

FCC RF Exposure Report

FCC ID : PY313200235
Equipment : LG6100D Brooklyn Bridge LTE Router
Model No. : LG6100D
Brand Name : NETGEAR
Applicant : NETGEAR, Inc.
Address : 350 East Plumeria Drive, San Jose, California
95134, USA
Standard : 47 CFR FCC Part 2.1091
Received Date : Oct. 11, 2013
Tested Date : Oct. 11 ~ Nov. 01, 2013

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:



Gary Chang / Manager



Testing Laboratory
2732

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Release Record

Report No.	Version	Description	Issued Date
FA3O2308	Rev. 01	Initial issue	Nov. 08, 2013

1 MPE EVALUATION OF MOBILE DEVICES

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

1.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm ²)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

1.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * Pi * R^2}$$

Where

Pd= Power density in mW/cm²

Pt= EIRP in Mw

Pi= 3.1416

R= Measurement distance

1.3 MPE EVALUATION RESULTS

MPE Evaluation of Single Transmission

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412~2462	26.26	2.4	20	0.146	1
5180~5240	16.57	2.9	20	0.018	1
5745~5825	23.76	3	20	0.094	1

MPE Evaluation of Simultaneous Transmission

The device contains a certified module (FCC ID: PY3NM7371), MPE of this module is as below table

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
814~824	24.92	7.9	20	0.381	0.543
824~849	24.83	7.9	20	0.373	0.549
1850~1910	24.76	8	20	0.376	1
2500~2690	23.49	9.5	20	0.396	1

2.4, 5GHz and WWAN function can transmit at the same time, MPE evaluation is as below formula

$PD1 / \text{Limit}1 + PD2 / \text{Limit} 2 + \dots < 1$, PD = Power density

Configuration1 = 2.4GHz + 5GHz + WWAN 814~824 MHz = 0.941 < 1

Configuration2 = 2.4GHz + 5GHz + WWAN 824~849 MHz = 0.919 < 1

Configuration3 = 2.4GHz + 5GHz + WWAN 1850~1910 MHz = 0.616 < 1

Configuration4 = 2.4GHz + 5GHz + WWAN 2500~2690 MHz = 0.636 < 1

Conclusion

MPE evaluations of single and simultaneous transmission meet the requirement of standard.

2 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

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