



TEST REPORT

Product Name: WIFI MODULE
FCC ID: 2BGY7-HZ
Trademark: N/A
Model Number: HZ-LY22UV1.0
Prepared For: Huizhou Huizhi Technology Co., Ltd
Address: 356 Longhai Fourth Road, Dayawan West District, Huizhou City, China
Manufacturer: Huizhou Huizhi Technology Co., Ltd
Address: 356 Longhai Fourth Road, Dayawan West District, Huizhou City, China
Prepared By: Shenzhen CTB Testing Technology Co., Ltd.
Address: 1&2/F., Building A, No.26, Xinhe Road, Xinqiao, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China
Sample Received Date: May. 07, 2024
Sample tested Date: May. 07, 2024 to Jun. 05, 2024
Issue Date: Jun. 05, 2024
Report No.: CTB240523068RFX
Test Standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247
ANSI C63.10:2013
Test Results: PASS
Remark: This is WIFI-2.4GHz band radio test report.

Compiled by:

Reviewed by:

Approved by:

Zhou kui

Arron Liu



Zhou Kui

Arron Liu

Bin Mei / Director

Note: If there is any objection to the inspection results in this report, please submit a written report to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen CTB Testing Technology Co., Ltd. this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client. "*" indicates the testing items were fulfilled by subcontracted lab. "#" indicates the items are not in CNAS accreditation scope.

TABLE OF CONTENT

Test Report Declaration	Page
1. VERSION.....	3
2. TEST SUMMARY	4
3. MEASUREMENT UNCERTAINTY	5
4. PRODUCT INFORMATION AND TEST SETUP	6
4.1 Product Information	6
4.2 Test Setup Configuration.....	6
4.3 Support Equipment.....	6
4.4 Channel List	6
4.5 Test Mode	7
4.6 Test Environment	7
5. TEST FACILITY AND TEST INSTRUMENT USED	8
5.1 Test Facility	8
5.2 Test Instrument Used	8
6. AC POWER LINE CONDUCTED EMISSION	11
6.1 Block Diagram Of Test Setup.....	11
6.2 Limit.....	11
6.3 Test procedure	11
6.4 Test Result	13
7. RADIATED SPURIOUS EMISSION	15
7.1 Block Diagram Of Test Setup.....	15
7.2 Limit.....	15
7.3 Test procedure	16
7.4 Test Result	17
8. BAND EDGE AND RF CONDUCTED SPURIOUS EMISSIONS	59
8.1 Block Diagram Of Test Setup.....	59
8.2 Limit.....	59
8.3 Test procedure	59
9. CONDUCTED OUTPUT POWER.....	76
9.1 Block Diagram Of Test Setup.....	76
9.2 Limit.....	76
9.3 Test procedure	76
9.4 Test Result	77
10. 6DB OCCUPIED BANDWIDTH.....	78
10.1 Block Diagram Of Test Setup.....	78
10.2 Limit.....	78
10.3 Test procedure	78
10.4 Test Result	79
11. POWER SPECTRAL DENSITY.....	89
11.1 Block Diagram Of Test Setup.....	89
11.2 Limit.....	89
11.3 Test procedure	89
11.4 Test Result	90
12. ANTENNA REQUIREMENT	99
13. EUT TEST SETUP PHOTOGRAPHS.....	100

(Note: N/A means not applicable)



1. VERSION

Report No.	Issue Date	Description	Approved
CTB240523068RFX	Jun. 05, 2024	Original	Valid

2. TEST SUMMARY

The Product has been tested according to the following specifications:

Test Item	Test Requirement	Test method	Result
AC Power Line Conducted Emission	47 CFR Part 15 Subpart C Section 15.207	ANSI C63.10-2013	PASS
Radiated Spurious emissions	47 CFR Part 15 Subpart C Section 15.205/15.209	ANSI C63.10-2013	PASS
Band edge and RF Conducted Spurious Emissions	47 CFR Part 15 Subpart C Section 15.247(d)/15.205(a)	ANSI C63.10-2013	PASS
Conducted Peak Output Power	47 CFR Part 15 Subpart C Section 15.247 (b)(3)	ANSI C63.10-2013	PASS
6dB Occupied Bandwidth	47 CFR Part 15 Subpart C Section 15.247 (a)(2)	ANSI C63.10-2013	PASS
Power Spectral Density	47 CFR Part 15 Subpart C Section 15.247 (e)	ANSI C63.10-2013/ KDB 558074 D01 v05r02	PASS
Antenna Requirement	47 CFR Part 15 Subpart C Section 15.203/15.247 (b)	/	PASS
RF Exposure Evaluation	47 CFR Part 15 Subpart C Section 15.247 (i)/1.1310/2.1091	KDB447498D01v06	PASS

Remark:

Test according to ANSI C63.10-2013.

3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

Item	Uncertainty
Occupancy bandwidth	$U=\pm 54.3\text{Hz}$
Conducted output power Above 1G	$U=\pm 1.0\text{dB}$
Conducted output power below 1G	$U=\pm 0.9\text{dB}$
Power Spectral Density , Conduction	$U=\pm 1.0\text{dB}$
Conduction spurious emissions	$U=\pm 2.8\text{dB}$
Out of band emission	$U=\pm 54\text{Hz}$
3m chamber Radiated spurious emission(9KHz-30MHz)	$U=\pm 4.8\text{dB}$
3m chamber Radiated spurious emission(30MHz-1GHz)	$U=\pm 4.3\text{dB}$
3m chamber Radiated spurious emission(1GHz-18GHz)	$U=\pm 4.5\text{dB}$
3m chamber Radiated spurious emission(1GHz-40GHz)	$U=\pm 4.8\text{dB}$
humidity uncertainty	$U=\pm 5.3\%$
Temperature uncertainty	$U=\pm 0.59^{\circ}\text{C}$
Supply voltages	$U=\pm 3\%$
Time	$U=\pm 5\%$
Conducted Emission (9KHz-30MHz)	3.2 dB

4. PRODUCT INFORMATION AND TEST SETUP

4.1 Product Information

Model(s):	HZ-LY22UV1.0
Model Description:	N/A
Wi-Fi Specification:	IEEE 802.11b/g/n
Hardware Version:	V1.0
Software Version:	V1.0
Operation Frequency:	WiFi: IEEE 802.11b/g/n 20: 2412-2462MHz/ 11 channel IEEE 802.11n 40: 2422-2452MHz/ 7 channel
Max. RF output power:	WiFi (2.4G): 17.601dBm
Type of Modulation:	WiFi (2.4G): DSSS, OFDM
Antenna installation:	WiFi (2.4G): Built-in antenna
Antenna Gain:	WiFi (2.4G): Ant1: 2.31dBi Ant2: 2.31dBi
Ratings:	DC 5V by notebook

4.2 Test Setup Configuration

See test photographs attached in EUT TEST SETUP PHOTOGRAPHS for the actual connections between Product and support equipment

4.3 Support Equipment

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
1.	Laptop	DELL	Vostro 5490	N/A	N/A

Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.4 Channel List

CH	Frequency (MHz)	CH	Frequency (MHz)	CH	Frequency (MHz)	CH	Frequency (MHz)
1	2412	2	2417	3	2422	4	2427
5	2432	6	2437	7	2442	8	2447
9	2452	10	2457	11	2462		

4.5 Test Mode

All test mode(s) and condition(s) mentioned were considered and evaluated respectively by performing full tests, the worst data were recorded and reported.

ANT 1, ANT 2

Test mode	Low channel	Middle channel	High channel
Transmitting(802.11b/g/n20)	2412MHz	2437MHz	2462MHz
Transmitting(802.11n40)	2422MHz	2437MHz	2452MHz

MIMO(ANT 1+ANT 2)

Test mode	Low channel	Middle channel	High channel
Transmitting(802.11n20)	2412MHz	2437MHz	2462MHz
Transmitting(802.11n40)	2422MHz	2437MHz	2452MHz

EUT has two Internal Antenna with Max Antenna Gain 2.31dBi on every antenna, CDD device with two spatial streams, according to KDB662911 D01 v02r01,

Directional gain= GANT + Array Gain, where Array Gain is as follows.

1) For power spectral density(PSD) measurements,

Array Gain=10log(NANT/NSS)dB=10log(2/1)=1.16dB,

So the directional gain for PSD is 3.47dBi

2) For power measurements,

The Array gain=0 dB for NANT≤4,

So the directional gain for Power measurements is 2.31dBi

NOTE: Dutycycle>98%.

Test mode	Rate
802.11b	11M
802.11g	54M
802.11n20	65M
802.11n40	65M

4.6 Test Environment

Humidity(%):	54
Atmospheric Pressure(kPa):	101
Normal Voltage(DC):	5V
Normal Temperature(°C)	23
Low Temperature(°C)	0
High Temperature(°C)	50

5. TEST FACILITY AND TEST INSTRUMENT USED

5.1 Test Facility

All measurement facilities used to collect the measurement data are located at 1&2F., Building A, No. 26, Xinghe Road, Xinqiao, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

5.2 Test Instrument Used

No.	Equipment	Manufacturer	Type No.	Serial No.	Firmware Version	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY52090073	A.14.16	2024.07.05
2	Power Sensor	Agilent	U2021XA	MY56120032	/	2024.07.05
3	Power Sensor	Agilent	U2021XA	MY56120034	/	2024.07.05
4	Communication test set	R&S	CMW500	108058	V3.5.80	2024.07.05
5	Spectrum Analyzer	KEYSIGHT	N9020A	MY51289897	A.14.16	2024.07.05
6	Signal Generator	Agilent	N5181A	MY50140365	A.01.60	2024.07.05
7	Vector signal generator	Agilent	N5182A	MY47420195	A.01.87	2024.07.05
8	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2024.07.06
9	2.4 GHz Filter	Shenxiang	MSF2400-24 83.5MS-1154	20181015001	/	2024.07.05
10	5 GHz Filter	Shenxiang	MSF5150-58 50MS-1155	20181015001	/	2024.07.06
11	Filter	Xingbo	XBLBQ-DZA 120	190821-1-1	/	2024.07.06
12	BT&WI-FI Automatic test software	Microwave	MTS8000	Ver. 2.0.0.0	/	/
13	Rohde & Schwarz SFU Broadcast Test System	R&S	SFU	101017	/	2024.10.30
14	Temperature humidity chamber	Hongjing	TH-80CH	DG-15174	/	2024.07.05
15	234G Automatic test software	Microwave	MTS8200	Ver. 2.0.0.0	/	/
16	966 chamber	C.R.T.	966	/	/	2024.08.11
17	Receiver	R&S	ESPI	100362	RF_ATTEN_7 (104489/003)	2024.07.05
18	Amplifier	HP	8447E	2945A02747	/	2024.07.05
19	Amplifier	Agilent	8449B	3008A01838	/	2024.07.05
20	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	00869	/	2024.07.08

21	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA9120D	01911	/	2024.07.08
22	EMI test software	Fala	EZ-EMC	FA-03A2 RE	/	/
23	Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-224	/	2024.07.08
24	loop antenna	ZHINAN	ZN30900A	GTS534	/	/
25	40G Horn antenna	A/H/System	SAS-574	588	/	2024.10.30
26	Amplifier	AEROFLEX	Aeroflex	097	/	2024.07.05
27	Power Metter	KEYSIGHT	N1912AP	N/A	A.05.00	2024.07.05

Continuous disturbance

No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Calibrated until
1	LISN	ROHDE&SCHWARZ	ESH3-Z5	100318	/	2024.07.05
2	Pulse limiter	ROHDE&SCHWARZ	ESH3Z2	357881052	/	2024.07.05
3	EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100428/003	V4.42.SP3	2024.07.05
4	Coaxial cable	ZDECL	Z302S-NJ-SM AJ-12M	18091905	/	2024.07.05
5	ISN	Schwarzbeck	NTFM8158	183	/	2024.07.05
6	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2024.07.05
7	Communication test set	R&S	CMW500	108058	V3.5.80	2024.07.05
8	EZ-EMC	Frad	EMC-con3A1.1	/	/	/

Radiated emission

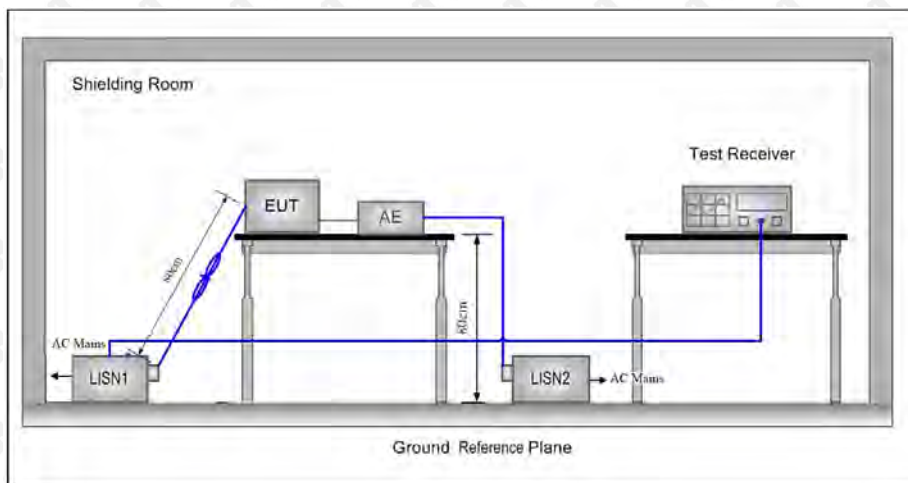
No.	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Calibrated until
1	Double Ridged Broadband Horn Antenna	Schwarzbeck	BBHA 9120 D	01911	/	2024.07.08
2	TRILOG Broadband Antenna	Schwarzbeck	VULB 9168	00869	/	2024.07.08
3	Amplifier	Agilent	8449B	3008A01838	/	2024.07.05
4	Amplifier	HP	8447E	2945A02747	/	2024.07.05
5	EMI TEST RECEIVER	ROHDE&SCHWARZ	ESCI	100428/003	V4.42.SP3	2024.07.05
6	Coaxial cable	ETS	RFC-SNS-100-N MS-80 NI	/	/	2024.07.05
7	Coaxial cable	ETS	RFC-SNS-100-N MS-20 NI	/	/	2024.07.05
8	Coaxial cable	ETS	RFC-SNS-100-S MS-20 NI	/	/	2024.07.05
9	Coaxial cable	ETS	RFC-NNS-100- NMS-300 NI	/	/	2024.07.05
10	Communication test set	Agilent	E5515C	MY50102567	B.19.07 (E1962B)	2024.07.05



11	Communication test set	R&S	CMW500	108058	V3.5.80	2024.07.05
12	EZ-EMC	Frad	EMC-con3A1.1	/	/	/

6. AC POWER LINE CONDUCTED EMISSION

6.1 Block Diagram Of Test Setup



6.2 Limit

Table 4 – AC power-line conducted emissions limits

Frequency (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 ^{Note 1}	56 to 46 ^{Note 1}
0.5 - 5	56	46
5 - 30	60	50

Note 1: The level decreases linearly with the logarithm of the frequency.

* Decreasing linearly with the logarithm of the frequency

6.3 Test procedure

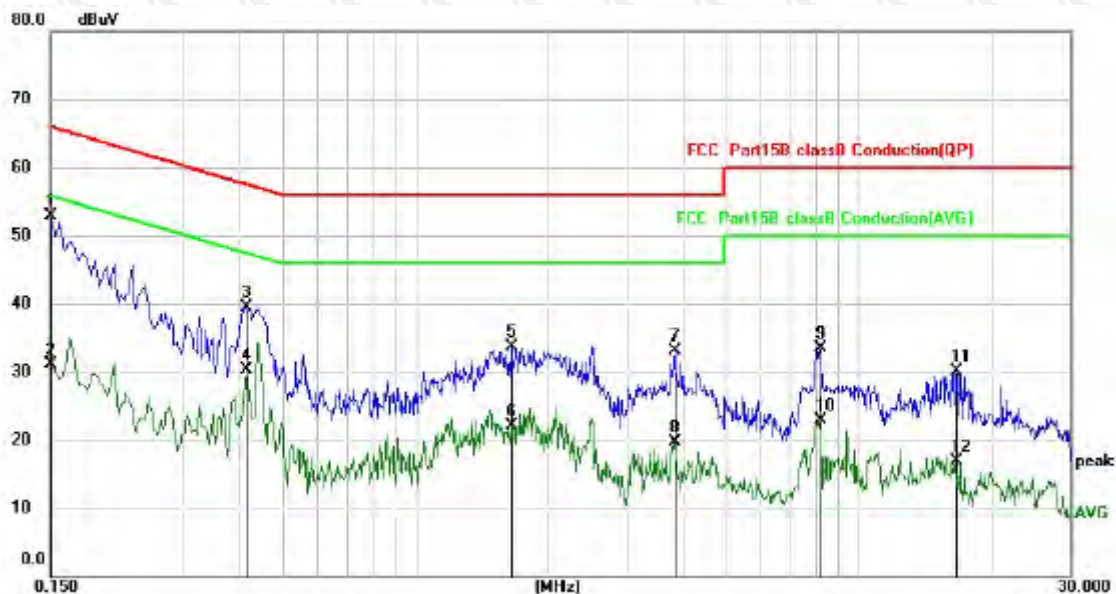
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0,4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane.

This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0,8 m from the LISN 2.

- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

6.4 Test Result

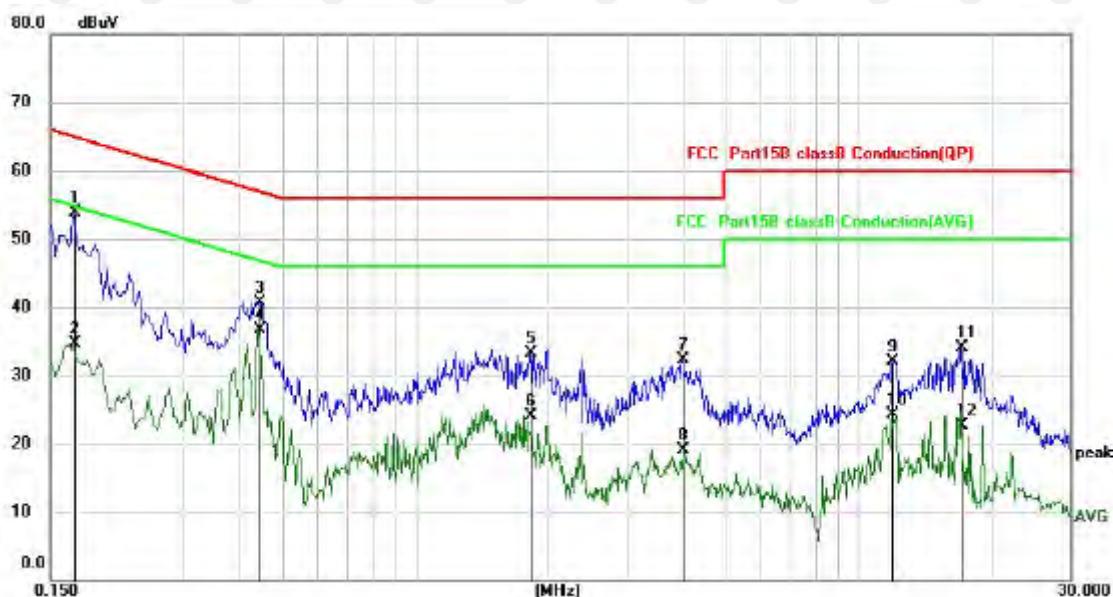
Test Specification: Line
AC 120V 60Hz



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV	dBuV	dB	
1	*	0.1500	42.90	9.95	52.85	66.00	-13.15	QP
2		0.1500	21.15	9.95	31.10	56.00	-24.90	AVG
3		0.4138	29.53	9.98	39.51	57.57	-18.06	QP
4		0.4138	20.39	9.98	30.37	47.57	-17.20	AVG
5		1.6500	23.57	10.06	33.63	56.00	-22.37	QP
6		1.6500	12.01	10.06	22.07	46.00	-23.93	AVG
7		3.8580	22.87	10.27	33.14	56.00	-22.86	QP
8		3.8580	9.46	10.27	19.73	46.00	-26.27	AVG
9		8.1500	22.95	10.54	33.49	60.00	-26.51	QP
10		8.1500	12.35	10.54	22.89	50.00	-27.11	AVG
11		16.5619	19.40	10.76	30.16	60.00	-29.84	QP
12		16.5619	6.13	10.76	16.89	50.00	-33.11	AVG

Remark: Factor = Cable loss + LISN factor, Margin = Measurement – Limit

Test Specification: Neutral
AC 120V 60Hz



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.1700	43.93	9.95	53.88	64.96	-11.08	QP
2		0.1700	24.76	9.95	34.71	54.96	-20.25	AVG
3		0.4460	30.80	9.98	40.78	56.95	-16.17	QP
4	*	0.4460	26.67	9.98	36.65	46.95	-10.30	AVG
5		1.8100	23.15	10.07	33.22	56.00	-22.78	QP
6		1.8100	13.94	10.07	24.01	46.00	-21.99	AVG
7		4.0060	22.11	10.28	32.39	56.00	-23.61	QP
8		4.0060	8.73	10.28	19.01	46.00	-26.99	AVG
9		11.9259	21.48	10.64	32.12	60.00	-27.88	QP
10		11.9259	13.61	10.64	24.25	50.00	-25.75	AVG
11		17.0856	23.36	10.77	34.13	60.00	-25.87	QP
12		17.0856	11.85	10.77	22.62	50.00	-27.38	AVG

Remark: Factor = Cable loss + LISN factor, Margin = Measurement – Limit

7. RADIATED SPURIOUS EMISSION

7.1 Block Diagram Of Test Setup

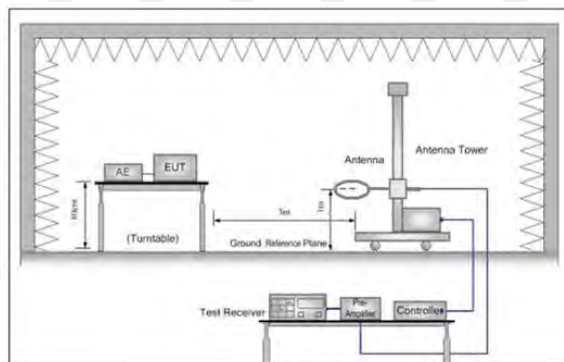


Figure 1. Below 30MHz

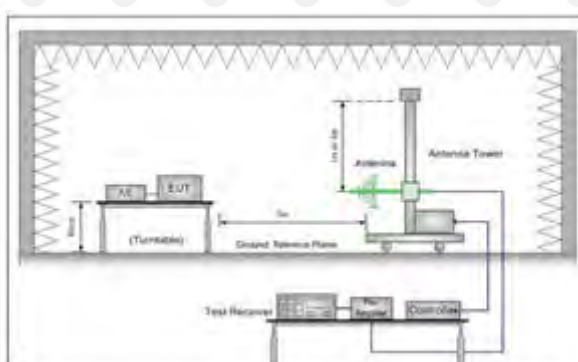


Figure 2. 30MHz to 1GHz

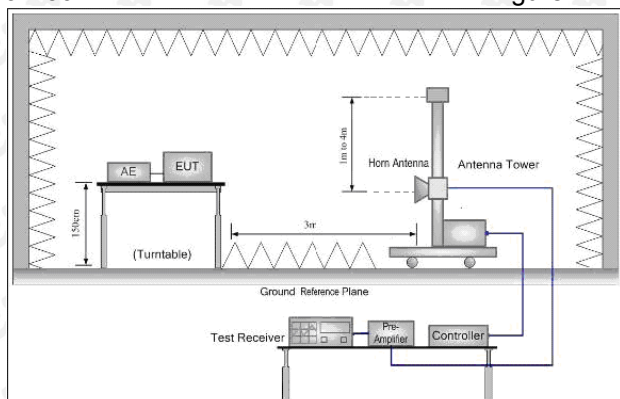


Figure 3. Above 1GHz

7.2 Limit

Spurious Emissions:

Frequency	Field strength (microvolt/meter)	Limit (dB μ V/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F (kHz)	-	-	300
0.490MHz-1.705MHz	24000/F (kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

7.3 Test procedure

Below 1GHz test procedure as below:

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rota table table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

Above 1GHz test procedure as below:

- g. Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 meter to 1.5 meter(Above 18GHz the distance is 1 meter and table is 1.5 meter).
- h. Test the EUT in the lowest channel ,the middle channel ,the Highest channel
- j. Repeat above procedures until all frequencies measured was complete.

Receiver set:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30KHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30KHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30KHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30KHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30KHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Quasi-peak	120 kHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement –X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

7.4 Test Result

After pre-scanning three directions, the report recorded the worst case

Below 1GHz Test Results:

Antenna polarity: H



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		39.0245	26.73	-5.03	21.70	40.00	-18.30	QP
2		66.0342	26.26	-7.53	18.73	40.00	-21.27	QP
3		149.2239	28.61	-3.26	25.35	43.50	-18.15	QP
4		254.7284	30.16	-6.70	23.46	46.00	-22.54	QP
5		504.7062	31.54	0.16	31.70	46.00	-14.30	QP
6	*	948.7610	26.74	7.36	34.10	46.00	-11.90	QP

Remark: Factor = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit - Level

Antenna polarity: V



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		38.6838	26.76	-5.12	21.64	40.00	-18.36	QP
2		58.4074	26.78	-6.72	20.06	40.00	-19.94	QP
3		153.2003	28.57	-3.29	25.28	43.50	-18.22	QP
4	*	245.9509	39.66	-6.95	32.71	46.00	-13.29	QP
5		431.0315	32.89	-1.47	31.42	46.00	-14.58	QP
6		965.5420	28.02	7.53	35.55	54.00	-18.45	QP

Remark: Factor = Cable lose + Antenna factor - Pre-amplifier; Margin = Limit – Level

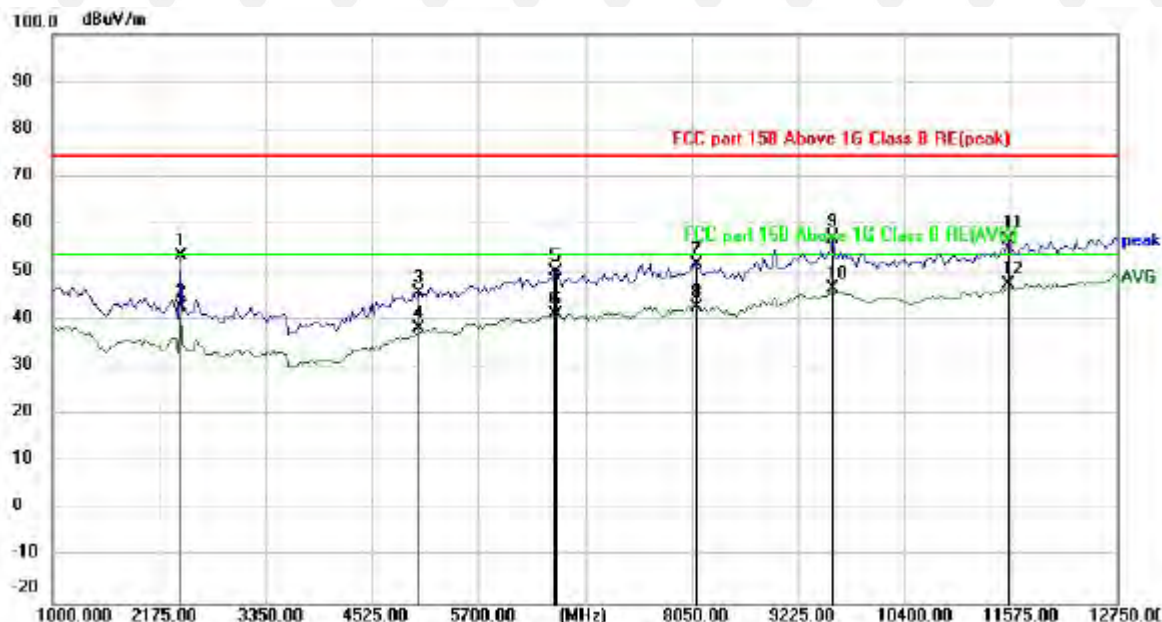
1. The margin of 9K-30MH measurement exceeds 20dB, so the test chart is not included.

2. All modes have been tested, and the test results show that ANT2 b-mode data is the worst, only ANT2 b-mode test chart is put.

