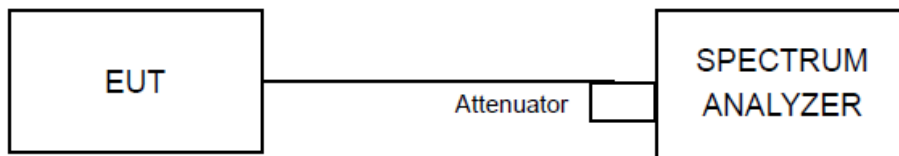


4.7 Conducted Band Edges Measurement

4.7.1 Limit

Below -20dB of the highest emission level of operating band (in 100kHz RBW).

4.7.2 Test Setup



4.7.3 Test Procedures

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz and 300 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

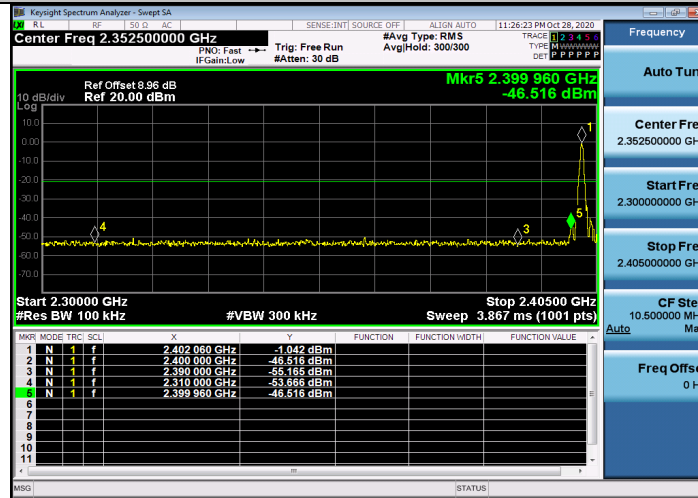
4.7.4 Deviation of Test Standard

No deviation.

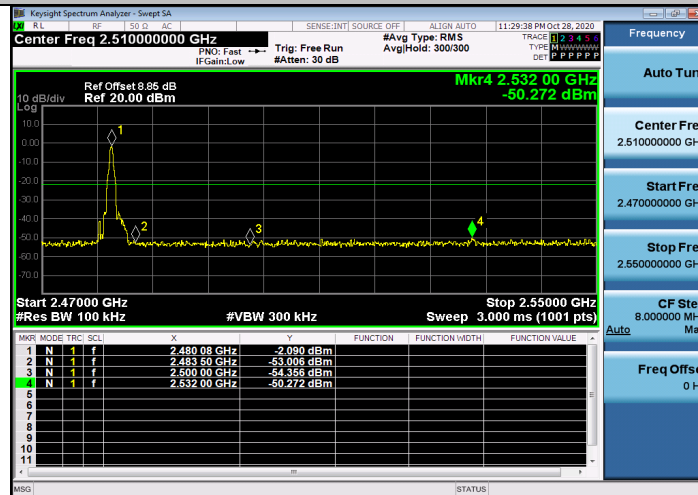
4.7.5 Test Result

Test Mode	Antenna	ChName	Channel [MHz]	RefLevel [dBm]	Max. Spurious Level [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-1.04	-46.52	<=-21.04	PASS
		High	2480	-2.09	-50.27	<=-22.09	PASS
		Low	Hop_2402	-2.32	-50.97	<=-22.32	PASS
		High	Hop_2480	-3.24	-49.91	<=-23.24	PASS
2DH5	Ant1	Low	2402	-2.98	-45.73	<=-22.98	PASS
		High	2480	-4.13	-50.77	<=-24.13	PASS
		Low	Hop_2402	-4.70	-49.69	<=-24.7	PASS
		High	Hop_2480	-3.82	-50.44	<=-23.82	PASS
3DH5	Ant1	Low	2402	-3.04	-48.03	<=-23.04	PASS
		High	2480	-3.69	-50.33	<=-23.69	PASS
		Low	Hop_2402	-4.85	-51.08	<=-24.85	PASS
		High	Hop_2480	-5.03	-50.87	<=-25.03	PASS

