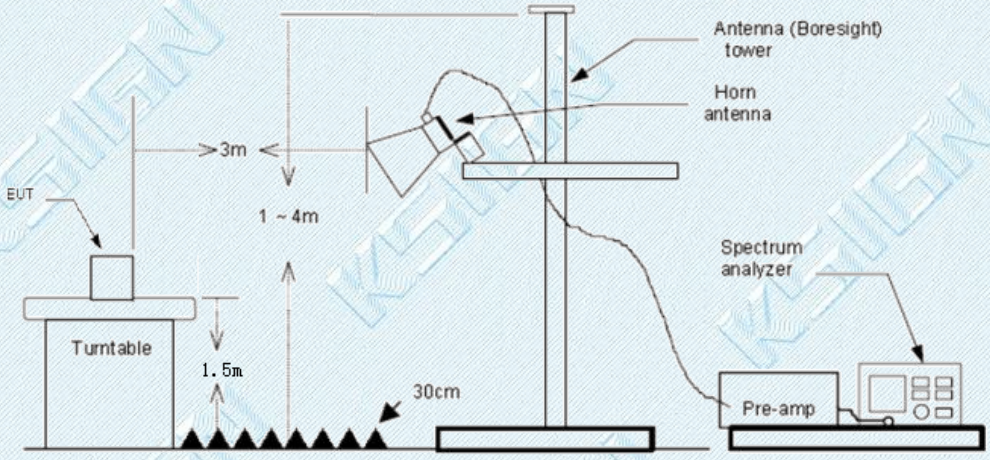
3.8. Band Edge Emissions(Radiated)

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 C63.10:2020 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 C63.10:2020on 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.

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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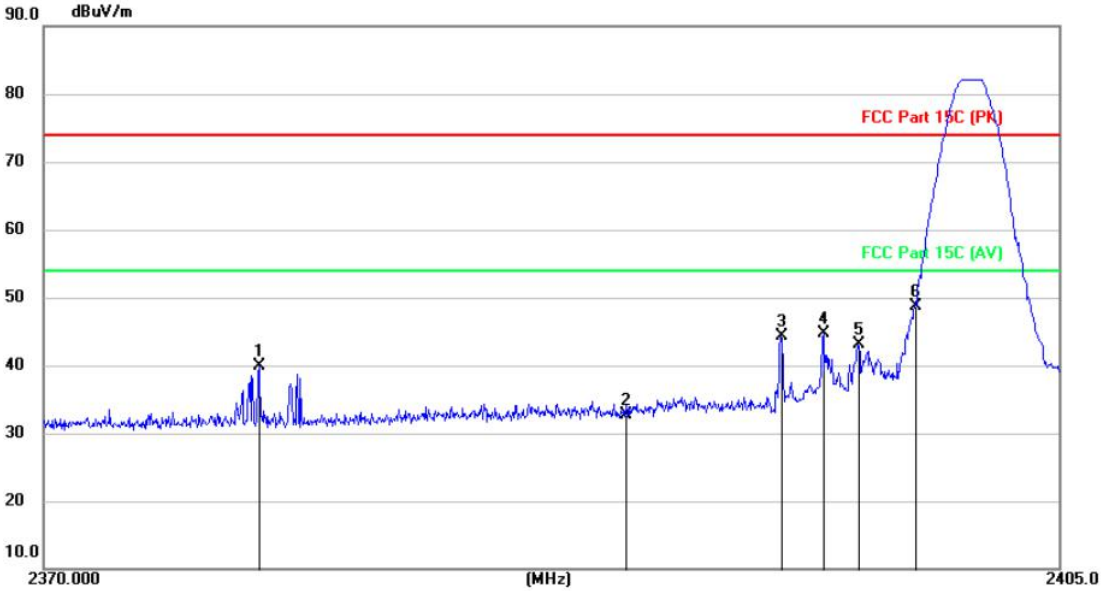
Test Results

Note:

1. Measurement = Reading level + Correct Factor
2. Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
3. Pre-scan DH5, 2DH5 and 3DH5 modulation, and found the DH5 modulation which it is worse case, so only show the test data for worse case.

Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	DH5 Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2377.403	50.76	-10.93	39.83	74.00	-34.17	peak
2		2390.000	43.58	-10.92	32.66	74.00	-41.34	peak
3		2395.392	55.14	-10.91	44.23	74.00	-29.77	peak
4		2396.834	55.53	-10.92	44.61	74.00	-29.39	peak
5		2398.056	54.03	-10.92	43.11	74.00	-30.89	peak
6	*	2400.000	59.53	-10.92	48.61	74.00	-25.39	peak

