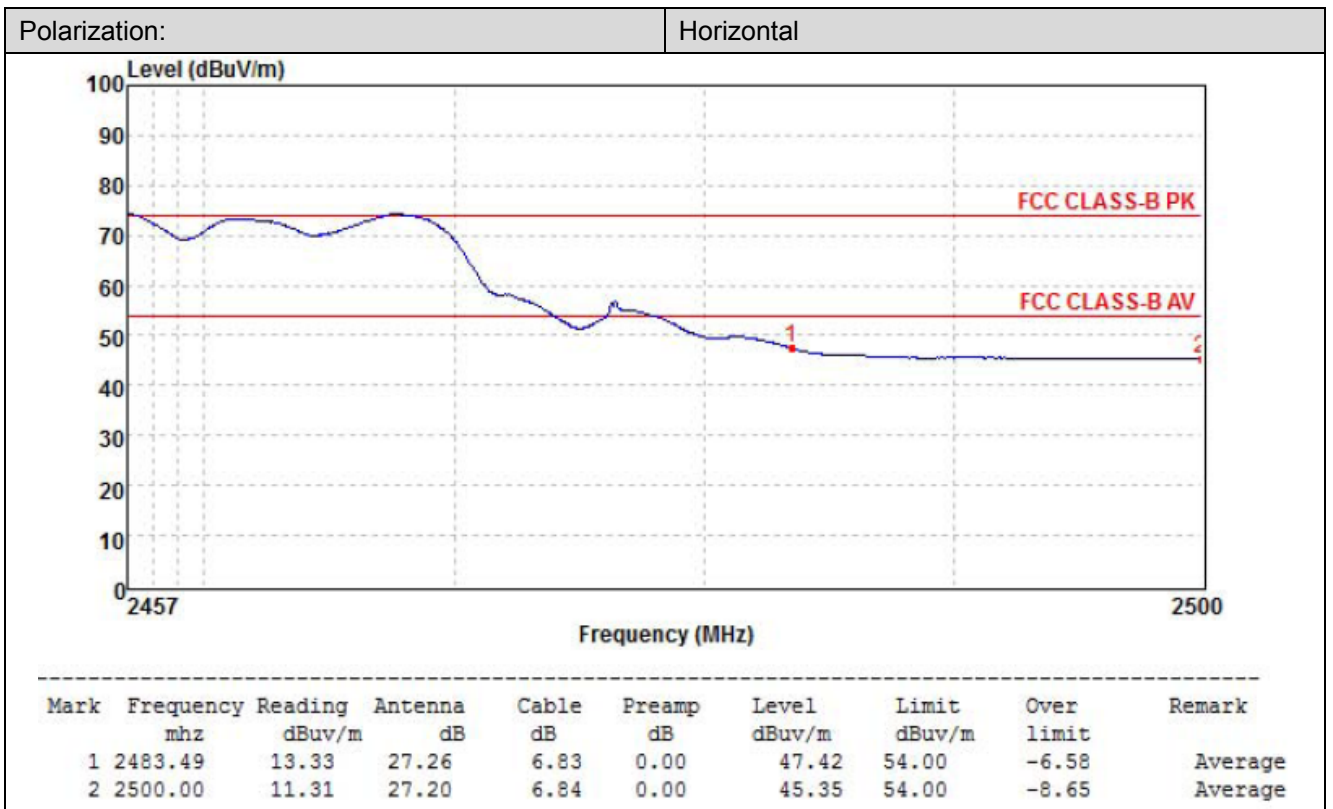
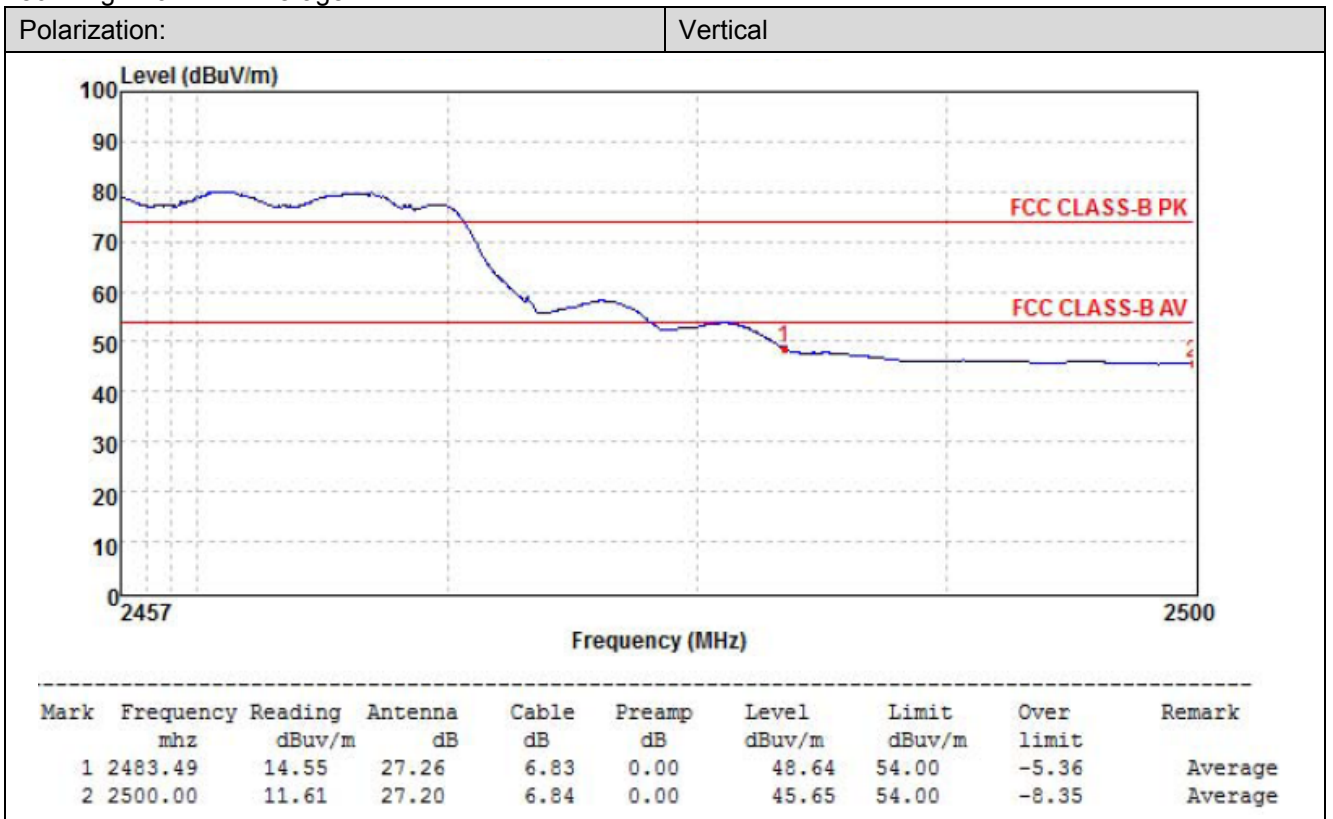
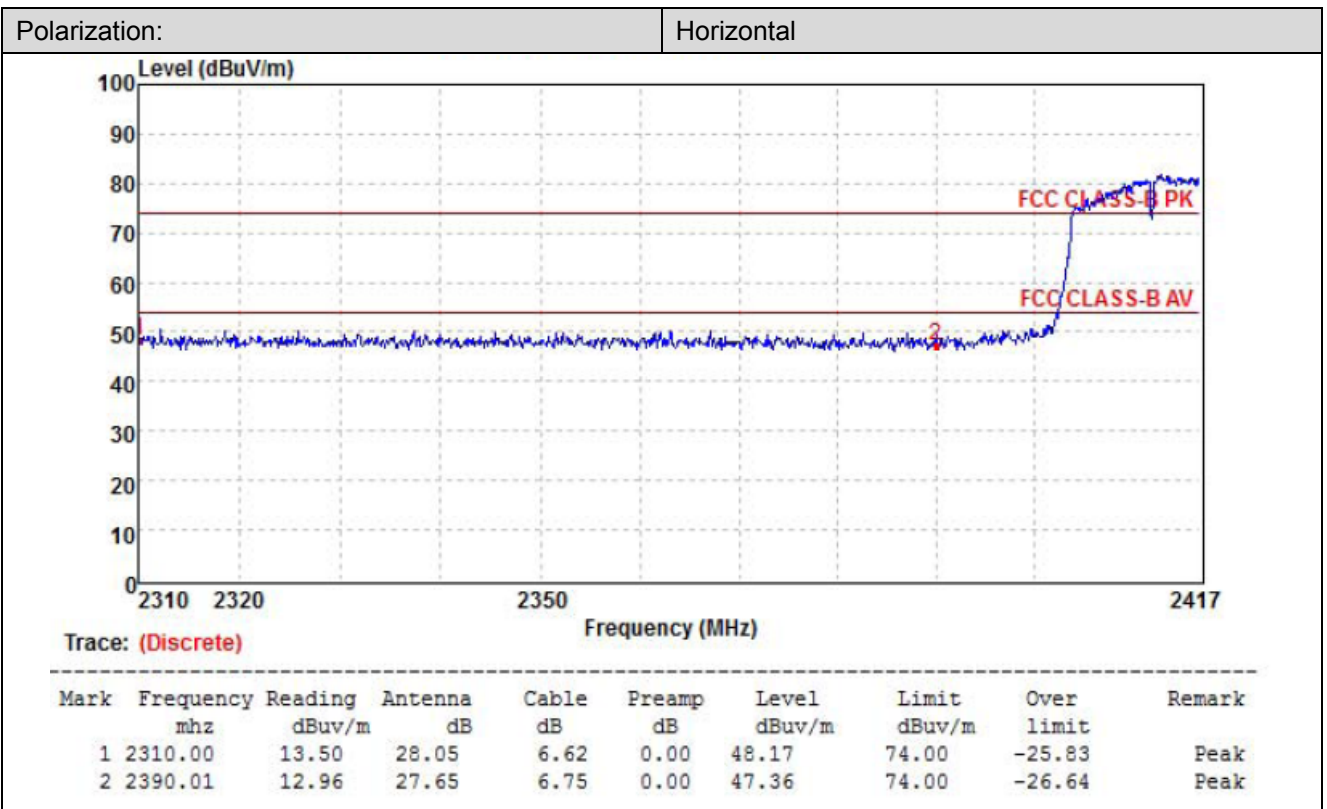
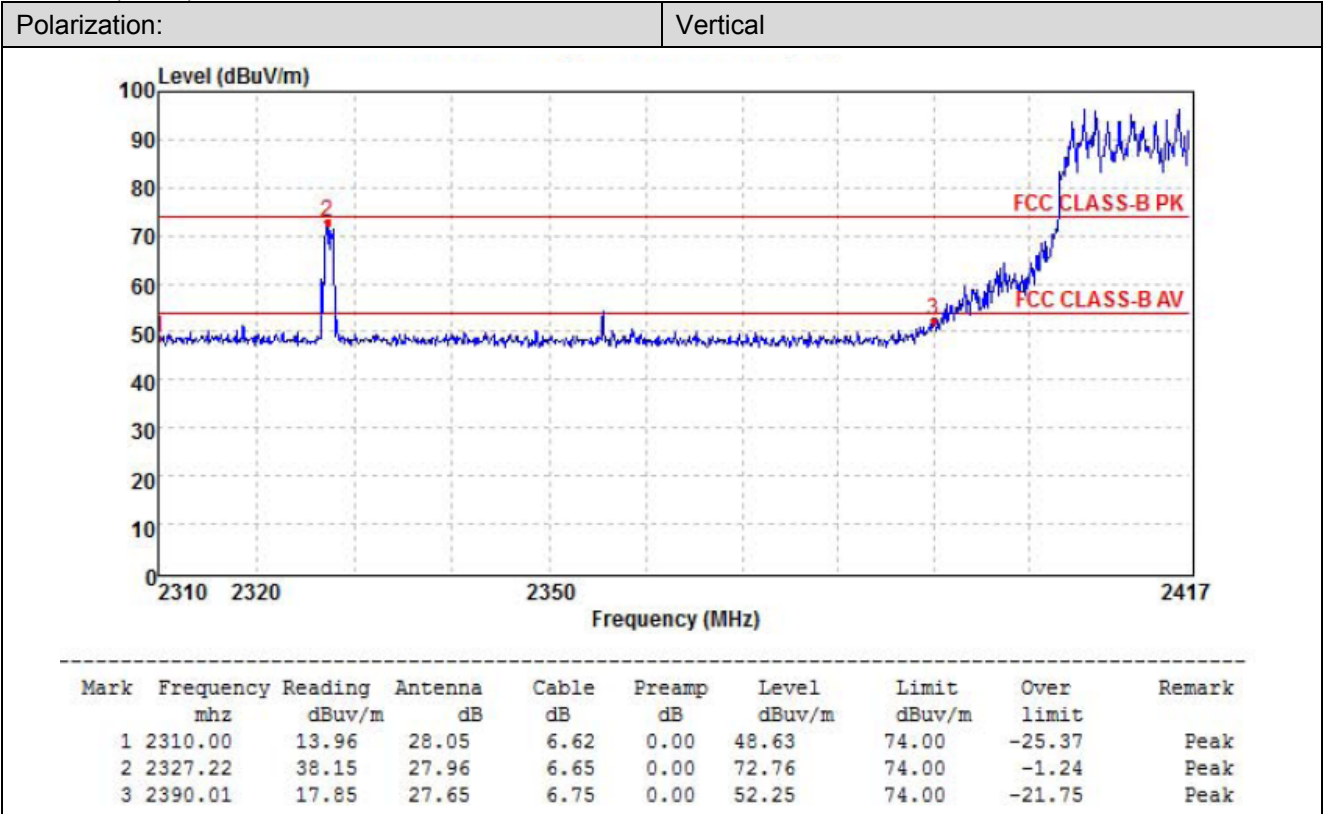


