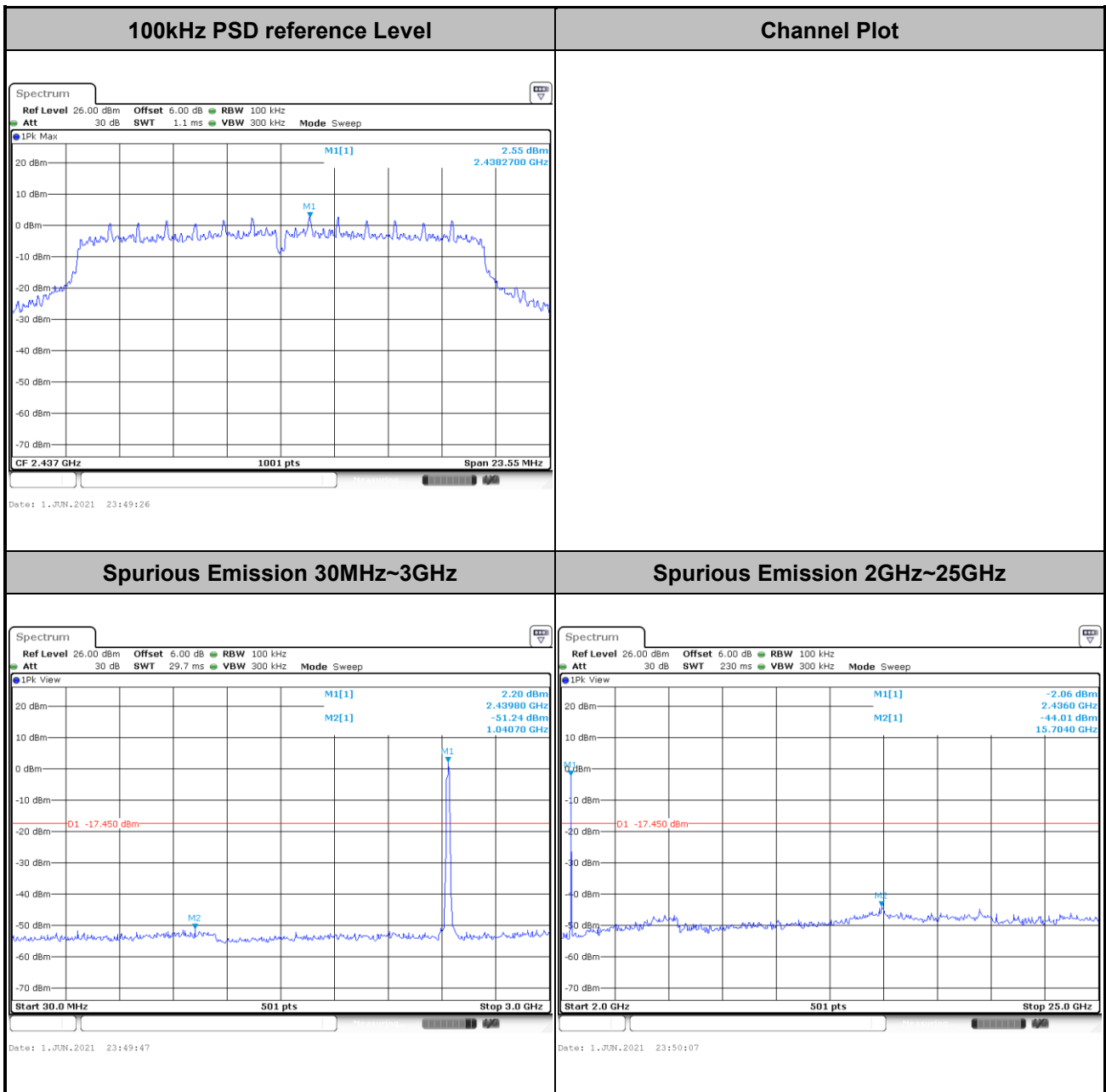




Test Mode :	802.11n HT20	Test Channel :	06
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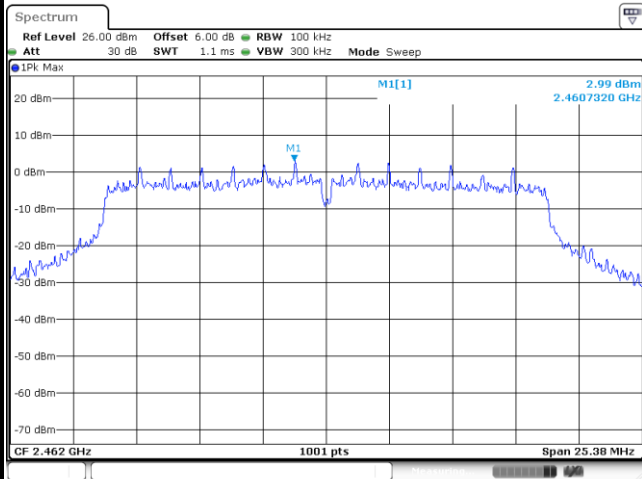