Measurement = Reading level + Correct Factor

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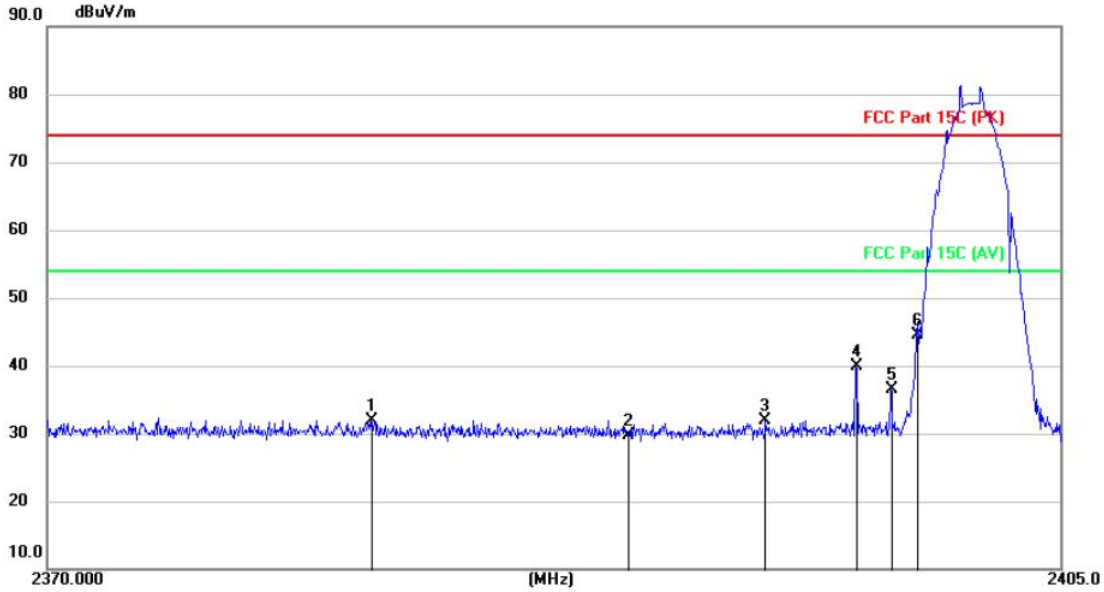
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	DH5 Mode 2402 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2381.130	42.77	-10.93	31.84	74.00	-42.16	peak
2		2390.000	40.70	-10.92	29.78	74.00	-44.22	peak
3		2394.762	42.82	-10.91	31.91	74.00	-42.09	peak
4		2397.916	50.84	-10.92	39.92	74.00	-34.08	peak
5		2399.134	47.43	-10.92	36.51	74.00	-37.49	peak
6	*	2400.000	55.34	-10.92	44.42	74.00	-29.58	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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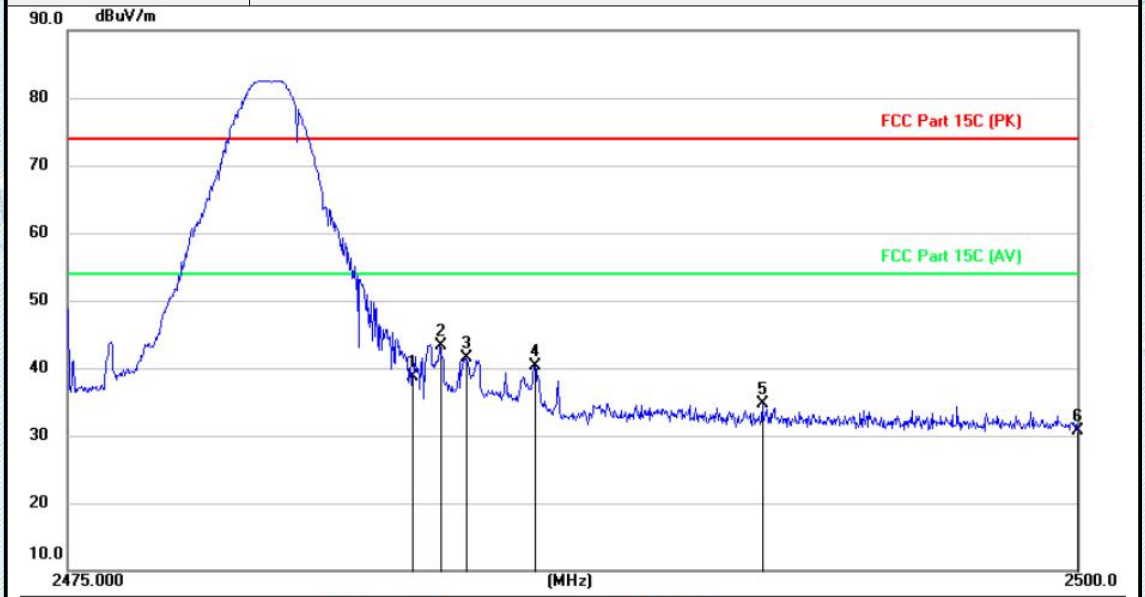
Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	DH5 Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	49.62	-10.88	38.74	74.00	-35.26	peak
2	*	2484.220	54.22	-10.88	43.34	74.00	-30.66	peak
3		2484.838	52.41	-10.88	41.53	74.00	-32.47	peak
4		2486.543	51.16	-10.88	40.28	74.00	-33.72	peak
5		2492.177	45.56	-10.89	34.67	74.00	-39.33	peak
6		2500.000	41.62	-10.88	30.74	74.00	-43.26	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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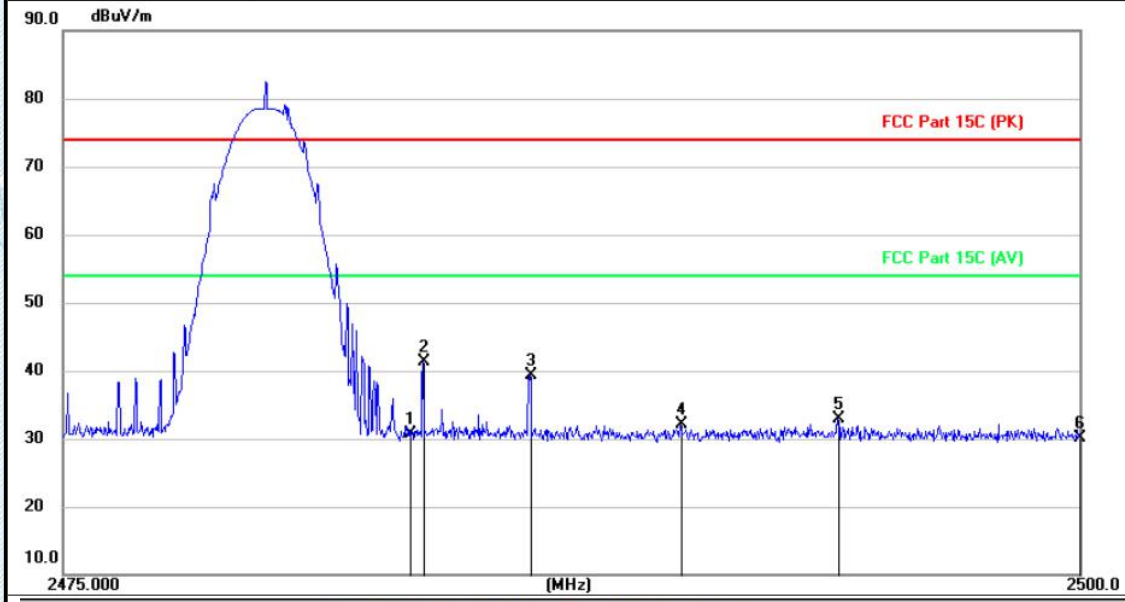
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	DH5 Mode 2480 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	41.58	-10.88	30.70	74.00	-43.30	peak
2	*	2483.843	52.24	-10.88	41.36	74.00	-32.64	peak
3		2486.448	50.20	-10.88	39.32	74.00	-34.68	peak
4		2490.150	42.92	-10.89	32.03	74.00	-41.97	peak
5		2494.035	43.75	-10.88	32.87	74.00	-41.13	peak
6		2500.000	41.03	-10.88	30.15	74.00	-43.85	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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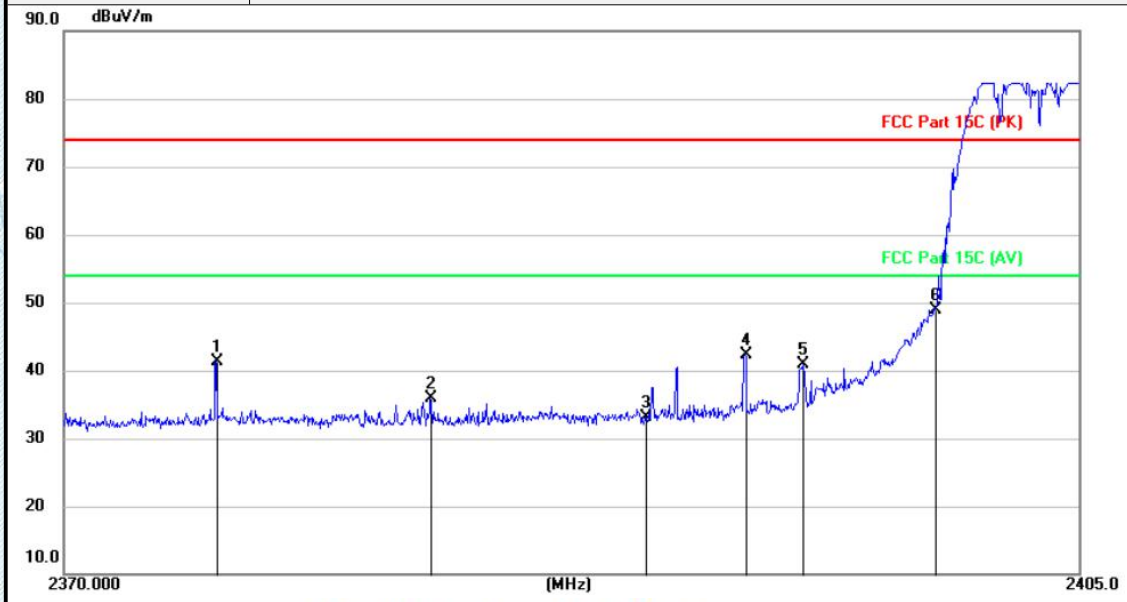
Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	DH5-Hop Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2375.226	52.30	-10.93	41.37	74.00	-32.63	peak
2		2382.579	46.86	-10.92	35.94	74.00	-38.06	peak
3		2390.000	44.02	-10.92	33.10	74.00	-40.90	peak
4		2393.443	53.23	-10.92	42.31	74.00	-31.69	peak
5		2395.456	51.88	-10.91	40.97	74.00	-33.03	peak
6	*	2400.000	59.83	-10.92	48.91	74.00	-25.09	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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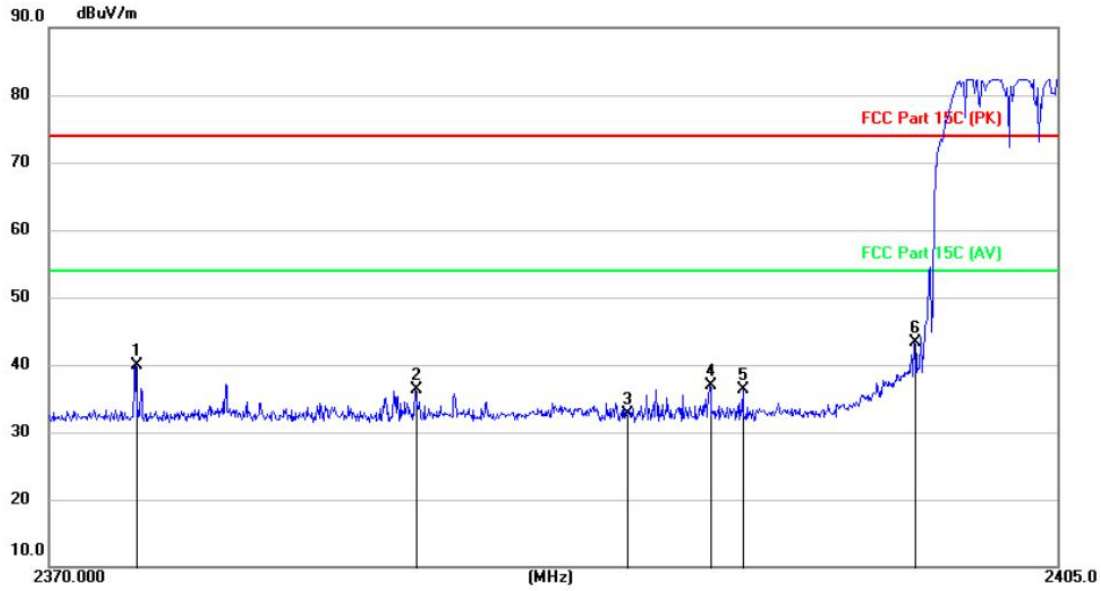
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	DH5-Hop Mode 2402 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2373.024	50.75	-10.92	39.83	74.00	-34.17	peak
2		2382.653	47.26	-10.92	36.34	74.00	-37.66	peak
3		2390.000	43.71	-10.92	32.79	74.00	-41.21	peak
4		2392.883	47.87	-10.92	36.95	74.00	-37.05	peak
5		2394.059	47.13	-10.92	36.21	74.00	-37.79	peak
6	*	2400.000	54.21	-10.92	43.29	74.00	-30.71	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	DH5-Hop 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	52.25	-10.88	41.37	74.00	-32.63	peak
2	*	2485.472	53.70	-10.88	42.82	74.00	-31.18	peak
3		2487.503	47.77	-10.88	36.89	74.00	-37.11	peak
4		2490.048	45.99	-10.89	35.10	74.00	-38.90	peak
5		2493.617	46.86	-10.89	35.97	74.00	-38.03	peak
6		2500.000	42.96	-10.88	32.08	74.00	-41.92	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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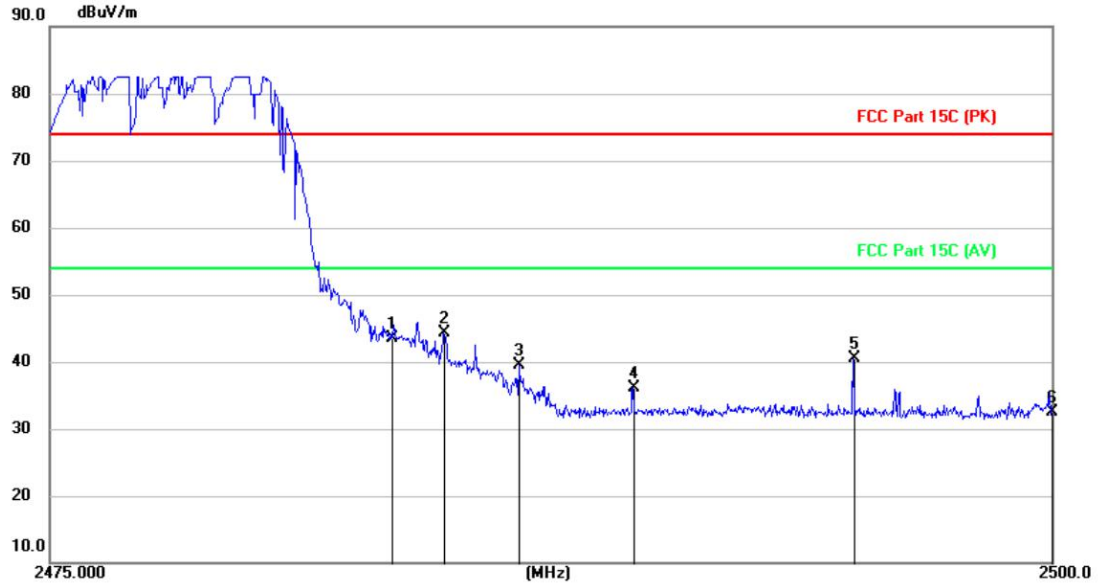
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	DH5-Hop Mode 2480 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		2483.500	54.32	-10.88	43.44	74.00	-30.56	peak
2	*	2484.818	55.18	-10.88	44.30	74.00	-29.70	peak
3		2486.688	50.30	-10.88	39.42	74.00	-34.58	peak
4		2489.530	46.94	-10.89	36.05	74.00	-37.95	peak
5		2495.032	51.28	-10.87	40.41	74.00	-33.59	peak
6		2500.000	43.31	-10.88	32.43	74.00	-41.57	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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3.9. Radiated Spurious Emissions

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

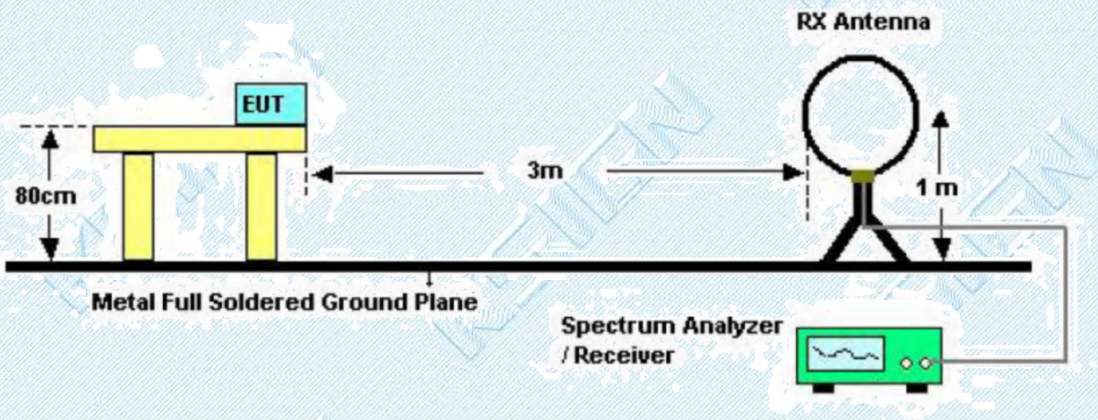
Note:

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

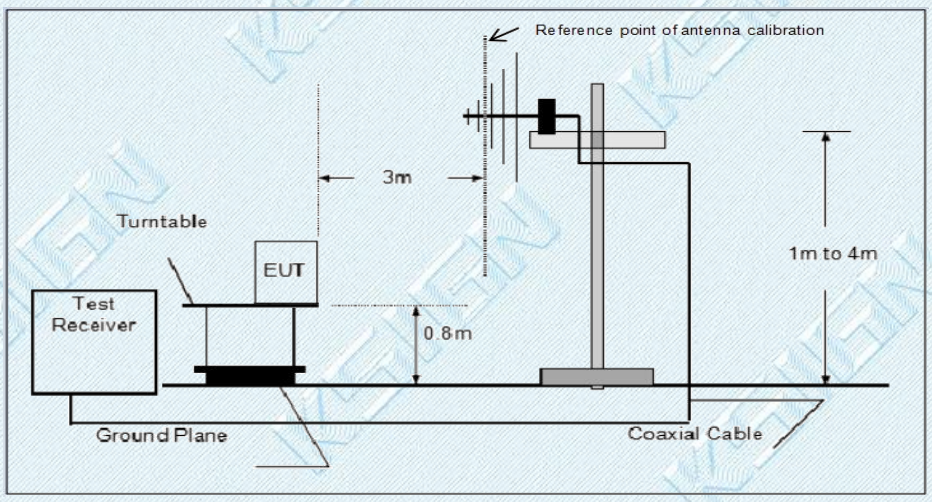
(2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

Test Configuration

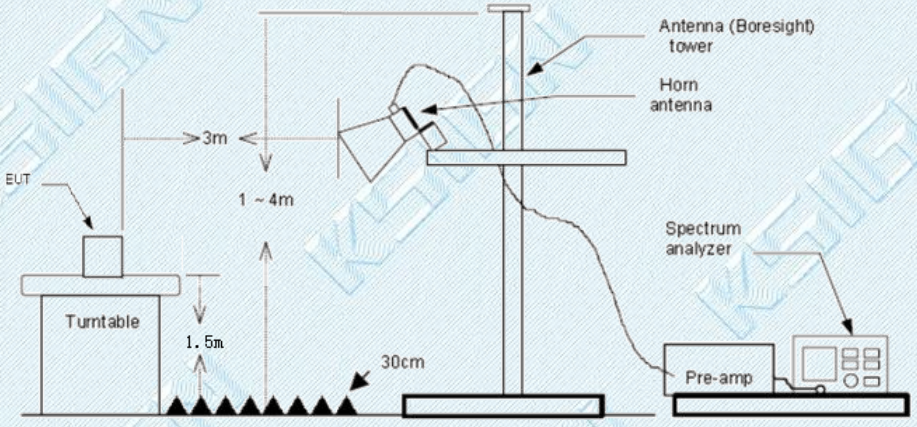
Below 30MHz Test Setup



Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
Tel :+(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail :info@gdksign.cn Web: www.gdksign.com



Below 1000MHz Test Setup



Above 1GHz Test Setup

Test Procedure

1. The EUT was setup and tested according to ANSI C63.10:2020
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 Peak value.

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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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 DH5, 2DH5 and 3DH5 modulation, found the DH5-CH00 Channel Below 1GHz and found the DH5 modulation which it is worse case for above 1GHz, so only show the test data for worse case.

RADIATED EMISSION BELOW 30MHZ

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

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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30MHz-1GHz

Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	DH5 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		66.6856	32.68	-19.01	13.67	40.00	-26.33	QP
2		72.8466	34.37	-20.00	14.37	40.00	-25.63	QP
3		123.4384	34.50	-19.87	14.63	43.50	-28.87	QP
4		206.4700	33.11	-17.72	15.39	43.50	-28.11	QP
5		648.5216	26.73	-7.37	19.36	46.00	-26.64	QP
6	*	927.7060	26.34	-3.97	22.37	46.00	-23.63	QP

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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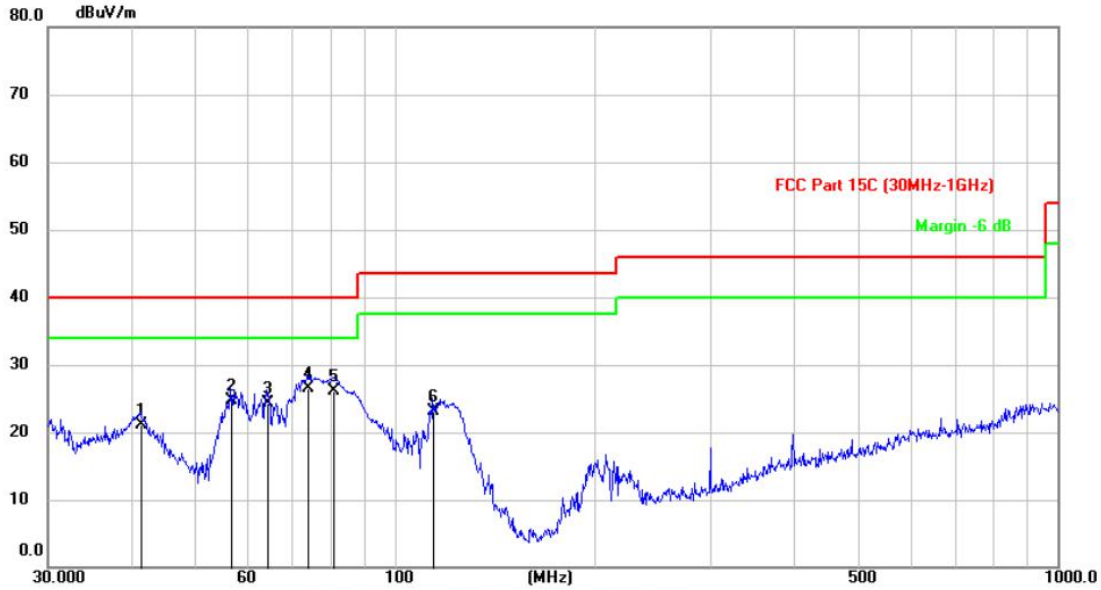
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	DH5 Mode 2402 MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		41.3200	37.99	-16.84	21.15	40.00	-18.85	QP
2		56.6326	41.66	-16.97	24.69	40.00	-15.31	QP
3		64.4104	42.92	-18.52	24.40	40.00	-15.60	QP
4	*	74.0831	46.54	-20.12	26.42	40.00	-13.58	QP
5		80.7008	47.46	-21.34	26.12	40.00	-13.88	QP
6		114.1938	41.99	-18.86	23.13	43.50	-20.37	QP

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
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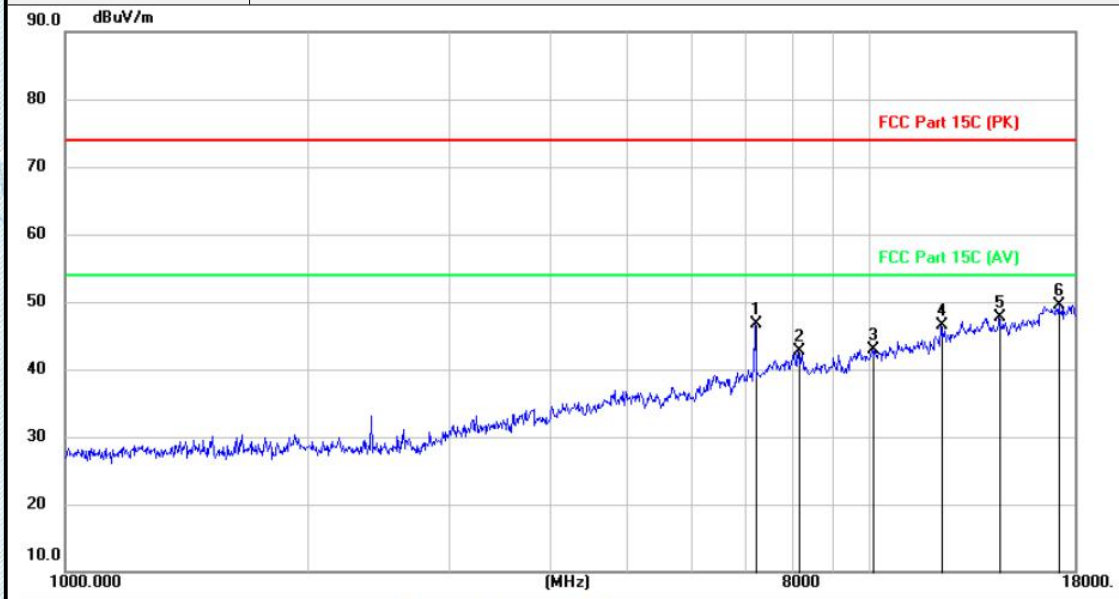
Adobe 1GHz

Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX DH5 Mode 2402MHz

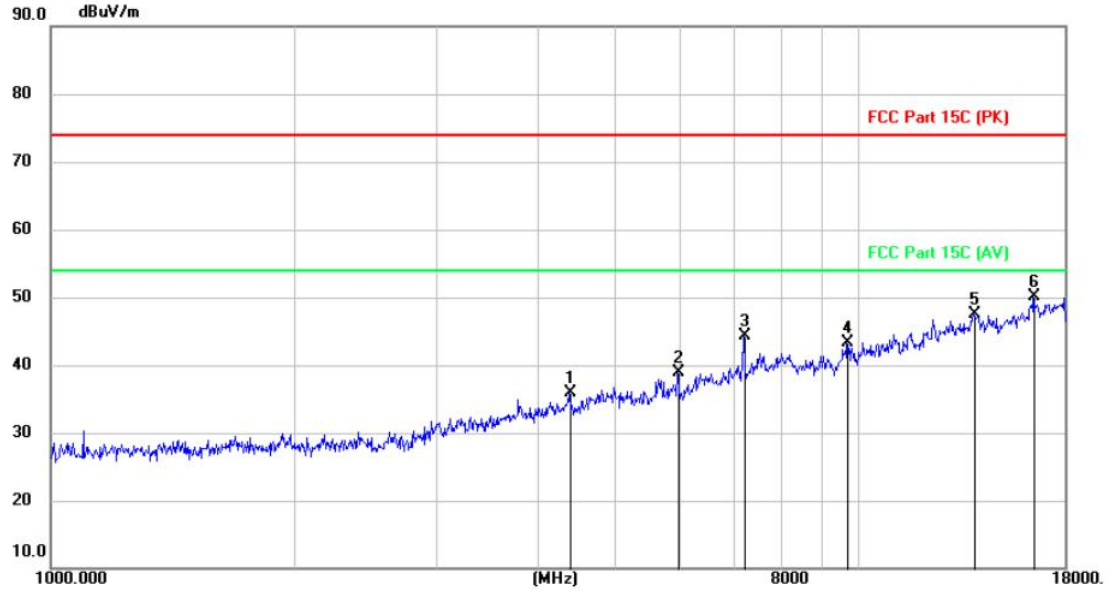


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		7205.000	46.76	-0.09	46.67	74.00	-27.33	peak
2		8155.300	40.71	2.03	42.74	74.00	-31.26	peak
3		10071.200	38.79	4.19	42.98	74.00	-31.02	peak
4		12279.500	37.98	8.50	46.48	74.00	-27.52	peak
5		14504.800	37.16	10.58	47.74	74.00	-26.26	peak
6	*	17224.800	36.35	13.19	49.54	74.00	-24.46	peak

