

CCT DEDADT

| | TEST REI | PORT | | | |
|------------------|--|-------------------------------|---|--|--|
| To: | NEW BRIGHT INDUSTRIAL CO., LTD | To: | - | | |
| Attn: | Eric Kwok | Attn: | - | | |
| Address: | 9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD, KOWLOON BAY, KOWLOON, HONG KONG. | Address: | - | | |
| Fax: | 852 27953665 | Fax: | - | | |
| E-mail: | ypeng01@newbright.com / chkwok01@newbright.com | E-mail: | - | | |
| Folder No.: | NBT-17 | MY433MTHS-B-B | | | |
| Factory Name: | | T INDUSTRIAL CO. | | | |
| Location: | | EUNG YUET ROAD, HONG KONG. | JNG YUET ROAD, KOWLOON BAY, KOWLOON, DNG KONG. | | |
| Product: | - | ΓΟΥ Receiver | | | |
| Model No.: | | GF1448RR | | | |
| Additional Model | No.: | | | | |
| | | Sample No: | HK170524/017 | | |
| | | Date of Receipt | May 26, 2017 | | |
| | | Test Date(s): | May 29, 2017 to May 31, 2017 | | |
| | | Test Requested: | FCC Part 15 – 2015 | | |

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 B.

Assistant Manager, **EMC** Department

ANSI C63.4 - 2014

Name: Law Man Kit Date: June 26, 2017

Test Method:



Equipment Under Test:

Product **TOY Receiver** Model No. GF1448RR Power Supply 120Va.c., 60Hz

Data Cable

Power Line Cable 0.46m non-shielded USB cable

Accessory Device

Description of Adaptor

Adaptor **SUPER** Model S-1200R

Input 120Va.c., 60Hz, 31.8W Input power line cable 1.83m non-shielded cable Output 3.0-15Vd.c., 1200mA Output power line cable 1.01m non-shielded cable

Additional Product Name:

Additional Model No.:

Additional Model Information:

Description of Test modes:

Charge mode: with indicator light

Report Revision & Sample Re-submit History:

Remark: -

For the test results, the EUT had been tested with all conditions. The worst case was showed in test report.

www.cps.bureauveritas.com



Test Result Summary

| rest nesalt callinary | | | | | |
|--------------------------------------|--------------|-------------|--------|--|--|
| EMISSION TEST | | | | | |
| Test requirement: FCC Part 15 - 2015 | | | | | |
| Toot Condition | Test Method | Test Result | | | |
| Test Condition | r est Method | Pass | Failed | | |
| Conducted Emission Test, | ANSI C63.4 | | | | |
| 0.15MHz to 30MHz | | | | | |
| Radiated Emission Test, | ANSI C63.4 | \boxtimes | | | |
| 30MHz to 1GHz | | | | | |



Test Laboratory & Test Instruments List

Radiated and Conducted emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 – 2014. An Open Area Test Site and Full Anechoic Chamber 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

Test Instrument List

Radiated Emission

| naulateu Elliissioli | | | | | |
|--------------------------------------|--------------|-----------|--------------|-------------|---------------|
| EQUIPMENT | MANUFACTURER | MODEL NO. | SERIAL NO. | CAL. DATE | CAL. DUE DATE |
| EMI TEST RECEIVER | R&S | ESCI | 100379 | 22-FEB-2017 | 21-FEB-2018 |
| SIGNAL ANALYZER 40GHZ | R&S | FSV 40 | 100977 | 16-AUG-2016 | 15-AUG-2017 |
| BILOG ANTENNA | SCHAFFNER | CBL6112D | 25229 | 27-FEB-2016 | 26-FEB-2018 |
| OPEN AREA TEST SITE | BVCPS | N/A | N/A | 18-JUN-2016 | 17-JUN-2017 |
| ANECHOIC CHAMBER | ALBATROSS | M-CDC | 80374004499B | 10-MAY-2017 | 09-MAY-2018 |
| BICONICAL ANTENNA | R&S | HK116 | 100179 | 14-APR-2016 | 13-APR-2018 |
| LOG-PERIODIC DIPOLE ARRAY ANTENNA | R&S | HL223 | 832369/001 | 07-APR-2016 | 06-APR-2018 |

Conducted Emission

| EQUIPMENT | MANUFACTURER | MODEL NO. | SERIAL NO. | CAL. DATE | CAL. DUE DATE |
|-------------------|--------------|-----------|------------|-------------|---------------|
| EMI TEST RECEIVER | R&S | ESCI | 100379 | 22-FEB-2017 | 21-FEB-2018 |
| LISN | R&S | ENV216 | 100024 | 19-OCT-2016 | 18-OCT-2017 |
| | | | | | |
| SOFTWARE | MANUFACTURER | VERSION | SERIAL NO. | | |
| EMC32-E | R&S | 8.4 | N/A | | |

