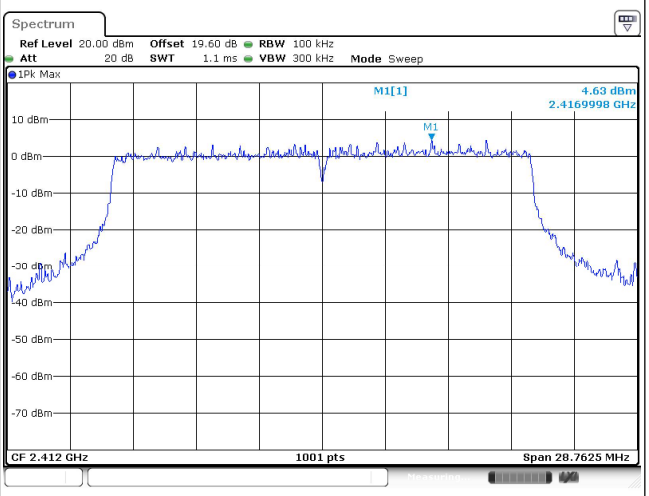
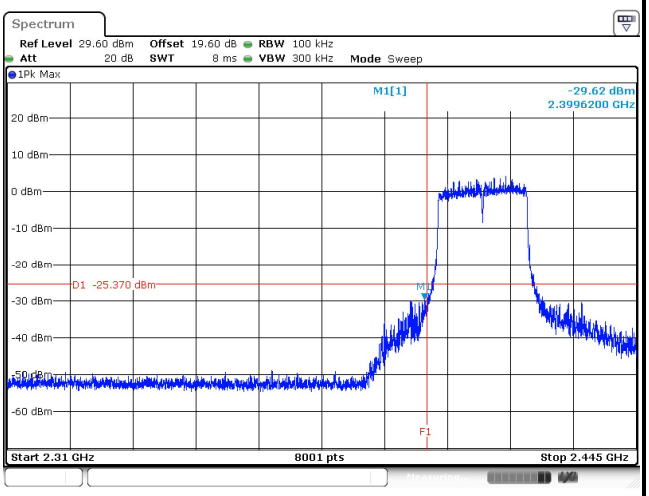
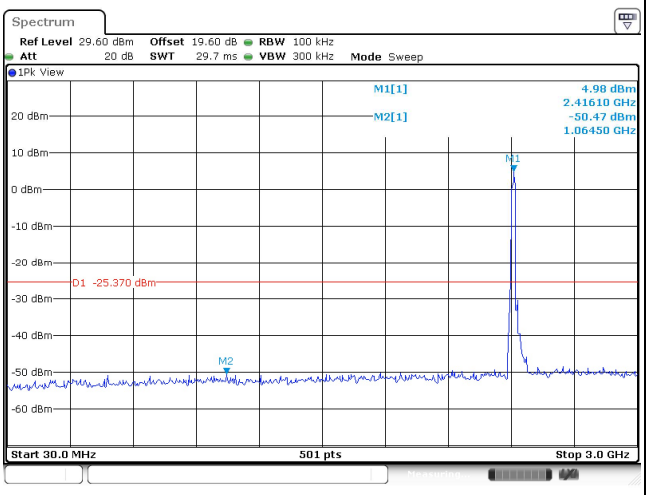
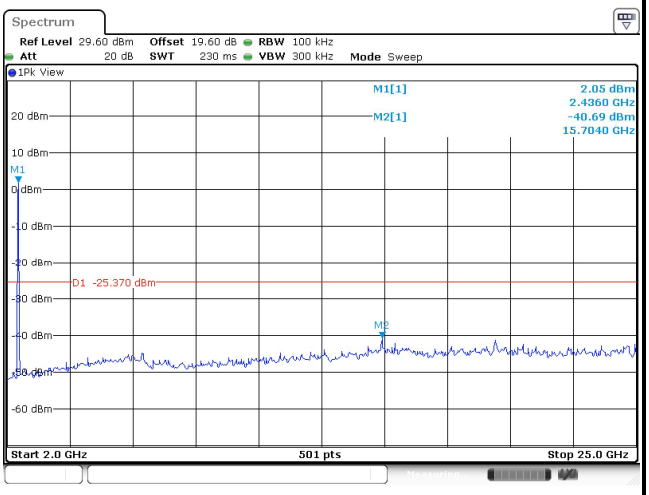
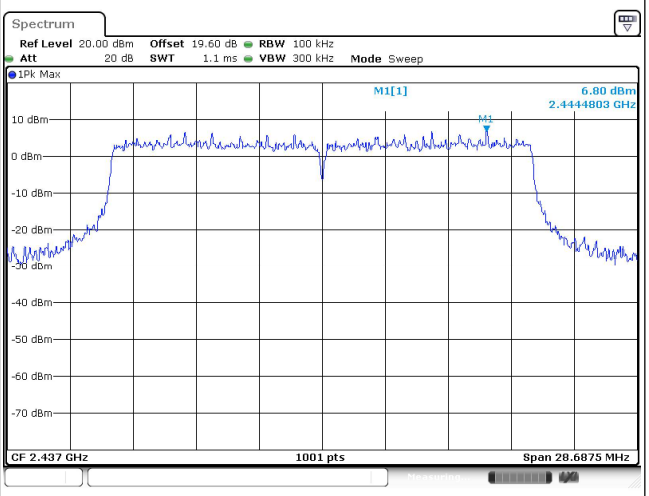
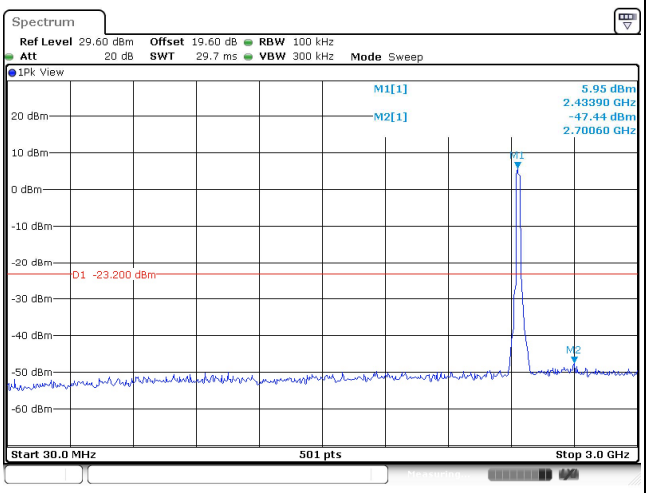
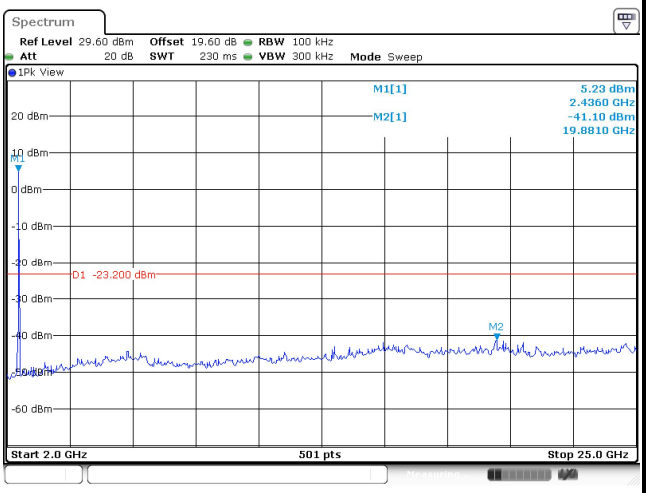
Number of TX = 2, Ant. 2 (Measured)

Test Mode :	802.11ax HE20	Test Channel :	01 Full RU

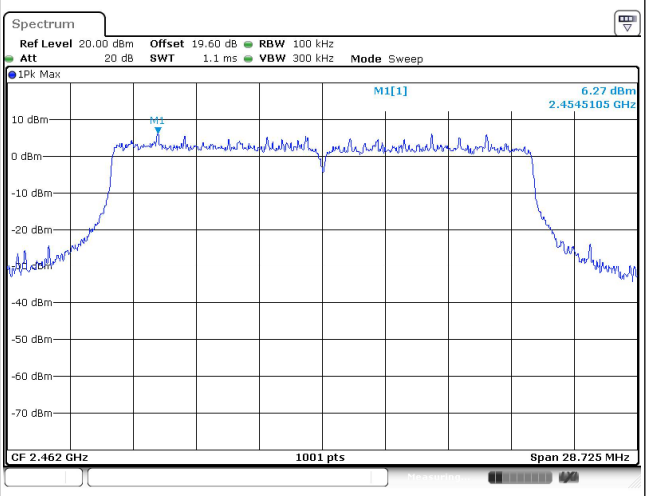
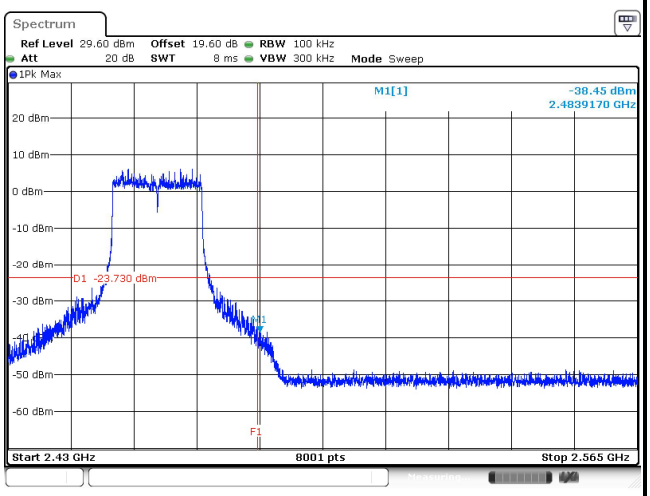
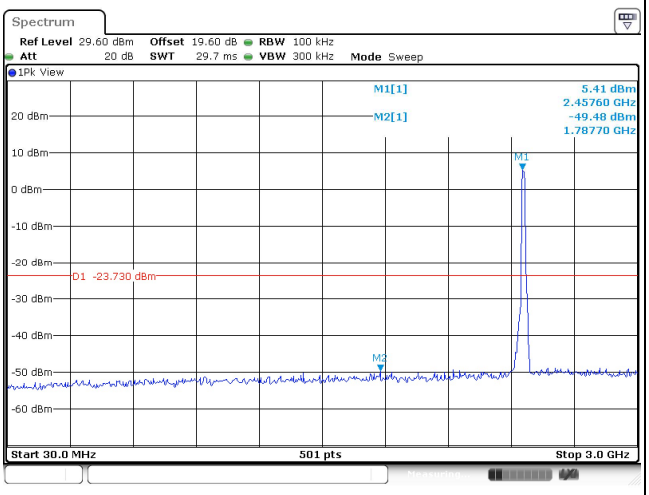
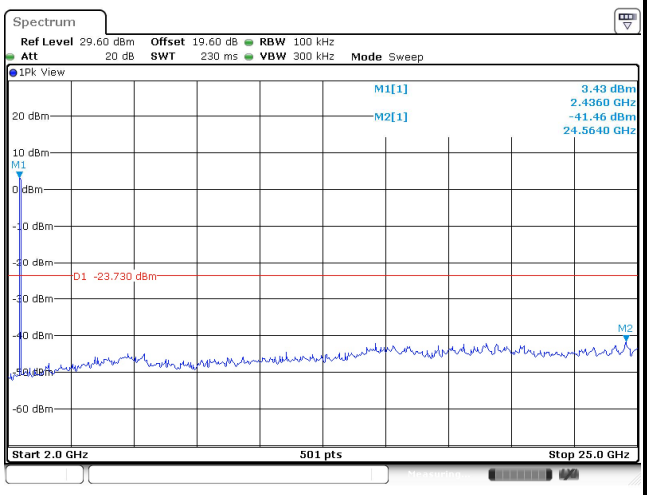
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	

