



Test Report

FCC ID: 2APOP-SC-530KBM

Date of issue: Sept. 22, 2020

Report number: MTi20082518-2E1

Sample description: 2.4G Wireless Keyboard Combo

Model(s): SC-530KBM, SC-531KBM

Applicant: Marsk T Co., limited

Address: 702, Baishiwei business building, Fuwei West Street 39, Fuyong, Baoan, Shenzhen, China

Date of test: Agu. 31, 2020 to Sept. 22, 2020

Shenzhen Microtest Co., Ltd.
<http://www.mtitest.com>



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Test Result Certification

Applicant's name: Marsk T Co., limited
Address: 702, Baishiwei business building, Fuwei West Street 39, Fuyong, Baoan, Shenzhen, China

Manufacture's name: Marsk T Co., limited
Address: 702, Baishiwei business building, Fuwei West Street 39, Fuyong, Baoan, Shenzhen, China

Product name: 2.4G Wireless Keyboard Combo

Trademark: N/A

Model name: SC-530KBM, SC-531KBM

Standards: FCC Part 15.249

Test procedure: ANSI C63.10-2013

This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Tested by:

Danny Xu

Sept. 22, 2020

Reviewed by:

Leo Su

Sept. 22, 2020

Approved by:

Tom Xue

Sept. 22, 2020



1 General description

1.1 Feature of equipment under test (EUT)

Equipment:	2.4G Wireless Keyboard Combo
Trade Name:	Supersonic
Model Name:	SC-530KBM
Serial Model:	SC-531KBM
Model Difference:	All the models are the same circuit and RF module, except the model No.
Operation Frequency:	2404 - 2478 MHz
Modulation Type:	GFSK
Antenna Type:	PCB antenna
Antenna Gain:	0.9dBi
Max. Field Strength:	103.23dBuV/m
Power Source:	USB:DC 5V from Laptop Keyboard: DC 3V from battery
Battery:	Keyboard: DC 1.5V*2 cell "AAA" alkaline battery
Hardware version:	V1.0
Software version:	V1.0

1.2 Operation channel list

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
--	--	27	2430	54	2457
01	2404	28	2431	55	2458
02	2405	29	2432	56	2459
03	2406	30	2433	57	2460
04	2407	31	2434	58	2461
05	2408	32	2435	59	2462
06	2409	33	2436	60	2463
07	2410	34	2437	61	2464
08	2411	35	2438	62	2465
09	2412	36	2439	63	2466
10	2413	37	2440	64	2467
11	2414	38	2441	65	2468
12	2415	39	2442	66	2469
13	2416	40	2443	67	2470



14	2417	41	2444	68	2471
15	2418	42	2445	69	2472
16	2419	43	2446	70	2473
17	2420	44	2447	71	2474
18	2421	45	2448	72	2475
19	2422	46	2449	73	2476
20	2423	47	2450	74	2477
21	2424	48	2451	75	2478
22	2425	49	2452	--	--
23	2426	50	2453	--	--
24	2427	51	2454	--	--
25	2428	52	2455	--	--
26	2429	53	2456	--	--

1.3 Test Frequency Channel

Channel	Frequency(MHz)
Low	2404
Middle	2441
High	2478

1.4 EUT operation mode

During testing, RF test program provided by the manufacturer to control the Tx operation followed the test requirement.

1.5 Ancillary equipment list

Equipment	Model	S/N	Manufacturer
Laptop	E485	/	Lenovo

2 Summary of Test Result

Test procedures according to the technical standards:

Item	FCC Part No.	Description of Test	Result
1	FCC Part15.203	Antenna Requirement	Pass
2	FCC Part15.207	AC power line conducted emission	N/A
3	FCC Part15.249(a)	Field strength of fundamental and harmonic emissions	Pass
4	FCC Part 15.215	20dB and 99% Bandwidth	Pass
5	FCC Part15.249(d)	Radiated spurious emission	Pass



3 Test Facilities and Accreditations

3.1 Test laboratory

Test Laboratory	Shenzhen Microtest Co., Ltd
Location	101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao' an District, Shenzhen, Guangdong, China.
FCC Registration No.	448573

3.2 Environmental conditions

Temperature:	15°C~35°C
Humidity	20%~75%
Atmospheric pressure	98kPa~101kPa

3.3 Measurement uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %

RF frequency	1 x 10-7
RF power, conducted	± 1 dB
Conducted emission(150kHz~30MHz)	± 2.5 dB
Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %

3.4 Test software

Software Name	Manufacturer	Model	Version
Bluetooth and WiFi Test System	Shenzhen JS tonsend co.,ltd	JS1120-3	2.5.77.0418



