CE Test Report

Equipment	:	**Sona IF573 802.11ax Wi-Fi 6E Module with Bluetooth 5.4**
Model No.	:	**Sona IF573**
Brand Name	:	**Laird Connectivity**
Applicant	:	**Laird Connectivity LLC**
Address	:	**W66N220 Commerce Court, Cedarburg, WI 53012 United States Of America**
Standard	:	**EN 300 328 V2.2.2 (2019-07)**
Received Date	:	**Jan. 17, 2023**
Tested Date	:	**Apr. 24 ~ Aug. 08, 2023**

We, International Certification Corporation, would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by: **Approved by:**

Alex Huang / Supervisor **Gary Chang / Manager**

Table of Contents

1 GENERAL DESCRIPTION 5

1.1 Information 5
1.2 Local Support Equipment List 11
1.3 Test Setup Chart 12
1.4 Test Equipment List and Calibration Data 13
1.5 Testing Applied Standards 14
1.6 Deviation from Test Standard and Measurement Procedure 15
1.7 Measurement Uncertainty 15

2 TEST CONFIGURATION 16

2.1 Testing Facility 16
2.2 The Worst Test Modes and Channel Details 17

3 TRANSMITTER TEST RESULTS 19

3.1 RF Output Power 19
3.2 Power Spectral Density 20
3.3 Occupied Channel Bandwidth 21
3.4 Transmitter Unwanted Emissions in the Out-Of-Band Domain 22
3.5 Transmitter Unwanted Emissions in the Spurious Domain 23

4 RECEIVER TEST RESULTS 25

4.1 Receiver Spurious Emissions 25

5 ADAPTIVITY TEST RESULTS 27

5.1 Adaptivity and Unwanted Signal Parameters 27

6 RECEIVER BLOCKING TEST RESULTS 29

6.1 Receiver Blocking 29

7 PHOTOGRAPHS OF THE TEST CONFIGURATION 32

8 TEST LABORATORY INFORMATION 35

Appendix A. RF Output Power

Appendix B. Power Spectral Density

Appendix C. Occupied Channel Bandwidth

Appendix D. Transmitter Unwanted Emissions In The Out-Of-Band Domain

Appendix E. Transmitter Spurious Emissions

Appendix F. Receiver Spurious Emissions

Appendix G. Adaptivity And Unwanted Signal Parameters

Appendix H. Receiver Blocking

Release Record

Report No.	Version	Description	Issued Date
ER311701AC	Rev. 01	Initial issue	Sep. 20, 2023

Summary of Test Results

Ref. Std. Clause	Test Items	Measured	Result
4.3.2.2	RF Output Power	***Non-beamforming mode*** 19.44 dBm. ***Beamforming mode*** 16.35 dBm.	Pass
4.3.2.3	Power Spectral Density	Meet the requirement of limit.	Pass
4.3.2.4	Duty Cycle, Tx-sequence, Tx-gap	Only for non-adaptive equipment.	N/A
4.3.2.5	Medium Utilisation (MU) factor	Only for non-adaptive equipment.	N/A
4.3.2.6	Adaptivity	Meet the requirement of limit.	Pass
4.3.2.7	Occupied Channel Bandwidth	Meet the requirement of limit.	Pass
4.3.2.8	Transmitter unwanted emissions in the out of band domain	Meet the requirement of limit.	Pass
4.3.2.9	Transmitter unwanted emissions in the spurious domain	Meet the requirement of limit.	Pass
4.3.2.10	Receiver spurious emissions	Meet the requirement of limit.	Pass
4.3.2.11	Receiver Blocking	Meet the requirement of limit.	Pass
4.3.2.12	Geo-location Capability	The device has no this capability.	N/A

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Information

1.1.1 Product Details

The four configurations of the EUT are shown on the following:

Model Name	Part No.	Description
Sona IF573	453-00117	Module, Sona IF573, MIMO, MHF4
	453-00118	Module, Sona IF573, MIMO, Trace Pin
	453-00119	Module, Sona IF573, MIMO, M.2, Key E, SDIO, UART
	453-00120	Module, Sona IF573, MIMO, M.2, Key E, PCIe, UART

1.1.2 Specification of the Equipment under Test (EUT)

RF General Information					
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Freq. (MHz)	Channel Number	Transmit Chains (N_{TX})	Data Rate / MCS
2400-2483.5	b	2412-2472	1-13 [13]	1 2	1-11 Mbps
2400-2483.5	g	2412-2472	1-13 [13]	1 2	6-54 Mbps
2400-2483.5	n (HT20)	2412-2472	1-13 [13]	1 2	MCS 0-7 MCS 8-15
2400-2483.5	ax (HE20)	2412-2472	1-13 [13]	1 2	MCS 0-11

Note 1: 802.11b uses a combination of DSSS-DBPSK, DQPSK, CCK modulation.
Note 2: 802.11g/n/ax uses a combination of OFDM/OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM and 1024QAM modulation.
Note 3: 802.11ax supports beamforming function.
Note 4: 802.11ax supports full RU and partial RU configuration.

1.1.3 Antenna Details

Ant. No.	Manufacturer	Model	Part Number	Type	Connector	Operating Frequencies / Gain (dBi)		
						2.4GHz	5GHz	6GHz
1	JOYMAX	TWX-100B RSAX-2001	NA	Dipole	RP-SMA	2	4	4
2	Laird	FlexMIMO 6E	EFD2471A3 S-10MH4L	PIFA	MHF4L	2.2	3.8	3.3
3	Laird	Mini NanoBlade Flex 6 GHz	EMF2471A 3S-10MH4L	PCB Dipole	MHF4L	2.4	4.4	5.2
4	Laird	FlexPIFA 6E	EFB2471A3 S-10MH4L	PIFA	MHF4L	2.2	3.9	3.8

1.1.4 EUT Operational Condition

Power Supply Type	3.3Vdc from host		
SW Version	18.15 RC1.54 wl0: May 21 2023 19:48:44 version 18.53.212.8(7e2f89f) FWID 01-2b47fc4c		
Operational Climatic	☒ Tnom (20°C)	☒ Tmax (85°C)	☒ Tmin (-40°C)

1.1.5 Accessories

N/A

1.1.6 Adaptive Equipment

			Adaptive Equipment
☐	non-Adaptive Equipment:		
	The maximum RF Output Power (e.i.r.p.): dBm		
	The maximum (corresponding) Duty Cycle: %		
☒	Adaptive Equipment without the possibility to switch to a non-adaptive mode:		
	☒	The equipment has implemented an LBT based DAA mechanism:	
		☐	The equipment is Frame Based equipment
		☒	The equipment is Load Based equipment
		☐	The equipment can switch dynamically between Frame Based and Load Based equipment
	☐	The equipment has implemented an non-LBT based DAA mechanism	
	☐	The equipment can operate in more than one adaptive mode	
	☐	Adaptive Frequency Hopping using other forms of DAA (non-LBT based)/without Short Control Signaling Transmissions	
☐	Adaptive Equipment which can also operate in a non-adaptive mode		

1.1.7 Channel List

Channel	Frequency(MHz)
1	2412
2	2417
3	2422
4	2427
5	2432
6	2437
7	2442
8	2447
9	2452
10	2457
11	2462
12	2467
13	2472

1.1.8 Test Tool and Duty Cycle

SC Module

Test Tool	By command, version: 18.53.180.8			
Modulation Mode	Duty Cycle Of Test Signal (%)		Duty Factor (dB)	
	1TX	2TX	1TX	2TX
11b	98.96%	98.92%	0.05	0.05
11g	94.01%	93.63%	0.27	0.29
ax HE20-OFDMA	98.95%	97.60%	0.05	0.11

Test Tool	By command	
Modulation Mode	Duty Cycle Of Test Signal (%)	Duty Factor (dB)
ax HE20-OFDMA RU26	99.66%	0.015
ax HE20-OFDMA RU52	99.64%	0.016
ax HE20-OFDMA RU106	99.61%	0.017

ST M.2, PCIe module

Test Tool	By command, version: 18.53.212.8			
Modulation Mode	Duty Cycle Of Test Signal (%)		Duty Factor (dB)	
	1TX	2TX	1TX	2TX
11b	98.96%	99.83%	0.05	0.01
11g	94.01%	98.67%	0.27	0.06
ax HE20-OFDMA	98.95%	99.39%	0.05	0.03

Test Tool	By command	
Modulation Mode	Duty Cycle Of Test Signal (%)	Duty Factor (dB)
ax HE20-OFDMA RU26	99.66%	0.015
ax HE20-OFDMA RU52	99.64%	0.016
ax HE20-OFDMA RU106	99.61%	0.017

1.1.9 Power Index of Test Tool

SC Module

Modulation Mode	Test Frequency (MHz)		
	2412	**2442**	**2472**
1TX			
11b	62	62	60
11g	68	66	66
ax HE20-OFDMA	27	27	29
2TX			
11b	52	51	50
11g	55	55	55
ax HE20-OFDMA	33	34	35

Modulation Mode	Test Frequency (MHz)		
	2412	**2442**	**2472**
1TX			
ax HE20-OFDMA RU26	40	42	42
ax HE20-OFDMA RU52	34	36	36
ax HE20-OFDMA RU106	26	28	28
2TX			
ax HE20-OFDMA RU26	46	47	48
ax HE20-OFDMA RU52	40	41	42
ax HE20-OFDMA RU106	33	35	36

ST M.2, PCIe module

Modulation Mode	Test Frequency (MHz)		
	2412	**2442**	**2472**
1TX			
11b	61	60	59
11g	66	64	64
ax HE20-OFDMA	28	29	30
2TX			
11b	54	52	52
11g	55	55	55
ax HE20-OFDMA	33	34	35

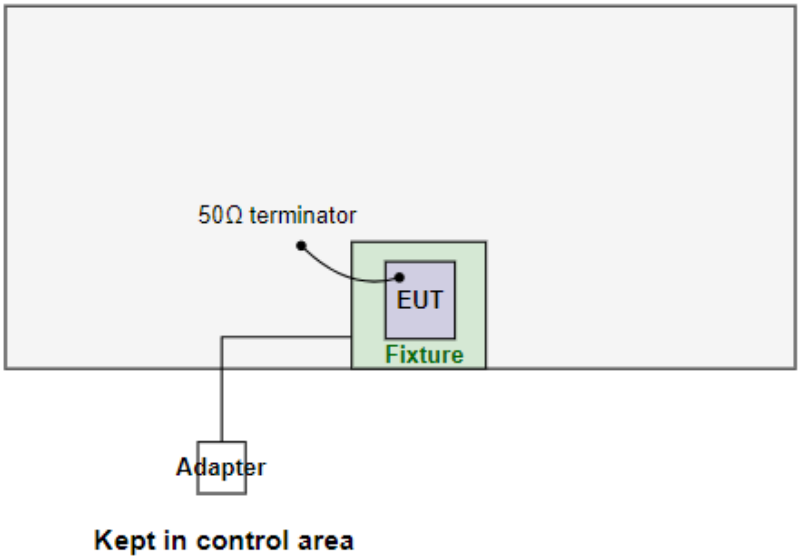
Modulation Mode	Test Frequency (MHz)		
	2412	**2442**	**2472**
1TX			
ax HE20-OFDMA RU26	40	42	41
ax HE20-OFDMA RU52	34	36	35
ax HE20-OFDMA RU106	27	29	29
2TX			
ax HE20-OFDMA RU26	45	46	46
ax HE20-OFDMA RU52	39	40	40
ax HE20-OFDMA RU106	31	33	34

1.2 Local Support Equipment List

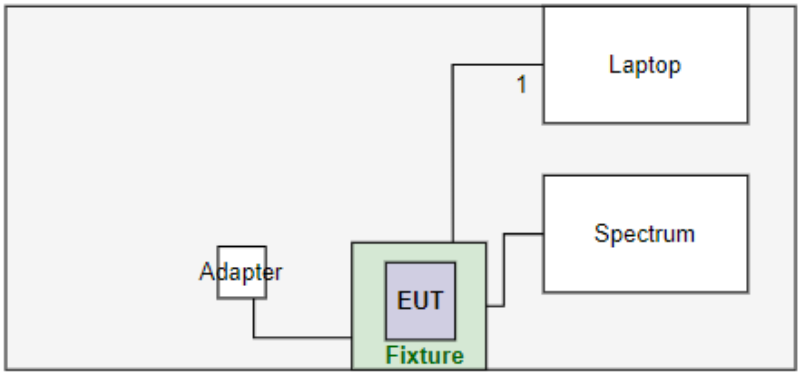
Support Equipment List					
No.	**Equipment**	**Brand**	**Model**	**S/N**	**Remarks**
1	Laptop	DELL	Latitude 5400	CXYCM33	---
2	Fixture	---	700-46370 REV B	---	Provided by applicant.
3	Fixture's adapter	---	EA1045CR	---	Provided by applicant. I/P: 100-240Vac,1.5A,50-60Hz O/P: 5.0V 3.0A
4	50Ω terminator	---	---	---	---

1.3 Test Setup Chart

Test Setup Diagram (Radiated Test)



Test Setup Diagram (Conducted Test)



No.	Signal cable / Length (m)
1	USB, 1m shielded.

1.4 Test Equipment List and Calibration Data

Test Item	Radiated Emissions				
Test Site	Fully –anechoic chamber 2 / (05CH02-WS)				
Test Date	Apr. 24 ~ Jun. 14, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	Agilent	N9010A	MY52221474	Nov. 07, 2022	Nov. 06, 2023
Bilog Antenna 30-1000MHz	SCHWARZBECK	VULB9168	9168-563	Mar. 10, 2023	Mar. 09, 2024
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	9120D-1205	Feb. 03, 2023	Feb. 02, 2024
Preamplifier	Agilent	83017A	MY53270013	Feb. 04, 2023	Feb. 03, 2024
Preamplifier	EMC	EMC02325	980188	Oct. 26, 2022	Oct. 25, 2023
RF Cable-1M	EMC	EMC104-35M-35M-1000	210926	Oct. 12, 2022	Oct. 11, 2023
RF Cable-1M	EMC	EMC104-35M-35M-1000	210927	Oct. 12, 2022	Oct. 11, 2023
RF cable-3M	HUBER+SUHNER	SUCOFLEX104	MY22621/4	Oct. 12, 2022	Oct. 11, 2023
RF cable-4M	HUBER+SUHNER	SUCOFLEX104	MY32489/4	Oct. 12, 2022	Oct. 11, 2023
LF cable-0.8M	EMC	EMC8D-NM-NM-800	EMC8D-NM-NM-800-002	Oct. 12, 2022	Oct. 11, 2023
LF cable-3M	EMC	EMC8D-NM-NM-3000	131102	Oct. 12, 2022	Oct. 11, 2023
LF cable-10M	EMC	EMC8D-NM-NM-10000	131101	Oct. 12, 2022	Oct. 11, 2023
Measurement Software	AUDIX	e3	6.120210g	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Test Date	Jul. 19 ~ Aug. 08, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum Analyzer	R&S	FSV40	101910	Apr. 14, 2023	Apr. 13, 2024
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Jun. 21, 2023	Jun. 20, 2024
Power Sensor	Agilent	U2021XA	MY53480019	Mar. 07, 2023	Mar. 06, 2024
Power Sensor	Agilent	U2021XA	MY53510003	Mar. 07, 2023	Mar. 06, 2024
Power Sensor	Agilent	U2021XA	MY54070003	Mar. 27, 2023	Mar. 26, 2024
Power Sensor	Agilent	U2021XA	MY54060013	Mar. 27, 2023	Mar. 26, 2024
RF cable	EMC	EMC104-35M-35M-1000	210928	Oct. 14, 2022	Oct. 13, 2023
RF Cable	EMC	EMC104-35M-35M-1000	210929	Oct. 14, 2022	Oct. 13, 2023
RF Cable	EMC	EMC104-35M-35M-1000	210930	Oct. 14, 2022	Oct. 13, 2023
RF Cable	EMC	EMC104-35M-35M-1000	210931	Oct. 14, 2022	Oct. 13, 2023
Measurement Software	Sporton	SENSE	5.10.7	NA	NA
Measurement Software	Agilent	EN RF test	1.1501125	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Adaptivity				
Test Site	(TH01-WS)				
Test Date	Jul. 25, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Spectrum	R&S	FSV7	101607	Feb. 23, 2023	Feb. 02, 2024
RF cable-4M	HUBER+SUHNER	SUCOFLEX_104	MY15686/4	Oct. 13, 2022	Oct. 12, 2023
RF cable-0.5M	HUBER+SUHNER	SUCOFLEX_104	296081/4	Oct. 13, 2022	Oct. 12, 2023
RF cable-0.2M	HUBER+SUHNER	SUCOFLEX_104	329023/4	Oct. 13, 2022	Oct. 12, 2023
RF cable-0.2M	HUBER+SUHNER	SUCOFLEX_104	329021/4	Oct. 13, 2022	Oct. 12, 2023
MXG-B RF Vector Signal Generator	Agilent	N5182B	MY53050081	May 26, 2023	May 25, 2024
Signal Generator	R&S	SMB100A	175727	May 26, 2023	May 25, 2024
Preamplifier	Burgeon	BPA-530	100219	Nov. 22, 2022	Nov. 21, 2023
Oscilloscope	National Instruments	USB-5133	F651FF	Aug. 16, 2022	Aug. 15, 2023
Combiner(1X2)	Woken	2WAYDIV-1	0120A02056002D	Oct. 13, 2022	Oct. 12, 2023
Combiner(1X2)	Woken	DOM2AEW1A22	0120A02201801O	Oct. 13, 2022	Oct. 12, 2023
Combiner(1X4)	Woken	4WAYDIV	0120A042011010	Oct. 13, 2022	Oct. 12, 2023
Direction Coupler	Marvelous Microwave	MVE4514-20	20	Oct. 13, 2022	Oct. 12, 2023
Attenuator	Warison	WATT-6SR1211	01	Oct. 13, 2022	Oct. 12, 2023
Measurement Software	Sporton	Sporton_3	2.2.0.0	NA	NA
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Receiver Blocking				
Test Site	Fully –anechoic chamber 1 / (05CH01-WS)				
Test Date	Jul. 23, 2023				
Instrument	**Brand**	**Model No.**	**Serial No.**	**Calibration Date**	**Calibration Until**
Wireless connectivity tester	R&S	CMW270	100856	Nov. 16, 2022	Nov. 15, 2023
Vector signal generator	R&S	SMBV100A	263146	Feb. 06, 2023	Feb. 05, 2024
RF cable-0.5M	HUBER+SUHNER	SUCOFLEX_104	500202/4	Oct. 13, 2022	Oct. 12, 2023
RF cable-0.5M	HUBER+SUHNER	SUCOFLEX_104	296088/4	Oct. 13, 2022	Oct. 12, 2023
RF cable-0.2M	HUBER+SUHNER	SUCOFLEX_104	329023/4	Oct. 13, 2022	Oct. 12, 2023
Combiner(1X2)	WOKEN	2WAYDIV	12101200003	Oct. 13, 2022	Oct. 12, 2023
Note: Calibration Interval of instruments listed above is one year.					

1.5 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

EN 300 328 V2.2.2 (2019-07)

1.6 Deviation from Test Standard and Measurement Procedure

None

1.7 Measurement Uncertainty

The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)).

Measurement Uncertainty		
Parameters	**Uncertainty**	**Limit**
Occupied Channel Bandwidth	±0.0034 %	±5 %
RF output power, conducted	±0.592 dB	±1.5 dB
Power Spectral Density, conducted	±0.583 dB	±3 dB
Unwanted Emissions, conducted	±2.715 dB	±3 dB
All emissions, radiated	±3.14 dB	±6 dB
Temperature	±0.4 ºC	±3 °C
Supply voltages	±0.15 %	±3 %
Time	±0.1 %	±5 %

2 Test Configuration

2.1 Testing Facility

Test Laboratory	International Certification Corporation
Test Site	TH01-WS, 05CH01-WS
Address of Test Site	No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)
Test Site	05CH02-WS
Address of Test Site	No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

2.2 The Worst Test Modes and Channel Details

full RU configuration							
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test method**	**Mode**	**Test Configuration**	**Note**
Non-beamforming mode							
RF Output Power Power Spectral Density Occupied Channel Bandwidth	11b 11g ax HE20-OFDMA	2412 / 2442 / 2472 2412 / 2442 / 2472 2412 / 2442 / 2472	1 Mbps 6 Mbps MCS 0	Conducted	1TX 2TX	1	-
RF Output Power Power Spectral Density	11b 11g ax HE20-OFDMA	2412 / 2442 / 2472 2412 / 2442 / 2472 2412 / 2442 / 2472	1 Mbps 6 Mbps MCS 0	Conducted	1TX 2TX	2	-
Transmitter Emissions ≤ 1GHz	11g ax HE20-OFDMA	2412 / 2472 2412 / 2472	6 Mbps MCS 0	Conducted Radiated	1TX 2TX	1	- Note 2
Transmitter Emissions >1GHz	11b 11g ax HE20-OFDMA	2412 / 2472 2412 / 2472 2412 / 2472	1 Mbps 6 Mbps MCS 0	Conducted Radiated	1TX 2TX	1	- Note 2
Receiver Emissions ≤ 1GHz Receiver Emissions >1GHz	11g ax HE20-OFDMA	2412 / 2472 2412 / 2472	6 Mbps MCS 0	Conducted Radiated	1RX 2RX	1	- Note 2
Transmitter unwanted emissions in the out of band domain Adaptivity	11b 11g ax HE20-OFDMA	2412 / 2472 2412 / 2472 2412 / 2472	1 Mbps 6 Mbps MCS 0	Conducted	2TX	1	-
Receiver Blocking	11b	2412 / 2472	1 Mbps	Conducted	2RX	1	-
Beamforming mode							
RF Output Power	ax HE20-OFDMA	2412 / 2442 / 2472	MCS 0	Conducted	2TX	1, 2	-

NOTE:
1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** result was found as the worst case and was shown in this report.
2. The 50Ω terminator is connected to antenna port of EUT for radiated emission measurement.
3. Beamforming mode is calculated not measured. The calculation method is conducted power of non-beamforming – 3.01 dB.
4. Test configurations are listed as below:
   Configuration 1: Laird part number: 453-00117 (SC module)
   Configuration 2: Laird part number: 453-00120 (ST M.2, PCIe Module)

partial RU configuration							
Test item	**Modulation Mode**	**Test Frequency (MHz)**	**Data Rate**	**Test method**	**Mode**	**Test Configuration**	**Note**
Non-beamforming mode							
RF Output Power Power Spectral Density	ax HE20-OFDMA RU26 RU52 RU106	2412 / 2442 / 2472 2412 / 2442 / 2472 2412 / 2442 / 2472	MCS 0 MCS 0 MCS 0	Conducted	1TX 2TX	1, 2	-
Transmitter Emissions ≤ 1GHz	ax HE20-OFDMA RU106	2412 / 2472	MCS 0	Conducted	1TX 2TX	1	-
Transmitter Emissions >1GHz				Radiated			Note 2
Beamforming mode							
RF Output Power	ax HE20-OFDMA RU26 RU52 RU106	2412 / 2442 / 2472 2412 / 2442 / 2472 2412 / 2442 / 2472	MCS 0 MCS 0 MCS 0	Conducted	2TX	1, 2	-

NOTE:

1. The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement – X, Y, and Z-plane. The **Z-plane** result was found as the worst case and was shown in this report.
2. The 50Ω terminator is connected to antenna port of EUT for radiated emission measurement.
3. Beamforming mode is calculated not measured. The calculation method is conducted power of non-beamforming – 3.01 dB.
4. Test configurations are listed as below:
   Configuration 1: Laird part number: 453-00117 (SC module)
   Configuration 2: Laird part number: 453-00120 (ST M.2, PCIe Module)

3 Transmitter Test Results

3.1 RF Output Power

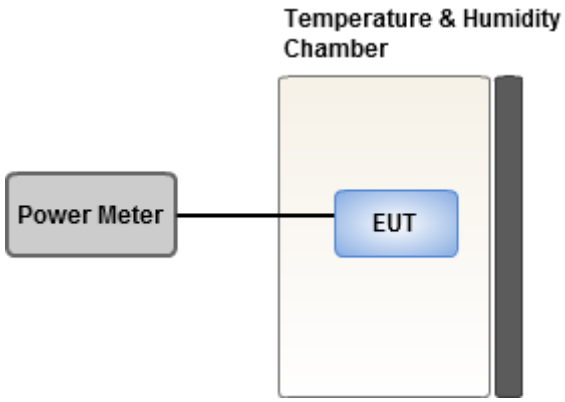
3.1.1 Limit of RF Output Power

The maximum RF output power shall be 20 dBm.

3.1.2 Test Procedures

Reference to clause 5.4.2.2 of ETSI EN 300 328 V2.2.2 (2019-07).

3.1.3 Test Setup



3.1.4 Test Results

Ambient Condition	20°C / 65%	**Tested By**	Hugo Zhen / Ryan Lee

Refer to Appendix A.

3.2 Power Spectral Density

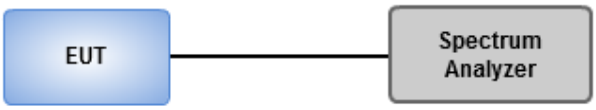
3.2.1 Limit of Power Spectral Density

The maximum Power Spectral Density is limited to 10 dBm per MHz.

3.2.2 Test Procedures

Reference to clause 5.4.3.2 of ETSI EN 300 328 V2.2.2 (2019-07).

3.2.3 Test Setup



3.2.4 Test Results

Ambient Condition	20°C / 65%	**Tested By**	Hugo Zhen

Refer to Appendix B.

3.3 Occupied Channel Bandwidth

3.3.1 Limit of Occupied Channel Bandwidth

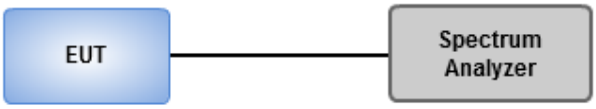
The Occupied Channel Bandwidth shall fall completely within 2.4~2.4835 GHz.

In addition, for non-adaptive equipment using wide band modulations other than FHSS and with e.i.r.p greater than 10 dBm, the occupied channel bandwidth shall be less than 20 MHz.

3.3.2 Test Procedures

Reference to clause 5.4.7.2 of ETSI EN 300 328 V2.2.2 (2019-07).

3.3.3 Test Setup



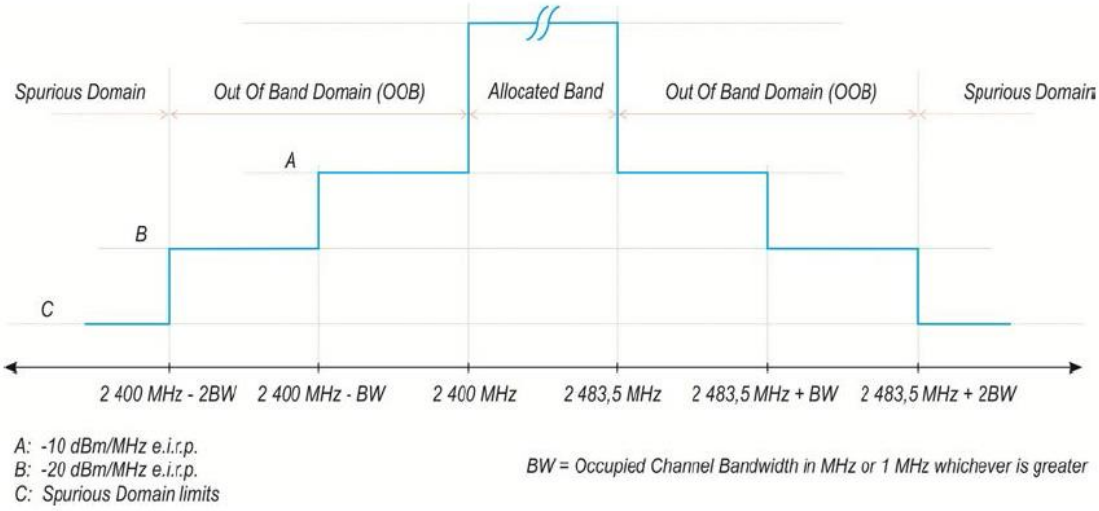
3.3.4 Test Results

Ambient Condition	20°C / 65%	**Tested By**	Hugo Zhen

Refer to Appendix C.

3.4 Transmitter Unwanted Emissions in the Out-Of-Band Domain

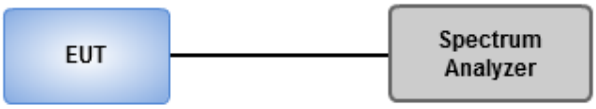
3.4.1 Limit of Transmitter Unwanted Emissions in the Out-Of-Band Domain



3.4.2 Test Procedures

Reference to clause 5.4.8.2 of ETSI EN 300 328 V2.2.2 (2019-07).

3.4.3 Test Setup



3.4.4 Test Results

Ambient Condition	20°C / 65%	**Tested By**	Hugo Zhen

Refer to Appendix D.

3.5 Transmitter Unwanted Emissions in the Spurious Domain

3.5.1 Limit of Transmitter Unwanted Emissions in the Spurious Domain

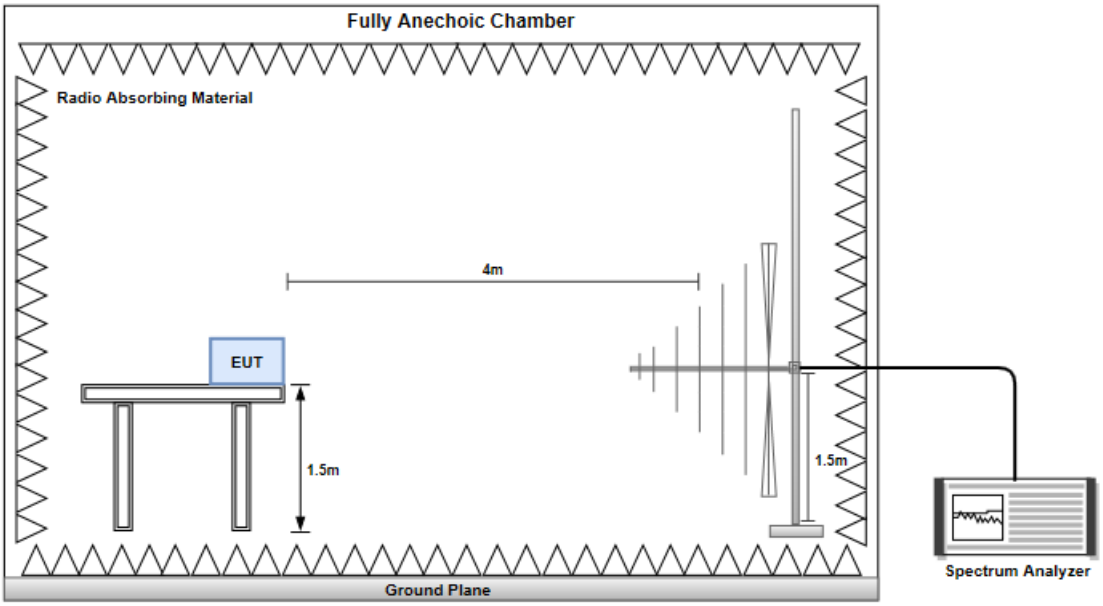
Frequency Range (MHz)	Maximum power (dBm)	Bandwidth (kHz)
30 to 47	-36	100
47 to 74	-54	100
74 to 87,5	-36	100
87,5 to 118	-54	100
118 to 174	-36	100
174 to 230	-54	100
230 to 470	-36	100
470 to 694	-54	100
694 to 1000	-36	100
1000 to 12750	-30	1000

3.5.2 Test Procedures

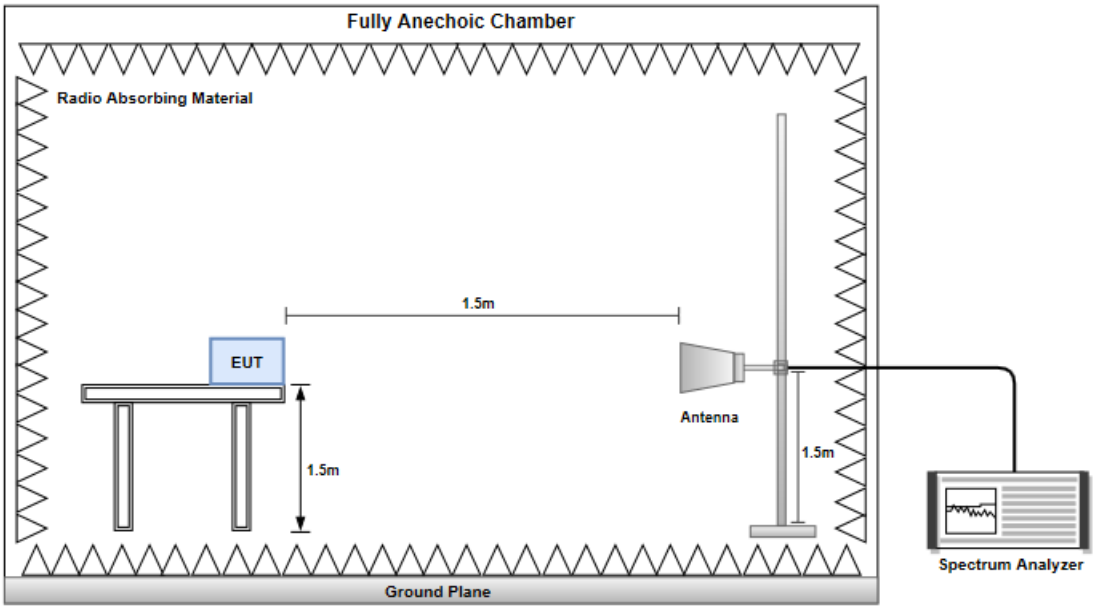
Reference to clause 5.4.9.2 of ETSI EN 300 328 V2.2.2 (2019-07).

3.5.3 Test Setup

Below 1GHz



Above 1 GHz



3.5.4 Test Results

Refer to Appendix E.

4 Receiver Test Results

4.1 Receiver Spurious Emissions

4.1.1 Limit of Receiver Spurious Emissions

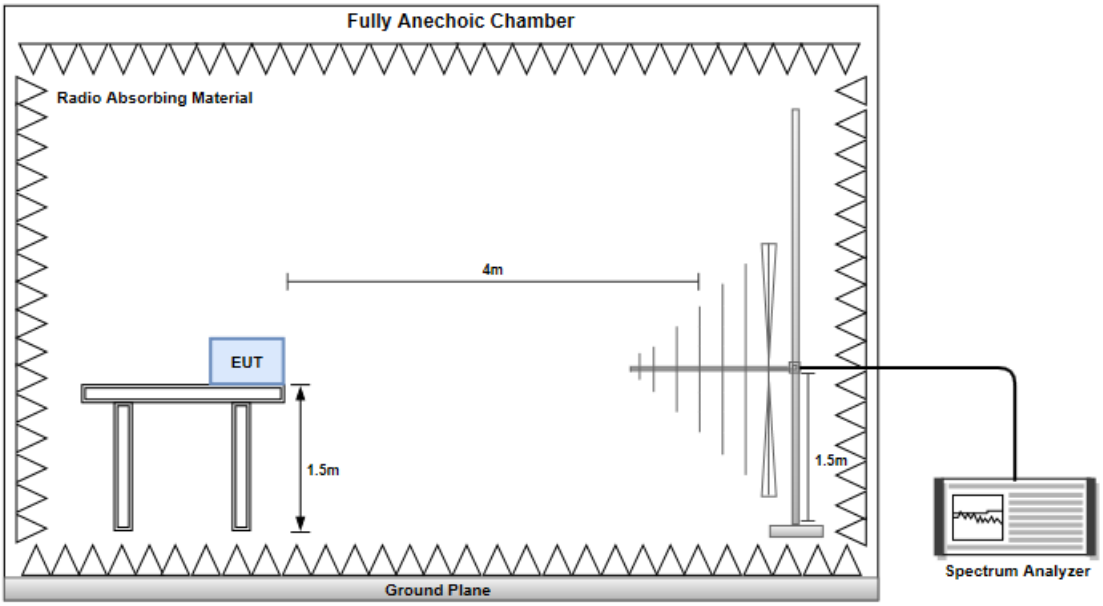
Frequency Range	Maximum power (dBm)	Measurement bandwidth (kHz)
30 MHz to 1 GHz	-57	100
Above 1 GHz to 12,75 GHz	-47	1000

4.1.2 Test Procedures

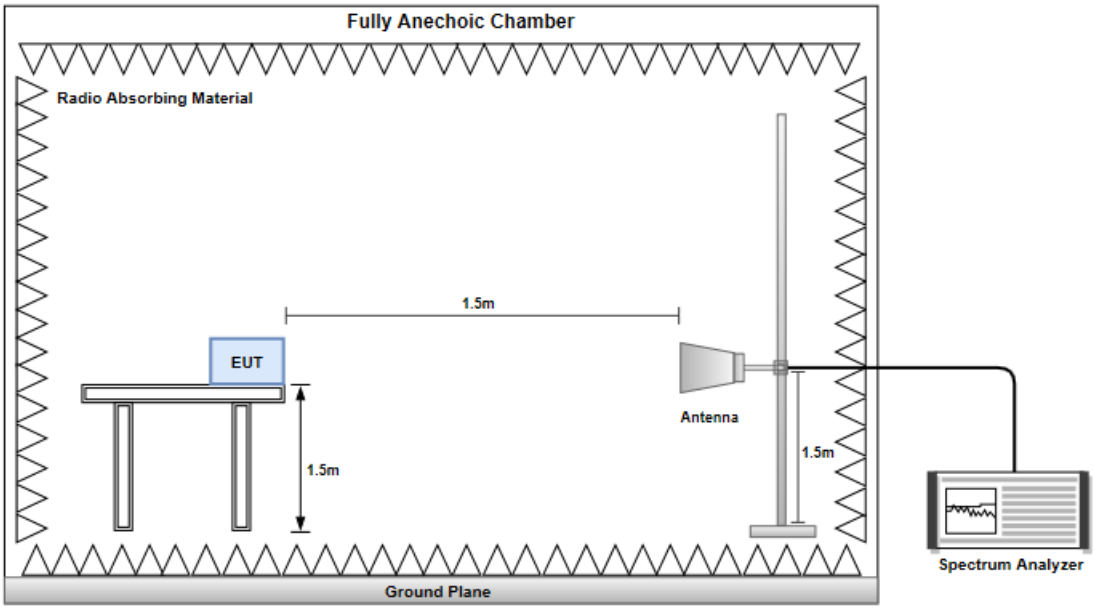
Reference to clause 5.4.10.2 of ETSI EN 300 328 V2.2.2 (2019-07).

4.1.3 Test Setup

Below 1GHz



Above 1 GHz



4.1.4 Test Results

Refer to Appendix F.

5 Adaptivity Test Results

5.1 Adaptivity and Unwanted Signal Parameters

5.1.1 Limit of Adaptivity and Unwanted Signal Parameters

Adaptivity and Unwanted Signal Limit	
☒	Only for adaptive systems and RF Output Power > 10 dBm
☐	Non-LBT based Detect and Avoid: ◆ minimum remain unavailable = 1sec; ◆ minimum Idle Period time = 100us; ◆ maximum Channel Occupancy Time (COT) = 40ms ◆ detection threshold level = -70 dBm/MHz + 10 x $\log_{10}$(100mW / Pout) (Pout in mW e.i.r.p);
☐	LBT based Detect and Avoid (Frame Based Equipment): ◆ minimum Clear Channel Assessment (CCA) time = 18 us; ◆ COT = 1 ms to 10 ms ◆ Idle Period = 5% of COT ◆ detection threshold level = -70 dBm/MHz + 10 x $\log_{10}$(100mW / Pout) (Pout in mW e.i.r.p);
☒	LBT based Detect and Avoid (Load Based Equipment with spectrum sharing mechanism IEEE Std.): ◆ LBT based spectrum sharing mechanism may implement IEEE 802.11™-2012 [i.3] clause 9, clause 10, clause 16,clause 17, clause 19 and clause 20, or in IEEE 802.15.4™-2011 [i.4], clause 4, clause 5 and clause 8 ◆ detection threshold level = -70 dBm/MHz + 10 x $\log_{10}$(100mW / Pout) (Pout in mW e.i.r.p);
☒	Short Control Signalling Transmissions: ◆ Short Control Signalling Transmissions shall have a maximum duty cycle of 10 % within an observation period of 50 ms.

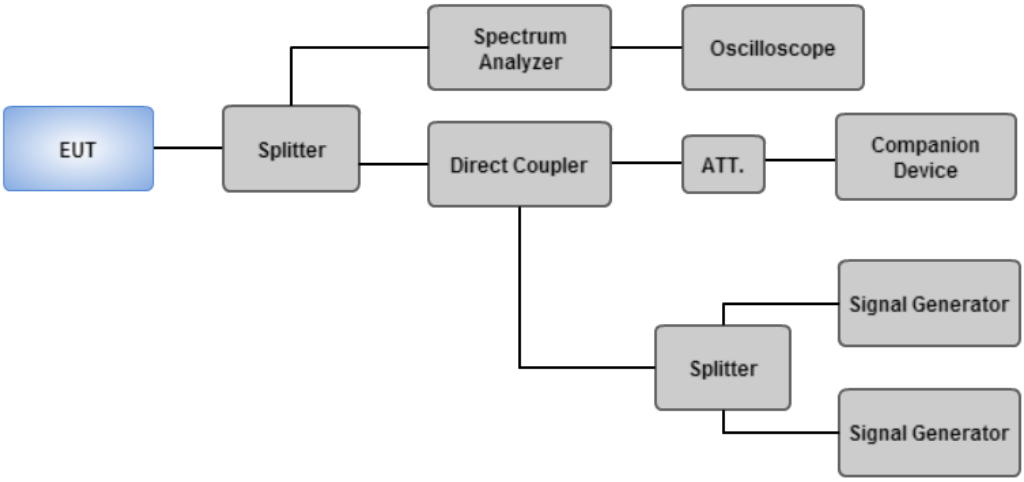
Unwanted Signal Parameters			
Equipment Type	**Wanted Signal Mean Power from Companion Device**	**Unwanted signal frequency (MHz)**	**Unwanted CW signal power (dBm)**
non-FHSS using LBT	sufficient to maintain the link (see note 3)	2395 or 2488,5 (see note 1)	-35 (see note 2)
non-FHSS using DAA	-30 dBm(see note 2)		

Note 1: The highest frequency shall be used for testing operating channels within the range 2 400 MHz to 2 442MHz, while the lowest frequency shall be used fortesting operating channels within the range 2 442 MHz to 2 483,5 MHz.
Note 2: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density in front of the UUT antenna
Note 3: A typical conducted value which can be used in most cases is -50 dBm/MHz

5.1.2 Test Procedures

Reference to clause 5.4.6.2 of ETSI EN 300 328 V2.2.2 (2019-07).

5.1.3 Test Setup



5.1.4 Test Results

Ambient Condition	25°C / 65%	**Tested By**	Jack Li

Refer to Appendix G.

6 Receiver Blocking Test Results

6.1 Receiver Blocking

6.1.1 Limit of Receiver Blocking

Receiver Blocking Parameters for Receiver Category 1 Equipment Limit			
Wanted Signal Mean Power from Companion Device (dBm) (see notes 1 and 4)	**Blocking Signal Frequency (MHz)**	**Blocking Signal Power (dBm) (see note 4)**	**Type of Blocking Signal**
(-133 dBm + 10 × log10(OCBW)) or -68 dBm whichever is less (see note 2)	2 380 2 504	-34	CW
(-139 dBm + 10 × log10(OCBW)) or -74 dBm whichever is less (see note 3)	2 300 2 330 2 360 2 524 2 584 2 674		

Note 1: OCBW is in Hz.
Note 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 26 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.
Note 3: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 20 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal.
Note 4: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned.

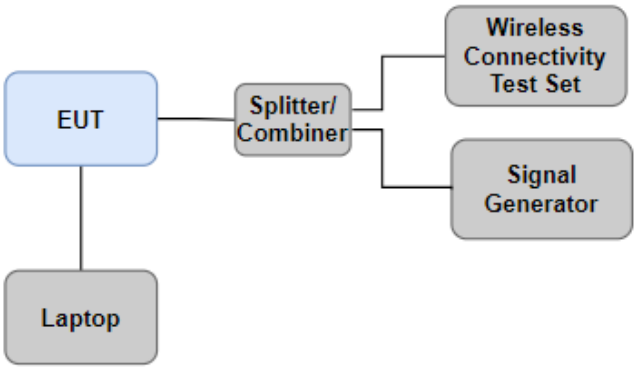
Receiver Blocking Parameters for Receiver Category 2 Equipment Limit			
Wanted Signal Mean Power from Companion Device (dBm) (see notes 1 and 3)	**Blocking Signal Frequency (MHz)**	**Blocking Signal Power (dBm) (see note 3)**	**Type of Blocking Signal**
(-139 dBm + 10 × log10(OCBW) + 10 dB) or (-74 dBm + 10 dB) whichever is less (see note 2)	2 380 2 504 2 300 2 584	-34	CW
Note 1: OCBW is in Hz. Note 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative test may be performed using a wanted signal up to P_{min} + 26 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal. Note 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned.			

Receiver Blocking Parameters for Receiver Category 3 Equipment Limit			
Wanted Signal Mean Power from Companion Device (dBm) (see notes 1 and 3)	**Blocking Signal Frequency (MHz)**	**Blocking Signal Power (dBm) (see note 3)**	**Type of Blocking Signal**
(-139 dBm + 10 × log10(OCBW) + 20 dB) or (-74 dBm + 20 dB) whichever is less	2 380 2 504 2 300 2 584	-34	CW
Note 1: OCBW is in Hz. Note 2: In case of radiated measurements using a companion device and the level of the wanted signal from the companion device cannot be determined, a relative the test may be performed using a wanted signal up to P_{min} + 30 dB where P_{min} is the minimum level of wanted signal required to meet the minimum performance criteria as defined in clause 4.3.1.12.3 in the absence of any blocking signal Note 3: The level specified is the level at the UUT receiver input assuming a 0 dBi antenna assembly gain. In case of conducted measurements, this level has to be corrected for the (in-band) antenna assembly gain (G). In case of radiated measurements, this level is equivalent to a power flux density (PFD) in front of the UUT antenna with the UUT being configured/positioned.			

6.1.2 Test Procedures

Reference to clause 5.4.11.2 of ETSI EN 300 328 V2.2.2 (2019-07).

6.1.3 Test Setup



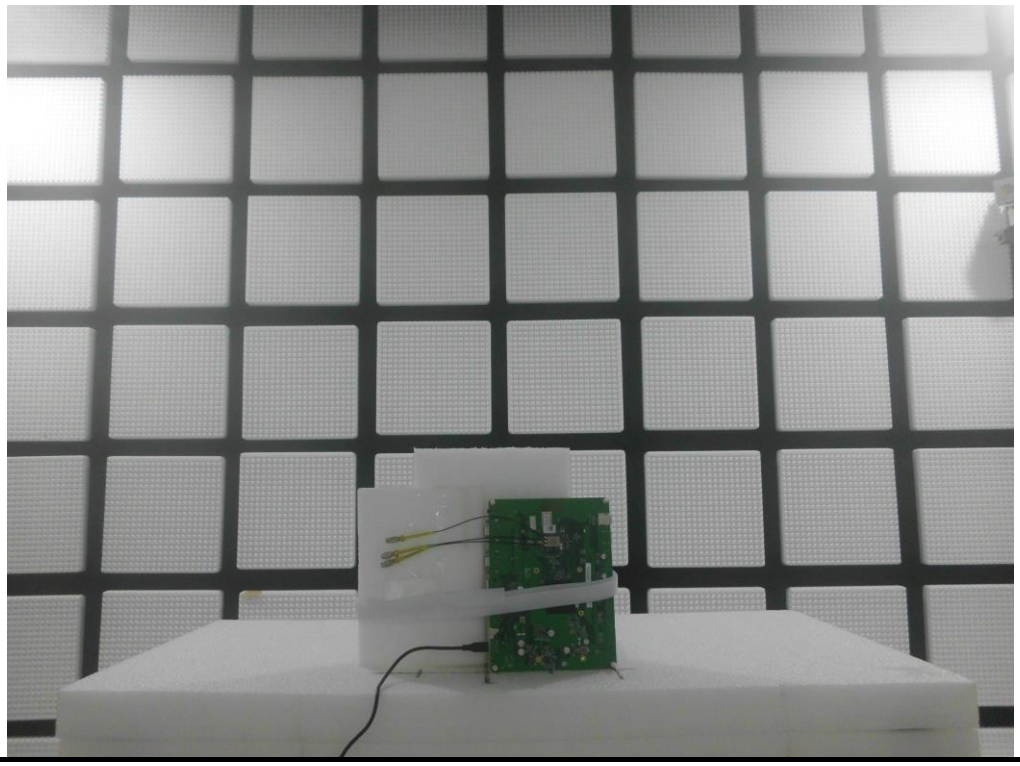
6.1.4 Test Results

Ambient Condition	25°C / 65%	**Tested By**	Jack Li

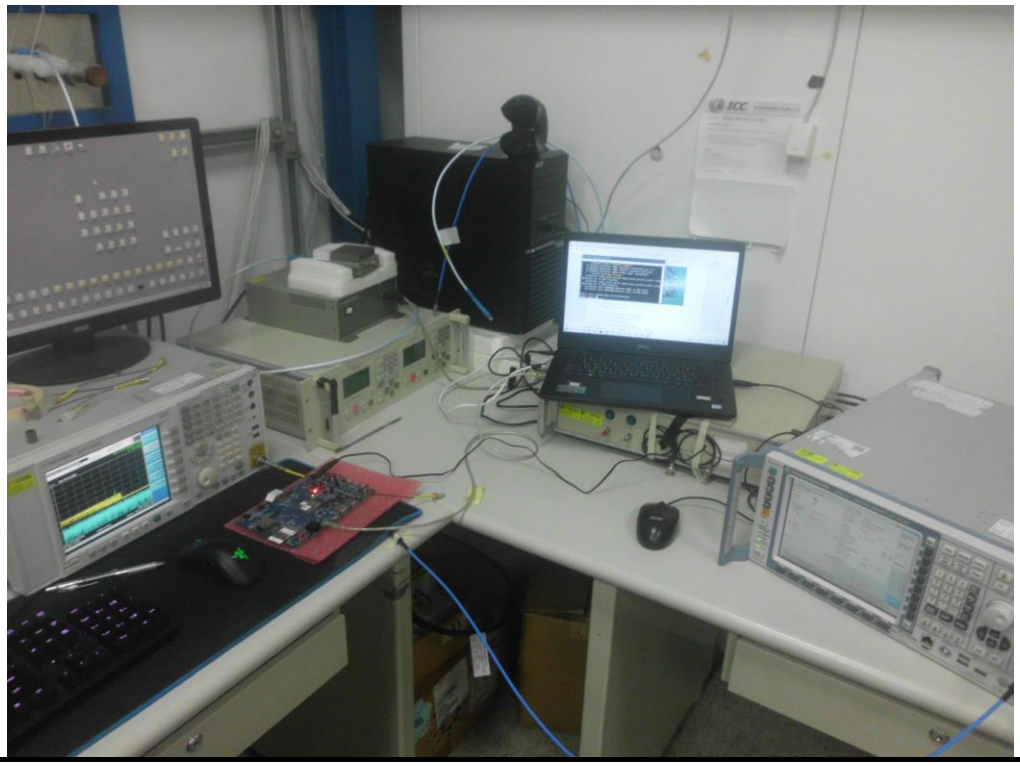
Refer to Appendix H.

7 Photographs of the Test Configuration

Spurious Emission Test (RSE)

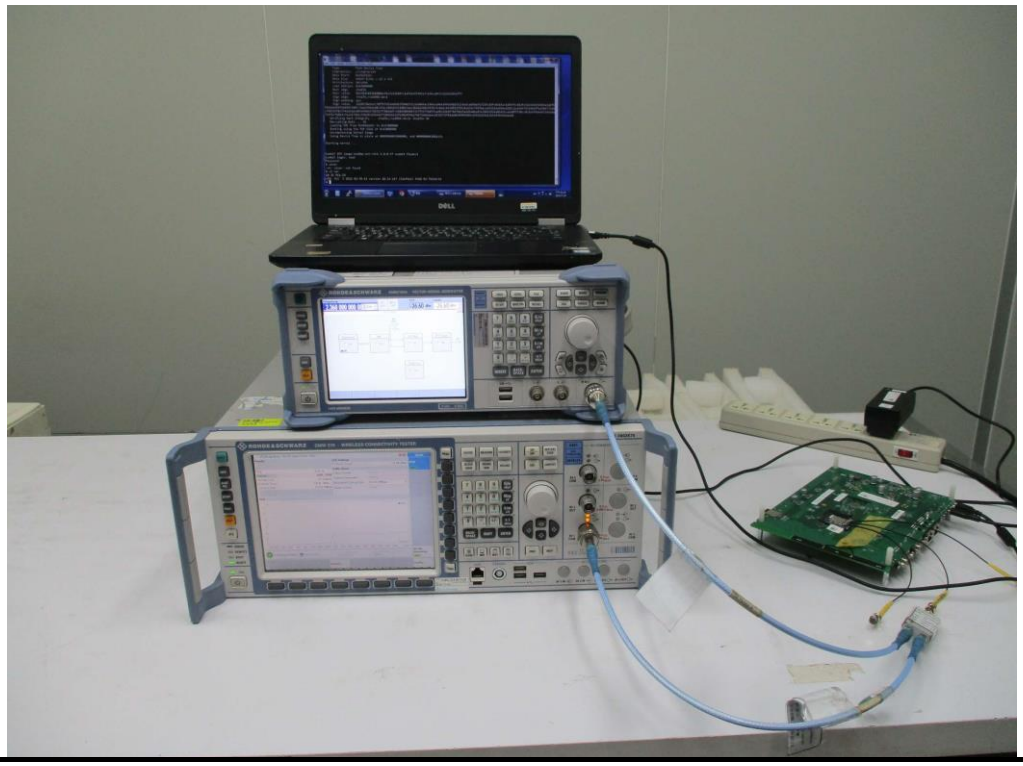


Spurious Emission Test (CSE)



Adaptivity, Unwanted Signal and Short Control Signalling Transmissions Test

Receiver Blocking Test



8 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corporation (EMC and Wireless Communication Laboratory), it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan District. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

Tel: 886-2-2601-1640

No.30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan (R.O.C.)

Kwei Shan

Tel: 886-3-271-8666

No.3-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

No.2-1, Lane 6, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

Kwei Shan Site II

Tel: 886-3-271-8640

No.14-1, Lane 19, Wen San 3rd St., Kwei Shan Dist., Tao Yuan City 33381, Taiwan (R.O.C.)

If you have any suggestion, please feel free to contact us as below information.

