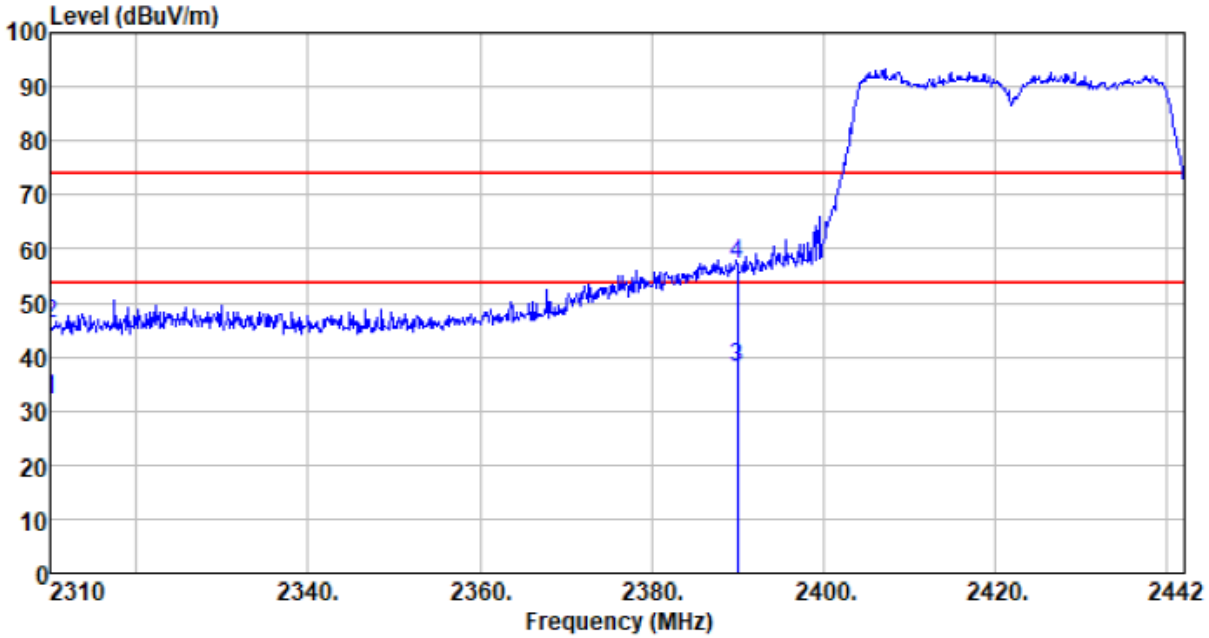
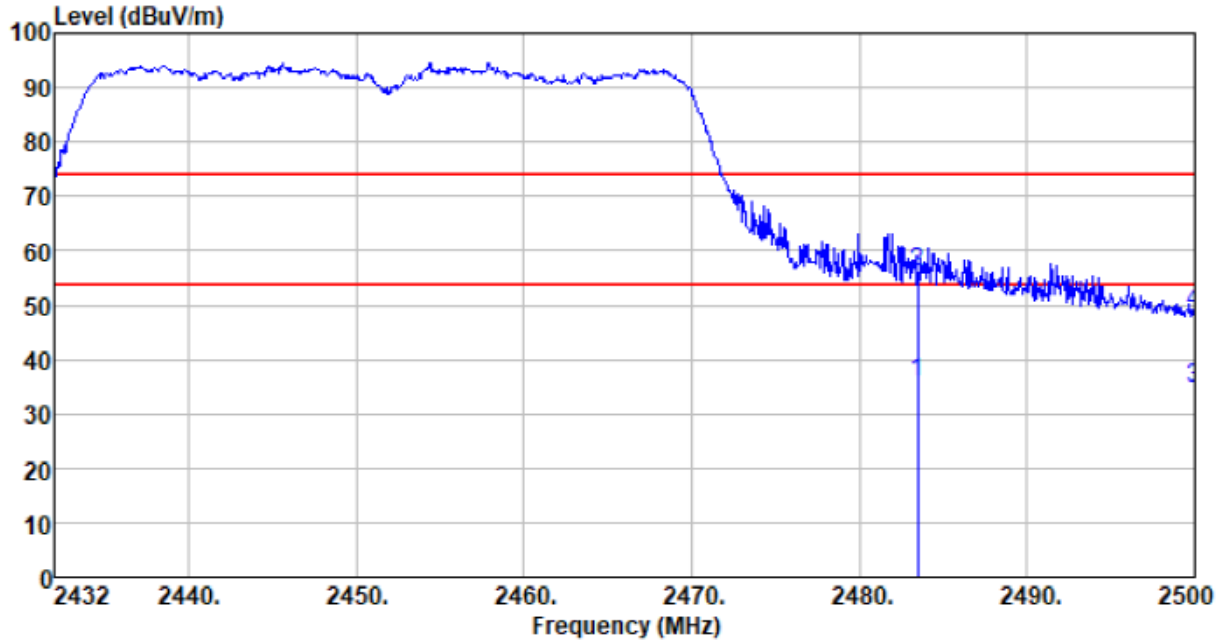
Vertical:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2310.000	32.64	27.14	2.81	30.43	32.16	54.00	-21.84	Average
2310.000	46.76	27.14	2.81	30.43	46.28	74.00	-27.72	Peak
2390.000	37.82	27.37	2.91	30.24	37.86	54.00	-16.14	Average
2390.000	57.31	27.37	2.91	30.24	57.35	74.00	-16.65	Peak

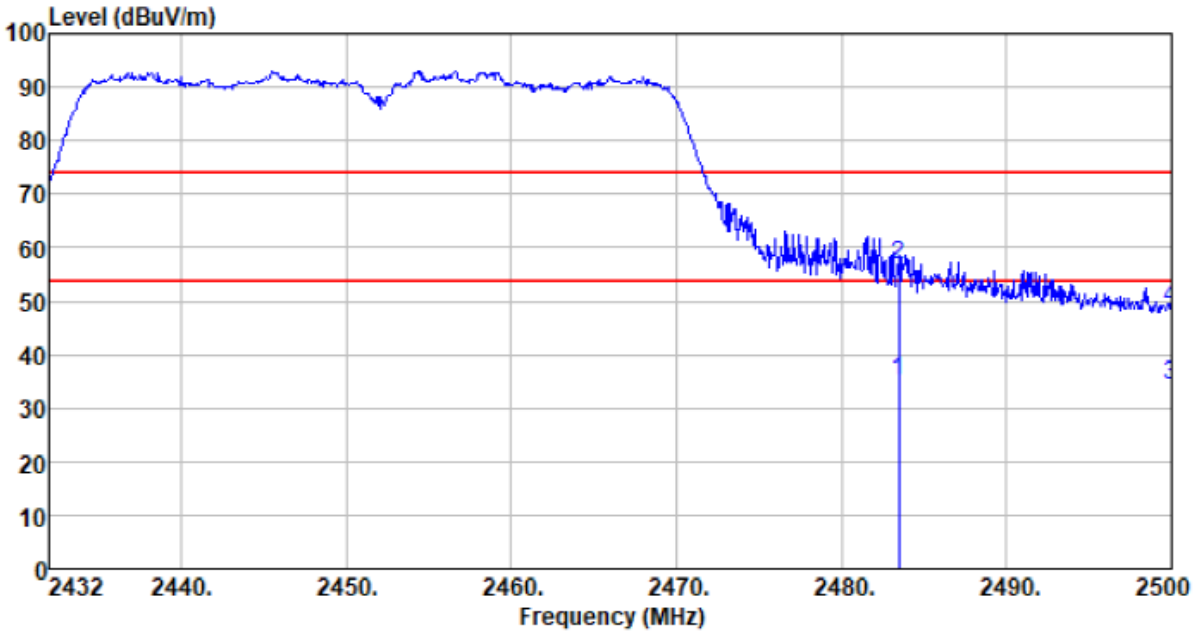
Test mode:	802.11n(HT40)	Test channel:	Highest

Horizontal:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
2483.500	35.10	27.66	2.99	30.12	35.63	54.00	-18.37	Average
2483.500	55.45	27.66	2.99	30.12	55.98	74.00	-18.02	Peak
2500.000	34.02	27.70	3.01	30.13	34.60	54.00	-19.40	Average
2500.000	48.18	27.70	3.01	30.13	48.76	74.00	-25.24	Peak

Vertical:



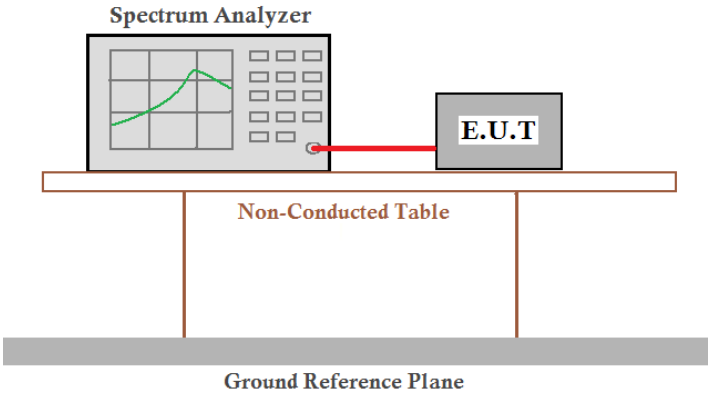
Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
2483.500	34.64	27.66	2.99	30.12	35.17	54.00	-18.83	Average
2483.500	56.26	27.66	2.99	30.12	56.79	74.00	-17.21	Peak
2500.000	33.80	27.70	3.01	30.13	34.38	54.00	-19.62	Average
2500.000	47.94	27.70	3.01	30.13	48.52	74.00	-25.48	Peak

Remarks:

1. *Only the worst case Main Antenna test data.*
2. *The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (lowest and highest frequencies) data was showed.*
3. *Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
4. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

7.7 Spurious Emission

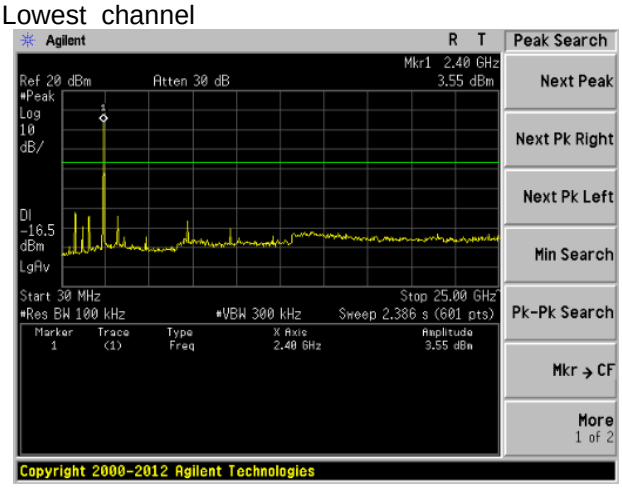
7.7.1 Conducted Emission Method

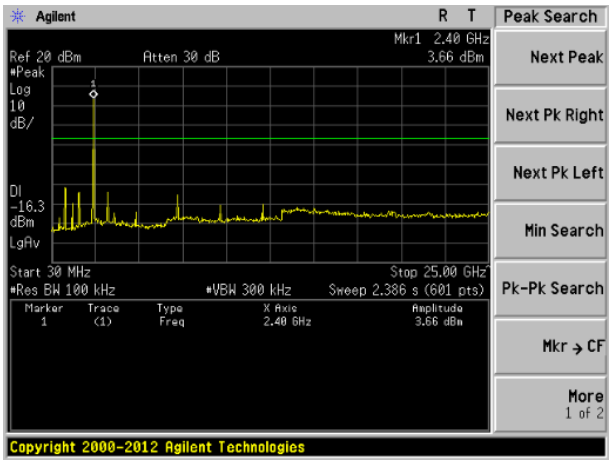
Test Requirement:	FCC Part15 C Section 15.247 (d) RSS-247 Section 5.5
Test Method:	KDB558074 D01 DTS Meas Guidance v05r02 ANSI C63.10:2013 & RSS-Gen
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that 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 setup:	
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Test plot as follows:

ANT 1	802.11b	ANT 2	802.11b

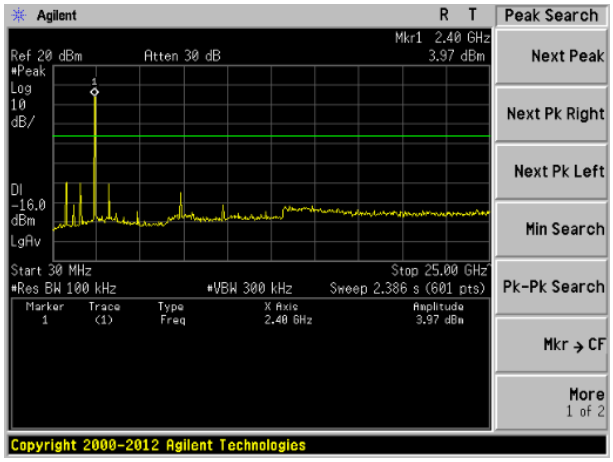
Lowest channel

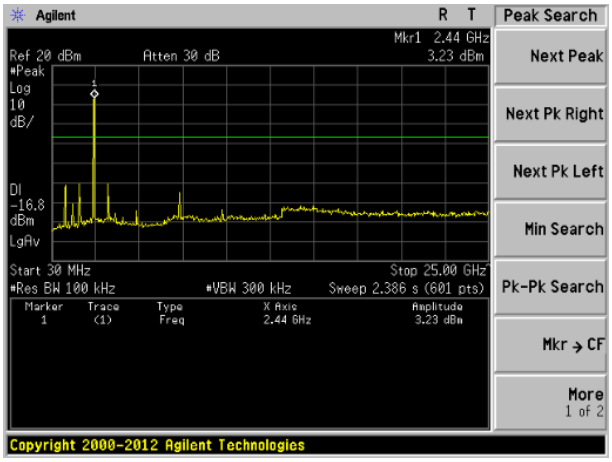




30MHz~25GHz

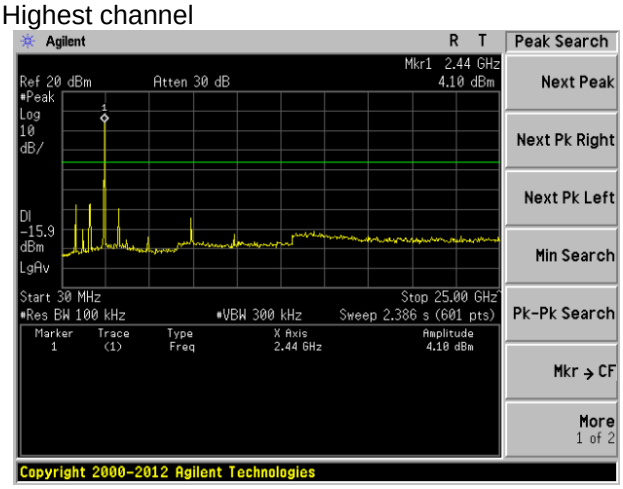
Middle channel

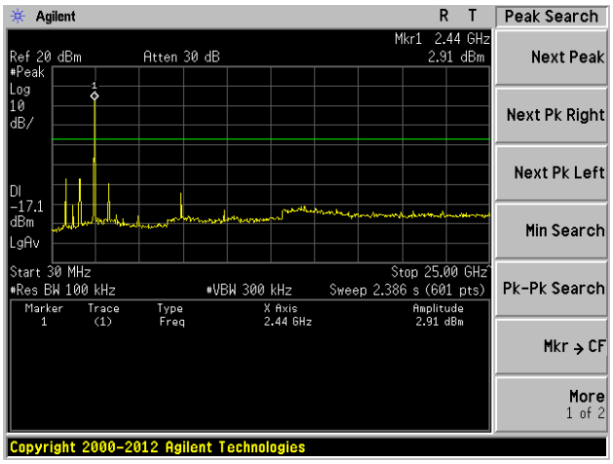




30MHz~25GHz

Highest channel

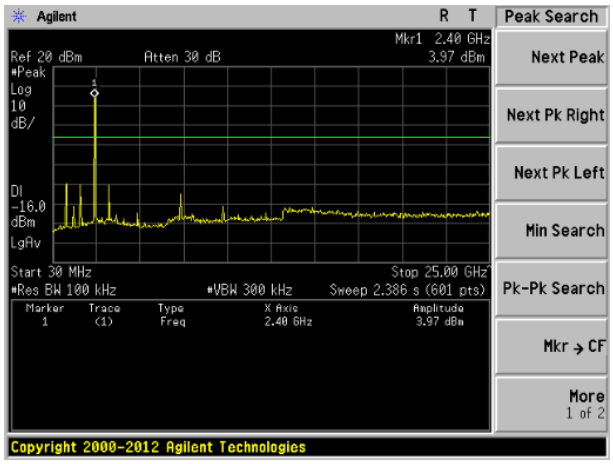


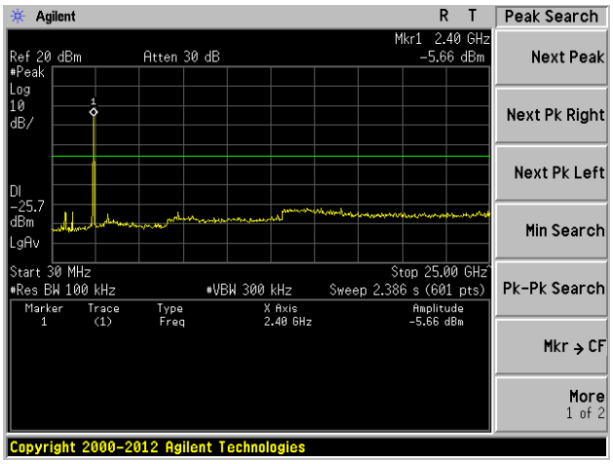


30MHz~25GHz

ANT 1	802.11g	ANT 2	802.11g

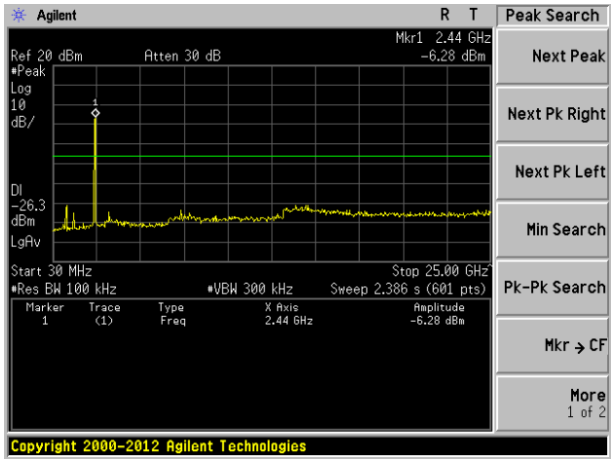
Lowest channel

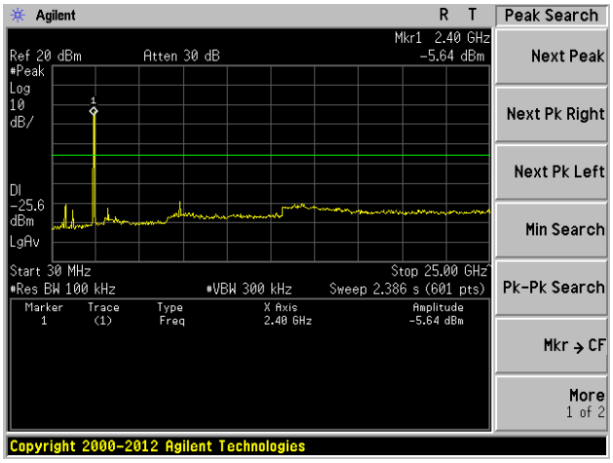




30MHz~25GHz

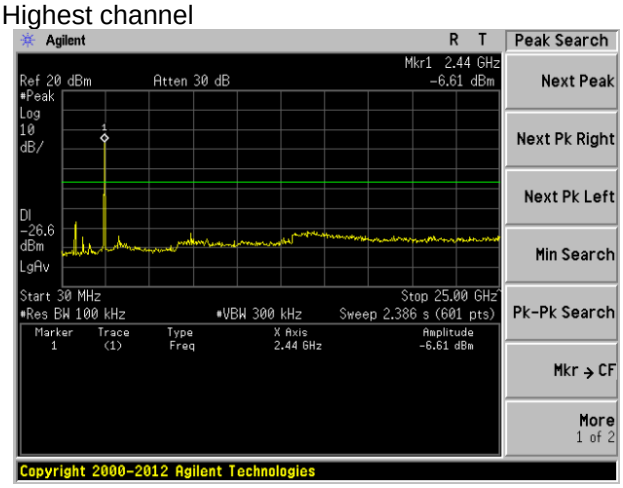
Middle channel

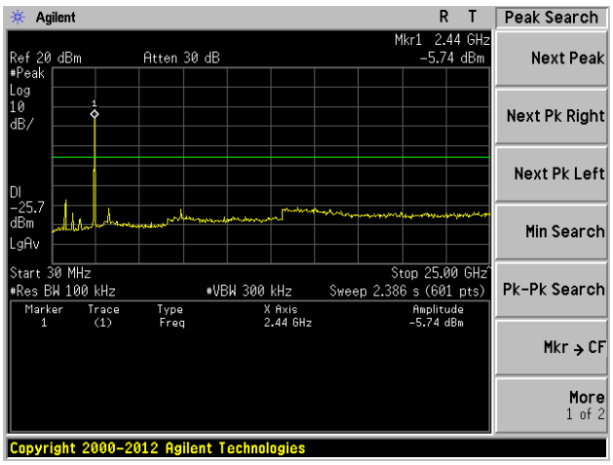




30MHz~25GHz

Highest channel

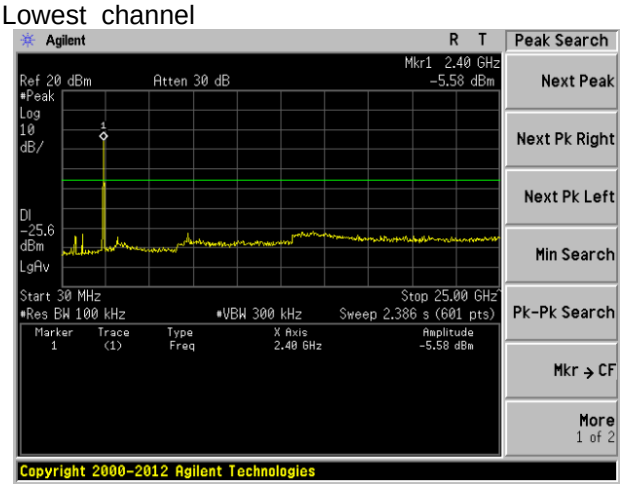


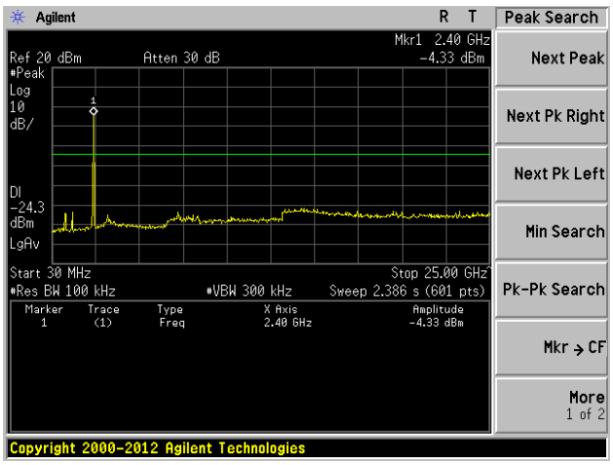


30MHz~25GHz

ANT 1	802.11n(HT20)	ANT 2	802.11n(HT20)

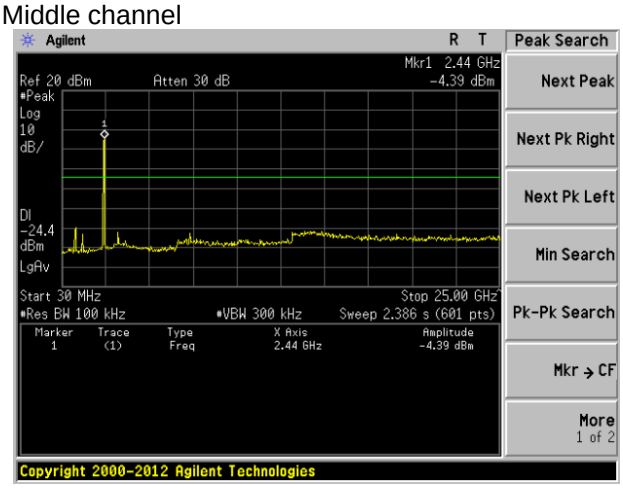
Lowest channel

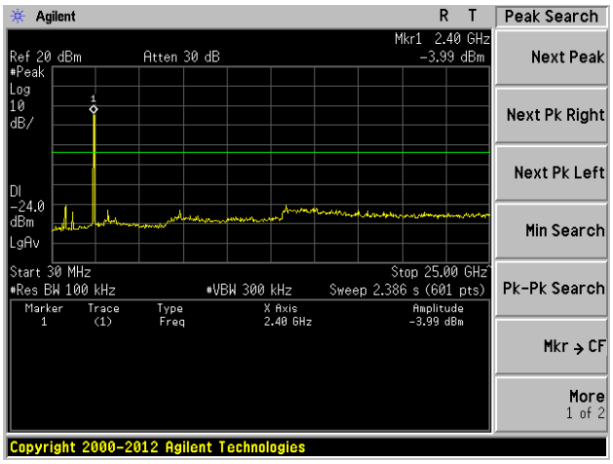




30MHz~25GHz

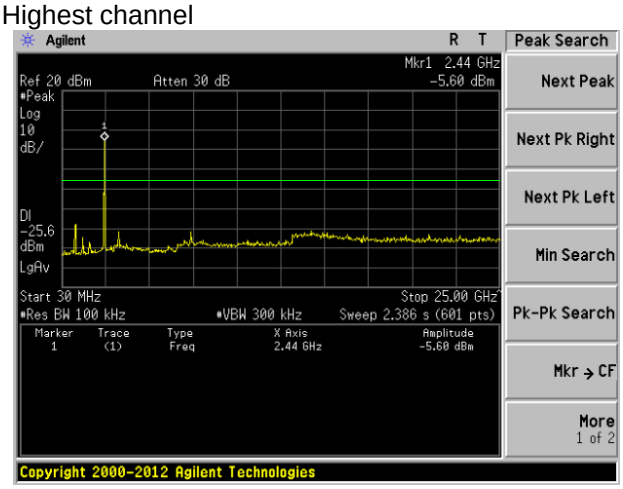
Middle channel

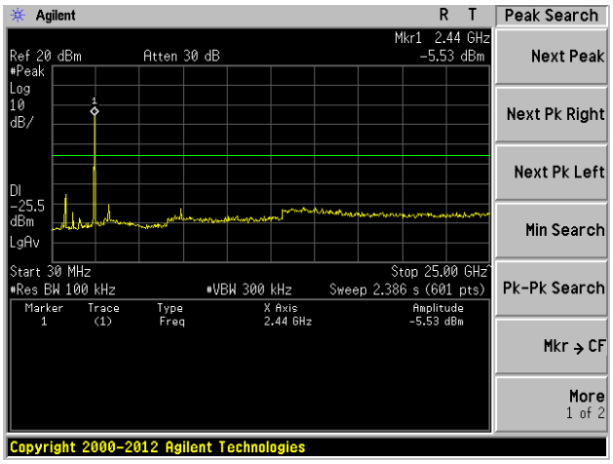




30MHz~25GHz

Highest channel

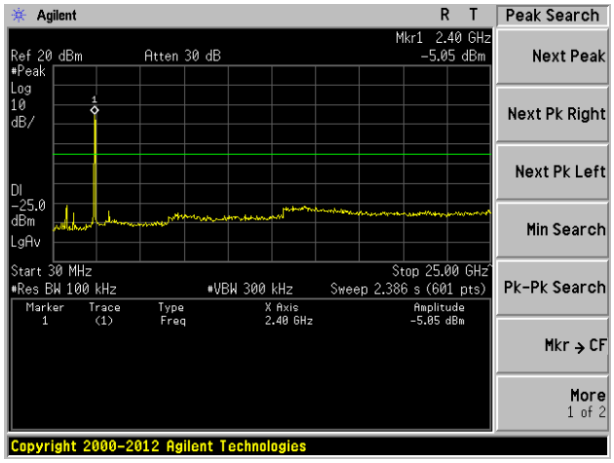


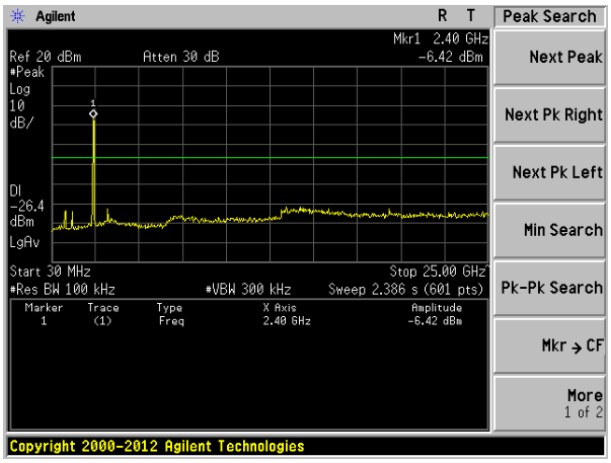


30MHz~25GHz

ANT 1	802.11n(HT40)	ANT 2	802.11n(HT40)