Measurement = Reading level + Correct Factor

Add：West Side of 1/F., Building C, Zone A, Fuyuan New Factory, Jiujiu Industrial Park, Minzhu, Shatou, Shajing, Bao'an District, Shenzhen, Guangdong, China
Tel :+(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail :info@gdksign.cn Web: www.gdksign.com

Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX DH5 Mode 2402MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		4389.800	43.00	-7.12	35.88	74.00	-38.12	peak
2		5979.300	42.78	-3.84	38.94	74.00	-35.06	peak
3		7206.700	44.47	-0.07	44.40	74.00	-29.60	peak
4		9688.700	40.02	3.38	43.40	74.00	-30.60	peak
5		13913.200	36.48	11.12	47.60	74.00	-26.40	peak
6	*	16475.100	36.31	13.75	50.06	74.00	-23.94	peak

Measurement = Reading level + Correct Factor

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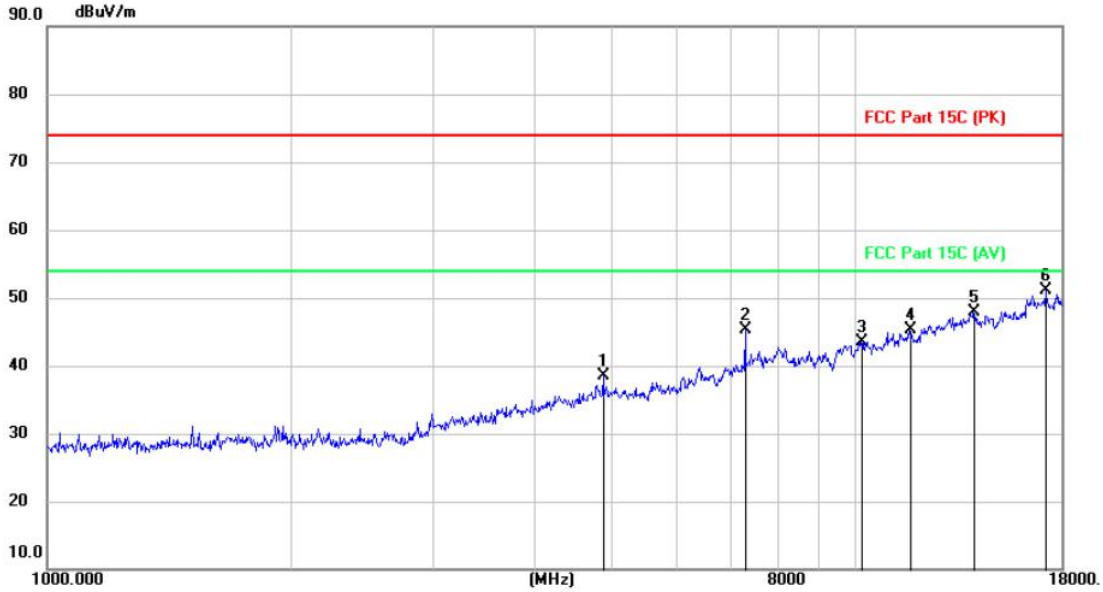
Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX DH5 Mode 2441MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		4881.100	44.15	-5.71	38.44	74.00	-35.56	peak
2		7322.300	45.01	0.27	45.28	74.00	-28.72	peak
3		10180.000	39.21	4.38	43.59	74.00	-30.41	peak
4		11689.600	38.07	7.25	45.32	74.00	-28.68	peak
5		14015.200	36.72	11.21	47.93	74.00	-26.07	peak
6	*	17216.300	37.82	13.20	51.02	74.00	-22.98	peak

Measurement = Reading level + Correct Factor

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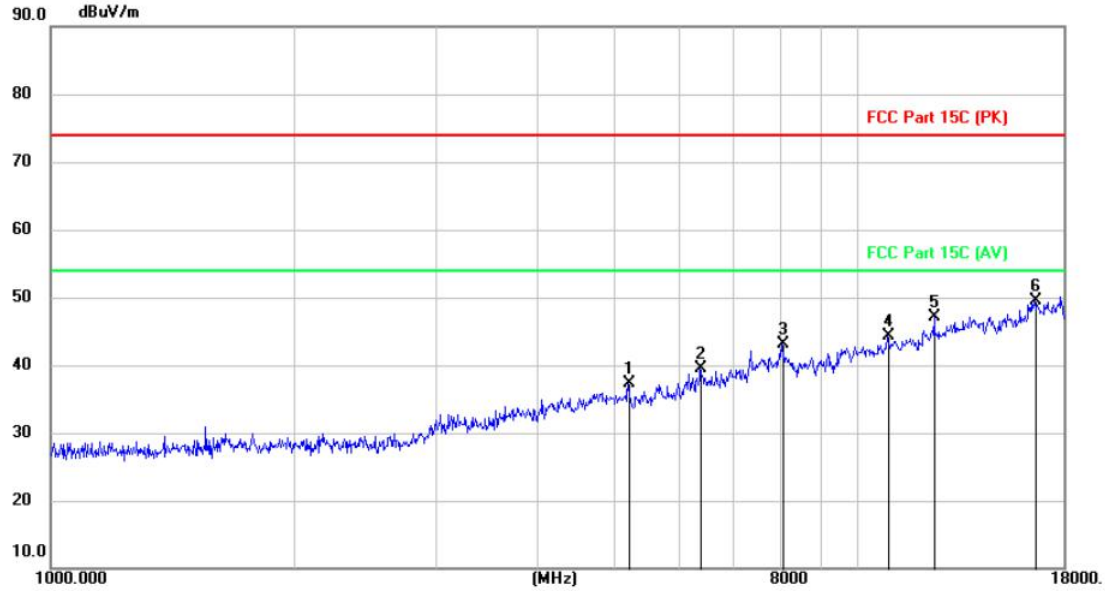
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX DH5 Mode 2441MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		5207.500	42.41	-5.20	37.21	74.00	-36.79	peak
2		6389.000	41.91	-2.48	39.43	74.00	-34.57	peak
3		8072.000	41.05	2.05	43.10	74.00	-30.90	peak
4		10888.900	38.76	5.53	44.29	74.00	-29.71	peak
5		12458.000	38.26	8.88	47.14	74.00	-26.86	peak
6	*	16560.100	35.73	13.72	49.45	74.00	-24.55	peak

Measurement = Reading level + Correct Factor

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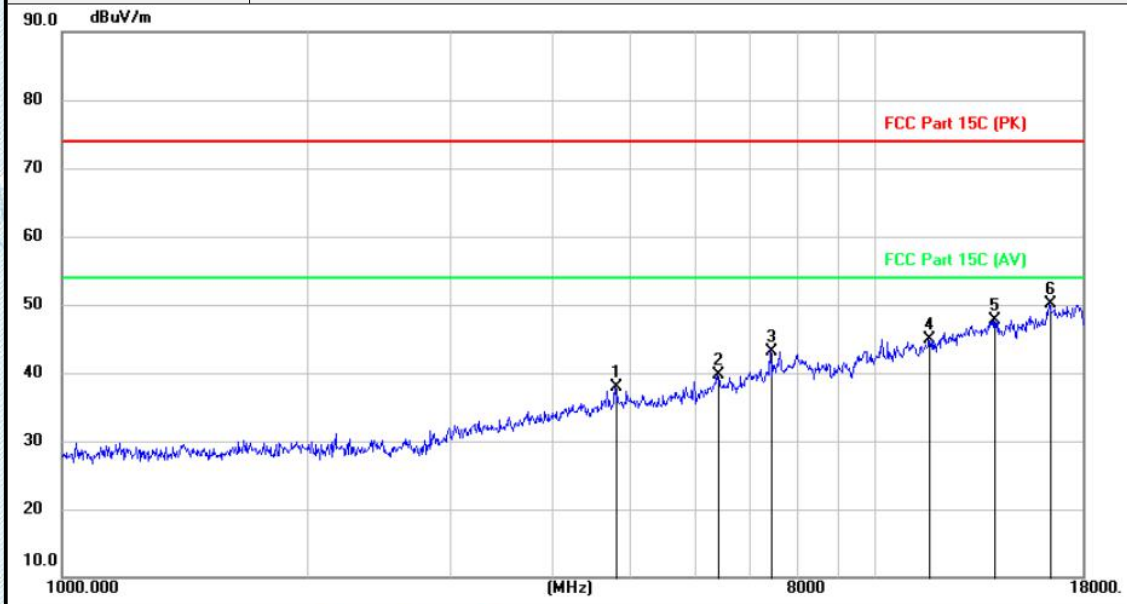
Test Voltage	DC 3.7V
Ant. Pol.	Horizontal
Test Mode:	TX DH5 Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		4794.400	43.90	-5.95	37.95	74.00	-36.05	peak
2		6395.800	42.22	-2.46	39.76	74.00	-34.24	peak
3		7439.600	42.56	0.64	43.20	74.00	-30.80	peak
4		11652.200	37.80	7.17	44.97	74.00	-29.03	peak
5		14020.300	36.51	11.21	47.72	74.00	-26.28	peak
6	*	16393.500	36.48	13.55	50.03	74.00	-23.97	peak

Measurement = Reading level + Correct Factor

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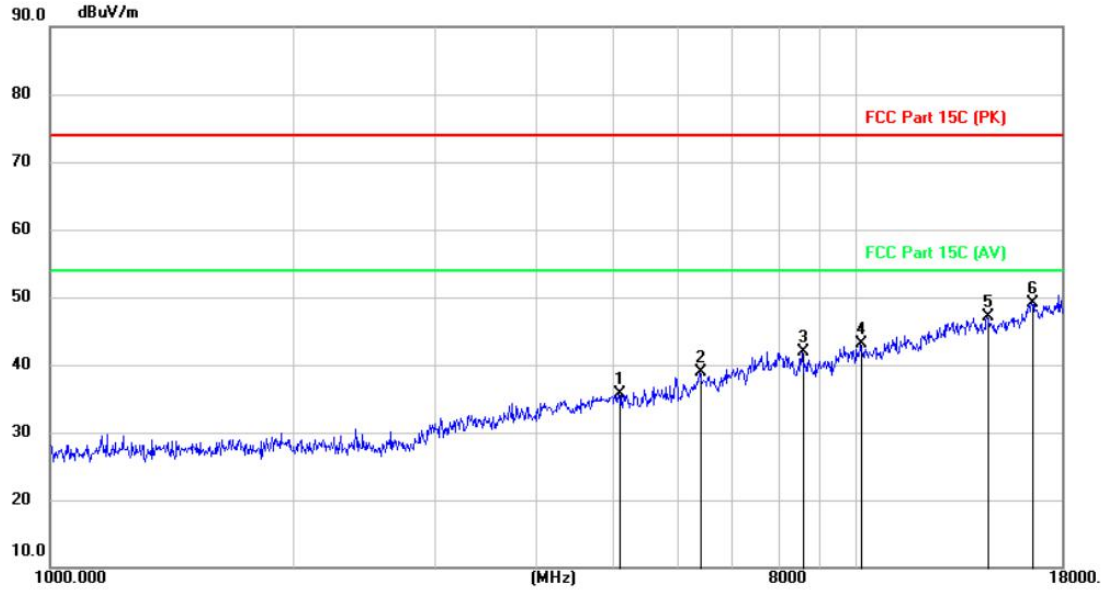
Test Voltage	DC 3.7V
Ant. Pol.	Vertical
Test Mode:	TX DH5 Mode 2480MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	(dBuV)	(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	Detector
1		5076.600	40.98	-5.32	35.66	74.00	-38.34	peak
2		6407.700	41.31	-2.41	38.90	74.00	-35.10	peak
3		8575.200	40.06	1.92	41.98	74.00	-32.02	peak
4		10134.100	38.88	4.29	43.17	74.00	-30.83	peak
5		14559.200	36.39	10.69	47.08	74.00	-26.92	peak
6	*	16519.300	35.25	13.78	49.03	74.00	-24.97	peak

Measurement = Reading level + Correct Factor

Note:

All test modes had been tested. The GFSK(DH5) modulation is the worst case and recorded in the report.