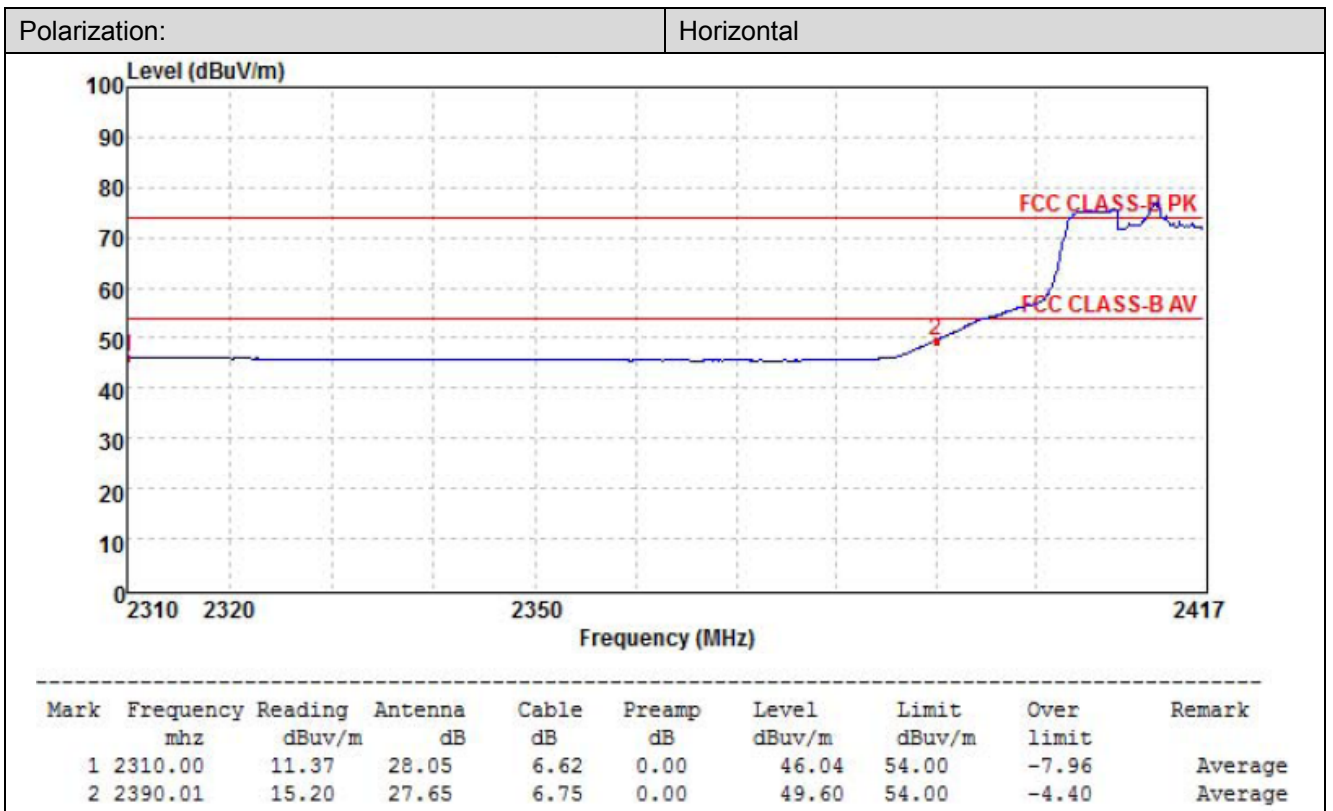
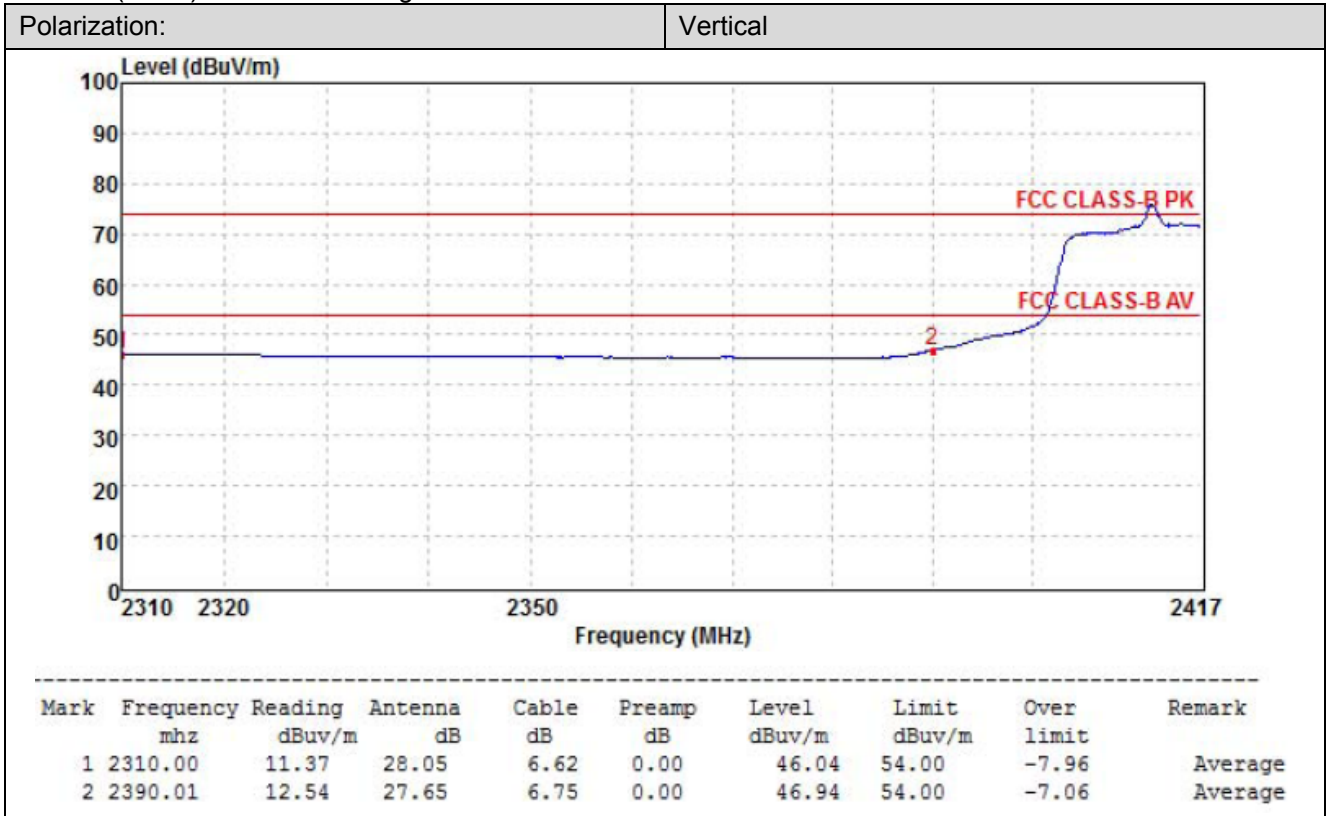
802.11g-2462MHz Average:



