

RF Exposure Evaluation TEST REPORT

for

Lenovo (Beijing) Limited

LCD Monitor

Model No.: A20270DL0

Brand Name: Lenovo

FCC ID: A5M- A20270DL0

Prepared for : Lenovo (Beijing) Limited  
201-H2-6, Floor2, Building 2, No.6 Shangdi West Road,  
Haidian District, Beijing, China

Prepared By : Audix Technology (Shenzhen) Co., Ltd.  
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Report Number : ACS-F20161  
Date of Test : Aug.11,2020  
Date of Report : Aug.24,2020

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**REPORT VERIFICATION**

Applicant : Lenovo (Beijing) Limited  
Product : LCD Monitor  
Brand : Lenovo  
FCC ID : A5M- A20270DL0  
(A) Model No. : A20270DL0  
(B) Test Voltage : AC 120V/60Hz

Testing Based on:  
KDB 680106 D01 RF Exposure Wireless Charging Apps v03

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd.. The measurement results were contained in this test report and Audix Technology (Shenzhen) Co., Ltd. was assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT to be technically compliance with the FCC RF Exposure requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd..

Date of Test : Aug.11,2020 Report of date: Aug.24,2020

Prepared by : Brave Zhang Reviewed by : Sunny Lu  
Brave Zhang / Assistant Sunny Lu / Deputy Manager

**AUDIX**<sup>®</sup> 信華科技(深圳)有限公司  
Audix Technology (Shenzhen) Co., Ltd.  
EMC 部門報告專用章  
Stamp only for EMC Dept. Report  
Signature: David Jin  
David Jin / Deputy General Manager

Approved & Authorized Signer :

## 1. GENERAL INFORMATION

### 1.1. Description of Equipment Under Test

Applicant	Lenovo (Beijing) Limited
Applicant Address	201-H2-6, Floor2, Building 2, No.6 Shangdi West Road, Haidian District, Beijing, China
Manufacturer	Lenovo (Beijing) Limited
Manufacturer Address	201-H2-6, Floor2, Building 2, No.6 Shangdi West Road, Haidian District, Beijing, China
Factory	TPV Electronics (Fujian) Co., Ltd.
Factory Address	Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R. China.
Product	LCD Monitor
Model No.	A20270DL0
Brand	Lenovo
Adapter	Manufacturer: Lenovo; M/N: ADP-170CB B Input: AC 100-240V 50-60Hz, 2.5A Output: DC 20V, 8.5A
Radio Frequency	127.7kHz
Modulation Type	FSK
Sample Type	Prototype production
Date of Receipt	Jul.14,2020
Date of Test	Aug.11,2020

## 1.2. Test Facility

### Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Kefeng Road, Science & Technology  
Park, Nanshan District , Shenzhen, Guangdong,  
China

RF Anechoic Chamber : Dimensions are:  
[L]10m × [W]5.5m × [H]5m

EMC Lab. : Accredited by DAkkS, Germany  
Registration No: D-PL-12151-01-00  
Valid Date: Dec.07, 2021

: Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2021

Certificated by FCC, USA  
Designation No: CN5022  
Valid Date: Mar.31, 2021

## 1.3. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Radiated Spurious Emission test in RF chamber	3.7dB(30MHz-1000MHz)
	3.3dB(1GHz-26.5GHz)
Uncertainty for test site temperature and humidity	0.6°C
	3%

## 2. RF EXPOSURE REQUIREMENT

### 2.1.GENERAL INFORMATION

For devices designed for typical desktop applications, such as wireless charging pads, RF exposure evaluation should be conducted assuming a user separation distance of 15 cm. E and H field strength measurements or numerical modeling may be used to demonstrate compliance. Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm measured from the center of the probe(s) to the edge of the device. Emissions between 100 kHz to 300 kHz should be assessed versus the limits at 300 kHz in Table 1 of Section 1.1310: 614 V/m and 1.63 A/m. A KDB inquiry is required to determine the applicable exposure limits below 100 kHz.

This device meeting all of the following requirements, so the PGA is not required.

- (1) Power transfer frequency is less than 1 MHz.
- (2) Output power from each primary coil is less than or equal to 15 watts.
- (3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
- (4) Client device is placed directly in contact with the transmitter.
- (5) Mobile exposure conditions only
- (6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

### 2.2.LIMIT

#### Basic Restrictions Reference levels

Basic restrictions for electric, magnetic and electromagnetic fields (0Hz to 300GHz)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz \* = Plane-wave equivalent power density

### 3. ASSESS RESULTS

EUT: LCD Monitor					
M/N: A20270DL0					
Test date: 2020-08-11		Pressure: 102.5±1.0 kpa		Humidity: 52.7±3.0%	
Tested by: Lynn		Test site: RF Site		Temperature: 22.6±0.6°C	
Normal Operation (Charging mode)					
Frequency (kHz)	Position	Distance (CM)	E-Field Strength (V/m)	Limit (V/m)	Result
127.7	Front	10	1.356	614	PASS
	Bank	10	1.336	614	PASS
	Left	10	1.325	614	PASS
	Right	10	1.323	614	PASS
	Top	10	1.632	614	PASS
	Buttom	10	1.592	614	PASS
Normal Operation (Charging mode)					
	Position	Distance (CM)	H-Field Strength (A/m)	Limit (A/m)	Result
127.7	Front	10	0.524	1.63	PASS
	Bank	10	0.532	1.63	PASS
	Left	10	0.501	1.63	PASS
	Right	10	0.523	1.63	PASS
	Top	10	0.663	1.63	PASS
	Buttom	10	0.624	1.63	PASS

#### 4. PHOTOGRAPHS



..... **THE END** .....