

RF Exposure

This calculation is based on the highest EIRP possible from the EUT considering maximum power and antenna gain.

The highest output power of the EUT is 251 mW and the gain of the antenna is 0 dBi

1 MINIMUM SEPARATION DISTANCE PER OET 65

The following information provides the minimum separation distance for the EUT, as calculated from **FCC OET 65 Appendix B, Table 1B** "Guidelines for General Population/Uncontrolled Exposure"

Freq. MHz	S	Maximum Peak Antenna		EIRP dBm	EIRP watts	MSD
	GP limit mW/cm ²	RF power dBm	Gain dB			d meters
2450	1	24	0	24	0.2512	0.0447

GP is the limit for general Population/Uncontrolled Exposure
MSD is the minimum Separation Distance

Notes on above table.

(S) GP limit is from OET 65 table 1B

EIRP = Power in dBm + Antenna Gain in dBi

MSD (Minimum Separation Distance) = $((\text{EIRP} \times 30) / 3770 \times \text{S})^{0.5}$

NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less

2 RF EVALUATION FOR RSS-102E

Since EUT is not handheld and the e.i.r.p. of the Product is 251 mW Peak it is exempt from routine SAR and RF exposure evaluations in accordance to Sections 2.5.1 or 2.5.2 of RSS-102e.

The following information provides the calculation for section 4.2 of RSS-102e for the General Public.

Freq. MHz	Peak RF	Antenna	Effective		Seperation Distance meters	RF field from EUT V/m	Exposure
	Power dBm	Gain dB	RF power dBm	mW			GP limit V/m rms
2450	24	0	24	251.19	0.200	13.7	61.4

GP is the limit for general Public

Note on above table.

ERP = $(\text{V/m} \times \text{dist})^{2/30}$