TEST REPORT

Report No.:	BCTC2311144017-3E
Applicant:	Vivid-Hosting, LLC
Product Name:	FRC Radio
Test Model:	VH-109
Tested Date:	2023-09-25 to 2024-01-10
Issued Date:	2024-01-29

Shenzhen BCTC Testing Co., Ltd.

FCC ID:2BBOU10923

Product Name:	FRC Radio
Trademark:	N/A
Model/Type Ref.:	VH-109
Prepared For:	Vivid-Hosting, LLC
Address:	4275 Executive Sq STE 206, La Jolla, CA 92037, USA
Manufacturer:	Vivid-Hosting, LLC
Address:	4275 Executive Sq STE 206, La Jolla, CA 92037, USA
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Tangwei, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date:	2023-09-25
Sample tested Date:	2023-09-25 to 2024-01-10
Report No.:	BCTC2311144017-3E
Test Standards:	FCC Part15 15.407 ANSI C63.10-2013 KDB 662911 D01 v02r01 KDB 789033 D02 v02r01 KDB 987594 D02 v02r01
Test Results:	PASS

Tested by:

Brave Zeng/ Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

Table of Content

1. Version

Report No.	Issue Date	Description	Approved
BCTC2311144017-3E	2024-01-29	Original	Valid

2. Test Summary

The Product has been tested according to the following specifications:

No.	Test Parameter	Clause No.	Results
1	Spurious Radiated Emissions	15.209(a), 15.407 (b)	PASS
2	Conducted Emission	15.207	PASS
3	26 dB and 99% Emission Bandwidth	15.407 (a)	PASS
4	Maximum Conducted Output Power	15.407 (a)	PASS
5	In-band Emission	15.407(b)	PASS
6	Power Spectral Density	15.407 (a)	PASS
7	Spurious Emissions at Antenna Terminals	15.407(b)	PASS
8	Frequency Stability	15.407(g)	PASS
9	Contention Based Protocol	15.407(d)	PASS
10	Antenna Requirement	15.203	PASS
NOTE: N/A (Not Applicable)			

3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Uncertainty
1	3m chamber Radiated spurious emission(9kHz-30MHz)	U=3.7dB
2	3m chamber Radiated spurious emission(30MHz-1GHz)	U=4.3dB
3	3m chamber Radiated spurious emission(1GHz-18GHz)	U=4.5dB
4	3m chamber Radiated spurious emission(18GHz-40GHz)	U=3.34dB
5	Conducted Emission(150kHz-30MHz)	U=3.20dB
6	Conducted Adjacent channel power	U=1.38dB
7	Conducted output power uncertainty Above 1G	U=1.576dB
8	Conducted output power uncertainty below 1G	U=1.28dB
9	humidity uncertainty	U=5.3%
10	Temperature uncertainty	U=0.59℃

4. Product Information and Test Setup

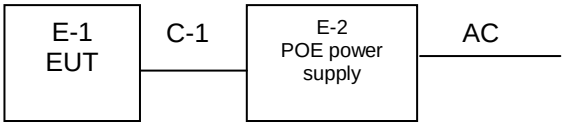
4.1 Product Information

Model/Type Ref.:	VH-109
Equipment classes:	6XD
Hardware Version:	N/A
Software Version:	N/A
IEEE 802.11 WLAN Mode Supported	802.11ax20: 20MHz 802.11ax40: 40MHz 802.11ax80: 80MHz 802.11ax160: 160MHz
Operation Frequency:	U-NII-5: 5955-6415MHz U-NII-6: 6435-6515MHz U-NII-7: 6535-6865MHz U-NII-8: 6885-7115MHz
Type of Modulation:	802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM)
Number Of Channel	802.11ax20MHz bandwidth: 59 802.11ax40MHz bandwidth: 29 802.11ax80MHz bandwidth: 14 802.11ax160MHz bandwidth: 7
Transmit Power:	U-NII-5:20.40dBm U-NII-6:20.07dBm U-NII-7:20.71dBm U-NII-8:19.95dBm
Antenna installation:	Internal antenna
Antenna Gain:	Antenna 1:5.2dBi Antenna 2:2.9dBi Antenna 3:6.1dBi Antenna 4:6.3dBi
power supply:	DC 12V form battery DC 12V form POE

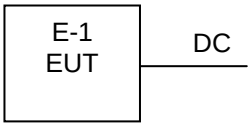
4.2 Test Setup Configuration

See test photographs attached in *EUT TEST SETUP PHOTOGRAPHS* for the actual connections between Product and support equipment.

Conducted Emission:



Radiated Spurious Emission:



4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
E-1	FRC Radio	N/A	VH-109	N/A	EUT
E-2	POE power supply	N/A	N/A	N/A	Auxiliary
	DC power supply	N/A	D-41747 Viersen	6230316	Auxiliary

Item	Shielded Type	Ferrite Core	Length	Note
N/A	N/A	N/A	N/A	N/A

Notes:
1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

U-NII-5: 5955-6415MHz

802.11ax20 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5955	25	6075	49	6195	73	6315
5	5975	29	6095	53	6215	77	6335
9	5995	33	6115	57	6235	81	6355
13	6015	37	6135	61	6255	85	6375
17	6035	41	6155	65	6275	89	6395
21	6055	45	6175	69	6295	93	6415

802.11ax40 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)

3	5965	27	6085	51	6205	75	6325
11	6005	35	6125	59	6245	83	6365
19	6045	43	6165	67	6285	91	6405

802.11ax80 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
7	5985	39	6145	71	6305
23	6065	55	6225	87	6385

802.11ax160 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
15	6025	47	6185	79	6345

U-NII-6: 6435-6515MHz

802.11ax20 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
97	6435	105	6475	113	6515		
101	6455	109	6495				

802.11ax40 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
99	6445	107	6485	115	6525 （Straddle）		

802.11ax80 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
103	6465	119	6545（Straddle）		

802.11ax160 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
111	6505（Straddle）				

U-NII-7: 6535-6865MHz

802.11ax20 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
117	6535	137	6635	157	6735	177	6835
121	6555	141	6655	161	6755	181	6855
125	6575	145	6675	165	6775	185	6875 （Straddle）
129	6595	149	6695	169	6795		
133	6615	153	6715	173	6815		

802.11ax40 Carrier Frequency Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency

	(MHz)		(MHz)		(MHz)		(MHz)
123	6565	147	6685	171	6805		
131	6605	155	6725	179	6845		
139	6645	163	6765	187	6885（Straddle）		

802.11ax80 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
135	6625	167	6785		
151	6705	183	6865（Straddle）		

802.11ax160 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
143	6665	175	6825（Straddle）		

U-NII-8: 6885-7115MHz

802.11ax20 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
189	6895	201	6955	213	7015	225	7075
193	6915	205	6975	217	7035	229	7095
197	6935	209	6995	221	7055	233	7115

802.11ax40 Carrier Frequency Channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
195	6925	211	7005	227	7085		
203	6965	219	7045				

802.11ax80 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
199	6945	215	7025		

802.11ax160 Carrier Frequency Channel					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
207	6985				

4.5 Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11ax20 CH1/ CH45/ CH 93 802.11ax20 CH97/ CH105/ CH113 802.11ax20 CH117/ CH149/ CH181/CH185（Straddle）

	802.11ax20 CH189/ CH209/ CH233
Mode 2	802.11ax40 CH3/ CH 43/ CH 91 802.11ax40 CH99/ CH 107/ CH115（Straddle） 802.11ax40 CH123/ CH 147/ CH 179/ CH 187（Straddle） 802.11ax40 CH195/ CH 203/ CH 227
Mode 3	802.11ax80 CH 7/CH 39/ CH 87 802.11ax80 CH 103/CH 119（Straddle） 802.11ax80 CH 135/CH 151/ CH 167/ CH 183（Straddle） 802.11ax80 CH 199/CH 215
Mode 4	802.11ax160 CH 15/CH 47/ CH 79 802.11ax160 CH 111 802.11ax160 CH 143/CH 175（Straddle） 802.11ax160 CH 207
Mode 5	Link Mode

4.6 Test Environment

1. Normal Test Conditions:

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Temperature(℃):	26
Test Voltage(DC):	12V

2.Extreme Test Conditions:

For tests at extreme voltages, measurements shall be made over the extremes of the power source voltage range as declared by the manufacturer.

Test Conditions	LV	NV	HV
Test Voltage (DC)	4.5	12	19

4.7 Table Of Parameters Of Text Software Setting

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters

5955MHz-7115MHz 1T1R (Antenna 1)							
Test Software Version	QRCT						
Frequency (MHz)	5955	6175	6415	6435	6475	6515	6535
802.11ax20 Mode	8	8	7	7	7	7	7
Frequency (MHz)	6695	6855	6875	6895	6695	7115	
802.11ax20 Mode	8	7	7	7	8	8	
Frequency (MHz)	5965	6165	6405	6445	6485	6525	6565

802.11ax40 Mode	8	8	8	8	8	8	8
Frequency (MHz)	6685	6845	6885	6925	6965	7085	
802.11ax40 Mode	8	7	8	8	8	8	
Frequency (MHz)	5985	6145	6385	6465	6545	6625	6705
802.11ax80 Mode	10	10	10	10	10	10	10
Frequency (MHz)	6785	6865	6945	7025			
802.11ax80 Mode	10	10	10	10			
Frequency (MHz)	6025	6185	6345	6505	6665	6825	6985
802.11ax160 Mode	12	12	12	12	12	10	12

5955MHz-7115MHz 1T1R (Antenna 2)							
Test Software Version	QRCT						
Frequency (MHz)	5955	6175	6415	6435	6475	6515	6535
802.11ax20 Mode	10	10	9	8	8	8	8
Frequency (MHz)	6695	6855	6875	6895	6695	7115	
802.11ax20 Mode	8	8	8	8	8	8	
Frequency (MHz)	5965	6165	6405	6445	6485	6525	6565
802.11ax40 Mode	12	12	12	12	12	12	12
Frequency (MHz)	6685	6845	6885	6925	6965	7085	
802.11ax40 Mode	11	11	11	12	13	13	
Frequency (MHz)	5985	6145	6385	6465	6545	6625	6705
802.11ax80 Mode	16	16	16	15	15	15	14
Frequency (MHz)	6785	6865	6945	7025			
802.11ax80 Mode	14	14	16	16			
Frequency (MHz)	6025	6185	6345	6505	6665	6825	6985
802.11ax160 Mode	18	18	18	18	17	17	19

5955MHz-7115MHz 1T1R (Antenna 3)							
Test Software Version	QRCT						
Frequency (MHz)	5955	6175	6415	6435	6475	6515	6535
802.11ax20 Mode	9	9	9	8	8	9	9
Frequency (MHz)	6695	6855	6875	6895	6695	7115	
802.11ax20 Mode	9	8	8	9	8	8	
Frequency (MHz)	5965	6165	6405	6445	6485	6525	6565
802.11ax40 Mode	12	12	12	12	12	12	14

Frequency (MHz)	6685	6845	6885	6925	6965	7085	
802.11ax40 Mode	13	10	12	12	12	12	
Frequency (MHz)	5985	6145	6385	6465	6545	6625	6705
802.11ax80 Mode	15	15	15	15	15	17	16
Frequency (MHz)	6785	6865	6945	7025			
802.11ax80 Mode	15	14	14	14			
Frequency (MHz)	6025	6185	6345	6505	6665	6825	6985
802.11ax160 Mode	18	17	17	17	19	16	16

5955MHz-7115MHz 1T1R (Antenna 4)							
Test Software Version	QRCT						
Frequency (MHz)	5955	6175	6415	6435	6475	6515	6535
802.11ax20 Mode	11	9	9	9	9	9	9
Frequency (MHz)	6695	6855	6875	6895	6695	7115	
802.11ax20 Mode	10	9	9	10	9	9	
Frequency (MHz)	5965	6165	6405	6445	6485	6525	6565
802.11ax40 Mode	12	12	12	12	12	12	12
Frequency (MHz)	6685	6845	6885	6925	6965	7085	
802.11ax40 Mode	12	12	12	12	12	12	
Frequency (MHz)	5985	6145	6385	6465	6545	6625	6705
802.11ax80 Mode	15	15	15	15	15	15	15
Frequency (MHz)	6785	6865	6945	7025			
802.11ax80 Mode	15	15	15	14			
Frequency (MHz)	6025	6185	6345	6505	6665	6825	6985
802.11ax160 Mode	17	17	17	17	17	17	17

5955MHz-7115MHz MIMO							
Test Software Version	QRCT						
Frequency (MHz)	5955	6175	6415	6435	6475	6515	6535
802.11ax20 Mode	-3	-3	-4	-4	-4	-4	-4
Frequency (MHz)	6695	6855	6875	6895	6695	7115	
802.11ax20 Mode	-4	-5	-5	-2	-2	-2	
Frequency (MHz)	5965	6165	6405	6445	6485	6525	6565
802.11ax40 Mode	0	0	-1	-1	-1	-1	-1
Frequency (MHz)	6685	6845	6885	6925	6965	7085	

802.11ax40 Mode	0	-1	0	1	1	1	
Frequency (MHz)	5985	6145	6385	6465	6545	6625	6705
802.11ax80 Mode	3	3	3	3	3	4	4
Frequency (MHz)	6785	6865	6945	7025			
802.11ax80 Mode	4	4	4	4			
Frequency (MHz)	6025	6185	6345	6505	6665	6825	6985
802.11ax160 Mode	6	6	6	6	6	6	6

4.8 Antenna Requirements

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

Directional gain = GANT + Array Gain, where Array Gain is as follows:

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4.

GANT is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation follows F)2)f)ii) of KDB 662911 D01 v02r01.

- $$Directional Gain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$$

where

Each antenna is driven by no more than one spatial stream;

N_{SS} = the number of independent spatial streams of data;

N_{ANT} = the total number of antennas

$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;

G_k is the gain in dBi of the kth antenna.

As minimum NSS=1 is supported by EUT, the formula can be simplified as:

Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20} + \cdots + 10^{GN/20})^2 / N_{ANT}]$ dBi

Where G1, G2….GN denotes single antenna gain.

If a device has two antenna, GANT1= 5.2dBi; GANT2=2.9dBi; GANT3=6.1dBi; GANT4=6.3dBi

Directional gain of power measurement = max (5.2, 2.9, 6.1, 6.3) + 0 = 6.3 dBi

Directional gain of PSD measurement = $10 * \log [(10^{5.2/20} + 10^{2.9/20} + 10^{6.1/20} + 10^{6.3/20})^2 / 4]$ =11.25 dBi

	Antenna 1 (dBi)	Antenna 2 (dBi)	Antenna 3 (dBi)	Antenna 4 (dBi)	Directional gain for Power (dBi)	Directional gain for PSD (dBi)
5955-7115MHz	5.2	2.9	6.1	6.3	6.3	11.25

5. Test Facility And Test Instrument Used

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at
Shenzhen BCTC Testing Co., Ltd.
Address:1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdi strict, Bao'an District, Shenzhen, Guangdong, China.
The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

Conducted Emissions Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
LISN	R&S	ENV216	101375	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	EMC-CON 3A1	\	\
Attenuator	\	10dB DC-6GHz	1650	May 15, 2023	May 14, 2024

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Power Metter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A	\	May 15, 2023	May 14, 2024
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024
Spectrum Analyzer9kHz-40GHz	R&S	FSP40	\	May 15, 2023	May 14, 2024

RF Conducted Test					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
Wireless Connectivity Test Set	Anritsu	MT8862A	SN6272327180	2023-10-10	2024-10-09
EXA Signal Analyzer	Keysight	N9010B	MY60241168	2023-11-03	2024-11-02
Vector Signal Generator	Keysight	N5182B	MY61250192	2023-04-17	2024-04-16

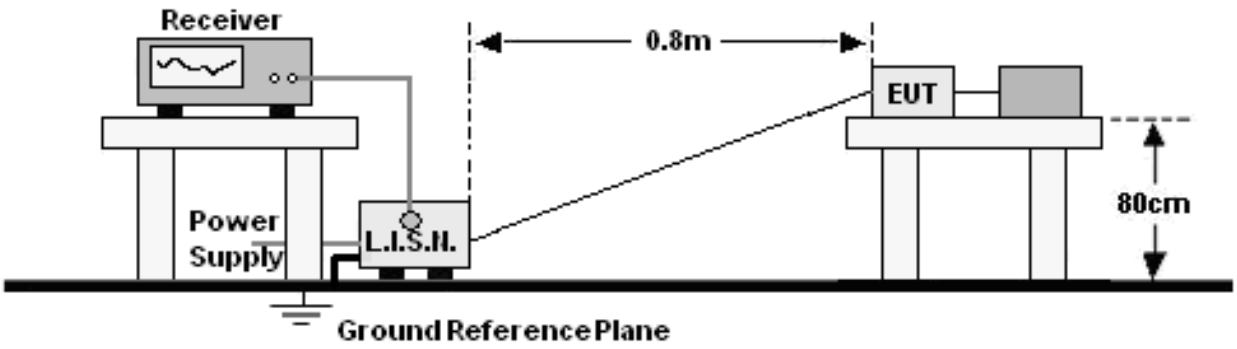
Analog Signal Generator	Keysight	N5173B	MY59101178	2023-11-03	2024-11-02
Constant Temperature Humidity Chamber	Sanwood	SC-80-CC-3	6557	2023-8-29	2024-8-28
Band Extender Unit	Tonscend	JS-DN-RF-026	SN2208120004	N/A	N/A
RF Control Unit and Power Test Unit	Tonscend	JS0806-2	SN21F8060437	2023-04-17	2024-04-16
Test Software	Tonscend	JS1120-3 V3.2.22	N/A	N/A	N/A

Radiated Emissions Test (966 Chamber)					
Equipment	**Manufacturer**	**Model#**	**Serial#**	**Last Cal.**	**Next Cal.**
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESR3	102075	May 15, 2023	May 14, 2024
Receiver	R&S	ESRP	101154	May 15, 2023	May 14, 2024
Amplifier	SKET	LAPA_01G18G-45dB	\	May 15, 2023	May 14, 2024
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 15, 2023	May 14, 2024
TRILOG Broadband Antenna	Schwarzbeck	VULB9163	942	May 15, 2023	May 14, 2024
Horn Antenna	Schwarzbeck	BBHA9120D	1541	May 15, 2023	May 14, 2024
Horn Antenn(18GHz-40GHz)	Schwarzbeck	BBHA9170	00822	May 15, 2023	May 14, 2024
Amplifier(18GHz-40GHz)	MITEQ	TTA1840-35-HG	2034381	May 15, 2023	May 14, 2024
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	May 15, 2023	May 14, 2024
RF cables1(9kHz-30MHz)	Huber+Suhnar	9kHz-30MHz	B1702988-0008	May 15, 2023	May 14, 2024
RF cables2(30MHz-1GHz)	Huber+Suhnar	30MHz-1GHz	1486150	May 15, 2023	May 14, 2024
RF cables3(1GHz-40GHz)	Huber+Suhnar	1GHz-40GHz	1607106	May 15, 2023	May 14, 2024
Power Metter	Keysight	E4419	\	May 15, 2023	May 14, 2024
Power Sensor (AV)	Keysight	E9300A	\	May 15, 2023	May 14, 2024
Signal Analyzer20kHz-26.5GHz	Keysight	N9020A	MY49100060	May 15, 2023	May 14, 2024

Spectrum Analyzer9kHz-40GHz	R&S	FSP40	\	May 15, 2023	May 14, 2024
Software	Frad	EZ-EMC	FA-03A2 RE	\	\

6. Conducted Emissions

6.1 Block Diagram Of Test Setup



6.2 Limit

Frequency (MHz)	Limit (dBuV)	
	Quas-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00
Notes: 1. *Decreasing linearly with logarithm of frequency. 2. The lower limit shall apply at the transition frequencies.		

