APPLICATION CERTIFICATION FCC Part 15C
On Behalf of
WITTECH COMPANY LIMITED

Bluetooth 4.0 Body Scale
Model No.:S1

FCC ID: PXM-S1

Prepared for	:	WITTECH COMPANY LIMITED
Address	:	Room 806, Alliance Building, 130-136 Connaught Road, Central, Hong Kong
Prepared by	:	ACCURATE TECHNOLOGY CO., LTD
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Report Number	:	ATE20122187
Date of Test	:	Sep 13- Oct 12, 2012
Date of Report	:	Oct 12, 2012

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Description Page

Test Report Certification

Applicant **:** WITTECH COMPANY LIMITED

Manufacturer **:** Care Electronic (Scale) Co. Ltd.

EUT Description **:** Bluetooth 4.0 Body Scale

(A) MODEL NO.: S1

(B) TRADE NAME.: WIT

(C) POWER SUPPLY: DC 4.5V

Measurement Procedure Used:

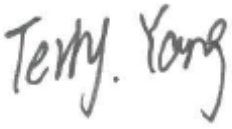
FCC Rules and Regulations Part 15 Subpart C Section 15.247
ANSI C63.4: 2009
KDB 558074 D01 DTS Meas Guidance v01

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

Date of Test : Sep 13-Oct 12, 2012

Prepared by :



(Engineer)

Approved & Authorized Signer :

(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

EUT	:	Bluetooth 4.0 Body Scale
Model Number	:	S1
Frequency Range	:	Bluetooth V4.0 BLE: 2402MHz-2480MHz
Number of Channels	:	40
Antenna Gain	:	2.5dBi
Power Supply	:	DC 4.5V
Adapter	:	N/A
Data Rate	:	
Applicant	:	WITTECH COMPANY LIMITED
Address	:	Room 806, Alliance Building, 130-136 Connaught Road, Central, Hong Kong
Manufacturer	:	Care Electronic (Scale) Co. Ltd.
Address	:	NO 19-23 Civilization Road, The Second Industrial Park, South Area, Zhongshan City, Guangdong Province China
Date of sample received	:	Sep 13, 2012
Date of Test	:	Sep 13-Oct 12, 2012

1.2.Carrier Frequency of Channels

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2402	11	2422	21	2442	31	2462
02	2404	12	2424	22	2444	32	2464
03	2406	13	2426	23	2446	33	2466
04	2408	14	2428	24	2448	34	2468
05	2410	15	2430	25	2450	35	2470
06	2412	16	2432	26	2452	36	2472
07	2414	17	2434	27	2454	37	2474
08	2416	18	2436	28	2456	38	2476
09	2418	19	2438	29	2458	39	2478
10	2420	20	2440	30	2460	40	2480

1.3.Special Accessory and Auxiliary Equipment

N/A

1.4.Description of Test Facility

EMC Lab	:	Accredited by TUV Rheinland Shenzhen Listed by FCC The Registration Number is 752051 Listed by Industry Canada The Registration Number is 5077A-2 Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	:	ACCURATE TECHNOLOGY CO. LTD
Site Location	:	F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

1.5.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	=	2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	=	3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	=	4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	=	4.06dB, k=2

2. MEASURING DEVICE AND TEST EQUIPMENT

Table 1: List of Test and Measurement Equipment

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 8, 2012	Jan. 7, 2013
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 8, 2012	Jan. 7, 2013
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 8, 2012	Jan. 7, 2013
Pre-Amplifier	Rohde&Schwarz	CBLU1183540-01	3791	Jan. 8, 2012	Jan. 7, 2013
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 8, 2012	Jan. 7, 2013
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 8, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 8, 2012	Jan. 7, 2013
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 8, 2012	Jan. 7, 2013
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 8, 2012	Jan. 7, 2013
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 8, 2012	Jan. 7, 2013

3. OPERATION OF EUT DURING TESTING

3.1.Operating Mode

The mode is used: **BLE Transmitting mode**

Low Channel: 2402MHz

Middle Channel: 2440MHz

High Channel: 2480MHz

3.2.Configuration and peripherals

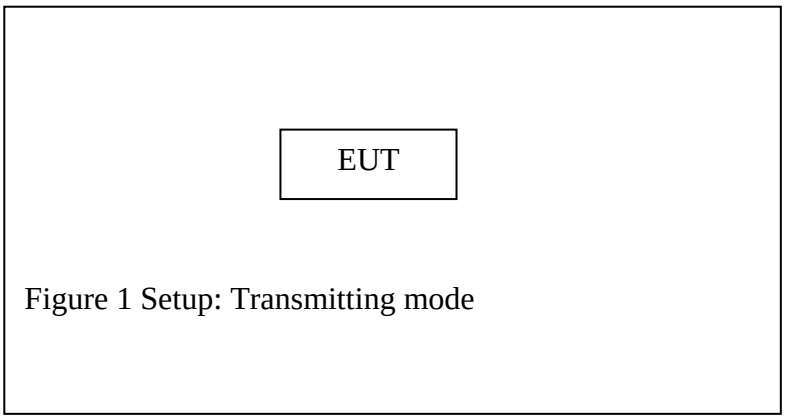


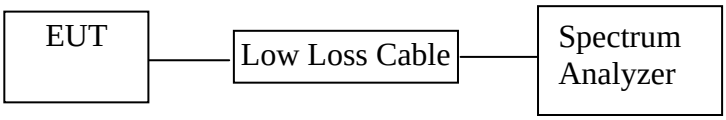
Figure 1 Setup: Transmitting mode

4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.247(a)(2)	6dB Bandwidth Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.247(b)(3)	Maximum Peak Output Power Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.247(d) Section 15.209	Radiated Spurious Emission Test	Compliant
Section 15.247(d)	Conducted Spurious Emission Test	Compliant
Section 15.207	AC Power Line Conducted Emission Test	Compliant
Section 15.203	Antenna Requirement	Compliant

5. 6DB BANDWIDTH MEASUREMENT

5.1.Block Diagram of Test Setup



(EUT: Bluetooth 4.0 Body Scale)

5.2.The Requirement For Section 15.247(a)(2)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.3.EUT Configuration on Measurement

The following equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.3.1. Bluetooth 4.0 Body Scale (EUT)

Model Number **:** S1
Serial Number **:** N/A

5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 5.1.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

5.5. Test Procedure

5.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

5.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to300 kHz.

5.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

5.6. Test Result

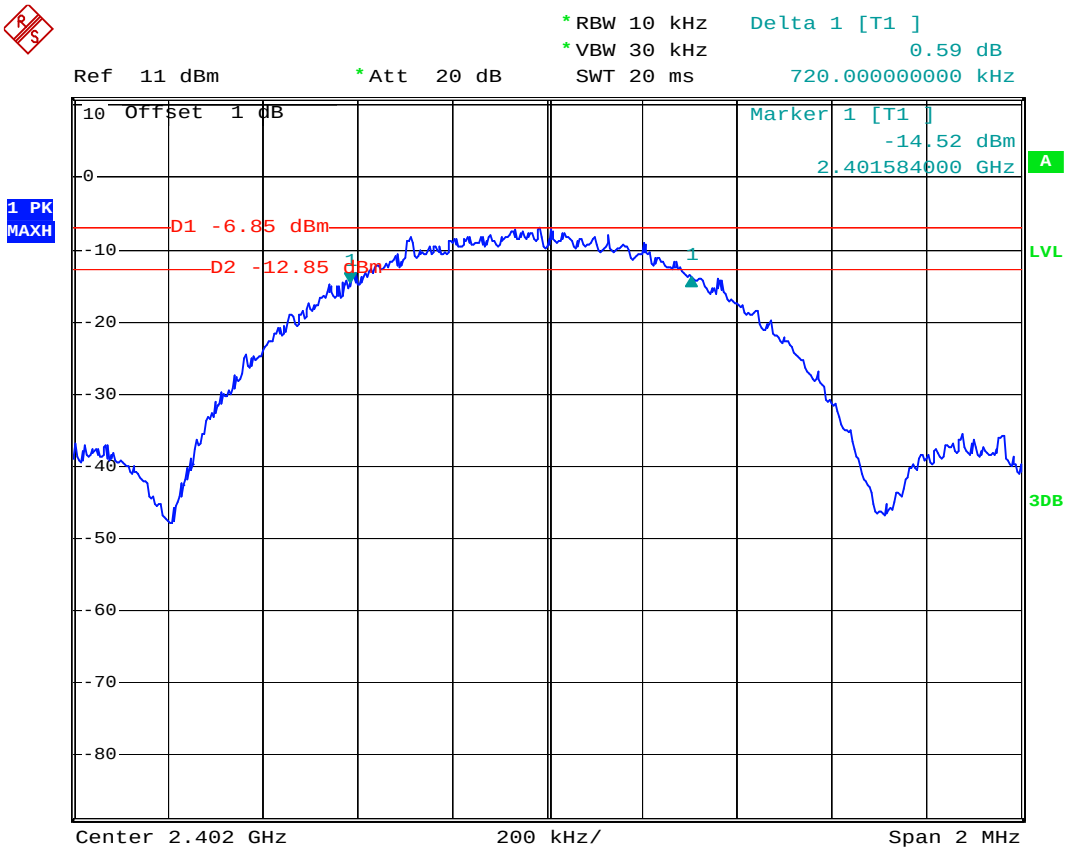
PASS.

Date of Test:	Oct 11, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	TX	Test Engineer:	Alen

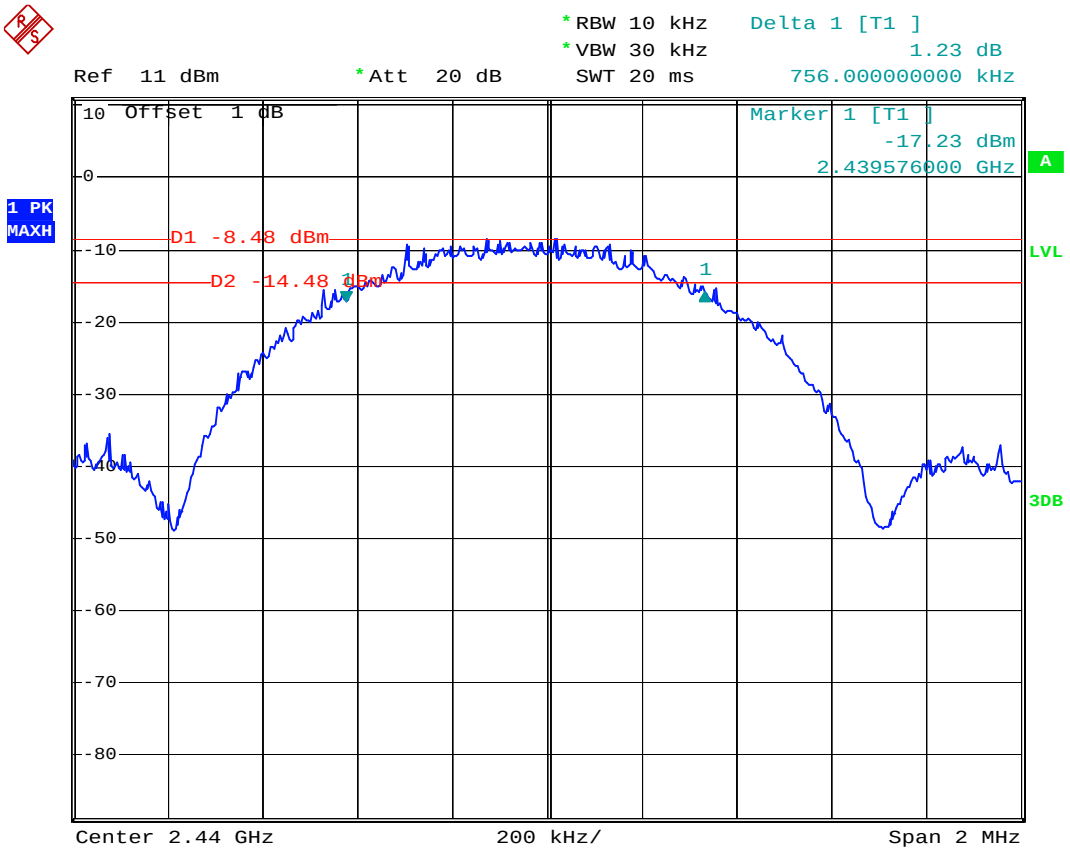
The test was performed with BLE			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
Low	2402	0.720	> 0.5MHz
Middle	2440	0.756	> 0.5MHz
High	2480	0.752	> 0.5MHz

The spectrum analyzer plots are attached as below.

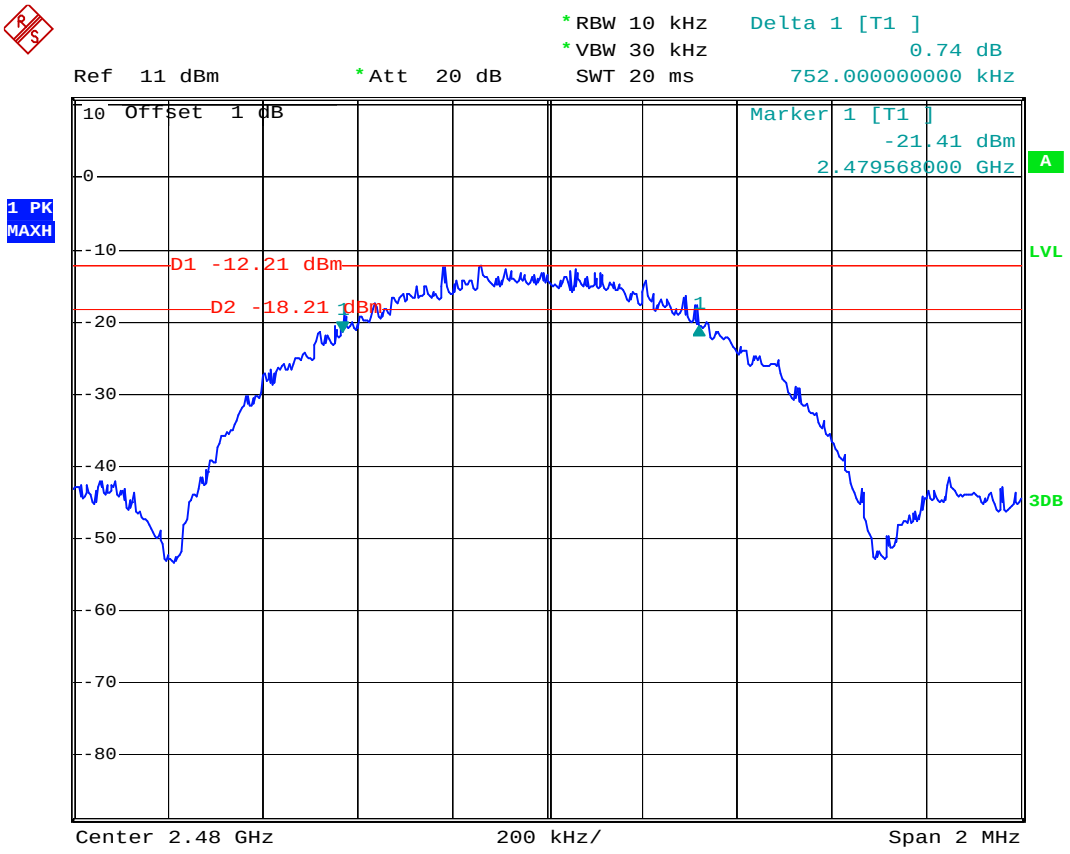
BLE Channel Low 2402MHz



BLE Channel Middle 2440MHz

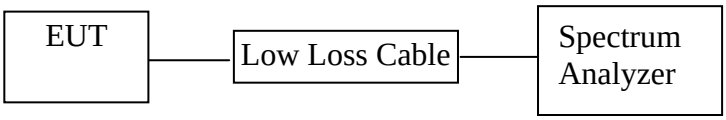


BLE Channel High 2480MHz



6. MAXIMUM PEAK OUTPUT POWER

6.1.Block Diagram of Test Setup



(EUT: Bluetooth 4.0 Body Scale)

6.2.The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

6.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

6.3.1. Bluetooth 4.0 Body Scale (EUT)

Model Number **:** S1
Serial Number **:** N/A

6.4.Operating Condition of EUT

6.4.1.Setup the EUT and simulator as shown as Section 6.1.

