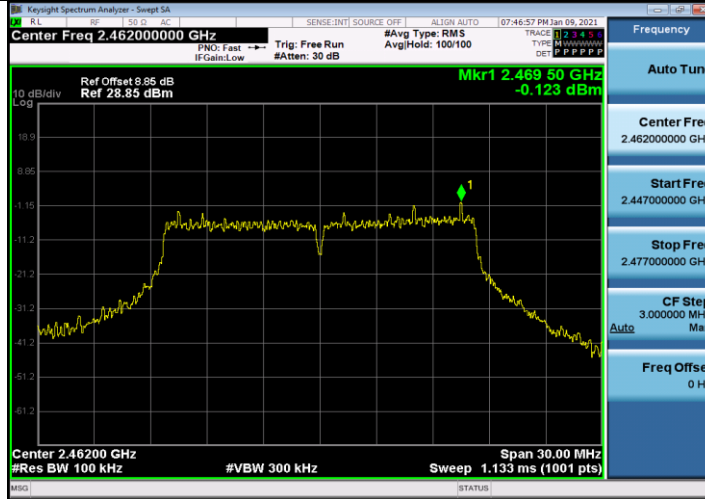
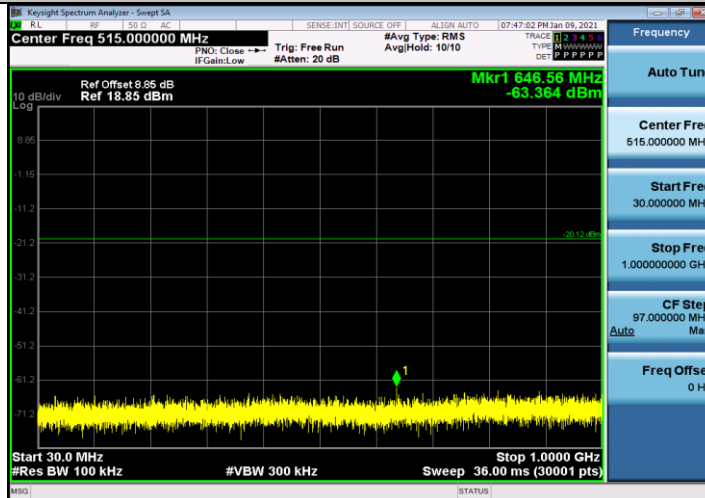


