

US Tech Test Report:
Report Number:
Customer:
FCC ID:
IC:
Issue Date:
Model:

FCC Part 15.247/ RSS 210
14-0123
Paksense
WPEPSASII-01
8031A-PSASII01
September 8, 2014
PSASII-01

Maximum Public Exposure to RF (MPE)

The maximum exposure level to the public from the RF power of the EUT shall not exceed a power density, **S**, of 1 mW/cm² at a distance, d, of 20 cm from the EUT.

Therefore, for:

Measured maximum output power: + 3.5 dBm
Highest Gain Antenna (Dipole antenna) = 2.0 dBi

Peak Power (Watts) = 0.002 (Manufacture's claimed highest output power)
Gain of Transmit Antenna = 2.0 dBi = 1.585, numeric (from Table 4 of Test Report)
d = Distance = 20 cm = 0.2 m

$$\begin{aligned} S &= (PG/ 4\pi d^2) = EIRP/4A = (0.002*1.585)/4*\pi*0.2*0.2 \\ &= 0.00317/0.5027 = 6.3065 \text{ W/m}^2 \\ &= (\text{W/m}^2) (1\text{m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.63065 \text{ mW/cm}^2 \end{aligned}$$

which is < less than 1.0 mW/cm²