

166 South Carter, Genoa City, WI 53128

Company: Whirlpool Corporation

Model Tested: XPWG3 DLS Project: 7037

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: Wifi Gen3

Kind of Equipment: 802.11b/g/n Wi-Fi appliance module

Frequency Range: 2412-2462 MHz

Test Configuration: DC powered transceiver module

Model Number(s): XPWG3

Model(s) Tested: XPWG3

Serial Number(s): RF Conducted SN: GW95013003GG

Radiated SN: GW95013003IC

Date of Tests: February 27th through March 19th, 2015

Test Conducted For: Whirlpool Corporation

750 Monte Rd

Benton Harbor, MI 49022, USA



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Transmitter Information:

Maximum Conducted Output Power: 25.08 dBm

Maximum Effective Isotropic Radiated Power 26.84 dBm

Frequency: 2412 MHz

Antenna Type: PCB slot antenna

Antenna Gain: 1.76 dBi

Exposure Limit:

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

Limit: (S) $(mW/cm^2) = 1.0 \text{ mW/cm}^2$

MPE Calculation:

Power Density (mW/cm²):

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

 $S = Power Density (mW/cm^2)$

 $P = Power \ Input \ to \ the \ antenna \ (mW)$

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 =	2412	MHz						
P =	26.84	dBm						
G =	1.76	dBi						
R =	20	cm						
π	3.14159							
Transmit Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (numeric)	Distance (cm)	Power Density (mW/cm²)	Power Density Limit (mW/cm²)	Margin
2412	26.84	483.05880	1.76	1.49968	20	0.1441	1.0	0.856

Summary of Results:

With a minimum separation distance of 20 centimeters as defined by FCC 2.1091(b), for a mobile device, the Whirlpool Inc. Wifi Gen3 model XPWG3 **meets** the RF exposure evaluation requirements for maximum permissible exposure to any radiating structure and the general population / uncontrolled exposure.

Conclusion:

The Whirlpool Inc Wifi Gen3 model XPWG3 operating under FCC part 15.247 complies with the requirements of FCC Part 1.1307(b)(1) for RF Exposure Evaluation.