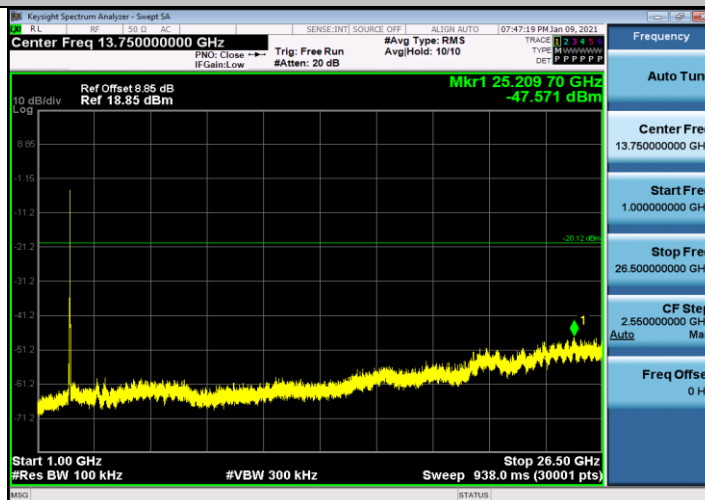
11G_Ant1_2462_0~Reference



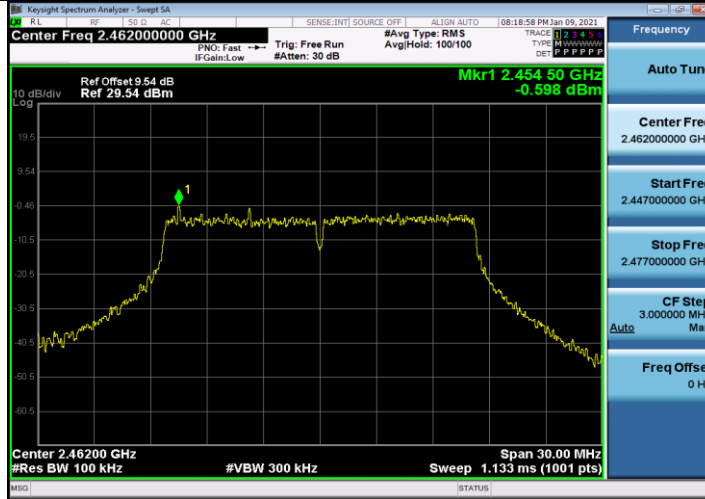
11G_Ant1_2462_30~1000



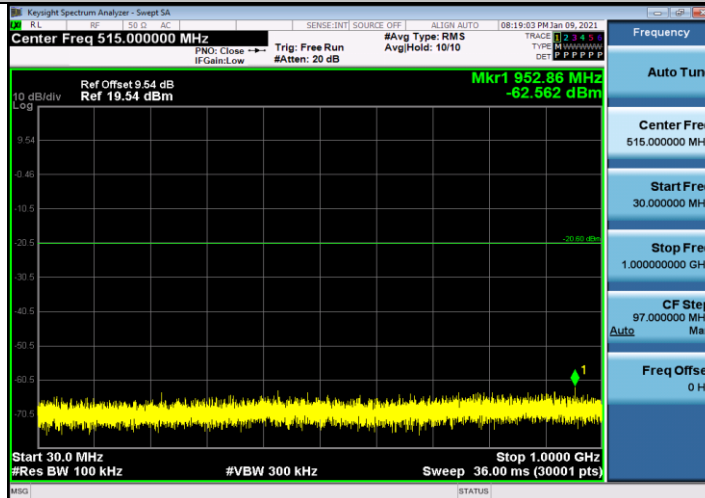
11G_Ant1_2462_1000~26500



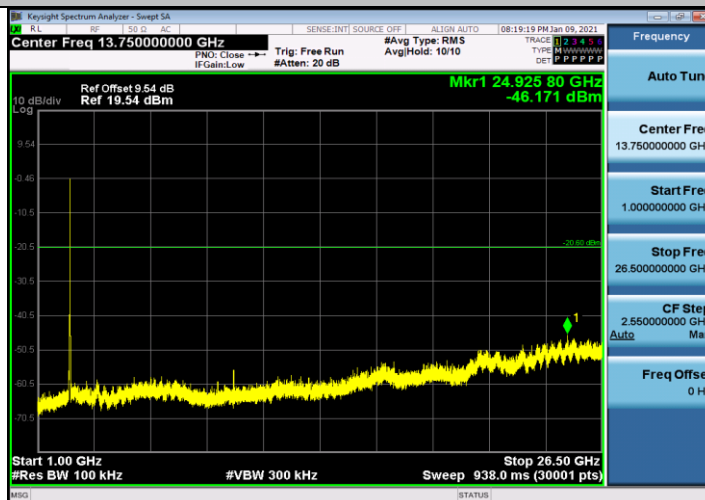
11G_Ant2_2462_0~Reference



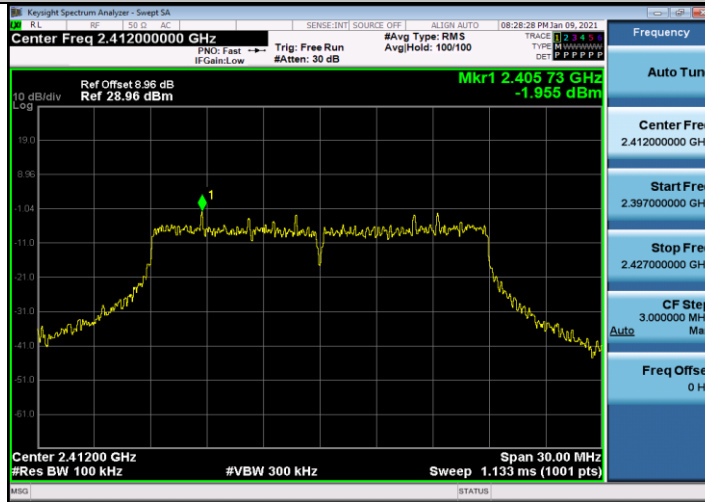
11G_Ant2_2462_30~1000



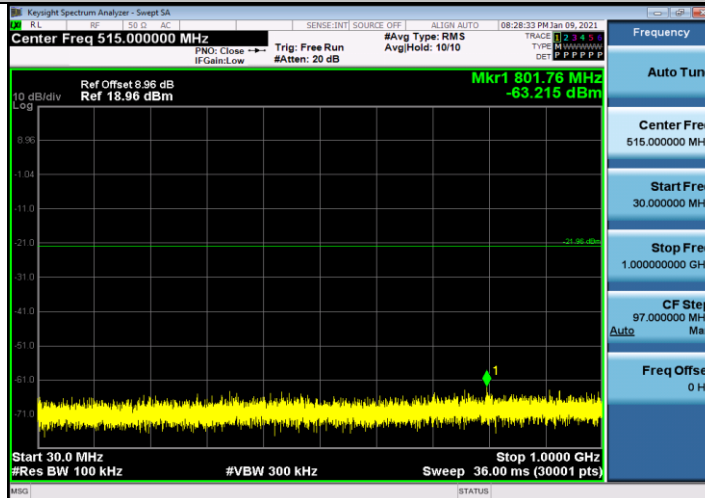
11G_Ant2_2462_1000~26500



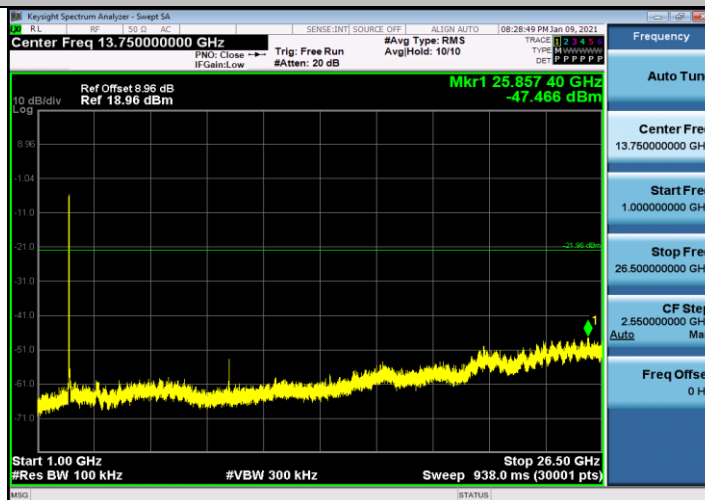
11N20MIMO_Ant1_2412_0~Reference



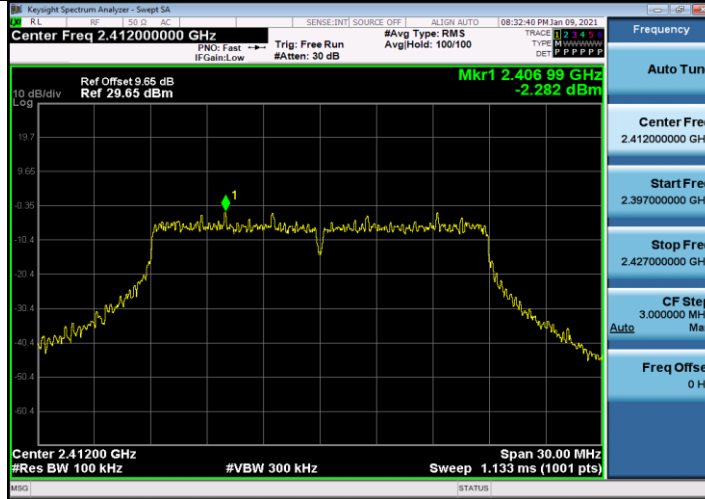
11N20MIMO_Ant1_2412_30~1000



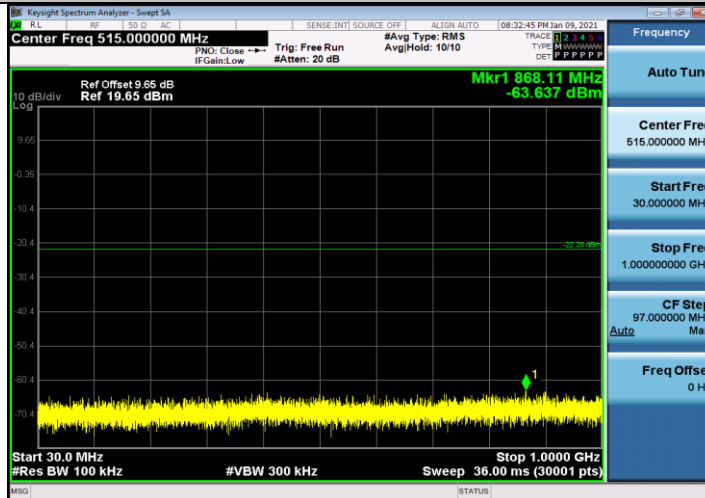
11N20MIMO_Ant1_2412_1000~26500



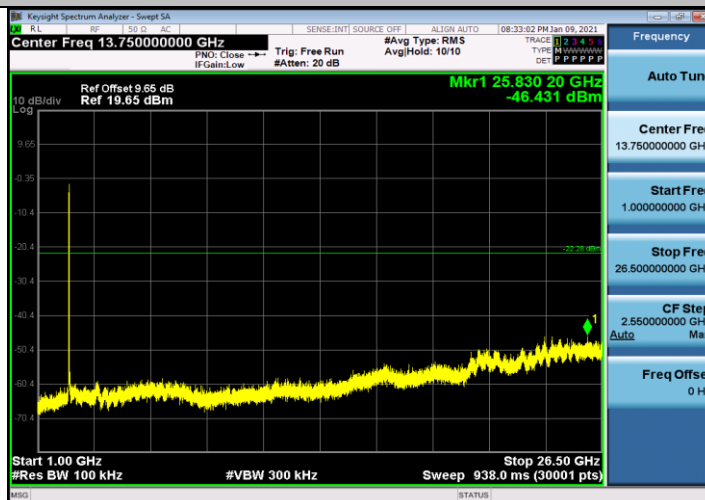
11N20MIMO_Ant2_2412_0~Reference



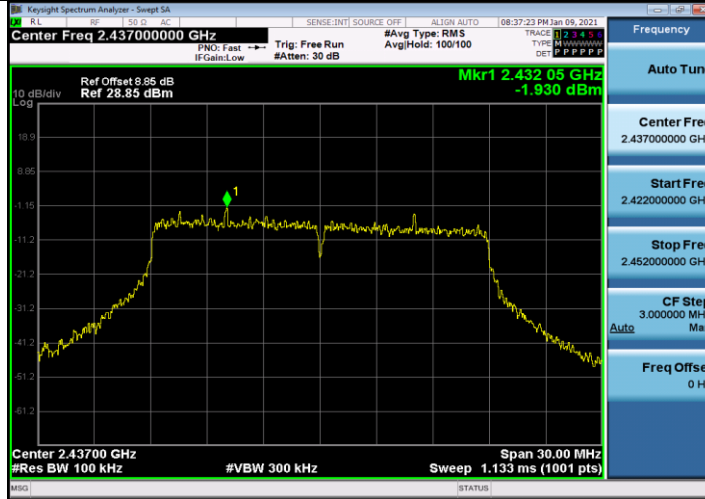
11N20MIMO_Ant2_2412_30~1000



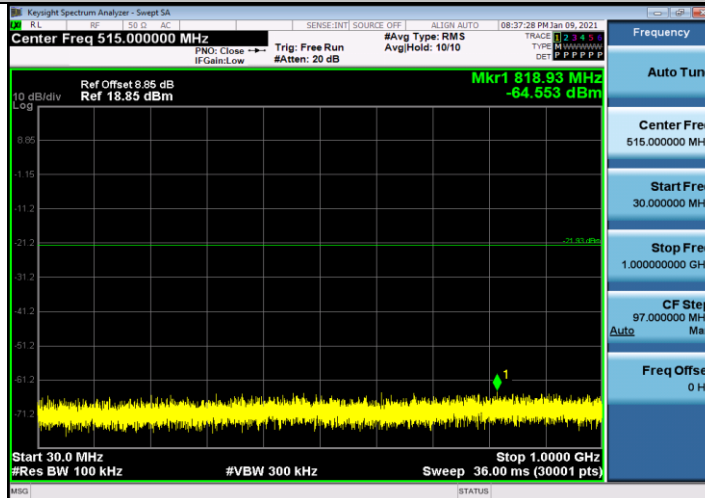
11N20MIMO_Ant2_2412_1000~26500



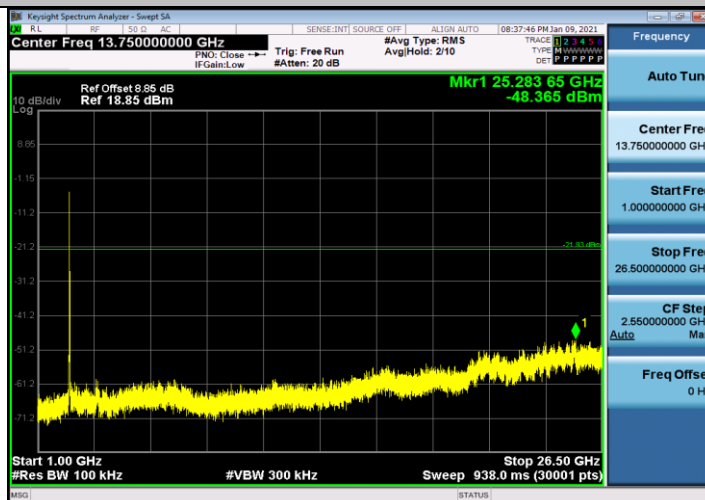
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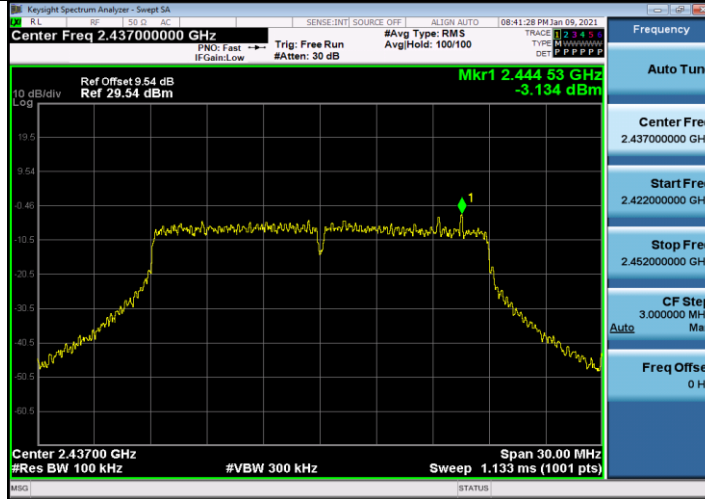
11N20MIMO_Ant1_2437_30~1000



