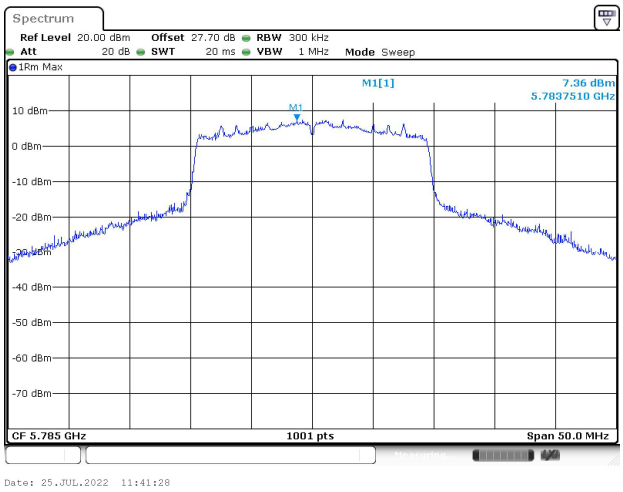
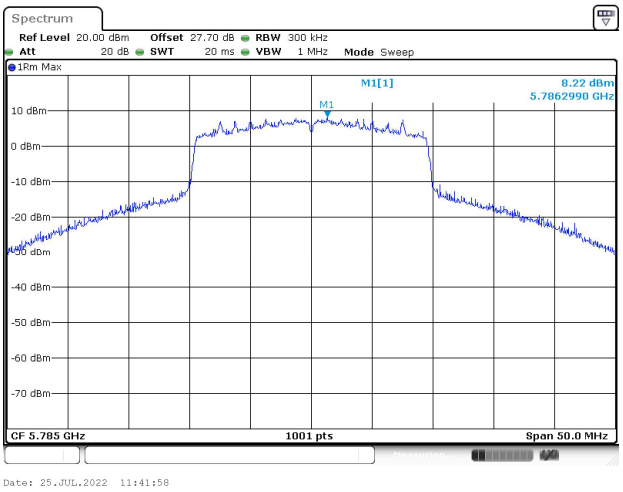
<TXBF Mode>

Band IV MIMO																
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	10log (500kHz /RBW) Factor (dB)		Average Power Density (dBm/500kHz)			Average PSD Limit (dBm/500kHz)		DG (dBi)		Pass /Fail
						Ant 6	Ant 7	Ant 6	Ant 7	SUM	Ant 6	Ant 7	Ant 6	Ant 7	
HE20	MCS0	2	149	5745	Full	2.22		9.68	10.37	13.38	30.00		4.63		Pass
HE20	MCS0	2	157	5785	Full	2.22		9.58	10.44	13.45	30.00		4.63		Pass
HE20	MCS0	2	165	5825	Full	2.22		9.38	10.33	13.34	30.00		4.63		Pass
HE40	MCS0	2	151	5755	Full	2.22		5.16	5.59	8.60	30.00		4.63		Pass
HE40	MCS0	2	159	5795	Full	2.22		4.70	6.16	9.17	30.00		4.63		Pass
HE80	MCS0	2	155	5775	Full	2.22		1.73	3.02	6.03	30.00		4.63		Pass

<802.11ax HE20>

Maximum Power Density Plot (dBm/MHz)	
MIMO Ant. 6	MIMO Ant. 7
	

3.4 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.4.1 Limit of Unwanted Emissions

(1) For transmitters operating in the 5.725-5.85 GHz band:

15.407(b)(4)(i) 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) Unwanted spurious emissions falls in restricted bands shall comply with the general field strength limits as below table,

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

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

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27	68.3

(3) KDB789033 D02 v02r01 G)2)c)

(i) Sections 15.407(b)(1-3) specifies the unwanted emissions limit for the U-NII-1 and U-NII-2 bands. As specified, emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of −27 dBm/MHz.

(ii) Section 15.407(b)(4) specifies the unwanted emissions limit for the U-NII-3 band. A band emissions mask is specified in Section 15.407(b)(4)(i). The emission limits are based on the use of a peak detector.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

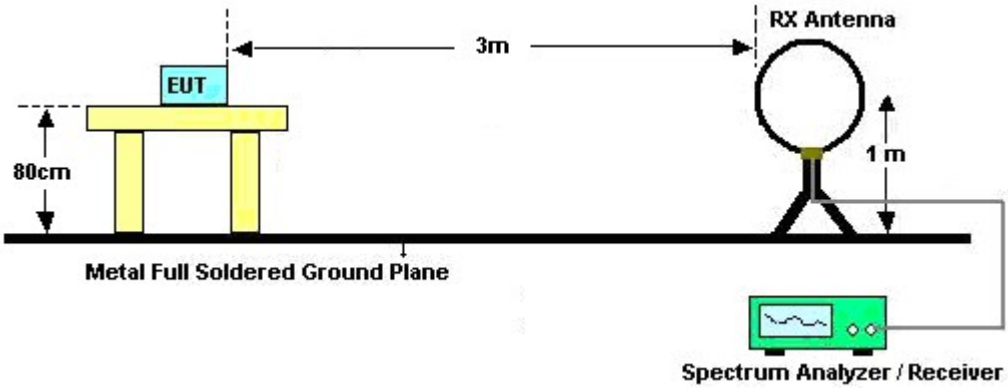
1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section G) Unwanted emissions measurement.
   (1) Procedure for Unwanted Emissions Measurements Below 1000 MHz
   - RBW = 120 kHz
   - VBW = 300 kHz
   - Detector = Peak
   - Trace mode = max hold

   (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

   (3) Procedures for Average Unwanted Emissions Measurements Above 1000 MHz
   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading.
   When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-“..
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies.
   When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-“.

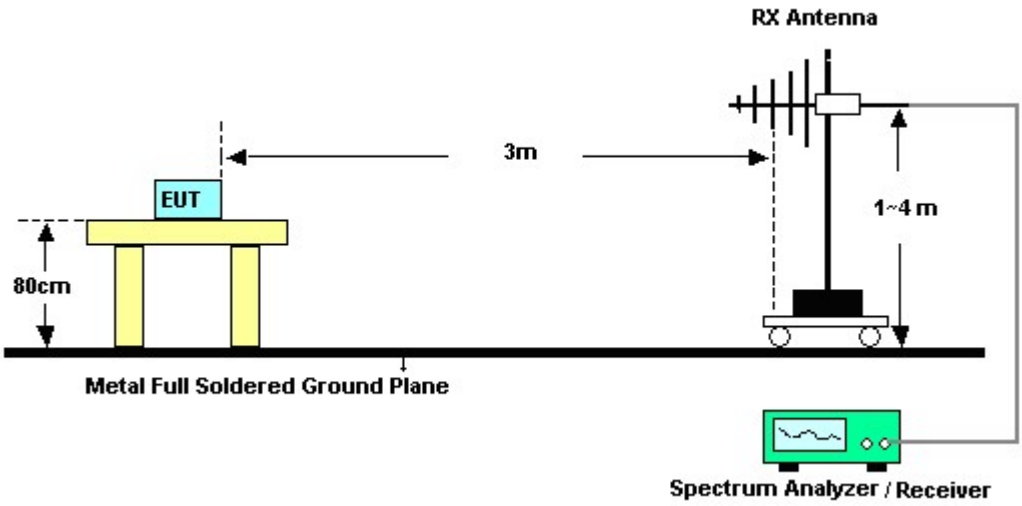
3.4.4 Test Setup

For radiated emissions below 30MHz

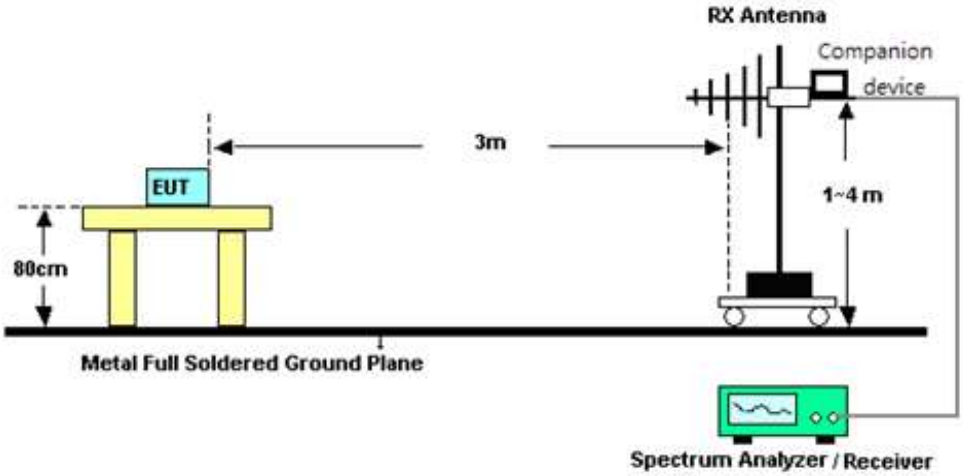


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

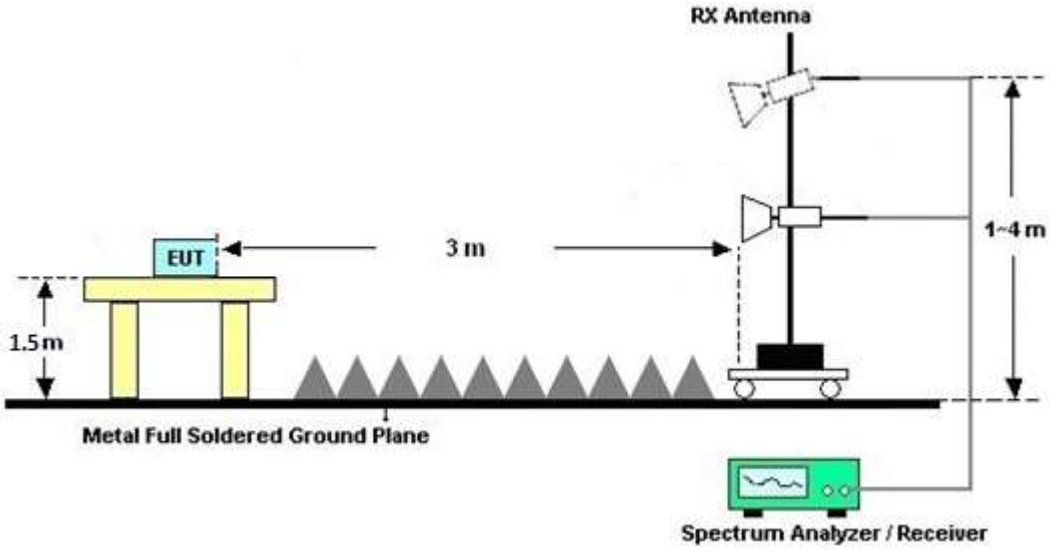


<TXBF Modes>

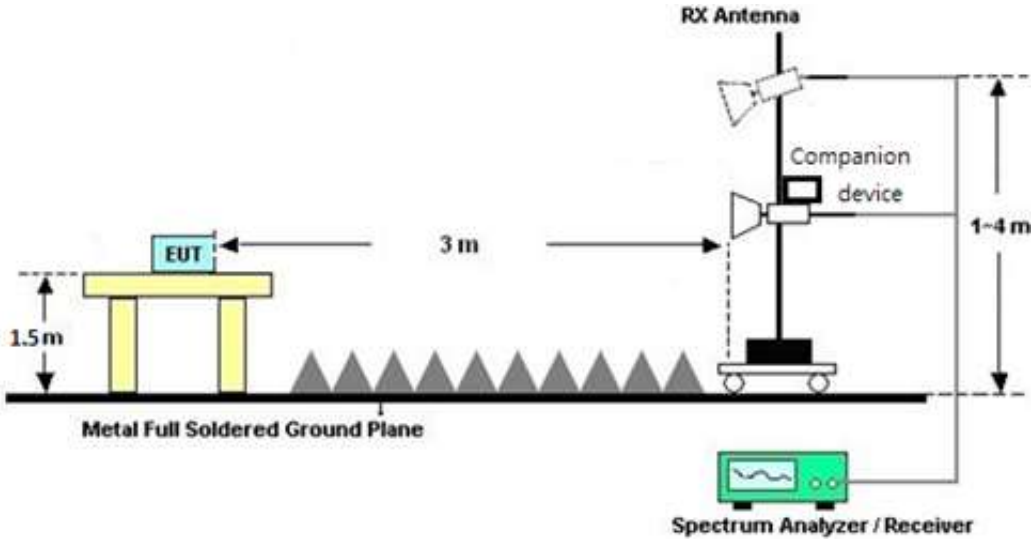


For radiated test from 1GHz to 18GHz

<CDD Mode>

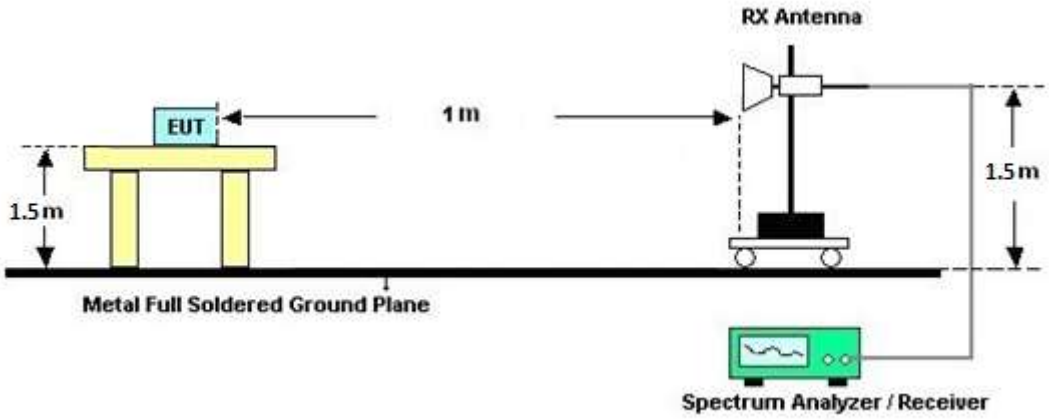


<TXBF Modes>

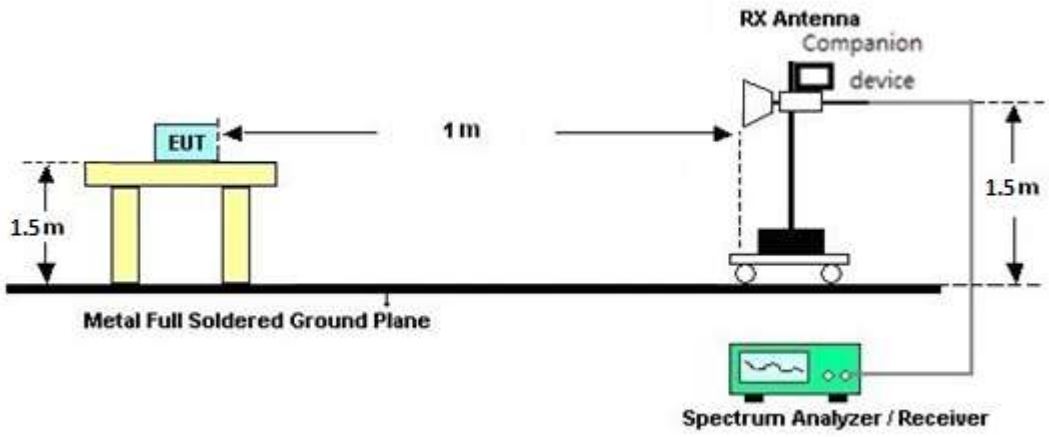


For radiated test above 18GHz

<CDD Mode>



<TXBF Modes>



3.4.5 Test Results of Radiated Emissions (9 kHz ~ 30 MHz)

The low frequency, which starts from 9 kHz to 30 MHz, is pre-scanned and the result which is 20 dB lower than the limit line is not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.4.6 Test Result of Radiated Band Edges

Please refer to Appendix B and C.

