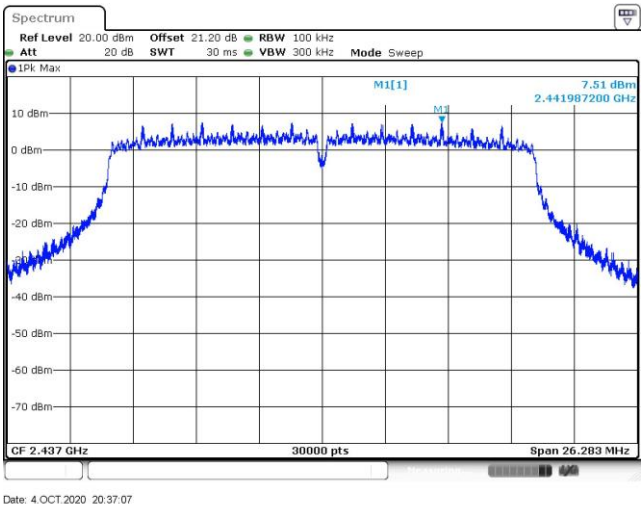
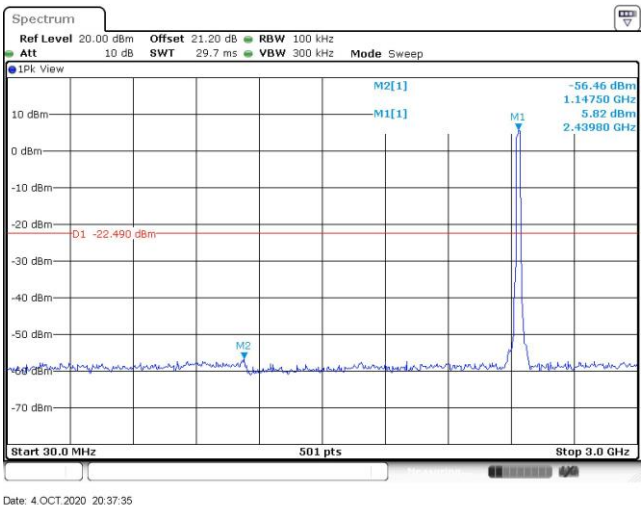
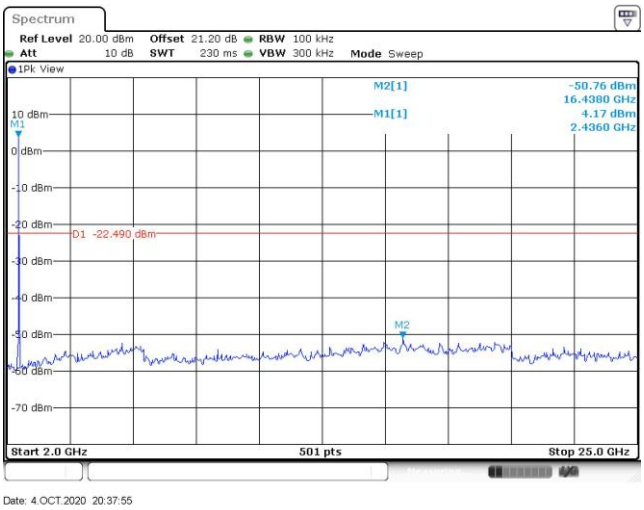
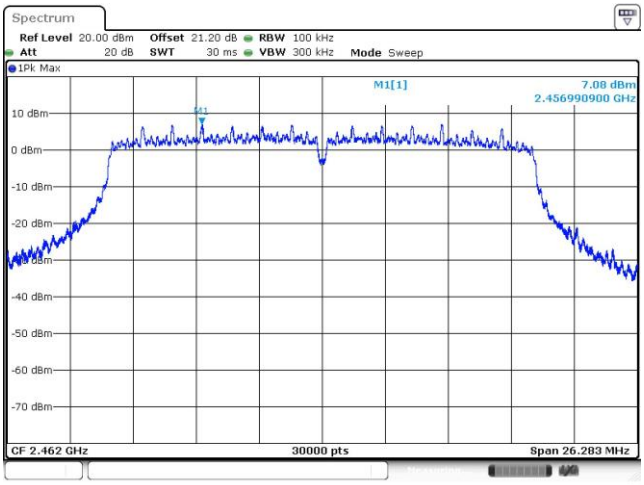
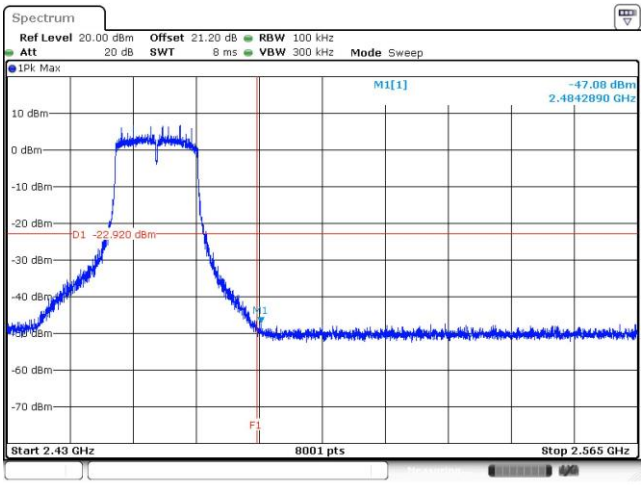
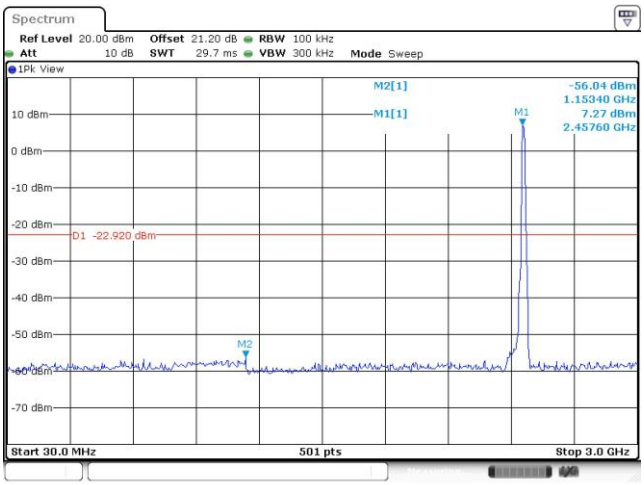
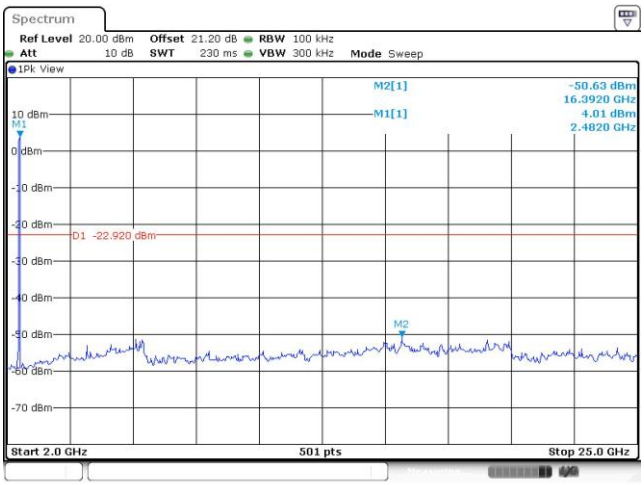
Test Mode :	802.11n HT20	Test Channel :	06

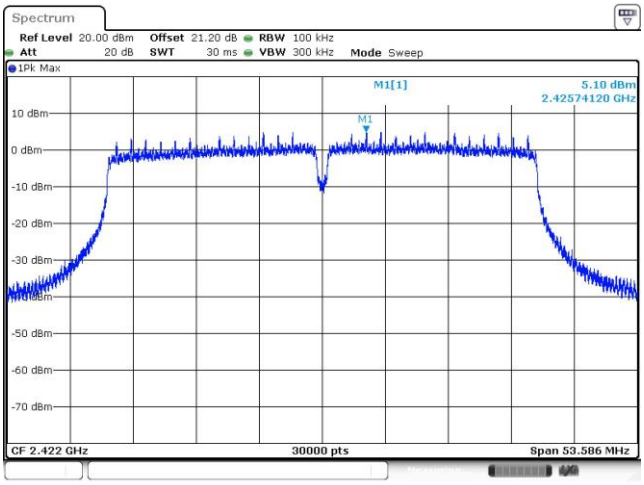
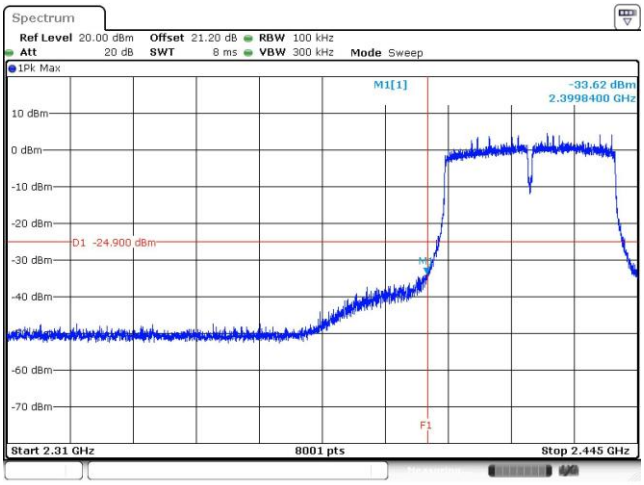
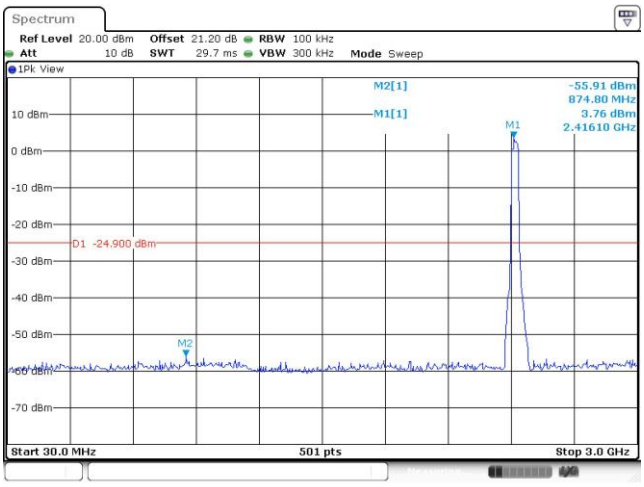
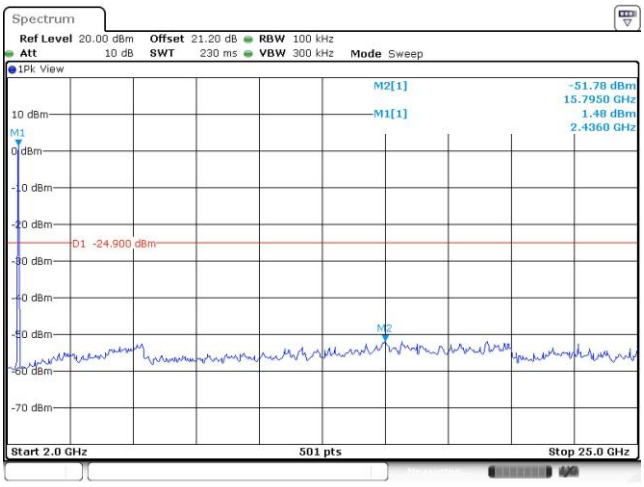
100kHz PSD reference Level	
	

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

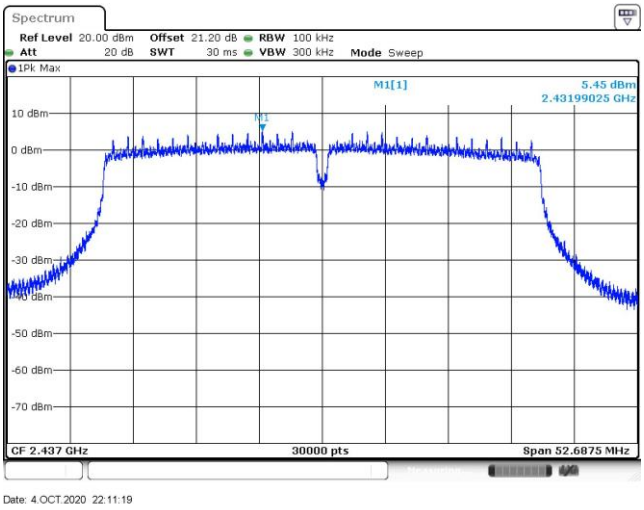
Test Mode :	802.11n HT20	Test Channel :	11

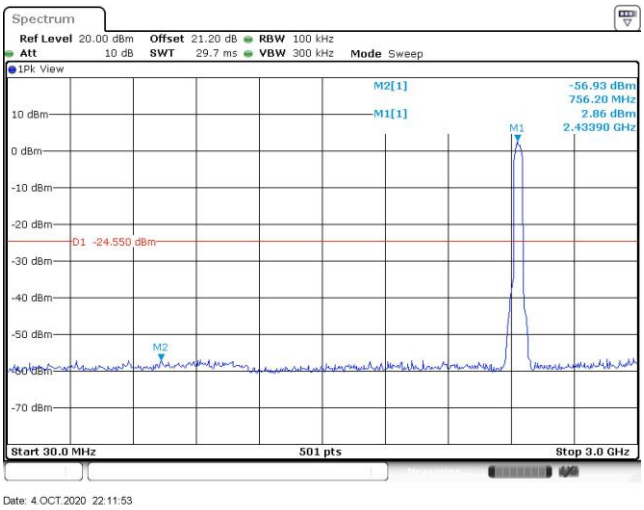
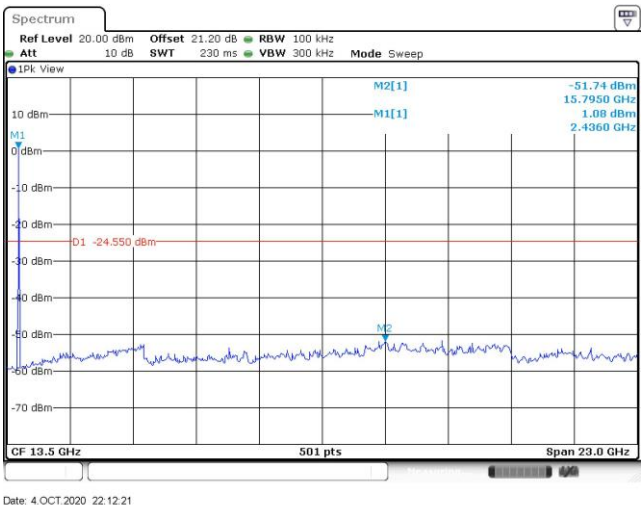
100kHz PSD reference Level	Channel Plot
	
Date: 4.OCT.2020 21:07:41	Date: 4.OCT.2020 21:07:56
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 4.OCT.2020 21:08:23	Date: 4.OCT.2020 21:08:36

Test Mode :	802.11n HT40	Test Channel :	03

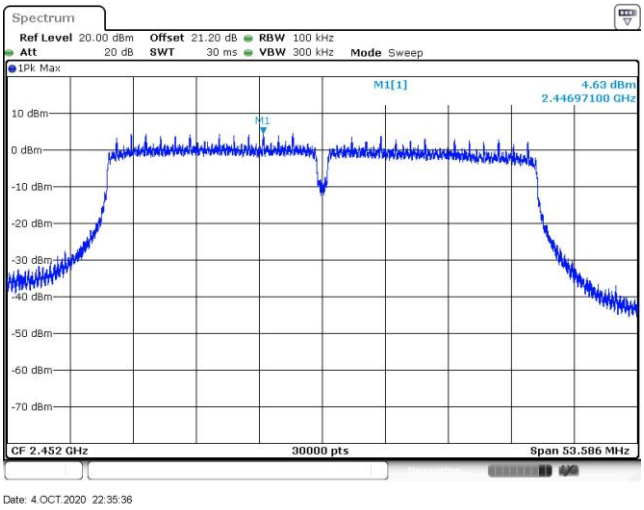
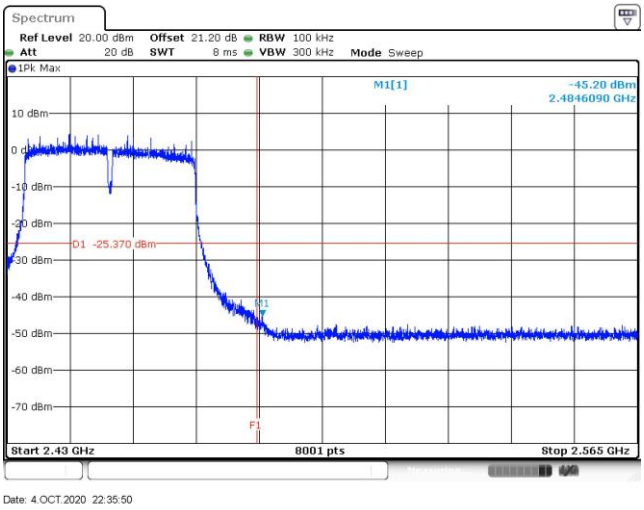
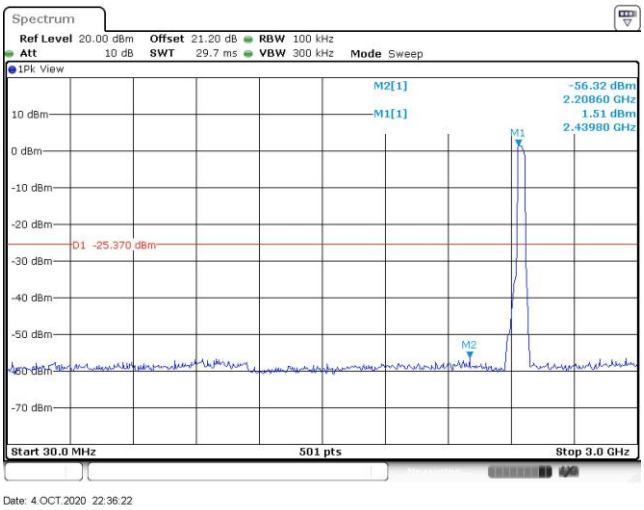
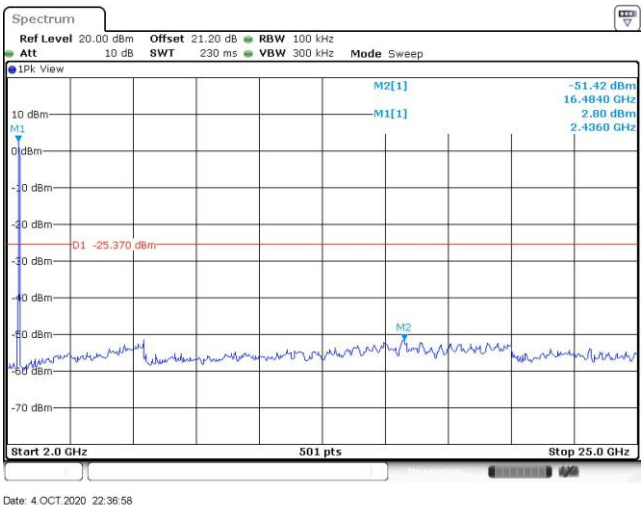
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Test Mode :	802.11n HT40	Test Channel :	06