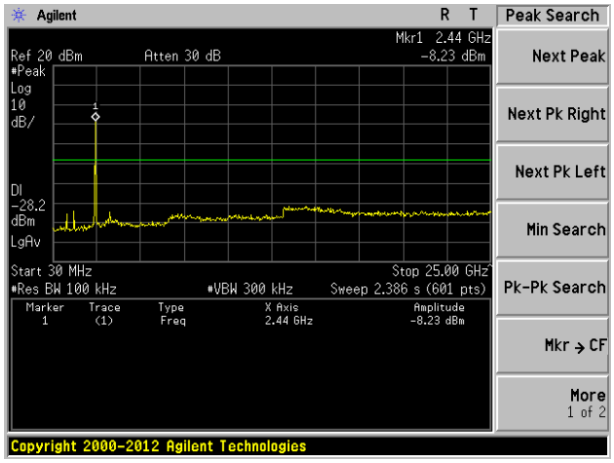
Lowest channel

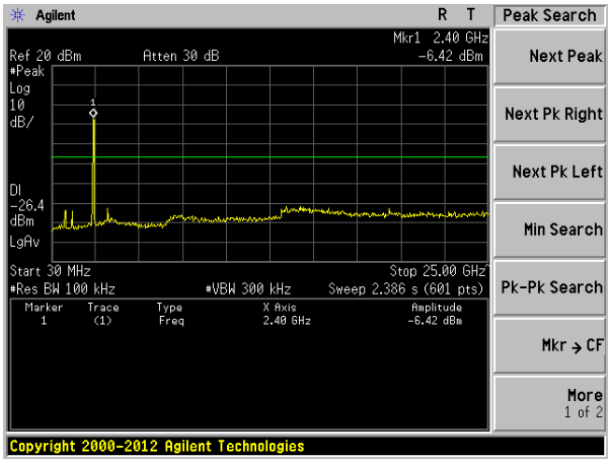




30MHz~25GHz

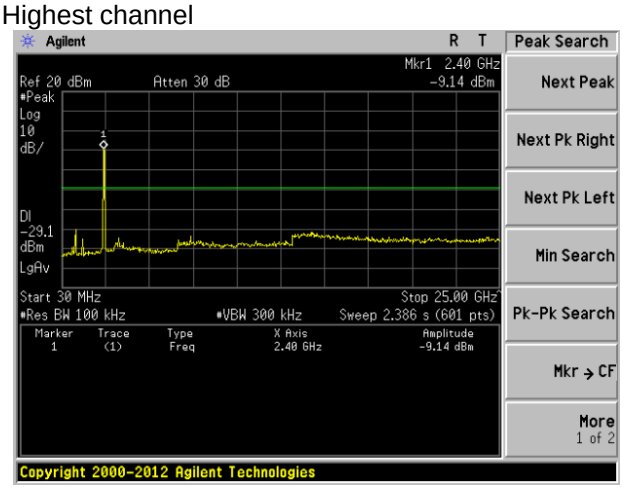
Middle channel

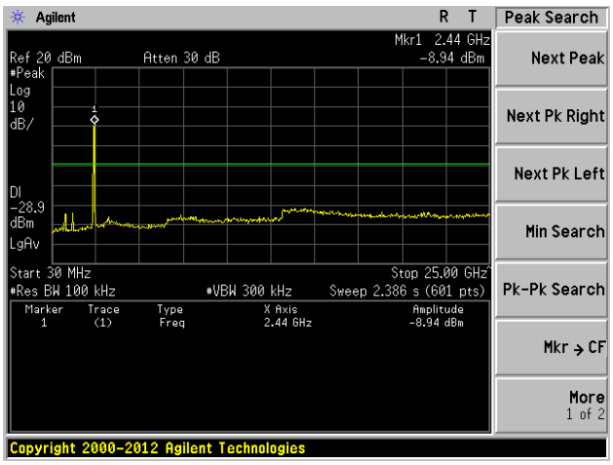




30MHz~25GHz

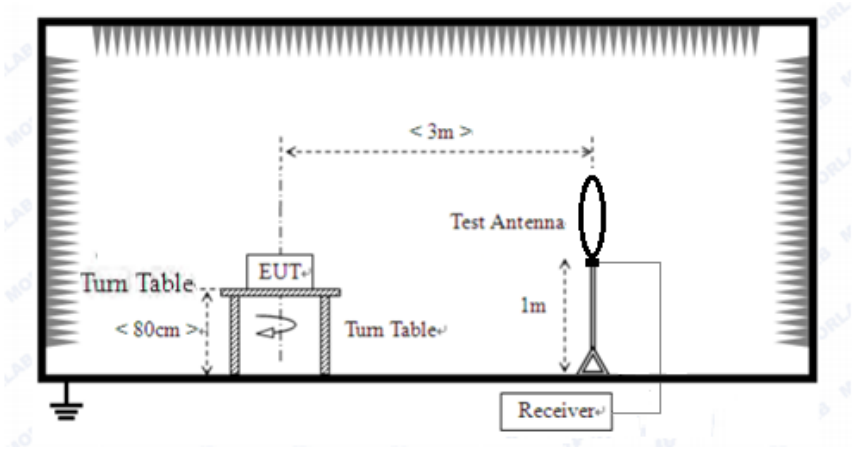
Highest channel



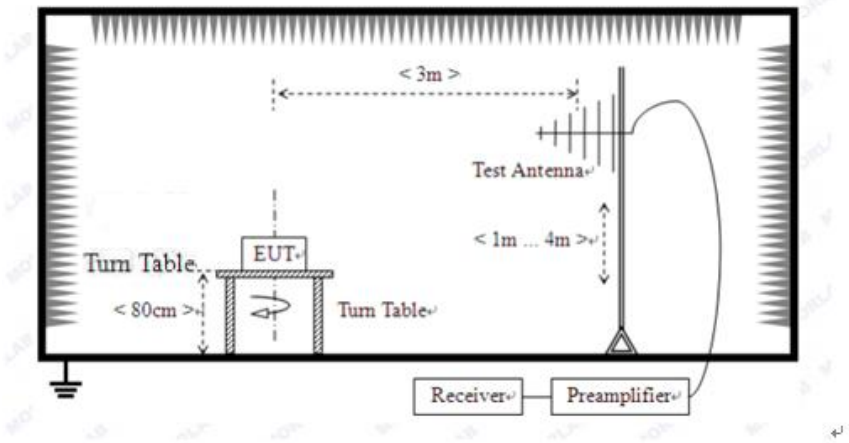


30MHz~25GHz

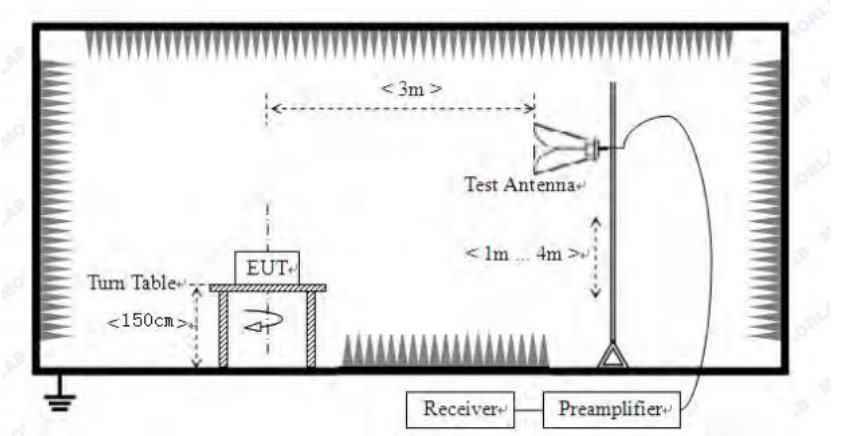
7.7.2 Radiated Emission Method

<table>
<tr><td>Test Requirement:</td><td>FCC Part15 C Section 15.209
RSS-247 Section 3.3 & RSS-Gen Section 8.9</td></tr>
<tr><td>Test Method:</td><td>ANSI C63.10: 2013 & RSS-Gen</td></tr>
<tr><td>Test Frequency Range:</td><td>9kHz to 25GHz</td></tr>
<tr><td>Test site:</td><td>Measurement Distance: 3m</td></tr>
<tr><td>Receiver setup:</td><td>
<table>
<tr><th>Frequency</th><th>Detector</th><th>RBW</th><th>VBW</th><th>Value</th></tr>
<tr><td>9KHz-150KHz</td><td>Quasi-peak</td><td>200Hz</td><td>600Hz</td><td>Quasi-peak</td></tr>
<tr><td>150KHz-30MHz</td><td>Quasi-peak</td><td>9KHz</td><td>30KHz</td><td>Quasi-peak</td></tr>
<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>
</table>
</td></tr>
<tr><td>Limit:</td><td>
<table>
<tr><th>Frequency</th><th>Limit (uV/m)</th><th>Value</th><th>Measurement Distance</th></tr>
<tr><td>0.009MHz-0.490MHz</td><td>2400/F(KHz)</td><td>QP</td><td>300m</td></tr>
<tr><td>0.490MHz-1.705MHz</td><td>24000/F(KHz)</td><td>QP</td><td>300m</td></tr>
<tr><td>1.705MHz-30MHz</td><td>30</td><td>QP</td><td>30m</td></tr>
<tr><td>30MHz-88MHz</td><td>100</td><td>QP</td><td rowspan="6">3m</td></tr>
<tr><td>88MHz-216MHz</td><td>150</td><td>QP</td></tr>
<tr><td>216MHz-960MHz</td><td>200</td><td>QP</td></tr>
<tr><td>960MHz-1GHz</td><td>500</td><td>QP</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>500</td><td>Average</td></tr>
<tr><td>5000</td><td>Peak</td></tr>
</table>
</td></tr>
<tr><td>Test setup:</td><td>For radiated emissions from 9kHz to 30MHz
 

For radiated emissions from 30MHz to1GHz</td></tr>
</table>



For radiated emissions above 1GHz



Test Procedure:

1. The EUT was placed on the top of a rotating table (0.8m for below 1G and 1.5m for above 1G) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. 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.
4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. 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.					
Test Instruments:	Refer to section 6.0 for details					
Test mode:	Refer to section 5.2 for details					
Test voltage:	AC120V 60Hz					
Test environment:	Temp.:	25 °C	Humid.:	52%	Press.:	1012mbar
Test results:	Pass					

Remarks:

1. *Only the worst case ANT 1 test data.*
2. *Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.*

Measurement data:

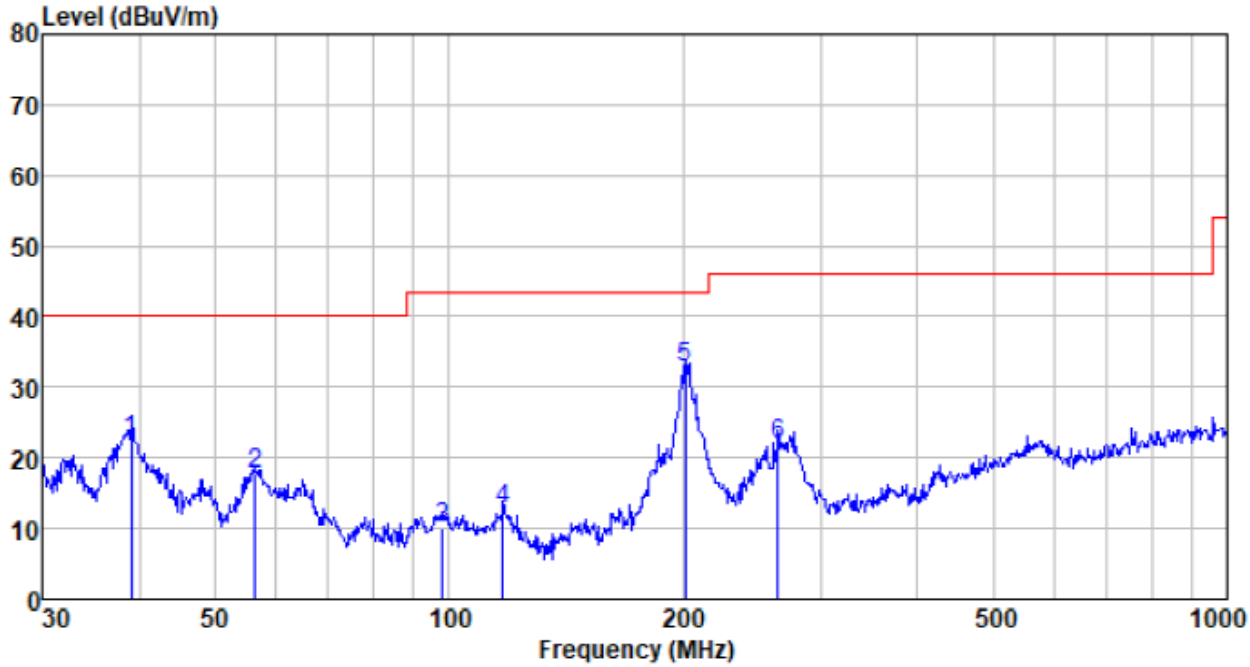
■ **9kHz~30MHz**

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and according to 15.31(o) & RSS-Gen 6.13, the test result no need to reported.

■ **Below 1GHz**

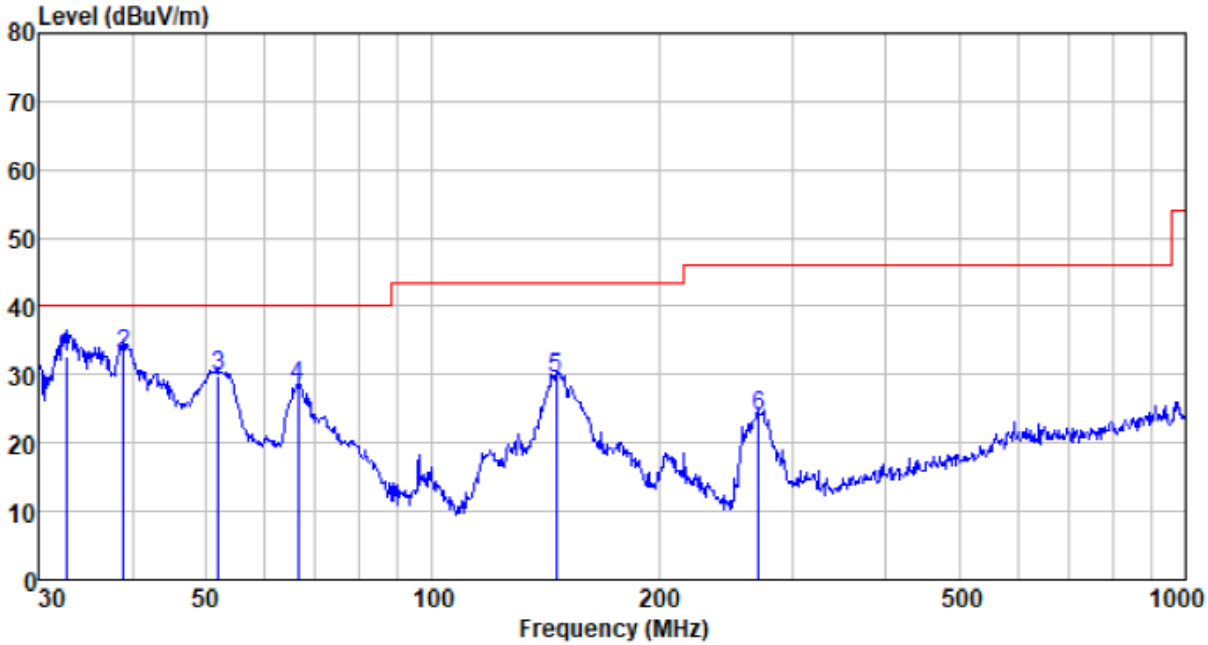
Pre-scan all test modes, found worst case at 802.11b 2412MHz of ANT 1, and so only show the test result of 802.11b 2412MHz of ANT 1

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
39.024	45.47	12.04	0.65	35.61	22.55	40.00	-17.45	QP
56.395	41.50	11.65	0.83	36.27	17.71	40.00	-22.29	QP
98.142	33.75	11.93	1.18	36.71	10.15	43.50	-33.35	QP
117.360	38.42	9.92	1.34	36.86	12.82	43.50	-30.68	QP
201.393	57.70	10.44	1.85	37.33	32.66	43.50	-10.84	QP
264.746	44.47	12.62	2.19	37.39	21.89	46.00	-24.11	QP

Vertical:



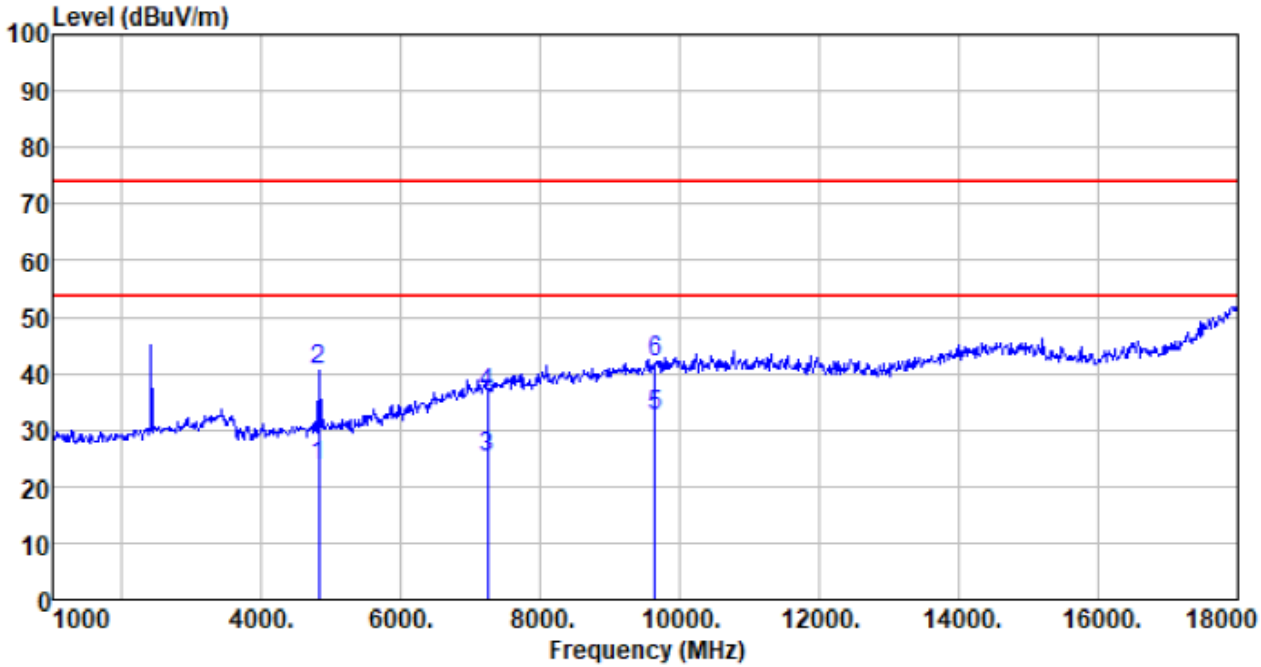
Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
32.634	56.02	11.25	0.58	35.19	32.66	40.00	-7.34	QP
38.888	55.89	12.01	0.65	35.60	32.95	40.00	-7.05	QP
52.025	53.12	12.07	0.79	36.21	29.77	40.00	-10.23	QP
66.266	55.03	8.88	0.91	36.40	28.42	40.00	-11.58	QP
145.861	57.60	7.51	1.54	37.05	29.60	43.50	-13.90	QP
271.325	46.19	12.80	2.23	37.40	23.82	46.00	-22.18	QP

■ **Above 1GHz**

All antennas have test, only the worst case ANT 1 report.

