

RF Exposure Report (FCC)

Report No.: FCC_RF_SL20010901-HAR-2216_MPE

FCC ID: 2AHPN-BE2845

Model: R1 INT NA

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Applicant: HARMAN INTERNATIONAL

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**FCC Registration /
Designation Number:** 540430 / 4842D



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Release Control Record

Issue No.	Description	Date Issued
FCC_RF_SL20010901-HAR-2216_MPE	Original Release	03/23/2020

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	f/1500	30
1500-100,000	1.0	30

f = Frequency in MHz; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

Where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.
 So, this device is classified as Mobile Device.

2.4 Calculation Result of Maximum Conducted Power

Type	Frequency Band (MHz)	Max Power (dBm)	Max Power (mW)	Turn-Up Tolerance	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
BT-BDR	2402	5.87	3.864	± 1dB	-1.41	20	0.000699	1
2.4GHz WLAN	2462	11.55	14.28	± 1dB	-0.23	20	0.003395	1
5GHz WLAN	5180	8.03	6.35	± 1dB	2.65	20	0.002930	1

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

3 Conclusion

Therefore the maximum calculations of above situations are less than the “1” limit.

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