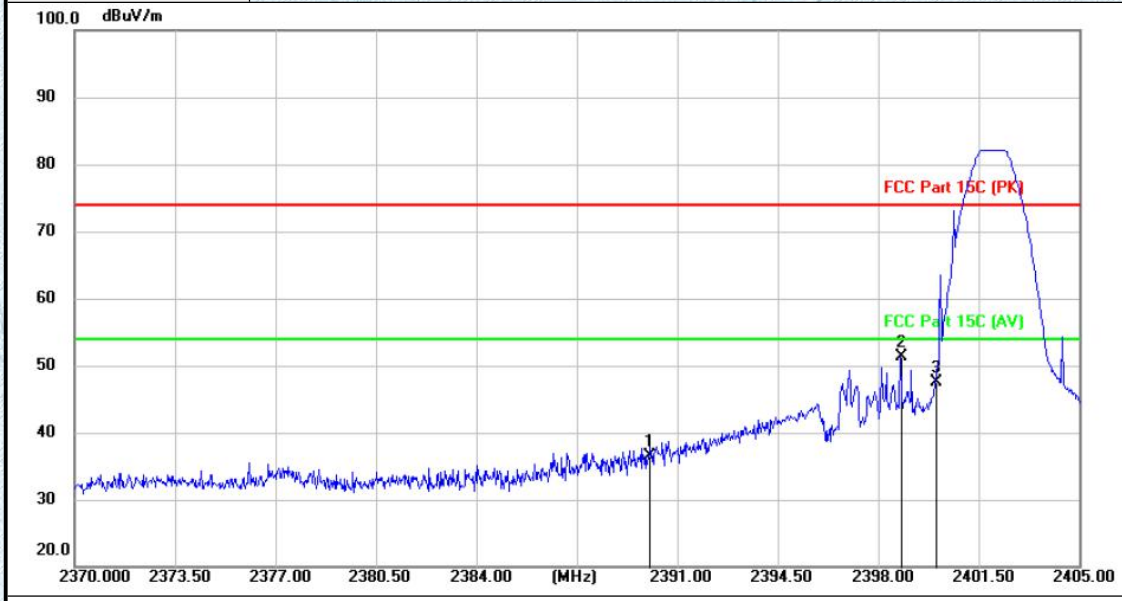
Test model:MK02D

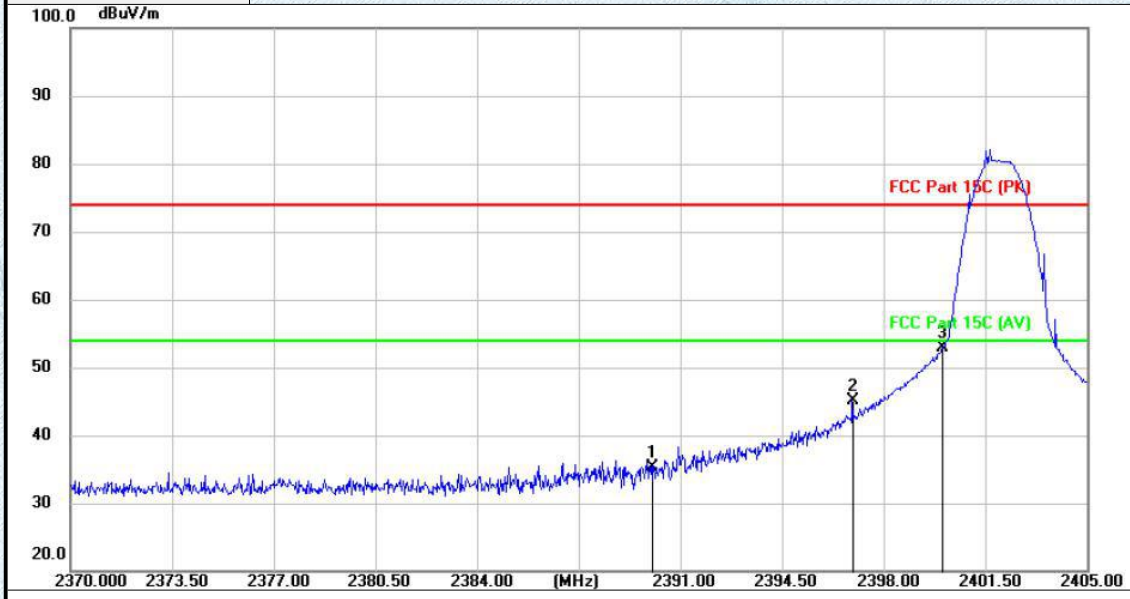
Ant. Pol.:	Horizontal
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2390.000	47.52	-10.92	36.60	74.00	-37.40	peak
2	*	2398.798	62.25	-10.92	51.33	74.00	-22.67	peak
3		2400.000	58.43	-10.92	47.51	74.00	-26.49	peak

Emission Level= Read Level+ Correct Factor

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	46.32	-10.92	35.40	74.00	-38.60	peak
2		2396.929	55.93	-10.92	45.01	74.00	-28.99	peak
3	*	2400.000	63.78	-10.92	52.86	74.00	-21.14	peak

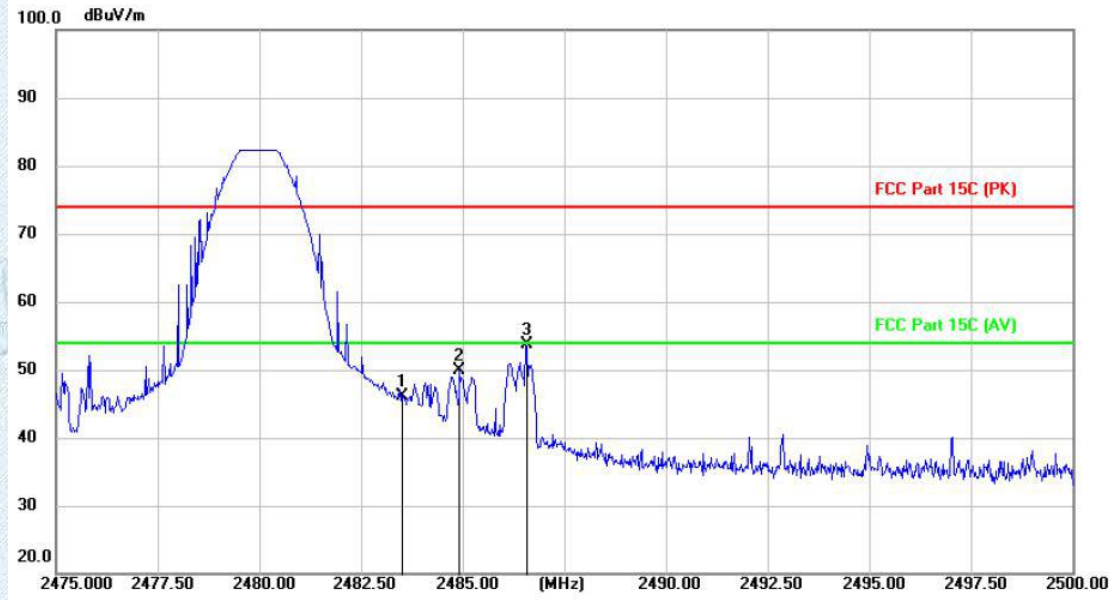
Emission Level= Read Level+ Correct Factor

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		2483.500	58.41	-10.88	47.53	74.00	-26.47	peak
2		2484.693	61.55	-10.88	50.67	74.00	-23.33	peak
3	*	2486.173	63.36	-10.88	52.48	74.00	-21.52	peak

Emission Level= Read Level+ Correct Factor

Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2480 MHz

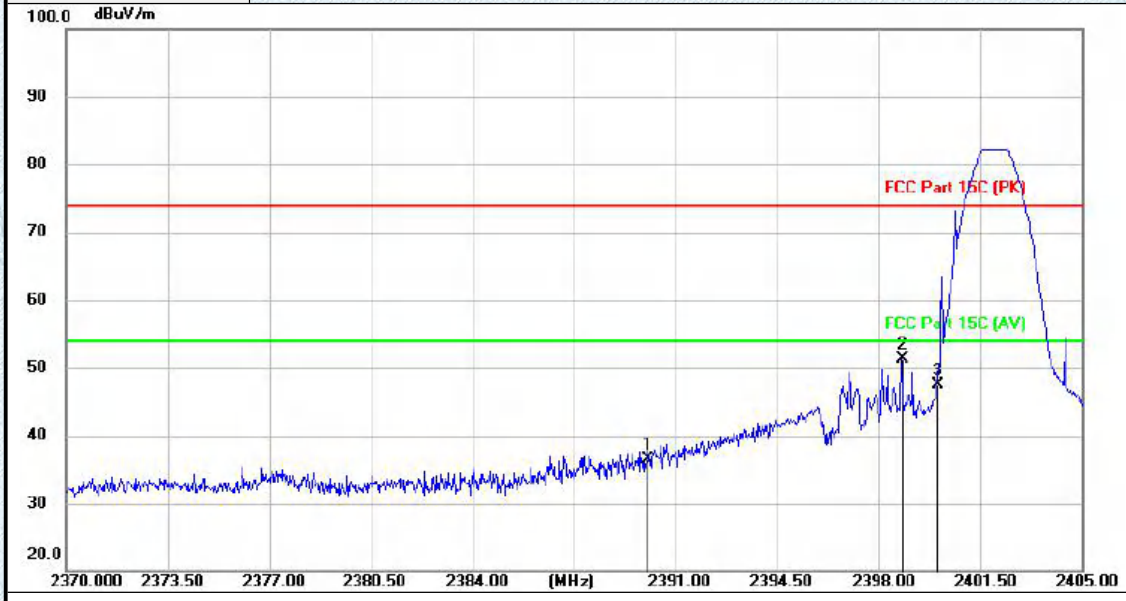


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	56.90	-10.88	46.02	74.00	-27.98	peak
2		2484.925	60.69	-10.88	49.81	74.00	-24.19	peak
3	*	2486.573	64.60	-10.88	53.72	74.00	-20.28	peak

Emission Level= Read Level+ Correct Factor

Test model:MK02E

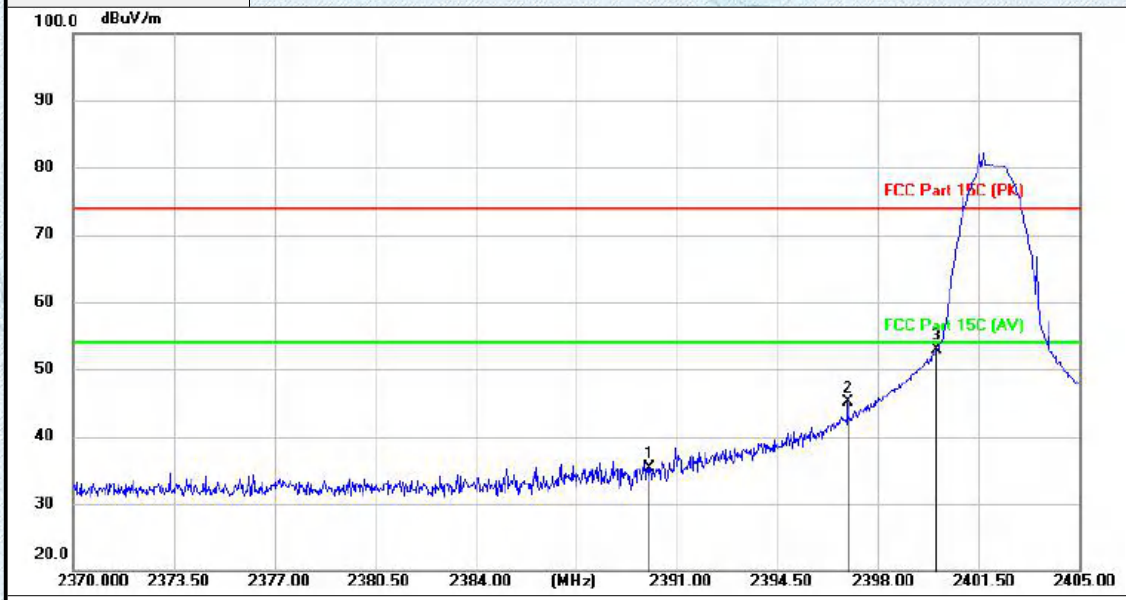
Ant. Pol.:	Horizontal
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2390.000	47.52	-10.92	36.60	74.00	-37.40	peak
2	*	2398.798	62.25	-10.92	51.33	74.00	-22.67	peak
3		2400.000	58.43	-10.92	47.51	74.00	-26.49	peak