Tel: 886-3-271-8666
Fax: 886-3-318-0345
Email: ICC_Service@icertifi.com.tw

═END═

full RU configuration

Non-beamforming mode – 1TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		11b	11g	ax HE20-OFDMA		
$T_{nom}V_{nom}$	2412	18.16	19.02	18.81	20	Pass
$T_{min}V_{nom}$	2412	18.02	18.67	18.48	20	Pass
$T_{max}V_{nom}$	2412	18.25	18.94	19.08	20	Pass
$T_{nom}V_{nom}$	2442	18.29	18.78	19.04	20	Pass
$T_{min}V_{nom}$	2442	18.24	18.50	18.67	20	Pass
$T_{max}V_{nom}$	2442	18.49	18.88	**19.44**	20	Pass
$T_{nom}V_{nom}$	2472	18.00	18.98	18.75	20	Pass
$T_{min}V_{nom}$	2472	17.96	18.88	18.33	20	Pass
$T_{max}V_{nom}$	2472	18.22	19.00	19.08	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Non-beamforming mode – 2TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		11b	11g	ax HE20-OFDMA		
$T_{nom}V_{nom}$	2412	18.34	18.44	18.99	20	Pass
$T_{min}V_{nom}$	2412	18.50	18.63	18.74	20	Pass
$T_{max}V_{nom}$	2412	18.64	18.48	19.25	20	Pass
$T_{nom}V_{nom}$	2442	18.07	18.45	19.05	20	Pass
$T_{min}V_{nom}$	2442	18.11	18.26	18.74	20	Pass
$T_{max}V_{nom}$	2442	18.43	18.41	**19.36**	20	Pass
$T_{nom}V_{nom}$	2472	18.16	18.07	18.85	20	Pass
$T_{min}V_{nom}$	2472	18.05	17.83	18.59	20	Pass
$T_{max}V_{nom}$	2472	18.00	17.75	19.07	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Beamforming mode – 2TX

RF Output Power (dBm)				
Condition	Freq. (MHz)	EIRP Power (dBm)	Limit (dBm)	Results
		ax HE20-OFDMA		
$T_{nom}V_{nom}$	2412	15.98	20	Pass
$T_{min}V_{nom}$	2412	15.73	20	Pass
$T_{max}V_{nom}$	2412	16.24	20	Pass
$T_{nom}V_{nom}$	2442	16.04	20	Pass
$T_{min}V_{nom}$	2442	15.73	20	Pass
$T_{max}V_{nom}$	2442	**16.35**	20	Pass
$T_{nom}V_{nom}$	2472	15.84	20	Pass
$T_{min}V_{nom}$	2472	15.58	20	Pass
$T_{max}V_{nom}$	2472	16.06	20	Pass

partial RU configuration

Non-beamforming mode – 1TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		ax HE20-OFDMA RU26	ax HE20-OFDMA RU52	ax HE20-OFDMA RU106		
$T_{nom}V_{nom}$	2412	12.86	15.90	18.85	20	Pass
$T_{min}V_{nom}$	2412	12.53	15.57	18.52	20	Pass
$T_{max}V_{nom}$	2412	13.13	16.17	19.12	20	Pass
$T_{nom}V_{nom}$	2442	12.73	15.68	18.67	20	Pass
$T_{min}V_{nom}$	2442	12.36	15.31	18.30	20	Pass
$T_{max}V_{nom}$	2442	13.13	16.08	19.07	20	Pass
$T_{nom}V_{nom}$	2472	13.12	16.03	18.91	20	Pass
$T_{min}V_{nom}$	2472	12.70	15.61	18.49	20	Pass
$T_{max}V_{nom}$	2472	13.45	16.36	19.24	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Non-beamforming mode – 2TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		ax HE20-OFDMA RU26	ax HE20-OFDMA RU52	ax HE20-OFDMA RU106		
$T_{nom}V_{nom}$	2412	12.99	15.80	18.95	20	Pass
$T_{min}V_{nom}$	2412	12.74	15.55	18.70	20	Pass
$T_{max}V_{nom}$	2412	13.25	16.06	19.21	20	Pass
$T_{nom}V_{nom}$	2442	13.18	16.00	18.76	20	Pass
$T_{min}V_{nom}$	2442	12.87	15.69	18.45	20	Pass
$T_{max}V_{nom}$	2442	13.49	16.31	19.07	20	Pass
$T_{nom}V_{nom}$	2472	13.10	15.90	18.61	20	Pass
$T_{min}V_{nom}$	2472	12.84	15.64	18.35	20	Pass
$T_{max}V_{nom}$	2472	13.32	16.12	18.83	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Beamforming mode – 2TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		ax HE20-OFDMA RU26	ax HE20-OFDMA RU52	ax HE20-OFDMA RU106		
$T_{nom}V_{nom}$	2412	9.98	12.79	15.94	20	Pass
$T_{min}V_{nom}$	2412	9.73	12.54	15.69	20	Pass
$T_{max}V_{nom}$	2412	10.24	13.05	16.20	20	Pass
$T_{nom}V_{nom}$	2442	10.17	12.99	15.75	20	Pass
$T_{min}V_{nom}$	2442	9.86	12.68	15.44	20	Pass
$T_{max}V_{nom}$	2442	10.48	13.30	16.06	20	Pass
$T_{nom}V_{nom}$	2472	10.09	12.89	15.60	20	Pass
$T_{min}V_{nom}$	2472	9.83	12.63	15.34	20	Pass
$T_{max}V_{nom}$	2472	10.31	13.11	15.82	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

full RU configuration

Non-beamforming mode – 1TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		11b	11g	ax HE20-OFDMA		
$T_{nom}V_{nom}$	2412	18.06	18.87	18.57	20	Pass
$T_{min}V_{nom}$	2412	18.06	18.87	18.57	20	Pass
$T_{max}V_{nom}$	2412	18.06	18.87	18.57	20	Pass
$T_{nom}V_{nom}$	2442	18.17	18.69	18.77	20	Pass
$T_{min}V_{nom}$	2442	18.17	18.69	18.77	20	Pass
$T_{max}V_{nom}$	2442	18.17	18.69	18.77	20	Pass
$T_{nom}V_{nom}$	2472	17.98	18.83	18.45	20	Pass
$T_{min}V_{nom}$	2472	17.98	18.83	18.45	20	Pass
$T_{max}V_{nom}$	2472	17.98	18.83	18.45	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Non-beamforming mode – 2TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		11b	11g	ax HE20-OFDMA		
$T_{nom}V_{nom}$	2412	18.07	17.89	18.22	20	Pass
$T_{min}V_{nom}$	2412	18.07	17.89	18.22	20	Pass
$T_{max}V_{nom}$	2412	18.07	17.89	18.22	20	Pass
$T_{nom}V_{nom}$	2442	18.09	18.03	18.38	20	Pass
$T_{min}V_{nom}$	2442	18.09	18.03	18.38	20	Pass
$T_{max}V_{nom}$	2442	18.09	18.03	18.38	20	Pass
$T_{nom}V_{nom}$	2472	18.13	18.07	18.06	20	Pass
$T_{min}V_{nom}$	2472	18.13	18.07	18.06	20	Pass
$T_{max}V_{nom}$	2472	18.13	18.07	18.06	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Beamforming mode – 2TX

RF Output Power (dBm)				
Condition	Freq. (MHz)	EIRP Power (dBm)	Limit (dBm)	Results
		ax HE20-OFDMA		
$T_{nom}V_{nom}$	2412	15.21	20	Pass
$T_{min}V_{nom}$	2412	15.21	20	Pass
$T_{max}V_{nom}$	2412	15.21	20	Pass
$T_{nom}V_{nom}$	2442	15.37	20	Pass
$T_{min}V_{nom}$	2442	15.37	20	Pass
$T_{max}V_{nom}$	2442	15.37	20	Pass
$T_{nom}V_{nom}$	2472	15.05	20	Pass
$T_{min}V_{nom}$	2472	15.05	20	Pass
$T_{max}V_{nom}$	2472	15.05	20	Pass

partial RU configuration

Non-beamforming mode – 1TX

Note: EIRP = Measured conducted power + Antenna gain.

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		ax HE20-OFDMA RU26	ax HE20-OFDMA RU52	ax HE20-OFDMA RU106		
$T_{nom}V_{nom}$	2412	12.67	15.52	18.70	20	Pass
$T_{nom}V_{nom}$	2442	12.48	15.32	18.47	20	Pass
$T_{nom}V_{nom}$	2472	13.11	16.02	18.78	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Non-beamforming mode – 2TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		ax HE20-OFDMA RU26	ax HE20-OFDMA RU52	ax HE20-OFDMA RU106		
$T_{nom}V_{nom}$	2412	12.62	15.44	18.82	20	Pass
$T_{nom}V_{nom}$	2442	12.84	15.72	18.70	20	Pass
$T_{nom}V_{nom}$	2472	12.97	15.83	18.59	20	Pass

Note: EIRP = Measured conducted power + Antenna gain.

Beamforming mode – 2TX

RF Output Power (dBm)						
Condition	Freq. (MHz)	EIRP Power (dBm)			Limit (dBm)	Results
		ax HE20-OFDMA RU26	ax HE20-OFDMA RU52	ax HE20-OFDMA RU106		
$T_{nom}V_{nom}$	2412	9.61	12.43	15.81	20	Pass
$T_{nom}V_{nom}$	2442	9.83	12.71	15.69	20	Pass
$T_{nom}V_{nom}$	2472	9.96	12.82	15.58	20	Pass

full RU configuration

Non-beamforming mode – 1TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
11b	2412	9.78	10	Pass
11b	2442	9.80	10	Pass
11b	2472	9.59	10	Pass
11g	2412	8.67	10	Pass
11g	2442	8.34	10	Pass
11g	2472	8.69	10	Pass
ax HE20-OFDMA	2412	6.38	10	Pass
ax HE20-OFDMA	2442	6.59	10	Pass
ax HE20-OFDMA	2472	6.24	10	Pass

Non-beamforming mode – 2TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
11b	2412	9.90	10	Pass
11b	2442	9.73	10	Pass
11b	2472	9.79	10	Pass
11g	2412	8.03	10	Pass
11g	2442	8.03	10	Pass
11g	2472	7.72	10	Pass
ax HE20-OFDMA	2412	6.50	10	Pass
ax HE20-OFDMA	2442	6.60	10	Pass
ax HE20-OFDMA	2472	6.33	10	Pass

partial RU configuration

Non-beamforming mode – 1TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
ax HE20-OFDMA RU26	2412	9.80	10	Pass
ax HE20-OFDMA RU26	2442	9.59	10	Pass
ax HE20-OFDMA RU26	2472	9.99	10	Pass
ax HE20-OFDMA RU52	2412	9.86	10	Pass
ax HE20-OFDMA RU52	2442	9.63	10	Pass
ax HE20-OFDMA RU52	2472	9.95	10	Pass
ax HE20-OFDMA RU106	2412	9.89	10	Pass
ax HE20-OFDMA RU106	2442	9.71	10	Pass
ax HE20-OFDMA RU106	2472	9.90	10	Pass

Non-beamforming mode – 2TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
ax HE20-OFDMA RU26	2412	9.77	10	Pass
ax HE20-OFDMA RU26	2442	9.95	10	Pass
ax HE20-OFDMA RU26	2472	9.88	10	Pass
ax HE20-OFDMA RU52	2412	9.71	10	Pass
ax HE20-OFDMA RU52	2442	9.94	10	Pass
ax HE20-OFDMA RU52	2472	9.86	10	Pass
ax HE20-OFDMA RU106	2412	9.97	10	Pass
ax HE20-OFDMA RU106	2442	9.86	10	Pass
ax HE20-OFDMA RU106	2472	9.59	10	Pass

full RU configuration

Non-beamforming mode – 1TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
11b	2412	9.69	10	Pass
11b	2442	9.86	10	Pass
11b	2472	9.60	10	Pass
11g	2412	8.55	10	Pass
11g	2442	8.37	10	Pass
11g	2472	8.45	10	Pass
ax HE20-OFDMA	2412	6.17	10	Pass
ax HE20-OFDMA	2442	6.34	10	Pass
ax HE20-OFDMA	2472	5.93	10	Pass

Non-beamforming mode – 2TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
11b	2412	9.82	10	Pass
11b	2442	9.80	10	Pass
11b	2472	9.78	10	Pass
11g	2412	7.47	10	Pass
11g	2442	7.64	10	Pass
11g	2472	7.69	10	Pass
ax HE20-OFDMA	2412	5.80	10	Pass
ax HE20-OFDMA	2442	5.89	10	Pass
ax HE20-OFDMA	2472	5.61	10	Pass

partial RU configuration

Non-beamforming mode – 1TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
ax HE20-OFDMA RU26	2412	9.62	10	Pass
ax HE20-OFDMA RU26	2442	9.39	10	Pass
ax HE20-OFDMA RU26	2472	9.99	10	Pass
ax HE20-OFDMA RU52	2412	9.59	10	Pass
ax HE20-OFDMA RU52	2442	9.33	10	Pass
ax HE20-OFDMA RU52	2472	9.97	10	Pass
ax HE20-OFDMA RU106	2412	9.78	10	Pass
ax HE20-OFDMA RU106	2442	9.49	10	Pass
ax HE20-OFDMA RU106	2472	9.89	10	Pass

Non-beamforming mode – 2TX

Modulation Mode	Freq. (MHz)	Power Density (dBm/1MHz)	Limit (dBm/1MHz)	Results
ax HE20-OFDMA RU26	2412	9.57	10	Pass
ax HE20-OFDMA RU26	2442	9.72	10	Pass
ax HE20-OFDMA RU26	2472	9.88	10	Pass
ax HE20-OFDMA RU52	2412	9.39	10	Pass
ax HE20-OFDMA RU52	2442	9.73	10	Pass
ax HE20-OFDMA RU52	2472	9.82	10	Pass
ax HE20-OFDMA RU106	2412	9.92	10	Pass
ax HE20-OFDMA RU106	2442	9.68	10	Pass
ax HE20-OFDMA RU106	2472	9.57	10	Pass

1TX

Summary

Mode	OBW (Hz)	ITU-Code
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_1TX	12.043M	12M0G1D
802.11g_Nss1,(6Mbps)_1TX	16.648M	16M6D1D
802.11ax HEW20_Nss1,(MCS0)_1TX	19.132M	19M1D1D

OBW = 99% occupied bandwidth

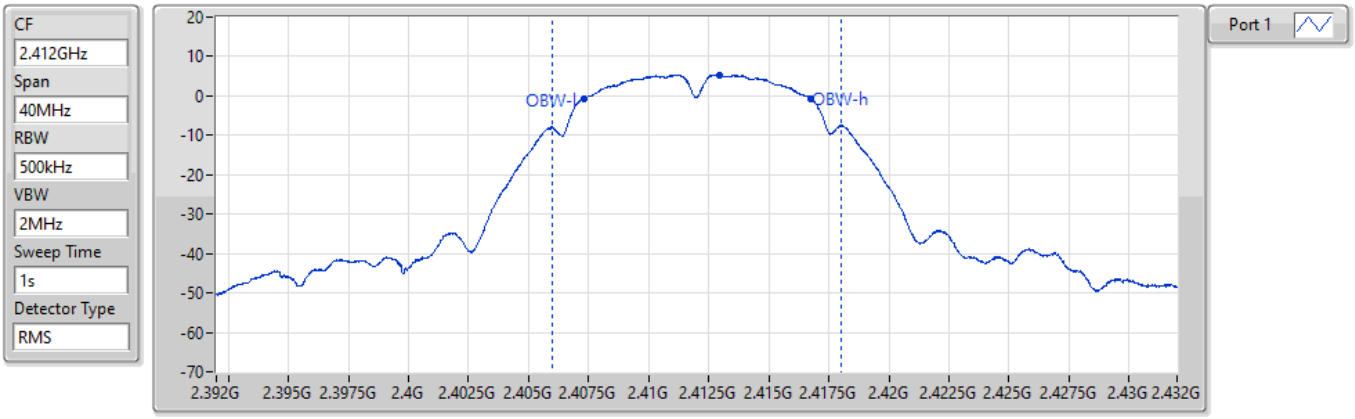
Result

Mode	Result	Limit (Hz)	fl-OBW (Hz)	fh-OBW (Hz)	OBW (Hz)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-
2412MHz_Tnom	Pass	2.4-2.4835G	2.405991G	2.418034G	12.043M
2442MHz_Tnom	Pass	2.4-2.4835G	2.435991G	2.448G	12.009M
2472MHz_Tnom	Pass	2.4-2.4835G	2.465965G	2.477974G	12.008M
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-
2412MHz_Tnom	Pass	2.4-2.4835G	2.403668G	2.420316G	16.648M
2442MHz_Tnom	Pass	2.4-2.4835G	2.433662G	2.450308G	16.646M
2472MHz_Tnom	Pass	2.4-2.4835G	2.463652G	2.4803G	16.648M
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-
2412MHz_Tnom	Pass	2.4-2.4835G	2.402433G	2.421552G	19.12M
2442MHz_Tnom	Pass	2.4-2.4835G	2.432422G	2.451553G	19.132M
2472MHz_Tnom	Pass	2.4-2.4835G	2.46242G	2.481544G	19.124M

fl-OBW = fl lower edge 99% occupied bandwidth; fh-OBW = fh higher edge 99% occupied bandwidth; OBW = 99% occupied bandwidth;
N dB = 6dB down bandwidth

802.11b_Nss1,(1Mbps)_1TX EBW

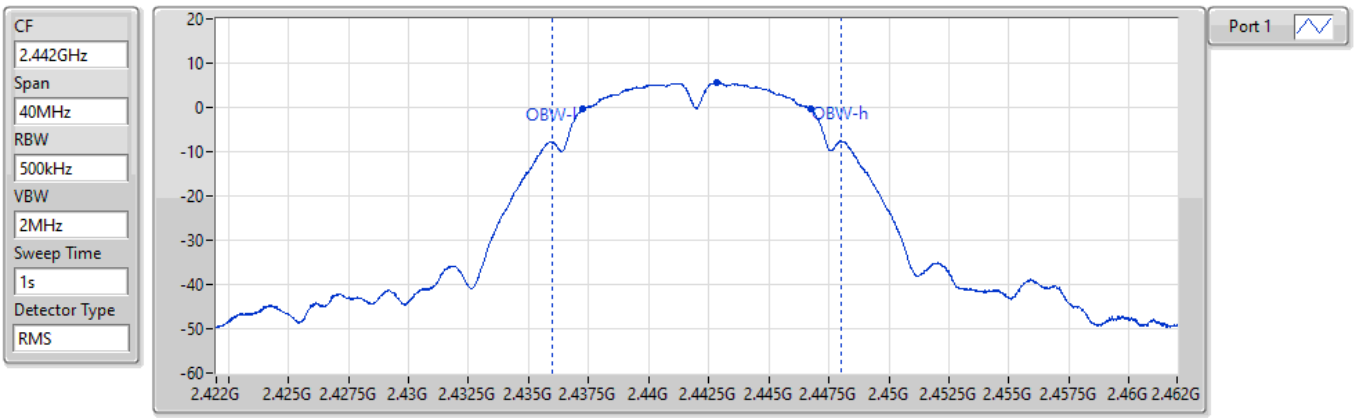
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.46M	2.4073G	2.41676G	12.043M	2.405991G	2.418034G	2.4-2.4835G	1

802.11b_Nss1,(1Mbps)_1TX EBW

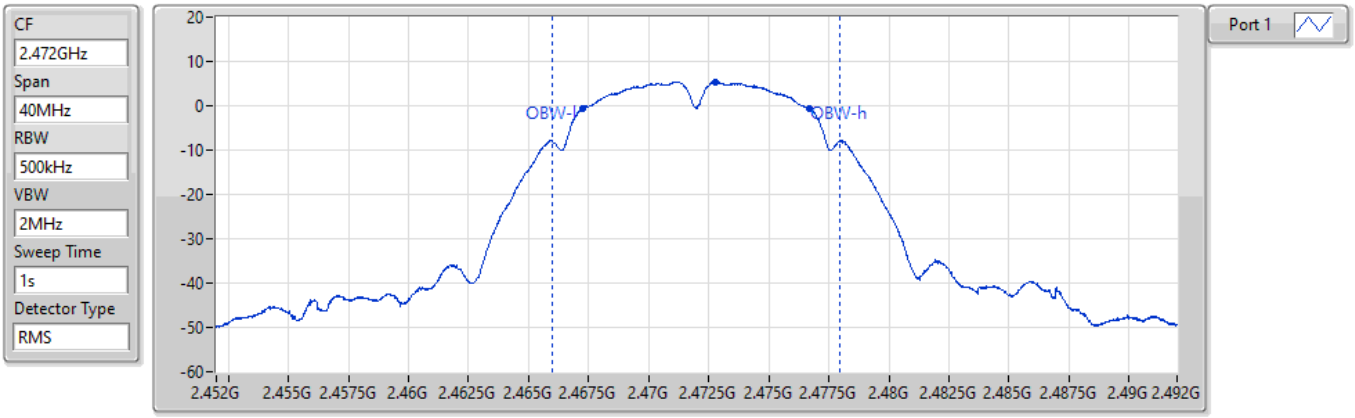
2442MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.44M	2.43728G	2.44672G	12.009M	2.435991G	2.448G	2.4-2.4835G	1

802.11b_Nss1,(1Mbps)_1TX EBW

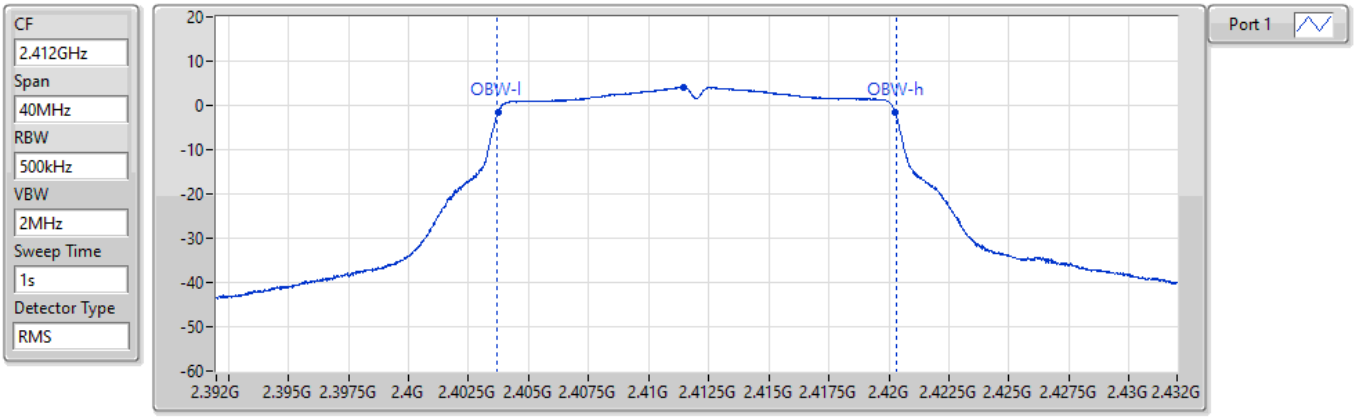
2472MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.44M	2.46724G	2.47668G	12.008M	2.465965G	2.477974G	2.4-2.4835G	1

802.11g_Nss1,(6Mbps)_1TX EBW

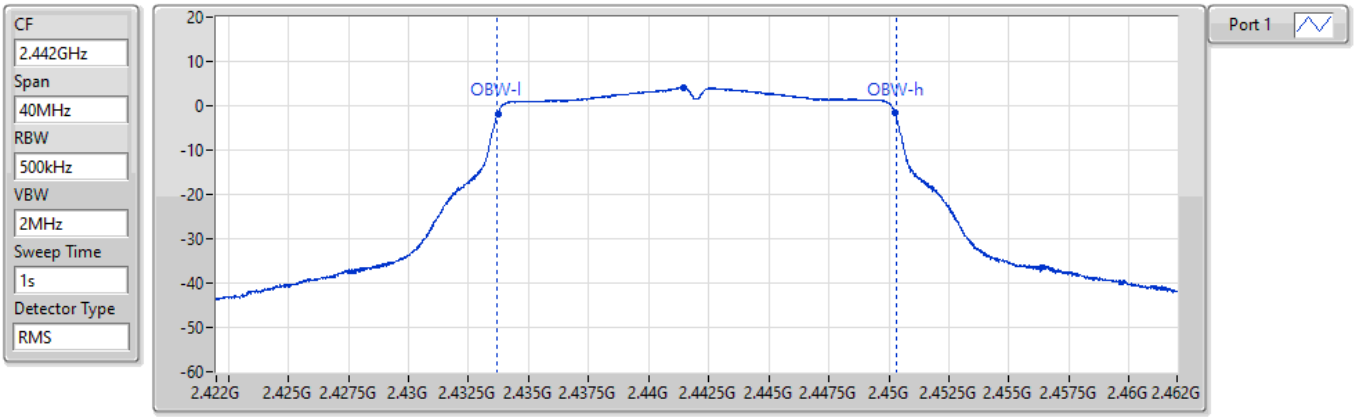
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.52M	2.40374G	2.42026G	16.648M	2.403668G	2.420316G	2.4-2.4835G	1

802.11g_Nss1,(6Mbps)_1TX EBW

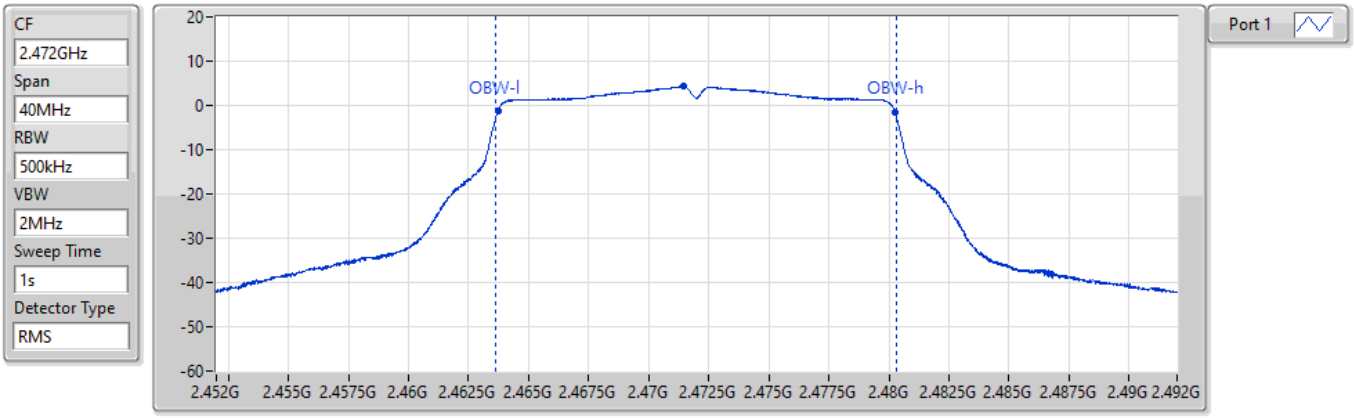
2442MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.54M	2.43372G	2.45026G	16.646M	2.433662G	2.450308G	2.4-2.4835G	1

802.11g_Nss1,(6Mbps)_1TX EBW

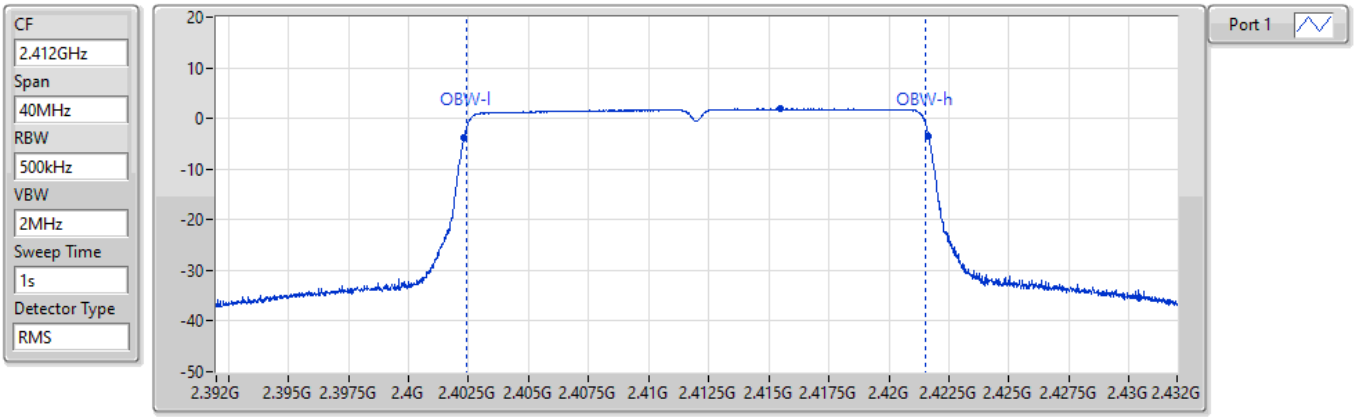
2472MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.52M	2.46372G	2.48024G	16.648M	2.463652G	2.4803G	2.4-2.4835G	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

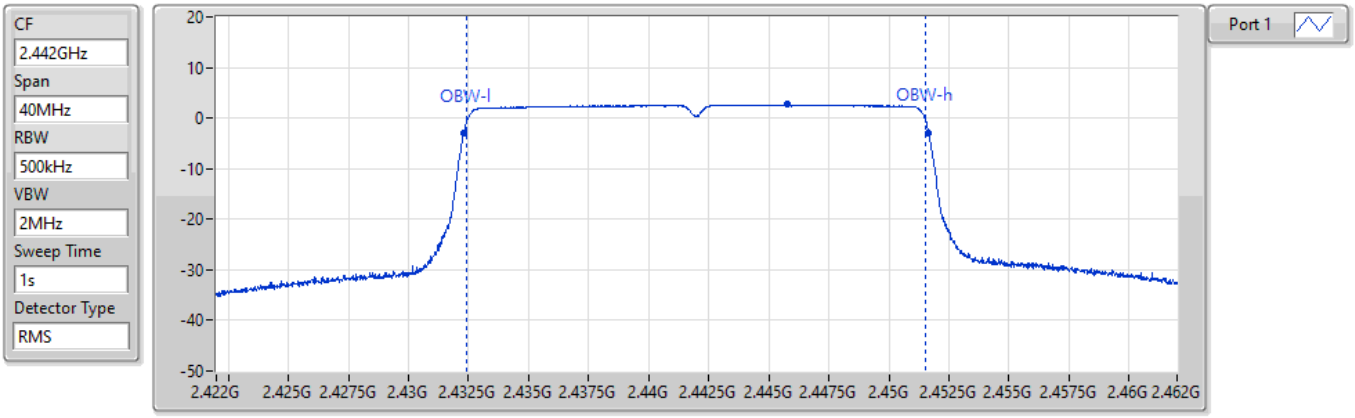
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.34M	2.40232G	2.42166G	19.12M	2.402433G	2.421552G	2.4-2.4835G	1

802.11ax HEW20_Nss1,(MCS0)_1TX EBW

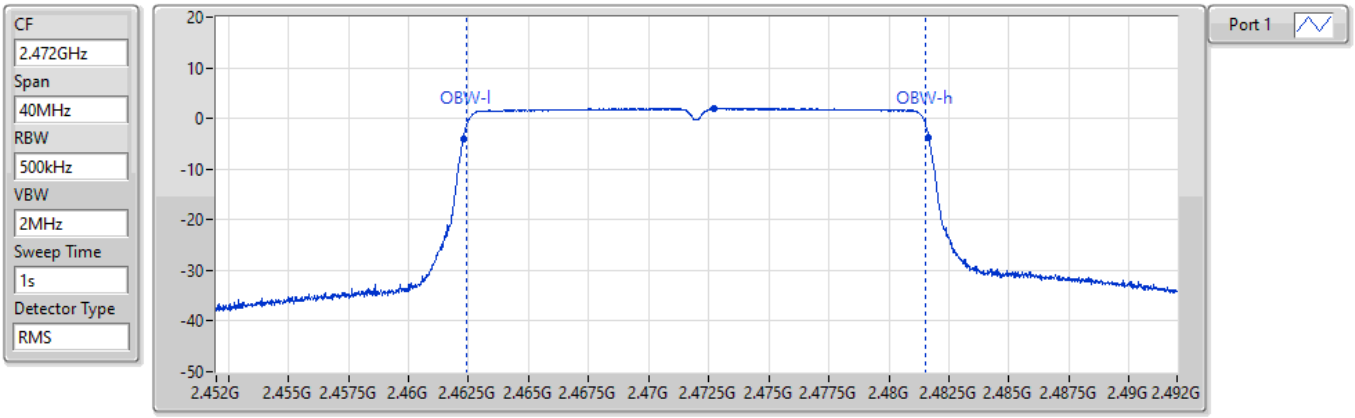
2442MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.36M	2.4323G	2.45166G	19.132M	2.432422G	2.451553G	2.4-2.4835G	1

802.11ax HEW20_Nss1,(MCS0)_1TX **EBW**

2472MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.38M	2.46228G	2.48166G	19.124M	2.46242G	2.481544G	2.4-2.4835G	1

2TX

Summary

Mode	OBW (Hz)	ITU-Code
2.4-2.4835GHz	-	-
802.11b_Nss1,(1Mbps)_2TX	11.97M	12M0G1D
802.11g_Nss1,(6Mbps)_2TX	16.642M	16M6D1D
HE20_Nss1,(MCS0)_2TX	19.068M	19M1D1D

OBW = 99% occupied bandwidth

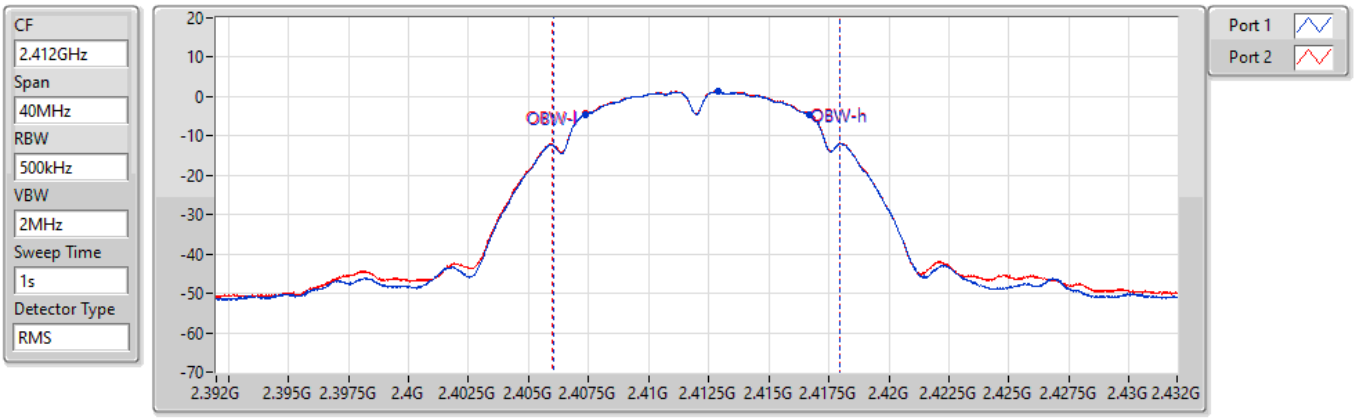
Result

Mode	Result	Limit (Hz)	fl-OBW (Hz)	fh-OBW (Hz)	OBW (Hz)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-
2412MHz_Tnom	Pass	2.4-2.4835G	2.406008G	2.417978G	11.97M
2442MHz_Tnom	Pass	2.4-2.4835G	2.436016G	2.447963G	11.946M
2472MHz_Tnom	Pass	2.4-2.4835G	2.466023G	2.477953G	11.929M
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-
2412MHz_Tnom	Pass	2.4-2.4835G	2.403667G	2.420309G	16.642M
2442MHz_Tnom	Pass	2.4-2.4835G	2.433664G	2.450306G	16.642M
2472MHz_Tnom	Pass	2.4-2.4835G	2.463663G	2.480304G	16.639M
HE20_Nss1,(MCS0)_2TX	-	-	-	-	-
2412MHz_Tnom	Pass	2.4-2.4835G	2.402456G	2.421521G	19.065M
2442MHz_Tnom	Pass	2.4-2.4835G	2.432451G	2.451519G	19.068M
2472MHz_Tnom	Pass	2.4-2.4835G	2.462452G	2.481518G	19.066M

fl-OBW = fl lower edge 99% occupied bandwidth; fh-OBW = fh higher edge 99% occupied bandwidth; OBW = 99% occupied bandwidth;
N dB = 6dB down bandwidth

802.11b_Nss1,(1Mbps)_2TX EBW

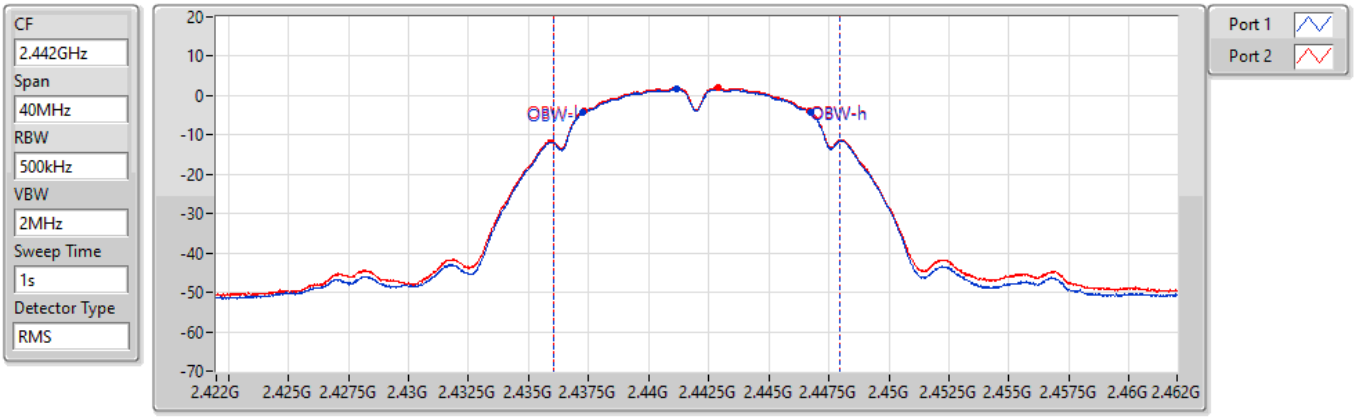
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.32M	2.40736G	2.41668G	11.939M	2.406036G	2.417974G	2.4-2.4835G	1
9.32M	2.40736G	2.41668G	11.97M	2.406008G	2.417978G	2.4-2.4835G	2

802.11b_Nss1,(1Mbps)_2TX EBW

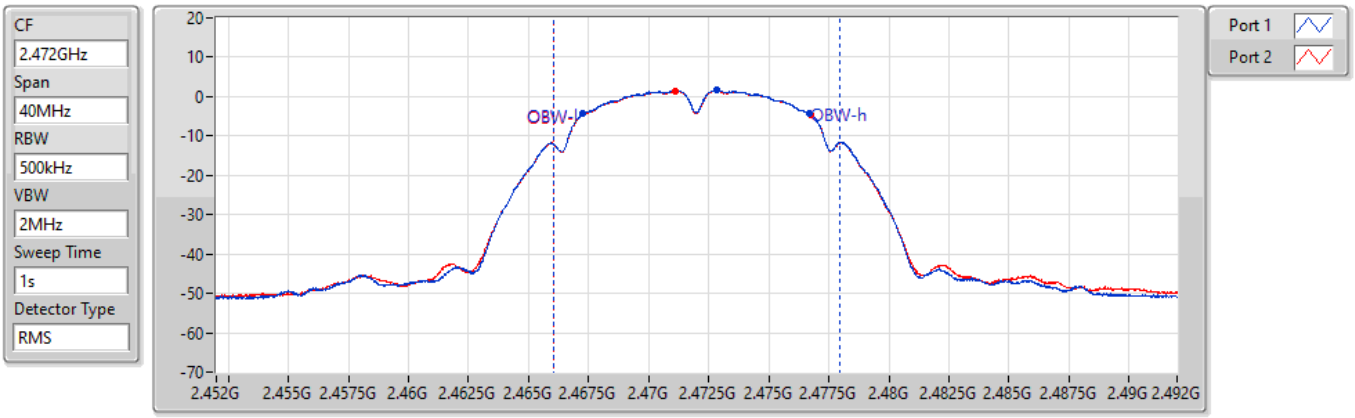
2442MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.44M	2.43728G	2.44672G	11.921M	2.436041G	2.447963G	2.4-2.4835G	1
9.4M	2.4373G	2.4467G	11.946M	2.436016G	2.447963G	2.4-2.4835G	2

802.11b_Nss1,(1Mbps)_2TX EBW

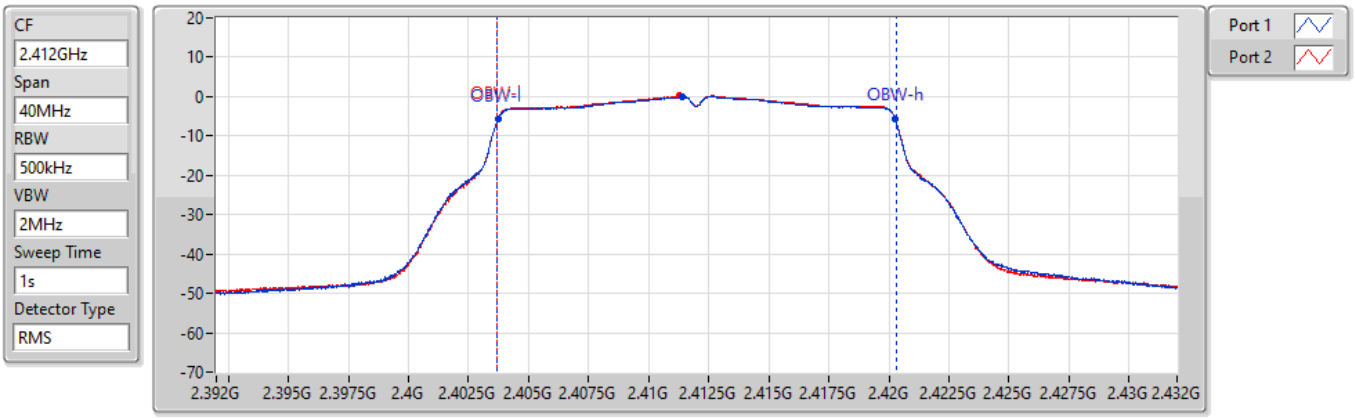
2472MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
9.42M	2.46728G	2.4767G	11.927M	2.466023G	2.47795G	2.4-2.4835G	1
9.44M	2.46728G	2.47672G	11.929M	2.466024G	2.477953G	2.4-2.4835G	2

802.11g_Nss1,(6Mbps)_2TX EBW

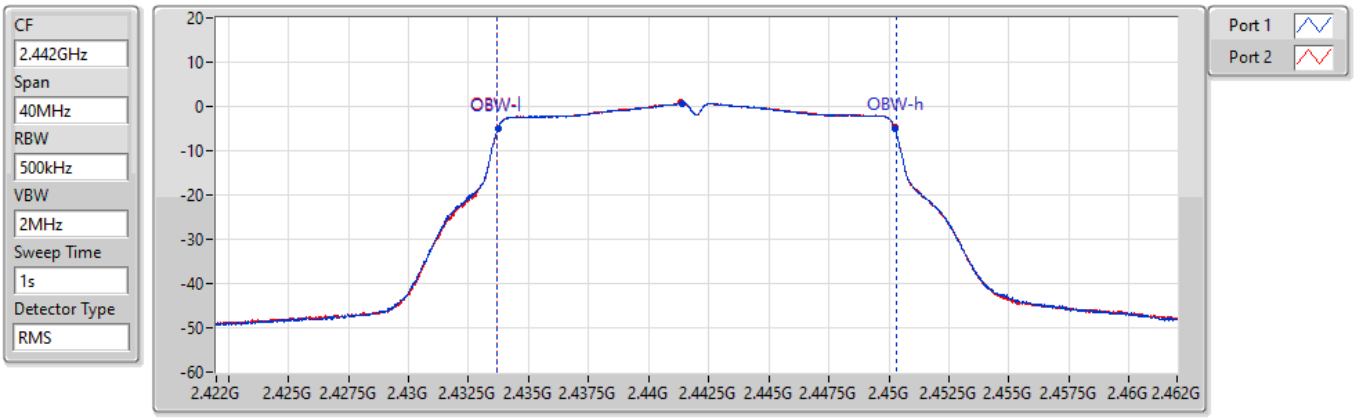
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.54M	2.40372G	2.42026G	16.642M	2.403667G	2.420309G	2.4-2.4835G	1
16.54M	2.40372G	2.42026G	16.631M	2.403675G	2.420307G	2.4-2.4835G	2

802.11g_Nss1,(6Mbps)_2TX EBW

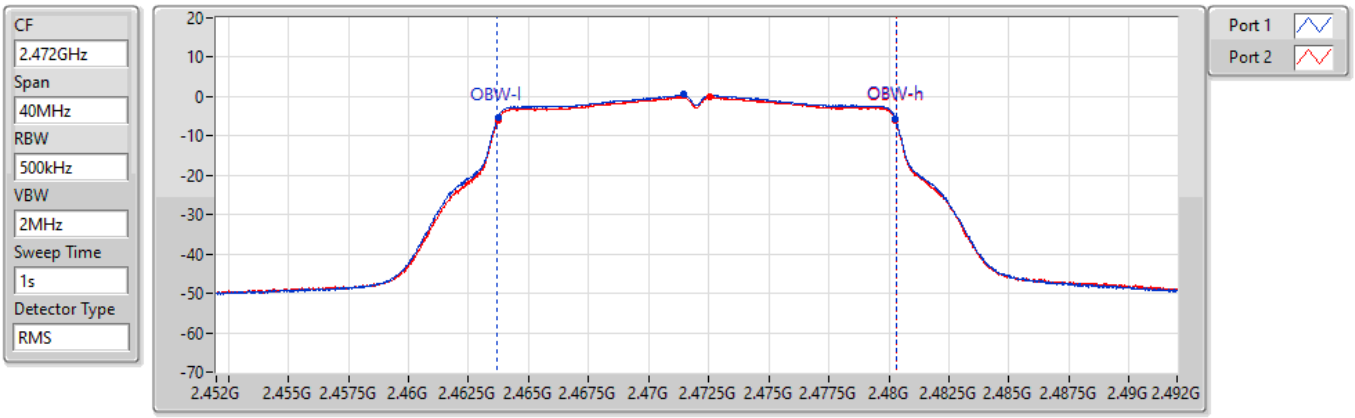
2442MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.54M	2.43372G	2.45026G	16.642M	2.433664G	2.450306G	2.4-2.4835G	1
16.52M	2.43372G	2.45024G	16.633M	2.433672G	2.450305G	2.4-2.4835G	2

802.11g_Nss1,(6Mbps)_2TX EBW

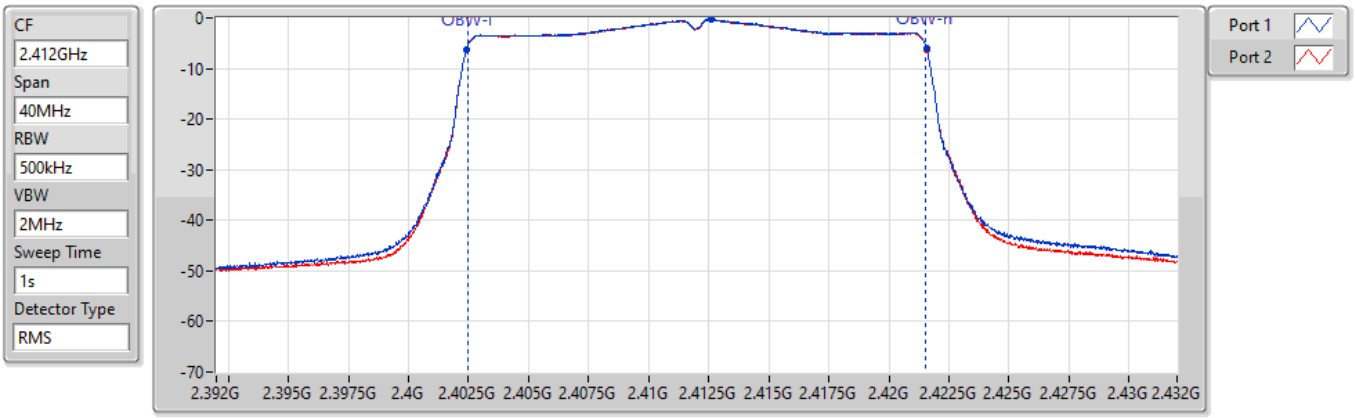
2472MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.54M	2.46372G	2.48026G	16.639M	2.463663G	2.480302G	2.4-2.4835G	1
16.54M	2.46372G	2.48026G	16.628M	2.463676G	2.480304G	2.4-2.4835G	2

HE20_Nss1,(MCS0)_2TX EBW

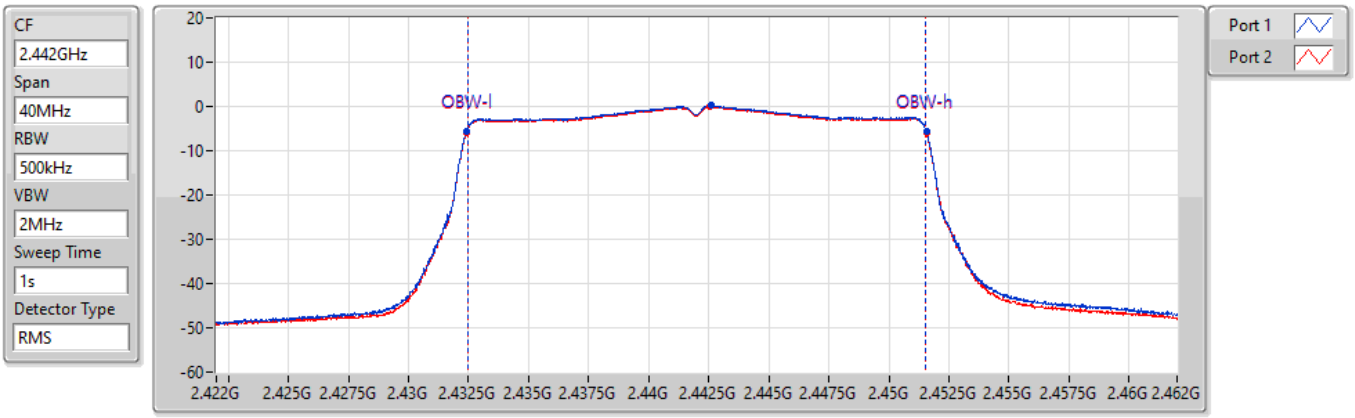
2412MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.14M	2.40242G	2.42156G	19.064M	2.402457G	2.421521G	2.4-2.4835G	1
19.14M	2.40242G	2.42156G	19.065M	2.402456G	2.421521G	2.4-2.4835G	2

HE20_Nss1,(MCS0)_2TX EBW

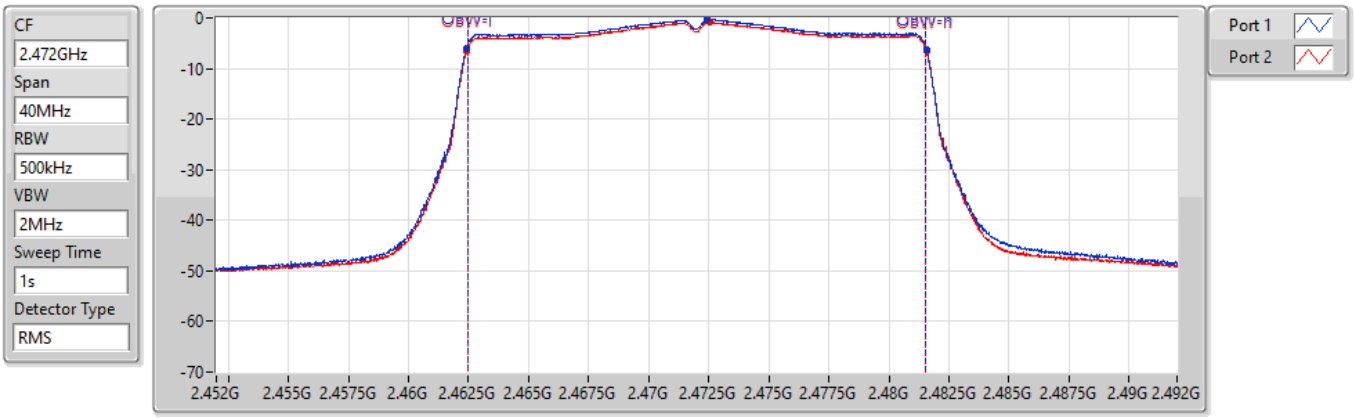
2442MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.14M	2.43242G	2.45156G	19.068M	2.432451G	2.451519G	2.4-2.4835G	1
19.14M	2.43242G	2.45156G	19.068M	2.432451G	2.451519G	2.4-2.4835G	2

HE20_Nss1,(MCS0)_2TX **EBW**

2472MHz



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.14M	2.46242G	2.48156G	19.062M	2.462452G	2.481514G	2.4-2.4835G	1
19.14M	2.46242G	2.48156G	19.066M	2.462453G	2.481518G	2.4-2.4835G	2

1TX

Summary

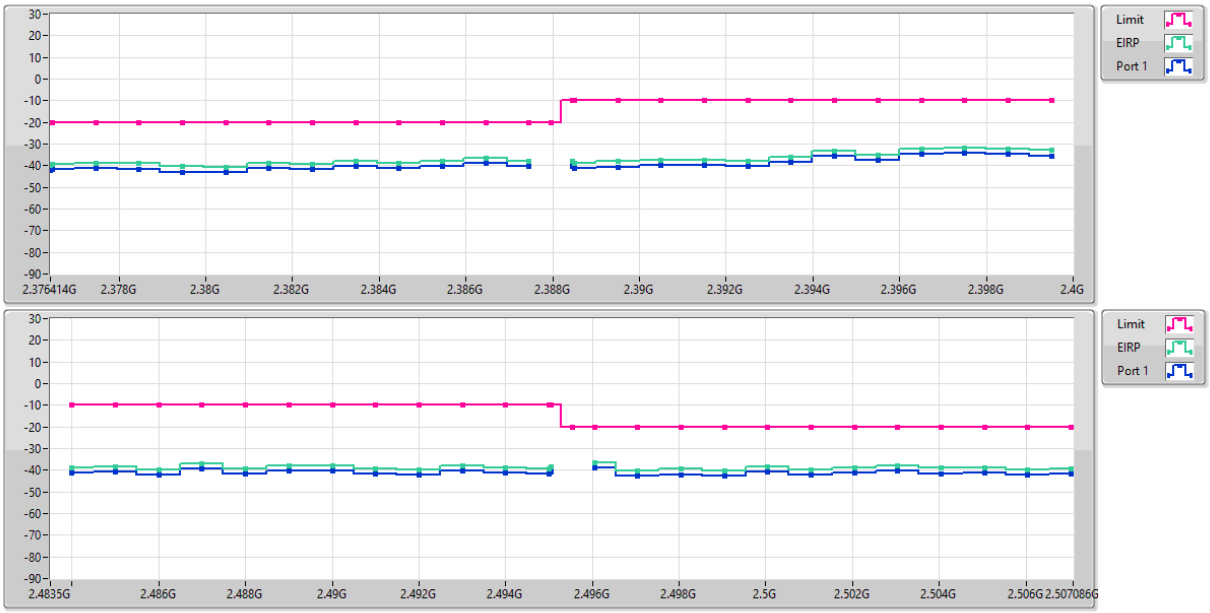
Mode	EIRP-A (dBm)	Limit-A (dBm)	EIRP-B (dBm)	Limit-B (dBm)
2.4-2.4835GHz	-	-	-	-
802.11b_Nss1,(1Mbps)_1TX	-30.42	-10	-36.66	-20
802.11g_Nss1,(6Mbps)_1TX	-19.75	-10	-29.58	-20
802.11ax HEW20_Nss1,(MCS0)_1TX	-14.39	-10	-31.46	-20

Result

Mode	Result	Freq (Hz)	EIRP (dBm)	Limit (dBm)	Freq (Hz)	EIRP (dBm)	Limit (dBm)
802.11b_Nss1,(1Mbps)_1TX	-	-	-	-	-	-	-
2412MHz_Tnom	Pass	2.386457G	-36.68	-20	2.3975G	-31.92	-10
2412MHz_Tnom	Pass	2.496043G	-36.66	-20	2.487G	-37.13	-10
2472MHz_Tnom	Pass	2.378492G	-37.99	-20	2.3935G	-38.75	-10
2472MHz_Tnom	Pass	2.500008G	-37.26	-20	2.486G	-30.42	-10
802.11g_Nss1,(6Mbps)_1TX	-	-	-	-	-	-	-
2412MHz_Tnom	Pass	2.381852G	-29.58	-20	2.3995G	-21.93	-10
2412MHz_Tnom	Pass	2.512648G	-35.83	-20	2.486G	-36.49	-10
2472MHz_Tnom	Pass	2.382852G	-37.40	-20	2.3955G	-37.75	-10
2472MHz_Tnom	Pass	2.500648G	-33.67	-20	2.484G	-19.75	-10
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
2412MHz_Tnom	Pass	2.37438G	-33.43	-20	2.3995G	-15.21	-10
2412MHz_Tnom	Pass	2.51512G	-37.16	-20	2.501G	-36.85	-10
2472MHz_Tnom	Pass	2.362376G	-38.18	-20	2.3945G	-37.75	-10
2472MHz_Tnom	Pass	2.517124G	-31.46	-20	2.485G	-14.39	-10