3.4.7 Duty Cycle

Please refer to Appendix D.

3.4.8 Test Result of Unwanted Radiated Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix B and C.

3.5 AC Conducted Emission Measurement

3.5.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

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

*Decreases with the logarithm of the frequency.

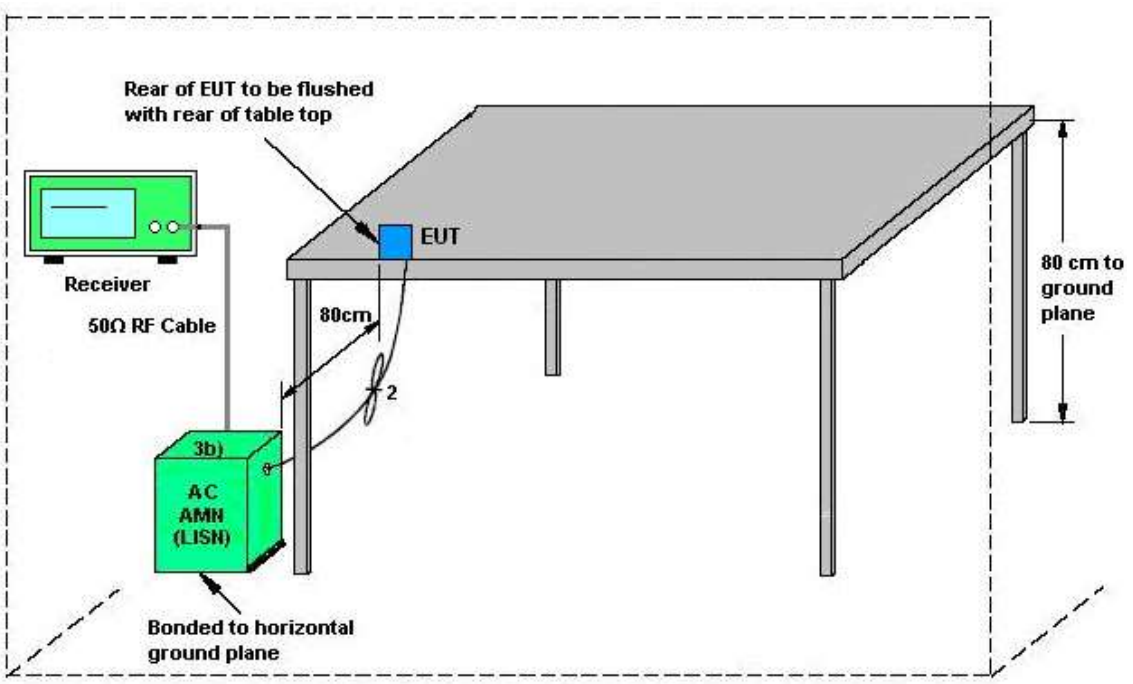
3.5.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN shall be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.5.4 Test Setup



AMN = Artificial mains network (LISN)
AE = Associated equipment
EUT = Equipment under test
ISN = Impedance stabilization network

3.5.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

3.6 Antenna Requirements

3.6.1 Standard Applicable

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.6.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.6.3 Antenna Gain

<CDD Modes >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For power measurements on IEEE 802.11 devices,

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

G_{ANT} is set equal to the gain of the antenna having the highest gain.

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

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

where

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

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

N_{ANT} = the total number of antennas

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

G_k is the gain in dBi of the kth antenna.

As minimum N_{SS}=1 is supported by EUT, the formula can be simplified as:

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

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

For example: If a device has two antenna, G_{ANT1}= 3.6dBi; G_{ANT2}=4.2dBi

Directional gain of power measurement = max(3.6, 4.2) + 0 = 4.2 dBi

Directional gain of PSD measurement = $10 * \log[(10^{3.6/20} + 10^{4.2/20})^2 / 2]$ = 6.92 dBi

The directional gain of EUT is listed in the following table.

<CDD Modes>						
	Ant. 6 (dBi)	Ant. 7 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	1.52	1.72	1.72	4.63	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

Calculation example:

For the Band IV, the DG for PSD is derived from formula is

10 x log { { [10^ (1.52 dBi / 20) + 10^ (1.72 dBi / 20)] ^ 2 } / 2 }

= 4.63 dBi

TXBF modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

where

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

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

N_{ANT} = the total number of antennas

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

G_k is the gain in dBi of the kth antenna.

The EUT supports beamforming modes.

The directional gain calculation is following F)2)e)ii) of KDB 662911 D01 v02r01.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain "DG" is calculated as following table.

	Ant 6 (dBi)	Ant 7 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
Band IV	1.52	1.72	4.63	4.63	0.00	0.00

Power Limit Reduction = DG(Power) – 6dBi, (min = 0)

PSD Limit Reduction = DG(PSD) – 6dBi, (min = 0)

Calculation example:

For the Band IV, the DG for PSD is derived from formula is

10 x log { { [10^ (1.52 dBi / 20) + 10^ (1.72 dBi / 20)] ^ 2 } / 2 }

= 4.63 dBi

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Jun. 16, 2022~ Jul. 25, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO 12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	Jun. 16, 2022~ Jul. 25, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	Jun. 16, 2022~ Jul. 25, 2022	Aug. 29, 2022	Conducted (TH05-HY)
Switch Control Mainframe	E-IUSTRUME NT	ETF-1405-0	EC1900067 (BOX7)	N/A	Aug. 12, 2021	Jun. 16, 2022~ Jul. 25, 2022	Aug. 11, 2022	Conducted (TH05-HY)
AC Power Source	ACPOWER	AFC-11003G	F317040033	N/A	N/A	Jul. 04, 2022	N/A	Conduction (CO07-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Jul. 04, 2022	N/A	Conduction (CO07-HY)
Pulse Limiter	SCHWARZBE CK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Oct. 29, 2021	Jul. 04, 2022	Oct. 28, 2022	Conduction (CO07-HY)
RF Cable	HUBER + SUHNER	RG 214/U	1358175	9kHz~30MHz	Mar. 16, 2022	Jul. 04, 2022	Mar. 15, 2023	Conduction (CO07-HY)
Two-Line V-Network	TESEQ	NNB 51	45051	N/A	Feb. 16, 2022	Jul. 04, 2022	Feb. 15, 2023	Conduction (CO07-HY)
EMI Test Receiver	Rohde & Schwarz	ESCI7	100724	9kHz~7GHz	Feb. 24, 2022	Jul. 04, 2022	Feb. 23, 2023	Conduction (CO07-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	May 13, 2022	Jun. 23, 2022~ Jun. 30, 2022	May 12, 2023	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N -06	47020 & 06	30MHz to 1GHz	Oct. 09, 2021	Jun. 23, 2022~ Jun. 30, 2022	Oct. 08, 2022	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 10, 2022	Jun. 23, 2022~ Jun. 30, 2022	Mar. 09, 2023	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	00993	18GHz ~40GHz	Nov. 30, 2021	Jun. 23, 2022~ Jun. 30, 2022	Nov. 29, 2022	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Jul. 05, 2021	Jun. 23, 2022~ Jun. 30, 2022	Jul. 04, 2022	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060812	18GHz~40GHz	Dec. 27, 2021	Jun. 23, 2022~ Jun. 30, 2022	Dec. 26, 2022	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 09, 2021	Jun. 23, 2022~ Jun. 30, 2022	Dec. 08, 2022	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	3Hz~26.5GHz	Dec.15, 2021	Jun. 23, 2022~ Jun. 30, 2022	Dec. 14, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11680/4P E	NA	Aug. 28, 2021	Jun. 23, 2022~ Jun. 30, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY11688/4P E	NA	Aug. 28, 2021	Jun. 23, 2022~ Jun. 30, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5 757	NA	Aug. 28, 2021	Jun. 23, 2022~ Jun. 30, 2022	Aug. 27, 2022	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jun. 23, 2022~ Jun. 30, 2022	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jun. 23, 2022~ Jun. 30, 2022	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jun. 23, 2022~ Jun. 30, 2022	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jun. 23, 2022~ Jun. 30, 2022	N/A	Radiation (03CH16-HY)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.3 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.8 dB

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.2 dB

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

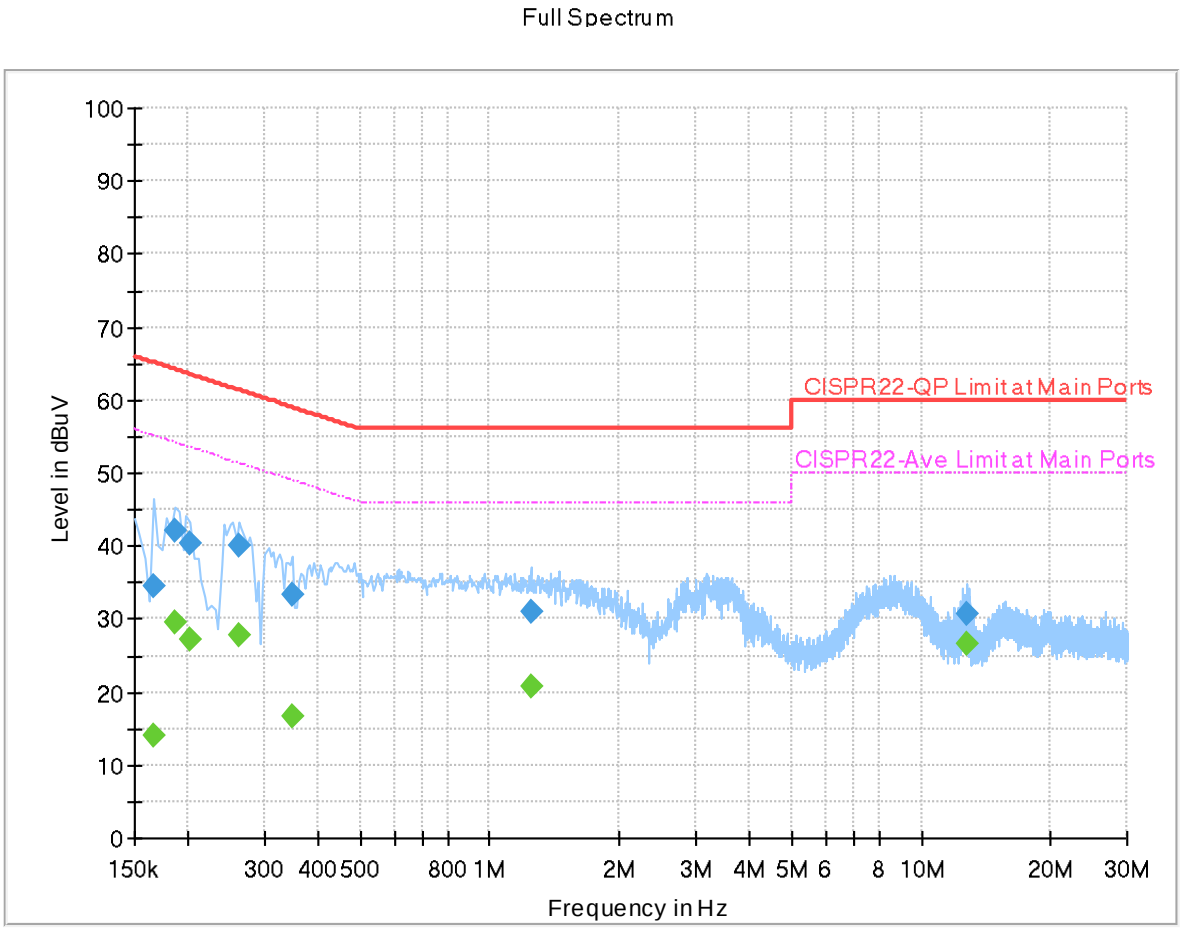
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.8 dB

Appendix A. AC Conducted Emission Test Results

Test Engineer :	Louis Chung	**Temperature :**	22.2~26.3℃
		Relative Humidity :	48.2~58.7%