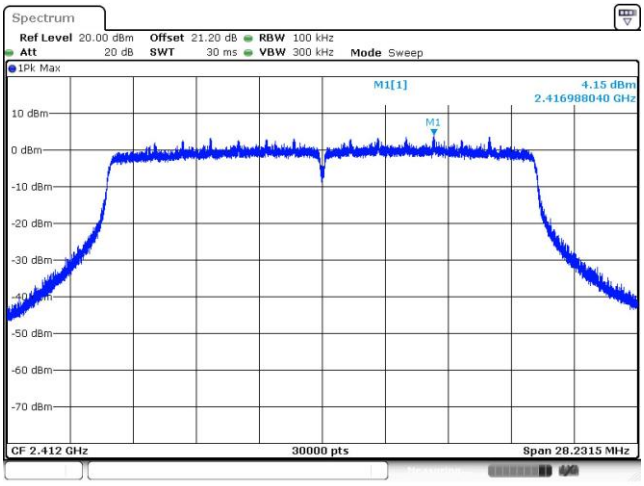
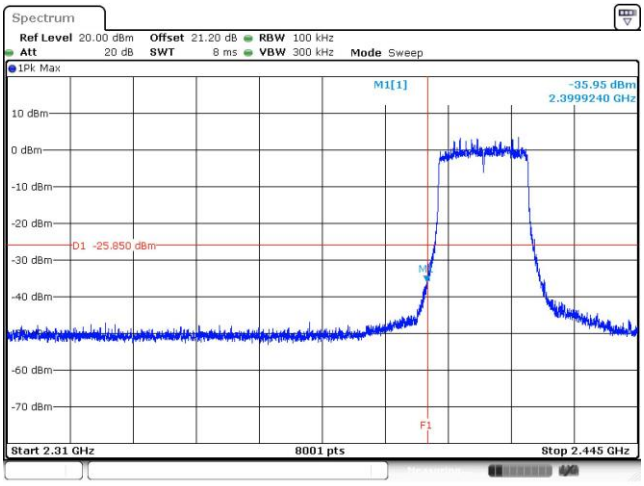
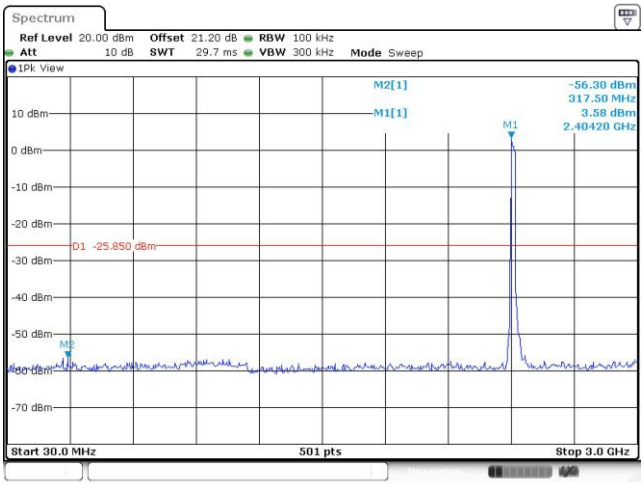
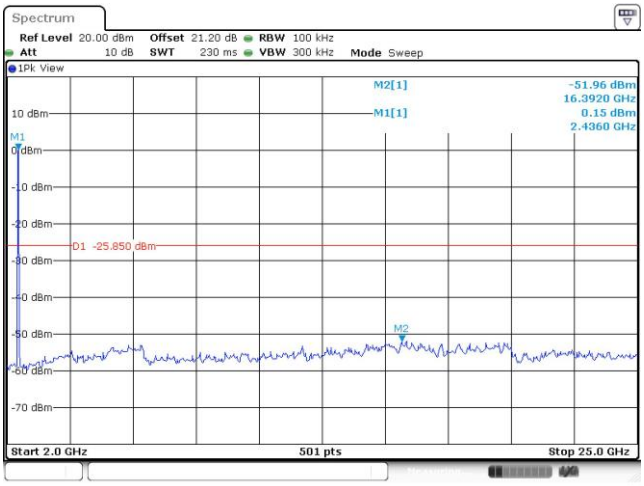
100kHz PSD reference Level	
	

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

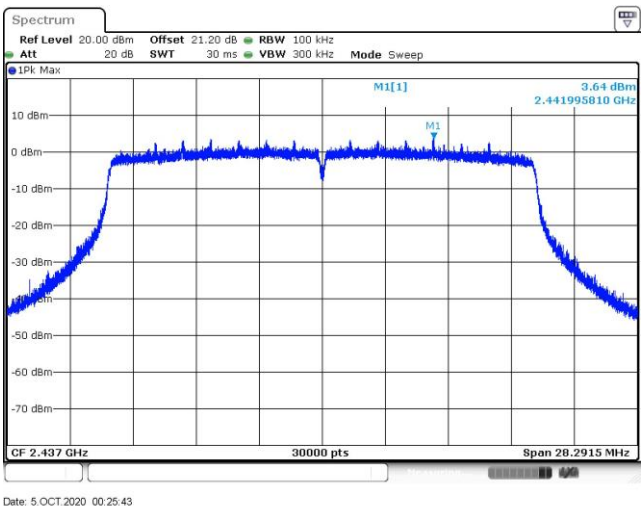
Test Mode :	802.11n HT40	Test Channel :	09

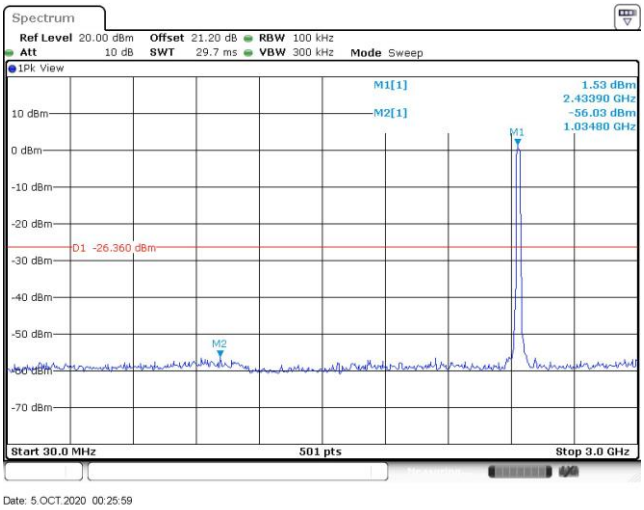
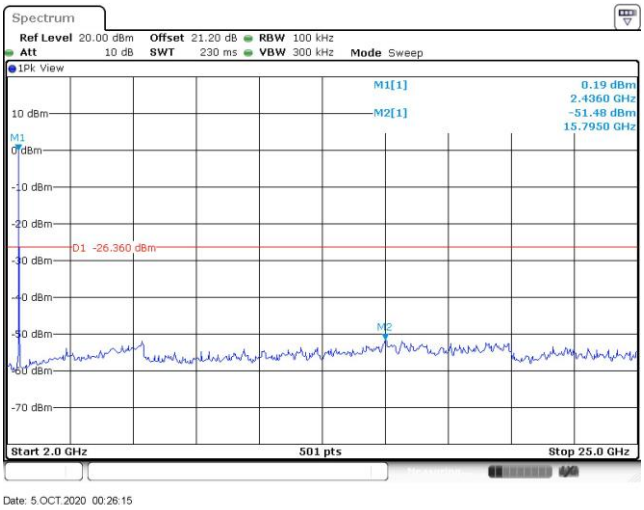
100kHz PSD reference Level	Channel Plot
	
Spurious Emission 30MHz~3GHz	Spurious Emission 2GHz~25GHz
	

Test Mode :	802.11ax HE20	Test Channel :	01

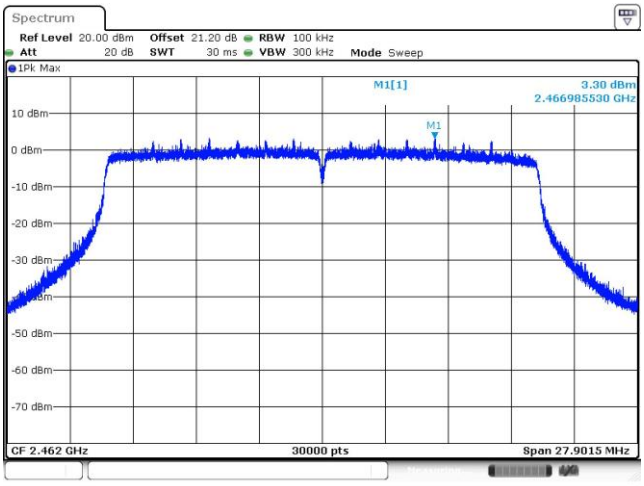
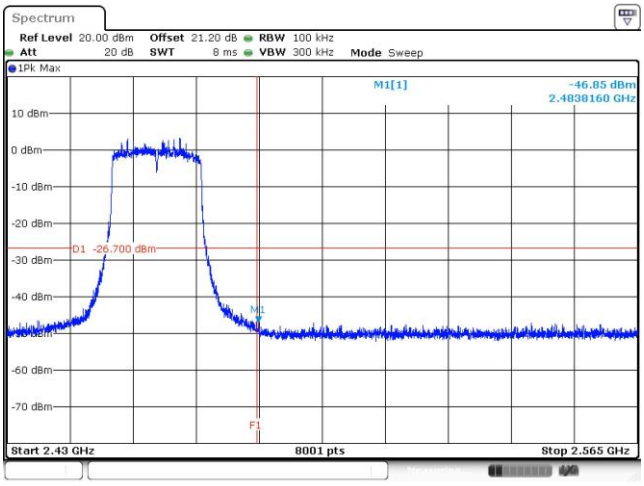
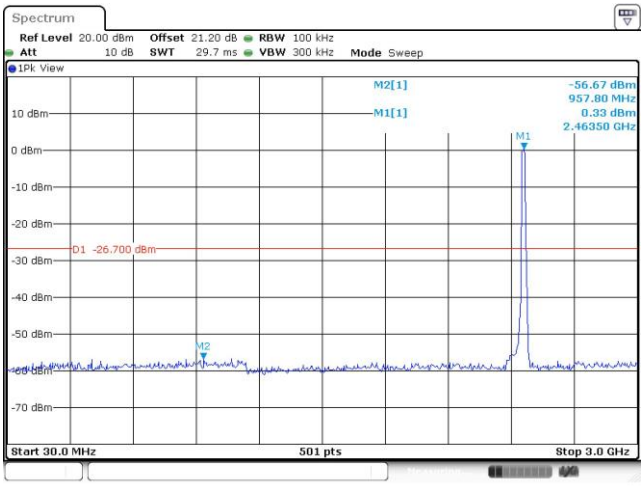
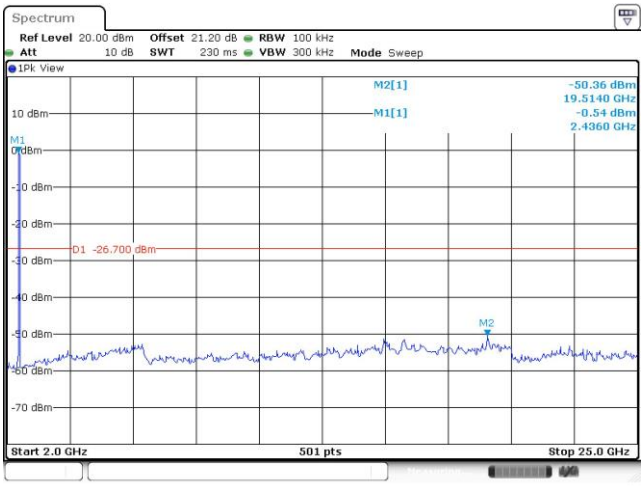
100kHz PSD reference Level	Channel Plot
 Date: 4.OCT.2020 23:55:52	 Date: 4.OCT.2020 23:56:04
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
 Date: 4.OCT.2020 23:56:37	 Date: 4.OCT.2020 23:57:01

Test Mode :	802.11ax HE20	Test Channel :	06

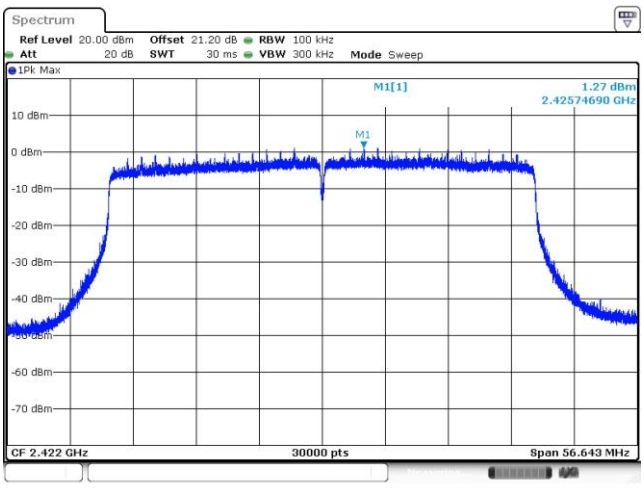
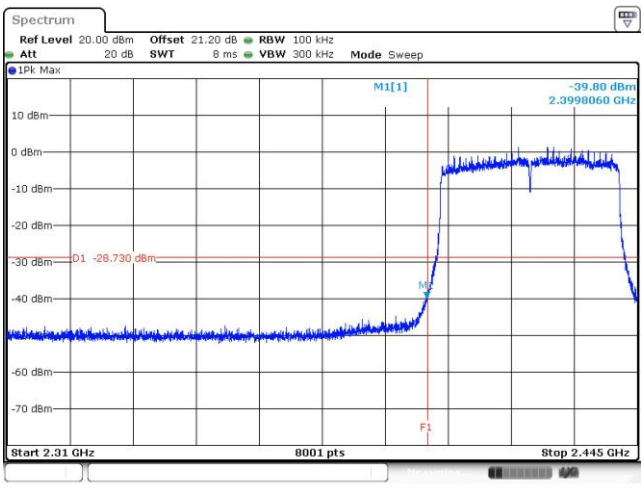
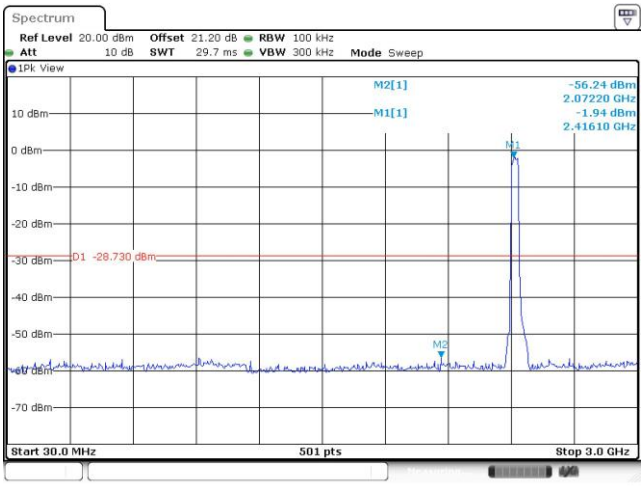
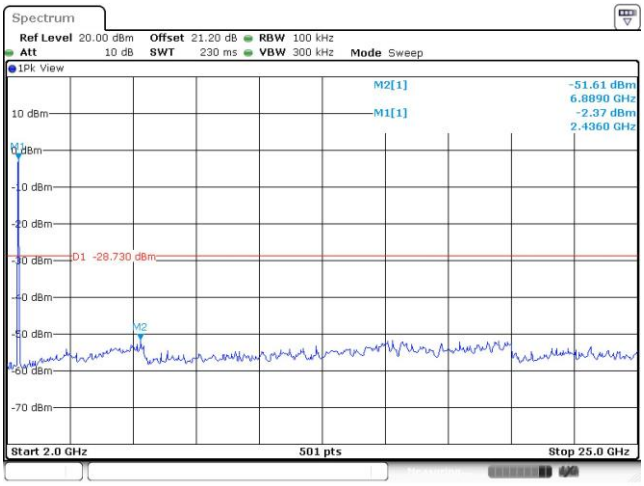
100kHz PSD reference Level	
	

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

Test Mode :	802.11ax HE20	Test Channel :	11

100kHz PSD reference Level	Channel Plot
	
Date: 5.OCT.2020 00:55:29	Date: 5.OCT.2020 00:55:48
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
Date: 5.OCT.2020 00:56:28	Date: 5.OCT.2020 00:57:00

Test Mode :	802.11ax HE40	Test Channel :	03

100kHz PSD reference Level	Channel Plot
	
Date: 5.OCT.2020 01:23:17	Date: 5.OCT.2020 01:23:38
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
	