Test Mode :	802.11ax HE20	Test Channel :	06 Full RU

100kHz PSD reference Level	Channel Plot
	

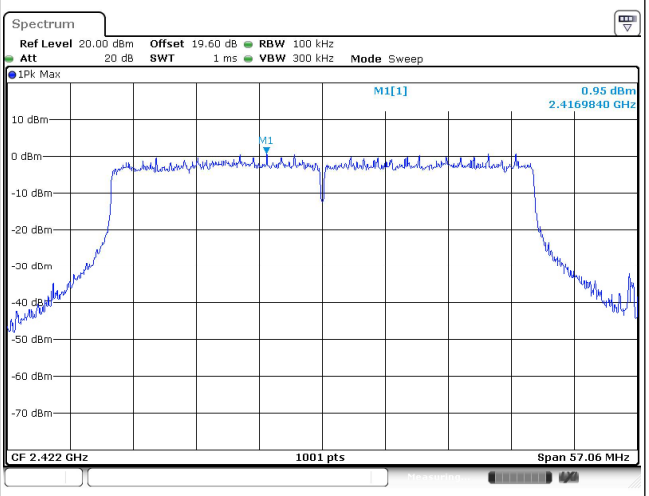
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Test Mode :	802.11ax HE20	Test Channel :	11 Full RU

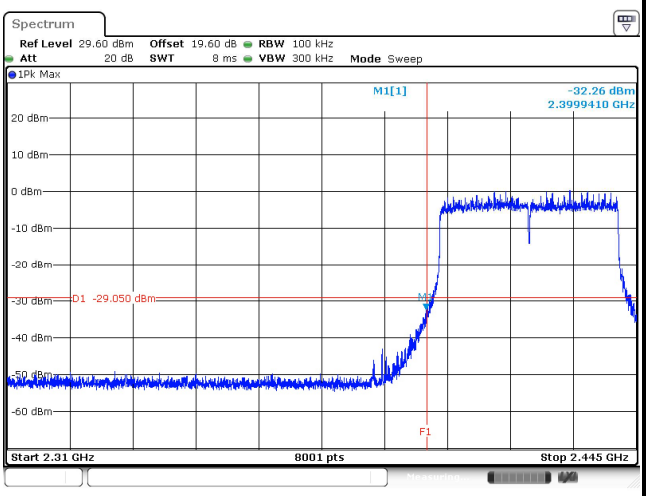
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Test Mode :	802.11ax HE40	Test Channel :	03 Full RU

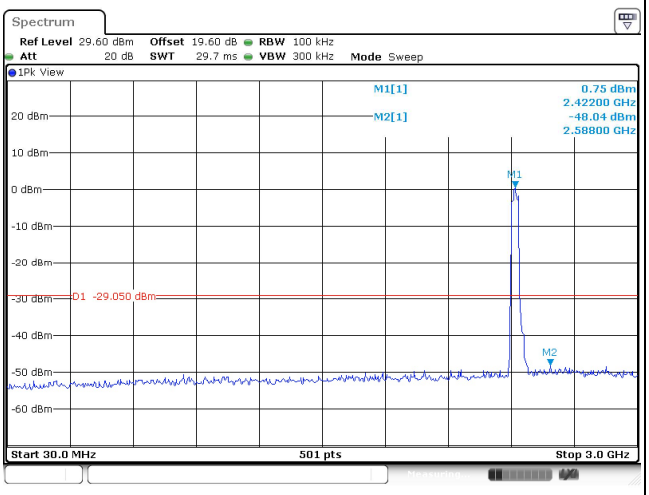
100kHz PSD reference Level



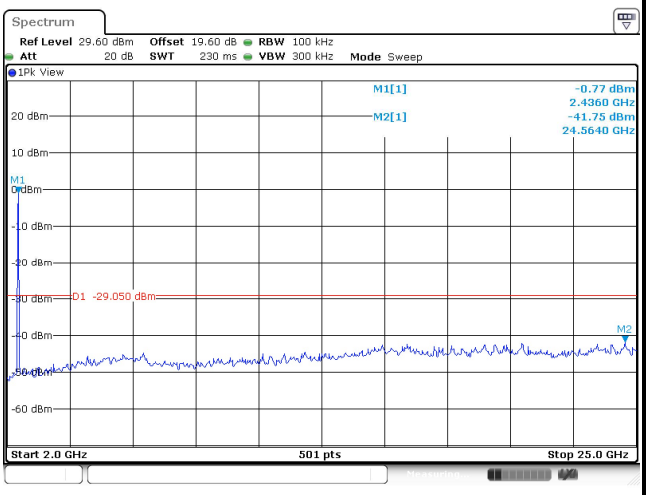
Channel Plot



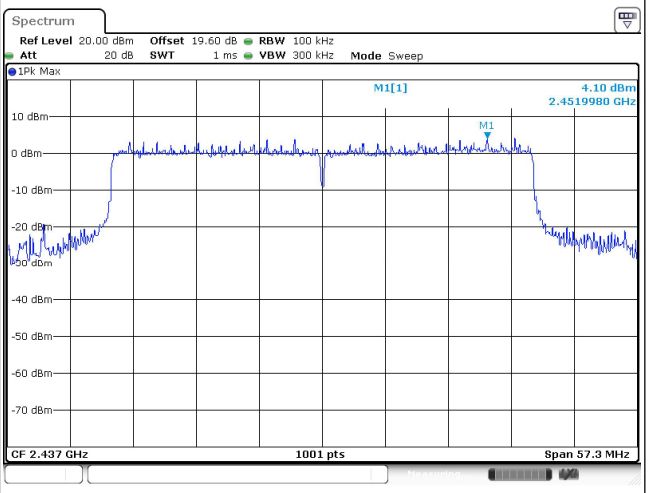
Spurious Emission 30MHz~3GHz

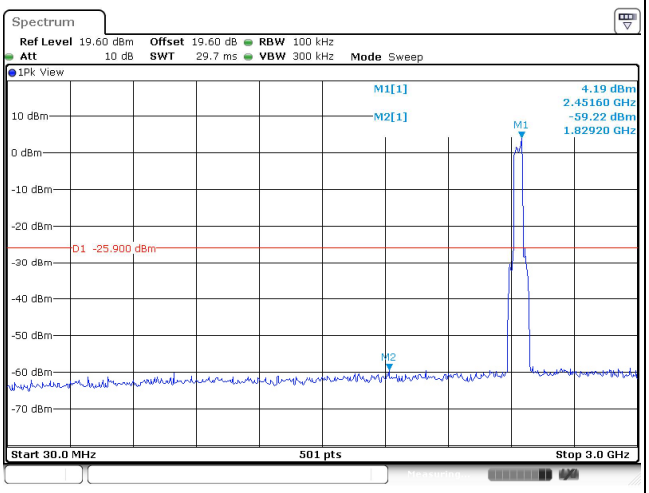
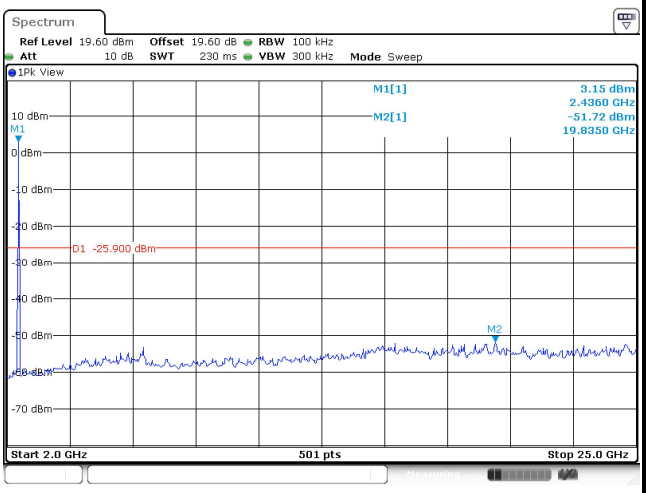


