

# FCC PART 15.247 TEST REPORT

For

# Shenzhen Belter Health Measurement and Analysis Technology Co.,Ltd.

702, 704, Block C, Tsinghua Unis Science Park, Hi-Tech Industrial Park North, Nanshan, Shenzhen, China

FCC ID: 2AAEESSG1

**Report Type: Product Name:** Original Report Smart Weight Scale Lorin Dian Test Engineer: Lorin Bian Report Number: RDG160918802 **Report Date: 2016-10-21 Henry Ding** Henry Ding **EMC Leader** Reviewed By: Bay Area Compliance Laboratories Corp. (Chengdu) 5040, HuiLongWan Plaza, No. 1, ShaWan Road, JinNiu District, ChengDu, China Tel: 028-65523123, Fax: 028-65525125 **Test Laboratory:** www.baclcorp.com

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# **GENERAL INFORMATION**

#### **Product Description for Equipment under Test (EUT)**

The **Shenzhen Belter Health Measurement and Analysis Technology Co.,Ltd.**'s product, model number: **SG1 (FCC ID: 2AAEESSG1)** or (the "EUT") in this report was a **Smart Weight Scale**, which was measured approximately: 31.5 cm (L) x 31.5 cm (W) x 2.9 cm (H), rated input voltage: DC6V from battery.

\*All measurement and test data in this report was gathered from final production sample, serial number: 160918802 (assigned by the BACL, Chengdu). It may have deviation from any other sample. The EUT supplied by the applicant was received on 2016-09-19, and EUT conformed to test requirement.

# **Objective**

This report is prepared on behalf of **Shenzhen Belter Health Measurement and Analysis Technology Co.,Ltd.** in accordance with Part 2, Subpart J, Part 15, Subparts A, B and C of the Federal Communications Commission's rules

The tests were performed in order to determine the compliance of the EUT with FCC Part 15-Subpart C, section 15.203, 15.205, 15.209 and 15.247 rules.

#### Related Submittal(s)/Grant(s)

N/A

#### **Test Methodology**

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All emissions measurement was performed and Bay Area Compliance Laboratories Corp. (Chengdu). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

The uncertainty of any RF tests which use conducted method measurement is ±3.17 dB, the uncertainty of any radiation on emissions measurement is:

30M~200MHz: ±4.7 dB; 200M~1GHz: ±6.0 dB; 1G-6GHz: ±5.13dB; 6G~25GHz: ±5.47dB;

And the uncertainty will not be taken into consideration for all test data recorded in the report.

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Bay Area Compliance Laboratories Corp. (Chengdu)

#### **Test Facility**

The test site used by BACL to collect test data is located in the 5040, HuiLongWan Plaza, No. 1, ShaWan Road, JinNiu District, ChengDu, China

Test site at BACL has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on April 24, 2015. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 560332. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

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# **SYSTEM TEST CONFIGURATION**

# **Description of Test Configuration**

The system was configured for testing in testing mode, which was provided by manufacturer. For Bluetooth LE mode, 40 channels are provided for testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404		
		38	2478
19	2440	39	2480

EUT was tested with channel 0, 19 and 39.

# **Equipment Modifications**

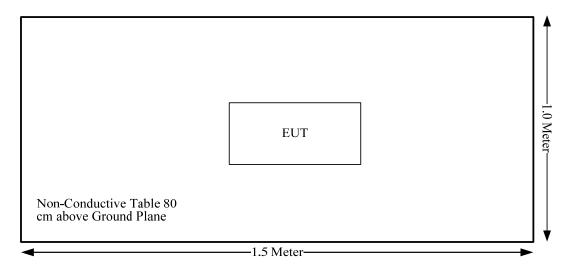
No modification was made to the EUT tested.

