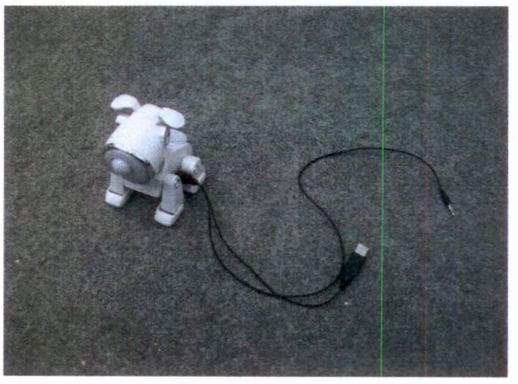
TEST REPORT No: (5213)171-1626

TEST REPORT

To:	**SILVERLIT TOYS MANUFACTORY LIMITED**	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:	I-Fido Model No.: 83012		



Sample No:	(5213)171-1626
Test date:	July 2, 2013 to July 3, 2013
Test Requested:	FCC Part 15 - 2011
Test Method:	ANSI C63.4 - 2009
FCC ID:	OYK-TX0002G4-1306

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 5, 2013	Date: August 5, 2013

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Test Result Summary

EMISSION TEST			
Test requirement: FCC Part 15 - 2011			
Test Condition	Test Method	Test Result	
		Pass	Failed
Conducted Emission Test, 0.15MHz to 30MHz	ANSI C63.4	☒	☐
Radiated Emission Test, 9kHz to 40GHz	ANSI C63.4	☒	☐

Report Revision & Sample Re-submit History:

--

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

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	14-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	RG214	N/A	24-SEP-2013

Conducted Emission

EQUIPMENT	MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATION DUE
EMI TEST RECEIVER	R&S	ESCS30	830986/030	20-MAR-2014
LISN	R&S	ENV216	100024	18-JUN-2014

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

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Equipment Under Test [EUT]
Description of Sample:

Model Name:	I-Fido
Model Number:	83012
Rating:	Computer: 117Va.c., 60Hz Dog: 3.7Vd.c. ("rechargeable battery" x 1)

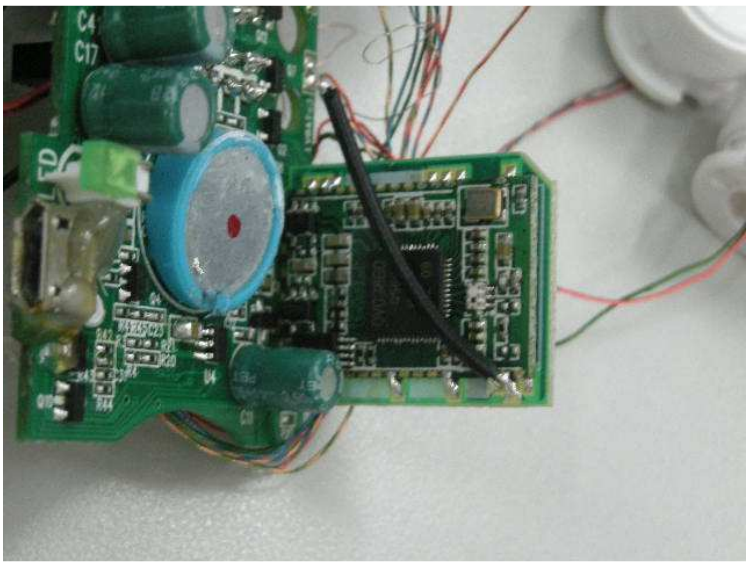
Description of EUT Operation:

The Equipment Under Test (EUT) is a **SILVERLIT TOYS MANUFACTORY LIMITED** of Remote Control Transceiver. It is a 1 switch and 1 button transceiver and operating at 2402MHz to 2480MHz. The lowest, middle and highest frequencies were tested and the results are shown in the report. The EUT transmit while switch is turned to ON, Modulation by IC, and types are pi/4QPSK & 8DPSK, data packet type are DH1, DH3 & DH5 and the worst case (8DPSK with DH5 while charging via PC) was tested and the result is shown in the report.
The transmitter has different control:

1. ON/OFF switch – ON/OFF control
2. Function button – Action control

Antenna Requirement (Section 15.203)

The EUT is use of a permanently antenna. The antenna consists of 32mm long metal wire covered with rubber and 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.



BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Test Results

Conducted Emissions (150kHz to 30MHz)

Test Requirement:	FCC Part 15 Section 15.107
Test Method:	ANSI C63.4
Test Limits:	Class B
Test Date(s):	2013-07-02
Temperature:	23.0 °C
Humidity:	70.0 %
Atmospheric Pressure:	100.2 kPa
Mode of Operation:	Charge & Bluetooth mode
Tested Voltage:	Computer: 117Va.c., 60Hz

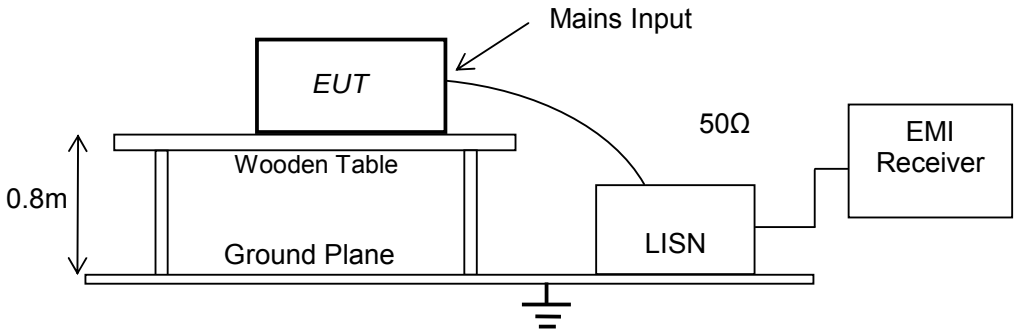
Test Method:

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 – 2009. The EUT was setup as described in the procedures, and both lines were measured.

Initial measurements were performed in peak and average detection modes on the live and neutral line, any emissions recorded within 30dB of the relevant limit lines were re-measured using quasi-peak and average detection on the live and neutral lines with the worst case recorded in the table of results.

Location: No. 603, 6/F., Westin Centre, 26 Hung To Road, Kwun Tong, Kowloon, Hong Kong

Test Setup: Shielding Room



BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

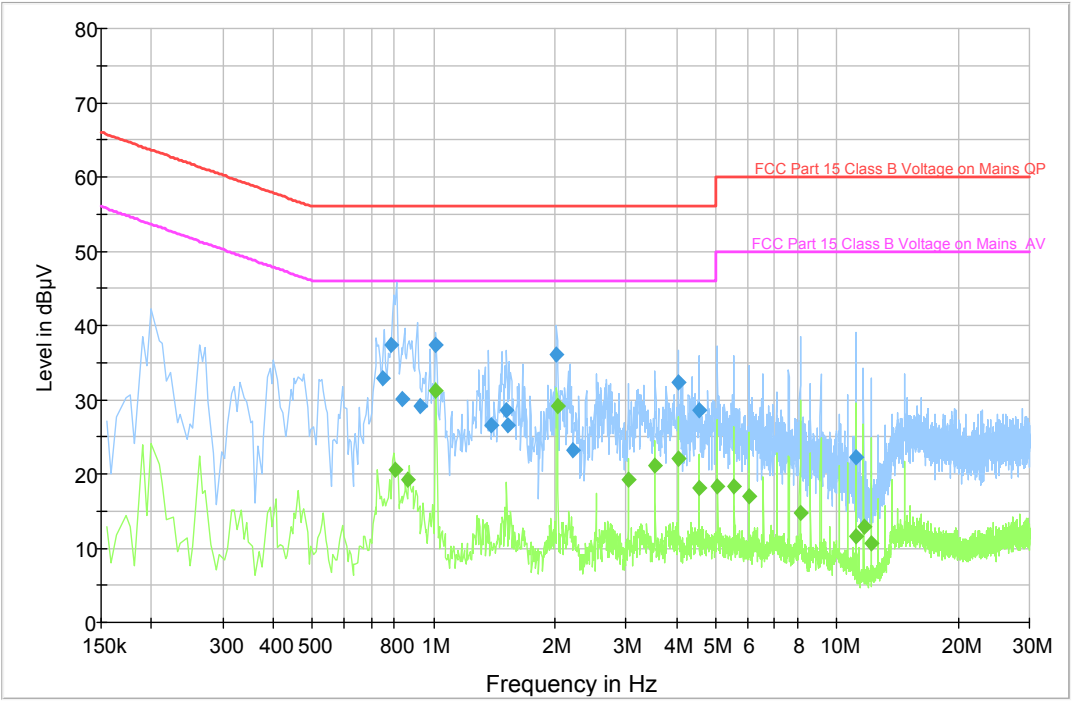
Measurement Data: Live

Test Result of (Charge and Bluetooth mode): PASS

Results and limit lines for Conducted Emission:

Limits for Conducted Emission Test, please refer to limit lines (Quasi-Peak and Average) in the following diagram.

FCC Part 15 Class B Voltage



BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

Results and limit lines for Conducted Emission:

Limits for Conducted Emission Test, please refer to limit lines (Quasi-Peak and Average) in the following tables.

