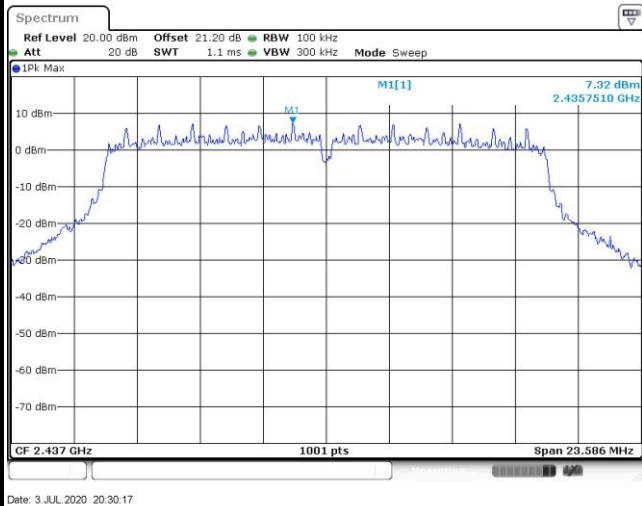




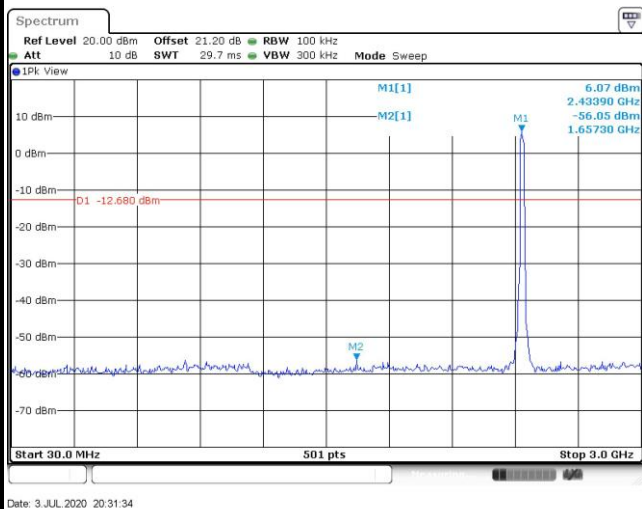
Test Mode :	802.11g	Test Channel :	06
-------------	---------	----------------	----

100kHz PSD reference Level

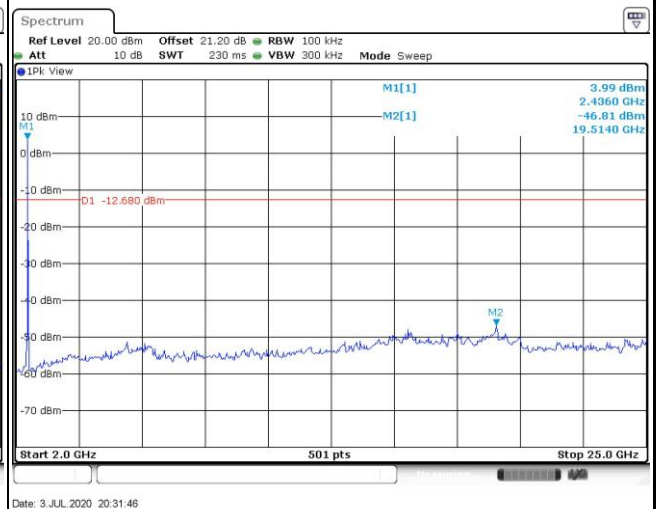


Channel Plot

Spurious Emission 30MHz~3GHz

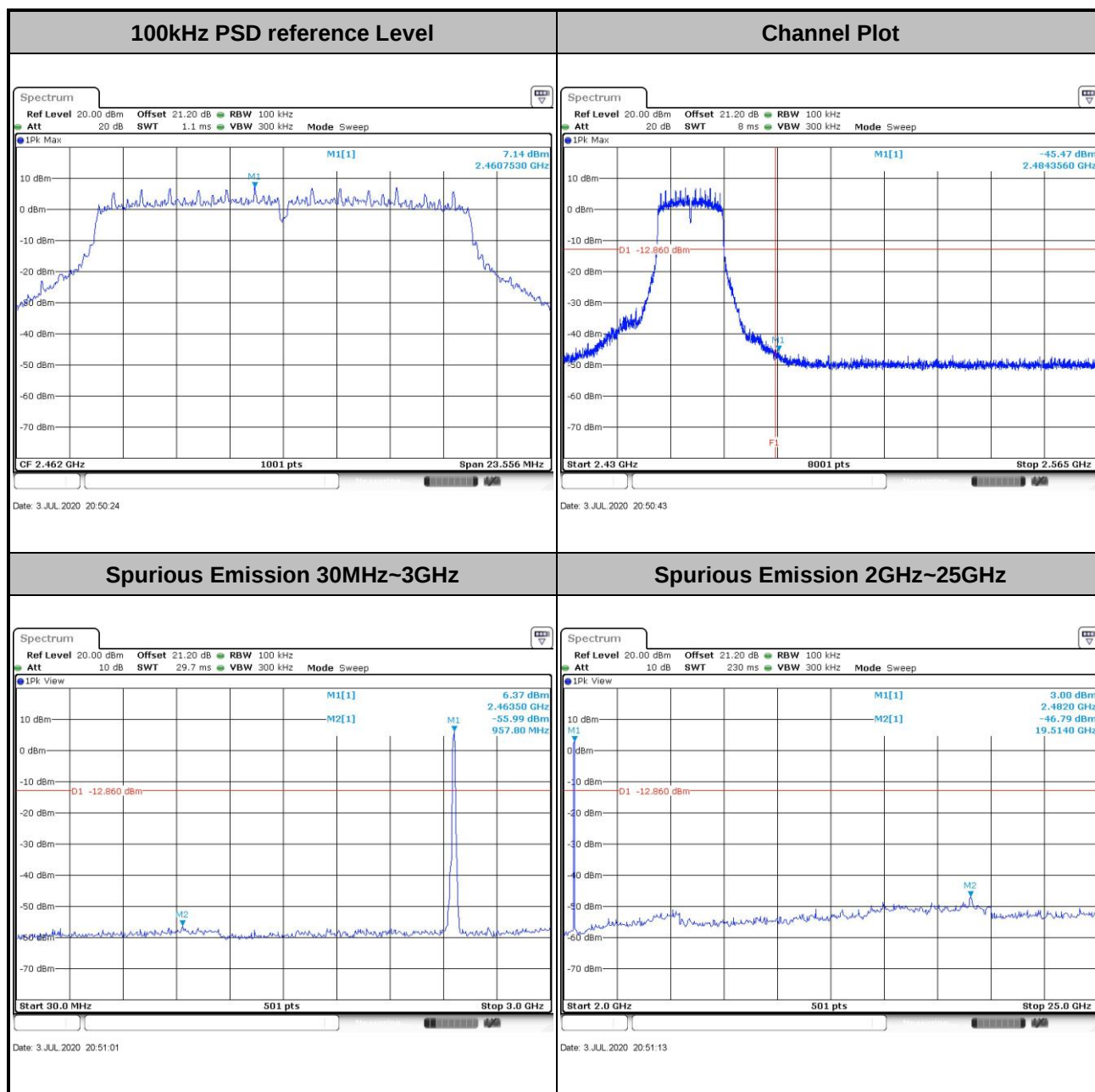


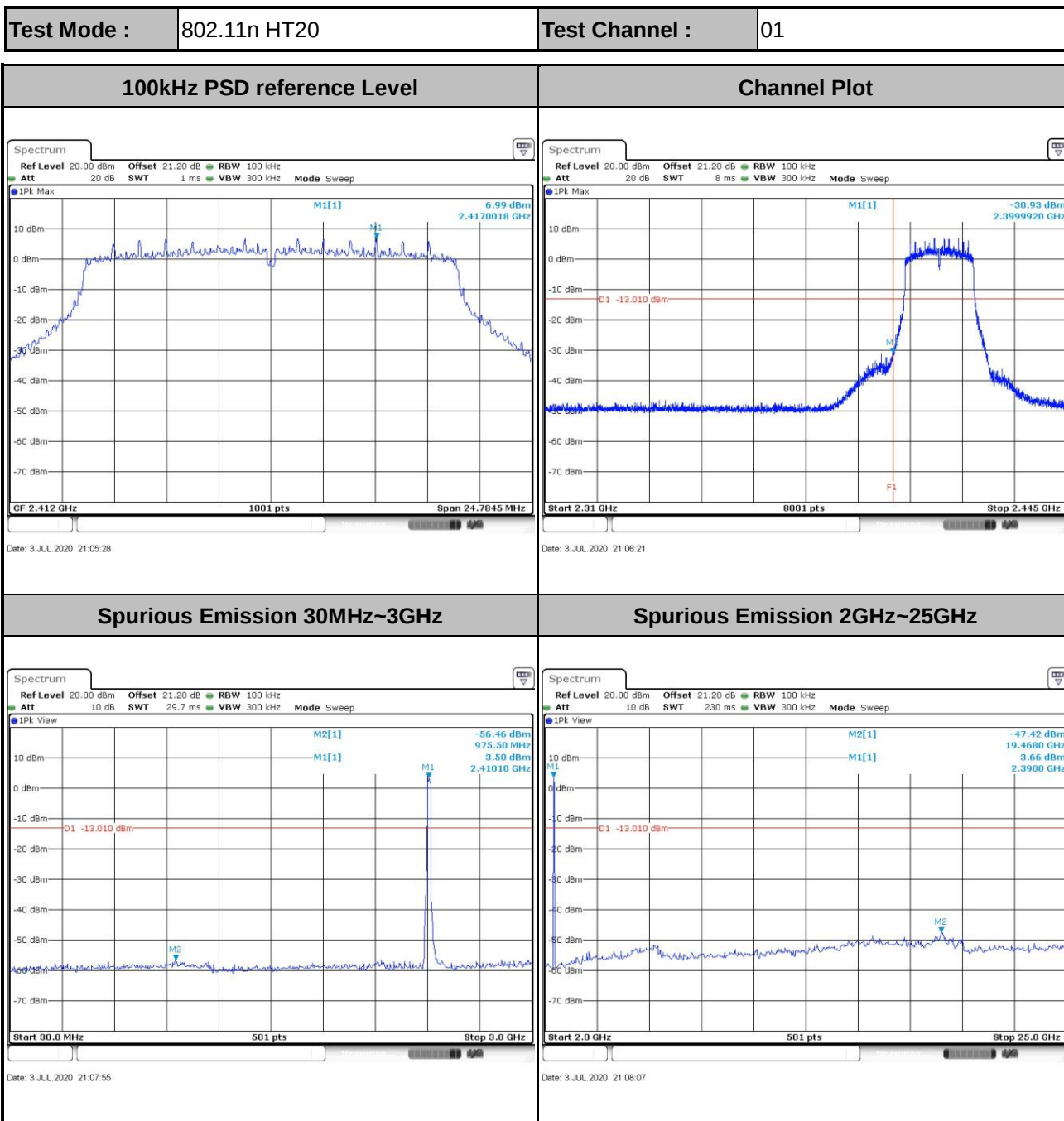
Spurious Emission 2GHz~25GHz



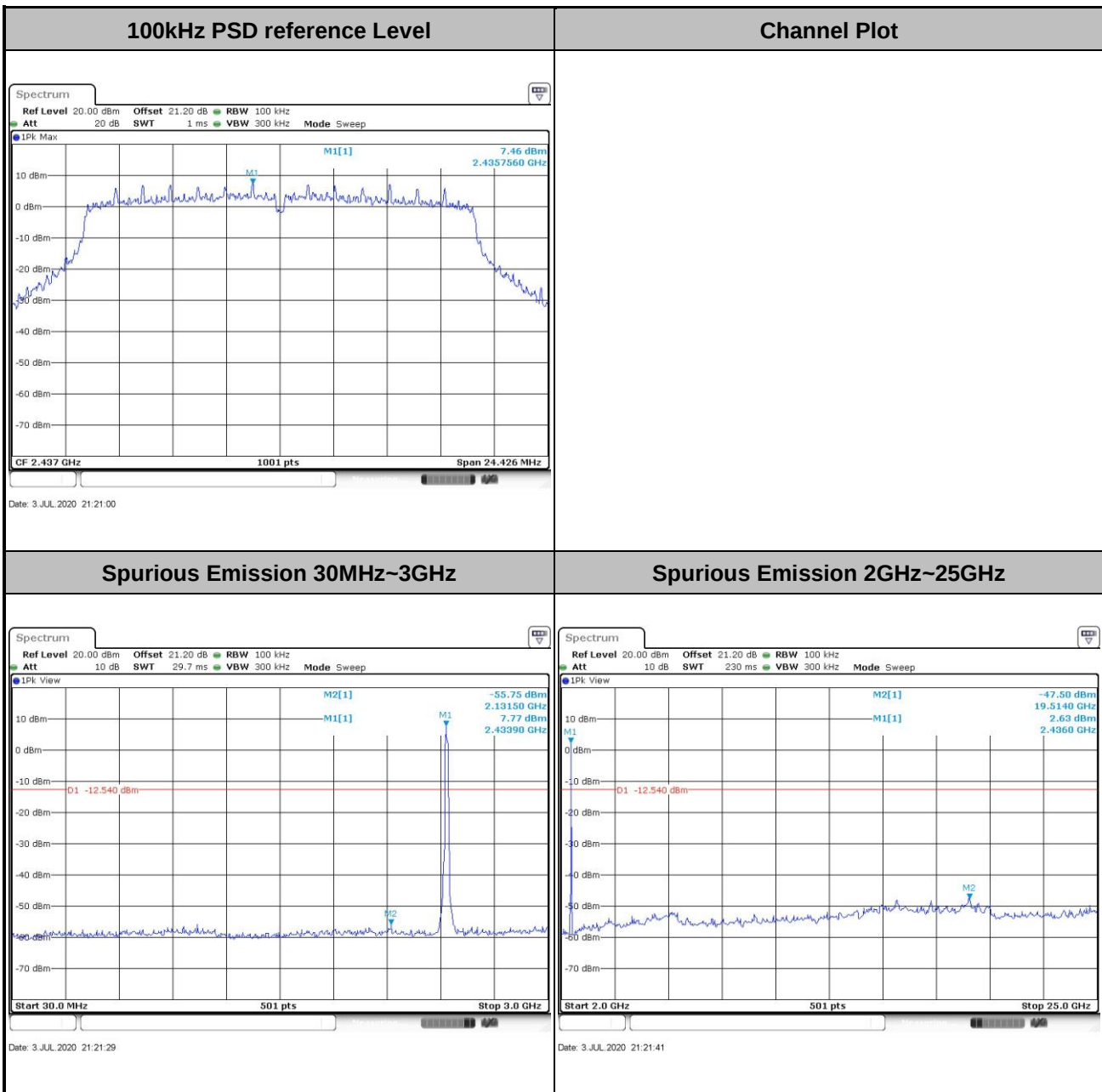


Test Mode :	802.11g	Test Channel :	11
-------------	---------	----------------	----





Test Mode :	802.11n HT20	Test Channel :	06
--------------------	--------------	-----------------------	----

