MPE CALCULATION

For Solectek Corp– Outdoor Broadband Wireless Radio, Model: SkyWay Xl49

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:	4945MHz ~4985MHzMHz
Limits for General Population/Uncontrolled Exposure in the band of:	1500MHz – 100000MHz
Power Density Limit:	1 mW/ cm^2;

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

$\quad$ Where, $\quad$ S = Power Density

$\qquad\qquad\quad$ P = Power Input to Antenna

$\qquad\qquad\quad$ G = Antenna Gain

$\qquad\qquad\quad$ R = distance to the center of radiated antenna

Power = 19.97dBm, Typical Antenna Gain = 29dBi, MPE limit= 1mW/cm^2

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

R= 79.22cm

Result

The Above Result had shown that the minimum separation distance in order to meet MPE requirement is 80cm.

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