



## Appendix E): Power Spectral Density

### Test Limit

According to §15.247(e),

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

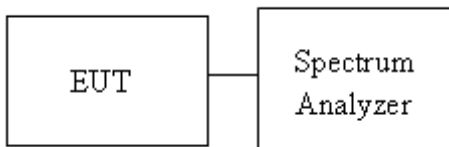
Limit	<input checked="" type="checkbox"/> Antenna not exceed 6 dBi : 8dBm <input type="checkbox"/> Antenna with DG greater than 6 dBi : [ Limit = 8 – (DG – 6) ] <input type="checkbox"/> Point-to-point operation :
-------	---

### Test Procedure

Test method Refer as KDB 558074 D01.

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
4. The path loss was compensated to the results for each measurement by SA.
5. Mark the maximum level.
6. Measure and record the result of power spectral density. in the test report.

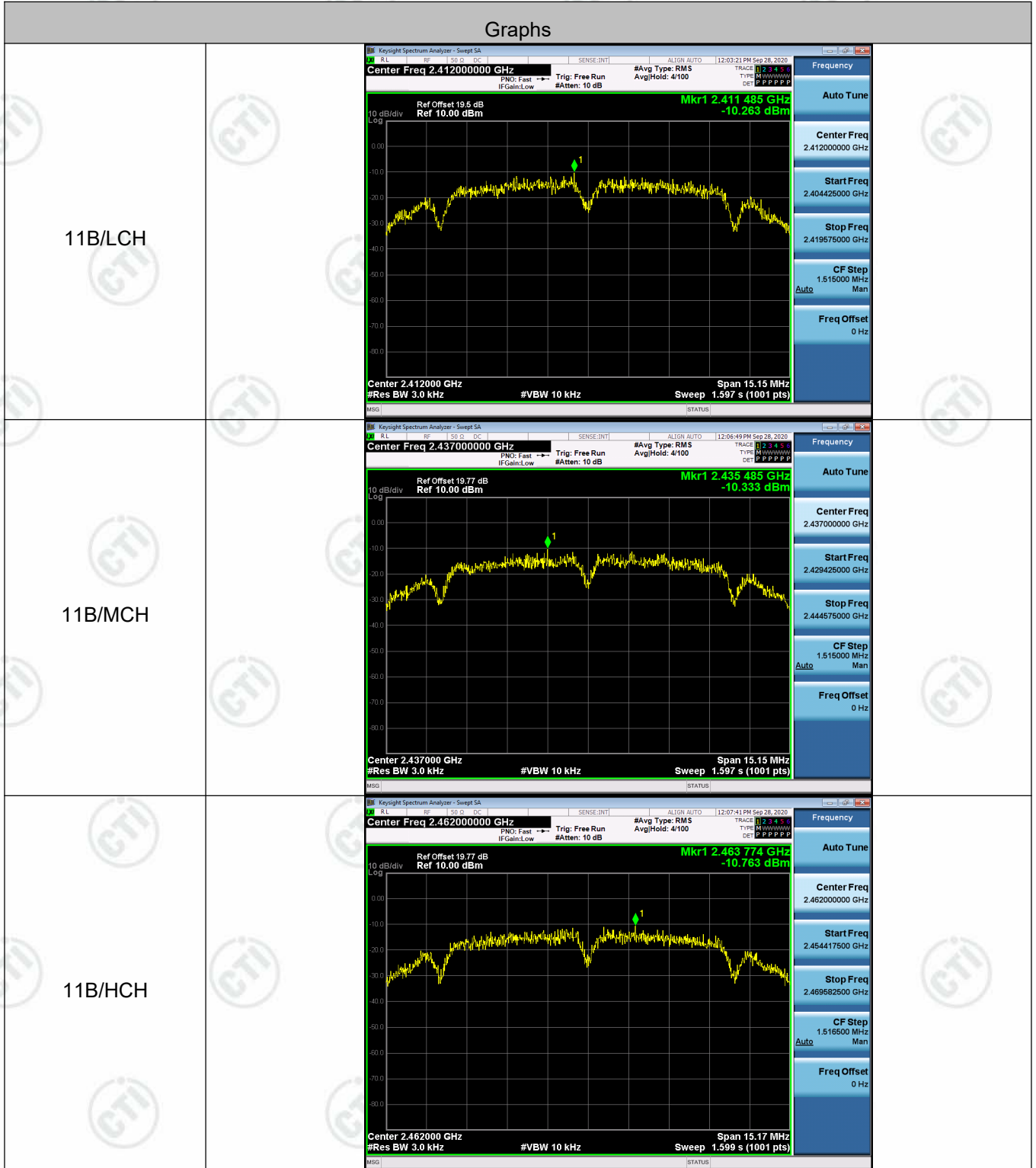
### Test Setup

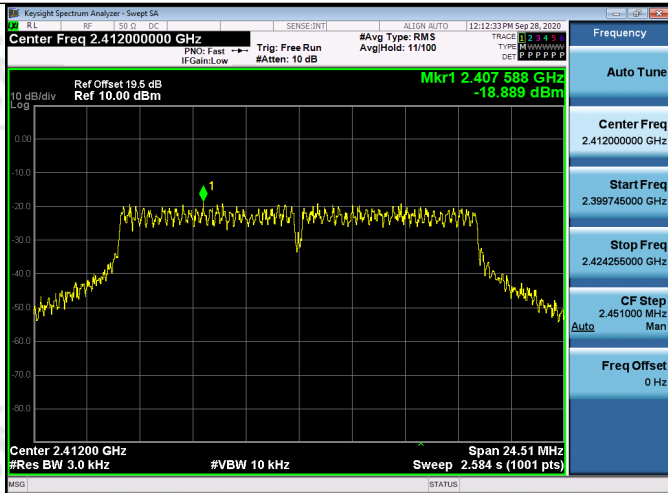
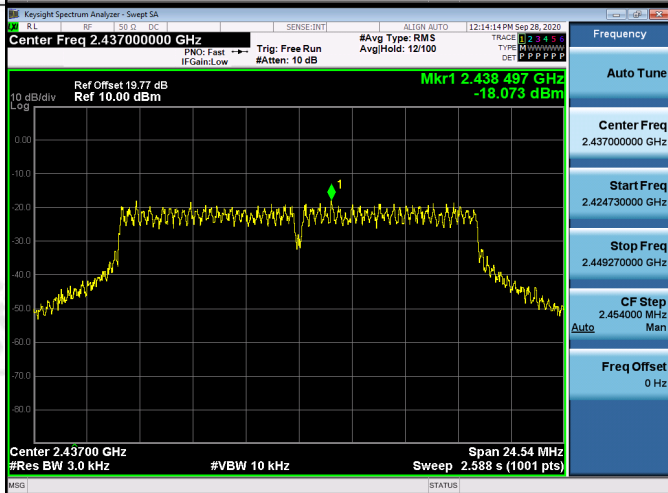
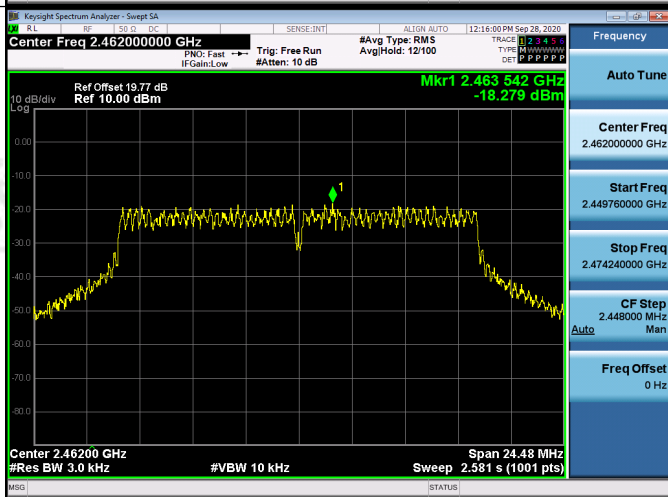


**Result Table**

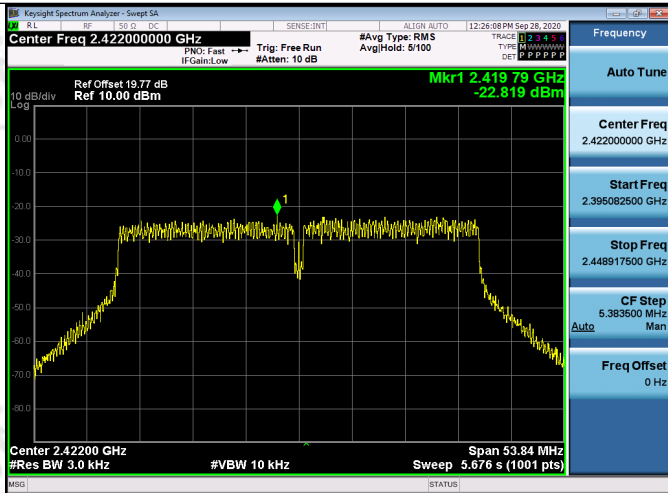
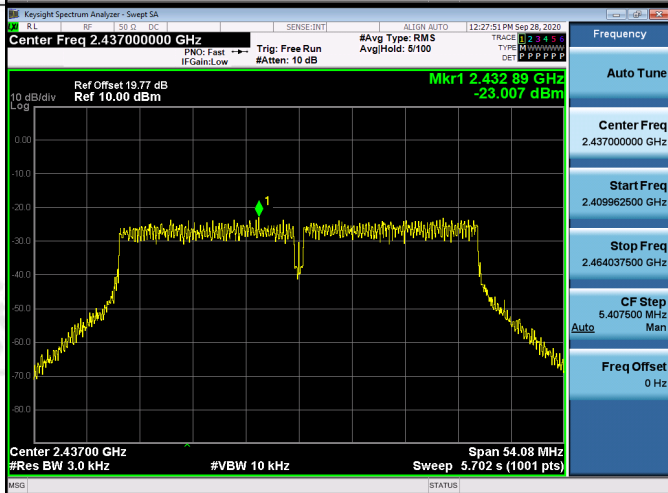
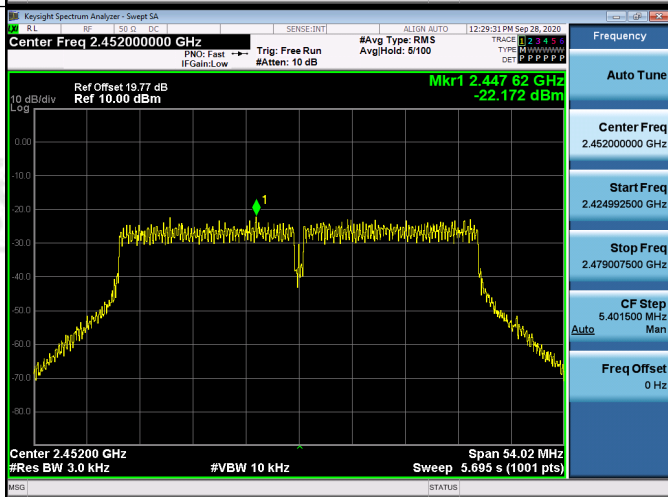
Mode	Channel	Power Spectral Density [dBm]	Verdict
11B	LCH	-10.263	PASS
11B	MCH	-10.333	PASS
11B	HCH	-10.763	PASS
11G	LCH	-18.889	PASS
11G	MCH	-18.073	PASS
11G	HCH	-18.279	PASS
11N20SISO	LCH	-18.239	PASS
11N20SISO	MCH	-18.295	PASS
11N20SISO	HCH	-18.676	PASS
11N40SISO	LCH	-22.819	PASS
11N40SISO	MCH	-23.007	PASS
11N40SISO	HCH	-22.172	PASS

**Test Graph**



<p>11G/LCH</p>	 <p>Keyight Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.41200000 GHz</p> <p>Ref Offset 19.5 dB Ref 10.00 dBm</p> <p>Mkr1 2.407 588 GHz -18.889 dBm</p> <p>Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 24.51 MHz Sweep 2.584 s (1001 pts)</p>
<p>11G/MCH</p>	 <p>Keyight Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.43700000 GHz</p> <p>Ref Offset 19.77 dB Ref 10.00 dBm</p> <p>Mkr1 2.438 497 GHz -18.073 dBm</p> <p>Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 24.54 MHz Sweep 2.588 s (1001 pts)</p>
<p>11G/HCH</p>	 <p>Keyight Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.46200000 GHz</p> <p>Ref Offset 19.77 dB Ref 10.00 dBm</p> <p>Mkr1 2.463 542 GHz -18.279 dBm</p> <p>Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 24.48 MHz Sweep 2.581 s (1001 pts)</p>

<p>11N20SISO/LCH</p>	
<p>11N20SISO/MCH</p>	
<p>11N20SISO/HCH</p>	

<p>11N40SISO/LCH</p>	 <p>Keyight Spectrum Analyzer - Swept SA Center Freq 2.42200000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.419 79 GHz -22.819 dBm Center 2.42200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 53.84 MHz Sweep 5.676 s (1001 pts)</p>
<p>11N40SISO/MCH</p>	 <p>Keyight Spectrum Analyzer - Swept SA Center Freq 2.43700000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.432 89 GHz -23.007 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 54.08 MHz Sweep 5.702 s (1001 pts)</p>
<p>11N40SISO/HCH</p>	 <p>Keyight Spectrum Analyzer - Swept SA Center Freq 2.45200000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.447 62 GHz -22.172 dBm Center 2.45200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 54.02 MHz Sweep 5.695 s (1001 pts)</p>

## Appendix F): Antenna Requirement

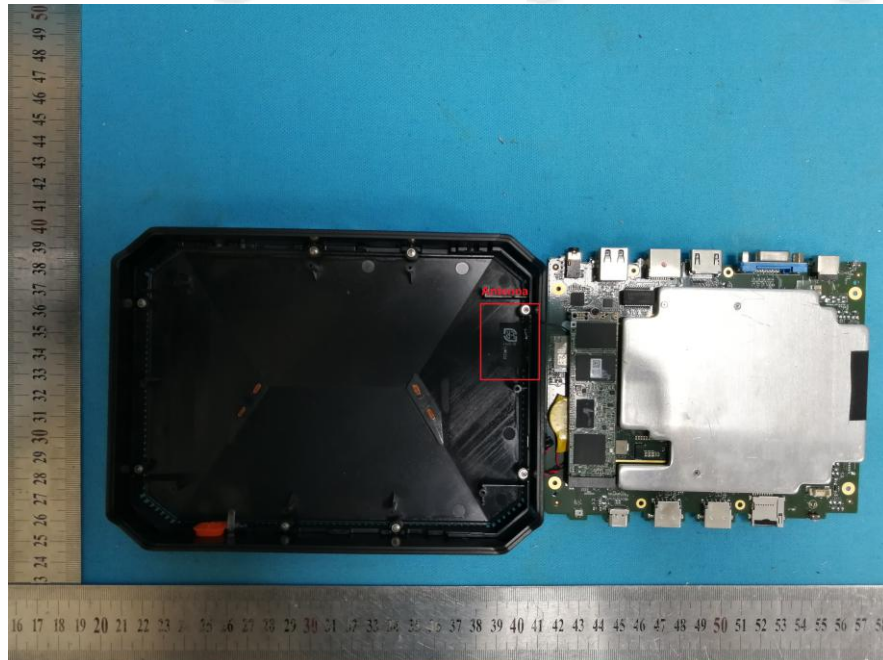
### 15.203 requirement:

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 FPC antenna. The best case gain of the antenna is 2.14dBi.