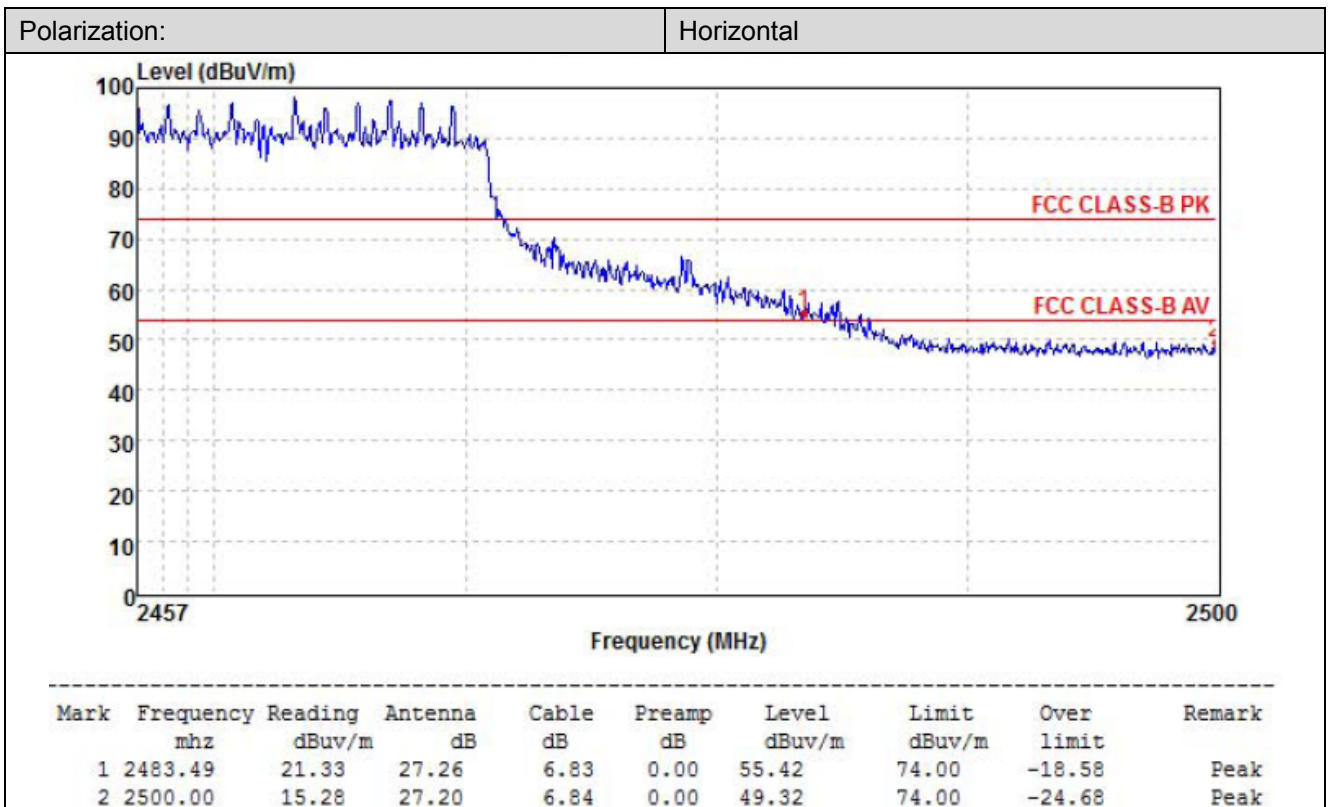
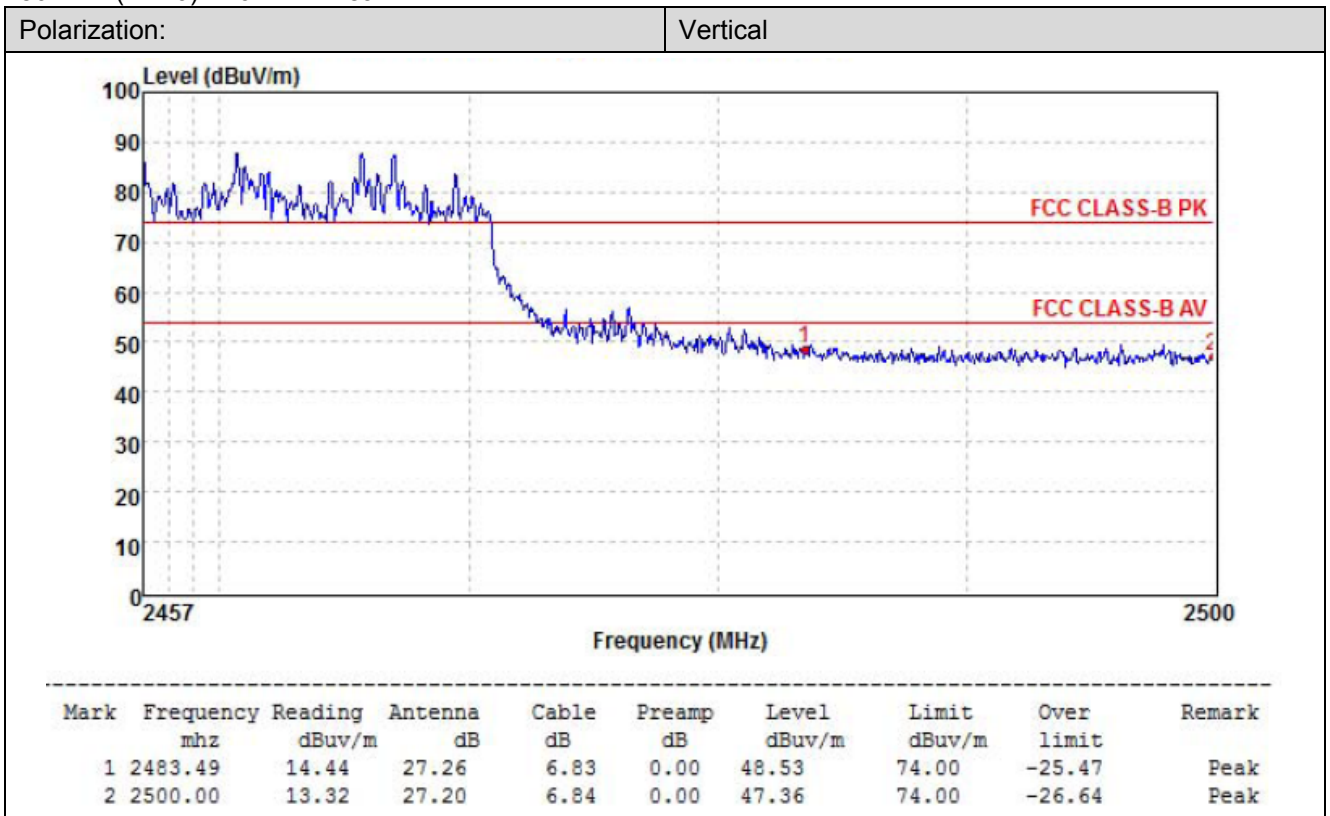
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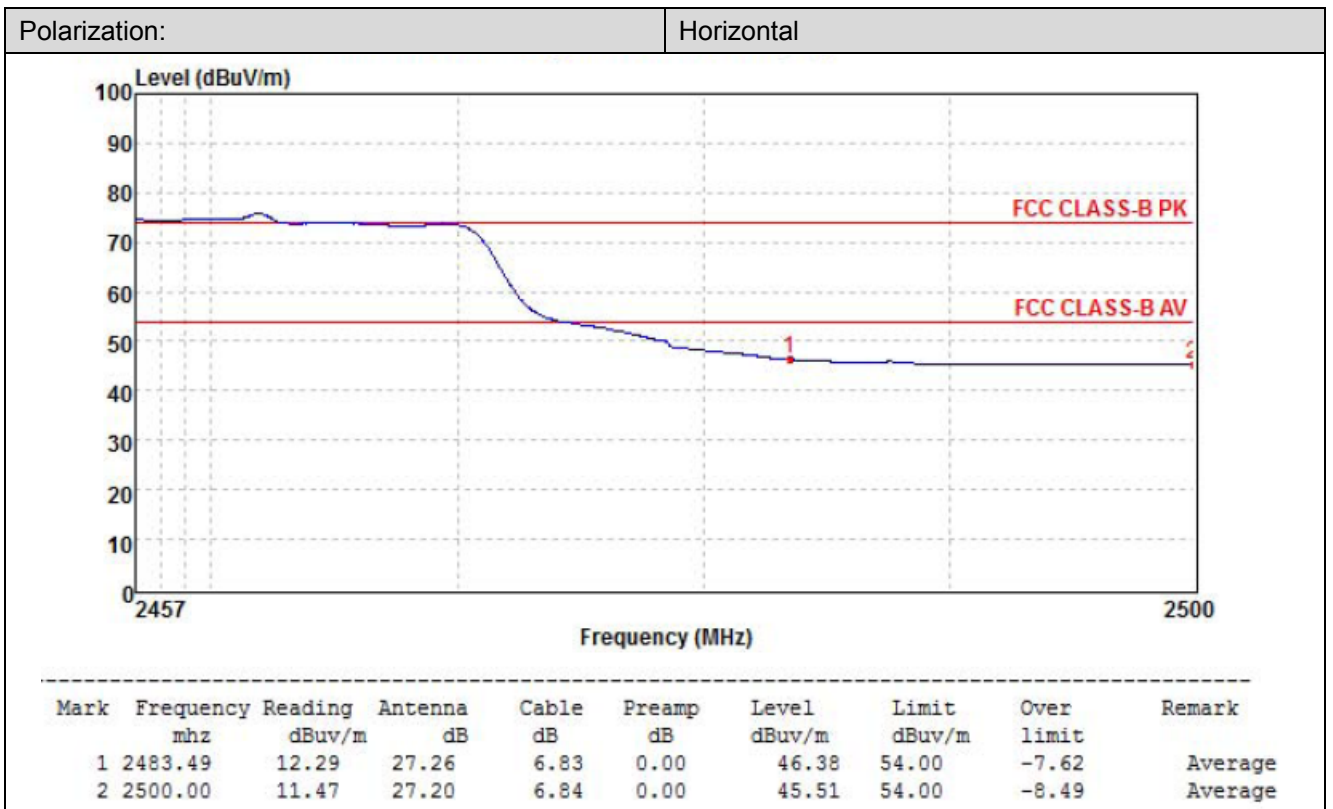
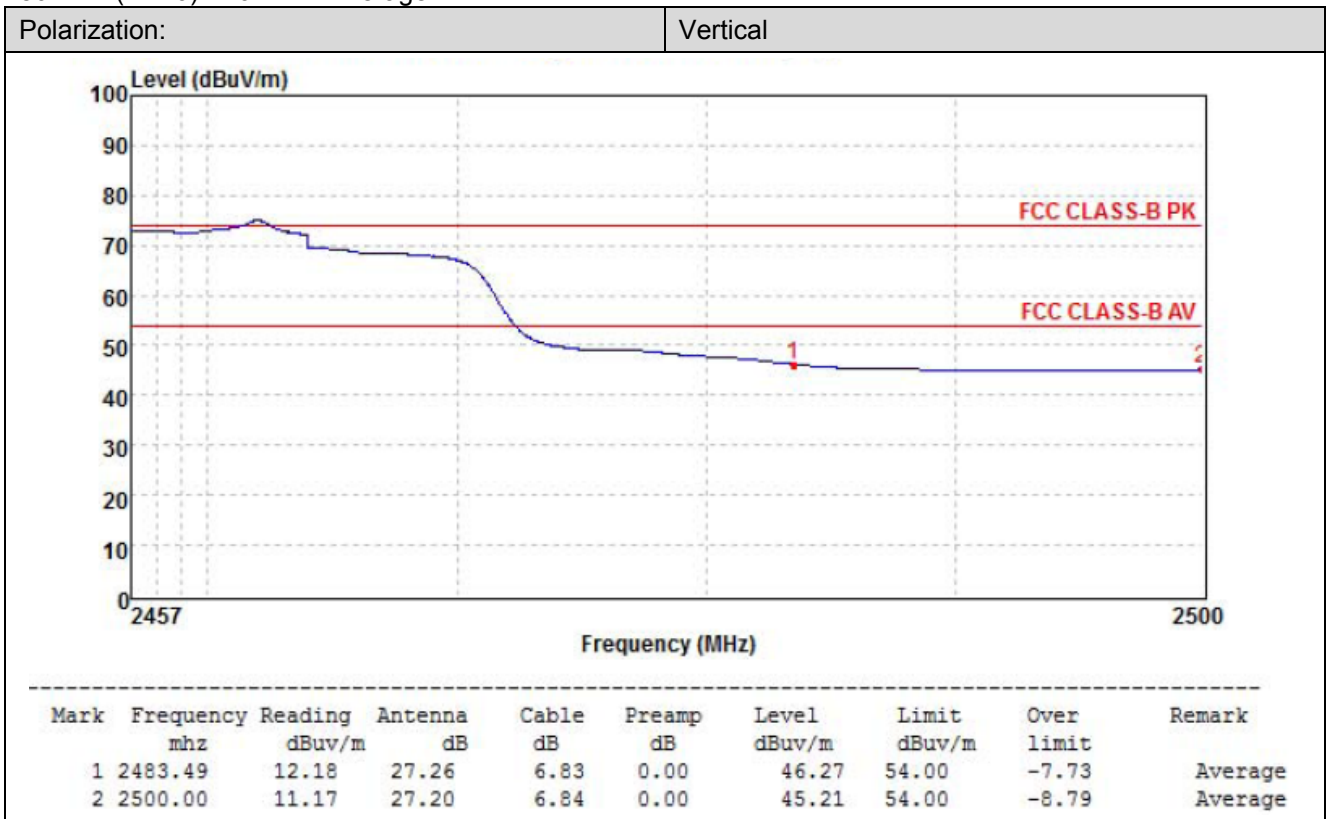
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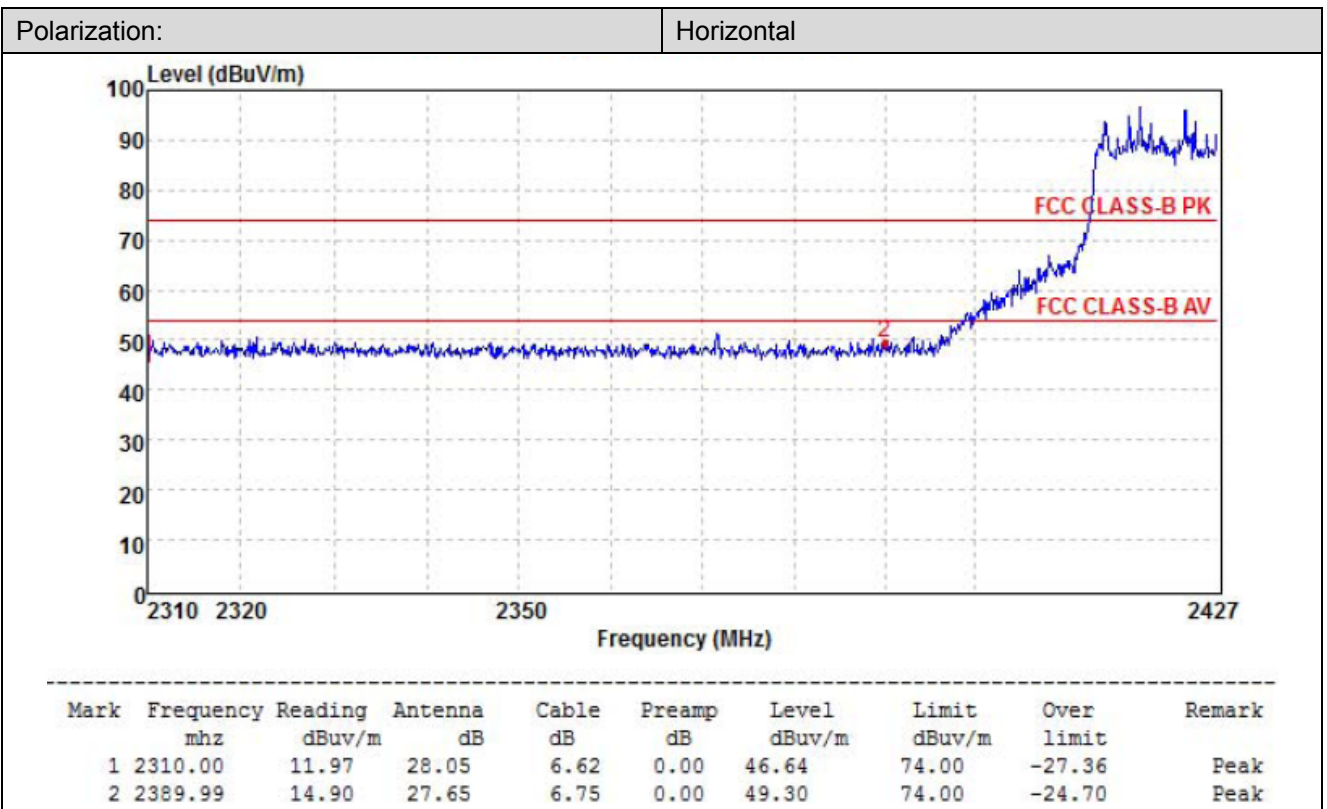
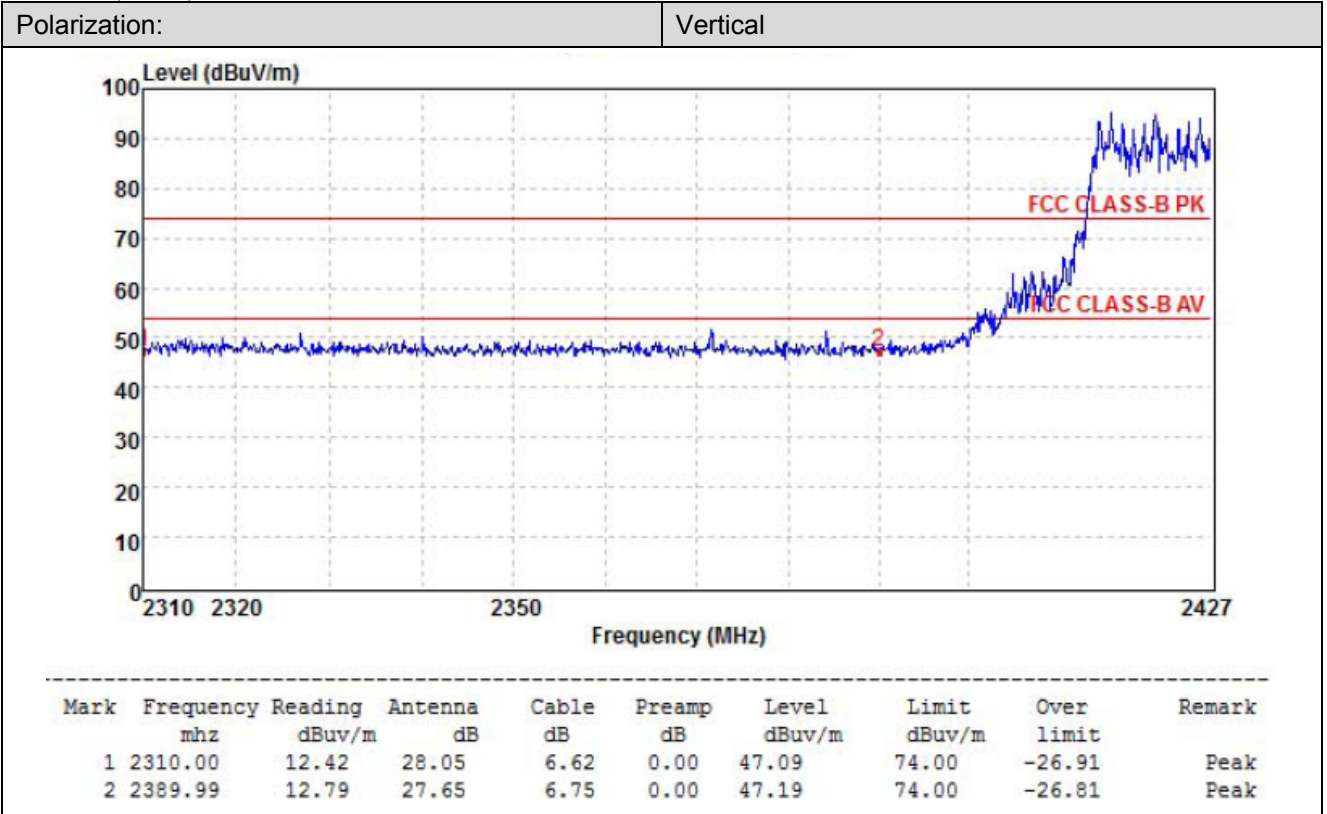
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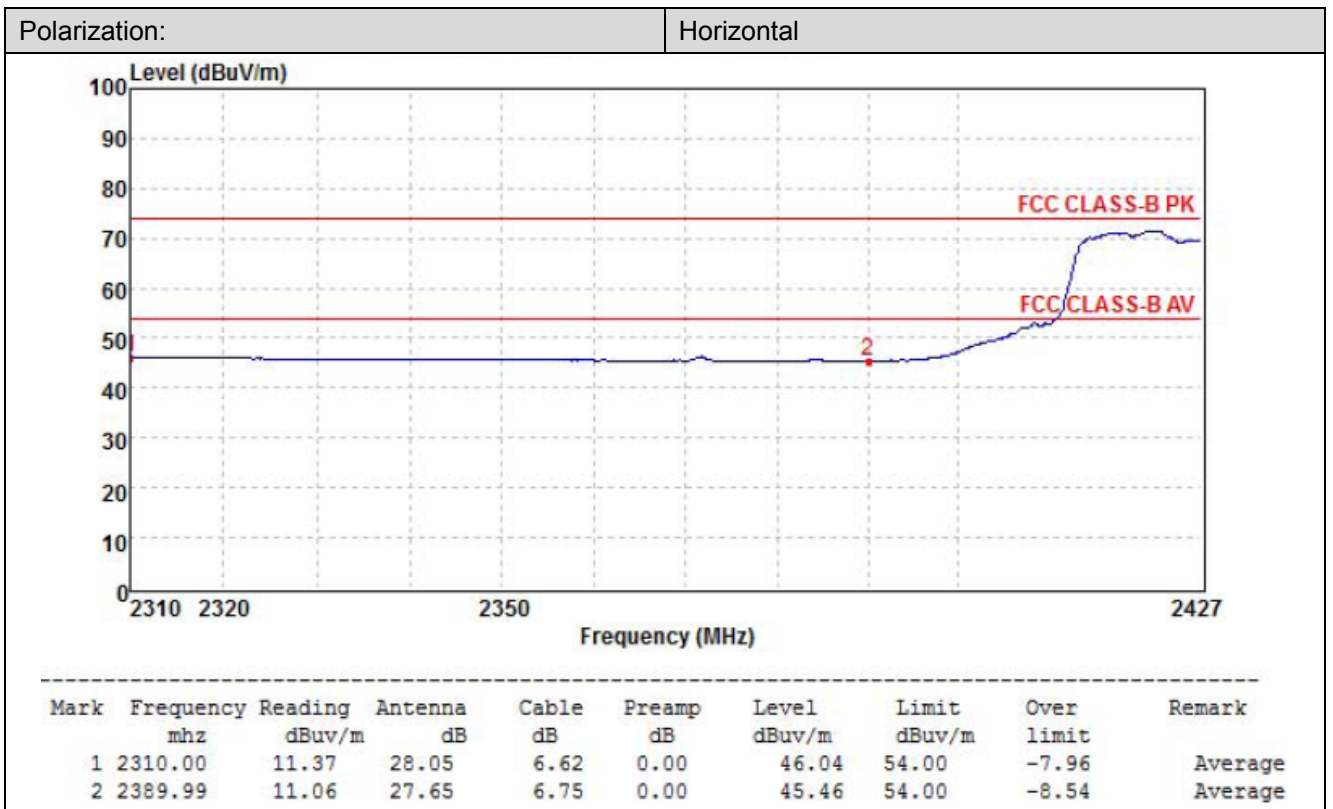
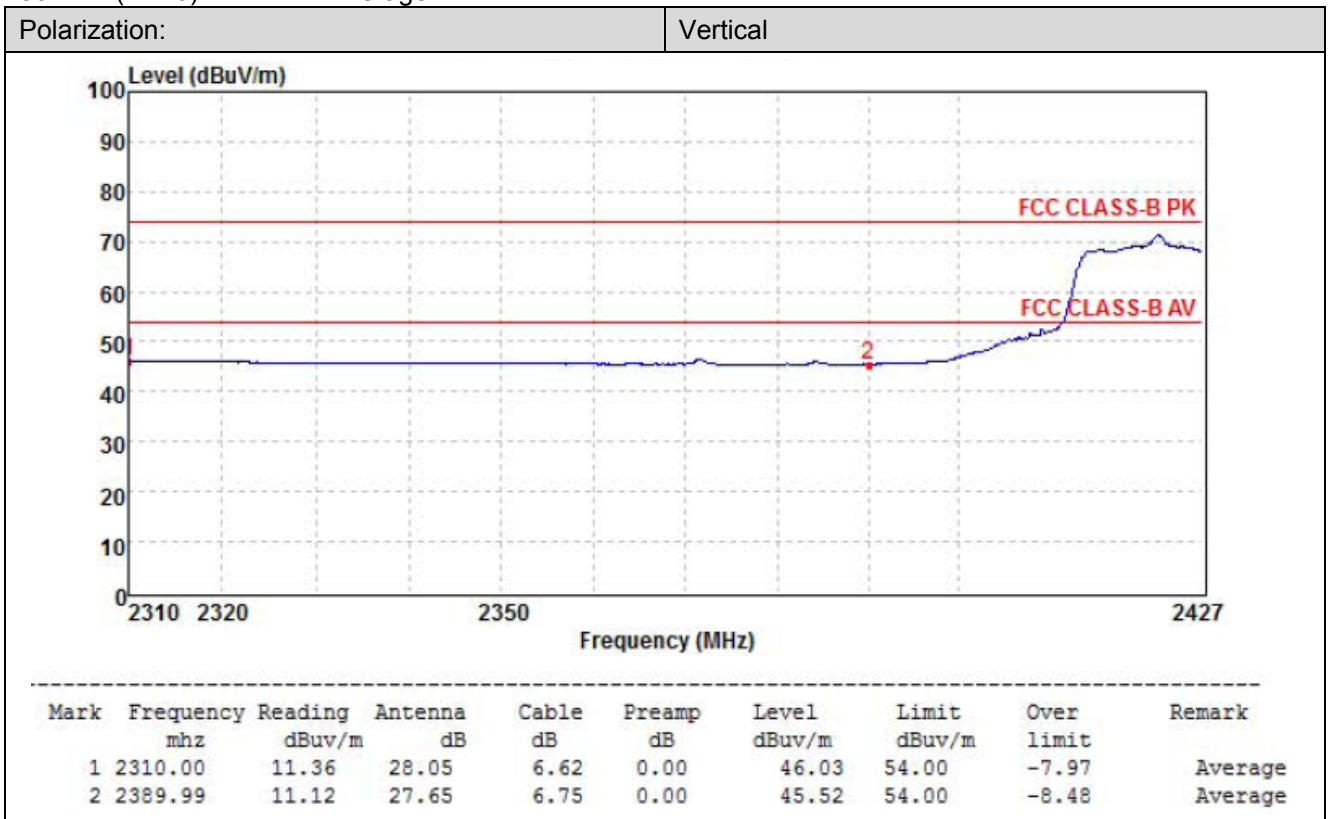
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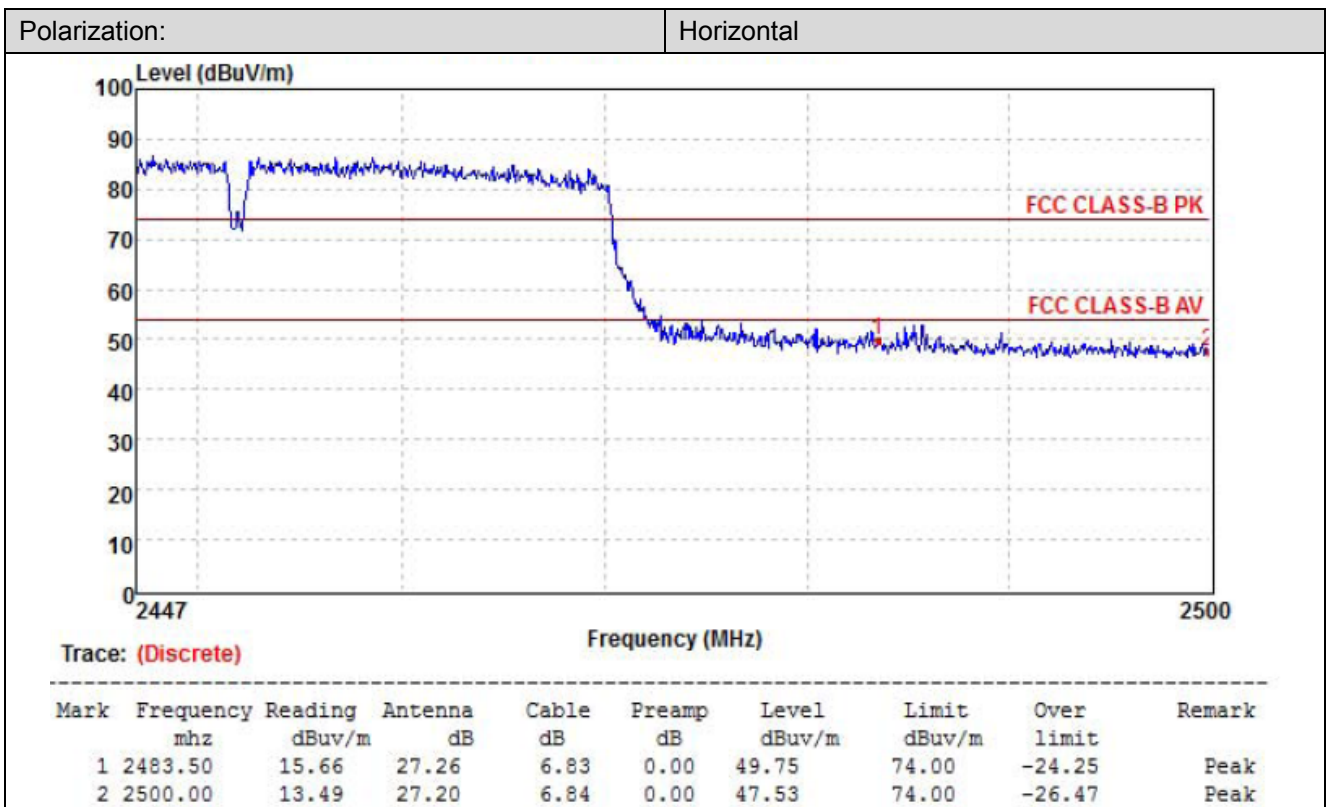
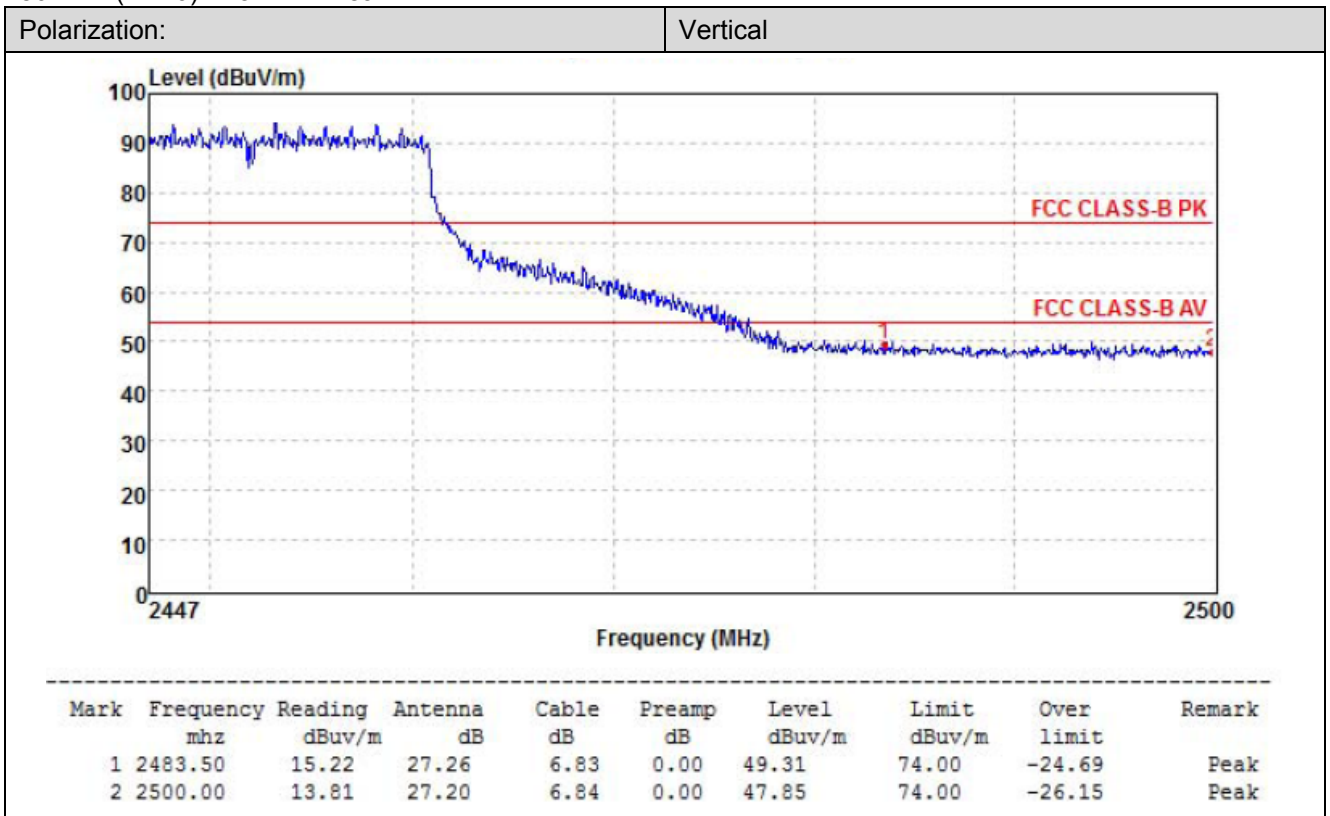
802.11n(HT40)-2422MHz Peak:



802.11n(HT40)-2422MHz Average:

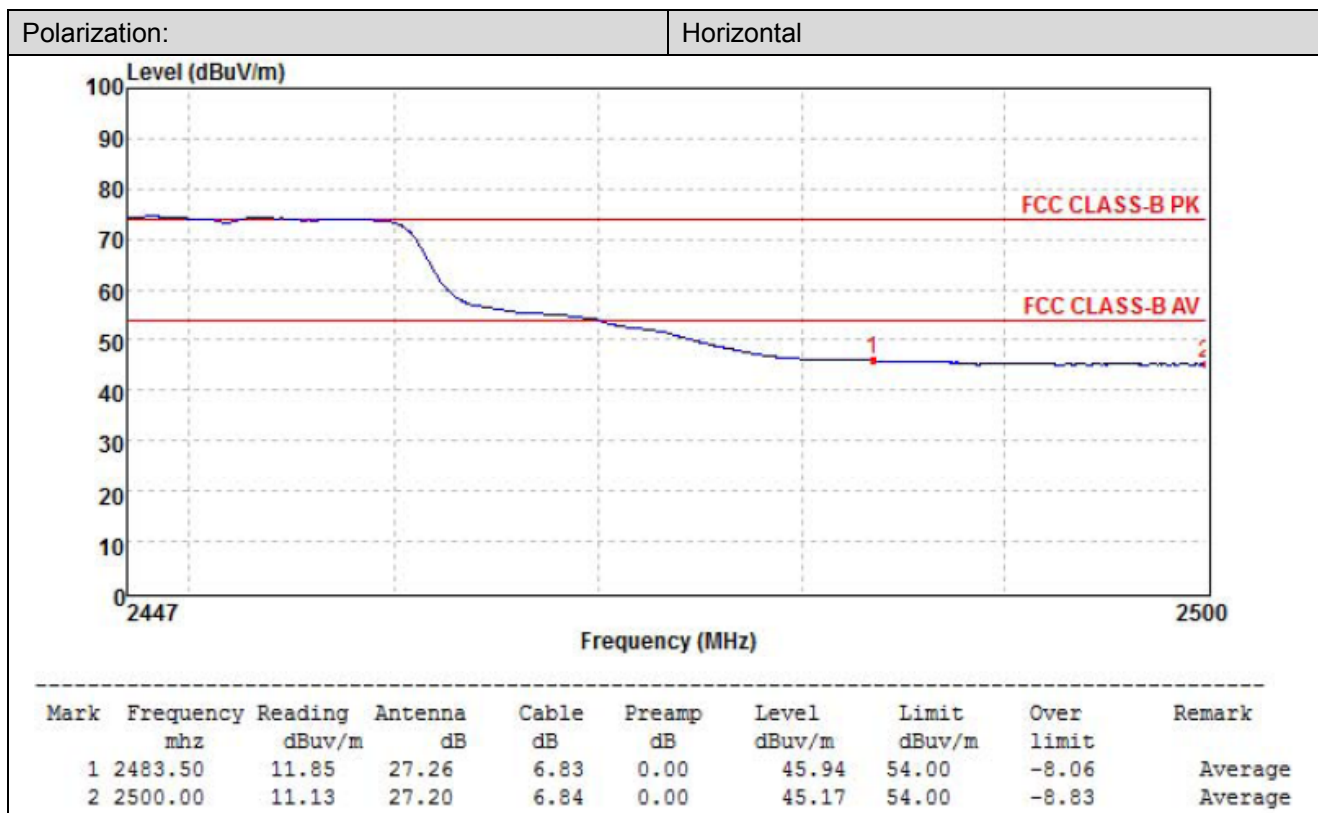
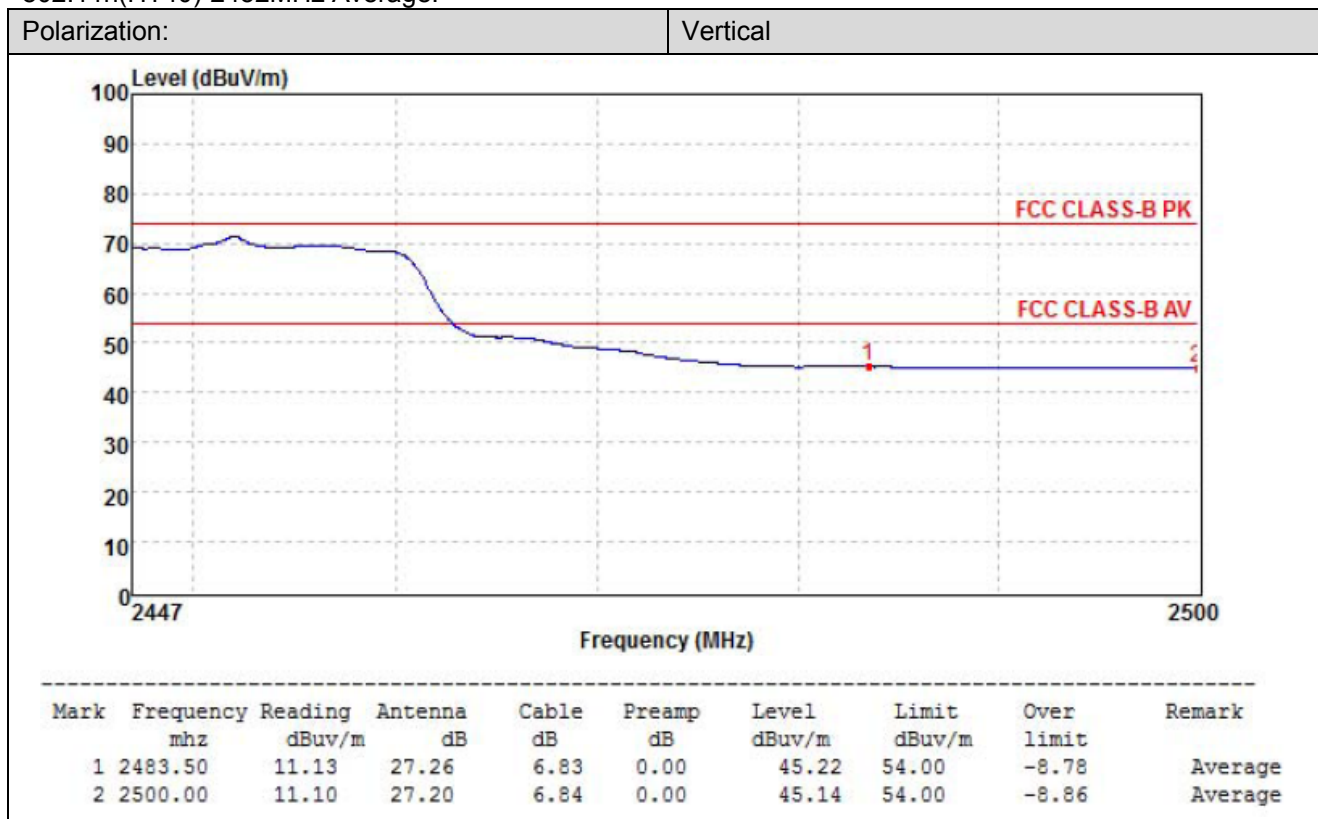