EUT Information

Report NO :	1N2541
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

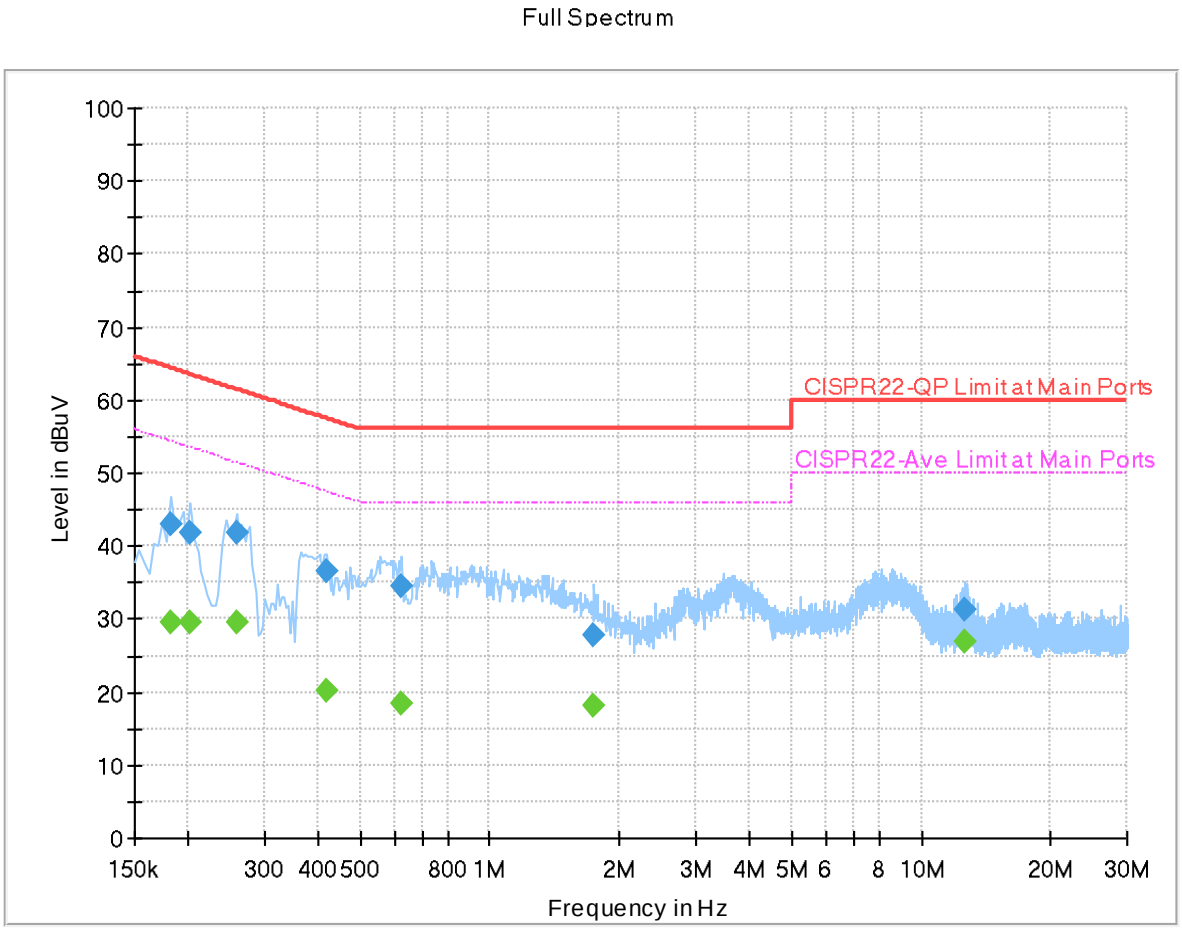


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.166000	---	13.90	55.16	41.26	L1	OFF	20.0
0.166000	34.57	---	65.16	30.59	L1	OFF	20.0
0.186000	---	29.51	54.21	24.70	L1	OFF	20.0
0.186000	42.02	---	64.21	22.19	L1	OFF	20.0
0.202000	---	27.31	53.53	26.22	L1	OFF	20.0
0.202000	40.33	---	63.53	23.20	L1	OFF	20.0
0.262000	---	27.72	51.37	23.65	L1	OFF	20.0
0.262000	40.06	---	61.37	21.31	L1	OFF	20.0
0.350000	---	16.59	48.96	32.37	L1	OFF	20.0
0.350000	33.41	---	58.96	25.55	L1	OFF	20.0
1.242000	---	20.67	46.00	25.33	L1	OFF	20.0
1.242000	30.93	---	56.00	25.07	L1	OFF	20.0
12.706000	---	26.61	50.00	23.39	L1	OFF	20.2
12.706000	30.76	---	60.00	29.24	L1	OFF	20.2

EUT Information

Report NO :	1N2541
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.182000	---	29.64	54.39	24.75	N	OFF	20.0
0.182000	42.99	---	64.39	21.40	N	OFF	20.0
0.202000	---	29.47	53.53	24.06	N	OFF	20.0
0.202000	41.74	---	63.53	21.79	N	OFF	20.0
0.258000	---	29.53	51.50	21.97	N	OFF	20.0
0.258000	41.67	---	61.50	19.83	N	OFF	20.0
0.418000	---	20.32	47.49	27.17	N	OFF	20.0
0.418000	36.43	---	57.49	21.06	N	OFF	20.0
0.626000	---	18.47	46.00	27.53	N	OFF	20.0
0.626000	34.47	---	56.00	21.53	N	OFF	20.0
1.746000	---	18.21	46.00	27.79	N	OFF	20.0
1.746000	27.82	---	56.00	28.18	N	OFF	20.0
12.614000	---	26.94	50.00	23.06	N	OFF	20.2
12.614000	31.41	---	60.00	28.59	N	OFF	20.2

Appendix B. Radiated Spurious Emission

Test Engineer :	Andy Yang, Karl Hou and Steven Wu	Temperature :	20~25°C
		Relative Humidity :	50~60%

<CDD Mode>

Band 4 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
6+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5641.8	56.52	-11.68	68.2	40.2	33.02	12.9	29.6	100	312	P	H
		5694.2	60.88	-40.04	100.92	44.2	33.35	12.93	29.6	100	312	P	H
		5717.8	69.55	-40.63	110.18	52.75	33.47	12.94	29.61	100	312	P	H
		5722.2	80.26	-35.56	115.82	63.43	33.49	12.95	29.61	100	312	P	H
	*	5745	116.21	-	-	99.28	33.58	12.96	29.61	100	312	P	H
	*	5745	108.95	-	-	92.02	33.58	12.96	29.61	100	312	A	H
													H
													H
		5620.2	56.33	-11.87	68.2	39.97	33.06	12.89	29.59	295	171	P	V
		5691.4	58.37	-40.49	98.86	41.71	33.33	12.93	29.6	295	171	P	V
		5719.8	69.05	-41.69	110.74	52.23	33.48	12.95	29.61	295	171	P	V
		5724.8	78.97	-42.77	121.74	62.13	33.5	12.95	29.61	295	171	P	V
	*	5745	113.01	-	-	96.08	33.58	12.96	29.61	295	171	P	V
	*	5745	105.81	-	-	88.88	33.58	12.96	29.61	295	171	A	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		5620.8	56.07	-12.13	68.2	39.71	33.06	12.89	29.59	100	298	P	H
		5699.4	57.01	-47.75	104.76	40.29	33.4	12.93	29.61	100	298	P	H
		5714.8	57.68	-51.67	109.35	40.89	33.46	12.94	29.61	100	298	P	H
		5720.4	58.9	-52.81	111.71	42.08	33.48	12.95	29.61	100	298	P	H
	*	5785	116.46	-	-	99.29	33.81	12.98	29.62	100	298	P	H
	*	5785	108.9	-	-	91.73	33.81	12.98	29.62	100	298	A	H
		5850	57.6	-64.6	122.2	40.3	34.1	12.83	29.63	100	298	P	H
		5856.8	57.38	-52.92	110.3	40.07	34.13	12.81	29.63	100	298	P	H
		5881	57.35	-43.39	100.74	40.04	34.22	12.73	29.64	100	298	P	H
		5947.8	55.81	-12.39	68.2	38.65	34.3	12.51	29.65	100	298	P	H
													H
													H
		5626.8	54.65	-13.55	68.2	38.3	33.05	12.89	29.59	285	173	P	V
		5686.8	56.31	-39.15	95.46	39.69	33.29	12.93	29.6	285	173	P	V
		5720	56.2	-54.6	110.8	39.38	33.48	12.95	29.61	285	173	P	V
		5721.4	57.91	-56.08	113.99	41.08	33.49	12.95	29.61	285	173	P	V
	*	5785	112.69	-	-	95.52	33.81	12.98	29.62	285	173	P	V
	*	5785	105.78	-	-	88.61	33.81	12.98	29.62	285	173	A	V
		5854.6	56.96	-54.75	111.71	39.66	34.12	12.81	29.63	285	173	P	V
		5855.2	56.68	-54.06	110.74	39.38	34.12	12.81	29.63	285	173	P	V
		5924.6	55.63	-12.86	68.49	38.39	34.3	12.59	29.65	285	173	P	V
		5939.8	55.57	-12.63	68.2	38.38	34.3	12.54	29.65	285	173	P	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	5825	116.19	-	-	98.91	34	12.91	29.63	100	311	P	H
	*	5825	108.42	-	-	91.14	34	12.91	29.63	100	311	A	H
		5851	70.48	-49.44	119.92	53.19	34.1	12.82	29.63	100	311	P	H
		5855.4	67.85	-42.84	110.69	50.55	34.12	12.81	29.63	100	311	P	H
		5875.6	59.03	-45.72	104.75	41.73	34.2	12.74	29.64	100	311	P	H
		5929.8	56.02	-12.18	68.2	38.8	34.3	12.57	29.65	100	311	P	H
													H
802.11a													H
CH 165	*	5825	113.33	-	-	96.05	34	12.91	29.63	300	175	P	V
5825MHz	*	5825	105.49	-	-	88.21	34	12.91	29.63	300	175	A	V
		5853.8	66.77	-46.77	113.54	49.46	34.12	12.82	29.63	300	175	P	V
		5855.4	62.62	-48.07	110.69	45.32	34.12	12.81	29.63	300	175	P	V
		5898	55.3	-32.84	88.14	37.98	34.29	12.67	29.64	300	175	P	V
		5946.6	56.53	-11.67	68.2	39.37	34.3	12.51	29.65	300	175	P	V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11490	47.85	-26.15	74	55.64	39.2	19.23	66.22	-	-	P	H
		17235	50.35	-17.85	68.2	52.93	38.47	25.11	66.16	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11490	49.98	-24.02	74	57.77	39.2	19.23	66.22	100	220	P	V
		11490	39.87	-14.13	54	47.66	39.2	19.23	66.22	100	220	A	V
		17235	53.47	-14.73	68.2	56.05	38.47	25.11	66.16	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 157 5785MHz		11570	47.91	-26.09	74	55.87	38.99	19.27	66.22	-	-	P	H
		17355	49.01	-19.19	68.2	51.12	38.76	25.16	66.03	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11570	47.66	-26.34	74	55.62	38.99	19.27	66.22	-	-	P	V
		17355	50.47	-17.73	68.2	52.58	38.76	25.16	66.03	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 165 5825MHz		11650	47.68	-26.32	74	55.8	38.8	19.3	66.22	-	-	P	H
		17475	50.28	-17.92	68.2	51.99	38.97	25.22	65.9	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		11650	47.88	-26.12	74	56	38.8	19.3	66.22	-	-	P	V
		17475	52.17	-16.03	68.2	53.88	38.97	25.22	65.9	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 4 5725~5850MHz

WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5641.2	58.25	-9.95	68.2	41.93	33.02	12.9	29.6	100	293	P	H
		5696.8	60.91	-41.93	102.84	44.22	33.37	12.93	29.61	100	293	P	H
		5719.6	77.05	-33.64	110.69	60.23	33.48	12.95	29.61	100	293	P	H
		5723.2	81.74	-36.36	118.1	64.91	33.49	12.95	29.61	100	293	P	H
	*	5745	117.86	-	-	100.93	33.58	12.96	29.61	100	293	P	H
	*	5745	108.15	-	-	91.22	33.58	12.96	29.61	100	293	A	H
802.11ax													H
HE20 Full													H
CH 149		5648.6	56.91	-11.29	68.2	40.6	33	12.91	29.6	312	167	P	V
5745MHz		5698.8	57.41	-46.91	104.32	40.7	33.39	12.93	29.61	312	167	P	V
		5719.8	69.93	-40.81	110.74	53.11	33.48	12.95	29.61	312	167	P	V
		5722.4	77.89	-38.38	116.27	61.06	33.49	12.95	29.61	312	167	P	V
	*	5745	114.1	-	-	97.17	33.58	12.96	29.61	312	167	P	V
	*	5745	105.2	-	-	88.27	33.58	12.96	29.61	312	167	A	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5639	58.6	-9.6	68.2	42.28	33.02	12.9	29.6	100	298	P	H
		5699.4	58.29	-46.47	104.76	41.57	33.4	12.93	29.61	100	298	P	H
		5700.8	59.23	-46.19	105.42	42.5	33.4	12.94	29.61	100	298	P	H
		5723.8	58.1	-61.36	119.46	41.26	33.5	12.95	29.61	100	298	P	H
	*	5785	117.96	-	-	100.79	33.81	12.98	29.62	100	298	P	H
	*	5785	108.83	-	-	91.66	33.81	12.98	29.62	100	298	A	H
		5850.2	58.08	-63.66	121.74	40.78	34.1	12.83	29.63	100	298	P	H
		5856	57.36	-53.16	110.52	40.06	34.12	12.81	29.63	100	298	P	H
		5887.4	57.05	-38.94	95.99	39.73	34.25	12.71	29.64	100	298	P	H
		5926.4	55.55	-12.65	68.2	38.32	34.3	12.58	29.65	100	298	P	H
802.11ax													H
HE20 Full													H
CH 157		5632.6	56.57	-11.63	68.2	40.23	33.03	12.9	29.59	296	184	P	V
5785MHz		5672.2	57.23	-27.44	84.67	40.73	33.18	12.92	29.6	296	184	P	V
		5712.8	57.07	-51.72	108.79	40.29	33.45	12.94	29.61	296	184	P	V
		5721	56.86	-56.22	113.08	40.04	33.48	12.95	29.61	296	184	P	V
	*	5785	115.56	-	-	98.39	33.81	12.98	29.62	296	184	P	V
	*	5785	105.44	-	-	88.27	33.81	12.98	29.62	296	184	A	V
		5853	56.18	-59.18	115.36	38.88	34.11	12.82	29.63	296	184	P	V
		5855.4	56.4	-54.29	110.69	39.1	34.12	12.81	29.63	296	184	P	V
		5896.8	56.82	-32.21	89.03	39.49	34.29	12.68	29.64	296	184	P	V
		5925.4	55.26	-12.94	68.2	38.03	34.3	12.58	29.65	296	184	P	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	5825	116.96	-	-	99.68	34	12.91	29.63	100	319	P	H
	*	5825	107.9	-	-	90.62	34	12.91	29.63	100	319	A	H
		5851	73.62	-46.3	119.92	56.33	34.1	12.82	29.63	100	319	P	H
		5855	67.81	-42.99	110.8	50.51	34.12	12.81	29.63	100	319	P	H
		5875.4	58.88	-46.02	104.9	41.58	34.2	12.74	29.64	100	319	P	H
		5933.4	56.44	-11.76	68.2	39.23	34.3	12.56	29.65	100	319	P	H
802.11ax													H
HE20 Full													H
CH 165	*	5825	115.84	-	-	98.56	34	12.91	29.63	280	175	P	V
5825MHz	*	5825	105.47	-	-	88.19	34	12.91	29.63	280	175	A	V
		5851.8	69.71	-48.39	118.1	52.41	34.11	12.82	29.63	280	175	P	V
		5859.4	65.28	-44.29	109.57	47.97	34.14	12.8	29.63	280	175	P	V
		5877.4	57.16	-46.26	103.42	39.85	34.21	12.74	29.64	280	175	P	V
		5932.8	57.77	-10.43	68.2	40.56	34.3	12.56	29.65	280	175	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11490	47.63	-26.37	74	55.42	39.2	19.23	66.22	-	-	P	H
		17235	50.48	-17.72	68.2	53.06	38.47	25.11	66.16	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 149		11490	47.9	-26.1	74	55.69	39.2	19.23	66.22	-	-	P	V
5745MHz		17235	49.91	-18.29	68.2	52.49	38.47	25.11	66.16	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11570	47.37	-26.63	74	55.33	38.99	19.27	66.22	-	-	P	H
		17355	49.71	-18.49	68.2	51.82	38.76	25.16	66.03	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 157		11570	47.88	-26.12	74	55.84	38.99	19.27	66.22	-	-	P	V
5785MHz		17355	48.42	-19.78	68.2	50.53	38.76	25.16	66.03	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11650	47.39	-26.61	74	55.51	38.8	19.3	66.22	-	-	P	H
		17475	50.08	-18.12	68.2	51.79	38.97	25.22	65.9	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 165		11650	46.99	-27.01	74	55.11	38.8	19.3	66.22	-	-	P	V
5825MHz		17475	49.7	-18.5	68.2	51.41	38.97	25.22	65.9	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

