

RF Exposure Evaluation declaration

Product Name	Intel® Dual Band Wireless-AC 8260
Model No.	8260D2W
FCC ID	PD98260D2

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

Date of Receipt	June 03, 2015
Date of Declaration	Sep. 30, 2016
Report No.	1560148R-RFUSP01V00

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Issued Date: Sep. 30, 2016

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Product Name	Intel® Dual Band Wireless-AC 8260
Applicant	Intel Mobile Communications
Address	100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA
Manufacturer	Intel Mobile Communications
Model No.	8260D2W
FCC ID.	PD98260D2
EUT Rated Voltage	DC 3.3V
EUT Test Voltage	AC 120V/60Hz
Trade Name	Intel
Applicable Standard	FCC 47 CFR 1.1310
Test Result	Complied

Documented By :

Rita Huang

(Senior Adm. Specialist / Rita Huang)

Tested By :

Eason chen

(Engineer / Eason Chen)

Approved By :

Vincent Lin

(Director / Vincent Lin)

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

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

P_d is the limit of MPE, 1 mW/cm². 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°C and 78% RH.

1.3. Test Result of RF Exposure Evaluation

Product : Intel® Dual Band Wireless-AC 8260
Test Item : RF Exposure Evaluation
Test Site : No.3 OATS

For 2.4GHz:

Operation Frequency Range	2412-2467MHz, 2422-2457MHz, 2402-2480MHz
Maximum Conducted output power	25.43dBm
Antenna gain	2.89dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm ²)
349.1403	0.135123

Power density is lower than the limit (1 mW/cm²).

For 5GHz:

Operation Frequency Range	5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz, 5190-5230MHz, 5270-5310MHz, 5510-5670MHz, 5755-5795MHz, 5720 MHz, 5710MHz, 5210-5290MHz, 5530-5690MHz, 5775MHz
Maximum Conducted output power	22.738dBm
Antenna gain	4.41dBi

Output Power Into Antenna & RF Exposure Evaluation Distance:

Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm ²)
187.8452	0.103165

Power density is lower than the limit (1 mW/cm²).