Spurious Emission 2GHz~25GHz



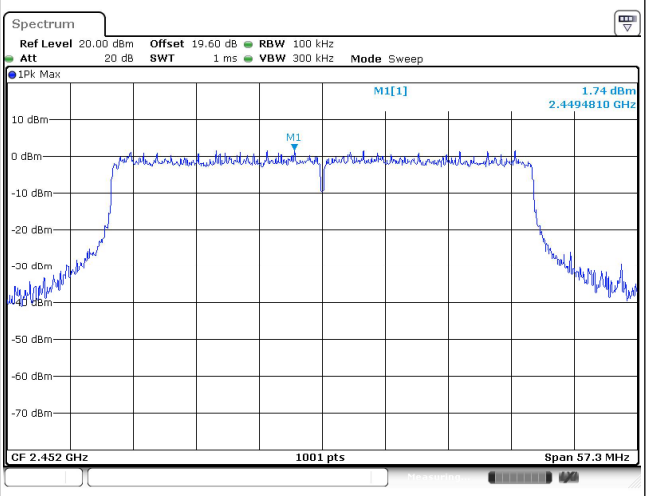
Test Mode :	802.11ax HE40	Test Channel :	06 Full RU

100kHz PSD reference Level	Channel Plot
	

Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

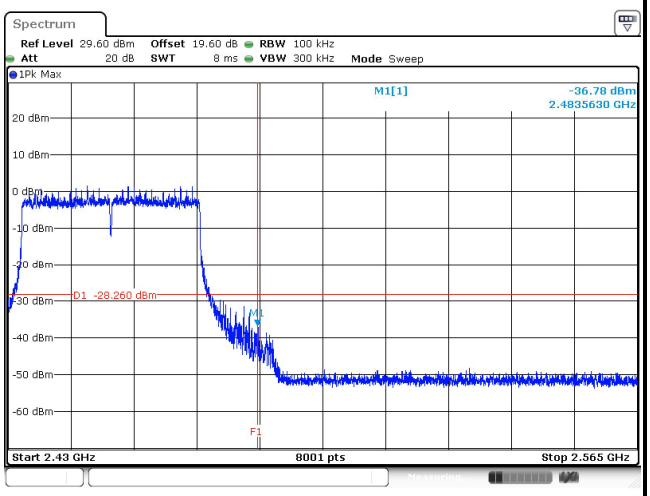
Test Mode :	802.11ax HE40	Test Channel :	09 Full RU

100kHz PSD reference Level



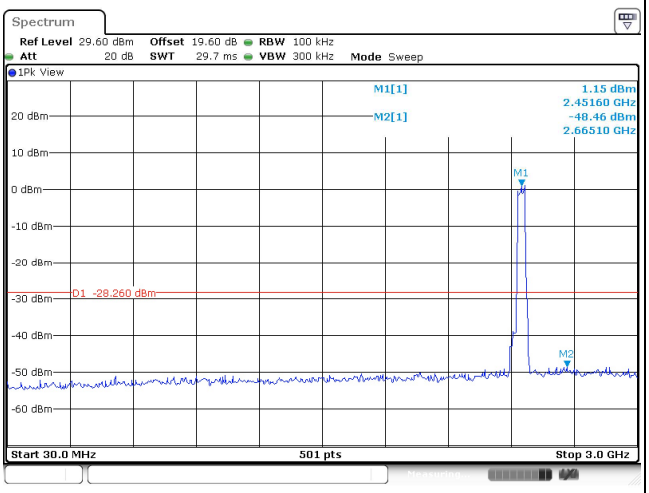
Date: 21.SEP.2022 14:29:01

Channel Plot



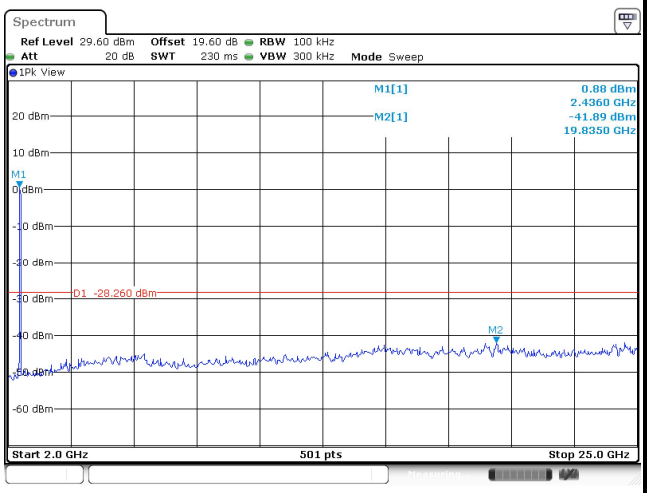
Date: 21.SEP.2022 14:29:29

Spurious Emission 30MHz~3GHz



Date: 21.SEP.2022 14:30:47

Spurious Emission 2GHz~25GHz



Date: 21.SEP.2022 14:31:05

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

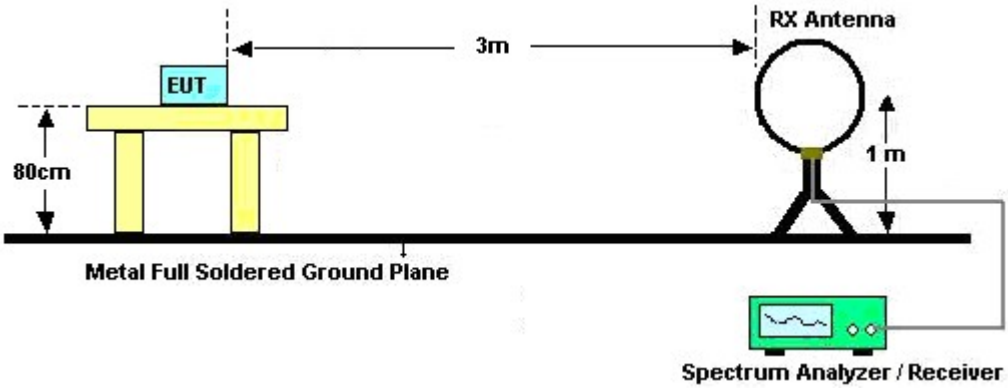
Please refer to the measuring equipment list in this test report.

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 ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW = 3 MHz for f ≥ 1 GHz for peak measurement.
   For average measurement:
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