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Margin (dB)	Limit (dBµV)
0.748500	32.8	9.000	L1	23.2	56.0
0.784500	37.4	9.000	L1	18.6	56.0
0.834000	30.1	9.000	L1	25.9	56.0
0.928500	29.1	9.000	L1	26.9	56.0
1.014000	37.5	9.000	L1	18.5	56.0
1.392000	26.5	9.000	L1	29.5	56.0
1.518000	28.5	9.000	L1	27.5	56.0
1.522500	26.6	9.000	L1	29.4	56.0
2.022000	36.1	9.000	L1	19.9	56.0
2.211000	23.1	9.000	L1	32.9	56.0
4.056000	32.3	9.000	L1	23.7	56.0
4.546500	28.6	9.000	L1	27.4	56.0
11.139000	22.3	9.000	L1	37.7	60.0

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Margin (dB)	Limit (dBµV)
0.802500	20.5	9.000	L1	25.5	46.0
0.865500	19.2	9.000	L1	26.8	46.0
1.014000	31.2	9.000	L1	14.8	46.0
2.026500	29.2	9.000	L1	16.8	46.0
3.039000	19.3	9.000	L1	26.7	46.0
3.543000	21.1	9.000	L1	24.9	46.0
4.051500	22.1	9.000	L1	23.9	46.0
4.555500	18.1	9.000	L1	27.9	46.0
5.064000	18.3	9.000	L1	31.7	50.0
5.568000	18.4	9.000	L1	31.6	50.0
6.076500	17.0	9.000	L1	33.0	50.0
8.106000	14.7	9.000	L1	35.3	50.0
11.139000	11.7	9.000	L1	38.3	50.0
11.652000	12.9	9.000	L1	37.1	50.0
12.147000	10.7	9.000	L1	39.3	50.0

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

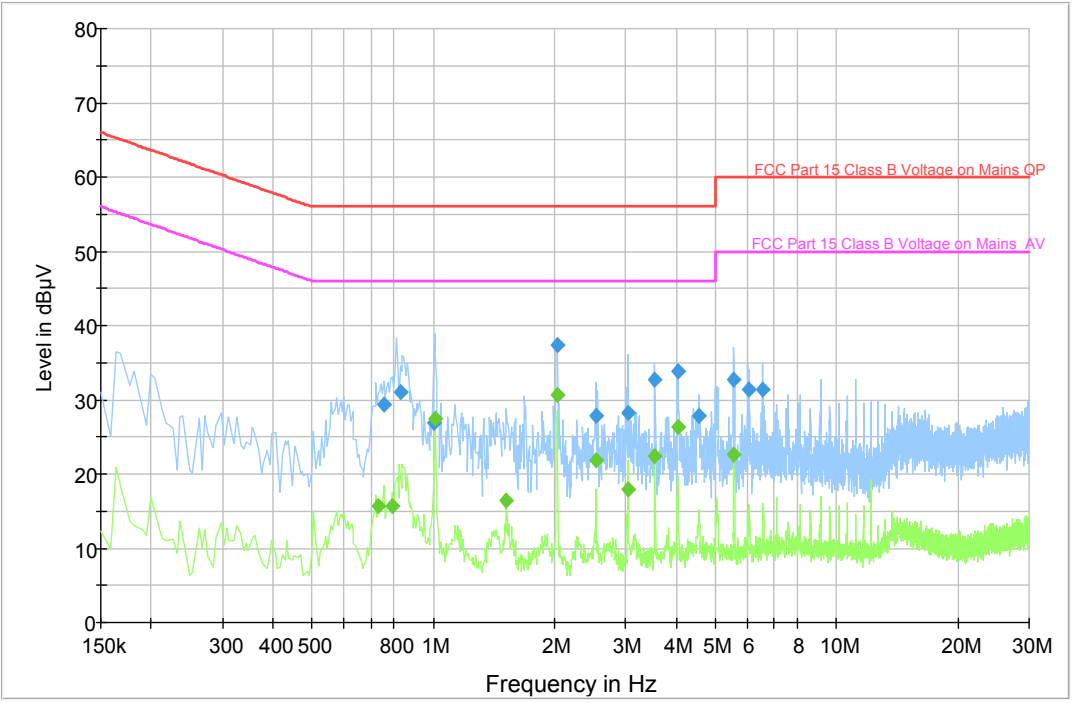
Measurement Data: Neutral

Test Result of (Charge and Bluetooth mode): PASS

Results and limit lines for Conducted Emission:

Limits for Conducted Emission Test, please refer to limit lines (Quasi-Peak and Average) in the following diagram.

FCC Part 15 Class B Voltage



BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

Results and limit lines for Conducted Emission:

Limits for Conducted Emission Test, please refer to limit lines (Quasi-Peak and Average) in the following tables.