Test Mode : 802.11n HT20

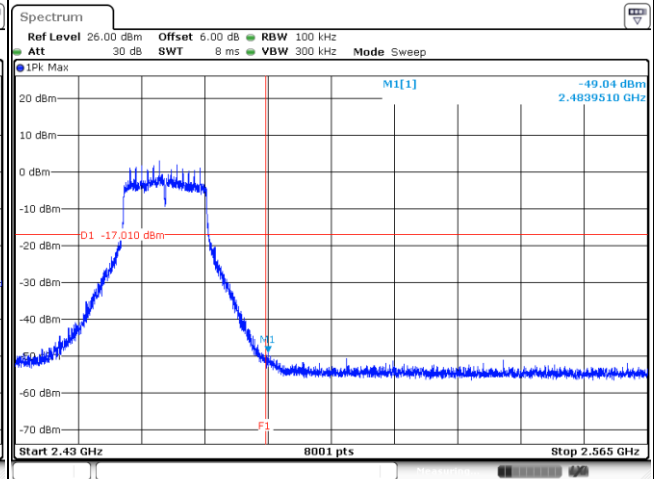
Test Channel : 11

100kHz PSD reference Level



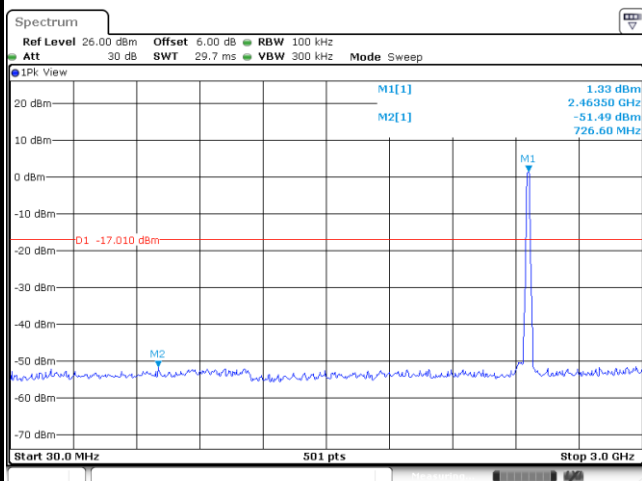
Date: 1.JUN.2021 23:52:21

Channel Plot



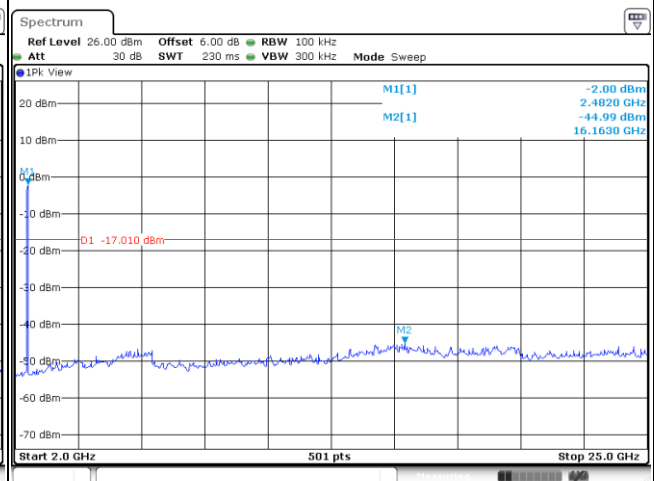
Date: 1.JUN.2021 23:52:40

Spurious Emission 30MHz~3GHz



Date: 1.JUN.2021 23:53:01

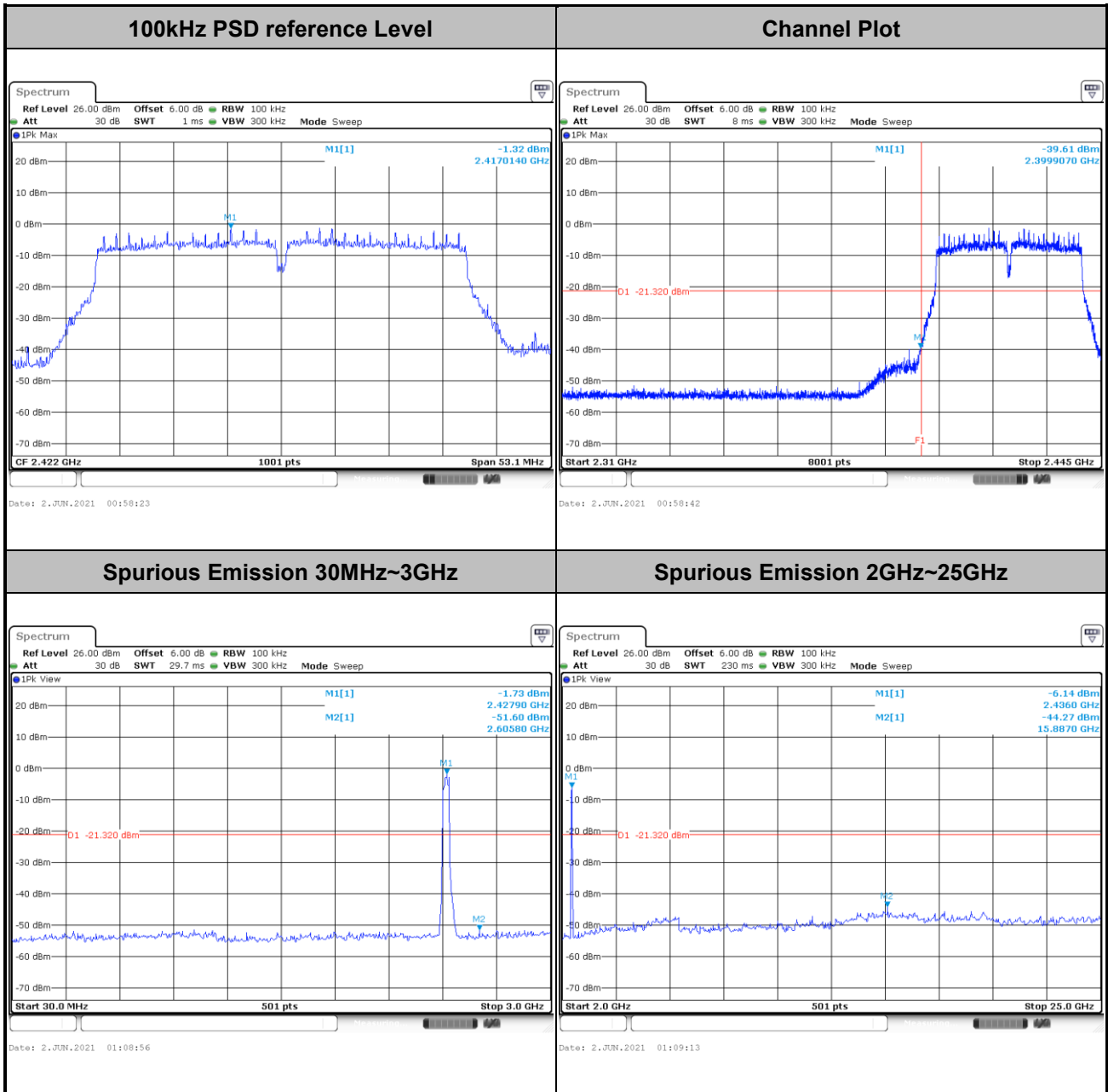
Spurious Emission 2GHz~25GHz



Date: 1.JUN.2021 23:53:21

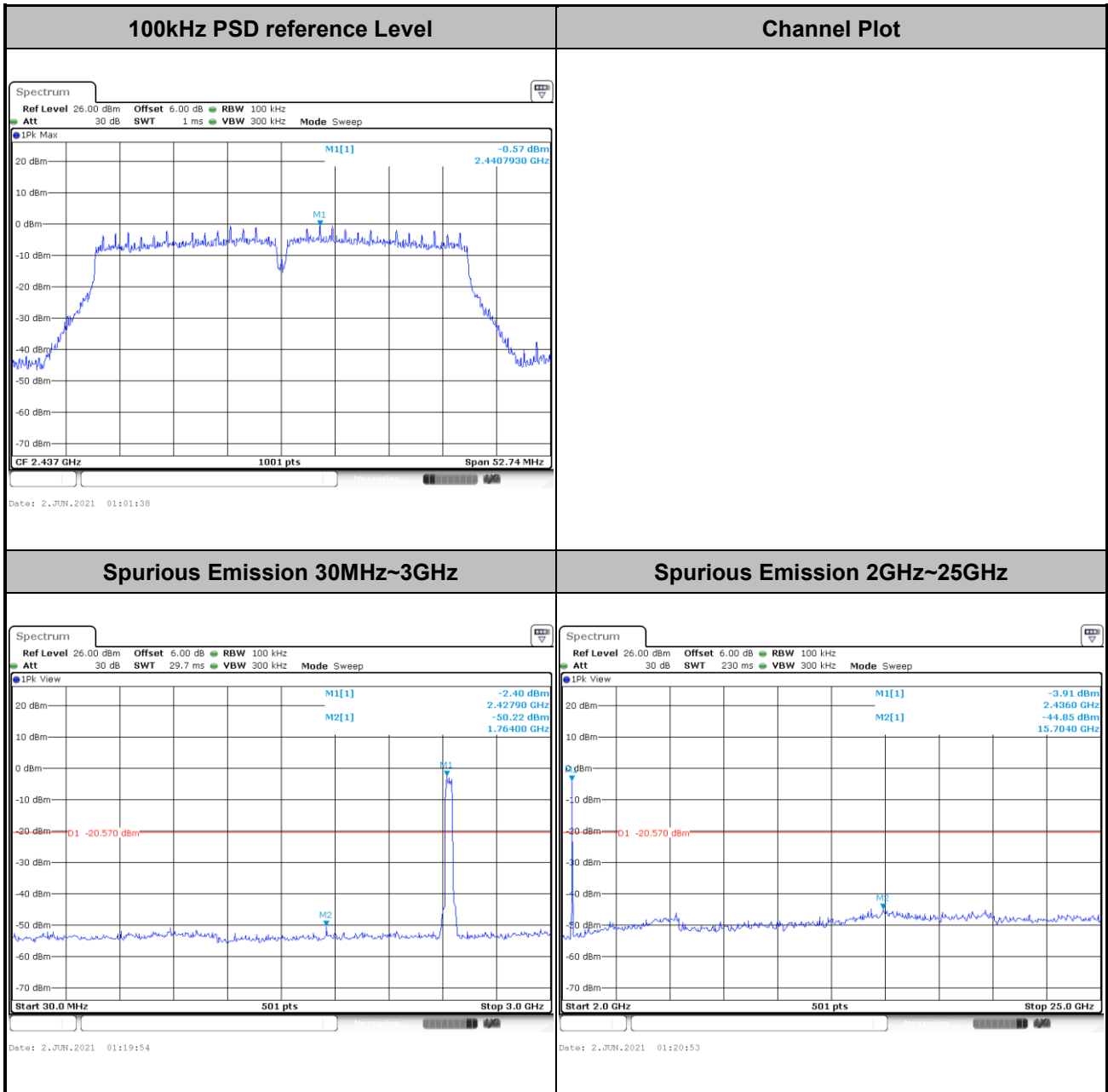


Test Mode :	802.11n HT40	Test Channel :	03
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Test Mode :	802.11n HT40	Test Channel :	06
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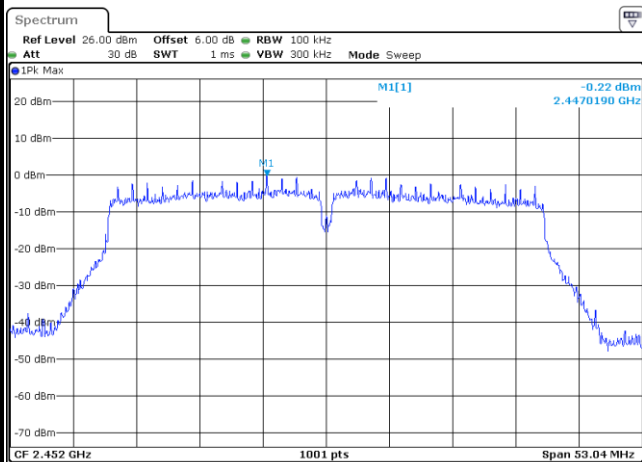