Emission Level= Read Level+ Correct Factor

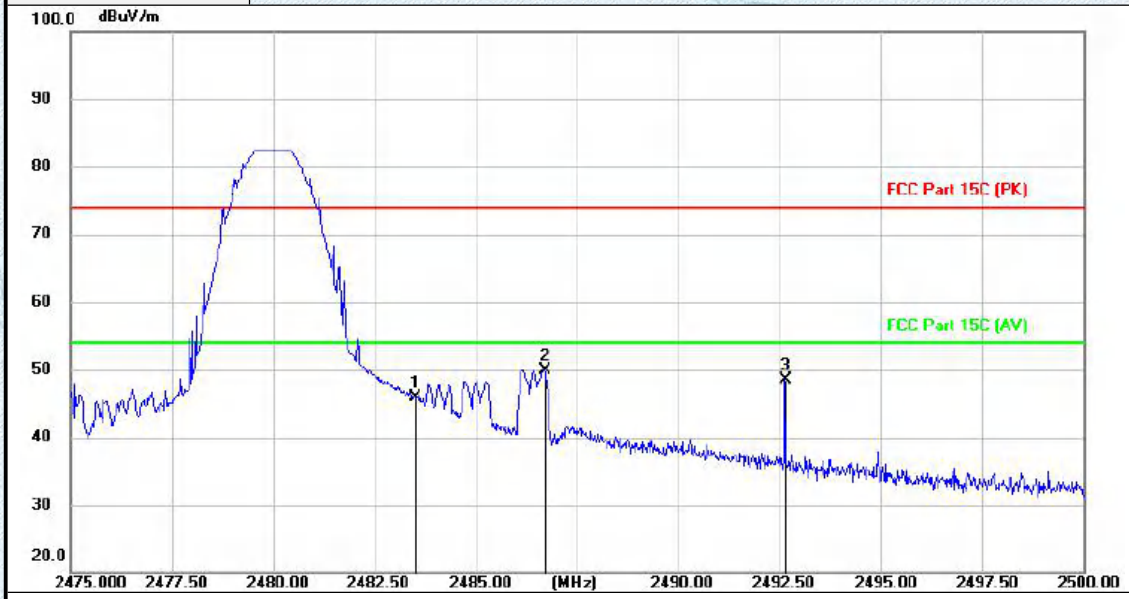
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2402 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2390.000	46.32	-10.92	35.40	74.00	-38.60	peak
2		2396.929	55.93	-10.92	45.01	74.00	-28.99	peak
3	*	2400.000	63.78	-10.92	52.86	74.00	-21.14	peak

Emission Level= Read Level+ Correct Factor

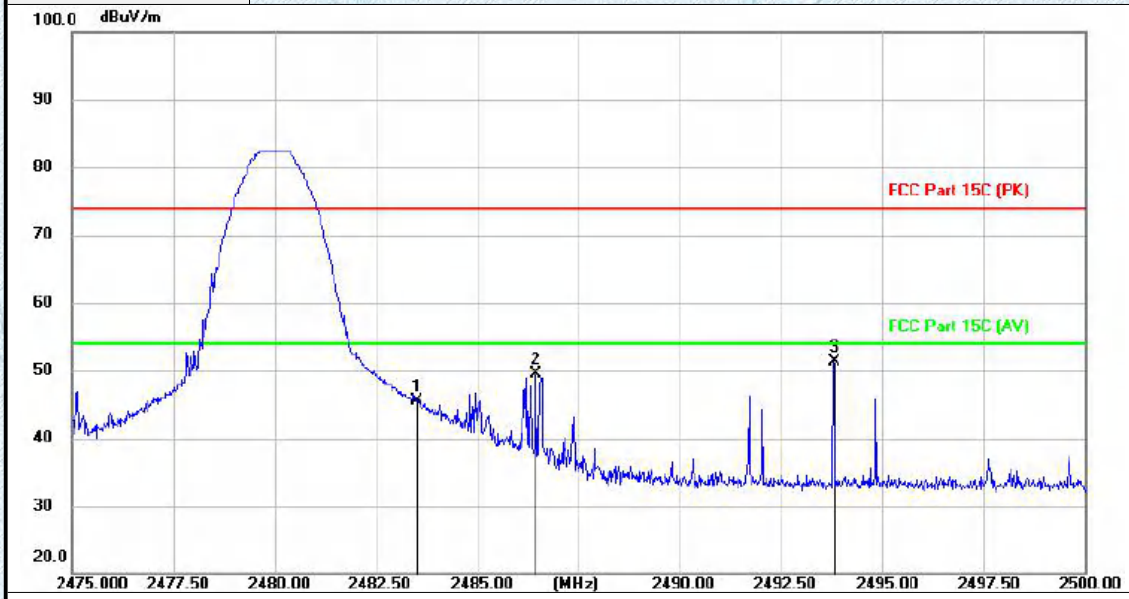
Ant. Pol.:	Horizontal
Test Mode:	TX BLE Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	56.69	-10.88	45.81	74.00	-28.19	peak
2	*	2486.680	60.86	-10.88	49.98	74.00	-24.02	peak
3		2492.637	59.47	-10.89	48.58	74.00	-25.42	peak

Emission Level= Read Level+ Correct Factor

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		2483.500	56.42	-10.88	45.54	74.00	-28.46	peak
2		2486.435	60.38	-10.88	49.50	74.00	-24.50	peak
3	*	2493.798	62.18	-10.89	51.29	74.00	-22.71	peak

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)

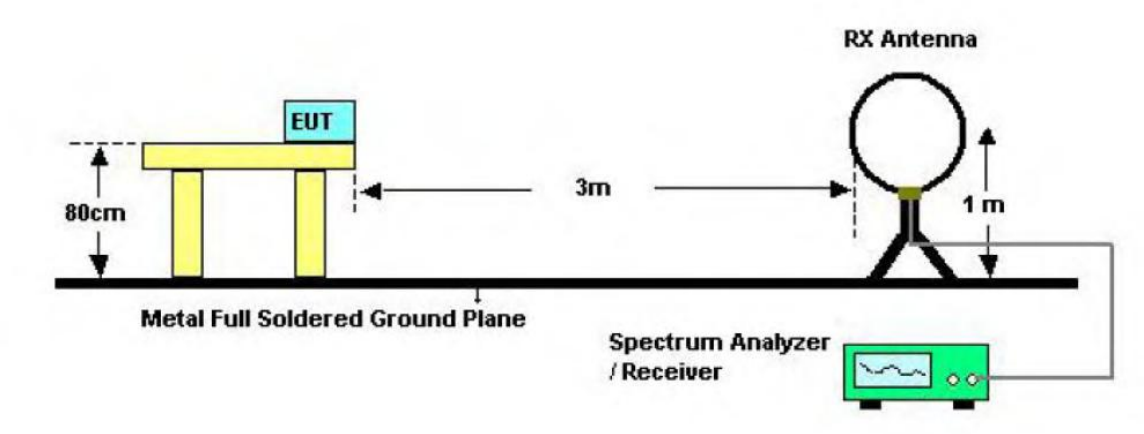
Frequency (MHz)	Distance Meters(at 3m)	
	Peak	Average
Above 1000	74	54

Note:

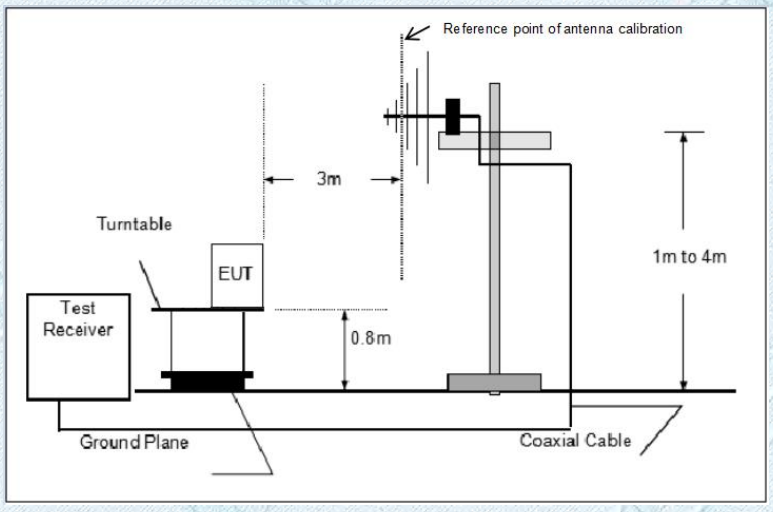
(1) The tighter limit applies at the band edges.

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

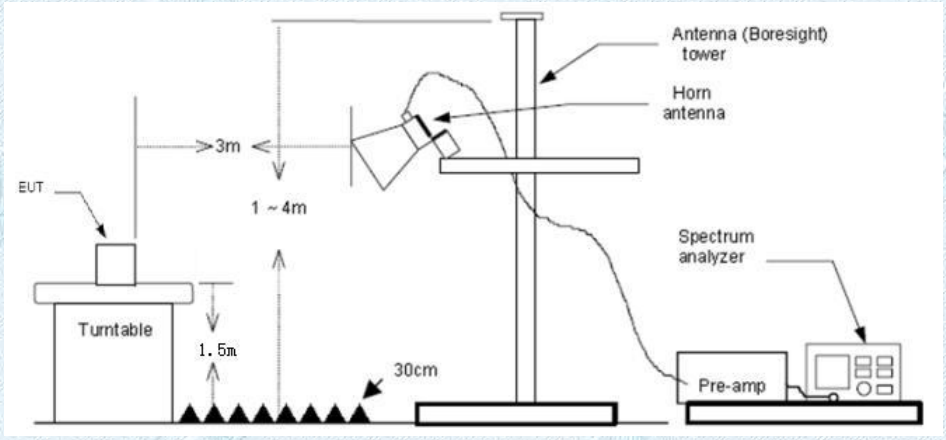
Test Configuration



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 Peak detector for Average value.

Test Mode

Please refer to the clause 2.3.

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 GFSK_1M_ CH00 which it is worse case for 30MHz-1GHz , so only show the test data for worse case.