6.3 Test Procedure

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

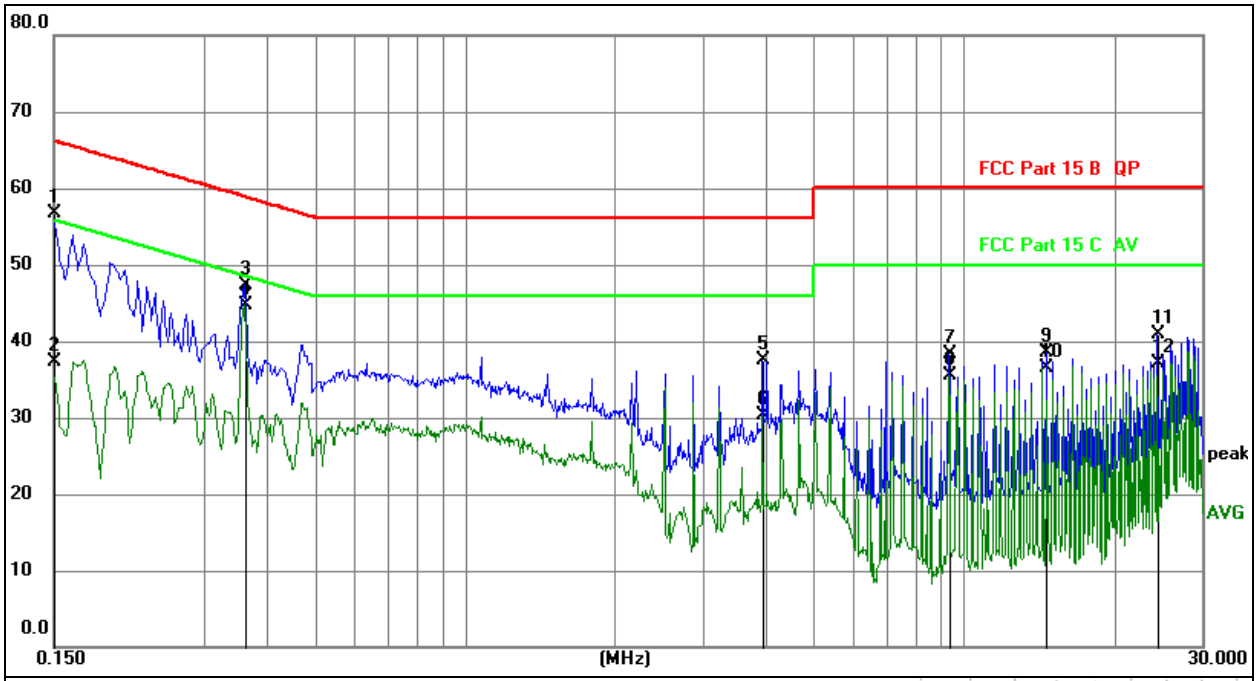
a. The Product was placed on a nonconductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.
c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

6.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

6.5 Test Result

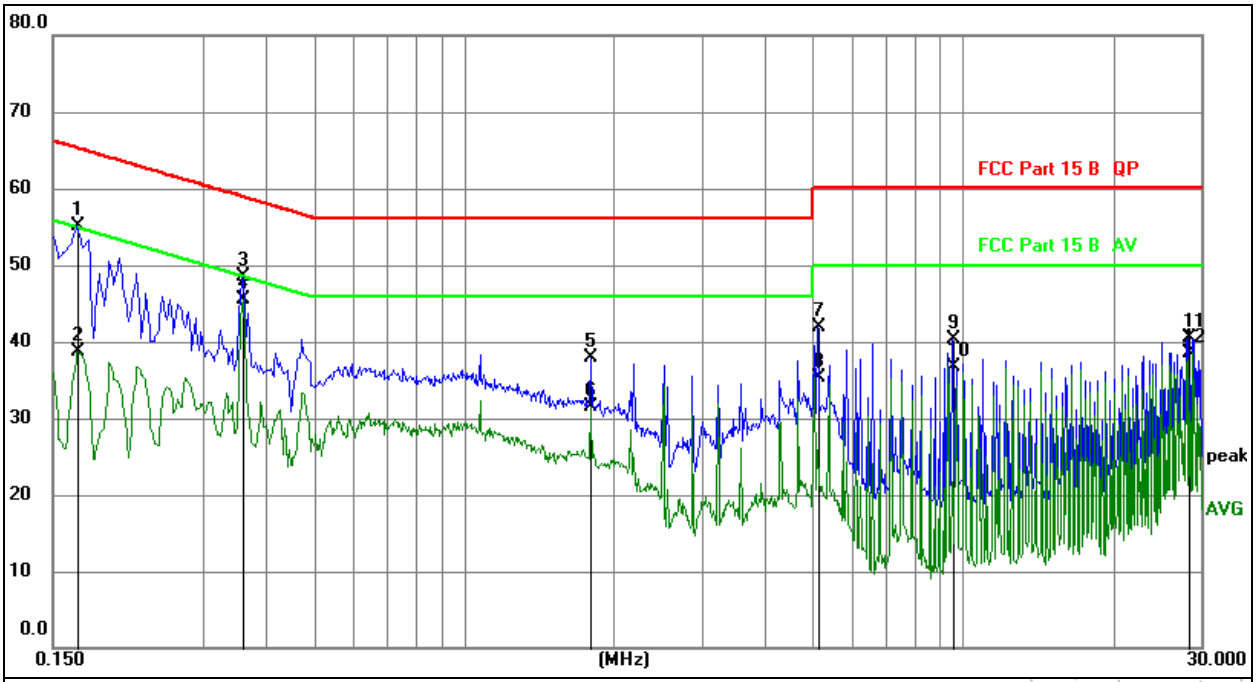
Temperature:	24 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC 120V/60Hz
Test Mode:	Mode 5	Polarization :	L



Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz		dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	46.57	10.18	56.75	66.00	-9.25	QP	
2		0.1500	27.05	10.18	37.23	56.00	-18.77	AVG	
3		0.3615	37.22	10.18	47.40	58.69	-11.29	QP	
4	*	0.3615	34.60	10.18	44.78	48.69	-3.91	AVG	
5		3.9570	27.21	10.24	37.45	56.00	-18.55	QP	
6		3.9570	20.00	10.24	30.24	46.00	-15.76	AVG	
7		9.3480	27.82	10.41	38.23	60.00	-21.77	QP	
8		9.3480	25.08	10.41	35.49	50.00	-14.51	AVG	
9		14.6580	28.04	10.49	38.53	60.00	-21.47	QP	
10		14.6580	26.00	10.49	36.49	50.00	-13.51	AVG	
11		24.4500	30.49	10.41	40.90	60.00	-19.10	QP	
12		24.4500	26.72	10.41	37.13	50.00	-12.87	AVG	

Temperature:	24 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	AC 120V/60Hz
Test Mode:	Mode 5	Polarization :	N



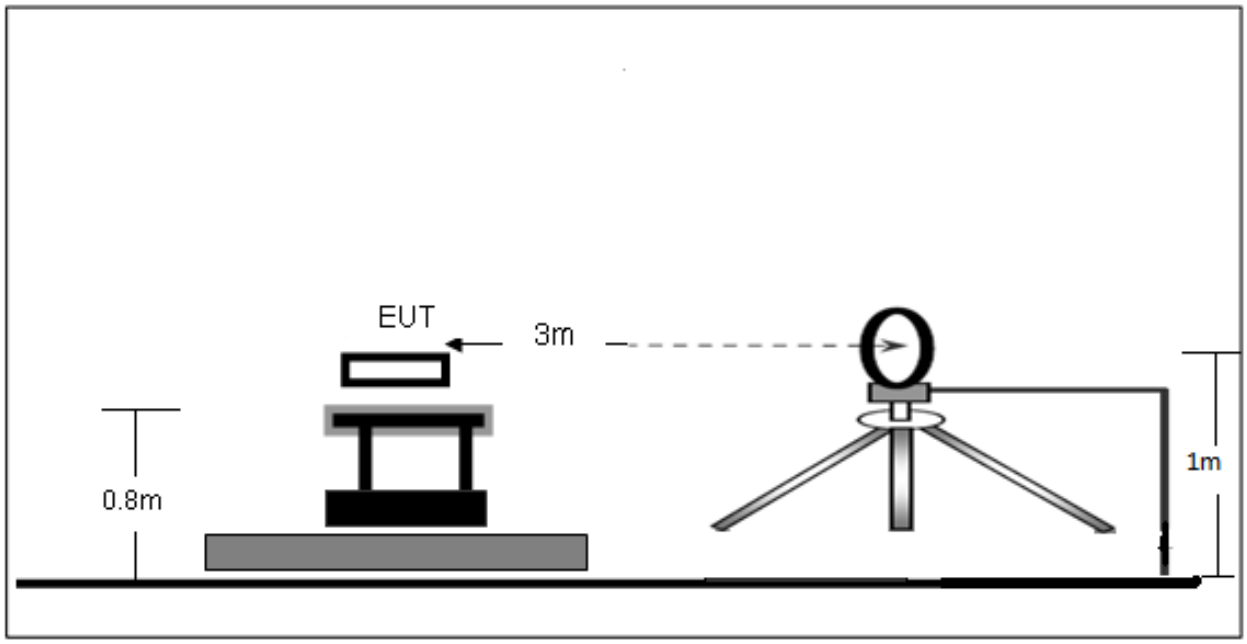
Remark:
1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.
3. Measurement = Reading Level + Correct Factor
4. Over = Measurement - Limit

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz		dB	dBuV	dBuV	dB	Detector	Comment
1		0.1680	44.92	10.18	55.10	65.06	-9.96	QP	
2		0.1680	28.59	10.18	38.77	55.06	-16.29	AVG	
3		0.3614	38.34	10.18	48.52	58.70	-10.18	QP	
4	*	0.3614	35.27	10.18	45.45	48.70	-3.25	AVG	
5		1.7968	27.74	10.11	37.85	56.00	-18.15	QP	
6		1.7968	21.30	10.11	31.41	46.00	-14.59	AVG	
7		5.1314	31.49	10.32	41.81	60.00	-18.19	QP	
8		5.1314	24.98	10.32	35.30	50.00	-14.70	AVG	
9		9.5235	29.82	10.41	40.23	60.00	-19.77	QP	
10		9.5235	26.25	10.41	36.66	50.00	-13.34	AVG	
11		28.4054	30.13	10.41	40.54	60.00	-19.46	QP	
12		28.4054	28.07	10.41	38.48	50.00	-11.52	AVG	

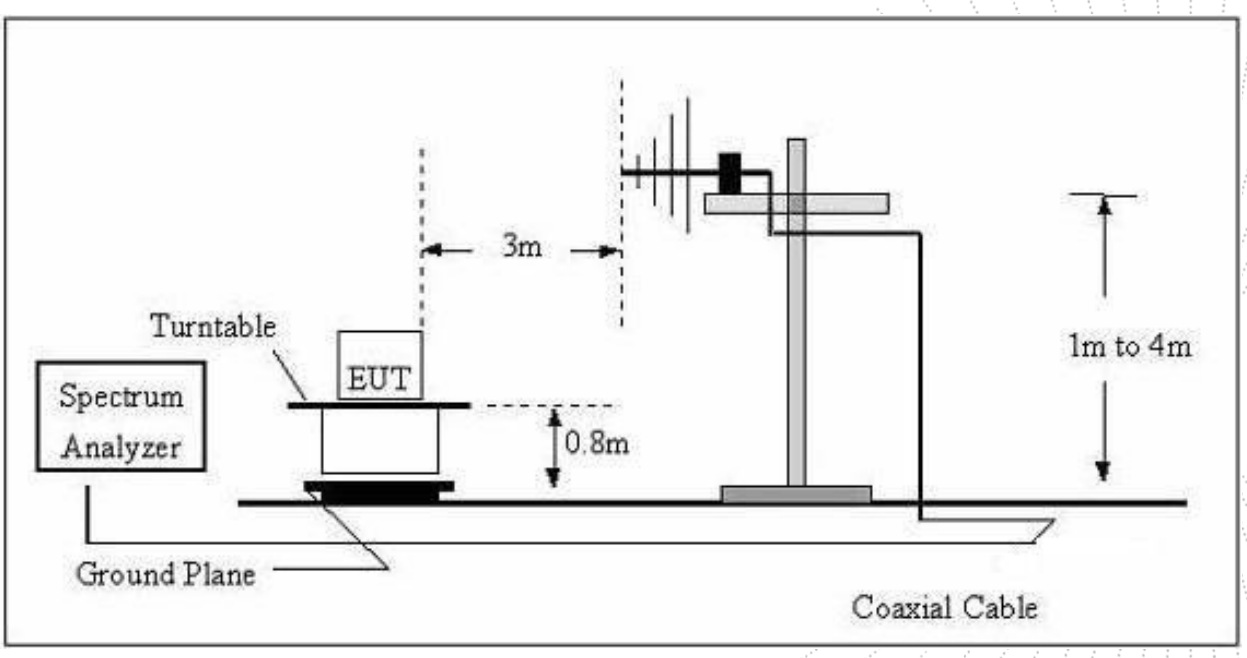
7. Radiated Emissions

7.1 Block Diagram Of Test Setup

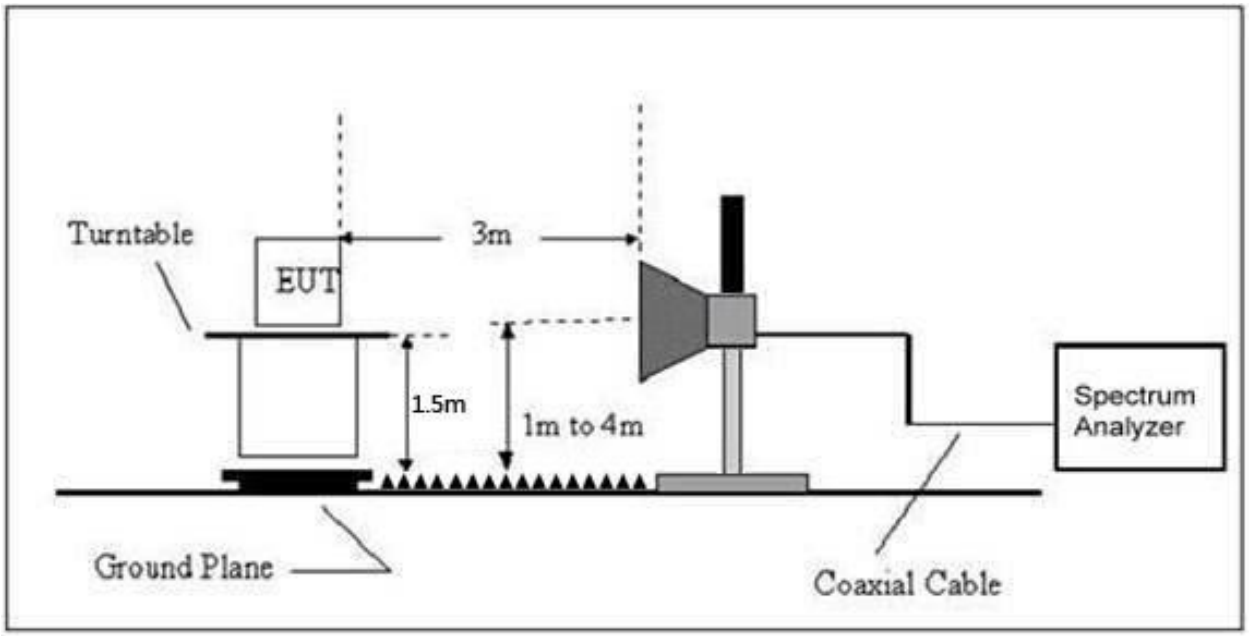
（A）Radiated Emission Test-Up Frequency Below 30MHz



（B）Radiated Emission Test-Up Frequency 30MHz~1GHz



（C）Radiated Emission Test-Up Frequency Above 1GHz



7.2 Limit

FCC Part15 C Section 15.209 and 15.205

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequency	Field Strength	Distance	Field Strength Limit at 3m Distance	
(MHz)	uV/m	(m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	$20\log^{(2400/F(kHz))}$ + 80
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	$20\log^{(24000/F(kHz))}$ + 40
1.705 ~ 30	30	30	100 * 30	$20\log^{(30)}$ + 40
30 ~ 88	100	3	100	$20\log^{(100)}$
88 ~ 216	150	3	150	$20\log^{(150)}$
216 ~ 960	200	3	200	$20\log^{(200)}$
Above 960	500	3	500	$20\log^{(500)}$

For transmitters operating within the 5.925–7.125 GHz band: Any emissions outside of the 5.925–7.125 GHz band must not exceed an e.i.r.p. of −27 dBm/MHz.

According 987594 D02 U-NII 6GHz EMC Measurement section G:
Use guidance in KDB 789033 for measurements below 1000 MHz and above 1000 MHz. Unwanted emissions outside of restricted bands are measured with a RMS detector. In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit

Limits Of Radiated Emission Measurement (Above 1000MHz)

Frequency (MHz)	Limit (dBuV/m) (at 3M)	
	Peak	Average
Above 1000	74	54

Notes:
(1)The limit for radiated test was performed according to FCC PART 15C.
(2)The tighter limit applies at the band edges.
(3) Emission level (dBuV/m)=20log Emission level (uV/m).

7.3 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m.The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.
This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205.
It must be performed with the highest gain of each type of antenna proposed for use with the EUT.
Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz

Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested
and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	QP	120 kHz	300 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =10*lg(100 [kHz]/narrower RBW [kHz]). , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the
narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

7.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

7.5 Test Result

Below 30MHz

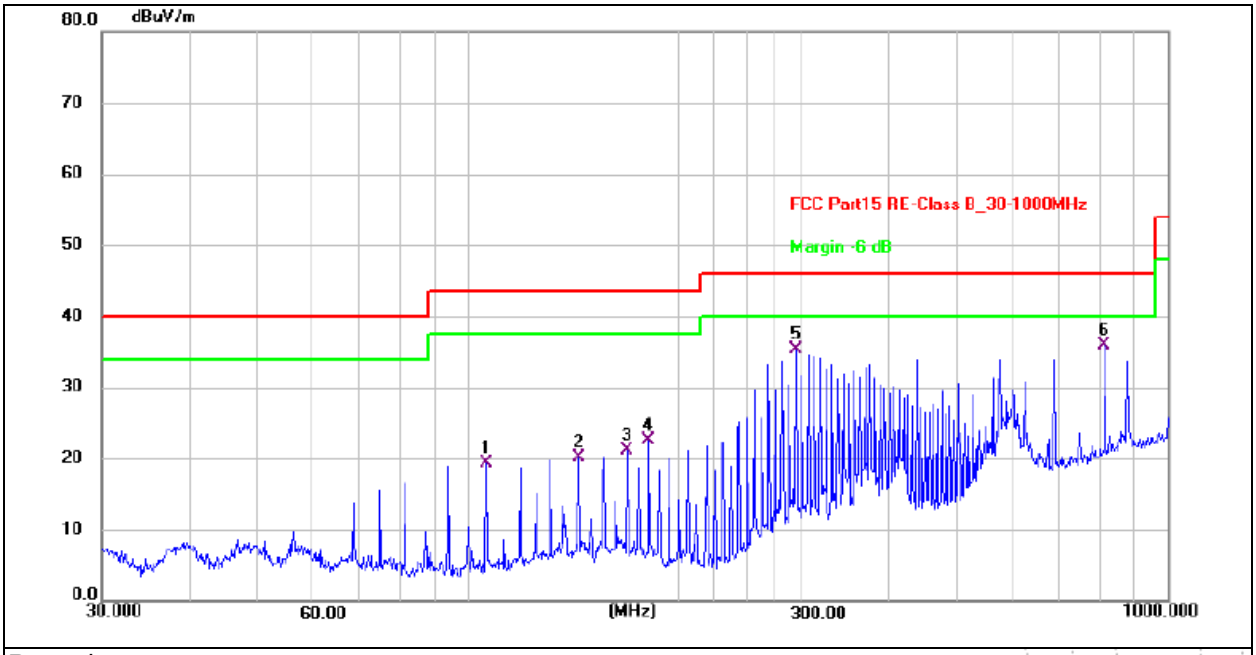
Temperature:	26℃	Relative Humidity:	24%
Pressure:	101 kPa	Test Voltage:	DC 12V from DC power
Test Mode:	Mode 5	Polarization:	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	PASS
--	--	--	--	PASS

Note:
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
Distance extrapolation factor =40 log (specific distance/test distance)(dB);
Limit line = specific limits(dBuv) + distance extrapolation factor.