Test Mode : 802.11n HT40

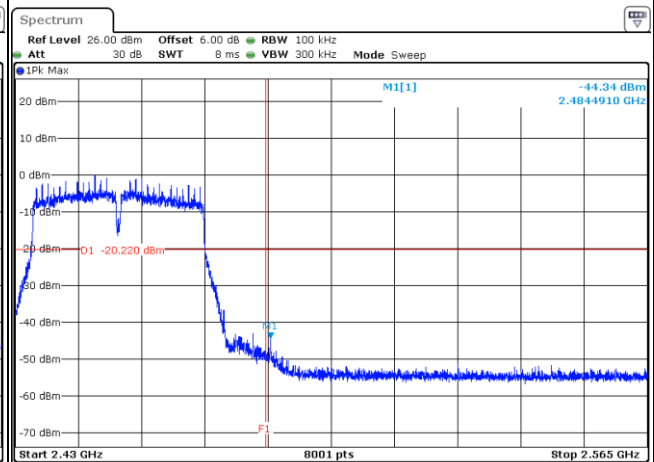
Test Channel : 09

100kHz PSD reference Level



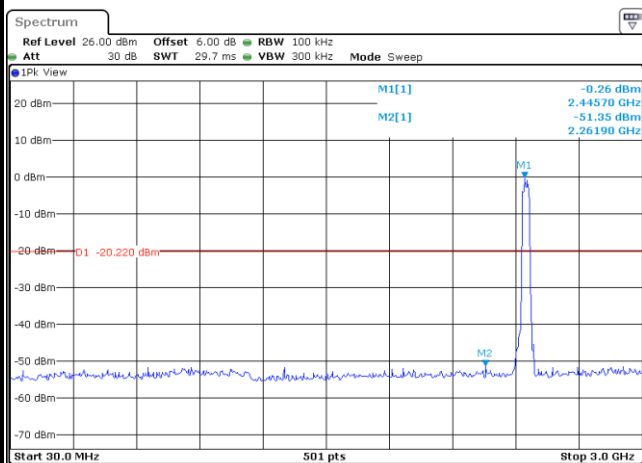
Date: 2.JUN.2021 01:04:33

Channel Plot



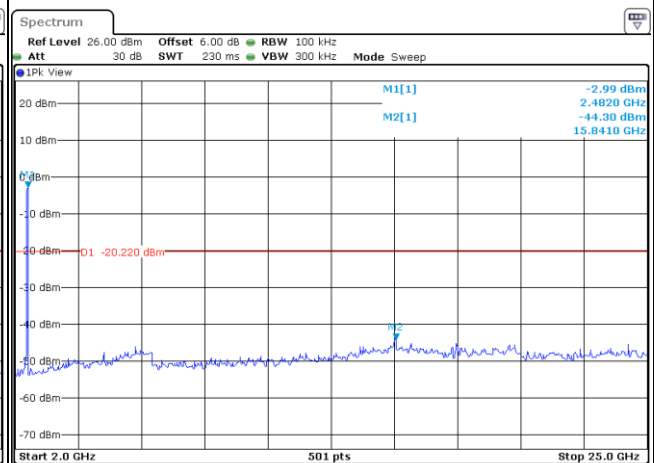
Date: 2.JUN.2021 01:04:52

Spurious Emission 30MHz~3GHz



Date: 2.JUN.2021 01:23:25

Spurious Emission 2GHz~25GHz



Date: 2.JUN.2021 01:23:39

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

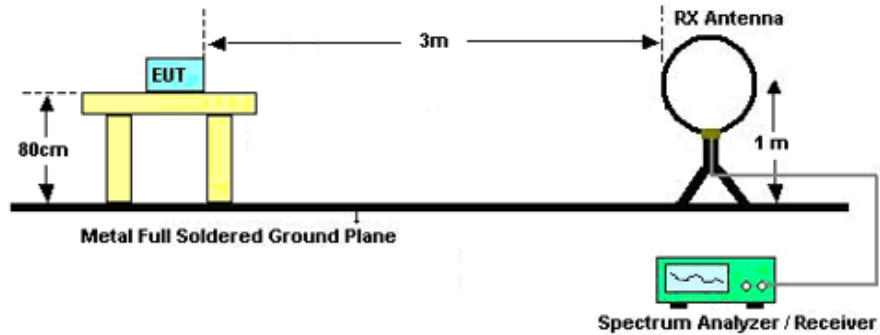
The measuring equipment is listed in the section 4 of this test report.

3.5.3 Test Procedures

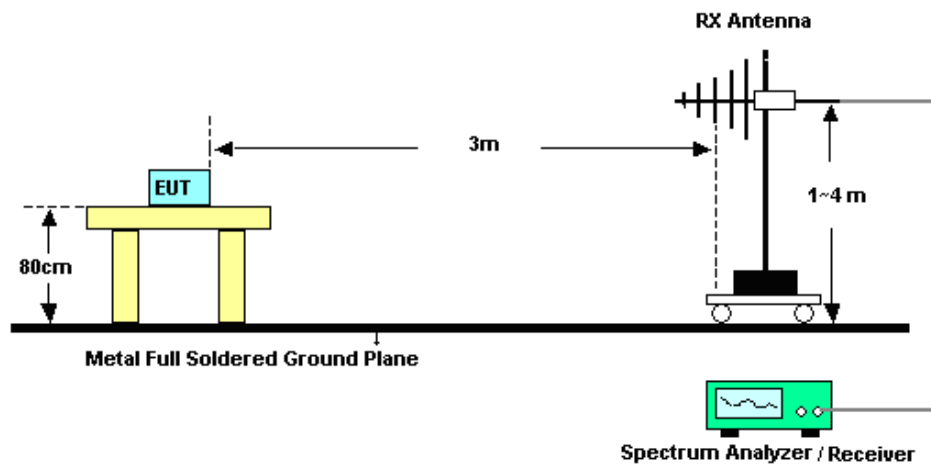
1. The testing follows ANSI C63.10-2013 clause 11.11 & 11.12
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better 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 $\geq$ 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

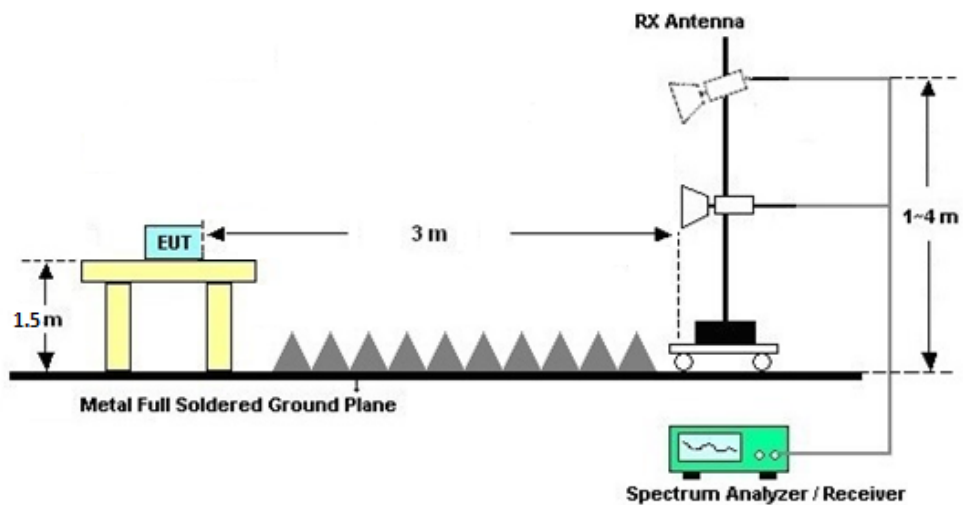
For radiated emissions below 30MHz



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 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 (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.

