

RF Exposure Evaluation Report

Product : 233621 Trip Wireless Headphone
Trade mark : 233621
Model/Type reference : Trip
Serial Number : N/A
Report Number : EED32L00371602
FCC ID : 2AN4C-1266
Date of Issue : Mar. 04, 2020
47 CFR Part 1.1307
Test Standards : 47 CFR Part 2.1093
KDB 447498 D01v06
Test result : PASS

Prepared for:

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Pingdi Gaoqiao Industry Zone, Longgang District, Shenzhen, China

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Mar. 04, 2020



Check No.:3096323045

2 Version

Version No.	Date	Description
00	Aug. 16, 2018	Original
01	Mar. 04, 2020	1 Add TVS tube and resistance at USB PCBA and PCBA connector of main board, 2 Update charging current from 360mA to 320mA, 3 Change the power supply of MIC noise reduction chip from 3.3v to 3.0v, 4 Add electronic switch chip for speaker output, 5 Change the switch off circuit electronic, 6 Change product name and trademark

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4 General Information

4.1 Client Information

Applicant:	Shenzhen Grandsun Electronic Co., Ltd.
Address of Applicant:	Pingdi Gaoqiao Industry Zone, Longgang District, Shenzhen, China
Manufacturer:	Shenzhen Grandsun Electronic Co., Ltd.
Address of Manufacturer:	Pingdi Gaoqiao Industry Zone, Longgang District, Shenzhen, China
Factory:	Shenzhen Grandsun Electronic Co., Ltd.
Address of Factory:	Pingdi Gaoqiao Industry Zone, Longgang District, Shenzhen, China

4.2 General Description of EUT

Product Name:	233621 Trip Wireless Headphone
Model No.(EUT):	Trip
Trade Mark:	233621
EUT Supports Radios application:	BT4.2 Single mode, 2402-2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	2402-2480MHz
Test Power Grade:	DH5: power (Ext, Int) 255,0 ; 2DH5: power (Ext, Int) 255,20 ; 3DH5: power (Ext, Int) 255,20
Test Software of EUT:	Bluetest3
Antenna Type:	PIFA type FPC antenna
Antenna Gain:	2dBi
Power Supply:	Battery: 3.7V, 720mAh
Conducted Peak Output Power:	2.466 dBm The Conducted Peak Output Power data refer to the report EED32L00371601
Sample Received Date:	Dec. 05, 2019
Sample tested Date:	Dec. 05, 2019 to Dec. 24, 2019
The tested sample(s) and the sample information are provided by the client.	

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4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v05
Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 calculation¹⁷

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

5.1.3 EUT RF Exposure

The tune-up power is 1.5 dBm +1.0/-2.0dB, therefore the highest tune-up power is

2.5 dBm	(1.78 mW)	@ 2441 MHz
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When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$(1.78\text{mW} / 5\text{mm}) * (2.441\text{GHz}^{0.5})$	$= 0.6$
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$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.6 < 3.0$

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32L00371601 for EUT external and internal photos.

*** End of Report ***

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