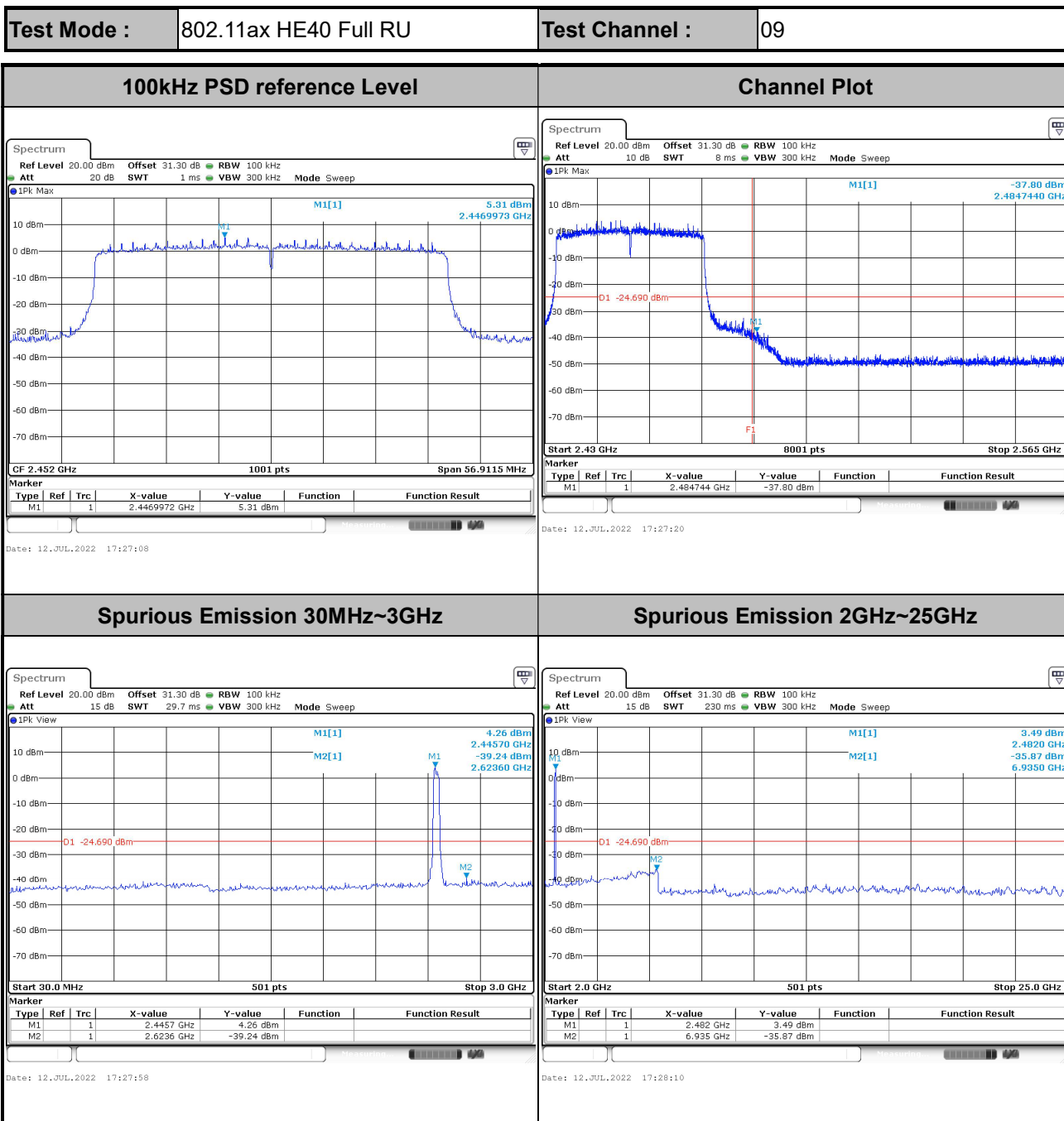




3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device is measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the limits as below.

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

3.5.2 Measuring Instruments

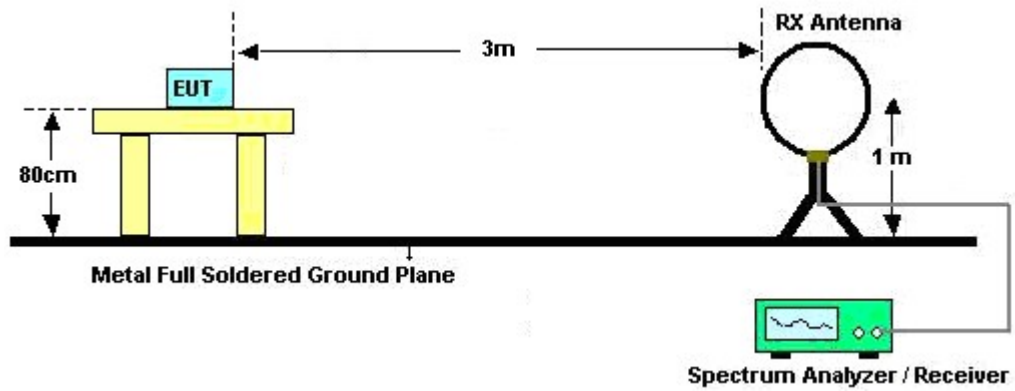
Please refer to the measuring equipment list in this test report.

3.5.3 Test Procedures

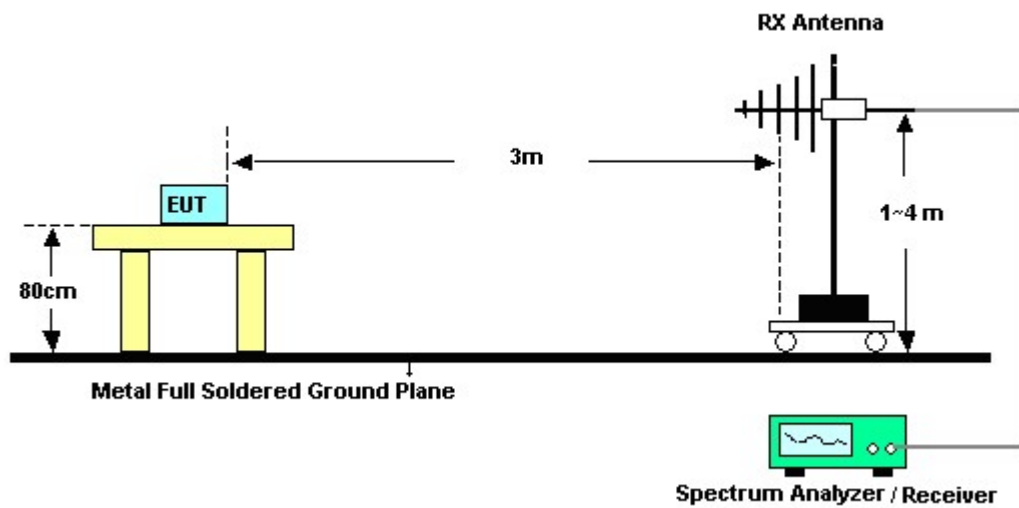
1. The testing follows the ANSI C63.10 Section 11.12.1 Radiated emission measurements.
2. The EUT is arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. 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.
4. The EUT is set 3 meters away from the receiving antenna, which is mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
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 “-”.
8. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW = 100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, VBW= 3 MHz for $f \geq 1$ GHz for peak measurement.For average measurement:
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, 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.

3.5.4 Test Setup

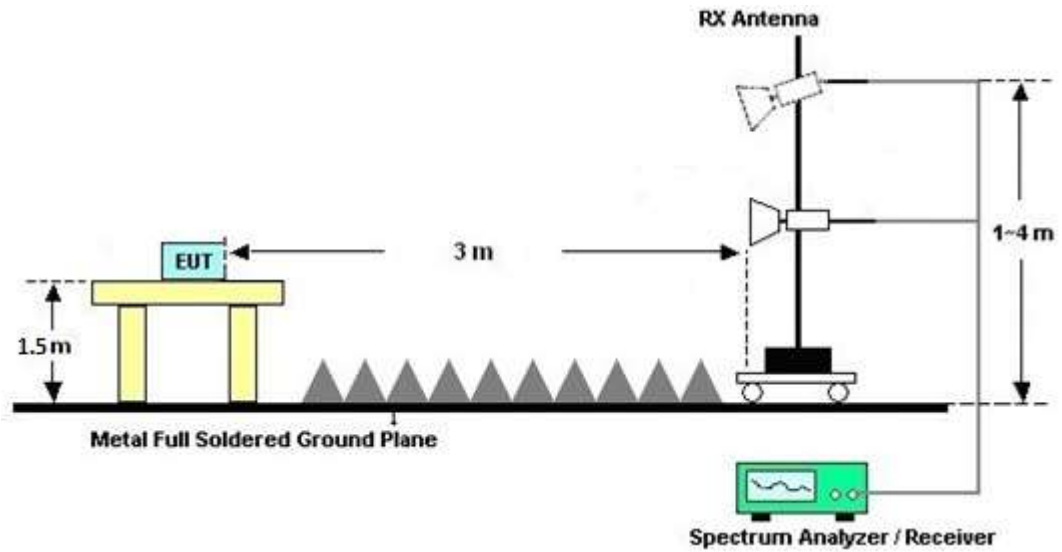
For radiated emissions below 30MHz



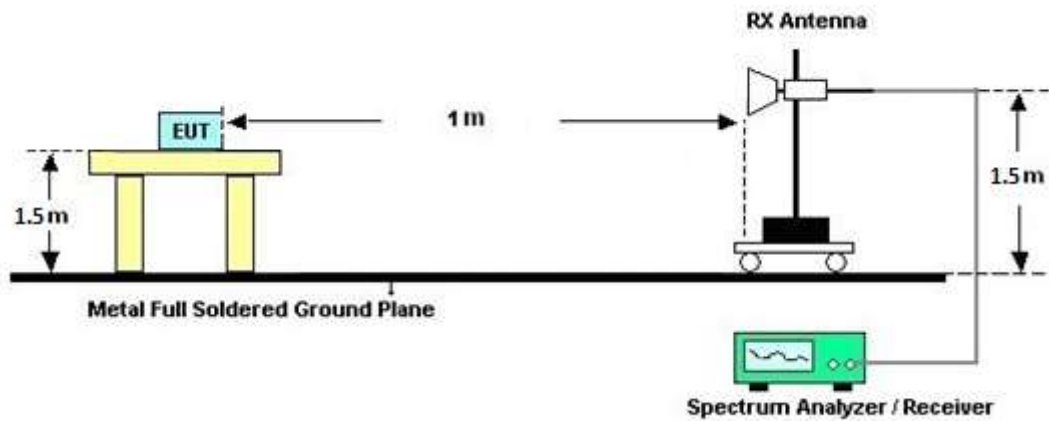
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



**3.5.5 Test Results of Radiated Spurious Emissions (9kHz ~ 30MHz)**

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 comes out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

3.5.8 Test Result of Radiated Spurious Emission (30MHz ~ 10th Harmonic)

Please refer to Appendix C and D.

3.6 AC Conducted Emission Measurement

3.6.1 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 (dB μ V)	
	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.

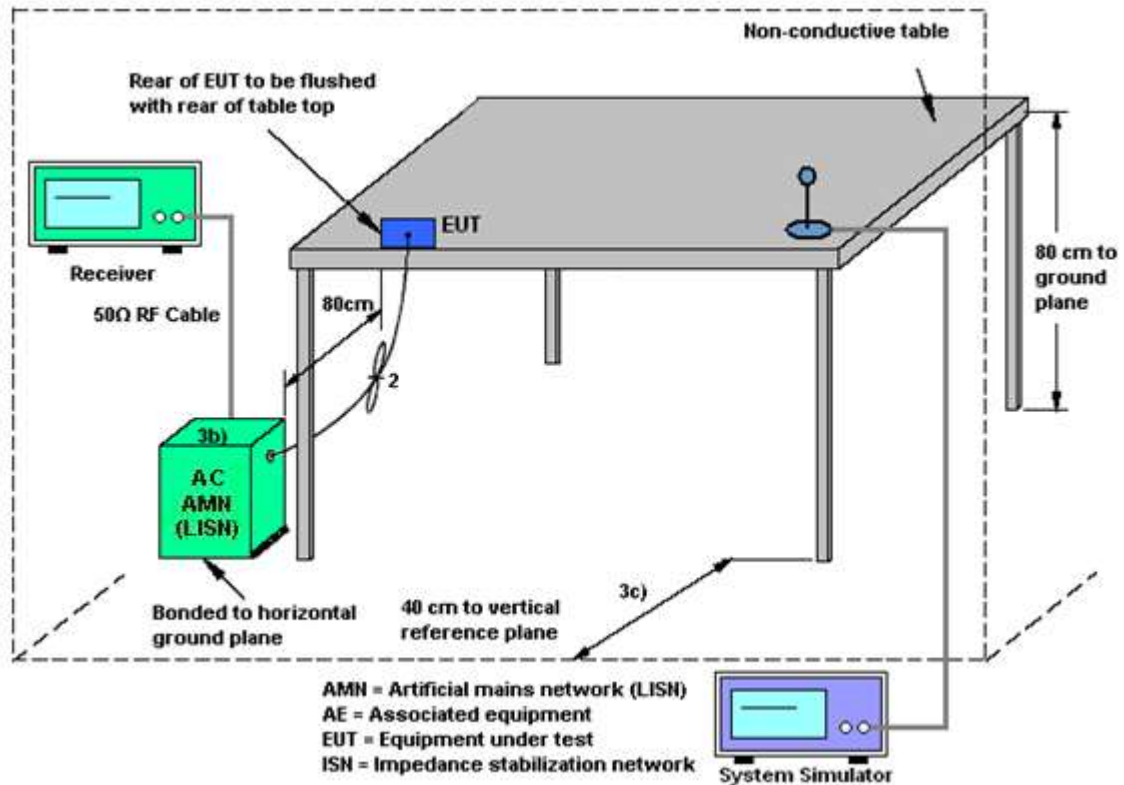
3.6.2 Measuring Instruments

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

3.6.3 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 (IF bandwidth = 9kHz) with Maximum Hold Mode.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Please refer to Appendix B.

3.7 Antenna Requirements

3.7.1 Standard Applicable

If directional gain of transmitting Antennas is greater than 6 dBi, the power shall be reduced by the same level in dB comparing to gain minus 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the rule.

3.7.2 Antenna Anti-Replacement Construction

An embedded-in antenna design is used.

3.7.3 Antenna Gain

<CDD Modes >

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 k th antenna is being fed by spatial stream j , or zero if it is not;
 G_k is the gain in dBi of the k th antenna.

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

Directional gain = $10 \cdot \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

Where $G_1, G_2, \dots, G_N$ denote single antenna gain.

