

Shenzhen Certification Technology Service Co., Ltd. 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

TEST REPORT

FCC ID: 2AATEFORIPAD

Applicant: Hi Glory Electronic Industry (SuZhou) Co. Ltd. Address :No.26 Huoju Road, Suzhou New District, China

Equipment Under Test (EUT):

Name : Bluetooth Keyboard Cover For Ipad

Model : For Ipad

In Accordance with: FCC PART 15, SUBPART C: 2012 (Section 15.247)

Report No : STI130806137

Date of Test : August 17-28, 2013

Date of Issue : August 29, 2013

Test Result: PASS

In the configuration tested, the EUT complied with the standards specified above

Authorized Signature

(Mark Zhu)

General Manager

The manufacture should ensure that all the products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of Shenzhen Certification Technology Service Co., Ltd. Or test done by Shenzhen Certification Technology Service Co., Ltd. Approvals in connection with, distribution or use of the product described in this report must be approved by Shenzhen Certification Technology Service Co., Ltd. Approvals in writing.

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1. General Information

1.1. Description of Device (EUT)

EUT : Bluetooth Keyboard Cover For Ipad

Model No. : For Ipad

Trade mark : Padcoat

Power supply : DC 3.7V From battery

DC 5V From PC With AC 120V/60Hz

Radio : Bluetooth 3.0

Technology

FCC Operation: 2402MHz -2480MHz

frequency

Modulation : GFSK, $\pi/4$ DQPSK, 8-DPSK

Antenna Type : PCB Antenna, Maximum Gain is 0dBi

Applicant : Hi Glory Electronic Industry (SuZhou) Co. Ltd. Address : No.26 Huoju Road, Suzhou New District, China

Manufacturer : Hi Glory Electronic Industry (SuZhou) Co. Ltd. Address : No.26 Huoju Road, Suzhou New District, China

Accessories of device (EUT)

Accessories 1 : N/A
Type : N/A

1.2. Test Lab information

Shenzhen Certification Technology Service Co., Ltd. 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China FCC Registered No.:197647

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2. Summary of test

2.1. Summary of test result

Standard	Results
FCC Part 15: 15.247(b)(1) ANSI C63.4:2003	PASS
FCC Part 15: 15.215 ANSI C63.4 :2003	PASS
FCC Part 15: 15.247(a)(1) ANSI C63.4:2003	PASS
FCC Part 15: 15.247(a)(1)(iii) ANSI C63.4:2003	PASS
FCC Part 15: 15.247(a)(1)(iii) ANSI C63.4 :2003	PASS
FCC Part 15: 15.209 FCC Part 15: 15.247(d) ANSI C63.4:2003	PASS
FCC Part 15: 15.247(d) ANSI C63.4 :2003	PASS
FCC Part 15: 15.207 ANSI C63.4 :2003	PASS
FCC Part 15: 15.203	PASS
	ANSI C63.4 :2003 FCC Part 15: 15.215 ANSI C63.4 :2003 FCC Part 15: 15.247(a)(1) ANSI C63.4 :2003 FCC Part 15: 15.247(a)(1)(iii) ANSI C63.4 :2003 FCC Part 15: 15.247(a)(1)(iii) ANSI C63.4 :2003 FCC Part 15: 15.247(d) ANSI C63.4 :2003

Note: the test with DA00-705 test procedure.

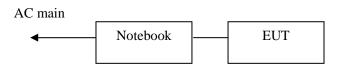
2.2. Assistant equipment used for test

Description : Test PC 1

Manufacturer : Dell Model No. : D430

2.3. Block Diagram

1, For radiated emissions test: EUT was placed on a turn table, which is 0.8 meter high above ground. EUT was be set into BT test mode by Bluesuite software before test.



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2, For Power Line Conducted Emissions Test: EUT was connected to power adapter by 1m USB line



2.4. Test mode

The test software "Bluesuite" was used to control EUT work in Continuous TX mode, and select test channel, wireless mode

Tested mode, channel, and data rate information				
Mode	Mode Channel			
		(MHz)		
	Low:CH1	2402		
BDR:GFSK	Middle: CH40	2441		
	High: CH79	2480		
	Low:CH1	2402		
EDR:π/4 QPSK	Middle: CH40	2441		
	High: CH79	2480		
	Low:CH1	2402		
EDR:8-DPSK	Middle: CH40	2441		
	High: CH79	2480		

Note: For $\pi/4$ QPSK its same modulation type with 8-DPSK, and based exploratory test, there is no significant difference of that two types test result, so except output power, all other items final test were only performed with 8-DPSK and GFSK.

2.5. Test Conditions

Temperature range	21-25℃
Humidity range	40-75%
Pressure range	86-106kPa

2.6. Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m	2.13 dB	Polarize: V
chamber (below 30MHz)	2.57dB	Polarize: H
Uncertainty for Radiation Emission test in 3m	3.54dB	Polarize: V
chamber (30MHz to 1GHz)	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m	2.08dB	Polarize: H
chamber (1GHz to 25GHz)	2.56dB	Polarize: V
Uncertainty for radio frequency	1×10-9	
Uncertainty for conducted RF Power	0.65dB	

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Uncertainty for temperature	0.2℃	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

2.7. Test Equipment

Equipment	Manufacture	Model No.	Serial No.	Last cal.	Cal Interval
3m Semi-Anechoic	ETS-LINDGREN	N/A	SEL0017	Nov. 16, 12	1Year
Spectrum analyzer	Agilent	E4407B	MY49510055	Oct. 31, 12	1 Year
Receiver	R&S	ESCI	101165	Oct. 31, 12	1 Year
Receiver	R&S	ESCI	101202	Oct. 31, 12	1Year
Bilog Antenna	SCHWARZBECK	VULB 9168	9168-438	Feb. 20, 13	1Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	Feb. 20, 13	1Year
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA 9170 D(1432)	Feb. 20, 13	1Year
Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	Feb.20, 13	1Year
L.I.S.N.	SCHWARZBECK	NSLK8126	8126466	Oct. 31, 12	1Year
Cable	Resenberger	N/A	No.1	Oct. 31, 12	1Year
Cable	SCHWARZBECK	N/A	No.2	Oct. 31, 12	1Year
Cable	SCHWARZBECK	N/A	No.3	Oct. 31, 12	1Year
Power Meter	Anritsu	ML2487A	6K00001491	Oct. 31, 12	1Year
Power sensor	Anritsu	ML2491A	32516	Oct. 31, 12	1Year
Pre-amplifier	SCHWARZBECK	BBV9743	9743-019	Oct. 31, 12	1Year
Pre-amplifier	Quietek	AP-180C	CHM-0602012	Oct. 31, 12	1 Year

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3. Maximum Peak Output power

3.1. Limit

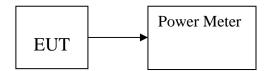
Please refer section 15.247.

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts, the e.i.r.p shall not exceed 4W

3.2. Test Procedure

The transmitter output is connected to the RF Power Meter. The RF Power Meter is set to the peak power detection.

3.3. Test Setup



3.4. Test Result

EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad						
Test date: 2013-08-22		Test site: RF site		Tested by: Anna Fan		
Mode	Freq (MHz)	Reading Power (dBm)	Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)
	2402	1.92	0.5	2.42	21	18.58
GFSK	2441	1.94	0.5	2.44	21	18.56
	2480	1.89	0.5	2.39	21	18.61
	2402	0.91	0.5	1.41	21	19.59
π/4 QPSK	2441	0.88	0.5	1.38	21	19.62
	2480	0.93	0.5	1.43	21	19.57
	2402	1.52	0.5	2.02	21	18.98
8-DPSK	2441	1.46	0.5	1.96	21	19.04
	2480	1.41	0.5	1.91	21	19.09
Conclusion: I	Conclusion: PASS					

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4. 20dB bandwidth

4.1. Limit

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.

4.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

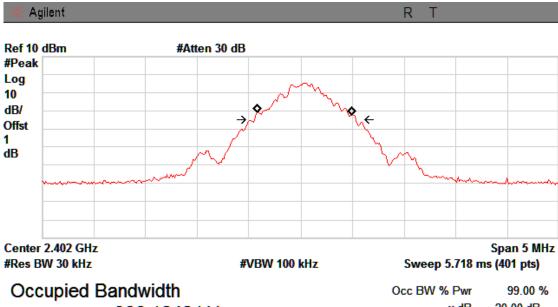
4.3. Test Result

EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad				
Test date: 20	13-08-22	Test site: RF site	Tested by: Anna Fan	
Mode Freq (MHz)		20dB Bandwidth (MHz)	Limit (kHz)	Conclusion
	2402	0.973	/	PASS
GFSK	2441	0.977	/	PASS
	2480	0.976	/	PASS
	2402	1.221	/	PASS
8-DPSK	2441	1.222	/	PASS
	2480	1.221	/	PASS

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Orginal Test data For 20dB bandwidth **GFSK**



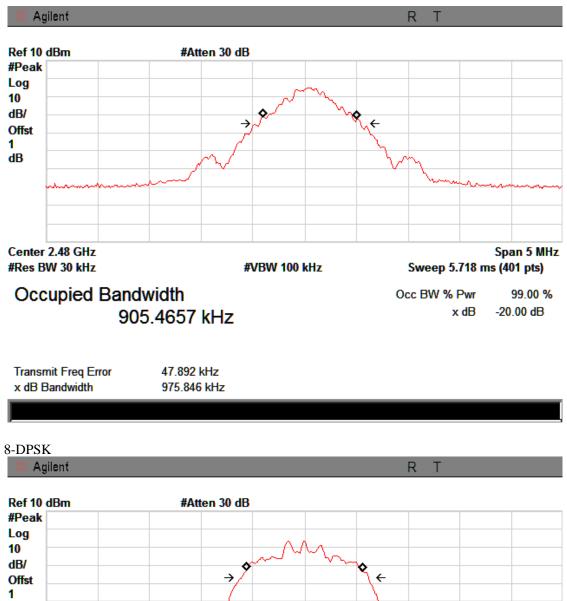
906.1242 kHz

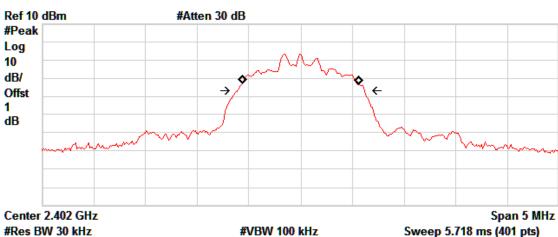
x dB -20.00 dB

Transmit Freq Error 39.690 kHz x dB Bandwidth 972.985 kHz

Agilent Ref 10 dBm #Atten 30 dB #Peak Log 10 dB/ Offst dB Center 2.441 GHz Span 5 MHz #Res BW 30 kHz **#VBW 100 kHz** Sweep 5.718 ms (401 pts) Occupied Bandwidth Occ BW % Pwr 99.00 % x dB -20.00 dB 905.2421 kHz

