



Test Report No.:
FCC2023-0055-RF3

TEST REPORT

FCC ID : 2AK43E25
Applicant : Guangzhou Rigal Electronics Co., Ltd.
Product Name : Multimedia projector /LCD INTELLIGENT
PROJECTOR
Model No. : E25, B1, Exx, Exy, lxx, lxy, Bxy, Heyup Boxe Lite

CVC Testing Technology Co., Ltd.

Applicant		Name: Guangzhou Rigal Electronics Co., Ltd.	
		Address: No.3-1, Ruixiang Road, Huadu District, Guangzhou	
Manufacturer		Name: Guangzhou Rigal Electronics Co., Ltd.	
		Address: No.3-1, Ruixiang Road, Huadu District, Guangzhou	
Equipment Under Test		Product Name : Multimedia projector /LCD INTELLIGENT PROJECTOR Model No. : E25 Trade mark : N/A Serial no. : 000165233801001 Sampling : 1-1	
Date of Receipt.	2023.9.1	Date of Testing	2023.9.22
Test Specification		Test Result	
FCC CFR47 Part 15E (2020) ANSI C63.10 (2013) KDB 789033 D02 General UNII Test Procedures New Rules v01r04 KDB 662911 D01 Multiple Transmitter Output v02r01 KDB905462 D02 UNII DFS Compliance Procedures New Rules v02 KDB 905462 D03 UNII Clients Without Radar Detection New Rules v01r02		PASS	
Evaluation of Test Result		The equipment under test was found to comply with the requirements of the standards applied. Seal of CVC Issue Date: 2023.10.31	
Approved by: Chen Huawen 		Reviewed by: Xu Zhenfei 	
		Tested by: Lu Weiji 	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			
Note: This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.			

TABLE OF CONTENTS

1. GENERAL PRODUCT INFORMATION	4
1.1 GENERAL INFORMATION	4
2. TEST SITES	6
2.1 TEST FACILITIES	6
2.2 DESCRIPTION OF NON-STANDARD METHOD AND DEVIATIONS	6
2.3 LIST OF TEST AND MEASUREMENT INSTRUMENTS	6
3. TEST CONFIGURATION	7
3.1 TEST MODE	7
3.2 DUTY CYCLE	10
4. SUMMARY OF MEASUREMENT RESULTS.....	11
5. MEASUREMENT PROCEDURE	12
5.1 CONDUCTED EMISSION	12
5.2 UNWANTED EMISSION	15
5.3 MAXIMUM CONDUCTED OUTPUT POWER	48
5.4 MIN EMISSION BANDWIDTH AND EMISSION BANDWIDTH AND OCCUPIED BANDWIDTH	51
5.5 MAXIMUM POWER SPECTRAL DENSITY	55
5.6 FREQUENCY STABILITY	58
5.7 DYNAMIC FREQUENCY SELECTION (DFS).....	71
6. APPENDIX X.....	80

1. General Product Information

1.1 General information

Product Name	Multimedia projector /LCD INTELLIGENT PROJECTOR
Model No.	E25
Additional model	B1, Heyup Boxe Lite, Exx(x represents the numbers 0-9), Exy(x represents numbers 0-9, y represents letters a-z or A-Z), lxx(x represents the numbers 0-9), lxy(x represents numbers 0-9, y represents letters a-z or A-Z), Bxy(x represents numbers 0-9, y represents letters a-z or A-Z)
Power Supply	AC100-240V, 50/60Hz
Serial Number(SN)	000165233801001
firmware	v1.0.0
software	v2.1.2
specific power settings	IEEE 802.11a: Default IEEE 802.11n(20MHz): Default IEEE 802.11n(40MHz): Default IEEE 802.11ac(20MHz): Default IEEE 802.11ac (40MHz): Default IEEE 802.11ax(20MHz): Default IEEE 802.11ax (40MHz): Default
Antenna Type	Internal antenna
Antenna Connector	A detachable antenna
Antenna Gain	U-NII-1: 1.72 dBi (provided by client) U-NII-2A: 1.65 dBi (provided by client) U-NII-3: 1.87 dBi (provided by client)
Beamforming gain	Unsupported
Frequency Range	U-NII-1: For 20MHz:5180-5240MHz For 40MHz:5190-5230MHz U-NII-2A: For 20MHz:5260-5320MHz For 40MHz:5270-5310MHz U-NII-3: For 20MHz:5745-5825MHz For 40MHz:5755-5795MHz
Modulation Type	802.11a/n(HT20/HT40): 64QAM, 16QAM, QPSK, BPSK for OFDM 802.11ac(VHT20/VHT40): 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM 802.11ax(HE20/HE40): 1024QAM, 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDMA
Max. Conducted Power	U-NII-1: 10.74 dBm U-NII-2A: 10.28 dBm U-NII-3: 13.90 dBm
DFS device type	☐ Master ☒ Slave

TPC Function	☐ Support ☒ Not support
TDWR Band	☐ Support ☒ Not support
Operate Temp.Range	5~30°C

Note:

1. The information of the EUT is declared by the manufacturer.
2. The laboratory is not responsible for the product technical specification provided by the client.
3. The product model of this application are E25,B1,Heyup Boxe Lite, Exx(x represents the numbers 0-9), Exy(x represents numbers 0-9, y represents letters a-z or A-Z), lxx(x represents the numbers 0-9), lxy(x represents numbers 0-9, y represents letters a-z or A-Z), Bxy(x represents numbers 0-9, y represents letters a-z or A-Z). The material difference between the parts and the parts in the product model for inspection is shown in the table below:

No	Model	Difference	Remarks
1	E25	1. Only the appearance color difference is different. 2. All three nameplates can be sold on each model.	Inspection model
2	B1		Coverage model
3	Heyup Boxe Lite		Coverage model
4	Exx		Coverage model
5	Exy		Coverage model
6	lxy		Coverage model
7	lxx		Coverage model
8	Bxy		Coverage model

All the tests carried out on model E25.

Factory: Guangzhou Rigal Electronics Co., Ltd.

Address: No.3-1, Ruixiang Road, Huadu District, Guangzhou

2. Test Sites

2.1 Test Facilities

The tests and measurements refer to this report were performed by RF testing Lab of CVC Testing Technology Co., Ltd.

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Telephone : +86-20-32293888

Fax : +86-20-32293889

FCC(Test firm designation number: CN1282)

IC(Test firm CAB identifier number: CN0103)

2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

2.3 List of Test and Measurement Instruments

Refer to **Appendix X**.

3. Test Configuration

3.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Test Mode	Antenna Delivery	Test Channel
IEEE 802.11A	1TX / 1RX	36,44,48,52,60,64,149,157,165
IEEE 802.11N 20 SISO	1TX / 1RX	36,44,48,52,60,64,149,157,165
IEEE 802.11N 40 SISO	1TX / 1RX	38,46,54,62,151,159
IEEE 802.11AC 20 SISO	1TX / 1RX	36,44,48,52,60,64,149,157,165
IEEE 802.11AC 40 SISO	1TX / 1RX	38,46,54,62,151,159
IEEE 802.11AX 20 SISO	1TX / 1RX	36,44,48,52,60,64,149,157,165
IEEE 802.11AX 40 SISO	1TX / 1RX	38,46,54,62,151,159

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate and different channels.. Preliminary tests have been done on all the configurations for confirming worst case.

Data rate below means worst-case rate of each test item.

Worst-case data rates and channels are shown as following table.

Test Mode	Antenna Delivery	Data Rate		
		Antenna 1	Antenna 2	MIMO
IEEE 802.11A	1TX / 1RX	6	/	/
IEEE 802.11N 20MHz	1TX / 1RX	MCS 0	/	/
IEEE 802.11N 40MHz	1TX / 1RX	MCS 0	/	/
IEEE 802.11AC 20MHz	1TX / 1RX	MCS 0	/	/
IEEE 802.11AC 40MHz	1TX / 1RX	MCS 0	/	/
IEEE 802.11AX 20MHz	1TX / 1RX	MCS 0	/	/
IEEE 802.11AX 40MHz	1TX / 1RX	MCS 0	/	/

Test Items	Test Antennas	Test Modes	Test Channels
Conducted Emissions	Antenna 1	IEEE 802.11AX 20	36
Maximum conducted output power	Antenna 1	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AX 20/ IEEE 802.11AX 40	36,44,48,52,60,64,149,157,165/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/
Maximum Power spectral density	Antenna 1	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AX 20/ IEEE 802.11AX 40	36,44,48,52,60,64,149,157,165/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/
Unwanted Emissions (Band Edge Measurement)	Antenna 1	IEEE 802.11AX 20	36,64,149,165
Unwanted Emissions (Spurious Emissions)	Antenna 1	IEEE 802.11AX 20	36,64,149
Min Emission Bandwidth and Emission Bandwidth and Occupied Bandwidth	Antenna 1	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AX 20/ IEEE 802.11AX 40	36,44,48,52,60,64,149,157,165/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/
Frequency stability	Antenna 1	IEEE 802.11A/ IEEE 802.11N 20/ IEEE 802.11N 40/ IEEE 802.11AC 20/ IEEE 802.11AC 40/ IEEE 802.11AX 20/ IEEE 802.11AX 40	36,44,48,52,60,64,149,157,165/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/ 36,44,48,52,60,64,149,157,165/ 38,46,54,62,151,159/
Dynamic Frequency Selection (DFS)	Antenna 1	IEEE 802.11AX 40	54,62

3.2 Duty cycle

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
11A	Ant1	5180	2.03	2.14	94.86	---	---
		5220	2.03	2.21	91.86	---	---
		5240	2.03	2.20	92.27	---	---
		5260	2.04	2.20	92.73	---	---
		5300	2.03	2.21	91.86	---	---
		5320	2.03	2.26	89.82	---	---
		5745	2.03	2.19	92.69	---	---
		5785	2.04	2.26	90.27	---	---
11N20SISO	Ant1	5825	2.03	2.25	90.22	---	---
		5180	1.89	2.03	93.10	---	---
		5220	1.89	2.05	92.20	---	---
		5240	1.89	2.00	94.50	---	---
		5260	1.89	2.07	91.30	---	---
		5300	1.89	2.00	94.50	---	---
		5320	1.89	2.03	93.10	---	---
		5745	1.89	2.07	91.30	---	---
11N40SISO	Ant1	5785	1.89	2.01	94.03	---	---
		5825	1.89	2.01	94.03	---	---
		5190	0.93	1.06	87.74	---	---
		5230	0.93	0.98	94.90	---	---
		5270	0.93	1.12	83.04	---	---
		5310	0.93	1.07	86.92	---	---
11AC20SISO	Ant1	5755	0.93	1.00	93.00	---	---
		5795	0.93	1.04	89.42	---	---
		5180	1.91	1.96	97.45	---	---
		5220	1.90	2.05	92.68	---	---
		5240	1.89	2.03	93.10	---	---
		5260	1.89	2.00	94.50	---	---
		5300	1.91	1.96	97.45	---	---
		5320	1.90	2.09	90.91	---	---
11AC40SISO	Ant1	5745	1.91	2.03	94.09	---	---
		5785	1.91	2.11	90.52	---	---
		5825	1.90	2.12	89.62	---	---
		5190	0.94	1.08	87.04	---	---
		5230	0.93	0.99	93.94	---	---
		5270	0.94	1.12	83.93	---	---
11AX20SISO	Ant1	5310	0.93	1.12	83.04	---	---
		5755	0.94	1.00	94.00	---	---
		5795	0.94	1.09	86.24	---	---
		5180	1.46	1.57	92.99	---	---
		5220	1.45	1.57	92.36	---	---
		5240	1.46	1.59	91.82	---	---
		5260	1.46	1.61	90.68	---	---
		5300	1.46	1.55	94.19	---	---
11AX40SISO	Ant1	5320	1.45	1.59	91.19	---	---
		5745	1.45	2.63	55.13	---	---
		5785	1.46	1.75	83.43	---	---
		5825	1.46	1.51	96.69	---	---
		5190	0.75	0.86	87.21	---	---
		5230	0.75	0.91	82.42	---	---
11AX40SISO	Ant1	5270	0.75	0.86	87.21	---	---
		5310	0.75	0.93	80.65	---	---
		5755	0.75	0.84	89.29	---	---
		5795	0.75	0.95	78.95	---	---

4. Summary of measurement results

Summary of measurements of results	Clause in FCC rules	Verdict	Note
Conducted Emissions	15.207	PASS	/
Maximum conducted output power	15.407(a)	PASS	Appendix C of WIFI5G_ diagram
Maximum Power spectral density	15.407(a)	PASS	Appendix D of WIFI5G_ diagram
Unwanted Emissions	15.407(b)	PASS	/
Min Emission Bandwidth and Emission Bandwidth and Occupied Bandwidth	15.407(e)	PASS	Appendix A of WIFI5G_ diagram
Frequency stability	15.407(g)	PASS	Appendix E of WIFI5G_ diagram
Dynamic Frequency Selection (DFS)	15.407(h)	PASS	/
Antenna Requirement	15.203	PASS	See note 1

Note 1: According to 15.203, it is considered sufficient to comply with the provisions of this section.

5. Measurement procedure

5.1 Conducted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.

The test is in transmitting mode.

Limits:

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

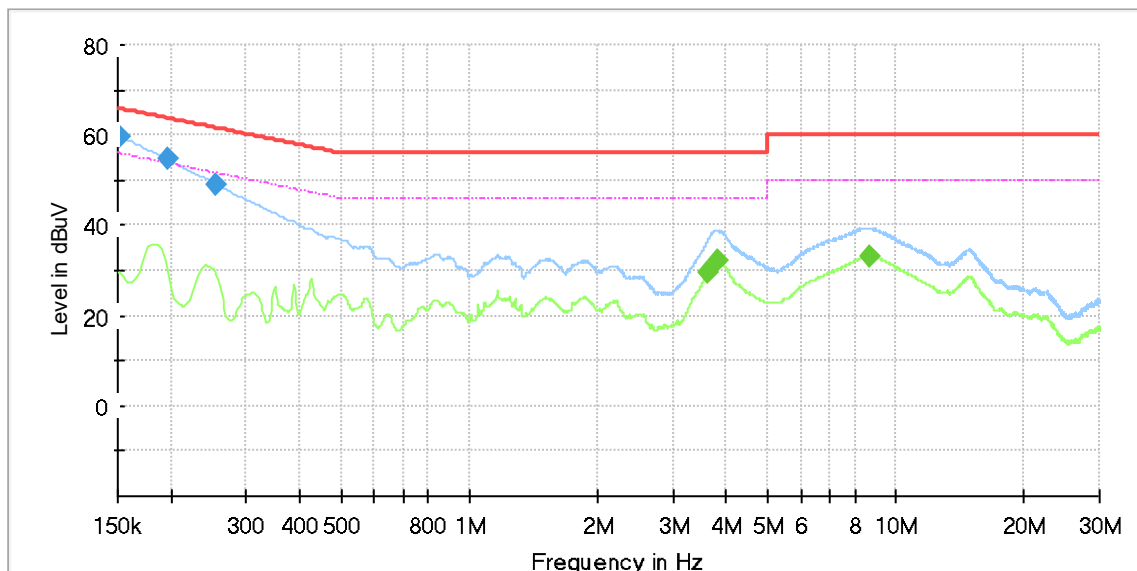
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Test Results:

During the test, the Conducted Emission from 150kHz to 30MHz was performed in all modes with all channels, and all antennas. 802.11ax20, Channel 36, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

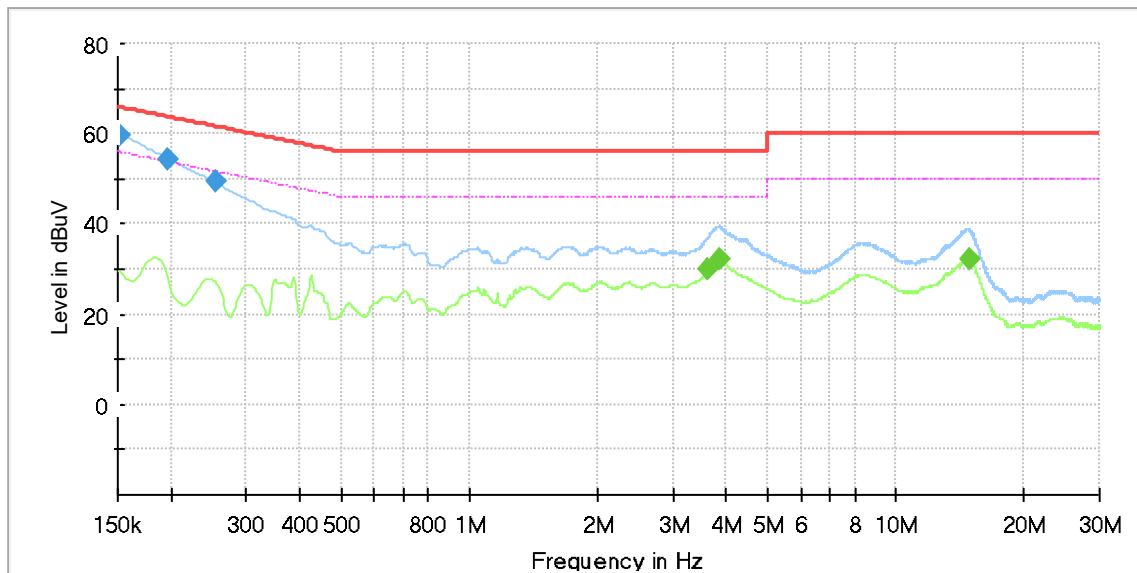
Power Line	L
Test channel	Worst-Case

Suspected List							
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV]	Limit [dBμV]	Margin [dB]	Detector	Pass/Fail
0.152	19.5	40.2	59.7	65.9	6.1	QP	PASS
0.197	19.5	35.1	54.6	63.7	9.1	QP	PASS
0.256	19.4	29.7	49.1	61.6	12.4	QP	PASS
3.602	19.5	9.9	29.4	46.0	16.6	AV	PASS
3.802	19.5	12.7	32.2	46.0	13.8	AV	PASS
8.642	19.6	13.5	33.1	50.0	16.9	AV	PASS



Power Line	N
Test channel	Worst-Case

Suspected List							
Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV]	Limit [dBμV]	Margin [dB]	Detector	Pass/Fail
0.152	19.5	40.2	59.7	65.9	6.2	QP	PASS
0.197	19.5	35	54.5	63.7	9.2	QP	PASS
0.256	19.4	29.8	49.2	61.6	12.3	QP	PASS
3.602	19.6	10.2	29.8	46.0	16.2	AV	PASS
3.860	19.6	12.7	32.3	46.0	13.7	AV	PASS
14.807	20.1	12.2	32.3	50.0	17.7	AV	PASS



5.2 Unwanted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.

The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter)..

Test the EUT in the lowest channel ,the middle channel ,the Highest channel

The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.

Repeat above procedures until all frequencies measured was complete.

Limits:

1. For transmitters operating in the 5725-5850 MHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.
2. For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).
3. For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).
4. For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz(68.2dBμV/m).

Note: the following formula is used to convert the EIRP to field strength

§1、 $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and

d = distance at which field strength limit is specified in the rules;

§2、 $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for d = 3 meters

5. Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table.

Frequency	Limit ($\mu\text{V/m}$)	Limit ($\text{dB}\mu\text{V/m}$ @3m)	Remark
0.009MHz-0.490MHz	2400/F(kHz)@300m	$20\lg(240000/F(\text{kHz}))$	Quasi-peak Level
0.490MHz~1.705MHz	24000/F(kHz)@30m	$20\lg(240000/F(\text{kHz}))$	Quasi-peak Level
1.705MHz~30.0MHz	30@30m	49.54	Quasi-peak Level
30MHz-88MHz	100@3m	40.0	Quasi-peak Level
88MHz-216MHz	150@3m	43.5	Quasi-peak Level
216MHz-960MHz	200@3m	46.0	Quasi-peak Level
960MHz-1GHz	500@3m	54.0	Quasi-peak Level
Above 1GHz	500@3m	54.0	Average Level
	5000@3m	74.0	Peak Level

Measurement Data

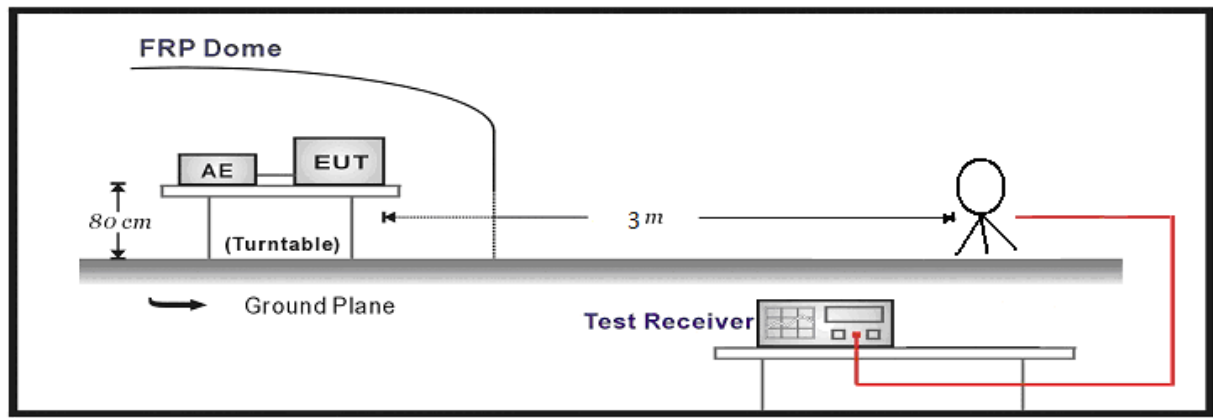
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading - Correct Factor

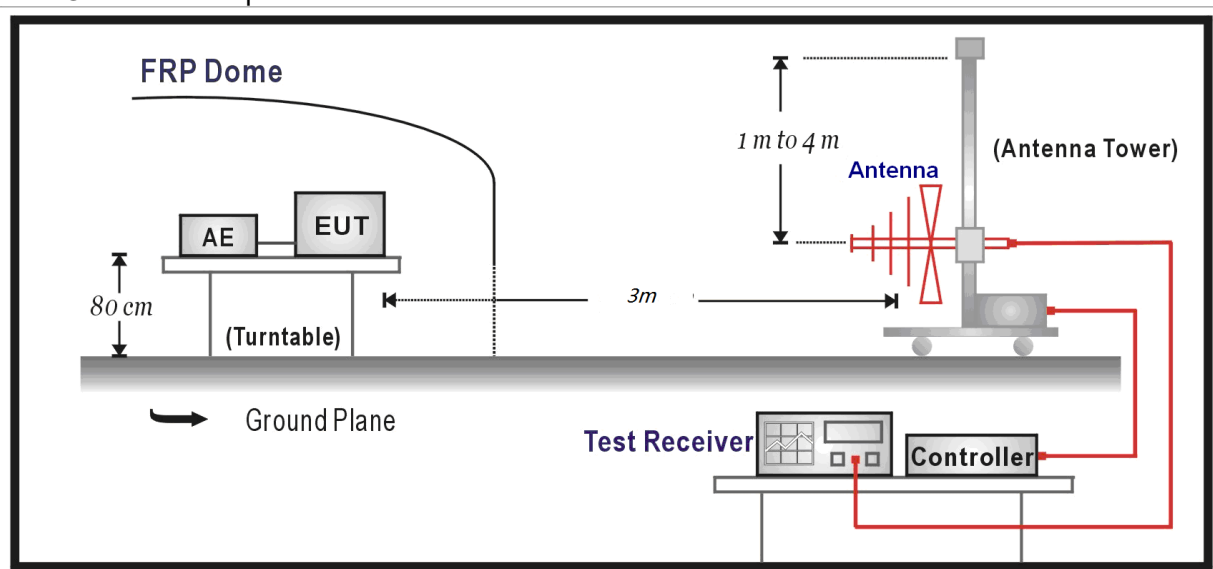
Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor

Test Setup:

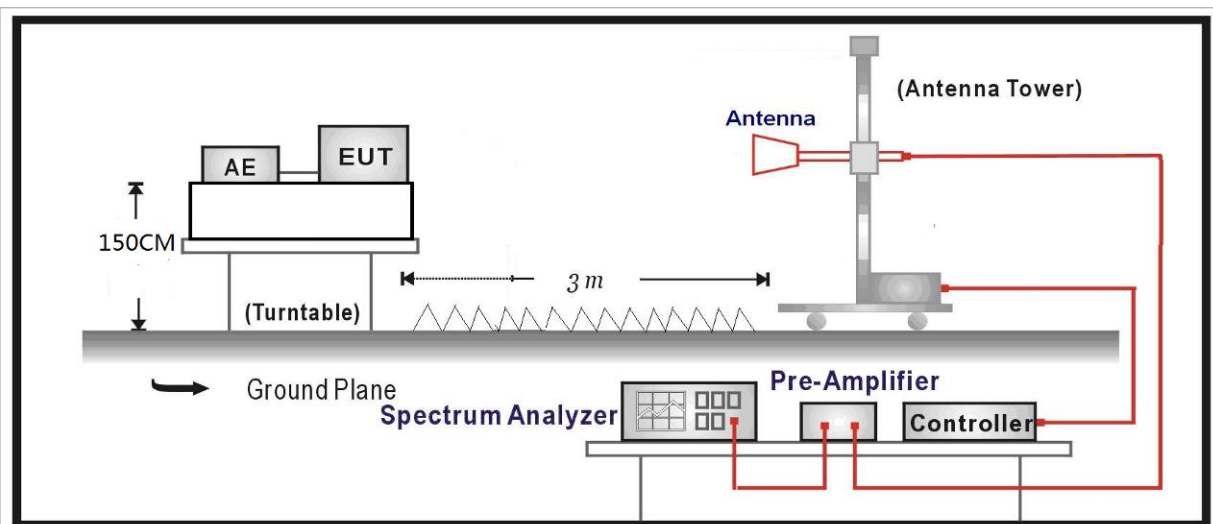
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
1GHz-26.5G	3.68 dB
26.5G-40GHz	4.76dB

5.2.1 SPURIOUS EMISSIONS:

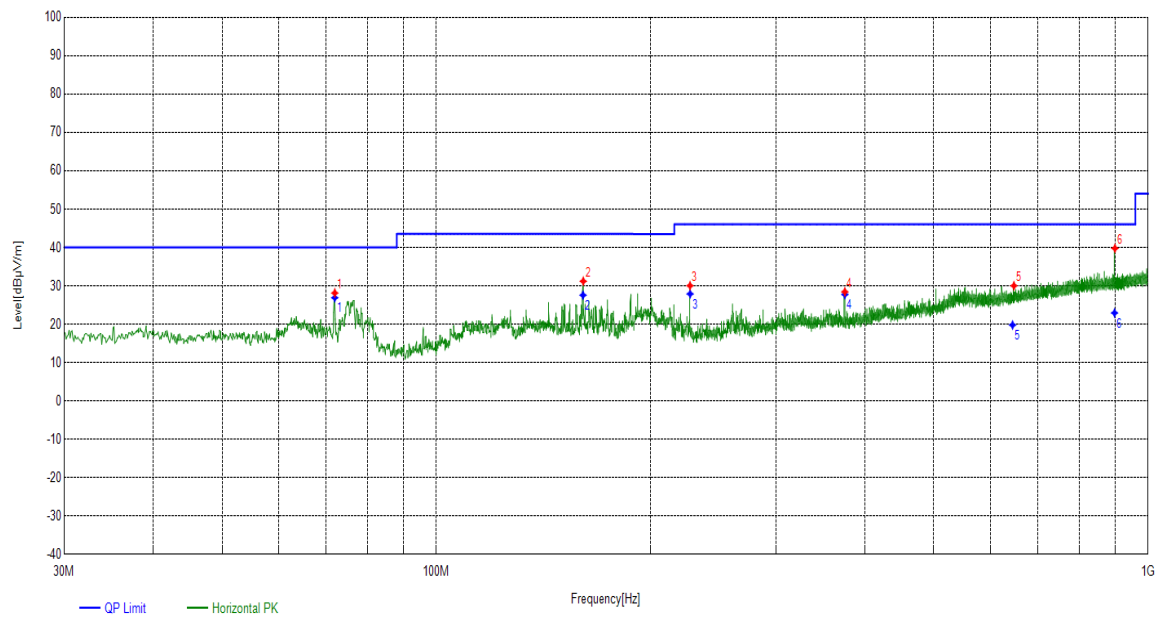
5.2.1.1 Below 1GHz:

During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels and all antennas, 802.11ax20, Channel 36, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission		9k~1G							
Test channel		Worst-Case							
Polarity		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
72.0052	17.84	10.28	28.12	40.00	11.88	PK	100	178	PASS
160.8661	20.83	10.36	31.19	43.51	12.32	PK	100	40	PASS
227.2207	18.45	11.58	30.03	46.02	15.99	PK	100	139	PASS
374.9665	23.31	5.12	28.43	46.01	17.58	PK	100	79	PASS
647.9518	29.51	0.50	30.01	46.01	16.00	PK	100	53	PASS
898.3338	33.01	6.75	39.76	46.00	6.24	PK	100	33	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

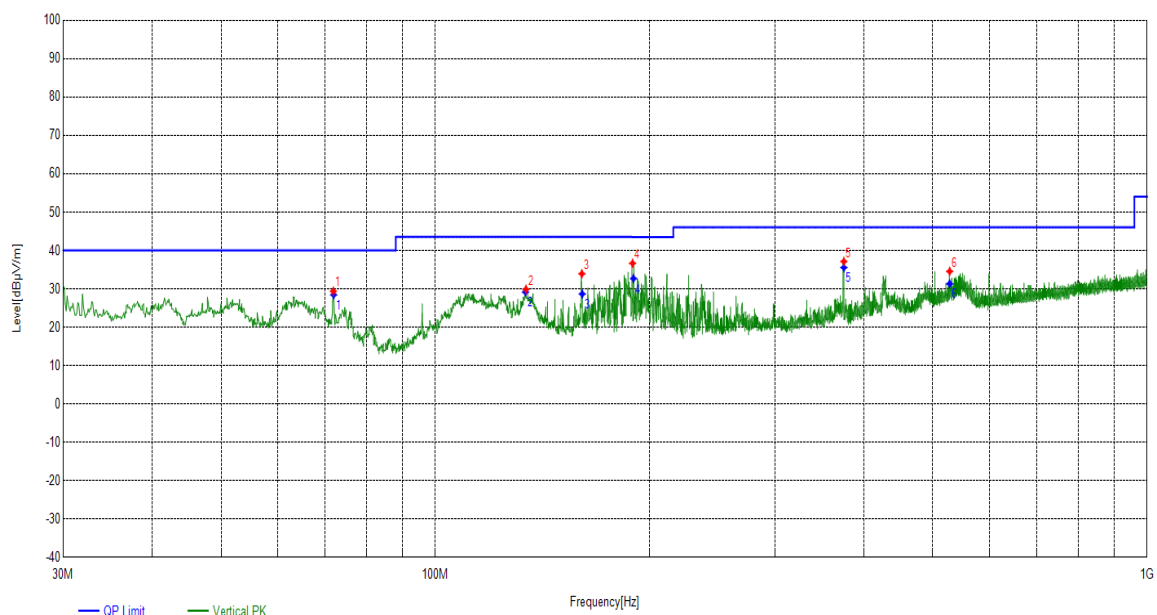
Final Data List							
Frequency [MHz]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
71.999	17.84	26.89	40.00	13.11	340	178	PASS
160.7521	20.83	27.56	43.51	15.95	400	40	PASS
227.2963	18.45	27.89	46.02	18.13	210	139	PASS
374.9937	23.31	27.73	46.01	18.28	170	79	PASS
645.073	29.51	19.78	46.01	26.23	360	53	PASS
897.2161	33.01	22.93	46.00	23.07	350	33	PASS



Radiates Emission		9k~1G							
Test channel		Worst-Case							
Polarity		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/ m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
71.9082	17.86	11.50	29.36	40.00	10.64	PK	100	64	PASS
134.0914	19.56	10.31	29.87	43.51	13.64	PK	100	44	PASS
160.6721	20.84	13.07	33.91	43.51	9.60	PK	100	104	PASS
189.2899	17.97	18.67	36.64	43.50	6.86	PK	100	130	PASS
374.9665	23.31	13.80	37.11	46.01	8.90	PK	100	70	PASS
528.0478	27.23	7.31	34.54	46.01	11.47	PK	100	162	PASS

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

Final Data List							
Frequency [MHz]	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
71.9811	17.86	28.43	40.00	11.57	100	64	PASS
133.8624	19.56	29.13	43.51	14.38	100	44	PASS
160.8627	20.84	28.65	43.51	14.86	100	104	PASS
189.868	17.97	32.68	43.50	10.82	100	130	PASS
375.0208	23.31	35.53	46.01	10.48	100	70	PASS
527.9943	27.23	31.30	46.01	14.71	100	162	PASS

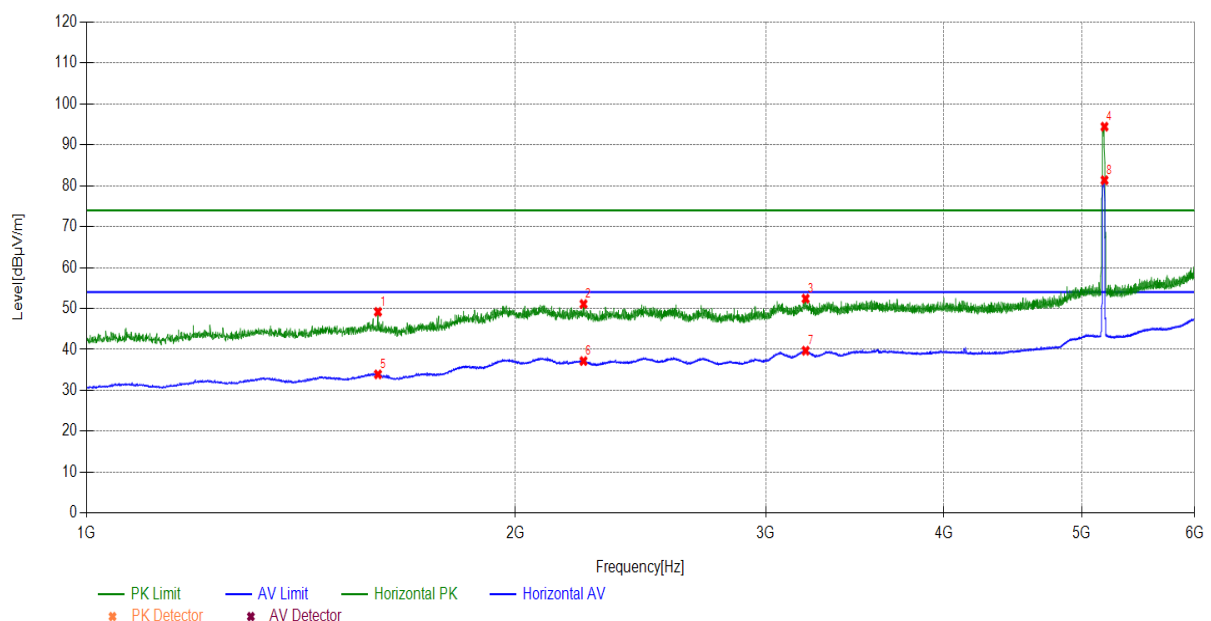


5.2.1.2 Above 1GHz:

5.2.1.2.1 U-NII-1:

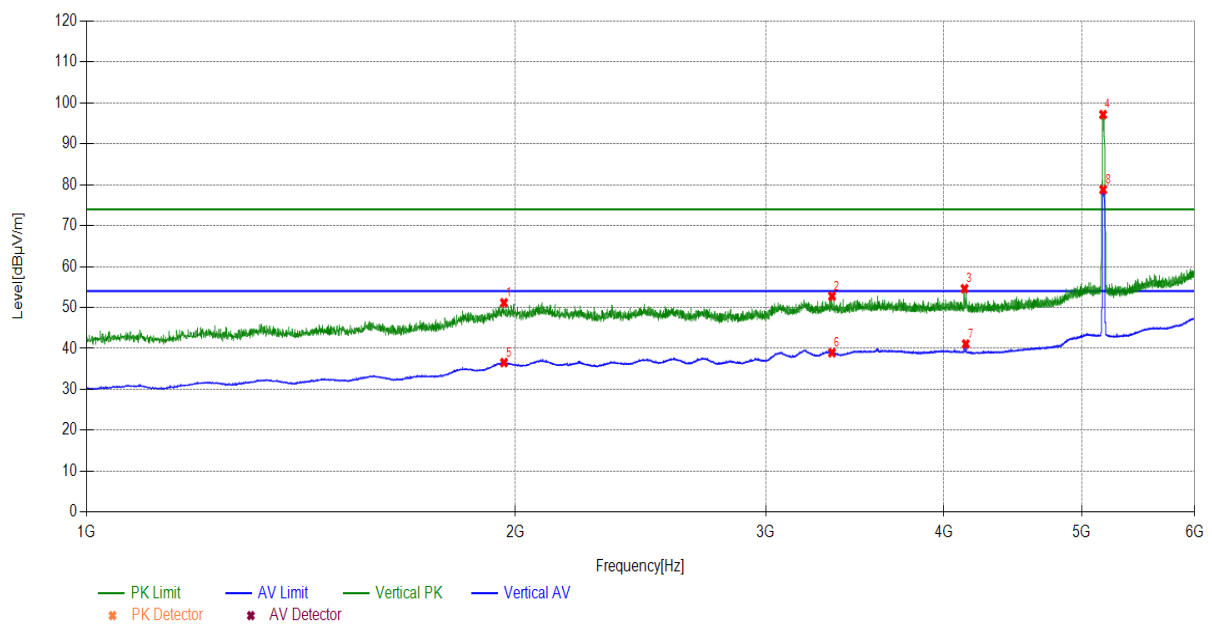
During the test, the Radiates Emission from 1GHz to 40GHz was performed in all modes with all channels and all antennas, 802.11ax20, Channel 36, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission		1G~6G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
1602.0602	-7.72	56.92	49.20	74.00	24.80	PK	150	326	PASS
2233.6234	-5.72	56.83	51.11	74.00	22.89	PK	150	65	PASS
3198.7199	-2.34	54.75	52.41	74.00	21.59	PK	150	326	PASS
5186.4186	2.05	92.38	94.43	74.00	-20.43	PK	150	302	---
1602.0602	-7.72	41.63	33.91	54.00	20.09	AV	150	6	PASS
2233.6234	-5.72	42.90	37.18	54.00	16.82	AV	150	6	PASS
3198.7199	-2.34	42.03	39.69	54.00	14.31	AV	150	1	PASS
5186.4186	2.05	79.30	81.35	54.00	-27.35	AV	150	6	---



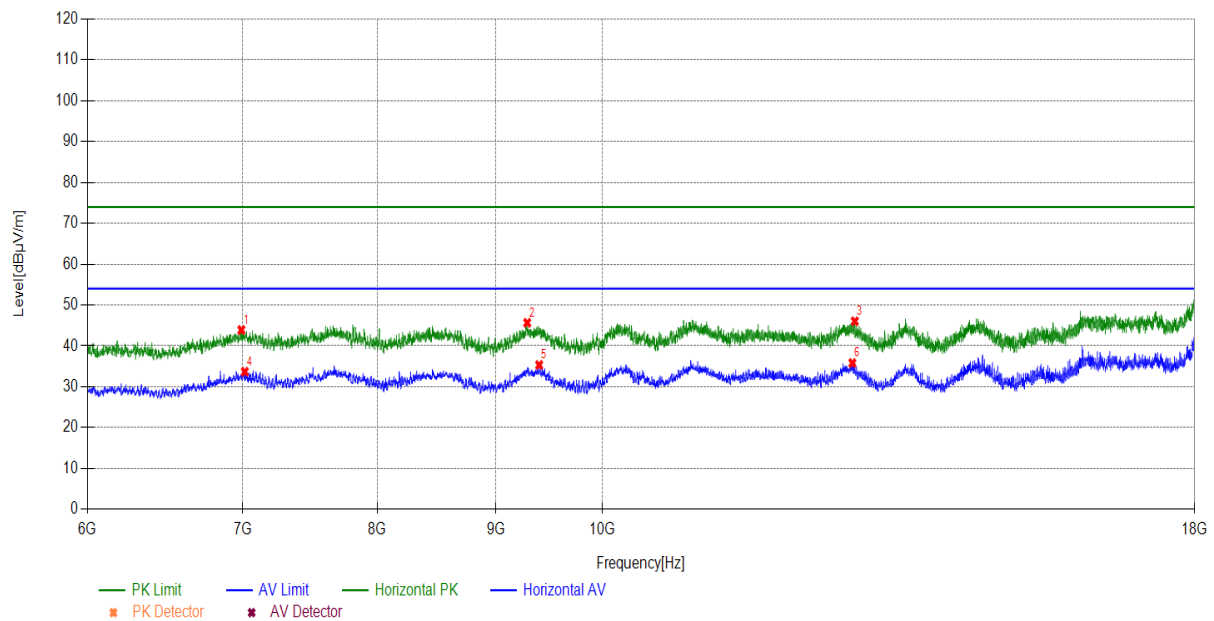
Note: The signal beyond the limit is carrier

Radiates Emission		1G~6G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
1964.0964	-6.48	57.64	51.16	74.00	22.84	PK	150	148	PASS
3338.2338	-1.76	54.54	52.78	74.00	21.22	PK	150	291	PASS
4135.8136	-0.28	54.90	54.62	74.00	19.38	PK	150	160	PASS
5174.4174	2.01	95.14	97.15	74.00	-23.15	PK	150	160	---
1964.0964	-6.48	43.04	36.56	54.00	17.44	AV	150	338	PASS
3338.2338	-1.76	40.73	38.97	54.00	15.03	AV	150	357	PASS
4144.3144	-0.29	41.40	41.11	54.00	12.89	AV	150	124	PASS
5175.4175	2.01	76.78	78.79	54.00	-24.79	AV	150	64	---

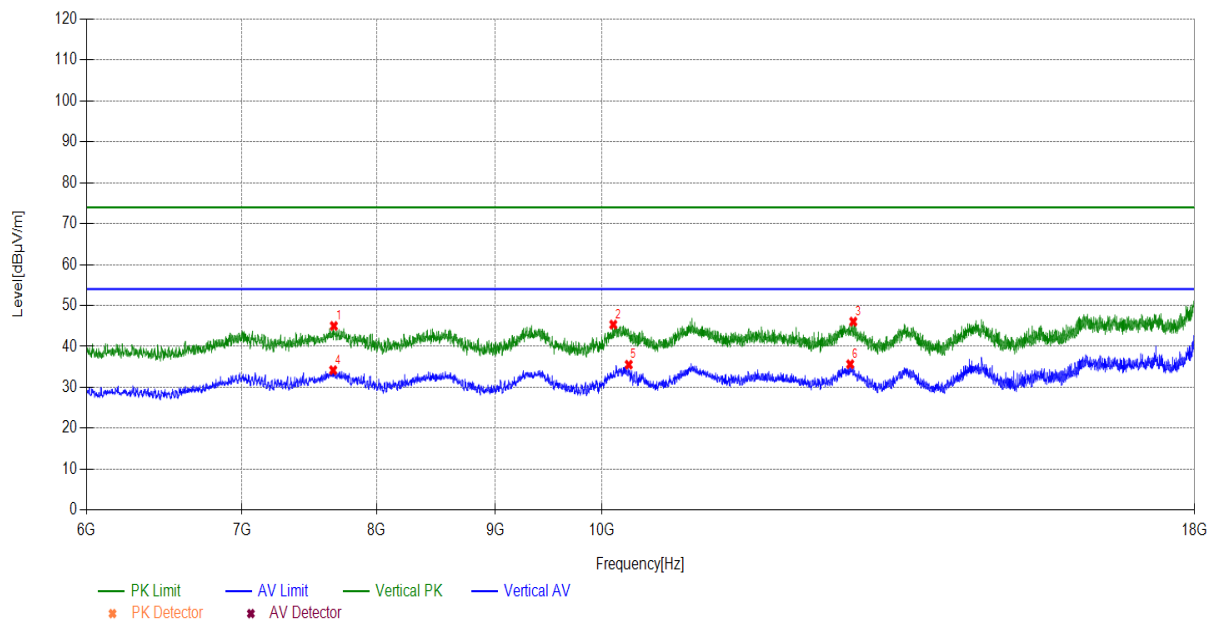


Note: The signal beyond the limit is carrier

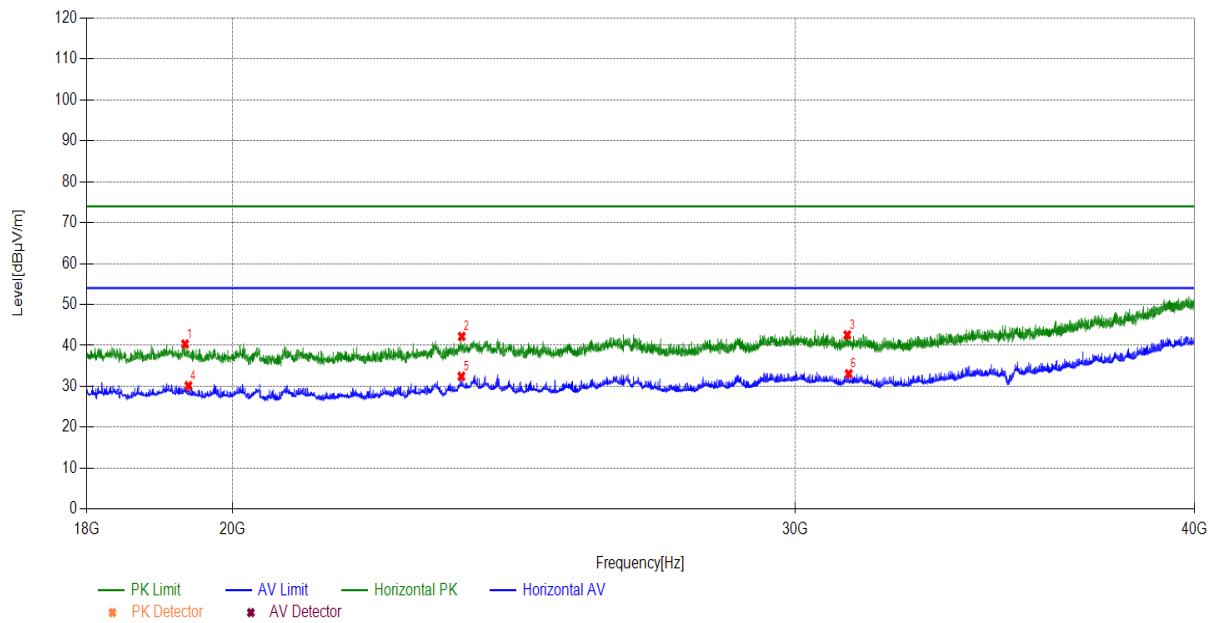
Radiates Emission		6G~18G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
6990.099	7.96	35.94	43.90	74.00	30.10	PK	150	10	PASS
9282.3282	10.60	35.05	45.65	74.00	28.35	PK	150	10	PASS
12847.8848	12.90	33.13	46.03	74.00	27.97	PK	150	20	PASS
7014.1014	8.01	25.68	33.69	54.00	20.31	AV	150	160	PASS
9392.7393	10.98	24.37	35.35	54.00	18.65	AV	150	20	PASS
12816.6817	12.82	23.01	35.83	54.00	18.17	AV	150	20	PASS



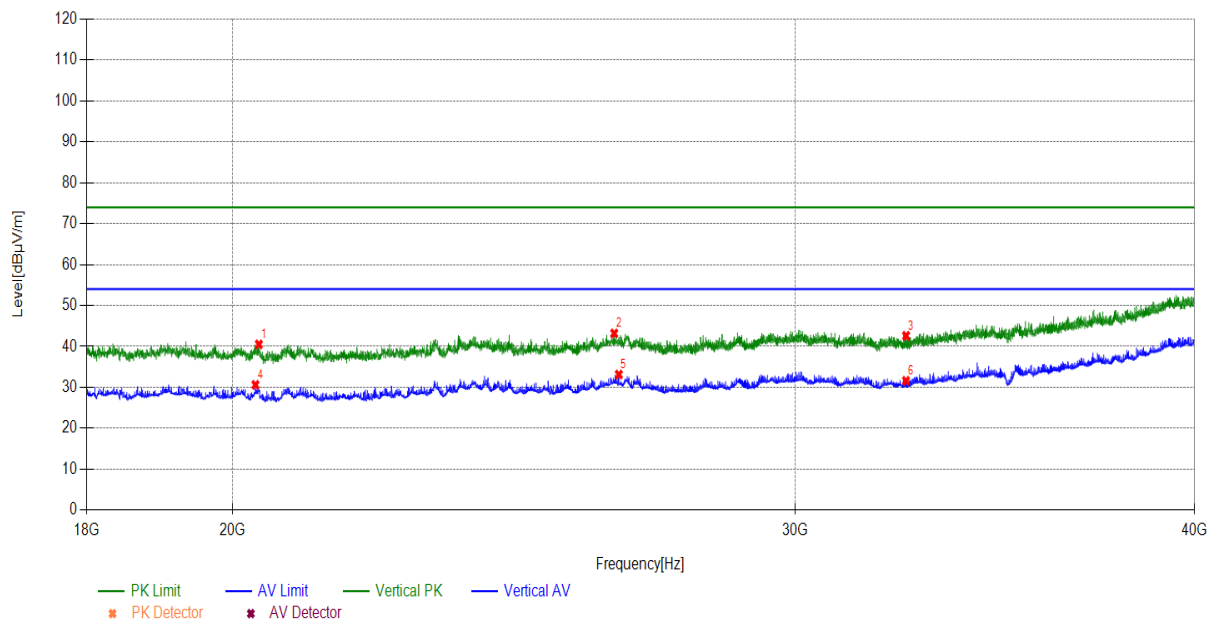
Radiates Emission		6G~18G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7666.9667	8.37	36.64	45.01	74.00	28.99	PK	150	260	PASS
10115.2115	11.66	33.69	45.35	74.00	28.65	PK	150	30	PASS
12832.2832	12.86	33.21	46.07	74.00	27.93	PK	150	290	PASS
7662.1662	8.37	25.83	34.20	54.00	19.80	AV	150	10	PASS
10271.2271	11.83	23.74	35.57	54.00	18.43	AV	150	30	PASS
12792.6793	12.76	22.92	35.68	54.00	18.32	AV	150	10	PASS