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

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

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

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

	Ant. 7 (dBi)	Ant. 8 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	-0.62	-3.82	-0.62	0.94	0.00	0.00

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

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

Calculation example:

The DG for PSD is derived from formula is

$$10 \times \log \left\{ \left[10^{\frac{-0.62}{20}} + 10^{\frac{-3.82}{20}} \right]^2 \right\} / 2$$

= 0.94 dBi



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	May 13, 2022	Jun. 21, 2022~ Jul. 14, 2022	May 12, 2023	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 09, 2021	Jun. 21, 2022~ Jul. 14, 2022	Oct. 08, 2022	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	Mar. 10, 2022	Jun. 21, 2022~ Jul. 14, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA9170	00993	18GHz~40GHz	Nov. 30, 2021	Jun. 21, 2022~ Jul. 14, 2022	Nov. 29, 2022	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Dec. 10, 2021	Jun. 21, 2022~ Jul. 14, 2022	Dec. 09, 2022	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 10, 2021	Jun. 21, 2022~ Jul. 14, 2022	Nov. 09, 2022	Radiation (03CH11-HY)
Preamplifier	Jet-Power	JPA0118-55-303	17100018000 55007	1GHz~18GHz	Jun. 15, 2022	Jun. 21, 2022~ Jul. 14, 2022	Jun. 14, 2023	Radiation (03CH11-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Jun. 21, 2022~ Jul. 14, 2022	Dec. 23, 2022	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 15, 2021	Jun. 21, 2022~ Jul. 14, 2022	Oct. 14, 2022	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY55420170	20MHz~8.4GHz	Jul. 15, 2021	Jun. 21, 2022~ Jul. 13, 2022	Jul. 14, 2022	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A(MXE)	MY57290111	20MHz~8.4GHz	Dec. 15, 2021	Jul. 14, 2022	Dec. 14, 2022	Radiation (03CH11-HY)
Controller	EMEC	EM 1000	N/A	Control Turn table & Ant Mast	N/A	Jun. 21, 2022~ Jul. 14, 2022	N/A	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Jun. 21, 2022~ Jul. 14, 2022	N/A	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0~360 Degree	N/A	Jun. 21, 2022~ Jul. 14, 2022	N/A	Radiation (03CH11-HY)
Software	Audix	E3 6.2009-8-24	RK-001053	N/A	N/A	Jun. 21, 2022~ Jul. 14, 2022	N/A	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2859/2	30MHz-40GHz	Mar. 10, 2022	Jun. 21, 2022~ Jul. 14, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	9kHz-30MHz	Mar. 10, 2022	Jun. 21, 2022~ Jul. 14, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4PE	30MHz-18GHz	Mar. 10, 2022	Jun. 21, 2022~ Jul. 14, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	811852/4	30MHz-18GHz	Mar. 10, 2022	Jun. 21, 2022~ Jul. 14, 2022	Mar. 09, 2023	Radiation (03CH11-HY)
Filter	Wainwright	WLK4-1000-153 0-8000-40SS	SN11	1.53G Low Pass	Sep. 13, 2021	Jun. 21, 2022~ Jul. 14, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-2700-3 000-18000-60SS	SN3	3GHz High Pass Filter	Sep. 13, 2021	Jun. 21, 2022~ Jul. 14, 2022	Sep. 12, 2022	Radiation (03CH11-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Filter	Wainwright	WHKX8-5872.5-6750-18000-40SS	SN3	6.75GHz High Pass Filter	Sep. 13, 2021	Jun. 21, 2022~Jul. 14, 2022	Sep. 12, 2022	Radiation (03CH11-HY)
Filter	Wainwright	WHKX12-900-1000-15000-60SS	SN12	1GHz High Pass Filter	Nov. 04, 2021	Jun. 21, 2022~Jul. 14, 2022	Nov. 03, 2022	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP140325	N/A	Nov. 26, 2021	Jun. 21, 2022~Jul. 14, 2022	Nov. 25, 2022	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303B	TP200880	N/A	Sep. 30, 2021	Jun. 21, 2022~Jul. 14, 2022	Sep. 29, 2022	Radiation (03CH11-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	May 28, 2022~Jul. 13, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	16I00054SNO12 (NO:113)	10MHz~6GHz	Dec. 16, 2021	May 28, 2022~Jul. 13, 2022	Dec. 15, 2022	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	846202	300MHz~40GHz	Sep. 30, 2021	May 28, 2022~Jul. 13, 2022	Sep. 29, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101566	10Hz~40GHz	Aug. 30, 2021	May 28, 2022~Jul. 13, 2022	Aug. 29, 2022	Conducted (TH05-HY)
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	May 29, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	May 29, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	May 29, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	May 29, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	May 29, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-FN	00691	N/A	Jul. 28, 2021	May 29, 2022	Jul. 27, 2022	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	May 29, 2022	Dec. 29, 2022	Conduction (CO05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.1 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.8 dB
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Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.4 dB
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Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.9 dB
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Appendix A. Test Result of Conducted Test Items

Test Engineer:	Ching Chen/Mina Liu	Temperature:	21~25	°C
Test Date:	2022/5/28~2022/07/13	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band MIMO										
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
					Ant7	Ant8	Ant7	Ant8		
11b	1Mbps	2	1	2412	13.24	13.29	7.64	8.12	0.50	Pass
11b	1Mbps	2	6	2437	13.69	13.59	8.56	8.08	0.50	Pass
11b	1Mbps	2	11	2462	13.49	13.29	8.12	8.14	0.50	Pass
11g	6Mbps	2	1	2412	17.18	17.23	15.99	15.97	0.50	Pass
11g	6Mbps	2	6	2437	18.13	18.13	16.35	16.35	0.50	Pass
11g	6Mbps	2	11	2462	17.18	17.28	16.35	16.37	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band MIMO																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant7	Ant8	SUM	Ant7	Ant8	Ant7	Ant8	Ant7	Ant8	Ant7	Ant8	
11b	1Mbps	2	1	2412	20.90	20.40	23.67	30.00		-0.62		23.05		36.00		Pass
11b	1Mbps	2	6	2437	21.00	20.20	23.63	30.00		-0.62		23.01		36.00		Pass
11b	1Mbps	2	11	2462	20.90	20.10	23.53	30.00		-0.62		22.91		36.00		Pass
11g	6Mbps	2	1	2412	20.30	19.90	23.11	30.00		-0.62		22.49		36.00		Pass
11g	6Mbps	2	6	2437	21.00	20.70	23.86	30.00		-0.62		23.24		36.00		Pass
11g	6Mbps	2	11	2462	19.00	19.10	22.06	30.00		-0.62		21.44		36.00		Pass
HT20	MCS0	2	1	2412	19.10	18.90	22.01	30.00		-0.62		21.39		36.00		Pass
HT20	MCS0	2	6	2437	20.80	20.50	23.66	30.00		-0.62		23.04		36.00		Pass
HT20	MCS0	2	11	2462	18.90	18.90	21.91	30.00		-0.62		21.29		36.00		Pass
HT40	MCS0	2	3	2422	20.90	20.40	23.67	30.00		-0.62		23.05		36.00		Pass
HT40	MCS0	2	6	2437	20.90	20.70	23.81	30.00		-0.62		23.19		36.00		Pass
HT40	MCS0	2	9	2452	18.20	18.30	21.26	30.00		-0.62		20.64		36.00		Pass
VHT20	MCS0	2	1	2412	19.10	18.90	22.01	30.00		-0.62		21.39		36.00		Pass
VHT20	MCS0	2	6	2437	20.80	20.50	23.66	30.00		-0.62		23.04		36.00		Pass
VHT20	MCS0	2	11	2462	18.90	18.90	21.91	30.00		-0.62		21.29		36.00		Pass
VHT40	MCS0	2	3	2422	20.90	20.40	23.67	30.00		-0.62		23.05		36.00		Pass
VHT40	MCS0	2	6	2437	20.90	20.70	23.81	30.00		-0.62		23.19		36.00		Pass
VHT40	MCS0	2	9	2452	18.20	18.30	21.26	30.00		-0.62		20.64		36.00		Pass

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band MIMO												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant7	Ant8	Worse + 3.01	Ant7	Ant8	Ant7	Ant8	
11b	1Mbps	2	1	2412	-2.98	-3.81	0.03	0.94		8.00		Pass
11b	1Mbps	2	6	2437	-2.39	-3.18	0.62	0.94		8.00		Pass
11b	1Mbps	2	11	2462	-2.50	-3.95	0.51	0.94		8.00		Pass
11g	6Mbps	2	1	2412	-6.08	-6.43	-3.07	0.94		8.00		Pass
11g	6Mbps	2	6	2437	-5.85	-5.77	-2.76	0.94		8.00		Pass
11g	6Mbps	2	11	2462	-7.08	-7.18	-4.07	0.94		8.00		Pass

Measured power density (dBm) has offset with cable loss.

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band MIMO											
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config	99% Occupied BW (MHz)		6dB BW (MHz)		6dB BW Limit (MHz)	Pass/Fail
						Ant7	Ant8	Ant7	Ant8		
HE20	MCS0	2	1	2412	Full	19.38	19.48	18.82	18.69	0.50	Pass
HE20	MCS0	2	6	2437	Full	19.98	20.03	19.02	18.77	0.50	Pass
HE20	MCS0	2	11	2462	Full	19.43	19.58	18.72	18.89	0.50	Pass
HE40	MCS0	2	3	2422	Full	38.26	38.26	37.66	37.46	0.50	Pass
HE40	MCS0	2	6	2437	Full	38.36	38.46	37.74	37.94	0.50	Pass
HE40	MCS0	2	9	2452	Full	37.86	37.96	37.66	37.94	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band MIMO																	
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant7	Ant8	SUM	Ant7	Ant8	Ant7	Ant8	Ant7	Ant8	Ant7	Ant8	
HE20	MCS0	2	1	2412	Full	19.20	19.00	22.11	30.00		-0.62		21.49		36.00		Pass
HE20	MCS0	2	1	2412	26/0	9.30	9.40	12.36	30.00		-0.62		11.74		36.00		Pass
HE20	MCS0	2	1	2412	52/37	12.00	12.40	15.21	30.00		-0.62		14.59		36.00		Pass
HE20	MCS0	2	1	2412	106/53	16.00	16.00	19.01	30.00		-0.62		18.39		36.00		Pass
HE20	MCS0	2	1	2412	242/61	18.40	18.30	21.36	30.00		-0.62		20.74		36.00		Pass
HE20	MCS0	2	6	2437	Full	20.90	20.60	23.76	30.00		-0.62		23.14		36.00		Pass
HE20	MCS0	2	6	2437	26/4	10.90	10.40	13.67	30.00		-0.62		13.05		36.00		Pass
HE20	MCS0	2	6	2437	52/39	13.50	13.90	16.71	30.00		-0.62		16.09		36.00		Pass
HE20	MCS0	2	6	2437	106/53	16.70	16.40	19.56	30.00		-0.62		18.94		36.00		Pass
HE20	MCS0	2	6	2437	242/61	20.20	20.10	23.16	30.00		-0.62		22.54		36.00		Pass
HE20	MCS0	2	11	2462	Full	19.00	19.00	22.01	30.00		-0.62		21.39		36.00		Pass
HE20	MCS0	2	11	2462	26/8	8.70	9.10	11.91	30.00		-0.62		11.29		36.00		Pass
HE20	MCS0	2	11	2462	52/40	11.60	12.30	14.97	30.00		-0.62		14.35		36.00		Pass
HE20	MCS0	2	11	2462	106/54	15.30	15.50	18.41	30.00		-0.62		17.79		36.00		Pass
HE20	MCS0	2	11	2462	242/61	18.30	18.10	21.21	30.00		-0.62		20.59		36.00		Pass
HE40	MCS0	2	3	2422	Full	21.00	20.50	23.77	30.00		-0.62		23.15		36.00		Pass
HE40	MCS0	2	3	2422	242/61	18.60	18.20	21.41	30.00		-0.62		20.79		36.00		Pass
HE40	MCS0	2	3	2422	484/65	18.40	18.00	21.21	30.00		-0.62		20.59		36.00		Pass
HE40	MCS0	2	6	2437	Full	21.00	20.80	23.91	30.00		-0.62		23.29		36.00		Pass
HE40	MCS0	2	6	2437	242/61	18.50	18.00	21.27	30.00		-0.62		20.65		36.00		Pass
HE40	MCS0	2	6	2437	484/65	20.70	20.60	23.66	30.00		-0.62		23.04		36.00		Pass
HE40	MCS0	2	9	2452	Full	18.30	18.40	21.36	30.00		-0.62		20.74		36.00		Pass
HE40	MCS0	2	9	2452	242/62	16.80	16.40	19.61	30.00		-0.62		18.99		36.00		Pass
HE40	MCS0	2	9	2452	484/65	17.10	17.00	20.06	30.00		-0.62		19.44		36.00		Pass

Note: Measured power (dBm) has offset with cable loss.

TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band MIMO													
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
						Ant7	Ant8	Worse + 3.01	Ant7	Ant8	Ant7	Ant8	
HE20	MCS0	2	1	2412	Full	-6.51	-6.75	-3.50	0.94		8.00		Pass
HE20	MCS0	2	1	2412	26/0	-6.90	-6.87	-3.86	0.94		8.00		Pass
HE20	MCS0	2	1	2412	52/37	-6.82	-7.14	-3.81	0.94		8.00		Pass
HE20	MCS0	2	1	2412	106/53	-6.69	-7.01	-3.68	0.94		8.00		Pass
HE20	MCS0	2	1	2412	242/61	-6.96	-7.30	-3.95	0.94		8.00		Pass
HE20	MCS0	2	6	2437	Full	-5.35	-5.65	-2.34	0.94		8.00		Pass
HE20	MCS0	2	6	2437	26/4	-5.49	-6.01	-2.48	0.94		8.00		Pass
HE20	MCS0	2	6	2437	52/39	-5.54	-5.63	-2.53	0.94		8.00		Pass
HE20	MCS0	2	6	2437	106/53	-5.78	-5.69	-2.68	0.94		8.00		Pass
HE20	MCS0	2	6	2437	242/61	-5.62	-5.81	-2.61	0.94		8.00		Pass
HE20	MCS0	2	11	2462	Full	-7.27	-7.69	-4.26	0.94		8.00		Pass
HE20	MCS0	2	11	2462	26/8	-7.46	-7.96	-4.45	0.94		8.00		Pass
HE20	MCS0	2	11	2462	52/40	-7.81	-7.93	-4.80	0.94		8.00		Pass
HE20	MCS0	2	11	2462	106/54	-7.42	-7.72	-4.41	0.94		8.00		Pass
HE20	MCS0	2	11	2462	242/61	-7.79	-7.86	-4.78	0.94		8.00		Pass
HE40	MCS0	2	3	2422	Full	-7.84	-7.71	-4.70	0.94		8.00		Pass
HE40	MCS0	2	3	2422	242/61	-7.93	-7.72	-4.71	0.94		8.00		Pass
HE40	MCS0	2	3	2422	484/65	-10.60	-10.86	-7.59	0.94		8.00		Pass
HE40	MCS0	2	6	2437	Full	-8.01	-7.82	-4.81	0.94		8.00		Pass
HE40	MCS0	2	6	2437	242/61	-8.33	-7.83	-4.82	0.94		8.00		Pass
HE40	MCS0	2	6	2437	484/65	-8.39	-8.27	-5.26	0.94		8.00		Pass
HE40	MCS0	2	9	2452	Full	-9.93	-9.54	-6.53	0.94		8.00		Pass
HE40	MCS0	2	9	2452	242/62	-10.20	-9.70	-6.69	0.94		8.00		Pass
HE40	MCS0	2	9	2452	484/65	-11.35	-11.04	-8.03	0.94		8.00		Pass

Measured power density (dBm) has offset with cable loss.