802.11n(HT40)-2452MHz Peak:





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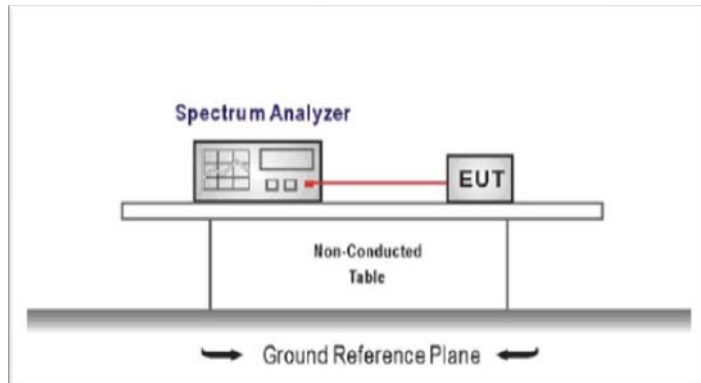


## 5.7. Band edge and Spurious Emissions (conducted)

### LIMIT

**FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):** In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

### TEST CONFIGURATION



### TEST PROCEDURE

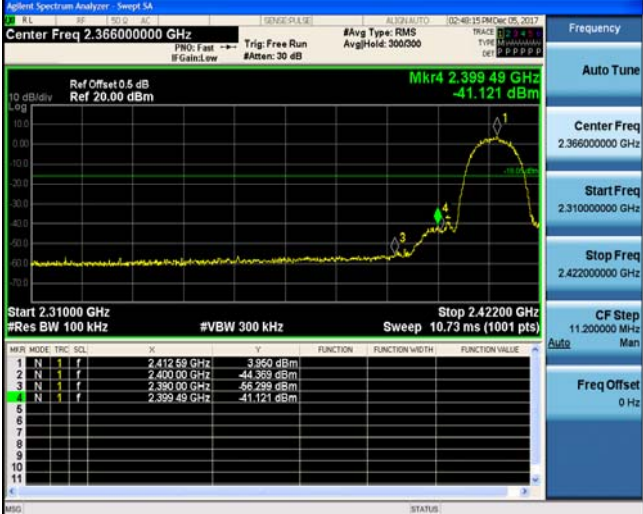

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Establish a reference level by using the following procedure  
Center frequency=DTS channel center frequency  
The span = 1.5 times the DTS bandwidth.  
RBW = 100 kHz, VBW  $\geq$  3 x RBW  
Detector = peak, Sweep time = auto couple, Trace mode = max hold  
Allow trace to fully stabilize  
Use the peak marker function to determine the maximum PSD level  
  
Note: the channel found to contain the maximum PSD level can be used to establish the reference level.
3. Emission level measurement  
Set the center frequency and span to encompass frequency range to be measured  
RBW = 100 kHz, VBW  $\geq$  3 x RBW  
Detector = peak, Sweep time = auto couple, Trace mode = max hold  
Allow trace to fully stabilize  
Use the peak marker function to determine the maximum amplitude level.
4. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
5. Ensure that the amplitude of all unwanted emission outside of the authorized frequency band excluding restricted frequency bands) are attenuated by at least the minimum requirements specified (at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz). Report the three highest emission relative to the limit.

### TEST MODE:



Please refer to the clause 3.3


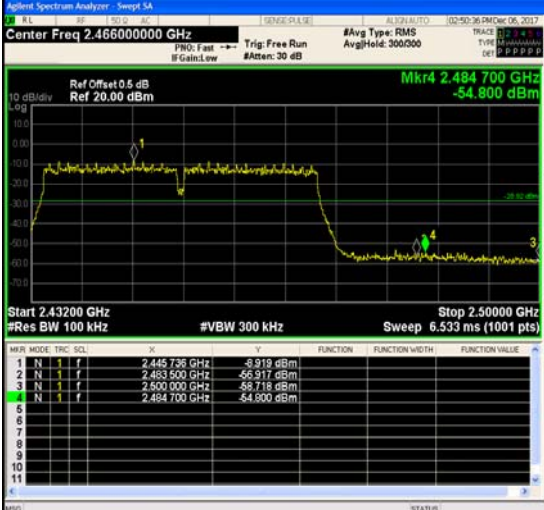
### TEST RESULTS


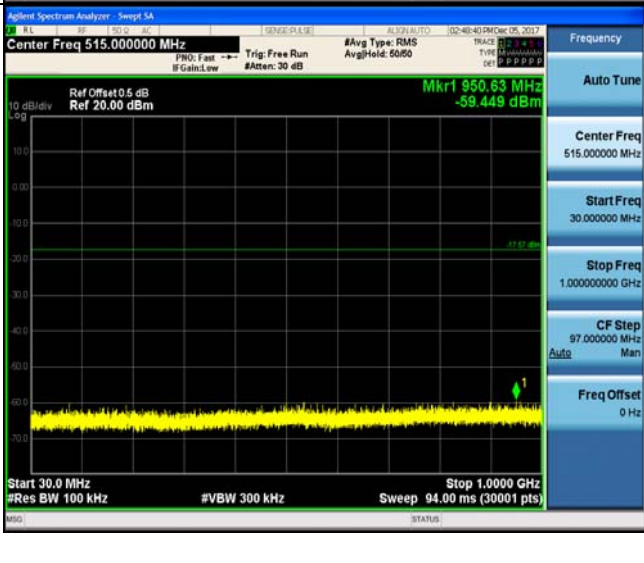
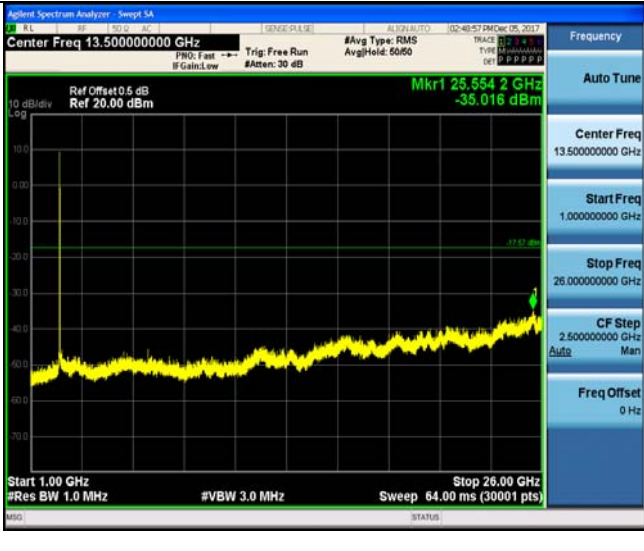
Passed       Not Applicable

Test Item:	Bandedge	Type:	802.11 b																																													
CH01	 <p>Agilent Spectrum Analyzer - Sweep SA          Center Freq 2.366000000 GHz          Ref Offset 0.5 dB Ref 20.00 dBm          Mkr4 2.399 49 GHz -41.121 dBm          Start 2.31000 GHz Stop 2.42200 GHz          #Res BW 100 kHz #VBW 300 kHz Sweep 10.73 ms (1001 pts)</p> <table border="1" data-bbox="687 571 1236 728"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>F</th> <th>dBm</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.412 59 GHz</td> <td>-3.959 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.400 00 GHz</td> <td>-44.369 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.390 00 GHz</td> <td>-56.299 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.399 49 GHz</td> <td>-41.121 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			MNR	MODE	TRC	SCL	F	dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.412 59 GHz	-3.959 dBm				2	N	1	f	2.400 00 GHz	-44.369 dBm				3	N	1	f	2.390 00 GHz	-56.299 dBm				4	N	1	f	2.399 49 GHz	-41.121 dBm			
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CH11	 <p>Agilent Spectrum Analyzer - Sweep SA          Center Freq 2.476000000 GHz          Ref Offset 0.5 dB Ref 20.00 dBm          Mkr4 2.484 736 GHz -53.828 dBm          Start 2.45200 GHz Stop 2.50000 GHz          #Res BW 100 kHz #VBW 300 kHz Sweep 4.600 ms (1001 pts)</p> <table border="1" data-bbox="687 1097 1236 1254"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>F</th> <th>dBm</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.483 280 GHz</td> <td>-2.987 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.483 500 GHz</td> <td>-55.693 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.500 000 GHz</td> <td>-58.148 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.484 736 GHz</td> <td>-53.828 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			MNR	MODE	TRC	SCL	F	dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.483 280 GHz	-2.987 dBm				2	N	1	f	2.483 500 GHz	-55.693 dBm				3	N	1	f	2.500 000 GHz	-58.148 dBm				4	N	1	f	2.484 736 GHz	-53.828 dBm			
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Test Item:	Bandedge	Type:	802.11 g																																								
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CH11	<p>Agilent Spectrum Analyzer - Sweep SA</p> <p>Center Freq 2.476000000 GHz</p> <p>Ref Offset 0.5 dB Ref 20.00 dBm</p> <p>Mkr4 2.484 256 GHz -50.666 dBm</p> <p>Start 2.45200 GHz #Res BW 100 kHz</p> <p>Stop 2.50000 GHz #VBW 300 kHz Sweep 4.600 ms (1001 pts)</p> <table border="1"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>F</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.485 744 GHz</td> <td></td> <td></td> <td>-2.508 dBm</td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.483 500 GHz</td> <td></td> <td></td> <td>-2.161 dBm</td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.500 000 GHz</td> <td></td> <td></td> <td>-57.517 dBm</td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.484 256 GHz</td> <td></td> <td></td> <td>-50.666 dBm</td> </tr> </tbody> </table>			MNR	MODE	TRC	SCL	F	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.485 744 GHz			-2.508 dBm	2	N	1	f	2.483 500 GHz			-2.161 dBm	3	N	1	f	2.500 000 GHz			-57.517 dBm	4	N	1	f	2.484 256 GHz			-50.666 dBm
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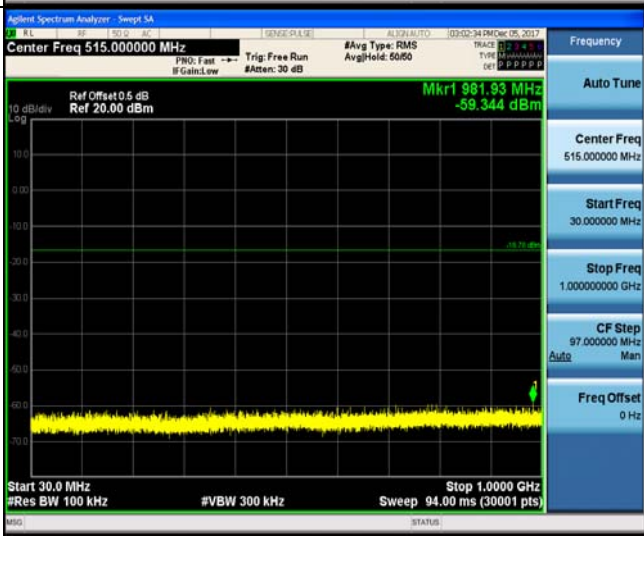
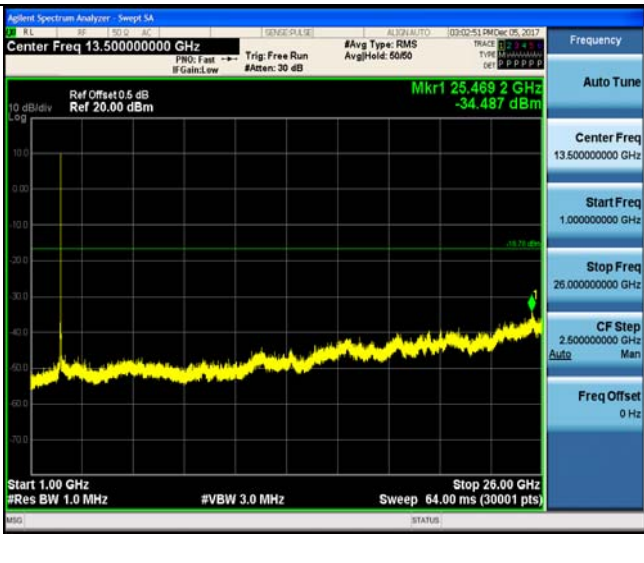
Test Item:	Bandedge	Type:	802.11 n(HT20)																																													
CH01	 <p>Agilent Spectrum Analyzer - Sweep SA</p> <p>Center Freq 2.366000000 GHz</p> <p>Ref Offset 0.5 dB Ref 20.00 dBm</p> <p>Mkr4 2.399 82 GHz -42.673 dBm</p> <p>Start 2.31000 GHz #Res BW 100 kHz</p> <p>Stop 2.42200 GHz #VBW 300 kHz Sweep 10.73 ms (1001 pts)</p> <table border="1"> <thead> <tr> <th>MNR</th> <th>MODE</th> <th>TRC</th> <th>SCL</th> <th>F</th> <th>dBm</th> <th>FUNCTION</th> <th>FUNCTION WIDTH</th> <th>FUNCTION VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N</td> <td>1</td> <td>f</td> <td>2.415 73 GHz</td> <td>-5.007 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>N</td> <td>1</td> <td>f</td> <td>2.400 00 GHz</td> <td>-43.539 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>N</td> <td>1</td> <td>f</td> <td>2.390 00 GHz</td> <td>-53.942 dBm</td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>N</td> <td>1</td> <td>f</td> <td>2.399 82 GHz</td> <td>-42.673 dBm</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Frequency: 2.366000000 GHz</p> <p>Center Freq: 2.366000000 GHz</p> <p>Start Freq: 2.310000000 GHz</p> <p>Stop Freq: 2.422000000 GHz</p> <p>CF Step: 11.200000 MHz</p> <p>Freq Offset: 0 Hz</p>			MNR	MODE	TRC	SCL	F	dBm	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f	2.415 73 GHz	-5.007 dBm				2	N	1	f	2.400 00 GHz	-43.539 dBm				3	N	1	f	2.390 00 GHz	-53.942 dBm				4	N	1	f	2.399 82 GHz	-42.673 dBm			
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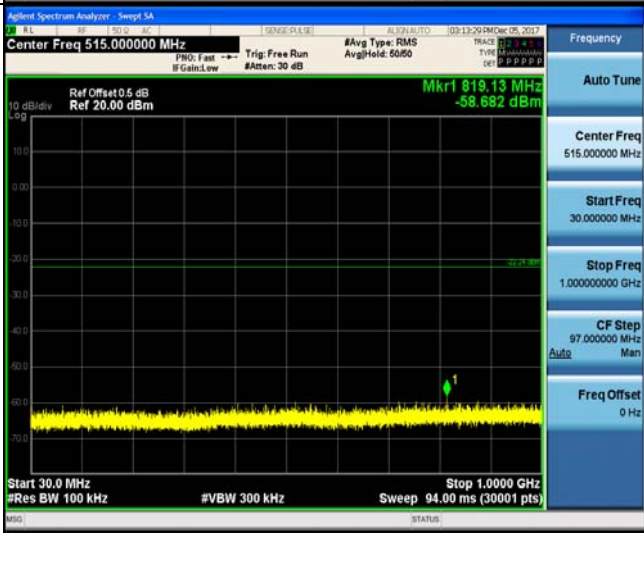
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CF Step 13.200000 MHz										
Freq Offset 0 Hz										
CH09			<table border="1"> <tr><td>Frequency</td></tr> <tr><td>Auto Tune</td></tr> <tr><td>Center Freq 2.466000000 GHz</td></tr> <tr><td>Start Freq 2.432000000 GHz</td></tr> <tr><td>Stop Freq 2.500000000 GHz</td></tr> <tr><td>CF Step 6.800000 MHz</td></tr> <tr><td>Freq Offset 0 Hz</td></tr> </table>	Frequency	Auto Tune	Center Freq 2.466000000 GHz	Start Freq 2.432000000 GHz	Stop Freq 2.500000000 GHz	CF Step 6.800000 MHz	Freq Offset 0 Hz
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Freq Offset 0 Hz										


