



RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2111021328AT
Applicant: POGS B.V.
Address of Applicant: Hendrik Andriessenlaan 42 2102CZ Heemstede Netherlands
Manufacturer: POGS B.V.
Address of Manufacturer: Hendrik Andriessenlaan 42 2102CZ Heemstede Netherlands
Factory: 1. Minami Acoustics Limited
2. Minami Acoustics Limited
Address of Factory: 1. Shangou Industrial Park GongJiang Town, Yudu County Ganzhou City
Jiangxi Province, P.R. China
2. No.13. Maonan Road, Torch Development District, Zhongshan, Guangdong,
China
Equipment Under Test (EUT):
EUT Name: Bluetooth Headphone
Model No.: The Gecko
Trade Mark: POGS
Standard(s): 47 CFR Part 1.1307,
KDB 447498D01 General RF Exposure Guidance v06
Date of Receipt: 2020-12-08
Date of Evaluation: 2020-12-16 to 2020-12-31
Date of Issue: 2021-11-05

Evaluation Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.



Kobe Jian
EMC Laboratory Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2021-11-05		Original

Authorized for issue by:				
Tested By				
		Curry_Wu /Project Engineer		
Checked By				
		Ricky_Liu /Reviewer		



2 Evaluation Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
RF Exposure	47 CFR Part 1.1307, KDB 447498D01 General RF Exposure Guidance v06	KDB 447498D01 General RF Exposure Guidance v06	KDB 447498D01 General RF Exposure Guidance v06	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.



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4 General Information

4.1 Details of E.U.T.

Power Supply: DC 5V supply by adaptor
DC 3.7V rechargeable battery

Test Voltage: DC 3.7V

Cable: About 0.5m unscreened micro USB cable
About 1m unscreened AUX in cable
About 1.2m unscreened AUX in cable

Antenna Gain: 1.5dBi

Antenna Type: PCB antenna

For Classic:

Channel Spacing: 1MHz

Modulation Type: GFSK, $\pi/4$ DQPSK, 8DPSK

Number of Channels: 79

Operation Frequency: 2402MHz to 2480MHz

Spectrum Spread Technology: Frequency Hopping Spread Spectrum(FHSS)

For BLE:

Channel Spacing: 2MHz

Modulation Type: GFSK

Number of Channels: 40

4.2 Description of Support Units

The EUT has been tested as an independent unit.

4.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.



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4.4 Facility

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

● **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

● **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

● **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

● **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to

ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

● **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818, Jul 13, 2017.

● **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

● **VCCI (Registration No.: R-12460, C-12584, G-10449 and T-11179)**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-10449 and T-11179 respectively.

● **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.



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4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None



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5 Radio Spectrum Technical Requirement

5.1 RF Exposure

5.1.1 Test Requirement:

CFR 47 Part 2.1093

Limit:

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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{[\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}} \right] \cdot$$

- ☐ f(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



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5.1.2 Conclusion

Classic

The Max Conducted Peak Output Power	3.22	dBm on the lowest channel	2.402	GHz
3.22 dBm logarithmic terms convert to numeric result is nearly	2.10	mW		
According to the formula. calculate the test exclusion thresholds:				
[(max. power of channel, including tune-up tolerance, mW)/				
(min. test separation distance, mm)] · [√f(GHz)]				
General RF Exposure = (2.10 mW / 5 mm) x √2.402 GHz =	0.65		(1)	
SAR requirement:				
S = 3.0			(2)	
(1) < (2)				

BLE

The Max Conducted Peak Output Power	-0.37	dBm on the lowest channel	2.402	GHz
-0.37 dBm logarithmic terms convert to numeric result is nearly	0.92	mW		
According to the formula. calculate the test exclusion thresholds:				
[(max. power of channel, including tune-up tolerance, mW)/				
(min. test separation distance, mm)] · [√f(GHz)]				
General RF Exposure = (0.92 mW / 5 mm) x √2.402 GHz =	0.29		(1)	
SAR requirement:				
S = 3.0			(2)	
(1) < (2)				

The classic and BLE can be transmit synchronously,

$$0.65/3 + 0.29/3 = 0.313 < 1$$

So the SAR report is not required.



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6 Photographs

6.1 EUT Constructional Details

Refer to Appendix – External and Internal Photos for GZCR2111021328AT

--End of Report--