



**BUREAU
VERITAS**

TEST REPORT No: (5212)171-0633(B)

TEST REPORT

To:	SILVERLIT TOYS MANUFACTORY LIMITED	To:	-
Attn:	Edmond Chan	Attn:	-
Address:	17 th Floor World Trade Centre, 280 Gloucester Road, Causeway Bay, Hong Kong	Address:	-
Fax:	28348797	Fax:	-
E-mail:	edmond@silverlit.com	E-mail:	-
Folder No.:	ITM-12JU205MTHS-B-A		

Factory name:	SILVERLIT TOYS MANUFACTORY LIMITED
Location:	17 th Floor World Trade Centre, 280 Gloucester Road, Causeway Bay, Hong Kong
Product:	2.4G Sky Eye Model No.: 84602


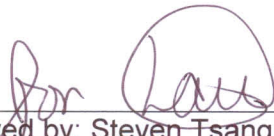


Sample No:	HK120606/025
Test date:	July 17, 2012
Test Requested:	FCC Part 15 - 2011
Test Method:	ANSI C63.4 - 2009
FCC ID:	OYK-TX0002G4-1208

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: August 22, 2012	Date: August 22, 2012

**BUREAU VERITAS HONG KONG LIMITED –
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This report is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. Our report is limited to the test samples identified herein. The results set forth in this report are not necessarily indicative or representative of the statistical quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof. You shall have thirty days from receipt of this report to request additional testing of the samples or to notify us of any errors or omissions relating to our report, provided, however, such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



TEST REPORT No: (5212)171-0633(B)
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Report Revision & Sample Re-submit History:

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TEST REPORT No: (5212)171-0633(B)

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	18-OCT-2012
LOOP ANTENNA	ETS-LINDGREN	6502	00102266	07-AUG-2012
BILOG ANTENNA	SCHAFFNER	CBL6112D	25229	16-SEP-2012
HORN ANTENNA	SCHWARZBECK	BBHA9120D	9120D-692	16-SEP-2012
PREAMPLIFIER	SCHWARZBECK	BBV9718	9718-152	16-SEP-2012
OPEN AREA TEST SITE	BVCPS	N/A	N/A	10-JUL-2013
ANECHOIC CHAMBER	ALBATROSS	M-CDC	80374004499B	01-DEC-2012
COAXIAL CABLE	SUHNER	N/A	N/A	06-OCT-2012

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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Equipment Under Test [EUT]

Description of Sample:

Model Name: 2.4G Sky Eye
Model Number: 84602
Rating: 12Vd.c. ("AA" size battery x 8)

Description of EUT Operation:

The Equipment Under Test (EUT) is a **SILVERLIT TOYS MANUFACTORY LIMITED** of Remote Control Transceiver. It is a 1 switch, 9 buttons and 2 sticks transceiver and operating at 2410.87MHz to 2468.25MHz. The lowest, middle and highest frequencies were tested and the results are shown in the report. The EUT transmit while buttons is being pressed or sticks are being pushed or pulled, Modulation by IC, and type is FHSS.

The transmitter has different control:

1. ON/OFF switch – ON/OFF control
2. Video recording button – video recording control
3. Photographing button – photographing control
4. UP button – display control
5. DOWN button – display control
6. ENTER button – display control
7. MENU/BACK button – display control
8. Display on/off button – display on/off control
9. Trimmer L button – turn the trim dial clockwise
10. Trimmer R button – turn the trim dial anticlockwise
11. Left stick – control upward and downward
12. Right stick – control direction

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.



