

RF Exposure report

Report No.: HQ200606DC09-FM

FCC ID: 2AWOT-SMARTDETECTOR

Applicant Name: Visual World Co., Ltd

Applicant Address: 50 meters north of Tangxing First Road, Guangming District, Shenzhen

Product Name VW-Smart detector

Brand name: N/A

Test Model: VW-SD08

VW-SD05; VW-SD07; VW-SD10.1; VW-SD12.5; VW-SD14;

Series Model: VW-SD15.6; VW-SD18.5; VW-SD21.5; VW-SD22; VW-SD24; VW-SD27; VW-SD28; VW-SD32;

Model Difference: All of models are exactly the same except the model name and size

Received Date: Jun. 06, 2020

Test Date: Jun. 06, 2020 ~ Jun. 20, 2020

Issued Date: Jun. 30, 2020

Issued By: Hwa-Hsing (Dongguan) Testing Co., Ltd.

Lab Address: No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China

FCC Designation Number: CN1255

Standards: FCC Part 2 (Section 2.1091); KDB 447498 D01; IEEE C95.1

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

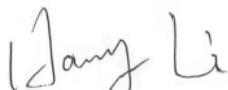
Prepared by :



Date: Jun. 25, 2020

Tank Tan//Engineer

Approved by :



Date: Jun. 30, 2020

Harry Li/ Supervisor

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Release control record

Issue No.	Reason for change	Date issued
HQ200606DC09-FM	Original release	Jun. 30, 2020

1. RF exposure limit

Limits for maximum permissible exposure (MPE)

Limits for general population / uncontrolled exposure				
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Average time (minutes)
300-1500	F/1500	30
1500-100,000	1.0	30

Note: F = Frequency in MHz

2. MPE calculation formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

Where:

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Classification:

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

3. Calculation result of maximum conducted power

The antennas provided to the EUT, please refer to the following table:

Antenna No.	Function	Frequency Band (MHz)	Antenna Gain (dBi)	Antenna Type	Transmit and Receive Chain	Maximum AVG Power(dBm)
1	WLAN	2400~2483.5	2	FPCB	1TX,1RX	14.24

Frequency band (MHz)	Max power (mW)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm ²)	Limit (mW/cm ²)
2412~2462MHz	26.546	2	20	0.00837	1.0

Conclusion:

Therefore, the worst-case situation is 0.00837mW/cm², which is less than "1". This confirmed that the device compliance with FCC 1.1310 MPE limit.

Appendix – information on the testing laboratories

We, [Hwa-Hsing \(Dongguan\) Co., Ltd.](#), A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values "HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT", commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lab Address: [No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China](#)

Contact Tel: [0769-83078199](#)

Email: customerservice.dg@hwa-hsing.com

Web Site: www.hwa-hsing.com

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