

MPE Limit Calculation: EUT's operating frequencies in Part 90 band @ 860 MHz;
highest conducted power = 12.33 *dBm* therefore, **Limit for Uncontrolled Exposure:**
0.573 mW/cm²

EUT maximum antenna gain = 3 *dBi*.

Equation from page 18 of OET 65, Edition 97-01

$$S = PG / 4\pi R^2 \quad \text{or} \quad R = \sqrt{PG / 4\pi S}$$

where, R = Distance (20 cm)

P = Power Input to antenna (17.11 mW)

G = Antenna Gain (2 numeric)

$$S = (17.11 \times 2) / (4 \times \pi \times 400)$$

$$S = 0.006808 \text{ mW/cm}^2$$

MPE Limit Calculation: EUT's operating frequencies in Part 22 band @ 881.6 MHz;
highest conducted power = 21.80 *dBm* therefore, **Limit for Uncontrolled Exposure:**
0.588 mW/cm²

EUT maximum antenna gain = 3 *dBi*.

Equation from page 18 of OET 65, Edition 97-01

$$S = PG / 4\pi R^2 \quad \text{or} \quad R = \sqrt{PG / 4\pi S}$$

where, R = Distance (20 cm)
P = Power Input to antenna (152 mW)
G = Antenna Gain (2 numeric)

$$S = (152 \times 2) / (4 \times \pi \times 400)$$
$$S = 0.06048 \text{ mW/cm}^2$$

MPE Limit Calculation: EUT's operating frequencies in Part 24 band @ 1960 MHz;
highest conducted power = 21.94 *dBm* therefore, **Limit for Uncontrolled Exposure: 1 mW/cm²**

EUT maximum antenna gain = 4 *dBi*.

Equation from page 18 of OET 65, Edition 97-01

$$S = PG / 4\pi R^2 \quad \text{or} \quad R = \sqrt{PG / 4\pi S}$$

where, R = Distance (20 cm)

P = Power Input to antenna (156.5 mW)

G = Antenna Gain (2.52 numeric)

$$S = (156.5 * 2.52) / (4 * \pi * 400)$$

$$S = 0.07846 \text{ mW/cm}^2$$

(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 ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f ²)*	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 ²)	Averaging Time E ² , H ² or S (minutes)
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