TEST REPORT No: (5212)171-0633(B)

Radiated Emissions (Fundamental)

Test Requirement: FCC Part 15 Section 15.249
 Test Method: ANSI C63.4
 Test Date(s): 2012-07-17
 Temperature: 30.0 °C
 Humidity: 69.0 %
 Atmospheric Pressure: 100.3 kPa
 Mode of Operation: Transmission mode
 Tested Voltage: 12Vd.c. ("AA" size battery x 8)

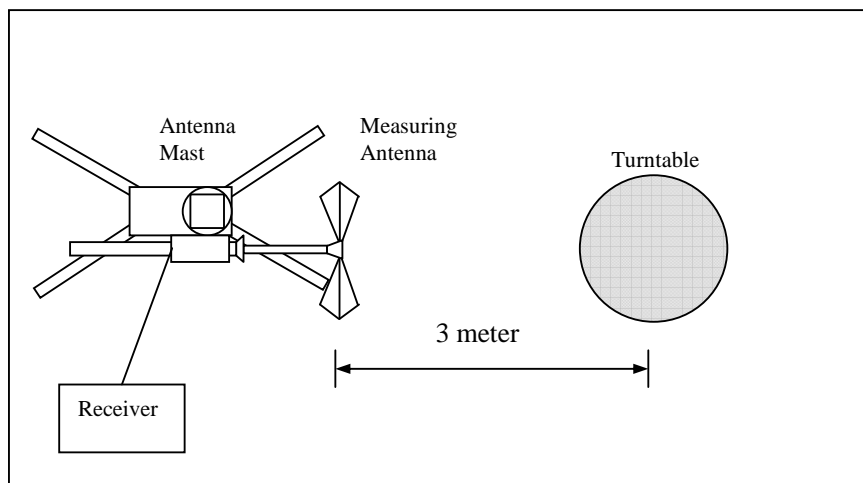
Test Procedure:

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)
2410.875	H	-5.2	89.2	114.0	-24.8
2410.875	V	-5.2	94.4	114.0	-19.6

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)
2410.875	H	-5.2	**69.2	94.0	-24.8
2410.875	V	-5.2	**74.4	94.0	-19.6

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.

**Duty Cycle Correction = $20\text{Log}(0.062) = -24.1\text{dB}$.

Therefore, -20dB is taken as precedence

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz

VBW = 1MHz

TEST REPORT No: (5212)171-0633(B)

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 (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
2437.875	H	-4.6	88.9	114.0	-25.1
2437.875	V	-4.6	87.8	114.0	-26.2

Detection mode: # Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
2437.875	H	-4.6	**68.9	94.0	-25.1
2437.875	V	-4.6	**67.8	94.0	-26.2

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 (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
2468.250	H	-4.3	90.3	114.0	-23.7
2468.250	V	-4.3	93.4	114.0	-20.6

Detection mode: # Average

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
2468.250	H	-4.3	**70.3	94.0	-23.7
2468.250	V	-4.3	**73.4	94.0	-20.6

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.

**Duty Cycle Correction = $20\text{Log}(0.062) = -24.1\text{dB}$.

Therefore, -20dB is taken as precedence

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz



TEST REPORT No: (5212)171-0633(B)

Radiated Emissions (Spurious Emission)

Test Requirement: FCC Part 15 Section 15.249
 Test Method: ANSI C63.4
 Test Date(s): 2012-07-17
 Temperature: 30.0 °C
 Humidity: 69.0 %
 Atmospheric Pressure: 100.3 kPa
 Mode of Operation: Transmission mode
 Tested Voltage: 12Vd.c. ("AA" size battery x 8)

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)
4821.750	H	5.5	59.3	74.0	-14.7
7232.625	H	12.4	52.9	74.0	-21.1
9643.500	H	15.1	52.7	74.0	-21.3
12054.375	H	17.5	54.0	74.0	-20.0
14465.250	H	22.1	51.8	74.0	-22.2
16876.125	H	30.8	52.6	74.0	-21.4
19287.000	H	31.8	53.1	74.0	-20.9
21697.875	H	32.3	62.2	74.0	-11.8
24108.750	H	33.7	62.8	74.0	-11.2
26519.625	H	34.6	57.3	74.0	-16.7

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
 VBW = 1MHz



TEST REPORT No: (5212)171-0633(B)