4 List of test equipment

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTI-E043	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2020/06/04	2021/06/03
MTI-E044	TRILOG Broadband Antenna	schwarzb eck	VULB 9163	9163-133 8	2020/06/05	2021/06/04
MTI-E047	Amplifier	Hewlett-Packard	8447F	3113A061 50	2020/06/04	2021/06/03
MTI-E089	ESG Vector Signal Generator	Agilent	N5182A	MY49060 455	2020/06/03	2021/06/02
MTI-E058	ESG Series Analog Signal Generator	Agilent	E4421B	GB40051 240	2020/07/03	2021/07/04
MTI-E062	PXA Signal Analyzer	Agilent	N9030A	MY51350 296	2020/06/04	2021/06/03
MTI-E066	MXA Signal Analyzer	Agilent	N9020A	MY50143 483	2020/06/04	2021/06/03
MTI-E078	Synthesized Sweeper	Agilent	83752A	3610A019 57	2020/06/04	2021/06/03
MTI-E079	DC Power Supply	Agilent	E3632A	MY40027 695	2020/06/04	2021/06/03
MTI-E045	Double Ridged Broadband Horn Antenna	schwarzb eck	BBHA 9120 D	9120D-22 78	2020/06/05	2021/06/04
MTI-E021	EMI Test Receiver	Rohde&schwarz	ESCS30	100210	2020/06/04	2021/06/03
MTI-E022	Pulse Limiter	Schwarzb eck	VSTD 9561-F	00679	2020/06/03	2021/06/02
MTI-E023	Artificial mains network	Schwarzb eck	NSLK 8127	NSLK 8127 #841	2020/06/04	2021/06/03
MTI-E046	Active Loop Antenna	Schwarzb eck	FMZB 1519 B	00044	2020/06/05	2021/06/04
MTI-E048	Amplifier	Agilent	8449B	3008A024 00	2020/07/03	2021/07/04
MTI-E072	Thermometer Clock Humidity Monitor	-	HTC-1	/	2020/06/07	2021/06/06

Note: the calibration interval of the above test instruments is 12 months and the calibrations are traceable to international system unit (SI).



5 Test Result

5.1 Antenna requirement

5.1.1 Standard requirement

FCC PART 15.203;

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

5.1.2 EUT Antenna

The antenna is a PCB antenna, which was permanently affixed to the device and un-replaced, complies with 15.203. In addition, the maximum antenna gain is 0.9dBi.



5.2 AC power line conducted emission

5.2.1 Limits

FCC §15.207;

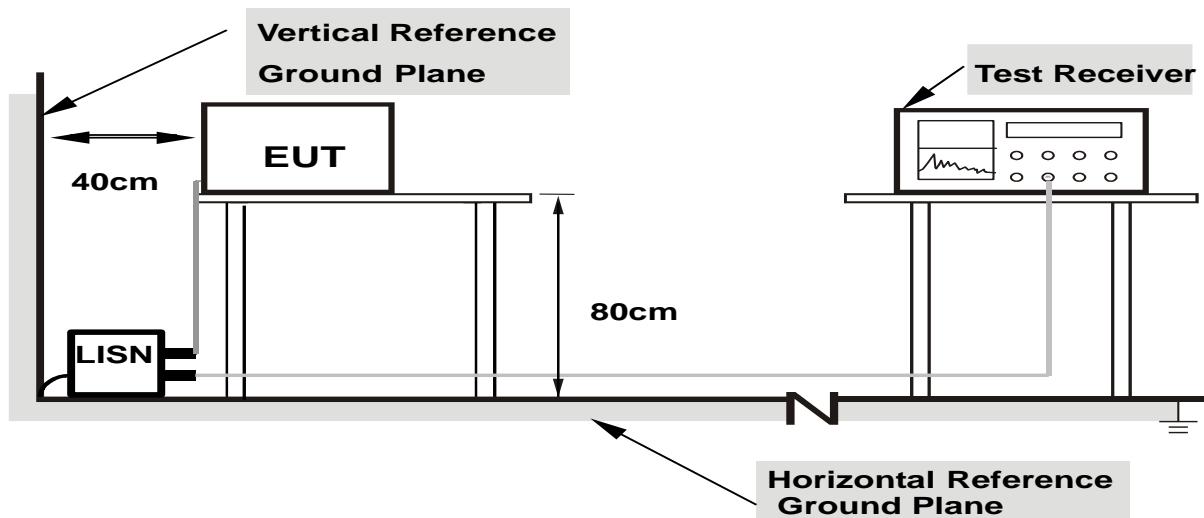
For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 ^{note2}	56 - 46 ^{note2}
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note1: The tighter limit applies at the band edges.

Note2: The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

5.2.2 Test setup



Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes



5.2.3 Test procedure

a. EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

b. The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

- c. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment's powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- d. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- e. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- f. LISN at least 80 cm from nearest part of EUT chassis.

For the actual test configuration, please refer to the related Item –EUT Test Photos.

5.2.4 Test results

Note: This device is battery powered and does not apply to conducted emission.



5.3 Field strength of fundamental and harmonic emissions

5.3.1 Limits

FCC §15.249(a);

The field strength of fundamental and harmonic emissions, measured at 3 m, shall not exceed 50 mV/m and 0.5 mV/m respectively.

The field strength limits shall be measured using an average detector, except for the fundamental emission in the frequency band 902-928 MHz, which is based on measurements using an International Special Committee on Radio Interference (CISPR) quasi-peak detector

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

Frequency	Field Strength(dBuv/m)	Detector
Fundamental	114	PK
Fundamental	94	AV
Harmonic emissions	74	PK
Harmonic emissions	54	AV

Note: 50mV/m=50000uv/m

20*log(50000uV/m)=94dBuv/m

PK limit reference 15.249(e)

5.3.2 Test Method

1. The EUT is placed on a turntable, which is 0.8m above ground plane for test frequency range below 1GHz, and 1.5m above ground plane for test frequency range above 1GHz.

2. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.

3. Use the following spectrum analyser settings:

Span = wide enough to fully capture the emission being measured, RBW = 1 MHz for $f \geq 1\text{GHz}$, 100 kHz for $f < 1\text{ GHz}$, VBW \geq RBW, Sweep = auto, Detector function = peak, Trace = max hold

4. Follow the guidelines in ANSI C63.4-2014 with respect to maximizing the emission by rotating the EUT, adjusting the measurement antenna height and polarization, etc. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, submit this data. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

5. The peak level, once corrected, must comply with the limit specified in Section 15.209. Set the RBW = 1MHz, VBW = 10Hz, Detector = PK for AV value, while maintaining all of the other instrument settings.



5.3.3 Test Result

Transmitter channel: 2404MHz

Frequency (MHz)	Ant. Polarization	Emission level dB μ V/m	Limits dB μ V/m	Detector	Result
2404	V	101.07	114	PK	
2404	H	100.17	114	PK	
2404	V	80.85	94	AV	
2404	H	82.08	94	AV	
4808	V	59.90	74	PK	
4808	H	53.42	74	PK	
4808	V	53.12	54	AV	
4808	H	49.37	54	AV	

Transmitter channel: 2441MHz

Frequency (MHz)	Ant. Polarization	Emission level dB μ V/m	Limits dB μ V/m	Detector	Result
2441	V	103.23	114	PK	
2441	H	100.24	114	PK	
2441	V	80.01	94	AV	
2441	H	83.32	94	AV	
4882	V	65.98	74	PK	
4882	H	56.65	74	PK	
4882	V	37.21	54	AV	
4882	H	49.19	54	AV	

Transmitter channel: 2478MHz

Frequency (MHz)	Ant. Polarization	Emission level dB μ V/m	Limits dB μ V/m	Detector	Result
2478	V	101.50	114	PK	
2478	H	102.88	114	PK	
2478	V	83.01	94	AV	
2478	H	80.08	94	AV	
4956	V	66.52	74	PK	
4956	H	57.51	74	PK	
4956	V	49.51	54	AV	
4956	H	47.08	54	AV	



5.4 20dB and 99% bandwidth

5.4.1 Limits

FCC §15.215(c)

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

5.4.2 Test method

Use the following spectrum analyzer settings:

For 20 dB bandwidth

Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel
RBW \geq 1% of the 20 dB bandwidth

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

The EUT should be transmitting at its maximum data rate. Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 20 dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth and 99% occupied bandwidth of the emission