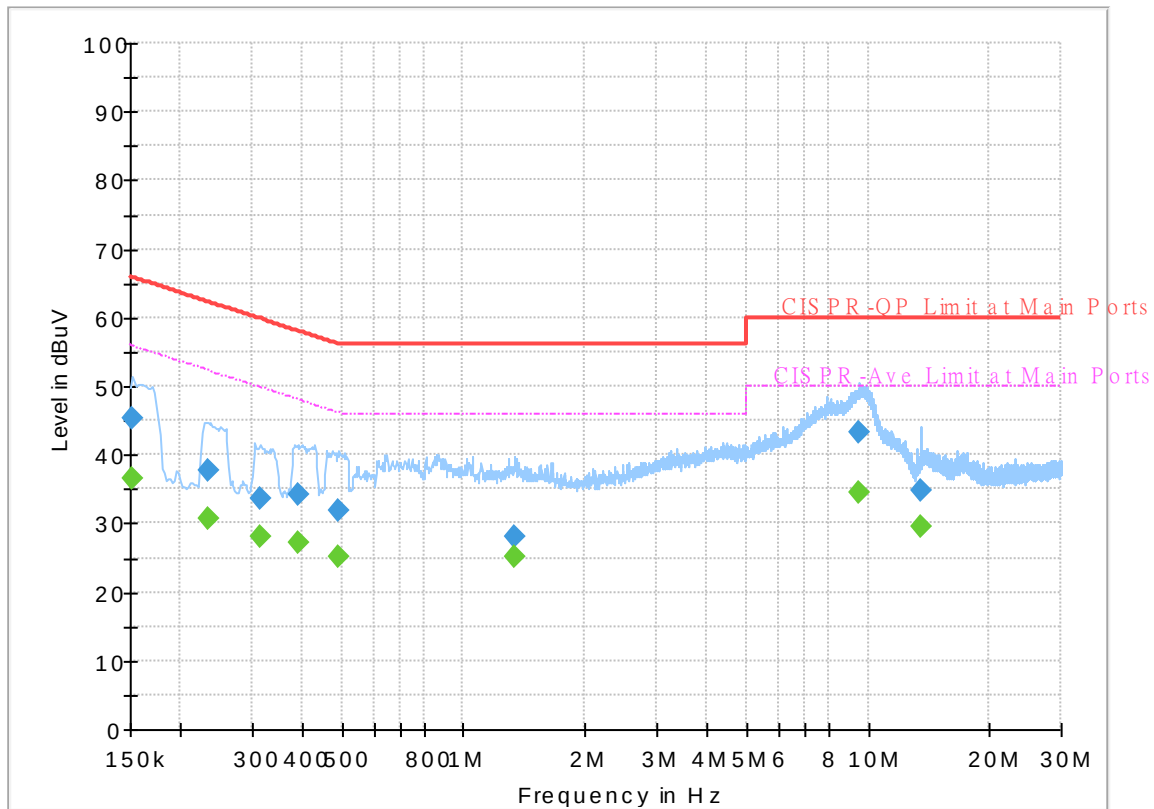
Appendix B. AC Conducted Emission Test Results

Test Engineer :	Howard Huang	Temperature :	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO : 210409
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Line

Full Spectrum



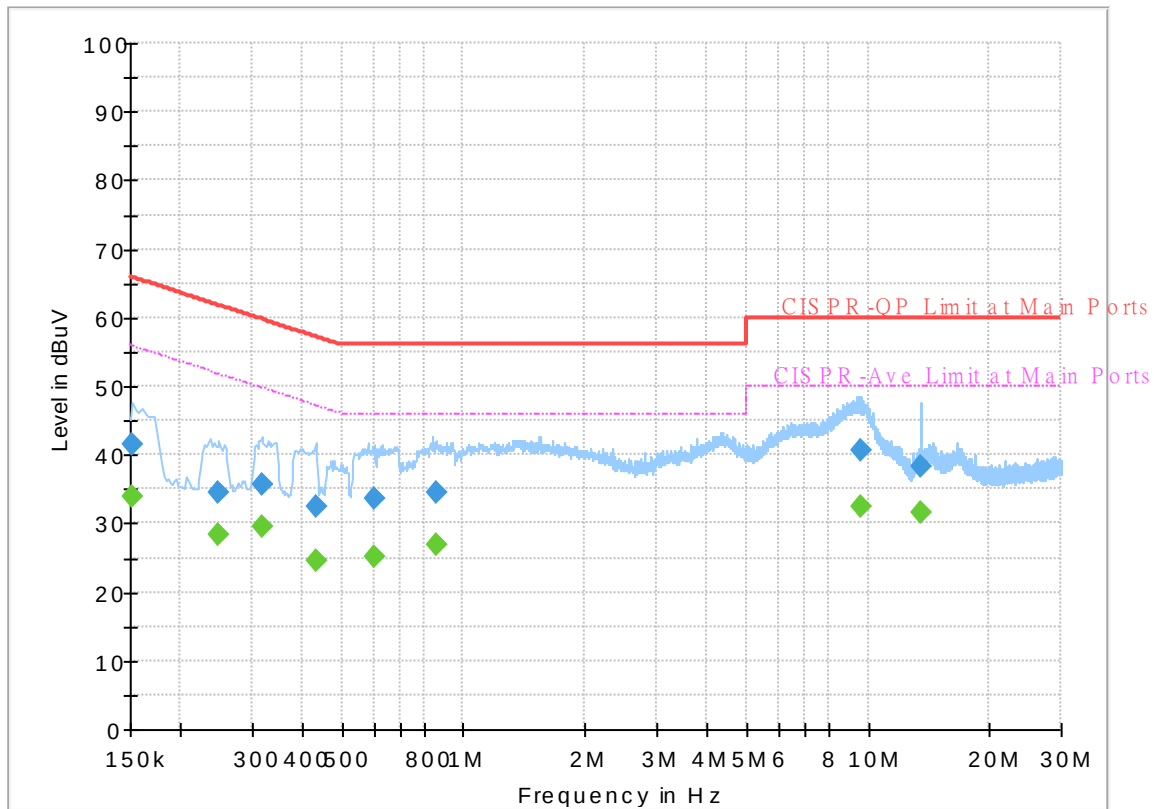
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	36.49	55.88	19.39	L1	OFF	19.6
0.152250	45.29	---	65.88	20.59	L1	OFF	19.6
0.233250	---	30.59	52.33	21.74	L1	OFF	19.6
0.233250	37.82	---	62.33	24.51	L1	OFF	19.6
0.314250	---	28.09	49.86	21.77	L1	OFF	19.6
0.314250	33.48	---	59.86	26.38	L1	OFF	19.6
0.388500	---	27.14	48.10	20.96	L1	OFF	19.6
0.388500	34.24	---	58.10	23.86	L1	OFF	19.6
0.492000	---	25.14	46.13	20.99	L1	OFF	19.6
0.492000	31.77	---	56.13	24.36	L1	OFF	19.6
1.338000	---	25.07	46.00	20.93	L1	OFF	19.7
1.338000	28.11	---	56.00	27.89	L1	OFF	19.7
9.543750	---	34.63	50.00	15.37	L1	OFF	20.0
9.543750	43.35	---	60.00	16.65	L1	OFF	20.0
13.560000	---	29.44	50.00	20.56	L1	OFF	20.2
13.560000	34.77	---	60.00	25.23	L1	OFF	20.2

EUT Information

Report NO : 210409
Test Mode : Mode 1
Test Voltage : 120Vac/60Hz
Phase : Neutral

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	33.83	55.88	22.05	N	OFF	19.6
0.152250	41.64	---	65.88	24.24	N	OFF	19.6
0.249000	---	28.29	51.79	23.50	N	OFF	19.6
0.249000	34.39	---	61.79	27.40	N	OFF	19.6
0.316500	---	29.54	49.80	20.26	N	OFF	19.6
0.316500	35.65	---	59.80	24.15	N	OFF	19.6
0.431250	---	24.65	47.23	22.58	N	OFF	19.6
0.431250	32.52	---	57.23	24.71	N	OFF	19.6
0.600000	---	25.12	46.00	20.88	N	OFF	19.6
0.600000	33.57	---	56.00	22.43	N	OFF	19.6
0.854250	---	26.77	46.00	19.23	N	OFF	19.6
0.854250	34.39	---	56.00	21.61	N	OFF	19.6
9.642750	---	32.51	50.00	17.49	N	OFF	20.1
9.642750	40.63	---	60.00	19.37	N	OFF	20.1
13.560000	---	31.56	50.00	18.44	N	OFF	20.2
13.560000	38.43	---	60.00	21.57	N	OFF	20.2



Appendix C. Radiated Spurious Emission

Test Engineer :	Daniel Lee, Fu Chen, Troye Hsieh	Temperature :	20.1~21.6°C
		Relative Humidity :	56.5~66.9%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Margin	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
7+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2336.67	52.64	-21.36	74	42.08	27.3	17.22	33.96	100	275	P	H
		2389.905	41.85	-12.15	54	31.05	27.46	17.29	33.95	100	275	A	H
	*	2412	110.97	-	-	100.04	27.55	17.32	33.94	100	275	P	H
	*	2412	107.63	-	-	96.7	27.55	17.32	33.94	100	275	A	H
													H
													H
		2367.12	52.86	-21.14	74	42.18	27.37	17.26	33.95	346	126	P	V
		2390	41.83	-12.17	54	31.03	27.46	17.29	33.95	346	126	A	V
	*	2412	109.74	-	-	98.81	27.55	17.32	33.94	346	126	P	V
	*	2412	106.77	-	-	95.84	27.55	17.32	33.94	346	126	A	V
													V
													V
802.11b CH 06 2437MHz		2382.8	52.81	-21.19	74	42.05	27.43	17.28	33.95	126	294	P	H
		2389.68	41.77	-12.23	54	30.97	27.46	17.29	33.95	126	294	A	H
	*	2437	108.53	-	-	97.46	27.65	17.36	33.94	126	294	P	H
	*	2437	105.25	-	-	94.18	27.65	17.36	33.94	126	294	A	H
		2497.68	53.2	-20.8	74	41.87	27.8	17.45	33.92	126	294	P	H
		2483.76	42.31	-11.69	54	31.03	27.77	17.43	33.92	126	294	A	H
		2329.36	52.77	-21.23	74	42.22	27.3	17.21	33.96	378	124	P	V
		2389.84	41.71	-12.29	54	30.91	27.46	17.29	33.95	378	124	A	V
	*	2437	109.2	-	-	98.13	27.65	17.36	33.94	378	124	P	V
	*	2437	106.23	-	-	95.16	27.65	17.36	33.94	378	124	A	V
		2486.32	53.1	-20.9	74	41.82	27.77	17.43	33.92	378	124	P	V
		2483.84	42.76	-11.24	54	31.48	27.77	17.43	33.92	378	124	A	V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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)
802.11b CH 11 2462MHz	*	2462	109.54	-	-	98.36	27.72	17.39	33.93	118	280	P	H
	*	2462	106.36	-	-	95.18	27.72	17.39	33.93	118	280	A	H
		2486.4	53.75	-20.25	74	42.47	27.77	17.43	33.92	118	280	P	H
		2483.56	42.34	-11.66	54	31.06	27.77	17.43	33.92	118	280	A	H
													H
													H
	*	2462	109.42	-	-	98.24	27.72	17.39	33.93	379	125	P	V
	*	2462	106.31	-	-	95.13	27.72	17.39	33.93	379	125	A	V
		2498.44	54.89	-19.11	74	43.56	27.8	17.45	33.92	379	125	P	V
		2483.52	42.8	-11.2	54	31.52	27.77	17.43	33.92	379	125	A	V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

**2.4GHz 2400~2483.5MHz****WIFI 802.11b (Harmonic @ 3m)**

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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)
802.11b CH 01 2412MHz		4824	40.86	-33.14	74	55.01	32.34	11.47	57.96	-	-	P	H
		12105	48.12	-25.88	74	53.75	39.2	17.91	62.74	-	-	P	H
		12105	39.33	-14.67	54	44.96	39.2	17.91	62.74	-	-	A	H
		14490	48.48	-25.52	74	49.53	40.59	20.83	62.47	-	-	P	H
		14490	39.69	-14.31	54	40.74	40.59	20.83	62.47	-	-	A	H
		18000	50.76	-23.24	74	41.2	42.6	23.04	56.08	-	-	P	H
		18000	41.97	-12.03	54	32.41	42.6	23.04	56.08	-	-	A	H
		4824	40.86	-33.14	74	55.01	32.34	11.47	57.96	-	-	P	H
													H
													H
													H
													H
		4824	40.52	-33.48	74	54.67	32.34	11.47	57.96	-	-	P	V
		12615	48.09	-25.91	74	53.3	39.51	18.46	63.18	-	-	P	V
		12615	39.3	-14.7	54	44.51	39.51	18.46	63.18	-	-	A	V
		14490	48.95	-25.05	74	50	40.59	20.83	62.47	-	-	P	V
		14490	40.16	-13.84	54	41.21	40.59	20.83	62.47	-	-	A	V
		17730	49.63	-24.37	74	43.58	39.87	22.78	56.6	-	-	P	V
		17730	40.84	-13.16	54	34.79	39.87	22.78	56.6	-	-	A	V
													V
													V
													V
													V
													V



WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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)
802.11b CH 06 2437MHz		4874	40.58	-33.42	74	54.34	32.6	11.63	57.99	-	-	P	H
		7311	43.36	-30.64	74	51.62	37.06	13.41	58.73	-	-	P	H
		11355	47.71	-26.29	74	52.52	39.15	17.55	61.51	-	-	P	H
		11355	38.92	-15.08	54	43.73	39.15	17.55	61.51	-	-	A	H
		14475	48.71	-25.29	74	49.83	40.57	20.81	62.5	-	-	P	H
		14475	39.92	-14.08	54	41.04	40.57	20.81	62.5	-	-	A	H
		17895	50.22	-23.78	74	41.73	41.83	22.94	56.28	-	-	P	H
		17895	41.43	-12.57	54	32.94	41.83	22.94	56.28	-	-	A	H
													H
													H
													H
													H
		4874	40.71	-33.29	74	54.47	32.6	11.63	57.99	-	-	P	V
		7311	42.78	-31.22	74	51.04	37.06	13.41	58.73	-	-	P	V
		11160	47.7	-26.3	74	52.53	39.02	17.47	61.32	-	-	P	V
		11160	38.91	-15.09	54	43.74	39.02	17.47	61.32	-	-	A	V
		14490	48.95	-25.05	74	50	40.59	20.83	62.47	-	-	P	V
		14490	40.16	-13.84	54	41.21	40.59	20.83	62.47	-	-	A	V
		18000	49.74	-24.26	74	40.18	42.6	23.04	56.08	-	-	P	V
		18000	40.95	-13.05	54	31.39	42.6	23.04	56.08	-	-	A	V
													V
													V
													V
													V

