



Test Report No.:
GJW2023-0754-RF3

TEST REPORT

IC : 24728-SKIWB921AU1
Applicant : Guangzhou Shikun Electronics Co., Ltd
Product Name : Module
Mode No. : SKI.WB921AU.1

CVC Testing Technology Co., Ltd.

Applicant		Name: Guangzhou Shikun Electronics Co., Ltd	
		Address: NO.6 Liankun Road,Huangpu District,Guangzhou,China	
Manufacturer		Name: Guangzhou Shikun Electronics Co., Ltd	
		Address: NO.6 Liankun Road,Huangpu District,Guangzhou,China	
Equipment Under Test		Product Name : Module	
		Model No. : SKI.WB921AU.1	
		Trade mark : /	
		Serial no. : B4ADA3CE77D8	
		Sampling : —	
Date of Receipt.	2023.03.10	Date of Testing	2023.03.10~2023.03.13
Test Specification		Test Result	
RSS-247 Issue 2 RSS-Gen Issue 5 ANSI C63.10 (2013)		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: 2023.06.07		
Tested by: <i>LuWeiJi</i>	Reviewed by: <i>Xu Zhenfei</i>	Approved by: <i>ChenHuaWen</i>	
Lu Weiji	Xu Zhenfei	Chen HuaWen	
Other Aspects: NONE.			
Abbreviations:OK, Pass= passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			
This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.			

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1. General Product Information

1.1 General information

Product Name	Module	
Model No.	SKI.WB921AU.1	
Power Supply	DC 3.3V	
Serial Number(SN)	B4ADA3CE77D8	
Power Supply	Adapter	/
	Battery	/
Antenna Type	External antenna	
Antenna Connector	A detachable antenna	
Antenna Gain	5.0 dBi	
Beamforming gain	0 dBi (provided by client)	
Frequency Range	U-NII-1: For 20MHz:5180-5240MHz For 40MHz:5190-5230MHz For 80MHz:5210MHz U-NII-2A: For 20MHz:5260-5320MHz For 40MHz:5270-5310MHz For 80MHz:5290MHz U-NII-2C: For 20MHz:5500-5700MHz(without 5600~5640MHz) For 40MHz:5510-5670MHz(without 5590-5630MHz) For 80MHz:5530MHz U-NII-3: For 20MHz:5745-5825MHz For 40MHz:5755-5795MHz For 80MHz:5775MHz	
Modulation Type	802.11a/n (HT20/HT40) : OFDM 802.11ac (VHT20/VHT40/VHT80): OFDM 802.11ax (HE20/HE40/HE80): OFDM	
Max. Conducted Power	U-NII-1: 16.90 dBm (Output Power) U-NII-1: 21.87 dBm (E.I.R.P) U-NII-2A: 17.30 dBm (Output Power) U-NII-2A: 22.17 dBm (E.I.R.P) U-NII-2C: 17.50 dBm (Output Power) U-NII-2C: 22.55 dBm (E.I.R.P)	

	U-NII-3: 17.20 dBm (Output Power) U-NII-3: 22.19 dBm (E.I.R.P)
TPC Function	<input type="checkbox"/> Support <input checked="" type="checkbox"/> Not support
TDWR Band	<input type="checkbox"/> Support <input checked="" type="checkbox"/> Not support
Operate Temp.Range	-40°C to +125°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. Note: This module (the module number is SKI.WB921AU.1) has passed the certification. The module plans to add five models of antennas, as shown in the table below. In the report, only the radiated emission is tested, and the antenna used is A100-0062. Other test items and test data will refer to the report of the module (IC ID:24728-SKIWB921AU1)

Antennas	AG-011320-0679	3D0504BK07-001	SLK-KG-B3DBS-SMA(P)	A100-0062	SH-230317-0001
Gain	4.5dBi	5.0dBi	3.3dBi	5.0dBi	4.39dBi

4. When installed in the host product, the radio can support “hotspot” features and operate as a master device only working at WiFi 2.4GHz (2412MHZ-2462MHz) and WIFI 5GHz (5180MHz-5240MHz, 5745MHz-5825MHz).

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.

Add.: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, Guangdong, 510663, People's Republic of China

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 E**.

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.

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. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Test Mode	Antenna Delivery	Data Rate		
		Antenna 1	Antenna 2	MIMO
IEEE 802.11A TX mode	2TX / 2RX	6	6	/
IEEE 802.11N 20MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11N 40MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AC 20MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AC 40MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AC 80MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AX 20MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AX 40MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8
IEEE 802.11AX 80MHz TX mode	2TX / 2RX	MCS 0	MCS 0	MCS 8

Test Items	Test Antennas	Test Modes	Test Channels
Maximum conducted output power	Antenna 1/ Antenna 2/ MIMO	IEEE 802.11A/ IEEE 802.11N20/ IEEE 802.11N40/ IEEE 802.11AC20/ IEEE 802.11AC40/ IEEE 802.11AC80 IEEE 802.11AX20/ IEEE 802.11AX40/ IEEE 802.11AX80	36,40,48,52,56,64,100,116,140,149,157,165/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 42,58,106,155/ 36,40,48,52,56,64,100,116,140,149,157,165/ 38,46,54,62,102,110,134,151,159/ 42,58,106,155
Unwanted Emissions (Band Edge Measurement)	MIMO	IEEE 802.11AX 20	36,64,100,140,149,165
Unwanted Emissions (Spurious Emissions)	MIMO	IEEE 802.11AX 20	36,52,100,149

4. Summary of measurement results

Summary of measurements of results	Clause in IC rules	Verdict	Note
Unwanted Emissions	RSS-Gen 8.9	PASS	/
Maximum conducted output power	RSS-247-6.2	PASS	/
Dynamic Frequency Selection (DFS)	RSS-247-6.3	N/A	Note1

Note1: This test is mainly to complete the antenna reporting, while the EUT is Client only device, no radar detection Capability. Changing the antenna will not affect the results, so there is no need to test.

5. Measurement procedure

5.1 Unwanted Emission

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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、 $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] - 20 \log(d[\text{meters}]) + 104.77$, where E = field strength and d = distance at which field strength limit is specified in the rules;

§2、 $E[\text{dB}\mu\text{V}/\text{m}] = \text{EIRP}[\text{dBm}] + 95.2$, 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	Field strength (microvolt/meter)	Limit (dBµV/m)	Remark	Measurement distance (m)
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

Measurement Data

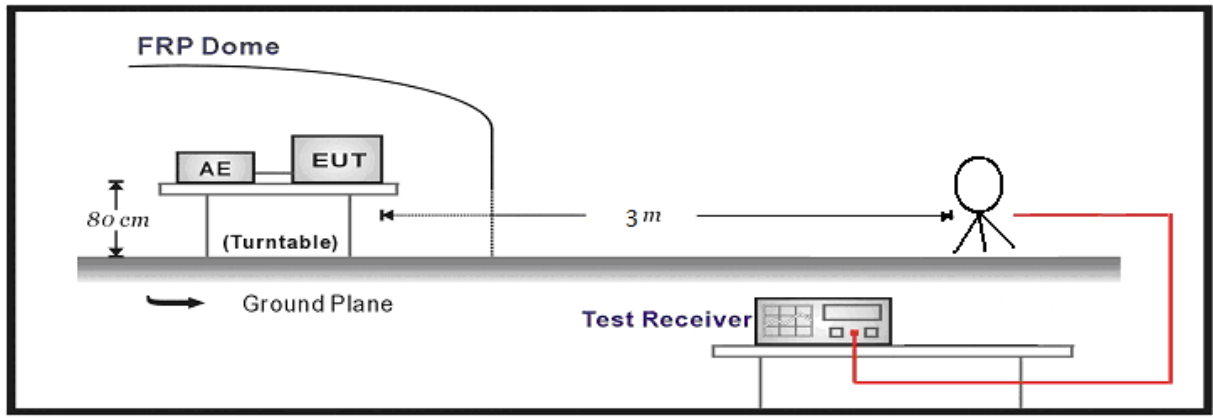
The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

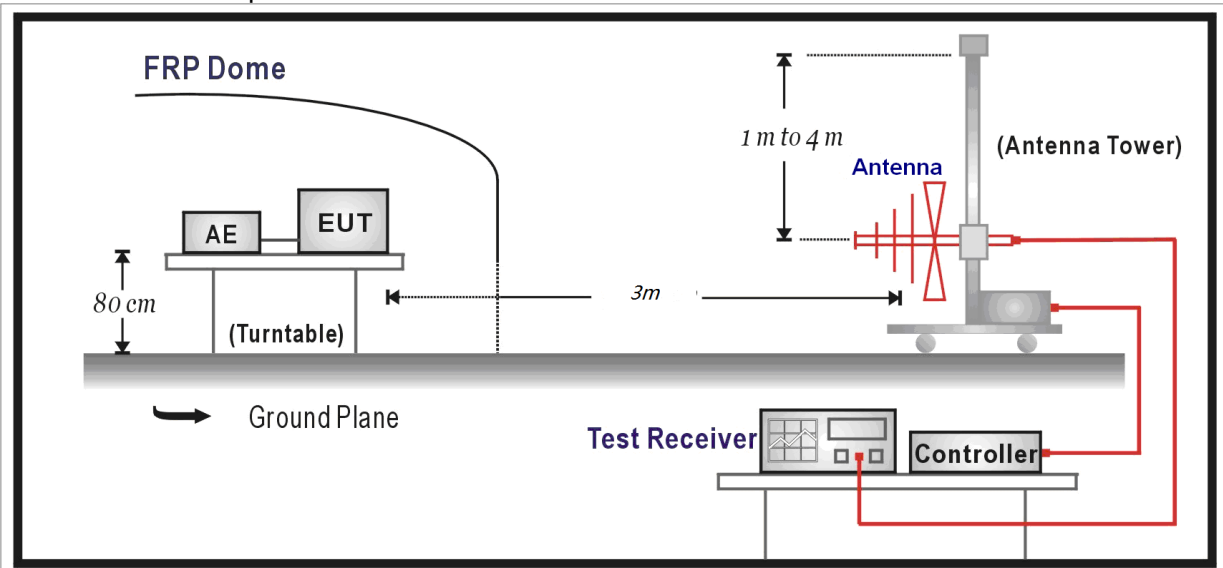
Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Test Setup:

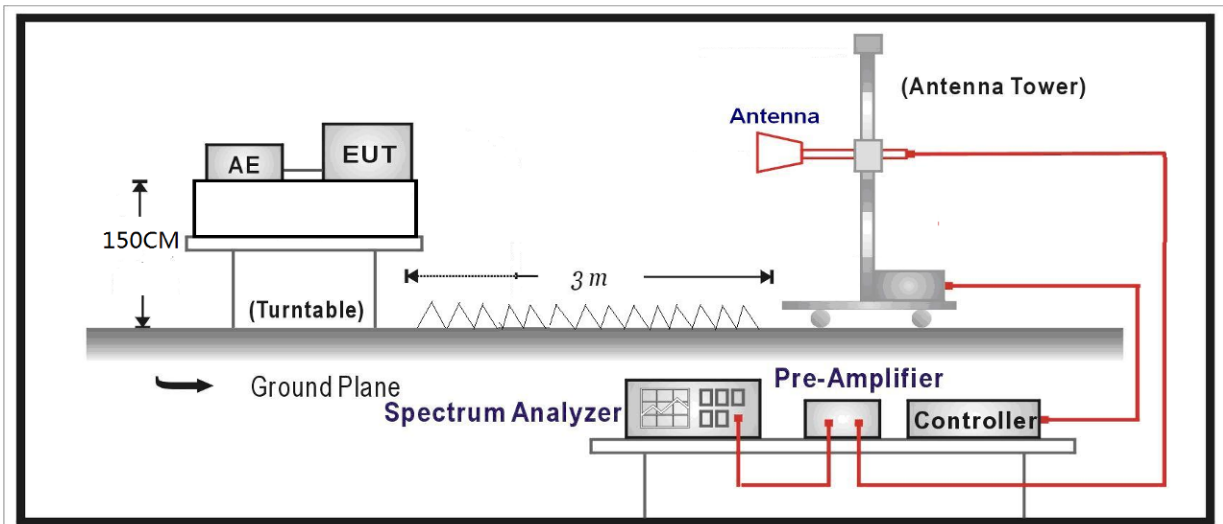
Below 30MHz Test Setup:



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

5.1.1 Band edge measurements (Radiates):

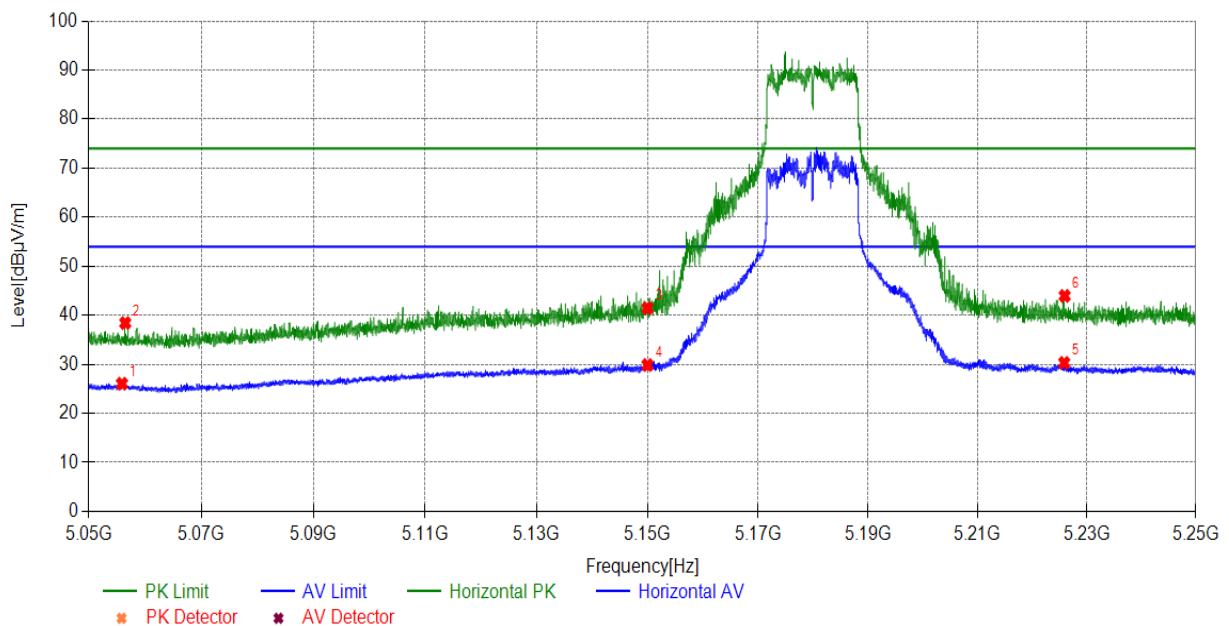
Test Results:

U-NII-1: 5150-5350MHz:

During the test, the Band Edge was performed in WIFI all modes with all channels and all antenna. 802.11ax20, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

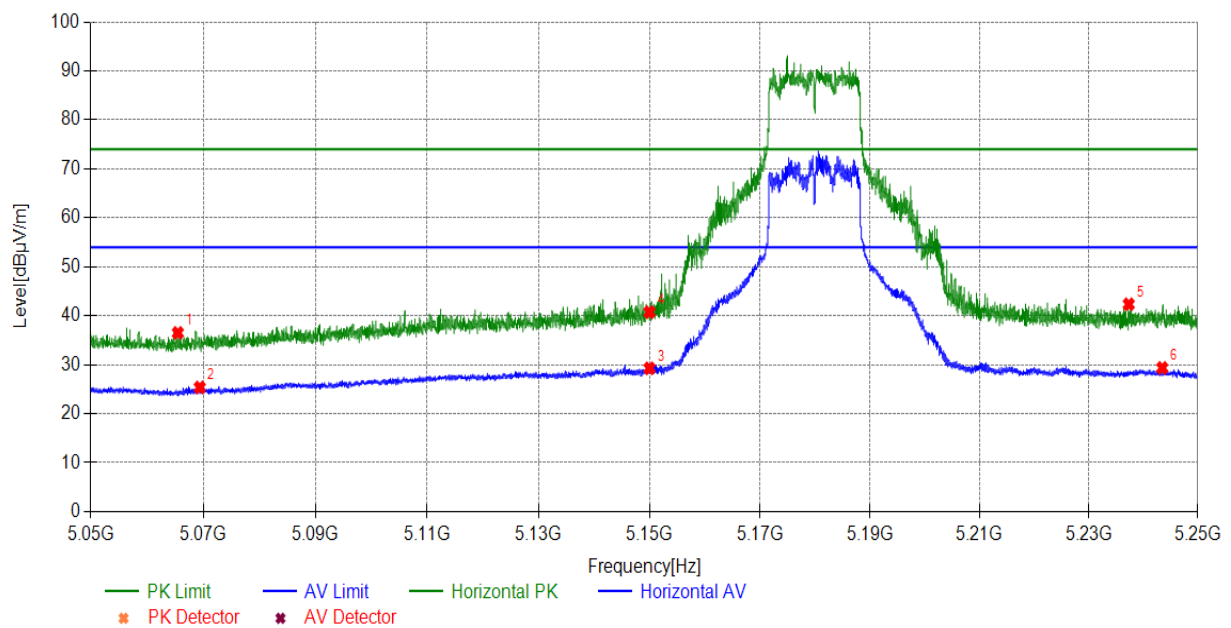
Test mode	802.11 AX HT 20MHz
Test channel	Low(L)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5225.9376	Horizontal	-5.61	49.56	43.95	74.00	30.05	PK	150	288	PASS
5056.5007	Horizontal	-5.58	44.00	38.42	74.00	35.58	PK	150	293	PASS
5150.0100	Horizontal	-5.59	47.03	41.44	74.00	32.56	PK	150	278	PASS
5150.0100	Horizontal	-5.59	35.45	29.86	54.00	24.14	AV	150	252	PASS
5225.8576	Horizontal	-5.61	35.91	30.30	54.00	23.70	AV	150	252	PASS
5055.9206	Horizontal	-5.58	31.62	26.04	54.00	27.96	AV	150	342	PASS



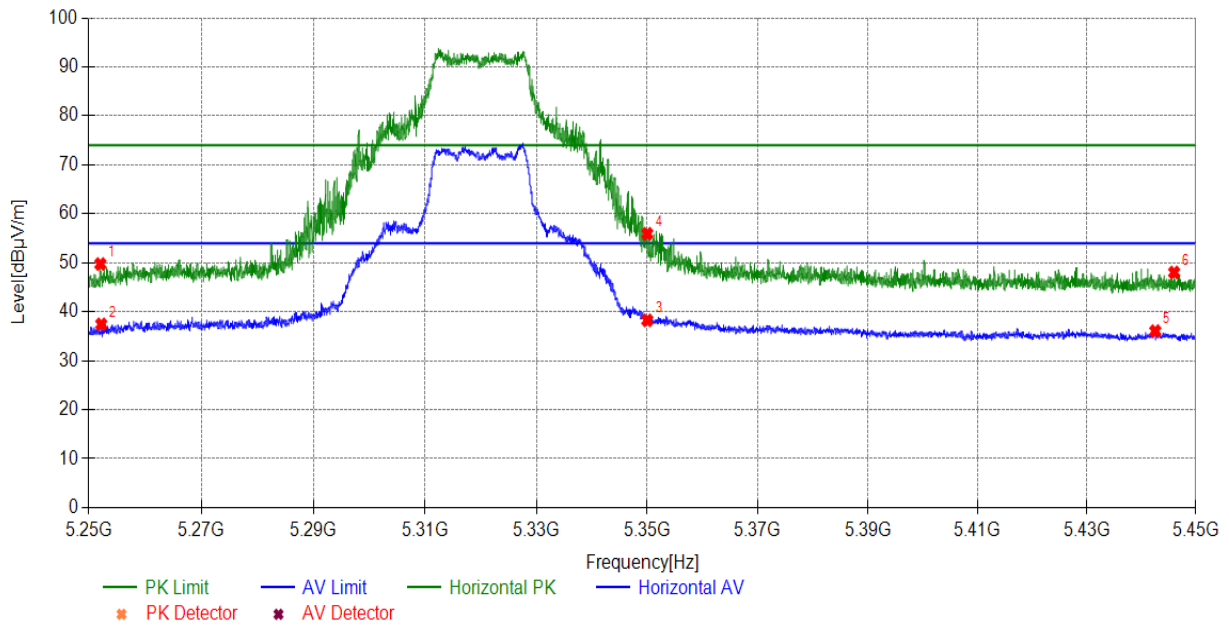
Test mode	802.11 AX HT 20MHz
Test channel	Low(L)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5065.5016	Vertical	-5.58	42.08	36.50	74.00	37.50	PK	150	278	PASS
5150.0100	Vertical	-5.59	46.33	40.74	74.00	33.26	PK	150	278	PASS
5237.3387	Vertical	-5.61	47.95	42.34	74.00	31.66	PK	150	288	PASS
5069.3819	Vertical	-5.58	30.93	25.35	54.00	28.65	AV	150	61	PASS
5243.4994	Vertical	-5.61	34.95	29.34	54.00	24.66	AV	150	71	PASS
5150.0100	Vertical	-5.59	34.85	29.26	54.00	24.74	AV	150	252	PASS



