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TEST REPORT

Report No.: 15010067HKG-001R1

HeathCo LLC

Application
For
Certification
(Original Grant)
(FCC ID: BJ4-5985BLE)
(IC: 3984A-5985BLE)

Transceiver

This verification supersedes previous verification with Verification/Report number(s)
15010067HKG-001 dated March 20, 2015.

Prepared and Checked by:

Approved by:

Signed On File

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Date: April 08, 2015

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GENERAL INFORMATION

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Manufacturer:	Living Style Enterprises Ltd.
Manufacturer Address:	NO.168 SanJiang Industrial HengliTown DongGuan City GuangDong Province
Brand Name:	Secure Home, Heath/Zenith
Model:	5985
Type of EUT:	Transceiver
Description of EUT:	LED Bluetooth Fixture
Serial Number:	N/A
FCC ID / IC:	BJ4-5985BLE / 3984A-5985BLE
Date of Sample Submitted:	January 05, 2015
Date of Test:	January 05, 2015 to January 30, 2015
Report No.:	15010067HKG-001R1
Report Date:	April 08, 2015
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

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SUMMARY OF TEST RESULT

TEST SPECIFICATION	REFERENCE	RESULTS
Transmitter Power Line Conducted Emissions	15.207 / RSS-Gen 7.2.4	Pass
Radiated Emission Radiated Emission on the Bandedge	15.249 / RSS-210 A2.9	Pass
Restricted Band of operation	15.205 / RSS- 210 Section 2.2	Pass

The equipment under test is found to be complying with the following standards:
FCC Part 15, October 1, 2013 Edition
RSS-210 Issue 8, December 2010
RSS-Gen Issue 4, December 2014

- Note: 1. The EUT uses a permanently attached antenna which, in accordance to section 15.203, is considered sufficient to comply with the provisions of this section.
2. Pursuant to FCC part 15 Section 15.215(c), the 20 dB bandwidth of the emission was contained within the frequency band designated (mentioned as above) which the EUT operated. The effects, if any, from frequency sweeping, frequency hopping, other modulation techniques and frequency stability over excepted variations in temperature and supply voltage were considered.

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Table of Contents

1.0	<u>General Description</u>	1
1.1	Product Description	1
1.2	Related Submittal(s) Grants	1
1.3	Test Methodology	1
1.4	Test Facility	1
2.0	<u>System Test Configuration</u>	2
2.1	Justification.....	2
2.2	EUT Exercising Software	2
2.3	Special Accessories.....	2
2.4	Measurement Uncertainty	2
2.5	Support Equipment List and Description.....	2
3.0	<u>Emission Results</u>	3
3.1	Field Strength Calculation	3
3.2	Radiated Emission Configuration Photograph	4
3.3	Radiated Emission Data	4
3.4	Conducted Emission Configuration Photograph	4
3.5	Conducted Emission Data.....	4
4.0	<u>Equipment Photographs</u>	9
5.0	<u>Product Labelling</u>	9
6.0	<u>Technical Specifications</u>	9
7.0	<u>Instruction Manual</u>	9
8.0	<u>Miscellaneous Information</u>	10
8.1	Measured Bandwidth / Radiated Emission on the Bandedge.....	10
8.2	Discussion of Pulse Desensitization	13
8.3	Calculation of Average Factor	13
8.4	Emissions Test Procedures	16
8.5	Occupied Bandwidth.....	20
9.0	<u>Confidentiality Request</u>	21
10.0	<u>Equipment List</u>	21

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1.0 General Description

1.1 Product Description

The Equipment Under Test (EUT) is a 2.4GHz BLE transceiver for motion security light LED that operated at 2402MHz to 2480MHz (39channels with 2MHz channel spacing. The EUT is powered by 120VAC. After pairing with smartphone, the setting of EUT can be controlled by smartphone via Bluetooth communication.

Antenna Type: Internal, Integral

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

1.2 Related Submittal(s) Grants

This is a single application for certification of a transceiver.

The receiver for this transceiver is exempted from the Part 15 technical rules per 15.101(b).

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2009). All radiated measurements were performed in an 3m Chamber. Preliminary scans were performed in the 3m Chamber only to determine worst case modes. All radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the “**Justification Section**” of this Application.

1.4 Test Facility

The 3m Chamber and conducted measurement facility used to collect the radiated data is located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. Workshop No. 3, G/F., World-Wide Industrial Centre, 43-47 Shan Mei Street, Fo Tan, Sha Tin, N.T., Hong Kong. This test facility and site measurement data have been placed on file with the FCC and IC.

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2.0 System Test Configuration

2.1 Justification

The system was configured for testing in a typical fashion (as a customer would normally use it), and in the confines as outlined in ANSI C63.4 (2009).

The device was powered by 120AC .

