



Test Report FCC Part15 Subpart C

Product Name : Zipp

Model No. : LTH300

FCC ID : Y2SLTH300

IC : 9452A-LTH300

Applicant: LIBRATONE A/S

Address: Marielundvej 43A, DK-2730 Herlev, Denmark

Date of Receipt: Dec. 09, 2015

Test Date : Dec. 10, 2015~ Dec. 24, 2015

Issued Date : Jan. 04, 2016

Report No. : 15C2023R -RF-US-P06V02

Report Version: V1.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date: Jan. 04, 2016

Report No.: 15C2023R-RF-US-P06V02



a DEKRA company

Product Name

Zipp

Applicant

: LIBRATONE A/S

Address

Marielundvej 43A, DK-2730 Herlev, Denmark

Manufacturer

Goertek Inc

Address

No 268 Dongfang Rd., New&high-tech Industry

Development Zone Weifang Shandong Province 261031,

PRC.

Model No.

LTH300

FCC ID

Y2SLTH300

IC

9452A-LTH300

EUT Voltage

AC 100~240V, 50/60Hz, 1.0A

Brand Name

: LIBRATONE

Applicable Standard

FCC CFR Title 47 Part 15 Subpart C: 2015

ANSI C63.4: 2014: ANSI C63.10: 2013

Industry Canada RSS-Gen Issue 4 / RSS-247 Issue 1

Test Result

Complied

Performed Location

Suzhou EMC Laboratory

No.99 Hongye Rd., Suzhou Industrial Park, Suzhou,

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Laboratory Information

We, **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C. : BSMI, NCC, TAF

USA : FCC
Japan : VCCI
China : CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

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History of This Test Report

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
15C2023R-RF-US-P06V02	V1.0	Initial Issued Report	Dec. 25, 2015
15C2023R-RF-US-P06V02	V1.1	Add item of power output	Jan. 04, 2016



1. General Information

1.1. EUT Description

Product Name	Zipp		
Brand Name	LIBRATONE		
Model No.	LTH300		
Working Voltage	AC 100~240V, 50/60Hz, 1.0A		
Bluetooth Specification	3.0 + Version 4.0		
Frequency Range	2402- 2480 MHz		
Channel Number	V3.0+HS: 79		
Charmer Number	V4.0: 40		
Channel Separation	V3.0+HS: 1MHz		
	V4.0: 2MHz		
Type of Modulation	V3.0: GFSK, Pi/4 DQPSK, 8DPSK		
Type of Modulation	V4.0: GFSK		
Data Rate	V3.0: 1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps (8DPSK)		
	V4.0: 1Mbps		
Antenna Type	Reference to Antenna List		
Peak Antenna Gain	Reference to Antenna List		

Note: This report was based on Quietek report No: 1560645R. This is to verify metal cover for top and bottom enclosure as 2nd enclosure source.



Bluetooth Working Frequency of Each Channel: (For V4.0)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

Bluetooth Antenna List

Antenna	Manufacturer	Model No.	Peak Gain
PIFA Antenna	Goertek	N/A	1.2dBi for 2.4GHz



1.2. Mode of Operation

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode

Mode 1: Transmit-1Mbps(GFSK_BLE)

Note:

- 1. Regards to the frequency band operation: the lowest、middle and highest frequency of channel were selected to perform the test, then shown on this report.
- 2. For portable device, radiated spurious emission was verified over X, Y, Z Axis, and shown the worst case on this report.



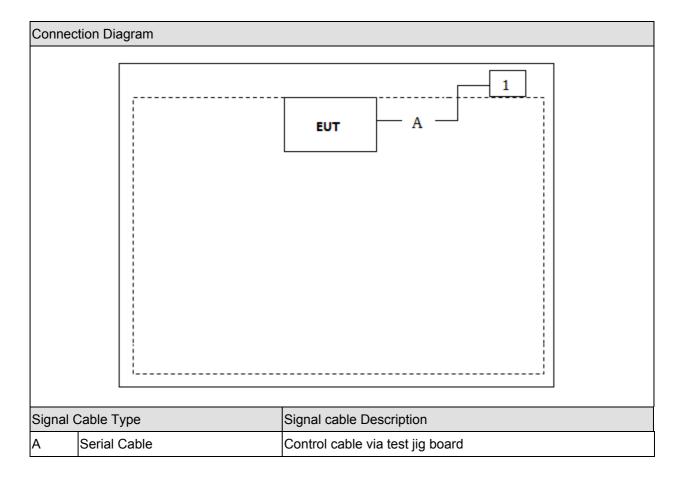
1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 Notebook	Asus	N80V	8BN0AS226971468	N/A