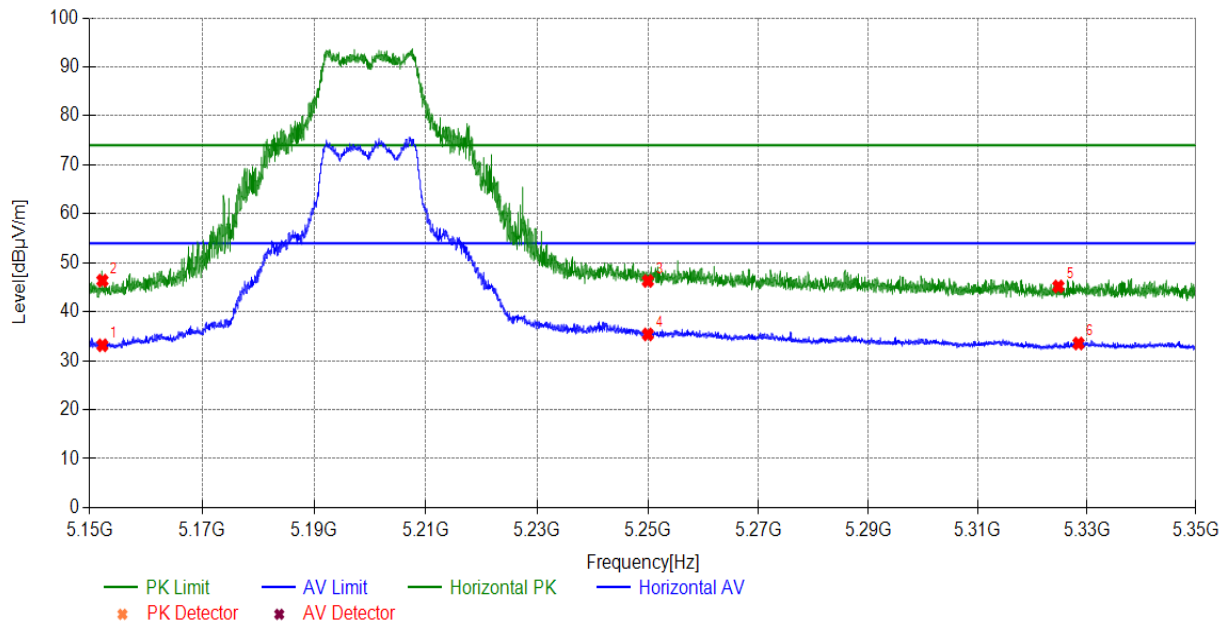
Test mode	802.11 AX HT 20MHz
Test channel	High(H)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5252.1002	Horizontal	-5.61	55.35	49.74	74.00	24.26	PK	150	337	PASS
5252.2602	Horizontal	-5.61	43.04	37.43	54.00	16.57	AV	150	10	PASS
5350.0100	Horizontal	-5.63	43.88	38.25	54.00	15.75	AV	150	26	PASS
5350.0100	Horizontal	-5.63	61.56	55.93	74.00	18.07	PK	150	21	PASS
5442.5793	Horizontal	-5.64	41.68	36.04	54.00	17.96	AV	150	35	PASS
5446.0596	Horizontal	-5.64	53.66	48.02	74.00	25.98	PK	150	35	PASS



Test mode	802.11 AX HT 20MHz
Test channel	High(H)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5276.4026	Vertical	-5.61	56.04	50.43	74.00	23.57	PK	150	348	PASS
5277.5828	Vertical	-5.61	43.56	37.95	54.00	16.05	AV	150	343	PASS
5350.0100	Vertical	-5.63	59.92	54.29	74.00	19.71	PK	150	348	PASS
5350.0100	Vertical	-5.63	43.73	38.10	54.00	15.90	AV	150	7	PASS
5381.8932	Vertical	-5.63	54.86	49.23	74.00	24.77	PK	150	16	PASS
5381.9732	Vertical	-5.63	42.02	36.39	54.00	17.61	AV	150	21	PASS

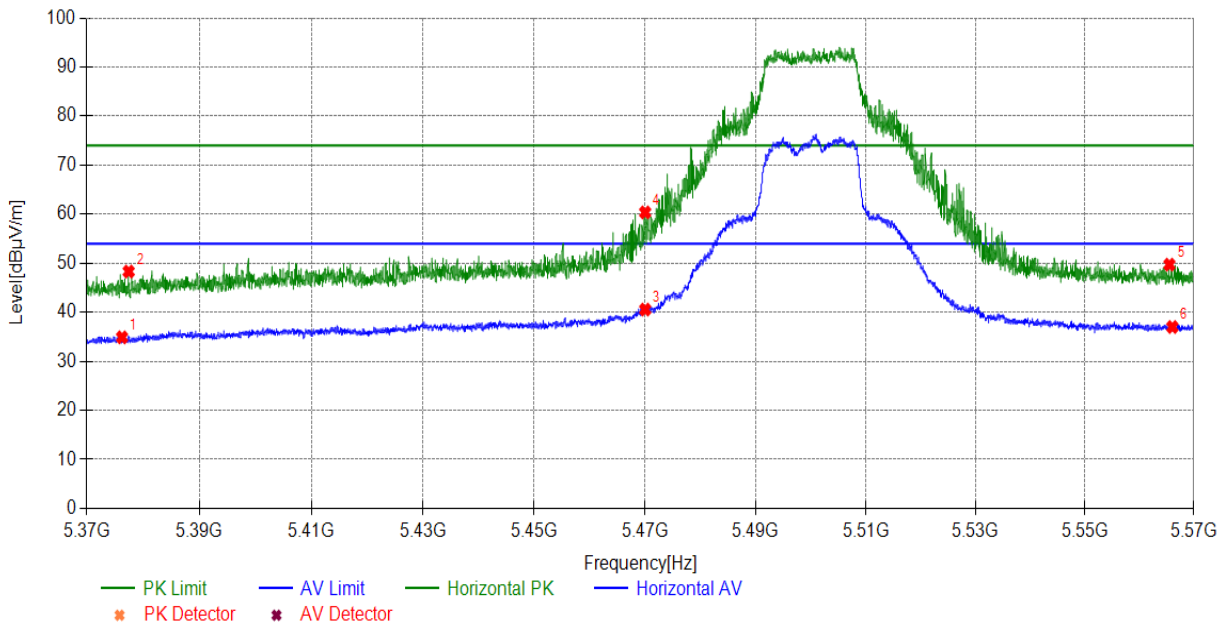


U-NII-2C:5470-5725MHz:

During the test, the Band Edge was performed in WIFI all modes with all channels and all antenna. 802.11ax20, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

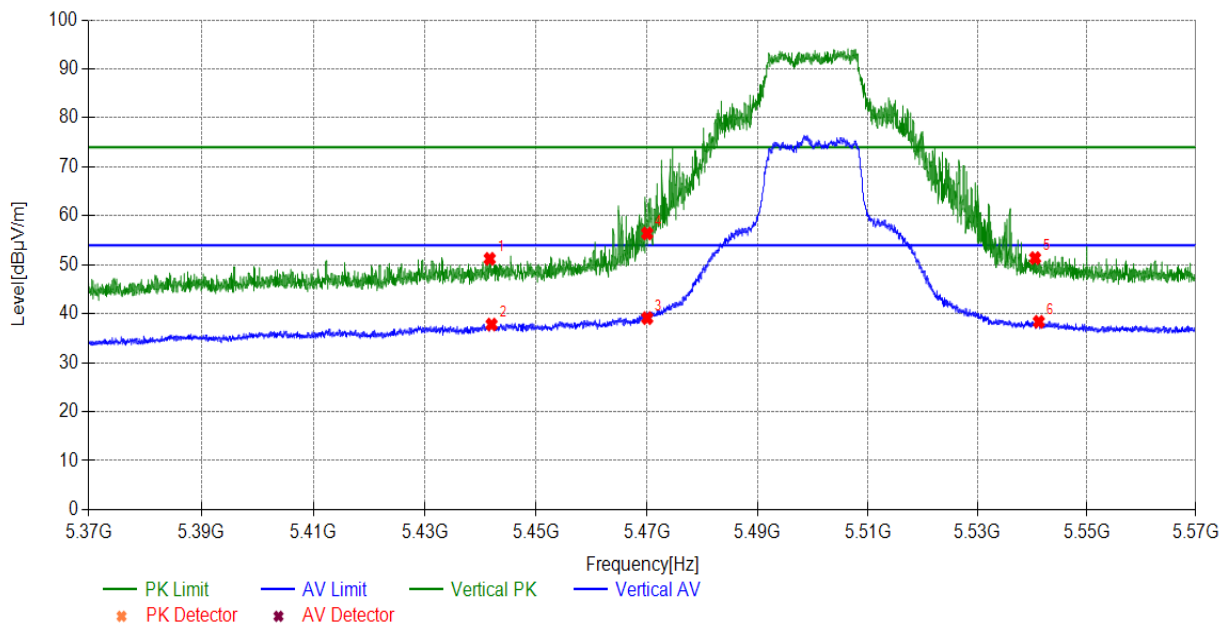
Test mode	802.11 AX HT 20MHz
Test channel	Low(L)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5376.3006	Horizontal	-5.63	40.51	34.88	54.00	19.12	AV	150	48	PASS
5377.4807	Horizontal	-5.63	53.93	48.30	74.00	25.70	PK	150	38	PASS
5470.0100	Horizontal	-5.65	46.20	40.55	54.00	13.45	AV	150	69	PASS
5470.0100	Horizontal	-5.65	66.01	60.36	74.00	13.64	PK	150	80	PASS
5565.5596	Horizontal	-5.44	55.15	49.71	74.00	24.29	PK	150	213	PASS
5566.0996	Horizontal	-5.43	42.42	36.99	54.00	17.01	AV	150	64	PASS



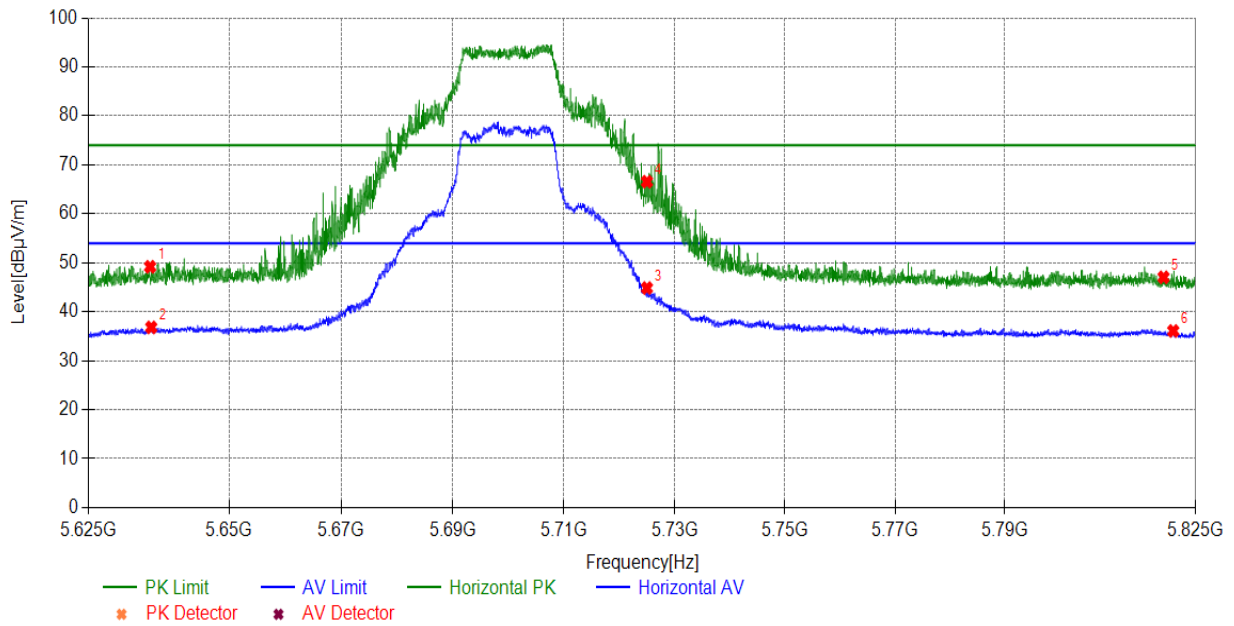
Test mode	802.11 AX HT 20MHz
Test channel	Low(L)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5441.6272	Vertical	-5.64	56.86	51.22	74.00	22.78	PK	150	42	PASS
5441.9672	Vertical	-5.64	43.44	37.80	54.00	16.20	AV	150	32	PASS
5470.0100	Vertical	-5.65	44.76	39.11	54.00	14.89	AV	150	37	PASS
5470.0100	Vertical	-5.65	62.05	56.40	74.00	17.60	PK	150	277	PASS
5540.5571	Vertical	-5.52	56.89	51.37	74.00	22.63	PK	150	281	PASS
5541.2371	Vertical	-5.52	43.88	38.36	54.00	15.64	AV	150	42	PASS



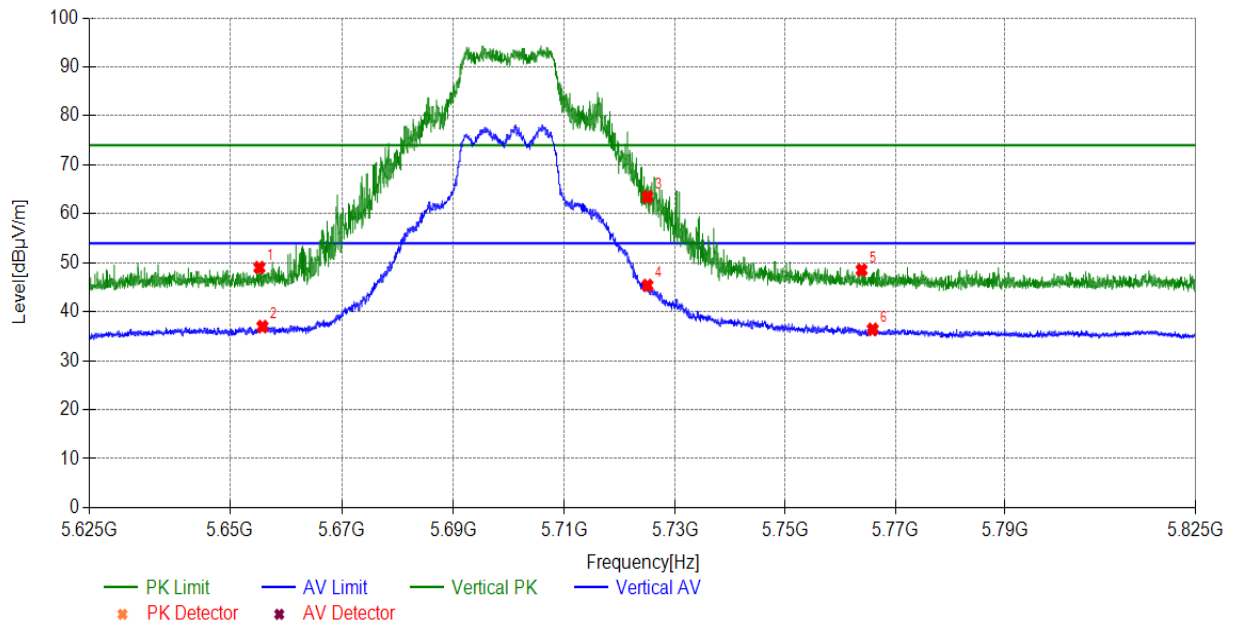
Test mode	802.11 AX HT 20MHz
Test channel	High(H)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5635.9411	Horizontal	-5.21	54.39	49.18	74.00	24.82	PK	150	306	PASS
5725.0100	Horizontal	-4.92	71.48	66.56	74.00	7.44	PK	150	275	PASS
5819.1194	Horizontal	-4.61	51.65	47.04	74.00	26.96	PK	150	158	PASS
5636.1411	Horizontal	-5.21	42.01	36.80	54.00	17.20	AV	150	275	PASS
5820.8996	Horizontal	-4.60	40.68	36.08	54.00	17.92	AV	150	190	PASS
5725.0100	Horizontal	-4.92	49.76	44.84	54.00	9.16	AV	150	275	PASS



Test mode	802.11 AX HT 20MHz
Test channel	High(H)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5655.2630	Vertical	-5.14	54.15	49.01	74.00	24.99	PK	150	97	PASS
5655.8231	Vertical	-5.14	42.11	36.97	54.00	17.03	AV	150	55	PASS
5725.0100	Vertical	-4.92	68.38	63.46	74.00	10.54	PK	150	12	PASS
5725.0100	Vertical	-4.92	50.29	45.37	54.00	8.63	AV	150	17	PASS
5763.8739	Vertical	-4.79	53.30	48.51	74.00	25.49	PK	150	22	PASS
5765.8941	Vertical	-4.78	41.18	36.40	54.00	17.60	AV	150	34	PASS

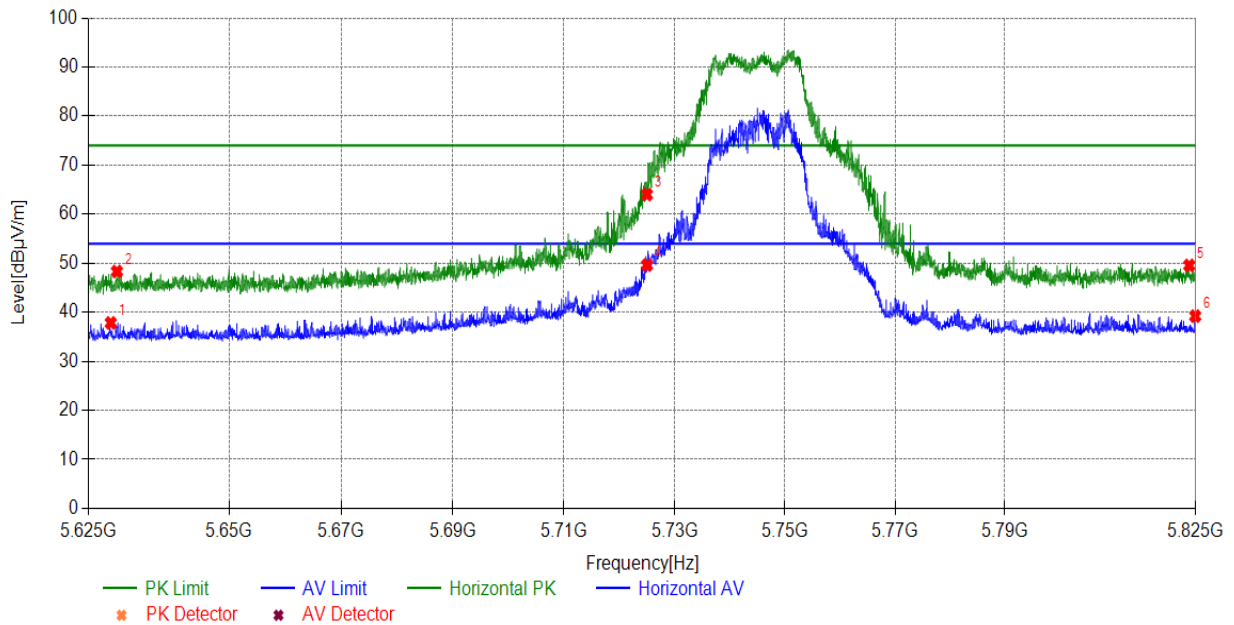


U-NII-3 5725-5850MHz:

During the test, the Band Edge was performed in WIFI all modes with all channels and all antenna. 802.11ax20, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

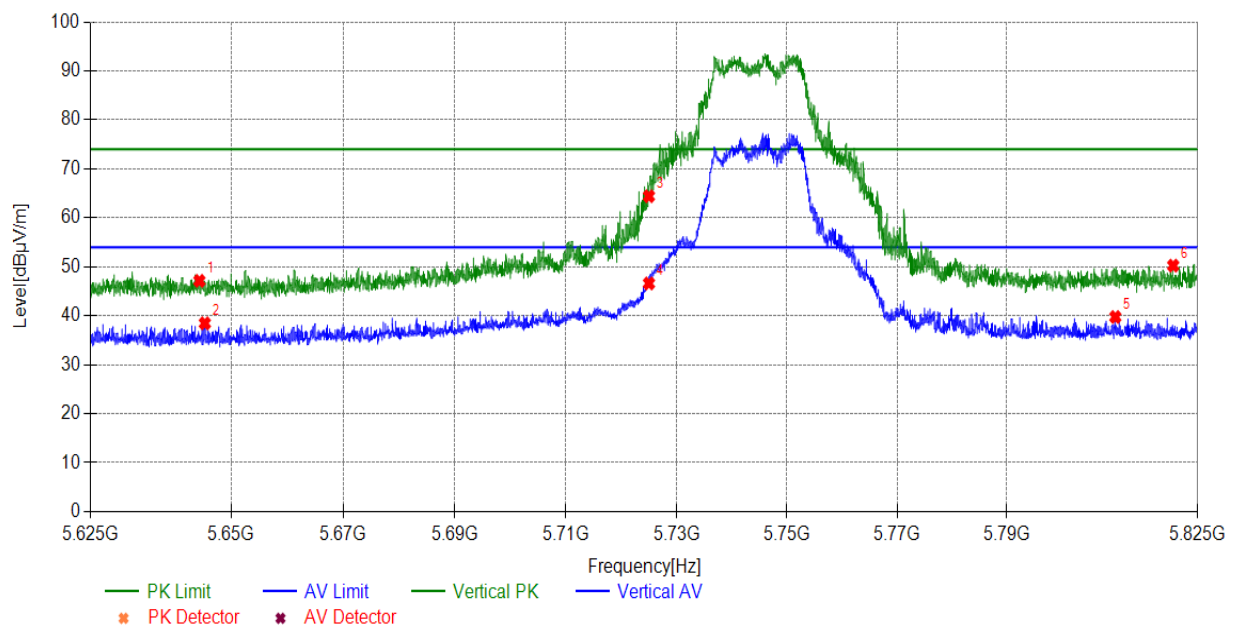
Test mode	802.11 AX HT 20MHz
Test channel	Low(L)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5725.0100	Horizontal	-4.92	68.92	64.00	74.00	10.00	PK	150	70	PASS
5630.0405	Horizontal	-5.23	53.54	48.31	74.00	25.69	PK	150	20	PASS
5823.8399	Horizontal	-4.59	54.15	49.56	74.00	24.44	PK	150	80	PASS
5824.9400	Horizontal	-4.59	43.80	39.21	54.00	14.79	AV	150	10	PASS
5725.0100	Horizontal	-4.92	54.53	49.61	54.00	4.39	AV	150	20	PASS
5628.9404	Horizontal	-5.23	43.06	37.83	54.00	16.17	AV	150	10	PASS



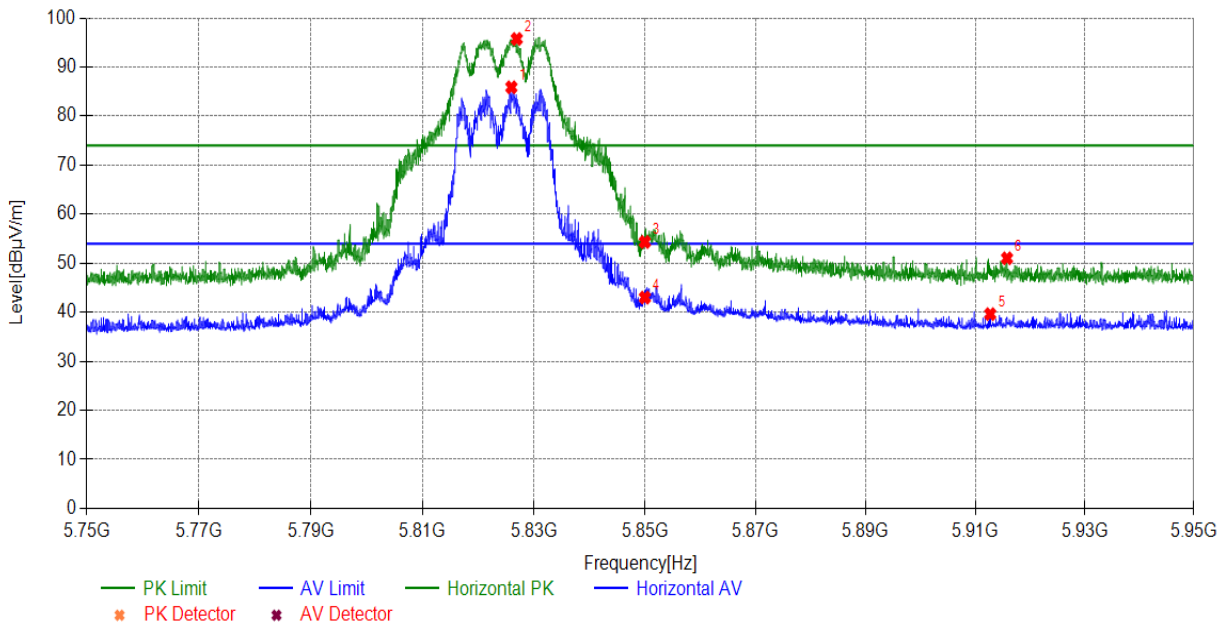
Test mode	802.11 AX HT 20MHz
Test channel	Low(L)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5820.5196	Vertical	-4.61	54.85	50.24	74.00	23.76	PK	150	100	PASS
5644.3619	Vertical	-5.18	52.31	47.13	74.00	26.87	PK	150	20	PASS
5725.0100	Vertical	-4.92	69.33	64.41	74.00	9.59	PK	150	90	PASS
5725.0100	Vertical	-4.92	51.52	46.60	54.00	7.40	AV	150	90	PASS
5809.8985	Vertical	-4.64	44.38	39.74	54.00	14.26	AV	150	10	PASS
5645.3220	Vertical	-5.18	43.64	38.46	54.00	15.54	AV	150	10	PASS



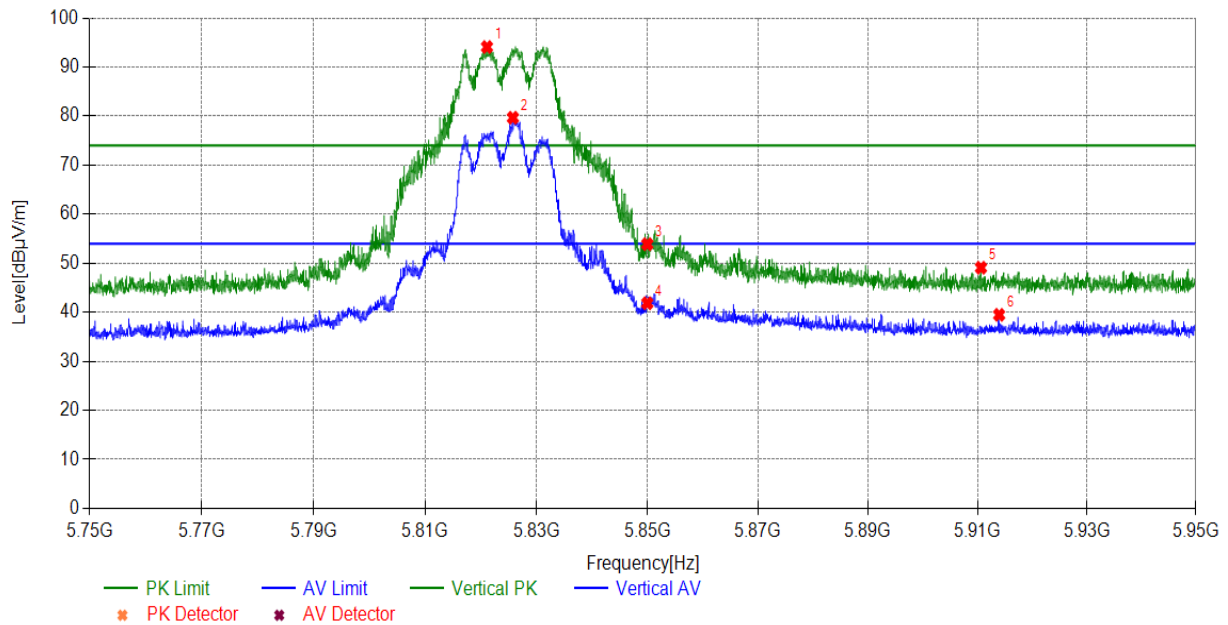
Test mode	802.11 AX HT 20MHz
Test channel	High(H)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5915.8166	Horizontal	-4.29	55.30	51.01	74.00	22.99	PK	150	30	PASS
5850.0100	Horizontal	-4.51	58.84	54.33	74.00	19.67	PK	150	120	PASS
5850.0100	Horizontal	-4.51	47.50	42.99	54.00	11.01	AV	150	10	PASS
5912.7563	Horizontal	-4.30	43.92	39.62	54.00	14.38	AV	150	10	PASS



Test mode	802.11 AX HT 20MHz
Test channel	High(H)

Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
5850.0100	Vertical	-4.51	58.39	53.88	74.00	20.12	PK	150	100	PASS
5910.6561	Vertical	-4.31	53.39	49.08	74.00	24.92	PK	150	120	PASS
5850.0100	Vertical	-4.51	46.35	41.84	54.00	12.16	AV	150	110	PASS
5913.9764	Vertical	-4.30	43.77	39.47	54.00	14.53	AV	150	10	PASS



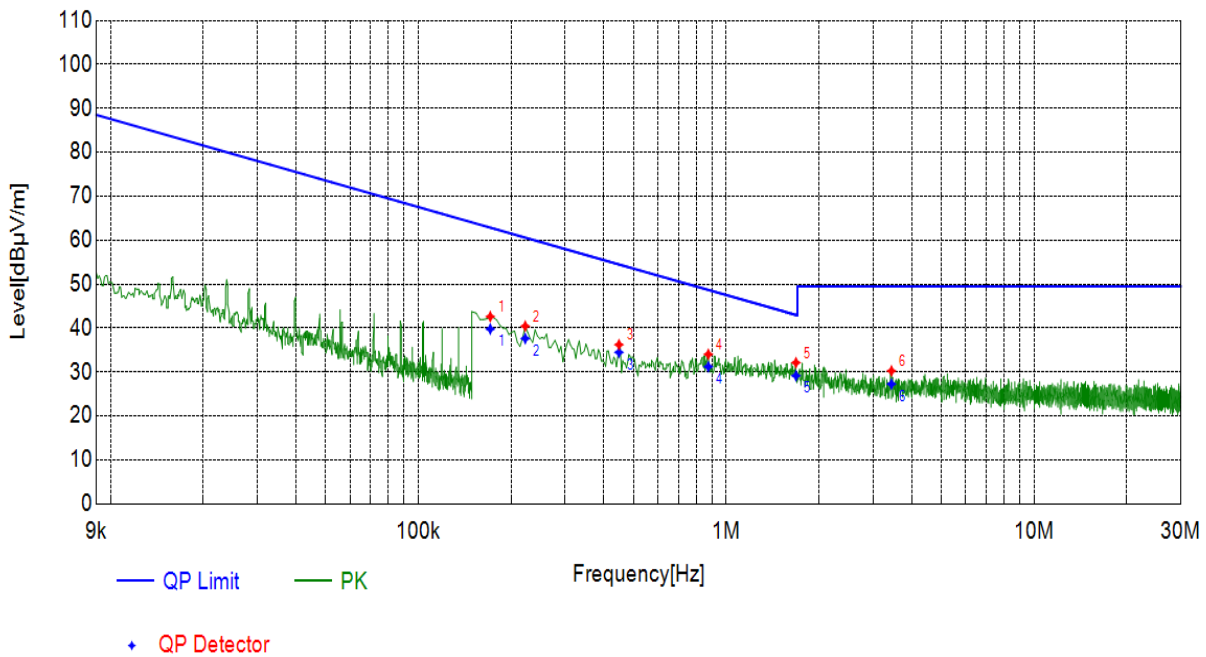
5.1.2 SPURIOUS EMISSIONS:

5.1.2.1 Below 30M:

During the test, the Radiates Emission from 9KHz to 30MHz was performed in all modes with all channels and all antenna, 802.11ax20, Channel 36, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

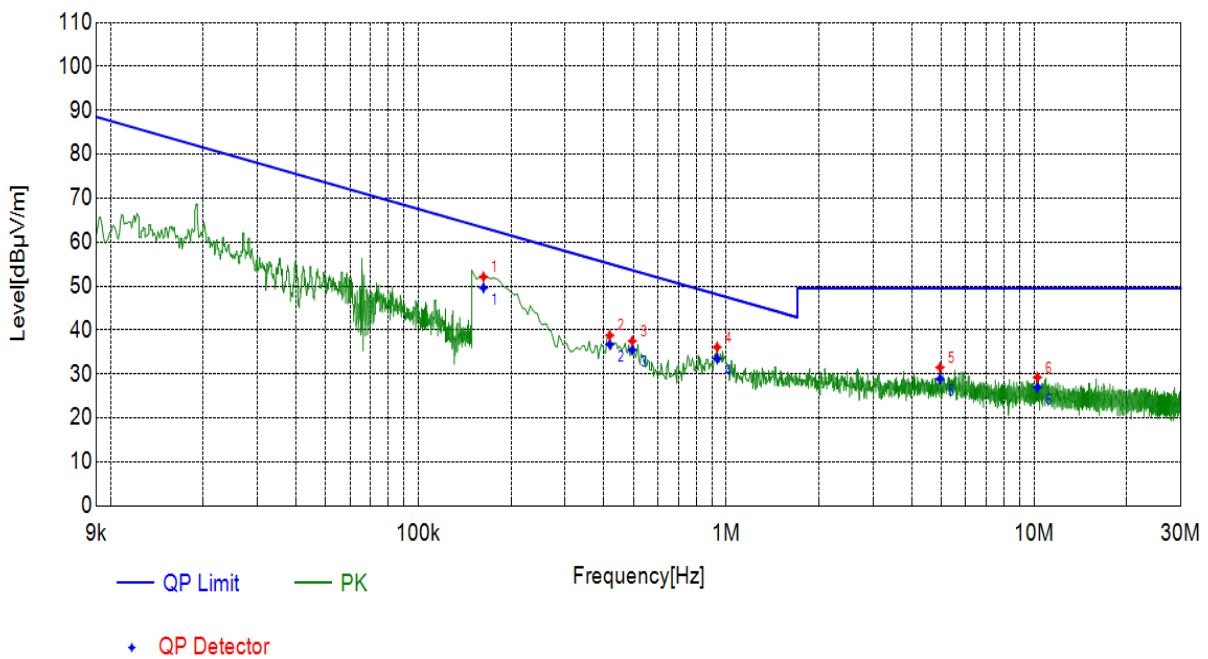
Radiated Emission	9KHz-30MHz
Polarity	X axis
Test channel	Worst-Case

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
0.1713	X axis	20.40	39.78	62.85	23.07	100	150	PASS
0.2225	X axis	20.37	37.61	60.57	22.96	100	90	PASS
0.4485	X axis	20.41	34.47	54.47	20.00	100	250	PASS
0.8750	X axis	20.59	31.21	48.68	17.47	100	320	PASS
1.6854	X axis	20.73	29.14	43.00	13.86	100	40	PASS
3.4425	X axis	20.99	27.26	49.50	22.24	100	0	PASS



Radiated Emission	9KHz-30MHz
Polarity	Y axis
Test channel	Worst-Case

Final Data List								
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail
0.1628	Y axis	20.41	49.61	63.29	13.68	100	270	PASS
0.4187	Y axis	20.32	36.75	55.07	18.32	100	300	PASS
0.4955	Y axis	20.56	35.47	53.60	18.13	100	320	PASS
0.9347	Y axis	20.56	33.49	48.11	14.62	100	90	PASS
4.9480	Y axis	21.13	28.87	49.50	20.63	100	270	PASS
10.2578	Y axis	20.95	26.98	49.50	22.52	100	230	PASS

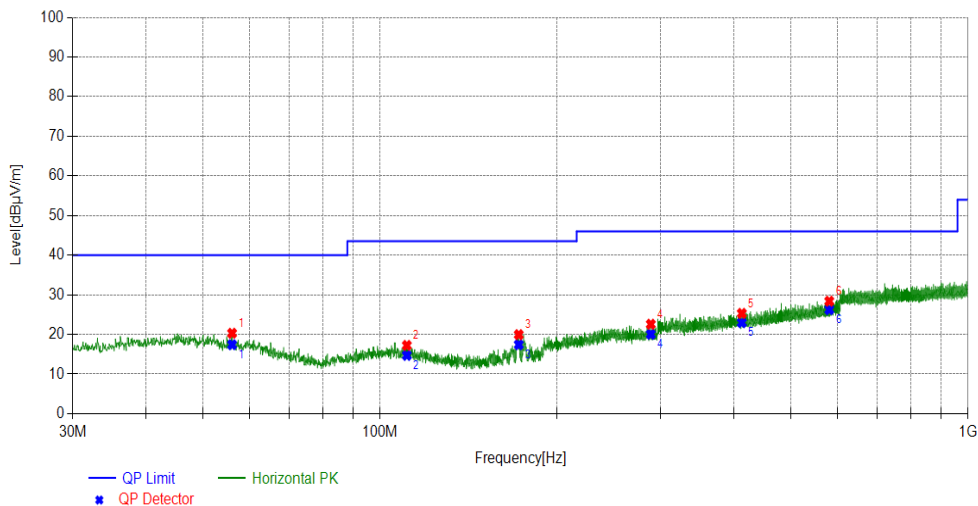


5.1.2.2 30MHz~1GHz:

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels and all antenna, 802.11ax20, Channel 36, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