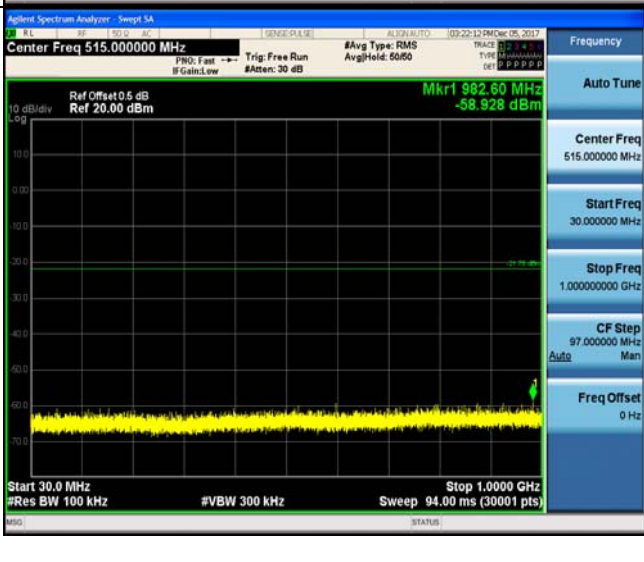
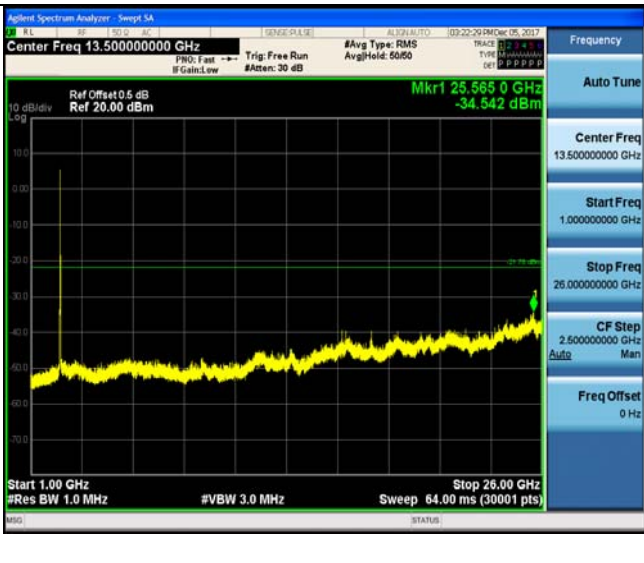
Test Item:	SE	Type:	802.11 b
Reference level CH01			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.397000000 GHz</p> <p>Stop Freq 2.427000000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
CH01			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 515.000000 MHz</p> <p>Start Freq 30.000000 MHz</p> <p>Stop Freq 1.000000000 GHz</p> <p>CF Step 97.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 13.50000000 GHz</p> <p>Start Freq 1.000000000 GHz</p> <p>Stop Freq 26.00000000 GHz</p> <p>CF Step 2.50000000 GHz Auto Man</p> <p>Freq Offset 0 Hz</p>


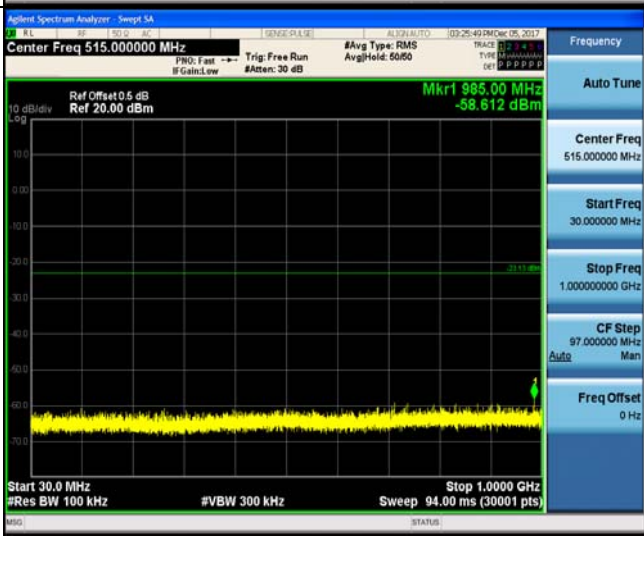
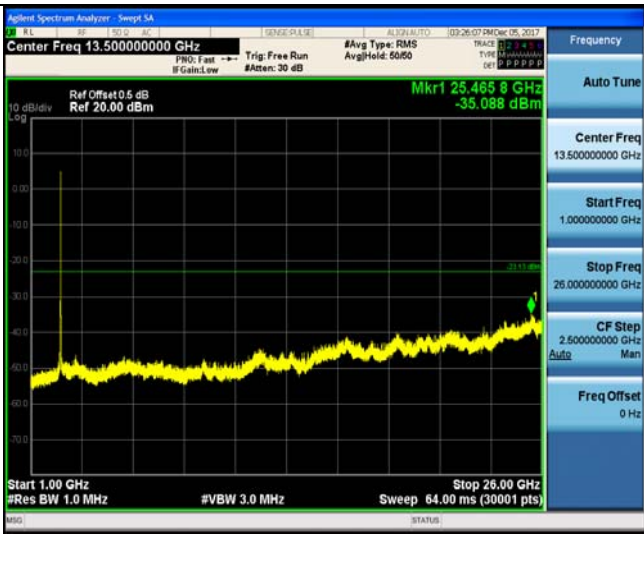
<p>Reference level CH06</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.437000000 GHz</p> <p>Start Freq 2.422000000 GHz</p> <p>Stop Freq 2.452000000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>CH06</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 515.000000 MHz</p> <p>Start Freq 30.000000 MHz</p> <p>Stop Freq 1.000000000 GHz</p> <p>CF Step 97.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 13.500000000 GHz</p> <p>Start Freq 1.000000000 GHz</p> <p>Stop Freq 26.000000000 GHz</p> <p>CF Step 2.500000000 GHz Auto Man</p> <p>Freq Offset 0 Hz</p>


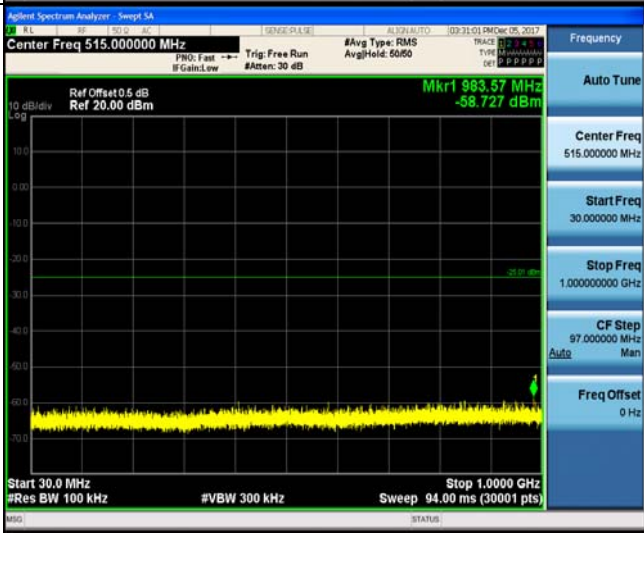
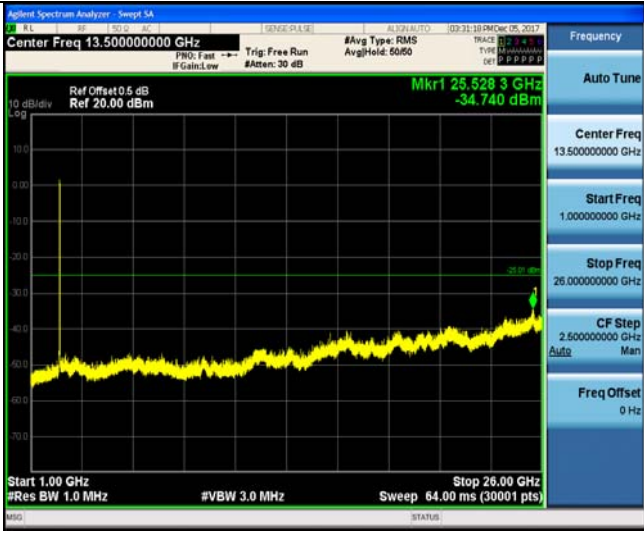



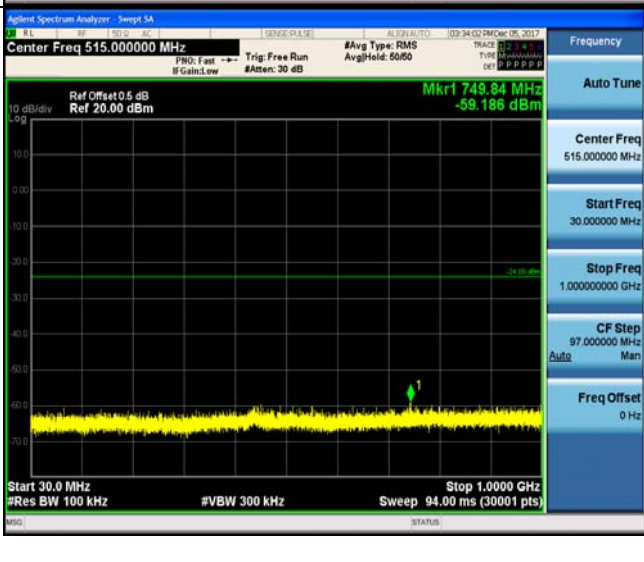
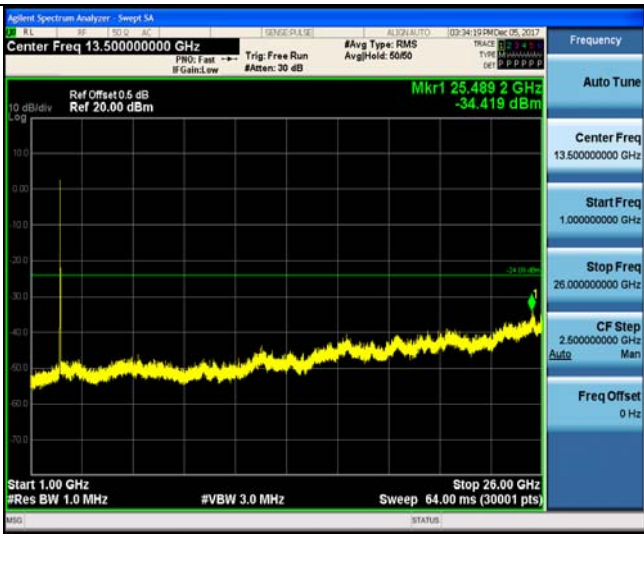
<p>Reference level CH11</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 2.46200000 GHz Mkr1 2.461 40 GHz 3.220 dBm Span 30.00 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.933 ms (1001 pts)</p>
<p>CH11</p>	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 515.000000 MHz Mkr1 981.93 MHz -59.344 dBm Start 30.0 MHz Stop 1.0000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 94.00 ms (30001 pts)</p>
	 <p>Agilent Spectrum Analyzer - Swept SA Center Freq 13.50000000 GHz Mkr1 25.489 2 GHz -34.487 dBm Start 1.00 GHz Stop 26.00 GHz #Res BW 1.0 MHz #VBW 3.0 MHz Sweep 64.00 ms (30001 pts)</p>


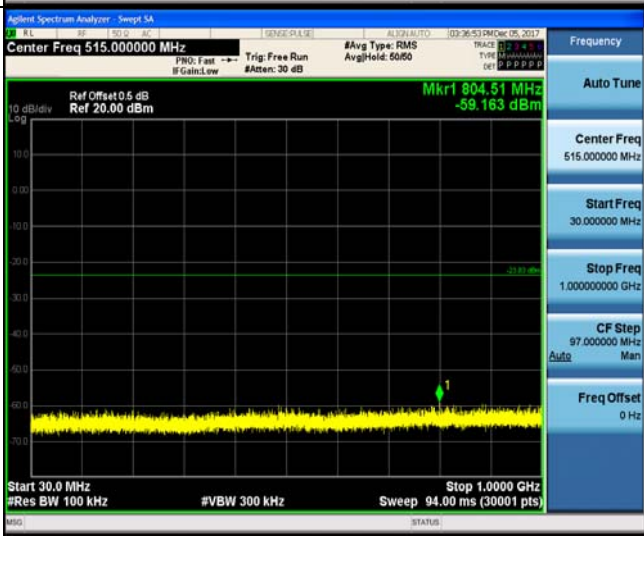
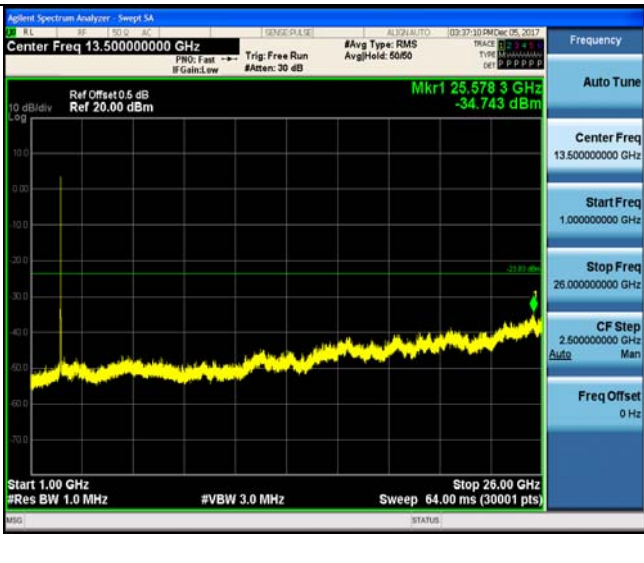
Test Item:	SE	Type:	802.11 g
Reference level CH01			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.412000000 GHz</p> <p>Start Freq 2.397000000 GHz</p> <p>Stop Freq 2.427000000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
CH01			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 515.000000 MHz</p> <p>Start Freq 30.000000 MHz</p> <p>Stop Freq 1.000000000 GHz</p> <p>CF Step 97.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 13.500000000 GHz</p> <p>Start Freq 1.000000000 GHz</p> <p>Stop Freq 26.000000000 GHz</p> <p>CF Step 2.500000000 GHz Auto Man</p> <p>Freq Offset 0 Hz</p>

