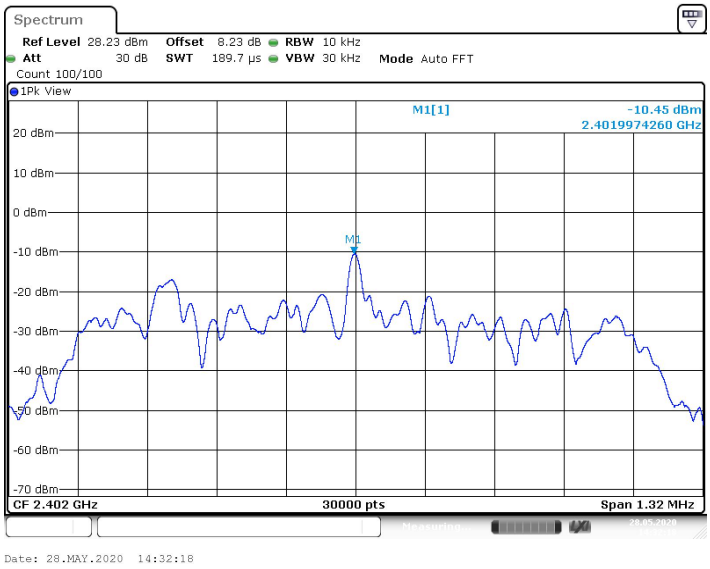
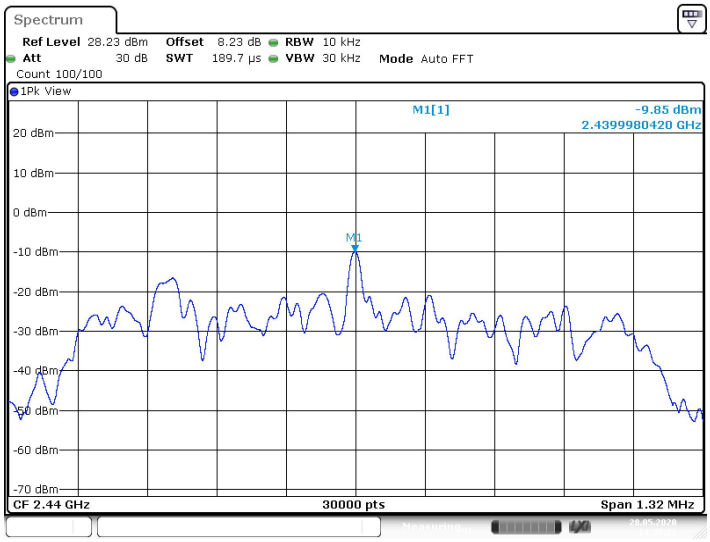
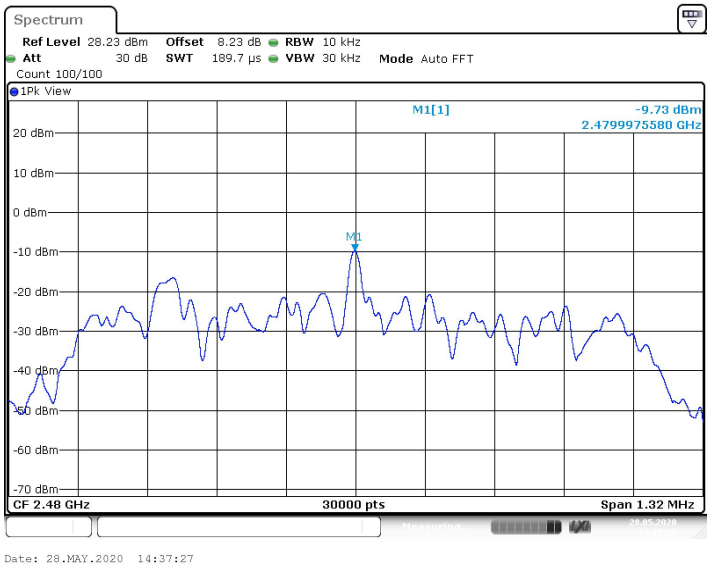
Test Mode:	BLE Mode		
Channel Frequency (MHz)	**Power Density (dBm/10kHz)**	**Power Density (dBm/3kHz)**	**Limit (dBm)**
2402	-10.45	-15.68	8dBm/3kHz
2440	-9.85	-15.08	
2480	-9.73	-14.96	
BLE Mode			
2402 MHz			



BLE Mode
2440 MHz



BLE Mode
2480 MHz

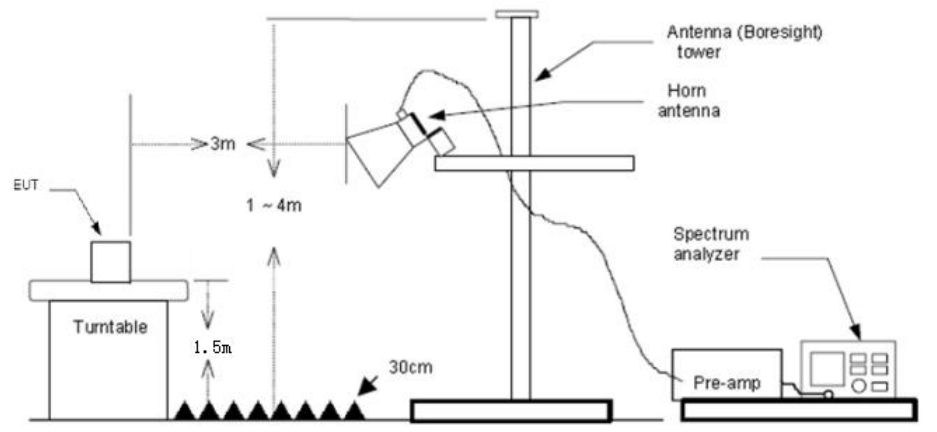


3.7. Band Edge Emissions(Radiated)

Limit

Restricted Frequency Band (MHz)	(dBuV/m)(at 3m)	
	Peak	Average
2310 ~2390	74	54
2483.5 ~2500	74	54
Note: All restriction bands have been tested, only the worst case is reported.		