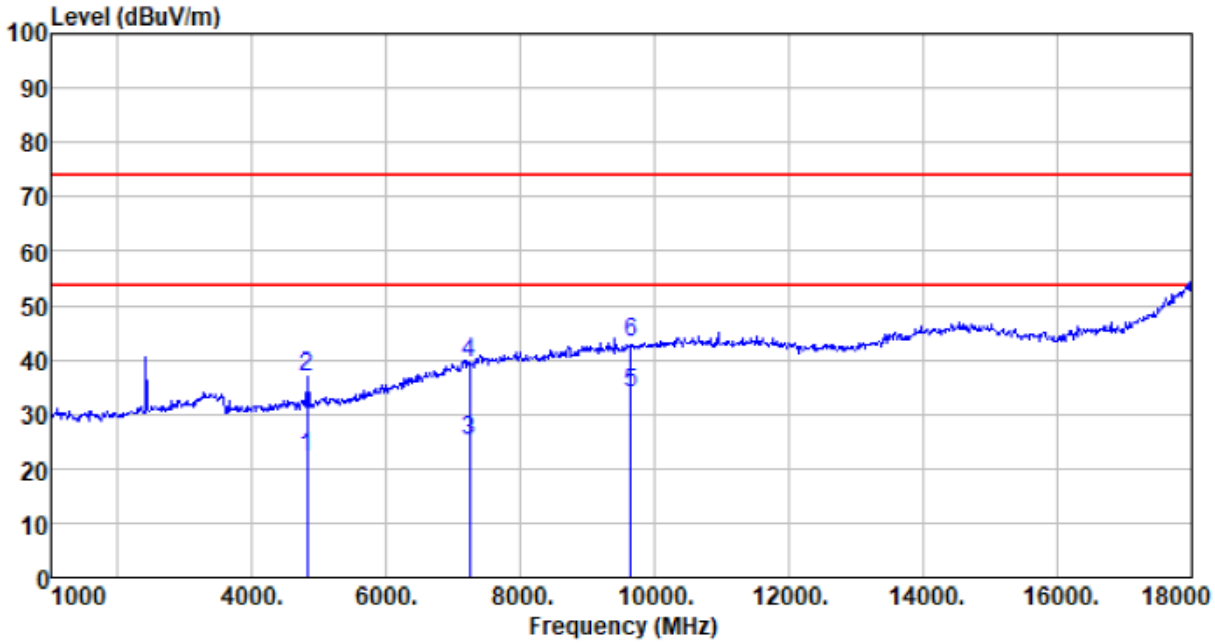
Test mode:	802.11b	Test channel:	Lowest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	25.34	31.22	4.63	37.73	23.46	54.00	-30.54	Average
4824.000	42.59	31.22	4.63	37.73	40.71	74.00	-33.29	Peak
7236.000	17.81	36.25	6.52	35.62	24.96	54.00	-29.04	Average
7236.000	29.32	36.25	6.52	35.62	36.47	74.00	-37.53	Peak
9648.000	21.48	37.97	7.99	34.95	32.49	54.00	-21.51	Average
9648.000	31.12	37.97	7.99	34.95	42.13	74.00	-31.87	Peak

Vertical:

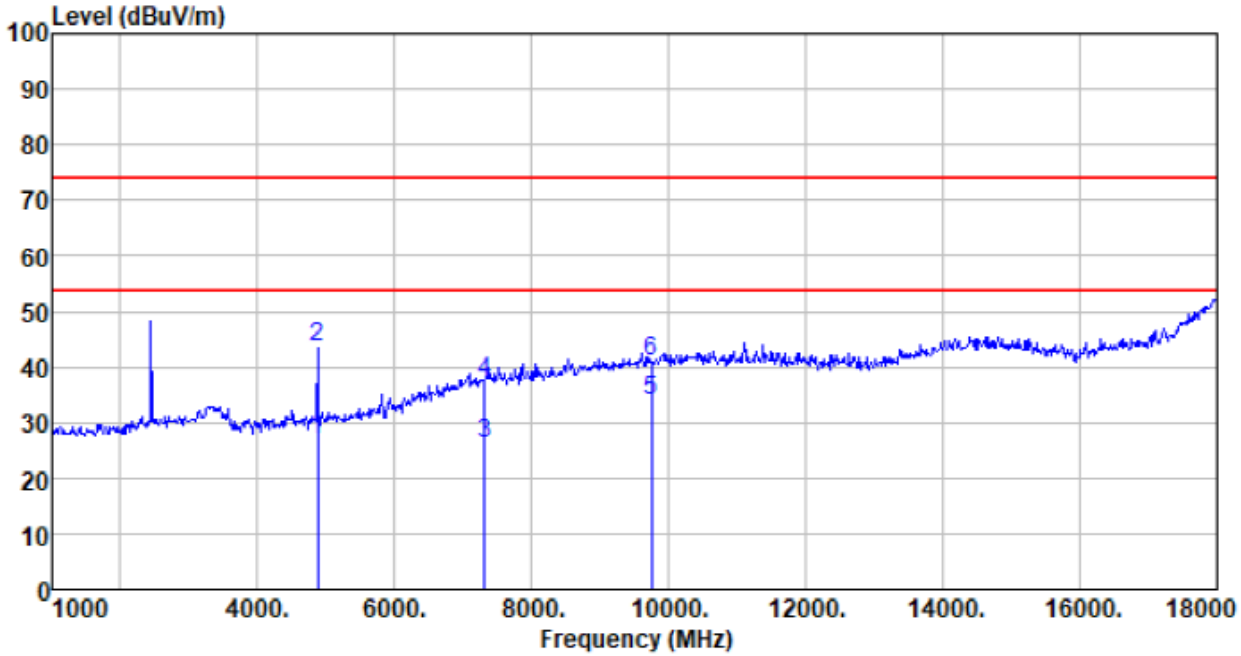


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	24.03	31.22	4.63	37.73	22.15	54.00	-31.85	Average
4824.000	38.91	31.22	4.63	37.73	37.03	74.00	-36.97	Peak
7236.000	18.06	36.25	6.52	35.62	25.21	54.00	-28.79	Average
7236.000	32.25	36.25	6.52	35.62	39.40	74.00	-34.60	Peak
9648.000	22.78	37.97	7.99	34.95	33.79	54.00	-20.21	Average
9648.000	32.09	37.97	7.99	34.95	43.10	74.00	-30.90	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

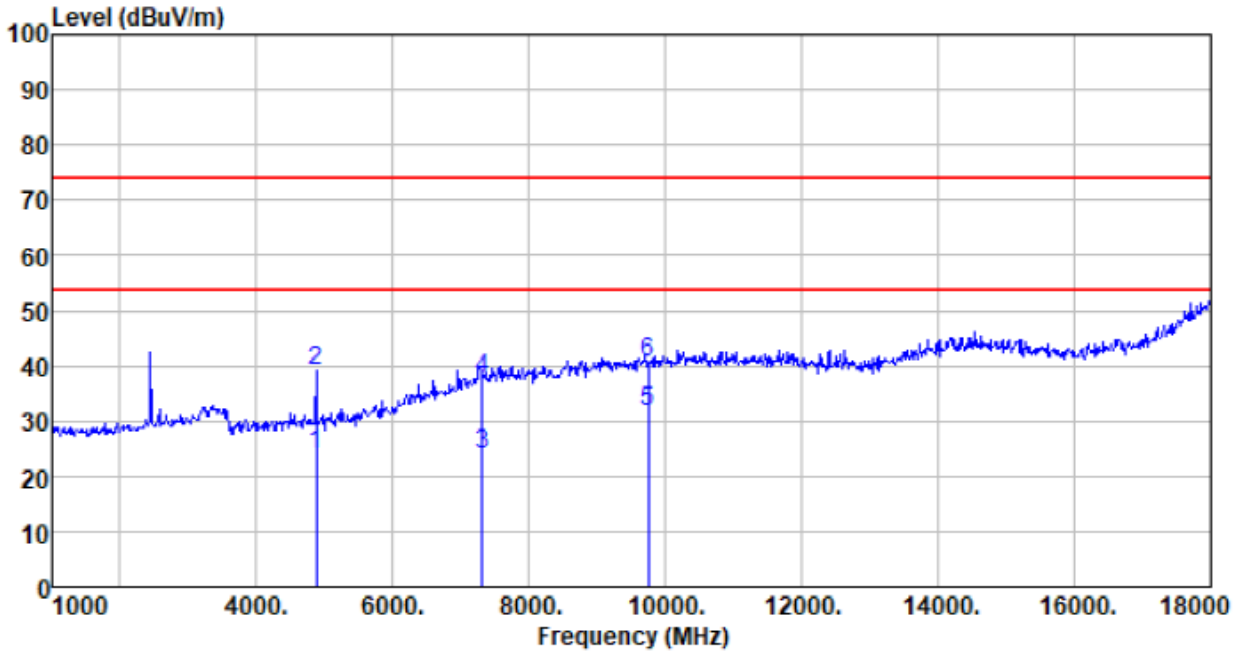
Test mode:	802.11b	Test channel:	Middle

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	28.81	31.31	4.69	37.75	27.06	54.00	-26.94	Average
4874.000	45.12	31.31	4.69	37.75	43.37	74.00	-30.63	Peak
7311.000	18.86	36.39	6.61	35.60	26.26	54.00	-27.74	Average
7311.000	29.77	36.39	6.61	35.60	37.17	74.00	-36.83	Peak
9748.000	22.73	38.10	8.03	35.03	33.83	54.00	-20.17	Average
9748.000	30.00	38.10	8.03	35.03	41.10	74.00	-32.90	Peak

Vertical:

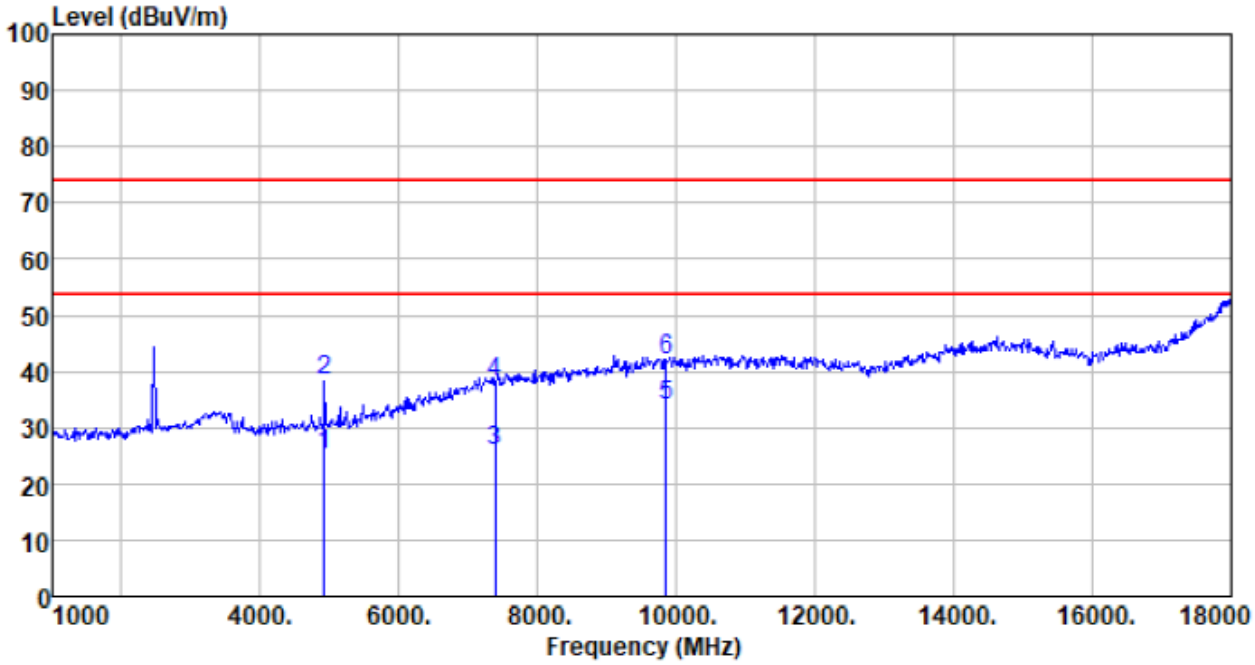


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	25.71	31.31	4.69	37.75	23.96	54.00	-30.04	Average
4874.000	40.96	31.31	4.69	37.75	39.21	74.00	-34.79	Peak
7311.000	16.58	36.39	6.61	35.60	23.98	54.00	-30.02	Average
7311.000	30.09	36.39	6.61	35.60	37.49	74.00	-36.51	Peak
9748.000	20.71	38.10	8.03	35.03	31.81	54.00	-22.19	Average
9748.000	29.44	38.10	8.03	35.03	40.54	74.00	-33.46	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

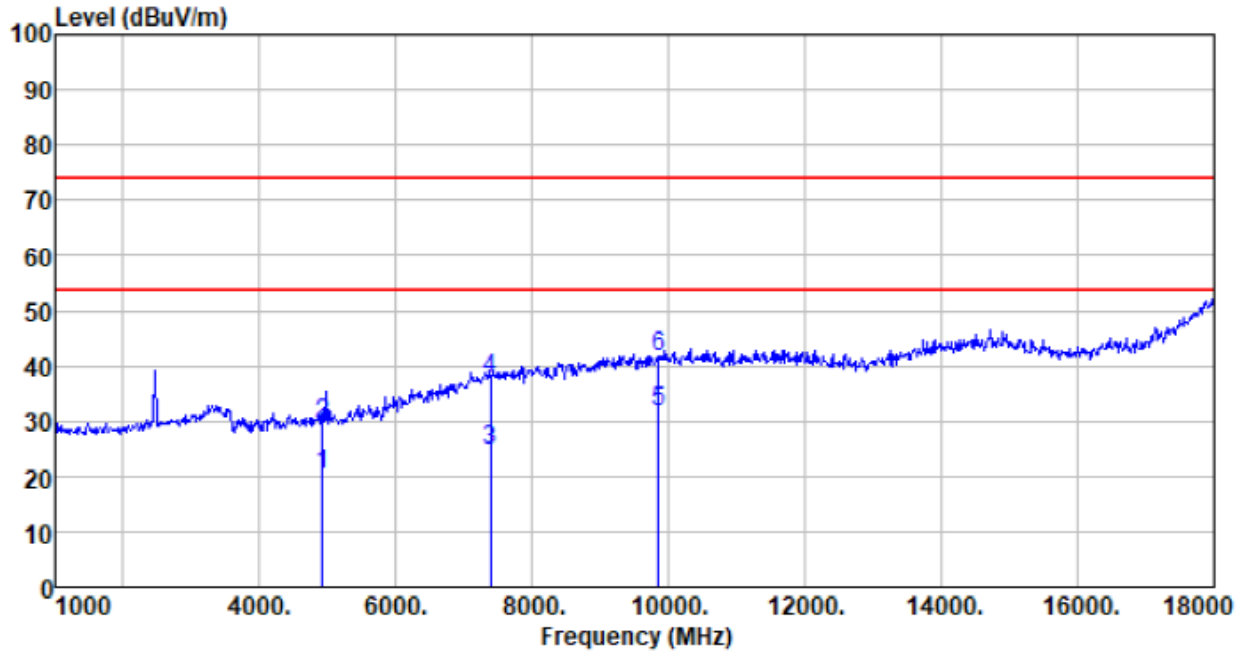
Test mode:	802.11b	Test channel:	Highest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	26.81	31.39	4.75	37.77	25.18	54.00	-28.82	Average
4924.000	40.13	31.39	4.75	37.77	38.50	74.00	-35.50	Peak
7386.000	17.95	36.57	6.71	35.58	25.65	54.00	-28.35	Average
7386.000	30.48	36.57	6.71	35.58	38.18	74.00	-35.82	Peak
9848.000	22.91	38.20	8.06	35.09	34.08	54.00	-19.92	Average
9848.000	30.89	38.20	8.06	35.09	42.06	74.00	-31.94	Peak