Above 1 GHz Test Results:

ANT1 LOW CH1 (802.11b Mode)/2412

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	52.91	0.71	53.62	74.00	-20.38	peak
2		2410.000	42.17	0.71	42.88	54.00	-11.12	AVG
3		5053.750	37.93	7.90	45.83	74.00	-28.17	peak
4		5053.750	30.54	7.90	38.44	54.00	-15.56	AVG
5		6551.875	38.98	11.31	50.29	74.00	-23.71	peak
6		6551.875	29.93	11.31	41.24	54.00	-12.76	AVG
7		8108.750	38.17	13.70	51.87	74.00	-22.13	peak
8		8108.750	29.27	13.70	42.97	54.00	-11.03	AVG
9		9606.875	39.84	17.56	57.40	74.00	-16.60	peak
10		9606.875	29.13	17.56	46.69	54.00	-7.31	AVG
11		11545.62	39.46	17.49	56.95	74.00	-17.05	peak
12	*	11545.62	30.15	17.49	47.64	54.00	-6.36	AVG

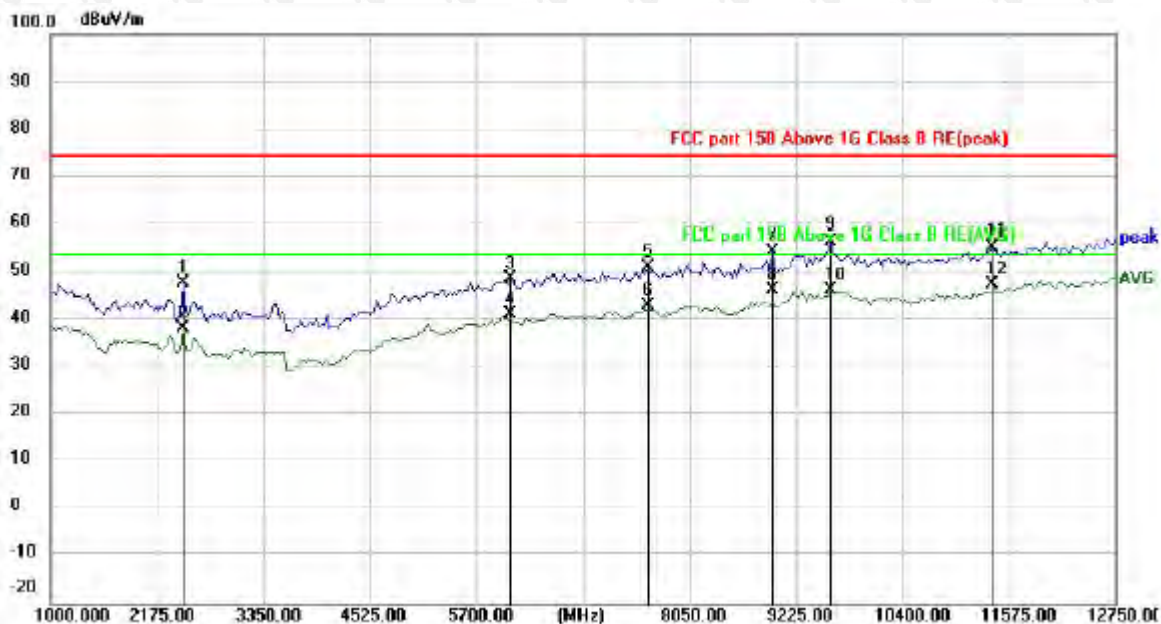
Vertical:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		1734.375	42.68	3.23	45.91	74.00	-28.09	peak
2		1734.375	33.52	3.23	36.75	54.00	-17.25	AVG
3		3408.750	42.17	1.72	43.89	74.00	-30.11	peak
4		3408.750	34.20	1.72	35.92	54.00	-18.08	AVG
5		5670.625	39.10	9.43	48.53	74.00	-25.47	peak
6		5670.625	30.67	9.43	40.10	54.00	-13.90	AVG
7		7580.000	40.19	13.33	53.52	74.00	-20.48	peak
8		7580.000	30.37	13.33	43.70	54.00	-10.30	AVG
9		9606.875	41.26	17.56	58.82	74.00	-15.18	peak
10		9606.875	29.81	17.56	47.37	54.00	-6.63	AVG
11		11927.50	40.08	17.76	57.84	74.00	-16.16	peak
12	*	11927.50	30.62	17.76	48.38	54.00	-5.62	AVG

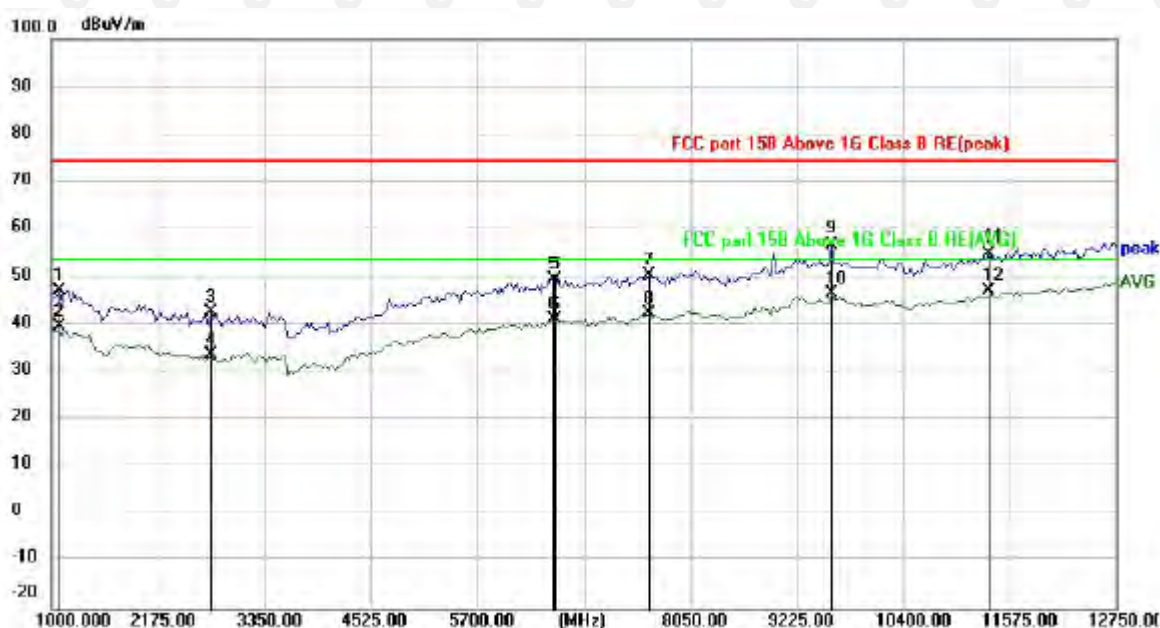
ANT1 MID CH6 (802.11b Mode)/2437

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2468.750	47.63	0.40	48.03	74.00	-25.97	peak
2		2468.750	37.87	0.40	38.27	54.00	-15.73	AVG
3		6081.875	38.37	10.52	48.89	74.00	-25.11	peak
4		6081.875	30.86	10.52	41.38	54.00	-12.62	AVG
5		7580.000	37.96	13.33	51.29	74.00	-22.71	peak
6		7580.000	29.70	13.33	43.03	54.00	-10.97	AVG
7		8960.625	38.77	15.85	54.62	74.00	-19.38	peak
8		8960.625	30.48	15.85	46.33	54.00	-7.67	AVG
9		9606.875	38.95	17.56	56.51	74.00	-17.49	peak
10		9606.875	28.79	17.56	46.35	54.00	-7.65	AVG
11		11398.75	38.15	17.36	55.51	74.00	-18.49	peak
12	*	11398.75	30.25	17.36	47.61	54.00	-6.39	AVG

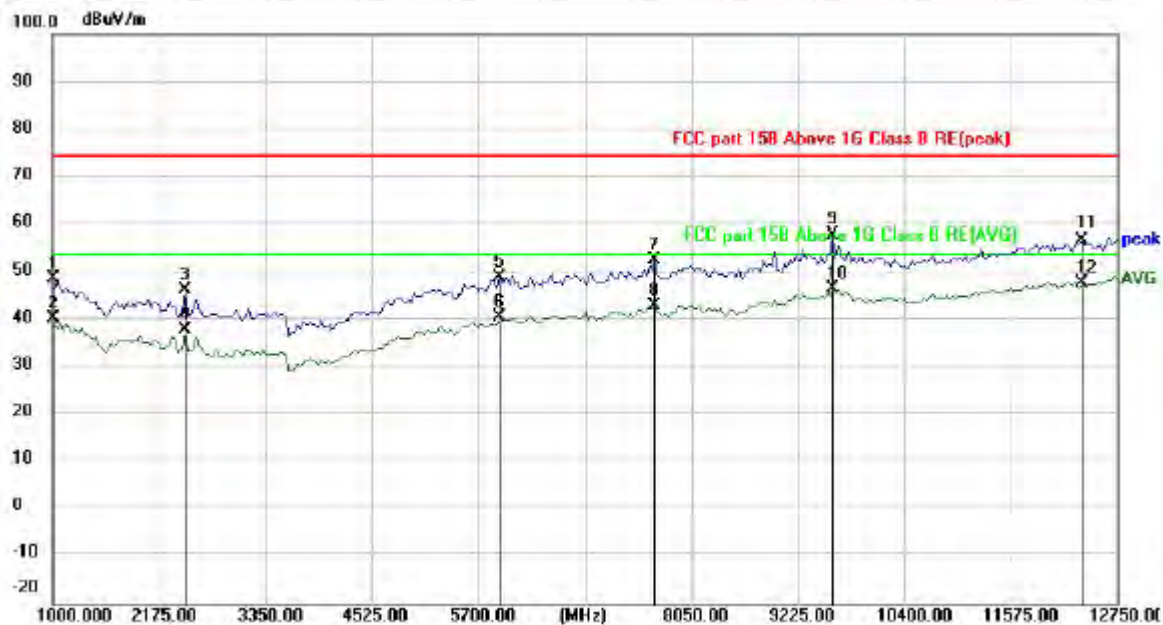
Vertical:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		1088.125	43.37	4.03	47.40	74.00	-26.60	peak
2		1088.125	35.93	4.03	39.96	54.00	-14.04	AVG
3		2762.500	42.52	0.45	42.97	74.00	-31.03	peak
4		2762.500	33.45	0.45	33.90	54.00	-20.10	AVG
5		6551.875	38.58	11.31	49.89	74.00	-24.11	peak
6		6551.875	30.06	11.31	41.37	54.00	-12.63	AVG
7		7580.000	37.24	13.33	50.57	74.00	-23.43	peak
8		7580.000	29.14	13.33	42.47	54.00	-11.53	AVG
9		9606.875	39.52	17.56	57.08	74.00	-16.92	peak
10		9606.875	29.09	17.56	46.65	54.00	-7.35	AVG
11		11340.00	37.96	17.31	55.27	74.00	-18.73	peak
12	*	11340.00	30.04	17.31	47.35	54.00	-6.65	AVG

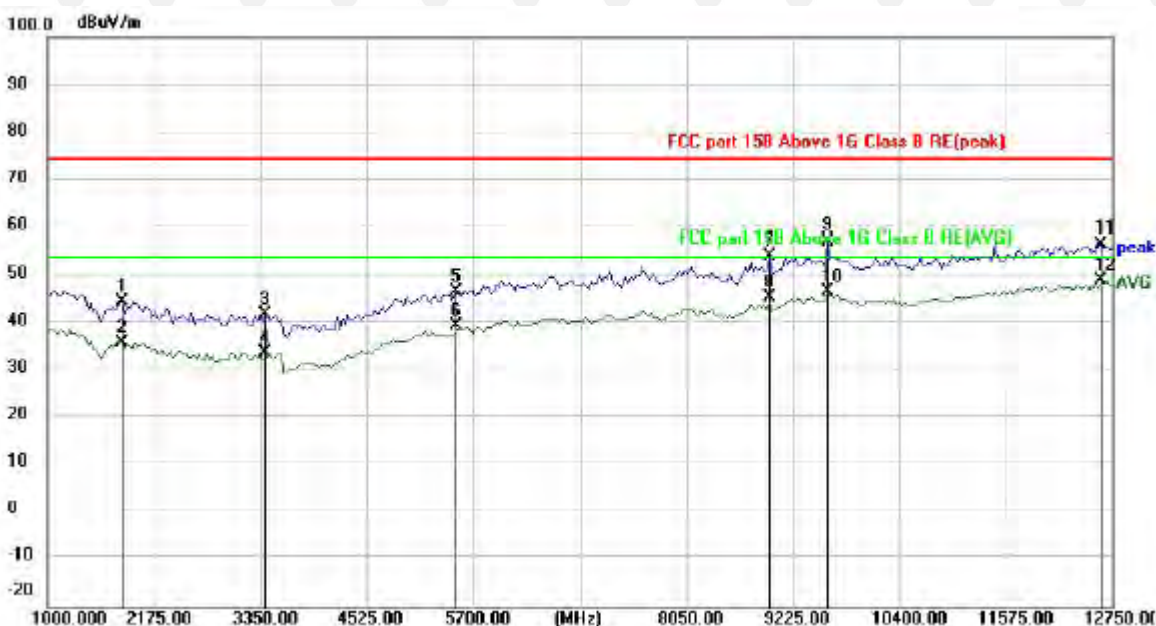
ANT1 HIGH CH11 (802.11b Mode)/2462

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		1000.000	44.78	4.13	48.91	74.00	-25.09	peak
2		1000.000	36.35	4.13	40.48	54.00	-13.52	AVG
3		2468.750	46.16	0.40	46.56	74.00	-27.44	peak
4		2468.750	37.62	0.40	38.02	54.00	-15.98	AVG
5		5935.000	38.85	10.19	49.04	74.00	-24.96	peak
6		5935.000	30.48	10.19	40.67	54.00	-13.33	AVG
7		7638.750	39.33	13.38	52.71	74.00	-21.29	peak
8		7638.750	29.91	13.38	43.29	54.00	-10.71	AVG
9		9606.875	40.41	17.56	57.97	74.00	-16.03	peak
10		9606.875	29.32	17.56	46.88	54.00	-7.12	AVG
11		12368.12	38.75	18.24	56.99	74.00	-17.01	peak
12	*	12368.12	29.73	18.24	47.97	54.00	-6.03	AVG

Vertical:



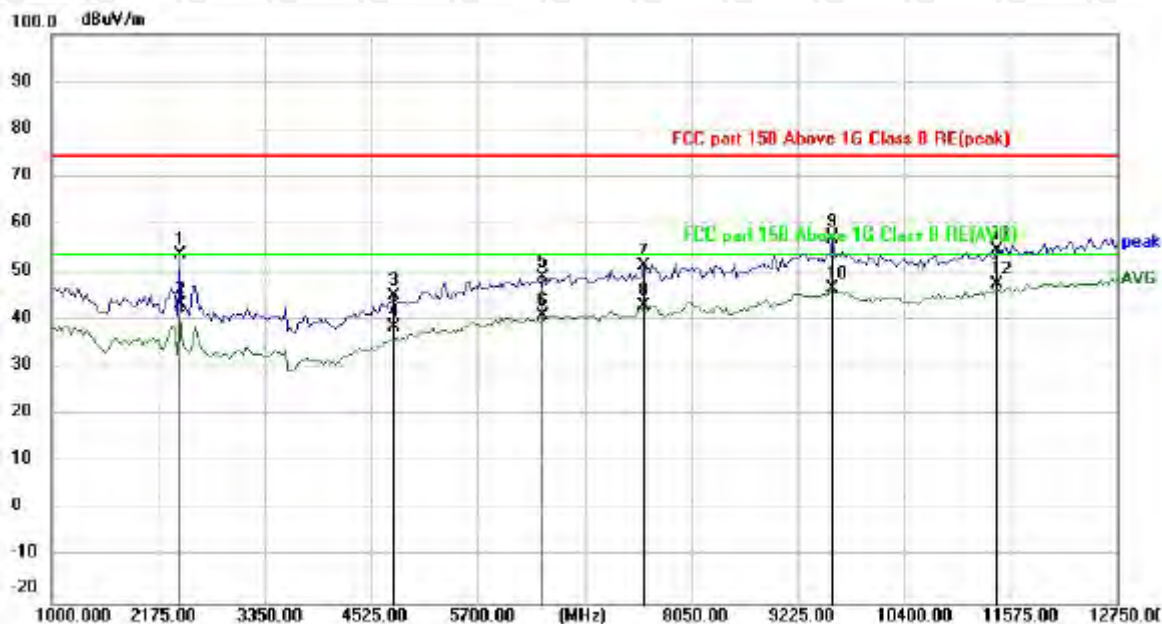
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		1822.500	41.63	3.11	44.74	74.00	-29.26	peak
2		1822.500	32.99	3.11	36.10	54.00	-17.90	AVG
3		3408.750	40.37	1.72	42.09	74.00	-31.91	peak
4		3408.750	32.11	1.72	33.83	54.00	-20.17	AVG
5		5523.750	37.82	9.01	46.83	74.00	-27.17	peak
6		5523.750	30.58	9.01	39.59	54.00	-14.41	AVG
7		8960.625	38.38	15.85	54.23	74.00	-19.77	peak
8		8960.625	29.65	15.85	45.50	54.00	-8.50	AVG
9		9606.875	39.67	17.56	57.23	74.00	-16.77	peak
10		9606.875	29.06	17.56	46.62	54.00	-7.38	AVG
11		12632.50	38.26	18.45	56.71	74.00	-17.29	peak
12	*	12632.50	30.77	18.45	49.22	54.00	-4.78	AVG

Remark:

- (1). Measuring frequencies from 9KHz to the 25 GHz. The test range is 9K ~10 times the main wave, and other spurious below the limit of 20dB will not be reflected in the report
- (2) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

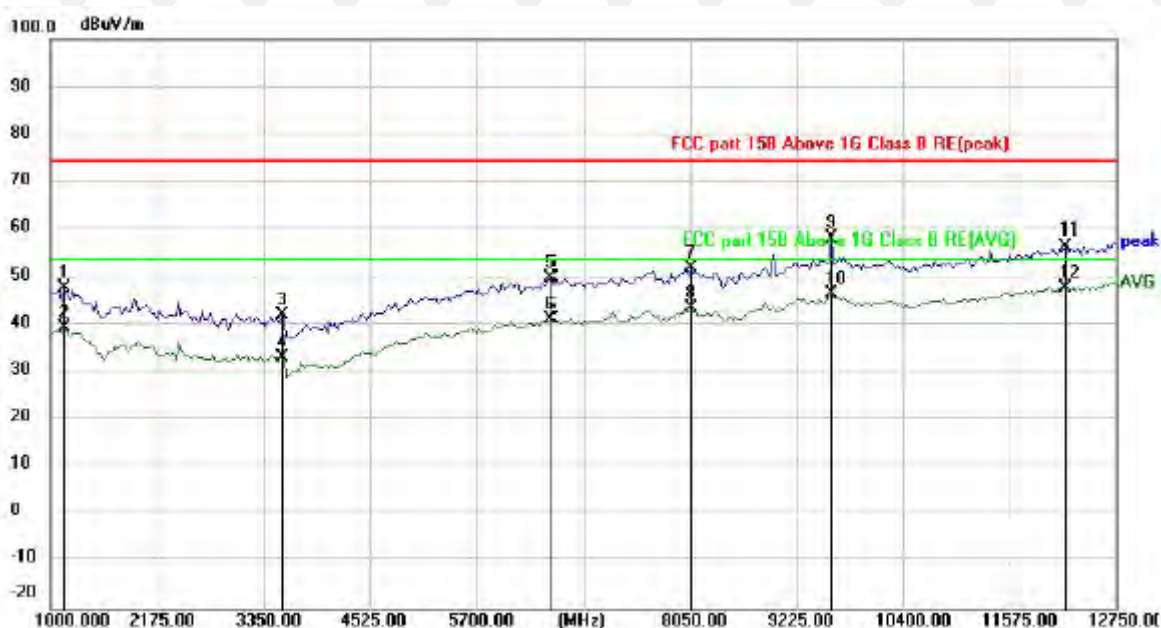
ANT1 LOW CH1 (802.11g Mode)/2412

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	53.27	0.71	53.98	74.00	-20.02	peak
2		2410.000	42.75	0.71	43.46	54.00	-10.54	AVG
3		4789.375	38.18	6.97	45.15	74.00	-28.85	peak
4		4789.375	31.75	6.97	38.72	54.00	-15.28	AVG
5		6434.375	38.03	11.12	49.15	74.00	-24.85	peak
6		6434.375	29.98	11.12	41.10	54.00	-12.90	AVG
7		7521.250	38.30	13.29	51.59	74.00	-22.41	peak
8		7521.250	29.88	13.29	43.17	54.00	-10.83	AVG
9		9606.875	39.64	17.56	57.20	74.00	-16.80	peak
10		9606.875	29.27	17.56	46.83	54.00	-7.17	AVG
11		11428.12	37.34	17.39	54.73	74.00	-19.27	peak
12	*	11428.12	30.23	17.39	47.62	54.00	-6.38	AVG

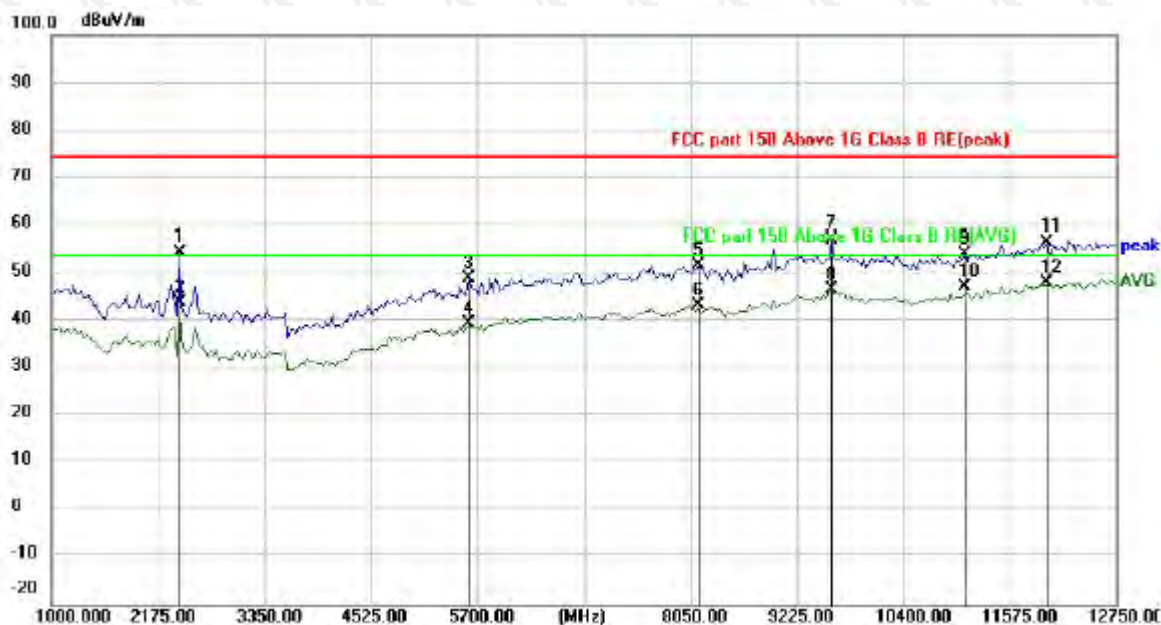
Vertical:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		1146.875	44.09	3.96	48.05	74.00	-25.95	peak
2		1146.875	35.68	3.96	39.64	54.00	-14.36	AVG
3		3555.625	40.05	2.17	42.22	74.00	-31.78	peak
4		3555.625	31.21	2.17	33.38	54.00	-20.62	AVG
5		6522.500	38.64	11.27	49.91	74.00	-24.09	peak
6		6522.500	30.00	11.27	41.27	54.00	-12.73	AVG
7		8050.000	38.59	13.69	52.28	74.00	-21.72	peak
8		8050.000	30.09	13.69	43.78	54.00	-10.22	AVG
9		9606.875	40.51	17.56	58.07	74.00	-15.93	peak
10		9606.875	29.21	17.56	46.77	54.00	-7.23	AVG
11		12191.87	38.58	18.04	56.62	74.00	-17.38	peak
12	*	12191.87	30.02	18.04	48.06	54.00	-5.94	AVG

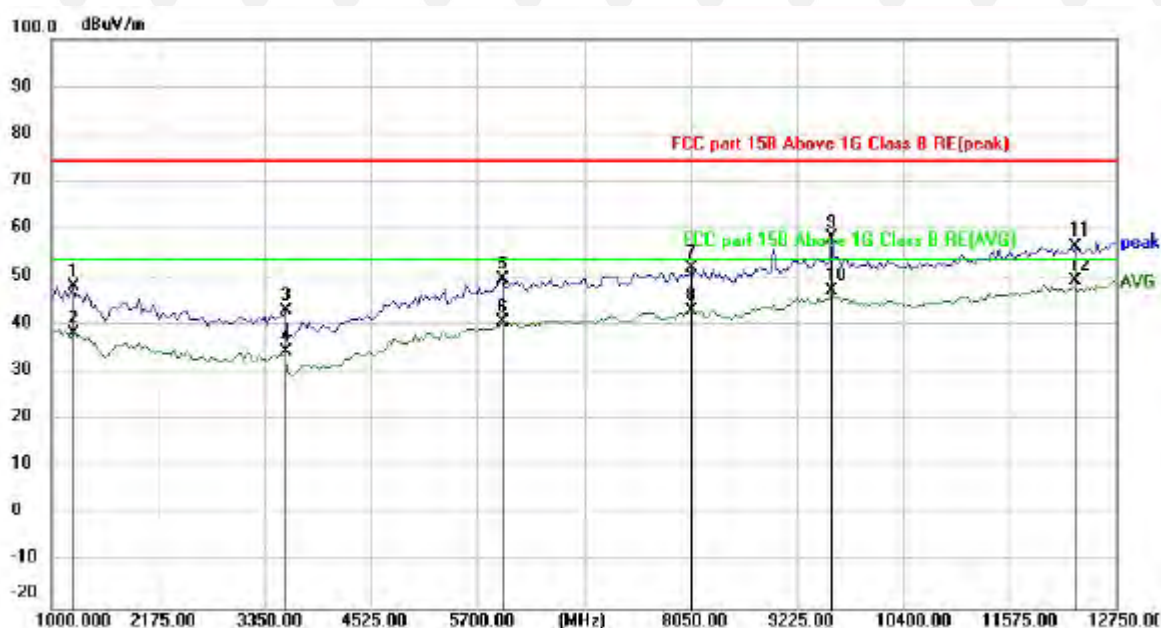
ANT1 MID CH6 (802.11g Mode)/2437

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	53.98	0.71	54.69	74.00	-19.31	peak
2		2410.000	43.29	0.71	44.00	54.00	-10.00	AVG
3		5611.875	39.96	9.26	49.22	74.00	-24.78	peak
4		5611.875	30.25	9.26	39.51	54.00	-14.49	AVG
5		8138.125	38.06	13.71	51.77	74.00	-22.23	peak
6		8138.125	29.72	13.71	43.43	54.00	-10.57	AVG
7		9606.875	39.57	17.56	57.13	74.00	-16.87	peak
8		9606.875	29.13	17.56	46.69	54.00	-7.31	AVG
9		11075.62	37.26	17.06	54.32	74.00	-19.68	peak
10		11075.62	30.23	17.06	47.29	54.00	-6.71	AVG
11		11986.25	38.82	17.80	56.62	74.00	-17.38	peak
12	*	11986.25	30.36	17.80	48.16	54.00	-5.84	AVG

