

# Technical Compliance Statement FCC Test Report

#### For the following information Ref. File No.: A1Z2306021

Product :	OLED Monitor
Model No. :	AG456UCZD; AG456******
	(*=0-9,A-Z,a-z,+,-,/,\ or blank)
Brand :	AOC
Applicant :	TPV Electronics (FuJian) Co., Ltd.
Address :	Rongqiao Economic and Technological Development Zone,Fuqing City,Fujian Province,P.R. China
Rules and Standards :	47 CFR FCC Part 15 Subpart B
	ANSI C63.4: 2014+ANSI C63.4a: 2017 (Class B Limits)

We hereby certify that the above product has been tested by us and complied with above FCC standard limits. The test was performed according to the procedures ANSI C63.4: 2014+ANSI C63.4a: 2017. The equipment might be marketed in US in accordance with the rules of 47 CFR FCC Part 2 regulations.

The test data and results are issued on the test report ACS-F23116.

Test Laboratory: Audix Technology (Shenzhen) Co., Ltd. NVLAP Lab. Code: 200372-0 FCC OET Designation: CN5022 Web Site: www.audix.com.cn

<sup>18</sup> 信華科技 (深圳) 有限公司 AUDIX Audix Technology (Shenzhen) Co., Ltd. EMC部門報告專用章 Stamp only for EMC Dept. Report auc Signature: (David Jin / Deputy General Manager)

Date: Jul.11, 2023

The statement is based on a single evaluation of one sample of the above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab logo.



#### TEST REPORT

**OLED Monitor** 

Model No.: AG456UCZD; AG456\*\*\*\*\*\*\* (\*=0-9,A-Z,a-z,+,-,/,\ or blank)

Brand: AOC

Prepared for: TPV Electronics (FuJian) Co., Ltd. Rongqiao Economic and Technological Development Zone,Fuqing City,Fujian Province,P.R. China

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

> Tel: (0755) 26639496 Fax: (0755) 26632877



Report Number	:	ACS-F23116
Date of Test	:	Jun.11~17, 2023
Date of Report	:	Jul.11, 2023

The test report is based on a single evaluation of one sample of the above-mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab logo.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, TAF, or any agency of the U.S. Government.



### **TABLE OF CONTENTS**

<b>Descrip</b>	tion	Page
TEST RE	EPORT	
1.SUMN	IARY OF STANDARDS AND RESULTS	
1.1.	Description of Standards and Results	
2.GENE	RAL INFORMATION	5
2.1.	Description of Device (EUT)	
2.2.	Tested Supporting System Details	6
2.3.	Block Diagram of Test Setup	7
2.4.	Method of Exercising EUT	
2.5.	Description of Test Facility	9
2.6.	Measurement Uncertainty ( 95% confidence levels, k=2 )	9
3.POWE	ER LINE CONDUCTED EMISSION TEST	
3.1.	Test Equipments	
3.2.	Block Diagram of Test Setup	
3.3.	Power Line Conducted Emission Class B Limits	
3.4.		
3.5.	Conducted Disturbance at Mains Terminals Test Results	
4.RADIA	ATED EMISSION TEST	
4.1.	Test Equipments	
4.2.	Block Diagram of Test Setup	
4.3.	Radiated Emission Limits	
4.4.	Test Procedure	
4.5.	Radiated Disturbance Test Results	
5.DEVIA	ATION TO TEST SPECIFICATIONS	
6.PHOT	OGRAPH	
6.1.	Photos of Power Line Conducted Emission Test	
6.2.	Photos of Radiated Emission Test (In 10m Anechoic Chamber)	



# TEST REPORT

Applicant : TPV Electronics (FuJian) Co., Ltd.

Product: OLED MonitorBrand: AOC

Model No. : AG456UCZD; AG456\*\*\*\*\*\*\* (\*=0-9,A-Z,a-z,+,-,/,\ or blank)

Report No. : ACS-F23116

Power Supply: AC 100-240V, 50/60Hz

Test Voltage : AC 120V/60Hz

Rules of Compliance and Applicable Standards:

47 CFR FCC Part 15 Subpart B, Class B Limits ANSI C63.4: 2014+ANSI C63.4a: 2017

The device described above was tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. All of the tests were requested by the applicant and the results thereof based upon the information that the applicant provided to us. We, Audix Technology (Shenzhen) Co., Ltd. assume full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT is compliance with the requirements of 47 CFR FCC Part 2 regulations.