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 (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
4821.750	V	5.5	69.2	74.0	-4.8
7232.625	V	12.4	53.1	74.0	-20.9
9643.500	V	15.1	53.6	74.0	-20.4
12054.375	V	17.5	52.2	74.0	-21.8
14465.250	V	22.1	52.2	74.0	-21.8
16876.125	V	30.8	51.9	74.0	-22.1
19287.000	V	31.8	53.8	74.0	-20.2
21697.875	V	32.3	51.5	74.0	-22.5
24108.750	V	33.7	53.6	74.0	-20.4
26519.625	V	34.6	58.1	74.0	-15.9

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz



TEST REPORT No: (5212)171-0633(B)

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)
4821.750	H	5.5	**39.3	54.0	-14.7
7232.625	H	12.4	**32.9	54.0	-21.1
9643.500	H	15.1	**32.7	54.0	-21.3
12054.375	H	17.5	**34.0	54.0	-20.0
14465.250	H	22.1	**31.8	54.0	-22.2
16876.125	H	30.8	**32.6	54.0	-21.4
19287.000	H	31.8	**33.1	54.0	-20.9
21697.875	H	32.3	**42.2	54.0	-11.8
24108.750	H	33.7	**42.8	54.0	-11.2
26519.625	H	34.6	**37.3	54.0	-16.7

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)
4821.750	V	5.5	**49.2	54.0	-4.8
7232.625	V	12.4	**33.1	54.0	-20.9
9643.500	V	15.1	**33.6	54.0	-20.4
12054.375	V	17.5	**32.2	54.0	-21.8
14465.250	V	22.1	**32.2	54.0	-21.8
16876.125	V	30.8	**31.9	54.0	-22.1
19287.000	V	31.8	**33.8	54.0	-20.2
21697.875	V	32.3	**31.5	54.0	-22.5
24108.750	V	33.7	**33.6	54.0	-20.4
26519.625	V	34.6	**38.1	54.0	-15.9

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.

**Duty Cycle Correction = $20\text{Log}(0.062) = -24.1\text{dB}$.

Therefore, -20dB is taken as precedence

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz

VBW = 1MHz



TEST REPORT No: (5212)171-0633(B)

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 (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
4875.750	H	5.7	58.2	74.0	-15.8
7313.625	H	13.9	55.4	74.0	-18.6
9751.500	H	14.0	54.7	74.0	-19.3
12189.375	H	18.6	52.7	74.0	-21.3
14627.250	H	23.2	52.1	74.0	-21.9
17065.125	H	31.2	52.4	74.0	-21.6
19503.000	H	32.0	52.4	74.0	-21.6
21940.875	H	33.5	54.1	74.0	-19.9
24378.750	H	34.1	54.3	74.0	-19.7
26816.625	H	35.2	57.1	74.0	-16.9

Frequency (MHz)	Polarity (H/V)	Antenna Factor and Cable Loss (dB/m)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
4875.750	V	5.7	63.5	74.0	-10.5
7313.625	V	13.9	55.3	74.0	-18.7
9751.500	V	14.0	53.9	74.0	-20.1
12189.375	V	18.6	53.6	74.0	-20.4
14627.250	V	23.2	53.0	74.0	-21.0
17065.125	V	31.2	54.5	74.0	-19.5
19503.000	V	32.0	54.0	74.0	-20.0
21940.875	V	33.5	55.5	74.0	-18.5
24378.750	V	34.1	55.8	74.0	-18.2
26816.625	V	35.2	58.1	74.0	-15.9

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz



TEST REPORT No: (5212)171-0633(B)

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)
4875.750	H	5.7	**38.2	54.0	-15.8
7313.625	H	13.9	**35.4	54.0	-18.6
9751.500	H	14.0	**34.7	54.0	-19.3
12189.375	H	18.6	**32.7	54.0	-21.3
14627.250	H	23.2	**32.1	54.0	-21.9
17065.125	H	31.2	**32.4	54.0	-21.6
19503.000	H	32.0	**32.4	54.0	-21.6
21940.875	H	33.5	**34.1	54.0	-19.9
24378.750	H	34.1	**34.3	54.0	-19.7
26816.625	H	35.2	**37.1	54.0	-16.9

