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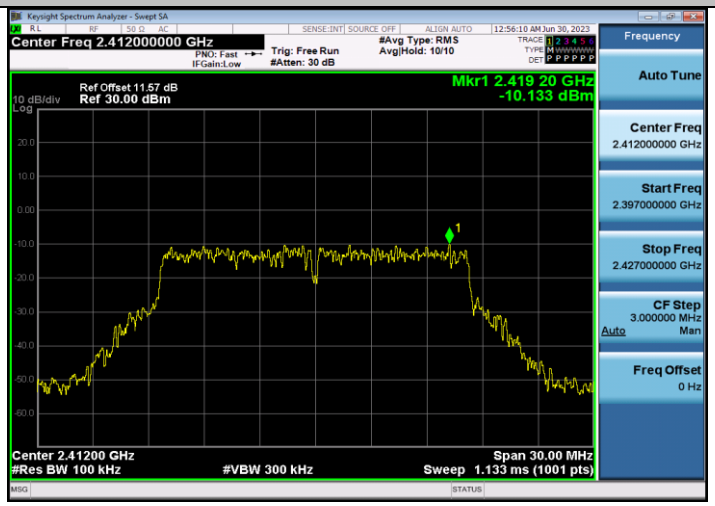

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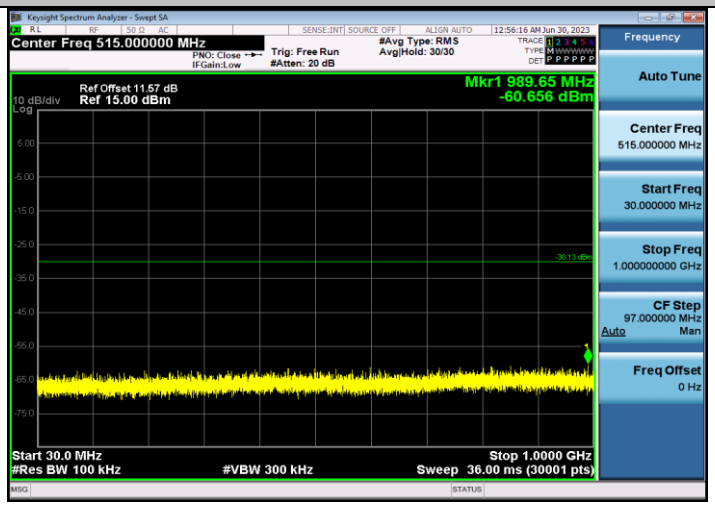

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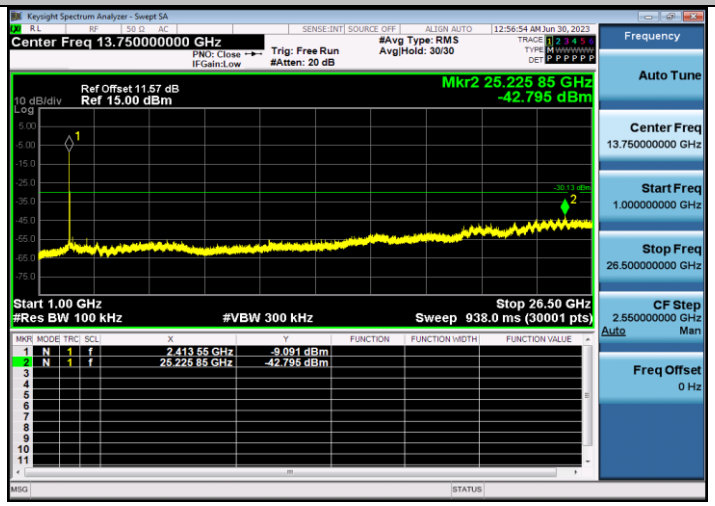

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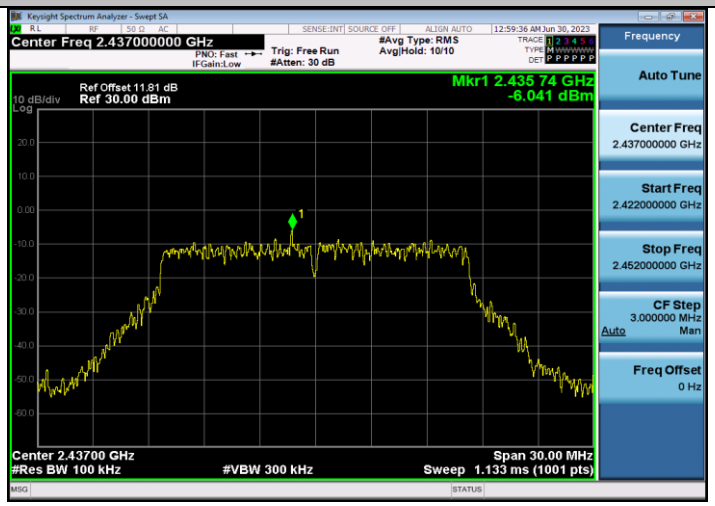

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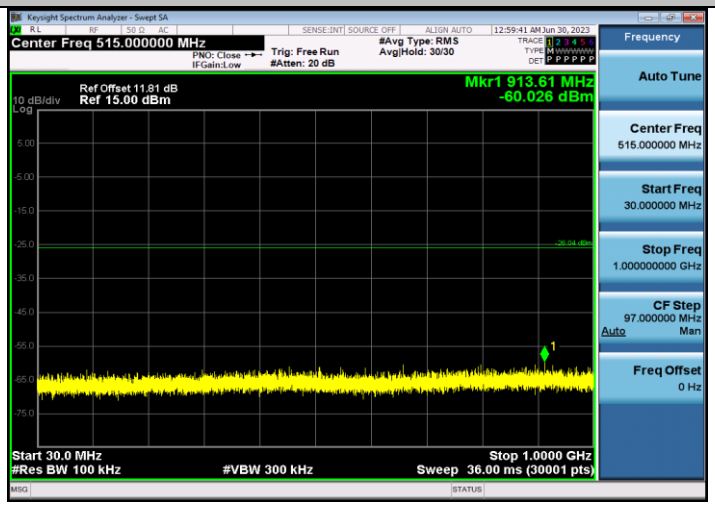

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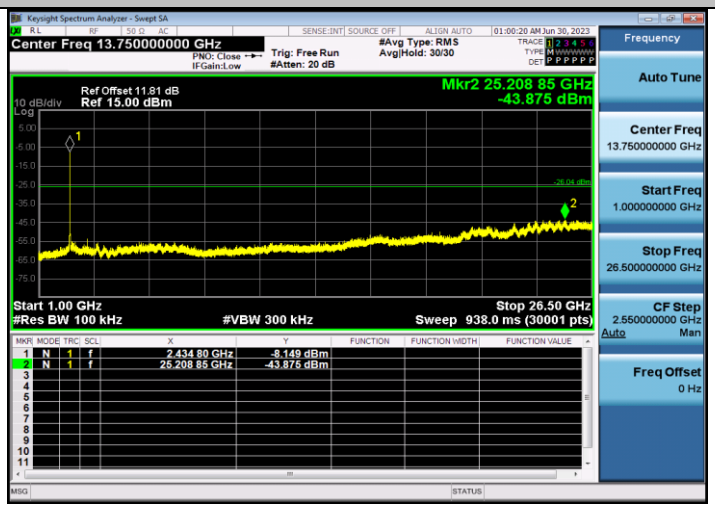

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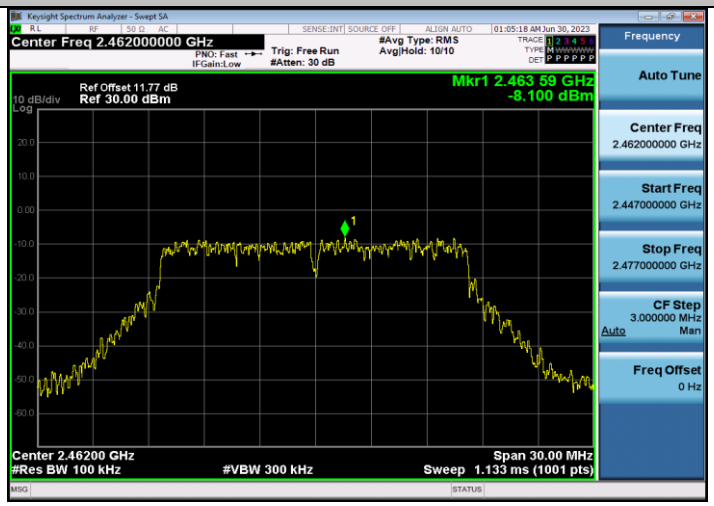

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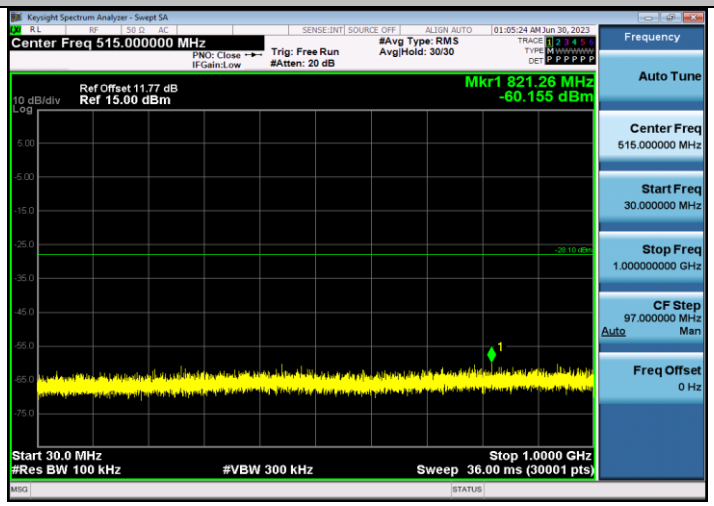

