

US Tech
Test Report:
Date:
Model(s):
FCC ID:
Customer:

FCC Part 15.249
13-0310
January 29, 2013
BM-1
2AA65-BM1
D5W, Inc.

Maximum Public Exposure to RF (MPE)

The maximum exposure levels to the public from the RF power of the EUT shall not exceed a power density, S, of 1mW/cm² at a distance, d, of 2.5 cm from the EUT.

Therefore, for:

Highest Gain Antenna (Inverted F)= 3.3 dBi

Peak Power (Watts) = 0.001 (Manufacture's claimed highest output power)
Gain of Transmit Antenna = 3.3 dBi = 2.14, numeric (from Table 3 of Test Report)
d = Distance = 2.5 cm = 0.025 m

$$\begin{aligned} S &= (PG / 4d^2) = EIRP / 4A = 0.001(2.14) / 4 * \pi * 0.025^2 \\ &= 0.00214 / 0.0079 = 0.2709 \text{ W/m}^2 \\ &= (W/m^2) (1m^2/W) (0.1 \text{ mW/cm}^2) \\ &= 0.02709 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 1.0 mW/cm²