

REGULATORY COMPLIANCE REPORT

TITLE: FCC & IC RF Exposure Report
Zigbee® Digital Transmission Device (DTS), 2.405 – 2.475 GHz

(product model: 2.4ZRB Gas Range Extender, Itron part numbers: OWR-1001-001)

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REV	CCO	DESCRIPTION OF CHANGE	DATE	APPROVALS	
1				Engineering	Douglas Knoll
				Regulatory	Jay Holcomb

REVISION HISTORY

				Engineering	
				Regulatory	
				Engineering	
				Regulatory	
				Engineering	
				Regulatory	

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1.1310 & 2.1091 / RSS-102

Maximum Permissible Exposure (MPE)

Determine the maximum power density for the general / uncontrolled population minimum separation distance of 20 cm.

FCC Limit: $f > 1500 \text{ MHz} = 1\text{mW/cm}^2$;

IC Limit: $f=1500 \text{ to } 15000 \text{ MHz} = 10\text{W/m}^2$

The power density is calculated as:

$$P_d = \frac{P_t \times G}{4 \times \pi \times r^2}$$

P_d = power density in milliwatts/cm²

P_t = transmit power in milliwatts

G = numeric antenna gain

r = distance between body and transmitter in centimeters.

Other Technical Information:

Antenna Type: Omni

Antenna Gain: 1 (0dBi)

Transmitter Power (Conducted): 43mW

Frequency: 2440 MHz

results: $P_D = (43 \times 1) / (4 \times \pi \times 20\text{cm}^2) =$

0.00855mW/cm² @ 20cm

0.0855W/m² @ 0.2M