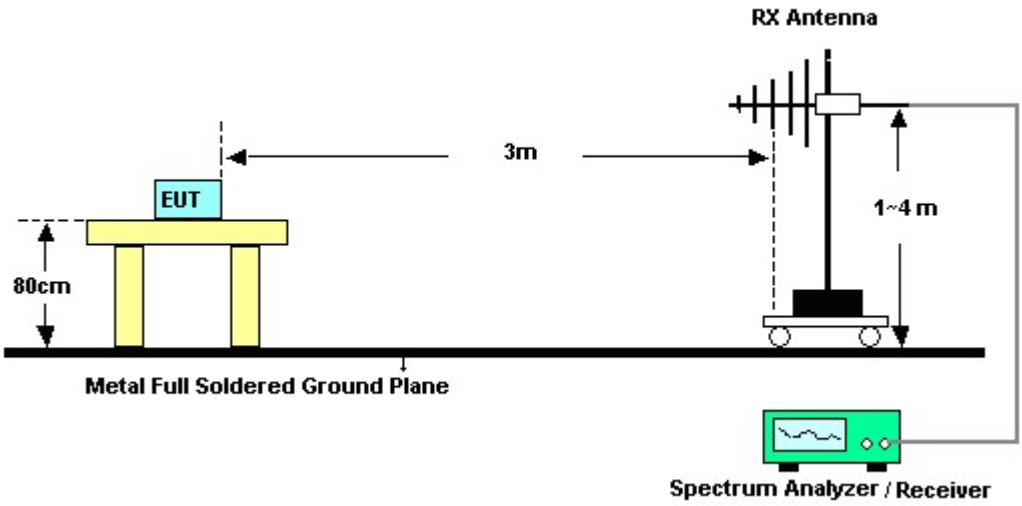
3.5.4 Test Setup

For radiated emissions below 30MHz

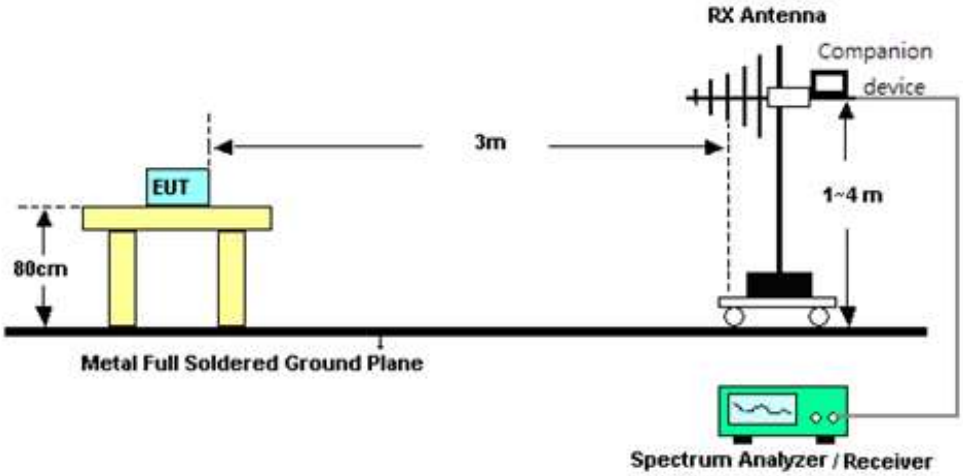


For radiated emissions from 30MHz to 1GHz

<CDD Mode>

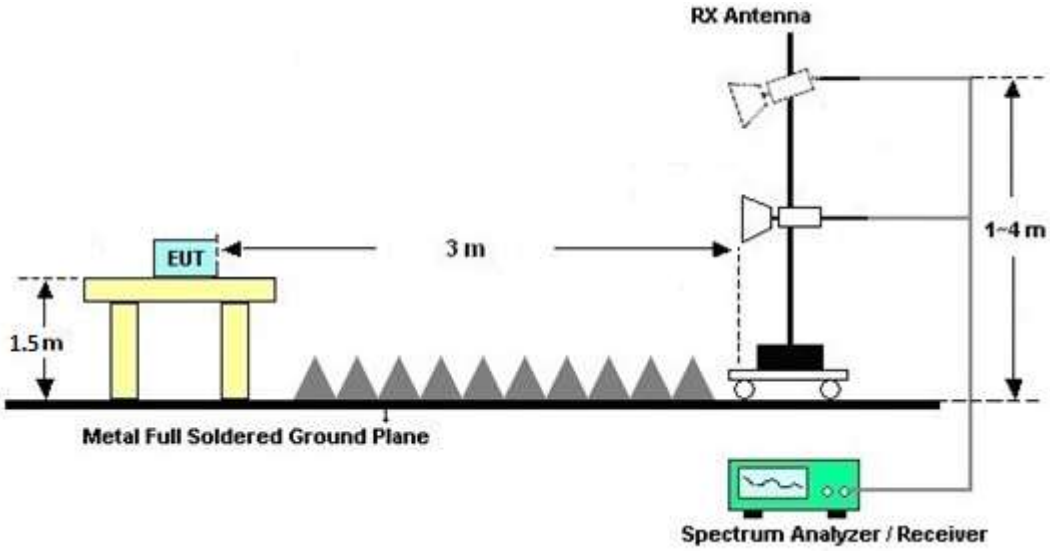


<TXBF Modes>

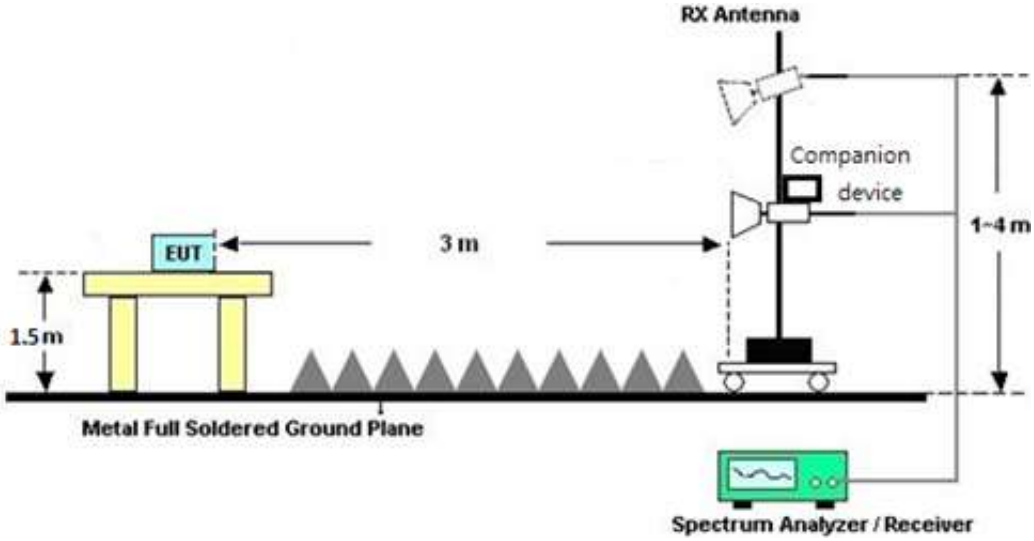


For radiated test from 1GHz to 18GHz

<CDD Mode>

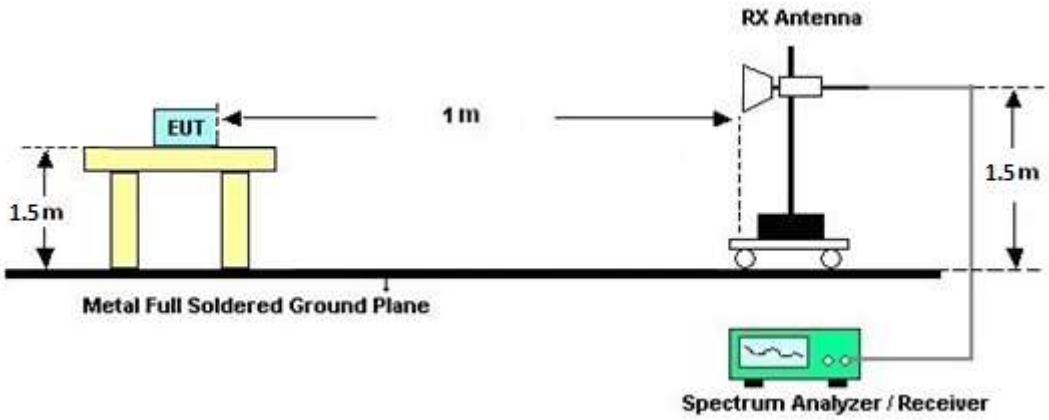


<TXBF Modes>

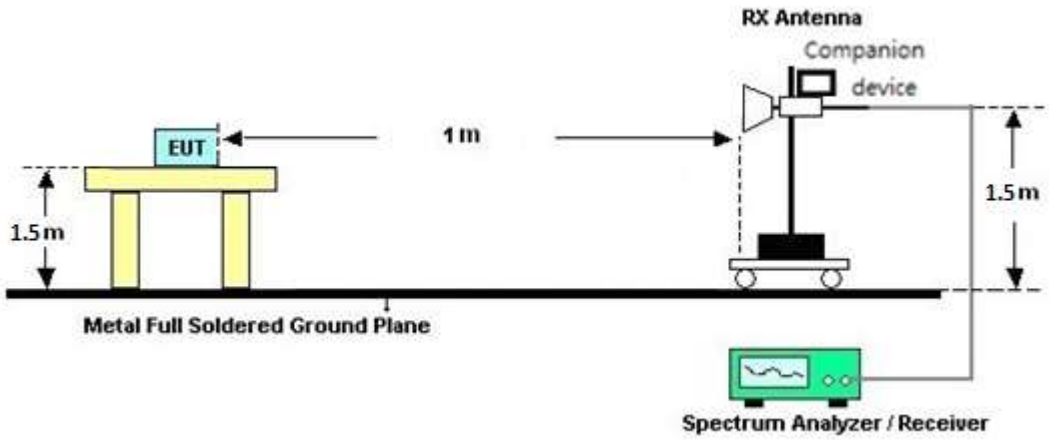


For radiated test above 18GHz

<CDD Mode>



<TXBF Modes>



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

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

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result 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 (30 MHz ~ 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 (dBμV)	
	Quasi-Peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

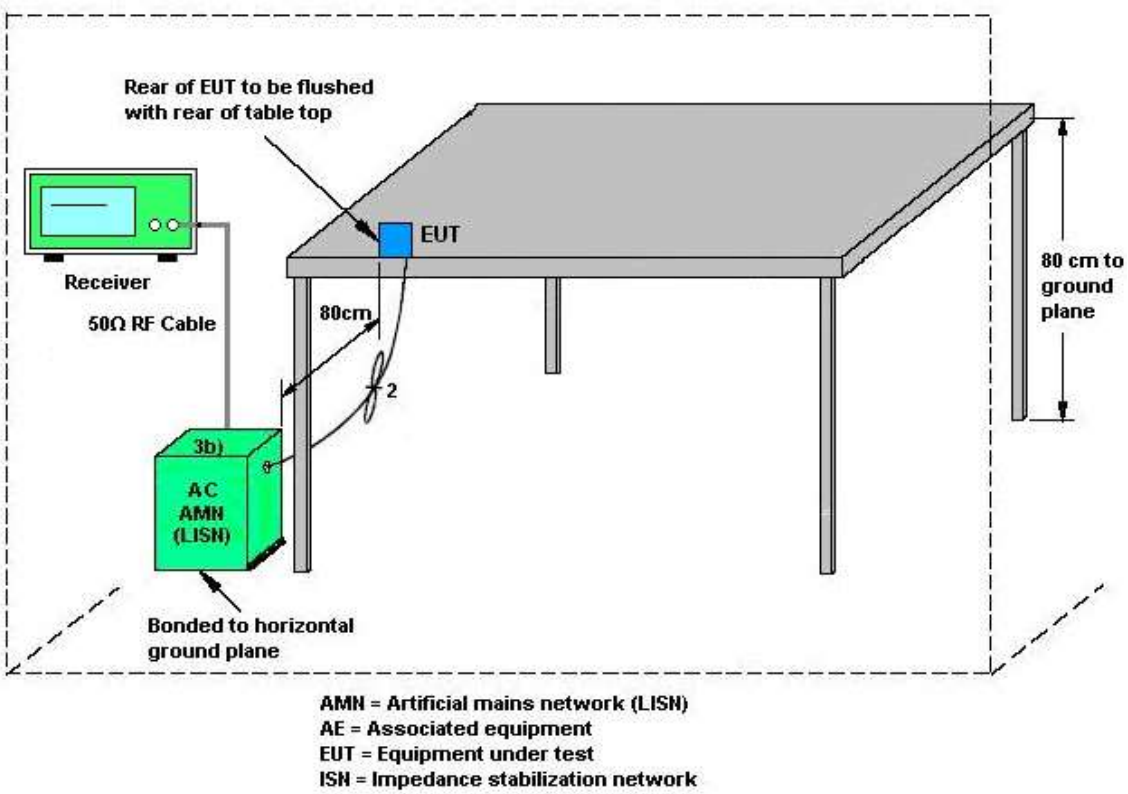
3.6.2 Measuring Instruments

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 = 9 kHz) 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

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.