802.11b_Nss1,(1Mbps)_1TX **MASK-DTS**

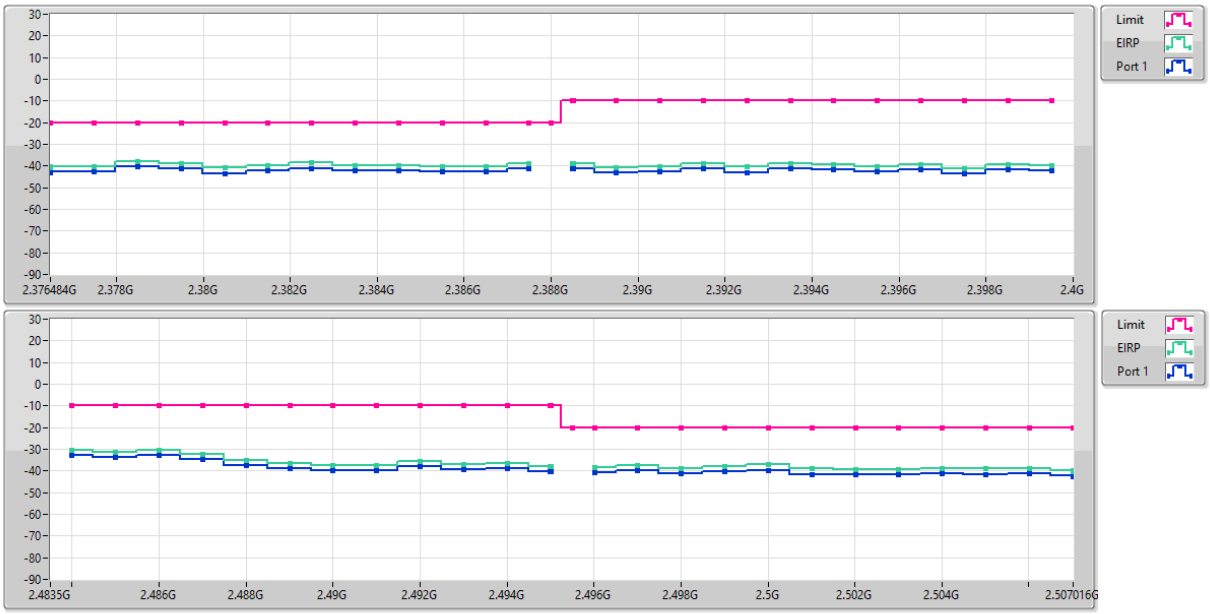
2412MHz_Tnom



Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.386457G	-36.68	-20	2.3975G	-31.92	-10	2.487G	-37.13	-10	2.496043G	-36.66	-20

802.11b_Nss1,(1Mbps)_1TX **MASK-DTS**

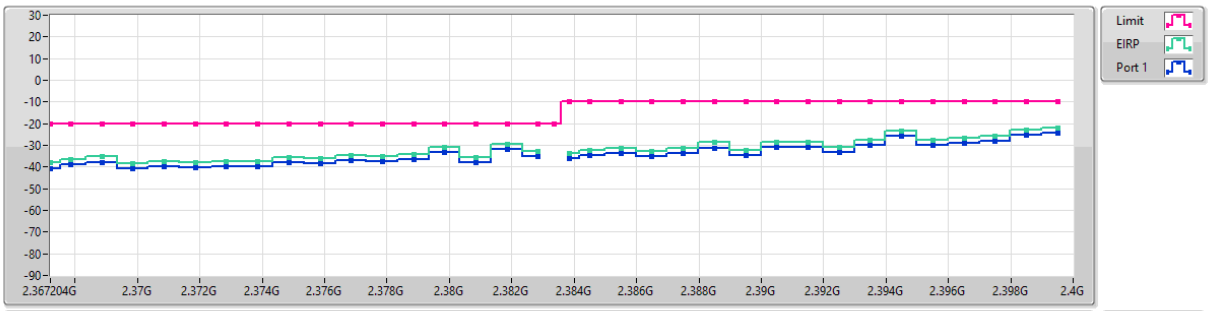
2472MHz_Tnom

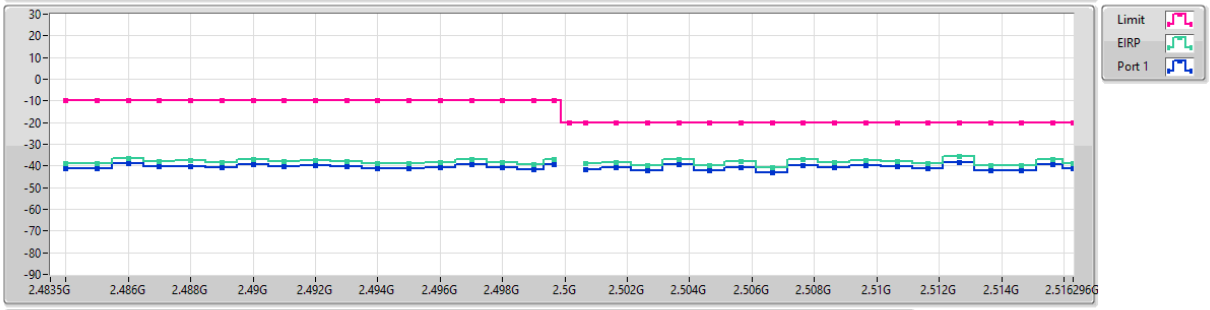


Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.378492G	-37.99	-20	2.3935G	-38.75	-10	2.486G	-30.42	-10	2.500008G	-37.26	-20

802.11g_Nss1,(6Mbps)_1TX **MASK-DTS**

2412MHz_Tnom

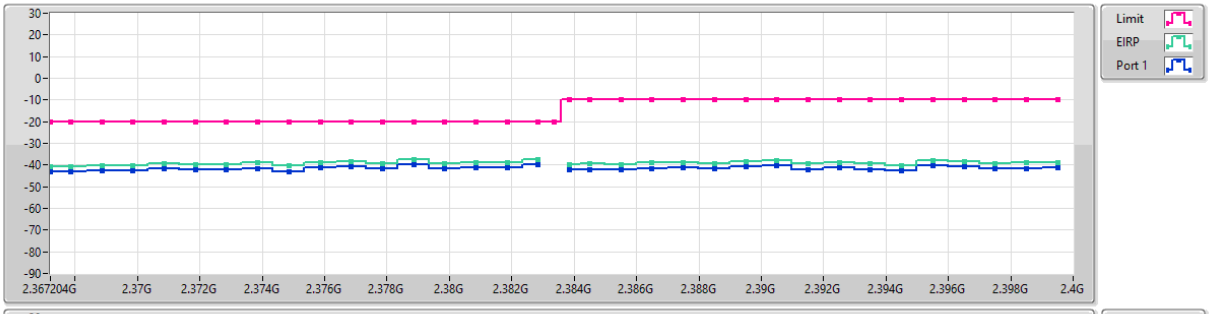


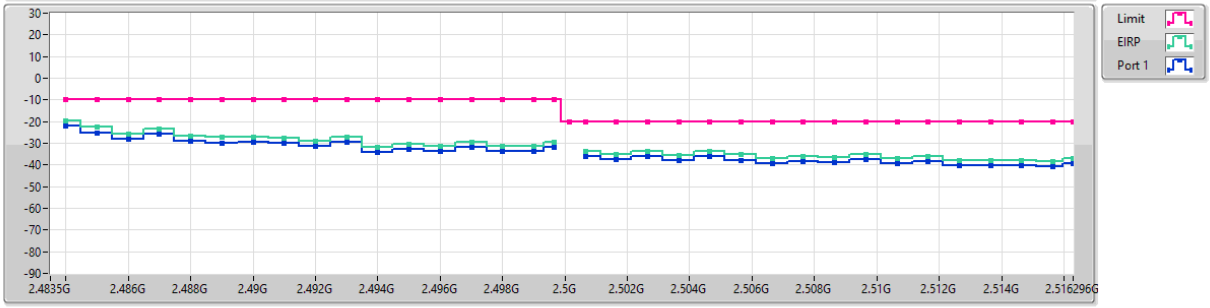


Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.381852G	-29.58	-20	2.3995G	-21.93	-10	2.486G	-36.49	-10	2.512648G	-35.83	-20

802.11g_Nss1,(6Mbps)_1TX **MASK-DTS**

2472MHz_Tnom

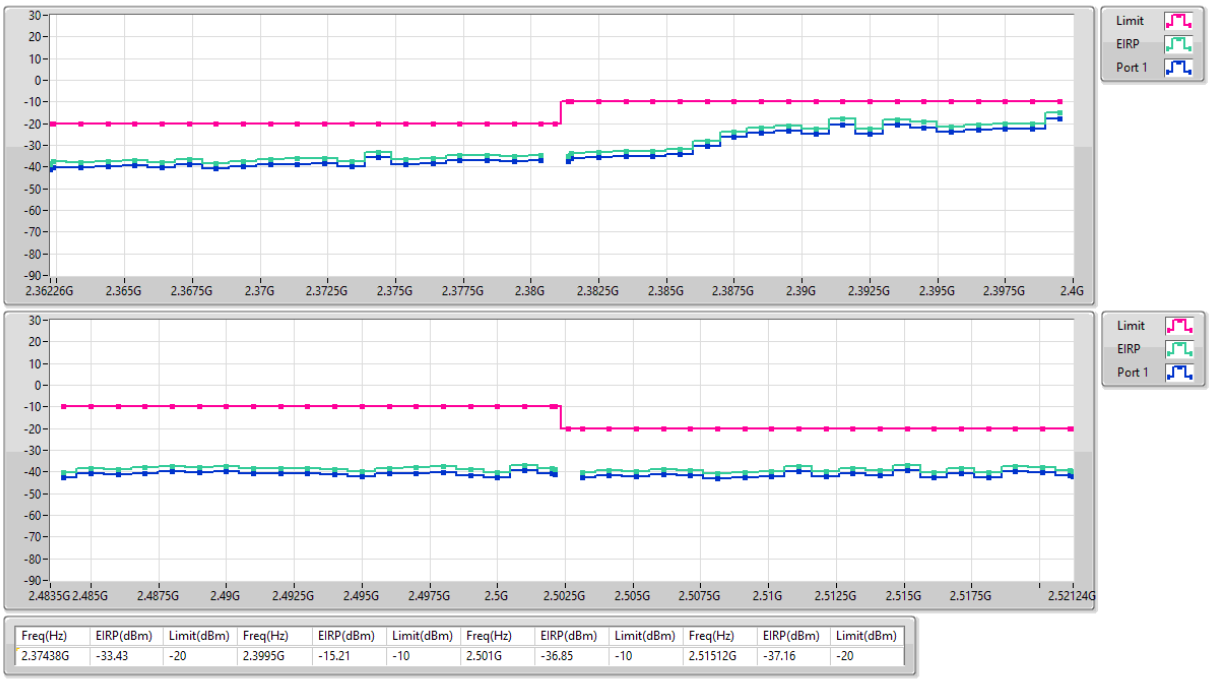




Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.382852G	-37.40	-20	2.3955G	-37.75	-10	2.484G	-19.75	-10	2.500648G	-33.67	-20

802.11ax HEW20_Nss1,(MCS0)_1TX **MASK-DTS**

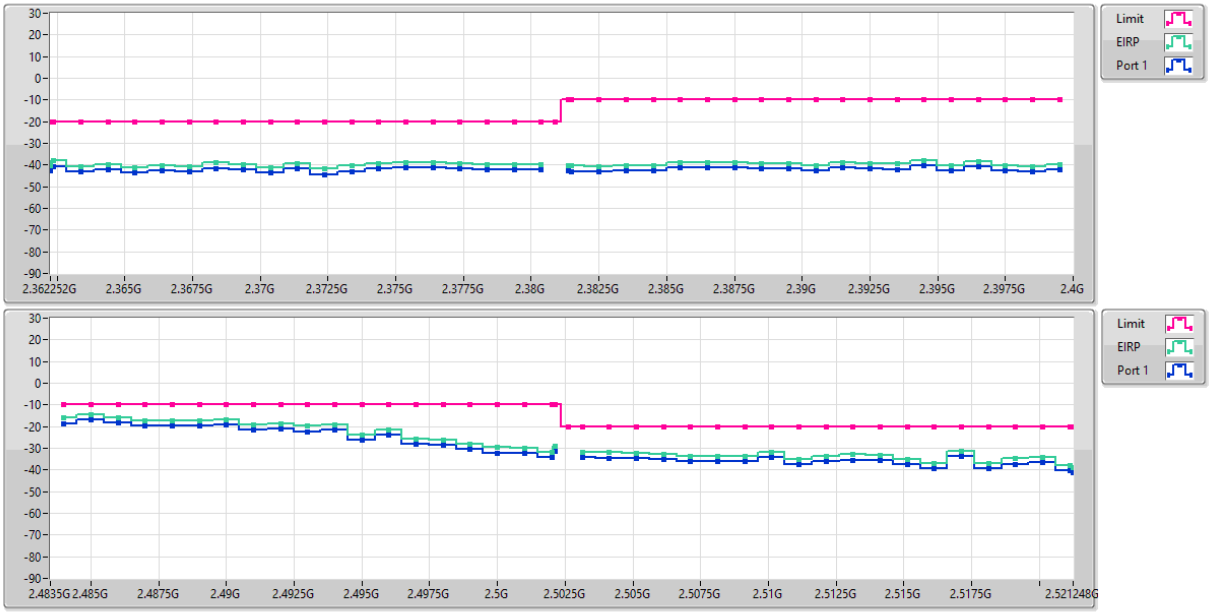
2412MHz_Tnom



Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.37438G	-33.43	-20	2.3995G	-15.21	-10	2.501G	-36.85	-10	2.51512G	-37.16	-20

802.11ax HEW20_Nss1,(MCS0)_1TX **MASK-DTS**

2472MHz_Tnom



Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.362376G	-38.18	-20	2.3945G	-37.75	-10	2.485G	-14.39	-10	2.517124G	-31.46	-20

2TX

Summary

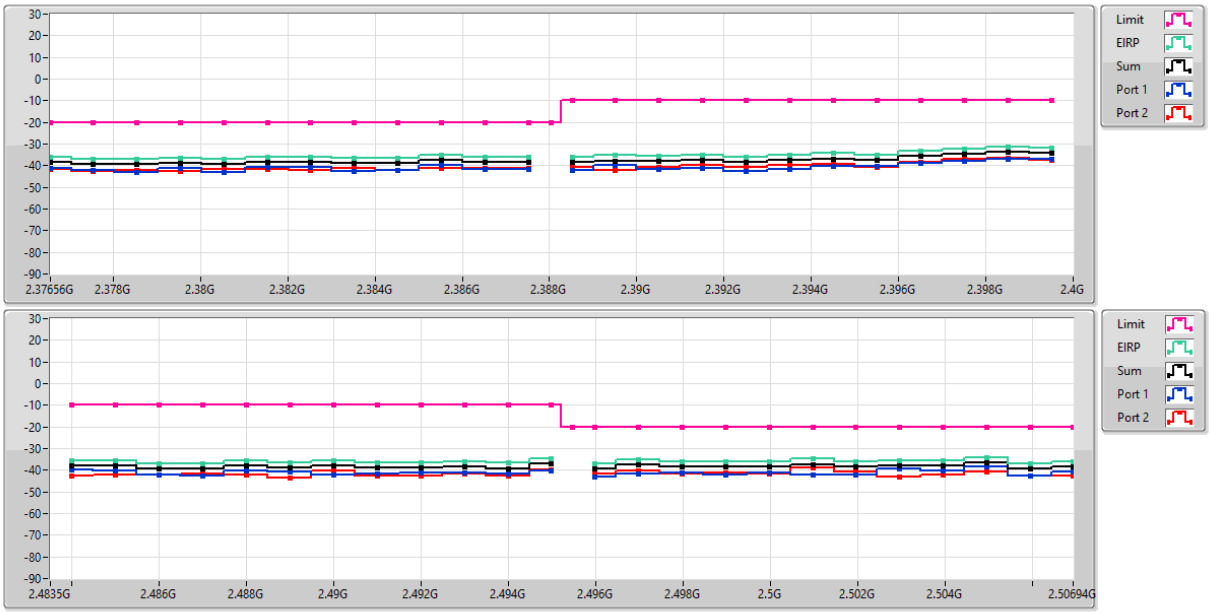
Mode	EIRP-A (dBm)	Limit-A (dBm)	EIRP-B (dBm)	Limit-B (dBm)
2.4-2.4835GHz	-	-	-	-
802.11b_Nss1,(1Mbps)_2TX	-31.12	-10	-33.99	-20
802.11g_Nss1,(6Mbps)_2TX	-21.9	-10	-34.32	-20
HE20_Nss1,(MCS0)_2TX	-20.77	-10	-33.72	-20

Result

Mode	Result	Freq (Hz)	EIRP (dBm)	Limit (dBm)	Freq (Hz)	EIRP (dBm)	Limit (dBm)
802.11b_Nss1,(1Mbps)_2TX	-	-	-	-	-	-	-
2412MHz_Tnom	Pass	2.38553G	-35.15	-20	2.3985G	-31.58	-10
2412MHz_Tnom	Pass	2.50497G	-34.26	-20	2.49497G	-34.70	-10
2472MHz_Tnom	Pass	2.386571G	-35.91	-20	2.3945G	-35.34	-10
2472MHz_Tnom	Pass	2.501929G	-33.99	-20	2.485G	-31.12	-10
802.11g_Nss1,(6Mbps)_2TX	-	-	-	-	-	-	-
2412MHz_Tnom	Pass	2.381858G	-34.94	-20	2.3995G	-27.64	-10
2412MHz_Tnom	Pass	2.504642G	-35.07	-20	2.486G	-34.46	-10
2472MHz_Tnom	Pass	2.374861G	-35.09	-20	2.3925G	-34.59	-10
2472MHz_Tnom	Pass	2.500639G	-34.32	-20	2.484G	-21.90	-10
HE20_Nss1,(MCS0)_2TX	-	-	-	-	-	-	-
2412MHz_Tnom	Pass	2.377435G	-35.64	-20	2.3995G	-29.25	-10
2412MHz_Tnom	Pass	2.515065G	-33.72	-20	2.496G	-34.07	-10
2472MHz_Tnom	Pass	2.369434G	-35.14	-20	2.3935G	-35.78	-10
2472MHz_Tnom	Pass	2.505066G	-34.62	-20	2.484G	-20.77	-10

802.11b_Nss1,(1Mbps)_2TX **MASK-DTS**

2412MHz_Tnom



Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.38553G	-35.15	-20	2.3985G	-31.58	-10	2.49497G	-34.70	-10	2.50497G	-34.26	-20

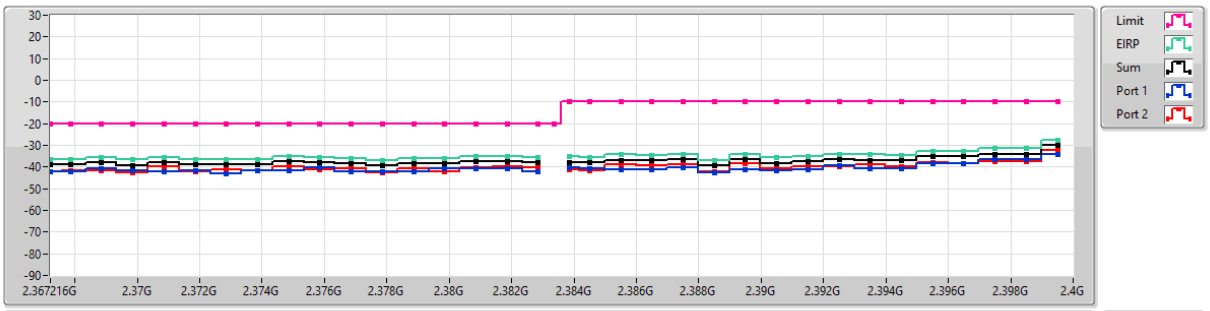
802.11b_Nss1,(1Mbps)_2TX **MASK-DTS**

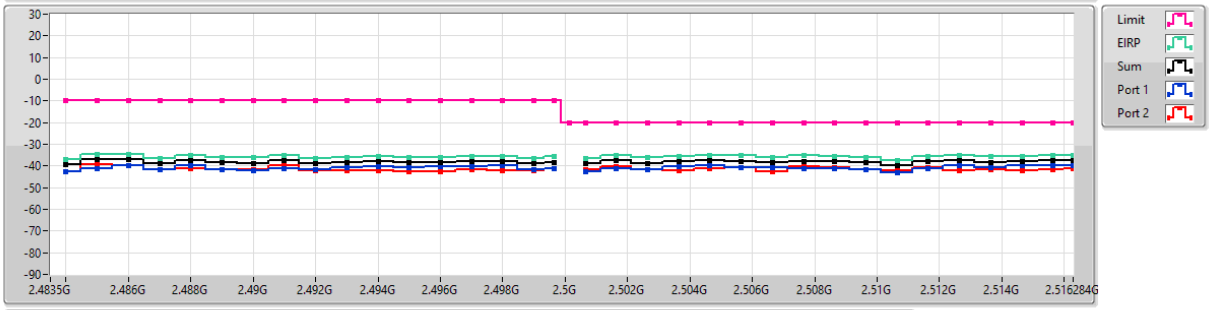
2472MHz_Tnom

Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.386571G	-35.91	-20	2.3945G	-35.34	-10	2.485G	-31.12	-10	2.501929G	-33.99	-20

802.11g_Nss1,(6Mbps)_2TX **MASK-DTS**

2412MHz_Tnom

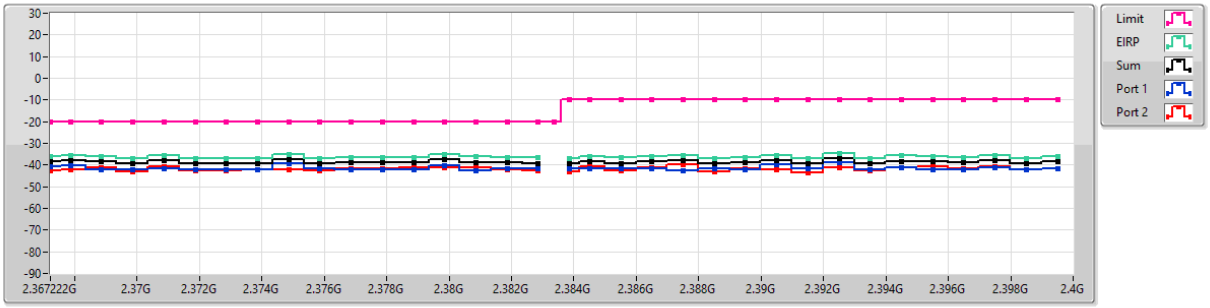


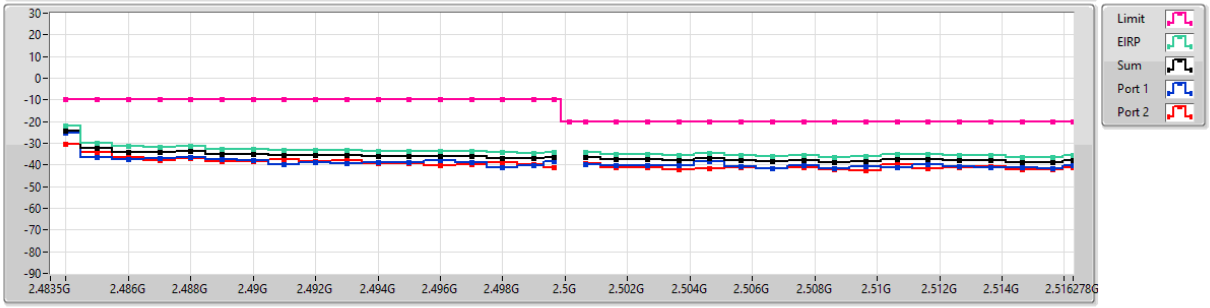


Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.381858G	-34.94	-20	2.3995G	-27.64	-10	2.486G	-34.46	-10	2.504642G	-35.07	-20

802.11g_Nss1,(6Mbps)_2TX **MASK-DTS**

2472MHz_Tnom

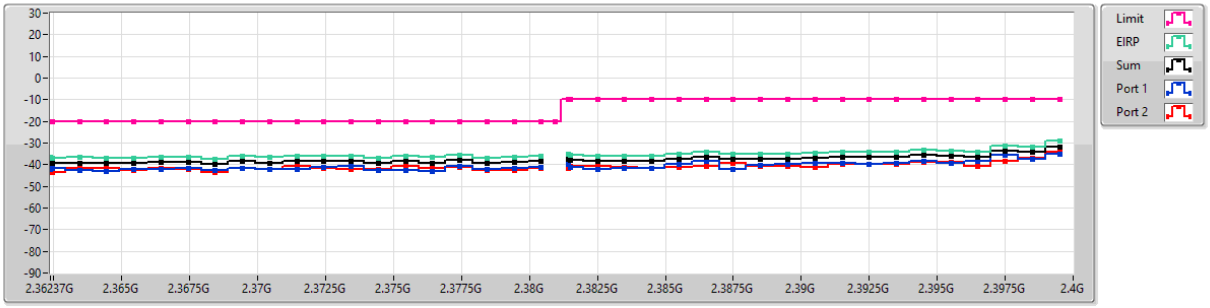


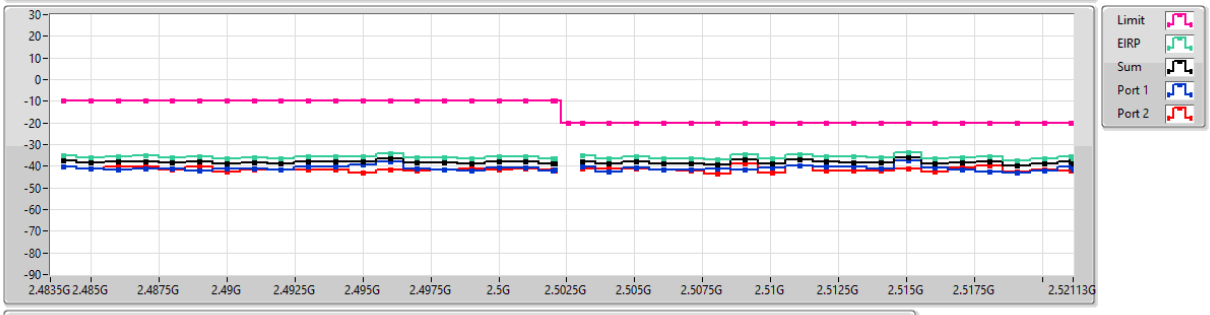


Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.374861G	-35.09	-20	2.3925G	-34.59	-10	2.484G	-21.90	-10	2.500639G	-34.32	-20

HE20_Nss1,(MCS0)_2TX **MASK-DTS**

2412MHz_Tnom

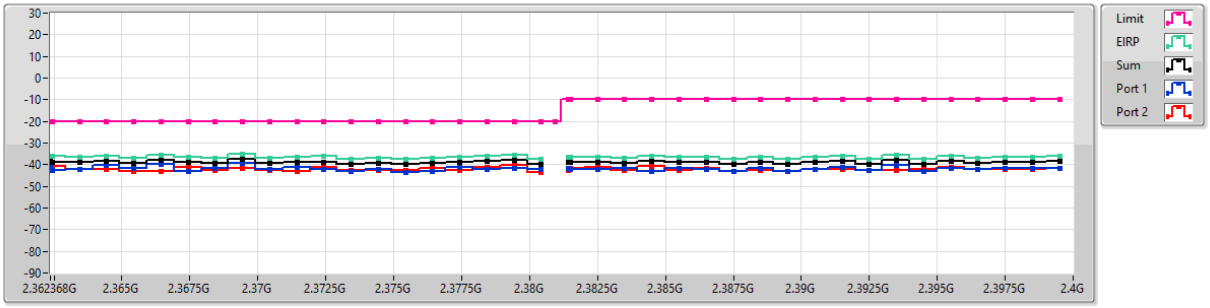


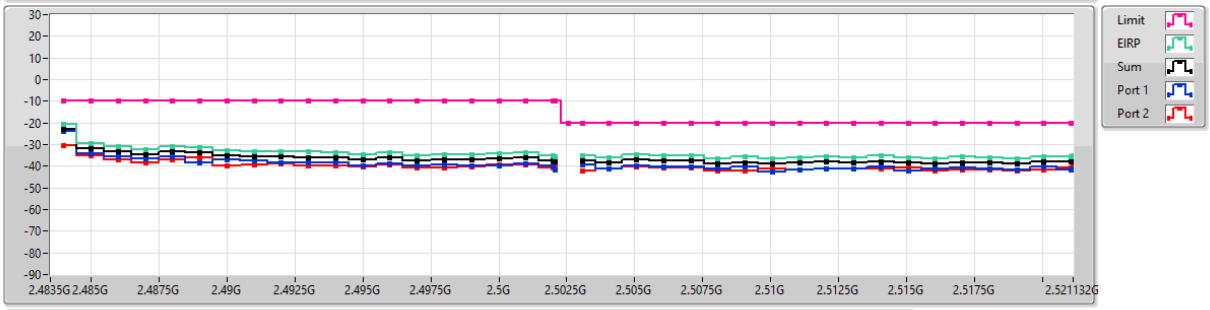


Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.377435G	-35.64	-20	2.3995G	-29.25	-10	2.496G	-34.07	-10	2.515065G	-33.72	-20

HE20_Nss1,(MCS0)_2TX **MASK-DTS**

2472MHz_Tnom





Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)	Freq(Hz)	EIRP(dBm)	Limit(dBm)
2.369434G	-35.14	-20	2.3935G	-35.78	-10	2.484G	-20.77	-10	2.505066G	-34.62	-20

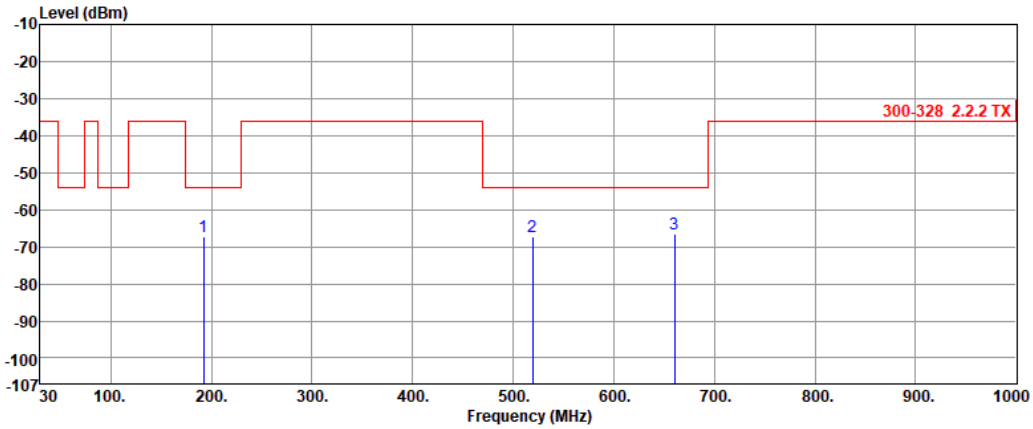
full RU configuration

1TX

Emissions (Below 1GHz)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

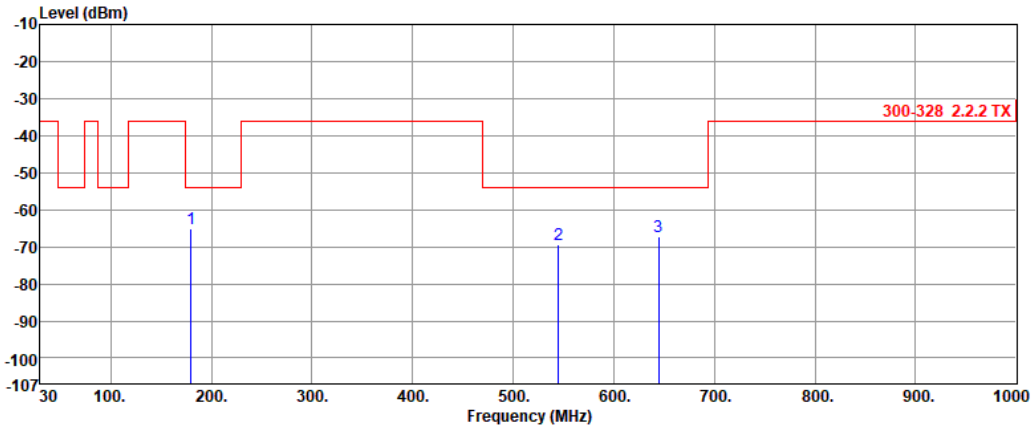


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.97	-67.41	-54.00	-13.41	-4.31	-63.10
2	519.53	-67.14	-54.00	-13.14	4.66	-71.80
3	660.56	-66.73	-54.00	-12.73	6.74	-73.47

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

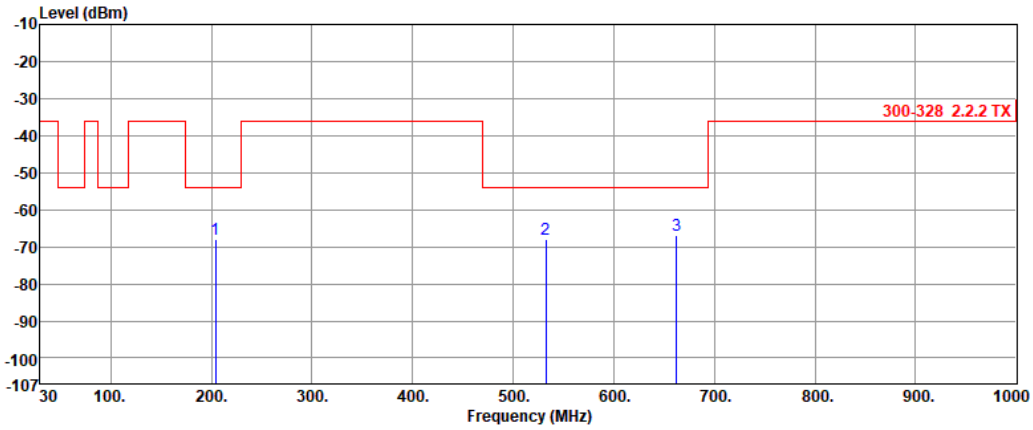


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.66	-65.16	-54.00	-11.16	-3.11	-62.05
2	545.30	-69.32	-54.00	-15.32	4.93	-74.25
3	644.85	-67.30	-54.00	-13.30	7.31	-74.61

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

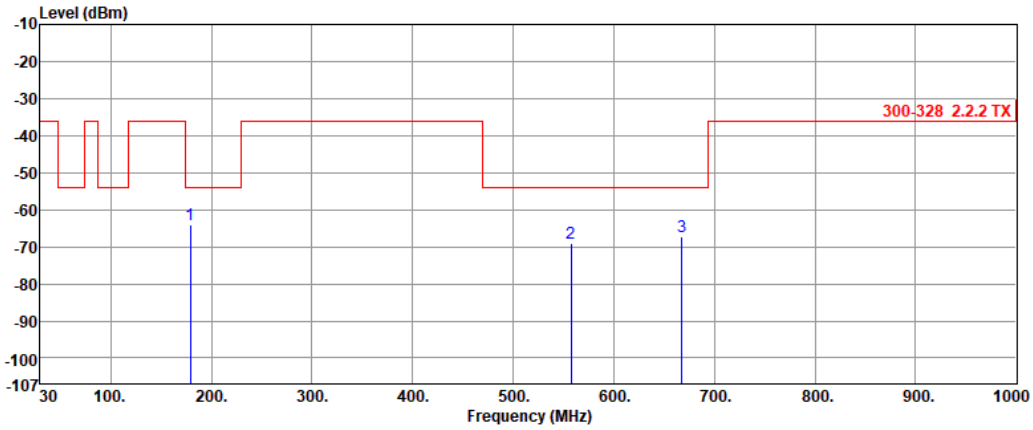


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	204.26	-67.93	-54.00	-13.93	-4.47	-63.46
2	532.28	-68.06	-54.00	-14.06	4.96	-73.02
3	662.32	-67.08	-54.00	-13.08	6.77	-73.85

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

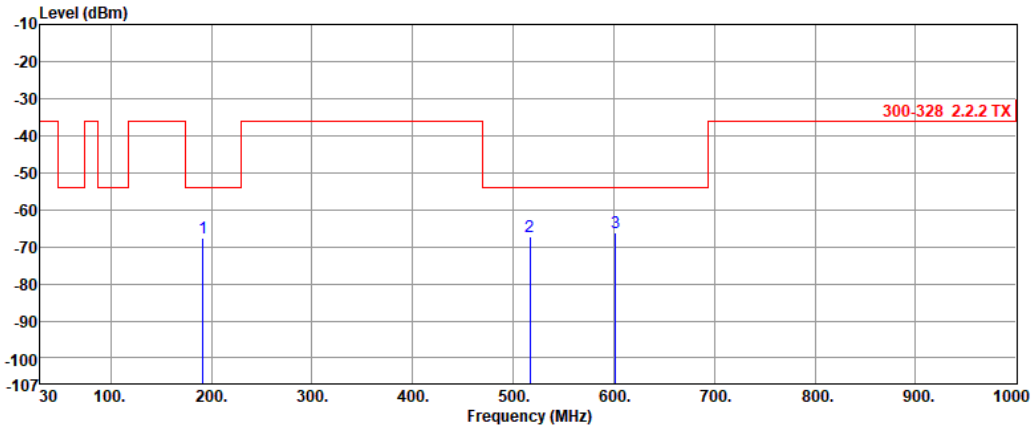


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.17	-64.05	-54.00	-10.05	-3.00	-61.05
2	557.27	-69.09	-54.00	-15.09	5.44	-74.53
3	667.82	-67.28	-54.00	-13.28	7.51	-74.79

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

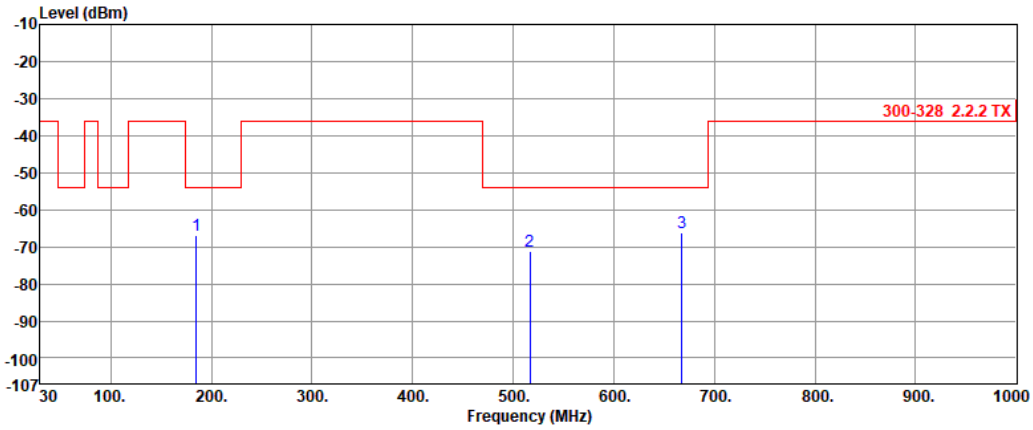


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.51	-67.79	-54.00	-13.79	-4.24	-63.55
2	516.55	-67.17	-54.00	-13.17	4.59	-71.76
3	601.49	-66.09	-54.00	-12.09	6.36	-72.45

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

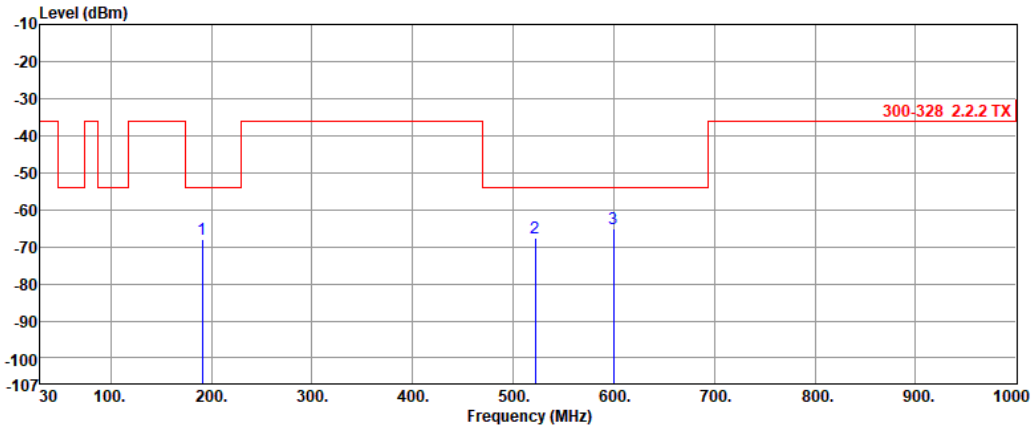


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	184.80	-66.95	-54.00	-12.95	-4.15	-62.80
2	516.33	-71.23	-54.00	-17.23	3.85	-75.08
3	667.79	-66.12	-54.00	-12.12	7.51	-73.63

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

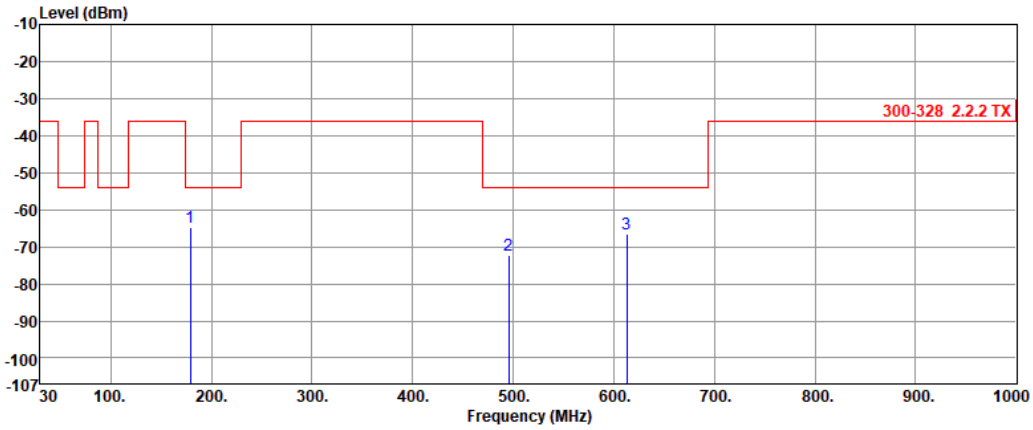


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.10	-67.82	-54.00	-13.82	-4.19	-63.63
2	521.79	-67.47	-54.00	-13.47	4.69	-72.16
3	599.88	-65.12	-54.00	-11.12	6.35	-71.47

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



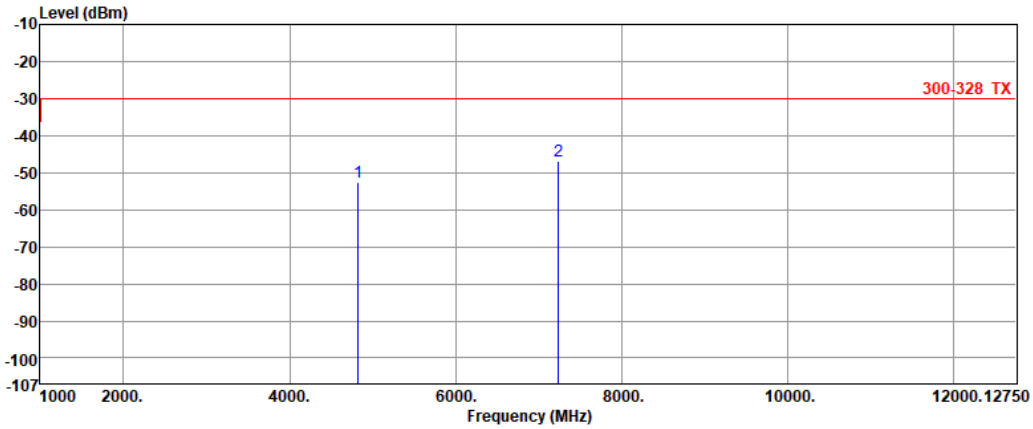
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.05	-64.66	-54.00	-10.66	-2.97	-61.69
2	495.60	-72.17	-54.00	-18.17	3.70	-75.87
3	613.07	-66.44	-54.00	-12.44	6.54	-72.98

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11b

Modulation	11b	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

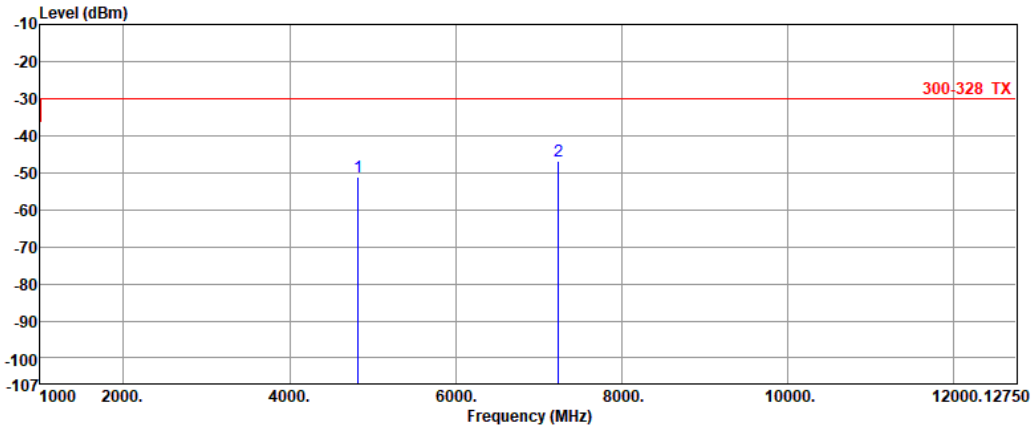


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.01	-52.66	-30.00	-22.66	13.76	-66.42
2	7236.13	-46.96	-30.00	-16.96	19.13	-66.09

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

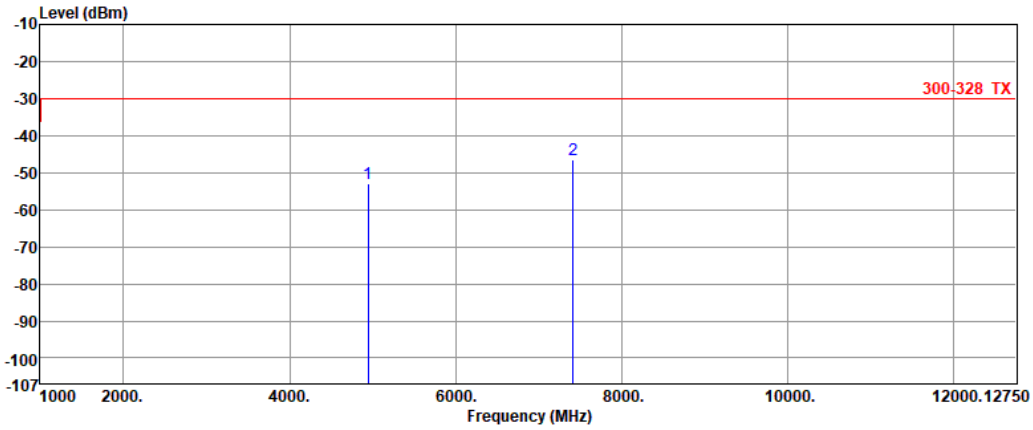


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.29	-51.31	-30.00	-21.31	13.70	-65.01
2	7236.37	-46.93	-30.00	-16.93	18.95	-65.88

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

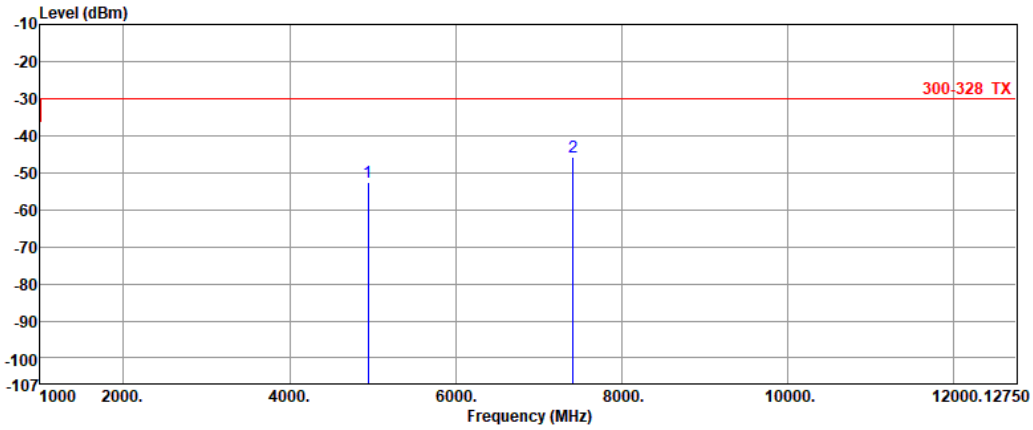


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.25	-52.96	-30.00	-22.96	13.85	-66.81
2	7416.50	-46.62	-30.00	-16.62	19.39	-66.01

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



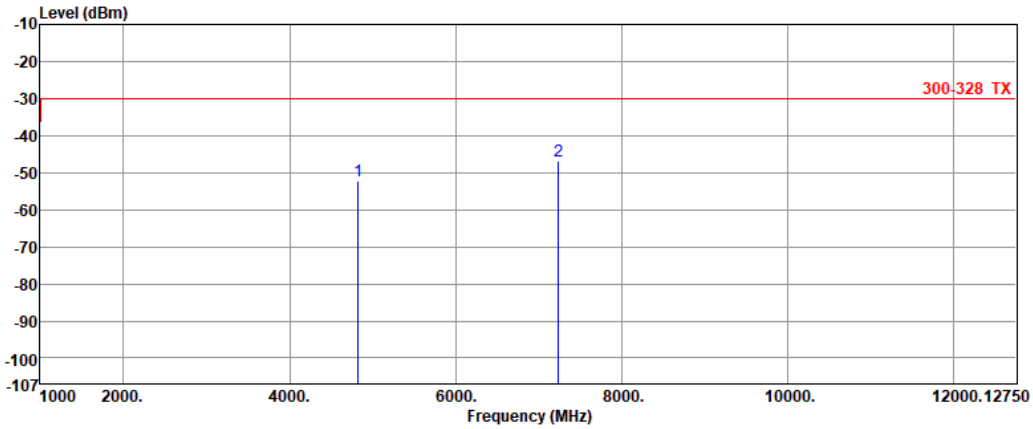
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.17	-52.71	-30.00	-22.71	13.32	-66.03
2	7416.01	-45.73	-30.00	-15.73	19.51	-65.24

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11g

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

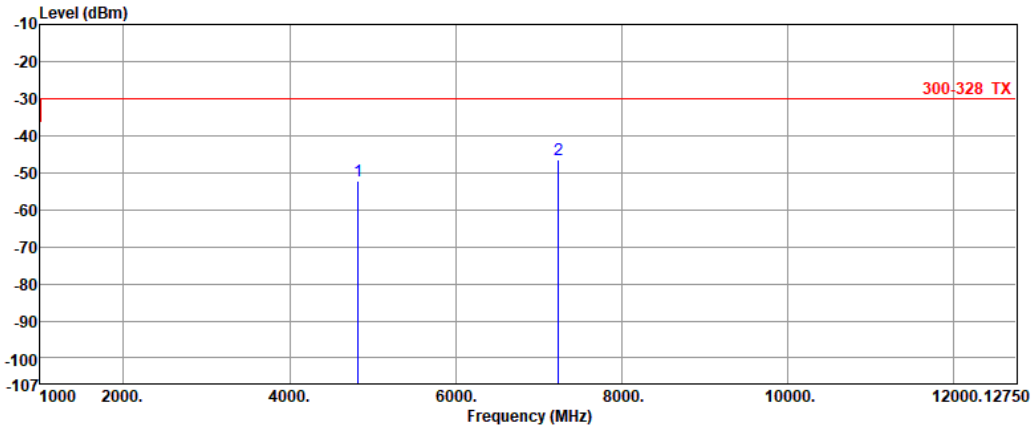


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.06	-52.17	-30.00	-22.17	13.76	-65.93
2	7236.49	-46.81	-30.00	-16.81	19.13	-65.94

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

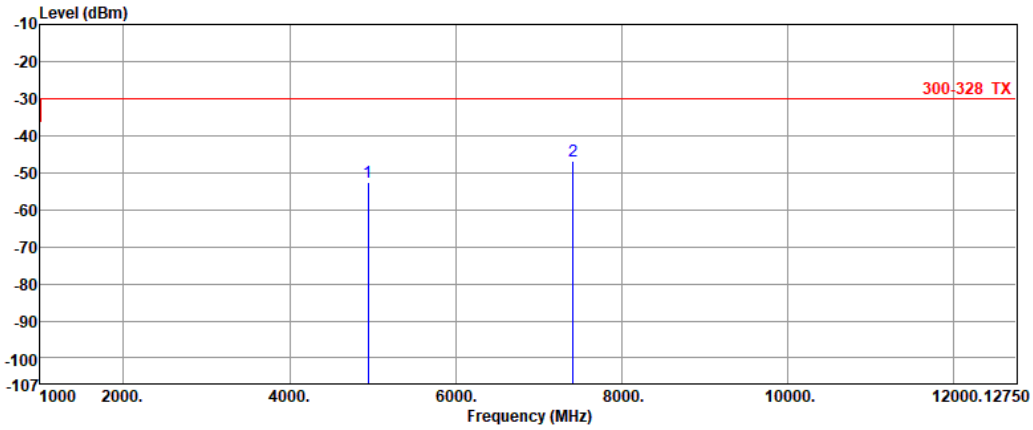


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.12	-52.20	-30.00	-22.20	13.70	-65.90
2	7236.40	-46.50	-30.00	-16.50	18.95	-65.45

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

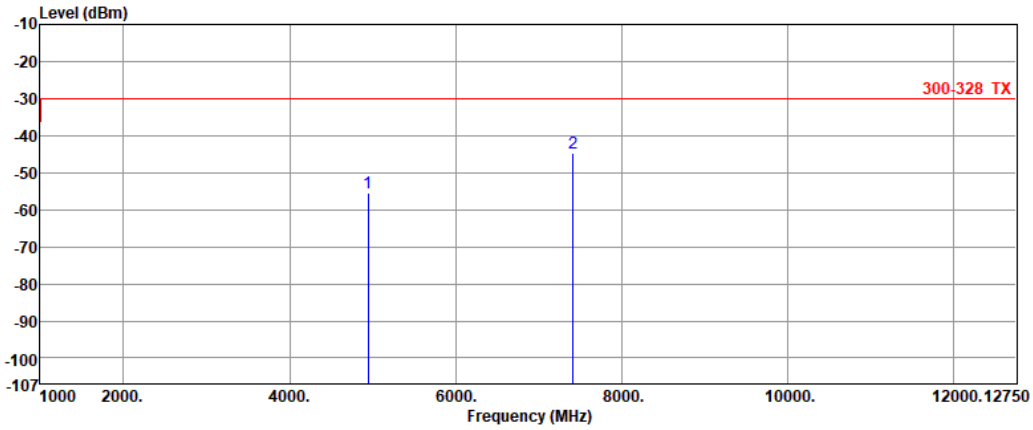


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.13	-52.74	-30.00	-22.74	13.85	-66.59
2	7416.23	-46.86	-30.00	-16.86	19.38	-66.24

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



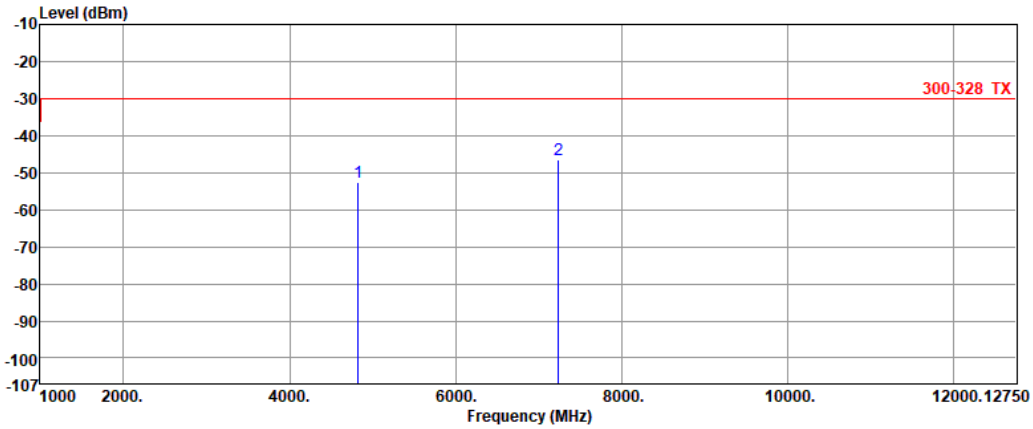
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.05	-55.62	-30.00	-25.62	13.32	-68.94
2	7416.01	-44.85	-30.00	-14.85	19.51	-64.36

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for ax HE20-OFDMA

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

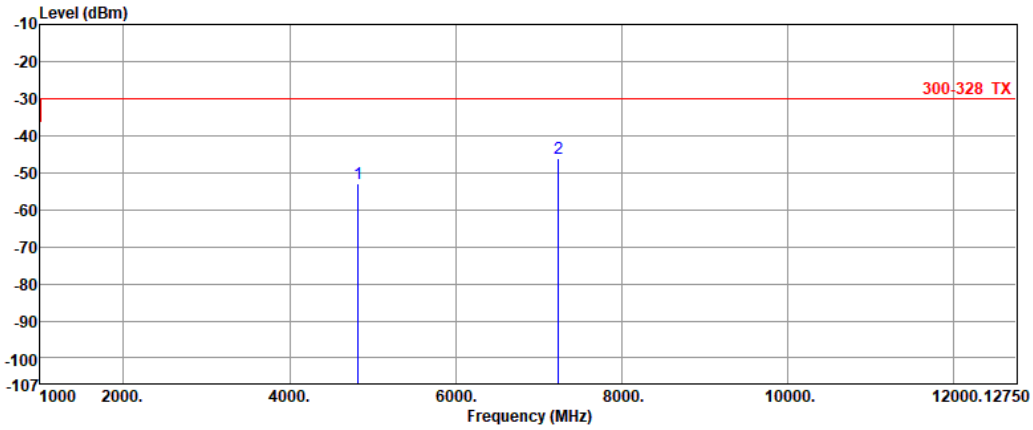


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.14	-52.71	-30.00	-22.71	13.76	-66.47
2	7236.13	-46.51	-30.00	-16.51	19.13	-65.64