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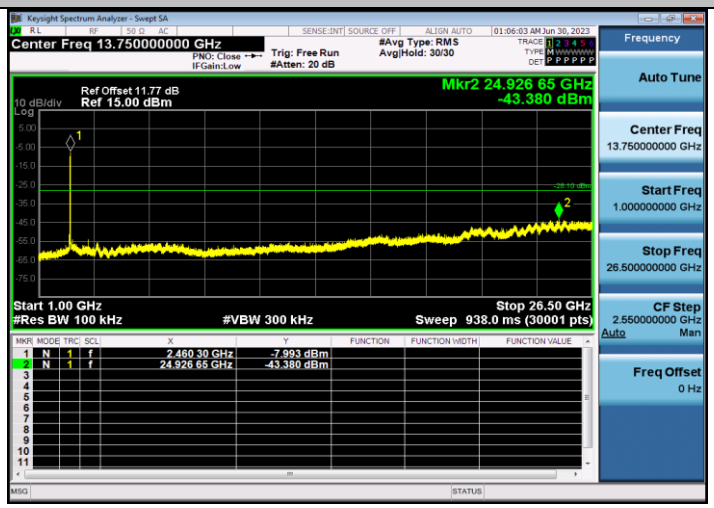

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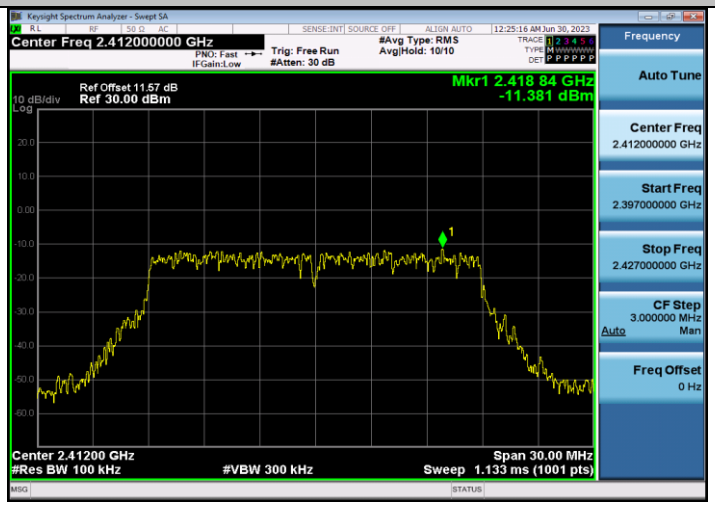

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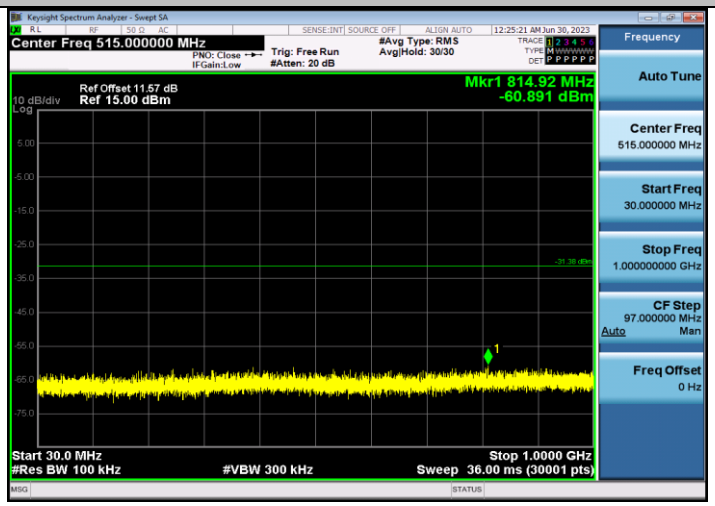

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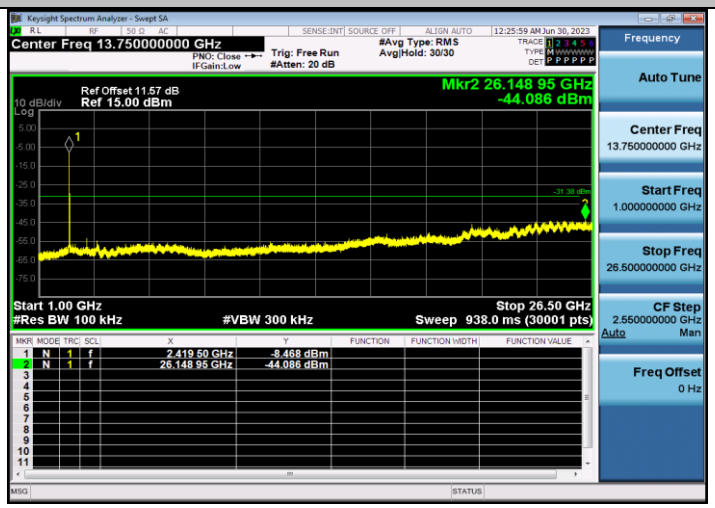

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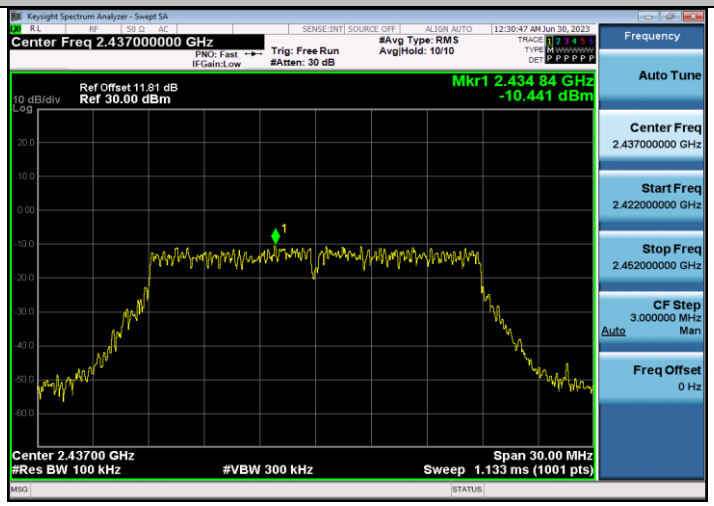

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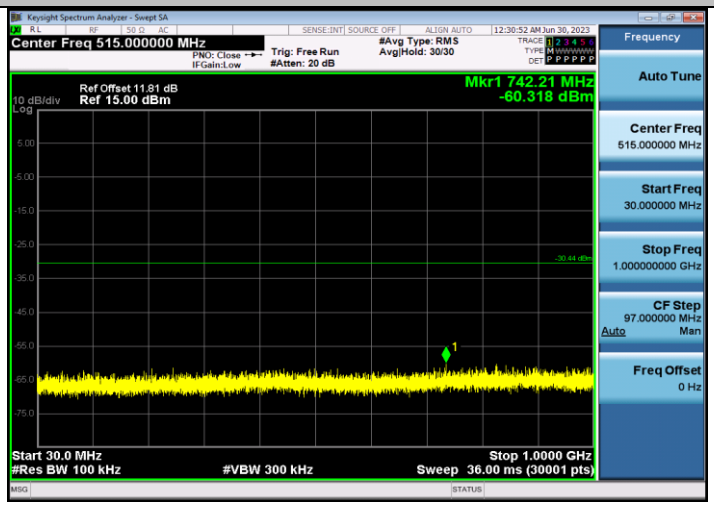

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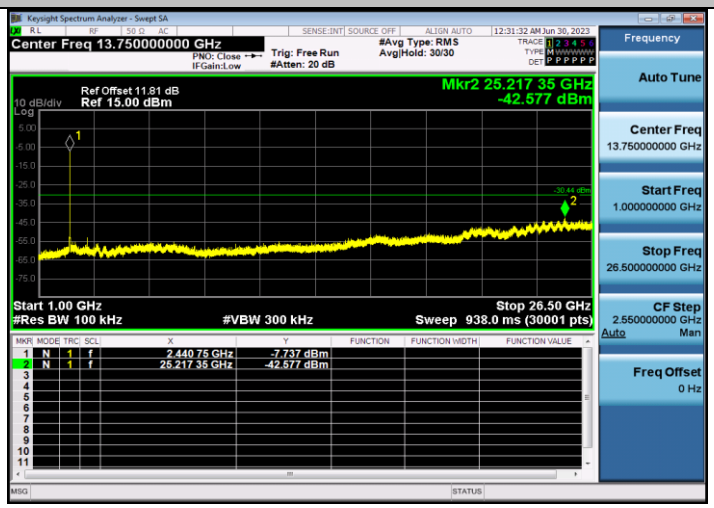

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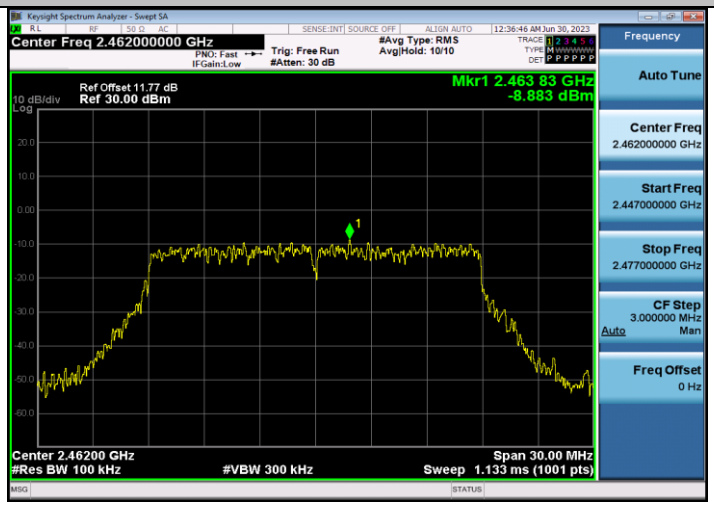

