

TEST REPORT

Application No.: HKEM2001000024HS

Applicant: Kingtronics International Trading Co., Ltd

Address of Applicant: Units 1203, 05, 07 & Penthouse, Century Centre, 44-46 Hung To Road, Kwun Tong, Kowloon, HongKong

Manufacturer: CELIOS CORPORATION

Address of Manufacturer: 401 Edgewater Pl, Suite 190, Wakefield, MA, 01880, USA

Factory: KINGTRONICS CORPORATION OF ELEC.&MECH. TECHNOLOGY (ZHANGZHOU)CO., LTD

Address of Factory: NO.20 Longchi Road, Longchi Industrial Park, Zhangzhou Taiwanese Investment Zone

Equipment Under Test (EUT):

EUT Name: G200 Advanced Air Purifier Remote Control

Model No.: G200-Remote

FCC ID.: 2AVYPG200-RM-01

Trade Mark: celios®

Standard(s) : 47 CFR Part 1.1307, Part 1.1310
KDB447498D01 General RF Exposure Guidance v06

Date of Receipt: 2020-03-20

Date of Test: 2020-03-24 to 2020-04-05

Date of Issue: 2020-04-11

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



Law Man Kit
EMC Manager

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2020-04-11		Original

Authorized for issue by:			
			
		Leo Xu /Project Engineer	Date: 2020-04-11
			
		Law Man Kit /Reviewer	Date: 2020-04-11



2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
RF Exposure	47 CFR Part 1.1307, Part 1.1310	CFR 47 Part 1.1310	CFR 47 Part 1.1310	PASS

Declaration of EUT Family Grouping:

None

Abbreviation:

- Tx: In this whole report Tx (or tx) means Transmitter.
- Rx: In this whole report Rx (or rx) means Receiver.
- RF: In this whole report RF means Radiated Frequency.
- CH: In this whole report CH means channel.
- Volt: In this whole report Volt means Voltage.
- Temp: In this whole report Temp means Temperature.
- Humid: In this whole report Humid means humidity.
- Press: In this whole report Press means Pressure.
- N/A: In this whole report not application.
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4 General Information

4.1 Details of E.U.T.

Power supply:	3VDC ("AAA" size battery x 2)
Test voltage:	3VDC
Antenna Gain:	0.5dBi
Antenna Type:	PCB Antenna
Conducted Peak Output Power	-1.2dBm (0.76mW) Refer to test report HKEM200100002403

4.2 Description of Support Units

The EUT has been tested with corresponding accessories as below:

Supplied by client

Description	Manufacturer	Model No.	SN/Certificate NO
MCHPRT 2 Test Software	N/A	Version 1.0	N/A

Supplied by SGS:

Description	Manufacturer	Model No.	SN/Certificate NO
NoteBook (EMC4)	Dell	P75F	N/A

4.3 Test Location

All tests were performed at:

SGS IECC Limited (Member of the SGS Group (SGS SA))

Unit 2 and 3, G/F, Block A, Po Lung Centre,

11 Wang Chiu Road, Kowloon Bay, Kowloon, Hong Kong

Tel: +852 2305 2570 Fax: +852 2756 4480

No tests were sub-contracted.

4.4 Test Facility

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

• **HOKLAS (Lab Code: 125)**

SGS IECC Limited has been accepted by HKAS Executive, on the recommendation of the Accreditation Advisory Board, as a HOKLAS Accredited Laboratory, this laboratory meets the requirements of ISO/IEC 17025:2005 and it has been accredited for performing specific test as listed in the scope of accreditation within the test category of Electrical and Electronic Products.

• **FCC Recognized Accredited Test Firm (CAB Registration No.: 446297)**

SGS IECC Limited 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: HK0010, Test Firm Registration Number: 446297.

• **Industry Canada (Site Registration No.: 5193A; CAB Identifier No.: HK0010)**

SGS IECC Limited has been recognized by Department of Innovation, Science and Economic Development (ISED) Canada as a wireless testing laboratory. The acceptance letter from the ISED is maintained in our files. CAB Identifier No: HK0010, Site Registration Number: 5193A-2.

4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None

5 Radio Spectrum Technical Requirement

5.1 RF Exposure for FCC

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. 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.

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:

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

5.1.2 Conclusion

According to the formula. calculate the test exclusion thresholds:

$$\begin{aligned} \text{General RF Exposure} &= (0.76 \text{ mW} / 5 \text{ mm}) \times \sqrt{2.02 \text{ GHz}} \\ &= 0.22 \quad (1) \end{aligned}$$

SAR requirement:

$$S = 3.0 \quad (2)$$

$$(1) < (2)$$

So the SAR report is not required.



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6 Photographs

Remark: Photos refer to Appendix A, Appendix B and Appendix C of HKEM200100002403.

- End of the Report -
