Global EMC Scott Dry

Prediction of MPE limit at a given distance

Exposure imit according to FCC CFR 47part 1, §1.1307, §1.1310 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 radia

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:23.70 (dBm)Maximum peak output power at antenna input terminal:234.4228815 (mW)Antenna gain(typical):-5.6 (dBi)Maximum antenna gain:0.27542287 (numeric)Time Averaging:100 (%)Prediction distance:20 (cm)Prediction frequency:180 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: ______ (mW/cm^2)

Power density at prediction frequency: 0.012845 (mW/cm^2)

Margin of compliance: -11.9 (dB)

This equates to 0.128448828 W/m^2 PASS

For information This equates to 6.958822314 V/m

Global EMC Scott Dry

Prediction of MPE limit at a given distance

Exposure imit according to FCC CFR 47part 1, §1.1307, §1.1310 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 radia

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: 24.90 (dBm)

Maximum peak output power at antenna input terminal: 309.0295433 (mW)

Antenna gain(typical): -1.3 (dBi)

Maximum antenna gain: 0.741310241 (numeric)

Time Averaging: 100 (%)
Prediction distance: 20 (cm)

Prediction frequency: 566 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.366666667 (mW/cm^2)

Power density at prediction frequency: 0.045575 (mW/cm^2)

Margin of compliance: -9.1 (dB)

This equates to 0.455753639 W/m^2 PASS

For information This equates to 13.10797932 V/m

Global EMC Scott Dry

Prediction of MPE limit at a given distance

Exposure imit according to FCC CFR 47part 1, §1.1307, §1.1310 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 radia

R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal: 18.10 (dBm)

Maximum peak output power at antenna input terminal: 64.5654229 (mW)

Antenna gain(typical): 4.2 (dBi)

Maximum antenna gain: 2.630267992 (numeric)

Time Averaging: 100 (%)
Prediction distance: 20 (cm)

Prediction frequency: 686 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 0.433333333 (mW/cm^2)

Power density at prediction frequency: 0.033785 (mW/cm^2)

Margin of compliance: -11.1 (dB)

This equates to 0.33785484 W/m^2 PASS

For information This equates to 11.2858883 V/m