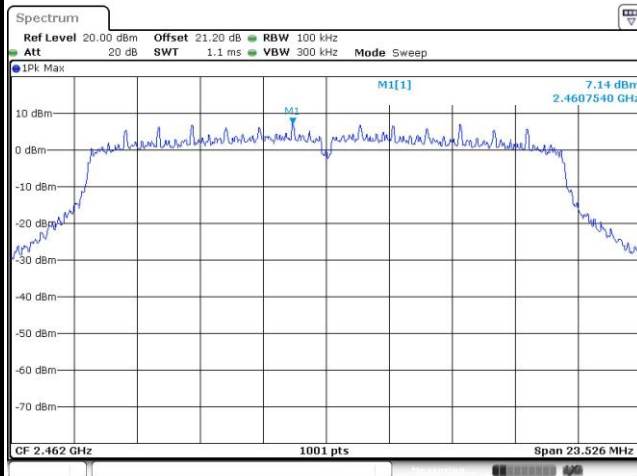




Test Mode : 802.11n HT20

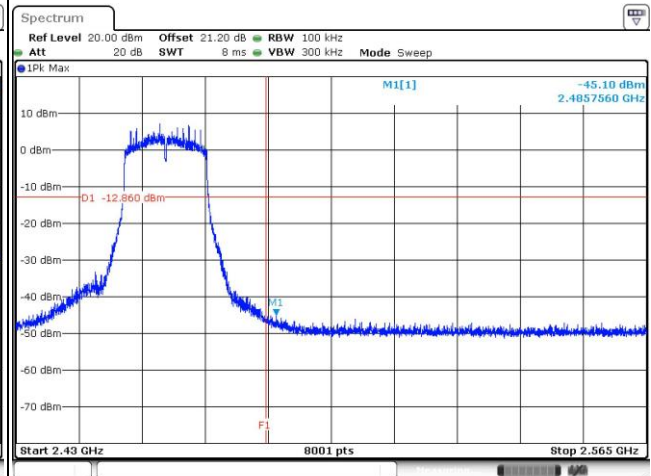
Test Channel : 11

100kHz PSD reference Level



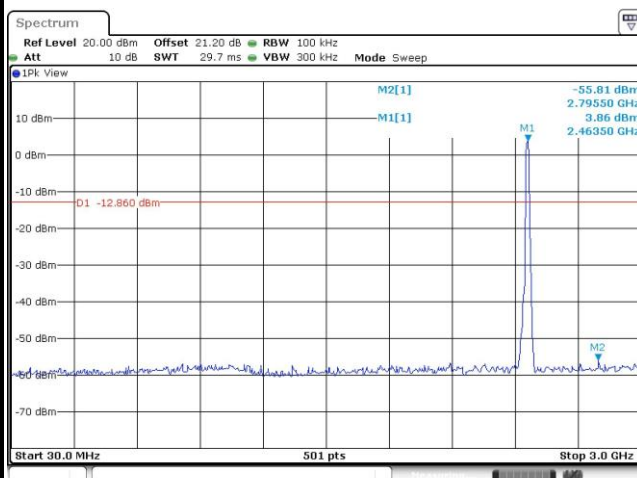
Date: 3 JUL 2020 21:43:43

Channel Plot



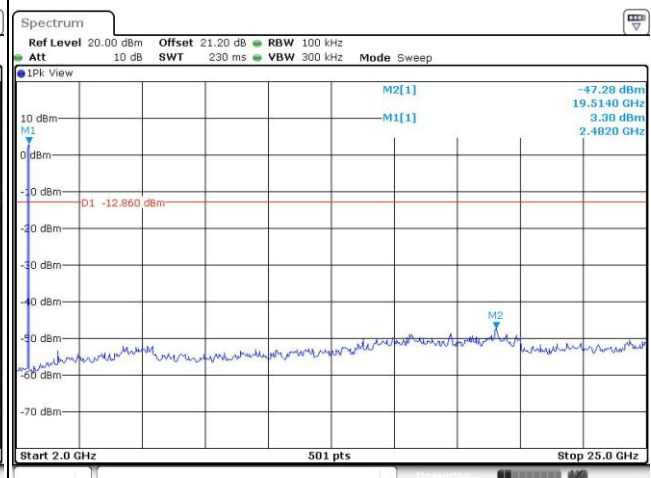
Date: 3 JUL 2020 21:44:34

Spurious Emission 30MHz~3GHz

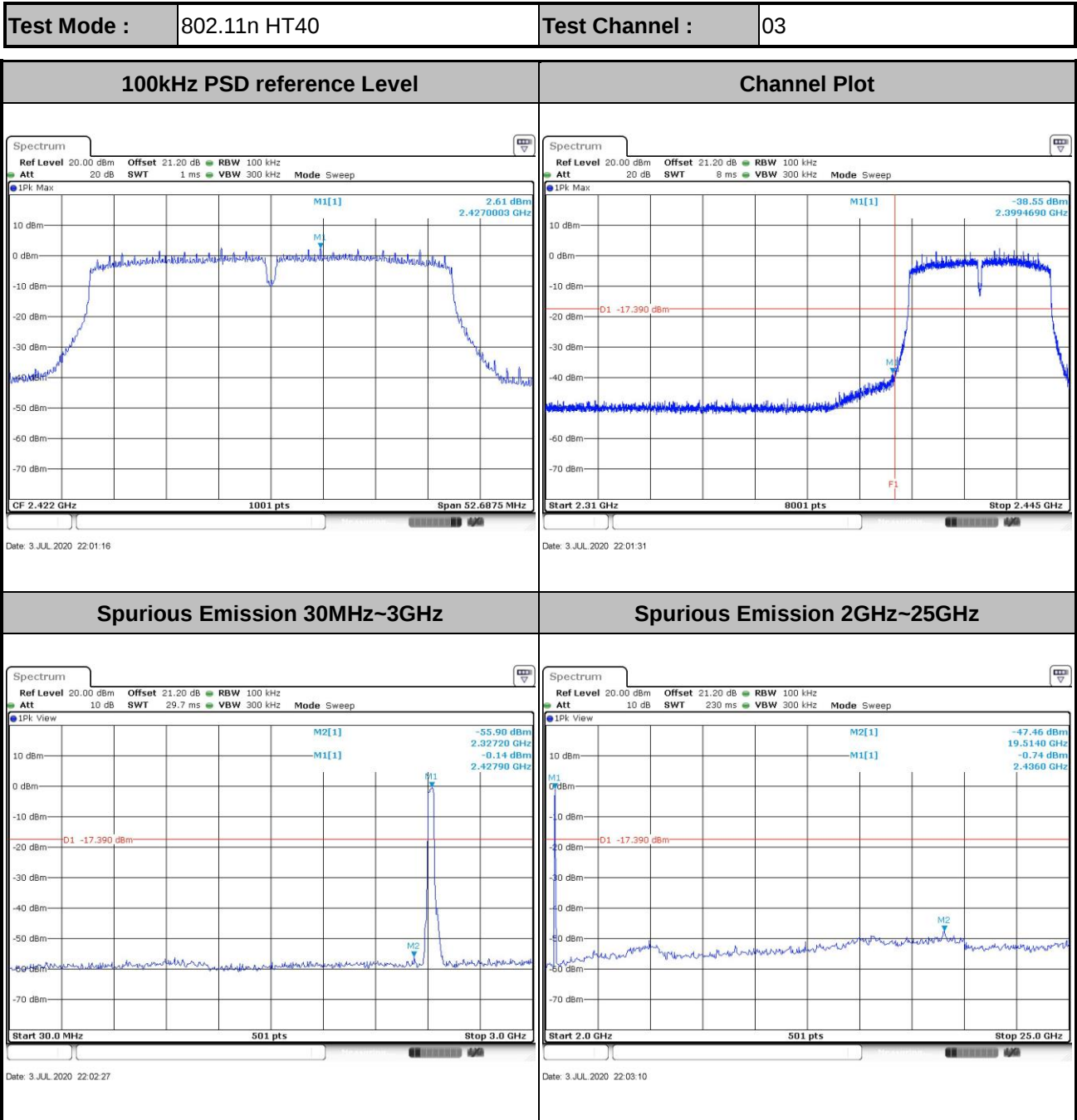


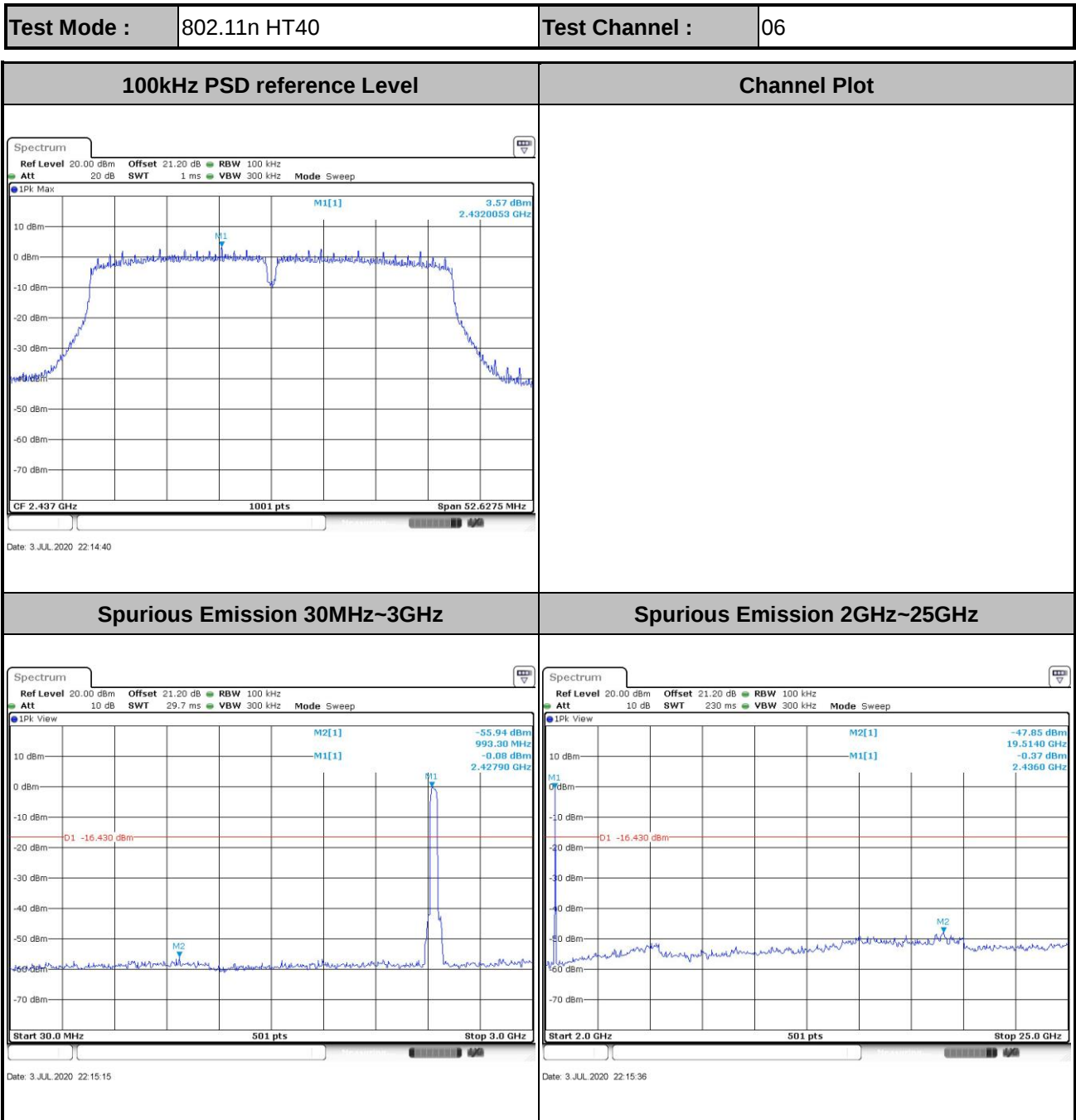
Date: 3 JUL 2020 21:45:53

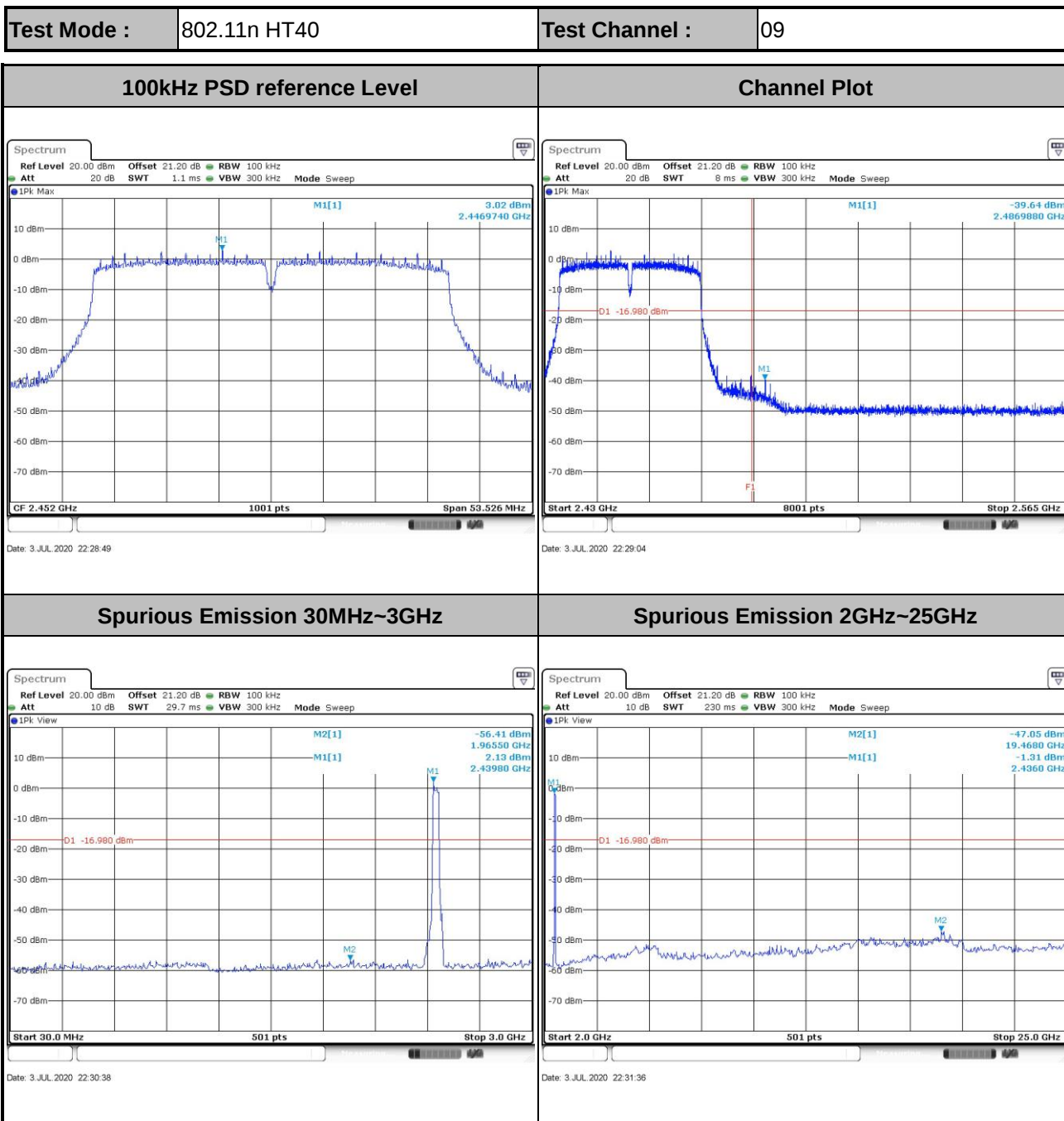
Spurious Emission 2GHz~25GHz



Date: 3 JUL 2020 21:46:08



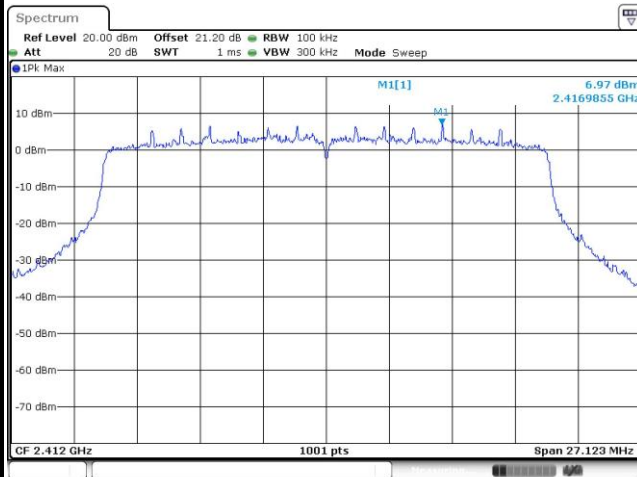




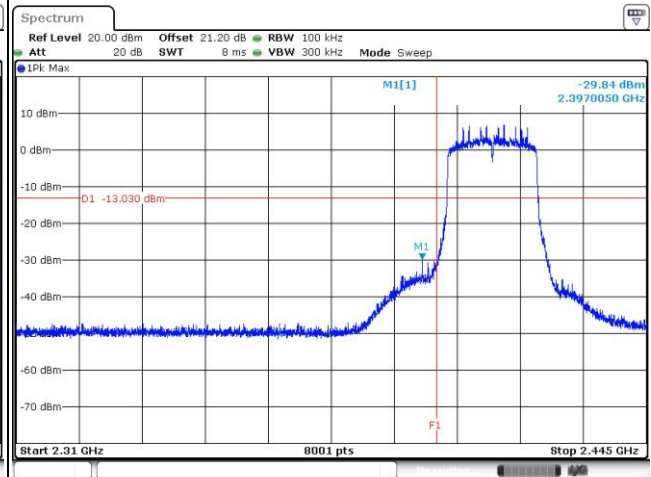


Test Mode :	802.11ax HE20	Test Channel :	01
-------------	---------------	----------------	----