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Margin (dB)	Limit (dBµV)
0.753000	29.3	9.000	N	26.7	56.0
0.829500	31.1	9.000	N	24.9	56.0
1.000500	27.0	9.000	N	29.0	56.0
2.026500	37.4	9.000	N	18.6	56.0
2.535000	27.9	9.000	N	28.1	56.0
3.034500	28.2	9.000	N	27.8	56.0
3.543000	32.7	9.000	N	23.3	56.0
4.051500	33.8	9.000	N	22.2	56.0
4.555500	27.9	9.000	N	28.1	56.0
5.568000	32.8	9.000	N	27.2	60.0
6.076500	31.5	9.000	N	28.5	60.0
6.580500	31.5	9.000	N	28.5	60.0

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Margin (dB)	Limit (dBµV)
0.730500	15.7	9.000	N	30.3	46.0
0.793500	15.7	9.000	N	30.3	46.0
1.014000	27.5	9.000	N	18.5	46.0
1.518000	16.5	9.000	N	29.5	46.0
2.026500	30.6	9.000	N	15.4	46.0
2.530500	21.8	9.000	N	24.2	46.0
3.034500	18.0	9.000	N	28.0	46.0
3.543000	22.4	9.000	N	23.6	46.0
4.051500	26.3	9.000	N	19.7	46.0
5.568000	22.6	9.000	N	27.4	50.0

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Radiated Emissions (Fundamental)

Test Requirement:	FCC Part 15 Section 15.249
Test Method:	ANSI C63.4
Test Date(s):	2013-07-03
Temperature:	30.0 °C
Humidity:	77.0 %
Atmospheric Pressure:	100.3 kPa
Mode of Operation:	Transmission mode
Tested Voltage:	Dog: 3.7Vd.c. (“rechargeable battery” x 1)

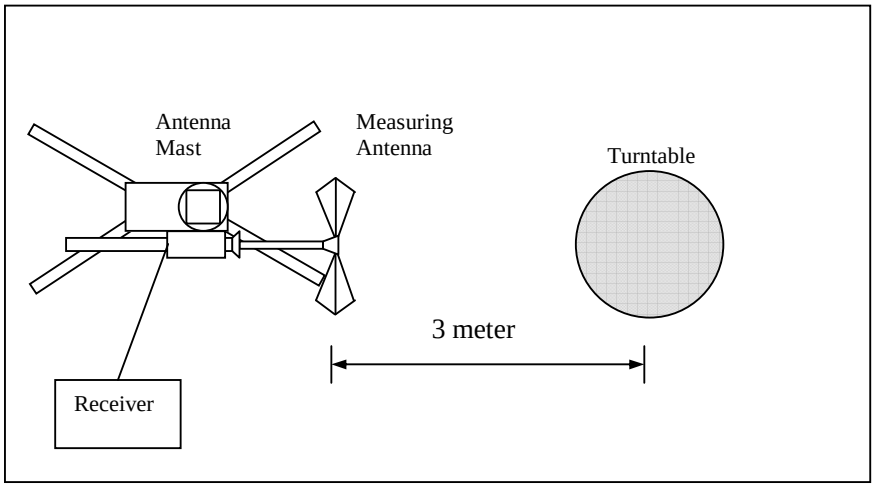
Test Procedure:

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



BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBμV/m)	Limit at 3m – Peak (dBμV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBμV/m)	Limit at 3m – Average (dBμV/m)	Margin - Average (dB)
2402.00	H	-2.7	-10.0	65.6	114.0	-48.4	**55.6	94.0	-38.4
2402.00	V	-2.7	-10.0	65.6	114.0	-48.4	**55.6	94.0	-38.4

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBμV/m)	Limit at 3m – Peak (dBμV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBμV/m)	Limit at 3m – Average (dBμV/m)	Margin - Average (dB)
2441.00	H	-2.7	-10.0	63.6	114.0	-50.4	**53.6	94.0	-40.4
2441.00	V	-2.7	-10.0	69.6	114.0	-44.4	**59.6	94.0	-34.4

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBμV/m)	Limit at 3m – Peak (dBμV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBμV/m)	Limit at 3m – Average (dBμV/m)	Margin - Average (dB)
2480.00	H	-2.7	-10.0	59.1	114.0	-54.9	**49.1	94.0	-44.9
2480.00	V	-2.7	-10.0	70.5	114.0	-43.5	**60.5	94.0	-33.5

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(0.317) = -10.0dB.

