FCC Test Report

Report No.: AGC00006130601FE03

FCC ID	:	ZDB-BRK5200
APPLICATION PURPOSE	:	Class II Permissive Change
PRODUCT DESIGNATION	:	iPad Grip Case with Bluetooth Keyboard
BRAND NAME	:	N/A
MODEL NAME	:	BRK8800,ITIP-8800
CLIENT	:	Tianyu Technology Co., Ltd
DATE OF ISSUE	:	June 13,2013
STANDARD(S)	:	FCC Part 15 Rules
REPORT VERSION	:	V 1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	June 13,2013	Valid	Extension Report

Product Change Record

This is a variant report based on model BRK5200. The new product model is BRK8800. Two Models all the same except for keyboard layout, PCB size and appearance. But Bluetooth Module no any change. The original report can be referred to AGC02Y130301-1F2. Only Radiated Emission, Edges and Conduction Emission were verified for the differences based on the original product.

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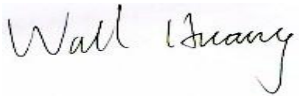
1. VERIFICATION OF COMPLIANCE

Applicant	Tianyu Technology Co., Ltd
Address	No 5, 3rd Beian Road, HuangJiang Town, Donguan City, China
Manufacturer	Tianyu Technology Co., Ltd
Address	No 5, 3rd Beian Road, HuangJiang Town, Donguan City, China
Product Designation	iPad Grip Case with Bluetooth Keyboard
Brand Name	N/A
Test Model	BRK8800
Series Model	ITIP-8800
Difference description	All the same except for the model name.
Date of test	June 7,2013 to June 8,2013
Deviation	None
Condition of Test Sample	Normal

WE HEREBY CERTIFY THAT:

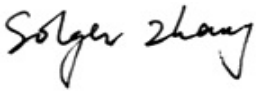
The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Prepared By 

Wall Huang June 13,2013

Checked By 

Forrest Lei June 13,2013

Authorized By 

Solger Zhang June 13,2013

2. GENERAL INFORMATION

2.1 PRODUCT DESCRIPTION

The EUT is “iPad Grip Case with Bluetooth Keyboard” designed as a “Communication Device”. It is designed by way of utilizing the FHSS technology to achieve the system operation.

A major technical description of EUT is described as following:

Operation Frequency	2.402 GHz to 2.480GHz
Bluetooth Version	V 3.0
Modulation	GFSK, π /4-DQPSK, 8DPSK
Number of channels	79
Antenna Designation	Integrated Antenna
Antenna Gain	0.8dBi
Hardware Version	N/A
Software Version	N/A
Power Supply	DC 3.7V by Built-in Li-ion Battery

Note: *The USB port is only used to charging.*

2.2 TABLE OF CARRIER FREQUENCYS

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	0	2402MHZ
	1	2403MHZ
	:	:
	38	2440 MHZ
	39	2441 MHZ
	40	2442 MHZ
	:	:
	77	2479 MHZ
	78	2480 MHZ

2.3 RECEIVER INPUT BANDWIDTH

The input bandwidth of the receiver is 1.3 MHz. In every connection one Bluetooth device is the master and the other one is slave. The master determines the hopping sequence. The slave follows this sequence. Both devices shift between RX and TX time slot according to the clock of the master. Additionally the type of connection (e.g. single of multisport (packet) is set up at the beginning of the connection. The master adapts its hopping frequency and its TX/RX timing according to the packet type of the connection. Also the slave of the connection will use these settings.

Repeating of a packet has no influence on the hopping sequence. The hopping sequence generated by the master of the connection will be followed in any case. That means, a repeated packet will not be send on the same frequency, it is send on the next frequency of the hopping sequence.

2.4 EXAMPLE OF A HOPPING SEQUENCY IN DATA MODE

Example of a 79 hopping sequence in data mode:
40,21,44,23,42,53,46,55,48,33,52,35,50,65,54,67
56,37,60,39,58,69,62,71,64,25,68,27,66,57,70,59
72,29,76,31,74,61,78,63,01,41,05,43,03,73,07,75
09,45,13,47,11,77,15,00,64,49,66,53,68,02,70,06
01, 51,03,55,05,04

2.5 EQUALLY AVERAGE USE OF FREQUENCIES AND BEHAVIOUR

The generation of the hopping sequence in connection mode depends essentially on two input values:
1 LAP/UAP of the master of the connection
2 Internal master clock
The LAP(lower address part) are the 24 LSB's of the 48 BD_ADDRESS. The BD_ADDRESS is an unambiguous number of every Bluetooth unit. The UAP(upper address part) are the 24MSB's of the 48BD_ADDRESS
The internal clock of a Bluetooth unit is derived from a free running clock which is never adjusted and Is never turned off. For synchronization with other units only offset are used. It has no relation to the time Of the day. Its resolution is at least half the RX/TX slot length of 312.5us.The clock has a cycle of about One day(23h30).In most case it is implemented as 28 bit counter. For the deriving of the hopping sequence the entire.
LAP(24 bits),4LSB's(4bits)(Input 1) and the 27MSB's of the clock(Input 2) are used. With this input values different mathematical procedures(permutations, additions, XOR-operations)are performed to generate te Sequence. This will be done at the beginning of every new transmission.
Regarding short transmissions the Bluetooth system has the following behavior:
The first connection between the two devices is established, a hopping sequence was generated. For Transmitting the wanted data the complete hopping sequence was not used. The connection ended.
The second connection will be established. A new hopping sequence is generated. Due to the fact the Bluetooth clock has a different value, because the period between the two transmission is longer(and it Cannot be shorter)than the minimum resolution of the clock(312.5us).The hopping sequence will always Differ from the first one.

2.6 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: ZDB-BRK5200**, filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.

2.7 TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (2003). Radiated testing was performed at an antenna to EUT distance 3 meters.

2.8 MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

- Uncertainty of Conducted Emission, Uc = ±2.75dB
- Uncertainty of Radiated Emission, Uc = ±3.2dB

2.9 TEST FACILITY

All measurement facilities used to collect the measurement data are located at
Attestation of Global Compliance(Shenzhen) Co., Ltd.
2/F., Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003.
FCC register No.: 259865

2.10 SPECIAL ACCESSORIES

Refer to section 2.2.

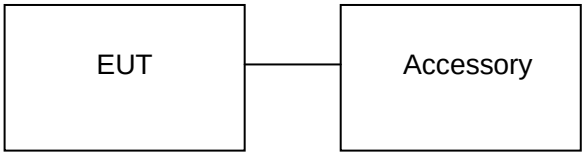
2.11 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

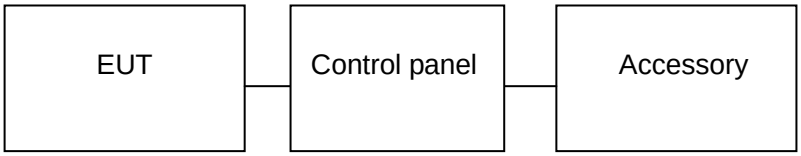
3. SYSTEM TEST CONFIGURATION

3.1 CONFIGURATION OF TESTED SYSTEM

Configuration 1: (Normal Hopping)



Configuration 2: (control continuous TX through PC)



3.2 EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Mfr/Brand	Model/Type No.	Remark
1	iPad Grip Case with Bluetooth Keyboard	N/A	BRK8800	EUT
2	PC	Dell	INSPIRON	A.E

4. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.209	Radiated Emission	Compliant
§15.247	Band Edges	Compliant
§15.207	Conduction Emission	Compliant

5. DESCRIPTION OF TEST MODES

TEST MODE DESCRIPTION		
NO.	**TEST MODE DESCRIPTION**	**WORST**
1	Low channel TX	
2	Middle channel TX	
3	High channel TX	
4	Normal Hopping	V

Note:
1. V means EMI worst mode.
2. All the test modes can be supply by Built-in Li-ion battery and adapter, only the result of the worst case was recorded in the report, if no other cases.
3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.

6. RADIATED EMISSION

6.1 MEASUREMENT PROCEDURE

1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.

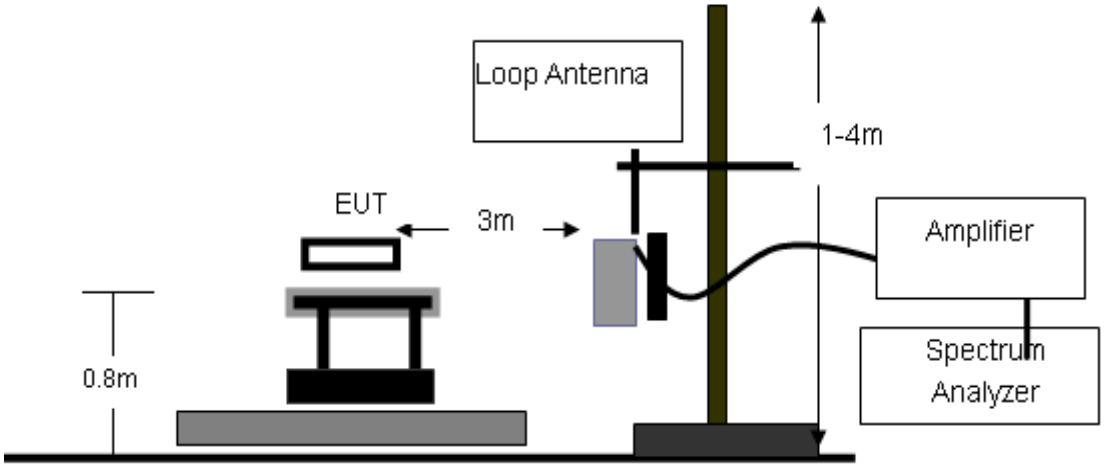
The following table is the setting of spectrum analyzer and receiver.'