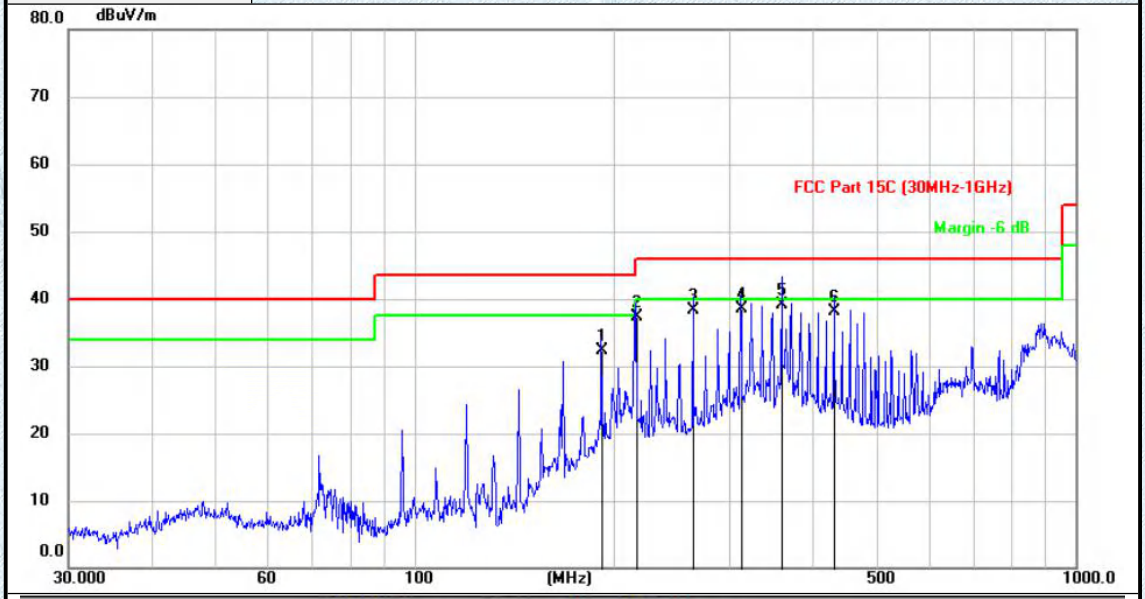
BELOW 30MHZ

No emission found between lowest internal used/generated frequencies to 30MHz.

30MHz-1GHz

Test model:MK02D

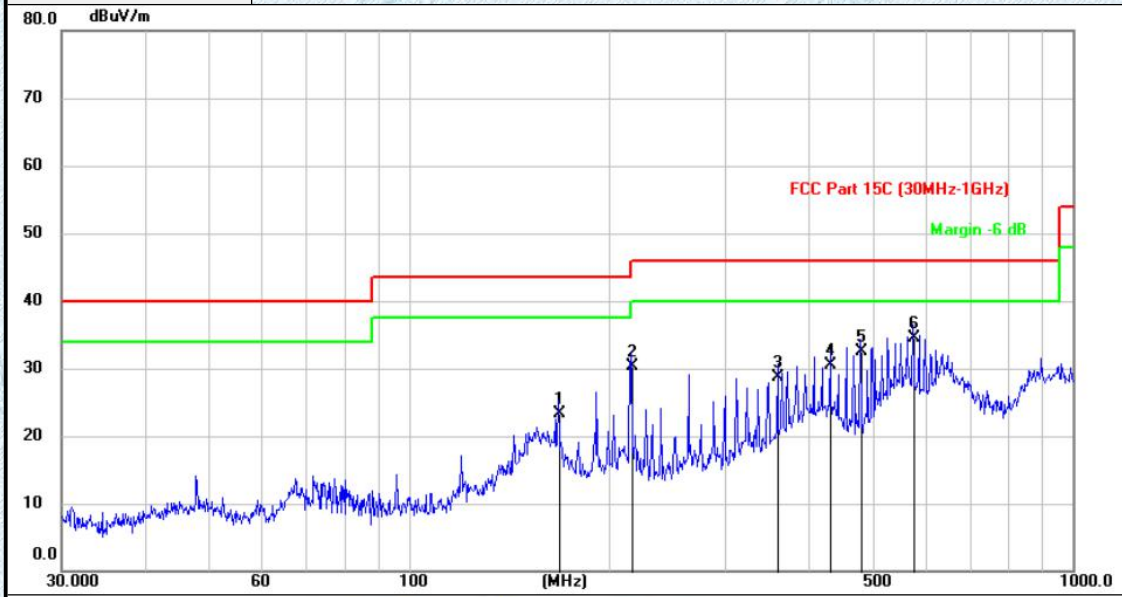
Ant. Pol.	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		192.0142	50.57	-18.34	32.23	43.50	-11.27	QP
2		216.0240	54.63	-17.29	37.34	46.00	-8.66	QP
3		264.0041	53.69	-15.48	38.21	46.00	-7.79	QP
4		312.0700	52.62	-14.14	38.48	46.00	-7.52	QP
5	*	360.0687	51.34	-12.21	39.13	46.00	-6.87	QP
6		432.0909	48.73	-10.53	38.20	46.00	-7.80	QP

Emission Level= Read Level+ Correct Factor

Ant. Pol.	Vertical

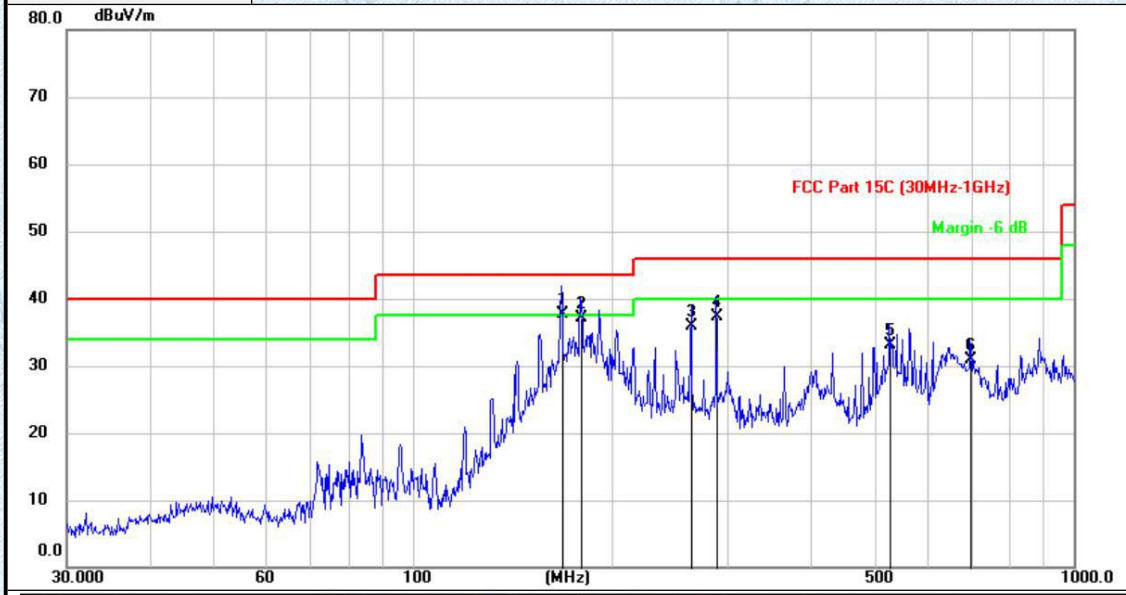


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		168.0009	43.97	-20.71	23.26	43.50	-20.24	QP
2		216.0240	47.52	-17.29	30.23	46.00	-15.77	QP
3		360.0687	40.82	-12.21	28.61	46.00	-17.39	QP
4		432.0909	41.03	-10.53	30.50	46.00	-15.50	QP
5		480.0224	42.57	-10.09	32.48	46.00	-13.52	QP
6	*	576.0381	42.85	-8.26	34.59	46.00	-11.41	QP

Emission Level= Read Level+ Correct Factor

Test model:MK02E

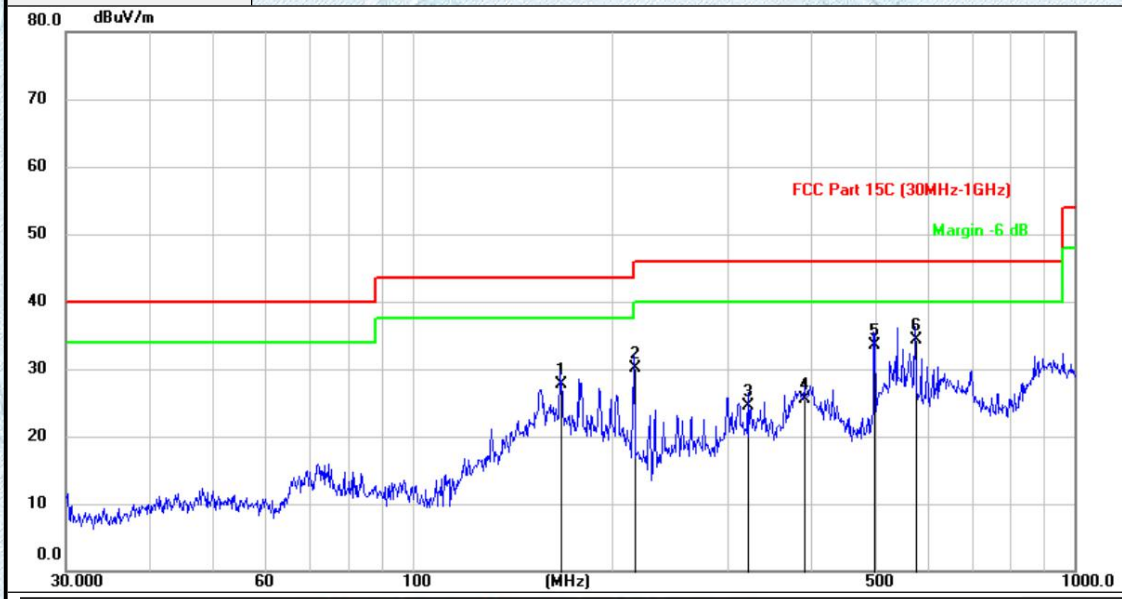
Ant. Pol.	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1	*	168.0009	58.35	-20.71	37.64	43.50	-5.86	QP
2		179.9534	56.16	-19.06	37.10	43.50	-6.40	QP
3		264.5600	51.32	-15.47	35.85	46.00	-10.15	QP
4		288.4958	52.18	-14.94	37.24	46.00	-8.76	QP
5		528.0606	42.40	-9.36	33.04	46.00	-12.96	QP
6		698.3242	38.03	-7.15	30.88	46.00	-15.12	QP