Between 30MHz – 1GHz

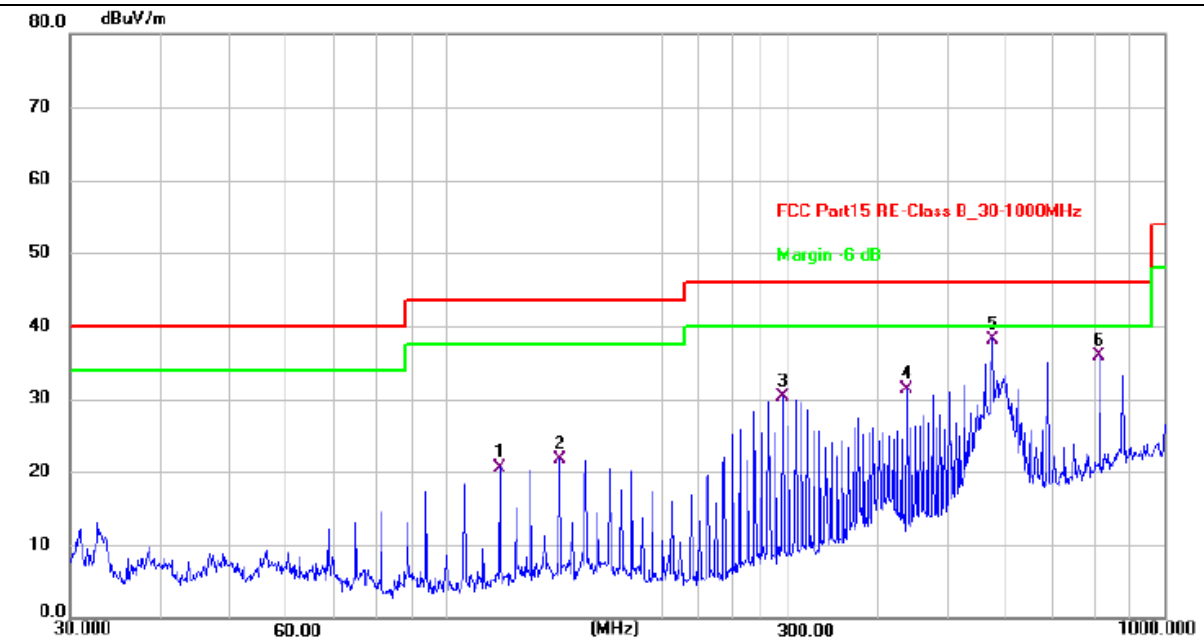
Temperature：	26℃	Relative Humidity：	54%
Pressure：	101 kPa	Test Voltage ：	DC 12V from DC power
Test Mode ：	Mode 5	Polarization :	Horizontal



Remark:
1.Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	106.3850	39.51	-20.22	19.29	43.50	-24.21	QP
2	143.8295	37.57	-17.51	20.06	43.50	-23.44	QP
3	169.0053	38.61	-17.41	21.20	43.50	-22.30	QP
4	181.2834	41.02	-18.49	22.53	43.50	-20.97	QP
5	294.1137	52.85	-17.45	35.40	46.00	-10.60	QP
6 *	813.1115	42.71	-6.71	36.00	46.00	-10.00	QP

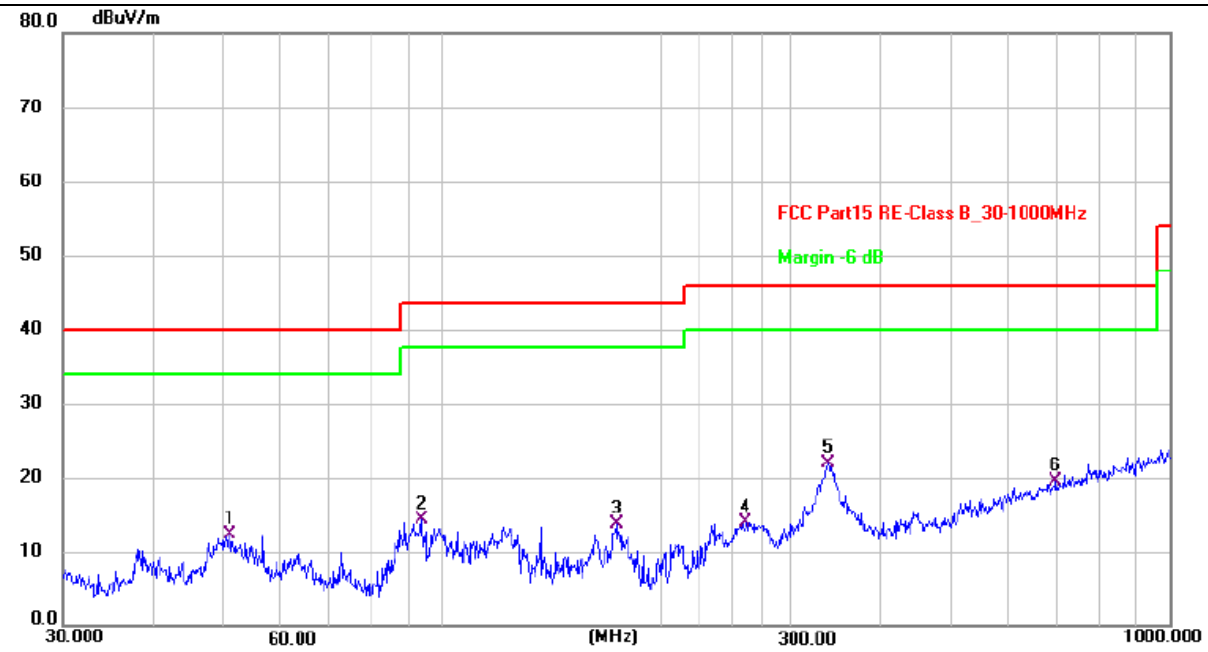
Temperature：	26℃	Relative Humidity：	54%
Pressure：	101 kPa	Test Voltage ：	DC 12V from DC power
Test Mode ：	Mode 5	Polarization :	Vertical



Remark:
1.Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement=Reading Level+ Correct Factor
3. Over= Measurement-Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	118.6014	39.88	-19.28	20.60	43.50	-22.90	QP
2	143.8295	39.19	-17.51	21.68	43.50	-21.82	QP
3	294.1137	47.66	-17.45	30.21	46.00	-15.79	QP
4	438.6554	45.19	-13.90	31.29	46.00	-14.71	QP
5 *	576.6443	48.86	-10.66	38.20	46.00	-7.80	QP
6	813.1115	42.63	-6.71	35.92	46.00	-10.08	QP

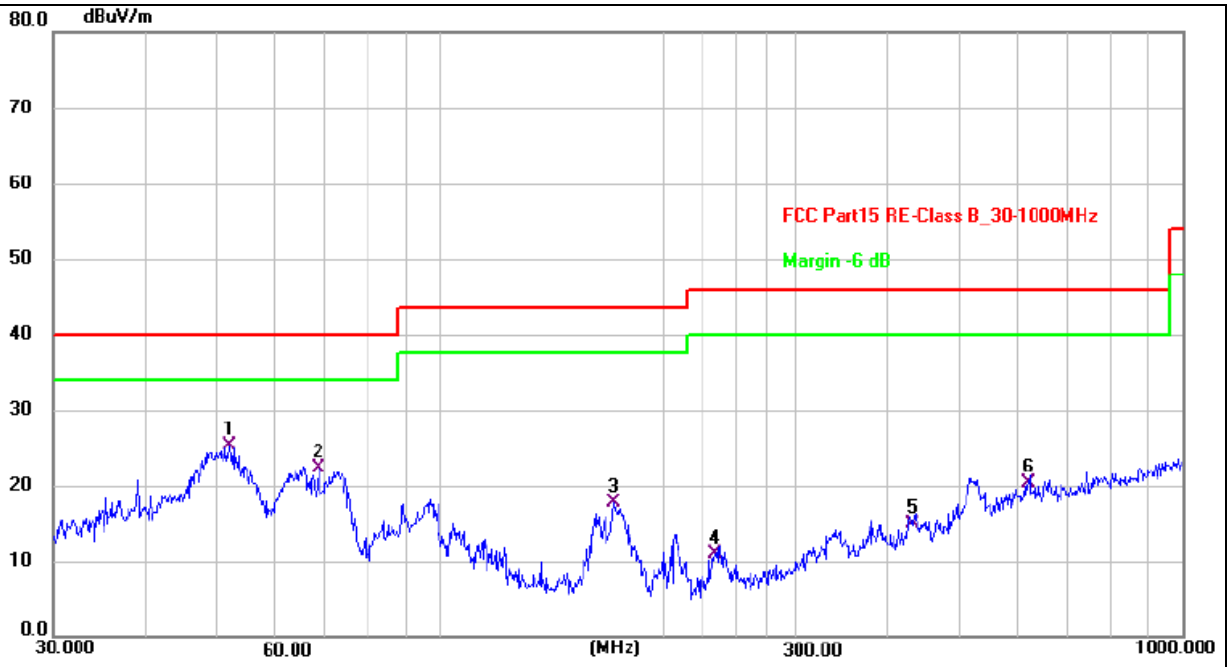
Temperature:	24 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	DC 12V from POE
Test Mode:	Mode 5	Polarization :	Horizontal



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	50.9420	28.99	-16.74	12.25	40.00	-27.75	QP
2	93.4402	35.14	-20.79	14.35	43.50	-29.15	QP
3	173.2051	31.39	-17.74	13.65	43.50	-29.85	QP
4	261.0583	32.53	-18.59	13.94	46.00	-32.06	QP
5 *	338.4001	38.03	-16.20	21.83	46.00	-24.17	QP
6	696.8567	28.12	-8.67	19.45	46.00	-26.55	QP

Temperature:	24 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage :	DC 12V from POE
Test Mode:	Mode 5	Polarization :	Vertical



Remark:
1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.
2. Measurement = Reading Level + Correct Factor
3. Over = Measurement - Limit

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	52.0251	42.06	-16.82	25.24	40.00	-14.76	QP
2	68.3908	40.76	-18.55	22.21	40.00	-17.79	QP
3	171.3926	35.31	-17.58	17.73	43.50	-25.77	QP
4	234.1684	30.85	-19.96	10.89	46.00	-35.11	QP
5	432.5457	29.05	-14.06	14.99	46.00	-31.01	QP
6	618.5369	30.02	-9.68	20.34	46.00	-25.66	QP

Between 1GHz – 40GHz

U-NII-5: 5955-6415MHz

Test Mode ：	TX(U-NII-5: 5955-6415MHz) - 802.11ax20

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5955 MHz)-Above 1G							
Vertical	4680.057	69.54	-20.24	49.30	74	-24.70	Pk
Vertical	4680.057	54.18	-20.24	33.94	54	-20.06	AV
Vertical	11910.032	57.95	-8.63	49.32	68.2	-18.88	Pk
Vertical	11910.032	44.17	-8.63	35.54	54	-18.46	AV
Vertical	17865.086	52.53	-1.57	50.96	68.2	-17.24	Pk
Vertical	17865.086	39.37	-1.57	37.80	54	-16.20	AV
Horizontal	4679.110	65.17	-20.73	44.44	74	-29.56	Pk
Horizontal	4679.110	54.83	-20.73	34.10	54	-19.90	AV
Horizontal	11910.173	56.83	-8.63	48.20	68.2	-20.00	Pk
Horizontal	11910.173	44.02	-8.63	35.39	54	-18.61	AV
Horizontal	17865.016	51.19	-1.57	49.62	68.2	-18.58	Pk
Horizontal	17865.016	39.58	-1.57	38.01	54	-15.99	AV
middle Channel (6175 MHz)-Above 1G							
Vertical	4592.152	66.77	-20.42	46.36	74	-27.64	Pk
Vertical	4592.152	54.71	-20.42	34.30	54	-19.70	AV
Vertical	12350.012	58.10	-9.16	48.94	68.2	-19.26	Pk
Vertical	12350.012	44.00	-9.16	34.84	54	-19.16	AV
Vertical	18525.200	53.31	6.65	59.96	68.2	-8.24	Pk
Vertical	18525.200	39.94	6.65	46.59	54	-7.41	AV
Horizontal	4592.170	69.39	-20.42	48.97	74	-25.03	Pk
Horizontal	4592.170	54.37	-20.42	33.95	54	-20.05	AV
Horizontal	12350.137	55.72	-9.16	46.56	68.2	-21.64	Pk
Horizontal	12350.137	44.49	-9.16	35.33	54	-18.67	AV
Horizontal	18525.184	51.72	6.65	58.37	68.2	-9.83	Pk
Horizontal	18525.184	39.53	6.65	46.18	54	-7.82	AV
High Channel (6415 MHz)-Above 1G							
Vertical	6039.200	66.00	-18.93	47.06	68.2	-21.14	Pk
Vertical	6039.200	54.69	-18.93	35.76	54	-18.24	AV
Vertical	12830.085	59.74	-8.92	50.82	74	-23.18	Pk
Vertical	12830.085	44.82	-8.92	35.90	54	-18.10	AV
Vertical	19245.158	54.37	7.78	62.15	68.2	-6.05	Pk
Vertical	19245.158	39.04	7.78	46.82	54	-7.18	AV
Horizontal	6039.058	67.12	-18.93	48.18	68.2	-20.02	Pk
Horizontal	6039.058	54.28	-18.93	35.35	54	-18.65	AV
Horizontal	12830.051	57.46	-8.92	48.54	74	-25.46	Pk
Horizontal	12830.051	44.97	-8.92	36.05	54	-17.95	AV
Horizontal	19245.123	50.48	7.78	58.26	68.2	-9.94	Pk
Horizontal	19245.123	39.84	7.78	47.62	54	-6.38	AV

Note: The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-5: 5955-6415MHz) - 802.11ax40

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5965 MHz)-Above 1G							
Vertical	4679.067	65.64	-20.24	45.40	74	-28.60	Pk
Vertical	4679.067	54.58	-20.24	34.34	54	-19.66	AV
Vertical	11930.165	55.39	-8.51	46.88	74	-27.12	Pk
Vertical	11930.165	44.50	-8.51	35.99	54	-18.01	AV
Vertical	17895.160	53.63	-1.43	52.20	68.2	-16.00	Pk
Vertical	17895.160	39.84	-1.43	38.41	54	-15.59	AV
Horizontal	4679.119	65.68	-20.24	45.44	74	-28.56	Pk
Horizontal	4679.119	54.95	-20.24	34.71	54	-19.29	AV
Horizontal	11930.156	56.18	-8.51	47.67	74	-26.33	Pk
Horizontal	11930.156	44.67	-8.51	36.16	54	-17.84	AV
Horizontal	17895.134	53.16	-1.43	51.73	68.2	-16.47	Pk
Horizontal	17895.134	39.01	-1.43	37.58	54	-16.42	AV
middle Channel (6165 MHz)-Above 1G							
Vertical	6039.151	65.80	-18.93	46.86	68.2	-21.34	Pk
Vertical	6039.151	54.09	-18.93	35.15	54	-18.85	AV
Vertical	12330.027	57.78	-9.16	48.62	74	-25.38	Pk
Vertical	12330.027	44.67	-9.16	35.51	54	-18.49	AV
Vertical	18495.066	54.78	6.65	61.43	68.2	-6.77	Pk
Vertical	18495.066	39.11	6.65	45.76	54	-8.24	AV
Horizontal	6039.149	66.50	-18.93	47.57	68.2	-20.63	Pk
Horizontal	6039.149	54.98	-18.93	36.05	54	-17.95	AV
Horizontal	12330.001	57.93	-9.16	48.77	74	-25.23	Pk
Horizontal	12330.001	44.98	-9.16	35.82	54	-18.18	AV
Horizontal	18495.111	52.82	6.65	59.47	68.2	-8.73	Pk
Horizontal	18495.111	39.48	6.65	46.13	54	-7.87	AV
High Channel (6405 MHz)-Above 1G							
Vertical	6039.097	67.68	-18.93	48.75	68.2	-19.45	Pk
Vertical	6039.097	54.97	-18.93	36.04	54	-17.96	AV
Vertical	12810.064	56.46	-8.92	47.54	74	-26.46	Pk
Vertical	12810.064	44.39	-8.92	35.47	54	-18.53	AV
Vertical	19215.195	53.98	7.78	61.76	68.2	-6.44	Pk
Vertical	19215.195	39.70	7.78	47.48	54	-6.52	AV
Horizontal	6039.017	67.47	-18.93	48.54	68.2	-19.66	Pk
Horizontal	6039.017	54.10	-18.93	35.17	54	-18.83	AV
Horizontal	12810.182	55.11	-8.92	46.19	74	-27.81	Pk
Horizontal	12810.182	44.25	-8.92	35.33	54	-18.67	AV
Horizontal	19215.116	51.01	7.78	58.79	68.2	-9.41	Pk
Horizontal	19215.116	39.22	7.78	47.00	54	-7.00	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-5: 5955-6415MHz)- 802.11ax80

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (5985 MHz)-Above 1G							
Vertical	4679.011	68.93	-20.24	48.68	74	-25.32	Pk
Vertical	4679.011	54.62	-20.24	34.38	54	-19.62	AV
Vertical	11970.046	56.18	-8.51	47.67	74	-26.33	Pk
Vertical	11970.046	44.19	-8.51	35.68	54	-18.32	AV
Vertical	17955.150	51.21	-1.41	49.80	68.2	-18.40	Pk
Vertical	17955.150	39.92	-1.41	38.51	54	-15.49	AV
Horizontal	4679.172	68.26	-20.24	48.02	74	-25.98	Pk
Horizontal	4679.172	54.70	-20.24	34.46	54	-19.54	AV
Horizontal	11970.169	58.95	-8.51	50.44	74	-23.56	Pk
Horizontal	11970.169	44.84	-8.51	36.33	54	-17.67	AV
Horizontal	17955.177	52.74	-1.41	51.33	68.2	-16.87	Pk
Horizontal	17955.177	39.41	-1.41	38.00	54	-16.00	AV
Middle Channel (6145 MHz)-Above 1G							
Vertical	6039.052	66.87	-18.93	47.94	68.2	-20.26	Pk
Vertical	6039.052	54.98	-18.93	36.05	54	-17.95	AV
Vertical	12290.044	59.89	-9.21	50.68	74	-23.32	Pk
Vertical	12290.044	44.02	-9.21	34.81	54	-19.19	AV
Vertical	18435.193	51.91	6.57	58.48	68.2	-9.72	Pk
Vertical	18435.193	40.00	6.57	46.57	54	-7.43	AV
Horizontal	6039.122	66.80	-18.93	47.87	68.2	-20.33	Pk
Horizontal	6039.122	54.07	-18.93	35.14	54	-18.86	AV
Horizontal	12290.180	55.22	-9.21	46.01	74	-27.99	Pk
Horizontal	12290.180	44.92	-9.21	35.71	54	-18.29	AV
Horizontal	18435.048	51.84	6.57	58.41	68.2	-9.79	Pk
Horizontal	18435.048	39.85	6.57	46.42	54	-7.58	AV
High Channel (6385 MHz)-Above 1G							
Vertical	6039.115	69.17	-18.93	50.24	68.2	-17.96	Pk
Vertical	6039.115	54.54	-18.93	35.60	54	-18.40	AV
Vertical	12770.191	57.26	-8.97	48.29	74	-25.71	Pk
Vertical	12770.191	44.36	-8.97	35.39	54	-18.61	AV
Vertical	19155.090	50.97	7.83	58.80	68.2	-9.40	Pk
Vertical	19155.090	39.96	7.83	47.79	54	-6.21	AV
Horizontal	6039.166	65.24	-18.93	46.31	68.2	-21.89	Pk
Horizontal	6039.166	54.42	-18.93	35.49	54	-18.51	AV
Horizontal	12770.017	59.93	-8.97	50.96	74	-23.04	Pk
Horizontal	12770.017	44.55	-8.97	35.58	54	-18.42	AV
Horizontal	19155.159	54.11	7.83	61.94	68.2	-6.26	Pk
Horizontal	19155.159	39.11	7.83	46.94	54	-7.06	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode:	TX(U-NII-5: 5955-6415MHz) - 802.11ax160

