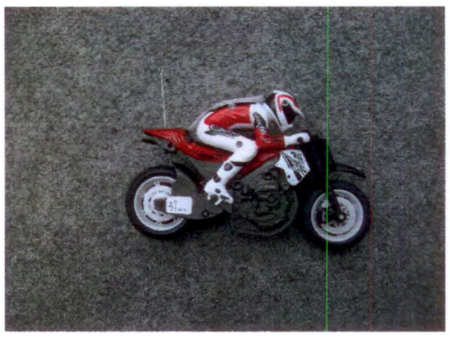
TEST REPORT No: (5213)135-0950(C)

TEST REPORT

To:	**SILVERLIT TOYS MANUFACTORY LTD.**	To:	-
Attn:	Ms. May Choi / Mr. Nelson Ng / Mr. Edmond / Ms. Angel Zhang	Attn:	-
Address:	17th Floor World Trade Centre, 280 Gloucester Road, Causeway Bay, Hong Kong	Address:	-
Fax:	29162984	Fax:	-
E-mail:	may@silverlit.com / wt.mark-qa@silverlit.com / nelson@silverlit.com / edmond@silverlit.com / wt.angelzhang@silverlit.com / wt.jim@silverlit.com	E-mail:	-
Folder No.:	--		
Factory name:	--		
Location:	--		
Product:	2.4G Gyro Buzz Model No.: 82414		



Sample No:	(5213)135-0950
Test date:	May 28, 2013
Test Requested:	FCC Part 15 - 2011
Test Method:	ANSI C63.4 - 2009
FCC ID:	OYK-FCC82414

The results given in this report are related to the tested specimen of the described electrical apparatus.

CONCLUSION: The submitted sample was found to COMPLY with requirement of FCC Part 15 Subpart C.

Authorized Signature:

Reviewed by: Keith Yeung	Approved by: Steven Tsang
Date: July 4, 2013	Date: July 4, 2013

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TEST REPORT No: (5213)135-0950(C)

Test Result Summary

EMISSION TEST			
Test requirement: FCC Part 15 - 2011			
Test Condition	Test Method	Test Result	
		Pass	Failed
Radiated Emission Test, 9kHz to 40GHz	ANSI C63.4	☒	☐

Report Revision & Sample Re-submit History:

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Location of the test laboratory

Radiated and Conducted emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2009. An Open Area Test Site and Full Anechoic Chamber (FCC Listed Site, Registration No. 642151) are set up for investigation and located at :

BUREAU VERITAS HONG KONG LIMITED, EMC CENTRE

No. 2106-2107, 21/F., Westin Centre,
26 Hung To Road,
Kwun Tong, Kowloon,
Hong Kong

List of measuring equipment

Radiated Emission

EQUIPMENT	MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATION DUE
EMI TEST RECEIVER	R&S	ESCI	100379	28-JAN-2014
LOOP ANTENNA	ETS-LINDGREN	6502	00102266	13-AUG-2013
BILOG ANTENNA	SCHAFFNER	CBL6112D	25229	12-SEP-2013
OPEN AREA TEST SITE	BVCPS	N/A	N/A	09-JUL-2013
ANECHOIC CHAMBER	ALBATROSS	M-CDC	80374004499B	05-FEB-2014
COAXIAL CABLE	SUHNER	N/A	N/A	24-SEP-2013

Remarks:-
N/A : Not Applicable or Not Available

The measurement instrumentation uncertainty would be taking into consideration on each of the test result

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TEST REPORT No: (5213)135-0950(C)

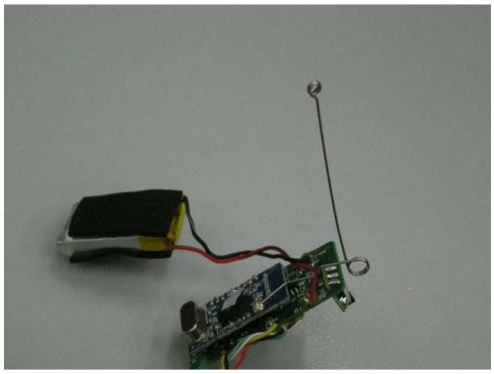
Equipment Under Test [EUT]
Description of Sample:
Model Name: 2.4G Gyro Buzz
Model Number: 82414
Rating: 3.7Vd.c. ("internal rechargeable battery" x 1)

Description of EUT Operation:
The Equipment Under Test (EUT) is a **SILVERLIT TOYS MANUFACTORY LIMITED** of Remote Control Transceiver. It is a 1 switch transceiver and operating at 2403MHz to 2480MHz. The lowest, middle and highest frequencies were tested and the results are shown in the report. The EUT transmit while received controller command, Modulation by IC, and type is FHSS.
The transmitter has different control:

1. ON/OFF switch – ON/OFF control

Antenna Requirement (Section 15.203)
The EUT is use of a permanently antenna. It is soldered on the PCB. The antenna is not replaceable or user serviceable. The requirements of S15.203 are met. There are no deviations or exceptions to the specifications.