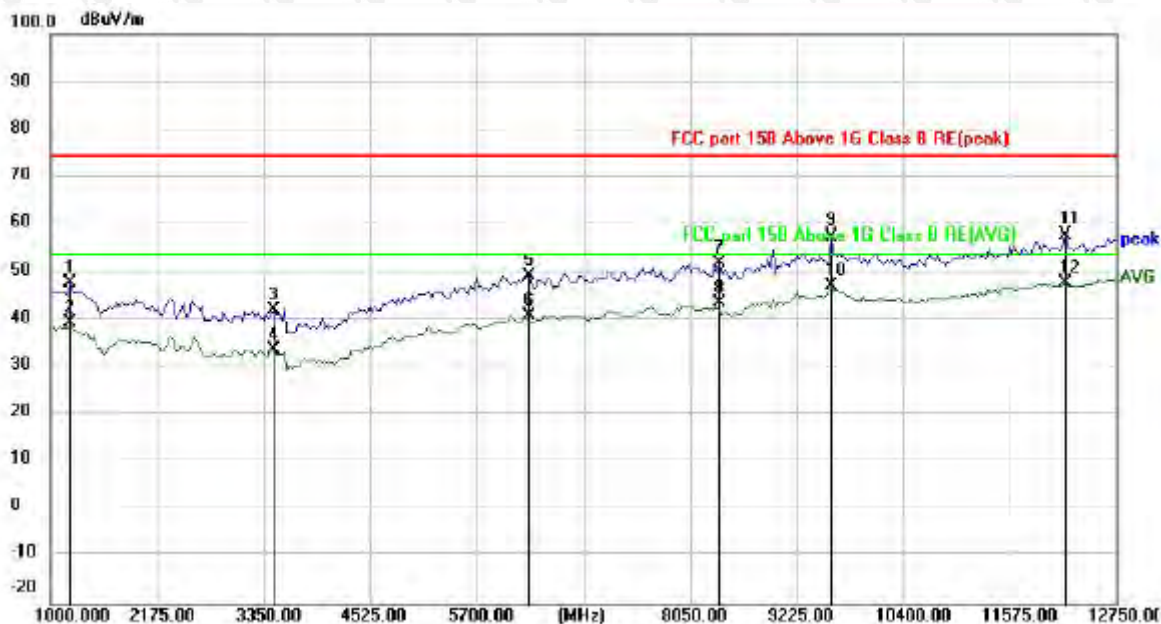
Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		1235.000	44.53	3.86	48.39	74.00	-25.61	peak
2		1235.000	34.38	3.86	38.24	54.00	-15.76	AVG
3		3585.000	40.79	2.27	43.06	74.00	-30.94	peak
4		3585.000	32.08	2.27	34.35	54.00	-19.65	AVG
5		5993.750	39.46	10.36	49.82	74.00	-24.18	peak
6		5993.750	30.45	10.36	40.81	54.00	-13.19	AVG
7		8050.000	38.37	13.69	52.06	74.00	-21.94	peak
8		8050.000	29.42	13.69	43.11	54.00	-10.89	AVG
9		9606.875	40.62	17.56	58.18	74.00	-15.82	peak
10		9606.875	29.67	17.56	47.23	54.00	-6.77	AVG
11		12309.37	38.55	18.17	56.72	74.00	-17.28	peak
12	*	12309.37	31.29	18.17	49.46	54.00	-4.54	AVG

ANT1 HIGH CH11 (802.11g Mode)/2462

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		1205.625	43.96	3.89	47.85	74.00	-26.15	peak
2		1205.625	35.63	3.89	39.52	54.00	-14.48	AVG
3		3467.500	40.41	1.87	42.28	74.00	-31.72	peak
4		3467.500	31.93	1.87	33.80	54.00	-20.20	AVG
5		6287.500	38.72	10.87	49.59	74.00	-24.41	peak
6		6287.500	30.07	10.87	40.94	54.00	-13.06	AVG
7		8373.125	38.42	13.79	52.21	74.00	-21.79	peak
8		8373.125	29.99	13.79	43.78	54.00	-10.22	AVG
9		9606.875	40.08	17.56	57.64	74.00	-16.36	peak
10		9606.875	29.81	17.56	47.37	54.00	-6.63	AVG
11		12191.87	39.88	18.04	57.92	74.00	-16.08	peak
12	*	12191.87	30.00	18.04	48.04	54.00	-5.96	AVG

Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		1117.500	43.45	3.99	47.44	74.00	-26.56	peak
2		1117.500	35.60	3.99	39.59	54.00	-14.41	AVG
3		2645.000	42.24	0.35	42.59	74.00	-31.41	peak
4		2645.000	33.91	0.35	34.26	54.00	-19.74	AVG
5		5582.500	39.69	9.18	48.87	74.00	-25.13	peak
6		5582.500	30.28	9.18	39.46	54.00	-14.54	AVG
7		7609.375	38.20	13.36	51.56	74.00	-22.44	peak
8		7609.375	30.19	13.36	43.55	54.00	-10.45	AVG
9		9254.375	38.16	16.85	55.01	74.00	-18.99	peak
10		9254.375	29.65	16.85	46.50	54.00	-7.50	AVG
11		12191.87	38.30	18.04	56.34	74.00	-17.66	peak
12	*	12191.87	30.39	18.04	48.43	54.00	-5.57	AVG

Remark:

- (1) Measuring frequencies from 9KHz to the 25 GHz. The test range is 9K ~10 times the main wave, and other spurious below the limit of 20dB will not be reflected in the report
- (2) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

Above 1GHz ANT1+ANT2 :

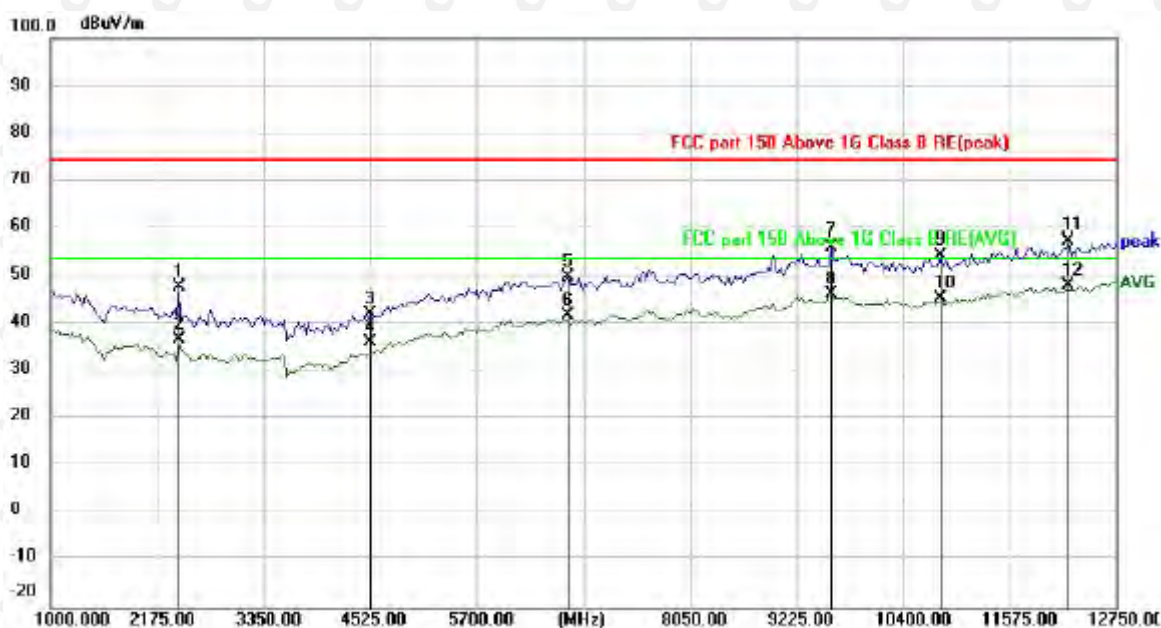
LOW CH1 (802.11n/H20 Mode)/2412

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	56.99	0.71	57.70	74.00	-16.30	peak
2	*	2410.000	47.54	0.71	48.25	54.00	-5.75	AVG
3		5024.375	37.85	7.83	45.68	74.00	-28.32	peak
4		5024.375	30.19	7.83	38.02	54.00	-15.98	AVG
5		6052.500	39.19	10.47	49.66	74.00	-24.34	peak
6		6052.500	30.50	10.47	40.97	54.00	-13.03	AVG
7		7403.750	37.46	13.03	50.49	74.00	-23.51	peak
8		7403.750	29.82	13.03	42.85	54.00	-11.15	AVG
9		9606.875	40.02	17.56	57.58	74.00	-16.42	peak
10		9606.875	29.18	17.56	46.74	54.00	-7.26	AVG
11		12015.62	38.60	17.83	56.43	74.00	-17.57	peak
12		12015.62	30.19	17.83	48.02	54.00	-5.98	AVG

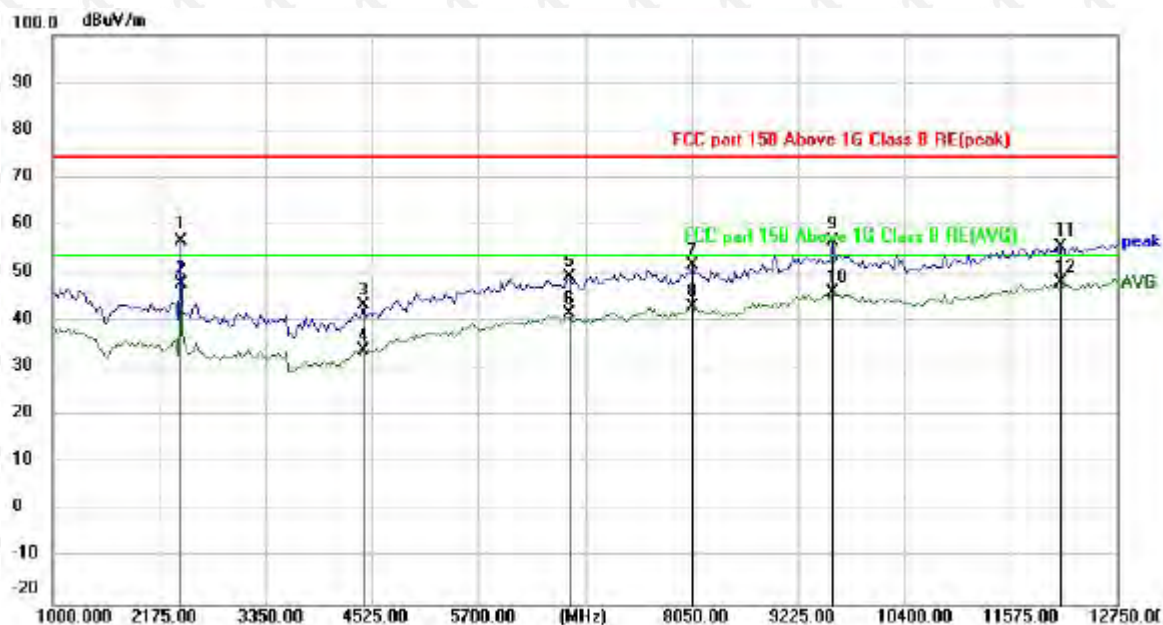
Vertical:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	47.30	0.71	48.01	74.00	-25.99	peak
2		2410.000	36.17	0.71	36.88	54.00	-17.12	AVG
3		4525.000	36.22	5.96	42.18	74.00	-31.82	peak
4		4525.000	30.34	5.96	36.30	54.00	-17.70	AVG
5		6698.750	38.58	11.55	50.13	74.00	-23.87	peak
6		6698.750	30.54	11.55	42.09	54.00	-11.91	AVG
7		9606.875	38.75	17.56	56.31	74.00	-17.69	peak
8		9606.875	28.96	17.56	46.52	54.00	-7.48	AVG
9		10811.25	37.98	16.64	54.62	74.00	-19.38	peak
10		10811.25	28.89	16.64	45.53	54.00	-8.47	AVG
11		12221.25	39.45	18.07	57.52	74.00	-16.48	peak
12	*	12221.25	30.12	18.07	48.19	54.00	-5.81	AVG

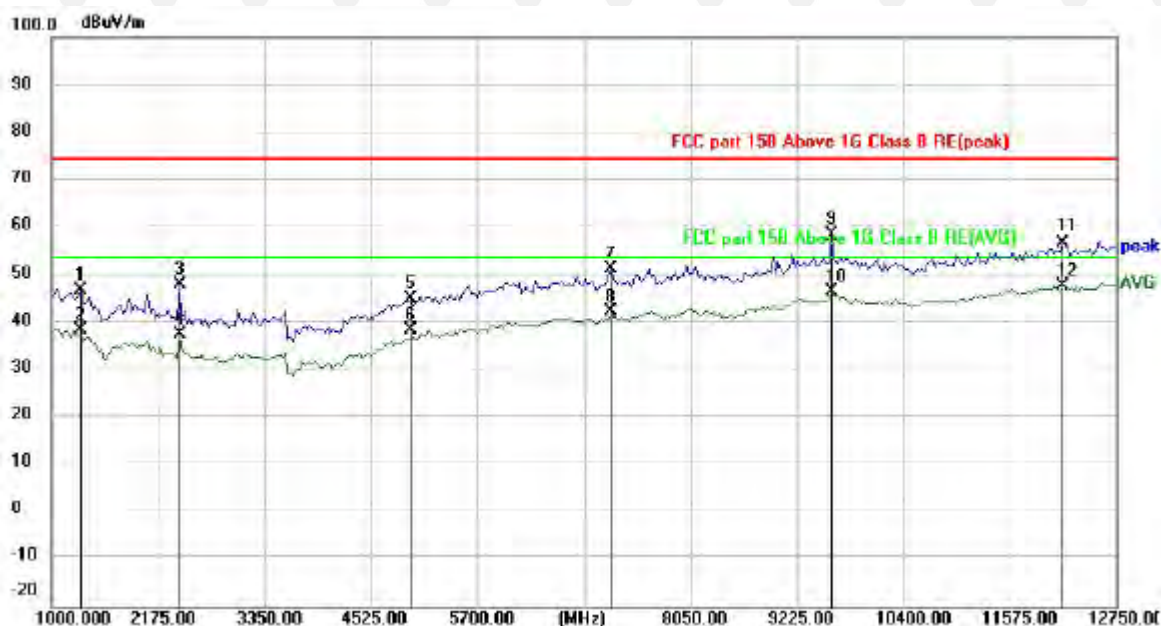
LOW CH1 (802.11n/H20 Mode)/2437

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	56.13	0.71	56.84	74.00	-17.16	peak
2		2410.000	47.38	0.71	48.09	54.00	-5.91	AVG
3		4436.875	37.78	5.61	43.39	74.00	-30.61	peak
4		4436.875	28.20	5.61	33.81	54.00	-20.19	AVG
5		6698.750	37.96	11.55	49.51	74.00	-24.49	peak
6		6698.750	30.12	11.55	41.67	54.00	-12.33	AVG
7		8050.000	38.18	13.69	51.87	74.00	-22.13	peak
8		8050.000	29.54	13.69	43.23	54.00	-10.77	AVG
9		9606.875	39.35	17.56	56.91	74.00	-17.09	peak
10		9606.875	28.60	17.56	46.16	54.00	-7.84	AVG
11		12133.12	37.66	17.97	55.63	74.00	-18.37	peak
12	*	12133.12	30.27	17.97	48.24	54.00	-5.76	AVG

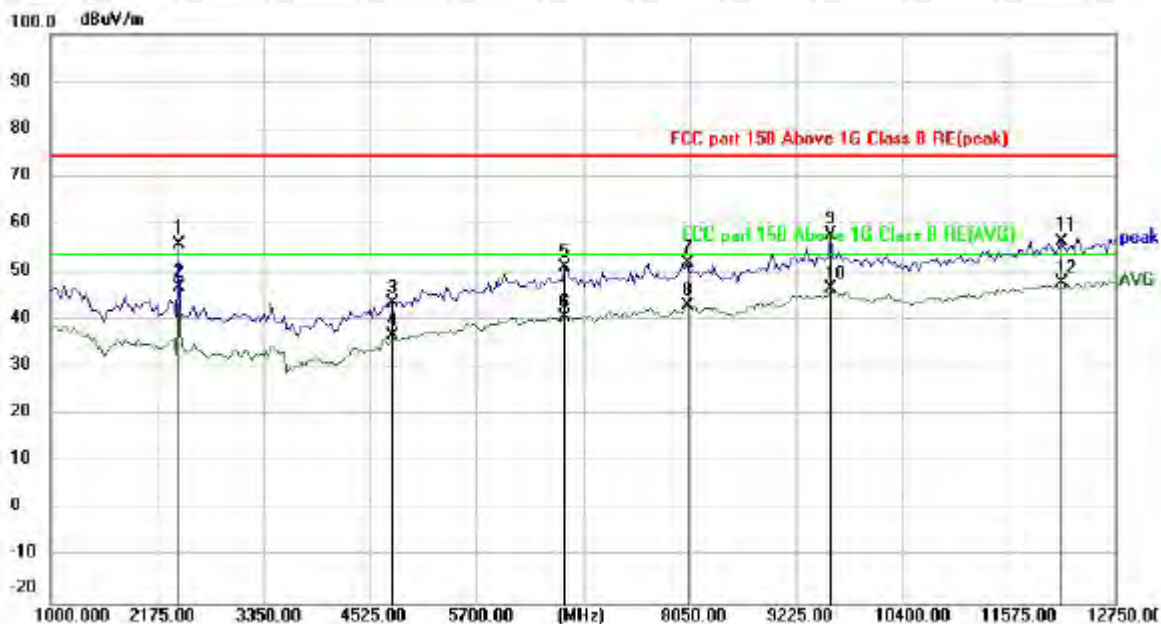
Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		1323.125	43.37	3.76	47.13	74.00	-26.87	peak
2		1323.125	34.75	3.76	38.51	54.00	-15.49	AVG
3		2410.000	47.58	0.71	48.29	74.00	-25.71	peak
4		2410.000	36.96	0.71	37.67	54.00	-16.33	AVG
5		4965.625	37.56	7.64	45.20	74.00	-28.80	peak
6		4965.625	30.98	7.64	38.62	54.00	-15.38	AVG
7		7168.750	39.20	12.46	51.66	74.00	-22.34	peak
8		7168.750	30.10	12.46	42.56	54.00	-11.44	AVG
9		9606.875	40.81	17.56	58.37	74.00	-15.63	peak
10		9606.875	29.10	17.56	46.66	54.00	-7.34	AVG
11		12162.50	39.07	18.00	57.07	74.00	-16.93	peak
12	*	12162.50	29.97	18.00	47.97	54.00	-6.03	AVG

LOW CH1 (802.11n/H20 Mode)/2462

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	55.44	0.71	56.15	74.00	-17.85	peak
2		2410.000	46.45	0.71	47.16	54.00	-6.84	AVG
3		4789.375	36.78	6.97	43.75	74.00	-30.25	peak
4		4789.375	29.91	6.97	36.88	54.00	-17.12	AVG
5		6669.375	39.72	11.50	51.22	74.00	-22.78	peak
6		6669.375	29.36	11.50	40.86	54.00	-13.14	AVG
7		8020.625	38.61	13.68	52.29	74.00	-21.71	peak
8		8020.625	29.42	13.68	43.10	54.00	-10.90	AVG
9		9606.875	40.21	17.56	57.77	74.00	-16.23	peak
10		9606.875	29.09	17.56	46.65	54.00	-7.35	AVG
11		12162.50	38.62	18.00	56.62	74.00	-17.38	peak
12	*	12162.50	29.94	18.00	47.94	54.00	-6.06	AVG

Vertical:



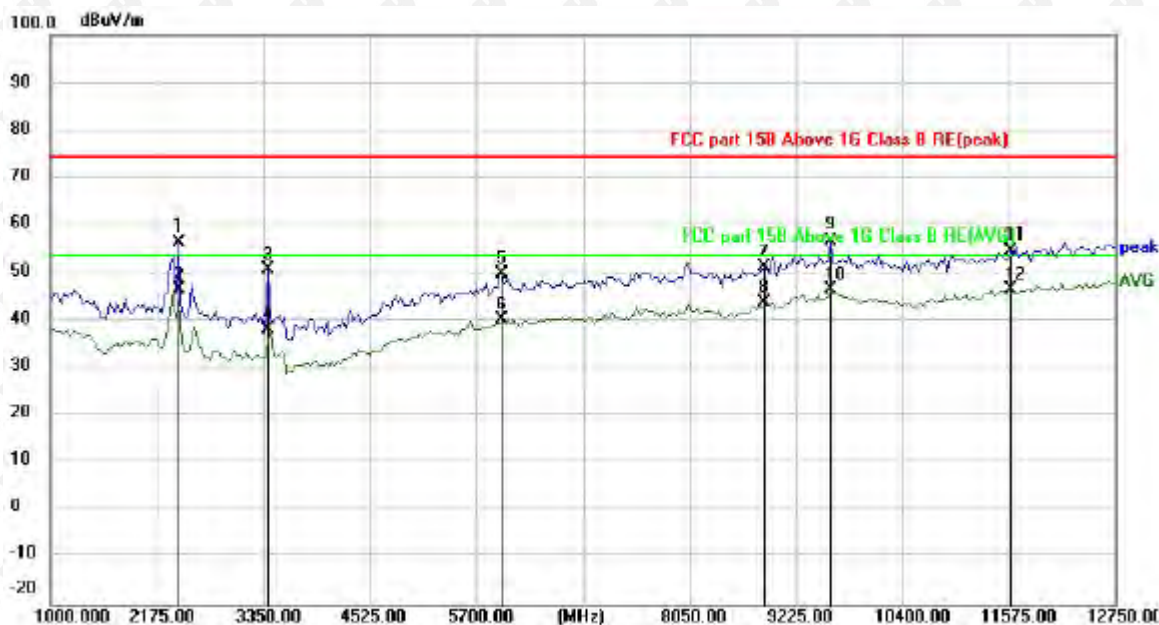
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		1058.750	45.41	4.06	49.47	74.00	-24.53	peak
2		1058.750	35.27	4.06	39.33	54.00	-14.67	AVG
3		1910.625	42.95	2.99	45.94	74.00	-28.06	peak
4		1910.625	32.81	2.99	35.80	54.00	-18.20	AVG
5		3555.625	40.44	2.17	42.61	74.00	-31.39	peak
6		3555.625	30.94	2.17	33.11	54.00	-20.89	AVG
7		6052.500	39.99	10.47	50.46	74.00	-23.54	peak
8		6052.500	30.49	10.47	40.96	54.00	-13.04	AVG
9		9606.875	41.29	17.56	58.85	74.00	-15.15	peak
10	*	9606.875	29.63	17.56	47.19	54.00	-6.81	AVG
11		11457.50	37.32	17.42	54.74	74.00	-19.26	peak
12		11457.50	29.02	17.42	46.44	54.00	-7.56	AVG

Remark:

- (1). Measuring frequencies from 9KHz to the 25 GHz. The test range is 9K ~10 times the main wave, and other spurious below the limit of 20dB will not be reflected in the report
- (2) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) Data of measurement within this frequency range shown "---" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

ANT1+ANT2 LOW CH3 (802.11n/H40 Mode)/2422

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	55.89	0.71	56.60	74.00	-17.40	peak
2		2410.000	45.95	0.71	46.66	54.00	-7.34	AVG
3		3408.750	49.24	1.72	50.96	74.00	-23.04	peak
4		3408.750	36.55	1.72	38.27	54.00	-15.73	AVG
5		5993.750	39.60	10.36	49.96	74.00	-24.04	peak
6		5993.750	30.18	10.36	40.54	54.00	-13.46	AVG
7		8872.500	36.01	15.46	51.47	74.00	-22.53	peak
8		8872.500	28.60	15.46	44.06	54.00	-9.94	AVG
9		9606.875	39.35	17.56	56.91	74.00	-17.09	peak
10		9606.875	29.24	17.56	46.80	54.00	-7.20	AVG
11		11604.37	37.41	17.53	54.94	74.00	-19.06	peak
12	*	11604.37	29.34	17.53	46.87	54.00	-7.13	AVG

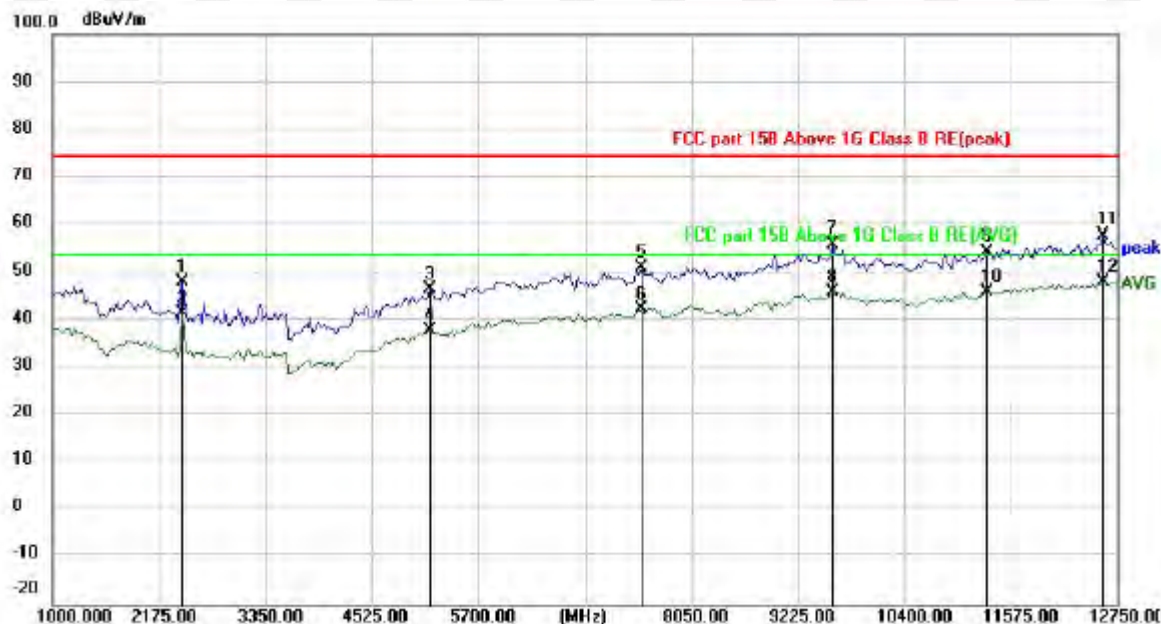
Vertical:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2439.375	48.48	0.55	49.03	74.00	-24.97	peak
2		2439.375	39.93	0.55	40.48	54.00	-13.52	AVG
3		3438.125	40.61	1.80	42.41	74.00	-31.59	peak
4		3438.125	31.85	1.80	33.65	54.00	-20.35	AVG
5		6052.500	38.34	10.47	48.81	74.00	-25.19	peak
6		6052.500	30.05	10.47	40.52	54.00	-13.48	AVG
7		7550.625	38.00	13.31	51.31	74.00	-22.69	peak
8		7550.625	29.20	13.31	42.51	54.00	-11.49	AVG
9		9606.875	39.27	17.56	56.83	74.00	-17.17	peak
10		9606.875	29.41	17.56	46.97	54.00	-7.03	AVG
11		12015.62	38.64	17.83	56.47	74.00	-17.53	peak
12	*	12015.62	30.39	17.83	48.22	54.00	-5.78	AVG

ANT1+ANT2 MID CH6 (802.11n/H40 Mode)/2437

Horizontal:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		2439.375	47.81	0.55	48.36	74.00	-25.64	peak
2		2439.375	41.19	0.55	41.74	54.00	-12.26	AVG
3		5171.250	38.73	8.17	46.90	74.00	-27.10	peak
4		5171.250	29.76	8.17	37.93	54.00	-16.07	AVG
5		7491.875	38.03	13.25	51.28	74.00	-22.72	peak
6		7491.875	29.37	13.25	42.62	54.00	-11.38	AVG
7		9606.875	38.35	17.56	55.91	74.00	-18.09	peak
8		9606.875	28.60	17.56	46.16	54.00	-7.84	AVG
9		11310.62	37.25	17.28	54.53	74.00	-19.47	peak
10		11310.62	28.98	17.28	46.26	54.00	-7.74	AVG
11		12603.12	39.33	18.44	57.77	74.00	-16.23	peak
12	*	12603.12	29.85	18.44	48.29	54.00	-5.71	AVG

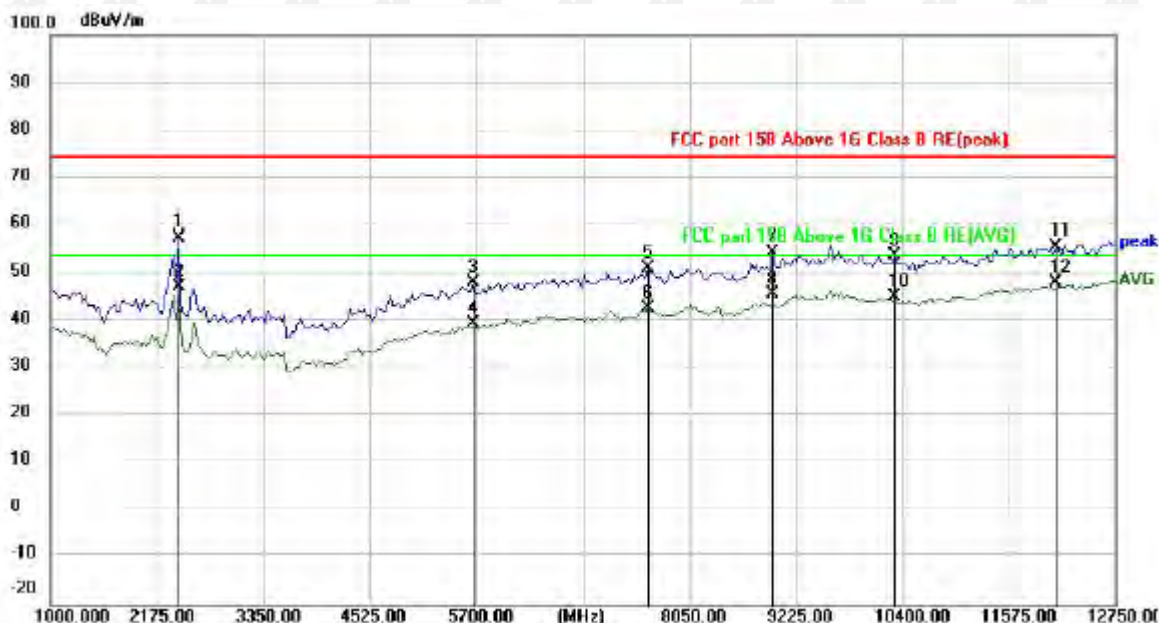
Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		2410.000	47.14	0.71	47.85	74.00	-26.15	peak
2		2410.000	39.80	0.71	40.51	54.00	-13.49	AVG
3		5641.250	38.70	9.35	48.05	74.00	-25.95	peak
4		5641.250	29.70	9.35	39.05	54.00	-14.95	AVG
5		8108.750	38.29	13.70	51.99	74.00	-22.01	peak
6		8108.750	29.95	13.70	43.65	54.00	-10.35	AVG
7		9606.875	39.62	17.56	57.18	74.00	-16.82	peak
8		9606.875	29.19	17.56	46.75	54.00	-7.25	AVG
9		11516.25	37.80	17.47	55.27	74.00	-18.73	peak
10		11516.25	28.38	17.47	45.85	54.00	-8.15	AVG
11		12191.87	38.33	18.04	56.37	74.00	-17.63	peak
12	*	12191.87	30.40	18.04	48.44	54.00	-5.56	AVG