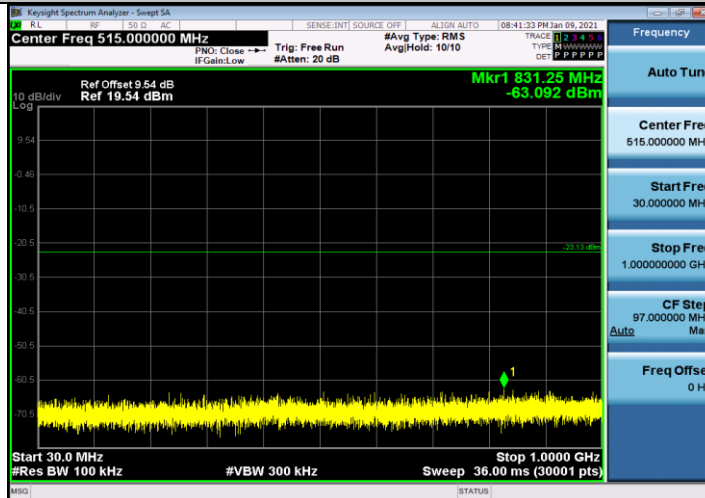
11N20MIMO_Ant1_2437_1000~26500



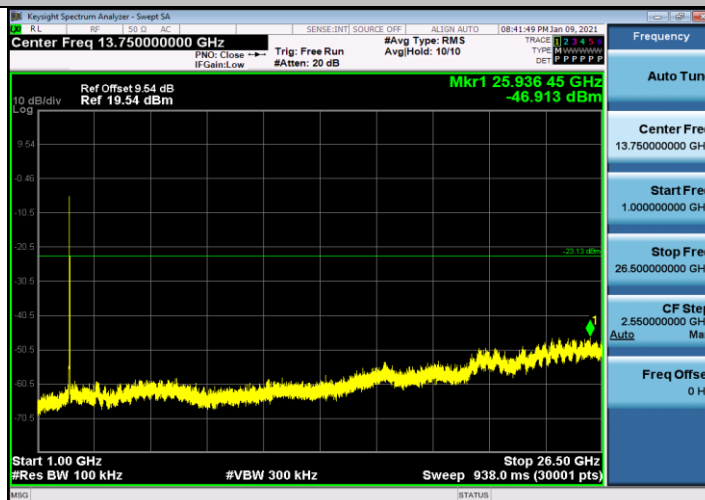
11N20MIMO_Ant2_2437_0~Reference



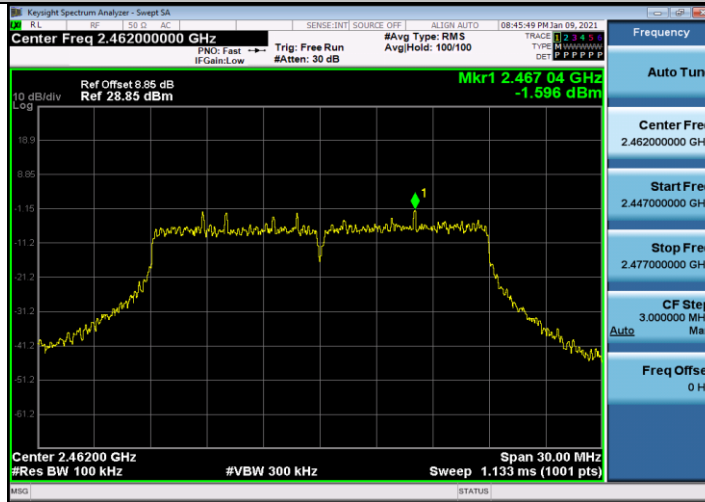
11N20MIMO_Ant2_2437_30~1000



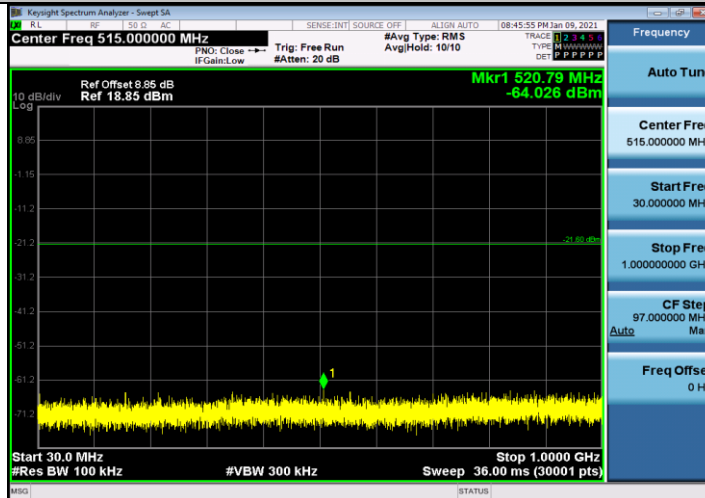
11N20MIMO_Ant2_2437_1000~26500



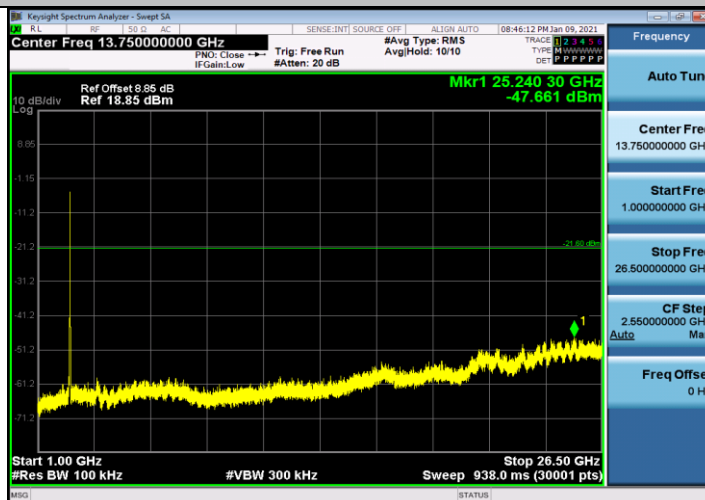
11N20MIMO_Ant1_2462_0~Reference



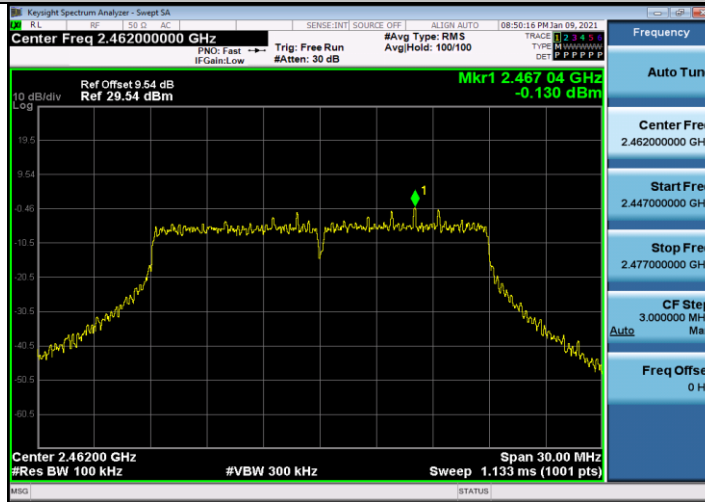
11N20MIMO_Ant1_2462_30~1000



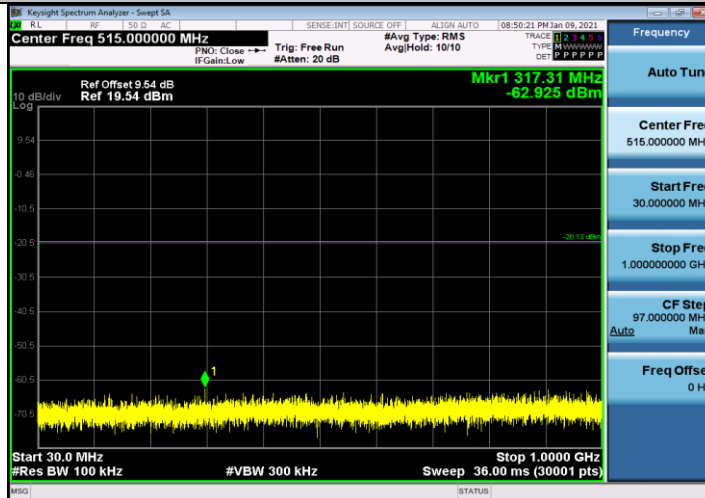
11N20MIMO_Ant1_2462_1000~26500



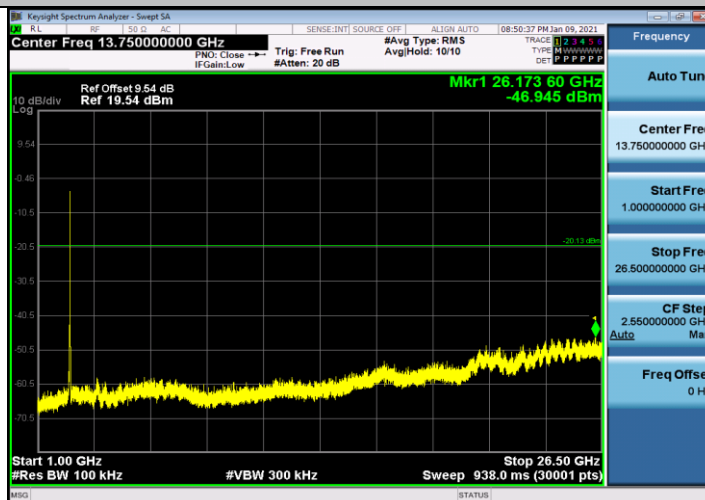
11N20MIMO_Ant2_2462_0~Reference



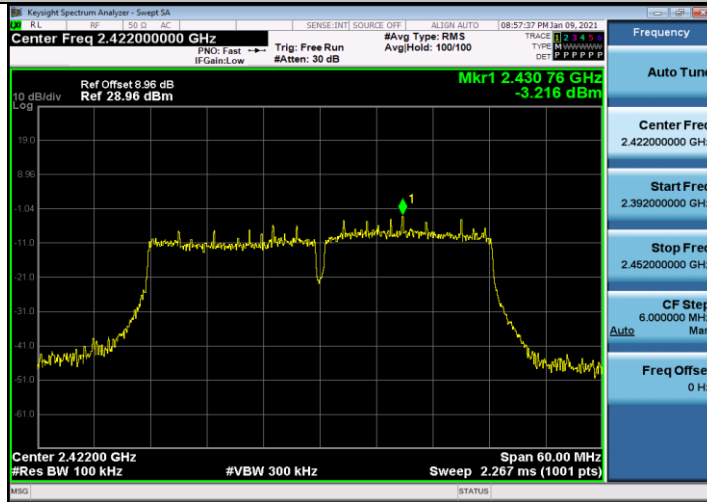
11N20MIMO_Ant2_2462_30~1000



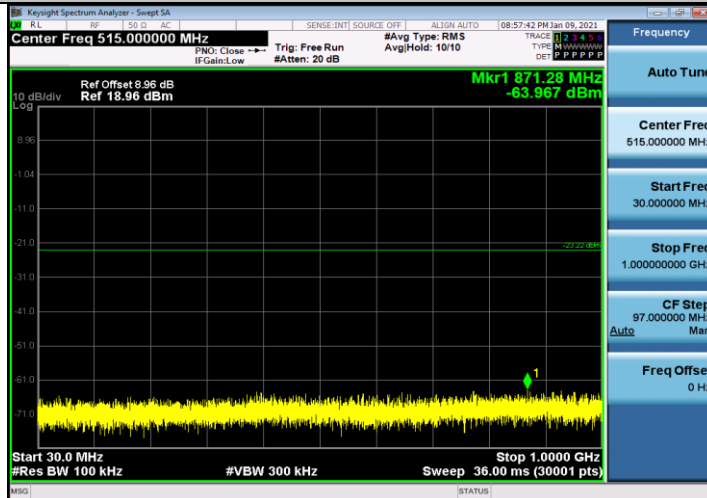
11N20MIMO_Ant2_2462_1000~26500



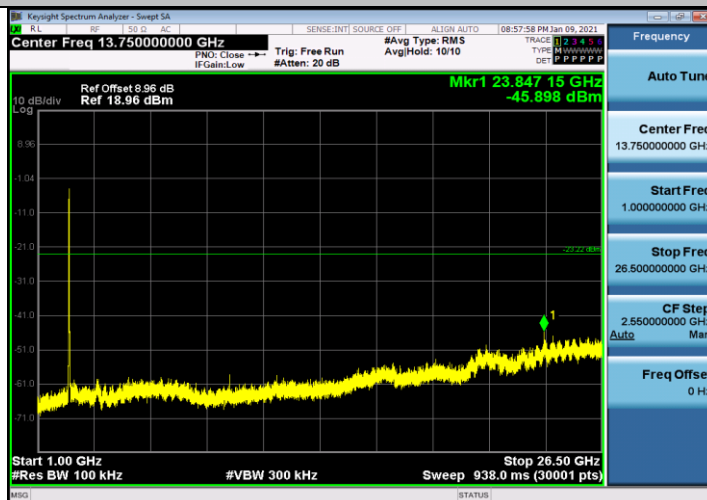
11N40MIMO_Ant1_2422_0~Reference



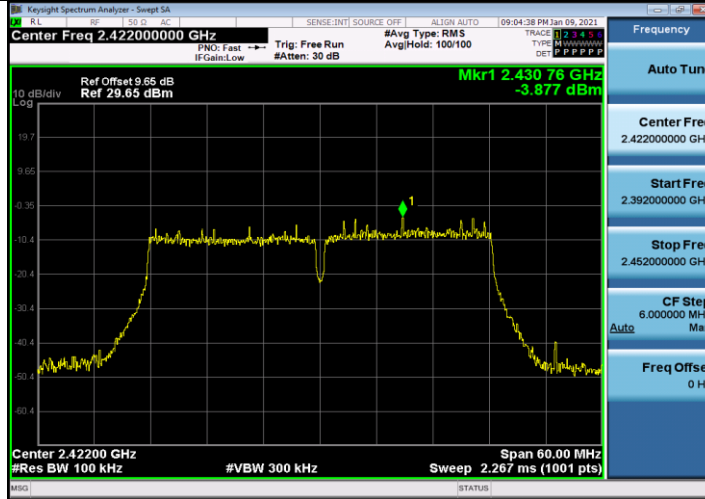
11N40MIMO_Ant1_2422_30~1000



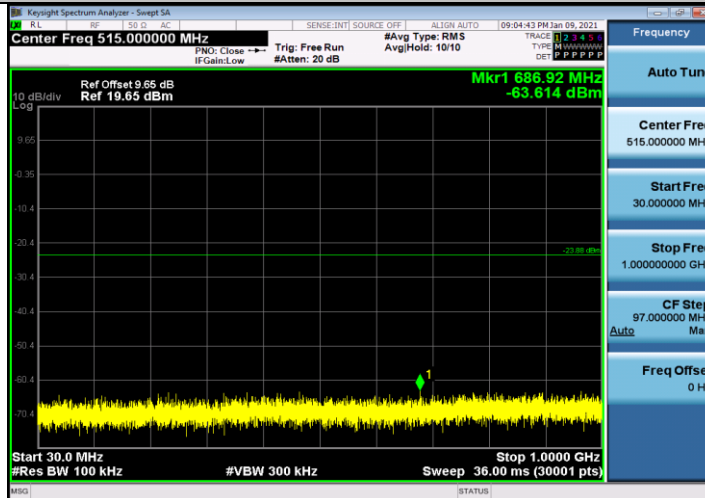
11N40MIMO_Ant1_2422_1000~26500



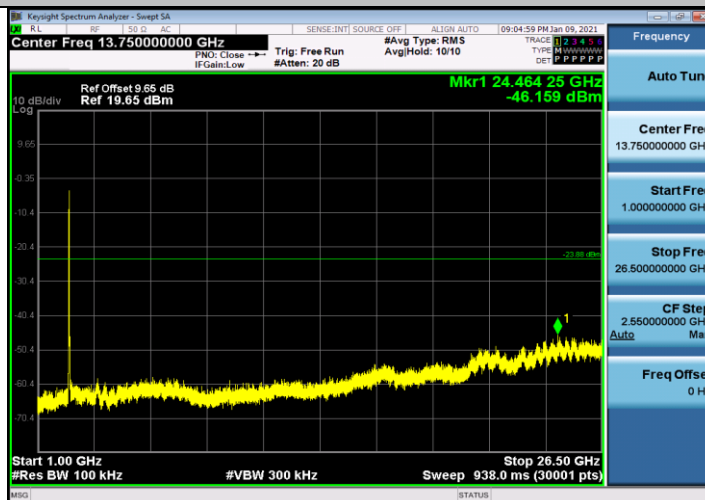
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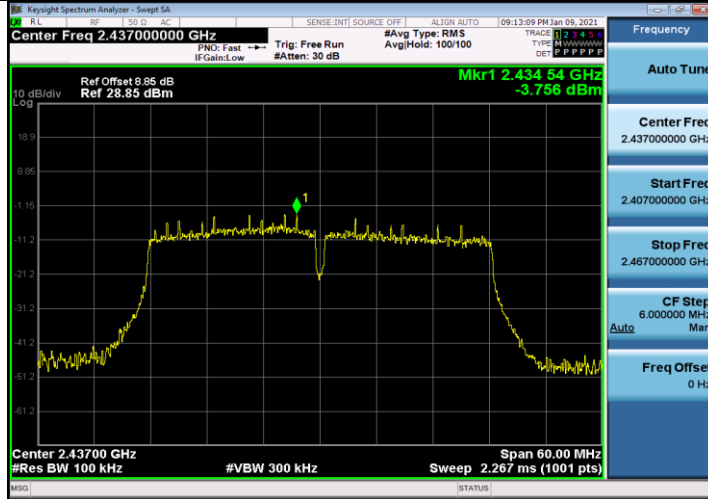
11N40MIMO_Ant2_2422_30~1000