Antenna



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TEST REPORT No: (5213)135-0950(C)

Radiated Emissions (Fundamental)

Test Requirement:	FCC Part 15 Section 15.249
Test Method:	ANSI C63.4
Test Date(s):	2013-05-28
Temperature:	25.0 °C
Humidity:	69.0 %
Atmospheric Pressure:	100.1 kPa
Mode of Operation:	Transmission mode
Tested Voltage:	3.7Vd.c. ("internal rechargeable battery" x 1)

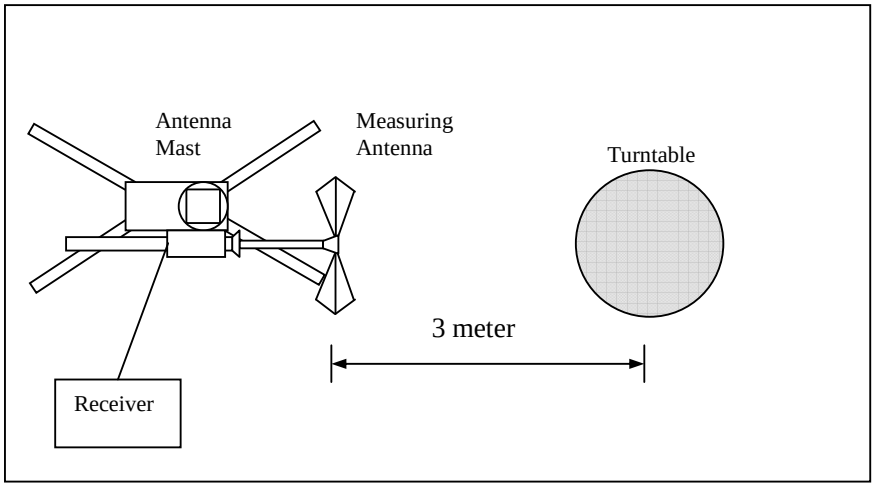
Test Procedure:

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2009.

The equipment under test (EUT) was placed on a non-conductive turntable with dimensions of 1.5m x 1m and 0.8m high above the ground. 3m from the EUT, a broadband antenna mounting on the mast received the signal strength. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, For battery operated equipment, the equipment tests shall be perform using new battery. The turntable was rotated to maximize the emission level. The antenna was then moving along the mast from 1m up to 4m until no more higher value was found. Both horizontal and vertical polarization of the antenna were placed and investigated.

Location: The Roof, Westin Centre, 26 Hung To Road, Kwun Tong, Kowloon, Hong Kong

Test Setup: Open Area Test Site



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Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.249]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission (Average) [mV/m]	Field Strength of Harmonics Emission (Average) [μV/m]
2400-2483.5	50	500

Measurement Data

Test Result of (Transmission mode, Lowest frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
2403.00	H	-2.7	78.2	114.0	-35.8
2403.00	V	-2.7	86.5	114.0	-27.5

Detection mode: # Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
2403.00	H	-2.7	**58.2	94.0	-35.8
2403.00	V	-2.7	**66.5	94.0	-27.5

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.
** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

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TEST REPORT No: (5213)135-0950(C)

Measurement Data

Test Result of (Transmission mode, Middle frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2440.00	H	-2.7	83.3	114.0	-30.7
2440.00	V	-2.7	87.7	114.0	-26.3

Detection mode: # Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2440.00	H	-2.7	**63.3	94.0	-30.7
2440.00	V	-2.7	**67.7	94.0	-26.3

Test Result of (Transmission mode, Highest frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2480.00	H	-2.7	81.9	114.0	-32.1
2480.00	V	-2.7	88.9	114.0	-25.1

Detection mode: # Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2480.00	H	-2.7	**61.9	94.0	-32.1
2480.00	V	-2.7	**68.9	94.0	-25.1