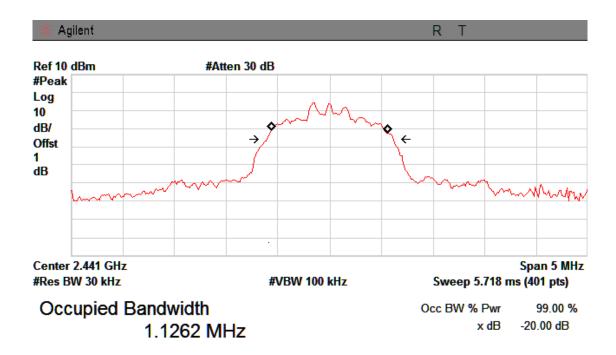
Transmit Freq Error 43.444 kHz x dB Bandwidth 976.847 kHz



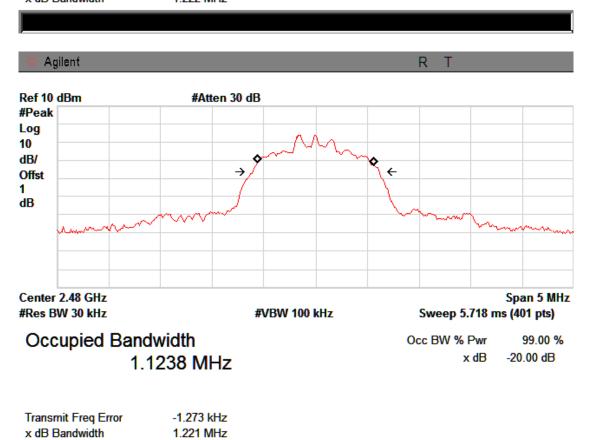


Occupied Bandwidth 1.1257 MHz Occ BW % Pwr 99.00 % x dB -20.00 dB

Transmit Freq Error 794.615 Hz x dB Bandwidth 1.221 MHz



Transmit Freq Error 403.939 Hz x dB Bandwidth 1.222 MHz



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5. Carrier Frequency Separation

5.1. Limit

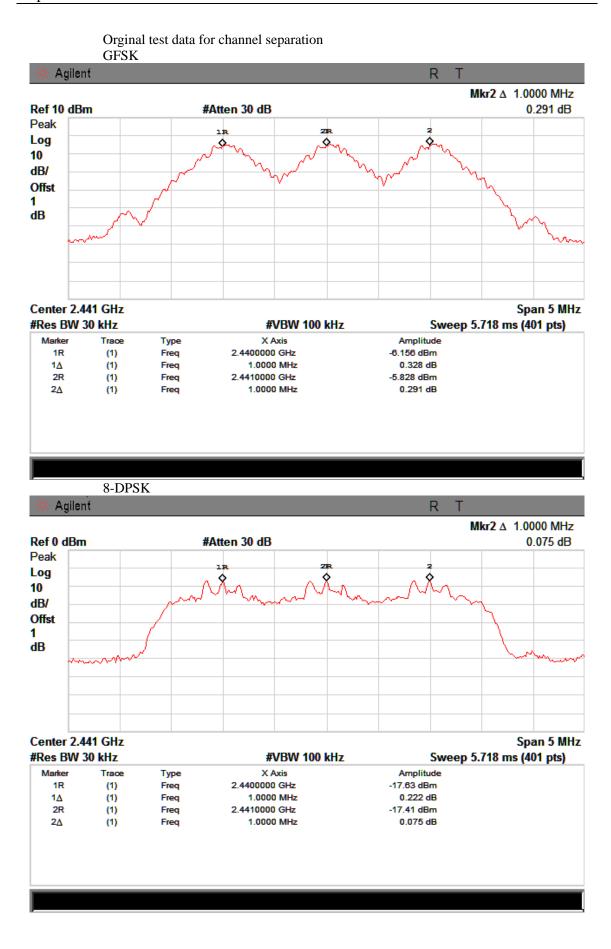
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that 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

5.2. Test Procedure

The transmitter output was coupled to a spectrum analyzer via a antenna. The carrier frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW.

5.3. Test Result

EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad					
Test date: 20	13-08-22	Test site: RF site	Tested by: Ar	nna Fan	
Mode	Channel separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz) 2/3 20dB bandwidth	Conclusion	
GFSK	1.0	0.977	0.651	PASS	
8-DPSK	1.0	1.222	0.815	PASS	



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6. Number Of Hopping Channel

6.1. Limit

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels

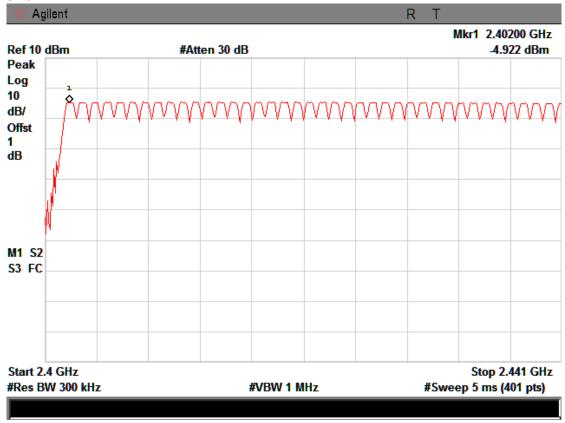
6.2. Test Procedure

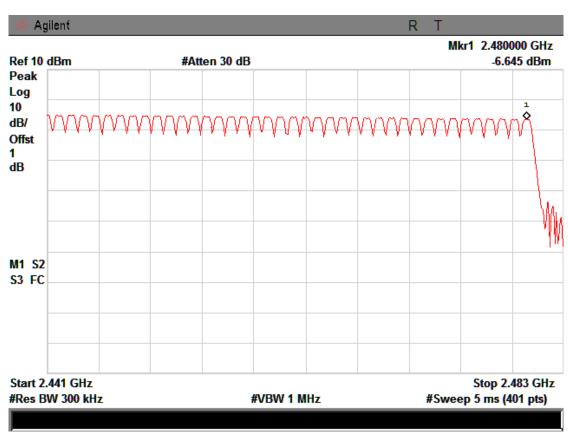
The transmitter output was coupled to a spectrum analyzer via a antenna. The number of hopping channel was measured by spectrum analyzer with 300kHz RBW and 1MHz VBW.

6.3. Test Result

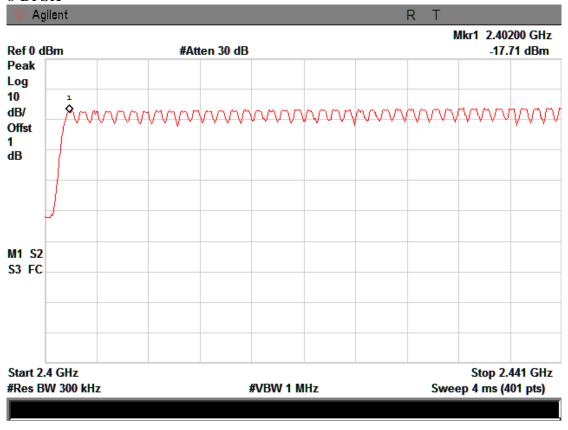
EUT: Bluetoe	oth Keyboard Cover For Ipad	M/N: For Ipad		
Test date: 20	13-08-22 Test site: RF site	Tested by: Ar	ına Fan	
Mode	Number of hopping channel	Limit	Conclusion	
GFSK	79	>15	PASS	
8-DPSK	79	>15	PASS	

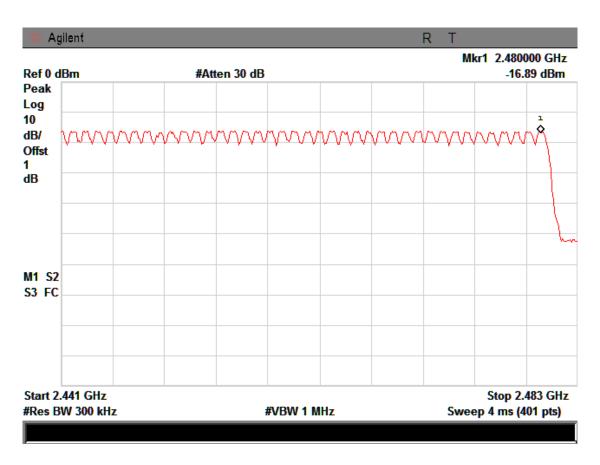






8-DPSK





7. Dwell Time

7.1. Test limit

Please refer section 15.247

According to §15.247(a)(1)(iii), Frequency hopping systems operating in the 2400MHz-2483.5 MHz. The average time of occupancy on any frequency shall not greater than 0.4 s within period of 0.4 sec- onds multiplied by the number of hopping channel employed.

7.2. Test Procedure

- 7.2.1. Place the EUT on the table and set it in transmitting mode.
- 7.2.2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 7.2.3. Set center frequency of spectrum analyzer = operating frequency.
- 7.2.4. Set the spectrum analyzer as RBW, VBW=1MHz, Span = 0Hz, Sweep = auto.
- 7.2.5. Repeat above procedures until all frequency measured were complete.

7.3. Test Results

PASS.