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)
4875.750	V	5.7	**43.5	54.0	-10.5
7313.625	V	13.9	**35.3	54.0	-18.7
9751.500	V	14.0	**33.9	54.0	-20.1
12189.375	V	18.6	**33.6	54.0	-20.4
14627.250	V	23.2	**33.0	54.0	-21.0
17065.125	V	31.2	**34.5	54.0	-19.5
19503.000	V	32.0	**34.0	54.0	-20.0
21940.875	V	33.5	**35.5	54.0	-18.5
24378.750	V	34.1	**35.8	54.0	-18.2
26816.625	V	35.2	**38.1	54.0	-15.9

For pulse modulated devices and using measuring equipment employing a peak detection mode, properly adjusted for such factor as pulse desensitisation.

**Duty Cycle Correction = $20\text{Log}(0.062) = -24.1\text{dB}$.

Therefore, -20dB is taken as precedence

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz

VBW = 1MHz



TEST REPORT No: (5212)171-0633(B)

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)
4936.500	H	5.7	61.7	74.0	-12.3
7404.750	H	14.7	57.4	74.0	-16.6
9873.000	H	12.9	52.0	74.0	-22.0
12341.250	H	19.5	53.5	74.0	-20.5
14809.500	H	25.1	57.4	74.0	-16.6
17277.750	H	33.4	54.4	74.0	-19.6
19746.000	H	34.7	56.1	74.0	-17.9
22214.250	H	35.6	56.1	74.0	-17.9
24682.500	H	36.8	57.6	74.0	-16.4
27150.750	H	37.5	60.3	74.0	-13.7

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)
4936.500	V	5.7	66.6	74.0	-7.4
7404.750	V	14.7	57.9	74.0	-16.1
9873.000	V	12.9	52.9	74.0	-21.1
12341.250	V	19.5	54.4	74.0	-19.6
14809.500	V	25.1	58.0	74.0	-16.0
17277.750	V	33.4	54.9	74.0	-19.1
19746.000	V	34.7	56.4	74.0	-17.6
22214.250	V	35.6	57.4	74.0	-16.6
24682.500	V	36.8	58.5	74.0	-15.5
27150.750	V	37.5	60.4	74.0	-13.6

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz
VBW = 1MHz



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TEST REPORT No: (5212)171-0633(B)

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)
4936.500	H	5.7	**41.7	54.0	-12.3
7404.750	H	14.7	**37.4	54.0	-16.6
9873.000	H	12.9	**32.0	54.0	-22.0
12341.250	H	19.5	**33.5	54.0	-20.5
14809.500	H	25.1	**37.4	54.0	-16.6
17277.750	H	33.4	**34.4	54.0	-19.6
19746.000	H	34.7	**36.1	54.0	-17.9
22214.250	H	35.6	**36.1	54.0	-17.9
24682.500	H	36.8	**37.6	54.0	-16.4
27150.750	H	37.5	**40.3	54.0	-13.7

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)
4936.500	V	5.7	**46.6	54.0	-7.4
7404.750	V	14.7	**37.9	54.0	-16.1
9873.000	V	12.9	**32.9	54.0	-21.1
12341.250	V	19.5	**34.4	54.0	-19.6
14809.500	V	25.1	**38.0	54.0	-16.0
17277.750	V	33.4	**34.9	54.0	-19.1
19746.000	V	34.7	**36.4	54.0	-17.6
22214.250	V	35.6	**37.4	54.0	-16.6
24682.500	V	36.8	**38.5	54.0	-15.5
27150.750	V	37.5	**40.4	54.0	-13.6

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(0.062) = -24.1dB.