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.
** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

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TEST REPORT No: (5213)135-0950(C)

Radiated Emissions (Spurious Emission)

Test Requirement:	FCC Part 15 Section 15.249
Test Method:	ANSI C63.4
Test Date(s):	2013-05-28
Temperature:	25.0 °C
Humidity:	69.0 %
Atmospheric Pressure:	100.1 kPa
Mode of Operation:	Transmission mode
Tested Voltage:	3.7Vd.c. (“internal rechargeable battery” x 1)

Measurement Data

Test Result of (Transmission mode, Lowest frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2400.00	H	-2.7	55.5	74.0	-18.5
4806.00	H	6.3	62.0	74.0	-12.0
7209.00	H	13.5	63.1	74.0	-10.9
9612.00	H	13.2	61.4	74.0	-12.6
12015.00	H	18.5	62.0	74.0	-12.0
14418.00	H	19.2	63.4	74.0	-10.6
16821.00	H	25.4	65.1	74.0	-8.9
19224.00	H	27.3	64.9	74.0	-9.1
21627.00	H	29.3	65.2	74.0	-8.8
24030.00	H	32.1	64.0	74.0	-10.0
26433.00	H	33.9	65.6	74.0	-8.4

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz

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Measurement Data

Test Result of (Transmission mode, Lowest frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2400.00	V	-2.7	63.2	74.0	-10.8
4806.00	V	6.3	62.7	74.0	-11.3
7209.00	V	13.5	64.3	74.0	-9.7
9612.00	V	13.2	61.6	74.0	-12.4
12015.00	V	18.5	64.3	74.0	-9.7
14418.00	V	19.2	64.3	74.0	-9.7
16821.00	V	25.4	64.1	74.0	-9.9
19224.00	V	27.3	64.8	74.0	-9.2
21627.00	V	29.3	65.6	74.0	-8.4
24030.00	V	32.1	64.3	74.0	-9.7
26433.00	V	33.9	65.5	74.0	-8.5

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz

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Measurement Data

Test Result of (Transmission mode, Lowest frequency): PASS

Detection mode: #Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2400.00	H	-2.7	**35.5	54.0	-18.5
4806.00	H	6.3	**42.0	54.0	-12.0
7209.00	H	13.5	**43.1	54.0	-10.9
9612.00	H	13.2	**41.4	54.0	-12.6
12015.00	H	18.5	**42.0	54.0	-12.0
14418.00	H	19.2	**43.4	54.0	-10.6
16821.00	H	25.4	**45.1	54.0	-8.9
19224.00	H	27.3	**44.9	54.0	-9.1
21627.00	H	29.3	**45.2	54.0	-8.8
24030.00	H	32.1	**44.0	54.0	-10.0
26433.00	H	33.9	**45.6	54.0	-8.4

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.
** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

TEST REPORT No: (5213)135-0950(C)

Measurement Data

Test Result of (Transmission mode, Lowest frequency): PASS

Detection mode: #Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2400.00	V	-2.7	**43.2	54.0	-10.8
4806.00	V	6.3	**42.7	54.0	-11.3
7209.00	V	13.5	**44.3	54.0	-9.7
9612.00	V	13.2	**41.6	54.0	-12.4
12015.00	V	18.5	**44.3	54.0	-9.7
14418.00	V	19.2	**44.3	54.0	-9.7
16821.00	V	25.4	**44.1	54.0	-9.9
19224.00	V	27.3	**44.8	54.0	-9.2
21627.00	V	29.3	**45.6	54.0	-8.4
24030.00	V	32.1	**44.3	54.0	-9.7
26433.00	V	33.9	**45.5	54.0	-8.5

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** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

TEST REPORT No: (5213)135-0950(C)

Measurement Data

Test Result of (Transmission mode, Middle frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
4880.00	H	6.3	61.5	74.0	-12.5
7320.00	H	13.5	63.4	74.0	-10.6
9760.00	H	13.2	63.5	74.0	-10.5
12200.00	H	18.5	63.9	74.0	-10.1
14640.00	H	19.2	63.7	74.0	-10.3
17080.00	H	25.4	64.4	74.0	-9.6
19520.00	H	27.3	64.0	74.0	-10.0
21960.00	H	29.3	64.9	74.0	-9.1
24400.00	H	32.1	65.1	74.0	-8.9
26840.00	H	33.9	64.6	74.0	-9.4