A period time = 0.4 (s) * 79 = 31.6(s)

```
CH Low: DH1 time slot =0.3795 (ms) * (1600/(1*79)) * 31.6 = 242.88 (ms)
```

DH3 time slot =
$$1.663$$
 (ms) * $(1600/(3*79))$ * $31.6 = 354.77$ (ms)

DH5 time slot =
$$2.927$$
 (ms) * $(1600/(5*79))$ * $31.6 = 374.66$ (ms)

3-DH1 time slot =
$$0.3875$$
 (ms) * $(1600/(1*79))$ * $31.6 = 248$ (ms)

3-DH3 time slot =
$$1.625$$
 (ms) * $(1600/(3*79))$ * $31.6 = 346.67$ (ms)

3-DH5 time slot =
$$2.875$$
 (ms) * $(1600/(5*79))$ * $31.6 = 368$ (ms)

CH Mid: DH1 time slot =
$$0.3875$$
 (ms) * $(1600/(1*79))$ * $31.6 = 248$ (ms)

DH3 time slot =
$$1.663$$
 (ms) * $(1600/(3*79))$ * $31.6 = 354.77$ (ms)

DH5 time slot =
$$2.914 \text{ (ms)} * (1600/(5*79)) * 31.6 = 372.99 \text{ (ms)}$$

3-DH1 time slot =
$$0.3875$$
 (ms) * $(1600/(1*79))$ * $31.6 = 248$ (ms)

3-DH3 time slot =
$$1.638$$
 (ms) * $(1600/(3*79))$ * $31.6 = 349.44$ (ms)

3-DH5 time slot =
$$2.875$$
 (ms) * $(1600/(5*79))$ * $31.6 = 368$ (ms)

CH High: DH1 time slot =
$$0.3875$$
 (ms) * $(1600/(1*79))$ * $31.6 = 248$ (ms)

DH3 time slot =
$$1.663$$
 (ms) * $(1600/(3*79))$ * $31.6 = 354.77$ (ms)

DH5 time slot =
$$2.927$$
 (ms) * $(1600/(5*79))$ * $31.6 = 374.66$ (ms)

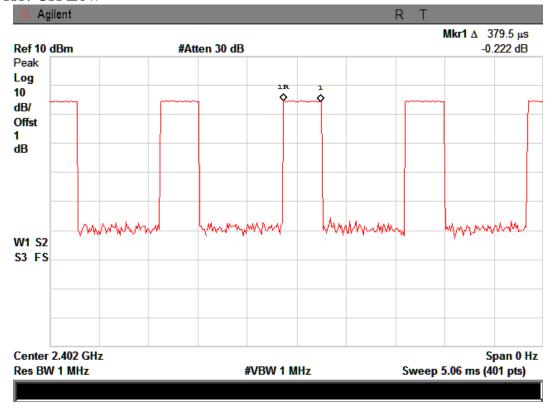
3-DH1 time slot =
$$0.375$$
 (ms) * $(1600/(1*79))$ * $31.6 = 240$ (ms)

3-DH3 time slot =
$$1.625$$
 (ms) * $(1600/(3*79))$ * $31.6 = 346.67$ (ms)

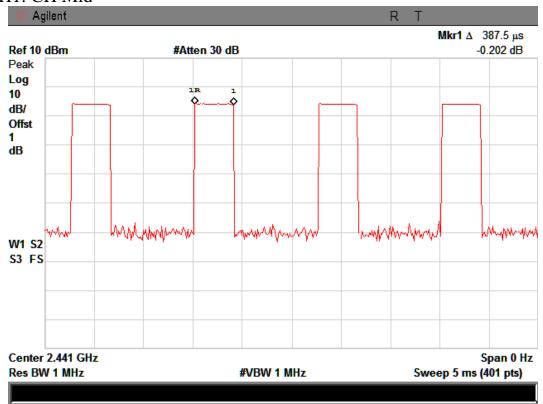
3-DH5 time slot =2.875 (ms) * (1600/(5*79)) * 31.6 = 368 (ms)

Detailed information please see the following page.

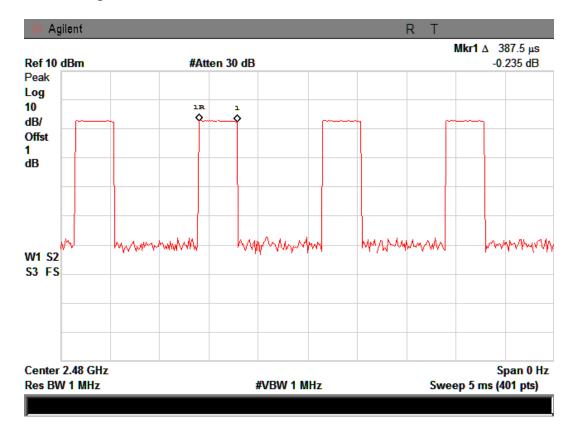
DH1: CH Low



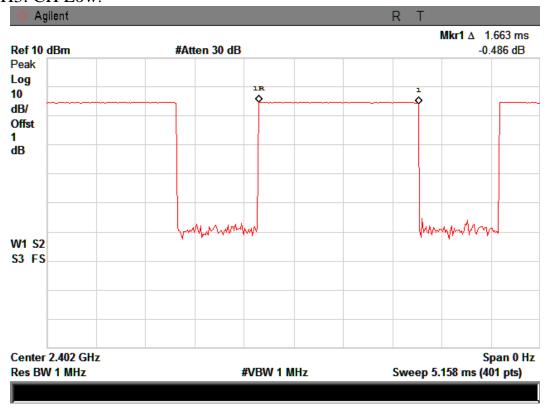
DH1: CH Mid



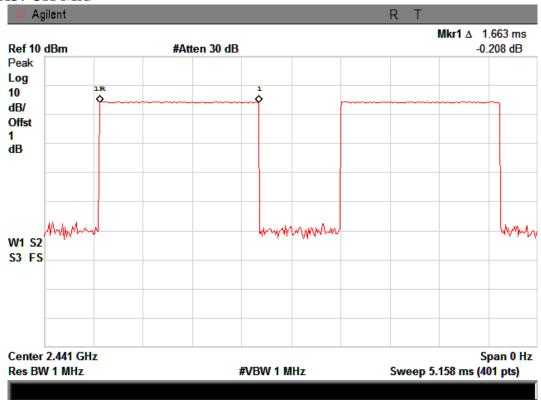
DH1: CH High



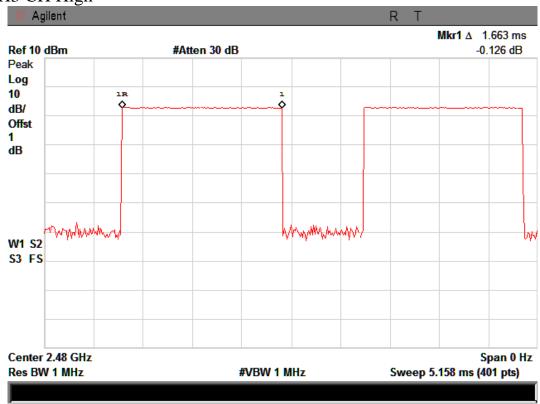
DH3: CH Low:



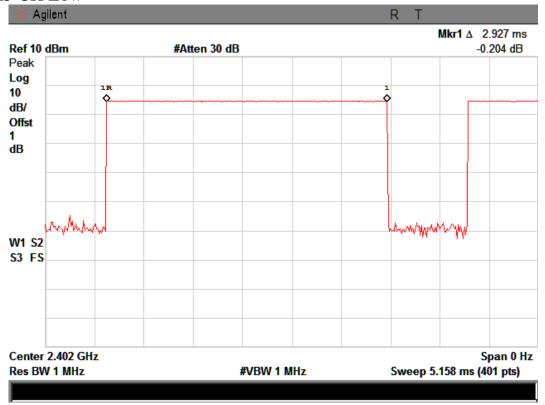
DH3: CH Mid



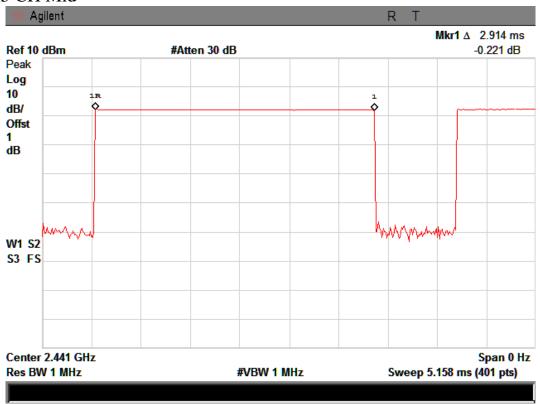
DH3 CH High



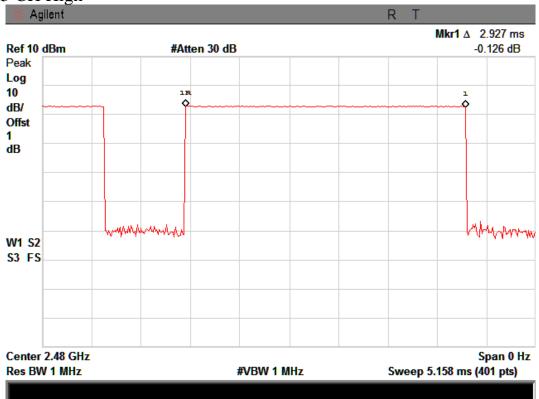
DH5 CH Low



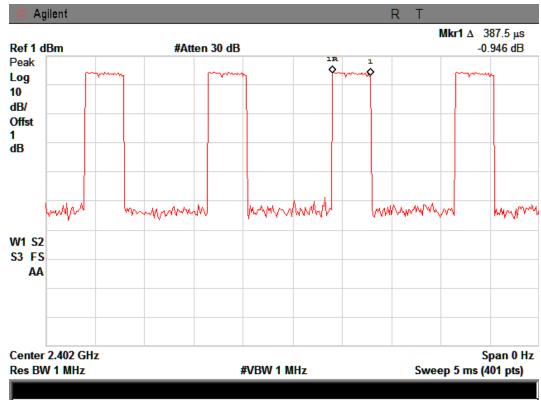
DH5 CH Mid



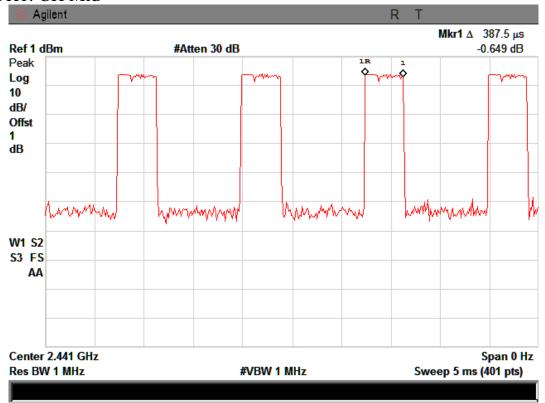
DH5 CH High



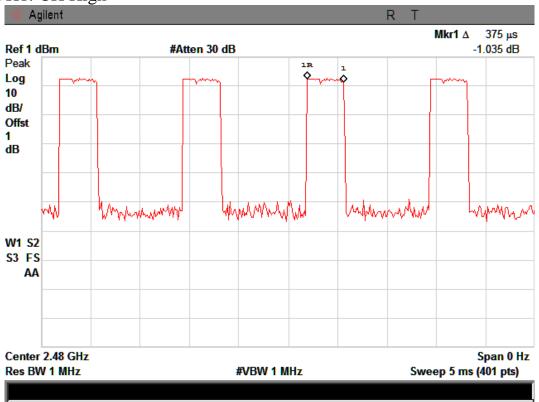
3-DH1: CH Low



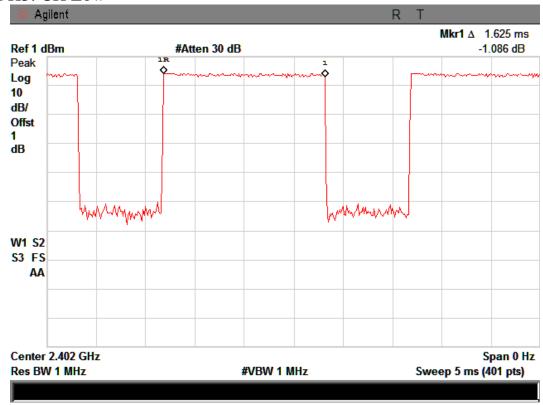
3-DH1: CH Mid



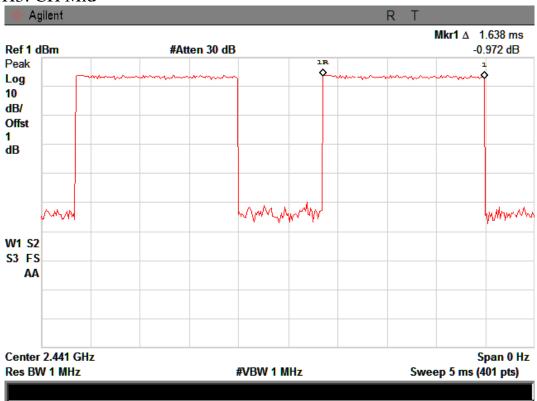
3-DH1: CH High



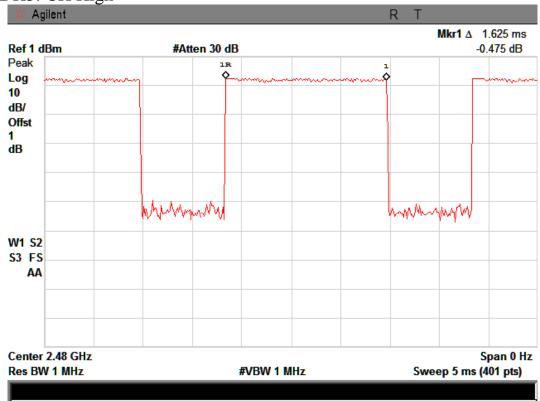
3-DH3: CH Low



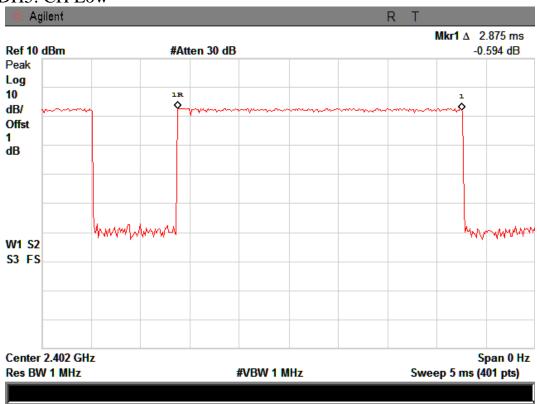
3-DH3: CH Mid



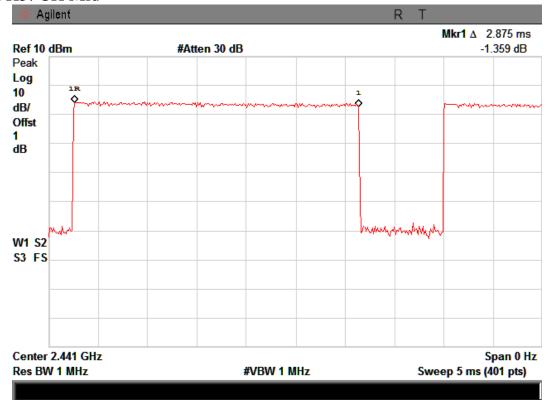
3-DH3: CH High



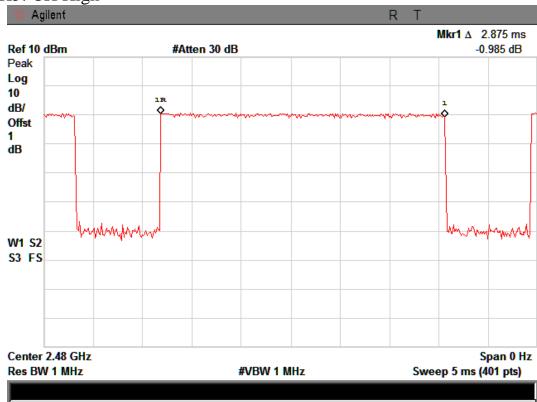
3-DH5: CH Low



3-DH5: CH Mid



3-DH5: CH High



8. Radiated emissions

8.1. Limit

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

15.205 Restricted frequency band

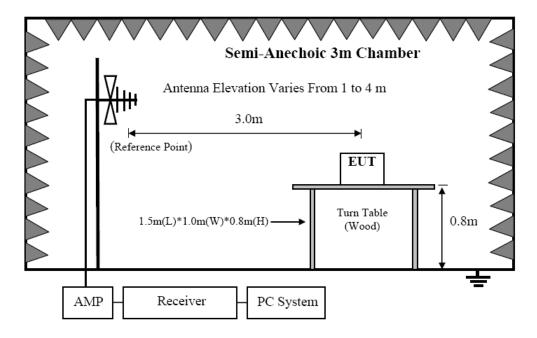
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(2)

15.209 Limit

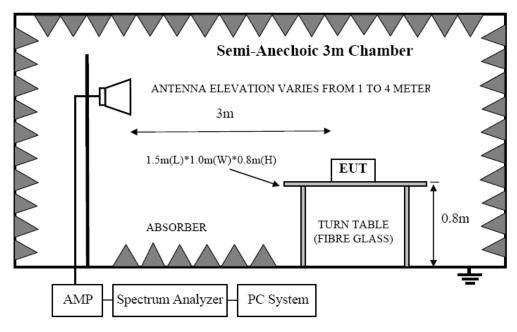
FREQUENCY	DISTANCE	FIELD STREN	NGTHS LIMIT		
MHz	Meters	$\mu V/m$	$dB(\mu V)\!/m$		
0.009-0.490	300	2400/F(KHz)	/		
0.490-1.705	30	24000/F(KHz)	/		
1.705-30	30	30	29.5		
30 ~ 88	3	100	40.0		
88 ~ 216	3	150	43.5		
216 ~ 960	3	200	46.0		
960 ~ 1000	3	500 54.0			
Above 1000	3	74.0 dB(μV)/m (Peak)			
Above 1000	3	54.0 dB(μV)/m (Average)			

8.2. Block Diagram of Test setup

8.2.1. In 3m Anechoic Chamber Test Setup Diagram for below 1GHz



8.2.2. In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

8.3. Test Procedure

(1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber.

FCC ID: 2AATEFORIPAD

- (2) Setup EUT and simulator as shown in section 1.4 and 6.1
- (3) Test antenna was located 3m from the EUT on an adjustable mast. Below pre-scan procedure was first performed in order to find prominent radiated emissions.
- (a) Change work frequency or channel of device if practicable.
- (b) Change modulation type of device if practicable.
- (c) Change power supply range from 85% to 115% of the rated supply voltage for AC power supply.
- (d) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions
- (4) Spectrum frequency from 9KHz to 25GHz (tenth harmonic of fundamental frequency) was investigated
- (5) For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4 2003 on Radiated Emission test.
- (6) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz for Peak measure; RBW is set at 1MHz, VBW is set at 10Hz for Average measure.

8.4. Test Result

We have scanned the 10th harmonic from 9KHz to the EUT.

Detailed information please see the following page.

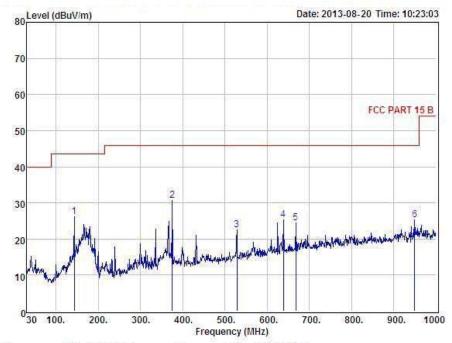
From 9KHz to 30MHz: Conclusion: PASS

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

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Shenzhen Certification Technology Service Co., Ltd. 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China Tel: 4006786199 FAX: +86-755-26736857 Website: http://www.cessz.com/Email: Service@cessz.com/



Condition : FCC PART 15 B 3m POL: HORIZONTAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad Test Mode : Link Mode

Power : DC 5V From PC with AC 120V/60Hz adapter

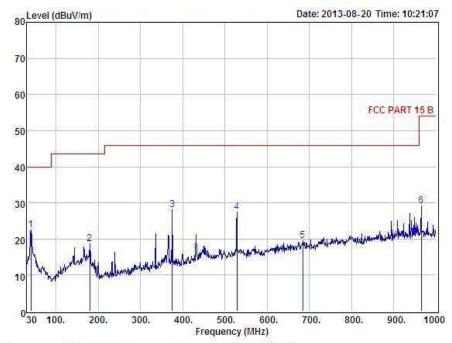
Test Engineer : Anna Remark : Temp : 24.2℃

ar curre	110777	720							
Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	143.49	39.01	13.64	26.90	0.38	26.13	43.50	-17.37	QP
2	375.32	42.78	14.32	27.35	1.01	30.76	46.00	-15.24	QP
3	528.58	32.01	17.03	27.68	1.07	22.43	46.00	-23.57	QP
4	638.19	32.94	18.94	27.82	1.22	25.28	46.00	-20.72	QP
5	667.29	31.94	19.30	27.78	0.96	24.42	46.00	-21.58	QP
6	949.56	29.38	22.13	27.62	1.34	25.23	46.00	-20.77	OP

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



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: FCC PART 15 B POL: VERTICAL Condition 3m

EUT : Bluetooth Keyboard Cover For Ipad

32.71

Model No : For Ipad Test Mode : Link Mode

Power : DC 5V From PC with AC 120V/60Hz adapter

Test Engineer : Anna Remark : 24.2°C Temp

965.08

Hum

: 54% Read Cable Item Freq Antenna Preamp Level Limit Margin Remark Factor Loss Level Factor dBuV dBuV MHz dBuV dB dB dB dBuV 27.81 0.18 14.07 22.48 40.00 -17.52 1 40.67 36.04 QP QP QP 180.35 33.49 11.68 26.93 0.47 18.71 43.50 -24.79 375.32 40.11 14.32 27.35 1.01 28.09 46.00 -17.91 27.68 27.77 37.06 17.03 27.48 46.00 -18.52 QP 528.58 1.07 26.37 1.40 QP 683.78 19.48 19.48 46.00 -26.52

