

# FCC RF EXPOSURE REPORT

# FCC ID: A5MYOGA27ARH7

**Project No.** : 2112C039

**Equipment**: Personal Computer

Brand Name : Lenovo

Product Name : Yoga AIO 7 27ARH7

Series Model : N/A

**Applicant**: Lenovo (Beijing) Limited

Address : 201-H2-6, Floor 2, Building 2, No.6 Shangdi West Road, Haidian

District, Beijing, China 100085

Manufacturer : Lenovo (Beijing) Limited

Address : 201-H2-6,Floor 2,Building 2,No.6 Shangdi West Road,Haidian

District, Beijing, China 100085

Date of Receipt : Dec. 08, 2021

**Date of Test** : Dec. 10, 2021 ~ Jan. 08, 2022

**Issued Date** : Jan. 28, 2022

Report Version : R01

Test Sample : Engineering Sample No.: DG202112101

Standard(s) : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091

FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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IAC-MRA ACC

ACCREDITED
TESTING CERT #5123.02

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# **REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue	Jan. 27, 2022
R01	Deleted the series model.	Jan. 28, 2022





### 1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town Dongguan City, Guangdong 523792 People's Republic of China.

BTL's Registration Number for FCC: 357015 BTL's Designation Number for FCC: CN1240

# 2. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna:

#### For BT/LE/2.4GHz:

Ant.	Brand	P/N	Antenna Type	Connector	Gain(dBi)
1	high-tek	high-tek 0ACAVC21014N		N/A	2.99
1	SPEED	F-0G-48-6002-002-00	PIFA	N/A	1.38

#### Note:

- 1) Both groups of antennas were evaluated and found the worst case was the high-tek, so only the worst case was recorded in this test report.
- 2) The antenna gain is provided by the manufacturer.

# For 5GHz

Ant.	Brand	P/N	Antenna Type	Connector	Gain(dBi)
1	high-tek	high-tek 0ACAVC21014N		N/A	2.05
1	SPEED	F-0G-48-6002-002-00	PIFA	N/A	2.44

#### Note:

- 1) Both groups of antennas were evaluated and found the worst case was the SPEED, so only the worst case was recorded in this test report.
- 2) The antenna gain is provided by the manufacturer.





# 3. TEST RESULTS

### For BT:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm²)	Test Result
2.99	1.9907	6.43	4.3954	0.00174	1	Complies

# For LE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm²)	Test Result
2.99	1.9907	5.91	3.8994	0.00155	1	Complies

# For 2.4GHz:

Ar	ntenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm²)	Test Result
	2.99	1.9907	18.04	63.6796	0.02523	1	Complies

# For 5GHz UNII-1:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2.44	1.7539	16.29	42.5598	0.01486	1	Complies

# For 5GHz UNII-2A:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
2.44	1.7539	17.30	53.7032	0.01875	1	Complies

# For 5GHz UNII-2C:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm²)	Test Result
2.44	1.7539	16.79	47.7529	0.01667	1	Complies

# For 5GHz UNII-3:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm²)	Test Result
2.44	1.7539	16.14	41.1150	0.01435	1	Complies

Note: The calculated distance is 20 cm.

# **End of Test Report**