Radiates Emission		18G~40G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
19324.5325	1.33	39.02	40.35	74.00	33.65	PK	150	80	PASS
23588.5589	3.37	38.85	42.22	74.00	31.78	PK	150	260	PASS
31144.1144	6.20	36.37	42.57	74.00	31.43	PK	150	60	PASS
19370.7371	1.33	28.82	30.15	54.00	23.85	AV	150	20	PASS
23581.9582	3.37	29.10	32.47	54.00	21.53	AV	150	170	PASS
31174.9175	6.19	26.90	33.09	54.00	20.91	AV	150	90	PASS



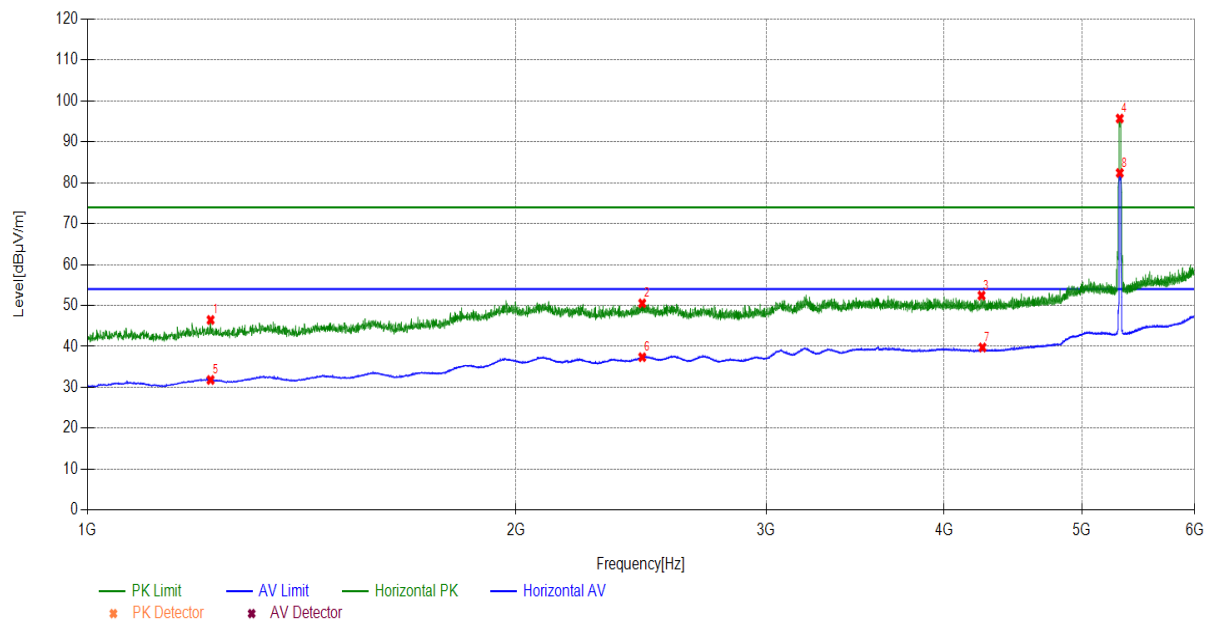
Radiates Emission		18G~40G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
20380.6381	1.43	39.08	40.51	74.00	33.49	PK	150	40	PASS
26327.8328	4.63	38.58	43.21	74.00	30.79	PK	150	60	PASS
32490.6491	6.10	36.51	42.61	74.00	31.39	PK	150	260	PASS
20330.033	1.42	29.20	30.62	54.00	23.38	AV	150	140	PASS
26415.8416	4.67	28.47	33.14	54.00	20.86	AV	150	320	PASS
32488.4488	6.10	25.52	31.62	54.00	22.38	AV	150	220	PASS



5.2.1.2.2 U-NII-2A:

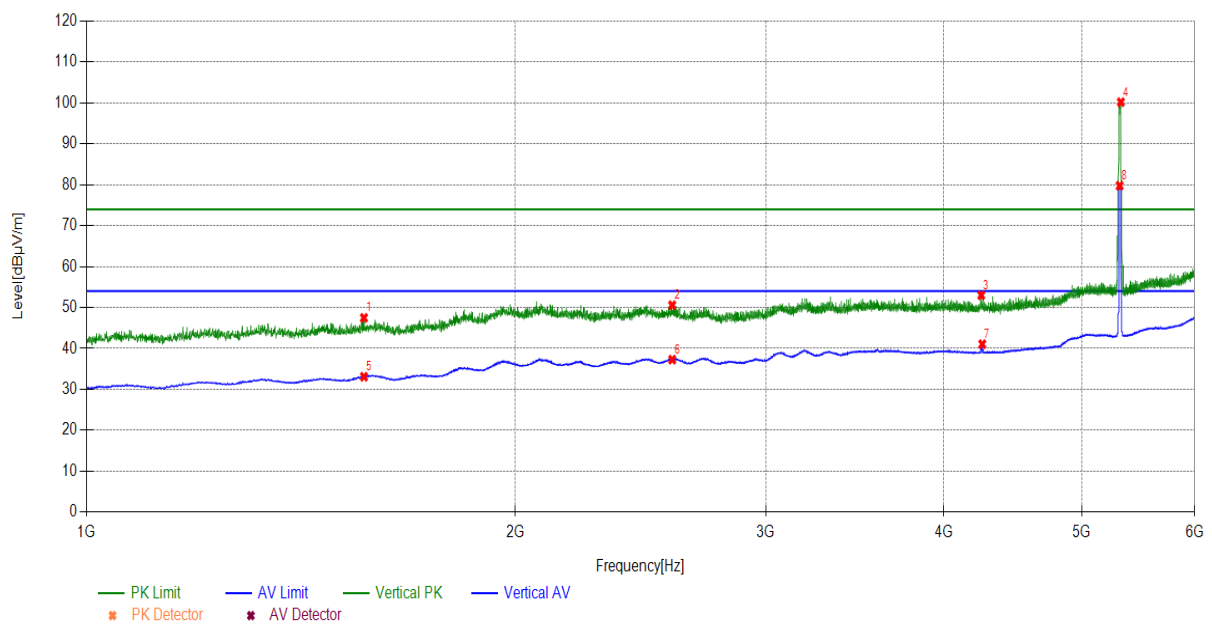
During the test, the Radiates Emission from 1GHz to 40GHz was performed in all modes with all channels and all antennas, 802.11ax20, Channel 64, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission		1G~6G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
1220.5221	-8.75	55.23	46.48	74.00	27.52	PK	150	347	PASS
2454.1454	-5.04	55.59	50.55	74.00	23.45	PK	150	275	PASS
4249.825	-0.41	52.86	52.45	74.00	21.55	PK	150	25	PASS
5314.9315	2.33	93.36	95.69	74.00	-21.69	PK	150	0	---
1220.5221	-8.75	40.58	31.83	54.00	22.17	AV	150	334	PASS
2454.1454	-5.04	42.43	37.39	54.00	16.61	AV	150	61	PASS
4256.3256	-0.41	40.17	39.76	54.00	14.24	AV	150	13	PASS
5315.4315	2.33	80.06	82.39	54.00	-28.39	AV	150	356	---



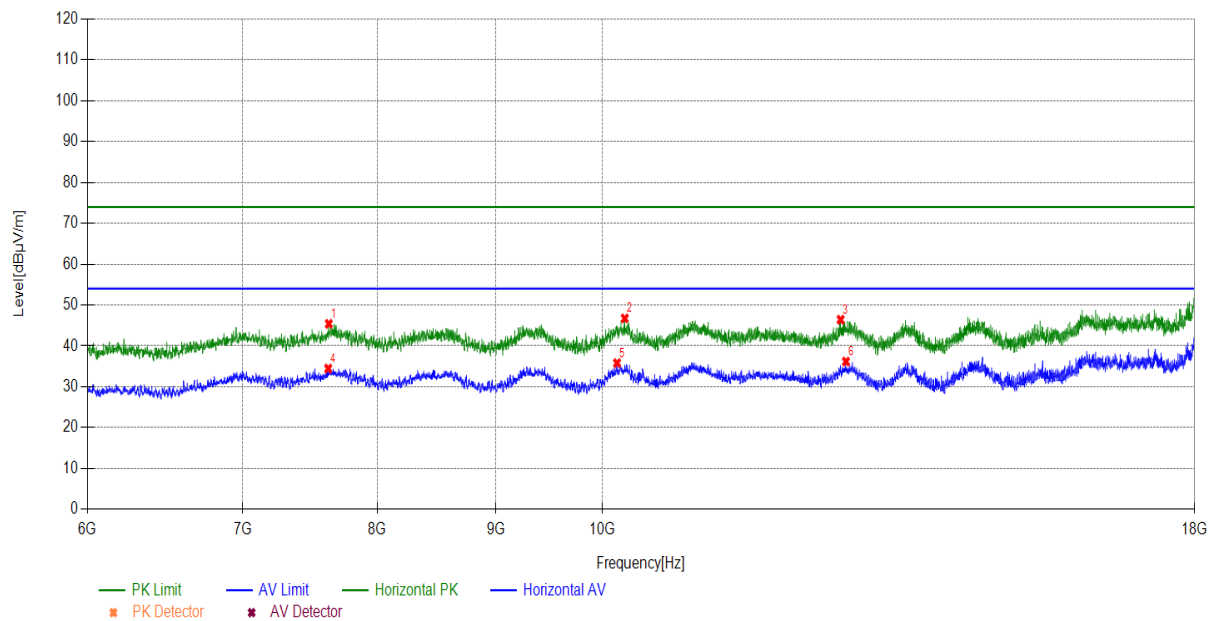
Note: The signal beyond the limit is carrier

Radiates Emission		1G~6G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
1566.0566	-7.83	55.31	47.48	74.00	26.52	PK	150	320	PASS
2578.1578	-4.65	55.22	50.57	74.00	23.43	PK	150	213	PASS
4249.3249	-0.41	53.42	53.01	74.00	20.99	PK	150	224	PASS
5325.4325	2.35	97.82	100.17	74.00	-26.17	PK	150	34	---
1566.0566	-7.83	40.93	33.10	54.00	20.90	AV	150	22	PASS
2578.1578	-4.65	41.94	37.29	54.00	16.71	AV	150	296	PASS
4256.3256	-0.41	41.47	41.06	54.00	12.94	AV	150	213	PASS
5314.9315	2.33	77.42	79.75	54.00	-25.75	AV	150	213	---

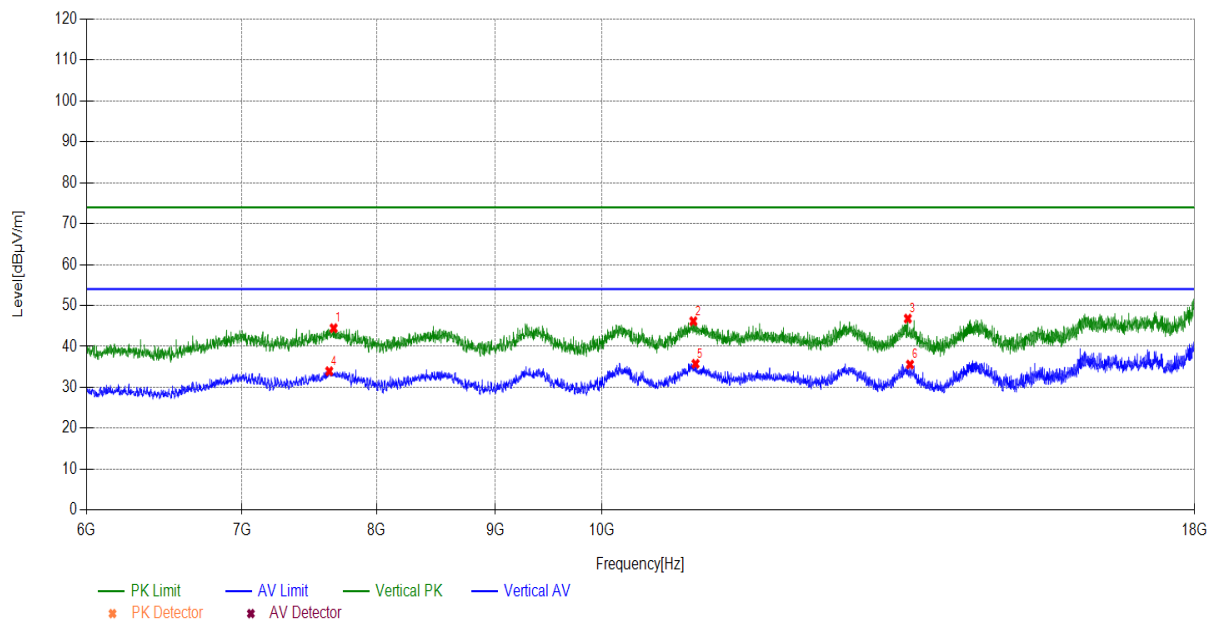


Note: The signal beyond the limit is carrier

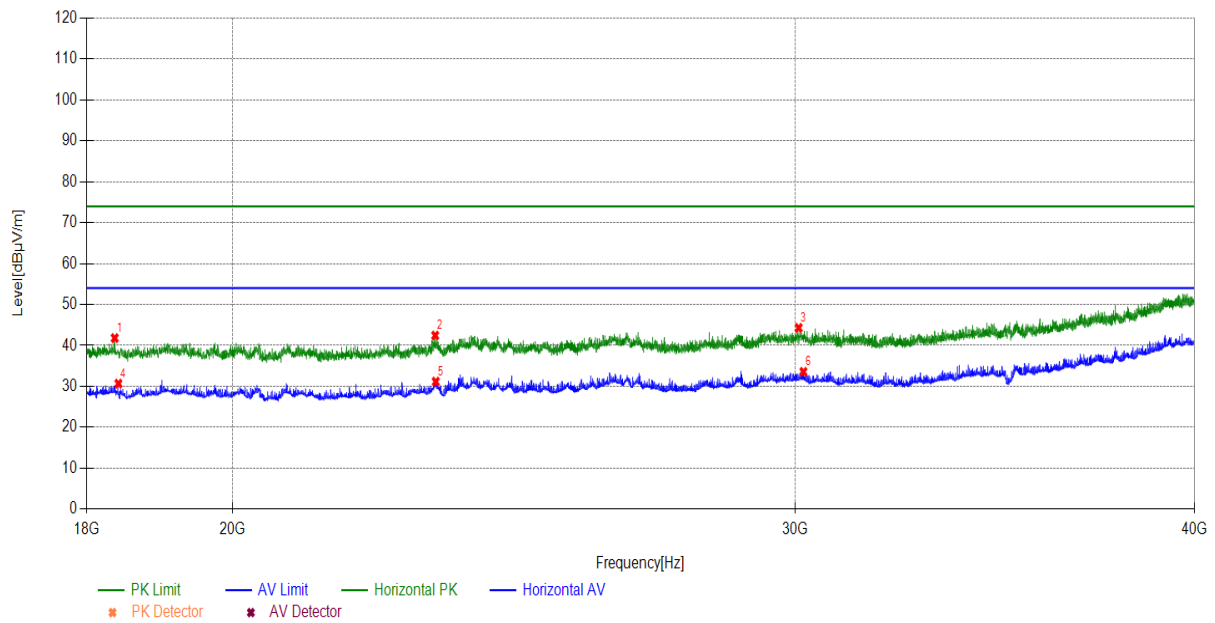
Radiates Emission		6G~18G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7623.7624	8.36	37.05	45.41	74.00	28.59	PK	150	310	PASS
10225.6226	11.79	34.95	46.74	74.00	27.26	PK	150	80	PASS
12667.8668	12.38	34.04	46.42	74.00	27.58	PK	150	250	PASS
7618.9619	8.36	26.11	34.47	54.00	19.53	AV	150	20	PASS
10147.6148	11.70	24.10	35.80	54.00	18.20	AV	150	160	PASS
12735.0735	12.58	23.59	36.17	54.00	17.83	AV	150	20	PASS



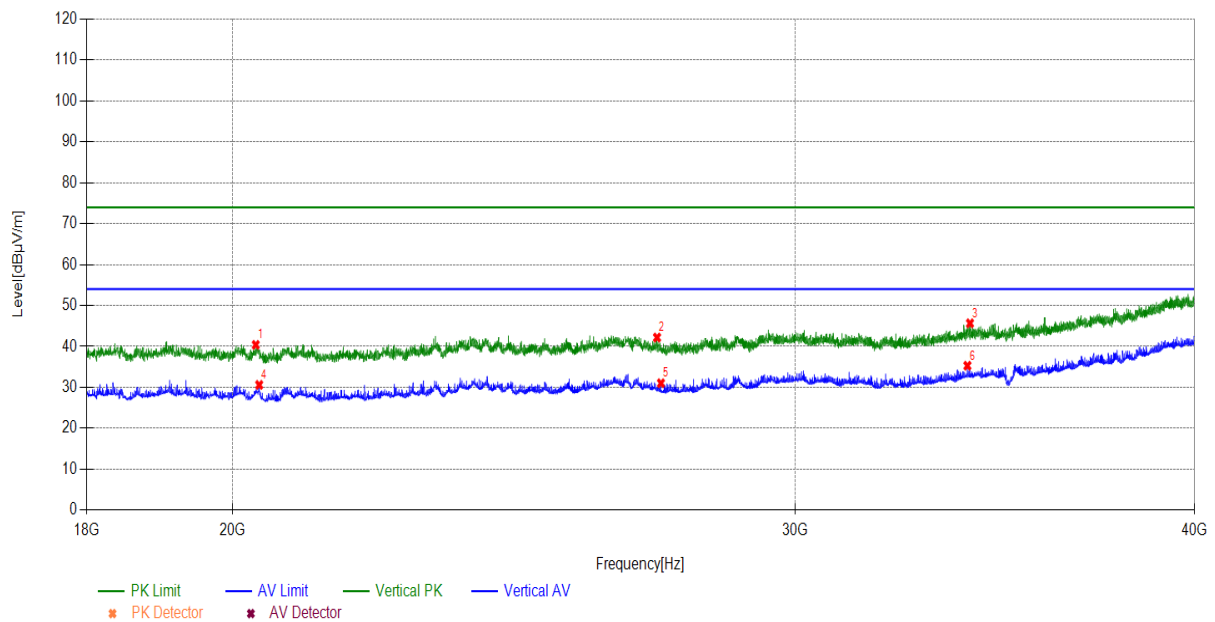
Radiates Emission		6G~18G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7665.7666	8.37	36.10	44.47	74.00	29.53	PK	150	240	PASS
10950.495	11.68	34.50	46.18	74.00	27.82	PK	150	330	PASS
13545.1545	13.58	33.24	46.82	74.00	27.18	PK	150	160	PASS
7632.1632	8.36	25.59	33.95	54.00	20.05	AV	150	290	PASS
10974.4975	11.66	24.12	35.78	54.00	18.22	AV	150	10	PASS
13573.9574	13.64	21.96	35.60	54.00	18.40	AV	150	30	PASS



Radiates Emission		18G~40G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
18369.637	1.19	40.62	41.81	74.00	32.19	PK	150	140	PASS
23141.9142	3.01	39.42	42.43	74.00	31.57	PK	150	120	PASS
30070.407	6.67	37.63	44.30	74.00	29.70	PK	150	230	PASS
18418.0418	1.20	29.49	30.69	54.00	23.31	AV	150	10	PASS
23150.7151	3.02	28.15	31.17	54.00	22.83	AV	150	260	PASS
30173.8174	6.62	26.96	33.58	54.00	20.42	AV	150	60	PASS



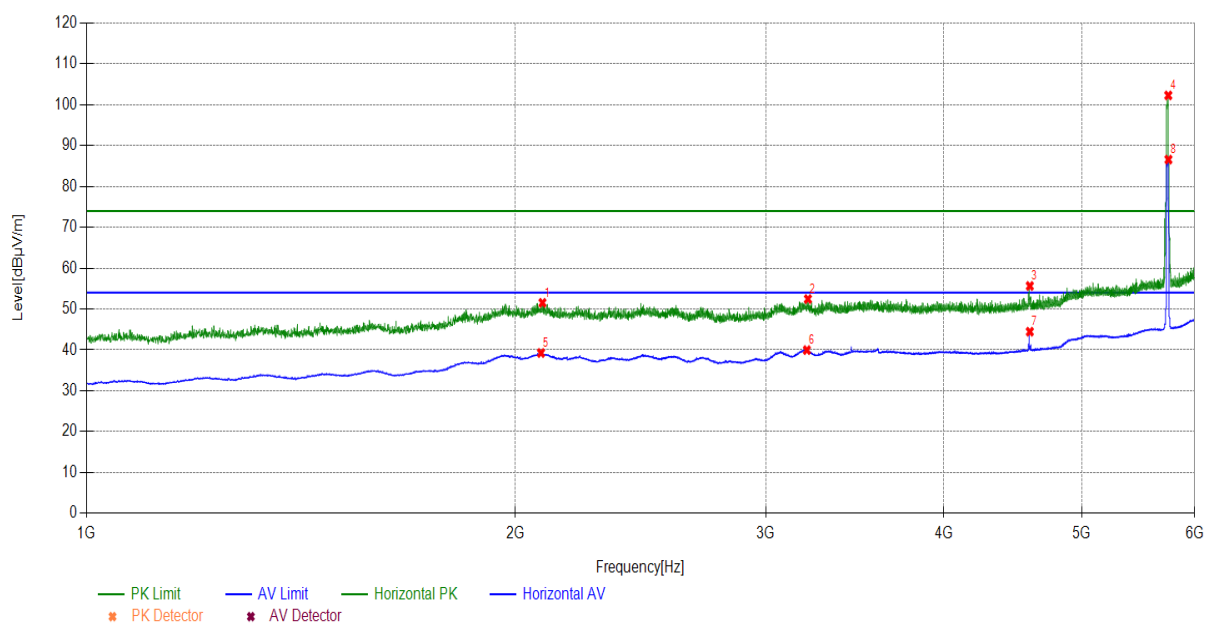
Radiates Emission		18G~40G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
20334.4334	1.42	38.97	40.39	74.00	33.61	PK	150	360	PASS
27152.9153	4.98	37.21	42.19	74.00	31.81	PK	150	20	PASS
34022.0022	6.60	39.07	45.67	74.00	28.33	PK	150	320	PASS
20385.0385	1.43	29.19	30.62	54.00	23.38	AV	150	180	PASS
27229.923	5.01	26.02	31.03	54.00	22.97	AV	150	60	PASS
33958.1958	6.59	28.72	35.31	54.00	18.69	AV	150	260	PASS