Emission Level= Read Level+ Correct Factor

Ant. Pol.	Vertical



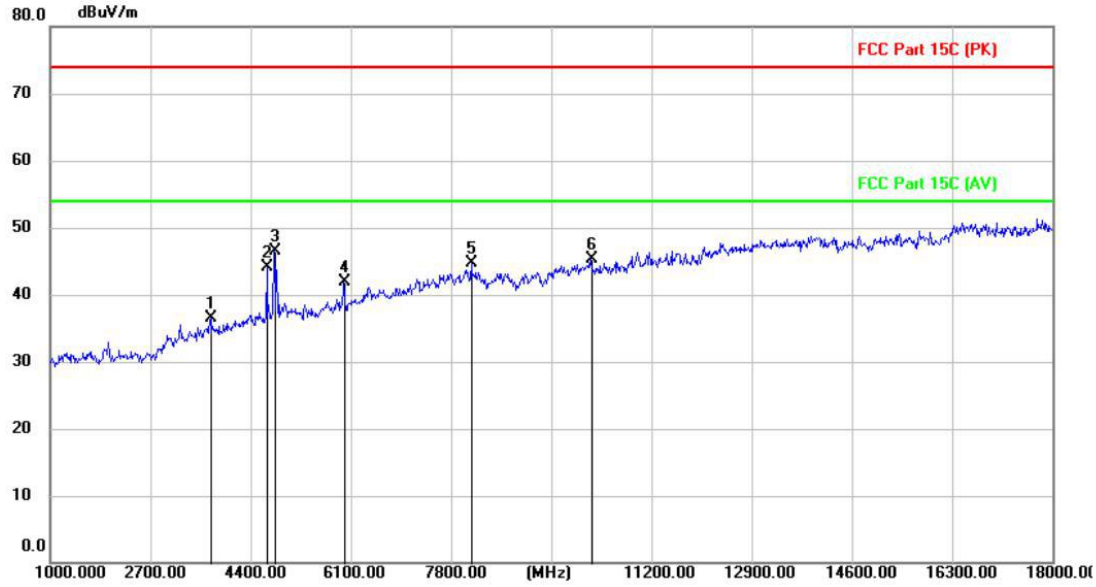
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		167.7654	48.34	-20.73	27.61	43.50	-15.89	QP
2		216.3272	47.41	-17.28	30.13	46.00	-15.87	QP
3		321.3987	38.29	-13.75	24.54	46.00	-21.46	QP
4		391.8202	36.70	-11.17	25.53	46.00	-20.47	QP
5		498.2003	43.44	-9.94	33.50	46.00	-12.50	QP
6	*	576.0381	42.50	-8.26	34.24	46.00	-11.76	QP

Emission Level= Read Level+ Correct Factor

Adobe 1GHz

Test model:MK02D

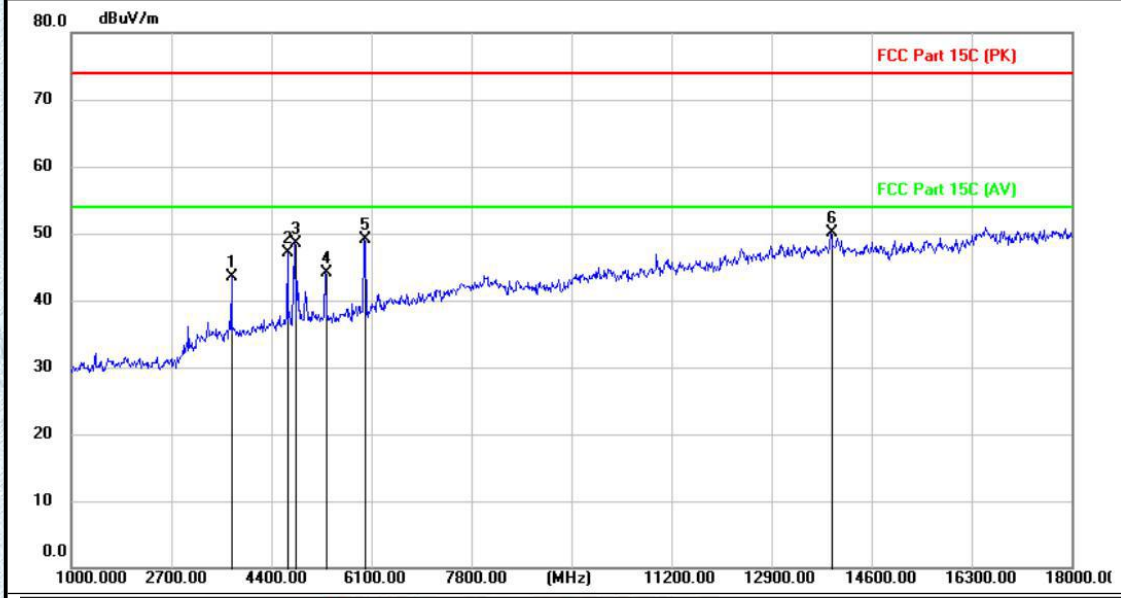
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3730.200	45.57	-9.10	36.47	74.00	-37.53	peak
2		4675.400	50.35	-6.27	44.08	74.00	-29.92	peak
3	*	4804.600	52.40	-5.92	46.48	74.00	-27.52	peak
4		5986.100	45.65	-3.84	41.81	74.00	-32.19	peak
5		8140.000	42.75	2.03	44.78	74.00	-29.22	peak
6		10166.400	40.94	4.36	45.30	74.00	-28.70	peak

Emission Level= Read Level+ Correct Factor

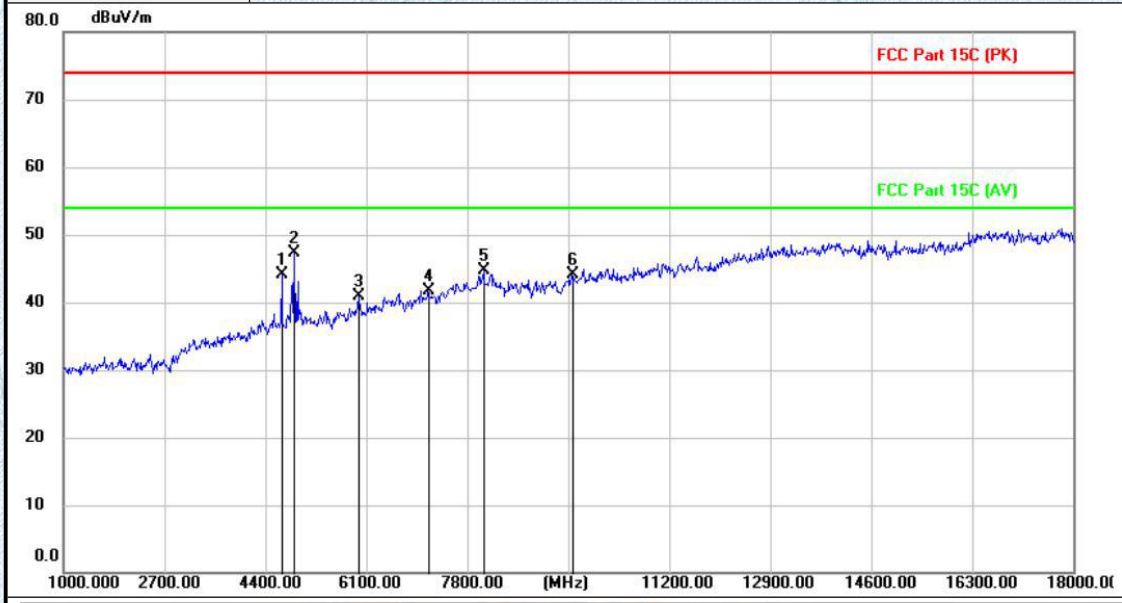
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3726.800	52.69	-9.12	43.57	74.00	-30.43	peak
2		4675.400	53.34	-6.27	47.07	74.00	-26.93	peak
3		4804.600	54.51	-5.92	48.59	74.00	-25.41	peak
4		5326.500	49.24	-5.09	44.15	74.00	-29.85	peak
5		5984.400	53.03	-3.84	49.19	74.00	-24.81	peak
6	*	13911.500	38.92	11.12	50.04	74.00	-23.96	peak

Emission Level= Read Level+ Correct Factor

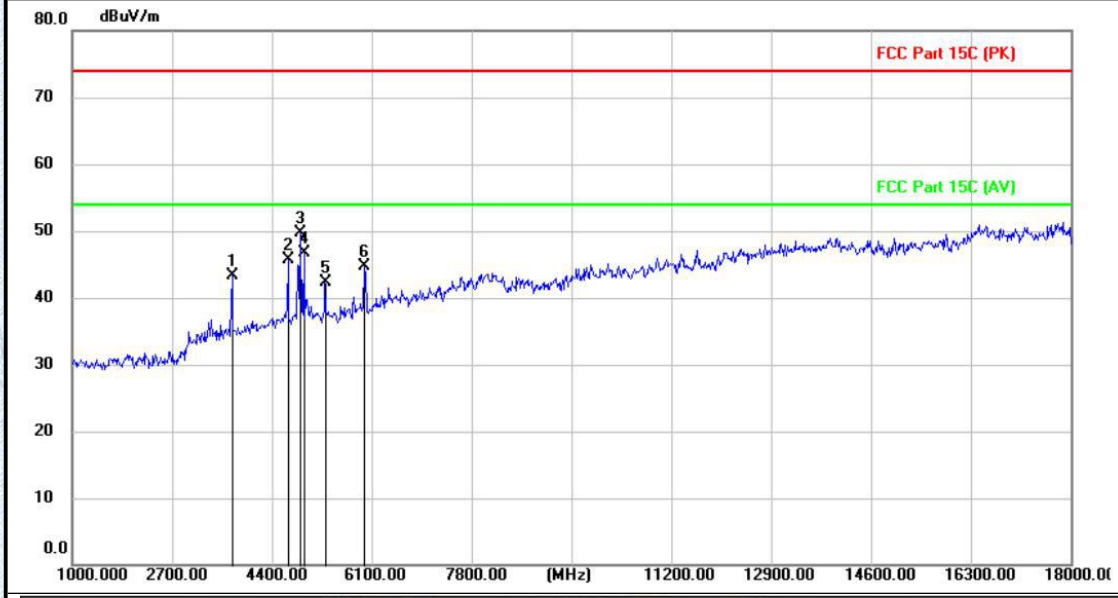
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2440MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		4675.400	50.31	-6.27	44.04	74.00	-29.96	peak
2	*	4881.100	53.02	-5.71	47.31	74.00	-26.69	peak
3		5979.300	44.66	-3.84	40.82	74.00	-33.18	peak
4		7147.200	41.93	-0.27	41.66	74.00	-32.34	peak
5		8073.700	42.67	2.04	44.71	74.00	-29.29	peak
6		9559.500	40.96	3.10	44.06	74.00	-29.94	peak