Spectrum Parameter	Setting
Start Frequency	1GHz
Stop Frequency	26.5GHz
RB/VB(Emission in restricted band)	1MHz/1MHz for Peak, 1MHz/10Hz for Average
RB/VB(Emission in non-restricted band)	1MHz/1MHz for Peak

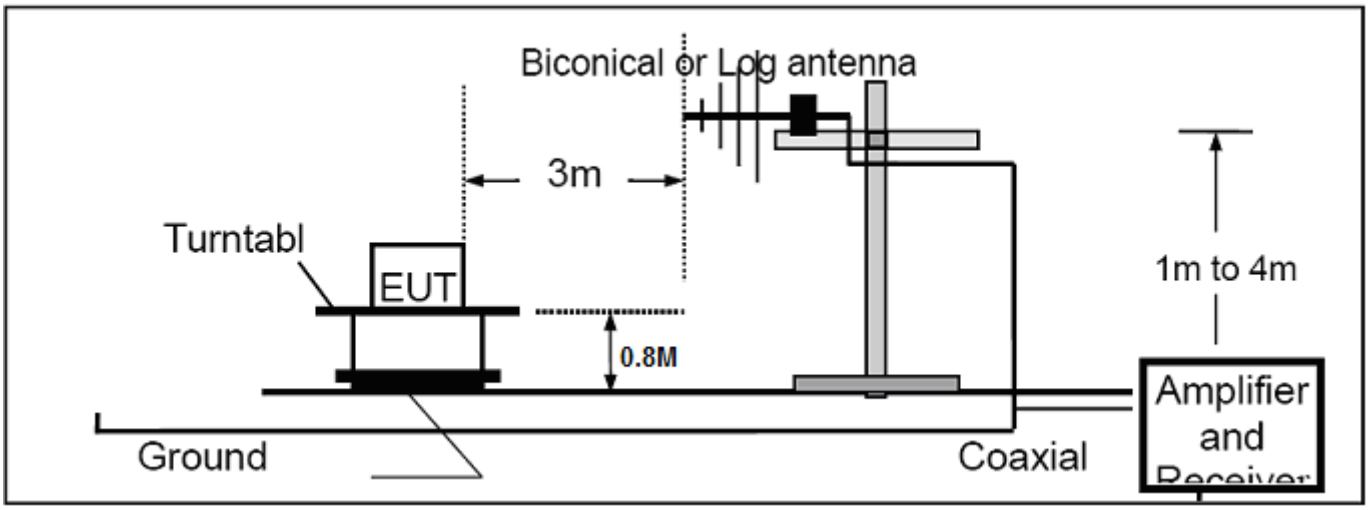
Receiver Parameter	Setting
Start ~Stop Frequency	9KHz~150KHz/RB 200Hz for QP
Start ~Stop Frequency	150KHz~30MHz/RB 9KHz for QP
Start ~Stop Frequency	30MHz~1000MHz/RB 120KHz for QP

6.2 TEST SETUP

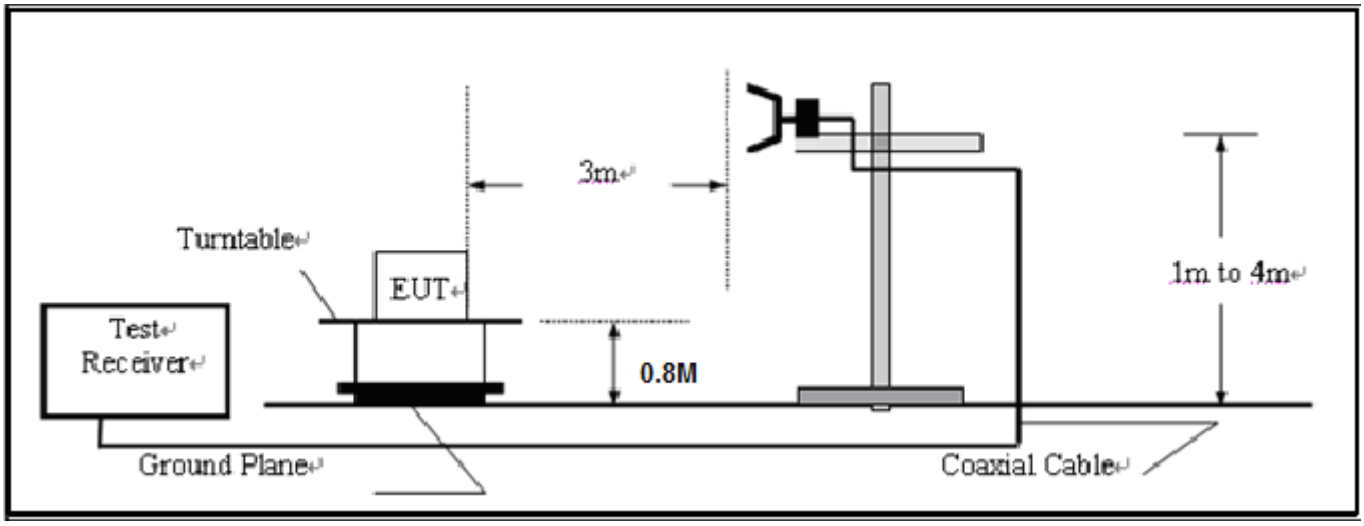
RADIATED EMISSION TEST SETUP BELOW 30MHz



RADIATED EMISSION TEST SETUP 30MHz-1000MHz



RADIATED EMISSION TEST SETUP ABOVE 1000MHz



6.3 TEST EQUIMENT LIST

Description	Manufacturer	Model	SERIAL NUMBER	Cal. Date	Cal. Due
Spectrum Analyzer	Agilent	E4440A	US41421290	07/18/2012	07/17/2013
Amplifier	EM	EM30180	0607030	02/28/2013	02/27/2014
Horn Antenna	EM	EM-AH-10180	67	04/21/2013	04/20/2014
Horn Antenna	A.H. Systems Inc.	SAS-574	--	07/18/2012	07/17/2013
EMI Test Receiver	Rohde & Schwarz	ESCI	100694	07/18/2012	07/17/2013
Biological Antenna	A.H. Systems Inc.	SAS-521-4	28	06/08/2012	06/07/2013
Biological Antenna	A.H. Systems Inc.	SAS-521-4	28	06/08/2013	06/07/2014

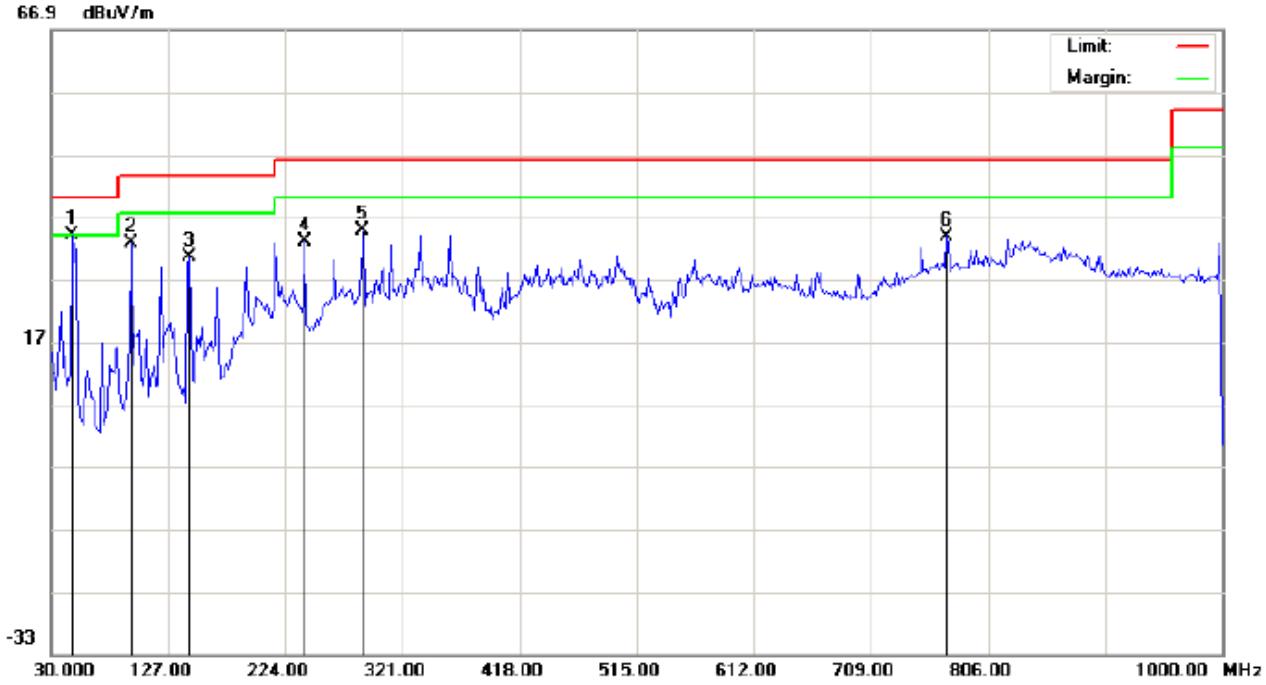
6.4 TEST RESULT

THE WORST CASE IS NORMAL HOPPING MODE.

