# **TEST REPORT**

Estel Qian / Project Engineer

Compiled by:

Approved by:

Deval Qin Designated Reviewer

Reference No.: WTF23D05104063W003 Page 2 of 8

# 2. Contents

			Page	
1	COVI	ER PAGE	1	
2.	CON.	TENTS	2	
3.	REVI	ISION HISTORY	3	
4.	GENERAL INFORMATION			
	4.1. 4.2. 4.3. 4.4. 4.5.	GENERAL DESCRIPTION OF E.U.T.  DETAILS OF E.U.T.  TEST FACILITY  SUBCONTRACTED  ABNORMALITIES FROM STANDARD CONDITIONS		
5.	TEST	T SUMMARY	6	
6.	RF EXPOSURE			
	6.1. 6.2. 6.3	PROCEDURES AND REQUIREMENTS	7	

Reference No.: WTF23D05104063W003 Page 3 of 8

# 3. Revision History

Test Report No.	Date of Receipt Sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTF23D05104063W003	2023-06-01	2023-06-01 to 2023-06-08	2023-07-11	Original	-	Valid

Reference No.: WTF23D05104063W003 Page 4 of 8

## 4. General Information

# 4.1. General Description of E.U.T.

Product: Bluetooth Speaker

Model(s): SP-SG2BT

Bluetooth Version: V5.3(BLE is not supported)

Hardware Version: BS454-V3.0

Software Version: BP18454(JVC-SPSG2BT)\_6969D\_Jq202305

## 4.2. Details of E.U.T.

Operation Frequency: 2402~2480MHz

Max. RF output power: -1.77dBm

Type of Modulation: GFSK,  $\pi$ /4DQPSK Antenna installation: Inverted F Antenna

Antenna Gain: -0.68dBi

Ratings: DC 5V from type-C USB port or DC 3.7V from battery

Battery: DC 3.7V 600mAh 2.22Wh

Accessory: USB cable

USB type A plug to USB type C plug, length 30cm

Note: for more details, please refer to user manual and EUT photos.

Reference No.: WTF23D05104063W003 Page 5 of 8

# 4.3. Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Testing Group Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Testing Group Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

#### 4.4. Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:						
☐ Yes	⊠ No					
If Yes, list the related test items and lab information:						
Test Lab:	N/A					
Lab address:	N/A					
Test items:	N/A					

#### 4.5. Abnormalities from Standard Conditions

None.

Reference No.: WTF23D05104063W003 Page 6 of 8

# 5. Test Summary

Test Items	Test Requirement	Result	
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	47CFR FCC Part 2 Subpart J § 2.1093	PASS	

Reference No.: WTF23D05104063W003 Page 7 of 8

# 6. RF Exposure

Test Requirement: 47CFR FCC Part 2 Subpart J § 2.1093 Evaluation Method: 47CFR FCC Part 1 Subpart I §1.1307,

KDB 447498 D01 General RF Exposure Guidance v06

## 6.1. Procedures and Requirements

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR, and  $\le 7.5$  for 10-g extremity SAR, where

- f(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

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

#### 6.2. Calculation Method

Result = $P\sqrt{F}/D$ 

P= Maximum turn-up power in mW

F= Channel frequency in GHz

D= Minimum test separation distance in mm

Reference No.: WTF23D05104063W003 Page 8 of 8

## 6.3. Test Result

A distance of 5mm normally can be maintained between the user and the device.

Modulation	СН	Freq. (GHz)	Max Power (dBm)	Max. Tune-up Power (dBm)	Max. Tune- up Power (mW)	Distance (mm)	Result	Limit
GFSK	High	2.480	-2.36	-1.36	0.731	5	0.23	3
π/4DQPSK	High	2.480	-1.77	-0.77	0.838	5	0.26	3

## **Conclusion:**

No SAR measurement is required.

=====End of Report=====