



**BUREAU
VERITAS**

Test Report No.: FS141216N012



RF EXPOSURE REPORT

Applicant	NETGEAR, Inc.
Address	350 East Plumeria Drive San Jose, CA 95134

Manufacturer or Supplier	NETGEAR, Inc.
Address	350 East Plumeria Drive San Jose, CA 95134
Product	ADSL2+ Modem Router
Brand Name	NETGEAR
Model	D2200D-1FRNAS
Additional Model & Model Difference	N/A
Date of tests	Dec. 17, 2014 ~ Mar. 19, 2015

- FCC Part 2 (Section 2.1091)
- KDB 447498 D03
- IEEE C95.1

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Yuqiang Yin Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
	
	Date: Mar. 20, 2015

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS141216N012	Original release	Mar. 20, 2015

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1. CERTIFICATION

FCC ID: PY314400297
PRODUCT: ADSL2+ Modem Router
BRAND NAME: NETGEAR
MODEL NO.: D2200D-1FRNAS
TEST SAMPLE: Engineering Sample
APPLICANT: NETGEAR, Inc.
TESTED DATE: Mar. 19, 2015
STANDARDS: FCC Part 2 (Section 2.1091)
KDB 447498 D03
IEEE C95.1

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2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Total Gain (dBi)	Antenna Type
Chain 0	1.5	4.51	PCB Antenna
Chain 1	1.5		PCB Antenna

Note: Total Gain=1.5+10log(N=2)=1.5+3.01=4.51dBi

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	402.717	4.51	20	0.226	1.00

Conclusion

Therefore device complies with FCC's RF radiation exposure limits for general population in mobile exposure category (distance > 20cm)

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