## Appendix G): AC Power Line Conducted Emission

<p>Test Procedure:</p>	<p>Test frequency range :150KHz-30MHz</p> <ol style="list-style-type: none"> <li>1) The mains terminal disturbance voltage test was conducted in a shielded room.</li> <li>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω 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.</li> <li>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,</li> <li>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.</li> <li>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.</li> </ol>														
<p>Limit:</p>	<table border="1" data-bbox="464 1115 1332 1339"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th> <th colspan="2">Limit (dBμV)</th> </tr> <tr> <th>Quasi-peak</th> <th>Average</th> </tr> </thead> <tbody> <tr> <td>0.15-0.5</td> <td>66 to 56*</td> <td>56 to 46*</td> </tr> <tr> <td>0.5-5</td> <td>56</td> <td>46</td> </tr> <tr> <td>5-30</td> <td>60</td> <td>50</td> </tr> </tbody> </table> <p>* The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz. NOTE : The lower limit is applicable at the transition frequency</p>	Frequency range (MHz)	Limit (dBμV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBμV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													

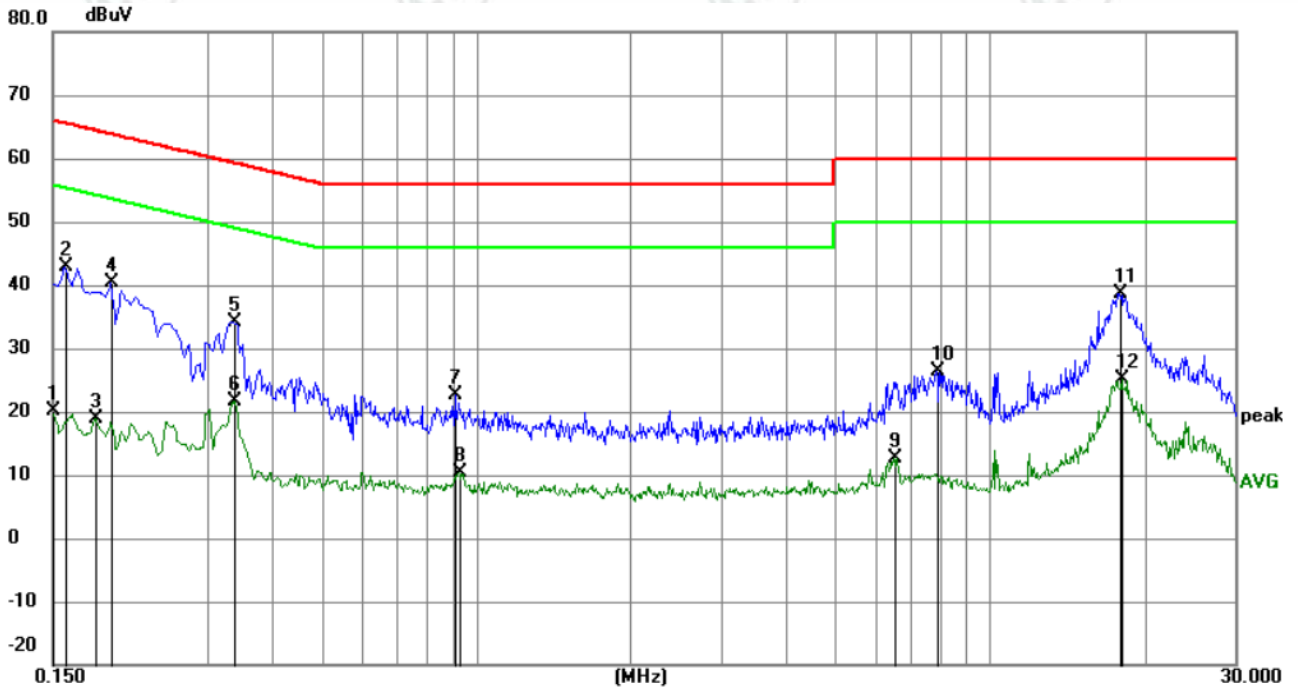
### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

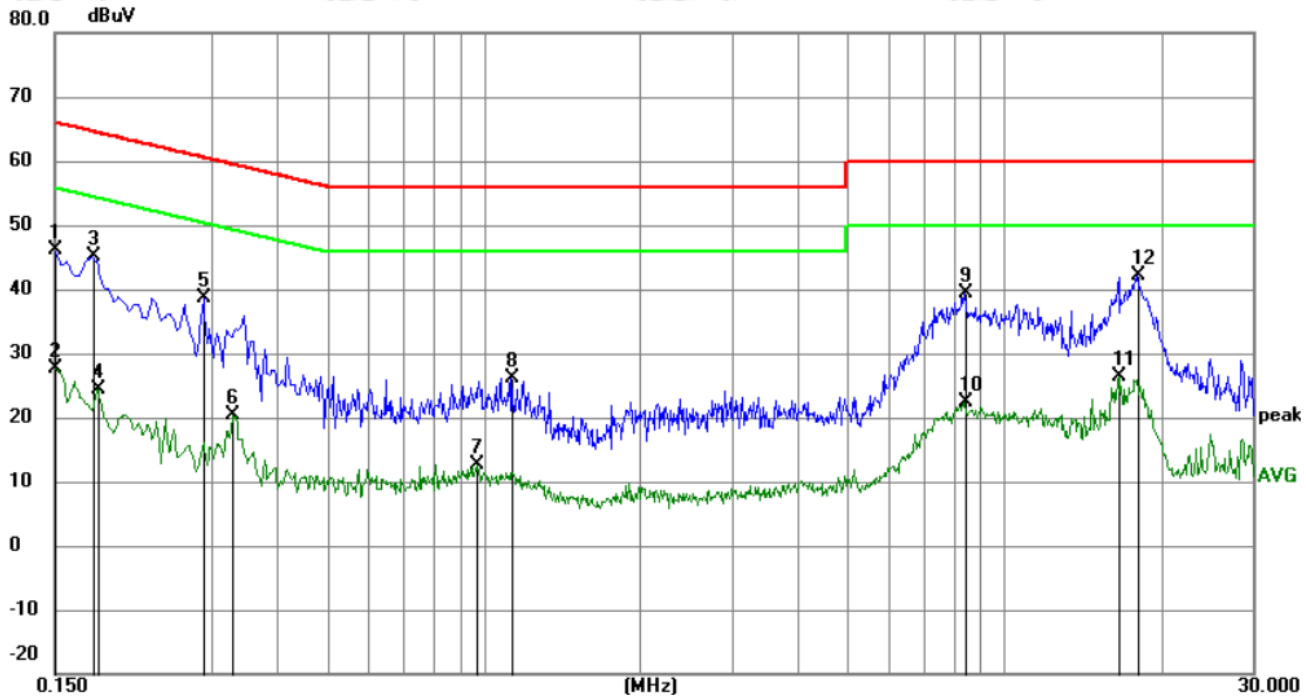


Live line:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	10.29	9.87	20.16	56.00	-35.84	AVG	
2		0.1590	33.06	9.87	42.93	65.52	-22.59	QP	
3		0.1815	8.92	9.87	18.79	54.42	-35.63	AVG	
4		0.1949	30.49	9.87	40.36	63.83	-23.47	QP	
5		0.3390	24.17	10.03	34.20	59.23	-25.03	QP	
6		0.3390	11.64	10.03	21.67	49.23	-27.56	AVG	
7		0.9105	12.76	9.85	22.61	56.00	-33.39	QP	
8		0.9240	0.44	9.85	10.29	46.00	-35.71	AVG	
9		6.4995	2.91	9.79	12.70	50.00	-37.30	AVG	
10		7.8765	16.66	9.79	26.45	60.00	-33.55	QP	
11	*	17.8890	28.75	9.95	38.70	60.00	-21.30	QP	
12		18.1050	15.26	9.95	25.21	50.00	-24.79	AVG	

Neutral line:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	36.36	9.87	46.23	66.00	-19.77	QP	
2		0.1500	17.84	9.87	27.71	56.00	-28.29	AVG	
3		0.1770	35.17	9.87	45.04	64.63	-19.59	QP	
4		0.1815	14.48	9.87	24.35	54.42	-30.07	AVG	
5		0.2895	28.66	10.05	38.71	60.54	-21.83	QP	
6		0.3300	10.25	10.04	20.29	49.45	-29.16	AVG	
7		0.9735	2.81	9.84	12.65	46.00	-33.35	AVG	
8		1.1310	16.42	9.82	26.24	56.00	-29.76	QP	
9		8.3895	29.58	9.79	39.37	60.00	-20.63	QP	
10		8.3895	12.65	9.79	22.44	50.00	-27.56	AVG	
11		16.5795	16.38	9.94	26.32	50.00	-23.68	AVG	
12	*	17.9880	32.25	9.95	42.20	60.00	-17.80	QP	

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

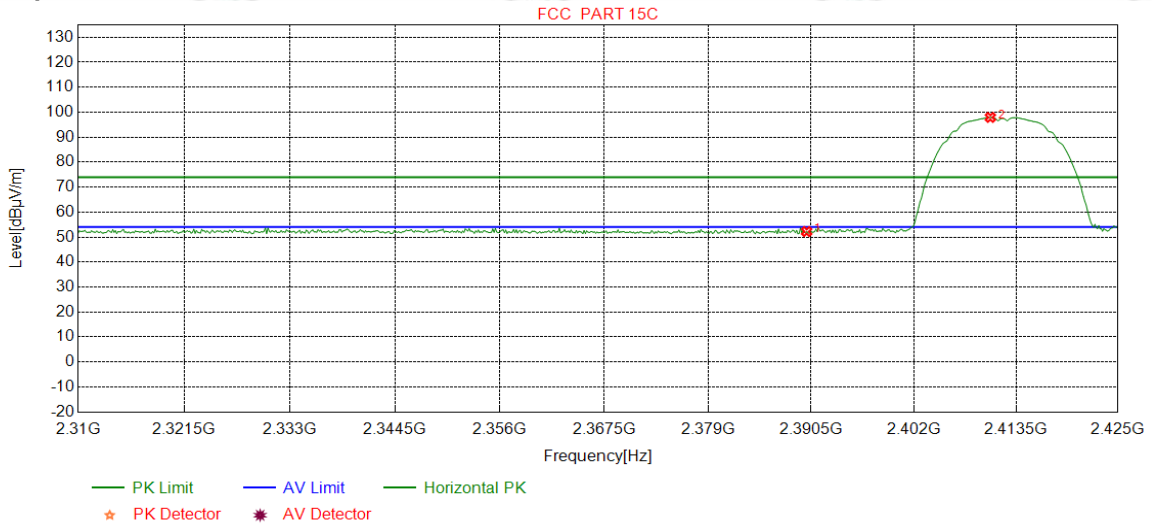
## Appendix H): Restricted bands around fundamental frequency (Radiated)

Receiver Setup:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Detector</th> <th>RBW</th> <th>VBW</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-1GHz</td> <td>Quasi-peak</td> <td>120kHz</td> <td>300kHz</td> <td>Quasi-peak</td> </tr> <tr> <td rowspan="2">Above 1GHz</td> <td>Peak</td> <td>1MHz</td> <td>3MHz</td> <td>Peak</td> </tr> <tr> <td>Peak</td> <td>1MHz</td> <td>10Hz</td> <td>Average</td> </tr> </tbody> </table>	Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak	Above 1GHz	Peak	1MHz	3MHz	Peak	Peak	1MHz	10Hz	Average	
Frequency	Detector	RBW	VBW	Remark																	
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak																	
Above 1GHz	Peak	1MHz	3MHz	Peak																	
	Peak	1MHz	10Hz	Average																	
Test Procedure:	<p><b>Below 1GHz test procedure as below:</b></p> <p>Test method Refer as KDB 558074 D01</p> <ol style="list-style-type: none"> <li>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.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>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.</li> <li>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 and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</li> </ol> <p><b>Above 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber change form table 0.8 meter to 1.5 meter( Above 18GHz the distance is 1 meter and table is 1.5 meter).</li> <li>Test the EUT in the lowest channel , the Highest channel</li> <li>The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.</li> <li>Repeat above procedures until all frequencies measured was complete.</li> </ol>																				
Limit:	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Limit (dB<math>\mu</math>V/m @3m)</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>30MHz-88MHz</td> <td>40.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>88MHz-216MHz</td> <td>43.5</td> <td>Quasi-peak Value</td> </tr> <tr> <td>216MHz-960MHz</td> <td>46.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td>960MHz-1GHz</td> <td>54.0</td> <td>Quasi-peak Value</td> </tr> <tr> <td rowspan="2">Above 1GHz</td> <td>54.0</td> <td>Average Value</td> </tr> <tr> <td>74.0</td> <td>Peak Value</td> </tr> </tbody> </table>	Frequency	Limit (dB $\mu$ V/m @3m)	Remark	30MHz-88MHz	40.0	Quasi-peak Value	88MHz-216MHz	43.5	Quasi-peak Value	216MHz-960MHz	46.0	Quasi-peak Value	960MHz-1GHz	54.0	Quasi-peak Value	Above 1GHz	54.0	Average Value	74.0	Peak Value
Frequency	Limit (dB $\mu$ V/m @3m)	Remark																			
30MHz-88MHz	40.0	Quasi-peak Value																			
88MHz-216MHz	43.5	Quasi-peak Value																			
216MHz-960MHz	46.0	Quasi-peak Value																			
960MHz-1GHz	54.0	Quasi-peak Value																			
Above 1GHz	54.0	Average Value																			
	74.0	Peak Value																			