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6025 MHz)-Above 1G							
Vertical	4679.145	65.77	-20.24	45.53	74	-28.47	Pk
Vertical	4679.145	54.86	-20.24	34.62	54	-19.38	AV
Vertical	12050.097	58.64	-8.45	50.19	74	-23.81	Pk
Vertical	12050.097	44.74	-8.45	36.29	54	-17.71	AV
Vertical	18075.004	50.86	-1.31	49.55	68.2	-18.65	Pk
Vertical	18075.004	39.07	-1.31	37.76	54	-16.24	AV
Horizontal	4679.100	69.85	-20.24	49.61	74	-24.39	Pk
Horizontal	4679.100	54.72	-20.24	34.48	54	-19.52	AV
Horizontal	12050.144	58.95	-8.45	50.50	74	-23.50	Pk
Horizontal	12050.144	44.26	-8.45	35.81	54	-18.19	AV
Horizontal	18075.083	51.68	-1.31	50.37	68.2	-17.83	Pk
Horizontal	18075.083	39.99	-1.31	38.68	54	-15.32	AV
middle Channel (6185 MHz)-Above 1G							
Vertical	6039.138	65.44	-18.93	46.51	68.2	-21.69	Pk
Vertical	6039.138	54.28	-18.93	35.35	54	-18.65	AV
Vertical	12370.046	57.78	-9.03	48.75	74	-25.25	Pk
Vertical	12370.046	44.67	-9.03	35.64	54	-18.36	AV
Vertical	18555.120	52.13	6.68	58.81	68.2	-9.39	Pk
Vertical	18555.120	39.50	6.68	46.18	54	-7.82	AV
Horizontal	6039.068	67.06	-18.93	48.13	68.2	-20.07	Pk
Horizontal	6039.068	54.95	-18.93	36.02	54	-17.98	AV
Horizontal	12370.198	59.35	-9.03	50.32	74	-23.68	Pk
Horizontal	12370.198	44.79	-9.03	35.76	54	-18.24	AV
Horizontal	18555.083	52.15	6.68	58.83	68.2	-9.37	Pk
Horizontal	18555.083	39.74	6.68	46.42	54	-7.58	AV
High Channel (6345 MHz)-Above 1G							
Vertical	6039.100	66.95	-18.93	48.02	68.2	-20.18	Pk
Vertical	6039.100	54.17	-18.93	35.23	54	-18.77	AV
Vertical	12690.034	59.75	-8.97	50.78	74	-23.22	Pk
Vertical	12690.034	44.89	-8.97	35.92	54	-18.08	AV
Vertical	19035.071	51.65	7.68	59.33	68.2	-8.87	Pk
Vertical	19035.071	39.24	7.68	46.92	54	-7.08	AV
Horizontal	6039.064	69.46	-18.93	50.53	68.2	-17.67	Pk
Horizontal	6039.064	54.63	-18.93	35.70	54	-18.30	AV
Horizontal	12690.004	58.44	-8.97	49.47	74	-24.53	Pk
Horizontal	12690.004	44.22	-8.97	35.25	54	-18.75	AV
Horizontal	19035.165	54.05	7.68	61.73	68.2	-6.47	Pk
Horizontal	19035.165	39.25	7.68	46.93	54	-7.07	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

U-NII-6: 6435-6515MHz

Test Mode ：	TX(U-NII-6: 6435-6515MHz) - 802.11ax20

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6435 MHz)-Above 1G							
Vertical	4680.115	66.58	-20.24	46.34	74	-27.66	Pk
Vertical	4680.115	54.26	-20.24	34.02	54	-19.98	AV
Vertical	12870.088	58.66	-7.95	50.71	68.2	-17.49	Pk
Vertical	12870.088	44.44	-7.95	36.49	54	-17.51	AV
Vertical	19305.096	50.28	7.76	58.04	68.2	-10.16	Pk
Vertical	19305.096	39.39	7.76	47.15	54	-6.85	AV
Horizontal	4679.036	65.74	-20.73	45.01	74	-28.99	Pk
Horizontal	4679.036	54.60	-20.73	33.87	54	-20.13	AV
Horizontal	12870.059	57.67	-7.95	49.72	68.2	-18.48	Pk
Horizontal	12870.059	44.03	-7.95	36.08	54	-17.92	AV
Horizontal	19305.144	54.70	7.76	62.46	68.2	-5.74	Pk
Horizontal	19305.144	39.85	7.76	47.61	54	-6.39	AV
middle Channel (6475 MHz)-Above 1G							
Vertical	4592.089	66.87	-20.42	46.45	74	-27.55	Pk
Vertical	4592.089	54.68	-20.42	34.27	54	-19.73	AV
Vertical	12950.058	57.92	-7.89	50.03	68.2	-18.17	Pk
Vertical	12950.058	44.67	-7.89	36.78	54	-17.22	AV
Vertical	19425.143	51.95	7.78	59.73	68.2	-8.47	Pk
Vertical	19425.143	39.27	7.78	47.05	54	-6.95	AV
Horizontal	4592.091	67.39	-20.42	46.98	74	-27.02	Pk
Horizontal	4592.091	54.07	-20.42	33.65	54	-20.35	AV
Horizontal	12950.109	59.54	-7.89	51.65	68.2	-16.55	Pk
Horizontal	12950.109	44.97	-7.89	37.08	54	-16.92	AV
Horizontal	19425.040	54.35	7.78	62.13	68.2	-6.07	Pk
Horizontal	19425.040	39.11	7.78	46.89	54	-7.11	AV
High Channel (6515 MHz)-Above 1G							
Vertical	6039.092	66.85	-18.93	47.91	68.2	-20.29	Pk
Vertical	6039.092	54.20	-18.93	35.27	54	-18.73	AV
Vertical	13030.144	56.38	-7.80	48.58	74	-25.42	Pk
Vertical	13030.144	44.02	-7.80	36.22	54	-17.78	AV
Vertical	19545.136	52.66	7.78	60.44	68.2	-7.76	Pk
Vertical	19545.136	39.39	7.78	47.17	54	-6.83	AV
Horizontal	6039.085	67.96	-18.93	49.03	68.2	-19.17	Pk
Horizontal	6039.085	54.23	-18.93	35.30	54	-18.70	AV
Horizontal	13030.151	57.47	-7.80	49.67	74	-24.33	Pk
Horizontal	13030.151	44.61	-7.80	36.81	54	-17.19	AV
Horizontal	19545.080	54.25	7.78	62.03	68.2	-6.17	Pk
Horizontal	19545.080	39.90	7.78	47.68	54	-6.32	AV

Note: The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-6: 6435-6515MHz) - 802.11ax40

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6445 MHz)-Above 1G							
Vertical	4679.000	68.48	-20.24	48.23	74	-25.77	Pk
Vertical	4679.000	54.96	-20.24	34.72	54	-19.28	AV
Vertical	12890.025	59.29	-7.95	51.34	74	-22.66	Pk
Vertical	12890.025	44.66	-7.95	36.71	54	-17.29	AV
Vertical	19335.197	53.05	7.76	60.81	68.2	-7.39	Pk
Vertical	19335.197	39.80	7.76	47.56	54	-6.44	AV
Horizontal	4679.076	68.62	-20.24	48.37	74	-25.63	Pk
Horizontal	4679.076	54.68	-20.24	34.44	54	-19.56	AV
Horizontal	12890.090	59.66	-7.95	51.71	74	-22.29	Pk
Horizontal	12890.090	44.26	-7.95	36.31	54	-17.69	AV
Horizontal	19335.148	51.60	7.76	59.36	68.2	-8.84	Pk
Horizontal	19335.148	39.19	7.76	46.95	54	-7.05	AV
middle Channel (6485 MHz)-Above 1G							
Vertical	6039.093	69.30	-18.93	50.37	68.2	-17.83	Pk
Vertical	6039.093	54.32	-18.93	35.39	54	-18.61	AV
Vertical	12970.152	57.97	-7.85	50.12	74	-23.88	Pk
Vertical	12970.152	44.24	-7.85	36.39	54	-17.61	AV
Vertical	19455.129	52.63	7.78	60.41	68.2	-7.79	Pk
Vertical	19455.129	39.03	7.78	46.81	54	-7.19	AV
Horizontal	6039.032	67.95	-18.93	49.01	68.2	-19.19	Pk
Horizontal	6039.032	54.42	-18.93	35.48	54	-18.52	AV
Horizontal	12970.166	57.69	-7.85	49.84	74	-24.16	Pk
Horizontal	12970.166	44.99	-7.85	37.14	54	-16.86	AV
Horizontal	19455.074	51.00	7.78	58.78	68.2	-9.42	Pk
Horizontal	19455.074	39.81	7.78	47.59	54	-6.41	AV
High Channel (6525 MHz)-Above 1G							
Vertical	6039.091	68.37	-18.93	49.44	68.2	-18.76	Pk
Vertical	6039.091	54.22	-18.93	35.29	54	-18.71	AV
Vertical	13050.008	55.18	-7.8	47.38	74	-26.62	Pk
Vertical	13050.008	44.22	-7.8	36.42	54	-17.58	AV
Vertical	19575.046	50.45	7.78	58.23	68.2	-9.97	Pk
Vertical	19575.046	39.79	7.78	47.57	54	-6.43	AV
Horizontal	6039.048	65.32	-18.93	46.39	68.2	-21.81	Pk
Horizontal	6039.048	54.13	-18.93	35.20	54	-18.80	AV
Horizontal	13050.025	58.11	-7.8	50.31	74	-23.69	Pk
Horizontal	13050.025	44.18	-7.8	36.38	54	-17.62	AV
Horizontal	19575.154	52.37	7.78	60.15	68.2	-8.05	Pk
Horizontal	19575.154	39.44	7.78	47.22	54	-6.78	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-6: 6435-6515MHz)- 802.11ax80

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6465 MHz)-Above 1G							
Vertical	4679.064	65.92	-20.24	45.68	74	-28.32	Pk
Vertical	4679.064	54.80	-20.24	34.55	54	-19.45	AV
Vertical	12930.030	58.27	-7.85	50.42	74	-23.58	Pk
Vertical	12930.030	44.89	-7.85	37.04	54	-16.96	AV
Vertical	19395.027	54.87	7.76	62.63	68.2	-5.57	Pk
Vertical	19395.027	39.69	7.76	47.45	54	-6.55	AV
Horizontal	4679.189	65.77	-20.24	45.53	74	-28.47	Pk
Horizontal	4679.189	54.42	-20.24	34.18	54	-19.82	AV
Horizontal	12930.091	57.77	-7.85	49.92	74	-24.08	Pk
Horizontal	12930.091	44.14	-7.85	36.29	54	-17.71	AV
Horizontal	19395.113	51.18	7.76	58.94	68.2	-9.26	Pk
Horizontal	19395.113	39.13	7.76	46.89	54	-7.11	AV
High Channel (6545 MHz)-Above 1G							
Vertical	6039.103	67.88	-18.93	48.95	68.2	-19.25	Pk
Vertical	6039.103	54.86	-18.93	35.93	54	-18.07	AV
Vertical	13090.138	56.91	-7.8	49.11	74	-24.89	Pk
Vertical	13090.138	44.68	-7.8	36.88	54	-17.12	AV
Vertical	19635.020	51.48	7.78	59.26	68.2	-8.94	Pk
Vertical	19635.020	39.46	7.78	47.24	54	-6.76	AV
Horizontal	6039.141	67.17	-18.93	48.24	68.2	-19.96	Pk
Horizontal	6039.141	54.40	-18.93	35.47	54	-18.53	AV
Horizontal	13090.074	58.99	-7.8	51.19	74	-22.81	Pk
Horizontal	13090.074	44.44	-7.8	36.64	54	-17.36	AV
Horizontal	19635.171	54.28	7.78	62.06	68.2	-6.14	Pk
Horizontal	19635.171	39.09	7.78	46.87	54	-7.13	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode:	TX(U-NII-6: 6435-6515MHz)- 802.11ax160

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6505 MHz)-Above 1G							
Vertical	4679.105	66.63	-20.24	46.39	74	-27.61	Pk
Vertical	4679.105	54.23	-20.24	33.99	54	-20.01	AV
Vertical	13010.146	59.47	-7.8	51.67	74	-22.33	Pk
Vertical	13010.146	44.92	-7.8	37.12	54	-16.88	AV
Vertical	19515.173	54.33	7.78	62.11	68.2	-6.09	Pk
Vertical	19515.173	39.70	7.78	47.48	54	-6.52	AV
Horizontal	4679.130	66.28	-20.24	46.04	74	-27.96	Pk
Horizontal	4679.130	54.59	-20.24	34.35	54	-19.65	AV
Horizontal	13010.174	59.03	-7.8	51.23	74	-22.77	Pk
Horizontal	13010.174	44.14	-7.8	36.34	54	-17.66	AV
Horizontal	19515.062	53.87	7.78	61.65	68.2	-6.55	Pk
Horizontal	19515.062	39.32	7.78	47.10	54	-6.90	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

U-NII-7: 6535-6865MHz

Test Mode ：	TX(U-NII-7: 6535-6865MHz) - 802.11ax20

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6535 MHz)-Above 1G							
Vertical	4680.122	65.48	-20.24	45.24	74	-28.76	Pk
Vertical	4680.122	54.52	-20.24	34.28	54	-19.72	AV
Vertical	13070.171	56.91	-7.8	49.11	68.2	-19.09	Pk
Vertical	13070.171	45.00	-7.8	37.20	54	-16.80	AV
Vertical	19605.192	52.91	7.78	60.69	68.2	-7.51	Pk
Vertical	19605.192	39.95	7.78	47.73	54	-6.27	AV
Horizontal	4679.042	67.19	-20.73	46.46	74	-27.54	Pk
Horizontal	4679.042	54.43	-20.73	33.70	54	-20.30	AV
Horizontal	13070.162	55.06	-7.8	47.26	68.2	-20.94	Pk
Horizontal	13070.162	44.39	-7.8	36.59	54	-17.41	AV
Horizontal	19605.056	50.47	7.78	58.25	68.2	-9.95	Pk
Horizontal	19605.056	39.76	7.78	47.54	54	-6.46	AV
Middle Channel (6695 MHz)-Above 1G							
Vertical	4592.111	66.51	-20.42	46.10	74	-27.90	Pk
Vertical	4592.111	54.26	-20.42	33.84	54	-20.16	AV
Vertical	13390.150	59.74	-7.53	52.21	68.2	-15.99	Pk
Vertical	13390.150	44.76	-7.53	37.23	54	-16.77	AV
Vertical	20085.167	53.53	8.00	61.53	68.2	-6.67	Pk
Vertical	20085.167	39.84	8.00	47.84	54	-6.16	AV
Horizontal	4592.103	67.71	-20.42	47.30	74	-26.70	Pk
Horizontal	4592.103	54.45	-20.42	34.04	54	-19.96	AV
Horizontal	13390.078	55.39	-7.53	47.86	68.2	-20.34	Pk
Horizontal	13390.078	44.80	-7.53	37.27	54	-16.73	AV
Horizontal	20085.164	53.30	8.00	61.30	68.2	-6.90	Pk
Horizontal	20085.164	39.35	8.00	47.35	54	-6.65	AV
High Channel (6855 MHz)-Above 1G							
Vertical	6039.029	67.49	-18.93	48.56	68.2	-19.64	Pk
Vertical	6039.029	54.07	-18.93	35.14	54	-18.86	AV
Vertical	13710.199	58.85	-7.31	51.54	74	-22.46	Pk
Vertical	13710.199	44.57	-7.31	37.26	54	-16.74	AV
Vertical	20565.062	53.99	3.72	57.71	68.2	-10.49	Pk
Vertical	20565.062	39.69	3.72	43.41	54	-10.59	AV
Horizontal	6039.013	67.84	-18.93	48.91	68.2	-19.29	Pk
Horizontal	6039.013	54.81	-18.93	35.88	54	-18.12	AV
Horizontal	13710.141	56.58	-7.31	49.27	74	-24.73	Pk
Horizontal	13710.141	44.16	-7.31	36.85	54	-17.15	AV
Horizontal	20565.096	53.23	3.72	56.95	68.2	-11.25	Pk
Horizontal	20565.096	39.44	3.72	43.16	54	-10.84	AV
High Channel (6875 MHz)-Above 1G							
Vertical	6039.200	66.30	-18.93	47.37	68.2	-20.83	Pk
Vertical	6039.200	54.41	-18.93	35.47	54	-18.53	AV
Vertical	13750.048	55.22	-7.31	47.91	74	-26.09	Pk

Vertical	13750.048	44.10	-7.31	36.79	54	-17.21	AV
Vertical	20625.182	52.53	3.71	56.24	68.2	-11.96	Pk
Vertical	20625.182	39.03	3.71	42.74	54	-11.26	AV
Horizontal	6039.098	65.25	-18.93	46.31	68.2	-21.89	Pk
Horizontal	6039.098	54.87	-18.93	35.94	54	-18.06	AV
Horizontal	13750.118	57.89	-7.31	50.58	74	-23.42	Pk
Horizontal	13750.118	44.68	-7.31	37.37	54	-16.63	AV
Horizontal	20625.028	50.67	3.71	54.38	68.2	-13.82	Pk
Horizontal	20625.028	39.92	3.71	43.63	54	-10.37	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-7: 6535-6865MHz) - 802.11ax40

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6565 MHz)-Above 1G							
Vertical	4679.087	68.60	-20.24	48.35	74	-25.65	Pk
Vertical	4679.087	54.38	-20.24	34.14	54	-19.86	AV
Vertical	13130.098	58.48	-7.65	50.83	74	-23.17	Pk
Vertical	13130.098	44.52	-7.65	36.87	54	-17.13	AV
Vertical	19695.188	53.24	7.78	61.02	68.2	-7.18	Pk
Vertical	19695.188	39.91	7.78	47.69	54	-6.31	AV
Horizontal	4679.140	67.85	-20.24	47.60	74	-26.40	Pk
Horizontal	4679.140	54.76	-20.24	34.52	54	-19.48	AV
Horizontal	13130.103	55.53	-7.65	47.88	74	-26.12	Pk
Horizontal	13130.103	44.38	-7.65	36.73	54	-17.27	AV
Horizontal	19695.184	53.28	7.78	61.06	68.2	-7.14	Pk
Horizontal	19695.184	39.84	7.78	47.62	54	-6.38	AV
middle Channel (6685 MHz)-Above 1G							
Vertical	6039.024	67.42	-18.93	48.49	68.2	-19.71	Pk
Vertical	6039.024	54.88	-18.93	35.95	54	-18.05	AV
Vertical	13370.145	58.25	-7.53	50.72	74	-23.28	Pk
Vertical	13370.145	44.54	-7.53	37.01	54	-16.99	AV
Vertical	20055.100	53.44	8	61.44	68.2	-6.76	Pk
Vertical	20055.100	39.63	8	47.63	54	-6.37	AV
Horizontal	6039.145	65.14	-18.93	46.21	68.2	-21.99	Pk
Horizontal	6039.145	54.34	-18.93	35.40	54	-18.60	AV
Horizontal	13370.035	55.19	-7.53	47.66	74	-26.34	Pk
Horizontal	13370.035	44.20	-7.53	36.67	54	-17.33	AV
Horizontal	20055.097	50.35	8	58.35	68.2	-9.85	Pk
Horizontal	20055.097	39.48	8	47.48	54	-6.52	AV
High Channel (6845 MHz)-Above 1G							
Vertical	6039.057	67.60	-18.93	48.66	68.2	-19.54	Pk
Vertical	6039.057	54.38	-18.93	35.45	54	-18.55	AV
Vertical	13690.094	56.53	-7.31	49.22	74	-24.78	Pk
Vertical	13690.094	44.82	-7.31	37.51	54	-16.49	AV
Vertical	20535.199	52.60	3.72	56.32	68.2	-11.88	Pk
Vertical	20535.199	39.58	3.72	43.30	54	-10.70	AV
Horizontal	6039.182	65.24	-18.93	46.30	68.2	-21.90	Pk
Horizontal	6039.182	54.47	-18.93	35.54	54	-18.46	AV
Horizontal	13690.180	56.56	-7.31	49.25	74	-24.75	Pk
Horizontal	13690.180	44.63	-7.31	37.32	54	-16.68	AV
Horizontal	20535.140	54.64	3.72	58.36	68.2	-9.84	Pk
Horizontal	20535.140	39.44	3.72	43.16	54	-10.84	AV
High Channel (6885 MHz)-Above 1G							
Vertical	6039.042	69.81	-18.93	50.88	68.2	-17.32	Pk
Vertical	6039.042	54.10	-18.93	35.16	54	-18.84	AV
Vertical	13770.092	55.98	-7.31	48.67	74	-25.33	Pk
Vertical	13770.092	44.43	-7.31	37.12	54	-16.88	AV
Vertical	20655.122	52.44	3.71	56.15	68.2	-12.05	Pk

Vertical	20655.122	39.30	3.71	43.01	54	-10.99	AV
Horizontal	6039.030	65.07	-18.93	46.13	68.2	-22.07	Pk
Horizontal	6039.030	54.38	-18.93	35.45	54	-18.55	AV
Horizontal	13770.036	55.13	-7.31	47.82	74	-26.18	Pk
Horizontal	13770.036	44.99	-7.31	37.68	54	-16.32	AV
Horizontal	20655.187	50.00	3.71	53.71	68.2	-14.49	Pk
Horizontal	20655.187	39.92	3.71	43.63	54	-10.37	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-7: 6535-6865MHz)- 802.11ax80