Band 4 5725~5850MHz

WIFI 802.11ax HE20_Partial 106 (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/53 CH 149 5745MHz		5620.6	56.88	-11.32	68.2	40.52	33.06	12.89	29.59	100	293	P	H
		5680.4	58.34	-32.39	90.73	41.78	33.24	12.92	29.6	100	293	P	H
		5717.6	65.45	-44.68	110.13	48.65	33.47	12.94	29.61	100	293	P	H
		5723.4	71.61	-46.94	118.55	54.78	33.49	12.95	29.61	100	293	P	H
	*	5745	117.47	-	-	100.54	33.58	12.96	29.61	100	293	P	H
	*	5745	108.06	-	-	91.13	33.58	12.96	29.61	100	293	A	H
													H
													H
		5623.6	55.48	-12.72	68.2	39.13	33.05	12.89	29.59	295	168	P	V
		5682.6	56.05	-36.31	92.36	39.46	33.26	12.93	29.6	295	168	P	V
		5720	62.47	-48.33	110.8	45.65	33.48	12.95	29.61	295	168	P	V
		5724.8	69.29	-52.45	121.74	52.45	33.5	12.95	29.61	295	168	P	V
	*	5745	114.06	-	-	97.13	33.58	12.96	29.61	295	168	P	V
	*	5745	104.83	-	-	87.9	33.58	12.96	29.61	295	168	A	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 106/54 CH 165 5825MHz	*	5825	117.21	-	-	99.93	34	12.91	29.63	100	310	P	H
	*	5825	107.36	-	-	90.08	34	12.91	29.63	100	310	A	H
		5850	61.89	-60.31	122.2	44.59	34.1	12.83	29.63	100	310	P	H
		5856.8	62.4	-47.9	110.3	45.09	34.13	12.81	29.63	100	310	P	H
		5903.8	58.13	-25.72	83.85	40.82	34.3	12.65	29.64	100	310	P	H
		5925.6	56.25	-11.95	68.2	39.02	34.3	12.58	29.65	100	310	P	H
													H
													H
	*	5825	113.52	-	-	96.24	34	12.91	29.63	300	176	P	V
	*	5825	103.77	-	-	86.49	34	12.91	29.63	300	176	A	V
		5853.2	59.37	-55.53	114.9	42.07	34.11	12.82	29.63	300	176	P	V
		5856.2	56.98	-53.48	110.46	39.68	34.12	12.81	29.63	300	176	P	V
		5908.2	56.23	-24.37	80.6	38.93	34.3	12.64	29.64	300	176	P	V
		5938.4	55	-13.2	68.2	37.81	34.3	12.54	29.65	300	176	P	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5650	59.23	-8.97	68.2	42.92	33	12.91	29.6	100	291	P	H
		5698.8	63.66	-40.66	104.32	46.95	33.39	12.93	29.61	100	291	P	H
		5720	76.91	-33.89	110.8	60.09	33.48	12.95	29.61	100	291	P	H
		5723.6	79.83	-39.18	119.01	63	33.49	12.95	29.61	100	291	P	H
	*	5755	112.2	-	-	95.22	33.63	12.97	29.62	100	291	P	H
	*	5755	101.67	-	-	84.69	33.63	12.97	29.62	100	291	A	H
		5853.4	57.64	-56.81	114.45	40.34	34.11	12.82	29.63	100	291	P	H
		5859.8	56.86	-52.59	109.45	39.55	34.14	12.8	29.63	100	291	P	H
		5912.4	57.76	-19.73	77.49	40.48	34.3	12.62	29.64	100	291	P	H
		5934.6	58.07	-10.13	68.2	40.87	34.3	12.55	29.65	100	291	P	H
802.11ax													H
HE40 Full													H
CH 151		5623.8	55.86	-12.34	68.2	39.51	33.05	12.89	29.59	278	173	P	V
5755MHz		5700	59.59	-45.61	105.2	42.87	33.4	12.93	29.61	278	173	P	V
		5713.2	71.43	-37.47	108.9	54.65	33.45	12.94	29.61	278	173	P	V
		5725	78.73	-43.47	122.2	61.89	33.5	12.95	29.61	278	173	P	V
	*	5755	109.23	-	-	92.25	33.63	12.97	29.62	278	173	P	V
	*	5755	98.6	-	-	81.62	33.63	12.97	29.62	278	173	A	V
		5853.4	56.47	-57.98	114.45	39.17	34.11	12.82	29.63	278	173	P	V
		5859.6	56.78	-52.73	109.51	39.47	34.14	12.8	29.63	278	173	P	V
		5886	55.78	-41.25	97.03	38.47	34.24	12.71	29.64	278	173	P	V
		5936.8	55.75	-12.45	68.2	38.55	34.3	12.55	29.65	278	173	P	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5629.2	55.96	-12.24	68.2	39.61	33.04	12.9	29.59	100	299	P	H
		5678	56.45	-32.51	88.96	39.91	33.22	12.92	29.6	100	299	P	H
		5714.6	57.52	-51.77	109.29	40.73	33.46	12.94	29.61	100	299	P	H
		5720	56.77	-54.03	110.8	39.95	33.48	12.95	29.61	100	299	P	H
	*	5795	111.49	-	-	94.25	33.87	12.99	29.62	100	299	P	H
	*	5795	101.35	-	-	84.11	33.87	12.99	29.62	100	299	A	H
		5853.2	63.8	-51.1	114.9	46.5	34.11	12.82	29.63	100	299	P	H
		5857.4	59.93	-50.2	110.13	42.63	34.13	12.8	29.63	100	299	P	H
		5881.6	58.58	-41.72	100.3	41.27	34.23	12.72	29.64	100	299	P	H
		5929.4	55.96	-12.24	68.2	38.74	34.3	12.57	29.65	100	299	P	H
802.11ax													H
HE40 Full													H
CH 159		5630.8	54.77	-13.43	68.2	38.42	33.04	12.9	29.59	287	173	P	V
5795MHz		5693.4	55.18	-45.15	100.33	38.5	33.35	12.93	29.6	287	173	P	V
		5718	56.96	-53.28	110.24	40.16	33.47	12.94	29.61	287	173	P	V
		5724.6	55.39	-65.9	121.29	38.55	33.5	12.95	29.61	287	173	P	V
	*	5795	108.44	-	-	91.2	33.87	12.99	29.62	287	173	P	V
	*	5795	98.28	-	-	81.04	33.87	12.99	29.62	287	173	A	V
		5851.8	57.83	-60.27	118.1	40.53	34.11	12.82	29.63	287	173	P	V
		5862	56.32	-52.52	108.84	39.02	34.15	12.79	29.64	287	173	P	V
		5895	56.3	-34.06	90.36	38.98	34.28	12.68	29.64	287	173	P	V
		5925.8	54.92	-13.28	68.2	37.69	34.3	12.58	29.65	287	173	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11510	47.82	-26.18	74	55.63	39.17	19.24	66.22	-	-	P	H
		17265	48.54	-19.66	68.2	51.03	38.53	25.11	66.13	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 151		11510	47.86	-26.14	74	55.67	39.17	19.24	66.22	-	-	P	V
5755MHz		17265	49.78	-18.42	68.2	52.27	38.53	25.11	66.13	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11590	46.69	-27.31	74	54.7	38.93	19.28	66.22	-	-	P	H
		17385	49.09	-19.11	68.2	51.07	38.85	25.17	66	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 159		11590	46.89	-27.11	74	54.9	38.93	19.28	66.22	-	-	P	V
5795MHz		17385	49.32	-18.88	68.2	51.3	38.85	25.17	66	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636.4	62	-6.2	68.2	45.66	33.03	12.9	29.59	100	350	P	H
		5693.2	71.02	-29.17	100.19	54.34	33.35	12.93	29.6	100	350	P	H
		5719.2	75.57	-35.01	110.58	58.75	33.48	12.95	29.61	100	350	P	H
		5720.6	74.31	-37.86	112.17	57.49	33.48	12.95	29.61	100	350	P	H
	*	5775	108.08	-	-	90.97	33.75	12.98	29.62	100	350	P	H
	*	5775	99.08	-	-	81.97	33.75	12.98	29.62	100	350	A	H
		5853.8	71.02	-42.52	113.54	53.71	34.12	12.82	29.63	100	350	P	H
		5858.4	69.22	-40.63	109.85	51.92	34.13	12.8	29.63	100	350	P	H
		5876.6	64.83	-39.18	104.01	47.52	34.21	12.74	29.64	100	350	P	H
		5945.8	59.12	-9.08	68.2	41.95	34.3	12.52	29.65	100	350	P	H
802.11ax													H
HE80 Full													H
CH 155		5647.4	57.11	-11.09	68.2	40.79	33.01	12.91	29.6	271	179	P	V
5775MHz		5686.2	66.19	-28.83	95.02	49.57	33.29	12.93	29.6	271	179	P	V
		5716.4	69.82	-39.97	109.79	53.02	33.47	12.94	29.61	271	179	P	V
		5724.2	71.26	-49.12	120.38	54.42	33.5	12.95	29.61	271	179	P	V
	*	5775	105.63	-	-	88.52	33.75	12.98	29.62	271	179	P	V
	*	5775	95.81	-	-	78.7	33.75	12.98	29.62	271	179	A	V
		5852.8	67.87	-47.95	115.82	50.57	34.11	12.82	29.63	271	179	P	V
		5856.6	65.51	-44.84	110.35	48.2	34.13	12.81	29.63	271	179	P	V
		5875.8	61.11	-43.5	104.61	43.81	34.2	12.74	29.64	271	179	P	V
		5940.2	57.85	-10.35	68.2	40.67	34.3	12.53	29.65	271	179	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.78	-26.22	74	55.7	39.05	19.25	66.22	-	-	P	H
		17325	48.71	-19.49	68.2	50.96	38.67	25.14	66.06	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE80 Full													H
CH 155		11550	47.69	-26.31	74	55.61	39.05	19.25	66.22	-	-	P	V
5775MHz		17325	48.93	-19.27	68.2	51.18	38.67	25.14	66.06	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

Emission below 1GHz

5GHz WIFI 802.11ax HE80 Full (LF @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full LF		37.76	25.78	-14.22	40	36.28	20.79	1.01	32.3	-	-	P	H
		55.22	27.55	-12.45	40	45.88	12.63	1.32	32.28	-	-	P	H
		127	25.57	-17.93	43.5	38.32	17.54	1.98	32.27	-	-	P	H
		422.85	23.62	-22.38	46	29.5	22.94	3.59	32.41	-	-	P	H
		732.28	29.92	-16.08	46	29.86	27.75	4.67	32.36	-	-	P	H
		951.5	34.08	-11.92	46	29.27	30.6	5.4	31.19	-	-	P	H
													H
													H
													H
													H
													H
													H
		37.76	33.9	-6.1	40	44.4	20.79	1.01	32.3	-	-	P	V
		51.34	32.67	-7.33	40	50.02	13.67	1.27	32.29	-	-	P	V
		179.38	28.28	-15.22	43.5	43.03	15.08	2.39	32.22	-	-	P	V
		493.66	26.79	-19.21	46	31.36	23.93	3.86	32.36	-	-	P	V
		738.1	30.12	-15.88	46	29.81	27.96	4.7	32.35	-	-	P	V
		949.56	34.02	-11.98	46	29.28	30.54	5.4	31.2	-	-	P	V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against limit line. 3. The emission position marked as "-" means no suspected emission found and emission level has at least 6dB margin against limit or emission is noise floor only.												