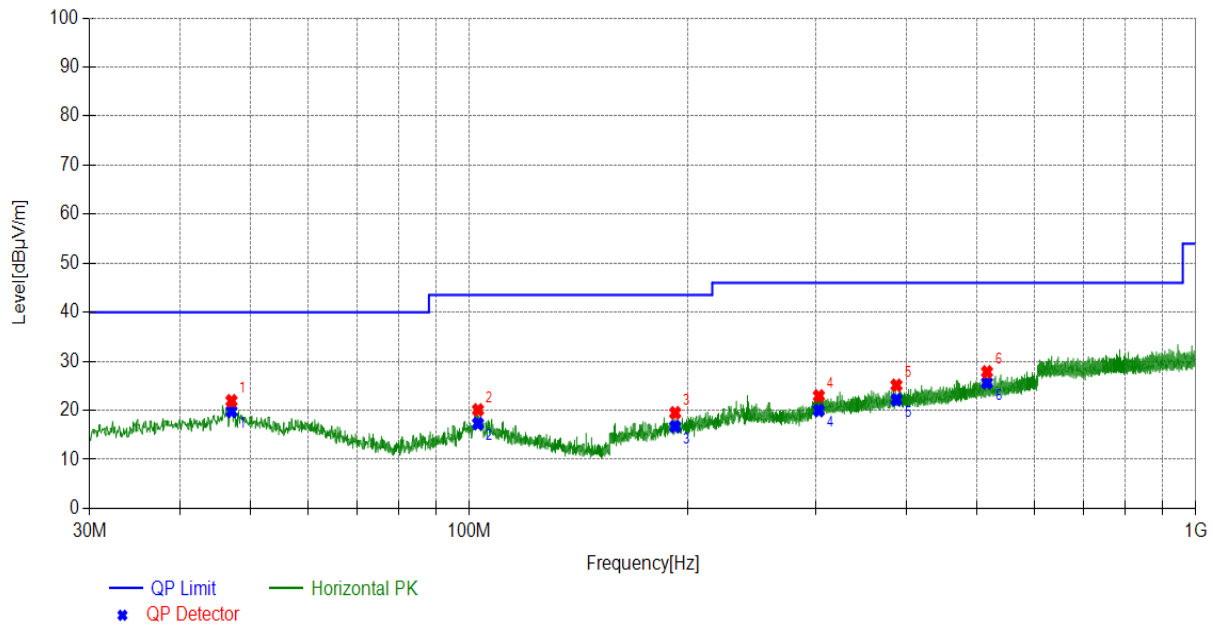
Test mode	802.11ax20									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
56.0204	Horizontal	13.82	6.47	20.29	40.00	19.71	PK	100	12	PASS
111.0854	Horizontal	12.33	4.89	17.22	43.52	26.30	PK	100	254	PASS
172.1990	Horizontal	10.65	9.29	19.94	43.52	23.58	PK	100	289	PASS
288.8340	Horizontal	15.24	7.33	22.57	46.02	23.45	PK	100	185	PASS
412.5449	Horizontal	17.49	7.81	25.30	46.02	20.72	PK	100	220	PASS
581.0495	Horizontal	20.59	7.79	28.38	46.02	17.64	PK	100	220	PASS

Final Data List									
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dB μ V/m]	QP Limit [dB μ V/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail	
56.0204	Horizontal	13.82	17.41	40.00	22.59	102	12	PASS	
111.0854	Horizontal	12.33	14.70	43.52	28.82	106	254	PASS	
172.1990	Horizontal	10.65	17.42	43.52	26.10	111	289	PASS	
288.8340	Horizontal	15.24	20.05	46.02	25.97	132	185	PASS	
412.5449	Horizontal	17.49	22.97	46.02	23.05	125	220	PASS	
581.0495	Horizontal	20.59	26.25	46.02	19.77	100	220	PASS	



Test mode		802.11ax20								
Test channel		Worst-Case Low(L)								
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
47.0616	Vertical	14.36	7.57	21.93	40.00	18.07	PK	100	332	PASS
102.8113	Vertical	12.43	7.65	20.08	43.52	23.44	PK	100	211	PASS
192.0566	Vertical	12.19	7.29	19.48	43.52	24.04	PK	100	228	PASS
302.8713	Vertical	15.38	7.54	22.92	46.02	23.10	PK	100	55	PASS
387.3234	Vertical	17.02	8.09	25.11	46.02	20.91	PK	100	211	PASS
516.1127	Vertical	19.48	8.35	27.83	46.02	18.19	PK	100	55	PASS

Final Data List									
Frequency [MHz]	Polarity	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Pass/Fail	
47.0616	Vertical	14.36	19.78	40.00	20.22	110	332	PASS	
102.8113	Vertical	12.43	17.29	43.52	26.23	101	211	PASS	
192.0566	Vertical	12.19	16.69	43.52	26.83	105	228	PASS	
302.8713	Vertical	15.38	19.97	46.02	26.05	154	55	PASS	
387.3234	Vertical	17.02	22.16	46.02	23.86	122	211	PASS	
516.1127	Vertical	19.48	25.60	46.02	20.42	132	55	PASS	

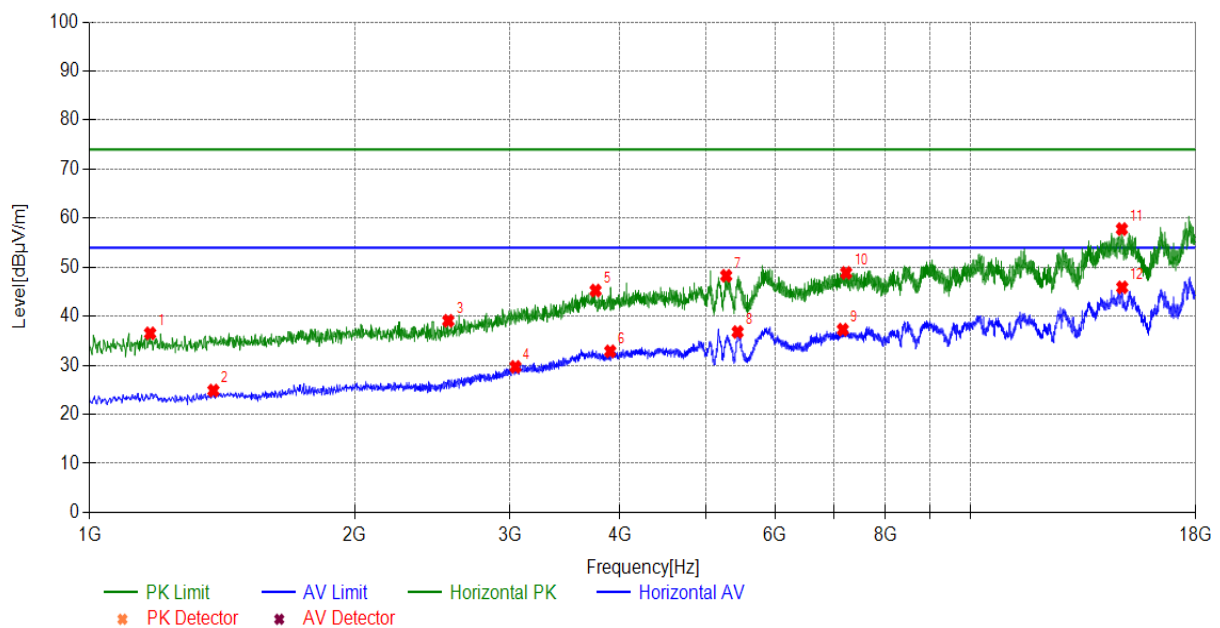


5.1.2.3 Above 1GHz:

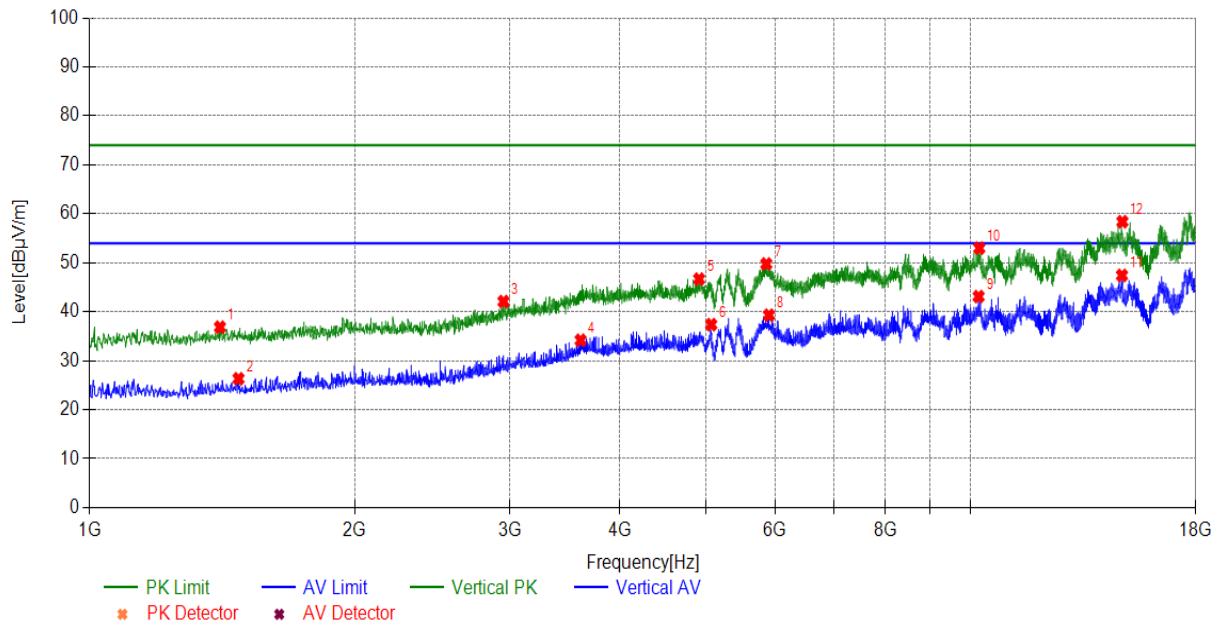
5.1.2.3.1 U-NII-1:

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

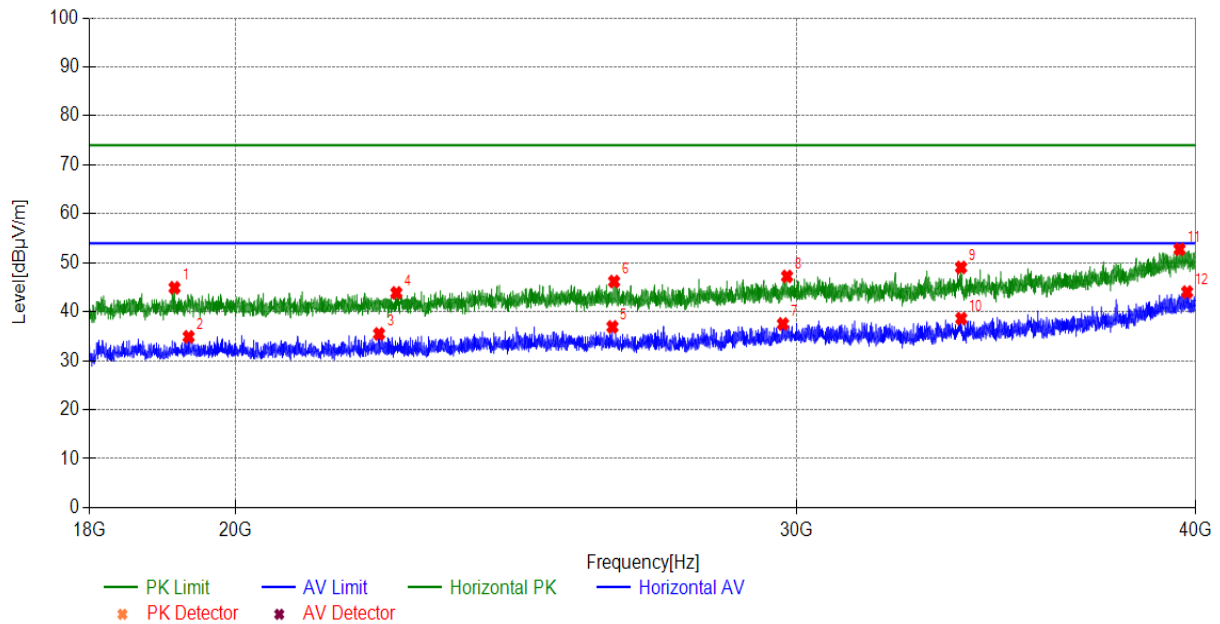
Test mode	802.11ax (HE20)(1G~18G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
1171.7172	Horizontal	-15.95	52.46	36.51	74.00	37.49	PK	150	328	PASS
1382.5383	Horizontal	-15.58	40.42	24.84	54.00	29.16	AV	150	348	PASS
2553.9554	Horizontal	-12.58	51.65	39.07	74.00	34.93	PK	150	348	PASS
3043.6044	Horizontal	-10.05	39.73	29.68	54.00	24.32	AV	150	348	PASS
3752.5753	Horizontal	-7.00	52.24	45.24	74.00	28.76	PK	150	328	PASS
3898.7899	Horizontal	-6.73	39.57	32.84	54.00	21.16	AV	150	348	PASS
5279.3279	Horizontal	-5.61	53.86	48.25	74.00	25.75	PK	150	284	PASS
5439.1439	Horizontal	-5.64	42.43	36.79	54.00	17.21	AV	150	348	PASS
7159.7160	Horizontal	-1.14	38.40	37.26	54.00	16.74	AV	150	343	PASS
7222.6223	Horizontal	-0.99	49.83	48.84	74.00	25.16	PK	150	323	PASS
14844.4844	Horizontal	8.63	49.14	57.77	74.00	16.23	PK	150	328	PASS
14858.0858	Horizontal	8.63	37.26	45.89	54.00	8.11	AV	150	348	PASS



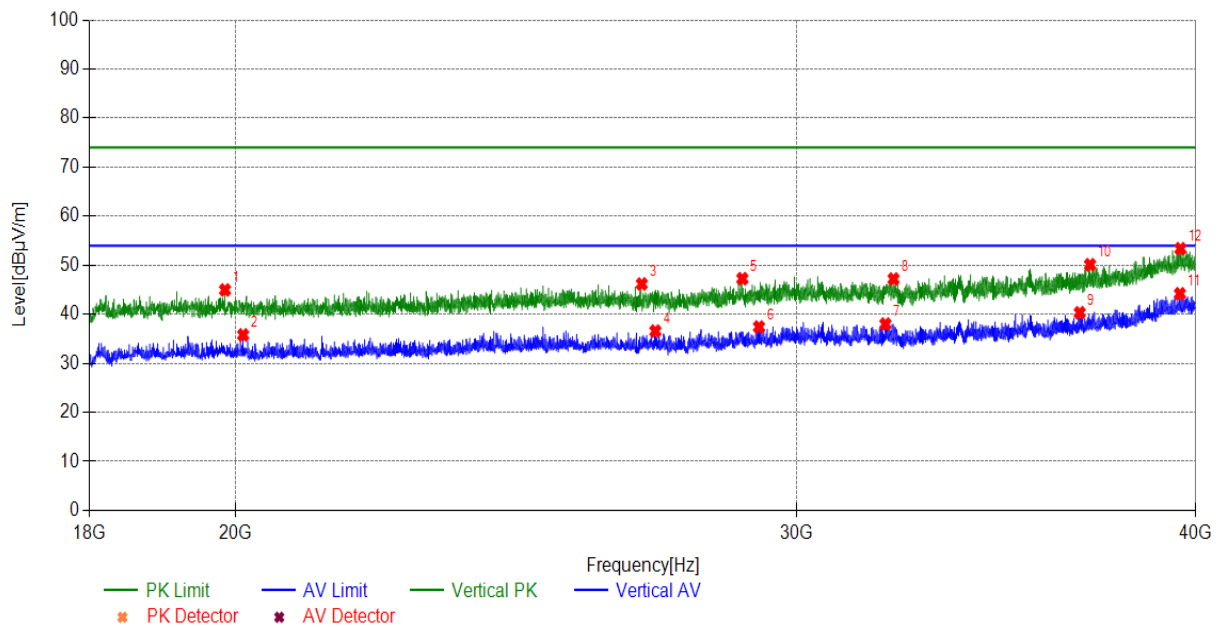
Test mode	802.11ax (HE20)(1G~18G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
1406.3406	Vertical	-15.54	52.39	36.85	74.00	37.15	PK	150	220	PASS
1476.0476	Vertical	-15.42	41.73	26.31	54.00	27.69	AV	150	10	PASS
2950.0950	Vertical	-10.56	52.65	42.09	74.00	31.91	PK	150	40	PASS
3608.0608	Vertical	-7.26	41.44	34.18	54.00	19.82	AV	150	10	PASS
4918.8919	Vertical	-5.67	52.34	46.67	74.00	27.33	PK	150	40	PASS
5077.0077	Vertical	-5.58	42.95	37.37	54.00	16.63	AV	150	10	PASS
5862.4862	Vertical	-4.47	54.23	49.76	74.00	24.24	PK	150	80	PASS
5903.2903	Vertical	-4.34	43.64	39.30	54.00	14.70	AV	150	10	PASS
10209.8210	Vertical	4.10	39.01	43.11	54.00	10.89	AV	150	10	PASS
10228.5229	Vertical	4.15	48.84	52.99	74.00	21.01	PK	150	30	PASS
14849.5850	Vertical	8.63	38.79	47.42	54.00	6.58	AV	150	10	PASS
14864.8865	Vertical	8.63	49.76	58.39	74.00	15.61	PK	150	230	PASS



Test mode	802.11ax (HE20)(18G~40G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
19139.7140	Horizontal	1.34	43.55	44.89	74.00	29.11	PK	150	90	PASS
26288.2288	Horizontal	4.62	41.54	46.16	74.00	27.84	PK	150	50	PASS
39537.9538	Horizontal	10.78	41.97	52.75	74.00	21.25	PK	150	30	PASS
29782.1782	Horizontal	6.55	40.66	47.21	74.00	26.79	PK	150	20	PASS
33768.9769	Horizontal	6.53	42.52	49.05	74.00	24.95	PK	150	20	PASS
22464.2464	Horizontal	2.36	41.49	43.85	74.00	30.15	PK	150	90	PASS
26255.2255	Horizontal	4.60	32.30	36.90	54.00	17.10	AV	150	10	PASS
19335.5336	Horizontal	1.33	33.55	34.88	54.00	19.12	AV	150	10	PASS
22184.8185	Horizontal	2.08	33.39	35.47	54.00	18.53	AV	150	10	PASS
29694.1694	Horizontal	6.49	31.01	37.50	54.00	16.50	AV	150	10	PASS
33773.3773	Horizontal	6.53	32.07	38.60	54.00	15.40	AV	150	10	PASS
39753.5754	Horizontal	10.79	33.22	44.01	54.00	9.99	AV	150	10	PASS