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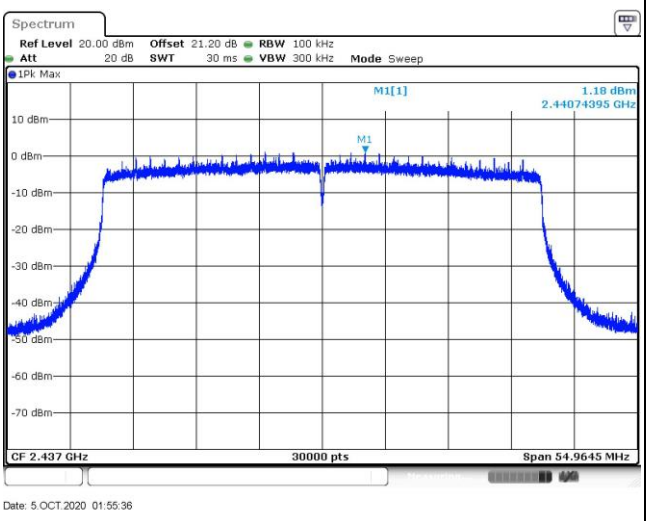
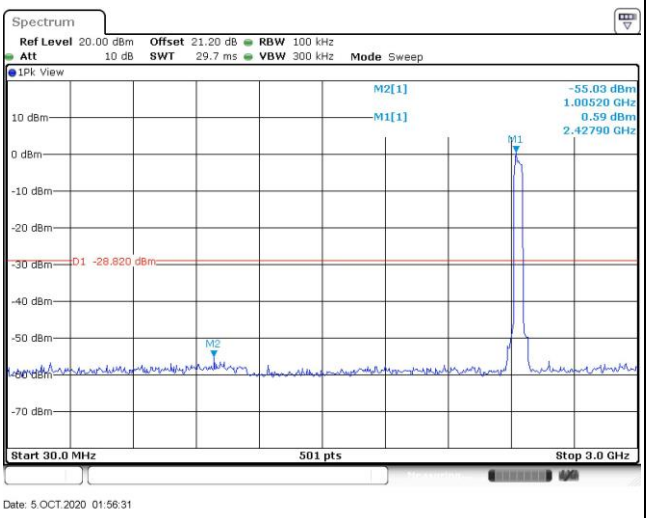
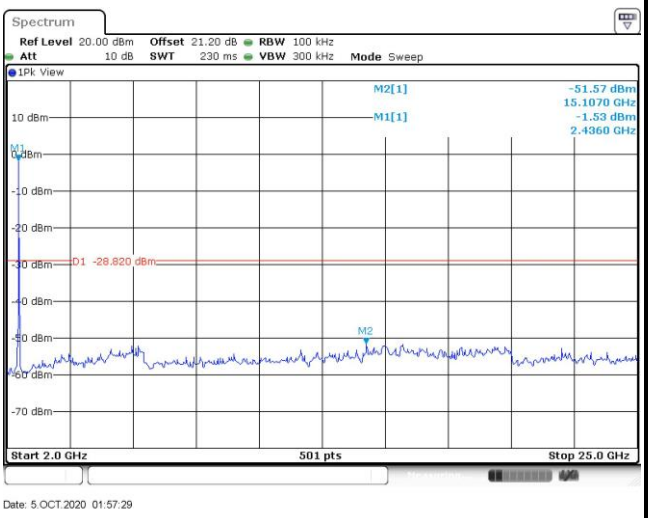
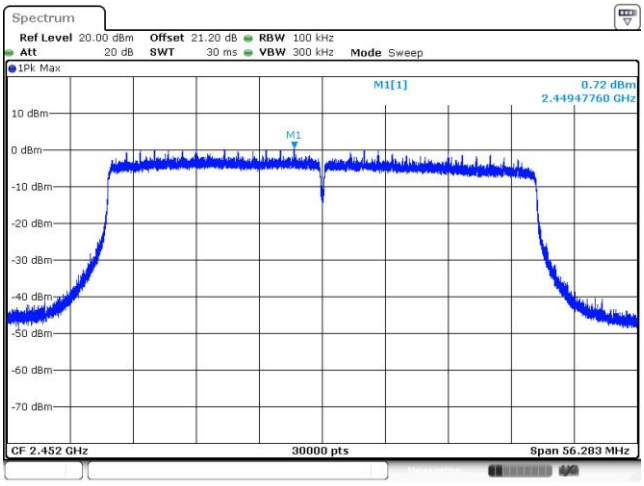
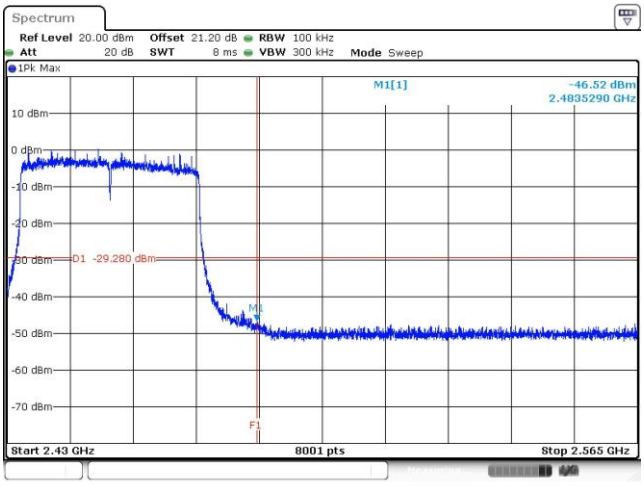
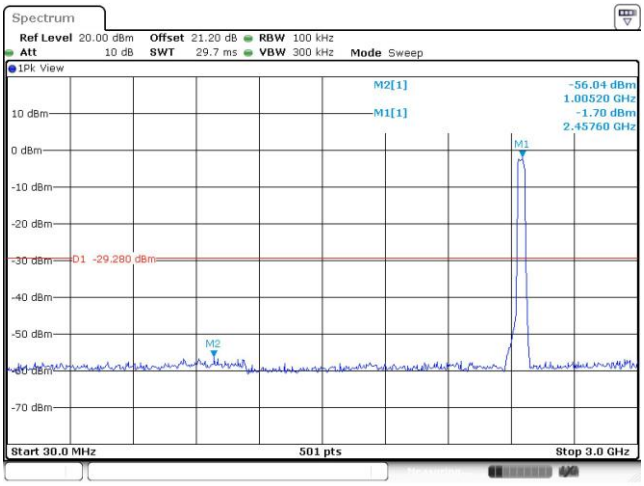
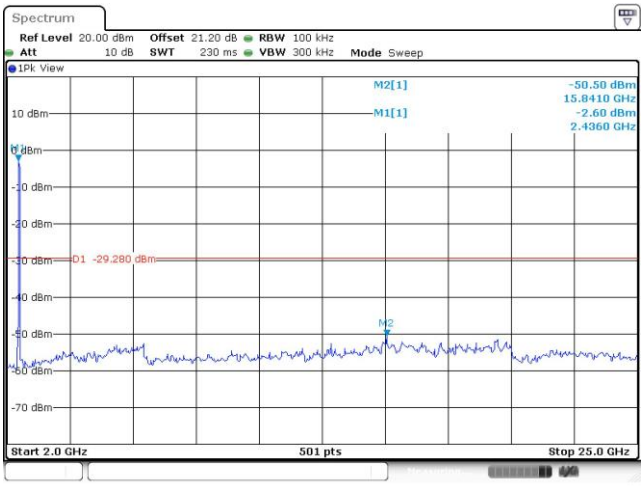
Test Mode :	802.11ax HE40	Test Channel :	06

100kHz PSD reference Level	
	

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

Test Mode :	802.11ax HE40	Test Channel :	09

100kHz PSD reference Level	Channel Plot
 Date: 5.OCT.2020 02:30:12	 Date: 5.OCT.2020 02:30:41
Spurious Emission 30MHz~3GHz	**Spurious Emission 2GHz~25GHz**
 Date: 5.OCT.2020 02:31:15	 Date: 5.OCT.2020 02:31:40

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

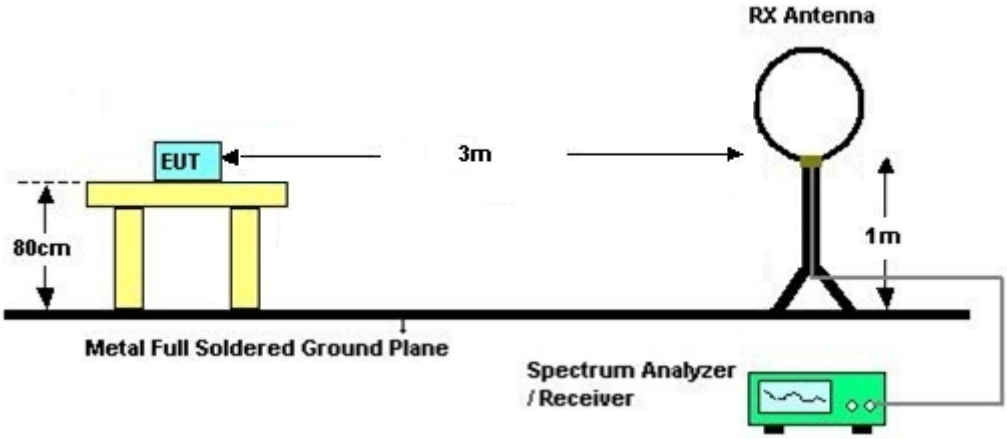
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

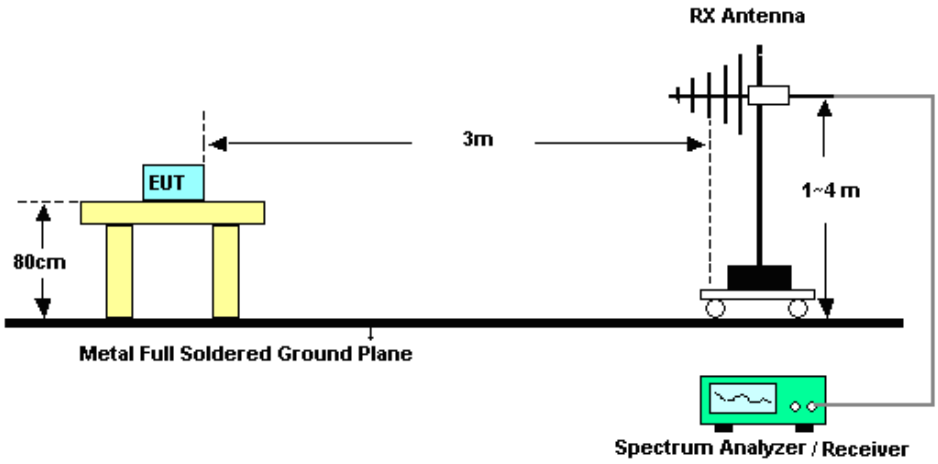
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better 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 peak 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 ≥ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
   (3) Set RBW = 1 MHz, VBW= 3MHz 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

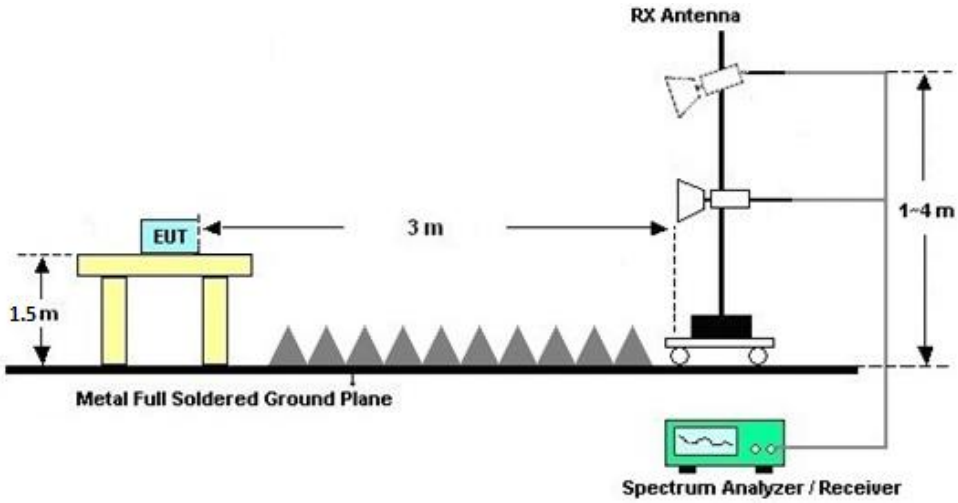
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz

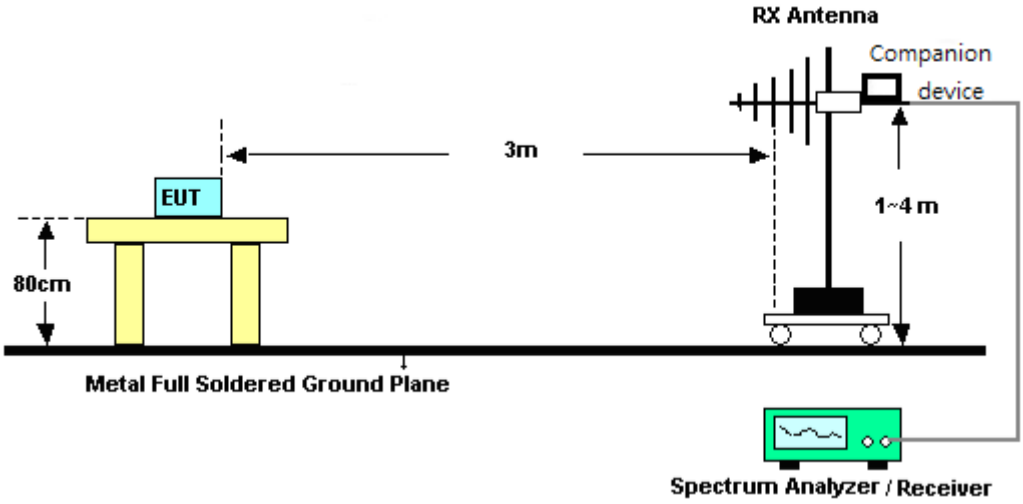


For radiated emissions above 1GHz

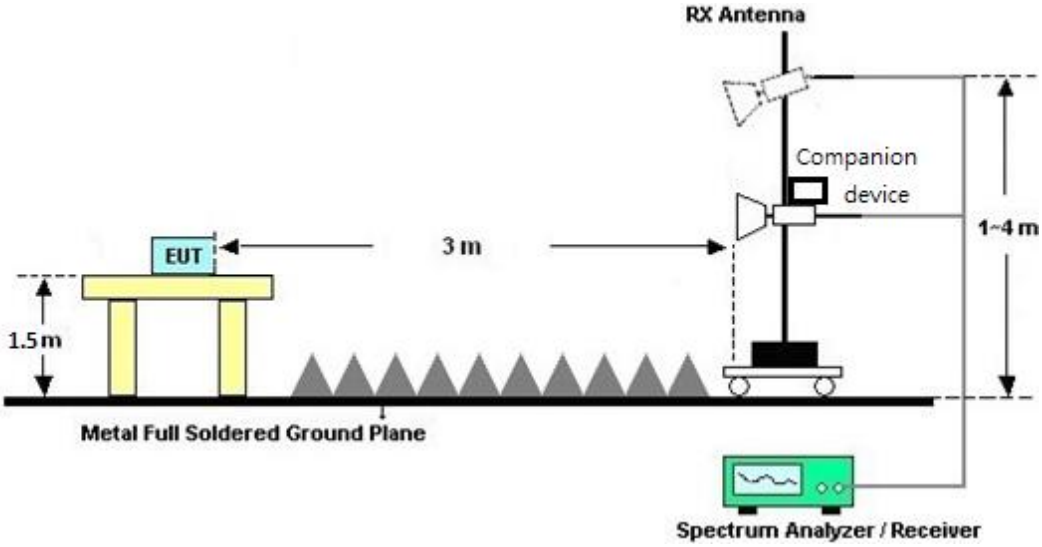


<TXBF Modes>

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 or 40GHz, whichever is lower)

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 (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.

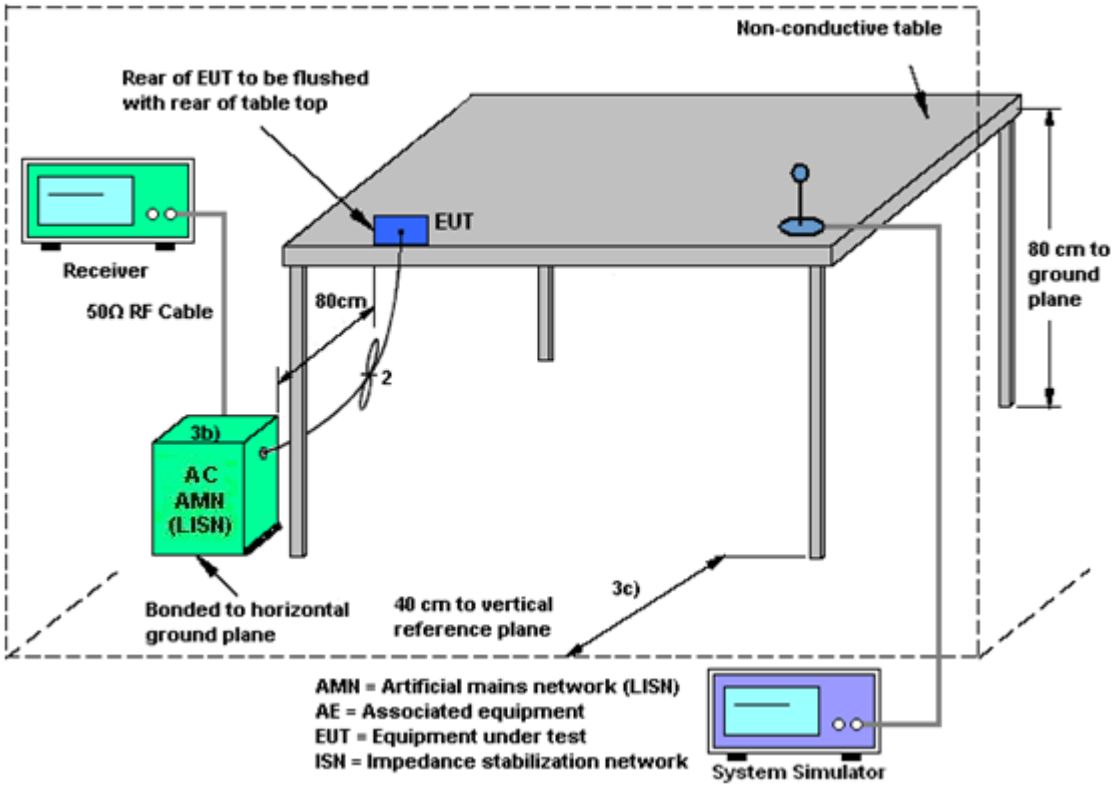
3.6.2 Measuring Instruments

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 (dBi)	Ant. 2 (dBi)	Ant. 3 (dBi)	Ant. 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	4.16	2.85	3.00	3.27	4.16	9.36	0.00	3.36

TXBF modes

FCC KDB 662911 D01 Multiple Transmitter Output v02r01

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

where

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

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

N_{ANT} = the total number of antennas

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

G_k is the gain in dBi of the kth antenna.

The EUT supports beamforming for 802.11ax mode.

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

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

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

	Ant 1 (dBi)	Ant 2 (dBi)	Ant 3 (dBi)	Ant 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)	Power Limit Reduction (dB)	PSD Limit Reduction (dB)
2.4 GHz	4.16	2.85	3.00	3.27	9.36	9.36	3.36	3.36

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	Oct. 04, 2020~ Oct. 14, 2020	Apr. 16, 2021	Conducted (TH01-SZ)
Pulse Power Senor	Anritsu	MA2411B	1207253	30MHz~40GHz	Dec. 26, 2019	Oct. 04, 2020~ Oct. 14, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
Power Meter	Anritsu	ML2495A	1218010	50MHz Bandwidth	Dec. 26, 2019	Oct. 04, 2020~ Oct. 14, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
EMI Test Receiver	Keysight	N9038A	MY56400004	3Hz~8.5GHz;Max 30dBm	Oct. 17, 2020	Oct. 26, 2020	Oct. 16, 2021	Radiation (03CH06-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44GHz	Apr. 14, 2020	Oct. 26, 2020	Apr. 13, 2021	Radiation (03CH06-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 10, 2019	Oct. 26, 2020	Nov. 09, 2020	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	49921	30MHz-1GHz	May 29, 2020	Oct. 26, 2020	May 28, 2021	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 27, 2020	Oct. 26, 2020	Apr. 26, 2021	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2019	Oct. 26, 2020	Nov. 09, 2020	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Apr. 14, 2020	Oct. 26, 2020	Apr. 13, 2021	Radiation (03CH06-KS)
Amplifier	MITEQ	EM18G40GGA	060728	18~40GHz	Jan. 08, 2020	Oct. 26, 2020	Jan. 07, 2021	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-00101800-30-10P	2025788	1Ghz-18Ghz	Jan. 03, 2020	Oct. 26, 2020	Jan. 02, 2021	Radiation (03CH06-KS)
Amplifier	Keysight	83017A	MY53270203	500MHz~26.5GHz	Apr. 15, 2020	Oct. 26, 2020	Apr. 14, 2021	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 26, 2020	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 26, 2020	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 26, 2020	NCR	Radiation (03CH06-KS)
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	Apr. 14, 2020	Sep. 30, 2020	Apr. 13, 2021	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 18, 2019	Sep. 30, 2020	Oct. 17, 2020	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060105	9kHz~30MHz	Oct. 28, 2019	Sep. 30, 2020	Oct. 27, 2020	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP000000811	AC 0V~300V, 45Hz~1000Hz	Oct. 18, 2019	Sep. 30, 2020	Oct. 17, 2020	Conduction (CO01-KS)

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))	**2.9dB**

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))	**5.0dB**

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

A1. Conducted Test Results

Test Engineer:	Zhang Jiang	Temperature:	21~25	°C
Test Date:	2020/10/4~2020/10/14	Relative Humidity:	51~54	%

TEST RESULTS DATA
6dB and 99% Occupied Bandwidth

2.4GHz Band														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)				6dB BW (MHz)				6dB BW Limit (MHz)	Pass/Fail
					Ant1	Ant2	Ant3	Ant4	Ant1	Ant2	Ant3	Ant4		
11b	1Mbps	1	1	2412	12.94	12.94	12.94	12.94	8.03	8.03	8.03	8.03	0.50	Pass
11b	1Mbps	1	6	2437	12.94	12.89	12.89	12.89	8.03	8.05	8.05	8.05	0.50	Pass
11b	1Mbps	1	11	2462	13.04	12.94	13.04	13.04	8.05	8.05	8.05	8.05	0.50	Pass
11g	6Mbps	1	1	2412	16.43	16.43	16.48	16.43	16.28	16.30	16.32	16.30	0.50	Pass
11g	6Mbps	1	6	2437	16.43	16.38	16.43	16.43	16.28	16.28	16.28	16.28	0.50	Pass
11g	6Mbps	1	11	2462	16.48	16.48	16.48	16.48	16.30	16.30	16.30	16.30	0.50	Pass

2.4GHz Band														
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	99% Occupied BW (MHz)				6dB BW (MHz)				6dB BW Limit (MHz)	Pass/Fail
					Ant1	Ant2	Ant3	Ant4	Ant1	Ant2	Ant3	Ant4		
HT20	MCS0	4	1	2412	17.53	17.63	17.63	17.63	17.30	17.54	17.52	17.52	0.50	Pass
HT20	MCS0	4	6	2437	17.58	17.58	17.58	17.58	17.50	17.52	17.50	17.52	0.50	Pass
HT20	MCS0	4	11	2462	17.58	17.58	17.58	17.58	17.18	17.18	17.28	17.52	0.50	Pass
HT40	MCS0	4	3	2422	36.26	36.26	36.36	36.26	35.68	35.68	35.72	35.72	0.50	Pass
HT40	MCS0	4	6	2437	36.16	36.16	36.26	36.16	35.32	35.32	35.12	35.12	0.50	Pass
HT40	MCS0	4	9	2452	36.36	36.26	36.36	36.26	35.72	35.72	35.72	35.72	0.50	Pass
HE20	MCS0	4	1	2412	18.93	18.93	18.93	18.93	18.96	18.90	18.94	18.82	0.50	Pass
HE20	MCS0	4	6	2437	18.88	18.88	18.88	18.88	18.84	18.84	18.96	18.86	0.50	Pass
HE20	MCS0	4	11	2462	18.88	18.93	18.93	18.93	18.86	18.86	18.92	18.60	0.50	Pass
HE40	MCS0	4	3	2422	37.96	37.96	37.96	37.96	37.88	37.68	37.60	37.76	0.50	Pass
HE40	MCS0	4	6	2437	37.76	37.86	37.86	37.86	37.36	36.96	37.80	36.64	0.50	Pass
HE40	MCS0	4	9	2452	37.96	37.86	37.96	37.96	37.40	37.32	37.92	37.52	0.50	Pass

TEST RESULTS DATA
Average Output Power

2.4GHz Band																											
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	Ant3	Ant4	SUM	Ant1	Ant2	Ant3	Ant4	Ant1	Ant2	Ant3	Ant4	Ant1	Ant2	Ant3	Ant4	Ant1	Ant2	Ant3	Ant4	
11b	1Mbps	1	1	2412	Full	19.80	20.00	20.00	20.00		30.00	30.00	30.00	30.00	4.16	2.85	3.00	3.27	23.96	22.85	23.00	23.27	36.00	36.00	36.00	36.00	Pass
11b	1Mbps	1	6	2437	Full	19.90	19.90	19.90	20.00		30.00	30.00	30.00	30.00	4.16	2.85	3.00	3.27	24.06	22.75	22.90	23.27	36.00	36.00	36.00	36.00	Pass
11b	1Mbps	1	11	2462	Full	19.60	19.00	17.10	18.90		30.00	30.00	30.00	30.00	4.16	2.85	3.00	3.27	23.76	21.85	20.10	22.17	36.00	36.00	36.00	36.00	Pass
11g	6Mbps	1	1	2412	Full	18.90	18.50	19.00	18.90		30.00	30.00	30.00	30.00	4.16	2.85	3.00	3.27	23.06	21.35	22.00	22.17	36.00	36.00	36.00	36.00	Pass
11g	6Mbps	1	6	2437	Full	18.80	18.90	19.00	19.00		30.00	30.00	30.00	30.00	4.16	2.85	3.00	3.27	22.96	21.75	22.00	22.27	36.00	36.00	36.00	36.00	Pass
11g	6Mbps	1	11	2462	Full	18.60	18.70	18.80	18.70		30.00	30.00	30.00	30.00	4.16	2.85	3.00	3.27	22.76	21.55	21.80	21.97	36.00	36.00	36.00	36.00	Pass

2.4GHz Band															
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	Ant3	Ant4	SUM	Ant1+Ant2+Ant3+Ant4	Ant1+Ant2+Ant3+Ant4	Ant1+Ant2+Ant3+Ant4	Ant1+Ant2+Ant3+Ant4	
HT20	MCS0	4	1	2412	Full	17.20	17.10	16.90	17.00	23.07	30.00	4.16	27.23	36.00	Pass
HT20	MCS0	4	6	2437	Full	19.00	18.70	18.50	18.80	24.77	30.00	4.16	28.93	36.00	Pass
HT20	MCS0	4	11	2462	Full	18.70	18.40	18.40	18.40	24.50	30.00	4.16	28.66	36.00	Pass
HT40	MCS0	4	3	2422	Full	15.70	15.50	15.50	15.60	21.60	30.00	4.16	25.76	36.00	Pass
HT40	MCS0	4	6	2437	Full	18.00	17.90	17.60	17.60	23.80	30.00	4.16	27.96	36.00	Pass
HT40	MCS0	4	9	2452	Full	18.40	18.30	18.10	18.10	24.25	30.00	4.16	28.41	36.00	Pass
HE20	MCS0	4	1	2412	Full	15.00	15.00	14.90	14.90	20.97	30.00	4.16	25.13	36.00	Pass
HE20	MCS0	4	1	2412	26/(0+1)	9.10	9.20	9.60	9.20	15.30	30.00	4.16	19.46	36.00	Pass
HE20	MCS0	4	1	2412	52/(37+38)	11.10	11.00	10.80	10.70	16.92	30.00	4.16	21.08	36.00	Pass
HE20	MCS0	4	1	2412	106/(53+54)	14.20	14.10	14.00	14.10	20.12	30.00	4.16	24.28	36.00	Pass
HE20	MCS0	4	6	2437	Full	14.90	14.90	15.00	14.90	20.95	30.00	4.16	25.11	36.00	Pass
HE20	MCS0	4	11	2462	Full	14.80	14.80	14.60	14.70	20.75	30.00	4.16	24.91	36.00	Pass
HE20	MCS0	4	11	2462	26/(7+8)	8.50	8.60	8.60	8.80	14.65	30.00	4.16	18.81	36.00	Pass
HE20	MCS0	4	11	2462	52/(39+40)	10.50	10.30	10.20	10.60	16.42	30.00	4.16	20.58	36.00	Pass
HE20	MCS0	4	11	2462	106/(53+54)	13.60	13.80	13.50	13.70	19.67	30.00	4.16	23.83	36.00	Pass
HE40	MCS0	4	3	2422	Full	15.00	14.90	14.90	15.00	20.97	30.00	4.16	25.13	36.00	Pass
HE40	MCS0	4	6	2437	Full	14.90	15.00	15.00	14.90	20.97	30.00	4.16	25.13	36.00	Pass
HE40	MCS0	4	9	2452	Full	14.80	14.90	14.60	14.60	20.75	30.00	4.16	24.91	36.00	Pass

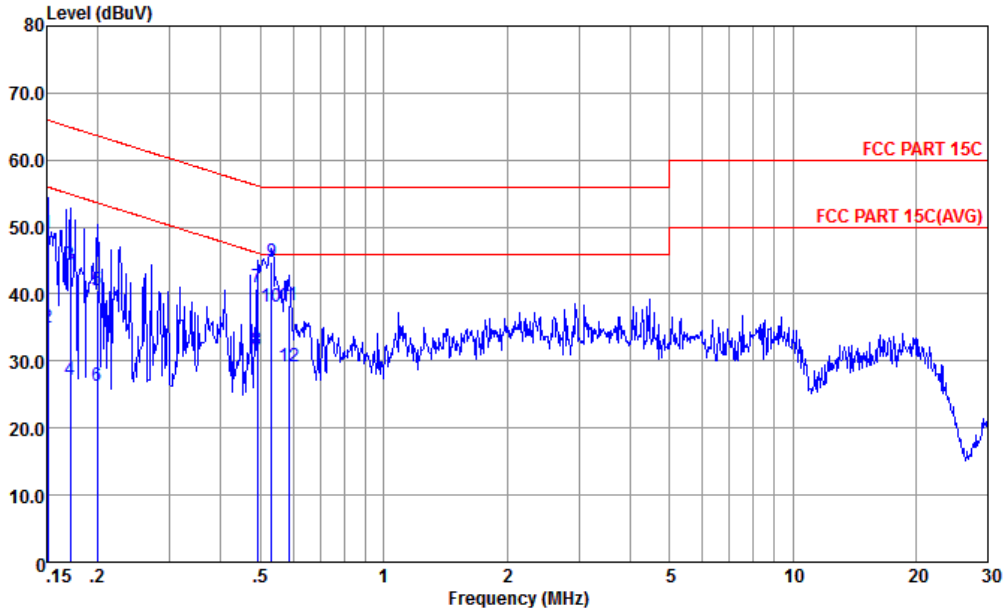
TEST RESULTS DATA
Peak Power Spectral Density

2.4GHz Band																				
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Peak PSD (dBm/3kHz)					DG (dBi)				Peak PSD Limit (dBm/3kHz)				Pass/Fail
						Ant1	Ant2	Ant3	Ant4	Worse + 3.01	Ant1	Ant2	Ant3	Ant4	Ant1	Ant2	Ant3	Ant4	
11b	1Mbps	1	1	2412	Full	-6.13	-5.69	-5.16	-4.89		4.16	2.85	3.00	3.27	8.00	8.00	8.00	8.00	Pass
11b	1Mbps	1	6	2437	Full	-5.58	-5.18	-5.25	-6.26		4.16	2.85	3.00	3.27	8.00	8.00	8.00	8.00	Pass
11b	1Mbps	1	11	2462	Full	-4.59	-4.78	-6.71	-4.35		4.16	2.85	3.00	3.27	8.00	8.00	8.00	8.00	Pass
11g	6Mbps	1	1	2412	Full	-7.97	-8.94	-8.40	-7.60		4.16	2.85	3.00	3.27	8.00	8.00	8.00	8.00	Pass
11g	6Mbps	1	6	2437	Full	-7.44	-8.00	-7.59	-6.83		4.16	2.85	3.00	3.27	8.00	8.00	8.00	8.00	Pass
11g	6Mbps	1	11	2462	Full	-8.49	-8.82	-7.80	-8.52		4.16	2.85	3.00	3.27	8.00	8.00	8.00	8.00	Pass

2.4GHz Band													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Peak PSD (dBm/3kHz)					DG (dBi)	Peak PSD Limit (dBm/3kHz)	Pass/Fail
						Ant1	Ant2	Ant3	Ant4	Worse + 6.02	Ant1+Ant2+Ant3+Ant4	Ant1+Ant2+Ant3+Ant4	
HT20	MCS0	4	1	2412	Full	-5.42	-5.83	-6.58	-6.02	0.60	9.36	4.64	Pass
HT20	MCS0	4	6	2437	Full	-5.69	-5.78	-5.99	-5.59	0.43	9.36	4.64	Pass
HT20	MCS0	4	11	2462	Full	-5.69	-6.86	-6.94	-6.21	0.33	9.36	4.64	Pass
HT40	MCS0	4	3	2422	Full	-9.86	-9.39	-9.81	-8.80	-2.78	9.36	4.64	Pass
HT40	MCS0	4	6	2437	Full	-9.19	-10.22	-9.63	-9.33	-3.17	9.36	4.64	Pass
HT40	MCS0	4	9	2452	Full	-9.50	-10.24	-9.63	-10.15	-3.48	9.36	4.64	Pass
HE20	MCS0	4	1	2412	Full	-9.85	-11.19	-10.41	-10.62	-3.83	9.36	4.64	Pass
HE20	MCS0	4	1	2412	26/(0+1)	-10.22	-11.23	-10.60	-10.77	-4.20	9.36	4.64	Pass
HE20	MCS0	4	1	2412	52/(37+38)	-11.61	-11.34	-11.50	-11.49	-5.32	9.36	4.64	Pass
HE20	MCS0	4	1	2412	106/(53+54)	-11.43	-11.37	-11.44	-11.07	-5.05	9.36	4.64	Pass
HE20	MCS0	4	6	2437	Full	-10.69	-11.35	-9.90	-10.41	-3.88	9.36	4.64	Pass
HE20	MCS0	4	11	2462	Full	-10.74	-11.92	-10.94	-11.08	-4.72	9.36	4.64	Pass
HE20	MCS0	4	11	2462	26/(7+8)	-11.45	-12.21	-11.45	-11.39	-5.37	9.36	4.64	Pass
HE20	MCS0	4	11	2462	52/(39+40)	-11.23	-12.26	-11.77	-11.54	-5.21	9.36	4.64	Pass
HE20	MCS0	4	11	2462	106/(53+54)	-11.47	-12.33	-11.94	-11.56	-5.45	9.36	4.64	Pass
HE40	MCS0	4	3	2422	Full	-12.60	-13.34	-13.26	-13.29	-6.58	9.36	4.64	Pass
HE40	MCS0	4	6	2437	Full	-12.87	-14.05	-14.06	-12.55	-6.53	9.36	4.64	Pass
HE40	MCS0	4	9	2452	Full	-13.55	-13.50	-13.62	-13.51	-7.48	9.36	4.64	Pass

Appendix B. AC Conducted Emission Test Results

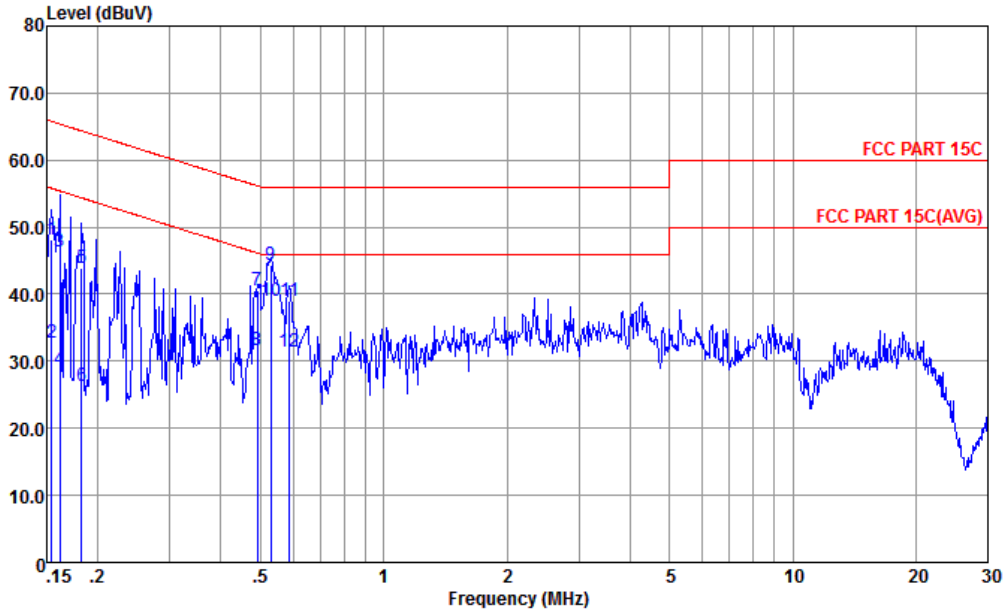
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line



Site : CO01-KS
Condition : FCC PART 15C LISN-L-191028-060105 LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.151	49.11	-16.85	65.96	38.60	0.03	10.48	QP
2	0.151	35.01	-20.95	55.96	24.50	0.03	10.48	Average
3	0.171	44.36	-20.54	64.90	33.90	0.03	10.43	QP
4	0.171	27.26	-27.64	54.90	16.80	0.03	10.43	Average
5	0.200	40.60	-23.02	63.62	30.20	0.04	10.36	QP
6	0.200	26.20	-27.42	53.62	15.80	0.04	10.36	Average
7	0.491	40.90	-15.24	56.14	30.60	0.06	10.24	QP
8	0.491	31.60	-14.54	46.14	21.30	0.06	10.24	Average
9	0.532	44.90	-11.10	56.00	34.60	0.06	10.24	QP
10 *	0.532	38.10	-7.90	46.00	27.80	0.06	10.24	Average
11	0.585	38.40	-17.60	56.00	28.10	0.06	10.24	QP
12	0.585	29.20	-16.80	46.00	18.90	0.06	10.24	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral



Site : CO01-KS
Condition : FCC PART 15C LISN-N-191028-060105 NEUTRAL

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	0.154	48.05	-17.73	65.78	37.50	0.08	10.47	QP
2	0.154	32.85	-22.93	55.78	22.30	0.08	10.47	Average
3	0.162	46.43	-18.95	65.38	35.90	0.08	10.45	QP
4	0.162	28.83	-26.55	55.38	18.30	0.08	10.45	Average
5	0.182	43.98	-20.39	64.37	33.50	0.08	10.40	QP
6	0.182	26.28	-28.09	54.37	15.80	0.08	10.40	Average
7	0.491	40.54	-15.60	56.14	30.20	0.10	10.24	QP
8	0.491	31.64	-14.50	46.14	21.30	0.10	10.24	Average
9	0.529	44.44	-11.56	56.00	34.10	0.10	10.24	QP
10 *	0.529	38.94	-7.06	46.00	28.60	0.10	10.24	Average
11	0.589	38.94	-17.06	56.00	28.60	0.10	10.24	QP
12	0.589	31.44	-14.56	46.00	21.10	0.10	10.24	Average

Note:

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

Appendix C. Radiated Spurious Emission

2.4GHz 2400~2483.5MHz

WIFI 802.11b ant1 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2371.36	54.09	-19.91	74	48.59	32.1	7.4	34	300	123	P	H
		2387.61	43.82	-10.18	54	38.18	32.2	7.43	33.99	300	123	A	H
	*	2412	105.34	-	-	99.7	32.16	7.46	33.98	300	123	P	H
	*	2412	102.16	-	-	96.52	32.16	7.46	33.98	300	123	A	H
		2388.91	54.97	-19.03	74	49.33	32.2	7.43	33.99	195	171	P	V
		2389.69	45.02	-8.98	54	39.38	32.2	7.43	33.99	195	171	A	V
	*	2412	111.7	-	-	106.06	32.16	7.46	33.98	195	171	P	V
	*	2412	108.52	-	-	102.88	32.16	7.46	33.98	195	171	A	V
802.11b CH 11 2462MHz		2494.78	54.26	-19.74	74	48.66	31.94	7.59	33.93	350	303	P	H
		2483.5	43.05	-10.95	54	37.44	31.99	7.56	33.94	350	303	A	H
	*	2462	106.19	-	-	100.57	32.03	7.54	33.95	350	303	P	H
	*	2464	103.14	-	-	97.52	32.03	7.54	33.95	350	303	A	H
		2492.2	54.65	-19.35	74	49.05	31.94	7.59	33.93	267	256	P	V
		2486.32	43.54	-10.46	54	37.92	31.99	7.56	33.93	267	256	A	V
	*	2462	111.56	-	-	105.94	32.03	7.54	33.95	267	256	P	V
	*	2462	108.23	-	-	102.61	32.03	7.54	33.95	267	256	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 ant1 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	49.21	-24.79	74	65.86	35.16	10.67	62.48	300	0	P	H
		4824	54.51	-19.49	74	71.16	35.16	10.67	62.48	365	185	P	V
		4824	52.47	-1.53	54	69.12	35.16	10.67	62.48	365	185	A	V
802.11b CH 06 2437MHz		4872	53.24	-20.76	74	69.52	35.17	10.75	62.2	125	212	P	H
		4872	49.05	-4.95	54	65.33	35.17	10.75	62.2	125	212	A	H
		7308	44.2	-29.8	74	56.12	36.86	13.33	62.11	300	0	P	H
		4872	55.27	-18.73	74	71.55	35.17	10.75	62.2	267	186	P	V
		4872	52.74	-1.26	54	69.02	35.17	10.75	62.2	267	186	A	V
		7308	43.62	-30.38	74	55.54	36.86	13.33	62.11	300	360	P	V
802.11b CH 11 2462MHz		4926	53.88	-20.12	74	69.95	35.18	10.82	62.07	239	300	P	H
		4926	51.21	-2.79	54	67.28	35.18	10.82	62.07	239	300	A	H
		7386	43.31	-30.69	74	55.28	36.88	13.41	62.26	300	0	P	H
		4926	55.65	-18.35	74	71.72	35.18	10.82	62.07	313	178	P	V
		4926	53.62	-0.38	54	69.69	35.18	10.82	62.07	323	178	A	V
		7386	43.44	-30.56	74	55.41	36.88	13.41	62.26	300	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 802.11g ant1 (Band Edge @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.69	60.63	-13.37	74	54.99	32.2	7.43	33.99	274	0	P	H
		2389.95	48.79	-5.21	54	43.15	32.2	7.43	33.99	274	0	A	H
	*	2408	106.11	-	-	100.47	32.16	7.46	33.98	274	0	P	H
	*	2408	98.17	-	-	92.53	32.16	7.46	33.98	274	0	A	H
		2389.95	63.82	-10.18	74	58.18	32.2	7.43	33.99	161	175	P	V
		2389.95	52.61	-1.39	54	46.97	32.2	7.43	33.99	161	175	A	V
	*	2414	112.46	-	-	106.82	32.16	7.46	33.98	161	175	P	V
	*	2414	104.56	-	-	98.92	32.16	7.46	33.98	161	175	A	V
802.11g CH 11 2462MHz		2483.86	58.23	-15.77	74	52.62	31.99	7.56	33.94	311	76	P	H
		2483.5	47.62	-6.38	54	42.01	31.99	7.56	33.94	311	76	A	H
	*	2464	111.65	-	-	106.03	32.03	7.54	33.95	311	76	P	H
	*	2464	103.83	-	-	98.21	32.03	7.54	33.95	311	76	A	H
		2484.76	59.73	-14.27	74	54.12	31.99	7.56	33.94	282	254	P	V
		2483.5	48.62	-5.38	54	43.01	31.99	7.56	33.94	282	254	A	V
	*	2466	112.77	-	-	107.15	32.03	7.54	33.95	282	254	P	V
	*	2464	104.89	-	-	99.27	32.03	7.54	33.95	282	254	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 ant1 (Harmonic @ 3m)

WIFI Ant. 1	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	44.55	-29.45	74	61.2	35.16	10.67	62.48	300	0	P	H
		4824	48.67	-25.33	74	65.32	35.16	10.67	62.48	300	360	P	V
802.11g CH 06 2437MHz		4878	48.04	-25.96	74	64.32	35.17	10.75	62.2	300	0	P	H
		7308	44.39	-29.61	74	56.31	36.86	13.33	62.11	300	0	P	H
		4872	48.9	-25.1	74	65.18	35.17	10.75	62.2	300	360	P	V
		7308	43.78	-30.22	74	55.7	36.86	13.33	62.11	300	360	P	V
802.11g CH 11 2462MHz		4932	49.26	-24.74	74	65.33	35.18	10.82	62.07	300	0	P	H
		7386	43.35	-30.65	74	55.32	36.88	13.41	62.26	300	0	P	H
		4926	55.94	-18.06	74	72.01	35.18	10.82	62.07	310	179	P	V
		4926	44.72	-9.28	54	60.79	35.18	10.82	62.07	310	179	A	V
		7386	43.07	-30.93	74	55.04	36.88	13.41	62.26	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11b ant2 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2388.39	54.13	-19.87	74	48.49	32.2	7.43	33.99	122	64	P	H
		2389.69	44.51	-9.49	54	38.87	32.2	7.43	33.99	122	64	A	H
	*	2412	110.96	-	-	105.32	32.16	7.46	33.98	122	64	P	H
	*	2412	107.75	-	-	102.11	32.16	7.46	33.98	122	64	A	H
		2353.42	54.51	-19.49	74	49.15	32	7.37	34.01	101	74	P	V
		2389.95	43.98	-10.02	54	38.34	32.2	7.43	33.99	101	74	A	V
	*	2412	108.52	-	-	102.88	32.16	7.46	33.98	101	74	P	V
	*	2412	105.44	-	-	99.8	32.16	7.46	33.98	101	74	A	V
802.11b CH 11 2462MHz		2485.54	54.57	-19.43	74	48.96	31.99	7.56	33.94	303	65	P	H
		2484.94	43.87	-10.13	54	38.26	31.99	7.56	33.94	303	65	A	H
	*	2462	111.76	-	-	106.14	32.03	7.54	33.95	303	65	P	H
	*	2462	108.67	-	-	103.05	32.03	7.54	33.95	303	65	A	H
		2498.62	54.27	-19.73	74	48.67	31.94	7.59	33.93	304	82	P	V
		2485.84	43.02	-10.98	54	37.41	31.99	7.56	33.94	304	82	A	V
	*	2462	106.93	-	-	101.31	32.03	7.54	33.95	304	82	P	V
	*	2460	103.66	-	-	98.04	32.03	7.54	33.95	304	82	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 ant2 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	52.89	-21.11	74	69.54	35.16	10.67	62.48	311	234	P	H
		4824	50.54	-3.46	54	67.19	35.16	10.67	62.48	311	234	A	H
		4824	49.12	-24.88	74	65.77	35.16	10.67	62.48	300	360	P	V
802.11b CH 06 2437MHz		4872	47.83	-26.17	74	64.11	35.17	10.75	62.2	300	0	P	H
		7308	43.31	-30.69	74	55.23	36.86	13.33	62.11	300	0	P	H
		4872	43.26	-30.74	74	59.54	35.17	10.75	62.2	300	360	P	V
		7308	43.52	-30.48	74	55.44	36.86	13.33	62.11	300	360	P	V
802.11b CH 11 2462MHz		4926	55.14	-18.86	74	71.21	35.18	10.82	62.07	133	177	P	H
		4926	52.03	-1.97	54	68.1	35.18	10.82	62.07	133	177	A	H
		7386	42.72	-31.28	74	54.69	36.88	13.41	62.26	300	0	P	H
		4926	50.26	-23.74	74	66.33	35.18	10.82	62.07	124	76	P	V
		4926	46.65	-7.35	54	62.72	35.18	10.82	62.07	124	76	A	V
		7386	42.91	-31.09	74	54.88	36.88	13.41	62.26	300	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 802.11g ant2 (Band Edge @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.95	64.64	-9.36	74	59	32.2	7.43	33.99	346	244	P	H
		2389.95	53.07	-0.93	54	47.43	32.2	7.43	33.99	346	244	A	H
	*	2416	112.9	-	-	107.26	32.16	7.46	33.98	346	244	P	H
	*	2414	104.97	-	-	99.33	32.16	7.46	33.98	346	244	A	H
		2388.52	58.06	-15.94	74	52.42	32.2	7.43	33.99	100	247	P	V
		2389.95	47.45	-6.55	54	41.81	32.2	7.43	33.99	100	247	A	V
	*	2410	108.05	-	-	102.41	32.16	7.46	33.98	100	247	P	V
	*	2410	100	-	-	94.36	32.16	7.46	33.98	100	247	A	V
802.11g CH 11 2462MHz		2483.56	58.09	-15.91	74	52.48	31.99	7.56	33.94	303	65	P	H
		2483.5	47.94	-6.06	54	42.33	31.99	7.56	33.94	303	65	A	H
	*	2464	112.81	-	-	107.19	32.03	7.54	33.95	303	65	P	H
	*	2466	105.01	-	-	99.39	32.03	7.54	33.95	303	65	A	H
		2483.92	54.96	-19.04	74	49.35	31.99	7.56	33.94	100	72	P	V
		2483.56	45.19	-8.81	54	39.58	31.99	7.56	33.94	100	72	A	V
	*	2464	107.55	-	-	101.93	32.03	7.54	33.95	100	72	P	V
	*	2464	99.84	-	-	94.22	32.03	7.54	33.95	100	72	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 ant2 (Harmonic @ 3m)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	45.25	-28.75	74	61.9	35.16	10.67	62.48	300	0	P	H
		4824	43.63	-30.37	74	60.28	35.16	10.67	62.48	300	360	P	V
802.11g CH 06 2437MHz		4872	44.98	-29.02	74	61.26	35.17	10.75	62.2	300	0	P	H
		7308	43.65	-30.35	74	55.57	36.86	13.33	62.11	300	0	P	H
		4872	42.29	-31.71	74	58.57	35.17	10.75	62.2	300	360	P	V
		7308	44.68	-29.32	74	56.6	36.86	13.33	62.11	300	360	P	V
802.11g CH 11 2462MHz		4924	43.4	-30.6	74	59.47	35.18	10.82	62.07	300	0	P	H
		7386	44.13	-29.87	74	56.1	36.88	13.41	62.26	300	0	P	H
		4924	42.34	-31.66	74	58.41	35.18	10.82	62.07	300	360	P	V
		7386	43.5	-30.5	74	55.47	36.88	13.41	62.26	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11b ant3 (Band Edge @ 3m)

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2382.41	55.7	-18.3	74	50.19	32.1	7.4	33.99	331	33	P	H
		2386.83	44.2	-9.8	54	38.56	32.2	7.43	33.99	331	33	A	H
	*	2412	107.75	-	-	102.11	32.16	7.46	33.98	331	33	P	H
	*	2412	104.52	-	-	98.88	32.16	7.46	33.98	331	33	A	H
		2351.47	54.32	-19.68	74	49.09	31.9	7.34	34.01	366	66	P	V
		2387.35	43.84	-10.16	54	38.2	32.2	7.43	33.99	366	66	A	V
	*	2414	108.94	-	-	103.3	32.16	7.46	33.98	366	66	P	V
	*	2414	105.97	-	-	100.33	32.16	7.46	33.98	366	66	A	V
802.11b CH 11 2462MHz		2487.64	54.19	-19.81	74	48.59	31.94	7.59	33.93	277	36	P	H
		2484.7	43.03	-10.97	54	37.42	31.99	7.56	33.94	277	36	A	H
	*	2462	109.5	-	-	103.88	32.03	7.54	33.95	277	36	P	H
	*	2462	106.22	-	-	100.6	32.03	7.54	33.95	277	36	A	H
		2490.28	54.28	-19.72	74	48.68	31.94	7.59	33.93	299	50	P	V
		2484.34	43.11	-10.89	54	37.5	31.99	7.56	33.94	299	50	A	V
	*	2462	109.76	-	-	104.14	32.03	7.54	33.95	299	50	P	V
	*	2464	106.53	-	-	100.91	32.03	7.54	33.95	299	50	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 ant3 (Harmonic @ 3m)

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	49.39	-24.61	74	66.04	35.16	10.67	62.48	300	0	P	H
		4824	52.76	-21.24	74	69.41	35.16	10.67	62.48	102	351	P	V
		4824	50.35	-3.65	54	67	35.16	10.67	62.48	102	351	A	V
802.11b CH 06 2437MHz		4872	50.32	-23.68	74	66.6	35.17	10.75	62.2	100	163	P	H
		4872	47.12	-6.88	54	63.4	35.17	10.75	62.2	100	163	A	H
		7308	43.79	-30.21	74	55.71	36.86	13.33	62.11	300	0	P	H
		4872	48.8	-25.2	74	65.08	35.17	10.75	62.2	300	360	P	V
		7308	44.08	-29.92	74	56	36.86	13.33	62.11	300	360	A	V
802.11b CH 11 2462MHz		4926	54.21	-19.79	74	70.28	35.18	10.82	62.07	103	75	P	H
		4926	51.32	-2.68	54	67.39	35.18	10.82	62.07	103	75	A	H
		7386	43.43	-30.57	74	55.4	36.88	13.41	62.26	300	0	P	H
		4926	55.72	-18.28	74	71.79	35.18	10.82	62.07	214	62	P	V
		4926	53.07	-0.93	54	69.14	35.18	10.82	62.07	214	62	A	V
		7386	42.41	-31.59	74	54.38	36.88	13.41	62.26	300	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 802.11g ant3 (Band Edge @ 3m)

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.95	58.63	-15.37	74	52.99	32.2	7.43	33.99	330	39	P	H
		2389.95	49.75	-4.25	54	44.11	32.2	7.43	33.99	330	39	A	H
	*	2408	108.41	-	-	102.77	32.16	7.46	33.98	330	39	P	H
	*	2410	100.31	-	-	94.67	32.16	7.46	33.98	330	39	A	H
		2389.82	58.13	-15.87	74	52.49	32.2	7.43	33.99	365	64	P	V
		2389.95	47.49	-6.51	54	41.85	32.2	7.43	33.99	365	64	A	V
	*	2416	109.7	-	-	104.06	32.16	7.46	33.98	365	64	P	V
	*	2416	101.77	-	-	96.13	32.16	7.46	33.98	365	64	A	V
802.11g CH 11 2462MHz		2483.98	55.22	-18.78	74	49.61	31.99	7.56	33.94	302	37	P	H
		2483.5	44.9	-9.1	54	39.29	31.99	7.56	33.94	302	37	A	H
	*	2464	110.41	-	-	104.79	32.03	7.54	33.95	302	37	P	H
	*	2464	102.6	-	-	96.98	32.03	7.54	33.95	302	37	A	H
		2483.56	54.99	-19.01	74	49.38	31.99	7.56	33.94	299	47	P	V
		2483.5	44.96	-9.04	54	39.35	31.99	7.56	33.94	299	47	A	V
	*	2466	110.82	-	-	105.2	32.03	7.54	33.95	299	47	P	V
	*	2464	103.17	-	-	97.55	32.03	7.54	33.95	299	47	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 ant3 (Harmonic @ 3m)