6.4.2.Turn on the power of all equipment.

6.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

6.5.Test Procedure

6.5.1.The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.2.Set RBW of spectrum analyzer to 1MHz and VBW to 3MHz.

6.5.3.Measurement the maximum peak output power.

6.6.Test Result

PASS.

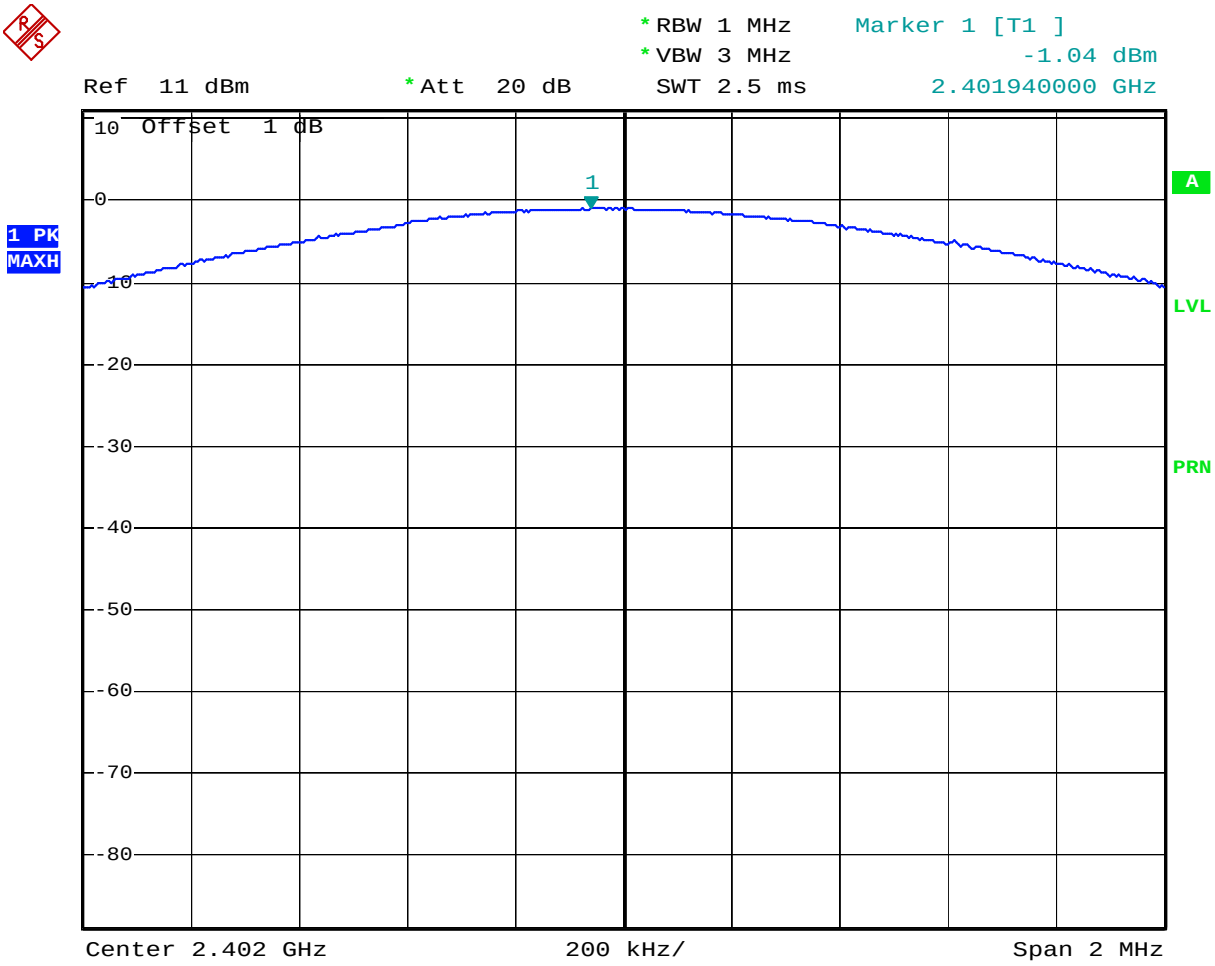
Date of Test:	Oct 11, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	TX	Test Engineer:	Alen

The test was performed with BLE

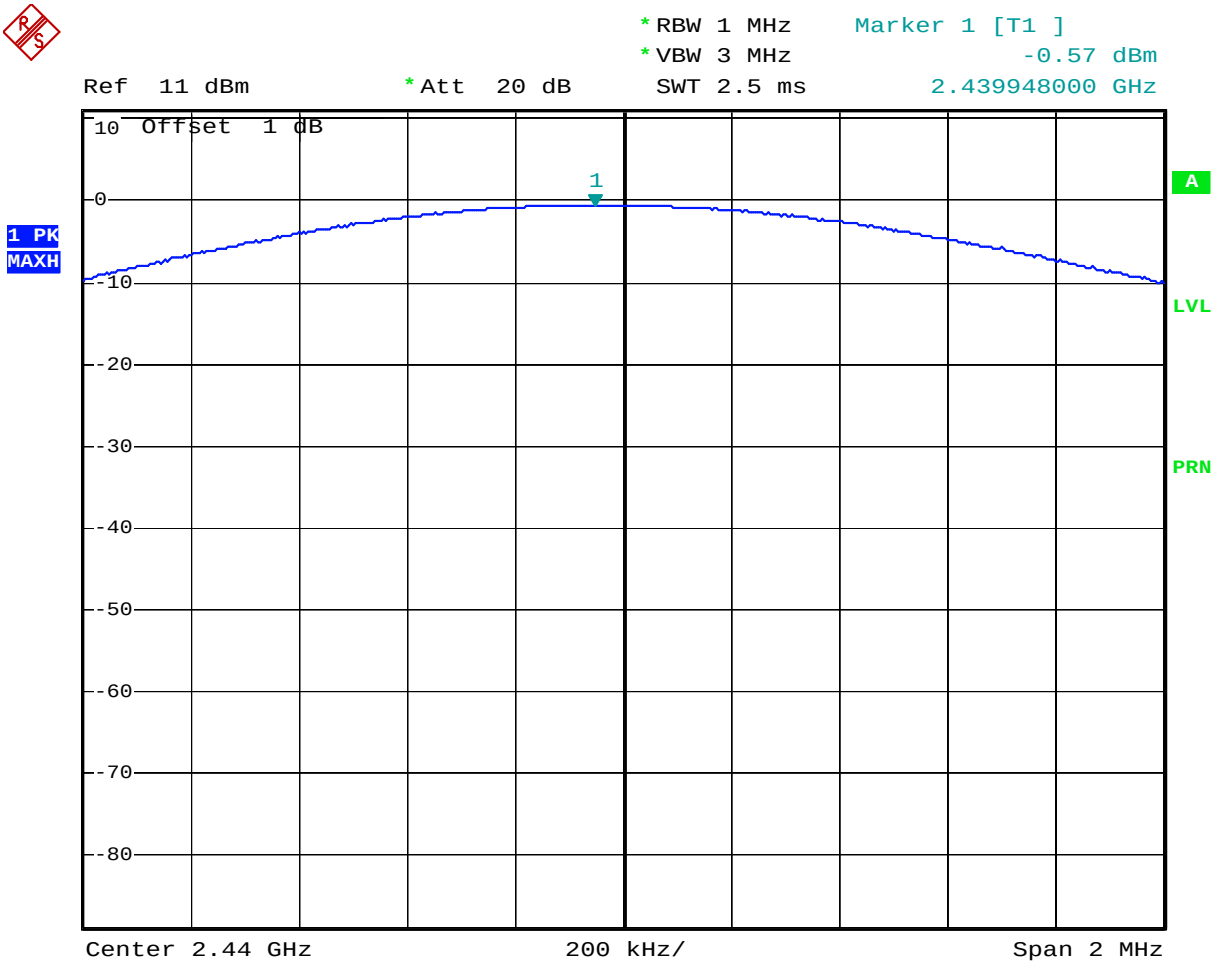
Channel	Frequency (MHz)	Peak Output Power (dBm)	Peak Output Power (mW)	Limits dBm / W
Low	2402	-1.04	0.79	30 dBm / 1 W
Middle	2440	-0.57	0.88	30 dBm / 1 W
High	2480	-0.40	0.91	30 dBm / 1 W

The spectrum analyzer plots are attached as below.

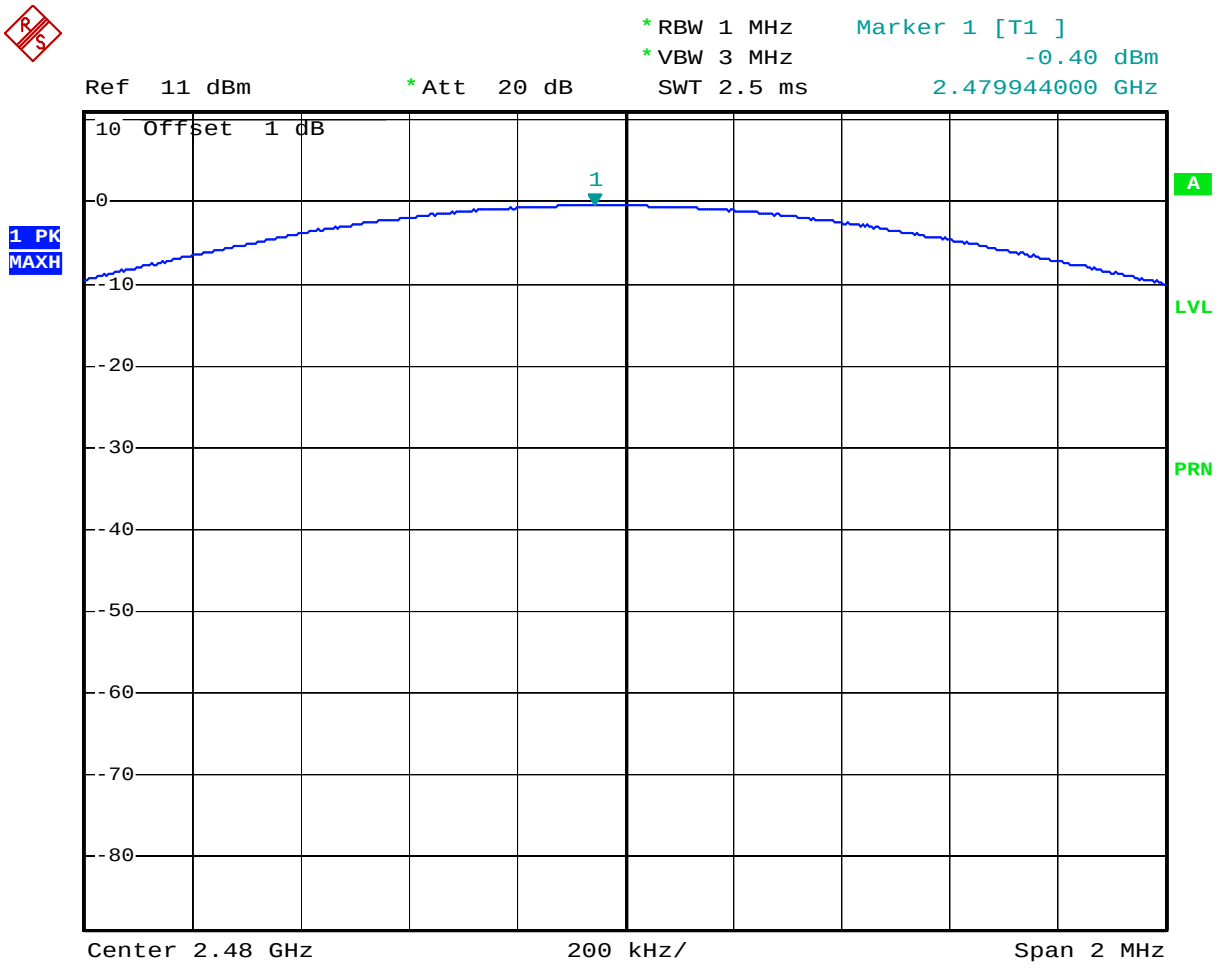
BLE Channel Low 2402MHz



BLE Channel Middle 2440MHz

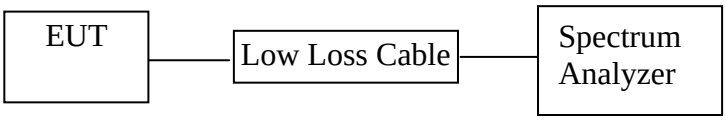


BLE Channel High 2480MHz



7. POWER SPECTRAL DENSITY MEASUREMENT

7.1.Block Diagram of Test Setup



(EUT: Bluetooth 4.0 Body Scale)

7.2.The Requirement For Section 15.247(e)

Section 15.247(e): 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.

7.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

7.3.1. Bluetooth 4.0 Body Scale (EUT)

Model Number	**:**	S1
Serial Number	**:**	N/A

7.4.Operating Condition of EUT

7.4.1.Setup the EUT and simulator as shown as Section 7.1.

7.4.2.Turn on the power of all equipment.

7.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz, sweep time = auto, span=5%-30% greater than the EBW.

7.5.3. Measurement the maximum power spectral density.

7.6. Test Result

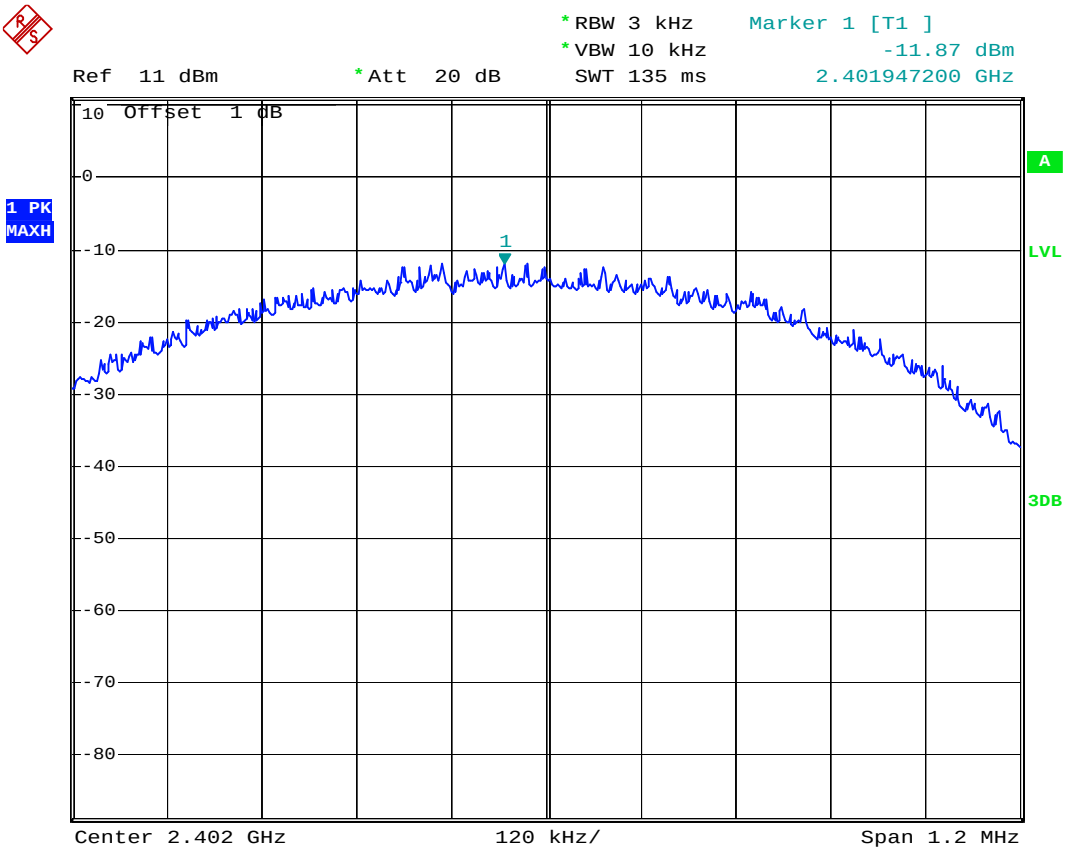
PASS.