1.97

29.25

54.00

-24.75

QP

Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss

22.18

27.61

1GHz—25GHz Radiated emissison Test result									
EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad									
Power: DC 5V From PC with AC 120V/60Hz adapter									
•									
mode: G	FSK Tx CF	H1 2402M	IHz						
enna pola	rity: Vertica	al							
No Freq (MHz) Read Level (dBuV/m) (dB/m) Result (dBuV/m) Result (dBuV/m) (dB) Remark									
4804	47.93	34.08	10.12	34.18	57.95	74.00	16.05	PK	
4804	33.85	34.08	10.12	34.18	43.87	54.00	10.13	AV	
7206	/								
9608	/								
12010	/								
enna Pola	rity: Horizo	ntal							
4804	48.16	34.08	10.12	34.18	58.18	74.00	15.82	PK	
4804	34.21	34.08	10.12	34.18	44.23	54.00	9.77	AV	
7206	/								
9608	/								
12010	/								
	er: DC 57 date: 202 mode: G enna pola Freq (MHz) 4804 4804 7206 9608 12010 enna Pola 4804 4804 7206 9608	C: Bluetooth Keyboar er: DC 5V From PC date: 2013-08-20 mode: GFSK Tx CF enna polarity: Vertica Freq (MHz) 4804 47.93 4804 47.93 4804 7206 9608 7enna Polarity: Horizo 4804 4804 48.16 4804 7206 9608 7	E: Bluetooth Keyboard Cover er: DC 5V From PC with AC date: 2013-08-20 Test site mode: GFSK Tx CH1 2402M enna polarity: Vertical Read Level (dBuV/m) (dB/m) 4804 47.93 34.08 4804 33.85 34.08 12010 / enna Polarity: Horizontal 4804 48.16 34.08 4804 34.21 34.08 7206 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 /	E: Bluetooth Keyboard Cover For Ipacer: DC 5V From PC with AC 120V/6 date: 2013-08-20 Test site: 3m Chamode: GFSK Tx CH1 2402MHz Enna polarity: Vertical Read Antenna Cable Factor loss(d (dBuV/m) (dB/m) B) 4804 47.93 34.08 10.12 4804 43.85 34.08 10.12 7206 /	E: Bluetooth Keyboard Cover For Ipad er: DC 5V From PC with AC 120V/60Hz addate: 2013-08-20 Test site: 3m Chamber mode: GFSK Tx CH1 2402MHz enna polarity: Vertical Read	E: Bluetooth Keyboard Cover For Ipad M/N: Per: DC 5V From PC with AC 120V/60Hz adapter date: 2013-08-20 Test site: 3m Chamber Tested by mode: GFSK Tx CH1 2402MHz Enna polarity: Vertical Freq (MHz) Read Level (dBuV/m) (dB/m) B) (dB) Result (dBuV/m) (dB/m) B) (dB) 4804 47.93 34.08 10.12 34.18 57.95 4804 33.85 34.08 10.12 34.18 43.87 7206 / 9608 / 12010 / 9608 4804 48.16 34.08 10.12 34.18 58.18 4804 48.16 34.08 10.12 34.18 58.18 4804 34.21 34.08 10.12 34.18 44.23 7206 / 9608 / 9608 78.20 79.20 9608 / 9608 / 9608 79.20 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 79.20 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608 / 9608	E: Bluetooth Keyboard Cover For Ipad	Frequence Read (ABuV/m) Actor (ABu) Actor (ABu)	

Note:

- 1, Measuring frequency from 1GHz to 25GHz
- 2, Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
- 2, Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK
- 3, Result = Read level + Antenna factor + cable loss-Amp factor
- 4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

1011	25011	D 1' / 1	• •	7D (1.
1(÷H7	シンク マー・ファー・ファー・ファー・ファー・ファー・ファー・ファー・ファー・ファー・ファ	Radiated	Amiccicon	Lect recult
TOHE	-23OHZ	Nauraicu	CHIISSISOH	Test result

EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad

Power: DC 5V From PC with AC 120V/60Hz adapter

Test date: 2013-08-20 Test site: 3m Chamber Tested by: Anna Fan

Test mode: GFSK Tx CH40 2441MHz

Antenna polarity: Vertical

Amen	Antenna polarity: Vertical								
No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss(d B)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882	48.52	34.10	10.14	34.20	58.56	74.00	15.44	PK
2	4882	34.71	34.10	10.14	34.20	44.75	54.00	9.25	AV
3	7323	/							
4	9764	/							
5	12205	/							
Anter	ına Polari	ty: Horizon	ıtal						
1	4882	46.85	34.10	10.14	34.20	56.89	74.00	17.11	PK
2	4882	32.96	34.10	10.14	34.20	43.00	54.00	11.00	AV
3	7323	/							
4	9764	/							
5	12205	/							

Note:

- 1, Measuring frequency from 1GHz to 25GHz
- 2, Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
- 2, Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK
- 3, Result = Read level + Antenna factor + cable loss-Amp factor
- 4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

1011	0 COTT	D 1' . 1		TD . 1.
1 (÷H7_	フラ(デロッ	Radiated	Amiccicon	Test result
1 () 1 1 / -	-2.7(1117)	Nauiaicu	CHHOOLOUH	I Cot I Court

EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad

Power: DC 5V From PC with AC 120V/60Hz adapter

Test date: 2013-08-20 Test site: 3m Chamber Tested by: Anna Fan

Test mode: GFSK Tx CH79 2480MHz

Antenna polarity: Vertical

No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss(d B)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960	46.83	34.09	10.13	34.19	56.86	74.00	17.14	PK
2	4960	32.41	34.09	10.13	34.19	42.44	54.00	11.56	AV
3	7440	/							
4	9920	/							
5	12400	/							
Ant	enna Pola	arity: Horizo	ontal						
1	4960	47.05	34.09	10.13	34.19	57.08	74.00	16.92	PK
2	4960	33.91	34.09	10.13	34.19	43.94	54.00	10.06	AV
3	7440	/							
4	9920	/							
5	12400	/							

Note:

- 1, Measuring frequency from 1GHz to 25GHz
- Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
- 2, Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK
- 3, Result = Read level + Antenna factor + cable loss-Amp factor
- 4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

		1GI	Hz—25G	Hz Rad	iated en	nissison Tes	st result			
EU'	Γ: Blueto	oth Keyboa	rd Cover	For Ipa	d	M/N:	For Ipad	-		
Pow	ver: DC 5	V From PC	with AC	120V/6	60Hz ad	lapter				
Test	t date: 20	13-08-20	Test site	e: 3m C	hamber	Tested by	y: Anna F	an		
Test	t mode: 8	-DPSK Tx	CH1 2402	2MHz						
Ant	enna pola	arity: Vertic	al							
No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss(d B)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	
1	4804	46.98	34.08	10.12	34.18	57.00	74.00	17.00	PK	
2	4804	32.54	34.08	10.12	34.18	42.56	54.00	11.44	AV	
3	7206	/								
4	9608	/								
5	12010	/								
Ant	enna Pola	arity: Horiz	ontal							
1	1 4804 47.56 34.08 10.12 34.18 57.58 74.00 16.42 PK									
2	4804	34.17	34.08	10.12	34.18	44.19	54.00	9.81	AV	
3	7206	/								
4	9608	/								

Note:

12010

- 1, Measuring frequency from 1GHz to 25GHz
- 2,Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
- 2,Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK
- 3,Result = Read level + Antenna factor + cable loss-Amp factor
- 4,All the other emissions not reported were too low to read and deemed to comply with FCC limit.

FCC ID: 2AATEFORIPAD

IGHz—25GHz Radiated e	emissison Test result
EUT: Bluetooth Keyboard Cover For Ipad	M/N: For Ipad

Power: DC 5V From PC with AC 120V/60Hz adapter

Test date: 2013-08-20 Test site: 3m Chamber Tested by: Anna Fan

Test mode: 8-DPSK Tx CH40 2441MHz

Antenna polarity: Vertical

AIIU	cima poic	unty. Venue	aı						
No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss(d B)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4882	49.46	34.10	10.14	34.20	59.50	74.00	14.50	PK
2	4882	35.82	34.10	10.14	34.20	45.86	54.00	8.14	AV
3	7323	/							
4	9764	/							
5	12205	/							
Ant	enna Pola	arity: Horizo	ontal						
1	4882	49.14	34.10	10.14	34.20	59.18	74.00	14.82	PK
2	4882	34.32	34.10	10.14	34.20	44.36	54.00	9.64	AV
3	7323	/							
4	9764	/							
5	12205	/							

Note:

- 1, Measuring frequency from 1GHz to 25GHz
- 2, Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
- 2, Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK
- 3, Result = Read level + Antenna factor + cable loss-Amp factor
- 4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

1011	OCCIT	D 1' / 1	• •	TT 4 14
- I (THZ	-20CiHZ	Radiated	emissison	Test result

EUT: Bluetooth Keyboard Cover For Ipad M/N: For Ipad

Power: DC 5V From PC with AC 120V/60Hz adapter

Test date: 2013-08-20 Test site: 3m Chamber Tested by: Anna Fan

Test mode: 8-DPSK Tx CH79 2480MHz

Antenna polarity: Vertical

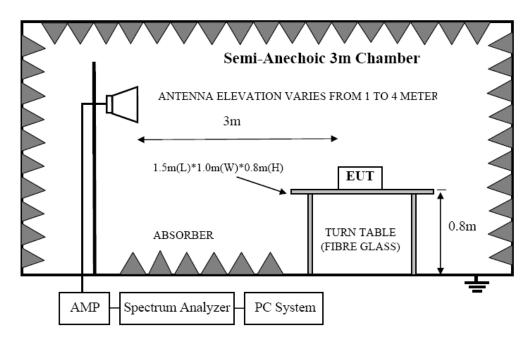
No	Freq (MHz)	Read Level (dBuV/m)	Antenna Factor (dB/m)	Cable loss(d B)	Amp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	4960	48.13	34.09	10.13	34.19	58.16	74.00	15.84	PK
2	4960	33.57	34.09	10.13	34.19	43.60	54.00	10.40	AV
3	7440	/							
4	9920	/							
5	12400	/							
Anten	nna Polari	ty: Horizon	ıtal						
1	4960	47.76	34.09	10.13	34.19	57.79	74.00	16.21	PK
2	4960	33.44	34.09	10.13	34.19	43.47	54.00	10.53	AV
3	7440	/							
4	9920	/							
5	12400	/							

Note:

- 1, Measuring frequency from 1GHz to 25GHz
- 2, Spectrum Set for PK measure: RBW=1MHz, VBW=1MHz, Sweep time=Auto, Detector: PK
- 2, Spectrum Set for AV measure: RBW=1MHz, VBW=10Hz, Sweep time=Auto, Detector: PK
- 3, Result = Read level + Antenna factor + cable loss-Amp factor
- 4, All the other emissions not reported were too low to read and deemed to comply with FCC limit.