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	Aug. 09, 2022~ Aug. 31, 2022	May 12, 2023	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 24, 2021	Aug. 09, 2022~ Aug. 31, 2022	Dec. 23, 2022	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz-40GHz	Nov. 30, 2021	Aug. 09, 2022~ Aug. 31, 2022	Nov. 29, 2022	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803953/2	30MHz~40GHz	Mar. 08, 2022	Aug. 09, 2022~ Aug. 31, 2022	Mar. 07, 2023	Radiation (03CH13-HY)
Amplifier	SONOMA	310N	187282	9kHz~1GHz	Dec. 15, 2021	Aug. 09, 2022~ Aug. 31, 2022	Dec. 14, 2022	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	40103 & 07	30MHz~1GHz	Apr. 24, 2022	Aug. 09, 2022~ Aug. 31, 2022	Apr. 23, 2023	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz~18GHz	Jul. 25, 2022	Aug. 09, 2022~ Aug. 31, 2022	Jul. 24, 2023	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303B	TP200889	N/A	Sep. 30, 2021	Aug. 09, 2022~ Aug. 31, 2022	Sep. 29, 2022	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590074	1GHz~18GHz	May 17, 2022	Aug. 09, 2022~ Aug. 31, 2022	May 16, 2023	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY53270147	1GHz~26.5GHz	Oct. 26, 2021	Aug. 09, 2022~ Aug. 31, 2022	Oct. 25, 2022	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY55370526	10Hz~44GHz	Mar. 18, 2022	Aug. 09, 2022~ Aug. 31, 2022	Mar. 17, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WLK4-1000-1530-8000-40SS	SN12	1.53GHz Low Pass Filter	Sep. 14, 2021	Aug. 09, 2022~ Aug. 31, 2022	Sep. 13, 2022	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700-3000-18000-60SS	SN2	3GHz High Pass Filter	Jul. 11, 2022	Aug. 09, 2022~ Aug. 31, 2022	Jul. 10, 2023	Radiation (03CH13-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN5	6.75GHz High Pass Filter	Mar. 10, 2022	Aug. 09, 2022~ Aug. 31, 2022	Mar. 09, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30MHz~18GHz	Feb. 09, 2022	Aug. 09, 2022~ Aug. 31, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30MHz~18GHz	Feb. 09, 2022	Aug. 09, 2022~ Aug. 31, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30MHz~18GHz	Feb. 09, 2022	Aug. 09, 2022~ Aug. 31, 2022	Feb. 08, 2023	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Aug. 09, 2022~ Aug. 31, 2022	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Aug. 09, 2022~ Aug. 31, 2022	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Aug. 09, 2022~ Aug. 31, 2022	N/A	Radiation (03CH13-HY)

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Aug. 22, 2022	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9kHz~3.6GHz	Dec. 01, 2021	Aug. 22, 2022	Nov. 30, 2022	Conduction (CO05-HY)
Hygrometer	Testo	608-H1	34913912	N/A	Nov. 17, 2021	Aug. 22, 2022	Nov. 16, 2022	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 03, 2021	Aug. 22, 2022	Dec. 02, 2022	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32	N/A	N/A	N/A	Aug. 22, 2022	N/A	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	00691	N/A	Aug. 01, 2022	Aug. 22, 2022	Jul. 31, 2023	Conduction (CO05-HY)
LISN Cable	MVE	RG-400	260260	N/A	Dec. 30, 2021	Aug. 22, 2022	Dec. 29, 2022	Conduction (CO05-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Aug. 18, 2022 Sep. 21, 2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	15I00041SNO10 (NO:248)	10MHz~6GHz	Dec. 29, 2021	Aug. 18, 2022 Sep. 21, 2022	Dec. 28, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101905	10Hz - 40GHz(內建amp)	Aug. 03, 2022	Aug. 18, 2022 Sep. 21, 2022	Aug. 02, 2023	Conducted (TH05-HY)
Hygrometer	TECPEL	DTM-303A	TP201996	N/A	Nov. 16, 2021	Aug. 15, 2022 Aug. 26 .2022	Nov. 15, 2022	Conducted (TH05-HY)
Power Sensor	DARE	RPR3006W	15I00041SNO10 (NO:248)	10MHz~6GHz	Dec. 29, 2021	Aug. 15, 2022 Aug. 26, 2022	Dec. 28, 2022	Conducted (TH05-HY)
Power Meter	Anritsu	ML2495A	932001	N/A	Sep. 30, 2021	Aug. 15, 2022 Aug. 26, 2022	Sep. 29, 2022	Conducted (TH05-HY)
Power Sensor	Anritsu	MA2411B	846202	300MHz~40GHz	Sep. 30, 2021	Aug. 15, 2022 Aug. 26, 2022	Sep. 29, 2022	Conducted (TH05-HY)
Signal Analyzer	Rohde & Schwarz	FSV40	101565	10Hz ~ 40GHz	Dec. 29, 2021	Aug. 15, 2022 Aug. 26, 2022	Dec. 28, 2022	Conducted (TH05-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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	6.0 dB

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.9 dB

Appendix A. Test Result of Conducted Test Items

<CDD Mode>

Test Engineer:	Benny Ku	Temperature:	21~25	°C
Test Date:	2022/08/15~2022/08/26	Relative Humidity:	51~54	%

Report Number : FR271537C

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
					Ant9	Ant8	Ant9	Ant8		
11b	1Mbps	2	1	2412	13.19	13.19	8.10	8.12	0.50	Pass
11b	1Mbps	2	6	2437	13.44	13.44	7.62	7.64	0.50	Pass
11b	1Mbps	2	11	2462	13.19	13.59	7.18	8.58	0.50	Pass
11g	6Mbps	2	1	2412	17.03	17.08	16.12	15.96	0.50	Pass
11g	6Mbps	2	6	2437	17.28	17.28	16.36	16.38	0.50	Pass
11g	6Mbps	2	11	2462	17.13	17.23	16.34	16.38	0.50	Pass

Report Number : FR271537C

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
					Ant9	Ant8	SUM	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	
11b	1Mbps	2	1	2412	21.30	21.10	24.21	30.00		1.79		26.00		36.00		Pass
11b	1Mbps	2	6	2437	20.80	20.90	23.86	30.00		1.79		25.65		36.00		Pass
11b	1Mbps	2	11	2462	20.80	20.70	23.76	30.00		1.79		25.55		36.00		Pass
11g	6Mbps	2	1	2412	18.40	18.40	21.41	30.00		1.79		23.20		36.00		Pass
11g	6Mbps	2	6	2437	19.20	19.10	22.16	30.00		1.79		23.95		36.00		Pass
11g	6Mbps	2	11	2462	17.60	17.50	20.56	30.00		1.79		22.35		36.00		Pass
HT20	MCS0	2	1	2412	18.80	18.70	21.76	30.00		1.79		23.55		36.00		Pass
HT20	MCS0	2	6	2437	18.50	18.50	21.51	30.00		1.79		23.30		36.00		Pass
HT20	MCS0	2	11	2462	17.20	16.90	20.06	30.00		1.79		21.85		36.00		Pass
HT40	MCS0	2	3	2422	18.30	18.40	21.36	30.00		1.79		23.15		36.00		Pass
HT40	MCS0	2	6	2437	18.40	18.40	21.41	30.00		1.79		23.20		36.00		Pass
HT40	MCS0	2	9	2452	16.60	16.50	19.56	30.00		1.79		21.35		36.00		Pass
VHT20	MCS0	2	1	2412	18.90	18.80	21.86	30.00		1.79		23.65		36.00		Pass
VHT20	MCS0	2	6	2437	19.00	19.00	22.01	30.00		1.79		23.80		36.00		Pass
VHT20	MCS0	2	11	2462	17.30	17.00	20.16	30.00		1.79		21.95		36.00		Pass
VHT40	MCS0	2	3	2422	18.40	18.60	21.51	30.00		1.79		23.30		36.00		Pass
VHT40	MCS0	2	6	2437	18.90	18.90	21.91	30.00		1.79		23.70		36.00		Pass
VHT40	MCS0	2	9	2452	16.70	16.60	19.66	30.00		1.79		21.45		36.00		Pass

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

Report Number : FR271537C

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
					Ant9	Ant8	Worse + 3.01	Ant9	Ant8	Ant9	Ant8	
11b	1Mbps	2	1	2412	-4.31	-4.21	-1.20	4.25		8.00		Pass
11b	1Mbps	2	6	2437	-4.02	-3.83	-0.82	4.25		8.00		Pass
11b	1Mbps	2	11	2462	-3.49	-2.60	0.41	4.25		8.00		Pass
11g	6Mbps	2	1	2412	-8.62	-7.85	-4.84	4.25		8.00		Pass
11g	6Mbps	2	6	2437	-8.16	-8.63	-5.15	4.25		8.00		Pass
11g	6Mbps	2	11	2462	-8.92	-8.87	-5.86	4.25		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
						Ant9	Ant8	Ant9	Ant8		
HE20	MCS0	2	1	2412	Full	19.28	19.33	18.30	17.55	0.50	Pass
HE20	MCS0	2	6	2437	Full	19.43	19.48	18.98	18.90	0.50	Pass
HE20	MCS0	2	11	2462	Full	19.33	19.38	18.68	18.83	0.50	Pass
HE40	MCS0	2	3	2422	Full	37.96	37.76	35.72	37.88	0.50	Pass
HE40	MCS0	2	6	2437	Full	37.96	38.06	37.84	37.64	0.50	Pass
HE40	MCS0	2	9	2452	Full	37.86	37.96	36.96	37.92	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
						Ant9	Ant8	SUM	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	
HE20	MCS0	2	1	2412	Full	19.00	18.90	21.96	30.00		1.79		23.75		36.00		Pass
HE20	MCS0	2	1	2412	26/0	9.10	9.10	12.11	30.00		1.79		13.90		36.00		Pass
HE20	MCS0	2	1	2412	52/37	11.80	11.20	14.52	30.00		1.79		16.31		36.00		Pass
HE20	MCS0	2	1	2412	106/53	15.00	15.10	18.06	30.00		1.79		19.85		36.00		Pass
HE20	MCS0	2	6	2437	Full	19.10	19.10	22.11	30.00		1.79		23.90		36.00		Pass
HE20	MCS0	2	6	2437	26/4	9.90	10.20	13.06	30.00		1.79		14.85		36.00		Pass
HE20	MCS0	2	6	2437	52/39	13.10	12.90	16.01	30.00		1.79		17.80		36.00		Pass
HE20	MCS0	2	6	2437	106/53	16.30	16.10	19.21	30.00		1.79		21.00		36.00		Pass
HE20	MCS0	2	11	2462	Full	17.40	17.10	20.26	30.00		1.79		22.05		36.00		Pass
HE20	MCS0	2	11	2462	26/8	8.10	8.60	11.37	30.00		1.79		13.16		36.00		Pass
HE20	MCS0	2	11	2462	52/40	10.30	11.40	13.90	30.00		1.79		15.69		36.00		Pass
HE20	MCS0	2	11	2462	106/54	14.00	14.10	17.06	30.00		1.79		18.85		36.00		Pass
HE40	MCS0	2	3	2422	Full	18.50	18.70	21.61	30.00		1.79		23.40		36.00		Pass
HE40	MCS0	2	3	2422	242/61	14.70	14.90	17.81	30.00		1.79		19.60		36.00		Pass
HE40	MCS0	2	6	2437	Full	19.00	19.00	22.01	30.00		1.79		23.80		36.00		Pass
HE40	MCS0	2	6	2437	242/61	16.30	16.50	19.41	30.00		1.79		21.20		36.00		Pass
HE40	MCS0	2	9	2452	Full	16.80	16.70	19.76	30.00		1.79		21.55		36.00		Pass
HE40	MCS0	2	9	2452	242/62	13.80	14.00	16.91	30.00		1.79		18.70		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
						Ant9	Ant8	Worse + 3.01	Ant9	Ant8	Ant9	Ant8	
HE20	MCS0	2	1	2412	Full	-8.00	-8.77	-4.99	4.25		8.00		Pass
HE20	MCS0	2	1	2412	26/0	-8.09	-8.78	-5.08	4.25		8.00		Pass
HE20	MCS0	2	1	2412	52/37	-8.10	-9.12	-5.09	4.25		8.00		Pass
HE20	MCS0	2	1	2412	106/53	-8.14	-8.90	-5.13	4.25		8.00		Pass
HE20	MCS0	2	6	2437	Full	-7.64	-7.94	-4.63	4.25		8.00		Pass
HE20	MCS0	2	6	2437	26/4	-7.74	-8.11	-4.73	4.25		8.00		Pass
HE20	MCS0	2	6	2437	52/39	-7.80	-8.20	-4.79	4.25		8.00		Pass
HE20	MCS0	2	6	2437	106/53	-7.69	-8.24	-4.68	4.25		8.00		Pass
HE20	MCS0	2	11	2462	Full	-9.42	-9.52	-6.41	4.25		8.00		Pass
HE20	MCS0	2	11	2462	26/8	-9.44	-9.67	-6.43	4.25		8.00		Pass
HE20	MCS0	2	11	2462	52/40	-9.49	-9.53	-6.48	4.25		8.00		Pass
HE20	MCS0	2	11	2462	106/54	-9.58	-9.58	-6.57	4.25		8.00		Pass
HE40	MCS0	2	3	2422	Full	-11.18	-10.90	-7.89	4.25		8.00		Pass
HE40	MCS0	2	3	2422	242/61	-11.65	-11.21	-8.20	4.25		8.00		Pass
HE40	MCS0	2	6	2437	Full	-10.59	-9.74	-6.73	4.25		8.00		Pass
HE40	MCS0	2	6	2437	242/61	-11.01	-10.19	-7.18	4.25		8.00		Pass
HE40	MCS0	2	9	2452	Full	-12.17	-12.31	-9.16	4.25		8.00		Pass
HE40	MCS0	2	9	2452	242/62	-12.61	-12.73	-9.60	4.25		8.00		Pass

