2 Test and Measurements (Cont'd)

2.19 Maximum Public Exposure to RF (MPE) CFR 15.247 (i)

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm^2 at a distance, d, of 20 cm from the EUT.

Therefore, for :

Peak Power (Watts) = 0.15849 (from Table 5, herein)
Gain of Transmit Antenna = 2.2 dB_i = 1.66, numeric (from Table 3, herein)
d = Distance = 20 cm = 0.2 m

S = $(PG/ 4\pi d^2)$ = EIRP/4A = 0.15849(1.66)/4*Pi*0.2*0.2
=0.263/0.503 = 0.523 w/m^2
= (0.523W/m^2)(1m^2/W)(0.1 mW/cm^2)
= 0.0523 mW/cm^2

which is << less than 1 mW/cm^2