<TXBF Mode>

Band 4 - 5725~5850MHz

WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
6+7		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5627	56.99	-11.21	68.2	40.64	33.05	12.89	29.59	100	311	P	H
		5699	61.31	-43.15	104.46	44.6	33.39	12.93	29.61	100	311	P	H
		5720	74.23	-36.57	110.8	57.41	33.48	12.95	29.61	100	311	P	H
		5725	80.05	-42.15	122.2	63.21	33.5	12.95	29.61	100	311	P	H
	*	5745	117.19	-	-	100.26	33.58	12.96	29.61	100	311	P	H
	*	5745	107.83	-	-	90.9	33.58	12.96	29.61	100	311	A	H
802.11ax													H
HE20 Full													H
CH 149		5620.8	56	-12.2	68.2	39.64	33.06	12.89	29.59	302	178	P	V
5745MHz		5699.6	57.05	-47.86	104.91	40.33	33.4	12.93	29.61	302	178	P	V
		5719.2	71.29	-39.29	110.58	54.47	33.48	12.95	29.61	302	178	P	V
		5724.4	77.07	-43.76	120.83	60.23	33.5	12.95	29.61	302	178	P	V
	*	5745	114.07	-	-	97.14	33.58	12.96	29.61	302	178	P	V
	*	5745	104.38	-	-	87.45	33.58	12.96	29.61	302	178	A	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5636.8	55.21	-12.99	68.2	38.87	33.03	12.9	29.59	100	300	P	H
		5662.2	57.23	-20.03	77.26	40.82	33.1	12.91	29.6	100	300	P	H
		5710.4	57.26	-50.85	108.11	40.49	33.44	12.94	29.61	100	300	P	H
		5723.2	58.27	-59.83	118.1	41.44	33.49	12.95	29.61	100	300	P	H
	*	5785	117.02	-	-	99.85	33.81	12.98	29.62	100	300	P	H
	*	5785	107.5	-	-	90.33	33.81	12.98	29.62	100	300	A	H
		5850.2	56.64	-65.1	121.74	39.34	34.1	12.83	29.63	100	300	P	H
		5860.4	57.05	-52.24	109.29	39.75	34.14	12.79	29.63	100	300	P	H
		5878.8	57.34	-45.04	102.38	40.03	34.22	12.73	29.64	100	300	P	H
		5941.4	55.56	-12.64	68.2	38.38	34.3	12.53	29.65	100	300	P	H
802.11ax													H
HE20 Full													H
CH 157		5630.8	55.36	-12.84	68.2	39.01	33.04	12.9	29.59	283	180	P	V
5785MHz		5695.6	55.86	-46.1	101.96	39.18	33.36	12.93	29.61	283	180	P	V
		5708	56.09	-51.35	107.44	39.33	33.43	12.94	29.61	283	180	P	V
		5721.4	55.25	-58.74	113.99	38.42	33.49	12.95	29.61	283	180	P	V
	*	5785	113.45	-	-	96.28	33.81	12.98	29.62	283	180	P	V
	*	5785	103.97	-	-	86.8	33.81	12.98	29.62	283	180	A	V
		5854.2	55.4	-57.22	112.62	38.1	34.12	12.81	29.63	283	180	P	V
		5865.8	56.39	-51.38	107.77	39.09	34.16	12.78	29.64	283	180	P	V
		5888.6	56.68	-38.42	95.1	39.37	34.25	12.7	29.64	283	180	P	V
		5944.8	55.94	-12.26	68.2	38.77	34.3	12.52	29.65	283	180	P	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
	*	5825	117.13	-	-	99.85	34	12.91	29.63	311	312	P	H
	*	5825	107.08	-	-	89.8	34	12.91	29.63	311	312	A	H
		5850.6	74.31	-46.52	120.83	57.01	34.1	12.83	29.63	311	312	P	H
		5856	69.23	-41.29	110.52	51.93	34.12	12.81	29.63	311	312	P	H
		5875.2	58.05	-47	105.05	40.74	34.2	12.75	29.64	311	312	P	H
		5941.2	55.63	-12.57	68.2	38.45	34.3	12.53	29.65	311	312	P	H
802.11ax													H
HE20 Full													H
CH 165	*	5825	113.6	-	-	96.32	34	12.91	29.63	279	177	P	V
5825MHz	*	5825	104.3	-	-	87.02	34	12.91	29.63	279	177	A	V
		5851.4	72.27	-46.74	119.01	54.97	34.11	12.82	29.63	279	177	P	V
		5856	65.08	-45.44	110.52	47.78	34.12	12.81	29.63	279	177	P	V
		5881.6	57.12	-43.18	100.3	39.81	34.23	12.72	29.64	279	177	P	V
		5948.2	56	-12.2	68.2	38.84	34.3	12.51	29.65	279	177	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11490	47.71	-26.29	74	55.5	39.2	19.23	66.22	-	-	P	H
		17235	49.89	-18.31	68.2	52.47	38.47	25.11	66.16	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 149		11490	47.62	-26.38	74	55.41	39.2	19.23	66.22	-	-	P	V
5745MHz		17235	49.06	-19.14	68.2	51.64	38.47	25.11	66.16	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11570	47.76	-26.24	74	55.72	38.99	19.27	66.22	-	-	P	H
		17355	48.64	-19.56	68.2	50.75	38.76	25.16	66.03	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 157		11570	47.89	-26.11	74	55.85	38.99	19.27	66.22	-	-	P	V
5785MHz		17355	51.03	-17.17	68.2	53.14	38.76	25.16	66.03	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11650	47.87	-26.13	74	55.99	38.8	19.3	66.22	-	-	P	H
		17475	49.46	-18.74	68.2	51.17	38.97	25.22	65.9	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 165		11650	47.83	-26.17	74	55.95	38.8	19.3	66.22	-	-	P	V
5825MHz		17475	51.23	-16.97	68.2	52.94	38.97	25.22	65.9	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.
3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5641.6	57.48	-10.72	68.2	41.16	33.02	12.9	29.6	100	300	P	H
		5697	64.78	-38.21	102.99	48.08	33.38	12.93	29.61	100	300	P	H
		5717.8	75.06	-35.12	110.18	58.26	33.47	12.94	29.61	100	300	P	H
		5722	77.08	-38.28	115.36	60.25	33.49	12.95	29.61	100	300	P	H
	*	5755	110.44	-	-	93.46	33.63	12.97	29.62	100	300	P	H
	*	5755	100.92	-	-	83.94	33.63	12.97	29.62	100	300	A	H
		5855	56.96	-53.84	110.8	39.66	34.12	12.81	29.63	100	300	P	H
		5867.2	58.26	-49.12	107.38	40.96	34.17	12.77	29.64	100	300	P	H
		5909	57.71	-22.3	80.01	40.41	34.3	12.64	29.64	100	300	P	H
		5930	56.99	-11.21	68.2	39.77	34.3	12.57	29.65	100	300	P	H
802.11ax													H
HE40 Full													H
CH 151		5600.4	55.7	-12.5	68.2	39.31	33.1	12.88	29.59	296	176	P	V
5755MHz		5700	61.64	-43.56	105.2	44.92	33.4	12.93	29.61	296	176	P	V
		5716.6	70.06	-39.79	109.85	53.26	33.47	12.94	29.61	296	176	P	V
		5723.2	73.89	-44.21	118.1	57.06	33.49	12.95	29.61	296	176	P	V
	*	5755	107.75	-	-	90.77	33.63	12.97	29.62	296	176	P	V
	*	5755	97.17	-	-	80.19	33.63	12.97	29.62	296	176	A	V
		5850.4	55.94	-65.35	121.29	38.64	34.1	12.83	29.63	296	176	P	V
		5868	55.96	-51.2	107.16	38.66	34.17	12.77	29.64	296	176	P	V
		5889.6	56.4	-37.96	94.36	39.08	34.26	12.7	29.64	296	176	P	V
		5941.8	55.62	-12.58	68.2	38.44	34.3	12.53	29.65	296	176	P	V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5632.8	55.66	-12.54	68.2	39.32	33.03	12.9	29.59	101	300	P	H
		5663.6	56.07	-22.23	78.3	39.65	33.11	12.91	29.6	101	300	P	H
		5712.8	59.58	-49.21	108.79	42.8	33.45	12.94	29.61	101	300	P	H
		5724.6	59.41	-61.88	121.29	42.57	33.5	12.95	29.61	101	300	P	H
	*	5795	110.63	-	-	93.39	33.87	12.99	29.62	101	300	P	H
	*	5795	100.98	-	-	83.74	33.87	12.99	29.62	101	300	A	H
		5853.4	64.27	-50.18	114.45	46.97	34.11	12.82	29.63	101	300	P	H
		5855.2	60.71	-50.03	110.74	43.41	34.12	12.81	29.63	101	300	P	H
		5875.4	57.97	-46.93	104.9	40.67	34.2	12.74	29.64	101	300	P	H
		5928	56.03	-12.17	68.2	38.81	34.3	12.57	29.65	101	300	P	H
802.11ax													H
HE40 Full													H
CH 159		5639.8	55.78	-12.42	68.2	39.46	33.02	12.9	29.6	290	172	P	V
5795MHz		5694.2	56.46	-44.46	100.92	39.78	33.35	12.93	29.6	290	172	P	V
		5708	55.11	-52.33	107.44	38.35	33.43	12.94	29.61	290	172	P	V
		5723.2	55.98	-62.12	118.1	39.15	33.49	12.95	29.61	290	172	P	V
	*	5795	107.56	-	-	90.32	33.87	12.99	29.62	290	172	P	V
	*	5795	97.56	-	-	80.32	33.87	12.99	29.62	290	172	A	V
		5851.8	58.83	-59.27	118.1	41.53	34.11	12.82	29.63	290	172	P	V
		5862.8	58.47	-50.14	108.61	41.17	34.15	12.79	29.64	290	172	P	V
		5875.6	56.63	-48.12	104.75	39.33	34.2	12.74	29.64	290	172	P	V
		5949.6	55.4	-12.8	68.2	38.25	34.3	12.5	29.65	290	172	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11510	47.92	-26.08	74	55.73	39.17	19.24	66.22	-	-	P	H
		17265	48.34	-19.86	68.2	50.83	38.53	25.11	66.13	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 151		11510	47.83	-26.17	74	55.64	39.17	19.24	66.22	-	-	P	V
5755MHz		17265	49.22	-18.98	68.2	51.71	38.53	25.11	66.13	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11590	47.38	-26.62	74	55.39	38.93	19.28	66.22	-	-	P	H
		17385	49.15	-19.05	68.2	51.13	38.85	25.17	66	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE40 Full													H
CH 159		11590	47.58	-26.42	74	55.59	38.93	19.28	66.22	-	-	P	V
5795MHz		17385	49.03	-19.17	68.2	51.01	38.85	25.17	66	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Band Edge @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5648	63.74	-4.46	68.2	47.43	33	12.91	29.6	100	305	P	H
		5697.2	76.31	-26.83	103.14	59.61	33.38	12.93	29.61	100	305	P	H
		5714.6	78.8	-30.49	109.29	62.01	33.46	12.94	29.61	100	305	P	H
		5722.4	81.14	-35.13	116.27	64.31	33.49	12.95	29.61	100	305	P	H
	*	5775	109.63	-	-	92.52	33.75	12.98	29.62	100	305	P	H
	*	5775	99.52	-	-	82.41	33.75	12.98	29.62	100	305	A	H
		5854.4	77.86	-34.31	112.17	60.56	34.12	12.81	29.63	100	305	P	H
		5862.2	77.83	-30.95	108.78	60.53	34.15	12.79	29.64	100	305	P	H
		5875	73.92	-31.28	105.2	56.61	34.2	12.75	29.64	100	305	P	H
		5926.2	62.57	-5.63	68.2	45.34	34.3	12.58	29.65	100	305	P	H
802.11ax													H
HE80 Full													H
CH 155		5600.8	57.98	-10.22	68.2	41.59	33.1	12.88	29.59	283	304	P	V
5775MHz		5698.6	70.61	-33.56	104.17	53.9	33.39	12.93	29.61	283	304	P	V
		5715	73.93	-35.47	109.4	57.14	33.46	12.94	29.61	283	304	P	V
		5721.8	75.27	-39.63	114.9	58.44	33.49	12.95	29.61	283	304	P	V
	*	5775	104.95	-	-	87.84	33.75	12.98	29.62	283	304	P	V
	*	5775	95.39	-	-	78.28	33.75	12.98	29.62	283	304	A	V
		5851	71.13	-48.79	119.92	53.84	34.1	12.82	29.63	283	304	P	V
		5858.4	71.55	-38.3	109.85	54.25	34.13	12.8	29.63	283	304	P	V
		5875.4	68.59	-36.31	104.9	51.29	34.2	12.74	29.64	283	304	P	V
		5933.4	57.52	-10.68	68.2	40.31	34.3	12.56	29.65	283	304	P	V
													V
													V

Remark

1. No other spurious found.
2. All results are PASS against Peak and Average limit line.

Band 4 5725~5850MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 6+7	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		11550	47.54	-26.46	74	55.46	39.05	19.25	66.22	-	-	P	H
		17325	47.68	-20.52	68.2	49.93	38.67	25.14	66.06	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE80 Full													H
CH 155		11550	46.88	-27.12	74	54.8	39.05	19.25	66.22	-	-	P	V
5775MHz		17325	47.53	-20.67	68.2	49.78	38.67	25.14	66.06	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
6+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 149 5745MHz		5650	55.45	-12.75	68.2	54.51	32.22	4.58	35.86	103	308	P	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 5650MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 68.2(dBμV/m)

= -12.75 (dB)

Peak measured complies with the limit line, so test result is “PASS”.