9. Band Edge Compliance

9.1. Block Diagram of Test Setup



9.2. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz and 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

9.3. Test Procedure

Same with clause 6.3 except change investigated frequency range from 2310MHz to 2415MHz, 2475MHz to 2500MHz and 5725MHz to 5850MHz

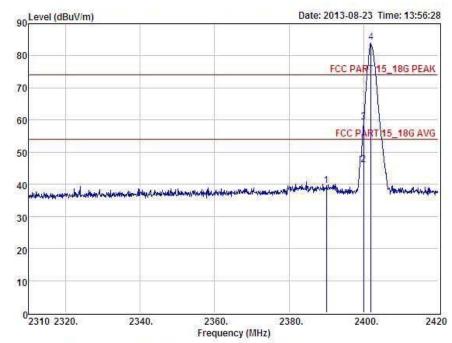
9.4. Test Result

PASS. (See below detailed test data)

GFSK CH LOW:



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POL: HORIZONTAL Condition : FCC PARI 15_18G PEAK 3m

EUT : Bluetooth Keyboard Cover For Ipad : For Ipad

Model No

: GFSK TX 2402MHz Test Mode

Power ; DC 5V From PC with AC 120V/60Hz adapter

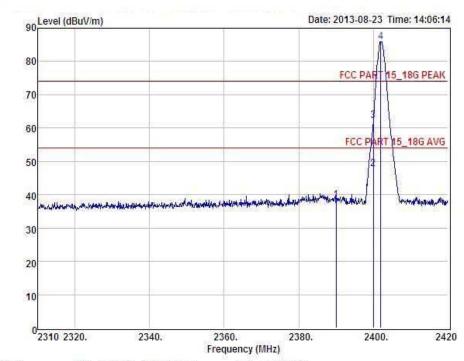
Test Engineer : Anna Remark

Temp Hum

Item	Freq	Read Level	Antenna Factor	Preamp	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	42.95	27.62	34.97	3.92	39.52	74.00	-34.48	Peak
2	2400.00	49.38	27.62	34.97	3.94	45.97	54.00	-8.03	Average
3	2400.00	62.66	27.62	34.97	3.94	59.25	74.00	-14.75	Peak
4	2402.00	87.63	27.62	34.97	3.94	84.22	74.00	10.22	Peak



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: FCC PART 15_18G PEAK 3m Condition POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No

Test Mode

: For Ipad : GFSK IX 2402MHz : DC 5V From PC with AC 120V/60Hz adapter Power

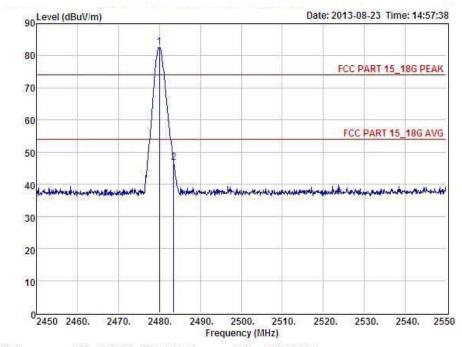
Test Engineer : Anna Remark Temp Hum

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390.00	41.82	27.62	34.97	3.92	38.39	74.00	-35.61	Peak
2	2400.00	51.08	27.62	34.97	3.94	47.67	54.00	-6.33	Average
3	2400.00	65.59	27.62	34.97	3.94	62.18	74.00	-11.82	Peak
4	2402.00	89.26	27.62	34.97	3.94	85.85	74.00	11.85	Peak

CH High:



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: FCC PART 15_18G PEAK 3m Condition POL: HORIZONTAL

: Bluetooth Keyboard Cover For Ipad : For Ipad : GFSK TX 2480MHz EUT

Model No Test Mode

Power : DC 5V From PC with AC 120V/60Hz adapter

Test Engineer : Anna

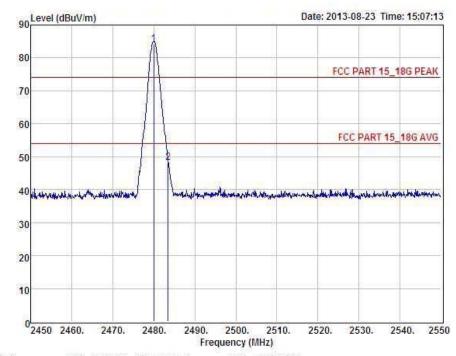
Remark

Temp Hum

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2480.00	86.13	27.59	34.97	4.00	82.75	74.00	8.75	Peak
2	2483.50	50.12	27.59	34.97	4.00	46.74	74.00	-27.26	Peak



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Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad
Test Mode : GFSK TX 2480MHz

Power : DC 5V From PC with AC 120V/60Hz adapter

Test Engineer : Anna Remark :

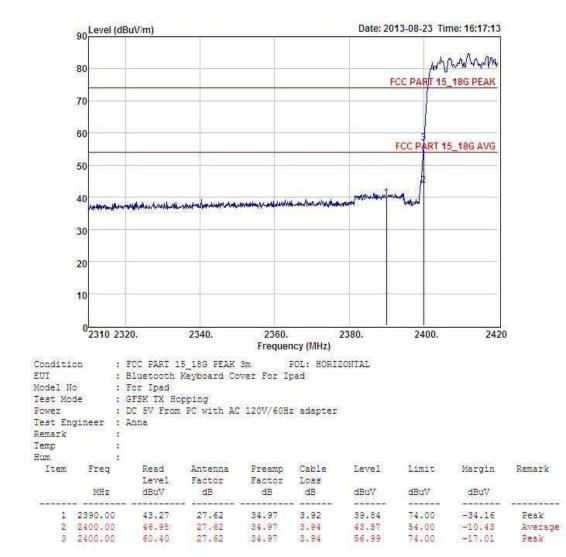
Remark : Temp : Hum :

Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
		Level	Factor	Factor	Loss				
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2480.00	87,61	27.59	34.97	4.00	84.23	74.00	10.23	Peak
2	2483.50	51.54	27.59	34.97	4.00	48.16	74.00	-25.84	Peak

Hopping mode



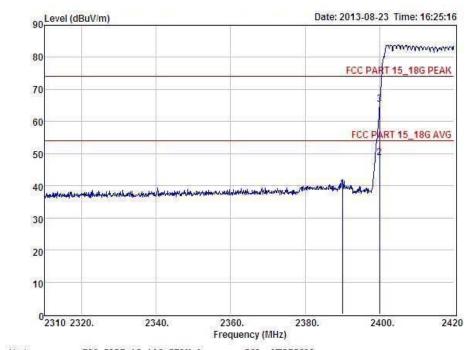
Shenzhen Certification Technology Service Co., Ltd. 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China Tel: 4006786199 FAX: +86-755-26736857 Website http://www.cessz.com/Email: Service@cessz.com/



Remark: Level = Read Level + Antenna Factor - Preamp Factor + Cable Loss



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Website http://www.cessz.com/Email: Service@cessz.com/



Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad
Test Mode : GFSK TX Hopping

Power ; DC 5V From PC with AC 120V/60Hz adapter

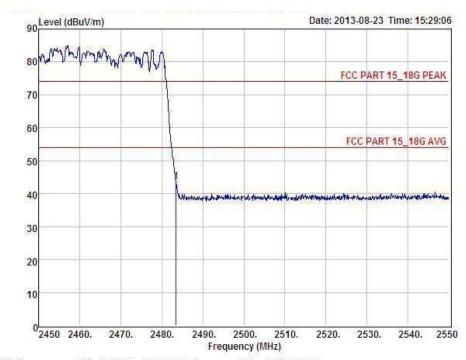
Test Engineer : Anna Remark : Temp :

Hum

Item Freq Read Cable Antenna Preamp Level Limit Margin Remark Factor Loss Level Factor dBuV dBuV MHz dBuV dB dB dB dBuV ______ 8017-10180000-222 800000 42.46 27.62 34.97 3.92 39.03 74.00 -34.97 Peak 1 2390.00 2 2400.00 52.09 27.62 34.97 3.94 48.68 54.00 -5.32 Average 3 2400.00 68.78 27.62 34.97 74.00 -8.63 Peak



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Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad
Test Mode : GFSK TX Hopping

Power : DC SV From PC with AC 120V/60Hz adapter

Test Engineer : Anna

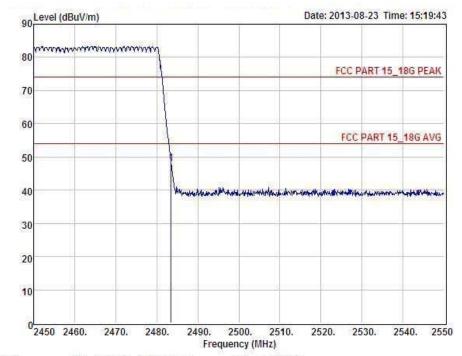
Remark : Temp :

Hum

Item	Freq	Read	Antenna	Preamp	Cable	Leve1	Limit	Margin	Remark
		Level	Factor	Factor	Loss				
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	47.07	27.59	34.97	4.00	43.69	74.00	-30,31	Peak



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Condition : FCC PART 15 18G PEAK 3m POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No

Test Mode

: For Ipad : GFSK TX Hopping : DC 5V From PC with AC 120V/60Hz adapter Power

Test Engineer : Anna Remark Temp

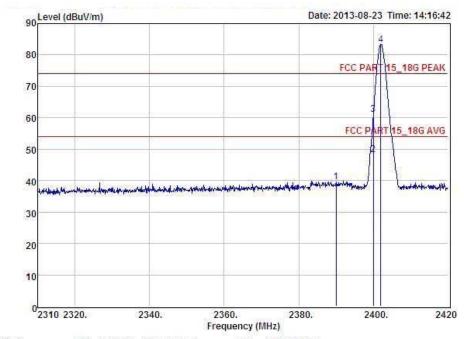
Item Freq Read Antenna Preamp Cable Limit Margin Remark Level Factor Factor Loss Level MHz dBuV dBuV dBuV dBuV dB dB dB 1 2483.50 51.49 27,59 34.97 4.00 48.11 74.00 -25,89 Peak

8-DPSK

CH LOW:



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Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad

Test Mode : DPSK TX 2402MHz

: DC 5V From PC with AC 120V/60Hz adapter Power

Test Engineer : Anna Remark

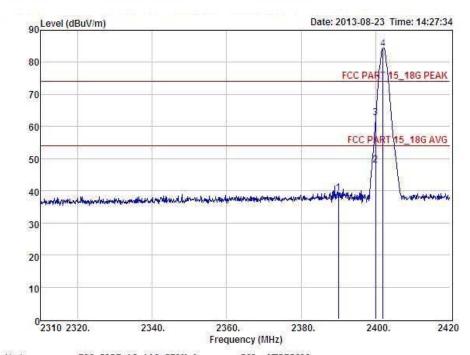
Temp

Hum 100

Item	Freq	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
4:	2390.00	43.05	27.62	34.97	3.92	39.62	74.00	-34.38	Peak
+	2390.00	43.05	21.02	34.9/	3.92	39.02	74.00	-34.30	reak
2	2400.00	51.63	27.62	34.97	3.94	48.22	54.00	-5.78	Average
3	2400.00	64.54	27.62	34.97	3.94	61.13	74.00	-12.87	Peak
4	2402.00	86.71	27.62	34.97	3.94	83.30	74.00	9.30	Peak



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Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad Test Mode : DPSK TX 2402MHz

Power : DC 5V From PC with AC 120V/60Hz adapter

Test Engineer : Anna Remark

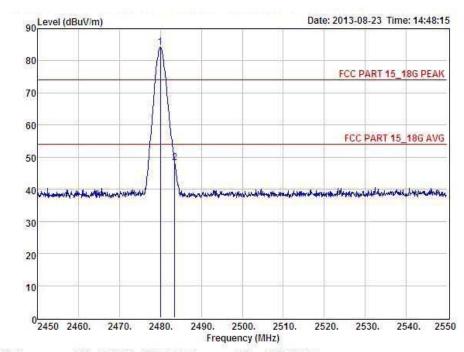
Temp Hum

Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	Level dBuV	Factor dB	Factor	Loss	dBuV	dBuV	dBuV	
		abay			<u>ab</u>		abuv		
1	2390.00	42.72	27.62	34.97	3.92	39.29	74.00	-34.71	Peak
2	2400.00	51.42	27.62	34.97	3.94	48.01	54.00	-5.99	Average
3	2400.00	66.07	27.62	34.97	3.94	62.66	74.00	-11.34	Peak
4	2402.00	87.67	27.62	34.97	3.94	84.26	74.00	10.26	Peak

CH High:



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Condition : FCC PART 15_18G PEAK 3m POL: HORIZONTAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad
Test Mode : DPSK TX 2480MHz

Power : DC 5V From PC with AC 120V/60Hz adapter

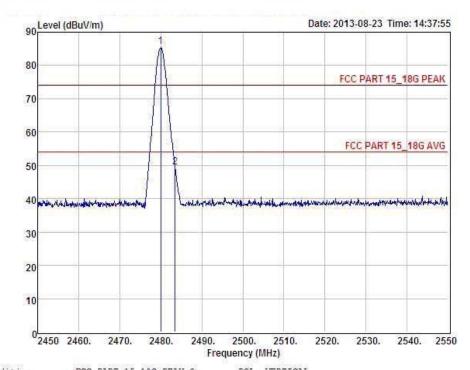
Test Engineer : Anna Remark :

Remark : Temp : Hum :

Item Freq Preamp Cable Level Limit Margin Remark Read Antenna Level Factor Factor Loss dBuV dBuV MHz dBuV dB dB dB dBuV 27,59 1 2480.00 87.48 34.97 84.10 74.00 10.10 Peak 74.00 -25.65 Peak 2 2483.50 51.73 27.59 34.97 4.00 48.35



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Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad : DPSK TX 2480MHz Power : DC 5V From PC with AC 120V/60Hz adapter

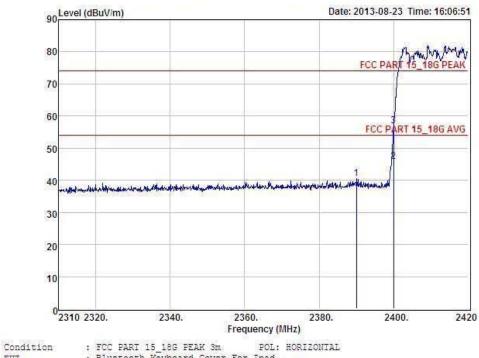
Test Engineer : Anna Remark Temp Hum

Item Freq Antenna Preamp Cable Read Level Limit Margin Remark Level. Factor Factor Loss MHz dBuV dB dB dB dBuV dBuV dBuV Peak 88.93 1 2480.00 27,59 34.97 4.00 85.55 74.00 11.55 74.00 34.97 4.00 27.59 52.79 2 2483.50 49.41 -24.59

Hopping mode:



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: Bluetooth Keyboard Cover For Ipad EUT

Model No : For Ipad Test Mode : DPSK TX Hopping

Power : DC 5V From PC with AC 120V/60Hz adapter

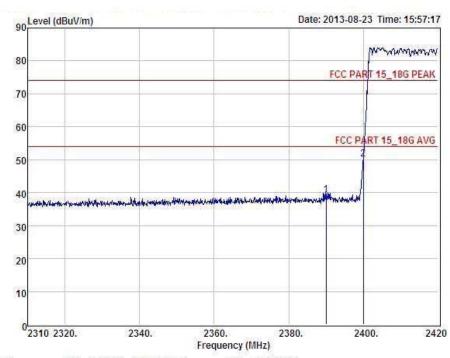
Test Engineer : Anna Remark Temp

Hum

Item	Freq	Read Level	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390,00	43.91	27.62	34.97	3.92	40.48	74.00	-33.52	Peak
2	2400.00	49.31	27.62	34.97	3.94	45.90	54.00	-8.10	Average
3	2400.00	60.28	27.62	34.97	3.94	56.87	74.00	-17.13	Peak



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Condition : FCC PART 15_18G PEAK 3m POL: VERTICAL

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad
Test Mode : DPSK TX Hopping

Power : DC SV From PC with AC 120V/60Hz adapter

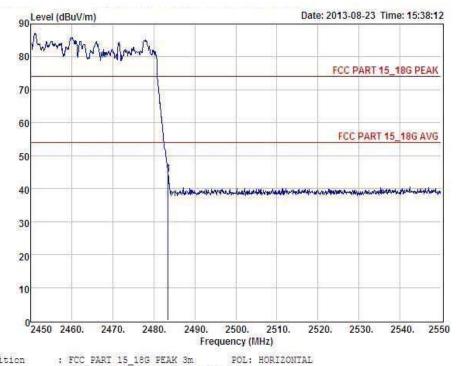
Test Engineer : Anna

Remark : Temp : Hum :

Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
		Level	Factor	Factor	Loss				
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2390,00	42.86	27.62	34.97	3.92	39.43	74.00	-34.57	Peak
2	2400.00	53.60	27.62	34.97	3.94	50.19	74.00	-23.81	Peak



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Condition

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad : DPSK TX Hopping Test Mode

Power ; DC 5V From PC with AC 120V/60Hz adapter

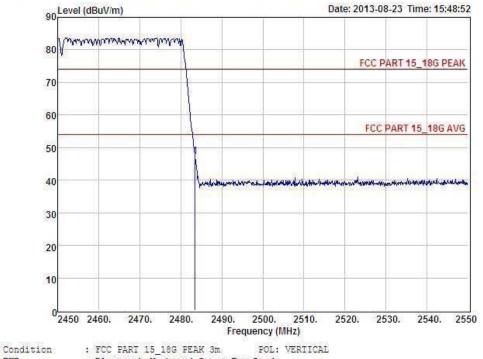
Test Engineer : Anna

Remark Temp Hum

Item	Freq	Read	Antenna	Preamp	Cable	Level	Limit	Margin	Remark
		Level	Factor	Factor	Loss				
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	47.77	27.59	34.97	4.00	44.39	74.00	-29.61	Peak



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: Bluetooth Keyboard Cover For Ipad : For Ipad EUT

Model No Test Mode : DPSK TX Hopping

Power : DC 5V From PC with AC 120V/60Hz adapter

Test Engineer : Anna

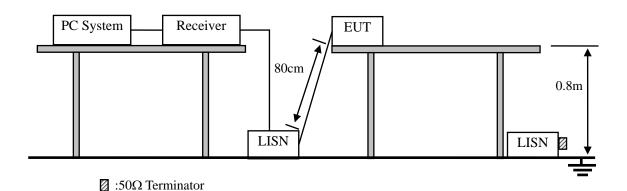
Remark

Temp Hum

ltem	rreq	Kead Level	Antenna Factor	Factor	Loss	Level	Limit	Margin	Kemark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	2483.50	50,73	27.59	34.97	4.00	47.35	74.00	-26,65	Peak

10. Power Line Conducted Emissions

10.1.Block Diagram of Test Setup



10.2.Limit

	Maximum RF Line Voltage					
Frequency	Quasi-Peak Level	Average Level				
	$dB(\mu V)$	$dB(\mu V)$				
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*				
500kHz ~ 5MHz	56	46				
5MHz ~ 30MHz	60	50				

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

10.3. Test Procedure

- (1) The EUT was placed on a non-metallic table, 80cm above the ground plane.
- (2) Setup the EUT and simulator as shown in 10.1
- (3) The EUT Power connected to the power mains through a power adapter and a line impedance stabilization network (L.I.S.N1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N2), this provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4 2003 on conducted Emission test.
- (4) The bandwidth of test receiver is set at 10KHz.
- (5) The frequency range from 150 KHz to 30MHz is checked.

