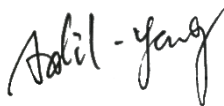
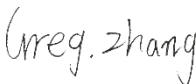
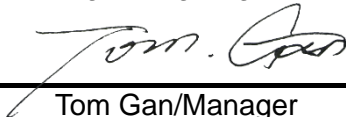


RF Exposure Report

Product name: Remote Controller
Trademark: N.A.
Model no......: HS-8AC
Series Model(s).....: N.A.
FCC ID.....: 2ANM3HS8AC
IC: 23165-HS8AC
HVIN: HS-8AC
Report No: C240715063-RF02
Test Standards.....: CFR47 FCC Part 2: Section 2.1093
CFR47 FCC Part 1: Section 1.1310
RSS-102 Issue 6
Applicant: Shenzhen Chuangwei-RGB Electronics Co., Ltd.
Address of applicant: 13F-16F, Unit A, Skyworth Building, Shennan Road,Nanshan
District, Shenzhen, China
Manufacturer: Shenzhen Chuangwei-RGB Electronics Co., Ltd.
Manufacturer Address.....: 13F-16F, Unit A, Skyworth Building, Shennan Road,Nanshan
District, Shenzhen, China
Date of Test Date.....: N.A.
Date of issue.....: Nov 08,2024
Test result.....: Compliance

Prepared By : 
Adil Yang/Engineer

Reviewed By : 
Greg Zhang/Engineer

Approved By : 
Tom Gan/Manager

The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to CSIC within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.

Table of Contents**Page**

1	TEST SUMMARY.....	3
1.1	TEST FACILITY	3
2	GENERAL INFORMATION.....	4
2.1	GENERAL DESCRIPTION OF EUT	4
3	MAXIMUM PERMISSIBLE EXPOSURE (MPE).....	5
3.1	RF EXPOSURE.....	5

1 TEST SUMMARY

1.1 Test Facility

Shenzhen Central Standard International Center Co., Ltd. (CSIC)

Room 201, Building 1, Mogen Fashion Industrial Park, No. 10, Shilongzai Road, Xinshi Community, Dalang Street, Longhua District, Shenzhen.

The test facility is recognized, certified or accredited by the following organizations:

CNAS	Registration No.: L11671	
FCC	Registration No.: 0031378433	Designation Number: CN1317
IC	CAB identifier: CN0051	
A2LA	Lab Cert. No.: 6426.01	

2 GENERAL INFORMATION

2.1 General Description of EUT

Product information	
Product Name:	Remote Controller
Trademark:	N.A.
Model No:	HS-8AC
Series Model:	N.A.
Power supply:	DC 3V for 2*AAA Battery
Hardware version:	E01202-20201200-000
Software version:	Skyworth_HS-8AC
Technical Specification of Bluetooth LE	
Frequency Range:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK
Channel Number:	40 channels
Data Rate:	1 Mbps, 2 Mbps
Channel Separation:	2 MHz
Antenna type:	PCB antenna
Antenna gain:	1.0dBi
Product factory information	
Name of factory 1:	N.A.
Address of factory 1:	N.A.
Remark:	

Remark: The above information and materials are provided by the Manufacturer. and full tests were applied to the sample(C240715063-Y01/01) only in this document.

3 Maximum Permissible Exposure (MPE)

3.1 RF Exposure

3.1.1 Limit

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 and RSS-102 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached. Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio frequency (RF) radiation as specified in 1.1307 (b).

According to RSS-102: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio frequency (RF) radiation as specified in 6.3

For FCC:

Frequency Range [MHz]	Electric Field Strength [V/m]	Magnetic Field Strength [A/m]	Power Density [mW/cm ²]
Limits for Occupational / controlled Exposures			
300 - 1500	--	--	f/300
1500 - 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
300 - 1500	--	--	f/1500
1500 - 100000	--	--	1.0

NOTE: f = Frequency in MHz

For IC:

Frequency [MHz]	Exemption Limits [mW]				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	45	116	139	163	189
450	32	71	87	104	124
835	21	32	41	54	72
1900	6	10	18	33	57
2450	3	7	16	32	56
3500	2	6	15	29	50
5800	1	5	13	23	32
Frequency [MHz]	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of >50 mm
≤300	216	246	280	319	362
450	147	175	208	248	296
835	96	129	172	228	298
1900	92	138	194	257	323
2450	89	128	170	209	245
3500	72	94	114	134	158
5800	41	54	74	102	128

3.1.2 Friss Formula

According to KDB447498 D01 General RF Exposure Guidance V06.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where $f(\text{GHz})$ is the RF channel transmit frequency in GHz;

Power and distance are rounded to the nearest mW and mm before calculation;

The result is rounded to one decimal place for comparison;

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz.

If we know the maximum gain of the antenna and the total output power to the antenna, Through calculation, we will know MPE value at distance 5mm.

3.1.3 Classification

The antenna of this product, under normal use condition, is at least 5mm away from the body of the user. Warning statement to the user for keeping at least 5mm or more separation distance from the antenna should be included in the User manual. So, this device is classified as Mobile device.

3.1.4 EUT Operating Conditions

EUT was enabled to transmit and receive at lowest, middle and highest channels.

3.1.5 Evaluation Result

1) stand-alone transmission MPE

For FCC

Mode	Frequency (GHz)	*Measured RF Output Power (dBm)	Distance (mm)	Result calculation	Limit (1-g)
Bluetooth	2.402	-6.146	5	0.075	3.0

Note:

1. Bluetooth RF Output Power: Refer to test report C240715063-RF01

For IC

The maximum EIRP is 0.31mW and the limit is 3mW at 5mm, thus meeting RF exposure requirements.

Note:

1. Bluetooth RF Output Power: Refer to test report C240715063-RF01

3.1.6 Conclusion

Therefore, the maximum calculations result of above are meet the requirement of Radio Frequency Exposure (MPE) limit.

*****THE END*****