**Test plot as follows:**

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2412
Remark:	PK		

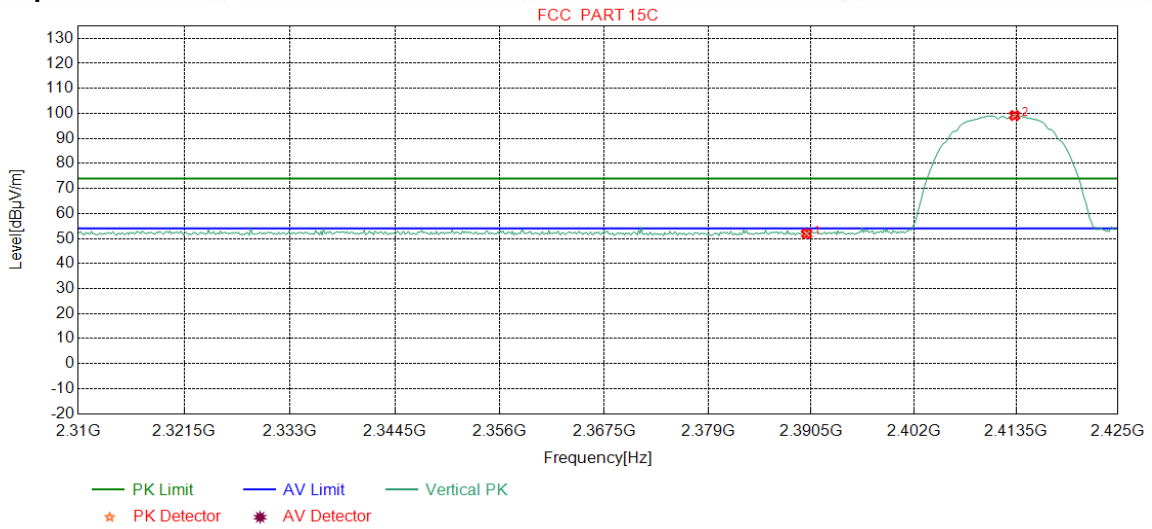
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.71	52.21	74.00	21.79	Pass	Horizontal
2	2410.6070	32.27	13.35	-43.11	95.40	97.91	74.00	-23.91	Pass	Horizontal

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2412
Remark:	PK		

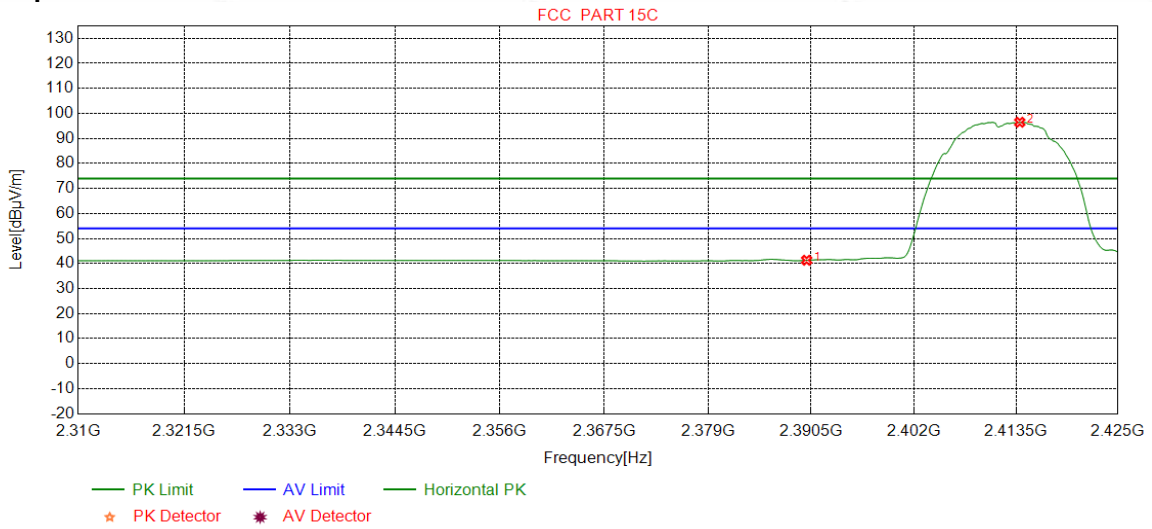
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.43	51.93	74.00	22.07	Pass	Vertical
2	2413.3417	32.28	13.36	-43.12	96.62	99.14	74.00	-25.14	Pass	Vertical

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2412
Remark:	AV		

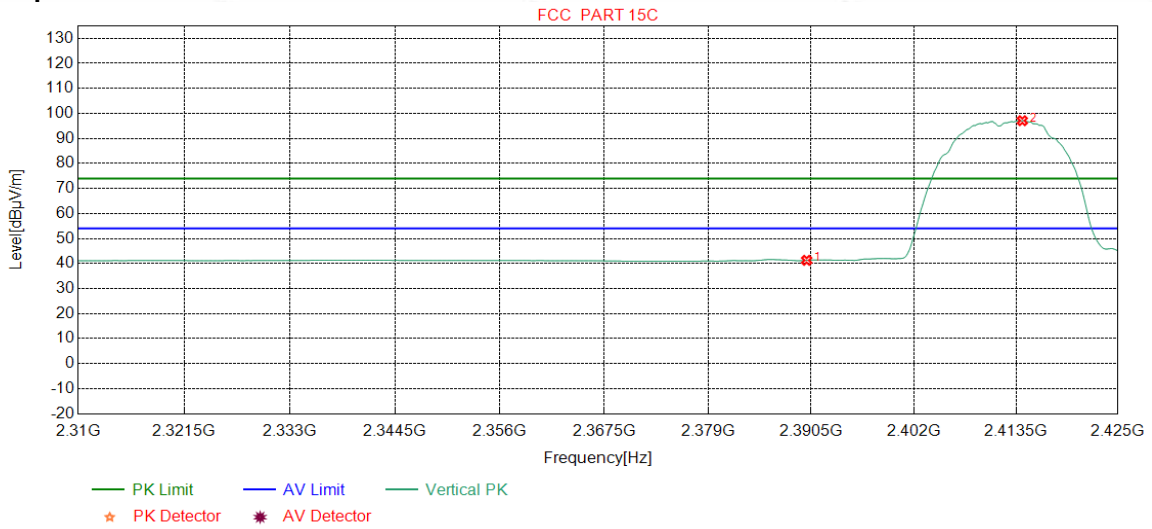
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	38.81	41.31	54.00	12.69	Pass	Horizontal
2	2413.9174	32.28	13.36	-43.11	93.94	96.47	54.00	-42.47	Pass	Horizontal

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2412
Remark:	AV		

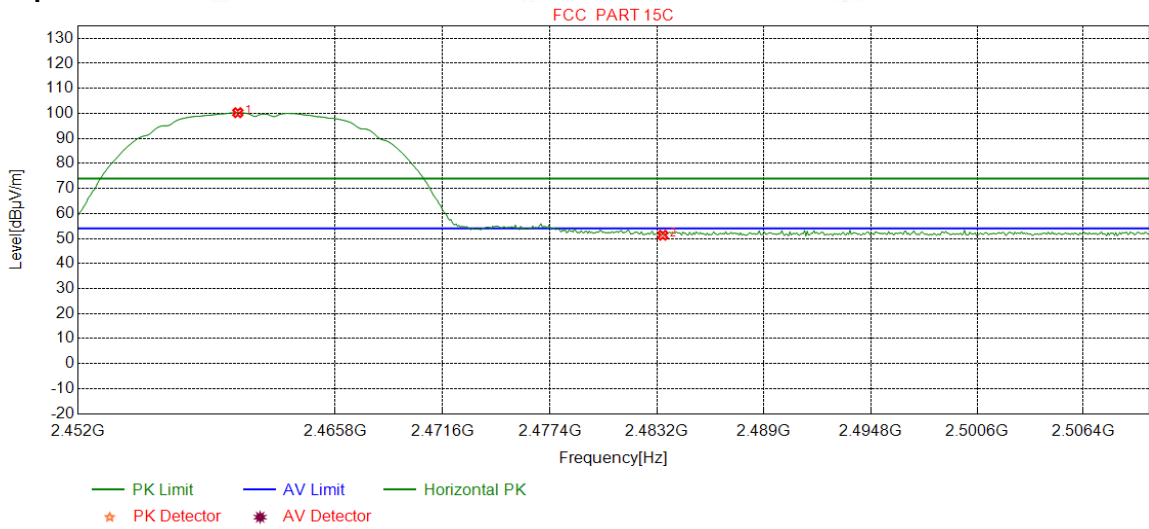
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	38.78	41.28	54.00	12.72	Pass	Vertical
2	2414.2053	32.28	13.37	-43.12	94.56	97.09	54.00	-43.09	Pass	Vertical

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2462
Remark:	PK		

**Test Graph**

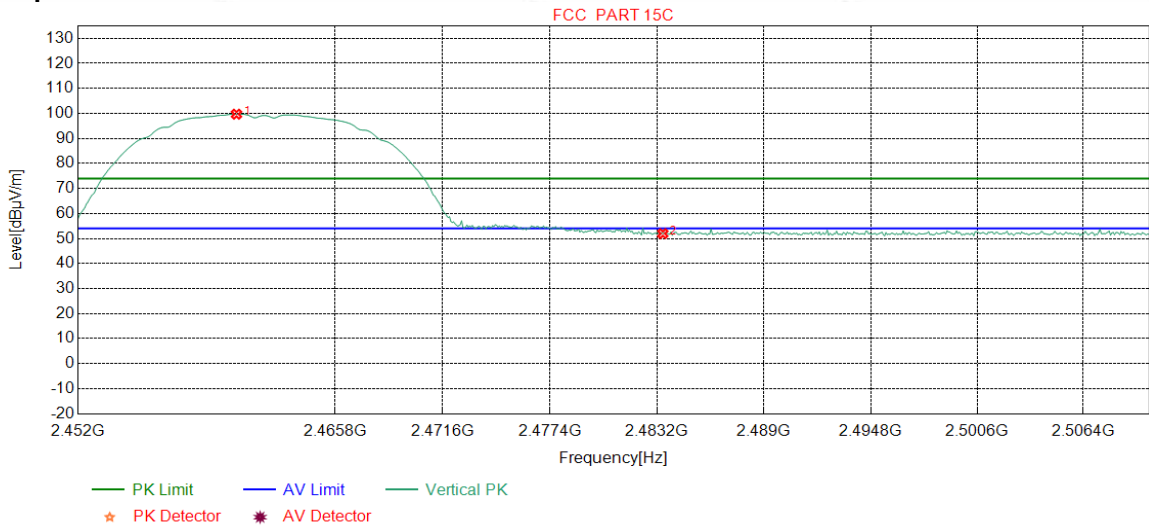


NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2460.5657	32.34	13.48	-43.10	97.57	100.29	74.00	-26.29	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	48.66	51.31	74.00	22.69	Pass	Horizontal



Mode:	802.11 b(1Mbps) Transmitting	Channel:	2462
Remark:	PK		

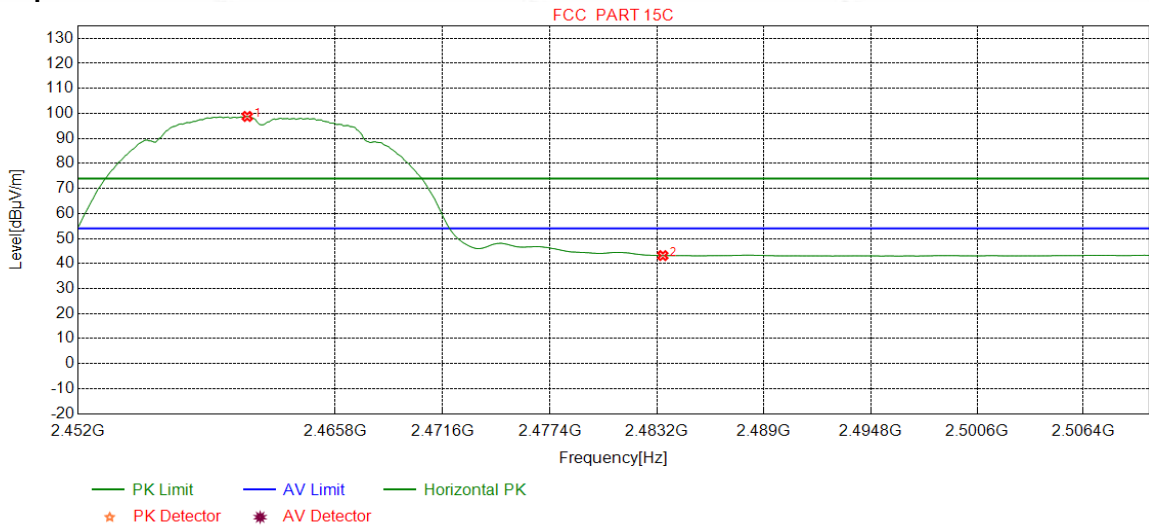
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2460.4931	32.34	13.48	-43.10	96.97	99.69	74.00	-25.69	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	49.29	51.94	74.00	22.06	Pass	Vertical

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2462
Remark:	AV		

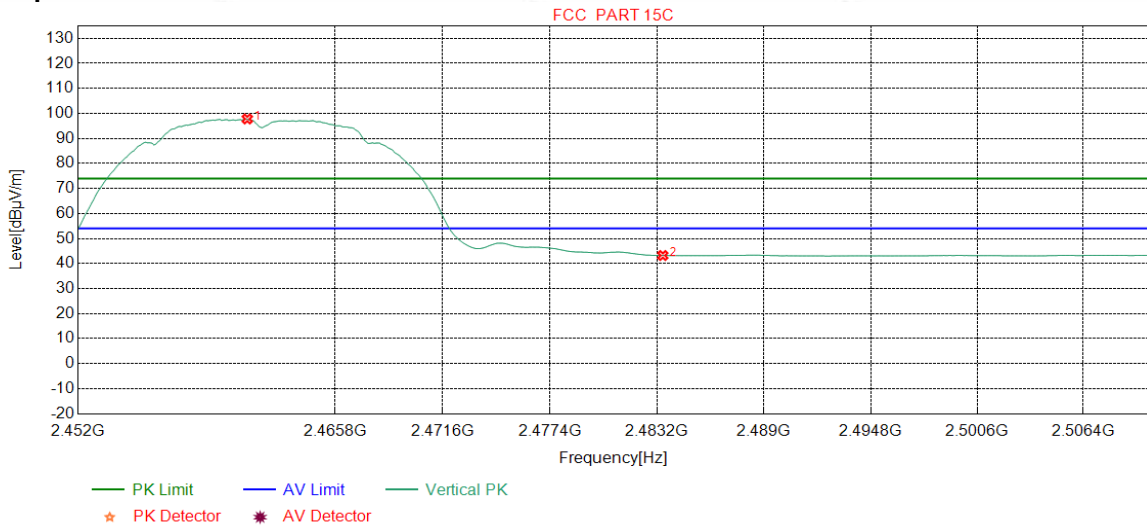
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2461.0738	32.35	13.48	-43.11	96.07	98.79	54.00	-44.79	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	40.52	43.17	54.00	10.83	Pass	Horizontal