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

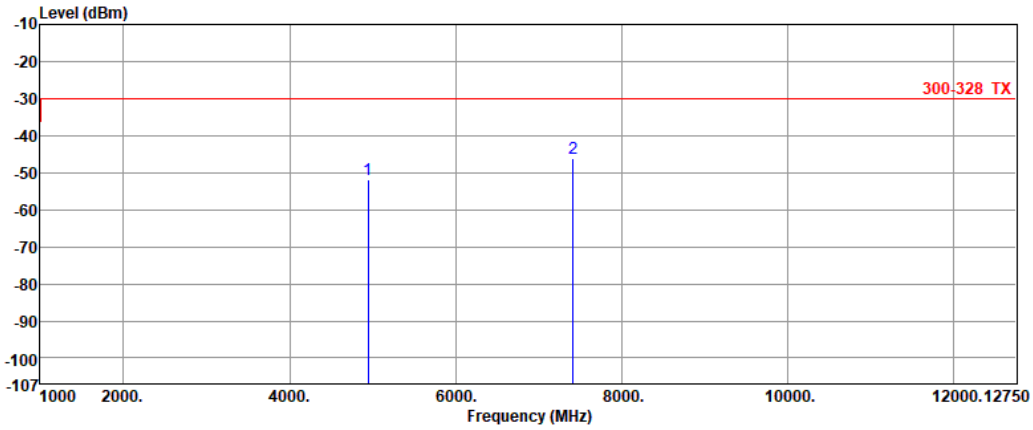


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.02	-52.78	-30.00	-22.78	13.70	-66.48
2	7236.09	-46.13	-30.00	-16.13	18.95	-65.08

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

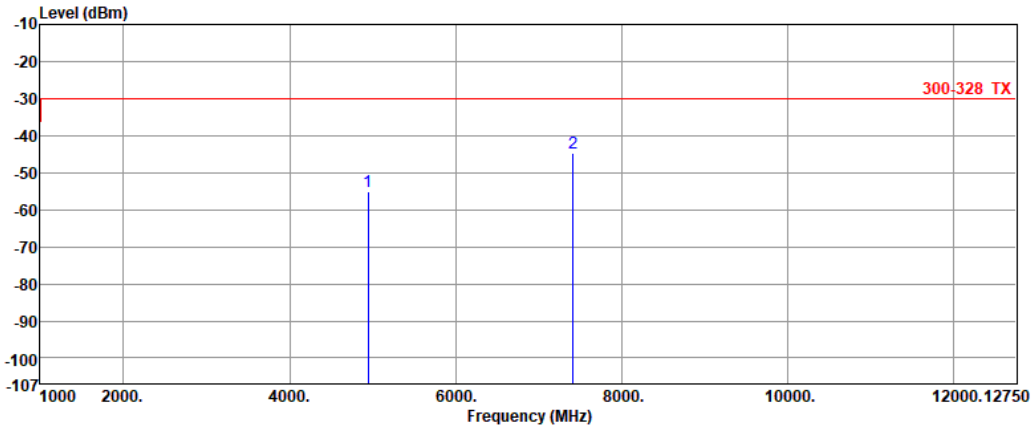


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.09	-52.02	-30.00	-22.02	13.85	-65.87
2	7416.34	-46.10	-30.00	-16.10	19.39	-65.49

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.08	-55.18	-30.00	-25.18	13.32	-68.50
2	7416.11	-44.87	-30.00	-14.87	19.51	-64.38

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

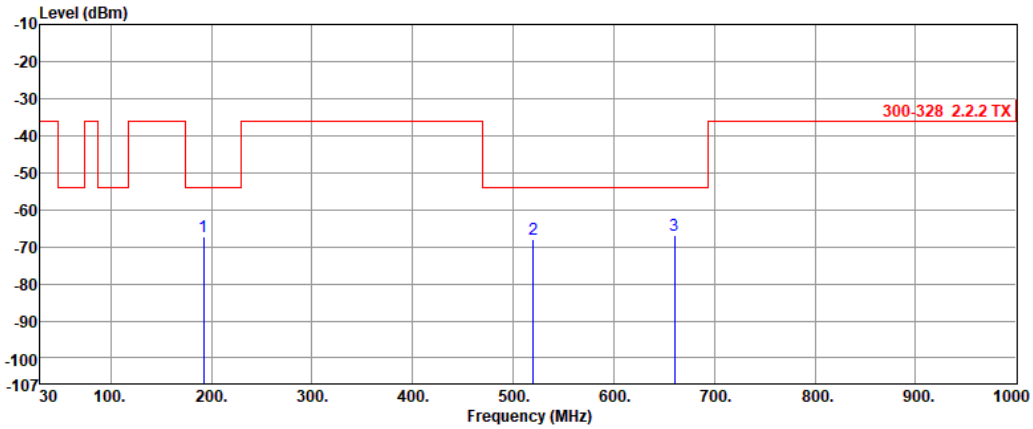
full RU configuration

2TX

Emissions (Below 1GHz)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

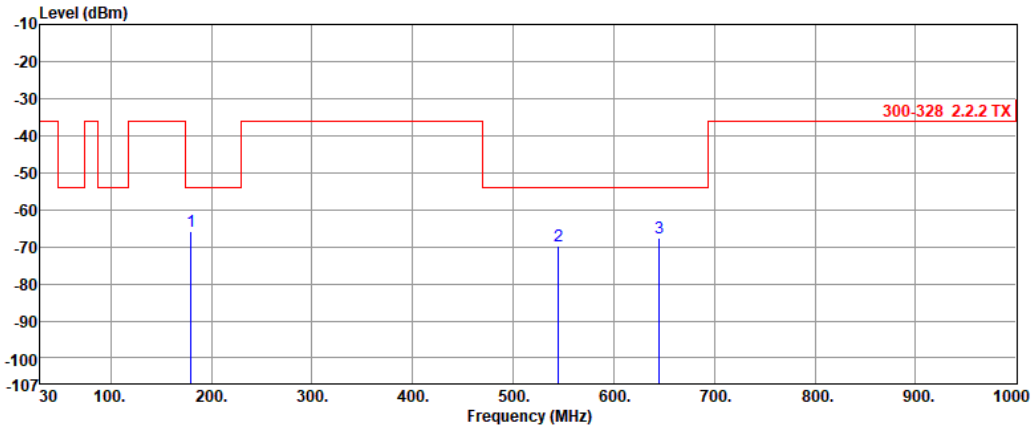


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.99	-67.44	-54.00	-13.44	-4.31	-63.13
2	519.85	-67.87	-54.00	-13.87	4.67	-72.54
3	660.50	-66.93	-54.00	-12.93	6.74	-73.67

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

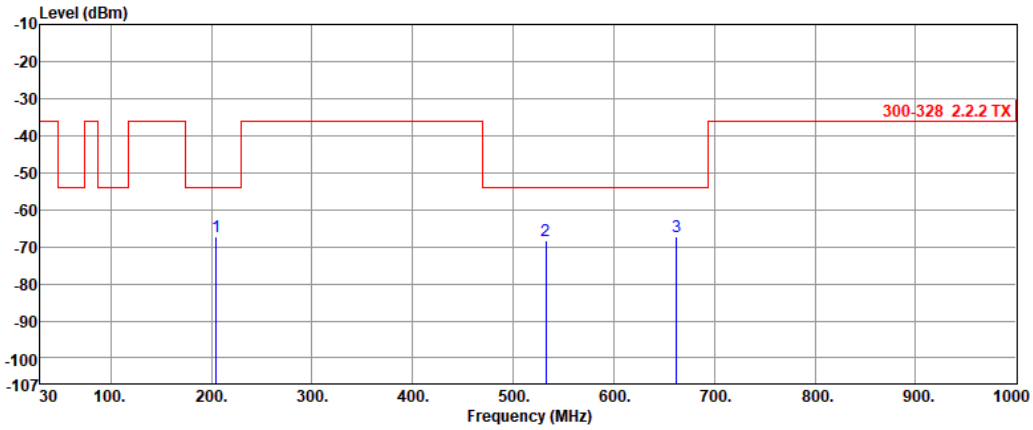


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.38	-65.75	-54.00	-11.75	-3.05	-62.70
2	545.07	-69.74	-54.00	-15.74	4.92	-74.66
3	644.98	-67.73	-54.00	-13.73	7.34	-75.07

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

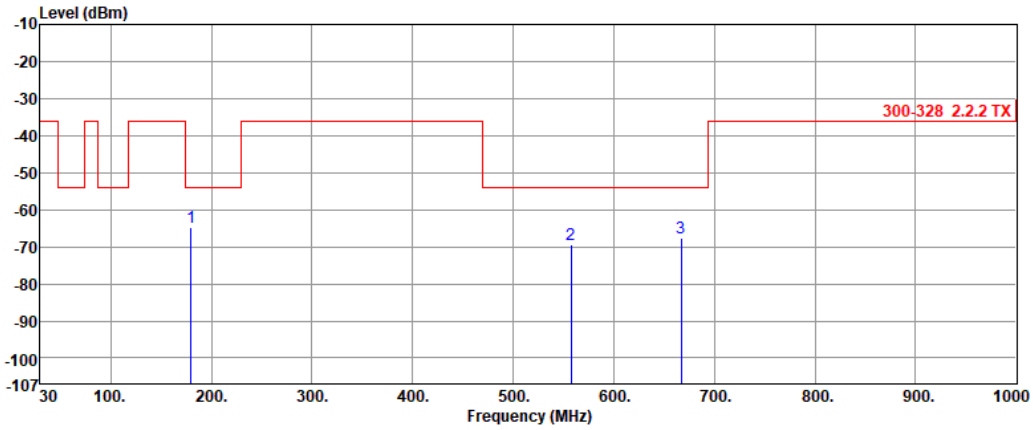


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	204.60	-67.23	-54.00	-13.23	-4.44	-62.79
2	532.46	-68.19	-54.00	-14.19	4.96	-73.15
3	662.44	-67.33	-54.00	-13.33	6.77	-74.10

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

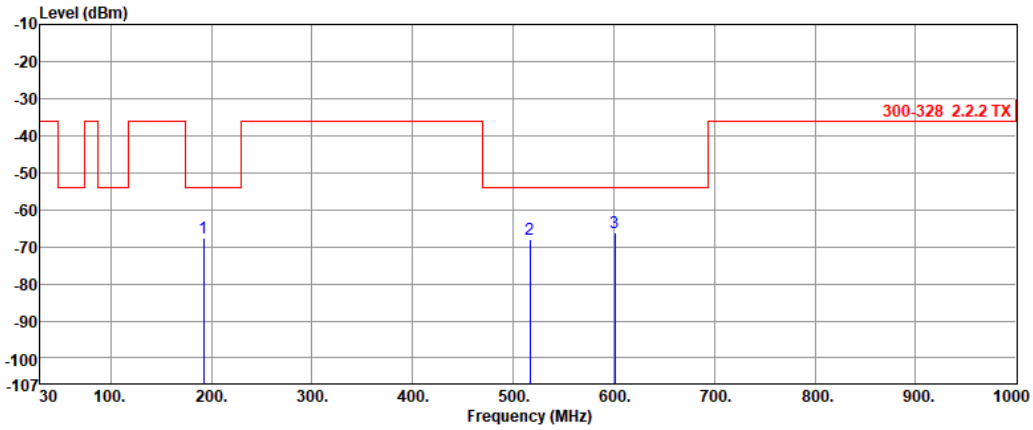


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.38	-64.60	-54.00	-10.60	-3.05	-61.55
2	557.68	-69.55	-54.00	-15.55	5.47	-75.02
3	667.29	-67.55	-54.00	-13.55	7.50	-75.05

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

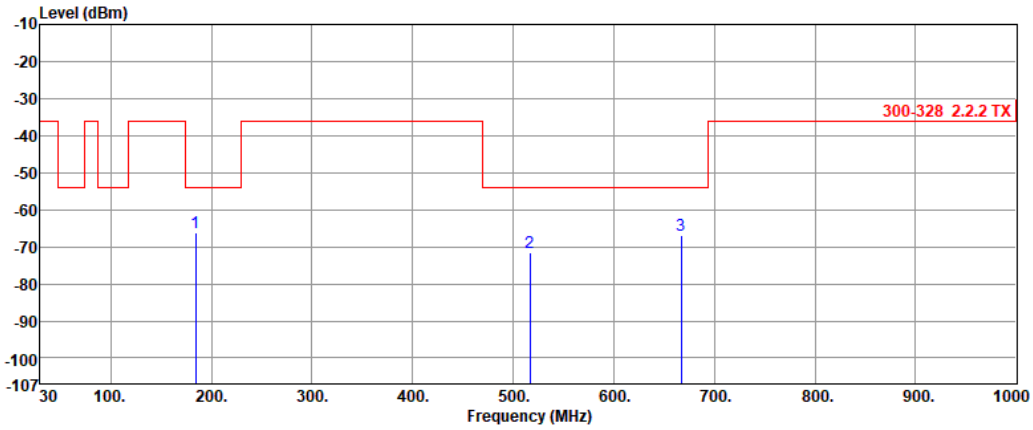


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.99	-67.69	-54.00	-13.69	-4.31	-63.38
2	516.94	-67.84	-54.00	-13.84	4.60	-72.44
3	601.33	-66.16	-54.00	-12.16	6.36	-72.52

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

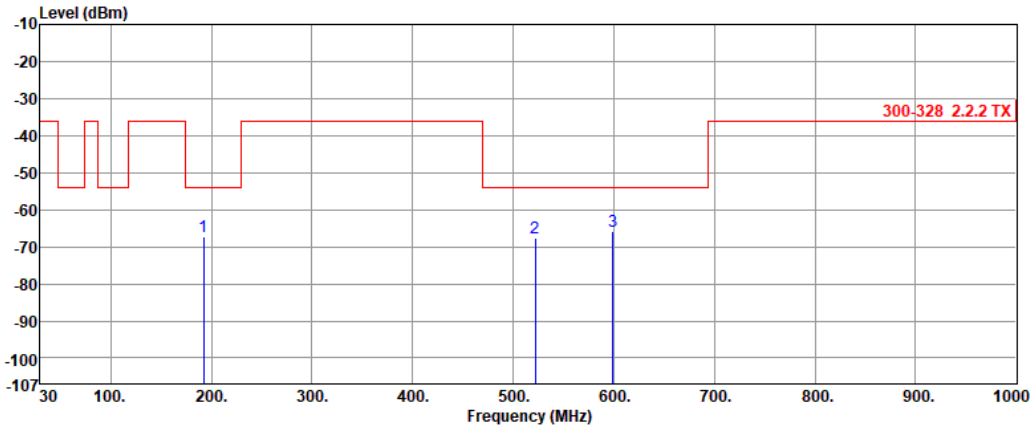


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	184.23	-66.35	-54.00	-12.35	-4.04	-62.31
2	516.94	-71.68	-54.00	-17.68	3.86	-75.54
3	667.29	-66.82	-54.00	-12.82	7.50	-74.32

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

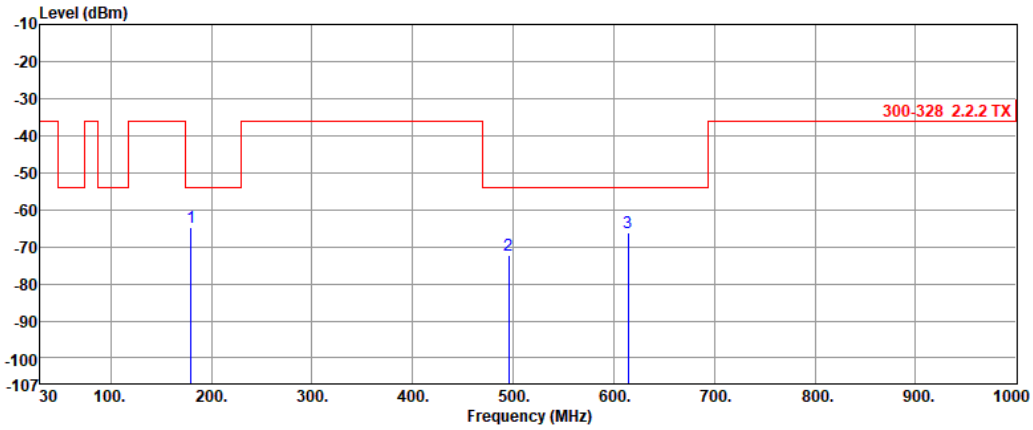


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.99	-67.36	-54.00	-13.36	-4.31	-63.05
2	521.79	-67.47	-54.00	-13.47	4.69	-72.16
3	599.39	-65.80	-54.00	-11.80	6.33	-72.13

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



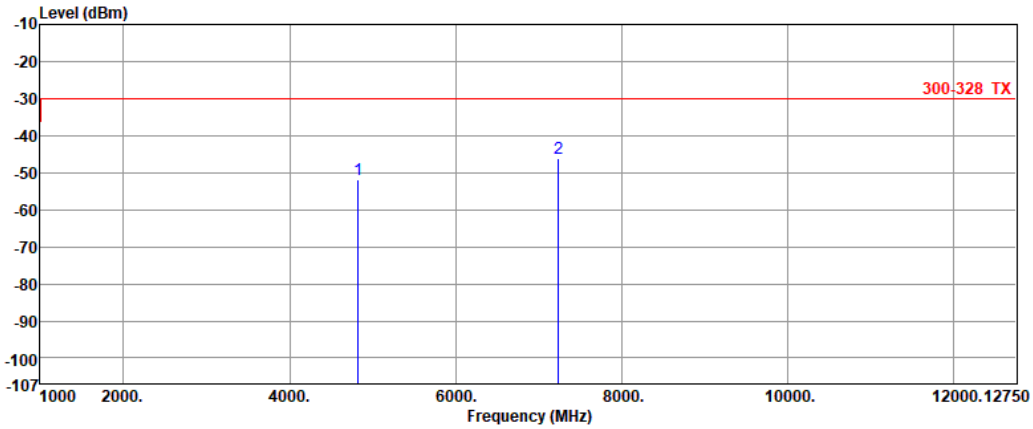
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.38	-64.78	-54.00	-10.78	-3.05	-61.73
2	495.60	-72.17	-54.00	-18.17	3.70	-75.87
3	613.94	-66.37	-54.00	-12.37	6.52	-72.89

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11b

Modulation	11b	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

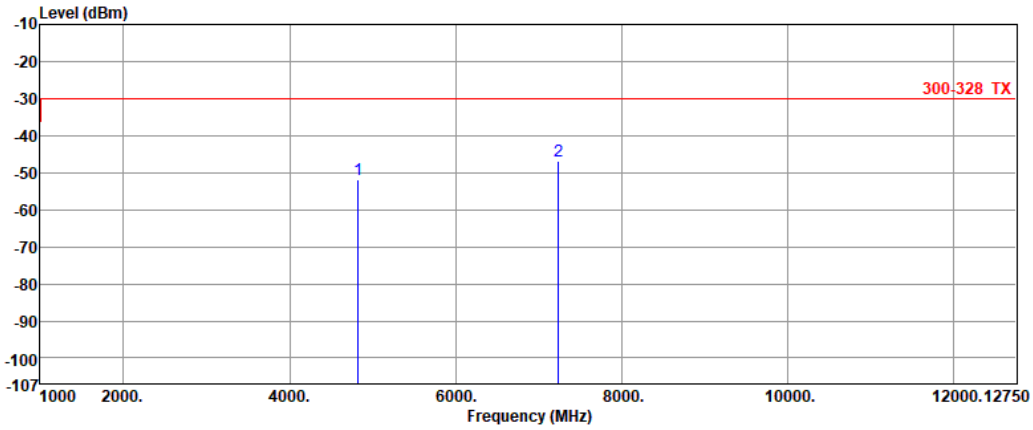


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.03	-52.06	-30.00	-22.06	13.76	-65.82
2	7236.41	-46.24	-30.00	-16.24	19.13	-65.37

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

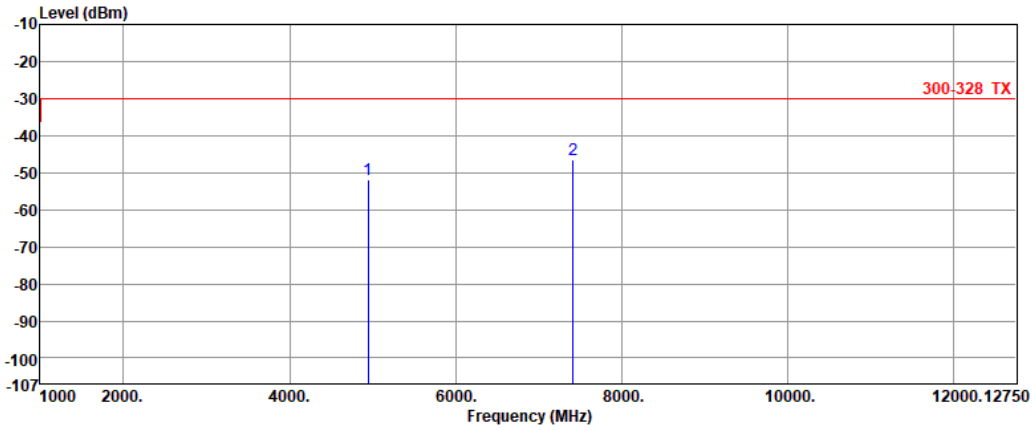


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.43	-51.80	-30.00	-21.80	13.70	-65.50
2	7236.37	-46.93	-30.00	-16.93	18.95	-65.88

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

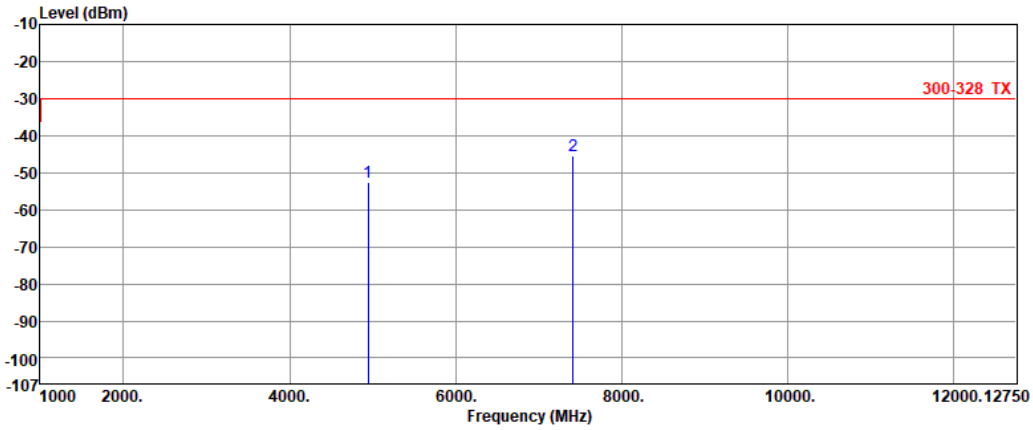


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.13	-52.03	-30.00	-22.03	13.85	-65.88
2	7416.30	-46.58	-30.00	-16.58	19.39	-65.97

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



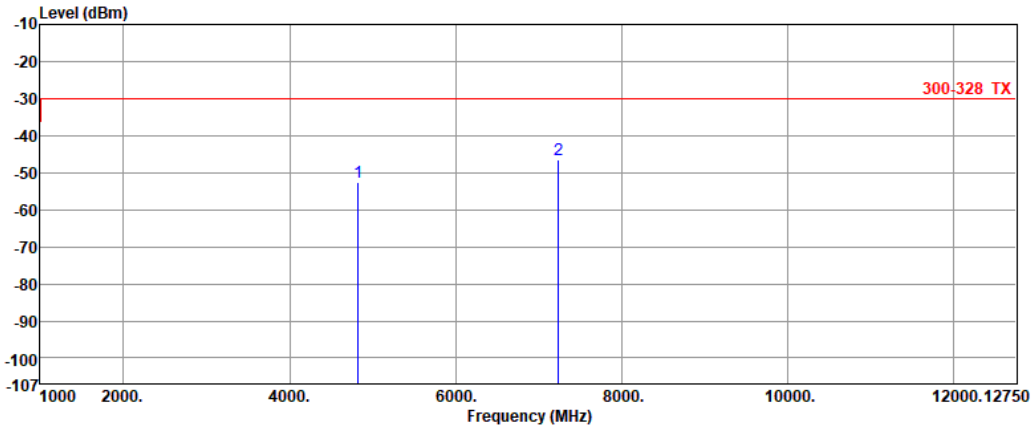
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.14	-52.73	-30.00	-22.73	13.32	-66.05
2	7416.47	-45.60	-30.00	-15.60	19.51	-65.11

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11g

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

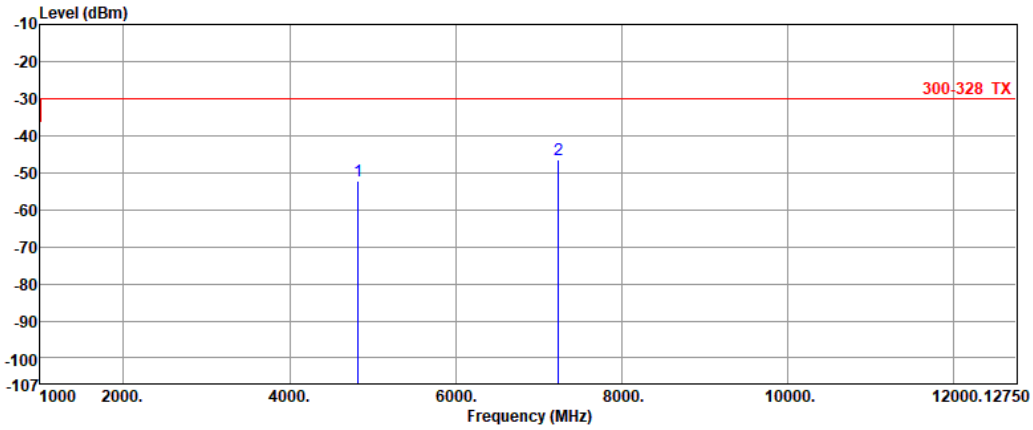


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.32	-52.50	-30.00	-22.50	13.76	-66.26
2	7236.17	-46.47	-30.00	-16.47	19.13	-65.60

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

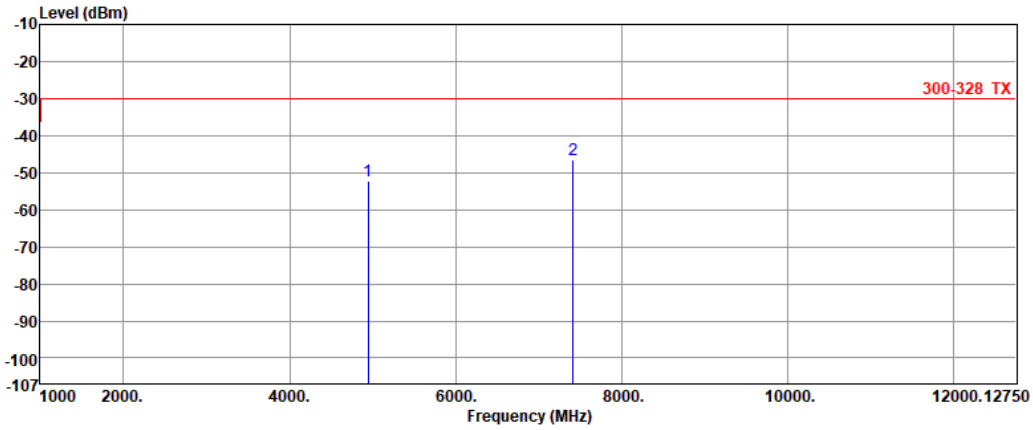


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.18	-52.41	-30.00	-22.41	13.70	-66.11
2	7236.47	-46.59	-30.00	-16.59	18.95	-65.54

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

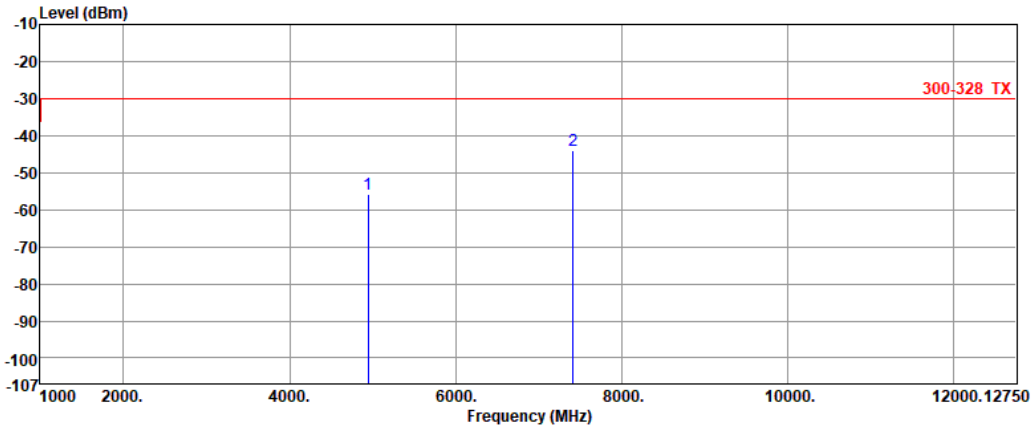


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.33	-52.17	-30.00	-22.17	13.85	-66.02
2	7416.16	-46.55	-30.00	-16.55	19.38	-65.93

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



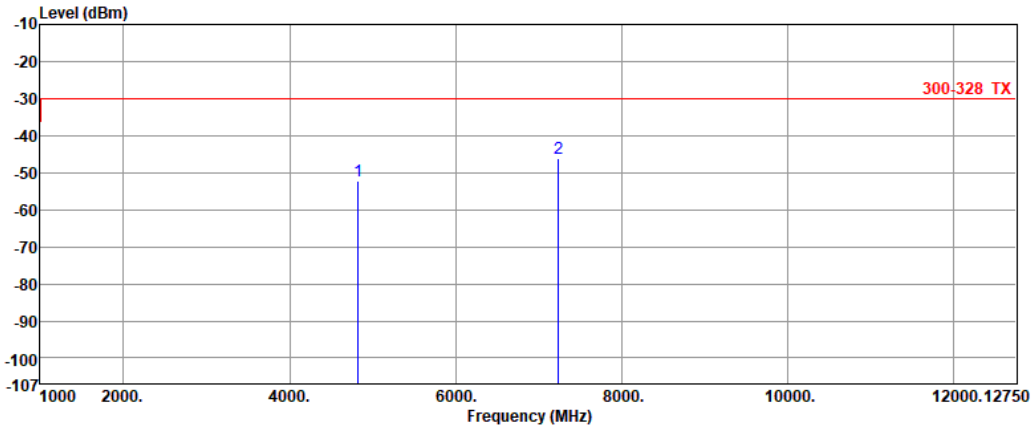
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.38	-55.82	-30.00	-25.82	13.32	-69.14
2	7416.47	-44.10	-30.00	-14.10	19.51	-63.61

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for ax HE20-OFDMA

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

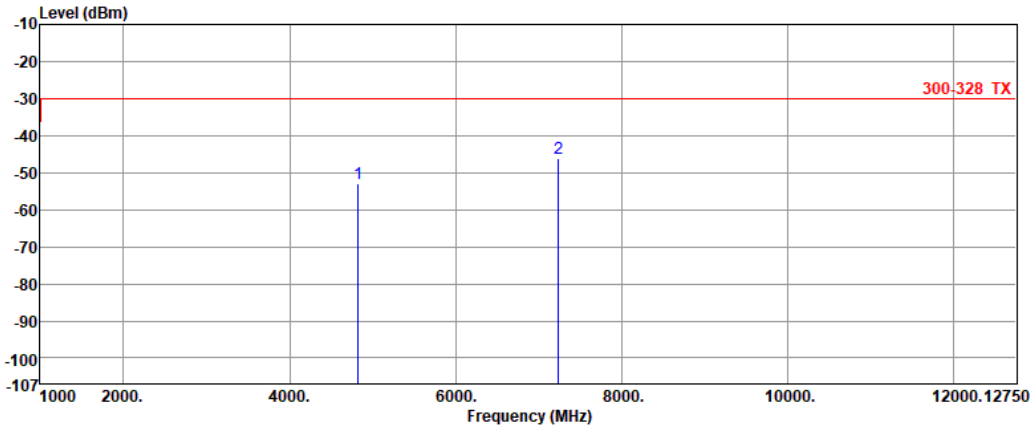


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.47	-52.20	-30.00	-22.20	13.76	-65.96
2	7236.20	-46.16	-30.00	-16.16	19.13	-65.29

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

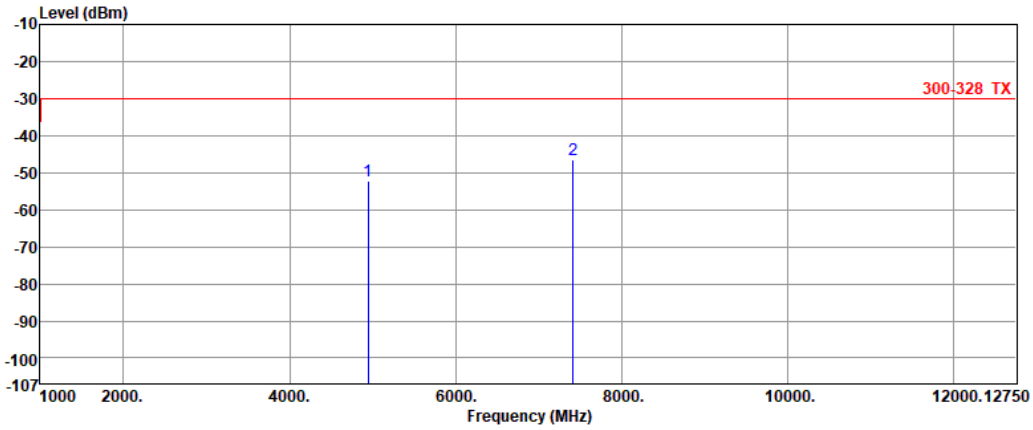


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.30	-52.93	-30.00	-22.93	13.70	-66.63
2	7236.05	-46.03	-30.00	-16.03	18.95	-64.98

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

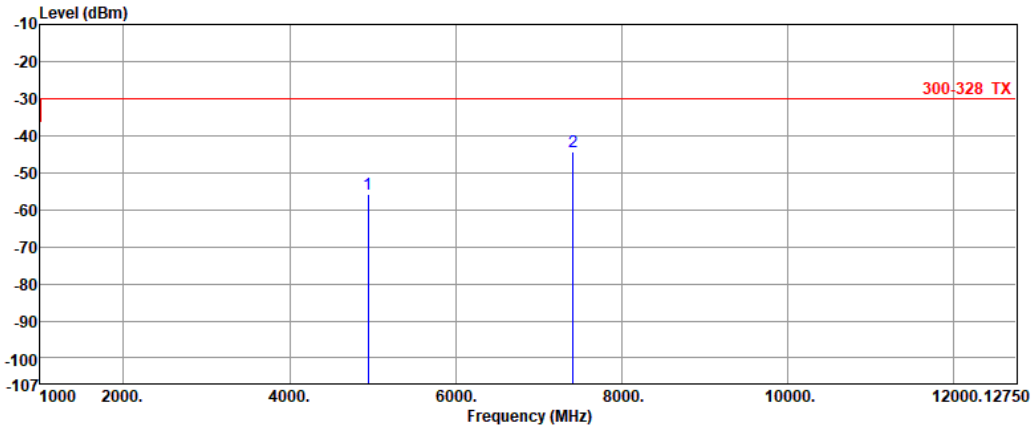


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.38	-52.14	-30.00	-22.14	13.85	-65.99
2	7416.14	-46.57	-30.00	-16.57	19.38	-65.95

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.32	-55.68	-30.00	-25.68	13.32	-69.00
2	7416.42	-44.21	-30.00	-14.21	19.51	-63.72

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

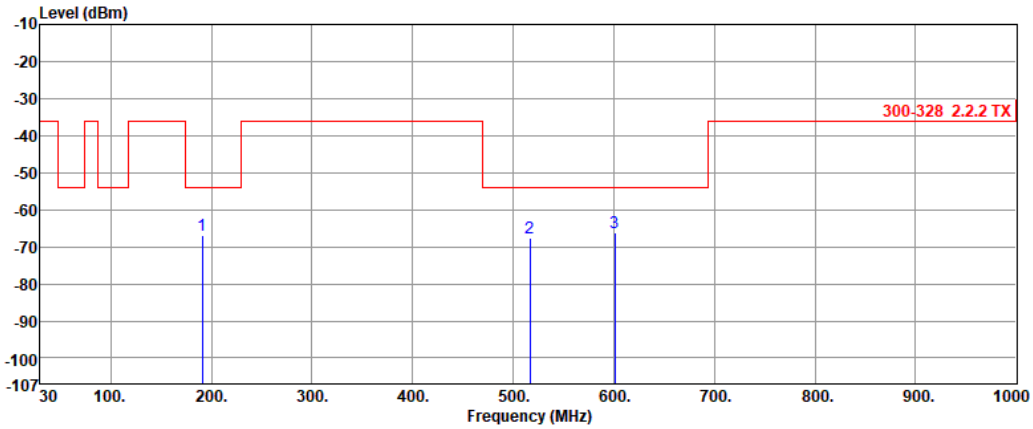
partial RU configuration

1TX

Emissions (Below 1GHz)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

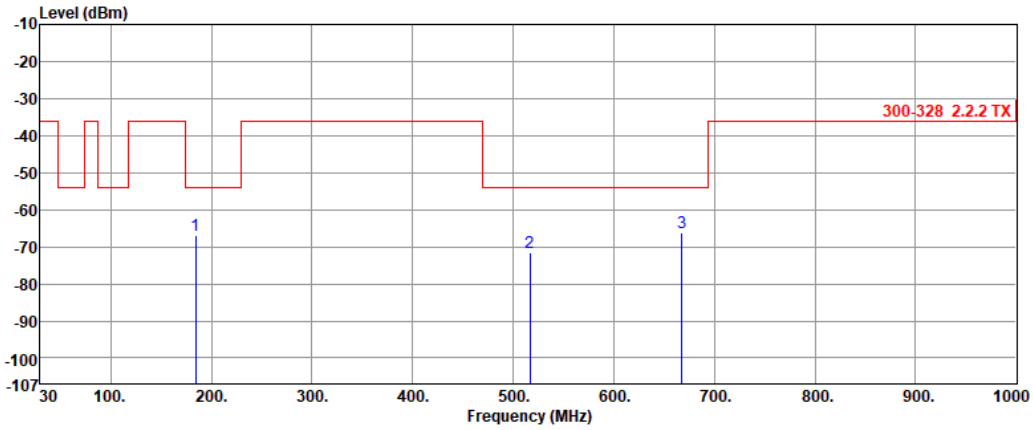


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.11	-67.07	-54.00	-13.07	-4.19	-62.88
2	516.69	-67.52	-54.00	-13.52	4.59	-72.11
3	601.21	-66.15	-54.00	-12.15	6.36	-72.51

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

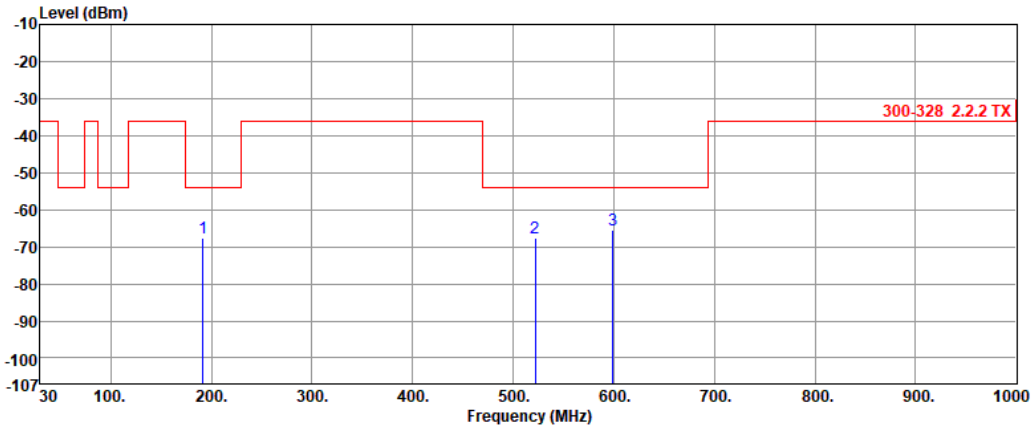


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	184.08	-66.82	-54.00	-12.82	-4.01	-62.81
2	516.83	-71.46	-54.00	-17.46	3.86	-75.32
3	667.63	-66.31	-54.00	-12.31	7.51	-73.82

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

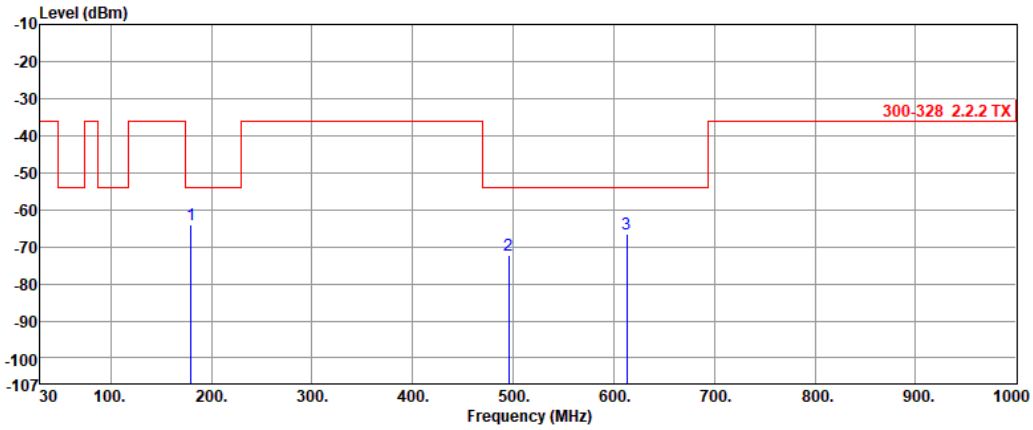


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.39	-67.62	-54.00	-13.62	-4.22	-63.40
2	521.86	-67.56	-54.00	-13.56	4.69	-72.25
3	599.10	-65.40	-54.00	-11.40	6.32	-71.72

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



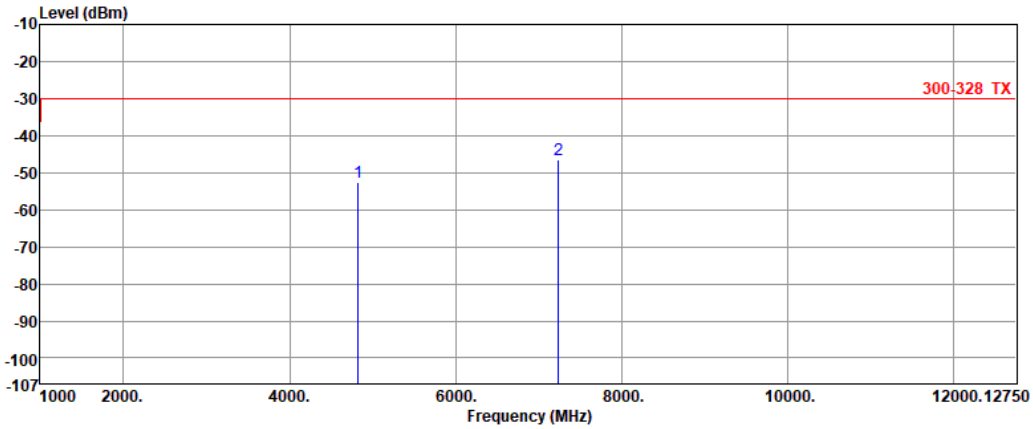
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.38	-64.02	-54.00	-10.02	-3.05	-60.97
2	495.85	-72.18	-54.00	-18.18	3.71	-75.89
3	613.14	-66.54	-54.00	-12.54	6.54	-73.08

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

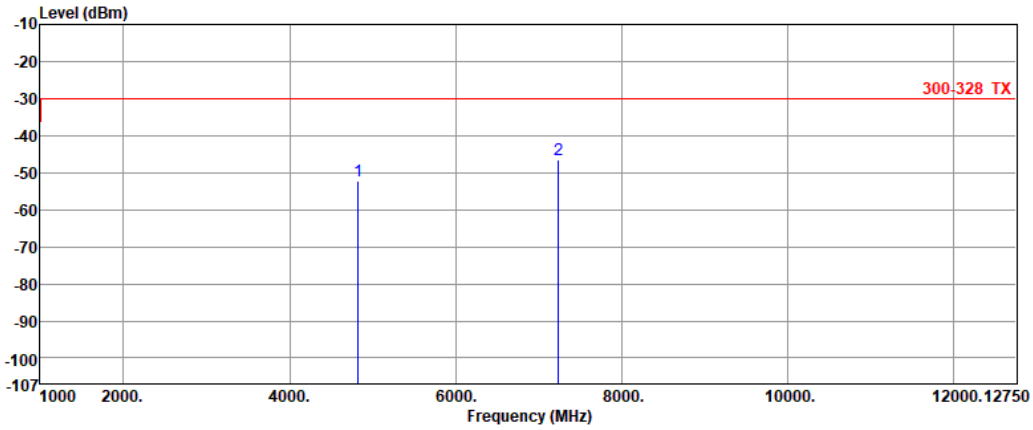


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.43	-52.51	-30.00	-22.51	13.76	-66.27
2	7236.36	-46.59	-30.00	-16.59	19.13	-65.72

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

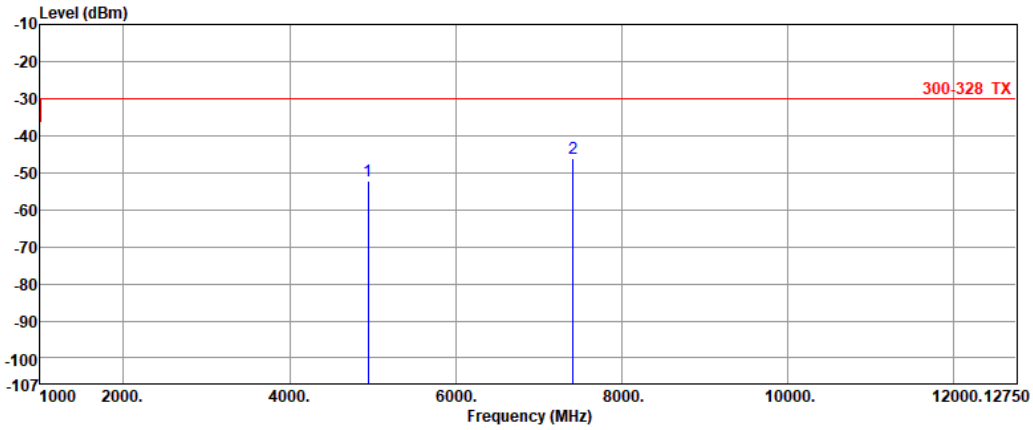


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.04	-52.14	-30.00	-22.14	13.70	-65.84
2	7236.15	-46.42	-30.00	-16.42	18.95	-65.37

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

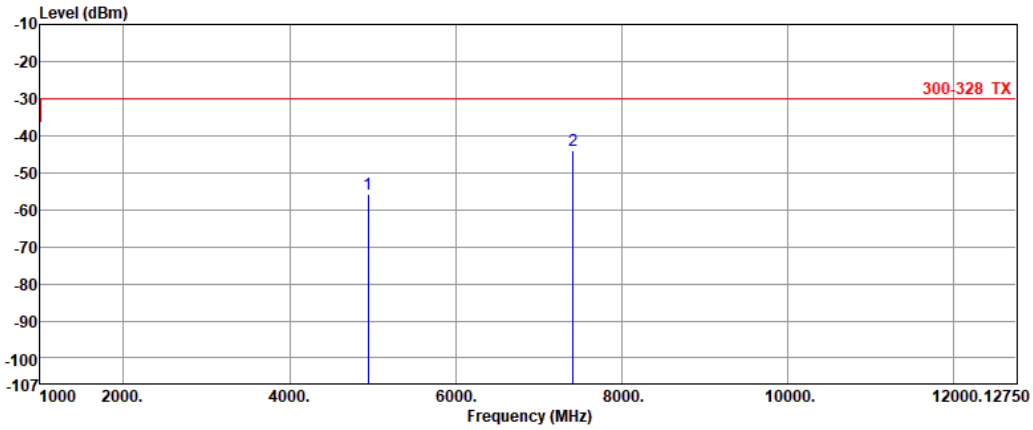


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.28	-52.31	-30.00	-22.31	13.85	-66.16
2	7416.12	-46.06	-30.00	-16.06	19.38	-65.44

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.36	-55.95	-30.00	-25.95	13.32	-69.27
2	7416.11	-44.11	-30.00	-14.11	19.51	-63.62

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

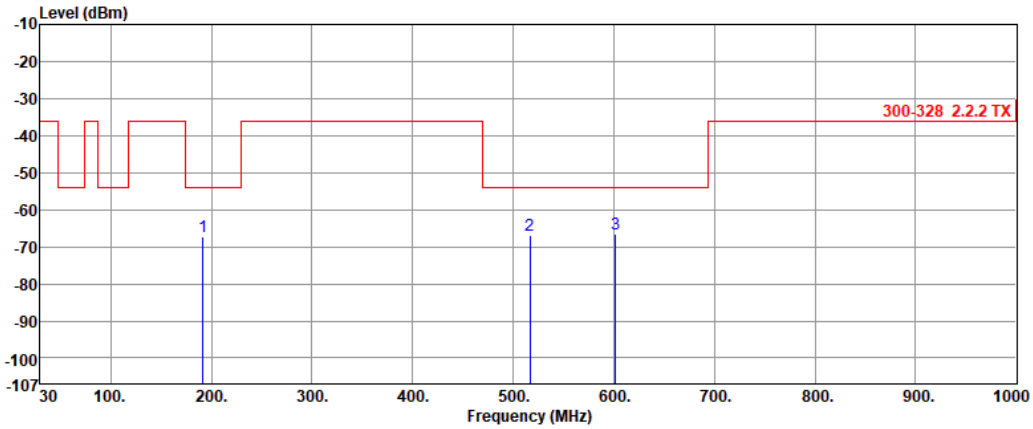
partial RU configuration

2TX

Emissions (Below 1GHz)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

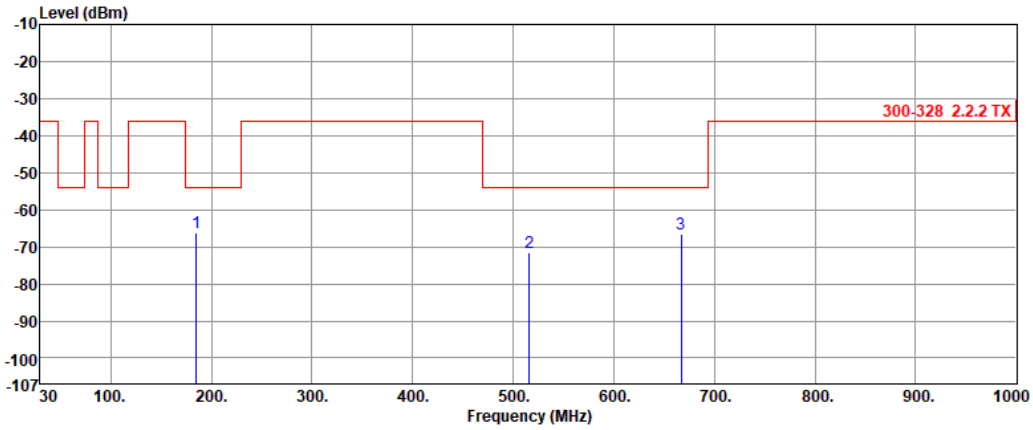


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.26	-67.17	-54.00	-13.17	-4.21	-62.96
2	516.62	-67.03	-54.00	-13.03	4.59	-71.62
3	601.71	-66.52	-54.00	-12.52	6.36	-72.88

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

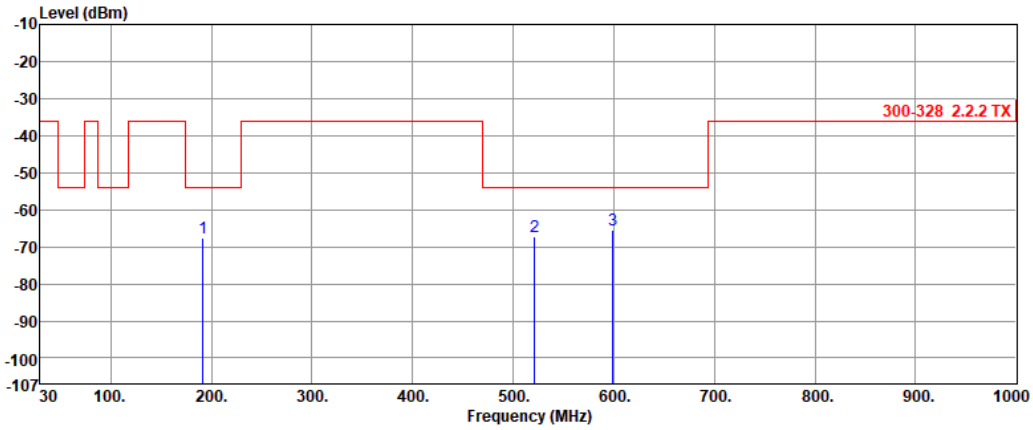


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	184.82	-66.22	-54.00	-12.22	-4.15	-62.07
2	516.29	-71.73	-54.00	-17.73	3.85	-75.58
3	667.27	-66.45	-54.00	-12.45	7.50	-73.95

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

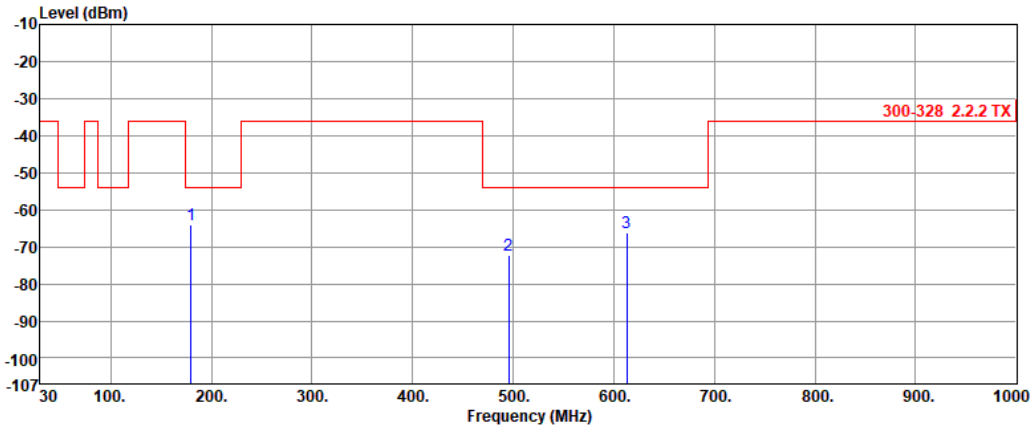


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.45	-67.79	-54.00	-13.79	-4.23	-63.56
2	521.53	-67.15	-54.00	-13.15	4.69	-71.84
3	599.26	-65.50	-54.00	-11.50	6.32	-71.82

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



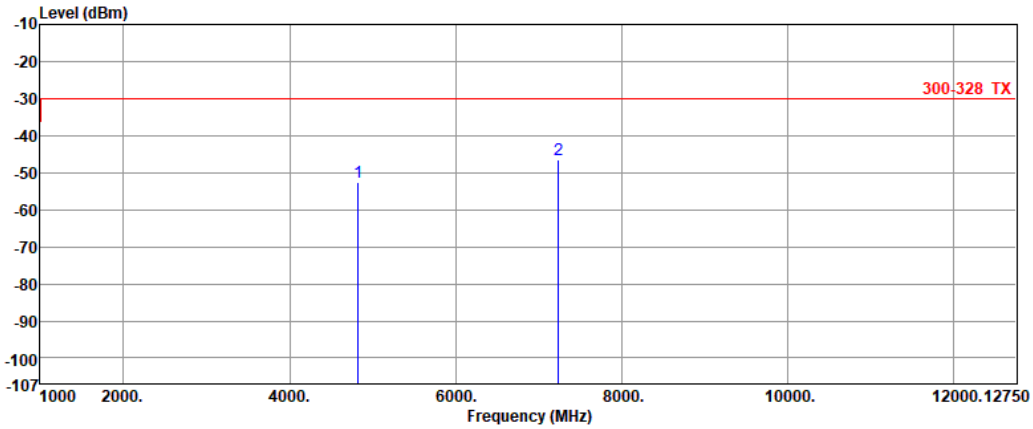
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.39	-64.10	-54.00	-10.10	-3.05	-61.05
2	495.78	-72.16	-54.00	-18.16	3.71	-75.87
3	613.08	-66.15	-54.00	-12.15	6.54	-72.69