5.2.1.2.3 U-NII-3:

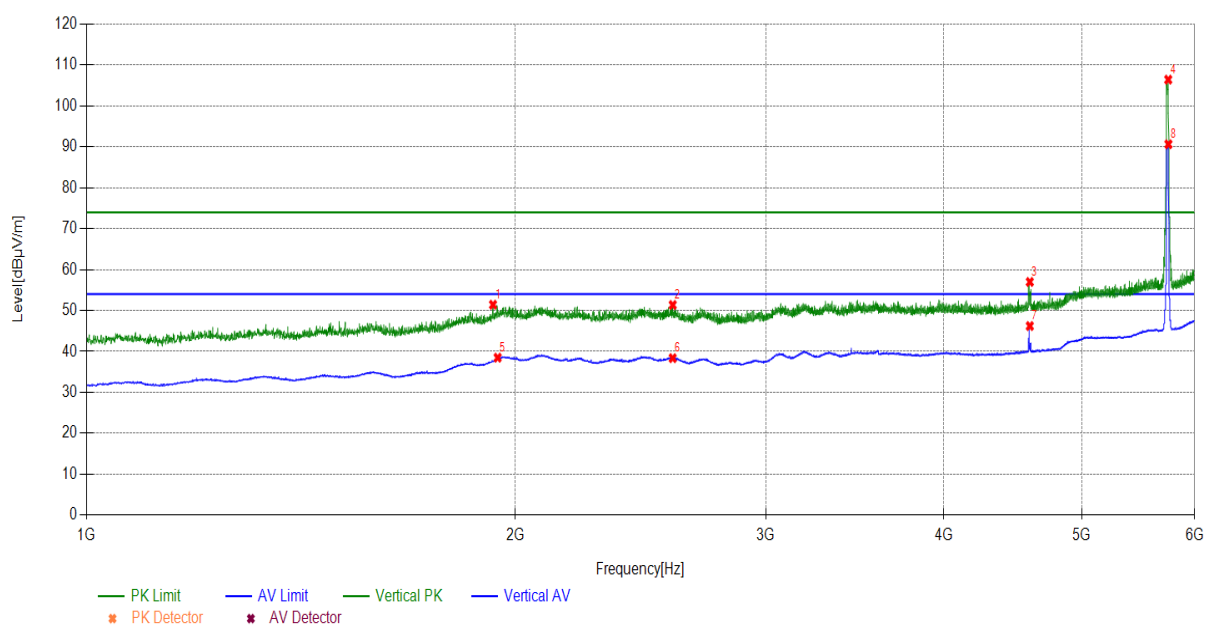
During the test, the Radiates Emission from 1GHz to 40GHz was performed in all modes with all channels and all antennas, 802.11ax20, Channel 149, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Radiates Emission		1G~6G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
2090.109	-6.11	57.63	51.52	74.00	22.48	PK	150	234	PASS
3210.7211	-2.29	54.74	52.45	74.00	21.55	PK	150	359	PASS
4596.3596	-0.23	55.87	55.64	74.00	18.36	PK	150	91	PASS
5749.975	3.88	98.38	102.26	74.00	-28.26	PK	150	31	---
2085.1085	-6.13	45.38	39.25	54.00	14.75	AV	150	352	PASS
3205.2205	-2.31	42.28	39.97	54.00	14.03	AV	150	359	PASS
4596.3596	-0.23	44.69	44.46	54.00	9.54	AV	150	43	PASS
5751.4751	3.89	82.68	86.57	54.00	-32.57	AV	150	19	---



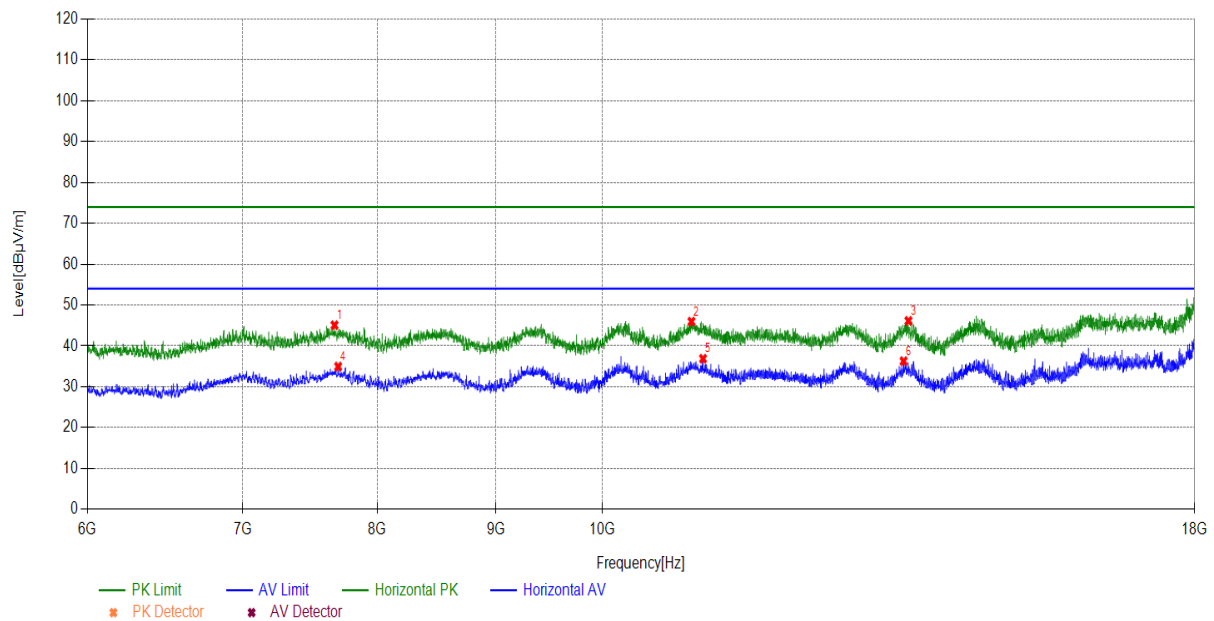
Note: The signal beyond the limit is carrier

Radiates Emission		1G~6G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
1929.593	-6.61	58.04	51.43	74.00	22.57	PK	150	49	PASS
2580.158	-4.64	56.01	51.37	74.00	22.63	PK	150	335	PASS
4596.3596	-0.23	57.22	56.99	74.00	17.01	PK	150	180	PASS
5749.4749	3.88	102.53	106.41	74.00	-32.41	PK	150	97	---
1944.0944	-6.56	45.05	38.49	54.00	15.51	AV	150	4	PASS
2580.158	-4.64	43.01	38.37	54.00	15.63	AV	150	168	PASS
4596.3596	-0.23	46.45	46.22	54.00	7.78	AV	150	216	PASS
5751.4751	3.89	86.73	90.62	54.00	-36.62	AV	150	251	---

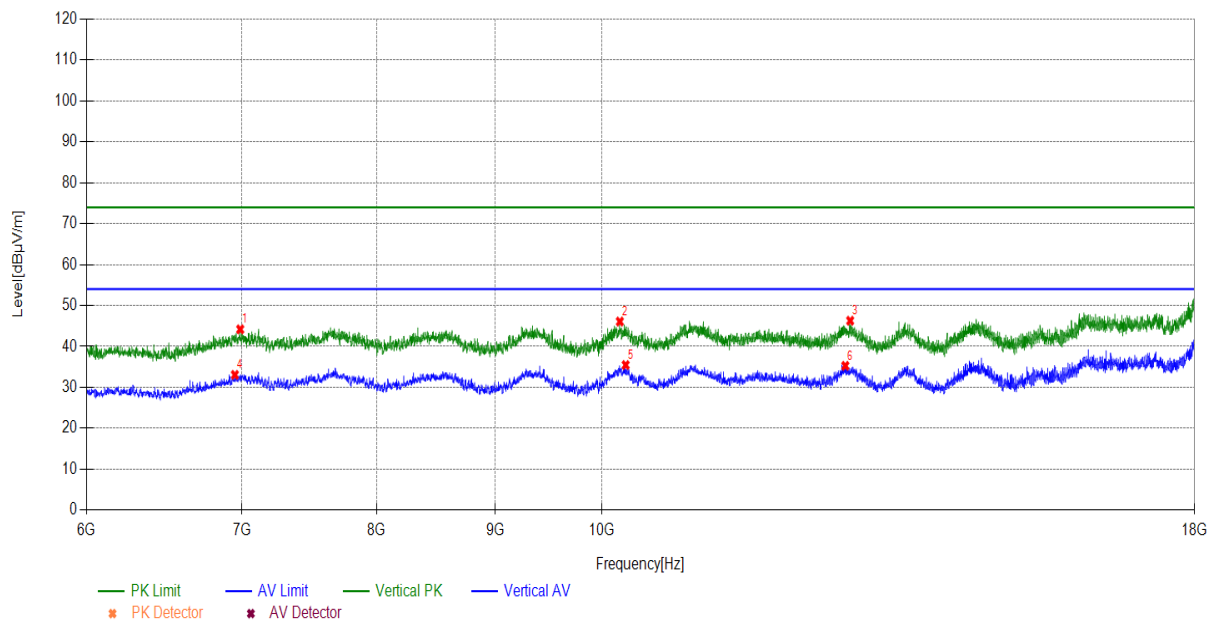


Note: The signal beyond the limit is carrier

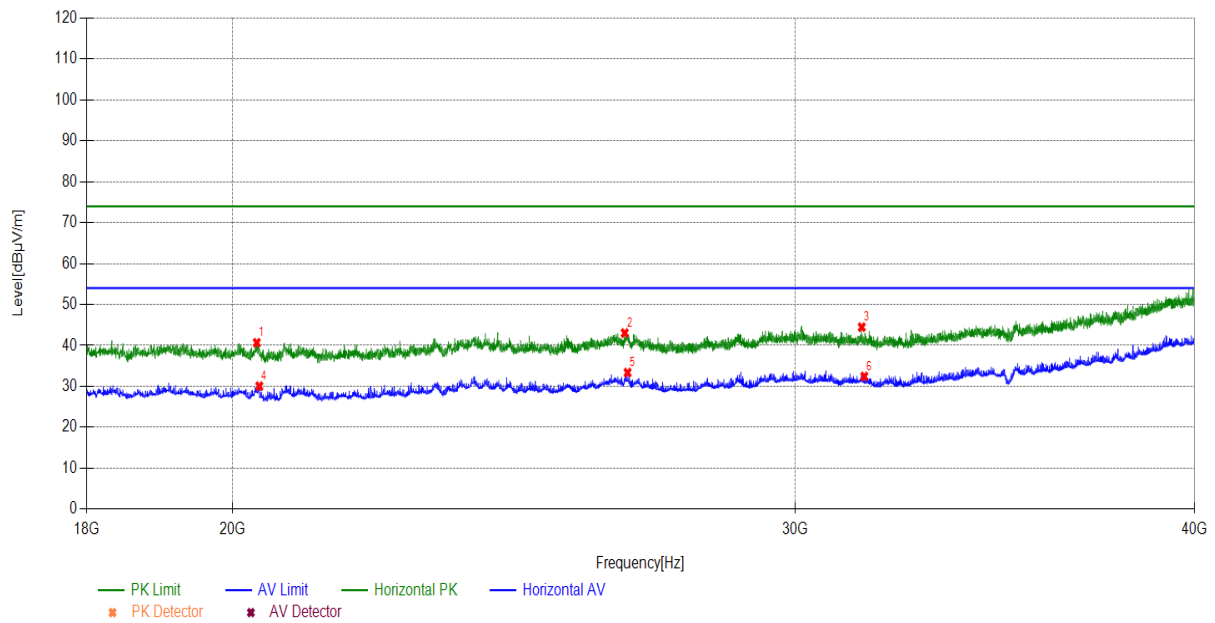
Radiates Emission		6G~18G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
7666.9667	8.37	36.69	45.06	74.00	28.94	PK	150	220	PASS
10925.2925	11.70	34.25	45.95	74.00	28.05	PK	150	120	PASS
13549.955	13.59	32.54	46.13	74.00	27.87	PK	150	60	PASS
7694.5695	8.38	26.57	34.95	54.00	19.05	AV	150	180	PASS
11051.3051	11.61	25.27	36.88	54.00	17.12	AV	150	70	PASS
13485.1485	13.48	22.80	36.28	54.00	17.72	AV	150	20	PASS



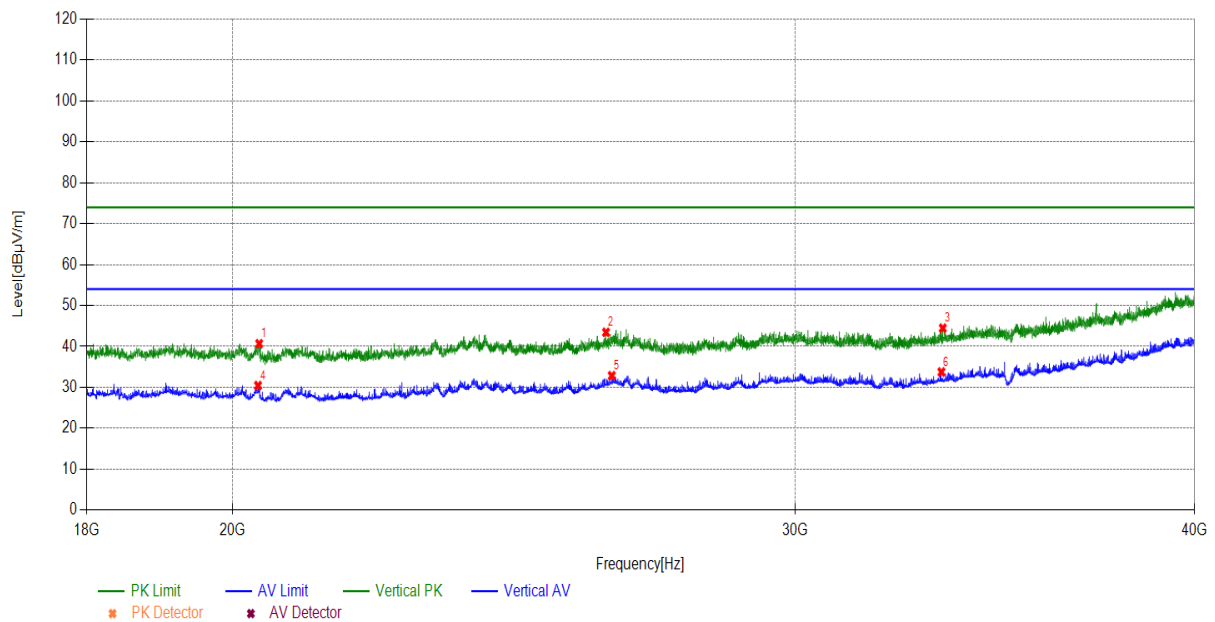
Radiates Emission		6G~18G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
6987.6988	7.95	36.25	44.20	74.00	29.80	PK	150	250	PASS
10181.2181	11.75	34.34	46.09	74.00	27.91	PK	150	180	PASS
12792.6793	12.76	33.54	46.30	74.00	27.70	PK	150	170	PASS
6950.495	7.75	25.33	33.08	54.00	20.92	AV	150	50	PASS
10240.024	11.80	23.67	35.47	54.00	18.53	AV	150	110	PASS
12731.4731	12.57	22.71	35.28	54.00	18.72	AV	150	220	PASS



Radiates Emission		18G~40G							
Test channel		Worst-Case							
polarization		Horizontal							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
20349.835	1.42	39.26	40.68	74.00	33.32	PK	150	150	PASS
26528.0528	4.71	38.34	43.05	74.00	30.95	PK	150	160	PASS
31469.747	6.09	38.40	44.49	74.00	29.51	PK	150	260	PASS
20387.2387	1.44	28.63	30.07	54.00	23.93	AV	150	120	PASS
26583.0583	4.73	28.66	33.39	54.00	20.61	AV	150	230	PASS
31526.9527	6.07	26.35	32.42	54.00	21.58	AV	150	10	PASS



Radiates Emission		18G~40G							
Test channel		Worst-Case							
polarization		Vertical							
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/ m]	Limit [dBμV/ m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
20385.0385	1.43	39.25	40.68	74.00	33.32	PK	150	30	PASS
26173.8174	4.57	38.90	43.47	74.00	30.53	PK	150	360	PASS
33361.9362	6.41	38.07	44.48	74.00	29.52	PK	150	40	PASS
20367.4367	1.43	29.03	30.46	54.00	23.54	AV	150	20	PASS
26281.6282	4.61	28.26	32.87	54.00	21.13	AV	150	310	PASS
33328.9329	6.40	27.37	33.77	54.00	20.23	AV	150	170	PASS



5.2.2 Band edge measurements (Radiates):

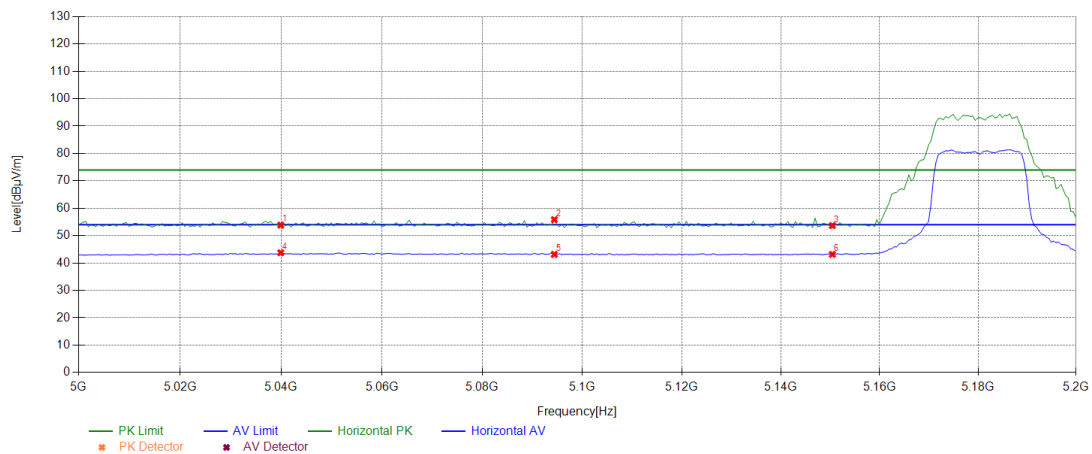
Test Results:

U-NII-1, U-NII-2A: 5150-5350MHz:

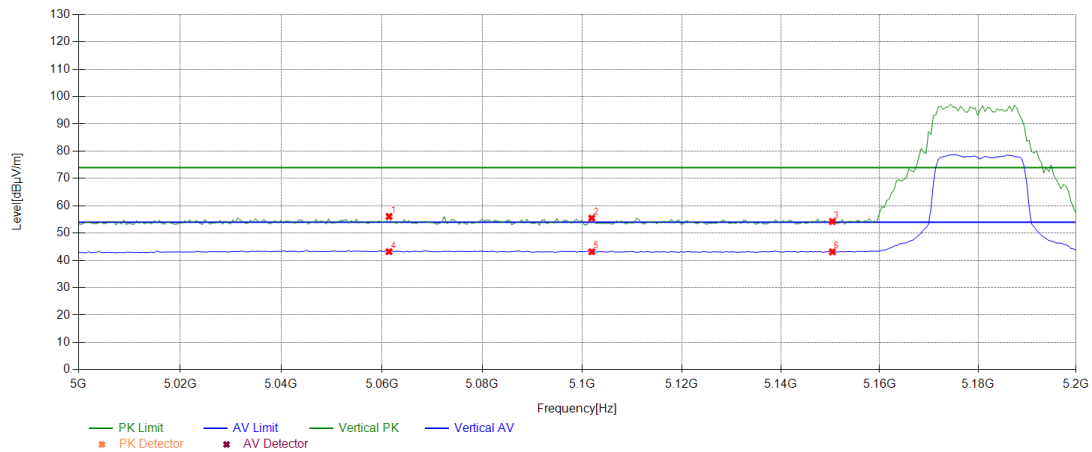
During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas.

802.11ax20, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

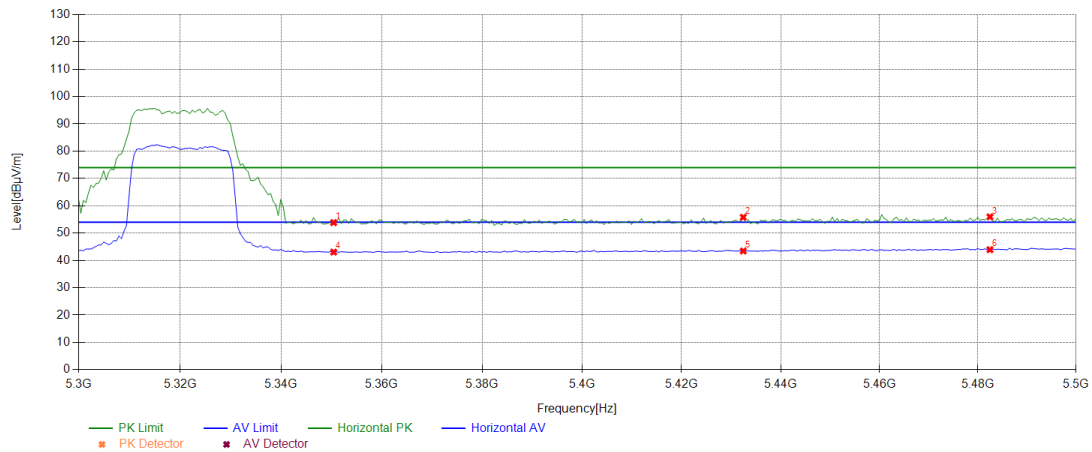
Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Horizontal						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5039.904	1.59	52.27	53.86	74.00	20.14	PK	150	254	PASS
5094.4094	1.76	54.09	55.85	74.00	18.15	PK	150	1	PASS
5150.415	1.94	51.75	53.69	74.00	20.31	PK	150	360	PASS
5039.904	1.59	42.17	43.76	54.00	10.24	AV	150	1	PASS
5094.4094	1.76	41.39	43.15	54.00	10.85	AV	150	171	PASS
5150.415	1.94	41.22	43.16	54.00	10.84	AV	150	360	PASS



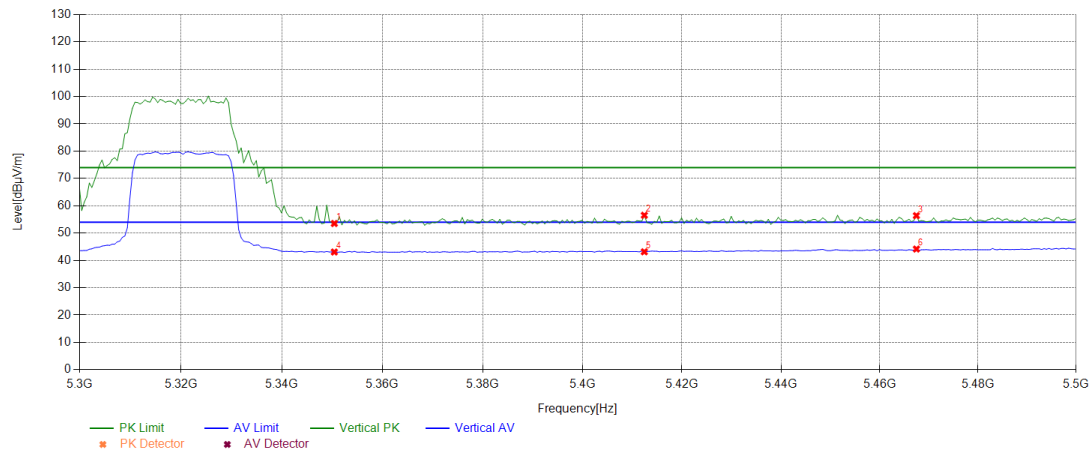
Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Vertical						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5061.4061	1.65	54.47	56.12	74.00	17.88	PK	150	53	PASS
5101.9102	1.78	53.72	55.50	74.00	18.50	PK	150	338	PASS
5150.415	1.94	52.30	54.24	74.00	19.76	PK	150	326	PASS
5061.4061	1.65	41.58	43.23	54.00	10.77	AV	150	160	PASS
5101.9102	1.78	41.42	43.20	54.00	10.80	AV	150	357	PASS
5150.415	1.94	41.22	43.16	54.00	10.84	AV	150	160	PASS



Test mode			802.11ax20						
Test channel			Highest channel						
polarization			Horizontal						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5350.435	2.40	51.45	53.85	74.00	20.15	PK	150	85	PASS
5432.4432	2.59	53.21	55.80	74.00	18.20	PK	150	168	PASS
5482.4482	2.72	53.23	55.95	74.00	18.05	PK	150	323	PASS
5350.435	2.40	40.67	43.07	54.00	10.93	AV	150	216	PASS
5432.4432	2.59	40.87	43.46	54.00	10.54	AV	150	97	PASS
5482.4482	2.72	41.22	43.94	54.00	10.06	AV	150	347	PASS



Test mode			802.11ax20						
Test channel			Highest channel						
polarization			Vertical						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5350.435	2.40	51.13	53.53	74.00	20.47	PK	150	189	PASS
5412.4412	2.54	54.00	56.54	74.00	17.46	PK	150	213	PASS
5467.4467	2.68	53.72	56.40	74.00	17.60	PK	150	22	PASS
5350.435	2.40	40.69	43.09	54.00	10.91	AV	150	10	PASS
5412.4412	2.54	40.64	43.18	54.00	10.82	AV	150	237	PASS
5467.4467	2.68	41.49	44.17	54.00	9.83	AV	150	10	PASS

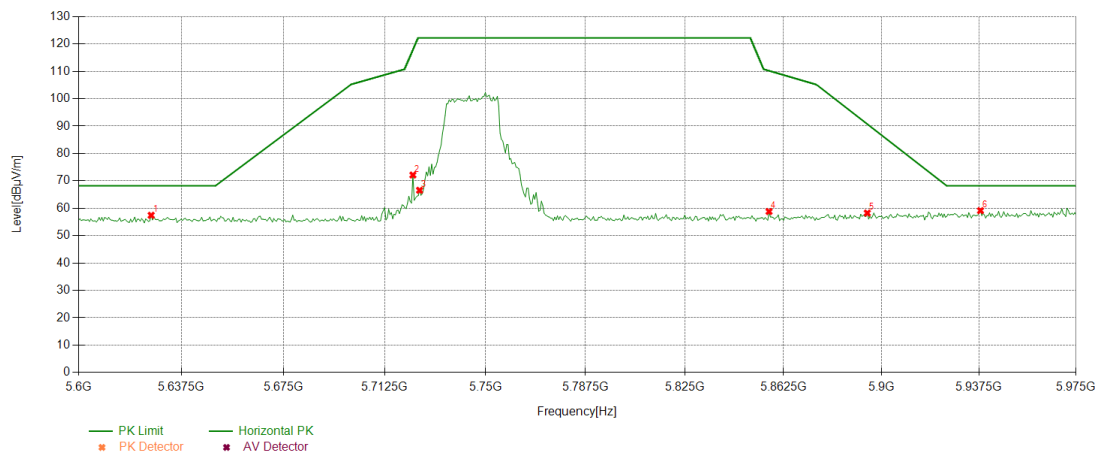


U-NII-3 5725-5850MHz:

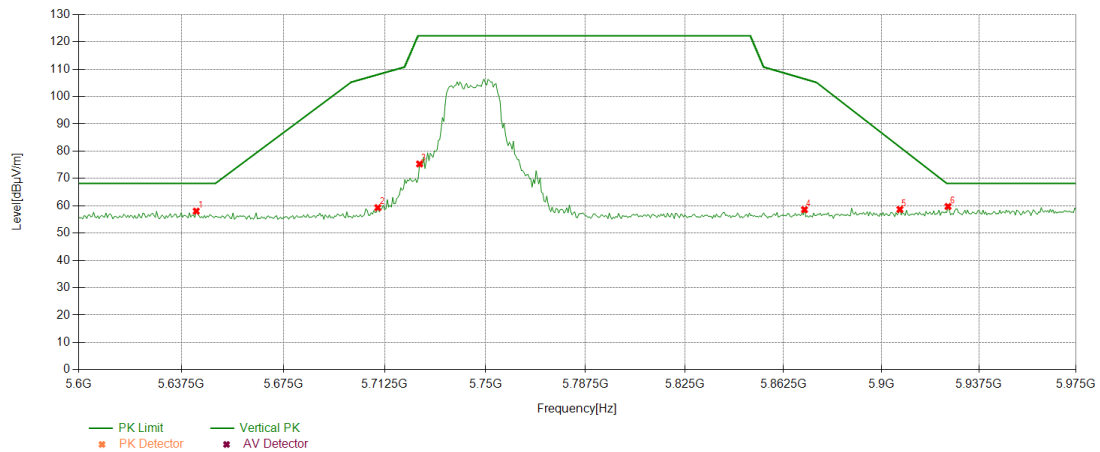
During the test, the Band Edge was performed in WIFI all modes with all channels and all antennas.