Test Configuration



Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
5. The receiver set as follow:
   RBW=1MHz, VBW=3MHz PEAK detector for Peak value.
   RBW=1MHz, VBW=10Hz with PEAK Detector for Average Value.

Test Mode

Please refer to the clause 2.2.

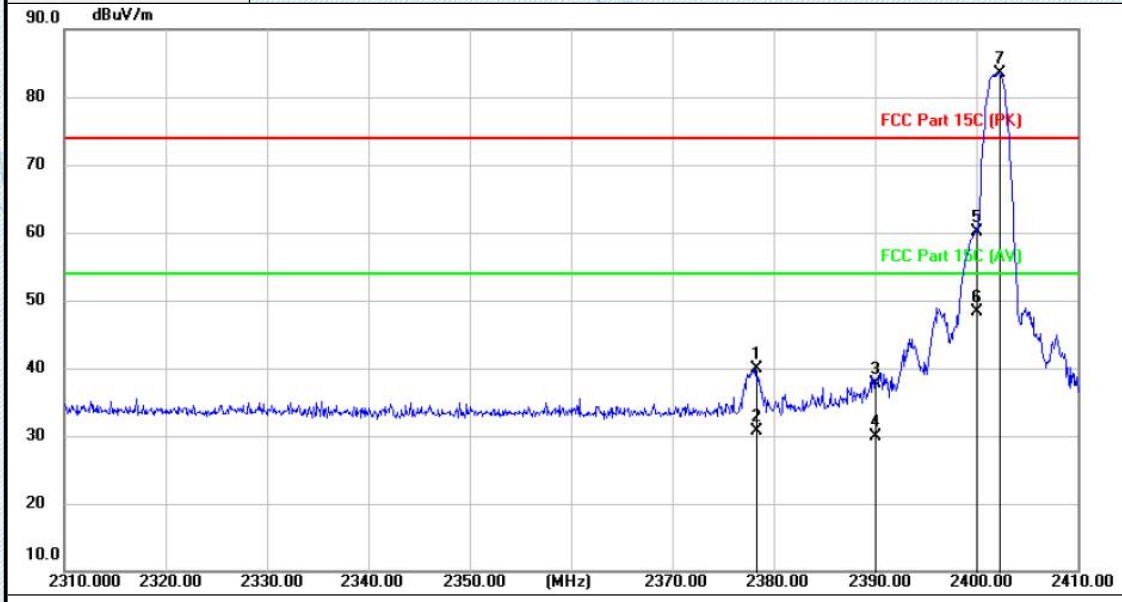
Test Results

Note:

Measurement = Reading level + Correct Factor

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

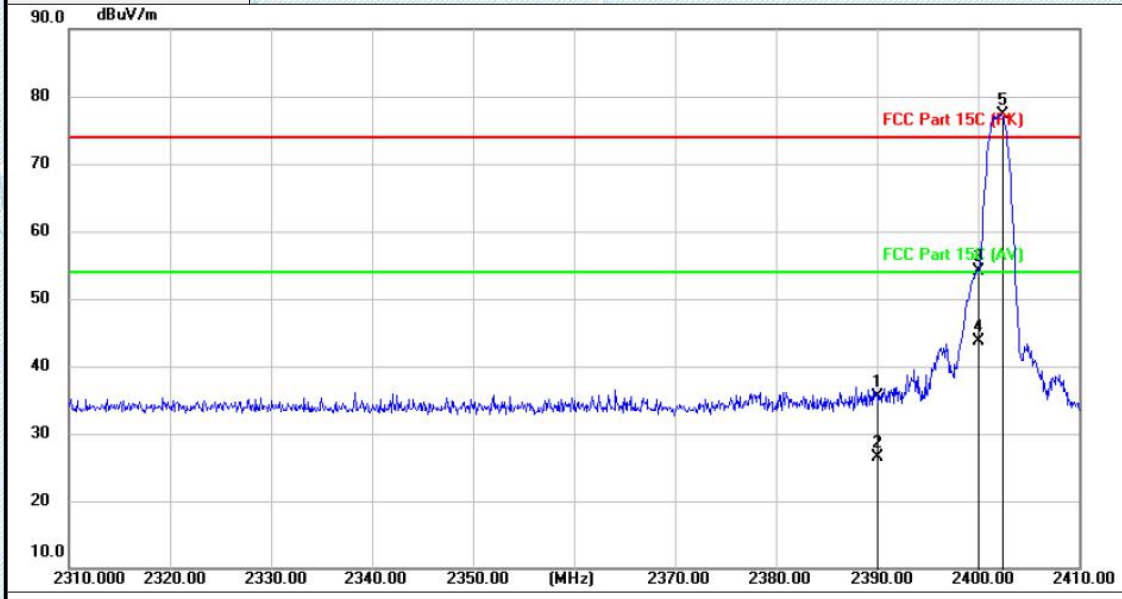
Test Voltage:	DC 3.7V
Ant. Pol.:	Horizontal
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2378.270	50.76	-10.92	39.84	74.00	-34.16	peak
2		2378.270	41.56	-10.92	30.64	54.00	-23.36	AVG
3		2390.000	48.66	-10.92	37.74	74.00	-36.26	peak
4		2390.000	40.77	-10.92	29.85	54.00	-24.15	AVG
5		2400.000	71.06	-10.92	60.14	74.00	-13.86	peak
6		2400.000	59.18	-10.92	48.26	54.00	-5.74	AVG
7	*	2402.250	94.37	-10.91	83.46	**Fundamental Frequency**		peak

