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TEST REPORT

Report No.: 14011109HKG-001

Physical Enterprises Inc.

Application
For
Certification
(Original Grant)
(FCC ID: QVY56P)
(IC: 10714A-56P)

Transceiver

Prepared and Checked by:

Approved by:

Signed On File
Allen Wong
Assistant Engineer

Wong Kwok Yeung, Kenneth
Lead Engineer
Date: March 21, 2014

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Intertek Testing Services Hong Kong Ltd.

2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

INTERTEK TESTING SERVICES

GENERAL INFORMATION

Physical Enterprises Inc.
BRAND NAME: MIO, MODEL: 56P

FCC ID: QVY56P
IC: 10714A-56P

Grantee:	Physical Enterprises Inc.
Grantee Address:	302-2930 Arbutus St., Vancouver, B.C., V6J 3Y9, Canada.
Contact Person:	Manson Fei
Tel:	(604) 224 9184
Fax:	(604) 224 9194
e-mail:	manson.fei@mioglobal.com
Manufacturer:	IDT Technology Limited
Manufacturer Address:	Block 29-33, Lai Chee Garden, Chentian Industrial Estate, Xixian, Bao An District, Shenzhen City, Guang Dong Province, China.
Brand Name:	MIO
Model:	56P
Type of EUT:	Transceiver
Description of EUT:	Mio LINK - Strapless Continuous Heart Rate Monitor
Serial Number:	N/A
FCC ID / IC:	QVY56P / 10714A-56P
Date of Sample Submitted:	January 28, 2014
Date of Test:	January 28, 2014 to February 26, 2014
Report No.:	14011109HKG-001
Report Date:	March 21, 2014
Environmental Conditions:	Temperature: +10 to 40°C Humidity: 10 to 90%

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SUMMARY OF TEST RESULT

Physical Enterprises Inc.
BRAND NAME: MIO, MODEL: 56P

FCC ID: QVY56P
IC: 10714A-56P

TEST SPECIFICATION	REFERENCE	RESULTS
Bandwidth Requirement Radiated Emission Radiated Emisison on the Bandedge	15.249 / 15.209 RSS-210 A2.9 (a) A2.9 (b) / RSS-GEN	Pass

The equipment under test is found to be complying with the following standards:
FCC Part 15, October 1, 2012 Edition
RSS-210 Issue 8, December 2010
RSS-Gen Issue 3, December 2010

- Note: 1. The EUT uses a permanently attached antenna which, in accordance to section 15.203, is considered sufficient to comply with the pervisions 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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1.0 General Description

1.1 Product Description

The Equipment Under Test (EUT) is a portable heart rate sensor, equipped with USB, Bluetooth 4.0 and ANT+ Interface. The EUT operates in fixed frequency 2457MHz at ANT+ and also operates in the frequency range 2402MHz to 2480MHz at Bluetooth 4.0 (40 channels with 2MHz spacing). The EUT is powered by 1 X 3.7V rechargeable battery (Li-Poly). The USB interface of the EUT do not contain PC Connectivity which the USB interface is for charging use only.

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.

1.3 Test Methodology

Radiated emission measurements were performed according to the procedures in ANSI C63.4 (2009). All radiated measurements were performed in an Open Area Test Site. Preliminary scans were performed in the Open Area Test Site 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 open area test site and conducted measurement facility used to collect the radiated data is located at Garment Centre, 576 Castle Peak Road, Kowloon, 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 1 x 3.7V Lithium rechargeable battery pack.

For maximizing emissions, 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 reported in Exhibit 3.0.

The unit was operated standalone and placed in the center of the turntable.

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.

For simultaneous transmission, both ANT+ and Bluetooth transceiver are also switched on when taking radiated emission for determining worst-case spurious emission.

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 Equipment Modification

Any modifications installed previous to testing by Physical Enterprises Inc. will be incorporated in each production model sold/leased in the United States and Canada.

No modifications were installed by Intertek Testing Services Hong Kong Ltd.

