# RF Exposure Evaluation declaration

Product Name : Intel® Dual Band Wireless-AC 8265

Model No. : 8265NGW

FCC ID : 2ANPM8265NG

Applicant : Nexstgo Company Limited
Address : FLAT/RM 1602 16/F ENTERPRISE SQUARE TOWER II NO.9
SHEUNG YUET ROAD KOWLOON BAY

Date of Receipt:Sep. 18, 2017Date of Declaration :Nov. 14, 2017Report No.:1790242R-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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Product Name	Intel® Dual Band Wireless-AC 8265	
Applicant	Nexstgo Company Limited	
A 11	FLAT/RM 1602 16/F ENTERPRISE SQUARE TOWER II NO.9	
Address	SHEUNG YUET ROAD KOWLOON BAY	
Manufacturer	Intel Mobile Communications France SAS	
Model No.	8265NGW	
FCC ID.	2ANPM8265NG	
EUT Rated Voltage	DC 3.3V (via Mini-PCI Express slot)	
EUT Test Voltage	AC 120V/60Hz	
Trade Name	Intel	
Applicable Standard	FCC 47 CFR 1.1310	
Test Result	Complied	
Documented By :	April Chen	
	(Adm. Specialist / April Chen)	
Tested By :	Xiao Chen	
	(Engineer / Xiao Chen)	
Approved By :	Hand	
	( 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	Electric Field	Magnetic Field	Power Density	Average Time	
(MHz)	Strength (V/m)	Strength (A/m)	$(mW/cm^2)$	(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,  $1 \text{ mW/cm}^2$ . 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® Dual Band Wireless-AC 8265
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	29.84dBm
Antenna gain	1.89dBi

#### Output Power Into Antenna & RF Exposure Evaluation Distance:

Output Power to Antenna (mW)		Power Density at $R = 20 \text{ cm} (\text{mW/cm2})$	
	963.8290236	0.2963	

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	23.38dBm
Antenna gain	3.05dBi

#### Output Power Into Antenna & RF Exposure Evaluation Distance:

Output Power to Antenna (mW)	Power Density at $R = 20 \text{ cm} (\text{mW/cm2})$
217.7709772	0.0874

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