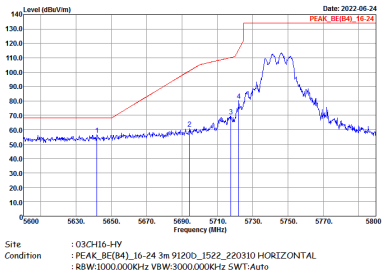
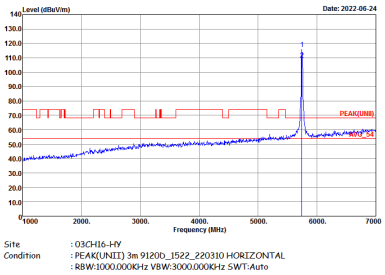
Appendix C. Radiated Spurious Emission Plots

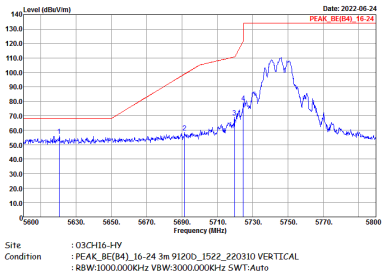
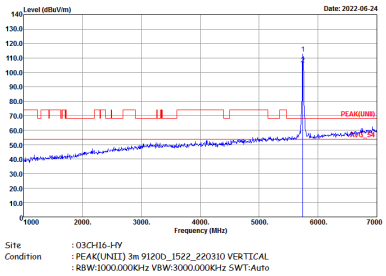
Test Engineer :	Andy Yang, Karl Hou and Steven Wu	Temperature :	20~25°C
		Relative Humidity :	50~60%

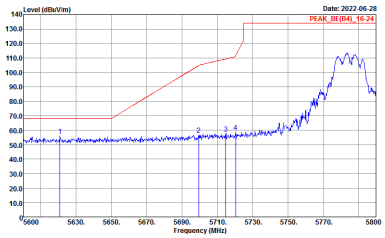
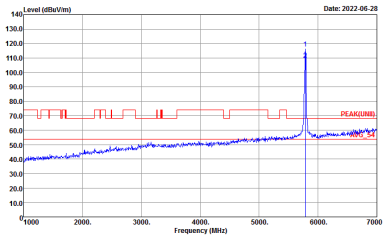
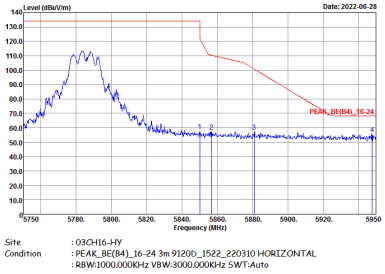
<CDD Mode>

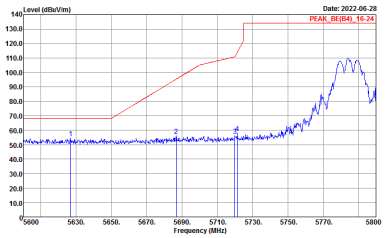
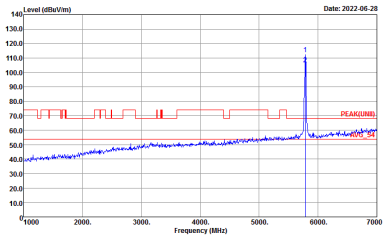
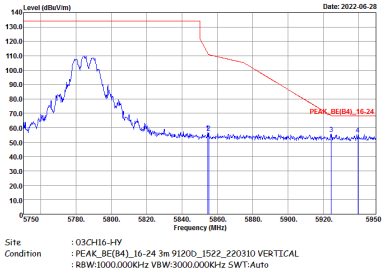
Band 4 - 5725~5850MHz

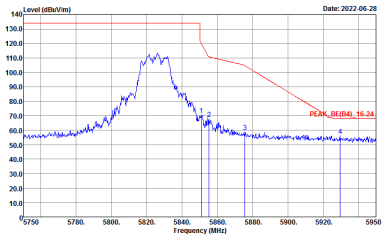
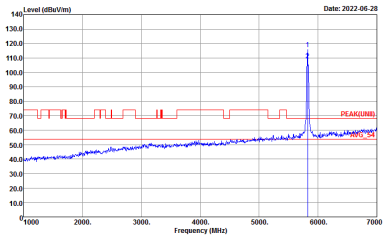
WIFI 802.11a (Band Edge @ 3m)

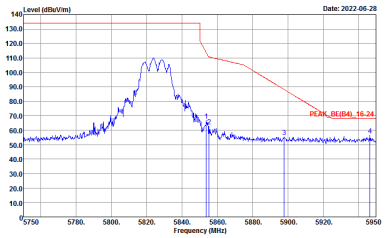
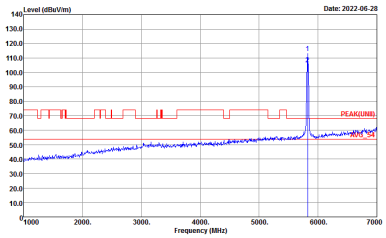
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
6+7	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH149 5745MHz	
6+7	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

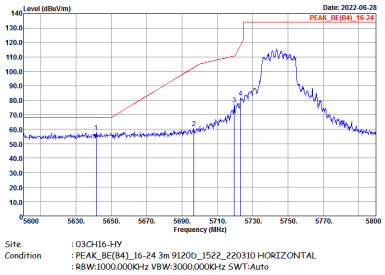
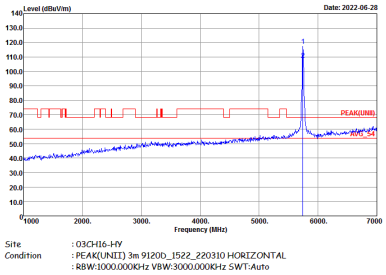
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

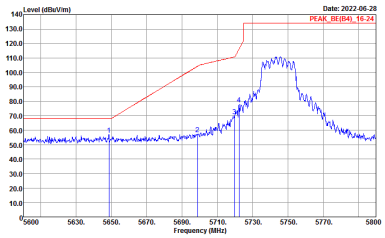
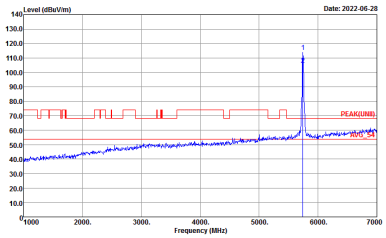
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak		

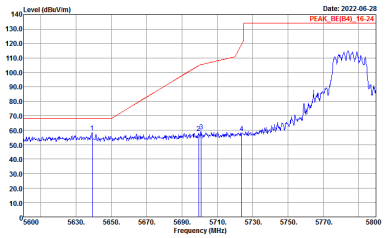
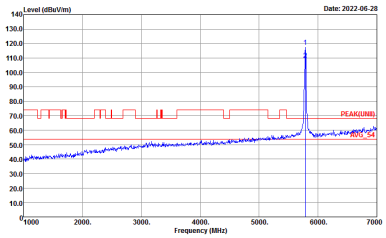
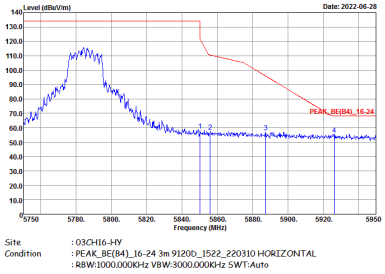
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11a CH165 5825MHz	
6+7	Vertical	Fundamental
Peak		

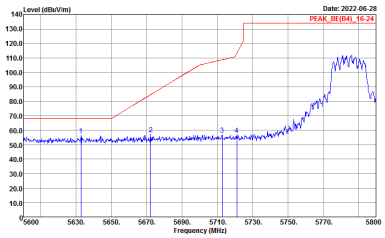
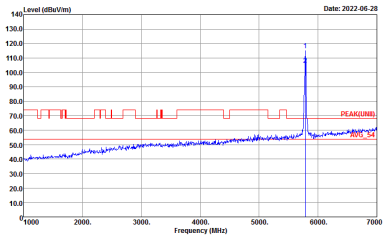
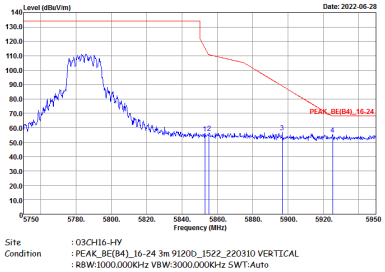
Band 4 5725~5850MHz

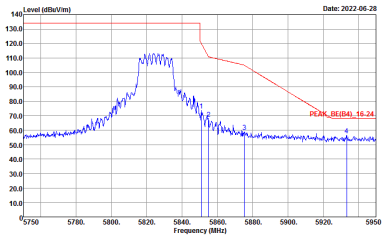
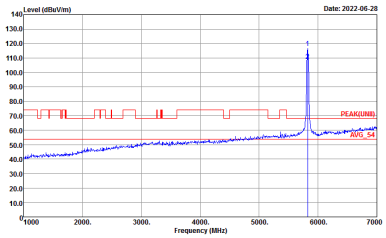
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

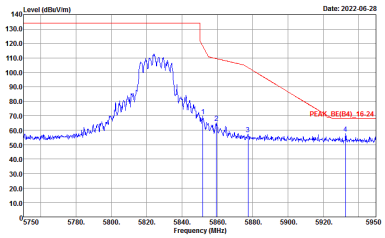
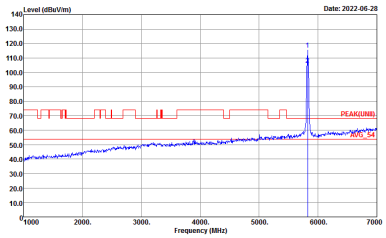
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

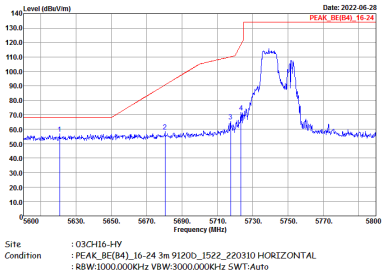
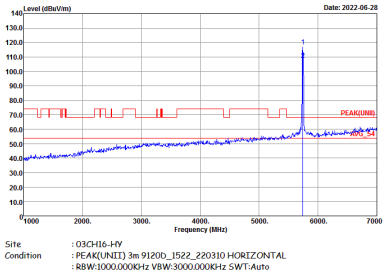
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

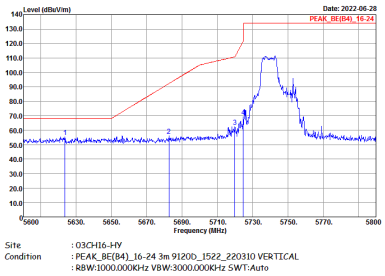
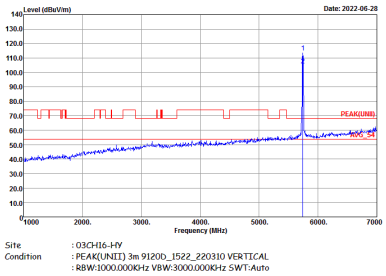
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak		

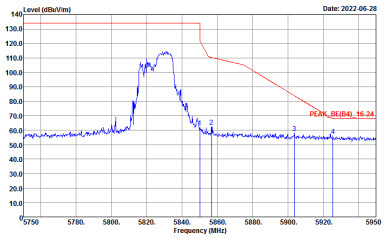
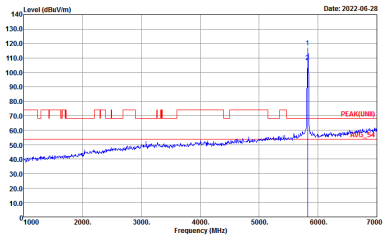
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Vertical	Fundamental
Peak		

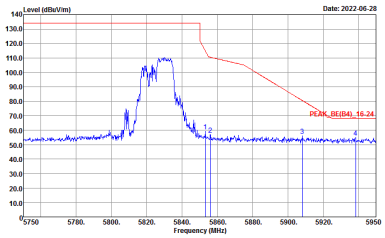
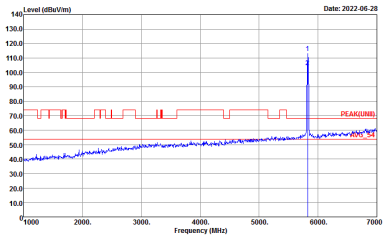
Band 4 5725~5850MHz

WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH149 5745MHz	
6+7	Horizontal	Fundamental
Peak		

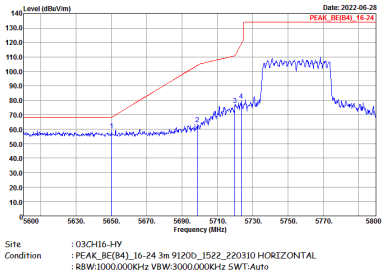
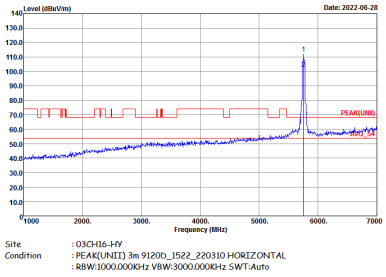
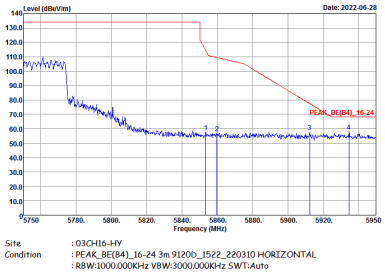
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH149 5745MHz	
6+7	Vertical	Fundamental
Peak		

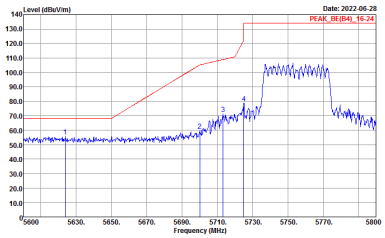
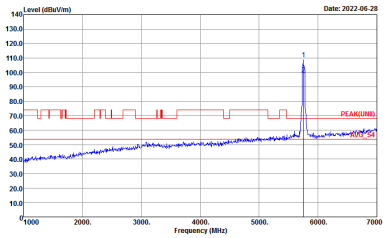
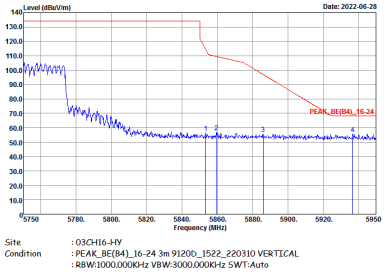
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak		

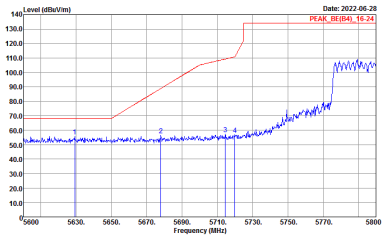
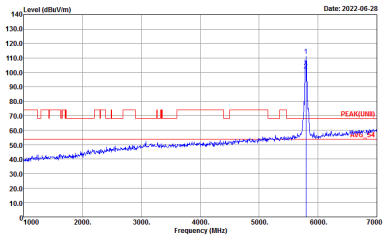
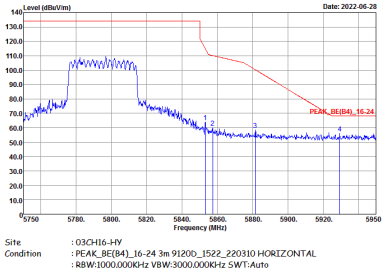
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH165 5825MHz	
6+7	Vertical	Fundamental
Peak		