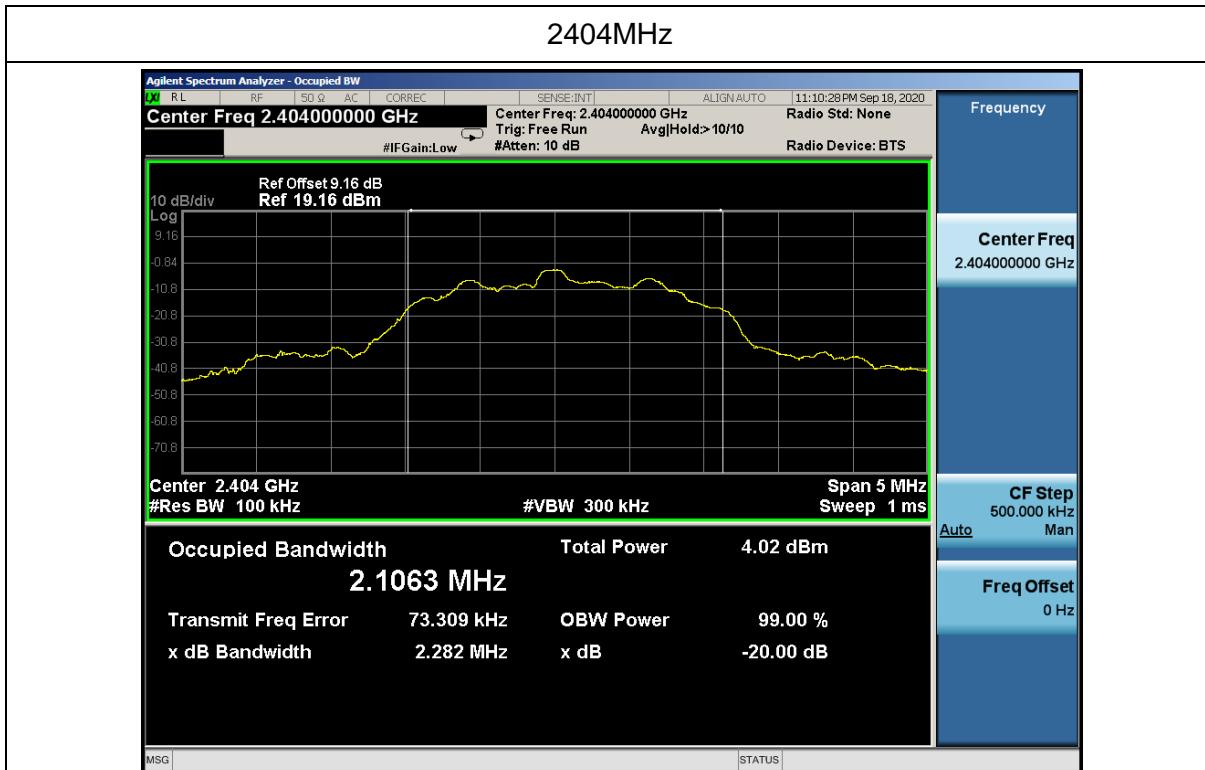


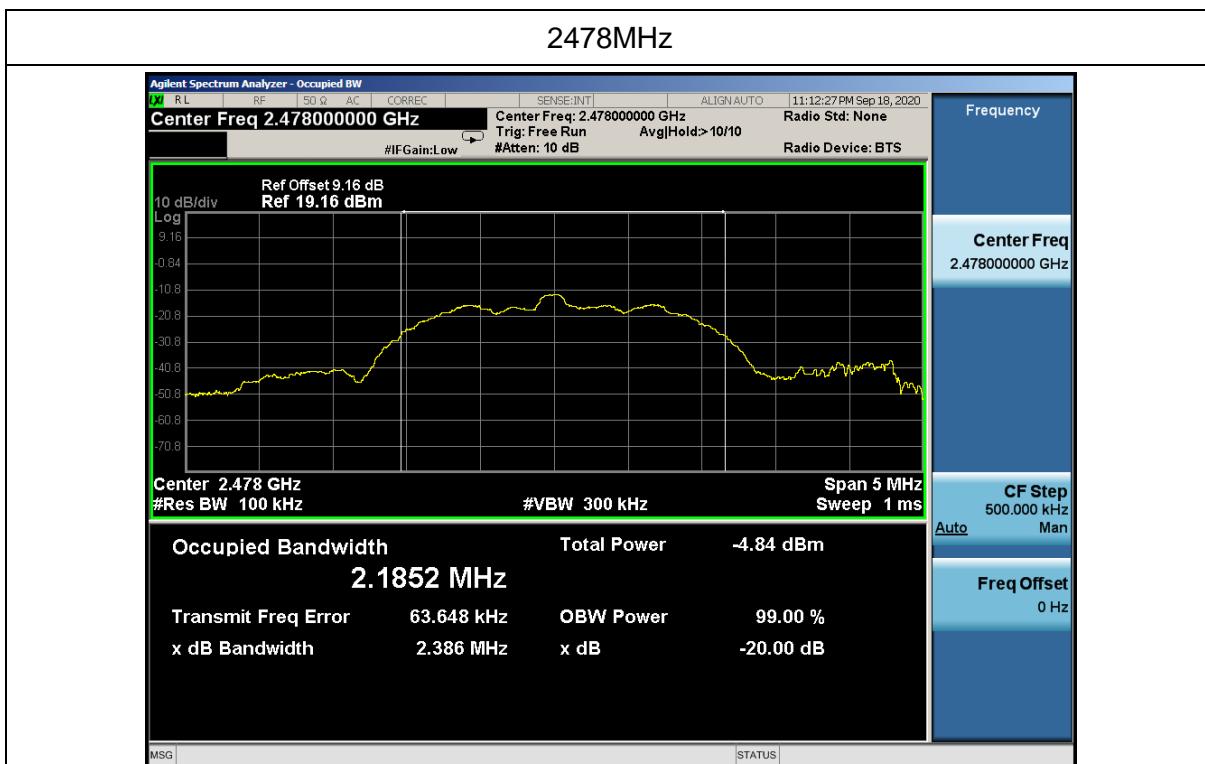
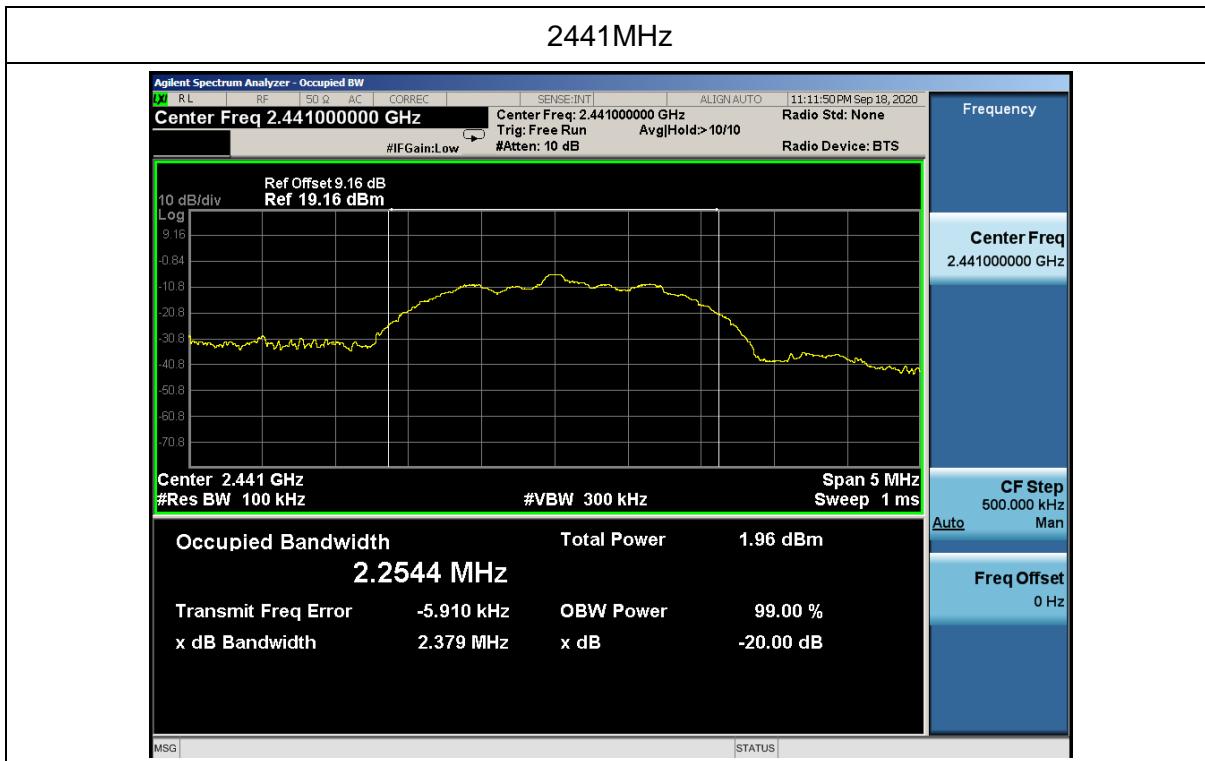
5.4.3 Test result