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dB□V/m)	Limit at 3m (dB□V/m)	Margin (dB)
4880.00	V	6.3	60.7	74.0	-13.3
7320.00	V	13.5	61.8	74.0	-12.2
9760.00	V	13.2	63.0	74.0	-11.0
12200.00	V	18.5	61.8	74.0	-12.2
14640.00	V	19.2	62.9	74.0	-11.1
17080.00	V	25.4	64.6	74.0	-9.4
19520.00	V	27.3	64.4	74.0	-9.6
21960.00	V	29.3	64.7	74.0	-9.3
24400.00	V	32.1	64.7	74.0	-9.3
26840.00	V	33.9	64.1	74.0	-9.9

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz

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Measurement Data

Test Result of (Transmission mode, Middle frequency): PASS

Detection mode: #Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
4880.00	H	6.3	**41.5	54.0	-12.5
7320.00	H	13.5	**43.4	54.0	-10.6
9760.00	H	13.2	**43.5	54.0	-10.5
12200.00	H	18.5	**43.9	54.0	-10.1
14640.00	H	19.2	**43.7	54.0	-10.3
17080.00	H	25.4	**44.4	54.0	-9.6
19520.00	H	27.3	**44.0	54.0	-10.0
21960.00	H	29.3	**44.9	54.0	-9.1
24400.00	H	32.1	**45.1	54.0	-8.9
26840.00	H	33.9	**44.6	54.0	-9.4

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
4880.00	V	6.3	**40.7	54.0	-13.3
7320.00	V	13.5	**41.8	54.0	-12.2
9760.00	V	13.2	**43.0	54.0	-11.0
12200.00	V	18.5	**41.8	54.0	-12.2
14640.00	V	19.2	**42.9	54.0	-11.1
17080.00	V	25.4	**44.6	54.0	-9.4
19520.00	V	27.3	**44.4	54.0	-9.6
21960.00	V	29.3	**44.7	54.0	-9.3
24400.00	V	32.1	**44.7	54.0	-9.3
26840.00	V	33.9	**44.1	54.0	-9.9

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.
** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

TEST REPORT No: (5213)135-0950(C)

Measurement Data

Test Result of (Transmission mode, Highest frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2483.50	H	-2.7	63.4	74.0	-10.6
4960.00	H	6.3	61.5	74.0	-12.5
7440.00	H	13.5	62.7	74.0	-11.3
9920.00	H	13.2	63.4	74.0	-10.6
12400.00	H	18.5	61.7	74.0	-12.3
14880.00	H	19.2	65.7	74.0	-8.3
17360.00	H	26.2	65.5	74.0	-8.5
19840.00	H	27.3	65.1	74.0	-8.9
22320.00	H	29.3	65.9	74.0	-8.1
24800.00	H	32.1	65.3	74.0	-8.7
27280.00	H	33.9	65.8	74.0	-8.2

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz

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Test Result of (Transmission mode, Highest frequency): PASS

Detection mode: Peak

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2483.50	V	-2.7	69.3	74.0	-4.7
4960.00	V	6.3	60.9	74.0	-13.1
7440.00	V	13.5	64.0	74.0	-10.0
9920.00	V	13.2	62.1	74.0	-11.9
12400.00	V	18.5	63.5	74.0	-10.5
14880.00	V	19.2	64.7	74.0	-9.3
17360.00	V	26.2	65.8	74.0	-8.2
19840.00	V	27.3	66.0	74.0	-8.0
22320.00	V	29.3	65.5	74.0	-8.5
24800.00	V	32.1	65.9	74.0	-8.1
27280.00	V	33.9	66.4	74.0	-7.6

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz

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TEST REPORT No: (5213)135-0950(C)

Measurement Data

Test Result of (Transmission mode, Highest frequency): PASS

Detection mode: #Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2483.50	H	-2.7	**43.4	54.0	-10.6
4960.00	H	6.3	**41.5	54.0	-12.5
7440.00	H	13.5	**42.7	54.0	-11.3
9920.00	H	13.2	**43.4	54.0	-10.6
12400.00	H	18.5	**41.7	54.0	-12.3
14880.00	H	19.2	**45.7	54.0	-8.3
17360.00	H	26.2	**45.5	54.0	-8.5
19840.00	H	27.3	**45.1	54.0	-8.9
22320.00	H	29.3	**45.9	54.0	-8.1
24800.00	H	32.1	**45.3	54.0	-8.7
27280.00	H	33.9	**45.8	54.0	-8.2

