

RADIATION EXPOSURE

The Malibu AirMAX™ System is a Digital Microwave Fixed Link device. It is made up of "Base Station Equipment" (BSE) radios and "Customer Premises Equipment" (CPE) radios. The BSE stations are considered point-to-multipoint systems because they communicate with several different CPE stations on a regular basis. The CPE stations are considered point-to-point because they only communicate back to a particular BSE station. Both BSE and CPE are usually mounted on poles or on a roof and used in fixed application, at least 1 m from any body part of the user or near by persons.

The maximum measured conducted power for the sample tested is 20.2 dBm. With a maximum antenna gain of 14 dBi, the maximum EIRP becomes 34.2 dBm or 2.63 W.

The maximum EIRP specified in the Operational Description is 34.7 dBm, or 2.95 W, for BSE and for CPE units.

To comply with RF Exposure Requirements under the higher of these two EIRP values, the MPE is calculated.

The Power Density can be calculated using the formula

$$S = \text{EIRP} / 4\pi D^2$$

Where: S is Power Density in W/m²
D is the distance from the antenna.

In the table below, the calculated Power Density at different distances and MPE Limit for general population/uncontrolled exposure are presented.

Distance, m	BSE Power Density, W/m ²	CPE Power Density, W/m ²	MPE, W/m ²
0.2	5.87	5.87	10.0
0.4	1.47	1.47	10.0
0.6	0.65	0.65	10.0
0.8	0.37	0.37	10.0
1.0	0.23	0.23	10.0

As can be seen from the data, the MPE is well below the limit at 0.4 m and more.