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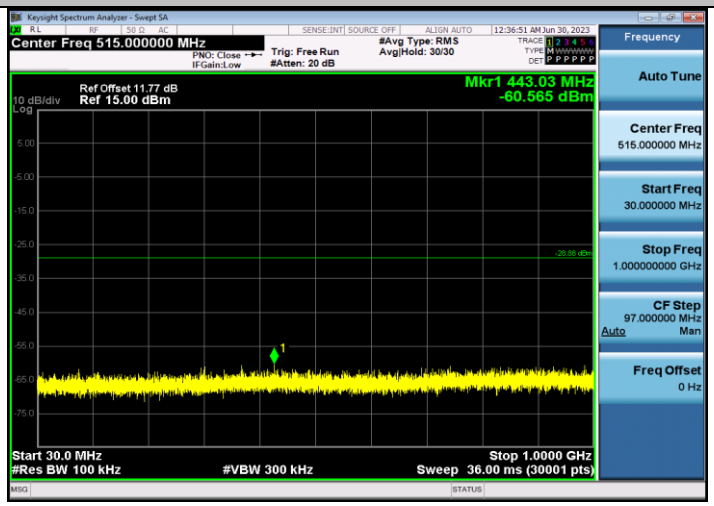

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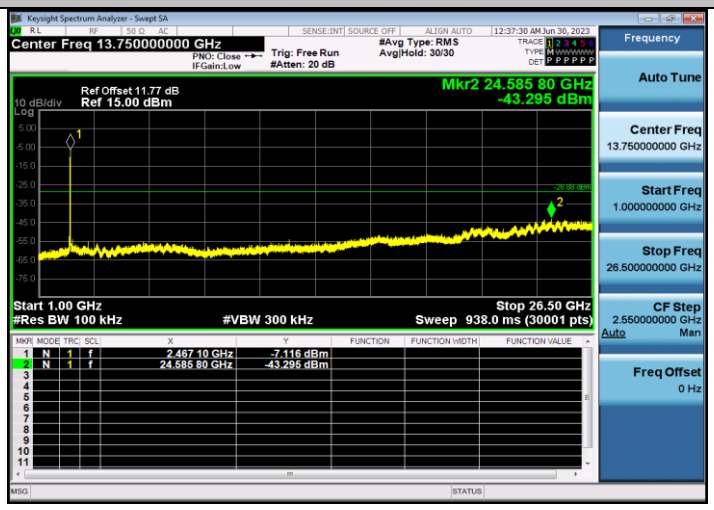

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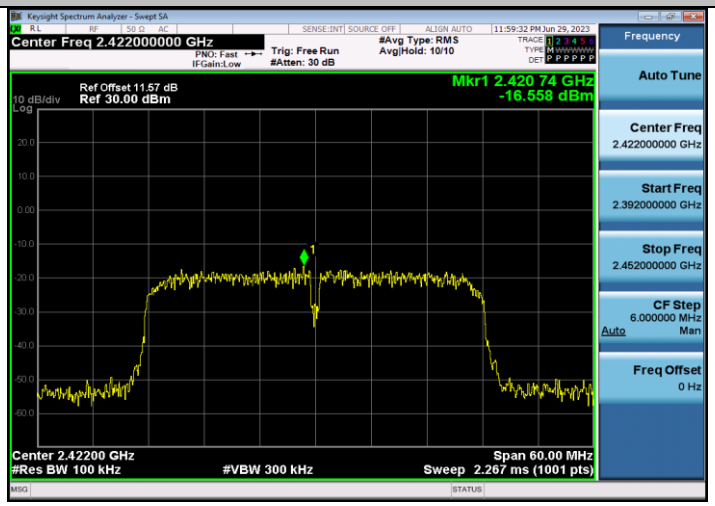
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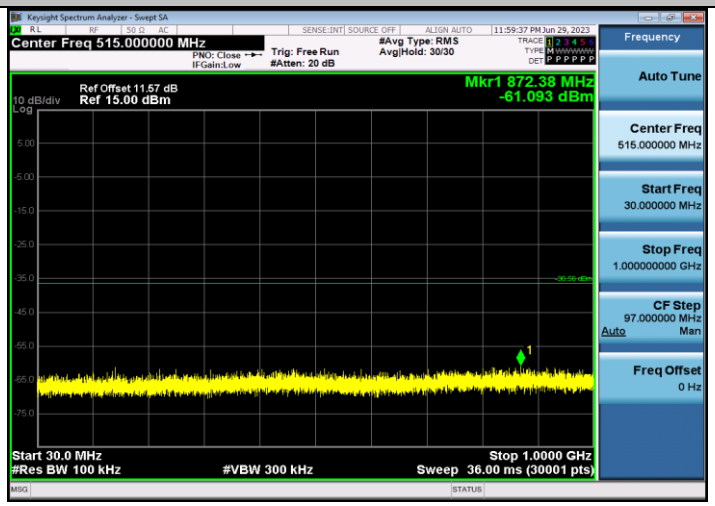
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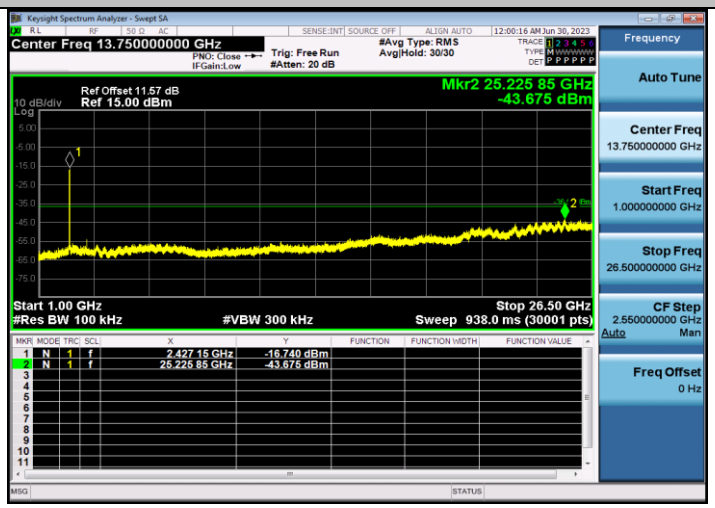

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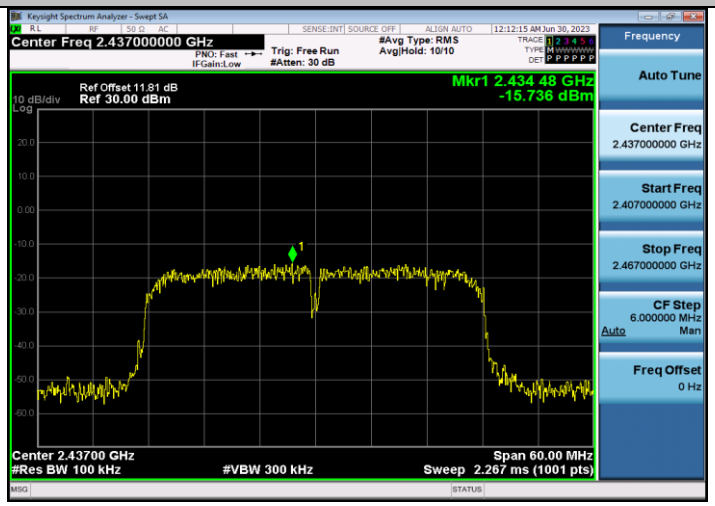
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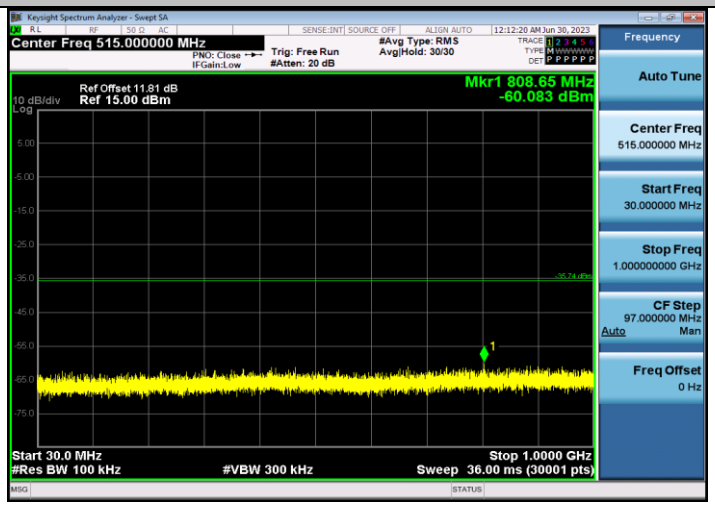
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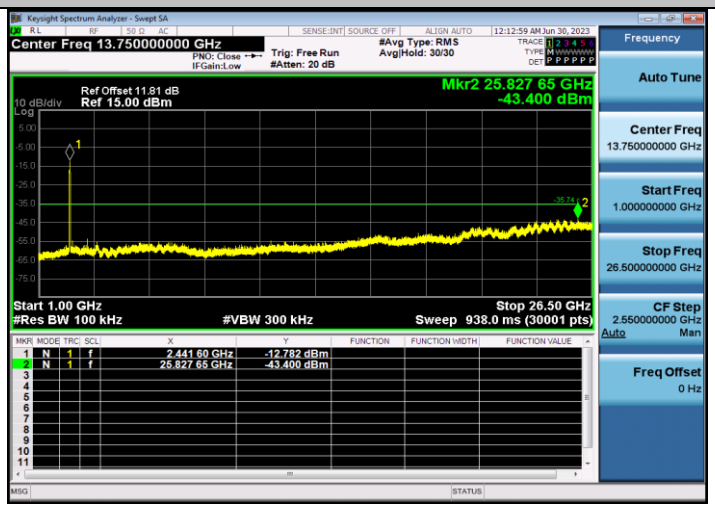