Emission Level= Read Level+ Correct Factor

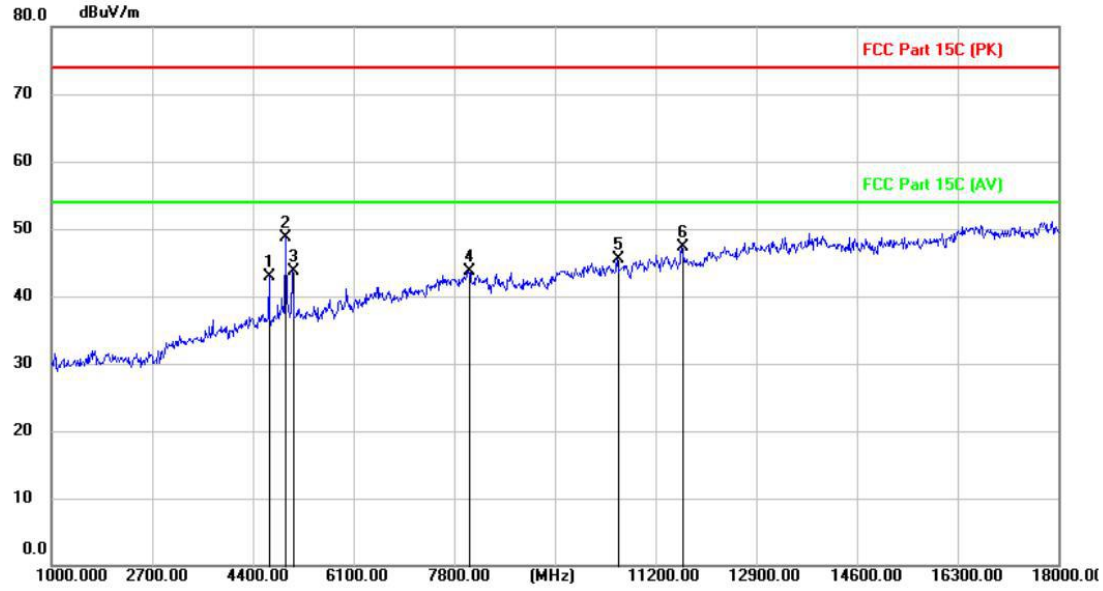
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2440MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3720.000	52.49	-9.13	43.36	74.00	-30.64	peak
2		4675.400	51.97	-6.27	45.70	74.00	-28.30	peak
3	*	4879.400	55.47	-5.72	49.75	74.00	-24.25	peak
4		4957.600	52.28	-5.51	46.77	74.00	-27.23	peak
5		5314.600	47.40	-5.10	42.30	74.00	-31.70	peak
6		5979.300	48.51	-3.84	44.67	74.00	-29.33	peak

Emission Level= Read Level+ Correct Factor

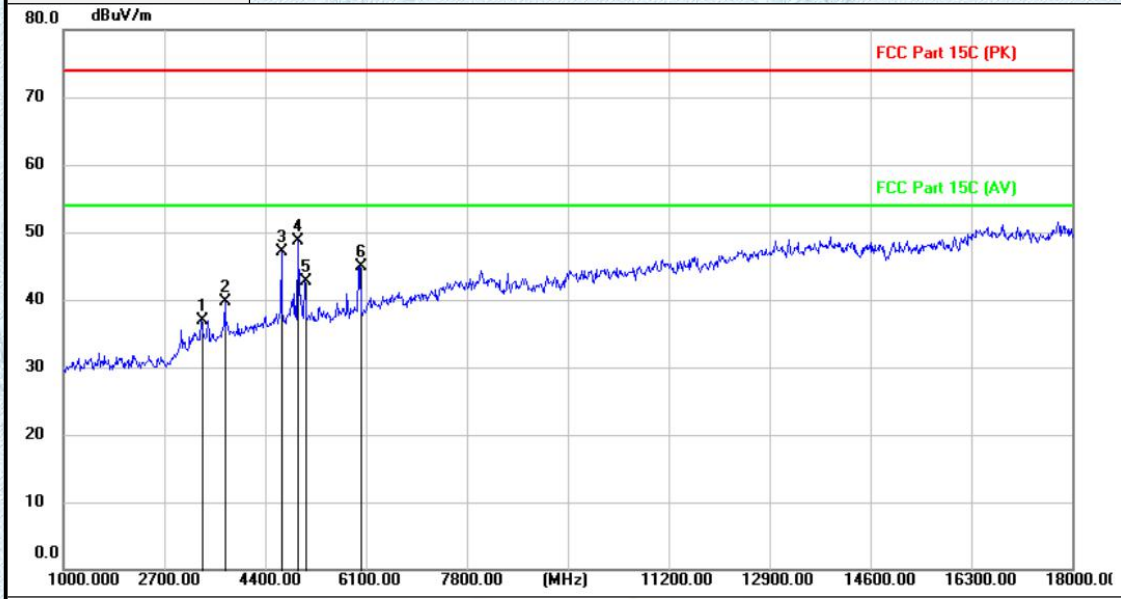
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		4675.400	49.14	-6.27	42.87	74.00	-31.13	peak
2	*	4959.300	54.29	-5.51	48.78	74.00	-25.22	peak
3		5068.100	49.11	-5.32	43.79	74.00	-30.21	peak
4		8048.200	41.68	2.06	43.74	74.00	-30.26	peak
5		10569.300	40.39	5.03	45.42	74.00	-28.58	peak
6		11650.500	40.08	7.17	47.25	74.00	-26.75	peak

Emission Level= Read Level+ Correct Factor

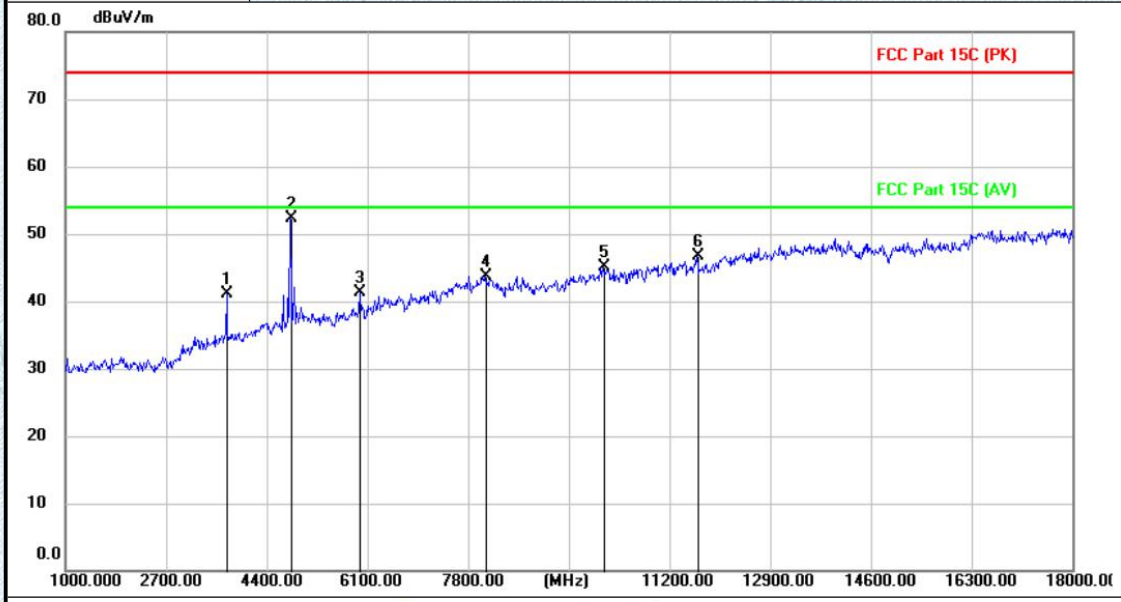
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3332.400	46.93	-9.98	36.95	74.00	-37.05	peak
2		3723.400	48.84	-9.12	39.72	74.00	-34.28	peak
3		4675.400	53.32	-6.27	47.05	74.00	-26.95	peak
4	*	4961.000	54.23	-5.50	48.73	74.00	-25.27	peak
5		5068.100	47.94	-5.32	42.62	74.00	-31.38	peak
6		5999.700	48.70	-3.80	44.90	74.00	-29.10	peak

Emission Level= Read Level+ Correct Factor

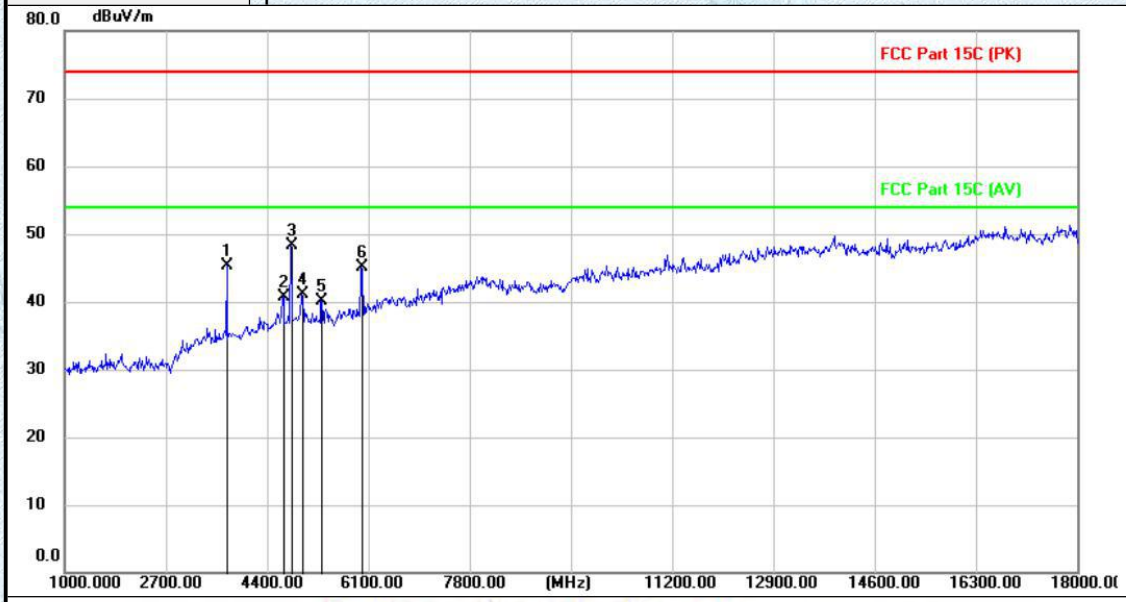
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3728.500	50.18	-9.12	41.06	74.00	-32.94	peak
2	*	4802.900	58.16	-5.92	52.24	74.00	-21.76	peak
3		5979.300	45.10	-3.84	41.26	74.00	-32.74	peak
4		8094.100	41.74	2.05	43.79	74.00	-30.21	peak
5		10084.800	40.80	4.21	45.01	74.00	-28.99	peak
6		11669.200	39.43	7.20	46.63	74.00	-27.37	peak

Emission Level= Read Level+ Correct Factor

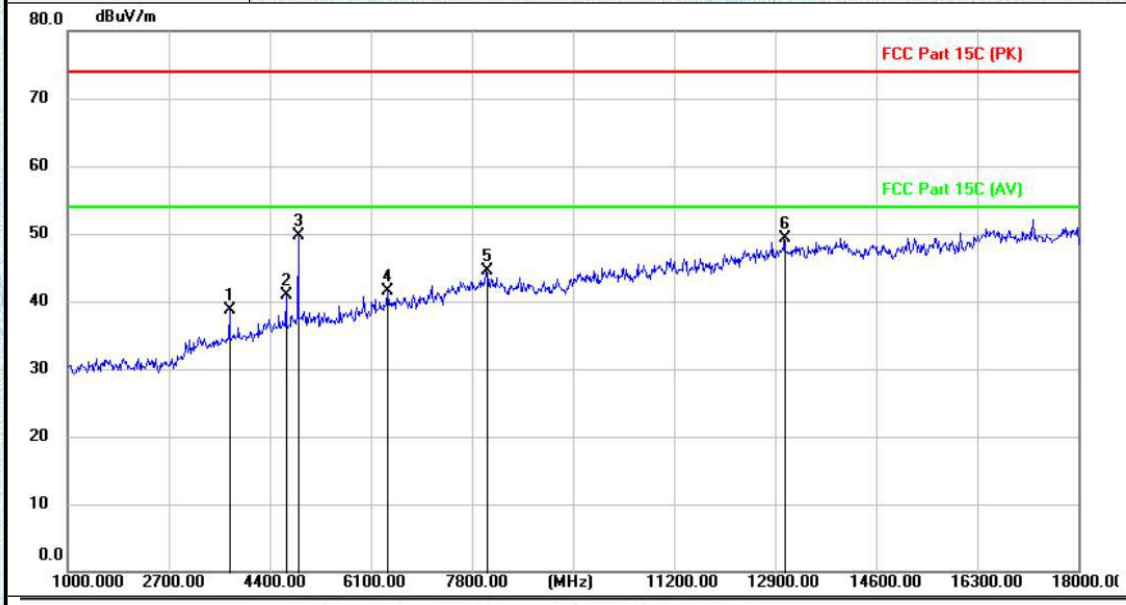
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2402MHz
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3726.800	54.49	-9.12	45.37	74.00	-28.63	peak
2		4682.200	47.00	-6.26	40.74	74.00	-33.26	peak
3	*	4804.600	54.17	-5.92	48.25	74.00	-25.75	peak
4		4983.100	46.51	-5.44	41.07	74.00	-32.93	peak
5		5316.300	45.18	-5.10	40.08	74.00	-33.92	peak
6		5982.700	48.98	-3.84	45.14	74.00	-28.86	peak

