

## RF Exposure Report

**FCC ID: 2BFMV-P1**

The EUT is a Projector in the 2402-2480MHz、2412-2462MHz and 5180-5240MHz frequency band.

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

### (A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	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

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz

### MPE calculation method

Calculation Method of RF Safety Distance:

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

S: power density mW/ cm<sup>2</sup>;

P: power input to the antenna in mW;

g: numeric gain of antenna;

r: distance to centre of radiation in cm

### Unit dbuv/m@3m to mW calculation method

$$E = \text{EIRP} - 20\log(d) + 104.8$$

E: is the electric field strength in dBuv/m;

EIRP: is the equivalent isotropically radiated power in dBm;

d: is the specified measurement distance in m

## Calculated result

Mode	Max. Peak output power (dBm)	Max. Peak output power (mW)	Antenna Gain (numeric)	Power Density (S) (mW/ cm <sup>2</sup> )	Limit of Power Density (S) (mW/ cm <sup>2</sup> )
BT	-11.28	0.074	1.462	0.000022	1
802.11b	12.45	17.579	1.462	0.005116	1
802.11g	11.80	15.136	1.462	0.004405	1
802.11n20	11.63	14.555	1.462	0.004236	1
802.11n40	11.83	15.241	1.462	0.004435	1
802.11a	10.91	12.331	1.836	0.004506	1
5G Wi-Fi 802.11 n20	10.05	10.116	1.836	0.003697	1
5G Wi-Fi 802.11 n40	8.84	7.656	1.836	0.002798	1
5G Wi-Fi 802.11 ac20	10.14	10.328	1.836	0.003774	1
5G Wi-Fi 802.11 ac40	8.93	7.816	1.836	0.002856	1
5G Wi-Fi 802.11 ac80	9.11	8.147	1.836	0.002977	1

## For BT mode

-- The max. field strength of fundamental frequency is 85.57 dBuV/m.

$EIRP[dBm] = E[dB\mu V/m] - 95.2 = 85.57 - 95.2 = -9.63dBm$ ,

conducted power = EIRP - ANT gain =  $-9.63 - (1.65) = -11.28dBm(0.074mW)$ .

Note1: the antenna gain is 1.65dBi for BT/2.4G WIFI;2.64dBi for 5G WIFI.

Note2: Calculated distance is 20cm, which is declared by the manufacture.