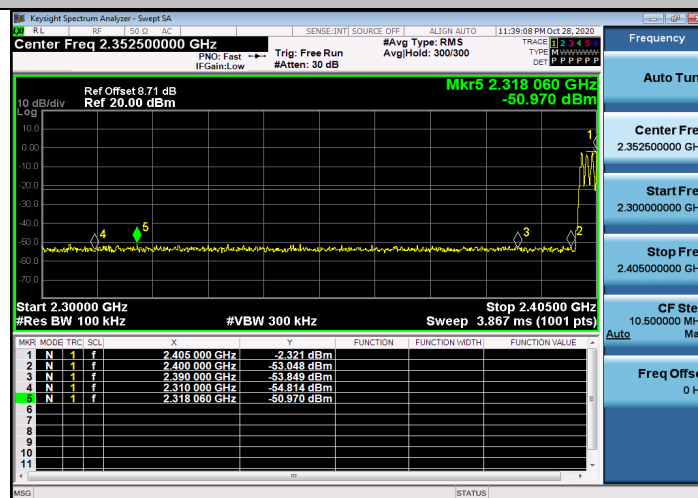
DH5_Ant1_Low_2402



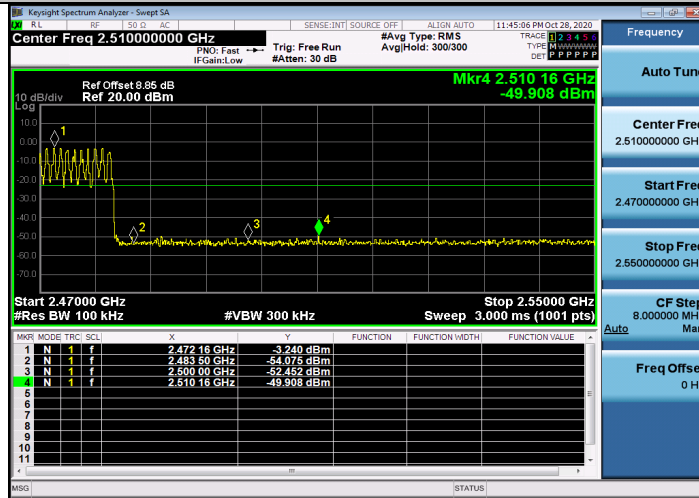
DH5_Ant1_High_2480



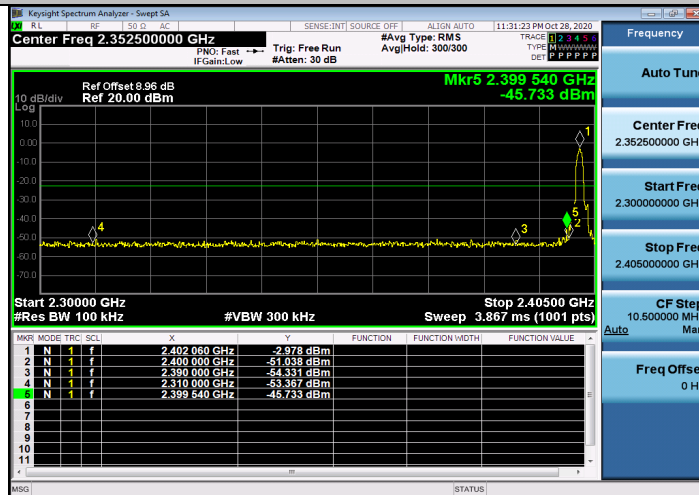
DH5_Ant1_Low_Hop_2402



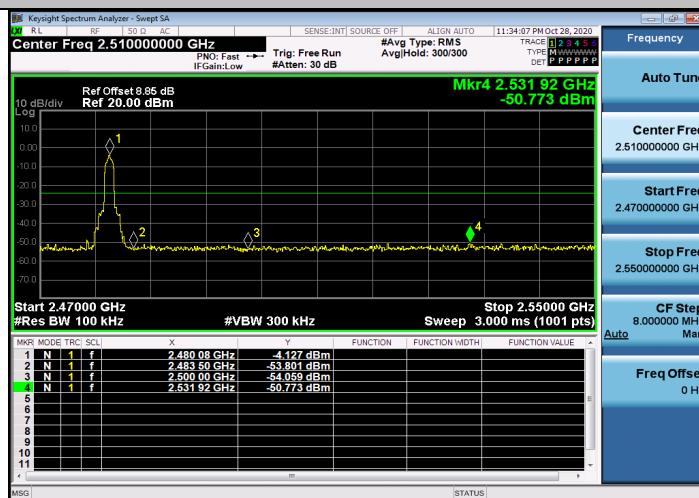
DH5_Ant1_High_Hop_2480



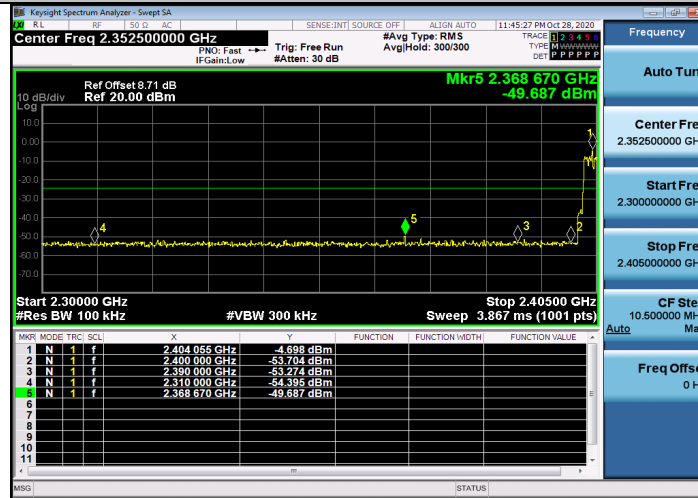
2DH5_Ant1_Low_2402



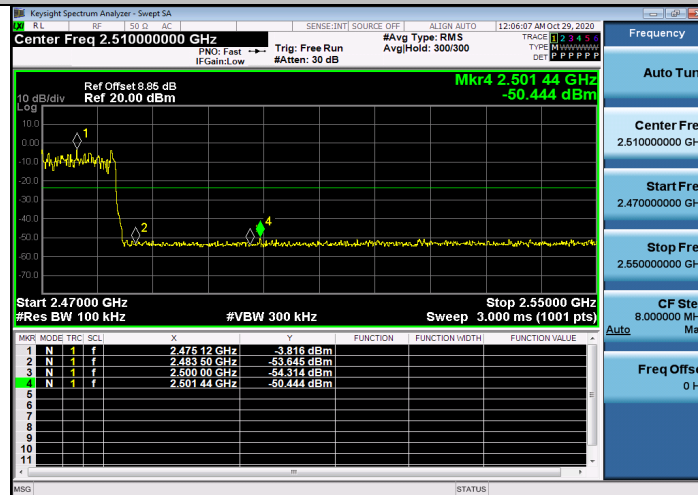
2DH5_Ant1_High_2480



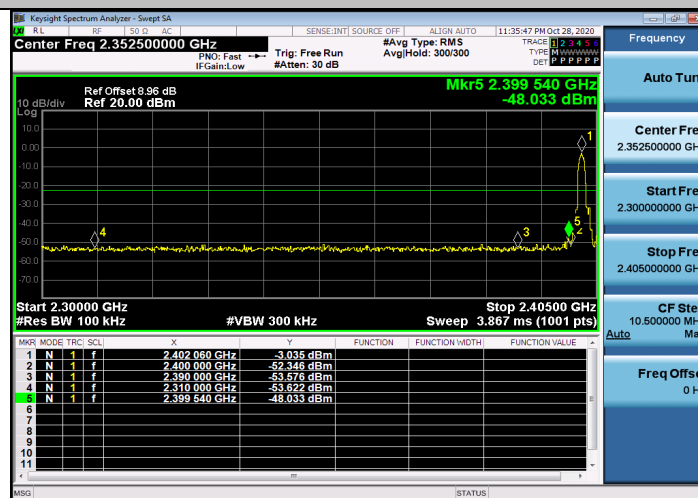
2DH5_Ant1_Low_Hop_2402



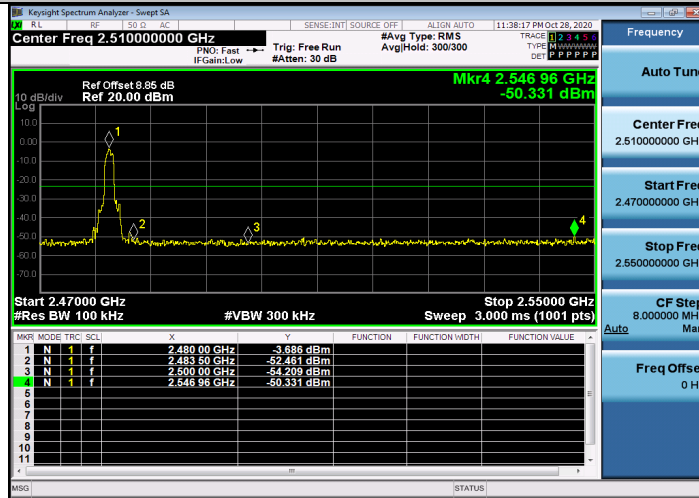
2DH5_Ant1_High_Hop_2480



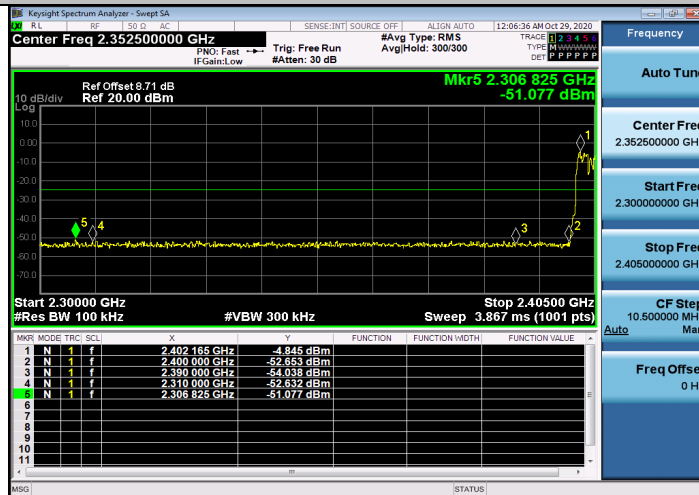
3DH5_Ant1_Low_2402



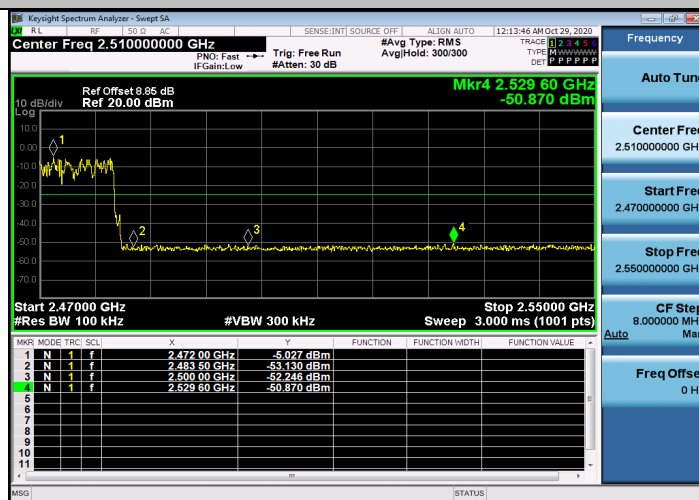
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

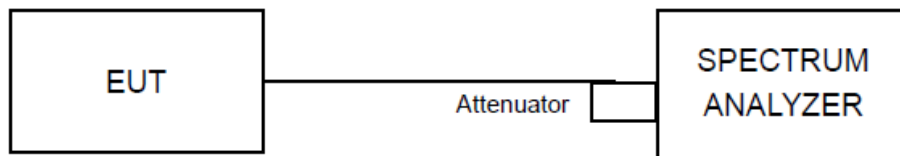


4.8 Conducted Spurious Emissions

4.8.1 Limit

Below -20dB of the highest emission level of operating band (in 100kHz RBW).

4.8.2 Test Setup



4.8.3 Test Procedures

The transmitter output was connected to the spectrum analyzer via a low loss cable. Set both RBW and VBW of spectrum analyzer to 100 kHz and 300 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

4.8.4 Deviation of Test Standard

No deviation.

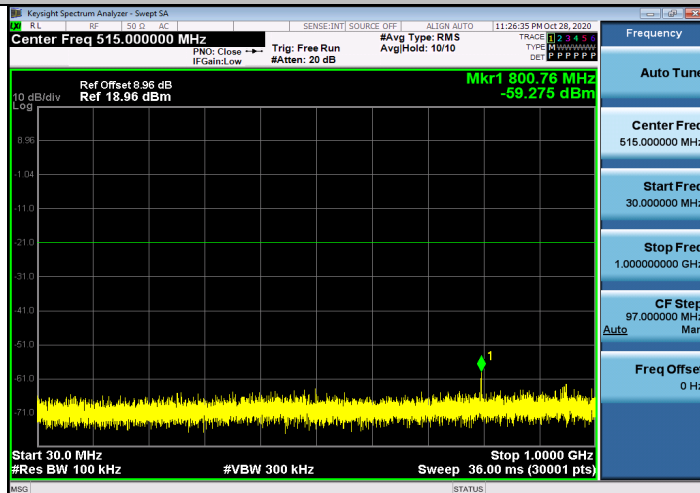
4.8.5 Test Result

Test Mode	Antenna	Channel [MHz]	FreqRange [MHz]	RefLevel [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.12	-1.12	---	PASS
			30~1000	30~1000	-59.275	<=-21.121	PASS
			1000~26500	1000~26500	-45.69	<=-21.121	PASS
		2441	Reference	-2.19	-2.19	---	PASS
			30~1000	30~1000	-60.367	<=-22.194	PASS
			1000~26500	1000~26500	-46.575	<=-22.194	PASS
		2480	Reference	-2.28	-2.28	---	PASS
			30~1000	30~1000	-59.317	<=-22.283	PASS
			1000~26500	1000~26500	-46.902	<=-22.283	PASS
2DH5	Ant1	2402	Reference	-2.71	-2.71	---	PASS
			30~1000	30~1000	-58.349	<=-22.71	PASS
			1000~26500	1000~26500	-45.67	<=-22.71	PASS
		2441	Reference	-3.84	-3.84	---	PASS
			30~1000	30~1000	-60.469	<=-23.843	PASS
			1000~26500	1000~26500	-45.903	<=-23.843	PASS
		2480	Reference	-3.63	-3.63	---	PASS
			30~1000	30~1000	-59.607	<=-23.627	PASS
			1000~26500	1000~26500	-46.559	<=-23.627	PASS
3DH5	Ant1	2402	Reference	-2.40	-2.40	---	PASS
			30~1000	30~1000	-57.504	<=-22.397	PASS
			1000~26500	1000~26500	-46.228	<=-22.397	PASS
		2441	Reference	-3.70	-3.70	---	PASS
			30~1000	30~1000	-62.095	<=-23.696	PASS
			1000~26500	1000~26500	-46.491	<=-23.696	PASS
		2480	Reference	-3.48	-3.48	---	PASS
			30~1000	30~1000	-61.135	<=-23.475	PASS
			1000~26500	1000~26500	-46.083	<=-23.475	PASS