Date of Test:	Oct 11, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	TX	Test Engineer:	Alen

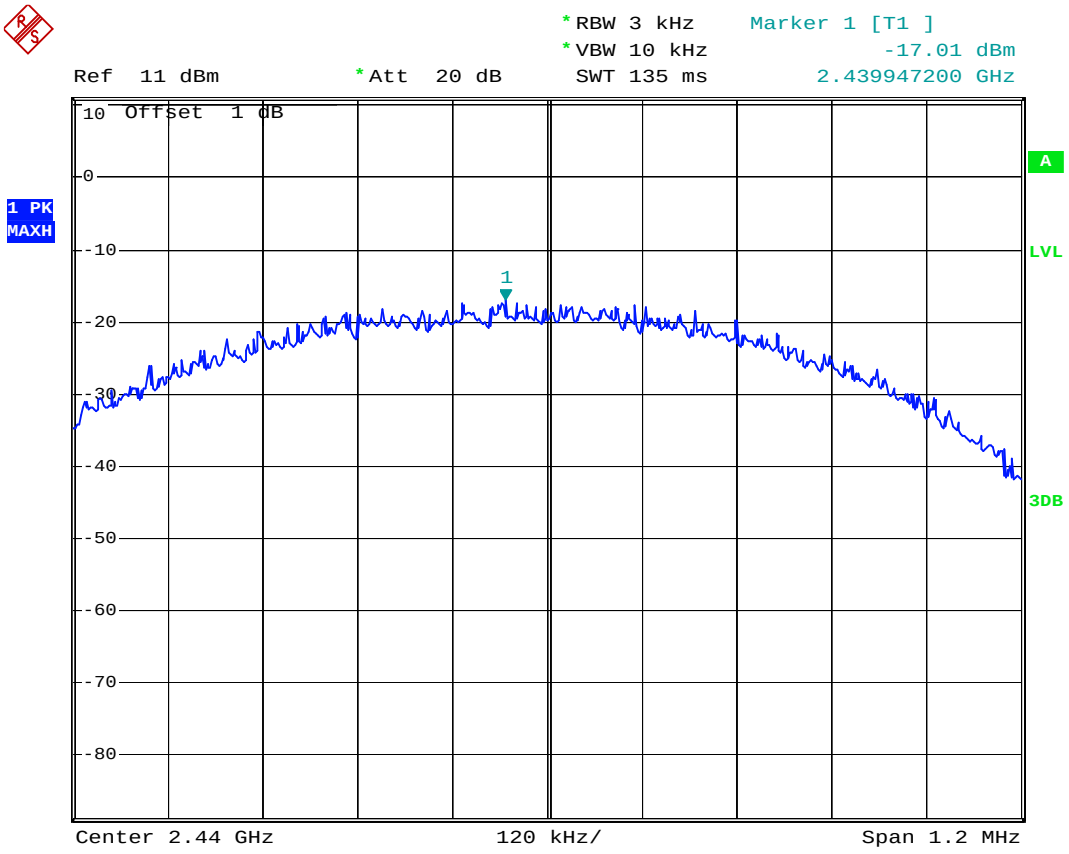
The test was performed with BLE			
Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limits (dBm/3kHz)
Low	2402	-11.87	8 dBm
Middle	2440	-17.01	8 dBm
High	2480	-14.61	8 dBm

The spectrum analyzer plots are attached as below.

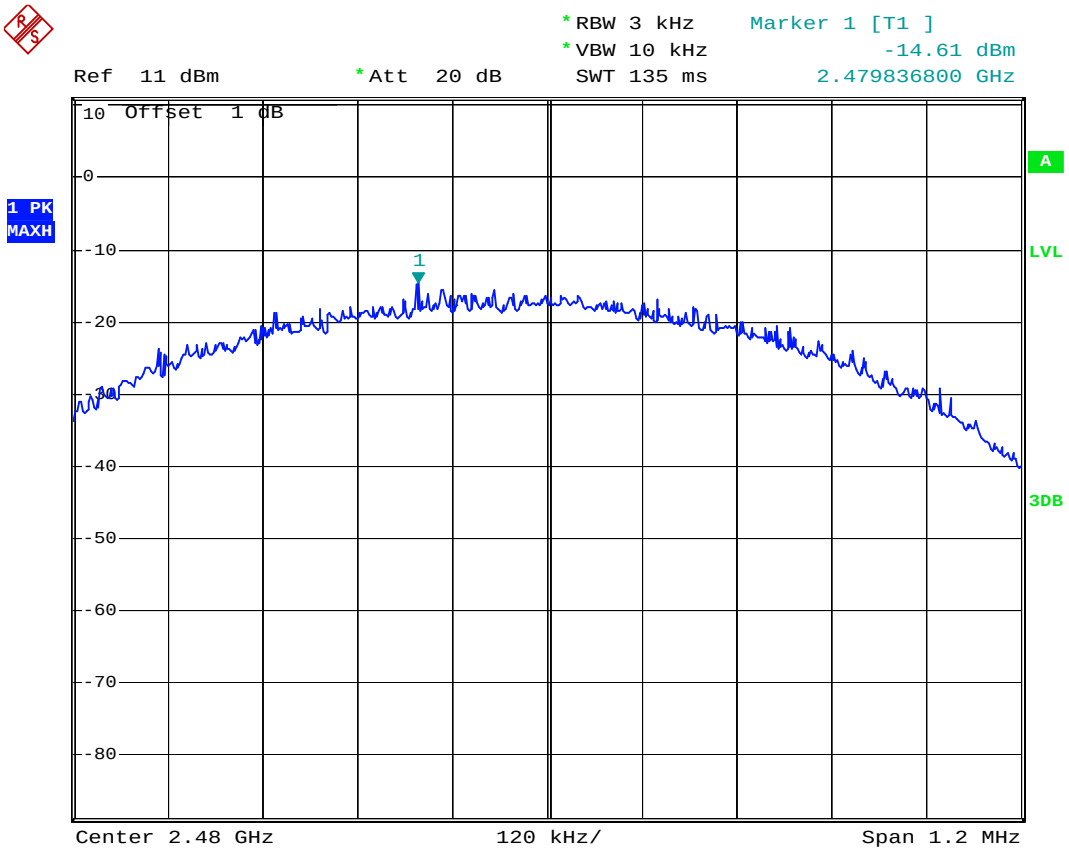
BLE Channel Low 2402MHz



BLE Channel Middle 2440MHz

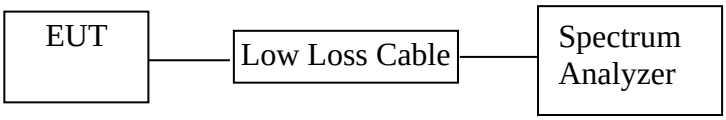


BLE Channel High 2480MHz



8. BAND EDGE COMPLIANCE TEST

8.1.Block Diagram of Test Setup



(EUT: Bluetooth 4.0 Body Scale)

8.2.The Requirement For Section 15.247(d)

Section 15.247(d): 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

8.3.EUT Configuration on Measurement

The following equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

8.3.1. Bluetooth 4.0 Body Scale (EUT)

Model Number **:** S1
Serial Number **:** N/A

8.4.Operating Condition of EUT

8.4.1.Setup the EUT and simulator as shown as Section 8.1.

8.4.2.Turn on the power of all equipment.

8.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

8.5.Test Procedure

Conducted Band Edge:

8.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

8.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

Radiate Band Edge:

8.5.3. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

8.5.4. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

8.5.5. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

8.5.6. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

RBW=1MHz, VBW=1MHz

8.5.7.The band edges was measured and recorded.

8.6.Test Result

Pass

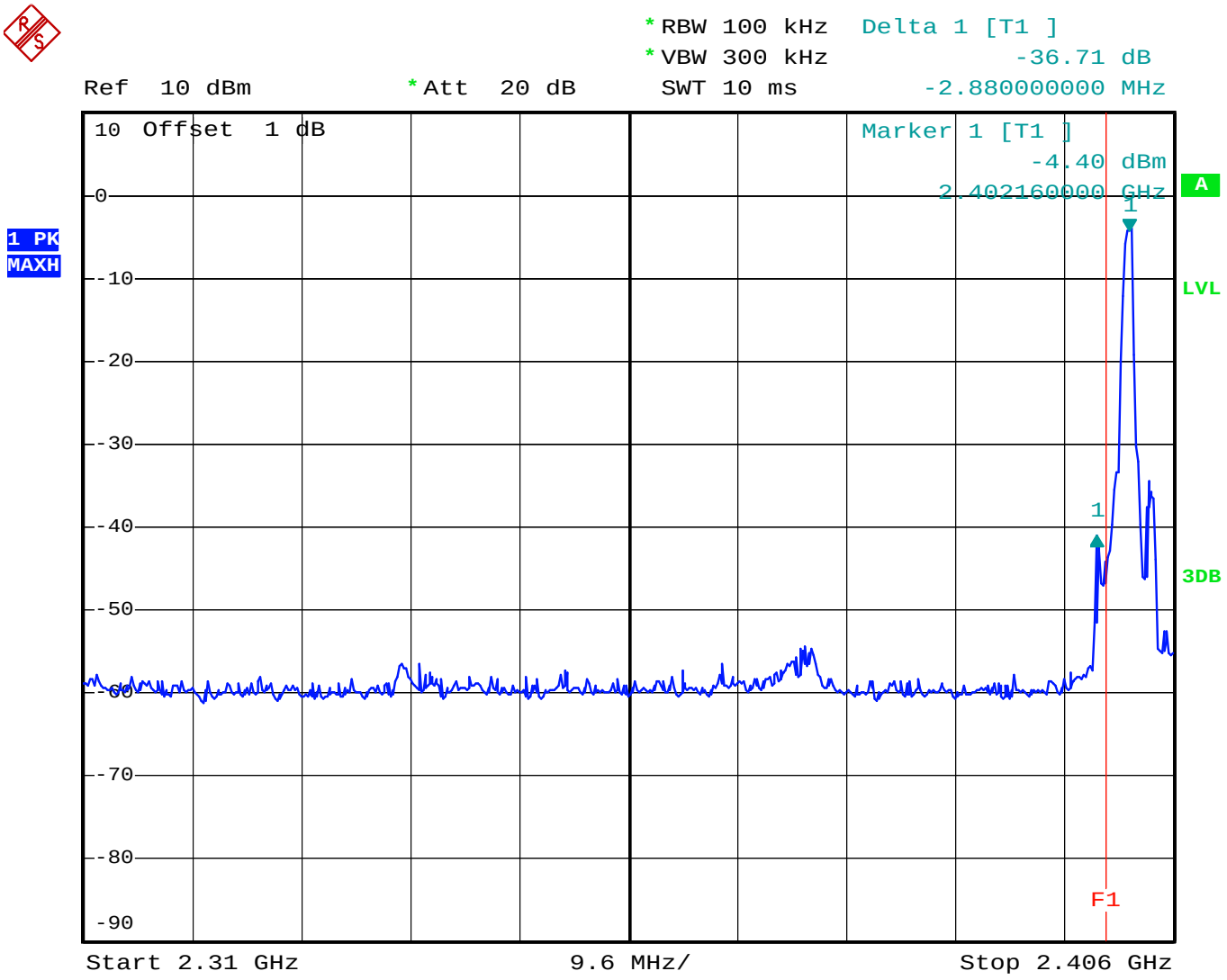
Conducted test

Date of Test:	Oct 11, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	TX	Test Engineer:	Alen

The test was performed with BLE

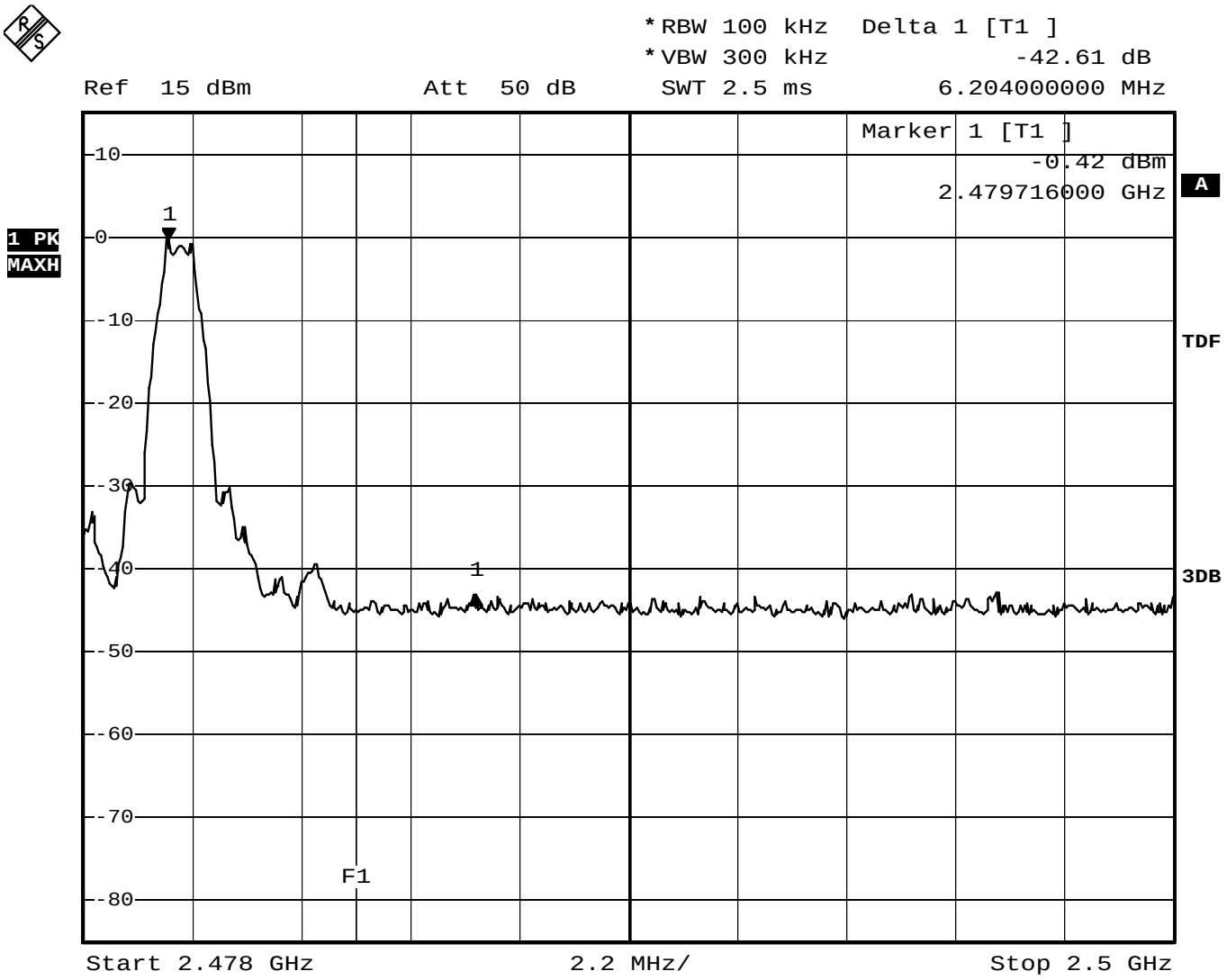
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
2402	36.78	> 20dBc
2480	42.61	> 20dBc

BLE Channel Low 2402MHz



Date: 11.OCT.2012 11:55:36

BLE Channel High 2480MHz



Radiated Band Edge Result

Date of Test:	Oct 4, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	BLE Channel Low 2402MHz	Test Engineer:	Alen

