MPE Calculations (Fixed Location)

The device is not a portable device (i.e. intended to be worn on the body or be hand-held), so it is classified as a fixed mounted device. The user's manual specifies a minimum separation distance of at least 22.8cm, consistent with this classification.

FCC part 1.1310, Table 1 limits the power density for uncontrolled exposure. The power density, Pd (mW/cm2) calculated from the maximum EIRP, Pt (mW) and the distance, d (m), between the transmitting antenna and the closest person, can be calculated using:

Formula is:

$$Pd = Pt / (4*pi*d^2)$$

Frequency (MHz)	MPE Limit (mW/cm^2)	Eirp (mW)	Pd at 20cm (mW/cm^2)	Distance where Pd = Limit (cm)
2400 - 2483.5	1	5985.79	1.19	21.8

Band	Mode	Output Power		Antenna gain	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average	(Max)	dBm	W			W	dBm
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	11	1	1.995	33.00
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	11	1	1.995	33.00
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	10	1	1.995	33.00
2400 - 2483.5	CCK	-	-	8.0	-	-	10	1	-	-
						Totals:		4	5.986	37.77

MPE exposure is based on Three 2.4GHz transmitting with one 2.4GHz receiving. Device can be programmed to transmit simultaneously.

Formula is:

$$Pd = Pt / (4*pi*d^2)$$

Frequency (MHz)	MPE Limit (mW/cm^2)	Eirp (mW)	Pd at 20cm (mW/cm^2)	Distance where Pd = Limit (cm)
5725 - 5825	1	6516.67	1.30	22.8

Band	Mode	Output Power		Antenna gain	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average	(Max)	dBm	W			W	dBm
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	10	1	1.995	33.00
2400 - 2483.5	OFDM	-	25.0	8.0	33.0	2.00	10	1	1.995	33.00
2400 - 2483.5	OFDM	-	25.0	8.0	33.0	2.00	10	1	1.995	33.00
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
							Totals:	4	6.517	38.14

MPE exposure is based on Three 2.4GHz transmitting with one 5GHz transmitting. Device can be programmed to transmit simultaneously.

Formula is:

$$Pd = Pt / (4*pi*d^2)$$

Frequency (MHz)	MPE Limit (mW/cm^2)	Eirp (mW)	Pd at 20cm (mW/cm^2)	Distance where Pd = Limit (cm)
2400 - 5825	1	5052.29	1.01	20.1

Band	Mode	Output Power		Antenna gain	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average	(Max)	dBm	W			W	dBm
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	11	1	1.995	33.00
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	11	1	1.995	33.00
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
							Totals:	4	5.052	37.03

MPE exposure is based on two 2.4GHz with two 5GHz transmitter. Device can be programmed to transmitt simultaneously.

Formula is:

$$Pd = Pt / (4*pi*d^2)$$

Frequency (MHz)	MPE Limit (mW/cm^2)	Eirp (mW)	Pd at 20cm (mW/cm^2)	Distance where Pd = Limit (cm)
5725 - 5825	1	3587.92	0.71	16.9

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
2400 - 2483.5	CCK	-	25.0	8.0	33.0	2.00	10	1	1.995	33.00
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
						Totals:		4	3.588	35.55

MPE exposure is based on one 2.4GHz transmitting with three 5GHz transmitting. Device can be programmed to transmit simultaneously.

Formula is:

$$Pd = Pt / (4*pi*d^2)$$

Frequency (MHz)	MPE Limit (mW/cm^2)	Eirp (mW)	Pd at 20cm (mW/cm^2)	Distance where Pd = Limit (cm)
5725 - 5825	1	2123.54	0.42	13.0

Band	Mode	Output Power		Antenna gain (Max)	EIRP		Channels Available	Channels Used	Total EIRP	
		Peak	Average		dBm	W			W	dBm
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
5725 - 5825	OFDM	-	19.3	8.0	27.3	0.53	10	1	0.531	27.25
						Totals:		4	2.124	33.27

MPE exposure is based on Four 5GHz transmitter. Device can be programmed to transmitt simultaneously.