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Radiated Emissions (Spurious Emission)

Test Requirement:	FCC Part 15 Section 15.249
Test Method:	ANSI C63.4
Test Date(s):	2013-07-03
Temperature:	30.0 °C
Humidity:	77.0 %
Atmospheric Pressure:	100.3 kPa
Mode of Operation:	Transmission mode
Tested Voltage:	Dog: 3.7Vd.c. ("rechargeable battery" x 1)

Measurement Data

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBμV/m)	Limit at 3m – Peak (dBμV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBμV/m)	Limit at 3m – Average (dBμV/m)	Margin - Average (dB)
4804.00	H	6.3	-10.0	53.9	74.0	-20.1	**43.9	54.0	-10.1
7206.00	H	13.5	-10.0	56.5	74.0	-17.5	**46.5	54.0	-7.5
9608.00	H	13.2	-10.0	56.6	74.0	-17.4	**46.6	54.0	-7.4
12010.00	H	18.5	-10.0	54.4	74.0	-19.6	**44.4	54.0	-9.6
14412.00	H	19.2	-10.0	55.6	74.0	-18.4	**45.6	54.0	-8.4
16814.00	H	25.4	-10.0	56.9	74.0	-17.1	**46.9	54.0	-7.1
19216.00	H	27.3	-10.0	55.7	74.0	-18.3	**45.7	54.0	-8.3
21618.00	H	29.3	-10.0	55.4	74.0	-18.6	**45.4	54.0	-8.6
24020.00	H	32.1	-10.0	56.3	74.0	-17.7	**46.3	54.0	-7.7
26422.00	H	33.9	-10.0	57.8	74.0	-16.2	**47.8	54.0	-6.2

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(0.317) = -10.0dB.

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

TEST REPORT No: (5213)171-1626

Measurement Data

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBµV/m)	Limit at 3m – Peak (dBµV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBµV/m)	Limit at 3m – Average (dBµV/m)	Margin - Average (dB)
4804.00	V	6.3	-10.0	55.5	74.0	-18.5	**45.5	54.0	-8.5
7206.00	V	13.5	-10.0	56.7	74.0	-17.3	**46.7	54.0	-7.3
9608.00	V	13.2	-10.0	56.6	74.0	-17.4	**46.6	54.0	-7.4
12010.00	V	18.5	-10.0	55.2	74.0	-18.8	**45.2	54.0	-8.8
14412.00	V	19.2	-10.0	54.5	74.0	-19.5	**44.5	54.0	-9.5
16814.00	V	25.4	-10.0	56.3	74.0	-17.7	**46.3	54.0	-7.7
19216.00	V	27.3	-10.0	56.3	74.0	-17.7	**46.3	54.0	-7.7
21618.00	V	29.3	-10.0	56.6	74.0	-17.4	**46.6	54.0	-7.4
24020.00	V	32.1	-10.0	57.2	74.0	-16.8	**47.2	54.0	-6.8
26422.00	V	33.9	-10.0	56.4	74.0	-17.6	**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(0.317) = -10.0dB.

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBμV/m)	Limit at 3m – Peak (dBμV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBμV/m)	Limit at 3m – Average (dBμV/m)	Margin - Average (dB)
4882.00	H	6.3	-10.0	55.7	74.0	-18.3	**45.7	54.0	-8.3
7323.00	H	13.5	-10.0	55.6	74.0	-18.4	**45.6	54.0	-8.4
9764.00	H	13.2	-10.0	57.5	74.0	-16.5	**47.5	54.0	-6.5
12205.00	H	18.5	-10.0	54.8	74.0	-19.2	**44.8	54.0	-9.2
14646.00	H	19.2	-10.0	55.7	74.0	-18.3	**45.7	54.0	-8.3
17087.00	H	25.4	-10.0	56.5	74.0	-17.5	**46.5	54.0	-7.5
19528.00	H	27.3	-10.0	57.5	74.0	-16.5	**47.5	54.0	-6.5
21969.00	H	29.3	-10.0	57.4	74.0	-16.6	**47.4	54.0	-6.6
24410.00	H	32.1	-10.0	57.7	74.0	-16.3	**47.7	54.0	-6.3
26851.00	H	33.9	-10.0	58.0	74.0	-16.0	**48.0	54.0	-6.0

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBμV/m)	Limit at 3m – Peak (dBμV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBμV/m)	Limit at 3m – Average (dBμV/m)	Margin - Average (dB)
4882.00	V	6.3	-10.0	54.2	74.0	-19.8	**44.2	54.0	-9.8
7323.00	V	13.5	-10.0	56.6	74.0	-17.4	**46.6	54.0	-7.4
9764.00	V	13.2	-10.0	57.3	74.0	-16.7	**47.3	54.0	-6.7
12205.00	V	18.5	-10.0	55.6	74.0	-18.4	**45.6	54.0	-8.4
14646.00	V	19.2	-10.0	55.9	74.0	-18.1	**45.9	54.0	-8.1
17087.00	V	25.4	-10.0	56.7	74.0	-17.3	**46.7	54.0	-7.3
19528.00	V	27.3	-10.0	57.9	74.0	-16.1	**47.9	54.0	-6.1
21969.00	V	29.3	-10.0	57.6	74.0	-16.4	**47.6	54.0	-6.4
24410.00	V	32.1	-10.0	57.1	74.0	-16.9	**47.1	54.0	-6.9
26851.00	V	33.9	-10.0	57.4	74.0	-16.6	**47.4	54.0	-6.6

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(0.317) = -10.0dB.