#### **EUT Exercise Software**

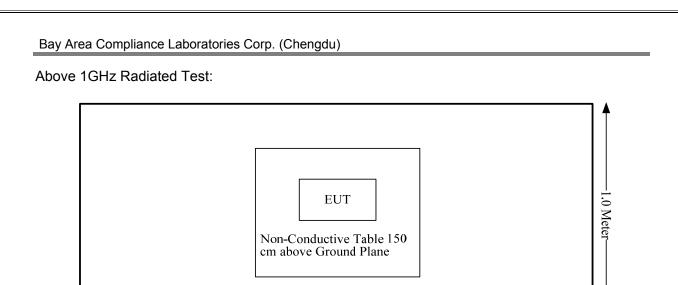
No Software was used in test, the test mode was configured by manufacture setting with duty cycle 100% and switched channels by manual operation.

# **Block Diagram of Test Setup**

Below 1GHz Radiated Test:



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-1.5 Meter-

# SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.247 (i) & §1.1310 & §2.1093	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.207 (a)	AC Line Conducted Emissions	Not Applicable
§15.247(d)	Spurious Emissions at Antenna Port	Compliant
§15.205, §15.209, §15.247(d)	Spurious Emissions	Compliant
§15.247 (a)(2)	6 dB Emission Bandwidth	Compliant
§15.247(b)(3)	Maximum conducted output power	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.247(e)	Power Spectral Density	Compliant

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# FCC §15.247 (i) & §1.1310 & §2.1093- RF EXPOSURE

# **Applicable Standard**

According to §15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,

mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

#### **Measurement Result**

The output power including tune-up tolerance is -8dBm =0.16mW (-10dBm+/-2dB), [(max. power of channel, mW)/(min. test separation distance, mm)][ $\sqrt{f(GHz)}$ ] = 0.16/5\*( $\sqrt{2.480}$ ) = 0.05 < 3.0

So the stand-alone SAR evaluation is not necessary.

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# FCC §15.203 - ANTENNA REQUIREMENT

# **Applicable Standard**

According to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT. Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

#### **Antenna Connector Construction**

The EUT has one PCB antenna arrangement and the antenna gain is 0 dBi, fulfill the requirement of this section. Please refer to the EUT photos.

Result: Compliance.

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# FCC §15.209, §15.205 & §15.247(d) - SPURIOUS EMISSIONS

#### **Applicable Standard**

FCC §15.247 (d); §15.209; §15.205;

# **Measurement Uncertainty**

Compliance or non- compliance with a disturbance limit shall be determined in the following manner:

If  $U_{lab}$  is less than or equal to  $U_{cispr}$  of Table 2, then:

- -compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- -non compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.
- If  $U_{lab}$  is greater than  $U_{cispr}$  of Table 2, then:
- –compliance is deemed to occur if no measured disturbance level, increased by  $(U_{lab} U_{cispr})$ , exceeds the disturbance limit;
- -non compliance is deemed to occur if any measured disturbance level, increased by  $(U_{lab} U_{cispr})$ , exceeds the disturbance limit.

Based on CISPR 16-4-2-2011, measurement uncertainty of radiated emission at a distance of 3m at Bay Area Compliance Laboratories Corp. (Chengdu) is:

30M~200MHz: ±4.7 dB; 200M~1GHz: ±6.0 dB; 1G-6GHz: ±5.13dB; 6G~25GHz: ±5.47 dB;

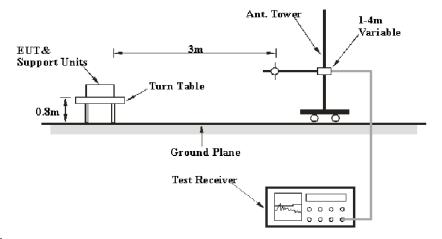
Table 2 – Values of  $U_{cispr}$ 

Measurement		
Radiated disturbance (electric field strength at an OATS or in a SAC) (30 MHz to 1000 MHz)	6.3 dB	
Radiated disturbance (electric field strength in a FAR) (1 GHz to 6 GHz)	5.2 dB	
Radiated disturbance (electric field strength in a FAR) (6 GHz to 18 GHz)	5.5 dB	

