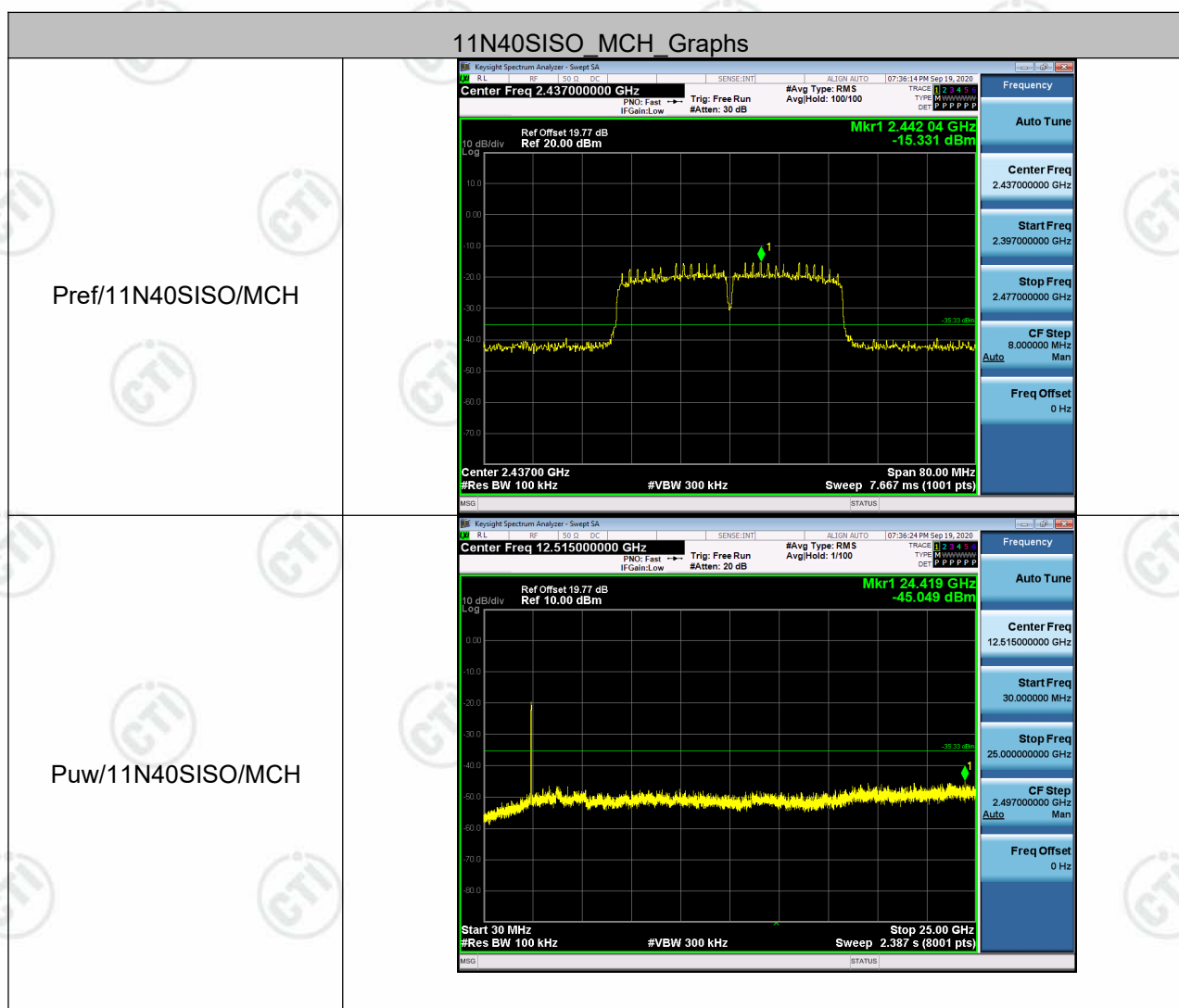
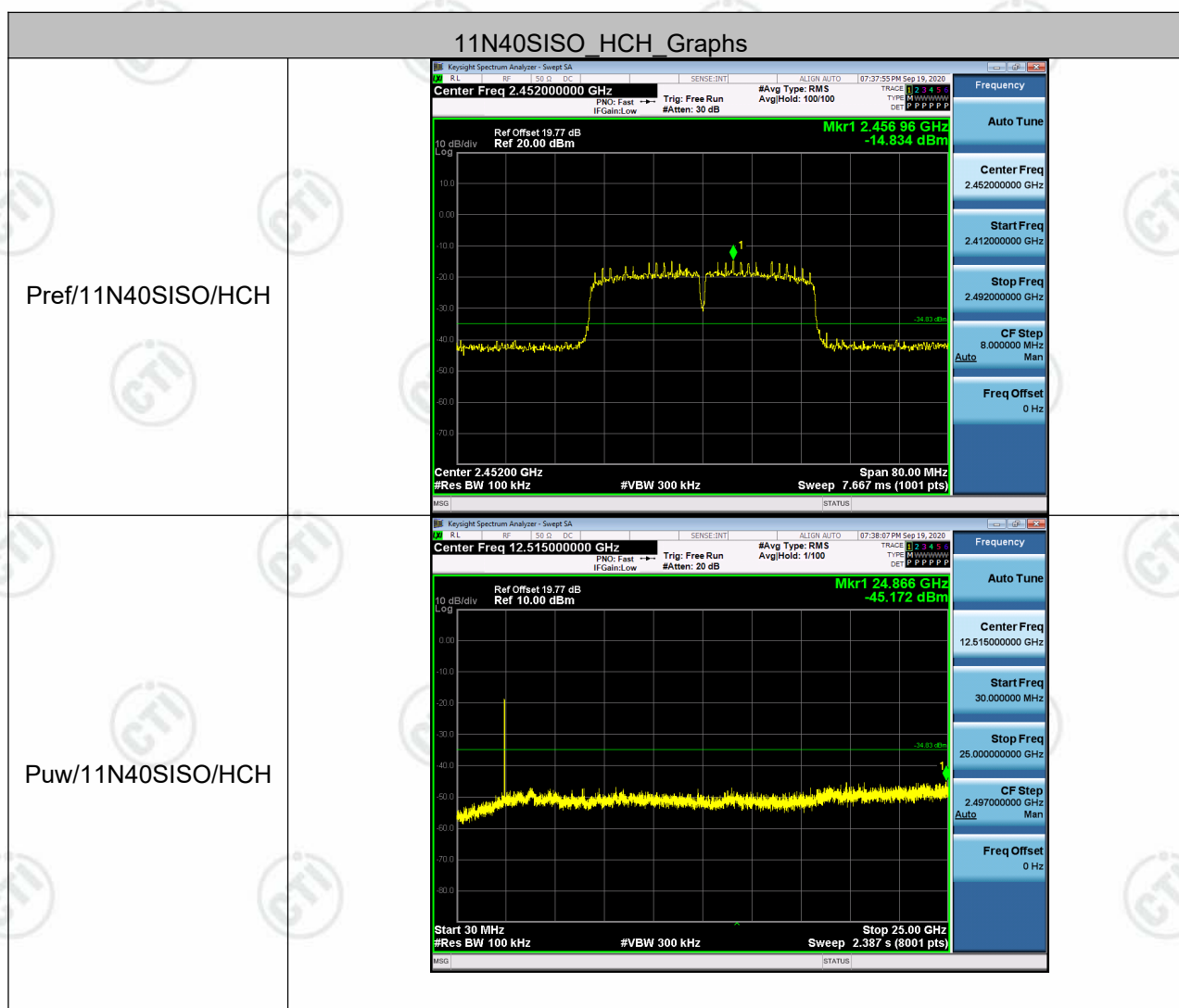






Appendix E): Power Spectral Density

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.

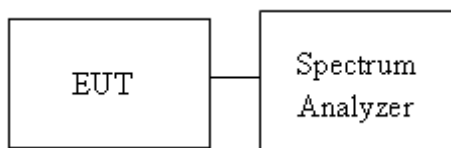
Limit	☒ Antenna not exceed 6 dBi: 8dBm ☐ Antenna with DG greater than 6 dBi: [Limit = 8 – (DG – 6)] ☐ Point-to-point operation:
-------	--

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 = 30kHz, 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

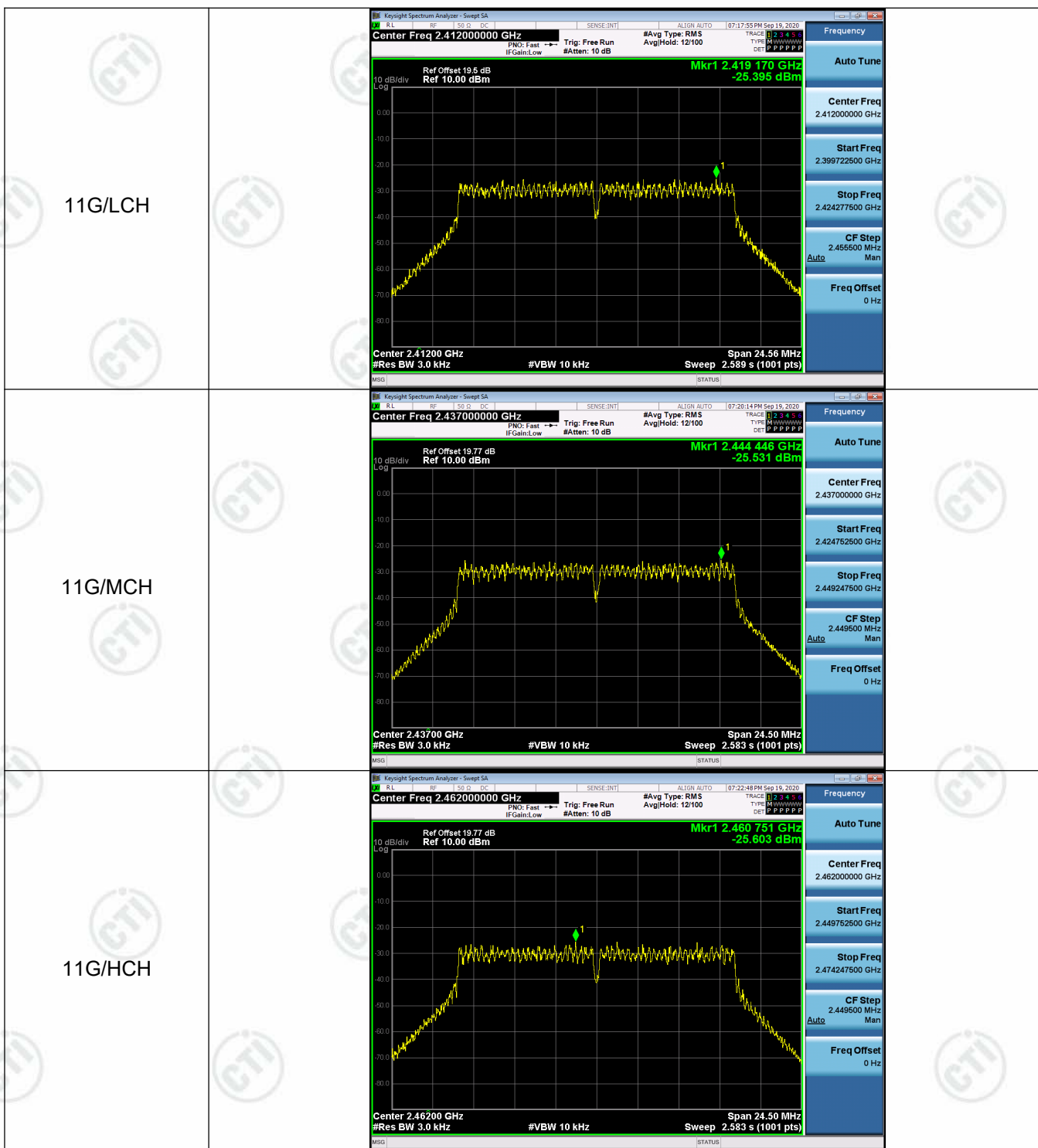


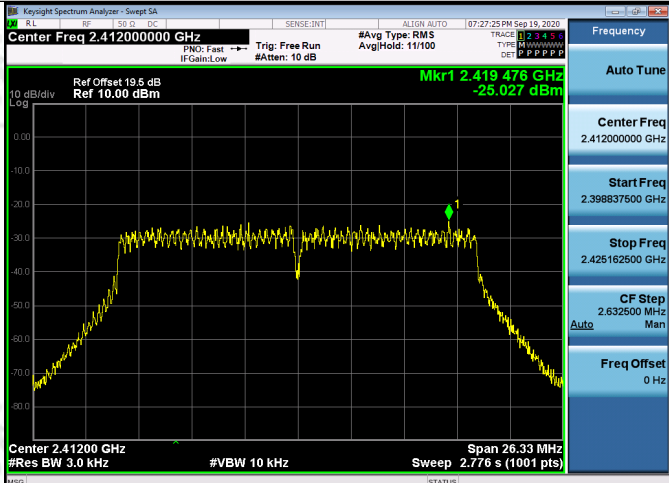
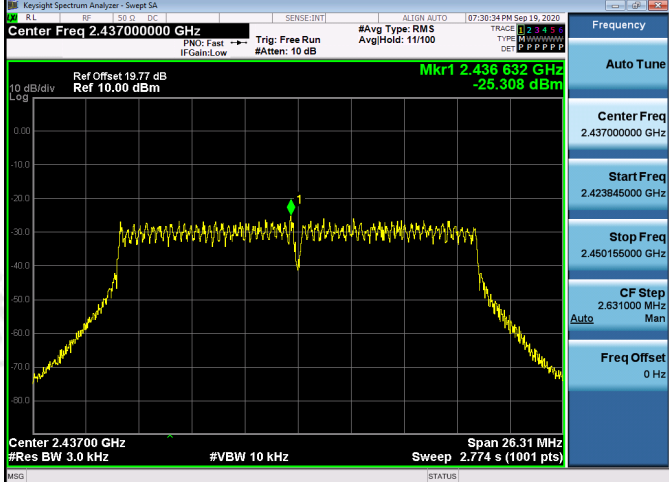
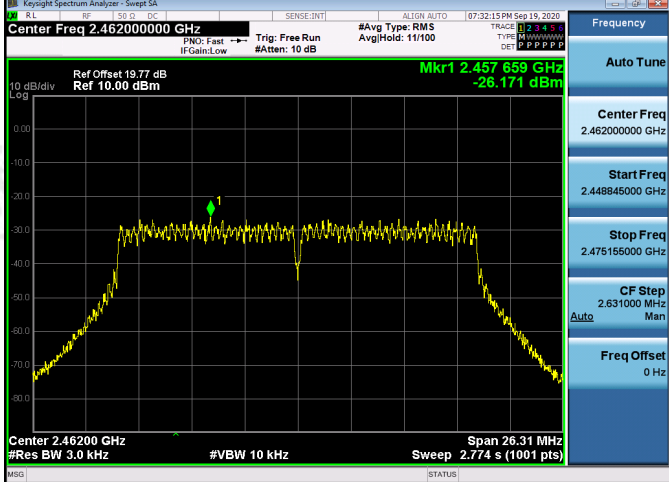
Result Table