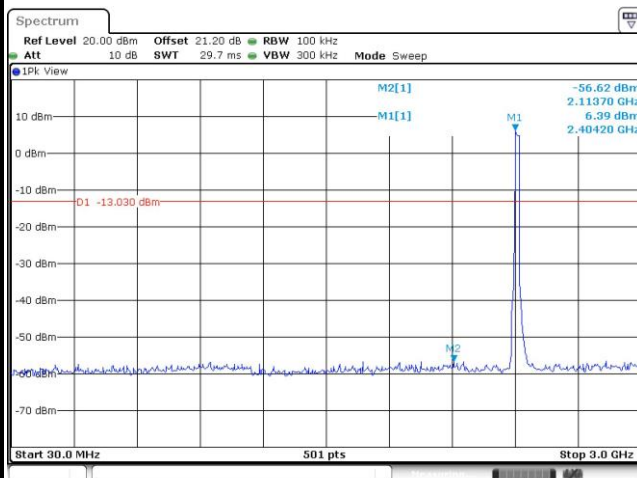
100kHz PSD reference Level



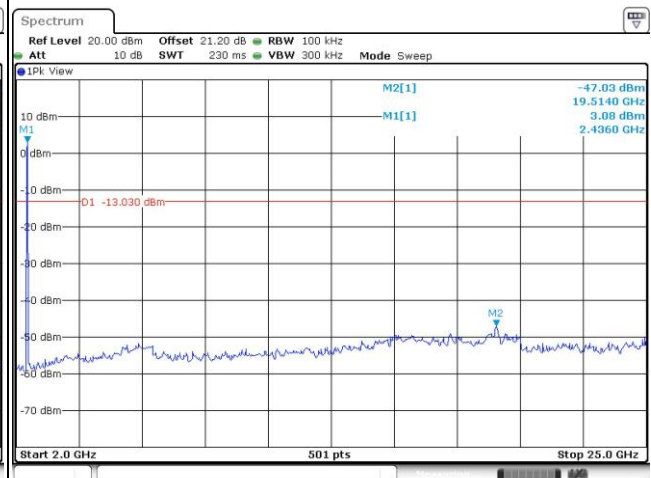
Channel Plot



Spurious Emission 30MHz~3GHz



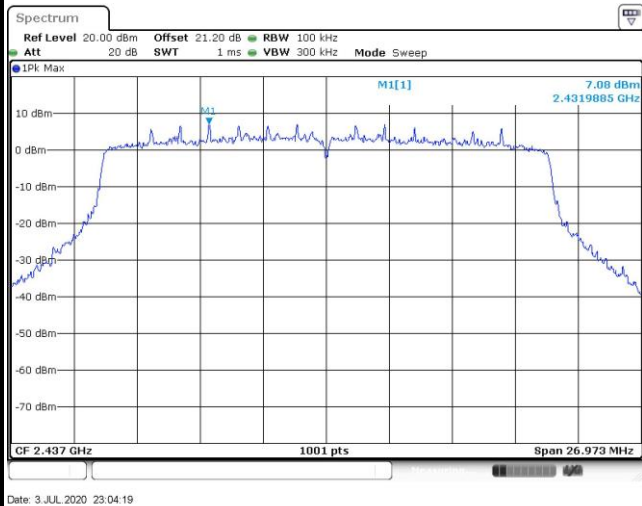
Spurious Emission 2GHz~25GHz





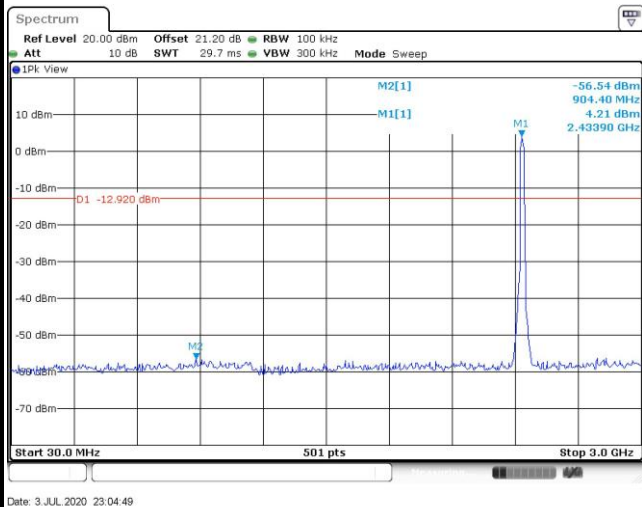
Test Mode :	802.11ax HE20	Test Channel :	06
-------------	---------------	----------------	----

100kHz PSD reference Level

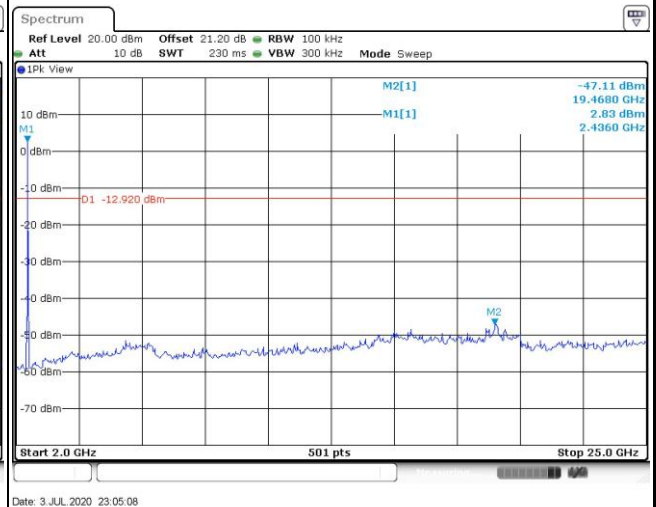


Channel Plot

Spurious Emission 30MHz~3GHz

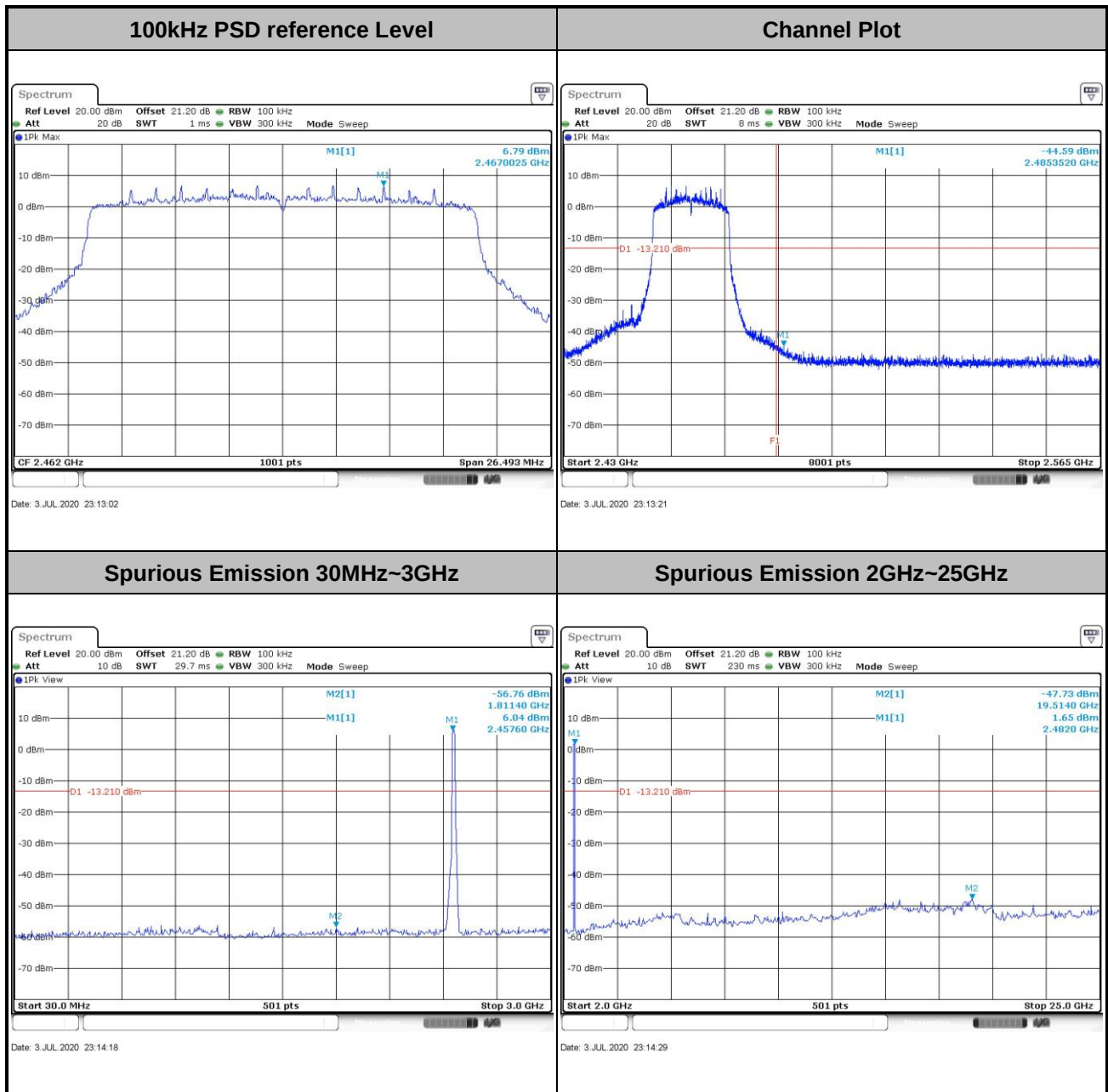


Spurious Emission 2GHz~25GHz





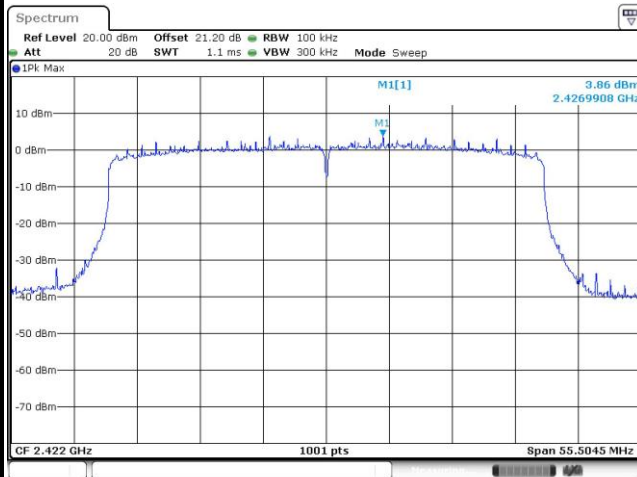
Test Mode :	802.11ax HE20	Test Channel :	11
-------------	---------------	----------------	----





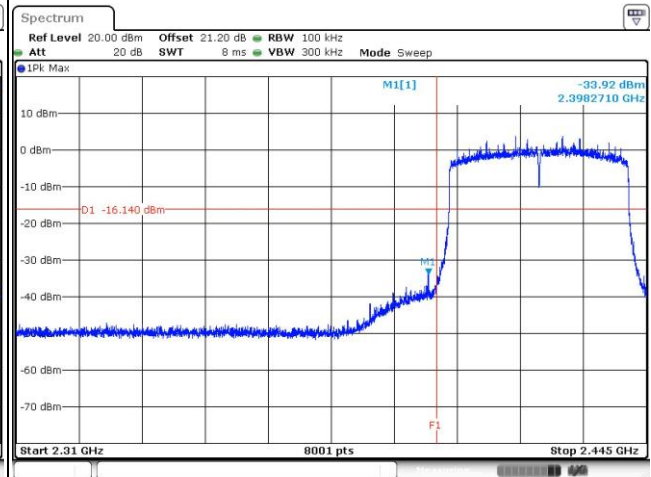
Test Mode :	802.11ax HE40	Test Channel :	03
-------------	---------------	----------------	----