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6625 MHz)-Above 1G							
Vertical	4679.157	65.70	-20.24	45.45	74	-28.55	Pk
Vertical	4679.157	54.43	-20.24	34.19	54	-19.81	AV
Vertical	13250.162	59.10	-7.61	51.49	74	-22.51	Pk
Vertical	13250.162	44.50	-7.61	36.89	54	-17.11	AV
Vertical	19875.001	54.10	7.78	61.88	68.2	-6.32	Pk
Vertical	19875.001	39.96	7.78	47.74	54	-6.26	AV
Horizontal	4679.154	67.87	-20.24	47.63	74	-26.37	Pk
Horizontal	4679.154	54.73	-20.24	34.49	54	-19.51	AV
Horizontal	13250.161	59.81	-7.61	52.20	74	-21.80	Pk
Horizontal	13250.161	44.22	-7.61	36.61	54	-17.39	AV
Horizontal	19875.138	52.96	7.78	60.74	68.2	-7.46	Pk
Horizontal	19875.138	39.74	7.78	47.52	54	-6.48	AV
Middle Channel (6705 MHz)-Above 1G							
Vertical	6039.051	69.73	-18.93	50.80	68.2	-17.40	Pk
Vertical	6039.051	54.34	-18.93	35.41	54	-18.59	AV
Vertical	13410.018	59.49	-7.4	52.09	74	-21.91	Pk
Vertical	13410.018	44.70	-7.4	37.30	54	-16.70	AV
Vertical	20115.095	54.92	6.35	61.27	68.2	-6.93	Pk
Vertical	20115.095	39.61	6.35	45.96	54	-8.04	AV
Horizontal	6039.094	65.33	-18.93	46.40	68.2	-21.80	Pk
Horizontal	6039.094	54.73	-18.93	35.79	54	-18.21	AV
Horizontal	13410.160	56.03	-7.4	48.63	74	-25.37	Pk
Horizontal	13410.160	44.64	-7.4	37.24	54	-16.76	AV
Horizontal	20115.162	50.72	6.35	57.07	68.2	-11.13	Pk
Horizontal	20115.162	39.42	6.35	45.77	54	-8.23	AV
High Channel (6785 MHz)-Above 1G							
Vertical	6039.011	67.43	-18.93	48.50	68.2	-19.70	Pk
Vertical	6039.011	54.76	-18.93	35.83	54	-18.17	AV
Vertical	13570.100	59.09	-7.39	51.70	74	-22.30	Pk
Vertical	13570.100	44.58	-7.39	37.19	54	-16.81	AV
Vertical	20355.124	54.85	5.82	60.67	68.2	-7.53	Pk
Vertical	20355.124	39.18	5.82	45.00	54	-9.00	AV
Horizontal	6039.115	65.32	-18.93	46.38	68.2	-21.82	Pk
Horizontal	6039.115	54.36	-18.93	35.43	54	-18.57	AV
Horizontal	13570.040	58.27	-7.39	50.88	74	-23.12	Pk
Horizontal	13570.040	44.19	-7.39	36.80	54	-17.20	AV
Horizontal	20355.143	52.43	5.82	58.25	68.2	-9.95	Pk
Horizontal	20355.143	39.42	5.82	45.24	54	-8.76	AV
High Channel (6865 MHz)-Above 1G							
Vertical	6039.115	68.74	-18.93	49.81	68.2	-18.39	Pk
Vertical	6039.115	54.03	-18.93	35.09	54	-18.91	AV
Vertical	13730.014	58.37	-7.23	51.14	74	-22.86	Pk
Vertical	13730.014	44.86	-7.23	37.63	54	-16.37	AV

Vertical	20595.151	50.56	3.51	54.07	68.2	-14.13	Pk
Vertical	20595.151	39.79	3.51	43.30	54	-10.70	AV
Horizontal	6039.151	66.98	-18.93	48.05	68.2	-20.15	Pk
Horizontal	6039.151	54.68	-18.93	35.75	54	-18.25	AV
Horizontal	13730.007	57.12	-7.23	49.89	74	-24.11	Pk
Horizontal	13730.007	44.65	-7.23	37.42	54	-16.58	AV
Horizontal	20595.170	55.00	3.51	58.51	68.2	-9.69	Pk
Horizontal	20595.170	39.26	3.51	42.77	54	-11.23	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode:	TX(U-NII-7: 6535-6865MHz)- 802.11ax160

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6665 MHz)-Above 1G							
Vertical	4679.007	66.17	-20.24	45.93	74	-28.07	Pk
Vertical	4679.007	54.07	-20.24	33.83	54	-20.17	AV
Vertical	13330.048	59.32	-7.5	51.82	74	-22.18	Pk
Vertical	13330.048	44.07	-7.5	36.57	54	-17.43	AV
Vertical	19995.023	54.80	8	62.80	68.2	-5.40	Pk
Vertical	19995.023	39.45	8	47.45	54	-6.55	AV
Horizontal	4679.134	65.80	-20.24	45.56	74	-28.44	Pk
Horizontal	4679.134	54.65	-20.24	34.41	54	-19.59	AV
Horizontal	13330.092	57.73	-7.5	50.23	74	-23.77	Pk
Horizontal	13330.092	44.88	-7.5	37.38	54	-16.62	AV
Horizontal	19995.070	54.88	8	62.88	68.2	-5.32	Pk
Horizontal	19995.070	39.37	8	47.37	54	-6.63	AV
High Channel (6825 MHz)-Above 1G							
Vertical	6039.152	66.03	-18.93	47.10	68.2	-21.10	Pk
Vertical	6039.152	54.86	-18.93	35.92	54	-18.08	AV
Vertical	13650.068	58.36	-7.3	51.06	74	-22.94	Pk
Vertical	13650.068	44.13	-7.3	36.83	54	-17.17	AV
Vertical	20475.056	53.87	4.27	58.14	68.2	-10.06	Pk
Vertical	20475.056	39.28	4.27	43.55	54	-10.45	AV
Horizontal	6039.159	67.87	-18.93	48.93	68.2	-19.27	Pk
Horizontal	6039.159	54.20	-18.93	35.27	54	-18.73	AV
Horizontal	13650.100	59.66	-7.3	52.36	74	-21.64	Pk
Horizontal	13650.100	44.62	-7.3	37.32	54	-16.68	AV
Horizontal	20475.010	53.69	4.27	57.96	68.2	-10.24	Pk
Horizontal	20475.010	39.54	4.27	43.81	54	-10.19	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

U-NII-8: 6885-7115MHz

Test Mode ：	TX(U-NII-8: 6885-7115MHz) - 802.11ax20

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6895 MHz)-Above 1G							
Vertical	4679.829	69.18	-20.24	48.94	74	-25.06	Pk
Vertical	4679.829	54.56	-20.24	34.32	54	-19.68	AV
Vertical	13790.151	56.49	-7.23	49.26	68.2	-18.94	Pk
Vertical	13790.151	44.51	-7.23	37.28	54	-16.72	AV
Vertical	20685.184	53.57	3.51	57.08	68.2	-11.12	Pk
Vertical	20685.184	39.75	3.51	43.26	54	-10.74	AV
Horizontal	4679.120	66.21	-20.73	45.48	74	-28.52	Pk
Horizontal	4679.120	54.54	-20.73	33.81	54	-20.19	AV
Horizontal	13790.031	55.48	-7.23	48.25	68.2	-19.95	Pk
Horizontal	13790.031	44.92	-7.23	37.69	54	-16.31	AV
Horizontal	20685.111	53.03	3.51	56.54	68.2	-11.66	Pk
Horizontal	20685.111	39.75	3.51	43.26	54	-10.74	AV
middle Channel (6995 MHz)-Above 1G							
Vertical	4592.196	66.01	-20.42	45.60	74	-28.40	Pk
Vertical	4592.196	54.12	-20.42	33.70	54	-20.30	AV
Vertical	13990.035	55.07	-6.83	48.24	68.2	-19.96	Pk
Vertical	13990.035	44.41	-6.83	37.58	54	-16.42	AV
Vertical	20985.007	53.32	-1.95	51.37	68.2	-16.83	Pk
Vertical	20985.007	39.16	-1.95	37.21	54	-16.79	AV
Horizontal	4592.131	68.86	-20.42	48.44	74	-25.56	Pk
Horizontal	4592.131	54.67	-20.42	34.26	54	-19.74	AV
Horizontal	13990.087	55.31	-6.83	48.48	68.2	-19.72	Pk
Horizontal	13990.087	44.25	-6.83	37.42	54	-16.58	AV
Horizontal	20985.047	54.50	-1.95	52.55	68.2	-15.65	Pk
Horizontal	20985.047	39.75	-1.95	37.80	54	-16.20	AV
High Channel (7115 MHz)-Above 1G							
Vertical	4592.090	68.70	-20.42	48.28	68.2	-19.92	Pk
Vertical	4592.090	54.05	-20.42	33.63	54	-20.37	AV
Vertical	14230.181	55.99	-7.12	48.87	74	-25.13	Pk
Vertical	14230.181	44.35	-7.12	37.23	54	-16.77	AV
Vertical	21345.013	53.55	-1.91	51.64	68.2	-16.56	Pk
Vertical	21345.013	39.24	-1.91	37.33	54	-16.67	AV
Horizontal	6039.045	69.74	-18.93	50.81	68.2	-17.39	Pk
Horizontal	6039.045	54.27	-18.93	35.34	54	-18.66	AV
Horizontal	14230.001	55.01	-7.12	47.89	74	-26.11	Pk
Horizontal	14230.001	44.35	-7.12	37.23	54	-16.77	AV
Horizontal	21345.133	54.00	-1.91	52.09	68.2	-16.11	Pk
Horizontal	21345.133	39.96	-1.91	38.05	54	-15.95	AV

Note: The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-8: 6885-7115MHz) - 802.11ax40

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6925 MHz)-Above 1G							
Vertical	4679.158	65.26	-20.24	45.02	74	-28.98	Pk
Vertical	4679.158	54.77	-20.24	34.52	54	-19.48	AV
Vertical	13850.110	58.05	-7.23	50.82	74	-23.18	Pk
Vertical	13850.110	44.71	-7.23	37.48	54	-16.52	AV
Vertical	20775.063	52.90	3.51	56.41	68.2	-11.79	Pk
Vertical	20775.063	39.83	3.51	43.34	54	-10.66	AV
Horizontal	4679.105	68.50	-20.24	48.26	74	-25.74	Pk
Horizontal	4679.105	54.96	-20.24	34.72	54	-19.28	AV
Horizontal	13850.004	57.01	-7.23	49.78	74	-24.22	Pk
Horizontal	13850.004	44.86	-7.23	37.63	54	-16.37	AV
Horizontal	20775.083	50.33	3.51	53.84	68.2	-14.36	Pk
Horizontal	20775.083	39.24	3.51	42.75	54	-11.25	AV
middle Channel (6965 MHz)-Above 1G							
Vertical	6039.083	69.90	-18.93	50.97	68.2	-17.23	Pk
Vertical	6039.083	54.80	-18.93	35.87	54	-18.13	AV
Vertical	13930.029	58.79	-6.83	51.96	74	-22.04	Pk
Vertical	13930.029	44.60	-6.83	37.77	54	-16.23	AV
Vertical	20895.126	52.28	-1.95	50.33	68.2	-17.87	Pk
Vertical	20895.126	39.53	-1.95	37.58	54	-16.42	AV
Horizontal	6039.093	69.93	-18.93	51.00	68.2	-17.20	Pk
Horizontal	6039.093	54.59	-18.93	35.66	54	-18.34	AV
Horizontal	13930.194	58.82	-6.83	51.99	74	-22.01	Pk
Horizontal	13930.194	44.98	-6.83	38.15	54	-15.85	AV
Horizontal	20895.028	51.53	-1.95	49.58	68.2	-18.62	Pk
Horizontal	20895.028	39.43	-1.95	37.48	54	-16.52	AV
High Channel (7085 MHz)-Above 1G							
Vertical	6039.169	66.67	-18.93	47.74	68.2	-20.46	Pk
Vertical	6039.169	54.02	-18.93	35.09	54	-18.91	AV
Vertical	14170.078	58.43	-7.12	51.31	74	-22.69	Pk
Vertical	14170.078	44.30	-7.12	37.18	54	-16.82	AV
Vertical	21255.059	50.02	-1.91	48.11	68.2	-20.09	Pk
Vertical	21255.059	39.33	-1.91	37.42	54	-16.58	AV
Horizontal	6039.156	68.68	-18.93	49.75	68.2	-18.45	Pk
Horizontal	6039.156	54.48	-18.93	35.55	54	-18.45	AV
Horizontal	14170.021	57.84	-7.12	50.72	74	-23.28	Pk
Horizontal	14170.021	44.89	-7.12	37.77	54	-16.23	AV
Horizontal	21255.163	53.41	-1.91	51.50	68.2	-16.70	Pk
Horizontal	21255.163	39.99	-1.91	38.08	54	-15.92	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode :	TX(U-NII-8: 6885-7115MHz) - 802.11ax80

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6945 MHz)-Above 1G							
Vertical	4679.199	69.20	-20.24	48.96	74	-25.04	Pk
Vertical	4679.199	54.87	-20.24	34.63	54	-19.37	AV
Vertical	13890.022	55.48	-7.23	48.25	74	-25.75	Pk
Vertical	13890.022	44.85	-7.23	37.62	54	-16.38	AV
Vertical	20835.161	51.88	3.51	55.39	68.2	-12.81	Pk
Vertical	20835.161	39.36	3.51	42.87	54	-11.13	AV
Horizontal	4679.033	66.68	-20.24	46.44	74	-27.56	Pk
Horizontal	4679.033	54.80	-20.24	34.56	54	-19.44	AV
Horizontal	13890.008	58.59	-7.23	51.36	74	-22.64	Pk
Horizontal	13890.008	44.27	-7.23	37.04	54	-16.96	AV
Horizontal	20835.186	54.97	3.51	58.48	68.2	-9.72	Pk
Horizontal	20835.186	39.29	3.51	42.80	54	-11.20	AV
High Channel (7025 MHz)-Above 1G							
Vertical	6039.122	65.20	-18.93	46.27	68.2	-21.93	Pk
Vertical	6039.122	54.53	-18.93	35.60	54	-18.40	AV
Vertical	14050.177	58.24	-6.83	51.41	74	-22.59	Pk
Vertical	14050.177	44.45	-6.83	37.62	54	-16.38	AV
Vertical	21075.068	52.95	-1.95	51.00	68.2	-17.20	Pk
Vertical	21075.068	39.67	-1.95	37.72	54	-16.28	AV
Horizontal	6039.156	67.47	-18.93	48.54	68.2	-19.66	Pk
Horizontal	6039.156	54.17	-18.93	35.24	54	-18.76	AV
Horizontal	14050.114	59.01	-6.83	52.18	74	-21.82	Pk
Horizontal	14050.114	44.39	-6.83	37.56	54	-16.44	AV
Horizontal	21075.000	54.92	-1.95	52.97	68.2	-15.23	Pk
Horizontal	21075.000	39.80	-1.95	37.85	54	-16.15	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

Test Mode:	TX(U-NII-8: 6885-7115MHz) - 802.11ax160

Polar	Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Over	Detector Type
(H/V)	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel (6985 MHz)-Above 1G							
Vertical	4679.034	65.78	-20.24	45.54	74	-28.46	Pk
Vertical	4679.034	54.89	-20.24	34.65	54	-19.35	AV
Vertical	13970.071	56.38	-6.83	49.55	74	-24.45	Pk
Vertical	13970.071	44.47	-6.83	37.64	54	-16.36	AV
Vertical	20955.105	53.46	-1.95	51.51	68.2	-16.69	Pk
Vertical	20955.105	39.92	-1.95	37.97	54	-16.03	AV
Horizontal	4679.154	66.02	-20.24	45.78	74	-28.22	Pk
Horizontal	4679.154	54.43	-20.24	34.18	54	-19.82	AV
Horizontal	13970.169	58.16	-6.83	51.33	74	-22.67	Pk
Horizontal	13970.169	44.64	-6.83	37.81	54	-16.19	AV
Horizontal	20955.133	51.10	-1.95	49.15	68.2	-19.05	Pk
Horizontal	20955.133	39.34	-1.95	37.39	54	-16.61	AV

Note: PK value is lower than the Average value limit, So average didn't record.
The 26.5-40G amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.
Emission level (dBuV/m) = 20 log Emission level (uV/m).
Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.
Test Mode is MIMO Mode (4T4R).

- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 20 Frequency(MHz): 5955

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5892.750	V	47.95	68.20
5925.000	V	44.93	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5902.375	H	47.27	68.20
5925.00	H	46.27	68.20

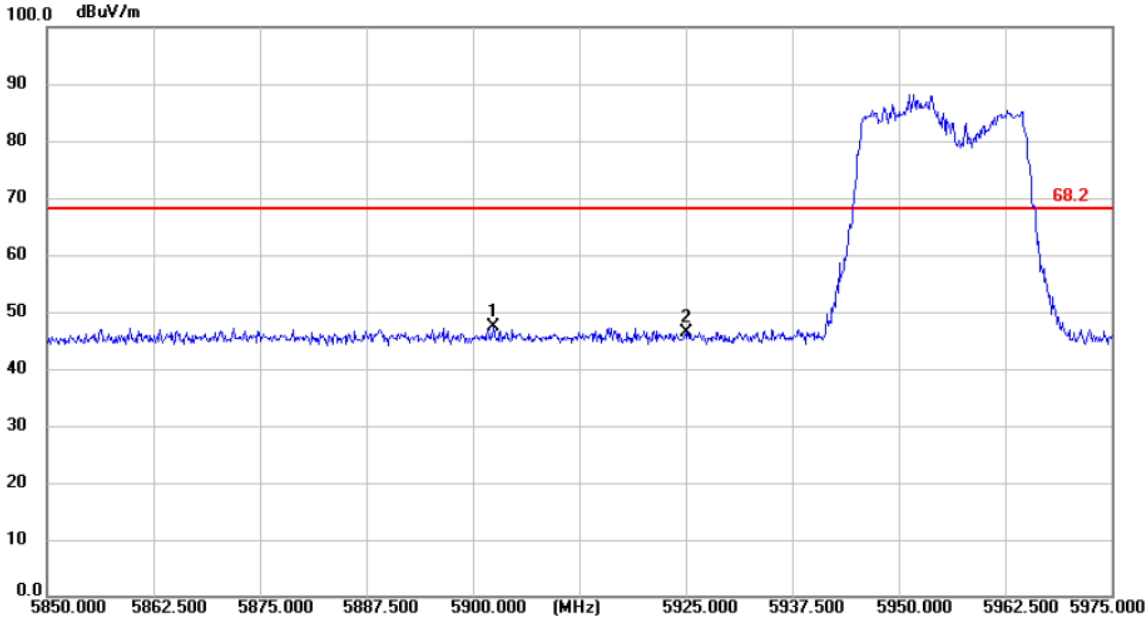
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L – Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 20

☒5955 Ant.Pol H

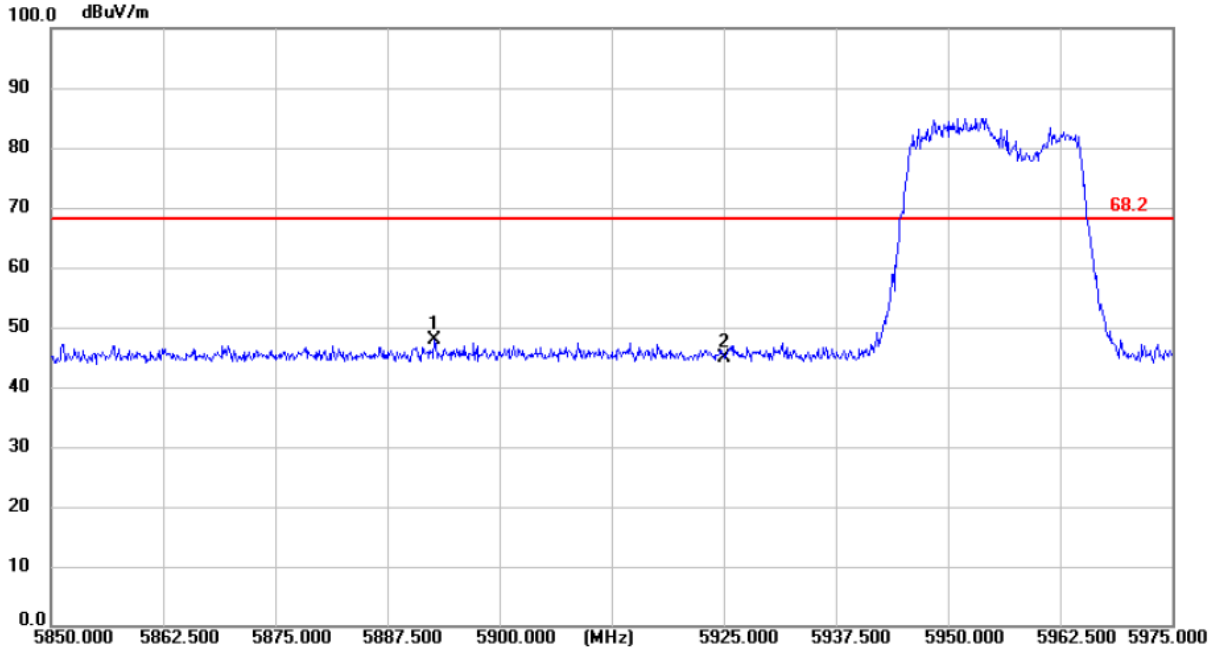


U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 20

☒5955 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 40 Frequency(MHz): 5965