[illegible]



2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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)
802.11g CH 01 2412MHz		2390	64.3	-9.7	74	53.5	27.46	17.29	33.95	125	322	P	H
		2389.905	50.47	-3.53	54	39.67	27.46	17.29	33.95	125	322	A	H
	*	2412	112.44	-	-	101.51	27.55	17.32	33.94	125	322	P	H
	*	2412	105.1	-	-	94.17	27.55	17.32	33.94	125	322	A	H
													H
													H
		2389.695	56.93	-17.07	74	46.13	27.46	17.29	33.95	346	124	P	V
		2390	47.06	-6.94	54	36.26	27.46	17.29	33.95	346	124	A	V
	*	2412	110.01	-	-	99.08	27.55	17.32	33.94	346	124	P	V
	*	2412	103.07	-	-	92.14	27.55	17.32	33.94	346	124	A	V
													V
													V
802.11g CH 11 2462MHz	*	2462	111.27	-	-	100.09	27.72	17.39	33.93	100	320	P	H
	*	2462	103.75	-	-	92.57	27.72	17.39	33.93	100	320	A	H
		2483.72	62.42	-11.58	74	51.14	27.77	17.43	33.92	100	320	P	H
		2483.72	49.85	-4.15	54	38.57	27.77	17.43	33.92	100	320	A	H
													H
													H
	*	2462	107.74	-	-	96.56	27.72	17.39	33.93	350	126	P	V
	*	2462	100.4	-	-	89.22	27.72	17.39	33.93	350	126	A	V
		2486.48	59.86	-14.14	74	48.58	27.77	17.43	33.92	350	126	P	V
		2486.16	46.2	-7.8	54	34.92	27.77	17.43	33.92	350	126	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Harmonic @ 3m)

[illegible]



2.4GHz 2400~2483.5MHz

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

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 Full CH 01 2412MHz		2390	64.23	-9.77	74	53.43	27.46	17.29	33.95	100	27	P	H
		2390	49.85	-4.15	54	39.05	27.46	17.29	33.95	100	27	A	H
	*	2412	112.81	-	-	101.88	27.55	17.32	33.94	100	27	P	H
	*	2412	103.49	-	-	92.56	27.55	17.32	33.94	100	27	A	H
													H
													H
		2389.59	58.69	-15.31	74	47.89	27.46	17.29	33.95	350	125	P	V
		2390	47.63	-6.37	54	36.83	27.46	17.29	33.95	350	125	A	V
	*	2412	110.58	-	-	99.65	27.55	17.32	33.94	350	125	P	V
	*	2412	101.16	-	-	90.23	27.55	17.32	33.94	350	125	A	V
													V
													V
802.11ax HE20 Full CH 11 2462MHz	*	2462	113.26	-	-	102.08	27.72	17.39	33.93	100	29	P	H
	*	2462	103.7	-	-	92.52	27.72	17.39	33.93	100	29	A	H
		2484.36	68.12	-5.88	74	56.84	27.77	17.43	33.92	100	29	P	H
		2483.52	51.67	-2.33	54	40.39	27.77	17.43	33.92	100	29	A	H
													H
													H
	*	2462	109.35	-	-	98.17	27.72	17.39	33.93	381	108	P	V
	*	2462	100.46	-	-	89.28	27.72	17.39	33.93	381	108	A	V
		2483.68	60.14	-13.86	74	48.86	27.77	17.43	33.92	381	108	P	V
		2483.52	46.59	-7.41	54	35.31	27.77	17.43	33.92	381	108	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 Full CH 06 2437MHz		4874	40.97	-33.03	74	54.73	32.6	11.63	57.99	-	-	P	H
		7311	42.94	-31.06	74	51.2	37.06	13.41	58.73	-	-	P	H
		11340	47.59	-26.41	74	52.37	39.16	17.55	61.49	-	-	P	H
		11340	38.8	-15.2	54	43.58	39.16	17.55	61.49	-	-	A	H
		14490	48.91	-25.09	74	49.96	40.59	20.83	62.47	-	-	P	H
		14490	40.12	-13.88	54	41.17	40.59	20.83	62.47	-	-	A	H
		17820	49.81	-24.19	74	42.59	40.78	22.87	56.43	-	-	P	H
		17820	41.02	-12.98	54	33.8	40.78	22.87	56.43	-	-	A	H
													H
													H
													H
													H
		4874	41.25	-32.75	74	55.01	32.6	11.63	57.99	-	-	P	V
		7311	43.42	-30.58	74	51.68	37.06	13.41	58.73	-	-	P	V
		11415	47.69	-26.31	74	52.58	39.1	17.58	61.57	-	-	P	V
		11415	38.9	-15.1	54	43.79	39.1	17.58	61.57	-	-	A	V
		14475	49.33	-24.67	74	50.45	40.57	20.81	62.5	-	-	P	V
		14475	40.54	-13.46	54	41.66	40.57	20.81	62.5	-	-	A	V
		18000	50.02	-23.98	74	40.46	42.6	23.04	56.08	-	-	P	V
		18000	41.23	-12.77	54	31.67	42.6	23.04	56.08	-	-	A	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. 4. The emission level close to 18GHz is checked that the average emission level is noise floor only.												



2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 242/61 CH 01 2412MHz		2390	66.44	-7.56	74	55.64	27.46	17.29	33.95	100	29	P	H
		2390	50.38	-3.62	54	39.58	27.46	17.29	33.95	100	29	A	H
	*	2412	111.94	-	-	101.01	27.55	17.32	33.94	100	29	P	H
	*	2412	104.28	-	-	93.35	27.55	17.32	33.94	100	29	A	H
													H
													H
		2390	61.89	-12.11	74	51.09	27.46	17.29	33.95	400	52	P	V
		2390	46.43	-7.57	54	35.63	27.46	17.29	33.95	400	52	A	V
	*	2412	106.88	-	-	95.95	27.55	17.32	33.94	400	52	P	V
	*	2412	98.92	-	-	87.99	27.55	17.32	33.94	400	52	A	V
													V
													V
802.11ax HE20 Partial 242/61 CH 11 2462MHz	*	2462	108.55	-	-	97.37	27.72	17.39	33.93	100	80	P	H
	*	2462	99.82	-	-	88.64	27.72	17.39	33.93	100	80	A	H
		2483.56	69.65	-4.35	74	58.37	27.77	17.43	33.92	100	80	P	H
		2483.52	51.3	-2.7	54	40.02	27.77	17.43	33.92	100	80	A	H
													H
													H
	*	2462	103.31	-	-	92.13	27.72	17.39	33.93	372	55	P	V
	*	2462	95.61	-	-	84.43	27.72	17.39	33.93	372	55	A	V
		2484.08	63.28	-10.72	74	52	27.77	17.43	33.92	372	55	P	V
		2483.52	46.79	-7.21	54	35.51	27.77	17.43	33.92	372	55	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

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

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 01 2412MHz		2389.905	65.87	-8.13	74	55.07	27.46	17.29	33.95	100	30	P	H
		2390	48.41	-5.59	54	37.61	27.46	17.29	33.95	100	30	A	H
	*	2412	115.84	-	-	104.91	27.55	17.32	33.94	100	30	P	H
	*	2412	107.97	-	-	97.04	27.55	17.32	33.94	100	30	A	H
													H
													H
		2390	63.53	-10.47	74	52.73	27.46	17.29	33.95	358	53	P	V
		2390	45.25	-8.75	54	34.45	27.46	17.29	33.95	358	53	A	V
	*	2412	110.62	-	-	99.69	27.55	17.32	33.94	358	53	P	V
	*	2412	102.89	-	-	91.96	27.55	17.32	33.94	358	53	A	V
													V
													V
802.11ax HE20 Partial 106/54 CH 11 2462MHz	*	2462	111.42	-	-	100.24	27.72	17.39	33.93	100	27	P	H
	*	2462	102.67	-	-	91.49	27.72	17.39	33.93	100	27	A	H
		2484.68	69.75	-4.25	74	58.47	27.77	17.43	33.92	100	27	P	H
		2483.52	50.43	-3.57	54	39.15	27.77	17.43	33.92	100	27	A	H
													H
													H
	*	2462	106.22	-	-	95.04	27.72	17.39	33.93	382	291	P	V
	*	2462	97.77	-	-	86.59	27.72	17.39	33.93	382	291	A	V
		2483.68	61.93	-12.07	74	50.65	27.77	17.43	33.92	382	291	P	V
		2483.52	45.18	-8.82	54	33.9	27.77	17.43	33.92	382	291	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

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

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 HE40 Full CH 03 2422MHz		2389.52	66.26	-7.74	74	55.46	27.46	17.29	33.95	126	301	P	H
		2386.48	50.48	-3.52	54	39.7	27.45	17.28	33.95	126	301	A	H
	*	2422	109.88	-	-	98.9	27.59	17.33	33.94	126	301	P	H
	*	2422	101.47	-	-	90.49	27.59	17.33	33.94	126	301	A	H
		2487.28	58.21	-15.79	74	46.93	27.77	17.43	33.92	126	301	P	H
		2487.6	45.88	-8.12	54	34.59	27.78	17.43	33.92	126	301	A	H
		2389.84	65.25	-8.75	74	54.45	27.46	17.29	33.95	348	258	P	V
		2390	50.19	-3.81	54	39.39	27.46	17.29	33.95	348	258	A	V
	*	2422	104.81	-	-	93.83	27.59	17.33	33.94	348	258	P	V
	*	2422	95.91	-	-	84.93	27.59	17.33	33.94	348	258	A	V
		2483.84	55	-19	74	43.72	27.77	17.43	33.92	348	258	P	V
		2483.52	44.32	-9.68	54	33.04	27.77	17.43	33.92	348	258	A	V
802.11ax HE40 Full CH 09 2452MHz		2389.68	52.56	-21.44	74	41.76	27.46	17.29	33.95	100	29	P	H
		2390	42.04	-11.96	54	31.24	27.46	17.29	33.95	100	29	A	H
	*	2452	110.08	-	-	98.93	27.7	17.38	33.93	100	29	P	H
	*	2452	101.25	-	-	90.1	27.7	17.38	33.93	100	29	A	H
		2483.52	67.4	-6.6	74	56.12	27.77	17.43	33.92	100	29	P	H
		2483.52	51.73	-2.27	54	40.45	27.77	17.43	33.92	100	29	A	H
		2376.72	52.8	-21.2	74	42.07	27.41	17.27	33.95	380	104	P	V
		2388.88	41.74	-12.26	54	30.94	27.46	17.29	33.95	380	104	A	V
	*	2452	106.52	-	-	95.37	27.7	17.38	33.93	380	104	P	V
	*	2452	97.69	-	-	86.54	27.7	17.38	33.93	380	104	A	V
		2487.04	61.44	-12.56	74	50.16	27.77	17.43	33.92	380	104	P	V
		2483.52	46.55	-7.45	54	35.27	27.77	17.43	33.92	380	104	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE40 Full (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
7+8						(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full CH 06 2437MHz		4874	40.16	-33.84	74	53.92	32.6	11.63	57.99	-	-	P	H
		7311	43.09	-30.91	74	51.35	37.06	13.41	58.73	-	-	P	H
		10785	47.98	-26.02	74	52.66	39.1	17.12	60.9	-	-	P	H
		10785	39.19	-14.81	54	43.87	39.1	17.12	60.9	-	-	A	H
		14490	48.85	-25.15	74	49.9	40.59	20.83	62.47	-	-	P	H
		14490	40.06	-13.94	54	41.11	40.59	20.83	62.47	-	-	A	H
		18000	50.19	-23.81	74	40.63	42.6	23.04	56.08	-	-	P	H
		18000	41.4	-12.6	54	31.84	42.6	23.04	56.08	-	-	A	H
													H
													H
													H
													H
		4874	40.52	-33.48	74	54.28	32.6	11.63	57.99	-	-	P	V
		7311	43.18	-30.82	74	51.44	37.06	13.41	58.73	-	-	P	V
		11115	47.69	-26.31	74	52.57	38.93	17.46	61.27	-	-	P	V
		11115	38.9	-15.1	54	43.78	38.93	17.46	61.27	-	-	A	V
		14490	48.83	-25.17	74	49.88	40.59	20.83	62.47	-	-	P	V
		14490	40.04	-13.96	54	41.09	40.59	20.83	62.47	-	-	A	V
		17820	49.28	-24.72	74	42.06	40.78	22.87	56.43	-	-	P	V
		17820	40.49	-13.51	54	33.27	40.78	22.87	56.43	-	-	A	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.												
	4. The emission level close to 18GHz is checked that the average emission level is noise floor only.												