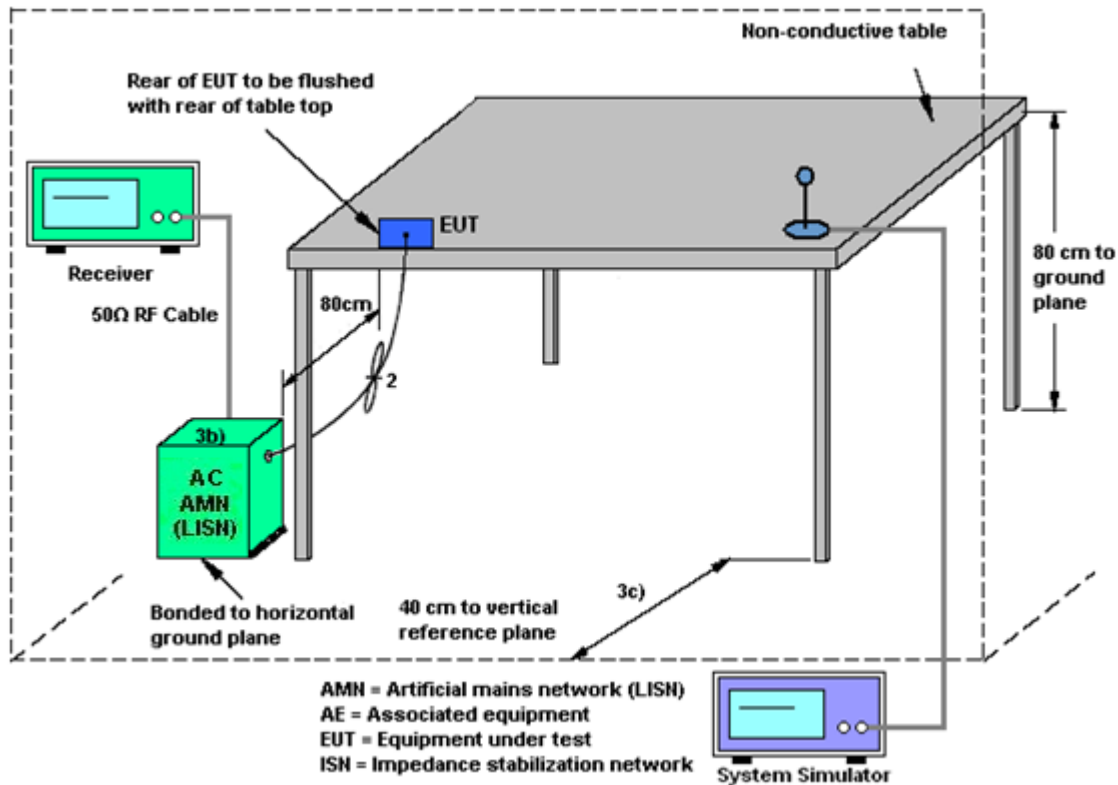
3.6.2 Measuring Instruments

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 for 802.11n mode

			DG	DG	Power	PSD
			for	for	Limit	Limit
	Ant. 1	Ant. 2	Power	PSD	Reduction	Reduction
	(dBi)	(dBi)	(dBi)	(dBi)	(dB)	(dB)
2.4 GHz	0.89	0.52	0.89	3.72	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
EMI Receiver	R&S	ESC17	100768	9kHz~7GHz;	Apr. 21, 2021	Jun. 25, 2021	Apr. 20, 2022	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060103	9kHz~30MHz	Oct. 17, 2020	Jun. 25, 2021	Oct. 16, 2021	Conduction (CO01-KS)
AC LISN	R&S	ENV216	100334	9kHz~30MHz	Oct. 17, 2020	Jun. 25, 2021	Oct. 16, 2021	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP00000 0811	AC 0V~300V, 45Hz~1000Hz	Oct. 17, 2020	Jun. 25, 2021	Oct. 16, 2021	Conduction (CO01-KS)
EMI Test Receiver	Keysight	N9038A	MY564000 04	3Hz~8.5GHz;M ax 30dBm	Oct. 17, 2020	Jun. 13, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY551502 44	10Hz~44G,MAX 30dB	Apr. 13, 2021	Jun. 13, 2021	Apr. 12, 2022	Radiation (03CH05-KS)
Loop Antenna	R&S	HFH2-Z2	100321	9kHz~30MHz	Nov. 01, 2020	Jun. 13, 2021	Oct. 31, 2021	Radiation (03CH05-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz~1GHz	May 30, 2021	Jun. 13, 2021	May 29, 2022	Radiation (03CH05-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00218652	1GHz~18GHz	Apr. 24, 2021	Jun. 13, 2021	Apr. 23, 2022	Radiation (03CH05-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2020	Jun. 13, 2021	Nov. 09, 2021	Radiation (03CH05-KS)
Amplifier	SONOMA	310N	187289	9KHz~1GHz	Apr. 12, 2021	Jun. 13, 2021	Apr. 11, 2022	Radiation (03CH05-KS)
Amplifier	MITEQ	EM18G40GG A	060728	18~40GHz	Jan. 07, 2021	Jun. 13, 2021	Jan. 06, 2022	Radiation (03CH05-KS)
high gain Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	2012228	1Ghz~18Ghz	Oct. 17, 2020	Jun. 13, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
Amplifier	Keysight	83017A	MY532703 16	500MHz~26.5G Hz	Oct. 17, 2020	Jun. 13, 2021	Oct. 16, 2021	Radiation (03CH05-KS)
AC Power Source	Chroma	61601	F1040900 04	N/A	NCR	Jun. 13, 2021	NCR	Radiation (03CH05-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jun. 13, 2021	NCR	Radiation (03CH05-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jun. 13, 2021	NCR	Radiation (03CH05-KS)
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 01, 2020	Jun. 01, 2021~ Jun. 02, 2021	Oct. 31, 2021	Conducted (TH01-KS)
Pulse Power Sensor	Anritsu	MA2411B	0917070	300MHz~40GHz	Jan. 07, 2021	Jun. 01, 2021~ Jun. 02, 2021	Jan. 06, 2022	Conducted (TH01-KS)
Power Meter	Anritsu	ML2495A	1005002	50MHz Bandwidth	Jan. 07, 2021	Jun. 01, 2021~ Jun. 02, 2021	Jan. 06, 2022	Conducted (TH01-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% ($U = 2Uc(y)$)	2.94dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

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

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
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----- THE END -----



Appendix A. Conducted Test Results

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
					Ant 1	Ant 2	Ant 1	Ant 2		
11b	1Mbps	1	1	2412	13.84	13.84	8.06	8.06	0.50	Pass
11b	1Mbps	1	6	2437	14.04	14.04	8.08	8.08	0.50	Pass
11b	1Mbps	1	11	2462	14.19	14.19	8.08	8.08	0.50	Pass
11g	6Mbps	1	1	2412	17.28	17.28	15.12	15.14	0.50	Pass
11g	6Mbps	1	6	2437	17.48	17.53	15.10	15.32	0.50	Pass
11g	6Mbps	1	11	2462	17.73	17.73	16.28	15.66	0.50	Pass
HT20	MCS0	2	1	2412	18.48	18.63	15.08	15.42	0.50	Pass
HT20	MCS0	2	6	2437	18.73	18.73	16.52	15.70	0.50	Pass
HT20	MCS0	2	11	2462	18.93	18.68	16.56	16.92	0.50	Pass
HT40	MCS0	2	3	2422	36.36	36.36	35.92	35.40	0.50	Pass
HT40	MCS0	2	6	2437	36.36	36.46	35.16	35.16	0.50	Pass
HT40	MCS0	2	9	2452	36.36	36.36	35.12	35.36	0.50	Pass

TEST RESULTS DATA
Peak Output Power

2.4GHz Band																
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
					Ant 1	Ant 2	SUM	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	19.20	19.38		30.00	30.00	0.89	0.52	20.09	19.90	36.00	36.00	Pass
11b	1Mbps	1	6	2437	19.26	19.22		30.00	30.00	0.89	0.52	20.15	19.74	36.00	36.00	Pass
11b	1Mbps	1	11	2462	19.28	19.41		30.00	30.00	0.89	0.52	20.17	19.93	36.00	36.00	Pass
11g	6Mbps	1	1	2412	17.33	17.83		30.00	30.00	0.89	0.52	18.22	18.35	36.00	36.00	Pass
11g	6Mbps	1	6	2437	17.38	17.41		30.00	30.00	0.89	0.52	18.27	17.93	36.00	36.00	Pass
11g	6Mbps	1	11	2462	17.42	17.38		30.00	30.00	0.89	0.52	18.31	17.90	36.00	36.00	Pass
HT20	MCS0	2	1	2412	17.72	16.74	20.27	30.00		0.89		21.16		36.00		Pass
HT20	MCS0	2	6	2437	17.65	16.99	20.34	30.00		0.89		21.23		36.00		Pass
HT20	MCS0	2	11	2462	17.82	17.06	20.47	30.00		0.89		21.36		36.00		Pass
HT40	MCS0	2	3	2422	18.85	18.36	21.62	30.00		0.89		22.51		36.00		Pass
HT40	MCS0	2	6	2437	18.93	19.03	21.99	30.00		0.89		22.88		36.00		Pass
HT40	MCS0	2	9	2452	18.99	19.18	22.10	30.00		0.89		22.99		36.00		Pass

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

TEST RESULTS DATA
Average Output Power

2.4GHz Band									
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)		
					Ant 1	Ant 2	Ant 1	Ant 2	SUM
11b	1Mbps	1	1	2412	0.00	0.00	16.72	16.82	
11b	1Mbps	1	6	2437	0.00	0.00	16.63	16.76	
11b	1Mbps	1	11	2462	0.00	0.00	16.66	16.87	
11g	6Mbps	1	1	2412	0.09	0.06	12.40	12.28	
11g	6Mbps	1	6	2437	0.09	0.06	12.67	12.71	
11g	6Mbps	1	11	2462	0.09	0.06	12.72	12.54	
HT20	MCS0	2	1	2412	0.08	0.08	12.20	12.06	15.14
HT20	MCS0	2	6	2437	0.08	0.08	12.46	12.10	15.29
HT20	MCS0	2	11	2462	0.08	0.08	12.37	12.25	15.32
HT40	MCS0	2	3	2422	0.23	0.23	11.95	11.73	14.85
HT40	MCS0	2	6	2437	0.23	0.23	11.92	12.05	14.99
HT40	MCS0	2	9	2452	0.23	0.23	11.81	12.16	14.99