1.4. Configuration of Tested System





1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	Run the RF test software, and set the test mode and channel, then press OK to start continue Transmit.

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2. Technical Test

2.1. Summary of Test Result

\boxtimes	No deviations from the test standards
	Deviations from the test standards as below description:

For FCC

Performed Test Item	Normative References		Deviation	
Performed restitem	Normative References	Performed	Deviation	
Radiated Emission	sion FCC CFR Title 47 Part 15 Subpart C: 2015		No	
	Section 15.209			
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2015	Yes	No	
	15.247(d)			
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2015	Yes	No	
	Section 15.247(b)(3)			

For IC

Derformed Test Item	Normative References	Test	Deviation	
Performed Test Item	Normative References	Performed		
Radiated Emission	RSS-247 Issue 1 May 2015	Yes	No	
	Section 5.5			
Radiated Emission Band Edge	RSS-Gen Issue 4 November 2014	Yes	No	
	Section 8.10			
Power Output	RSS-247 Issue 1 May 2015	Yes	No	
	Section 5.4			

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2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

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3. Radiated Emission

3.1. Test Equipment

Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
EMI Test Receiver	R&S	ESCI	100573	2016.03.28
Loop Antenna	R&S	HFH2-Z2	833799/003	2016.11.25
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2016.10.10
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2016.03.01
Temperature/Humidity				
Meter	Zhicheng	ZC1-2	AC2-TH	2016.01.08

Radiated Emission / AC-5

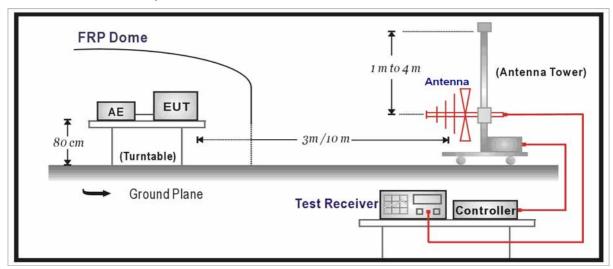
Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9010A	MY48030494	2016.05.12
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.03
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2016.10.15
Broad-Band Horn				
Antenna	Schwarzbeck	BBHA9120D	499	2016.06.08
Broad-Band Horn				
Antenna	Schwarzbeck	BBHA9170	294	2016.04.10
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
Temperature/Humidity				
Meter	Zhicheng	ZC1-2	AC5-TH	2016.01.08

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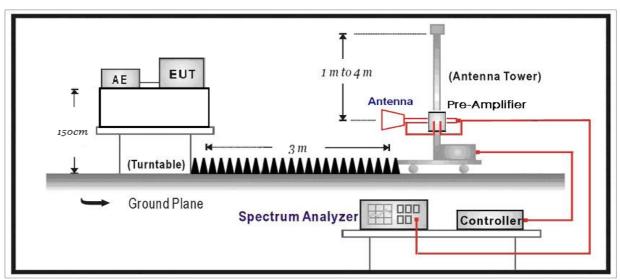


3.2. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:





3.3. **Limit**

FCC Part 15 Subpart C Paragraph 15.209						
Frequency (MHz)	Distance (m)	Level (dBuV/m)				
30 - 88	3	40				
88 - 216	3	43.5				
216 - 960	3	46				
Above 960	3	54				

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength $(dBuV/m) = 20 \log E$ field strength (uV/m)

3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2014 and tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2009 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn antenna will be bended down a little (as horn antenna has the narrow beamwidth) in order to keeping the antenna in the "cone of radiation" of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

3.5. Uncertainty

The measurement uncertainty above 1GHz is defined as ± 3.9 dB below 1GHz is defined as ± 3.8 dB