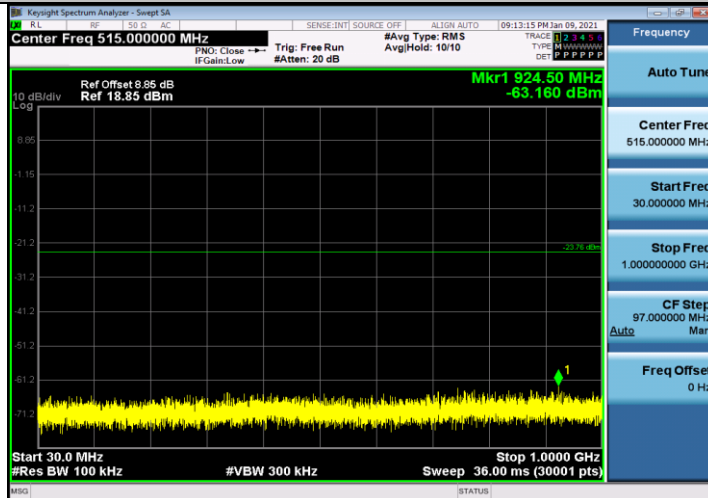
11N40MIMO_Ant2_2422_1000~26500



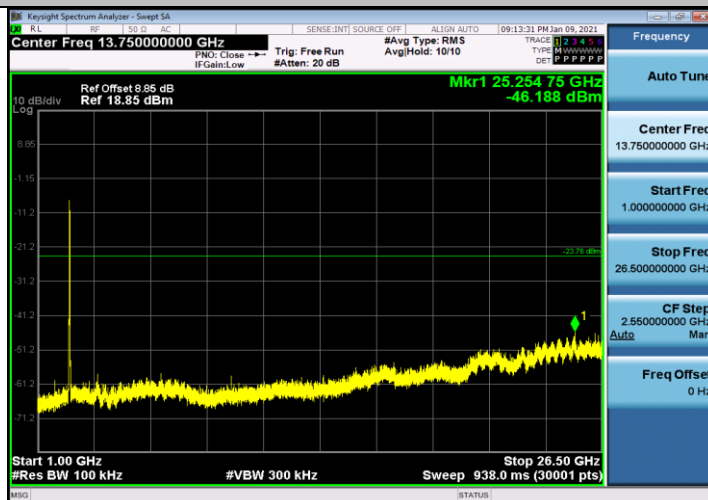
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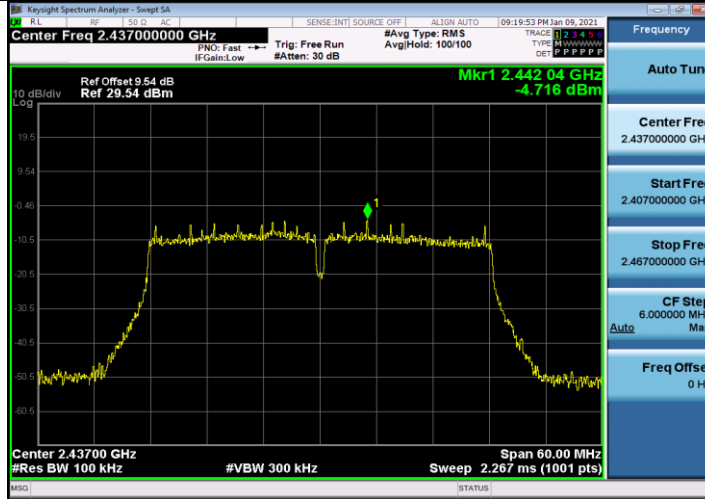
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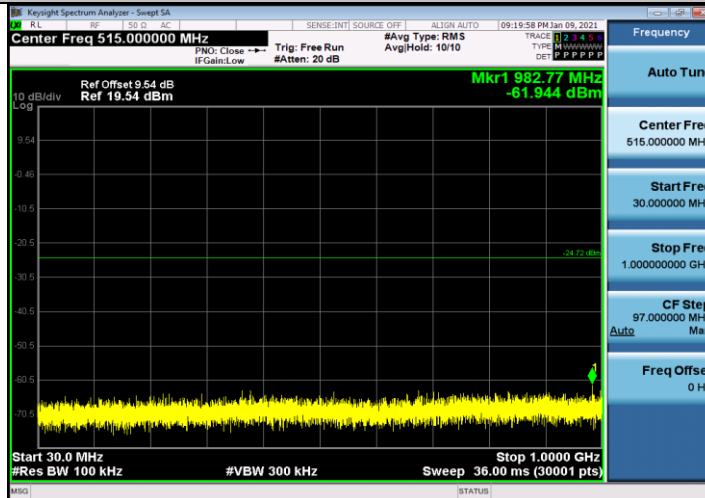
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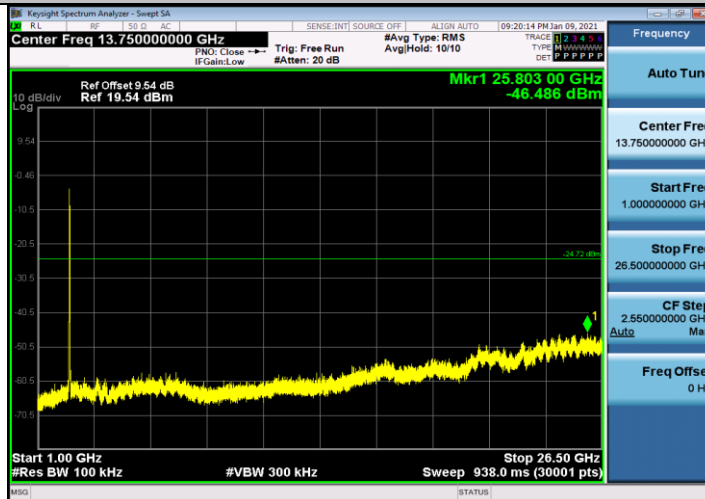
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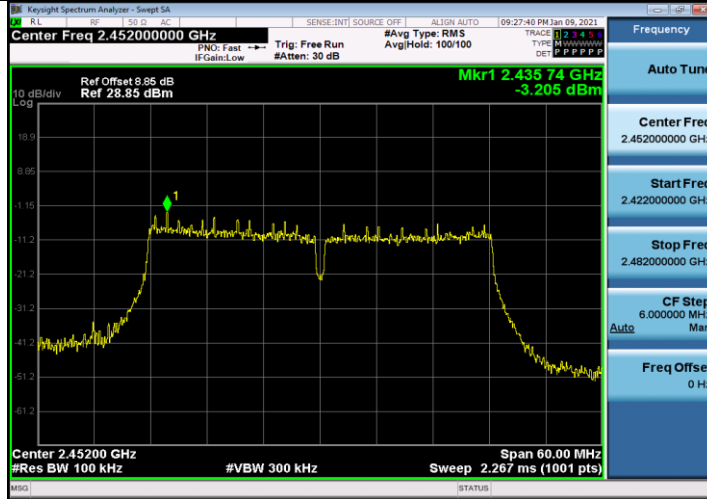
11N40MIMO_Ant2_2437_30~1000



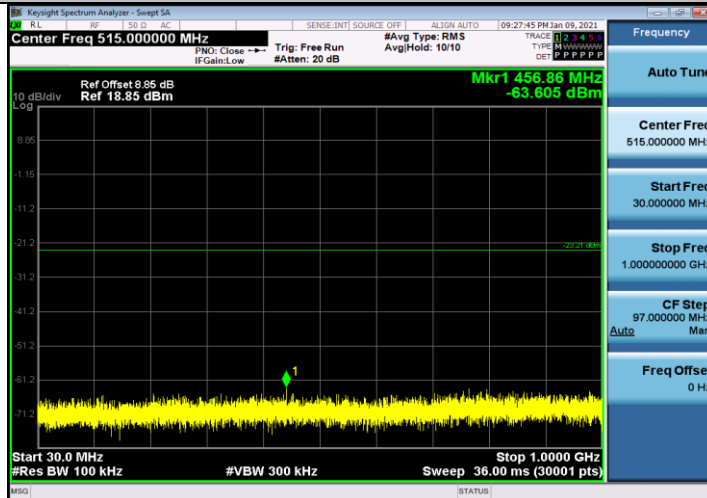
11N40MIMO_Ant2_2437_1000~26500



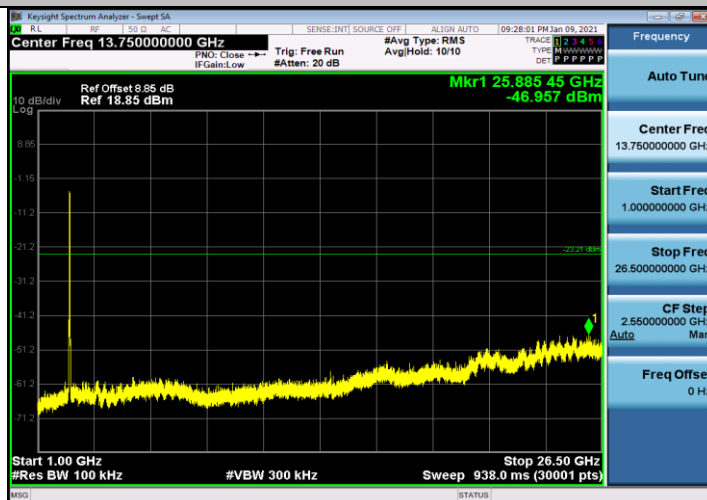
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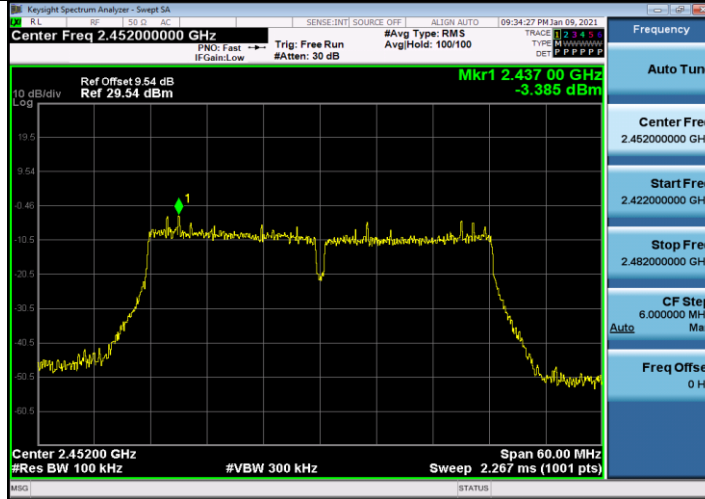
11N40MIMO_Ant1_2452_30~1000