For maximizing emissions below 30 MHz, the EUT was rotated through 360°, the centre of the loop antenna was placed 1 meter above the ground, and the antenna polarization was changed. For maximizing emission at and above 30 MHz, the EUT was rotated through 360°, the antenna height was varied from 1 meter to 4 meters above the ground plane, and the antenna polarization was changed. This step by step procedure for maximizing emissions led to the data report in Exhibit 3.0.

The rear of unit shall be flushed with the rear of the table.

The equipment under test (EUT) was configured for testing in a typical fashion (as a customer would normally use it). The EUT was mounted to a plastic stand if necessary and placed on the wooden turntable, which enabled the engineer to maximize emissions through its placement in the three orthogonal axes.

2.2 EUT Exercising Software

There was no special software to exercise the device. Once the unit is powered up, it transmits the RF signal continuously.

2.3 Special Accessories

There are no special accessories necessary for compliance of this product.

2.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

2.5 Support Equipment List and Description

N/A.

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3.0 Emission Results

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included.

3.1 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any), Average Factor (optional) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG - AV$$

where

- FS = Field Strength in dB μ V/m
- RA = Receiver Amplitude (including preamplifier) in dB μ V
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB
- AV = Average Factor in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows:

$$FS = RR + LF$$

where

- FS = Field Strength in dB μ V/m
- RR = RA - AG - AV in dB μ V
- LF = CF + AF in dB

Assume a receiver reading of 52.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB are added. The amplifier gain of 29 dB and average factor of 5 dB are subtracted, giving a field strength of 27 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$\begin{aligned} RA &= 52.0 \text{ dB}\mu\text{V/m} \\ AF &= 7.4 \text{ dB} & RR &= 18.0 \text{ dB}\mu\text{V} \\ CF &= 1.6 \text{ dB} & LF &= 9.0 \text{ dB} \\ AG &= 29.0 \text{ dB} \\ AV &= 5.0 \text{ dB} \\ FS &= RR + LF \\ FS &= 18 + 9 = 27 \text{ dB}\mu\text{V/m} \end{aligned}$$

$$\text{Level in } \mu\text{V/m} = \text{Common Antilogarithm } [(27 \text{ dB}\mu\text{V/m})/20] = 22.4 \mu\text{V/m}$$

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3.2 Radiated Emission Configuration Photograph

The worst case in radiated emission was found at 2400 MHz

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.pdf.

3.3 Radiated Emission Data

The data on the following page lists the significant emission frequencies, the limit and the margin of compliance. Numbers with a minus sign are below the limit.

Judgment: Passed by 11.5 dB

3.4 Conducted Emission Configuration Photograph

The worst case in line-conducted emission was found at 0.2085 MHz

For electronic filing, the worst case line-conducted configuration photographs are saved with filename: conducted photo.pdf.

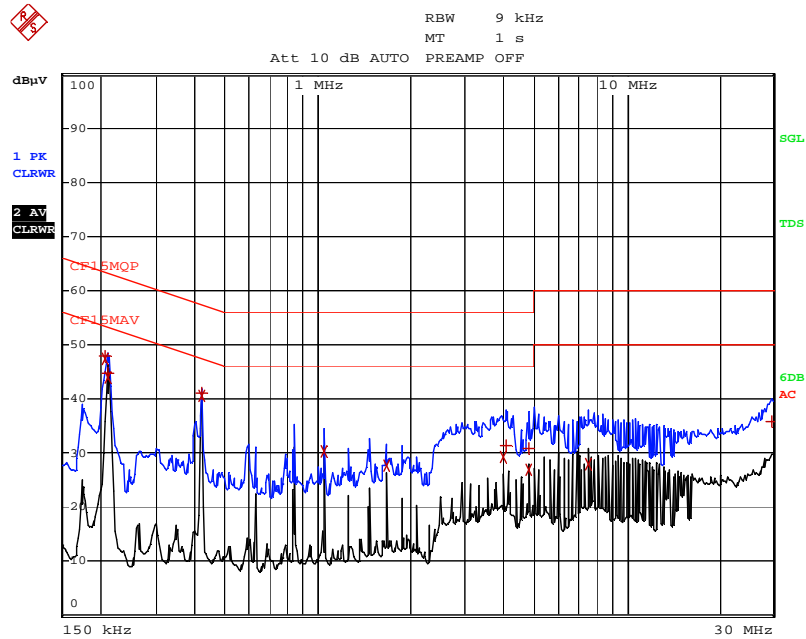
3.5 Conducted Emission Data

For electronic filing, the graph and data table of conducted emission is saved with filename: conducted.pdf.