Emission Level= Read Level+ Correct Factor

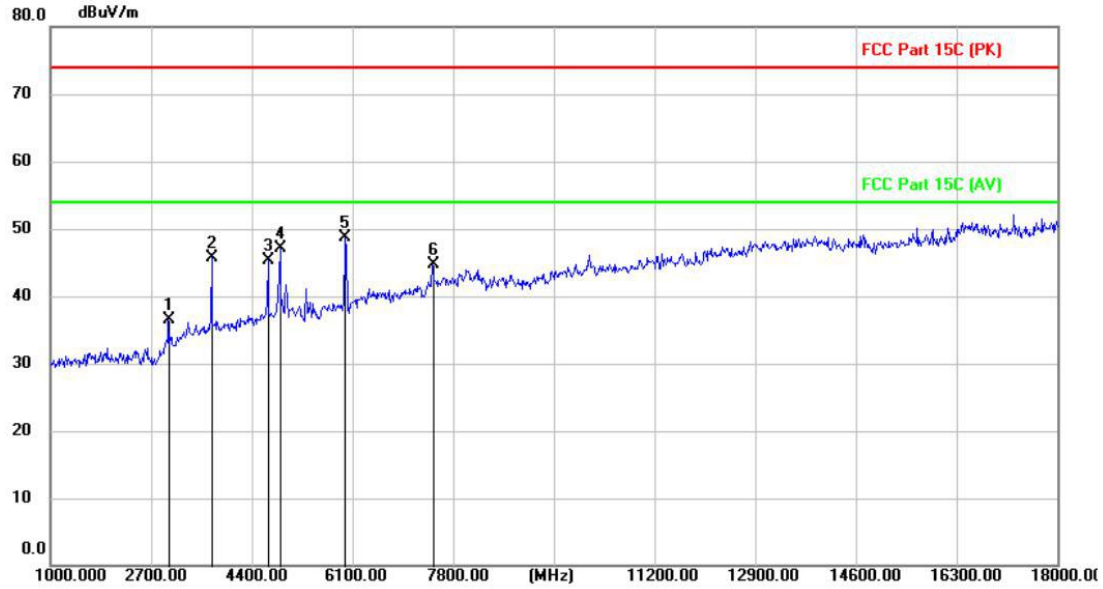
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2440MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3721.700	47.88	-9.12	38.76	74.00	-35.24	peak
2		4682.200	47.09	-6.26	40.83	74.00	-33.17	peak
3	*	4879.400	55.40	-5.72	49.68	74.00	-24.32	peak
4		6380.500	43.99	-2.51	41.48	74.00	-32.52	peak
5		8044.800	42.48	2.06	44.54	74.00	-29.46	peak
6		13056.400	39.36	10.01	49.37	74.00	-24.63	peak

Emission Level= Read Level+ Correct Factor

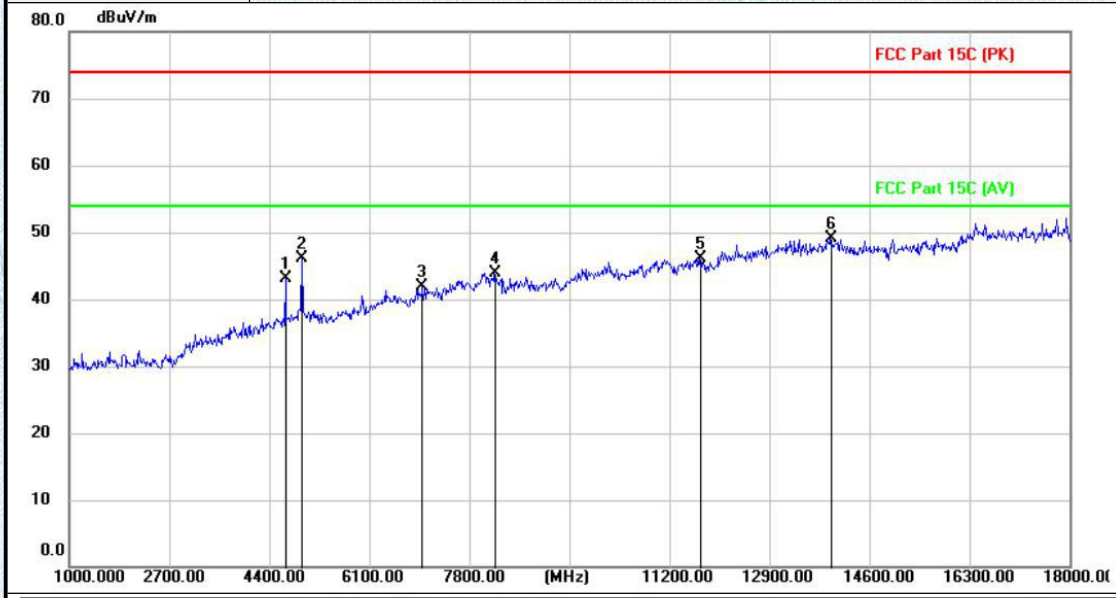
Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2440MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2997.500	47.12	-10.59	36.53	74.00	-37.47	peak
2		3721.700	54.78	-9.12	45.66	74.00	-28.34	peak
3		4683.900	51.60	-6.26	45.34	74.00	-28.66	peak
4		4879.400	52.89	-5.72	47.17	74.00	-26.83	peak
5	*	5981.000	52.56	-3.84	48.72	74.00	-25.28	peak
6		7456.600	44.05	0.70	44.75	74.00	-29.25	peak

Emission Level= Read Level+ Correct Factor

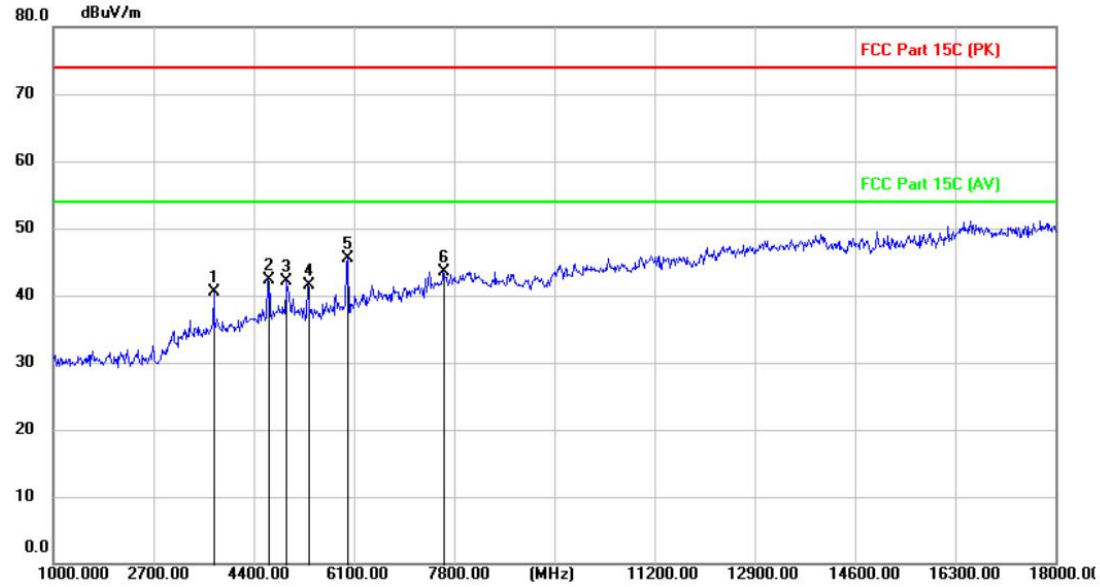
Ant. Pol.	Horizontal
Test Mode:	TX BLE Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		4682.200	49.40	-6.26	43.14	74.00	-30.86	peak
2		4959.300	51.54	-5.51	46.03	74.00	-27.97	peak
3		7001.000	42.60	-0.71	41.89	74.00	-32.11	peak
4		8233.500	41.94	2.01	43.95	74.00	-30.05	peak
5		11721.900	38.72	7.31	46.03	74.00	-27.97	peak
6	*	13942.100	37.99	11.16	49.15	74.00	-24.85	peak

Emission Level= Read Level+ Correct Factor

Ant. Pol.	Vertical
Test Mode:	TX BLE Mode 2480MHz



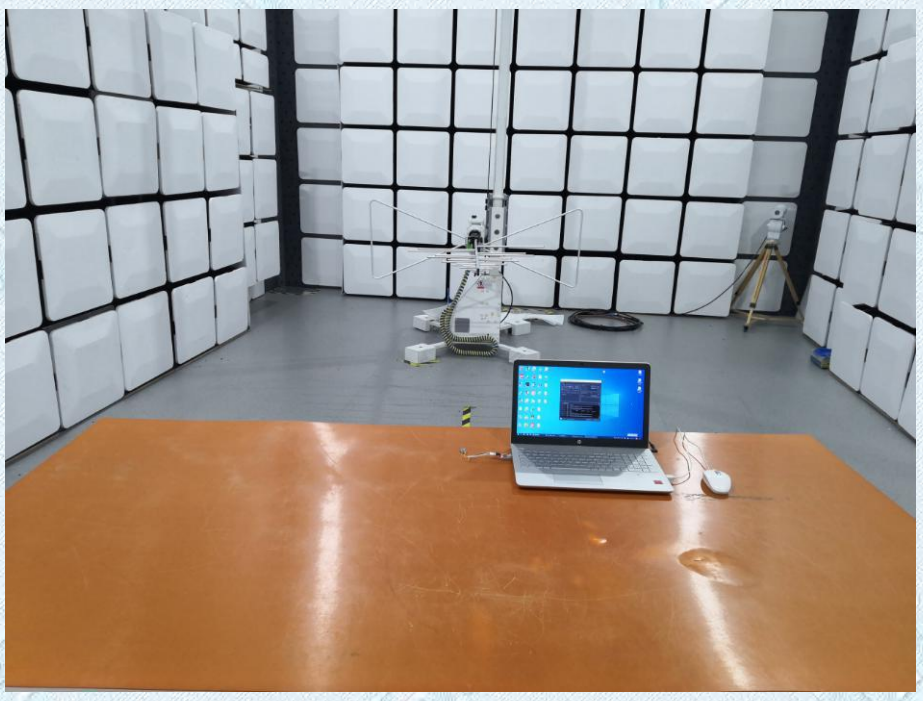
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		3720.000	49.70	-9.13	40.57	74.00	-33.43	peak
2		4651.600	48.56	-6.35	42.21	74.00	-31.79	peak
3		4961.000	47.69	-5.50	42.19	74.00	-31.81	peak
4		5319.700	46.63	-5.10	41.53	74.00	-32.47	peak
5	*	5998.000	49.34	-3.81	45.53	74.00	-28.47	peak
6		7626.600	42.43	1.14	43.57	74.00	-30.43	peak

