RF Exposure Evaluation Declaration

FCC ID:	CFS8DLWLE200N2
APPLICANT:	Honeywell International Inc.
Application Type:	Certification
Product:	WIRELESS-BGN 2X2 NETWORK MINI PCIE ADAPTER
Model No.:	WLE200N2
Brand Name:	Honeywell
FCC Classification:	Digital Transmission System (DTS)
Test Date:	February 07 ~ 17, 2014

Reviewed By : Robin Wu
(Robin Wu)

Approved By : Marlin Chen
(Marlin Chen)

The test results relate only to the samples tested.
The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.
The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date
1405RSU01002	Rev. 01	Initial report	05-19-2014

1. RF Exposure Evaluation

1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b) 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)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $P_d = (P_{out}*G)/(4*pi*r^2)$

Where
P_d = power density in mW/cm^2
P_{out} = 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 (The minimum distance is 20cm)

P_d is the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

1.2. Test Result of RF Exposure Evaluation

Product	WIRELESS-BGN 2X2 NETWORK MINI PCIE ADAPTER
Test Item	RF Exposure Evaluation

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 4.5dBi for 2.4GHz in logarithm scale.

Output Average Power into Antenna:

Test Mode	Frequency Range (MHz)	Maximum Average Output Power (dBm)	Power Density at r = 20 cm (mW/cm^2)	Limit of Power Density $S(mW/cm^2)$
802.11b/g/n-HT20	2412~2462	20.35	0.061	1
802.11n-HT40	2422~2452	20.42	0.062	1

Note: Antenna to user separation ≥ 20cm

The End