Judgment: Pass by 5.99 dB

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Worst-Case Operating Mode: Operating



EDIT PEAK LIST (Final Measurement Results)

Trace1: CF15MQP
Trace2: CF15MAV
Trace3: ---

TRACE	FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1 Quasi Peak	208.5 kHz	47.92 L1 gnd	-15.33
2 CISPR Average	208.5 kHz	47.27 L1 gnd	-5.99
1 Quasi Peak	213 kHz	44.78 L1 gnd	-18.30
2 CISPR Average	213 kHz	43.95 L1 gnd	-9.13
1 Quasi Peak	420 kHz	41.16 L1 gnd	-16.28
2 CISPR Average	420 kHz	40.43 L1 gnd	-7.01
2 CISPR Average	1.05 MHz	30.27 L1 gnd	-15.72
2 CISPR Average	1.68 MHz	27.65 N gnd	-18.34
2 CISPR Average	3.984 MHz	29.27 N gnd	-16.72
1 Quasi Peak	4.0875 MHz	31.43 N gnd	-24.56
1 Quasi Peak	4.8255 MHz	30.85 N gnd	-25.14
2 CISPR Average	4.8255 MHz	26.84 N gnd	-19.15
2 CISPR Average	7.548 MHz	28.05 L1 gnd	-21.94
1 Quasi Peak	29.751 MHz	35.74 L1 gnd	-24.25

Note: Measurement Uncertainty is ± 4.2 dB at a level of confidence of 95%.

INTERTEK TESTING SERVICES

Applicant: HeathCo LLC

Date of Test: January 30, 2015

Model: 5985

Worst-Case Operating Mode: Transmitting

Table 1

Radiated Emissions Pursuant to FCC Part 15 Section 15.249 Requirement

Lowest Channel

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBμV/m)	Average Factor (dB)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2402.000	100.2	33	29.4	96.6	43.2	53.4	94.0	-40.6
V	4804.000	57.0	33	34.9	58.9	43.2	15.7	54.0	-38.3
V	7206.000	53.8	33	37.9	58.7	43.2	15.5	54.0	-38.5
V	9608.000	51.6	33	40.4	59.0	43.2	15.8	54.0	-38.2
V	12050.000	50.2	33	40.5	57.7	43.2	14.5	54.0	-39.5
V	14412.000	50.4	33	40.0	57.4	43.2	14.2	54.0	-39.8

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
H	2402.000	100.2	33	29.4	96.6	114.0	-17.4
V	4804.000	57.0	33	34.9	58.9	74.0	-15.1
V	7206.000	53.8	33	37.9	58.7	74.0	-15.3
V	9608.000	51.6	33	40.4	59.0	74.0	-15.0
V	12050.000	50.2	33	40.5	57.7	74.0	-16.3
V	14412.000	50.4	33	40.0	57.4	74.0	-16.6

- NOTES: 1. Peak Detector Data unless otherwise stated.
2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative sign in the column shows value below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 Section 2.2.
6. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

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Applicant: HeathCo LLC
 Model: 5985

Date of Test: January 30, 2015

Worst-Case Operating Mode: Transmitting

Table 2

Radiated Emissions Pursuant to FCC Part 15 Section 15.249 Requirement

Middle Channel

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBμV/m)	Average Factor (dB)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2442.000	99.8	33	29.4	96.2	43.2	53.0	94.0	-41.0
V	4884.000	56.4	33	34.9	58.3	43.2	15.1	54.0	-38.9
V	7326.000	54.0	33	37.9	58.9	43.2	15.7	54.0	-38.3
V	9768.000	51.7	33	40.4	59.1	43.2	15.9	54.0	-38.1
V	12210.000	50.2	33	40.5	57.7	43.2	14.5	54.0	-39.5
V	14652.000	51.7	33	38.4	57.1	43.2	13.9	54.0	-40.1

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
H	2442.000	99.8	33	29.4	96.2	114.0	-17.8
V	4884.000	56.4	33	34.9	58.3	74.0	-15.7
V	7326.000	54.0	33	37.9	58.9	74.0	-15.1
V	9768.000	51.7	33	40.4	59.1	74.0	-14.9
V	12210.000	50.2	33	40.5	57.7	74.0	-16.3
V	14652.000	51.7	33	38.4	57.1	74.0	-16.9

- NOTES: 1. Peak Detector Data unless otherwise stated.
2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative sign in the column shows value below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 Section 2.2.
6. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

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Applicant: HeathCo LLC
 Model: 5985
 Worst-Case Operating Mode: Transmitting

Date of Test: January 30, 2015

Table 3

Radiated Emissions Pursuant to FCC Part 15 Section 15.249 Requirement

Highest Channel

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBμV/m)	Average Factor (dB)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2480.000	100.5	33	29.4	96.9	43.2	53.7	94.0	-40.3
V	4960.000	57.2	33	34.9	59.1	43.2	15.9	54.0	-38.1
V	7440.000	54.1	33	37.9	59.0	43.2	15.8	54.0	-38.2
V	9920.000	51.9	33	40.4	59.3	43.2	16.1	54.0	-37.9
V	12400.000	50.6	33	40.5	58.1	43.2	14.9	54.0	-39.1
V	14880.000	52.0	33	38.4	57.4	43.2	14.2	54.0	-39.8