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.
** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

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Measurement Data

Test Result of (Transmission mode, Highest frequency): PASS

Detection mode: #Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
2483.50	V	-2.7	**49.3	54.0	-4.7
4960.00	V	6.3	**40.9	54.0	-13.1
7440.00	V	13.5	**44.0	54.0	-10
9920.00	V	13.2	**42.1	54.0	-11.9
12400.00	V	18.5	**43.5	54.0	-10.5
14880.00	V	19.2	**44.7	54.0	-9.3
17360.00	V	26.2	**45.8	54.0	-8.2
19840.00	V	27.3	**46.0	54.0	-8.0
22320.00	V	29.3	**45.5	54.0	-8.5
24800.00	V	32.1	**45.9	54.0	-8.1
27280.00	V	33.9	**46.4	54.0	-7.6

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.
** Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 1MHz
VBW = 1MHz

TEST REPORT No: (5213)135-0950(C)

Radiated Emissions (30MHz – 2.4GHz)

Test Requirement:	FCC Part 15 Section 15.209
Test Method:	ANSI C63.4
Test Date(s):	2013-05-28
Temperature:	25.0 °C
Humidity:	69.0 %
Atmospheric Pressure:	100.1 kPa
Mode of Operation:	On mode / Charge mode
Tested Voltage:	Bike: 3.7Vd.c. (“internal rechargeable battery” x 1) / Remote: 6Vd.c. (“AA” size battery x 6)

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

Frequency Range [MHz]	Quasi-Peak Limits [μV/m]
1.705-30	300
30-88	100
88-216	150
216-960	200
Above960	500

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Test Result of (On mode): PASS

Detector mode: Quasi-peak

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
415.72	H	28.0	46.0	-18.0
421.72	H	28.4	46.0	-17.6
450.96	H	26.7	46.0	-19.3
585.84	H	36.1	46.0	-9.9
605.96	H	34.6	46.0	-11.4
716.68	H	31.3	46.0	-14.7

Detector mode: Quasi-peak

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
415.72	V	32.5	46.0	-13.5
421.72	V	31.2	46.0	-14.8
450.96	V	32.9	46.0	-13.1
585.84	V	30.5	46.0	-15.5
605.96	V	30.0	46.0	-16.0
716.68	V	36.7	46.0	-9.3

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TEST REPORT No: (5213)135-0950(C)

Test Result of (Charge mode): PASS

Detector mode: Quasi-peak

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
37.08	H	23.9	40.0	-16.1
126.16	H	20.7	43.5	-22.8
294.28	H	21.6	46.0	-24.4
372.46	H	25.2	46.0	-20.8
415.22	H	26.3	46.0	-19.7
487.48	H	27.1	46.0	-18.9

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
37.08	V	24.2	40.0	-15.8
126.16	V	20.5	43.5	-23.0
294.28	V	21.3	46.0	-24.7
372.46	V	25.0	46.0	-21.0
415.22	V	26.9	46.0	-19.1
487.48	V	27.5	46.0	-18.5

Note: Field Strength includes Antenna Factor and Cable Loss.

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TEST REPORT No: (5213)135-0950(C)

Frequency range of Fundamental Emission

Test Requirement:	FCC 47 CFR 15.249
Test Method:	ANSI C63.4:2009 (Section 13.1.7)
Test Date(s):	2013-05-28
Temperature:	25.0 °C
Humidity:	69.0 %
Atmospheric Pressure:	100.1 kPa
Mode of Operation:	Transmission mode
Tested Voltage:	Bike: 3.7Vd.c. (“internal rechargeable battery” x 1)

Test Method:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

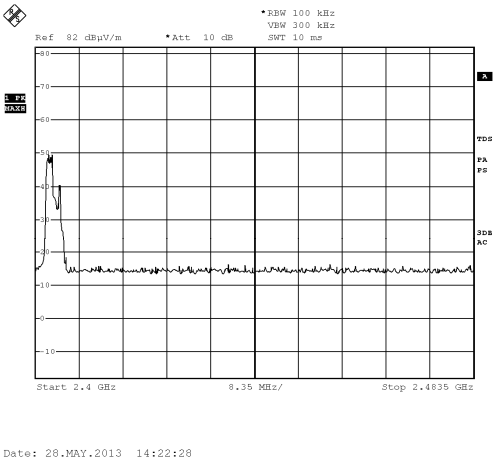
Limits for Frequency range of Fundamental Emission:

Frequency [MHz]	FCC Limits [MHz]
2403.00 – 2480.00	2400 – 2483.5

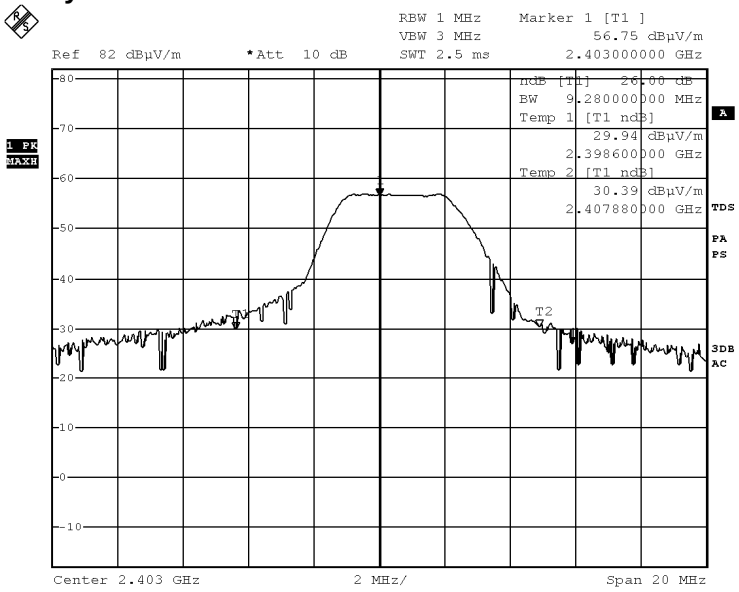
TEST REPORT No: (5213)135-0950(C)

Measurement Data :

Test Result of Frequency Range of Fundamental Emission: PASS
Lowest Frequency – 2403.00MHz



Test Result of 26dB Bandwidth of Fundamental Emission: PASS
Lowest Frequency – 2403.00MHz



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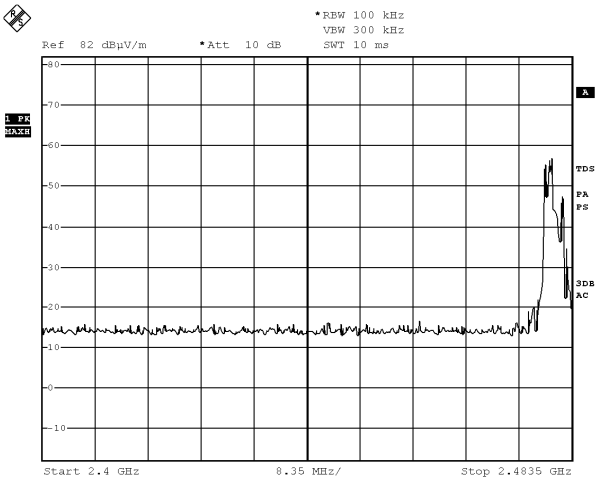
TEST REPORT No: (5213)135-0950(C)

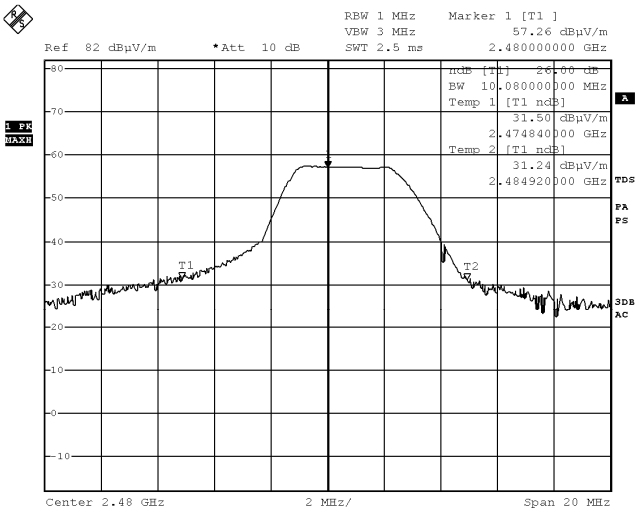
Measurement Data :

Test Result of Frequency Range of Fundamental Emission: PASS
Highest Frequency – 2480.00MHz



Date: 28.MAY.2013 14:33:56

Test Result of 26dB Bandwidth of Fundamental Emission: PASS
Highest Frequency – 2480.00MHz



Date: 28.MAY.2013 14:36:19

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Duty Cycle Correction During 100msec:

Each function key sends a different series of characters, but each packet period (100msec) never exceeds a series of 16 pulses (0.2msec). Assuming any combination of short and long pulses maybe obtained due to encoding the worst case transmit duty cycle would be considered (16*0.2) per 100msec = 3.2% duty cycle.