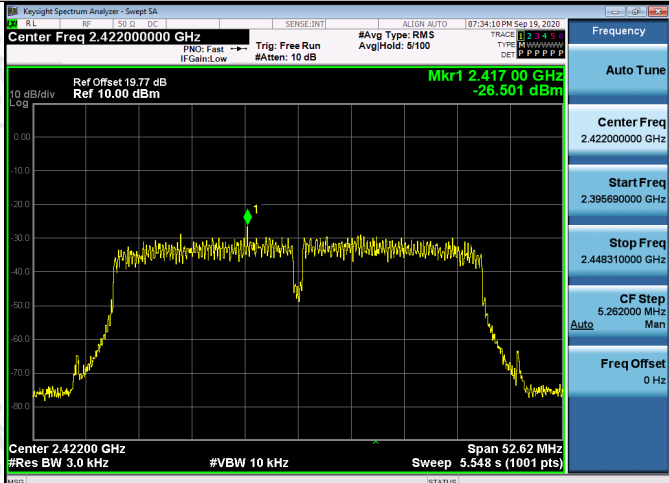
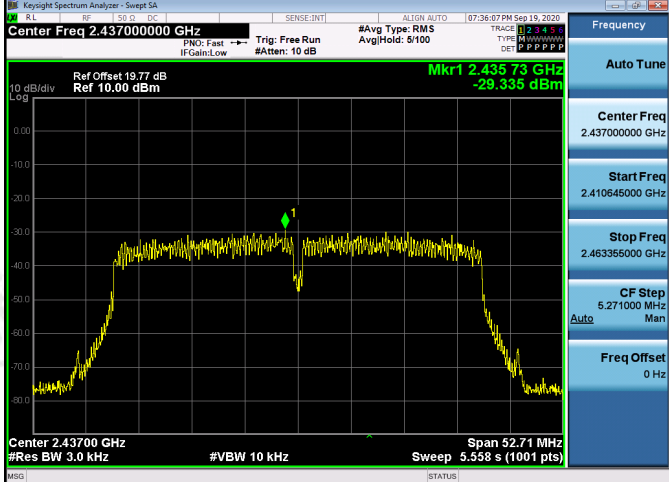
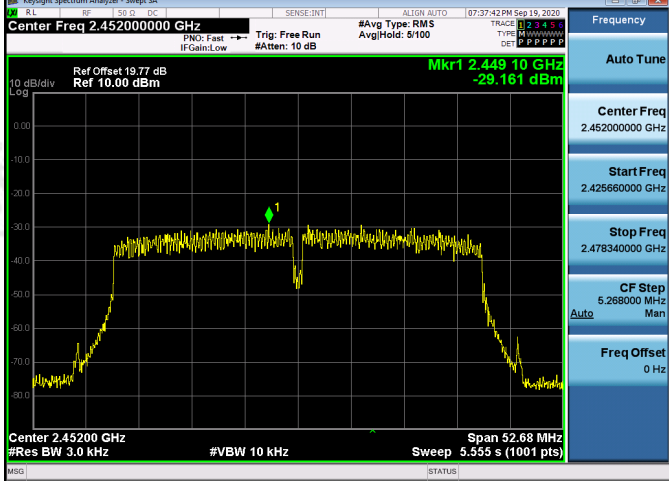
Mode	Channel	Power Spectral Density [dBm]	Verdict
11B	LCH	-16.978	PASS
11B	MCH	-15.257	PASS
11B	HCH	-16.725	PASS
11G	LCH	-25.395	PASS
11G	MCH	-25.531	PASS
11G	HCH	-25.603	PASS
11N20SISO	LCH	-25.027	PASS
11N20SISO	MCH	-25.308	PASS
11N20SISO	HCH	-26.171	PASS
11N40SISO	LCH	-26.501	PASS
11N40SISO	MCH	-29.335	PASS
11N40SISO	HCH	-29.161	PASS

Test Graph





11N20SISO/LCH	 Key: Keysight Spectrum Analyzer - Sweep SA Center Freq 2.41200000 GHz Ref Offset 19.5 dB Ref 10.00 dBm Mkr1 2.419 476 GHz -25.027 dBm Center 2.41200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 26.33 MHz Sweep 2.776 s (1001 pts) Frequency Auto Tune Center Freq 2.41200000 GHz Start Freq 2.398837500 GHz Stop Freq 2.425162500 GHz CF Step 2.632500 MHz Auto Man Freq Offset 0 Hz
11N20SISO/MCH	 Key: Keysight Spectrum Analyzer - Sweep SA Center Freq 2.43700000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.436 632 GHz -25.308 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 26.31 MHz Sweep 2.774 s (1001 pts) Frequency Auto Tune Center Freq 2.43700000 GHz Start Freq 2.423845000 GHz Stop Freq 2.450155000 GHz CF Step 2.631000 MHz Auto Man Freq Offset 0 Hz
11N20SISO/HCH	 Key: Keysight Spectrum Analyzer - Sweep SA Center Freq 2.46200000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.457 659 GHz -26.171 dBm Center 2.46200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 26.31 MHz Sweep 2.774 s (1001 pts) Frequency Auto Tune Center Freq 2.46200000 GHz Start Freq 2.448845000 GHz Stop Freq 2.475155000 GHz CF Step 2.631000 MHz Auto Man Freq Offset 0 Hz

11N40SISO/LCH	 Key: Keysight Spectrum Analyzer - Sweep SA Center Freq 2.422000000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.417 00 GHz -26.501 dBm Center 2.42200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 52.62 MHz Sweep 5.548 s (1001 pts) Frequency Auto Tune Center Freq 2.422000000 GHz Start Freq 2.395690000 GHz Stop Freq 2.448310000 GHz CF Step 5.262000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/MCH	 Key: Keysight Spectrum Analyzer - Sweep SA Center Freq 2.437000000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.435 73 GHz -29.335 dBm Center 2.43700 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 52.71 MHz Sweep 5.558 s (1001 pts) Frequency Auto Tune Center Freq 2.437000000 GHz Start Freq 2.410645000 GHz Stop Freq 2.463355000 GHz CF Step 5.271000 MHz Auto Man Freq Offset 0 Hz
11N40SISO/HCH	 Key: Keysight Spectrum Analyzer - Sweep SA Center Freq 2.452000000 GHz Ref Offset 19.77 dB Ref 10.00 dBm Mkr1 2.449 10 GHz -29.161 dBm Center 2.45200 GHz #Res BW 3.0 kHz #VBW 10 kHz Span 52.68 MHz Sweep 5.555 s (1001 pts) Frequency Auto Tune Center Freq 2.452000000 GHz Start Freq 2.425660000 GHz Stop Freq 2.478340000 GHz CF Step 5.268000 MHz Auto Man Freq Offset 0 Hz

Appendix F): Antenna Requirement

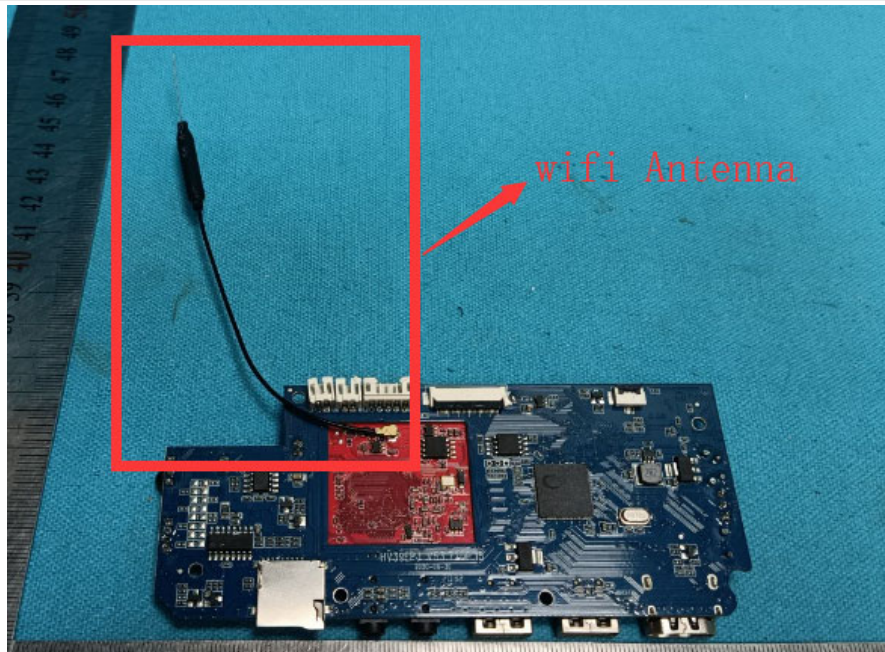
15.203 requirement:

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 Internal antenna. The best case gain of the antenna is 2dBi.

Appendix G): AC Power Line Conducted Emission

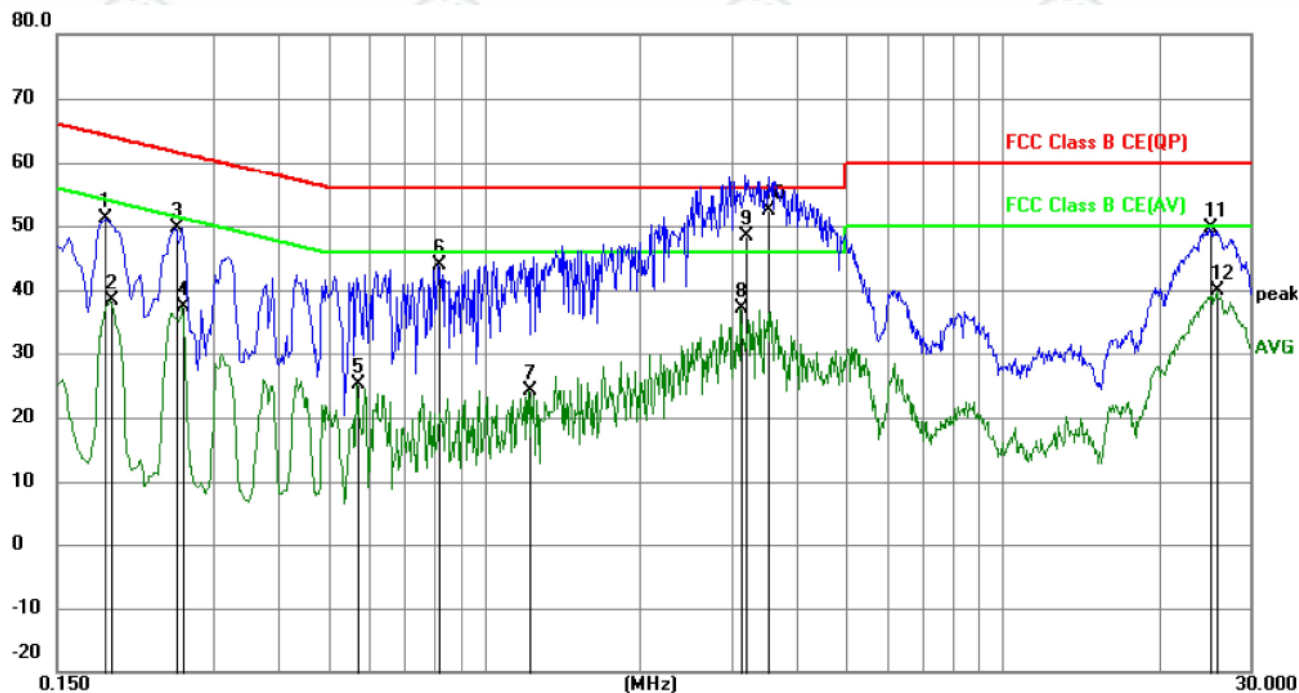
Test Procedure:	Test frequency range :150KHz-30MHz 1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of 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. 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.														
Limit:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBμV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><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></table> * 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	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.

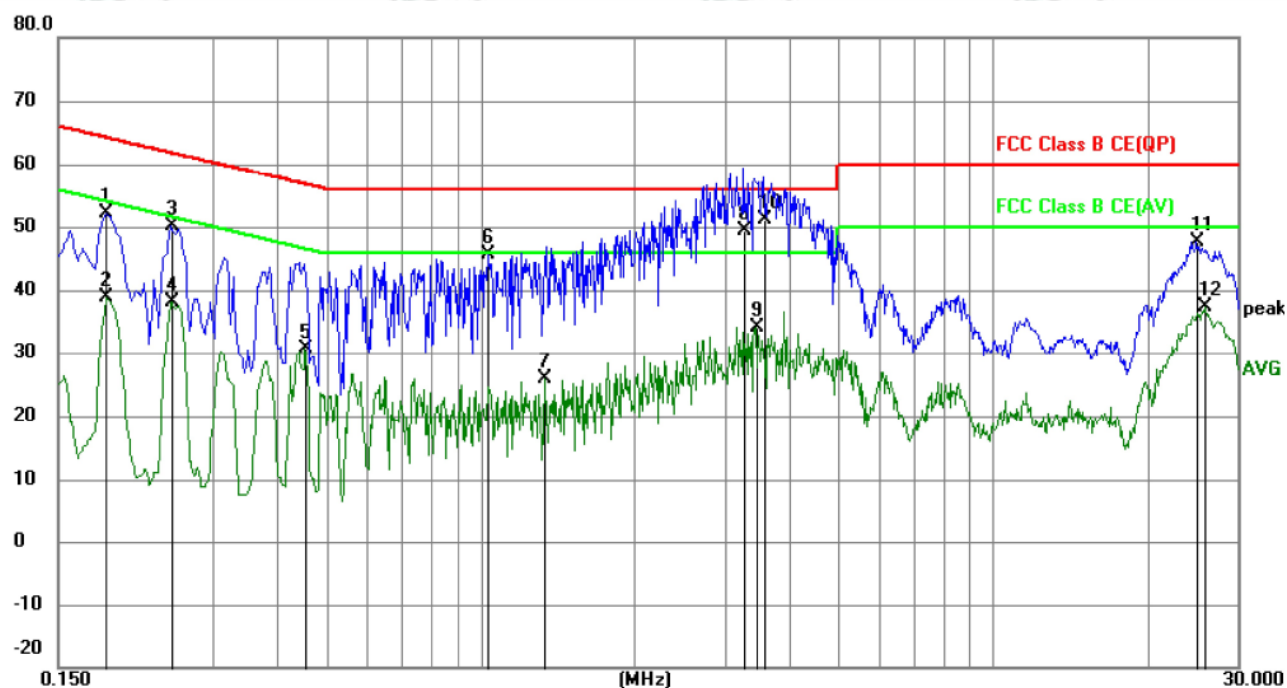
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1860	41.22	9.87	51.09	64.21	-13.12	QP	
2		0.1905	28.47	9.87	38.34	54.01	-15.67	AVG	
3		0.2535	39.58	9.98	49.56	61.64	-12.08	QP	
4		0.2625	27.28	10.00	37.28	51.35	-14.07	AVG	
5		0.5685	15.19	10.03	25.22	46.00	-20.78	AVG	
6		0.8160	33.91	9.85	43.76	56.00	-12.24	QP	
7		1.2210	14.42	9.82	24.24	46.00	-21.76	AVG	
8		3.1380	27.27	9.79	37.06	46.00	-8.94	AVG	
9		3.2055	38.71	9.79	48.50	56.00	-7.50	QP	
10	*	3.5385	42.72	9.78	52.50	56.00	-3.50	QP	
11		25.1160	39.57	10.00	49.57	60.00	-10.43	QP	
12		25.9800	29.87	10.01	39.88	50.00	-10.12	AVG	