Emission Level= Read Level+ Correct Factor

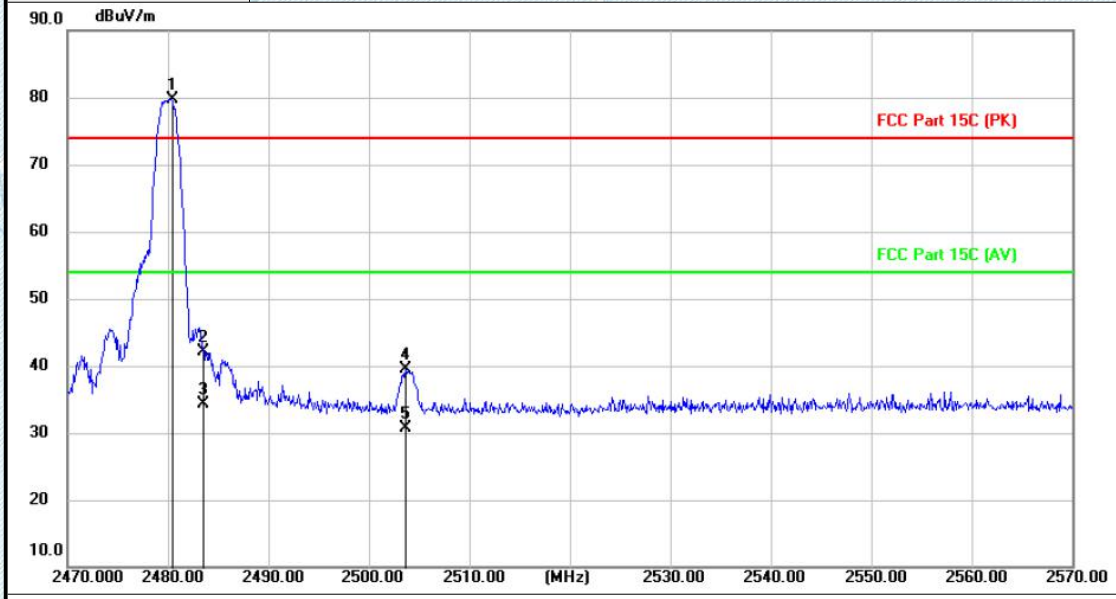
Test Voltage:	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2390.000	46.41	-10.92	35.49	74.00	-38.51	peak
2		2390.000	37.38	-10.92	26.46	54.00	-27.54	AVG
3		2400.000	65.04	-10.92	54.12	74.00	-19.88	peak
4		2400.000	54.56	-10.92	43.64	54.00	-10.36	AVG
5	*	2402.390	88.17	-10.91	77.26	**Fundamental Frequency**		peak

Emission Level= Read Level+ Correct Factor

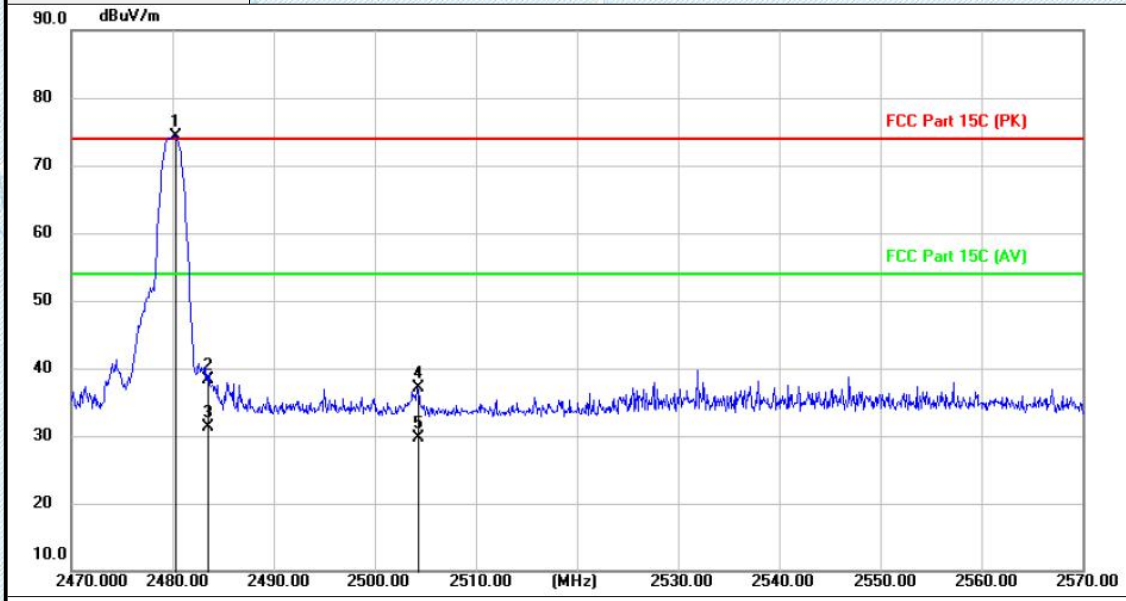
Test Voltage:	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2480 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	2480.310	90.68	-10.89	79.79	Fundamental Frequency		peak
2		2483.500	53.05	-10.88	42.17	74.00	-31.83	peak
3		2483.500	45.19	-10.88	34.31	54.00	-19.69	AVG
4		2503.640	50.43	-10.88	39.55	74.00	-34.45	peak
5		2503.640	41.52	-10.88	30.64	54.00	-23.36	AVG

