FCC RF EXPOSURE REPORT

FCC ID: 2BCFYHT-178AX

Product description	:	Wireless Home Gateway
Model No.	:	HT-178AX
Trade Mark	:	HEIGHTS
Product No.	:	POC230808001-S001
Applicant	:	Heights Telecom T LTD
		Ha-Sakhlav 6, Irus, 7680900, Israel
Receipt date	:	2023.08.08
Test date	:	2023.08.09~2023.09.04
Issued Date	:	2023.09.04
Standard(s)	:	FCC Guidelines for Human Exposure IEEE C95.1
		FCC Title 47 Part 2.1091
		KDB 447498 D01 General RF Exposure Guidance v06

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History of this test report

Original Report Issue Date: 2023.09.04

● No additional attachment

○ Additional attachments were issued following record

Attachment No.	Issue Date	Description

1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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: 3.24dBi	Ant2: 3.27dBi	PCB antenna

For 5GWiFi

Antenna gain				Antenna Type
Ant1: 3.16dBi	Ant2: 3.15dBi	Ant3: 3.24dBi	Ant4: 3.15dBi	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	19.19	3.24	22.43	174.98	1	0.035
2.4G Wifi ant2	2412-2462	19.95	3.27	23.22	209.89	1	0.042
5G Wifi ant1	5180-5825	19.91	3.16	23.07	202.77	1	0.040
5G Wifi ant2	5180-5825	21.59	3.15	24.74	297.85	1	0.059
5G Wifi ant3	5180-5825	22.09	3.24	25.33	341.19	1	0.068
5G Wifi ant4	5180-5825	18.32	3.15	21.47	140.28	1	0.028

Note: 1. The calculated distance is 20 cm.
2. The 2.4G Wifi function can transmit at the same time with the 5G Wifi function

Simultaneous transmitting consideration

The ratio= $MPE_{2.4G\ Wifi\ ant1}$/limit+ $MPE_{2.4G\ Wifi\ ant2}$/limit+$MPE_{5G\ Wifi\ ant1}$/limit+$MPE_{5G\ Wifi\ ant2}$/limit+$MPE_{5G\ Wifi\ ant3}$/limit +$MPE_{5G\ Wifi\ ant4}$/limit
=0.035/1+0.042/1+0.040/1+0.059/1+0.068/1+0.028/1=0.272<1.0

Result: Complies

（END OF REPORT）