Neutral line:



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1860	42.35	9.87	52.22	64.21	-11.99	QP	
2	0.1860	28.91	9.87	38.78	54.21	-15.43	AVG	
3	0.2490	40.04	9.97	50.01	61.79	-11.78	QP	
4	0.2490	28.17	9.97	38.14	51.79	-13.65	AVG	
5	0.4560	20.59	9.96	30.55	46.77	-16.22	AVG	
6	1.0365	35.72	9.83	45.55	56.00	-10.45	QP	
7	1.3335	16.06	9.82	25.88	46.00	-20.12	AVG	
8	3.2640	39.61	9.79	49.40	56.00	-6.60	QP	
9	3.4530	24.42	9.79	34.21	46.00	-11.79	AVG	
10 *	3.5790	41.42	9.78	51.20	56.00	-4.80	QP	
11	24.9900	37.57	10.00	47.57	60.00	-12.43	QP	
12	25.9125	27.41	10.01	37.42	50.00	-12.58	AVG	

Notes:

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

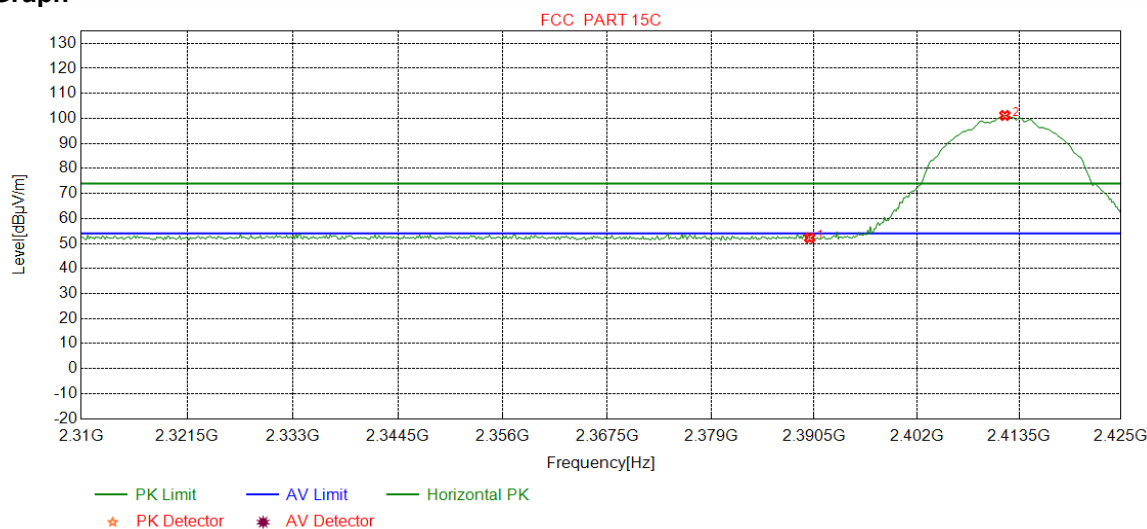
Appendix H): Restricted bands around fundamental frequency (Radiated)

Receiver Setup:	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:	Below 1GHz test procedure as below: Test method Refer as KDB 558074 D01 - 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. - The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. - 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. - 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. - The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. - 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 Above 1GHz test procedure as below: - 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). - Test the EUT in the lowest channel , the Highest channel - 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. - Repeat above procedures until all frequencies measured was complete.				
Limit:	Frequency	Limit (dBμV/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 Transmitting	Channel:	2412
Remark:	PK		

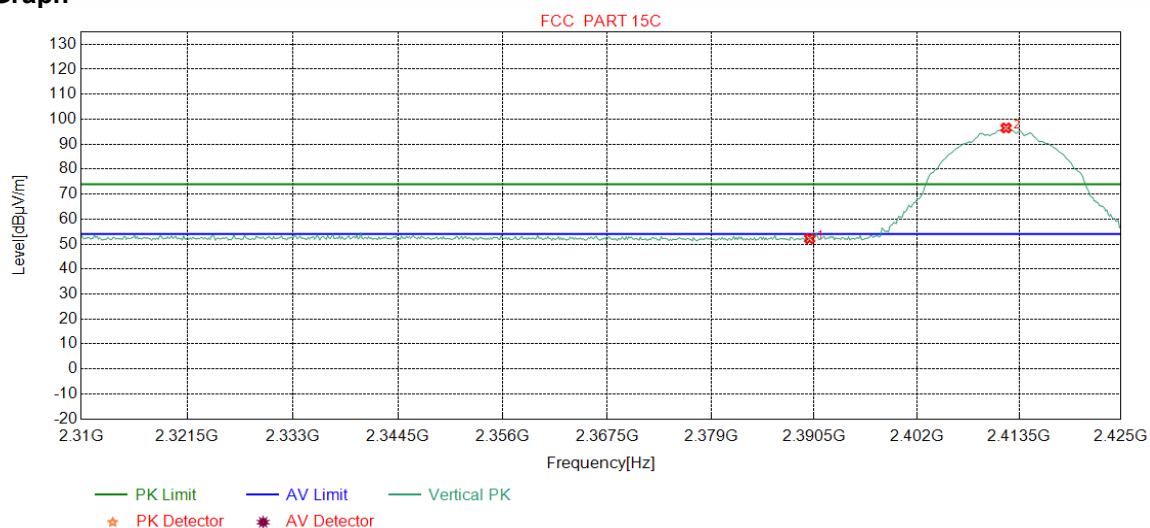
Test Graph



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	49.76	52.26	74.00	21.74	Pass	Horizontal
2	2411.9024	32.28	13.35	-43.12	98.66	101.17	74.00	-27.17	Pass	Horizontal

Mode:	802.11 b Transmitting	Channel:	2412
Remark:	PK		

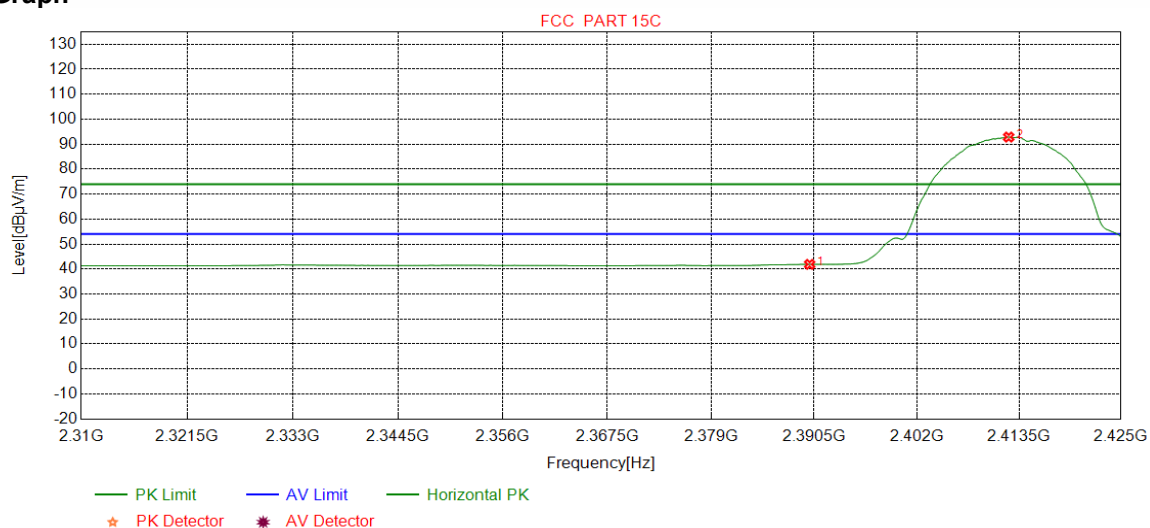
Test Graph



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	49.66	52.16	74.00	21.84	Pass	Vertical
2	2412.0463	32.28	13.36	-43.13	94.00	96.51	74.00	-22.51	Pass	Vertical

Mode:	802.11 b Transmitting	Channel:	2412
Remark:	AV		

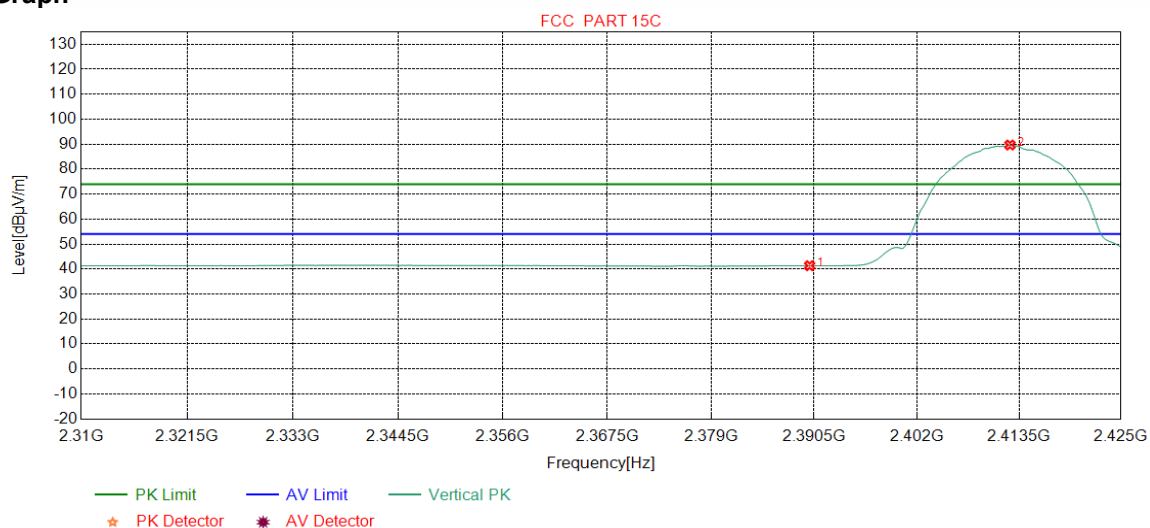
Test Graph



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	39.37	41.87	54.00	12.13	Pass	Horizontal
2	2412.3342	32.28	13.36	-43.12	90.32	92.84	54.00	-38.84	Pass	Horizontal

Mode:	802.11 b Transmitting	Channel:	2412
Remark:	AV		

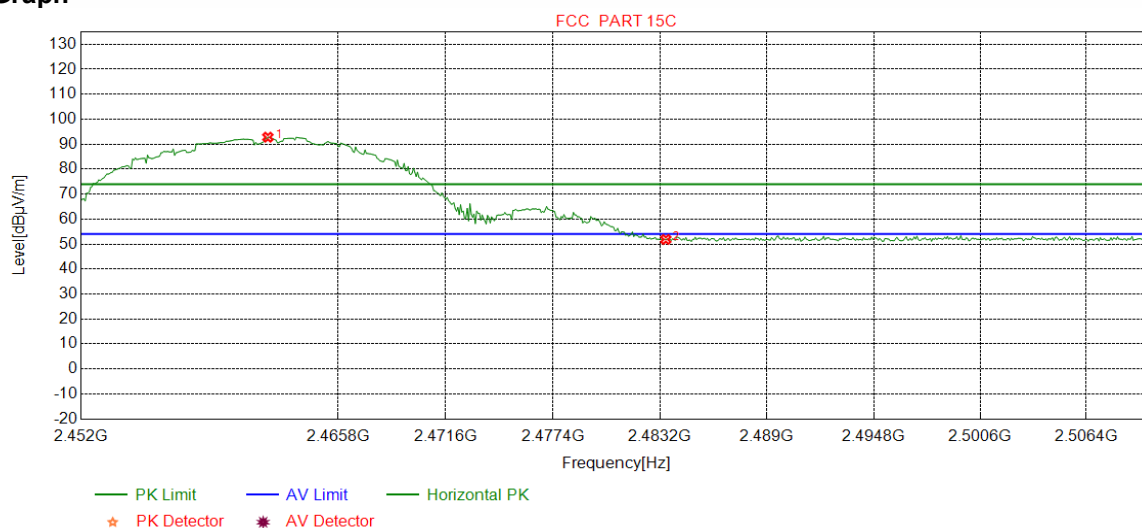
Test Graph



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	38.83	41.33	54.00	12.67	Pass	Vertical
2	2412.4781	32.28	13.36	-43.12	87.15	89.67	54.00	-35.67	Pass	Vertical

Mode:	802.11 b Transmitting	Channel:	2462
Remark:	PK		

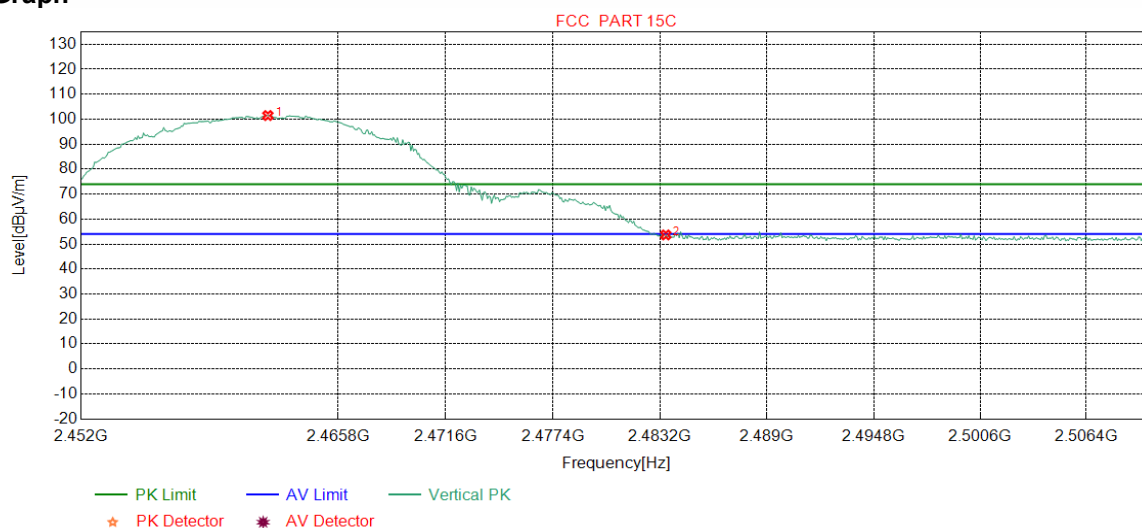
Test Graph



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	2462.0175	32.35	13.47	-43.11	90.08	92.79	74.00	-18.79	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	49.19	51.84	74.00	22.16	Pass	Horizontal