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2.5 Measurement Uncertainty

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

2.6 Support Equipment List and Description

Software: nRFgo Studio (Provided by Applicant)

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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.

$$RA = 52.0 \text{ dB}\mu\text{V/m}$$

$$AF = 7.4 \text{ dB}$$

$$CF = 1.6 \text{ dB}$$

$$AG = 29.0 \text{ dB}$$

$$AV = 5.0 \text{ dB}$$

$$FS = RR + LF$$

$$FS = 18 + 9 = 27 \text{ dB}\mu\text{V/m}$$

$$RR = 18.0 \text{ dB}\mu\text{V}$$

$$LF = 9.0 \text{ dB}$$

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

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3.2 Radiated Emission Configuration Photograph

The worst case in radiated emission was found at 4880.000 MHz for Bluetooth 4.0 and 2400.000 MHz for Ant+.

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 7.5 dB for Bluetooth 4.0 and 2.3 dB for Ant+.

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Applicant: Physical Enterprises Inc.

Date of Test: February 26, 2014

Model: 56P

Worst-Case Operating Mode: Transmitting (Bluetooth 4.0)

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)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2402.000	84.4	33	29.4	80.8	80.8	94.0	-13.2
H	4804.000	44.5	33	34.9	46.4	46.4	54.0	-7.6
H	7206.000	40.7	33	37.9	45.6	45.6	54.0	-8.4
H	9608.000	38.1	33	40.4	45.5	45.5	54.0	-8.5
H	12010.000	37.3	33	40.5	44.8	44.8	54.0	-9.2
H	14412.000	37.1	33	40.0	44.1	44.1	54.0	-9.9

Remark: Average measurement method is used according to ANSI C63.10.

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	88.2	33	29.4	84.6	114.0	-29.4
H	4804.000	48.9	33	34.9	50.8	74.0	-23.2
H	7206.000	45.7	33	37.9	50.6	74.0	-23.4
H	9608.000	42.8	33	40.4	50.2	74.0	-23.8
H	12010.000	42.0	33	40.5	49.5	74.0	-24.5
H	14412.000	42.3	33	40.0	49.3	74.0	-24.7

Remark: Peak detector is used for the emission measurement.

NOTES:

1. 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.
2. Negative sign in the column shows value below limit.
3. Horn antenna is used for the emission over 1000MHz.

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INTERTEK TESTING SERVICES

Applicant: Physical Enterprises Inc.

Date of Test: February 26, 2014

Model: 56P

Worst-Case Operating Mode: Transmitting (Bluetooth 4.0)

Table 2

Radiated Emissions Pursuant to FCC Part 15 Section 15.249 Requirement

Middle Channel

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dB μ V/m)	Calculated at 3m (dB μ V/m)	Average Limit at 3m (dB μ V/m)	Margin (dB)
H	2440.000	86.1	33	29.4	82.5	82.5	94.0	-11.5
H	4880.000	44.6	33	34.9	46.5	46.5	54.0	-7.5
H	7320.000	40.6	33	37.9	45.5	45.5	54.0	-8.5
H	9760.000	38.1	33	40.4	45.5	45.5	54.0	-8.5
H	12200.000	36.8	33	40.5	44.3	44.3	54.0	-9.7
H	14640.000	38.8	33	38.4	44.2	44.2	54.0	-9.8

Remark: Average measurement method is used according to ANSI C63.10.

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-Amp Gain (dB)	Antenna Factor (dB)	Net at 3m - Peak (dB μ V/m)	Peak Limit at 3m (dB μ V/m)	Margin (dB)
H	2440.000	91.0	33	29.4	87.4	114.0	-26.6
H	4880.000	49.0	33	34.9	50.9	74.0	-23.1
H	7320.000	45.5	33	37.9	50.4	74.0	-23.6
H	9760.000	42.8	33	40.4	50.2	74.0	-23.8
H	12200.000	42.0	33	40.5	49.5	74.0	-24.5
H	14640.000	43.9	33	38.4	49.3	74.0	-24.7

Remark: Peak detector is used for the emission measurement.