Emission Level= Read Level+ Correct Factor

Test Voltage:	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2480 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	2480.270	85.25	-10.89	74.36	Fundamental Frequency		peak
2		2483.500	49.12	-10.88	38.24	74.00	-35.76	peak
3		2483.500	42.22	-10.88	31.34	54.00	-22.66	AVG
4		2504.270	47.92	-10.89	37.03	74.00	-36.97	peak
5		2504.270	40.53	-10.89	29.64	54.00	-24.36	AVG

Emission Level= Read Level+ Correct Factor

3.8. Spurious Emission (Radiated)

Limit

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz)	Field Strength (microvolt/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

Radiated Emission Limit (Above 1000MHz)

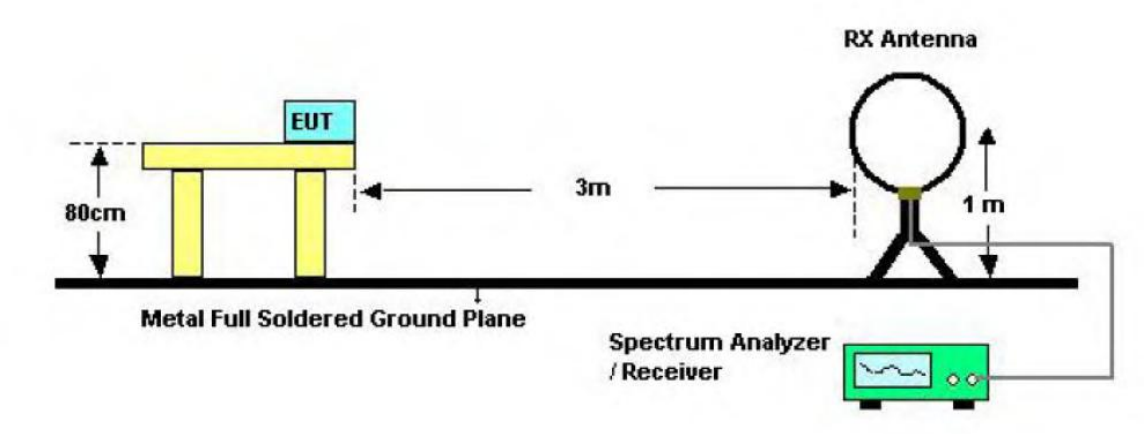
Frequency (MHz)	Distance Meters(at 3m)	
	Peak	Average
Above 1000	74	54

Note:

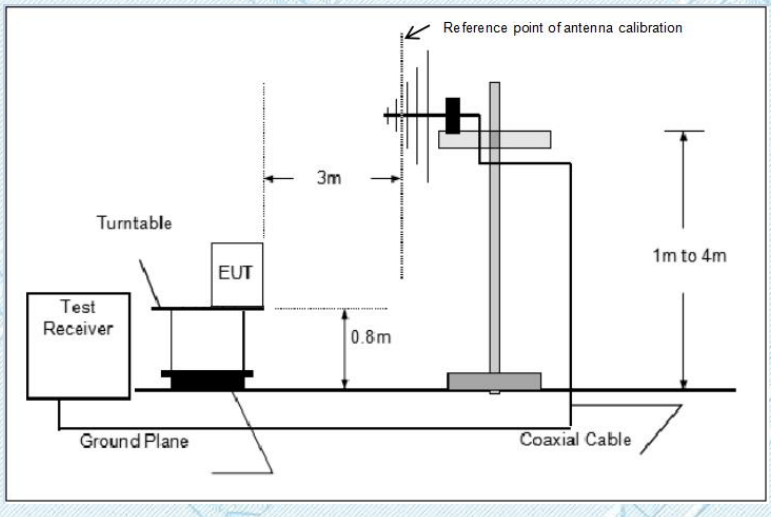
(1) The tighter limit applies at the band edges.

(2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

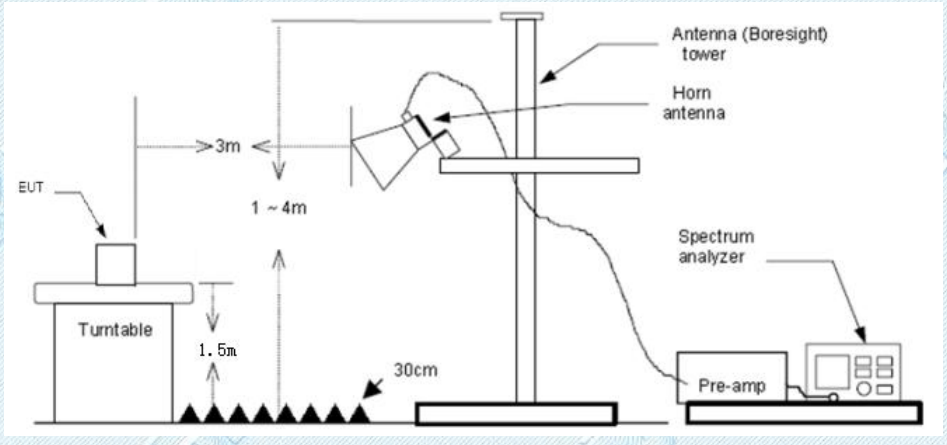
Test Configuration



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2013
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings

   (1) Span shall wide enough to fully capture the emission being measured;

   (2) Below 1 GHz:

   RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

   If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

   (3) From 1 GHz to 10th harmonic:

   RBW=1MHz, VBW=3MHz Peak detector for Peak value.

   RBW=1MHz, VBW=10Hz RMS detector for Average value.

Test Mode

Please refer to the clause 2.2.