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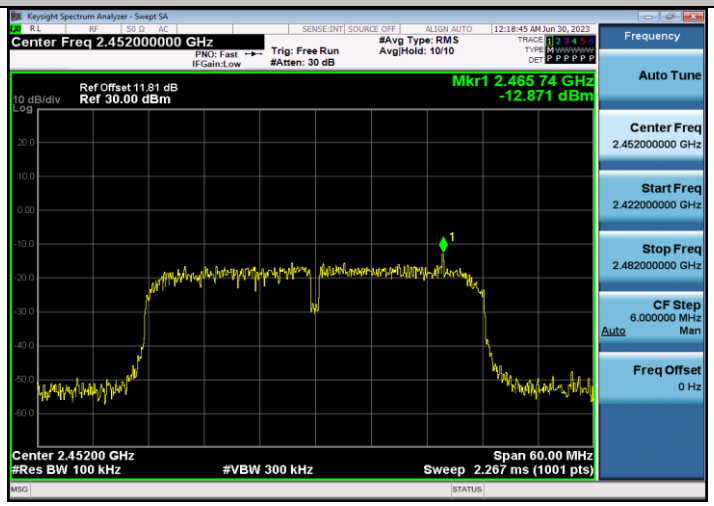

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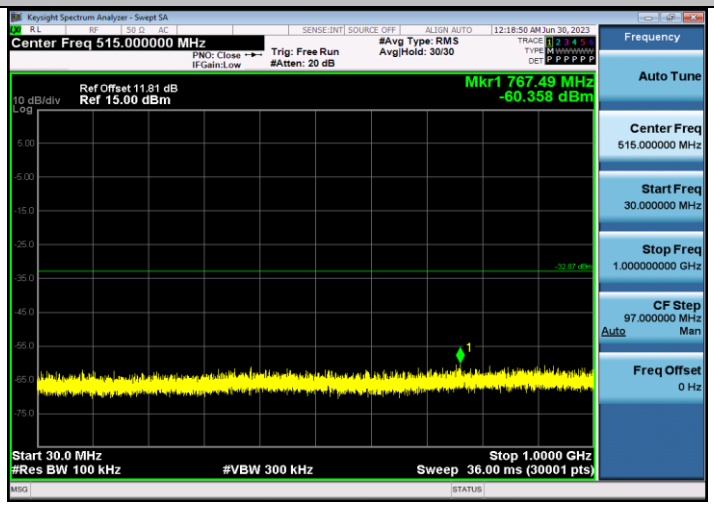

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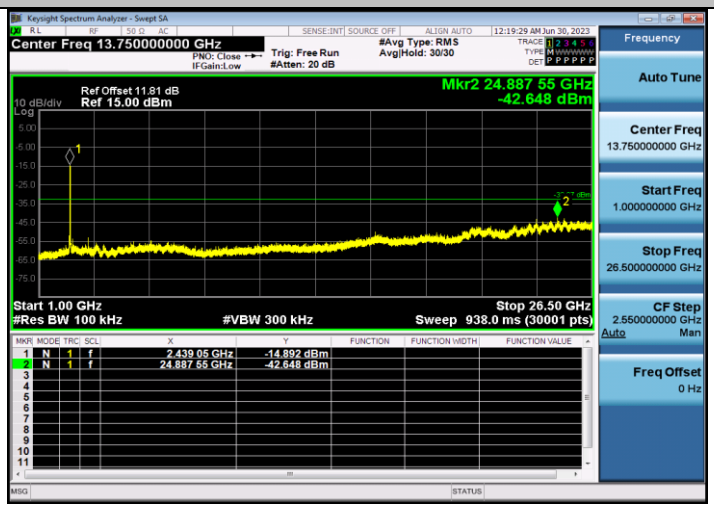


4.7 Emissions in restricted frequency bands

4.7.1 Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
1 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)
13.36 - 13.41	--	--	--

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

4.7.2 Test Procedure Reference

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

4.7.3 Test Procedures

Peak Field Strength Measurements

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

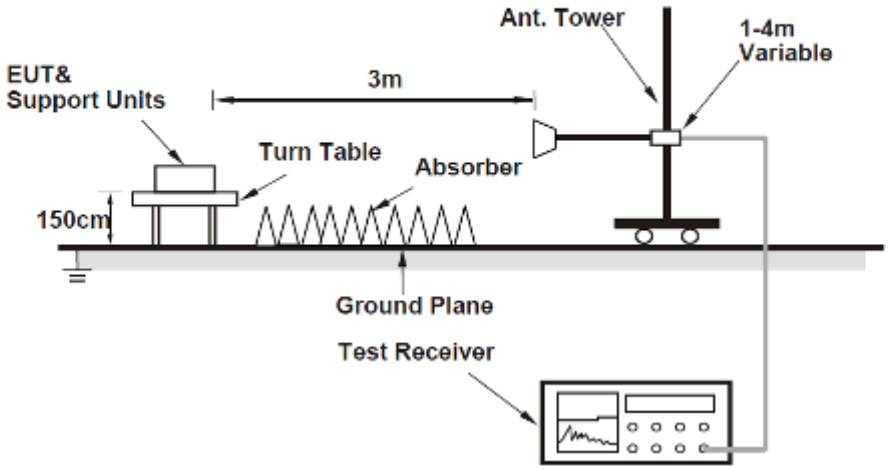
Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.

   If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.
4. Detector = Peak
5. Sweep time = auto
6. Trace mode = max hold
7. Trace was allowed to stabilize

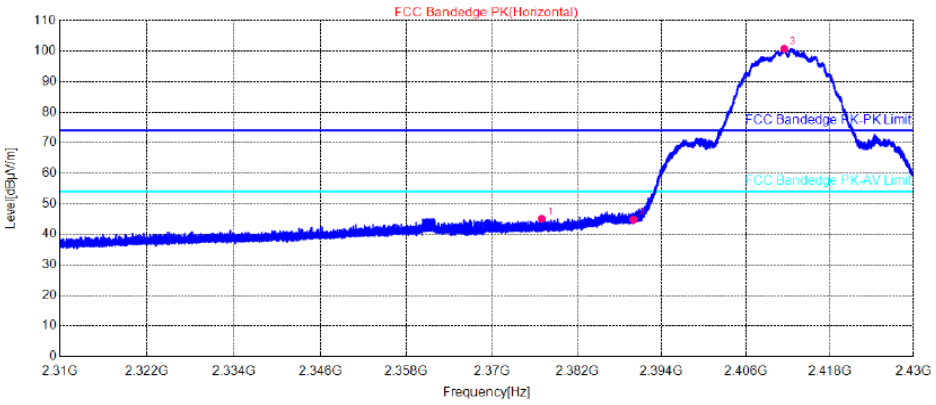
4.7.4 Test Setup

For Radiated emission above 1GHz



4.7.5 Test Results

802.11b-2412MHz/ Horizontal



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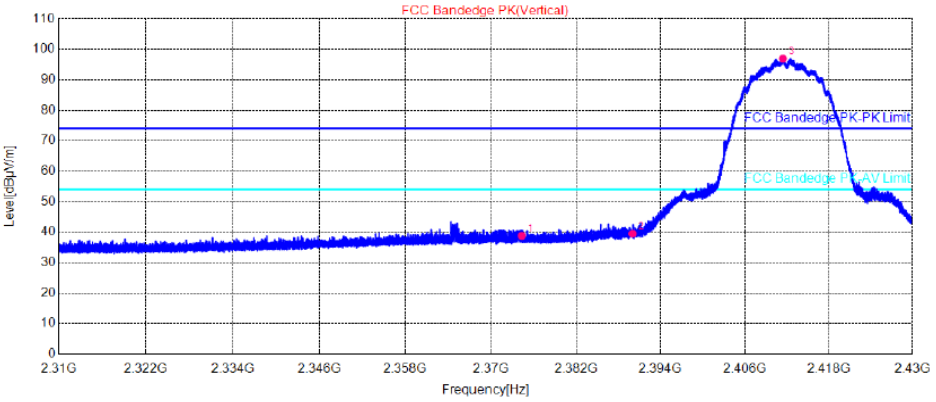
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2377.0080	62.78	45.09	74.00	28.91	200	346	Horizontal	PK
2	2390.0100	62.57	44.85	74.00	29.15	100	351	Horizontal	PK
3	2411.4720	118.50	100.72	74.00	-26.72	100	176	Horizontal	PK

802.11b-2412MHz/ Vertical



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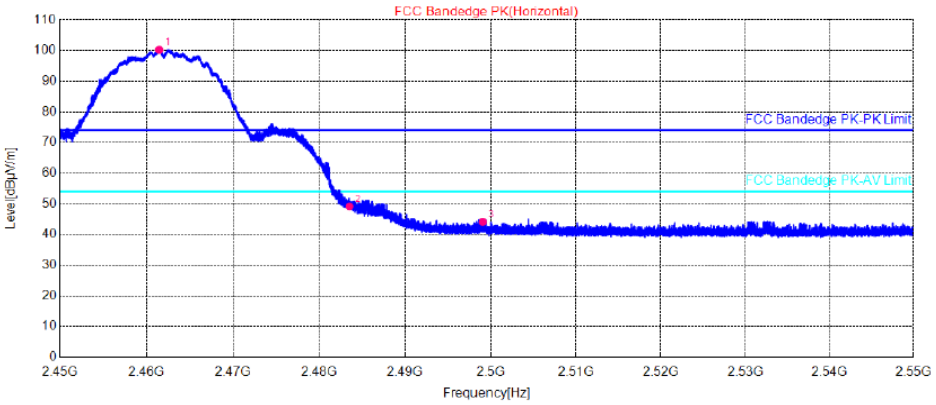
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2374.3560	56.50	38.82	74.00	35.18	100	238	Vertical	PK
2	2390.0100	57.23	39.51	74.00	34.49	100	266	Vertical	PK
3	2411.4240	114.68	96.90	74.00	-22.90	100	76	Vertical	PK