Vertical:

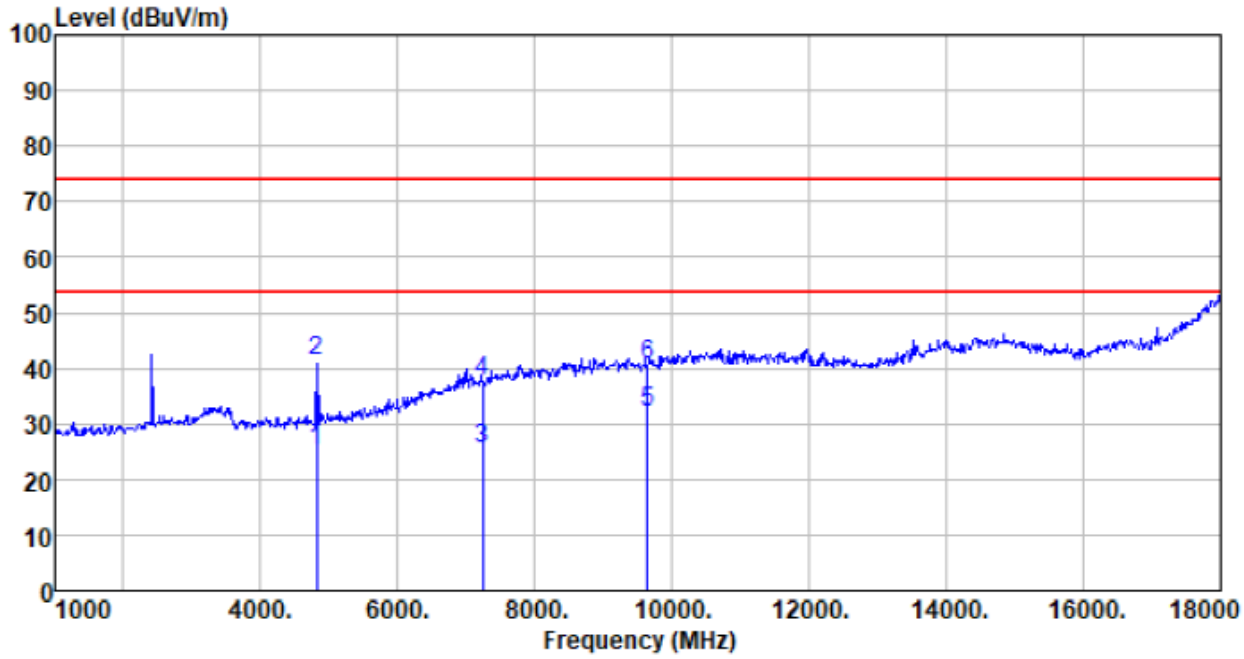


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	21.98	31.39	4.75	37.77	20.35	54.00	-33.65	Average
4924.000	31.24	31.39	4.75	37.77	29.61	74.00	-44.39	Peak
7386.000	16.86	36.57	6.71	35.58	24.56	54.00	-29.44	Average
7386.000	30.08	36.57	6.71	35.58	37.78	74.00	-36.22	Peak
9848.000	20.73	38.20	8.06	35.09	31.90	54.00	-22.10	Average
9848.000	30.36	38.20	8.06	35.09	41.53	74.00	-32.47	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

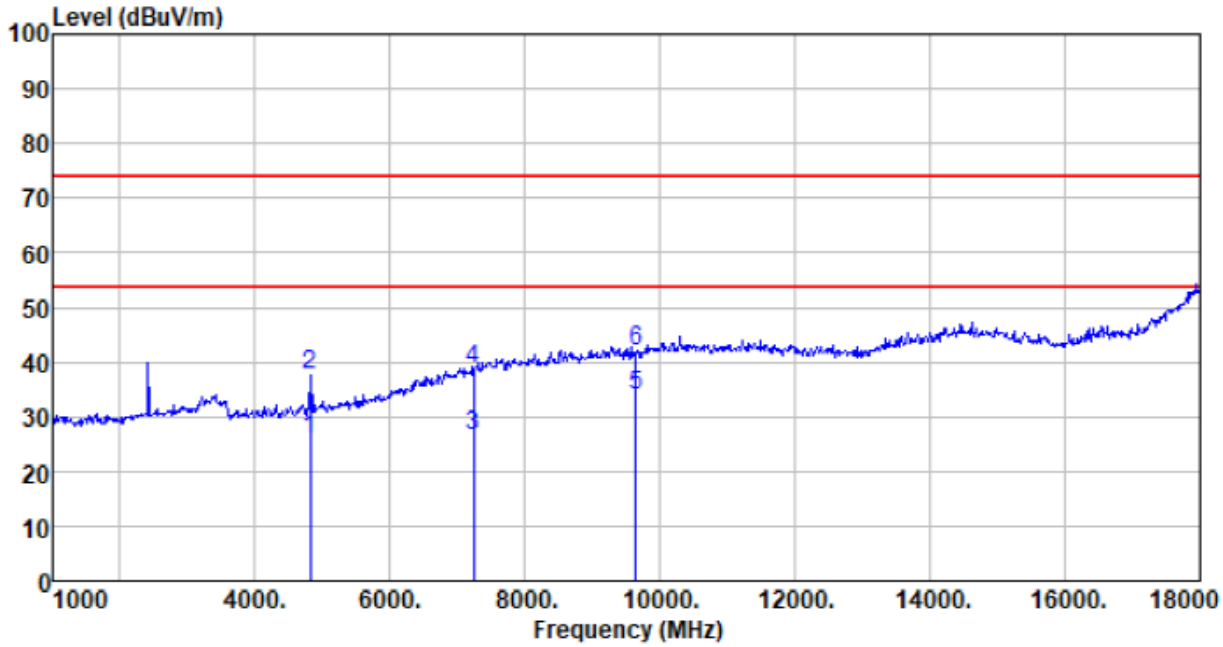
Test mode:	802.11g	Test channel:	lowest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	26.83	31.22	4.63	37.73	24.95	54.00	-29.05	Average
4824.000	43.38	31.22	4.63	37.73	41.50	74.00	-32.50	Peak
7236.000	18.40	36.25	6.52	35.62	25.55	54.00	-28.45	Average
7236.000	30.38	36.25	6.52	35.62	37.53	74.00	-36.47	Peak
9648.000	20.96	37.97	7.99	34.95	31.97	54.00	-22.03	Average
9648.000	29.52	37.97	7.99	34.95	40.53	74.00	-33.47	Peak

Vertical:

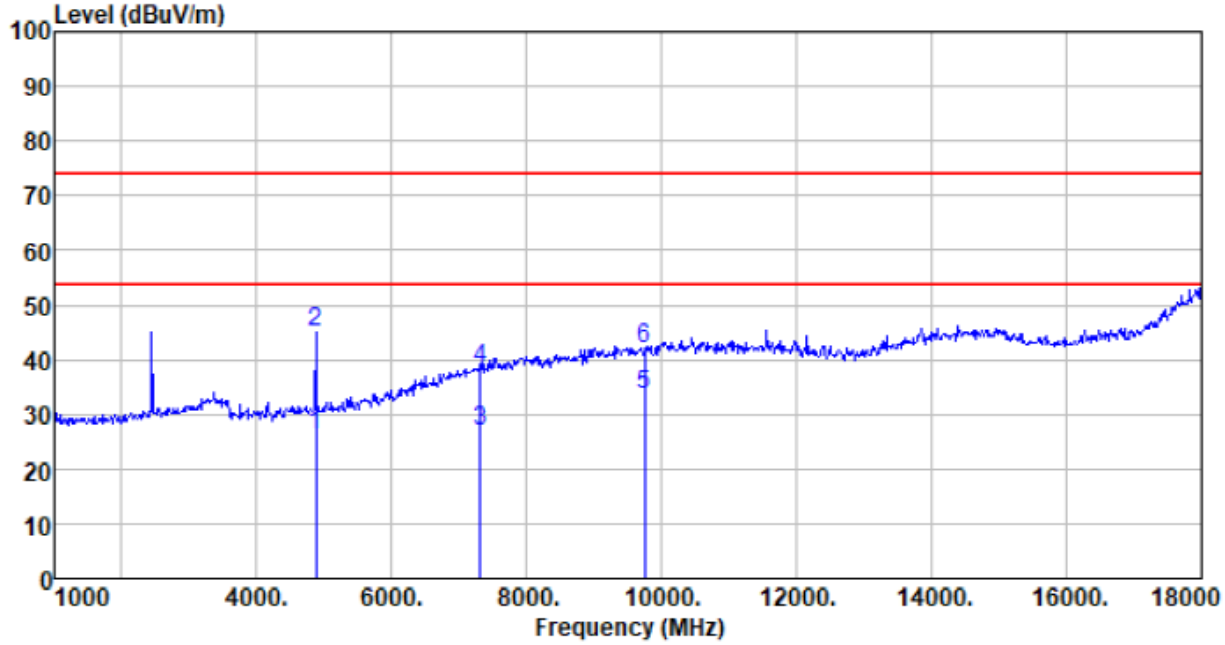


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4824.000	27.54	31.22	4.63	37.73	25.66	54.00	-28.34	Average
4824.000	39.45	31.22	4.63	37.73	37.57	74.00	-36.43	Peak
7236.000	19.59	36.25	6.52	35.62	26.74	54.00	-27.26	Average
7236.000	31.62	36.25	6.52	35.62	38.77	74.00	-35.23	Peak
9648.000	23.04	37.97	7.99	34.95	34.05	54.00	-19.95	Average
9648.000	30.87	37.97	7.99	34.95	41.88	74.00	-32.12	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

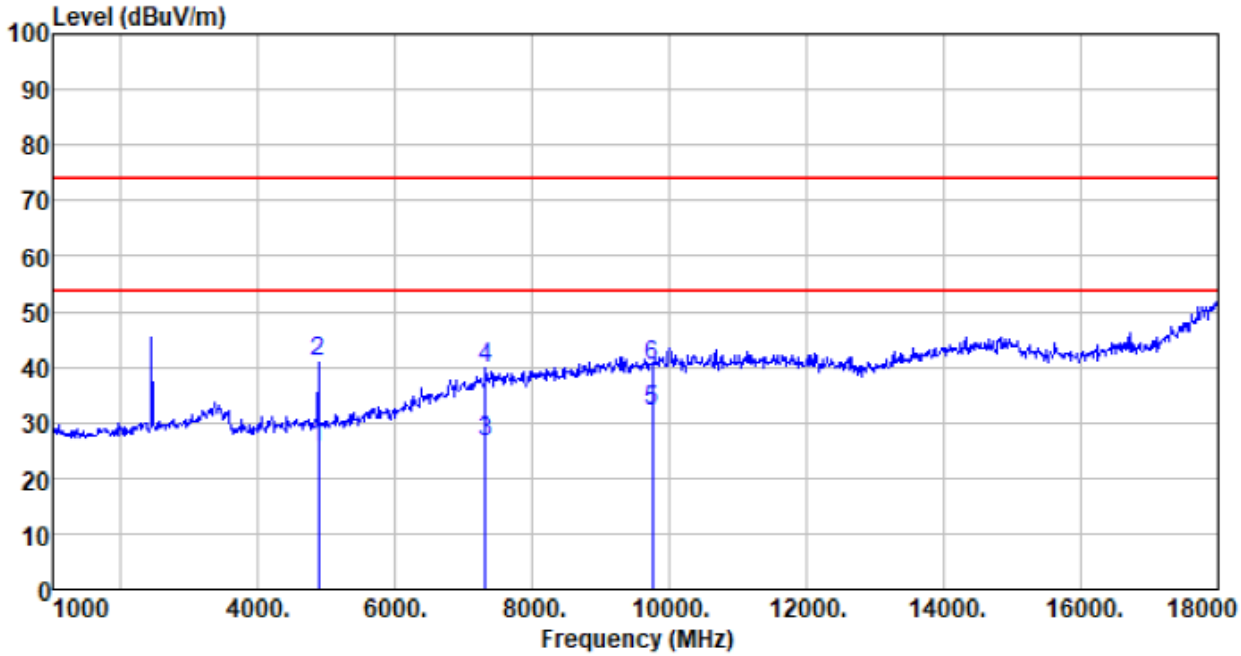
Test mode:	802.11g	Test channel:	Middle

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	28.06	31.31	4.69	37.75	26.31	54.00	-27.69	Average
4874.000	46.70	31.31	4.69	37.75	44.95	74.00	-29.05	Peak
7311.000	19.40	36.39	6.61	35.60	26.80	54.00	-27.20	Average
7311.000	31.00	36.39	6.61	35.60	38.40	74.00	-35.60	Peak
9748.000	22.58	38.10	8.03	35.03	33.68	54.00	-20.32	Average
9748.000	30.92	38.10	8.03	35.03	42.02	74.00	-31.98	Peak

Vertical:

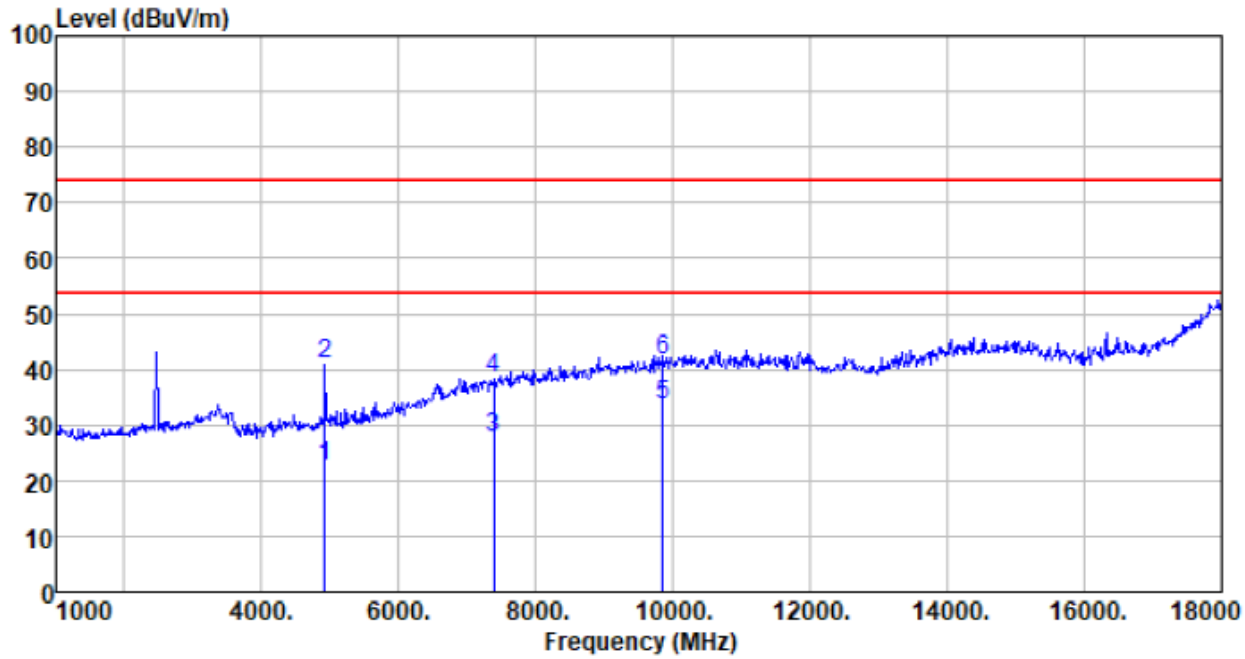


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	27.21	31.31	4.69	37.75	25.46	54.00	-28.54	Average
4874.000	42.88	31.31	4.69	37.75	41.13	74.00	-32.87	Peak
7311.000	19.33	36.39	6.61	35.60	26.73	54.00	-27.27	Average
7311.000	32.38	36.39	6.61	35.60	39.78	74.00	-34.22	Peak
9748.000	21.01	38.10	8.03	35.03	32.11	54.00	-21.89	Average
9748.000	29.21	38.10	8.03	35.03	40.31	74.00	-33.69	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