RADIATED EMISSION BELOW 30MHZ

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

RADIATED EMISSION BELOW 1GHZ

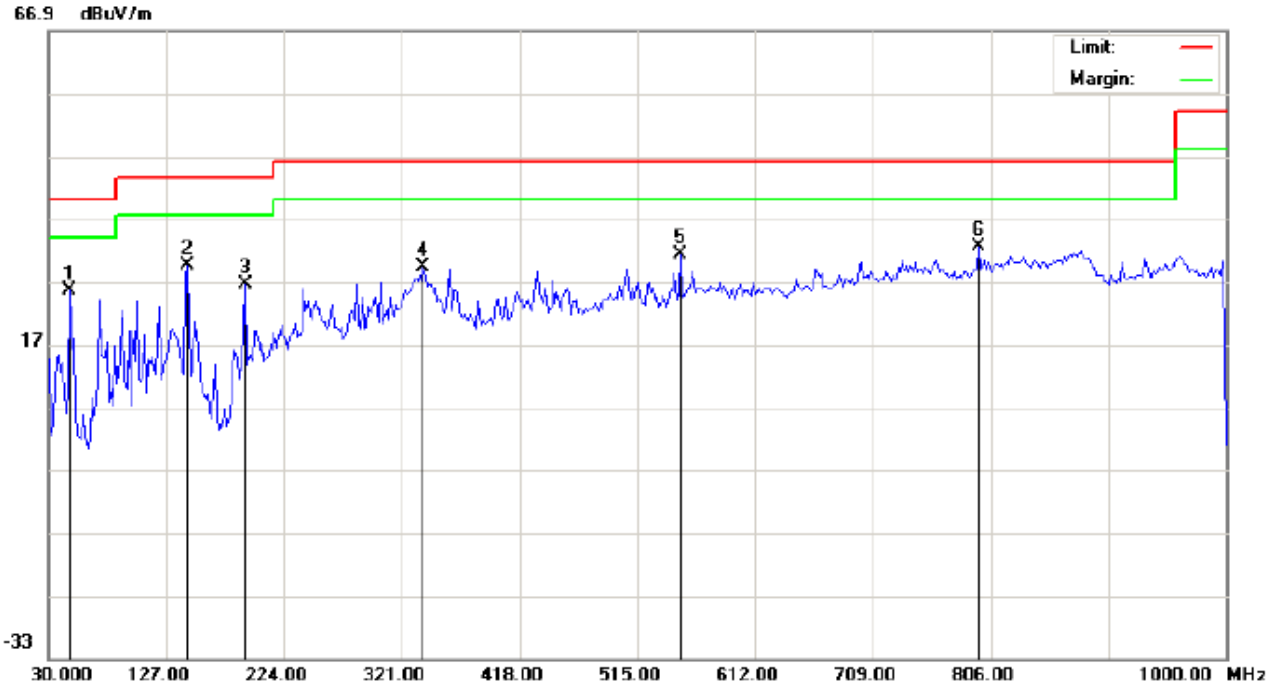


Site: site #1
Limit: FCC Class B 3M Radiation
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Normal Hopping
Note:

Polarization: *Horizontal*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	47.7833	31.60	2.35	33.95	40.00	-6.05	peak			
2		96.2833	22.21	10.51	32.72	43.50	-10.78	peak			
3		144.7833	25.00	5.52	30.52	43.50	-12.98	peak			
4		240.1667	22.92	10.18	33.10	46.00	-12.90	peak			
5		288.6666	17.34	17.46	34.80	46.00	-11.20	peak			
6		772.0500	5.04	28.86	33.90	46.00	-12.10	peak			



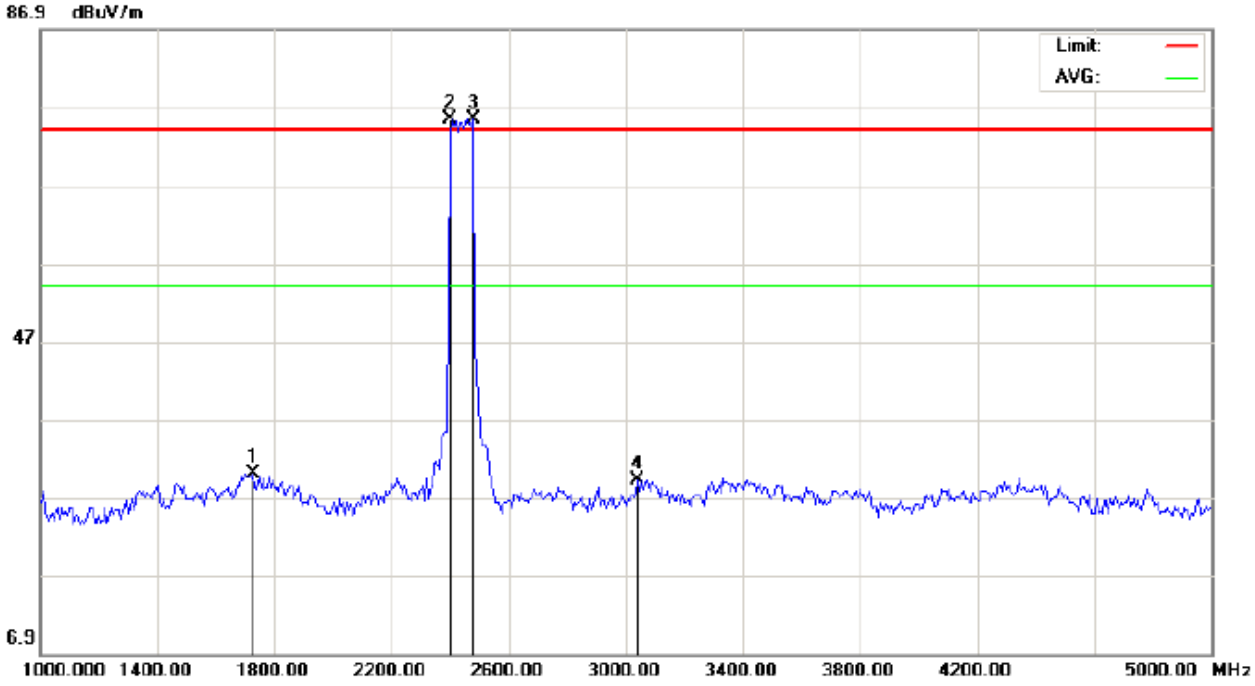
Site: site #1
Limit: FCC Class B 3M Radiation
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Normal Hopping
Note:

Polarization: *Vertical*
Power:
Distance:

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		47.7833	21.47	4.04	25.51	40.00	-14.49	peak			
2		144.7833	23.96	5.47	29.43	43.50	-14.07	peak			
3		191.6667	19.37	7.06	26.43	43.50	-17.07	peak			
4		338.7833	9.07	20.21	29.28	46.00	-16.72	peak			
5		550.5667	7.83	23.45	31.28	46.00	-14.72	peak			
6	*	796.3000	3.54	29.09	32.63	46.00	-13.37	peak			

RADIATED EMISSION ABOVE 1GHZ (1-10th Harmonics)

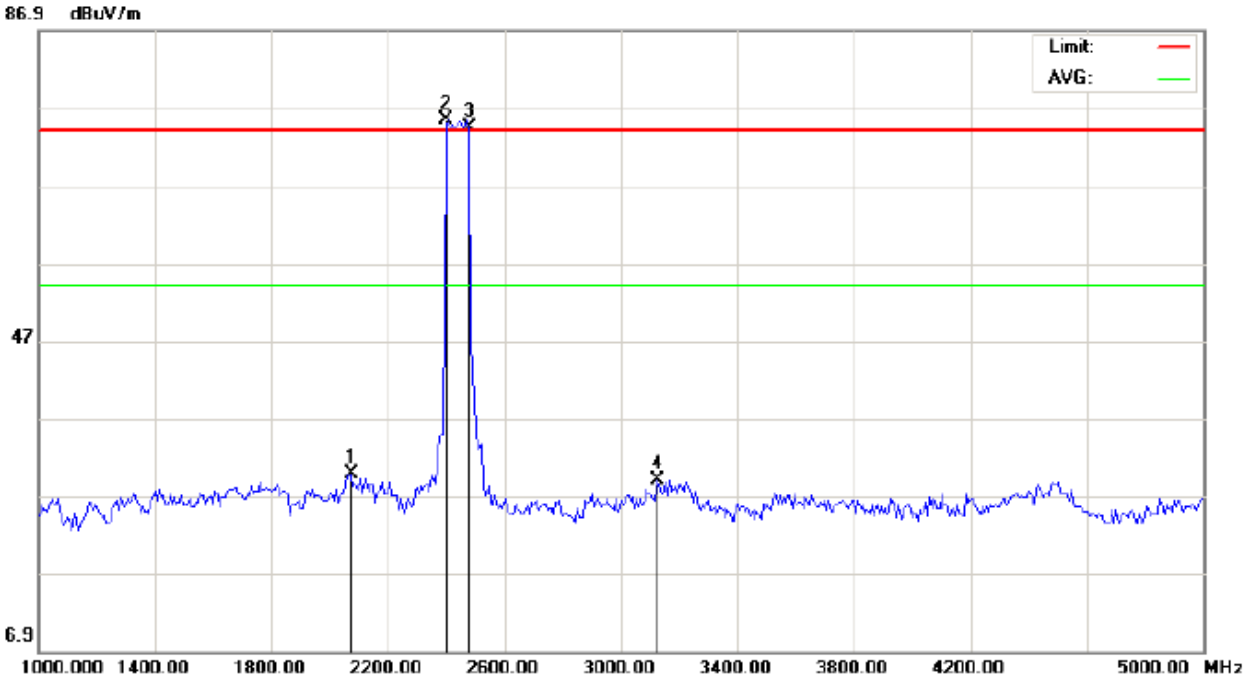


Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Normal Hopping
Note:

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		1726.667	40.34	-10.27	30.07	74.00	-43.93	peak			
2	*	2402.000	83.71	-8.39	75.32	74.00	1.32	peak			
3	X	2480.000	83.39	-8.08	75.31	74.00	1.31	peak			
4		3040.000	37.92	-8.66	29.26	74.00	-44.74	peak			



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Normal Hopping
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2073.333	39.51	-9.71	29.80	74.00	-44.20	peak			
2	*	2402.000	83.71	-8.39	75.32	74.00	1.32	peak			
3	X	2480.000	82.39	-8.08	74.31	74.00	0.31	peak			
4		3126.667	37.53	-8.46	29.07	74.00	-44.93	peak			

***Note:** 5~25GHz at least have 20dB margin. No recording in the test report.*
Factor=Antenna Factor+ Cable loss-Amplifier gain, Over=Measurement-Limit.