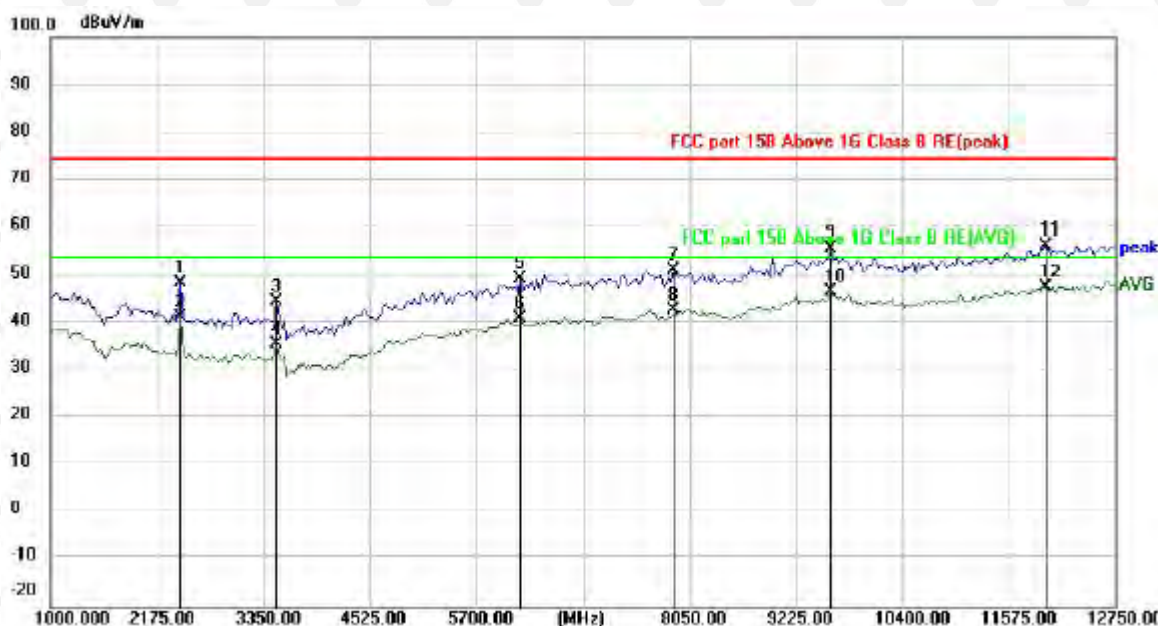
ANT1+ANT2 HIGH CH9 (802.11n/H40 Mode)/2452

Horizontal:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2410.000	56.88	0.71	57.59	74.00	-16.41	peak
2		2410.000	46.63	0.71	47.34	54.00	-6.66	AVG
3		5670.625	38.78	9.43	48.21	74.00	-25.79	peak
4		5670.625	30.04	9.43	39.47	54.00	-14.53	AVG
5		7580.000	38.02	13.33	51.35	74.00	-22.65	peak
6		7580.000	29.56	13.33	42.89	54.00	-11.11	AVG
7		8960.625	38.70	15.85	54.55	74.00	-19.45	peak
8		8960.625	29.85	15.85	45.70	54.00	-8.30	AVG
9		10311.87	37.44	16.50	53.94	74.00	-20.06	peak
10		10311.87	28.72	16.50	45.22	54.00	-8.78	AVG
11		12103.75	37.80	17.93	55.73	74.00	-18.27	peak
12	*	12103.75	30.44	17.93	48.37	54.00	-5.63	AVG

Vertical:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		2439.375	47.99	0.55	48.54	74.00	-25.46	peak
2		2439.375	40.66	0.55	41.21	54.00	-12.79	AVG
3		3496.875	42.85	1.95	44.80	74.00	-29.20	peak
4		3496.875	33.74	1.95	35.69	54.00	-18.31	AVG
5		6199.375	38.72	10.72	49.44	74.00	-24.56	peak
6		6199.375	30.27	10.72	40.99	54.00	-13.01	AVG
7		7873.750	37.59	13.57	51.16	74.00	-22.84	peak
8		7873.750	29.24	13.57	42.81	54.00	-11.19	AVG
9		9606.875	38.06	17.56	55.62	74.00	-18.38	peak
10		9606.875	29.34	17.56	46.90	54.00	-7.10	AVG
11		11986.25	38.70	17.80	56.50	74.00	-17.50	peak
12	*	11986.25	29.91	17.80	47.71	54.00	-6.29	AVG

Remark:

- (1). Measuring frequencies from 9KHz to the 25 GHz. The test range is 9K ~10 times the main wave, and other spurious below the limit of 20dB will not be reflected in the report
- (2) * denotes emission frequency which appearing within the Restricted Bands specified in provision of 15.205, then the general radiated emission limits in 15.209 apply.
- (3) Data of measurement within this frequency range shown "----" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) When the test results of Peak Detected below the limits of Average Detected, the Average Detected is not need completed. For example: Top Channel at Fundamental 73.16dBuV/m(PK Value) <93.98(AV Limit), at harmonic 53.20 dBuV/m(PK Value) <54 dBuV/m(AV Limit), the Average Detected not need to completed.

Restricted bands around fundamental frequency (Radiated)

Operation Mode:

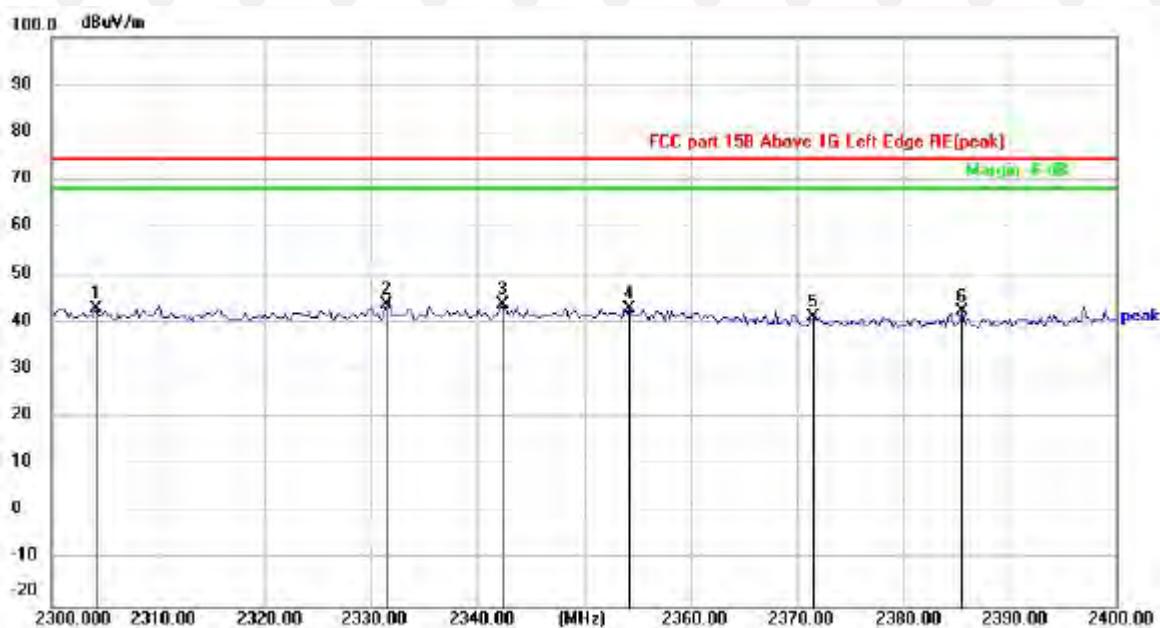
ANT 1 802.11b Mode TX CH Low (2412MHz)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2302.500	51.15	1.27	52.42	74.00	-21.58	peak
2		2313.750	53.68	1.21	54.89	74.00	-19.11	peak
3	*	2335.250	58.15	1.10	59.25	74.00	-14.75	peak
4		2350.500	56.87	1.02	57.89	74.00	-16.11	peak
5		2362.250	52.00	0.96	52.96	74.00	-21.04	peak
6		2380.250	50.61	0.86	51.47	74.00	-22.53	peak

Vertical:



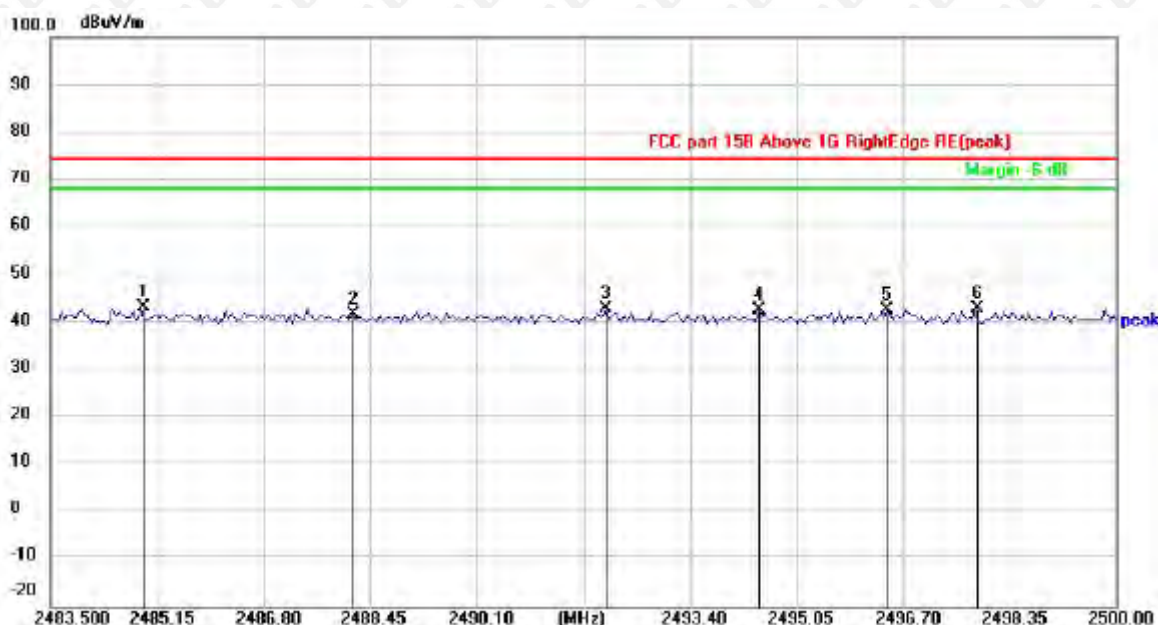
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2304.250	42.03	1.26	43.29	74.00	-30.71	peak
2	*	2331.500	42.92	1.12	44.04	74.00	-29.96	peak
3		2342.500	42.87	1.06	43.93	74.00	-30.07	peak
4		2354.250	42.10	1.00	43.10	74.00	-30.90	peak
5		2371.500	40.39	0.91	41.30	74.00	-32.70	peak
6		2385.500	41.84	0.83	42.67	74.00	-31.33	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

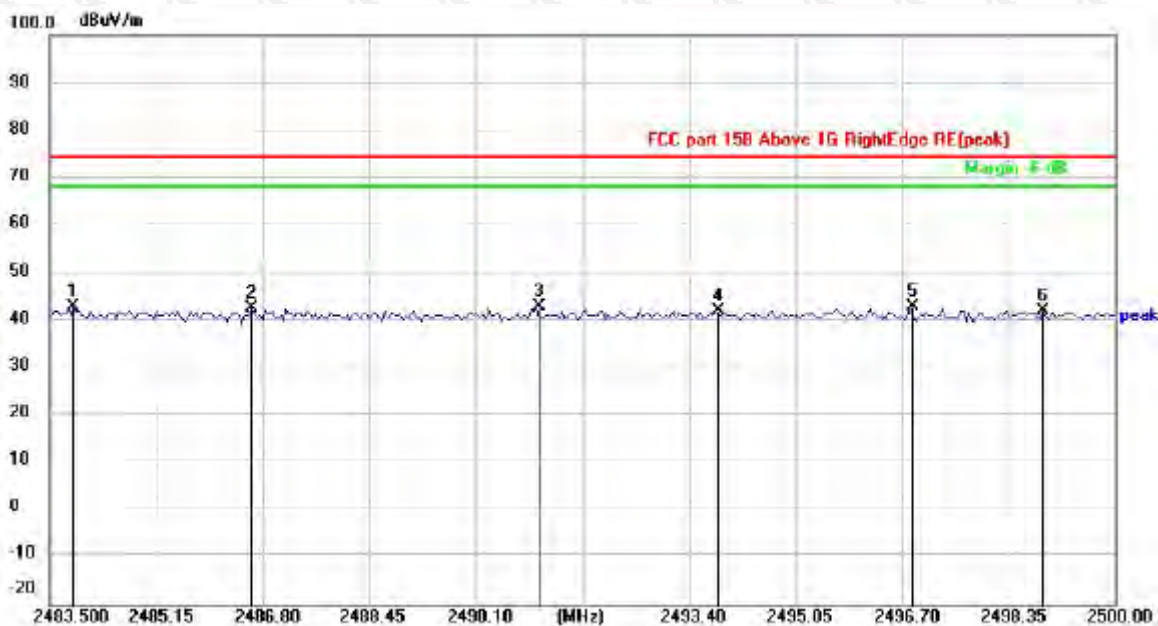
ANT1 802.11b Mode TX CH High (2462MHz)

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1	*	2484.903	43.15	0.31	43.46	74.00	-30.54	peak
2		2488.202	41.65	0.29	41.94	74.00	-32.06	peak
3		2492.080	42.82	0.27	43.09	74.00	-30.91	peak
4		2494.472	42.58	0.26	42.84	74.00	-31.16	peak
5		2496.452	42.65	0.25	42.90	74.00	-31.10	peak
6		2497.814	42.82	0.24	43.06	74.00	-30.94	peak

Vertical:



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	dBuV	Factor	dBuV/m	dB/m	dB	Detector
1	*	2483.871	42.92	0.32	43.24	74.00	-30.76	peak
2		2486.635	42.56	0.30	42.86	74.00	-31.14	peak
3		2491.049	42.75	0.28	43.03	74.00	-30.97	peak
4		2493.813	42.10	0.26	42.36	74.00	-31.64	peak
5		2496.824	42.91	0.25	43.16	74.00	-30.84	peak
6		2498.886	42.06	0.24	42.30	74.00	-31.70	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

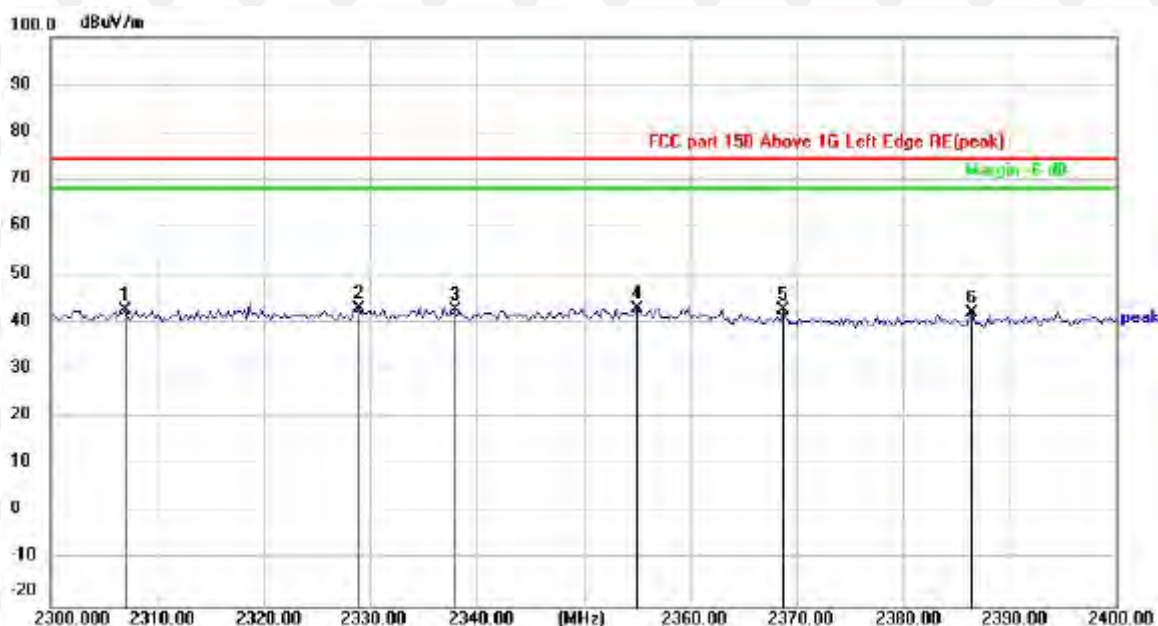
ANT1 802.11g Mode TX CH Low (2412MHz)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2309.000	51.87	1.24	53.11	74.00	-20.89	peak
2		2328.000	55.68	1.14	56.82	74.00	-17.18	peak
3	*	2342.250	57.91	1.06	58.97	74.00	-15.03	peak
4		2353.500	53.89	1.00	54.89	74.00	-19.11	peak
5		2371.250	49.86	0.91	50.77	74.00	-23.23	peak
6		2379.000	50.58	0.87	51.45	74.00	-22.55	peak

Vertical:



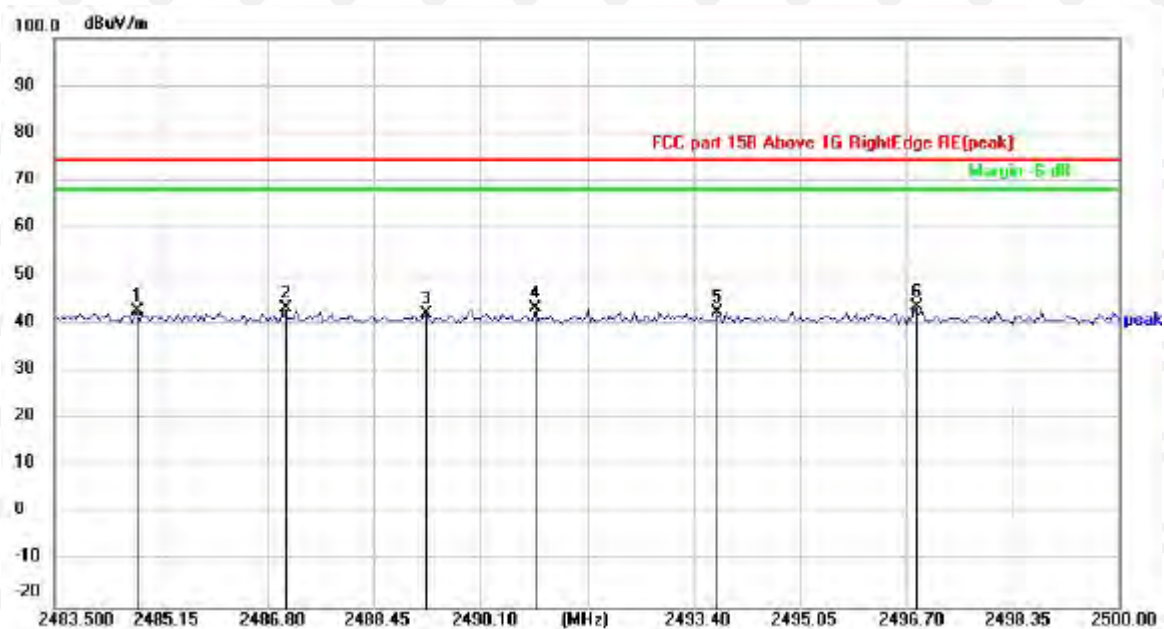
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2307.000	41.69	1.25	42.94	74.00	-31.06	peak
2	*	2329.000	42.05	1.13	43.18	74.00	-30.82	peak
3		2338.000	41.68	1.09	42.77	74.00	-31.23	peak
4		2355.000	42.16	1.00	43.16	74.00	-30.84	peak
5		2368.750	41.98	0.92	42.90	74.00	-31.10	peak
6		2386.500	41.47	0.83	42.30	74.00	-31.70	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

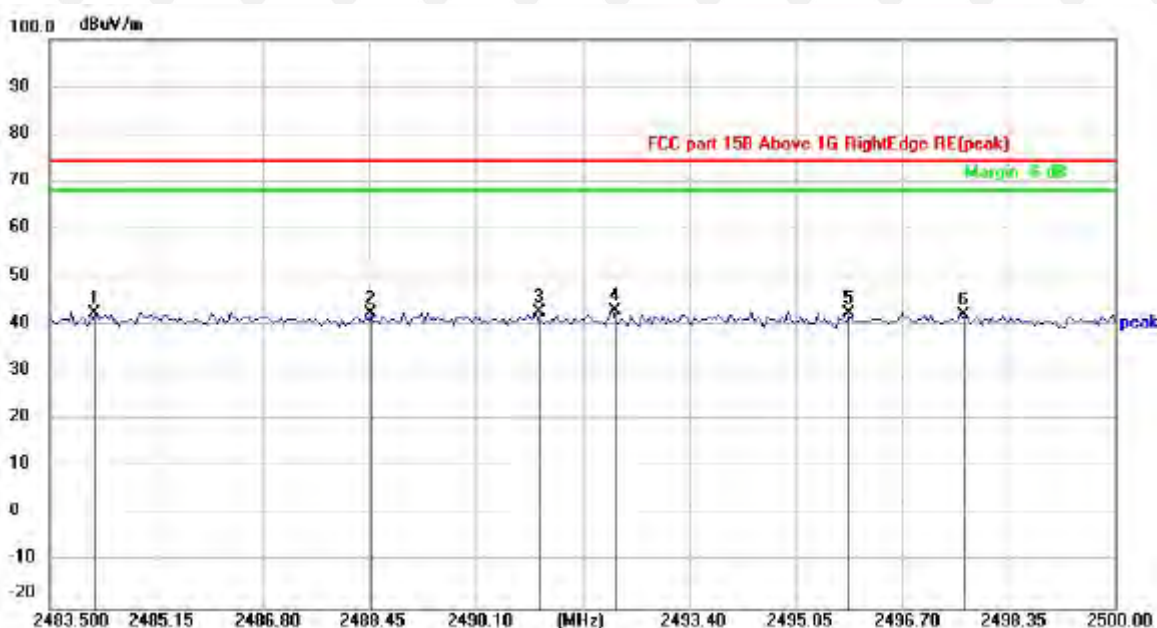
ANT1 802.11g Mode TX CH High (2462MHz)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2484.738	42.40	0.31	42.71	74.00	-31.29	peak
2		2487.048	43.28	0.30	43.58	74.00	-30.42	peak
3		2489.275	41.93	0.29	42.22	74.00	-31.78	peak
4		2490.966	43.05	0.28	43.33	74.00	-30.67	peak
5		2493.771	42.33	0.26	42.59	74.00	-31.41	peak
6	*	2496.824	43.37	0.25	43.62	74.00	-30.38	peak

Vertical:



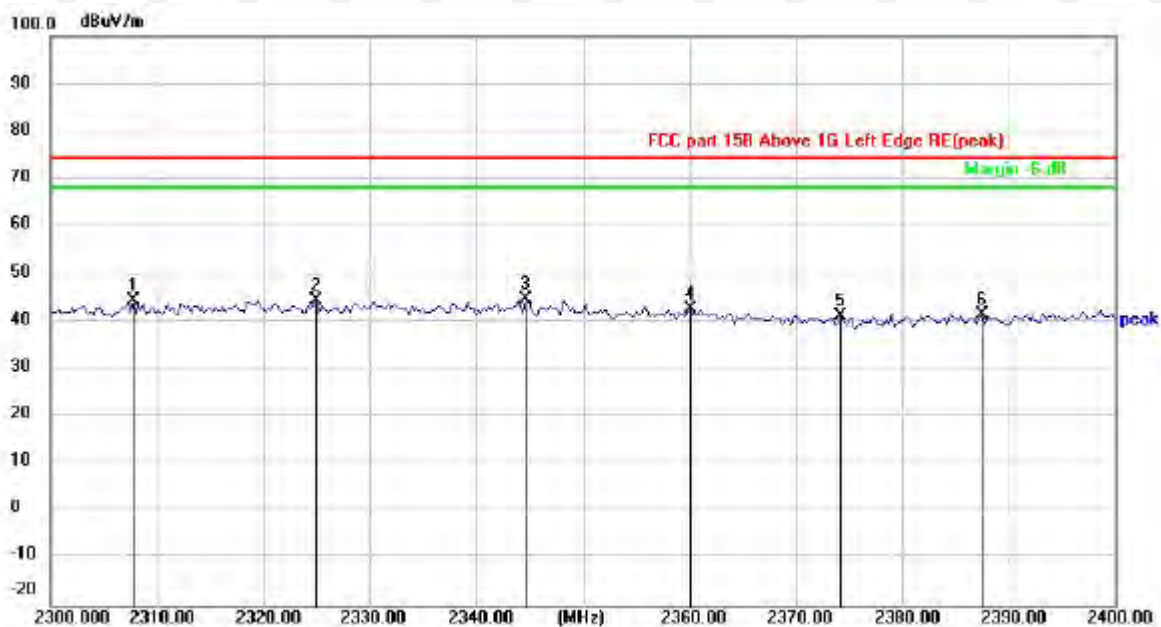
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		2484.201	42.34	0.31	42.65	74.00	-31.35	peak
2		2488.491	42.21	0.29	42.50	74.00	-31.50	peak
3		2491.049	42.57	0.28	42.85	74.00	-31.15	peak
4	*	2492.204	42.96	0.27	43.23	74.00	-30.77	peak
5		2495.875	42.26	0.25	42.51	74.00	-31.49	peak
6		2497.608	41.99	0.24	42.23	74.00	-31.77	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

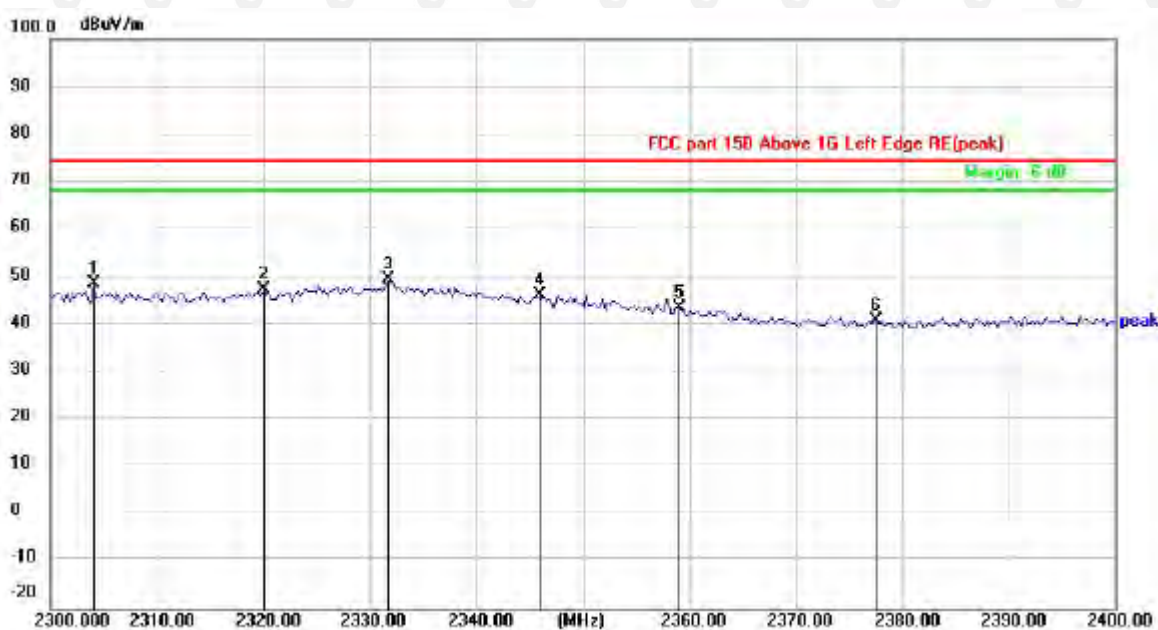
ANT1+ANT2 802.11n/H20 Mode TX CH Low (2412MHz)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2307.750	43.54	1.25	44.79	74.00	-29.21	peak
2		2325.000	43.57	1.15	44.72	74.00	-29.28	peak
3	*	2344.750	44.03	1.05	45.08	74.00	-28.92	peak
4		2360.000	41.75	0.97	42.72	74.00	-31.28	peak
5		2374.250	40.45	0.89	41.34	74.00	-32.66	peak
6		2387.500	40.69	0.82	41.51	74.00	-32.49	peak