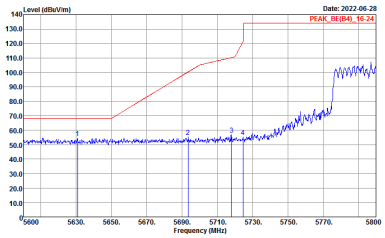
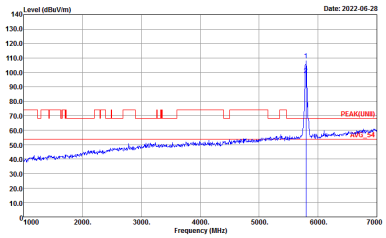
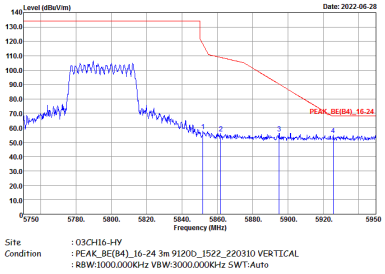
Band 4 5725~5850MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

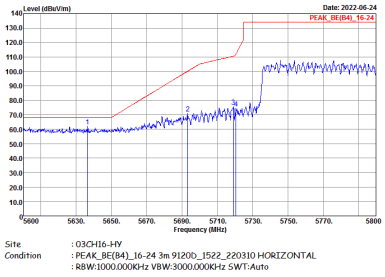
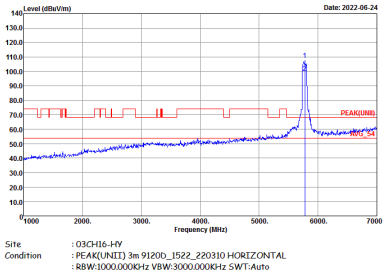
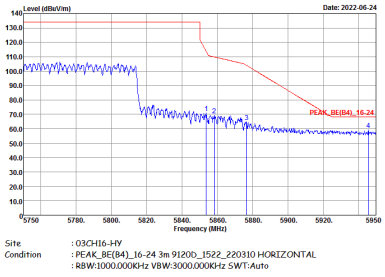
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

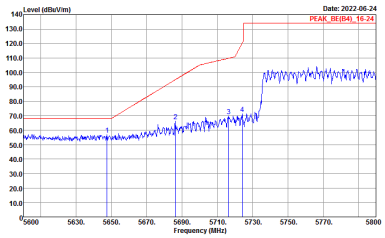
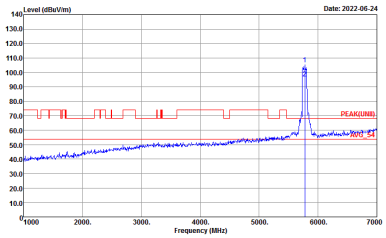
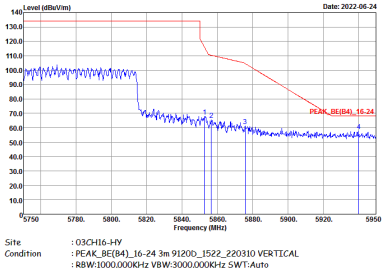
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

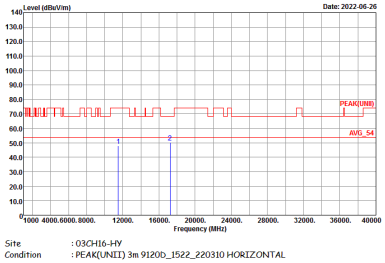
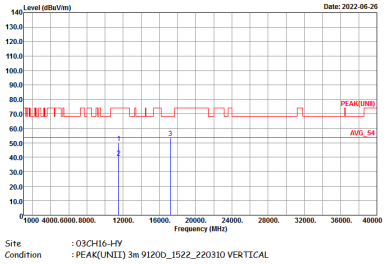
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

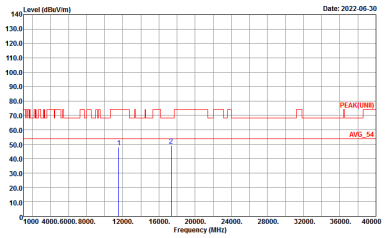
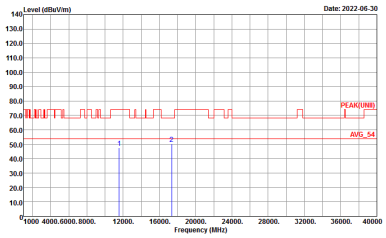
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

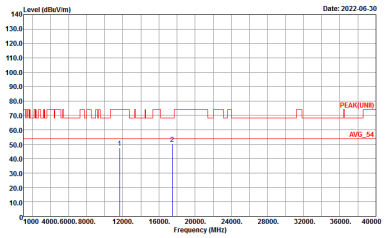
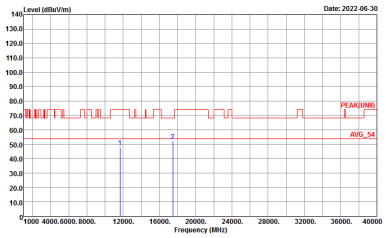
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

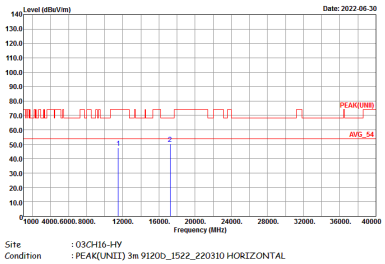
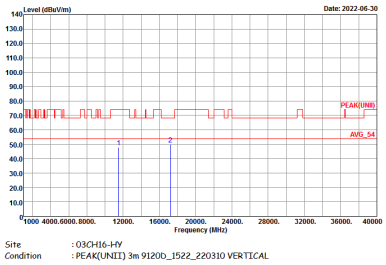
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH149 5745MHz	
6+7	Horizontal	Vertical
Peak Avg.		

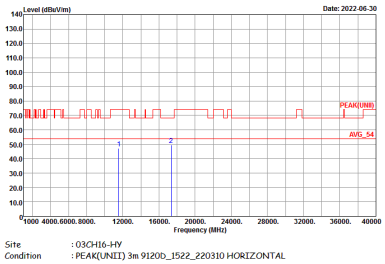
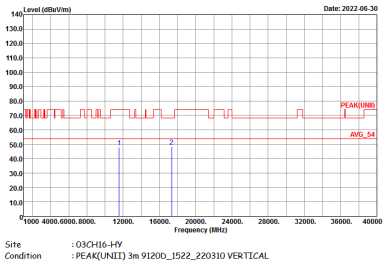
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH157 5785MHz	
6+7	Horizontal	Vertical
Peak Avg.		

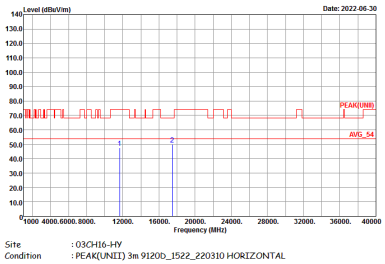
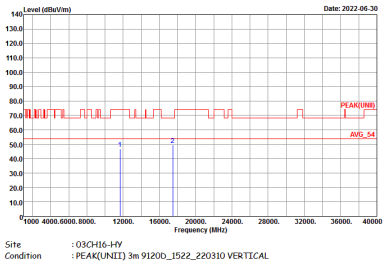
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11a CH165 5825MHz	
6+7	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

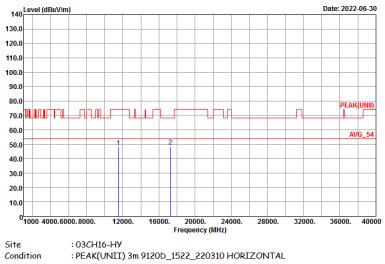
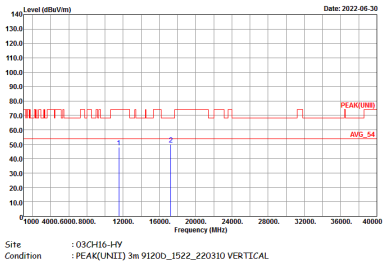
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Horizontal	Vertical
Peak Avg.		

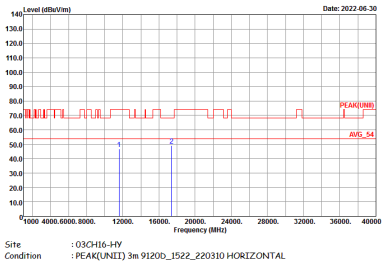
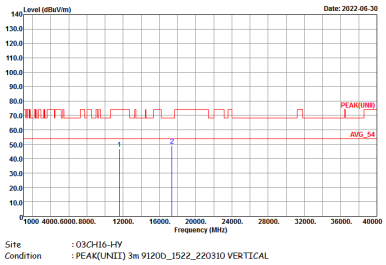
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

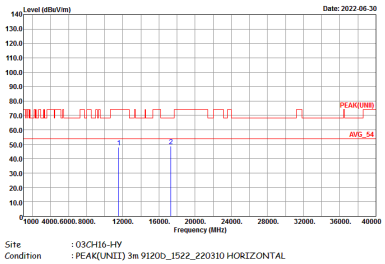
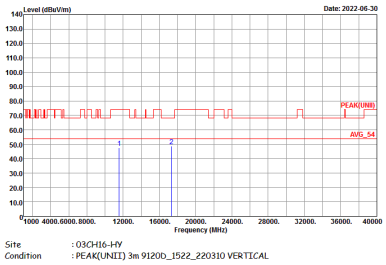
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Horizontal	Vertical
Peak Avg.		

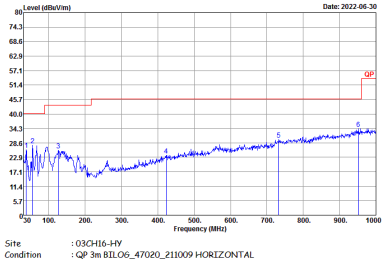
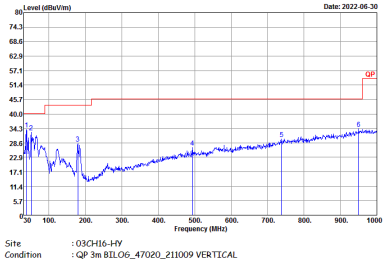
Band 4 5725~5850MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Horizontal	Vertical
Peak Avg.		

Emission below 1GHz

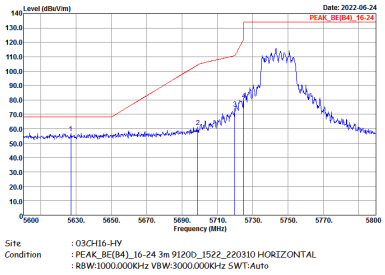
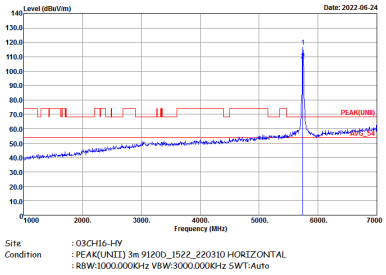
5GHz WIFI 802.11ax HE80 Full (LF @ 3m)

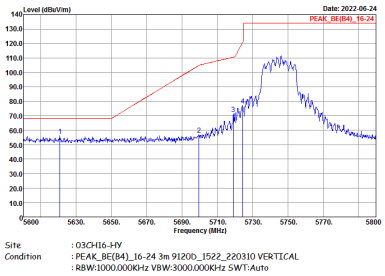
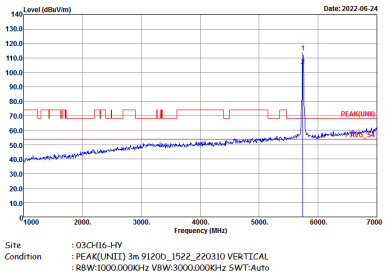
WIFI	5GHz WIFI	
ANT	802.11ax HE80 Full LF	
6+7	Horizontal	Vertical
QP / Peak		

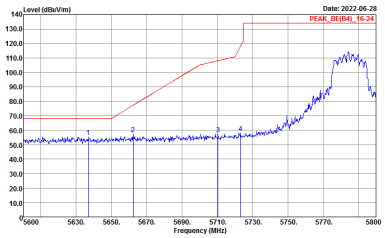
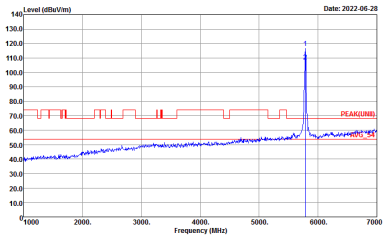
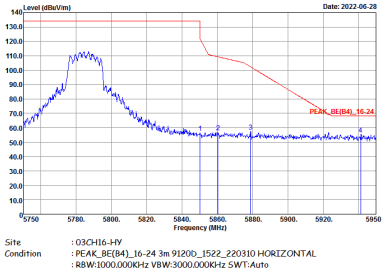
<TXBF Mode>

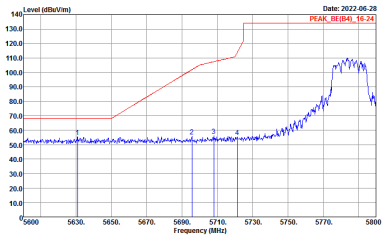
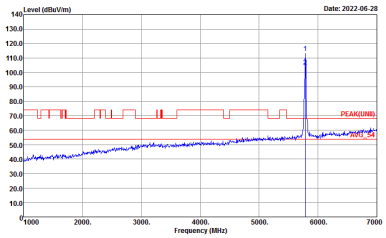
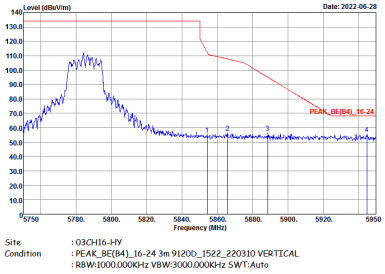
Band 4 - 5725~5850MHz

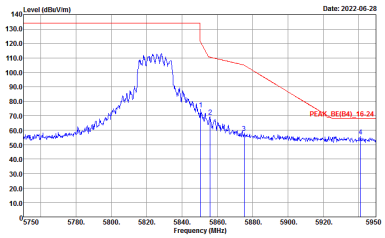
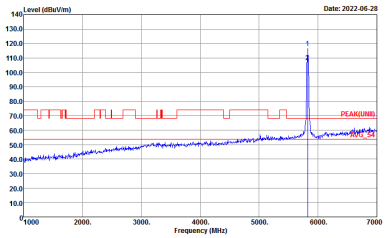
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

