

RF EXPOSURE REPORT

FCC ID: 2BCFYHT- HT580

Test Report No.....: RF240130006-01-006

Product(s) Name.....: XGSPON Gateway

Model(s).....: HT-580AXT, HT-580AET

Trade Mark.....: HEIGHTS

Applicant.....: Heights Telecom T LTD

Address.....: Ha-Sakhlav 6, Irus, 7680900, Israel

Receipt Date.....: 2024.02.01

Test Date.....: 2024.02.02~2024.03.26

Issued Date.....: 2024.03.26

Standards.....: FCC Guidelines for Human Exposure IEEE C95.1

FCC Title 47 Part 2.1091

KDB 447498 D01 General RF Exposure Guidance v06

Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
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History of this test report

Original Report Issue Date: 2024.03.26

- ☒ No additional attachment
- ☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1.. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

For 2.4GWiFi

Antenna gain				Antenna Type
Ant1: 3.40dBi	Ant2: 3.70dBi	Ant3: 3.70dBi	Ant4: 3.80dBi	PCB antenna

For 5GWiFi

Antenna gain				Antenna Type
Ant1: 4.30dBi	Ant2: 4.10dBi	Ant3: 4.10dBi	Ant4: 4.30dBi	PCB antenna

For 6EWiFi

Antenna gain				Antenna Type
Ant1: 4.40dBi	Ant2: 4.60dBi	Ant3: 4.90dBi	Ant4: 4.50dBi	PCB antenna

For BLE

Antenna gain				Antenna Type
Ant1: 3.60dBi				PCB antenna

2.. TEST RESULTS

Worst case as below

Operating Mode	Freq.	Maximum conducted output power	Directional Antenna Gain	Calculated maximum EIRP		MPE Limit	MPE Value
	(MHz)	(dBm)	(dBi)	(dBm)	(mW)	(mW/cm ²)	
2.4G Wifi ant1	2412-2462	22.86	3.4	26.26	422.67	1	0.084
2.4G Wifi ant2	2412-2462	23.08	3.7	26.78	476.43	1	0.095
2.4G Wifi ant3	2412-2462	22.97	3.7	26.67	464.52	1	0.092
2.4G Wifi ant4	2412-2462	23.15	3.8	26.95	495.45	1	0.099
5G Wifi ant1	5180-5825	22.63	4.3	26.93	493.17	1	0.098
5G Wifi ant2	5180-5825	22.55	4.1	26.65	462.38	1	0.092
5G Wifi ant3	5180-5825	23.98	4.1	28.08	642.69	1	0.128
5G Wifi ant4	5180-5825	22.59	4.3	26.89	488.65	1	0.097
6E Wifi ant1	5925-7125	16.94	4.4	21.34	136.14	1	0.027
6E Wifi ant2	5925-7125	17.05	4.6	21.65	146.22	1	0.029
6E Wifi ant3	5925-7125	17.14	4.9	22.04	159.96	1	0.032
6E Wifi ant4	5925-7125	16.48	4.5	20.98	125.31	1	0.025
BLE	2402-2480	1.77	3.6	5.37	3.44	1	0.001

Note: 1. The calculated distance is 20 cm.
2. The Wifi function can transmit at the same time with the BLE function

Simultaneous transmitting consideration

The ratio= $\frac{MPE_{2.4G\ Wifi\ ant1}}{limit} + \frac{MPE_{2.4G\ Wifi\ ant2}}{limit} + \frac{MPE_{2.4G\ Wifi\ ant3}}{limit} + \frac{MPE_{2.4G\ Wifi\ ant4}}{limit} + \frac{MPE_{5G\ Wifi\ ant1}}{limit} + \frac{MPE_{5G\ Wifi\ ant2}}{limit} + \frac{MPE_{5G\ Wifi\ ant3}}{limit} + \frac{MPE_{5G\ Wifi\ ant4}}{limit} + \frac{MPE_{6E\ Wifi\ ant1}}{limit} + \frac{MPE_{6E\ Wifi\ ant2}}{limit} + \frac{MPE_{6E\ Wifi\ ant3}}{limit} + \frac{MPE_{6E\ Wifi\ ant4}}{limit} + \frac{MPE_{BLE}}{limit} = 0.084/1 + 0.095/1 + 0.092/1 + 0.099/1 + 0.098/1 + 0.092/1 + 0.128/1 + 0.097/1 + 0.027/1 + 0.029/1 + 0.032/1 + 0.025/1 + 0.001/1 = 0.9 < 1.0$

Result: Complies

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

Shenzhen Haiyun Standard Technology Co., Ltd.

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(END OF REPORT)