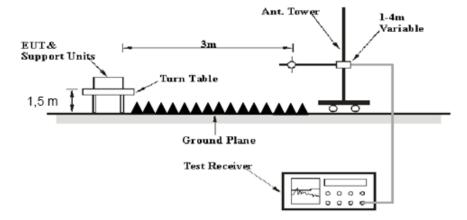
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# **EUT Setup**

#### **Below 1GHz:**



#### **Above 1GHz:**



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

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#### **EMI Test Receiver & Spectrum Analyzer Setup**

The system was investigated from 30 MHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

30MHz-1000MHz:

Detector	RBW	Video B/W	IF B/W
QP	120 kHz	300 kHz	120kHz

#### 1GHz-25GHz:

Detector	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
Δνο	>98%	1MHz	10 Hz
Ave.	<98%	1MHz	1/T

Note: T is minimum transmission duration

#### **Test Procedure**

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

#### **Corrected Amplitude & Margin Calculation**

The Corrected Amplitude is calculated by adding the Antenna Loss and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude = Meter Reading + Antenna Loss + Cable Loss - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit - Corrected Amplitude

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# **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Agilent	Amplifier	8447D	2944A10442	2015-12-02	2016-12-01
Rohde & Schwarz	EMI Test Receiver	ESCI	100028	2015-12-02	2016-12-01
Sunol Sciences	Broadband Antenna	JB3	A101808	2016-04-10	2019-04-09
Rohde & Schwarz	Spectrum Analyzer	FSEM30	100018	2015-12-02	2016-12-01
EM TEST	Horn Antenna	3115	003-6076	2015-12-02	2016-12-01
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726- 0113024	2014-06-16	2017-06-15
Mini-circuits	Amplifier	ZVA-183-S+	771001215	2016-05-20	2017-05-19
EMCT	Semi-Anechoic Chamber	966	N/A	2015-04-24	2018-04-23
N/A	RF Cable (below 1GHz)	NO.1	N/A	2015-11-10	2016-11-09
N/A	RF Cable (below 1GHz)	NO.4	N/A	2015-11-10	2016-11-09
N/A	RF Cable (above 1GHz)	NO.2	N/A	2015-11-10	2016-11-09

<sup>\*</sup> **Statement of Traceability:** BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

# **Test Results Summary**

According to the recorded data in following table, the EUT complied with the <u>FCC Title 47, Part 15, Section 15.205, 15.209 and 15.247</u>.

#### **Test Data**

#### **Environmental Conditions**

Temperature:	26.7 °C
Relative Humidity:	42 %
ATM Pressure:	100.5 kPa

<sup>\*</sup> The testing was performed by Lorin Bian on 2016-10-11.

Test Mode: Transmitting

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# 30MHz-25GHz:

2402       55.62       PK       H         2402       54.35       AV       H         2402       46.22       PK       V         2402       45.31       AV       V         2390       28.15       PK       H         2390       15.52       AV       H	(dB) -ow Chanr 23.53 23.53 23.53 23.53 23.57 23.57	Cable loss (dB) nel: 2402 3.00 3.00 3.00 3.00 3.00	MHz 0.00 0.00 0.00 0.00	Corrected Amplitude (dBµV/m) 82.15 80.88 72.75	Limit (dBµV/m)	Margin (dB)
2402       55.62       PK       H         2402       54.35       AV       H         2402       46.22       PK       V         2402       45.31       AV       V         2390       28.15       PK       H         2390       15.52       AV       H	23.53 23.53 23.53 23.53 23.57 23.57	3.00 3.00 3.00 3.00	0.00 0.00 0.00	80.88		N/A
2402       54.35       AV       H         2402       46.22       PK       V         2402       45.31       AV       V         2390       28.15       PK       H         2390       15.52       AV       H	23.53 23.53 23.53 23.57 23.57	3.00 3.00 3.00	0.00	80.88		N/A
2402 46.22 PK V 2402 45.31 AV V 2390 28.15 PK H 2390 15.52 AV H	23.53 23.53 23.57 23.57	3.00 3.00	0.00		N/A	
2402 45.31 AV V 2390 28.15 PK H 2390 15.52 AV H	23.53 23.57 23.57	3.00		72.75		N/A
2390 28.15 PK H 2390 15.52 AV H	23.57 23.57		0.00		N/A	N/A
2390 15.52 AV H	23.57	3.00	0.00	71.84	N/A	N/A
			0.00	54.72	74.00	19.28
4004 40.07 DV 11	20.77	3.00	0.00	42.09	54.00	11.91
4804 40.27 PK H	30.77	5.12	26.87	49.29	74.00	24.71
4804 36.49 AV H	30.77	5.12	26.87	45.51	54.00	8.49
7206 33.88 PK H	34.71	6.16	26.35	48.40	74.00	25.60
7206 27.43 AV H	34.71	6.16	26.35	41.95	54.00	12.05
1669 31.85 PK H	24.37	2.80	26.50	32.52	74.00	41.48
1669 27.66 AV H	24.37	2.80	26.50	28.33	54.00	25.67
224 29.75 QP V	11.72	1.08	27.63	14.92	46.00	31.08
288.02 27.12 QP V	13.98	1.13	27.52	14.71	46.00	31.29
	iddle Char					
2440 53.25 PK H	23.40	3.00	0.00	79.65	N/A	N/A
2440 52.46 AV H	23.40	3.00	0.00	78.86	N/A	N/A
2440 47.35 PK V	23.40	3.00	0.00	73.75	N/A	N/A
2440 46.58 AV V	23.40	3.00	0.00	72.98	N/A	N/A
4880 39.25 PK H	31.02	5.09	26.87	48.49	74.00	25.51
4880 35.18 AV H	31.02	5.09	26.87	44.42	54.00	9.58
7320 32.46 PK H	34.94	6.22	26.40	47.22	74.00	26.78
7320 27.59 AV H	34.94	6.22	26.40	42.35	54.00	11.65
1669 35.26 PK H	24.37	2.80	26.50	35.93	74.00	38.07
1669 30.49 AV H	24.37	2.80	26.50	31.16	54.00	22.84
3520 33.65 PK H	27.08	4.21	26.59	38.35	74.00	35.65
3520 28.16 AV H	27.08	4.21	26.59	32.86	54.00	21.14
224 30.47 QP V	11.72	1.08	27.63	15.64	46.00	30.36
288.02 28.79 QP V	13.98 High Chanı	1.13	27.52	16.38	46.00	29.62
2480 53.65 PK H	23.27	2.99	0.00	79.91	N/A	N/A
2480 52.53 AV H	23.27	2.99	0.00	78.79	N/A	N/A
2480 32.93 AV 11 2480 46.98 PK V	23.27	2.99	0.00	73.24	N/A	N/A
2480 45.67 AV V	23.27	2.99	0.00	71.93	N/A	N/A
		2.99				
	23.26	2.99	0.00	54.60	74.00	19.40 12.11
	23.26		0.00	41.89 50.58	54.00	
4960 41.14 PK H 4960 36.55 AV H	31.27 31.27	5.05 5.05	26.88 26.88	45.99	74.00 54.00	23.42 8.01
7440 32.43 PK H	35.18	6.27	26.45	47.43	74.00	26.57
7440 32.43 PK H	35.18	6.27	26.45	43.54	54.00	10.46
1669 36.31 PK H	24.37	2.80	26.50	36.98	74.00	37.02
1669 31.52 AV H	24.37	2.80	26.50	32.19	54.00	21.81
224 31.22 QP V	11.72	1.08	27.63	16.39	46.00	29.61
288.02 29.58 QP V	13.98	1.13	27.52	17.17	46.00	28.83

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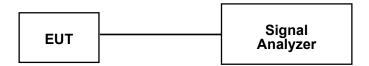
# FCC §15.247(a) (2) - 6 dB EMISSION BANDWIDTH

# **Applicable Standard**

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

#### **Test Procedure**

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) ≥ 3×RBW
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



# **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2016-09-21	2017-09-20
N/A	RF Cable	N/A	N/A	Each Time	1

<sup>\*</sup> **Statement of Traceability:** BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

#### **Test Data**

#### **Environmental Conditions**

Temperature:	27.2 °C
Relative Humidity:	49 %
ATM Pressure:	100.1 kPa

<sup>\*</sup> The testing was performed by Lorin Bian on 2016-10-20.