Polarization	Frequency (MHz)	Reading (dBμV)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dBμV/m)	Peak Limit at 3m (dBμV/m)	Margin (dB)
H	2480.000	100.5	33	29.4	96.9	114.0	-17.1
V	4960.000	57.2	33	34.9	59.1	74.0	-14.9
V	7440.000	54.1	33	37.9	59.0	74.0	-15.0
V	9920.000	51.9	33	40.4	59.3	74.0	-14.7
V	12400.000	50.6	33	40.5	58.1	74.0	-15.9
V	14880.000	52.0	33	38.4	57.4	74.0	-16.6

- NOTES: 1. Peak Detector Data unless otherwise stated.
2. All measurements were made at 3 meters. Harmonic emissions not detected at the 3-meter distances were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other harmonic emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative sign in the column shows value below limit.
4. Horn antenna is used for the emission over 1000MHz.
5. Emission (the row indicated by **bold italic**) within the restricted band meets the requirement of FCC Part 15 Section 15.205 / RSS-210 Section 2.2.
6. Measurement Uncertainty is ±5.3dB at a level of confidence of 95%.

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4.0 **Equipment Photographs**

For electronic filing, the photographs are saved with filename: external photos.pdf and internal photos.pdf.

5.0 **Product Labelling**

For electronics filing, the FCC ID label artwork and the label location are saved with filename: label.pdf.

6.0 **Technical Specifications**

For electronic filing, the block diagram and schematic of the tested EUT are saved with filename: block.pdf and circuit.pdf respectively.

7.0 **Instruction Manual**

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States and Canada.

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8.0 Miscellaneous Information

The miscellaneous information includes details of the test procedure and measured bandwidth / calculation of factor such as pulse desensitization and averaging factor (calculation and timing diagram).

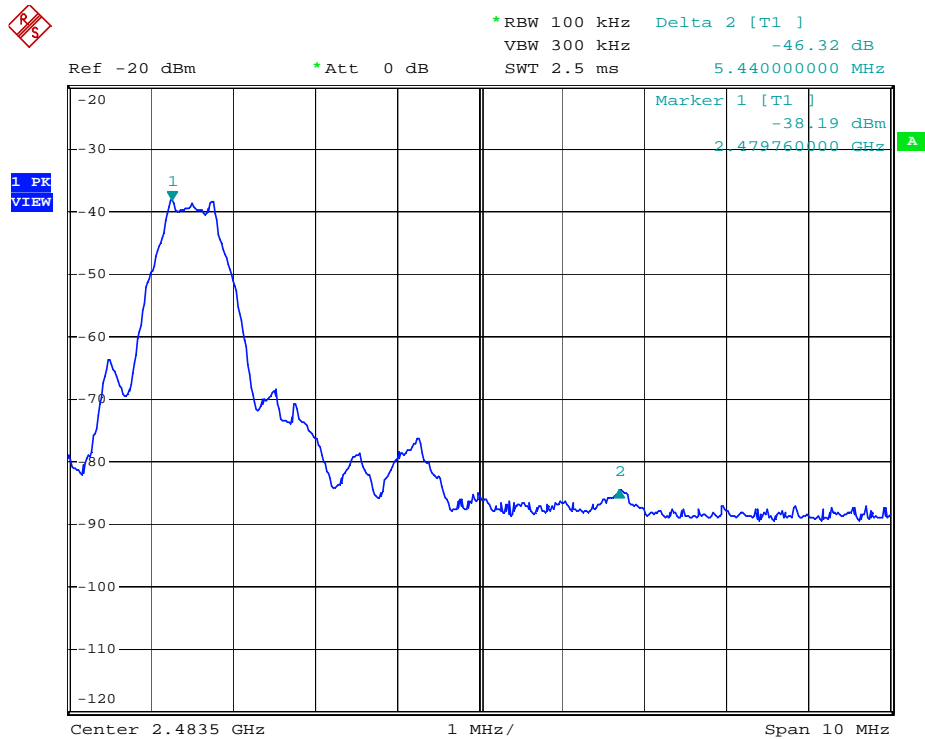
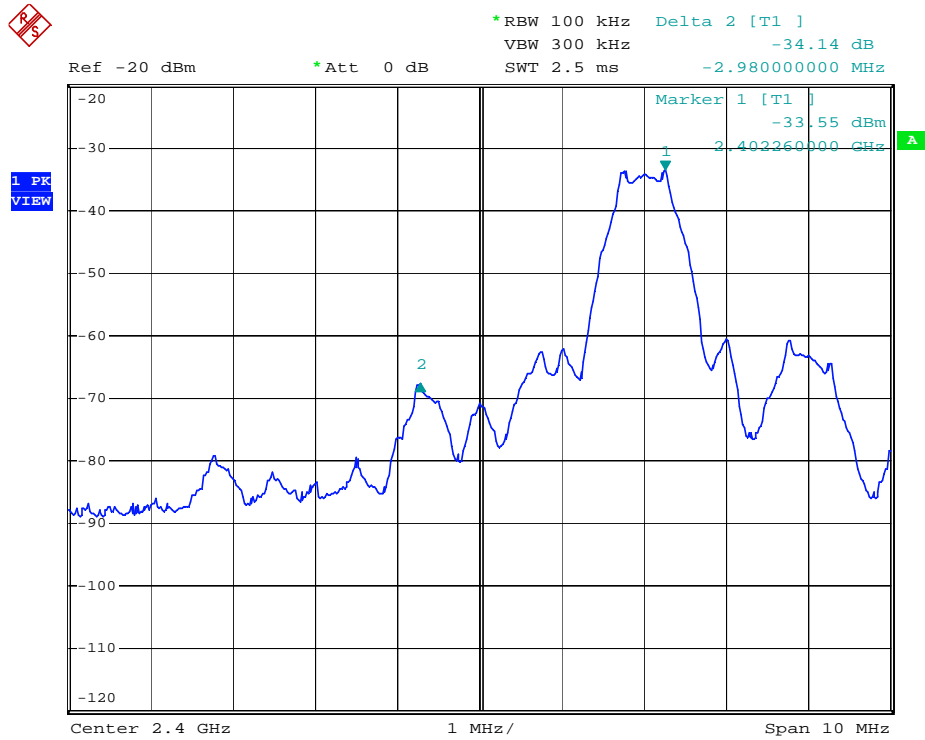
8.1 Radiated Emission on the Bandedge (for Section 15.249)