Test Result

9 KHz~30 MHz and 18GHz~25GHz

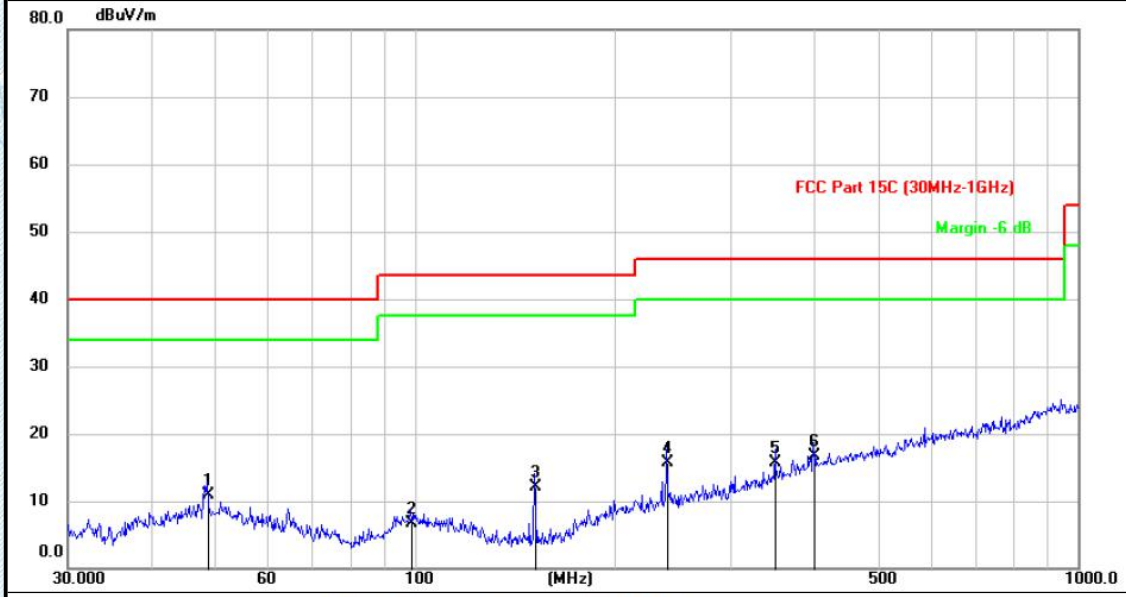
From 9 KHz~30 MHz and 18GHz~25GHz: Conclusion: PASS

Note:

1) Measurement = Reading level + Correct Factor
   Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
2) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
3) The emission levels of other frequencies are very lower than the limit and not show in test report.
4) The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
5) Pre-scan CH00, CH19 and CH39 modulation, and found the CH00 which it is worse case for 30MHz-1GHz , so only show the test data for worse case.

30MHz-1GHz

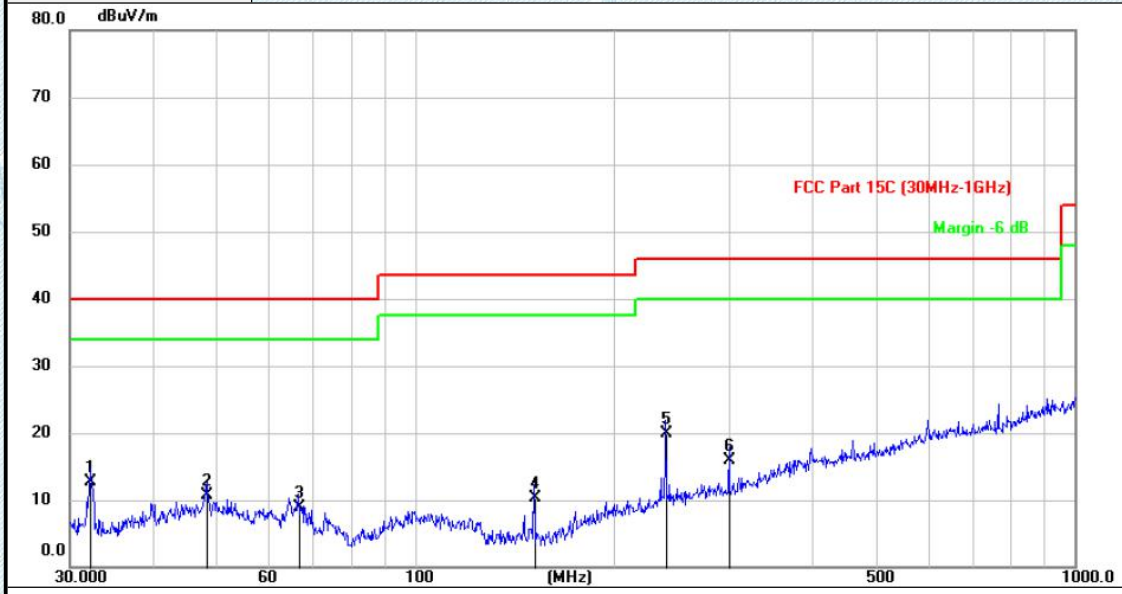
Test Voltage:	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	48.7402	26.71	-15.74	10.97	40.00	-29.03	QP
2		98.7633	24.47	-17.85	6.62	43.50	-36.88	QP
3		152.0231	33.45	-21.35	12.10	43.50	-31.40	QP
4		239.9874	31.83	-16.13	15.70	46.00	-30.30	QP
5		349.9854	28.34	-12.54	15.80	46.00	-30.20	QP
6		400.0109	27.66	-10.91	16.75	46.00	-29.25	QP

