Maximum Permissible Exposure Evaluation

The RF exposure calculation for the following FCC Certified module/device:
   1. FCC ID: SM6-MINODE-WATER, Mueller Technologies MINODE Transmitter Module

Based on the FCC OET Bulletin 65, Edition 97-01, the following formula is used to calculate RF exposure at a distance of 20cm from the transmitting antenna:

$$S = PG/4\pi R^2$$

Where:
S = Power Density (mW/cm^2)
P = Power output to the antenna
G = Antenna Numeric Gain
R = Distance from the transmitting antenna (cm)

Note: The RF transmit power used is from the original test reports submitted to the FCC for certification.

One Transmitter

Frequency	902.5	MHz
Limit	0.602	mW/cm^2
Distance (cm), R =	20	cm
Power (dBm), P =	28.9	dBm
TX Ant Gain (dBi), G =	0	dB
Power Density:	0.15	mW/cm^2 **Separation<20 cm**
Minimum Distance:	**10.1**	cm

Conclusion: The unit complies at the 20cm distance. The minimum MPE distance is 10.1cm for this unit. This unit will be a fixed device.

dBi = 10 $_{\log 10}$(**G**)