From the following plots, they show that the fundamental emissions are confined in the specified band (2400MHz to 2483.5MHz). In case of the fundamental emissions are within two standard bandwidths from the bandedge, the delta measurement technique is used for determining bandedge compliance. Standard bandwidth is the bandwidth specified by ANSI C63.4 (2009) for frequency being measured.

Emissions radiated outside of the specified frequency bands, except harmonics, are attenuated by 50dB below the level of the fundamental or to the general radiated emissions limits in Section 15.209, whichever is the lesser attenuation, which meet the requirement of part 15.249(d).

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Peak Measurement



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Peak Measurement

Bandedge compliance is determined by applying marker-delta method, i.e. (Bandedge Plot).

Lower bandedge

Peak Resultant field strength = Fundamental emissions (peak value) – delta from the plot

$$\begin{aligned} &=96.6 \text{ dB}\mu\text{V/m} - 34.1 \text{ dB} \\ &=62.5 \text{ dB}\mu\text{V/m} \end{aligned}$$

Average Resultant field strength = Fundamental emissions (average value) – delta from the plot

$$\begin{aligned} &=53.4 \text{ dB}\mu\text{V/m} - 34.1 \text{ dB} \\ &=19.3 \text{ dB}\mu\text{V/m} \end{aligned}$$

Upper bandedge

Peak Resultant field strength = Fundamental emissions (peak value) – delta from the plot

$$\begin{aligned} &=96.9 \text{ dB}\mu\text{V/m} - 46.3 \text{ dB} \\ &=50.6 \text{ dB}\mu\text{V/m} \end{aligned}$$

Average Resultant field strength = Fundamental emissions (average value) – delta from the plot

$$\begin{aligned} &=53.7 \text{ dB}\mu\text{V/m} - 46.3 \text{ dB} \\ &=7.4 \text{ dB}\mu\text{V/m} \end{aligned}$$

The resultant field strength meets the general radiated emission limit in Section 15.209, which does not exceed 74 dB μ V/m (Peak Limit) and 54 dB μ V/m (Average Limit).

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8.2 Discussion of Pulse Desensitization

Pulse desensitivity is not applicable for this device. The effective period (T_{eff}) is approximately 0.31ms for a digital "1" bit which illustrated on technical specification, with a resolution bandwidth (3dB) of 1MHz, so the pulse desensitivity factor is 0dB.

8.3 Calculation of Average Factor

The duty cycle is simply the on-time divided by the period:

The duration of one cycle = 100ms

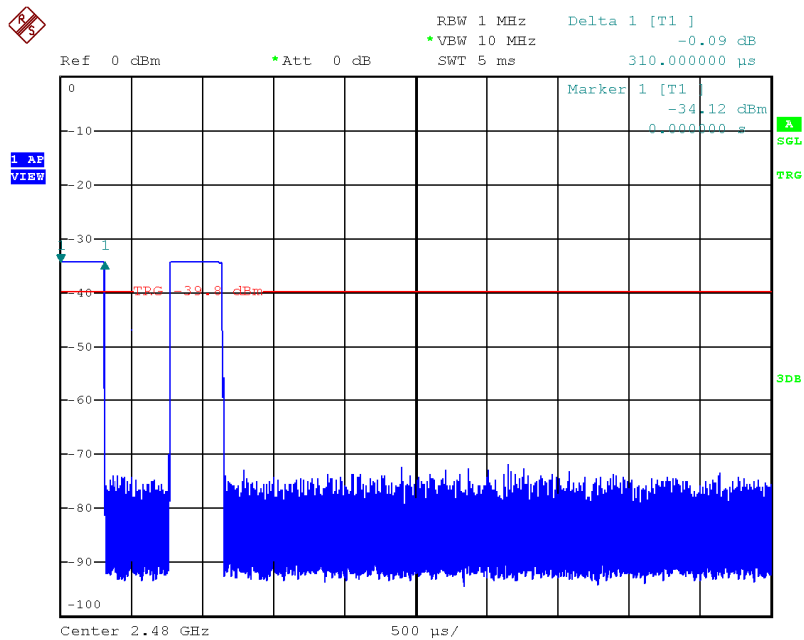
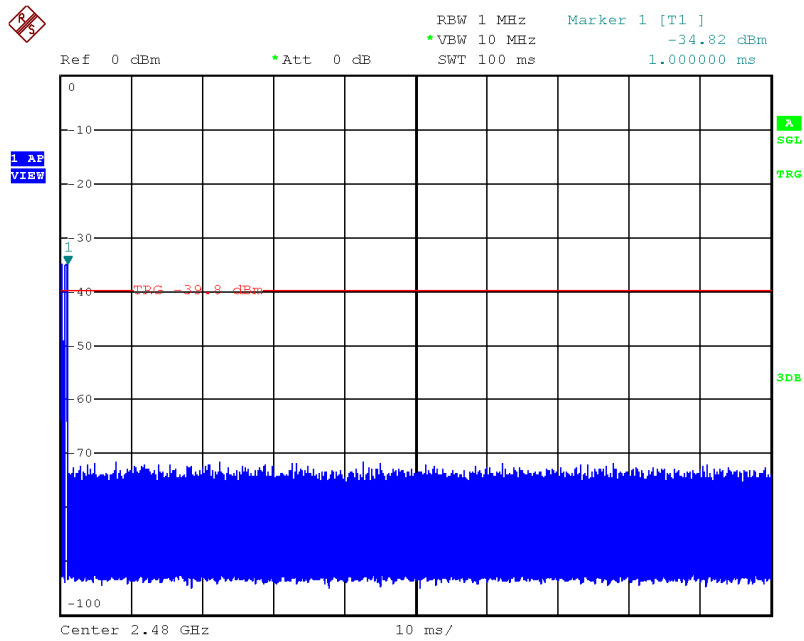
Effective period of the cycle = 0.31 + 0.38 = 0.69ms

DC = 0.69/100 = 0.0069

Therefore, the averaging factor is found by $20\log 0.0069 = -43.2\text{dB}$.

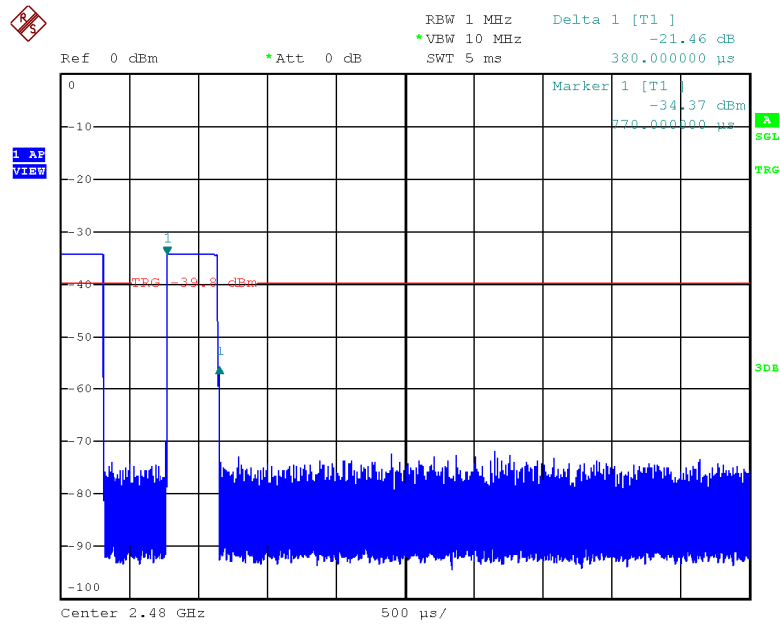
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Average Factor



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Average Factor



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8.4 Emissions Test Procedures

The following is a description of the test procedure used by Intertek Testing Services Hong Kong Ltd. in the measurements of transmitter operating under the Part 15, Subpart C rules.

The transmitting equipment under test (EUT) is placed on a wooden turntable which is four feet in diameter and approximately one meter in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjusted through all three orthogonal axis to obtain maximum emission levels. The antenna height and polarization are also varied during the testing to search for maximum signal levels. The height of the antenna is varied from one to four meters.