7. BAND EDGES EMISSION

7.1 MEASUREMENT PROCEDURE

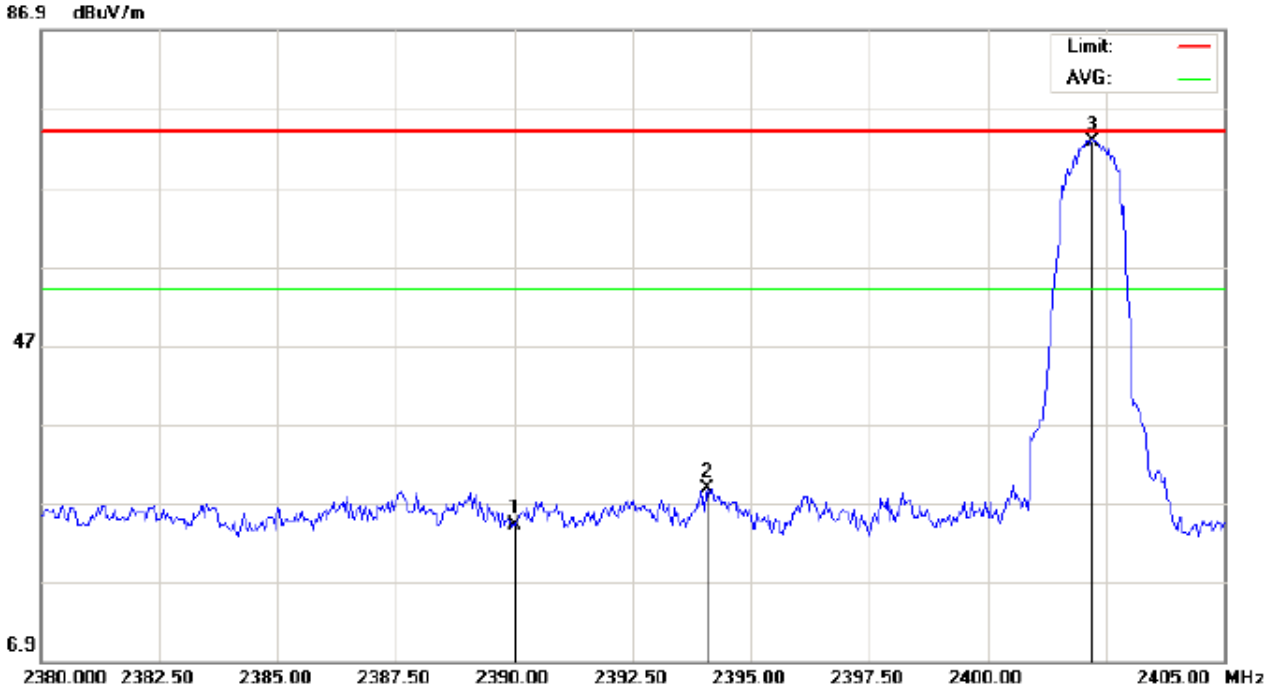
1, Set the EUT Work on the top, the bottom operation frequency individually.
2. Set SPA Start or Stop Frequency = Operation Frequency, RBW>=1%span, VBW>=RBW
3. The band edges was measured and recorded.

7.2 TEST SET-UP

The same as described in section 5.2

7.3 TEST RESULT

TEST PLOT OF BAND EDGE FOR LOW CHANNEL (3Mbps)

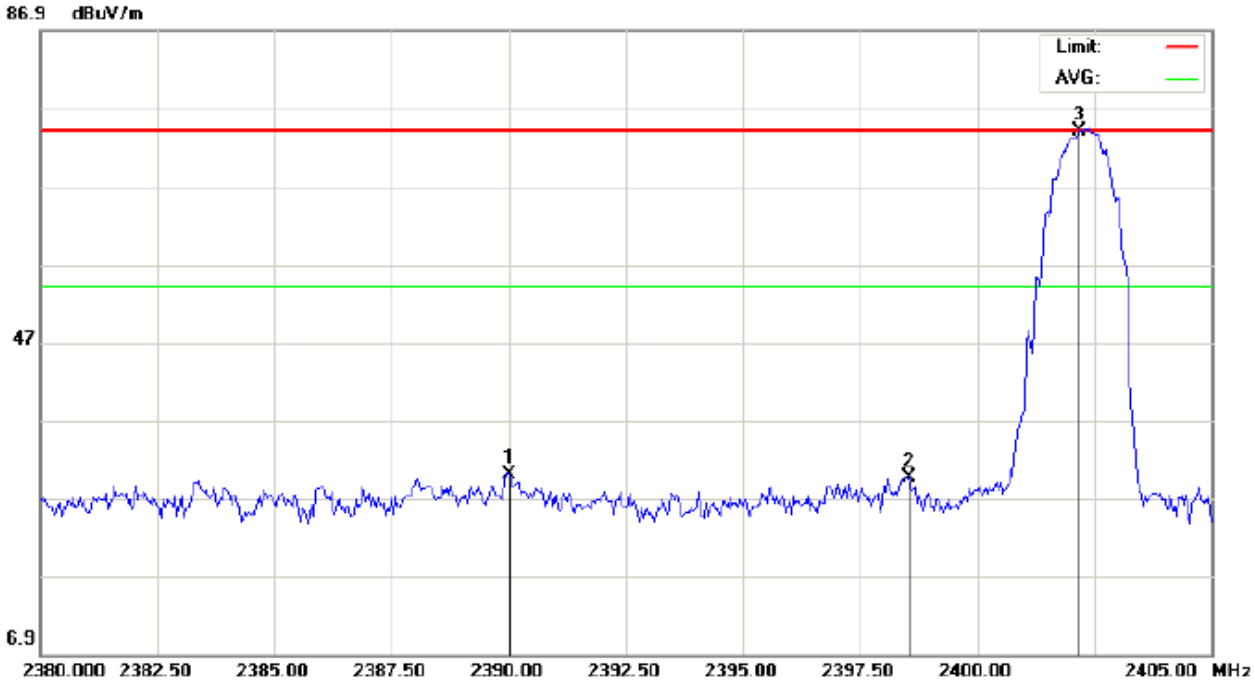


Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Low Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2390.000	32.68	-8.44	24.24	74.00	-49.76	peak			
2		2394.083	37.21	-8.42	28.79	74.00	-45.21	peak			
3	*	2402.210	81.17	-8.39	72.78	74.00	-1.22	peak			



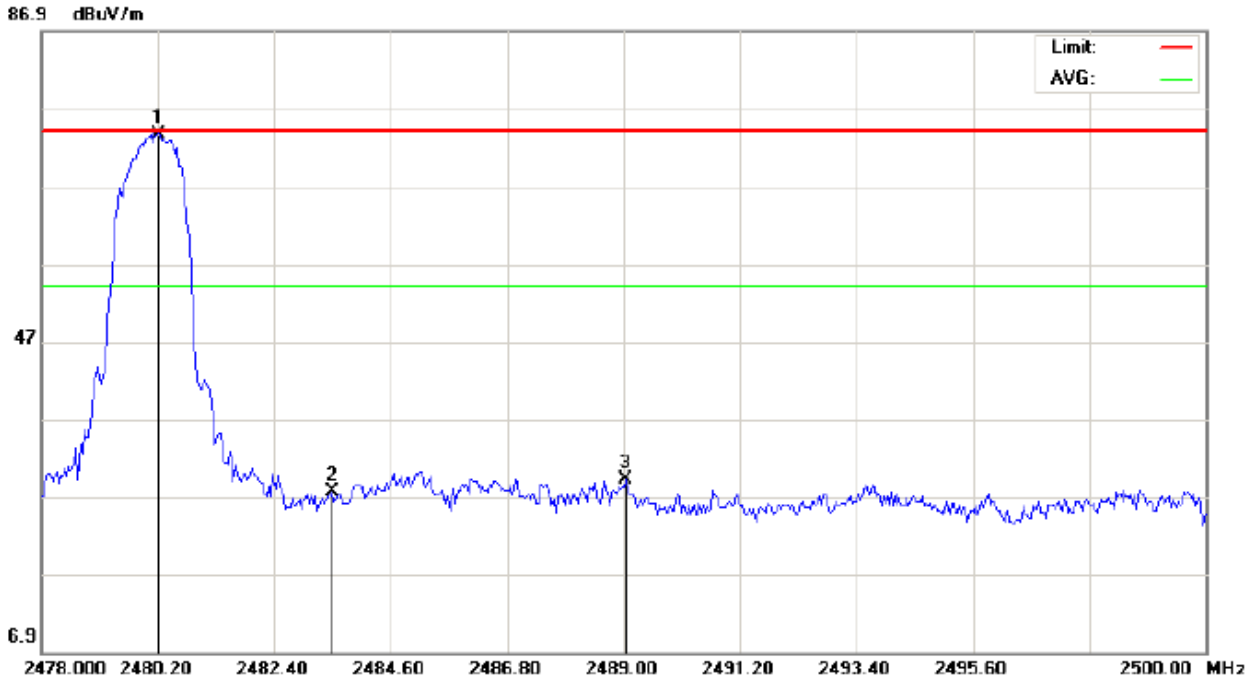
Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Low Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	.	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		2390.000	38.49	-8.44	30.05	74.00	-43.95	peak			
2		2398.542	38.11	-8.41	29.70	74.00	-44.30	peak			
3	*	2402.200	82.36	-8.39	73.97	74.00	-0.03	peak			

TEST PLOT OF BAND EDGE FOR HIGH CHANNEL (3Mbps)

