

1.1 Test Procedure

An MPE evaluation for was performed in order to show that the device was compliant with §2.1091. The maximum power density was calculated for each transmitter at a separation distance of 20cm.

$$S = \frac{PG}{4\pi R^2} \quad (3)$$

where: S = power density (in appropriate units, e.g. mW/cm²)
P = power input to the antenna (in appropriate units, e.g., mW)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

or:

$$S = \frac{EIRP}{4\pi R^2} \quad (4)$$

where: EIRP = equivalent (or effective) isotropically radiated power

Client specified safe distance of 3 m or 300 cm.

1.2 Results:

- EIRP = 37.51 dBm or 5.636W=5626mW

Power Density = 5626 / 1130500

Power Density = 0.004977 mW/cm²

Limit at 80.6496GHz = 1mW/cm²

The calculated maximum power density at 3m distance is less than the limit for general population / uncontrolled exposure.

Test Personnel: Vathana Ven 
Supervising/Reviewing Engineer:
(Where Applicable) N/A
Product Standard: CFR47 FCC Part 95, Subpart M
Input Voltage: 120VAC 60Hz
Pretest Verification w/ Ambient Signals or BB Source: N/A

Test Date: 09/17/2020

Limit Applied: See report section 6.3

Ambient Temperature: 21 °C

Relative Humidity: 46 %

Atmospheric Pressure: 1007 mbars

Deviations, Additions, or Exclusions: None