802.11ax20, Antenna1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

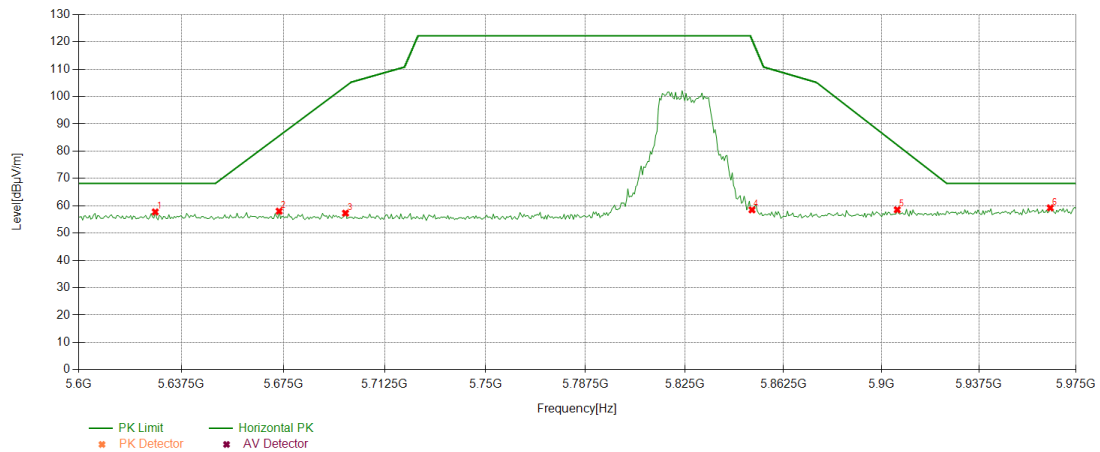
Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Horizontal						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5626.4626	3.32	54.12	57.44	68.20	10.76	PK	150	329	PASS
5722.9723	3.76	68.38	72.14	117.58	45.44	PK	150	31	PASS
5725.4725	3.77	62.80	66.57	122.20	55.63	PK	150	31	PASS
5856.9857	4.35	54.47	58.82	110.24	51.42	PK	150	127	PASS
5894.4894	4.51	53.75	58.26	90.74	32.48	PK	150	359	PASS
5937.9938	4.70	54.44	59.14	68.20	9.06	PK	150	31	PASS



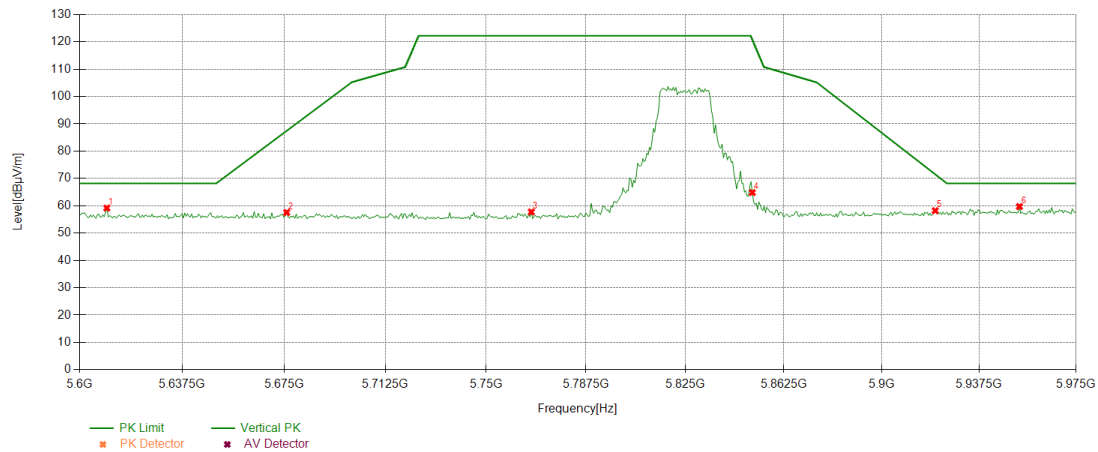
Test mode			802.11ax20						
Test channel			Lowest channel						
polarization			Vertical						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5642.9643	3.39	54.64	58.03	68.20	10.17	PK	150	228	PASS
5709.971	3.70	55.62	59.32	107.99	48.67	PK	150	228	PASS
5725.4725	3.77	71.55	75.32	122.20	46.88	PK	150	180	PASS
5870.487	4.41	54.18	58.59	106.46	47.87	PK	150	4	PASS
5906.9907	4.56	54.10	58.66	81.49	22.83	PK	150	61	PASS
5925.4925	4.64	55.12	59.76	68.20	8.44	PK	150	157	PASS



Test mode			802.11ax20						
Test channel			Highest channel						
polarization			Horizontal						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5627.9628	3.32	54.43	57.75	68.20	10.45	PK	150	178	PASS
5673.4673	3.53	54.50	58.03	85.61	27.58	PK	150	320	PASS
5697.9698	3.64	53.66	57.30	103.70	46.40	PK	150	237	PASS
5850.485	4.32	54.20	58.52	121.09	62.57	PK	150	118	PASS
5905.9906	4.56	53.98	58.54	82.23	23.69	PK	150	83	PASS
5964.9965	4.81	54.44	59.25	68.20	8.95	PK	150	189	PASS



Test mode			802.11ax20						
Test channel			Highest channel						
polarization			Vertical						
Suspected List									
Frequency [MHz]	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/ Fail
5609.961	3.24	55.95	59.19	68.20	9.01	PK	150	182	PASS
5675.9676	3.54	54.03	57.57	87.46	29.89	PK	150	158	PASS
5766.9767	3.96	53.80	57.76	122.20	64.44	PK	150	194	PASS
5850.485	4.32	60.52	64.84	121.09	56.25	PK	150	87	PASS
5920.492	4.62	53.59	58.21	71.52	13.31	PK	150	229	PASS
5952.9953	4.76	54.97	59.73	68.20	8.47	PK	150	182	PASS



5.3 Maximum conducted output power

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

During the process of the testing, The EUT was connected to spectrum analyzer through an external attenuator and a known loss cable. The EUT is max power transmission with proper modulation. We use Maximum average Conducted Output Power Level Method in KDB789033 for this test

The conducted Power is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

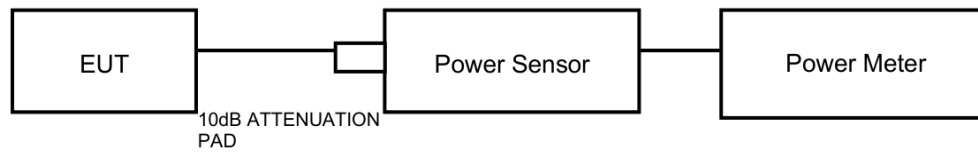
Limits:

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

Test Results:

TestMode	Antenna	Channel	Output Power[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	9.31	≤ 23.98	PASS
	Ant1	5220	10.41	≤ 23.98	PASS
	Ant1	5240	10.74	≤ 23.98	PASS
	Ant1	5260	10.28	≤ 23.98	PASS
	Ant1	5300	9.95	≤ 23.98	PASS
	Ant1	5320	9.20	≤ 23.98	PASS
	Ant1	5745	12.17	≤ 30.00	PASS
	Ant1	5785	12.38	≤ 30.00	PASS
	Ant1	5825	12.53	≤ 30.00	PASS
11N20SISO	Ant1	5180	9.14	≤ 23.98	PASS
	Ant1	5220	10.17	≤ 23.98	PASS
	Ant1	5240	10.44	≤ 23.98	PASS
	Ant1	5260	10.13	≤ 23.98	PASS
	Ant1	5300	9.58	≤ 23.98	PASS
	Ant1	5320	8.78	≤ 23.98	PASS
	Ant1	5745	12.00	≤ 30.00	PASS
	Ant1	5785	12.01	≤ 30.00	PASS
	Ant1	5825	13.04	≤ 30.00	PASS
11N40SISO	Ant1	5190	9.40	≤ 23.98	PASS
	Ant1	5230	9.52	≤ 23.98	PASS
	Ant1	5270	10.02	≤ 23.98	PASS
	Ant1	5310	9.08	≤ 23.98	PASS
	Ant1	5755	11.47	≤ 30.00	PASS
	Ant1	5795	11.91	≤ 30.00	PASS
11AC20SISO	Ant1	5180	8.82	≤ 23.98	PASS
	Ant1	5220	9.97	≤ 23.98	PASS
	Ant1	5240	10.28	≤ 23.98	PASS
	Ant1	5260	9.79	≤ 23.98	PASS
	Ant1	5300	9.30	≤ 23.98	PASS
	Ant1	5320	8.69	≤ 23.98	PASS
	Ant1	5745	11.37	≤ 30.00	PASS
	Ant1	5785	11.69	≤ 30.00	PASS
	Ant1	5825	11.91	≤ 30.00	PASS
11AC40SISO	Ant1	5190	8.71	≤ 23.98	PASS
	Ant1	5230	9.19	≤ 23.98	PASS

	Ant1	5270	9.50	≤ 23.98	PASS
	Ant1	5310	8.93	≤ 23.98	PASS
	Ant1	5755	11.01	≤ 30.00	PASS
	Ant1	5795	11.73	≤ 30.00	PASS
11AX20SISO	Ant1	5180	8.60	≤ 23.98	PASS
	Ant1	5220	9.73	≤ 23.98	PASS
	Ant1	5240	10.52	≤ 23.98	PASS
	Ant1	5260	9.93	≤ 23.98	PASS
	Ant1	5300	9.28	≤ 23.98	PASS
	Ant1	5320	8.49	≤ 23.98	PASS
	Ant1	5745	13.90	≤ 30.00	PASS
	Ant1	5785	12.34	≤ 30.00	PASS
	Ant1	5825	11.89	≤ 30.00	PASS
11AX40SISO	Ant1	5190	8.96	≤ 23.98	PASS
	Ant1	5230	10.02	≤ 23.98	PASS
	Ant1	5270	9.60	≤ 23.98	PASS
	Ant1	5310	9.35	≤ 23.98	PASS
	Ant1	5755	11.67	≤ 30.00	PASS
	Ant1	5795	11.78	≤ 30.00	PASS

5.4 Min Emission Bandwidth and Emission Bandwidth and Occupied Bandwidth

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

For U-NII-1, set RBW $\approx 1\%$ OCB kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

For U-NII-3, Set RBW = 100 kHz, VBW $\geq 3 \times$ RBW, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

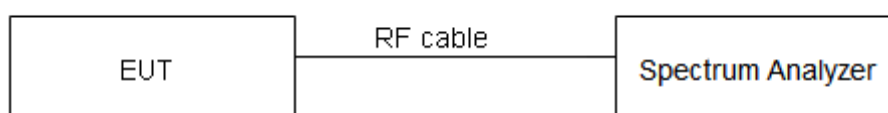
Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

Use the 99 % power bandwidth function of the instrument.

Limits:

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results: Min emission bandwidth

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.32	5736.80	5753.12	≥0.5	PASS
		5785	16.32	5776.80	5793.12	≥0.5	PASS
		5825	16.32	5816.80	5833.12	≥0.5	PASS
11N20SISO	Ant1	5745	17.60	5736.16	5753.76	≥0.5	PASS
		5785	17.60	5776.16	5793.76	≥0.5	PASS
		5825	17.60	5816.16	5833.76	≥0.5	PASS
11N40SISO	Ant1	5755	36.40	5736.76	5773.16	≥0.5	PASS
		5795	36.40	5776.76	5813.16	≥0.5	PASS
11AC20SISO	Ant1	5745	17.60	5736.16	5753.76	≥0.5	PASS
		5785	17.60	5776.16	5793.76	≥0.5	PASS
		5825	17.60	5816.16	5833.76	≥0.5	PASS
11AC40SISO	Ant1	5755	36.40	5736.76	5773.16	≥0.5	PASS
		5795	36.40	5776.76	5813.16	≥0.5	PASS
11AX20SISO	Ant1	5745	18.96	5735.48	5754.44	≥0.5	PASS
		5785	18.88	5775.52	5794.40	≥0.5	PASS
		5825	18.96	5815.48	5834.44	≥0.5	PASS
11AX40SISO	Ant1	5755	38.08	5735.96	5774.04	≥0.5	PASS
		5795	37.92	5776.04	5813.96	≥0.5	PASS

Test Results: Emission Bandwidth

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	25.16	5167.16	5192.32	---	---
	Ant1	5220	25.20	5206.88	5232.08	---	---
	Ant1	5240	25.00	5227.32	5252.32	---	---
	Ant1	5260	25.04	5247.08	5272.12	---	---
	Ant1	5300	25.04	5287.04	5312.08	---	---
	Ant1	5320	24.80	5307.00	5331.80	---	---
	Ant1	5745	24.52	5732.56	5757.08	---	---
	Ant1	5785	25.16	5772.44	5797.60	---	---
11N20SISO	Ant1	5825	25.28	5812.00	5837.28	---	---
	Ant1	5180	25.64	5167.32	5192.96	---	---
	Ant1	5220	26.00	5207.00	5233.00	---	---
	Ant1	5240	25.48	5226.96	5252.44	---	---
	Ant1	5260	25.88	5246.88	5272.76	---	---
	Ant1	5300	25.68	5286.88	5312.56	---	---
	Ant1	5320	25.60	5306.84	5332.44	---	---
	Ant1	5745	25.44	5732.32	5757.76	---	---
11N40SISO	Ant1	5785	25.80	5772.20	5798.00	---	---
	Ant1	5825	27.56	5811.36	5838.92	---	---
	Ant1	5190	50.00	5165.28	5215.28	---	---
	Ant1	5230	49.60	5204.72	5254.32	---	---
	Ant1	5270	51.12	5243.84	5294.96	---	---
	Ant1	5310	50.16	5284.40	5334.56	---	---
11AC20SISO	Ant1	5755	54.56	5726.60	5781.16	---	---
	Ant1	5795	51.44	5768.44	5819.88	---	---
	Ant1	5180	25.32	5167.60	5192.92	---	---
	Ant1	5220	25.36	5207.40	5232.76	---	---
	Ant1	5240	25.24	5227.20	5252.44	---	---
	Ant1	5260	25.60	5247.12	5272.72	---	---
	Ant1	5300	25.32	5287.32	5312.64	---	---
	Ant1	5320	25.20	5307.20	5332.40	---	---
11AC40SISO	Ant1	5745	26.64	5732.40	5759.04	---	---
	Ant1	5785	25.28	5772.40	5797.68	---	---
	Ant1	5825	25.88	5812.04	5837.92	---	---
	Ant1	5190	49.68	5165.28	5214.96	---	---
	Ant1	5230	49.12	5205.68	5254.80	---	---
	Ant1	5270	49.44	5245.28	5294.72	---	---
11AX20SISO	Ant1	5310	48.80	5285.28	5334.08	---	---
	Ant1	5755	49.36	5730.68	5780.04	---	---
	Ant1	5795	49.20	5770.92	5820.12	---	---
	Ant1	5180	25.36	5167.72	5193.08	---	---
	Ant1	5220	24.72	5207.92	5232.64	---	---
	Ant1	5240	25.40	5227.52	5252.92	---	---
	Ant1	5260	25.40	5247.16	5272.56	---	---
	Ant1	5300	25.04	5287.56	5312.60	---	---
11AX40SISO	Ant1	5320	24.28	5307.72	5332.00	---	---
	Ant1	5745	25.08	5732.64	5757.72	---	---
	Ant1	5785	24.88	5772.68	5797.56	---	---
	Ant1	5825	25.40	5812.44	5837.84	---	---
	Ant1	5190	45.60	5167.20	5212.80	---	---
	Ant1	5230	45.36	5207.04	5252.40	---	---
11AX40SISO	Ant1	5270	46.72	5245.84	5292.56	---	---
	Ant1	5310	45.84	5286.48	5332.32	---	---
	Ant1	5755	46.56	5731.56	5778.12	---	---
	Ant1	5795	46.72	5771.32	5818.04	---	---
	Ant1	5795	46.72	5771.32	5818.04	---	---

Test Results: Occupied channel bandwidth

TestMode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.581	---	---
	Ant1	5220	18.701	---	---
	Ant1	5240	18.621	---	---
	Ant1	5260	18.701	---	---
	Ant1	5300	18.581	---	---
	Ant1	5320	18.541	---	---
	Ant1	5745	18.701	---	---
	Ant1	5785	18.701	---	---
11N20SISO	Ant1	5825	18.701	---	---
	Ant1	5180	19.66	---	---
	Ant1	5220	19.58	---	---
	Ant1	5240	19.62	---	---
	Ant1	5260	19.74	---	---
	Ant1	5300	19.58	---	---
	Ant1	5320	19.74	---	---
	Ant1	5745	19.7	---	---
11N40SISO	Ant1	5785	19.74	---	---
	Ant1	5825	19.82	---	---
	Ant1	5190	37.882	---	---
	Ant1	5230	37.722	---	---
	Ant1	5270	37.962	---	---
	Ant1	5310	37.802	---	---
11AC20SISO	Ant1	5755	38.202	---	---
	Ant1	5795	37.962	---	---
	Ant1	5180	19.66	---	---
	Ant1	5220	19.62	---	---
	Ant1	5240	19.7	---	---
	Ant1	5260	19.74	---	---
	Ant1	5300	19.66	---	---
	Ant1	5320	19.7	---	---
11AC40SISO	Ant1	5745	19.82	---	---
	Ant1	5785	19.82	---	---
	Ant1	5825	19.78	---	---
	Ant1	5190	37.722	---	---
	Ant1	5230	37.642	---	---
	Ant1	5270	37.802	---	---
11AX20SISO	Ant1	5310	37.642	---	---
	Ant1	5755	38.122	---	---
	Ant1	5795	37.962	---	---
	Ant1	5180	19.98	---	---
	Ant1	5220	19.94	---	---
	Ant1	5240	19.94	---	---
	Ant1	5260	19.86	---	---
	Ant1	5300	19.82	---	---
11AX40SISO	Ant1	5320	19.82	---	---
	Ant1	5745	19.9	---	---
	Ant1	5785	19.94	---	---
	Ant1	5825	19.9	---	---
	Ant1	5190	38.681	---	---
	Ant1	5230	38.601	---	---
11AX20SISO	Ant1	5270	38.681	---	---
	Ant1	5310	38.601	---	---
	Ant1	5755	38.761	---	---
	Ant1	5795	38.761	---	---
	Ant1	5190	38.681	---	---

5.5 Maximum Power Spectral Density

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

Set RBW = 500 kHz, VBW = 1.5MHz for the band 5.725-5.85 GHz

Set RBW = 1 MHz, VBW = 3MHz for the band 5.150-5.250 GHz

The conducted PSD is measured at each antenna port. The measured results at the various antenna ports are then summed mathematically.

Limits:

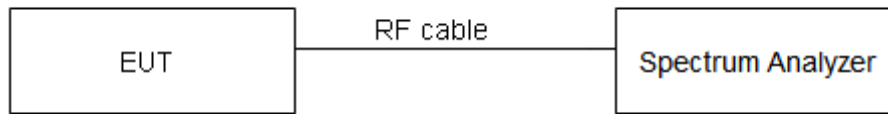
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Frequency Bands/MHz	Limits
5150-5250	11dBm/MHz
5.25-5.35 GHz and 5.47-5.725 GHz	11dBm/MHz
5725-5850	30dBm/500kHz

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

Test Results:

TestMode	Antenna	Channel	Result[dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	-1.79	≤ 11	PASS
		5220	-0.94	≤ 11	PASS
		5240	-0.55	≤ 11	PASS
		5260	-1.02	≤ 11	PASS
		5300	-1.31	≤ 11	PASS
		5320	-1.83	≤ 11	PASS
11N20SISO	Ant1	5180	-2.29	≤ 11	PASS
		5220	-1.34	≤ 11	PASS
		5240	-1.08	≤ 11	PASS
		5260	-1.4	≤ 11	PASS
		5300	-1.87	≤ 11	PASS
		5320	-2.45	≤ 11	PASS
11N40SISO	Ant1	5190	-5.26	≤ 11	PASS
		5230	-5.29	≤ 11	PASS
		5270	-4.83	≤ 11	PASS
		5310	-5.46	≤ 11	PASS
11AC20SISO	Ant1	5180	-2.66	≤ 11	PASS
		5220	-1.57	≤ 11	PASS
		5240	-1.21	≤ 11	PASS
		5260	-1.7	≤ 11	PASS
		5300	-2.23	≤ 11	PASS
		5320	-2.56	≤ 11	PASS
11AC40SISO	Ant1	5190	-5.9	≤ 11	PASS
		5230	-5.71	≤ 11	PASS
		5270	-5.22	≤ 11	PASS
		5310	-5.71	≤ 11	PASS
11AX20SISO	Ant1	5180	-3.22	≤ 11	PASS
		5220	-2.08	≤ 11	PASS
		5240	-1.35	≤ 11	PASS
		5260	-1.87	≤ 11	PASS
		5300	-2.53	≤ 11	PASS

		5320	-3.1	≤11	PASS
11AX40SISO	Ant1	5190	-5.93	≤11	PASS
		5230	-5.04	≤11	PASS
		5270	-5.41	≤11	PASS
		5310	-5.41	≤11	PASS

TestMode	Antenna	Channel	Result[dBm/ 500KHz]	Limit[dBm/ 500KHz]	Verdict
11A	Ant1	5745	-2.2	≤30	PASS
		5785	-1.8	≤30	PASS
		5825	-1.67	≤30	PASS
11N20SISO	Ant1	5745	-2.59	≤30	PASS
		5785	-2.46	≤30	PASS
		5825	-1.5	≤30	PASS
11N40SISO	Ant1	5755	-6.31	≤30	PASS
		5795	-5.77	≤30	PASS
11AC20SISO	Ant1	5745	-3.21	≤30	PASS
		5785	-2.88	≤30	PASS
		5825	-2.5	≤30	PASS
11AC40SISO	Ant1	5755	-6.91	≤30	PASS
		5795	-6.09	≤30	PASS
11AX20SISO	Ant1	5745	-0.97	≤30	PASS
		5785	-2.54	≤30	PASS
		5825	-2.97	≤30	PASS
11AX40SISO	Ant1	5755	-6.4	≤30	PASS
		5795	-5.95	≤30	PASS

5.6 Frequency Stability

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

Method of Measurement:

1. Frequency stability with respect to ambient temperature

- a) Supply the EUT with a nominal ac voltage or install a new or fully charged battery in the EUT. If possible, a dummy load shall be connected to the EUT because an antenna near the metallic walls of an environmental test chamber could affect the output frequency of the EUT. If the EUT is equipped with a permanently attached, adjustable-length antenna, then the EUT shall be placed in the center of the chamber with the antenna adjusted to the shortest length possible. Turn ON the EUT and tune it to one of the number of frequencies shown in 5.6.
 - b) Couple the unlicensed wireless device output to the measuring instrument by connecting an antenna to the measuring instrument with a suitable length of coaxial cable and placing the measuring antenna near the EUT (e.g., 15 cm away), or by connecting a dummy load to the measuring instrument, through an attenuator if necessary.
 - c) Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
 - d) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
 - e) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
 - f) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
 - g) Measure the frequency at each of frequencies specified in 5.6.
 - h) Switch OFF the EUT but do not switch OFF the oscillator heater.
 - i) Lower the chamber temperature by not more than 10 C, and allow the temperature inside the chamber to stabilize.
 - j) Repeat step f) through step i) down to the lowest specified temperature.
- #### 2. Frequency stability when varying supply voltage

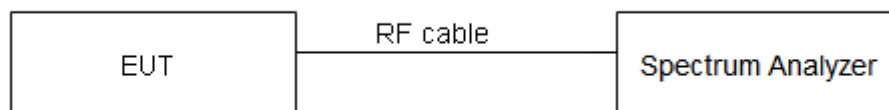
Unless otherwise specified, these tests shall be made at ambient room temperature (+15 °C to +25 °C). An antenna shall be connected to the antenna output terminals of the EUT if possible. If the EUT is equipped with or uses an adjustable-length antenna, then it shall be fully extended.