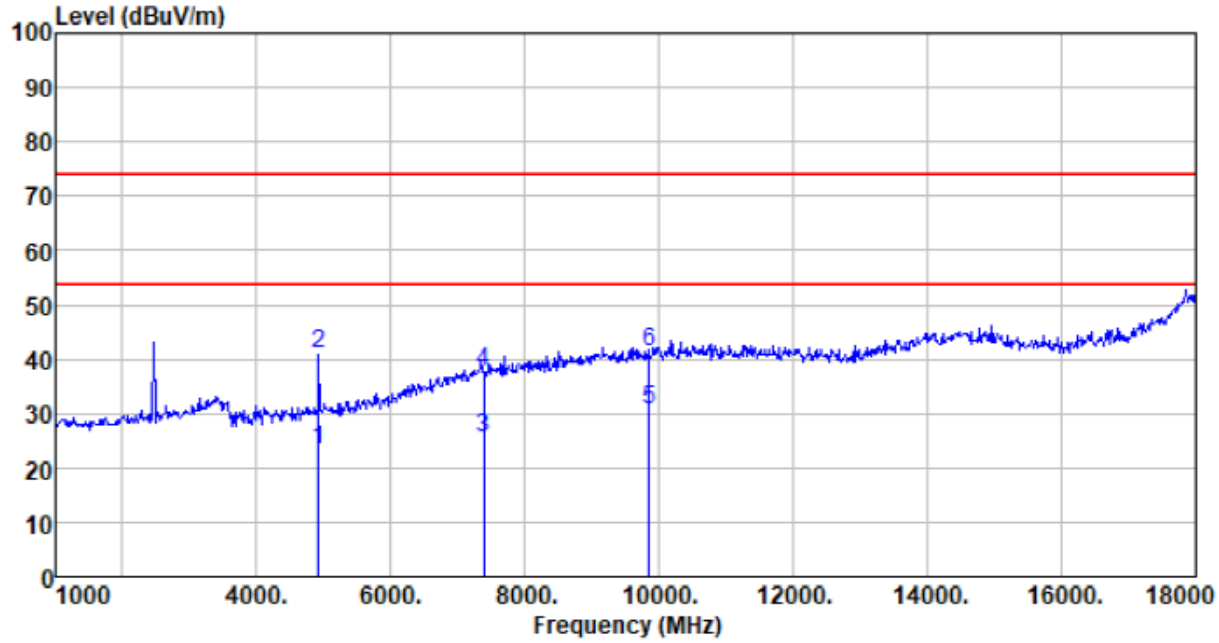
Test mode:	802.11g	Test channel:	Highest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	24.31	31.39	4.75	37.77	22.68	54.00	-31.32	Average
4924.000	42.43	31.39	4.75	37.77	40.80	74.00	-33.20	Peak
7386.000	19.91	36.57	6.71	35.58	27.61	54.00	-26.39	Average
7386.000	30.80	36.57	6.71	35.58	38.50	74.00	-35.50	Peak
9848.000	22.28	38.20	8.06	35.09	33.45	54.00	-20.55	Average
9848.000	30.63	38.20	8.06	35.09	41.80	74.00	-32.20	Peak

Vertical:

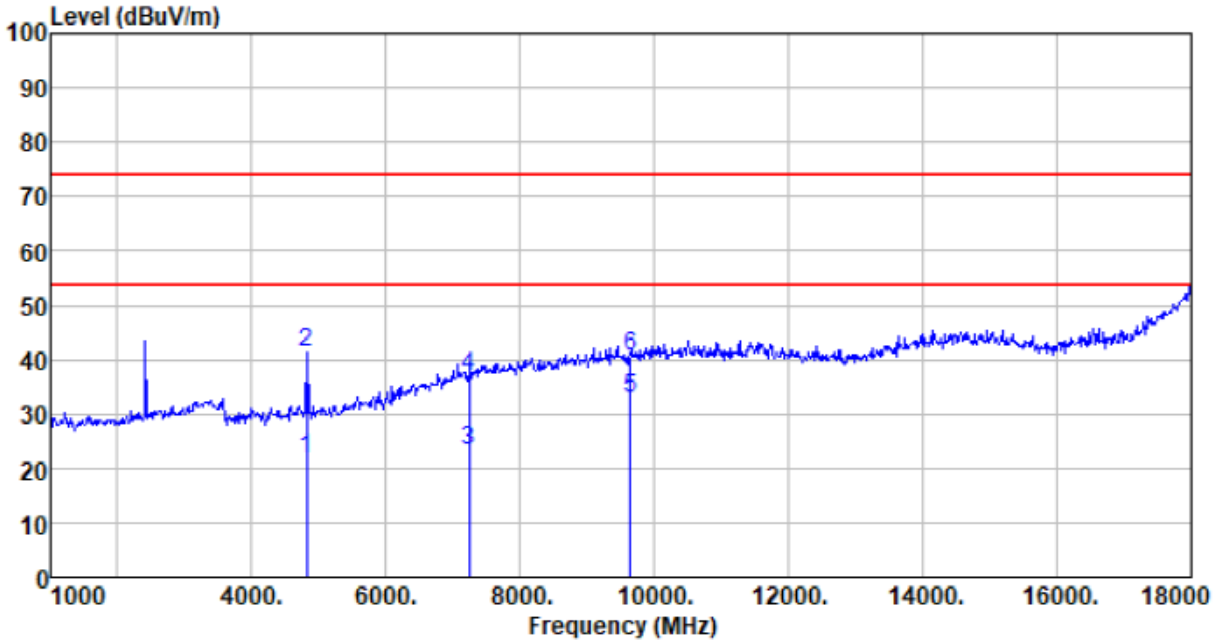


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	24.95	31.39	4.75	37.77	23.32	54.00	-30.68	Average
4924.000	42.46	31.39	4.75	37.77	40.83	74.00	-33.17	Peak
7386.000	17.86	36.57	6.71	35.58	25.56	54.00	-28.44	Average
7386.000	29.81	36.57	6.71	35.58	37.51	74.00	-36.49	Peak
9848.000	19.37	38.20	8.06	35.09	30.54	54.00	-23.46	Average
9848.000	30.14	38.20	8.06	35.09	41.31	74.00	-32.69	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

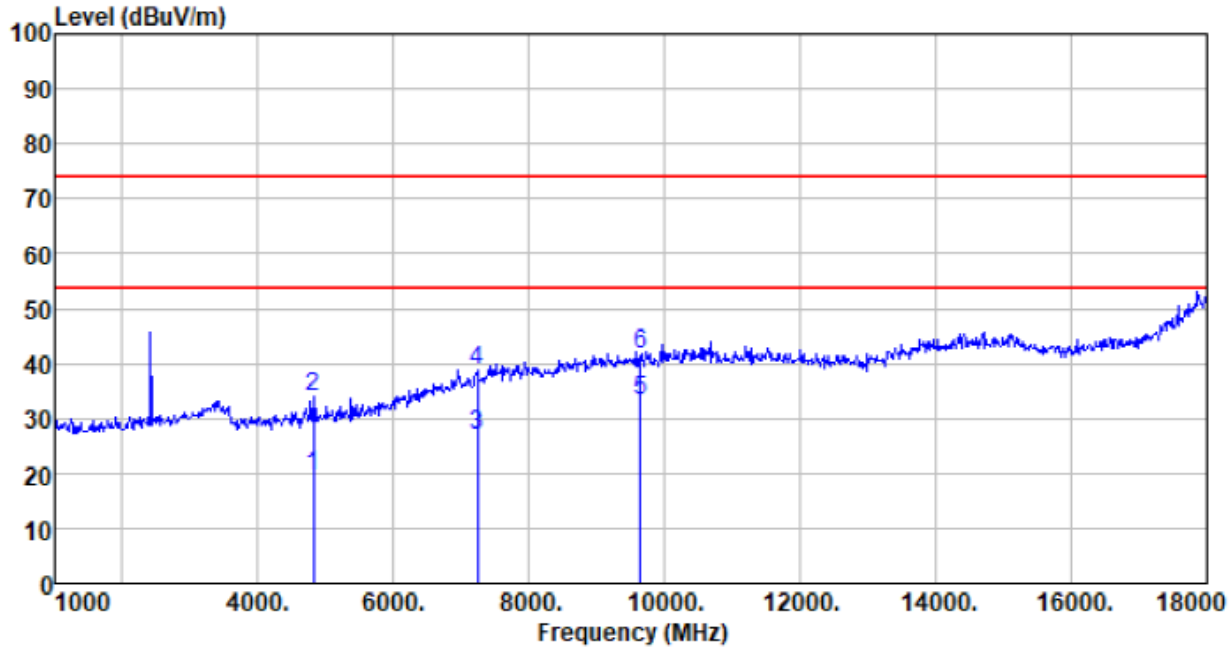
Test mode:	802.11n(HT20)	Test channel:	Lowest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	23.79	31.22	4.63	37.73	21.91	54.00	-32.09	Average
4824.000	43.25	31.22	4.63	37.73	41.37	74.00	-32.63	Peak
7236.000	16.13	36.25	6.52	35.62	23.28	54.00	-30.72	Average
7236.000	29.59	36.25	6.52	35.62	36.74	74.00	-37.26	Peak
9648.000	22.00	37.97	7.99	34.95	33.01	54.00	-20.99	Average
9648.000	29.57	37.97	7.99	34.95	40.58	74.00	-33.42	Peak

Vertical:

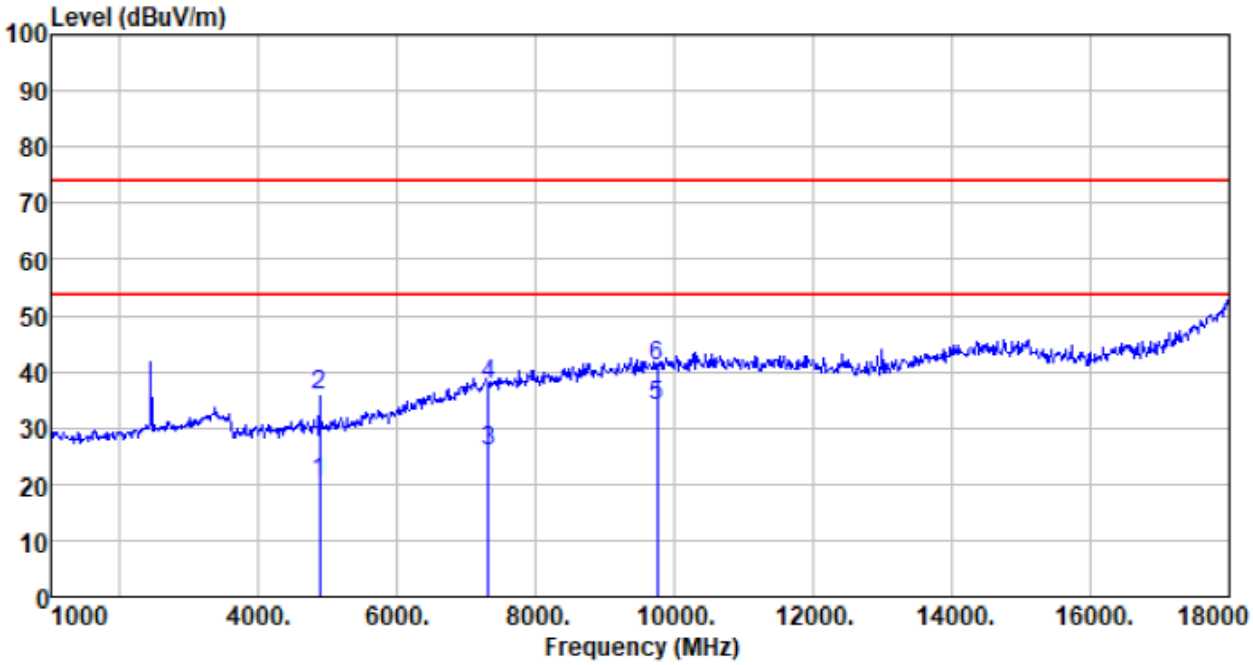


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4824.000	21.45	31.22	4.63	37.73	19.57	54.00	-34.43	Average
4824.000	35.99	31.22	4.63	37.73	34.11	74.00	-39.89	Peak
7236.000	19.73	36.25	6.52	35.62	26.88	54.00	-27.12	Average
7236.000	31.57	36.25	6.52	35.62	38.72	74.00	-35.28	Peak
9648.000	22.29	37.97	7.99	34.95	33.30	54.00	-20.70	Average
9648.000	30.74	37.97	7.99	34.95	41.75	74.00	-32.25	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

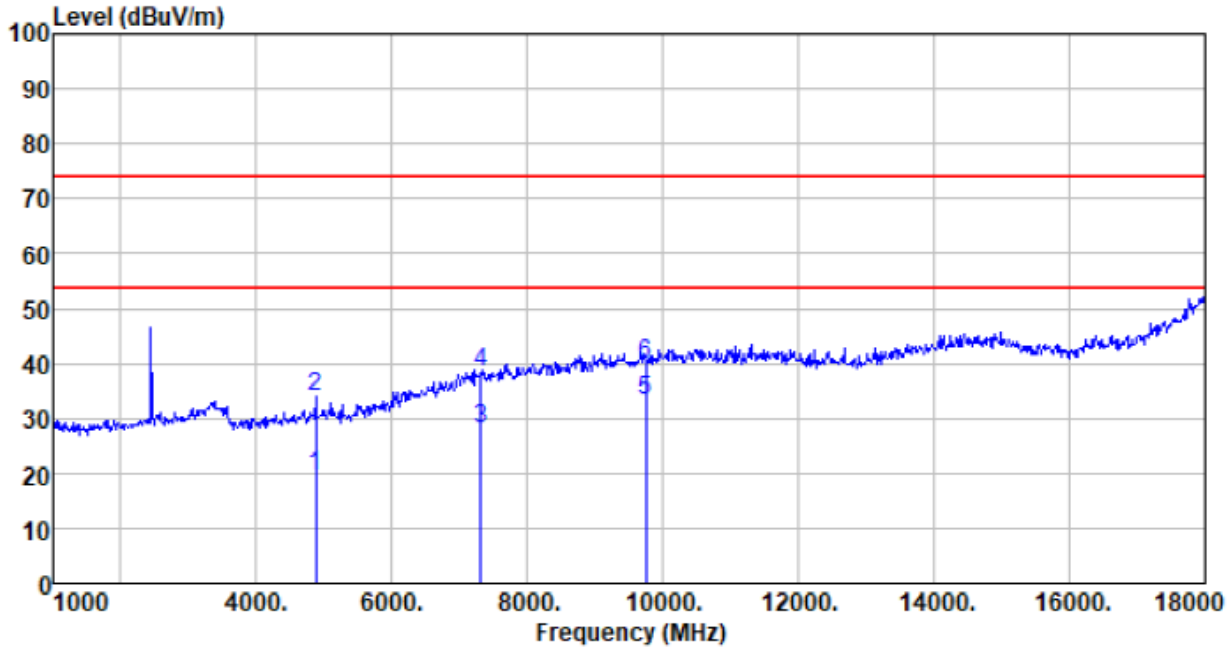
Test mode:	802.11n(HT20)	Test channel:	Middle