Emission Level= Read Level+ Correct Factor

Test Voltage:	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX 2402MHz

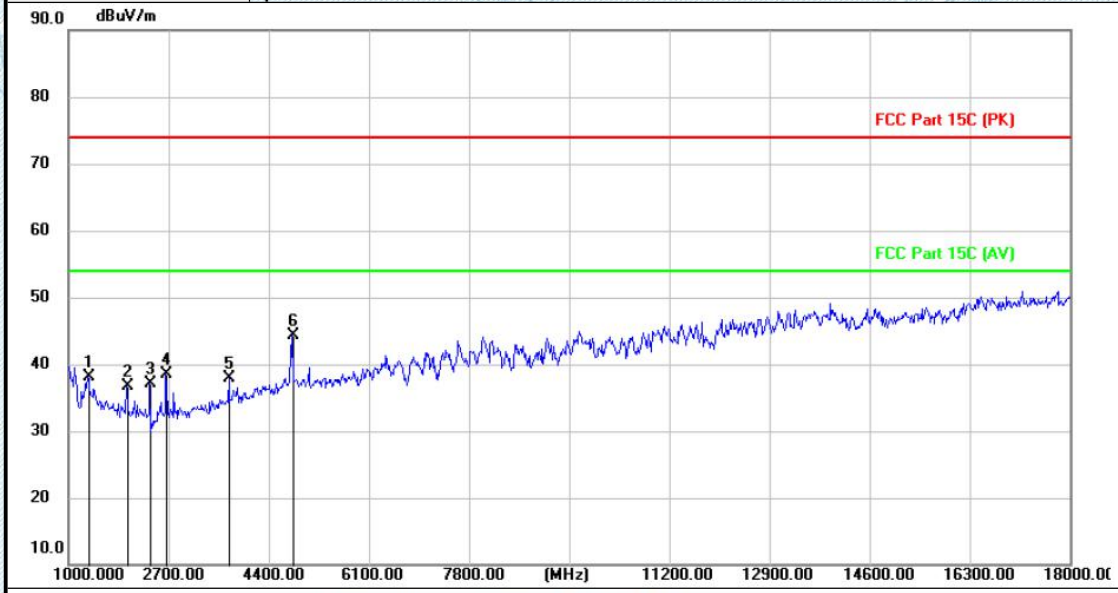


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		32.2359	31.62	-18.90	12.72	40.00	-27.28	QP
2		48.4336	26.48	-15.77	10.71	40.00	-29.29	QP
3		66.5223	27.92	-18.97	8.95	40.00	-31.05	QP
4		152.0231	31.66	-21.35	10.31	43.50	-33.19	QP
5	*	239.9874	36.02	-16.13	19.89	46.00	-26.11	QP
6		300.0514	30.48	-14.66	15.82	46.00	-30.18	QP

Emission Level= Read Level+ Correct Factor

Adobe 1GHz

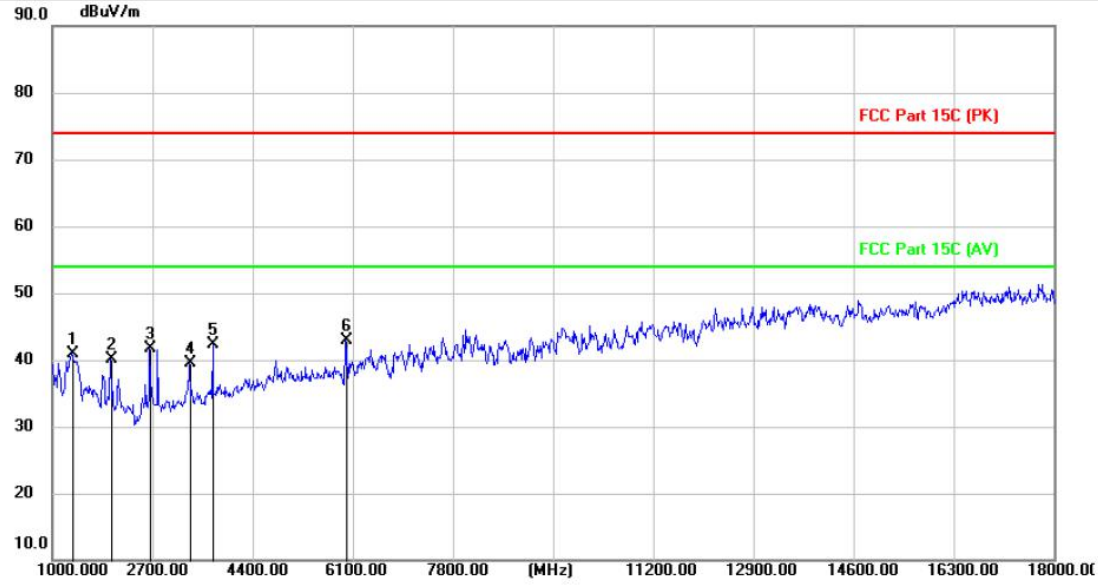
Test Voltage:	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2402MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		1331.500	50.11	-11.94	38.17	74.00	-35.83	peak
2		1999.600	47.86	-11.06	36.80	74.00	-37.20	peak
3		2378.700	47.97	-10.92	37.05	74.00	-36.95	peak
4		2664.300	49.30	-10.79	38.51	74.00	-35.49	peak
5		3725.100	46.95	-9.12	37.83	74.00	-36.17	peak
6	*	4801.200	50.25	-5.93	44.32	74.00	-29.68	peak