2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE40 Partial 484 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 HE40 Partial 484/65 CH 03 2422MHz		2389.84	64.94	-9.06	74	54.14	27.46	17.29	33.95	153	26	P	H
		2390	50.87	-3.13	54	40.07	27.46	17.29	33.95	153	26	A	H
	*	2422	109.14	-	-	98.16	27.59	17.33	33.94	153	26	P	H
	*	2422	100.82	-	-	89.84	27.59	17.33	33.94	153	26	A	H
		2483.52	59.93	-14.07	74	48.65	27.77	17.43	33.92	153	26	P	H
		2483.76	47.81	-6.19	54	36.53	27.77	17.43	33.92	153	26	A	H
		2389.84	60.62	-13.38	74	49.82	27.46	17.29	33.95	396	52	P	V
		2389.68	46.22	-7.78	54	35.42	27.46	17.29	33.95	396	52	A	V
	*	2422	104.8	-	-	93.82	27.59	17.33	33.94	396	52	P	V
	*	2422	96	-	-	85.02	27.59	17.33	33.94	396	52	A	V
		2484.56	53.46	-20.54	74	42.18	27.77	17.43	33.92	396	52	P	V
		2483.68	44.03	-9.97	54	32.75	27.77	17.43	33.92	396	52	A	V
802.11ax HE40 Partial 484/65 CH 09 2452MHz		2390	53.25	-20.75	74	42.45	27.46	17.29	33.95	100	28	P	H
		2389.84	42.91	-11.09	54	32.11	27.46	17.29	33.95	100	28	A	H
	*	2452	107.83	-	-	96.68	27.7	17.38	33.93	100	28	P	H
	*	2452	99.16	-	-	88.01	27.7	17.38	33.93	100	28	A	H
		2487.52	66.37	-7.63	74	55.08	27.78	17.43	33.92	100	28	P	H
		2483.52	51.13	-2.87	54	39.85	27.77	17.43	33.92	100	28	A	H
		2359.76	52.55	-21.45	74	41.92	27.34	17.25	33.96	343	54	P	V
		2385.52	42.64	-11.36	54	31.87	27.44	17.28	33.95	343	54	A	V
	*	2452	102.43	-	-	91.28	27.7	17.38	33.93	343	54	P	V
	*	2452	94.34	-	-	83.19	27.7	17.38	33.93	343	54	A	V
		2487.6	59.31	-14.69	74	48.02	27.78	17.43	33.92	343	54	P	V
		2483.6	45.78	-8.22	54	34.5	27.77	17.43	33.92	343	54	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Margin (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 HE40 Partial 242/61 CH 03 2422MHz		2389.04	67.17	-6.83	74	56.37	27.46	17.29	33.95	375	28	P	H
		2390	50.91	-3.09	54	40.11	27.46	17.29	33.95	375	28	A	H
	*	2422	109.18	-	-	98.2	27.59	17.33	33.94	375	28	P	H
	*	2422	100.85	-	-	89.87	27.59	17.33	33.94	375	28	A	H
		2484.08	60.01	-13.99	74	48.73	27.77	17.43	33.92	375	28	P	H
		2483.52	47.58	-6.42	54	36.3	27.77	17.43	33.92	375	28	A	H
		2389.2	62.03	-11.97	74	51.23	27.46	17.29	33.95	395	53	P	V
		2390	46.47	-7.53	54	35.67	27.46	17.29	33.95	395	53	A	V
	*	2422	105.07	-	-	94.09	27.59	17.33	33.94	395	53	P	V
	*	2422	96.15	-	-	85.17	27.59	17.33	33.94	395	53	A	V
		2484.24	54.78	-19.22	74	43.5	27.77	17.43	33.92	395	53	P	V
		2484.16	43.92	-10.08	54	32.64	27.77	17.43	33.92	395	53	A	V
802.11ax HE40 Partial 242/62 CH 09 2452MHz		2346.64	53.28	-20.72	74	42.71	27.3	17.23	33.96	193	25	P	H
		2374.16	42.73	-11.27	54	32.01	27.4	17.27	33.95	193	25	A	H
	*	2452	109.36	-	-	98.21	27.7	17.38	33.93	193	25	P	H
	*	2452	101.13	-	-	89.98	27.7	17.38	33.93	193	25	A	H
		2487.44	66.34	-7.66	74	55.06	27.77	17.43	33.92	193	25	P	H
		2483.52	50.7	-3.3	54	39.42	27.77	17.43	33.92	193	25	A	H
		2360.88	52.46	-21.54	74	41.83	27.34	17.25	33.96	343	55	P	V
		2387.92	42.69	-11.31	54	31.91	27.45	17.28	33.95	343	55	A	V
	*	2452	103.4	-	-	92.25	27.7	17.38	33.93	343	55	P	V
	*	2452	95.09	-	-	83.94	27.7	17.38	33.93	343	55	A	V
		2483.76	59.86	-14.14	74	48.58	27.77	17.43	33.92	343	55	P	V
		2483.6	45.7	-8.3	54	34.42	27.77	17.43	33.92	343	55	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission above 18GHz

2.4GHz WIFI 802.11ax HE40 (SHF)

[illegible]

Emission below 1GHz

2.4GHz WIFI 802.11ax HE40 (LF)

[illegible]



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	Peak or Average
H/V	Horizontal or Vertical

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

WIFI	Note	Frequency	Level	Margin	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.					Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
7+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	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 @ 2390MHz:

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) – 74(dBμV/m)
= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)
= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)
= 43.54 (dBμV/m)
2. Over Limit(dB)
= Level(dBμV/m) – Limit Line(dBμV/m)
= 43.54(dBμV/m) – 54(dBμV/m)
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix D. Radiated Spurious Emission Plots

Test Engineer :	Daniel Lee, Fu Chen, Troye Hsieh	Temperature :	20.1~21.6°C
		Relative Humidity :	56.5~66.9%

Note symbol

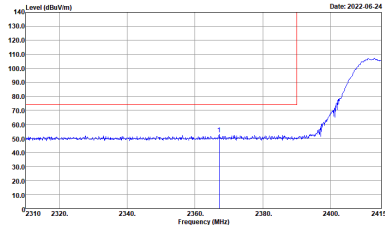
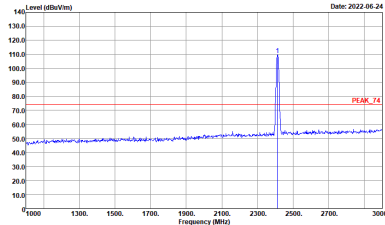
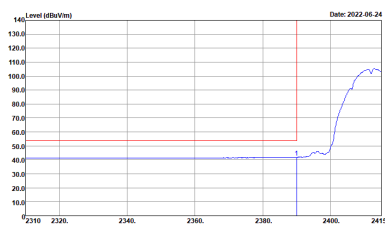
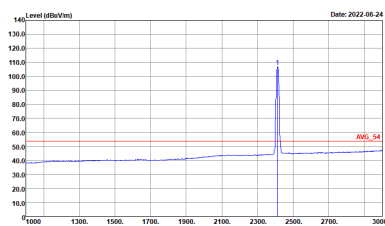
-L	Low channel location
-R	High channel location



2.4GHz 2400~2483.5MHz
WIFI 802.11b (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH01 2412MHz	
7+8	Vertical	Fundamental
Peak	 Site Condition : 03CH11-HY : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site Condition : 03CH11-HY : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
	 Site Condition : 03CH11-HY : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	 Site Condition : 03CH11-HY : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto
Avg.		



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto

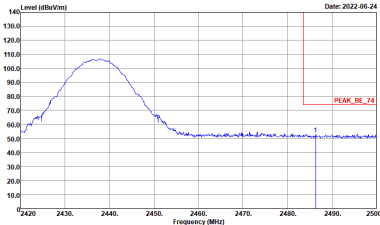
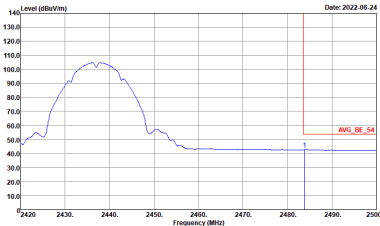


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Left blank
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	Left blank

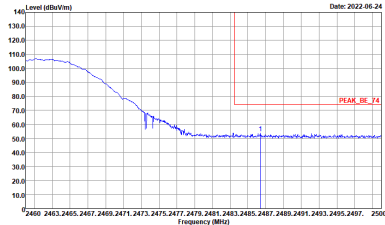
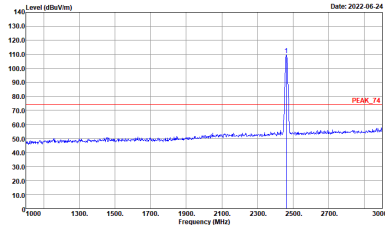
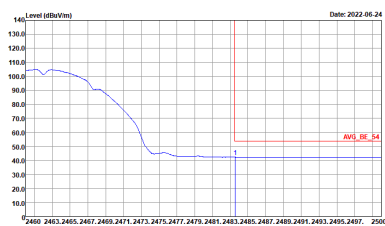
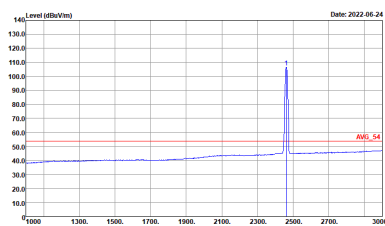


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - L	
7+8	Vertical	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto

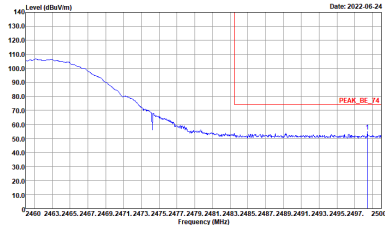
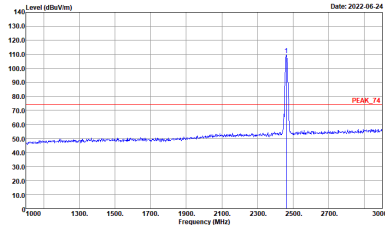
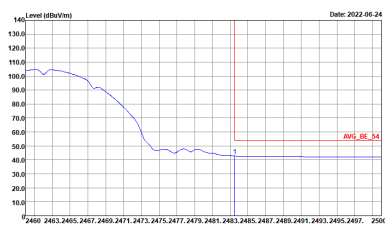
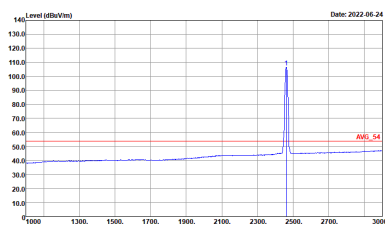


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH06 2437MHz - R	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto



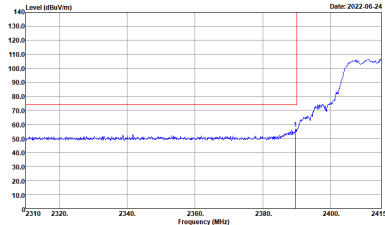
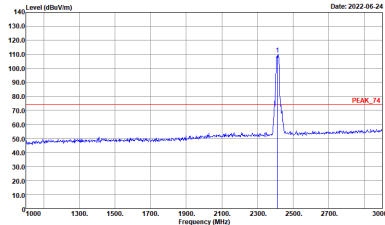
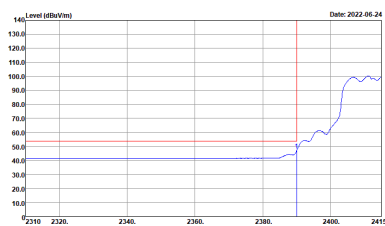
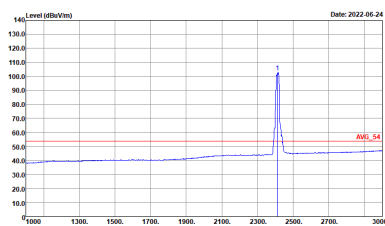
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11b CH11 2462MHz	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto



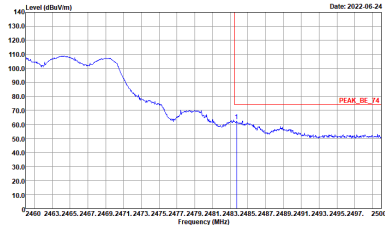
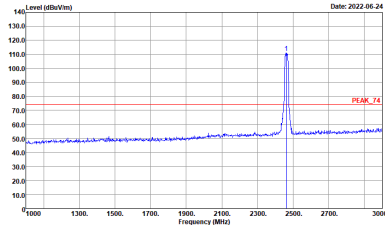
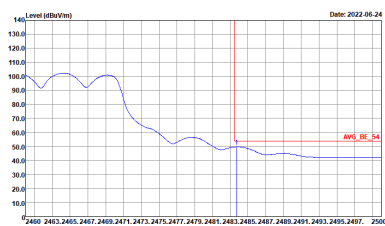
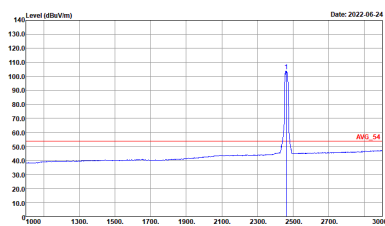
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto

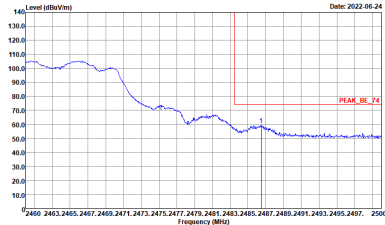
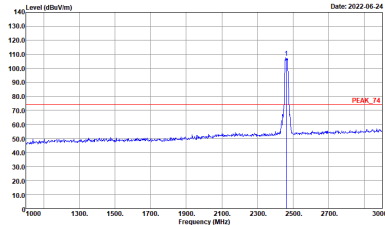
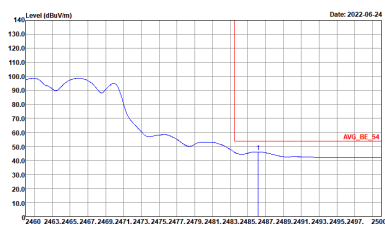
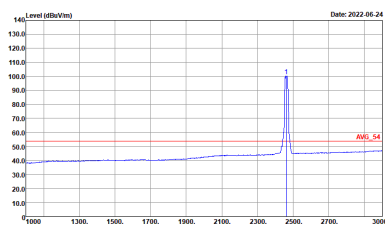


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH01 2412MHz	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto

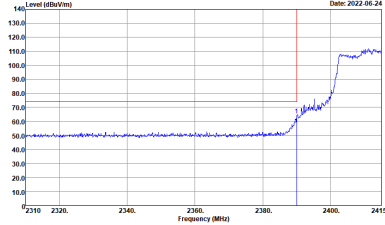
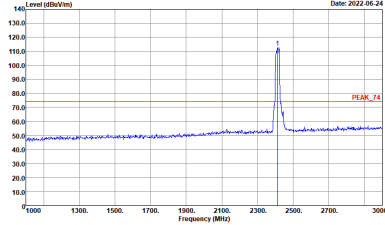
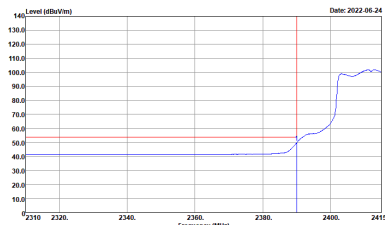
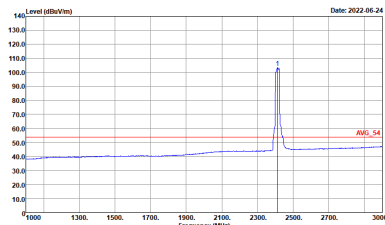


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11g CH11 2462MHz	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto

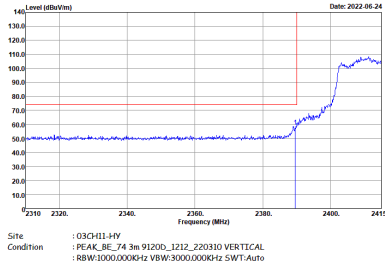
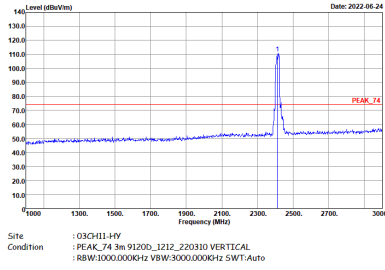
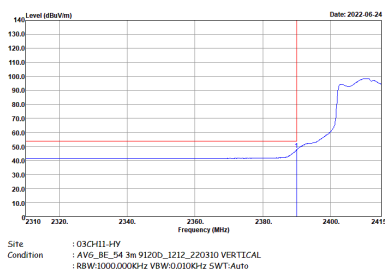
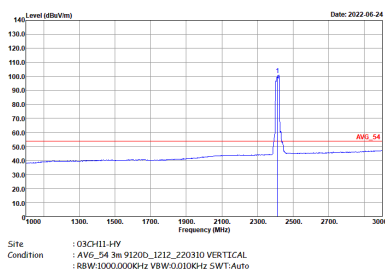