Detector function for radiated emissions is in peak mode. Average readings, when required, are taken by measuring the duty cycle of the equipment under test and subtracting the corresponding amount in dB from the measured peak readings. A detailed description for the calculation of the average factor can be found in Exhibit 8.3.

The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower. For line conducted emissions, the range scanned is 150 kHz to 30 MHz.

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8.4 Emissions Test Procedures (cont'd)

The EUT is warmed up for 15 minutes prior to the test.

AC power to the unit is varied from 85% to 115% nominal and variation in the fundamental emission field strength is recorded. If battery powered, a new, fully charged battery is used.

Conducted measurements were made as described in ANSI C63.4 (2009).

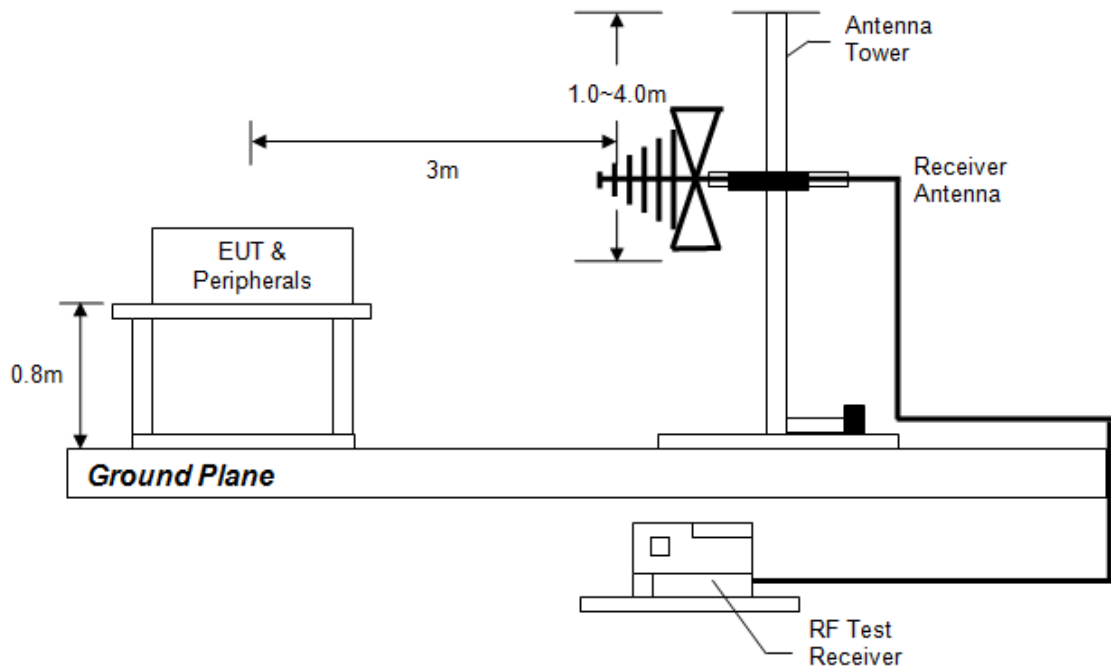
The IF bandwidth used for measurement of radiated signal strength was 100 kHz or greater when frequency is below 1000 MHz. Where pulsed transmissions of short enough pulse duration warrant, a greater bandwidth is selected according to the recommendations of Hewlett Packard Application Note 150-2. A discussion of whether pulse desensitivity is applicable to this unit is included in this report (See Exhibit 8.1). Above 1000 MHz, a resolution bandwidth of 3 MHz is used.

Transmitter measurements are normally conducted at a measurement distance of three meters. However, to assure low enough noise floor in the forbidden bands and above 1 GHz, signals are acquired at a distance of one meter or less. All measurements are extrapolated to three meters using inverse scaling, unless otherwise reported. Measurements taken at a closer distance are so marked.

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8.4.1 Radiated Emission Test Setup

The figure below shows the test setup, which is utilized to make these measurements.



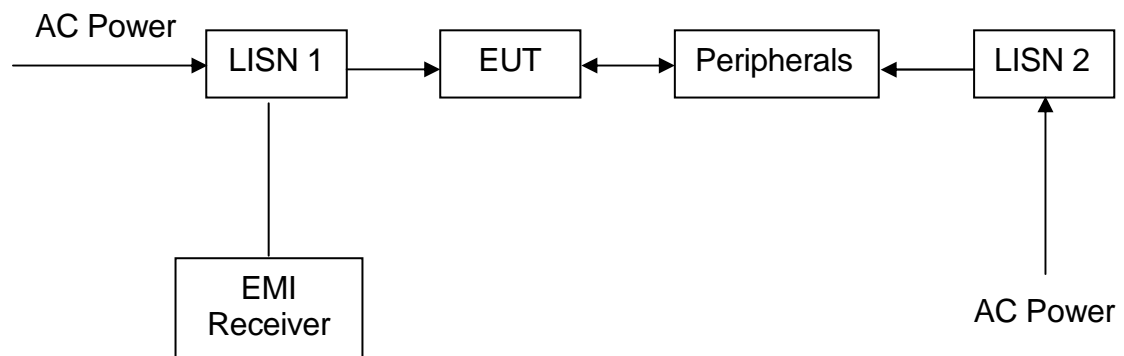
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8.4.2 Conducted Emission Test Procedures