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	21.94	31.31	4.69	37.75	20.19	54.00	-33.81	Average
4874.000	37.45	31.31	4.69	37.75	35.70	74.00	-38.30	Peak
7311.000	18.59	36.39	6.61	35.60	25.99	54.00	-28.01	Average
7311.000	30.34	36.39	6.61	35.60	37.74	74.00	-36.26	Peak
9748.000	22.67	38.10	8.03	35.03	33.77	54.00	-20.23	Average
9748.000	29.77	38.10	8.03	35.03	40.87	74.00	-33.13	Peak

Vertical:

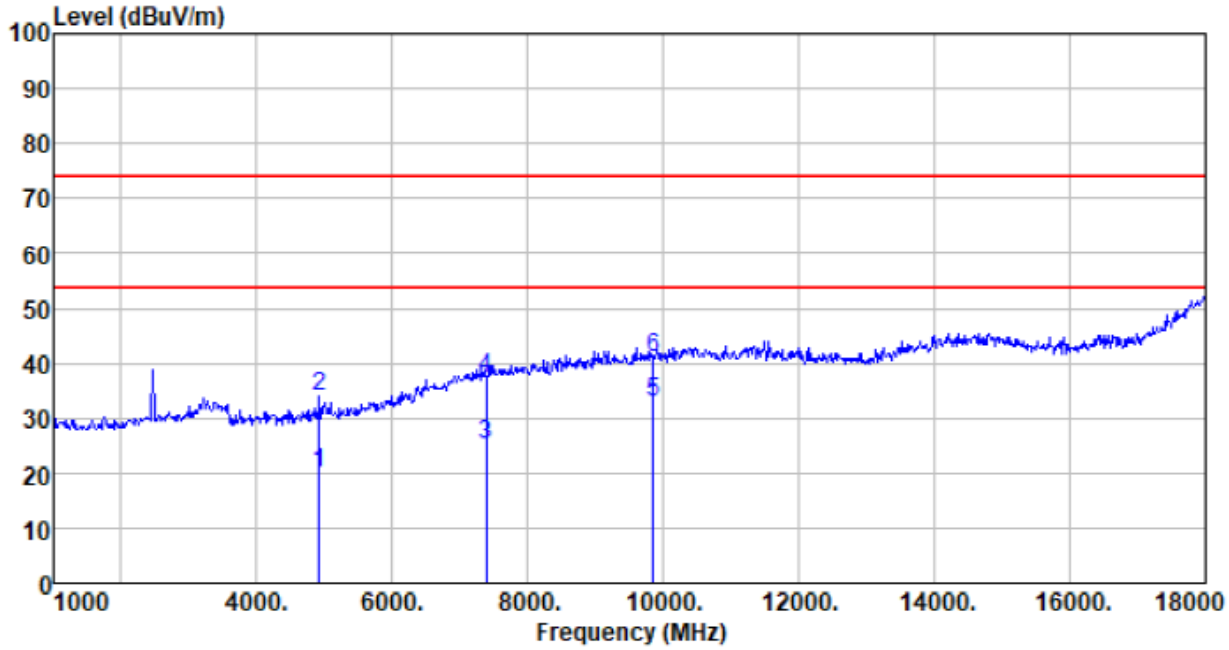


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	21.25	31.31	4.69	37.75	19.50	54.00	-34.50	Average
4874.000	35.79	31.31	4.69	37.75	34.04	74.00	-39.96	Peak
7311.000	20.62	36.39	6.61	35.60	28.02	54.00	-25.98	Average
7311.000	30.83	36.39	6.61	35.60	38.23	74.00	-35.77	Peak
9748.000	22.09	38.10	8.03	35.03	33.19	54.00	-20.81	Average
9748.000	28.73	38.10	8.03	35.03	39.83	74.00	-34.17	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

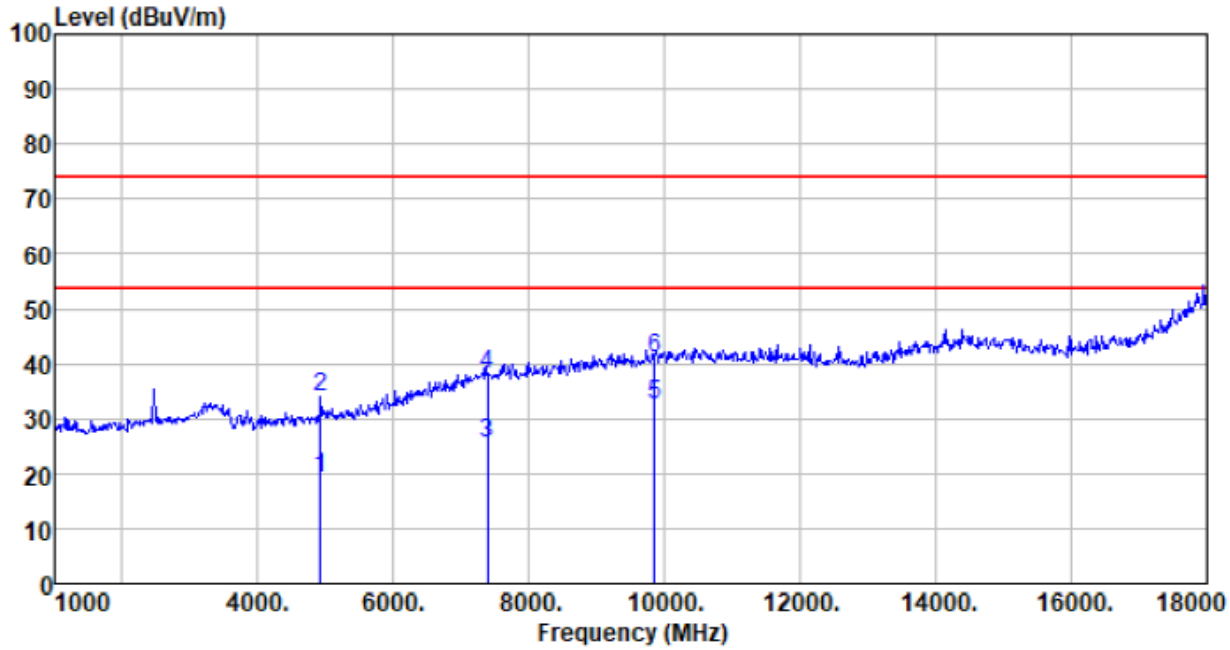
Test mode:	802.11n(HT20)	Test channel:	Highest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4924.000	21.63	31.39	4.75	37.77	20.00	54.00	-34.00	Average
4924.000	35.44	31.39	4.75	37.77	33.81	74.00	-40.19	Peak
7386.000	17.46	36.57	6.71	35.58	25.16	54.00	-28.84	Average
7386.000	29.70	36.57	6.71	35.58	37.40	74.00	-36.60	Peak
9848.000	21.67	38.20	8.06	35.09	32.84	54.00	-21.16	Average
9848.000	29.71	38.20	8.06	35.09	40.88	74.00	-33.12	Peak

Vertical:

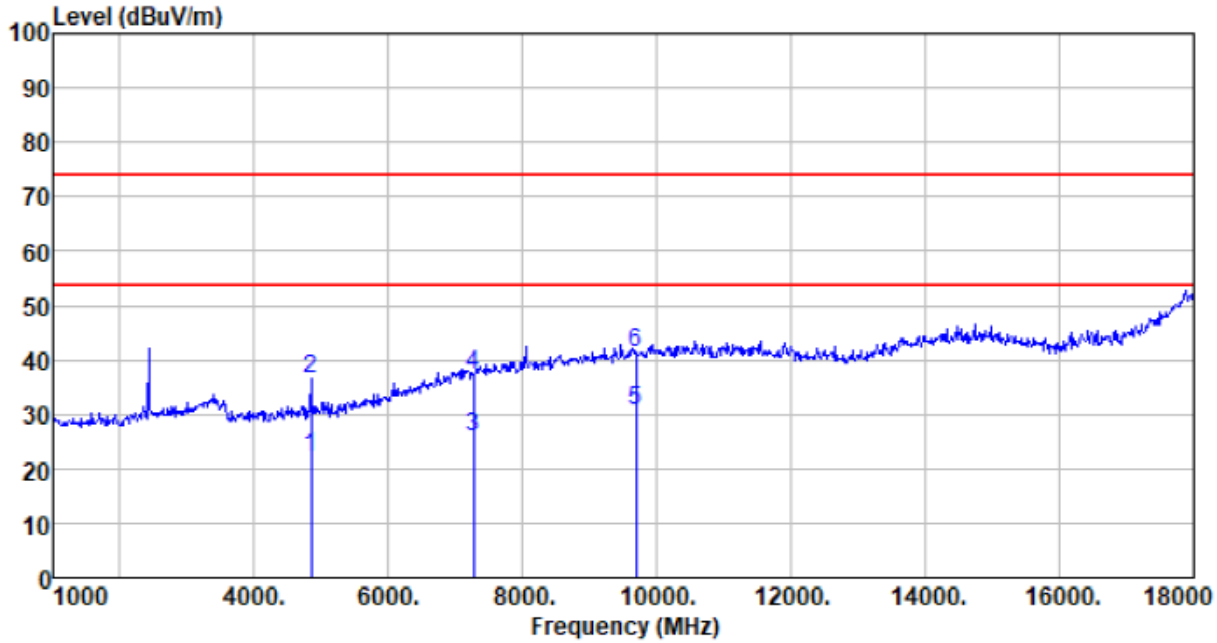


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4924.000	20.93	31.39	4.75	37.77	19.30	54.00	-34.70	Average
4924.000	35.69	31.39	4.75	37.77	34.06	74.00	-39.94	Peak
7386.000	17.60	36.57	6.71	35.58	25.30	54.00	-28.70	Average
7386.000	30.35	36.57	6.71	35.58	38.05	74.00	-35.95	Peak
9848.000	21.44	38.20	8.06	35.09	32.61	54.00	-21.39	Average
9848.000	29.67	38.20	8.06	35.09	40.84	74.00	-33.16	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

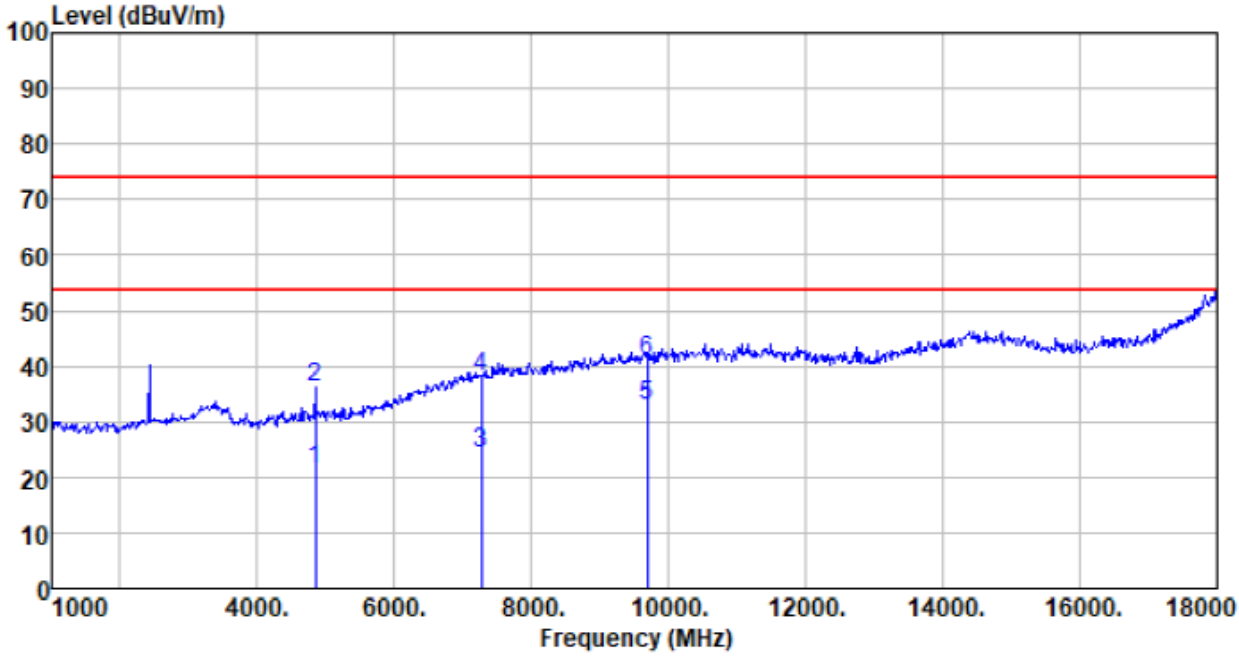
Test mode:	802.11n(HT40)	Test channel:	Lowest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4844.000	23.90	31.26	4.65	37.74	22.07	54.00	-31.93	Average
4844.000	38.50	31.26	4.65	37.74	36.67	74.00	-37.33	Peak
7266.000	18.49	36.30	6.57	35.62	25.74	54.00	-28.26	Average
7266.000	29.98	36.30	6.57	35.62	37.23	74.00	-36.77	Peak
9688.000	19.47	38.03	8.00	34.99	30.51	54.00	-23.49	Average
9688.000	30.13	38.03	8.00	34.99	41.17	74.00	-32.83	Peak

Vertical:

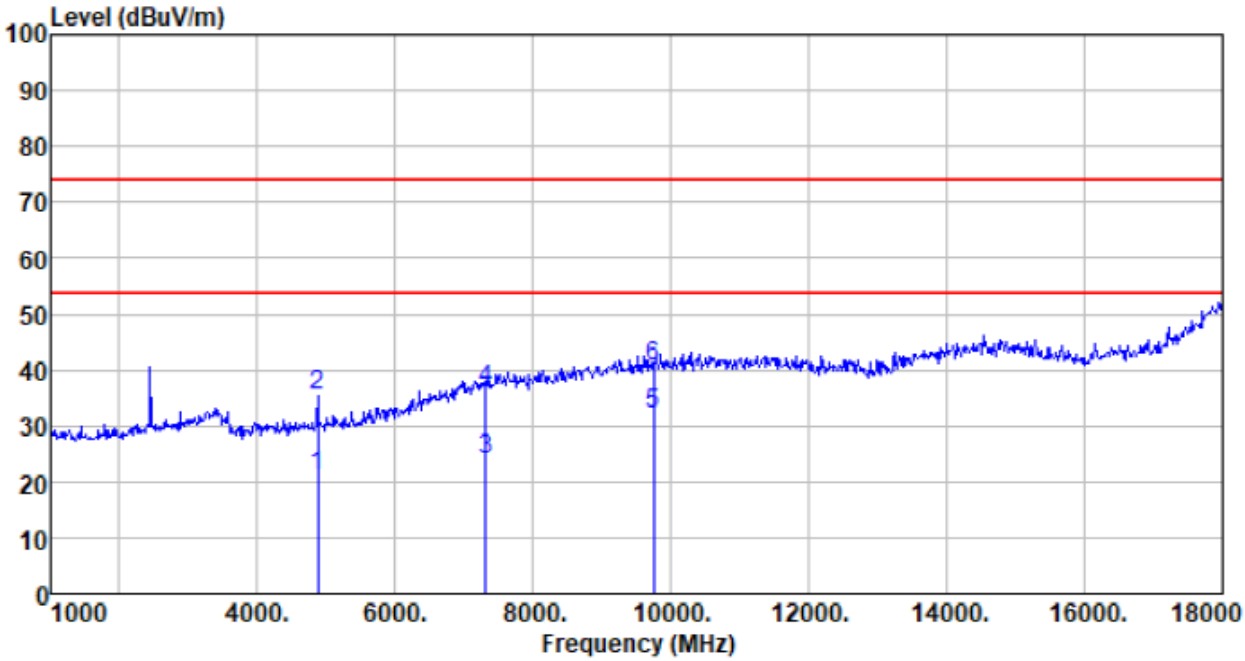


Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4844.000	23.30	31.26	4.65	37.74	21.47	54.00	-32.53	Average
4844.000	37.86	31.26	4.65	37.74	36.03	74.00	-37.97	Peak
7266.000	17.12	36.30	6.57	35.62	24.37	54.00	-29.63	Average
7266.000	30.62	36.30	6.57	35.62	37.87	74.00	-36.13	Peak
9688.000	21.73	38.03	8.00	34.99	32.77	54.00	-21.23	Average
9688.000	30.00	38.03	8.00	34.99	41.04	74.00	-32.96	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