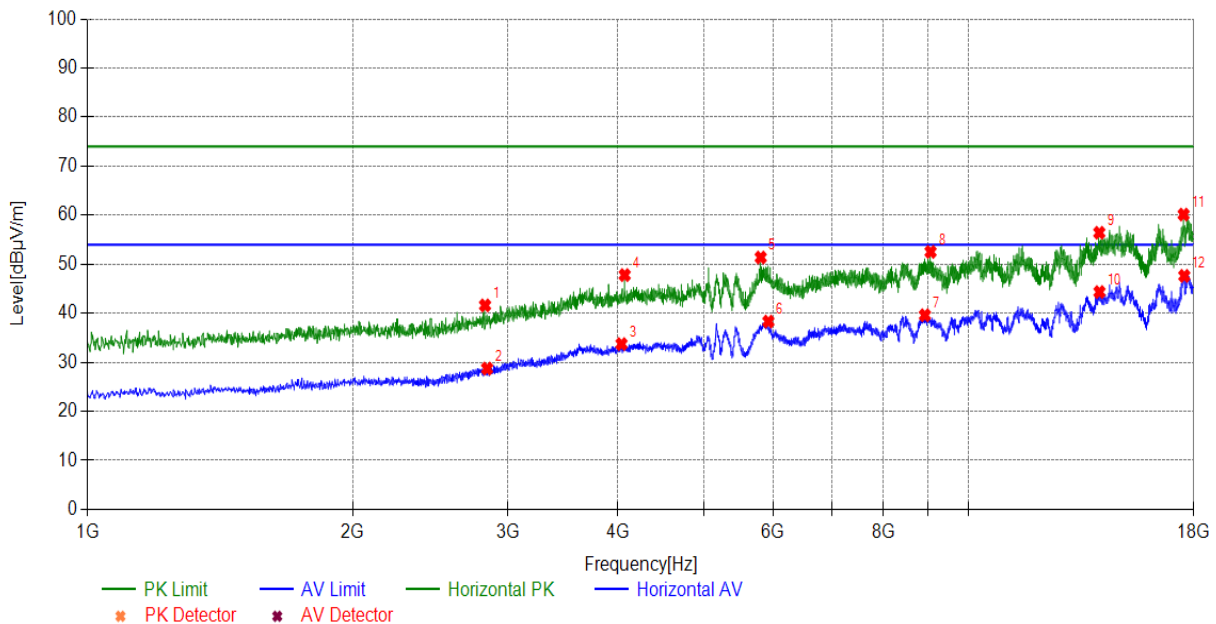
Test mode	802.11ax (HE20)(18G~40G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
39564.3564	Vertical	10.78	42.57	53.35	74.00	20.65	PK	150	50	PASS
37064.9065	Vertical	7.93	42.16	50.09	74.00	23.91	PK	150	120	PASS
19850.3850	Vertical	1.31	43.64	44.95	74.00	29.05	PK	150	120	PASS
32162.8163	Vertical	5.97	41.22	47.19	74.00	26.81	PK	150	20	PASS
28838.2838	Vertical	5.90	41.35	47.25	74.00	26.75	PK	150	70	PASS
26818.4818	Vertical	4.83	41.34	46.17	74.00	27.83	PK	150	70	PASS
39548.9549	Vertical	10.78	33.39	44.17	54.00	9.83	AV	150	10	PASS
20112.2112	Vertical	1.34	34.44	35.78	54.00	18.22	AV	150	10	PASS
27082.5083	Vertical	4.94	31.62	36.56	54.00	17.44	AV	150	10	PASS
36789.8790	Vertical	7.72	32.59	40.31	54.00	13.69	AV	150	10	PASS
31975.7976	Vertical	5.91	32.08	37.99	54.00	16.01	AV	150	10	PASS
29185.9186	Vertical	6.13	31.27	37.40	54.00	16.60	AV	150	10	PASS



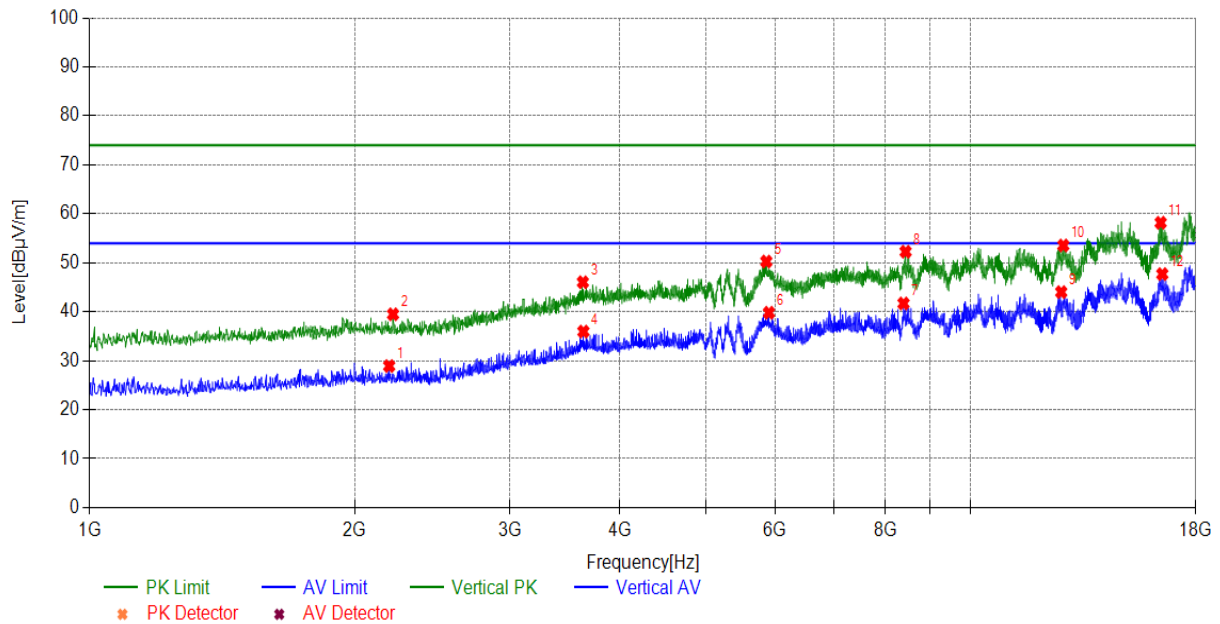
5.1.2.3.2 U-NII-2A:

During the test, the Radiates Emission from 1GHz to 40GHz was performed in all modes with all channels and all antenna, 802.11ax20, Channel 52, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

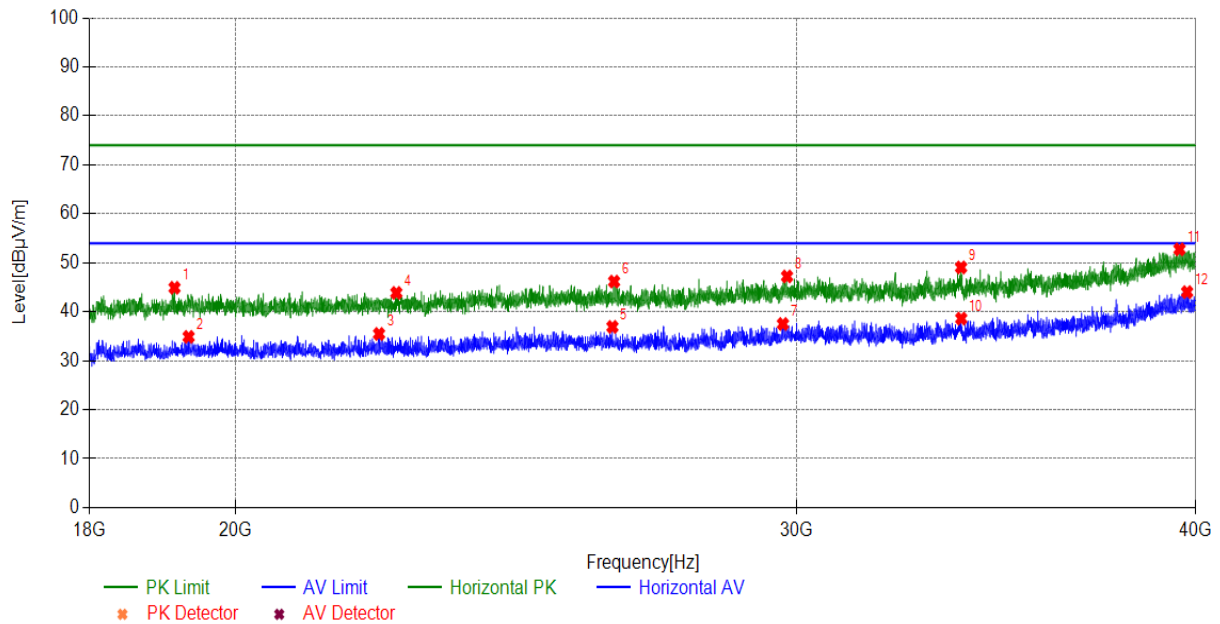
Test mode	802.11ax (HE20)(1G~18G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
2825.9826	Horizontal	-11.19	52.80	41.61	74.00	32.39	PK	150	348	PASS
2841.2841	Horizontal	-11.11	39.84	28.73	54.00	25.27	AV	150	348	PASS
4036.5037	Horizontal	-6.52	40.24	33.72	54.00	20.28	AV	150	348	PASS
4070.5071	Horizontal	-6.50	54.29	47.79	74.00	26.21	PK	150	348	PASS
5808.0808	Horizontal	-4.65	56.02	51.37	74.00	22.63	PK	150	348	PASS
5925.3925	Horizontal	-4.26	42.57	38.31	54.00	15.69	AV	150	343	PASS
8919.3919	Horizontal	1.29	38.31	39.60	54.00	14.40	AV	150	343	PASS
9052.0052	Horizontal	1.65	50.86	52.51	74.00	21.49	PK	150	279	PASS
14067.5068	Horizontal	7.30	49.12	56.42	74.00	17.58	PK	150	308	PASS
14074.3074	Horizontal	7.32	37.01	44.33	54.00	9.67	AV	150	343	PASS
17535.8536	Horizontal	13.05	47.08	60.13	74.00	13.87	PK	150	279	PASS
17566.4566	Horizontal	13.20	34.42	47.62	54.00	6.38	AV	150	348	PASS



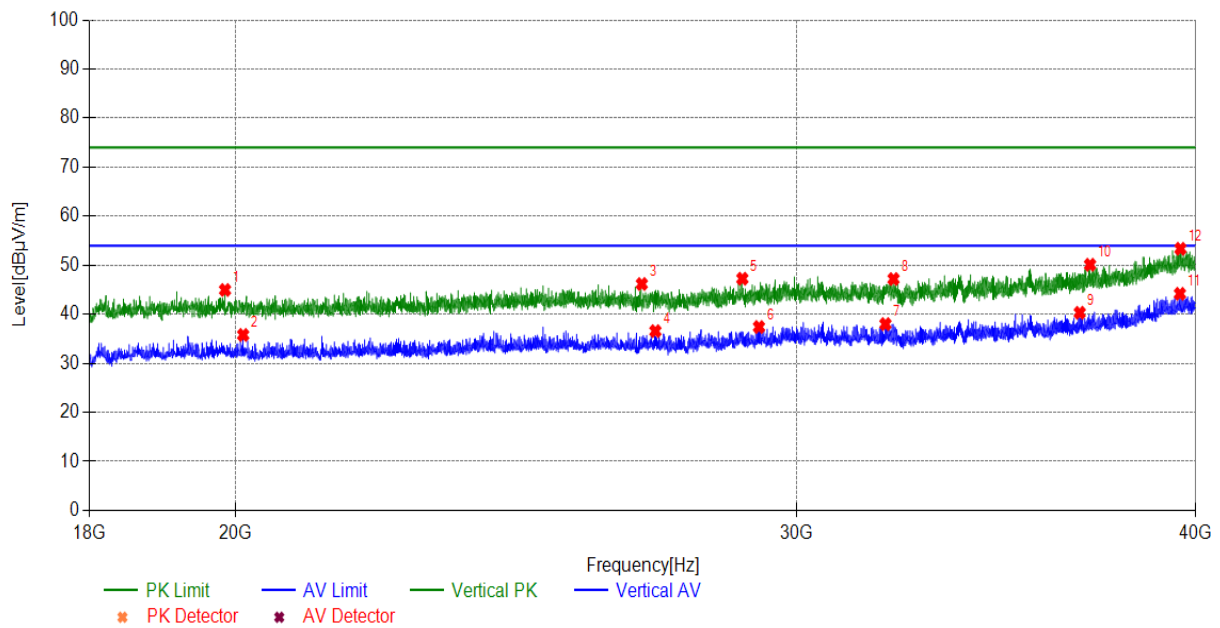
Test mode	802.11ax (HE20)(1G~18G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
2188.4188	Vertical	-13.53	42.44	28.91	54.00	25.09	AV	150	10	PASS
2210.5211	Vertical	-13.48	52.96	39.48	74.00	34.52	PK	150	50	PASS
3630.1630	Vertical	-7.22	53.25	46.03	74.00	27.97	PK	150	210	PASS
3635.2635	Vertical	-7.21	43.16	35.95	54.00	18.05	AV	150	10	PASS
5862.4862	Vertical	-4.47	54.73	50.26	74.00	23.74	PK	150	80	PASS
5903.2903	Vertical	-4.34	44.14	39.80	54.00	14.20	AV	150	10	PASS
8390.6391	Vertical	-0.02	41.71	41.69	54.00	12.31	AV	150	10	PASS
8436.5437	Vertical	0.00	52.26	52.26	74.00	21.74	PK	150	240	PASS
12669.9670	Vertical	4.76	39.25	44.01	54.00	9.99	AV	150	10	PASS
12739.6740	Vertical	4.88	48.66	53.54	74.00	20.46	PK	150	210	PASS
16429.0429	Vertical	8.74	49.44	58.18	74.00	15.82	PK	150	220	PASS
16498.7499	Vertical	8.95	38.74	47.69	54.00	6.31	AV	150	10	PASS



Test mode	802.11ax (HE20)(18G~40G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
19139.7140	Horizontal	1.34	43.55	44.89	74.00	29.11	PK	150	90	PASS
26288.2288	Horizontal	4.62	41.54	46.16	74.00	27.84	PK	150	50	PASS
39537.9538	Horizontal	10.78	41.97	52.75	74.00	21.25	PK	150	30	PASS
29782.1782	Horizontal	6.55	40.66	47.21	74.00	26.79	PK	150	20	PASS
33768.9769	Horizontal	6.53	42.52	49.05	74.00	24.95	PK	150	20	PASS
22464.2464	Horizontal	2.36	41.49	43.85	74.00	30.15	PK	150	90	PASS
26255.2255	Horizontal	4.60	32.30	36.90	54.00	17.10	AV	150	10	PASS
19335.5336	Horizontal	1.33	33.55	34.88	54.00	19.12	AV	150	10	PASS
22184.8185	Horizontal	2.08	33.39	35.47	54.00	18.53	AV	150	10	PASS
29694.1694	Horizontal	6.49	31.01	37.50	54.00	16.50	AV	150	10	PASS
33773.3773	Horizontal	6.53	32.07	38.60	54.00	15.40	AV	150	10	PASS
39753.5754	Horizontal	10.79	33.22	44.01	54.00	9.99	AV	150	10	PASS



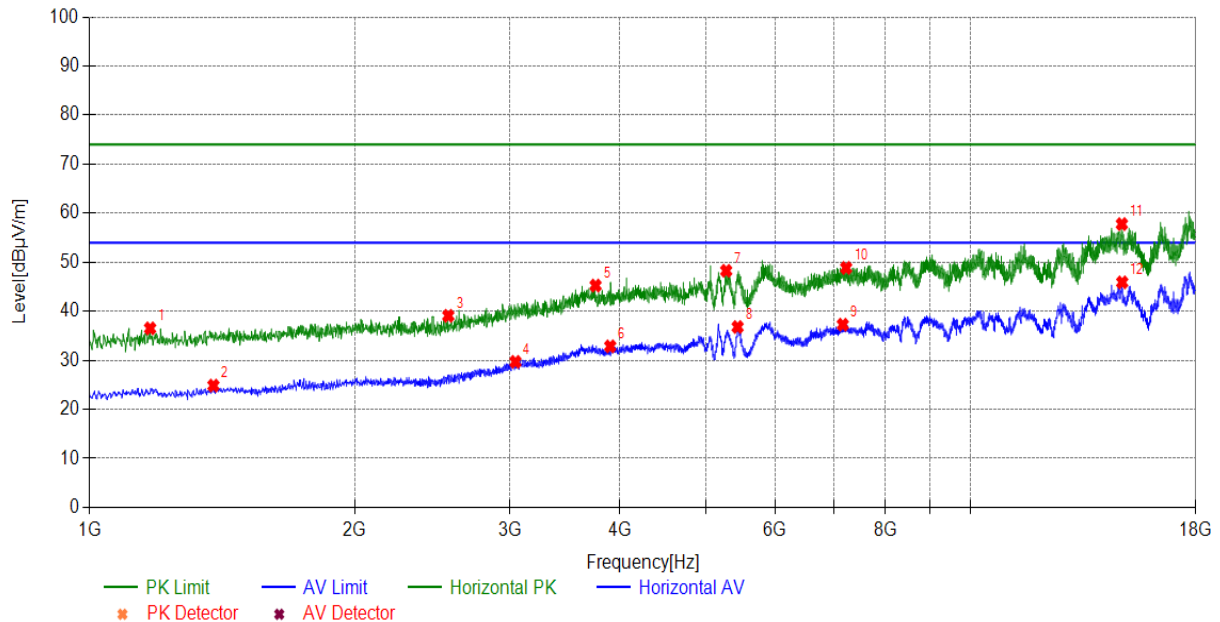
Test mode		802.11ax (HE20)(18G~40G)								
Test channel		Worst-Case Low(L)								
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
39564.3564	Vertical	10.78	42.57	53.35	74.00	20.65	PK	150	50	PASS
37064.9065	Vertical	7.93	42.16	50.09	74.00	23.91	PK	150	120	PASS
19850.3850	Vertical	1.31	43.64	44.95	74.00	29.05	PK	150	120	PASS
32162.8163	Vertical	5.97	41.22	47.19	74.00	26.81	PK	150	20	PASS
28838.2838	Vertical	5.90	41.35	47.25	74.00	26.75	PK	150	70	PASS
26818.4818	Vertical	4.83	41.34	46.17	74.00	27.83	PK	150	70	PASS
39548.9549	Vertical	10.78	33.39	44.17	54.00	9.83	AV	150	10	PASS
20112.2112	Vertical	1.34	34.44	35.78	54.00	18.22	AV	150	10	PASS
27082.5083	Vertical	4.94	31.62	36.56	54.00	17.44	AV	150	10	PASS
36789.8790	Vertical	7.72	32.59	40.31	54.00	13.69	AV	150	10	PASS
31975.7976	Vertical	5.91	32.08	37.99	54.00	16.01	AV	150	10	PASS
29185.9186	Vertical	6.13	31.27	37.40	54.00	16.60	AV	150	10	PASS



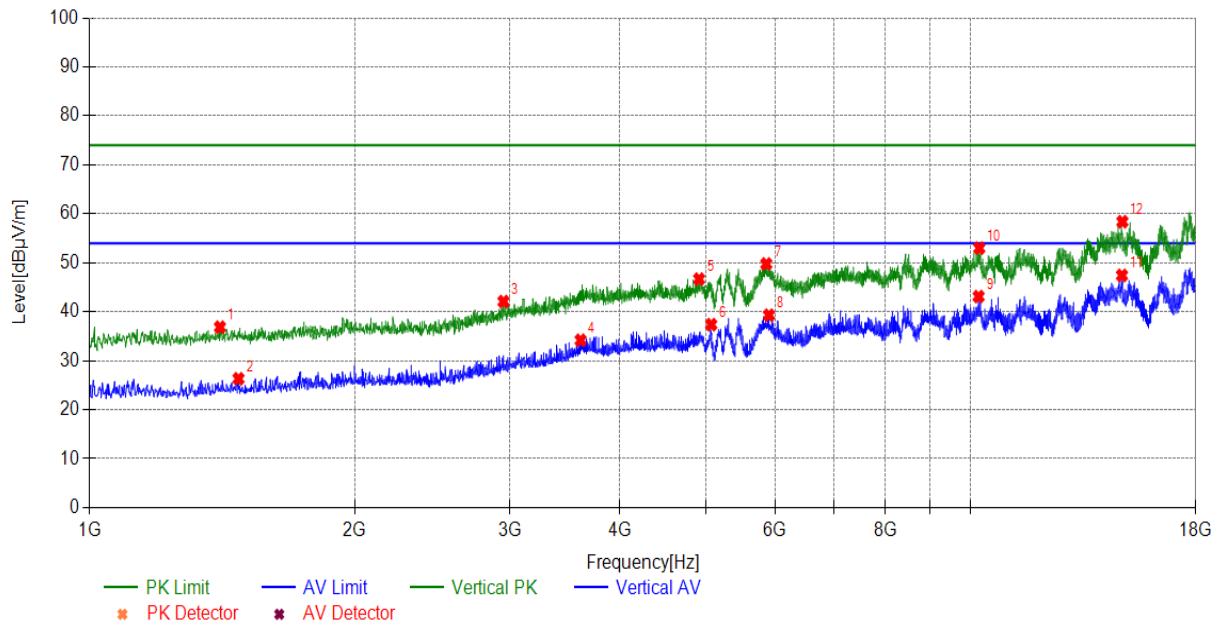
5.1.2.3.3 U-NII-2C:

During the test, the Radiates Emission from 1GHz to 40GHz was performed in all modes with all channels and all antenna, 802.11ax20, Channel 100, MIMO are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

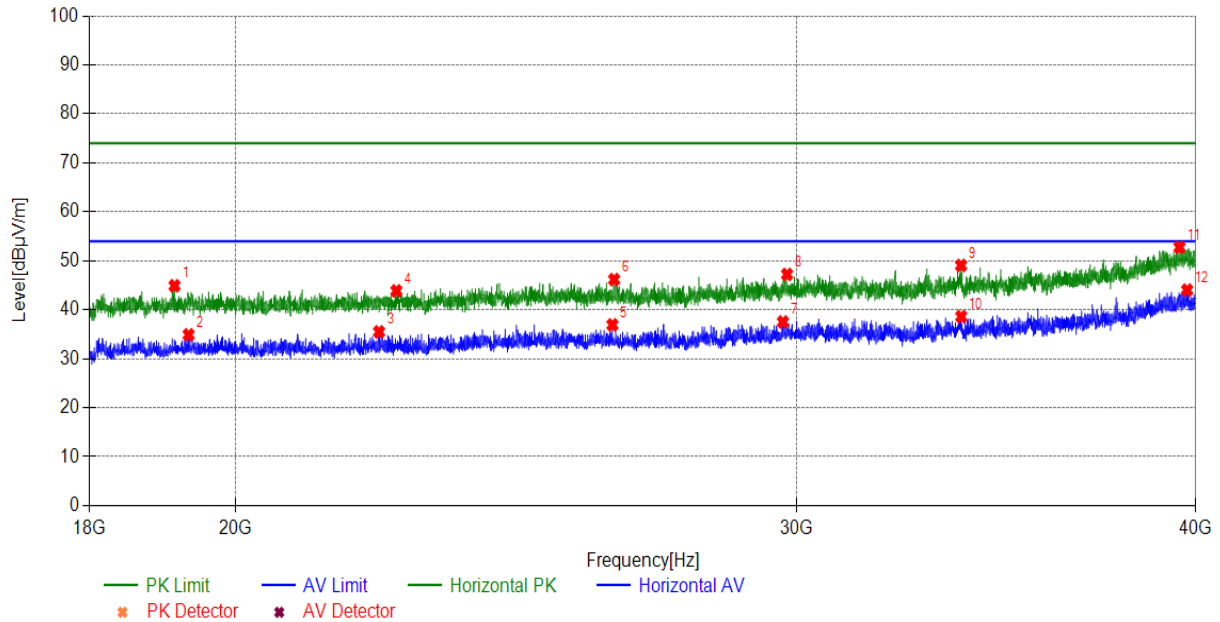
Test mode	802.11ax (HE20)(1G~18G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
1171.7172	Horizontal	-15.95	52.46	36.51	74.00	37.49	PK	150	328	PASS
1382.5383	Horizontal	-15.58	40.42	24.84	54.00	29.16	AV	150	348	PASS
2553.9554	Horizontal	-12.58	51.65	39.07	74.00	34.93	PK	150	348	PASS
3043.6044	Horizontal	-10.05	39.73	29.68	54.00	24.32	AV	150	348	PASS
3752.5753	Horizontal	-7.00	52.24	45.24	74.00	28.76	PK	150	328	PASS
3898.7899	Horizontal	-6.73	39.57	32.84	54.00	21.16	AV	150	348	PASS
5279.3279	Horizontal	-5.61	53.86	48.25	74.00	25.75	PK	150	284	PASS
5439.1439	Horizontal	-5.64	42.43	36.79	54.00	17.21	AV	150	348	PASS
7159.7160	Horizontal	-1.14	38.40	37.26	54.00	16.74	AV	150	343	PASS
7222.6223	Horizontal	-0.99	49.83	48.84	74.00	25.16	PK	150	323	PASS
14844.4844	Horizontal	8.63	49.14	57.77	74.00	16.23	PK	150	328	PASS
14858.0858	Horizontal	8.63	37.26	45.89	54.00	8.11	AV	150	348	PASS



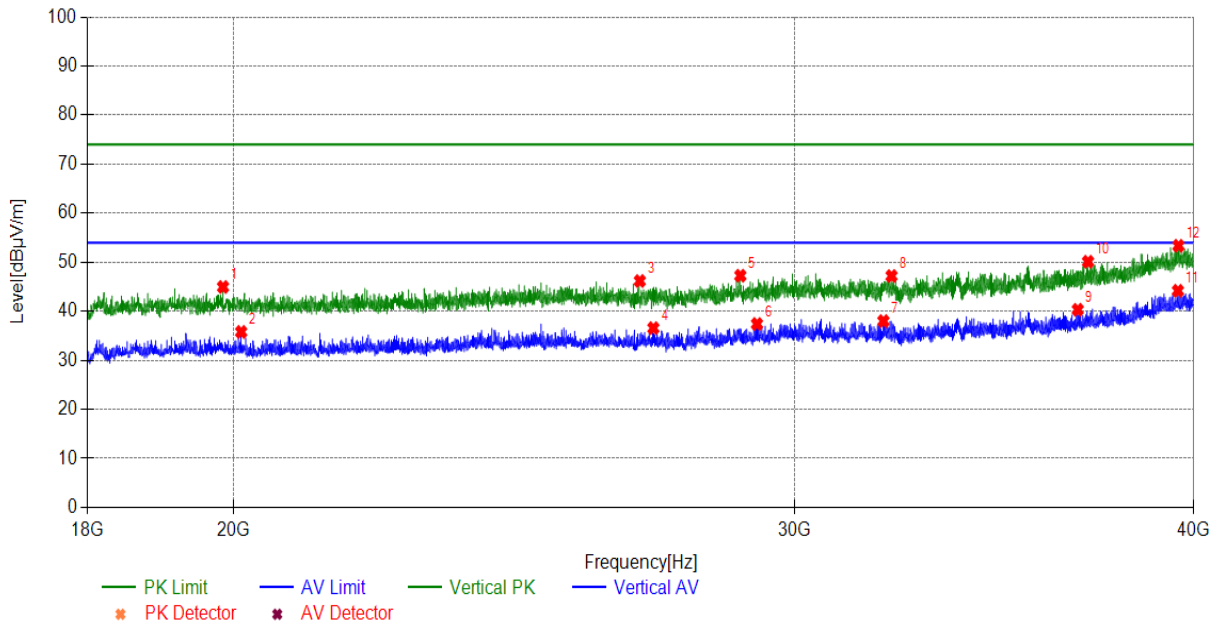
Test mode		802.11ax (HE20)(1G~18G)								
Test channel		Worst-Case Low(L)								
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detect or	Height [cm]	Angle deg	Pass/Fail
1406.3406	Vertical	-15.54	52.39	36.85	74.00	37.15	PK	150	220	PASS
1476.0476	Vertical	-15.42	41.73	26.31	54.00	27.69	AV	150	10	PASS
2950.0950	Vertical	-10.56	52.65	42.09	74.00	31.91	PK	150	40	PASS
3608.0608	Vertical	-7.26	41.44	34.18	54.00	19.82	AV	150	10	PASS
4918.8919	Vertical	-5.67	52.34	46.67	74.00	27.33	PK	150	40	PASS
5077.0077	Vertical	-5.58	42.95	37.37	54.00	16.63	AV	150	10	PASS
5862.4862	Vertical	-4.47	54.23	49.76	74.00	24.24	PK	150	80	PASS
5903.2903	Vertical	-4.34	43.64	39.30	54.00	14.70	AV	150	10	PASS
10209.8210	Vertical	4.10	39.01	43.11	54.00	10.89	AV	150	10	PASS
10228.5229	Vertical	4.15	48.84	52.99	74.00	21.01	PK	150	30	PASS
14849.5850	Vertical	8.63	38.79	47.42	54.00	6.58	AV	150	10	PASS
14864.8865	Vertical	8.63	49.76	58.39	74.00	15.61	PK	150	230	PASS



Test mode	802.11ax (HE20)(18G~40G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
19139.7140	Horizontal	1.34	43.55	44.89	74.00	29.11	PK	150	90	PASS
26288.2288	Horizontal	4.62	41.54	46.16	74.00	27.84	PK	150	50	PASS
39537.9538	Horizontal	10.78	41.97	52.75	74.00	21.25	PK	150	30	PASS
29782.1782	Horizontal	6.55	40.66	47.21	74.00	26.79	PK	150	20	PASS
33768.9769	Horizontal	6.53	42.52	49.05	74.00	24.95	PK	150	20	PASS
22464.2464	Horizontal	2.36	41.49	43.85	74.00	30.15	PK	150	90	PASS
26255.2255	Horizontal	4.60	32.30	36.90	54.00	17.10	AV	150	10	PASS
19335.5336	Horizontal	1.33	33.55	34.88	54.00	19.12	AV	150	10	PASS
22184.8185	Horizontal	2.08	33.39	35.47	54.00	18.53	AV	150	10	PASS
29694.1694	Horizontal	6.49	31.01	37.50	54.00	16.50	AV	150	10	PASS
33773.3773	Horizontal	6.53	32.07	38.60	54.00	15.40	AV	150	10	PASS
39753.5754	Horizontal	10.79	33.22	44.01	54.00	9.99	AV	150	10	PASS



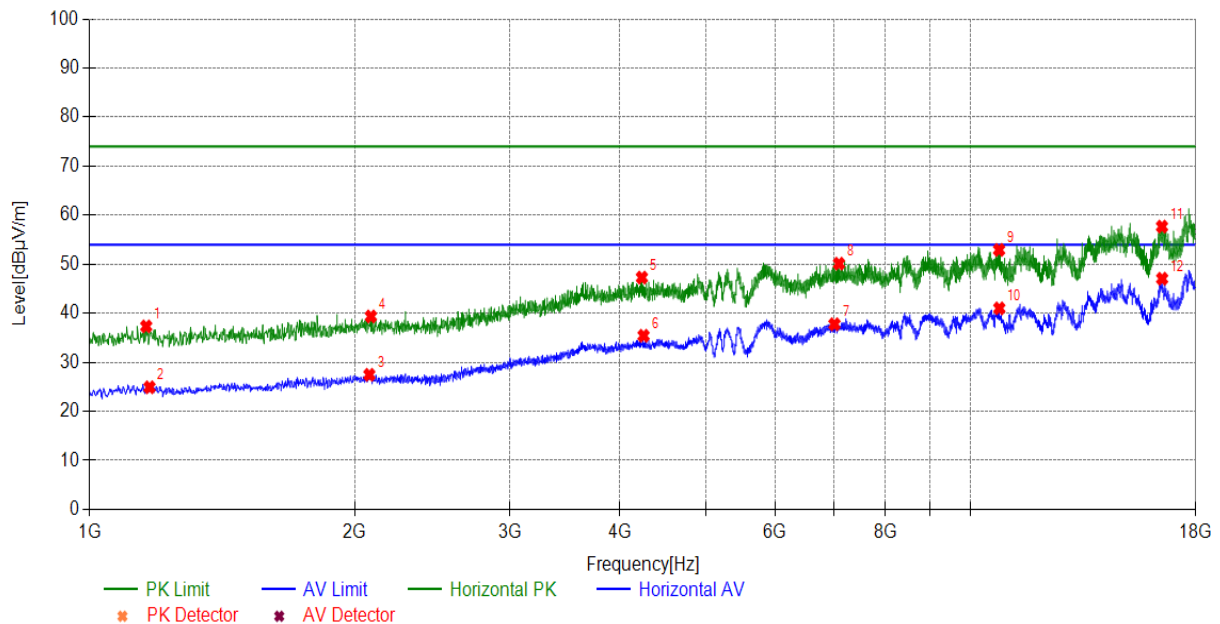
Test mode	802.11ax (HE20)(18G~40G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
39564.3564	Vertical	10.78	42.57	53.35	74.00	20.65	PK	150	50	PASS
37064.9065	Vertical	7.93	42.16	50.09	74.00	23.91	PK	150	120	PASS
19850.3850	Vertical	1.31	43.64	44.95	74.00	29.05	PK	150	120	PASS
32162.8163	Vertical	5.97	41.22	47.19	74.00	26.81	PK	150	20	PASS
28838.2838	Vertical	5.90	41.35	47.25	74.00	26.75	PK	150	70	PASS
26818.4818	Vertical	4.83	41.34	46.17	74.00	27.83	PK	150	70	PASS
39548.9549	Vertical	10.78	33.39	44.17	54.00	9.83	AV	150	10	PASS
20112.2112	Vertical	1.34	34.44	35.78	54.00	18.22	AV	150	10	PASS
27082.5083	Vertical	4.94	31.62	36.56	54.00	17.44	AV	150	10	PASS
36789.8790	Vertical	7.72	32.59	40.31	54.00	13.69	AV	150	10	PASS
31975.7976	Vertical	5.91	32.08	37.99	54.00	16.01	AV	150	10	PASS
29185.9186	Vertical	6.13	31.27	37.40	54.00	16.60	AV	150	10	PASS



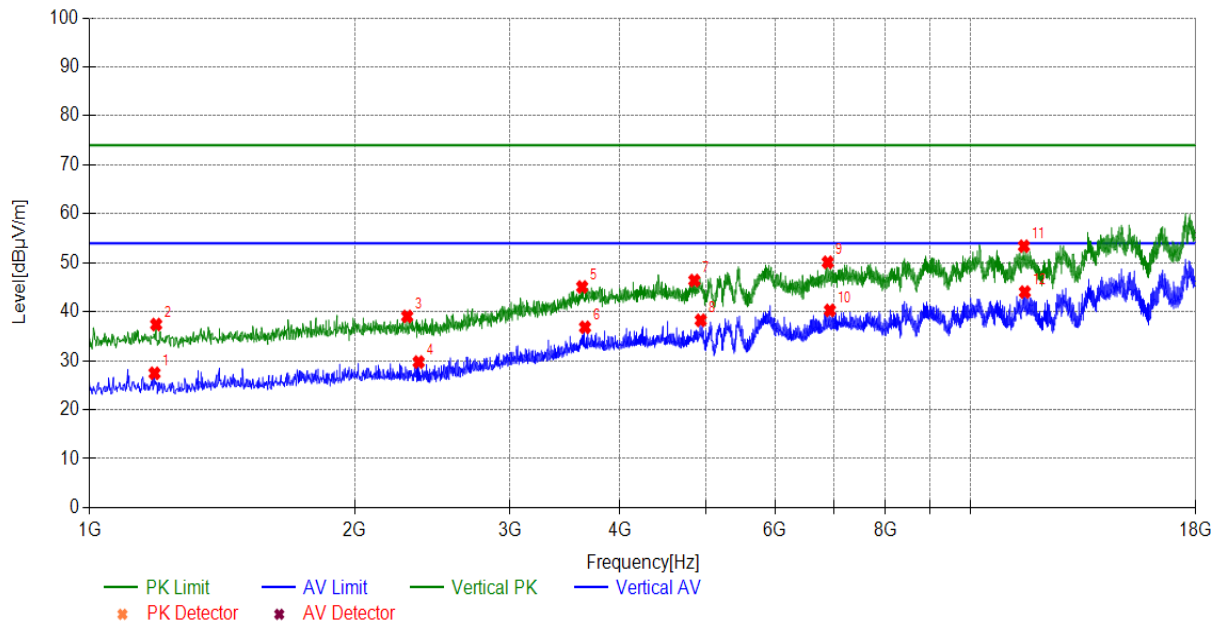
5.1.2.3.4 U-NII-3:

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

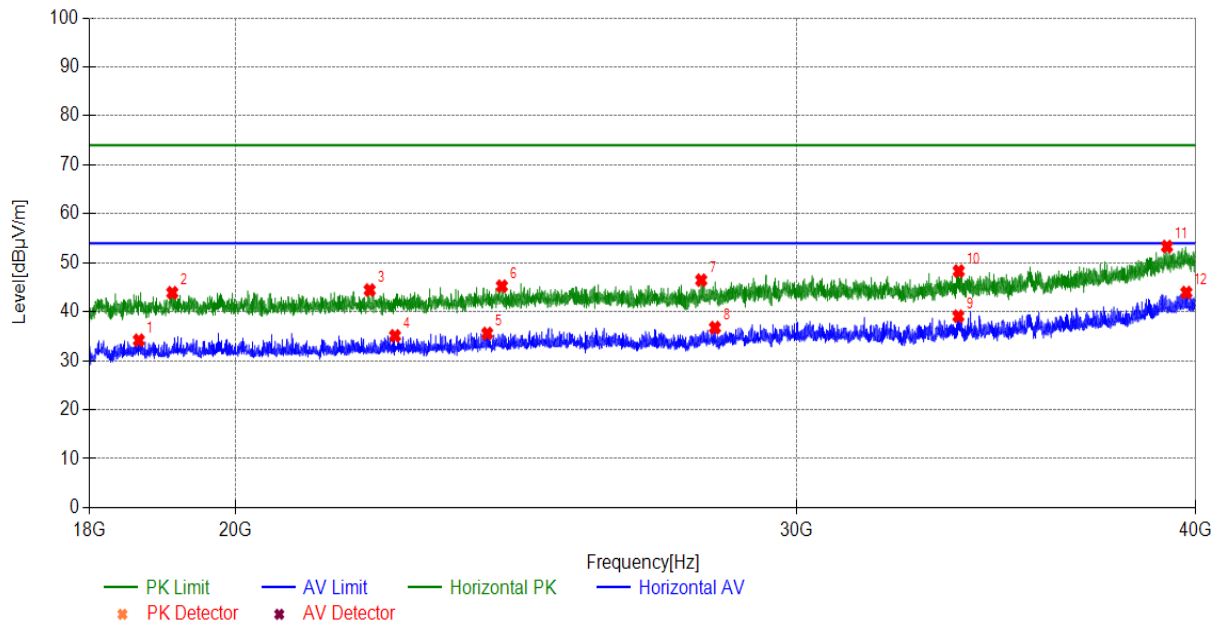
Test mode	802.11ax (HE20)(1G~18G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Dete ctor	Height [cm]	Angle deg	Pass/ Fail
1159.8160	Horizontal	-15.97	53.29	37.32	74.00	36.68	PK	150	334	PASS
1170.0170	Horizontal	-15.95	40.86	24.91	54.00	29.09	AV	150	350	PASS
2077.9078	Horizontal	-13.76	41.22	27.46	54.00	26.54	AV	150	355	PASS
2086.4086	Horizontal	-13.75	53.10	39.35	74.00	34.65	PK	150	355	PASS
4235.4235	Horizontal	-6.38	53.66	47.28	74.00	26.72	PK	150	345	PASS
4254.1254	Horizontal	-6.36	41.77	35.41	54.00	18.59	AV	150	355	PASS
7005.0005	Horizontal	-1.51	39.27	37.76	54.00	16.24	AV	150	355	PASS
7088.3088	Horizontal	-1.31	51.43	50.12	74.00	23.88	PK	150	350	PASS
10770.8771	Horizontal	5.05	47.87	52.92	74.00	21.08	PK	150	355	PASS
10777.6778	Horizontal	5.05	35.95	41.00	54.00	13.00	AV	150	350	PASS
16485.1485	Horizontal	8.91	48.76	57.67	74.00	16.33	PK	150	355	PASS
16491.9492	Horizontal	8.93	38.12	47.05	54.00	6.95	AV	150	355	PASS