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

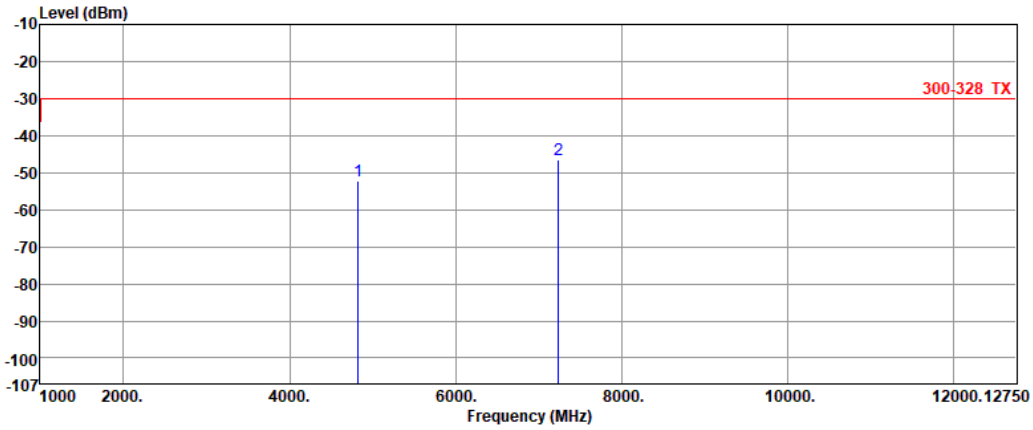


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.36	-52.45	-30.00	-22.45	13.76	-66.21
2	7236.13	-46.44	-30.00	-16.44	19.13	-65.57

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

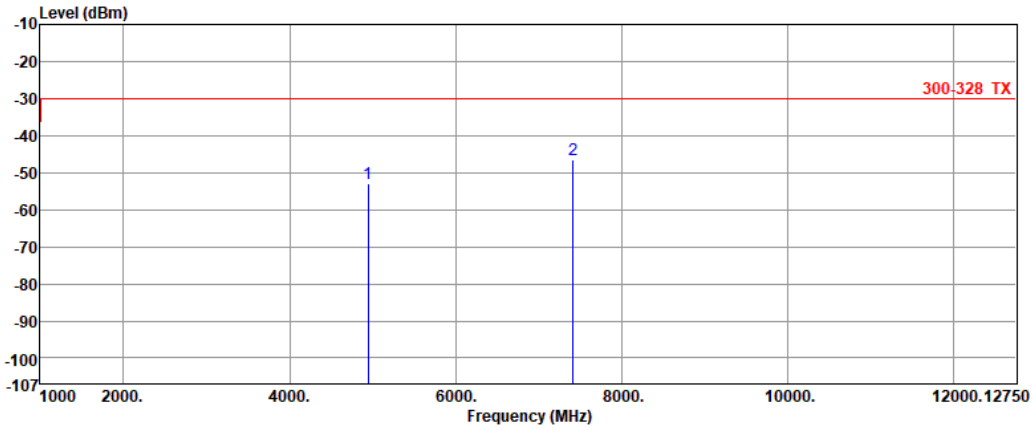


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.03	-52.32	-30.00	-22.32	13.70	-66.02
2	7236.04	-46.64	-30.00	-16.64	18.95	-65.59

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

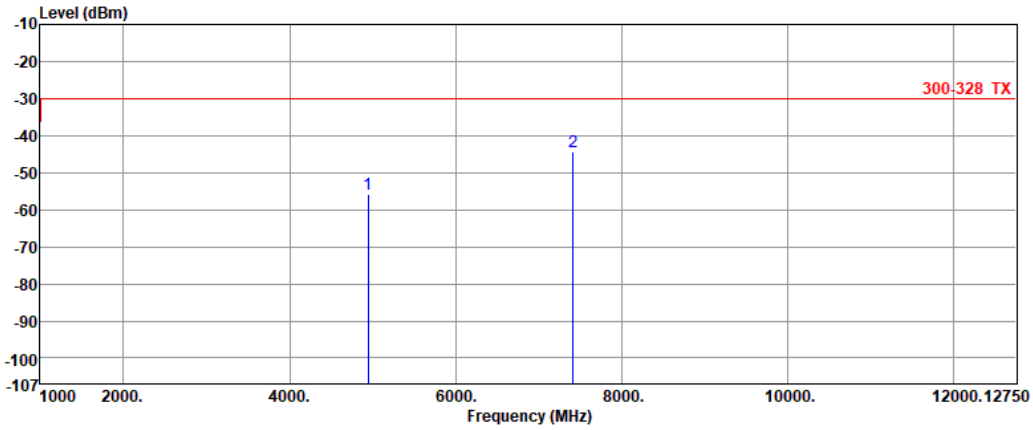


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.22	-52.80	-30.00	-22.80	13.85	-66.65
2	7416.11	-46.42	-30.00	-16.42	19.38	-65.80

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.19	-55.82	-30.00	-25.82	13.32	-69.14
2	7416.31	-44.23	-30.00	-14.23	19.51	-63.74

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

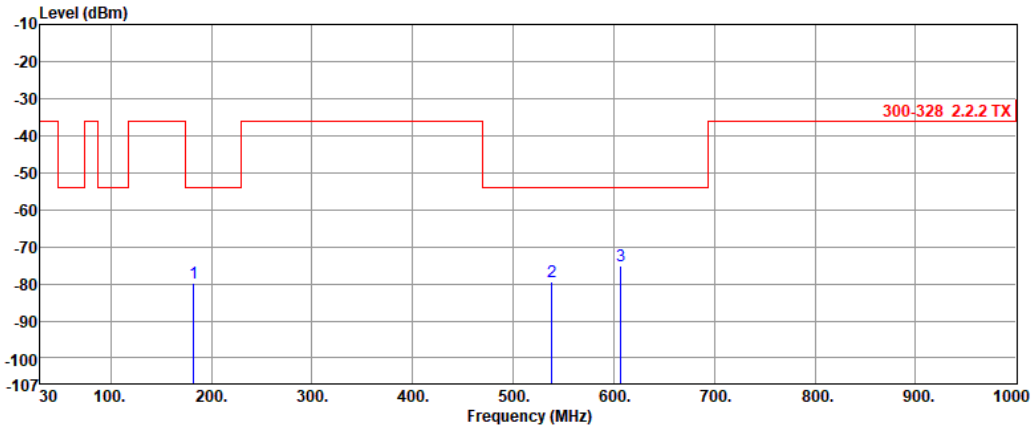
full RU configuration

1TX

Emissions (Below 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

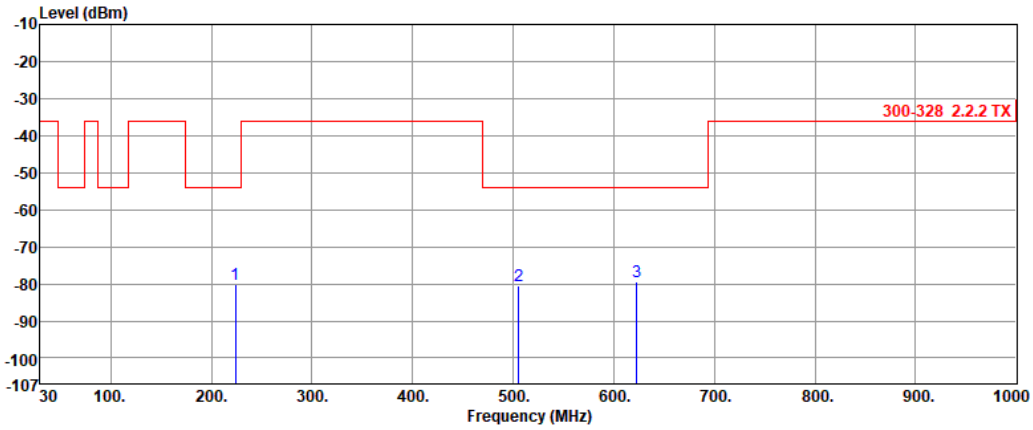


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	182.29	-79.65	-54.00	-25.65	0.00	-79.65
2	538.28	-79.52	-54.00	-25.52	0.00	-79.52
3	607.15	-74.98	-54.00	-20.98	0.00	-74.98

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

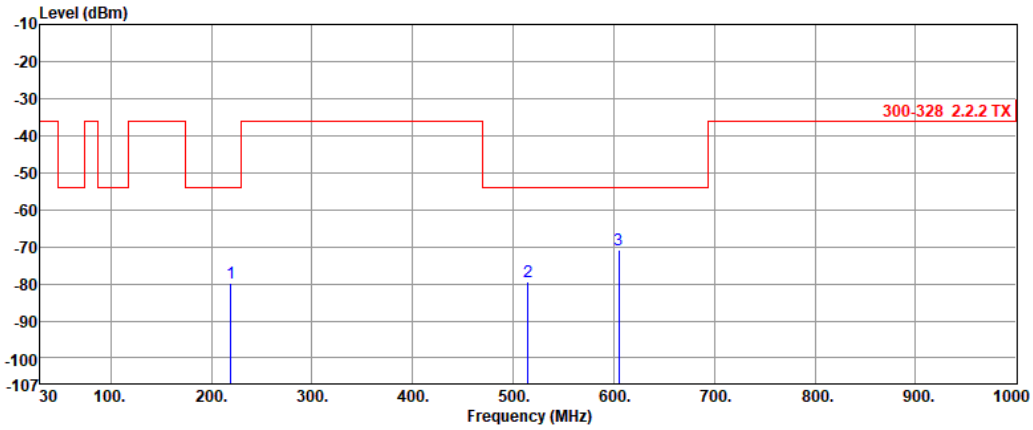


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	224.00	-80.09	-54.00	-26.09	0.00	-80.09
2	505.30	-80.41	-54.00	-26.41	0.00	-80.41
3	622.67	-79.57	-54.00	-25.57	0.00	-79.57

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

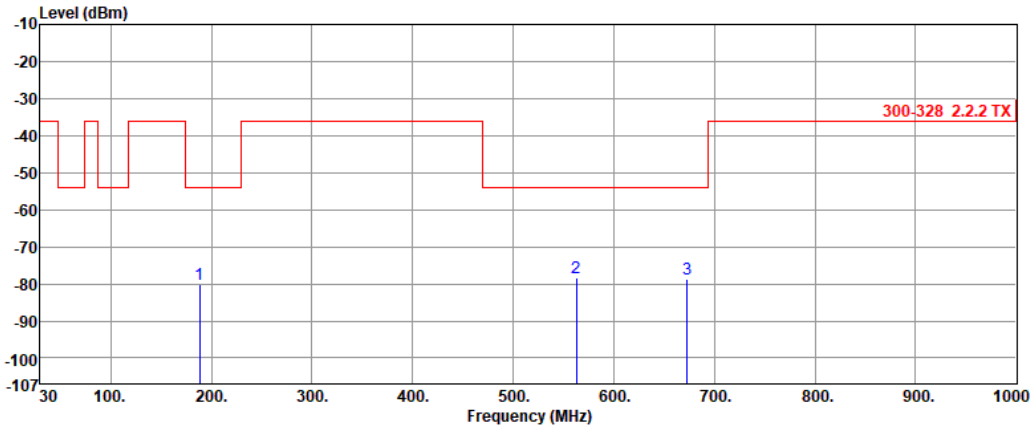


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	219.15	-79.78	-54.00	-25.78	0.00	-79.78
2	515.00	-79.54	-54.00	-25.54	0.00	-79.54
3	605.21	-70.76	-54.00	-16.76	0.00	-70.76

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



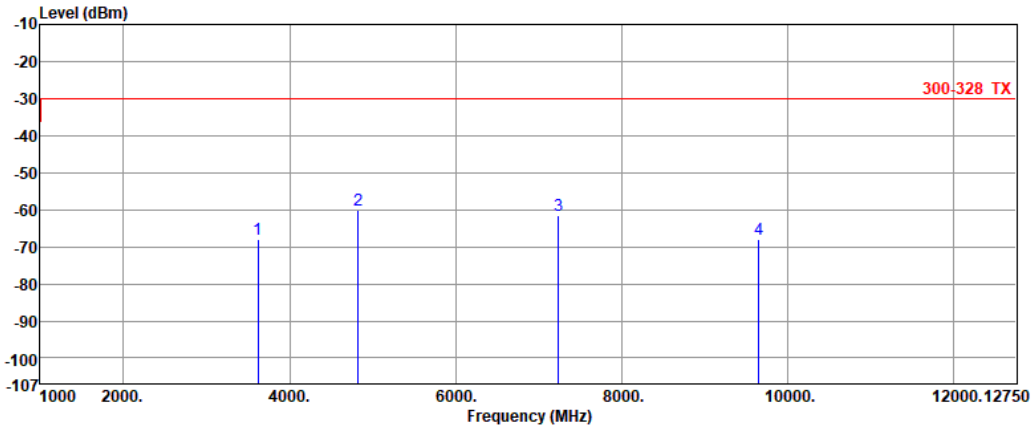
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	188.11	-80.29	-54.00	-26.29	0.00	-80.29
2	562.53	-78.51	-54.00	-24.51	0.00	-78.51
3	673.11	-78.61	-54.00	-24.61	0.00	-78.61

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11b

Modulation	11b
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

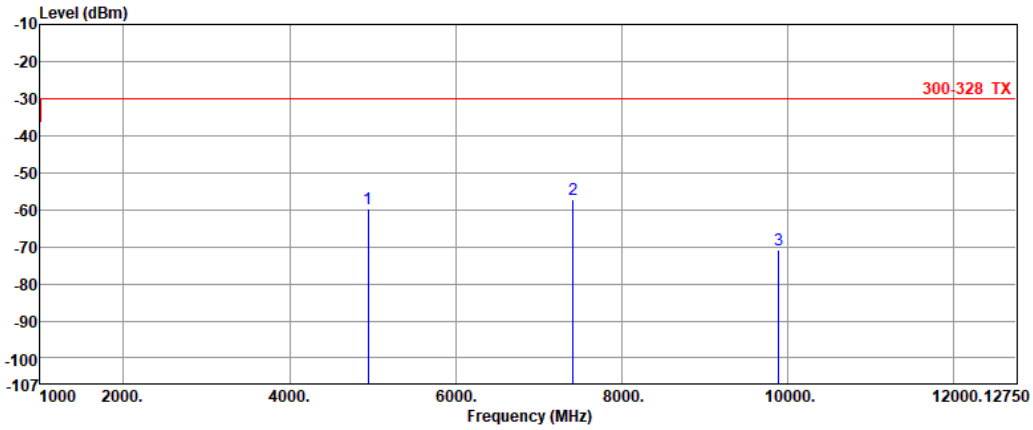


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3618.05	-67.86	-30.00	-37.86	0.00	-67.86
2	4823.69	-60.03	-30.00	-30.03	0.00	-60.03
3	7236.04	-61.60	-30.00	-31.60	0.00	-61.60
4	9647.82	-67.94	-30.00	-37.94	0.00	-67.94

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



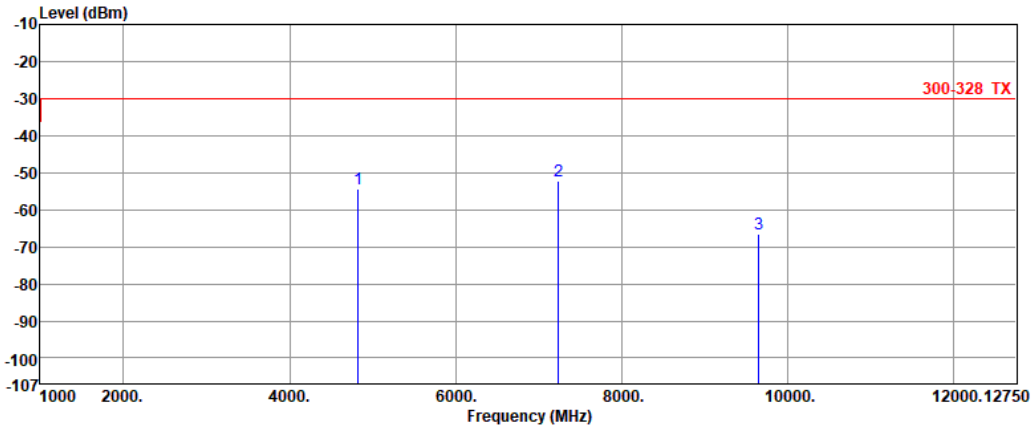
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.06	-59.74	-30.00	-29.74	0.00	-59.74
2	7415.83	-57.30	-30.00	-27.30	0.00	-57.30
3	9888.11	-70.85	-30.00	-40.85	0.00	-70.85

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11g

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

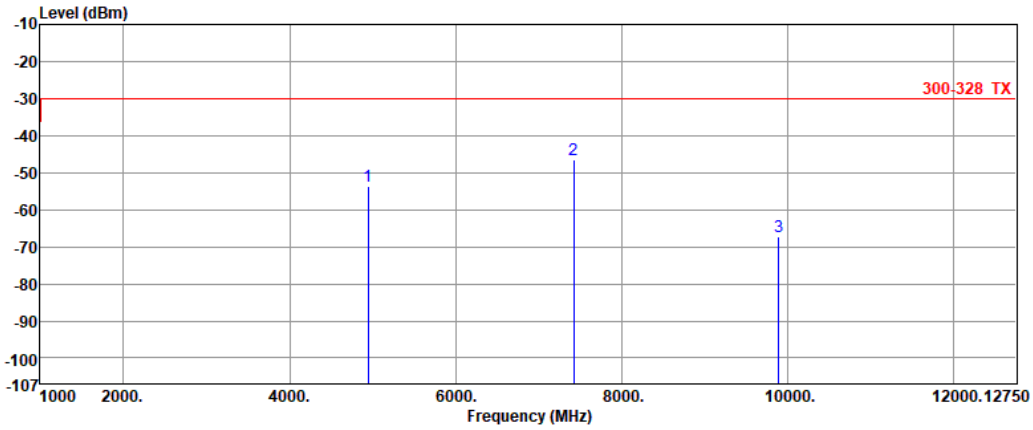


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.01	-54.31	-30.00	-24.31	0.00	-54.31
2	7236.85	-52.29	-30.00	-22.29	0.00	-52.29
3	9653.58	-66.46	-30.00	-36.46	0.00	-66.46

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



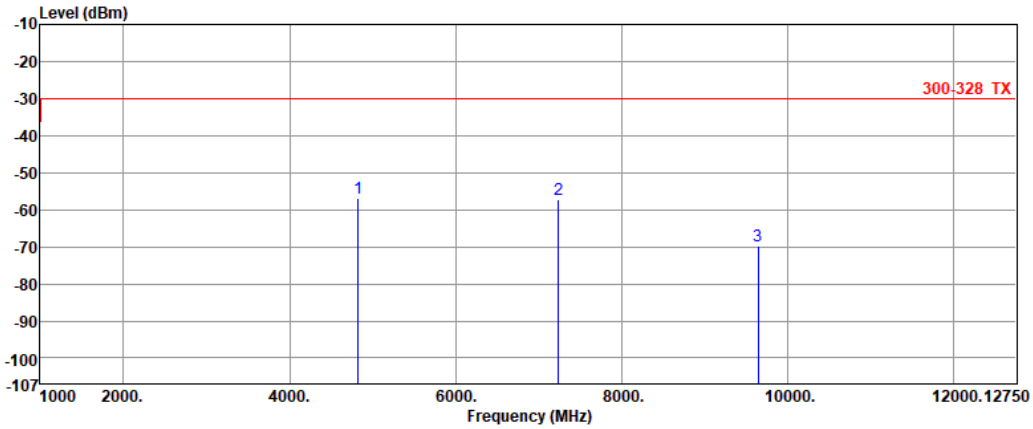
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4943.86	-53.73	-30.00	-23.73	0.00	-53.73
2	7418.76	-46.66	-30.00	-16.66	0.00	-46.66
3	9888.67	-67.25	-30.00	-37.25	0.00	-67.25

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for ax HE20-OFDMA

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

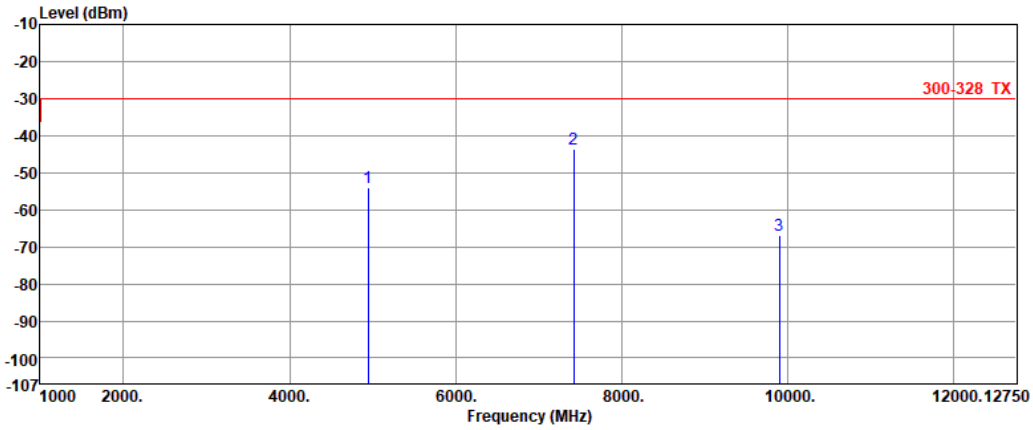


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4823.87	-56.72	-30.00	-26.72	0.00	-56.72
2	7241.10	-57.28	-30.00	-27.28	0.00	-57.28
3	9646.45	-69.95	-30.00	-39.95	0.00	-69.95

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.13	-54.06	-30.00	-24.06	0.00	-54.06
2	7424.28	-43.80	-30.00	-13.80	0.00	-43.80
3	9894.89	-66.93	-30.00	-36.93	0.00	-66.93

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

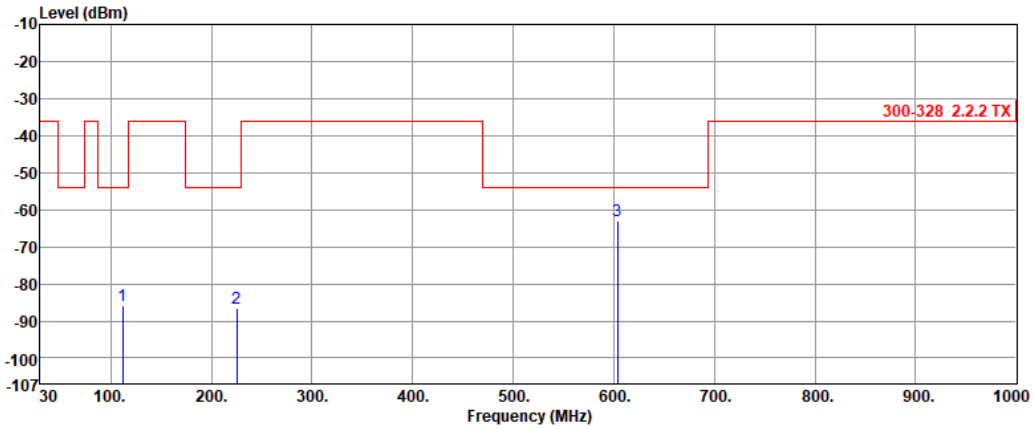
full RU configuration

2TX, ANT0

Emissions (Below 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

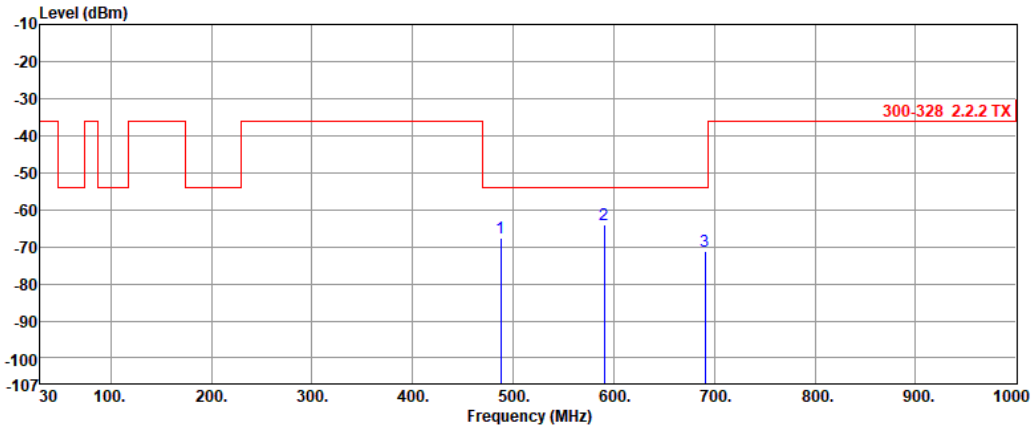


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	111.48	-85.90	-57.01	-28.89	0.00	-85.90
2	224.97	-86.56	-57.01	-29.55	0.00	-86.56
3	603.75	-63.13	-57.01	-6.12	0.00	-63.13

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

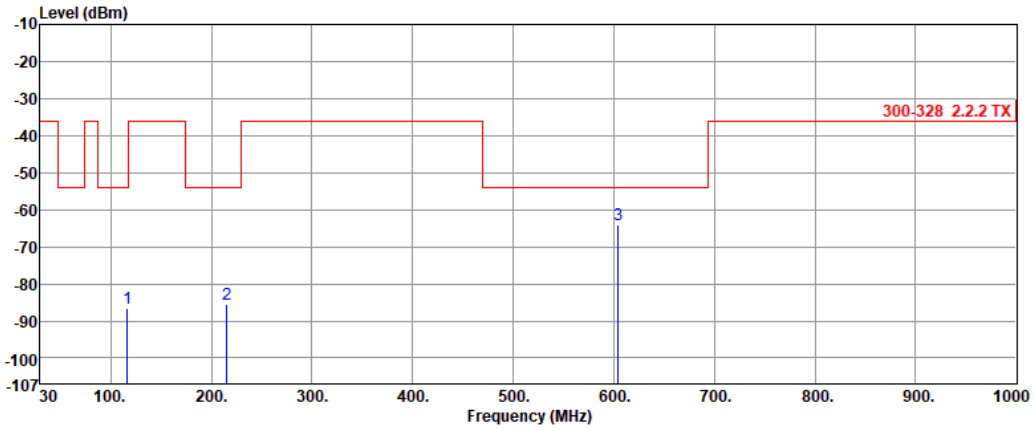


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	487.84	-67.77	-57.01	-10.76	0.00	-67.77
2	590.66	-63.93	-57.01	-6.92	0.00	-63.93
3	690.57	-71.04	-57.01	-14.03	0.00	-71.04

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

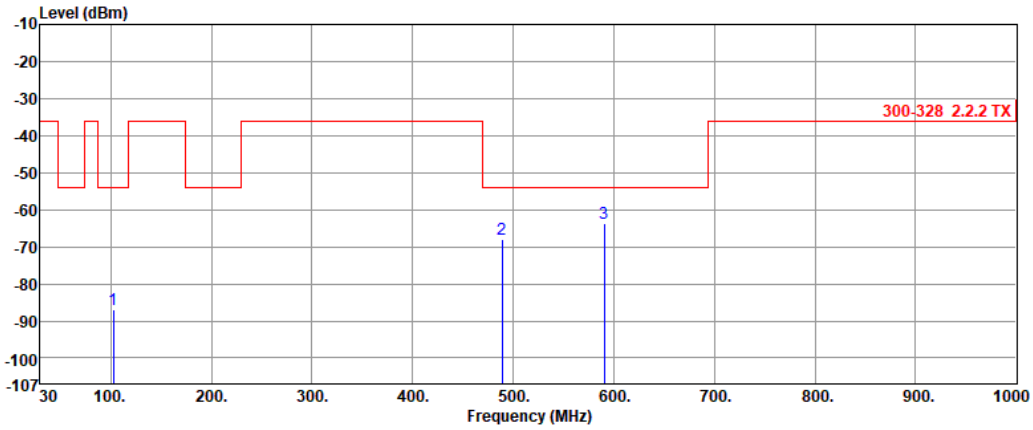


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	116.33	-86.46	-57.01	-29.45	0.00	-86.46
2	215.27	-85.37	-57.01	-28.36	0.00	-85.37
3	604.26	-63.88	-57.01	-6.87	0.00	-63.88

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



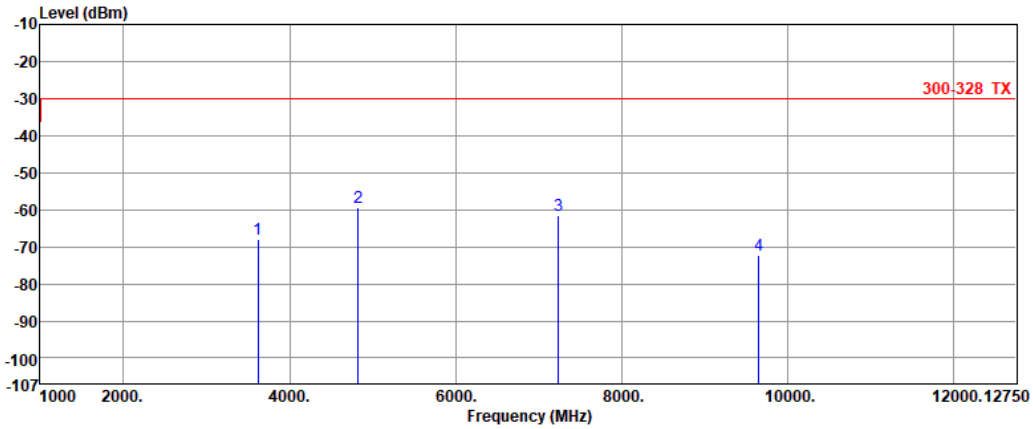
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	102.75	-86.85	-57.01	-29.84	0.00	-86.85
2	488.81	-67.86	-57.01	-10.85	0.00	-67.86
3	590.66	-63.66	-57.01	-6.65	0.00	-63.66

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11b

Modulation	11b
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

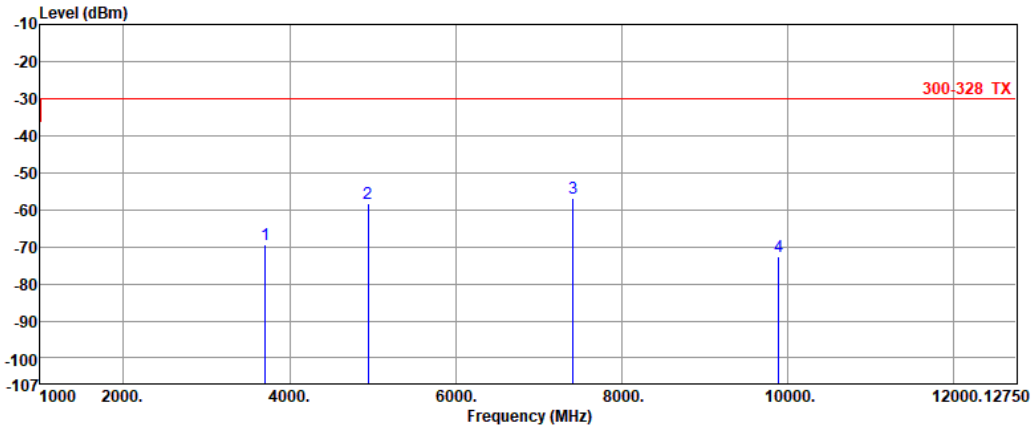


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3618.23	-68.15	-33.01	-35.14	0.00	-68.15
2	4823.90	-59.42	-33.01	-26.41	0.00	-59.42
3	7235.87	-61.44	-33.01	-28.43	0.00	-61.44
4	9648.34	-72.31	-33.01	-39.30	0.00	-72.31

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



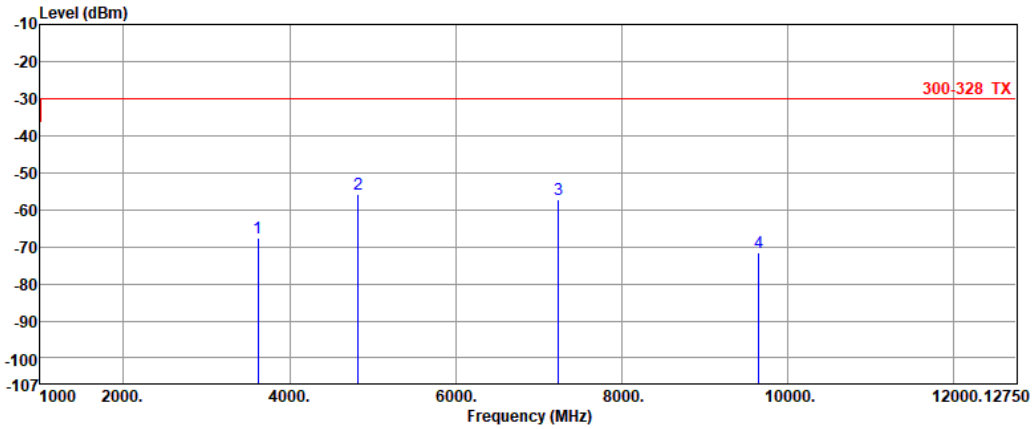
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3707.97	-69.28	-33.01	-36.27	0.00	-69.28
2	4944.02	-58.40	-33.01	-25.39	0.00	-58.40
3	7417.14	-56.88	-33.01	-23.87	0.00	-56.88
4	9887.69	-72.53	-33.01	-39.52	0.00	-72.53

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11g

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

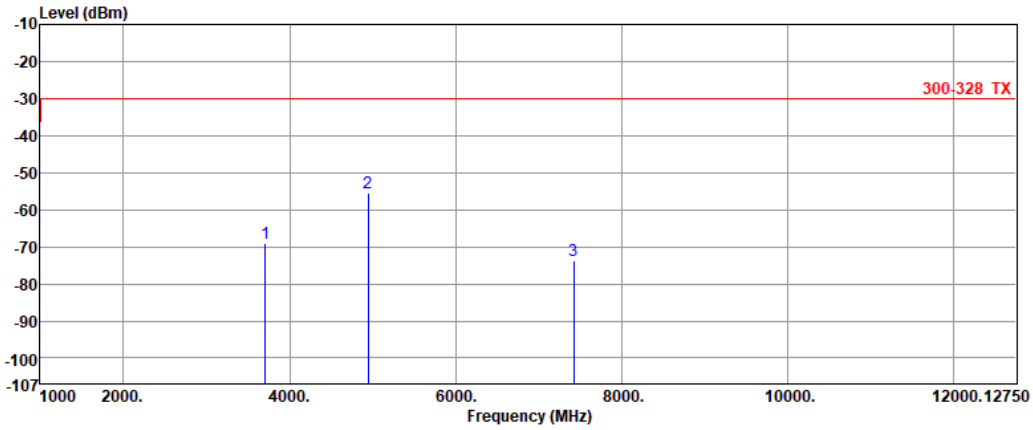


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3618.08	-67.56	-33.01	-34.55	0.00	-67.56
2	4823.99	-55.72	-33.01	-22.71	0.00	-55.72
3	7237.01	-57.27	-33.01	-24.26	0.00	-57.27
4	9649.88	-71.74	-33.01	-38.73	0.00	-71.74

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



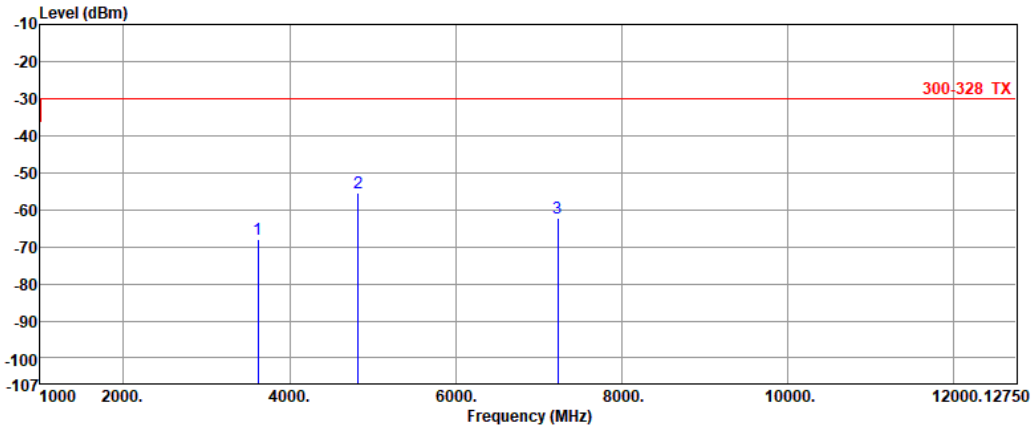
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3707.76	-68.93	-33.01	-35.92	0.00	-68.93
2	4943.87	-55.39	-33.01	-22.38	0.00	-55.39
3	7418.34	-73.72	-33.01	-40.71	0.00	-73.72

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for ax HE20-OFDMA

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

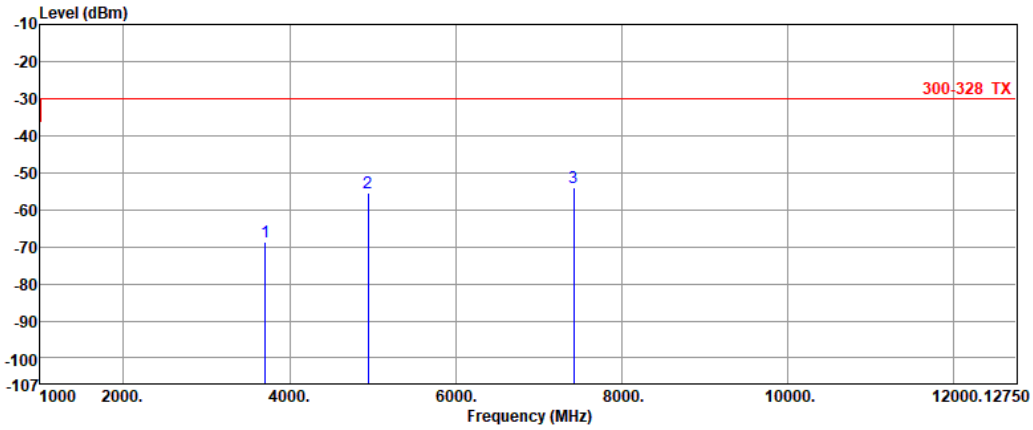


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3618.09	-68.05	-33.01	-35.04	0.00	-68.05
2	4823.98	-55.45	-33.01	-22.44	0.00	-55.45
3	7231.38	-62.23	-33.01	-29.22	0.00	-62.23

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3707.86	-68.69	-33.01	-35.68	0.00	-68.69
2	4944.08	-55.51	-33.01	-22.50	0.00	-55.51
3	7422.18	-53.87	-33.01	-20.86	0.00	-53.87

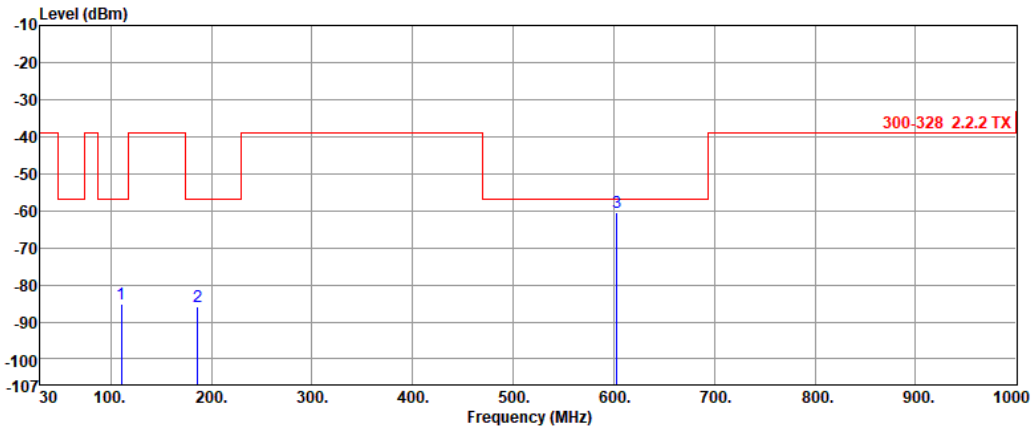
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

2TX, ANT1

Emissions (Below 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

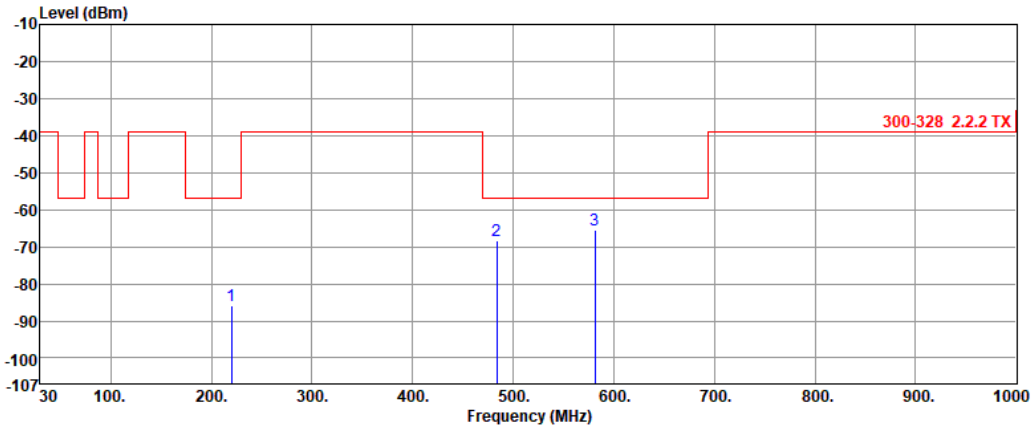


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	110.51	-85.19	-57.01	-28.18	0.00	-85.19
2	186.17	-85.72	-57.01	-28.71	0.00	-85.72
3	603.35	-60.31	-57.01	-3.30	0.00	-60.31

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

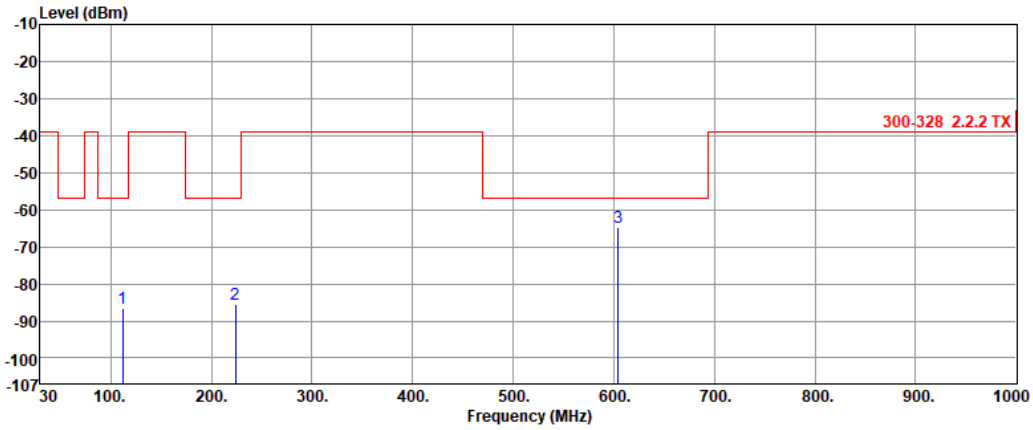


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	220.12	-86.05	-57.01	-29.04	0.00	-86.05
2	483.96	-68.27	-57.01	-11.26	0.00	-68.27
3	580.96	-65.37	-57.01	-8.36	0.00	-65.37

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

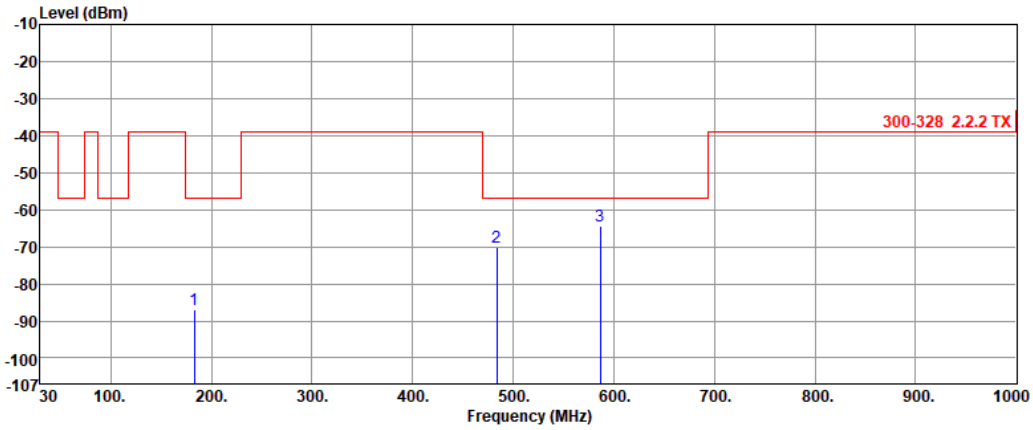


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	111.48	-86.56	-57.01	-29.55	0.00	-86.56
2	224.00	-85.69	-57.01	-28.68	0.00	-85.69
3	604.63	-64.72	-57.01	-7.71	0.00	-64.72

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



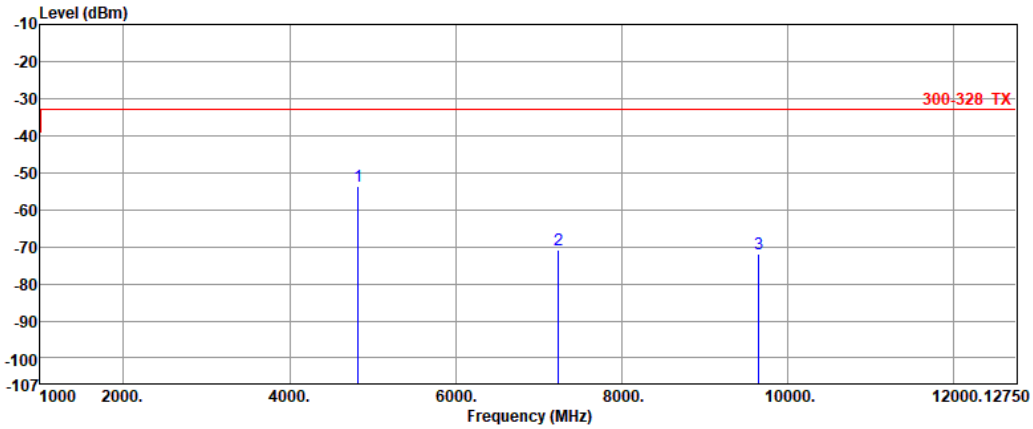
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	183.26	-87.01	-57.01	-30.00	0.00	-87.01
2	483.96	-70.14	-57.01	-13.13	0.00	-70.14
3	586.78	-64.40	-57.01	-7.39	0.00	-64.40

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11b

Modulation	11b
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

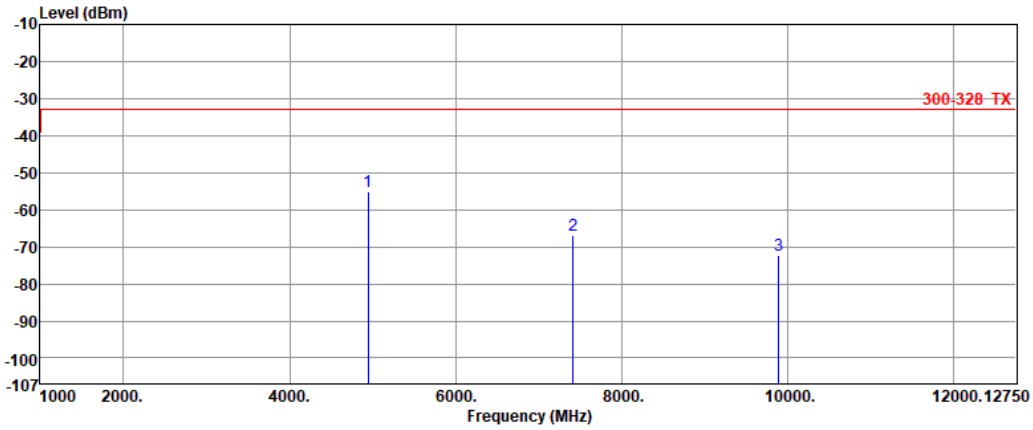


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4823.93	-53.64	-33.01	-20.63	0.00	-53.64
2	7236.34	-70.94	-33.01	-37.93	0.00	-70.94
3	9648.04	-71.84	-33.01	-38.83	0.00	-71.84

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11b
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



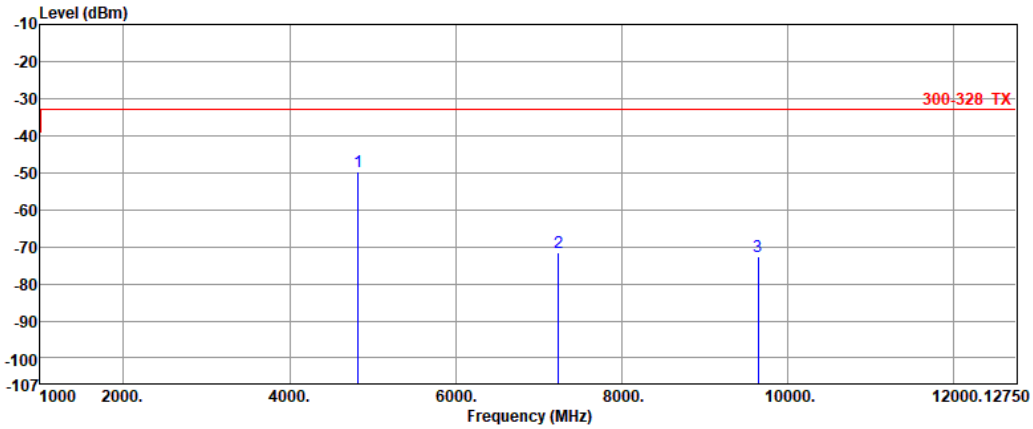
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4943.99	-55.01	-33.01	-22.00	0.00	-55.01
2	7415.79	-66.77	-33.01	-33.76	0.00	-66.77
3	9888.26	-72.30	-33.01	-39.29	0.00	-72.30

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for 802.11g

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

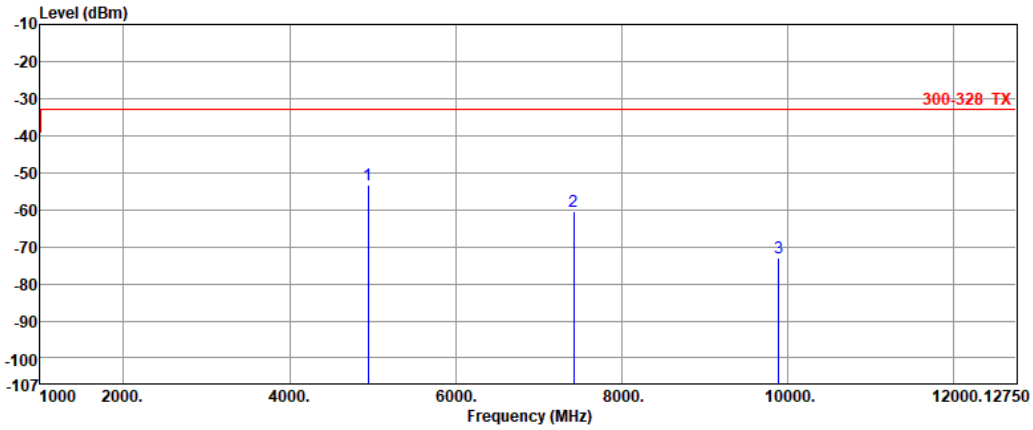


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4825.95	-49.73	-33.01	-16.72	0.00	-49.73
2	7235.82	-71.68	-33.01	-38.67	0.00	-71.68
3	9643.16	-72.81	-33.01	-39.80	0.00	-72.81

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



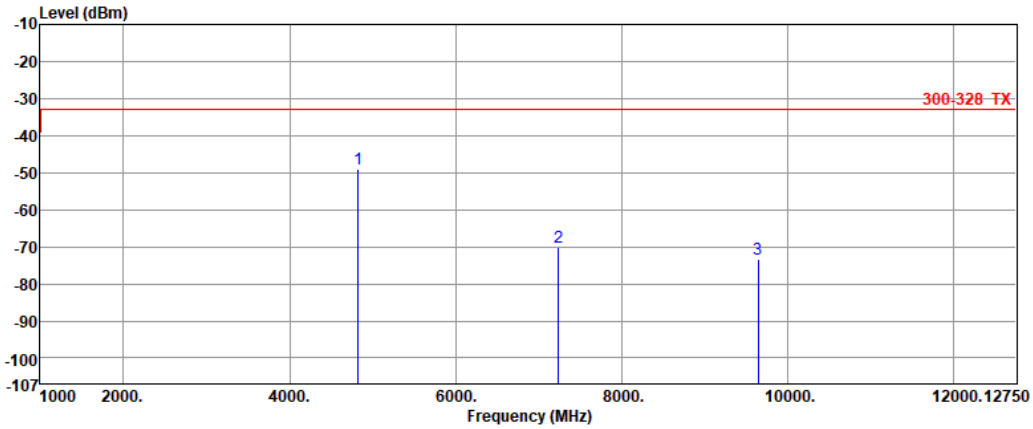
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4945.45	-53.46	-33.01	-20.45	0.00	-53.46
2	7423.10	-60.48	-33.01	-27.47	0.00	-60.48
3	9886.59	-73.02	-33.01	-40.01	0.00	-73.02

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz) for ax HE20-OFDMA

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

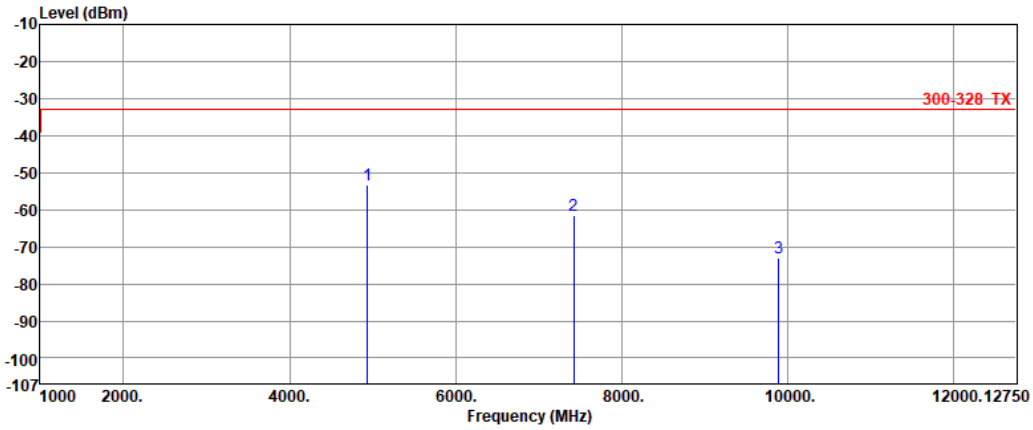


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4823.29	-49.09	-33.01	-16.08	0.00	-49.09
2	7235.82	-70.10	-33.01	-37.09	0.00	-70.10
3	9643.66	-73.19	-33.01	-40.18	0.00	-73.19

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4936.55	-53.31	-33.01	-20.30	0.00	-53.31
2	7424.50	-61.45	-33.01	-28.44	0.00	-61.45
3	9887.60	-73.06	-33.01	-40.05	0.00	-73.06