Mode:	802.11 b Transmitting	Channel:	2462
Remark:	PK		

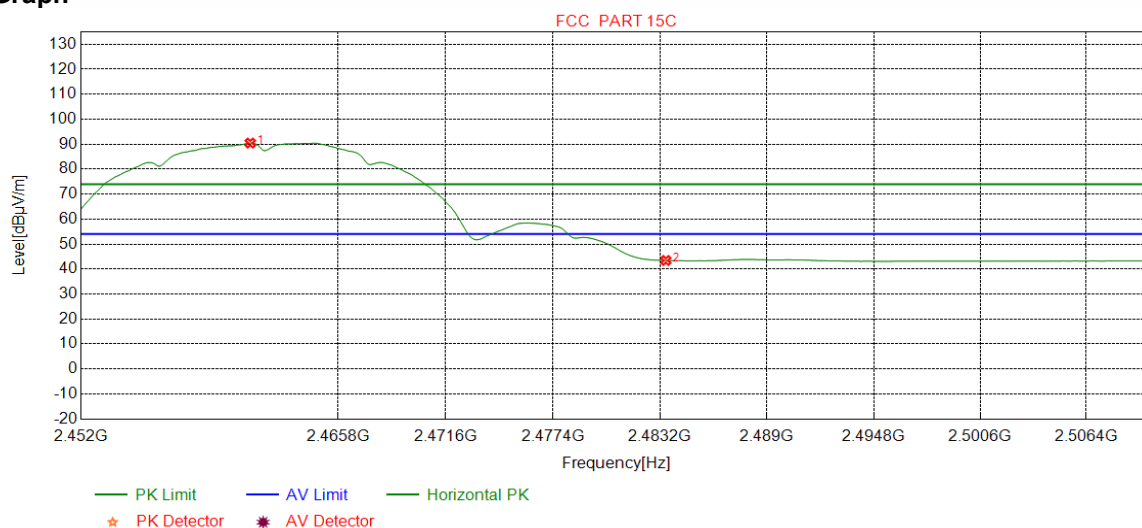
Test Graph



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	2462.0175	32.35	13.47	-43.11	98.76	101.47	74.00	-27.47	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	51.01	53.66	74.00	20.34	Pass	Vertical

Mode:	802.11 b Transmitting	Channel:	2462
Remark:	AV		

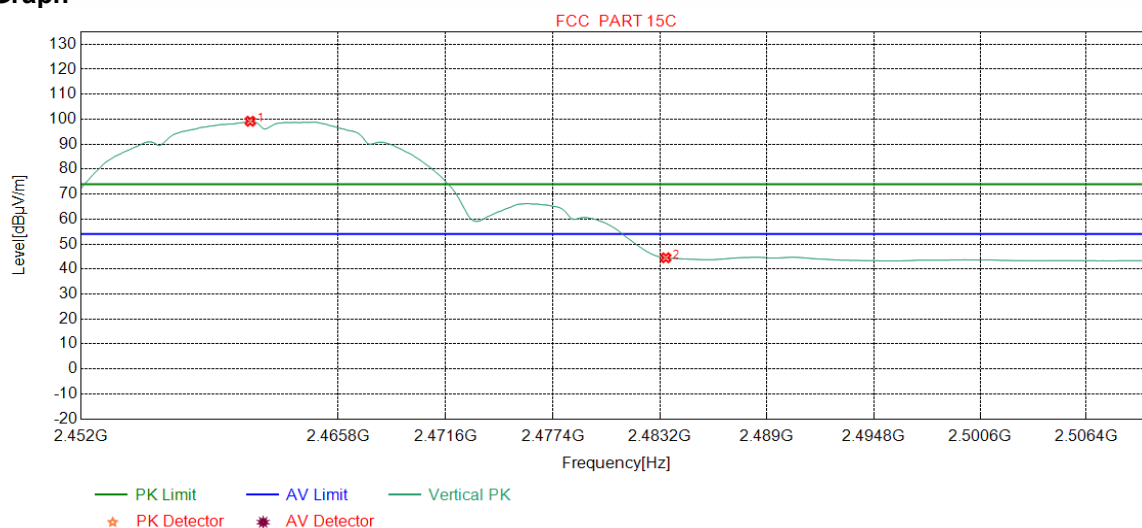
Test Graph



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	87.72	90.44	54.00	-36.44	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	40.78	43.43	54.00	10.57	Pass	Horizontal

Mode:	802.11 b Transmitting	Channel:	2462
Remark:	AV		

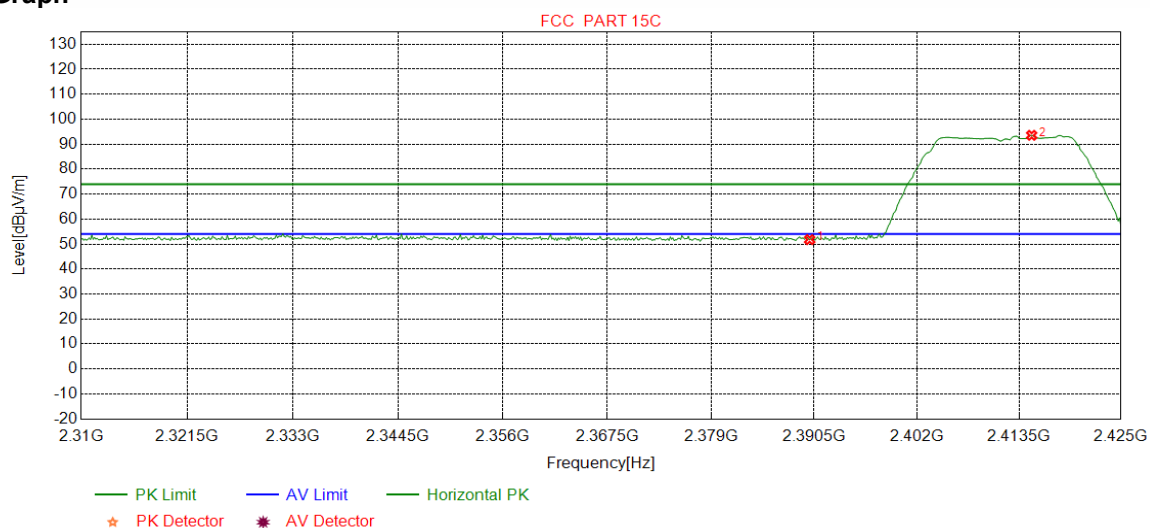
Test Graph



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	96.46	99.18	54.00	-45.18	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	41.86	44.51	54.00	9.49	Pass	Vertical

Mode:	802.11 g Transmitting	Channel:	2412
Remark:	PK		

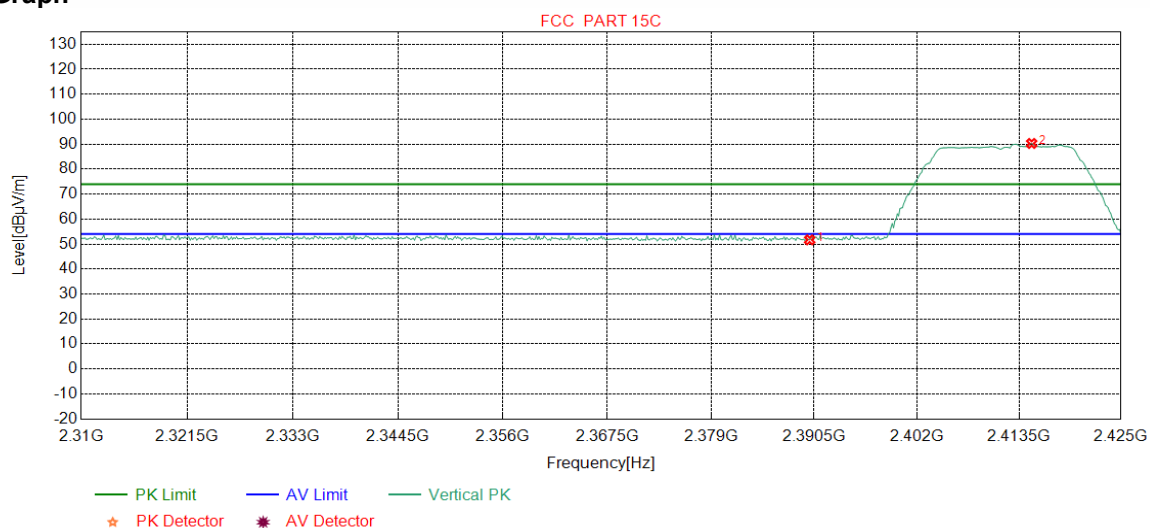
Test Graph



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	49.27	51.77	74.00	22.23	Pass	Horizontal
2	2414.9249	32.28	13.37	-43.12	91.02	93.55	74.00	-19.55	Pass	Horizontal

Mode:	802.11 g Transmitting	Channel:	2412
Remark:	PK		

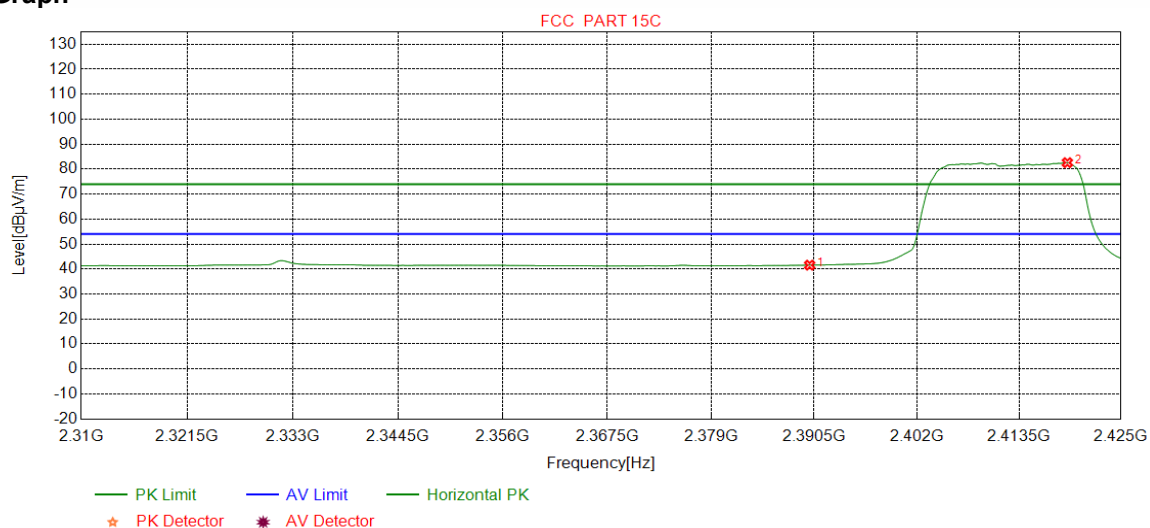
Test Graph



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	49.18	51.68	74.00	22.32	Pass	Vertical
2	2414.9249	32.28	13.37	-43.12	87.76	90.29	74.00	-16.29	Pass	Vertical

Mode:	802.11 g Transmitting	Channel:	2412
Remark:	AV		

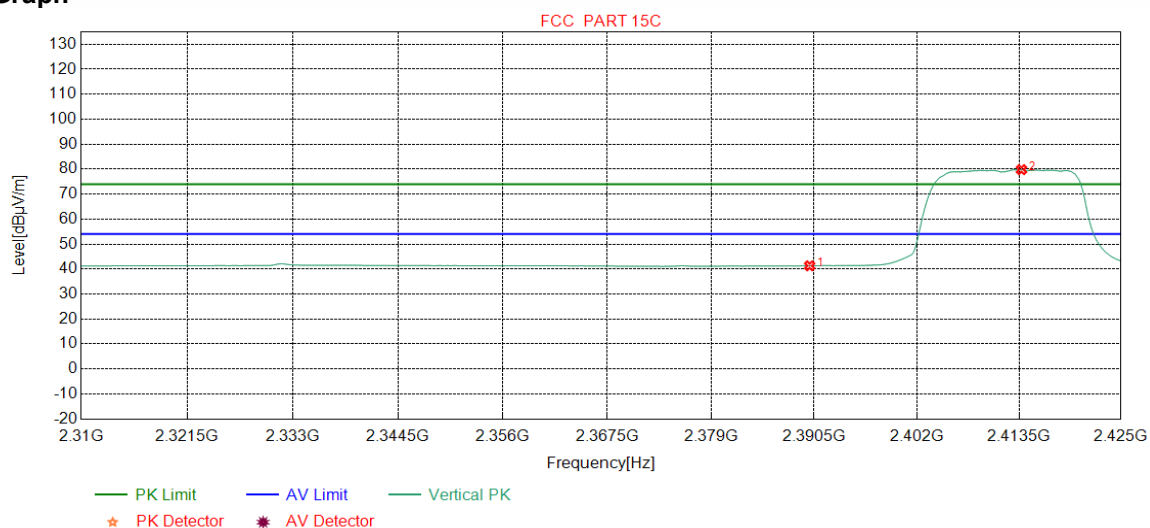
Test Graph



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	39.06	41.56	54.00	12.44	Pass	Horizontal
2	2418.9549	32.29	13.39	-43.12	80.04	82.60	54.00	-28.60	Pass	Horizontal

Mode:	802.11 g Transmitting	Channel:	2412
Remark:	AV		

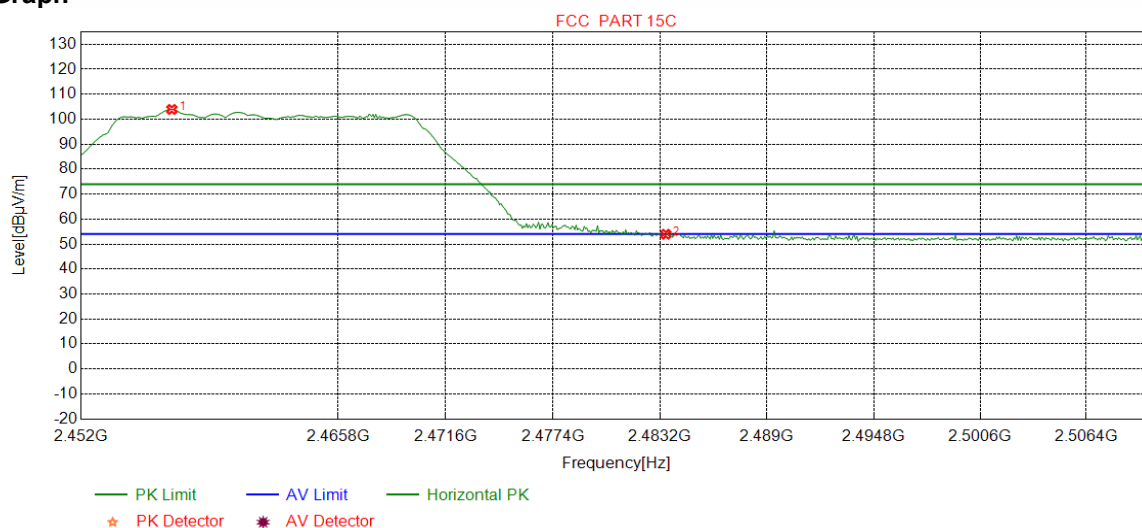
Test Graph



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	38.79	41.29	54.00	12.71	Pass	Vertical
2	2413.7735	32.28	13.36	-43.11	77.28	79.81	54.00	-25.81	Pass	Vertical