Emission Level= Read Level+ Correct Factor

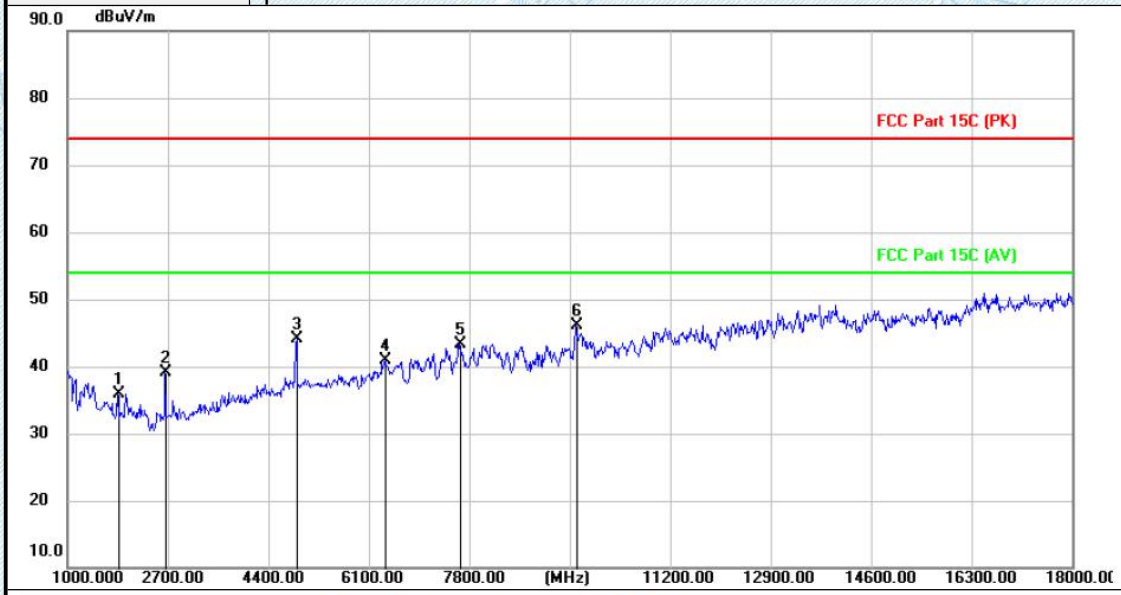
Test Voltage:	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2402MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		1331.500	52.76	-11.94	40.82	74.00	-33.18	peak
2		1994.500	51.24	-11.07	40.17	74.00	-33.83	peak
3		2659.200	52.54	-10.79	41.75	74.00	-32.25	peak
4		3332.400	49.47	-9.98	39.49	74.00	-34.51	peak
5		3720.000	51.52	-9.13	42.39	74.00	-31.61	peak
6	*	5989.500	46.63	-3.82	42.81	74.00	-31.19	peak

Emission Level= Read Level+ Correct Factor

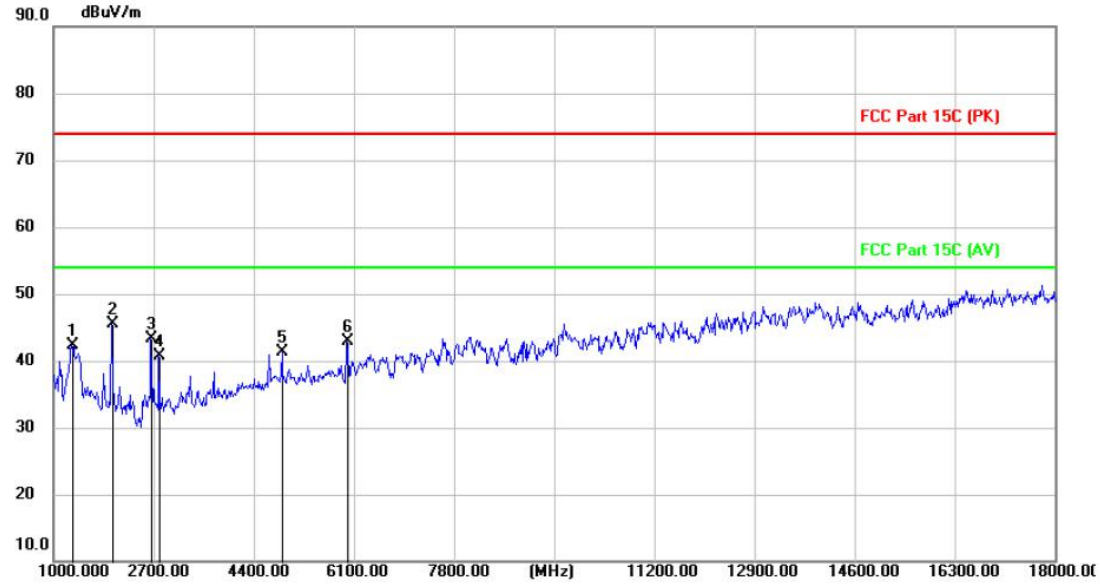
Test Voltage:	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2440MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		1865.300	47.01	-11.17	35.84	74.00	-38.16	peak
2		2657.500	49.87	-10.78	39.09	74.00	-34.91	peak
3		4877.700	49.83	-5.73	44.10	74.00	-29.90	peak
4		6378.800	43.48	-2.52	40.96	74.00	-33.04	peak
5		7641.900	42.11	1.18	43.29	74.00	-30.71	peak
6	*	9612.200	42.95	3.22	46.17	74.00	-27.83	peak