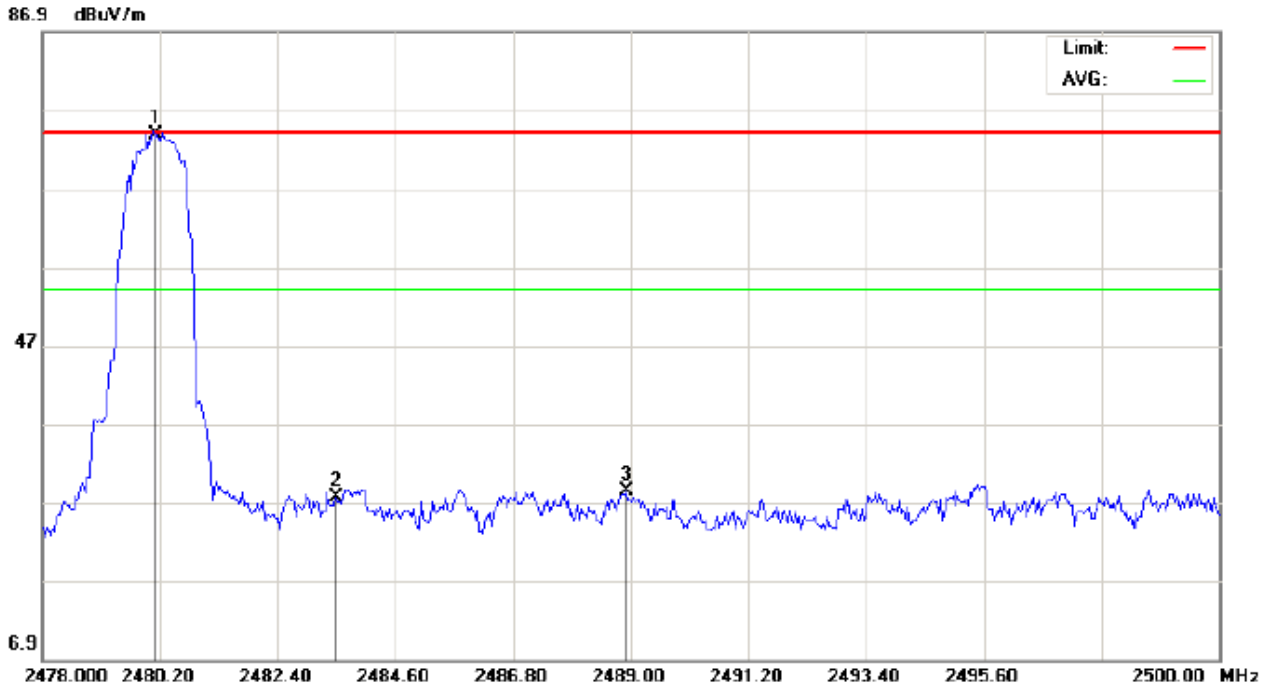


Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: High Channel TX
Note:

Polarization: *Horizontal*
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk.	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.200	81.73	-8.08	73.65	74.00	-0.35	peak			
2		2483.500	35.74	-8.07	27.67	74.00	-46.33	peak			
3		2489.037	37.31	-8.04	29.27	74.00	-44.73	peak			



Site: site #1
Limit: FCC Class B 3M Radiation above 1GHZ(PK)
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: High Channel TX
Note:

Polarization: *Vertical*
Power:
Distance: 3m

Temperature: 26
Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
	-	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1	*	2480.140	81.92	-8.08	73.84	74.00	-0.16	peak			
2		2483.500	35.61	-8.07	27.54	74.00	-46.46	peak			
3		2488.927	36.53	-8.04	28.49	74.00	-45.51	peak			

8. FCC LINE CONDUCTED EMISSION TEST

8.1 LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

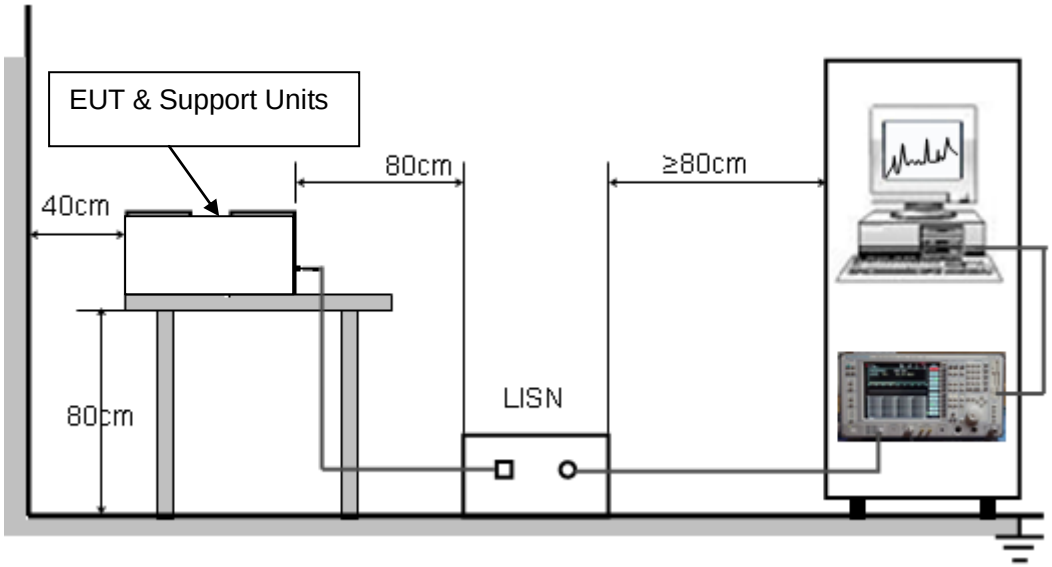
Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

8.2 TEST EQUIMENT LIST

Description	Manufacturer	Model	SERIAL NUMBER	Cal. Date	Cal. Due
EMI Test Receiver	Rohde & Schwarz	ESCI	100694	07/18/2012	07/17/2013
LISN	R&S	ESH3-Z5	N/A	07/18/2012	07/17/2013

8.3 BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



8.4 PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2. Support equipment, if needed, was placed as per ANSI C63.4.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
4. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received charging voltage by PC which received 120V/60Hzpower by a LISN..
6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

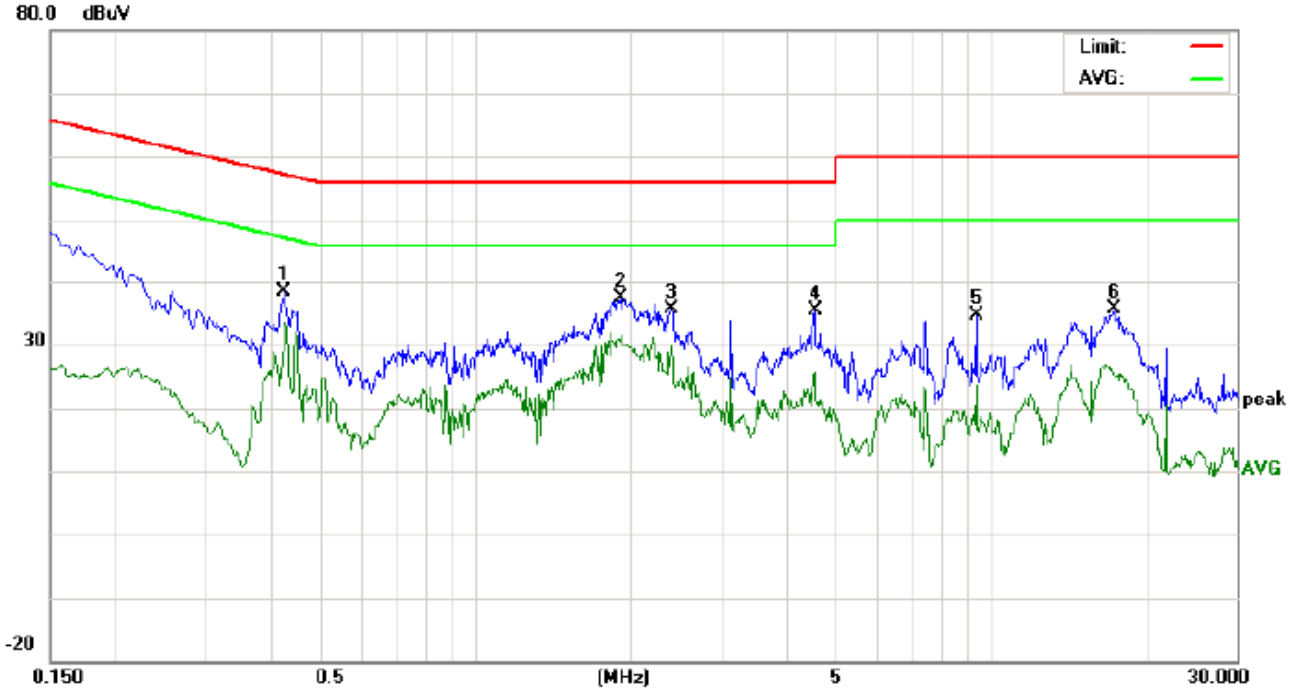
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