Vertical:



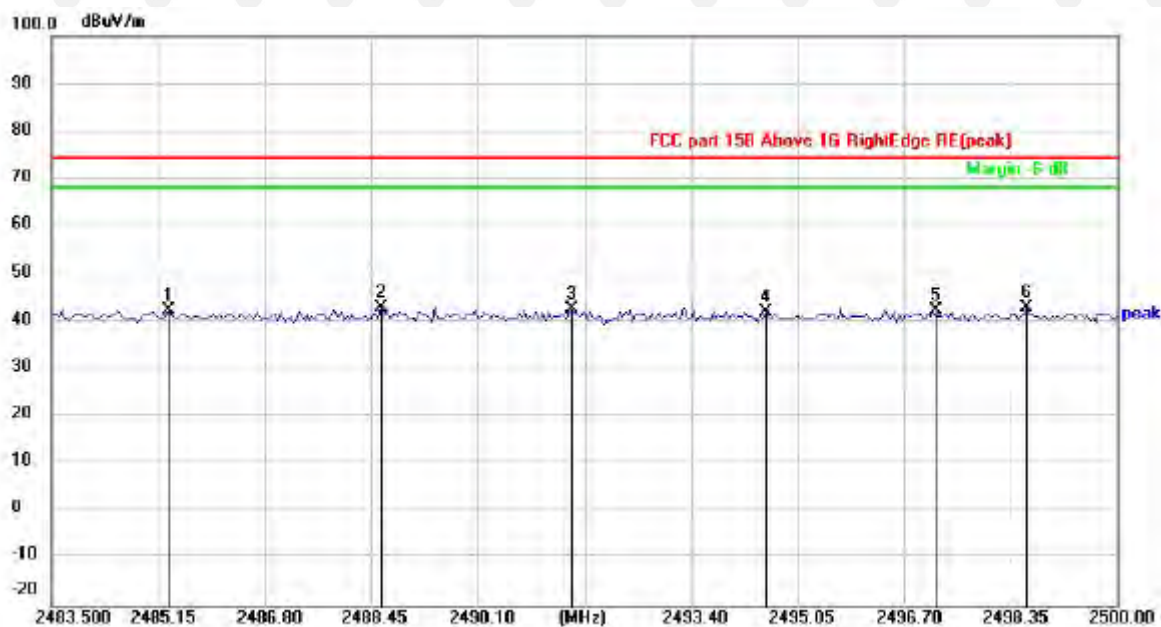
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2304.000	47.58	1.26	48.84	74.00	-25.16	peak
2		2320.000	46.40	1.18	47.58	74.00	-26.42	peak
3	*	2331.750	48.48	1.12	49.60	74.00	-24.40	peak
4		2346.000	45.50	1.04	46.54	74.00	-27.46	peak
5		2359.000	42.78	0.97	43.75	74.00	-30.25	peak
6		2377.500	40.05	0.88	40.93	74.00	-33.07	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

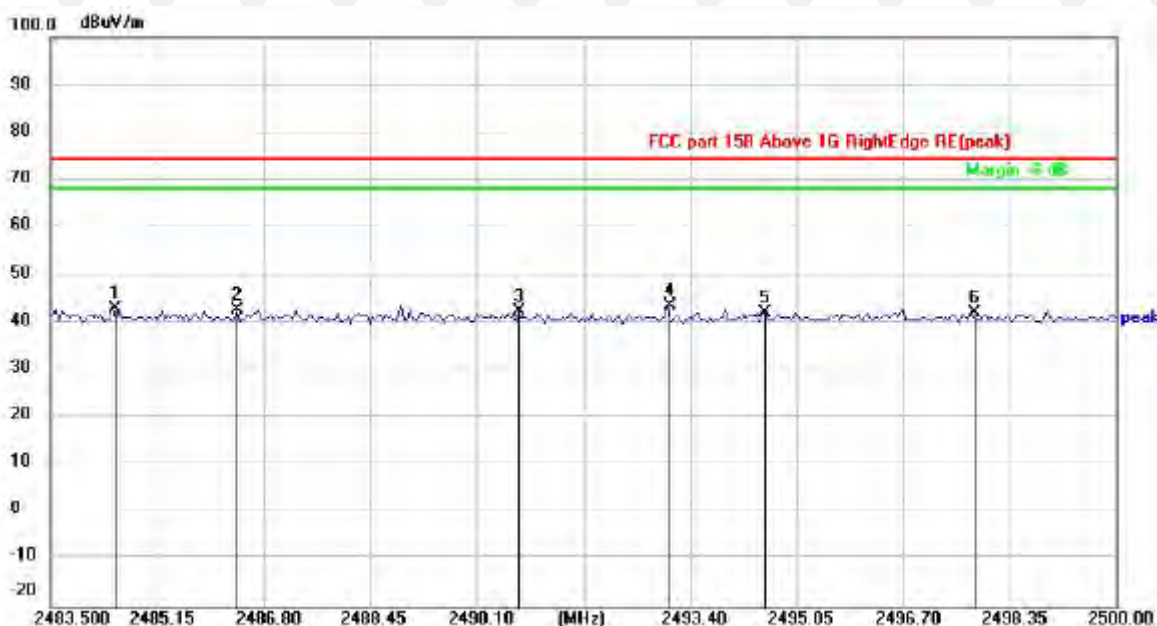
ANT1+ANT2 802.11n/H20 Mode TX CH High (2462MHz)

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	
		MHz	Level	Factor	ment			Detector
			dBuV	dB	dBuV/m	dB/m	dB	
1		2485.315	42.37	0.31	42.68	74.00	-31.32	peak
2		2488.615	42.80	0.29	43.09	74.00	-30.91	peak
3		2491.503	42.63	0.27	42.90	74.00	-31.10	peak
4		2494.555	42.02	0.26	42.28	74.00	-31.72	peak
5		2497.154	42.18	0.25	42.43	74.00	-31.57	peak
6	*	2498.597	42.89	0.24	43.13	74.00	-30.87	peak

Vertical:



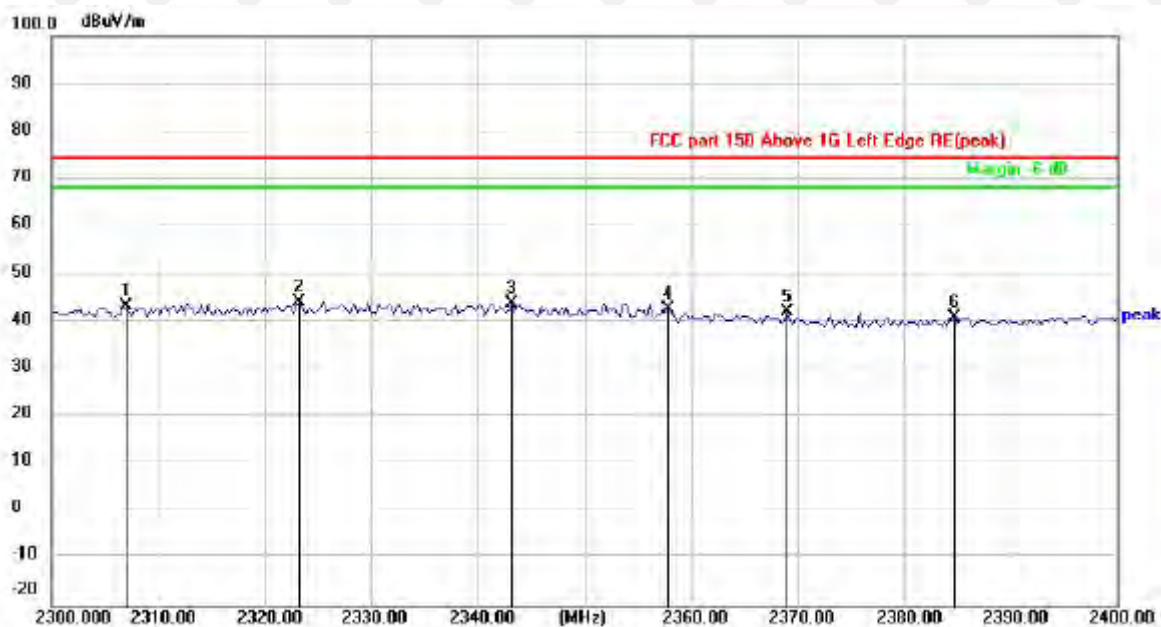
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
1		2484.449	42.71	0.31	43.02	74.00	-30.98	peak
2		2486.387	42.53	0.30	42.83	74.00	-31.17	peak
3		2490.760	42.14	0.28	42.42	74.00	-31.58	peak
4	*	2493.029	43.40	0.27	43.67	74.00	-30.33	peak
5		2494.514	42.09	0.26	42.35	74.00	-31.65	peak
6		2497.773	41.97	0.24	42.21	74.00	-31.79	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

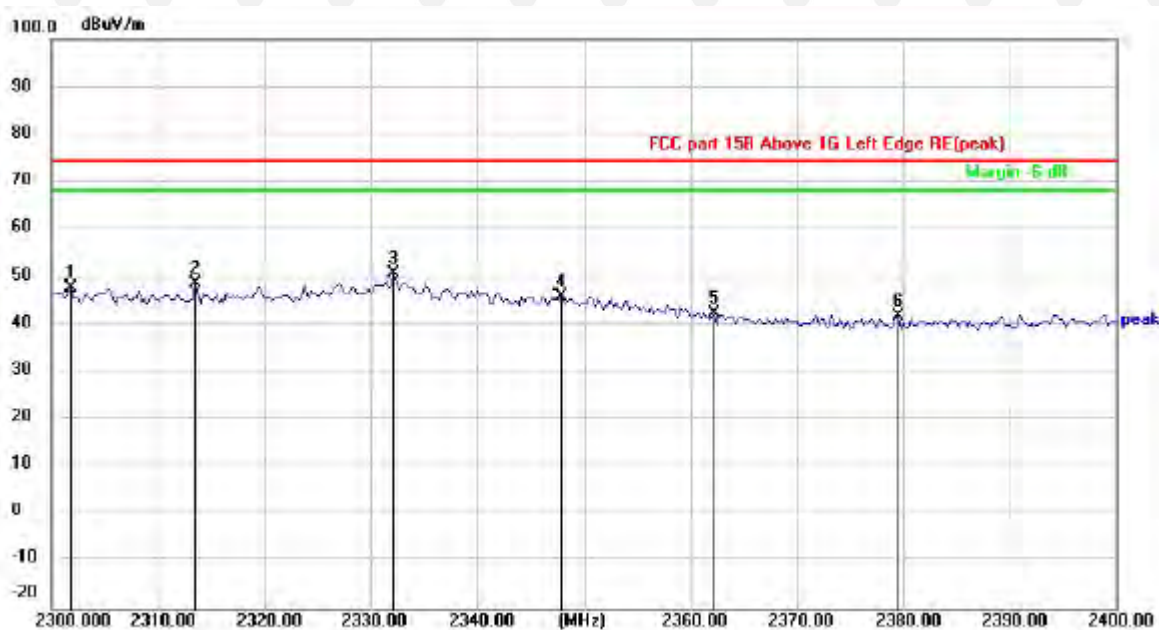
ANT1+ANT2 802.11n/H40 Mode TX CH Low (2422MHz)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2307.000	42.06	1.25	43.31	74.00	-30.69	peak
2	*	2323.250	43.22	1.16	44.38	74.00	-29.62	peak
3		2343.250	42.87	1.06	43.93	74.00	-30.07	peak
4		2357.750	41.90	0.98	42.88	74.00	-31.12	peak
5		2369.000	41.23	0.92	42.15	74.00	-31.85	peak
6		2384.750	40.29	0.84	41.13	74.00	-32.87	peak

Vertical:



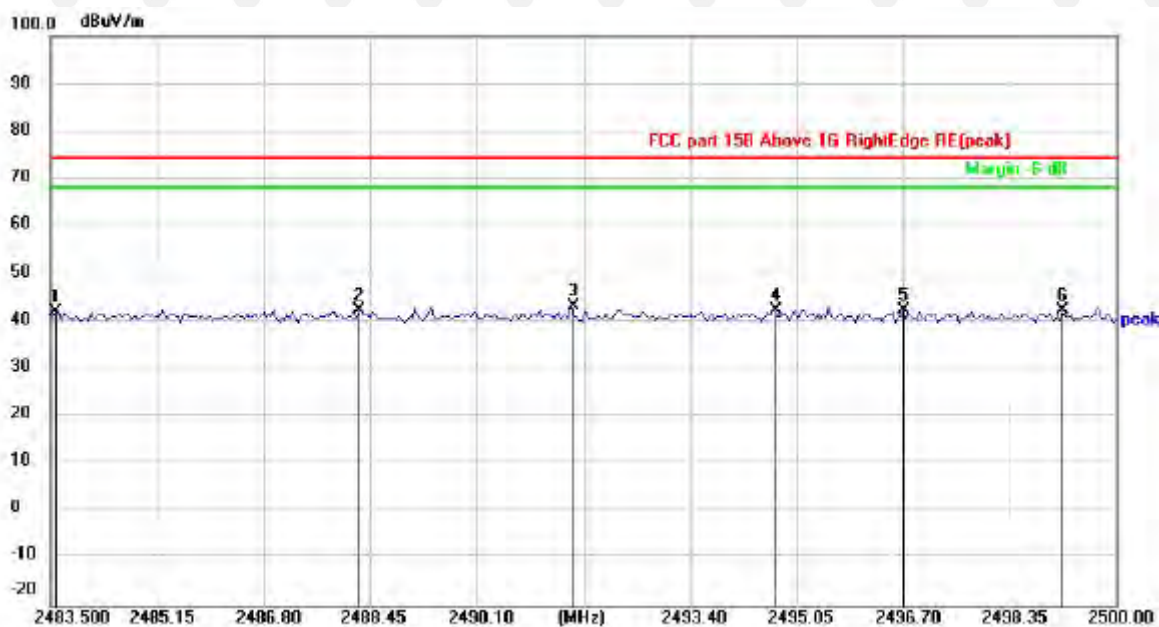
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2301.750	46.75	1.28	48.03	74.00	-25.97	peak
2		2313.500	47.57	1.21	48.78	74.00	-25.22	peak
3	*	2332.250	49.95	1.12	51.07	74.00	-22.93	peak
4		2347.750	45.03	1.03	46.06	74.00	-27.94	peak
5		2362.250	41.56	0.96	42.52	74.00	-31.48	peak
6		2379.500	41.08	0.87	41.95	74.00	-32.05	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

Operation Mode:

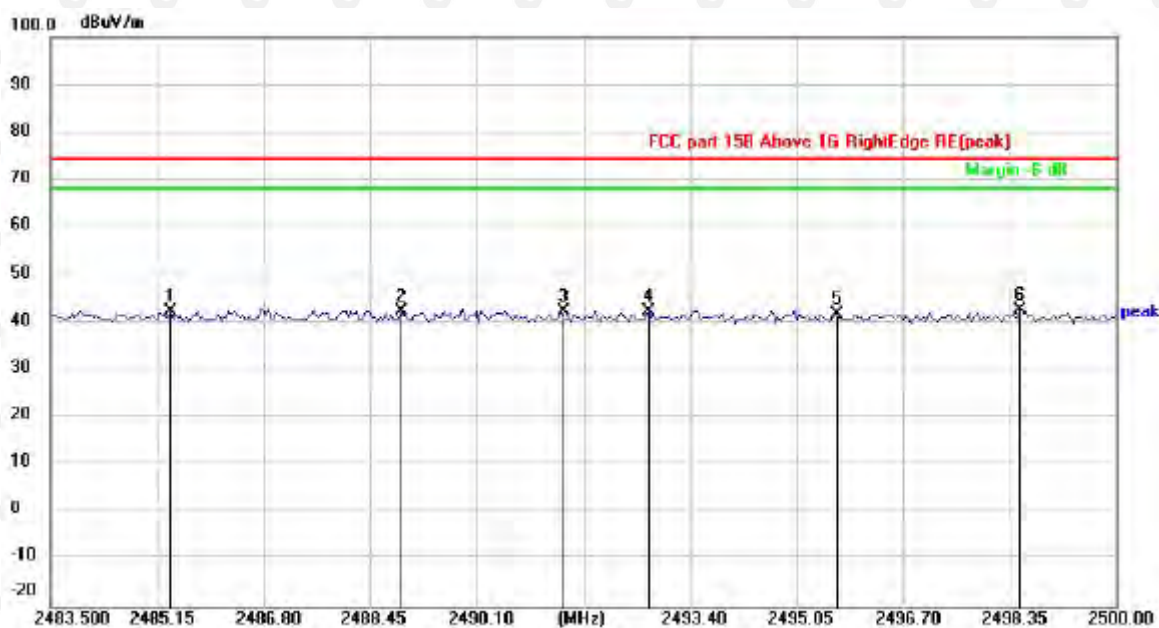
ANT1+ANT2 802.11n/H40 Mode TX CH High (2452MHz)

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2483.582	41.93	0.32	42.25	74.00	-31.75	peak
2		2488.285	42.12	0.29	42.41	74.00	-31.59	peak
3	*	2491.544	43.29	0.27	43.56	74.00	-30.44	peak
4		2494.679	42.42	0.26	42.68	74.00	-31.32	peak
5		2496.700	42.31	0.25	42.56	74.00	-31.44	peak
6		2499.175	42.29	0.23	42.52	74.00	-31.48	peak

Vertical:

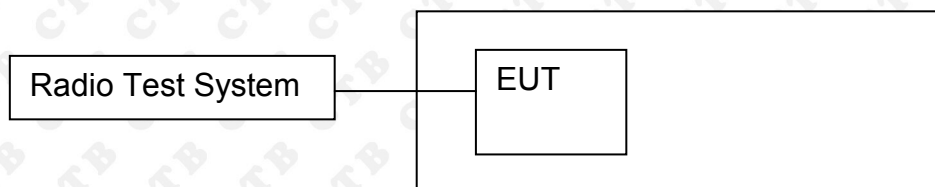


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB/m	Over dB	Detector
1		2485.356	42.21	0.31	42.52	74.00	-31.48	peak
2		2488.945	42.39	0.29	42.68	74.00	-31.32	peak
3		2491.379	42.26	0.28	42.54	74.00	-31.46	peak
4		2492.740	42.24	0.27	42.51	74.00	-31.49	peak
5		2495.628	41.78	0.25	42.03	74.00	-31.97	peak
6	*	2498.515	42.71	0.24	42.95	74.00	-31.05	peak

When the peak value is smaller than the AVG limit, AVG is not reflected.

8. BAND EDGE AND RF CONDUCTED SPURIOUS EMISSIONS

8.1 Block Diagram Of Test Setup



8.2 Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

8.3 Test procedure

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum;
2. Set the spectrum analyzer:

Below 30MHz:

RBW = 100kHz, VBW = 300kHz, Sweep = auto

Detector function = peak, Trace = max hold

Above 30MHz:

RBW = 100KHz, VBW = 300KHz, Sweep = auto

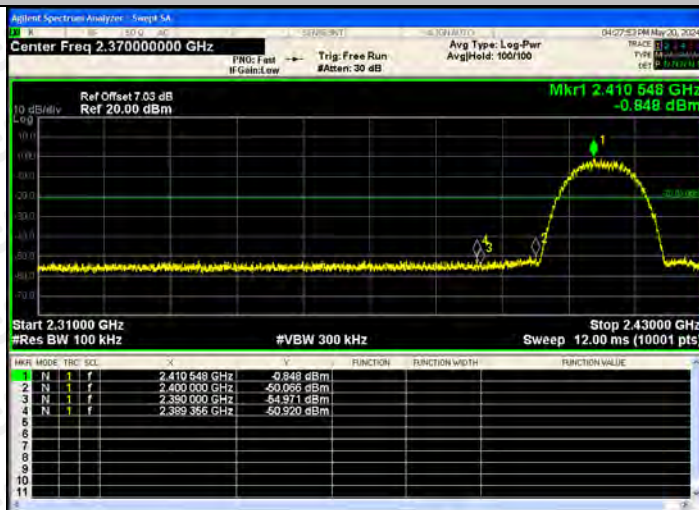
Detector function = peak, Trace = max hold

8.4 Test Result

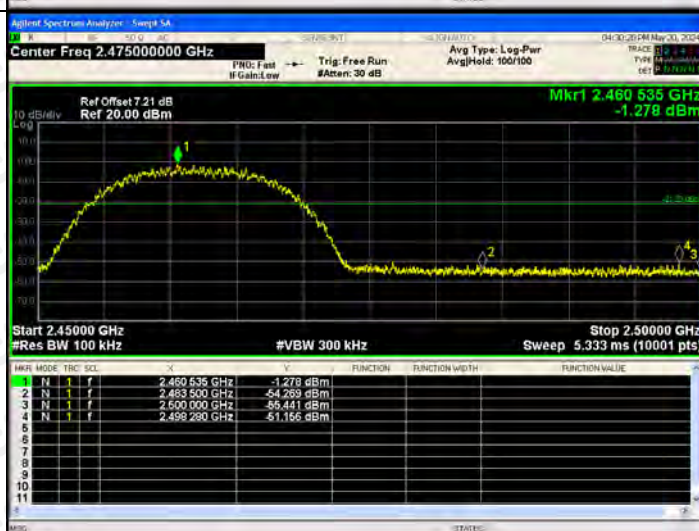
ANT1:

BAND EDGE Graphs

802.11b/LCH

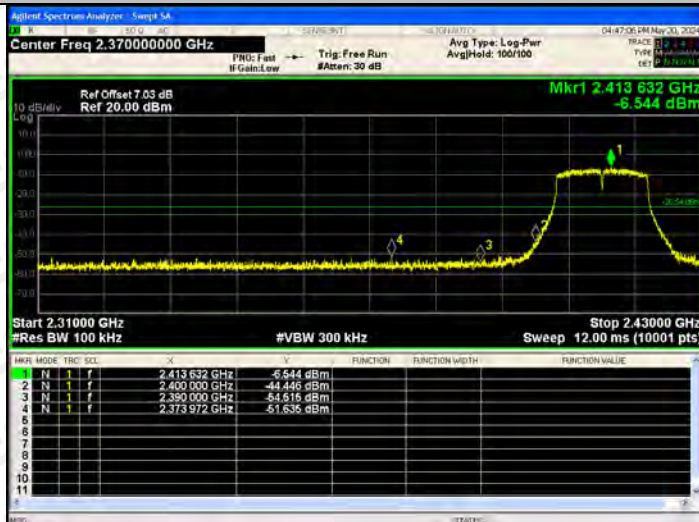


802.11b/HCH



BAND EDGE Graphs

802.11g/LCH

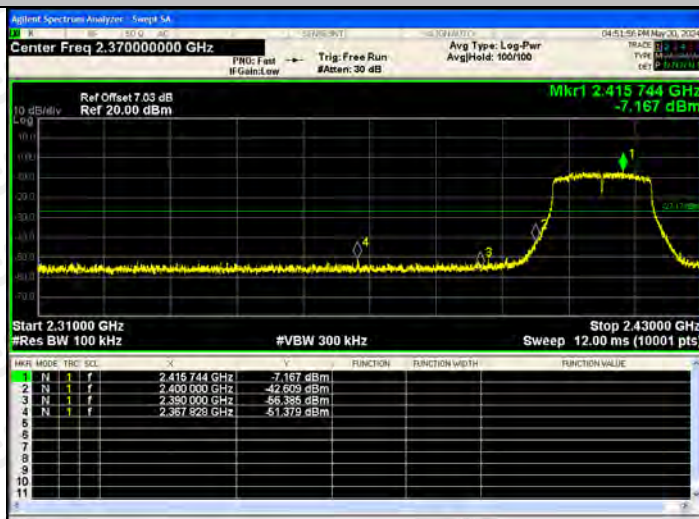


802.11g/HCH

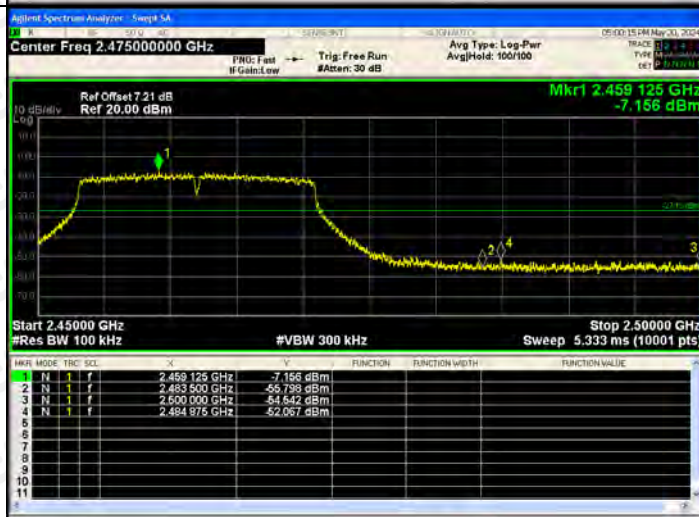


BAND EDGE Graphs

802.11n(HT20)/L
CH

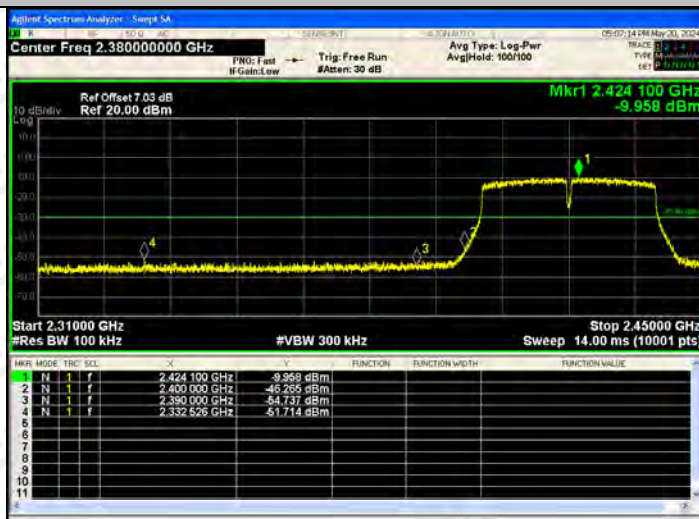


802.11n(HT20)/H
CH



BAND EDGE Graphs

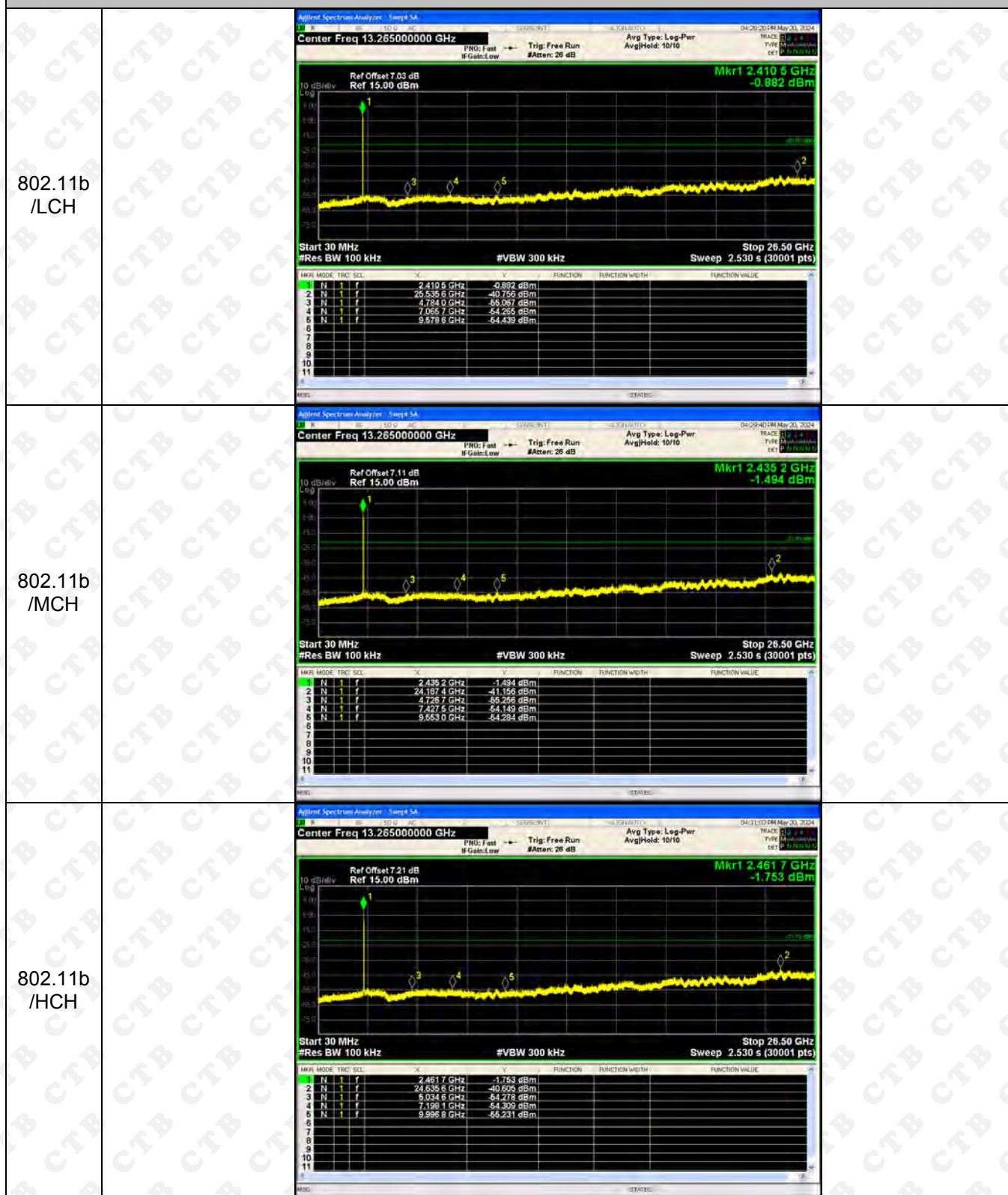
802.11n(HT40)/L
CH



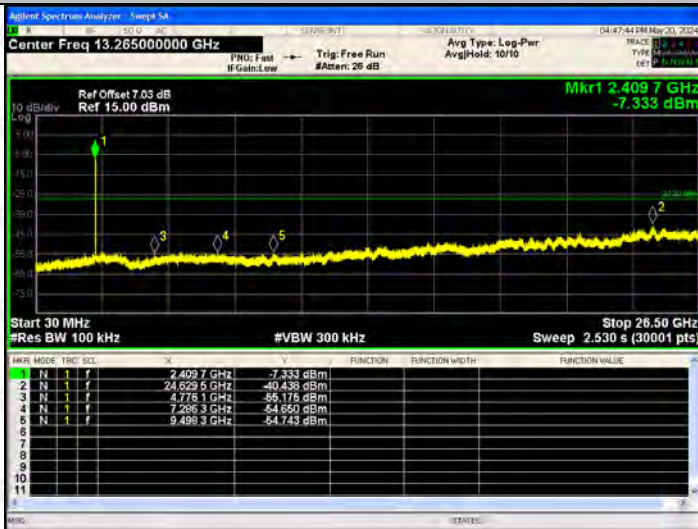
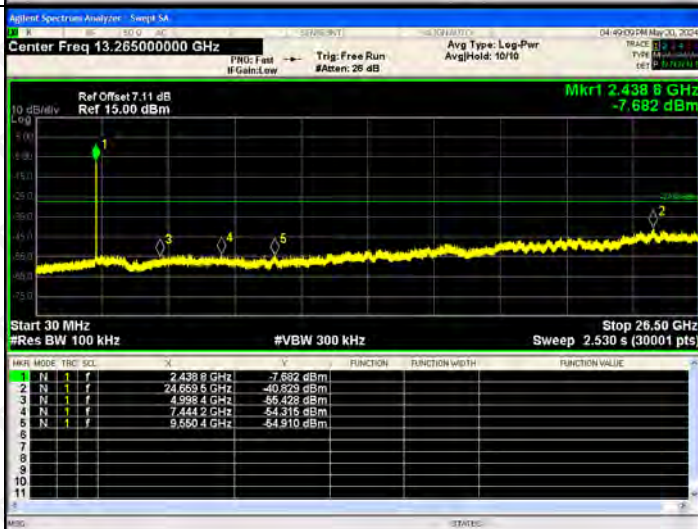
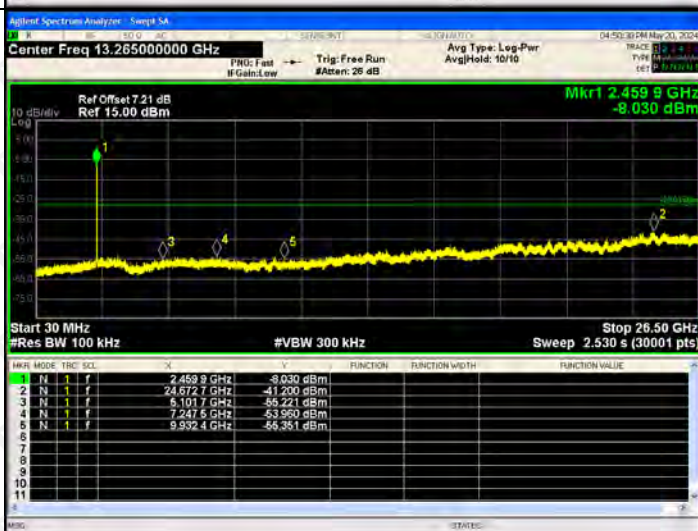
802.11n(HT40)/H
CH



RF Conducted Spurious Emissions Graphs

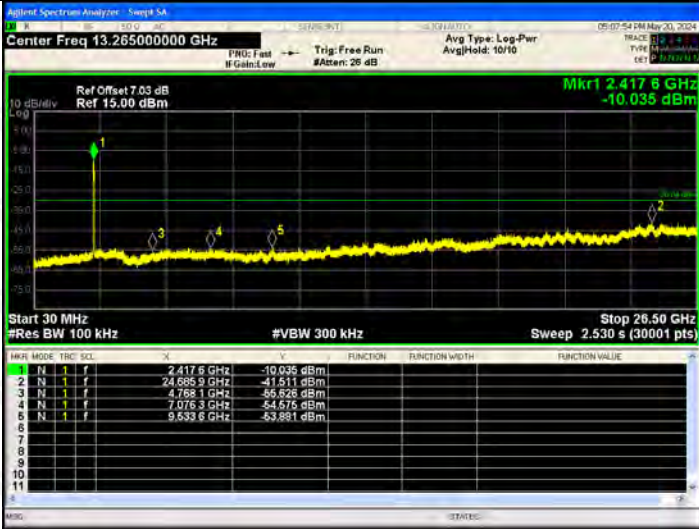
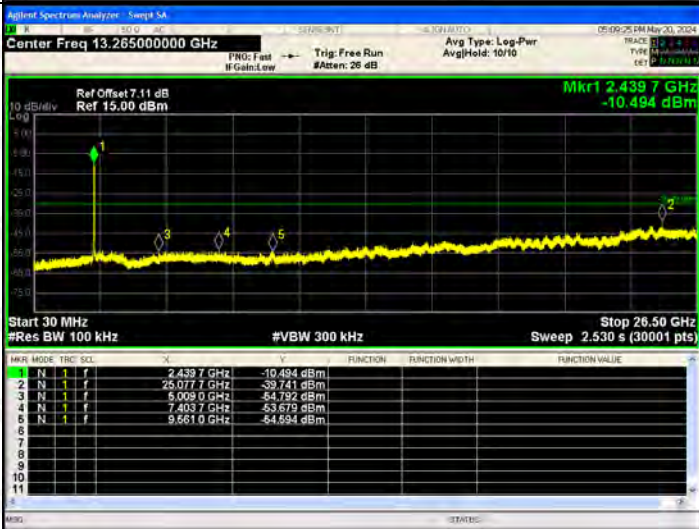
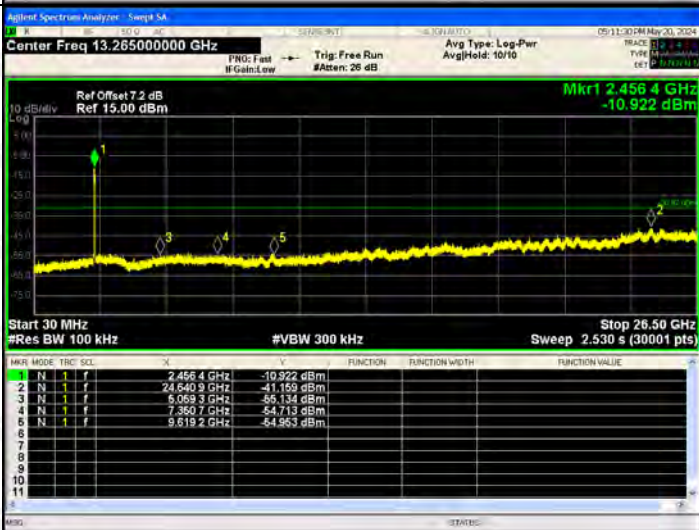


RF Conducted Spurious Emissions Graphs

802.11g /LCH	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 13.265000000 GHz Ref Offset 7.03 dB Ref 15.00 dBm Mkr1 2.409 7 GHz -7.333 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th><th>Function</th><th>Function Width</th><th>Function Value</th></tr><tr><td>1</td><td>N</td><td>2.409 7 GHz</td><td>-7.333 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>24.629 5 GHz</td><td>-40.438 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>4.776 1 GHz</td><td>-55.175 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>7.288 3 GHz</td><td>-54.650 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>N</td><td>9.498 9 GHz</td><td>-54.743 dBm</td><td></td><td></td><td></td></tr></table>	Mkr	Mode	Freq	Power	Function	Function Width	Function Value	1	N	2.409 7 GHz	-7.333 dBm				2	N	24.629 5 GHz	-40.438 dBm				3	N	4.776 1 GHz	-55.175 dBm				4	N	7.288 3 GHz	-54.650 dBm				5	N	9.498 9 GHz	-54.743 dBm			
Mkr	Mode	Freq	Power	Function	Function Width	Function Value																																					
1	N	2.409 7 GHz	-7.333 dBm																																								
2	N	24.629 5 GHz	-40.438 dBm																																								
3	N	4.776 1 GHz	-55.175 dBm																																								
4	N	7.288 3 GHz	-54.650 dBm																																								
5	N	9.498 9 GHz	-54.743 dBm																																								
802.11g /MCH	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 13.265000000 GHz Ref Offset 7.11 dB Ref 15.00 dBm Mkr1 2.438 8 GHz -7.682 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th><th>Function</th><th>Function Width</th><th>Function Value</th></tr><tr><td>1</td><td>N</td><td>2.438 8 GHz</td><td>-7.682 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>24.629 5 GHz</td><td>-40.438 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>4.998 4 GHz</td><td>-55.428 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>7.444 2 GHz</td><td>-54.315 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>N</td><td>9.550 4 GHz</td><td>-54.910 dBm</td><td></td><td></td><td></td></tr></table>	Mkr	Mode	Freq	Power	Function	Function Width	Function Value	1	N	2.438 8 GHz	-7.682 dBm				2	N	24.629 5 GHz	-40.438 dBm				3	N	4.998 4 GHz	-55.428 dBm				4	N	7.444 2 GHz	-54.315 dBm				5	N	9.550 4 GHz	-54.910 dBm			
Mkr	Mode	Freq	Power	Function	Function Width	Function Value																																					
1	N	2.438 8 GHz	-7.682 dBm																																								
2	N	24.629 5 GHz	-40.438 dBm																																								
3	N	4.998 4 GHz	-55.428 dBm																																								
4	N	7.444 2 GHz	-54.315 dBm																																								
5	N	9.550 4 GHz	-54.910 dBm																																								
802.11g /HCH	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 13.265000000 GHz Ref Offset 7.21 dB Ref 15.00 dBm Mkr1 2.459 9 GHz -8.030 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th><th>Function</th><th>Function Width</th><th>Function Value</th></tr><tr><td>1</td><td>N</td><td>2.459 9 GHz</td><td>-8.030 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>24.672 7 GHz</td><td>-41.200 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>5.101 7 GHz</td><td>-55.221 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>7.247 5 GHz</td><td>-53.950 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>N</td><td>9.532 4 GHz</td><td>-55.351 dBm</td><td></td><td></td><td></td></tr></table>	Mkr	Mode	Freq	Power	Function	Function Width	Function Value	1	N	2.459 9 GHz	-8.030 dBm				2	N	24.672 7 GHz	-41.200 dBm				3	N	5.101 7 GHz	-55.221 dBm				4	N	7.247 5 GHz	-53.950 dBm				5	N	9.532 4 GHz	-55.351 dBm			
Mkr	Mode	Freq	Power	Function	Function Width	Function Value																																					
1	N	2.459 9 GHz	-8.030 dBm																																								
2	N	24.672 7 GHz	-41.200 dBm																																								
3	N	5.101 7 GHz	-55.221 dBm																																								
4	N	7.247 5 GHz	-53.950 dBm																																								
5	N	9.532 4 GHz	-55.351 dBm																																								

RF Conducted Spurious Emissions Graphs

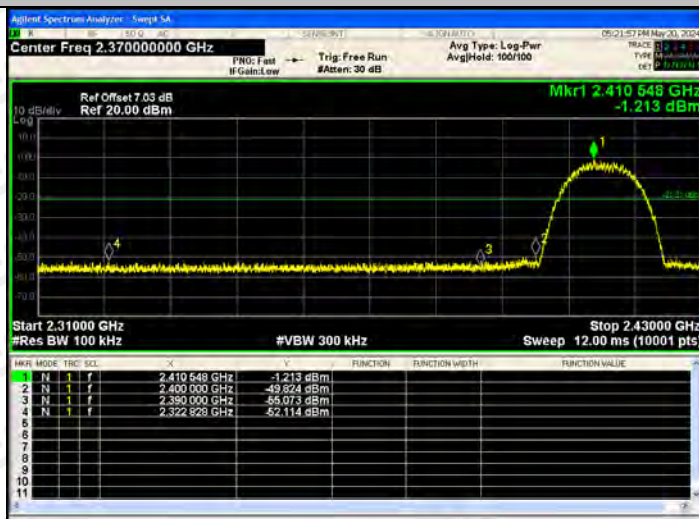
802.11n (HT20)/ LCH	<table><tr><th>CH</th><th>F</th><th>P</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>2.415 GHz</td><td>-7.985 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>2.436 GHz</td><td>-40.722 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>4.754 GHz</td><td>-55.831 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>7.210 GHz</td><td>-53.672 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>9.531 GHz</td><td>-54.972 dBm</td><td></td><td></td><td></td></tr></table>	CH	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	2.415 GHz	-7.985 dBm				2	2.436 GHz	-40.722 dBm				3	4.754 GHz	-55.831 dBm				4	7.210 GHz	-53.672 dBm				5	9.531 GHz	-54.972 dBm				
CH	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																																	
1	2.415 GHz	-7.985 dBm																																				
2	2.436 GHz	-40.722 dBm																																				
3	4.754 GHz	-55.831 dBm																																				
4	7.210 GHz	-53.672 dBm																																				
5	9.531 GHz	-54.972 dBm																																				
802.11 n(HT20) /MCH	<table><tr><th>CH</th><th>F</th><th>P</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>2.436 GHz</td><td>-7.342 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>2.436 GHz</td><td>-41.287 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>4.775 GHz</td><td>-56.306 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>7.141 GHz</td><td>-54.304 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>9.578 GHz</td><td>-54.154 dBm</td><td></td><td></td><td></td></tr></table>	CH	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	2.436 GHz	-7.342 dBm				2	2.436 GHz	-41.287 dBm				3	4.775 GHz	-56.306 dBm				4	7.141 GHz	-54.304 dBm				5	9.578 GHz	-54.154 dBm				
CH	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																																	
1	2.436 GHz	-7.342 dBm																																				
2	2.436 GHz	-41.287 dBm																																				
3	4.775 GHz	-56.306 dBm																																				
4	7.141 GHz	-54.304 dBm																																				
5	9.578 GHz	-54.154 dBm																																				
802.11 n(HT20) /HCH	<table><tr><th>CH</th><th>F</th><th>P</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr><tr><td>1</td><td>2.460 GHz</td><td>-8.142 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>2.436 GHz</td><td>-41.146 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>5.108 GHz</td><td>-54.188 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>7.621 GHz</td><td>-53.860 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td>10.021 GHz</td><td>-54.590 dBm</td><td></td><td></td><td></td></tr></table>	CH	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	2.460 GHz	-8.142 dBm				2	2.436 GHz	-41.146 dBm				3	5.108 GHz	-54.188 dBm				4	7.621 GHz	-53.860 dBm				5	10.021 GHz	-54.590 dBm				
CH	F	P	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																																	
1	2.460 GHz	-8.142 dBm																																				
2	2.436 GHz	-41.146 dBm																																				
3	5.108 GHz	-54.188 dBm																																				
4	7.621 GHz	-53.860 dBm																																				
5	10.021 GHz	-54.590 dBm																																				

802.11n (HT40)/ LCH	
802.11 n(HT40) /MCH	
802.11 n(HT40) /HCH	

ANT2:

BAND EDGE Graphs

802.11b/LCH

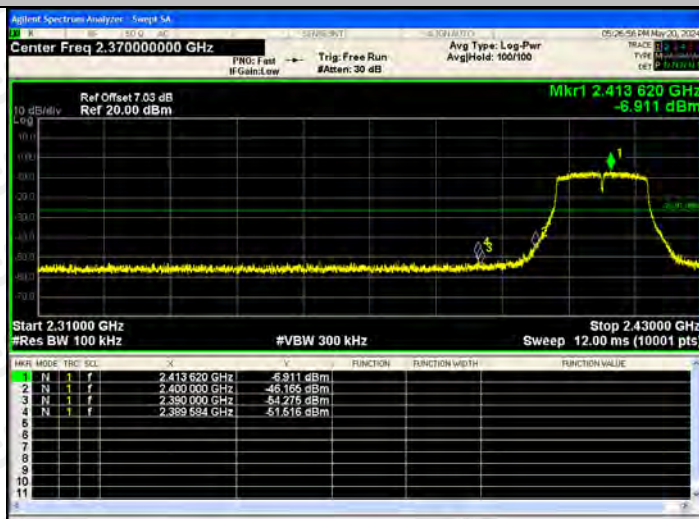


802.11b/HCH



BAND EDGE Graphs

802.11g/LCH

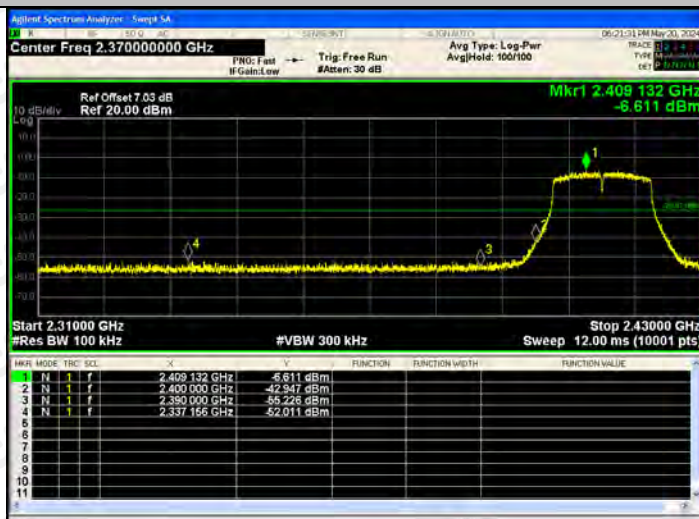


802.11g/HCH



BAND EDGE Graphs

802.11n(HT20)/L
CH

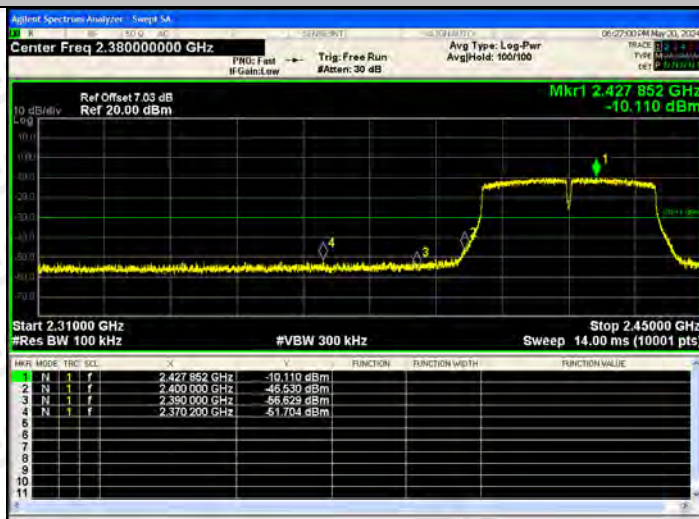


802.11n(HT20)/H
CH



BAND EDGE Graphs

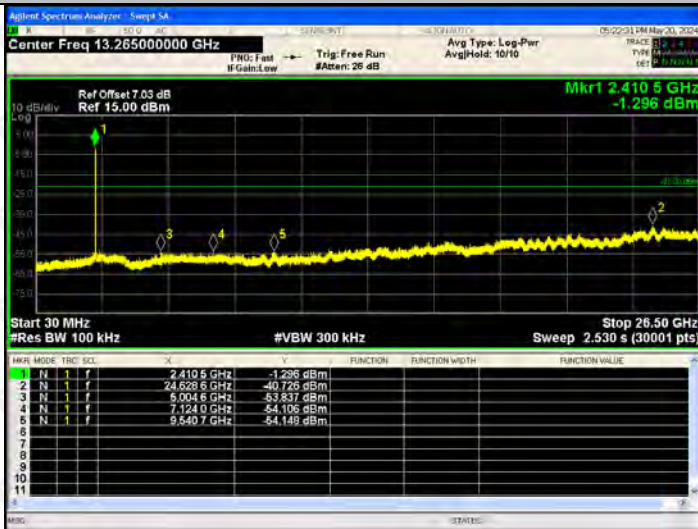
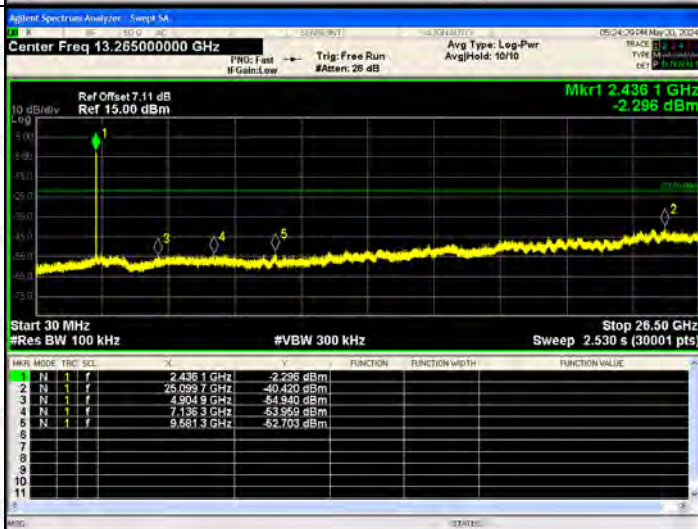
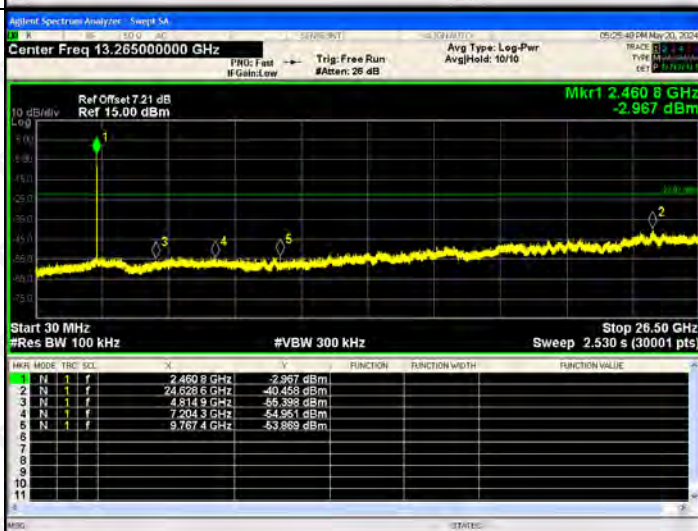
802.11n(HT40)/L
CH



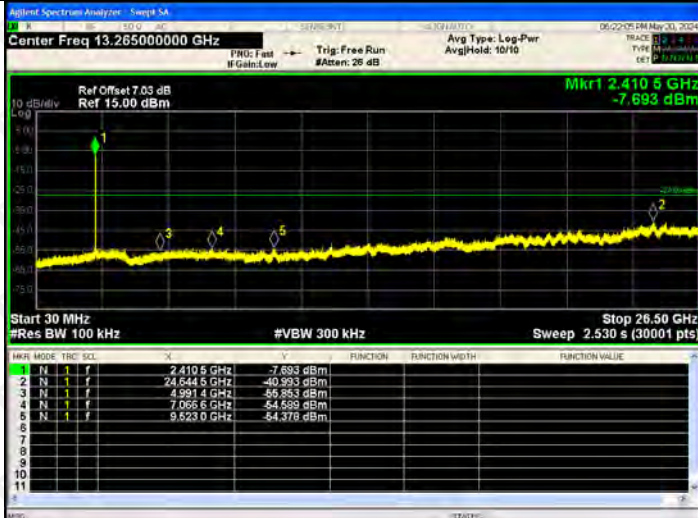
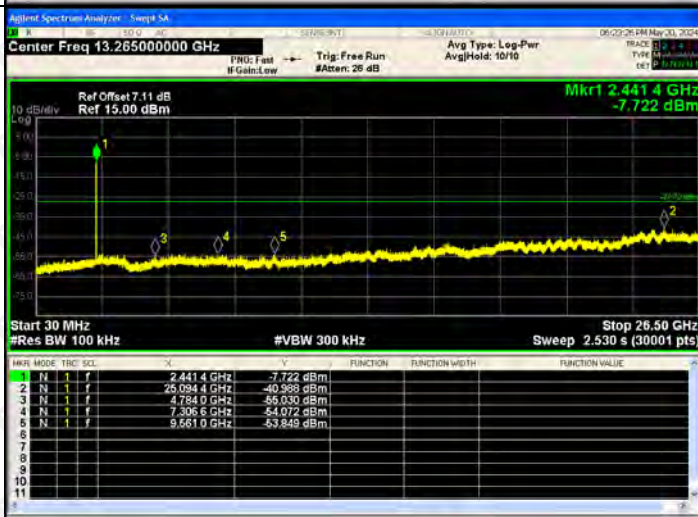
802.11n(HT40)/H
CH