Keyboard:

Frequency (MHz)	20dB bandwidth (MHz)
2404	2.282
2441	2.379
2478	2.386

Test plots







5.5 Radiated spurious emission

5.5.1 Limit

FCC PART 15.249(a);

Except as provided in paragraph (a) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Frequency (MHz)	Field Strength of Fundamental (mV/m)	Field Strength of Harmonics (μ V/m)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μ V/m)	Measurement Distance (m)
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

5.5.2 Test method

- a) The EUT is placed on a turntable, which is 0.8m above ground plane for test frequency range below 1GHz, and 1.5m above ground plane for test frequency range above 1GHz.
- b) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- c) Use the following spectrum analyser settings:
 - 1) Span = wide enough to fully capture the emission being measured
 - 2) RBW = 1 MHz for $f \geq 1\text{GHz}$, 100 kHz for $f < 1\text{ GHz}$
 - 3) VBW \geq RBW, Sweep = auto
 - 4) Detector function = peak
 - 5) Trace = max hold
- d) Follow the guidelines in ANSI C63.4-2014 with respect to maximizing the emission by rotating the EUT, adjusting the measurement antenna height and polarization, etc. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, submit this data. Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.



- e) The peak level, once corrected, must comply with the limit specified in Section 15.209. Set the RBW = 1MHz, VBW = 10Hz, Detector = PK for AV value, while maintaining all of the other instrument settings.

5.5.3 Test Result

Note: If the PK measured values lower than average mode limit, the EUT shall be deemed to meet average limits and then no additional average mode measurement performed.

Below 30MHz

EUT:	2.4G Wireless Keyboard Combo	Model name. :	SC-530KBM
Pressure:	1010 hPa	Test voltage:	DC 3V from battery
Test mode:	TX	Polarization :	--

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State
--	--	--	--	P/F
--	--	--	--	Pass
--	--	--	--	Pass

Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

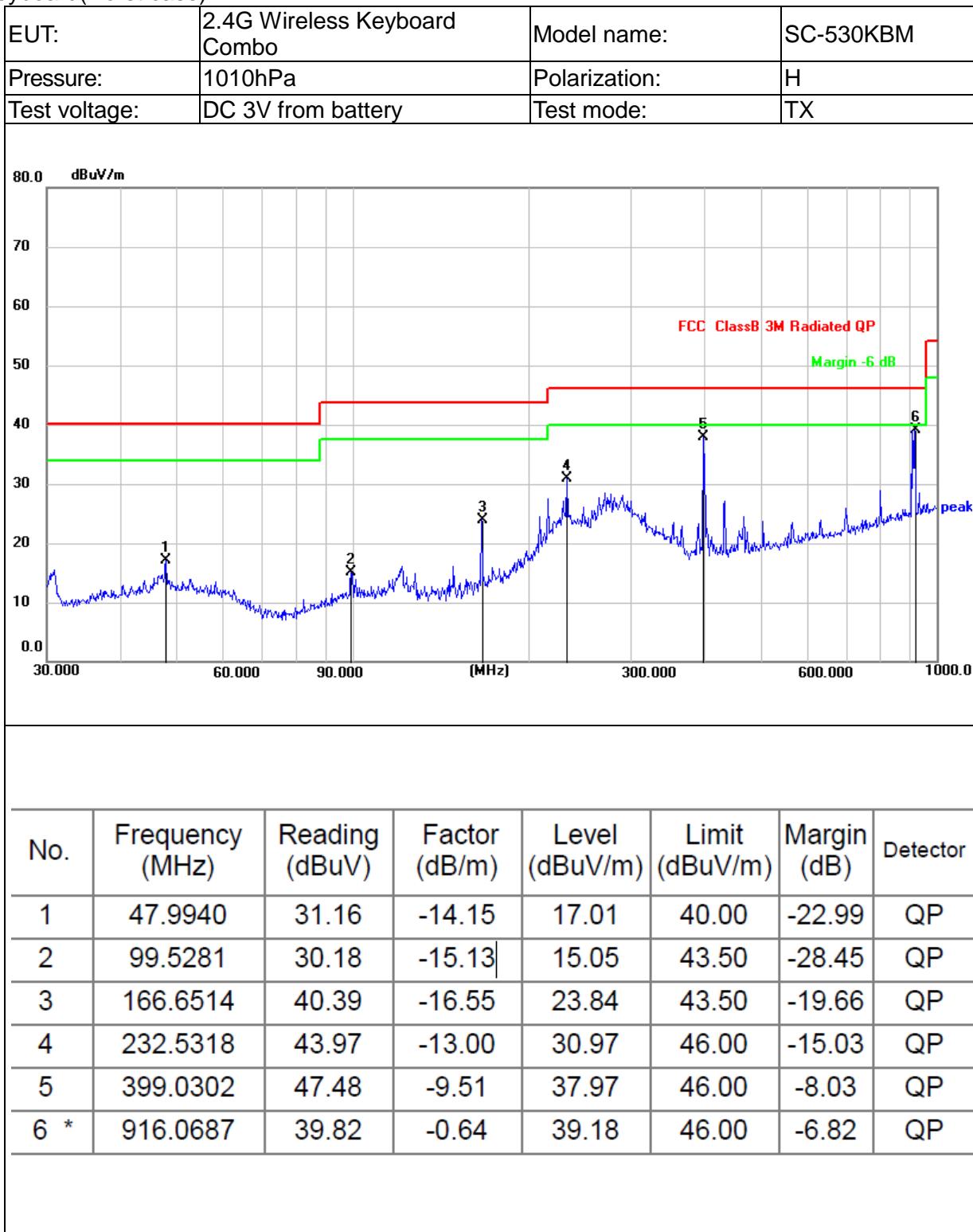
Distance extrapolation factor = $40 \log (\text{specific distance}/\text{test distance})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

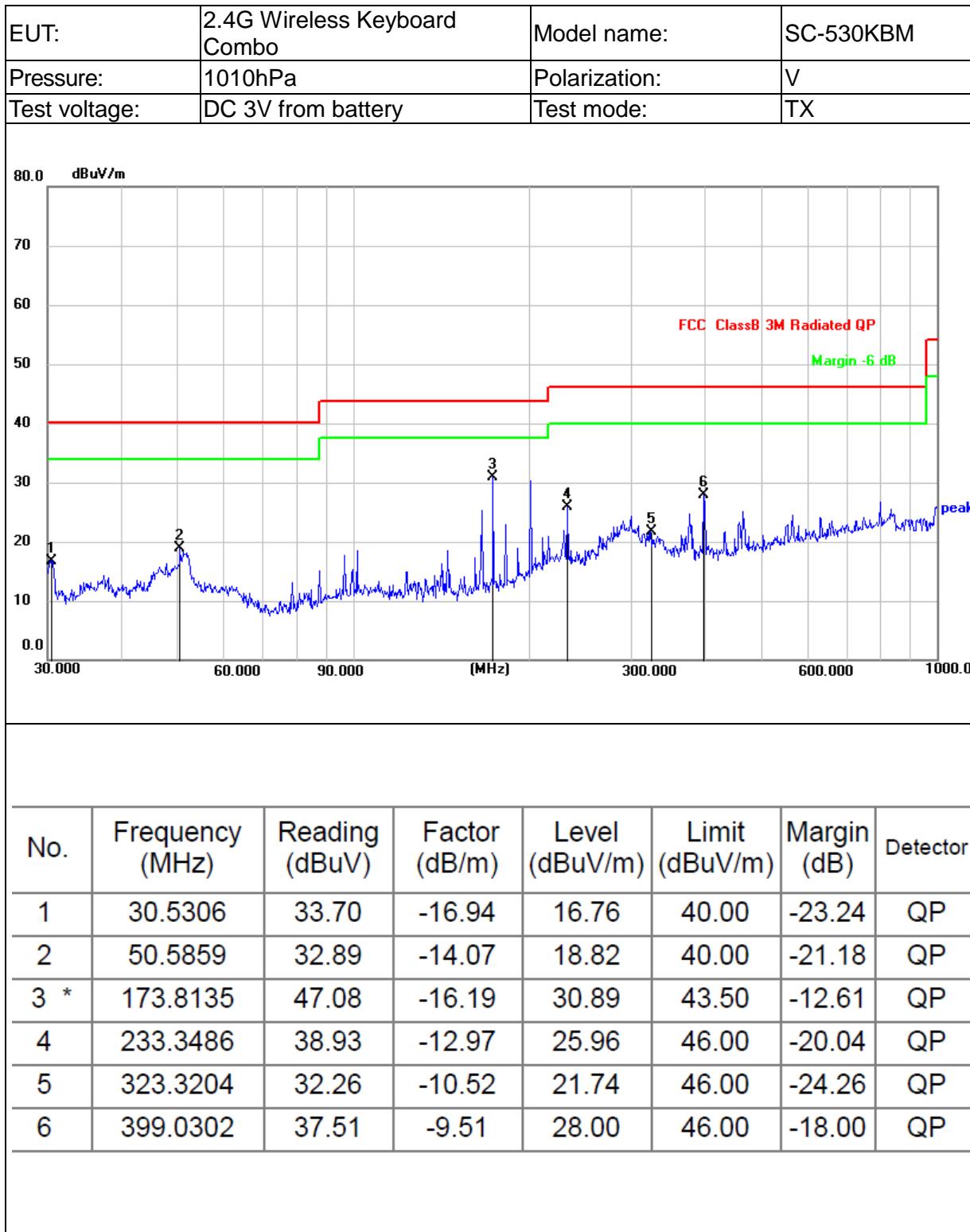


Radiation (30MHz – 1GHz)

