


# 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:**   
**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

<b>Test Result:</b>	
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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.

<b>Revision Record</b>				
<b>Version</b>	<b>Chapter</b>	<b>Date</b>	<b>Modifier</b>	<b>Remark</b>
01		2020-04-11		Original

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

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## 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  $\leq 50$  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  $\leq 7.5$  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<sup>17</sup>
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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.



## 6 Photographs

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

- End of the Report -

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