- a) Supply the EUT with nominal voltage or install a new or fully charged battery in the EUT. Turn ON the EUT and couple its output to a frequency counter or other frequency-measuring instrument.
- b) Tune the EUT to one of the number of frequencies required in 5.6. Adjust the location of the measurement antenna and the controls on the measurement instrument to obtain a suitable signal level (i.e., a level that will not overload the measurement instrument but is strong enough to allow measurement of the operating or fundamental frequency of the EUT).
- c) Measure the frequency at each of the frequencies specified in 5.6.
- d) Repeat the above procedure at 85% and 115% of the nominal supply voltage.

Limits:

Manufacturers 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.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 936$ Hz.

Test Results:

TestMod e	Antenna	Channel	Voltage					Verdict
			Voltage [Vdc]	Temperat ure (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	
11A	Ant1	5180	NV	NT	-40000.00	-7.722008	≤20	PASS
			LV	NT	-60000.00	-11.583012	≤20	PASS
			HV	NT	-40000.00	-7.722008	≤20	PASS
		5220	NV	NT	-40000.00	-7.662835	≤20	PASS
			LV	NT	-40000.00	-7.662835	≤20	PASS
			HV	NT	-40000.00	-7.662835	≤20	PASS
		5240	NV	NT	-60000.00	-11.450382	≤20	PASS
			LV	NT	-40000.00	-7.633588	≤20	PASS
			HV	NT	-40000.00	-7.633588	≤20	PASS
		5260	NV	NT	-20000.00	-3.802281	≤20	PASS
			LV	NT	-40000.00	-7.604563	≤20	PASS
			HV	NT	-60000.00	-11.406844	≤20	PASS
		5300	NV	NT	-40000.00	-7.547170	≤20	PASS
			LV	NT	-40000.00	-7.547170	≤20	PASS
			HV	NT	-40000.00	-7.547170	≤20	PASS
		5320	NV	NT	-20000.00	-3.759398	≤20	PASS
			LV	NT	-60000.00	-11.278195	≤20	PASS
			HV	NT	-40000.00	-7.518797	≤20	PASS
		5745	NV	NT	-40000.00	-6.962576	≤20	PASS
			LV	NT	-40000.00	-6.962576	≤20	PASS
			HV	NT	-40000.00	-6.962576	≤20	PASS
		5785	NV	NT	-40000.00	-6.914434	≤20	PASS
			LV	NT	-20000.00	-3.457217	≤20	PASS
			HV	NT	-60000.00	-10.371651	≤20	PASS
		5825	NV	NT	-60000.00	-10.300429	≤20	PASS
			LV	NT	-60000.00	-10.300429	≤20	PASS
			HV	NT	-40000.00	-6.866953	≤20	PASS
11N20SI SO	Ant1	5180	NV	NT	-60000.00	-11.583012	≤20	PASS
			LV	NT	-40000.00	-7.722008	≤20	PASS
			HV	NT	-40000.00	-7.722008	≤20	PASS
		5220	NV	NT	-40000.00	-7.662835	≤20	PASS
			LV	NT	-60000.00	-11.494253	≤20	PASS
			HV	NT	-40000.00	-7.662835	≤20	PASS
		5240	NV	NT	-20000.00	-3.816794	≤20	PASS
			LV	NT	-40000.00	-7.633588	≤20	PASS
			HV	NT	-40000.00	-7.633588	≤20	PASS
		5260	NV	NT	-60000.00	-11.406844	≤20	PASS
			LV	NT	-60000.00	-11.406844	≤20	PASS
			HV	NT	-40000.00	-7.604563	≤20	PASS
		5300	NV	NT	-40000.00	-7.547170	≤20	PASS
			LV	NT	-60000.00	-11.320755	≤20	PASS
			HV	NT	-40000.00	-7.547170	≤20	PASS
		5320	NV	NT	-40000.00	-7.518797	≤20	PASS
			LV	NT	-60000.00	-11.278195	≤20	PASS
			HV	NT	-60000.00	-11.278195	≤20	PASS
		5745	NV	NT	-60000.00	-10.443864	≤20	PASS
			LV	NT	-40000.00	-6.962576	≤20	PASS
			HV	NT	-60000.00	-10.443864	≤20	PASS
		5785	NV	NT	-60000.00	-10.371651	≤20	PASS
			LV	NT	-40000.00	-6.914434	≤20	PASS
			HV	NT	-60000.00	-10.371651	≤20	PASS
		5825	NV	NT	-60000.00	-10.300429	≤20	PASS
			LV	NT	-40000.00	-6.866953	≤20	PASS
			HV	NT	-20000.00	-3.433476	≤20	PASS
11N40SI SO	Ant1	5190	NV	NT	-40000.00	-7.707129	≤20	PASS
			LV	NT	-40000.00	-7.707129	≤20	PASS
			HV	NT	-40000.00	-7.707129	≤20	PASS
		5230	NV	NT	-40000.00	-7.648184	≤20	PASS

		5270	LV	NT	-40000.00	-7.648184	≤20	PASS
			HV	NT	-40000.00	-7.648184	≤20	PASS
			NV	NT	-40000.00	-7.590133	≤20	PASS
		5310	LV	NT	-40000.00	-7.590133	≤20	PASS
			HV	NT	-40000.00	-7.590133	≤20	PASS
			NV	NT	-40000.00	-7.532957	≤20	PASS
		5755	LV	NT	-40000.00	-7.532957	≤20	PASS
			HV	NT	-40000.00	-7.532957	≤20	PASS
			NV	NT	-40000.00	-6.950478	≤20	PASS
		5795	LV	NT	-40000.00	-6.950478	≤20	PASS
			HV	NT	-40000.00	-6.950478	≤20	PASS
			NV	NT	-40000.00	-6.902502	≤20	PASS
11AC20S ISO	Ant1	5180	NV	NT	-40000.00	-6.902502	≤20	PASS
			LV	NT	-40000.00	-6.902502	≤20	PASS
			HV	NT	-40000.00	-6.902502	≤20	PASS
		5220	NV	NT	-20000.00	-3.861004	≤20	PASS
			LV	NT	-40000.00	-7.722008	≤20	PASS
			HV	NT	-40000.00	-7.722008	≤20	PASS
		5240	NV	NT	-60000.00	-11.494253	≤20	PASS
			LV	NT	-40000.00	-7.662835	≤20	PASS
			HV	NT	-40000.00	-7.662835	≤20	PASS
		5260	NV	NT	-40000.00	-7.633588	≤20	PASS
			LV	NT	-60000.00	-11.450382	≤20	PASS
			HV	NT	-60000.00	-11.450382	≤20	PASS
		5300	NV	NT	-60000.00	-11.406844	≤20	PASS
			LV	NT	-40000.00	-7.604563	≤20	PASS
			HV	NT	-40000.00	-7.604563	≤20	PASS
		5320	NV	NT	-40000.00	-7.547170	≤20	PASS
			LV	NT	-40000.00	-7.547170	≤20	PASS
			HV	NT	-60000.00	-11.320755	≤20	PASS
		5745	NV	NT	-40000.00	-7.518797	≤20	PASS
			LV	NT	-40000.00	-7.518797	≤20	PASS
			HV	NT	-60000.00	-11.278195	≤20	PASS
		5785	NV	NT	-40000.00	-6.962576	≤20	PASS
			LV	NT	-60000.00	-10.443864	≤20	PASS
			HV	NT	-60000.00	-10.443864	≤20	PASS
11AC40S ISO	Ant1	5190	NV	NT	-40000.00	-6.914434	≤20	PASS
			LV	NT	-40000.00	-6.914434	≤20	PASS
			HV	NT	-40000.00	-6.914434	≤20	PASS
		5230	NV	NT	-40000.00	-6.866953	≤20	PASS
			LV	NT	-60000.00	-10.300429	≤20	PASS
			HV	NT	-60000.00	-10.300429	≤20	PASS
		5270	NV	NT	-40000.00	-7.707129	≤20	PASS
			LV	NT	-40000.00	-7.707129	≤20	PASS
			HV	NT	0.00	0.000000	≤20	PASS
		5310	NV	NT	-40000.00	-7.648184	≤20	PASS
			LV	NT	-40000.00	-7.648184	≤20	PASS
			HV	NT	-40000.00	-7.648184	≤20	PASS
		5755	NV	NT	-40000.00	-7.590133	≤20	PASS
			LV	NT	-40000.00	-7.590133	≤20	PASS
			HV	NT	-80000.00	-15.180266	≤20	PASS
11AX20S ISO	Ant1	5180	NV	NT	-40000.00	-7.532957	≤20	PASS
			LV	NT	-40000.00	-7.532957	≤20	PASS
			HV	NT	-40000.00	-7.532957	≤20	PASS
		5220	NV	NT	-40000.00	-6.950478	≤20	PASS
			LV	NT	-40000.00	-6.950478	≤20	PASS
			HV	NT	-40000.00	-6.950478	≤20	PASS
		5795	NV	NT	-40000.00	-6.902502	≤20	PASS
			LV	NT	-40000.00	-6.902502	≤20	PASS

		5240	HV	NT	-40000.00	-7.662835	≤20	PASS
			NV	NT	-40000.00	-7.633588	≤20	PASS
			LV	NT	-20000.00	-3.816794	≤20	PASS
			HV	NT	-40000.00	-7.633588	≤20	PASS
		5260	NV	NT	-40000.00	-7.604563	≤20	PASS
			LV	NT	-40000.00	-7.604563	≤20	PASS
			HV	NT	-60000.00	-11.406844	≤20	PASS
		5300	NV	NT	-20000.00	-3.773585	≤20	PASS
			LV	NT	-60000.00	-11.320755	≤20	PASS
			HV	NT	-40000.00	-7.547170	≤20	PASS
		5320	NV	NT	-40000.00	-7.518797	≤20	PASS
			LV	NT	-40000.00	-7.518797	≤20	PASS
			HV	NT	-40000.00	-7.518797	≤20	PASS
		5745	NV	NT	-40000.00	-6.962576	≤20	PASS
			LV	NT	-60000.00	-10.443864	≤20	PASS
			HV	NT	-40000.00	-6.962576	≤20	PASS
		5785	NV	NT	-60000.00	-10.371651	≤20	PASS
			LV	NT	-60000.00	-10.371651	≤20	PASS
			HV	NT	-60000.00	-10.371651	≤20	PASS
		5825	NV	NT	-60000.00	-10.300429	≤20	PASS
			LV	NT	-60000.00	-10.300429	≤20	PASS
			HV	NT	-40000.00	-6.866953	≤20	PASS
11AX40S ISO	Ant1	5190	NV	NT	-40000.00	-7.707129	≤20	PASS
			LV	NT	0.00	0.000000	≤20	PASS
			HV	NT	0.00	0.000000	≤20	PASS
		5230	NV	NT	-80000.00	-15.296367	≤20	PASS
			LV	NT	-40000.00	-7.648184	≤20	PASS
			HV	NT	-40000.00	-7.648184	≤20	PASS
		5270	NV	NT	-40000.00	-7.590133	≤20	PASS
			LV	NT	-80000.00	-15.180266	≤20	PASS
			HV	NT	-40000.00	-7.590133	≤20	PASS
		5310	NV	NT	-80000.00	-15.065913	≤20	PASS
			LV	NT	-80000.00	-15.065913	≤20	PASS
			HV	NT	-80000.00	-15.065913	≤20	PASS
		5755	NV	NT	-40000.00	-6.950478	≤20	PASS
			LV	NT	-80000.00	-13.900956	≤20	PASS
			HV	NT	-40000.00	-6.950478	≤20	PASS
		5795	NV	NT	-40000.00	-6.902502	≤20	PASS
			LV	NT	-40000.00	-6.902502	≤20	PASS
			HV	NT	-40000.00	-6.902502	≤20	PASS

Temperature								
TestMod e	Antenn a	Channel	Voltage [Vdc]	Temperat ure (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-40000.00	-7.722008	≤20	PASS
			NV	-20	-40000.00	-7.722008	≤20	PASS
			NV	-10	-40000.00	-7.722008	≤20	PASS
			NV	0	-40000.00	-7.722008	≤20	PASS
			NV	10	-20000.00	-3.861004	≤20	PASS
			NV	20	-40000.00	-7.722008	≤20	PASS
			NV	30	-20000.00	-3.861004	≤20	PASS
			NV	40	-20000.00	-3.861004	≤20	PASS
		5220	NV	50	-40000.00	-7.722008	≤20	PASS
			NV	-30	-40000.00	-7.662835	≤20	PASS
			NV	-20	-40000.00	-7.662835	≤20	PASS
			NV	-10	-40000.00	-7.662835	≤20	PASS
			NV	0	-40000.00	-7.662835	≤20	PASS
			NV	10	-40000.00	-7.662835	≤20	PASS
			NV	20	-40000.00	-7.662835	≤20	PASS
			NV	30	-20000.00	-3.831418	≤20	PASS
			NV	40	-40000.00	-7.662835	≤20	PASS

			NV	50	-40000.00	-7.662835	≤20	PASS
			NV	-30	-40000.00	-7.633588	≤20	PASS
			NV	-20	-40000.00	-7.633588	≤20	PASS
			NV	-10	-40000.00	-7.633588	≤20	PASS
			NV	0	-40000.00	-7.633588	≤20	PASS
			NV	10	-40000.00	-7.633588	≤20	PASS
			NV	20	-60000.00	-11.450382	≤20	PASS
			NV	30	-40000.00	-7.633588	≤20	PASS
			NV	40	-40000.00	-7.633588	≤20	PASS
		5240	NV	50	-20000.00	-3.816794	≤20	PASS
			NV	-30	-40000.00	-7.604563	≤20	PASS
			NV	-20	-40000.00	-7.604563	≤20	PASS
			NV	-10	-40000.00	-7.604563	≤20	PASS
			NV	0	-60000.00	-11.406844	≤20	PASS
			NV	10	-20000.00	-3.802281	≤20	PASS
			NV	20	-40000.00	-7.604563	≤20	PASS
			NV	30	-40000.00	-7.604563	≤20	PASS
			NV	40	-40000.00	-7.604563	≤20	PASS
		5260	NV	50	-40000.00	-7.604563	≤20	PASS
			NV	-30	-40000.00	-7.547170	≤20	PASS
			NV	-20	-40000.00	-7.547170	≤20	PASS
			NV	-10	-40000.00	-7.547170	≤20	PASS
			NV	0	-40000.00	-7.547170	≤20	PASS
			NV	10	-40000.00	-7.547170	≤20	PASS
			NV	20	-40000.00	-7.547170	≤20	PASS
			NV	30	-40000.00	-7.547170	≤20	PASS
			NV	40	-40000.00	-7.547170	≤20	PASS
		5300	NV	50	-40000.00	-7.547170	≤20	PASS
			NV	-30	-60000.00	-11.278195	≤20	PASS
			NV	-20	-40000.00	-7.518797	≤20	PASS
			NV	-10	-40000.00	-7.518797	≤20	PASS
			NV	0	-60000.00	-11.278195	≤20	PASS
			NV	10	-60000.00	-11.278195	≤20	PASS
			NV	20	-40000.00	-7.518797	≤20	PASS
			NV	30	-40000.00	-7.518797	≤20	PASS
			NV	40	-60000.00	-11.278195	≤20	PASS
		5320	NV	50	-40000.00	-7.518797	≤20	PASS
			NV	-30	-40000.00	-6.962576	≤20	PASS
			NV	-20	-40000.00	-6.962576	≤20	PASS
			NV	-10	-40000.00	-6.962576	≤20	PASS
			NV	0	-60000.00	-10.443864	≤20	PASS
			NV	10	-40000.00	-6.962576	≤20	PASS
			NV	20	-60000.00	-10.443864	≤20	PASS
			NV	30	-40000.00	-6.962576	≤20	PASS
			NV	40	-40000.00	-6.962576	≤20	PASS
		5745	NV	50	-40000.00	-6.962576	≤20	PASS
			NV	-30	-40000.00	-6.914434	≤20	PASS
			NV	-20	-40000.00	-6.914434	≤20	PASS
			NV	-10	-40000.00	-6.914434	≤20	PASS
			NV	0	-60000.00	-10.371651	≤20	PASS
			NV	10	-40000.00	-6.914434	≤20	PASS
			NV	20	-40000.00	-6.914434	≤20	PASS
			NV	30	-40000.00	-6.914434	≤20	PASS
			NV	40	-40000.00	-6.914434	≤20	PASS
		5785	NV	50	-40000.00	-6.914434	≤20	PASS
			NV	-30	-60000.00	-10.300429	≤20	PASS
			NV	-20	-40000.00	-6.866953	≤20	PASS
			NV	-10	-40000.00	-6.866953	≤20	PASS
			NV	0	-40000.00	-6.866953	≤20	PASS
			NV	10	-40000.00	-6.866953	≤20	PASS
			NV	20	-60000.00	-10.300429	≤20	PASS
			NV	30	-60000.00	-10.300429	≤20	PASS
			NV	40	-60000.00	-10.300429	≤20	PASS
		5825	NV	50	-60000.00	-10.300429	≤20	PASS

11N20SI SO	Ant1	5180	NV	-30	-40000.00	-7.722008	≤20	PASS
			NV	-20	-40000.00	-7.722008	≤20	PASS
			NV	-10	-20000.00	-3.861004	≤20	PASS
			NV	0	-40000.00	-7.722008	≤20	PASS
			NV	10	-40000.00	-7.722008	≤20	PASS
			NV	20	-40000.00	-7.722008	≤20	PASS
			NV	30	-40000.00	-7.722008	≤20	PASS
			NV	40	-20000.00	-3.861004	≤20	PASS
		5220	NV	50	-40000.00	-7.722008	≤20	PASS
			NV	-30	-40000.00	-7.662835	≤20	PASS
			NV	-20	-40000.00	-7.662835	≤20	PASS
			NV	-10	-40000.00	-7.662835	≤20	PASS
			NV	0	-40000.00	-7.662835	≤20	PASS
			NV	10	-40000.00	-7.662835	≤20	PASS
			NV	20	-40000.00	-7.662835	≤20	PASS
			NV	30	-20000.00	-3.831418	≤20	PASS
		5240	NV	40	-40000.00	-7.662835	≤20	PASS
			NV	50	-60000.00	-11.494253	≤20	PASS
			NV	-30	-20000.00	-3.816794	≤20	PASS
			NV	-20	-60000.00	-11.450382	≤20	PASS
			NV	-10	-60000.00	-11.450382	≤20	PASS
			NV	0	-40000.00	-7.633588	≤20	PASS
			NV	10	-40000.00	-7.633588	≤20	PASS
			NV	20	-40000.00	-7.633588	≤20	PASS
		5260	NV	30	-60000.00	-11.450382	≤20	PASS
			NV	40	-60000.00	-11.450382	≤20	PASS
			NV	50	-40000.00	-7.633588	≤20	PASS
			NV	-30	-40000.00	-7.604563	≤20	PASS
			NV	-20	-40000.00	-7.604563	≤20	PASS
			NV	-10	-40000.00	-7.604563	≤20	PASS
			NV	0	-40000.00	-7.604563	≤20	PASS
			NV	10	-60000.00	-11.406844	≤20	PASS
		5300	NV	20	-40000.00	-7.604563	≤20	PASS
			NV	30	-40000.00	-7.604563	≤20	PASS
			NV	40	-60000.00	-11.406844	≤20	PASS
			NV	50	-40000.00	-7.604563	≤20	PASS
			NV	-30	-60000.00	-11.320755	≤20	PASS
			NV	-20	-40000.00	-7.547170	≤20	PASS
			NV	-10	-40000.00	-7.547170	≤20	PASS
			NV	0	-40000.00	-7.547170	≤20	PASS
		5320	NV	10	-40000.00	-7.547170	≤20	PASS
			NV	20	-40000.00	-7.547170	≤20	PASS
			NV	30	-40000.00	-7.547170	≤20	PASS
			NV	40	-20000.00	-3.773585	≤20	PASS
			NV	50	-40000.00	-7.547170	≤20	PASS
			NV	-30	-40000.00	-7.518797	≤20	PASS
			NV	-20	-60000.00	-11.278195	≤20	PASS
			NV	-10	-40000.00	-7.518797	≤20	PASS
		5745	NV	0	-60000.00	-11.278195	≤20	PASS
			NV	10	-40000.00	-7.518797	≤20	PASS
			NV	20	-40000.00	-7.518797	≤20	PASS
			NV	30	-60000.00	-11.278195	≤20	PASS
			NV	40	-40000.00	-7.518797	≤20	PASS
			NV	50	-60000.00	-11.278195	≤20	PASS
			NV	-30	-40000.00	-6.962576	≤20	PASS
			NV	-20	-20000.00	-3.481288	≤20	PASS
		5785	NV	-10	-60000.00	-10.443864	≤20	PASS
			NV	0	-40000.00	-6.962576	≤20	PASS
			NV	10	-40000.00	-6.962576	≤20	PASS
			NV	20	-60000.00	-10.443864	≤20	PASS
			NV	30	-60000.00	-10.443864	≤20	PASS
			NV	40	-60000.00	-10.443864	≤20	PASS
			NV	50	-20000.00	-3.481288	≤20	PASS
			NV	-30	-60000.00	-10.371651	≤20	PASS