Emission Level= Read Level+ Correct Factor

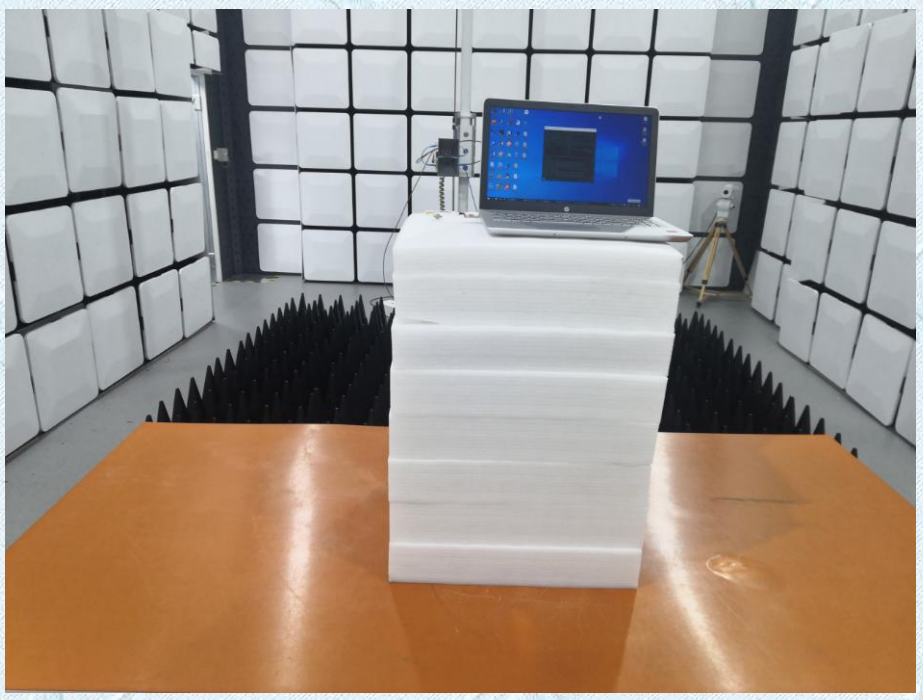
Note:All modulation modes were tested, and only the worst data of GFSM_1M was recorded in the report.

4.EUT TEST PHOTOS

Radiated Measurement (Below 1GHz)

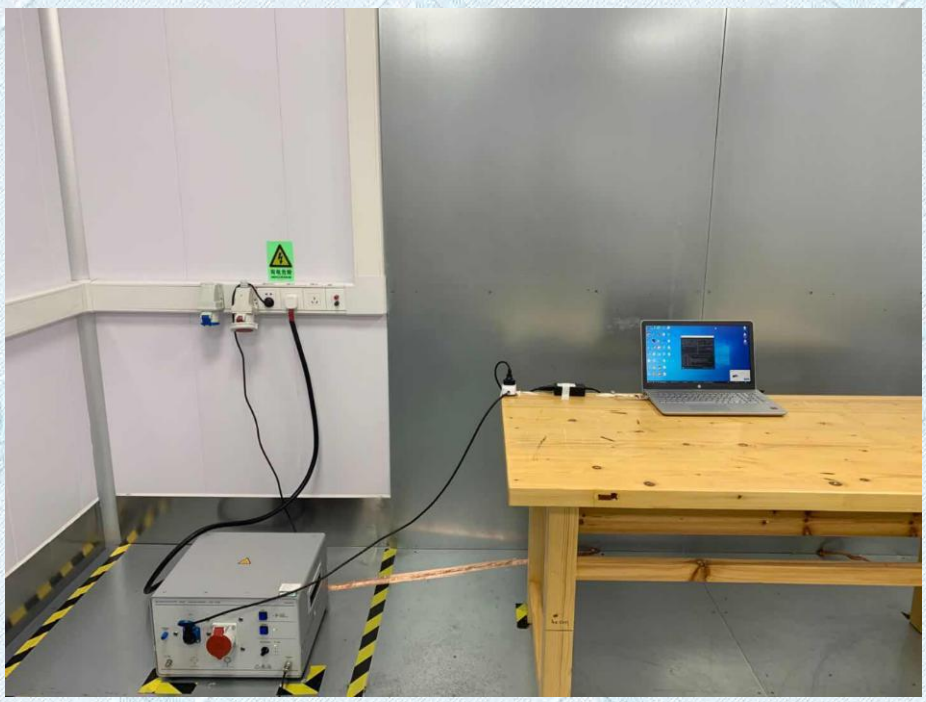


Radiated Measurement (Above 1GHz)