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

Report Number : FR271537C

<TXBF Mode>

Test Engineer:	Benny Ku	Temperature:	21~25	°C
Test Date:	2022/08/18~2022/09/21	Relative Humidity:	51~54	%

Report Number : FR271537C

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
					Ant9	Ant8	SUM	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	
HT20	MCS0	2	1	2412	15.90	16.40	19.17	30.00		4.25		23.42		36.00		Pass
HT20	MCS0	2	6	2437	18.80	18.90	21.86	30.00		4.25		26.11		36.00		Pass
HT20	MCS0	2	11	2462	18.00	18.30	21.16	30.00		4.25		25.42		36.00		Pass
HT40	MCS0	2	3	2422	14.80	15.10	17.96	30.00		4.25		22.22		36.00		Pass
HT40	MCS0	2	6	2437	17.90	18.40	21.17	30.00		4.25		25.42		36.00		Pass
HT40	MCS0	2	9	2452	15.80	16.20	19.01	30.00		4.25		23.27		36.00		Pass
VHT20	MCS0	2	1	2412	16.00	16.50	19.27	30.00		4.25		23.52		36.00		Pass
VHT20	MCS0	2	6	2437	18.90	19.00	21.96	30.00		4.25		26.21		36.00		Pass
VHT20	MCS0	2	11	2462	18.10	18.40	21.26	30.00		4.25		25.52		36.00		Pass
VHT40	MCS0	2	3	2422	14.90	15.20	18.06	30.00		4.25		22.32		36.00		Pass
VHT40	MCS0	2	6	2437	18.00	18.50	21.27	30.00		4.25		25.52		36.00		Pass
VHT40	MCS0	2	9	2452	15.90	16.30	19.11	30.00		4.25		23.37		36.00		Pass

Note: Measured power (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
						Ant9	Ant8	Ant9	Ant8		
HE20	MCS0	2	1	2412	Full	19.78	19.83	19.10	19.18	0.50	Pass
HE20	MCS0	2	6	2437	Full	20.03	20.33	19.15	19.13	0.50	Pass
HE20	MCS0	2	11	2462	Full	19.93	19.98	19.15	19.15	0.50	Pass
HE40	MCS0	2	3	2422	Full	38.26	38.16	38.16	38.04	0.50	Pass
HE40	MCS0	2	6	2437	Full	38.56	38.86	38.32	38.20	0.50	Pass
HE40	MCS0	2	9	2452	Full	38.36	38.36	38.20	38.20	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
						Ant9	Ant8	SUM	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	Ant9	Ant8	
HE20	MCS0	2	1	2412	Full	16.10	16.60	19.37	30.00		4.25		23.62		36.00		Pass
HE20	MCS0	2	6	2437	Full	19.00	19.10	22.06	30.00		4.25		26.31		36.00		Pass
HE20	MCS0	2	11	2462	Full	18.20	18.50	21.36	30.00		4.25		25.62		36.00		Pass
HE40	MCS0	2	3	2422	Full	15.00	15.30	18.16	30.00		4.25		22.42		36.00		Pass
HE40	MCS0	2	6	2437	Full	18.10	18.60	21.37	30.00		4.25		25.62		36.00		Pass
HE40	MCS0	2	9	2452	Full	16.00	16.40	19.21	30.00		4.25		23.47		36.00		Pass

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

Report Number : FR271537C

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
						Ant9	Ant8	Worse + 3.01	Ant9	Ant8	Ant9	Ant8	
HE20	MCS0	2	1	2412	Full	-11.75	-9.85	-6.84	4.25		8.00		Pass
HE20	MCS0	2	6	2437	Full	-8.56	-8.58	-5.55	4.25		8.00		Pass
HE20	MCS0	2	11	2462	Full	-10.28	-9.73	-6.72	4.25		8.00		Pass
HE40	MCS0	2	3	2422	Full	-15.91	-15.84	-12.83	4.25		8.00		Pass
HE40	MCS0	2	6	2437	Full	-13.09	-11.91	-8.90	4.25		8.00		Pass
HE40	MCS0	2	9	2452	Full	-13.19	-13.41	-10.18	4.25		8.00		Pass

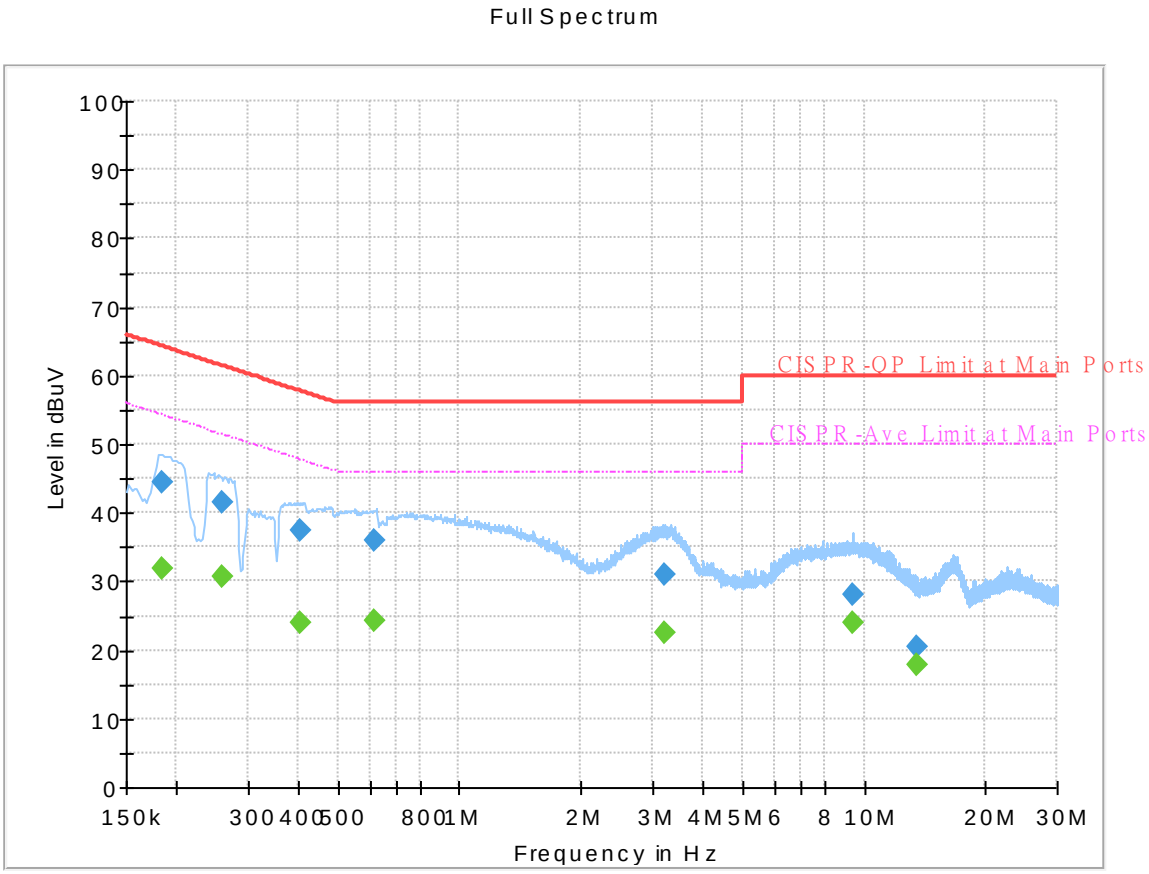
Measured power density (dBm) has offset with cable loss.

