

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

FCC Part 15 Certification/ RSS 247  
2ANDP-CW24-012  
23069-CW24012  
17-0343  
November 4, 2017  
Centero LLC  
CW24-012

## **Maximum Public Exposure to RF (MPE) CFR 15.247 (i), CFR 1.1310 (e) & RSS-102, 2.5.2**

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<sup>2</sup> at a distance, d, of 20 cm from the EUT.

Therefore, for:

Peak Power (dBm) = 14.36 dBm  
Peak Power (Watts) = 0.027 W  
Gain of Transmit Antenna = 2.0 dBi = 1.58, numeric  
d = Distance = 20 cm = 0.2 m

$$\begin{aligned} S &= (PG / 4\pi d^2) = \text{EIRP} / 4A = 0.027(1.58) / 4 * \pi * 0.2^2 \\ &= 0.0427 / 0.5030 = 0.0848 \text{ W/m}^2 \\ &= (0.0848 \text{ W/m}^2) (1 \text{ m}^2/\text{W}) (0.1 \text{ mW/cm}^2) \\ &= 0.00848 \text{ mW/cm}^2 \end{aligned}$$

which is << less than 1 mW/cm<sup>2</sup>

RSS-102, 2.5.2 Compliance for 2.4 GHz WiFi:

At or above 300 MHz and below 6 GHz and the source based time averaged maximum e.i.r.p. of the device is equal to or less than  $1.31 \times 10^{-2} f^{0.6834}$  in Watts (adjusted for tune-up tolerance where applicable), where f = frequency in MHz.

$$1.31 * 10^{-2} * 2440^{0.6834} = 2.7 \text{ W}$$

EUT max EIRP = 14.36 dBm + 2.0 dBi = 16.36 dBm = 0.043 Watts << 2.7 Watts