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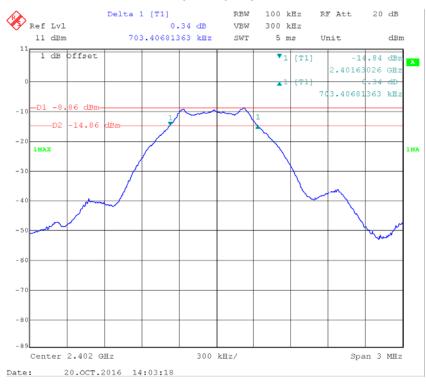
# Bay Area Compliance Laboratories Corp. (Chengdu)

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table and plots.

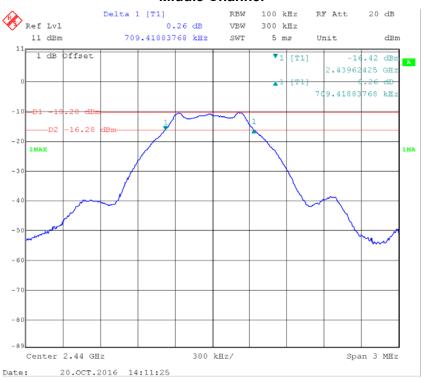
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
Low	2402	0.703	≥0.5
Middle	2440	0.709	≥0.5
High	2480	0.703	≥0.5

#### **Low Channel**

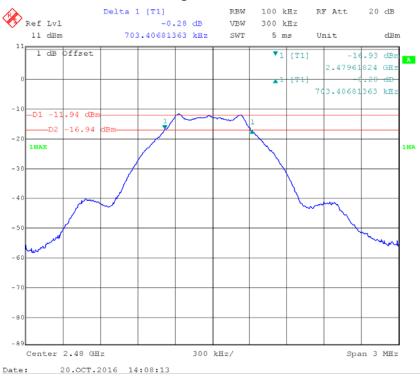


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#### **Middle Channel**



# **High Channel**



# FCC §15.247(b) (3) - MAXIMUM CONDUCTED OUTPUT POWER

# **Applicable Standard**

According to FCC §15.247(b) (3), for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

#### **Test Procedure**

- a) Set the RBW ≥ DTS bandwidth.
- b) Set VBW ≥ 3 RBW.
- c) Set span ≥ 3 x RBW
- d) Sweep time = auto couple.
- e) Detector = peak.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use peak marker function to determine the peak amplitude level.



#### **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2016-09-21	2017-09-20
N/A	RF Cable	N/A	N/A	Each Time	1

<sup>\*</sup> **Statement of Traceability:** BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

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# **Test Data**

#### **Environmental Conditions**

Temperature:	27.2 °C	
Relative Humidity:	49 %	
ATM Pressure:	100.1 kPa	

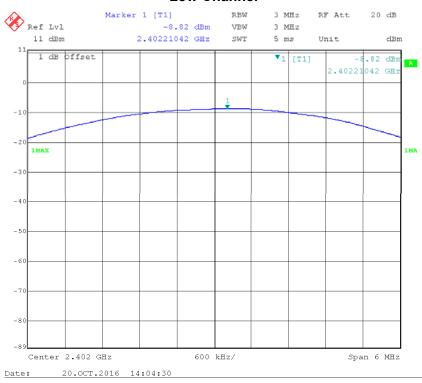
<sup>\*</sup> The testing was performed by Lorin Bian on 2016-10-20.

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table.