2.4GHz 2400~2483.5MHz

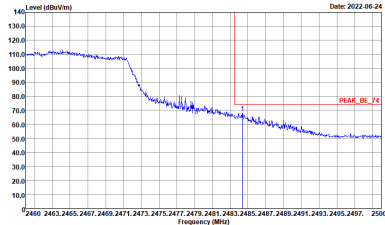
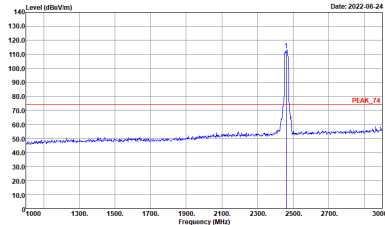
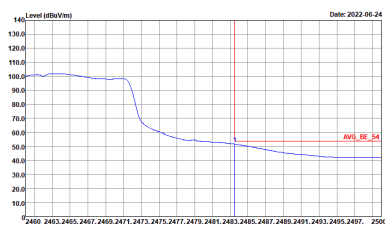
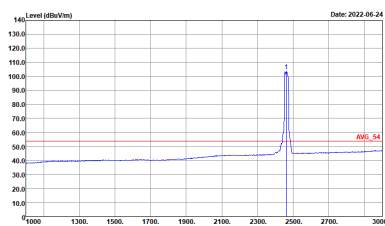
WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_8E_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH11-HY Condition : AVG_8E_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto

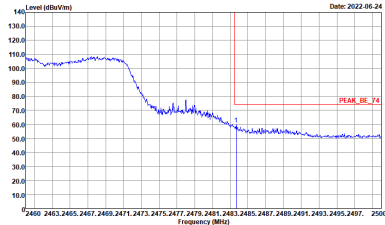
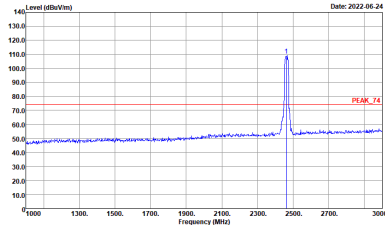
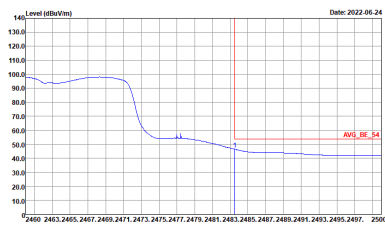
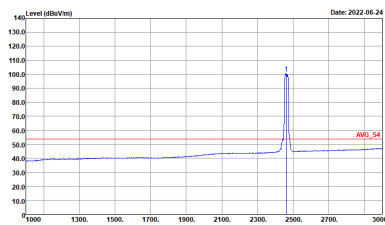


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH01 2412MHz	
7+8	Vertical	Fundamental
Peak		
		
Avg.		

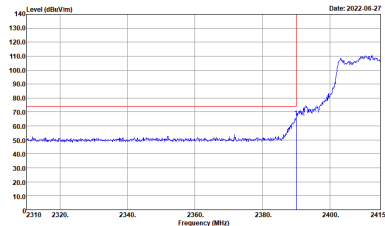
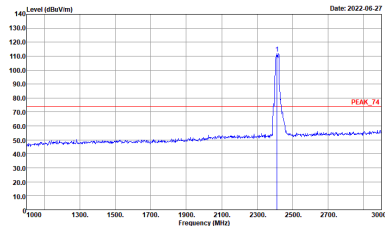
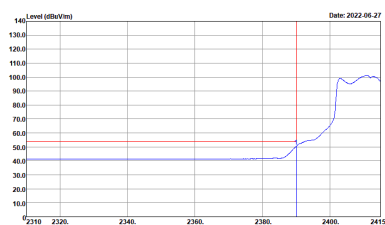
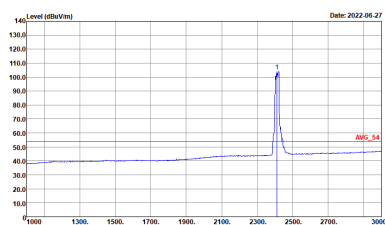


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto

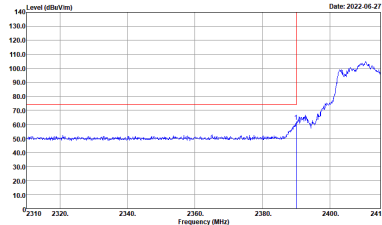
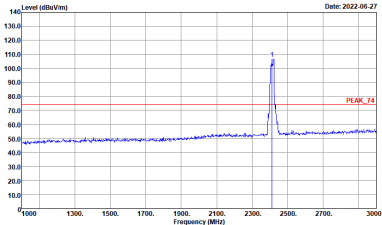
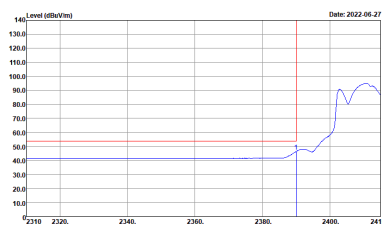
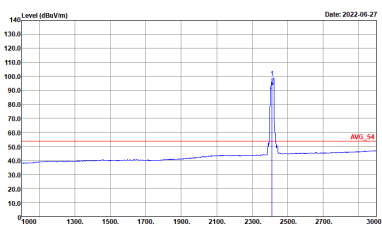


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Full CH11 2462MHz	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL Detector : Peak Project : 210409 Setting : 18.5	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL Detector : Peak Project : 210409 Setting : 18.5

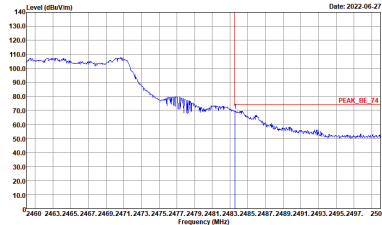
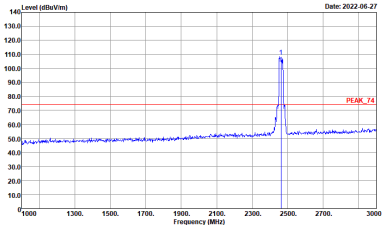
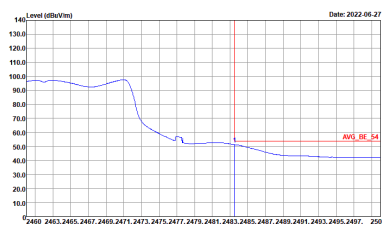
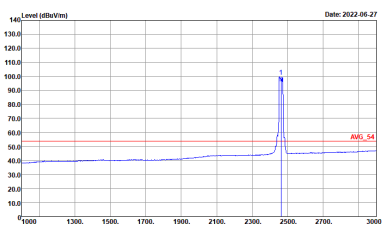
**2.4GHz 2400~2483.5MHz****WIFI 802.11ax HE20 Partial 242 (Band Edge @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 242/61 CH01 2412MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 242/61 CH01 2412MHz	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 242/61 CH11 2462MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		

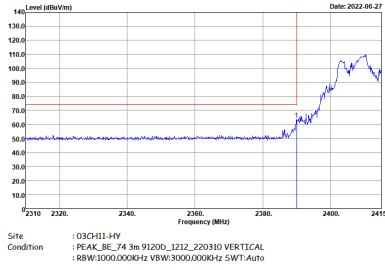
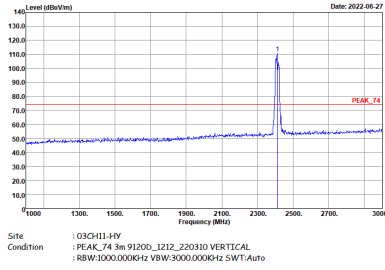
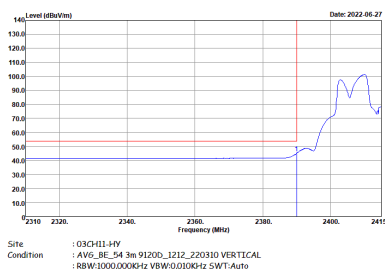
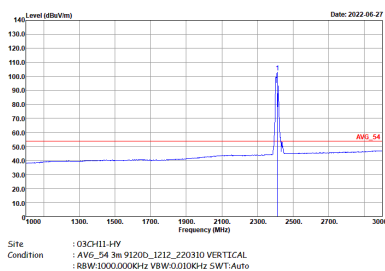


WIFI	2.4GHz 2400~2483.5MHz Fundamental @ 3m	
ANT	802.11ax HE20 Partial 242/61 CH11 2462MHz	
7+8	Vertical	Fundamental
Peak	Site Condition : 03CH11-HY : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Site Condition : 03CH11-HY : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	Site Condition : 03CH11-HY : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	Site Condition : 03CH11-HY : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto
Avg.		

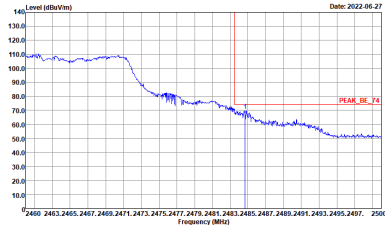
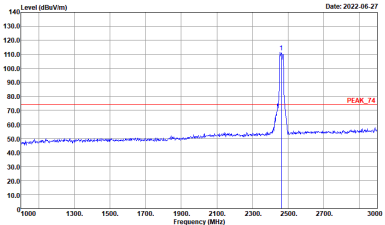
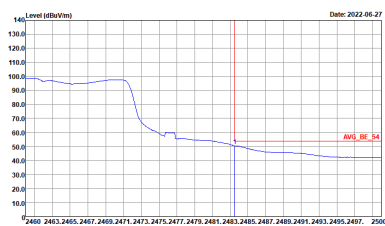
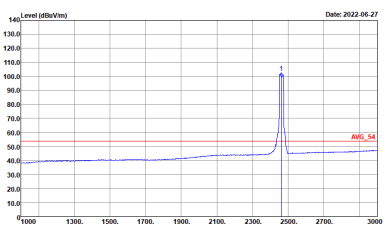
**2.4GHz 2400~2483.5MHz****WIFI 802.11ax HE20 Partial 106 (Band Edge @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/53 CH01 2412MHz	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto
Avg.		

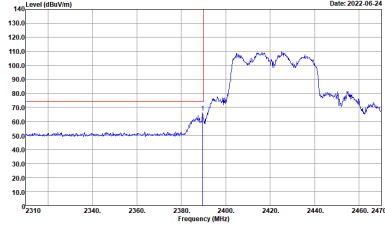
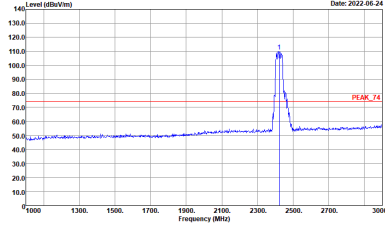
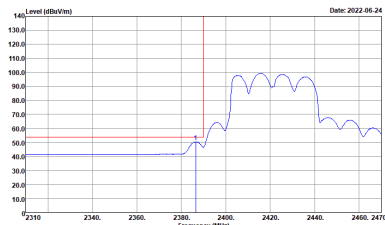
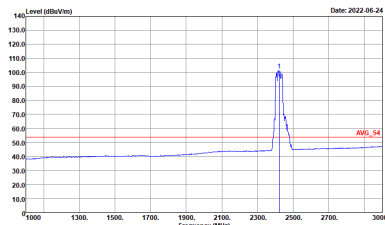


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE20 Partial 106/54 CH11 2462MHz	
7+8	Vertical	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto

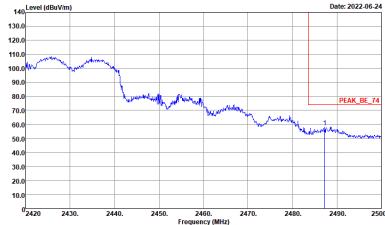
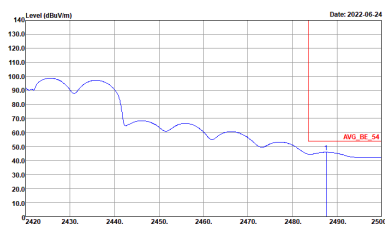


2.4GHz 2400~2483.5MHz

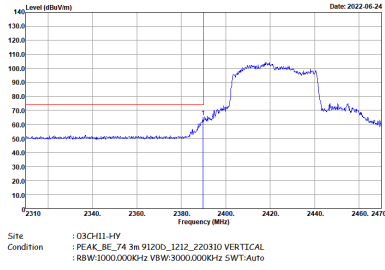
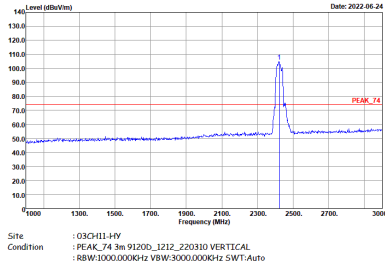
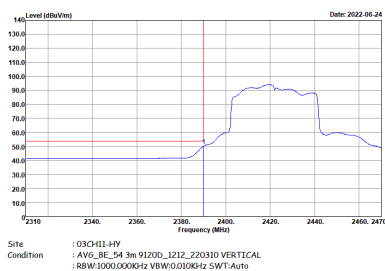
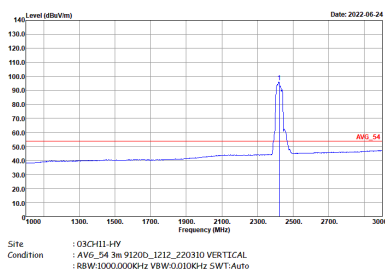
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - L	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_8E_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site : 03CH11-HY Condition : AVG_8E_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto

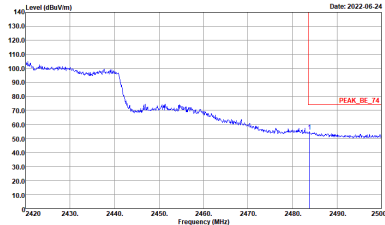
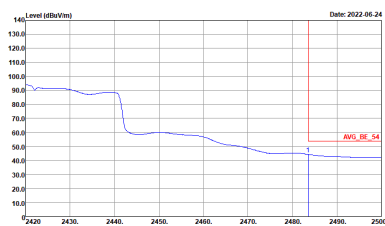


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - R	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - L	
7+8	Vertical	Fundamental
Peak		
Avg.		