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

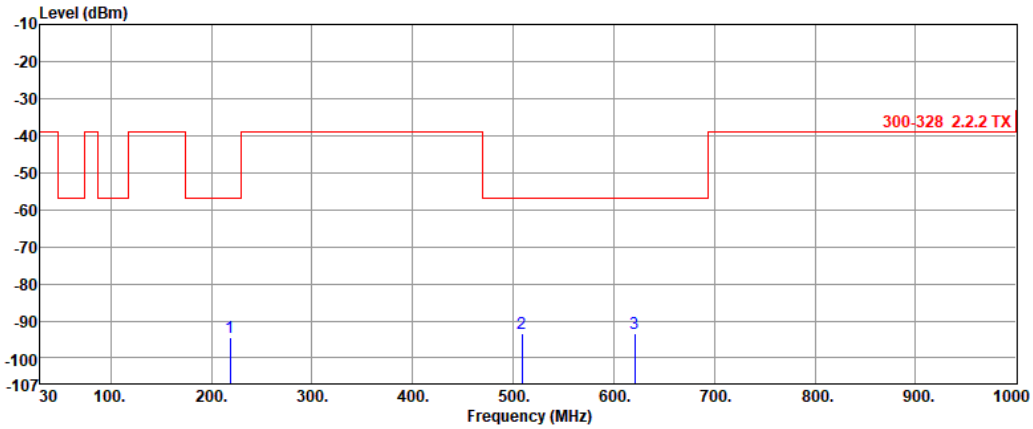
partial RU configuration

1TX

Emissions (Below 1GHz)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

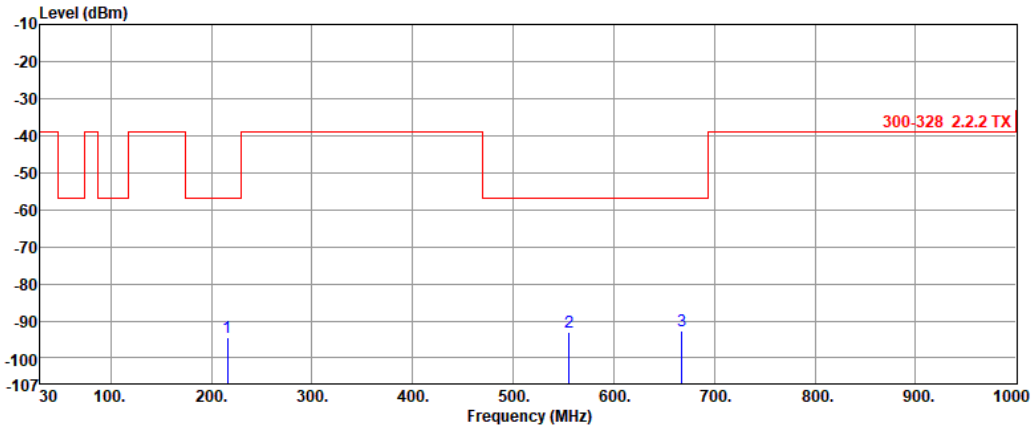


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	218.74	-94.54	-54.00	-40.54	0.00	-94.54
2	508.94	-93.39	-54.00	-39.39	0.00	-93.39
3	620.61	-93.31	-54.00	-39.31	0.00	-93.31

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



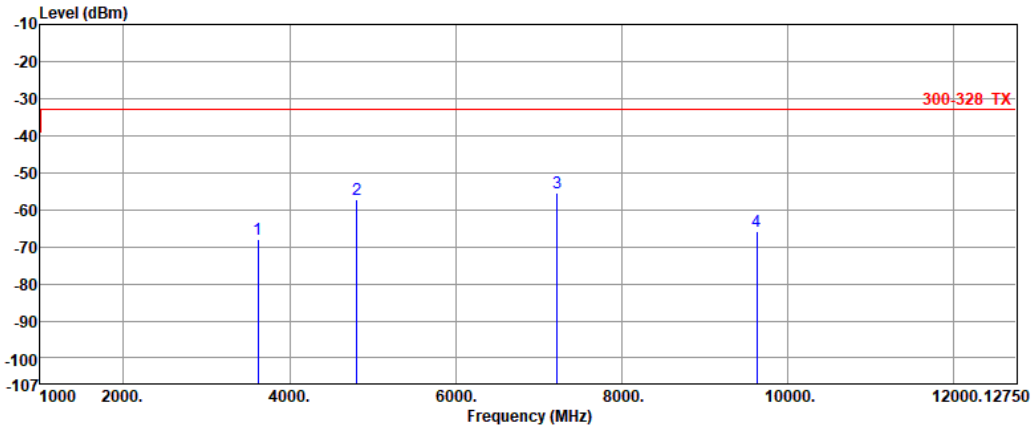
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	216.21	-94.53	-54.00	-40.53	0.00	-94.53
2	555.62	-93.14	-54.00	-39.14	0.00	-93.14
3	667.66	-92.55	-54.00	-38.55	0.00	-92.55

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

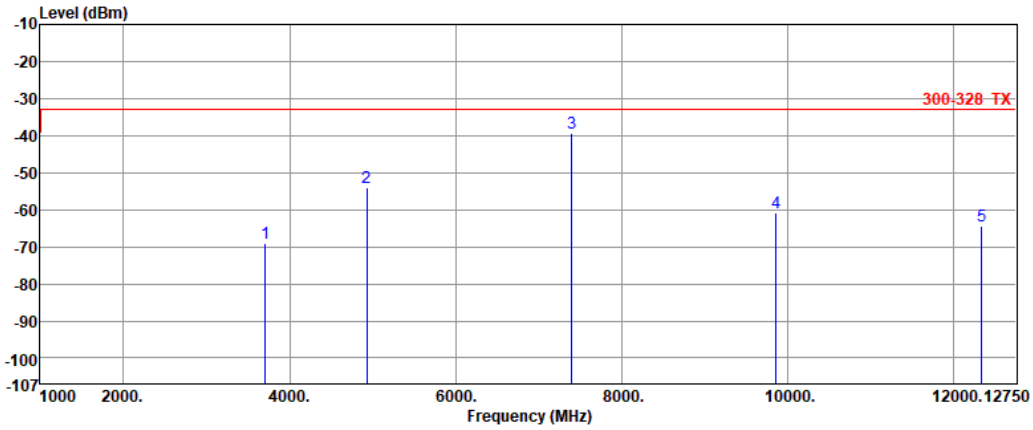


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3617.91	-68.11	-33.01	-35.10	0.00	-68.11
2	4810.91	-57.30	-33.01	-24.29	0.00	-57.30
3	7218.49	-55.36	-33.01	-22.35	0.00	-55.36
4	9627.19	-65.87	-33.01	-32.86	0.00	-65.87

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3707.73	-69.13	-33.01	-36.12	0.00	-69.13
2	4933.78	-53.98	-33.01	-20.97	0.00	-53.98
3	7397.53	-39.50	-33.01	-6.49	0.00	-39.50
4	9858.79	-60.82	-33.01	-27.81	0.00	-60.82
5	12336.58	-64.42	-33.01	-31.41	0.00	-64.42

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

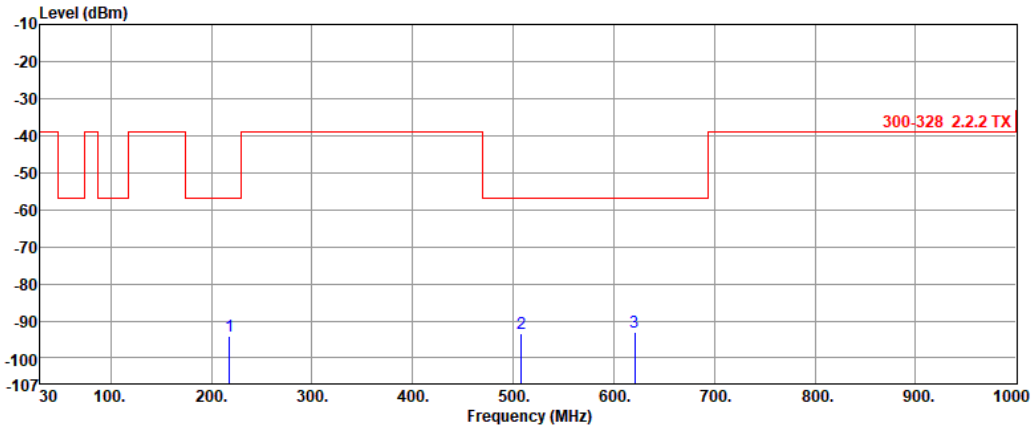
partial RU configuration

2TX, ANT0

Emissions (Below 1GHz)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

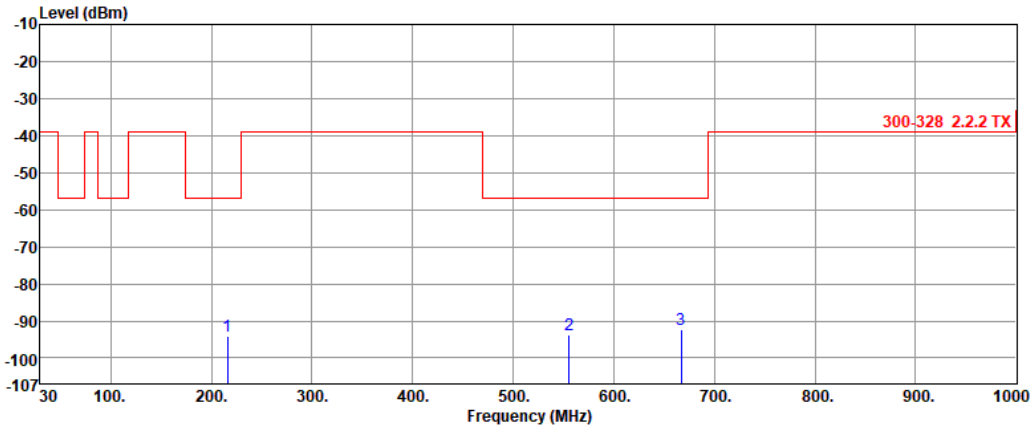


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	218.18	-94.11	-54.00	-40.11	0.00	-94.11
2	508.21	-93.35	-54.00	-39.35	0.00	-93.35
3	620.73	-93.02	-54.00	-39.02	0.00	-93.02

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



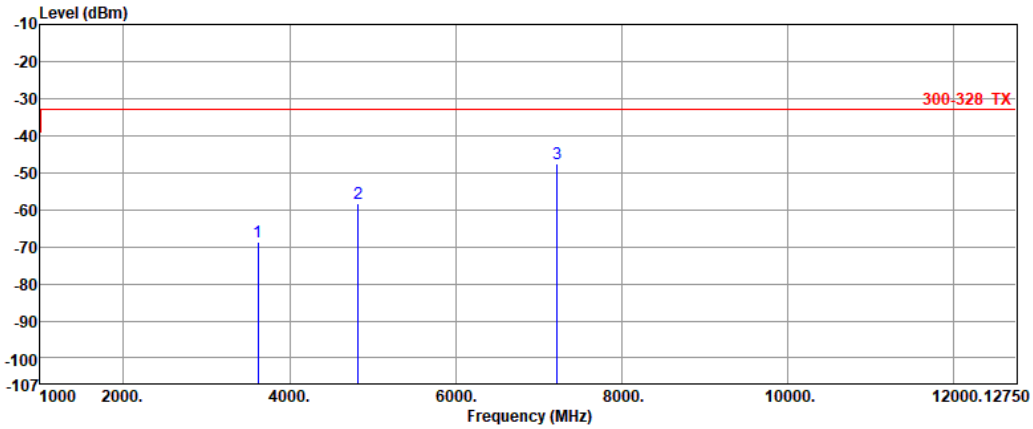
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	216.24	-94.20	-54.00	-40.20	0.00	-94.20
2	555.74	-93.59	-54.00	-39.59	0.00	-93.59
3	667.29	-92.41	-54.00	-38.41	0.00	-92.41

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

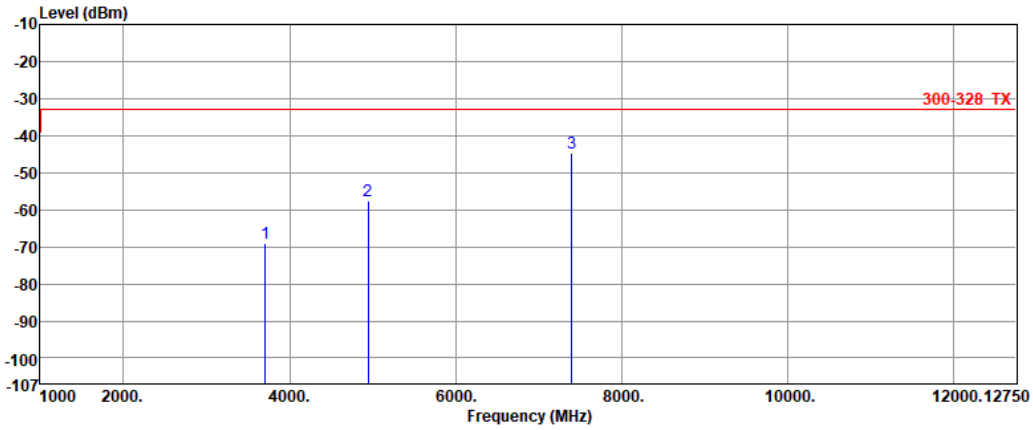


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3617.92	-68.53	-33.01	-35.52	0.00	-68.53
2	4823.86	-58.34	-33.01	-25.33	0.00	-58.34
3	7220.27	-47.63	-33.01	-14.62	0.00	-47.63

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	3708.15	-69.10	-33.01	-36.09	0.00	-69.10
2	4943.79	-57.76	-33.01	-24.75	0.00	-57.76
3	7396.01	-44.67	-33.01	-11.66	0.00	-44.67

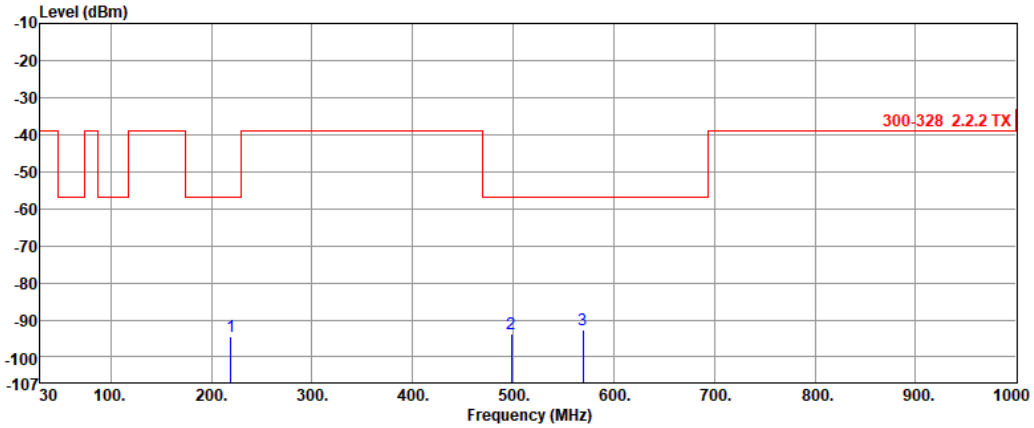
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

2TX, ANT1

Emissions (Below 1GHz)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

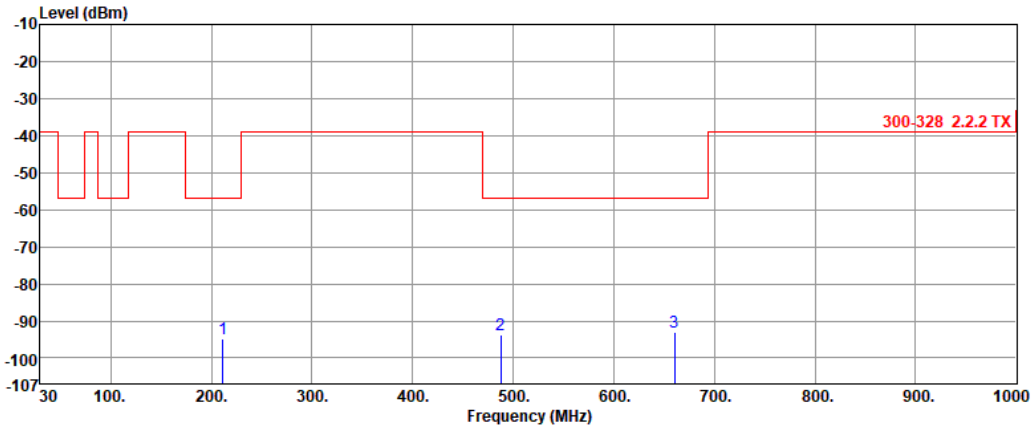


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	219.15	-94.35	-54.00	-40.35	0.00	-94.35
2	498.51	-93.79	-54.00	-39.79	0.00	-93.79
3	569.41	-92.80	-54.00	-38.80	0.00	-92.80

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



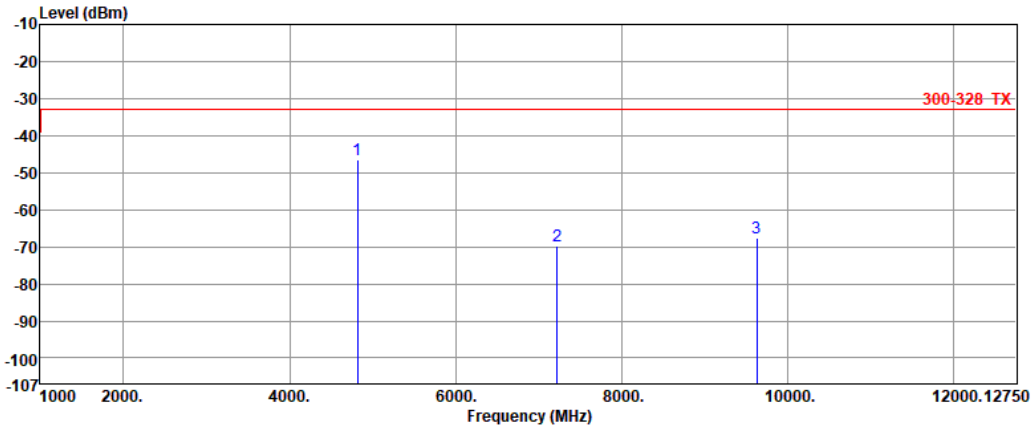
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	211.39	-94.94	-54.00	-40.94	0.00	-94.94
2	487.84	-93.82	-54.00	-39.82	0.00	-93.82
3	660.50	-93.20	-54.00	-39.20	0.00	-93.20

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

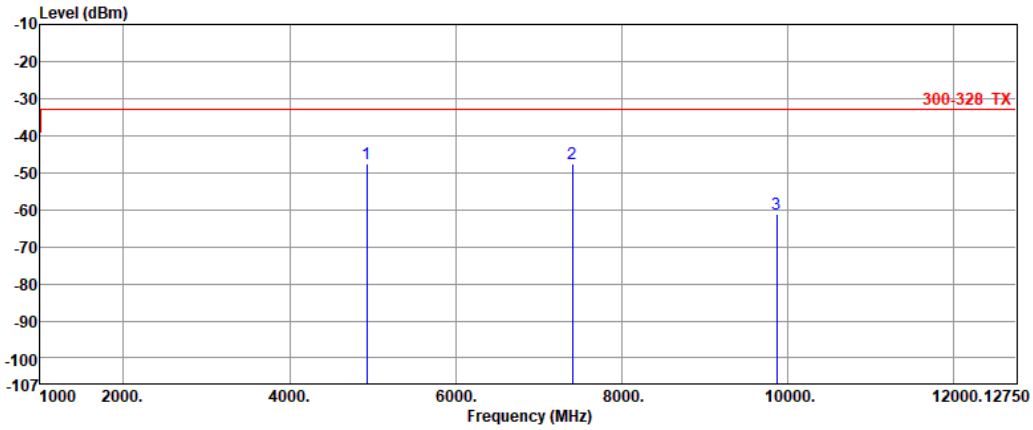


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4815.59	-46.40	-33.01	-13.39	0.00	-46.40
2	7222.34	-69.62	-33.01	-36.61	0.00	-69.62
3	9629.94	-67.58	-33.01	-34.57	0.00	-67.58

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA RU106
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4930.83	-47.47	-33.01	-14.46	0.00	-47.47
2	7402.70	-47.71	-33.01	-14.70	0.00	-47.71
3	9865.03	-61.09	-33.01	-28.08	0.00	-61.09

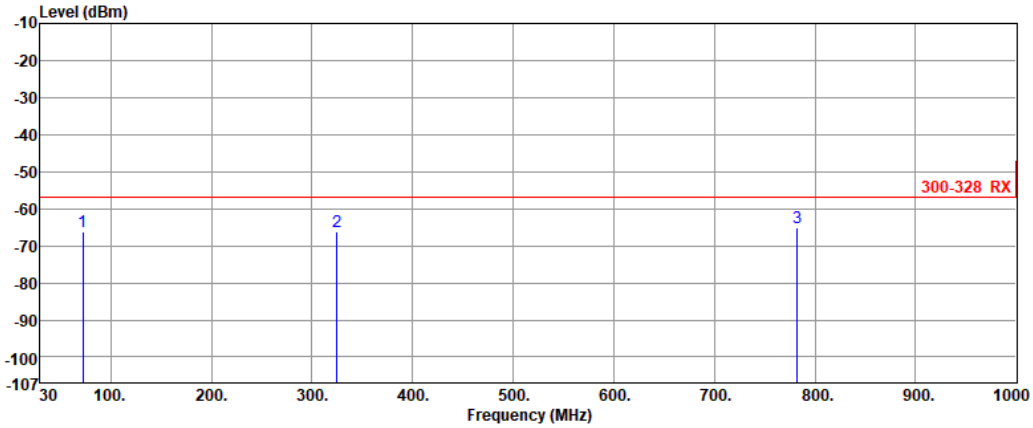
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

1RX

Emissions (Below 1GHz)

Modulation	11g	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

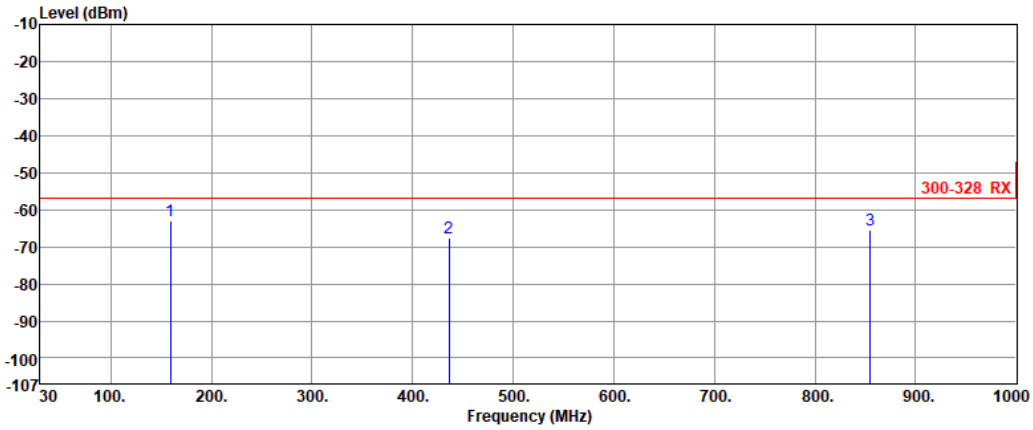


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	72.17	-66.14	-57.00	-9.14	-4.46	-61.68
2	324.81	-66.17	-57.00	-9.17	-0.32	-65.85
3	782.65	-65.17	-57.00	-8.17	9.18	-74.35

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

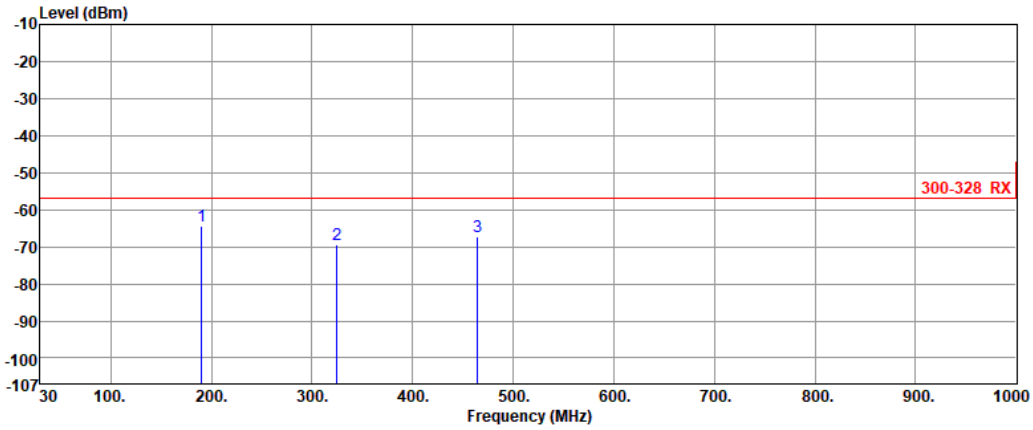


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	159.23	-63.12	-57.00	-6.12	0.86	-63.98
2	436.16	-67.57	-57.00	-10.57	2.47	-70.04
3	854.90	-65.36	-57.00	-8.36	10.08	-75.44

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

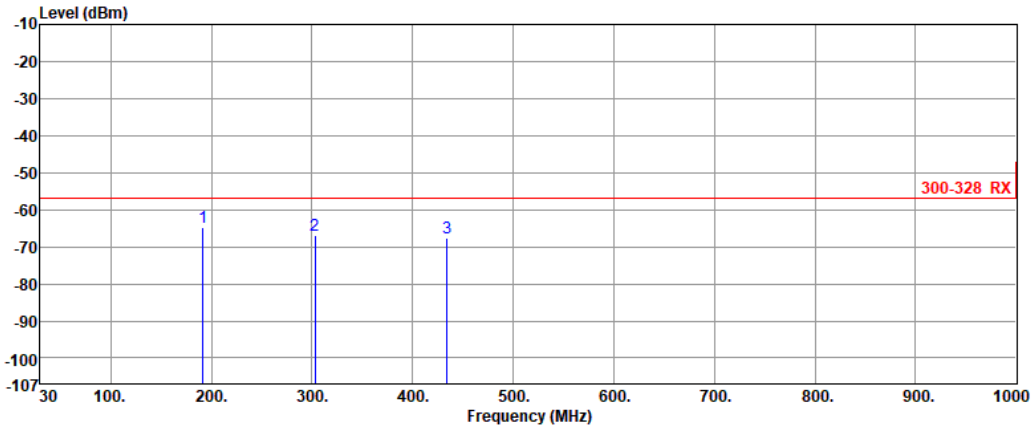


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	189.98	-64.30	-57.00	-7.30	-4.04	-60.26
2	324.51	-69.52	-57.00	-12.52	-0.35	-69.17
3	464.37	-67.10	-57.00	-10.10	3.21	-70.31

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

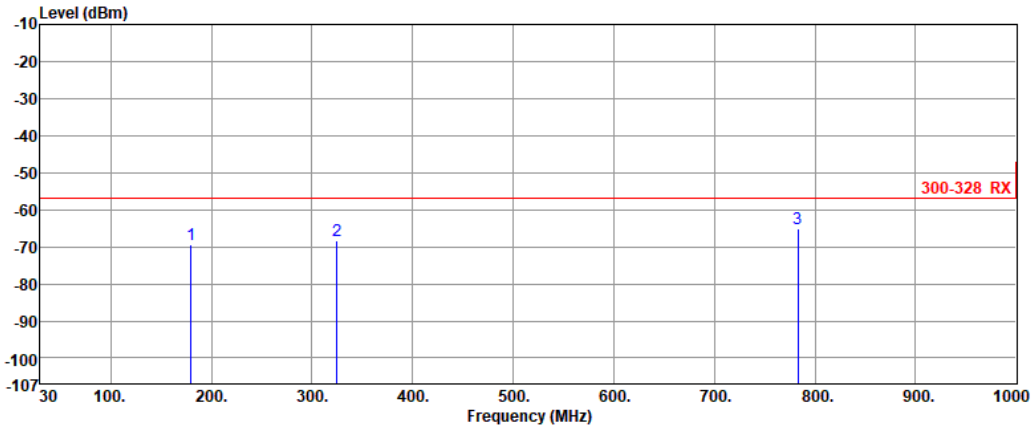


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.70	-64.82	-57.00	-7.82	-4.66	-60.16
2	302.95	-66.97	-57.00	-9.97	-0.75	-66.22
3	434.17	-67.76	-57.00	-10.76	2.36	-70.12

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

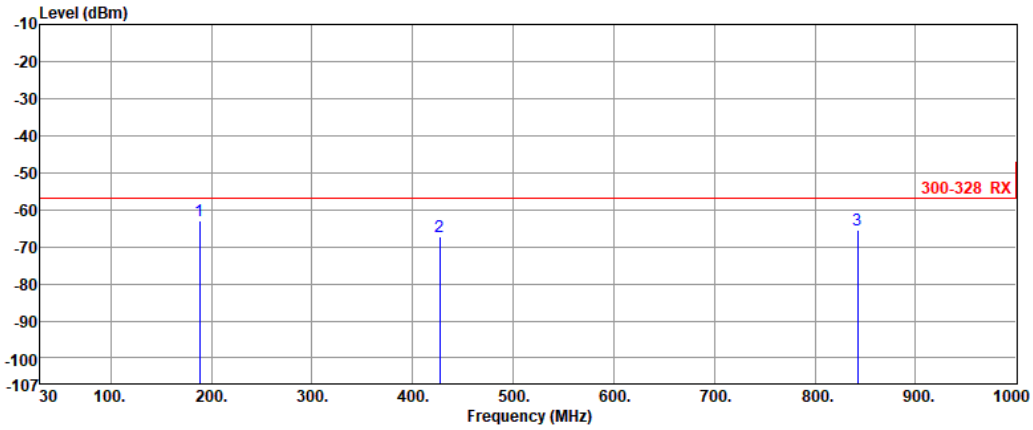


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.77	-69.37	-57.00	-12.37	-2.71	-66.66
2	324.86	-68.17	-57.00	-11.17	-0.31	-67.86
3	782.95	-65.12	-57.00	-8.12	9.13	-74.25

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

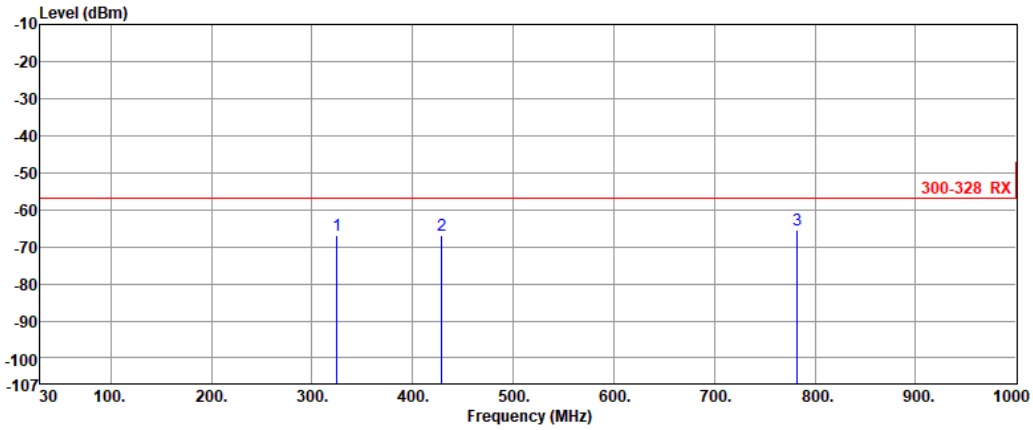


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	187.96	-63.10	-57.00	-6.10	-4.50	-58.60
2	426.75	-67.40	-57.00	-10.40	2.65	-70.05
3	842.69	-65.38	-57.00	-8.38	10.15	-75.53

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	Test Freq. (MHz)	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

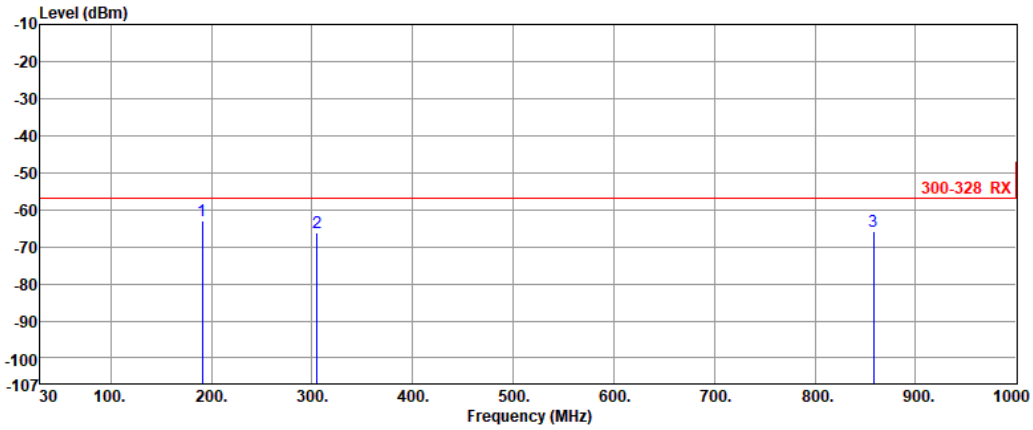


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	324.56	-67.05	-57.00	-10.05	-0.35	-66.70
2	429.11	-67.04	-57.00	-10.04	3.00	-70.04
3	782.39	-65.42	-57.00	-8.42	9.22	-74.64

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



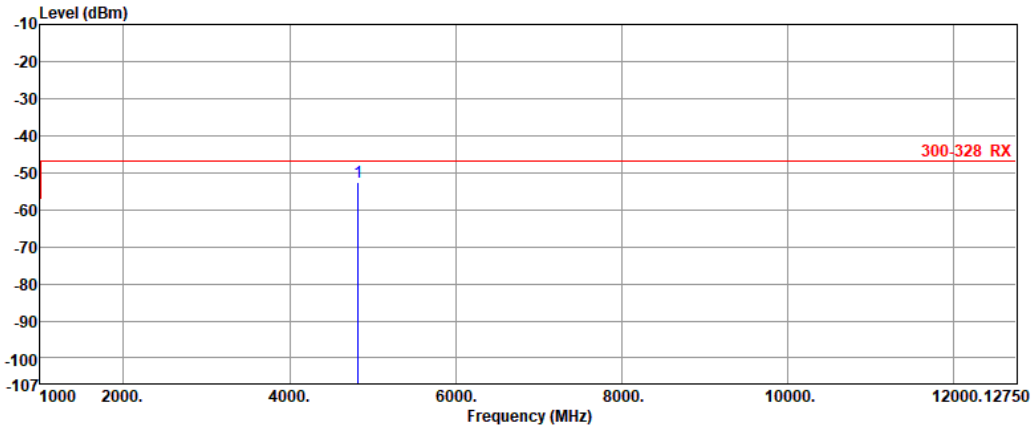
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.12	-63.11	-57.00	-6.11	-4.67	-58.44
2	305.28	-66.13	-57.00	-9.13	-0.63	-65.50
3	858.45	-65.86	-57.00	-8.86	10.75	-76.61

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

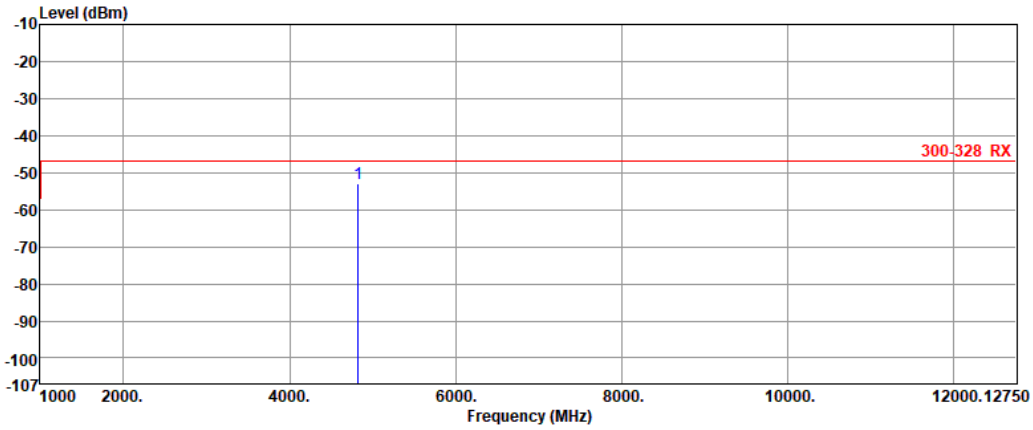


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.13	-52.77	-47.00	-5.77	13.76	-66.53

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

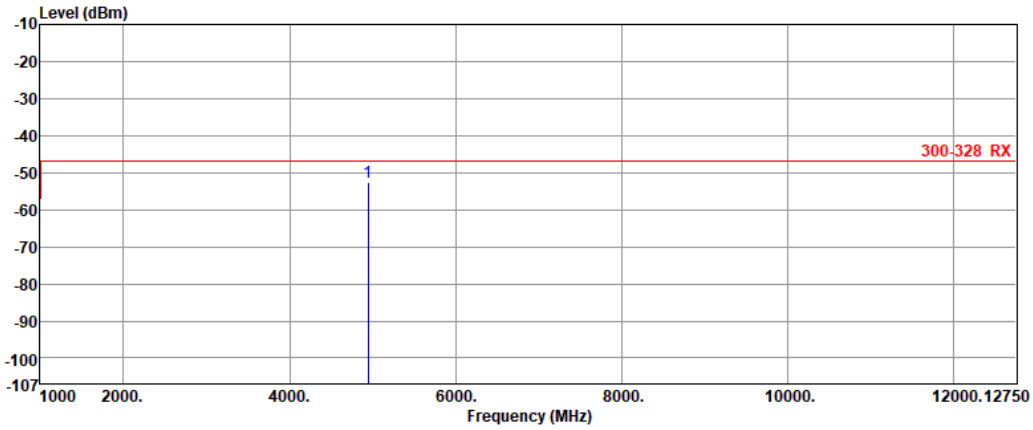


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.29	-52.98	-47.00	-5.98	13.70	-66.68

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

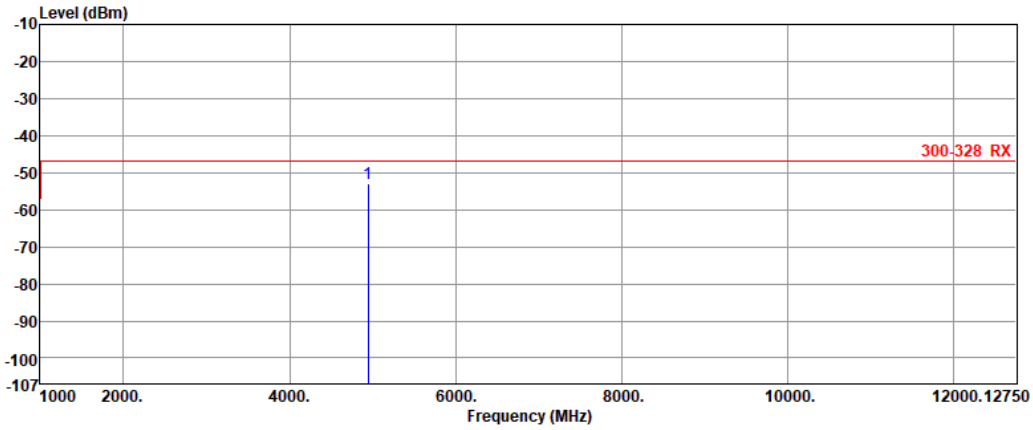


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.12	-52.64	-47.00	-5.64	13.85	-66.49

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

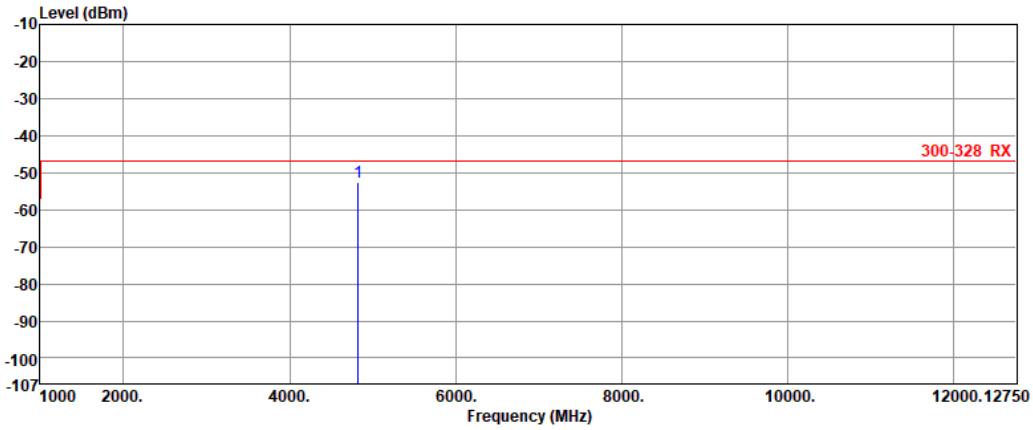


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.07	-52.89	-47.00	-5.89	13.32	-66.21

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

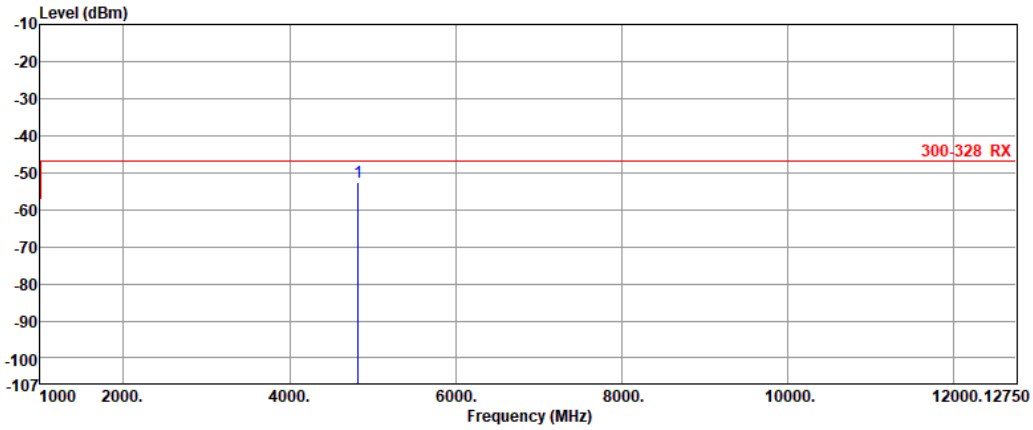


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.47	-52.74	-47.00	-5.74	13.76	-66.50

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	Test Freq. (MHz)	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

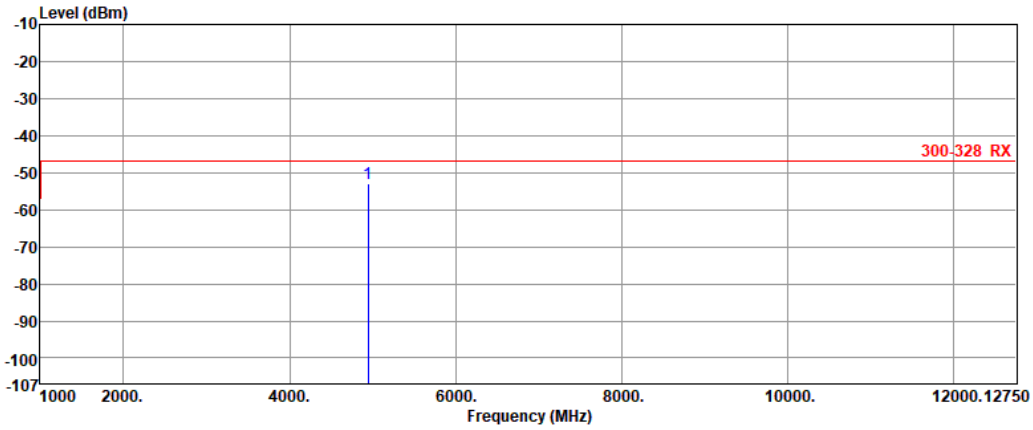


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.18	-52.57	-47.00	-5.57	13.70	-66.27

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

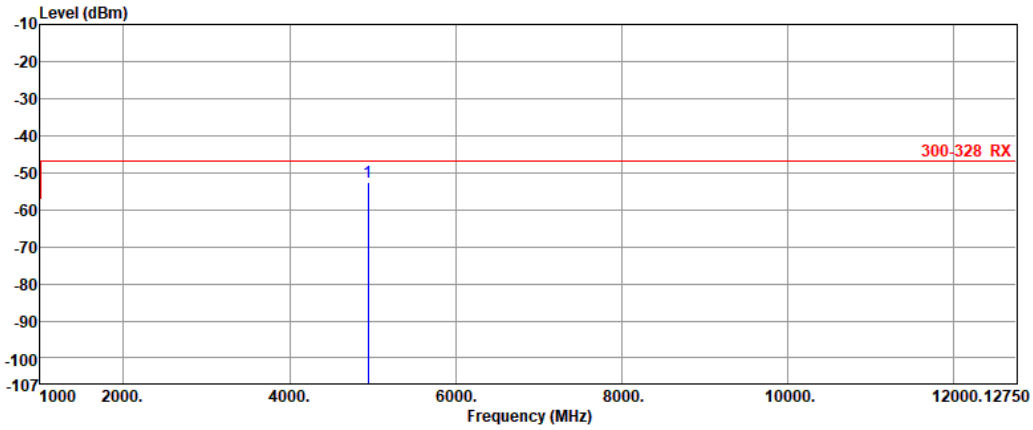


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4943.18	-52.83	-47.00	-5.83	13.85	-66.68

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.00	-52.54	-47.00	-5.54	13.32	-65.86

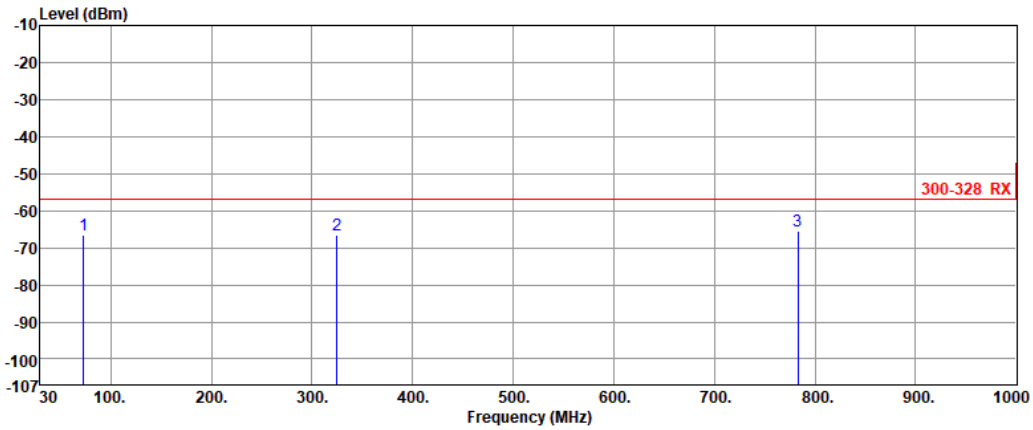
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

2RX

Emissions (Below 1GHz)

Modulation	11g	Test Freq. (MHz)	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

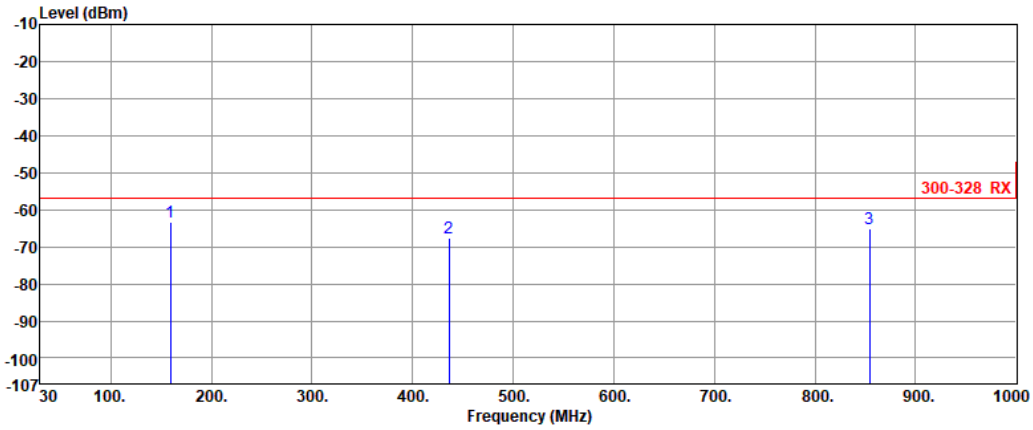


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	72.68	-66.66	-57.00	-9.66	-4.50	-62.16
2	324.88	-66.59	-57.00	-9.59	-0.31	-66.28
3	782.72	-65.44	-57.00	-8.44	9.17	-74.61

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

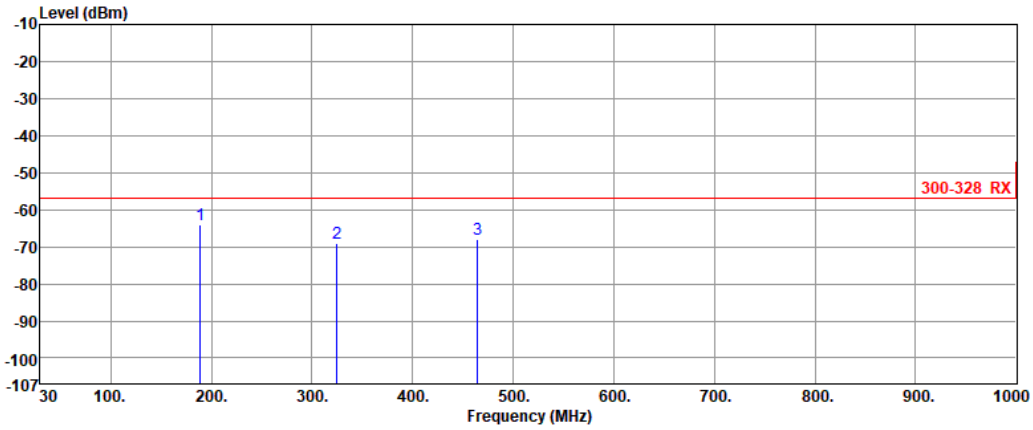


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	159.01	-63.45	-57.00	-6.45	0.87	-64.32
2	436.43	-67.54	-57.00	-10.54	2.49	-70.03
3	854.50	-65.15	-57.00	-8.15	10.08	-75.23

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

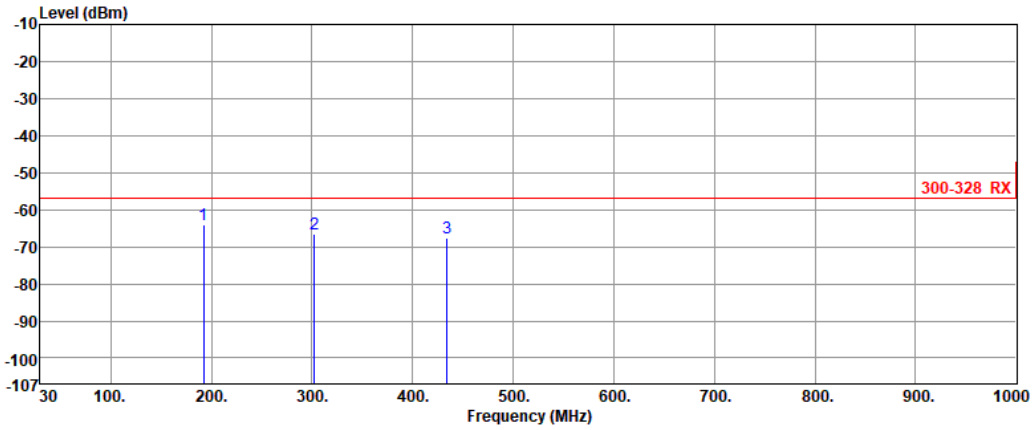


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	189.08	-64.21	-57.00	-7.21	-3.99	-60.22
2	324.88	-69.01	-57.00	-12.01	-0.31	-68.70
3	464.56	-67.90	-57.00	-10.90	3.21	-71.11

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

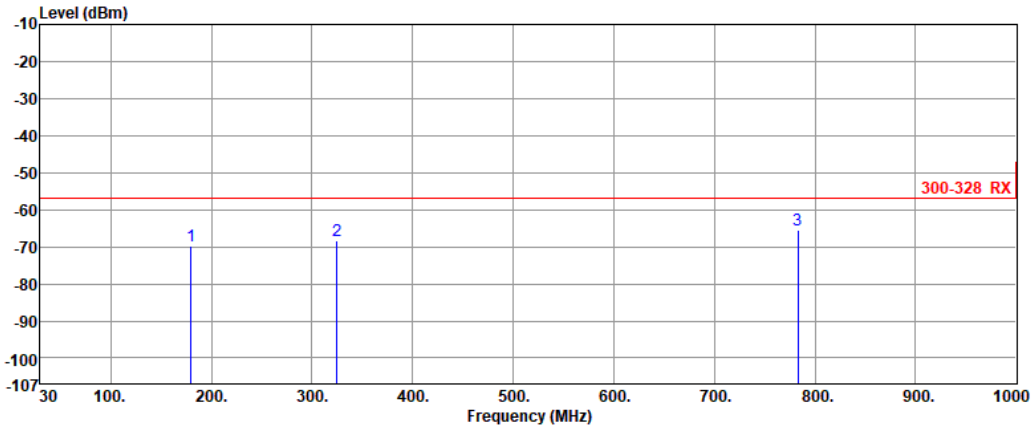


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.99	-64.10	-57.00	-7.10	-4.65	-59.45
2	302.57	-66.50	-57.00	-9.50	-0.77	-65.73
3	434.49	-67.63	-57.00	-10.63	2.37	-70.00

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

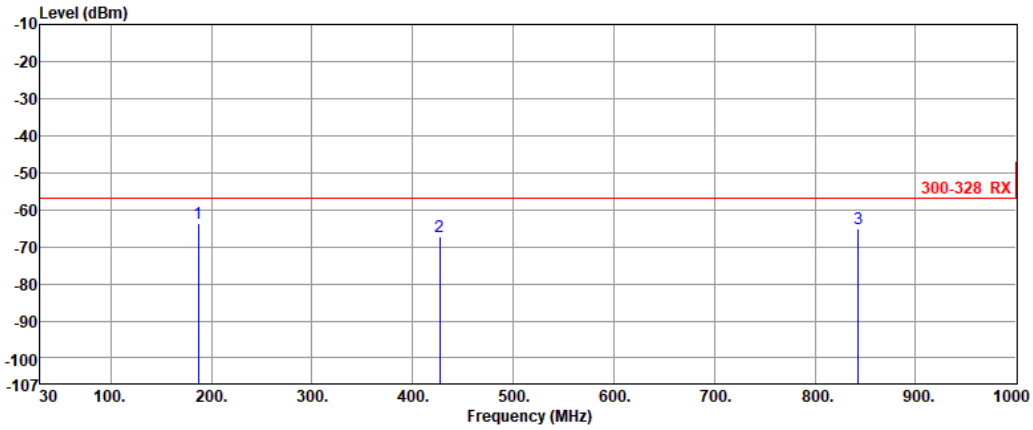


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	179.38	-69.74	-57.00	-12.74	-2.63	-67.11
2	324.88	-68.22	-57.00	-11.22	-0.31	-67.91
3	782.72	-65.66	-57.00	-8.66	9.17	-74.83

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

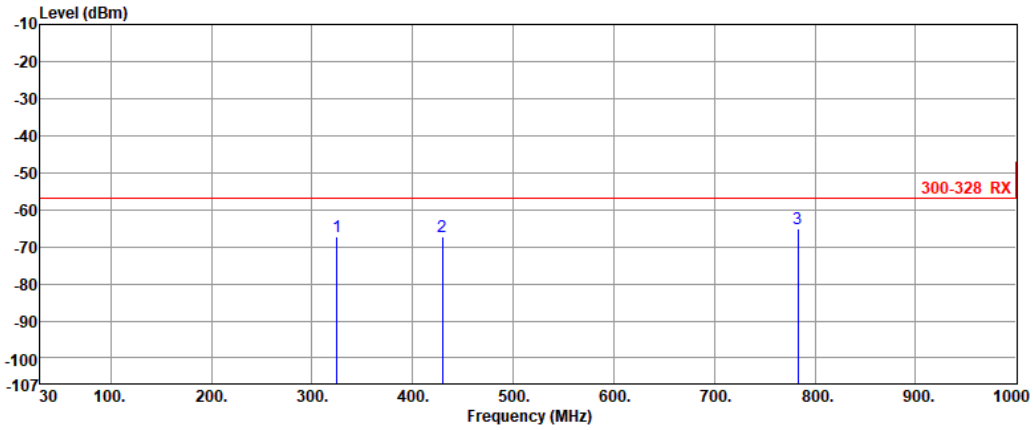


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	187.14	-63.86	-57.00	-6.86	-4.42	-59.44
2	426.73	-67.32	-57.00	-10.32	2.65	-69.97
3	842.86	-65.28	-57.00	-8.28	10.15	-75.43