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

TEST RESULTS DATA
Peak Power Spectral Density

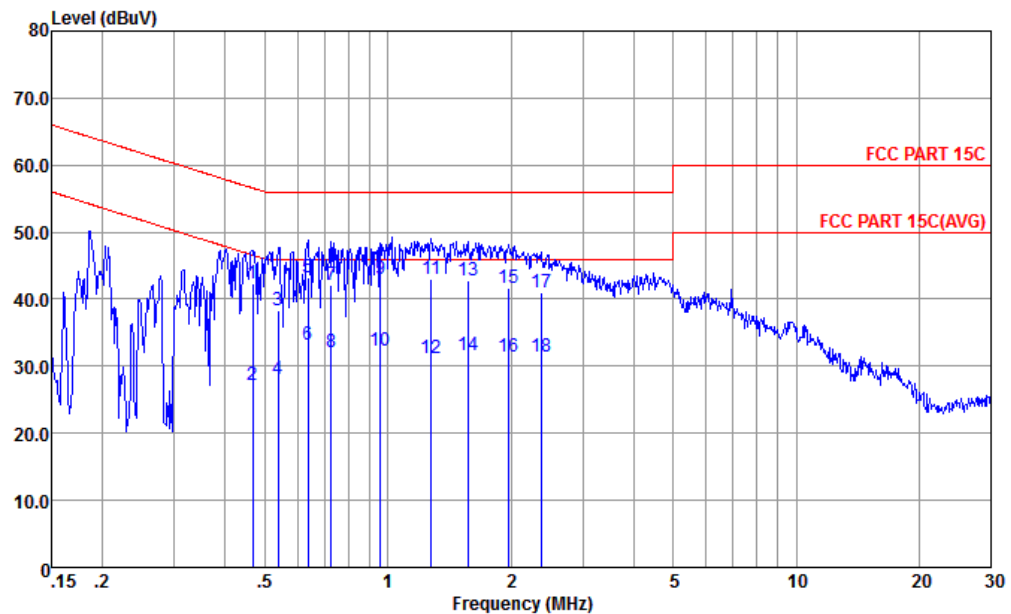
2.4GHz Band												
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	Peak PSD (dBm/3kHz)			DG (dBi)		Peak PSD Limit (dBm/3kHz)		Pass/Fail
					Ant 1	Ant 2	Worse + 3.01	Ant 1	Ant 2	Ant 1	Ant 2	
11b	1Mbps	1	1	2412	-8.29	-8.61	-	0.89	0.52	8.00	8.00	Pass
11b	1Mbps	1	6	2437	-8.42	-8.38		0.89	0.52	8.00	8.00	Pass
11b	1Mbps	1	11	2462	-8.75	-8.85		0.89	0.52	8.00	8.00	Pass
11g	6Mbps	1	1	2412	-14.18	-13.57		0.89	0.52	8.00	8.00	Pass
11g	6Mbps	1	6	2437	-14.11	-13.82		0.89	0.52	8.00	8.00	Pass
11g	6Mbps	1	11	2462	-13.81	-13.71		0.89	0.52	8.00	8.00	Pass
HT20	MCS0	2	1	2412	-14.00	-13.79	-10.78	3.72		8.00		Pass
HT20	MCS0	2	6	2437	-13.75	-13.74	-10.73	3.72		8.00		Pass
HT20	MCS0	2	11	2462	-13.58	-13.73	-10.57	3.72		8.00		Pass
HT40	MCS0	2	3	2422	-16.17	-16.34	-13.16	3.72		8.00		Pass
HT40	MCS0	2	6	2437	-16.77	-16.53	-13.52	3.72		8.00		Pass
HT40	MCS0	2	9	2452	-16.88	-16.20	-13.19	3.72		8.00		Pass

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



Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos Zhang	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

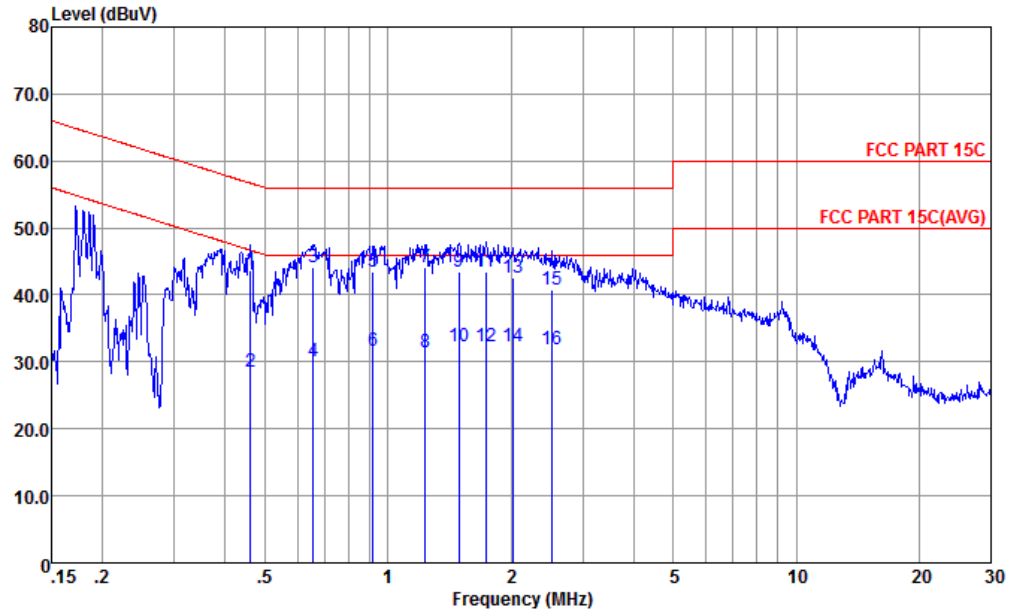


Site : CO01-KS
Condition : FCC PART 15C TWO-LISN-CN02-L LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.466	42.39	-14.19	56.58	22.50	9.65	10.24	QP
2	0.466	27.19	-19.39	46.58	7.30	9.65	10.24	Average
3	0.538	38.39	-17.61	56.00	18.50	9.65	10.24	QP
4	0.538	28.19	-17.81	46.00	8.30	9.65	10.24	Average
5 *	0.637	43.19	-12.81	56.00	23.29	9.66	10.24	QP
6	0.637	33.19	-12.81	46.00	13.29	9.66	10.24	Average
7	0.727	42.20	-13.80	56.00	22.30	9.66	10.24	QP
8	0.727	32.10	-13.90	46.00	12.20	9.66	10.24	Average
9	0.958	43.04	-12.96	56.00	23.10	9.70	10.24	QP
10	0.958	32.24	-13.76	46.00	12.30	9.70	10.24	Average
11	1.276	42.92	-13.08	56.00	22.90	9.79	10.23	QP
12	1.276	31.22	-14.78	46.00	11.20	9.79	10.23	Average
13	1.568	42.89	-13.11	56.00	22.80	9.86	10.23	QP
14	1.568	31.69	-14.31	46.00	11.60	9.86	10.23	Average
15	1.980	41.66	-14.34	56.00	21.50	9.93	10.23	QP
16	1.980	31.46	-14.54	46.00	11.30	9.93	10.23	Average
17	2.371	41.02	-14.98	56.00	20.80	9.99	10.23	QP
18	2.371	31.52	-14.48	46.00	11.30	9.99	10.23	Average



Test Engineer :	Amos Zhang	Temperature :	24.2~25.6°C
		Relative Humidity :	37~39%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : FCC PART 15C TWO-LISN-CN02-N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.461	43.59	-13.08	56.67	23.60	9.74	10.25	QP
2	0.461	28.59	-18.08	46.67	8.60	9.74	10.25	Average
3	0.658	44.06	-11.94	56.00	24.09	9.73	10.24	QP
4	0.658	30.16	-15.84	46.00	10.19	9.73	10.24	Average
5	0.918	43.45	-12.55	56.00	23.50	9.71	10.24	QP
6	0.918	31.55	-14.45	46.00	11.60	9.71	10.24	Average
7 *	1.236	44.11	-11.89	56.00	24.10	9.78	10.23	QP
8	1.236	31.51	-14.49	46.00	11.50	9.78	10.23	Average
9	1.495	43.56	-12.44	56.00	23.50	9.83	10.23	QP
10	1.495	32.26	-13.74	46.00	12.20	9.83	10.23	Average
11	1.734	43.41	-12.59	56.00	23.30	9.88	10.23	QP
12	1.734	32.31	-13.69	46.00	12.20	9.88	10.23	Average
13	2.033	42.46	-13.54	56.00	22.30	9.93	10.23	QP
14	2.033	32.36	-13.64	46.00	12.20	9.93	10.23	Average
15	2.513	40.84	-15.16	56.00	20.59	10.01	10.24	QP
16	2.513	31.84	-14.16	46.00	11.59	10.01	10.24	Average

