# FCC TEST REPORT(Bluetooth)

for

## ComTrade USA East, Inc.

# **Tablet Computer**

Model Number: Hero 8 W – Tesla tablet H785

FCC ID: 2AERW-H785

Prepared for : ComTrade USA East, Inc.

Address : 275 Grove Street Suite 2-400, Newton,

Massachusetts, United States

Prepared by: Keyway Testing Technology Co., Ltd.

Address : Building 1, Baishun Industrial Zone, Zhangmutou Town,

Dongguan, Guangdong, China

Tel: 86-769-8718 2258 Fax: 86-769-8718 1058

Report No. : 15KWE052599F Date of Test : May 20~25, 2015 Date of Report : May 26, 2015

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# Keyway Testing Technology Co., Ltd.

**Applicant:** ComTrade USA East, Inc.

**Address:** 275 Grove Street Suite 2-400, Newton,

Massachusetts, United States

Manufacturer: Borqs BeiJing Ltd.

**Address:** Tower A, Building B23, Universal Business Park, No. 10

Jiuxiangiao Road, Chaoyang District Beijing, 100015 China

**E.U.T:** Tablet Computer

**Model Number:** Hero 8\_W – Tesla tablet H785

Trade Name: ------ Serial No.: ------

**Date of Receipt:** May 18, 2015 **Date of Test:** May 20~25, 2015

**Test Specification:** FCC Part 15, Subpart 15.249: Oct. 1, 2014

ANSI C63.10:2013

Test Result: The equipment under test was found to be compliance with the

requirements of the standards applied.

Issue Date: May 26, 2015

Tested by: Reviewed by: Approved by:

Keven Wu / Engineer

Andy Gao / Supervisor

Jade Yang/Supervisor

Other Aspects:

None.

Abbreviations: OK/P=passed fail/F=failed n.a/N=not applicable E.U.T=equipment under tested

This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Keyway Testing Technology Co., Ltd.

# 1. TEST SUMMARY

Test Items	Test Requirement	Result
Conducted Emissions	15.207	PASS
Radiated Emissions	15.205(a)/15.209/15.249(d)	PASS
20dB Bandwidth	15.249	PASS
Emissions from out of band	15.249	PASS
Antenna Requirement	15.203	PASS

# 2. GENERAL PRODUCT INFORMATION

### 2.1. Product Function

Refer to Technical Construction Form and User Manual.

## 2.2. Description of Device (EUT)

Product Name:	Tablet Computer				
Model No.:	Hero 8_W – Tesla tablet H785				
	WIFI:2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))				
	2422MHz~2452MHz (802.11n(H40))				
Operation Frequency:	WIFI:5180-5240 MHz; (5G 802.11a/n(HT20))				
	5190-5230 MHz; (802.11n(HT40))				
	BT: 2402MHz~2480MHz				
	WIFI:11 for 802.11b/802.11g/802.11n(H20) ,7 for 802.11n(H40)				
Oh assaul assault assault	BT: 40 Channels				
Channel numbers:	7channels for 5G 802.11a/n(HT20)				
	5channels 5G for 802.11n(HT40)				
	WIFI: Direct Sequence Spread Spectrum (DSSS) for (IEEE 802.11b)				
Modulation technology:	Orthogonal Frequency Division Multiplexing(OFDM) for (IEEE 802.11g/802.11n)				
	BT: GFSK				
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps				
Data aread (IEEE 000 44 a):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps,				
Data speed (IEEE 802.11g):	36Mbps, 48Mbps,54Mbps				
Data speed (IEEE 802.11n):	Up to 150Mbps				
Antenna Type:	Internal				
Antonno goin:	1.5dBi for WIFI				
Antenna gain:	1.5dBi for BT				
Devices events	DC 3.7V form battery				
Power supply:	DC 5V from adapter				
	Manufacturer: Borqs BeiJing Ltd.				
Adaptor	M/N: ASSA43e-050200				
Adapter	I/P:AC 100~240V 50/60Hz 0.45A				
	O/P:DC 5V 2A				

# 2.3. Independent Operation Modes

The basic operation modes are:

Channel	Frequency
Low	2402MHz
Middle	2440MHz
High	2480MHz

### 2.4. Product Version

Product SW version	3.10.20
Product HW version	Anzhen4_mrd8_w_64-userdebug
Radio SW version	4.4
Radio HW version	VT2.1
Test SW Version	T1.2
RF power setting in TEST SW	2.4G:11b 15 dBm;11g 14 dBm;11n(HT20) 13 dBm; 11n(HT40) 11 dBm 5G:11n 12 dBm; 11a 14 dBm BT:0dBm

Note: SW means software, HW means hardware.