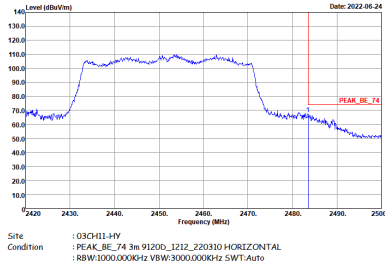
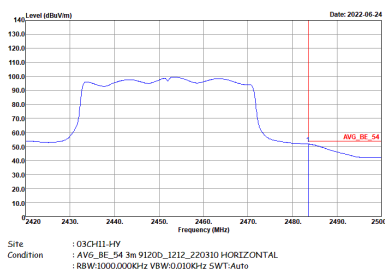


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH03 2422MHz - R	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - L	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:0.0100kHz SWT:Auto

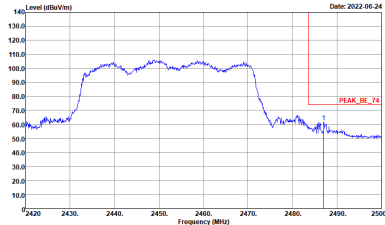
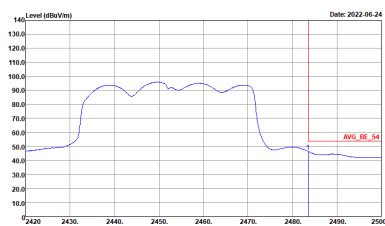


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - R	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

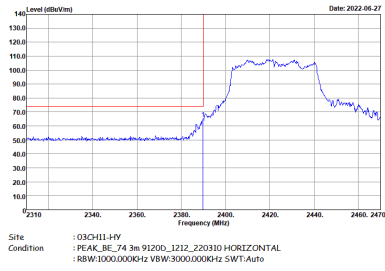
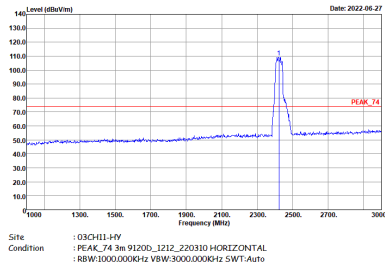
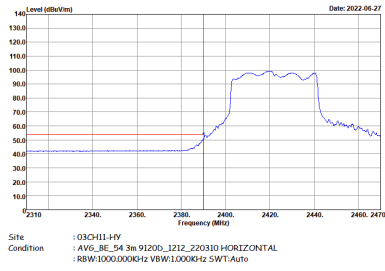
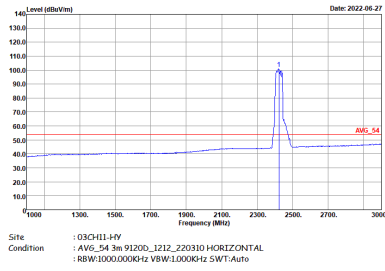


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - L	
7+8	Vertical	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:0.010kHz SWT:Auto

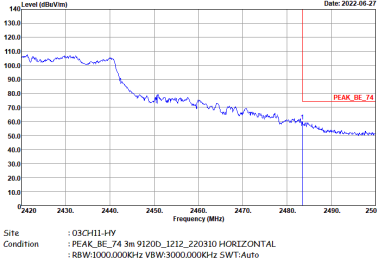
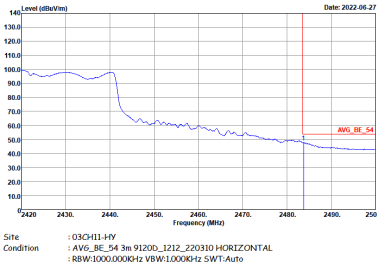


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Full CH09 2452MHz - R	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000KHz VBW:0.010KHz SWT:Auto	Left blank

**2.4GHz 2400~2483.5MHz****WIFI 802.11ax HE40 Partial 484 (Band Edge @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH03 2422MHz - L	
7+8	Horizontal	Fundamental
Peak	 Site: 03CH11-HY Condition: : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site: 03CH11-HY Condition: : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	 Site: 03CH11-HY Condition: : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:1000kHz SWT:Auto	 Site: 03CH11-HY Condition: : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:1000kHz SWT:Auto

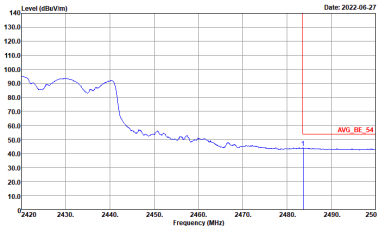


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH03 2422MHz - R	
7+8	Horizontal	Fundamental
Peak		Left blank
Avg.		Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH03 2422MHz - L	
7+8	Vertical	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto

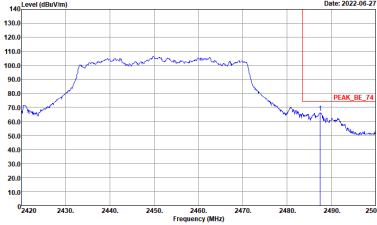
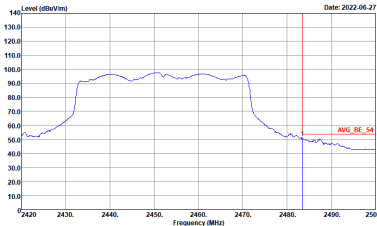


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH03 2422MHz - R	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000Hz VBW:1.0000Hz SWT:Auto	Left blank

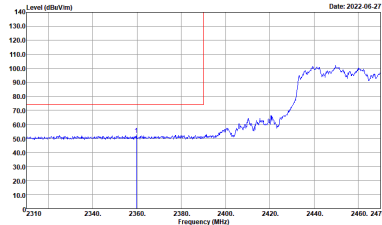
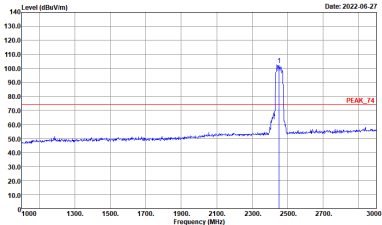
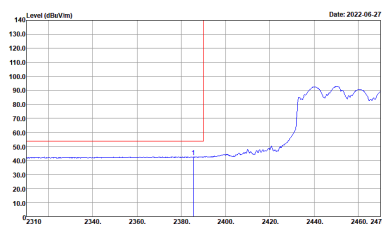
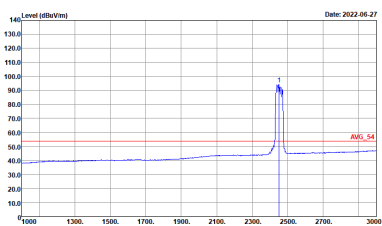


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH09 2452MHz - L	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto

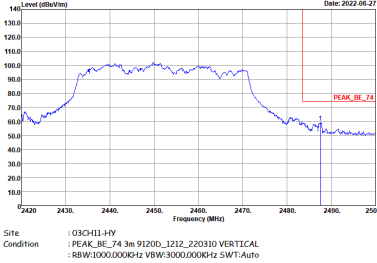
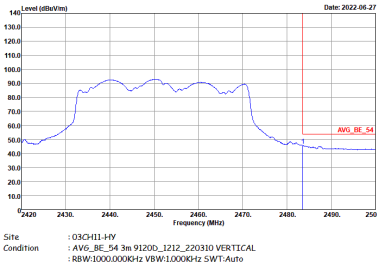


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH09 2452MHz - R	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000Hz VBW:1.0000Hz SWT:Auto	Left blank



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH09 2452MHz - L	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000kHz VBW:1.000kHz SWT:Auto

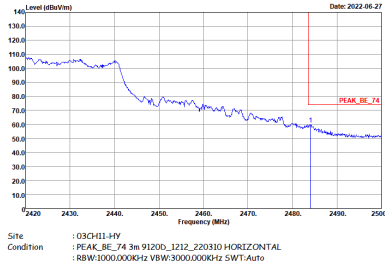
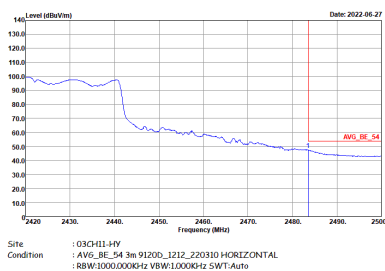


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 484/65 CH09 2452MHz - R	
7+8	Vertical	Fundamental
Peak		Left blank
Avg.		Left blank

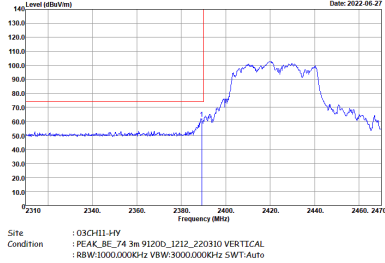
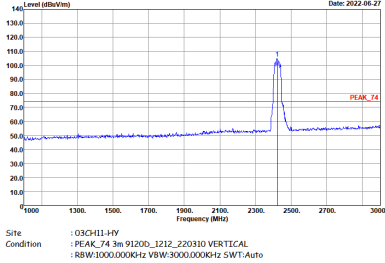
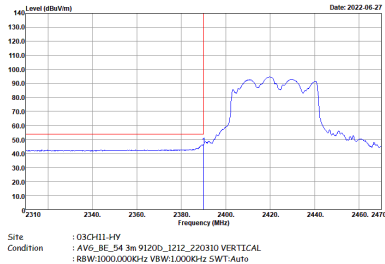
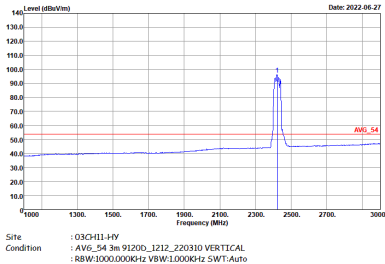
**2.4GHz 2400~2483.5MHz****WIFI 802.11ax HE40 Partial 242 (Band Edge @ 3m)**

WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH03 2422MHz - L	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto	Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:3000.000kHz SWT:Auto
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:1000kHz SWT:Auto	Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.000kHz VBW:1000kHz SWT:Auto

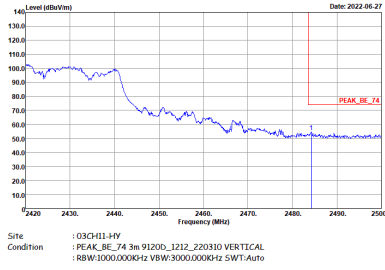
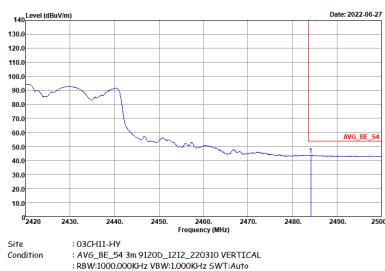


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH03 2422MHz - R	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto	Left blank

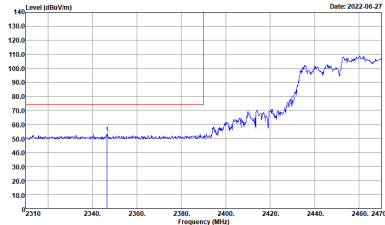
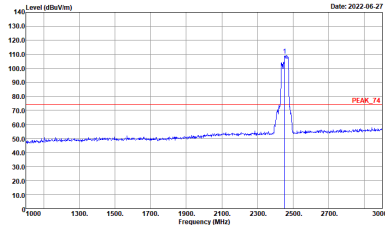
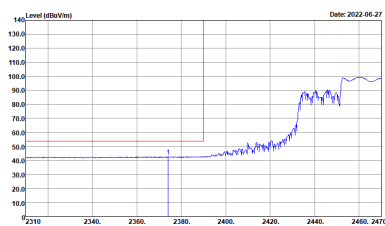
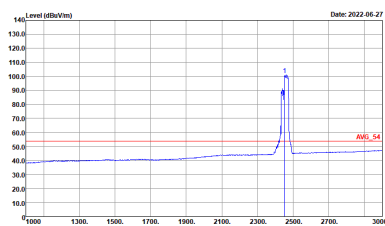


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH03 2422MHz - L	
7+8	Vertical	Fundamental
Peak	 Site: 03CH11-HY Condition: : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site: 03CH11-HY Condition: : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
Avg.	 Site: 03CH11-HY Condition: : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto	 Site: 03CH11-HY Condition: : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto



WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/61 CH03 2422MHz - R	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.000KHz VBW:3000.000KHz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.000KHz VBW:1.000KHz SWT:Auto	Left blank

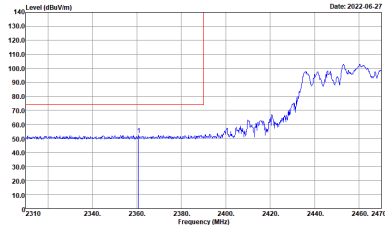
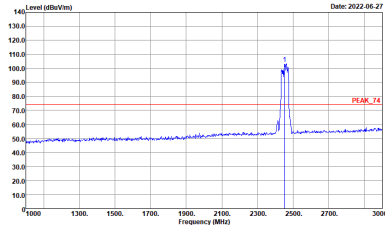
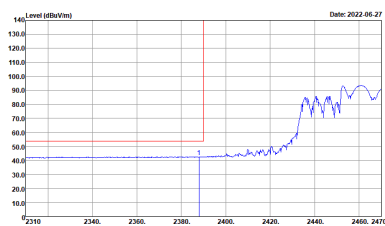
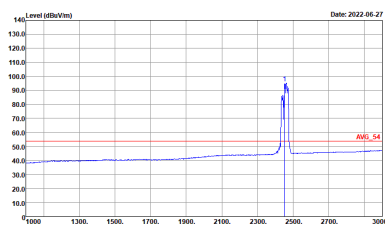


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH09 2452MHz - L	
7+8	Horizontal	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto
Avg.		