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5876.700	V	51.08	68.20
5925.000	V	45.22	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5911.800	H	47.65	68.20
5925.000	H	45.12	68.20

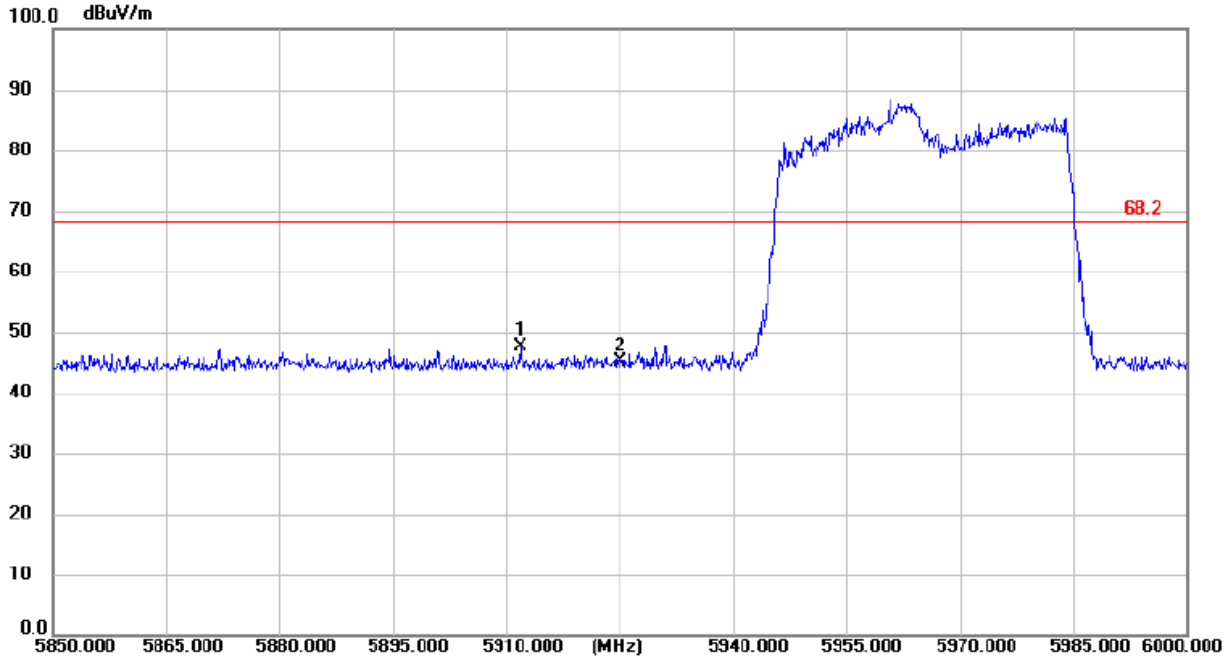
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 40

☒5965 Ant.Pol H

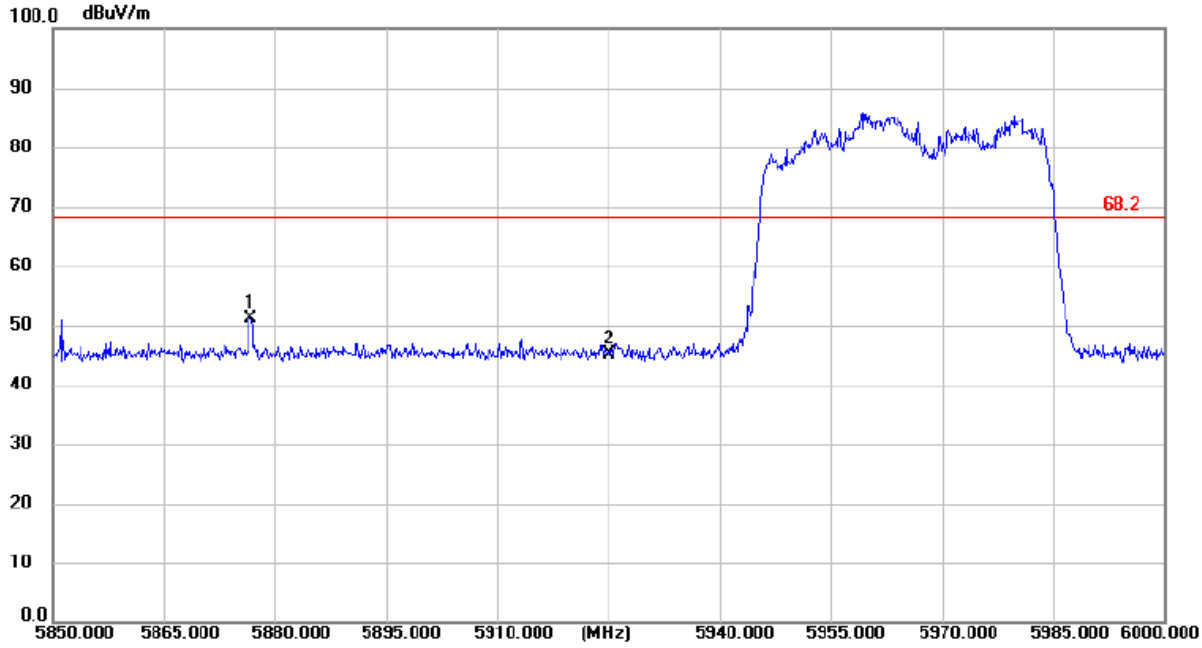


U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 40

☒5965 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 80 Frequency(MHz): 5985

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5856.200	V	47.22	68.20
5925.000	V	45.02	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5862.200	H	47.12	68.20
5925.000	H	45.27	68.20

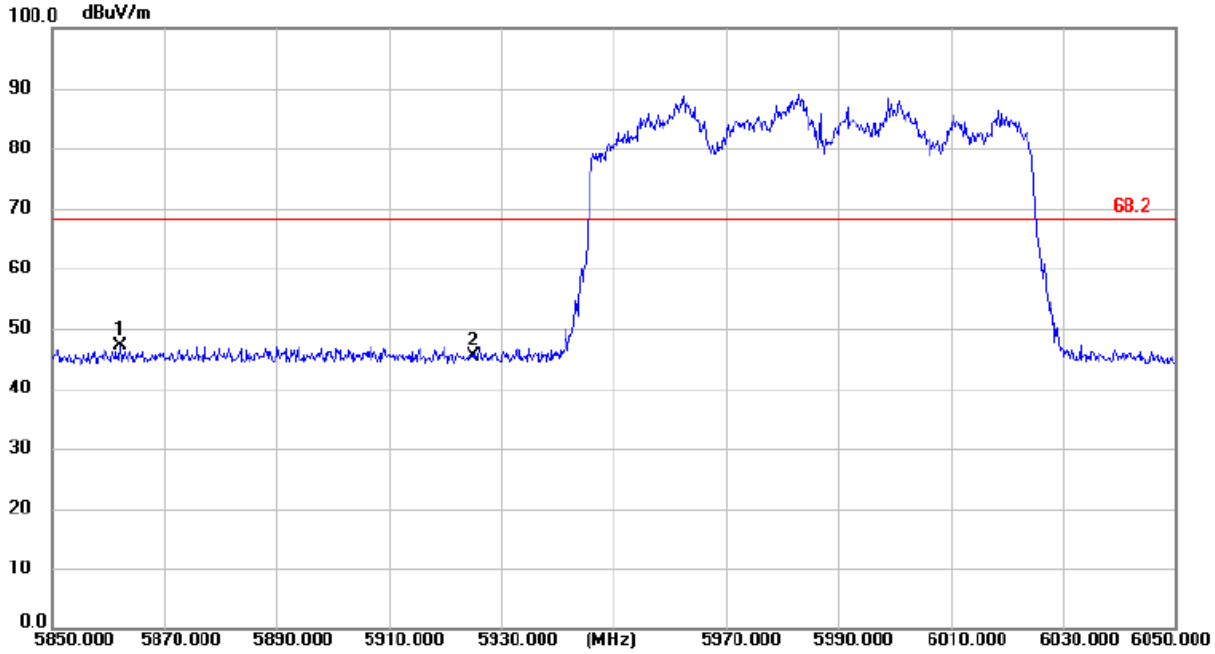
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 80

☒5985 Ant.Pol H

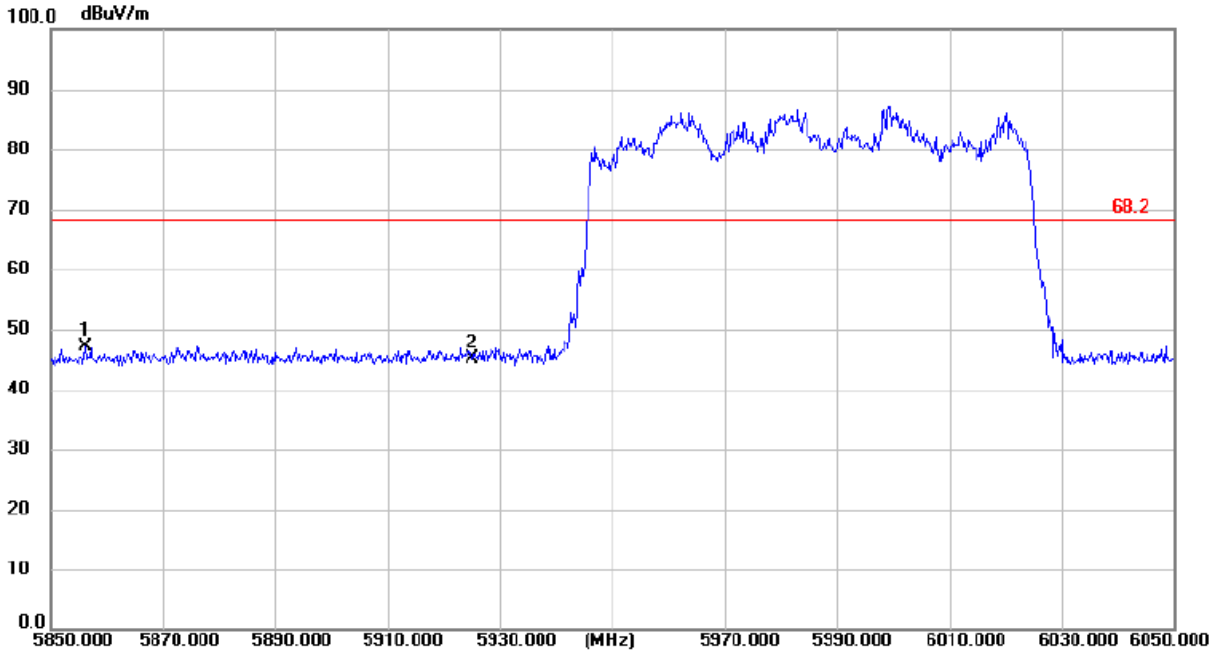


U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 80

☒5985 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 160 Frequency(MHz): 6025

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5907.000	V	47.02	68.20
5925.000	V	44.66	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
5864.400	H	46.84	68.20
5925.000	H	44.37	68.20

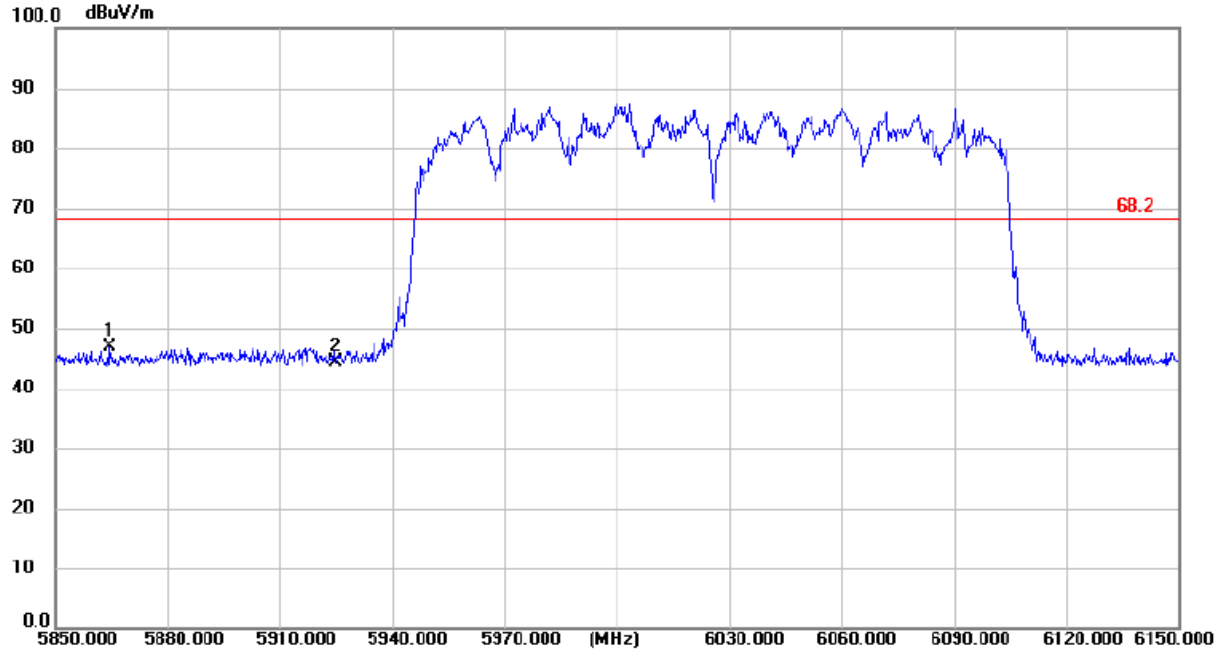
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 160

☒6025 Ant.Pol H

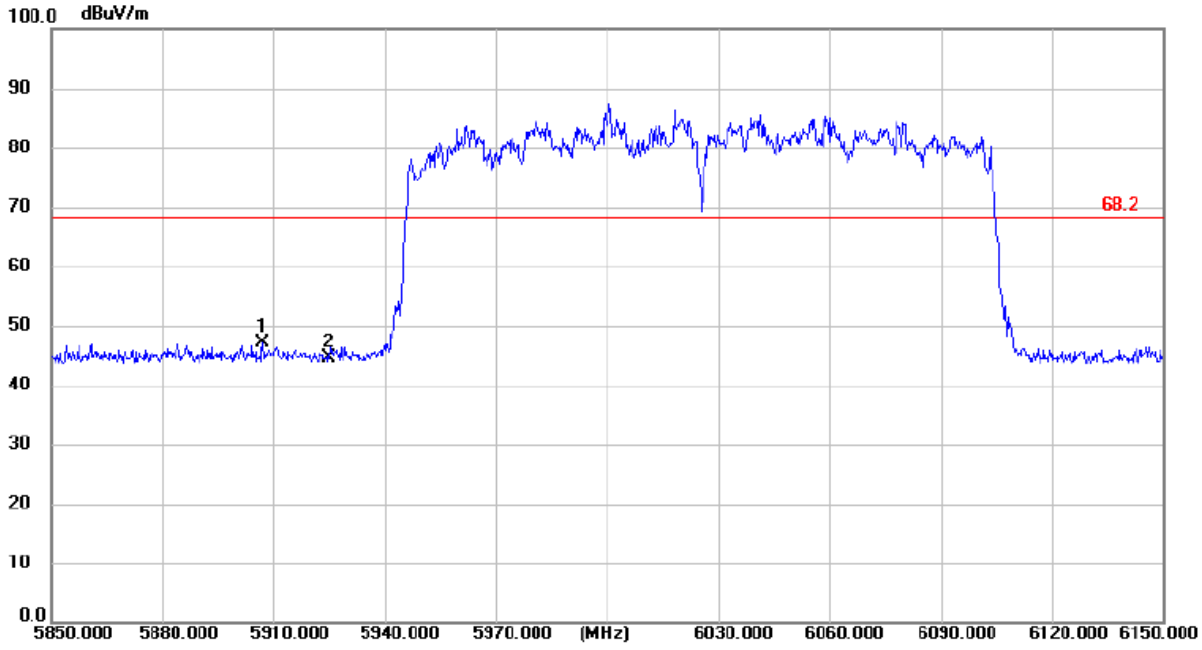


U-NII - 5

Test Model Undesirable radiated Spurious Emission in Restricted Band (5925-6425MHz)

☒802.11AX 160

☒6025 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 20 Frequency(MHz): 7115

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7125.000	V	67.66	68.20
7160.000	V	49.71	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7125.000	H	67.24	68.20
7228.400	H	49.28	68.20

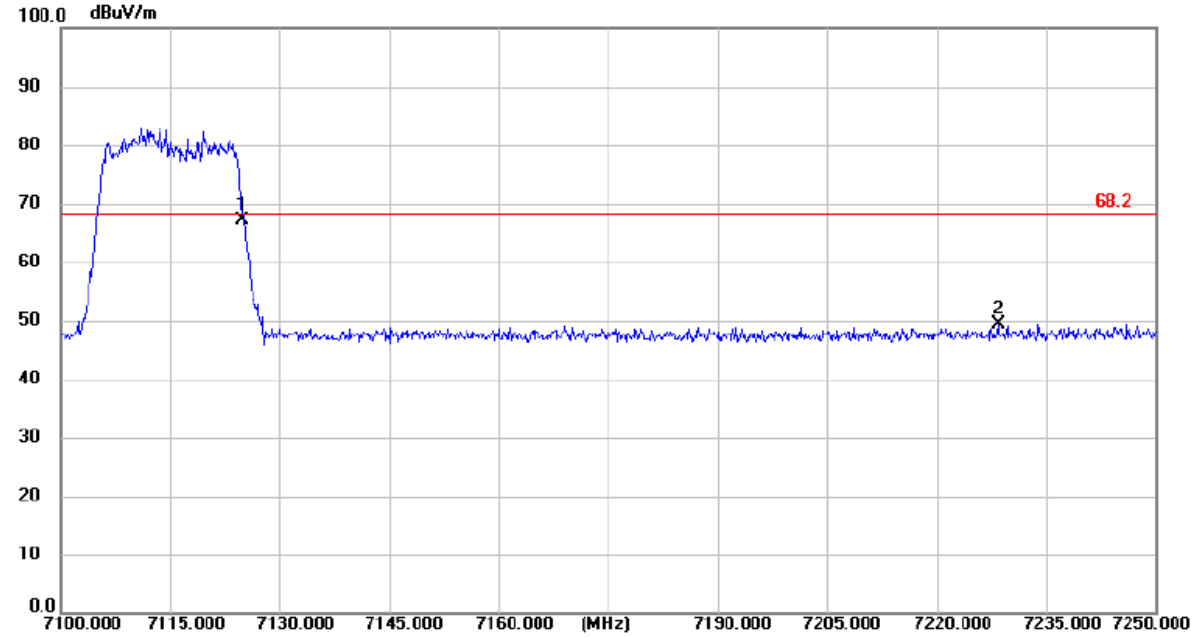
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 20