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

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

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBµV/m)	Limit at 3m – Peak (dBµV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBµV/m)	Limit at 3m – Average (dBµV/m)	Margin - Average (dB)
4960.00	H	6.3	-10.0	55.2	74.0	-18.8	**45.2	54.0	-8.8
7440.00	H	13.5	-10.0	55.1	74.0	-18.9	**45.1	54.0	-8.9
9920.00	H	13.2	-10.0	56.5	74.0	-17.5	**46.5	54.0	-7.5
12400.00	H	18.5	-10.0	54.1	74.0	-19.9	**44.1	54.0	-9.9
14880.00	H	19.2	-10.0	56.7	74.0	-17.3	**46.7	54.0	-7.3
17360.00	H	26.2	-10.0	57.8	74.0	-16.2	**47.8	54.0	-6.2
19840.00	H	27.3	-10.0	57.8	74.0	-16.2	**47.8	54.0	-6.2
22320.00	H	29.3	-10.0	57.3	74.0	-16.7	**47.3	54.0	-6.7
24800.00	H	32.1	-10.0	57.2	74.0	-16.8	**47.2	54.0	-6.8
27280.00	H	33.9	-10.0	57.1	74.0	-16.9	**47.1	54.0	-6.9

Frequency (MHz)	Polarity (H/V)	Antenna Factor & Cable Loss (dB/m)	Duty-cycle correction (dB)	Field Strength at 3m – Peak (dBµV/m)	Limit at 3m – Peak (dBµV/m)	Margin - Peak (dB)	Field Strength at 3m – Average (dBµV/m)	Limit at 3m – Average (dBµV/m)	Margin - Average (dB)
4960.00	V	6.3	-10.0	54.7	74.0	-19.3	**44.7	54.0	-9.3
7440.00	V	13.5	-10.0	56.2	74.0	-17.8	**46.2	54.0	-7.8
9920.00	V	13.2	-10.0	57.1	74.0	-16.9	**47.1	54.0	-6.9
12400.00	V	18.5	-10.0	54.9	74.0	-19.1	**44.9	54.0	-9.1
14880.00	V	19.2	-10.0	57.7	74.0	-16.3	**47.7	54.0	-6.3
17360.00	V	26.2	-10.0	57.0	74.0	-17.0	**47.0	54.0	-7.0
19840.00	V	27.3	-10.0	57.8	74.0	-16.2	**47.8	54.0	-6.2
22320.00	V	29.3	-10.0	57.5	74.0	-16.5	**47.5	54.0	-6.5
24800.00	V	32.1	-10.0	57.7	74.0	-16.3	**47.7	54.0	-6.3
27280.00	V	33.9	-10.0	57.3	74.0	-16.7	**47.3	54.0	-6.7

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(0.317) = -10.0dB.

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Radiated Emissions (30MHz – 2.4GHz)

Test Requirement:	FCC Part 15 Section 15.209
Test Method:	ANSI C63.4
Test Date(s):	2013-07-03
Temperature:	30.0 °C
Humidity:	77.0 %
Atmospheric Pressure:	100.3 kPa
Mode of Operation:	Charge mode / Bluetooth mode
Tested Voltage:	Adaptor: 117Va.c., 60Hz Dog: 3.7Vd.c. ("rechargeable battery" x 1)

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Measurement Data

Test Result of (Charge and Bluetooth mode): PASS

Detection mode: Quasi-Peak

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
161.32	H	31.6	43.5	-11.9
209.64	H	32.2	43.5	-11.3
274.16	H	33.5	46.0	-12.5
483.96	H	31.8	46.0	-14.2
548.64	H	37.9	46.0	-8.1
581.28	H	32.3	46.0	-13.7

Frequency (MHz)	Polarity (H/V)	Field Strength at 3m (dBμV/m)	Limit at 3m (dBμV/m)	Margin (dB)
161.32	V	30.3	43.5	-13.2
209.64	V	27.4	43.5	-16.1
274.16	V	32.5	46.0	-13.5
483.96	V	34.6	46.0	-11.4
548.64	V	36.3	46.0	-9.7
581.28	V	34.2	46.0	-11.8

Note: Field Strength includes Antenna Factor and Cable Loss.
Receiver setting: RBW = 120KHz
VBW = 120KHz

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

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):	2013-07-03
Temperature:	30.0 °C
Humidity:	77.0 %
Atmospheric Pressure:	100.3 kPa
Mode of Operation:	Transmission mode
Tested Voltage:	Dog: 3.7Vd.c. (“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:

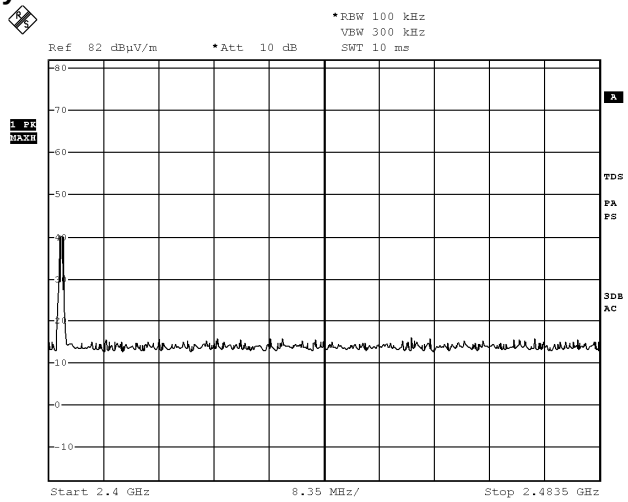
Frequency [MHz]	FCC Limits [MHz]
2402.00 – 2480.00	2400 – 2483.5

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

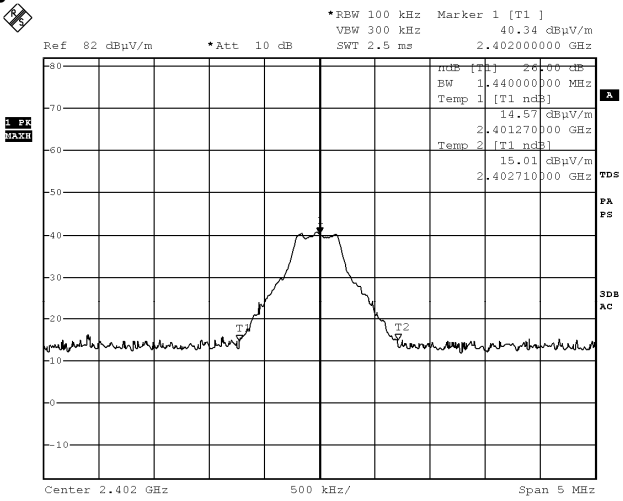
Measurement Data :

Test Result of Frequency Range of Fundamental Emission: PASS
Lowest Frequency – 2402.00MHz



Date: 3.JUL.2013 15:13:11

Test Result of 26dB Bandwidth of Fundamental Emission: PASS
Lowest Frequency – 2402.00MHz



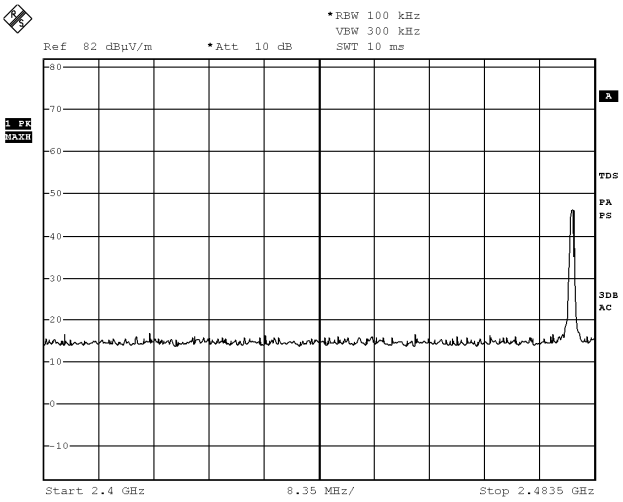
Date: 3.JUL.2013 15:13:40

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

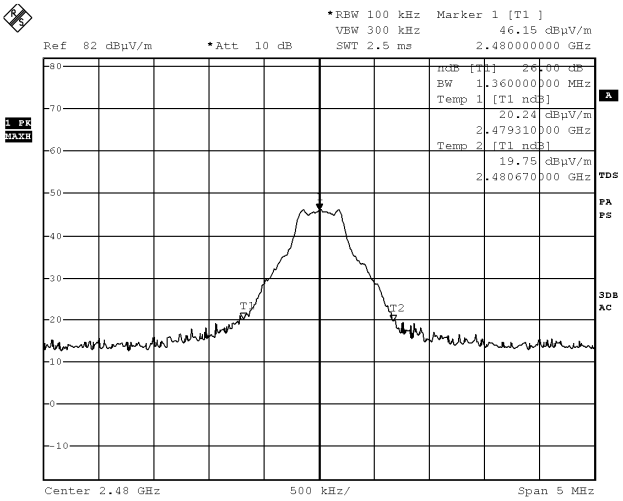
Measurement Data :

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



Date: 3.JUL.2013 15:46:25

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



Date: 3.JUL.2013 15:46:59

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

Duty Cycle Correction During 100msec:

Each function key sends a different series of characters, but each packet period (1.26msec) never exceeds a series of 1 pulse (0.4msec). Assuming any combination of short and long pulses maybe obtained due to encoding the worst case transmit duty cycle would be considered 0.4 per 1.26msec = 31.7% duty cycle.