Appendix B. AC Conducted Emission Test Results

Test Engineer :	Calvin Wang	**Temperature :**	23~26℃
		Relative Humidity :	45~55%

EUT Information

Report NO :	271537
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Line

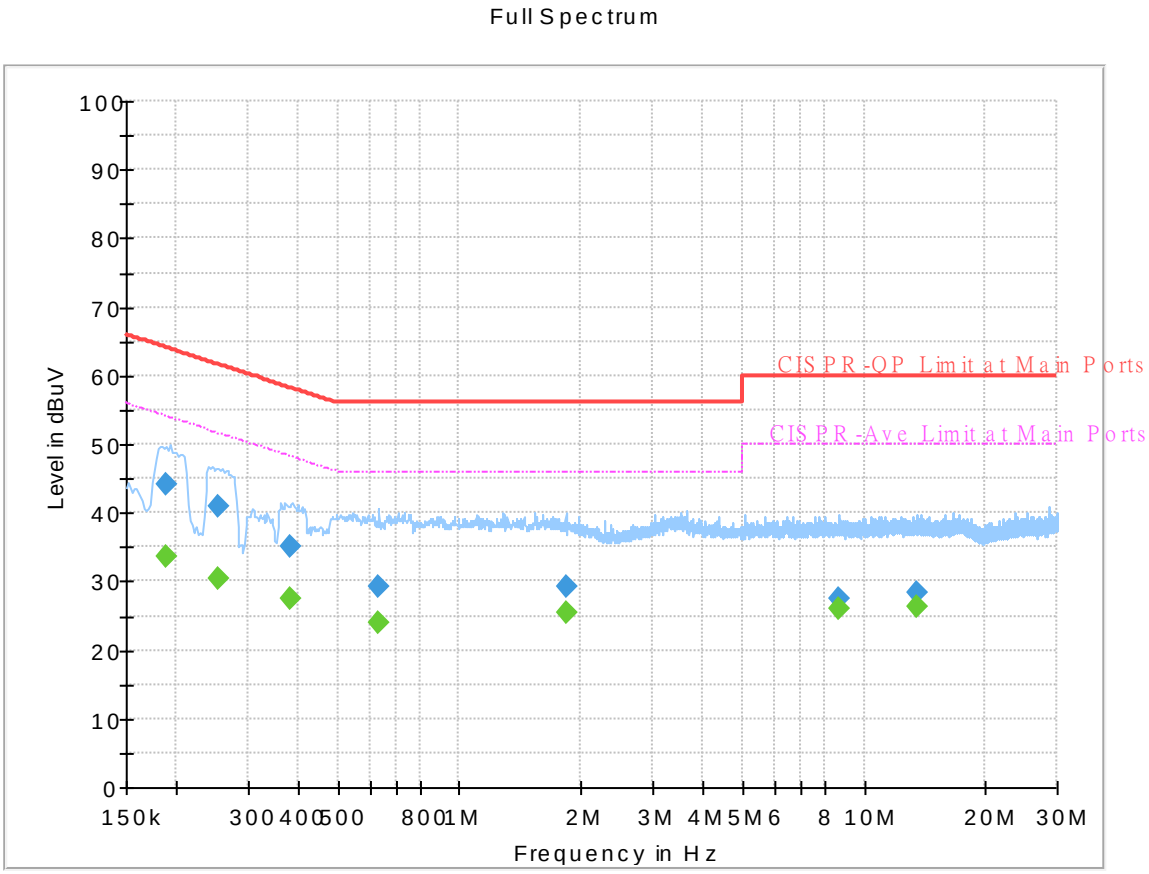


Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.183750	---	31.92	54.31	22.39	L1	OFF	19.8
0.183750	44.46	---	64.31	19.85	L1	OFF	19.8
0.258000	---	30.66	51.50	20.84	L1	OFF	19.8
0.258000	41.63	---	61.50	19.87	L1	OFF	19.8
0.404250	---	23.97	47.77	23.80	L1	OFF	19.8
0.404250	37.38	---	57.77	20.39	L1	OFF	19.8
0.618000	---	24.31	46.00	21.69	L1	OFF	19.8
0.618000	36.11	---	56.00	19.89	L1	OFF	19.8
3.221250	---	22.44	46.00	23.56	L1	OFF	19.8
3.221250	30.87	---	56.00	25.13	L1	OFF	19.8
9.397500	---	23.97	50.00	26.03	L1	OFF	19.9
9.397500	28.11	---	60.00	31.89	L1	OFF	19.9
13.560000	---	17.84	50.00	32.16	L1	OFF	20.0
13.560000	20.36	---	60.00	39.64	L1	OFF	20.0

EUT Information

Report NO :	271537
Test Mode :	Mode 1
Test Voltage :	120Vac/60Hz
Phase :	Neutral



Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.188250	---	33.51	54.11	20.60	N	OFF	19.8
0.188250	44.28	---	64.11	19.83	N	OFF	19.8
0.253500	---	30.44	51.64	21.20	N	OFF	19.8
0.253500	40.98	---	61.64	20.66	N	OFF	19.8
0.384000	---	27.40	48.19	20.79	N	OFF	19.8
0.384000	35.12	---	58.19	23.07	N	OFF	19.8
0.631500	---	24.08	46.00	21.92	N	OFF	19.8
0.631500	29.21	---	56.00	26.79	N	OFF	19.8
1.830750	---	25.36	46.00	20.64	N	OFF	19.9
1.830750	29.15	---	56.00	26.85	N	OFF	19.9
8.682000	---	26.01	50.00	23.99	N	OFF	20.2
8.682000	27.51	---	60.00	32.49	N	OFF	20.2
13.560000	---	26.25	50.00	23.75	N	OFF	20.4
13.560000	28.24	---	60.00	31.76	N	OFF	20.4

Appendix C. Radiated Spurious Emission

Test Engineer :	Mancy Chou , Jacky Hong and Rain Lee	**Temperature :**	20~25°C
		Relative Humidity :	50~60%

<CDD Mode><Sample1>

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant. 9+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		2334.675	56.15	-17.85	74	41.19	28.03	14.01	27.08	133	246	P	H
		2387.07	44.46	-9.54	54	29.62	27.85	14.06	27.07	133	246	A	H
	*	2412	112.64	-	-	97.82	27.8	14.08	27.06	133	246	P	H
	*	2412	109.68	-	-	94.86	27.8	14.08	27.06	133	246	A	H
													H
													H
		2361.765	55.73	-18.27	74	40.81	27.95	14.04	27.07	100	290	P	V
		2390	44.38	-9.62	54	29.55	27.84	14.06	27.07	100	290	A	V
	*	2412	112.15	-	-	97.33	27.8	14.08	27.06	100	290	P	V
	*	2412	109.2	-	-	94.38	27.8	14.08	27.06	100	290	A	V
													V
													V
802.11b CH 06 2437MHz		2375.66	56.17	-17.83	74	41.29	27.9	14.05	27.07	100	259	P	H
		2329.88	44.33	-9.67	54	29.36	28.04	14.01	27.08	100	259	A	H
	*	2437	111.15	-	-	96.3	27.8	14.1	27.05	100	259	P	H
	*	2437	107.89	-	-	93.04	27.8	14.1	27.05	100	259	A	H
		2486.5	55.37	-18.63	74	40.52	27.73	14.15	27.03	100	259	P	H
		2484.16	44.48	-9.52	54	29.64	27.73	14.15	27.04	100	259	A	H
		2372.72	55.73	-18.27	74	40.84	27.91	14.05	27.07	100	289	P	V
		2374.26	44.31	-9.69	54	29.43	27.9	14.05	27.07	100	289	A	V
	*	2437	112.19	-	-	97.34	27.8	14.1	27.05	100	289	P	V
	*	2437	109.07	-	-	94.22	27.8	14.1	27.05	100	289	A	V
		2489.83	55.58	-18.42	74	40.74	27.72	14.15	27.03	100	289	P	V
		2484.52	44.48	-9.52	54	29.63	27.73	14.15	27.03	100	289	A	V

802.11b CH 11 2462MHz	*	2462	112.04	-	-	97.17	27.78	14.13	27.04	100	9	P	H
	*	2462	108.94	-	-	94.07	27.78	14.13	27.04	100	9	A	H
		2491.44	55.64	-18.36	74	40.8	27.72	14.15	27.03	100	9	P	H
		2483.52	44.76	-9.24	54	29.92	27.73	14.15	27.04	100	9	A	H
													H
													H
	*	2462	113.08	-	-	98.21	27.78	14.13	27.04	100	290	P	V
	*	2462	109.92	-	-	95.05	27.78	14.13	27.04	100	290	A	V
		2495.84	56.15	-17.85	74	41.31	27.71	14.16	27.03	100	290	P	V
		2483.52	44.93	-9.07	54	30.09	27.73	14.15	27.04	100	290	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 802.11b (Harmonic @ 3m)

WIFI Ant. 9+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	43.19	-30.81	74	62.32	31.4	6.78	57.31	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4824	42.27	-31.73	74	61.4	31.4	6.78	57.31	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 9+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	42.72	-31.28	74	61.7	31.45	6.8	57.23	-	-	P	H
		7311	50.94	-23.06	74	62.68	37	8.59	57.33	102	353	P	H
		7311	43.77	-10.23	54	55.51	37	8.59	57.33	102	353	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4874	41.23	-32.77	74	60.21	31.45	6.8	57.23	-	-	P	V
		7311	52.43	-21.57	74	64.17	37	8.59	57.33	100	104	P	V
		7311	47.86	-6.14	54	59.6	37	8.59	57.33	100	104	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 9+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		4924	45.3	-28.7	74	64.08	31.55	6.83	57.16	-	-	P	H
		7386	52.39	-21.61	74	64.25	36.93	8.65	57.44	100	18	P	H
		7386	47.05	-6.95	54	58.91	36.93	8.65	57.44	100	18	A	H
													H
													H
													H
													H
													H
													H
													H
													H
		4924	45.66	-28.34	74	64.44	31.55	6.83	57.16	-	-	P	V
		7386	53.08	-20.92	74	64.94	36.93	8.65	57.44	100	235	P	V
		7386	48.71	-5.29	54	60.57	36.93	8.65	57.44	100	235	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line. 3. The emission position marked as "-" means no suspected emission found with sufficient margin against limit line or noise floor only.												