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

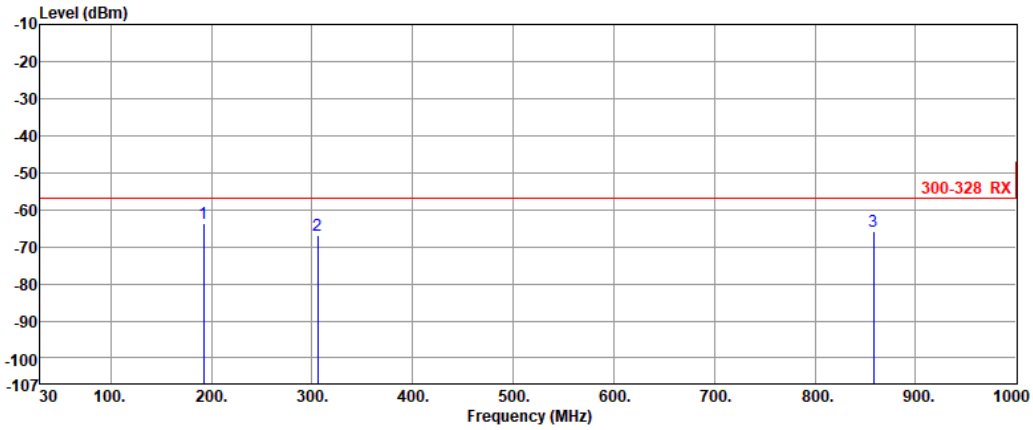


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	324.88	-67.11	-57.00	-10.11	-0.31	-66.80
2	429.64	-67.21	-57.00	-10.21	3.02	-70.23
3	782.72	-65.29	-57.00	-8.29	9.17	-74.46

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



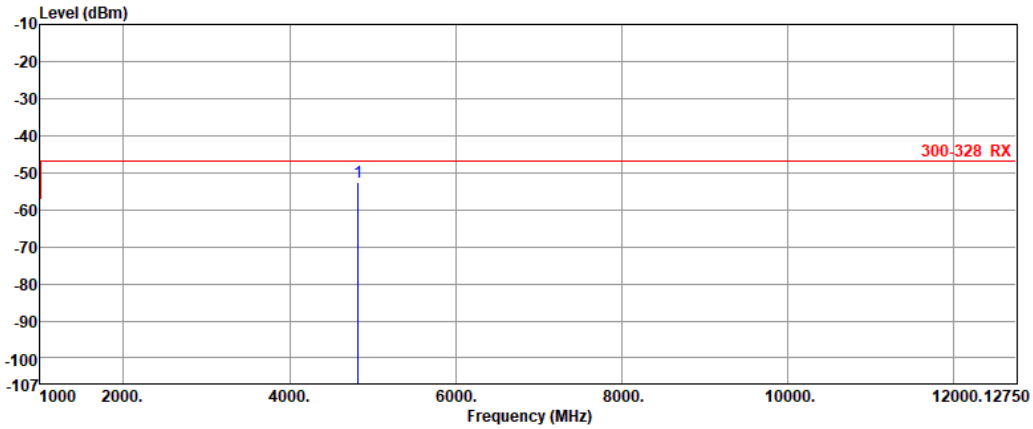
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.99	-63.80	-57.00	-6.80	-4.65	-59.15
2	305.48	-66.75	-57.00	-9.75	-0.63	-66.12
3	858.38	-65.82	-57.00	-8.82	10.74	-76.56

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

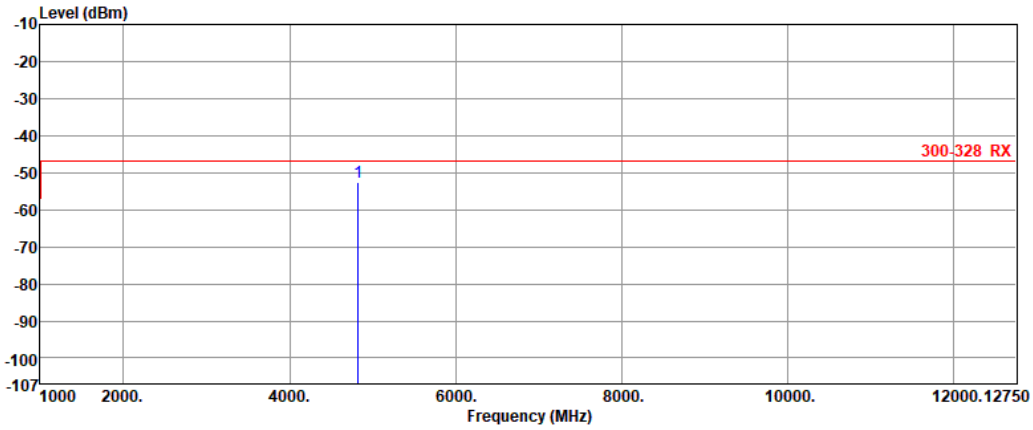


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.12	-52.77	-47.00	-5.77	13.76	-66.53

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

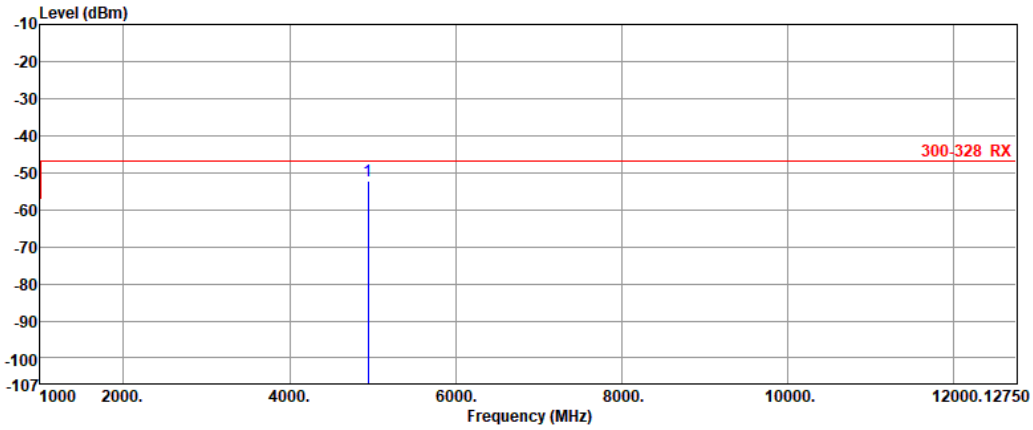


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.15	-52.66	-47.00	-5.66	13.70	-66.36

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

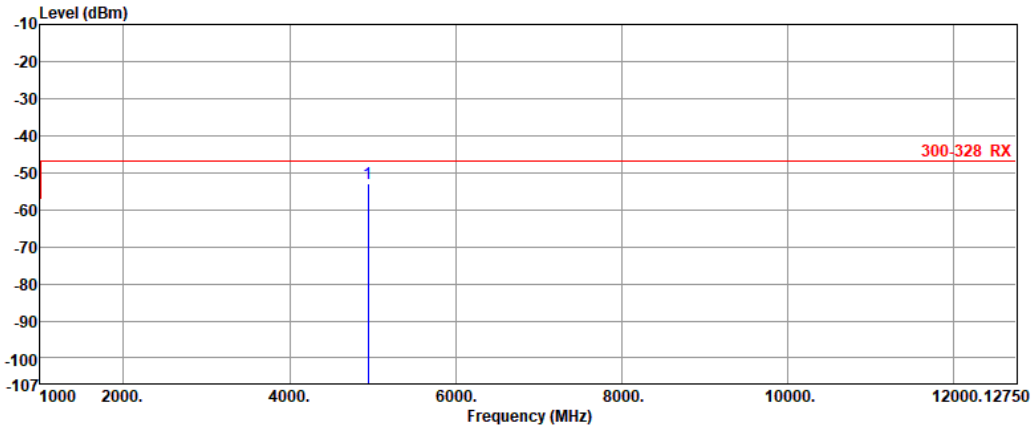


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.07	-52.31	-47.00	-5.31	13.85	-66.16

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

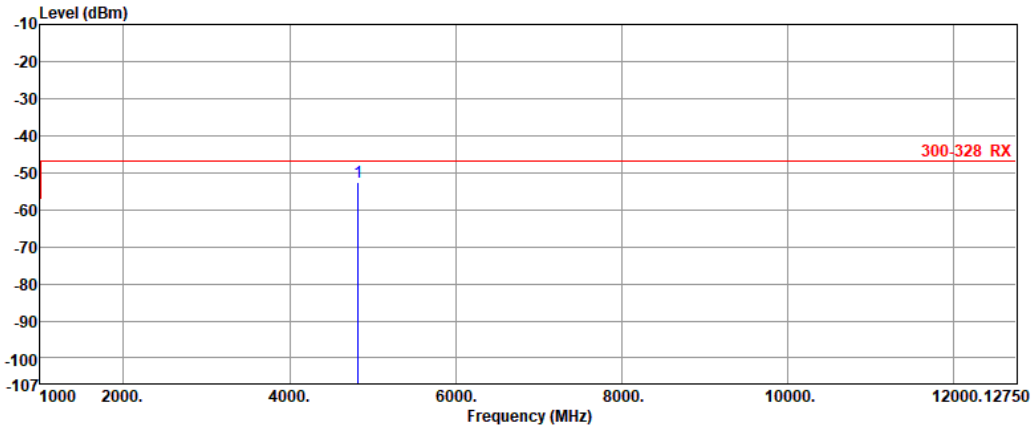


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.02	-52.97	-47.00	-5.97	13.32	-66.29

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

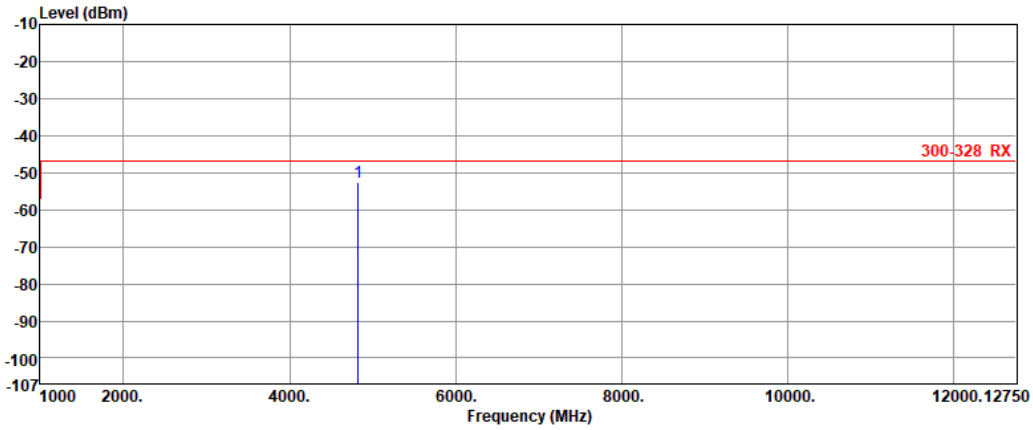


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.12	-52.59	-47.00	-5.59	13.76	-66.35

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2412
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

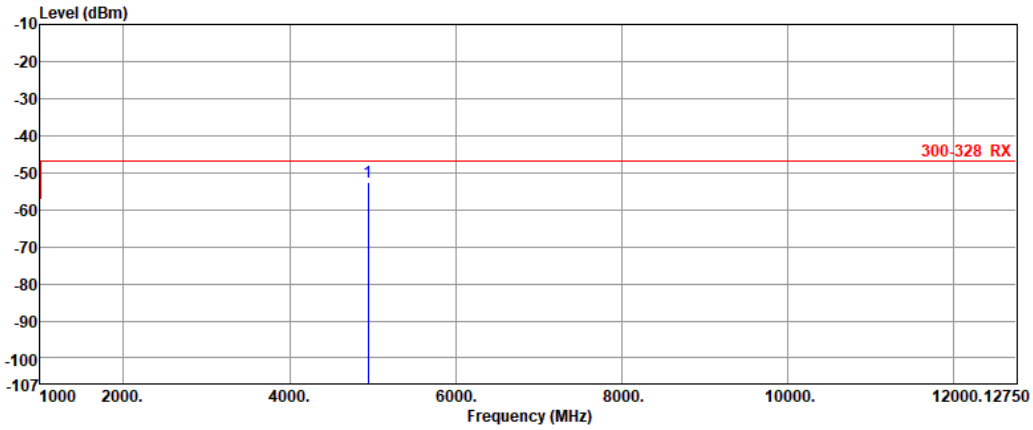


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4824.14	-52.66	-47.00	-5.66	13.70	-66.36

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Horizontal		

Test By :Hugo Zhen Temperature:24 Humidity(%):65

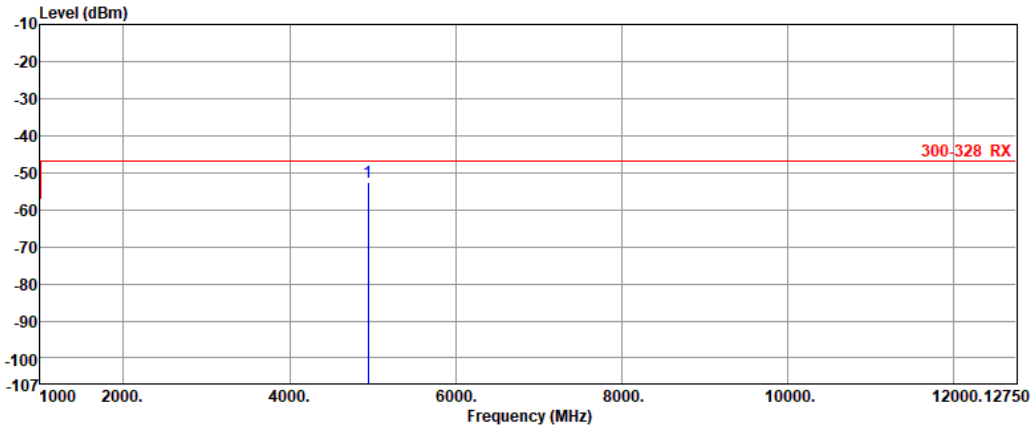


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4943.48	-52.42	-47.00	-5.42	13.85	-66.27

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA	**Test Freq. (MHz)**	2472
Polarization	Vertical		

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	4944.00	-52.50	-47.00	-5.50	13.32	-65.82

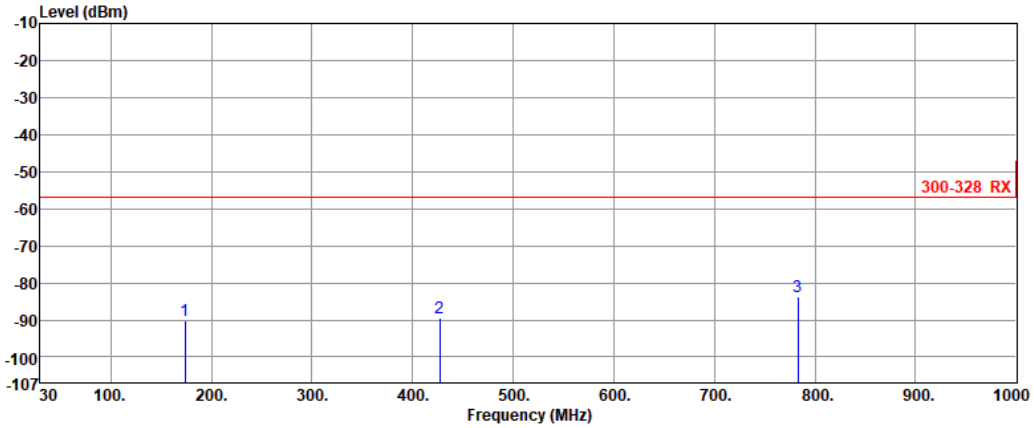
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

1RX

Emissions (Below 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

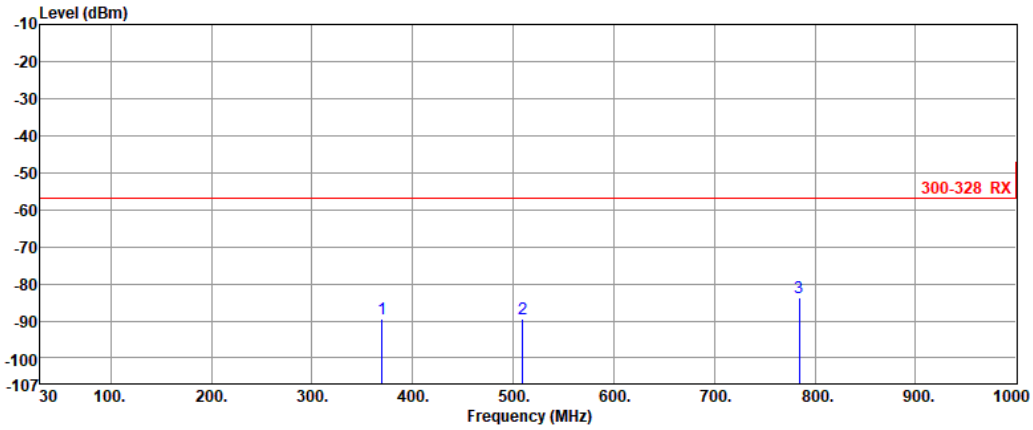


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	173.56	-90.08	-57.00	-33.08	0.00	-90.08
2	426.73	-89.29	-57.00	-32.29	0.00	-89.29
3	782.72	-83.84	-57.00	-26.84	0.00	-83.84

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

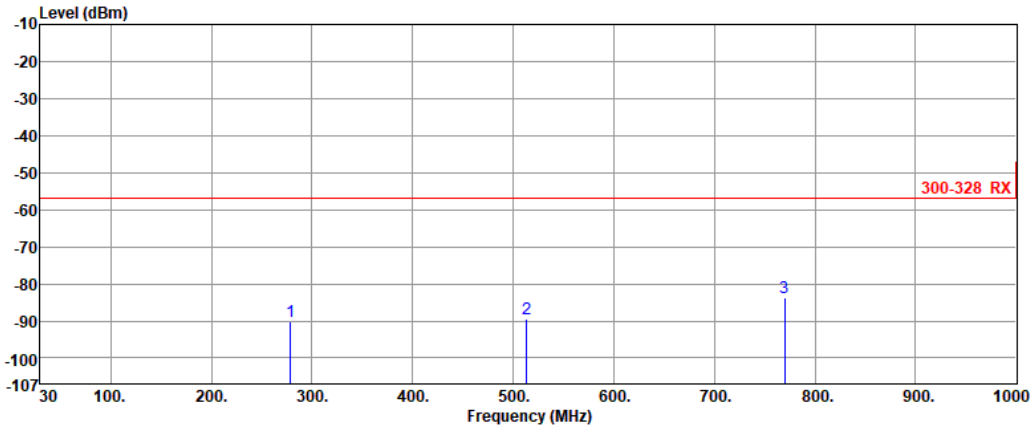


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	369.50	-89.64	-57.00	-32.64	0.00	-89.64
2	509.18	-89.60	-57.00	-32.60	0.00	-89.60
3	784.66	-83.85	-57.00	-26.85	0.00	-83.85

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

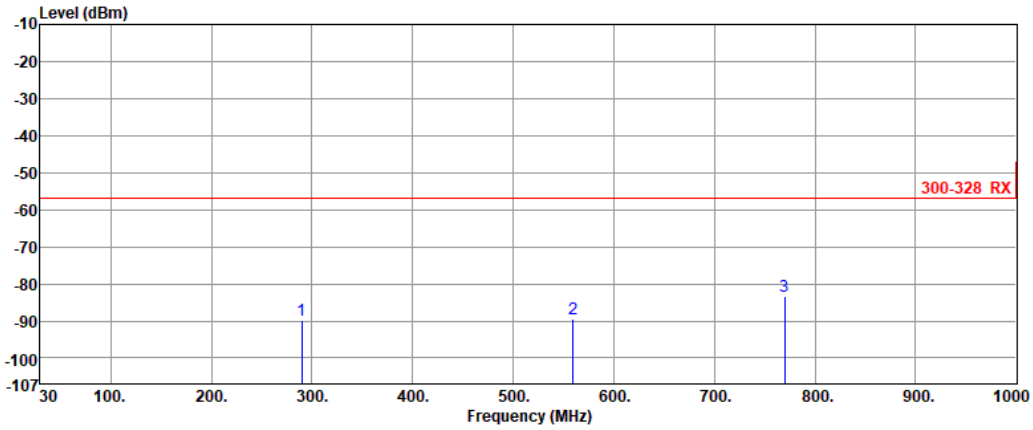


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	278.32	-90.11	-57.00	-33.11	0.00	-90.11
2	513.06	-89.56	-57.00	-32.56	0.00	-89.56
3	770.11	-83.80	-57.00	-26.80	0.00	-83.80

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



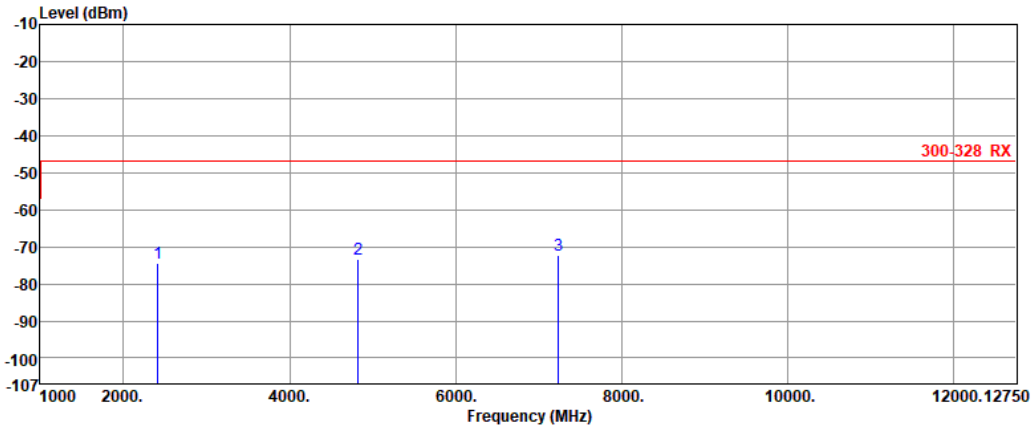
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	289.96	-89.81	-57.00	-32.81	0.00	-89.81
2	559.62	-89.32	-57.00	-32.32	0.00	-89.32
3	770.11	-83.26	-57.00	-26.26	0.00	-83.26

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

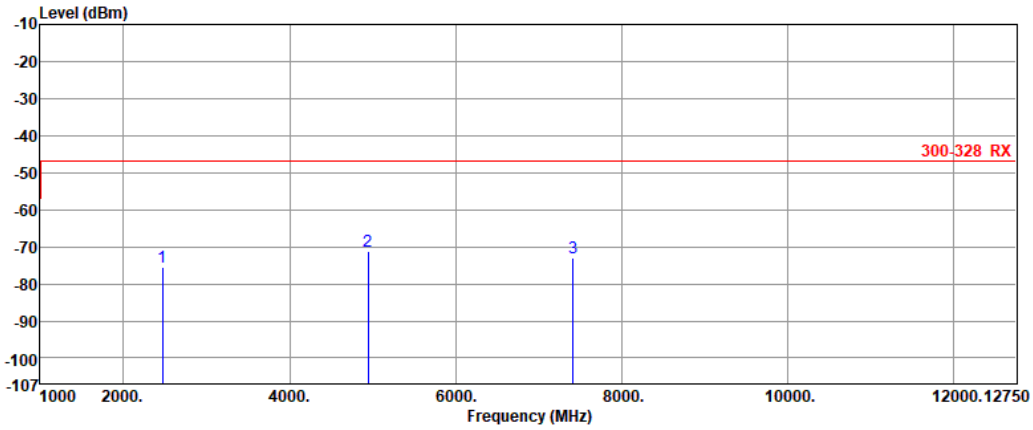


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2412.32	-74.60	-47.00	-27.60	0.00	-74.60
2	4824.43	-73.49	-47.00	-26.49	0.00	-73.49
3	7235.88	-72.24	-47.00	-25.24	0.00	-72.24

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

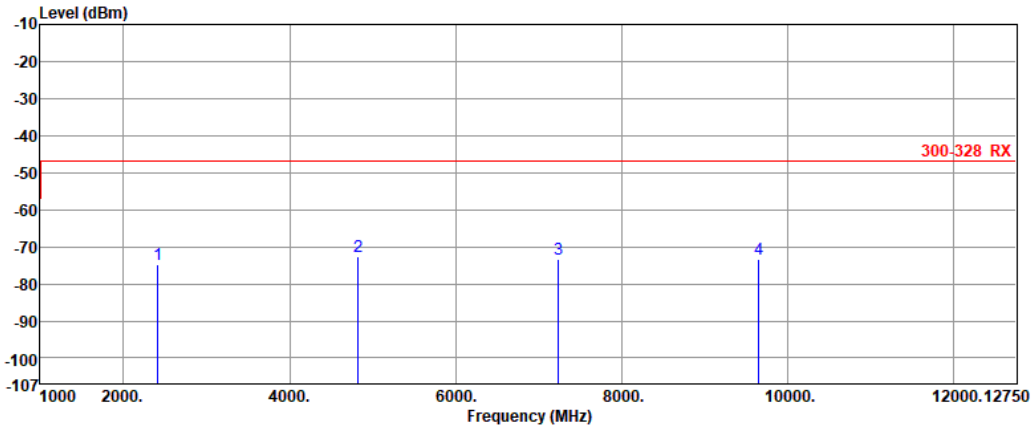


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2472.05	-75.64	-47.00	-28.64	0.00	-75.64
2	4943.89	-71.30	-47.00	-24.30	0.00	-71.30
3	7415.69	-72.92	-47.00	-25.92	0.00	-72.92

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

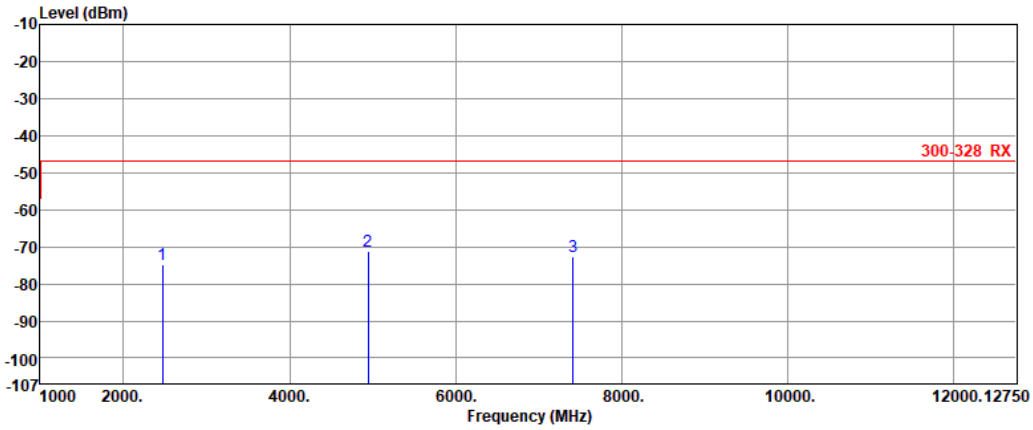


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2411.95	-74.78	-47.00	-27.78	0.00	-74.78
2	4824.09	-72.56	-47.00	-25.56	0.00	-72.56
3	7235.86	-73.22	-47.00	-26.22	0.00	-73.22
4	9647.90	-73.46	-47.00	-26.46	0.00	-73.46

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2471.88	-74.84	-47.00	-27.84	0.00	-74.84
2	4943.94	-71.36	-47.00	-24.36	0.00	-71.36
3	7415.94	-72.80	-47.00	-25.80	0.00	-72.80

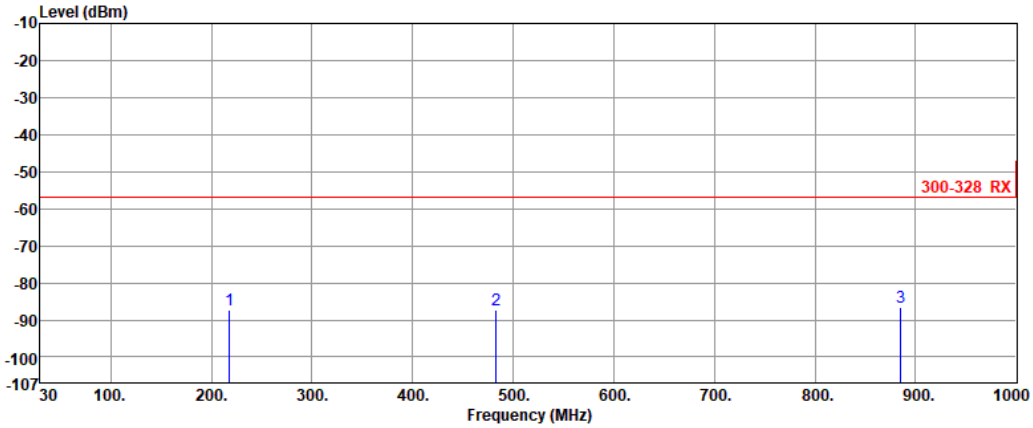
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

2RX, ANT0

Emissions (Below 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

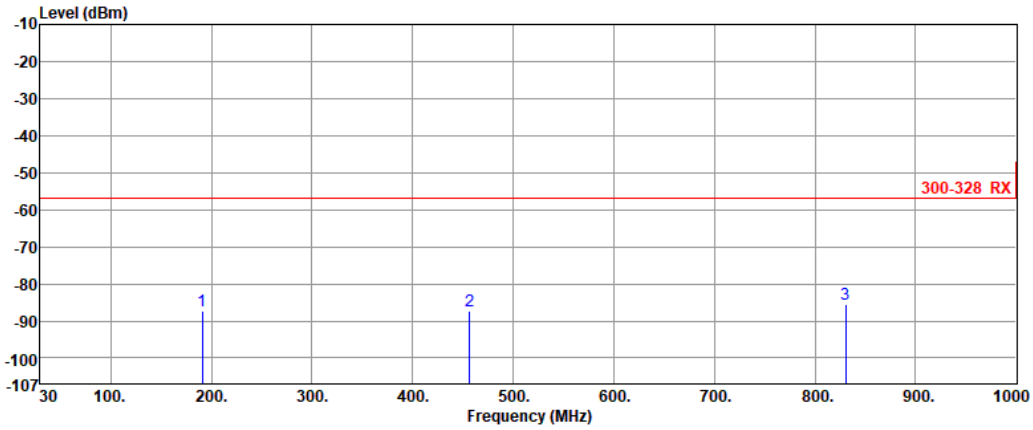


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	218.18	-87.36	-60.01	-27.35	0.00	-87.36
2	482.99	-87.41	-60.01	-27.40	0.00	-87.41
3	885.54	-86.54	-60.01	-26.53	0.00	-86.54

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

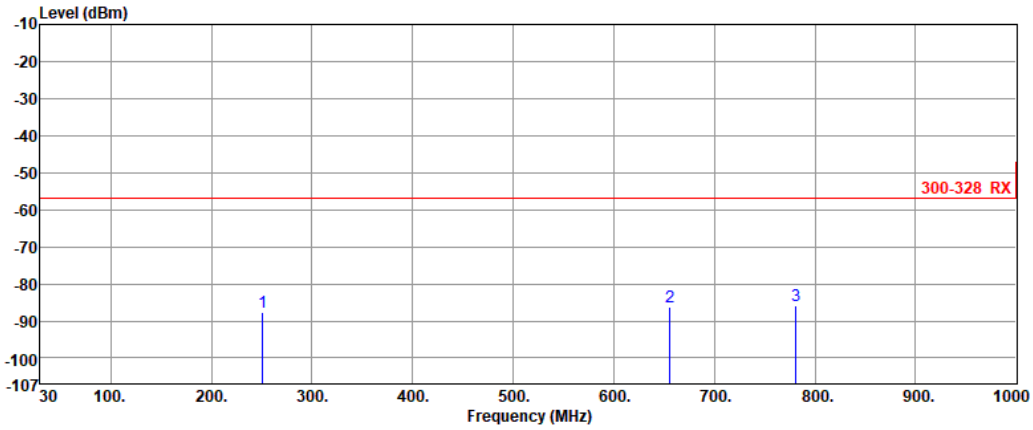


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	191.02	-87.44	-60.01	-27.43	0.00	-87.44
2	456.80	-87.30	-60.01	-27.29	0.00	-87.30
3	830.25	-85.55	-60.01	-25.54	0.00	-85.55

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

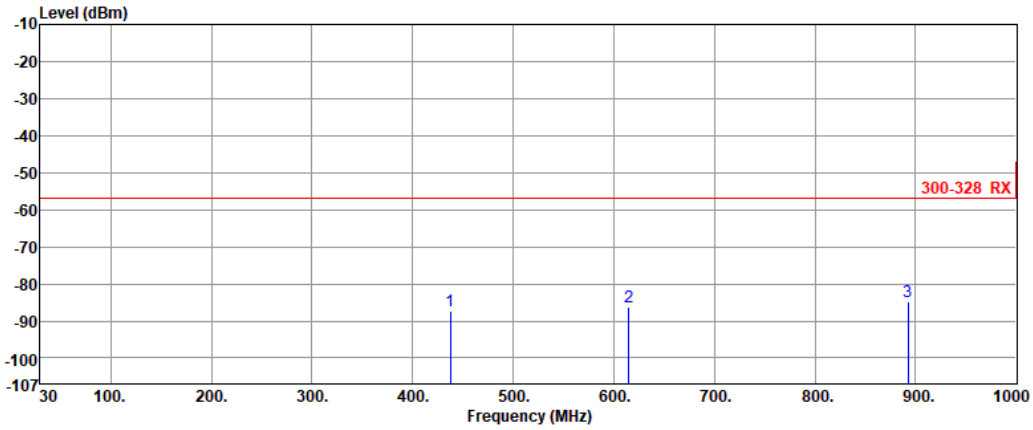


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	251.16	-87.74	-60.01	-27.73	0.00	-87.74
2	655.65	-86.17	-60.01	-26.16	0.00	-86.17
3	780.78	-85.90	-60.01	-25.89	0.00	-85.90

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



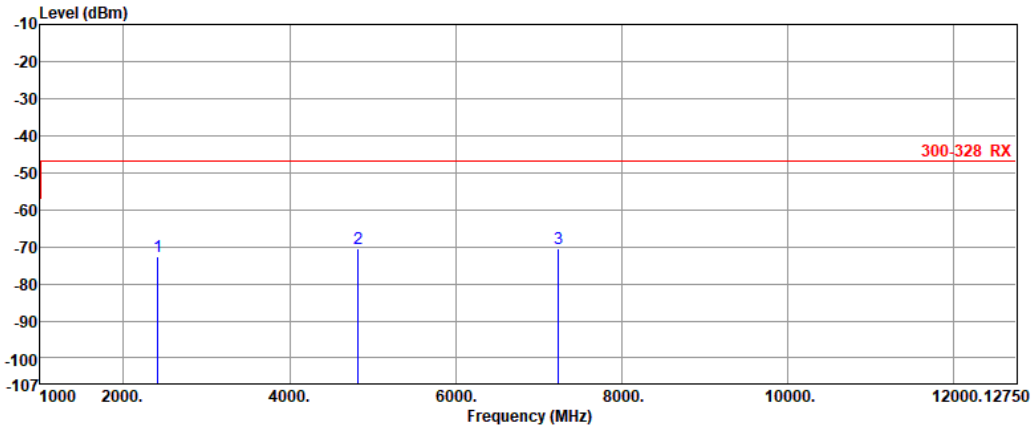
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	437.40	-87.32	-60.01	-27.31	0.00	-87.32
2	614.91	-86.34	-60.01	-26.33	0.00	-86.34
3	892.33	-84.91	-60.01	-24.90	0.00	-84.91

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

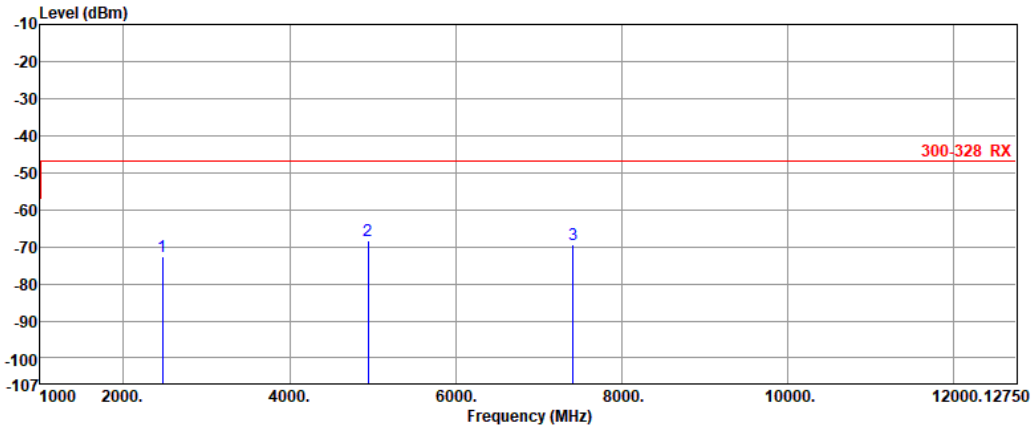


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2412.12	-72.63	-50.01	-22.62	0.00	-72.63
2	4823.65	-70.31	-50.01	-20.30	0.00	-70.31
3	7236.57	-70.44	-50.01	-20.43	0.00	-70.44

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

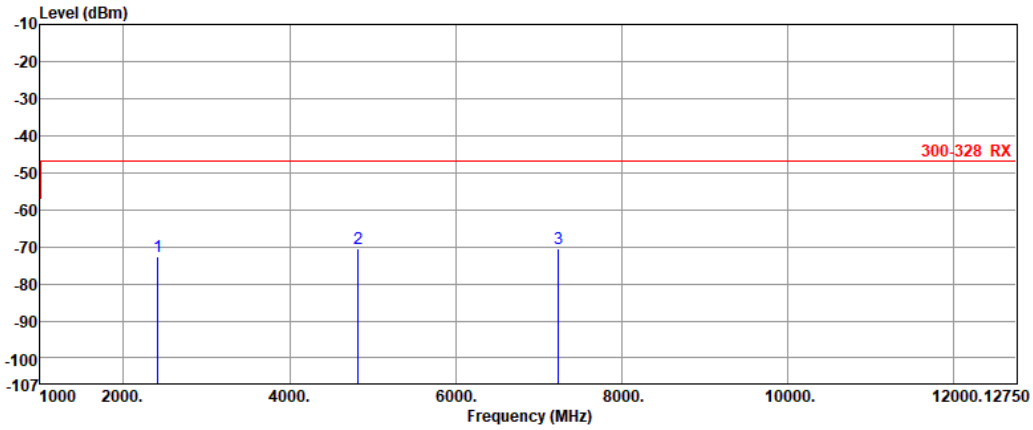


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2472.13	-72.63	-50.01	-22.62	0.00	-72.63
2	4943.13	-68.45	-50.01	-18.44	0.00	-68.45
3	7415.04	-69.33	-50.01	-19.32	0.00	-69.33

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

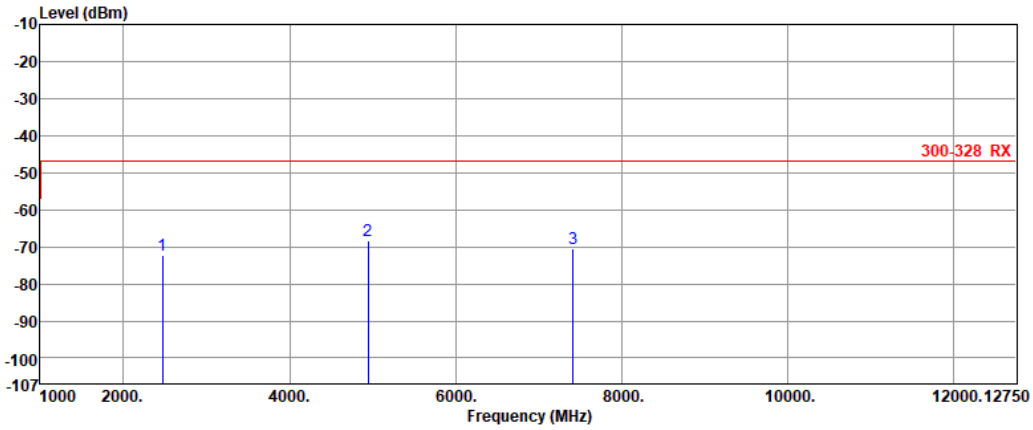


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2412.56	-72.63	-50.01	-22.62	0.00	-72.63
2	4823.88	-70.48	-50.01	-20.47	0.00	-70.48
3	7235.86	-70.44	-50.01	-20.43	0.00	-70.44

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2471.92	-72.31	-50.01	-22.30	0.00	-72.31
2	4943.89	-68.50	-50.01	-18.49	0.00	-68.50
3	7416.07	-70.41	-50.01	-20.40	0.00	-70.41

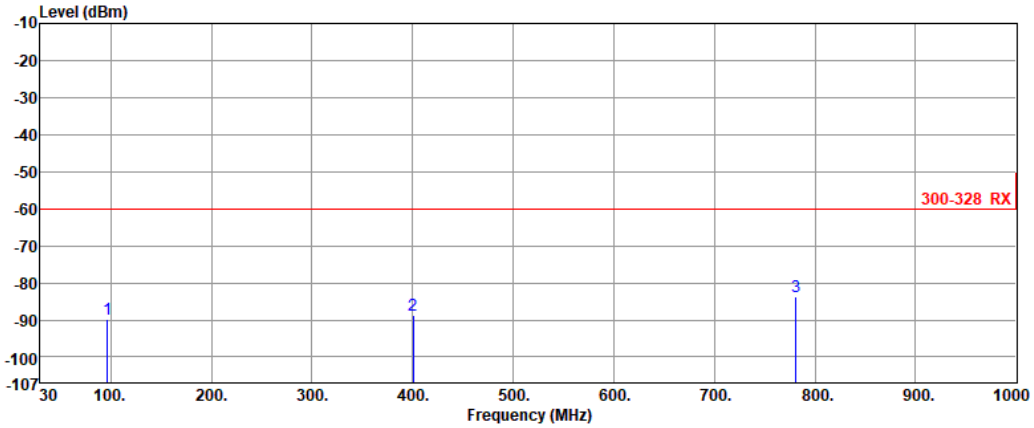
Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

2RX, ANT1

Emissions (Below 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

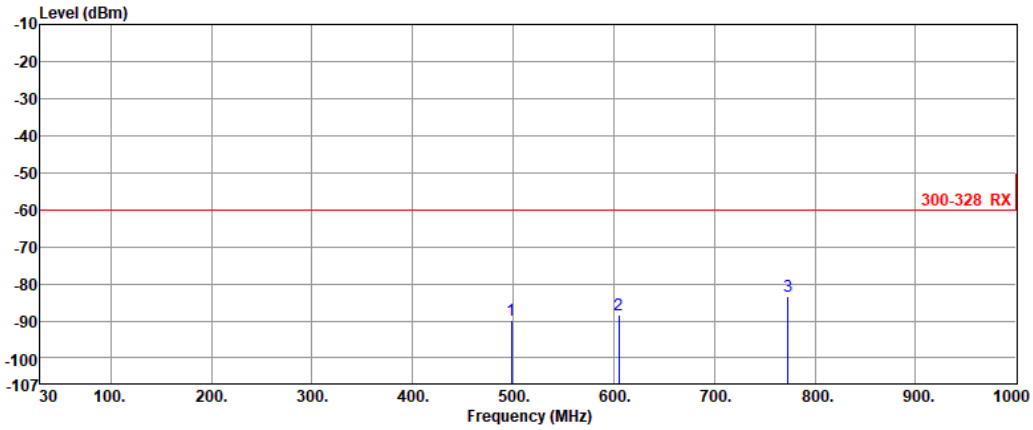


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	96.93	-89.76	-60.01	-29.75	0.00	-89.76
2	400.54	-88.90	-60.01	-28.89	0.00	-88.90
3	780.78	-83.65	-60.01	-23.64	0.00	-83.65

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

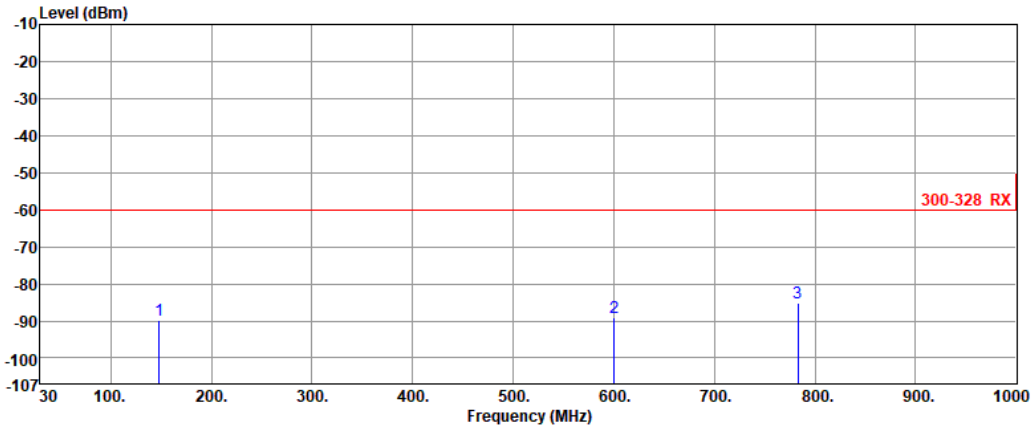


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	498.51	-89.90	-60.01	-29.89	0.00	-89.90
2	605.21	-88.28	-60.01	-28.27	0.00	-88.28
3	773.02	-83.48	-60.01	-23.47	0.00	-83.48

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

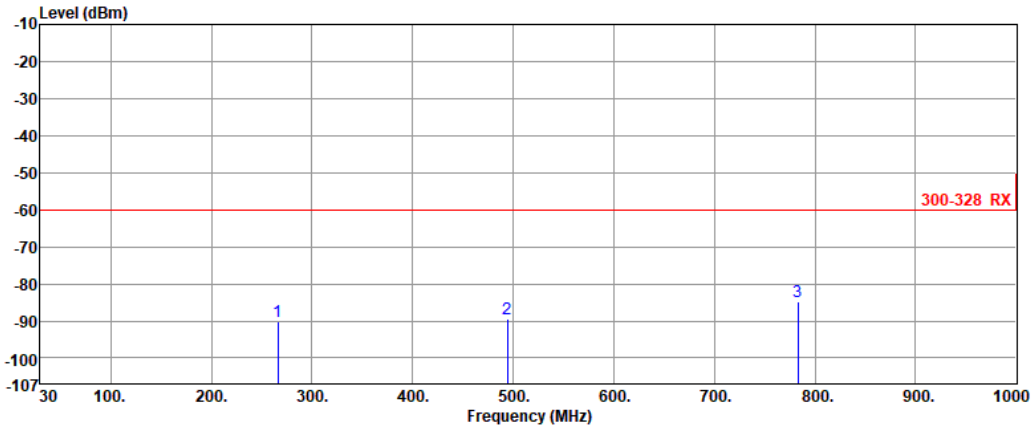


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	148.19	-89.67	-60.01	-29.66	0.00	-89.67
2	600.51	-89.15	-60.01	-29.14	0.00	-89.15
3	782.97	-85.34	-60.01	-25.33	0.00	-85.34

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



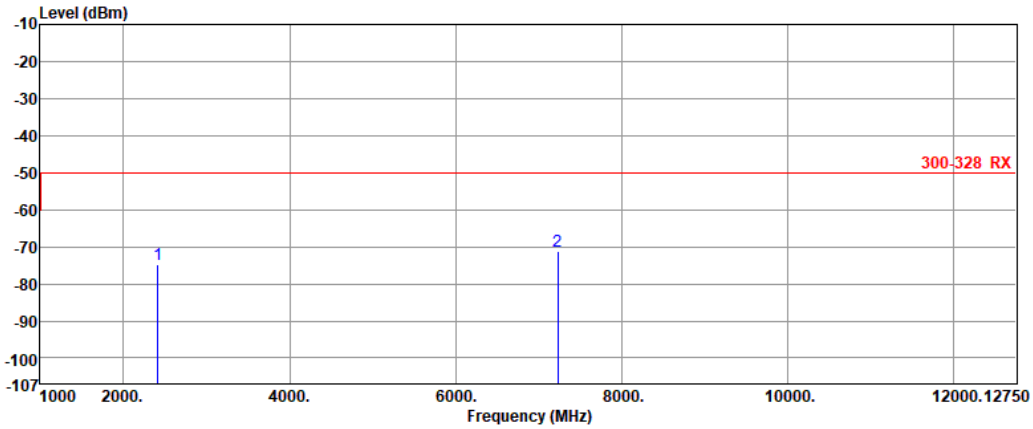
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	266.31	-90.29	-60.01	-30.28	0.00	-90.29
2	493.91	-89.51	-60.01	-29.50	0.00	-89.51
3	782.97	-84.74	-60.01	-24.73	0.00	-84.74

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Emissions (Above 1GHz)

Modulation	11g
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

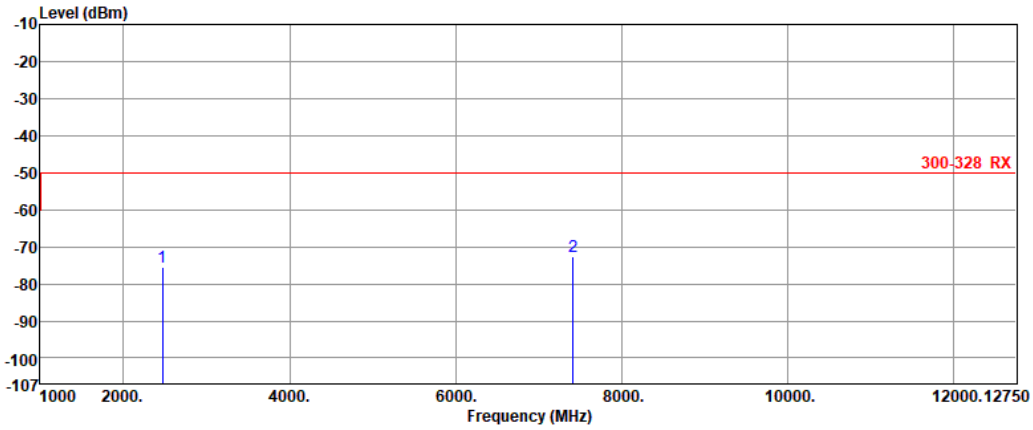


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2412.11	-74.64	-50.01	-24.63	0.00	-74.64
2	7234.17	-71.14	-50.01	-21.13	0.00	-71.14

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	11g
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65

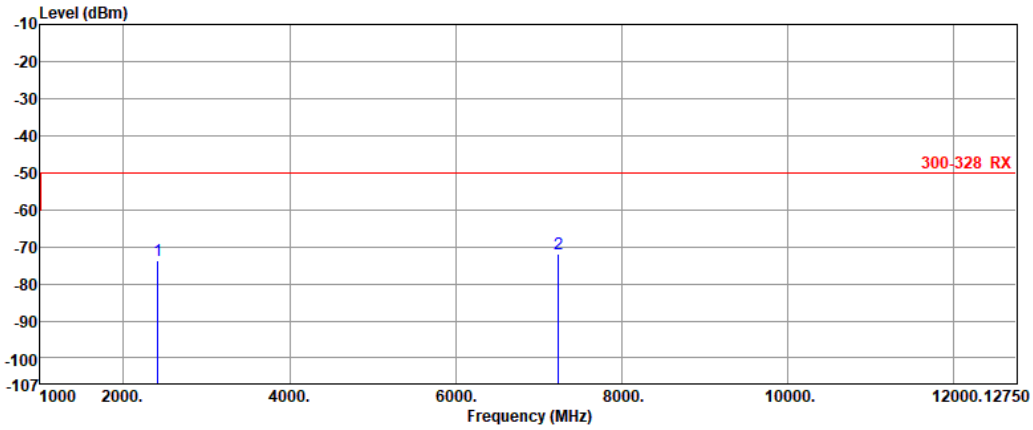


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2472.83	-75.36	-50.01	-25.35	0.00	-75.36
2	7416.03	-72.62	-50.01	-22.61	0.00	-72.62

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2412

Test By :Hugo Zhen Temperature:24 Humidity(%):65

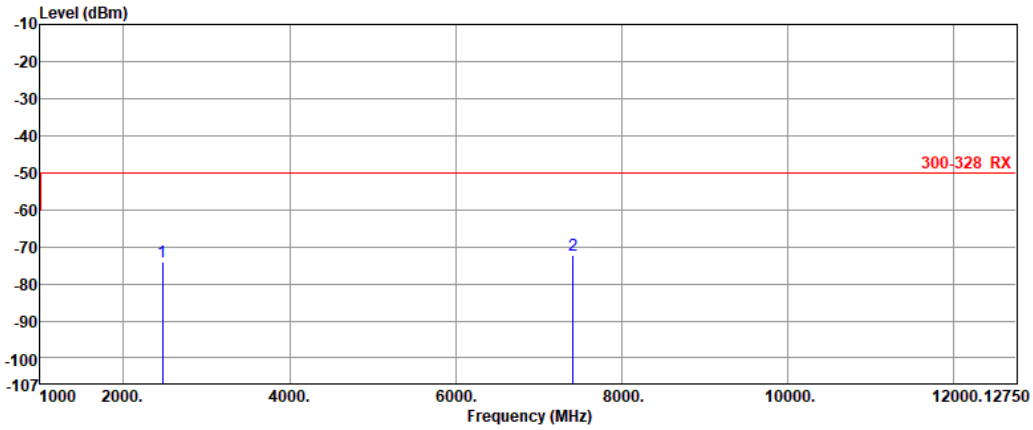


	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2412.17	-73.64	-50.01	-23.63	0.00	-73.64
2	7235.87	-71.84	-50.01	-21.83	0.00	-71.84

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Modulation	ax HE20-OFDMA
Test Freq. (MHz)	2472

Test By :Hugo Zhen Temperature:24 Humidity(%):65



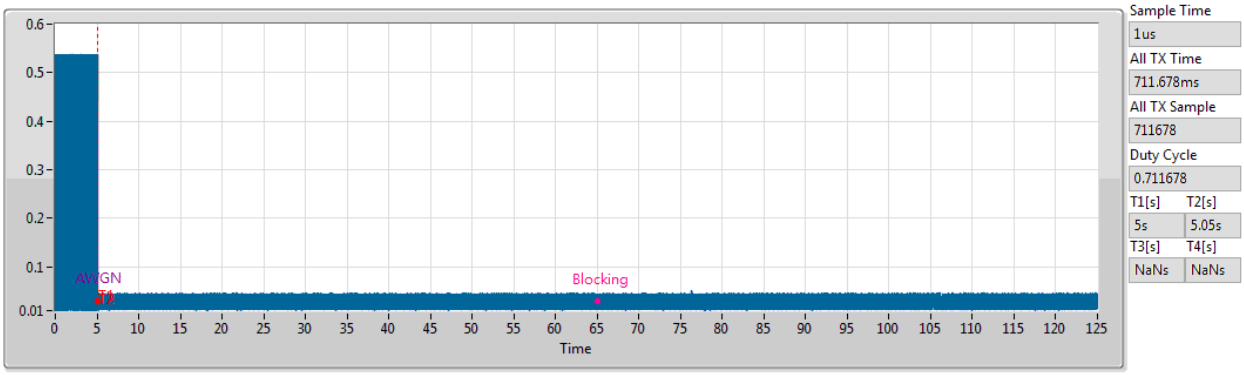
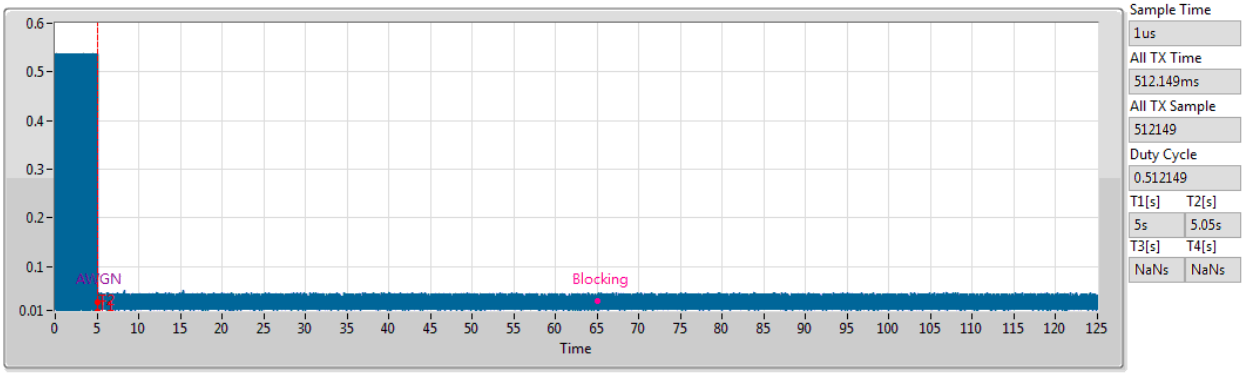
	Freq.	Measured value	Limit	Margin	Factor	Reading
	MHz	dBm	dBm	dB	dB	dBm
1	2471.97	-73.94	-50.01	-23.93	0.00	-73.94
2	7415.42	-72.14	-50.01	-22.13	0.00	-72.14