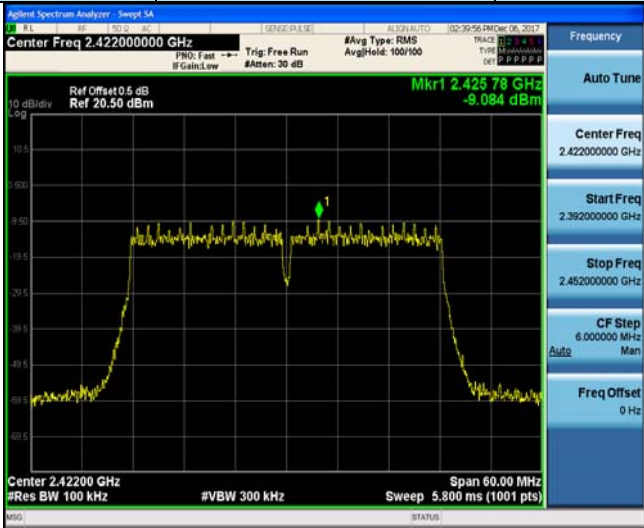
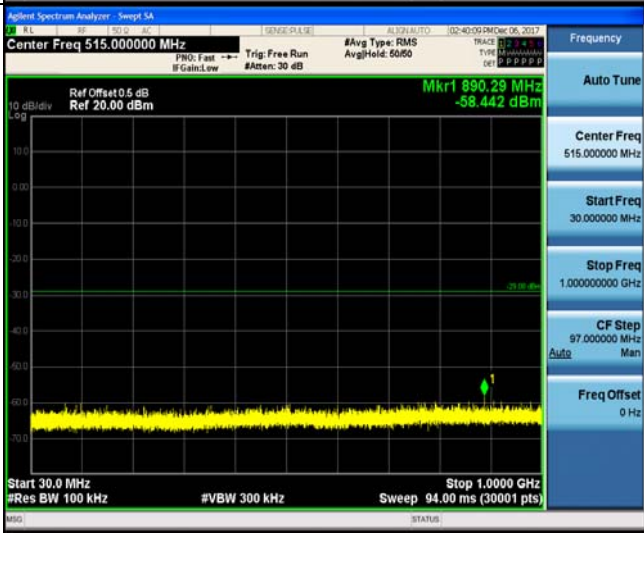
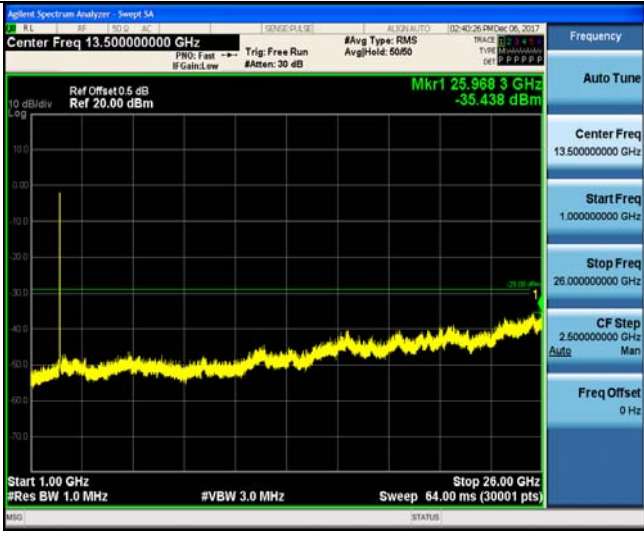
<p>Reference level CH06</p>		
<p>CH06</p>		
		

<p>Reference level CH11</p>		
<p>CH11</p>		
		


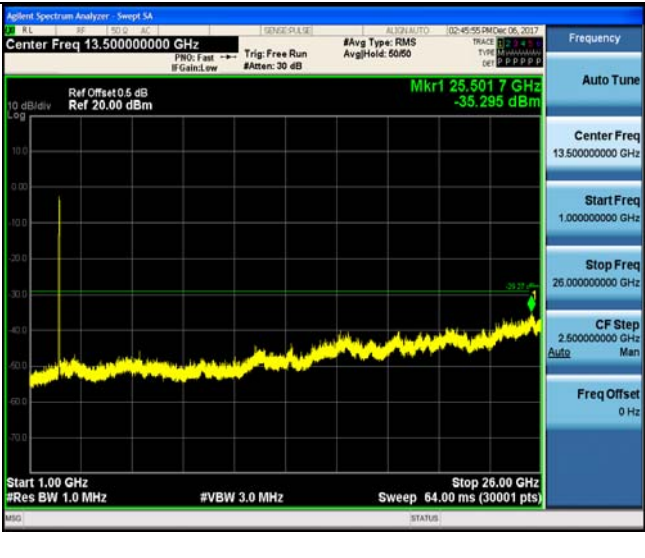
Test Item:	SE	Type:	802.11 n(HT20)
Reference level CH01			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.41200000 GHz</p> <p>Start Freq 2.397000000 GHz</p> <p>Stop Freq 2.427000000 GHz</p> <p>CF Step 3.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
CH01			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 515.000000 MHz</p> <p>Start Freq 30.000000 MHz</p> <p>Stop Freq 1.000000000 GHz</p> <p>CF Step 97.000000 MHz Auto Man</p> <p>Freq Offset 0 Hz</p>
			<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 13.50000000 GHz</p> <p>Start Freq 1.000000000 GHz</p> <p>Stop Freq 26.00000000 GHz</p> <p>CF Step 2.50000000 GHz Auto Man</p> <p>Freq Offset 0 Hz</p>

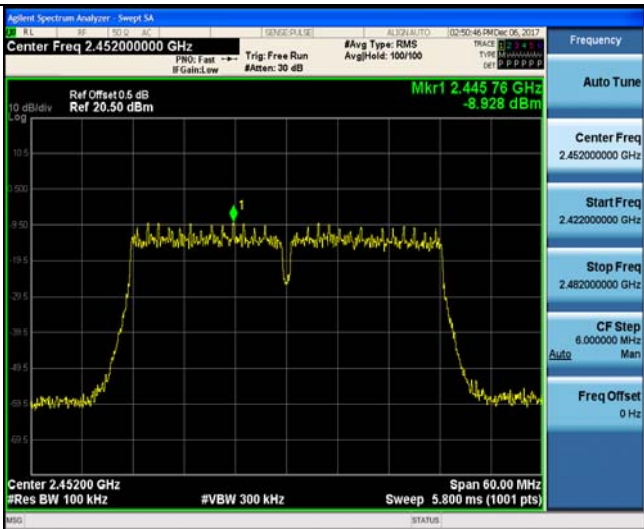
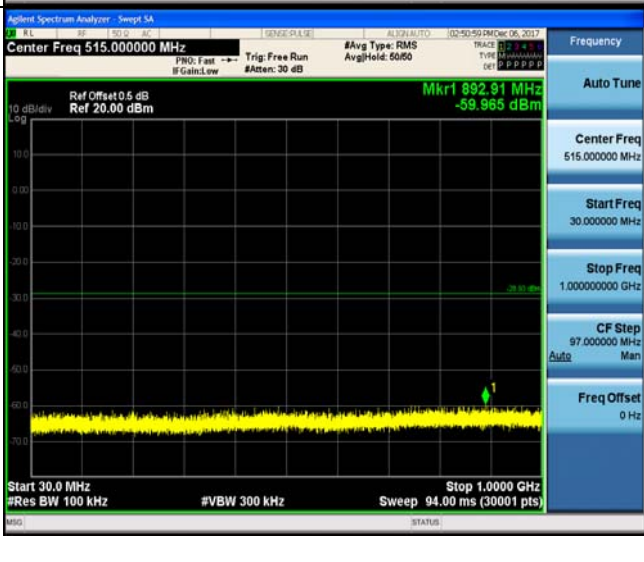
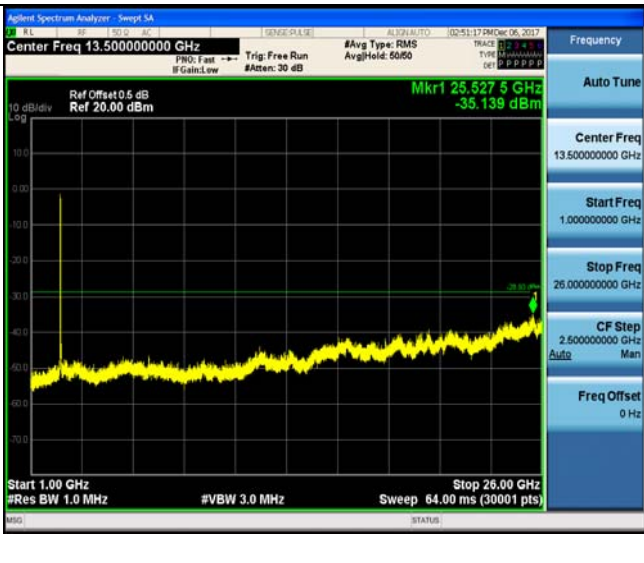
<p>Reference level CH06</p>		
<p>CH06</p>		
		

<p>Reference level CH11</p>		
<p>CH11</p>		
		

Test Item:	SE	Type:	802.11 n(HT40)
Reference level CH03			
CH03			
			



Reference level CH06		
CH06		
		

<p>Reference level CH09</p>		
<p>CH09</p>		
		

### 5.8. Spurious Emissions (radiated)

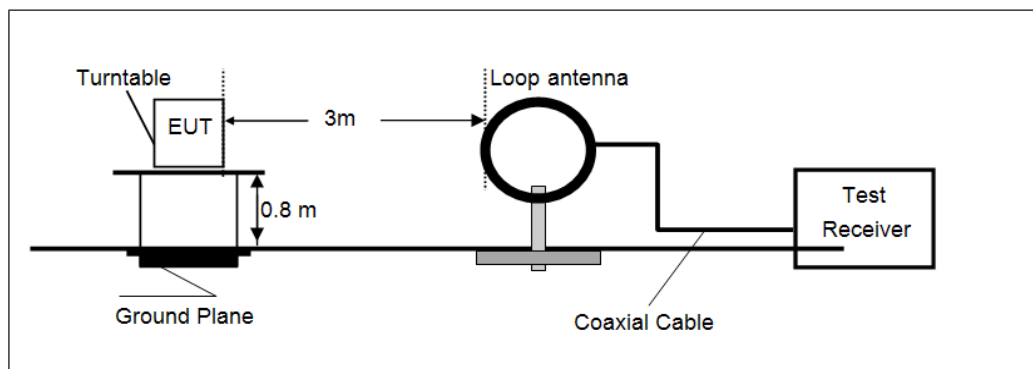
#### LIMIT

#### FCC CFR Title 47 Part 15 Subpart C Section 15.209

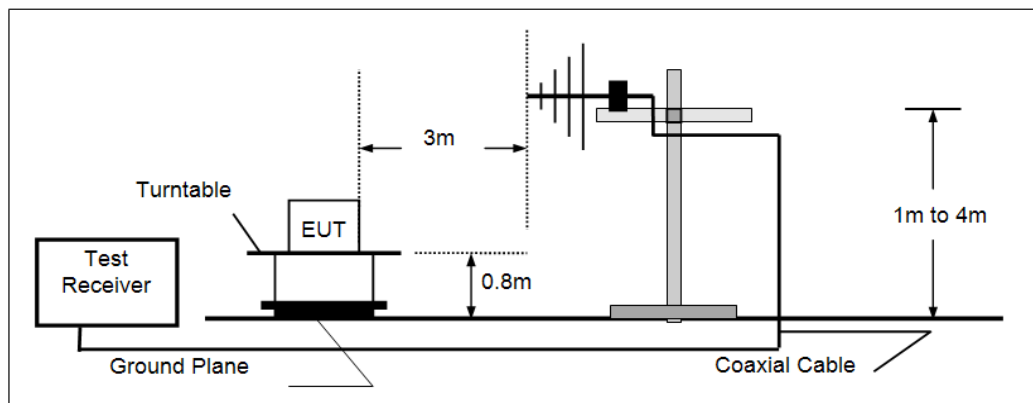
Frequency	Limit (dBuV/m @3m)	Value
30MHz-88MHz	40.00	Quasi-peak
88MHz-216MHz	43.50	Quasi-peak
216MHz-960MHz	46.00	Quasi-peak
960MHz-1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

#### TEST CONFIGURATION

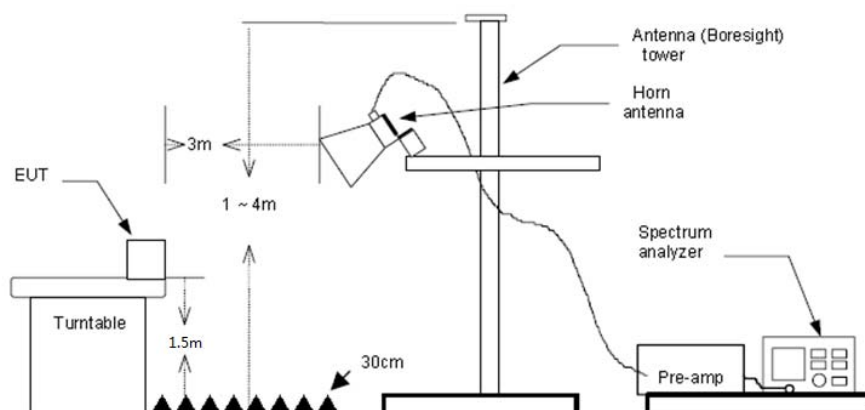
- 9kHz ~30MHz



- 30MHz ~ 1GHz



- Above 1GHz



**TEST PROCEDURE**

1. The EUT was tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
2. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna.
5. Use the following spectrum analyzer settings
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Below 1GHz, RBW=120kHz, VBW=300kHz, Sweep=auto, Detector function=peak, Trace=max hold;  
If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
  - (3) Above 1GHz, RBW=1MHz, VBW=3MHz PEAK detector for Peak value.  
RBW=1MHz, VBW=3MHz RMS detector for Average value.

**TEST MODE:**

Please refer to the clause 3.3

**TEST RESULTS**

**Passed**       **Not Applicable**

Note:

- 1) Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- 2) The emission levels of other frequencies are very lower than the limit and not show in test report.

➤ **9kHz ~ 30MHz**

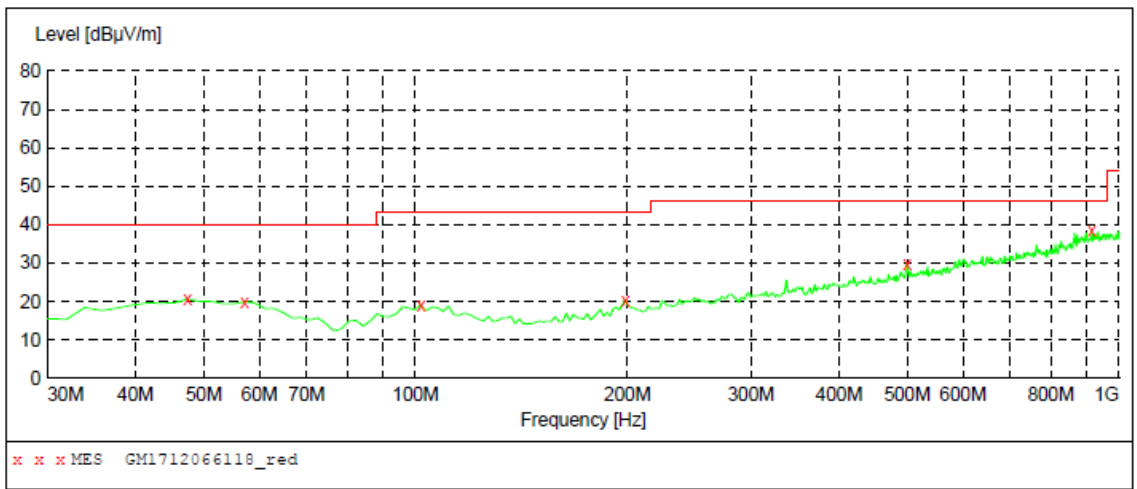
The EUT was pre-scanned the frequency band (9kHz~30MHz), found the radiated level lower than the limit, so don't show on the report.