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3.10. Conducted Emission

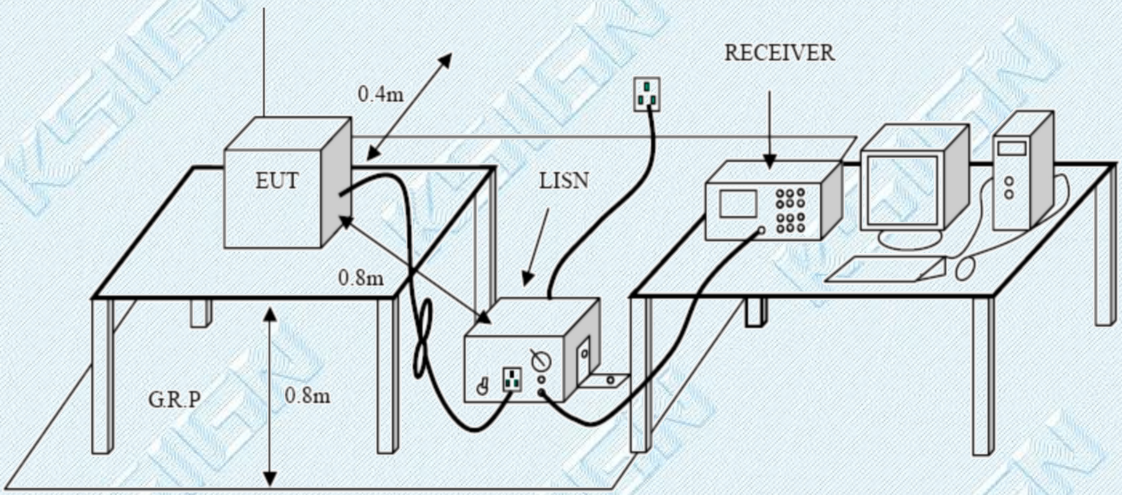
Limit

Conducted Emission Test Limit

Frequency	Maximum RF Line Voltage (dBμV)	
	Quasi-peak Level	Average Level
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Notes:
(1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequencies.
(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Configuration



Test Procedure

1. The EUT was setup according to ANSI C63.10:2020 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment.
   The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
7. During the above scans, the emissions were maximized by cable manipulation.

Test Mode:

Please refer to the clause 2.2

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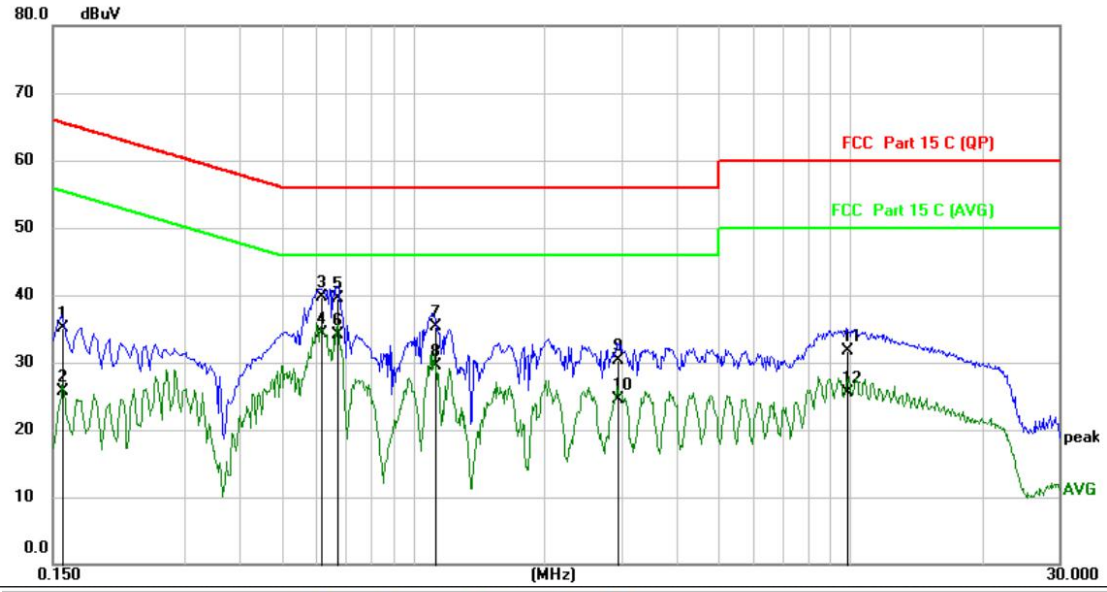
Test Results

Pre-scan DH5, 2DH5,3DH5 modulation, and found the DH5 modulation 2402MHz which it is worse case, so only show the test data for worse case.

Test Voltage:	AC 120V/60Hz
Terminal:	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1580	24.30	10.71	35.01	65.57	-30.56	QP
2		0.1580	14.92	10.71	25.63	55.57	-29.94	AVG
3		0.6140	29.15	10.47	39.62	56.00	-16.38	QP
4	*	0.6140	23.88	10.47	34.35	46.00	-11.65	AVG
5		0.6700	29.06	10.45	39.51	56.00	-16.49	QP
6		0.6700	23.68	10.45	34.13	46.00	-11.87	AVG
7		1.1180	24.82	10.44	35.26	56.00	-20.74	QP
8		1.1180	19.15	10.44	29.59	46.00	-16.41	AVG
9		2.9380	19.68	10.61	30.29	56.00	-25.71	QP
10		2.9380	13.85	10.61	24.46	46.00	-21.54	AVG
11		9.8100	21.00	10.62	31.62	60.00	-28.38	QP
12		9.8100	14.93	10.62	25.55	50.00	-24.45	AVG

Remarks:
1.Measurement = Reading Level+ Correct Factor
2.Over = Measurement -Limit

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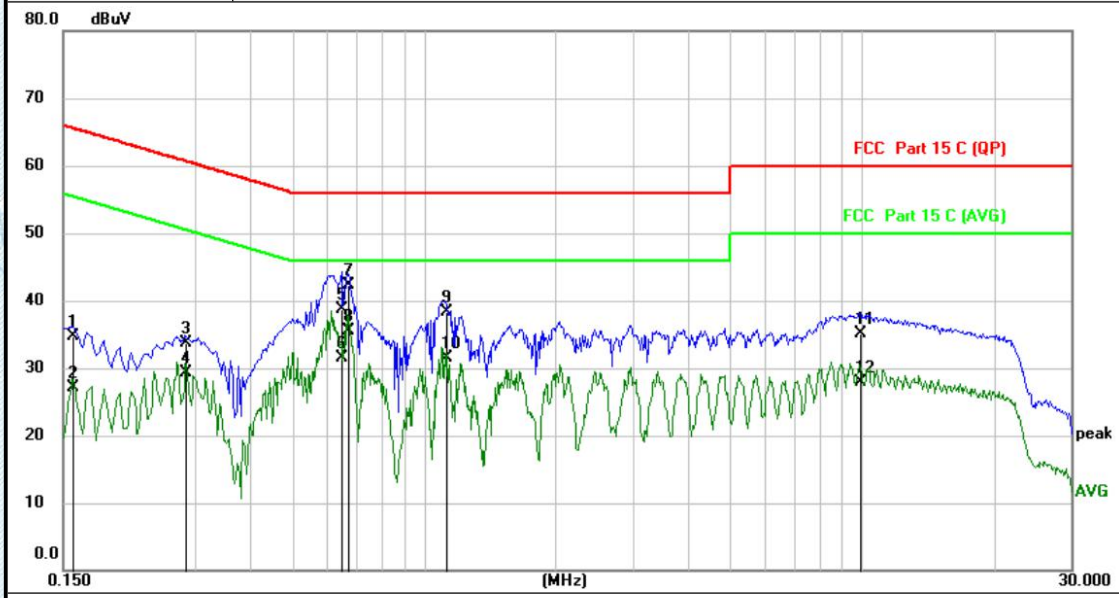
Test Voltage:	AC 120V/60Hz
Terminal:	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.1580	23.93	10.71	34.64	65.57	-30.93	QP
2		0.1580	16.40	10.71	27.11	55.57	-28.46	AVG
3		0.2860	23.13	10.56	33.69	60.64	-26.95	QP
4		0.2860	18.82	10.56	29.38	50.64	-21.26	AVG
5		0.6500	28.23	10.44	38.67	56.00	-17.33	QP
6		0.6500	21.03	10.44	31.47	46.00	-14.53	AVG
7		0.6700	31.83	10.44	42.27	56.00	-13.73	QP
8	*	0.6700	25.13	10.44	35.57	46.00	-10.43	AVG
9		1.1180	27.80	10.48	38.28	56.00	-17.72	QP
10		1.1180	20.96	10.48	31.44	46.00	-14.56	AVG
11		9.8660	24.51	10.59	35.10	60.00	-24.90	QP
12		9.8660	17.31	10.59	27.90	50.00	-22.10	AVG

Remarks:
1.Measurement = Reading Level+ Correct Factor
2.Over = Measurement -Limit

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3.11. Pseudorandom Frequency Hopping Sequence

LIMIT

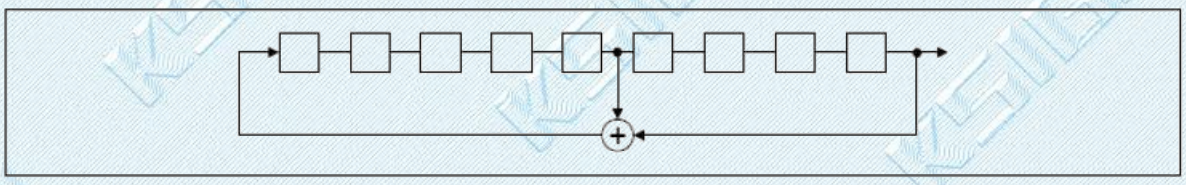
FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(1):

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hop-ping channel, whichever is greater. Al-ternatively, frequency hopping systems operating in the 2400–2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hop-ping channel bandwidths of their cor-responding transmitters and shall shift frequencies in synchronization with the transmitted signals.