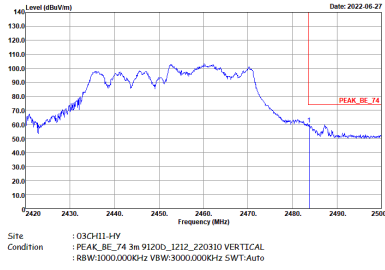
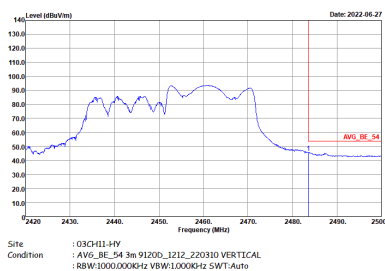


WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH09 2452MHz - R	
7+8	Horizontal	Fundamental
Peak	Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	Left blank
Avg.	Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 HORIZONTAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto	Left blank



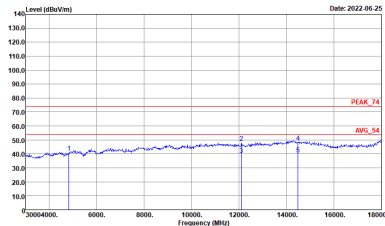
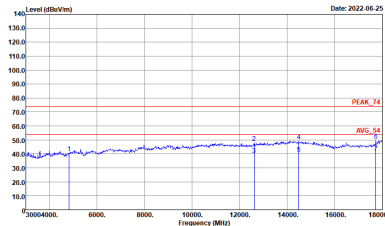
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH09 2452MHz - L	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:3000.0000kHz SWT:Auto
	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto	 Site : 03CH11-HY Condition : AVG_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000kHz VBW:1.0000kHz SWT:Auto



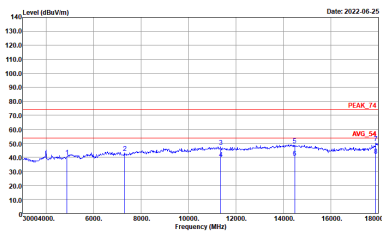
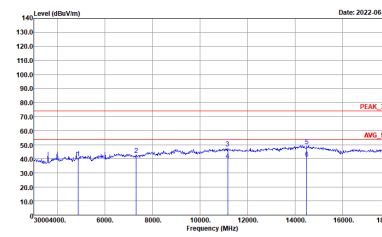
WIFI	2.4GHz 2400~2483.5MHz Band Edge @ 3m	
ANT	802.11ax HE40 Partial 242/62 CH09 2452MHz - R	
7+8	Vertical	Fundamental
Peak	 Site : 03CH11-HY Condition : PEAK_BE_74 3m 91200_1212_220310 VERTICAL : RBW:1000.0000Hz VBW:3000.0000Hz SWT:Auto	Left blank
Avg.	 Site : 03CH11-HY Condition : AVG_BE_54 3m 91200_1212_220310 VERTICAL : RBW:1000.0000Hz VBW:1.0000Hz SWT:Auto	Left blank



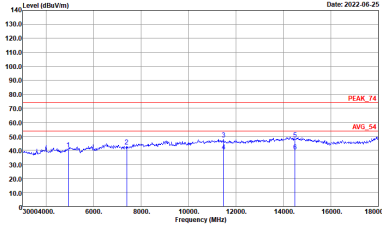
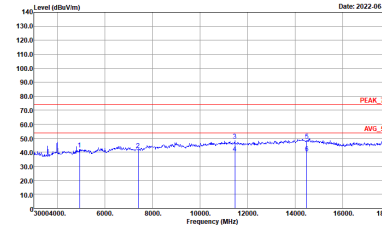
2.4GHz 2400~2483.5MHz
WIFI 802.11b (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH01 2412MHz	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL Detector : Peak	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL Detector : Peak



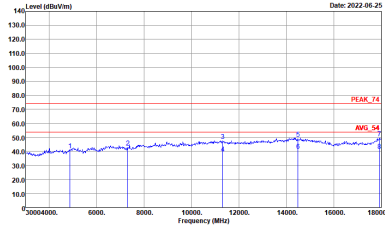
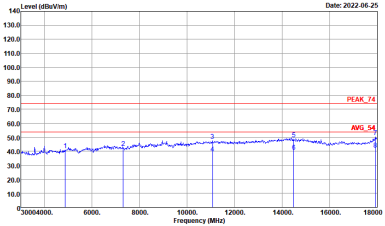
WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH06 2437MHz	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL



WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11b CH11 2462MHz	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL



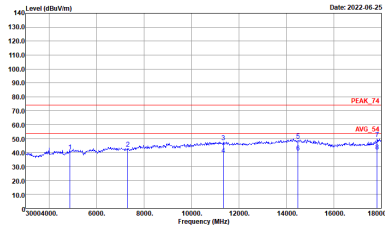
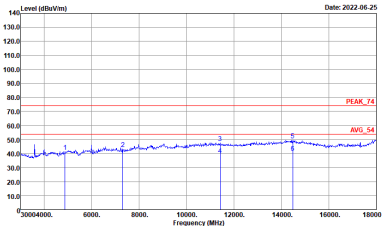
2.4GHz 2400~2483.5MHz
WIFI 802.11g (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11g CH06 2437MHz	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL



2.4GHz 2400~2483.5MHz

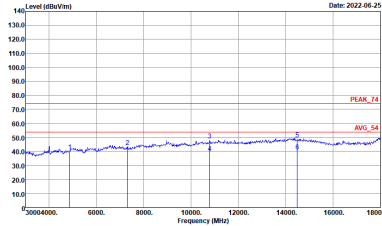
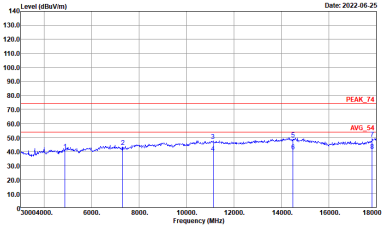
WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ax HE20 Full CH06 2437MHz	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL	 Site : 03CH11-HY Condition : PEAK_74 3m 91200_1212_220310 VERTICAL



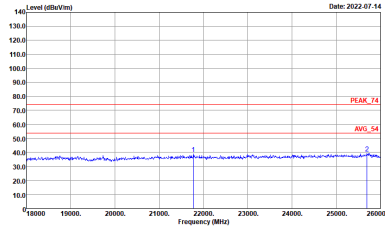
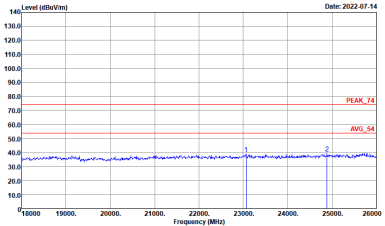
2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI	2.4GHz 2400~2483.5MHz Harmonic @ 3m	
ANT	802.11ax HE40 Full CH06 2437MHz	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-4Y Condition : PEAK_74 3m 91200_1212_220310 HORIZONTAL	 Site : 03CH11-4Y Condition : PEAK_74 3m 91200_1212_220310 VERTICAL

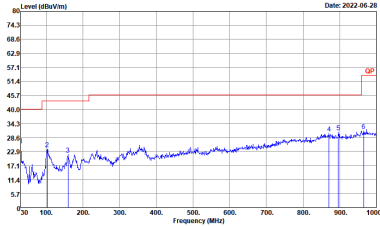
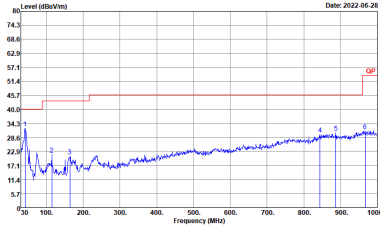


Emission above 18GHz
2.4GHz WIFI 802.11ax HE40 Full (SHF @ 1m)

WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE40 Full SHF	
7+8	Horizontal	Vertical
Peak Avg.	 Site : 03CH11-HY Condition : PEAK_74 1m SHF_00993_211130 HORIZONTAL	 Site : 03CH11-HY Condition : PEAK_74 1m SHF_00993_211130 VERTICAL



Emission above 18GHz
2.4GHz WIFI 802.11ax HE40 Full (LF)

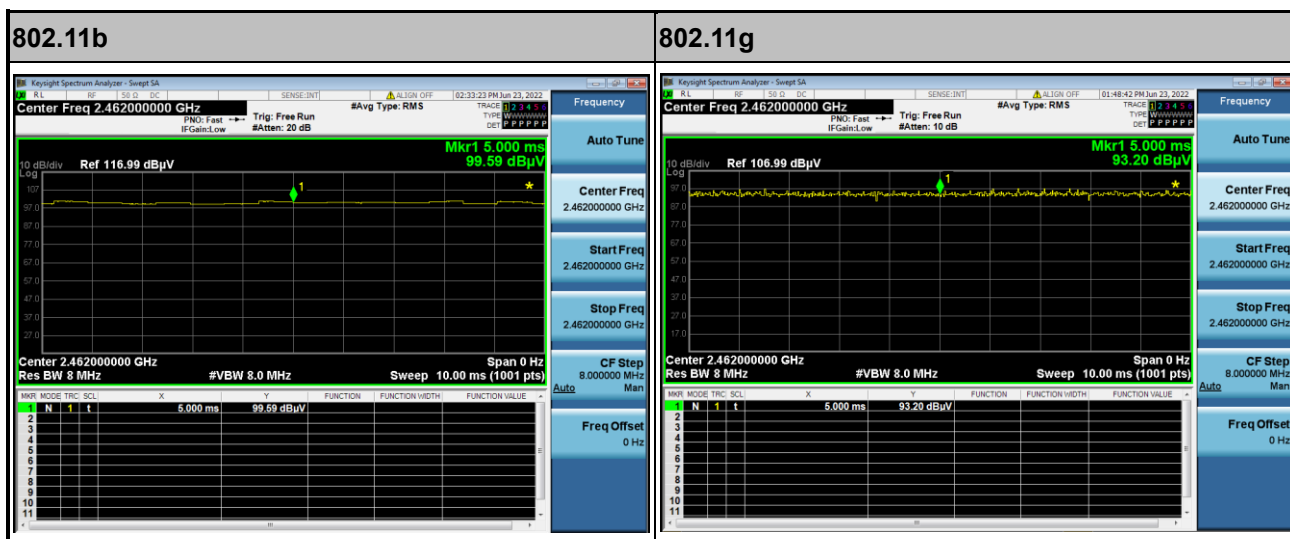
WIFI	2.4GHz 2400~2483.5MHz	
ANT	802.11ax HE40 Full LF	
7+8	Horizontal	Vertical
QP / Peak	 Site : 03CH11-HY Condition : QP 3m BE-LOG 35414-211009 HORIZONTAL	 Site : 03CH11-HY Condition : QP 3m BE-LOG 35414-211009 VERTICAL



Appendix E. Duty Cycle Plots

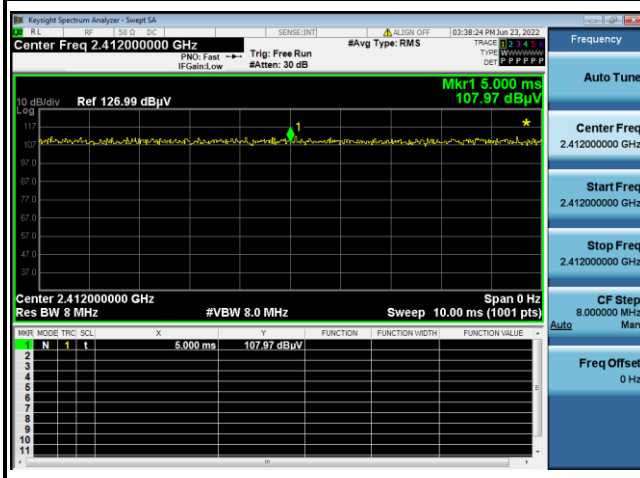
Antenna	Band	Duty Cycle(%)	T(us)	1/T(kHz)	VBW Setting
7+8	802.11b	100.00	-	-	10Hz
7+8	802.11g	100.00	-	-	10Hz
7+8	2.4GHz 802.11ax HE20 Full RU	100.00	-	-	10Hz
7+8	2.4GHz 802.11ax HE20 242 RU	99.42	-	-	10Hz
7+8	2.4GHz 802.11ax HE20 106 RU	99.50	-	-	10Hz
7+8	2.4GHz 802.11ax HE40 Full RU	98.91	-	-	10Hz
7+8	2.4GHz 802.11ax HE40 242 RU	95.09	1355	0.74	1kHz
7+8	2.4GHz 802.11ax HE40 484 RU	95.77	1360	0.74	1kHz

MIMO <Ant. 7+8>

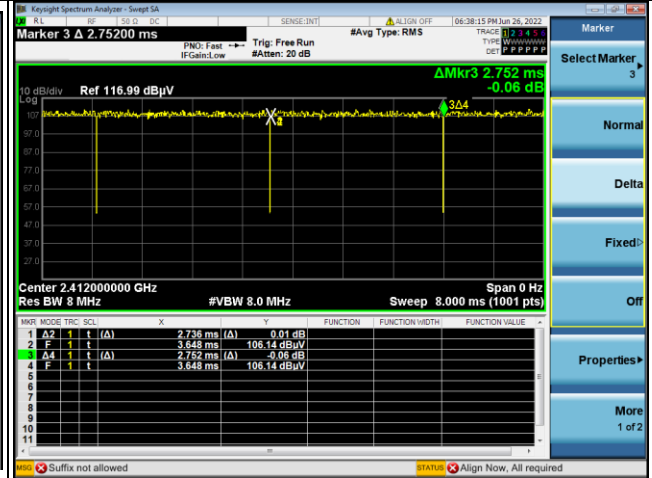




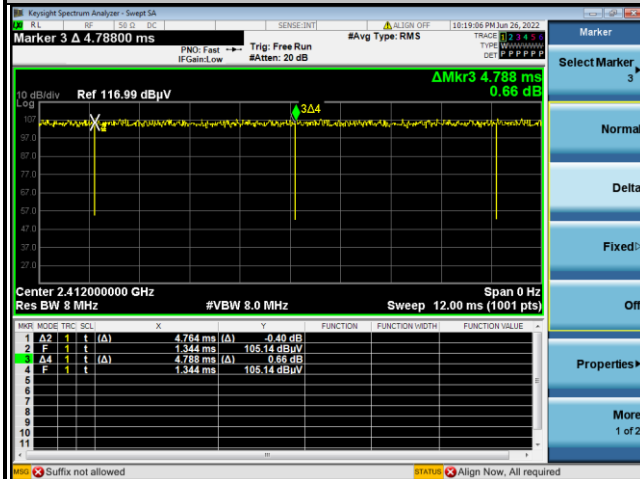
802.11ax HE20 Full RU



802.11ax HE20 242 RU

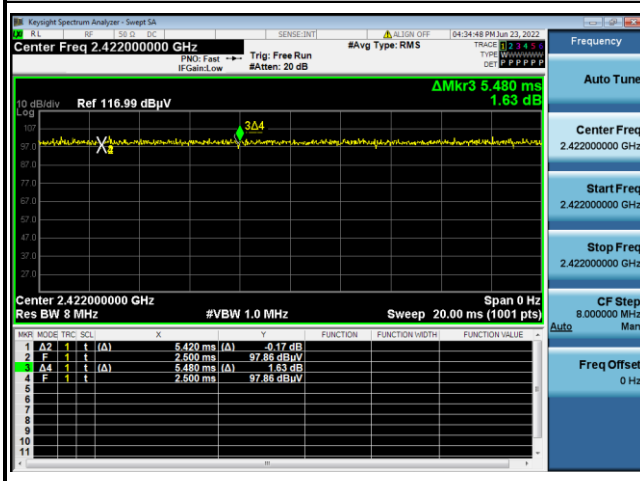


802.11ax HE20 106 RU

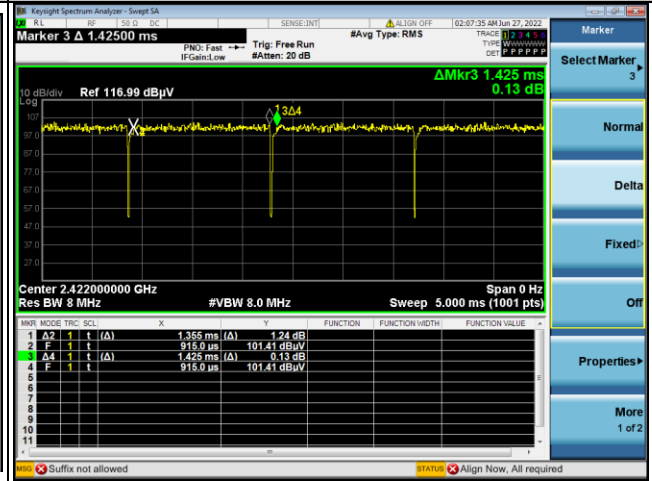




802.11ax HE40 Full RU



802.11ax HE40 242 RU



802.11ax HE40 484 RU