Remarks:

Duty Cycle Correction = 20Log(0.032) = -29.8dB
Therefore, -20dB is taken.

The following figures [Figure A] show the characteristics of the pulse train for one of these functions.

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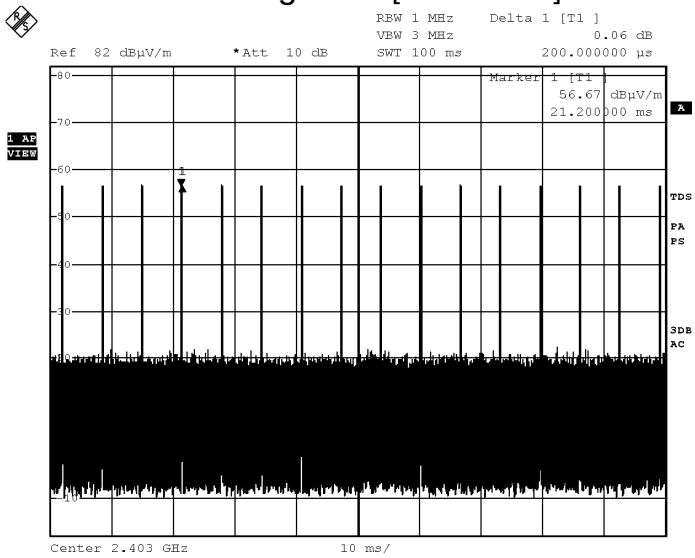
Measurement Data :

Figure A [Pulse Train]



Date: 28.MAY.2013 14:28:23

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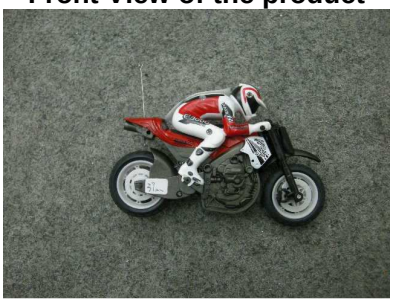
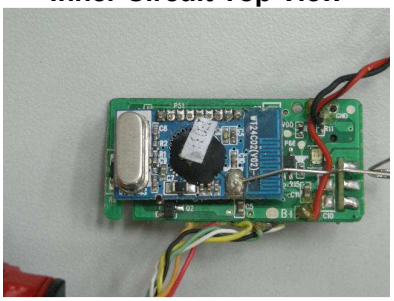
Photographs of EUT

Front View of the product

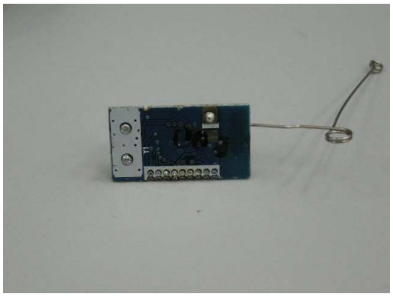


Front View of the product

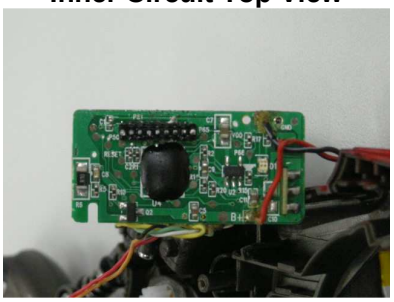
Inner Circuit Top View



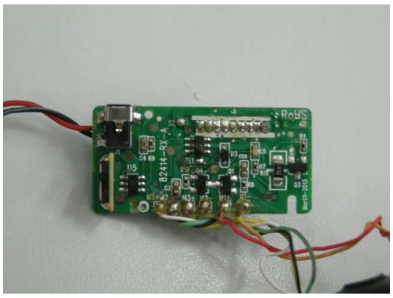
Inner Circuit Bottom View



Inner Circuit Top View



Inner Circuit Bottom View



Front View of the internal photo

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Measurement of Radiated Emission Test Set Up

******* End of Report *******

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