Mode:	802.11 g Transmitting	Channel:	2462
Remark:	PK		

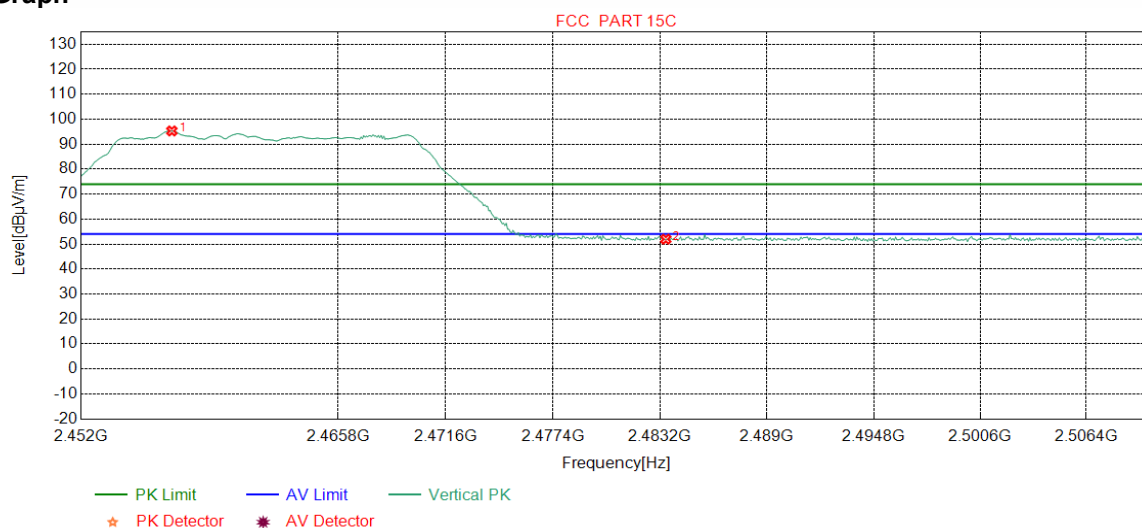
Test Graph



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	2456.8636	32.34	13.50	-43.11	101.18	103.91	74.00	-29.91	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	51.28	53.93	74.00	20.07	Pass	Horizontal

Mode:	802.11 g Transmitting	Channel:	2462
Remark:	PK		

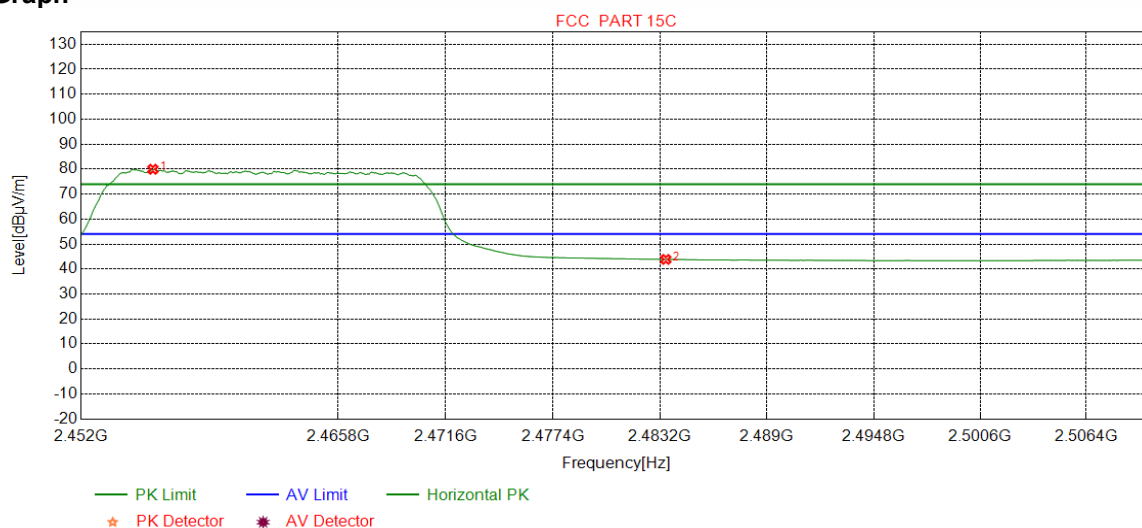
Test Graph



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	2456.8636	32.34	13.50	-43.11	92.56	95.29	74.00	-21.29	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	49.30	51.95	74.00	22.05	Pass	Vertical

Mode:	802.11 g Transmitting	Channel:	2462
Remark:	AV		

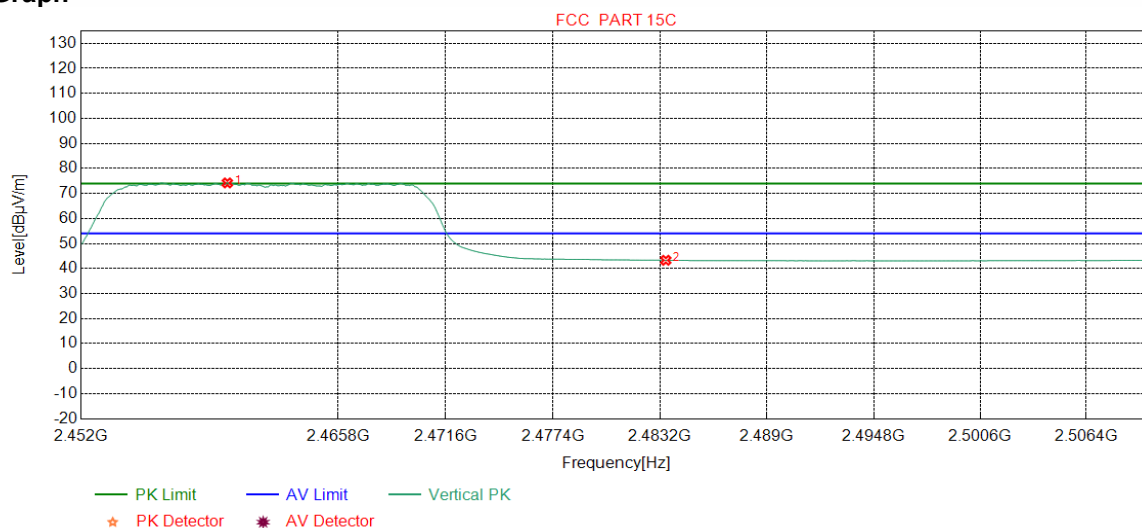
Test Graph



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	77.23	79.96	54.00	-25.96	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	41.21	43.86	54.00	10.14	Pass	Horizontal

Mode:	802.11 g Transmitting	Channel:	2462
Remark:	AV		

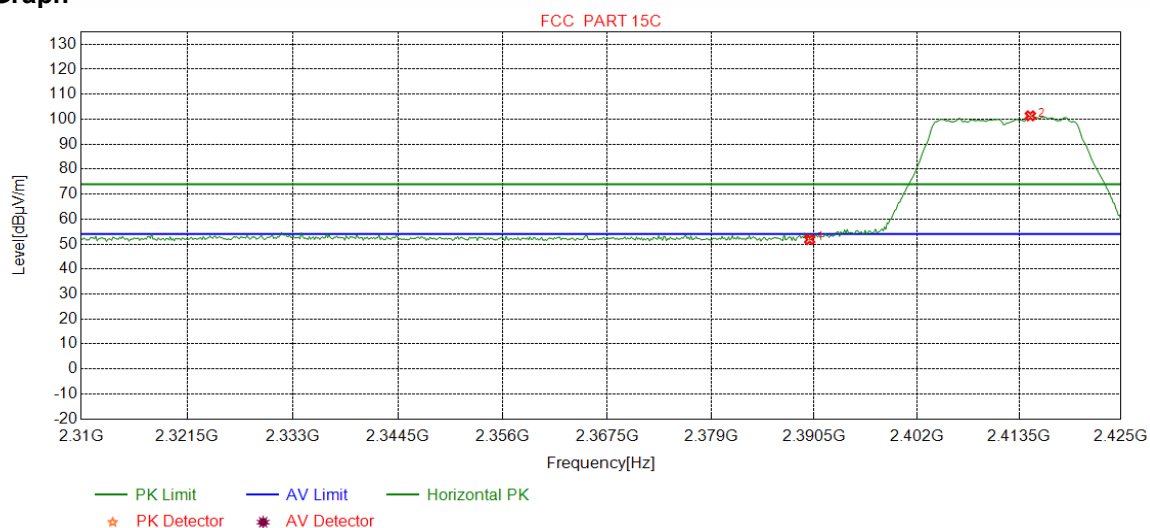
Test Graph



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	2459.8398	32.34	13.48	-43.10	71.50	74.22	54.00	-20.22	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	40.64	43.29	54.00	10.71	Pass	Vertical

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

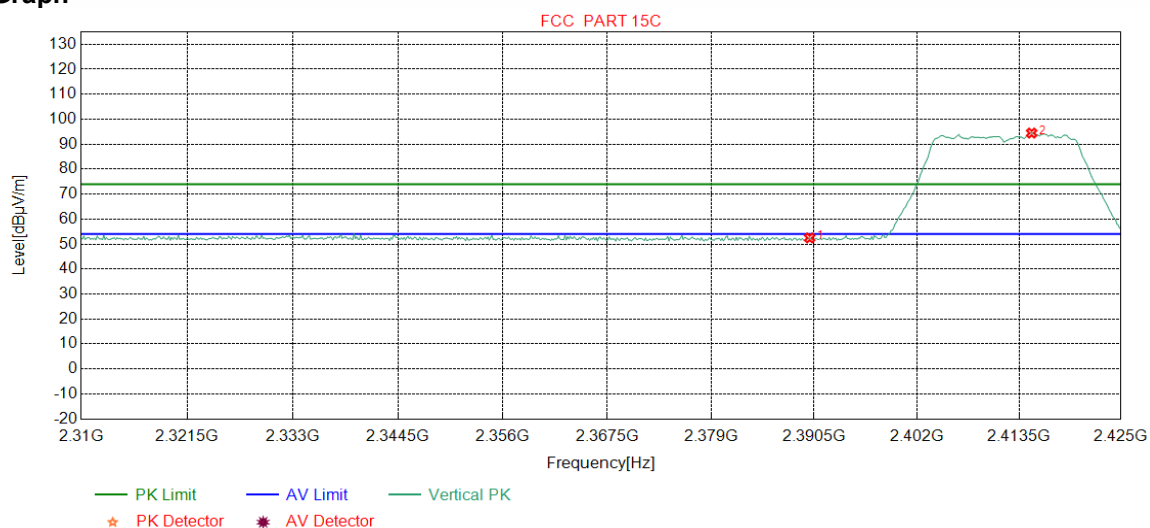
Test Graph



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	49.30	51.80	74.00	22.20	Pass	Horizontal
2	2414.7810	32.28	13.37	-43.12	98.81	101.34	74.00	-27.34	Pass	Horizontal

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

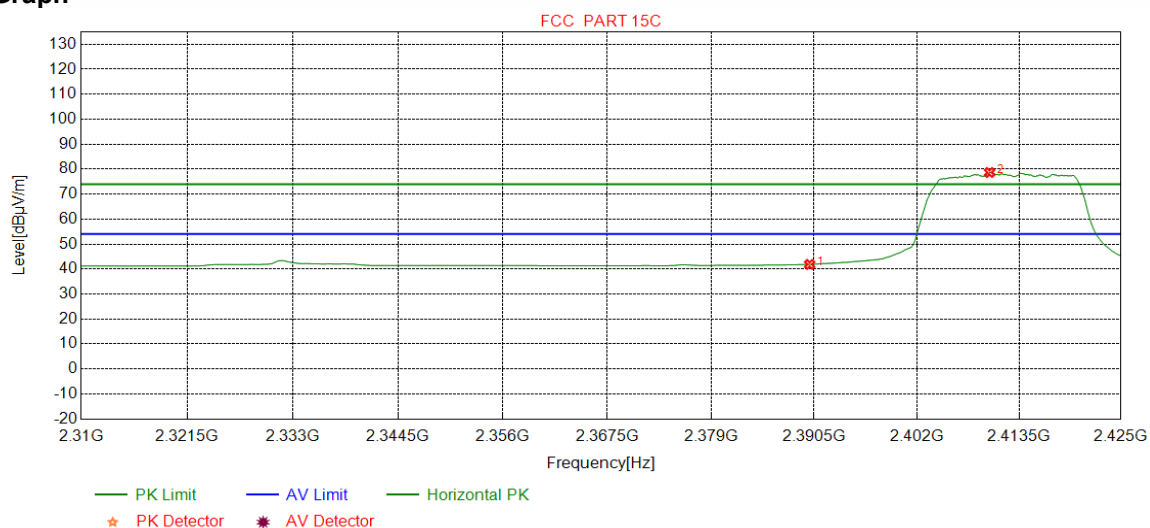
Test Graph



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	49.96	52.46	74.00	21.54	Pass	Vertical
2	2414.9249	32.28	13.37	-43.12	91.91	94.44	74.00	-20.44	Pass	Vertical

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

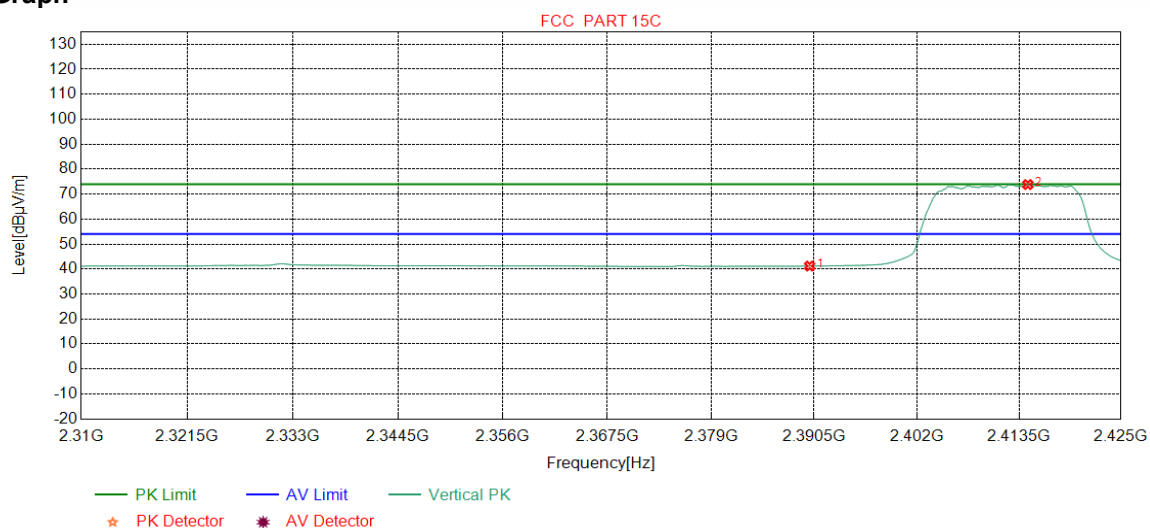
Test Graph



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	39.35	41.85	54.00	12.15	Pass	Horizontal
2	2410.1752	32.27	13.35	-43.12	76.16	78.66	54.00	-24.66	Pass	Horizontal

