

**TEST REPORT**  
**EN IEC 62311:2020****Report Reference No.**.....: **HK2503261504-2EH**

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Date of issue .....: 2025/04/30

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Heping, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China**Applicant's name**.....: EDA Technology Shanghai Co.,LtdAddress .....: Building 29, Shengchuang Enterprise Park, No.1661 Jialuo Road,  
Jiading District, Shanghai, PRC**Test specification** .....Standard .....: **EN IEC 62311:2020**

TRF Originator.....: Shenzhen HUAKE Testing Technology Co., Ltd.

Master TRF.....: Dated 2020-05

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**Product Name** .....: Outdoor LoRa GatewayTrade Mark .....: 

Product Model .....: ED-GWL2110

Serial Model.....: N/A

Hardware Version.....: V1.1

Software Version .....: V2.0

Ratings .....: DC 48V From POE Power

Result .....: **Pass**



## TEST REPORT

Test Report No. :	HK2503261504-2EH	2025/04/30
		Date of issue

Product Name : Outdoor LoRa Gateway

Product Model : ED-GWL2110

Serial Model : N/A

**Applicant** : EDA Technology Shanghai Co.,Ltd

Address : Building 29, Shengchuang Enterprise Park, No.1661 Jialuo Road,  
Jiading District, Shanghai, PRC

**Manufacturer** : EDA Technology Shanghai Co.,Ltd

Address : Building 29, Shengchuang Enterprise Park, No.1661 Jialuo Road,  
Jiading District, Shanghai, PRC



**\*\* Modified History \*\***

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	2025/04/30	Jason Zhou



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**GENERAL INFORMATION****1.1 GENERAL REMARKS**

Date of receipt of test sample	:	2025/03/26
Testing commenced on	:	2025/03/26
Testing concluded on	:	2025/04/30

**1.2 GENERAL DESCRIPTION OF EUT**

Equipment	Outdoor LoRa Gateway	
Model Name	ED-GWL2110	
Serial Model	N/A	
Difference description	N/A	
Product Description	The EUT is Outdoor LoRa Gateway.	
	BT-BLE:	
	Operation Frequency:	2402 MHz ~ 2480 MHz
	Modulation Type:	GFSK
	Antenna Designation:	External Antenna
	Antenna Gain(Peak)	4dBi
	BT-EDR	
	Operation Frequency:	2402 MHz ~ 2480 MHz
	Modulation Type:	GFSK, $\pi/4$ DQPSK, 8DPSK
	Antenna Designation:	External Antenna
	Antenna Gain(Peak)	4dBi
	2.4G Wifi	
	Operation Frequency:	IEEE 802.11b/g/n20 2412-2472MHz IEEE 802.11 n40 2422-2462MHz
	Modulation Type:	DSSS, OFDM
	Antenna Designation:	External Antenna
	Antenna Gain(Peak)	4dBi
	5G 5150-5250:	
	Operation Frequency:	IEEE 802.11a:5180MHz-5240MHz IEEE 802.11n HT20/IEEE 802.11ac HT20:5180MHz-5240MHz IEEE 802.11n HT40/IEEE 802.11ac HT40:5190MHz-5230MHz/IEEE 802.11ac HT80:5210MHz
	Modulation Type:	IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT20: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT40: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT80: OFDM(256AQAM, 64QAM, 16QAM, QPSK, BPSK)
	Antenna Designation:	External Antenna
	Antenna Gain(Peak)	6dBi

The results shown  
this document canThe sample(s) are retained for 30 days only. The document is issued by HUAKE,  
for written permission. The more details and the authenticity of the report will be confirmed at <http://www.cer-mark.com>.01 FAX : +86-755 2302 9901 E-mail : [service@cer-mark.com](mailto:service@cer-mark.com)



	5745-5825
	Operation Frequency: IEEE 802.11a/ IEEE 802.11n HT20/802.11ac HT20:5745MHz-5825MHz IEEE 802.11n HT40/ IEEE 802.11ac HT40:5755-5795MHz IEEE 802.11ac HT80:5775MHz
	Modulation Type: IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT20: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT40: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT80: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK)
	Antenna Designation: External Antenna
	Antenna Gain(Peak) 6dBi
	863-870MHz:
	Operation Frequency: 863.1-869.9MHz
	Modulation Type: FSK
	Antenna Designation: External Antenna
	Antenna Gain(Peak) 2dBi
	4G:
	Operation Frequency: Band 1:1920-1980MHz, Band 3:1710-1785MHz, Band 7:2500-2570MHz, Band 8:880-915MHz, Band 20:832-862MHz, Band 28:703-748MHz, Band 38:2570-2620MHz, Band 40:2300-2400MHz
	Modulation Type: QPSK , 16-QAM
	Antenna Designation: External Antenna
	Antenna Gain(Peak) 2dBi
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Channel List	Refer to below
Hardware Version	V1.1
Software Version	V2.0
Note:	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
Note: Antenna gain Refer to the antenna specifications. The cable loss data is obtained from the supplier. The test results in the report only apply to the tested sample.	



## 1.EN IEC 62311 REQUIREMENT

### 1.1 GENERAL INFORMATION

According to its specifications, the EUT must comply with the requirements of the following standards:

EN IEC 62311:2020[Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz)]

### 1.2 LIMIT

A. Typical usage, installation and the physical characteristics of equipment make it inherently compliant with the applicable EMF exposure levels such as those listed in the bibliography. This low-power equipment includes unintentional (or non-intentional) radiators, for example incandescent light bulbs and audio/visual (A/V) equipment, information technology equipment (ITE) and multimedia equipment (MME) that does not contain radio transmitters.

NOTE Equipment is described as A/V equipment, ITE or MME if its main use is playback/recording of music, voice or images, or processing of digital information.

B. The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion level defined in 4.2.

C. The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level defined in 4.2.

D. Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in 4.2.



### 3. RESULT

#### 3.1 Summary of Results

Limit (W/ m <sup>2</sup> )	Result (W/ m <sup>2</sup> )	Verdict
10	0.076	passed

#### 3.2 MPE Evaluation

$$S = PG / 4\pi R^2$$

P = Power input to antenna

G = Antenna Gain

R = distance to the center of radiation of antenna (in meter) = 0.2 m

$$\pi=3.142$$

The maximum power density at a distance of 0.2 m for EUT is shown as below:

Operation Mode	Max. EIRP (W)	R (m)	S (W/m <sup>2</sup> )	Limit (W/m <sup>2</sup> )	Conclusion
BT-BLE	0.0002	0.2	0.0004	10	PASS
BT-EDR	0.002	0.2	0.004	10	PASS
2.4G WIFI	0.030	0.2	0.060	10	PASS
5150-5250	0.038	0.2	0.076	10	PASS
5745-5825	0.018	0.2	0.036	10	PASS
863-870MHz	0.007	0.2	0.014	10	PASS

4G test result see 2107RSU065-E5 for MRT Technology (Suzhou) Co., Ltd.

#### 3.3 Measurement Uncertainty

Extended Uncertainty (k=2) 95%      0.5dB

.....End of Report.....