RF Exposure Evaluation Report

Product Name : Intel® Wireless-AC 9260

Model No. : 9260NGW

FCC ID : XHU-GCU040864

Applicant : Sorenson Communications, LLC

Address : 4192 South Riverboat Road, Salt Lake City, Utah 84123

Date of Receipt : Dec. 21, 2020

Date of Declaration : Mar. 23, 2021

Report No. : 20C0795R-E3082100013

Report Version : V1.0

Testing Laboratory

3023

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.
The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd.
Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Issued Date: Mar. 23, 2021
Report No.: 20C0795R-E3082100013

Product Name	Intel® Wireless-AC 9260	
Applicant	Sorenson Communications, LLC	
Address	4192 South Riverboat Road, Salt Lake City, Utah 84123	
Manufacturer	INTEL CORPORATION SAS	
Model No.	9260NGW	
FCC ID.	XHU-GCU040864	
Trade Name	Intel	
Applicable Standard	KDB 447498 D01 v06	☒ Minimum test separation distance ≥ 20 cm ☐ For low power devices
Test Result	Complied	

Documented By : Leven Huang
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Tested By : wen Lee
(Senior Engineer / Wen Lee)

Approved By :
(Director / Vincent Lin)

Revision History

Report No.	Version	Description	Issued Date
20C0795R-E3082100013	V1.0	Initial issue of report.	2021-03-23

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Intel® Wireless-AC 9260
Trade Name	Intel
Model No.	9260NGW
FCC ID.	XHU-GCU040864
Frequency Range	802.11b/g/n-20MHz:2412MHz~2472MHz 802.11n-40MHz: 2422MHz~2462MHz 802.11a/n-20MHz: 5180-5320MHz, 5500-5700MHz, 5720 MHz, 5745-5825MHz 802.11n-40MHz: 5190-5310MHz, 5510-5670MHz, 5710 MHz, 5755-5795MHz 802.11ac-80MHz: 5210-5290MHz, 5530-5690MHz, 5775MHz 802.11ac-160MHz: 5250MHz, 5570MHz BT : 2402-2480MHz
Channel Number	802.11b/g/n-20MHz: 13, 802.11n-40MHz: 9 802.11a/n-20MHz: 25, 802.11n-40MHz: 12 802.11ac-80MHz: 6, 802.11ac-160MHz: 2 BT : 79 , BLE : 40
Type of Modulation	DSSS/OFDM/BPSK/QPSK/16QAM/64QAM/256QAM FHSS: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps)
Antenna Type	Dipole Antenna
Channel Control	Auto
Antenna Gain	Refer to the table “Antenna List”

Antenna List

No.	Manufacturer	Part No.	Antenna Type	Peak Gain
1	Molex	1461531050	Dipole Antenna	3.2dBi for 2.4 GHz 4.25dBi for 5.15~5.25GHz 4.25dBi for 5.25~5.35GHz 4.25dBi for 5.47~5.725GHz 4.25dBi for 5.725~5.85GHz

2. RF Exposure Evaluation

2.1. Standard Applicable

According to KDB 447498 D01 (7.1), A minimum test separation distance ≥ 20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits.

2.2. 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

2.3. Test Result of RF Exposure Evaluation

Product : Intel® Wireless-AC 9260
Test Item : RF Exposure Evaluation

WLAN 2.4G Peak Gain: 3.2dBi

Channel	Frequency	Conducted Peak Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit (mWc/m^2)	Pass/Fail
07	2442	29.86	968.278	0.4025	1	Pass

Note: The conducted output power is refer to report No.: 20C0795R-E3032110118, 20C0795R-E3032110116, 20C0795R-E3032110108 from the DEKRA.

WLAN 5G Peak Gain: 4.25dBi

Channel	Frequency	Conducted Peak Power (dBm)	Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm^2)	Limit (mWc/m^2)	Pass/Fail
157	5785	24.63	290.402	0.1537	1	Pass

Note: The conducted output power is refer to report No.: 20C0795R-E3032110130 from the DEKRA.