100kHz PSD reference Level



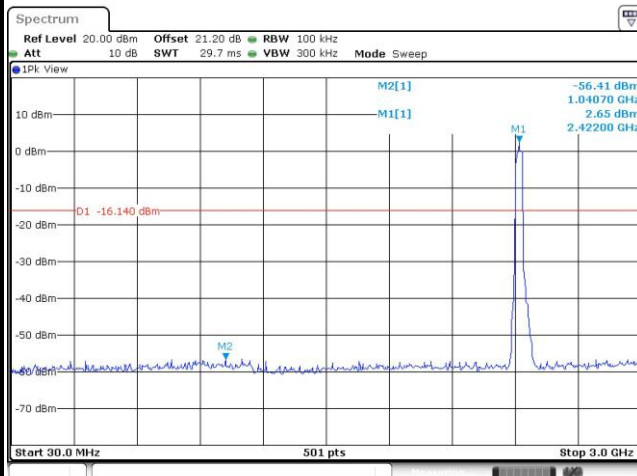
Date: 3 JUL 2020 23:26:49

Channel Plot



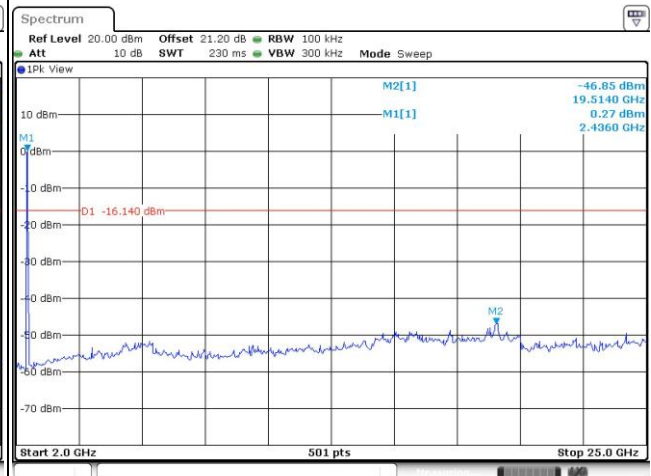
Date: 3 JUL 2020 23:27:18

Spurious Emission 30MHz~3GHz



Date: 3 JUL 2020 23:27:47

Spurious Emission 2GHz~25GHz

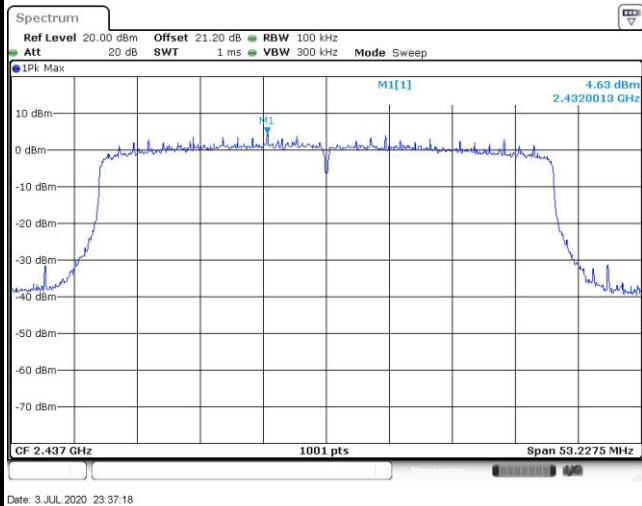


Date: 3 JUL 2020 23:28:11



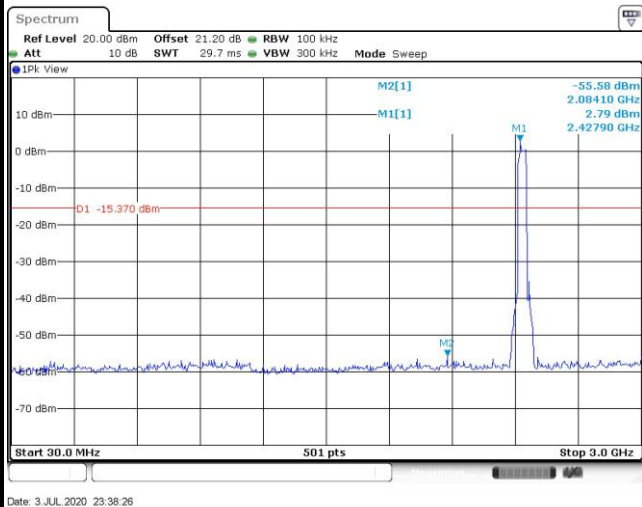
Test Mode :	802.11ax HE40	Test Channel :	06
-------------	---------------	----------------	----

100kHz PSD reference Level

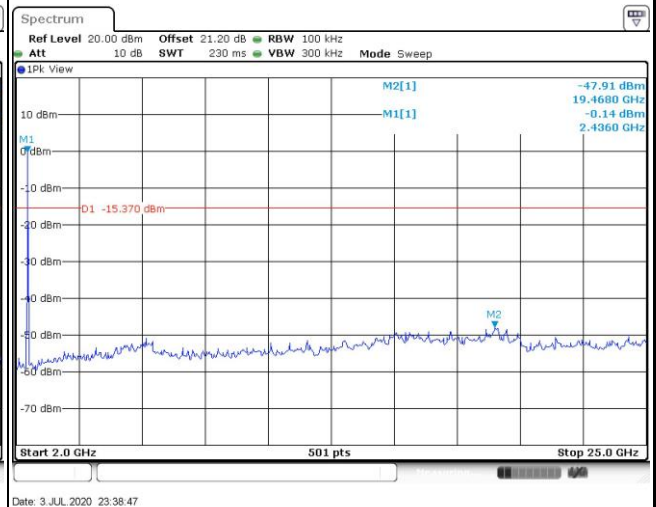


Channel Plot

Spurious Emission 30MHz~3GHz



Spurious Emission 2GHz~25GHz

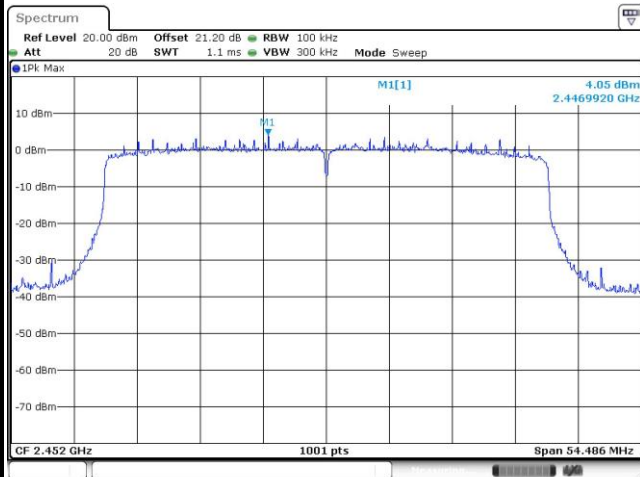




Test Mode : 802.11ax HE40

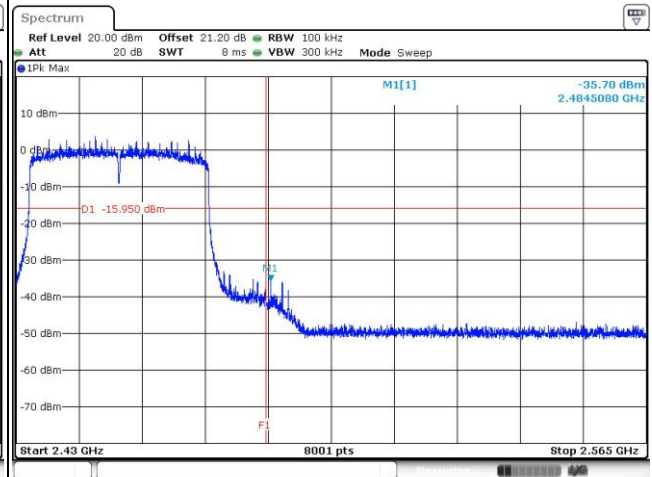
Test Channel : 09

100kHz PSD reference Level



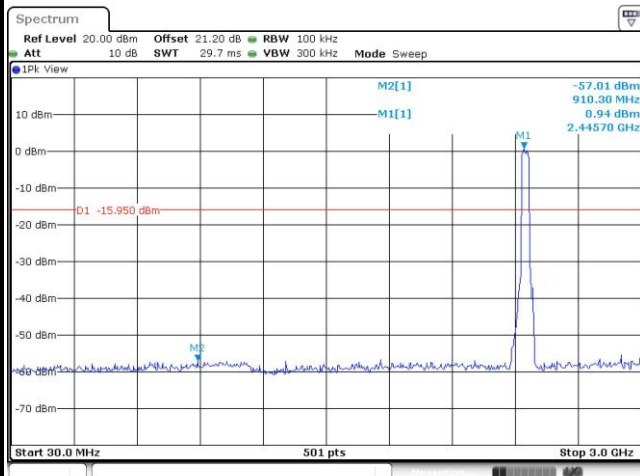
Date: 3 JUL 2020 23:53:51

Channel Plot



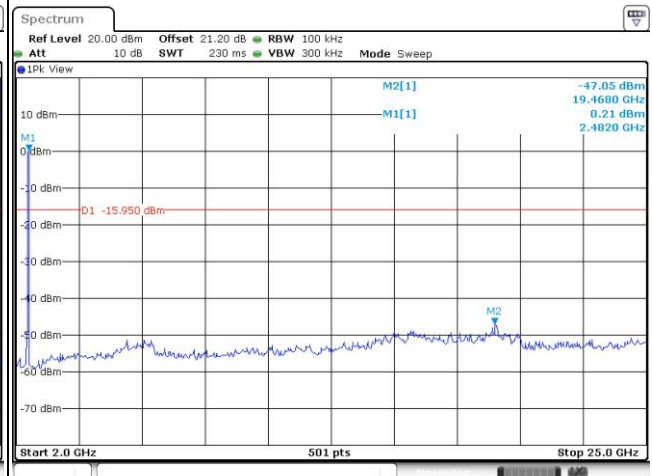
Date: 3 JUL 2020 23:54:07

Spurious Emission 30MHz~3GHz



Date: 3 JUL 2020 23:54:34

Spurious Emission 2GHz~25GHz



Date: 3 JUL 2020 23:54:47

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 was 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

The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

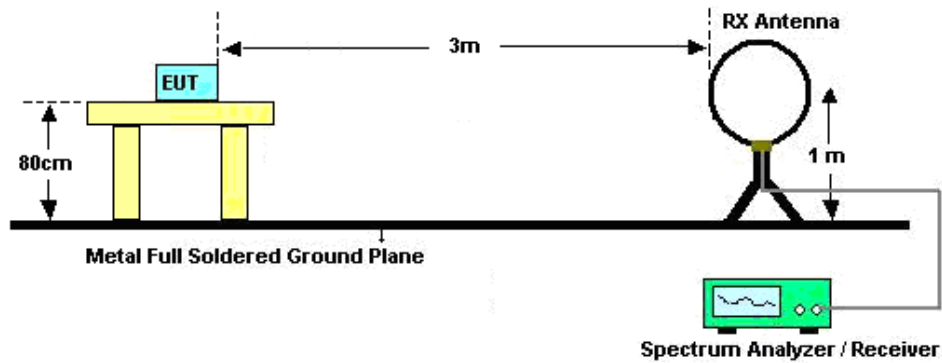
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
7. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
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= 3MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

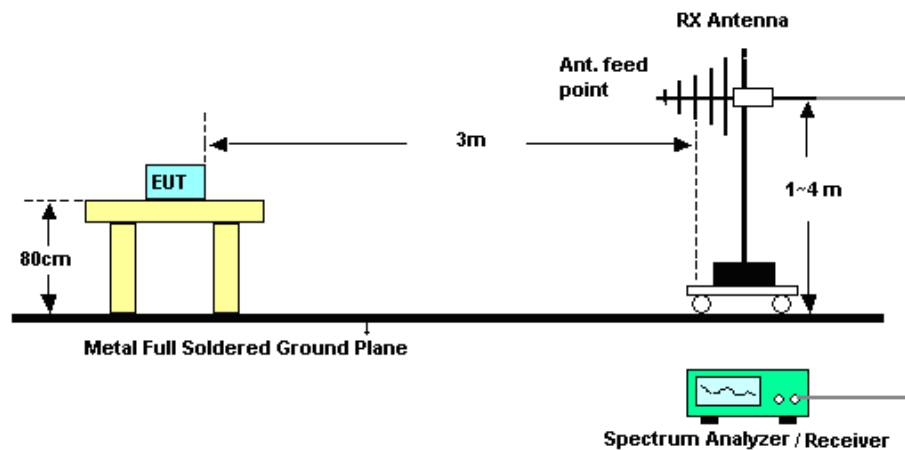
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.5.4 Test Setup

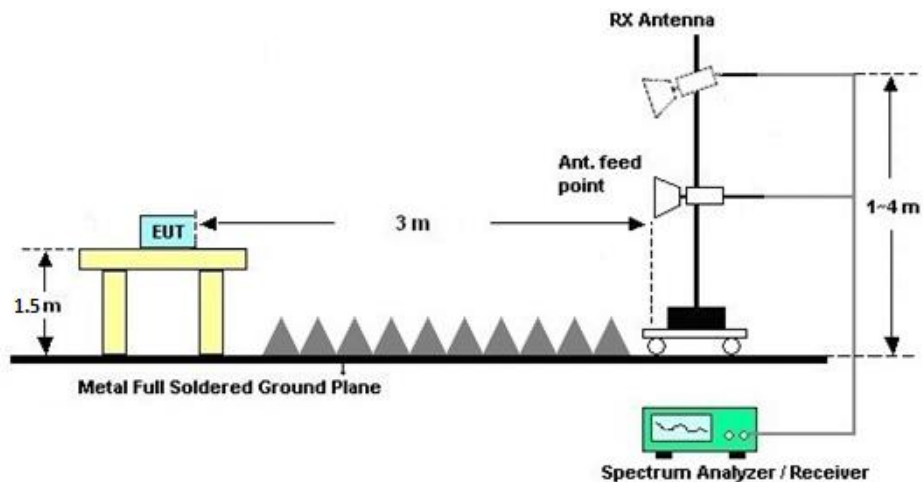
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz





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

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

There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix C.

3.5.7 Duty Cycle

Please refer to Appendix D.

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

Please refer to Appendix C.

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.

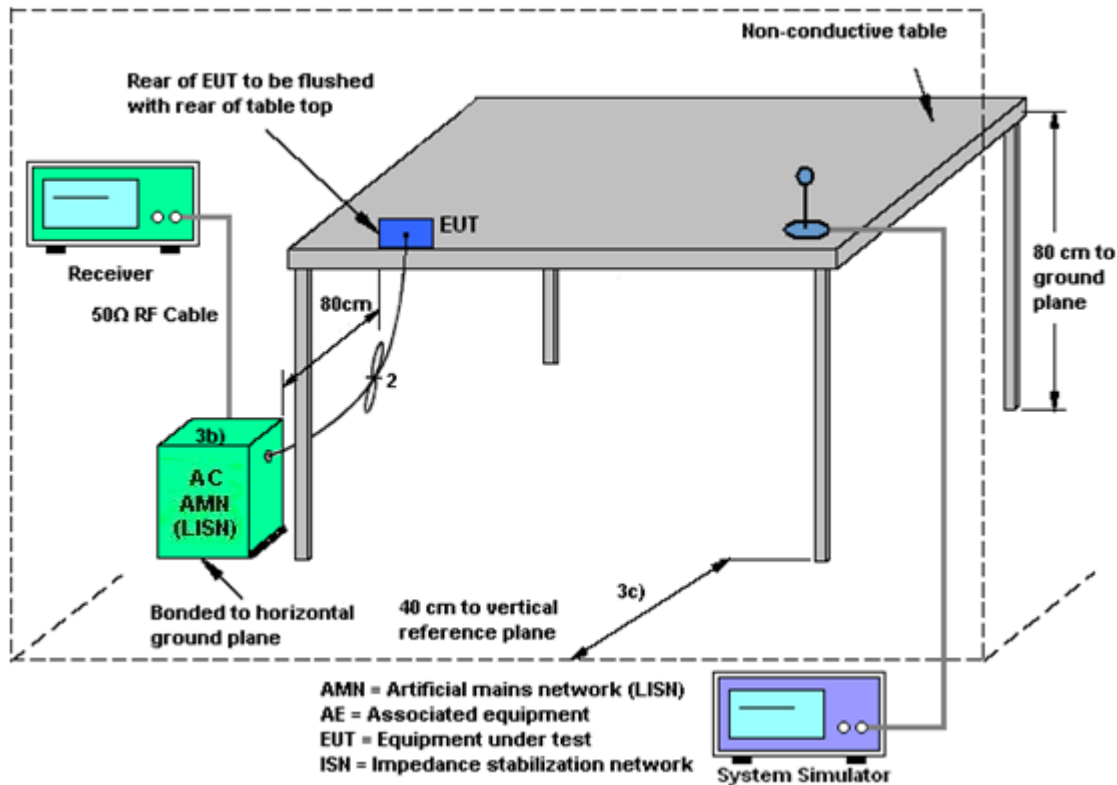
3.6.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.6.3 Test Procedures

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was 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 should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
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 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. 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 >

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

For CDD transmissions, directional gain is calculated as

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

For power spectral density (PSD) measurements on all devices,

Array Gain = $10 \log(N_{ANT}/N_{SS}=1)$ dB.