Therefore, -20dB is taken as precedence

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 1MHz

VBW = 1MHz

**BUREAU VERITAS HONG KONG LIMITED –
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TEST REPORT No: (5212)171-0633(B)

Radiated Emissions (30MHz – 2.4GHz)

Test Requirement: FCC Part 15 Section 15.209
Test Method: ANSI C63.4
Test Date(s): 2012-07-17
Temperature: 30.0 °C
Humidity: 69.0 %
Atmospheric Pressure: 100.3 kPa
Mode of Operation: On mode and Charge mode
Tested Voltage: 12Vd.c. ("AA" size battery x 8)

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

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



TEST REPORT No: (5212)171-0633(B)

Measurement Data

Test Result of (On mode): PASS

Detection mode: Quasi-Peak

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
288.00	H	38.1	46.0	-7.9
336.00	H	35.1	46.0	-10.9
384.00	H	34.6	46.0	-11.4
480.00	H	32.5	46.0	-13.5
576.00	H	39.1	46.0	-6.9
768.00	H	39.6	46.0	-6.4

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
288.00	V	30.2	46.0	-15.8
336.00	V	32.3	46.0	-13.7
384.00	V	34.1	46.0	-11.9
480.00	V	32.2	46.0	-13.8
576.00	V	37.3	46.0	-8.7
768.00	V	38.5	46.0	-7.5

Note: Field Strength includes Antenna Factor and Cable Loss.

Receiver setting: RBW = 120KHz
VBW = 120KHz



TEST REPORT No: (5212)171-0633(B)

Measurement Data

Test Result of (Charge mode): PASS

Detection mode: Quasi-Peak

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
55.12	H	27.1	40.0	-12.9
126.56	H	21.2	43.5	-22.3
268.44	H	23.7	46.0	-22.3
411.84	H	26.5	46.0	-19.5
535.48	H	29.2	46.0	-16.8
638.36	H	31.2	46.0	-14.8

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dB μ V/m)	Limit at 3m (dB μ V/m)	Margin (dB)
55.12	V	27.3	40.0	-12.7
126.56	V	22.6	43.5	-20.9
268.44	V	23.2	46.0	-22.8
411.84	V	26.1	46.0	-19.9
535.48	V	29.8	46.0	-16.2
638.36	V	31.7	46.0	-14.3

Note: Field Strength includes Antenna Factor and Cable Loss.



TEST REPORT No: (5212)171-0633(B)

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): 2012-07-17
Temperature: 30.0 °C
Humidity: 69.0 %
Atmospheric Pressure: 100.3 kPa
Mode of Operation: Transmission mode
Tested Voltage: 12Vd.c. ("AA" size battery x 8)

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]
2410.875 – 2468.250	2400 – 2483.5

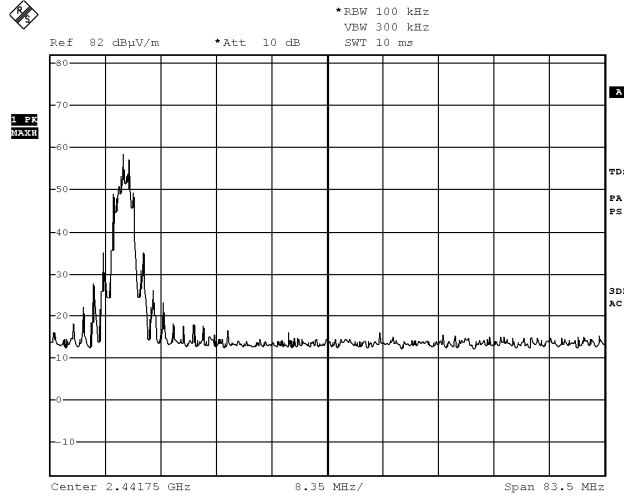


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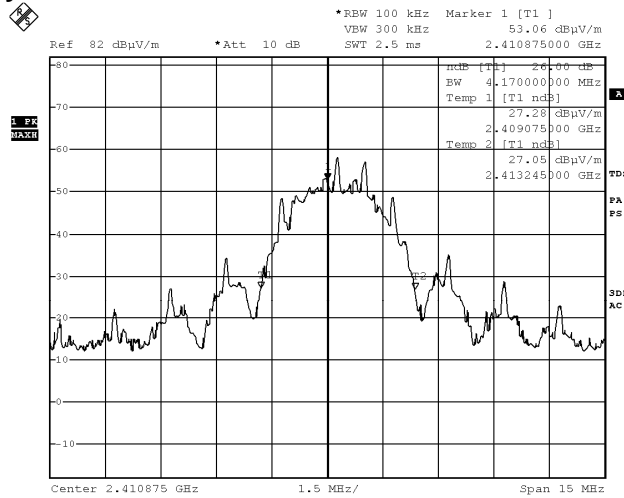
Measurement Data :