TEST RESULTS

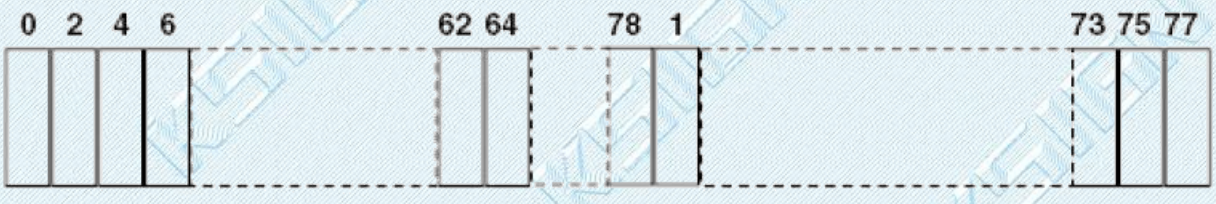
The pseudorandom frequency hopping sequence may be generated in a nice-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage.And the result is fed back to the input of the friststage.The sequence begins with the frist one of 9 consecutive ones, for example: the shift register is initialized with nine ones.

- Number of shift register stages: 9
- Length of pseudo-random sequence:29-1=511 bits
- Longest sequence of zeros:8(non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An explame of pseudorandom frequency hopping sequence as follows:



Each frequency used equally one the average by each transmitter.

The system receiver have input bandwidths that match the hopping channel bandwidths of their corresponding transmitter and shift frequencies in synchronization with the transmitted signals.

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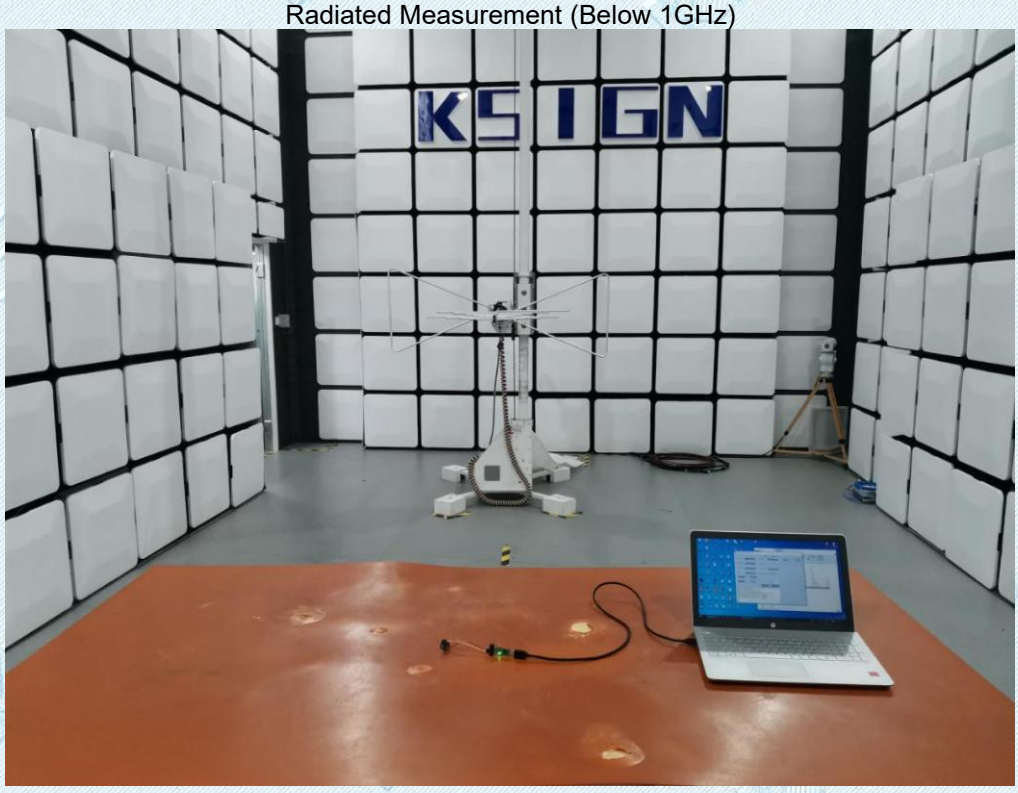
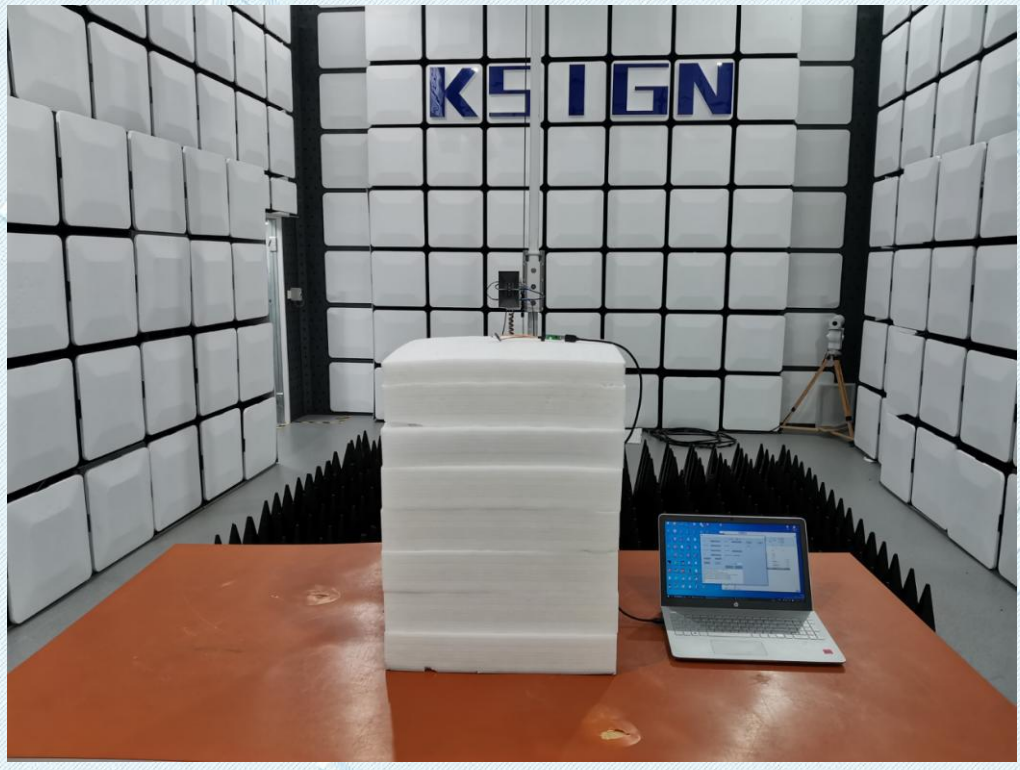
4.EUT TEST PHOTOS

Radiated Measurement (Below 1GHz)



Radiated Measurement (Above 1GHz)



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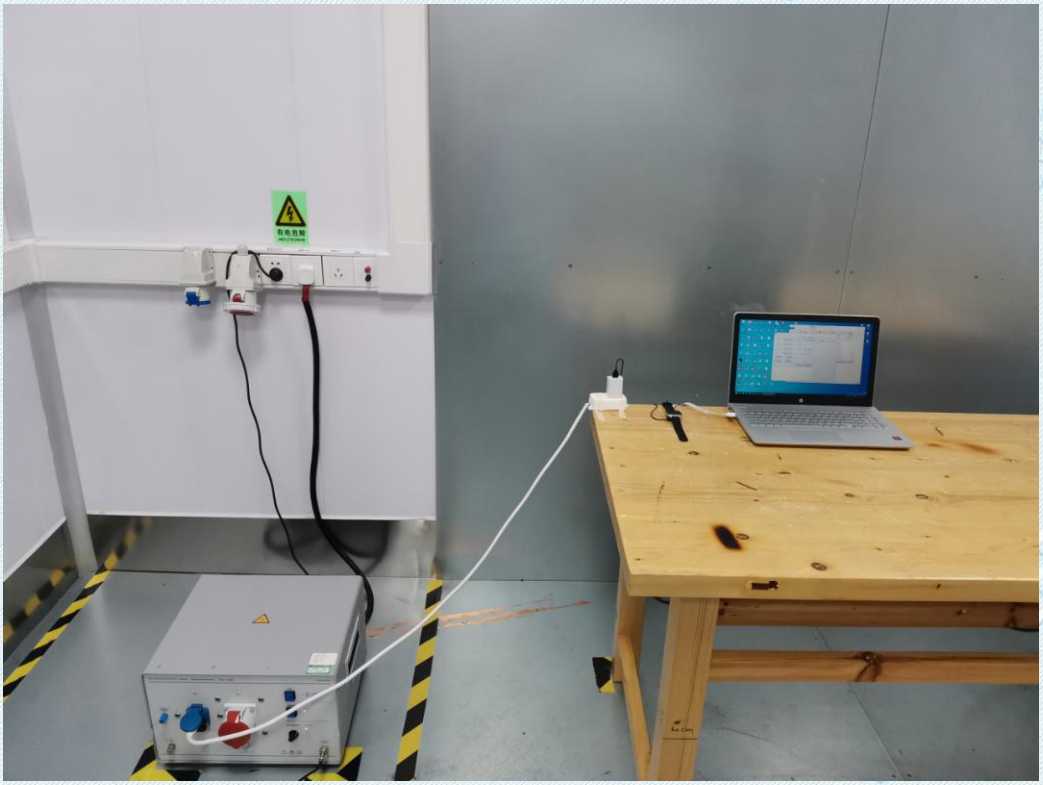
RF Conducted

CONDUCTED EMISSION TEST SETUP



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5.PHOTOGRAPHS OF EUT CONSTRUCTIONAL