WIFI Ant. 3	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	45.53	-28.47	74	62.18	35.16	10.67	62.48	100	360	P	H
		4824	47.36	-26.64	74	64.01	35.16	10.67	62.48	100	360	P	V
802.11g CH 06 2437MHz		4872	44.79	-29.21	74	61.07	35.17	10.75	62.2	100	360	P	H
		7308	44.66	-29.34	74	56.58	36.86	13.33	62.11	100	360	P	H
		4872	45.32	-28.68	74	61.6	35.17	10.75	62.2	100	360	P	V
		7308	43.48	-30.52	74	55.4	36.86	13.33	62.11	100	360	P	V
802.11g CH 11 2462MHz		4926	57.75	-16.25	74	73.82	35.18	10.82	62.07	103	72	P	H
		4926	46.61	-7.39	54	62.68	35.18	10.82	62.07	103	72	A	H
		7386	42.43	-31.57	74	54.4	36.88	13.41	62.26	100	360	P	H
		4926	58.86	-15.14	74	74.93	35.18	10.82	62.07	100	96	P	V
		4926	48.38	-5.62	54	64.45	35.18	10.82	62.07	100	96	A	V
		7386	42.7	-31.3	74	54.67	36.88	13.41	62.26	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11b ant4 (Band Edge @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2386.83	54.8	-19.2	74	49.16	32.2	7.43	33.99	153	183	P	H
		2389.04	44.2	-9.8	54	38.56	32.2	7.43	33.99	153	183	A	H
	*	2412	110.79	-	-	105.15	32.16	7.46	33.98	153	183	P	H
	*	2414	107.64	-	-	102	32.16	7.46	33.98	153	183	A	H
		2380.72	54.5	-19.5	74	49	32.1	7.4	34	388	224	P	V
		2389.69	43.48	-10.52	54	37.84	32.2	7.43	33.99	388	224	A	V
	*	2412	110.87	-	-	105.23	32.16	7.46	33.98	388	224	P	V
	*	2414	107.54	-	-	101.9	32.16	7.46	33.98	388	224	A	V
802.11b CH 11 2462MHz		2485.42	54.66	-19.34	74	49.05	31.99	7.56	33.94	134	173	P	H
		2485.96	44.28	-9.72	54	38.67	31.99	7.56	33.94	134	173	A	H
	*	2462	110.09	-	-	104.47	32.03	7.54	33.95	134	173	P	H
	*	2460	106.89	-	-	101.27	32.03	7.54	33.95	134	173	A	H
		2485.6	54.88	-19.12	74	49.27	31.99	7.56	33.94	348	71	P	V
		2485.96	43.54	-10.46	54	37.93	31.99	7.56	33.94	348	71	A	V
	*	2462	107.38	-	-	101.76	32.03	7.54	33.95	348	71	P	V
	*	2464	104.12	-	-	98.5	32.03	7.54	33.95	348	71	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 ant4 (Harmonic @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		4824	52.93	-21.07	74	69.58	35.16	10.67	62.48	131	161	P	H
		4824	50.48	-3.52	54	67.13	35.16	10.67	62.48	131	161	A	H
		4824	48.88	-25.12	74	65.53	35.16	10.67	62.48	300	360	P	V
802.11b CH 06 2437MHz		4872	46.95	-27.05	74	63.23	35.17	10.75	62.2	300	0	P	H
		7308	43.83	-30.17	74	55.75	36.86	13.33	62.11	300	0	P	H
		4872	46.32	-27.68	74	62.6	35.17	10.75	62.2	300	360	P	V
		7308	42.95	-31.05	74	54.87	36.86	13.33	62.11	300	360	P	V
802.11b CH 11 2462MHz		4926	56.07	-17.93	74	72.14	35.18	10.82	62.07	151	163	P	H
		4926	53.21	-0.79	54	69.28	35.18	10.82	62.07	151	163	A	H
		7386	42.96	-31.04	74	54.93	36.88	13.41	62.26	300	0	P	H
		4926	49.06	-24.94	74	65.13	35.18	10.82	62.07	300	360	P	V
		7386	43.28	-30.72	74	55.25	36.88	13.41	62.26	300	360	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 ant4 (Band Edge @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		2389.82	62.88	-11.12	74	57.24	32.2	7.43	33.99	154	177	P	H
		2389.95	52.21	-1.79	54	46.57	32.2	7.43	33.99	154	177	A	H
	*	2410	111.64	-	-	106	32.16	7.46	33.98	154	177	P	H
	*	2416	103.86	-	-	98.22	32.16	7.46	33.98	154	177	A	H
		2389.82	61.47	-12.53	74	55.83	32.2	7.43	33.99	371	180	P	V
		2389.95	50.55	-3.45	54	44.91	32.2	7.43	33.99	371	180	A	V
	*	2408	110.15	-	-	104.51	32.16	7.46	33.98	371	180	P	V
	*	2410	101.76	-	-	96.12	32.16	7.46	33.98	371	180	A	V
802.11g CH 11 2462MHz		2484.1	58.43	-15.57	74	52.82	31.99	7.56	33.94	227	173	P	H
		2483.5	47.86	-6.14	54	42.25	31.99	7.56	33.94	227	173	A	H
	*	2464	111.15	-	-	105.53	32.03	7.54	33.95	227	173	P	H
	*	2464	103.31	-	-	97.69	32.03	7.54	33.95	227	173	A	H
		2483.62	57.11	-16.89	74	51.5	31.99	7.56	33.94	348	73	P	V
		2483.5	45.63	-8.37	54	40.02	31.99	7.56	33.94	348	73	A	V
	*	2464	107.84	-	-	102.22	32.03	7.54	33.95	348	73	P	V
	*	2464	99.95	-	-	94.33	32.03	7.54	33.95	348	73	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 ant4 (Harmonic @ 3m)

WIFI Ant. 4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11g CH 01 2412MHz		4824	47.01	-26.99	74	63.66	35.16	10.67	62.48	300	0	P	H
		4824	43.16	-30.84	74	59.81	35.16	10.67	62.48	300	360	P	V
802.11g CH 06 2437MHz		4872	45.19	-28.81	74	61.47	35.17	10.75	62.2	100	360	P	H
		7308	43.45	-30.55	74	55.37	36.86	13.33	62.11	100	360	P	H
		4872	45.9	-28.1	74	62.18	35.17	10.75	62.2	100	360	P	V
		7308	43.11	-30.89	74	55.03	36.86	13.33	62.11	100	360	P	V
802.11g CH 11 2462MHz		4926	54.34	-19.66	74	70.41	35.18	10.82	62.07	159	167	P	H
		4926	44.69	-9.31	54	60.76	35.18	10.82	62.07	159	167	A	H
		7386	43.86	-30.14	74	55.83	36.88	13.41	62.26	300	0	P	H
		4926	48.6	-25.4	74	64.67	35.18	10.82	62.07	300	360	P	V
		7386	43.64	-30.36	74	55.61	36.88	13.41	62.26	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

WIFI 802.11n HT20 (Band Edge @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		2388.91	67.87	-6.13	74	62.23	32.2	7.43	33.99	236	119	P	H
		2389.3	52.77	-1.23	54	47.13	32.2	7.43	33.99	236	119	A	H
	*	2410	116.84	-	-	111.2	32.16	7.46	33.98	236	119	P	H
	*	2408	108.01	-	-	102.37	32.16	7.46	33.98	236	119	A	H
		2389.95	66.99	-7.01	74	61.35	32.2	7.43	33.99	297	48	P	V
		2389.95	53.53	-0.47	54	47.89	32.2	7.43	33.99	297	48	A	V
	*	2406	114.95	-	-	109.31	32.16	7.46	33.98	297	48	P	V
	*	2412	106.34	-	-	100.7	32.16	7.46	33.98	297	48	A	V
802.11n HT20 CH 11 2462MHz		2483.68	59.96	-14.04	74	54.35	31.99	7.56	33.94	118	76	P	H
		2483.5	49.66	-4.34	54	44.05	31.99	7.56	33.94	118	76	A	H
	*	2464	116.83	-	-	111.21	32.03	7.54	33.95	118	76	P	H
	*	2464	108.69	-	-	103.07	32.03	7.54	33.95	118	76	A	H
		2483.68	63.46	-10.54	74	57.85	31.99	7.56	33.94	183	273	P	V
		2483.5	51.39	-2.61	54	45.78	31.99	7.56	33.94	183	273	A	V
	*	2464	118.11	-	-	112.49	32.03	7.54	33.95	183	273	P	V
	*	2464	110.05	-	-	104.43	32.03	7.54	33.95	183	273	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+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	52.1	-21.9	74	68.75	35.16	10.67	62.48	292	232	P	H
		4824	42.81	-11.19	54	59.46	35.16	10.67	62.48	292	232	A	H
		4824	52.77	-21.23	74	69.42	35.16	10.67	62.48	239	186	P	V
		4824	41.89	-12.11	54	58.54	35.16	10.67	62.48	239	186	A	V
802.11n HT20 CH 06 2437MHz		4878	49.79	-24.21	74	66.07	35.17	10.75	62.2	300	0	P	H
		7308	44.3	-29.7	74	56.22	36.86	13.33	62.11	300	0	P	H
		4874	60.24	-13.76	74	76.52	35.17	10.75	62.2	340	143	P	V
		4874	46.63	-7.37	54	62.91	35.17	10.75	62.2	340	143	A	V
		7308	42.85	-31.15	74	54.77	36.86	13.33	62.11	300	360	P	V
802.11n HT20 CH 11 2462MHz		4926	60.97	-13.03	74	77.04	35.18	10.82	62.07	306	226	P	H
		4926	49.73	-4.27	54	65.8	35.18	10.82	62.07	306	226	A	H
		7386	42.46	-31.54	74	54.43	36.88	13.41	62.26	300	0	P	H
		4926	60.58	-13.42	74	76.65	35.18	10.82	62.07	100	70	P	V
		4926	49.12	-4.88	54	65.19	35.18	10.82	62.07	100	70	A	V
		7386	42.73	-31.27	74	54.7	36.88	13.41	62.26	300	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 802.11n HT40 (Band Edge @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT40 CH 03 2422MHz		2389.3	62.13	-11.87	74	56.49	32.2	7.43	33.99	224	131	P	H
		2389.3	48.62	-5.38	54	42.98	32.2	7.43	33.99	224	131	A	H
		2418	111.83	-	-	106.18	32.16	7.46	33.97	224	131	P	H
		2416	103.51	-	-	97.87	32.16	7.46	33.98	224	131	A	H
	*	2485.36	54.36	-19.64	74	48.75	31.99	7.56	33.94	224	131	P	H
	*	2483.68	43.28	-10.72	54	37.67	31.99	7.56	33.94	224	131	A	H
		2386.05	65	-9	74	59.36	32.2	7.43	33.99	299	46	P	V
		2386.7	53.16	-0.84	54	47.52	32.2	7.43	33.99	299	46	A	V
		2426	112.54	-	-	106.92	32.11	7.48	33.97	299	46	P	V
		2426	104.16	-	-	98.54	32.11	7.48	33.97	299	46	A	V
	*	2483.98	54.8	-19.2	74	49.19	31.99	7.56	33.94	299	46	P	V
	*	2483.56	43.94	-10.06	54	38.33	31.99	7.56	33.94	299	46	A	V
802.11n HT40 CH 06 2437MHz		2385.92	60.84	-13.16	74	55.2	32.2	7.43	33.99	291	77	P	H
		2386.18	48.44	-5.56	54	42.8	32.2	7.43	33.99	291	77	A	H
		2483.74	59.89	-14.11	74	54.28	31.99	7.56	33.94	291	77	P	H
		2483.5	48.68	-5.32	54	43.07	31.99	7.56	33.94	291	77	A	H
	*	2444	113.66	-	-	108.04	32.07	7.51	33.96	291	77	P	H
	*	2444	105.77	-	-	100.15	32.07	7.51	33.96	291	77	A	H
		2389.82	63.35	-10.65	74	57.71	32.2	7.43	33.99	196	263	P	V
		2389.95	52.12	-1.88	54	46.48	32.2	7.43	33.99	196	263	A	V
		2486.56	56.97	-17.03	74	51.35	31.99	7.56	33.93	196	263	P	V
		2485.42	45.29	-8.71	54	39.68	31.99	7.56	33.94	196	263	A	V
	*	2438	114.57	-	-	108.95	32.07	7.51	33.96	196	263	P	V
	*	2438	106.44	-	-	100.82	32.07	7.51	33.96	196	263	A	V

802.11n HT40 CH 09 2452MHz		2387.61	58.9	-15.1	74	53.26	32.2	7.43	33.99	289	71	P	H
		2381.24	46.33	-7.67	54	40.83	32.1	7.4	34	289	71	A	H
		2484.76	63.59	-10.41	74	57.98	31.99	7.56	33.94	289	71	P	H
		2483.5	48.28	-5.72	54	42.67	31.99	7.56	33.94	289	71	A	H
	*	2440	114.59	-	-	108.97	32.07	7.51	33.96	289	71	P	H
	*	2440	106.49	-	-	100.87	32.07	7.51	33.96	289	71	A	H
		2379.16	59.2	-14.8	74	53.7	32.1	7.4	34	100	20	P	V
		2379.03	48.28	-5.72	54	42.78	32.1	7.4	34	100	20	A	V
		2483.68	65.51	-8.49	74	59.9	31.99	7.56	33.94	100	20	P	V
		2483.56	52.93	-1.07	54	47.32	31.99	7.56	33.94	100	20	A	V
	*	2440	113.94	-	-	108.32	32.07	7.51	33.96	100	20	P	V
	*	2438	106.3	-	-	100.68	32.07	7.51	33.96	100	20	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+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n		4842	39.83	-34.17	74	56.35	35.17	10.7	62.39	300	0	P	H
HT40		7266	42.43	-31.57	74	54.47	36.86	13.3	62.2	300	0	P	H
CH 03		4842	39.25	-34.75	74	55.77	35.17	10.7	62.39	300	360	P	V
2422MHz		7266	42.8	-31.2	74	54.84	36.86	13.3	62.2	300	360	P	V
802.11n		4872	47.88	-26.12	74	64.16	35.17	10.75	62.2	300	0	P	H
HT40		7308	42.61	-31.39	74	54.53	36.86	13.33	62.11	300	0	P	H
CH 06		4872	47.74	-26.26	74	64.02	35.17	10.75	62.2	300	360	P	V
2437MHz		7308	42.85	-31.15	74	54.77	36.86	13.33	62.11	300	360	P	V
		4902	53.42	-20.58	74	69.52	35.18	10.8	62.08	274	128	P	H
802.11n		4902	43.62	-10.38	54	59.72	35.18	10.8	62.08	274	128	A	H
HT40		7356	43.31	-30.69	74	55.26	36.87	13.38	62.2	300	0	P	H
CH 09		4902	58.57	-15.43	74	74.67	35.18	10.8	62.08	219	180	P	V
2452MHz		4902	48.32	-5.68	54	64.42	35.18	10.8	62.08	219	180	A	V
		7356	44.41	-29.59	74	56.36	36.87	13.38	62.2	300	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 802.11 ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 01 2412MHz		2387.48	59.2	-14.8	74	53.56	32.2	7.43	33.99	295	129	P	H
		2389.95	47.92	-6.08	54	42.28	32.2	7.43	33.99	295	129	A	H
	*	2414	114.42	-	-	108.78	32.16	7.46	33.98	295	129	P	H
	*	2412	104.19	-	-	98.55	32.16	7.46	33.98	295	129	A	H
		2389.95	58.15	-15.85	74	52.51	32.2	7.43	33.99	293	46	P	V
		2389.95	46.82	-7.18	54	41.18	32.2	7.43	33.99	293	46	A	V
	*	2416	115.57	-	-	109.93	32.16	7.46	33.98	293	46	P	V
	*	2416	105.59	-	-	99.95	32.16	7.46	33.98	293	46	A	V
8802.11ax HE20 Full CH 11 2462MHz		2483.62	54.4	-19.6	74	48.79	31.99	7.56	33.94	238	3	P	H
		2483.62	44.33	-9.67	54	38.72	31.99	7.56	33.94	238	3	A	H
	*	2466	113.13	-	-	107.51	32.03	7.54	33.95	238	3	P	H
	*	2466	103.83	-	-	98.21	32.03	7.54	33.95	238	3	A	H
		2483.68	56.36	-17.64	74	50.75	31.99	7.56	33.94	321	49	P	V
		2483.5	46.37	-7.63	54	40.76	31.99	7.56	33.94	321	49	A	V
	*	2464	115.94	-	-	110.32	32.03	7.54	33.95	321	49	P	V
	*	2464	105.67	-	-	100.05	32.03	7.54	33.95	321	49	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 01 2412MHz		4824	45.8	-28.2	74	62.45	35.16	10.67	62.48	300	0	P	H
		4824	45.75	-28.25	74	62.4	35.16	10.67	62.48	300	360	P	V
802.11ax HE20 Full CH 06 2437MHz		4872	44.92	-29.08	74	61.2	35.17	10.75	62.2	300	0	P	H
		7308	44.03	-29.97	74	55.95	36.86	13.33	62.11	300	0	P	H
		4872	46.03	-27.97	74	62.31	35.17	10.75	62.2	300	360	P	V
		7308	43.85	-30.15	74	55.77	36.86	13.33	62.11	300	360	P	V
802.11ax HE20 Full CH 11 2462MHz		4924	54.24	-19.76	74	70.31	35.18	10.82	62.07	128	162	P	H
		4924	43.9	-10.1	54	59.97	35.18	10.82	62.07	128	162	A	H
		7386	43.05	-30.95	74	55.02	36.88	13.41	62.26	300	0	P	H
		4924	54.48	-19.52	74	70.55	35.18	10.82	62.07	149	341	P	V
		4924	43.52	-10.48	54	59.59	35.18	10.82	62.07	149	341	A	V
		7386	43.11	-30.89	74	55.08	36.88	13.41	62.26	300	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 26 (Band Edge @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20CH 01 0+1 2412MHz		2389.95	72.06	-1.94	74	66.42	32.2	7.43	33.99	299	135	P	H
		2389.95	49.56	-4.44	54	43.92	32.2	7.43	33.99	299	135	A	H
		2404	118.76	-	-	113.12	32.16	7.46	33.98	299	135	P	H
		2404	110.59	-	-	104.95	32.16	7.46	33.98	299	135	A	H
		2389.82	73.28	-0.72	74	67.64	32.2	7.43	33.99	100	265	P	V
		2389.95	49.87	-4.13	54	44.23	32.2	7.43	33.99	100	265	A	V
		2404	118.19	-	-	112.55	32.16	7.46	33.98	100	265	P	V
		2404	109.8	-	-	104.16	32.16	7.46	33.98	100	265	A	V
802.11ax HE20CH 11 7+8 2462MHz		2483.74	62.27	-11.73	74	56.66	31.99	7.56	33.94	299	347	P	H
		2483.56	43.88	-10.12	54	38.27	31.99	7.56	33.94	299	347	A	H
		2470	120.27	-	-	114.64	32.03	7.54	33.94	299	347	P	H
		2468	110.41	-	-	104.79	32.03	7.54	33.95	299	347	A	H
		2483.5	67.67	-6.33	74	62.06	31.99	7.56	33.94	246	277	P	V
		2483.56	44.57	-9.43	54	38.96	31.99	7.56	33.94	246	277	A	V
		2470	118.58	-	-	112.95	32.03	7.54	33.94	246	277	P	V
		2470	109.8	-	-	104.17	32.03	7.54	33.94	246	277	A	V