			NV	-20	-60000.00	-10.371651	≤20	PASS
			NV	-10	-60000.00	-10.371651	≤20	PASS
			NV	0	-40000.00	-6.914434	≤20	PASS
			NV	10	-40000.00	-6.914434	≤20	PASS
			NV	20	-40000.00	-6.914434	≤20	PASS
			NV	30	-40000.00	-6.914434	≤20	PASS
			NV	40	-60000.00	-10.371651	≤20	PASS
			NV	50	-60000.00	-10.371651	≤20	PASS
		5825	NV	-30	-60000.00	-10.300429	≤20	PASS
			NV	-20	-60000.00	-10.300429	≤20	PASS
			NV	-10	-40000.00	-6.866953	≤20	PASS
			NV	0	-60000.00	-10.300429	≤20	PASS
			NV	10	-40000.00	-6.866953	≤20	PASS
			NV	20	-40000.00	-6.866953	≤20	PASS
			NV	30	-60000.00	-10.300429	≤20	PASS
			NV	40	-60000.00	-10.300429	≤20	PASS
NV	50	-40000.00	-6.866953	≤20	PASS			
11N40SI SO	Ant1	5190	NV	-30	-40000.00	-7.707129	≤20	PASS
			NV	-20	-40000.00	-7.707129	≤20	PASS
			NV	-10	-40000.00	-7.707129	≤20	PASS
			NV	0	-40000.00	-7.707129	≤20	PASS
			NV	10	-40000.00	-7.707129	≤20	PASS
			NV	20	-40000.00	-7.707129	≤20	PASS
			NV	30	-40000.00	-7.707129	≤20	PASS
			NV	40	-40000.00	-7.707129	≤20	PASS
			NV	50	-40000.00	-7.707129	≤20	PASS
		5230	NV	-30	-40000.00	-7.648184	≤20	PASS
			NV	-20	-40000.00	-7.648184	≤20	PASS
			NV	-10	-40000.00	-7.648184	≤20	PASS
			NV	0	-40000.00	-7.648184	≤20	PASS
			NV	10	-40000.00	-7.648184	≤20	PASS
			NV	20	-40000.00	-7.648184	≤20	PASS
			NV	30	-40000.00	-7.648184	≤20	PASS
			NV	40	-40000.00	-7.648184	≤20	PASS
			NV	50	-40000.00	-7.648184	≤20	PASS
		5270	NV	-30	-40000.00	-7.590133	≤20	PASS
			NV	-20	-40000.00	-7.590133	≤20	PASS
			NV	-10	-40000.00	-7.590133	≤20	PASS
			NV	0	-40000.00	-7.590133	≤20	PASS
			NV	10	-40000.00	-7.590133	≤20	PASS
			NV	20	-40000.00	-7.590133	≤20	PASS
			NV	30	-40000.00	-7.590133	≤20	PASS
			NV	40	-40000.00	-7.590133	≤20	PASS
			NV	50	-40000.00	-7.590133	≤20	PASS
		5310	NV	-30	-40000.00	-7.532957	≤20	PASS
			NV	-20	-40000.00	-7.532957	≤20	PASS
			NV	-10	-40000.00	-7.532957	≤20	PASS
			NV	0	-40000.00	-7.532957	≤20	PASS
			NV	10	-40000.00	-7.532957	≤20	PASS
			NV	20	-40000.00	-7.532957	≤20	PASS
			NV	30	-40000.00	-7.532957	≤20	PASS
			NV	40	-40000.00	-7.532957	≤20	PASS
			NV	50	-40000.00	-7.532957	≤20	PASS
		5755	NV	-30	-40000.00	-6.950478	≤20	PASS
			NV	-20	-40000.00	-6.950478	≤20	PASS
			NV	-10	-40000.00	-6.950478	≤20	PASS
			NV	0	-40000.00	-6.950478	≤20	PASS
			NV	10	-40000.00	-6.950478	≤20	PASS
			NV	20	-40000.00	-6.950478	≤20	PASS
			NV	30	-40000.00	-6.950478	≤20	PASS
			NV	40	-40000.00	-6.950478	≤20	PASS
			NV	50	-40000.00	-6.950478	≤20	PASS
		5795	NV	-30	-40000.00	-6.902502	≤20	PASS
			NV	-20	-40000.00	-6.902502	≤20	PASS

			NV	-10	-40000.00	-6.902502	≤20	PASS
			NV	0	-40000.00	-6.902502	≤20	PASS
			NV	10	-40000.00	-6.902502	≤20	PASS
			NV	20	-40000.00	-6.902502	≤20	PASS
			NV	30	-40000.00	-6.902502	≤20	PASS
			NV	40	-40000.00	-6.902502	≤20	PASS
			NV	50	-40000.00	-6.902502	≤20	PASS
11AC20S ISO	Ant1	5180	NV	-30	-40000.00	-7.722008	≤20	PASS
			NV	-20	-20000.00	-3.861004	≤20	PASS
			NV	-10	-40000.00	-7.722008	≤20	PASS
			NV	0	-20000.00	-3.861004	≤20	PASS
			NV	10	-40000.00	-7.722008	≤20	PASS
			NV	20	-20000.00	-3.861004	≤20	PASS
			NV	30	-40000.00	-7.722008	≤20	PASS
			NV	40	-40000.00	-7.722008	≤20	PASS
		5220	NV	50	-40000.00	-7.722008	≤20	PASS
			NV	-30	-40000.00	-7.662835	≤20	PASS
			NV	-20	-40000.00	-7.662835	≤20	PASS
			NV	-10	-40000.00	-7.662835	≤20	PASS
			NV	0	-40000.00	-7.662835	≤20	PASS
			NV	10	-20000.00	-3.831418	≤20	PASS
			NV	20	-40000.00	-7.662835	≤20	PASS
			NV	30	-60000.00	-11.494253	≤20	PASS
		5240	NV	40	-20000.00	-3.831418	≤20	PASS
			NV	50	-40000.00	-7.662835	≤20	PASS
			NV	-30	-40000.00	-7.633588	≤20	PASS
			NV	-20	-60000.00	-11.450382	≤20	PASS
			NV	-10	-40000.00	-7.633588	≤20	PASS
			NV	0	-40000.00	-7.633588	≤20	PASS
			NV	10	-40000.00	-7.633588	≤20	PASS
			NV	20	-40000.00	-7.633588	≤20	PASS
		5260	NV	30	-40000.00	-7.633588	≤20	PASS
			NV	40	-40000.00	-7.633588	≤20	PASS
			NV	50	-60000.00	-11.450382	≤20	PASS
			NV	-30	-20000.00	-3.802281	≤20	PASS
			NV	-20	-40000.00	-7.604563	≤20	PASS
			NV	-10	-40000.00	-7.604563	≤20	PASS
			NV	0	-40000.00	-7.604563	≤20	PASS
			NV	10	-40000.00	-7.604563	≤20	PASS
		5300	NV	20	-40000.00	-7.604563	≤20	PASS
			NV	30	-40000.00	-7.604563	≤20	PASS
			NV	40	-40000.00	-7.604563	≤20	PASS
			NV	50	-40000.00	-7.604563	≤20	PASS
			NV	-30	-40000.00	-7.547170	≤20	PASS
			NV	-20	-60000.00	-11.320755	≤20	PASS
			NV	-10	-40000.00	-7.547170	≤20	PASS
			NV	0	-20000.00	-3.773585	≤20	PASS
		5320	NV	10	-60000.00	-11.320755	≤20	PASS
			NV	20	-40000.00	-7.547170	≤20	PASS
			NV	30	-40000.00	-7.547170	≤20	PASS
			NV	40	-40000.00	-7.547170	≤20	PASS
			NV	50	-40000.00	-7.547170	≤20	PASS
			NV	-30	-60000.00	-11.278195	≤20	PASS
			NV	-20	-40000.00	-7.518797	≤20	PASS
			NV	-10	-40000.00	-7.518797	≤20	PASS
		5745	NV	0	-40000.00	-7.518797	≤20	PASS
			NV	10	-40000.00	-7.518797	≤20	PASS
			NV	20	-60000.00	-11.278195	≤20	PASS
			NV	30	-40000.00	-7.518797	≤20	PASS
			NV	40	-60000.00	-11.278195	≤20	PASS
			NV	50	-60000.00	-11.278195	≤20	PASS
			NV	-30	-60000.00	-10.443864	≤20	PASS
			NV	-20	-60000.00	-10.443864	≤20	PASS
			NV	-10	-60000.00	-10.443864	≤20	PASS

			NV	0	-40000.00	-6.962576	≤20	PASS		
			NV	10	-40000.00	-6.962576	≤20	PASS		
			NV	20	-40000.00	-6.962576	≤20	PASS		
			NV	30	-40000.00	-6.962576	≤20	PASS		
			NV	40	-40000.00	-6.962576	≤20	PASS		
			NV	50	-60000.00	-10.443864	≤20	PASS		
		5785	NV	-30	-20000.00	-3.457217	≤20	PASS		
			NV	-20	-20000.00	-3.457217	≤20	PASS		
			NV	-10	-40000.00	-6.914434	≤20	PASS		
			NV	0	-40000.00	-6.914434	≤20	PASS		
			NV	10	-40000.00	-6.914434	≤20	PASS		
			NV	20	-40000.00	-6.914434	≤20	PASS		
			NV	30	-40000.00	-6.914434	≤20	PASS		
			NV	40	-60000.00	-10.371651	≤20	PASS		
		5825	NV	50	-40000.00	-6.914434	≤20	PASS		
			NV	-30	-40000.00	-6.866953	≤20	PASS		
			NV	-20	-40000.00	-6.866953	≤20	PASS		
			NV	-10	-60000.00	-10.300429	≤20	PASS		
			NV	0	-60000.00	-10.300429	≤20	PASS		
			NV	10	-40000.00	-6.866953	≤20	PASS		
			NV	20	-40000.00	-6.866953	≤20	PASS		
			NV	30	-40000.00	-6.866953	≤20	PASS		
		11AC40S ISO	Ant1	5190	NV	40	-60000.00	-10.300429	≤20	PASS
					NV	50	-60000.00	-10.300429	≤20	PASS
NV	-30				-40000.00	-7.707129	≤20	PASS		
NV	-20				-40000.00	-7.707129	≤20	PASS		
NV	-10				-40000.00	-7.707129	≤20	PASS		
NV	0				-40000.00	-7.707129	≤20	PASS		
NV	10				-40000.00	-7.707129	≤20	PASS		
NV	20				-40000.00	-7.707129	≤20	PASS		
5230	NV			30	-40000.00	-7.707129	≤20	PASS		
	NV			40	-40000.00	-7.707129	≤20	PASS		
	NV			50	0.00	0.000000	≤20	PASS		
	NV			-30	-40000.00	-7.648184	≤20	PASS		
	NV			-20	-40000.00	-7.648184	≤20	PASS		
	NV			-10	-40000.00	-7.648184	≤20	PASS		
	NV			0	0.00	0.000000	≤20	PASS		
	NV			10	-40000.00	-7.648184	≤20	PASS		
5270	NV			20	-40000.00	-7.648184	≤20	PASS		
	NV			30	-40000.00	-7.648184	≤20	PASS		
	NV			40	-40000.00	-7.648184	≤20	PASS		
	NV			50	0.00	0.000000	≤20	PASS		
	NV			-30	-40000.00	-7.590133	≤20	PASS		
	NV			-20	-40000.00	-7.590133	≤20	PASS		
	NV			-10	-40000.00	-7.590133	≤20	PASS		
	NV			0	-40000.00	-7.590133	≤20	PASS		
5310	NV	10	-40000.00	-7.590133	≤20	PASS				
	NV	20	-40000.00	-7.590133	≤20	PASS				
	NV	30	-40000.00	-7.590133	≤20	PASS				
	NV	40	-40000.00	-7.590133	≤20	PASS				
	NV	50	-40000.00	-7.590133	≤20	PASS				
	NV	-30	-40000.00	-7.532957	≤20	PASS				
	NV	-20	-40000.00	-7.532957	≤20	PASS				
	NV	-10	-40000.00	-7.532957	≤20	PASS				
5755	NV	0	-40000.00	-7.532957	≤20	PASS				
	NV	10	-40000.00	-7.532957	≤20	PASS				
	NV	20	-80000.00	-15.065913	≤20	PASS				
	NV	30	-40000.00	-7.532957	≤20	PASS				
	NV	40	-40000.00	-7.532957	≤20	PASS				
	NV	50	-40000.00	-7.532957	≤20	PASS				
	NV	-30	-40000.00	-6.950478	≤20	PASS				
	NV	-20	-40000.00	-6.950478	≤20	PASS				
NV	-10	-40000.00	-6.950478	≤20	PASS					
NV	0	-40000.00	-6.950478	≤20	PASS					

11AX20S ISO	Ant1		NV	10	-40000.00	-6.950478	≤20	PASS
			NV	20	-40000.00	-6.950478	≤20	PASS
			NV	30	-40000.00	-6.950478	≤20	PASS
			NV	40	-40000.00	-6.950478	≤20	PASS
			NV	50	-40000.00	-6.950478	≤20	PASS
		5795	NV	-30	-40000.00	-6.902502	≤20	PASS
			NV	-20	-40000.00	-6.902502	≤20	PASS
			NV	-10	-40000.00	-6.902502	≤20	PASS
			NV	0	-40000.00	-6.902502	≤20	PASS
			NV	10	-40000.00	-6.902502	≤20	PASS
			NV	20	-40000.00	-6.902502	≤20	PASS
			NV	30	-40000.00	-6.902502	≤20	PASS
			NV	40	-40000.00	-6.902502	≤20	PASS
			NV	50	-40000.00	-6.902502	≤20	PASS
		5180	NV	-30	-20000.00	-3.861004	≤20	PASS
			NV	-20	-20000.00	-3.861004	≤20	PASS
			NV	-10	-20000.00	-3.861004	≤20	PASS
			NV	0	-40000.00	-7.722008	≤20	PASS
			NV	10	-20000.00	-3.861004	≤20	PASS
			NV	20	-20000.00	-3.861004	≤20	PASS
			NV	30	-20000.00	-3.861004	≤20	PASS
			NV	40	-40000.00	-7.722008	≤20	PASS
		5220	NV	50	-40000.00	-7.722008	≤20	PASS
			NV	-30	-40000.00	-7.662835	≤20	PASS
			NV	-20	-40000.00	-7.662835	≤20	PASS
			NV	-10	-40000.00	-7.662835	≤20	PASS
			NV	0	-40000.00	-7.662835	≤20	PASS
			NV	10	-20000.00	-3.831418	≤20	PASS
			NV	20	-40000.00	-7.662835	≤20	PASS
			NV	30	-20000.00	-3.831418	≤20	PASS
		5240	NV	40	-20000.00	-3.831418	≤20	PASS
			NV	50	-40000.00	-7.662835	≤20	PASS
			NV	-30	-20000.00	-3.816794	≤20	PASS
			NV	-20	-20000.00	-3.816794	≤20	PASS
			NV	-10	-20000.00	-3.816794	≤20	PASS
			NV	0	-20000.00	-3.816794	≤20	PASS
			NV	10	-40000.00	-7.633588	≤20	PASS
			NV	20	-20000.00	-3.816794	≤20	PASS
		5260	NV	30	-60000.00	-11.450382	≤20	PASS
			NV	40	-40000.00	-7.633588	≤20	PASS
			NV	50	-40000.00	-7.633588	≤20	PASS
			NV	-30	-40000.00	-7.604563	≤20	PASS
			NV	-20	-40000.00	-7.604563	≤20	PASS
			NV	-10	-40000.00	-7.604563	≤20	PASS
			NV	0	-40000.00	-7.604563	≤20	PASS
			NV	10	-60000.00	-11.406844	≤20	PASS
		5300	NV	20	-40000.00	-7.604563	≤20	PASS
			NV	30	-40000.00	-7.604563	≤20	PASS
			NV	40	-40000.00	-7.604563	≤20	PASS
			NV	50	-60000.00	-11.406844	≤20	PASS
			NV	-30	-40000.00	-7.547170	≤20	PASS
			NV	-20	-40000.00	-7.547170	≤20	PASS
			NV	-10	-20000.00	-3.773585	≤20	PASS
			NV	0	-40000.00	-7.547170	≤20	PASS
		5320	NV	10	-40000.00	-7.547170	≤20	PASS
			NV	20	-40000.00	-7.547170	≤20	PASS
			NV	30	-40000.00	-7.547170	≤20	PASS
			NV	40	-20000.00	-3.773585	≤20	PASS
			NV	50	-40000.00	-7.547170	≤20	PASS
		5320	NV	-30	-40000.00	-7.518797	≤20	PASS
			NV	-20	-20000.00	-3.759398	≤20	PASS
			NV	-10	-40000.00	-7.518797	≤20	PASS
			NV	0	-60000.00	-11.278195	≤20	PASS
			NV	10	-40000.00	-7.518797	≤20	PASS

			NV	20	-40000.00	-7.518797	≤20	PASS
			NV	30	-60000.00	-11.278195	≤20	PASS
			NV	40	-40000.00	-7.518797	≤20	PASS
			NV	50	-60000.00	-11.278195	≤20	PASS
		5745	NV	-30	-60000.00	-10.443864	≤20	PASS
			NV	-20	-40000.00	-6.962576	≤20	PASS
			NV	-10	-60000.00	-10.443864	≤20	PASS
			NV	0	-40000.00	-6.962576	≤20	PASS
			NV	10	-60000.00	-10.443864	≤20	PASS
			NV	20	-60000.00	-10.443864	≤20	PASS
			NV	30	-60000.00	-10.443864	≤20	PASS
			NV	40	-40000.00	-6.962576	≤20	PASS
			NV	50	-60000.00	-10.443864	≤20	PASS
		5785	NV	-30	-40000.00	-6.914434	≤20	PASS
			NV	-20	-60000.00	-10.371651	≤20	PASS
			NV	-10	-60000.00	-10.371651	≤20	PASS
			NV	0	-60000.00	-10.371651	≤20	PASS
			NV	10	-40000.00	-6.914434	≤20	PASS
			NV	20	-60000.00	-10.371651	≤20	PASS
			NV	30	-40000.00	-6.914434	≤20	PASS
			NV	40	-40000.00	-6.914434	≤20	PASS
		5825	NV	50	-60000.00	-10.371651	≤20	PASS
			NV	-30	-60000.00	-10.300429	≤20	PASS
			NV	-20	-60000.00	-10.300429	≤20	PASS
			NV	-10	-40000.00	-6.866953	≤20	PASS
			NV	0	-60000.00	-10.300429	≤20	PASS
			NV	10	-60000.00	-10.300429	≤20	PASS
			NV	20	-60000.00	-10.300429	≤20	PASS
			NV	30	-40000.00	-6.866953	≤20	PASS
			NV	40	-40000.00	-6.866953	≤20	PASS
			NV	50	-60000.00	-10.300429	≤20	PASS
11AX40S ISO	Ant1	5190	NV	-30	-40000.00	-7.707129	≤20	PASS
			NV	-20	0.00	0.000000	≤20	PASS
			NV	-10	0.00	0.000000	≤20	PASS
			NV	0	-80000.00	-15.414258	≤20	PASS
			NV	10	-40000.00	-7.707129	≤20	PASS
			NV	20	0.00	0.000000	≤20	PASS
			NV	30	0.00	0.000000	≤20	PASS
			NV	40	0.00	0.000000	≤20	PASS
		5230	NV	50	-40000.00	-7.707129	≤20	PASS
			NV	-30	-40000.00	-7.648184	≤20	PASS
			NV	-20	-40000.00	-7.648184	≤20	PASS
			NV	-10	0.00	0.000000	≤20	PASS
			NV	0	-40000.00	-7.648184	≤20	PASS
			NV	10	-40000.00	-7.648184	≤20	PASS
			NV	20	0.00	0.000000	≤20	PASS
			NV	30	-40000.00	-7.648184	≤20	PASS
		5270	NV	40	-40000.00	-7.648184	≤20	PASS
			NV	50	0.00	0.000000	≤20	PASS
			NV	-30	-40000.00	-7.590133	≤20	PASS
			NV	-20	-40000.00	-7.590133	≤20	PASS
			NV	-10	-40000.00	-7.590133	≤20	PASS
			NV	0	-80000.00	-15.180266	≤20	PASS
			NV	10	-80000.00	-15.180266	≤20	PASS
			NV	20	-40000.00	-7.590133	≤20	PASS
		5310	NV	30	0.00	0.000000	≤20	PASS
			NV	40	-40000.00	-7.590133	≤20	PASS
			NV	50	-40000.00	-7.590133	≤20	PASS
			NV	-30	-40000.00	-7.532957	≤20	PASS
			NV	-20	-40000.00	-7.532957	≤20	PASS
			NV	-10	-40000.00	-7.532957	≤20	PASS
			NV	0	-80000.00	-15.065913	≤20	PASS
			NV	10	-80000.00	-15.065913	≤20	PASS
			NV	20	-40000.00	-7.532957	≤20	PASS

			NV	30	-80000.00	-15.065913	≤20	PASS
			NV	40	-40000.00	-7.532957	≤20	PASS
			NV	50	-80000.00	-15.065913	≤20	PASS
		5755	NV	-30	-80000.00	-13.900956	≤20	PASS
			NV	-20	-80000.00	-13.900956	≤20	PASS
			NV	-10	-80000.00	-13.900956	≤20	PASS
			NV	0	-80000.00	-13.900956	≤20	PASS
			NV	10	-40000.00	-6.950478	≤20	PASS
			NV	20	-40000.00	-6.950478	≤20	PASS
			NV	30	-40000.00	-6.950478	≤20	PASS
			NV	40	-40000.00	-6.950478	≤20	PASS
			NV	50	-40000.00	-6.950478	≤20	PASS
		5795	NV	-30	-40000.00	-6.902502	≤20	PASS
			NV	-20	-40000.00	-6.902502	≤20	PASS
			NV	-10	-40000.00	-6.902502	≤20	PASS
			NV	0	-40000.00	-6.902502	≤20	PASS
			NV	10	-80000.00	-13.805004	≤20	PASS
			NV	20	-40000.00	-6.902502	≤20	PASS
			NV	30	-80000.00	-13.805004	≤20	PASS
			NV	40	-40000.00	-6.902502	≤20	PASS
			NV	50	-80000.00	-13.805004	≤20	PASS

5.7 Dynamic Frequency Selection (DFS)

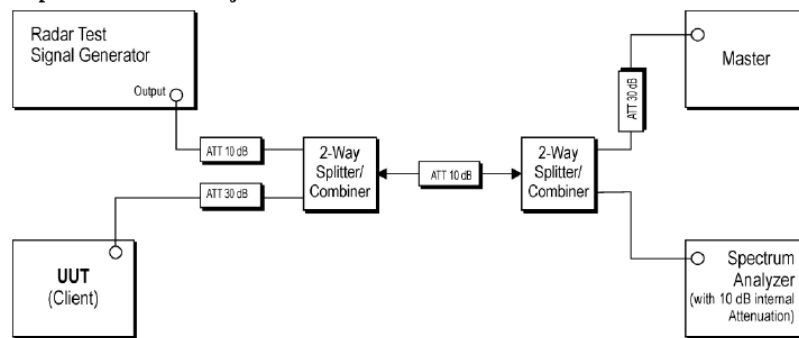
Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.2kPa

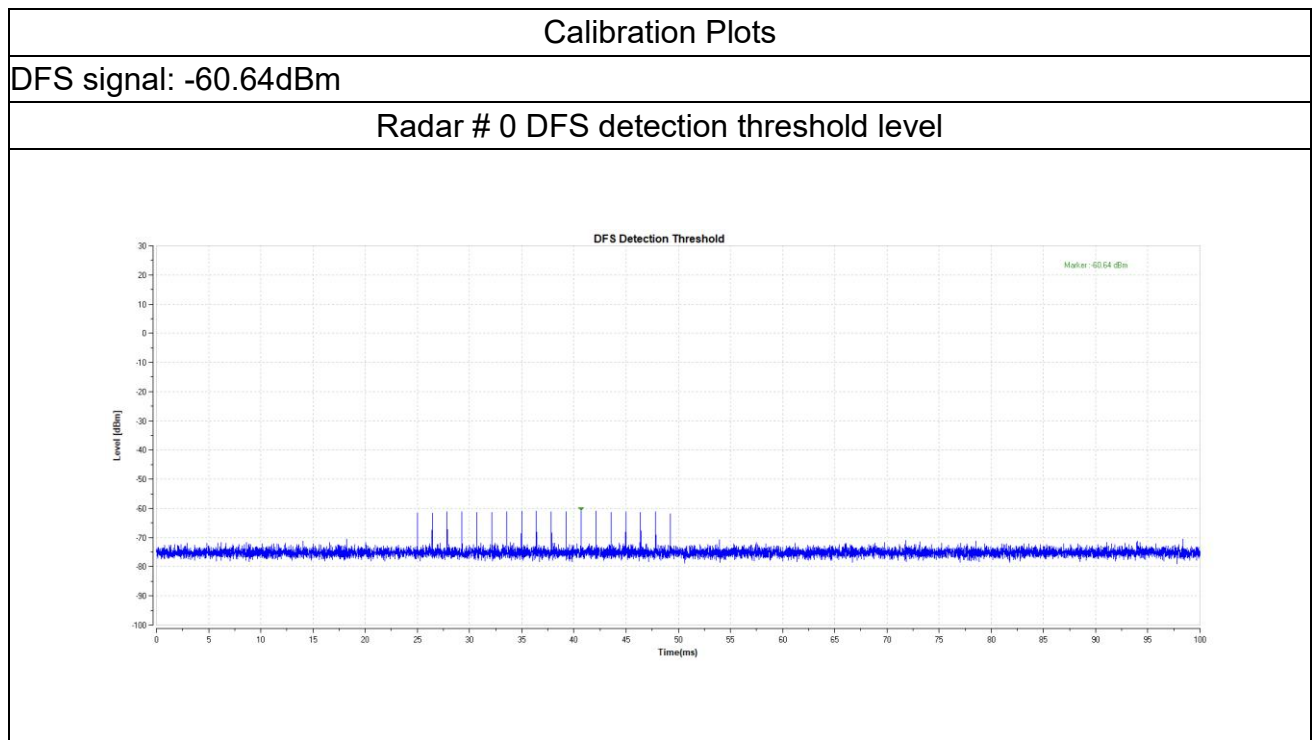
5.7.1 DFS detection threshold level

Test Setup:

Setup for Client with injection at the Master



Test Results:



5.7.2 UNII Detection Bandwidth

Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.1 for UNII Detection Bandwidth test. During the U-NII Detection Bandwidth detection test, radar type 1 is used and for each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic. The EUT is set up as a standalone device (no associated Client and no traffic). The radar frequency is increased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The highest frequency at which detection is greater than or equal to 90% is denoted as FH. The radar frequency is decreased in 1 MHz steps, repeating the above test sequence, until the detection rate falls below 90%. The lowest frequency at which detection is greater than or equal to 90% is denoted as FL. UNII Detection Bandwidth = FH -FL

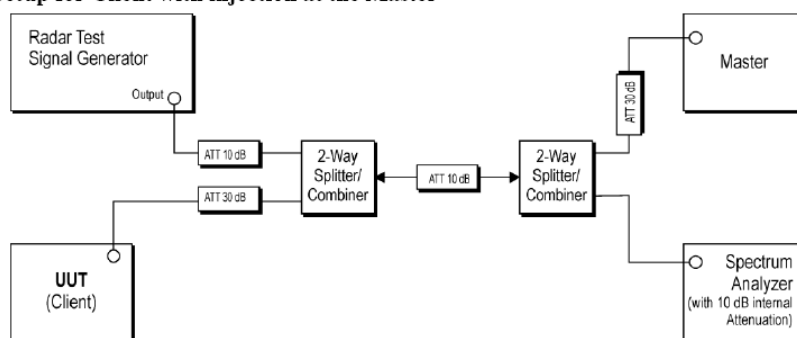
Limits:

Channel Bandwidth (MHz)	99% Power Bandwidth (MHz)	UNII Detection Bandwidth (MHz)
20	N/A	N/A
40	N/A	N/A
80	N/A	N/A

UNII Detection Bandwidth is minimum 100% of the 99% power bandwidth. A single radar Burst is generated for a minimum of 10 trials, and the response of the UUT is noted. The UUT must detect the Radar Waveform 90% or more of the time.

