FCC RF EXPOSURE REPORT

Applicant	:	ADESSO INC.
Address	:	20659 Valley BLVD. Walnut, CA 91789
Equipment	:	Wireless Barcode Scanner
Model No.	:	NuScan 4300B, NuScan 4000B, NuScan 4100B, NuScan 4200B, NuScan 4400B, NuScan 4500B, NuScan 4600, NuScan 4700, NuScan 4800, NuScan 4900
Trade Name	:	Adesso/Gyration
FCC ID	:	2ACFQ-4300B

I HEREBY CERTIFY THAT :

The sample was received on May. 19, 2023 and the testing was completed on Jul. 12, 2023 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Leevin Li /Supervisor

Contents

History of this test report

■ Original

☐ Additional attachment as following record:

Attachment No.	Issue Date	Description
DEFJ2304036	Jul. 17, 2023	Original

1. Test Configuration of Equipment under Test

1.1 Feature of Equipment

Equipment	Wireless Barcode Scanner
Model Name	NuScan 4300B, NuScan 4000B, NuScan 4100B, NuScan 4200B, NuScan 4400B, NuScan 4500B, NuScan 4600, NuScan 4700, NuScan 4800, NuScan 4900
Model Discrepancy	Different color or tooling, Model NuScan 4300B was chosen for final test.
Operation Frequency Range	BT/ BLE: 2400-2483.5MHz 2.4GHz: 2400MHz-2483.5MHz
Center Frequency Range	BT/ BLE: 2402MHz-2480MHz 2.4GHz: 2410MHz-2470MHz
Modulation Type	BT: GFSK, π/4-DQPSK, 8DPSK BLE: GFSK 2.4GHz: GFSK
Data Rate	BT: GFSK:1Mbps, π/4-DQPSK: 2Mbps, 8DPSK:3Mbps BLE: GFSK: 1Mbps 2.4GHz: GFSK: 1Mbps
Antenna Type	BT/BLE: PCB Antenna 2.4GHz: FPC Antenna
Antenna Gain	BT/BLE: 2402-2480MHz: 0.55dBi 2.4GHz: 2400-2500MHz: 0.22dBi
Working Temperature	-20°C to +50°C
Input Voltage	5±5%VDC
Power Supply	3.7V⎓500mA

Note: For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

1.2 General Information of Test

Test Site	**Cerpass Technology Corporation(Cerpass Laboratory)** Address: Room 102, No. 5, Xing'an Road, Chang'an Town, Dongguan City, Guangdong Province Tel: +86-769-8547-1212 Fax: +86-769-8547-1912
FCC Designation No.:	CN1288

2. Radio Frequency Exposure

2.1 Applicable Standards

The measurements shown in this test report were made in accordance with the procedures given in FCC Part 2 (Section 2.1093)

2.2 Limit

KDB 447498 D01 General RF Exposure Guidance v06 § 4.3(a)
For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where

*f(GHz) is the RF channel transmit frequency in GHz
* Power and distance are rounded to the nearest mW and mm before calculation
*The result is rounded to one decimal place for comparison
*The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion

2.3 Test Results

According to the KDB447498:

The SAR test exclusion thresholds Level:

[(max. power of channel, including tune-up tolerance, mW) /(min. test separation distance, mm)] * sqrt (freq. in GHz) < 3

Calculation

Bluetooth BR/EDR

Channel Frequency (MHz)	Max. Conducted output power(dBm)	Max. Tune up power (dBm)	Max. Tune up power (mW)	Distance (mm)	SAR test exclusion thresholds (mW)
2402-2480	-3.06	-1.06	0.78	5	10.00

Bluetooth LE

Channel Frequency (MHz)	Max. Conducted output power(dBm)	Max. Tune up power (dBm)	Max. Tune up power (mW)	Distance (mm)	SAR test exclusion thresholds (mW)
2402-2480	-1.47	0.53	1.13	5	10.00

2.4GHz

Antenna Gain (dBi)	distance (m)	Fundamental Emission (dBuV/m)	Fundamental Emission (dBm)
0.22	3	68.66	-26.54

Note: EIRP(dBm) = E(dBuV/m)+20log(d[m])-104.77

When d = 3m, EIRP(dBm) = E(dBuV/m)-95.2

Channel Frequency (MHz)	Max. Conducted output power(dBm)	Max. Tune up power (dBm)	Max. Tune up power (mW)	Distance (mm)	SAR test exclusion thresholds (mW)
2410-2470	-26.54	-24.54	0.0035	5	10.00

Then SAR evaluation is not required

----------THE END OF REPORT----------