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 52 (Band Edge @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20CH 01 37+38 2412MHz		2389.82	73.76	-0.24	74	68.12	32.2	7.43	33.99	298	134	P	H
		2389.95	51.65	-2.35	54	46.01	32.2	7.43	33.99	298	134	A	H
		2404	116.36	-	-	110.72	32.16	7.46	33.98	298	134	P	H
		2404	107.43	-	-	101.79	32.16	7.46	33.98	298	134	A	H
		2388.78	73.43	-0.57	74	67.79	32.2	7.43	33.99	100	17	P	V
		2389.69	52.2	-1.8	54	46.56	32.2	7.43	33.99	100	17	A	V
		2406	119.1	-	-	113.46	32.16	7.46	33.98	100	17	P	V
		2406	109.23	-	-	103.59	32.16	7.46	33.98	100	17	A	V
802.11ax HE20 CH 11 39+40 2462MHz		2483.86	64.56	-9.44	74	58.95	31.99	7.56	33.94	299	355	P	H
		2483.5	44.58	-9.42	54	38.97	31.99	7.56	33.94	299	355	A	H
		2466	122.45	-	-	116.83	32.03	7.54	33.95	299	355	P	H
		2466	111.76	-	-	106.14	32.03	7.54	33.95	299	355	A	H
		2484.82	64.07	-9.93	74	58.46	31.99	7.56	33.94	327	22	P	V
		2483.5	46.64	-7.36	54	41.03	31.99	7.56	33.94	327	22	A	V
		2464	121.36	-	-	115.74	32.03	7.54	33.95	327	22	P	V
		2464	112.73	-	-	107.11	32.03	7.54	33.95	327	22	A	V

2.4GHz 2400~2483.5MHz

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

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20CH 01 53+54 2412MHz		2389.82	72.11	-1.89	74	66.47	32.2	7.43	33.99	294	136	P	H
		2387.87	50.6	-3.4	54	44.96	32.2	7.43	33.99	294	136	A	H
		2404	112.5	-	-	106.86	32.16	7.46	33.98	294	136	P	H
		2404	104.31	-	-	98.67	32.16	7.46	33.98	294	136	A	H
		2389.69	70.25	-3.75	74	64.61	32.2	7.43	33.99	370	177	P	V
		2389.43	52.62	-1.38	54	46.98	32.2	7.43	33.99	370	177	A	V
		2414	117.58	-	-	111.94	32.16	7.46	33.98	370	177	P	V
		2414	106.68	-	-	101.04	32.16	7.46	33.98	370	177	A	V
802.11ax HE20CH 11 53+54 CH 11 2462MHz		2484.1	58.51	-15.49	74	52.9	31.99	7.56	33.94	267	347	P	H
		2483.5	46.6	-7.4	54	40.99	31.99	7.56	33.94	267	347	A	H
		2466	113.74	-	-	108.12	32.03	7.54	33.95	267	347	P	H
		2466	104.35	-	-	98.73	32.03	7.54	33.95	267	347	A	H
		2483.98	64.13	-9.87	74	58.52	31.99	7.56	33.94	333	245	P	V
		2483.5	48.55	-5.45	54	42.94	31.99	7.56	33.94	333	245	A	V
		2468	114.08	-	-	108.46	32.03	7.54	33.95	333	245	P	V
		2466	105.46	-	-	99.84	32.03	7.54	33.95	333	245	A	V

2.4GHz 2400~2483.5MHz

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

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 03 2422MHz		2388.52	58.84	-15.16	74	53.2	32.2	7.43	33.99	221	130	P	H
		2388.65	47.94	-6.06	54	42.3	32.2	7.43	33.99	221	130	A	H
		2497.42	53.92	-20.08	74	48.32	31.94	7.59	33.93	221	130	P	H
		2483.62	43.33	-10.67	54	37.72	31.99	7.56	33.94	221	130	A	H
	*	2418	112.87	-	-	107.22	32.16	7.46	33.97	221	130	P	H
	*	2416	102.95	-	-	97.31	32.16	7.46	33.98	221	130	A	H
		2386.57	65.29	-8.71	74	59.65	32.2	7.43	33.99	299	50	P	V
		2385.79	52.14	-1.86	54	46.5	32.2	7.43	33.99	299	50	A	V
		2485	54.14	-19.86	74	48.53	31.99	7.56	33.94	299	50	P	V
		2483.5	44.08	-9.92	54	38.47	31.99	7.56	33.94	299	50	A	V
	*	2426	113.51	-	-	107.89	32.11	7.48	33.97	299	50	P	V
	*	2424	103.2	-	-	97.58	32.11	7.48	33.97	299	50	A	V
802.11ax HE40 Full CH 06 2437MHz		2386.83	56.27	-17.73	74	50.63	32.2	7.43	33.99	291	80	P	H
		2385.53	45.46	-8.54	54	39.82	32.2	7.43	33.99	291	80	A	H
		2483.98	58.24	-15.76	74	52.63	31.99	7.56	33.94	291	80	P	H
		2483.5	47.66	-6.34	54	42.05	31.99	7.56	33.94	291	80	A	H
	*	2444	111.68	-	-	106.06	32.07	7.51	33.96	291	80	P	H
	*	2444	102.55	-	-	96.93	32.07	7.51	33.96	291	80	A	H
		2389.56	60.06	-13.94	74	54.42	32.2	7.43	33.99	235	254	P	V
		2389.95	48.47	-5.53	54	42.83	32.2	7.43	33.99	235	254	A	V
		2485.48	55.65	-18.35	74	50.04	31.99	7.56	33.94	235	254	P	V
		2485.12	44.91	-9.09	54	39.3	31.99	7.56	33.94	235	254	A	V
	*	2438	112.26	-	-	106.64	32.07	7.51	33.96	235	254	P	V
	*	2438	103.3	-	-	97.68	32.07	7.51	33.96	235	254	A	V

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 09 2452MHz		2375.91	54.59	-19.41	74	49.09	32.1	7.4	34	290	74	P	H
		2389.95	44.15	-9.85	54	38.51	32.2	7.43	33.99	290	74	A	H
		2484.16	55.07	-18.93	74	49.46	31.99	7.56	33.94	290	74	P	H
		2483.5	44.96	-9.04	54	39.35	31.99	7.56	33.94	290	74	A	H
	*	2440	112.89	-	-	107.27	32.07	7.51	33.96	290	74	P	H
	*	2440	103.17	-	-	97.55	32.07	7.51	33.96	290	74	A	H
		2383.45	55.82	-18.18	74	50.31	32.1	7.4	33.99	298	87	P	V
		2383.71	45.38	-8.62	54	39.87	32.1	7.4	33.99	298	87	A	V
		2483.62	60.05	-13.95	74	54.44	31.99	7.56	33.94	298	87	P	V
		2483.5	49.27	-4.73	54	43.66	31.99	7.56	33.94	298	87	A	V
	*	2442	112.69	-	-	107.07	32.07	7.51	33.96	298	87	P	V
	*	2444	102.41	-	-	96.79	32.07	7.51	33.96	298	87	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		4842	43.31	-30.69	74	59.83	35.17	10.7	62.39	300	0	P	H
HE40 Full		7266	43.8	-30.2	74	55.84	36.86	13.3	62.2	300	0	P	H
CH 03		4842	43.05	-30.95	74	59.57	35.17	10.7	62.39	300	360	P	V
2422MHz		7266	42.38	-31.62	74	54.42	36.86	13.3	62.2	300	360	P	V
802.11ax		4872	44.57	-29.43	74	60.85	35.17	10.75	62.2	300	0	P	H
HE40 Full		7308	42.53	-31.47	74	54.45	36.86	13.33	62.11	300	0	P	H
CH 06		4872	43.21	-30.79	74	59.49	35.17	10.75	62.2	300	360	P	V
2437MHz		7308	43.02	-30.98	74	54.94	36.86	13.33	62.11	300	360	P	V
802.11ax		4902	48.11	-25.89	74	64.21	35.18	10.8	62.08	300	0	P	H
HE40 Full		7356	43	-31	74	54.95	36.87	13.38	62.2	300	0	P	H
CH 09		4902	47.44	-26.56	74	63.54	35.18	10.8	62.08	300	360	P	V
2452MHz		7356	42.83	-31.17	74	54.78	36.87	13.38	62.2	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz WIFI 802. 11ax HE20 CH01 37+38 (LF)

WIFI Ant. 2	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
2.4GHz 802.11ax HE20 CH01 37+38 LF		31.94	37.28	-2.72	40	45.77	24.04	0.53	33.06	100	0	P	H
		42.61	34.21	-5.79	40	48.29	18.33	0.69	33.1	-	-	P	H
		49.4	32.87	-7.13	40	50.29	14.89	0.79	33.1	-	-	P	H
		62.01	24.93	-15.07	40	44.97	12.02	0.96	33.02	-	-	P	H
		80.44	21.01	-18.99	40	39.29	13.6	1.22	33.1	-	-	P	H
		117.3	24.55	-18.95	43.5	38.58	17.44	1.6	33.07	-	-	P	H
		37.76	32.92	-7.08	40	44.5	20.86	0.62	33.06	100	0	P	V
		47.46	27.87	-12.13	40	44.34	15.87	0.76	33.1	-	-	P	V
		79.47	24.27	-15.73	40	42.65	13.5	1.2	33.08	-	-	P	V
		116.33	28.86	-14.64	43.5	42.96	17.38	1.59	33.07	-	-	P	V
		261.83	17.19	-28.81	46	27.27	20.27	2.43	32.78	-	-	P	V
		457.77	21.5	-24.5	46	27.28	23.24	3.23	32.25	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

For TX Beamforming mode:

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE40 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2+3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
Tx BF 11ax HE40 CH 03 2422MHz		2389.43	64.28	-9.72	74	56.23	32.2	7.5	31.65	138	70	P	H
		2389.82	47.27	-6.73	54	39.22	32.2	7.5	31.65	138	70	A	H
		2485.96	56.95	-17.05	74	48.77	32.12	7.64	31.58	138	70	P	H
		2483.8	45.13	-8.87	54	36.95	32.12	7.64	31.58	138	70	A	H
	*	2436	108.99	-	-	100.87	32.17	7.56	31.61	138	70	P	H
	*	2414	94	-	-	85.94	32.18	7.53	31.65	138	70	A	H
		2389.95	64.13	-9.87	74	56.08	32.2	7.5	31.65	210	176	P	V
		2389.56	46.11	-7.89	54	38.06	32.2	7.5	31.65	210	176	A	V
		2493.46	56.51	-17.49	74	48.3	32.1	7.67	31.56	210	176	P	V
		2483.5	44.98	-9.02	54	36.8	32.12	7.64	31.58	210	176	A	V
	*	2434	105.25	-	-	97.15	32.17	7.56	31.63	210	176	P	V
	*	2430	94.72	-	-	86.62	32.17	7.56	31.63	210	176	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 (Harmonic @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
Tx BF 11ax HE40 CH 03 2422MHz		4842	43.51	-30.49	74	58.4	34.32	10.82	60.03	300	0	P	H
		7266	43.07	-30.93	74	54.29	35.94	13.35	60.51	300	0	P	H
		4842	42.76	-31.24	74	57.65	34.32	10.82	60.03	300	360	P	V
		7266	42.54	-31.46	74	53.76	35.94	13.35	60.51	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

For Co-location:

2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 RU52 Left (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2+3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 CH 01 2412MHz & LTE B30 BW=5		2389.3	70.56	-3.44	74	64.92	32.2	7.43	33.99	264	77	P	H
		2389.43	49.4	-4.6	54	43.76	32.2	7.43	33.99	264	77	A	H
	*	2406	117.71	-	-	112.07	32.16	7.46	33.98	264	77	P	H
	*	2408	108.43	-	-	102.79	32.16	7.46	33.98	264	77	A	H
		2389.04	67.38	-6.62	74	61.74	32.2	7.43	33.99	290	47	P	V
		2355.76	49.84	-4.16	54	44.48	32	7.37	34.01	290	47	A	V
	*	2404	115.32	-	-	109.68	32.16	7.46	33.98	290	47	P	V
	*	2404	106.17	-	-	100.53	32.16	7.46	33.98	290	47	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 RU52 Left (Harmonic @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 01 2412MHz & LTE B30 BW=5		4614	47.78	-26.22	74	65.12	35.12	10.43	62.89	300	0	P	H
		4716	47.93	-26.07	74	64.79	35.14	10.55	62.55	300	0	P	H
		4824	45.13	-28.87	74	61.78	35.16	10.67	62.48	300	0	P	H
		4614	50.69	-23.31	74	68.03	35.12	10.43	62.89	300	360	P	V
		4716	50.57	-23.43	74	67.43	35.14	10.55	62.55	300	360	P	V
		4824	41.81	-32.19	74	58.46	35.16	10.67	62.48	300	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 RU52 Left (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
1+2+3+4		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 CH 01 2412MHz & EN DC 12A n2A		2387.74	72.54	-1.46	74	66.9	32.2	7.43	33.99	300	69	P	H
		2389.69	51.97	-2.03	54	46.33	32.2	7.43	33.99	300	69	A	H
	*	2406	117.99	-	-	112.35	32.16	7.46	33.98	300	69	P	H
	*	2404	109.18	-	-	103.54	32.16	7.46	33.98	300	69	A	H
		2389.56	73.19	-0.81	74	67.55	32.2	7.43	33.99	349	142	P	V
		2386.96	52.61	-1.39	54	46.97	32.2	7.43	33.99	349	142	A	V
	*	2406	118.86	-	-	113.22	32.16	7.46	33.98	349	142	P	V
	*	2404	109.41	-	-	103.77	32.16	7.46	33.98	349	142	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 RU52 Left (Harmonic @ 3m)

WIFI Ant. 1+2+3+4	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 CH 01 2412MHz & EN DC 12A n2A		4272	50.97	-23.03	74	69.05	34.81	10.04	62.93	300	282	P	H
		4824	53.72	-20.28	74	70.37	35.16	10.67	62.48	312	252	P	H
		4824	45.75	-8.25	54	62.4	35.16	10.67	62.48	312	252	A	H
		4272	48.93	-25.07	74	67.01	34.81	10.04	62.93	300	360	P	V
		4824	49.45	-24.55	74	66.1	35.16	10.67	62.48	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Note symbol

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

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

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

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) =

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

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

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

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

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

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

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

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

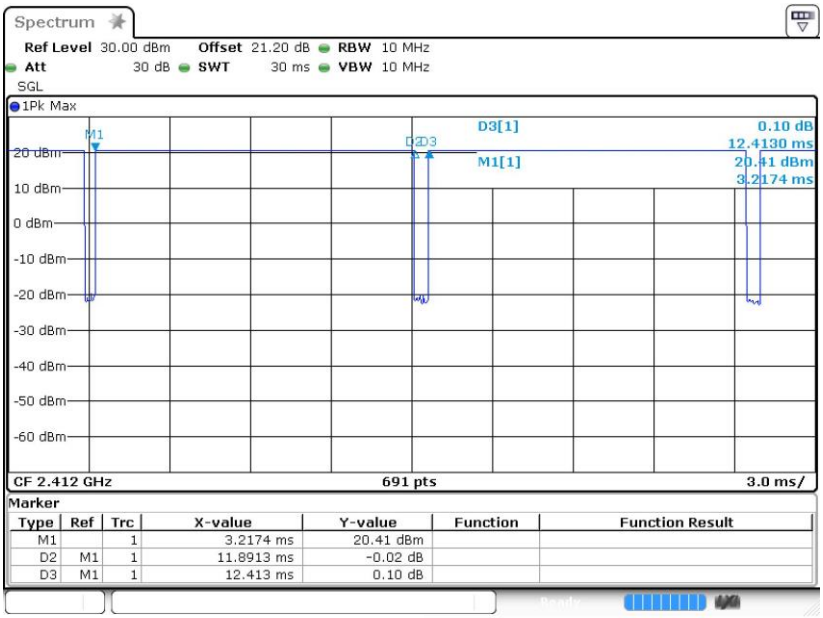
= -10.46(dB)

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

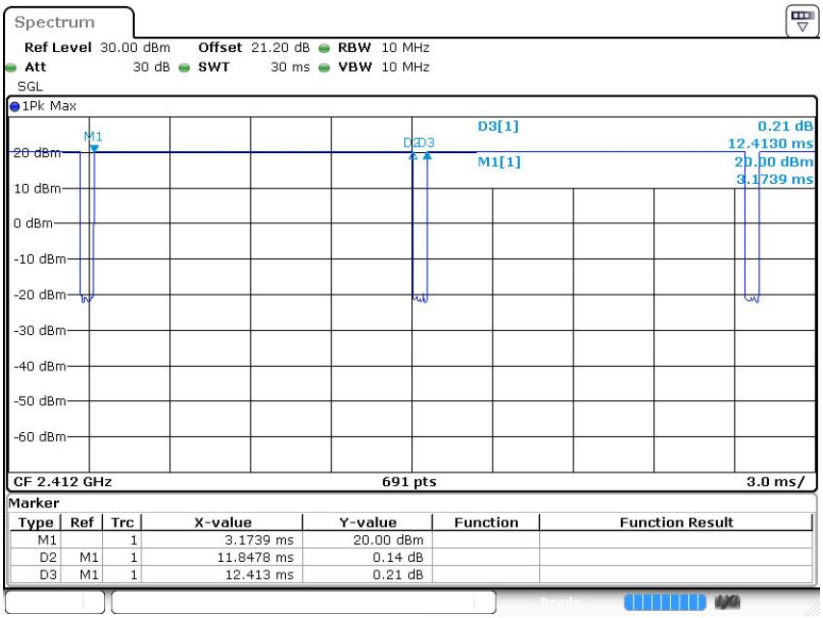
Appendix D. Duty Cycle Plots

Antenna	Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
1	802.11b	95.80	11.8913	0.0841	0.091kHz
2	802.11b	95.45	11.8478	0.0844	0.091kHz
3	802.11b	95.45	11.8478	0.0844	0.091kHz
4	802.11b	95.61	11.8333	0.0845	0.091kHz
1	802.11g	91.59	1.4203	0.7041	0.75kHz
2	802.11g	92.45	1.4203	0.7041	0.75kHz
3	802.11g	91.55	1.4130	0.7077	0.75kHz
4	802.11g	92.02	1.4203	0.7041	0.75kHz
1+2+3+4	802.11n HT20	95.41	5.4203	0.1845	0.2kHz
1+2+3+4	802.11n HT40	95.03	5.3986	0.1852	0.2kHz
1+2+3+4	802.11ax HE20	94.70	5.4420	0.1838	0.2kHz
1+2+3+4	802.11ax HE40	94.66	5.3986	0.1852	0.2kHz