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 ANT1 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamplifier 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		2352.12	56.05	-17.95	74	48.08	32.11	7.53	31.67	303	221	P	H
		2389.95	45.34	-8.66	54	37.2	32.2	7.59	31.65	303	221	A	H
	*	2412	107.06	-	-	98.91	32.18	7.62	31.65	303	221	P	H
	*	2412	103.67	-	-	95.52	32.18	7.62	31.65	303	221	A	H
		2388.52	56.57	-17.43	74	48.43	32.2	7.59	31.65	348	170	P	V
		2389.95	45.44	-8.56	54	37.3	32.2	7.59	31.65	348	170	A	V
	*	2412	106.67	-	-	98.52	32.18	7.62	31.65	348	170	P	V
	*	2410	103.18	-	-	95.03	32.18	7.62	31.65	348	170	A	V
802.11b CH 11 2462MHz		2487.04	58.03	-15.97	74	49.76	32.12	7.73	31.58	372	210	P	H
		2483.5	45.5	-8.5	54	37.23	32.12	7.73	31.58	372	210	A	H
	*	2464	105.99	-	-	97.76	32.13	7.7	31.6	372	210	P	H
	*	2464	102.91	-	-	94.68	32.13	7.7	31.6	372	210	A	H
		2491.78	56.17	-17.83	74	47.87	32.1	7.76	31.56	374	168	P	V
		2483.5	45.4	-8.6	54	37.13	32.12	7.73	31.58	374	168	A	V
	*	2464	106.68	-	-	98.45	32.13	7.7	31.6	374	168	P	V
	*	2464	103.52	-	-	95.29	32.13	7.7	31.6	374	168	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 ANT 1 (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)	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	45.01	-28.99	74	59.68	34.31	11.06	60.04	300	0	P	H
		4824	47.38	-26.62	74	62.05	34.31	11.06	60.04	300	360	P	V
802.11b CH 06 2437MHz		4872	48.33	-25.67	74	62.98	34.34	11.04	60.03	300	0	P	H
		7308	43.21	-30.79	74	54.3	35.94	13.48	60.51	300	0	P	H
		4872	48.74	-25.26	74	63.39	34.34	11.04	60.03	300	360	P	V
		7308	42.91	-31.09	74	54	35.94	13.48	60.51	300	360	P	V
802.11b CH 11 2462MHz		4926	50.08	-23.92	74	64.71	34.36	11.03	60.02	300	0	P	H
		7386	43.55	-30.45	74	54.61	35.92	13.55	60.53	300	0	P	H
		4926	52.29	-21.71	74	66.92	34.36	11.03	60.02	293	83	P	V
		4926	50.49	-3.51	54	65.12	34.36	11.03	60.02	293	83	A	V
		7386	44.01	-29.99	74	55.07	35.92	13.55	60.53	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI 802.11b ANT 2 (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)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11b CH 01 2412MHz		2360.18	56.29	-17.71	74	48.31	32.11	7.53	31.66	159	266	P	H
		2387.35	45.49	-8.51	54	37.35	32.2	7.59	31.65	159	266	A	H
	*	2414	107.12	-	-	98.97	32.18	7.62	31.65	159	266	P	H
	*	2414	104.11	-	-	95.96	32.18	7.62	31.65	159	266	A	H
		2388.13	56.02	-17.98	74	47.88	32.2	7.59	31.65	387	294	P	V
		2387.35	45.1	-8.9	54	36.96	32.2	7.59	31.65	387	294	A	V
	*	2412	104.74	-	-	96.59	32.18	7.62	31.65	387	294	P	V
	*	2414	101.43	-	-	93.28	32.18	7.62	31.65	387	294	A	V
802.11b CH 11 2462MHz		2498.38	56.84	-17.16	74	48.54	32.1	7.76	31.56	107	226	P	H
		2483.5	45.36	-8.64	54	37.09	32.12	7.73	31.58	107	226	A	H
	*	2462	104.76	-	-	96.53	32.13	7.7	31.6	107	226	P	H
	*	2460	101.39	-	-	93.16	32.13	7.7	31.6	107	226	A	H
		2491.54	56.5	-17.5	74	48.2	32.1	7.76	31.56	346	291	P	V
		2487.52	45.09	-8.91	54	36.81	32.1	7.76	31.58	346	291	A	V
	*	2462	102.6	-	-	94.37	32.13	7.7	31.6	346	291	P	V
	*	2460	99.27	-	-	91.04	32.13	7.7	31.6	346	291	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 ANT 2 (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)	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	50.13	-23.87	74	64.8	34.31	11.06	60.04	102	76	P	H
		4824	46.11	-7.89	54	60.78	34.31	11.06	60.04	102	76	A	H
		4824	48.35	-25.65	74	63.02	34.31	11.06	60.04	300	360	P	V
802.11b CH 06 2437MHz		4872	48.91	-25.09	74	63.56	34.34	11.04	60.03	300	0	P	H
		7308	43.84	-30.16	74	54.93	35.94	13.48	60.51	300	0	P	H
		4872	49.74	-24.26	74	64.39	34.34	11.04	60.03	300	360	P	V
		7308	43.41	-30.59	74	54.5	35.94	13.48	60.51	300	360	P	V
802.11b CH 11 2462MHz		4926	48.17	-25.83	74	62.8	34.36	11.03	60.02	300	0	P	H
		7386	44.08	-29.92	74	55.14	35.92	13.55	60.53	300	0	P	H
		4926	48.66	-25.34	74	63.29	34.36	11.03	60.02	300	360	P	V
		7386	43.18	-30.82	74	54.24	35.92	13.55	60.53	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 ANT 1 (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)	Cable 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	59.2	-14.8	74	51.06	32.2	7.59	31.65	301	234	P	H
		2389.95	48.81	-5.19	54	40.67	32.2	7.59	31.65	301	234	A	H
	*	2412	107.09	-	-	98.94	32.18	7.62	31.65	301	234	P	H
	*	2412	99.01	-	-	90.86	32.18	7.62	31.65	301	234	A	H
		2389.95	62.4	-11.6	74	54.26	32.2	7.59	31.65	395	157	P	V
		2389.95	50.66	-3.34	54	42.52	32.2	7.59	31.65	395	157	A	V
	*	2412	107.66	-	-	99.51	32.18	7.62	31.65	395	157	P	V
	*	2410	99.63	-	-	91.48	32.18	7.62	31.65	395	157	A	V
802.11g CH 11 2462MHz		2483.74	57.86	-16.14	74	49.59	32.12	7.73	31.58	100	214	P	H
		2483.5	46.89	-7.11	54	38.62	32.12	7.73	31.58	100	214	A	H
	*	2468	107.44	-	-	99.21	32.13	7.7	31.6	100	214	P	H
	*	2470	99.13	-	-	90.9	32.13	7.7	31.6	100	214	A	H
		2484.7	57.96	-16.04	74	49.69	32.12	7.73	31.58	374	165	P	V
		2483.5	47.56	-6.44	54	39.29	32.12	7.73	31.58	374	165	A	V
	*	2468	108.47	-	-	100.24	32.13	7.7	31.6	374	165	P	V
	*	2470	99.97	-	-	91.74	32.13	7.7	31.6	374	165	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 ANT 1 (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)	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	42.87	-31.13	74	57.54	34.31	11.06	60.04	300	0	P	H
		4824	43.91	-30.09	74	58.58	34.31	11.06	60.04	300	360	P	V
802.11g CH 06 2437MHz		4872	45.12	-28.88	74	59.77	34.34	11.04	60.03	300	0	P	H
		7308	43	-31	74	54.09	35.94	13.48	60.51	300	0	P	H
		4872	46	-28	74	60.65	34.34	11.04	60.03	300	360	P	V
		7308	43.07	-30.93	74	54.16	35.94	13.48	60.51	300	360	P	V
802.11g CH 11 2462MHz		4926	44.81	-29.19	74	59.44	34.36	11.03	60.02	300	0	P	H
		7386	42.99	-31.01	74	54.05	35.92	13.55	60.53	300	0	P	H
		4926	47.95	-26.05	74	62.58	34.36	11.03	60.02	300	360	P	V
		7386	42.68	-31.32	74	53.74	35.92	13.55	60.53	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI 802.11g ANT 2 (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)	Cable 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	58.69	-15.31	74	50.55	32.2	7.59	31.65	318	272	P	H
		2389.95	48.25	-5.75	54	40.11	32.2	7.59	31.65	318	272	A	H
	*	2412	108.42	-	-	100.27	32.18	7.62	31.65	318	272	P	H
	*	2412	100.35	-	-	92.2	32.18	7.62	31.65	318	272	A	H
		2388.13	57.03	-16.97	74	48.89	32.2	7.59	31.65	387	309	P	V
		2389.95	46.86	-7.14	54	38.72	32.2	7.59	31.65	387	309	A	V
	*	2414	105.59	-	-	97.44	32.18	7.62	31.65	387	309	P	V
	*	2410	97.82	-	-	89.67	32.18	7.62	31.65	387	309	A	V
802.11g CH 11 2462MHz		2483.56	62.48	-11.52	74	54.21	32.12	7.73	31.58	124	247	P	H
		2483.5	49.67	-4.33	54	41.4	32.12	7.73	31.58	124	247	A	H
	*	2462	107.42	-	-	99.19	32.13	7.7	31.6	124	247	P	H
	*	2462	99.32	-	-	91.09	32.13	7.7	31.6	124	247	A	H
		2484.04	59.52	-14.48	74	51.25	32.12	7.73	31.58	373	304	P	V
		2483.5	48.62	-5.38	54	40.35	32.12	7.73	31.58	373	304	A	V
	*	2464	104.88	-	-	96.65	32.13	7.7	31.6	373	304	P	V
	*	2462	96.97	-	-	88.74	32.13	7.7	31.6	373	304	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 ANT 2 (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)	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	43.94	-30.06	74	58.61	34.31	11.06	60.04	300	0	P	H
		4824	44.91	-29.09	74	59.58	34.31	11.06	60.04	300	360	P	V
802.11g CH 06 2437MHz		4872	46.05	-27.95	74	60.7	34.34	11.04	60.03	300	0	P	H
		7308	43.97	-30.03	74	55.06	35.94	13.48	60.51	300	0	P	H
		4872	46.21	-27.79	74	60.86	34.34	11.04	60.03	300	360	P	V
		7308	43.3	-30.7	74	54.39	35.94	13.48	60.51	300	360	P	V
802.11g CH 11 2462MHz		4926	43.95	-30.05	74	58.58	34.36	11.03	60.02	300	0	P	H
		7386	43.92	-30.08	74	54.98	35.92	13.55	60.53	300	0	P	H
		4926	44.89	-29.11	74	59.52	34.36	11.03	60.02	300	360	P	V
		7386	43.9	-30.1	74	54.96	35.92	13.55	60.53	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 HT20 ANT 1+2 (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		2389.3	61.95	-12.05	74	53.81	32.2	7.59	31.65	303	250	P	H
		2389.95	50.78	-3.22	54	42.64	32.2	7.59	31.65	303	250	A	H
	*	2412	111.16	-	-	103.01	32.18	7.62	31.65	303	250	P	H
	*	2410	103.2	-	-	95.05	32.18	7.62	31.65	303	250	A	H
		2389.95	60.67	-13.33	74	52.53	32.2	7.59	31.65	397	175	P	V
		2389.95	49.09	-4.91	54	40.95	32.2	7.59	31.65	397	175	A	V
	*	2412	107.85	-	-	99.7	32.18	7.62	31.65	397	175	P	V
	*	2410	99.35	-	-	91.2	32.18	7.62	31.65	397	175	A	V
802.11n HT20 CH 11 2462MHz		2483.5	60.1	-13.9	74	51.83	32.12	7.73	31.58	124	234	P	H
		2483.5	50.01	-3.99	54	41.74	32.12	7.73	31.58	124	234	A	H
	*	2466	109.85	-	-	101.62	32.13	7.7	31.6	124	234	P	H
	*	2466	101.22	-	-	92.99	32.13	7.7	31.6	124	234	A	H
		2483.92	58.32	-15.68	74	50.05	32.12	7.73	31.58	375	148	P	V
		2483.5	47.99	-6.01	54	39.72	32.12	7.73	31.58	375	148	A	V
	*	2466	106.77	-	-	98.54	32.13	7.7	31.6	375	148	P	V
	*	2466	98.31	-	-	90.08	32.13	7.7	31.6	375	148	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 ANT 1+2 (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)	Preamplifier Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11n HT20 CH 01 2412MHz		4824	42.14	-31.86	74	56.81	34.31	11.06	60.04	300	0	P	H
		4824	43.38	-30.62	74	58.05	34.31	11.06	60.04	300	360	P	V
802.11n HT20 CH 06 2437MHz		4872	46.15	-27.85	74	60.8	34.34	11.04	60.03	300	0	P	H
		7308	44.87	-29.13	74	55.96	35.94	13.48	60.51	300	0	P	H
		4872	46.53	-27.47	74	61.18	34.34	11.04	60.03	300	360	P	V
		7308	43.69	-30.31	74	54.78	35.94	13.48	60.51	300	360	P	V
802.11n HT20 CH 11 2462MHz		4926	46.14	-27.86	74	60.77	34.36	11.03	60.02	300	0	P	H
		7386	43.42	-30.58	74	54.48	35.92	13.55	60.53	300	0	P	H
		4926	45.84	-28.16	74	60.47	34.36	11.03	60.02	300	360	P	V
		7386	43.58	-30.42	74	54.64	35.92	13.55	60.53	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 ANT 1+2 (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		2389.95	58.59	-15.41	74	50.45	32.2	7.59	31.65	100	225	P	H
		2389.95	49.71	-4.29	54	41.57	32.2	7.59	31.65	100	225	A	H
		2496.58	56.59	-17.41	74	48.29	32.1	7.76	31.56	100	225	P	H
		2494.78	46.42	-7.58	54	38.12	32.1	7.76	31.56	100	225	A	H
	*	2410	101.96	-	-	93.81	32.18	7.62	31.65	100	225	P	H
	*	2412	94.3	-	-	86.15	32.18	7.62	31.65	100	225	A	H
		2389.17	56.74	-17.26	74	48.6	32.2	7.59	31.65	396	169	P	V
		2389.82	48.02	-5.98	54	39.88	32.2	7.59	31.65	396	169	A	V
		2498.86	56.54	-17.46	74	48.24	32.1	7.76	31.56	396	169	P	V
		2495.02	46.13	-7.87	54	37.83	32.1	7.76	31.56	396	169	A	V
	*	2418	98.41	-	-	90.24	32.18	7.62	31.63	396	169	P	V
	*	2418	90.2	-	-	82.03	32.18	7.62	31.63	396	169	A	V
802.11n HT40 CH 09 2452MHz		2389.17	56.73	-17.27	74	48.59	32.2	7.59	31.65	113	251	P	H
		2389.43	46.49	-7.51	54	38.35	32.2	7.59	31.65	113	251	A	H
		2483.74	59.13	-14.87	74	50.86	32.12	7.73	31.58	113	251	P	H
		2483.5	50.13	-3.87	54	41.86	32.12	7.73	31.58	113	251	A	H
	*	2450	105.9	-	-	97.69	32.15	7.67	31.61	113	251	P	H
	*	2450	98.2	-	-	89.99	32.15	7.67	31.61	113	251	A	H
		2324.17	55.93	-18.07	74	48.11	32.02	7.47	31.67	338	167	P	V
		2387.87	45.68	-8.32	54	37.54	32.2	7.59	31.65	338	167	A	V
		2483.8	58	-16	74	49.73	32.12	7.73	31.58	338	167	P	V
		2483.5	49.19	-4.81	54	40.92	32.12	7.73	31.58	338	167	A	V
	*	2448	104.31	-	-	96.1	32.15	7.67	31.61	338	167	P	V
	*	2448	96.03	-	-	87.82	32.15	7.67	31.61	338	167	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		4842	41.82	-32.18	74	56.48	34.32	11.05	60.03	300	0	P	H
HT40		7266	42.3	-31.7	74	53.42	35.94	13.45	60.51	300	0	P	H
CH 03		4842	40.9	-33.1	74	55.56	34.32	11.05	60.03	300	360	P	V
2422MHz		7266	42.33	-31.67	74	53.45	35.94	13.45	60.51	300	360	P	V
802.11n		4872	44.25	-29.75	74	58.9	34.34	11.04	60.03	300	0	P	H
HT40		7308	43.2	-30.8	74	54.29	35.94	13.48	60.51	300	0	P	H
CH 06		4872	43.35	-30.65	74	58	34.34	11.04	60.03	300	360	P	V
2437MHz		7308	42.07	-31.93	74	53.16	35.94	13.48	60.51	300	360	P	V
802.11n		4902	41.92	-32.08	74	56.56	34.35	11.03	60.02	300	0	P	H
HT40		7356	43.36	-30.64	74	54.43	35.93	13.52	60.52	300	0	P	H
CH 09		4902	41.77	-32.23	74	56.41	34.35	11.03	60.02	300	360	P	V
2452MHz		7356	42.71	-31.29	74	53.78	35.93	13.52	60.52	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