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2400.000	55.35	57.84	-7.46	47.89	50.38	54	74	-6.11	-23.62	Vertical
2400.000	54.69	56.44	-7.46	47.23	48.98	54	74	-6.77	-25.02	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Date of Test:	Oct 4, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	BLE Channel High 2480MHz	Test Engineer:	Alen

Frequency	Reading(dBμV/m)		Factor(dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dB)		Polarization
(MHz)	AV	PEAK	Corr.	AV	PEAK	AV	PEAK	AV	PEAK	
2483.500	38.69	40.19	-7.37	31.32	32.82	54	74	-22.68	-41.18	Vertical
2483.500	37.69	39.63	-7.37	30.32	32.26	54	74	-23.68	-41.74	Horizontal

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:
   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

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Site: 966 chamber
Tel:+86-0755-26503290
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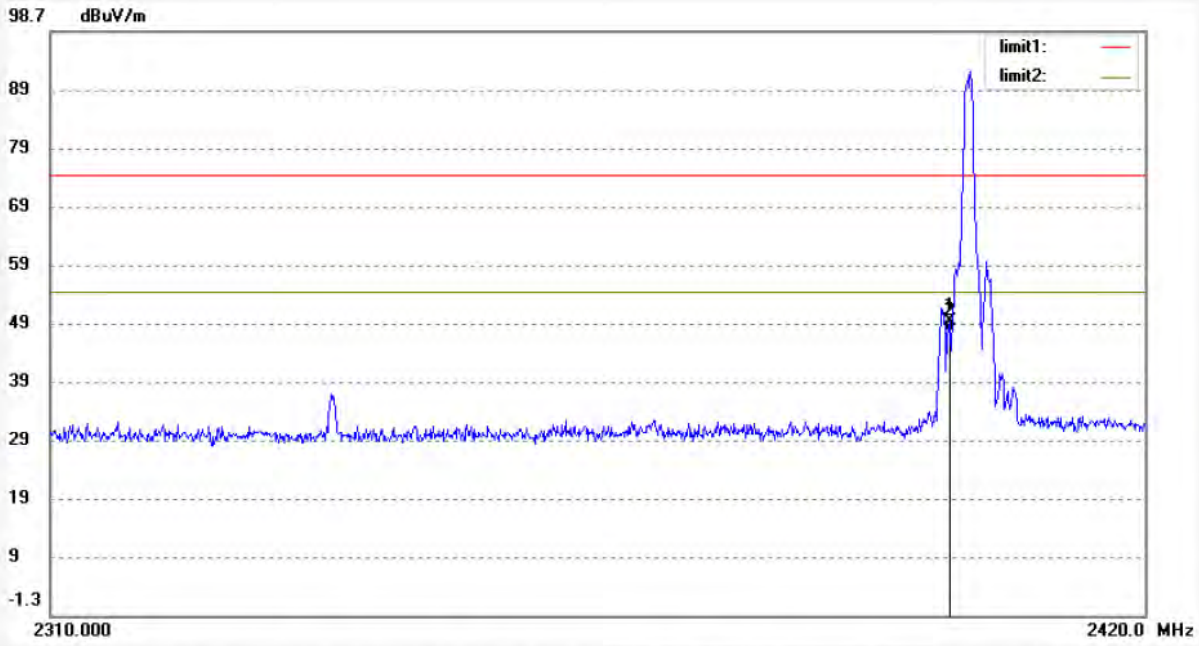
Job No.: ALEN #273
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: Bluetooth 4.0 Body Scale
Mode: TX 2402MHz
Model: S1
Manufacturer: Care

Polarization: Horizontal
Power Source: DC 4.5V
Date: 2012/10/04
Time: 15:01:20
Engineer Signature: alen
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	56.44	-7.46	48.98	74.00	-25.02	peak			
2	2400.000	54.69	-7.46	47.23	54.00	-6.77	AVG			

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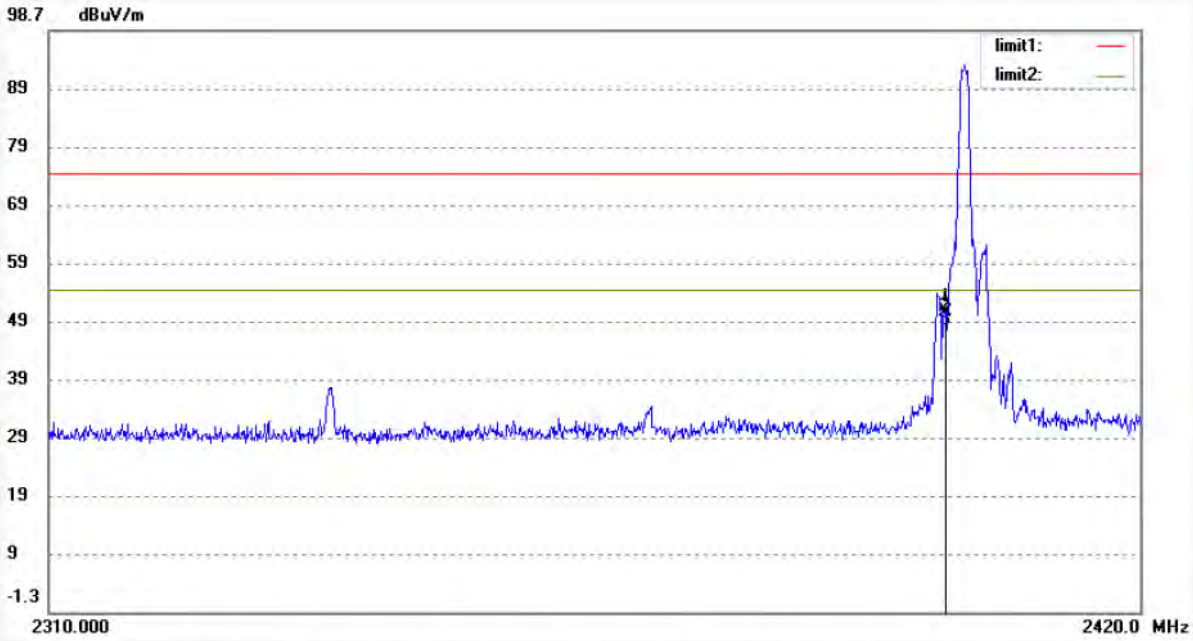
Fax:+86-0755-26503396

Job No.: ALEN #272
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: Bluetooth 4.0 Body Scale
Mode: TX 2402MHz
Model: S1
Manufacturer: Care

Polarization: Vertical
Power Source: DC 4.5V
Date: 2012/10/04
Time: 14:57:26
Engineer Signature: alen
Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2400.000	57.84	-7.46	50.38	74.00	-23.62	peak			
2	2400.000	55.35	-7.46	47.89	54.00	-6.11	AVG			

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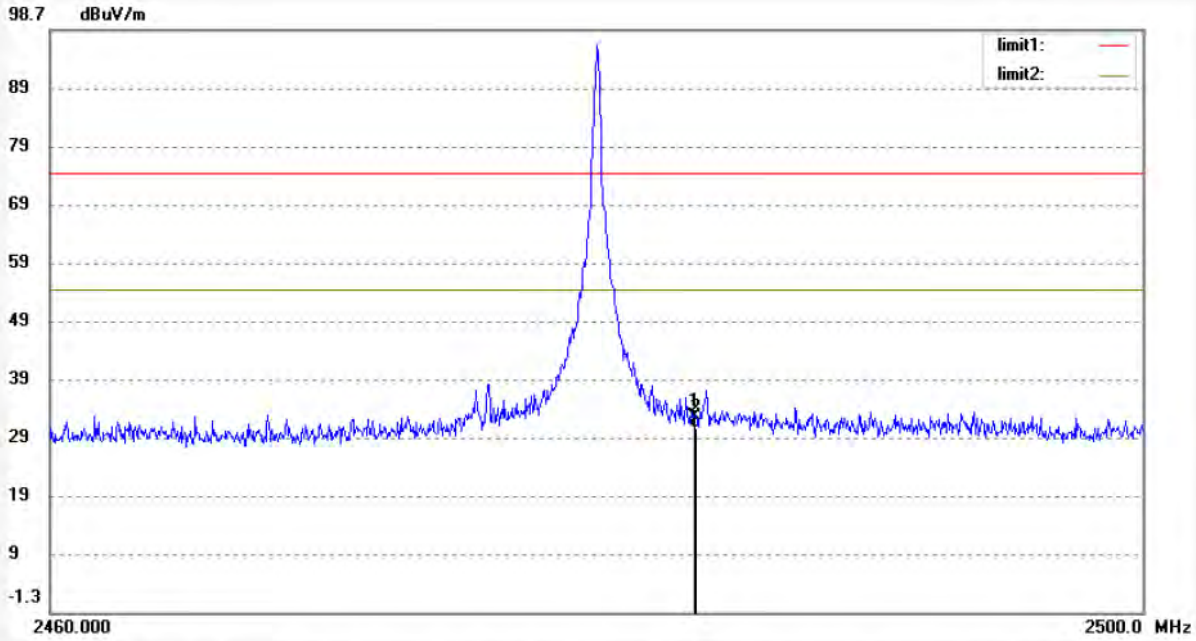
Fax:+86-0755-26503396

Job No.: ALEN #271	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:52:53
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	39.63	-7.37	32.26	74.00	-41.74	peak			
2	2483.500	37.69	-7.37	30.32	54.00	-23.68	AVG			

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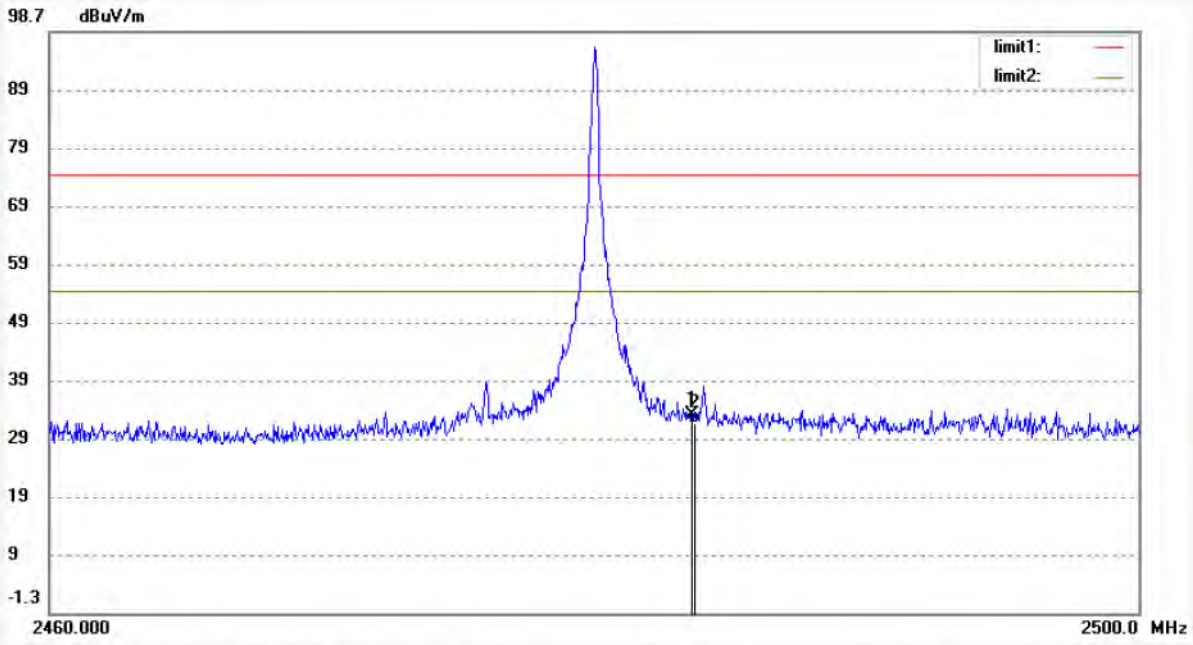
Job No.: ALEN #270
Standard: FCC 15C PK
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 49 %
EUT: Bluetooth 4.0 Body Scale
Mode: TX 2480MHz
Model: S1
Manufacturer: Care

Polarization: Vertical
Power Source: DC 4.5V
Date: 2012/10/04
Time: 14:50:31
Engineer Signature: alen
Distance: 3m

Note:

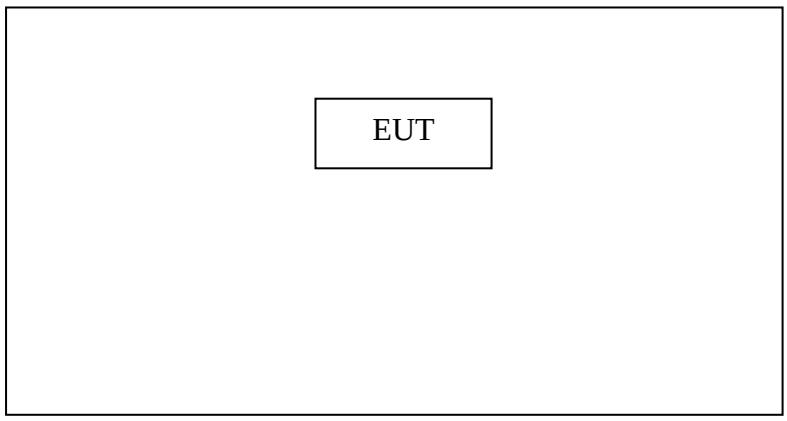


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.500	40.19	-7.37	32.82	74.00	-41.18	peak			
2	2483.500	38.69	-7.37	31.32	54.00	-22.68	AVG			

9. RADIATED SPURIOUS EMISSION TEST

9.1.Block Diagram of Test Setup

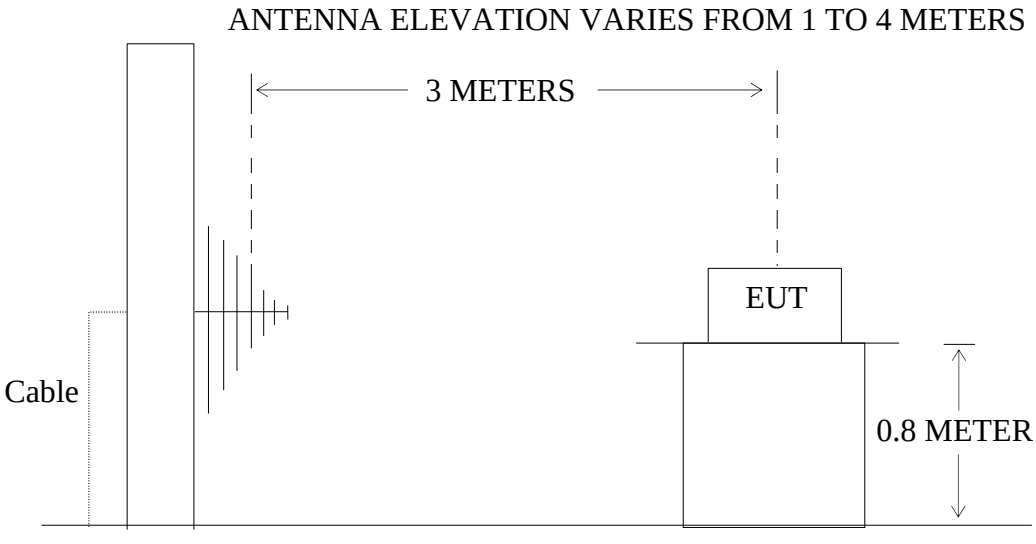
9.1.1.Block diagram of connection between the EUT and peripherals



Setup: Transmitting mode

(EUT: Bluetooth 4.0 Body Scale)

9.1.2.Semi-Anechoic Chamber Test Setup Diagram



(EUT: Bluetooth 4.0 Body Scale)

9.2.The Limit For Section 15.247(d)

Section 15.247(d): 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

9.3.Restricted bands of operation

9.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

[1]Until February 1, 1999, this restricted band shall be 0.490-0.510

[2]Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

9.4.Configuration of EUT on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

9.4.1.Bluetooth 4.0 Body Scale (EUT)

Model Number	**:**	S1
Serial Number	**:**	N/A

9.5.Operating Condition of EUT

9.5.1.Setup the EUT and simulator as shown as Section 9.1.