Emission Level= Read Level+ Correct Factor

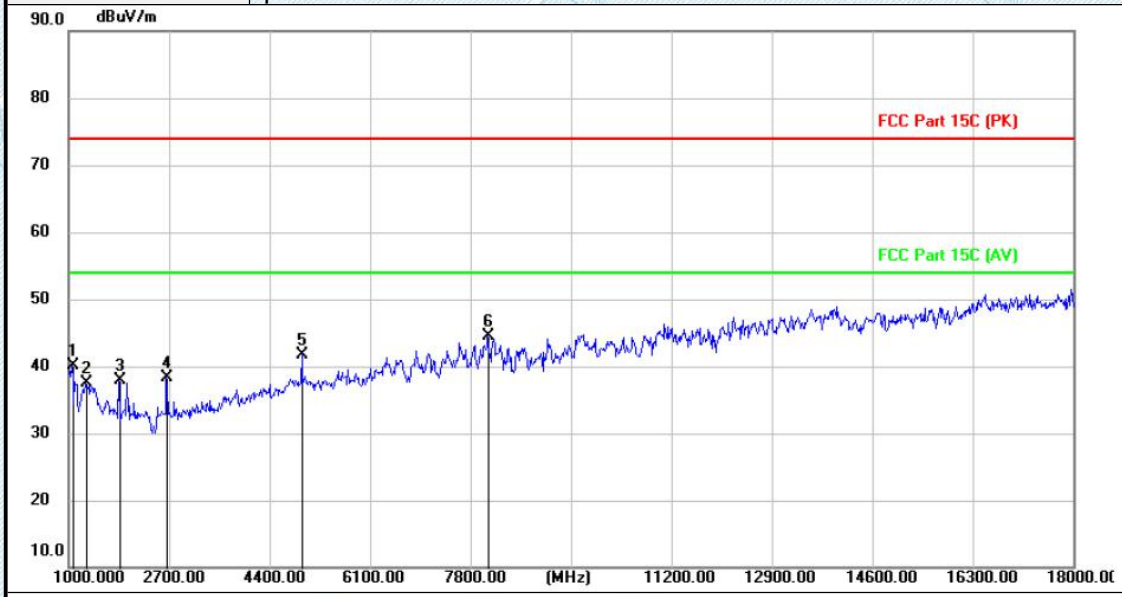
Test Voltage:	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2440MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		1307.700	54.34	-11.97	42.37	74.00	-31.63	peak
2	*	1992.800	56.60	-11.07	45.53	74.00	-28.47	peak
3		2662.600	54.07	-10.79	43.28	74.00	-30.72	peak
4		2796.900	51.51	-10.71	40.80	74.00	-33.20	peak
5		4876.000	47.04	-5.73	41.31	74.00	-32.69	peak
6		5994.600	46.62	-3.81	42.81	74.00	-31.19	peak

Emission Level= Read Level+ Correct Factor

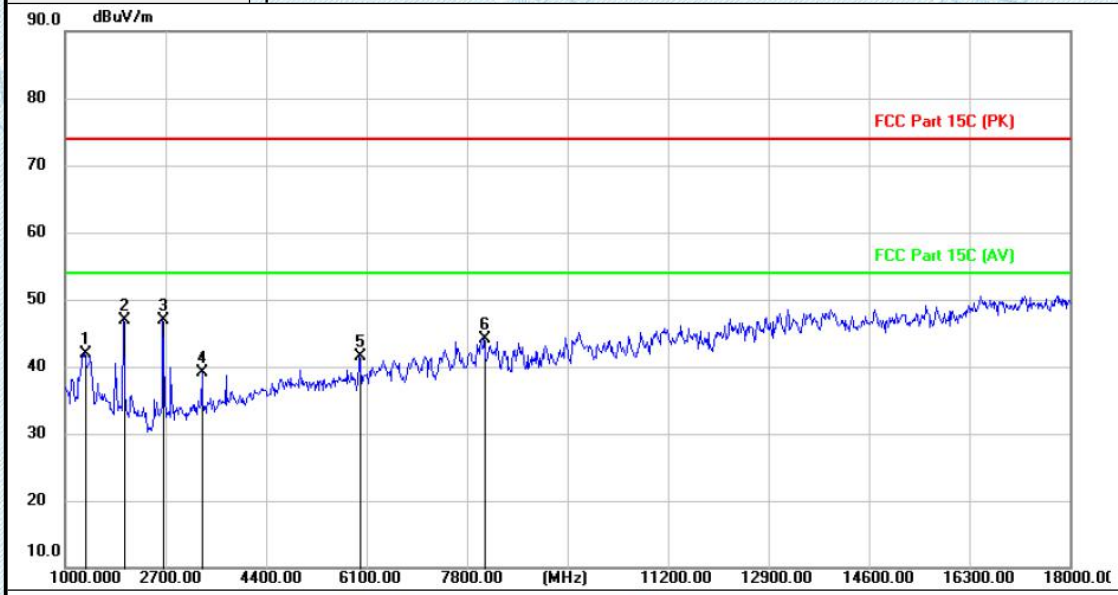
Test Voltage:	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2480MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		1056.100	52.41	-12.34	40.07	74.00	-33.93	peak
2		1302.600	49.51	-11.97	37.54	74.00	-36.46	peak
3		1865.300	49.01	-11.17	37.84	74.00	-36.16	peak
4		2664.300	49.11	-10.79	38.32	74.00	-35.68	peak
5		4957.600	47.31	-5.51	41.80	74.00	-32.20	peak
6	*	8092.400	42.36	2.05	44.41	74.00	-29.59	peak

Emission Level= Read Level+ Correct Factor

Test Voltage:	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2480MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		1331.500	53.89	-11.94	41.95	74.00	-32.05	peak
2		1992.800	57.89	-11.07	46.82	74.00	-27.18	peak
3	*	2660.900	57.74	-10.79	46.95	74.00	-27.05	peak
4		3322.200	49.20	-10.01	39.19	74.00	-34.81	peak
5		5987.800	45.31	-3.83	41.48	74.00	-32.52	peak
6		8102.600	42.11	2.05	44.16	74.00	-29.84	peak

Emission Level= Read Level+ Correct Factor

4.EUT TEST PHOTOS

Reference to the document No.: Test Photos.

5.PHOTOGRAPHS OF EUT CONSTRUCTIONAL

Reference to the document No.: External Photos and Internal Photos.

******THE END******