802.11b-2462MHz/ Horizontal



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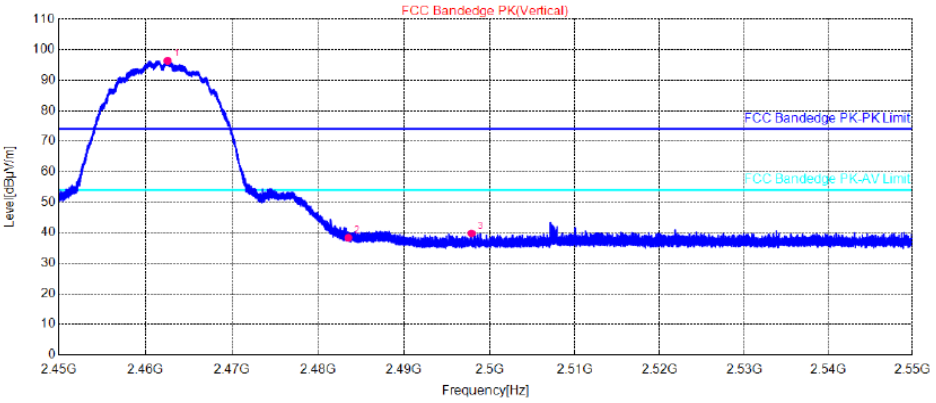
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2461.4450	118.05	100.21	74.00	-26.21	100	344	Horizontal	PK
2	2483.5000	67.03	49.18	74.00	24.82	100	341	Horizontal	PK
3	2499.0600	61.98	44.15	74.00	29.85	200	93	Horizontal	PK

802.11b-2462MHz/ Vertical



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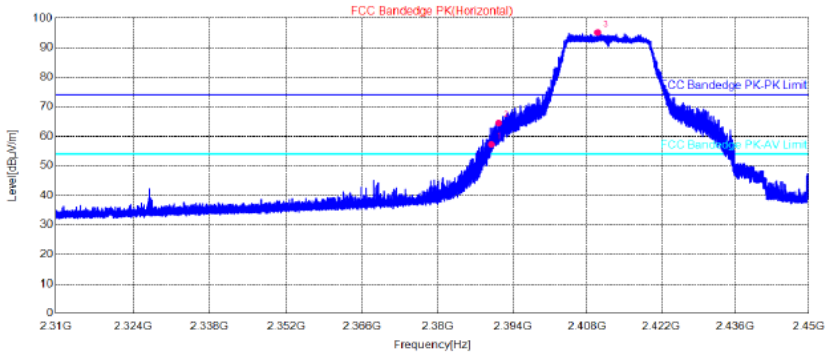
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2462.5500	114.15	96.31	74.00	-22.31	100	295	Vertical	PK
2	2483.5000	56.23	38.38	74.00	35.62	100	65	Vertical	PK
3	2497.8750	57.66	39.83	74.00	34.17	100	283	Vertical	PK

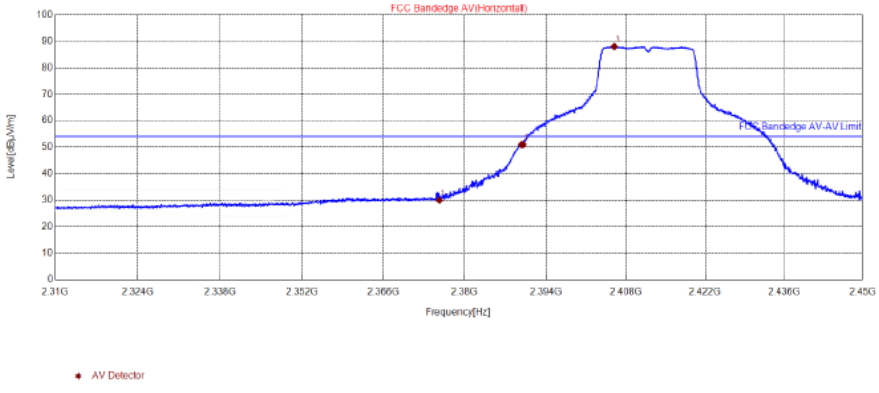
802.11g-2412MHz/ Horizontal-PK



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2390.0030	75.00	57.28	74.00	16.72	200	278	Horizontal	PK
2	2391.3680	82.26	64.54	74.00	9.46	200	345	Horizontal	PK
3	2409.9600	112.95	95.17	74.00	-21.17	200	342	Horizontal	PK

802.11g-2412MHz/ Horizontal-AV



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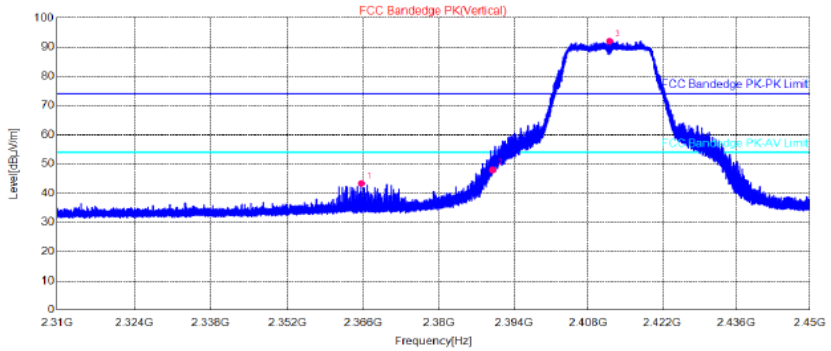
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2375.7000	47.64	29.95	54.00	24.05	155	2	Horizontal	AV
2	2390.0000	68.70	50.98	54.00	3.02	155	280	Horizontal	AV
3	2406.0000	105.73	87.97	54.00	-33.97	155	282	Horizontal	AV

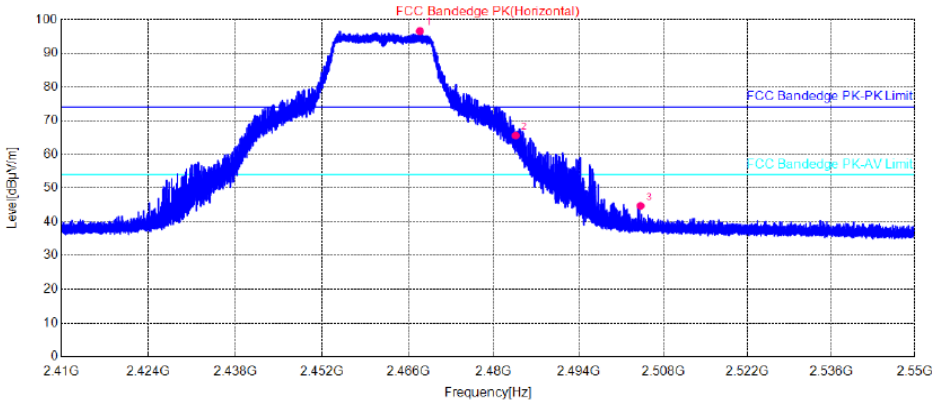
802.11g-2412MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2365.6360	60.92	43.27	74.00	30.73	100	187	Vertical	PK
2	2390.0030	65.68	47.96	74.00	26.04	100	325	Vertical	PK
3	2411.9900	109.74	91.96	74.00	-17.96	100	325	Vertical	PK

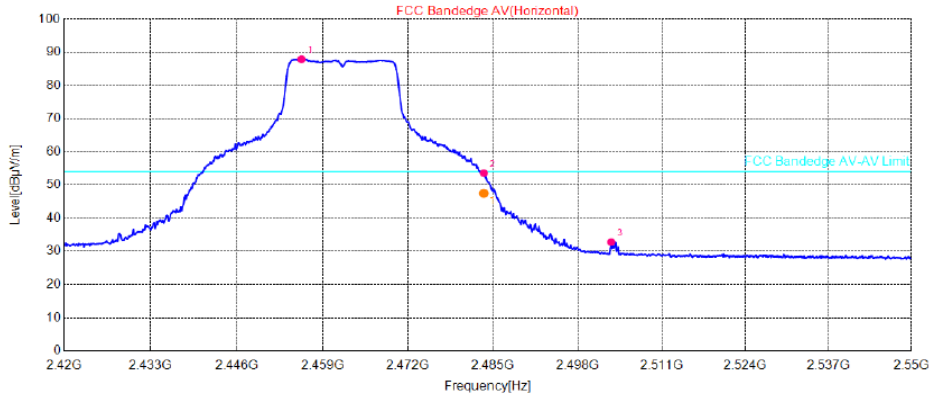
802.11g-2462MHz/ Horizontal-PK



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2467.8760	114.40	96.55	74.00	-22.55	200	277	Horizontal	PK
2	2483.5700	83.43	65.58	74.00	8.42	200	283	Horizontal	PK
3	2504.1710	62.57	44.73	74.00	29.27	200	277	Horizontal	PK

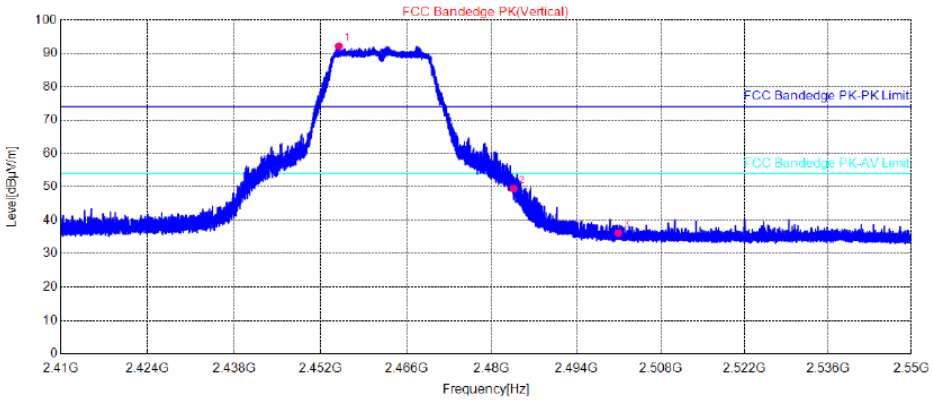
802.11g-2462MHz/ Horizontal-AV



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2455.7500	105.70	87.87	54.00	-33.87	155	279	Horizontal	AV
2	2483.5700	71.42	53.57	54.00	0.43	155	279	Horizontal	AV
3	2503.2000	50.63	32.79	54.00	21.21	155	7	Horizontal	AV