9.5.2.Turn on the power of all equipment.

9.5.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

9.6.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.
The worst-case data rate for this channel to be 1Mbps for 802.11b mode and 6Mbps for 802.11g mode and 300Mbps for 802.11n mode, based on previous with 802.11 WLAN product design architectures.

The bandwidth of test receiver is set at 9 kHz in below 30MHz. and set at 120 kHz in 30-1000MHz, and 1MHz in above 1000MHz.

The frequency range from 9 kHz to 25GHz is checked.
The final measurement in band 9-90 kHz, 110-490 kHz and above 1000MHz is performed with Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector.
The field strength is calculated by adding the antenna factor, and cable loss, and subtracting the amplifier gain from the measured reading. The basic equation calculation is as follows:
Result = Reading + Corrected Factor
Where Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

9.7.The Field Strength of Radiation Emission Measurement Results

PASS.

Date of Test:	Sep 29-4, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	BLE Channel Low 2402MHz	Test Engineer:	Alen

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m)	Factor(dB) Corr.	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m)	Factor Corr. (dB)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Polarization
	QP		QP	QP	QP	
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Horizontal
---	---	---	---	---	---	Horizontal
---	---	---	---	---	---	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	Sep 29-4, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	BLE Channel Middle 2440MHz	Test Engineer:	Bob

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m) QP	Factor(dB) Corr.	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Horizontal
---	---	---	---	---	---	Horizontal
---	---	---	---	---	---	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

Date of Test:	Sep 29-4, 2012	Temperature:	25°C
EUT:	Bluetooth 4.0 Body Scale	Humidity:	50%
Model No.:	S1	Power Supply:	DC 4.5V
Test Mode:	BLE Channel High 2480MHz	Test Engineer:	Alen

For Below 30MHz

Frequency (MHz)	Reading (dBμV/m) QP	Factor(dB) Corr.	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
-	-	-	-	-	-	X
-	-	-	-	-	-	Y
-	-	-	-	-	-	Z

For 30MHz-1000MHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading (dBμV/m) QP	Factor Corr. (dB)	Result (dBμV/m) QP	Limit (dBμV/m) QP	Margin (dB) QP	Polarization
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Vertical
---	---	---	---	---	---	Horizontal
---	---	---	---	---	---	Horizontal
---	---	---	---	---	---	Horizontal

For 1GHz-25GHz

Corrected Factor = Antenna Factor + Cable Loss – Amplifier Gain

Frequency (MHz)	Reading(dBμV/m)		Factor Corr. (dB)	Result(dBμV/m)		Limit(dBμV/m)		Margin(dBμV/m)		Polarization
	AV	PEAK		AV	PEAK	AV	PEAK	AV	PEAK	
-	-	-	-	-	-	-	-	-	-	Vertical
-	-	-	-	-	-	-	-	-	-	Horizontal

Note: 1. Emissions attenuated more than 20 dB below the permissible value are not reported.

2. *: Denotes restricted band of operation.

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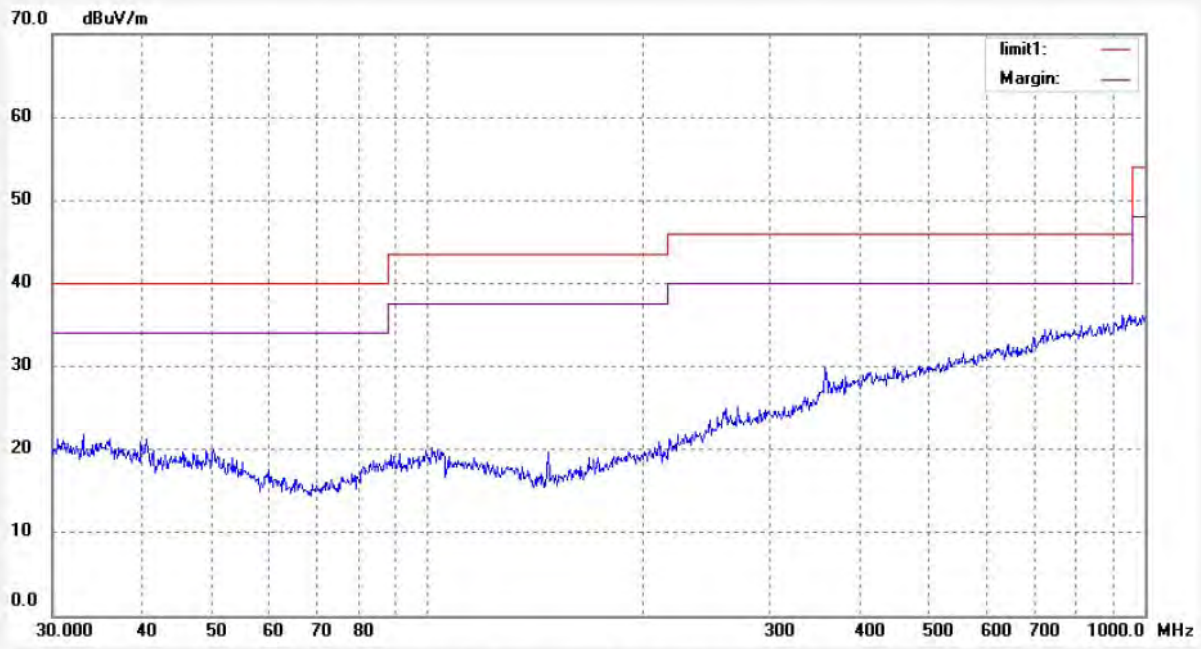
Job No.: ALEN #263	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:23:31
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2402MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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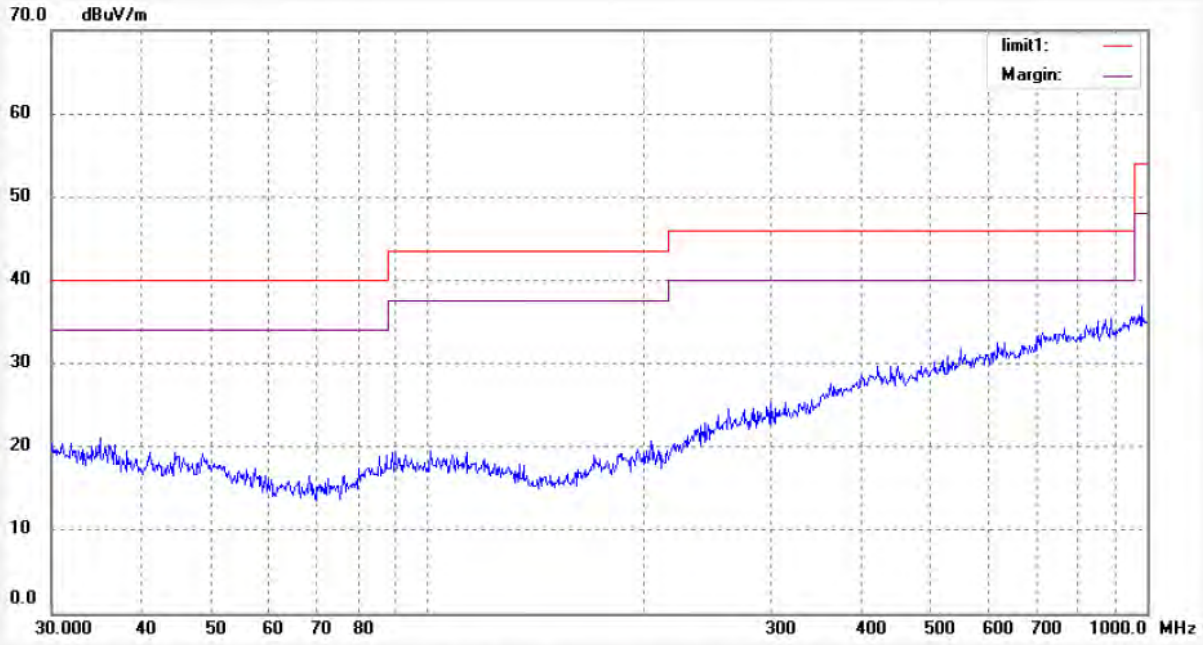
Job No.: ALEN #264	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:24:36
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2402MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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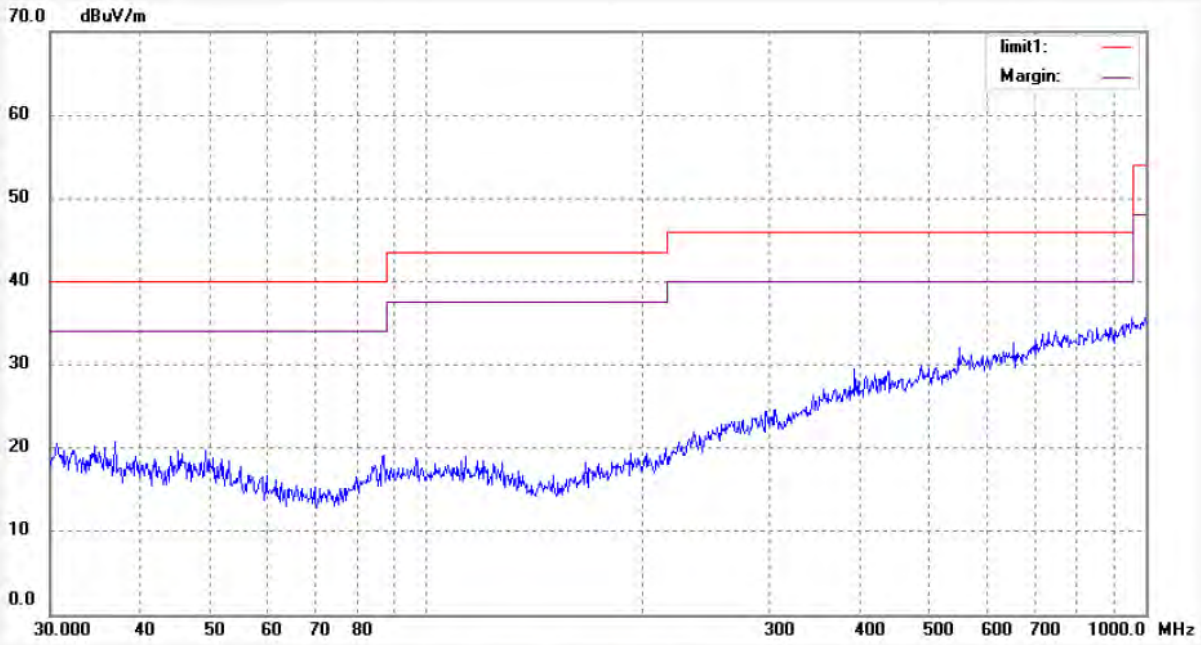
Fax:+86-0755-26503396