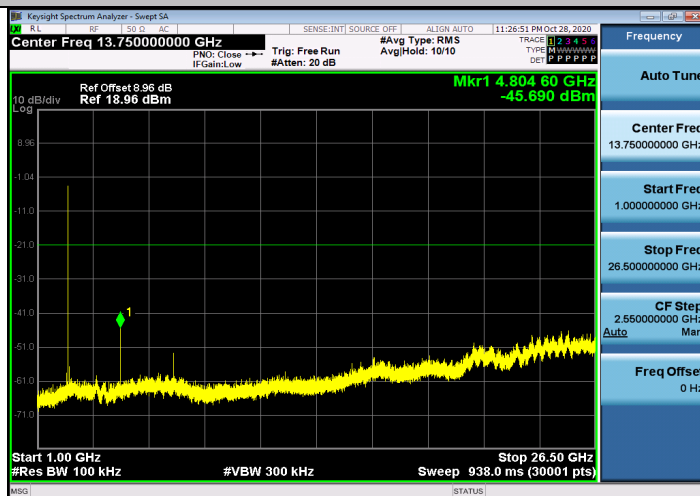
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



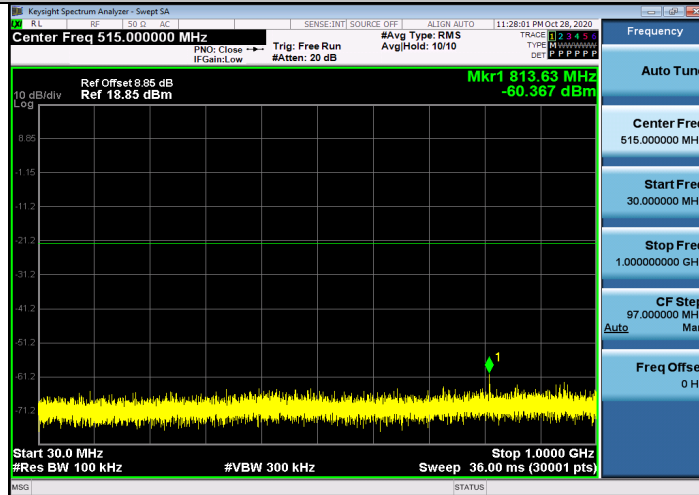
DH5_Ant1_2402_1000~26500



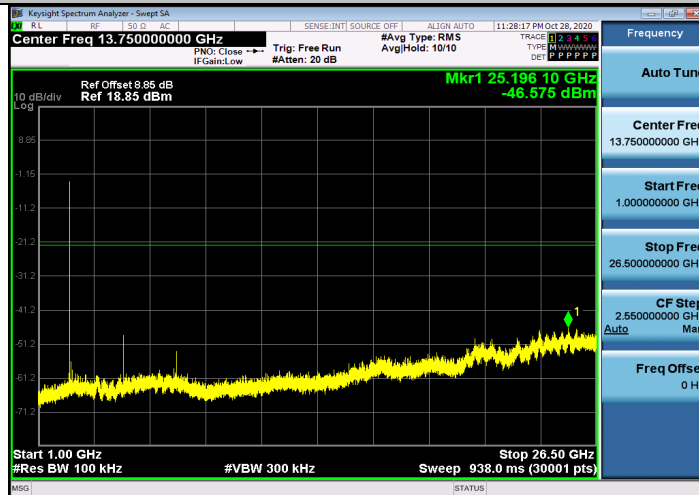
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



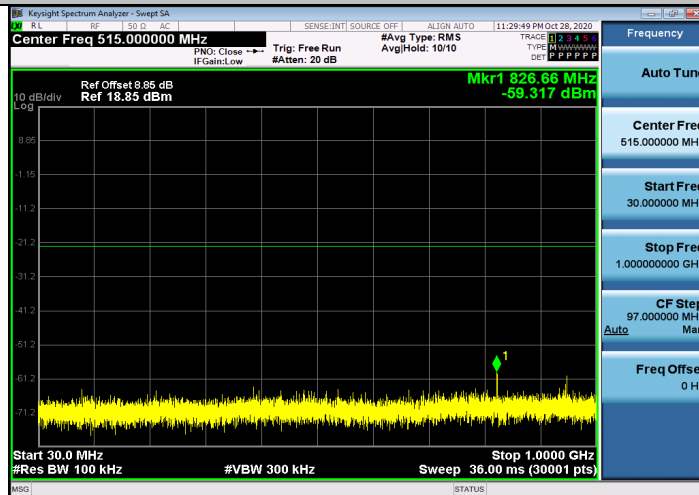
DH5_Ant1_2441_1000~26500



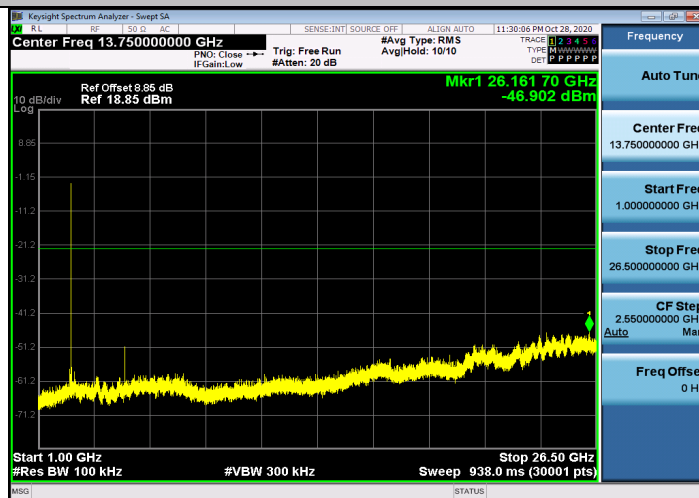
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000



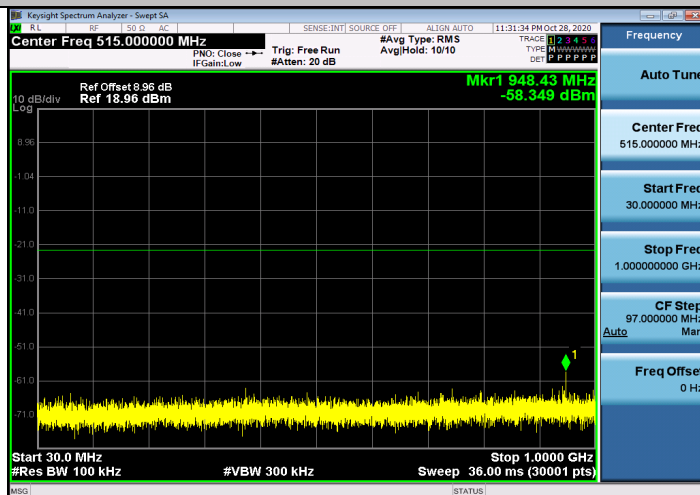
DH5_Ant1_2480_1000~26500



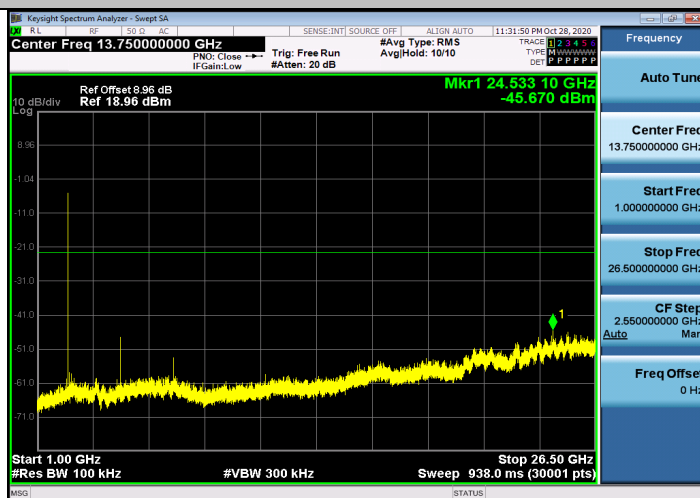
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000