NOTES:

1. 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.
2. Negative sign in the column shows value below limit.
3. Horn antenna is used for the emission over 1000MHz.

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Applicant: Physical Enterprises Inc.

Date of Test: February 26, 2014

Model: 56P

Worst-Case Operating Mode: Transmitting (Bluetooth 4.0)

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)	Calculated at 3m (dBμV/m)	Average Limit at 3m (dBμV/m)	Margin (dB)
H	2480.000	86.9	33	29.4	83.3	83.3	94.0	-10.7
H	4960.000	44.2	33	34.9	46.1	46.1	54.0	-7.9
H	7440.000	40.7	33	37.9	45.6	45.6	54.0	-8.4
H	9920.000	37.9	33	40.4	45.3	45.3	54.0	-8.7
H	12400.000	37.1	33	40.5	44.6	44.6	54.0	-9.4
H	14880.000	38.7	33	38.4	44.1	44.1	54.0	-9.9

Remark: Average measurement method is used according to ANSI C63.10.

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	90.9	33	29.4	87.3	114.0	-26.7
H	4960.000	48.4	33	34.9	50.3	74.0	-23.7
H	7440.000	45.4	33	37.9	50.3	74.0	-23.7
H	9920.000	42.1	33	40.4	49.5	74.0	-24.5
H	12400.000	41.9	33	40.5	49.4	74.0	-24.6
H	14880.000	43.9	33	38.4	49.3	74.0	-24.7

Remark: Peak detector is used for the emission measurement.

NOTES:

1. 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.
2. Negative sign in the column shows value below limit.
3. Horn antenna is used for the emission over 1000MHz.

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IC: 10714A-56P

INTERTEK TESTING SERVICES

Applicant: Physical Enterprises Inc.

Date of Test: February 26, 2014

Model: 56P

Worst-Case Operating Mode: Transmitting (ANT+)

Table 4

Radiated Emissions
Pursuant to FCC Part 15 Section 15.249 Requirement

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	2457.000	86.2	33	29.4	82.6	0	82.6	94.0	-11.4
H	4914.000	46.7	33	34.9	48.6	0	48.6	54.0	-5.4
H	7317.000	43.6	33	37.9	48.5	0	48.5	54.0	-5.5
H	9828.000	40.9	33	40.4	48.3	0	48.3	54.0	-5.7
H	12285.000	40.3	33	40.5	47.8	0	47.8	54.0	-6.2
H	14742.000	42.5	33	38.4	47.9	0	47.9	54.0	-6.1

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	2457.000	86.2	33	29.4	82.6	114.0	-31.4
H	4914.000	46.7	33	34.9	48.6	74.0	-25.4
H	7317.000	43.6	33	37.9	48.5	74.0	-25.5
H	9828.000	40.9	33	40.4	48.3	74.0	-25.7
H	12285.000	40.3	33	40.5	47.8	74.0	-26.2
H	14742.000	42.5	33	38.4	47.9	74.0	-26.1

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.

INTERTEK TESTING SERVICES

Applicant: Physical Enterprises Inc.

Date of Test: February 26, 2014

Model: 56P

Worst-Case Operating Mode: Operate with Transmission

Table 5

Radiated Emissions
Pursuant to FCC Part 15 Section 15.209 Requirement

Polarization	Frequency (MHz)	Reading (dB μ V)	Pre-amp (dB)	Antenna Factor (dB)	Net at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
V	45.306	39.6	16	10.0	33.6	40.0	-6.4
V	54.168	38.8	16	11.0	33.8	40.0	-6.2
H	108.523	36.6	16	14.0	34.6	43.5	-8.9
H	229.654	32.6	16	18.0	34.6	46.0	-11.4
H	270.136	28.1	16	22.0	34.1	46.0	-11.9
H	310.258	26.7	16	23.0	33.7	46.0	-12.3

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.

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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).