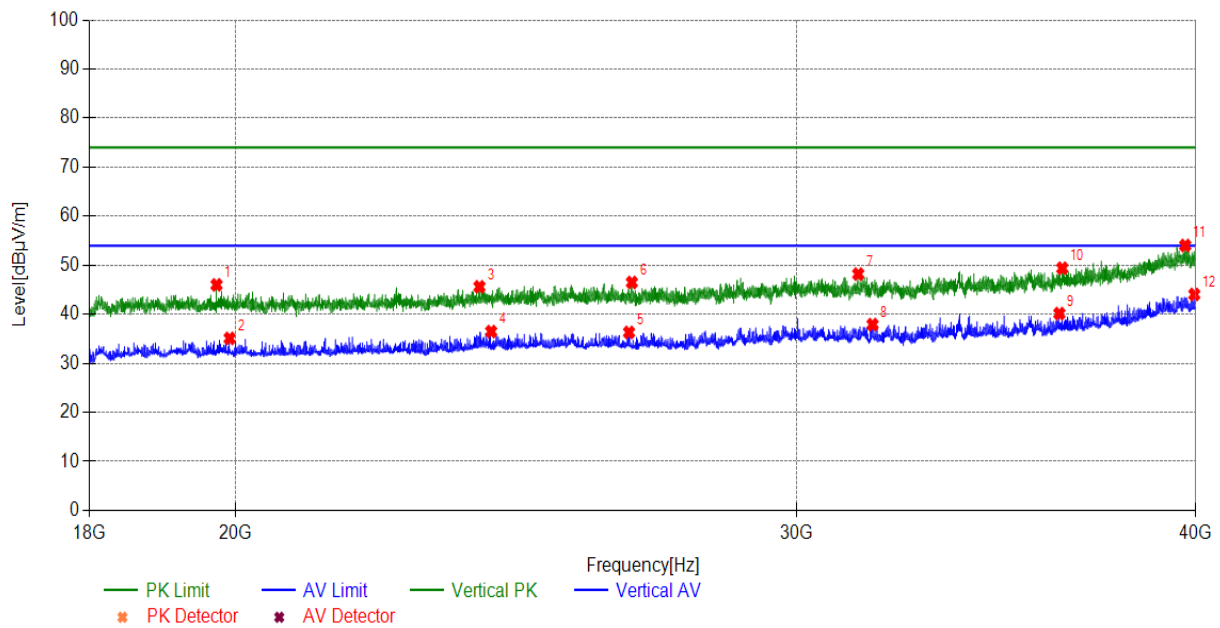
Test mode		802.11ax (HE20)(1G~18G)								
Test channel		Worst-Case Low(L)								
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
1185.3185	Vertical	-15.93	43.36	27.43	54.00	26.57	AV	150	10	PASS
1190.4190	Vertical	-15.92	53.31	37.39	74.00	36.61	PK	150	130	PASS
2293.8294	Vertical	-13.30	52.34	39.04	74.00	34.96	PK	150	140	PASS
2363.5364	Vertical	-13.15	42.87	29.72	54.00	24.28	AV	150	10	PASS
3623.3623	Vertical	-7.23	52.29	45.06	74.00	28.94	PK	150	20	PASS
3650.5651	Vertical	-7.18	43.99	36.81	54.00	17.19	AV	150	10	PASS
4857.6858	Vertical	-5.74	52.12	46.38	74.00	27.62	PK	150	80	PASS
4939.2939	Vertical	-5.64	43.89	38.25	54.00	15.75	AV	150	10	PASS
6884.2884	Vertical	-2.20	52.29	50.09	74.00	23.91	PK	150	190	PASS
6921.6922	Vertical	-1.98	42.26	40.28	54.00	13.72	AV	150	10	PASS
11493.449	Vertical	5.02	48.36	53.38	74.00	20.62	PK	150	230	PASS
11520.652	Vertical	4.96	39.05	44.01	54.00	9.99	AV	150	10	PASS



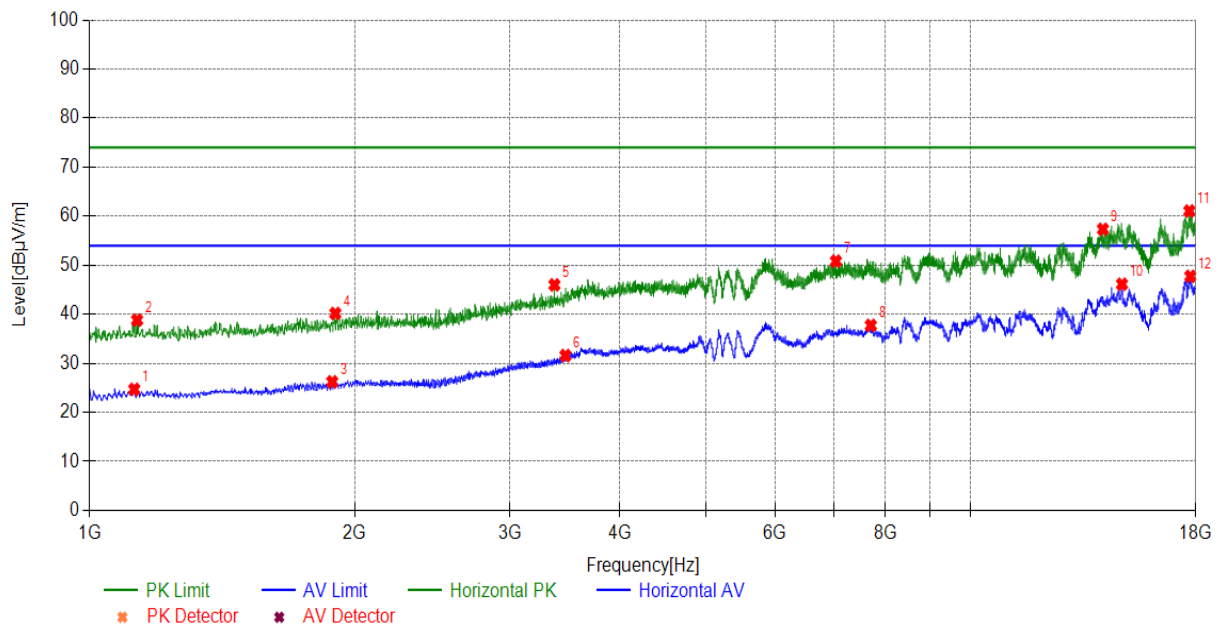
Test mode		802.11ax (HE20)(18G~40G)								
Test channel		Worst-Case Low(L)								
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dB μ V/m]	Level [dB μ V/m]	Limit [dB μ V/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
24242.0242	Horizontal	3.80	41.41	45.21	74.00	28.79	PK	150	100	PASS
33711.7712	Horizontal	6.51	41.79	48.30	74.00	25.70	PK	150	20	PASS
39181.5182	Horizontal	10.76	42.55	53.31	74.00	20.69	PK	150	70	PASS
22035.2035	Horizontal	1.94	42.48	44.42	74.00	29.58	PK	150	100	PASS
27993.3993	Horizontal	5.40	41.04	46.44	74.00	27.56	PK	150	70	PASS
19108.9109	Horizontal	1.34	42.54	43.88	74.00	30.12	PK	150	110	PASS
22442.2442	Horizontal	2.34	32.74	35.08	54.00	18.92	AV	150	10	PASS
39733.7734	Horizontal	10.79	33.13	43.92	54.00	10.08	AV	150	10	PASS
23986.7987	Horizontal	3.69	31.87	35.56	54.00	18.44	AV	150	10	PASS
28272.8273	Horizontal	5.56	31.18	36.74	54.00	17.26	AV	150	10	PASS
33702.9703	Horizontal	6.51	32.56	39.07	54.00	14.93	AV	150	10	PASS
18653.4653	Horizontal	1.26	32.92	34.18	54.00	19.82	AV	150	10	PASS



Test mode	802.11ax (HE20)(18G~40G)									
Test channel	Worst-Case Low(L)									
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
19729.3729	Vertical	1.31	44.69	46.00	74.00	28.00	PK	150	50	PASS
36330.0330	Vertical	7.39	41.99	49.38	74.00	24.62	PK	150	250	PASS
39700.7701	Vertical	10.79	43.23	54.02	74.00	19.98	PK	150	20	PASS
23852.5853	Vertical	3.58	42.02	45.60	74.00	28.40	PK	150	270	PASS
26627.0627	Vertical	4.75	41.73	46.48	74.00	27.52	PK	150	350	PASS
31353.1353	Vertical	6.13	42.06	48.19	74.00	25.81	PK	150	180	PASS
36253.0253	Vertical	7.33	32.81	40.14	54.00	13.86	AV	150	10	PASS
19916.3916	Vertical	1.30	33.78	35.08	54.00	18.92	AV	150	10	PASS
24055.0055	Vertical	3.72	32.75	36.47	54.00	17.53	AV	150	10	PASS
26572.0572	Vertical	4.73	31.57	36.30	54.00	17.70	AV	150	10	PASS
31678.7679	Vertical	6.01	31.89	37.90	54.00	16.10	AV	150	10	PASS
39962.5963	Vertical	10.80	33.24	44.04	54.00	9.96	AV	150	10	PASS



Test mode		802.11ax (HE40)(1G~18G)								
Test channel		Worst-Case Low(L)								
Suspected List										
Frequency [MHz]	Polarity	Factor [dB]	Reading [dBμV/m]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Height [cm]	Angle deg	Pass/Fail
1124.1124	Horizontal	-16.03	40.72	24.69	54.00	29.31	AV	150	353	PASS
1132.6133	Horizontal	-16.02	54.82	38.80	74.00	35.20	PK	150	294	PASS
1885.7886	Horizontal	-14.26	40.47	26.21	54.00	27.79	AV	150	353	PASS
1901.0901	Horizontal	-14.22	54.38	40.16	74.00	33.84	PK	150	61	PASS
3370.0370	Horizontal	-8.19	54.18	45.99	74.00	28.01	PK	150	348	PASS
3468.6469	Horizontal	-7.63	39.21	31.58	54.00	22.42	AV	150	353	PASS
7032.2032	Horizontal	-1.44	52.26	50.82	74.00	23.18	PK	150	281	PASS
7703.7704	Horizontal	-0.26	37.99	37.73	54.00	16.27	AV	150	353	PASS
14128.7129	Horizontal	7.48	49.84	57.32	74.00	16.68	PK	150	256	PASS
14849.5850	Horizontal	8.63	37.50	46.13	54.00	7.87	AV	150	353	PASS
17709.2709	Horizontal	13.94	47.12	61.06	74.00	12.94	PK	150	238	PASS
17753.4753	Horizontal	14.17	33.56	47.73	54.00	6.27	AV	150	343	PASS



5.2 Maximum conducted output power

Ambient condition:

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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:

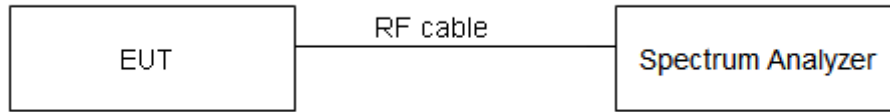
For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or $1.76 + 10 \log_{10} B$, dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

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]	E.I.R.P[dBm]	E.I.R.P Limit[dBm]	Verdict
11A	Ant1	5180	16.16	---	21.16	<=22.83	PASS
	Ant2	5180	15.89	---	19.89	<=22.76	PASS
	Ant1	5200	15.89	---	20.89	<=22.82	PASS
	Ant2	5200	15.06	---	20.06	<=22.83	PASS
	Ant1	5240	15.45	---	20.45	<=22.37	PASS
	Ant2	5240	14.02	---	19.02	<=22.35	PASS
	Ant1	5260	14.25	<=23.98	19.25	<=29.81	PASS
	Ant2	5260	13.86	<=23.98	18.86	<=29.84	PASS
	Ant1	5280	13.96	<=23.98	18.96	<=29.80	PASS
	Ant2	5280	13.52	<=23.98	18.52	<=29.76	PASS
	Ant1	5320	14.17	<=23.98	19.17	<=29.82	PASS
	Ant2	5320	13.86	<=23.98	18.86	<=29.89	PASS
	Ant1	5500	14.45	<=23.98	19.45	<=29.84	PASS
	Ant2	5500	14.20	<=23.98	19.20	<=29.81	PASS
	Ant1	5580	14.88	<=23.98	19.88	<=29.83	PASS
	Ant2	5580	15.28	<=23.98	20.28	<=29.75	PASS
	Ant1	5700	13.74	<=23.98	18.74	<=29.81	PASS
	Ant2	5700	14.17	<=23.98	19.17	<=29.85	PASS
	Ant1	5745	13.93	<=30	18.93	---	PASS
	Ant2	5745	15.10	<=30	20.10	---	PASS
Ant1	5785	14.14	<=30	19.14	---	PASS	
Ant2	5785	14.15	<=30	19.15	---	PASS	
Ant1	5825	14.76	<=30	19.76	---	PASS	
Ant2	5825	15.82	<=30	20.82	---	PASS	
11N20SISO	Ant1	5180	15.33	---	20.33	<=23	PASS
	Ant2	5180	14.96	---	19.96	<=22.94	PASS
	Ant1	5200	15.27	---	20.27	<=23	PASS
	Ant2	5200	15.18	---	20.18	<=23	PASS
	Ant1	5240	14.84	---	19.84	<=22.61	PASS
	Ant2	5240	14.38	---	19.38	<=22.58	PASS
	Ant1	5260	14.18	<=23.98	19.18	<=30	PASS
	Ant2	5260	13.71	<=23.98	18.71	<=30	PASS
	Ant1	5280	14.18	<=23.98	19.18	<=30	PASS
	Ant2	5280	13.49	<=23.98	18.49	<=29.97	PASS
Ant1	5320	14.07	<=23.98	19.07	<=30	PASS	
Ant2	5320	13.71	<=23.98	18.71	<=30	PASS	

	Ant1	5500	14.33	<=23.98	19.33	<=30	PASS
	Ant2	5500	14.15	<=23.98	19.15	<=30	PASS
	Ant1	5580	14.51	<=23.98	19.51	<=30	PASS
	Ant2	5580	15.66	<=23.98	20.66	<=29.94	PASS
	Ant1	5700	13.15	<=23.98	18.15	<=30.00	PASS
	Ant2	5700	13.84	<=23.98	18.84	<=30	PASS
	Ant1	5745	13.85	<=30	18.85	---	PASS
	Ant2	5745	14.91	<=30	19.91	---	PASS
	Ant1	5785	14.30	<=30	19.30	---	PASS
	Ant2	5785	15.92	<=30	20.62	---	PASS
	Ant1	5825	14.47	<=30	19.47	---	PASS
	Ant2	5825	15.97	<=30	20.97	---	PASS
11N40SISO	Ant1	5190	14.99	---	19.99	<=23	PASS
	Ant2	5190	15.33	---	20.33	<=23	PASS
	Ant1	5230	14.51	---	19.51	<=23	PASS
	Ant2	5230	14.86	---	19.86	<=23	PASS
	Ant1	5270	13.53	<=23.98	18.53	<=30	PASS
	Ant2	5270	13.84	<=23.98	18.84	<=30	PASS
	Ant1	5310	13.34	<=23.98	18.34	<=30	PASS
	Ant2	5310	13.97	<=23.98	18.97	<=30	PASS
	Ant1	5510	13.56	<=23.98	18.56	<=30	PASS
	Ant2	5510	14.71	<=23.98	19.71	<=30	PASS
	Ant1	5550	14.45	<=23.98	19.45	<=30	PASS
	Ant2	5550	15.33	<=23.98	20.33	<=30	PASS
	Ant1	5670	12.48	<=23.98	17.48	<=30	PASS
	Ant2	5670	14.04	<=23.98	19.04	<=30	PASS
	Ant1	5755	13.05	<=30	18.05	---	PASS
	Ant2	5755	15.22	<=30	20.22	---	PASS
Ant1	5795	13.46	<=30	18.46	---	PASS	
Ant2	5795	16.15	<=30	21.15	---	PASS	
11AC20SISO	Ant1	5180	15.33	---	20.33	<=23	PASS
	Ant2	5180	14.99	---	19.99	<=22.96	PASS
	Ant1	5200	15.03	---	20.03	<=23	PASS
	Ant2	5200	14.84	---	19.84	<=23	PASS
	Ant1	5240	14.80	---	19.80	<=22.58	PASS
	Ant2	5240	14.64	---	19.64	<=22.56	PASS
	Ant1	5260	14.43	<=23.98	19.43	<=30	PASS
	Ant2	5260	13.73	<=23.98	18.73	<=30	PASS
	Ant1	5280	13.93	<=23.98	18.93	<=29.95	PASS
	Ant2	5280	13.31	<=23.98	18.31	<=29.97	PASS
	Ant1	5320	13.58	<=23.98	18.58	<=29.99	PASS
	Ant2	5320	13.77	<=23.98	18.77	<=30	PASS
	Ant1	5500	14.35	<=23.98	19.35	<=30	PASS
	Ant2	5500	14.09	<=23.98	19.09	<=30	PASS
	Ant1	5580	15.13	<=23.98	20.13	<=29.95	PASS
	Ant2	5580	14.51	<=23.98	19.51	<=29.96	PASS
	Ant1	5700	13.69	<=23.98	18.69	<=30	PASS
	Ant2	5700	16.61	<=23.98	19.61	<=30	PASS
	Ant1	5745	13.42	<=30	18.42	---	PASS
	Ant2	5745	13.90	<=30	18.90	---	PASS
	Ant1	5785	14.12	<=30	19.12	---	PASS
	Ant2	5785	15.39	<=30	20.39	---	PASS
	Ant1	5825	13.97	<=30	18.97	---	PASS
	Ant2	5825	16.18	<=30	21.18	---	PASS
11AC40SISO	Ant1	5190	15.04	---	20.04	<=23	PASS
	Ant2	5190	15.99	---	20.99	<=23	PASS
	Ant1	5230	14.64	---	19.64	<=23	PASS
	Ant2	5230	12.66	---	17.66	<=23	PASS
	Ant1	5270	13.70	<=23.98	18.70	<=30	PASS
	Ant2	5270	11.64	<=23.98	16.64	<=30	PASS
Ant1	5310	13.52	<=23.98	18.52	<=30	PASS	