3.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms; Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Measure Level = Reading Level + Cable Loss + Antenna Factor - Preamplifier Gain

Mode 1: Transmitter-1Mbps(GFSK_BLE)

СН	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
	Н	4804.0	47.1	-6.3	40.8	54(Note2)	-13.2	PK
	V	4804.0	46.9	-6.3	40.6	54(Note2)	-13.4	PK
	Н	7206.0	44.7	-2.9	41.8	54(Note2)	-12.2	PK
0	V	7206.0	44.7	-2.9	41.8	54(Note2)	-12.2	PK
	Н	9608.0	42.5	1.0	43.5	54(Note2)	-10.5	PK
	V	9608.0	41.5	1.0	42.5	54(Note2)	-11.5	PK
	Н	4880.0	45.7	-6.3	39.4	54(Note2)	-14.6	PK
	V	4880.0	46.5	-6.3	40.2	54(Note2)	-13.8	PK
19	Н	7320.0	45.1	-2.8	42.3	54(Note2)	-11.7	PK
19	V	7320.0	45.4	-2.8	42.6	54(Note2)	-11.4	PK
	Н	9760.0	41.8	1.4	43.2	54(Note2)	-10.8	PK
	٧	9760.0	42.0	1.4	43.4	54(Note2)	-10.6	PK
	Н	4960.0	46.1	-6.0	40.1	54(Note2)	-13.9	PK
	V	4960.0	45.4	-6.0	39.4	54(Note2)	-14.6	PK
20	Н	7440.0	46.5	-2.6	43.9	54(Note2)	-10.1	PK
39	V	7440.0	44.9	-2.6	42.3	54(Note2)	-11.7	PK
	Н	9920.0	42.4	0.9	43.3	54(Note2)	-10.7	PK
	V	9920.0	42.0	0.9	42.9	54(Note2)	-11.1	PK

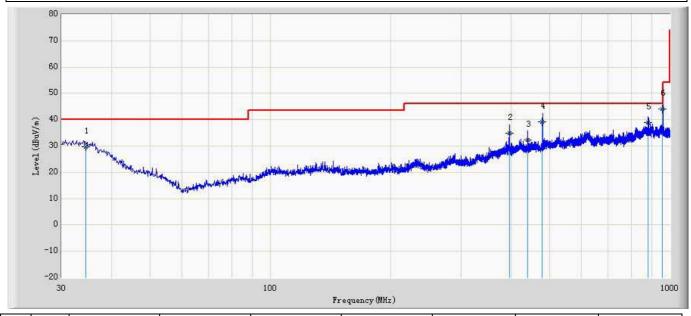
Note: 1. Measure Level = Reading Level + Factor.

- 2. The test frequency range, 9kHz~30MHz, 18GHz~25GHz, both of the worst case are at least 6dB below the limits, therefore no data appear in the report.
- 3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.



The worst case of Radiated Emission below 1GHz:

Site: AC2	Time: 2015/12/16	
Limit: FCC_Part15.209_RE(3m)	Margin: 0	
Probe: CBL6112D_27611(30-2000MHz)	Polarity: Horizontal	
EUT: Zipp	Power: AC 120V/60Hz	
Note: Mode1	·	



No	Mar	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
	k	(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
			(dBuV/m)	(dBuV)				
1		34.540	29.759	36.119	-10.241	40.000	-6.360	QP
2		396.201	34.913	39.837	-11.087	46.000	-4.924	QP
3		440.121	32.436	36.164	-13.564	46.000	-3.728	QP
4		479.218	39.227	42.139	-6.773	46.000	-2.912	QP
5		883.011	39.025	37.993	-6.975	46.000	1.032	QP
6	*	959.120	43.977	41.876	-2.023	46.000	2.101	QP



Site: AC2	Time: 2015/12/16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: CBL6112D_27611(30-2000MHz)	Polarity: Vertical
EUT: Zipp	Power: AC 120V/60Hz
Note: Mode1	

Frequency (Mfz)