Emission below 1GHz

WIFI 802.11n HT20 (LF)

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)
5GHz 802.11n HT20 LF		57.16	24.11	-15.89	40	42.26	13.88	1.13	33.16	-	-	P	H
		113.42	30.61	-12.89	43.5	43.93	17.94	1.61	32.87	-	-	P	H
		170.65	36.96	-6.54	43.5	50.88	17.01	1.99	32.92	200	0	P	H
		235.64	28.33	-17.67	46	40.58	18.51	2.34	33.1	-	-	P	H
		323.91	37.18	-8.82	46	46.56	20.78	2.74	32.9	-	-	P	H
		458.74	30.54	-15.46	46	36.23	23.76	3.27	32.72	-	-	P	H
		38.73	31.78	-8.22	40	43.17	20.5	0.89	32.78	-	-	P	V
		56.19	33.33	-6.67	40	51.35	14.04	1.12	33.18	-	-	P	V
		77.53	31.04	-8.96	40	48.83	13.78	1.33	32.9	-	-	P	V
		115.36	28.04	-15.46	43.5	41.37	17.92	1.62	32.87	-	-	P	V
		174.53	37.32	-6.18	43.5	51.35	16.91	2.01	32.95	100	360	P	V
		307.42	30.42	-15.58	46	40.27	20.38	2.67	32.9	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against 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	Cable	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
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													
2412MHz		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