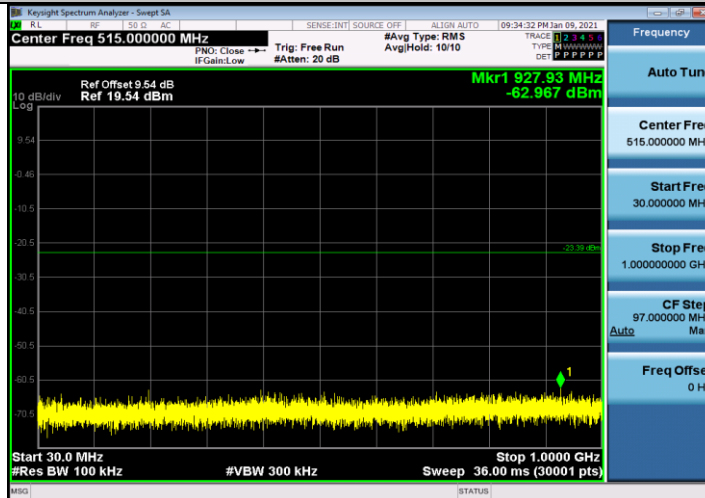
11N40MIMO_Ant1_2452_1000~26500



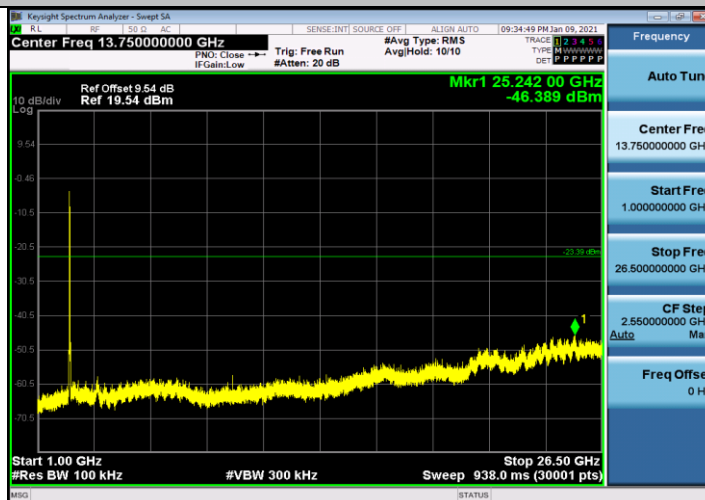
11N40MIMO_Ant2_2452_0~Reference



11N40MIMO_Ant2_2452_30~1000



11N40MIMO_Ant2_2452_1000~26500





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

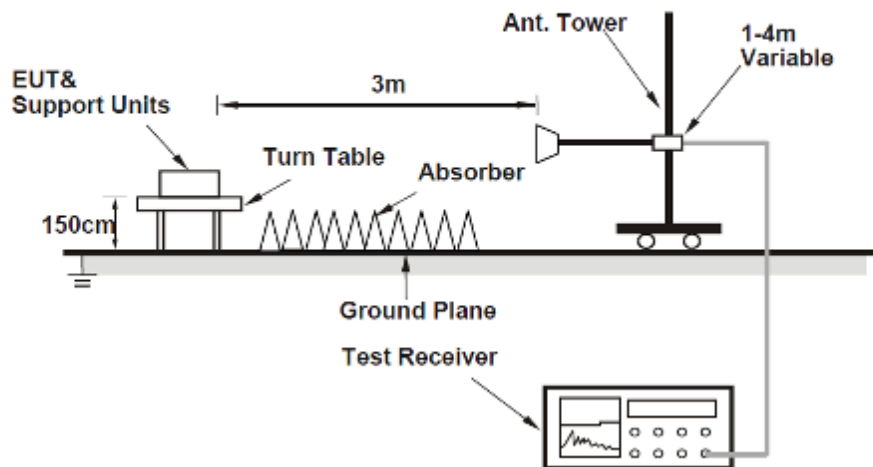
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

8. 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
9. 2. RBW = 1MHz
10. 3. VBW; If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW = 10 Hz.
11. If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$. T is the minimum transmission duration.
12. 4. Detector = Peak
13. 5. Sweep time = auto
14. 6. Trace mode = max hold
15. 7. Trace was allowed to stabilize

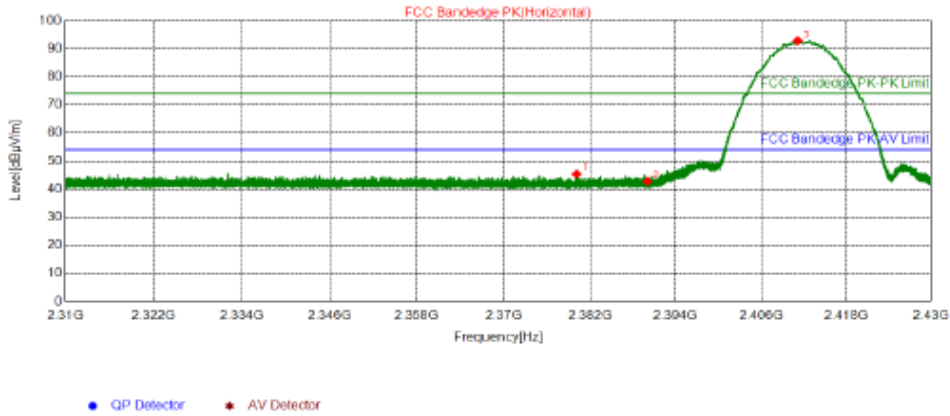
4.7.4 Test Setup

For Radiated emission above 1GHz



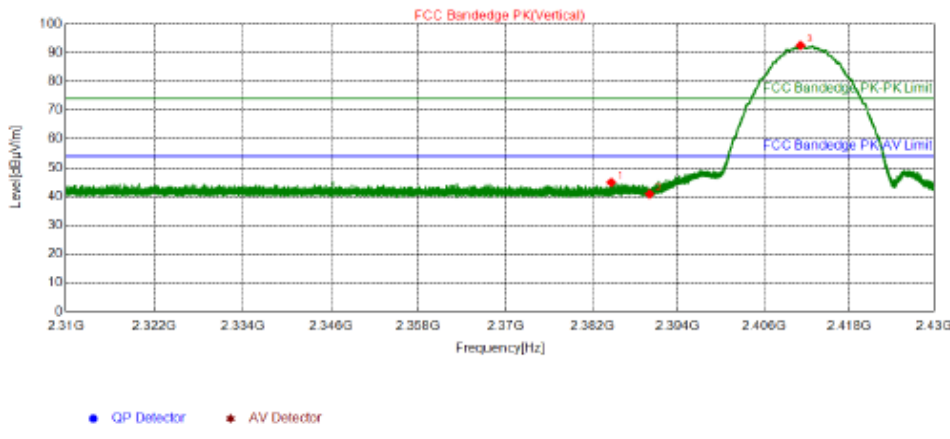
4.7.5 Test Results

802.11b-2412MHz/ Horizontal



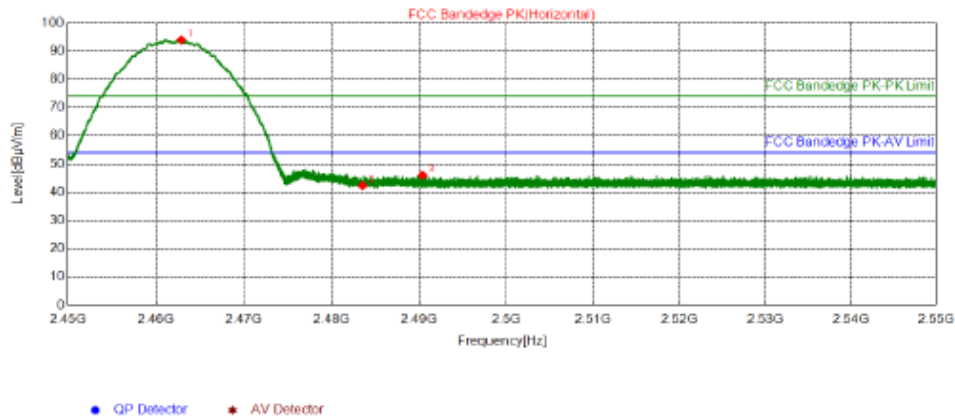
Suspected List									
NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2380.1460	41.02	45.39	74.00	28.61	380	348	Horizontal	PK
2	2390.0040	38.36	42.80	74.00	31.20	380	240	Horizontal	PK
3	2411.1120	88.26	92.83	74.00	-18.83	380	360	Horizontal	PK

802.11b-2412MHz/ Vertical



Suspected List									
NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2384.6760	40.52	44.92	74.00	29.08	380	228	Vertical	PK
2	2390.0040	36.46	40.90	74.00	33.10	380	288	Vertical	PK
3	2411.1300	87.94	92.51	74.00	-18.51	380	127	Vertical	PK

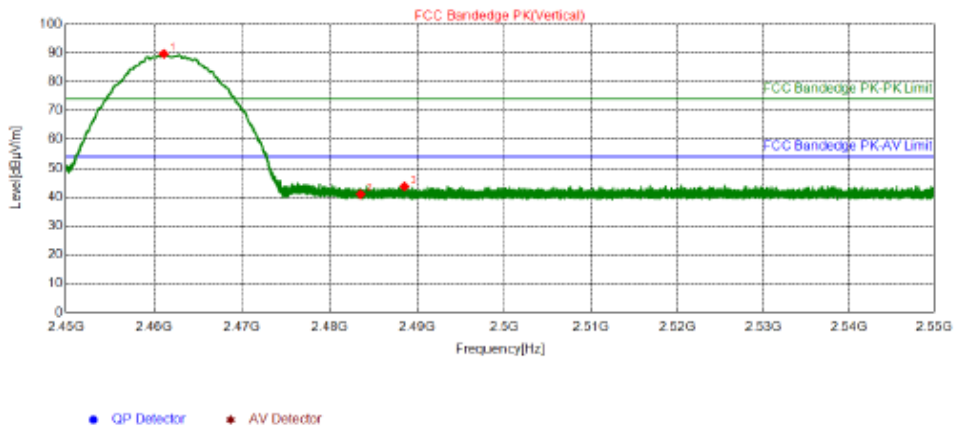
802.11b-2462MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2462.8650	89.12	93.96	74.00	-19.96	380	18	Horizontal	PK
2	2483.5000	37.40	42.34	74.00	31.66	380	214	Horizontal	PK
3	2490.3950	41.05	46.02	74.00	27.98	380	5	Horizontal	PK

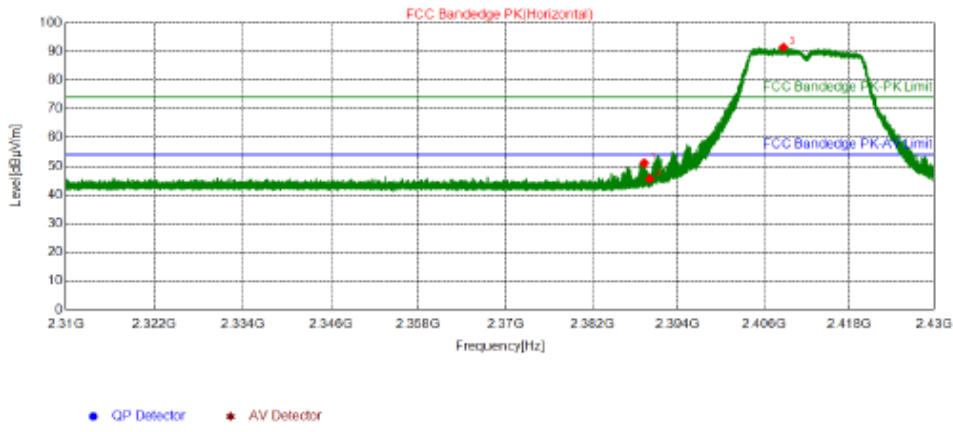
802.11b-2462MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2461.1000	84.85	89.68	74.00	-15.68	380	133	Vertical	PK
2	2483.5000	36.08	41.02	74.00	32.98	380	193	Vertical	PK
3	2488.5350	38.74	43.70	74.00	30.30	380	282	Vertical	PK