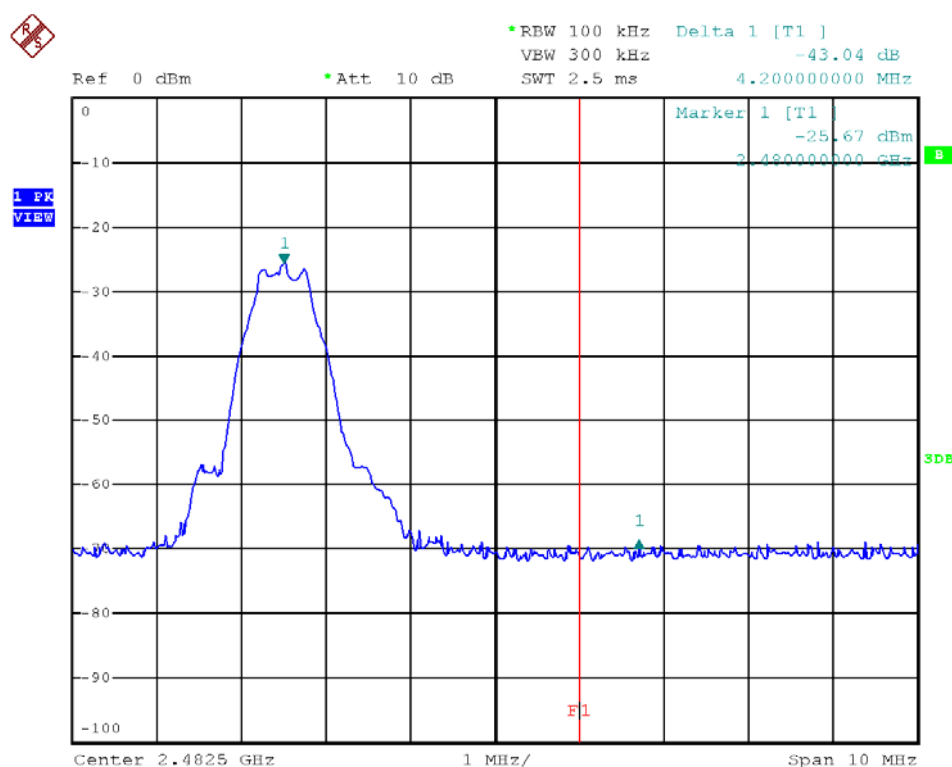
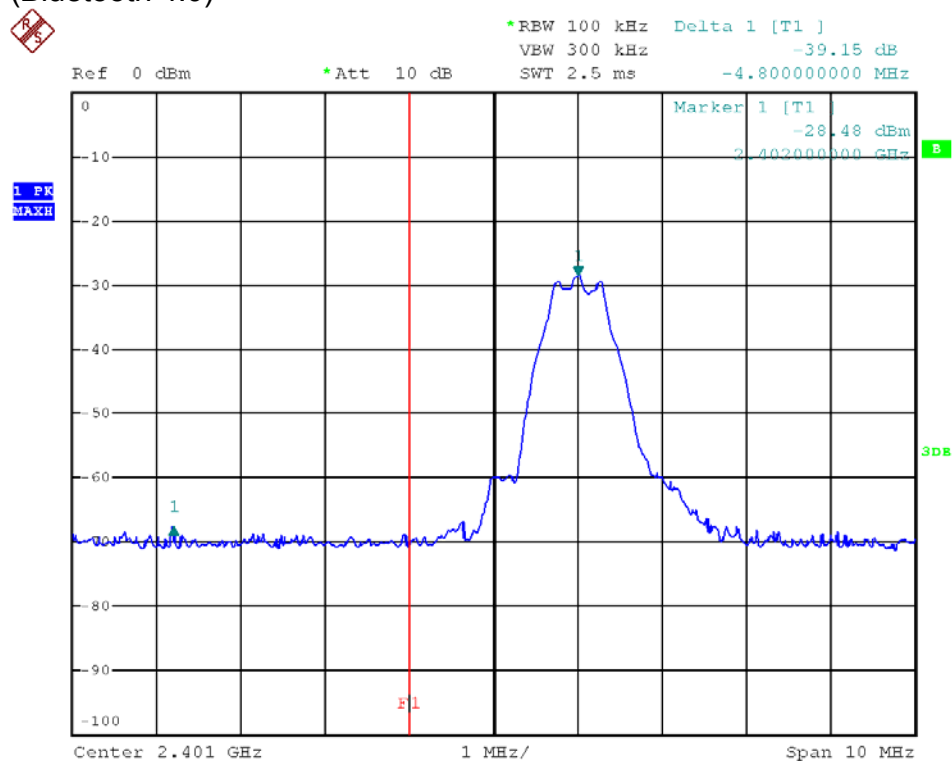
8.1 Measured Bandwidth