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

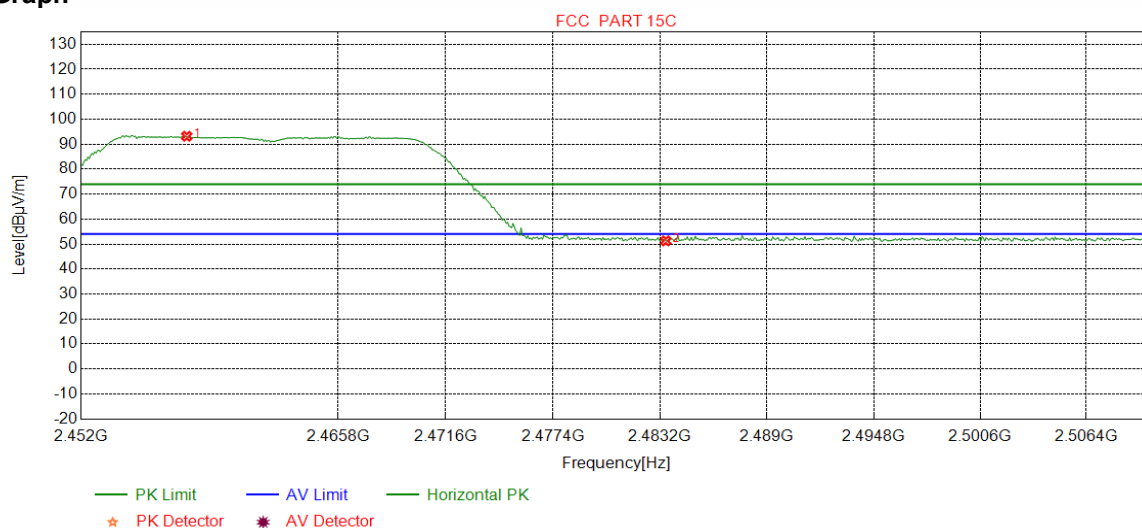
Test Graph



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	38.69	41.19	54.00	12.81	Pass	Vertical
2	2414.4931	32.28	13.37	-43.12	71.30	73.83	54.00	-19.83	Pass	Vertical

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

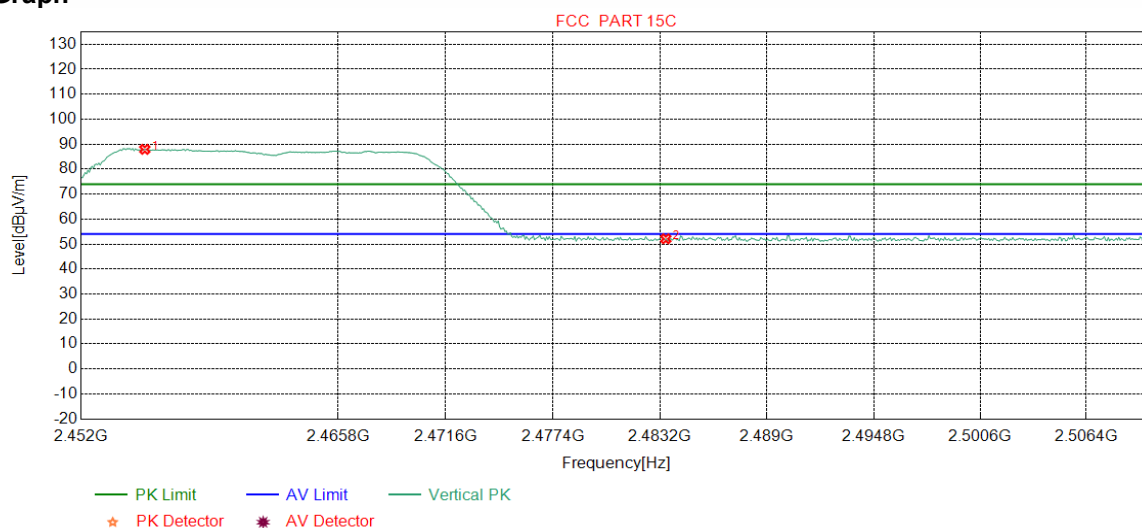
Test Graph



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	2457.6621	32.34	13.49	-43.10	90.44	93.17	74.00	-19.17	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	48.61	51.26	74.00	22.74	Pass	Horizontal

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

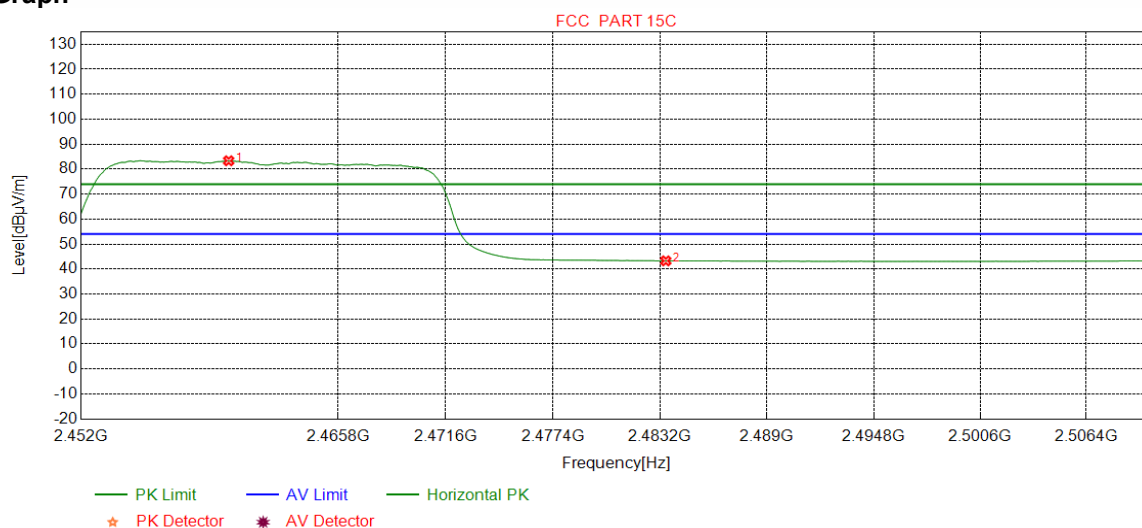
Test Graph



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	2455.4118	32.34	13.51	-43.12	85.20	87.93	74.00	-13.93	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	49.46	52.11	74.00	21.89	Pass	Vertical

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

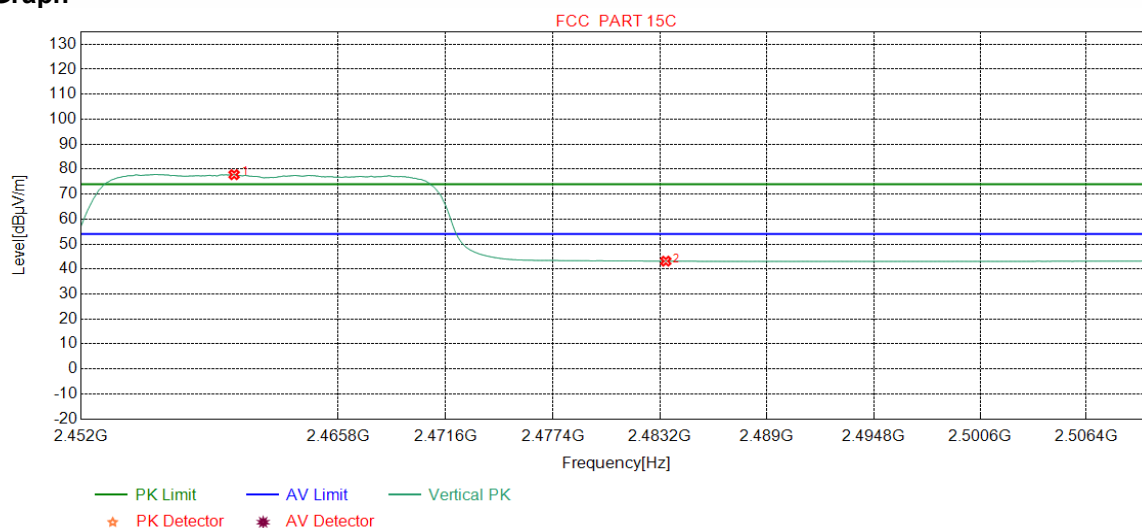
Test Graph



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	2459.9124	32.34	13.48	-43.10	80.63	83.35	54.00	-29.35	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	40.62	43.27	54.00	10.73	Pass	Horizontal

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

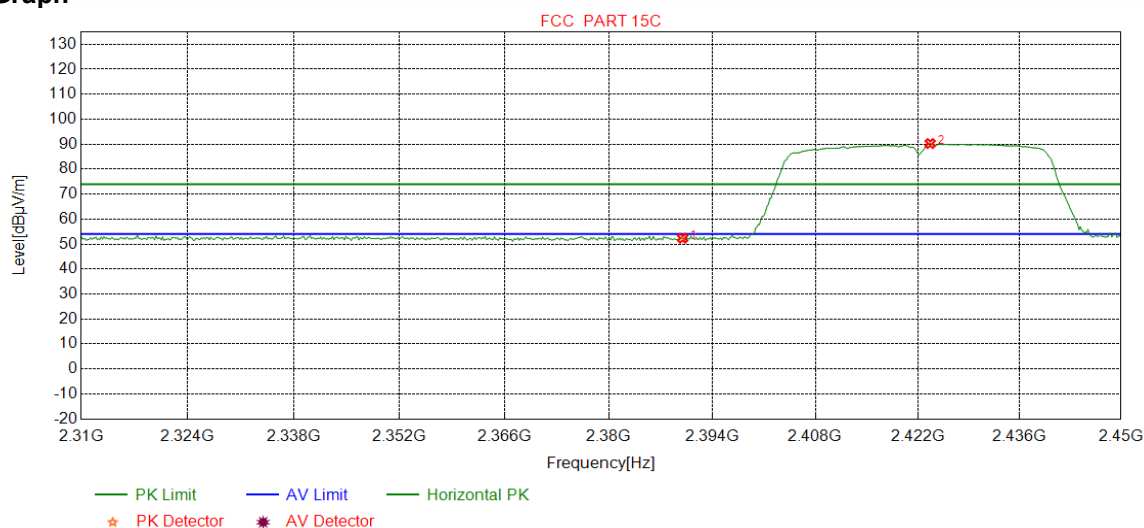
Test Graph



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	2460.2028	32.34	13.48	-43.10	75.06	77.78	54.00	-23.78	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	40.50	43.15	54.00	10.85	Pass	Vertical

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

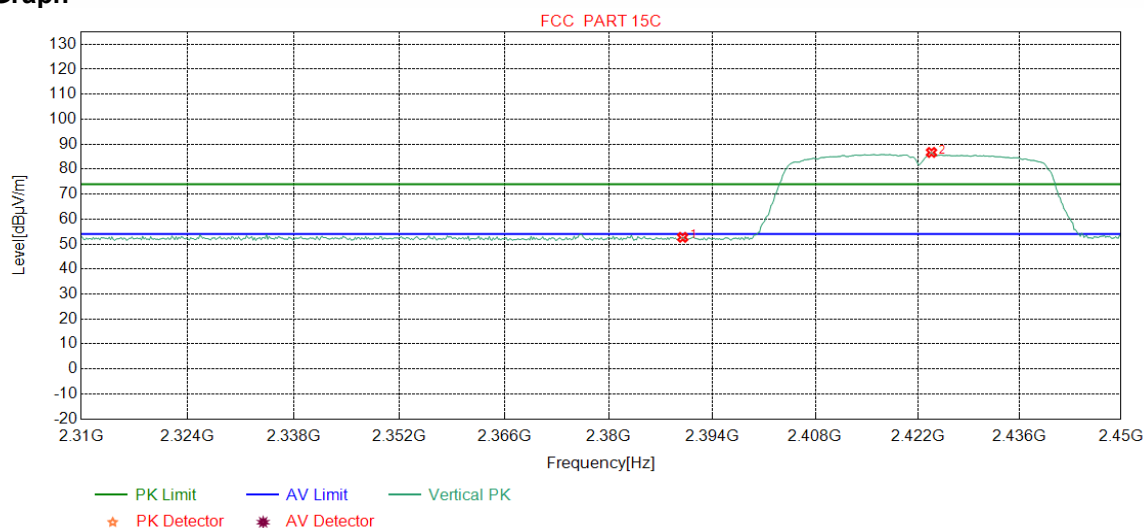
Test Graph



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	2423.7171	32.29	13.41	-43.11	87.66	90.25	74.00	-16.25	Pass	Horizontal

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

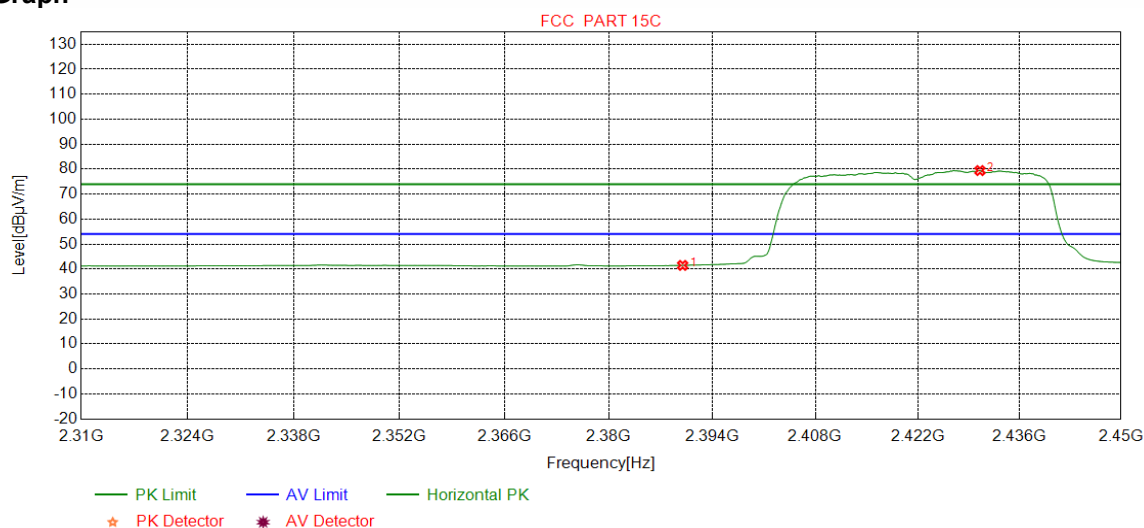
Test Graph



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	50.19	52.69	74.00	21.31	Pass	Vertical
2	2423.8924	32.29	13.41	-43.11	84.10	86.69	74.00	-12.69	Pass	Vertical