RF Conducted Spurious Emissions Graphs

802.11b /LCH	 Agilent Spectrum Analyzer - Sweep SA Center Freq 13.265000000 GHz Ref Offset 7.03 dB Ref 15.00 dBm Mkr1 2.410 5 GHz -1.296 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th></tr><tr><td>1</td><td>N</td><td>2.410 5 GHz</td><td>-1.296 dBm</td></tr><tr><td>2</td><td>N</td><td>2.436 1 GHz</td><td>-2.296 dBm</td></tr><tr><td>3</td><td>N</td><td>2.460 8 GHz</td><td>-2.987 dBm</td></tr><tr><td>4</td><td>N</td><td>2.484 9 GHz</td><td>-56.398 dBm</td></tr><tr><td>5</td><td>N</td><td>2.509 7 GHz</td><td>-40.420 dBm</td></tr><tr><td>6</td><td>N</td><td>2.534 3 GHz</td><td>-62.709 dBm</td></tr></table>	Mkr	Mode	Freq	Power	1	N	2.410 5 GHz	-1.296 dBm	2	N	2.436 1 GHz	-2.296 dBm	3	N	2.460 8 GHz	-2.987 dBm	4	N	2.484 9 GHz	-56.398 dBm	5	N	2.509 7 GHz	-40.420 dBm	6	N	2.534 3 GHz	-62.709 dBm
Mkr	Mode	Freq	Power																										
1	N	2.410 5 GHz	-1.296 dBm																										
2	N	2.436 1 GHz	-2.296 dBm																										
3	N	2.460 8 GHz	-2.987 dBm																										
4	N	2.484 9 GHz	-56.398 dBm																										
5	N	2.509 7 GHz	-40.420 dBm																										
6	N	2.534 3 GHz	-62.709 dBm																										
802.11b /MCH	 Agilent Spectrum Analyzer - Sweep SA Center Freq 13.265000000 GHz Ref Offset 7.11 dB Ref 15.00 dBm Mkr1 2.436 1 GHz -2.296 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th></tr><tr><td>1</td><td>N</td><td>2.436 1 GHz</td><td>-2.296 dBm</td></tr><tr><td>2</td><td>N</td><td>2.460 8 GHz</td><td>-2.987 dBm</td></tr><tr><td>3</td><td>N</td><td>2.484 9 GHz</td><td>-56.398 dBm</td></tr><tr><td>4</td><td>N</td><td>2.509 7 GHz</td><td>-40.420 dBm</td></tr><tr><td>5</td><td>N</td><td>2.534 3 GHz</td><td>-62.709 dBm</td></tr></table>	Mkr	Mode	Freq	Power	1	N	2.436 1 GHz	-2.296 dBm	2	N	2.460 8 GHz	-2.987 dBm	3	N	2.484 9 GHz	-56.398 dBm	4	N	2.509 7 GHz	-40.420 dBm	5	N	2.534 3 GHz	-62.709 dBm				
Mkr	Mode	Freq	Power																										
1	N	2.436 1 GHz	-2.296 dBm																										
2	N	2.460 8 GHz	-2.987 dBm																										
3	N	2.484 9 GHz	-56.398 dBm																										
4	N	2.509 7 GHz	-40.420 dBm																										
5	N	2.534 3 GHz	-62.709 dBm																										
802.11b /HCH	 Agilent Spectrum Analyzer - Sweep SA Center Freq 13.265000000 GHz Ref Offset 7.21 dB Ref 15.00 dBm Mkr1 2.460 8 GHz -2.987 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th></tr><tr><td>1</td><td>N</td><td>2.460 8 GHz</td><td>-2.987 dBm</td></tr><tr><td>2</td><td>N</td><td>2.484 9 GHz</td><td>-56.398 dBm</td></tr><tr><td>3</td><td>N</td><td>2.509 7 GHz</td><td>-40.420 dBm</td></tr><tr><td>4</td><td>N</td><td>2.534 3 GHz</td><td>-62.709 dBm</td></tr></table>	Mkr	Mode	Freq	Power	1	N	2.460 8 GHz	-2.987 dBm	2	N	2.484 9 GHz	-56.398 dBm	3	N	2.509 7 GHz	-40.420 dBm	4	N	2.534 3 GHz	-62.709 dBm								
Mkr	Mode	Freq	Power																										
1	N	2.460 8 GHz	-2.987 dBm																										
2	N	2.484 9 GHz	-56.398 dBm																										
3	N	2.509 7 GHz	-40.420 dBm																										
4	N	2.534 3 GHz	-62.709 dBm																										

RF Conducted Spurious Emissions Graphs

802.11n (HT20)/ LCH	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 13.265000000 GHz Ref Offset 7.03 dB Ref 15.00 dBm Mkr1 2.410 5 GHz -7.693 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th></tr><tr><td>1</td><td>N</td><td>2.410 5 GHz</td><td>-7.693 dBm</td></tr><tr><td>2</td><td>N</td><td>24.644 5 GHz</td><td>-40.993 dBm</td></tr><tr><td>3</td><td>N</td><td>4.991 4 GHz</td><td>-55.853 dBm</td></tr><tr><td>4</td><td>N</td><td>7.065 5 GHz</td><td>-54.699 dBm</td></tr><tr><td>5</td><td>N</td><td>9.923 0 GHz</td><td>-54.378 dBm</td></tr></table>	Mkr	Mode	Freq	Power	1	N	2.410 5 GHz	-7.693 dBm	2	N	24.644 5 GHz	-40.993 dBm	3	N	4.991 4 GHz	-55.853 dBm	4	N	7.065 5 GHz	-54.699 dBm	5	N	9.923 0 GHz	-54.378 dBm
Mkr	Mode	Freq	Power																						
1	N	2.410 5 GHz	-7.693 dBm																						
2	N	24.644 5 GHz	-40.993 dBm																						
3	N	4.991 4 GHz	-55.853 dBm																						
4	N	7.065 5 GHz	-54.699 dBm																						
5	N	9.923 0 GHz	-54.378 dBm																						
802.11 n(HT20) /MCH	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 13.265000000 GHz Ref Offset 7.11 dB Ref 15.00 dBm Mkr1 2.441 4 GHz -7.722 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th></tr><tr><td>1</td><td>N</td><td>2.441 4 GHz</td><td>-7.722 dBm</td></tr><tr><td>2</td><td>N</td><td>25.094 4 GHz</td><td>-40.988 dBm</td></tr><tr><td>3</td><td>N</td><td>4.784 0 GHz</td><td>-55.030 dBm</td></tr><tr><td>4</td><td>N</td><td>7.306 6 GHz</td><td>-54.072 dBm</td></tr><tr><td>5</td><td>N</td><td>9.661 0 GHz</td><td>-53.848 dBm</td></tr></table>	Mkr	Mode	Freq	Power	1	N	2.441 4 GHz	-7.722 dBm	2	N	25.094 4 GHz	-40.988 dBm	3	N	4.784 0 GHz	-55.030 dBm	4	N	7.306 6 GHz	-54.072 dBm	5	N	9.661 0 GHz	-53.848 dBm
Mkr	Mode	Freq	Power																						
1	N	2.441 4 GHz	-7.722 dBm																						
2	N	25.094 4 GHz	-40.988 dBm																						
3	N	4.784 0 GHz	-55.030 dBm																						
4	N	7.306 6 GHz	-54.072 dBm																						
5	N	9.661 0 GHz	-53.848 dBm																						
802.11 n(HT20) /HCH	 Agilent Spectrum Analyzer - Sweep 5A Center Freq 13.265000000 GHz Ref Offset 7.21 dB Ref 15.00 dBm Mkr1 2.460 8 GHz -8.314 dBm Start 30 MHz #Res BW 100 kHz #VBW 300 kHz Stop 26.50 GHz Sweep 2.530 s (30001 pts) <table><tr><th>Mkr</th><th>Mode</th><th>Freq</th><th>Power</th></tr><tr><td>1</td><td>N</td><td>2.460 8 GHz</td><td>-8.314 dBm</td></tr><tr><td>2</td><td>N</td><td>24.631 2 GHz</td><td>-41.377 dBm</td></tr><tr><td>3</td><td>N</td><td>5.078 7 GHz</td><td>-54.713 dBm</td></tr><tr><td>4</td><td>N</td><td>7.607 8 GHz</td><td>-54.169 dBm</td></tr><tr><td>5</td><td>N</td><td>9.765 7 GHz</td><td>-56.100 dBm</td></tr></table>	Mkr	Mode	Freq	Power	1	N	2.460 8 GHz	-8.314 dBm	2	N	24.631 2 GHz	-41.377 dBm	3	N	5.078 7 GHz	-54.713 dBm	4	N	7.607 8 GHz	-54.169 dBm	5	N	9.765 7 GHz	-56.100 dBm
Mkr	Mode	Freq	Power																						
1	N	2.460 8 GHz	-8.314 dBm																						
2	N	24.631 2 GHz	-41.377 dBm																						
3	N	5.078 7 GHz	-54.713 dBm																						
4	N	7.607 8 GHz	-54.169 dBm																						
5	N	9.765 7 GHz	-56.100 dBm																						

RF Conducted Spurious Emissions Graphs



9. COUDUCTED OUTPUT POWER

9.1 Block Diagram Of Test Setup



9.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Conducted Output Power	1 watt or 30dBm	2400-2483.5	PASS

9.3 Test procedure

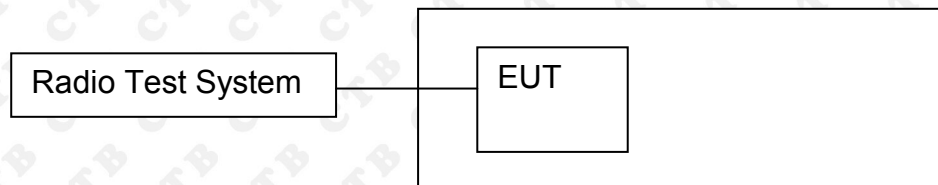
1. The EUT was directly connected to the Power meter

9.4 Test Result

Mode	Channel.	Maximum Peak Power [dBm] ant 1	Maximum Peak Power [dBm] ant 2	Total Power Peak Output Power(dBm)	Limit[dBm]
802.11b	LCH	14.516	14.209	/	30
	MCH	14.247	14.127	/	30
	HCH	14.207	13.928	/	30
802.11g	LCH	14.406	14.328	/	30
	MCH	14.141	14.117	/	30
	HCH	13.514	13.704	/	30
802.11n(HT20)	LCH	14.551	14.630	17.601	30
	MCH	14.535	13.513	17.064	30
	HCH	13.514	13.700	16.618	30
802.11n(HT40)	LCH	14.451	14.526	17.499	30
	MCH	14.130	14.116	17.133	30
	HCH	13.894	13.901	16.908	30

10. 6DB OCCUPIED BANDWIDTH

10.1 Block Diagram Of Test Setup



10.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

10.3 Test procedure

1. Rem1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

10.4 Test Result

ANT1:

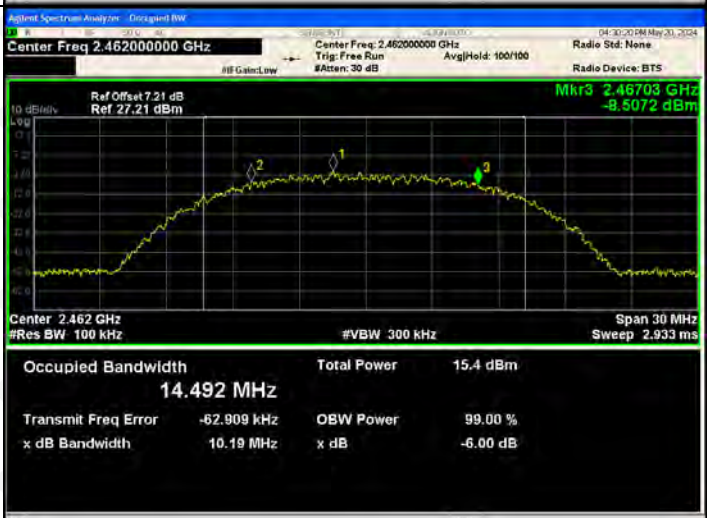
Test Mode	Frequency	6dB Bandwidth (MHz)	Limit(kHz)	Result
802.11b	LCH	10.218	500	PASS
	MCH	10.211	500	PASS
	HCH	10.186	500	PASS
802.11g	LCH	16.434	500	PASS
	MCH	16.423	500	PASS
	HCH	16.448	500	PASS
802.11n(HT20)	LCH	17.632	500	PASS
	MCH	17.633	500	PASS
	HCH	17.619	500	PASS
802.11n(HT40)	LCH	36.437	500	PASS
	MCH	36.427	500	PASS
	HCH	36.400	500	PASS

ANT2:

Test Mode	Frequency	6dB Bandwidth (MHz)	Limit(kHz)	Result
802.11b	LCH	10.200	500	PASS
	MCH	10.201	500	PASS
	HCH	10.199	500	PASS
802.11g	LCH	16.427	500	PASS
	MCH	16.441	500	PASS
	HCH	17.623	500	PASS
802.11n(HT20)	LCH	17.644	500	PASS
	MCH	17.637	500	PASS
	HCH	17.609	500	PASS
802.11n(HT40)	LCH	36.432	500	PASS
	MCH	36.404	500	PASS
	HCH	36.413	500	PASS

ANT1:

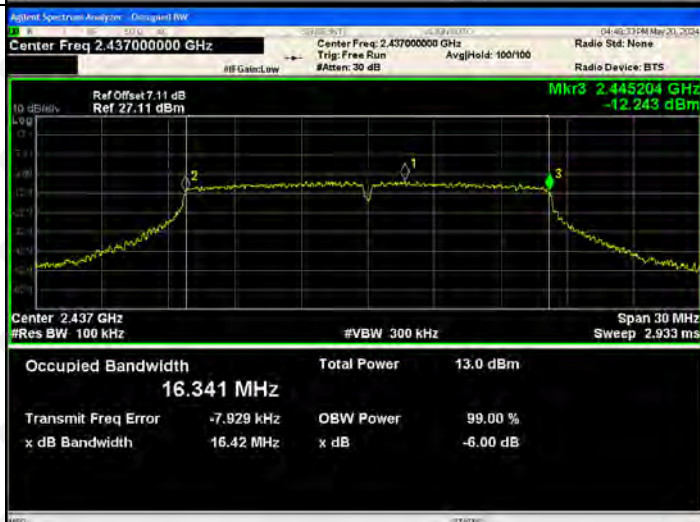
Test Graph:

Graphs	
802.11b /LCH	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.41200000 GHz Center Freq: 2.41200000 GHz Trig: Free Run #Att: 30 dB Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset 7.03 dB Ref 27.03 dBm Mkr3 2.417101 GHz -8.1539 dBm Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 14.493 MHz Total Power 15.8 dBm Transmit Freq Error -7.584 kHz OBW Power 99.00 % x dB Bandwidth 10.22 MHz x dB -6.00 dB
802.11b /MCH	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.43700000 GHz Center Freq: 2.43700000 GHz Trig: Free Run #Att: 30 dB Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset 7.11 dB Ref 27.11 dBm Mkr3 2.442086 GHz -8.1286 dBm Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 14.460 MHz Total Power 15.5 dBm Transmit Freq Error -19.223 kHz OBW Power 99.00 % x dB Bandwidth 10.21 MHz x dB -6.00 dB
802.11b/HCH	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.46200000 GHz Center Freq: 2.46200000 GHz Trig: Free Run #Att: 30 dB Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset 7.21 dB Ref 27.21 dBm Mkr3 2.46703 GHz -8.5072 dBm Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 14.492 MHz Total Power 15.4 dBm Transmit Freq Error -62.909 kHz OBW Power 99.00 % x dB Bandwidth 10.19 MHz x dB -6.00 dB

802.11g/LCH

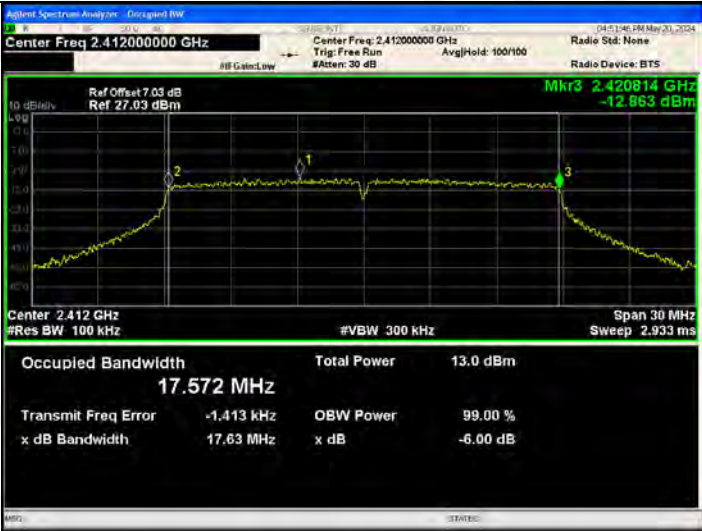


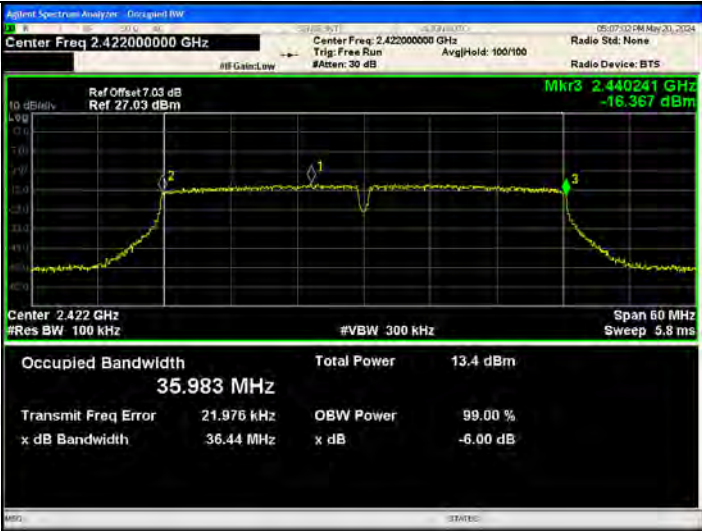
802.11g/MCH



802.11g/HCH

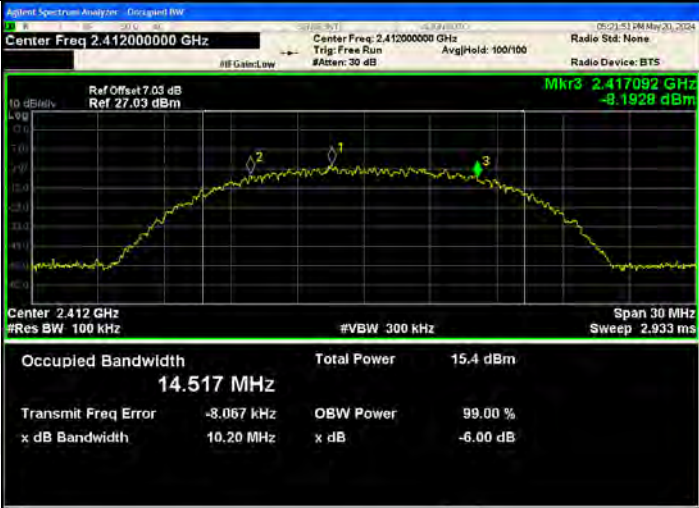
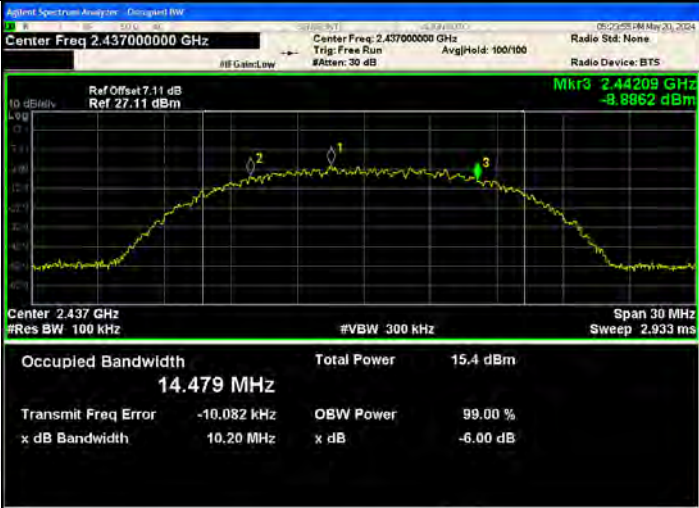


802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.41200000 GHz Ref Offset 7.03 dB Ref 27.03 dBm Mkr3 2.420814 GHz -12.863 dBm Center 2.412 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.572 MHz Total Power 13.0 dBm Transmit Freq Error -1.413 kHz OBW Power 99.00 % x dB Bandwidth 17.63 MHz x dB -6.00 dB
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 27.11 dBm Mkr3 2.445822 GHz -12.554 dBm Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.560 MHz Total Power 13.0 dBm Transmit Freq Error 5.491 kHz OBW Power 99.00 % x dB Bandwidth 17.63 MHz x dB -6.00 dB
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.46200000 GHz Ref Offset 7.21 dB Ref 27.21 dBm Mkr3 2.470793 GHz -13.138 dBm Center 2.462 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 2.933 ms Occupied Bandwidth 17.579 MHz Total Power 12.0 dBm Transmit Freq Error -16.620 kHz OBW Power 99.00 % x dB Bandwidth 17.62 MHz x dB -6.00 dB

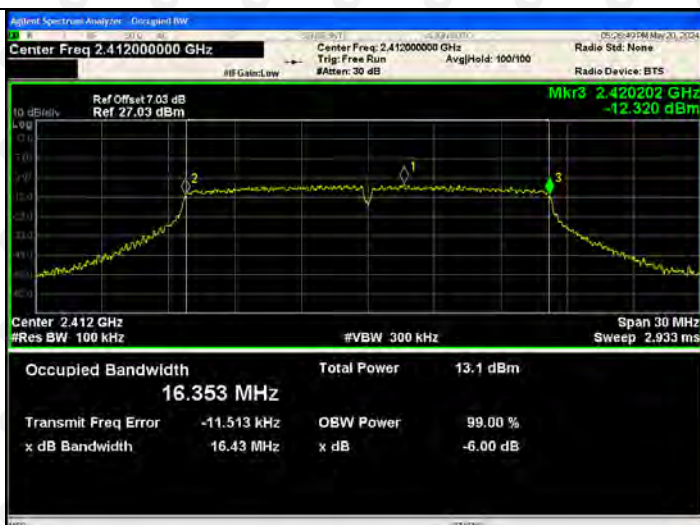
802.11n(HT40)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.42200000 GHz Ref Offset: 7.03 dB Ref: 27.03 dBm Mkr3: 2.440241 GHz -16.367 dBm Center: 2.422 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 35.983 MHz Total Power: 13.4 dBm Transmit Freq Error: 21.976 kHz OBW Power: 99.00 % x dB Bandwidth: 36.44 MHz x dB: -6.00 dB
802.11n(HT40)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.43700000 GHz Ref Offset: 7.11 dB Ref: 27.11 dBm Mkr3: 2.455201 GHz -15.569 dBm Center: 2.437 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 35.966 MHz Total Power: 13.1 dBm Transmit Freq Error: -12.788 kHz OBW Power: 99.00 % x dB Bandwidth: 36.43 MHz x dB: -6.00 dB
802.11n(HT40)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.45200000 GHz Ref Offset: 7.2 dB Ref: 27.20 dBm Mkr3: 2.470158 GHz -16.130 dBm Center: 2.452 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 60 MHz Sweep: 5.8 ms Occupied Bandwidth: 35.957 MHz Total Power: 12.9 dBm Transmit Freq Error: -41.629 kHz OBW Power: 99.00 % x dB Bandwidth: 36.40 MHz x dB: -6.00 dB

ANT2:

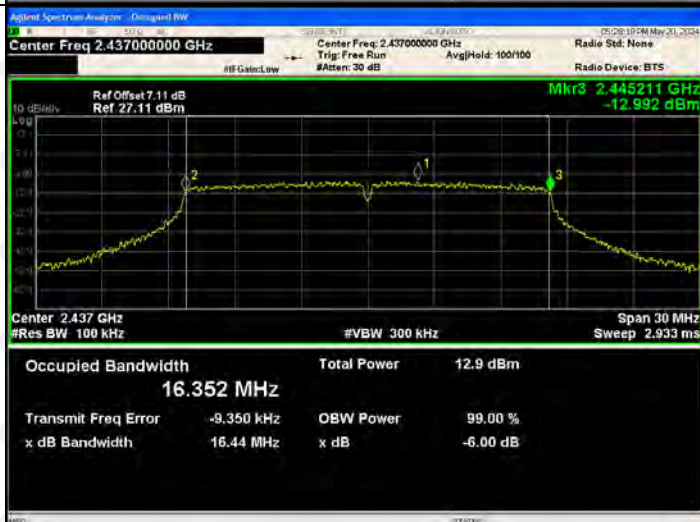
Test Graph:

Graphs	
802.11b /LCH	 Agilent Spectrum Analyzer - Crossguard BW Center Freq: 2.412000000 GHz Center Freq: 2.412000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset: 7.03 dB Ref: 27.03 dBm Mkr3: 2.417092 GHz -8.1928 dBm Center: 2.412 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms Occupied Bandwidth: 14.517 MHz Total Power: 15.4 dBm Transmit Freq Error: -8.067 kHz OBW Power: 99.00 % x dB Bandwidth: 10.20 MHz x dB: -6.00 dB
802.11b /MCH	 Agilent Spectrum Analyzer - Crossguard BW Center Freq: 2.437000000 GHz Center Freq: 2.437000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset: 7.11 dB Ref: 27.11 dBm Mkr3: 2.44209 GHz -8.8862 dBm Center: 2.437 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms Occupied Bandwidth: 14.479 MHz Total Power: 15.4 dBm Transmit Freq Error: -10.082 kHz OBW Power: 99.00 % x dB Bandwidth: 10.20 MHz x dB: -6.00 dB
802.11b/HCH	 Agilent Spectrum Analyzer - Crossguard BW Center Freq: 2.462000000 GHz Center Freq: 2.462000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset: 7.21 dB Ref: 27.21 dBm Mkr3: 2.467039 GHz -7.6398 dBm Center: 2.462 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms Occupied Bandwidth: 14.505 MHz Total Power: 15.2 dBm Transmit Freq Error: -60.863 kHz OBW Power: 99.00 % x dB Bandwidth: 10.20 MHz x dB: -6.00 dB

802.11g/LCH



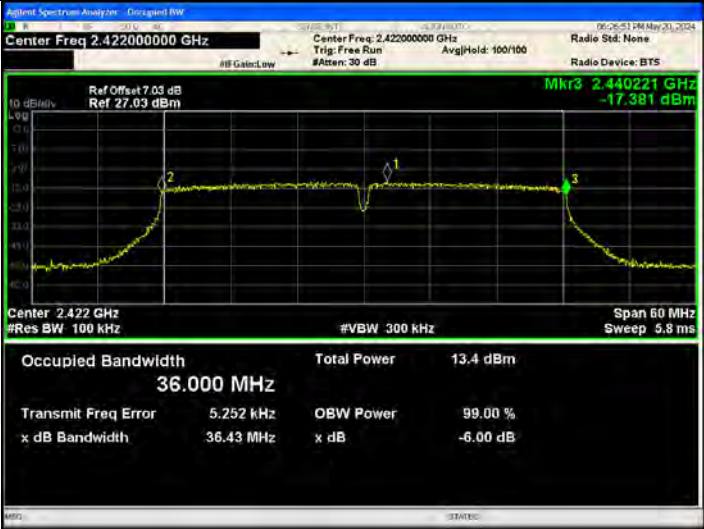
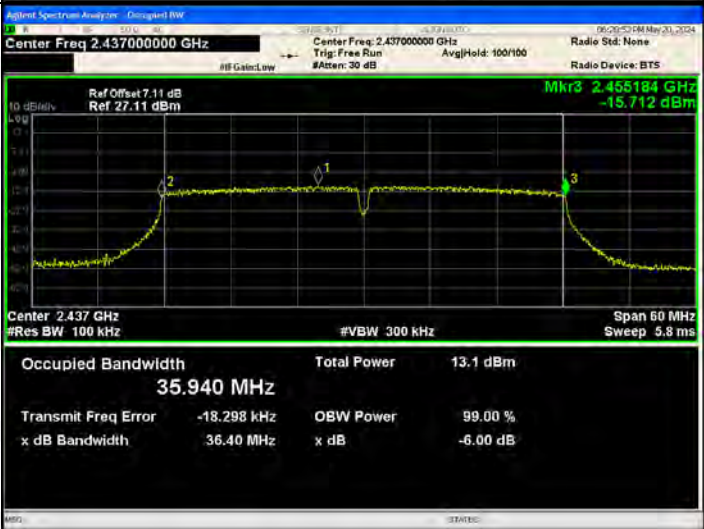
802.11g/MCH