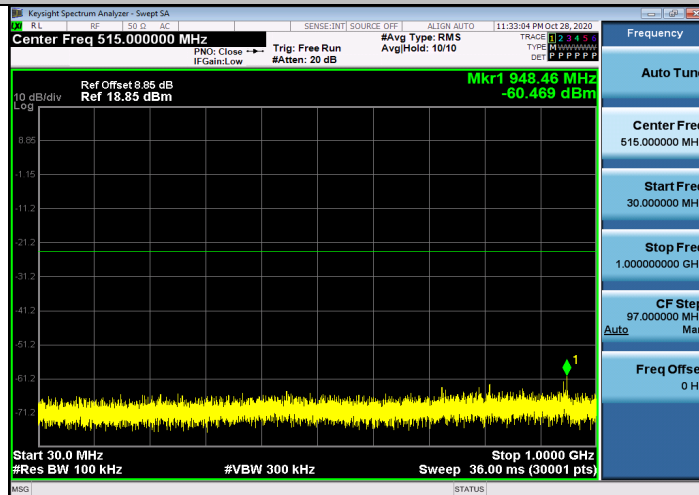
2DH5_Ant1_2402_1000~26500



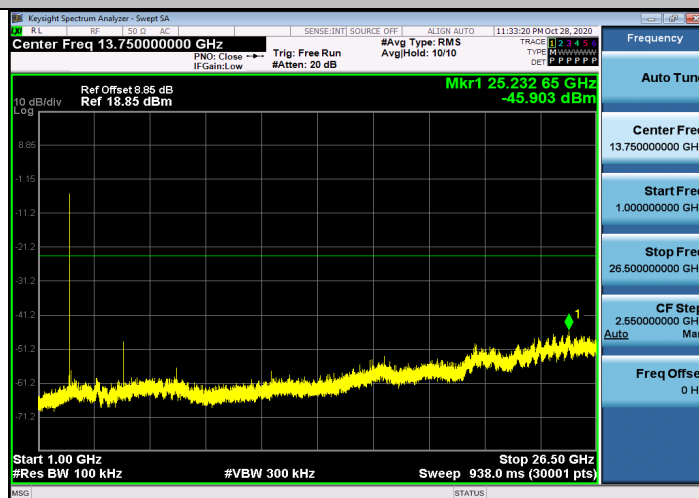
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



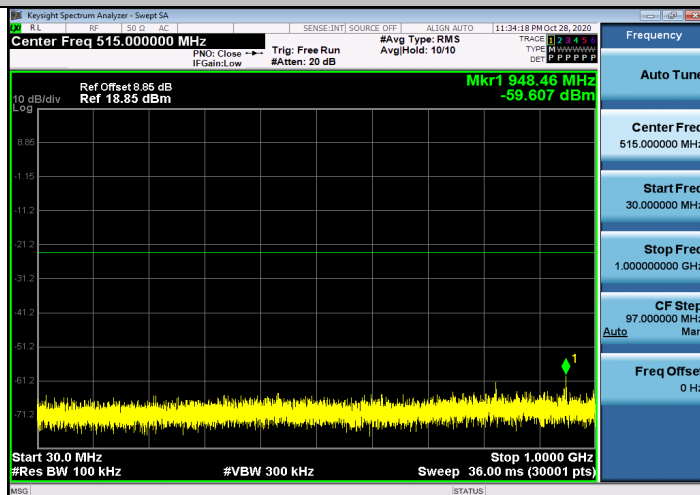
2DH5_Ant1_2441_1000~26500



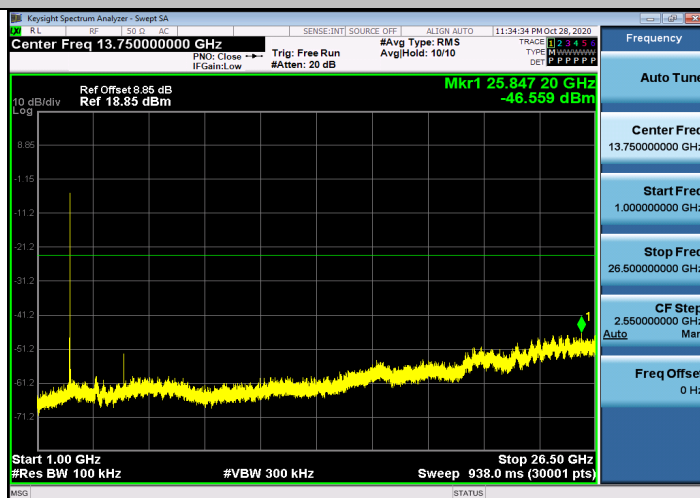
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



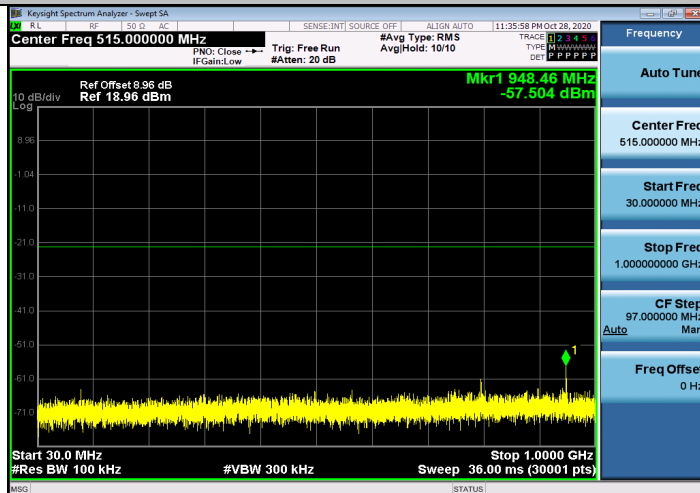
2DH5_Ant1_2480_1000~26500



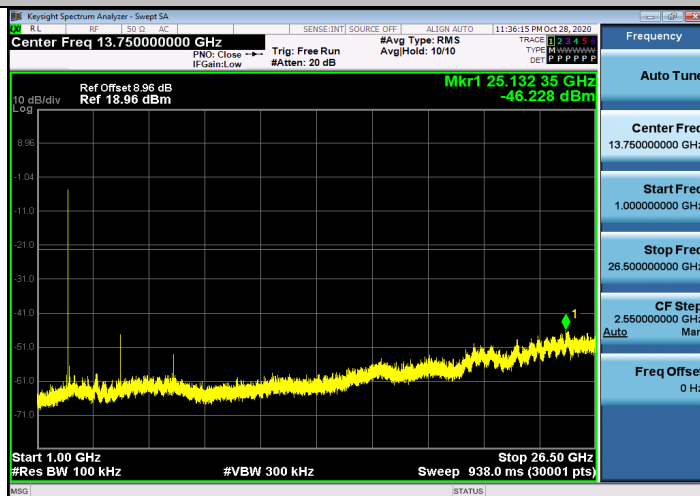
3DH5_Ant1_2402_0~Reference



3DH5_Ant1_2402_30~1000



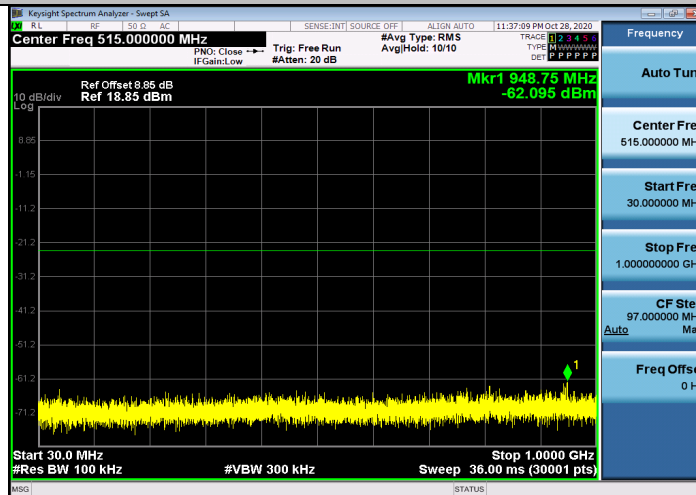
3DH5_Ant1_2402_1000~26500



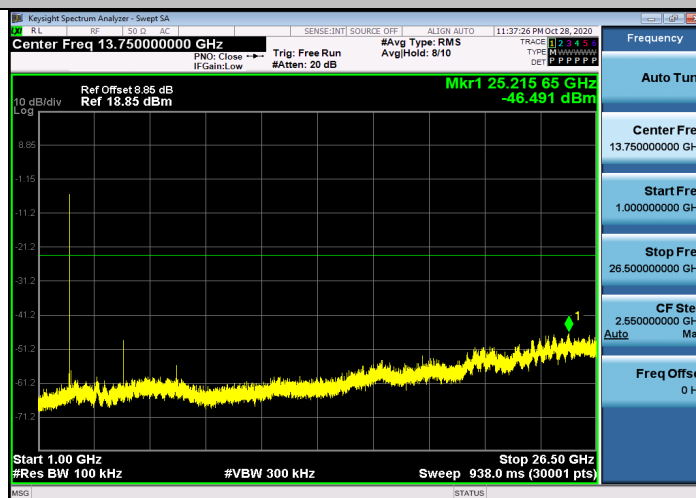
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000



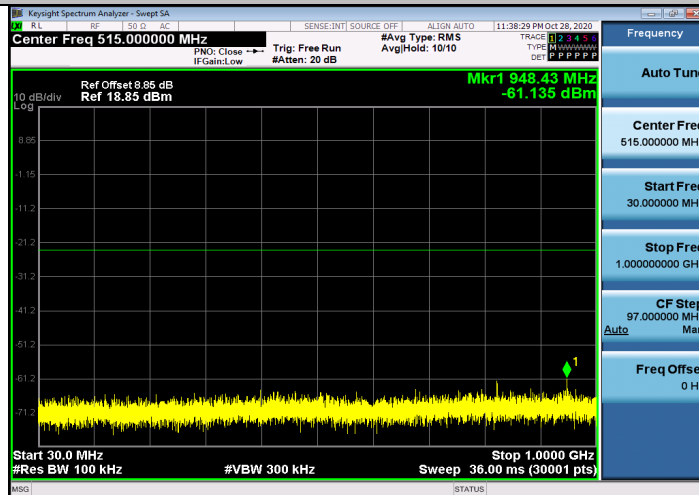
3DH5_Ant1_2441_1000~26500



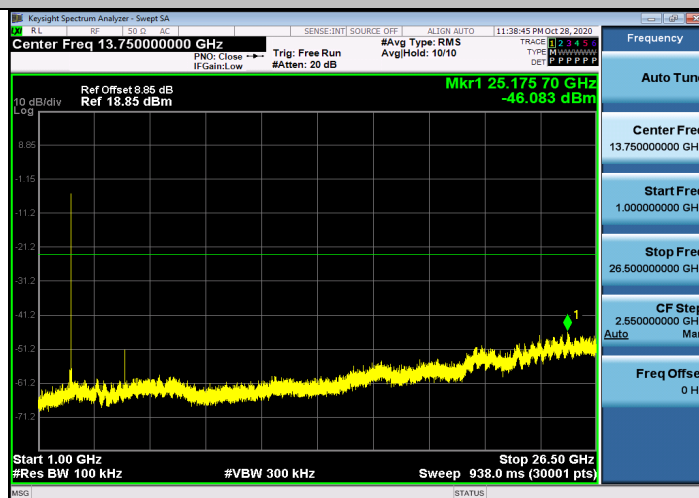
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