### 2.5. Channel List

Operation Frequency each of channel								
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
1	2402MHz	11	2422MHz	21	2442MHz	31	2462MHz	
2	2404MHz	12	2424MHz	22	2444MHz	32	2464MHz	
~	~	~	~	~	~	~	~	
19	2418MHz	19	2438MHz	29	2458MHz	39	2478MHz	
10	2420MHz	20	2440MHz	30	2460MHz	40	2480MHz	

### 2.6. TEST SITES

Lab Qualifications : Certificated by Industry Canada

Registration No.: 9868A

Date of registration: December 8, 2011

Certificated by FCC, USA Registration No.: 370994

Date of registration: February 21, 2012

Certificated by CNAS China Registration No.: CNAS L5783 Date of registration: August 8, 2012

## 2.7. List of Test and Measurement Instruments

## 2.7.1. For conducted emission at the mains terminals test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCI	101156	Apr. 27,15	Apr. 27,16
Artificial Mains Network	Rohde&Schwarz	ENV216	101315	Apr. 27,15	Apr. 27,16
Artificial Mains Network (AUX)	Rohde&Schwarz	ENV216	101314	Apr. 27,15	Apr. 27,16
RF Cable	FUJIKURA	3D-2W	944 Cable	Apr. 27,15	Apr. 27,16

### 2.7.2. For radiated emission test

		r			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCI	101156	Apr. 27,15	Apr. 27,16
System Simulator	Agilent	E5515C	GB43130245	Apr. 27,15	Apr. 27,16
Power Splitter	Weinschel	1506A	NW425	Apr. 27,15	Apr. 27,16
Bilog Antenna	ETS-LINDGREEN	3142D	135452	Apr. 27,15	Apr. 27,16
Spectrum Analyzer	Agilent	E4411B	MY4511304	Apr. 27,15	Apr. 27,16
Spectrum Analyzer	R&S	FSV40	132.1.3008K39 -100967	Apr. 27,15	Apr. 27,16
3m Semi-anechoic Chamber	ETS-LINDGREEN	966	KW01	Apr. 27,15	Apr. 27,16
Signal Amplifier	SONOMA	310	187016	Apr. 27,15	Apr. 27,16
Signal Amplifier	Agilent	8449B	3008A00251	Apr. 27,15	Apr. 27,16
RF Cable	IMRO	IMRO-400	966 Cable 1#	N/A	N/A
MULTI-DEVICE Controller	ETS-LINDGREEN	2090	126913	N/A	N/A
Horn Antenna	DAZE	ZN30701	11003	Apr. 27,15	Apr. 27,16
Horn Antenna	SCHWARZBECK	BBHA9170	9170-068	Apr. 27,15	Apr. 27,16
Spectrum Analyzer	Agilent	8593E	3911A04271	Apr. 27,15	Apr. 27,16
Spectrum Analyzer	Agilent	E4408B	MY44211125	Apr. 27,15	Apr. 27,16
Signal Amplifier	DAZE	ZN3380C	11001	Apr. 27,15	Apr. 27,16
High Pass filter	Micro	HPM50111	324216	Apr. 27,15	Apr. 27,16
Filter	COM-MW	ZBSF-C836.5-25-X	KW032	Apr. 27,15	Apr. 27,16
Filter	COM-MW	ZBSF-C1747.5-75-X2	KW035	Apr. 27,15	Apr. 27,16
Filter	COM-MW	ZBSF-C1880-60-X2	KW037	Apr. 27,15	Apr. 27,16
DC Power Supply	LongWei	PS-305D	010964729	Apr. 27,15	Apr. 27,16
Constant temperature and humidity box	GF	GTH-800-40-1P	MAA9906-005	Apr. 27,15	Apr. 27,16
Universal radio communication tester	Rohde&Schwarz	CMU200	3215420	Apr. 27,15	Apr. 27,16
Splitter	Agilent	11636B	0025164	Apr. 27,15	Apr. 27,16

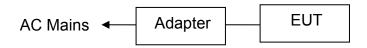
### 3. TEST SET-UP AND OPERATION MODES

## 3.1. Principle of Configuration Selection

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

## 3.2. Block Diagram of Test Set-up

System Diagram of Connections between EUT and Simulators



(EUT: Tablet Computer)

- 3.3. Test Operation Mode and Test Software None.
- 3.4. Special Accessories and Auxiliary Equipment None.
- 3.5. Countermeasures to Achieve EMC Compliance None.