802.11g/HCH

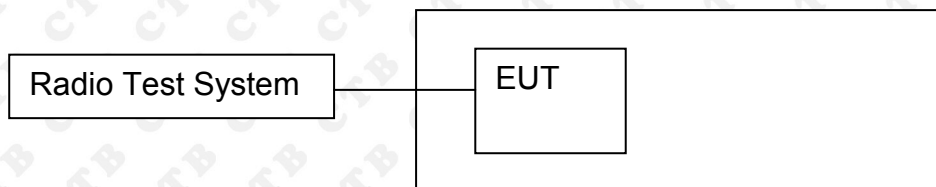


802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.41200000 GHz Ref Offset: 7.03 dB Ref: 27.03 dBm Mkr3: 2.420825 GHz -12.770 dBm Center: 2.412 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>13.0 dBm</td></tr><tr><td>17.571 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>2.853 kHz</td><td>OBW Power</td></tr><tr><td>x dB Bandwidth</td><td>17.64 MHz</td><td>x dB</td></tr><tr><td></td><td></td><td>99.00 %</td></tr><tr><td></td><td></td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	Total Power	13.0 dBm	17.571 MHz			Transmit Freq Error	2.853 kHz	OBW Power	x dB Bandwidth	17.64 MHz	x dB			99.00 %			-6.00 dB
Occupied Bandwidth	Total Power	13.0 dBm																	
17.571 MHz																			
Transmit Freq Error	2.853 kHz	OBW Power																	
x dB Bandwidth	17.64 MHz	x dB																	
		99.00 %																	
		-6.00 dB																	
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.43700000 GHz Ref Offset: 7.11 dB Ref: 27.11 dBm Mkr3: 2.450807 GHz -12.376 dBm Center: 2.437 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>12.8 dBm</td></tr><tr><td>17.557 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>4.9881 MHz</td><td>OBW Power</td></tr><tr><td>x dB Bandwidth</td><td>17.64 MHz</td><td>x dB</td></tr><tr><td></td><td></td><td>99.00 %</td></tr><tr><td></td><td></td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	Total Power	12.8 dBm	17.557 MHz			Transmit Freq Error	4.9881 MHz	OBW Power	x dB Bandwidth	17.64 MHz	x dB			99.00 %			-6.00 dB
Occupied Bandwidth	Total Power	12.8 dBm																	
17.557 MHz																			
Transmit Freq Error	4.9881 MHz	OBW Power																	
x dB Bandwidth	17.64 MHz	x dB																	
		99.00 %																	
		-6.00 dB																	
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq: 2.46200000 GHz Ref Offset: 7.21 dB Ref: 27.21 dBm Mkr3: 2.470785 GHz -13.405 dBm Center: 2.462 GHz #Res BW: 100 kHz #VBW: 300 kHz Span: 30 MHz Sweep: 2.933 ms <table><tr><td>Occupied Bandwidth</td><td>Total Power</td><td>12.1 dBm</td></tr><tr><td>17.577 MHz</td><td></td><td></td></tr><tr><td>Transmit Freq Error</td><td>-19.642 kHz</td><td>OBW Power</td></tr><tr><td>x dB Bandwidth</td><td>17.61 MHz</td><td>x dB</td></tr><tr><td></td><td></td><td>99.00 %</td></tr><tr><td></td><td></td><td>-6.00 dB</td></tr></table>	Occupied Bandwidth	Total Power	12.1 dBm	17.577 MHz			Transmit Freq Error	-19.642 kHz	OBW Power	x dB Bandwidth	17.61 MHz	x dB			99.00 %			-6.00 dB
Occupied Bandwidth	Total Power	12.1 dBm																	
17.577 MHz																			
Transmit Freq Error	-19.642 kHz	OBW Power																	
x dB Bandwidth	17.61 MHz	x dB																	
		99.00 %																	
		-6.00 dB																	

802.11n(HT40)/LC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.42200000 GHz Ref Offset 7.03 dB Ref 27.03 dBm Mkr3 2.440221 GHz -17.381 dBm Center 2.422 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 36.000 MHz Total Power 13.4 dBm Transmit Freq Error 5.252 kHz OBW Power 99.00 % x dB Bandwidth 36.43 MHz x dB -6.00 dB
802.11n(HT40)/MC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 27.11 dBm Mkr3 2.455184 GHz -15.712 dBm Center 2.437 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 35.940 MHz Total Power 13.1 dBm Transmit Freq Error -18.298 kHz OBW Power 99.00 % x dB Bandwidth 36.40 MHz x dB -6.00 dB
802.11n(HT40)/HC H	 Agilent Spectrum Analyzer - Occupied BW Center Freq 2.45200000 GHz Ref Offset 7.2 dB Ref 27.20 dBm Mkr3 2.470161 GHz -16.105 dBm Center 2.452 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 5.8 ms Occupied Bandwidth 35.956 MHz Total Power 12.9 dBm Transmit Freq Error -44.920 kHz OBW Power 99.00 % x dB Bandwidth 36.41 MHz x dB -6.00 dB

11. POWER SPECTRAL DENSITY

11.1 Block Diagram Of Test Setup



11.2 Limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

11.3 Test procedure

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3\text{ kHz} \leq \text{RBW} \leq 100\text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = Peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

11.4 Test Result

Mode	Channel.	Power Spectral Density [dBm /3KHz] ANT 1	Power Spectral Density [dBm /3KHz] ANT 2	Power Spectral Density [dBm /3KHz] Total	Limit(dBm)
802.11b	LCH	-14.731	-14.817	/	8
	MCH	-15.030	-14.872	/	8
	HCH	-15.277	-15.118	/	8
802.11g	LCH	-17.143	-20.901	/	8
	MCH	-17.875	-21.101	/	8
	HCH	-19.288	-21.652	/	8
802.11n(H T20)	LCH	-17.520	-21.098	-15.940	8
	MCH	-18.567	-21.582	-16.808	8
	HCH	-19.338	-21.719	-17.357	8
802.11n(H T40)	LCH	-20.418	-22.877	-18.465	8
	MCH	-18.854	-23.085	-17.463	8
	HCH	-18.663	-22.540	-17.172	8

ANT1: Test Graph

Graphs

802.11b /LCH



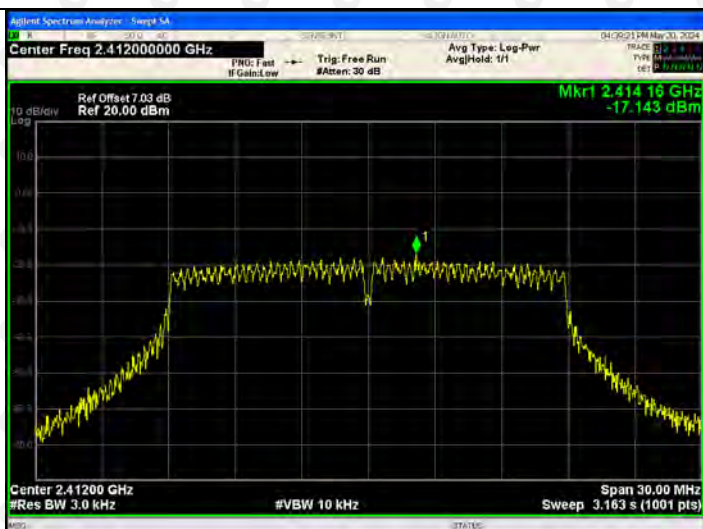
802.11b /MCH



802.11b/HCH



802.11g/LCH

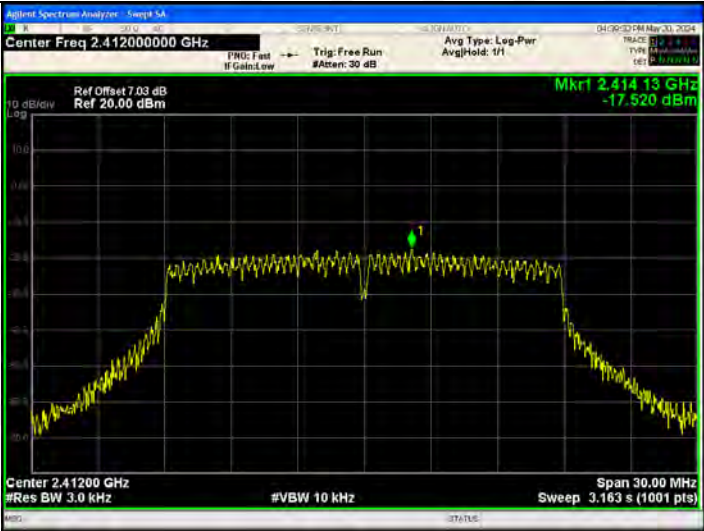
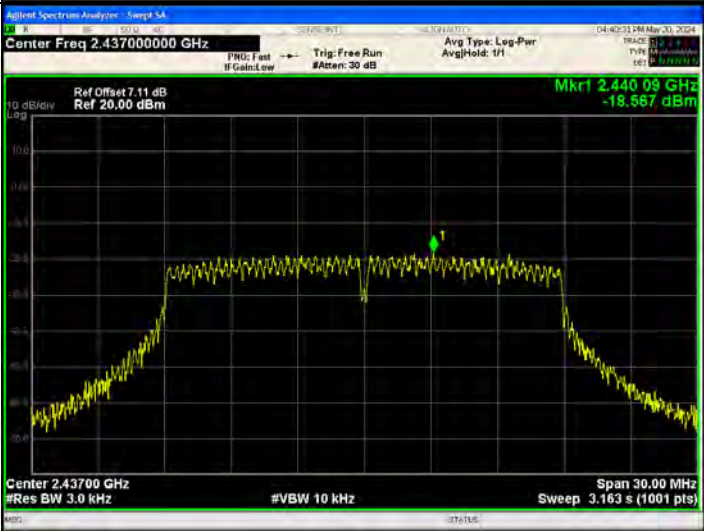


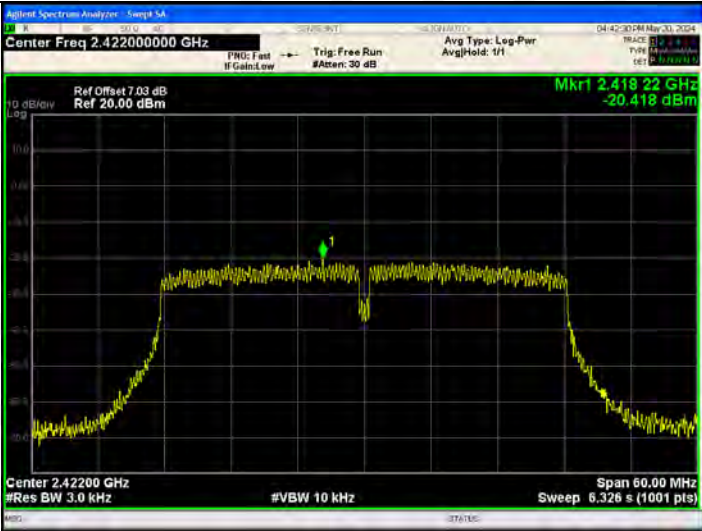
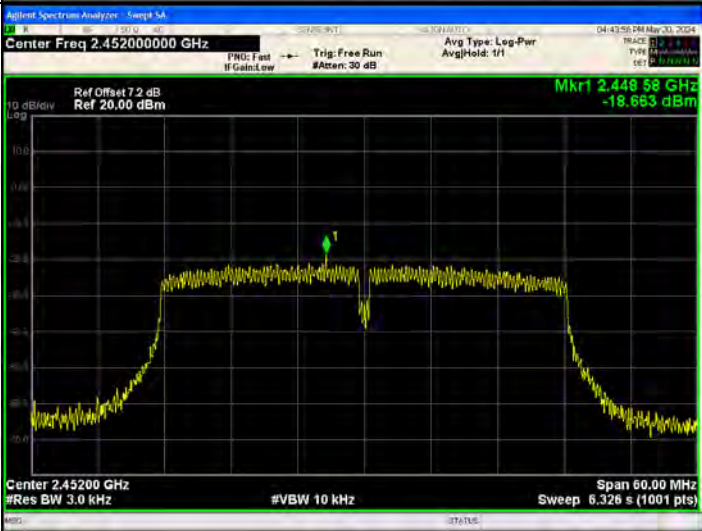
802.11g/MCH



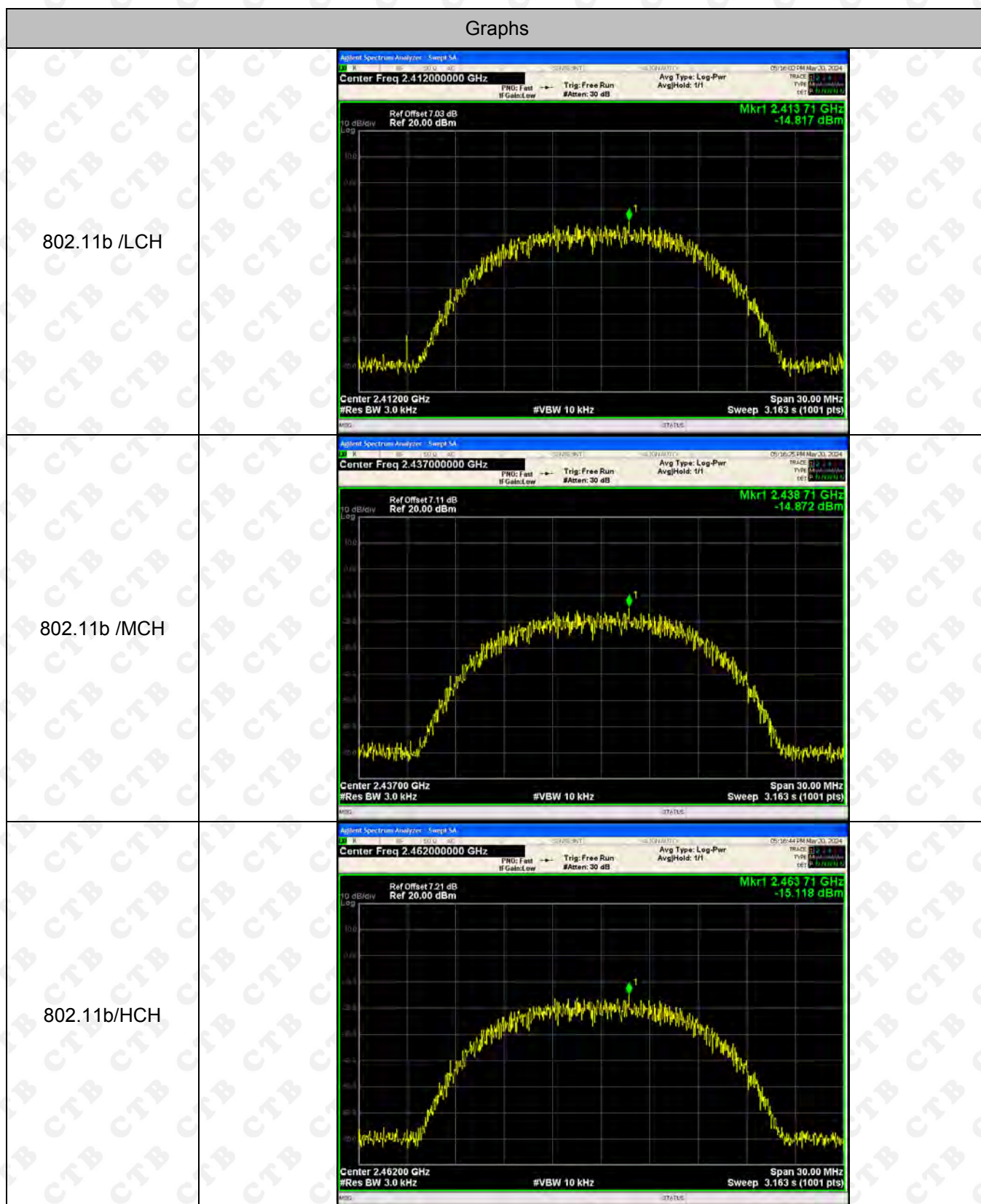
802.11g/HCH



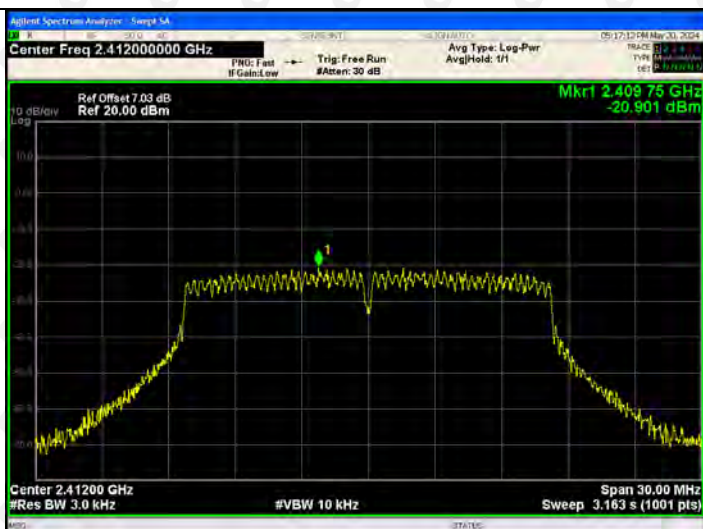
802.11n(HT20)/LC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.41200000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.41413 GHz -17.520 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)
802.11n(HT20)/MC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.44009 GHz -18.567 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)
802.11n(HT20)/HC H	 Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Ref Offset 7.21 dB Ref 20.00 dBm Mkr1 2.46509 GHz -19.338 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 30.00 MHz Sweep 3.163 s (1001 pts)

802.11n(HT40)/LC H	
802.11n(HT40)/MC H	
802.11n(HT40)/HC H	

ANT 2:
Test Graph



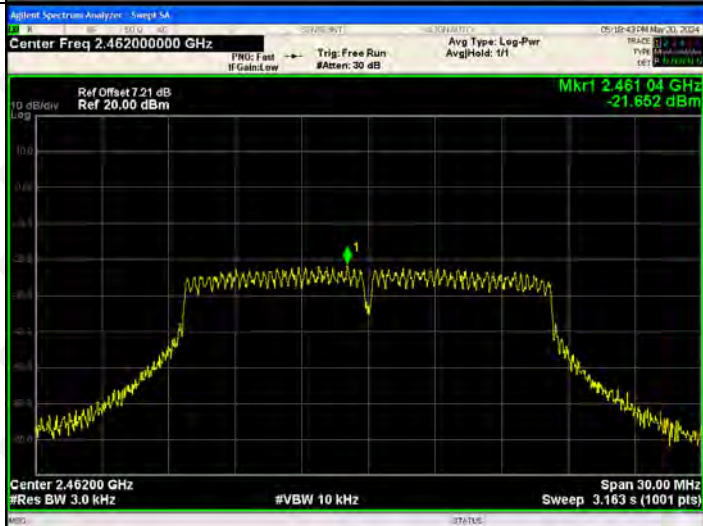
802.11g/LCH

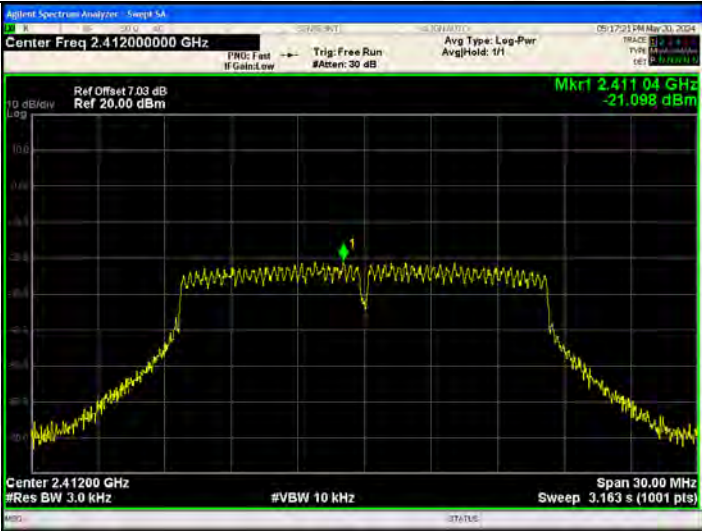
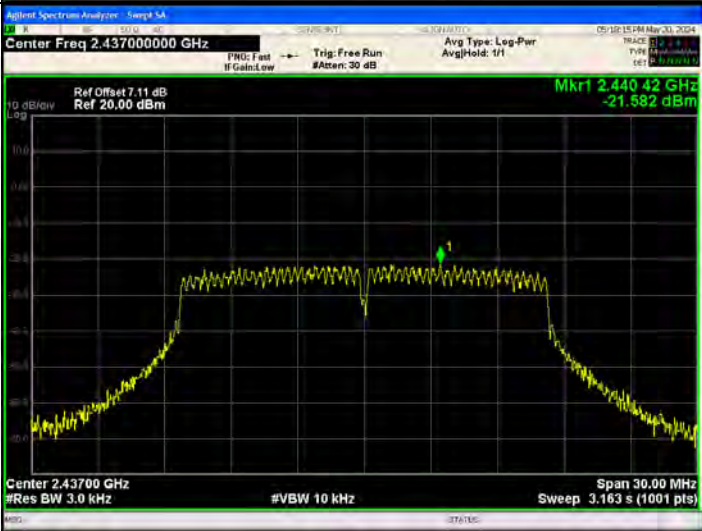


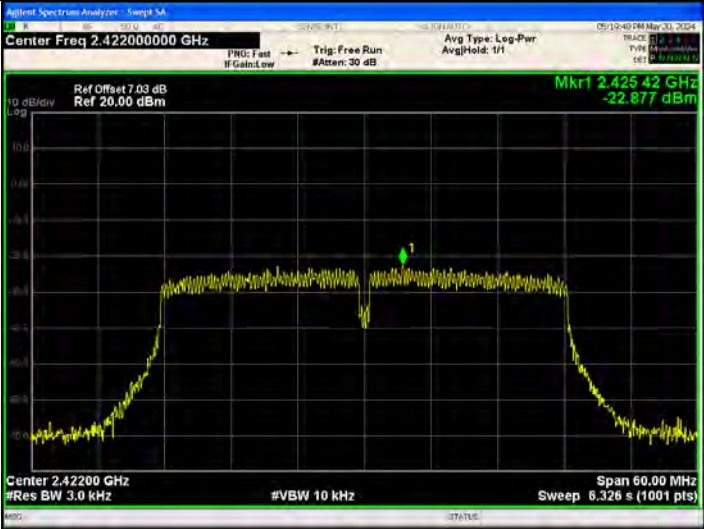
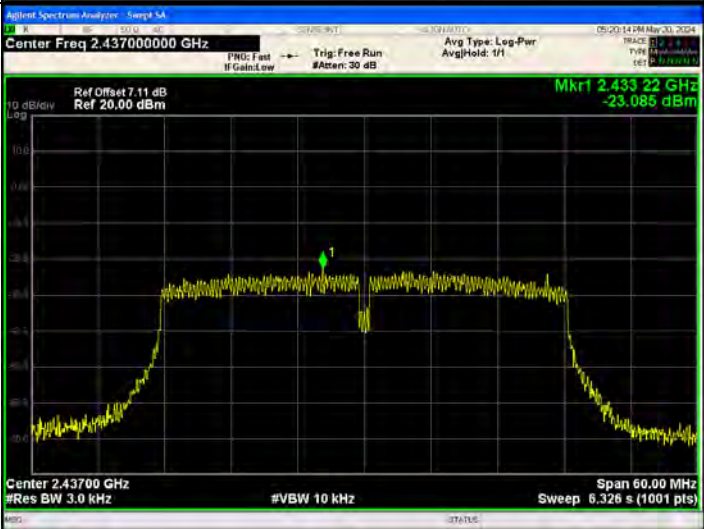
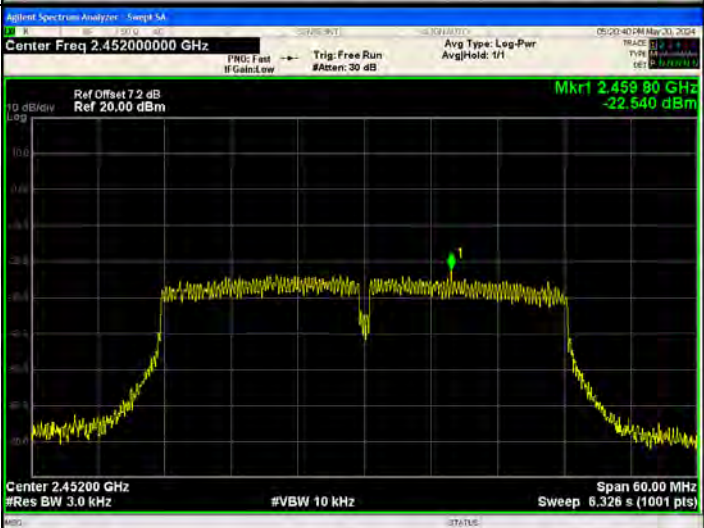
802.11g/MCH



802.11g/HCH



802.11n(HT20)/LC H	
802.11n(HT20)/MC H	
802.11n(HT20)/HC H	

802.11n(HT40)/LC H	 Agilent Spectrum Analyzer - Sweep SA Center Freq 2.42200000 GHz Ref Offset 7.03 dB Ref 20.00 dBm Mkr1 2.42542 GHz -22.877 dBm Center 2.42200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts)
802.11n(HT40)/MC H	 Agilent Spectrum Analyzer - Sweep SA Center Freq 2.43700000 GHz Ref Offset 7.11 dB Ref 20.00 dBm Mkr1 2.43322 GHz -23.085 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts)
802.11n(HT40)/HC H	 Agilent Spectrum Analyzer - Sweep SA Center Freq 2.45200000 GHz Ref Offset 7.2 dB Ref 20.00 dBm Mkr1 2.45980 GHz -22.540 dBm Center 2.45200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 60.00 MHz Sweep 6.326 s (1001 pts)

12. ANTENNA REQUIREMENT

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

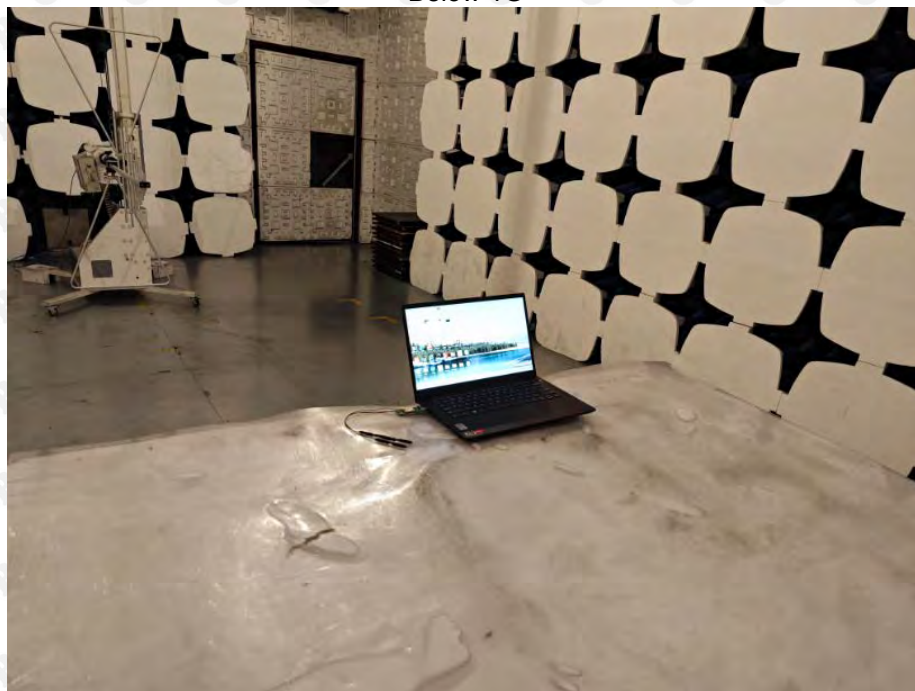
EUT Antenna:

The antenna is Built-in antenna and no consideration of replacement. The best case gain of the antenna is Ant1: 2.31dBi, Ant2: 2.31dBi.

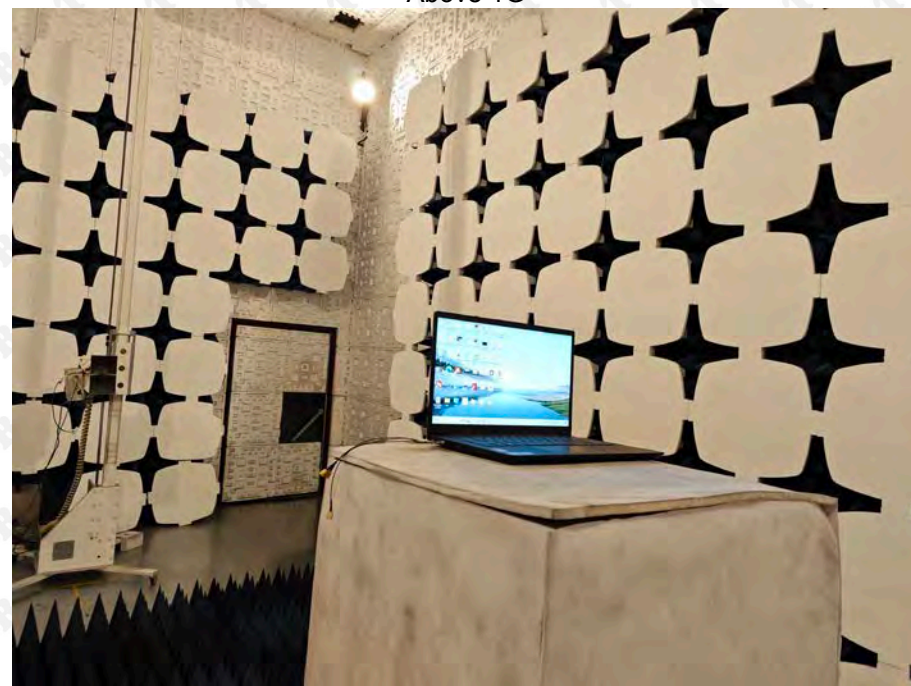
13. EUT TEST SETUP PHOTOGRAPHS

Radiated Emission

Below 1G



Above 1G



Conducted Emission



※※※※※ END OF REPORT ※※※※※