8.5 FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

8.6 TEST RESULT OF LINE CONDUCTED EMISSION TEST

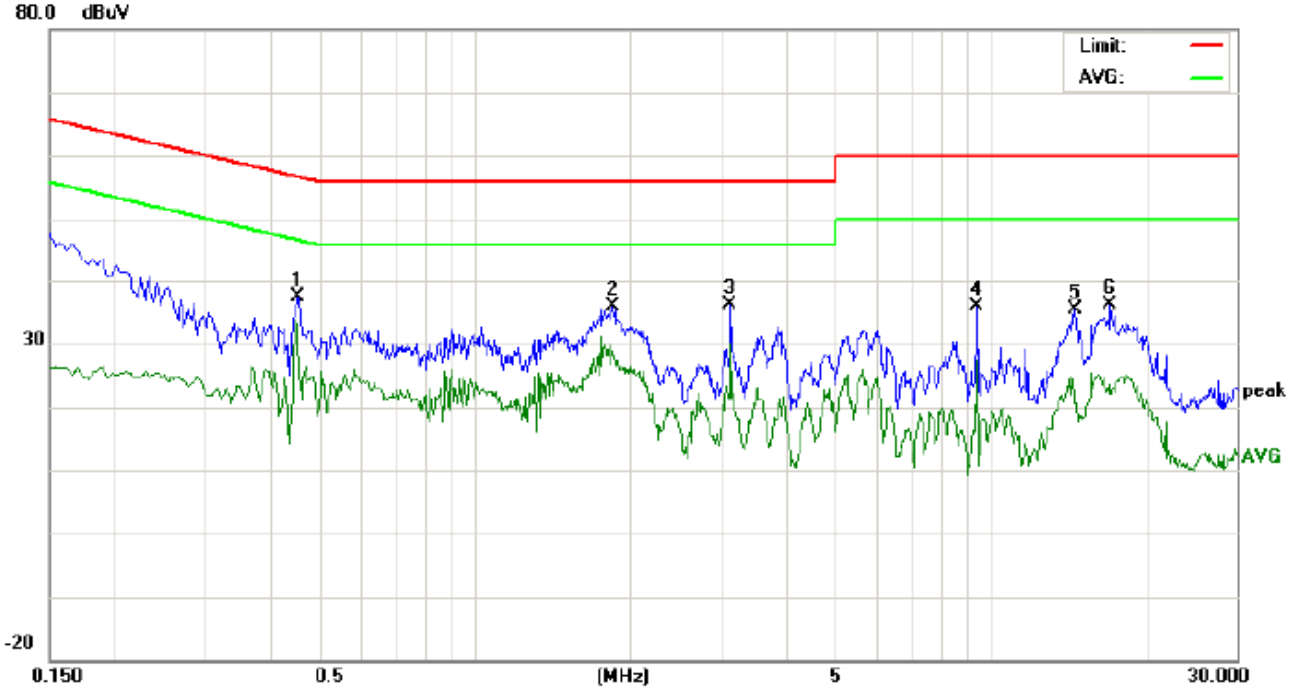
Line Conducted Emission Test Line 1-L



Site: Conduction
Phase: *L1*
Temperature: 26
Limit: FCC Class B Conduction(QP)
Power:
Humidity: 60 %
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Normal Hopping
Note:

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.4260	28.11		23.11	10.35	38.46		33.46	57.33	47.33	-18.87	-13.87	P	
2	1.9140	27.12		21.12	10.25	37.37		31.37	56.00	46.00	-18.63	-14.63	P	
3	2.4060	25.28		19.40	10.39	35.67		29.79	56.00	46.00	-20.33	-16.21	P	
4	4.5500	25.23		15.31	10.21	35.44		25.52	56.00	46.00	-20.56	-20.48	P	
5	9.3979	24.26		13.30	10.35	34.61		23.65	60.00	50.00	-25.39	-26.35	P	
6	17.3100	25.44		14.89	10.13	35.57		25.02	60.00	50.00	-24.43	-24.98	P	

Line Conducted Emission Test Line 2-N



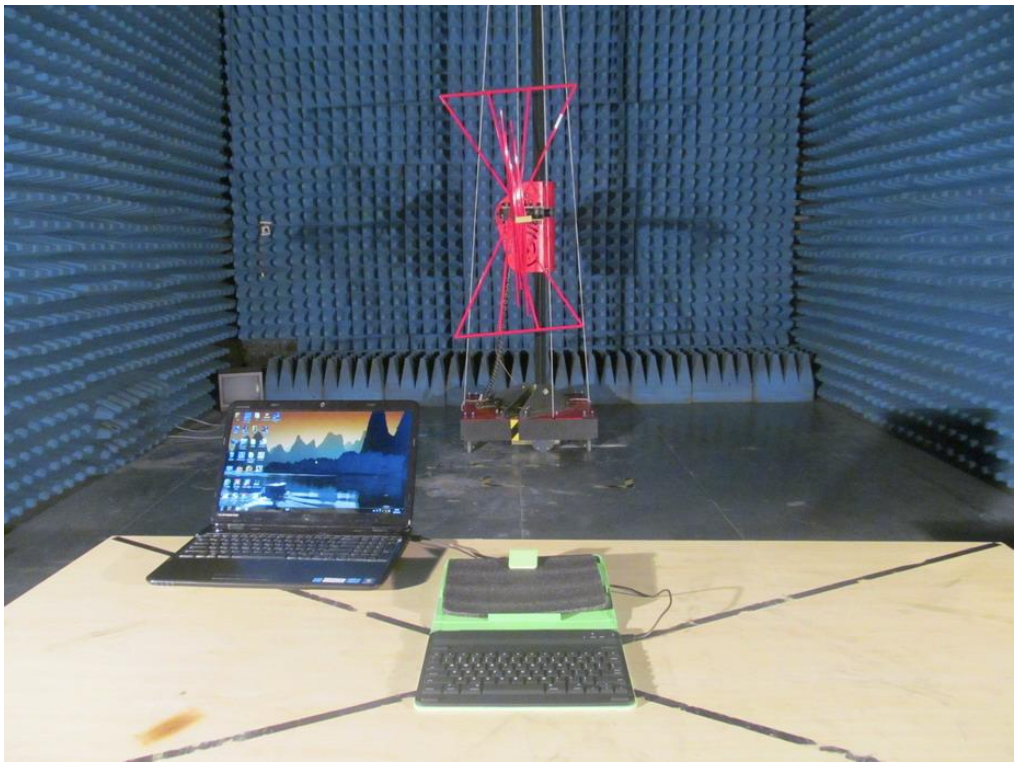
Site: Conduction
Phase: N
Temperature: 26
Limit: FCC Class B Conduction(QP)
Power:
Humidity: 60 %
EUT: iPad Grip Case with Bluetooth Keyboard
M/N: BRK8800
Mode: Normal Hopping
Note:

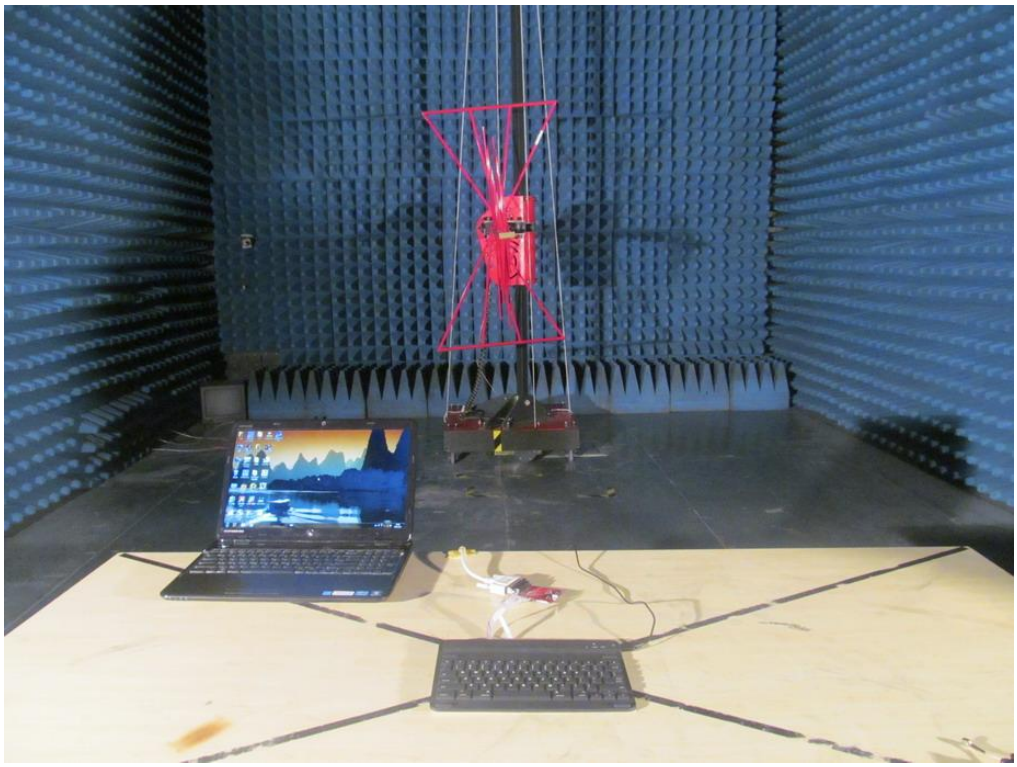
No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG	dB	Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.4540	26.99		20.90	10.37	37.36		31.27	56.80	46.80	-19.44	-15.53	P	
2	1.8580	25.60		17.78	10.27	35.87		28.05	56.00	46.00	-20.13	-17.95	P	
3	3.1340	25.46		19.64	10.54	36.00		30.18	56.00	46.00	-20.00	-15.82	P	
4	9.4020	25.42		17.00	10.35	35.77		27.35	60.00	50.00	-24.23	-22.65	P	
5	14.5540	25.25		11.10	10.12	35.37		21.22	60.00	50.00	-24.63	-28.78	P	
6	17.1020	26.12		11.93	10.13	36.25		22.06	60.00	50.00	-23.75	-27.94	P	

APPENDIX A
PHOTOGRAPHS OF THE TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP

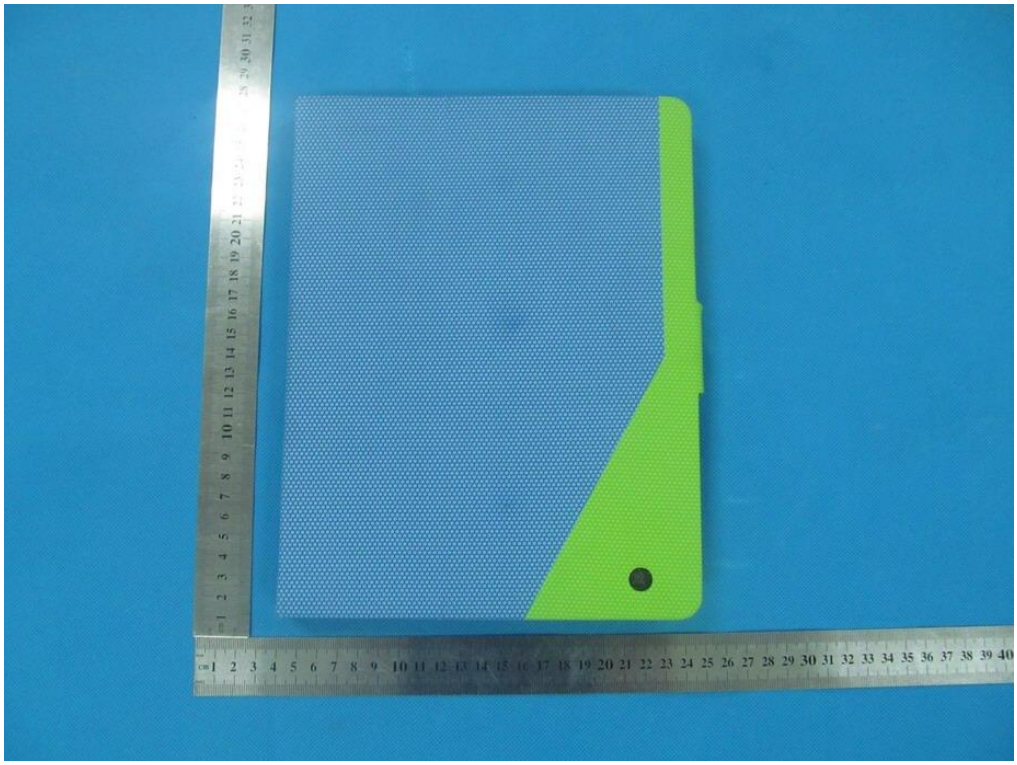
RADIATED EMISSION



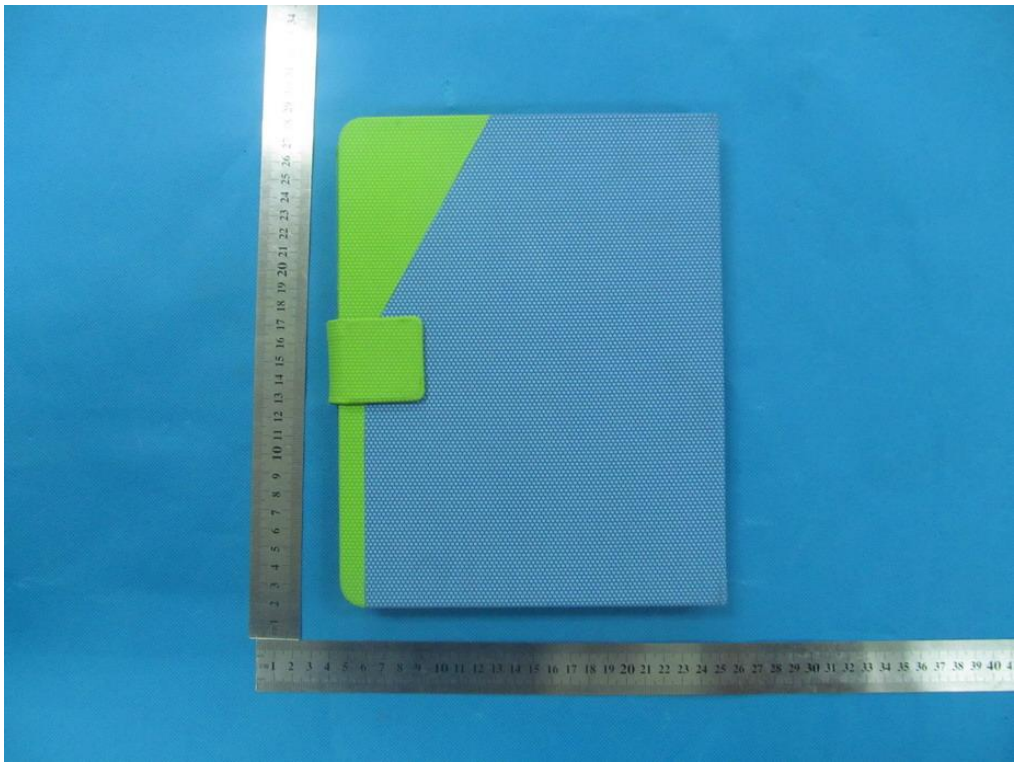


APPENDIX B
PHOTOGRAPHS OF THE EUT

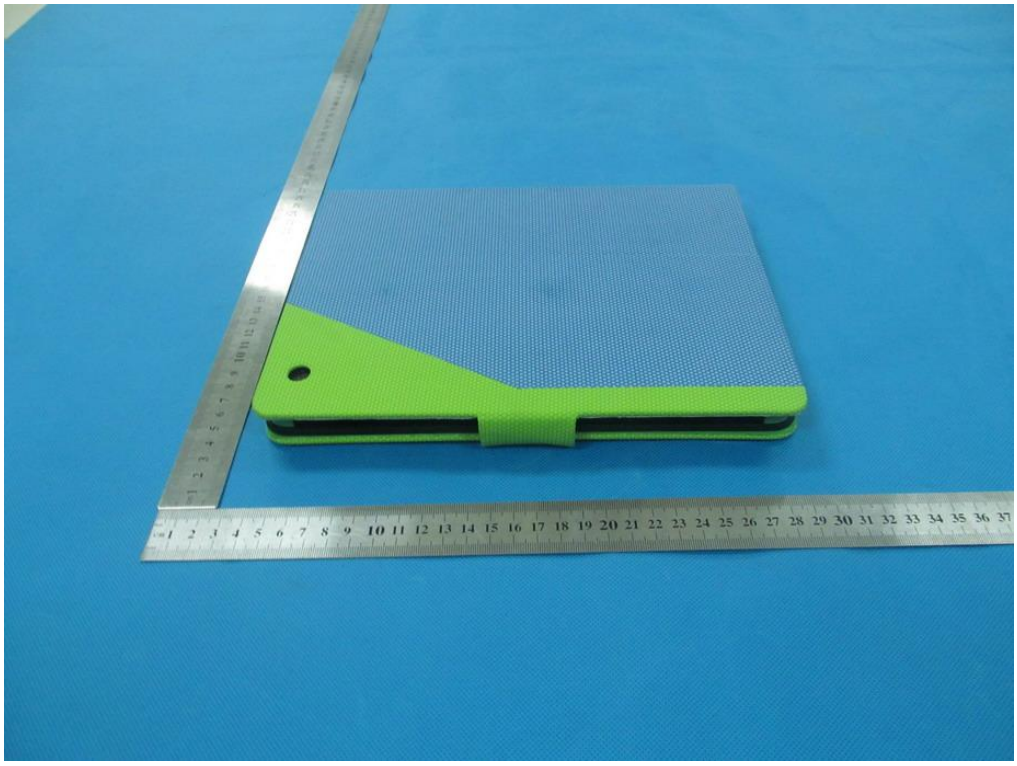
TOP VIEW OF EUT



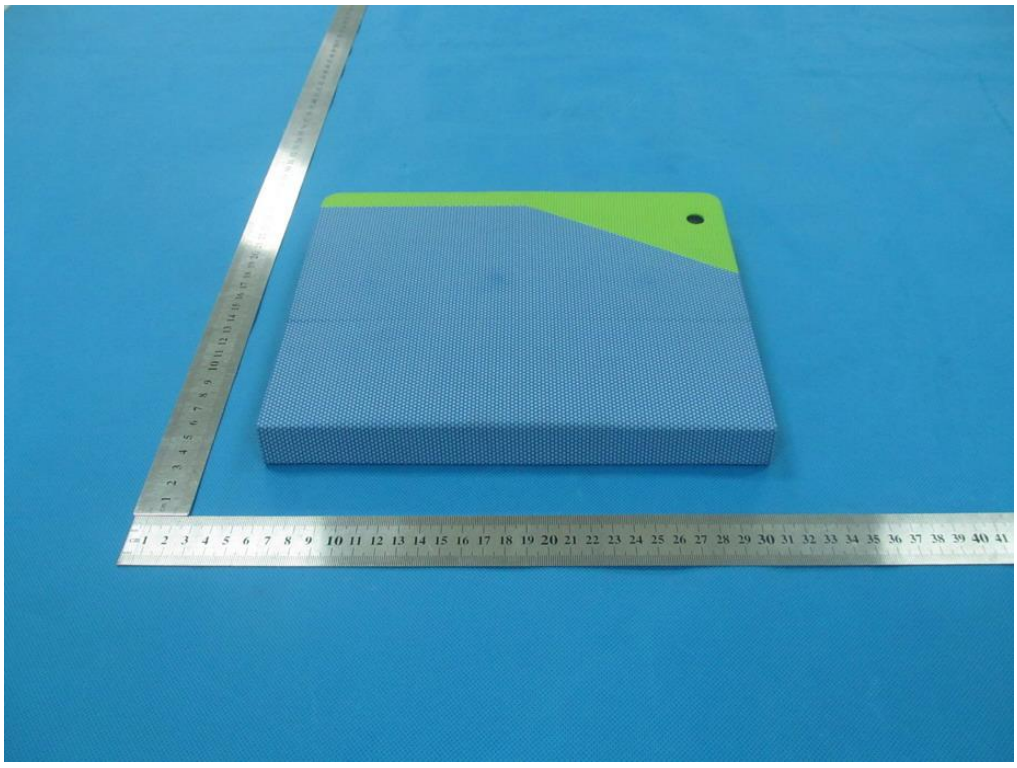
BOTTOM VIEW OF EUT



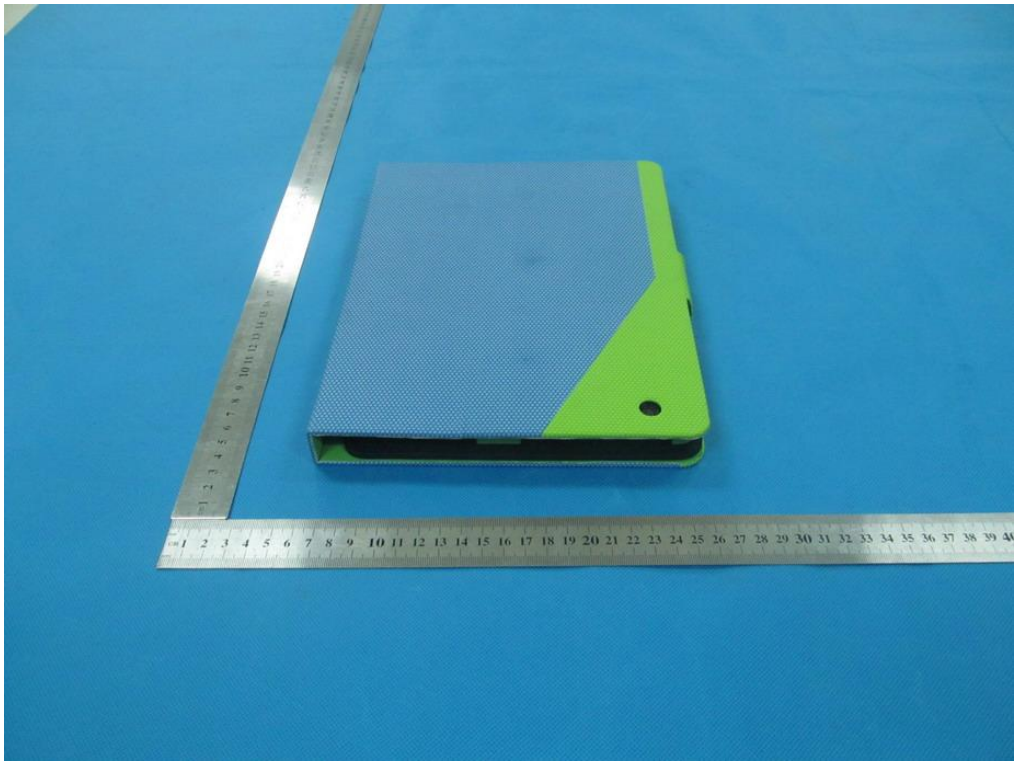
FRONT VIEW OF EUT