Mode:	802.11 b(1Mbps) Transmitting	Channel:	2462
Remark:	AV		

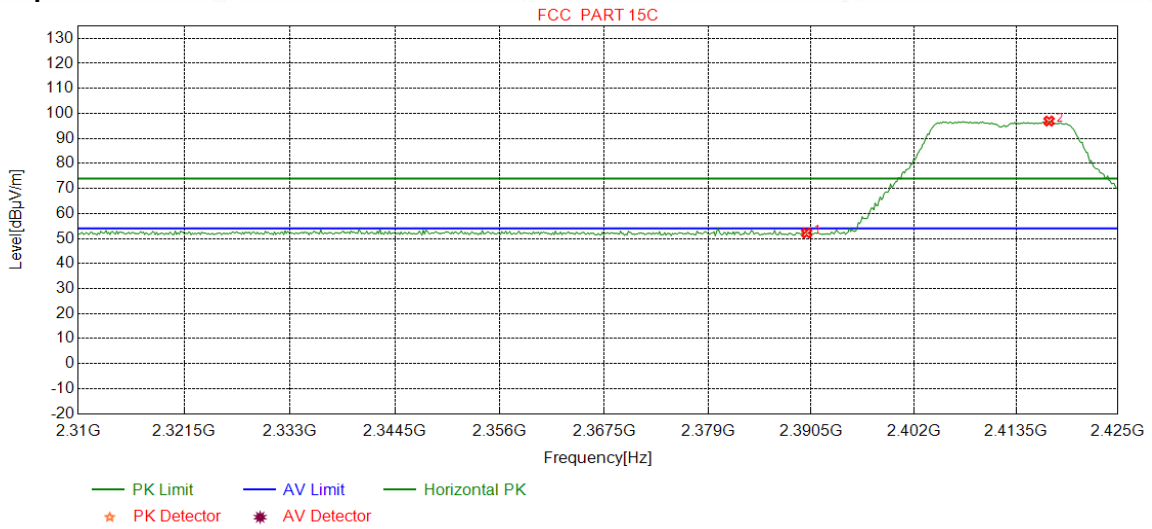
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2461.0738	32.35	13.48	-43.11	95.06	97.78	54.00	-43.78	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	40.56	43.21	54.00	10.79	Pass	Vertical

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2412
Remark:	PK		

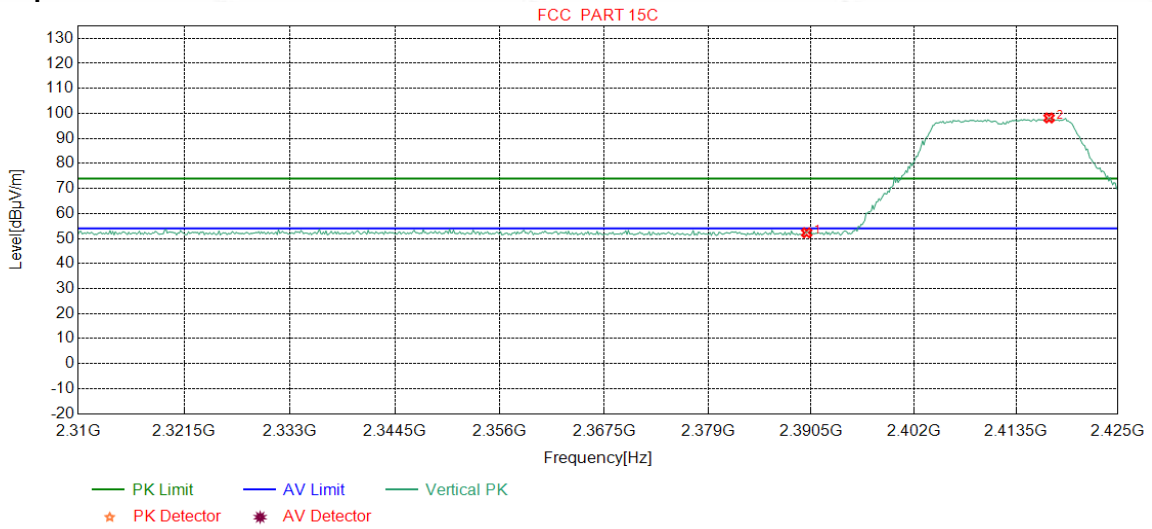
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.70	52.20	74.00	21.80	Pass	Horizontal
2	2417.2278	32.28	13.38	-43.11	94.39	96.94	74.00	-22.94	Pass	Horizontal

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2412
Remark:	PK		

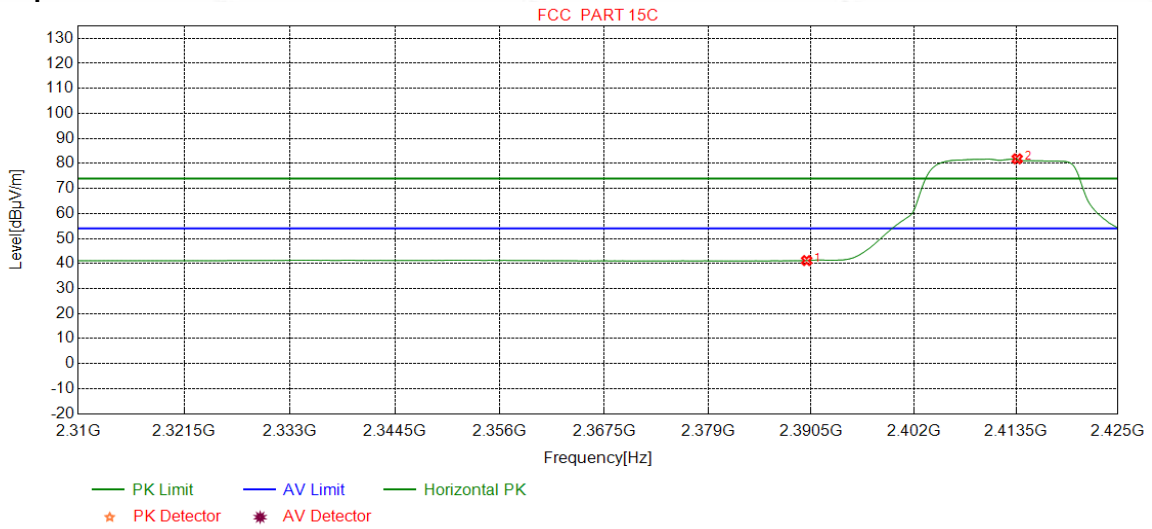
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.80	52.30	74.00	21.70	Pass	Vertical
2	2417.2278	32.28	13.38	-43.11	95.64	98.19	74.00	-24.19	Pass	Vertical

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2412
Remark:	AV		

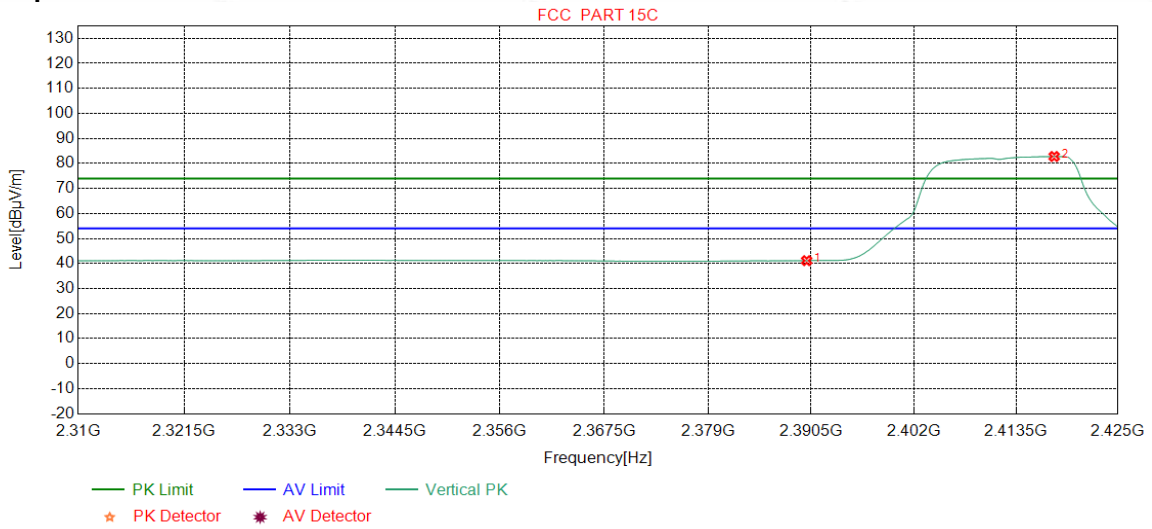
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	38.68	41.18	54.00	12.82	Pass	Horizontal
2	2413.6295	32.28	13.36	-43.12	79.31	81.83	54.00	-27.83	Pass	Horizontal

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2412
Remark:	AV		

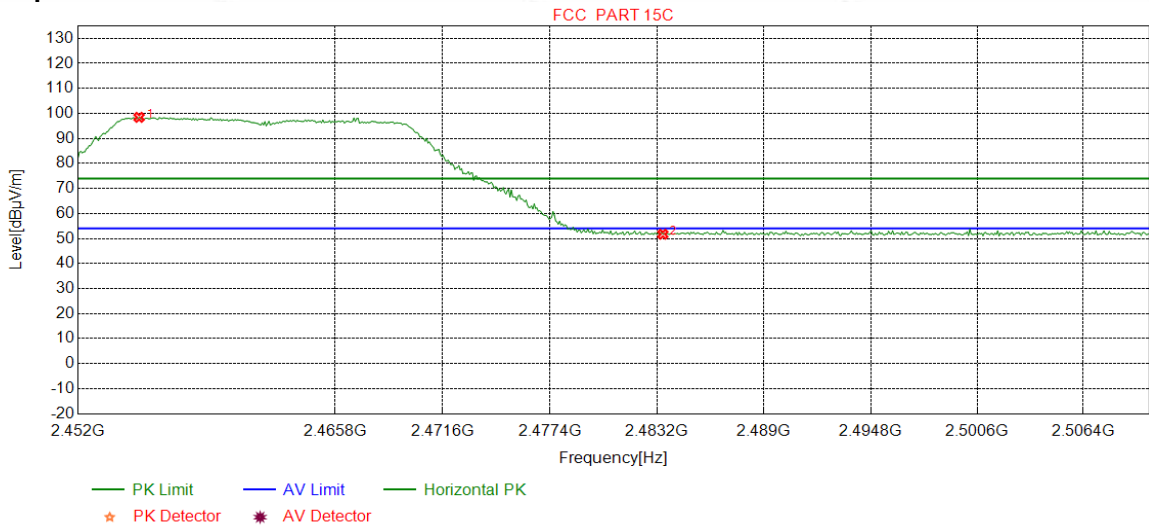
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	38.64	41.14	54.00	12.86	Pass	Vertical
2	2417.8035	32.28	13.38	-43.11	80.23	82.78	54.00	-28.78	Pass	Vertical

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2462
Remark:	PK		

**Test Graph**

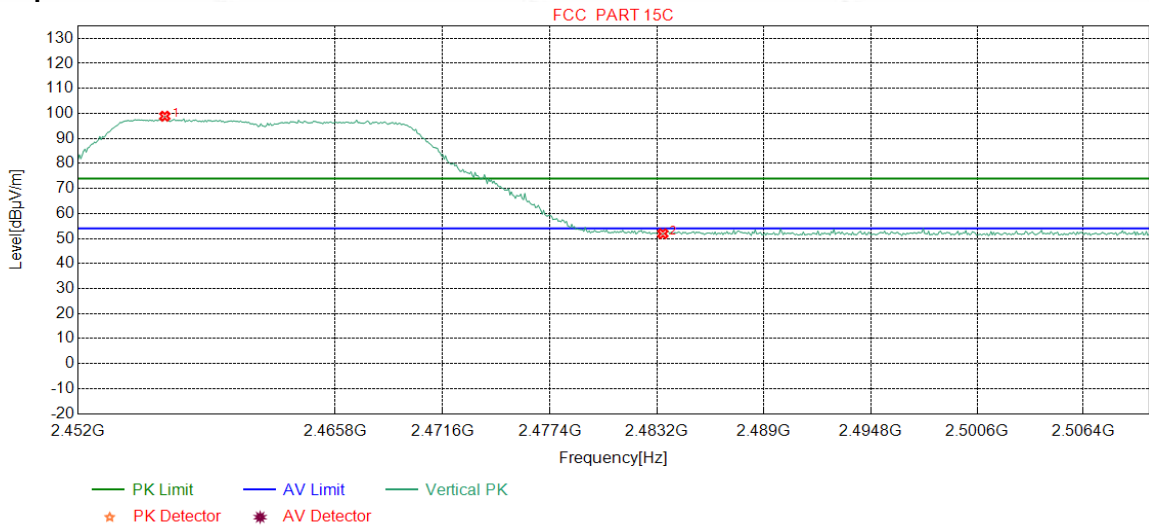


NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2455.2666	32.34	13.51	-43.12	95.70	98.43	74.00	-24.43	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	49.06	51.71	74.00	22.29	Pass	Horizontal



Mode:	802.11 g(6Mbps) Transmitting	Channel:	2462
Remark:	PK		

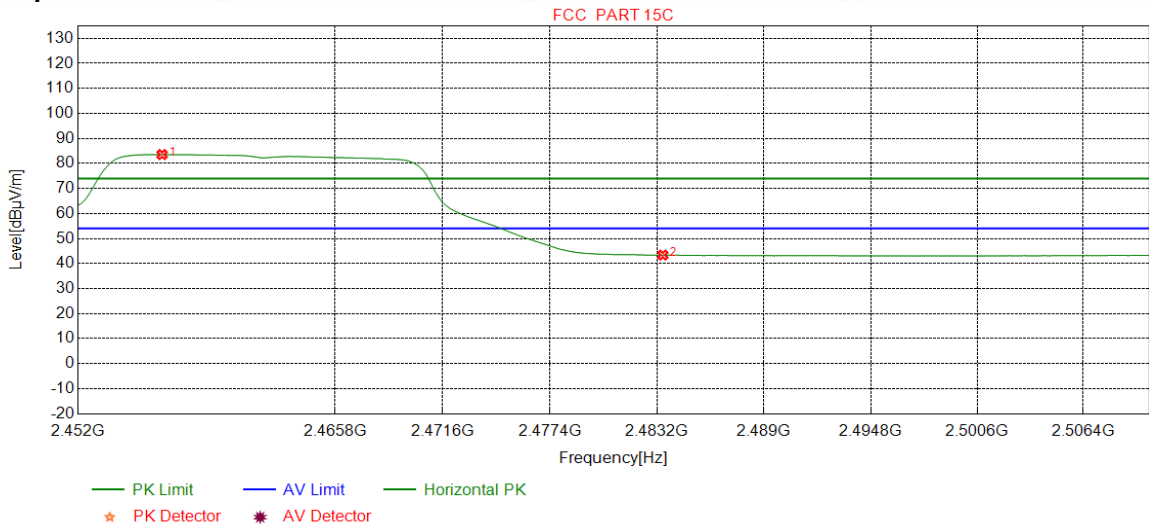
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2456.6458	32.34	13.50	-43.11	96.15	98.88	74.00	-24.88	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	49.27	51.92	74.00	22.08	Pass	Vertical

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2462
Remark:	AV		

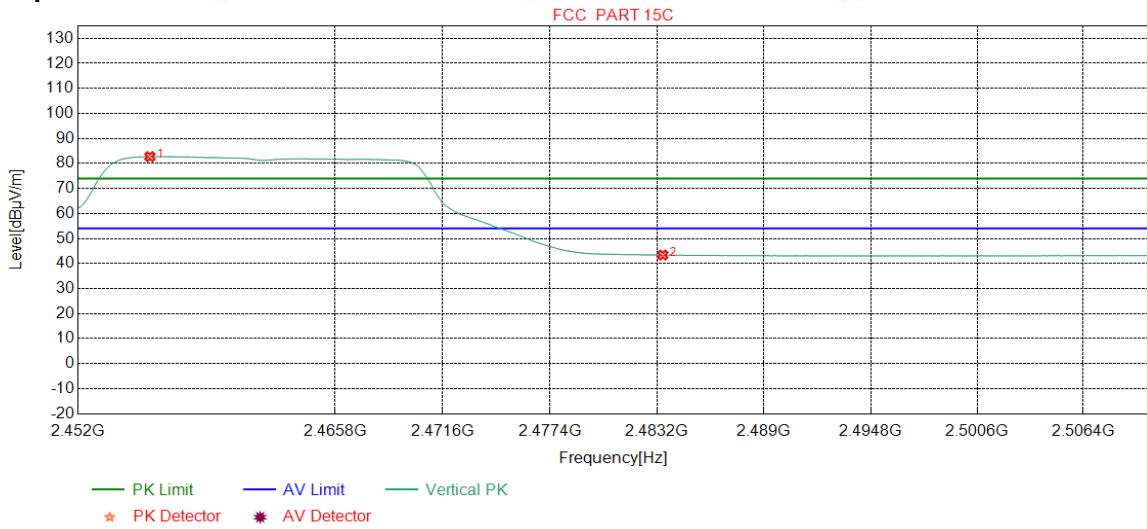
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2456.5006	32.34	13.50	-43.11	80.83	83.56	54.00	-29.56	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	40.73	43.38	54.00	10.62	Pass	Horizontal

Mode:	802.11 g(6Mbps) Transmitting	Channel:	2462
Remark:	AV		

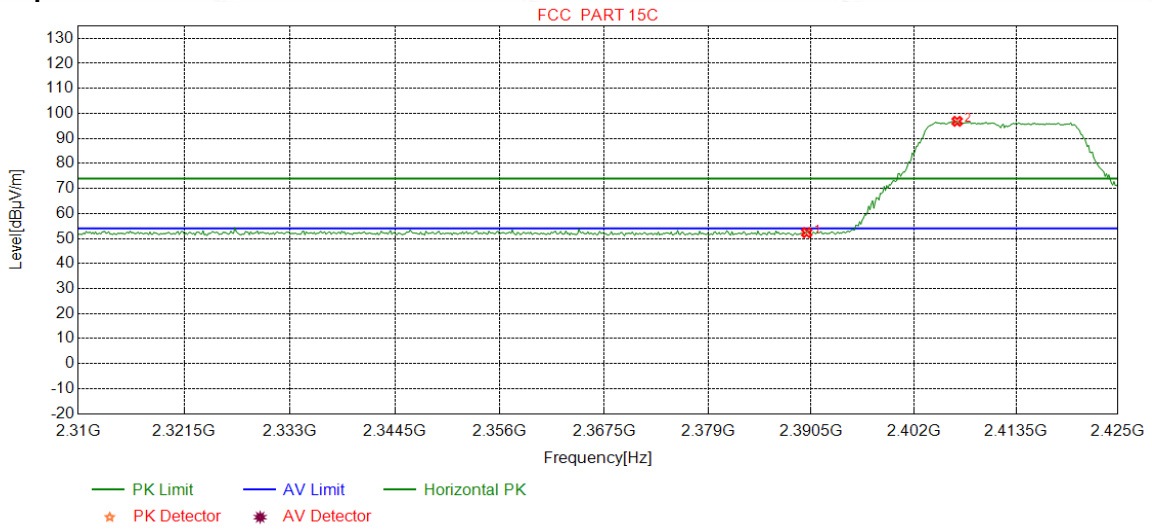
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2455.8473	32.34	13.50	-43.11	80.00	82.73	54.00	-28.73	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	40.74	43.39	54.00	10.61	Pass	Vertical

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2412
Remark:	PK		

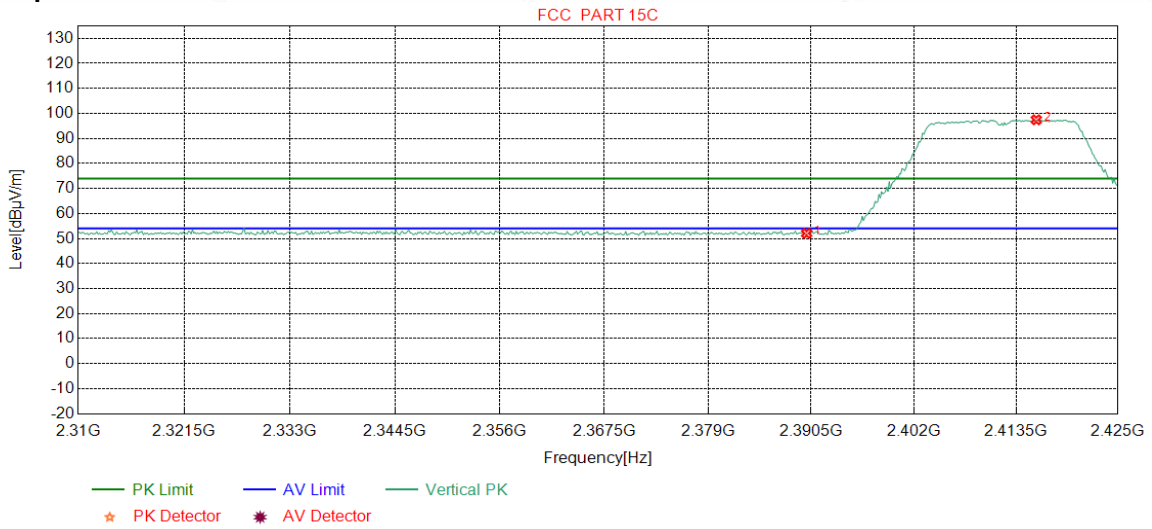
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.85	52.35	74.00	21.65	Pass	Horizontal
2	2406.8648	32.27	13.33	-43.12	94.36	96.84	74.00	-22.84	Pass	Horizontal

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2412
Remark:	PK		

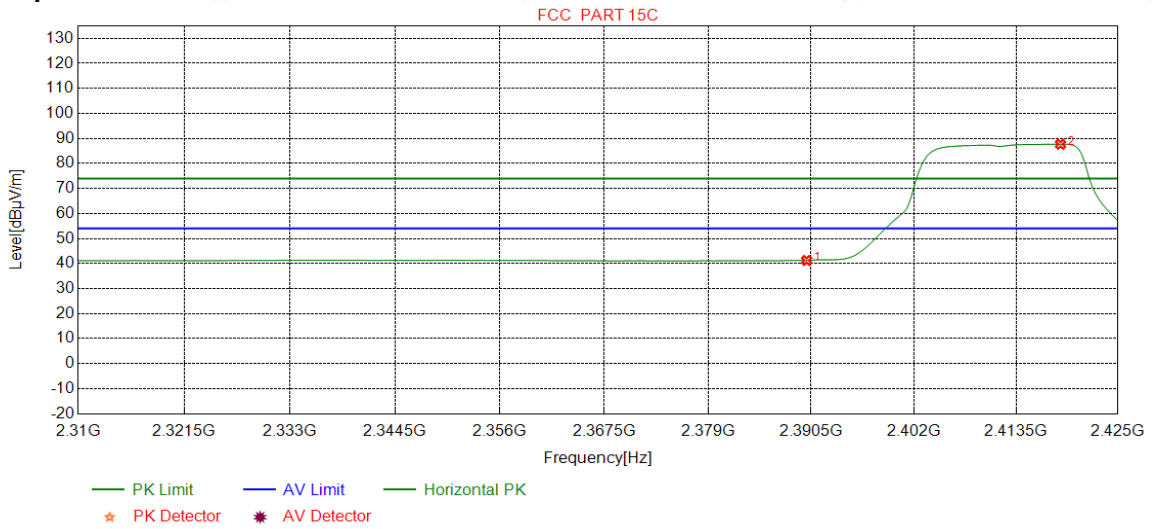
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.54	52.04	74.00	21.96	Pass	Vertical
2	2415.7885	32.28	13.37	-43.11	94.91	97.45	74.00	-23.45	Pass	Vertical

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2412
Remark:	AV		

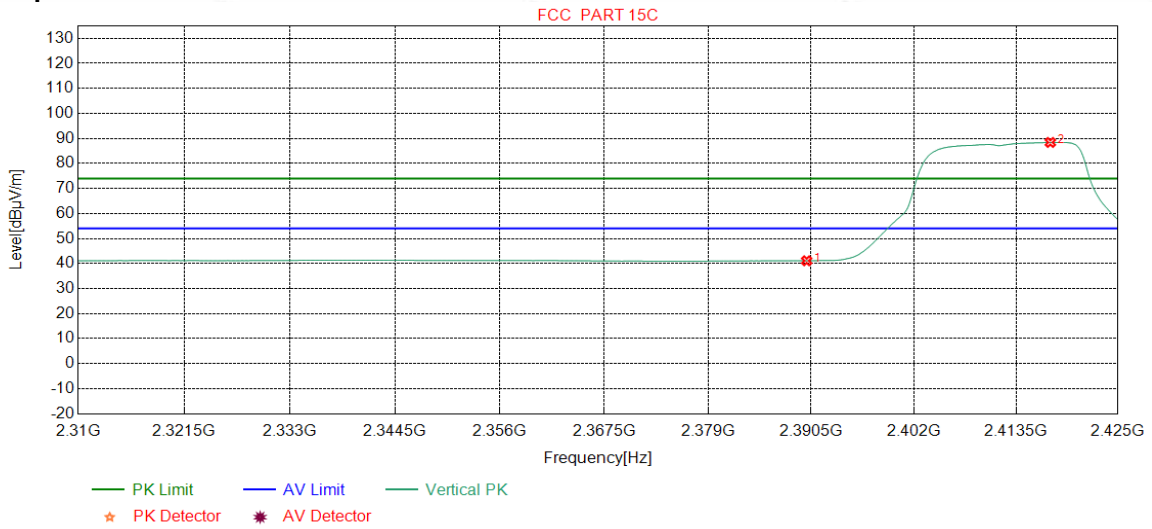
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	38.73	41.23	54.00	12.77	Pass	Horizontal
2	2418.5232	32.29	13.39	-43.13	85.12	87.67	54.00	-33.67	Pass	Horizontal

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2412
Remark:	AV		

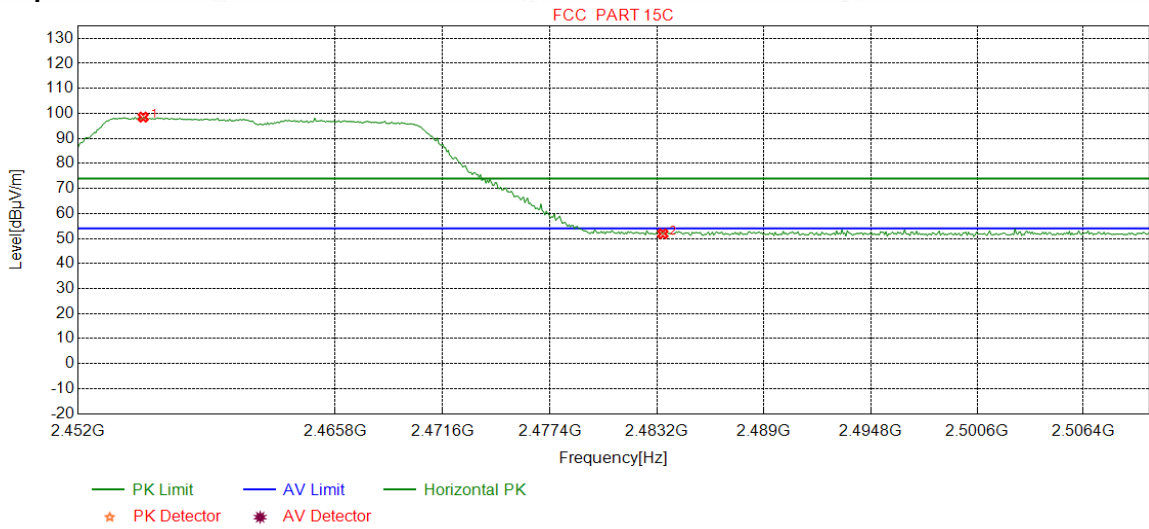
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	38.59	41.09	54.00	12.91	Pass	Vertical
2	2417.3717	32.28	13.38	-43.11	85.85	88.40	54.00	-34.40	Pass	Vertical