Job No.: ALEN #265	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:25:35
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2440MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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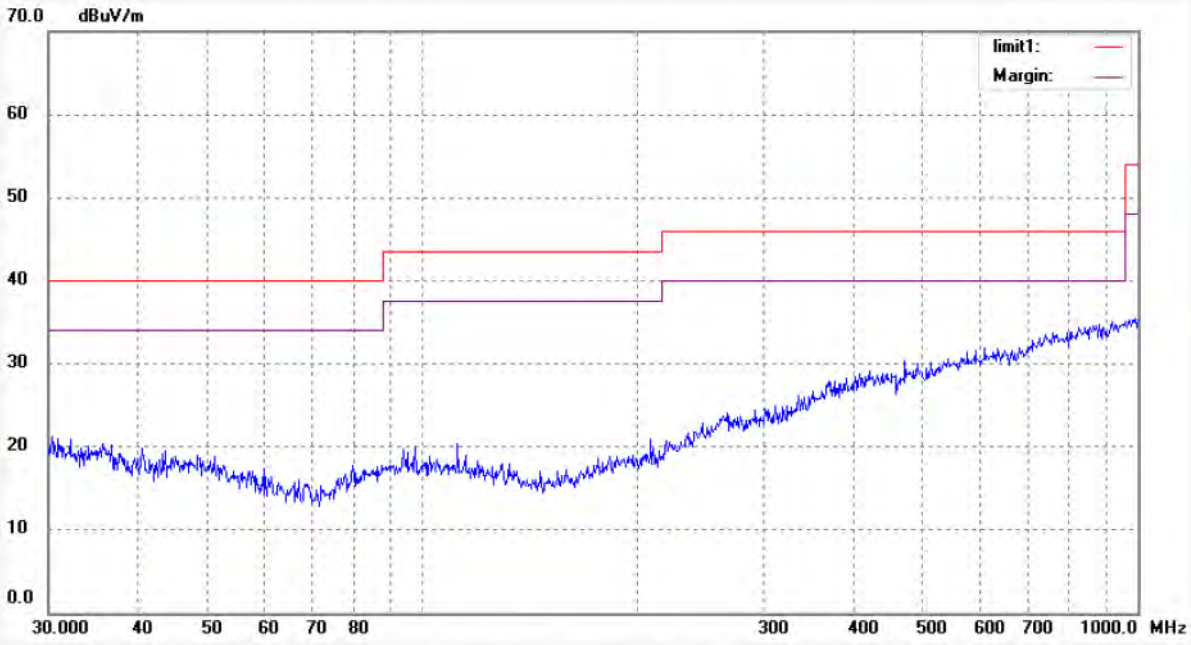
Job No.: ALEN #266	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:26:15
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2440MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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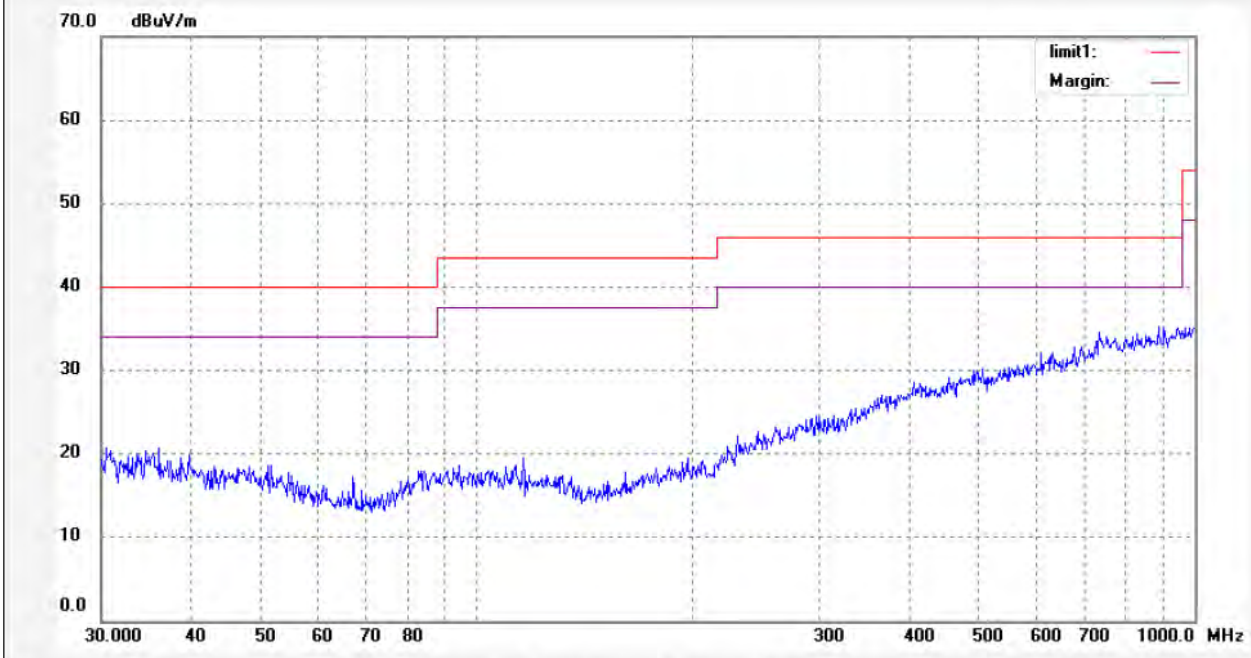
Job No.: ALEN #267	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:26:35
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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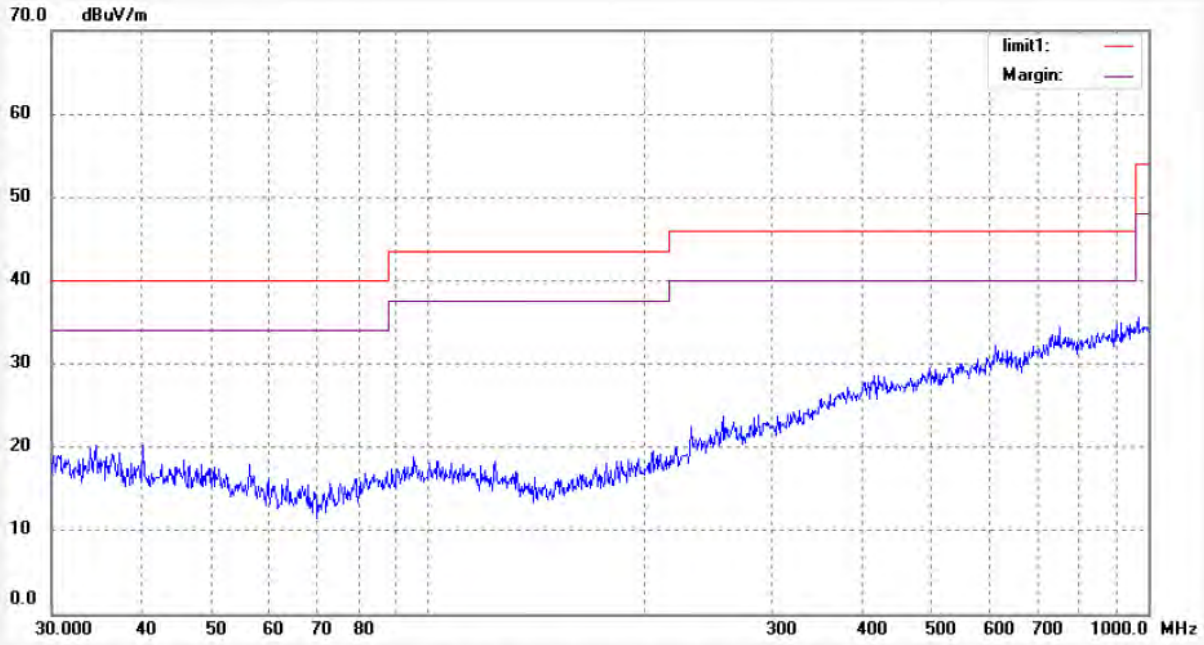
Job No.: ALEN #268	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 14:27:02
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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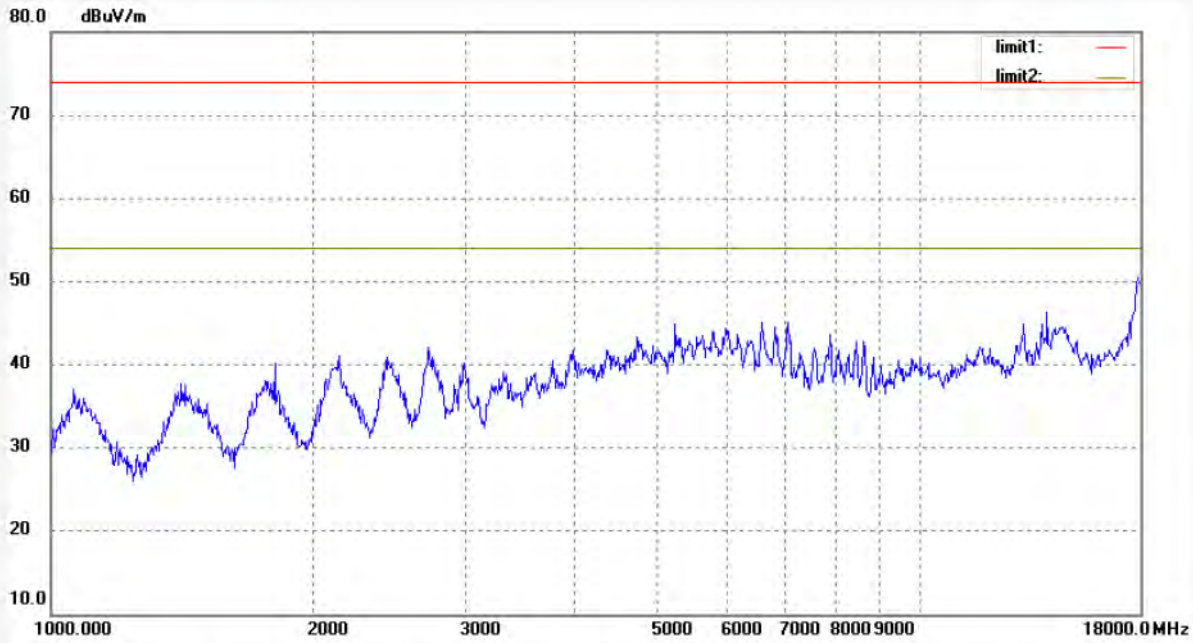
Job No.: ALEN #274	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 15:04:34
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2402MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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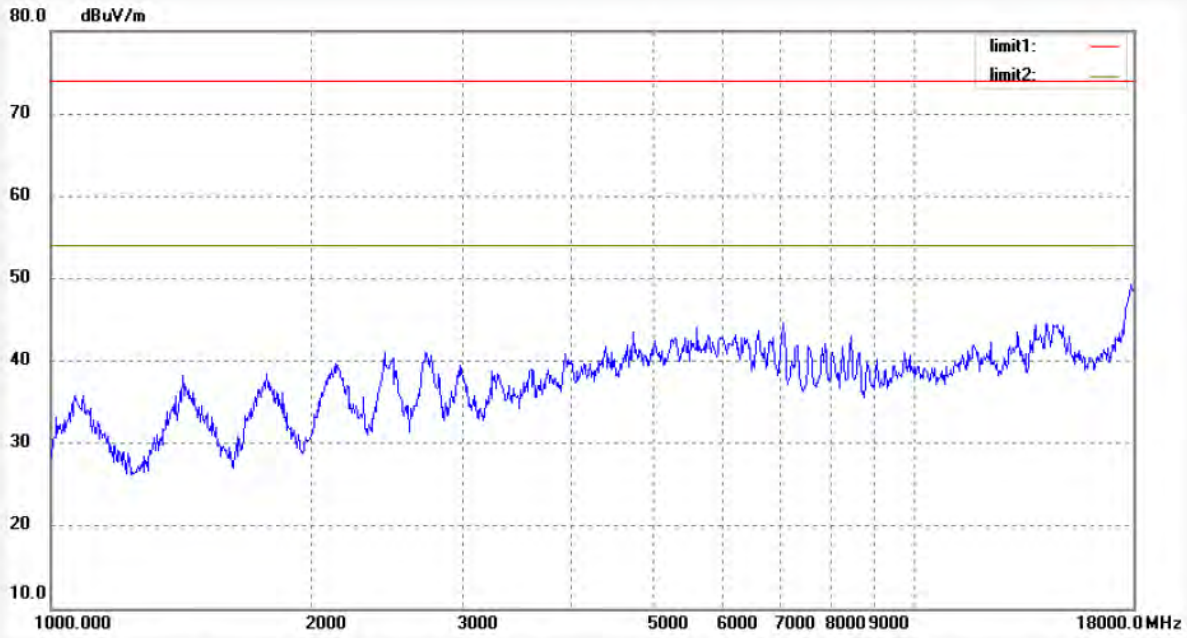
Job No.: ALEN #275	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 15:05:50
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2402MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

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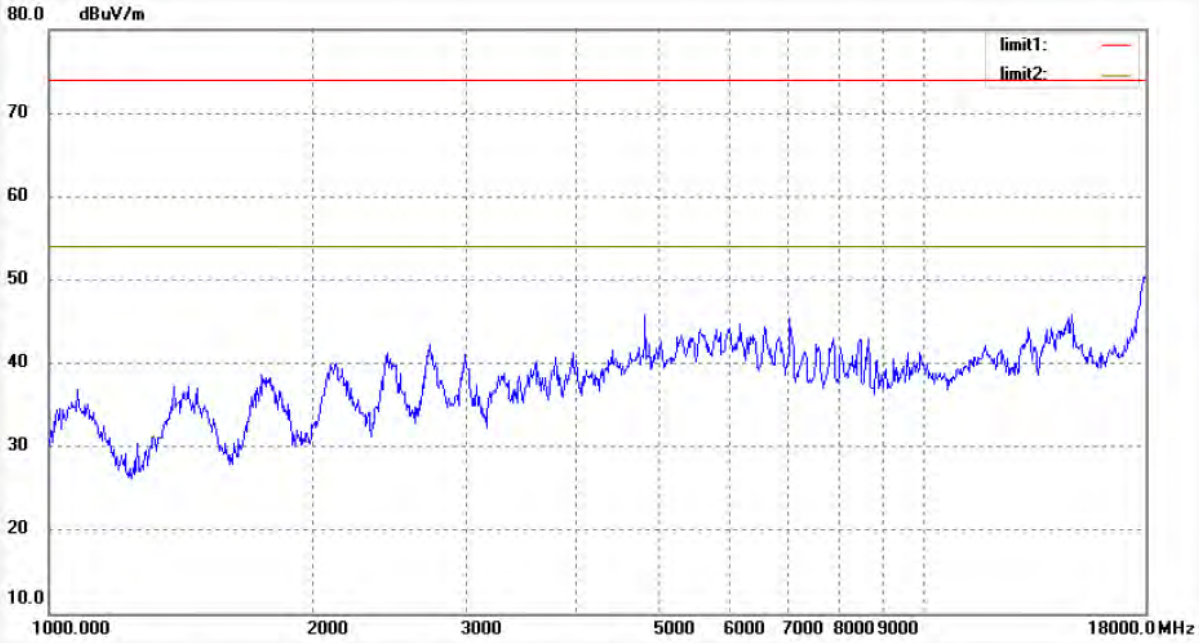
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: ALEN #276	Polarization: Vertical
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 15:08:49
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2440MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

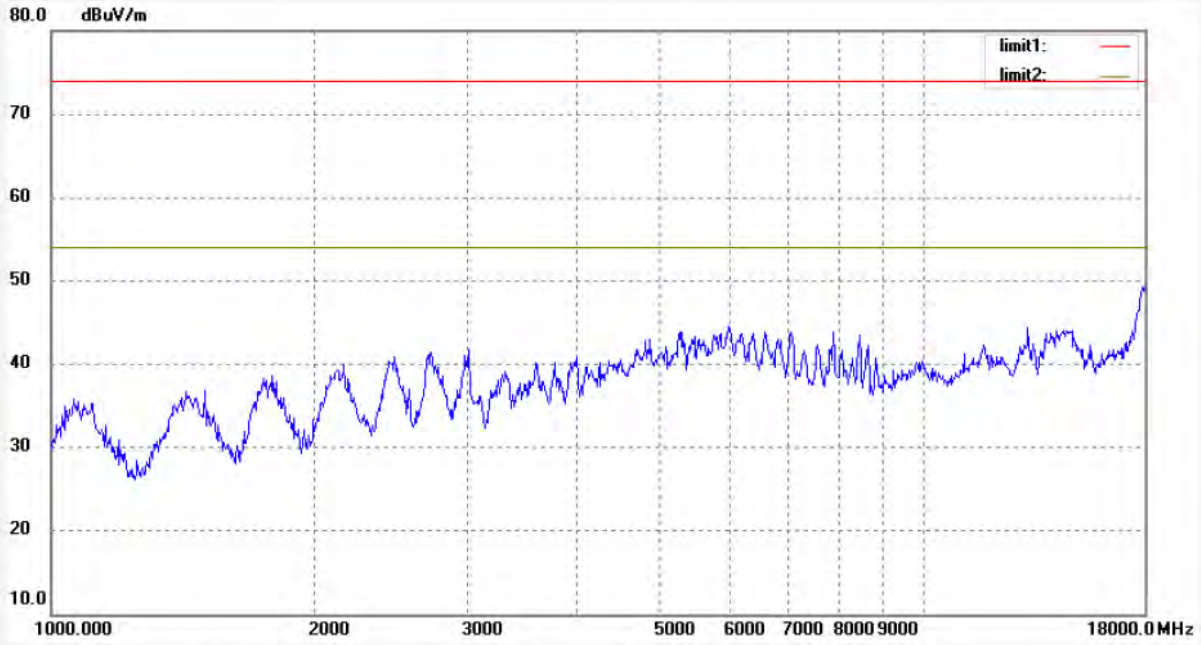


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: ALEN #277	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 15:11:28
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2440MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

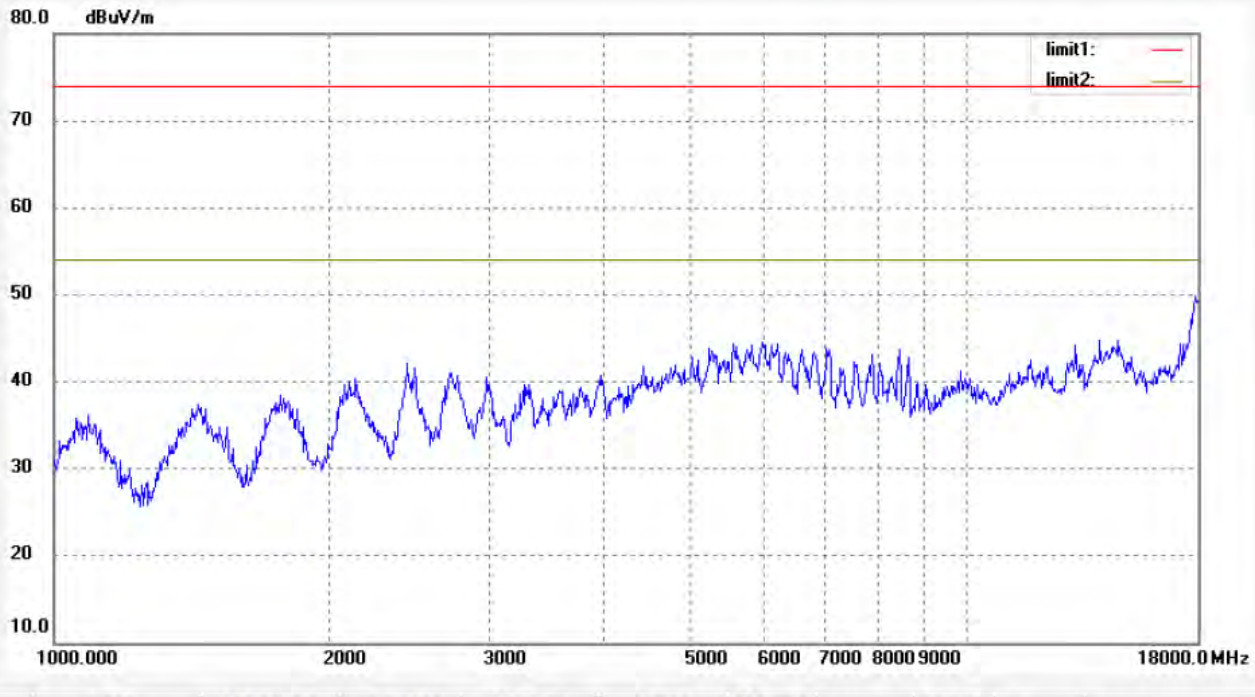


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: ALEN #278	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 15:12:47
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