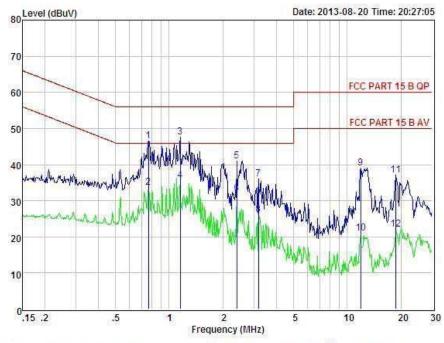
10.4. Test Result

PASS. (See below detailed test data)

FCC ID: 2AATEFORIPAD



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2F, Building B, East Area of Nanchang Second Industrial Zone,
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Website: http://www.cessz.com/Email:Service@cessz.com/



Condition : FCC PART 15 B QP POL: LINE Temp:24 °C Hum:56 %

EUT : Bluetooth Keyboard Cover For Ipad

Model No : For Ipad Test Mode : Link Mode

Power : DC 5V From PC with AC 120V/60Hz adapter

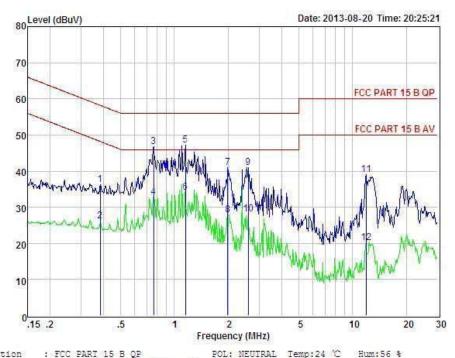
Test Engineer: Anna Remark :

It	em	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
		MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
257703		0.767	36.75	0.04	-9.71	0.10	46.60	56.00	-9.40	QP
	2	0.767	23,75	0.04	-9.71	0.10	33.60	46.00	-12.40	Average
	3	1.153	37.73	0.04	-9.71	0.10	47.58	56.00	-8.42	QP
2	1	1.153	25.73	0.04	-9.71	0.10	35.58	46.00	-10.42	Average
	5	2.396	31.09	0.06	-9.70	0.11	40.96	56.00	-15.04	QP
	5	2.396	22.09	0.06	-9.70	0.11	31.96	46.00	-14.04	Average
1	7	3.173	26.25	0.07	-9.69	0.12	36.13	56.00	-19.87	QP
8	3	3.173	16.25	0.07	-9.69	0.12	26.13	46.00	-19.87	Average
9	1	1.933	29.16	0.26	-9.47	0.22	39,11	60.00	-20.89	QP
10	1	1.933	11,16	0.26	-9,47	0.22	21.11	50.00	-28.89	Average
1:	1	8.820	26.99	0.30	-9.46	0.33	37.08	60.00	-22.92	QP
12	1	8.820	11.99	0.30	-9.46	0.33	22.08	50.00	-27.92	Average

Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss



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Condition

EUT : Bluetooth Keyboard Cover For Ipad

: For Ipad Model No Test Mode

: Link Mode : DC 5V From PC with AC 120V/60Hz adapter Power

Test Engineer: Anna Remark

Item	Freq	Read	LISN Factor	Preamp Factor	Cable Lose	Level	Limit	Margin	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dBuV	
1	0.384	26.41	0.03	-9.72	0.10	36.26	58.20	-21.94	QP
2	0.384	16,41	0.03	-9,72	0.10	26.26	48.20	-21.94	Average
3	0.767	37.00	0.04	-9.71	0.10	46.85	56.00	-9.15	QP
4	0.767	23.00	0.04	-9.71	0.10	32.85	46.00	-13.15	Average
5	1.153	37.33	0.04	-9.71	0.10	47.18	56.00	-8.82	QP
6	1.153	24.33	0.04	-9.71	0.10	34.18	46.00	-11.82	Average
7	1.993	31.05	0.06	-9.70	0.10	40.91	56.00	-15.09	QP
8	1.993	18.05	0.06	-9.70	0.10	27.91	46.00	-18.09	Average
9	2.600	31.17	0.06	-9.70	0.11	41.04	56.00	-14.96	QP
10	2.600	18,17	0.06	-9,70	0.11	28,04	46.00	-17.96	Average
11	11.977	29.13	0.26	-9.46	0.22	39.07	60.00	-20.93	QP
12	11.977	10.13	0.26	-9.46	0.22	20.07	50.00	-29.93	Average

Remarks: Level = Read + LISN Factor - Preamp Factor + Cable loss

-1-

Note: If QP Result comply with AV limit, AV Result is deemed to comply with AV limit

11. Antenna Requirements

11.1.Limit

For intentional device, according to FCC 47 CFR Section 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. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2.Result

The antennas used for this product are PCB Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 0dBi.

FCC ID: 2AATEFORIPAD Page 60 of 71

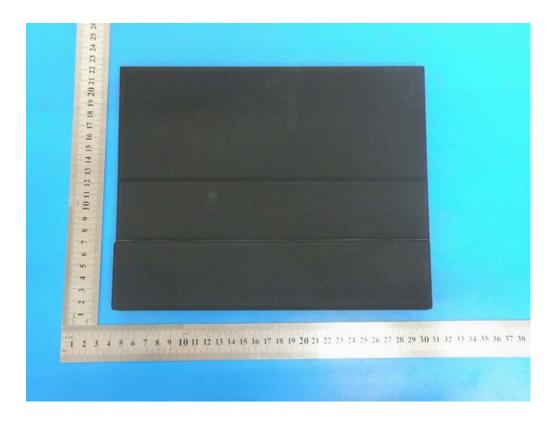
12. Test setup photo

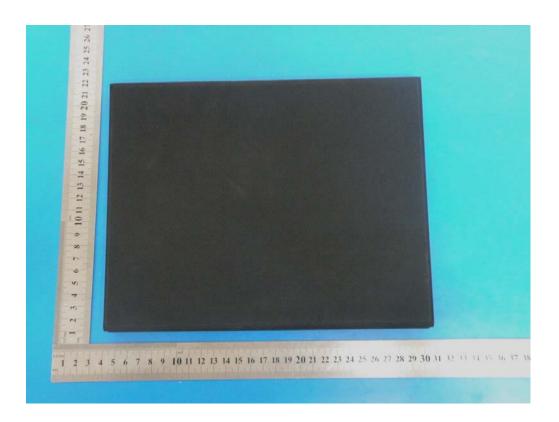


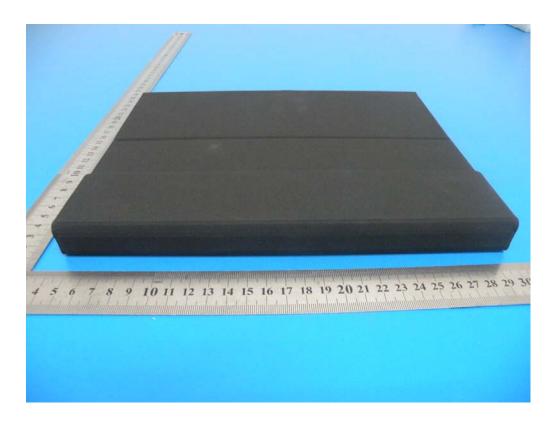


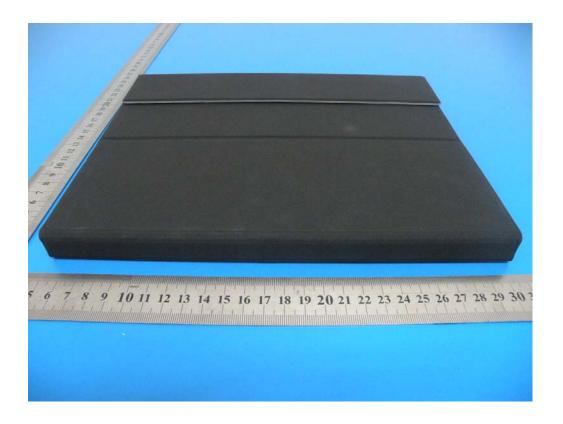


13. Photos of EUT



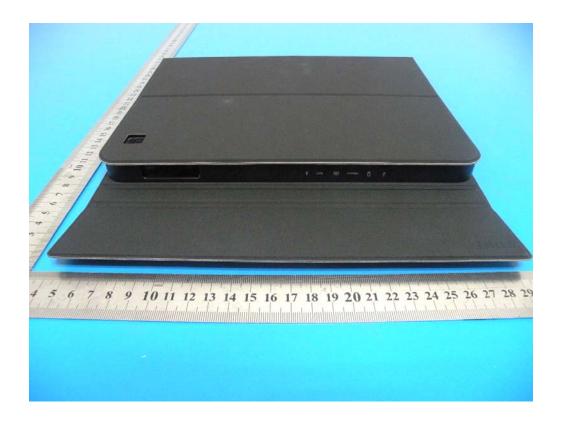








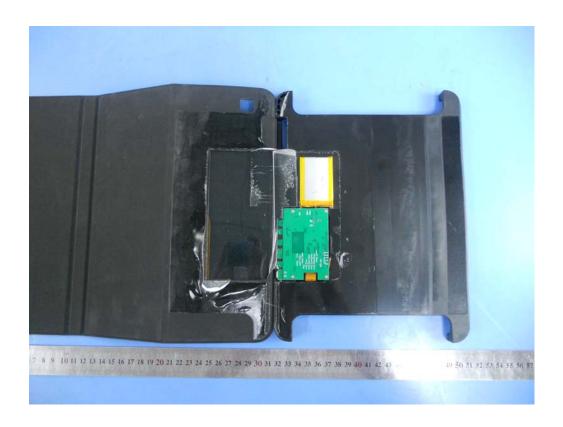




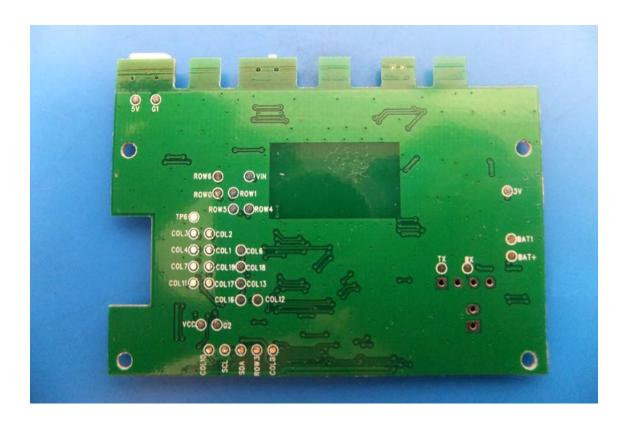


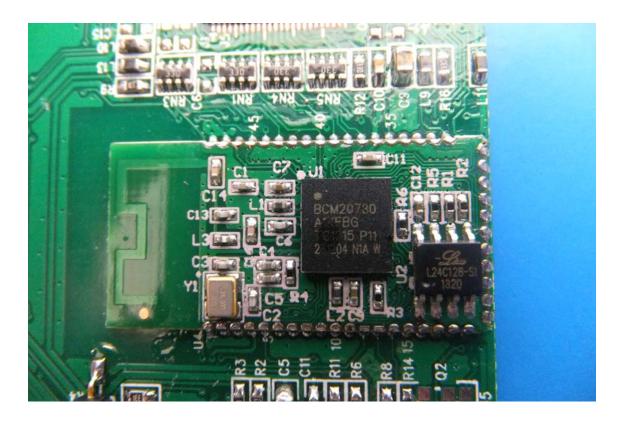


















END OF THE REPORT