

RF Exposure Evaluation declaration

| | |
|--------------|-------------------------|
| Product Name | Intel® Wireless-AC 9462 |
| Model No. | 9462NGW |
| FCC ID | PD99462NG |

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

| | |
|---------------------|---------------------|
| Date of Receipt | Feb. 22, 2018 |
| Date of Declaration | Mar. 28, 2018 |
| Report No. | 1820196R-RFUSP02V00 |

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.

This report must not be used to claim product endorsement by TAF or any agency of the government.

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Issued Date: Mar. 28, 2018
 Report No.: 1820196R-RFUSP02V00



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| Product Name | Intel® Wireless-AC 9462 |
| Applicant | Intel Mobile Communications |
| Address | 100 Center Point Circle, Suite 200 Columbia, South Carolina 29210 USA |
| Manufacturer | Intel Mobile Communications |
| Model No. | 9462NGW |
| FCC ID. | PD99462NG |
| EUT Rated Voltage | DC 3.3V (via Mini-PCI Express slot) |
| EUT Test Voltage | DC 3.3V (via Mini-PCI Express slot) |
| Trade Name | Intel |
| Applicable Standard | FCC 47 CFR 1.1310 |
| Test Result | Complied |

Documented By :



(Senior Adm. Specialist / Rita Huang)

Tested By :



(Engineer / Jason Tuan)

Approved By :



(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/cm^2

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/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°C and 78% RH.

1.3. Test Result of RF Exposure Evaluation

Product : Intel® Wireless-AC 9462
 Test Item : RF Exposure Evaluation
 Test Site : No.3 OATS

For 2.4GHz:

| | |
|--------------------------------|---|
| Operation Frequency Range | 2412-2472MHz, 2422-2462MHz, 2402-2480MHz |
| Maximum Conducted output power | 23.42dBm |
| 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) |
|------------------------------|--|
| 219.7859873 | 0.0851 |

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 | 21.20dBm |
| 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) |
|------------------------------|--|
| 131.8256739 | 0.0724 |

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

(5) EUT Photo

Trade Name: WIESON Technologies co ., ltd
Model No.: GY121HT0321-003-H / GY121C888-001-H(Main) 、
GY121HT0321-003-H / GY121C888-001-H(Aux)



(6) EUT Photo



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GY121HT0321-003-H / GY121C888-001-H(Aux)