No	Mar	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
	k	(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
			(dBuV/m)	(dBuV)				
1		124.900	31.041	40.717	-12.459	43.500	-9.676	QP
2		396.084	34.172	39.098	-11.828	46.000	-4.926	QP
3		439.044	32.761	36.516	-13.239	46.000	-3.755	QP
4		479.221	38.315	41.227	-7.685	46.000	-2.912	QP
5		630.001	33.857	34.586	-12.143	46.000	-0.729	QP
6	*	959.866	44.805	42.696	-1.195	46.000	2.109	QP



4. Radiated Emission Band Edge

4.1. Test Equipment

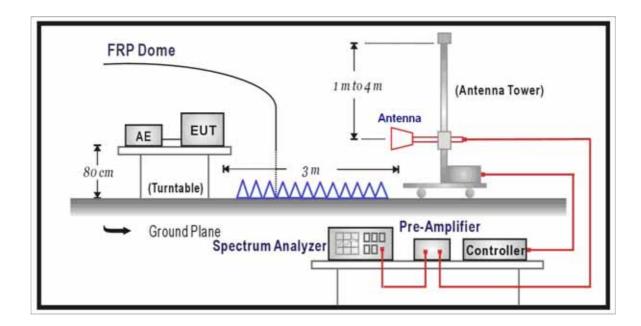
⊠Radiated Emission Band Edge / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2016.03.30
Preamplifier	Miteq	NSP1800-25	1364185	2016.05.03
Preamplifier	QuieTek	AP-040G	CHM-0906001	2016.05.03
Bilog Antenna	Teseq GmbH	CBL6112D	27612	2016.10.15
DRG Horn	ETS-Lindgren	3117	00123988	2016.01.05
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2016.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2016.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2016.08.07
Temperature/Humidity				
Meter	Zhicheng	ZC1-2	AC5-TH	2016.01.08

Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.



4.2. Test Setup



4.3. Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

4.4. Test Procedure

According to ANSI C63.10: 2013.

This test is required for any spurious emission or modulation product that falls in a Restricted Band, as defined in Section 15.205 of FCC part 15. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for f < 1GHz

 $VBW \ge RBW$

Sweep = auto

Detector function = peak

Trace = max hold

Follow the guidelines in ANSI C63.4 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with



sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b) of FCC part 15.

Now set the VBW ≥ 1 / T (the minimum transmission duration), while maintaining all of the other instrument settings. This peak level, once corrected, must comply with the limit specified in Section 15.209 of FCC Part 15.

If the emission on which a radiated measurement must be made is located at the edge of the authorized band of operation, then the alternative "marker-Zipp" method may be employed.

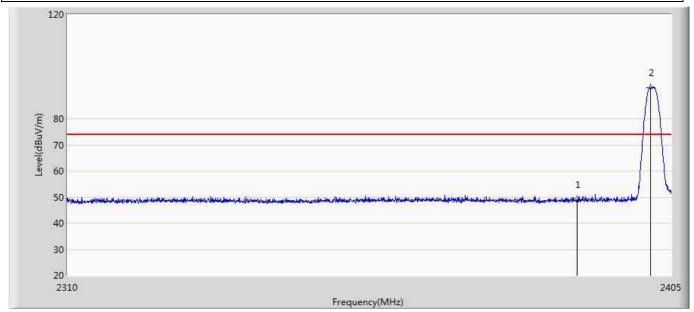
4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB



4.6. Test Result

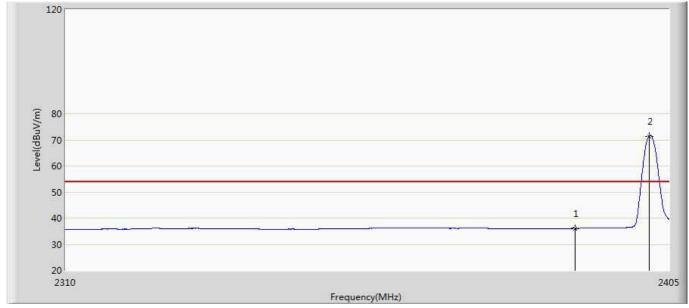
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:11			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2402Mhz by BLE				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	49.041	11.686	-24.959	74.000	37.355	PK
2	*	2401.675	91.938	54.596	17.938	74.000	37.342	PK