4.9 Emissions in restricted frequency bands

4.9.1 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

4.9.2 Test Procedure Reference

ANSI C63.10 Section 6.3 (General Requirements)

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

4.9.3 Test Procedures

Peak Field Strength Measurements

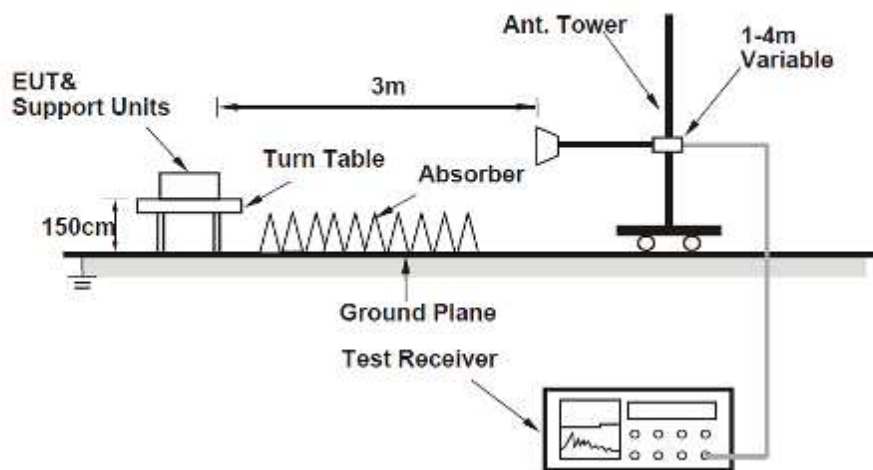
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

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

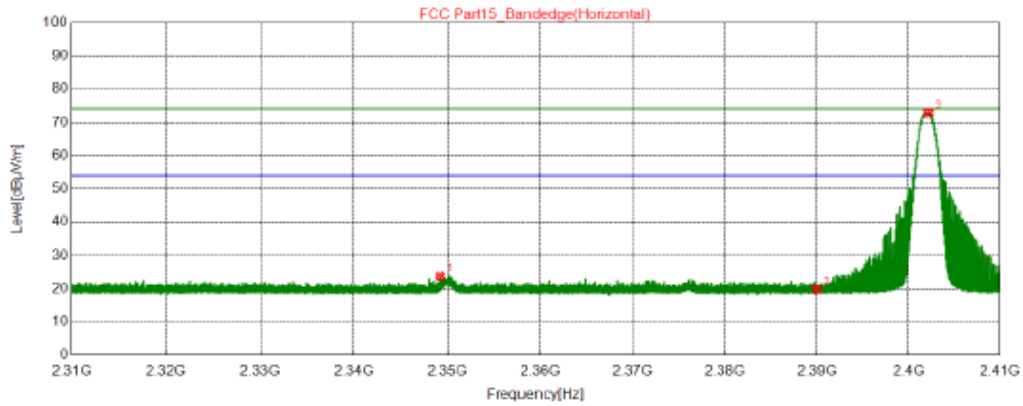
4.9.4 Test Setup

For Radiated emission above 1GHz



4.9.5 Test Results

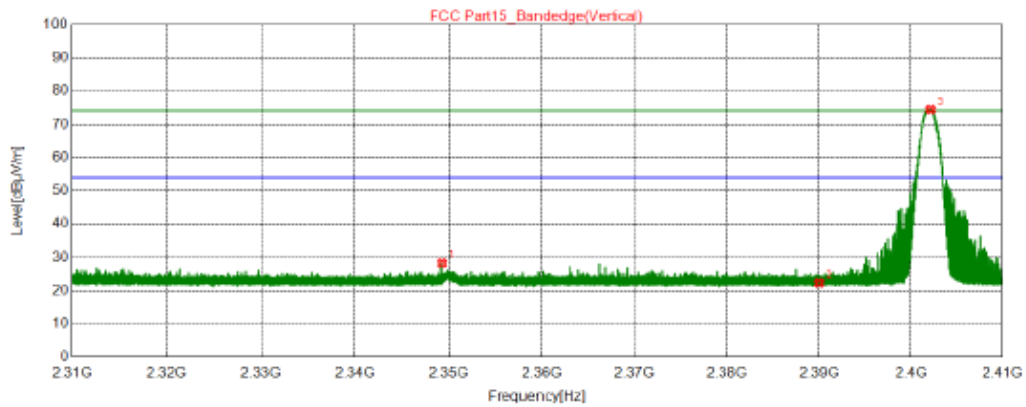
DH5-2402MHz/ Horizontal



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2349.	39.72	-15.96	23.76	74.00	50.24	180	349	Horizontal
2	2390.	35.52	-15.81	19.71	74.00	54.29	180	308	Horizontal
3	2402.	88.59	-15.77	72.82	74.00	1.18	180	82	Horizontal

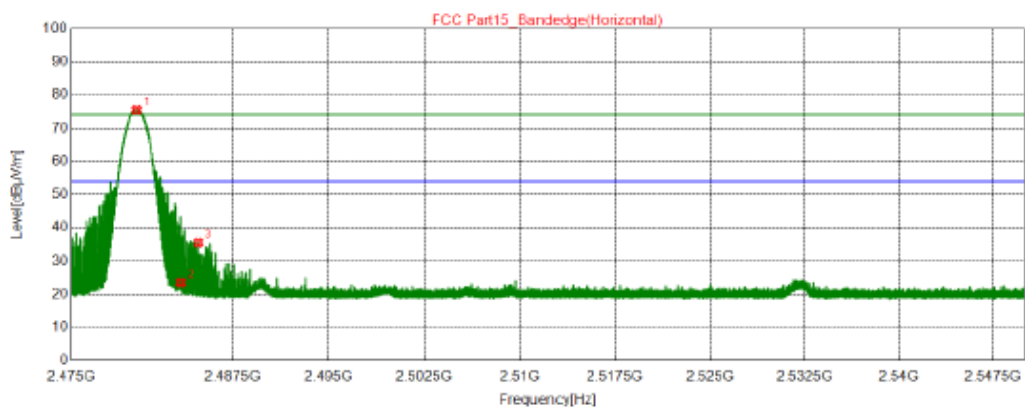
DH5-2402MHz/ Vertical



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2349.	44.16	-15.96	28.20	74.00	45.80	180	211	Vertical
2	2390.	38.05	-15.81	22.24	74.00	51.76	180	109	Vertical
3	2402.	90.18	-15.77	74.41	74.00	-0.41	180	6	Vertical

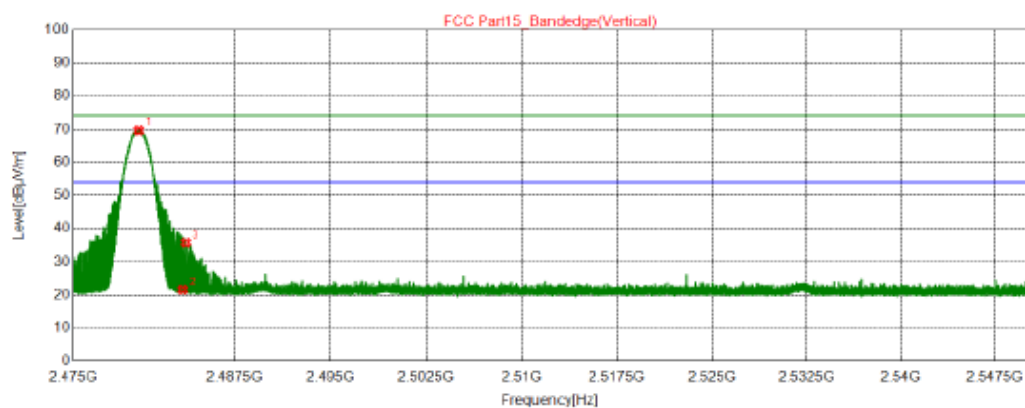
DH5-2480MHz/ Horizontal



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.	90.92	-15.51	75.41	74.00	-1.41	180	52	Horizontal
2	2483.	39.03	-15.50	23.53	74.00	50.47	180	32	Horizontal
3	2484.	51.02	-15.49	35.53	74.00	38.47	180	52	Horizontal

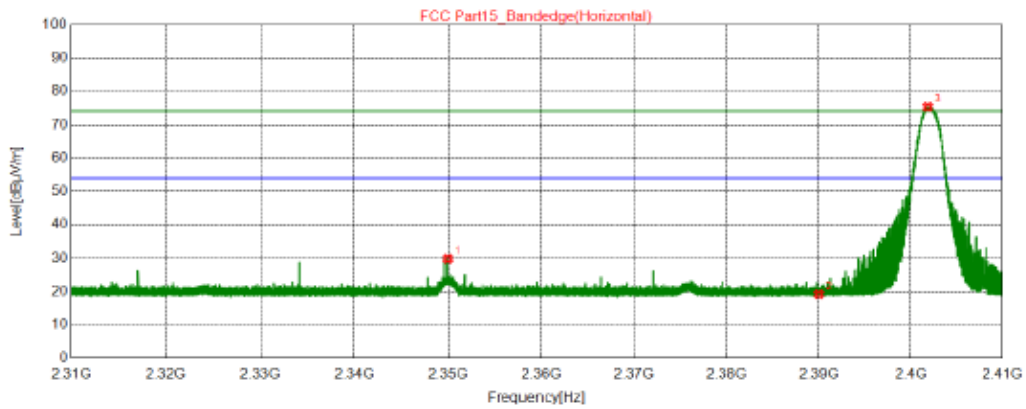
DH5-2480MHz/ Vertical



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.	85.07	-15.51	69.56	74.00	4.44	180	144	Vertical
2	2483.	37.05	-15.50	21.55	74.00	52.45	180	349	Vertical
3	2483.	51.23	-15.49	35.74	74.00	38.26	180	349	Vertical

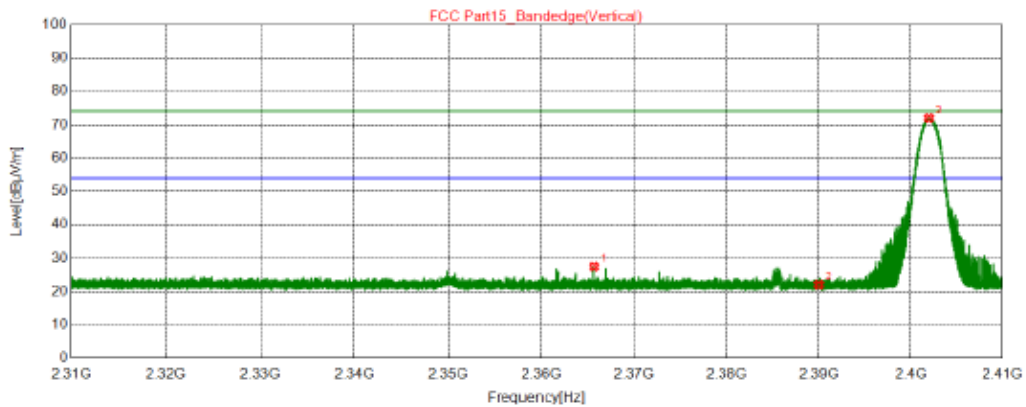
2DH5-2402MHz/ Horizontal



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBuV/m]	Factor [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2349.	45.79	-15.96	29.83	74.00	44.17	180	53	Horizontal
2	2390.	34.96	-15.81	19.15	74.00	54.85	180	175	Horizontal
3	2401.	91.07	-15.77	75.30	74.00	-1.30	180	53	Horizontal

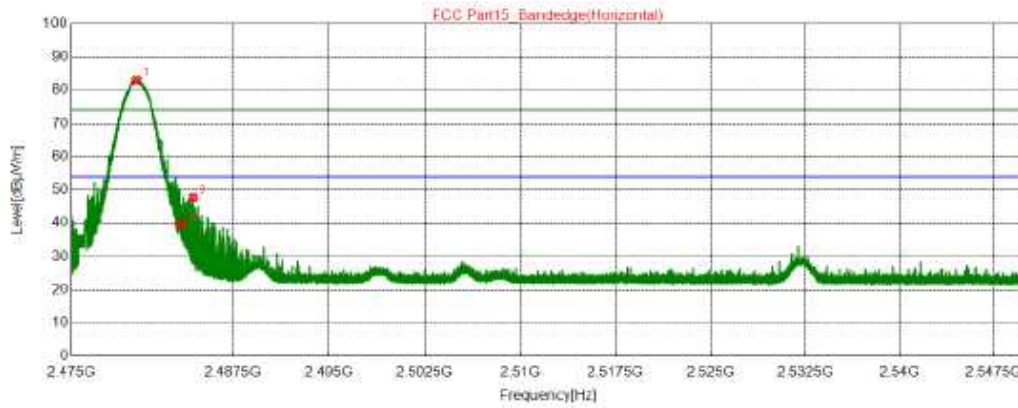
2DH5-2402MHz/ Vertical



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBuV/m]	Factor [dB]	Level [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2365.	43.35	-15.90	27.45	74.00	46.55	180	306	Vertical
2	2390.	37.80	-15.81	21.99	74.00	52.01	180	326	Vertical
3	2402.	87.71	-15.77	71.94	74.00	2.06	180	244	Vertical

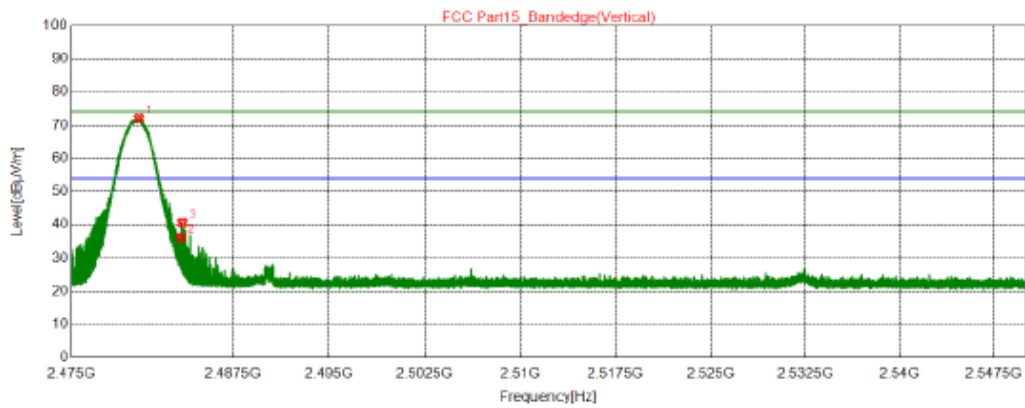
2DH5-2480MHz/ Horizontal



○ QP Detector ● AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.	98.50	-15.51	82.99	74.00	-8.99	180	82	Horizontal
2	2483.	55.18	-15.50	39.68	74.00	34.32	180	82	Horizontal
3	2484.	63.25	-15.49	47.76	74.00	26.24	180	82	Horizontal

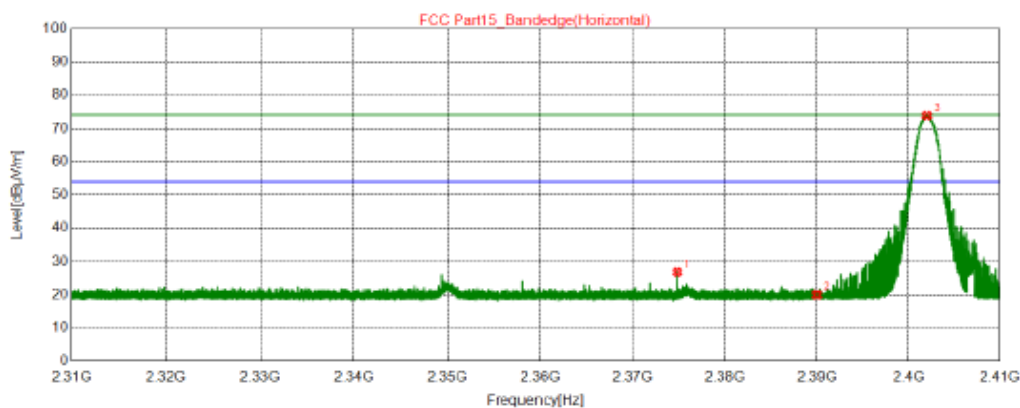
2DH5-2480MHz/ Vertical



○ QP Detector ● AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.	87.54	-15.51	72.03	74.00	1.97	180	135	Vertical
2	2483.	51.62	-15.50	36.12	74.00	37.88	180	13	Vertical
3	2483.	56.08	-15.49	40.59	74.00	33.41	180	13	Vertical

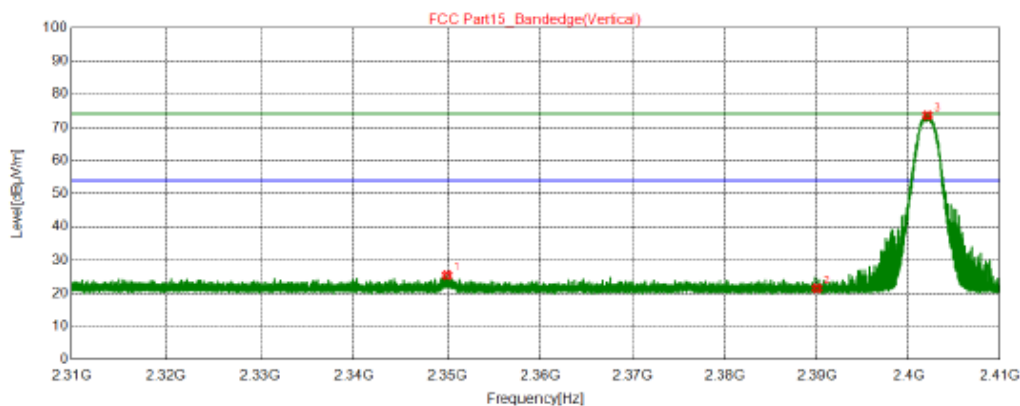
3DH5-2402MHz/ Horizontal



○ QP Detector ● AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2374.	42.73	-15.87	26.86	74.00	47.14	180	20	Horizontal
2	2390.	35.74	-15.81	19.93	74.00	54.07	180	122	Horizontal
3	2402.	89.65	-15.77	73.88	74.00	0.12	180	82	Horizontal