2.4GHz 2400~2483.5MHz

WIFI 802.11g (Band Edge @ 3m)

WIFI Ant. 9+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	63.68	-10.32	74	48.85	27.84	14.06	27.07	111	204	P	H
		2390	50.87	-3.13	54	36.04	27.84	14.06	27.07	111	204	A	H
	*	2412	113.72	-	-	98.9	27.8	14.08	27.06	111	204	P	H
	*	2412	106.11	-	-	91.29	27.8	14.08	27.06	111	204	A	H
													H
													H
		2389.905	59.93	-14.07	74	45.1	27.84	14.06	27.07	108	326	P	V
		2389.8	47.73	-6.27	54	32.9	27.84	14.06	27.07	108	326	A	V
	*	2412	109.74	-	-	94.92	27.8	14.08	27.06	108	326	P	V
	*	2412	102.1	-	-	87.28	27.8	14.08	27.06	108	326	A	V
													V
													V
802.11g CH 06 2437MHz		2368.52	55.69	-18.31	74	40.79	27.93	14.04	27.07	137	206	P	H
		2385.18	45.34	-8.66	54	30.49	27.86	14.06	27.07	137	206	A	H
	*	2437	114.82	-	-	99.97	27.8	14.1	27.05	137	206	P	H
	*	2437	107.17	-	-	92.32	27.8	14.1	27.05	137	206	A	H
		2495.1	56.28	-17.72	74	41.44	27.71	14.16	27.03	137	206	P	H
		2483.76	45.49	-8.51	54	30.65	27.73	14.15	27.04	137	206	A	H
		2316.58	56.11	-17.89	74	41.14	28.07	13.99	27.09	100	290	P	V
		2352.14	45.36	-8.64	54	30.42	27.99	14.03	27.08	100	290	A	V
	*	2437	111.37	-	-	96.52	27.8	14.1	27.05	100	290	P	V
	*	2437	103.96	-	-	89.11	27.8	14.1	27.05	100	290	A	V
		2492.65	55.68	-18.32	74	40.85	27.71	14.15	27.03	100	290	P	V
		2483.5	45.41	-8.59	54	30.57	27.73	14.15	27.04	100	290	A	V

802.11g CH 11 2462MHz	*	2462	113.51	-	-	98.64	27.78	14.13	27.04	107	210	P	H
	*	2462	105.71	-	-	90.84	27.78	14.13	27.04	107	210	A	H
		2483.88	63.79	-10.21	74	48.95	27.73	14.15	27.04	107	210	P	H
		2483.52	52.31	-1.69	54	37.47	27.73	14.15	27.04	107	210	A	H
													H
													H
	*	2462	110.25	-	-	95.38	27.78	14.13	27.04	100	274	P	V
	*	2462	102.82	-	-	87.95	27.78	14.13	27.04	100	274	A	V
		2485.28	59.16	-14.84	74	44.31	27.73	14.15	27.03	100	274	P	V
		2484.48	47.95	-6.05	54	33.1	27.73	14.15	27.03	100	274	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)

WIFI Ant. 9+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)
		4824	40.97	-33.03	74	60.1	31.4	6.78	57.31	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11g CH 01 2412MHz		4824	39.69	-34.31	74	58.82	31.4	6.78	57.31	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 9+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)
		4874	38.65	-35.35	74	57.63	31.45	6.8	57.23	-	-	P	H
		7311	47.69	-26.31	74	59.43	37	8.59	57.33	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11g CH 06 2437MHz													H
		4874	40.34	-33.66	74	59.32	31.45	6.8	57.23	-	-	P	V
		7311	49.33	-24.67	74	61.07	37	8.59	57.33	100	236	P	V
		7311	38.41	-15.59	54	50.15	37	8.59	57.33	100	236	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 9+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 11 2462MHz		4924	39.52	-34.48	74	58.3	31.55	6.83	57.16	-	-	P	H
		7386	47.64	-26.36	74	59.5	36.93	8.65	57.44	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
													H
		4924	39.37	-34.63	74	58.15	31.55	6.83	57.16	-	-	P	V
		7386	46.04	-27.96	74	57.9	36.93	8.65	57.44	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

2.4GHz 2400~2483.5MHz

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

WIFI Ant. 9+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	66.89	-7.11	74	52.06	27.84	14.06	27.07	117	208	P	H
		2390	52.33	-1.67	54	37.5	27.84	14.06	27.07	117	208	A	H
	*	2412	115.32	-	-	100.5	27.8	14.08	27.06	117	208	P	H
	*	2412	105.98	-	-	91.16	27.8	14.08	27.06	117	208	A	H
													H
													H
		2389.275	61.72	-12.28	74	46.89	27.84	14.06	27.07	100	125	P	V
		2390	48.11	-5.89	54	33.28	27.84	14.06	27.07	100	125	A	V
	*	2412	109.41	-	-	94.59	27.8	14.08	27.06	100	125	P	V
	*	2412	100.09	-	-	85.27	27.8	14.08	27.06	100	125	A	V
													V
													V
802.11ax HE20 Full CH 06 2437MHz		2365.86	56.26	-17.74	74	41.35	27.94	14.04	27.07	140	203	P	H
		2389.94	44.43	-9.57	54	29.6	27.84	14.06	27.07	140	203	A	H
	*	2437	117.48	-	-	102.63	27.8	14.1	27.05	140	203	P	H
	*	2437	106.69	-	-	91.84	27.8	14.1	27.05	140	203	A	H
		2499.46	56.66	-17.34	74	41.83	27.7	14.16	27.03	140	203	P	H
		2484.16	44.57	-9.43	54	29.73	27.73	14.15	27.04	140	203	A	H
		2377.2	55.8	-18.2	74	40.93	27.89	14.05	27.07	100	325	P	V
		2319.8	44.35	-9.65	54	29.38	28.06	14	27.09	100	325	A	V
	*	2437	113.34	-	-	98.49	27.8	14.1	27.05	100	325	P	V
	*	2437	102.04	-	-	87.19	27.8	14.1	27.05	100	325	A	V
		2486.23	56.46	-17.54	74	41.61	27.73	14.15	27.03	100	325	P	V
		2484.34	44.44	-9.56	54	29.6	27.73	14.15	27.04	100	325	A	V

WIFI Ant. 9+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 11 2462MHz	*	2462	115.88	-	-	101.01	27.78	14.13	27.04	100	206	P	H
	*	2462	104.5	-	-	89.63	27.78	14.13	27.04	100	206	A	H
		2485.6	66.57	-7.43	74	51.72	27.73	14.15	27.03	100	206	P	H
		2483.72	52.05	-1.95	54	37.21	27.73	14.15	27.04	100	206	A	H
													H
													H
	*	2462	109.58	-	-	94.71	27.78	14.13	27.04	100	324	P	V
	*	2462	99.78	-	-	84.91	27.78	14.13	27.04	100	324	A	V
		2483.8	62.84	-11.16	74	48	27.73	14.15	27.04	100	324	P	V
		2483.52	49.62	-4.38	54	34.78	27.73	14.15	27.04	100	324	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. 9+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)
		4824	39.64	-34.36	74	58.77	31.4	6.78	57.31	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 01		4824	39.96	-34.04	74	59.09	31.4	6.78	57.31	-	-	P	V
2412MHz													V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 9+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)
		4874	40.92	-33.08	74	59.9	31.45	6.8	57.23	-	-	P	H
		7311	46.18	-27.82	74	57.92	37	8.59	57.33	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 06		4874	38.9	-35.1	74	57.88	31.45	6.8	57.23	-	-	P	V
2437MHz		7311	51.04	-22.96	74	62.78	37	8.59	57.33	100	306	P	V
		7311	37.29	-16.71	54	49.03	37	8.59	57.33	100	306	A	V
													V
													V
													V
													V
													V
													V
													V
													V
													V

WIFI Ant. 9+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)
		4924	38.74	-35.26	74	57.52	31.55	6.83	57.16	-	-	P	H
		7386	45.16	-28.84	74	57.02	36.93	8.65	57.44	-	-	P	H
													H
													H
													H
													H
													H
													H
													H
													H
802.11ax													H
HE20 Full													H
CH 11		4924	38.68	-35.32	74	57.46	31.55	6.83	57.16	-	-	P	V
2462MHz		7386	45.72	-28.28	74	57.58	36.93	8.65	57.44	-	-	P	V
													V
													V
													V
													V
													V
													V
													V
													V
													V
													V

Remark

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

2.4GHz 2400~2483.5MHz

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

WIFI Ant. 9+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		2390	68.28	-5.72	74	53.45	27.84	14.06	27.07	109	210	P	H
		2390	48.53	-5.47	54	33.7	27.84	14.06	27.07	109	210	A	H
	*	2412	118.21	-	-	103.39	27.8	14.08	27.06	109	210	P	H
	*	2412	109.56	-	-	94.74	27.8	14.08	27.06	109	210	A	H
													H
													H
		2389.905	62.09	-11.91	74	47.26	27.84	14.06	27.07	300	162	P	V
		2390	46.12	-7.88	54	31.29	27.84	14.06	27.07	300	162	A	V
	*	2412	113.75	-	-	98.93	27.8	14.08	27.06	300	162	P	V
	*	2412	105.4	-	-	90.58	27.8	14.08	27.06	300	162	A	V
													V
													V
802.11ax HE20 Partial 106/54 CH 11 2462MHz	*	2462	119.82	-	-	104.95	27.78	14.13	27.04	160	201	P	H
	*	2462	108.4	-	-	93.53	27.78	14.13	27.04	160	201	A	H
		2484	72.95	-1.05	74	58.11	27.73	14.15	27.04	160	201	P	H
		2483.52	50.9	-3.1	54	36.06	27.73	14.15	27.04	160	201	A	H
													H
													H
	*	2462	115.24	-	-	100.37	27.78	14.13	27.04	100	360	P	V
	*	2462	104.02	-	-	89.15	27.78	14.13	27.04	100	360	A	V
		2484	69.2	-4.8	74	54.36	27.73	14.15	27.04	100	360	P	V
		2484.04	48.54	-5.46	54	33.7	27.73	14.15	27.04	100	360	A	V
													V
													V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												