Part 22 BC0

Prediction of MPE limit at a given distance

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

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

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at the antenna terminal:	<u>8.04</u> (dBm)
Maximum peak output power at the antenna terminal:	6.367955209 (mW)
Antenna gain(typical):	<u> </u>
Maximum antenna gain:	<u> </u>
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	<u>879.6</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.586400 (mW/cm^2)

Power density at prediction frequency: 0.001267 (mW/cm^2)

Part 24 BC1

Prediction of MPE limit at a given distance

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

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

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at the antenna terminal:	<u>17.00</u> (dBm)
Maximum peak output power at the antenna terminal:	50.11872336 (mW)
Antenna gain(typical):	<u> </u>
Maximum antenna gain:	<u> </u>
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	<u>1931.25</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000000 (mW/cm^2)

Power density at prediction frequency: 0.009971 (mW/cm^2)

Part 24 One-X

Prediction of MPE limit at a given distance

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

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

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at the antenna terminal:	<u>14.00</u> (dBm)
Maximum peak output power at the antenna terminal:	25.11886432 (mW)
Antenna gain(typical):	<u> </u>
Maximum antenna gain:	1 (numeric)
Prediction distance:	<u> 20</u> (cm)
Prediction frequency:	<u>1956.25</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm^2)

Power density at prediction frequency: 0.004997 (mW/cm^2)

Part 24 EVD0 Prediction of MPE limit at a given distance

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

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

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at the antenna terminal:	<u>22.70</u> (dBm)
Maximum peak output power at the antenna terminal:	<u>186.2087137</u> (mW)
Antenna gain(typical):	<u> </u>
Maximum antenna gain:	1 (numeric)
Prediction distance:	<u> 20 (</u> cm)
Prediction frequency:	<u>1988.7</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000000 (mW/cm^2)

Power density at prediction frequency: 0.037045 (mW/cm^2)

Part 90 BC10 Prediction of MPE limit at a given distance

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

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

where: S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Maximum peak output power at the antenna terminal:	7.54 (dBm)
Maximum peak output power at the antenna terminal:	5.675446054 (mW)
Antenna gain(typical):	<u>0</u> (dBi)
Maximum antenna gain:	1 (numeric)
Prediction distance:	<u>20</u> (cm)
Prediction frequency:	<u>867.9</u> (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.578600 (mW/cm^2)

Power density at prediction frequency: 0.001129 (mW/cm^2)

[Pd(1) / LPd(1)] + [Pd(2) / LPd(2)] + + [Pd(n) / LPd(n)] < 1,

then device complies with FCC's RF radiation exposure limit for general population for a mobile device.

Where;

Pd(n) = Power density of nth transmitter at 20cmLPd(n) = Power density limit for the nth transmitter

The highest gain values were used for antenna gain.

Radio Type	Power Density (mW/cm ²)	Limit (mW/cm²)	
Part 22 (BC0)	0.00126700	0.58640000	
Part 24 (one- x)	0.00499700	1.00000000	
Part 24 (EVDO)	0.03704500	1.00000000	
Part 24 (BC1)	0.00997100	1.00000000	
Part 90 (BC10)	0.00112900	0.57860000	
FINAL	COMBINED MPE	0.0561249 <1	PASS