	Ant2	5310	11.87	<=23.98	16.87	<=30	PASS
	Ant1	5510	13.99	<=23.98	18.99	<=30	PASS
	Ant2	5510	12.20	<=23.98	17.20	<=30	PASS
	Ant1	5550	14.63	<=23.98	19.63	<=30	PASS
	Ant2	5550	13.16	<=23.98	18.16	<=30	PASS
	Ant1	5670	13.15	<=23.98	18.15	<=30	PASS
	Ant2	5670	12.32	<=23.98	17.32	<=30	PASS
	Ant1	5755	13.86	<=30	18.86	---	PASS
	Ant2	5755	12.19	<=30	17.19	---	PASS
	Ant1	5795	14.15	<=30	19.15	---	PASS
Ant2	5795	14.07	<=30	19.07	---	PASS	
11AC80SISO	Ant1	5210	14.78	---	19.78	<=23	PASS
	Ant2	5210	12.03	---	17.03	<=23	PASS
	Ant1	5290	13.79	<=23.98	18.79	<=30	PASS
	Ant2	5290	11.40	<=23.98	16.40	<=30	PASS
	Ant1	5530	14.14	<=23.98	19.14	<=30	PASS
	Ant2	5530	12.34	<=23.98	17.34	<=30	PASS
	Ant1	5775	13.2	<=30	18.20	---	PASS
Ant2	5775	12.67	<=30	17.67	---	PASS	
11AX20SISO	Ant1	5180	16.7	---	21.70	<=22.88	PASS
	Ant2	5180	15.26	---	20.26	<=22.93	PASS
	Ant1	5200	16.27	---	21.27	<=22.91	PASS
	Ant2	5200	15.07	---	20.07	<=22.96	PASS
	Ant1	5240	15.82	---	20.82	<=22.76	PASS
	Ant2	5240	14.51	---	19.51	<=22.76	PASS
	Ant1	5260	15.48	<=23.98	20.48	<=29.93	PASS
	Ant2	5260	13.51	<=23.98	18.51	<=29.94	PASS
	Ant1	5280	14.75	<=23.98	19.75	<=29.86	PASS
	Ant2	5280	13.74	<=23.98	18.74	<=29.94	PASS
	Ant1	5320	15.17	<=23.98	20.17	<=29.90	PASS
	Ant2	5320	13.83	<=23.98	18.83	<=29.96	PASS
	Ant1	5500	15.37	<=23.98	20.37	<=29.89	PASS
	Ant2	5500	14.2	<=23.98	19.20	<=29.94	PASS
	Ant1	5580	15.54	<=23.98	20.54	<=29.88	PASS
	Ant2	5580	15.35	<=23.98	20.35	<=29.94	PASS
	Ant1	5700	14.66	<=23.98	19.66	<=29.91	PASS
	Ant2	5700	14.67	<=23.98	19.67	<=29.93	PASS
	Ant1	5745	15.41	<=30	20.41	---	PASS
	Ant2	5745	15.23	<=30	20.23	---	PASS
	Ant1	5785	14.37	<=30	19.37	---	PASS
	Ant2	5785	15.42	<=30	20.42	---	PASS
Ant1	5825	15.19	<=30	20.19	---	PASS	
Ant2	5825	16.27	<=30	21.27	---	PASS	
11AX40SISO	Ant1	5190	16.52	---	21.52	<=23	PASS
	Ant2	5190	15.44	---	20.44	<=23	PASS
	Ant1	5230	15.61	---	20.61	<=23	PASS
	Ant2	5230	15	---	20.00	<=23	PASS
	Ant1	5270	14.91	<=23.98	19.91	<=30	PASS
	Ant2	5270	13.95	<=23.98	18.95	<=30	PASS
	Ant1	5310	14.77	<=23.98	19.77	<=30	PASS
	Ant2	5310	14.23	<=23.98	19.23	<=30	PASS
	Ant1	5510	15.19	<=23.98	20.19	<=30	PASS
	Ant2	5510	14.88	<=23.98	19.88	<=30	PASS
	Ant1	5550	15.86	<=23.98	20.86	<=30	PASS
	Ant2	5550	15.49	<=23.98	20.49	<=30	PASS
	Ant1	5670	13.84	<=23.98	18.84	<=30	PASS
	Ant2	5670	14.98	<=23.98	19.98	<=30	PASS
	Ant1	5755	15.07	<=30	20.07	---	PASS
	Ant2	5755	15.65	<=30	20.65	---	PASS
	Ant1	5795	14.58	<=30	19.58	---	PASS
Ant2	5795	16.21	<=30	21.21	---	PASS	

11AX80SISO	Ant1	5210	16.44	---	21.44	<=23	PASS
	Ant2	5210	14.94	---	19.94	<=23	PASS
	Ant1	5290	14.82	<=23.98	19.82	<=30	PASS
	Ant2	5290	14.38	<=23.98	19.38	<=30	PASS
	Ant1	5530	15.72	<=23.98	20.72	<=30	PASS
	Ant2	5530	15.02	<=23.98	20.02	<=30	PASS
	Ant1	5775	15.06	<=30	20.06	---	PASS
	Ant2	5775	15.31	<=30	20.31	---	PASS
11N20MIMO	Ant1	5180	14.62	---	19.62	<=22.99	PASS
	Ant2	5180	12.94	---	17.94	<=22.71	PASS
	total	5180	16.90	---	21.87	<=22.71	PASS
	Ant1	5200	14.32	---	19.32	<=22.99	PASS
	Ant2	5200	13.23	---	18.23	<=22.73	PASS
	total	5200	16.29	---	21.29	<=22.73	PASS
	Ant1	5240	13.73	---	18.73	<=22.62	PASS
	Ant2	5240	12.61	---	17.61	<=22.53	PASS
	total	5240	16.20	---	21.22	<=22.53	PASS
	Ant1	5260	14.36	<=23.98	19.36	<=30	PASS
	Ant2	5260	13.19	<=23.98	18.19	<=30	PASS
	total	5260	16.80	<=23.98	21.82	<=30	PASS
	Ant1	5280	13.89	<=23.98	18.89	<=30	PASS
	Ant2	5280	12.38	<=23.98	17.38	<=30	PASS
	total	5280	16.20	<=23.98	21.21	<=30	PASS
	Ant1	5320	14.07	<=23.98	19.07	<=30	PASS
	Ant2	5320	12.65	<=23.98	17.65	<=29.86	PASS
	total	5320	16.40	<=23.98	21.43	<=29.86	PASS
	Ant1	5500	14.39	<=23.98	19.39	<=30	PASS
	Ant2	5500	13.65	<=23.98	18.65	<=29.85	PASS
	total	5500	17.00	<=23.98	22.05	<=29.85	PASS
	Ant1	5580	13.94	<=23.98	18.94	<=30	PASS
	Ant2	5580	13.41	<=23.98	18.41	<=29.86	PASS
	total	5580	16.60	<=23.98	21.69	<=29.86	PASS
	Ant1	5700	13.54	<=23.98	18.54	<=30	PASS
	Ant2	5700	13.64	<=23.98	18.64	<=29.76	PASS
	total	5700	16.60	<=23.98	21.60	<=29.76	PASS
	Ant1	5745	12.97	<=30	17.97	---	PASS
	Ant2	5745	13.24	<=30	18.24	---	PASS
	total	5745	16.10	<=30	21.12	---	PASS
	Ant1	5785	13.18	<=30	18.18	---	PASS
	Ant2	5785	13.21	<=30	18.21	---	PASS
	total	5785	16.20	<=30	21.21	---	PASS
	Ant1	5825	13.49	<=30	18.49	---	PASS
	Ant2	5825	13.86	<=30	18.86	---	PASS
	total	5825	16.70	<=30	21.69	---	PASS
11N40MIMO	Ant1	5190	14.00	---	19.00	<=23	PASS
	Ant2	5190	12.92	---	17.92	<=23	PASS
	total	5190	16.50	---	21.50	<=23	PASS
	Ant1	5230	13.31	---	18.31	<=23	PASS
	Ant2	5230	12.74	---	17.74	<=23	PASS
	total	5230	16.00	---	21.04	<=23	PASS
	Ant1	5270	13.31	<=23.98	18.31	<=30	PASS
	Ant2	5270	12.30	<=23.98	17.30	<=30	PASS
	total	5270	15.80	<=23.98	20.84	<=30	PASS
	Ant1	5310	13.40	<=23.98	18.40	<=30	PASS
	Ant2	5310	12.14	<=23.98	17.14	<=30	PASS
	total	5310	15.80	<=23.98	20.83	<=30	PASS
	Ant1	5510	14.00	<=23.98	19.00	<=30	PASS
	Ant2	5510	13.42	<=23.98	18.42	<=30	PASS
	total	5510	16.70	<=23.98	21.73	<=30	PASS
	Ant1	5550	14.26	<=23.98	19.26	<=30	PASS
Ant2	5550	13.97	<=23.98	18.97	<=30	PASS	

	total	5550	17.10	<=23.98	22.13	<=30	PASS
	Ant1	5670	12.69	<=23.98	17.69	<=30	PASS
	Ant2	5670	13.28	<=23.98	18.28	<=30	PASS
	total	5670	16.00	<=23.98	21.01	<=30	PASS
	Ant1	5755	13.11	<=30	18.11	---	PASS
	Ant2	5755	13.75	<=30	18.75	---	PASS
	total	5755	16.50	<=30	21.45	---	PASS
	Ant1	5795	13.47	<=30	18.47	---	PASS
	Ant2	5795	14.79	<=30	19.79	---	PASS
	total	5795	17.20	<=30	22.19	---	PASS
11AC20MIMO	Ant1	5180	13.58	---	18.58	<=23.00	PASS
	Ant2	5180	12.69	---	17.69	<=22.70	PASS
	total	5180	16.17	---	21.17	<=22.70	PASS
	Ant1	5200	13.04	---	18.04	<=22.98	PASS
	Ant2	5200	13.58	---	18.58	<=22.74	PASS
	total	5200	16.33	---	21.32	<=22.74	PASS
	Ant1	5240	13.77	---	18.77	<=22.59	PASS
	Ant2	5240	13.98	---	18.98	<=22.50	PASS
	total	5240	16.89	---	21.89	<=22.50	PASS
	Ant1	5260	14.16	<=23.98	19.16	<=30	PASS
	Ant2	5260	12.70	<=23.98	17.70	<=30	PASS
	total	5260	16.50	<=23.98	21.50	<=30	PASS
	Ant1	5280	14.58	<=23.98	19.58	<=30.00	PASS
	Ant2	5280	13.32	<=23.98	18.32	<=30	PASS
	total	5280	17.00	<=23.98	22.01	<=30	PASS
	Ant1	5320	14.46	<=23.98	19.46	<=30	PASS
	Ant2	5320	13.47	<=23.98	18.47	<=29.86	PASS
	total	5320	17.00	<=23.98	22.00	<=29.86	PASS
	Ant1	5500	14.02	<=23.98	19.02	<=30	PASS
	Ant2	5500	13.16	<=23.98	18.16	<=29.86	PASS
	total	5500	16.60	<=23.98	21.62	<=29.86	PASS
	Ant1	5580	13.66	<=23.98	18.66	<=29.99	PASS
	Ant2	5580	13.28	<=23.98	18.28	<=29.86	PASS
	total	5580	16.50	<=23.98	21.48	<=29.86	PASS
	Ant1	5700	13.97	<=23.98	18.97	<=29.98	PASS
	Ant2	5700	13.32	<=23.98	18.32	<=29.76	PASS
	total	5700	16.70	<=23.98	21.67	<=29.76	PASS
	Ant1	5745	12.68	<=30	17.68	---	PASS
	Ant2	5745	13.95	<=30	18.95	---	PASS
	total	5745	16.40	<=30	21.37	---	PASS
	Ant1	5785	13.30	<=30	18.30	---	PASS
	Ant2	5785	14.30	<=30	19.30	---	PASS
total	5785	16.80	<=30	21.84	---	PASS	
Ant1	5825	12.94	<=30	17.94	---	PASS	
Ant2	5825	13.56	<=30	18.56	---	PASS	
total	5825	16.30	<=30	21.27	---	PASS	
11AC40MIMO	Ant1	5190	13.85	---	18.85	<=23	PASS
	Ant2	5190	13.57	---	18.57	<=23	PASS
	total	5190	16.72	---	21.72	<=23	PASS
	Ant1	5230	14.20	---	19.20	<=23	PASS
	Ant2	5230	13.55	---	18.55	<=23	PASS
	total	5230	16.90	---	21.90	<=23	PASS
	Ant1	5270	14.79	<=23.98	19.79	<=30	PASS
	Ant2	5270	13.43	<=23.98	18.43	<=30	PASS
	total	5270	17.20	<=23.98	22.17	<=30	PASS
	Ant1	5310	14.34	<=23.98	19.34	<=30	PASS
	Ant2	5310	13.73	<=23.98	18.73	<=30	PASS
	total	5310	17.10	<=23.98	22.06	<=30	PASS
	Ant1	5510	14.10	<=23.98	19.10	<=30	PASS
	Ant2	5510	13.56	<=23.98	18.56	<=30	PASS
	total	5510	16.80	<=23.98	21.85	<=30	PASS
	Ant1	5550	13.15	<=23.98	18.15	<=30	PASS
	Ant2	5550	13.13	<=23.98	18.13	<=30	PASS
	total	5550	16.20	<=23.98	21.15	<=30	PASS

	Ant1	5670	13.68	<=23.98	18.68	<=30	PASS
	Ant2	5670	14.49	<=23.98	19.49	<=30	PASS
	total	5670	17.10	<=23.98	22.11	<=30	PASS
	Ant1	5755	13.60	<=30	18.60	---	PASS
	Ant2	5755	13.68	<=30	18.68	---	PASS
	total	5755	16.70	<=30	21.65	---	PASS
	Ant1	5795	12.38	<=30	17.38	---	PASS
	Ant2	5795	13.93	<=30	18.93	---	PASS
	total	5795	16.20	<=30	21.23	---	PASS
11AC80MIMO	Ant1	5210	13.40	---	18.40	<=23	PASS
	Ant2	5210	12.56	---	17.56	<=23	PASS
	total	5210	16.01	---	21.01	<=23	PASS
	Ant1	5290	14.11	<=23.98	19.11	<=30	PASS
	Ant2	5290	13.75	<=23.98	18.75	<=30	PASS
	total	5290	16.90	<=23.98	21.94	<=30	PASS
	Ant1	5530	14.52	<=23.98	19.52	<=30	PASS
	Ant2	5530	13.89	<=23.98	18.89	<=30	PASS
	total	5530	17.20	<=23.98	22.23	<=30	PASS
11AX20MIMO	Ant1	5775	12.48	<=30	17.48	---	PASS
	Ant2	5775	14.07	<=30	19.07	---	PASS
	total	5775	16.40	<=30	21.36	---	PASS
	Ant1	5180	13.50	---	18.50	<=22.96	PASS
	Ant2	5180	12.78	---	17.78	<=22.90	PASS
	total	5180	16.17	---	21.17	<=22.90	PASS
	Ant1	5200	12.95	---	17.95	<=22.95	PASS
	Ant2	5200	13.06	---	18.06	<=22.95	PASS
	total	5200	16.02	---	21.02	<=22.95	PASS
	Ant1	5240	13.10	---	18.10	<=22.77	PASS
	Ant2	5240	13.46	---	16.46	<=22.76	PASS
	total	5240	16.29	---	21.29	<=22.76	PASS
	Ant1	5260	14.30	<=23.98	19.30	<=29.94	PASS
	Ant2	5260	13.38	<=23.98	17.38	<=30.00	PASS
	total	5260	16.50	<=23.98	21.46	<=30.00	PASS
	Ant1	5280	14.80	<=23.98	19.80	<=29.98	PASS
	Ant2	5280	13.40	<=23.98	18.40	<=30	PASS
	total	5280	17.20	<=23.98	22.17	<=30	PASS
	Ant1	5320	14.74	<=23.98	19.74	<=29.94	PASS
	Ant2	5320	13.70	<=23.98	18.70	<=29.97	PASS
	total	5320	17.30	<=23.98	21.26	<=29.97	PASS
	Ant1	5500	14.23	<=23.98	19.23	<=29.95	PASS
	Ant2	5500	13.34	<=23.98	18.34	<=29.97	PASS
	total	5500	16.80	<=23.98	21.82	<=29.97	PASS
	Ant1	5580	14.55	<=23.98	19.55	<=29.96	PASS
	Ant2	5580	14.52	<=23.98	19.52	<=30	PASS
	total	5580	17.50	<=23.98	22.55	<=30	PASS
	Ant1	5700	13.44	<=23.98	18.44	<=29.94	PASS
	Ant2	5700	13.33	<=23.98	18.33	<=29.94	PASS
	total	5700	16.40	<=23.98	21.40	<=29.94	PASS
	Ant1	5745	13.70	<=30	18.70	---	PASS
	Ant2	5745	13.92	<=30	18.92	---	PASS
	total	5745	16.80	<=30	21.82	---	PASS
Ant1	5785	12.77	<=30	17.77	---	PASS	
Ant2	5785	13.72	<=30	18.72	---	PASS	
total	5785	16.30	<=30	21.28	---	PASS	
Ant1	5825	12.73	<=30	17.73	---	PASS	
Ant2	5825	13.53	<=30	18.53	---	PASS	
total	5825	16.20	<=30	21.16	---	PASS	
11AX40MIMO	Ant1	5190	13.96	---	18.96	<=23	PASS
	Ant2	5190	13.24	---	18.24	<=23	PASS
	total	5190	16.63	---	21.63	<=23	PASS
	Ant1	5230	13.75	---	18.75	<=23	PASS
	Ant2	5230	13.39	---	18.39	<=23	PASS
	total	5230	16.60	---	21.58	<=23	PASS
	Ant1	5270	13.86	<=23.98	18.86	<=30	PASS

	Ant2	5270	12.91	<=23.98	17.91	<=30	PASS
	total	5270	16.40	<=23.98	21.42	<=30	PASS
	Ant1	5310	13.68	<=23.98	18.68	<=30	PASS
	Ant2	5310	14.17	<=23.98	18.17	<=30	PASS
	total	5310	16.40	<=23.98	21.44	<=30	PASS
	Ant1	5510	14.10	<=23.98	19.10	<=30	PASS
	Ant2	5510	13.84	<=23.98	18.84	<=30	PASS
	total	5510	17.00	<=23.98	21.98	<=30	PASS
	Ant1	5550	13.73	<=23.98	18.73	<=30	PASS
	Ant2	5550	13.67	<=23.98	18.67	<=30	PASS
	total	5550	16.70	<=23.98	21.71	<=30	PASS
	Ant1	5670	13.50	<=23.98	18.50	<=30	PASS
	Ant2	5670	13.32	<=23.98	18.32	<=30	PASS
	total	5670	16.40	<=23.98	21.42	<=30	PASS
	Ant1	5755	12.68	<=30	17.68	---	PASS
	Ant2	5755	13.69	<=30	18.69	---	PASS
	total	5755	16.20	<=30	21.22	---	PASS
	Ant1	5795	13.34	<=30	18.34	---	PASS
	Ant2	5795	13.99	<=30	18.99	---	PASS
	total	5795	16.70	<=30	21.69	---	PASS
11AX80MIMO	Ant1	5210	14.02	---	19.02	<=23	PASS
	Ant2	5210	13.19	---	18.19	<=23	PASS
	total	5210	16.60	---	21.64	<=23	PASS
	Ant1	5290	13.74	<=23.98	18.74	<=30	PASS
	Ant2	5290	13.18	<=23.98	18.18	<=30	PASS
	total	5290	16.50	<=23.98	21.48	<=30	PASS
	Ant1	5530	13.33	<=23.98	18.33	<=30	PASS
	Ant2	5530	12.86	<=23.98	17.86	<=30	PASS
	total	5530	16.10	<=23.98	21.11	<=30	PASS
	Ant1	5775	13.11	<=30	18.11	---	PASS
	Ant2	5775	13.68	<=30	18.68	---	PASS
	total	5775	16.40	<=30	21.41	---	PASS

6. Appendix E

Test Equipment	Type/Mode	SERIAL NO.	Equipment No.	Manufacturer	Cal. Due
3m Semi-Anechoic Chamber	FACT-4	ST08035	WKNA-0024	ETS	2024-12-12
Semi-Anechoic Chamber(5m)	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
Broadband Antenna	VULB 9163	9163-530	EM-000342	SCHWARZBECK	2023-06-26
Waveguide Horn Antenna	HF906	360306/008	WKNA-0024-8	R&S	2024-02-25
Waveguide Horn Antenna	BBHA9170	00949	EM-000383	SCHWARZBECK	2023-07-31
Loop Antenna	HLA 6121	540046	EM-000546	TESEQ	2024-06-06
Loop Antenna	FMZB1513	1513-170	EM-000384	SCHWARZBECK	2024-02-22
Broadband Antenna(5m)	VULB 9163	9163-676	EM-000382	SCHWARZBECK	2024-05-05
Bandstop Filters	SW-BSF-2400-100 -7-A1	/	EM-000495	/	2023-09-04
5G Bandstop Filters	WRCJV12-4900-5 100-5900-6100-5 OEE	1	DZ-000186	WI	2023-12-06
Spectrum Analyzer	FSV40	101580	DZ-000238-3	R&S	2024-06-04
RF Radio Frequency Switch	JS0806-2	19H9080187	/	Tonscend	2024-06-06

The End