Test Setup:

Setup for Client with injection at the Master



Test Results:

Not required

5.7.3 Channel Availability Check (CAC)

Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.2.1 for Initial Channel Availability Check Time. The EUT does not emit beacon, control, or data signals on the test Channel until the power-up sequence has been completed and the UNII device checks for Radar Waveforms for one minute on the test Channel. This test does not use any Radar Waveforms.

Refer as FCC 06-96 Appendix, clause 7.8.2.2 for Radar Burst at the Beginning of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the Beginning of the Channel Availability Check Time.

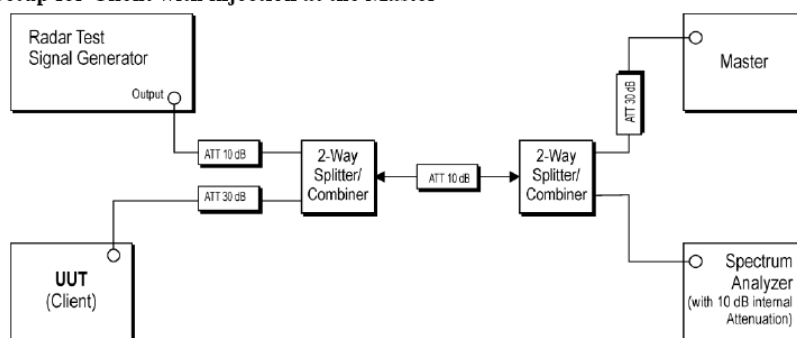
Refer as FCC 06-96 Appendix, clause 7.8.2.3 for Radar Burst at the End of the Channel Availability Check Time. To verify successful radar detection on the selected Channel during a period equal to the End of the Channel Availability Check Time.

Limits:

Channel Availability Check Limit
☒ The EUT shall perform a Channel Availability Check to ensure that there is no radar operating on the channel. After power-up sequence, receive at least 1 minute (60 sec) on the intended operating frequency.

Test Setup:

Setup for Client with injection at the Master



Test Results:

Not required

5.7.4 In-service Monitoring

Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.3 verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Channel Move Time). Compare the Channel Move Time and Channel Closing Transmission Time limits.

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 8.3 verified during In-Service Monitoring; Channel Closing Transmission Time, Channel Move Time. One 10 sec plot needs to be reported for the Short Pulse Radar Types 1-4 and one for the Long Pulse Radar Type in a 22 sec plot. And zoom-in a 600 ms plot verified channel closing time for the aggregate transmission time starting from 200ms after the end of the radar signal to the completion of the channel move.

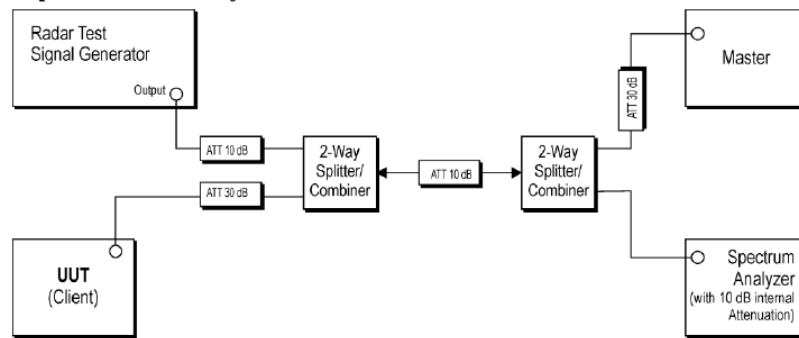
Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.3 verified during In-Service Monitoring; Non-Occupancy Period. Client Device will associate with the EUT. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel for duration greater than 10 seconds. Measure and record the transmissions from the EUT during the observation time (Non-Occupancy Period). Compare the Non-Occupancy Period limits.

Limits:

In-service Monitoring Limit	
Channel Move Time	10 sec
Channel Closing Transmission Time	200 ms + an aggregate of 60 ms over remaining 10 sec periods.
Non-occupancy period	Minimum 30 minutes

Test Setup:

Setup for Client with injection at the Master



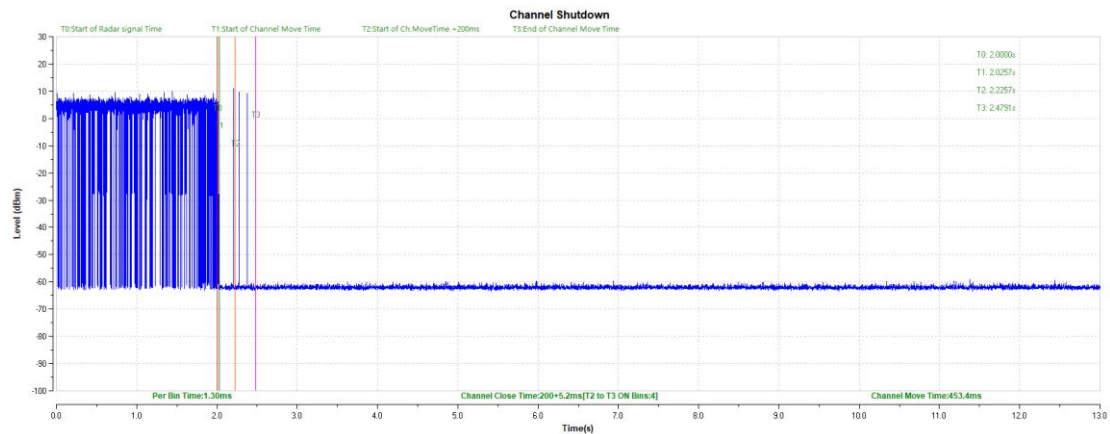
Test Results:

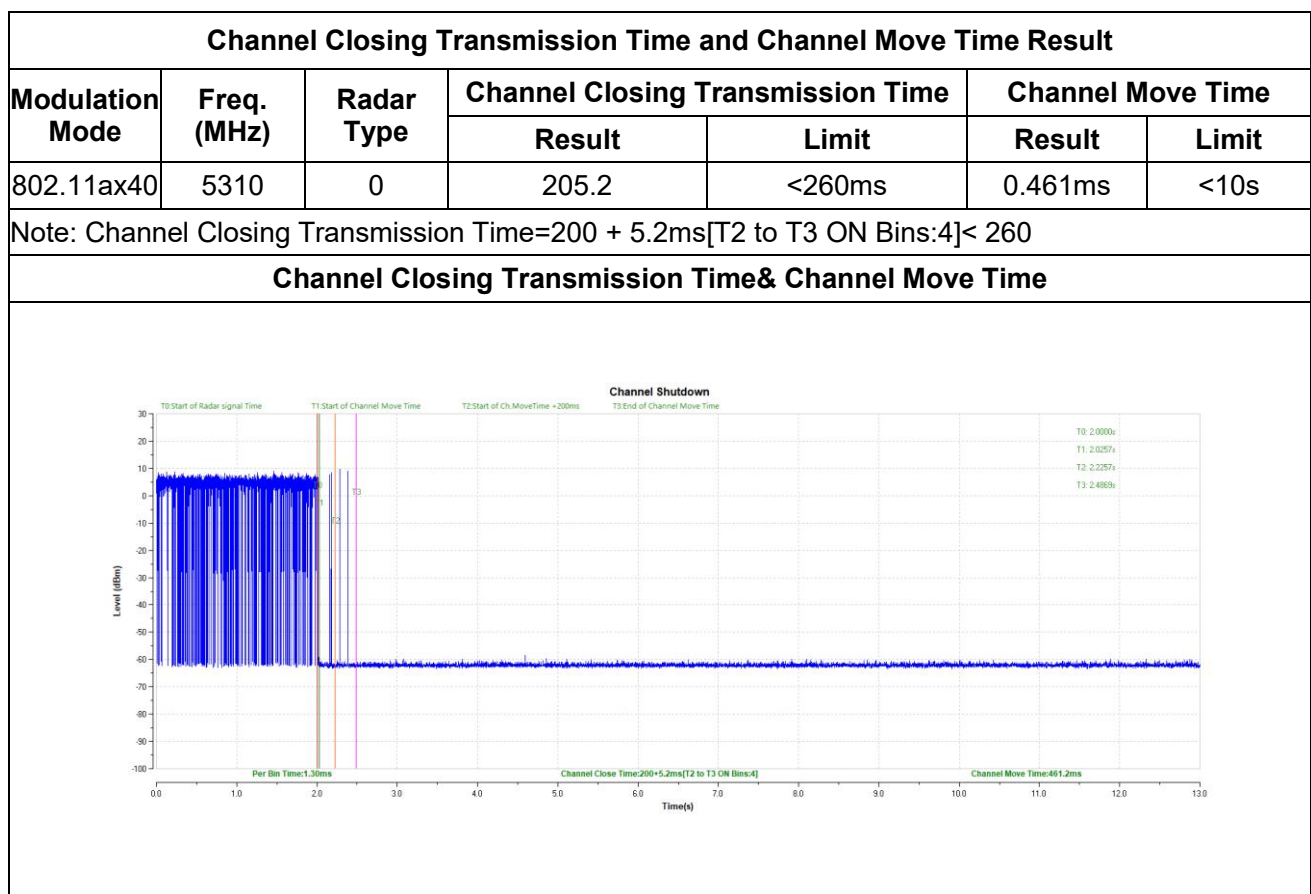
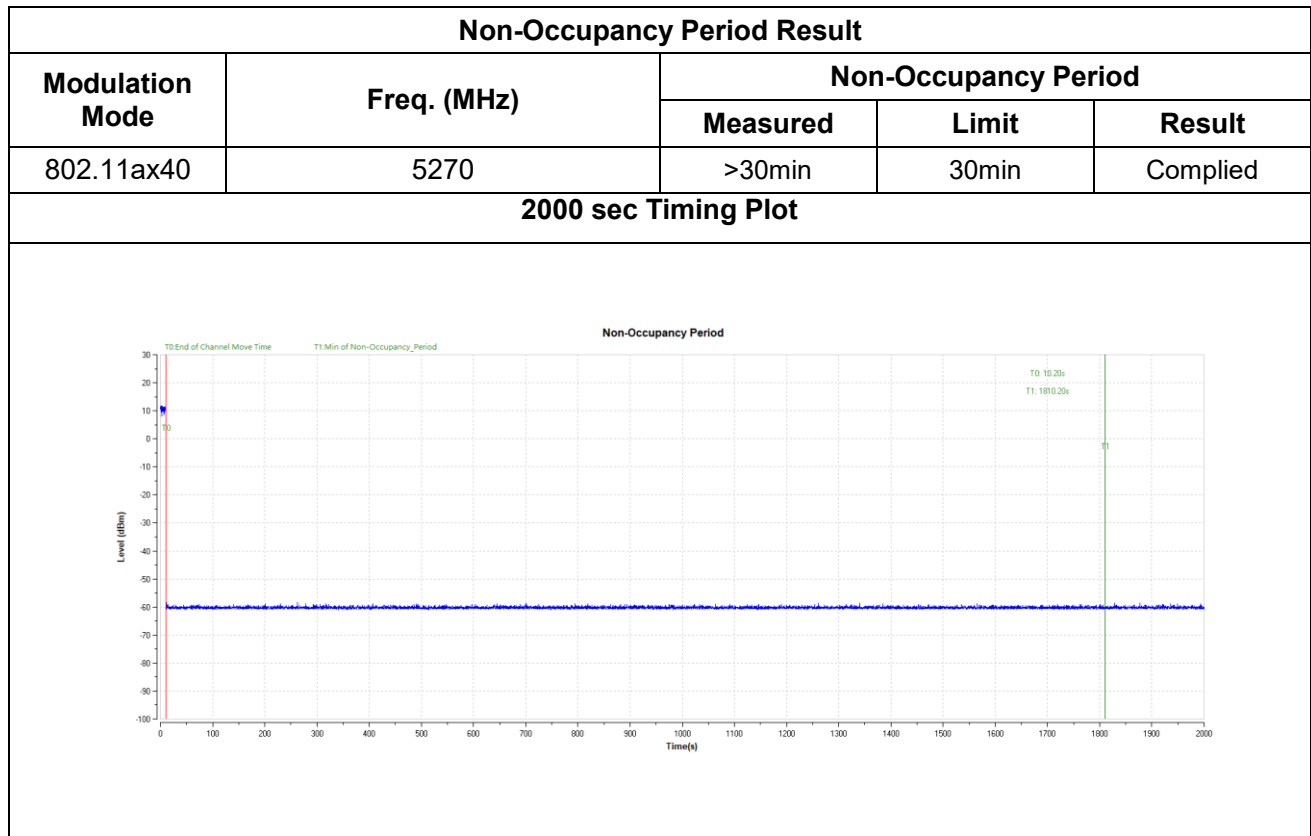
Channel Closing Transmission Time and Channel Move Time Result

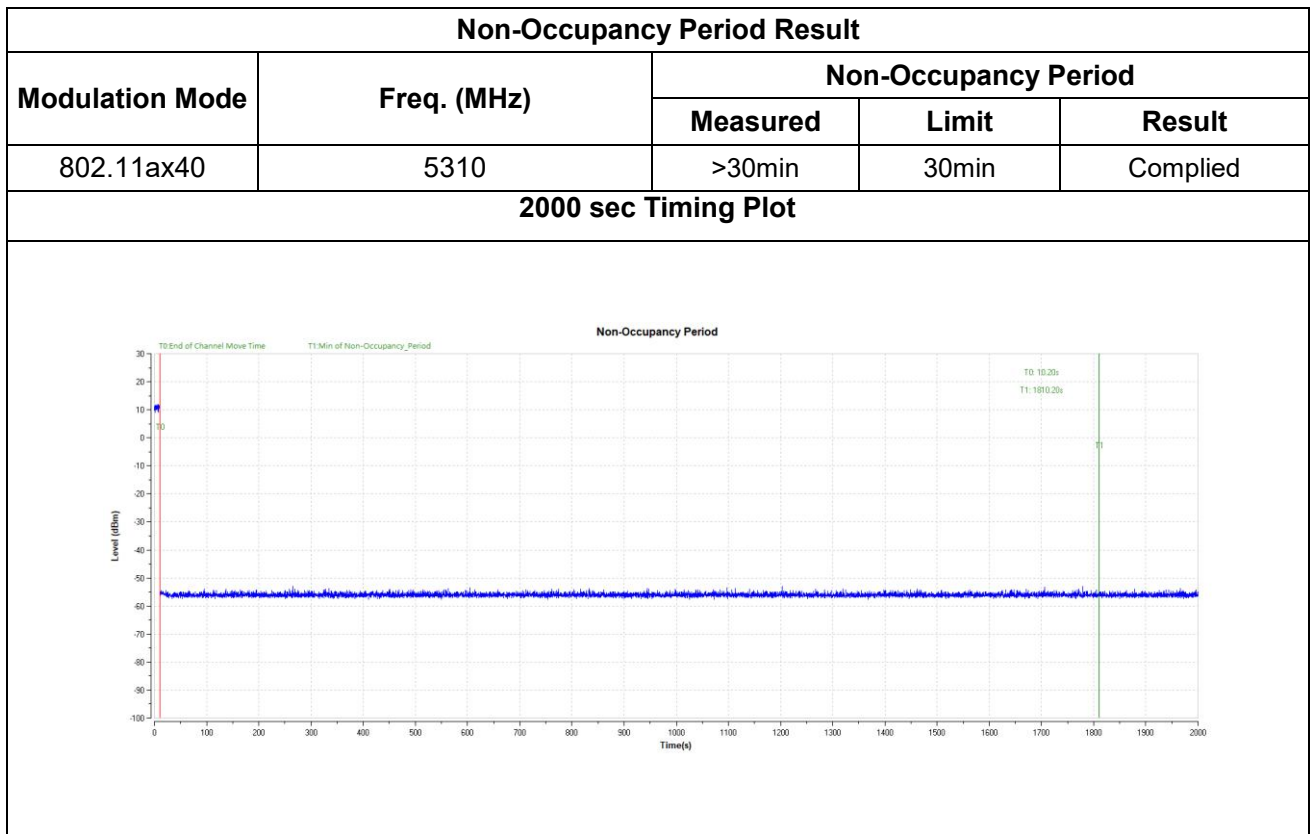
Modulation Mode	Freq. (MHz)	Radar Type	Channel Closing Transmission Time		Channel Move Time	
			Result(ms)	Limit (ms)	Result(S)	Limit (S)
802.11ax40	5270	0	205.2	<260	0.453	<10

Note: Channel Closing Transmission Time=200 + 5.2ms[T2 to T3 ON Bins:4]< 260

Channel Closing Transmission Time& Channel Move Time







5.7.5 Statistical Performance Check

Method of Measurement:

Refer as KDB905462 D02 UNII DFS Compliance Procedures New Rules v02, clause 7.8.4 for Statistical Performance Check test. Stream the MPEG test file from the Master Device to the Client Device on the test Channel for the entire period of the test. Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 10 seconds for Short Pulse Radar Types 1-4 and 6 to ensure detection occurs. Then Observe the transmissions of the UUT at the end of the Burst on the Operating Channel for duration greater than 22 seconds for Long Pulse Radar Type 5 to ensure detection occurs. The device can utilize a test mode to demonstrate when detection occurs to prevent the need to reset the device between trial runs.

Limits:

Radar Type	Minimum Percentage of Successful Detection (Pd)	Minimum Trials
1	60%	30
2	60%	30
3	60%	30
4	60%	30
Aggregate (Radar Types 1-4)	80%	120
5	80%	30
6	70%	30

The percentage of successful detection is calculated by:

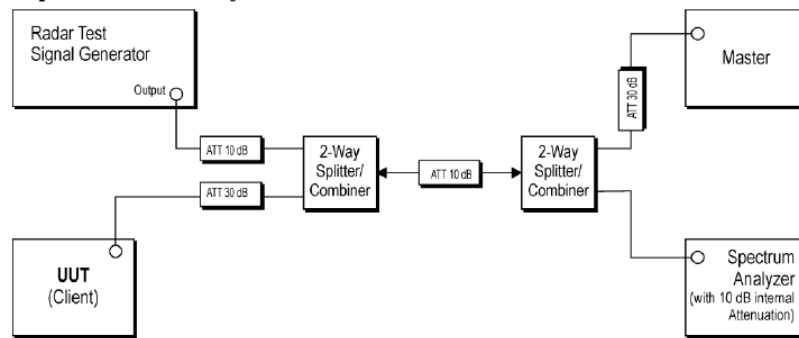
$$\frac{\text{Total Waveform Detections}}{\text{Total Waveform Trails}} \times 100 = \text{Probability of Detection Radar Waveform}$$

In addition an aggregate minimum percentage of successful detection across all Short Pulse Radar Types 1-4 is required and is calculated as follows:

$$\frac{Pd1+Pd2+Pd3+Pd4}{4}$$

Test Setup:

Setup for Client with injection at the Master



Test Results:

Not required

6. Appendix X

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
Spectrum Analyzer	FSV40	101580	DZ-000238-3	R&S	2024/04/22
Comprehensive Test Instrument	CMW270	100304	DZ-000240-1	R&S	2023/12/06
Analog Signal Generator	SMB100A	181858	DZ-000238-2	R&S	2024/05/29
Vector Signal Generator	SGT100A	111661	DZ-000238-1	R&S	2024/05/29
RF Radio Frequency Switch	JS0806-2	19H9080187	DZ-000241	Tonscend	2024/05/29
Programmable DC Power Supply	E3644A	MY58036222	DZ-000178	KEYSIGHT	2024/04/12
3m Semi-Anechoic Chamber	FACT-4	ST08035	WKNA-0024	ETS	2024/12/12
5m Semi-Anechoic Chamber	SAC-5	SAC-5-2.0	EM-000557	COMTEST	2024/11/02
Spectrum Analyzer	N9010B	MY57470323	DZ-000174	KEYSIGHT	2024/02/22
EMI Test Receiver	N9038A-508	MY532290079	EM-000397	Agilent	2024/02/22
EMI Test Receiver	ESR7	102235	VG DY-0956	R&S	2024/02/22
loop antenna	HLA 6121	540046	EM-000546	TESEQ	2024/06/05
Broadband Antenna	VULB 9168	01537	EM-000736-1	SCHWARZBECK	2024/04/24
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2024/06/10
Waveguide Horn Antenna	HF906	360306/008	EM-000093	R&S	2024/02/24
Waveguide Horn Antenna	BBHA9170	00949	DZ-000209-2	SCHWARZBECK	2024/08/05
Bandstop Filters	SW-BSF-2400-100-7-A1	/	EM-000495	/	2024/08/29
5G Bandstop Filters	WRCJV12-4900-5100-5900-6100-50EE	1	DZ-000186	WI	2023/12/06
Preamplifier	BBV 9721	9721-050	DZ-000209-1	SCHWARZBECK	2024/06/04
EMI Test Receiver	ESR3	102394	VG DY-0705	R&S	2024/04/22
LISN	NSLK 8127	8127644	EM-000370	SCHWARZBECK	2024/07/27
Plus Limiter (#2)	VTSD 9561	9561-F017	EM-000367	SCHWARZBECK	2024/09/03
Shielding Room(#2)	GP1A	001	WKNF-0006	LEINING	2024/08/07
Temperature and humidity meter	MHO-C201	/	DZ-000249-2	Seconds test	2024/09/23

Description Of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Description	Brand	Model No.	FCC ID	Serial Number	Supplied by
AX3000 Gigabit Wi-Fi 6 Router	TP-Link	Archer AX50	TE7AX50	22170V0001968	/

The End

Important

1. The test report is invalid without the official stamp of CVC;
2. Any part photocopies of the test report are forbidden without the written permission from CVC;
3. The test report is invalid without the signatures of Author and Reviewer;
4. The test report is invalid if altered;
5. Objections to the test report must be submitted to CVC within 15 days;
6. Generally, commission test is responsible for the tested samples only;
7. As for the test result, “—” or “ N/A” means “not applicable”, “ / ”means “not testing”, “P” means “pass” and “F” means “fail”.

***The test data and test results given in this test report should only be used for purposes of scientific research, teaching and internal quality control when the CMA symbol is not presented. ***

Address: No.3,Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, China (Test location)

Post Code: 510663 Tel: 020-32293888

FAX: 020 32293889 E-mail: office@cvc.org.cn