➤ **30MHz ~1000MHz**

Have pre-scan all modulation mode, found the 802.11b mode CH01 which it was worst case, so only the worst case's data on the test report.

➤ 30MHz ~ 1GHz

Polarization: Vertical

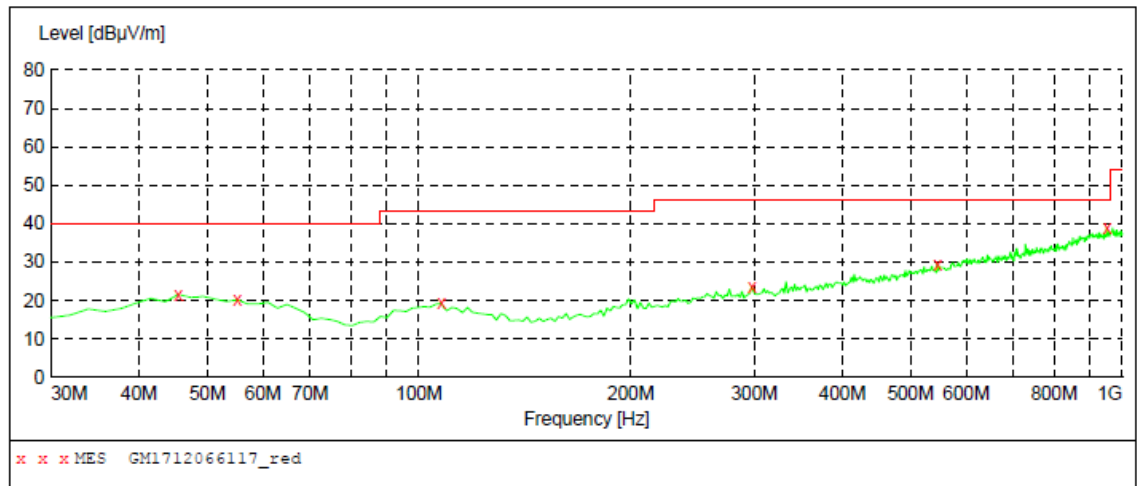


**MEASUREMENT RESULT: "GM1712066118\_red"**

12/6/2017 9:52PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
47.460000	20.70	-8.8	40.0	19.3	QP	100.0	79.00	VERTICAL
57.160000	19.90	-9.4	40.0	20.1	QP	100.0	11.00	VERTICAL
101.780000	19.20	-10.5	43.5	24.3	QP	100.0	199.00	VERTICAL
198.780000	20.30	-9.8	43.5	23.2	QP	100.0	119.00	VERTICAL
499.480000	29.90	-1.8	46.0	16.1	QP	100.0	0.00	VERTICAL
914.640000	38.50	6.9	46.0	7.5	QP	100.0	266.00	VERTICAL

Polarization: Horizontal



**MEASUREMENT RESULT: "GM1712066117\_red"**

12/6/2017 9:48PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
45.520000	21.60	-8.8	40.0	18.4	QP	300.0	217.00	HORIZONTAL
55.220000	20.20	-9.2	40.0	19.8	QP	100.0	57.00	HORIZONTAL
107.600000	19.30	-10.6	43.5	24.2	QP	300.0	360.00	HORIZONTAL
297.720000	23.70	-7.3	46.0	22.3	QP	300.0	89.00	HORIZONTAL
546.040000	29.60	-0.8	46.0	16.4	QP	100.0	284.00	HORIZONTAL
951.500000	38.80	7.3	46.0	7.2	QP	300.0	313.00	HORIZONTAL

## ➤ 1 GHz ~ 25 GHz

802.11b					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1293.17	35.99	26.21	4.82	36.52	30.50	74.00	-43.50	Vertical	Peak
3561.64	34.89	29.19	8.21	38.32	33.97	74.00	-40.03	Vertical	Peak
4547.56	33.85	30.80	9.37	37.32	36.70	74.00	-37.30	Vertical	Peak
5836.04	32.82	32.17	10.60	35.34	40.25	74.00	-33.75	Vertical	Peak
1195.05	35.36	26.26	4.65	36.57	29.70	74.00	-44.30	Horizontal	Peak
3543.55	36.01	29.13	8.18	38.35	34.97	74.00	-39.03	Horizontal	Peak
4821.76	34.14	31.56	9.55	36.90	38.35	74.00	-35.65	Horizontal	Peak
6678.99	32.54	34.20	11.45	35.21	42.98	74.00	-31.02	Horizontal	Peak

802.11b					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1764.12	46.33	25.33	5.89	37.06	40.49	74.00	-33.51	Vertical	Peak
4223.95	33.42	30.05	8.96	37.64	34.79	74.00	-39.21	Vertical	Peak
4871.10	36.47	31.46	9.59	36.76	40.76	74.00	-33.24	Vertical	Peak
7376.08	31.93	36.30	12.04	34.85	45.42	74.00	-28.58	Vertical	Peak
1104.37	37.00	25.54	4.44	36.62	30.36	74.00	-43.64	Horizontal	Peak
1750.70	41.93	25.30	5.86	37.04	36.05	74.00	-37.95	Horizontal	Peak
4278.06	33.76	30.16	9.01	37.61	35.32	74.00	-38.68	Horizontal	Peak
4871.10	38.89	31.46	9.59	36.76	43.18	74.00	-30.82	Horizontal	Peak

802.11b					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1222.74	37.38	26.28	4.70	36.56	31.80	74.00	-42.20	Vertical	Peak
1750.70	39.44	25.30	5.86	37.04	33.56	74.00	-40.44	Vertical	Peak
4920.96	39.18	31.42	9.62	36.62	43.60	74.00	-30.40	Vertical	Peak
8022.46	33.83	37.08	12.35	34.53	48.73	74.00	-25.27	Vertical	Peak
1232.12	35.20	26.27	4.71	36.55	29.63	74.00	-44.37	Horizontal	Peak
1818.84	34.01	25.38	5.99	37.16	28.22	74.00	-45.78	Horizontal	Peak
4933.50	38.78	31.43	9.63	36.59	43.25	74.00	-30.75	Horizontal	Peak
7009.96	31.85	35.33	11.85	34.80	44.23	74.00	-29.77	Horizontal	Peak

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.

802.11g					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1289.89	35.64	26.21	4.81	36.52	30.14	74.00	-43.86	Vertical	Peak
1702.36	35.10	25.20	5.77	36.93	29.14	74.00	-44.86	Vertical	Peak
3033.91	35.40	28.67	7.52	38.22	33.37	74.00	-40.63	Vertical	Peak
5836.04	32.79	32.17	10.60	35.34	40.22	74.00	-33.78	Vertical	Peak
1219.64	35.24	26.28	4.69	36.56	29.65	74.00	-44.35	Horizontal	Peak
1750.70	43.85	25.30	5.86	37.04	37.97	74.00	-36.03	Horizontal	Peak
3033.91	36.43	28.67	7.52	38.22	34.40	74.00	-39.60	Horizontal	Peak
4821.76	35.26	31.56	9.55	36.90	39.47	74.00	-34.53	Horizontal	Peak

802.11g					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1198.10	35.41	26.29	4.66	36.57	29.79	74.00	-44.21	Vertical	Peak
1809.61	33.82	25.39	5.97	37.15	28.03	74.00	-45.97	Vertical	Peak
3104.22	34.33	28.80	7.61	38.21	32.53	74.00	-41.47	Vertical	Peak
7338.62	33.32	36.30	12.01	34.90	46.73	74.00	-27.27	Vertical	Peak
1219.64	37.37	26.28	4.69	36.56	31.78	74.00	-42.22	Horizontal	Peak
3192.37	34.86	28.80	7.71	38.20	33.17	74.00	-40.83	Horizontal	Peak
4871.10	36.84	31.46	9.59	36.76	41.13	74.00	-32.87	Horizontal	Peak
6781.78	33.31	34.04	11.58	35.02	43.91	74.00	-30.09	Horizontal	Peak

802.11g					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1182.94	35.68	26.17	4.62	36.58	29.89	74.00	-44.11	Vertical	Peak
3507.65	34.58	29.02	8.13	38.40	33.33	74.00	-40.67	Vertical	Peak
4920.96	35.04	31.42	9.62	36.62	39.46	74.00	-34.54	Vertical	Peak
7961.43	32.98	36.95	12.49	34.63	47.79	74.00	-26.21	Vertical	Peak
1235.26	35.69	26.26	4.72	36.55	30.12	74.00	-43.88	Horizontal	Peak
1755.16	34.78	25.31	5.87	37.05	28.91	74.00	-45.09	Horizontal	Peak
4933.50	39.35	31.43	9.63	36.59	43.82	74.00	-30.18	Horizontal	Peak
7527.83	33.07	36.13	12.49	34.92	46.77	74.00	-27.23	Horizontal	Peak

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.

802.11n(HT20)					CH01				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1216.53	35.86	26.28	4.69	36.56	30.27	74.00	-43.73	Vertical	Peak
2195.85	32.75	27.47	6.44	37.34	29.32	74.00	-44.68	Vertical	Peak
4299.89	34.82	30.20	9.03	37.61	36.44	74.00	-37.56	Vertical	Peak
7880.77	32.28	36.59	12.87	34.85	46.89	74.00	-27.11	Vertical	Peak
1219.64	35.63	26.28	4.69	36.56	30.04	74.00	-43.96	Horizontal	Peak
3824.76	34.82	29.62	8.53	38.22	34.75	74.00	-39.25	Horizontal	Peak
5112.49	32.90	31.85	9.76	36.29	38.22	74.00	-35.78	Horizontal	Peak
8063.40	32.57	37.04	12.45	34.54	47.52	74.00	-26.48	Horizontal	Peak

802.11n(HT20)					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1346.93	35.59	26.06	4.91	36.49	30.07	74.00	-43.93	Vertical	Peak
1702.36	34.78	25.20	5.77	36.93	28.82	74.00	-45.18	Vertical	Peak
5217.66	36.37	31.46	9.86	36.25	41.44	74.00	-32.56	Vertical	Peak
8002.06	33.67	37.10	12.30	34.53	48.54	74.00	-25.46	Vertical	Peak
1182.94	35.83	26.17	4.62	36.58	30.04	74.00	-43.96	Horizontal	Peak
1899.28	37.73	25.30	6.11	37.22	31.92	74.00	-42.08	Horizontal	Peak
4871.10	36.09	31.46	9.59	36.76	40.38	74.00	-33.62	Horizontal	Peak
8002.06	32.86	37.10	12.30	34.53	47.73	74.00	-26.27	Horizontal	Peak

802.11n(HT20)					CH11				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1296.47	35.56	26.20	4.82	36.52	30.06	74.00	-43.94	Vertical	Peak
1755.16	35.32	25.31	5.87	37.05	29.45	74.00	-44.55	Vertical	Peak
4933.50	34.14	31.43	9.63	36.59	38.61	74.00	-35.39	Vertical	Peak
8571.38	34.20	37.19	12.88	34.48	49.79	74.00	-24.21	Vertical	Peak
1273.57	35.62	26.23	4.79	36.53	30.11	74.00	-43.89	Horizontal	Peak
1750.70	36.10	25.30	5.86	37.04	30.22	74.00	-43.78	Horizontal	Peak
4444.56	33.64	30.59	9.20	37.49	35.94	74.00	-38.06	Horizontal	Peak
5821.21	40.01	32.14	10.60	35.33	47.42	74.00	-26.58	Horizontal	Peak

## Remark:

- Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
- The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
- The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.



802.11n(HT40)					CH03				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1216.53	36.51	26.28	4.69	36.56	30.92	74.00	-43.08	Vertical	Peak
1711.05	34.89	25.22	5.79	36.95	28.95	74.00	-45.05	Vertical	Peak
3681.47	35.37	29.30	8.36	38.25	34.78	74.00	-39.22	Vertical	Peak
6851.19	32.93	34.36	11.66	34.94	44.01	74.00	-29.99	Vertical	Peak
1216.53	36.37	26.28	4.69	36.56	30.78	74.00	-43.22	Horizontal	Peak
1715.41	35.32	25.23	5.80	36.96	29.39	74.00	-44.61	Horizontal	Peak
4138.80	36.17	29.94	8.89	37.79	37.21	74.00	-36.79	Horizontal	Peak
5971.29	33.51	32.44	10.66	35.43	41.18	74.00	-32.82	Horizontal	Peak

802.11n(HT40)					CH06				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1241.56	35.36	26.26	4.73	36.55	29.80	74.00	-44.20	Vertical	Peak
1764.12	34.44	25.33	5.89	37.06	28.60	74.00	-45.40	Vertical	Peak
4983.99	32.59	31.48	9.66	36.44	37.29	74.00	-36.71	Vertical	Peak
7961.43	32.48	36.95	12.49	34.63	47.29	74.00	-26.71	Vertical	Peak
1219.64	35.84	26.28	4.69	36.56	30.25	74.00	-43.75	Horizontal	Peak
1764.12	35.94	25.33	5.89	37.06	30.10	74.00	-43.90	Horizontal	Peak
5177.97	35.01	31.59	9.81	36.22	40.19	74.00	-33.81	Horizontal	Peak
9490.10	33.35	39.03	13.71	35.24	50.85	74.00	-23.15	Horizontal	Peak

802.11n(HT40)					CH09				
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	Test value
1782.18	41.85	25.37	5.93	37.10	36.05	74.00	-37.95	Vertical	Peak
3873.75	34.89	29.67	8.60	38.19	34.97	74.00	-39.03	Vertical	Peak
5191.17	34.32	31.54	9.82	36.21	39.47	74.00	-34.53	Vertical	Peak
7338.62	32.52	36.30	12.01	34.90	45.93	74.00	-28.07	Vertical	Peak
1388.71	33.40	25.93	4.98	36.47	27.84	74.00	-46.16	Horizontal	Peak
3700.26	33.68	29.30	8.39	38.25	33.12	74.00	-40.88	Horizontal	Peak
5047.83	32.50	31.69	9.71	36.35	37.55	74.00	-36.45	Horizontal	Peak
8527.85	32.01	37.01	12.88	34.43	47.47	74.00	-26.53	Horizontal	Peak

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies(test frequency band is 1GHz to 25GHz) are very lower than the limit and not show in test report.

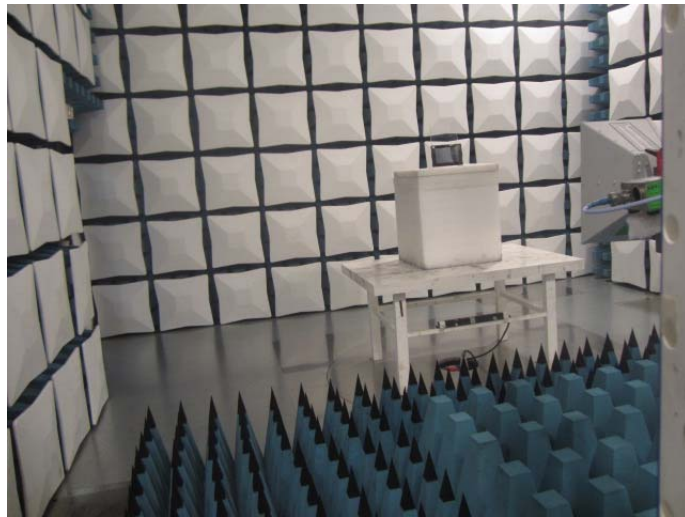
## 6. TEST SETUP PHOTOS

### Conducted Emissions



### Radiated Emissions





## 7. EXTERANAL AND INTERNAL PHOTOS

Reference to the test report No.: TRE1712001101.

.....**End of Report**.....