☒7115 Ant.Pol H

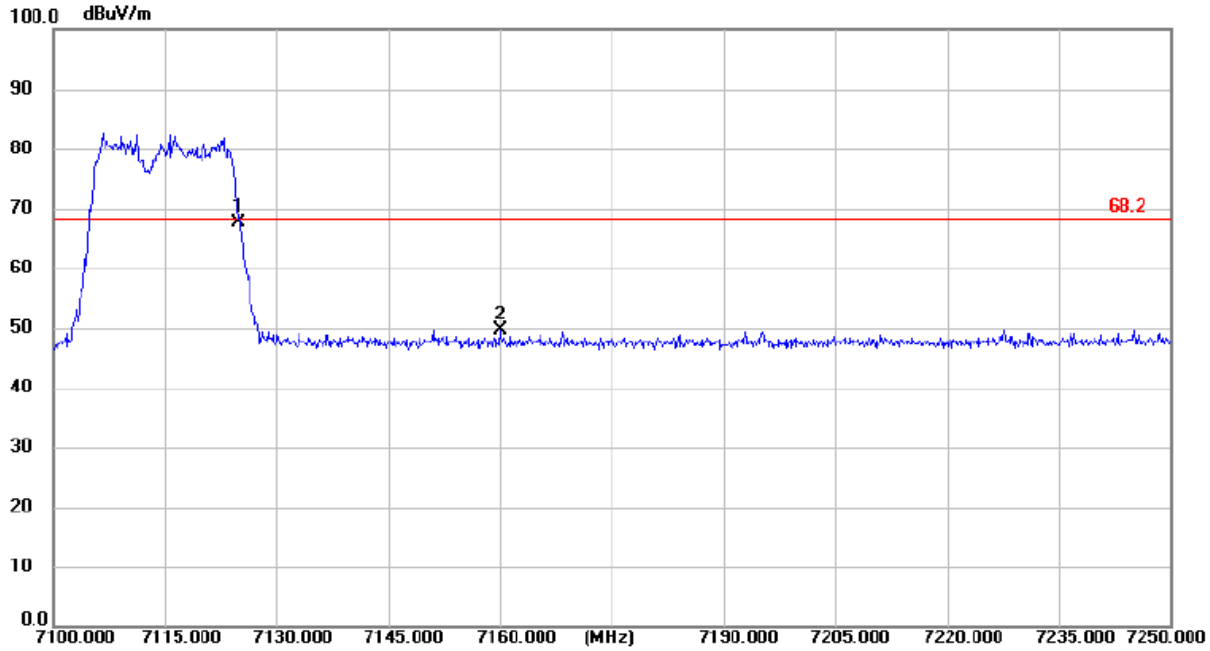


U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 20

☒7115 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 40 Frequency(MHz): 7085

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7125.000	V	47.48	68.20
7212.400	V	49.61	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7125.000	H	47.28	68.20
7199.000	H	49.62	68.20

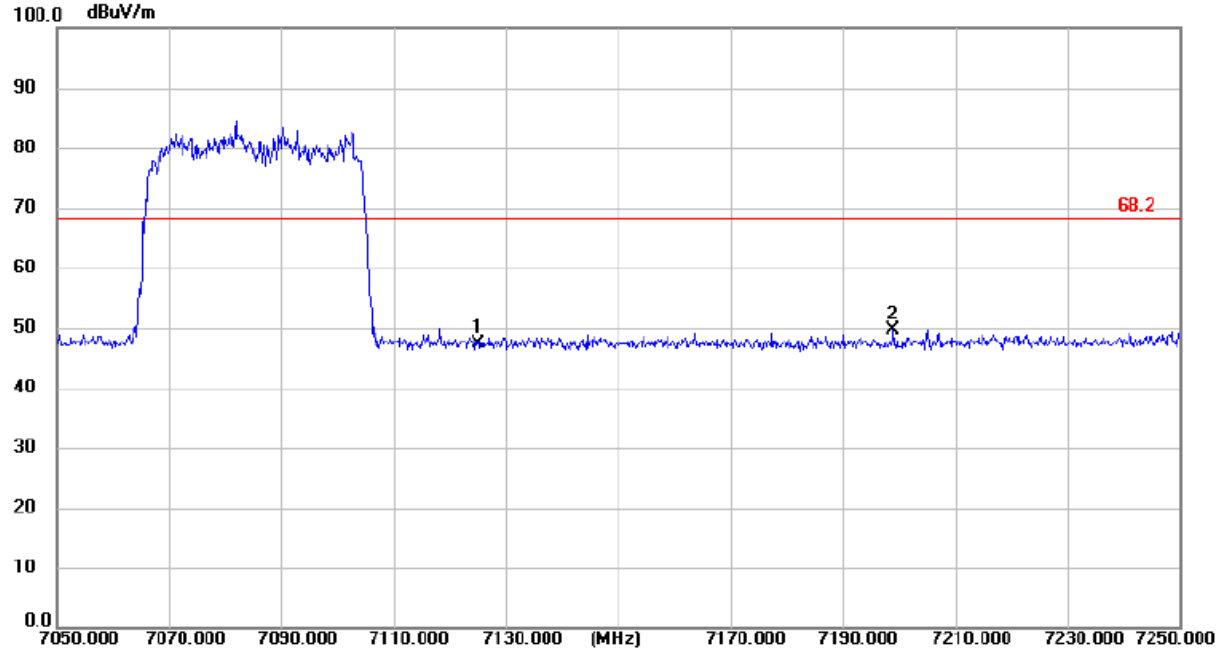
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 40

☒7085 Ant.Pol H

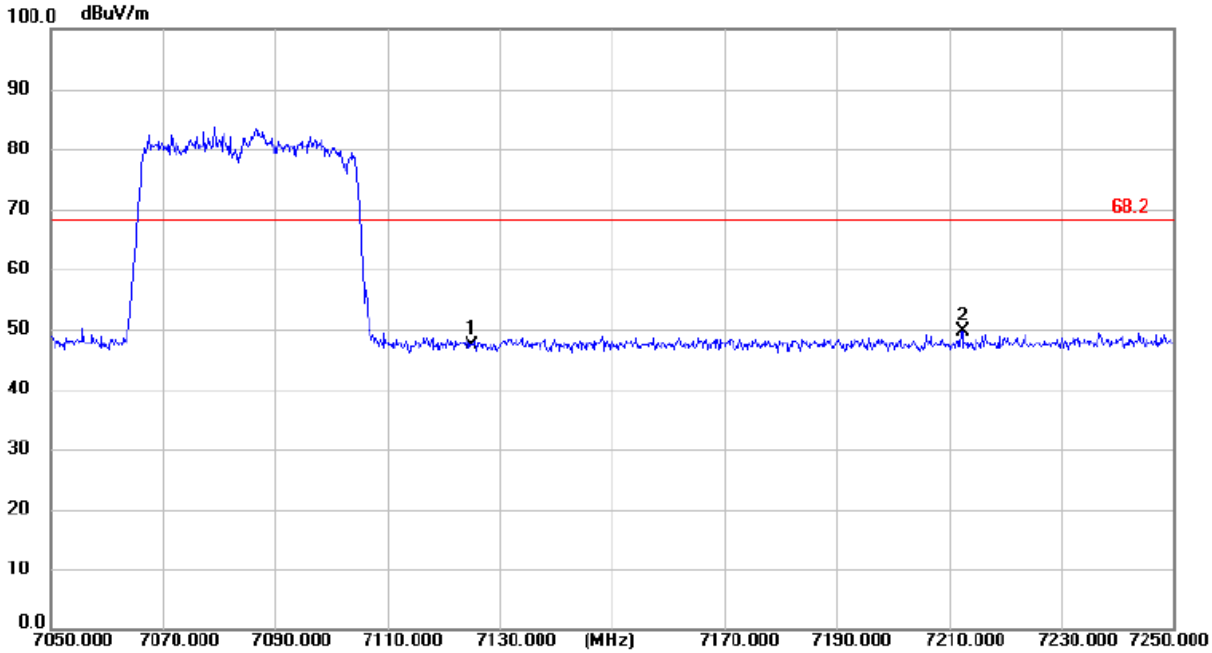


U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 40

☒7085 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 80 Frequency(MHz): 7025

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7085.000	V	48.05	68.20
7153.200	V	49.00	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7085.000	H	47.69	68.20
7135.200	H	49.66	68.20

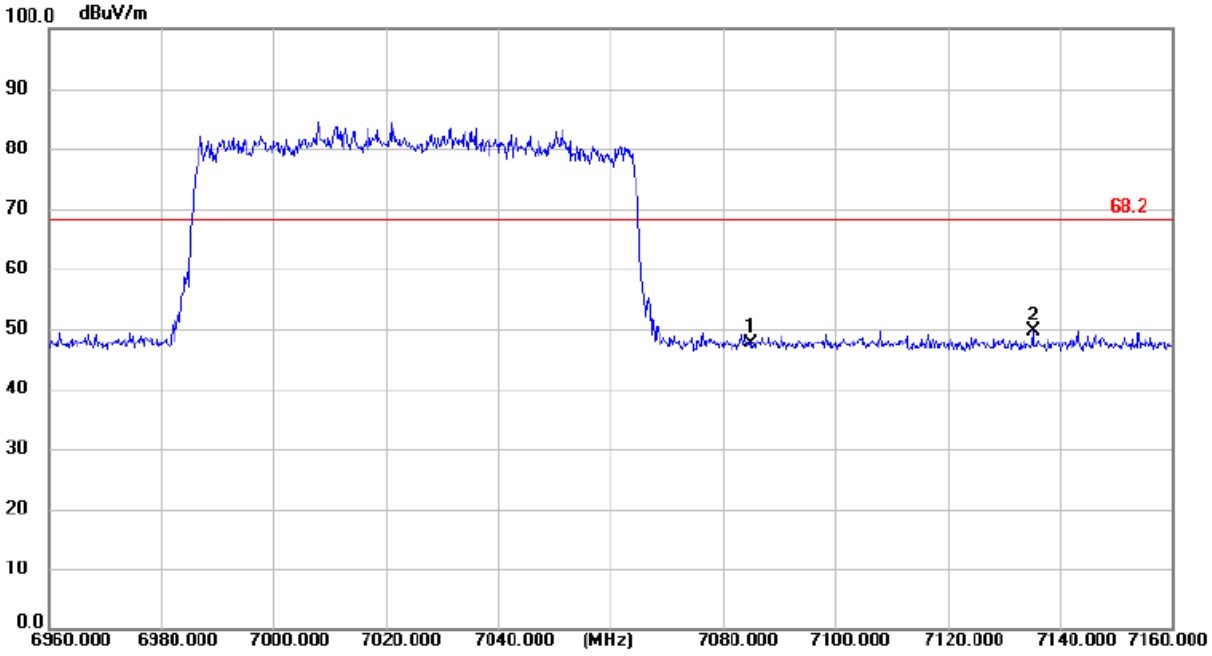
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 80

☒7025 Ant.Pol H

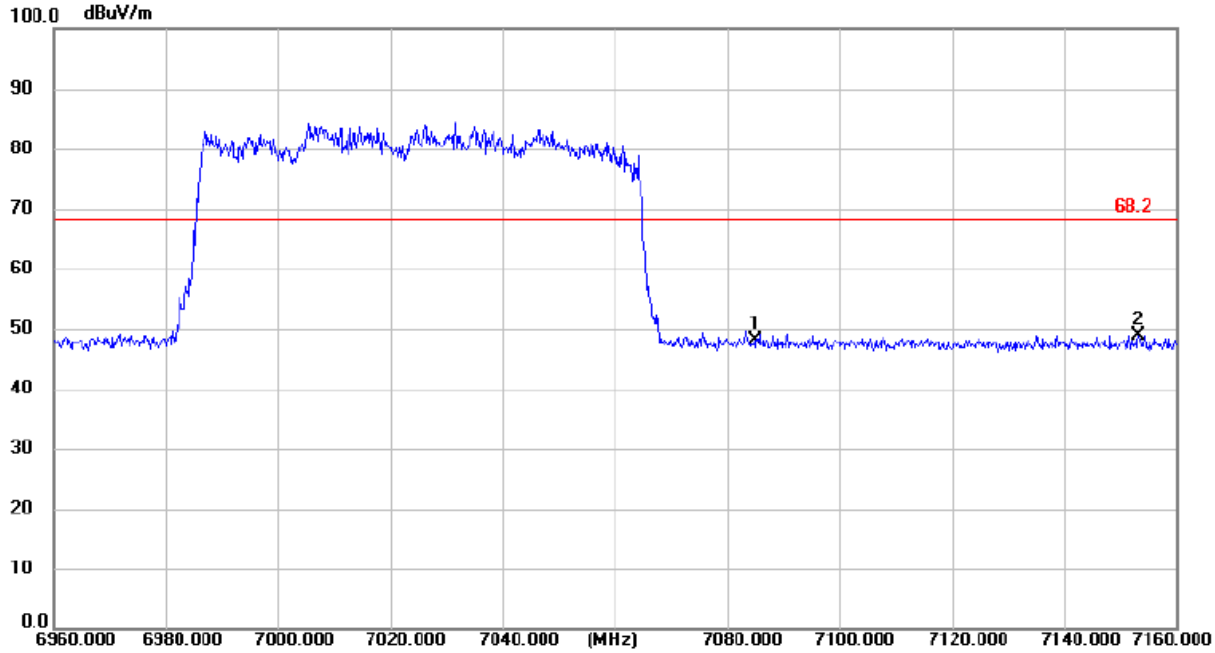


U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 80

☒7025 Ant.Pol V



- ☒Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11AX 160 Frequency(MHz): 6985

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7125.000	V	46.49	68.20
7172.860	V	48.98	68.20

Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)
7125.000	H	46.21	68.20
7188.820	H	48.57	68.20

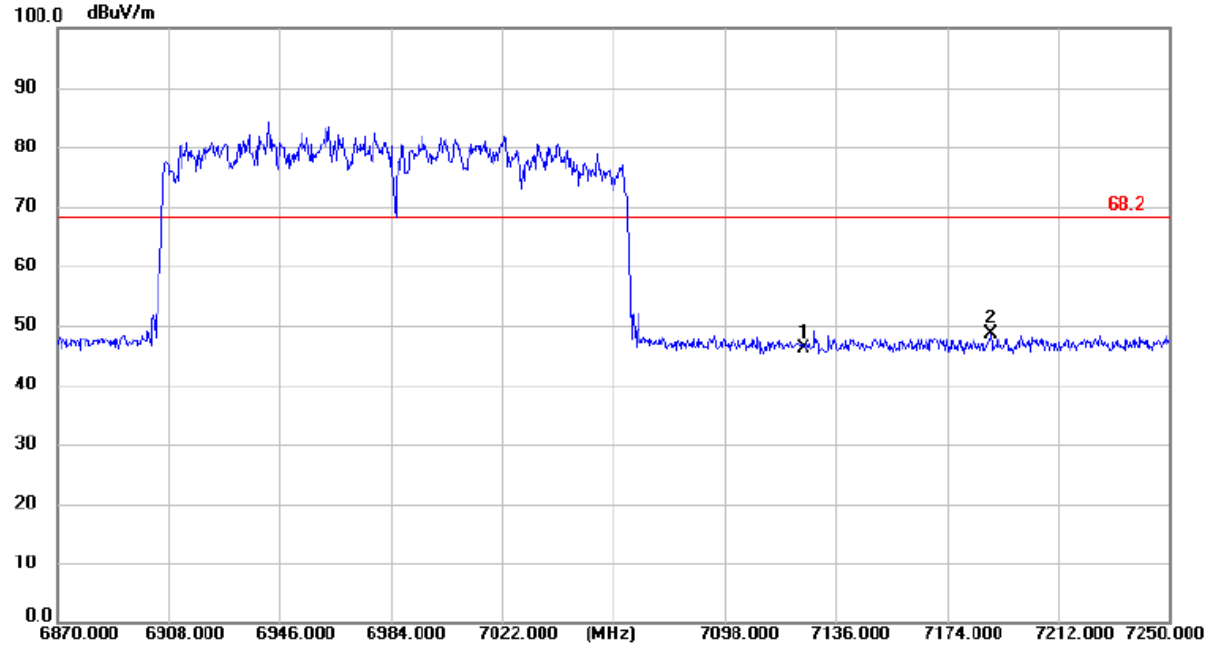
Note: (1) All Readings are Peak Value (VBW=3MHz) and Average Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)Test Mode is MIMO Mode (4T4R).

U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

☒802.11AX 160

☒6985 Ant.Pol H

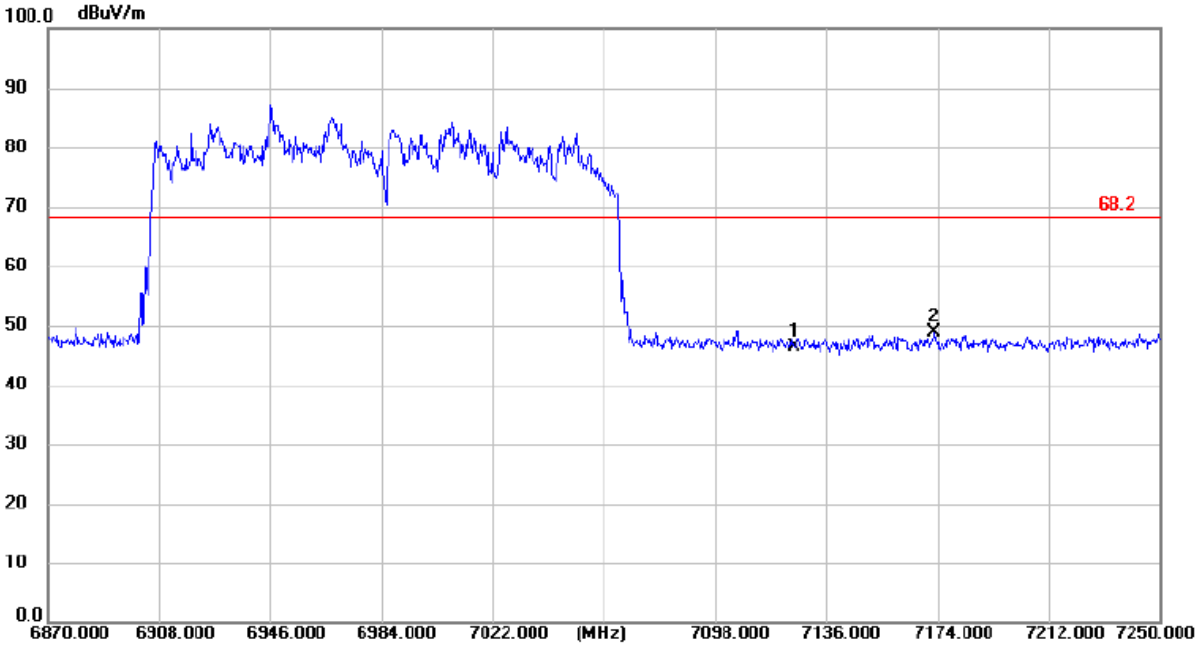


U-NII - 8

Test Model Undesirable radiated Spurious Emission in Restricted Band (6885-7115MHz)

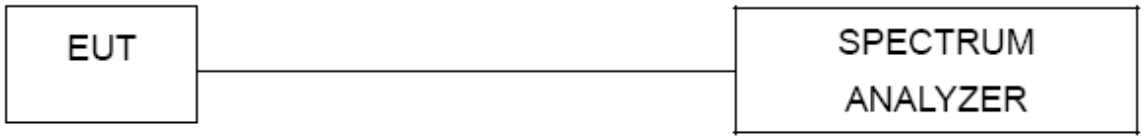
☒802.11AX 160

☒6985 Ant.Pol V



8. Power Spectral Density Test

8.1 Block Diagram Of Test Setup



8.2 Limit

For a standard power access point (6SD) and fixed client (6FC) device operating in the 5.925–6.425 GHz and 6.525–6.875 GHz bands, the maximum power spectral density must not exceed 23 dBm e.i.r.p in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

For an indoor access point (6ID) operating in the 5.925–7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

For a subordinate device (6PP) operating under the control of an indoor access point in the 5.925–7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

For client devices(6FX), except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925–6.425 GHz and 6.525–6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

For client devices(6XD) operating under the control of an indoor access point in the 5.925–7.125 GHz bands, the maximum power spectral density must not exceed −1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

8.3 Test Procedure

For devices operating in the bands 5.925–7.125 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:
a) Set RBW ≥ 1/T, where T is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.

c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add 10log(1MHz/RBW) to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since RBW=100 KHZ is available on nearly all spectrum analyzers.