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

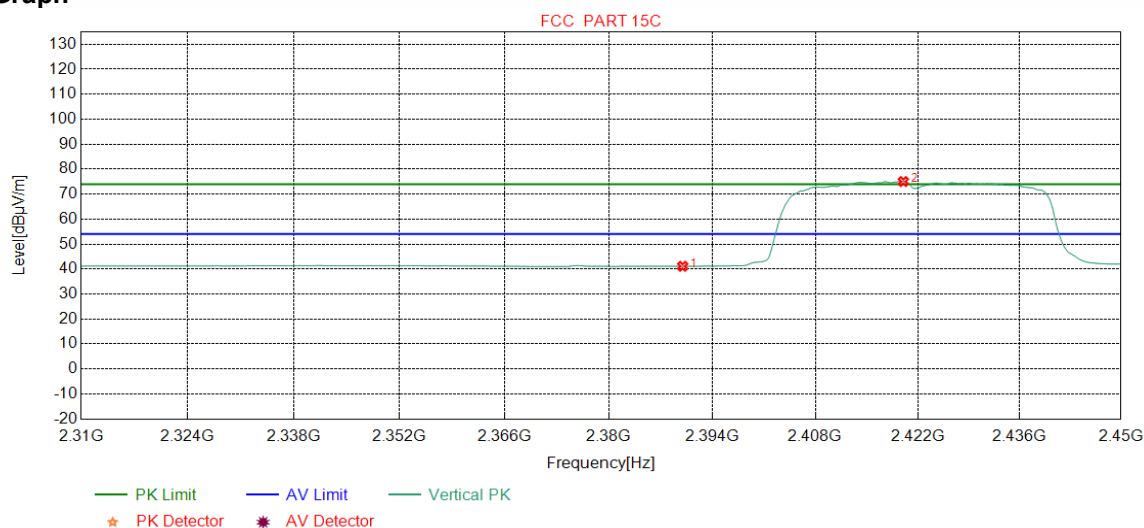
Test Graph



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	38.96	41.46	54.00	12.54	Pass	Horizontal
2	2430.5507	32.30	13.44	-43.11	76.80	79.43	54.00	-25.43	Pass	Horizontal

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

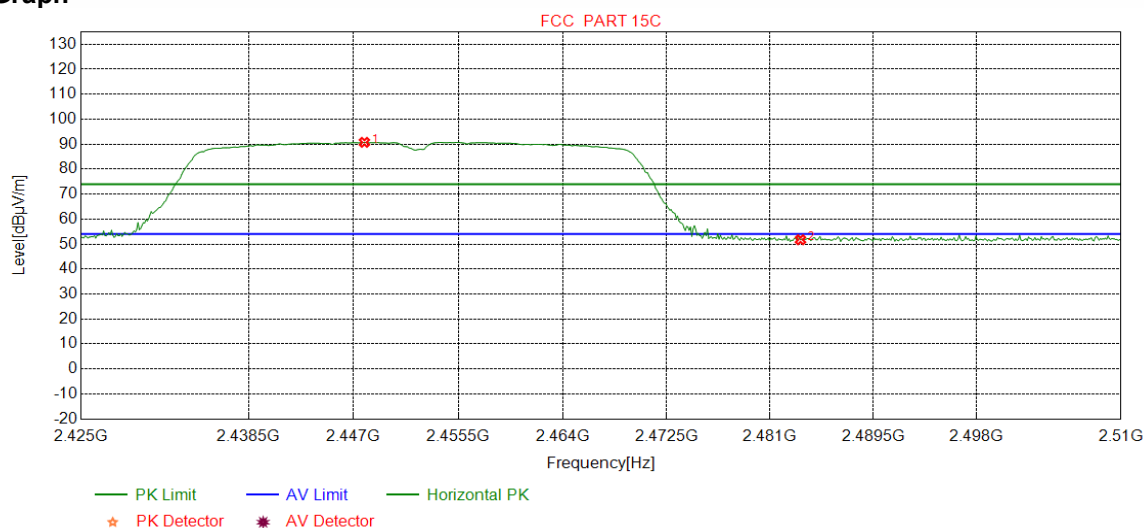
Test Graph



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	38.60	41.10	54.00	12.90	Pass	Vertical
2	2420.0375	32.29	13.39	-43.12	72.48	75.04	54.00	-21.04	Pass	Vertical

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

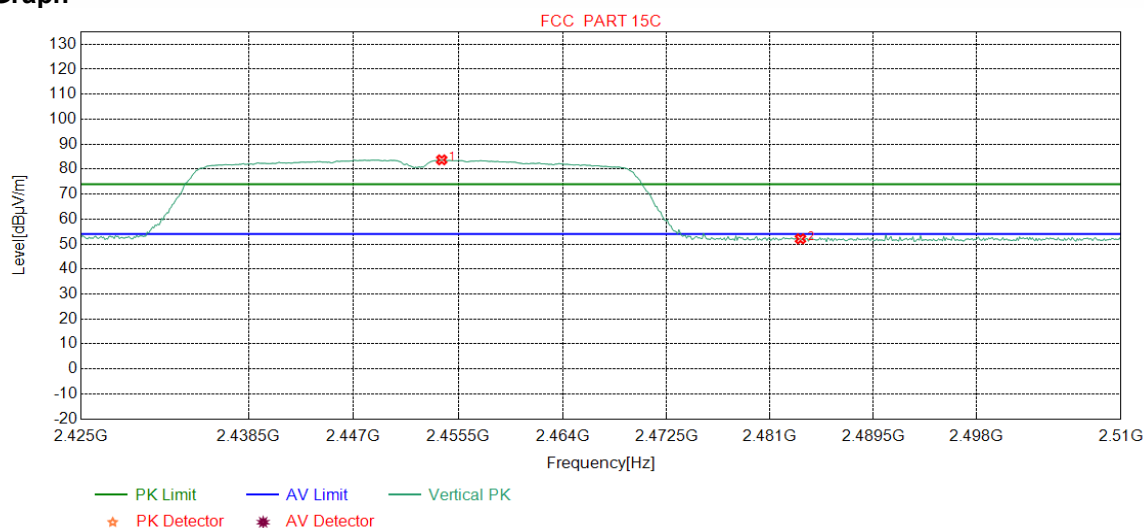
Test Graph



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	2447.8723	32.33	13.52	-43.11	88.00	90.74	74.00	-16.74	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	49.08	51.73	74.00	22.27	Pass	Horizontal

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

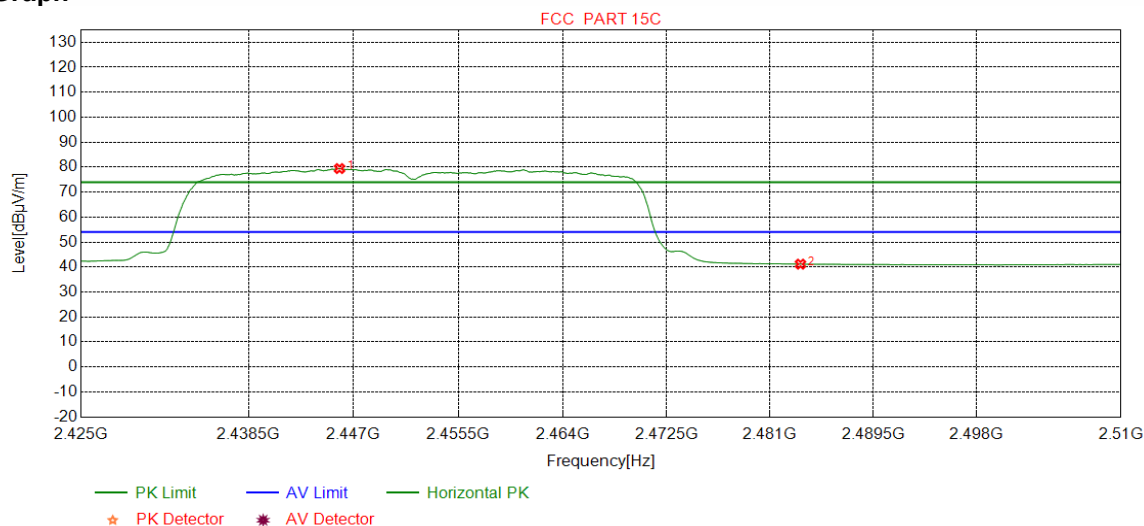
Test Graph



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	2454.1489	32.34	13.51	-43.11	80.98	83.72	74.00	-9.72	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	49.44	52.09	74.00	21.91	Pass	Vertical

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

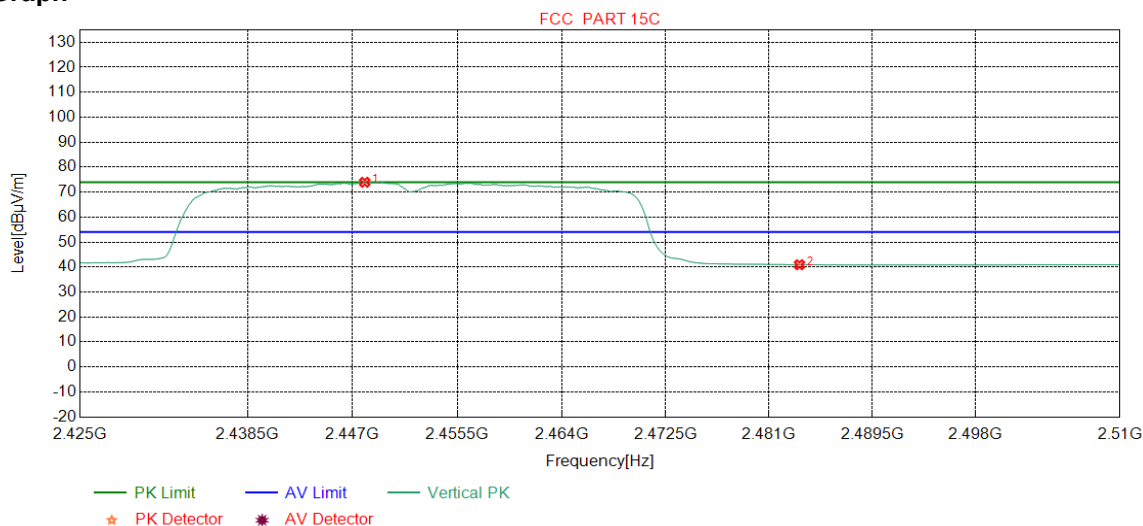
Test Graph



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	2445.8511	32.32	13.51	-43.11	76.72	79.44	54.00	-25.44	Pass	Horizontal
2	2483.5000	32.38	13.38	-43.11	38.51	41.16	54.00	12.84	Pass	Horizontal

Mode:	802.11 n(HT40) 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	2447.9787	32.33	13.52	-43.11	71.20	73.94	54.00	-19.94	Pass	Vertical
2	2483.5000	32.38	13.38	-43.11	38.29	40.94	54.00	13.06	Pass	Vertical

Note:

1) Through Pre-scan transmitting mode and charge+transmitter mode with all kind of modulation and data rate, find the 11Mbps 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

Receiver Setup:

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

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 rotatable 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 .

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.

j. Repeat above procedures until all frequencies measured was complete.

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBμV/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.

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 2437MHz was selected as the worst condition. The test data of the worst-case condition was recorded in this report.

Mode:		802.11 b 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
1	96.0636	10.37	1.13	-31.97	56.18	35.71	43.50	7.79	Pass	H
2	148.5459	7.50	1.44	-32.01	63.29	40.22	43.50	3.28	Pass	H
3	217.4227	11.35	1.76	-31.95	59.59	40.75	46.00	5.25	Pass	H
4	400.0920	15.40	2.38	-31.70	58.28	44.36	46.00	1.64	Pass	H
5	594.0144	18.88	2.92	-31.75	49.21	39.26	46.00	6.74	Pass	H
6	913.4673	22.18	3.62	-31.45	41.34	35.69	46.00	10.31	Pass	H
7	39.5070	12.14	0.71	-31.31	49.22	30.76	40.00	9.24	Pass	V
8	148.5459	7.50	1.44	-32.01	54.09	31.02	43.50	12.48	Pass	V
9	228.2878	11.64	1.79	-31.92	49.35	30.86	46.00	15.14	Pass	V
10	400.0920	15.40	2.38	-31.70	54.58	40.66	46.00	5.34	Pass	V
11	600.0290	19.00	2.96	-31.50	44.96	35.42	46.00	10.58	Pass	V
12	905.3185	22.13	3.60	-31.44	36.44	30.73	46.00	15.27	Pass	V

Transmitter Emission above 1GHz

Mode:		802.11 b 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	1194.8195	28.09	2.66	-42.89	55.24	43.10	74.00	30.90	Pass	H	Peak
2	1980.0980	31.57	3.45	-43.15	59.58	51.45	74.00	22.55	Pass	H	Peak
3	2772.3772	32.84	4.19	-43.10	57.54	51.47	74.00	22.53	Pass	H	Peak
4	3564.0376	33.45	4.41	-43.08	53.01	47.79	74.00	26.21	Pass	H	Peak
5	4356.0904	34.30	4.51	-42.85	53.22	49.18	74.00	24.82	Pass	H	Peak
6	7601.3068	36.56	6.10	-42.12	51.08	51.62	74.00	22.38	Pass	H	Peak
7	1188.2188	28.09	2.67	-42.91	62.07	49.92	74.00	24.08	Pass	V	Peak
8	1798.8799	30.37	3.32	-42.71	56.86	47.84	74.00	26.16	Pass	V	Peak
9	1980.0980	31.57	3.45	-43.15	57.55	49.42	74.00	24.58	Pass	V	Peak
10	2771.9772	32.84	4.19	-43.11	56.11	50.03	74.00	23.97	Pass	V	Peak
11	4356.0904	34.30	4.51	-42.85	55.81	51.77	74.00	22.23	Pass	V	Peak
12	9254.4170	37.65	6.60	-42.05	49.03	51.23	74.00	22.77	Pass	V	Peak

