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:

Highest Gain Dipole Antenna= 2.15 dBi

Peak Power (Watts) = 0.0589 (from Table 16 of Test Report)
Gain of Transmit Antenna = 2.15 dB_i = 1.641, numeric (from Table 4 of Test Report)
d = Distance = 20 cm = 0.2 m

S = (PG/ $4\pi d^2$) = EIRP/4A = 0.0589 (1.641)/4*π*0.2*0.2
= 0.0967/0.503 = 0.1922 W/m^2
= (W/m^2) (1m^2/W) (0.1 mW/cm^2)
= 0.01922 mW/cm^2

which is << less than 1.0 mW/cm^2

Highest Gain Chip Antenna= 1.85 dBi

Peak Power (Watts) = 0.0589 (from Table 16 of Test Report)
Gain of Transmit Antenna = 1.85 dB_i = 1.531, numeric (from Table 4 of Test Report)
d = Distance = 20 cm = 0.2 m

S = (PG/ $4\pi d^2$) = EIRP/4A = 0.0589 (1.531)/4*π*0.2*0.2
= 0.0902/0.503 = 0.1793 W/m^2
= (W/m^2) (1m^2/W) (0.1 mW/cm^2)
= 0.01793 mW/cm^2

which is << less than 1.0 mW/cm^2

Highest Gain Trace Antenna= 0 dBi

Peak Power (Watts) = 0.0589 (from Table 16 of Test Report)
Gain of Transmit Antenna = 0 dB_i = 1.0, numeric (from Table 4 of Test Report)
d = Distance = 20 cm = 0.2 m

S = (PG/ $4\pi d^2$) = EIRP/4A = 0.0589 (1)/4*π*0.2*0.2
= 0.0589/0.503 = 0.1171 W/m^2
= (W/m^2) (1m^2/W) (0.1 mW/cm^2)
= 0.01171 mW/cm^2

which is << less than 1.0 mW/cm^2