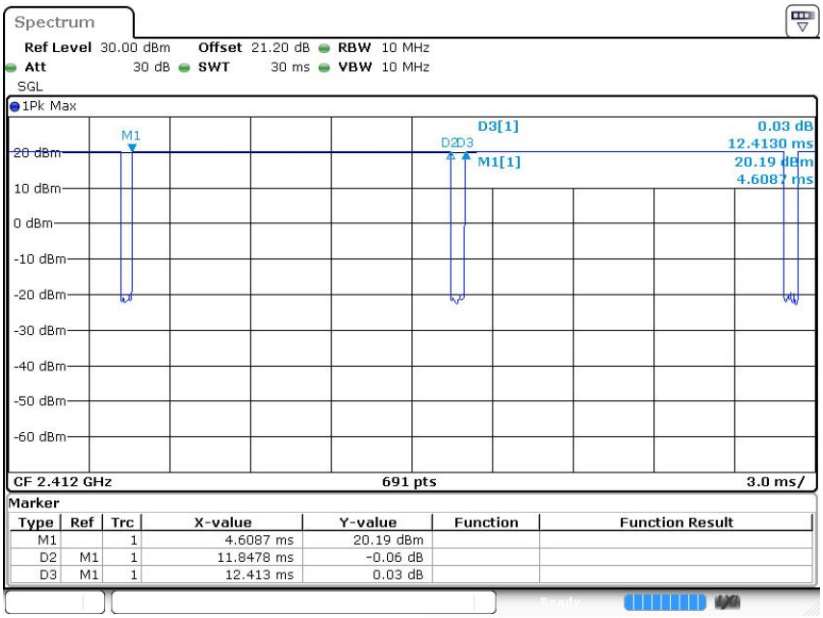
802.11b - Ant.1



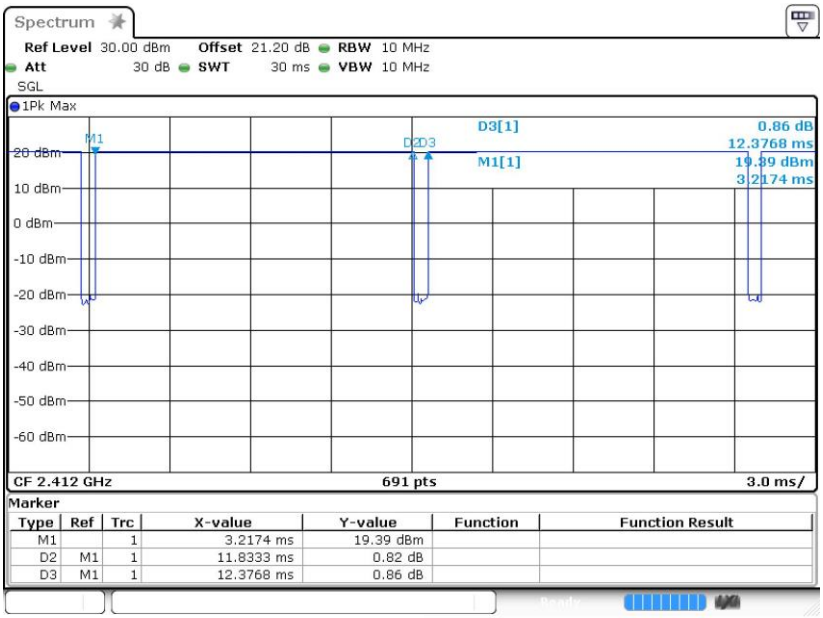
802.11b - Ant.2



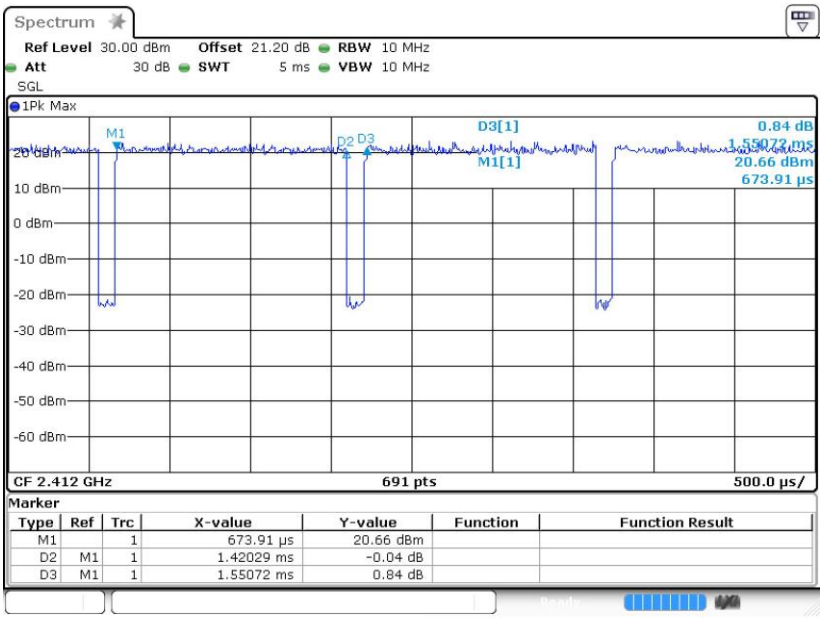
802.11b - Ant.3



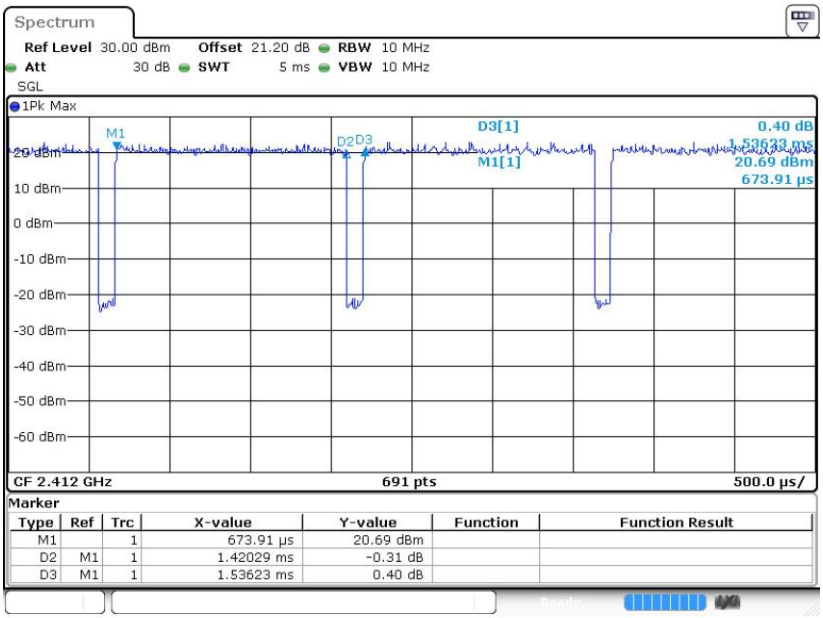
802.11b - Ant.4



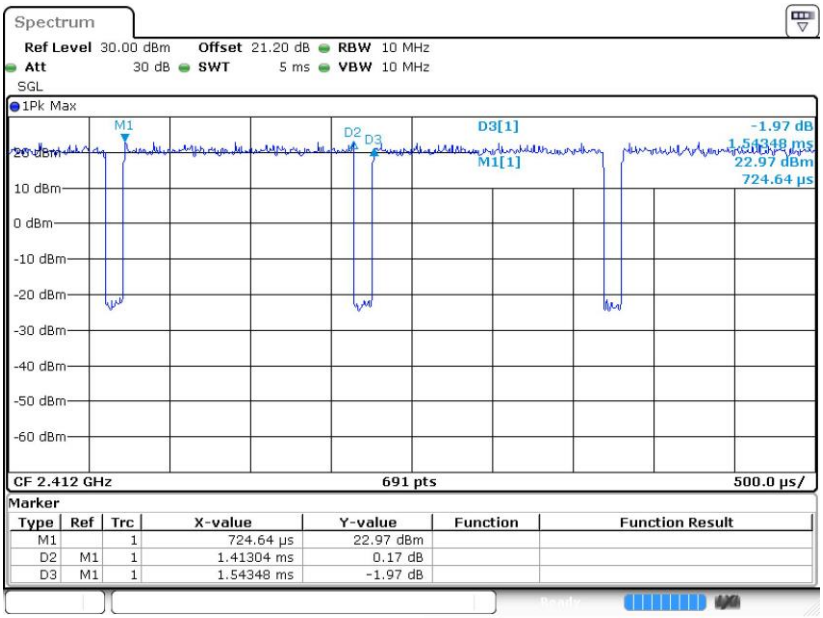
802.11g - Ant.1



802.11g - Ant.2



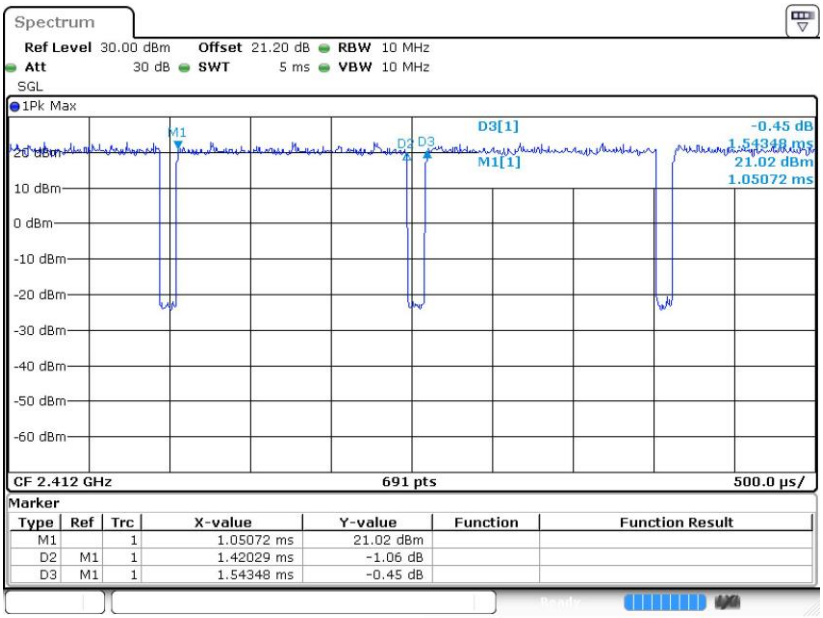
802.11g - Ant.3



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	724.64 µs	22.97 dBm		
D2	M1	1	1.41304 ms	0.17 dB		
D3	M1	1	1.54348 ms	-1.97 dB		

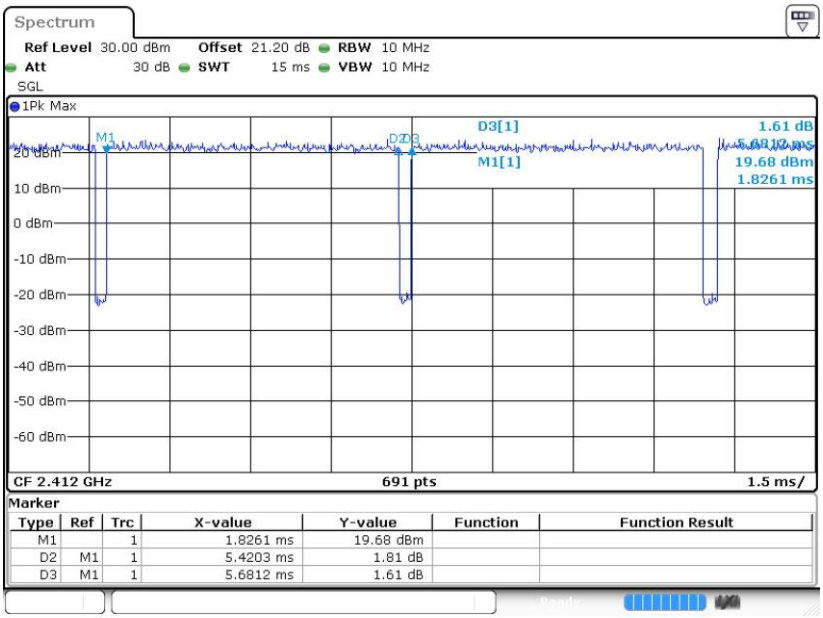
802.11g - Ant.4



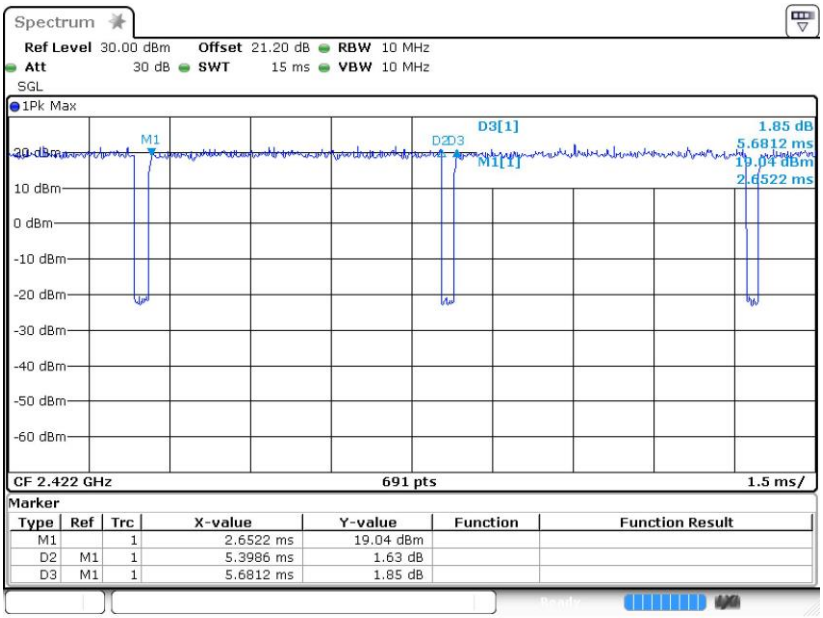
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	1.05072 ms	21.02 dBm		
D2	M1	1	1.42029 ms	-1.06 dB		
D3	M1	1	1.54348 ms	-0.45 dB		

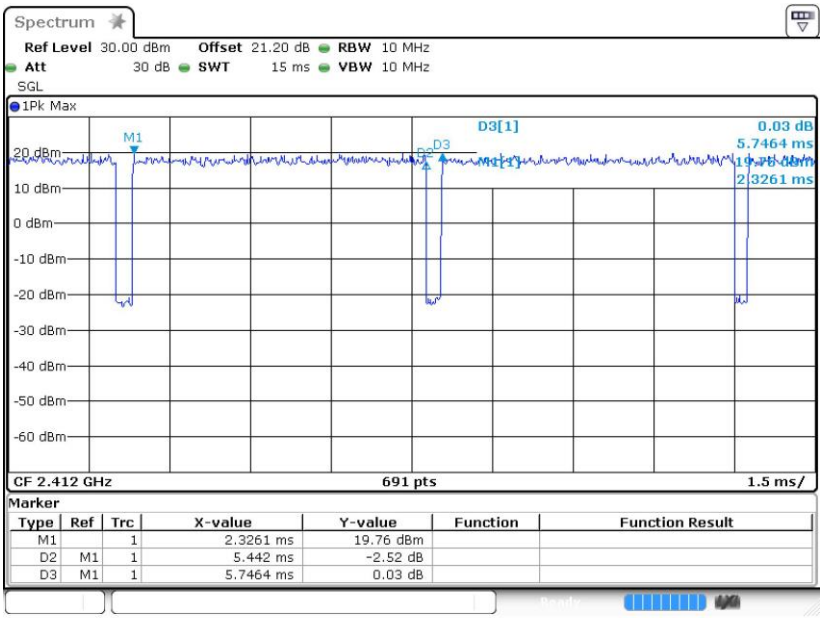
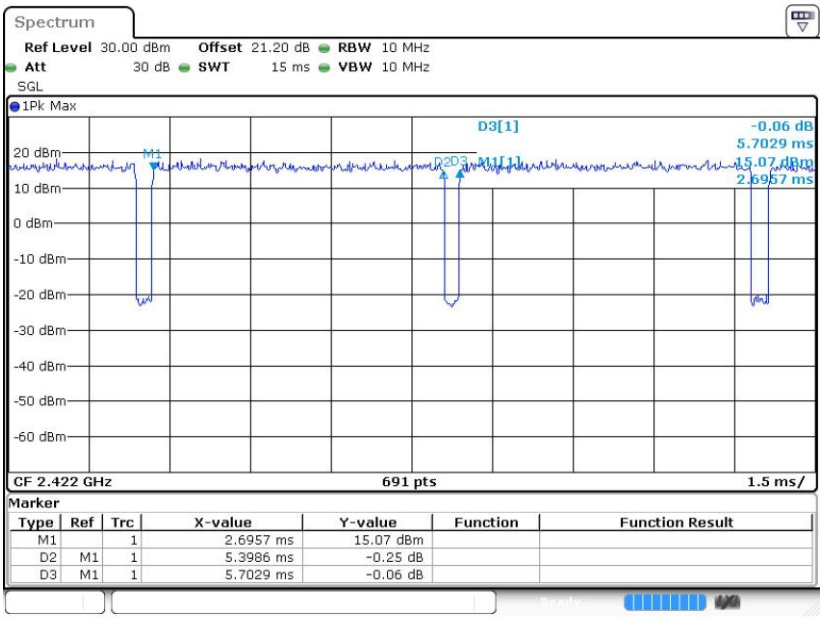
802.11n HT20



802.11n HT40



802.11ax HE20



802.11ax HE40