

FCC RF Exposure Report

FCC ID : NKRDNXA-GO1
Equipment : 802.11 b/g/n 3*3 PCIe module
Model No. : DNXA-GO1
Brand Name : WNC
Applicant : Wistron NeWeb Corporation
Address : 20 Park Avenue II, Hsinchu Science Park,
Hsinchu 308, Taiwan, R.O.C.
Standard : 47 CFR FCC Part 2.1091
Received Date : Feb. 11, 2014
Tested Date : May 06, 2014

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



Table of Contents

1	MPE EVALUATION OF MOBILE DEVICES	4
1.1	LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE.....	4
1.2	MPE EVALUATION FORMULA	4
1.3	MPE EVALUATION RESULTS	5
2	TEST LABORATORY INFORMATION	6

Release Record

Report No.	Version	Description	Issued Date
FA421101-01	Rev. 01	Initial issue	Jun. 06, 2014

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

The EUT will be installed in below host

Brand Name	Model Name	Product Name	Antenna type	Ant. No.	Antenna Gain (dBi)		
					2400~2483.5 (MHz)	5150~5250 (MHz)	5725~5850 (MHz)
Google	GFRG210	Platform	Printed	1 for 2.4G	2.19	-	-
				2 for 2.4G	3.33	-	-
				3 for 2.4G	4.21	-	-
				1 for 5G	-	3.88	4.20
				2 for 5G	-	2.62	4.02
				3 for 5G	-	4.16	3.43

Note: Above host contain EUT (FCC ID: NKRDNXA-GO1) and FCC ID: U2M-PCE4553AH

MPE Evaluation of Single Transmission

Evaluation result of FCC ID: NKRDNXA-GO1

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412~2462	28.44	4.21	20	0.366	1

Evaluation result of FCC ID: U2M-PCE4553AH

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
5180~5240	16.53	4.1618	20	0.023	1
5745~5825	26.88	4.2025	20	0.255	1

MPE Evaluation of Simultaneous Transmission

Both of the WLAN 2.4G & 5.0G can transmit simultaneously, the formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 +etc. < 1

CPD = Calculation power density

LPD = Limit of power density

MPE Evaluation = Maximum MPE of 2.4GHz + Maximum MPE of 5 GHz = 0.366 / 1 + 0.255 / 1 = 0.621

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>.

Linkou

Tel: 886-2-2601-1640

No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please free to contact us as below information

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==