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2462
Remark:	PK		

**Test Graph**

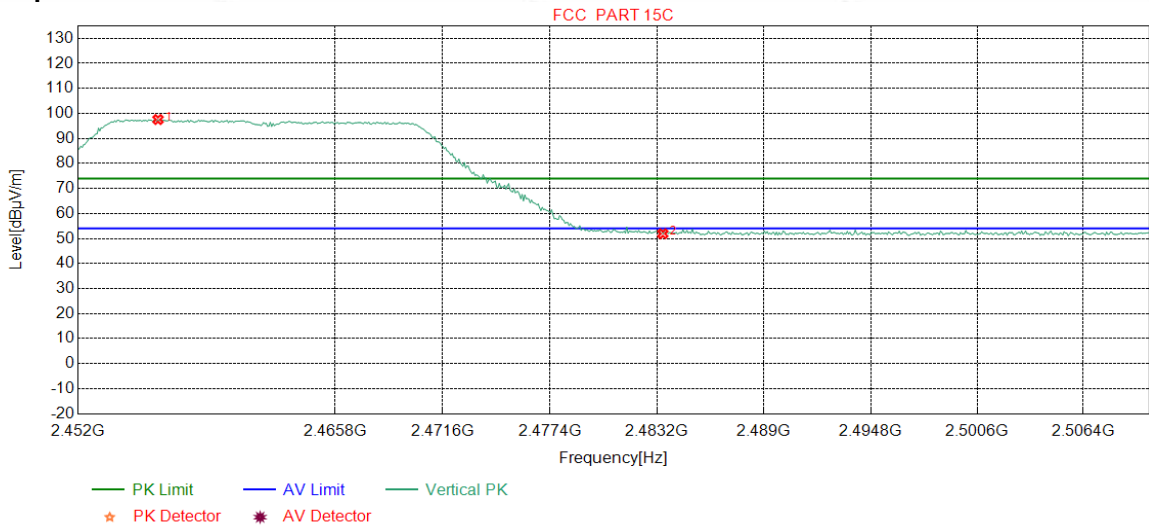


NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2455.4844	32.34	13.50	-43.11	95.79	98.52	74.00	-24.52	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	49.23	51.88	74.00	22.12	Pass	Horizontal



Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2462
Remark:	PK		

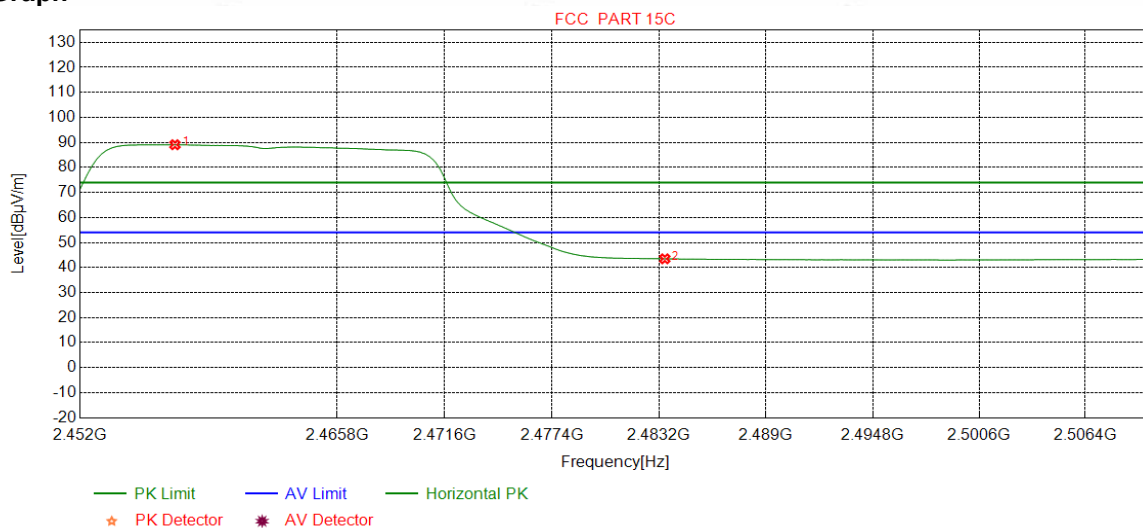
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2456.2829	32.34	13.50	-43.11	94.82	97.55	74.00	-23.55	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	49.25	51.90	74.00	22.10	Pass	Vertical

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2462
Remark:	AV		

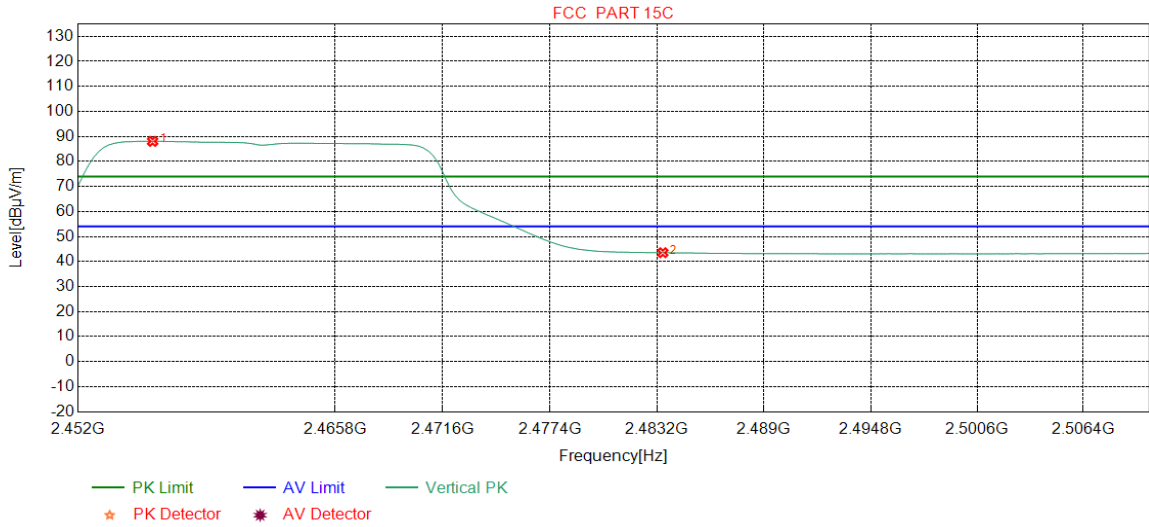
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2457.0814	32.34	13.50	-43.11	86.34	89.07	54.00	-35.07	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	40.83	43.48	54.00	10.52	Pass	Horizontal

Mode:	802.11 n(HT20) (6.5Mbps) Transmitting	Channel:	2462
Remark:	AV		

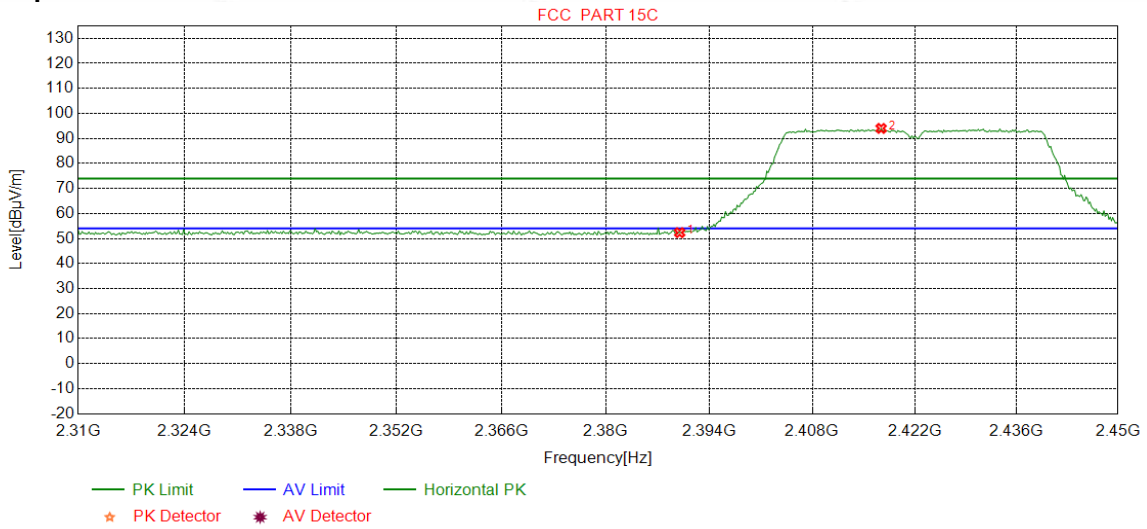
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2455.9925	32.34	13.50	-43.11	85.30	88.03	54.00	-34.03	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	40.88	43.53	54.00	10.47	Pass	Vertical

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2422
Remark:	PK		

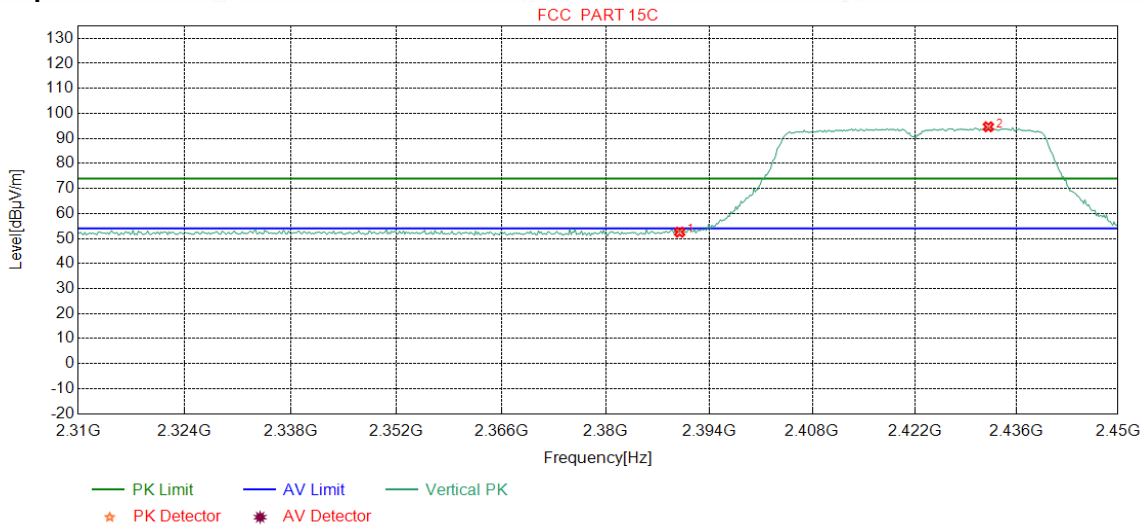
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	49.85	52.35	74.00	21.65	Pass	Horizontal
2	2417.4093	32.28	13.38	-43.11	91.45	94.00	74.00	-20.00	Pass	Horizontal

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2422
Remark:	PK		

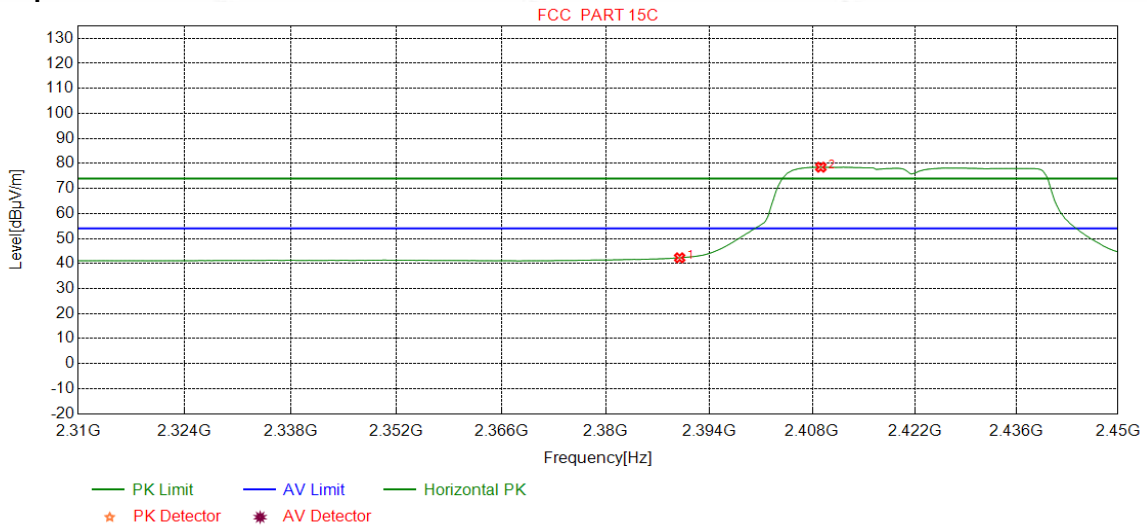
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	50.03	52.53	74.00	21.47	Pass	Vertical
2	2432.1277	32.30	13.45	-43.11	92.01	94.65	74.00	-20.65	Pass	Vertical

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2422
Remark:	AV		

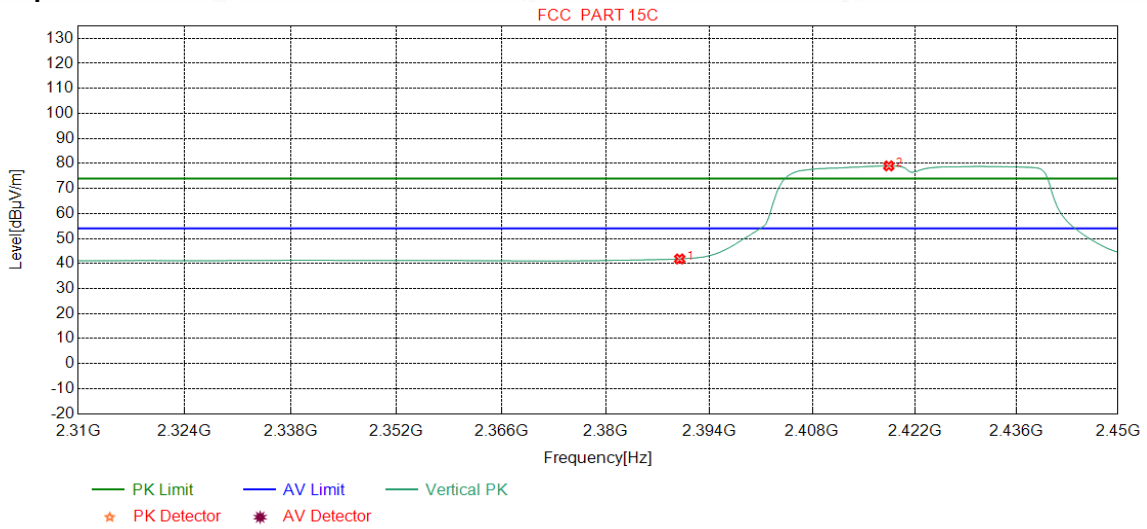
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	39.79	42.29	54.00	11.71	Pass	Horizontal
2	2409.1740	32.27	13.34	-43.11	76.00	78.50	54.00	-24.50	Pass	Horizontal