External Photographs

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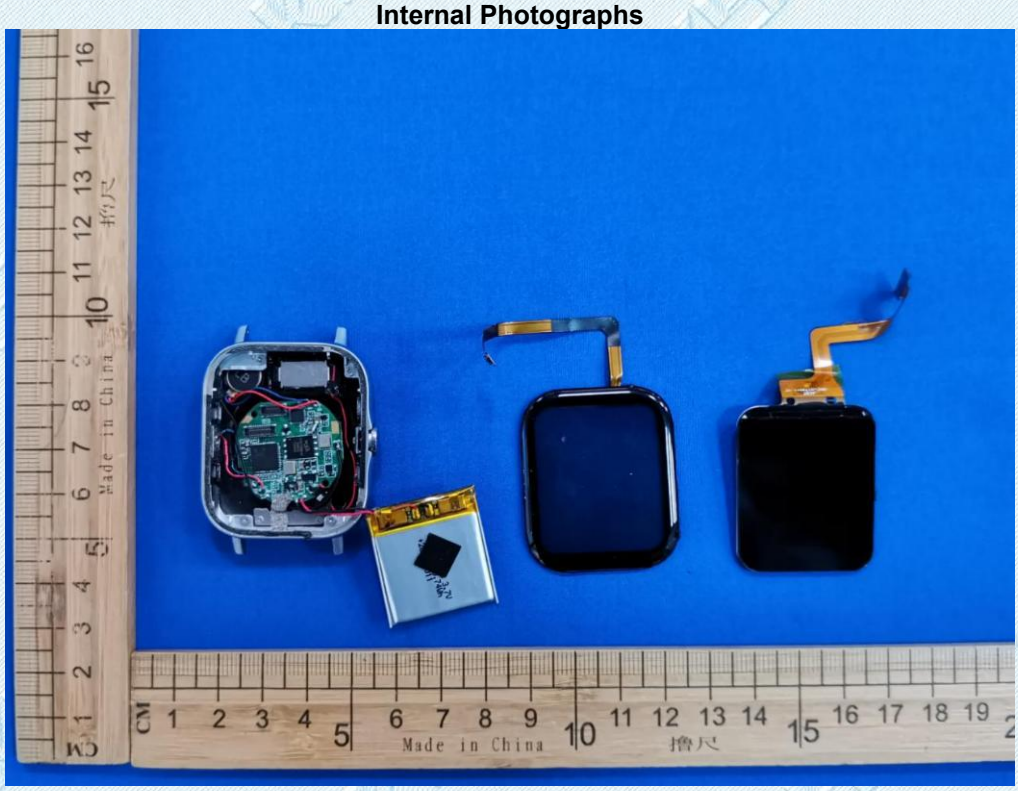
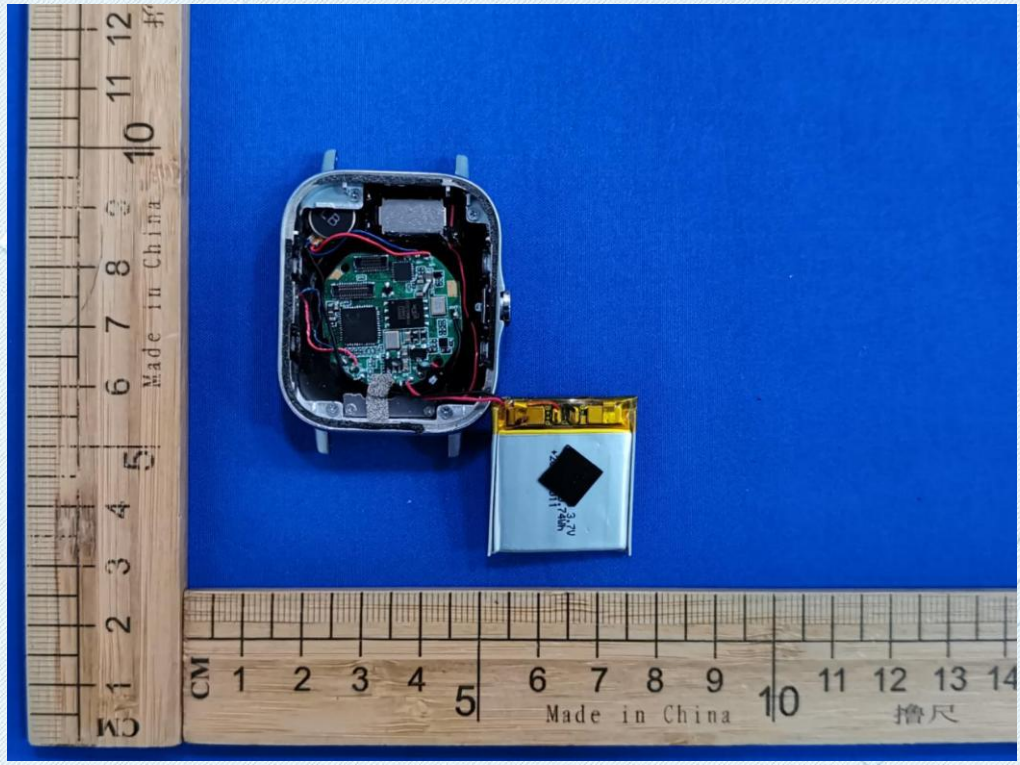
Internal Photographs





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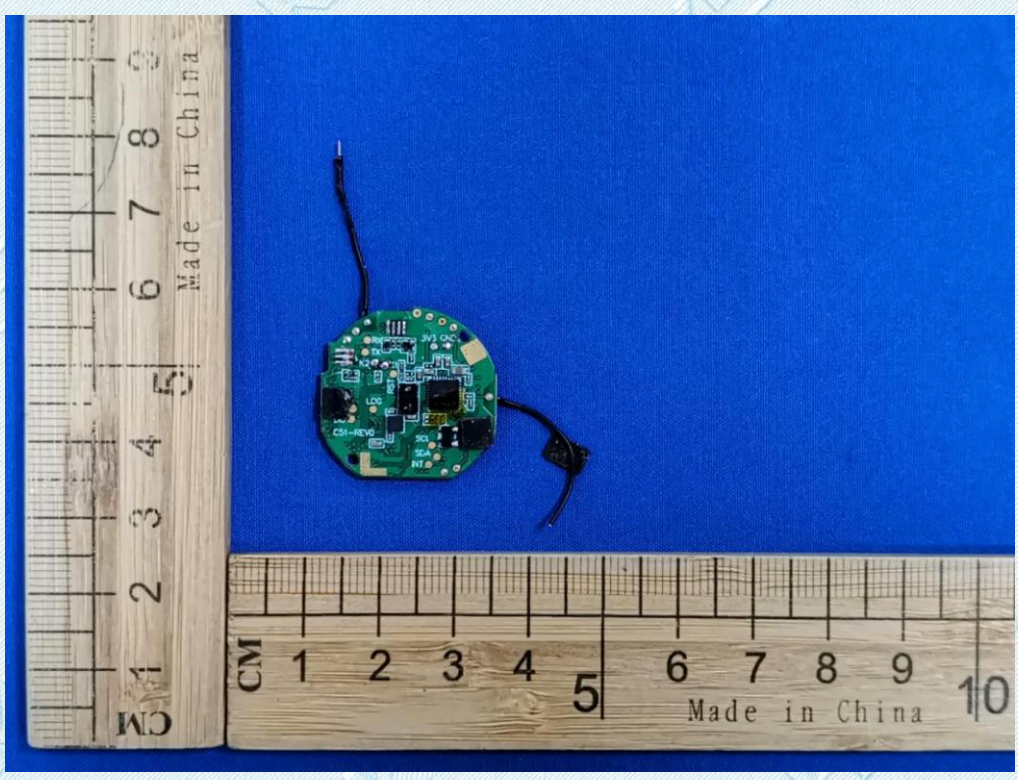
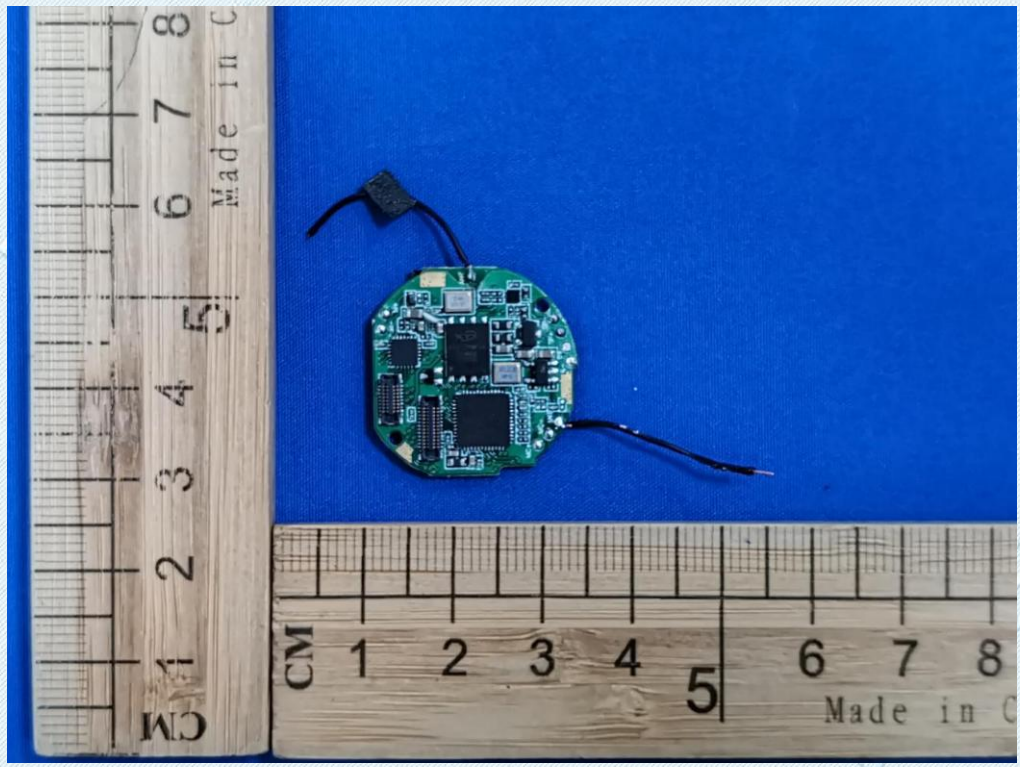
Tel :+(86) 0755-2985 2678 Fax: +(86) 0755-2985 2397 E-mail :info@gdksign.cn Web: www.gdksign.com





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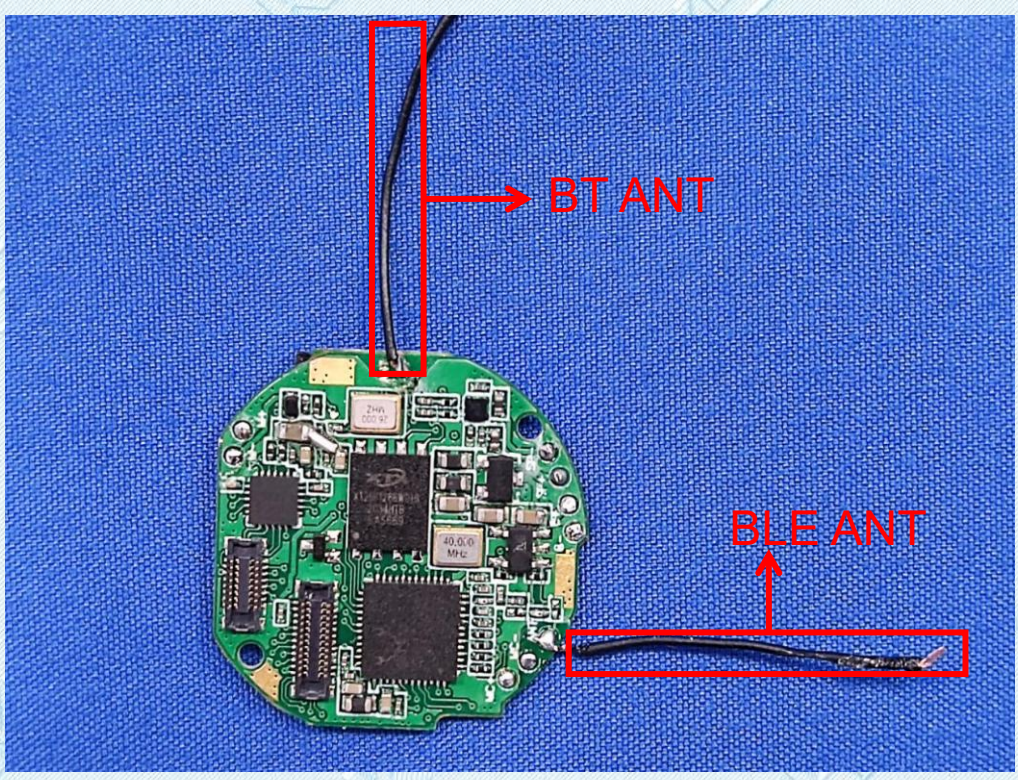