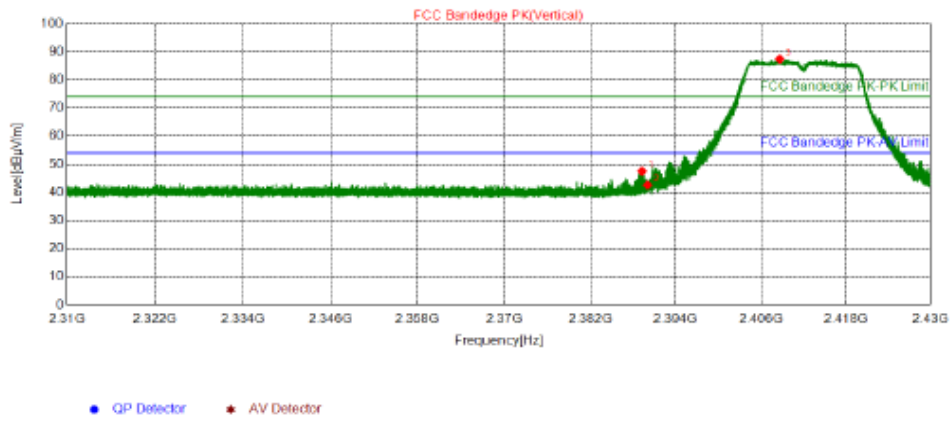
802.11g-2412MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2389.2540	46.70	51.13	74.00	22.87	380	100	Horizontal	PK
2	2390.0040	41.19	45.63	74.00	28.37	380	0	Horizontal	PK
3	2408.7480	86.91	91.46	74.00	-17.46	380	0	Horizontal	PK

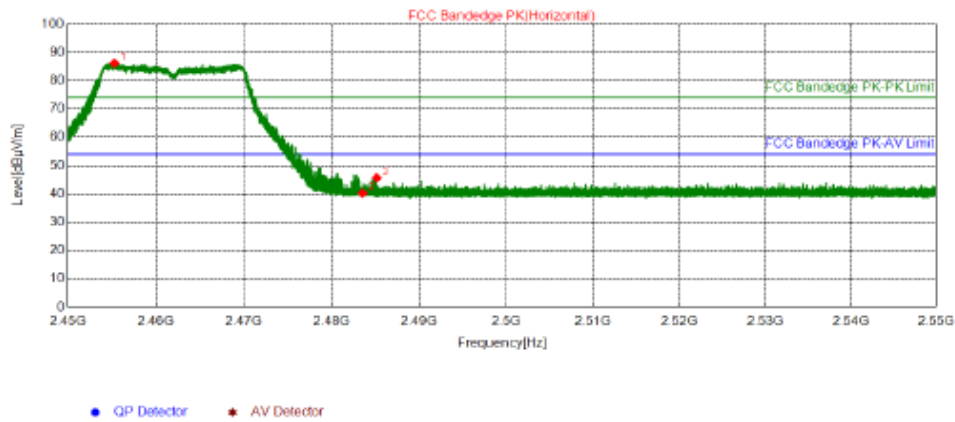
802.11g-2412MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2389.2360	43.10	47.53	74.00	26.47	380	142	Vertical	PK
2	2390.0040	38.18	42.62	74.00	31.38	380	216	Vertical	PK
3	2408.6280	82.85	87.40	74.00	-13.40	380	222	Vertical	PK

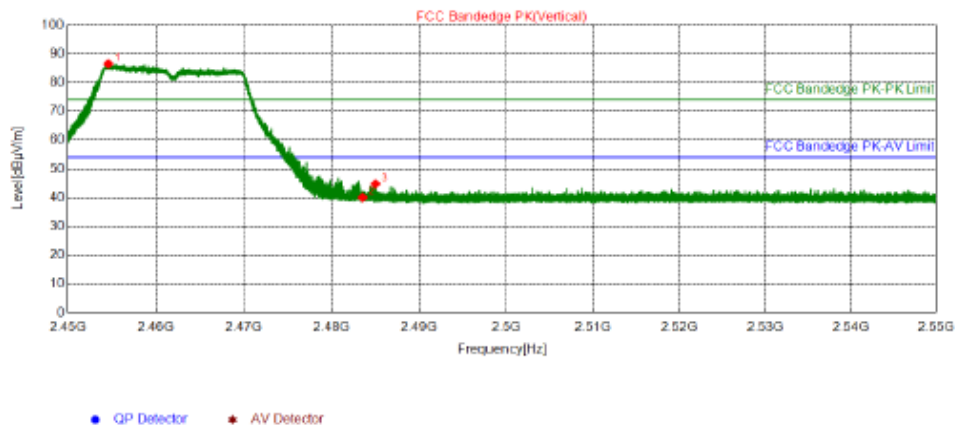
802.11g-2462MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2455.2700	81.35	86.16	74.00	-12.16	380	179	Horizontal	PK
2	2483.5000	35.33	40.27	74.00	33.73	380	139	Horizontal	PK
3	2485.1250	40.69	45.63	74.00	28.37	380	179	Horizontal	PK

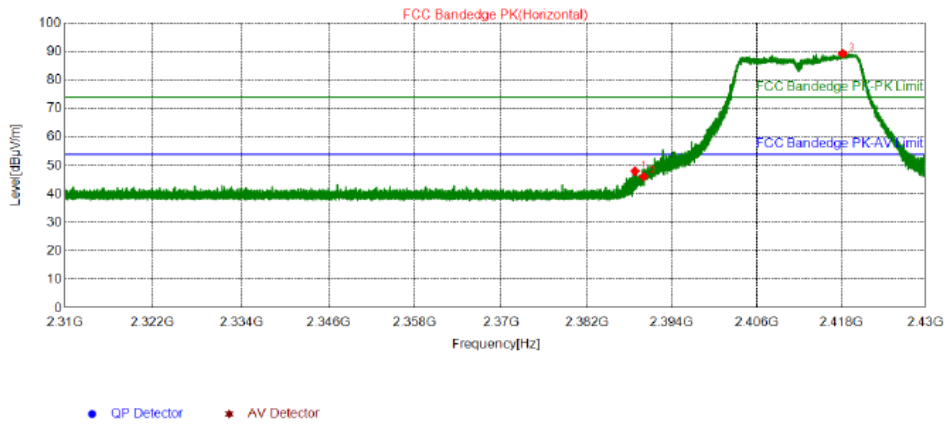
802.11g-2462MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2454.5950	81.70	86.50	74.00	-12.50	380	59	Vertical	PK
2	2483.5000	35.14	40.08	74.00	33.92	380	140	Vertical	PK
3	2484.9900	39.86	44.80	74.00	29.20	380	59	Vertical	PK

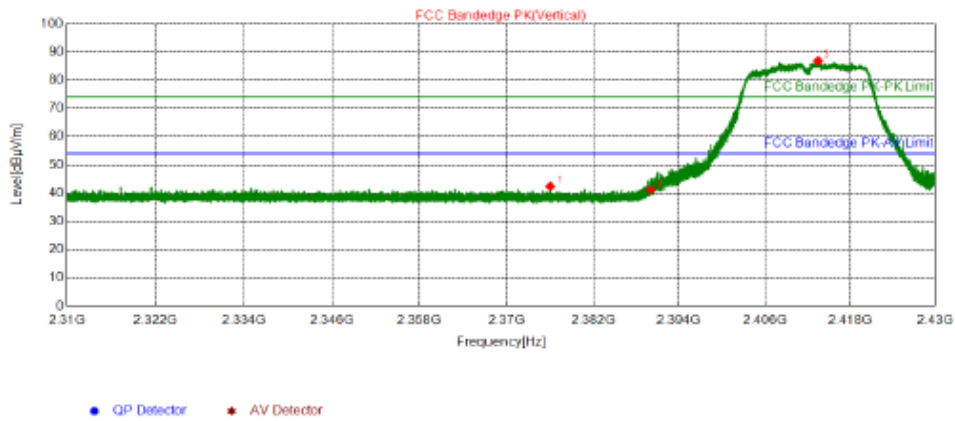
802.11n (HT20)-2412MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2388.7860	43.58	48.01	74.00	25.99	380	219	Horizontal	PK
2	2390.0040	41.66	46.10	74.00	27.90	380	178	Horizontal	PK
3	2418.2340	84.62	89.24	74.00	-15.24	380	252	Horizontal	PK

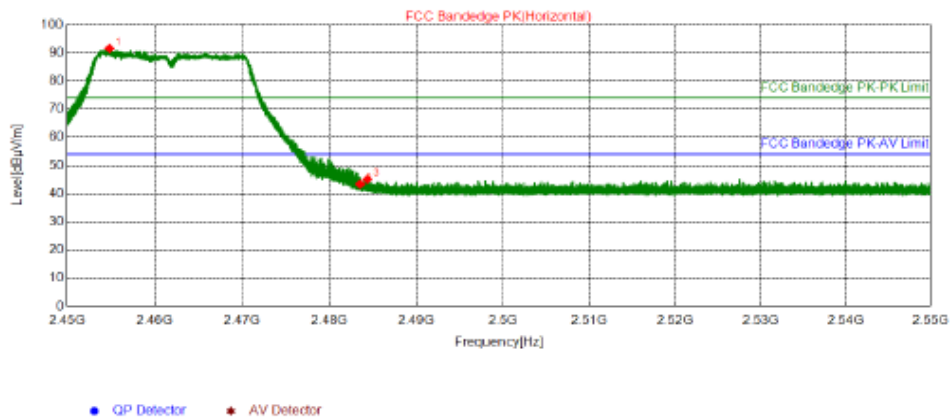
802.11n (HT20)-2412MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2376.0840	38.04	42.39	74.00	31.61	380	303	Vertical	PK
2	2390.0040	36.78	41.22	74.00	32.78	380	237	Vertical	PK
3	2413.4760	82.27	86.86	74.00	-12.86	380	146	Vertical	PK

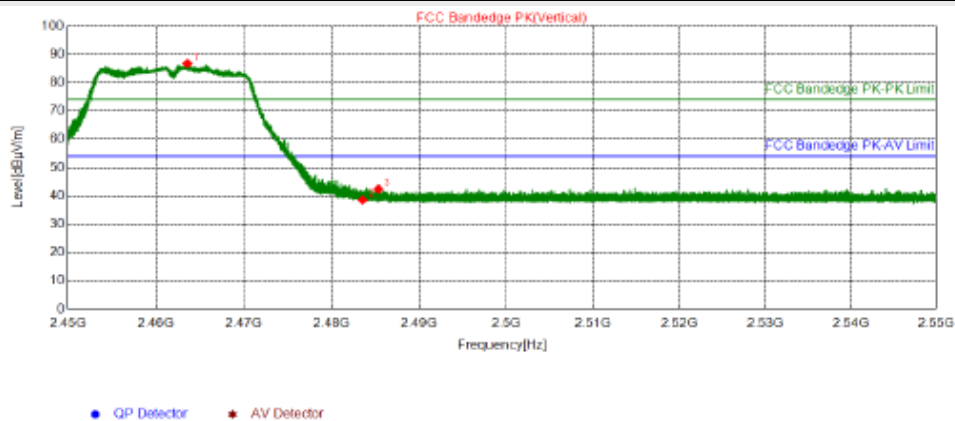
802.11n (ht20)-2462MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2454.8550	86.75	91.56	74.00	-17.56	380	222	Horizontal	PK
2	2483.5000	38.46	43.40	74.00	30.60	380	230	Horizontal	PK
3	2484.3250	40.17	45.11	74.00	28.89	380	181	Horizontal	PK