For power measurements on IEEE 802.11 devices,

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

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

The EUT supports CDD mode.

For power, the directional gain G_{ANT} is set equal to the antenna having the highest gain, i.e., F)2)f)i).

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

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

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

<CDD Modes>						
	Ant. 1	Ant. 2	DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	-2.80	-4.00	-2.80	-0.37	0.00	0.00

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

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



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 17, 2020	Jul. 03, 2020	Apr. 16, 2021	Conducted (TH01-SZ)
Pulse Power Sensor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 26, 2019	Jul. 03, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 26, 2019	Jul. 03, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 17, 2020	Jul. 28, 2020	Apr. 16, 2021	Radiation (03CH03-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 17, 2020	Jul. 28, 2020	Apr. 16, 2021	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	May 28, 2020	Jul. 28, 2020	May 27, 2022	Radiation (03CH03-SZ)
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz~2GHz	Apr. 17, 2020	Jul. 28, 2020	Apr. 16, 2021	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 01 2020	Jul. 28, 2020	Mar. 31, 2021	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 21, 2020	Jul. 28, 2020	Jul. 20, 2021	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz~40GHz	Apr. 17, 2020	Jul. 28, 2020	Apr. 16, 2021	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102210	0.01Hz~3000MHz	Oct. 18, 2019	Jul. 28, 2020	Oct. 17, 2020	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 18, 2019	Jul. 28, 2020	Oct. 17, 2020	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 23, 2019	Jul. 28, 2020	Dec. 22, 2020	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Jul. 28, 2020	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jul. 28, 2020	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jul. 28, 2020	NCR	Radiation (03CH03-SZ)
EMI Receiver	R&S	ESR7	101630	9kHz~7GHz;	Dec. 26, 2018	Jul. 10, 2020	Dec. 25, 2020	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Oct. 17, 2019	Jul. 10, 2020	Oct. 16, 2020	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Oct. 17, 2019	Jul. 10, 2020	Oct. 16, 2020	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Jul. 22, 2019	Jul. 10, 2020	Jul. 21, 2020	Conduction (CO01-SZ)

NCR: No Calibration Required

5 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.10-2013. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.7dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9dB
---	-------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.0dB
---	-------



Appendix A. Conducted Test Results

Test Engineer:	Zeng Meng Hui	Temperature:	21~25	°C
Test Date:	2020/7/3	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
					Ant1	Ant2	Ant1	Ant2		
11b	1Mbps	2	1	2412	13.04	12.84	8.05	8.05	0.50	Pass
11b	1Mbps	2	6	2437	12.94	12.89	8.07	8.05	0.50	Pass
11b	1Mbps	2	11	2462	12.99	12.89	7.55	8.07	0.50	Pass
11g	6Mbps	2	1	2412	16.38	16.38	15.52	16.26	0.50	Pass
11g	6Mbps	2	6	2437	16.33	16.38	15.64	15.72	0.50	Pass
11g	6Mbps	2	11	2462	16.33	16.38	15.46	15.70	0.50	Pass
HT20	MCS0	2	1	2412	17.48	17.53	16.56	16.52	0.50	Pass
HT20	MCS0	2	6	2437	17.48	17.53	16.48	16.28	0.50	Pass
HT20	MCS0	2	11	2462	17.53	17.48	15.96	15.68	0.50	Pass
HT40	MCS0	2	3	2422	35.96	35.96	35.68	35.12	0.50	Pass
HT40	MCS0	2	6	2437	36.06	35.96	35.52	35.08	0.50	Pass
HT40	MCS0	2	9	2452	35.96	36.06	35.36	35.68	0.50	Pass

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
						Ant1	Ant2	Ant1	Ant2		
HE20	MCS0	2	1	2412	Full	18.88	18.88	18.18	18.08	0.50	Pass
HE20	MCS0	2	6	2437	Full	18.88	18.83	18.16	17.98	0.50	Pass
HE20	MCS0	2	11	2462	Full	18.83	18.83	17.70	17.66	0.50	Pass
HE40	MCS0	2	3	2422	Full	37.66	37.66	37.64	37.00	0.50	Pass
HE40	MCS0	2	6	2437	Full	37.66	37.66	37.32	35.48	0.50	Pass
HE40	MCS0	2	9	2452	Full	37.66	37.76	36.72	36.32	0.50	Pass

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
					Ant1	Ant2	Worse + 3.01	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	2	1	2412	-4.69	-2.89	0.12	-0.37		8.00		Pass
11b	1Mbps	2	6	2437	-4.46	-5.08	-1.45	-0.37		8.00		Pass
11b	1Mbps	2	11	2462	-4.38	-3.43	-0.42	-0.37		8.00		Pass
11g	6Mbps	2	1	2412	-8.45	-8.67	-5.44	-0.37		8.00		Pass
11g	6Mbps	2	6	2437	-8.76	-7.53	-4.52	-0.37		8.00		Pass
11g	6Mbps	2	11	2462	-8.46	-7.69	-4.68	-0.37		8.00		Pass
HT20	MCS0	2	1	2412	-7.92	-7.79	-4.78	-0.37		8.00		Pass
HT20	MCS0	2	6	2437	-7.60	-6.97	-3.96	-0.37		8.00		Pass
HT20	MCS0	2	11	2462	-6.99	-7.01	-3.98	-0.37		8.00		Pass
HT40	MCS0	2	3	2422	-10.63	-11.76	-7.62	-0.37		8.00		Pass
HT40	MCS0	2	6	2437	-11.57	-9.61	-6.60	-0.37		8.00		Pass
HT40	MCS0	2	9	2452	-11.46	-11.06	-8.05	-0.37		8.00		Pass

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
						Ant1	Ant2	Worse + 3.01	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	2	1	2412	Full	-8.04	-9.12	-5.03	-0.37		8.00		Pass
HE20	MCS0	2	1	2412	26/0	-8.89	-9.36	-5.88	-0.37		8.00		Pass
HE20	MCS0	2	1	2412	52/37	-9.76	-10.14	-6.75	-0.37		8.00		Pass
HE20	MCS0	2	1	2412	106/53	-9.90	-9.85	-6.84	-0.37		8.00		Pass
HE20	MCS0	2	6	2437	Full	-8.60	-8.38	-5.37	-0.37		8.00		Pass
HE20	MCS0	2	11	2462	Full	-8.66	-8.69	-5.65	-0.37		8.00		Pass
HE20	MCS0	2	11	2462	26/8	-8.81	-10.82	-5.80	-0.37		8.00		Pass
HE20	MCS0	2	11	2462	52/40	-10.11	-9.90	-6.89	-0.37		8.00		Pass
HE20	MCS0	2	11	2462	106/54	-12.31	-9.84	-6.83	-0.37		8.00		Pass
HE40	MCS0	2	3	2422	Full	-11.22	-10.89	-7.88	-0.37		8.00		Pass
HE40	MCS0	2	3	2422	242/61	-11.87	-12.29	-8.86	-0.37		8.00		Pass
HE40	MCS0	2	6	2437	Full	-11.37	-10.40	-7.39	-0.37		8.00		Pass
HE40	MCS0	2	9	2452	Full	-11.20	-9.96	-6.95	-0.37		8.00		Pass
HE40	MCS0	2	9	2452	242/62	-11.74	-13.07	-8.73	-0.37		8.00		Pass

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

TEST RESULTS DATA
Peak Output Power

2.4GHz Band MIMO																
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	2	1	2412	20.93	20.15	23.57	30.00		-2.80		20.77		36.00		Pass
11b	1Mbps	2	6	2437	20.80	20.42	23.62	30.00		-2.80		20.82		36.00		Pass
11b	1Mbps	2	11	2462	20.73	20.35	23.55	30.00		-2.80		20.75		36.00		Pass
11g	6Mbps	2	1	2412	23.30	22.75	26.04	30.00		-2.80		23.24		36.00		Pass
11g	6Mbps	2	6	2437	23.11	22.80	25.97	30.00		-2.80		23.17		36.00		Pass
11g	6Mbps	2	11	2462	23.15	22.57	25.88	30.00		-2.80		23.08		36.00		Pass
HT20	MCS0	2	1	2412	23.35	22.75	26.07	30.00		-2.80		23.27		36.00		Pass
HT20	MCS0	2	6	2437	23.24	22.77	26.02	30.00		-2.80		23.22		36.00		Pass
HT20	MCS0	2	11	2462	23.13	22.61	25.89	30.00		-2.80		23.09		36.00		Pass
HT40	MCS0	2	3	2422	23.05	22.27	25.69	30.00		-2.80		22.89		36.00		Pass
HT40	MCS0	2	6	2437	22.75	22.54	25.66	30.00		-2.80		22.86		36.00		Pass
HT40	MCS0	2	9	2452	22.91	22.32	25.64	30.00		-2.80		22.84		36.00		Pass

TEST RESULTS DATA
Peak Output Power

2.4GHz Band MIMO																	
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	2	1	2412	Full	23.91	23.75	26.84	30.00		-2.80		24.04		36.00		Pass
HE20	MCS0	2	1	2412	26/0	19.66	19.44	22.56	30.00		-2.80		19.76		36.00		Pass
HE20	MCS0	2	1	2412	52/37	20.56	20.37	23.48	30.00		-2.80		20.68		36.00		Pass
HE20	MCS0	2	1	2412	106/53	23.11	22.04	25.62	30.00		-2.80		22.82		36.00		Pass
HE20	MCS0	2	6	2437	Full	23.88	23.73	26.82	30.00		-2.80		24.02		36.00		Pass
HE20	MCS0	2	11	2462	Full	23.71	23.43	26.58	30.00		-2.80		23.78		36.00		Pass
HE20	MCS0	2	11	2462	26/8	18.90	18.05	21.51	30.00		-2.80		18.71		36.00		Pass
HE20	MCS0	2	11	2462	52/40	21.34	20.35	23.88	30.00		-2.80		21.08		36.00		Pass
HE20	MCS0	2	11	2462	106/54	20.62	20.47	23.56	30.00		-2.80		20.76		36.00		Pass
HE40	MCS0	2	3	2422	Full	23.90	23.33	26.63	30.00		-2.80		23.83		36.00		Pass
HE40	MCS0	2	3	2422	242/61	22.25	22.13	25.20	30.00		-2.80		22.40		36.00		Pass
HE40	MCS0	2	6	2437	Full	23.62	23.55	26.60	30.00		-2.80		23.80		36.00		Pass
HE40	MCS0	2	9	2452	Full	23.71	23.27	26.51	30.00		-2.80		23.71		36.00		Pass
HE40	MCS0	2	9	2452	242/62	22.14	22.06	25.11	30.00		-2.80		22.31		36.00		Pass

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

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
					Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11b	1Mbps	2	1	2412	19.80	18.80	22.34	30.00		-2.80		19.54		36.00		Pass
11b	1Mbps	2	6	2437	19.50	19.10	22.31	30.00		-2.80		19.51		36.00		Pass
11b	1Mbps	2	11	2462	19.40	18.90	22.17	30.00		-2.80		19.37		36.00		Pass
11g	6Mbps	2	1	2412	18.00	17.20	20.63	30.00		-2.80		17.83		36.00		Pass
11g	6Mbps	2	6	2437	17.70	17.10	20.42	30.00		-2.80		17.62		36.00		Pass
11g	6Mbps	2	11	2462	17.70	17.00	20.37	30.00		-2.80		17.57		36.00		Pass
HT20	MCS0	2	1	2412	17.60	16.80	20.23	30.00		-2.80		17.43		36.00		Pass
HT20	MCS0	2	6	2437	17.30	17.00	20.16	30.00		-2.80		17.36		36.00		Pass
HT20	MCS0	2	11	2462	17.30	16.70	20.02	30.00		-2.80		17.22		36.00		Pass
HT40	MCS0	2	3	2422	17.10	16.20	19.68	30.00		-2.80		16.88		36.00		Pass
HT40	MCS0	2	6	2437	16.70	16.60	19.66	30.00		-2.80		16.86		36.00		Pass
HT40	MCS0	2	9	2452	16.90	16.10	19.53	30.00		-2.80		16.73		36.00		Pass

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

TEST RESULTS DATA
Average Output Power

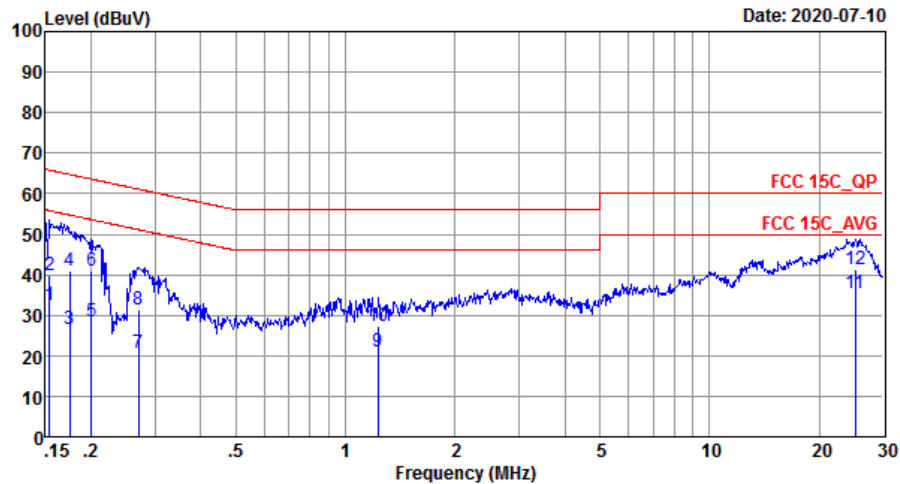
2.4GHz Band MIMO																	
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	Average Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant1	Ant2	SUM	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
HE20	MCS0	2	1	2412	Full	17.60	16.90	20.27	30.00		-2.80		17.47		36.00		Pass
HE20	MCS0	2	1	2412	26/0	8.30	7.90	11.11	30.00		-2.80		8.31		36.00		Pass
HE20	MCS0	2	1	2412	52/37	9.50	9.00	12.27	30.00		-2.80		9.47		36.00		Pass
HE20	MCS0	2	1	2412	106/53	13.10	12.30	15.73	30.00		-2.80		12.93		36.00		Pass
HE20	MCS0	2	6	2437	Full	17.30	17.10	20.21	30.00		-2.80		17.41		36.00		Pass
HE20	MCS0	2	11	2462	Full	17.40	16.80	20.12	30.00		-2.80		17.32		36.00		Pass
HE20	MCS0	2	11	2462	26/8	7.10	6.40	9.77	30.00		-2.80		6.97		36.00		Pass
HE20	MCS0	2	11	2462	52/40	10.30	9.30	12.84	30.00		-2.80		10.04		36.00		Pass
HE20	MCS0	2	11	2462	106/54	10.50	9.70	13.13	30.00		-2.80		10.33		36.00		Pass
HE40	MCS0	2	3	2422	Full	17.80	16.80	20.34	30.00		-2.80		17.54		36.00		Pass
HE40	MCS0	2	3	2422	242/61	14.20	13.20	16.74	30.00		-2.80		13.94		36.00		Pass
HE40	MCS0	2	6	2437	Full	17.50	17.20	20.36	30.00		-2.80		17.56		36.00		Pass
HE40	MCS0	2	9	2452	Full	17.60	16.90	20.27	30.00		-2.80		17.47		36.00		Pass
HE40	MCS0	2	9	2452	242/62	13.90	13.20	16.57	30.00		-2.80		13.77		36.00		Pass