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2422
Remark:	AV		

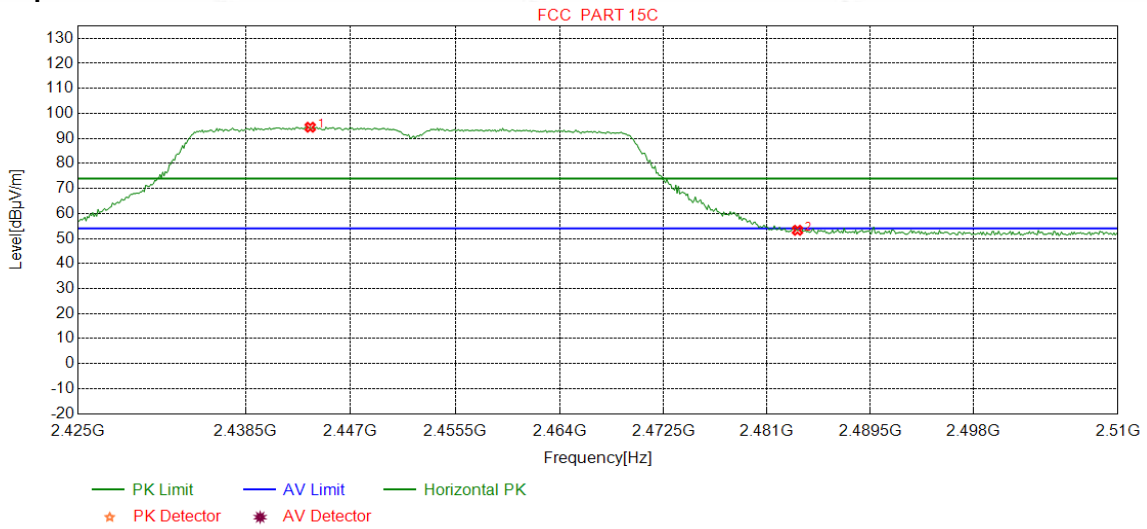
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2390.0000	32.25	13.37	-43.12	39.33	41.83	54.00	12.17	Pass	Vertical
2	2418.4606	32.29	13.38	-43.12	76.47	79.02	54.00	-25.02	Pass	Vertical

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2452
Remark:	PK		

**Test Graph**

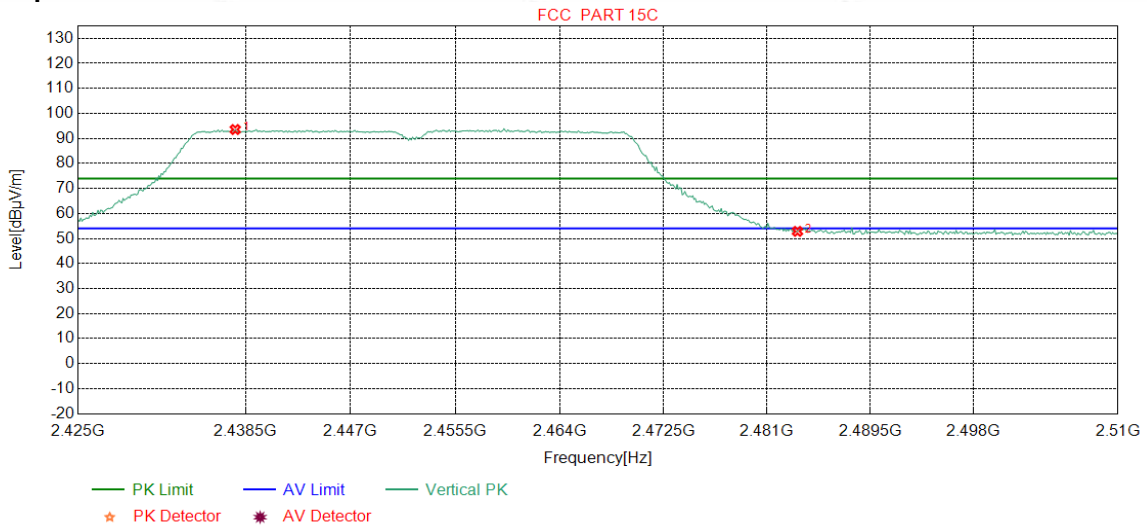


NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2443.7234	32.32	13.50	-43.11	91.77	94.48	74.00	-20.48	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	50.63	53.28	74.00	20.72	Pass	Horizontal



Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2452
Remark:	PK		

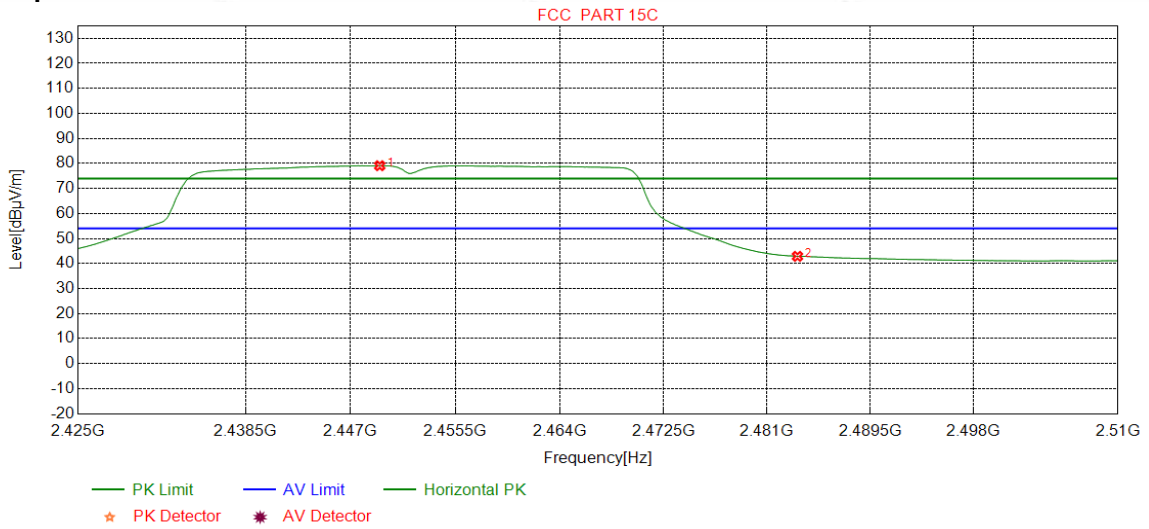
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2437.6596	32.31	13.47	-43.11	90.90	93.57	74.00	-19.57	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	50.20	52.85	74.00	21.15	Pass	Vertical

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2452
Remark:	AV		

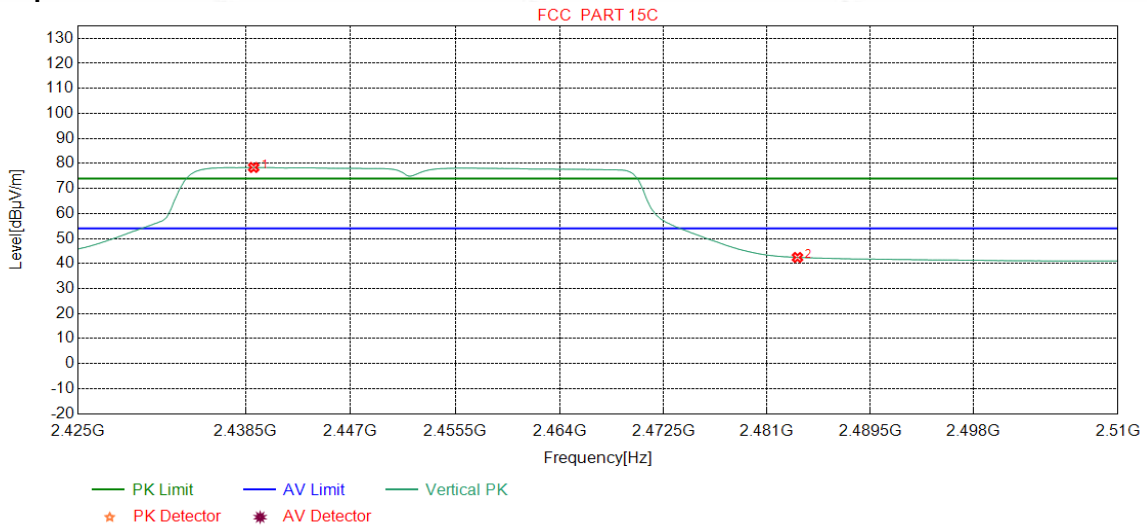
**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2449.3617	32.33	13.53	-43.11	76.35	79.10	54.00	-25.10	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	40.22	42.87	54.00	11.13	Pass	Horizontal

Mode:	802.11 n(HT40) (13.5Mbps) Transmitting	Channel:	2452
Remark:	AV		

**Test Graph**



NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity
1	2439.1489	32.31	13.48	-43.11	75.72	78.40	54.00	-24.40	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	39.79	42.44	54.00	11.56	Pass	Vertical

**Note:**

1) Through Pre-scan transmitting mode and charge+transmitter mode with all kind of modulation and data rate, find the 1Mbps of rate is the worst case of 802.11b; 6Mbps of rate is the worst case of 802.11g; 6.5Mbps of rate is the worst case of 802.11n(HT20) ; 13.5Mbps of rate is the worst case of 802.11n(HT40),and then Only the worst case is recorded in the report.

2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

### Appendix I): Radiated Spurious Emissions

<b>Receiver Setup:</b>	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	120kHz	300kHz	Quasi-peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Peak		1MHz	10Hz	Average	
<b>Test Procedure:</b>					
<b>Below 1GHz test procedure as below:</b>					
<p>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.</p> <p>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.</p> <p>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.</p> <p>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 rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</p> <p>e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</p> <p>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.</p>					
<b>Above 1GHz test procedure as below:</b>					
<p>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).</p> <p>h. Test the EUT in the lowest channel, the middle channel ,the Highest channel .</p> <p>i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.</p> <p>j. Repeat above procedures until all frequencies measured was complete.</p>					
Limit:	Frequency	Field strength (microvolt/meter)	Limit (dB $\mu$ 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
<p>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.</p>					

## Radiated Spurious Emissions test Data:

### Radiated Emission below 1GHz

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 11b Channel 2412MHz was selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Mode:		802.11 b(1Mbps) Transmitting				Channel:		2412		
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dB $\mu$ V]	Level [dB $\mu$ V/m]	Limit [dB $\mu$ V/m]	Margin [dB]	Result	Polarity
1	46.3946	13.20	0.76	-31.82	40.64	22.78	40.00	17.22	Pass	H
2	129.9200	7.71	1.33	-32.02	42.19	19.21	43.50	24.29	Pass	H
3	208.8859	11.13	1.71	-31.94	42.44	23.34	43.50	20.16	Pass	H
4	304.0524	13.29	2.07	-31.60	41.62	25.38	46.00	20.62	Pass	H
5	600.0290	19.00	2.96	-31.50	40.64	31.10	46.00	14.90	Pass	H
6	909.9750	22.16	3.60	-31.48	35.68	29.96	46.00	16.04	Pass	H
7	46.2006	13.20	0.76	-31.81	40.66	22.81	40.00	17.19	Pass	V
8	130.0170	7.70	1.33	-32.02	46.01	23.02	43.50	20.48	Pass	V
9	208.8859	11.13	1.71	-31.94	45.53	26.43	43.50	17.07	Pass	V
10	304.0524	13.29	2.07	-31.60	40.78	24.54	46.00	21.46	Pass	V
11	600.0290	19.00	2.96	-31.50	41.17	31.63	46.00	14.37	Pass	V
12	909.9750	22.16	3.60	-31.48	36.50	30.78	46.00	15.22	Pass	V

**Transmitter Emission above 1GHz**

Mode:		802.11 b (1Mbps) Transmitting				Channel:		2412			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1193.4193	28.09	2.66	-42.89	53.86	41.72	74.00	32.28	Pass	H	Peak
2	1922.4922	31.19	3.42	-43.01	53.84	45.44	74.00	28.56	Pass	H	Peak
3	3431.0287	33.37	4.48	-43.10	51.62	46.37	74.00	27.63	Pass	H	Peak
4	4824.0000	34.50	4.61	-42.80	47.18	43.49	74.00	30.51	Pass	H	Peak
5	7236.0000	36.34	5.79	-42.16	45.43	45.40	74.00	28.60	Pass	H	Peak
6	9648.0000	37.66	6.72	-42.10	46.53	48.81	74.00	25.19	Pass	H	Peak
7	1782.4782	30.26	3.29	-42.70	52.23	43.08	74.00	30.92	Pass	V	Peak
8	2938.9939	33.10	4.40	-43.10	51.89	46.29	74.00	27.71	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	51.61	46.52	74.00	27.48	Pass	V	Peak
10	4824.0000	34.50	4.61	-42.80	47.69	44.00	74.00	30.00	Pass	V	Peak
11	7236.0000	36.34	5.79	-42.16	46.42	46.39	74.00	27.61	Pass	V	Peak
12	9648.0000	37.66	6.72	-42.10	47.10	49.38	74.00	24.62	Pass	V	Peak

Mode:		802.11 b (1Mbps) Transmitting				Channel:		2437			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1189.0189	28.09	2.67	-42.91	55.36	43.21	74.00	30.79	Pass	H	Peak
2	2049.7050	31.77	3.56	-43.19	54.23	46.37	74.00	27.63	Pass	H	Peak
3	3417.0278	33.37	4.52	-43.11	52.46	47.24	74.00	26.76	Pass	H	Peak
4	4874.0000	34.50	4.78	-42.80	48.61	45.09	74.00	28.91	Pass	H	Peak
5	7311.0000	36.41	5.85	-42.14	46.02	46.14	74.00	27.86	Pass	H	Peak
6	9748.0000	37.70	6.77	-42.10	46.66	49.03	74.00	24.97	Pass	H	Peak
7	1281.2281	28.18	2.72	-42.80	54.01	42.11	74.00	31.89	Pass	V	Peak
8	1784.2784	30.28	3.29	-42.70	52.36	43.23	74.00	30.77	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	53.04	47.95	74.00	26.05	Pass	V	Peak
10	4874.0000	34.50	4.78	-42.80	49.31	45.79	74.00	28.21	Pass	V	Peak
11	7311.0000	36.41	5.85	-42.14	45.89	46.01	74.00	27.99	Pass	V	Peak
12	9748.0000	37.70	6.77	-42.10	46.96	49.33	74.00	24.67	Pass	V	Peak