8.4 EUT Operating Conditions

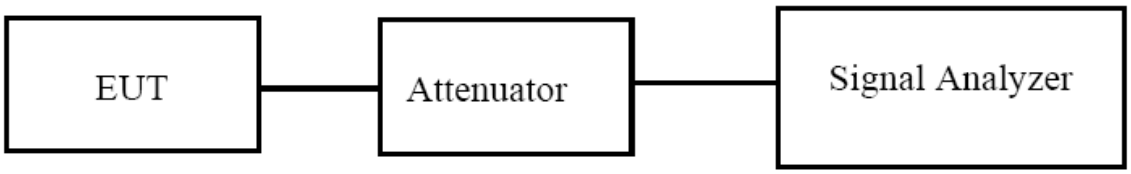
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

8.5 Test Result

Please refer to Appendix C: Power Spectral Density
Test Result: Pass

9. 26dB & 99% Emission Bandwidth

9.1 Block Diagram Of Test Setup



9.2 Limit

The maximum transmitter channel bandwidth for U–NII devices in the 5.925–7.125 GHz band is 320 megahertz

9.3 Test Procedure

a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
The following procedure shall be used for measuring (99 %) power bandwidth:
1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW ≥ 3 · RBW
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

9.4 EUT Operating Conditions

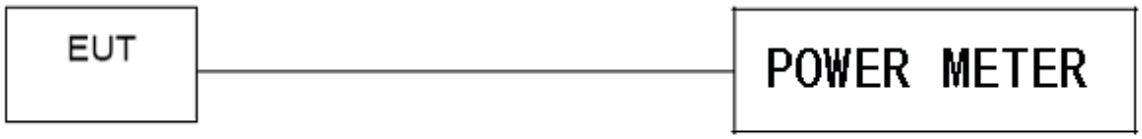
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

9.5 Test Result

Please refer to BCTC2311144017-2E FCC Part15.407 6ID Appendix A & B: Emission Bandwidth and Occupied channel bandwidth
Test Result: Pass

10. Maximum Conducted Output Power and Maximum EIRP

10.1 Block Diagram Of Test Setup



10.2 Limit

According to FCC §15.407

For a standard power access point (6SD) and fixed client (6FC) device operating in the 5.925–6.425 GHz and 6.525–6.875 GHz bands, the maximum power spectral density must not exceed 23 dBm e.i.r.p in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 36 dBm. For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

For an indoor access point (6ID) operating in the 5.925–7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

For a subordinate device (6PP) operating under the control of an indoor access point in the 5.925–7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

For client devices(6FX), except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925–6.425 GHz and 6.525–6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

For client devices(6XD) operating under the control of an indoor access point in the 5.925–7.125 GHz bands, the maximum power spectral density must not exceed −1 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

10.3 Test Procedure

Maximum conducted output power may be measured using a spectrum analyzer/EMI receiver or an RF power meter.

1. Device Configuration
If possible, configure or modify the operation of the EUT so that it transmits continuously at its maximum power control level (see section II.B.).

a) The intent is to test at 100 percent duty cycle; however a small reduction in duty cycle (to no lower than 98 percent) is permitted if required by the EUT for amplitude control purposes. Manufacturers are

expected to provide software to the test lab to permit such continuous operation.

b) If continuous transmission (or at least 98 percent duty cycle) cannot be achieved due to hardware limitations (e.g., overheating), the EUT shall be operated at its maximum power control level with the transmit duration as long as possible and the duty cycle as high as possible.

2. Measurement using a Spectrum Analyzer or EMI Receiver (SA)

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99-percent occupied bandwidth of the signal.1 However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with § 15.407(a).

a) The test method shall be selected as follows: (i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:

• The EUT transmits continuously (or with a duty cycle ≥ 98 percent).

• Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, below) is equal to or shorter than the duration T of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.

(ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2 percent.

(iii) Method SA-3 (RMS detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.

b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep): (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 Span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".

(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum

10.4 EUT Operating Conditions

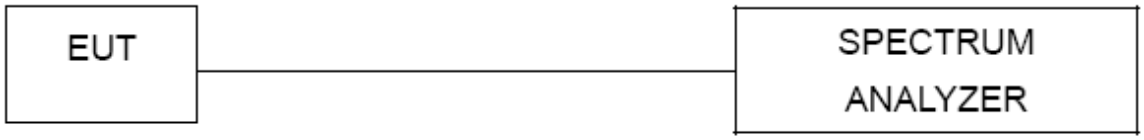
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

10.5 Test Result

Please refer to Appendix B: Maximum Conducted Output Power and Maximum EIRP
Test Result: Pass

11. In-Band Emission (Emission Mask)

11.1 Block Diagram Of Test Setup



11.2 Limit

According to FCC §15.407(b)
For transmitters operating within the 5.925–7.125 GHz band: Any emissions outside of the 5.925–7.125 GHz band must not exceed an e.i.r.p. of −27 dBm/MHz.
(7) For transmitters operating within the 5.925–7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

11.3 Test Procedure

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to
not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10-2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
a) Set the span to encompass the entire 26 dB EBW of the signal.
b) Set RBW = same RBW used for 26 dB EBW measurement.
c) Set VBW ≥ 3 X RBW
d) Number of points in sweep ≥ [2 X span / RBW].
e) Sweep time = auto.
f) Detector = RMS (i.e., power averaging)
g) Trace average at least 100 traces in power averaging (rms) mode.
h) Use the peak search function on the instrument to find the peak of the spectrum.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW or 99% of the occupied bandwidth.
6. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density

(in dB) as follows:
a) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
b) Suppressed by 28 dB at one channel bandwidth from the channel center.
c) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.

7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask

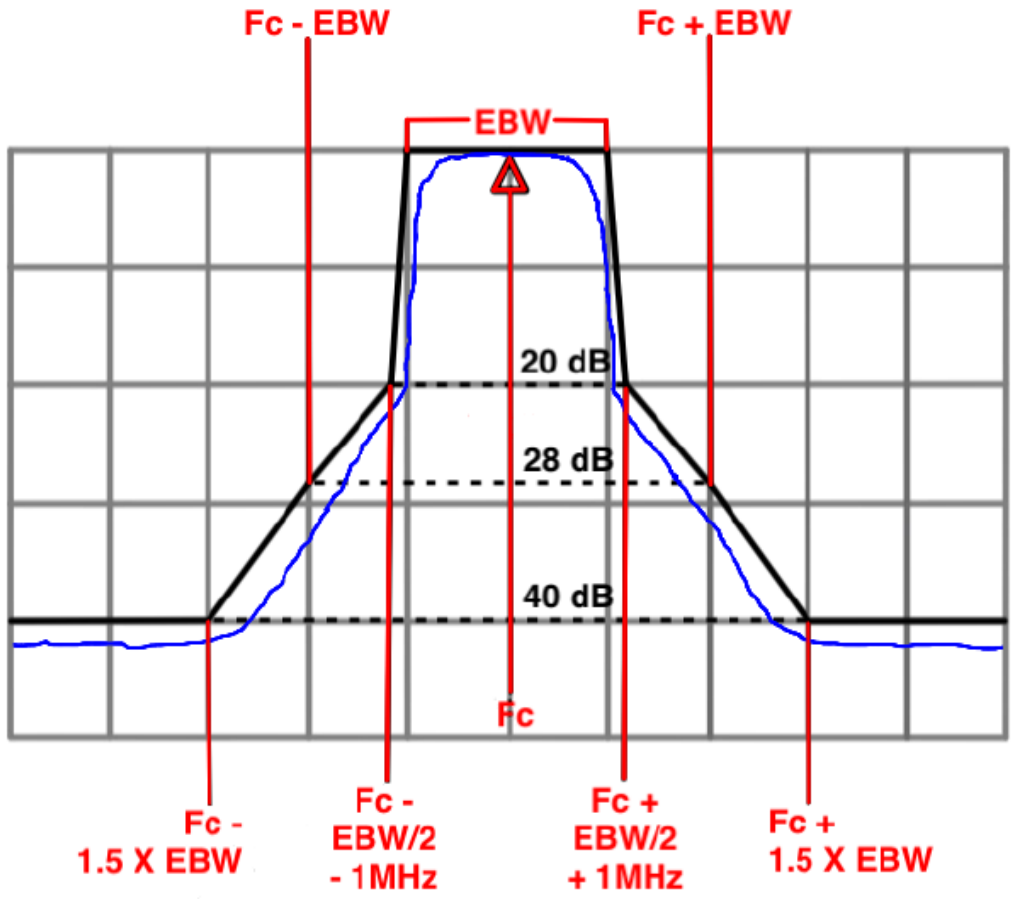


Figure 5. Generic Emission Mask

If a device utilizes channel puncturing the following additional requirements shall be met.

1. Standard Power Devices:
a. The device shall meet the FCC mask for the full nominal bandwidth regardless of whether the punctured channel portion is at the channel edge or internal to the channel. As an example, if a 40 megahertz sub-channel is punctured from a 160 megahertz channel, this new configuration shall still meet the FCC mask based on a 160 megahertz nominal bandwidth; i.e., at the edges of the nominal channel. Nominal bandwidth as defined here refers to 20, 40, 80, 160 & 320 megahertz bandwidths. Test data shall be provided for each nominal bandwidth capable of puncturing with at least one configuration where the puncturing is at the outer edge of the nominal bandwidth and several configurations where the puncturing is internal to the nominal bandwidth (puncturing using 20*N subchannels, where N is an integer). The mask is constructed based on 26 dB bandwidth; and
b. The device, when deployed must comply with all the AFC requirements; i.e., the power transmitted within the punctured region must be at or below the power that an AFC would permit for transmitting across the

punctured channels' bandwidth.
2. Low Power Indoor Devices: Channel puncturing is not permitted because, unlike standard power devices which receive channel/power information from the AFC, LPI devices have no such mechanism for ascertaining the level of suppression needed in the punctured region to protect incumbent operations

11.4 EUT Operating Conditions

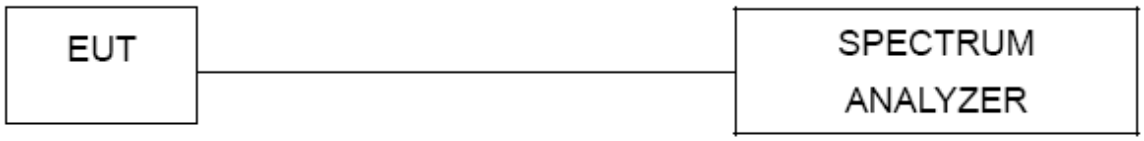
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data

11.5 Test Result

Please refer to Appendix D: InBand Emissions (Emission Mask)
Test Result: Pass

12. Spurious RF Conducted Emissions

12.1 Block Diagram Of Test Setup



12.2 Limit

For transmitters operating within the 5.925–7.125 GHz band: Any emissions outside of the 5.925–7.125 GHz band must not exceed an e.i.r.p. of −27 dBm/MHz.
For transmitters operating within the 5.925–7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

12.3 Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

12.4 Test Result

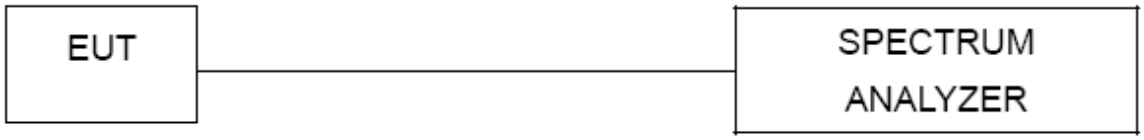
Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.

About:26.5GHz-40GHz, The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Please refer to BCTC2311144017-2E FCC Part15.407 6ID Appendix G: Conducted Spurious Emission
Test Result: Pass

13. Frequency Stability Measurement

13.1 Block Diagram Of Test Setup



13.2 Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification)..

13.3 Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 106 ppm and he limit is less than ±20ppm (IEEE 802.11nspecification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is -20°C~70°C.

13.4 Test Result

Please refer to Appendix E: Frequency Stability
Test Result: Pass

14. Contention Based Protocol

14.1 Block Diagram Of Test Setup

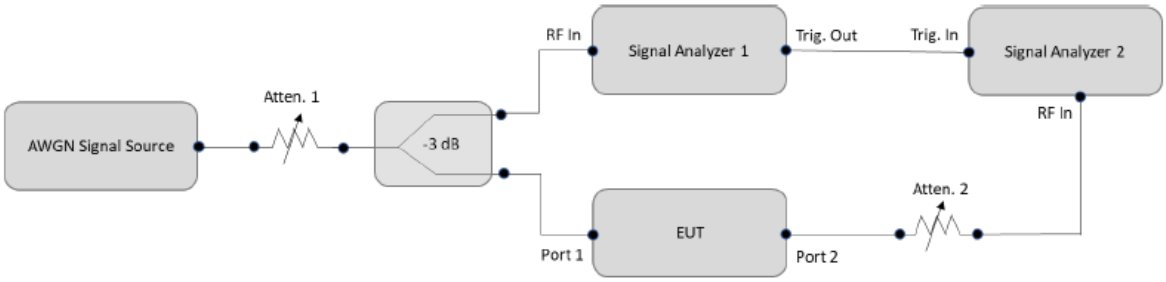


Figure 2. Contention-based protocol test setup, conducted method

14.2 Limit

Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel (in which incumbent signal is transmitted) and stay off the incumbent channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm)1. The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain.
To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF
energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

Required number of tests
Incumbent and EUT (access point, subordinate or client) signals may occupy different portions of the channel. Depending on the EUT transmission bandwidth and incumbent signal center frequency (simulated by a 10 MHz wide AWGN signal), the center frequency of the EUT signal F_{C1} may fall within the incumbent's occupied bandwidth (Figure 1.a), or outside of it (Figure 1.b).

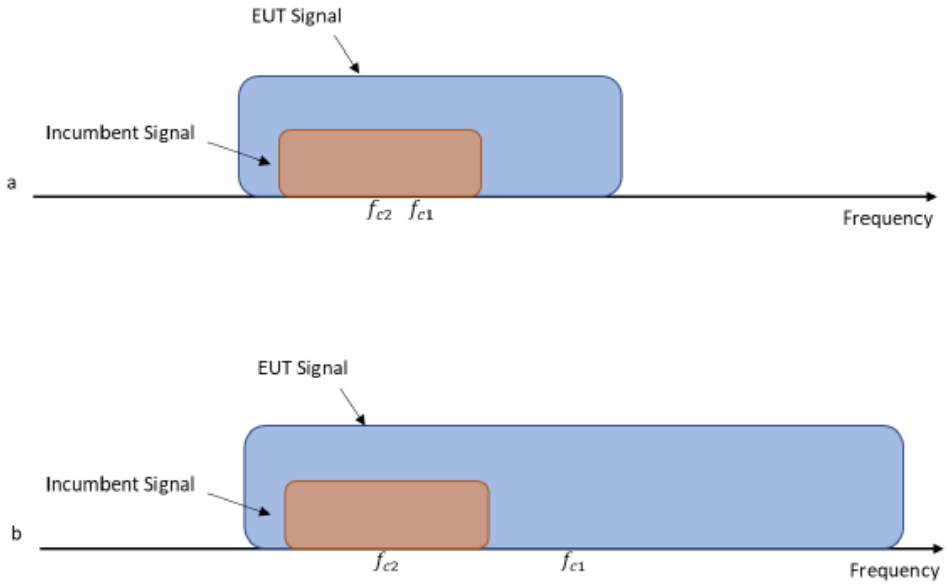


Figure 1. Two possible scenarios where a) center frequency of EUT transmission falls within incumbent's bandwidth, or b) outside of it

To ensure EUT reliably detects an incumbent signal in both scenarios shown in Figure 1, the detection threshold test may be repeated more than once with the incumbent signal (having center frequency F_{C2}) tuned to different center frequencies within the UT transmission bandwidth. The criteria specified in Table 1 determines how many times the detection threshold test must be performed;

Table 1. Criteria to determine number of times detection threshold test may be performed

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1} = f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$2BW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

where:
BW_{EUT}: Transmission bandwidth of EUT signal
BW_{1nc}: Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal)
F_{C1}: Center frequency of EUT transmission
F_{C2}: Center frequency of simulated incumbent signal

14.3 Test Procedure

To ensure the EUT is capable of detecting co-channel energy, the first step is to configure the EUT to transmit with a constant duty cycle.2 To simulate an incumbent signal, a signal generator (or similar source) that is capable of generating band-limited additive white Gaussian noise (AWGN) is required. Depending on the EUT antenna configuration, the AWGN signal can be provided to the EUT receiver via a conducted method (Figure 2) or a radiated method (Figure 3). Figure 2 shows the conducted test setup where a band-limited AWGN signal is generated at a very low power level and injected into the EUT's antenna port. The AWGN signal power level is then incrementally increased while the EUT transmission is monitored on a signal analyzer 2 to verify if the EUT can sense the AWGN signal and can subsequently cease its transmission. A triggered measurement, as shown in Figure 2, is optional, and assists with determining the time it takes the EUT to cease transmission (or vacate the channel) upon detecting RF energy. If the EUT has only one antenna port, then an AWGN signal source can be connected to the same antenna port.

1. Configure the EUT to transmit with a constant duty cycle.
2. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
3. Set the signal analyzer center frequency to the nominal EEUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2, as shown in Figure 2. Ensure that the attenuator 2 provides enough
attenuation to not overload the signal analyzer 2 receiver.
4. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step two.
5. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal.
Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
6. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT as shown in Figure 2.
7. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
8. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
9. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
10. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step 5, choose a different center frequency for the AWGN signal and repeat the process.

14.4 Test Result

For 6XD, when performing Content Based Protocol, only the power is reduced and the antenna gain does not change; so the worst data refers to the 6ID test report Content Based Protocol data.
Please refer to BCTC2311144017-2E FCC Part15.407 6ID test report 14.Contention Based Protocol Chapter
Test Result: Pass

15. Duty Cycle Of Test Signal

15.1 Standard Requirement

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle. All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

15.2 Formula

Duty Cycle = Ton / (Ton+Toff)

15.3 Test Procedure

1.Set span = Zero
2. RBW = 8MHz
3. VBW = 8MHz,
4. Detector = Peak

15.4 Test Result

Please refer to Appendix A: Duty Cycle
Test Result: Pass

16. Antenna Requirement

16.1 Limit

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

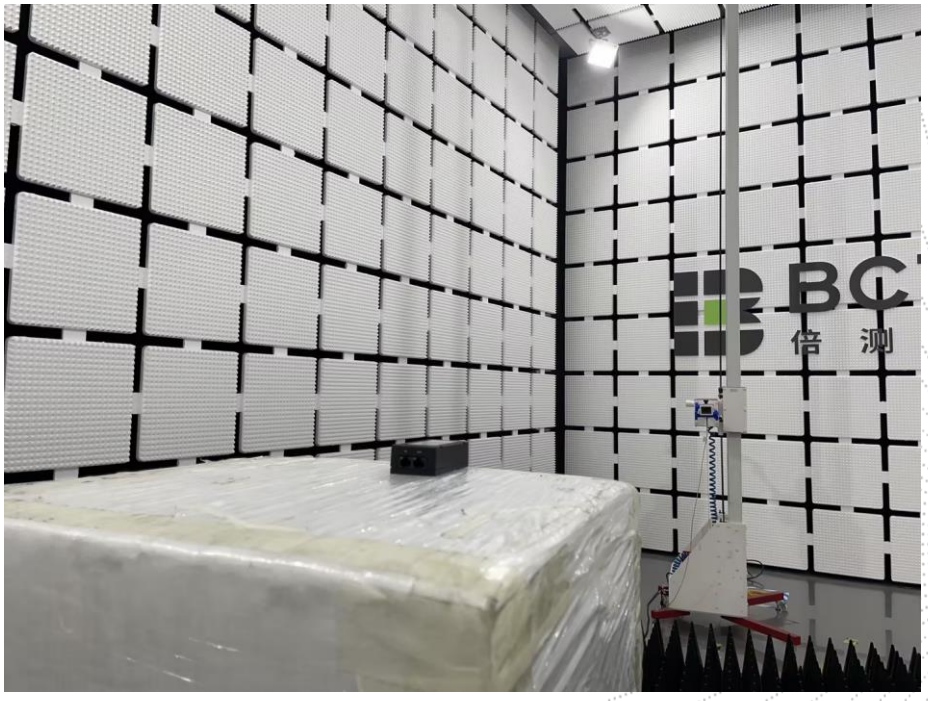
16.2 Test Result

The EUT antenna is internal antenna, fulfill the requirement of this section.

17. EUT Test Setup Photographs

Conducted emissions Photo

Radiated Measurement Photos



STATEMENT

1. The equipment lists are traceable to the national reference standards.

2. The test report can not be partially copied unless prior written approval is issued from our lab.

3. The test report is invalid without the "special seal for inspection and testing".

4. The test report is invalid without the signature of the approver.

5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

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