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### 4. EMISSION TEST RESULTS

#### 4.1. Conducted Emission at the Mains Terminals Test

#### 4.1.1. Limit 15.207 limits

FREQUENCY OF EMISSION (MHz) CONDUCTED LIMIT (		LIMIT (dBµV)
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 50

#### 4.1.2. Test Setup

The EUT was put on a wooden table which was 0.8 m high above the ground and connected to the AC mains through the Artificial Mains Network (AMN). Where the mains cable supplied by the manufacture was longer than 0.8 m, the excess was folded back and forth parallel to the cable at the centre so as to form a bundle no longer than 0.4 m.

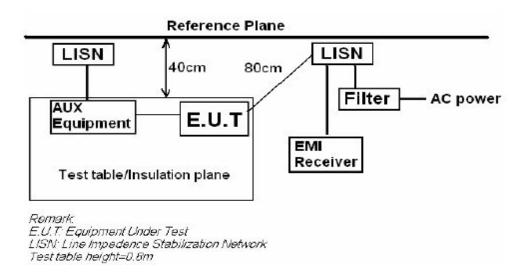
The EUT was kept 0.4 m from any other earthed conducting surface. Both sides of AC line were checked to find out the maximum conducted emission levels according to the test procedure during the conducted emission test.

The frequency range from 150 kHz to 30 MHz was investigated.

The bandwidth of the test receiver was set at 9 kHz.

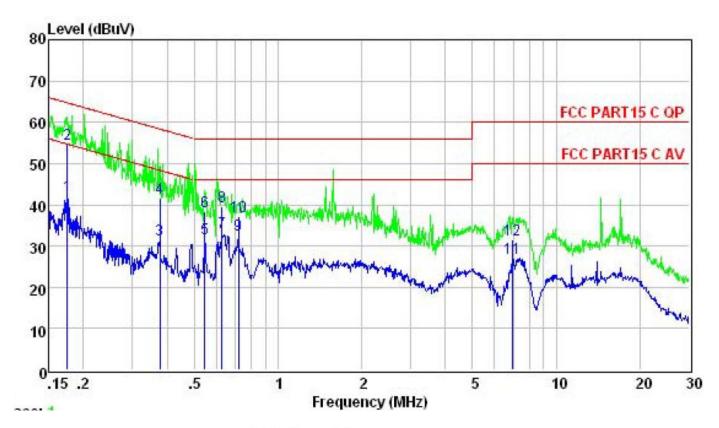
Pretest for all mode, The test data of the worst case was low channel and the data was reported on the following page.

Test voltage was AC 120V/60Hz



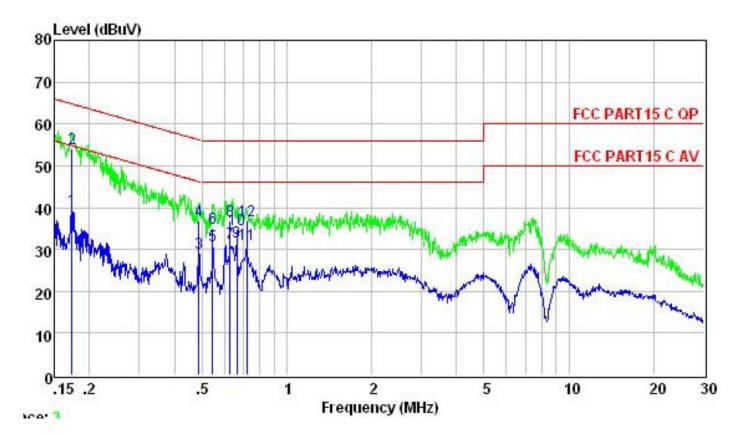
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#### Line



