

RFR ATTACHMENT

RADIATION HAZARD FORMULA
W274AO
SCRANTON, PA

This proposal has been evaluated with respect to the RF radiation exposure guidelines contained in OET Bulletin 65.

For the FM band, the power density may be computed from the formula:

$$S = \frac{(33.4)(F)(F)(P)}{(R)(R)}$$

where: S = Power Density

P = Total power in watts (Horizontal + Vertical)

R = Height of center of radiation in meters above ground minus 2

F = Relative field factor in the downward direction of interest (-60 to -90 degrees elevation) as supplied by the antenna manufacturer.

The antenna model is: Scala CA-2V

In this case P = 250 and R = 84

and F = 0.35 FCC General Population/

Uncontrolled Exposure limits permit up to 0.2 mW/sq cm exposure

at this frequency. Therefore at ground level, S = 0.000145

mW/sq m, or: 0.07% of the allowable.

It is evident that no practical hazard should exist.