RF EXPOSURE EVALUATION REPORT

FCC ID	: 2AEM4-5170111
Equipment	: Wireless Router
Brand Name	: eero
Model Name	: SN10001
Applicant	: eero LLC 660 3rd Street, 4th Floor, San Francisco, CA, USA
Manufacturer	: eero LLC 660 3rd Street, 4th Floor, San Francisco, CA, USA
Standard	: 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA422010	Rev. 01	Initial issue of report	Jun. 18, 2024
FA422010	Rev. 02	Update equipment name	Aug. 22, 2024

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Wireless Router
Brand Name	eero
Model Name	SN10001
FCC ID	2AEM4-5170111
Wireless Technology and Frequency Range	WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz IEEE 802.15.4: 2400 MHz ~ 2483.5 MHz
Mode	WLAN:802.11a/b/g/n/ac/ax/be HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160/EHT20/EHT40/EHT80/EHT160/EHT240 Bluetooth LE IEEE 802.15.4: BPSK
EUT Stage	Identical Prototype

Reviewed by: Jason Wang

Report Producer: Paula Chen

2. Maximum RF average output power among production units

Band	Maximum Average Power (dBm)
WLAN 2.4GHz	25.5
WLAN 5GHz	28
Bluetooth LE	19.5
IEEE 802.15.4	20.5

3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f2)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f2)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

Where:
S = Power Density
P = Output Power at Antenna Terminals
G = Gain of Transmit Antenna (linear gain)
R = Distance from Transmitting Antenna

4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (W)	Average EIRP (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)	Power Density / Limit
WLAN2.4GHz Band	3.14	25.5	28.6	0.73	731.14	0.146	1.000	0.146
WLAN5GHz Band	4.65	28.0	32.7	1.84	1840.77	0.366	1.000	0.366
Bluetooth	1.81	19.5	21.3	0.14	135.21	0.027	1.000	0.027
IEEE 802.15.4	1.81	20.5	22.3	0.17	170.22	0.034	1.000	0.034

4.2. Collocated Power Density Calculation

Maximum WLAN 2.4GHz Power Density / Limit	Maximum WLAN 5GHz Power Density / Limit	Σ(Power Density / Limit) of WLAN 2.4GHz + 5GHz
0.146	0.366	0.512

Maximum WLAN 5GHz Power Density / Limit	Maximum Bluetooth Power Density / Limit	Σ(Power Density / Limit) of WLAN 5GHz + Bluetooth
0.366	0.027	0.393

Maximum WLAN 5GHz Power Density / Limit	Maximum IEEE 802.15.4 Power Density / Limit	Σ(Power Density / Limit) of WLAN 5GHz + IEEE 802.15.4
0.366	0.034	0.400

Note:

1. Σ(Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WLAN 2.4GHz + WLAN 5GHz, WLAN 5GHz + Bluetooth, WLAN 5GHz + IEEE 802.15.4.
2. Considering the WLAN 5GHz collocation with the WLAN2.4GHz, Bluetooth and IEEE 802.15.4 transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant.

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.