RF Conducted

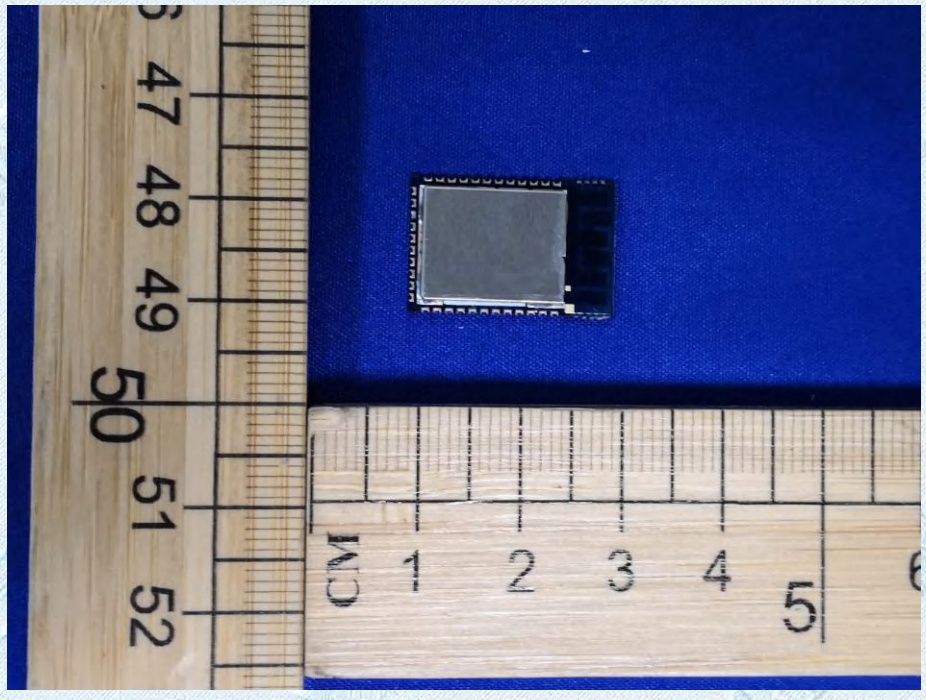
CONDUCTED EMISSION TEST SETUP

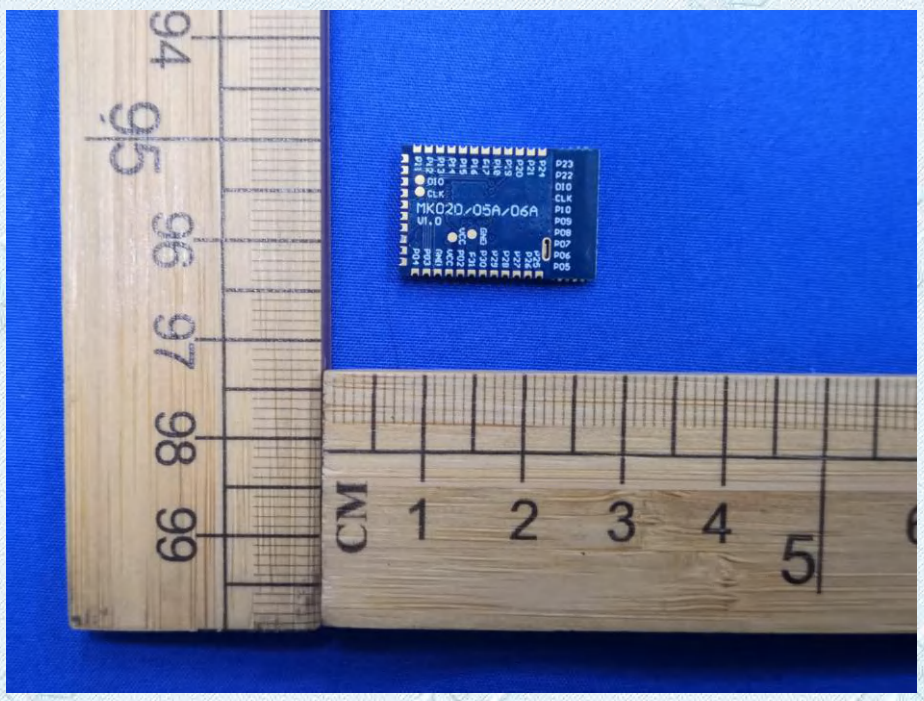


5.PHOTOGRAPHS OF EUT CONSTRUCTIONAL

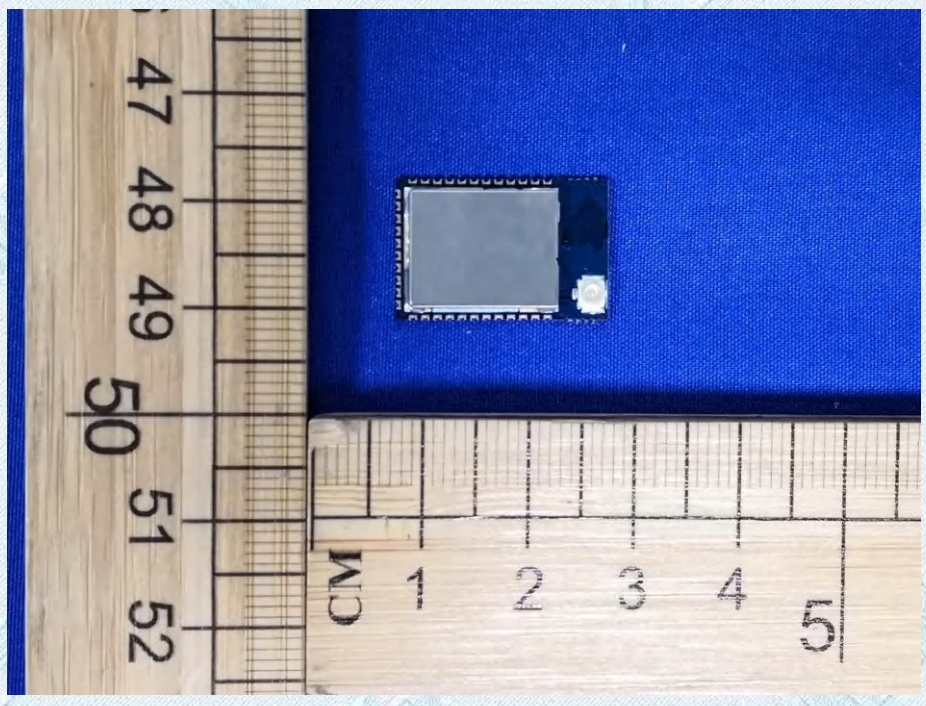
External Photographs

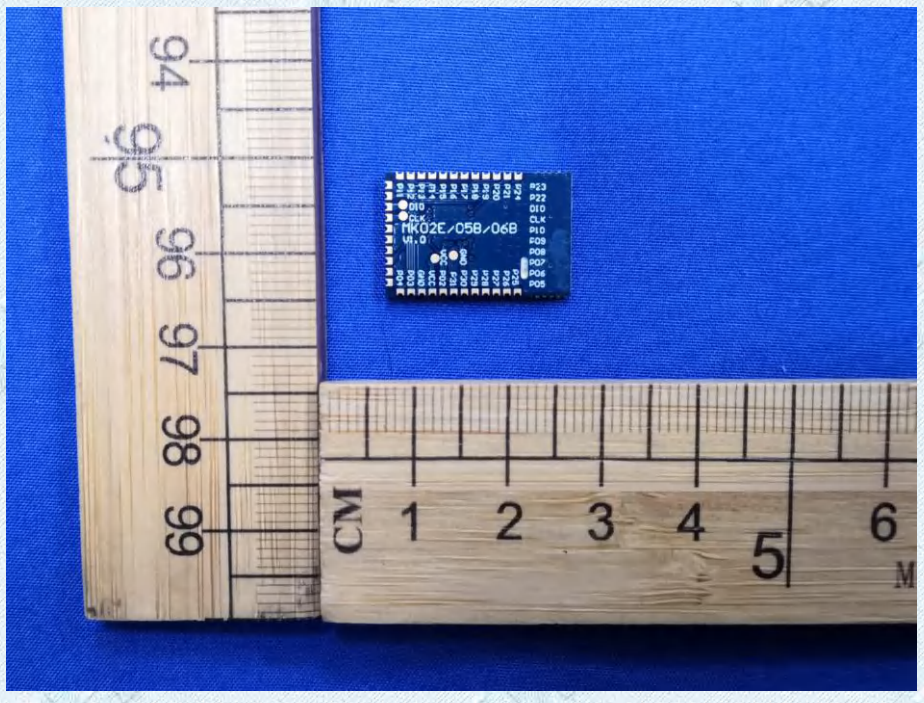
Modle:MK02D





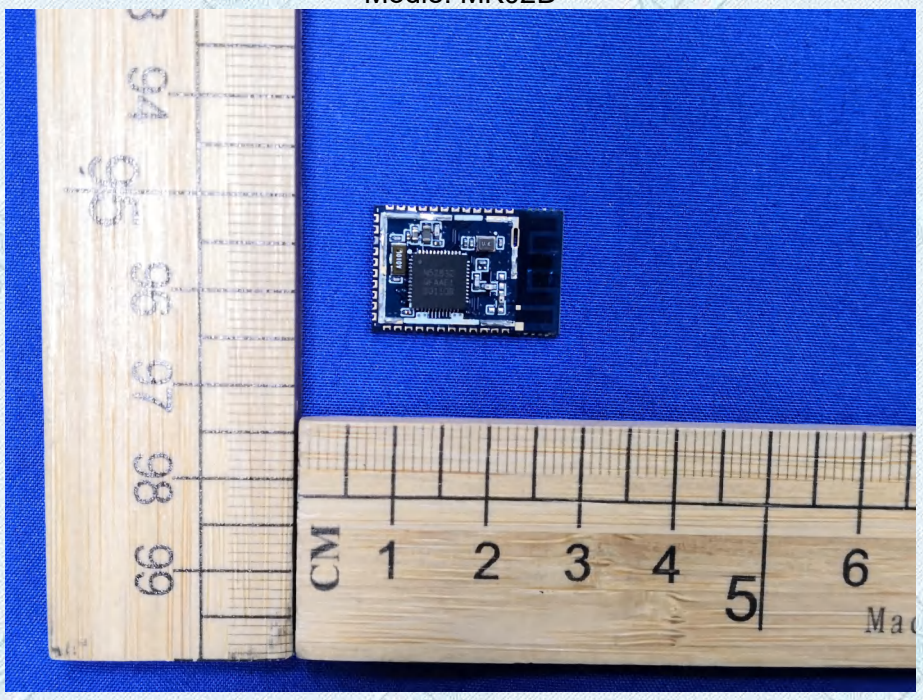
Modle: MK02E

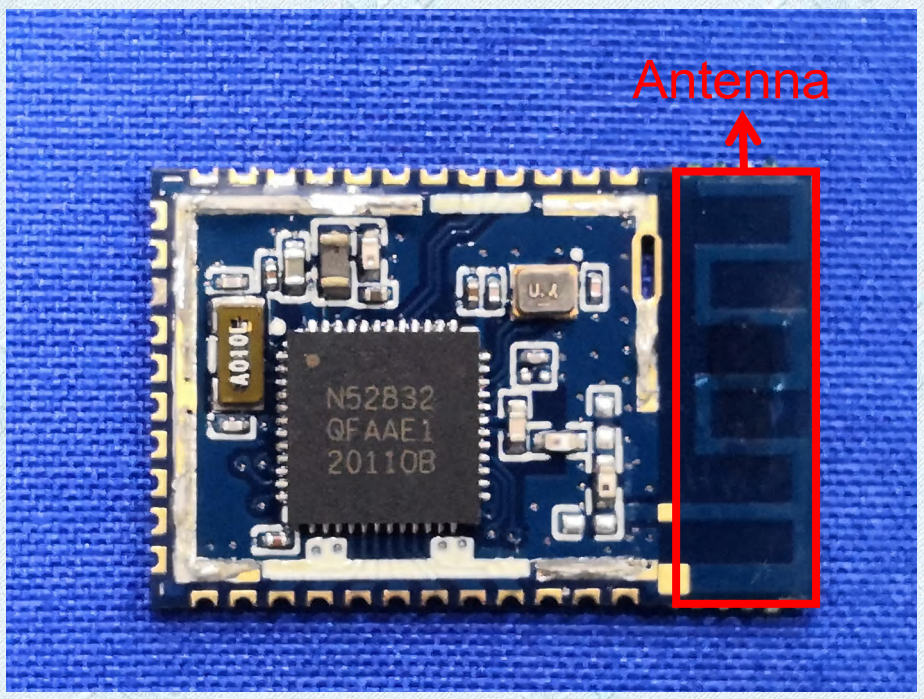

47 48 49 50 51 52
CM 1 2 3 4 5


94 95 96 97 98 99
MK02E/05B/06B
CM 1 2 3 4 5 6

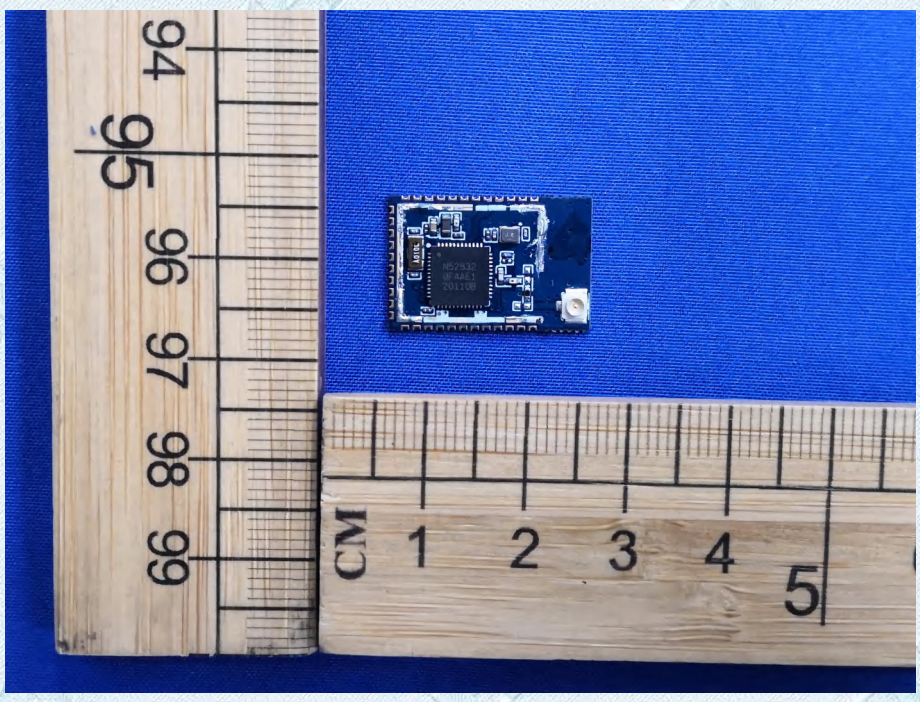
Internal Photographs

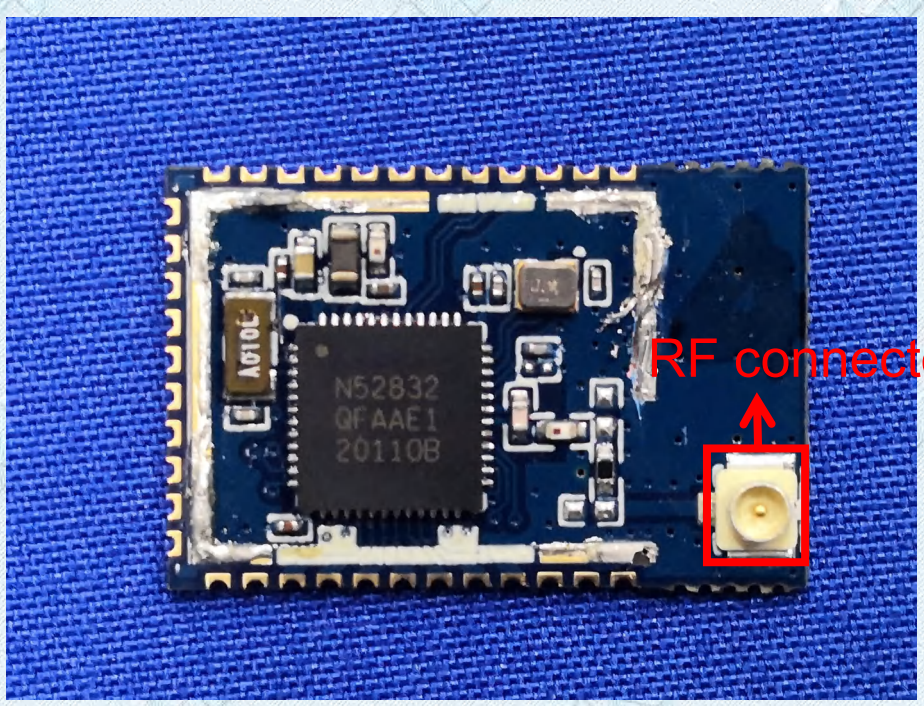
Modle: MK02D





Modle: MK02E





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