

CE Test Report

Report No.: 2405U81213EK

Applicant: Shenzhen Qianyan Technology LTD

Address: No.3301, Block C, Section 1, Chuangzhi Yuncheng Building,
Liuxian Avenue, Xili Community, Xili Street, Nanshan District,
Shenzhen, China

Product Name: Govee Outdoor Flood Lights 2

Product Model: H7058

Multiple Models: H7057, H8057

Trade Mark: Govee

Standards: EN 62479:2010; EN 50663:2017
BS EN 62479:2010; BS EN 50663:2017

Test Date: 2024-07-30

Test Result: Complied

Report Date: 2024-08-01

Reviewed by:

Approved by:

Frank Yin

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Prepared by:

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Revision History

Version No.	Issued Date	Description
00	2024-08-01	Original

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1 General Information

1.1 Client Information

Applicant:	Shenzhen Qianyan Technology LTD
Address:	No.3301, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue, Xili Community, Xili Street, Nanshan District, Shenzhen, China
Manufacturer:	Shenzhen Qianyan Technology LTD
Address:	No.3301, Block C, Section 1, Chuangzhi Yuncheng Building, Liuxian Avenue, Xili Community, Xili Street, Nanshan District, Shenzhen, China

1.2 Product Description of EUT

The EUT is Govee Outdoor Flood Lights 2 that contains, BLE, 2.4G WLAN radios.

Sample Serial Number	2N1P-11&2N1P-12 (assigned by WATC)
Sample Received Date	2024-06-17
Sample Status	Good Condition
Operational Frequency Range	BLE 1M: 2402-2480MHz 2.4G WLAN: 2412-2472MHz
Maximum EIRP:	BLE: -2.08Bm 2.4G Wi-Fi: 9.58dBm
Modulation Technology	GFSK, DSSS, OFDM
Antenna Gain [#]	BLE: 3.77dBi 2.4G Wi-Fi: 3.98dBi
Power Supply	DC 24V from adapter
EU Adapter Information	Adapter for H7058 Adapter model: SOY-72W-480 Input: AC200-240V, 50/60Hz, 1.2A Output: DC 24V/3.0A 72.0W Adapter for H7057 and H8057 Adapter model: BI48BH-240200-AdV Input: AC 200-240V, 50/60Hz, 0.6A Output: DC 24V/2.0A 48.0W
UK Adapter Information	Adapter for H7058 Adapter model: SOY-72W-480 Input: AC200-240V, 50/60Hz, 1.2A Output: DC 24V/3.0A 72.0W Adapter for H7057 and H8057

	Adapter model: BI48GH-240200-AdB Input: AC 200-240V, 50/60Hz, 0.6A Output: DC 24V/2.0A 48.0W
Modification	Sample No Modification by the test lab

1.3 Test Standard

The report was performed according to following standards:

EN 62479: 2010, Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

BS EN 62479: 2010, Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

EN 50663: 2017, Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)

BS EN 50663: 2017, Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)

1.4 Laboratory Location

World Alliance Testing & Certification (Shenzhen) Co., Ltd

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2 RF Exposure Evaluation

2.1 Standard

According to EN 62479:2010 §4.1:

Compliance of electromagnetic emissions from electronic and electrical equipment with the basic restrictions usually is determined by measurements and, in some cases, calculation of the exposure level. If the electrical power used by or radiated by the equipment is sufficiently low, the electromagnetic fields emitted will be incapable of producing exposures that exceed the basic restrictions. This standard provides simple EMF assessment procedures for this low power equipment.

Any relevant compliance assessment procedure which is consistent with the state of the art, reproducible and gives valid results can be used.

For transmitters intended for use with more than one antenna configuration option, the combination of transmitter and antenna(s) which generates the highest available antenna power and/or average total radiated power shall be assessed.

Four routes, which as described as follows, can be used to demonstrate compliance with this standard:

- 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 2.2.
- 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 2.2.
- 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 2.2.

If none of these routes can be used, then the equipment is deemed to be out of the scope of this standard and EMF assessment for conformity assessment purposes shall be made according to other standards, such as IEC 62311 or other EMF product standards.

According to EN 62479:2010 §4.2:

Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if it can be demonstrated using routes B, C or D that the available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level P_{max} .

Annex A contains example values for P_{max} derived from existing exposure limits listed in the bibliography, such as the ICNIRP guidelines [1], IEEE Std C95.1-1999 [2], and IEEE Std C95.1-2005 [3].

For wireless devices operated close to a person's body with available antenna powers and/or average total radiated powers higher than the P_{max} values given in Annex A, the alternative P_{max} values (called P_{max}'), described in Annex B can also be used.

For low power equipment using pulsed signals, other limits may apply in addition to those considered in Annex A and Annex B. Both ICNIRP guidelines and IEEE standards have specific restrictions on exposures to pulsed fields, and the requirements of those standards with respect to exposure to pulses shall be met. Annex C discusses this topic further.

Table A.1 – Example values of SAR-based P_{\max} for some cases described by ICNIRP, IEEE Std C95.1-1999 and IEEE Std C95.1-2005

Guideline / Standard	SAR limit, SAR_{\max} W/kg	Averaging mass, m g	P_{\max} mW	Exposure tier ^a	Region of body ^a
ICNIRP [1]	2	10	20	General public	Head and trunk
	4	10	40	General public	Limbs
	10	10	100	Occupational	Head and trunk
	20	10	200	Occupational	Limbs
IEEE Std C95.1-1999 [2]	1,6	1	1,6	Uncontrolled environment	Head, trunk, arms, legs
	4	10	40	Uncontrolled environment	Hands, wrists, feet and ankles
	8	1	8	Controlled environment	Head, trunk, arms, legs
	20	10	200	Controlled environment	Hands, wrists, feet and ankles
IEEE Std C95.1-2005 [3]	2	10	20	Action level	Body except extremities and pinnae
	4	10	40	Action level	Extremities and pinnae
	10	10	100	Controlled environment	Body except extremities and pinnae
	20	10	200	Controlled environment	Extremities and pinnae

^a Consult the appropriate standard for more information and definitions of terms.

2.2 Result

Mode	Maximum Tested EIRP ^(note 1) (dBm)	Maximum Tune Up EIRP ^{# (note 2)} (dBm)	Maximum Tune Up EIRP (mW)	Limit (mW)	Result
Bluetooth	-2.08	-2.0	0.63	20	Pass
Wi-Fi	9.58	10	10	20	Pass

Note 1: Data comes from RF test reports 2405U81213EI and 2405U81213EJ.

Note 2: Data provided by the applicant, which not higher than test data 2dB.

Result: Complied

3 E.U.T Photo

Please refer to the attachment 2405U81213E EUT photo.

---End of Report---