For tabletop equipment, the EUT along with its peripherals were placed on a 1.0m(W)×1.5m(L) and 0.8m in height wooden table. For floor-standing equipment, the EUT and all cables were insulated, if required, from the ground plane by up to 12 mm of insulating material. The EUT was adjusted to maintain a 0.4 meter space from a vertical reference plane. The EUT was connected to power mains through a line impedance stabilization network (LISN), which provided 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room. The excess power cable between the EUT and the LISN was bundled.

All connecting cables of EUT and peripherals were moved to find the maximum emission.

8.4.3 Conducted Emission Test Setup



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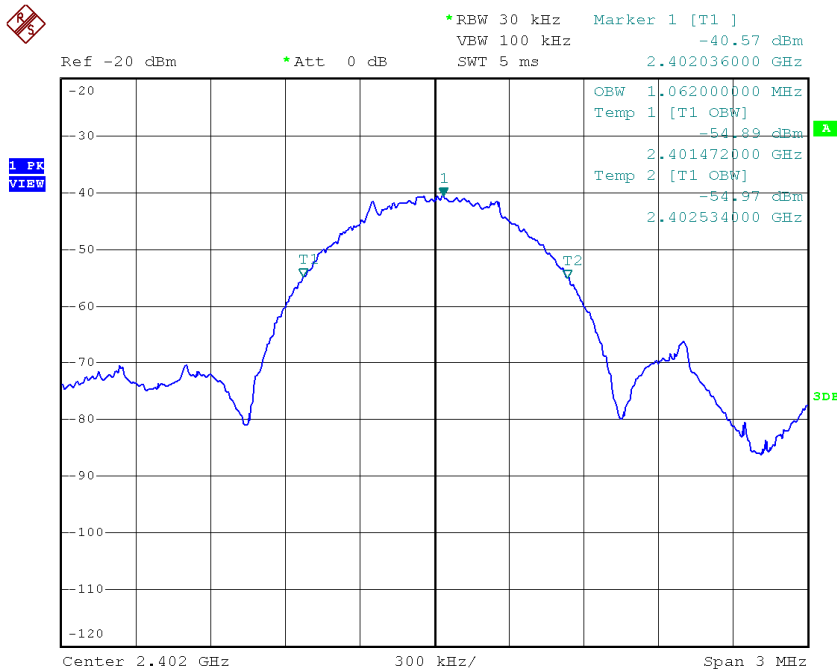
8.5 Occupied Bandwidth

Occupied Bandwidth Results: Bluetooth

Bluetooth	Occupied Bandwidth (kHz)
Low Channel: 2402	1062
Middle Channel: 2442	1062
High Channel: 2480	1056

The worst case of OBW is shown as below;

Bandwidth Measurement



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9.0 Confidentiality Request

For electronic filing, a preliminary copy of the confidentiality request is saved with filename: request.pdf.

10.0 Equipment List

1) Radiated Emissions Test

Equipment	Double Ridged Guide Antenna	EMI Test Receiver	Spectrum Analyzer
Registration No.	EW-1133	EW-2500	EW-2188
Manufacturer	EMCO	R&S	AGILENTTECH
Model No.	3115	ESCI	E4407B
Calibration Date	Apr. 30, 2014	Nov. 06, 2014	Apr. 16, 2014
Calibration Due Date	Oct. 30, 2015	Nov. 06, 2015	Apr. 16, 2015

Equipment	Biconical Antenna 20MHz to 200MHz	Log Periodic Antenna (200MHz to 1000MHz)
Registration No.	EW-0571	EW-0446
Manufacturer	EMCO	EMCO
Model No.	3104C	3146
Calibration Date	Nov. 01, 2013	Nov.10, 2014
Calibration Due Date	May 01, 2015	May 10, 2016

2) Conducted Emissions Test

Equipment	EMI Test Receiver	LISN	Pulse Limiter
Registration No.	EW-2500	EW-0192	EW-0698
Manufacturer	R&S	R&S	R&S
Model No.	ESCI	ESH3-Z5	ESH3-Z2
Calibration Date	Nov. 06, 2014	Jul. 24, 2014	Jul. 07, 2014
Calibration Due Date	Nov. 06, 2015	Apr. 15, 2015	Jul. 07, 2015

3) Bandedge Measurement

Equipment	Spectrum Analyzer
Registration No.	EW-2329
Manufacturer	R&S
Model No.	FSP3
Calibration Date	Jun. 19, 2014
Calibration Due Date	Jun. 19, 2015

END OF TEST REPORT