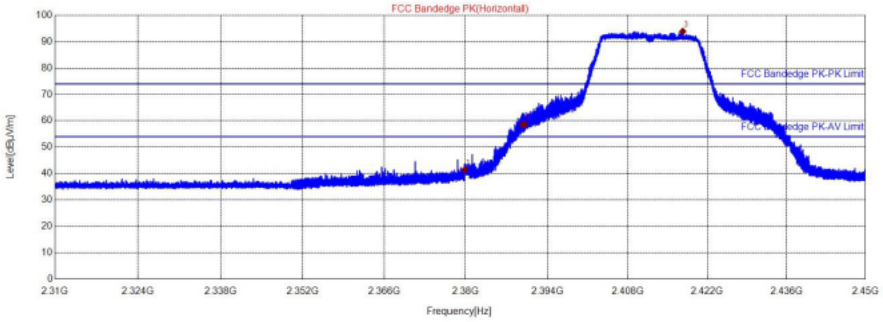
802.11g-2462MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2454.9400	109.98	92.15	74.00	-18.15	100	304	Vertical	PK
2	2483.5700	67.31	49.46	74.00	24.54	100	332	Vertical	PK
3	2500.9090	54.03	36.20	74.00	37.80	100	236	Vertical	PK

802.11n (HT20)-2412MHz/ Horizontal-PK



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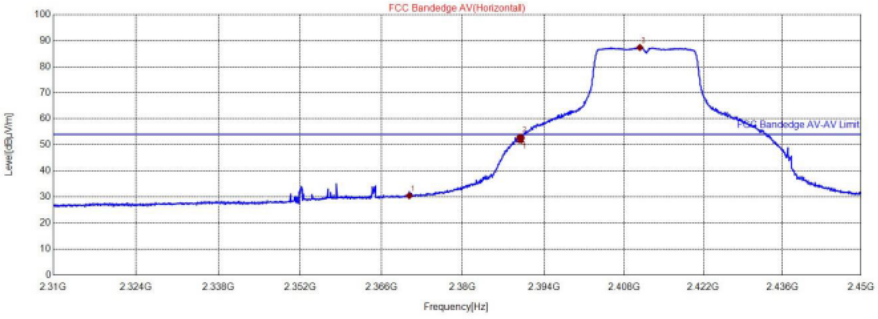
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2379.9000	59.12	41.41	74.00	32.59	200	119	Horizontal	PK
2	2390.0000	76.25	58.53	74.00	15.47	200	341	Horizontal	PK
3	2417.6850	111.67	93.88	74.00	-19.88	200	116	Horizontal	PK

802.11n (HT20)-2412MHz/ Horizontal-AV



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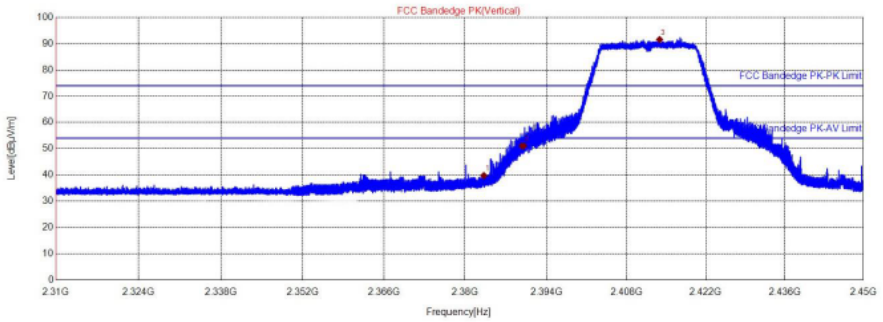
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2370.8000	48.12	30.46	54.00	23.54	155	341	Horizontal	AV
2	2390.0000	70.65	52.93	54.00	1.07	155	284	Horizontal	AV
3	2410.8000	105.13	87.35	54.00	-33.35	155	277	Horizontal	AV

802.11n (HT20)-2412MHz/ Vertical



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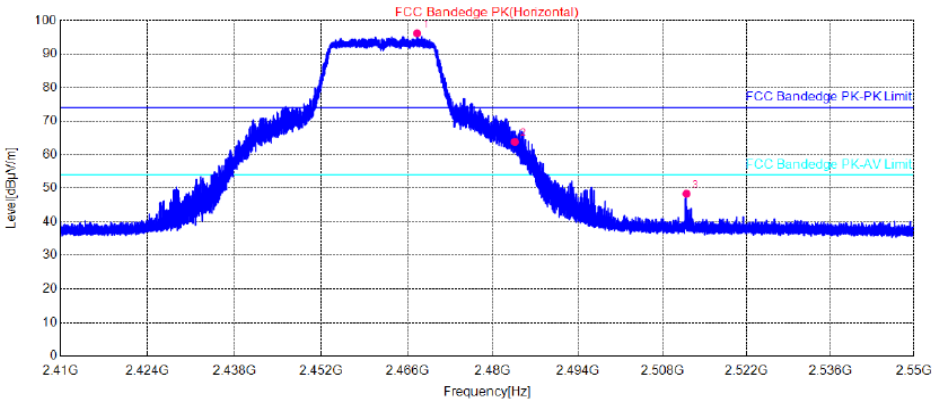
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2383.3050	57.45	39.74	74.00	34.26	100	6	Vertical	PK
2	2390.0000	68.80	51.08	74.00	22.92	100	307	Vertical	PK
3	2413.8450	109.33	91.55	74.00	-17.55	100	328	Vertical	PK

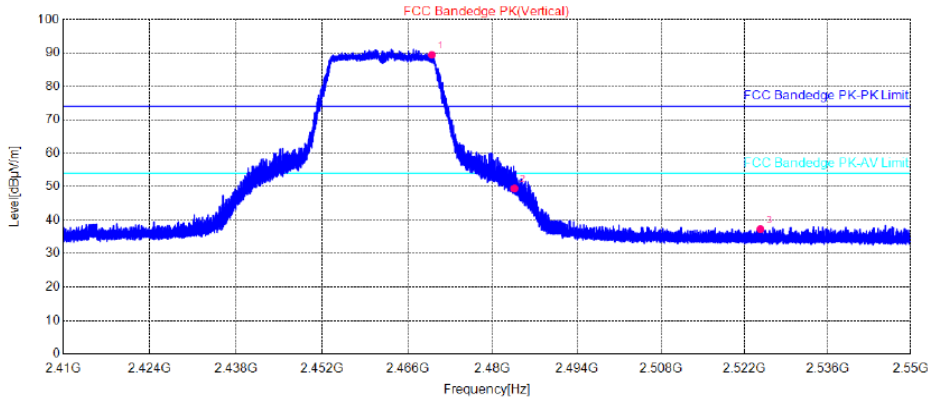
802.11n (HT20)-2462MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2467.5540	114.01	96.16	74.00	-22.16	200	288	Horizontal	PK
2	2483.5700	81.66	63.81	74.00	10.19	200	285	Horizontal	PK
3	2511.9340	66.21	48.36	74.00	25.64	200	161	Horizontal	PK

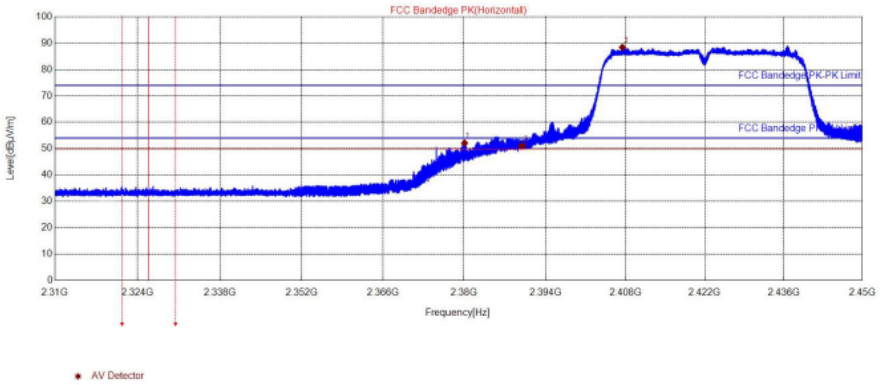
802.11n (HT20)-2462MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2469.9340	107.27	89.41	74.00	-15.41	100	301	Vertical	PK
2	2483.5700	67.33	49.48	74.00	24.52	100	301	Vertical	PK
3	2524.6390	55.14	37.31	74.00	36.69	100	320	Vertical	PK

802.11n (HT40)-2422MHz/ Horizontal



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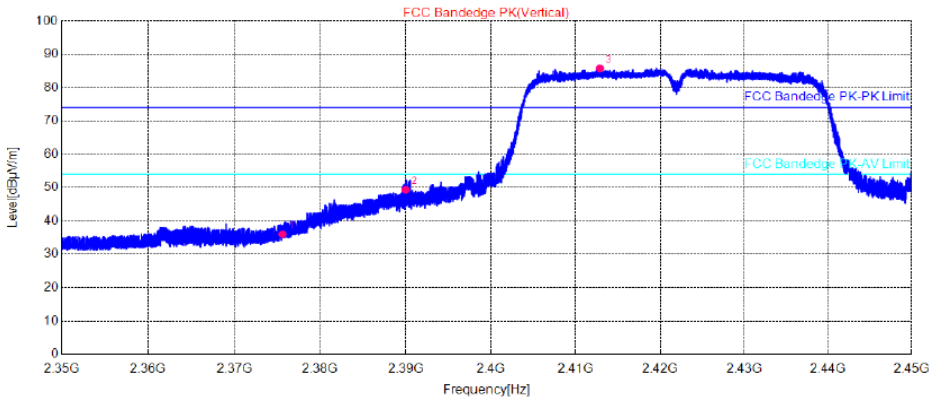
Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2379.5700	68.04	50.33	74.00	23.67	200	348	Horizontal	PK
2	2390.0000	68.69	50.97	74.00	23.03	200	352	Horizontal	PK
3	2407.4750	106.18	88.41	74.00	-14.41	200	342	Horizontal	PK

