RF Exposure Evaluation declaration

Product Name	Intel® Dual Band Wireless-AC 7265
Model No.	7265NGW
FCC ID	PD97265NG, PD97265NGU

Applicant	Intel Mobile Communications
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA

Date of Receipt	Oct. 01, 2014
Date of Declaration	Nov. 25, 2014
Report No.	14A0411R-RFUSP25V00

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

Friis Formula

Friis transmission formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where

Pd = power density in mW/cm^2

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

Pd id the limit of MPE, 1 mW/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 Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18℃and 78％ RH.

1.3. Test Result of RF Exposure Evaluation

Product : Intel® Dual Band Wireless-AC 7265
Test Item : RF Exposure Evaluation
Test Site : No.3 OATS

Operation Frequency Range	2402-2480MHz, 2412-2462MHz, 2422-2452MHz 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz 5190-5230MHz, 5270-5310MHz, 5510-5670MHz, 5755-5795MHz 5720 MHz, 5710 MHz 5210-5290MHz, 5530-5690MHz, 5775MHz
Maximum Conducted output power	19.56 dBm
Antenna gain	4.41 dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm2)
90.3649	0.049628

Power density in column 4 is much lower than the limit (1 mW/cm^2).