Shenzhen Huaxia Testing Technology Co., Ltd.

1F., Block A of Tongsheng Technology Building, Huahui Road, Dalang Street, Longhua District, Shenzhen, China

Telephone: +86-755-26648640
Fax: +86-755-26648637
Website: www.cqa-cert.com

Report Template Version: V05
Report Template Revision Date: 2021-11-03

RF Exposure Evaluation Report

Report No.:	CQASZ20220300469E-02
Applicant:	HONG KONG YOU RUI LIGHT CO., LIMITED
Address of Applicant:	UNIT E 10 FLOOK, CNT POWER, NO 338 HENNESSY ROAD WAN CHAL, HONG KONG.
Equipment Under Test (EUT):	
EUT Name:	stereo radio with bluetooth
Model No.:	USA 740
Test Model No.:	USA 740
Brand Name:	CUSTOM AUTOSOUND MFG
FCC ID:	2A53A-USA740
Standards:	47 CFR Part 1.1307 47 CFR Part 1.1310 447498 D04 Interim General RF Exposure Guidance v01
Date of Receipt:	2022-03-29
Date of Test:	2022-03-29 to 2022-04-08
Date of Issue:	2022-04-11
Test Result:	**PASS***

***In the configuration tested, the EUT complied with the standards specified above**

Tested By: Lewis Zhou

(Lewis Zhou)

Reviewed By: Rock Huang

(Rock Huang)

Approved By:

(Jack Ai)

1 Version

Revision History Of Report

Report No.	Version	Description	Issue Date
CQASZ20220300469E-02	Rev.01	Initial report	2022-04-11

2 Contents

Page

3 General Information

3.1 Client Information

Applicant:	HONG KONG YOU RUI LIGHT CO., LIMITED
Address of Applicant:	UNIT E 10 FLOOK, CNT POWER, NO 338 HENNESSY ROAD WAN CHAL, HONG KONG.
Manufacturer:	DONGGUAN YOU RUI LIGHT CO., LIMITED
Address of Manufacturer:	JINHE INDUSTRIAL PACK ZHANGMUTOU TOWN GUANGDONG
Factory:	DONGGUAN YOU RUI LIGHT CO., LIMITED
Address of Factory:	JINHE INDUSTRIAL PACK ZHANGMUTOU TOWN GUANGDONG

3.2 General Description of EUT

Product Name:	stereo radio with bluetooth
Model No.:	USA 740
Test Model No.:	USA 740
Trade Mark:	CUSTOM AUTOSOUND MFG
Software Version:	USA.730
Hardware Version:	USA-730-MB V2.6PA
EUT Power Supply:	Power by DC 12V

3.3 General Description of BT Classic

Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	Bluetooth Spec 5.0
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, π/4DQPSK, 8DPSK
Number of Channel:	79
Transfer Rate:	1Mbps/2Mbps/3Mbps
Hopping Channel Type:	Adaptive Frequency Hopping systems
Sample Type:	☒ Mobile ☐ Portable ☐ Fix Location
Antenna Type:	PCB antenna
Antenna Gain:	0dBi
Cable loss:	1.0 dB

Note：

The above parameters will directly affect the test results. The information is provided by the applicant.

4 MPE Evaluation

4.1 RF Exposure Compliance Requirement

4.1.1 Limits

The table applies to any RF source (i.e., single fixed, mobile, and portable transmitters) and specifies power and distance criteria for each of the five frequency ranges used for the MPE limits. These criteria apply at separation distances from any part of the radiating structure of at least $\lambda/2\pi$. The thresholds are based on the general population MPE limits with a single perfect reflection, outside of the reactive near-field, and in the main beam of the radiator.For mobile devices that are not exempt per Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] at distances from 20 cm to 40 cm and in 0.3 GHz to 6 GHz, evaluation of compliance with the exposure limits in § 1.1310 is necessary if the ERP of the device is greater than ERP20cm inFormula (B.1) [repeated from § 2.1091(c)(1) and § 1.1307(b)(1)(i)(B)].

$$P_{\text{th}}\,(\text{mW}) = ERP_{20\,\text{cm}}\,(\text{mW}) = \begin{cases} 2040f & 0.3\ \text{GHz} \le f < 1.5\ \text{GHz} \\ 3060 & 1.5\ \text{GHz} \le f \le 6\ \text{GHz} \end{cases}$$

If the ERP is not easily obtained, then the available maximum time-averaged power may be used (i.e., without consideration of ERP only if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave Dipole.
SAR-based exemptions are constant at separation distances between 20 cm and 40 cm to avoid discontinuities in the threshold when transitioning between SAR-based and MPE-based exemption criteria at 40 cm, considering the importance of reflections.

4.1.2 Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

4.1.3 EUT RF Exposure

1) For BT Classic

Output Power Into Antenna & RF Exposure Evaluation Distance:

Measurement Data

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-1.51	-1.5±1	-0.5	1.12
Middle(2441MHz)	0.09	0±1	1.0	1.26
Highest(2480MHz)	0.27	0.5±1	1.5	1.41
π/4DQPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-2.14	-2.0±1	-1.0	0.79
Middle(2441MHz)	-0.42	-0.5±1	0.5	1.12
Highest(2480MHz)	-0.36	0±1	1.0	1.26
8DPSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-1.84	-1.5±1	-0.5	0.89
Middle(2441MHz)	-0.51	-0.5±1	0.5	1.12
Highest(2480MHz)	-0.03	0±1	1.0	1.26

The maximum output power of this product is less than 3060mW

Note: 1) Refer to report No. CQASZ20220300469E-01 for EUT test Max Conducted Peak Output Power value.

2) EUT's Bluetooth module and its antenna is more than 20cm away from the human body.

*** END OF REPORT ***