Mode:		802.11 b 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	1980.0980	31.57	3.45	-43.15	60.31	52.18	74.00	21.82	Pass	H	Peak
2	2771.9772	32.84	4.19	-43.11	57.40	51.32	74.00	22.68	Pass	H	Peak
3	3565.0377	33.45	4.41	-43.09	53.86	48.63	74.00	25.37	Pass	H	Peak
4	4356.0904	34.30	4.51	-42.85	52.15	48.11	74.00	25.89	Pass	H	Peak
5	7641.3094	36.54	6.14	-42.12	49.57	50.13	74.00	23.87	Pass	H	Peak
6	10418.4946	38.39	7.13	-42.02	49.13	52.63	74.00	21.37	Pass	H	Peak
7	1188.0188	28.09	2.67	-42.91	61.59	49.44	74.00	24.56	Pass	V	Peak
8	1980.2980	31.57	3.45	-43.15	57.57	49.44	74.00	24.56	Pass	V	Peak
9	2772.9773	32.84	4.19	-43.10	56.25	50.18	74.00	23.82	Pass	V	Peak
10	3564.0376	33.45	4.41	-43.08	52.87	47.65	74.00	26.35	Pass	V	Peak
11	4356.0904	34.30	4.51	-42.85	56.24	52.20	74.00	21.80	Pass	V	Peak
12	10575.5050	38.52	6.95	-42.00	49.37	52.84	74.00	21.16	Pass	V	Peak

Mode:		802.11 b 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	1980.0980	31.57	3.45	-43.15	60.15	52.02	74.00	21.98	Pass	H	Peak
2	2771.9772	32.84	4.19	-43.11	57.69	51.61	74.00	22.39	Pass	H	Peak
3	3564.0376	33.45	4.41	-43.08	52.68	47.46	74.00	26.54	Pass	H	Peak
4	4356.0904	34.30	4.51	-42.85	52.19	48.15	74.00	25.85	Pass	H	Peak
5	7070.2714	36.17	5.72	-42.19	48.72	48.42	74.00	25.58	Pass	H	Peak
6	9230.4154	37.65	6.54	-42.04	49.49	51.64	74.00	22.36	Pass	H	Peak
7	1188.0188	28.09	2.67	-42.91	63.00	50.85	74.00	23.15	Pass	V	Peak
8	1980.2980	31.57	3.45	-43.15	58.00	49.87	74.00	24.13	Pass	V	Peak
9	2771.9772	32.84	4.19	-43.11	55.56	49.48	74.00	24.52	Pass	V	Peak
10	4357.0905	34.30	4.52	-42.86	53.78	49.74	74.00	24.26	Pass	V	Peak
11	9101.4068	37.68	6.44	-42.02	49.21	51.31	74.00	22.69	Pass	V	Peak
12	11307.5538	38.78	7.34	-42.00	48.94	53.06	74.00	20.94	Pass	V	Peak

Mode:		802.11 g 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	Remak
1	1187.8188	28.09	2.67	-42.91	62.50	50.35	74.00	23.65	Pass	H	Peak
2	1980.2980	31.57	3.45	-43.15	57.10	48.97	74.00	25.03	Pass	H	Peak
3	2771.9772	32.84	4.19	-43.11	57.67	51.59	74.00	22.41	Pass	H	Peak
4	3564.0376	33.45	4.41	-43.08	54.93	49.71	74.00	24.29	Pass	H	Peak
5	4356.0904	34.30	4.51	-42.85	52.05	48.01	74.00	25.99	Pass	H	Peak
6	8824.3883	37.31	6.39	-41.99	49.43	51.14	74.00	22.86	Pass	H	Peak
7	1188.2188	28.09	2.67	-42.91	59.46	47.31	74.00	26.69	Pass	V	Peak
8	1980.0980	31.57	3.45	-43.15	58.93	50.80	74.00	23.20	Pass	V	Peak
9	2772.7773	32.84	4.19	-43.10	55.22	49.15	74.00	24.85	Pass	V	Peak
10	3564.0376	33.45	4.41	-43.08	52.18	46.96	74.00	27.04	Pass	V	Peak
11	4356.0904	34.30	4.51	-42.85	53.96	49.92	74.00	24.08	Pass	V	Peak
12	8789.3860	37.24	6.35	-42.00	49.36	50.95	74.00	23.05	Pass	V	Peak

Mode:		802.11 g 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	1188.2188	28.09	2.67	-42.91	65.32	53.17	74.00	20.83	Pass	H	Peak
2	1979.8980	31.57	3.45	-43.15	59.82	51.69	74.00	22.31	Pass	H	Peak
3	2771.9772	32.84	4.19	-43.11	58.54	52.46	74.00	21.54	Pass	H	Peak
4	3564.0376	33.45	4.41	-43.08	52.74	47.52	74.00	26.48	Pass	H	Peak
5	9171.4114	37.67	6.45	-42.04	49.25	51.33	74.00	22.67	Pass	H	Peak
6	11817.5878	39.15	7.44	-41.93	49.18	53.84	74.00	20.16	Pass	H	Peak
7	1187.8188	28.09	2.67	-42.91	59.04	46.89	74.00	27.11	Pass	V	Peak
8	1979.8980	31.57	3.45	-43.15	58.45	50.32	74.00	23.68	Pass	V	Peak
9	2772.1772	32.84	4.19	-43.10	56.77	50.70	74.00	23.30	Pass	V	Peak
10	3564.0376	33.45	4.41	-43.08	57.51	52.29	74.00	21.71	Pass	V	Peak
11	4356.0904	34.30	4.51	-42.85	54.92	50.88	74.00	23.12	Pass	V	Peak
12	9252.4168	37.65	6.60	-42.05	48.80	51.00	74.00	23.00	Pass	V	Peak

Mode:		802.11 g 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	1485.0485	28.39	2.98	-43.04	58.13	46.46	74.00	27.54	Pass	H	Peak
2	2772.3772	32.84	4.19	-43.10	59.88	53.81	74.00	20.19	Pass	H	Peak
3	4356.0904	34.30	4.51	-42.85	53.21	49.17	74.00	24.83	Pass	H	Peak
4	7804.3203	36.48	6.09	-42.16	49.26	49.67	74.00	24.33	Pass	H	Peak
5	9155.4104	37.67	6.45	-42.03	49.32	51.41	74.00	22.59	Pass	H	Peak
6	10217.4812	38.10	6.85	-42.06	50.56	53.45	74.00	20.55	Pass	H	Peak
7	1187.6188	28.09	2.67	-42.91	64.94	52.79	74.00	21.21	Pass	V	Peak
8	1980.2980	31.57	3.45	-43.15	61.29	53.16	74.00	20.84	Pass	V	Peak
9	2772.1772	32.84	4.19	-43.10	58.17	52.10	74.00	21.90	Pass	V	Peak
10	3564.0376	33.45	4.41	-43.08	55.33	50.11	74.00	23.89	Pass	V	Peak
11	4356.0904	34.30	4.51	-42.85	53.98	49.94	74.00	24.06	Pass	V	Peak
12	9232.4155	37.65	6.54	-42.04	48.76	50.91	74.00	23.09	Pass	V	Peak

Mode:		802.11 n (HT20)				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	1105.6106	28.01	2.57	-42.99	57.58	45.17	74.00	28.83	Pass	H	Peak
2	1485.0485	28.39	2.98	-43.04	57.81	46.14	74.00	27.86	Pass	H	Peak
3	4356.0904	34.30	4.51	-42.85	54.21	50.17	74.00	23.83	Pass	H	Peak
4	6425.2283	35.89	5.42	-42.52	49.34	48.13	74.00	25.87	Pass	H	Peak
5	7656.3104	36.54	6.16	-42.13	48.56	49.13	74.00	24.87	Pass	H	Peak
6	10668.5112	38.53	7.01	-41.99	49.12	52.67	74.00	21.33	Pass	H	Peak
7	1188.0188	28.09	2.67	-42.91	64.58	52.43	74.00	21.57	Pass	V	Peak
8	2772.1772	32.84	4.19	-43.10	57.99	51.92	74.00	22.08	Pass	V	Peak
9	3564.0376	33.45	4.41	-43.08	54.52	49.30	74.00	24.70	Pass	V	Peak
10	4356.0904	34.30	4.51	-42.85	54.05	50.01	74.00	23.99	Pass	V	Peak
11	7593.3062	36.56	6.07	-42.12	48.44	48.95	74.00	25.05	Pass	V	Peak
12	9191.4128	37.66	6.44	-42.03	49.14	51.21	74.00	22.79	Pass	V	Peak

Mode:		802.11 n (HT20)				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	1484.8485	28.38	2.98	-43.03	56.47	44.80	74.00	29.20	Pass	H	Peak
2	2772.1772	32.84	4.19	-43.10	59.25	53.18	74.00	20.82	Pass	H	Peak
3	4356.0904	34.30	4.51	-42.85	52.81	48.77	74.00	25.23	Pass	H	Peak
4	6474.2316	35.89	5.50	-42.50	49.82	48.71	74.00	25.29	Pass	H	Peak
5	7662.3108	36.54	6.18	-42.14	49.66	50.24	74.00	23.76	Pass	H	Peak
6	10158.4772	38.02	6.86	-42.07	48.94	51.75	74.00	22.25	Pass	H	Peak
7	1188.0188	28.09	2.67	-42.91	65.05	52.90	74.00	21.10	Pass	V	Peak
8	2772.1772	32.84	4.19	-43.10	58.92	52.85	74.00	21.15	Pass	V	Peak
9	4356.0904	34.30	4.51	-42.85	54.26	50.22	74.00	23.78	Pass	V	Peak
10	6480.2320	35.90	5.49	-42.51	48.82	47.70	74.00	26.30	Pass	V	Peak
11	9268.4179	37.65	6.61	-42.05	48.92	51.13	74.00	22.87	Pass	V	Peak
12	10794.5196	38.56	7.19	-42.00	49.00	52.75	74.00	21.25	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	1287.0287	28.19	2.73	-42.80	56.84	44.96	74.00	29.04	Pass	H	Peak
2	4356.0904	34.30	4.51	-42.85	53.22	49.18	74.00	24.82	Pass	H	Peak
3	5674.1783	35.28	4.99	-42.60	49.63	47.30	74.00	26.70	Pass	H	Peak
4	7656.3104	36.54	6.16	-42.13	49.48	50.05	74.00	23.95	Pass	H	Peak
5	9185.4124	37.66	6.44	-42.03	48.83	50.90	74.00	23.10	Pass	H	Peak
6	11350.5567	38.81	7.32	-42.00	48.90	53.03	74.00	20.97	Pass	H	Peak
7	2772.1772	32.84	4.19	-43.10	58.17	52.10	74.00	21.90	Pass	V	Peak
8	3564.0376	33.45	4.41	-43.08	56.00	50.78	74.00	23.22	Pass	V	Peak
9	4356.0904	34.30	4.51	-42.85	54.13	50.09	74.00	23.91	Pass	V	Peak
10	6914.2610	36.07	5.86	-42.26	49.17	48.84	74.00	25.16	Pass	V	Peak
11	9151.4101	37.67	6.45	-42.03	49.26	51.35	74.00	22.65	Pass	V	Peak
12	11178.5452	38.71	7.21	-42.00	49.26	53.18	74.00	20.82	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	1182.4182	28.08	2.67	-42.91	58.83	46.67	74.00	27.33	Pass	H	Peak
2	1484.8485	28.38	2.98	-43.03	58.39	46.72	74.00	27.28	Pass	H	Peak
3	3565.0377	33.45	4.41	-43.09	49.98	44.75	74.00	29.25	Pass	H	Peak
4	5473.1649	34.97	5.04	-42.61	49.84	47.24	74.00	26.76	Pass	H	Peak
5	6981.2654	36.09	5.73	-42.21	48.90	48.51	74.00	25.49	Pass	H	Peak
6	9719.4480	37.69	6.66	-42.10	49.24	51.49	74.00	22.51	Pass	H	Peak
7	2772.3772	32.84	4.19	-43.10	58.68	52.61	74.00	21.39	Pass	V	Peak
8	3564.0376	33.45	4.41	-43.08	55.28	50.06	74.00	23.94	Pass	V	Peak
9	4356.0904	34.30	4.51	-42.85	54.50	50.46	74.00	23.54	Pass	V	Peak
10	6381.2254	35.88	5.37	-42.53	50.17	48.89	74.00	25.11	Pass	V	Peak
11	9168.4112	37.67	6.45	-42.04	49.32	51.40	74.00	22.60	Pass	V	Peak
12	11797.5865	39.14	7.46	-41.94	49.06	53.72	74.00	20.28	Pass	V	Peak

Mode:		802.11 n (HT40)				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	1190.4190	28.09	2.67	-42.90	56.26	44.12	74.00	29.88	Pass	H	Peak
2	1975.0975	31.54	3.45	-43.15	53.38	45.22	74.00	28.78	Pass	H	Peak
3	2772.1772	32.84	4.19	-43.10	59.96	53.89	74.00	20.11	Pass	H	Peak
4	4356.0904	34.30	4.51	-42.85	52.59	48.55	74.00	25.45	Pass	H	Peak
5	6858.2572	36.04	5.55	-42.28	49.96	49.27	74.00	24.73	Pass	H	Peak
6	9275.4184	37.64	6.62	-42.05	49.07	51.28	74.00	22.72	Pass	H	Peak
7	1193.4193	28.09	2.66	-42.89	54.86	42.72	74.00	31.28	Pass	V	Peak
8	2376.1376	32.23	3.89	-43.13	56.13	49.12	74.00	24.88	Pass	V	Peak
9	4356.0904	34.30	4.51	-42.85	54.88	50.84	74.00	23.16	Pass	V	Peak
10	6932.2622	36.07	5.83	-42.23	49.45	49.12	74.00	24.88	Pass	V	Peak
11	9022.4015	37.70	6.40	-42.01	49.09	51.18	74.00	22.82	Pass	V	Peak
12	10247.4832	38.15	6.82	-42.05	49.73	52.65	74.00	21.35	Pass	V	Peak

Mode:		802.11 n (HT40)				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	1194.0194	28.09	2.66	-42.89	59.53	47.39	74.00	26.61	Pass	H	Peak
2	2442.5443	32.32	3.97	-43.12	56.50	49.67	74.00	24.33	Pass	H	Peak
3	4356.0904	34.30	4.51	-42.85	52.76	48.72	74.00	25.28	Pass	H	Peak
4	6895.2597	36.06	5.84	-42.26	50.08	49.72	74.00	24.28	Pass	H	Peak
5	9176.4118	37.66	6.44	-42.03	49.37	51.44	74.00	22.56	Pass	H	Peak
6	10308.4872	38.23	6.87	-42.04	49.70	52.76	74.00	21.24	Pass	H	Peak
7	1188.2188	28.09	2.67	-42.91	62.27	50.12	74.00	23.88	Pass	V	Peak
8	2772.3772	32.84	4.19	-43.10	58.09	52.02	74.00	21.98	Pass	V	Peak
9	3564.0376	33.45	4.41	-43.08	56.06	50.84	74.00	23.16	Pass	V	Peak
10	4356.0904	34.30	4.51	-42.85	57.31	53.27	74.00	20.73	Pass	V	Peak
11	7545.3030	36.58	5.86	-42.11	48.41	48.74	74.00	25.26	Pass	V	Peak
12	9169.4113	37.67	6.45	-42.04	50.13	52.21	74.00	21.79	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.