Channel	Frequency (MHz)	Max Peak Conducted Output Power (dBm)	Limit (dBm)
Low	2402	-8.82	30
Middle	2440	-10.28	30
High	2480	-11.6	30

#### **Low Channel**

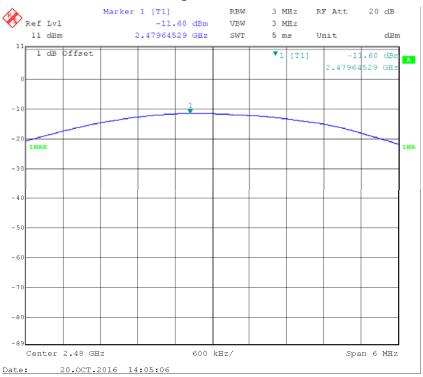


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#### **Middle Channel**



# **High Channel**



# FCC §15.247(d) - 100 kHz BANDWIDTH OF FREQUENCY BAND EDGE

#### **Applicable Standard**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

# **Test Procedure**

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- 4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- 5. Repeat above procedures until all measured frequencies were complete.

#### **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2016-09-21	2017-09-20
N/A	RF Cable	N/A	N/A	Each Time	/

<sup>\*</sup> Statement of Traceability: BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

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# **Test Data**

#### **Environmental Conditions**

Temperature:	27.2 °C	
Relative Humidity:	49 %	
ATM Pressure:	100.1 kPa	

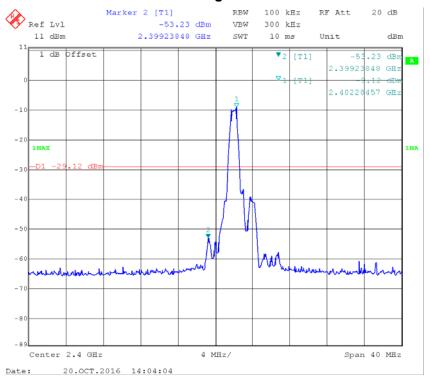
<sup>\*</sup> The testing was performed by Lorin Bian on 2016-10-20.

Test mode: Transmitting

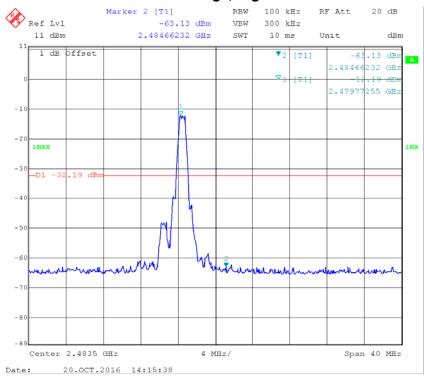
Test Result: Compliant. Please refer to following plots.

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#### **BLE Band Edge, Left Side**



# **BLE Band Edge, Right Side**



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# FCC §15.247(e) - POWER SPECTRAL DENSITY

#### **Applicable Standard**

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

#### **Test Procedure**

- 1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- 2. Position the EUT was set without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
- 3. set the RBW = 3 kHz, VBW = 10 kHz, Set the span to 1.5 times the DTS channel bandwidth.
- 4. Use the peak marker function to determine the maximum power level in any 3 kHz band segment within the fundamental EBW.

# **Test Equipment List and Details**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	Signal Analyzer	FSIQ26	831929/005	2016-09-21	2017-09-20
N/A	RF Cable	N/A	N/A	Each Time	1

<sup>\*</sup> Statement of Traceability: BACL (Chengdu) attested that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

#### **Test Data**

#### **Environmental Conditions**

Temperature:	27.2 °C	
Relative Humidity:	49 %	
ATM Pressure:	100.1 kPa	

<sup>\*</sup> The testing was performed by Lorin Bian on 2016-10-20.

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# Bay Area Compliance Laboratories Corp. (Chengdu)

Test Mode: Transmitting

Test Result: Compliant. Please refer to the following table and plots

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)
Low	2402	-8.82	≤8
Middle	2440	-10.28	≤8
High	2480	-11.6	≤8

#### Note:

Per C63.10 clause 11.10.1:

Where the measured power (peak conducted output power or maximum conducted output power) complies with the regulatory requirement for the PSD, then measurement of PSD is not required, provided that the PSD level is reported as being equal to the measured output power.

\*\*\*\*\* END OF REPORT \*\*\*\*\*

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