Remarks:

Duty Cycle Correction = 20Log(0.317) = -10.0dB

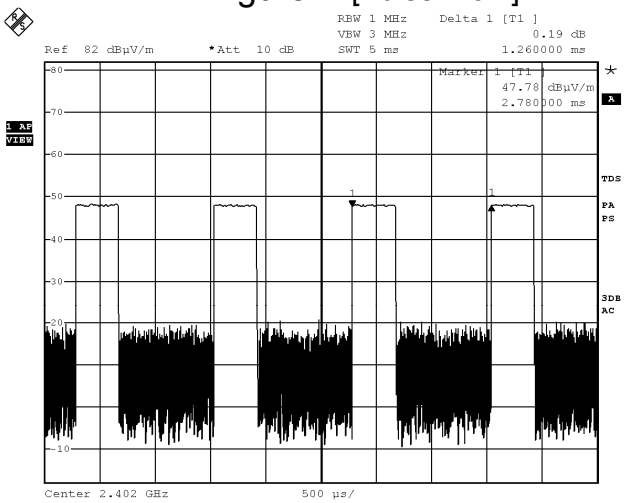
The following figures [Figure A to B] show the characteristics of the pulse train for one of these functions.

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

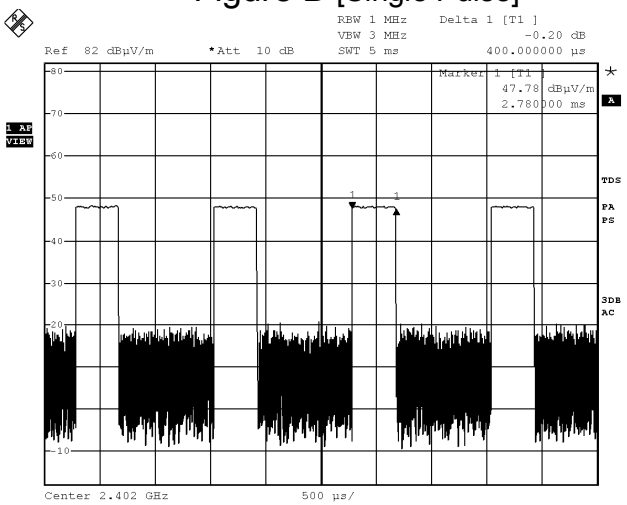
Measurement Data :

Figure A [Pulse Train]



Date: 3.JUL.2013 15:42:41

Figure B [Single Pulse]



Date: 3.JUL.2013 15:42:30

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

TEST REPORT No: (5213)171-1626

Photographs of EUT

Front View of the product

Rear View of the product

Side View of the product

Side View of the product

Bottom View of the product

USB and Aux in cable

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

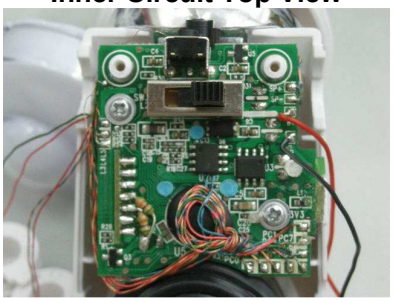
TEST REPORT No: (5213)171-1626

Photographs of EUT

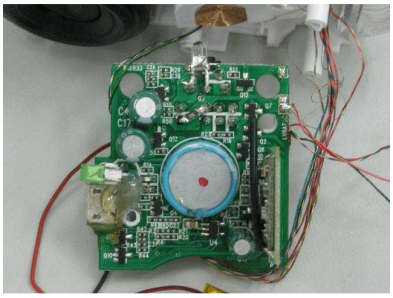
Inter View of the product

Inter View of the product

Inner Circuit Top View

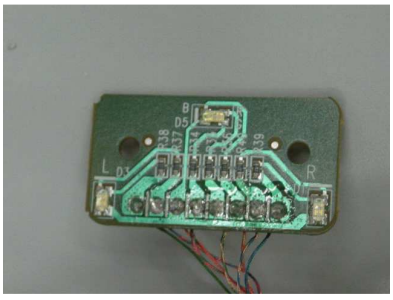


Inner Circuit Bottom View



Inner Circuit Top View

Inner Circuit Bottom View



BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

Measurement of Conducted Emission Test Set Up

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com

Measurement of Radiated Emission Test Set Up

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

BUREAU VERITAS HONG KONG LIMITED – Kowloon Bay Office
1/F Pacific Trade Centre,
2 Kai Hing Road, Kowloon Bay,
Kowloon,HONG KONG
Tel: +852 2331 0888
Fax: +852 2331 0889
www.cps.bureauveritas.com