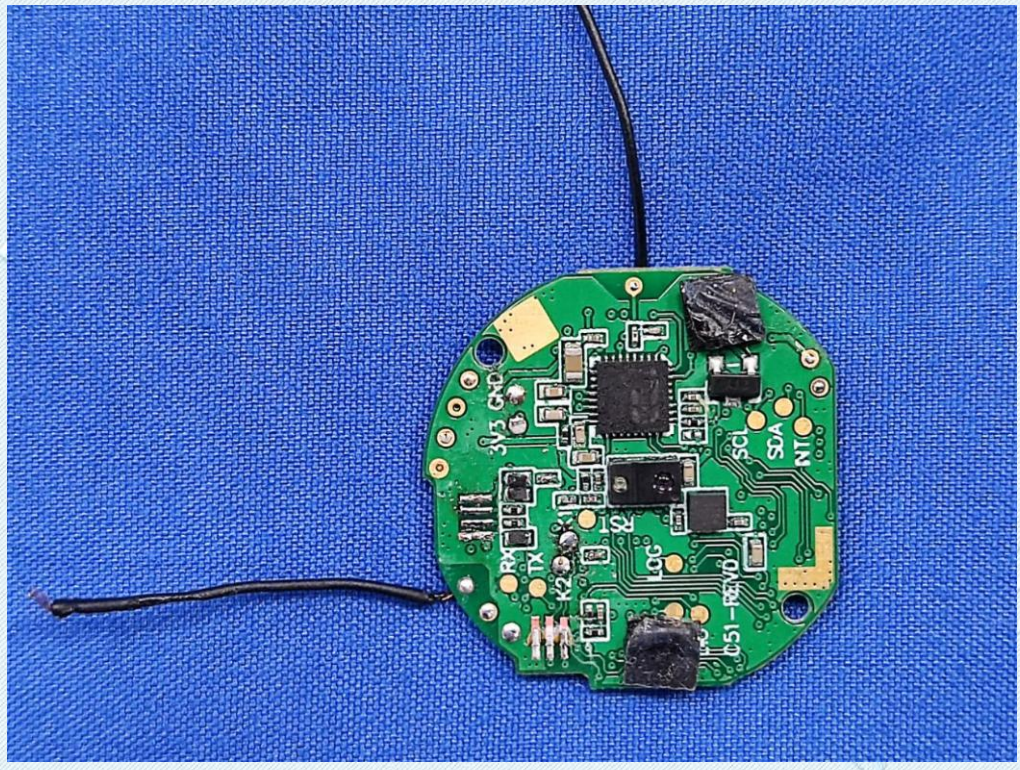

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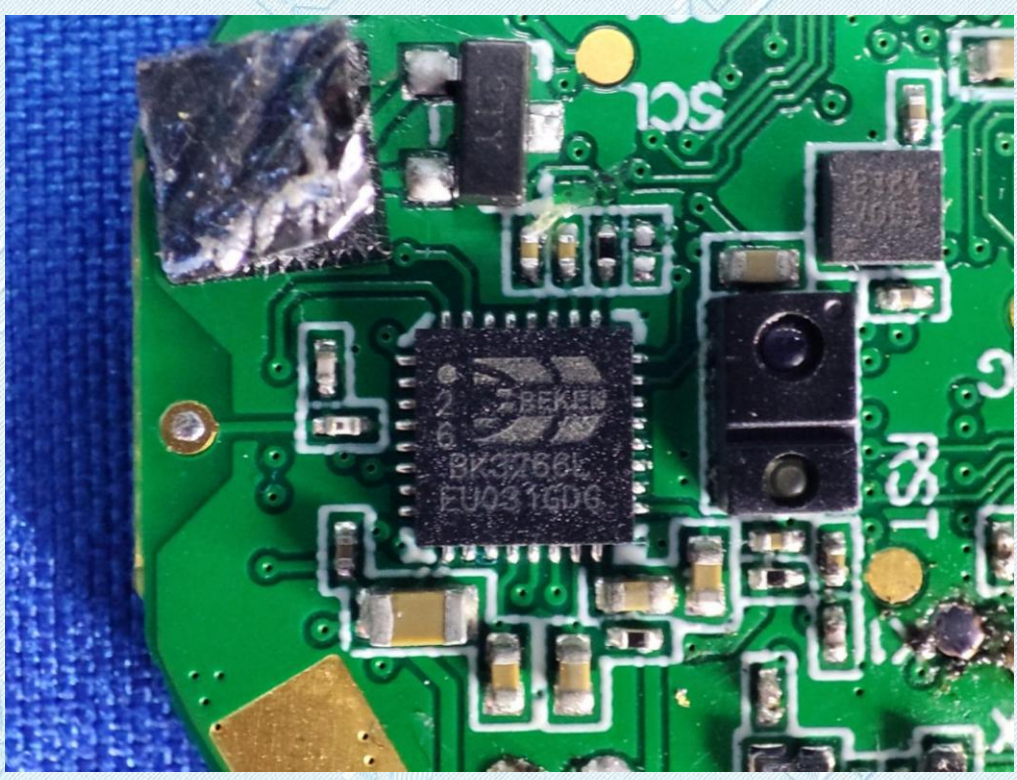

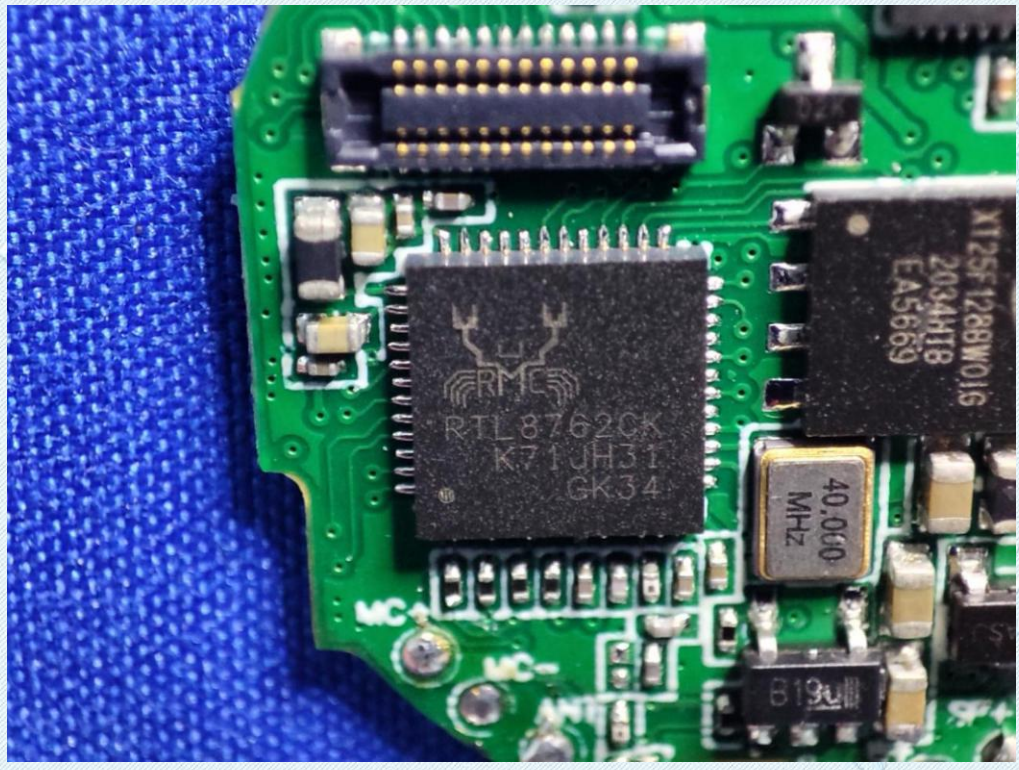

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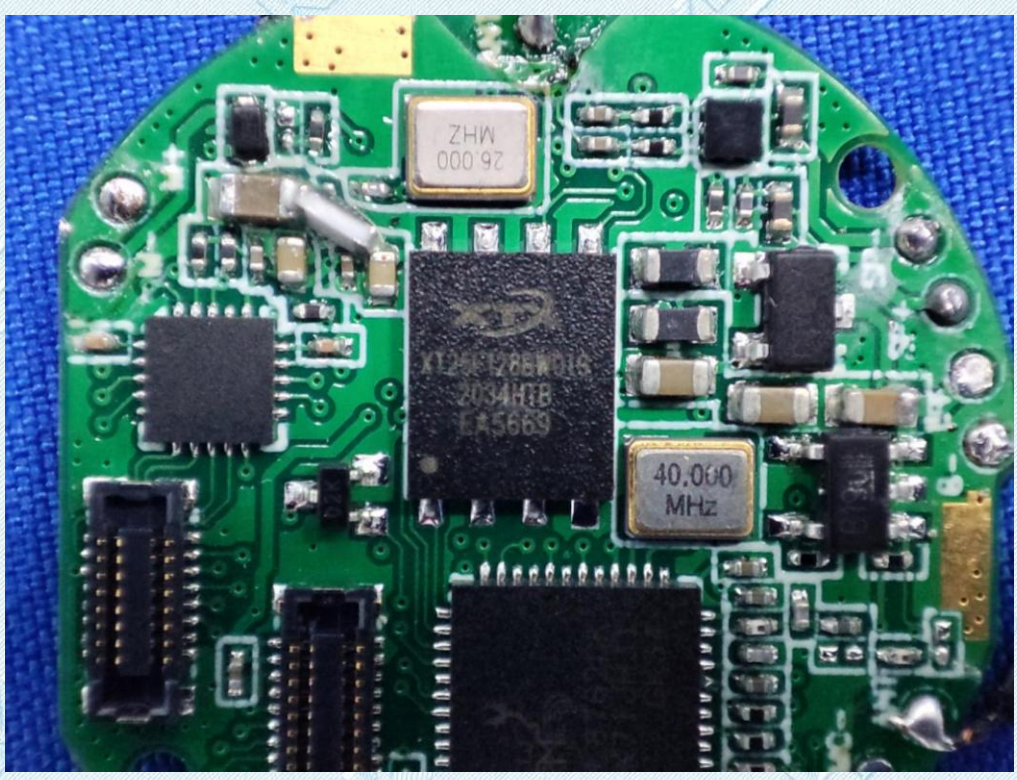

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