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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(Bluetooth 4.0)



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Peak Measurement (Bluetooth 4.0)

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

=84.6 dB μ V/m - 39.2 dB

=45.4 dB μ V/m

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

=80.8 dB μ V/m - 39.2 dB

=41.6 dB μ V/m

Upper bandedge

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

=87.3 dB μ V/m - 43.0 dB

=44.3 dB μ V/m

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

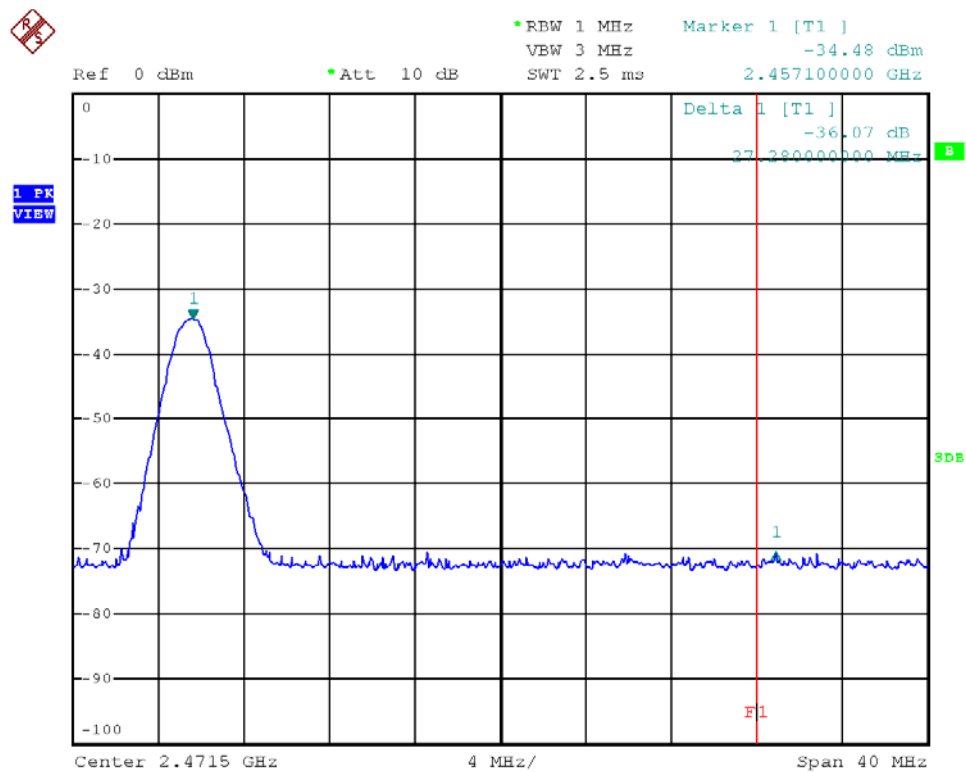
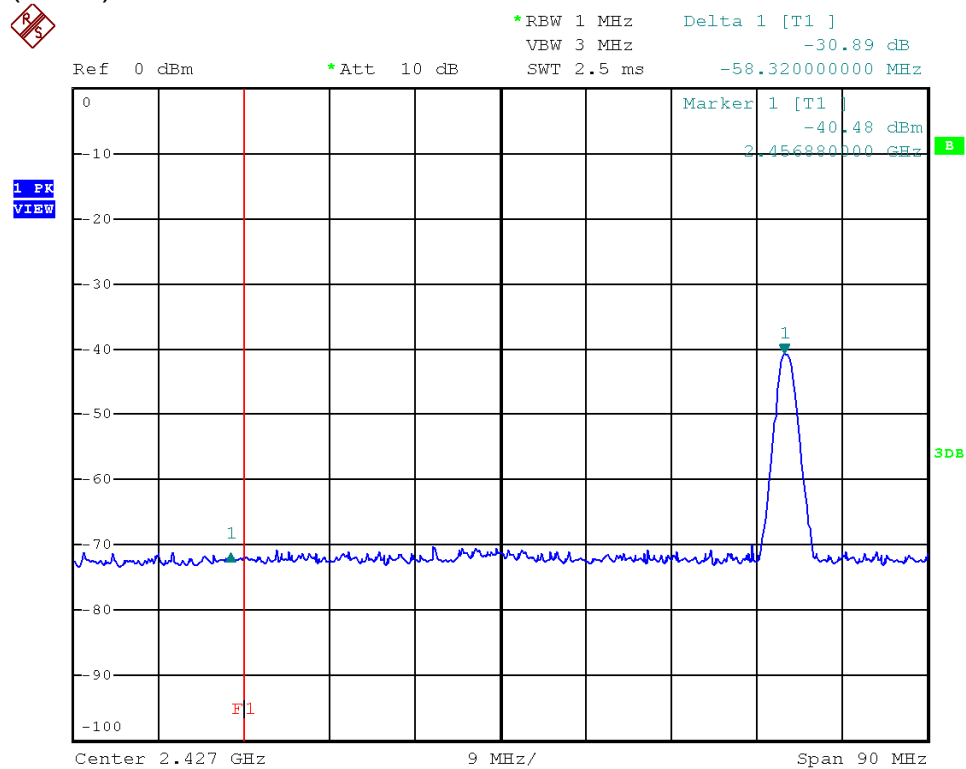
=83.3 dB μ V/m - 43.0 dB