Measurement Uncertainty

| MEASUREMENT | FREQUENCY | UNCERTAINTY | |
|---------------------|-----------------|-------------|--|
| Conducted emissions | 9kHz to 30MHz | 2.9dB | |
| | 9kHz to 30MHz | 4.2dB | |
| Dedicted emissions | 30MHz to 200MHz | 4.5dB | |
| Radiated emissions | 200MHZ to 1GHz | 5.6dB | |
| | 1GHz to 18GHz | 4.7dB | |

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

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



Test Results

Conducted Emissions (150kHz to 30MHz)

FCC Part 15 Section 15.107 Test Requirement:

Test Method: ANSI C63.4 Test Limits: Class B Test Date(s): 2017-05-29

Temperature: 27.0 °C Humidity: 60.0 % Atmospheric Pressure: 99.5 kPa

Mode of Operation: Charge mode Tested Voltage: 120Va.c., 60Hz

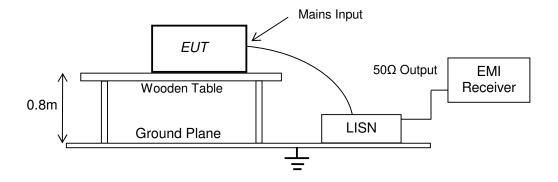
Test Method:

Conducted emissions measurements are investigated and also taken pursuant to the procedures of ANSI C63.4 -2014. 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





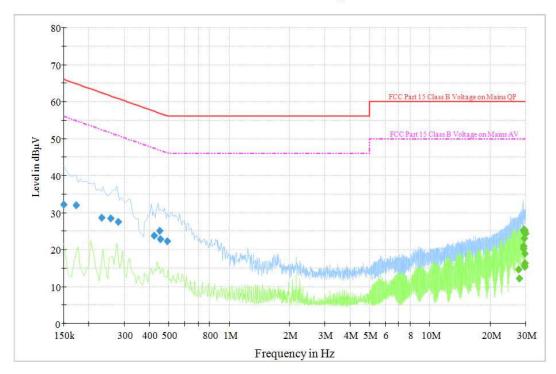
Measurement Data

Test Result of (Charge 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



Receiver setting: RBW = 120 kHz

VBW = 120 kHz



Radiated Emissions (30MHz to 1GHz)

Test Requirement: FCC Part 15 Section 15.109

Test Method: ANSI C63.4
Test Limits: Class B
Test Date(s): 2017-05-31
Temperature: 30.0 °C

 $\begin{array}{lll} \mbox{Temperature:} & 30.0 \ ^{\circ}\mbox{C} \\ \mbox{Humidity:} & 70.0 \ \% \\ \mbox{Atmospheric Pressure:} & 99.5 \ \mbox{kPa} \\ \end{array}$

Mode of Operation: Charge mode Tested Voltage: 120Va.c., 60Hz

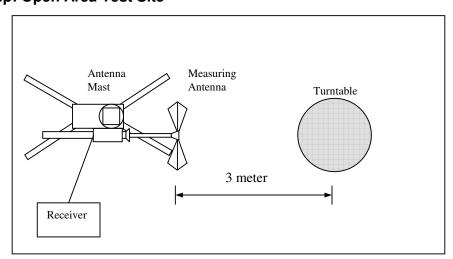
Test Method:

Radiated emissions measurements are investigated and taken pursuant to the procedures of ANSI C63.4 - 2014.

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





Limits for Radiated Emission: FCC Part 15.109

| Frequency Range | Limits |
|-----------------|---------------|
| [MHz] | [dBµV/m @ 3m] |
| 30-88 | 40.0 |
| 88-216 | 43.5 |
| 216-960 | 46.0 |
| Above 960 | 54.0 |

Measurement Data

Test Result of (Charge mode): PASS

Detection mode: Quasi-Peak

| Frequency (MHz) | Polarity (H/V) | Field Strength at 3m (dBμV/m) | Limit at 3m (dBµV/m) | Margin (dB) |
|--------------------|-------------------|----------------------------------|-------------------------|-------------|
| 120.62 | Н | 27.4 | 43.5 | -16.1 |
| 167.90 | Н | 23.6 | 43.5 | -19.9 |
| 38.72 | V | 36.1 | 40.0 | -3.9 |
| 129.12 | V | 27.9 | 43.5 | -15.6 |

Note: Field Strength includes Antenna Factor and Cable Loss.

 $RBW = 120 \, kHz$ Receiver setting:

 $VBW = 120 \, kHz$



Appendix I Regulatory Statement and Label Marking Advice for the FCC Verification (Class B)

1. Marking suggested for the Label:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

2. Regulatory Statement suggested for the User Manual:

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notes: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

If shielded cables or special accessories are required for compliance, a statement must be included which instructs the user to employ them, for example, Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

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