



Company:
Model Tested:
Certification Exhibit:

RF Technologies
0800-0551
RF Exposure

166 South Carter, Genoa City, WI 53128

FCC Code of Federal Regulations 47 Part 1.1307(b) (1)

RF Exposure Statement of Compliance

THE FOLLOWING **MEETS** THE ABOVE TEST SPECIFICATION

Formal Name:	Quick Response Premiere Router/Gateway Zigbee Transceiver
Kind of Equipment:	802.15.4 Wireless Module
Frequency Range:	2405-2475 MHz
Test Configuration:	9-15V AC or DC powered transceiver module
Model Number(s):	0800-0550 Internal Antenna 0800-0551 External High Gain Antenna
Model(s) Tested:	0800-0551 External High Gain Antenna
Serial Number(s):	DUT 6
Date of Tests:	August 13, 2015 through August 27, 2015
Test Conducted For:	RF Technologies 3125 N 126 th St. Brookfield, WI. 53005



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Transmitter Information:

Maximum Conducted Output Power:	9.45 dBm (8.81mW)
Maximum Effective Isotropic Radiated Power	11.65 dBm
Frequency:	2405 MHz
Antenna Type:	External High Gain
Antenna Gain:	2.2 dBi

Exposure Limit:

Maximum Permissible Exposure (MPE) limit for General Population / Uncontrolled Exposure in the frequency range 1500 – 100,000 MHz (ref: 47 CFR Part 1.1310 Table 1(b))

Limit: (S) (mW/cm²) = 1.0 mW/cm²

MPE Calculation:

Power Density (mW/cm²):

$$S = \frac{PG}{4\pi R^2}$$

S = Power Density (mW/cm²)

P = Power Input to the antenna (mW)

G = Numeric Power Gain of the antenna

R = Distance to the center of the radiation of the antenna (cm)



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Results:

RF Exposure Calculation								
	Input							
Frequency =	2405	MHz						
P =	9.45	dBm						
G =	2.2	dBi						
R =	20	cm						
π	3.14159							
Transmit Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain	Distance (cm)	Power Density (mW/cm ²)	Power Density Limit (mW/cm ²)	Margin
2405	9.45	8.81049	2.2	1.65959	20	0.0029	1.0	0.997

Summary of Results:

With a minimum separation distance of 20 centimeters as defined by FCC 2.1091(b), for a mobile device, the RF Technologies Quick Response Router/Gateway Zigbee Module **meets** the RF exposure evaluation requirements for maximum permissible exposure to any radiating structure and the general population / uncontrolled exposure.

Conclusion:

The RF Technologies Quick Response Router/Gateway Zigbee Module operating under FCC part 15.247 complies with the requirements of FCC Part 1.1307(b)(1) for RF Exposure Evaluation.

Supporting data to follow...



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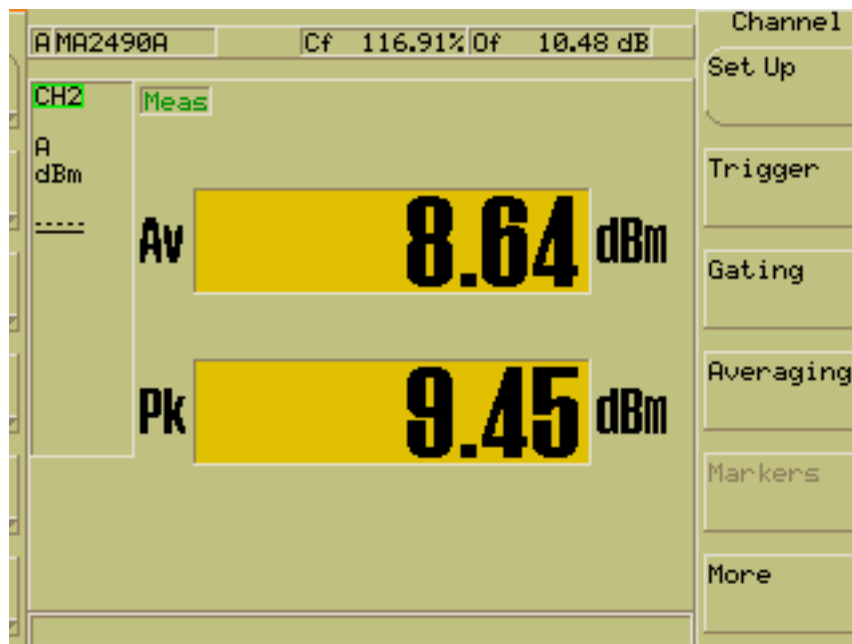
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Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Output - Conducted – 15.247 (b)(3)
Operator: Paul L

Comment: Low Channel – Ch.11 2.405 GHz

Peak Output Power = 9.45 dBm = 8.81mW





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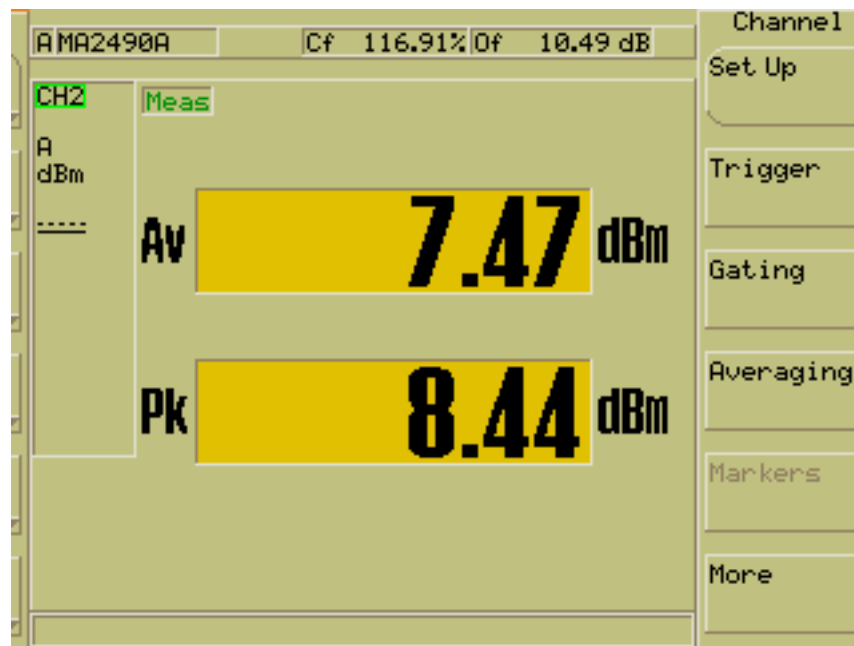
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Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Output - Conducted – 15.247 (b)(3)
Operator: Paul L

Comment: Mid Channel – Ch.18 2.440 GHz

Peak Output Power = 8.44dBm = 6.982mW





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Test Date: 08-19-2015
Company: RFT Technologies
EUT: Quick Response Premier Router/Gateway
Test: Peak Power Output - Conducted – 15.247 (b)(3)
Operator: Paul L

Comment: High Channel – Ch. 25 2.475 GHz

Peak Output Power = 7.44 dBm = 5.546mW