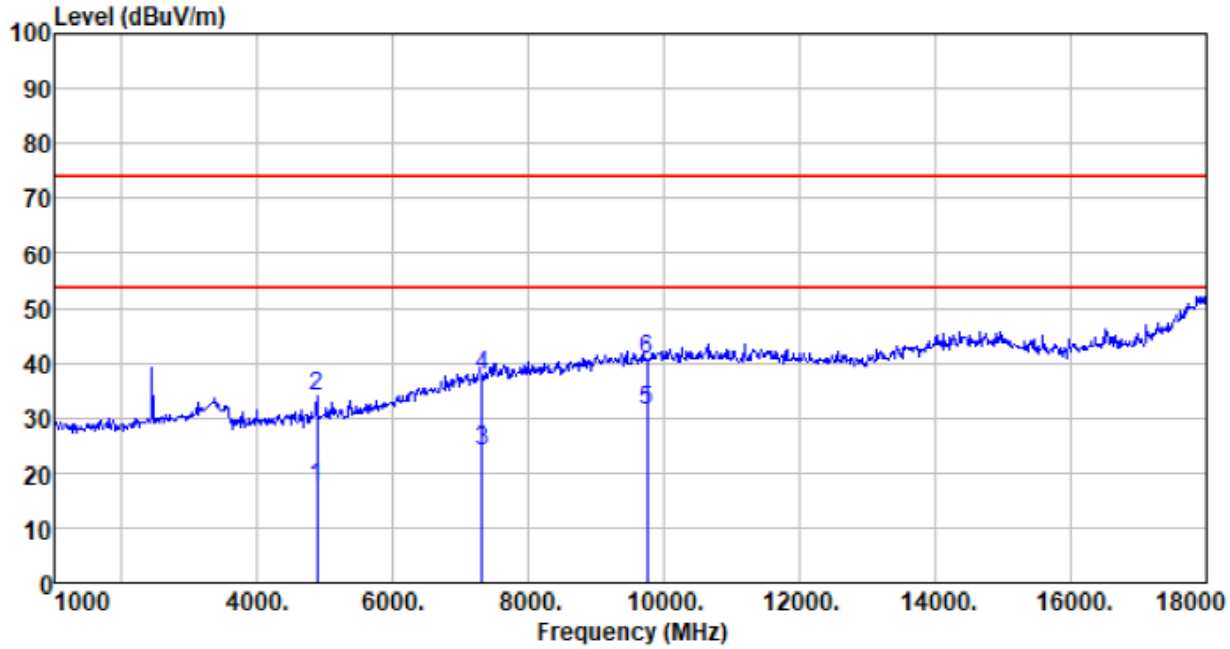
Test mode:	802.11n(HT40)	Test channel:	Middle

Horizontal:



Freq MHz	Reading level dBuV	Antenna factor dB/m	Cable loss dB	Preamp factor dB	level dBuV/m	Limit level dBuV/m	Over limit dB	Remark
4874.000	22.94	31.31	4.69	37.75	21.19	54.00	-32.81	Average
4874.000	37.25	31.31	4.69	37.75	35.50	74.00	-38.50	Peak
7311.000	16.59	36.39	6.61	35.60	23.99	54.00	-30.01	Average
7311.000	29.03	36.39	6.61	35.60	36.43	74.00	-37.57	Peak
9748.000	21.14	38.10	8.03	35.03	32.24	54.00	-21.76	Average
9748.000	29.51	38.10	8.03	35.03	40.61	74.00	-33.39	Peak

Vertical:

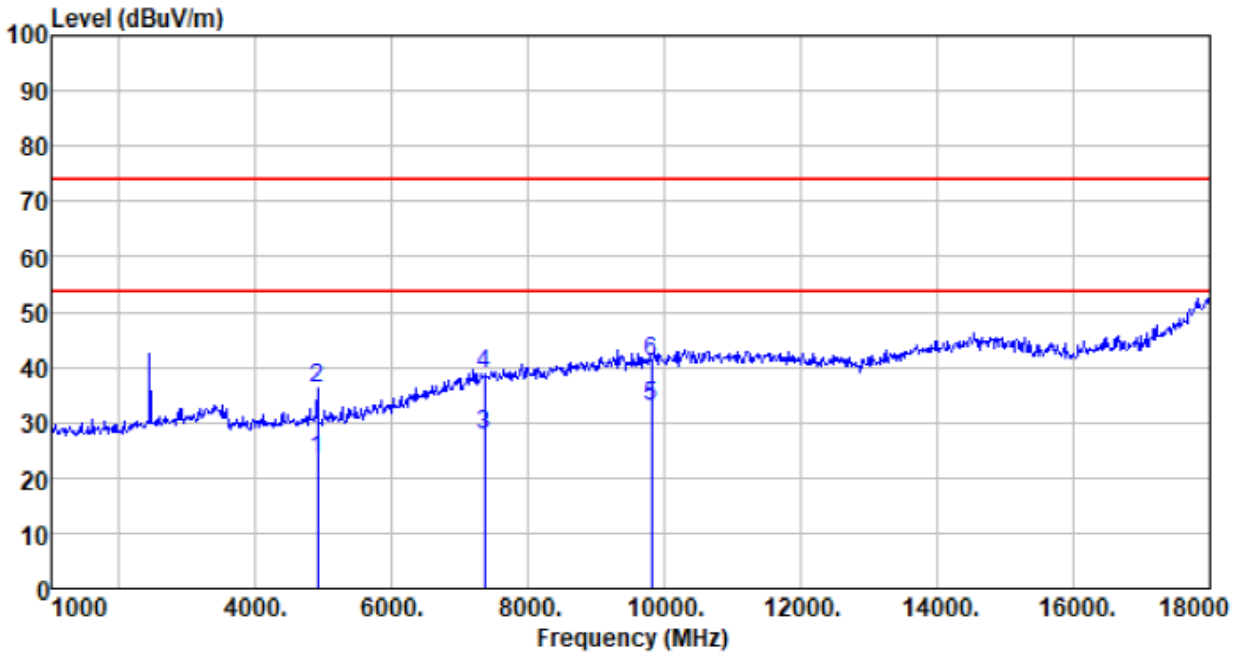


Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4874.000	18.96	31.31	4.69	37.75	17.21	54.00	-36.79	Average
4874.000	35.64	31.31	4.69	37.75	33.89	74.00	-40.11	Peak
7311.000	16.58	36.39	6.61	35.60	23.98	54.00	-30.02	Average
7311.000	30.09	36.39	6.61	35.60	37.49	74.00	-36.51	Peak
9748.000	20.39	38.10	8.03	35.03	31.49	54.00	-22.51	Average
9748.000	29.63	38.10	8.03	35.03	40.73	74.00	-33.27	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

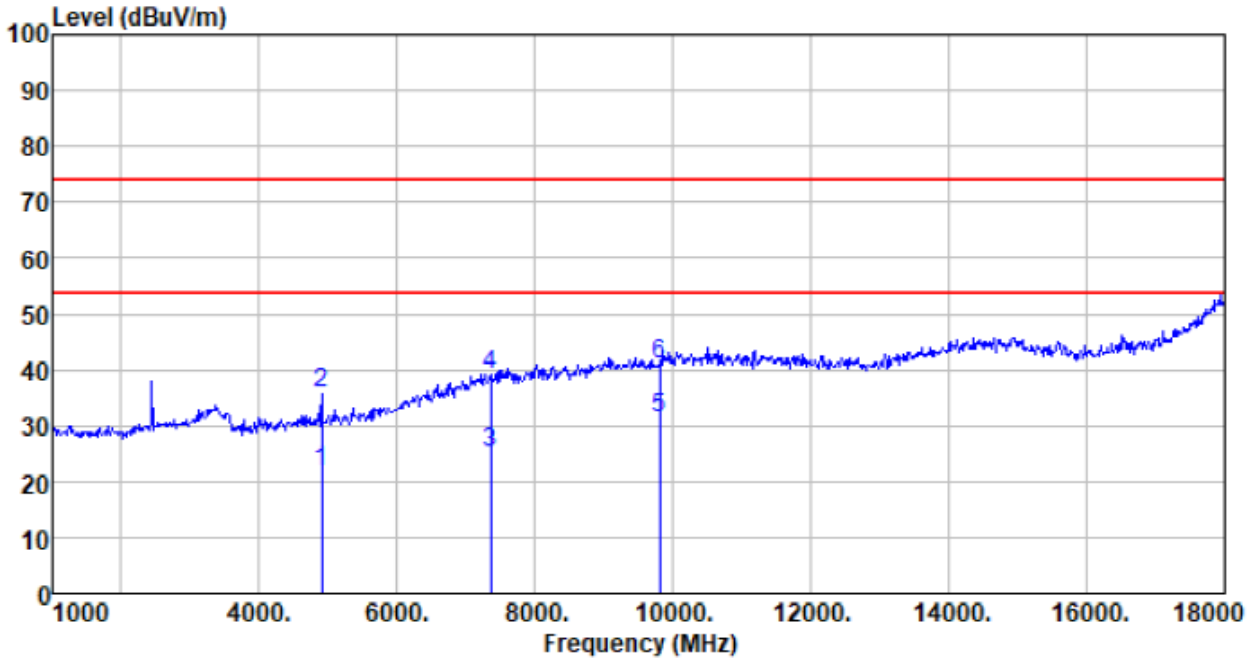
Test mode:	802.11n(HT40)	Test channel:	Highest

Horizontal:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4904.000	24.90	31.35	4.73	37.76	23.22	54.00	-30.78	Average
4904.000	37.81	31.35	4.73	37.76	36.13	74.00	-37.87	Peak
7356.000	20.24	36.48	6.67	35.59	27.80	54.00	-26.20	Average
7356.000	31.09	36.48	6.67	35.59	38.65	74.00	-35.35	Peak
9808.000	21.80	38.17	8.05	35.07	32.95	54.00	-21.05	Average
9808.000	29.97	38.17	8.05	35.07	41.12	74.00	-32.88	Peak

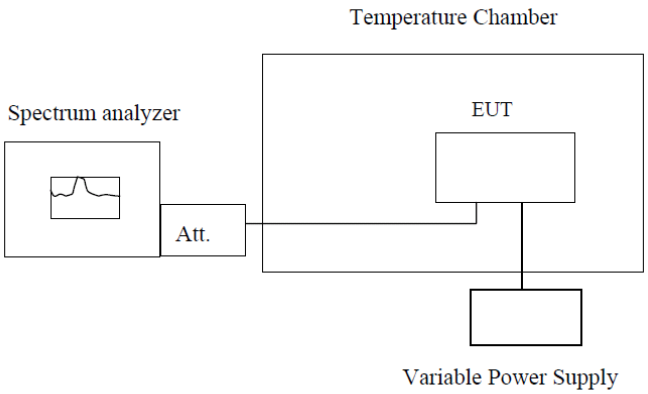
Vertical:



Freq	Reading level	Antenna factor	Cable loss	Preamp factor	level	Limit level	Over limit	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
4904.000	23.28	31.35	4.73	37.76	21.60	54.00	-32.40	Average
4904.000	37.66	31.35	4.73	37.76	35.98	74.00	-38.02	Peak
7356.000	17.55	36.48	6.67	35.59	25.11	54.00	-28.89	Average
7356.000	31.49	36.48	6.67	35.59	39.05	74.00	-34.95	Peak
9808.000	20.39	38.17	8.05	35.07	31.54	54.00	-22.46	Average
9808.000	29.63	38.17	8.05	35.07	40.78	74.00	-33.22	Peak

Remark: Final Level =Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor

7.8 Frequency stability

Test Requirement:	RSS-Gen Section 6.11& Section 8.11
Test Method:	ANSI C63.10: 2013 & RSS-Gen
Limit:	Manufactures of devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified
Test Procedure:	The EUT was setup to ANSI C63.10, 2013; tested to 2.1055 for compliance to RSS-Gen requirements.
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test Instruments:	Refer to section 6.0 for details
Test mode:	Refer to section 5.2 for details
Test results:	Pass

Remark: Set the EUT transmits at un-modulation mode to test frequency stability.

Measurement data:

Frequency stability versus Temp.						
Power Supply: AC 24V						
Temp. (°C)	Operating Frequency (MHz)	0 minute Measured Frequency (MHz)	2 minute Measured Frequency (MHz)	5 minute Measured Frequency (MHz)	10 minute Measured Frequency (MHz)	Pass /Fail
-30	2412	2412.096	2412.047	2412.872	2412.096	Pass
	2437	2437.679	2437.657	2437.813	2437.679	Pass
	2452	2452.015	2452.355	2452.204	2452.015	Pass
	2462	2462.817	2462.880	2462.283	2462.817	Pass
-20	2412	2412.008	2412.237	2412.416	2412.008	Pass
	2437	2437.744	2437.746	2437.838	2437.744	Pass
	2452	2452.915	2452.226	2452.244	2452.915	Pass
	2462	2462.950	2462.491	2462.170	2462.950	Pass
-10	2412	2412.404	2412.346	2412.710	2412.404	Pass
	2437	2437.940	2437.582	2437.946	2437.940	Pass
	2452	2452.148	2452.539	2452.572	2452.148	Pass
	2462	2462.908	2462.563	2462.081	2462.908	Pass
0	2412	2412.290	2412.954	2412.069	2412.290	Pass
	2437	2437.883	2437.151	2437.825	2437.883	Pass
	2452	2452.509	2452.408	2452.212	2452.509	Pass
	2462	2462.797	2462.264	2462.133	2462.797	Pass
10	2412	2412.677	2412.473	2412.078	2412.677	Pass
	2437	2437.284	2437.464	2437.325	2437.284	Pass
	2452	2452.013	2452.867	2452.583	2452.013	Pass
	2462	2462.289	2462.147	2462.475	2462.289	Pass
20	2412	2412.219	2412.634	2412.822	2412.219	Pass
	2437	2437.300	2437.601	2437.231	2437.300	Pass
	2452	2452.260	2452.885	2452.650	2452.260	Pass
	2462	2462.586	2462.180	2462.454	2462.586	Pass
30	2412	2412.621	2412.388	2412.772	2412.621	Pass
	2437	2437.032	2437.970	2437.842	2437.032	Pass
	2452	2452.056	2452.078	2452.090	2452.056	Pass
	2462	2462.663	2462.914	2462.145	2462.663	Pass
40	2412	2412.877	2412.954	2412.387	2412.877	Pass
	2437	2437.999	2437.475	2437.260	2437.999	Pass
	2452	2452.885	2452.459	2452.452	2452.885	Pass
	2462	2462.469	2462.282	2462.479	2462.469	Pass
50	2412	2412.069	2412.043	2412.907	2412.069	Pass
	2437	2437.841	2437.062	2437.672	2437.841	Pass
	2452	2452.104	2452.401	2452.850	2452.104	Pass
	2462	2462.861	2462.748	2462.375	2462.861	Pass

Frequency stability versus Voltage						
Temperature: 25°C						
Power Supply (VAC)	Operating Frequency (MHz)	0 minute	2 minute	5 minute	10 minute	Pass /Fail
		Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	Measured Frequency (MHz)	
18	2412	2412.070	2412.170	2412.447	2412.070	Pass
	2437	2437.486	2437.417	2437.814	2437.486	Pass
	2452	2452.471	2452.943	2452.647	2452.471	Pass
	2462	2462.336	2462.969	2462.610	2462.336	Pass
30	2412	2412.853	2412.245	2412.533	2412.853	Pass
	2437	2437.417	2437.388	2437.714	2437.417	Pass
	2452	2452.691	2452.826	2452.921	2452.691	Pass
	2462	2462.311	2462.878	2462.541	2462.311	Pass

8 Test Setup Photo

Reference to the **appendix I** for details.

9 EUT Constructional Details

Reference to the **appendix II** for details.

------End------