	Freq	Level	Limit Line	Over Limit	Remark
-	MHz	dBuV	dBuV	——dB	
1	0.175	42.21	54.72	-12.51	Average
2	0.175	54.68	64.72	-10.04	QP
3	0.377	31.61	48.34	-16.73	Average
4	0.377	41.57	58.34	-16.77	QP
5	0.546	31.82	46.00	-14.18	Average
6	0.546	38.49	56.00	-17.51	QP
7	0.630	33.25	46.00	-12.75	Average
8	0.630	39.41	56.00	-16.59	QP
9	0.720	32.59	46.00	-13.41	Average
10	0.720	37.14	56.00	-18.86	QP
11	6.951	27.10	50.00	-22.90	Average
12	6.951	31.45	60.00	-28.55	QP

#### Neutral



	Freq	Level	Limit Line	Over Limit	Remark
? <del></del>	MHz	dBuV	dBuV	dB	-
1	0.173	39.57	54.81	-15.24	Average
2	0.173	54.12	64.81	-10.69	QP
3	0.489	29.28	46.19	-16.91	Average
4	0.489	36.98	56.19	-19.21	QP
5	0.546	31.07	46.00	-14.93	Average
6	0.546	35.12	56.00	-20.88	QP
7	0.630	31.40	46.00	-14.60	Average
8	0.630	36.89	56.00	-19.11	QP
9	0.665	31.74	46.00	-14.26	Average
10	0.665	34.76	56.00	-21.24	QP
11	0.720	31.25	46.00	-14.75	Average
12	0.720	36.87	56.00	-19.13	QP

### 4.2. Radiated Emission Test

4.2.1. Limit 15.209 limits

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMIT		
MHz	Meters	$\mu V/m$	$dB(\mu V)/m$	
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	V)/m (Peak)	
		54.0 dB(μV	V)/m (Average)	

### 4.2.2. Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 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	( <sup>2</sup> )

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.

#### 4.2.3. Test setup

The EUT was placed on a turn table which was 0.8 m(above 1GHz, the table was 1.5m) above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 m away from the receiving antenna which was mounted on an antenna tower. The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 m to 4 m for both horizontal and vertical polarizations.

The EUT was tested in the Chamber Site. It was pre-scanned with a Peak detector from the spectrum, and all the final readings from the test receiver were measured with the Quasi-Peak detector.

The bandwidth of the EMI test receiver is set at 120kHz for frequency range from 30MHz to 1000 MHz.

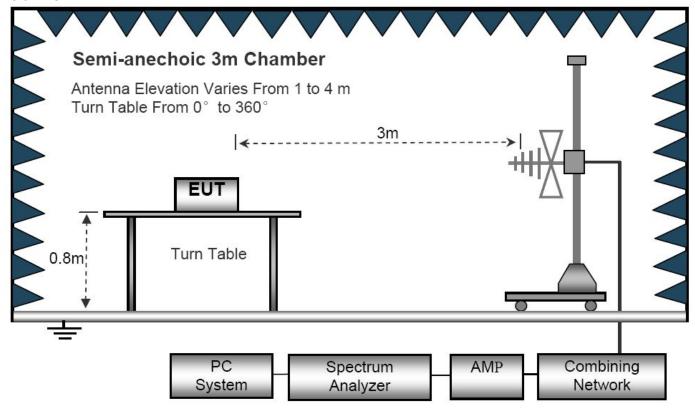
The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz.

The frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

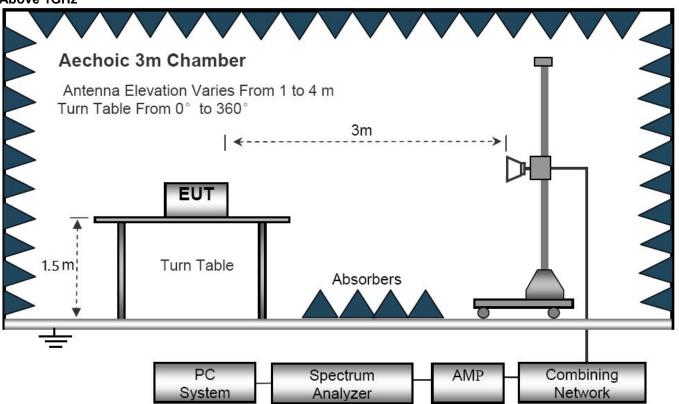
Notes: 1. Emission Level = Antenna Factor + Cable Loss + Meter Reading-Preamp Factor.