Note 1: Measured Value (dBm) = Reading (dBm) + Factor (dB)
Note 2: Margin (dB) = Measured Value (dBm) – Limit (dBm)

Test Result of Adaptivity & Unwanted Signal

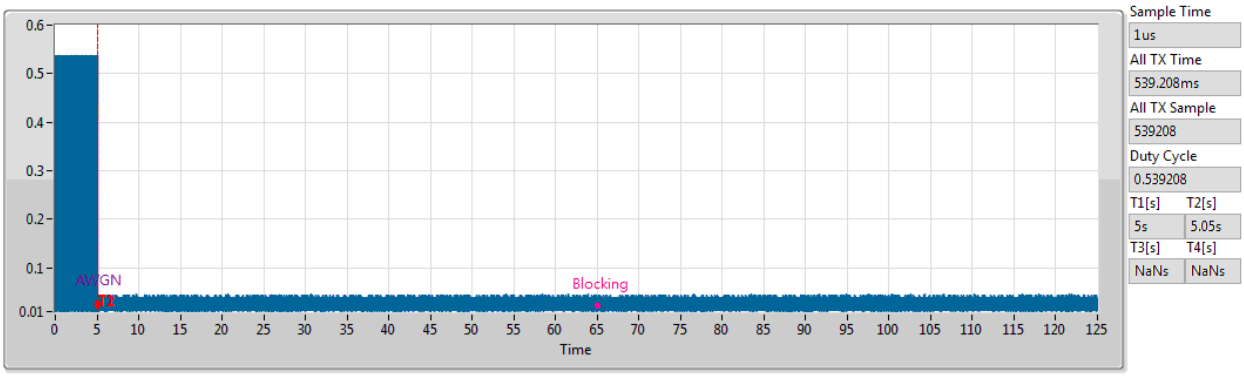
Adaptivity & Unwanted Signal Result.						
Adaptivity Detection Threshold Level (dBm)			-67.44			
Unwanted Signal Level (dBm)			-32.6			
Modulation Mode	**Freq. (MHz)**	**Short Control Signalling Transmissions (ms)**	**Channel Occupancy Time (ms)**	**Idle Period Time (μs)**	**Adaptivity**	**Unwanted Signal Test Status**
802.11b	2412	3.687	12.467	95	Pass	Pass
802.11b	2472	3.444	12.467	93		
802.11g	2412	2.621	0.699	95		
802.11g	2472	3.289	0.699	58		
802.11ax (HE20)	2412	4.891	12.483	66		
802.11ax (HE20)	2472	2.931	12.483	66		
Limit		< 5 ms	< 13 ms	>18μs		
Result		**Complied**				

Test Result of Adaptivity and Unwanted Signal Plots

Adaptivity & Unwanted Signal Result Plots
Unwanted signal: 2488.5 MHz
802.11b - 2412MHz
Time Analysis 
Unwanted signal: 2395 MHz
802.11b - 2472MHz
Time Analysis 

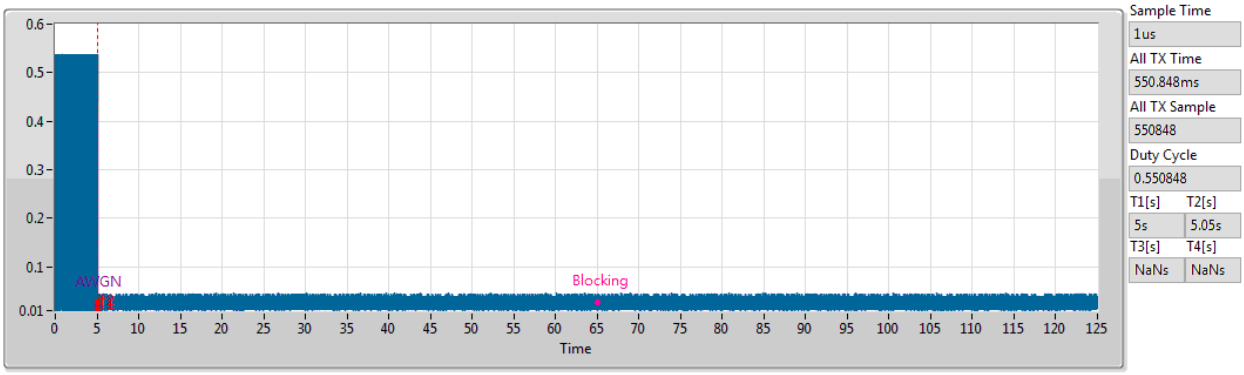
Adaptivity & Unwanted Signal Result Plots
Unwanted signal: 2488.5 MHz
802.11g - 2412MHz

Time Analysis



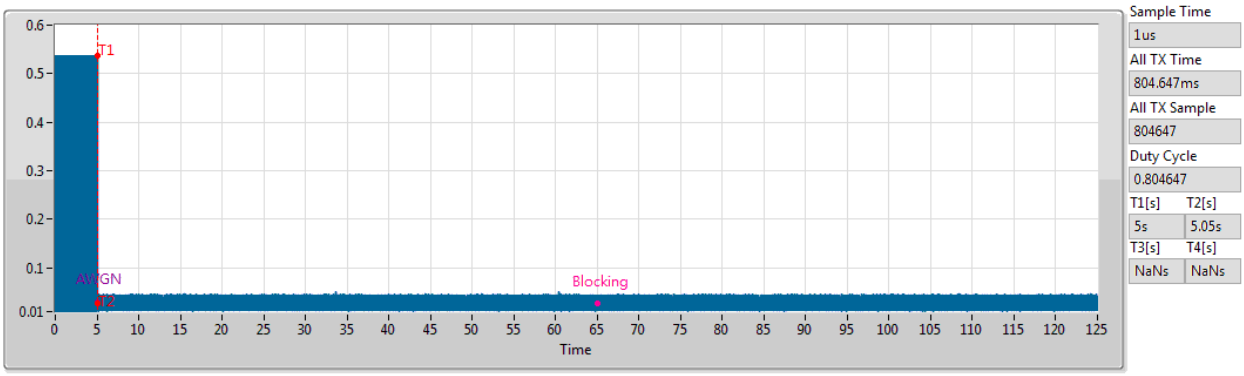
Unwanted signal: 2395 MHz
802.11g - 2472MHz

Time Analysis



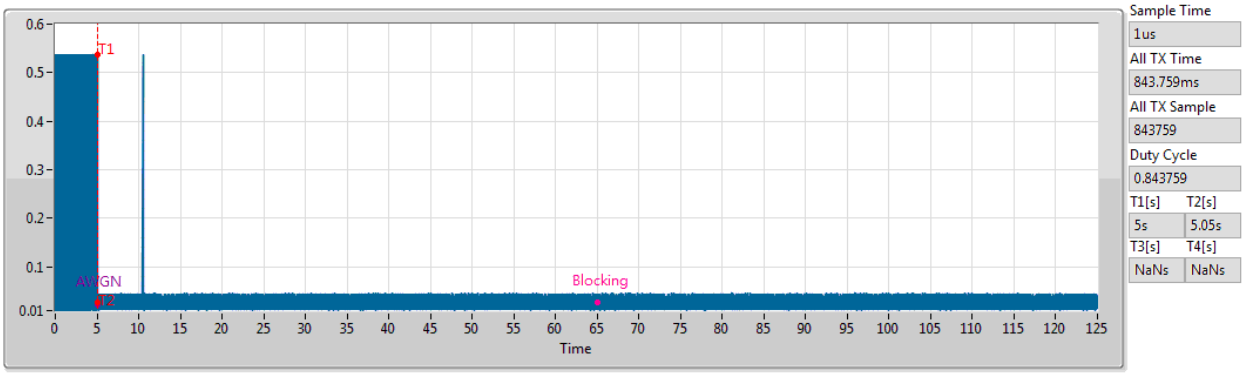
Adaptivity & Unwanted Signal Result Plots
Unwanted signal: 2488.5 MHz
802.11ax (HE20) - 2412MHz

Time Analysis

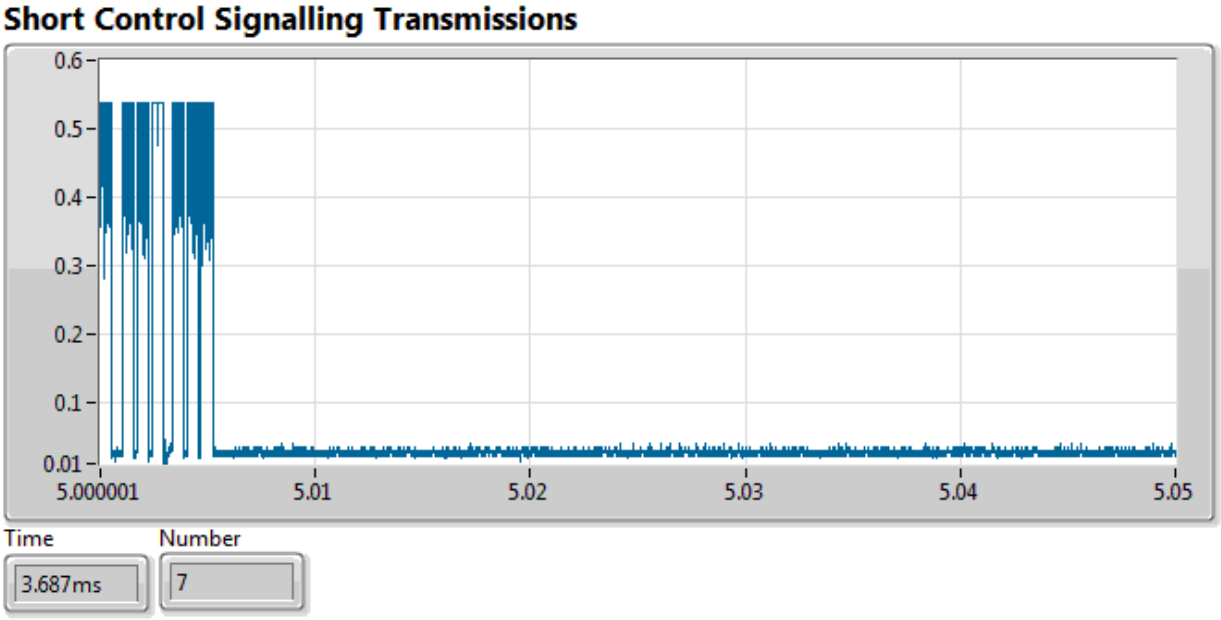
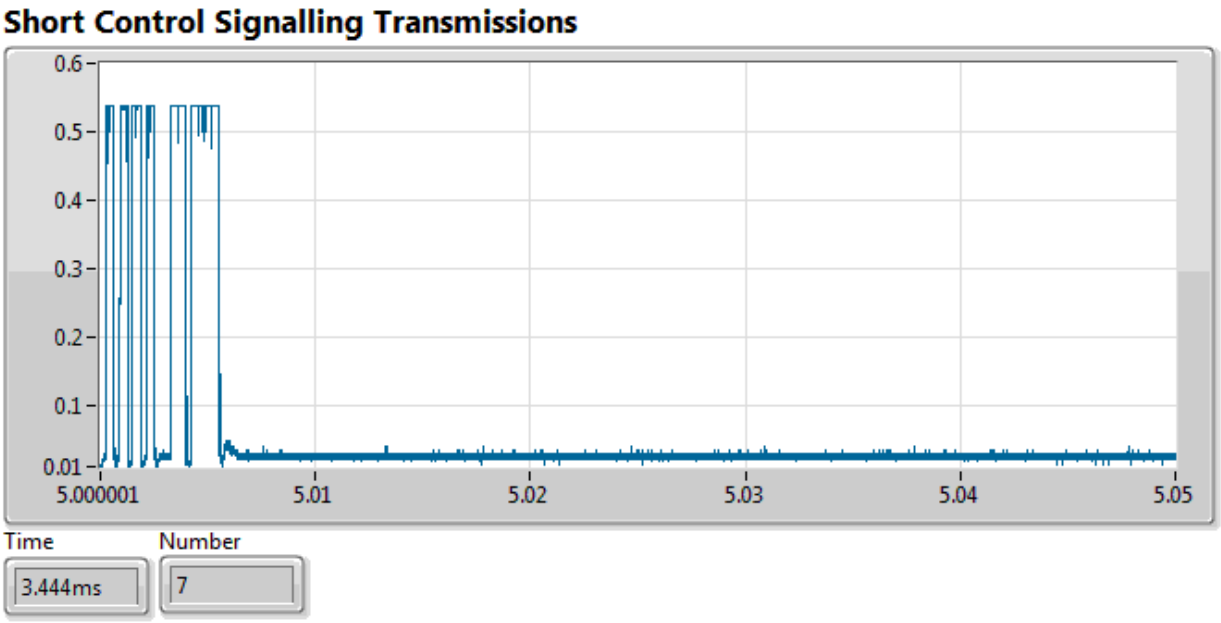


Unwanted signal: 2395 MHz
802.11ax (HE20) - 2472MHz

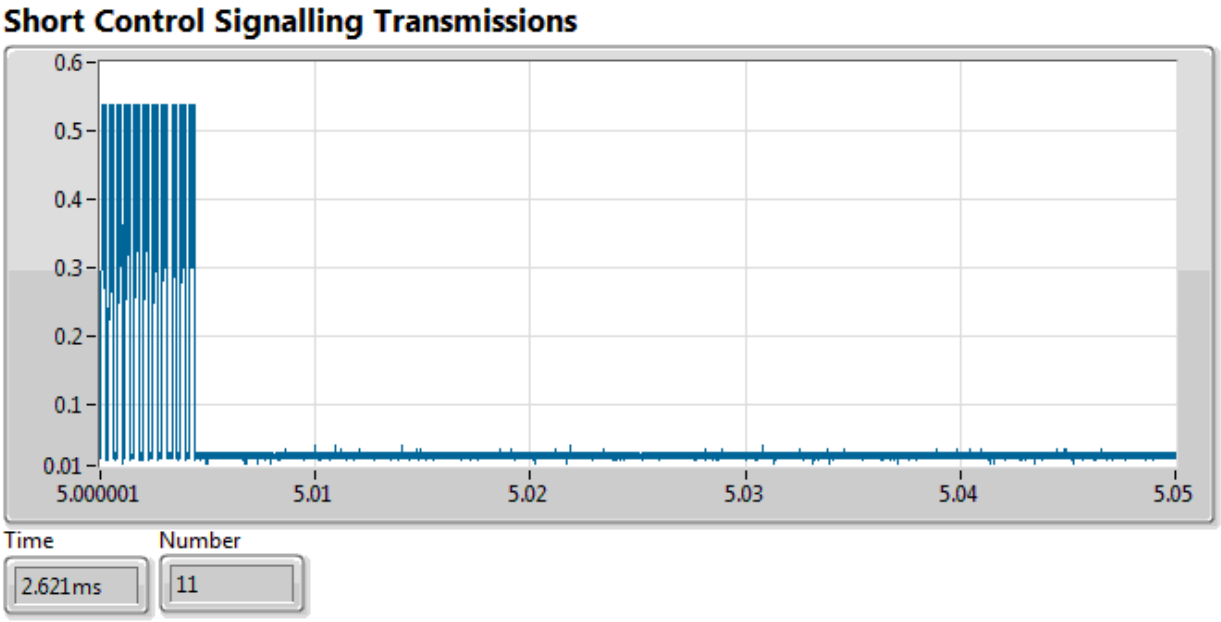
Time Analysis



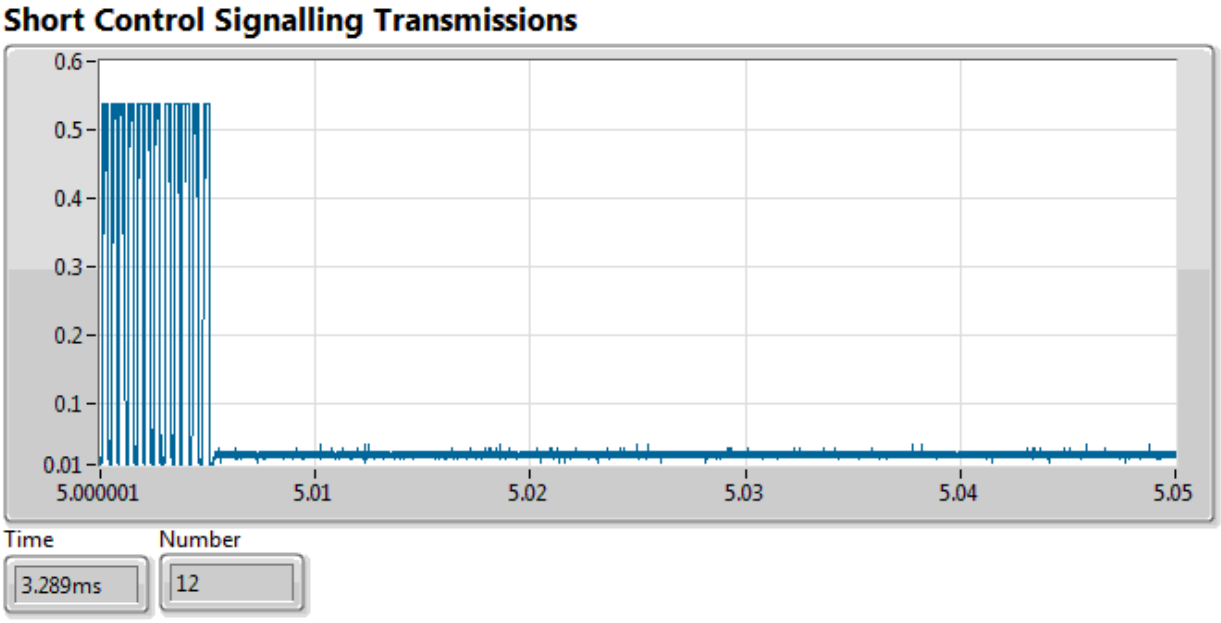
Test Result of Short Control Signalling Transmissions Plots

Short Control Signalling Transmissions Plots
802.11b - 2412MHz

802.11b - 2472MHz


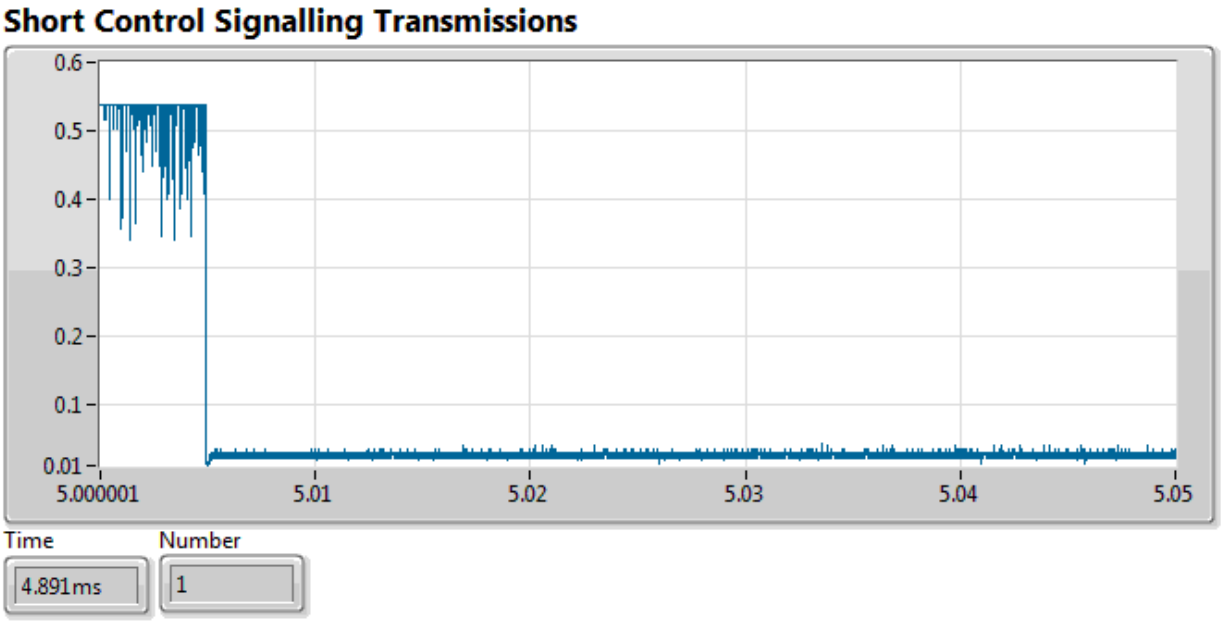
Short Control Signalling Transmissions Plots
802.11g - 2412MHz



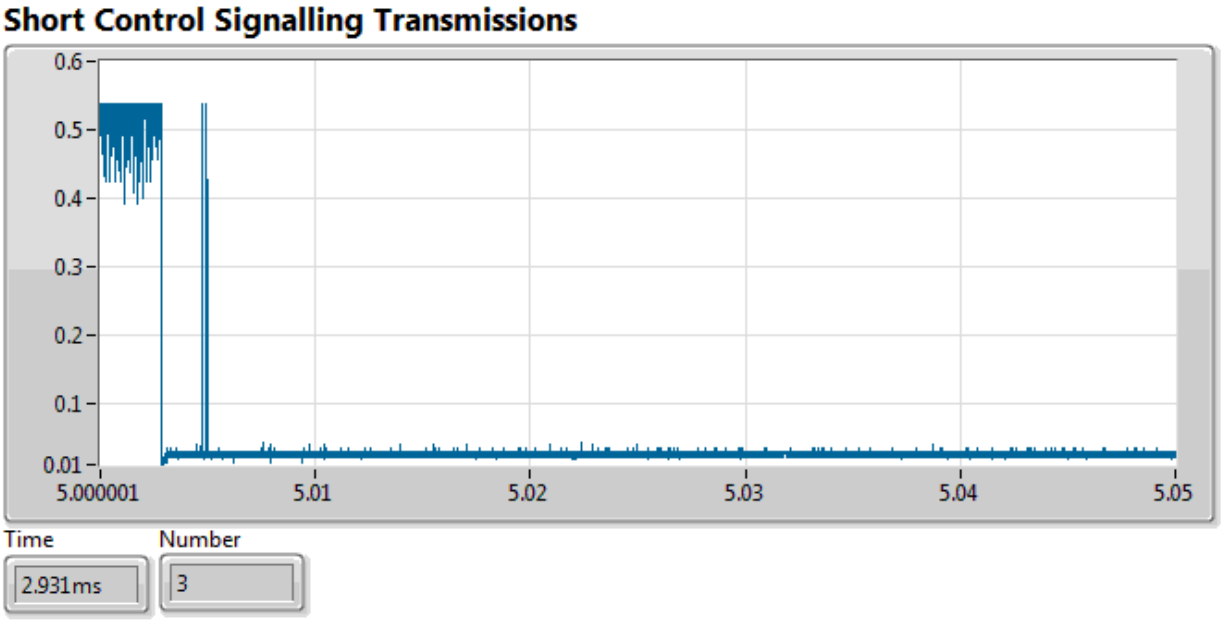
802.11g - 2472MHz



Short Control Signalling Transmissions Plots
802.11ax (HE20) - 2412MHz

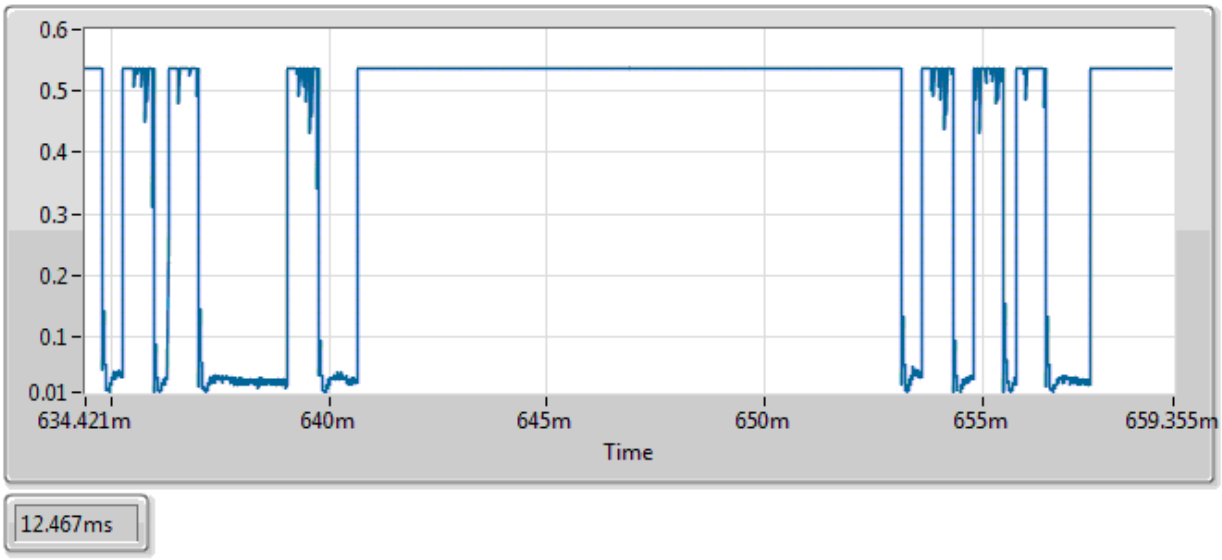


802.11ax (HE20) - 2472MHz



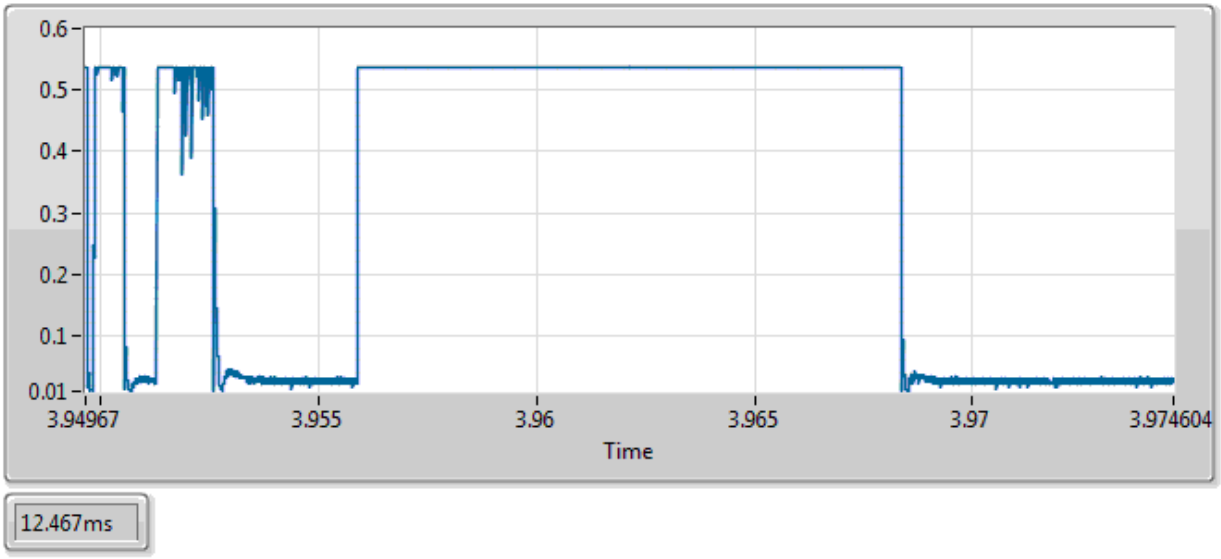
Channel Occupancy Time
802.11b - 2412MHz

Max On Time



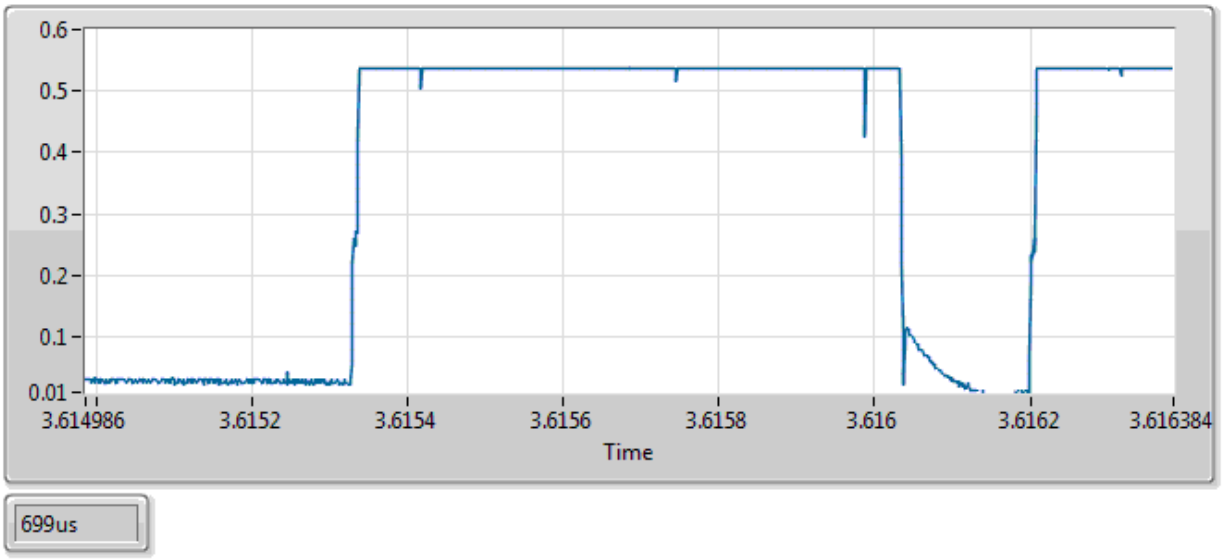
802.11b - 2472MHz

Max On Time



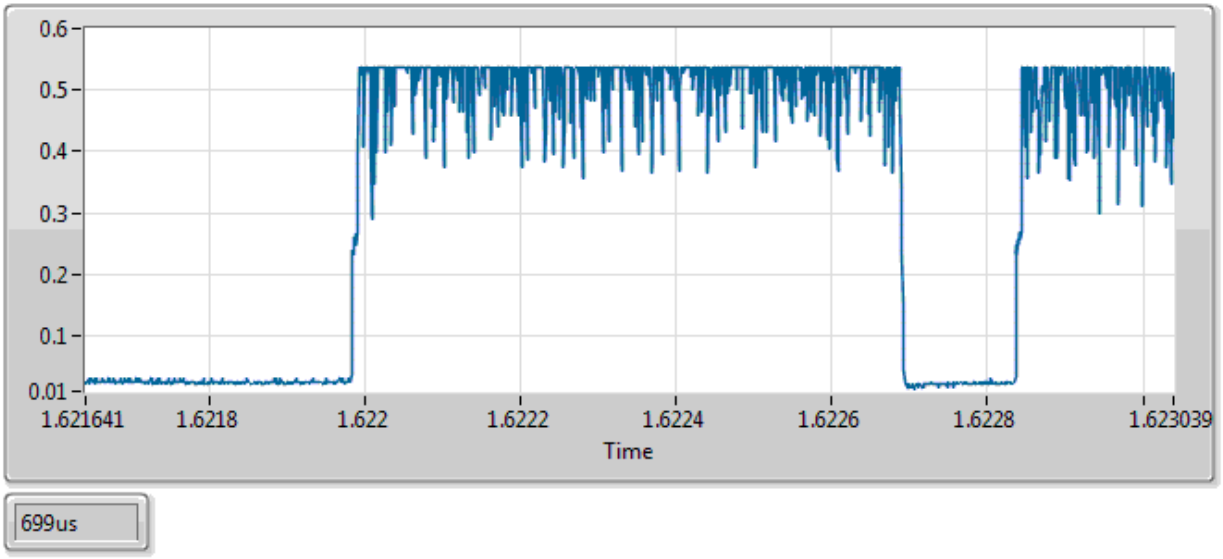
Channel Occupancy Time
802.11g - 2412MHz

Max On Time



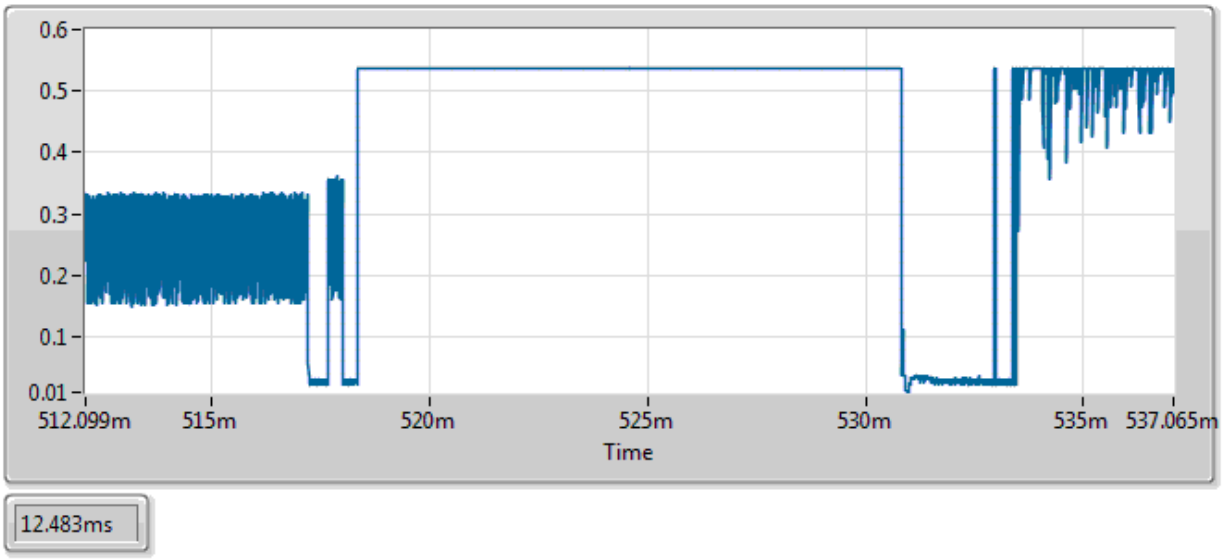
802.11g - 2472MHz

Max On Time



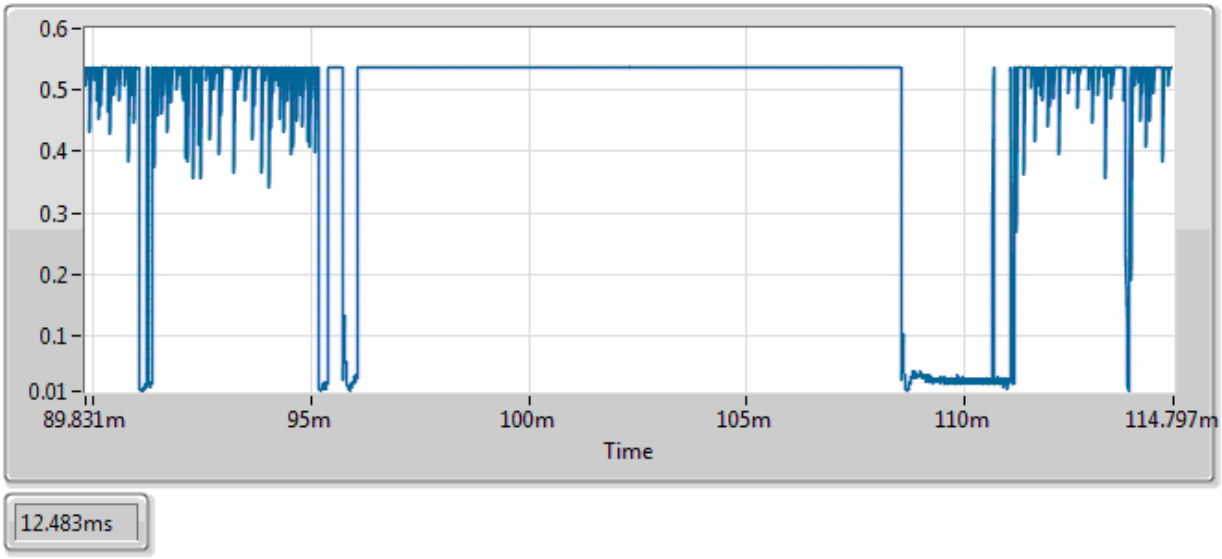
Channel Occupancy Time
802.11ax (HE20) - 2412MHz

Max On Time

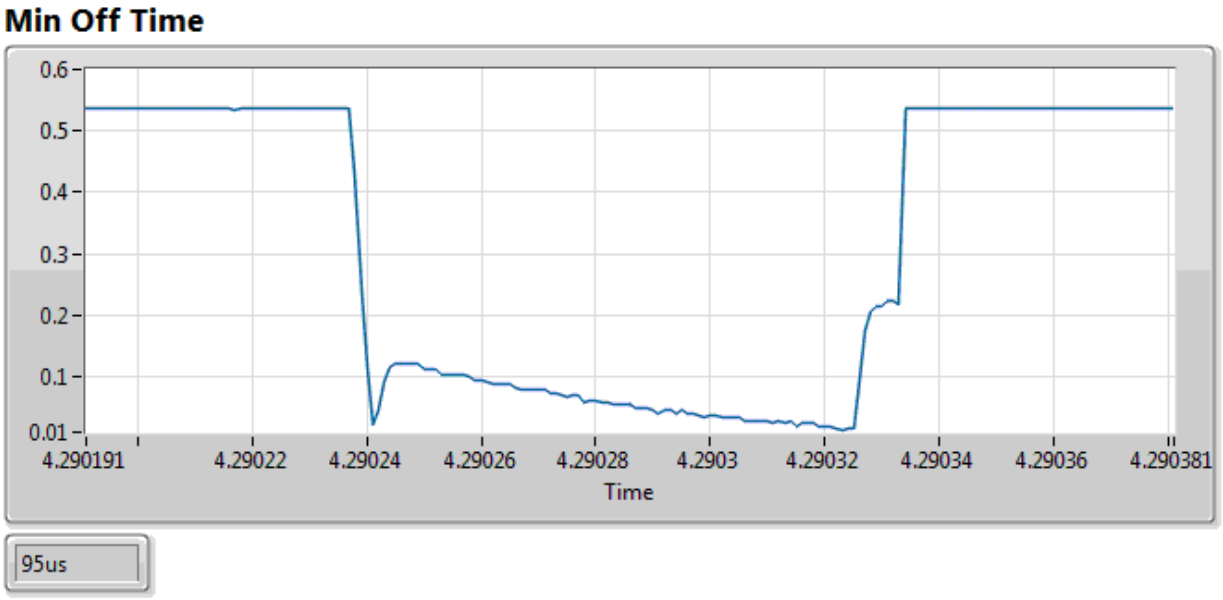


802.11ax (HE20) - 2472MHz

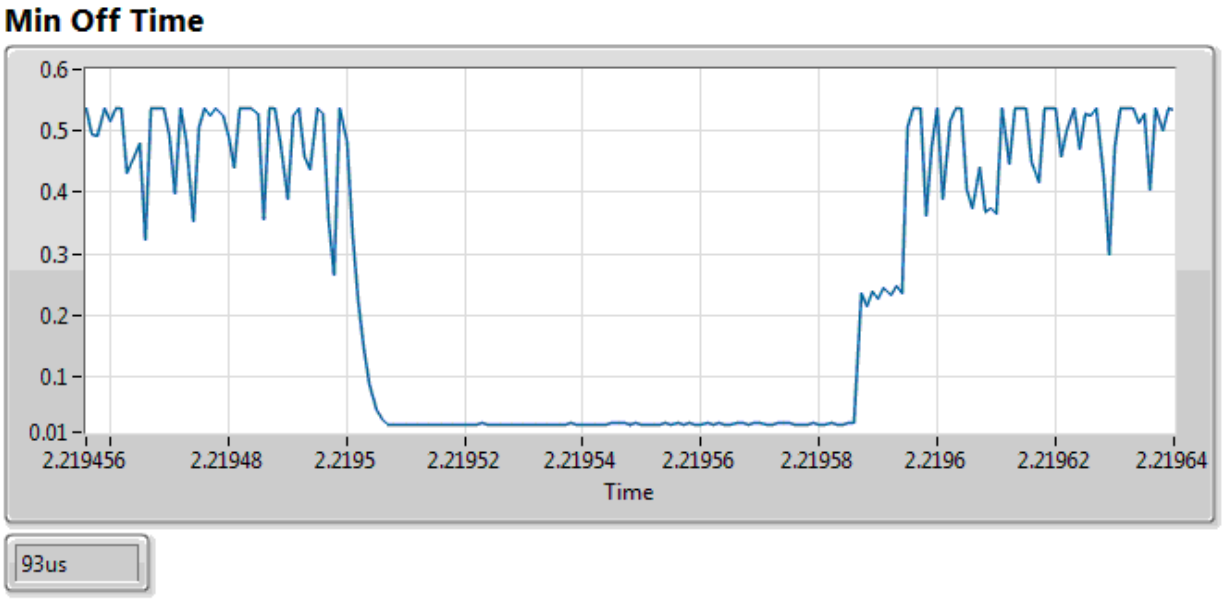
Max On Time



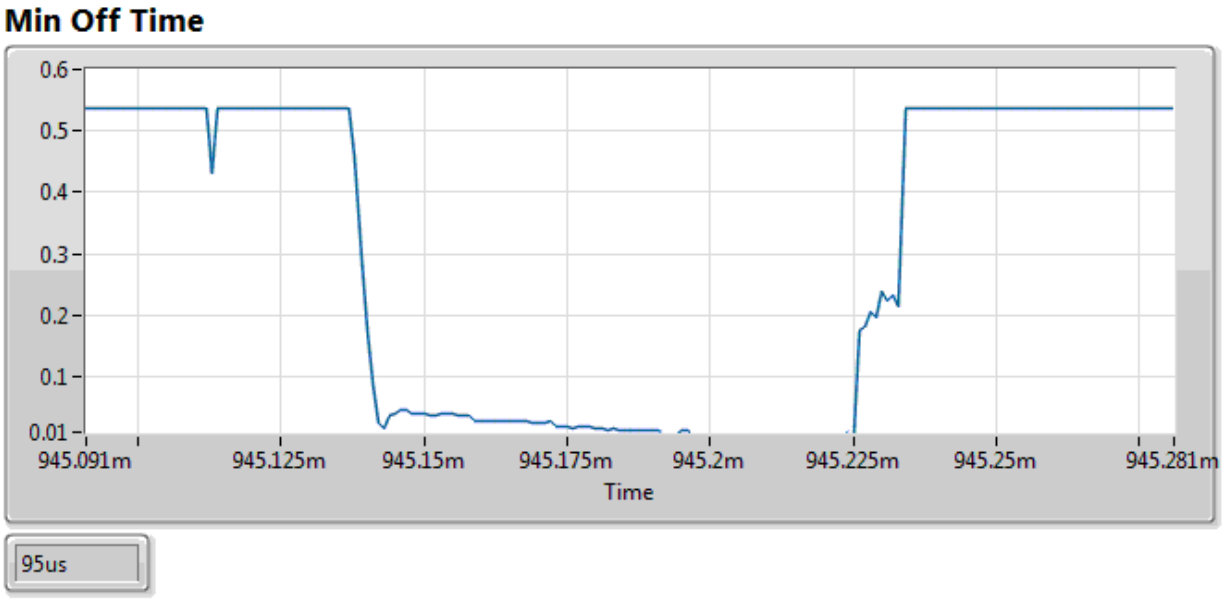
Idle Period Time
802.11b - 2412MHz



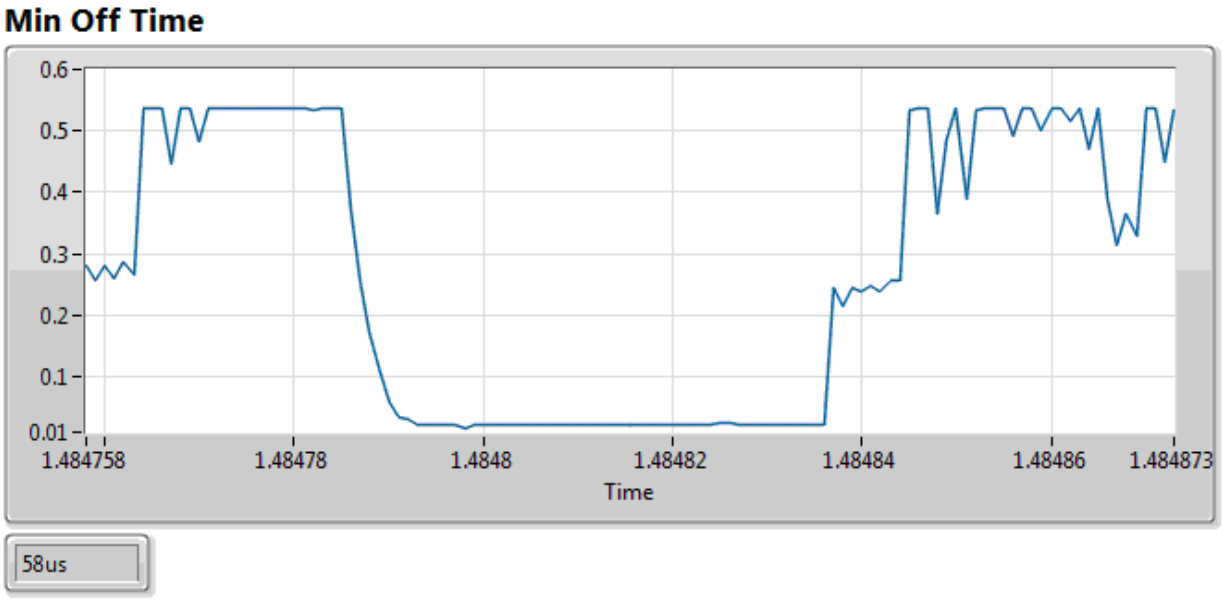
802.11b - 2472MHz



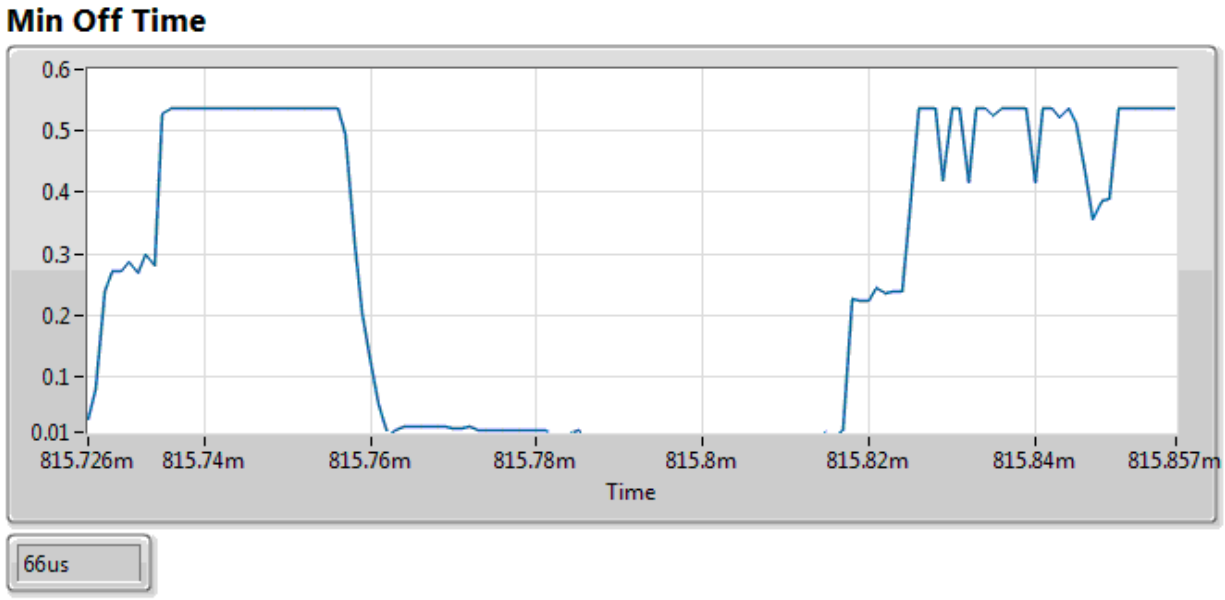
Idle Period Time
802.11g - 2412MHz



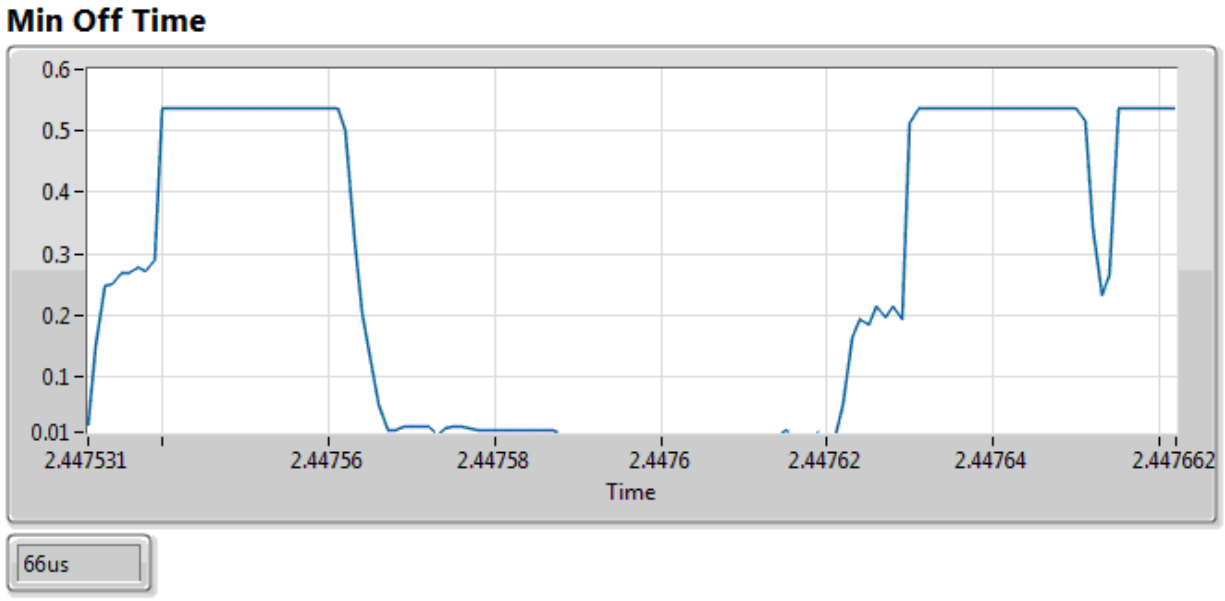
802.11g - 2472MHz



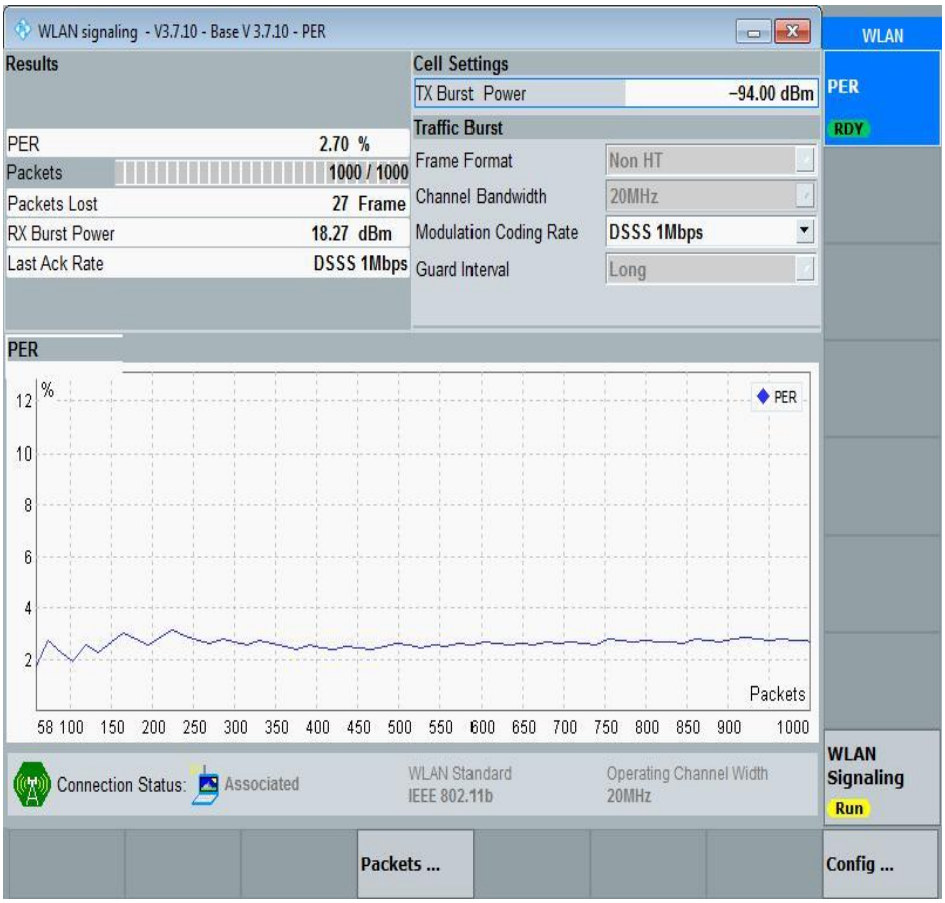
Idle Period Time
802.11ax (HE20) - 2412MHz



802.11ax (HE20) - 2472MHz



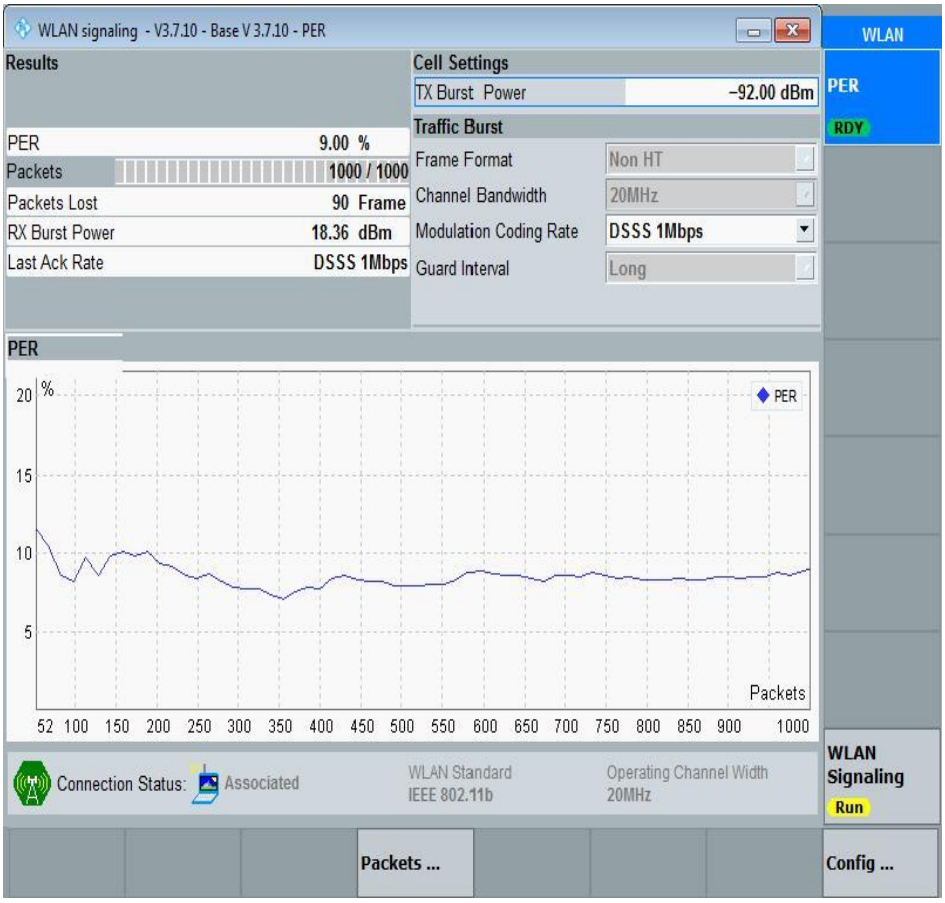
11b / 2412 MHz
Without Interference Signal Sensitivity Level



Receiver Category	1		
Performance Criteria Limit	PER ≤ 10 %		
Wanted Signal Mean Power from Companion Device (dBm)	**Blocking Signal Frequency (MHz)**	**Blocking Signal Power (dBm)**	**Test Result**
-65.60	2380	-31.6	Pass
-71.60	2300	-31.6	Pass
-71.60	2330	-31.6	Pass
-71.60	2360	-31.6	Pass

11b / 2472 MHz

Without Interference Signal Sensitivity Level



Receiver Category	1		
Performance Criteria Limit	PER ≤ 10 %		
Wanted Signal Mean Power from Companion Device (dBm)	Blocking Signal Frequency (MHz)	Blocking Signal Power (dBm)	Test Result
-65.60	2504	-31.6	Pass
-71.60	2524	-31.6	Pass
-71.60	2584	-31.6	Pass
-71.60	2674	-31.6	Pass