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



Appendix B. AC Conducted Emission Test Results

Test Engineer :	Doom Wu	Temperature :	22~25°C
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

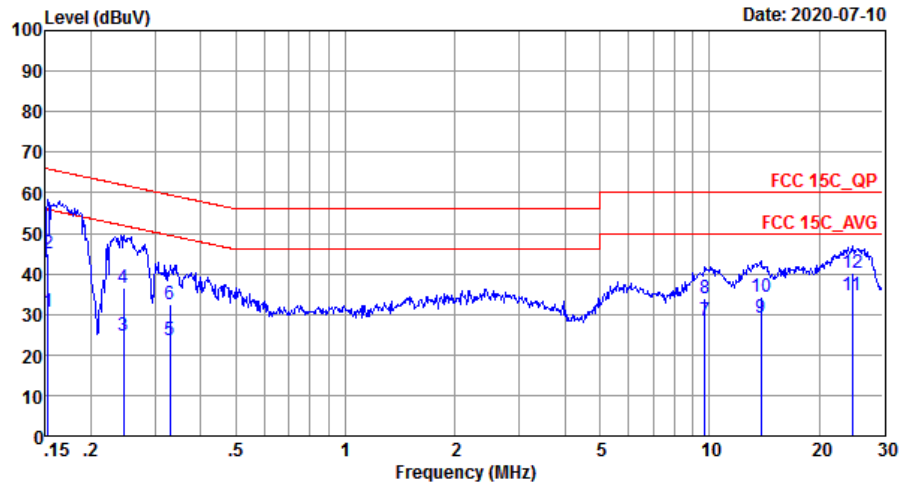


Site : C001-SZ
Condition: FCC 15C_QP LISN_20190719_L LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.15	32.54	-23.24	55.78	22.50	0.03	10.01	Average
2	0.15	39.94	-25.84	65.78	29.90	0.03	10.01	QP
3	0.17	26.54	-28.18	54.72	16.50	0.03	10.01	Average
4	0.17	41.14	-23.58	64.72	31.10	0.03	10.01	QP
5	0.20	28.44	-25.14	53.58	18.40	0.03	10.01	Average
6	0.20	41.04	-22.54	63.58	31.00	0.03	10.01	QP
7	0.27	20.64	-30.48	51.12	10.60	0.03	10.01	Average
8	0.27	31.44	-29.68	61.12	21.40	0.03	10.01	QP
9	1.23	20.93	-25.07	46.00	10.80	0.08	10.05	Average
10	1.23	27.13	-28.87	56.00	17.00	0.08	10.05	QP
11 *	25.19	35.31	-14.69	50.00	23.59	1.37	10.35	Average
12	25.19	41.21	-18.79	60.00	29.49	1.37	10.35	QP



Test Engineer :	Doom Wu	Temperature :	22~25°C
		Relative Humidity :	50~55%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-SZ
Condition: FCC 15C QP LISN_20190719_N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.15	30.54	-25.33	55.87	20.50	0.03	10.01	Average
2	0.15	44.84	-21.03	65.87	34.80	0.03	10.01	QP
3	0.25	24.54	-27.37	51.91	14.50	0.03	10.01	Average
4	0.25	36.54	-25.37	61.91	26.50	0.03	10.01	QP
5	0.33	23.64	-25.80	49.44	13.60	0.03	10.01	Average
6	0.33	32.54	-26.90	59.44	22.50	0.03	10.01	QP
7	9.71	28.30	-21.70	50.00	17.90	0.15	10.25	Average
8	9.71	33.80	-26.20	60.00	23.40	0.15	10.25	QP
9	13.84	28.98	-21.02	50.00	18.40	0.30	10.28	Average
10	13.84	34.38	-25.62	60.00	23.80	0.30	10.28	QP
11 *	24.66	34.81	-15.19	50.00	23.50	0.97	10.34	Average
12	24.66	40.31	-19.69	60.00	29.00	0.97	10.34	QP

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)



Appendix C. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2325.96	50.8	-23.2	74	51.74	27.91	4.75	33.6	220	308	P	H
		2387.28	42.36	-11.64	54	43.32	27.8	4.82	33.58	220	308	A	H
	*	2412	107.92	-	-	108.89	27.77	4.82	33.56	220	308	P	H
	*	2412	106.19	-	-	107.16	27.77	4.82	33.56	220	308	A	H
		2389.17	50.58	-23.42	74	51.54	27.8	4.82	33.58	229	9	P	V
		2388.33	41.05	-12.95	54	42.01	27.8	4.82	33.58	229	9	A	V
	*	2412	105.83	-	-	106.8	27.77	4.82	33.56	229	9	P	V
	*	2412	104.15	-	-	105.12	27.77	4.82	33.56	229	9	A	V
802.11b CH 06 2437MHz		2386.02	50.48	-23.52	74	51.44	27.8	4.82	33.58	232	360	P	H
		2389.94	39.44	-14.56	54	40.38	27.8	4.82	33.56	232	360	A	H
	*	2437	107.22	-	-	108.19	27.71	4.86	33.54	232	360	P	H
	*	2437	105.43	-	-	106.4	27.71	4.86	33.54	232	360	A	H
		2486.21	50.63	-23.37	74	51.58	27.66	4.9	33.51	232	360	P	H
		2483.55	39.25	-14.75	54	40.2	27.66	4.9	33.51	232	360	A	H
		2363.9	51.78	-22.22	74	52.74	27.85	4.78	33.59	220	7	P	V
		2389.94	39.46	-14.54	54	40.4	27.8	4.82	33.56	220	7	A	V
	*	2437	104.52	-	-	105.49	27.71	4.86	33.54	220	7	P	V
	*	2437	102.72	-	-	103.69	27.71	4.86	33.54	220	7	A	V
		2492.72	50.54	-23.46	74	51.51	27.63	4.9	33.5	220	7	P	V
		2483.5	39.17	-14.83	54	40.12	27.66	4.9	33.51	220	7	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 11 2462MHz	*	2462	108.09	-	-	109.07	27.69	4.86	33.53	117	303	P	H
	*	2462	106.35	-	-	107.33	27.69	4.86	33.53	117	303	A	H
		2487.08	52.07	-21.93	74	53.02	27.66	4.9	33.51	117	303	P	H
		2486.56	41.91	-12.09	54	42.86	27.66	4.9	33.51	117	303	A	H
	*	2462	102.41	-	-	103.39	27.69	4.86	33.53	135	32	P	V
	*	2462	100.67	-	-	101.65	27.69	4.86	33.53	135	32	A	V
		2492.52	51.04	-22.96	74	52.01	27.63	4.9	33.5	135	32	P	V
		2486.76	39.59	-14.41	54	40.54	27.66	4.9	33.51	135	32	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 802.11b (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	41.25	-32.75	74	60.08	31.12	7.53	57.48	145	274	P	H
		4824	41.94	-32.06	74	60.77	31.12	7.53	57.48	191	220	P	V
802.11b CH 06 2437MHz		4874	40.23	-33.77	74	59	31.17	7.58	57.52	112	229	P	H
		7311	44.87	-29.13	74	58.7	36.03	9.06	58.92	174	100	P	H
		4874	41.14	-32.86	74	59.91	31.17	7.58	57.52	157	360	P	V
		7311	45.31	-28.69	74	59.14	36.03	9.06	58.92	120	106	P	V
802.11b CH 11 2462MHz		4924	39.23	-34.77	74	57.89	31.22	7.67	57.55	133	180	P	H
		7386	44.51	-29.49	74	58.14	36.29	9.04	58.96	145	274	P	H
		4924	39.53	-34.47	74	58.19	31.22	7.67	57.55	153	360	P	V
		7386	44.81	-29.19	74	58.44	36.29	9.04	58.96	166	210	P	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 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2387.805	55.7	-18.3	74	56.66	27.8	4.82	33.58	143	64	P	H
		2390	46.31	-7.69	54	47.25	27.8	4.82	33.56	143	64	A	H
	*	2412	108.87	-	-	109.84	27.77	4.82	33.56	143	64	P	H
	*	2412	101.58	-	-	102.55	27.77	4.82	33.56	143	64	A	H
		2389.17	53.42	-20.58	74	54.38	27.8	4.82	33.58	136	270	P	V
		2389.485	43.93	-10.07	54	44.89	27.8	4.82	33.58	136	270	A	V
	*	2412	105.82	-	-	106.79	27.77	4.82	33.56	136	270	P	V
	*	2412	99.12	-	-	100.09	27.77	4.82	33.56	136	270	A	V
802.11g CH 06 2437MHz		2380.84	50.65	-23.35	74	51.62	27.83	4.78	33.58	136	65	P	H
		2388.82	39.66	-14.34	54	40.62	27.8	4.82	33.58	136	65	A	H
	*	2437	109.3	-	-	110.27	27.71	4.86	33.54	136	65	P	H
	*	2437	102.98	-	-	103.95	27.71	4.86	33.54	136	65	A	H
		2493	51.25	-22.75	74	52.22	27.63	4.9	33.5	136	65	P	H
		2484.04	39.4	-14.6	54	40.35	27.66	4.9	33.51	136	65	A	H
		2343.46	50.01	-23.99	74	50.97	27.88	4.75	33.59	100	285	P	V
		2389.8	39.76	-14.24	54	40.7	27.8	4.82	33.56	100	285	A	V
	*	2437	105.7	-	-	106.67	27.71	4.86	33.54	100	285	P	V
	*	2437	98.51	-	-	99.48	27.71	4.86	33.54	100	285	A	V
		2494.54	49.67	-24.33	74	50.64	27.63	4.9	33.5	100	285	P	V
		2483.83	39.26	-14.74	54	40.21	27.66	4.9	33.51	100	285	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 11 2462MHz	*	2462	109.38	-	-	110.36	27.69	4.86	33.53	124	59	P	H
	*	2462	102.08	-	-	103.06	27.69	4.86	33.53	124	59	A	H
		2483.52	53.93	-20.07	74	54.88	27.66	4.9	33.51	124	59	P	H
		2483.52	45.04	-8.96	54	45.99	27.66	4.9	33.51	124	59	A	H
	*	2462	104.1	-	-	105.08	27.69	4.86	33.53	122	272	P	V
	*	2462	96.88	-	-	97.86	27.69	4.86	33.53	122	272	A	V
		2483.64	52.73	-21.27	74	53.68	27.66	4.9	33.51	122	272	P	V
		2483.52	42.75	-11.25	54	43.7	27.66	4.9	33.51	122	272	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 802.11g (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	40.72	-33.28	74	59.55	31.12	7.53	57.48	145	274	P	H
		4824	41.09	-32.91	74	59.92	31.12	7.53	57.48	191	220	P	V
802.11g CH 06 2437MHz		4874	39.95	-34.05	74	58.72	31.17	7.58	57.52	112	229	P	H
		7311	45.25	-28.75	74	59.08	36.03	9.06	58.92	174	100	P	H
		4874	40.32	-33.68	74	59.09	31.17	7.58	57.52	153	360	P	V
		7311	44.48	-29.52	74	58.31	36.03	9.06	58.92	120	106	P	V
802.11g CH 11 2462MHz		4924	38.51	-35.49	74	57.17	31.22	7.67	57.55	133	180	P	H
		7386	44.75	-29.25	74	58.38	36.29	9.04	58.96	145	274	P	H
		4924	38.67	-35.33	74	57.33	31.22	7.67	57.55	153	360	P	V
		7386	44.4	-29.6	74	58.03	36.29	9.04	58.96	166	210	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2389.905	58.28	-15.72	74	59.22	27.8	4.82	33.56	221	308	P	H
		2390	48.81	-5.19	54	49.75	27.8	4.82	33.56	221	308	A	H
	*	2412	108.42	-	-	109.39	27.77	4.82	33.56	221	308	P	H
	*	2412	100.69	-	-	101.66	27.77	4.82	33.56	221	308	A	H
		2389.485	56.12	-17.88	74	57.08	27.8	4.82	33.58	135	32	P	V
		2390	46.03	-7.97	54	46.97	27.8	4.82	33.56	135	32	A	V
	*	2412	105.78	-	-	106.75	27.77	4.82	33.56	135	32	P	V
	*	2412	98.78	-	-	99.75	27.77	4.82	33.56	135	32	A	V
802.11n HT20 CH 06 2437MHz		2332.68	50.42	-23.58	74	51.36	27.91	4.75	33.6	261	307	P	H
		2389.8	39.46	-14.54	54	40.4	27.8	4.82	33.56	261	307	A	H
	*	2437	107.95	-	-	108.92	27.71	4.86	33.54	261	307	P	H
	*	2437	100.23	-	-	101.2	27.71	4.86	33.54	261	307	A	H
		2493.28	49.13	-24.87	74	50.1	27.63	4.9	33.5	261	307	P	H
		2483.83	39.23	-14.77	54	40.18	27.66	4.9	33.51	261	307	A	H
		2366.7	50.32	-23.68	74	51.27	27.85	4.78	33.58	257	253	P	V
		2358.3	39.33	-14.67	54	40.29	27.85	4.78	33.59	257	253	A	V
	*	2437	105.2	-	-	106.17	27.71	4.86	33.54	257	253	P	V
	*	2437	98.25	-	-	99.22	27.71	4.86	33.54	257	253	A	V
		2485.72	49.46	-24.54	74	50.41	27.66	4.9	33.51	257	253	P	V
		2483.76	39.1	-14.9	54	40.05	27.66	4.9	33.51	257	253	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 11 2462MHz	*	2462	107.53	-	-	108.51	27.69	4.86	33.53	270	360	P	H
	*	2462	99.89	-	-	100.87	27.69	4.86	33.53	270	360	A	H
		2483.8	54.86	-19.14	74	55.81	27.66	4.9	33.51	270	360	P	H
		2483.52	44.87	-9.13	54	45.82	27.66	4.9	33.51	270	360	A	H
	*	2462	105.45	-	-	106.43	27.69	4.86	33.53	250	252	P	V
	*	2462	98.59	-	-	99.57	27.69	4.86	33.53	250	252	A	V
		2483.52	52.48	-21.52	74	53.43	27.66	4.9	33.51	250	252	P	V
		2483.52	43.04	-10.96	54	43.99	27.66	4.9	33.51	250	252	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 802.11n HT20 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	41.16	-32.84	74	59.99	31.12	7.53	57.48	145	274	P	H
		4824	39.9	-34.1	74	58.73	31.12	7.53	57.48	191	220	P	V
802.11n HT20 CH 06 2437MHz		4874	40.6	-33.4	74	59.37	31.17	7.58	57.52	112	229	P	H
		7311	44.82	-29.18	74	58.65	36.03	9.06	58.92	174	100	P	H
		4874	39.51	-34.49	74	58.28	31.17	7.58	57.52	156	360	P	V
		7311	44.77	-29.23	74	58.6	36.03	9.06	58.92	120	106	P	V
802.11n HT20 CH 11 2462MHz		4924	38.88	-35.12	74	57.54	31.22	7.67	57.55	133	180	P	H
		7386	44.61	-29.39	74	58.24	36.29	9.04	58.96	145	274	P	H
		4924	38.89	-35.11	74	57.55	31.22	7.67	57.55	157	360	P	V
		7386	45.45	-28.55	74	59.08	36.29	9.04	58.96	166	210	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