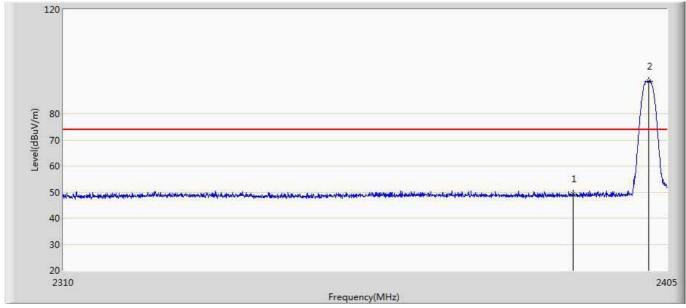
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:16			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2402Mhz by BLE	·			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	36.080	-1.275	-17.920	54.000	37.355	AV
2	*	2401.817	71.437	34.095	17.437	54.000	37.342	AV



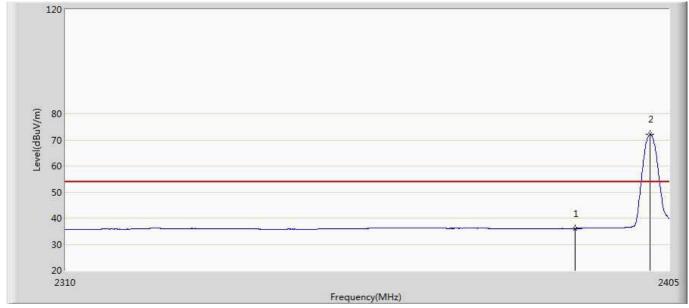
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:19			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2402Mhz by BLE				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	49.277	11.922	-24.723	74.000	37.355	PK
2	*	2402.103	92.551	55.209	18.551	74.000	37.342	PK



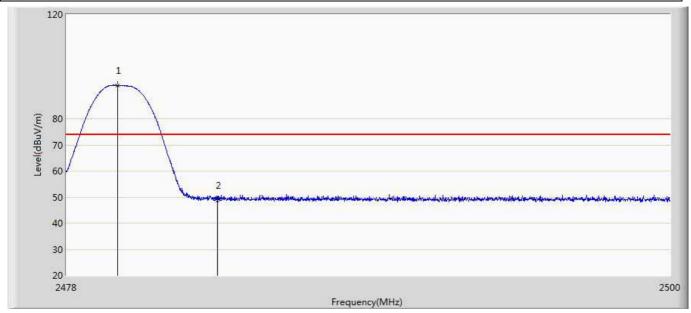
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:23			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2402Mhz by BLE	•			



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1		2390.000	36.051	-1.304	-17.949	54.000	37.355	AV
2	*	2401.913	72.057	34.715	18.057	54.000	37.342	AV



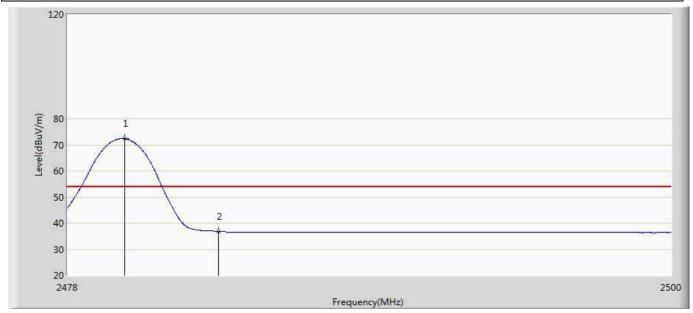
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:27			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2480Mhz by BLE				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2479.870	92.831	55.346	18.831	74.000	37.485	PK
2		2483.500	48.659	11.148	-25.341	74.000	37.511	PK