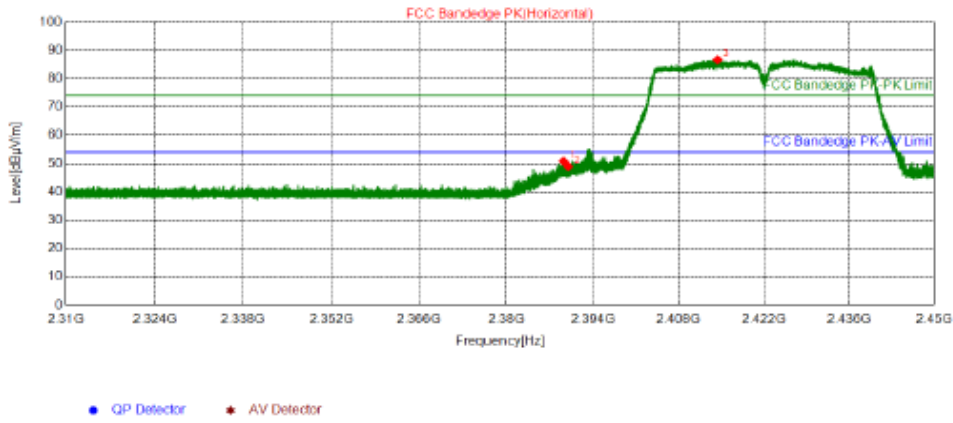
802.11n (HT20)-2462MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2463.5600	81.91	86.76	74.00	-12.76	380	49	Vertical	PK
2	2483.5000	33.64	38.58	74.00	35.42	380	90	Vertical	PK
3	2485.3300	37.41	42.36	74.00	31.64	380	65	Vertical	PK

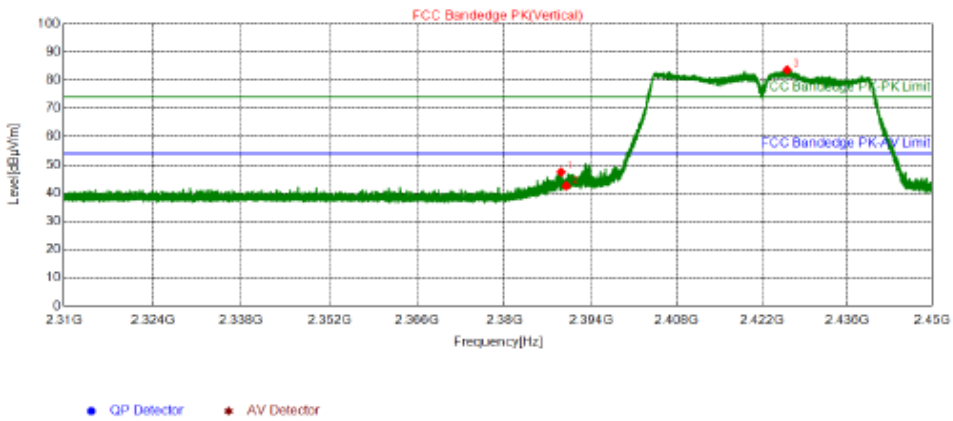
802.11n (HT40)-2422MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2389.2610	46.41	50.84	74.00	23.16	380	215	Horizontal	PK
2	2390.0100	44.51	48.95	74.00	25.05	380	215	Horizontal	PK
3	2414.3070	82.07	86.66	74.00	-12.66	380	173	Horizontal	PK

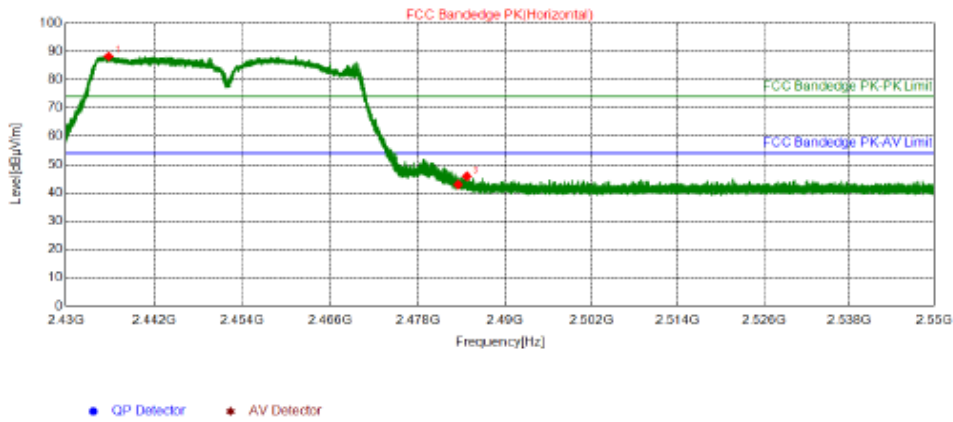
802.11n (HT40)-2422MHz/ Vertical



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2389.1910	43.04	47.47	74.00	26.53	380	88	Vertical	PK
2	2390.0100	38.11	42.55	74.00	31.45	380	211	Vertical	PK
3	2426.0460	78.95	83.62	74.00	-9.62	380	219	Vertical	PK

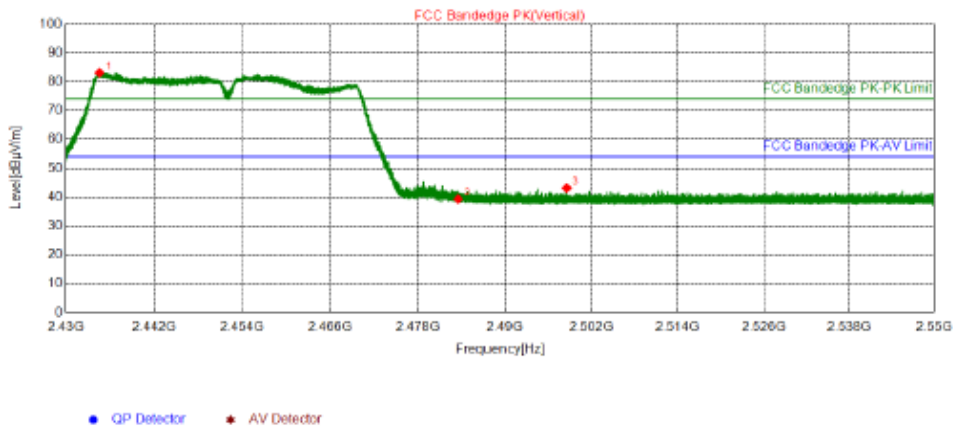
802.11n (HT40)-2452MHz/ Horizontal



Suspected List

NO.	Freq. [MHz]	Reading [dBµV/m]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Detector
1	2435.8140	83.50	88.22	74.00	-14.22	380	245	Horizontal	PK
2	2483.5020	37.97	42.91	74.00	31.09	380	253	Horizontal	PK
3	2484.7260	40.90	45.84	74.00	28.16	380	220	Horizontal	PK

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	2434.5720	78.42	83.13	74.00	-9.13	380	206	Vertical	PK
2	2483.5020	34.39	39.33	74.00	34.67	380	156	Vertical	PK
3	2498.5200	38.15	43.16	74.00	30.84	380	222	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:

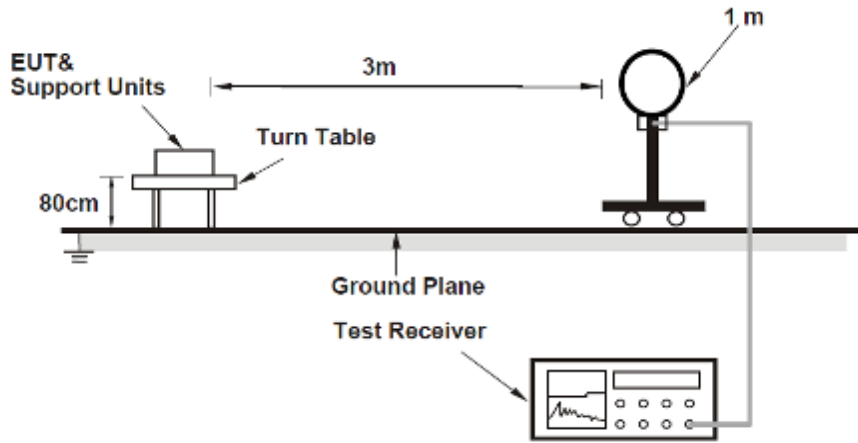
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz & 360 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency 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 \geq 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

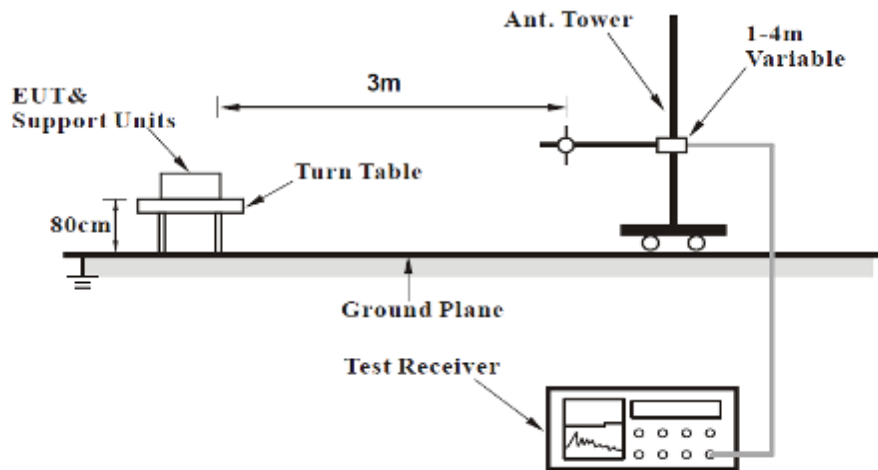
No deviation.

4.8.4 Test Setup

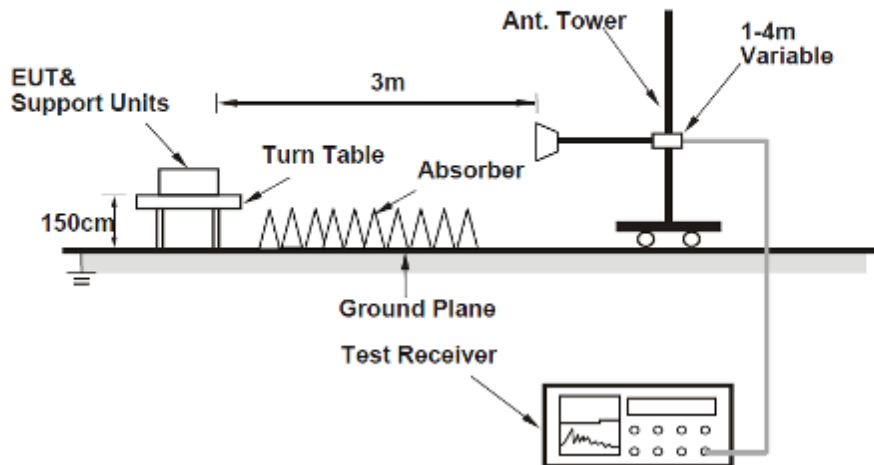
For Radiated emission below 30MHz



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

- Placed the EUT on a testing table.
- Use the software to control the EUT under transmission condition continuously at specific channel frequency.