- 2. Measurement Uncertainty: ±3.2 dB at a level of confidence of 95%.
- 3. For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
- 4. For emissions below 1GHz, pretest for all mode, The test data of the worst case condition(s) was reported on the following pages.
- 6: Pre-scan below 1GHz for all model, The other test only show worst model in report.

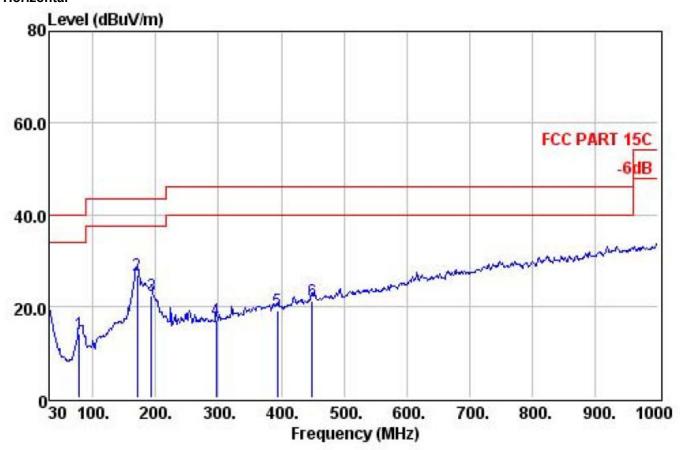
#### **Below 1GHz**



#### **Above 1GHz**

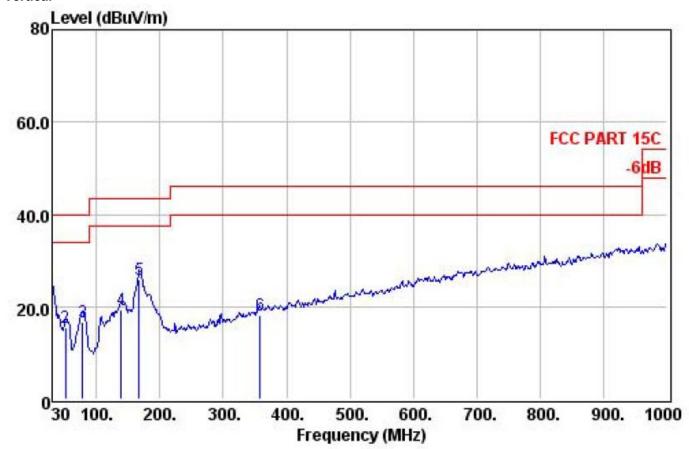


### Below 1GHz Horizontal



	Freq	Preamp Factor		Cable Loss		Limit Line		Remark
-	MHz	——dB	dBuV	——dB	dBuV/m	dBuV/m	dB	-
1	78.50	31.34	36.47	0.85	13.91	40.00	-26.09	QP
2	170.65	31.19	46.62	1.30	26.85	43.50	-16.65	QP
3	192.96	31.12	41.69	1.46	22.40	43.50	-21.10	QP
4	296.75	30.93	32.31	1.87	16.95	46.00	-29.05	QP
5	393.75	30.63	30.88	2.37	18.89	46.00	-27.11	QP
6	449.04	30.61	31.44	2.62	21.03	46.00	-24.97	QP





	Freq	Preamp Factor		Cable Loss		Limit Line		Remark
-	MHz	——dB	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.00	31.41	36.08	0.56	24.03	40.00	-15.97	QP
2	51.34	31.38	37.59	0.75	15.56	40.00	-24.44	QP
3	78.50	31.34	39.32	0.85	16.76	40.00	-23.24	QP
4	138.64	31.21	40.82	1.22	19.22	43.50	-24.28	QP
5	167.74	31.20	45.83	1.30	25.83	43.50	-17.67	QP
6	357.86	30.63	30.53	2.18	18.18	46.00	-27.82	OP

### Above 1GHz TX 2402MHz Horizontal

	Freq	Preamp Factor	Read Level		Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dBuV/m	dBuV/m	dB	\$ <del></del>
1	2402.00	26.32	79.04	7.34	88.78	94.00	-5.22	Average
2	2402.00	26.32	92.90	7.34	102.64	114.00	-11.36	Peak
3	4804.00	27.49	32.85	11.96	50.26	74.00	-23.74	Peak
4	7239.00	27.95	18.84	16.61	44.80	74.00	-29.20	Peak
5	10197.00	28.82	18.52	17.00	45.42	74.00	-28.58	Peak
6	14668.00	29.50	13.37	19.79	43.56	74.00	-30.44	Peak