Keyboard(worst case):



No.	Frequency (MHz)	Reading (dB _{UV})	Factor (dB/m)	Level (dB _{UV} /m)	Limit (dB _{UV} /m)	Margin (dB)	Detector
1	47.9940	31.16	-14.15	17.01	40.00	-22.99	QP
2	99.5281	30.18	-15.13	15.05	43.50	-28.45	QP
3	166.6514	40.39	-16.55	23.84	43.50	-19.66	QP
4	232.5318	43.97	-13.00	30.97	46.00	-15.03	QP
5	399.0302	47.48	-9.51	37.97	46.00	-8.03	QP
6 *	916.0687	39.82	-0.64	39.18	46.00	-6.82	QP





Above 1GHz:

Note:

- (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
- (2) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor
- (3) All other emissions more than 20dB below the limit.

All the modulation modes have been tested, and the worst result was report as below:

Keyboard(worst case):

Frequency (MHz)	Read Level (dB μ V)	Cable loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Remark	Comment
Low Channel (2404 MHz)-Above 1G									
4804.338	62.47	4.36	32.92	45.53	54.22	74.00	-19.78	Pk	Vertical
4804.338	41.45	4.36	32.92	45.53	33.20	54.00	-20.80	AV	Vertical
7206.107	61.77	5.02	37.63	45.56	58.86	74.00	-15.14	Pk	Vertical
7206.107	40.63	5.02	37.63	45.56	37.72	54.00	-16.28	AV	Vertical
4804.169	62.80	4.36	32.92	45.53	54.55	74.00	-19.45	Pk	Horizontal
4804.169	42.18	4.36	32.92	45.53	33.93	54.00	-20.07	AV	Horizontal
7206.214	62.22	5.02	37.63	45.56	59.31	74.00	-14.69	Pk	Horizontal
7206.214	42.01	5.02	37.63	45.56	39.10	54.00	-14.90	AV	Horizontal
Mid Channel (2441 MHz)-Above 1G									
4880.473	64.24	4.41	33.01	45.76	55.90	74.00	-18.10	Pk	Vertical
4880.473	43.61	4.41	33.01	45.76	35.27	54.00	-18.73	AV	Vertical
7320.265	64.92	5.02	37.68	45.59	62.03	74.00	-11.97	Pk	Vertical
7320.265	41.86	5.02	37.68	45.59	38.97	54.00	-15.03	AV	Vertical
4880.366	63.31	4.41	33.01	45.76	54.97	74.00	-19.03	Pk	Horizontal
4880.366	41.76	4.41	33.01	45.76	33.42	54.00	-20.58	AV	Horizontal
7320.234	60.69	5.02	37.68	45.59	57.80	74.00	-16.20	Pk	Horizontal
7320.234	44.37	5.02	37.68	45.59	41.48	54.00	-12.52	AV	Horizontal
High Channel (2478 MHz)- Above 1G									
4960.482	62.96	4.50	33.26	46.07	54.65	74.00	-19.35	Pk	Vertical
4960.482	41.66	4.50	33.26	46.07	33.35	54.00	-20.65	AV	Vertical
7440.131	64.12	5.02	37.78	45.77	61.15	74.00	-12.85	Pk	Vertical
7440.131	49.39	5.02	37.78	45.77	46.42	54.00	-7.58	AV	Vertical
4960.326	63.18	4.50	33.26	46.07	54.87	74.00	-19.13	Pk	Horizontal
4960.326	44.17	4.50	33.26	46.07	35.86	54.00	-18.14	AV	Horizontal
7440.199	64.89	5.02	37.78	45.77	61.92	74.00	-12.08	Pk	Horizontal
7440.199	45.39	5.02	37.78	45.77	42.42	54.00	-11.58	AV	Horizontal



5.5.4 Band edge-radiated

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor
(3) All other emissions more than 20dB below the limit.

All the modulation modes have been tested, and the worst result was report as below.