2.4GHz 2400~2483.5MHz

WIFI 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2389.94	56.54	-17.46	74	57.48	27.8	4.82	33.56	330	298	P	H
		2389.94	47.21	-6.79	54	48.15	27.8	4.82	33.56	330	298	A	H
	*	2422	103.63	-	-	104.61	27.74	4.82	33.54	330	298	P	H
	*	2422	97.06	-	-	98.04	27.74	4.82	33.54	330	298	A	H
		2498.88	50.8	-23.2	74	51.77	27.63	4.9	33.5	330	298	P	H
		2483.5	40.37	-13.63	54	41.32	27.66	4.9	33.51	330	298	A	H
		2388.96	54.25	-19.75	74	55.21	27.8	4.82	33.58	255	263	P	V
		2389.94	45.17	-8.83	54	46.11	27.8	4.82	33.56	255	263	A	V
	*	2422	100.5	-	-	101.48	27.74	4.82	33.54	255	263	P	V
	*	2422	93.87	-	-	94.85	27.74	4.82	33.54	255	263	A	V
		2494.47	49.22	-24.78	74	50.19	27.63	4.9	33.5	255	263	P	V
		2483.5	39.7	-14.3	54	40.65	27.66	4.9	33.51	255	263	A	V
802.11n HT40 CH 06 2437MHz		2388.4	51.3	-22.7	74	52.26	27.8	4.82	33.58	100	304	P	H
		2388.4	41.4	-12.6	54	42.36	27.8	4.82	33.58	100	304	A	H
	*	2437	104.95	-	-	105.92	27.71	4.86	33.54	100	304	P	H
	*	2437	97.35	-	-	98.32	27.71	4.86	33.54	100	304	A	H
		2487.26	52.37	-21.63	74	53.32	27.66	4.9	33.51	100	304	P	H
		2486.63	41.41	-12.59	54	42.36	27.66	4.9	33.51	100	304	A	H
		2311.54	50.03	-23.97	74	50.96	27.94	4.75	33.62	260	250	P	V
		2388.4	40.85	-13.15	54	41.81	27.8	4.82	33.58	260	250	A	V
	*	2437	101.38	-	-	102.35	27.71	4.86	33.54	260	250	P	V
	*	2437	94.81	-	-	95.78	27.71	4.86	33.54	260	250	A	V
		2486.63	51.43	-22.57	74	52.38	27.66	4.9	33.51	260	250	P	V
		2485.72	40.32	-13.68	54	41.27	27.66	4.9	33.51	260	250	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 09 2452MHz		2343.46	51	-23	74	51.96	27.88	4.75	33.59	100	307	P	H
		2389.94	41.12	-12.88	54	42.06	27.8	4.82	33.56	100	307	A	H
	*	2452	104.12	-	-	105.08	27.71	4.86	33.53	100	307	P	H
	*	2452	97.43	-	-	98.39	27.71	4.86	33.53	100	307	A	H
		2484.11	60.42	-13.58	74	61.37	27.66	4.9	33.51	100	307	P	H
		2483.5	50.36	-3.64	54	51.31	27.66	4.9	33.51	100	307	A	H
		2381.54	50.15	-23.85	74	51.12	27.83	4.78	33.58	231	257	P	V
		2389.94	40.38	-13.62	54	41.32	27.8	4.82	33.56	231	257	A	V
	*	2452	100.91	-	-	101.87	27.71	4.86	33.53	231	257	P	V
	*	2452	94.26	-	-	95.22	27.71	4.86	33.53	231	257	A	V
		2483.69	57.16	-16.84	74	58.11	27.66	4.9	33.51	231	257	P	V
		2483.5	46.63	-7.37	54	47.58	27.66	4.9	33.51	231	257	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 802.11n HT40 (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		4844	40.35	-33.65	74	59.13	31.13	7.58	57.49	156	360	P	H
HT40		7266	44.39	-29.61	74	58.31	35.93	9.06	58.91	200	360	P	H
CH 03		4844	40.17	-33.83	74	58.95	31.13	7.58	57.49	156	360	P	V
2422MHz		7266	45.11	-28.89	74	59.03	35.93	9.06	58.91	200	360	P	V
802.11n		4874	40.16	-33.84	74	58.93	31.17	7.58	57.52	157	360	P	H
HT40		7311	44.79	-29.21	74	58.62	36.03	9.06	58.92	157	360	P	H
CH 06		4874	40.44	-33.56	74	59.21	31.17	7.58	57.52	157	360	P	V
2437MHz		7311	44.38	-29.62	74	58.21	36.03	9.06	58.92	157	360	P	V
802.11n		4904	38.53	-35.47	74	57.25	31.2	7.62	57.54	157	360	P	H
HT40		7356	44.87	-29.13	74	58.57	36.19	9.05	58.94	157	360	P	H
CH 09		4904	38.53	-35.47	74	57.25	31.2	7.62	57.54	157	360	P	V
2452MHz		7356	44.67	-29.33	74	58.37	36.19	9.05	58.94	157	360	P	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 Full Ru (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 01 2412MHz		2389.59	58.74	-15.26	74	59.7	27.8	4.82	33.58	278	302	P	H
		2390	49.45	-4.55	54	50.39	27.8	4.82	33.56	278	302	A	H
		2412	108.48	-	-	109.45	27.77	4.82	33.56	278	302	P	H
		2412	98.74	-	-	99.71	27.77	4.82	33.56	278	302	A	H
		2389.905	55.67	-18.33	74	56.61	27.8	4.82	33.56	100	69	P	V
		2390	47.28	-6.72	54	48.22	27.8	4.82	33.56	100	69	A	V
		2412	107.89	-	-	108.86	27.77	4.82	33.56	100	69	P	V
		2412	97.62	-	-	98.59	27.77	4.82	33.56	100	69	A	V
802.11ax HE20 CH 06 2437MHz		2375.52	50.82	-23.18	74	51.79	27.83	4.78	33.58	100	307	P	H
		2389.94	39.57	-14.43	54	40.51	27.8	4.82	33.56	100	307	A	H
		2437	107.33	-	-	108.3	27.71	4.86	33.54	100	307	P	H
		2437	97.54	-	-	98.51	27.71	4.86	33.54	100	307	A	H
		2495.17	49.51	-24.49	74	50.48	27.63	4.9	33.5	100	307	P	H
		2484.53	39.35	-14.65	54	40.3	27.66	4.9	33.51	100	307	A	H
		2314.34	50.42	-23.58	74	51.33	27.94	4.75	33.6	103	66	P	V
		2389.66	39.49	-14.51	54	40.45	27.8	4.82	33.58	103	66	A	V
		2437	105.03	-	-	106	27.71	4.86	33.54	103	66	P	V
		2437	96.43	-	-	97.4	27.71	4.86	33.54	103	66	A	V
		2488.03	49.29	-24.71	74	50.27	27.63	4.9	33.51	103	66	P	V
		2484.39	39.12	-14.88	54	40.07	27.66	4.9	33.51	103	66	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 11 2462MHz		2462	107.43	-	-	108.41	27.69	4.86	33.53	268	304	P	H
		2462	97.61	-	-	98.59	27.69	4.86	33.53	268	304	A	H
		2484.28	54.61	-19.39	74	55.56	27.66	4.9	33.51	268	304	P	H
		2483.52	45.23	-8.77	54	46.18	27.66	4.9	33.51	268	304	A	H
		2462	104.77	-	-	105.75	27.69	4.86	33.53	100	55	P	V
		2462	94.86	-	-	95.84	27.69	4.86	33.53	100	55	A	V
		2484.88	51.48	-22.52	74	52.43	27.66	4.9	33.51	100	55	P	V
		2483.52	41.44	-12.56	54	42.39	27.66	4.9	33.51	100	55	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 HE20 Full Ru (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20		4824	41.47	-32.53	74	60.3	31.12	7.53	57.48	145	274	P	H
CH 01 2412MHz		4824	42.5	-31.5	74	61.33	31.12	7.53	57.48	191	220	P	V
802.11ax HE20		4874	41.62	-32.38	74	60.39	31.17	7.58	57.52	112	229	P	H
CH 06 2437MHz		7311	45.32	-28.68	74	59.15	36.03	9.06	58.92	174	100	P	H
		4874	41.99	-32.01	74	60.76	31.17	7.58	57.52	153	360	P	V
		7311	45.88	-28.12	74	59.71	36.03	9.06	58.92	120	106	P	V
802.11ax HE20		4924	41.02	-32.98	74	59.68	31.22	7.67	57.55	153	360	P	H
CH 11 2462MHz		7386	45.46	-28.54	74	59.09	36.29	9.04	58.96	145	274	P	H
		4924	40.17	-33.83	74	58.83	31.22	7.67	57.55	153	360	P	V
		7386	46.17	-27.83	74	59.8	36.29	9.04	58.96	166	210	P	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 Ru (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 03 2422MHz		2388.54	59.89	-14.11	74	60.85	27.8	4.82	33.58	271	312	P	H
		2389.94	50.96	-3.04	54	51.9	27.8	4.82	33.56	271	312	A	H
		2422	105.19	-	-	106.17	27.74	4.82	33.54	271	312	P	H
		2422	96.43	-	-	97.41	27.74	4.82	33.54	271	312	A	H
		2483.5	51.46	-22.54	74	52.41	27.66	4.9	33.51	271	312	P	H
		2483.5	41.1	-12.9	54	42.05	27.66	4.9	33.51	271	312	A	H
		2388.96	55.47	-18.53	74	56.43	27.8	4.82	33.58	112	338	P	V
		2389.94	47.46	-6.54	54	48.4	27.8	4.82	33.56	112	338	A	V
		2422	97.17	-	-	98.15	27.74	4.82	33.54	112	338	P	V
		2422	90.63	-	-	91.61	27.74	4.82	33.54	112	338	A	V
		2484.18	50	-24	74	50.95	27.66	4.9	33.51	112	338	P	V
		2485.65	41.61	-12.39	54	42.56	27.66	4.9	33.51	112	338	A	V
802.11ax HE40 CH 06 2437MHz		2388.96	52.83	-21.17	74	53.79	27.8	4.82	33.58	320	17	P	H
		2388.54	45.84	-8.16	54	46.8	27.8	4.82	33.58	320	17	A	H
		2437	102.28	-	-	103.25	27.71	4.86	33.54	320	17	P	H
		2437	95.62	-	-	96.59	27.71	4.86	33.54	320	17	A	H
		2483.69	59.98	-14.02	74	60.93	27.66	4.9	33.51	320	17	P	H
		2483.5	49.59	-4.41	54	50.54	27.66	4.9	33.51	320	17	A	H
		2389.8	54.89	-19.11	74	55.83	27.8	4.82	33.56	115	341	P	V
		2388.82	46.29	-7.71	54	47.25	27.8	4.82	33.58	115	341	A	V
		2437	98.36	-	-	99.33	27.71	4.86	33.54	115	341	P	V
		2437	92.17	-	-	93.14	27.71	4.86	33.54	115	341	A	V
		2485.3	53.13	-20.87	74	54.08	27.66	4.9	33.51	115	341	P	V
		2483.5	44.67	-9.33	54	45.62	27.66	4.9	33.51	115	341	A	V



WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 09 2452MHz		2387.28	50.41	-23.59	74	51.37	27.8	4.82	33.58	347	19	P	H
		2389.66	42.13	-11.87	54	43.09	27.8	4.82	33.58	347	19	A	H
		2452	101.29	-	-	102.25	27.71	4.86	33.53	347	19	P	H
		2452	94.35	-	-	95.31	27.71	4.86	33.53	347	19	A	H
		2483.5	57.8	-16.2	74	58.75	27.66	4.9	33.51	347	19	P	H
		2483.5	50.91	-3.09	54	51.86	27.66	4.9	33.51	347	19	A	H
		2363.48	50.2	-23.8	74	51.16	27.85	4.78	33.59	187	335	P	V
		2388.4	42.04	-11.96	54	43	27.8	4.82	33.58	187	335	A	V
		2452	97.9	-	-	98.86	27.71	4.86	33.53	187	335	P	V
		2452	91.2	-	-	92.16	27.71	4.86	33.53	187	335	A	V
		2483.69	55.97	-18.03	74	56.92	27.66	4.9	33.51	187	335	P	V
		2483.5	47.43	-6.57	54	48.38	27.66	4.9	33.51	187	335	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 Full Ru (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		4844	41.41	-32.59	74	60.19	31.13	7.58	57.49	153	360	P	H
HE40		7266	46.55	-27.45	74	60.47	35.93	9.06	58.91	200	360	P	H
CH 03		4844	42.11	-31.89	74	60.89	31.13	7.58	57.49	153	360	P	V
2422MHz		7266	45.5	-28.5	74	59.42	35.93	9.06	58.91	200	360	P	V
802.11ax		4874	42.3	-31.7	74	61.07	31.17	7.58	57.52	153	360	P	H
HE40		7311	45.45	-28.55	74	59.28	36.03	9.06	58.92	153	360	P	H
CH 06		4874	42.25	-31.75	74	61.02	31.17	7.58	57.52	153	360	P	V
2437MHz		7311	45.71	-28.29	74	59.54	36.03	9.06	58.92	153	360	P	V
802.11ax		4904	40.73	-33.27	74	59.45	31.2	7.62	57.54	153	360	P	H
HE40		7356	45.43	-28.57	74	59.13	36.19	9.05	58.94	153	360	P	H
CH 09		4904	41.07	-32.93	74	59.79	31.2	7.62	57.54	153	360	P	V
2452MHz		7356	45.72	-28.28	74	59.42	36.19	9.05	58.94	153	360	P	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 Ru (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 01 2412MHz		2370.06	52.69	-21.31	74	53.66	27.83	4.78	33.58	160	13	P	H
		2390	41.65	-12.35	54	42.59	27.8	4.82	33.56	160	13	A	H
		2412	107.97	-	-	108.94	27.77	4.82	33.56	160	13	P	H
		2412	99.87	-	-	100.84	27.77	4.82	33.56	160	13	A	H
		2327.115	52.53	-21.47	74	53.47	27.91	4.75	33.6	114	60	P	V
		2389.695	41.5	-12.5	54	42.46	27.8	4.82	33.58	114	60	A	V
		2412	105.93	-	-	106.9	27.77	4.82	33.56	114	60	P	V
		2412	98.16	-	-	99.13	27.77	4.82	33.56	114	60	A	V
802.11ax HE20 CH 11 2462MHz		2462	106.87	-	-	107.85	27.69	4.86	33.53	159	39	P	H
		2462	98.6	-	-	99.58	27.69	4.86	33.53	159	39	A	H
		2489.72	52.09	-21.91	74	53.07	27.63	4.9	33.51	159	39	P	H
		2485.04	41.13	-12.87	54	42.08	27.66	4.9	33.51	159	39	A	H
		2462	105.8	-	-	106.78	27.69	4.86	33.53	144	15	P	V
		2462	97.5	-	-	98.48	27.69	4.86	33.53	144	15	A	V
		2485.16	52.35	-21.65	74	53.3	27.66	4.9	33.51	144	15	P	V
		2484.32	41.31	-12.69	54	42.26	27.66	4.9	33.51	144	15	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 HE20 Partial Ru (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 01 2412MHz		4824	41.01	-32.99	74	59.84	31.12	7.53	57.48	145	274	P	H
		4824	40.67	-33.33	74	59.5	31.12	7.53	57.48	191	220	P	V
802.11ax HE20 CH 11 2462MHz		4924	39.49	-34.51	74	58.15	31.22	7.67	57.55	133	180	P	H
		7386	45.68	-28.32	74	59.31	36.29	9.04	58.96	145	274	P	H
		4924	39.47	-34.53	74	58.13	31.22	7.67	57.55	153	360	P	V
		7386	45.2	-28.8	74	58.83	36.29	9.04	58.96	166	210	P	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 Ru (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 CH 03 2422MHz		2387.84	61.61	-12.39	74	62.57	27.8	4.82	33.58	266	332	P	H
		2389.94	44.43	-9.57	54	45.37	27.8	4.82	33.56	266	332	A	H
		2422	105.62	-	-	106.6	27.74	4.82	33.54	266	332	P	H
		2422	95.98	-	-	96.96	27.74	4.82	33.54	266	332	A	H
		2487.82	53.91	-20.09	74	54.89	27.63	4.9	33.51	266	333	P	H
		2484.04	41.76	-12.24	54	42.71	27.66	4.9	33.51	266	333	A	H
		2389.94	62.2	-11.8	74	63.14	27.8	4.82	33.56	254	59	P	V
		2389.8	44.48	-9.52	54	45.42	27.8	4.82	33.56	254	59	A	V
		2422	105.7	-	-	106.68	27.74	4.82	33.54	254	59	P	V
		2422	96.11	-	-	97.09	27.74	4.82	33.54	254	59	A	V
		2489.36	52.82	-21.18	74	53.8	27.63	4.9	33.51	254	59	P	V
		2484.39	41.58	-12.42	54	42.53	27.66	4.9	33.51	254	59	A	V
802.11ax HE40 CH 09 2452MHz		2349.76	52.62	-21.38	74	53.55	27.88	4.78	33.59	153	223	P	H
		2388.96	41.74	-12.26	54	42.7	27.8	4.82	33.58	153	223	A	H
		2452	106.23	-	-	107.19	27.71	4.86	33.53	153	223	P	H
		2452	98.28	-	-	99.24	27.71	4.86	33.53	153	223	A	H
		2487.12	60.26	-13.74	74	61.21	27.66	4.9	33.51	153	223	P	H
		2483.5	43.86	-10.14	54	44.81	27.66	4.9	33.51	153	223	A	H
		2321.62	52.79	-21.21	74	53.73	27.91	4.75	33.6	159	81	P	V
		2389.8	41.76	-12.24	54	42.7	27.8	4.82	33.56	159	81	A	V
		2452	105	-	-	105.96	27.71	4.86	33.53	159	81	P	V
		2452	95.9	-	-	96.86	27.71	4.86	33.53	159	81	A	V
		2487.61	61.53	-12.47	74	62.51	27.63	4.9	33.51	159	81	P	V
		2483.5	44.14	-9.86	54	45.09	27.66	4.9	33.51	159	81	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 802.11n HE40 Partial Ru (Harmonic @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		4844	42.15	-31.85	74	60.93	31.13	7.58	57.49	100	268	P	H
HE40		7266	45.99	-28.01	74	59.91	35.93	9.06	58.91	200	360	P	H
CH 03		4844	42.39	-31.61	74	61.17	31.13	7.58	57.49	214	86	P	V
2422MHz		7266	44.94	-29.06	74	58.86	35.93	9.06	58.91	200	360	P	V
802.11ax		4904	41.82	-32.18	74	60.54	31.2	7.62	57.54	152	177	P	H
HE40		7356	46.46	-27.54	74	60.16	36.19	9.05	58.94	251	0	P	H
CH 09		4904	41.66	-32.34	74	60.38	31.2	7.62	57.54	130	74	P	V
2452MHz		7356	45.3	-28.7	74	59	36.19	9.05	58.94	114	211	P	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 LF (Band Edge @ 3m)