### Vertical

Hillai								
	<u> </u>	Preamp	Read	Cable		Limit	Over	2 5
	Freq	Factor	Level	Loss	Level	Line	Limit	Remark
	MHz	dB	dBuV	dB	dBuV/m	dBuV/m	dB	<del>-</del>
1	2402.00	26.32	78.89	7.34	88.63	94.00	-5.37	Average
2	2402.00	26.32	92.78	7.34	102.52	114.00	-11.48	Peak
3	4804.00	27.49	32.48	11.96	49.89	74.00	-24.11	Peak
4	9092.00	28.43	17.06	16.89	43.02	74.00	-30.98	Peak
5	12917.00	29.18	16.08	18.14	45.54	74.00	-28.46	Peak
6	14719.00	29.51	15.34	19.83	45.35	74.00	-28.65	Peak

### TX 2440MHz Horizontal

	Freq	Preamp Factor		Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	$\overline{\text{dBuV/m}}$	dBuV/m	dB	-
1	2440.00	26.33	78.76	7.48	88.67	94.00	-5.33	Average
2	2440.00	26.33	92.04	7.48	101.95	114.00	-12.05	Peak
3	4880.00	27.53	31.04	12.14	48.76	74.00	-25.24	Peak
4	9092.00	28.43	19.06	16.89	45.02	74.00	-28.98	Peak
5	10350.00	28.84	18.40	17.04	45.56	74.00	-28.44	Peak
6	14821.00	29.52	16.87	19.88	46.50	74.00	-27.50	Peak

#### Vertical

erticai		Preamp	Read	Cable		Limit	Over	
	Freq	Factor						Remark
	MHz	dB	dBuV	dB	dBuV/m	dBuV/m	dB	-
1	2440.00	26.33	79.25	7.48	89.16	94.00	-4.84	Average
2	2440.00	26.33	93.25	7.48	103.16	114.00	-10.84	Peak
3	4880.00	27.53	32.59	12.14	50.31	74.00	-23.69	Peak
4	10197.00	28.82	17.73	17.00	44.63	74.00	-29.37	Peak
5	14107.00	29.42	12.44	19.43	45.35	74.00	-28.65	Peak
6	17133.00	30.15	11.79	21.45	47.90	74.00	-26.10	Peak

### TX 2480MHz Horizontal

	Freq	Preamp Factor		Cable Loss	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dB	dBuV/m	dBuV/m	dB	<del></del>
1	2480.00	26.34	79.22	7.57	89.24	94.00	-4.76	Average
2	2480.00	26.34	92.84	7.57	102.86	114.00	-11.14	Peak
3	4960.00	27.58	31.58	12.36	49.68	74.00	-24.32	Peak
4	7018.00	27.90	20.57	16.60	46.48	74.00	-27.52	Peak
5	10843.00	28.88	17.41	17.13	45.07	74.00	-28.93	Peak
6	15535.00	29.63	18.64	20.34	47.88	74.00	-26.12	Peak

#### Vertical

Citicai		121	755 115	12 000		15.75	160	
		Preamp	Read	Cable		Limit	Over	
	Freq	Factor	Level	Loss	Level	Line	Limit	Remark
9	MHz	dB	dBuV	dB	dBuV/m	dBuV/m	dB	-
1	2480.00	26.34	78.77	7.57	88.79	94.00	-5.21	Average
2	2480.00	26.34	92.63	7.57	102.65	114.00	-11.35	Peak
3	4960.00	27.58	30.88	12.36	48.98	74.00	-25.02	Peak
4	7018.00	27.90	20.62	16.60	46.53	74.00	-27.47	Peak
5	12611.00	29.12	19.58	17.88	48.12	74.00	-25.88	Peak
6	15943.00	29.69	15.80	20.60	46.81	74.00	-27.19	Peak

### 5. 20DB OCCUPY BANDWIDTH

#### 5.1. Limits

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.

