MPE CALCULATION

For Qualcomm Incorporated – Trailer Tracking Device
FCC ID: J9CTT210Q1WW2

RF Exposure Requirements:	47 CFR §1.1307(b)
RF Radiation Exposure Limits:	47 CFR §1.1310
RF Radiation Exposure Guidelines:	FCC OST/OET Bulletin Number 65
EUT Frequency Band:	300 ~ 1500 MHz, 1500 ~100,000MHz
Limits for General Population/Uncontrolled Exposure in the band of:	30MHz – 300MHz
Power Density Limit:	0.2 mW/ cm^2

Equation: $S = PG / 4\pi R^2$ or $R = \sqrt{PG / 4\pi S}$

Where, S = Power Density

P = Power Input to Antenna

G = Antenna Gain

R = distance to the center of radiated antenna

Cellular

ERP Power = 2356.55mW, MPE limit = 0.566mW/cm^2

By using equation $R = \sqrt{PG / 4\pi S}$

R= 20cm

Result

The Above Result had shown that the minimum separation distance in order to meet MPE requirement is 0.468mW/cm^2.

PCS

EIRP Power = 1258.930mW, MPE limit = 1mW/cm^2

By using equation $R = \sqrt{PG / 4\pi S}$

R= 20cm

Result

The Above Result had shown that the minimum separation distance in order to meet MPE requirement is 0.250mW/cm^2.

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