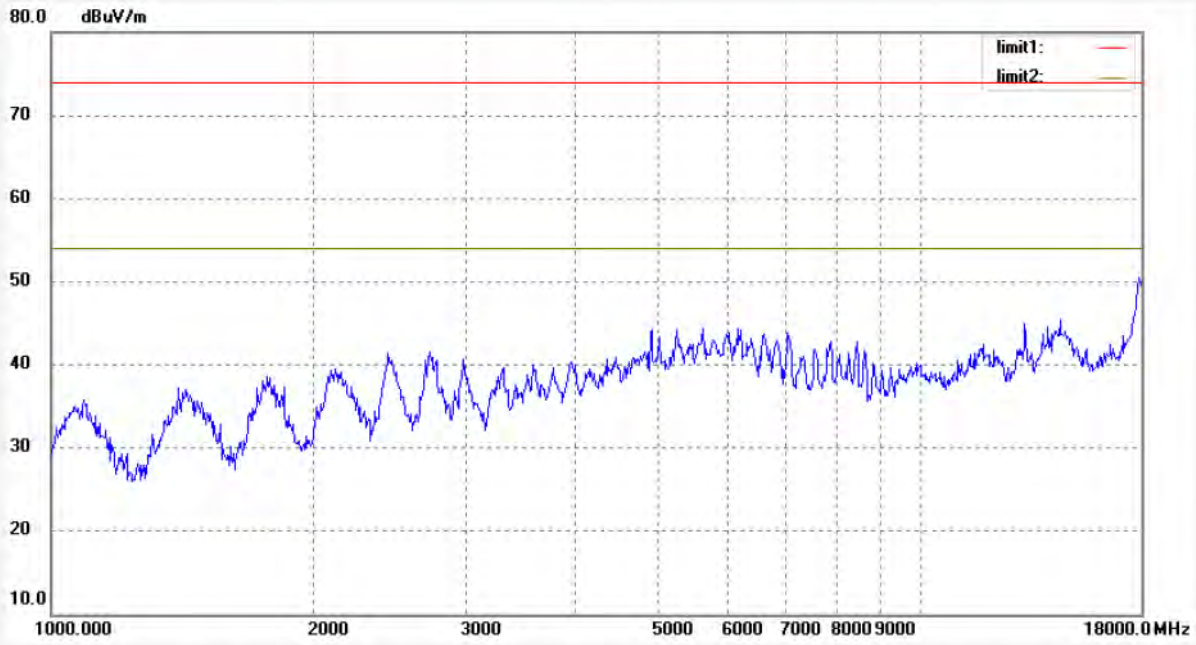


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: ALEN #279	Polarization: Horizontal
Standard: FCC 15C PK	Power Source: DC 4.5V
Test item: Radiation Test	Date: 2012/10/04
Temp.(C)/Hum.(%) 23 C / 49 %	Time: 15:14:12
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

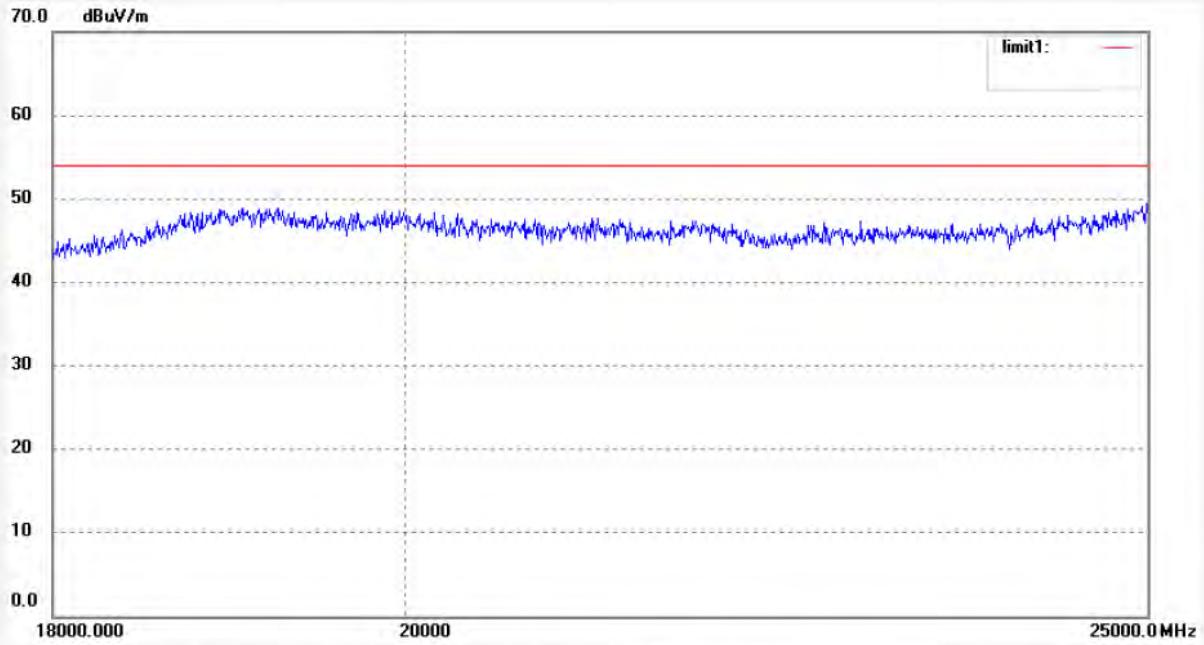


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Alen #168	Polarization: Vertical
Standard: FCC 15C	Power Source: DC 4.5V
Test item: Radiation Test	Date: 12/09/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:32:05
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: Alen
Mode: TX 2402MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

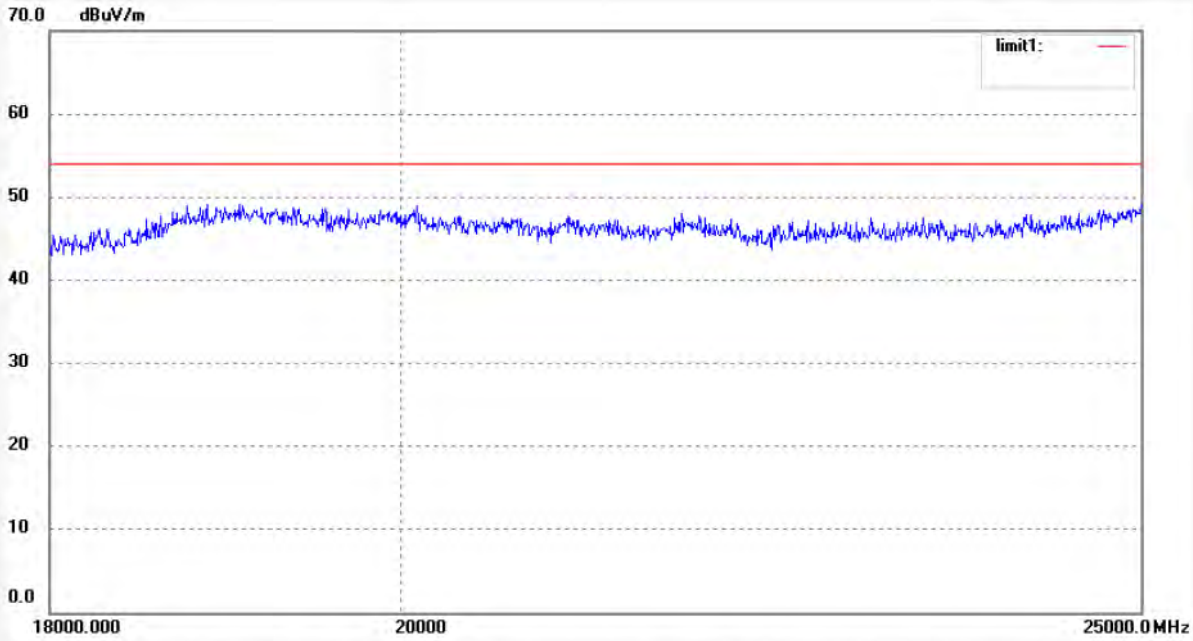


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Alen #169	Polarization: Horizontal
Standard: FCC 15C	Power Source: DC 4.5V
Test item: Radiation Test	Date: 12/09/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:35:56
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: Alen
Mode: TX 2402MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

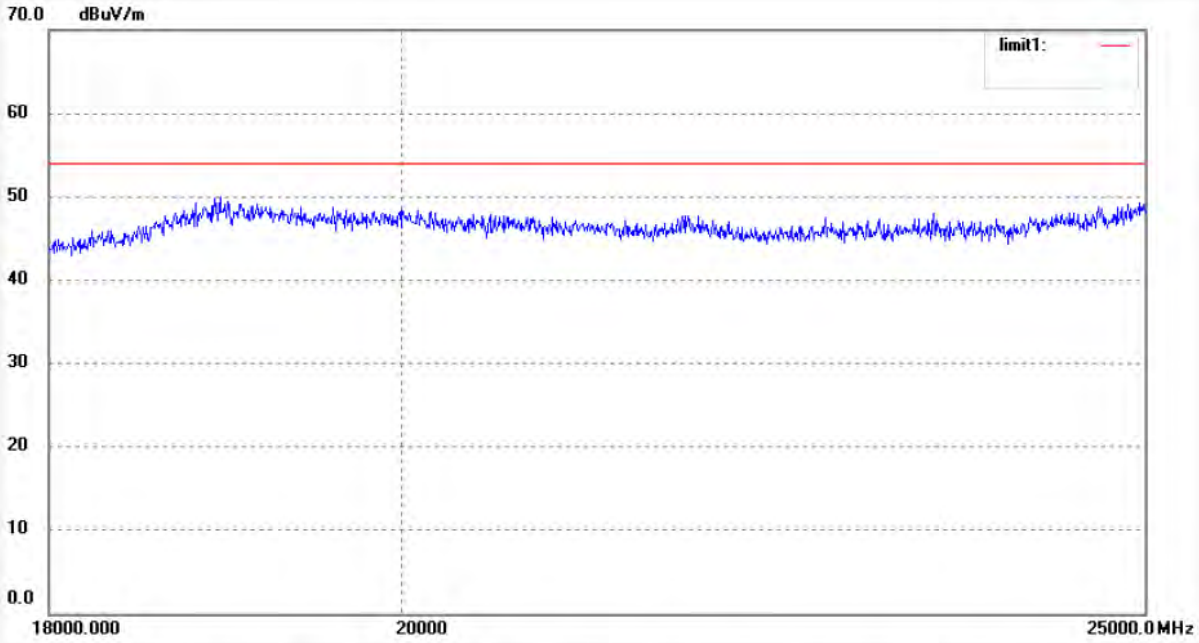


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Alen #170	Polarization: Horizontal
Standard: FCC 15C	Power Source: DC 4.5V
Test item: Radiation Test	Date: 12/09/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:38:38
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: Alen
Mode: TX 2440MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

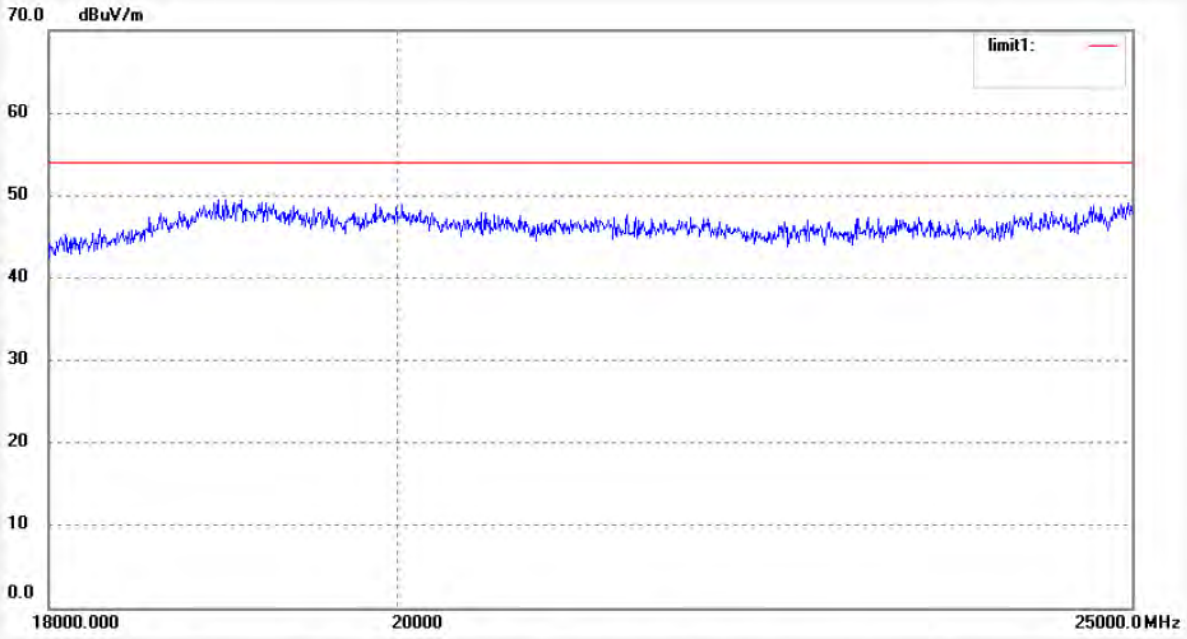


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Alen #171	Polarization: Vertical
Standard: FCC 15C	Power Source: DC 4.5V
Test item: Radiation Test	Date: 12/09/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:43:17
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: Alen
Mode: TX 2440MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

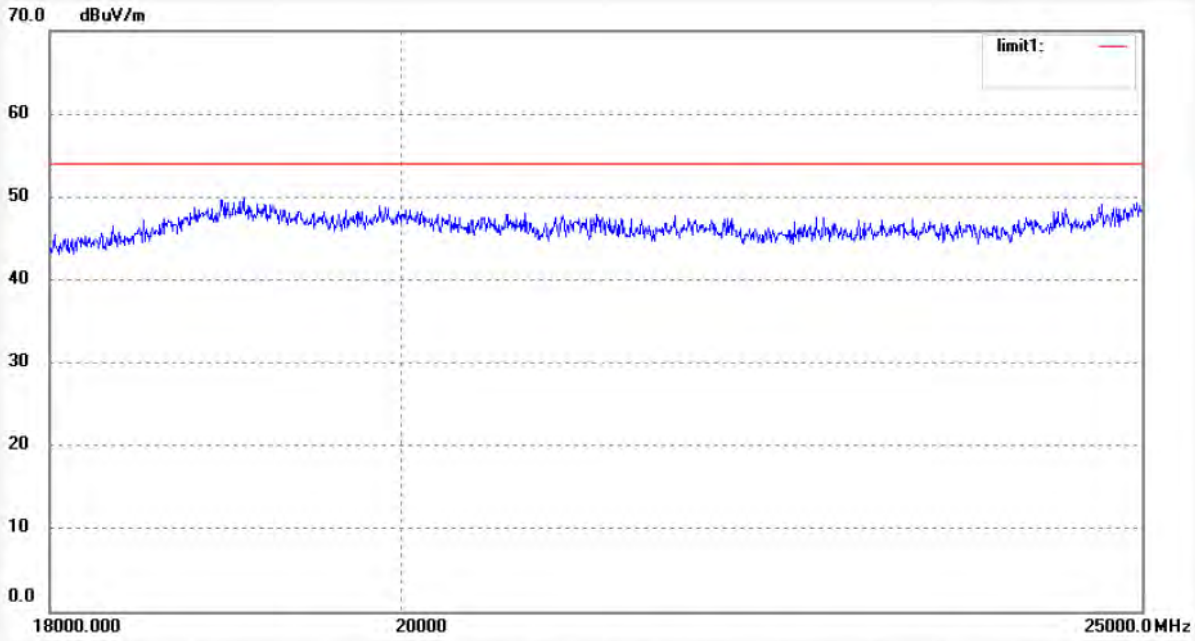


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Alen #172	Polarization: Vertical
Standard: FCC 15C	Power Source: DC 4.5V
Test item: Radiation Test	Date: 12/09/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:47:55
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: Alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

Note:

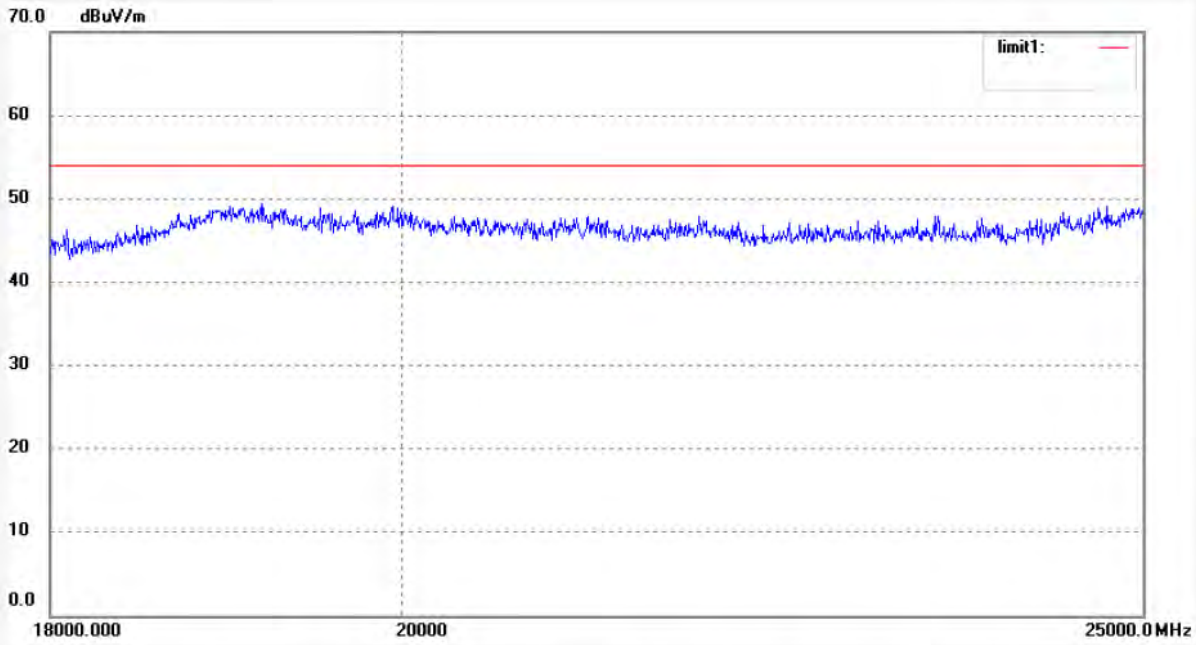


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China
Site: 966 chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: Alen #173	Polarization: Horizontal
Standard: FCC 15C	Power Source: DC 4.5V
Test item: Radiation Test	Date: 12/09/29/
Temp.(C)/Hum.(%) 25 C / 50 %	Time: 11:50:47
EUT: Bluetooth 4.0 Body Scale	Engineer Signature: Alen
Mode: TX 2480MHz	Distance: 3m
Model: S1	
Manufacturer: Care	

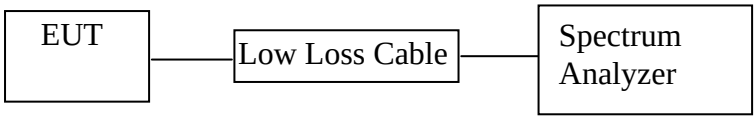
Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark

10. CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

10.1. Block Diagram of Test Setup



(EUT: Bluetooth 4.0 Body Scale)

10.2. The Requirement For Section 15.247(d)

Section 15.247(d): 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 Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

10.3. EUT Configuration on Measurement

The following equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

10.3.1. Bluetooth 4.0 Body Scale (EUT)

Model Number : S1
Serial Number : N/A

10.4.Operating Condition of EUT

10.4.1.Setup the EUT and simulator as shown as Section 10.1.

10.4.2.Turn on the power of all equipment.

10.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2440MHz, and 2480MHz TX frequency to transmit.

10.5.Test Procedure

10.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

10.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

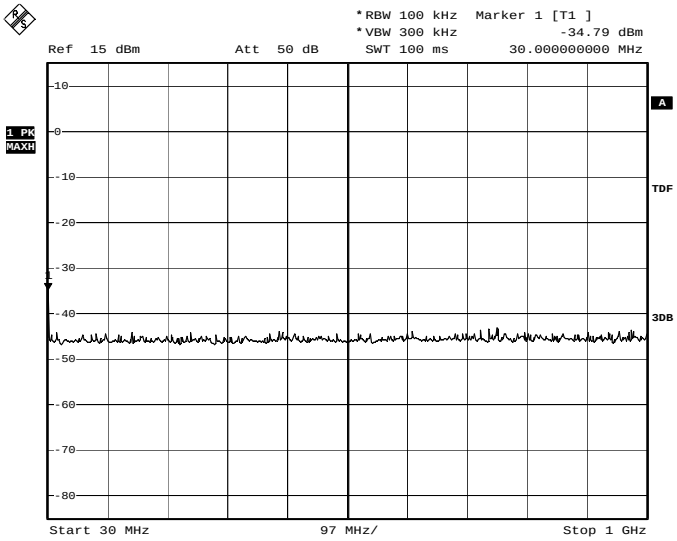
10.5.3.The Conducted Spurious Emission was measured and recorded.

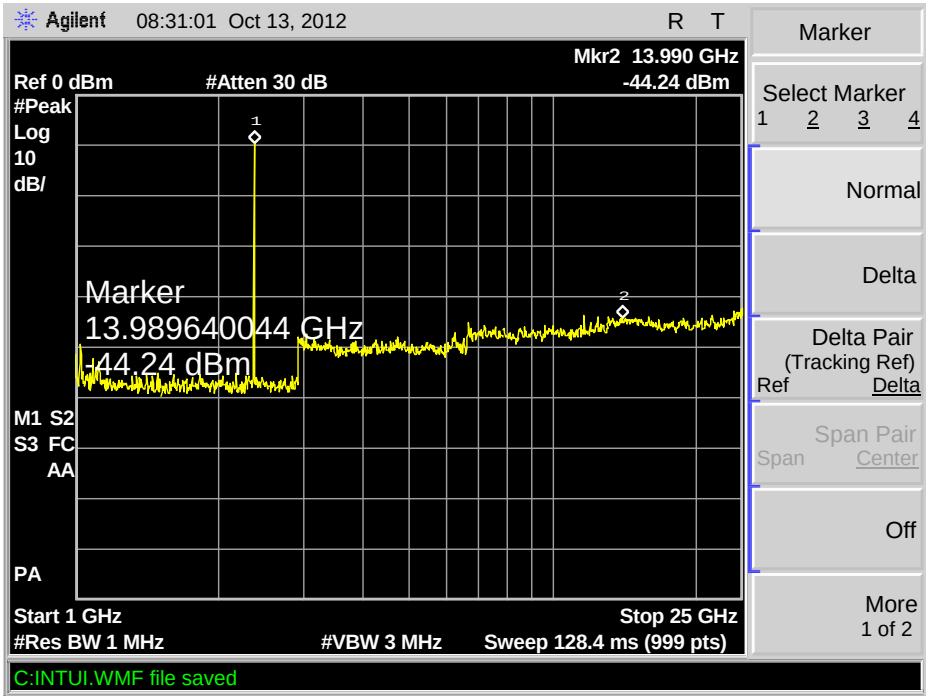
10.6.Test Result

Pass.

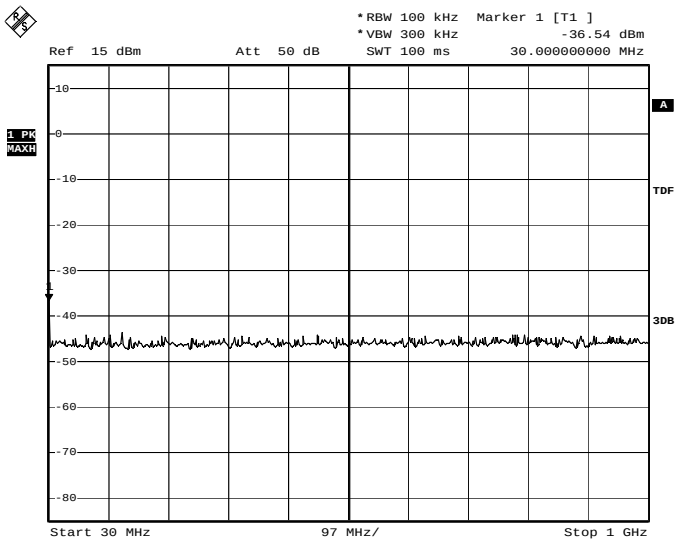
The spectrum analyzer plots are attached as below.

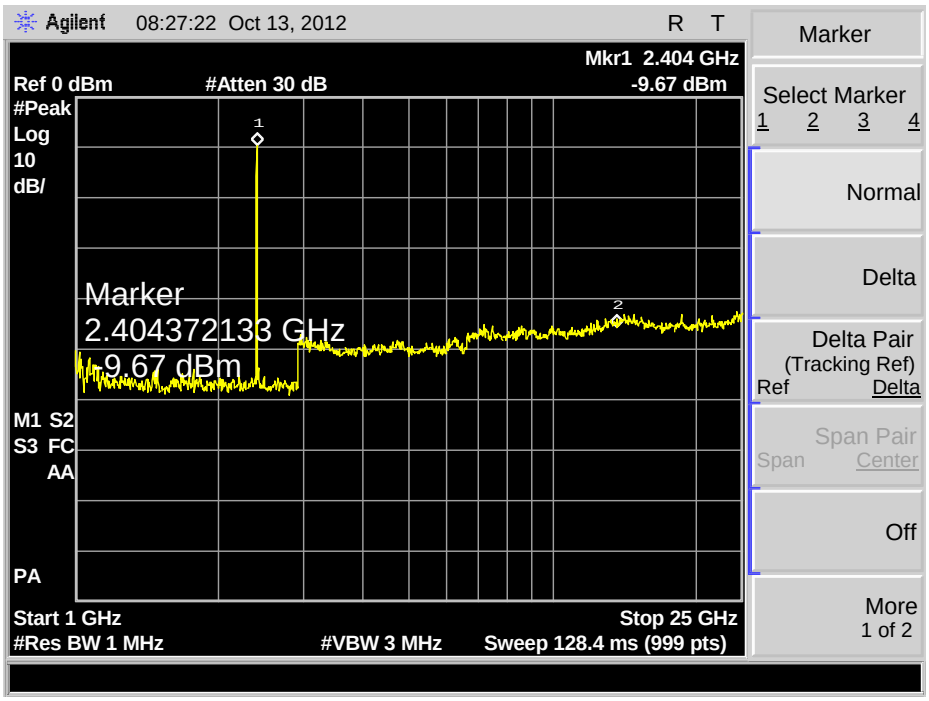
BLE Channel Low 2402MHz



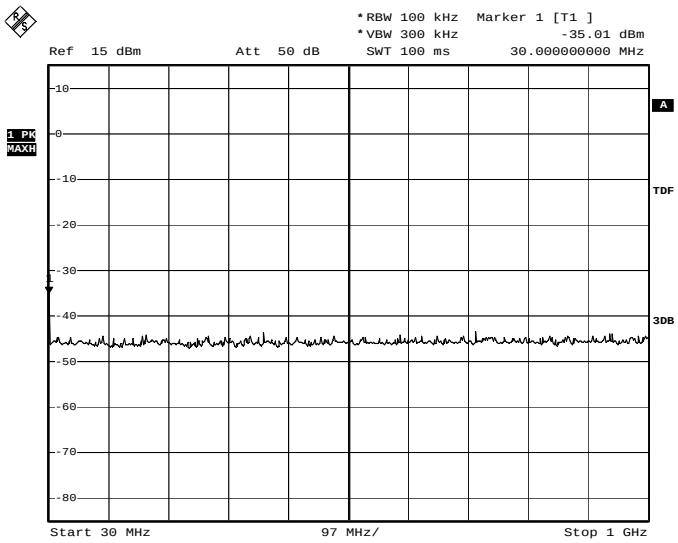


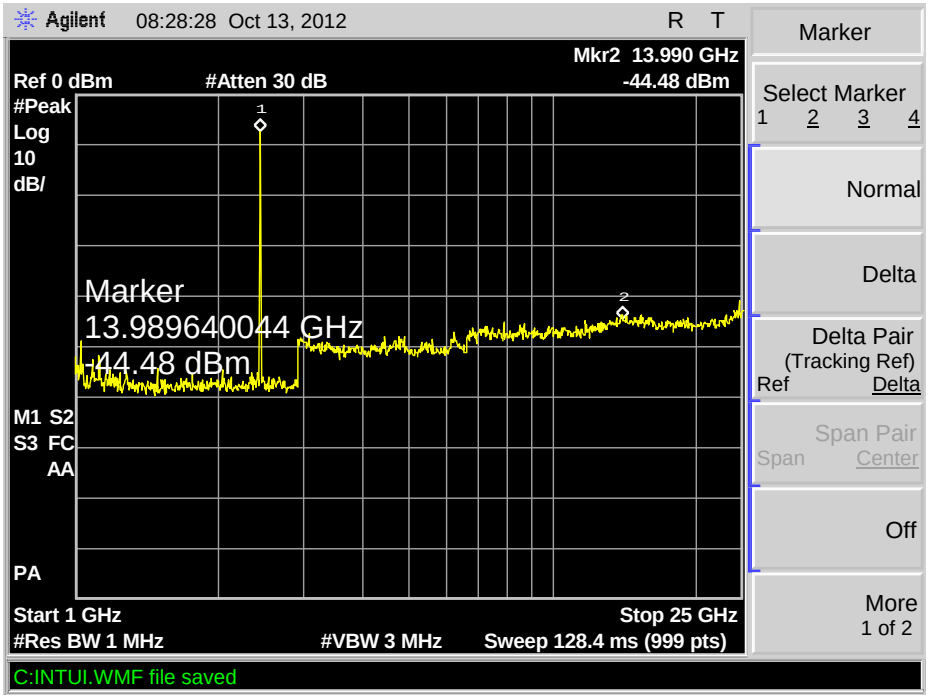
BLE Channel Middle 2440MHz





BLE Channel High 2480MHz





11. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

N/A

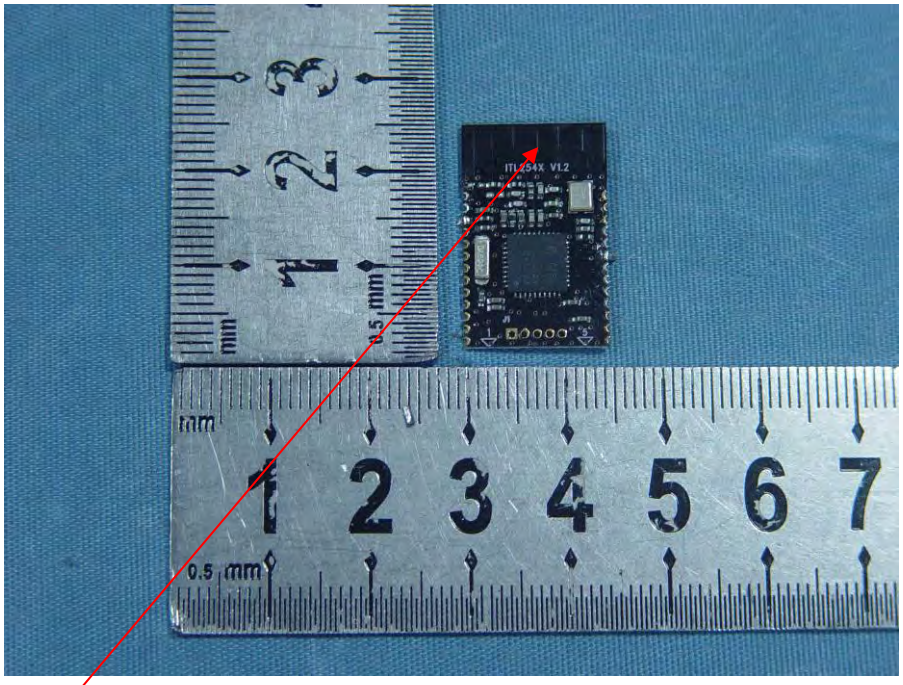
12. ANTENNA REQUIREMENT

12.1. The Requirement

According to 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.

12.2. Antenna Construction

Device is equipped with unique antenna, which isn't displaced by other antenna. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna