

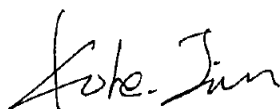
RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2109021158AT
Applicant: BlueCollars BV
Address of Applicant: Beemdheuvel 28 Best 5685AE Netherlands
Manufacturer: BlueCollars BV
Address of Manufacturer: Beemdheuvel 28 Best 5685AE Netherlands
Factory: BlueCollars BV
Address of Factory: Beemdheuvel 28 Best 5685AE Netherlands
Equipment Under Test (EUT):
EUT Name: GK Wireless System
Model No.: GKWR052
Trade Mark: GKWR
Standard(s) : 47 CFR Part 1.1307
 47 CFR Part 1.1310
 47 CFR Part 2.1091
Date of Receipt: 2021-09-29
Date of Evaluation: 2021-09-29 to 2021-11-01
Date of Issue: 2021-11-03

Evaluation Result:

Pass*

* In the configuration evaluated, 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		2021-11-03		Original

Authorized for issue by			
Tested By			
	Curry Wu/Project Engineer		
Reviewed By			
	Ricky Liu/Reviewer		



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2 Evaluation Summary

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:	Input: AC 100-240V 50/60Hz Output: DC 9V 300mAh
Operation Frequency:	2406MHz-2474MHz
Modulation Type:	DSSS (CCK, DQPSK, DBPSK)
Channel Spacing:	4MHz
Number of Channels:	18
Antenna Type:	Dipole Antenna
Antenna Gain:	3dBi

4.2 Evaluating Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Sciotech 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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4.3 Facility

The 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.

- **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-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 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-20107 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 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.4 Deviation from Standards

None

4.5 Abnormalities from Standard Conditions

None



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5 Technical Requirements Specification

5.1.1 EUT RF Exposure Evaluation

Antenna 1:

Antenna Gain: Antenna :3dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 2 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance:

Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm ²)	Limit	Result
2406	0.42	1.102	0.0004	1.0	PASS

Note: Refer to report No. GZCR210902115803 for EUT test Max Conducted Peak Output Power value.

The distance r (4th column) calculated from the Fries transmission formula is far greater than 20 cm separation requirement.

Antenna 2:

Antenna Gain: Antenna :3dBi

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 2 in linear scale.

Output Power Into Antenna & RF Exposure Evaluation Distance:

Frequency (MHz)	Max Conducted Peak Output Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm ²)	Limit	Result
2406	1.48	1.406	0.0006	1.0	PASS

Note: Refer to report No. GZCR210902115803 for EUT test Max Conducted Peak Output Power value.

The distance r (4th column) calculated from the Fries transmission formula is far greater than 20 cm separation requirement.

6 EUT Constructional Details (EUT Photos)

Refer to appendix - external and internal photos for GZCR2109021158AT

- End of the Report -