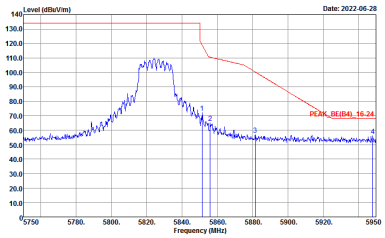
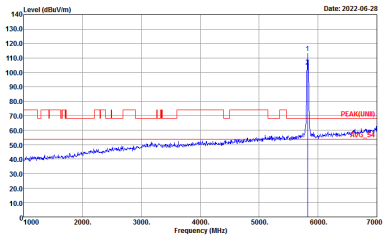
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Horizontal	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Vertical	Fundamental
Peak		

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

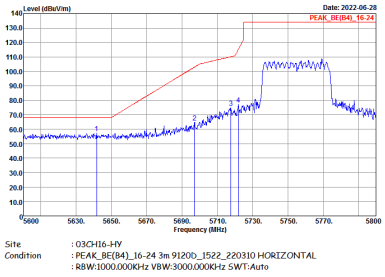
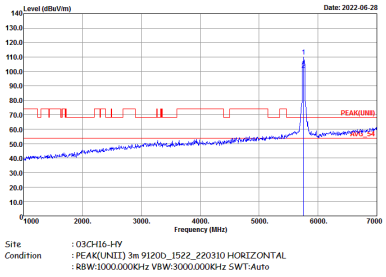
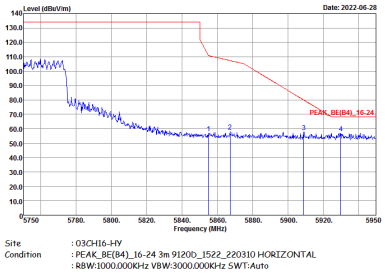
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

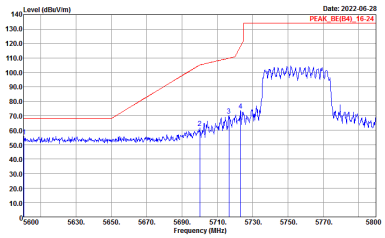
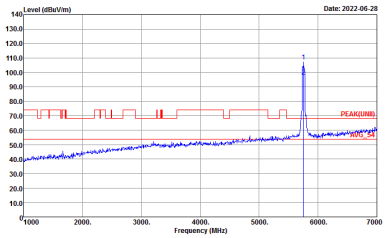
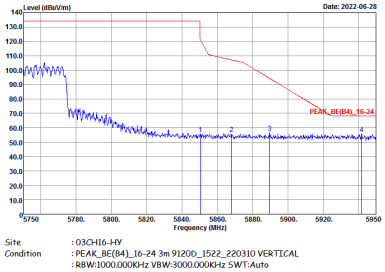
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Horizontal	Fundamental
Peak		

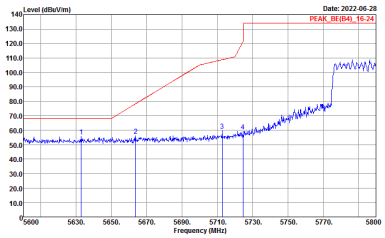
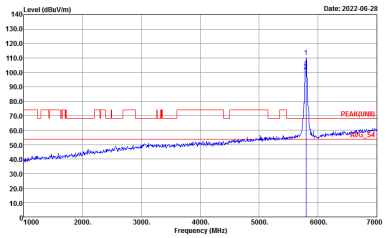
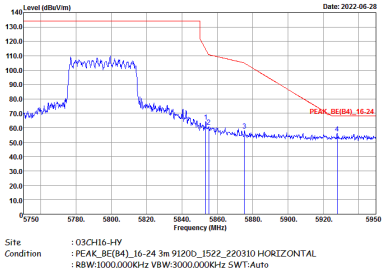
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Vertical	Fundamental
Peak		

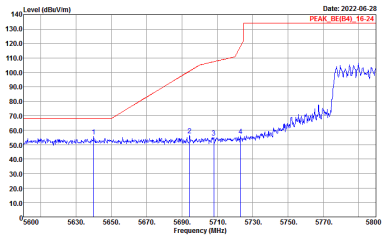
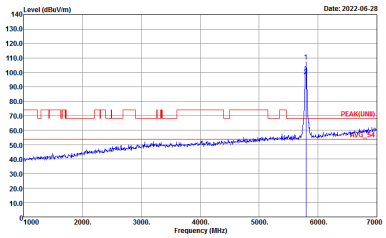
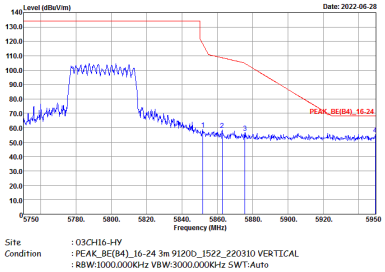
Band 4 5725~5850MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

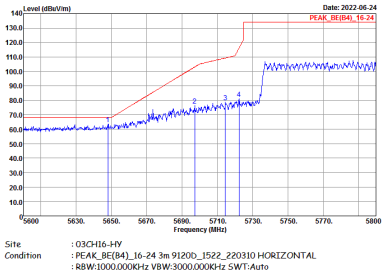
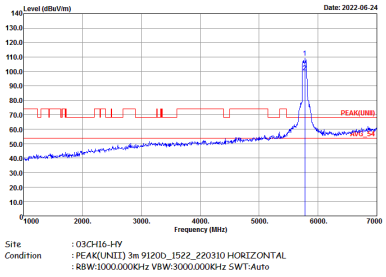
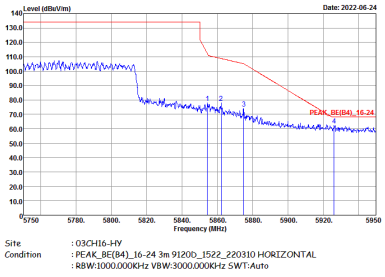
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

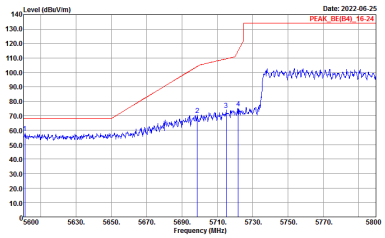
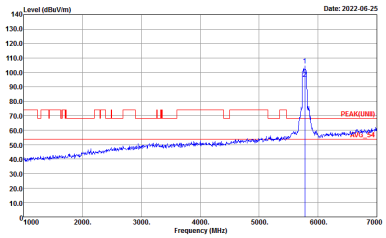
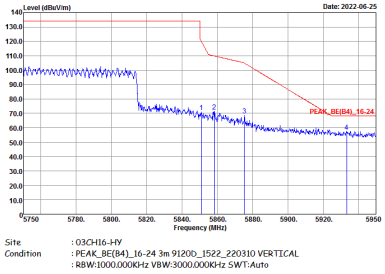
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full HT40 CH159 5795MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 5725~5850MHz

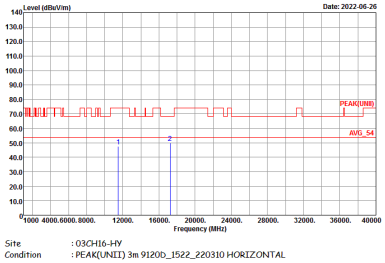
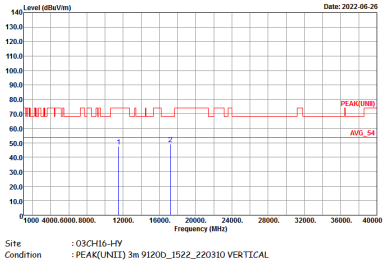
WIFI 802.11ax HE80 Full (Band Edge @ 3m)

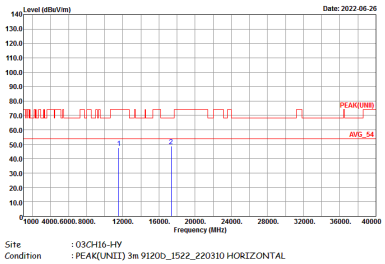
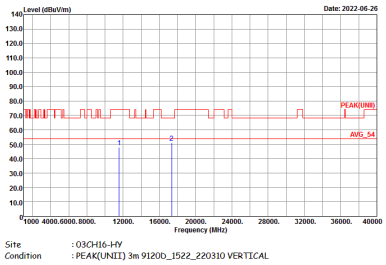
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Horizontal	Fundamental
Peak		
Peak		Left blank

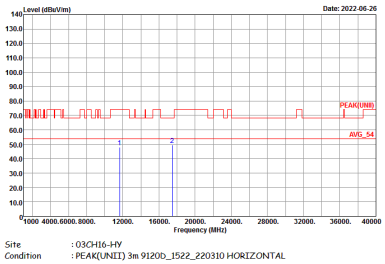
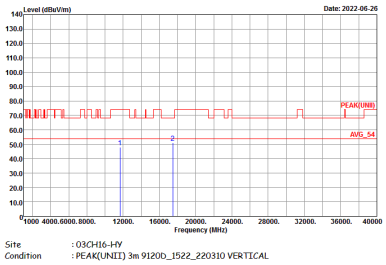
WIFI	Band 4 5725~5850MHz Band Edge @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Vertical	Fundamental
Peak		
Peak		Left blank

Band 4 - 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

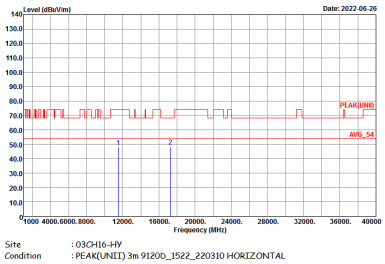
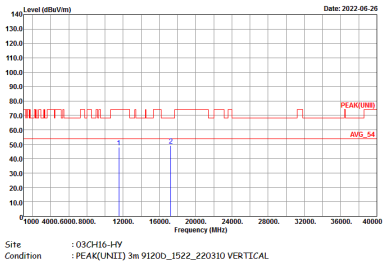
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH149 5745MHz	
6+7	Horizontal	Vertical
Peak Avg.		

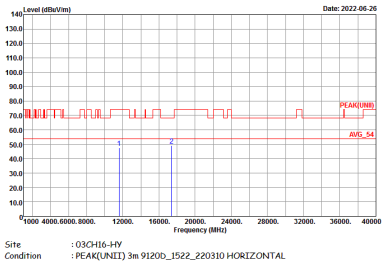
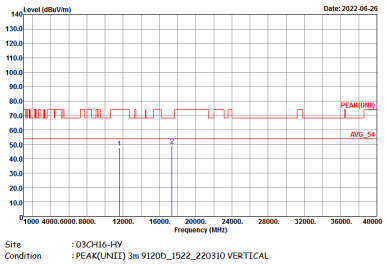
WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH157 5785MHz	
6+7	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH165 5825MHz	
6+7	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

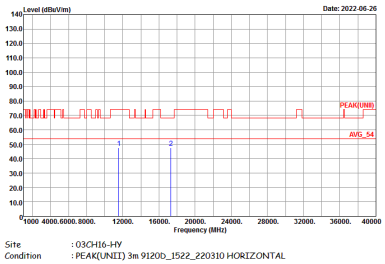
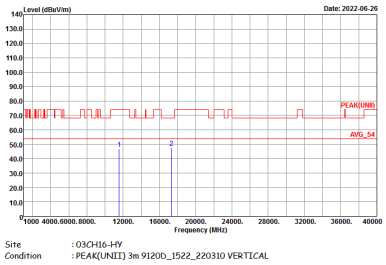
WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH151 5755MHz	
6+7	Horizontal	Vertical
Peak Avg.		

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH159 5795MHz	
6+7	Horizontal	Vertical
Peak Avg.		

Band 4 5725~5850MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI	Band 4 5725~5850MHz Harmonic @ 3m	
ANT	802.11ax HE80 Full CH155 5775MHz	
6+7	Horizontal	Vertical
Peak Avg.		

Appendix D. Duty Cycle Plots

<CDD Mode>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
6+7	5GHz 802.11a	93.46	1430	0.70	1kHz
6+7	5GHz 802.11ax HE20 Full RU	97.50	3900	0.26	300Hz
6+7	5GHz 802.11ax HE20 106 RU	99.56	-	-	10Hz
6+7	5GHz 802.11ax HE40 Full RU	95.18	1975	0.51	1kHz
6+7	5GHz 802.11ax HE80 Full RU	90.53	975	1.03	3kHz

MIMO <Ant. 6+7>

802.11a	802.11ax HE20 Full RU

802.11ax HE20 106 RU

802.11ax HE40 Full RU

802.11ax HE80 Full RU

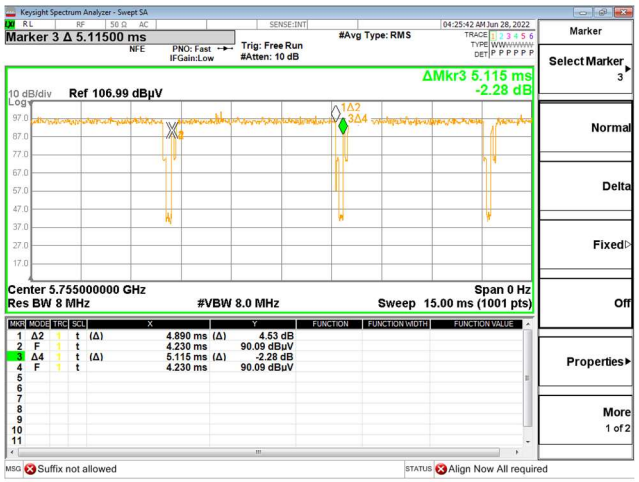
<TXBF Mode>

Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
6+7	5GHz 802.11ax HE20 Full RU	94.59	3150	0.32	1kHz
6+7	5GHz 802.11ax HE40 Full RU	95.60	4890	0.20	300Hz
6+7	5GHz 802.11ax HE80 Full RU	96.30	4680	0.21	300Hz

MIMO <Ant. 6+7>

802.11ax HE20 Full RU

802.11ax HE40 Full RU



802.11ax HE80 Full RU