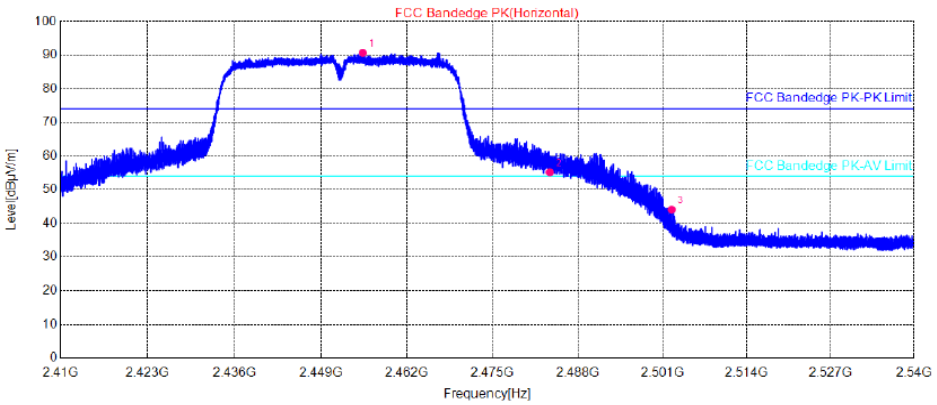
802.11n (HT40)-2422MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2375.5900	53.74	36.05	74.00	37.95	100	17	Vertical	PK
2	2390.0000	67.09	49.37	74.00	24.63	100	323	Vertical	PK
3	2412.8600	103.56	85.78	74.00	-11.78	100	323	Vertical	PK

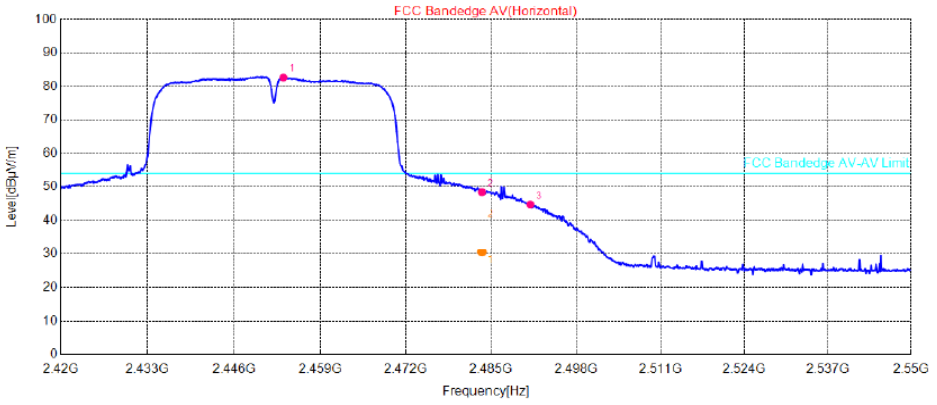
802.11n (HT40)-2452MHz/ Horizontal-PK



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2455.2790	108.48	90.65	74.00	-16.65	200	285	Horizontal	PK
2	2483.7035	73.03	55.18	74.00	18.82	200	276	Horizontal	PK
3	2502.4170	61.90	44.07	74.00	29.93	200	282	Horizontal	PK

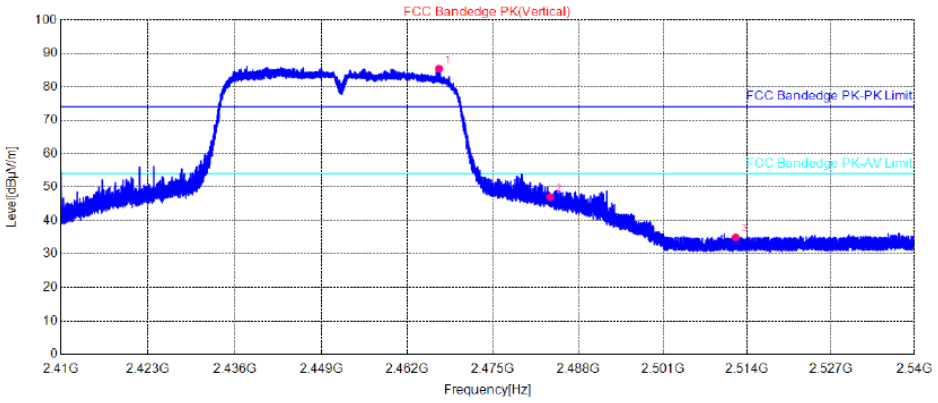
802.11n (HT40)-2452MHz/ Horizontal-AV



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2453.4100	100.46	82.63	54.00	-28.63	155	286	Horizontal	AV
2	2483.5700	66.26	48.41	54.00	5.59	155	284	Horizontal	AV
3	2490.9800	62.61	44.76	54.00	9.24	155	284	Horizontal	AV

802.11n (HT40)-2452MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2466.7775	103.24	85.39	74.00	-11.39	100	326	Vertical	PK
2	2483.7035	64.88	47.03	74.00	26.97	100	326	Vertical	PK
3	2512.2320	52.79	34.94	74.00	39.06	100	203	Vertical	PK

4.8 Radiated Emission Measurement

4.8.1 Limits

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

4.8.2 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degree 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. Both X and Y axes of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotate table was turned from 0 degree to 360 degree to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. 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 height of antenna 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

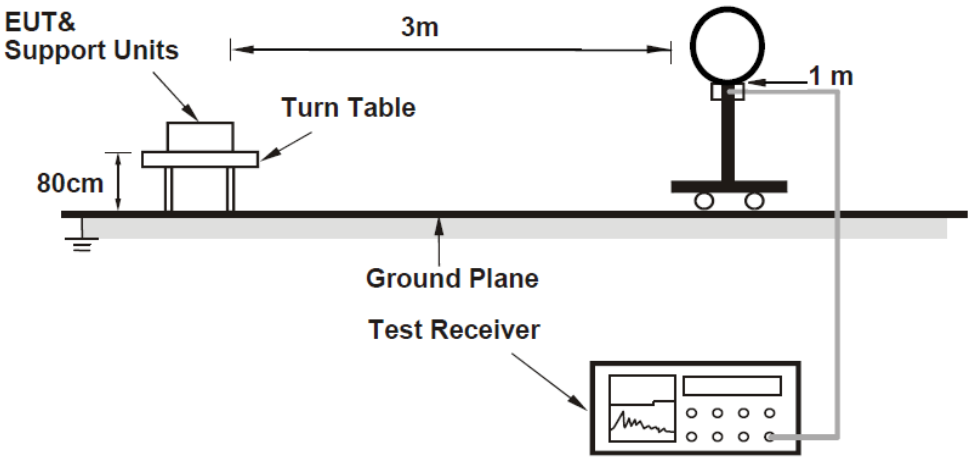
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz & 360 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1/T for RMS Average (Duty cycle < 98 %) for Peak detection at frequency above 1 GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz (Duty cycle $\geqslant$ 98 %) for Average detection (AV) at frequency above 1 GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.8.3 Deviation from Test Standard

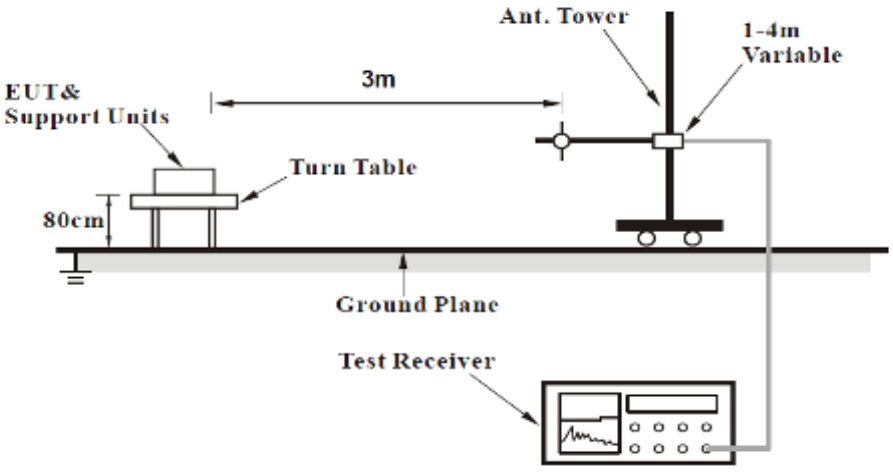
No deviation.