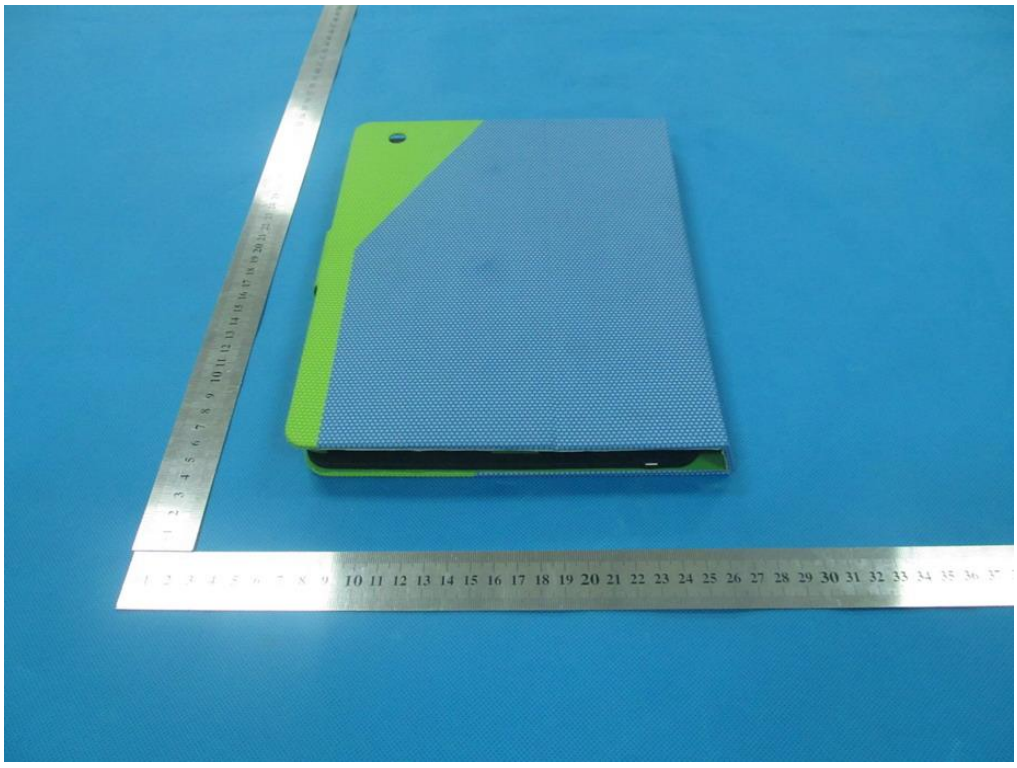
BACK VIEW OF EUT



LEFT VIEW OF EUT



RIGHT VIEW OF EUT

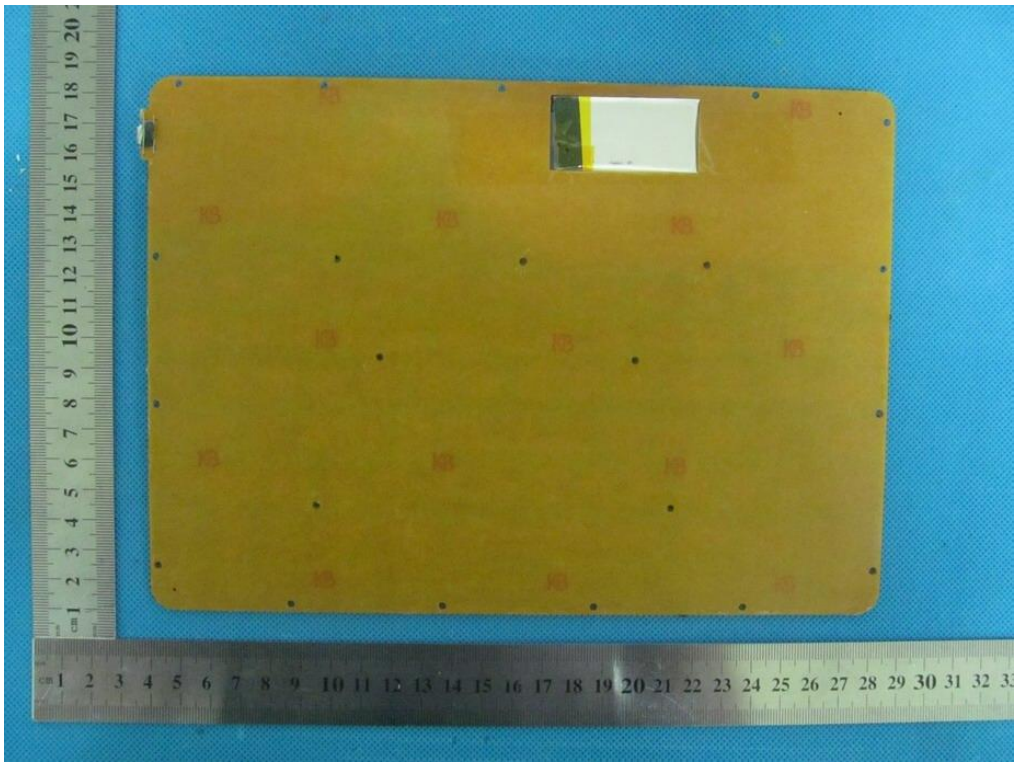


OPEN VIEW OF EUT-1

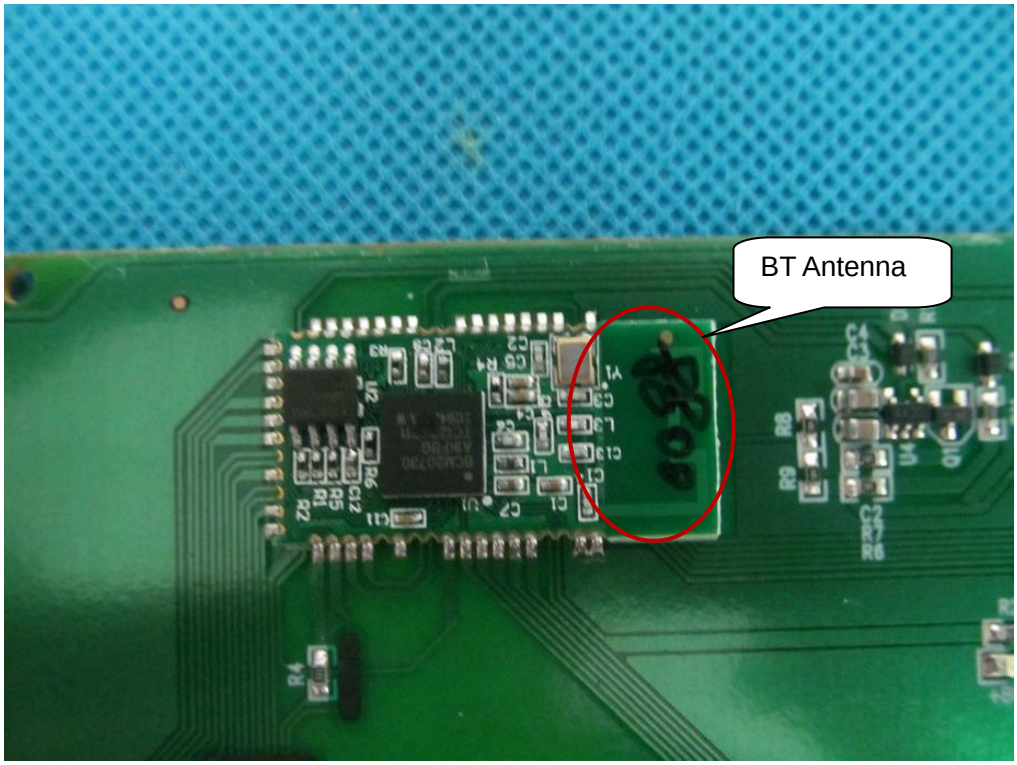
OPEN VIEW OF EUT-2

INTERNAL VIEW OF EUT-1

INTERNAL VIEW OF EUT-2



INTERNAL VIEW OF EUT-3



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