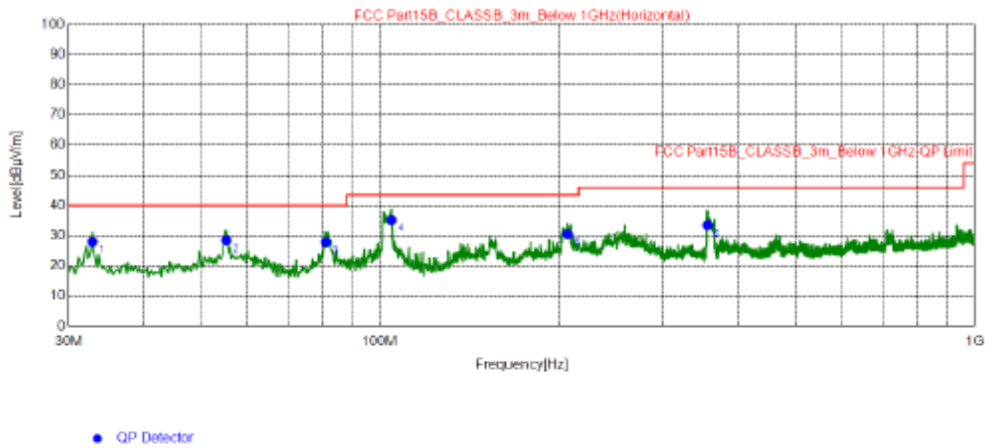
4.8.6 Test Results

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

Mode	802.11b-2412MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Horizontal
Power supply	AC 120V, 60Hz		



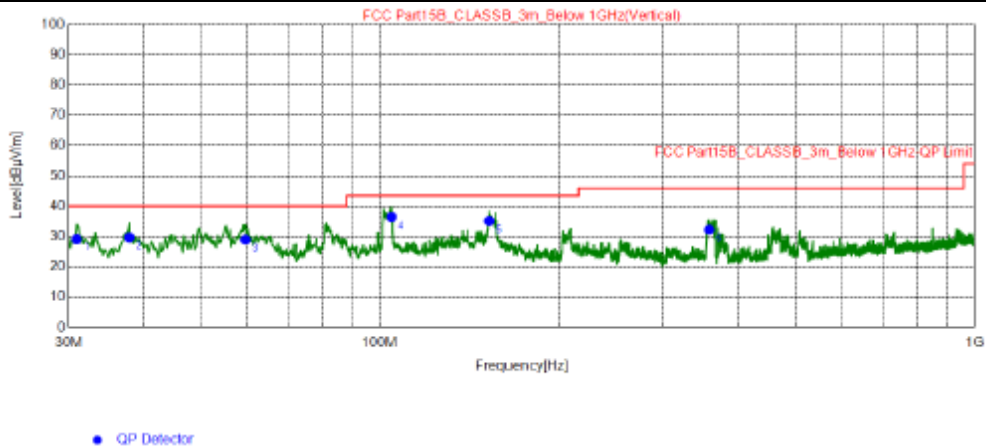
Final Data List

NO.	Freq. [MHz]	QP Reading [dB µV/m]	Factor [dB]	QP Value [dB µV/m]	QP Limit [dB µV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.91	39.32	-11.31	28.01	40.00	11.99	200	304	Horizontal
2	55.22	38.49	-10.00	28.49	40.00	11.51	100	223	Horizontal
3	81.21	42.4	-14.51	27.89	40.00	12.11	200	205	Horizontal
4	104.6	49.57	-14.39	35.18	43.50	8.32	200	83	Horizontal
5	207.1	42.5	-11.99	30.51	43.50	12.99	100	96	Horizontal
6	355.7	40.79	-7.30	33.49	46.00	12.51	200	164	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	802.11b-2412MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Vertical
Power supply	AC 120V, 60Hz		



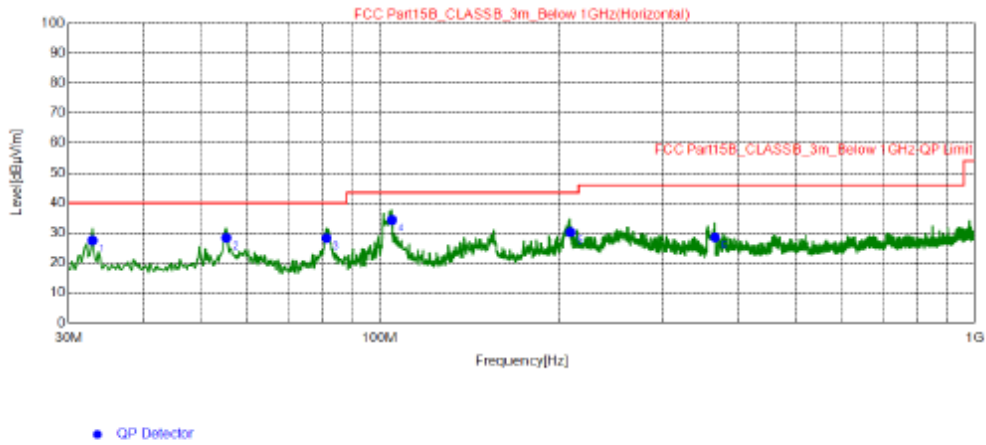
Final Data List

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	30.97	40.64	-11.55	29.09	40.00	10.91	100	146	Vertical
2	37.95	40.36	-10.69	29.67	40.00	10.33	200	277	Vertical
3	59.48	39.2	-10.25	28.95	40.00	11.05	100	321	Vertical
4	104.6	50.85	-14.39	36.46	43.50	7.04	100	25	Vertical
5	152.8	45.12	-9.96	35.16	43.50	8.34	100	136	Vertical
6	358.2	39.48	-7.25	32.23	46.00	13.77	100	231	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

Mode	802.11b-2412MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Horizontal
Power supply	AC 240V, 50Hz		



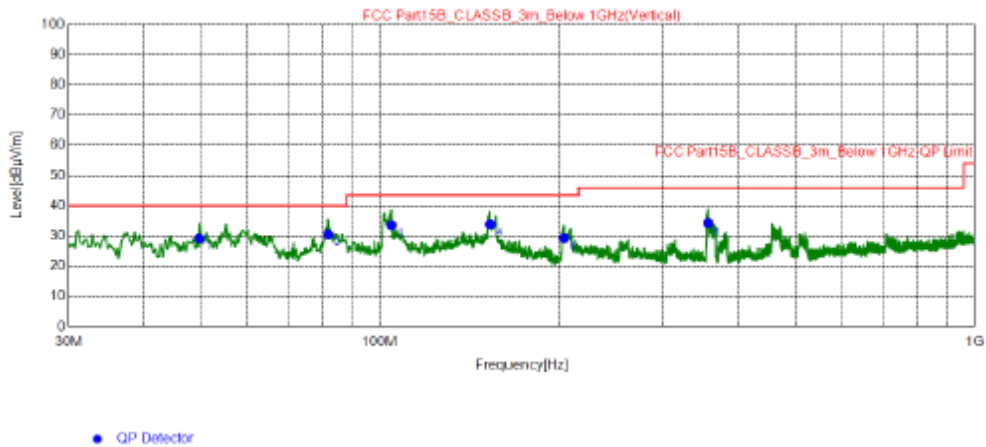
Final Data List

NO.	Freq. [MHz]	QP Reading [dB µV/m]	Factor [dB]	QP Value [dB µV/m]	QP Limit [dB µV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	32.91	38.87	-11.31	27.56	40.00	12.44	200	282	Horizontal
2	55.22	38.4	-10.00	28.40	40.00	11.60	100	254	Horizontal
3	81.41	42.86	-14.54	28.32	40.00	11.68	200	210	Horizontal
4	104.8	48.76	-14.37	34.39	43.50	9.11	200	106	Horizontal
5	209.2	42.24	-11.95	30.29	43.50	13.21	100	101	Horizontal
6	366.2	35.57	-7.02	28.55	46.00	17.45	100	204	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

Mode	802.11b-2412MHz	Detector Function	Quasi-Peak (QP)
Frequency Range	30MHz ~ 1GHz	Antenna Polarity	Vertical
Power supply	AC 240V, 50Hz		



Final Data List

NO.	Freq. [MHz]	QP Reading [dB µV/m]	Factor [dB]	QP Value [dB µV/m]	QP Limit [dB µV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	49.78	38.82	-9.72	29.10	40.00	10.90	100	306	Vertical
2	81.99	45.12	-14.64	30.48	40.00	9.52	100	170	Vertical
3	104.6	47.94	-14.39	33.55	43.50	9.95	100	125	Vertical
4	153.3	43.82	-9.94	33.88	43.50	9.62	100	102	Vertical
5	204.2	41.27	-12.05	29.22	43.50	14.28	100	198	Vertical
6	356.6	41.58	-7.28	34.30	46.00	11.70	100	198	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	7237.3000	32.73	74.00	41.27	-4.12	H	PK
2	7237.3000	26.10	54.00	27.90	-4.12	H	AV
3	7237.3000	29.96	74.00	44.04	-4.12	V	PK
4	7237.3000	24.68	54.00	29.32	-4.12	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	29.81	74.00	44.19	-3.98	H	PK
2	7312.1000	24.84	54.00	29.16	-3.98	H	AV
3	7312.1000	30.36	74.00	43.64	-3.98	V	PK
4	7312.1000	25.17	54.00	28.83	-3.98	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	7386.9000	31.08	74.00	42.92	-3.85	H	PK
2	7386.9000	26.90	54.00	27.10	-3.85	H	AV
3	7386.9000	30.67	74.00	43.33	-3.85	V	PK
4	7386.9000	24.43	54.00	29.57	-3.85	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	7237.3000	27.72	74.00	46.28	-4.12	H	PK
2	7237.3000	24.15	54.00	29.85	-4.12	H	AV
3	7237.3000	29.36	74.00	44.64	-4.12	V	PK
4	7237.3000	24.57	54.00	29.43	-4.12	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	30.76	74.00	43.24	-3.98	H	PK
2	7312.1000	25.14	54.00	28.86	-3.98	H	AV
3	7312.1000	29.82	74.00	44.18	-3.98	V	PK
4	7312.1000	25.00	54.00	29.00	-3.98	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	7386.9000	30.18	74.00	43.82	-3.85	H	PK
2	7386.9000	23.27	54.00	30.73	-3.85	H	AV
3	7386.9000	30.38	74.00	43.62	-3.85	V	PK
4	7386.9000	25.42	54.00	28.58	-3.85	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	7237.3000	29.37	74.00	44.63	-4.12	H	PK
2	7237.3000	24.30	54.00	29.70	-4.12	H	AV
3	7237.3000	28.62	74.00	45.38	-4.12	V	PK
4	7237.3000	24.02	54.00	29.98	-4.12	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	29.37	74.00	44.63	-3.98	H	PK
2	7312.1000	25.36	54.00	28.64	-3.98	H	AV
3	7312.1000	29.96	74.00	44.04	-3.98	V	PK
4	7312.1000	26.78	54.00	27.22	-3.98	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	7386.9000	29.38	74.00	44.62	-3.85	H	PK
2	7386.9000	25.22	54.00	28.78	-3.85	H	AV
3	7386.9000	30.63	74.00	43.37	-3.85	V	PK
4	7386.9000	23.76	54.00	30.24	-3.85	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	28.63	74.00	45.37	-4.06	H	PK
2	7266.2000	23.37	54.00	30.63	-4.06	H	AV
3	7266.2000	29.50	74.00	44.50	-4.06	V	PK
4	7266.2000	25.19	54.00	28.81	-4.06	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	29.34	74.00	44.66	-3.98	H	PK
2	7312.1000	25.01	54.00	28.99	-3.98	H	AV
3	7312.1000	30.01	74.00	43.99	-3.98	V	PK
4	7312.1000	24.22	54.00	29.78	-3.98	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	29.35	74.00	44.65	-3.90	H	PK
2	7356.3000	23.32	54.00	30.68	-3.90	H	AV
3	7356.3000	29.77	74.00	44.23	-3.90	V	PK
4	7356.3000	25.57	54.00	28.43	-3.90	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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