4.8.4 Test Setup

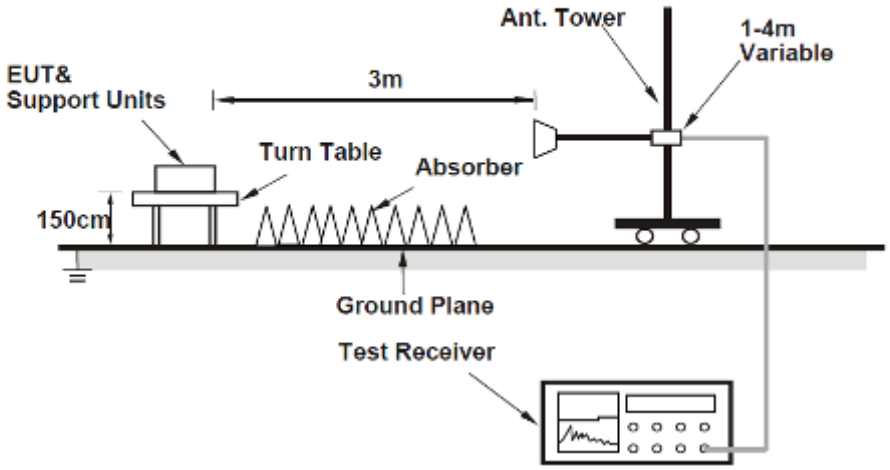
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.8.5 EUT Operating Conditions

a. Placed the EUT on a testing table.

b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.8.6 Test Results

Radiated Emissions Range 9kHz~30MHz

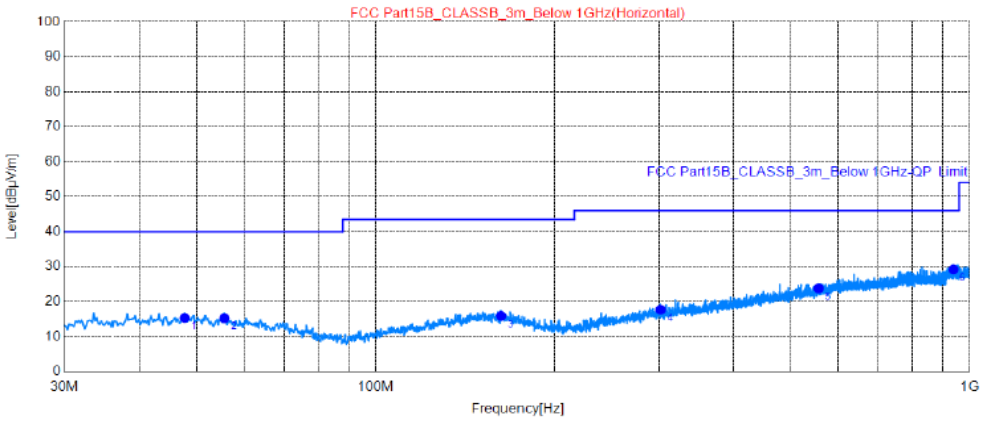
The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Radiated Emissions Range 30MHz~1GHz

Below is the worst test data

Channel	Channel 1	**Detector Function**	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	**Antenna Polarity**	Horizontal

Test Plot:



Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.65	25.62	-10.30	15.32	40.00	24.68	200	278	Horizontal
2	55.60	26.02	-10.78	15.24	40.00	24.76	200	272	Horizontal
3	162.5	25.26	-9.34	15.92	43.50	27.58	200	336	Horizontal
4	301.6	25.62	-7.91	17.71	46.00	28.29	200	214	Horizontal
5	556.9	26.26	-2.45	23.81	46.00	22.19	200	296	Horizontal
6	938.5	25.43	3.80	29.23	46.00	16.77	200	30	Horizontal

REMARKS:

1. Emission Level(dBuV/m) = Spectrum reading (dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)

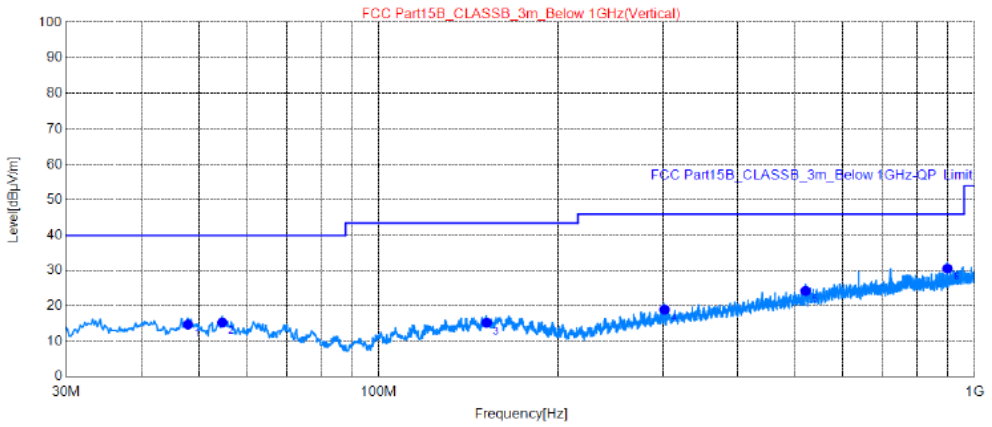
3. The other emission levels were very low against the limit.

4. Margin value = Limit value – Emission Level

Channel	Channel 1	**Detector Function**	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	**Antenna Polarity**	Vertical

Test Plot:

Test Graph



Final Data List

NO.	Freq. [MHz]	QP Reading [dBµV/m]	Factor [dB]	QP Value [dBµV/m]	QP Limit [dBµV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	47.84	25.03	-10.30	14.73	40.00	25.27	100	128	Vertical
2	54.63	26.02	-10.71	15.31	40.00	24.69	100	223	Vertical
3	151.6	24.78	-9.55	15.23	43.50	28.27	100	323	Vertical
4	301.6	26.85	-7.91	18.94	46.00	27.06	100	34	Vertical
5	520.0	27.29	-3.05	24.24	46.00	21.76	100	218	Vertical
6	899.5	28.31	2.27	30.58	46.00	15.42	100	305	Vertical

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)

3. The other emission levels were very low against the limit.

4. Margin value = Limit value – Emission Level

Radiated Emission Range 1GHz~10th Harmonic

802.11b

Channel	TX Channel 1	**Detector Function**	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Correction Factor (dB/m)**	**Antenna Polarity**	**Detector**
1	4821.6000	42.58	74.00	31.42	-13.24	H	PK
2	4821.6000	39.93	54.00	14.07	-13.24	H	AV
3	4821.6000	40.15	74.00	33.85	-13.24	V	PK
4	4821.6000	34.99	54.00	19.01	-13.24	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 6	**Detector Function**	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Correction Factor (dB/m)**	**Antenna Polarity**	**Detector**
1	4881.1000	37.97	74.00	36.03	-13.19	H	PK
2	4881.1000	32.19	54.00	21.81	-13.19	H	AV
3	4881.1000	35.11	74.00	38.89	-13.19	V	PK
4	4881.1000	31.67	54.00	22.33	-13.19	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 11	**Detector Function**	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Correction Factor (dB/m)**	**Antenna Polarity**	**Detector**
1	4961.0000	33.49	74.00	40.51	-13.05	H	PK
2	4961.0000	28.74	54.00	25.26	-13.05	H	AV
3	4961.0000	34.02	74.00	39.98	-13.05	V	PK
4	4961.0000	28.98	54.00	25.02	-13.05	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level

802.11g

Channel	TX Channel 1	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	4825.0000	34.32	74.00	39.68	-13.24	H	PK
2	4825.0000	29.13	54.00	24.87	-13.24	H	AV
3	4825.0000	33.38	74.00	40.62	-13.24	V	PK
4	4825.0000	31.93	54.00	22.07	-13.24	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 6	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	4874.3000	35.02	74.00	38.98	-13.19	H	PK
2	4874.3000	27.92	54.00	26.08	-13.19	H	AV
3	4874.3000	37.93	74.00	36.07	-13.19	V	PK
4	4874.3000	31.98	54.00	22.02	-13.19	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level

Channel	TX Channel 11	**Detector Function**	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Correction Factor (dB/m)**	**Antenna Polarity**	**Detector**
1	4925.3000	34.46	74.00	39.54	-12.15	H	PK
2	4925.3000	28.78	54.00	25.22	-12.14	H	AV
3	4925.3000	34.72	74.00	39.28	-12.15	V	PK
4	4925.3000	30.92	54.00	23.08	-12.15	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)

3. The other emission levels were very low against the limit.

4. Margin value = Limit value – Emission Level

802.11n (HT20)

Channel	TX Channel 1	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	4925.3000	34.38	74.00	39.62	-13.13	H	PK
2	4925.3000	30.09	54.00	23.91	-13.13	H	AV
3	4925.3000	33.64	74.00	40.36	-13.13	V	PK
4	4925.3000	28.48	54.00	25.52	-13.13	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 6	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	4874.3000	33.23	74.00	40.77	-13.19	H	PK
2	4874.3000	28.00	54.00	26.00	-13.19	H	AV
3	4876.0000	33.44	74.00	40.56	-13.19	V	PK
4	4876.0000	28.21	54.00	25.79	-13.19	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value =Limit value – Emission Level

Channel	TX Channel 11	**Detector Function**	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Correction Factor (dB/m)**	**Antenna Polarity**	**Detector**
1	4825.0000	34.09	74.00	39.91	-13.24	H	PK
2	4825.0000	30.55	54.00	23.45	-13.24	H	AV
3	4825.0000	34.43	74.00	39.57	-13.24	V	PK
4	4825.0000	29.24	54.00	24.76	-13.24	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)

3. The other emission levels were very low against the limit.

4. Margin value = Limit value – Emission Level

802.11n (HT40)

Channel	TX Channel 3	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	7266.2000	37.56	74.00	36.44	-8.79	H	PK
2	7266.2000	34.92	54.00	19.08	-8.79	H	AV
3	7266.2000	37.93	74.00	36.07	-8.79	V	PK
4	7266.2000	33.30	54.00	20.70	-8.79	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 6	Detector Function	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Correction Factor (dB/m)	Antenna Polarity	Detector
1	7312.1000	37.33	74.00	36.67	-8.81	H	PK
2	7312.1000	32.71	54.00	21.29	-8.81	H	AV
3	7312.1000	38.09	74.00	35.91	-8.81	V	PK
4	7312.1000	33.13	54.00	20.87	-8.81	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Limit value – Emission Level

Channel	TX Channel 9	**Detector Function**	Peak (PK)
Frequency Range	1GHz ~ 25GHz		Average (AV)

Spurious Emission Level							
No.	**Frequency (MHz)**	**Emission Level (dBuV/m)**	**Limit (dBuV/m)**	**Margin (dB)**	**Correction Factor (dB/m)**	**Antenna Polarity**	**Detector**
1	7356.3000	40.13	74.00	33.87	-8.83	H	PK
2	7356.3000	34.09	54.00	19.91	-8.83	H	AV
3	7356.3000	37.45	74.00	36.55	-8.83	V	PK
4	7356.3000	33.42	54.00	20.58	-8.83	V	AV

REMARKS:

1. Emission Level(dBuV/m) = Original Spectrum reading (dBuV) + Correction Factor(dB/m)

2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)

3. The other emission levels were very low against the limit.

4. Margin value = Limit value – Emission Level

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

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