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)

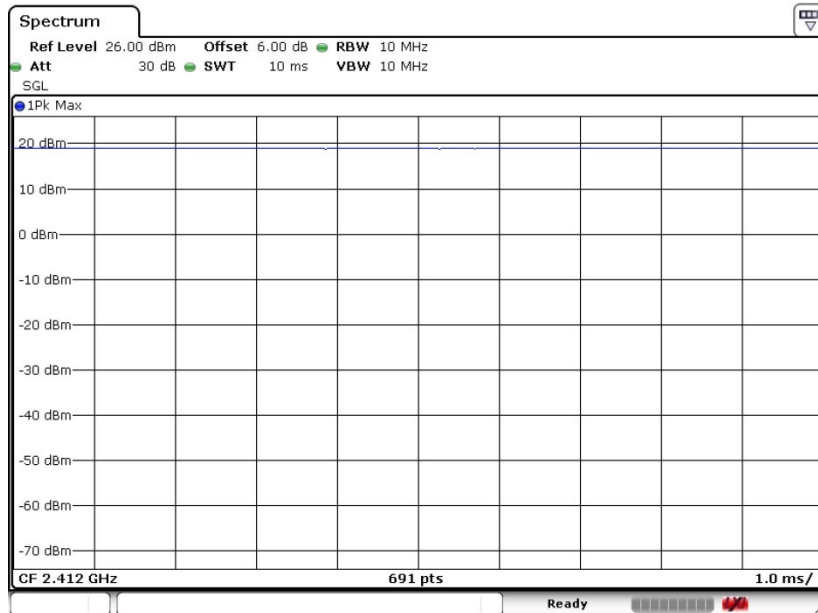
Both peak and average measured complies with the limit line, so test result is “PASS”.

Appendix D. Duty Cycle Plots

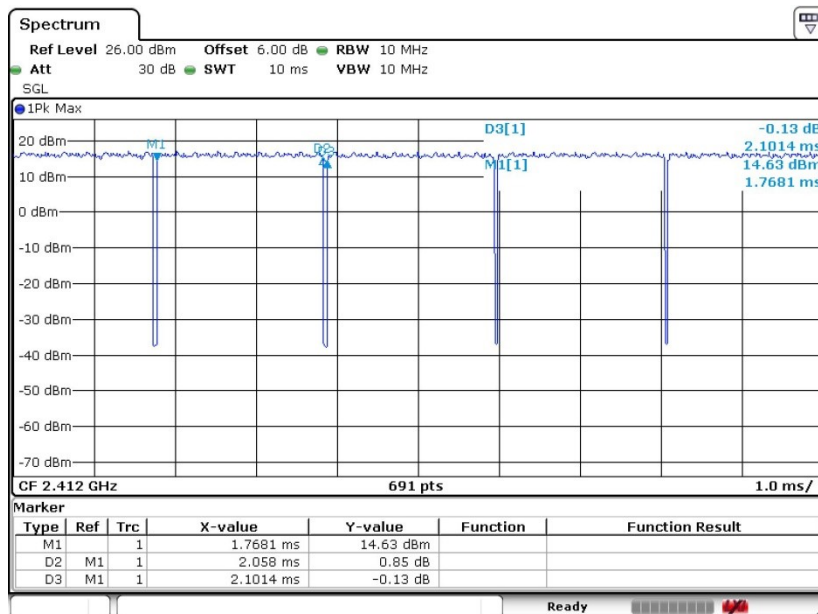
Band		Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11b	ANT 1	100	-	-	10Hz
802.11g	ANT 1	97.93	2.058	0.486	500Hz
802.11b	ANT 2	100	-	-	10Hz
802.11g	ANT 2	98.62	-	-	10Hz
802.11n HT20	ANT 1+2	98.16	-	-	10Hz
802.11n HT40	ANT 1+2	94.93	0.95	1.05	1.1kHz

ANT 1

802.11b



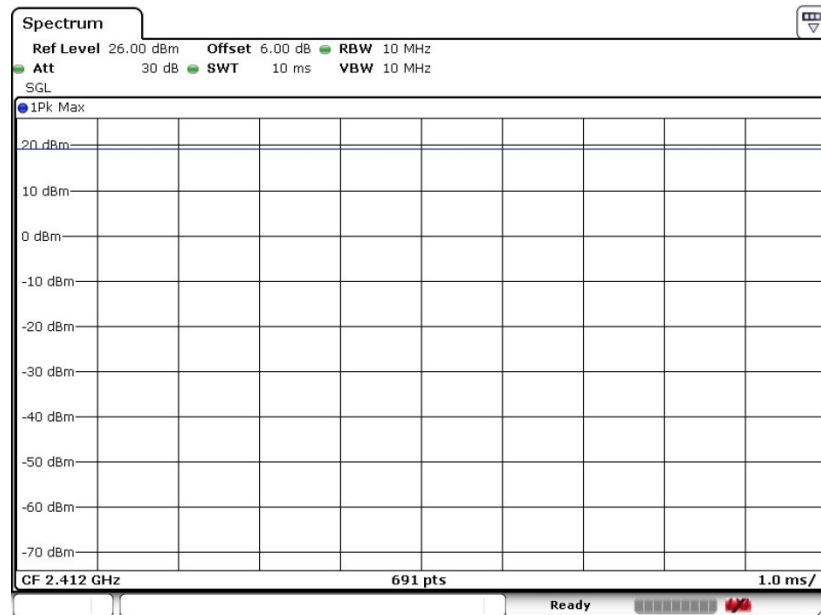
802.11g



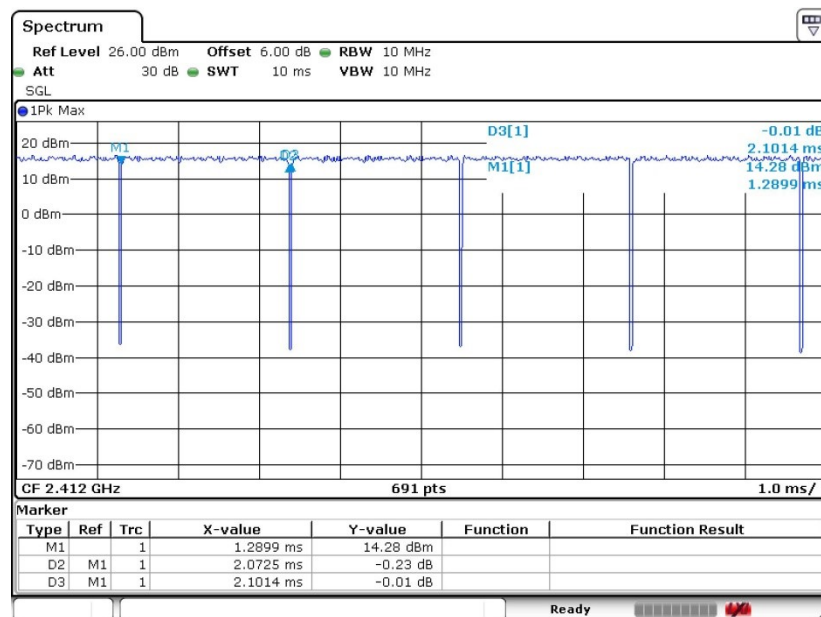


ANT 2

802.11b



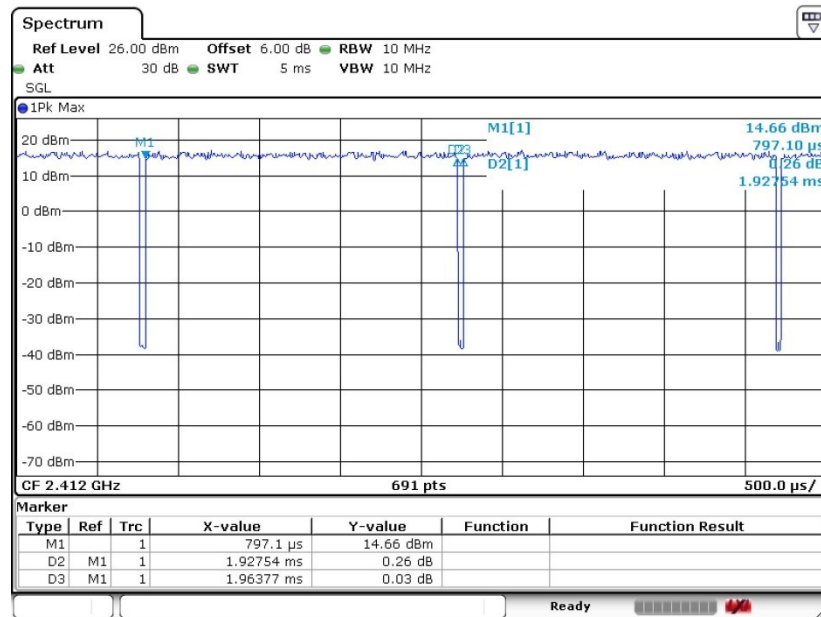
802.11g





ANT 1+2

802.11n HT20



802.11n HT40