=40.3 dB μ V/m

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).

INTERTEK TESTING SERVICES

(ANT+)



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Peak Measurement (ANT+)

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

=82.6 dB μ V/m - 30.9 dB

=51.7 dB μ V/m

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

=82.6 dB μ V/m - 30.9 dB

=51.7 dB μ V/m

Upper bandedge

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

=82.6 dB μ V/m - 36.1 dB

=49.8 dB μ V/m

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

=82.6 dB μ V/m - 36.1 dB

=49.8 dB μ V/m

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 0.18ms 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 average factor is not applicable for this device as the transmitted signal is a continuously signal.

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.

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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 1 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.

9.0 **Confidentiality Request**

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

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10.0 Equipment List

1) Radiated Emissions Test

Equipment	EMI Test Receiver	Biconical Antenna	Log Periodic Antenna
Registration No.	EW-2500	EW-2512	EW-0447
Manufacturer	R&S	EMCO	EMCO
Model No.	ESCI	3104C	3146
Calibration Date	Mar. 22, 2013	Jun. 25, 2013	Aug. 19, 2013
Calibration Due Date	Feb. 28, 2014	Dec. 25, 2014	Feb. 19, 2015

Equipment	Spectrum Analyzer	Double Ridged Guide Antenna
Registration No.	EW-2253	EW-1015
Manufacturer	R&S	EMCO
Model No.	FSP40	3115
Calibration Date	Apr. 24, 2013	Mar. 05, 2013
Calibration Due Date	Apr. 24, 2014	Sep. 05, 2014

2) Bandedge Measurement

Equipment	Spectrum Analyzer
Registration No.	EW-2249
Manufacturer	R&S
Model No.	FSP30
Calibration Date	Oct. 28, 2013
Calibration Due Date	Oct. 28, 2014