Mode:		802.11 b (1Mbps) Transmitting				Channel:		2462			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1366.4366	28.27	2.85	-42.72	55.97	44.37	74.00	29.63	Pass	H	Peak
2	2049.9050	31.77	3.56	-43.19	54.29	46.43	74.00	27.57	Pass	H	Peak
3	3122.0081	33.25	4.65	-43.10	52.41	47.21	74.00	26.79	Pass	H	Peak
4	4924.0000	34.50	4.85	-42.80	48.80	45.35	74.00	28.65	Pass	H	Peak
5	7386.0000	36.49	5.85	-42.13	45.55	45.76	74.00	28.24	Pass	H	Peak
6	9848.0000	37.74	6.83	-42.10	45.96	48.43	74.00	25.57	Pass	H	Peak
7	1418.4418	28.32	2.92	-42.76	56.31	44.79	74.00	29.21	Pass	V	Peak
8	1781.8782	30.26	3.29	-42.70	51.56	42.41	74.00	31.59	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	52.74	47.65	74.00	26.35	Pass	V	Peak
10	4924.0000	34.50	4.85	-42.80	48.68	45.23	74.00	28.77	Pass	V	Peak
11	7386.0000	36.49	5.85	-42.13	46.20	46.41	74.00	27.59	Pass	V	Peak
12	9848.0000	37.74	6.83	-42.10	45.19	47.66	74.00	26.34	Pass	V	Peak

Mode:		802.11 g (6Mbps) Transmitting				Channel:		2412			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1193.6194	28.09	2.66	-42.89	55.11	42.97	74.00	31.03	Pass	H	Peak
2	2106.7107	31.85	3.59	-43.18	53.80	46.06	74.00	27.94	Pass	H	Peak
3	3758.0505	33.61	4.35	-43.05	51.60	46.51	74.00	27.49	Pass	H	Peak
4	4824.0000	34.50	4.61	-42.80	47.64	43.95	74.00	30.05	Pass	H	Peak
5	7236.0000	36.34	5.79	-42.16	46.11	46.08	74.00	27.92	Pass	H	Peak
6	9648.0000	37.66	6.72	-42.10	45.60	47.88	74.00	26.12	Pass	H	Peak
7	1337.8338	28.24	2.80	-42.74	51.51	39.81	74.00	34.19	Pass	V	Peak
8	2970.7971	33.15	4.46	-43.09	51.21	45.73	74.00	28.27	Pass	V	Peak
9	3844.0563	33.68	4.36	-43.03	51.29	46.30	74.00	27.70	Pass	V	Peak
10	4824.0000	34.50	4.61	-42.80	46.23	42.54	74.00	31.46	Pass	V	Peak
11	7236.0000	36.34	5.79	-42.16	46.20	46.17	74.00	27.83	Pass	V	Peak
12	9648.0000	37.66	6.72	-42.10	46.30	48.58	74.00	25.42	Pass	V	Peak

Mode:		802.11 g (6Mbps) Transmitting				Channel:		2437			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1366.6367	28.27	2.85	-42.72	55.68	44.08	74.00	29.92	Pass	H	Peak
2	2050.3050	31.77	3.56	-43.19	54.16	46.30	74.00	27.70	Pass	H	Peak
3	3417.0278	33.37	4.52	-43.11	52.76	47.54	74.00	26.46	Pass	H	Peak
4	4874.0000	34.50	4.78	-42.80	46.41	42.89	74.00	31.11	Pass	H	Peak
5	7311.0000	36.41	5.85	-42.14	47.73	47.85	74.00	26.15	Pass	H	Peak
6	9748.0000	37.70	6.77	-42.10	47.82	50.19	74.00	23.81	Pass	H	Peak
7	1281.4281	28.18	2.72	-42.80	52.14	40.24	74.00	33.76	Pass	V	Peak
8	1924.4924	31.20	3.42	-43.01	51.10	42.71	74.00	31.29	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	51.43	46.34	74.00	27.66	Pass	V	Peak
10	4874.0000	34.50	4.78	-42.80	46.02	42.50	74.00	31.50	Pass	V	Peak
11	7311.0000	36.41	5.85	-42.14	46.53	46.65	74.00	27.35	Pass	V	Peak
12	9748.0000	37.70	6.77	-42.10	46.49	48.86	74.00	25.14	Pass	V	Peak

Mode:		802.11 g (6Mbps) Transmitting				Channel:		2462			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1335.0335	28.24	2.80	-42.75	56.11	44.40	74.00	29.60	Pass	H	Peak
2	2049.9050	31.77	3.56	-43.19	54.71	46.85	74.00	27.15	Pass	H	Peak
3	3399.0266	33.36	4.56	-43.10	52.65	47.47	74.00	26.53	Pass	H	Peak
4	4924.0000	34.50	4.85	-42.80	46.51	43.06	74.00	30.94	Pass	H	Peak
5	7386.0000	36.49	5.85	-42.13	47.05	47.26	74.00	26.74	Pass	H	Peak
6	9848.0000	37.74	6.83	-42.10	46.68	49.15	74.00	24.85	Pass	H	Peak
7	1214.2214	28.11	2.67	-42.88	51.83	39.73	74.00	34.27	Pass	V	Peak
8	1927.0927	31.22	3.42	-43.02	52.35	43.97	74.00	30.03	Pass	V	Peak
9	4157.0771	34.02	4.51	-42.94	52.42	48.01	74.00	25.99	Pass	V	Peak
10	4924.0000	34.50	4.85	-42.80	46.84	43.39	74.00	30.61	Pass	V	Peak
11	7386.0000	36.49	5.85	-42.13	46.00	46.21	74.00	27.79	Pass	V	Peak
12	9848.0000	37.74	6.83	-42.10	44.94	47.41	74.00	26.59	Pass	V	Peak



Mode:		802.11 n (HT20) (6.5Mbps)				Channel:		2412			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1193.6194	28.09	2.66	-42.89	56.25	44.11	74.00	29.89	Pass	H	Peak
2	2107.1107	31.85	3.59	-43.18	54.36	46.62	74.00	27.38	Pass	H	Peak
3	3400.0267	33.36	4.56	-43.10	53.50	48.32	74.00	25.68	Pass	H	Peak
4	4824.0000	34.50	4.61	-42.80	46.66	42.97	74.00	31.03	Pass	H	Peak
5	7236.0000	36.34	5.79	-42.16	45.19	45.16	74.00	28.84	Pass	H	Peak
6	9648.0000	37.66	6.72	-42.10	46.02	48.30	74.00	25.70	Pass	H	Peak
7	1365.4365	28.27	2.84	-42.72	52.31	40.70	74.00	33.30	Pass	V	Peak
8	1932.8933	31.26	3.42	-43.04	51.31	42.95	74.00	31.05	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	51.42	46.33	74.00	27.67	Pass	V	Peak
10	4824.0000	34.50	4.61	-42.80	46.48	42.79	74.00	31.21	Pass	V	Peak
11	7236.0000	36.34	5.79	-42.16	47.14	47.11	74.00	26.89	Pass	V	Peak
12	9648.0000	37.66	6.72	-42.10	46.18	48.46	74.00	25.54	Pass	V	Peak

Mode:		802.11 n (HT20) (6.5Mbps)				Channel:		2437			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1366.4366	28.27	2.85	-42.72	56.45	44.85	74.00	29.15	Pass	H	Peak
2	2050.1050	31.77	3.56	-43.19	54.29	46.43	74.00	27.57	Pass	H	Peak
3	3125.0083	33.25	4.64	-43.10	52.85	47.64	74.00	26.36	Pass	H	Peak
4	4874.0000	34.50	4.78	-42.80	46.92	43.40	74.00	30.60	Pass	H	Peak
5	7311.0000	36.41	5.85	-42.14	46.18	46.30	74.00	27.70	Pass	H	Peak
6	9748.0000	37.70	6.77	-42.10	47.51	49.88	74.00	24.12	Pass	H	Peak
7	1366.6367	28.27	2.85	-42.72	53.36	41.76	74.00	32.24	Pass	V	Peak
8	1781.2781	30.26	3.29	-42.71	52.12	42.96	74.00	31.04	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	52.87	47.78	74.00	26.22	Pass	V	Peak
10	4874.0000	34.50	4.78	-42.80	46.39	42.87	74.00	31.13	Pass	V	Peak
11	7311.0000	36.41	5.85	-42.14	46.23	46.35	74.00	27.65	Pass	V	Peak
12	9748.0000	37.70	6.77	-42.10	46.77	49.14	74.00	24.86	Pass	V	Peak

Mode:		802.11 n (HT20) (6.5Mbps)				Channel:		2462			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1339.0339	28.24	2.80	-42.74	56.28	44.58	74.00	29.42	Pass	H	Peak
2	2106.9107	31.85	3.59	-43.18	54.77	47.03	74.00	26.97	Pass	H	Peak
3	4173.0782	34.04	4.50	-42.93	52.29	47.90	74.00	26.10	Pass	H	Peak
4	4924.0000	34.50	4.85	-42.80	46.69	43.24	74.00	30.76	Pass	H	Peak
5	7386.0000	36.49	5.85	-42.13	46.62	46.83	74.00	27.17	Pass	H	Peak
6	9848.0000	37.74	6.83	-42.10	45.39	47.86	74.00	26.14	Pass	H	Peak
7	1370.0370	28.27	2.85	-42.71	51.56	39.97	74.00	34.03	Pass	V	Peak
8	1790.0790	30.31	3.30	-42.70	51.51	42.42	74.00	31.58	Pass	V	Peak
9	3866.0577	33.69	4.35	-43.02	51.61	46.63	74.00	27.37	Pass	V	Peak
10	4924.0000	34.50	4.85	-42.80	47.01	43.56	74.00	30.44	Pass	V	Peak
11	7386.0000	36.49	5.85	-42.13	47.52	47.73	74.00	26.27	Pass	V	Peak
12	9848.0000	37.74	6.83	-42.10	46.23	48.70	74.00	25.30	Pass	V	Peak

Mode:		802.11 n (HT40) (13.5Mbps)				Channel:		2422			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1193.8194	28.09	2.66	-42.89	55.99	43.85	74.00	30.15	Pass	H	Peak
2	2135.5136	31.89	3.63	-43.17	54.72	47.07	74.00	26.93	Pass	H	Peak
3	3106.0071	33.24	4.70	-43.10	53.72	48.56	74.00	25.44	Pass	H	Peak
4	4844.0000	34.50	4.66	-42.80	47.03	43.39	74.00	30.61	Pass	H	Peak
5	7266.0000	36.37	5.80	-42.15	45.57	45.59	74.00	28.41	Pass	H	Peak
6	9688.0000	37.68	6.62	-42.10	46.88	49.08	74.00	24.92	Pass	H	Peak
7	1338.2338	28.24	2.80	-42.74	52.35	40.65	74.00	33.35	Pass	V	Peak
8	1930.8931	31.24	3.42	-43.03	51.84	43.47	74.00	30.53	Pass	V	Peak
9	2980.7981	33.17	4.49	-43.10	52.99	47.55	74.00	26.45	Pass	V	Peak
10	4844.0000	34.50	4.66	-42.80	46.01	42.37	74.00	31.63	Pass	V	Peak
11	7266.0000	36.37	5.80	-42.15	45.70	45.72	74.00	28.28	Pass	V	Peak
12	9688.0000	37.68	6.62	-42.10	47.12	49.32	74.00	24.68	Pass	V	Peak

Mode:		802.11 n (HT40) (13.5Mbps)				Channel:		2437			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1366.4366	28.27	2.85	-42.72	55.89	44.29	74.00	29.71	Pass	H	Peak
2	2049.7050	31.77	3.56	-43.19	54.05	46.19	74.00	27.81	Pass	H	Peak
3	3133.0089	33.25	4.62	-43.10	52.30	47.07	74.00	26.93	Pass	H	Peak
4	4874.0000	34.50	4.78	-42.80	47.29	43.77	74.00	30.23	Pass	H	Peak
5	7311.0000	36.41	5.85	-42.14	46.22	46.34	74.00	27.66	Pass	H	Peak
6	9748.0000	37.70	6.77	-42.10	46.40	48.77	74.00	25.23	Pass	H	Peak
7	1385.0385	28.29	2.88	-42.70	51.72	40.19	74.00	33.81	Pass	V	Peak
8	1784.4784	30.28	3.29	-42.70	51.60	42.47	74.00	31.53	Pass	V	Peak
9	3758.0505	33.61	4.35	-43.05	51.09	46.00	74.00	28.00	Pass	V	Peak
10	4874.0000	34.50	4.78	-42.80	45.64	42.12	74.00	31.88	Pass	V	Peak
11	7311.0000	36.41	5.85	-42.14	45.90	46.02	74.00	27.98	Pass	V	Peak
12	9748.0000	37.70	6.77	-42.10	47.06	49.43	74.00	24.57	Pass	V	Peak

Mode:		802.11 n (HT40) (13.5Mbps)				Channel:		2452			
NO	Freq. [MHz]	Ant Factor [dB]	Cable loss [dB]	Pream gain [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remak
1	1708.4708	29.7	3.21	-42.67	54.55	44.87	74.00	29.13	Pass	H	Peak
2	2049.7050	31.7	3.56	-43.19	55.35	47.49	74.00	26.51	Pass	H	Peak
3	3547.0365	33.4	4.44	-43.09	52.33	47.12	74.00	26.88	Pass	H	Peak
4	4904.0000	34.5	4.88	-42.80	46.93	43.51	74.00	30.49	Pass	H	Peak
5	7356.0000	36.4	5.85	-42.13	47.85	48.03	74.00	25.97	Pass	H	Peak
6	9808.0000	37.7	6.59	-42.10	46.77	48.98	74.00	25.02	Pass	H	Peak
7	1195.6196	28.1	2.66	-42.90	51.64	39.50	74.00	34.50	Pass	V	Peak
8	1925.0925	31.2	3.42	-43.02	50.77	42.38	74.00	31.62	Pass	V	Peak
9	3758.0505	33.6	4.35	-43.05	52.05	46.96	74.00	27.04	Pass	V	Peak
10	4904.0000	34.5	4.88	-42.80	47.93	44.51	74.00	29.49	Pass	V	Peak
11	7356.0000	36.4	5.85	-42.13	46.99	47.17	74.00	26.83	Pass	V	Peak
12	9808.0000	37.7	6.59	-42.10	47.48	49.69	74.00	24.31	Pass	V	Peak

**Note:**

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading - Correct Factor

Correct Factor = Preamplifier Factor - Antenna Factor - Cable Factor

2) Scan from 9kHz to 25GHz, the disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.