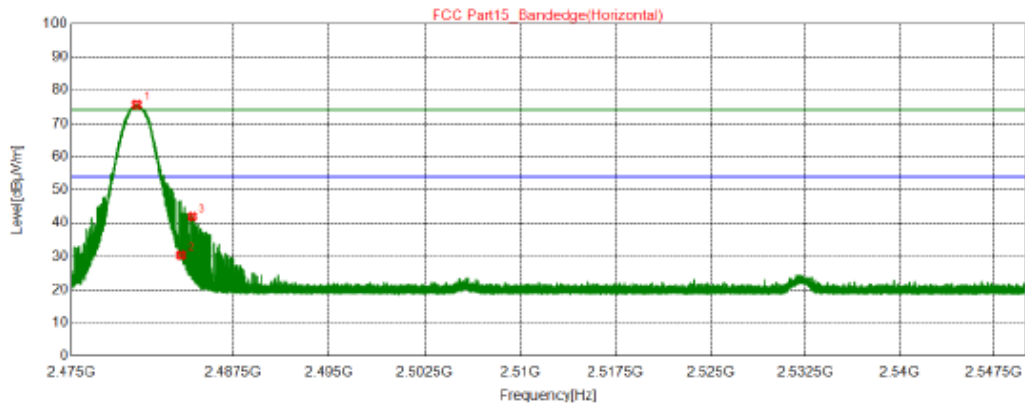
3DH5-2402MHz/ Vertical



○ QP Detector ● AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2349.	41.31	-15.96	25.35	74.00	48.65	180	33	Vertical
2	2390.	37.29	-15.81	21.48	74.00	52.52	180	13	Vertical
3	2402.	89.39	-15.77	73.62	74.00	0.38	180	13	Vertical

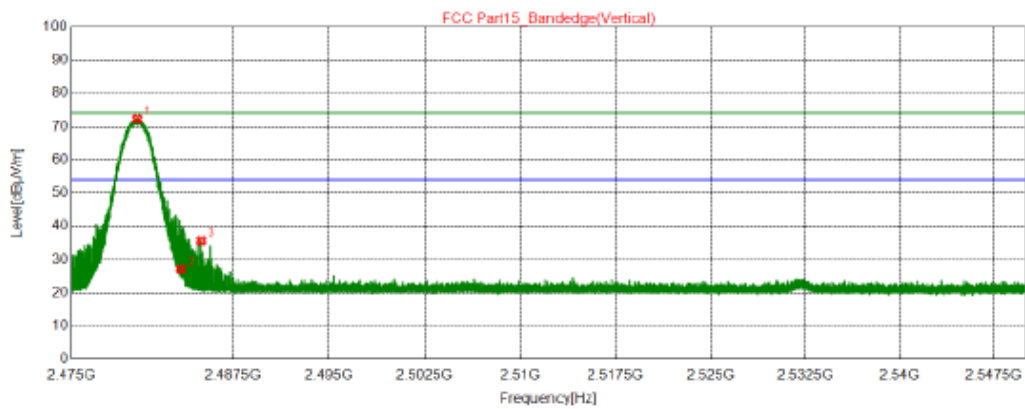
3DH5-2480MHz/ Horizontal



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.	91.14	-15.51	75.63	74.00	-1.63	180	33	Horizontal
2	2483.	45.87	-15.50	30.37	74.00	43.63	180	74	Horizontal
3	2484.	57.47	-15.49	41.98	74.00	32.02	180	33	Horizontal

3DH5-2480MHz/ Vertical



○ QP Detector ★ AV Detector

NO.	Freq. [MHz]	Reading [dBμV/m]	Factor [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	2480.	87.72	-15.51	72.21	74.00	1.79	180	246	Vertical
2	2483.	42.59	-15.50	27.09	74.00	46.91	180	246	Vertical
3	2485.	51.13	-15.49	35.64	74.00	38.36	180	246	Vertical

4.10 Radiated Emission Measurement

4.10.1 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.

4.10.2 Test Procedures

For Radiated emission below 30MHz

- a. The EUT was placed on a 80cm height table 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. 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 a 80cm height(above 1GHz is 1.5m height) table 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.

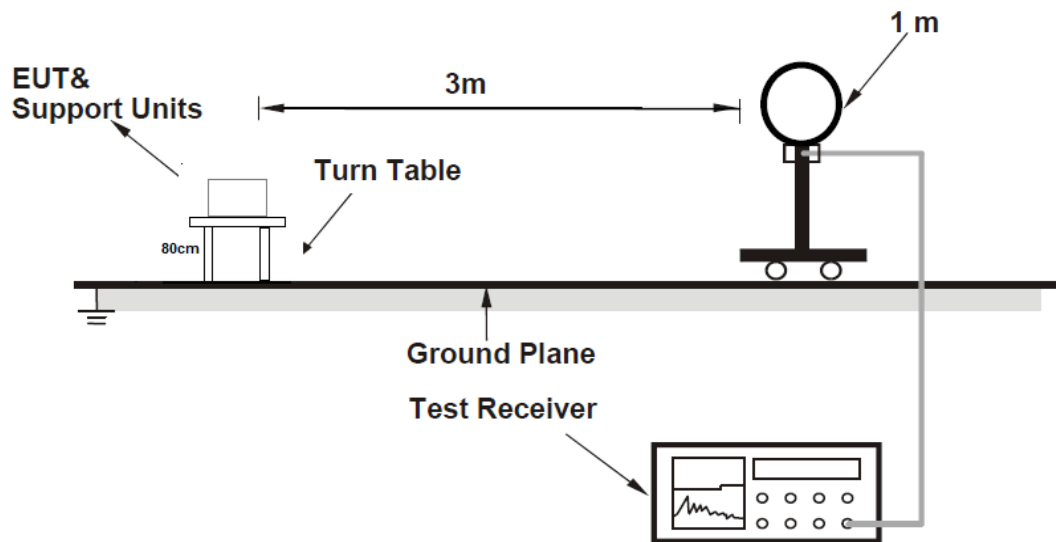
4.10.3

4.10.4 Deviation from Test Standard

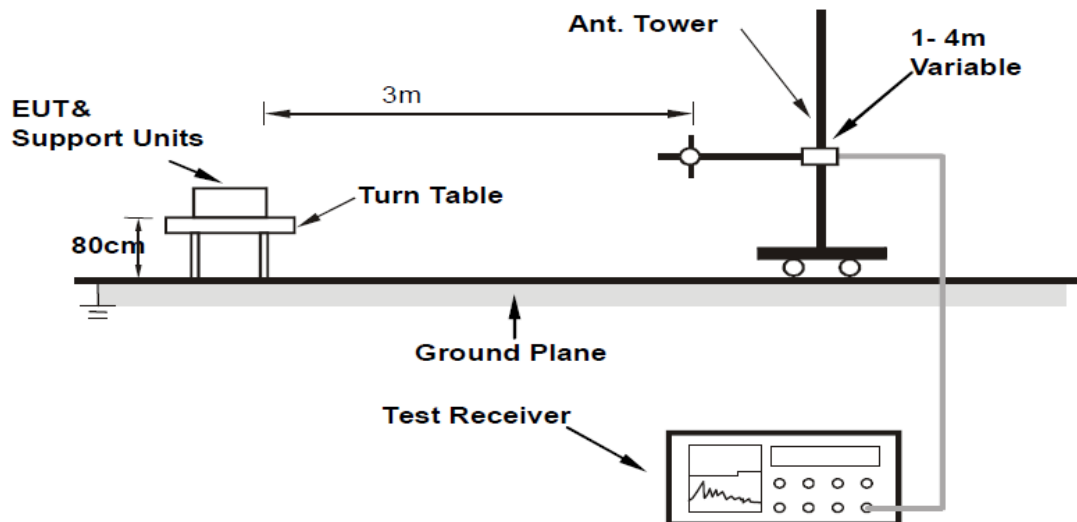
No deviation.