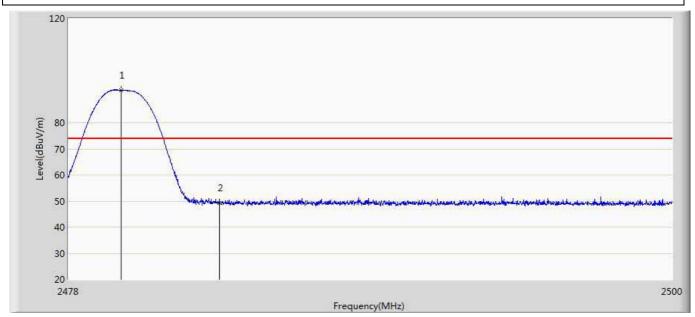
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:32			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2480Mhz by BLE				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.079	72.364	34.877	18.364	54.000	37.486	AV
2		2483.500	36.732	-0.779	-17.268	54.000	37.511	AV



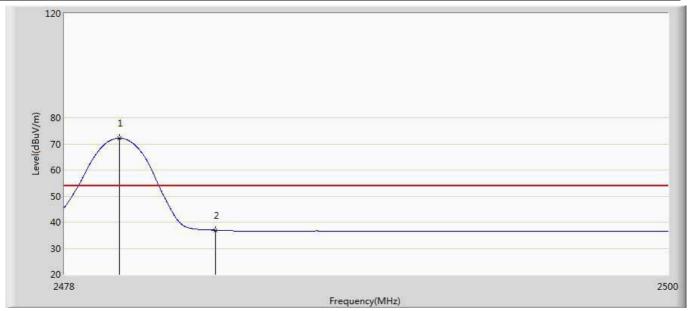
Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:36			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2480Mhz by BLE				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2479.914	92.524	55.039	18.524	74.000	37.485	PK
2		2483.500	49.394	11.883	-24.606	74.000	37.511	PK



Engineer: Scott				
Site: AC5	Time: 2015/12/19 - 09:39			
Limit: FCC_Part15.209_RE(3m)	Margin: 0			
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical			
EUT: Zipp	Power: AC 120V/60Hz			
Note: Mode 1:Transmit at 2480Mhz by BLE				



No	Mark	Frequency	Measure Level	Reading Level	Over Limit	Limit	Factor	Туре
		(MHz)	(dBuV/m)	(dBuV)	(dB)	(dBuV/m)	(dB)	
1	*	2480.013	72.199	34.713	18.199	54.000	37.486	AV
2		2483.500	36.922	-0.589	-17.078	54.000	37.511	AV



5. Power Output

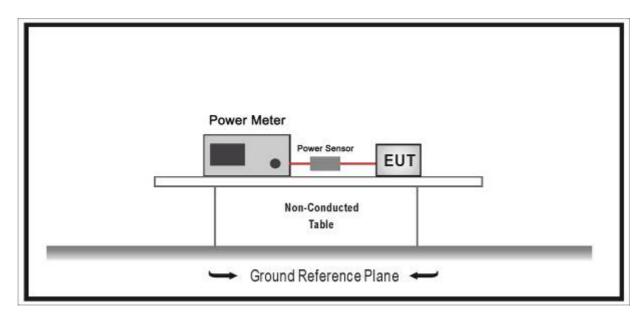
5.1. Test Equipment

Power Output / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Due Date
Wideband Peak Power Meter	Anritsu	ML2495A	0905006	2015.11.10
Power Sensor	Anritsu	MA2411B	0846014	2015.11.10
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2016.04.09

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup



5.3. Limit

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W. Except as provided in Section 5.4(5), the e.i.r.p. shall not exceed 4 W.



5.4. Test Procedure

The EUT was tested according to DTS test procedure of ANSI C63.10 for compliance to FCC 47CFR 15.247 requirements. The maximum conducted output power using ANSI C63.10 section 11.9.1.1 peak power meter method.

- 1. Power meter and sensor's minimum video bandwidth is 50MHz, larger than occupied bandwidth;
- 2. Fast responding diode sensors respond immediately to changes in power level to reduce total test time.
- 3. Use peak detector to test.

5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB



5.6. Test Result

Product	:	Zipp
Test Item	:	Power Output
Test Site	:	TR8
Test Mode	:	Mode 1: Transmit-1Mbps(GFSK_BLE)

Channel No.	Frequency (MHz)	Power Output (dBm)	Output Power Limit (dBm)	Result
00	2402	4.13	30.00	Pass
19	2440	4.11	30.00	Pass
39	2480	4.01	30.00	Pass

 The End	