#### 5.2. Test setup

- 1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum, During the measurement, the Bluetooth module of the EUT is activated and controlled by the software, and is set to operate under test mode transmitting 339 bytes DH5 packages at maximum power.
- 2. Set the spectrum analyzer:

Span: approximately 2 to 3 times the 20dB bandwidth, centered on a hopping channel

RBW ≥1% of the 20dB bandwidth

VBW ≥ RBW

Sweep=auto

Detector function=peak

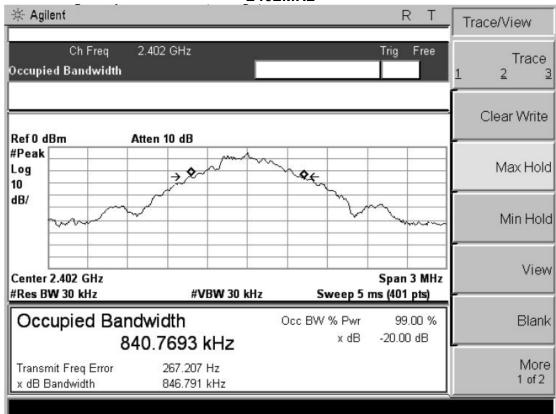
Trace=max hold

Test data:

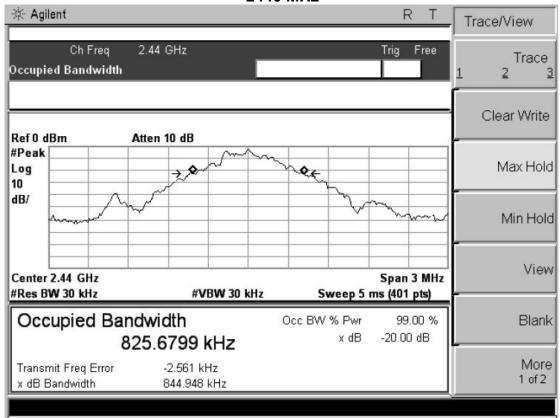
Modulation	Channel Frequency (MHz)	20dB Bandwidth (MHz)	Result
	2402	0.848	Pass
GFSK,	2440	0.845	Pass
	2480	0.851	Pass

Test plot as follows: GFSK

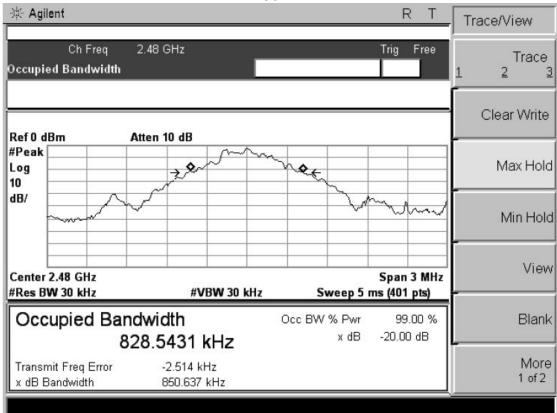
#### 2402MHz



#### 2440 MHz



#### 2480 MHz



### 6. BAND EDGE COMPLIANCE TEST

#### 6.1. Limits

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 shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

#### 6.2. Test setup

The EUT was placed on a turn table which was 1.5 m above the ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was set 3 m away from the receiving antenna which was mounted on an antenna tower. The measuring antenna moved up and down to find out the maximum emission level. It moved from 1 m to 4 m for both horizontal and vertical polarizations.

Set to span from the lowest frequency generated in the device up to and including the tenth harmonic of the highest fundamental frequency

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure. For all test, used peak detector. Note: If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.

#### For radiated test as follows:

	Frequency (MHz)	Antenna polarization	Emission (dBuV/m)	Band edge Limit (dBuV/m)		Result
	, ,	(H/V)	PK	PK	AV	
	<2400	Н	50.76	74.00	54.00	Pass
	<2400	V	49.95	74.00	54.00	Pass
	>2483.5	Н	50.09	74.00	54.00	Pass
I SIL	>2483.5	V	49.81	74.00	54.00	Pass

If the PK measured levels comply with average limit, then the average level were deemed to comply with average limit.

## 7. ANTENNA REQUIREMENTS

#### 7.1. Limits

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.

#### 7.2. Result

The antennas used for this product are permanent attached 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 1.5dBi.

# 8. PHOTOGRAPHS OF THE EUT