Keyboard(worst case):

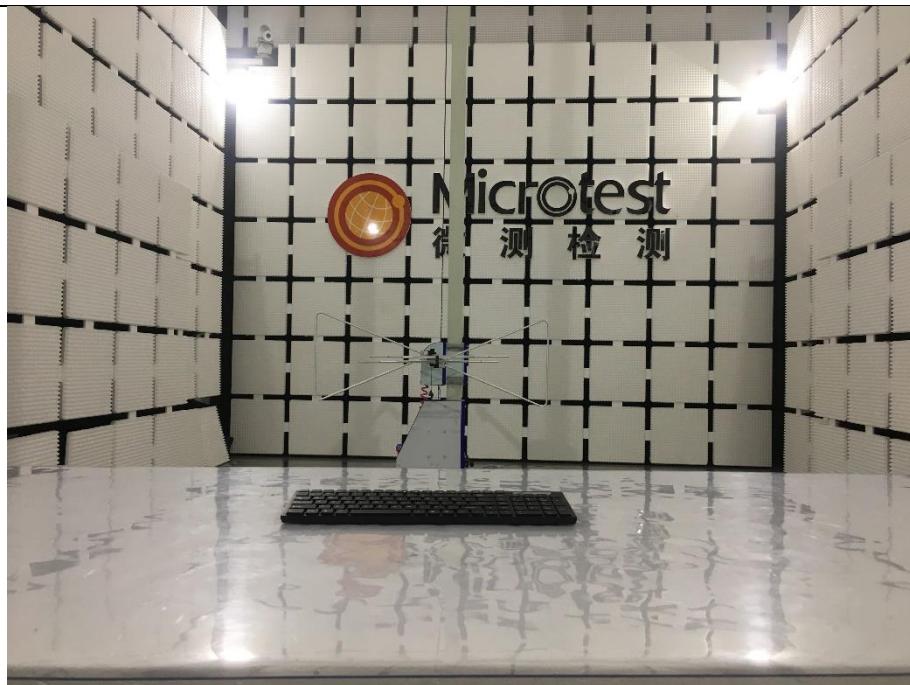
Frequency (MHz)	Meter Reading (dB μ V)	Cable Loss (dB)	Antenna Factor dB/m	Preamp Factor (dB)	Emission Level (dB μ V/m)	Limits (dB μ V/m)	Margin (dB)	Detector Type	Comment
GFSK									
2310.00	62.59	2.40	27.70	40.40	52.29	74	-21.71	Pk	Horizontal
2310.00	43.67	2.40	27.70	40.40	33.37	54	-20.63	AV	Horizontal
2310.00	61.23	2.40	27.70	40.40	50.93	74	-23.07	Pk	Vertical
2310.00	41.32	2.40	27.70	40.40	31.02	54	-22.98	AV	Vertical
2390.00	64.78	2.44	28.30	40.10	55.42	74	-18.58	Pk	Vertical
2390.00	42.55	2.44	28.30	40.10	33.19	54	-20.81	AV	Vertical
2390.00	63.91	2.44	28.30	40.10	54.55	74	-19.45	Pk	Horizontal
2390.00	42.92	2.44	28.30	40.10	33.56	54	-20.44	AV	Horizontal
2483.50	62.55	2.48	28.70	39.80	53.93	74	-20.07	Pk	Vertical
2483.50	43.27	2.48	28.70	39.80	34.65	54	-19.35	AV	Vertical
2483.50	65.46	2.48	28.70	39.80	56.84	74	-17.16	Pk	Horizontal
2483.50	43.80	2.48	28.70	39.80	35.18	54	-18.82	AV	Horizontal



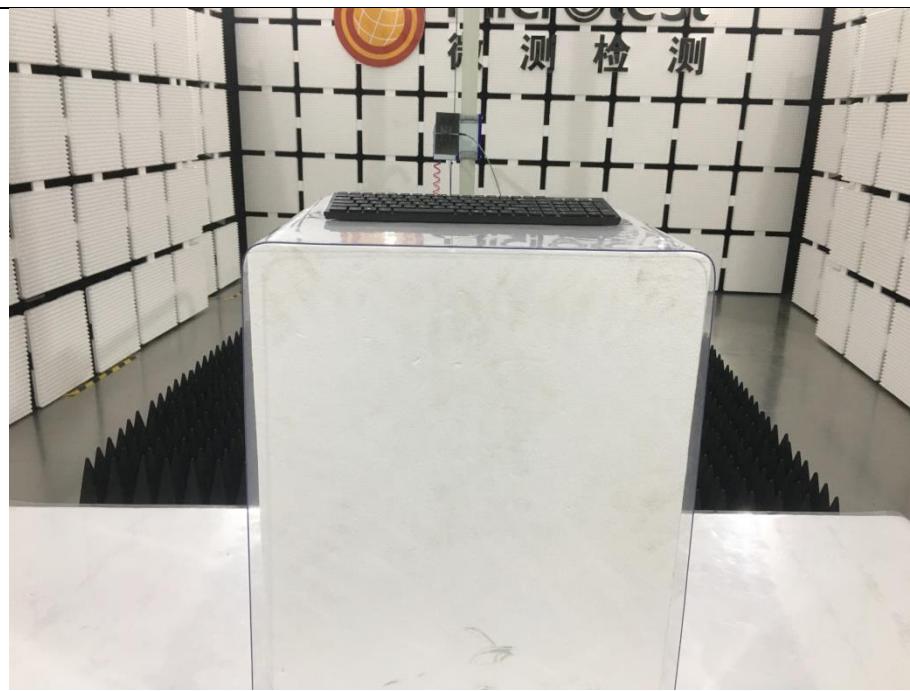
Photographs of the Test Setup

Keyboard:

Radiated emission – below 1GHz



Radiated emission – above 1GHz





Photographs of the EUT

See the APPENDIX 1: EUT PHOTO in the report No.: MTi20082518-2E1-1.

----END OF REPORT----