

	TEST RE	<b>:P</b>	ORT		
To:	NEW BRIGHT INDUSTRIAL CO., LTD		То:	-	
Attn:	Erick 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-1	7AF	P165MTHS-B-C		
Factory Name:	NEW BRIG	НТ	INDUSTRIAL CO.	, LTD	
Location:	9/F., NEW BRIGHT BUILDING, 11 SI	9/F., NEW BRIGHT BUILDING, 11 SHEUNG YUET ROAD, KOWLOON BAY, KOWLOON, HONG KONG.			
Product:		TC	Y Receiver		
Model No.:			GF32RR		
Additional Model	No.:				
			Sample No:	HK170419/012	
	Sales and the sales are the sa		Date of Receipt	April 19, 2017	
			Test Date(s):	May 08, 2017 to May 14, 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 07, 2017

Test Method:



**Equipment Under Test:** 

Product : TOY Receiver
Model No. : GF32RR
Power Supply : USB: 5Vd.c.

Data Cable : -

Power Line Cable : 0.45m 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:**

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#### **Additional Model No.:**

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## **Additional Model Information:**

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# **Description of Test modes:**

Charge mode: with indicator light

# **Report Revision & Sample Re-submit History:**

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#### Remark:

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

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# **Test Result Summary**

rest result outlinary					
EMISSION TEST					
Test requirement: FCC Part 15 - 2015					
Took Condition	Took Mothod	Test Result			
Test Condition	Test 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**

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	
Radiated 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 strictical 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 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): 2017-05-08

Temperature: 25.0 °C Humidity: 70.0 % Atmospheric Pressure: 99.9 kPa

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

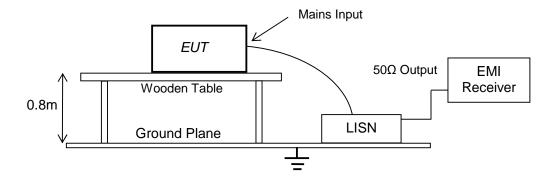
## Test Method:

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.

807 70-FCC Part 15 Class B Voltage on Mains QF 60-FCC Part 15 Class B Voltage on Mains AV 50 Level in dBµV 40-30 20-150k 300 400 500 800 1M 2.M 3M 4M 5M 6 8 10M 20M 30M Frequency in Hz

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): 2017-05-12

Temperature: 25.0 °C Humidity: 70.0 % Atmospheric Pressure: 99.8 kPa

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

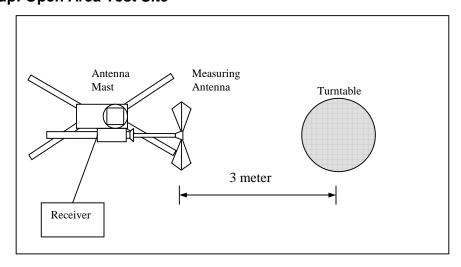
## **Test Method:**

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)			
Emissions detected are more than 20 dB below the limit line(s)							

Note: Field Strength includes Antenna Factor and Cable Loss.



## 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 \*\*\*\*\*

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