WIFI Ant. 1+2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
WIFI 802.11ax HE40 LF		30.97	27.76	-12.24	40	35.45	24.18	0.53	32.4	-	-	P	H
		87.23	28.56	-11.44	40	45.35	14.73	0.88	32.4	110	93	P	H
		205.57	25.01	-18.49	43.5	40.48	15.23	1.36	32.06	-	-	P	H
		299.66	32.23	-13.77	46	43.07	19.2	1.66	31.7	-	-	P	H
		653.71	27.83	-18.17	46	31.24	24.91	2.48	30.8	-	-	P	H
		885.54	29.69	-16.31	46	31.83	26.46	2.87	31.47	-	-	P	H
		42.61	25.25	-14.75	40	38.87	18.14	0.64	32.4	-	-	P	V
		87.23	23.63	-16.37	40	40.42	14.73	0.88	32.4	-	-	P	V
		195.87	22.94	-20.56	43.5	38.5	15.22	1.33	32.11	-	-	P	V
		299.66	32.79	-13.21	46	43.63	19.2	1.66	31.7	132	77	P	V
		609.09	28.09	-17.91	46	31.62	24.82	2.37	30.72	-	-	P	V
		917.55	28.97	-17.03	46	30.88	26.67	2.92	31.5	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



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

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2		(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		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H
2412MHz													

1. Level(dBμV/m) =

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

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Cable 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) + Cable 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)

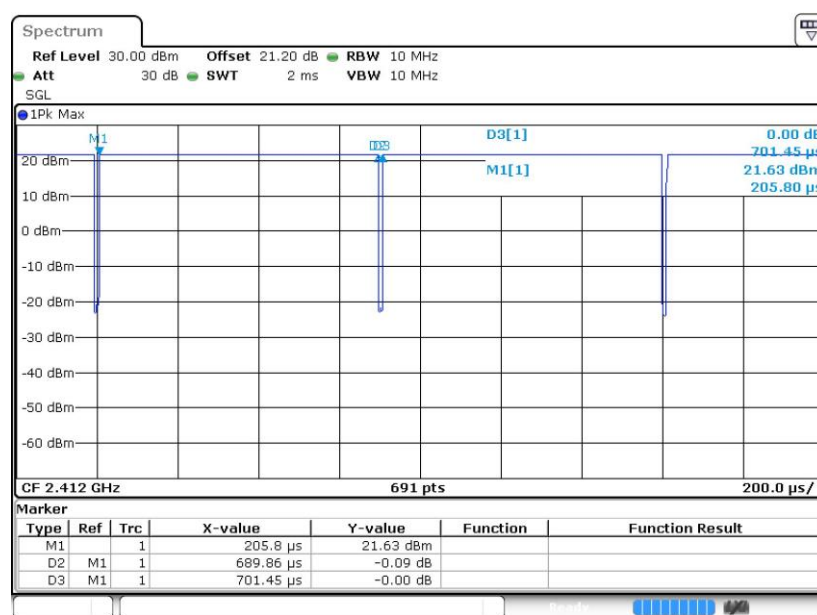
Both peak and average measured complies with the limit line, so test result is “PASS”.

Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1+2	802.11b	98.35	-	-	10Hz
1+2	802.11g	98.63	-	-	10Hz
1+2	802.11n HT20	100	-	-	10Hz
1+2	802.11n HT40	100	-	-	10Hz
1+2	802.11ax HE20	100	-	-	10Hz
1+2	802.11ax HE40	100	-	-	10Hz

<MIMO Ant. 1+2>

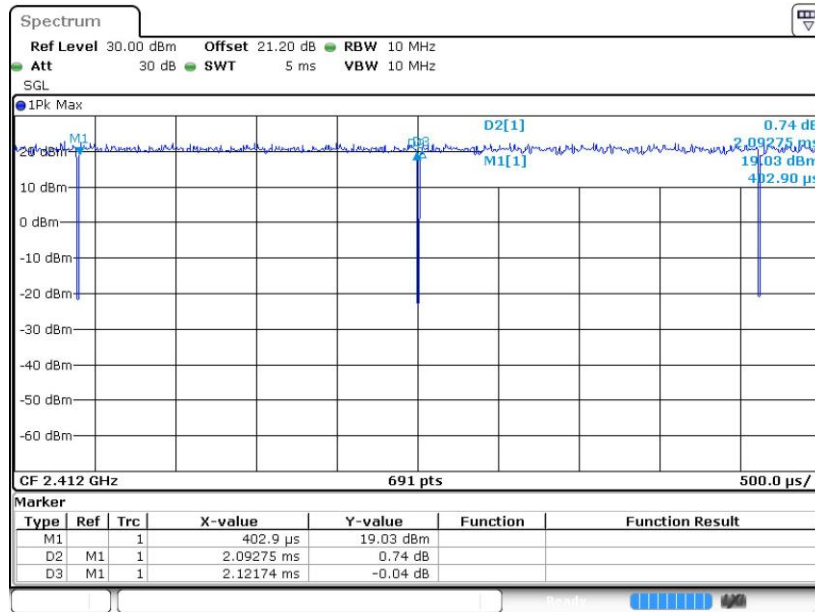
802.11b



Date: 2 JUL 2020 19:19:12

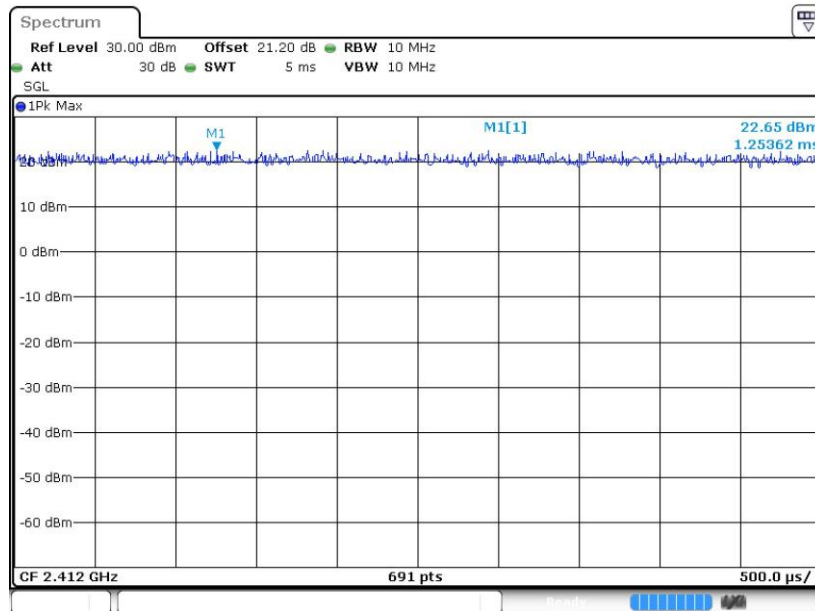


802.11g



Date: 2 JUL 2020 19:24:32

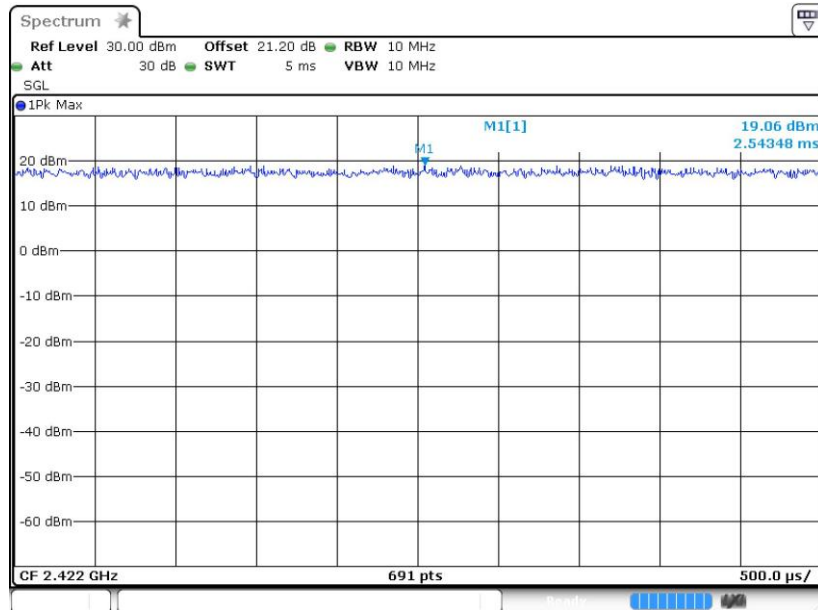
802.11n HT20



Date: 2 JUL 2020 19:27:38

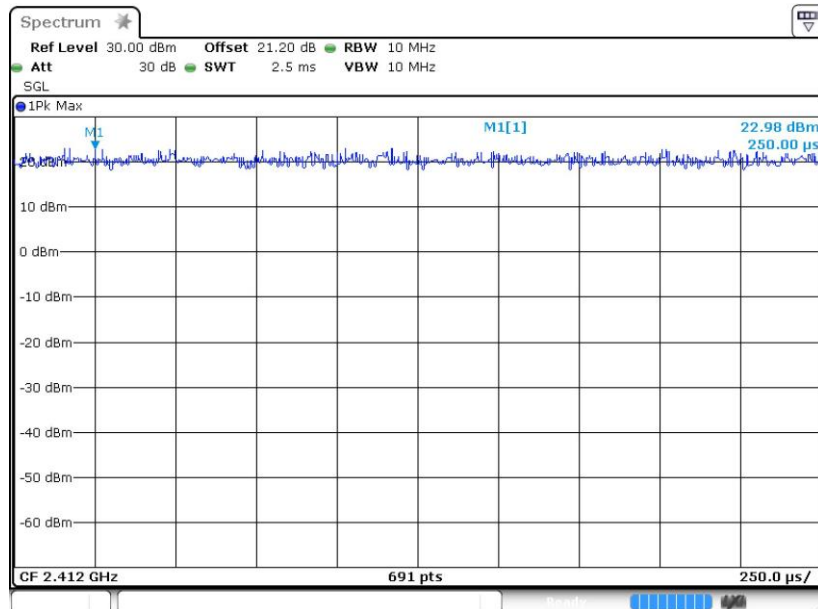


802.11n HT40



Date: 2 JUL 2020 19:30:31

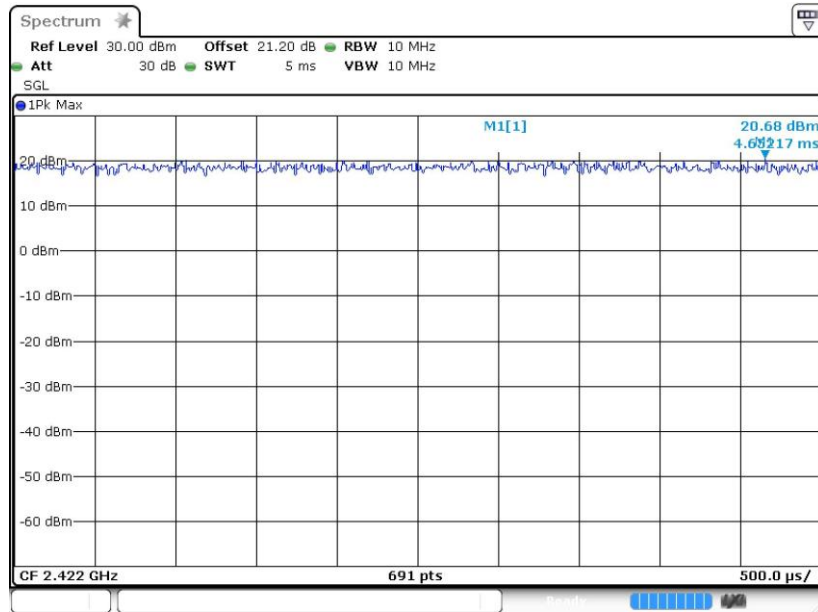
802.11ax HE20



Date: 2 JUL 2020 19:13:54



802.11ax HE40



Date: 2 JUL 2020 19:08:20