Test Result of Frequency Range of Fundamental Emission: PASS
Lowest Frequency – 2410.875MHz



Date: 17.JUL.2012 13:50:29

Test Result of 26dB Bandwidth of Fundamental Emission: PASS
Lowest Frequency – 2410.875MHz

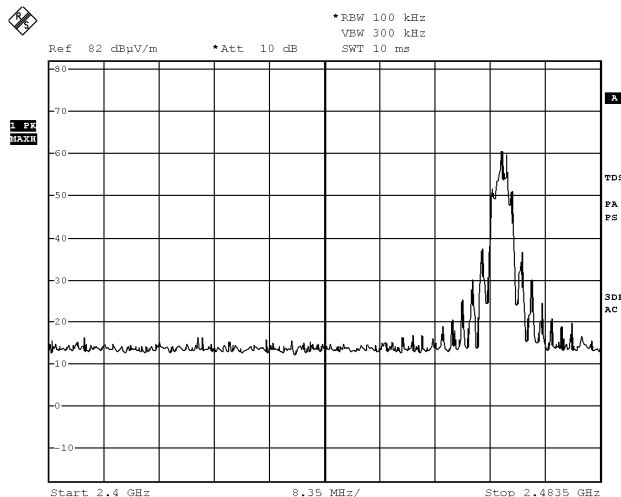


Date: 17.JUL.2012 13:51:29

TEST REPORT No: (5212)171-0633(B)

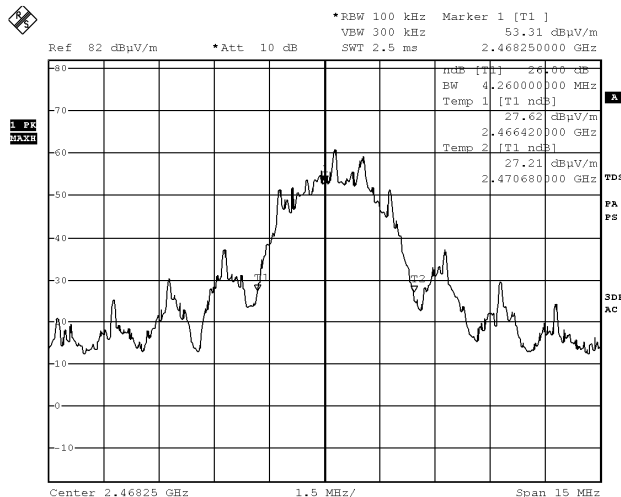
Measurement Data :

**Test Result of Frequency Range of Fundamental Emission: PASS
Highest Frequency – 2468.25MHz**



Date: 17.JUL.2012 14:11:25

**Test Result of 26dB Bandwidth of Fundamental Emission: PASS
Highest Frequency – 2468.25MHz**



Date: 17.JUL.2012 14:11:51



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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 31 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 (31×0.2) per 100msec = 6.2% duty cycle.

Remarks:

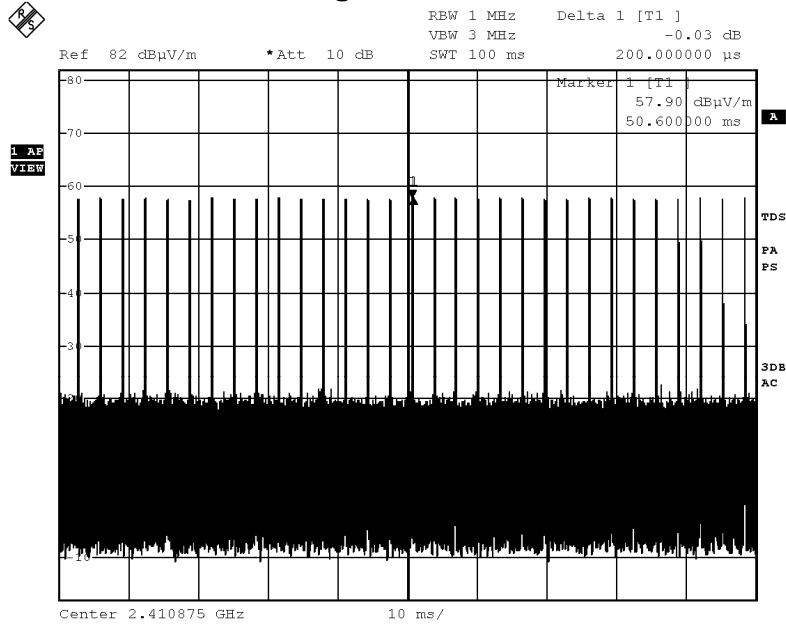
Duty Cycle Correction = $20\text{Log}(0.062) = -24.1\text{dB}$
Therefore, -20dB is taken as precedence

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: 17.JUL.2012 13:53:12

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Photographs of EUT

Front View of the product



Front View of the product



Side View of the product



Side View of the product



Battery Compartment



Battery Cover



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Photographs of EUT

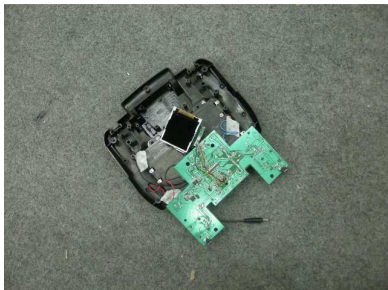
Internal View of the product



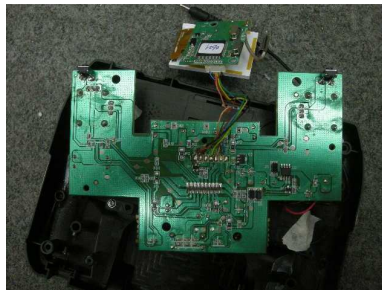
Inner Circuit View



Inner Circuit View



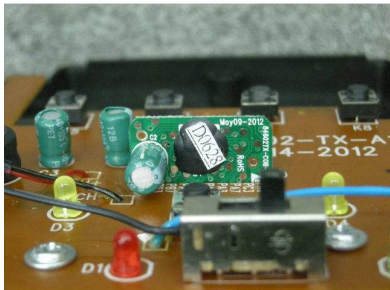
Inner Circuit View



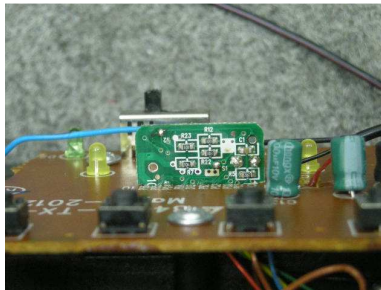
TEST REPORT No: (5212)171-0633(B)

Photographs of EUT

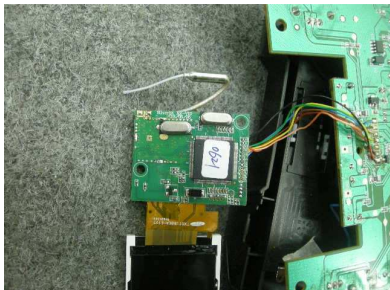
Inner Circuit View



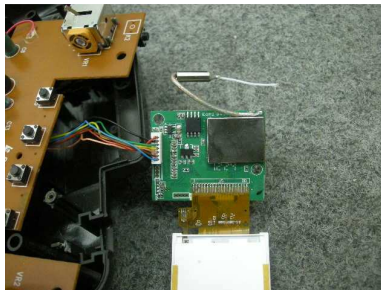
Inner Circuit View



Inner Circuit View



Inner Circuit View



Inner Circuit View



Antenna



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Measurement of Radiated Emission Test Set Up



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