4.10.5 Test Setup

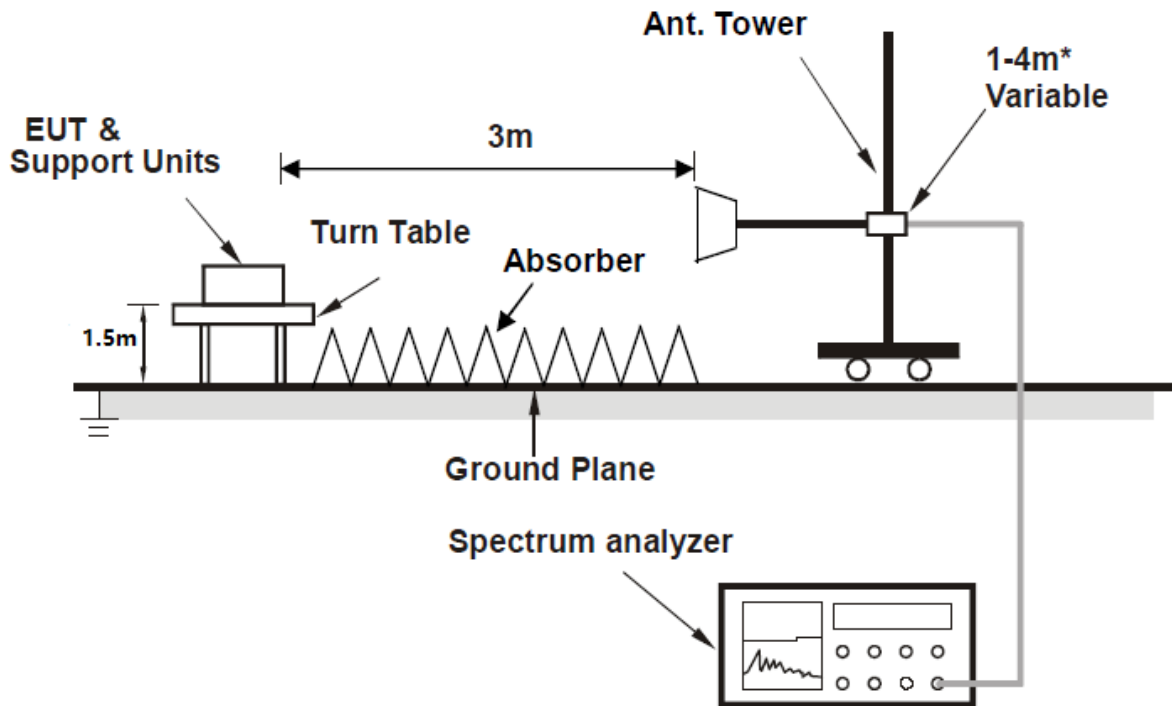
For Radiated emission between 30MHz~1000MHz



For Radiated emission between 30MHz~1000MHz



For Radiated emission above 1GHz



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

4.10.6 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.

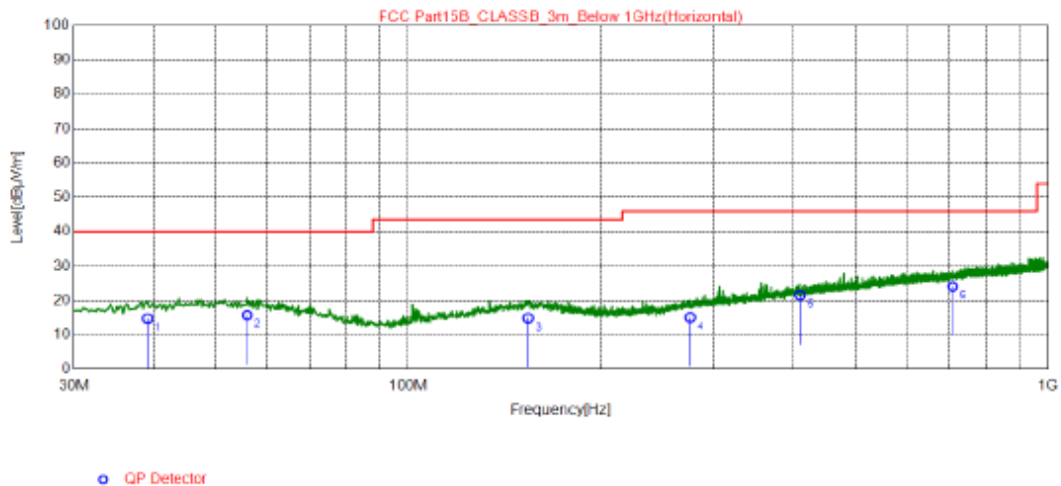
4.10.7 Test Results

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

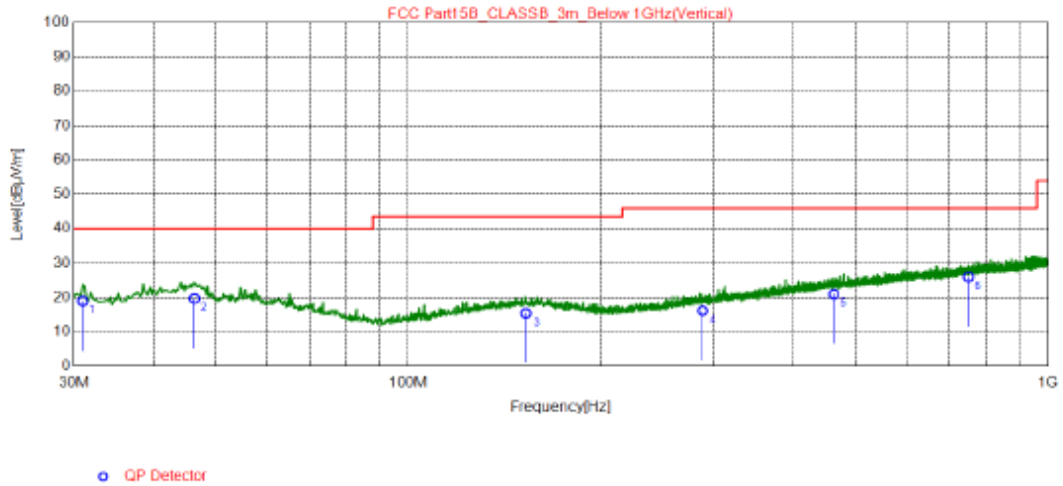


NO.	Freq. [MHz]	QP Reading [dBμV/m]	Factor [dB]	QP Value [dBμV/m]	QP Limit [dBμV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	39.11	25.28	-10.54	14.74	40.00	25.26	200	67	Horizontal
2	55.99	25.75	-10.05	15.70	40.00	24.30	100	24	Horizontal
3	153.9	24.79	-9.93	14.86	43.50	28.64	100	182	Horizontal
4	275.7	24.43	-9.38	15.05	46.00	30.95	200	254	Horizontal
5	409.6	27.56	-6.07	21.49	46.00	24.51	100	242	Horizontal
6	709.1	25.44	-1.38	24.06	46.00	21.94	200	268	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



NO.	Freq. [MHz]	QP Reading [dBuV/m]	Factor [dB]	QP Value [dBuV/m]	QP Limit [dBuV/m]	QP Margin [dB]	Height [cm]	Angle [°]	Polarity
1	30.97	30.46	-11.55	18.91	40.00	21.09	100	101	Vertical
2	46.29	29.61	-9.97	19.64	40.00	20.36	100	74	Vertical
3	152.8	25.34	-9.96	15.38	43.50	28.12	100	191	Vertical
4	288.4	25.07	-8.96	16.11	46.00	29.89	100	110	Vertical
5	462.4	25.95	-4.98	20.97	46.00	25.03	200	42	Vertical
6	750.3	26.64	-0.65	25.99	46.00	20.01	100	292	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

GFSK

Channel		TX Channel 0		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	7205.8500	48.92	74.00	25.08	-0.58	H	PK
2	7206.7000	46.06	54.00	7.94	-0.58	H	AV
3	7206.7000	48.95	74.00	25.05	-0.58	V	PK
4	7206.7000	46.00	54.00	8.00	-0.58	V	AV

Channel		TX Channel 39		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	7323.1500	49.33	74.00	24.67	-0.88	H	PK
2	7324.0000	45.74	54.00	8.26	-0.89	H	AV
3	7324.0000	48.26	74.00	25.74	-0.89	V	PK
4	7324.0000	45.11	54.00	8.89	-0.89	V	AV

Channel		TX Channel 78		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	7440.4500	46.10	74.00	27.90	-1.19	H	PK
2	7441.3000	44.43	54.00	9.57	-1.19	H	AV
3	7439.6000	44.87	74.00	29.13	-1.19	V	PK
4	7441.3000	42.14	54.00	11.86	-1.19	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

π/4-DQPSK

Channel		TX Channel 0		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	7324.0000	50.01	74.00	23.99	-0.89	H	PK
2	7324.0000	45.22	54.00	8.78	-0.89	H	AV
3	7206.7000	50.64	74.00	23.36	-0.58	V	PK
4	7207.5500	45.89	54.00	8.11	-0.58	V	AV

Channel		TX Channel 39		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	7324.0000	50.01	74.00	23.99	-0.89	H	PK
2	7324.0000	45.22	54.00	8.78	-0.89	H	AV
3	7324.0000	50.57	74.00	23.43	-0.89	V	PK
4	7324.0000	45.12	54.00	8.88	-0.89	V	AV

Channel		TX Channel 78		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	7440.4500	47.98	74.00	26.02	-1.19	H	PK
2	7441.3000	42.30	54.00	11.70	-1.19	H	AV
3	7441.3000	46.25	74.00	27.75	-1.19	V	PK
4	7441.3000	41.63	54.00	12.37	-1.19	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

8DPSK

Channel		TX Channel 0		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	7206.7000	50.06	74.00	23.94	-0.58	H	PK
2	7206.7000	45.20	54.00	8.80	-0.58	H	AV
3	7206.7000	50.07	74.00	23.93	-0.58	V	PK
4	7207.5500	46.31	54.00	7.69	-0.58	V	AV

Channel		TX Channel 39		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	7323.1500	50.66	74.00	23.34	-0.88	H	PK
2	7324.0000	47.58	54.00	6.42	-0.89	H	AV
3	7323.1500	50.88	74.00	23.12	-0.88	V	PK
4	7324.0000	44.91	54.00	9.09	-0.89	V	AV

Channel		TX Channel 78		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	7440.4500	48.31	74.00	25.69	-1.19	H	PK
2	7441.3000	43.87	54.00	10.13	-1.19	H	AV
3	7440.4500	46.11	74.00	27.89	-1.19	V	PK
4	7441.3000	41.51	54.00	12.49	-1.19	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

5 Pictures of Test Arrangements

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

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