No modifications were required during testing to bring this product into compliance. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

This report applies to single evaluation of one sample of above mentioned products. This report shall not be reproduced in parts without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test :	Jun.11~17, 2023	Report of date:	Jul.11, 20	23
Prepared by :	Sisi Wu / Assistant	Reviewed by :	Fire Zhang / Assist	heng ant Manager
	AUDIX	<sup>⑧</sup> 信華科技 (深圳) Audix Technology EMC 部 門 報 名	(Shenzhen) Co., Ltd.	
Approved & Authori		np only for EMC na <u>ture: David</u> David Jin	Dept. Report	nager

Name of the Representative of the Responsible Party:

Signature:



# 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION				
<b>Description of Test Item</b>	Standard	Results	Remark	
Power Line Conducted Emission Test	47 CFR FCC Part 15 Subpart B ANSI C63.4: 2014+ANSI C63.4a: 2017	PASS	Minimum passing margin is 16.92dB at 0.186MHz	
Radiated Emission Test (30MHz-1000MHz)	47 CFR FCC Part 15 Subpart B ANSI C63.4: 2014+ANSI C63.4a: 2017	PASS	Minimum passing margin is 4.65dB at 34.850MHz	
Radiated Emission Test (1GHz-18GHz)	47 CFR FCC Part 15 Subpart B ANSI C63.4: 2014+ANSI C63.4a: 2017	PASS	Minimum passing margin is 13.23dB at 6646.218MHz	
Note: Measurement uncertainty affection to the result is considered, the EUT is technically compliant				

with standard requirements.



# 2. GENERAL INFORMATION

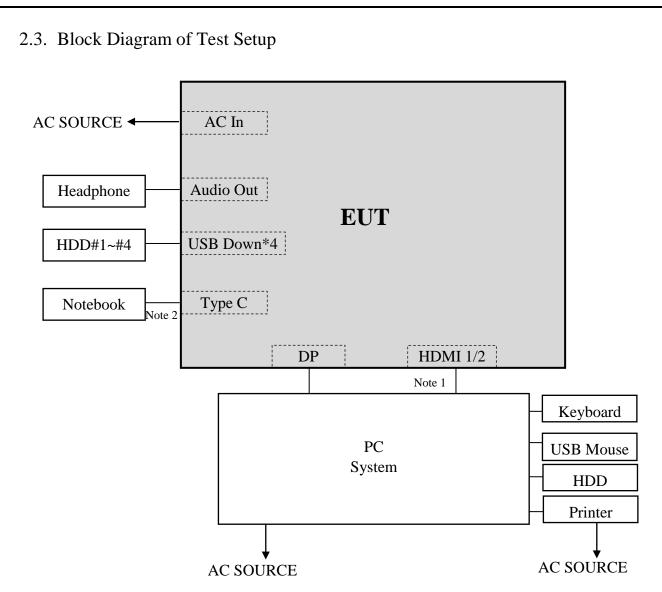
2.1.Description Product		EUT) OLED Monitor
Model No.	:	AG456UCZD; AG456******* (*=0-9,A-Z,a-z,+,-,/,\ or blank) Model differences(Declared by the Applicant ): Above all models difference are in sale marketing.
Test Model	:	AG456UCZD
Brand	:	AOC
Applicant	:	TPV Electronics (FuJian) Co., Ltd. Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province, P.R. China
Max. Resolut	tion :	HDMI: 3440*1440@100Hz DP/Type C: 3440*1440@240Hz
Max.Work F	requency :	Above 108MHz
I/O Port	:	<ul> <li>(1)One AC Port</li> <li>(2)Two HDMI Ports</li> <li>(3)One DP Port</li> <li>(4)One Type C Port</li> <li>(5)One USB Up-Steam Port</li> <li>(6)Four USB Down-Stream Ports</li> <li>(7)One Audio Out Port</li> </ul>
Power Cord	:	Unshielded, Detachable, 1.8m/1.5m (3 pins)
HDMI Cable	:	Shielded, Detachable, 1.8m/1.5m
DP Cable	:	Shielded, Detachable, 1.8m/1.5m
Type C Cable	e :	Shielded, Detachable, 1.8m/1.5m
USB3.0 to T	ype C Cable :	Shielded, Detachable, 1.8m/1.5m
USB3.0 Cabl	le :	Shielded, Detachable, 1.8m/1.5m
Date of Test	:	Jun.11~17, 2023
Date of Rece	ipt :	Jun.07, 2023
Sample Type	:	Prototype production



# 2.2. Tested Supporting System Details

		Manufacturer	Model	Serial Number
Personal	Test PC Z	DELL	Optiplex 7090MT	
Computer				
USB Keyboard	ACS-EMC-K03R	DELL	SK-8120	CN-ODJ365-71616- 2BE-0DCE-A00
2	USB Cable: Shielded	, Undetachable,	1.8m	
LICD Mouse	ACS-EMC-M03R	DELL	M0C5UO	512023253
USB Mouse	USB Cable: Shielded	, Undetachable,	1.8m	
	ACS-EMC-PT04	HP	C9079A	N/A
Printer		· · · ·		
	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-5390031
HDD01	USB Cable: Shielded	, Detachable, 1.8	3m	
DUD		Pioneer	DV-310NC-K	
DVD	Power Cord(2C): Uns	shielded, Detach	able, 1.5m	
** 11	ACS-EMC-EP01	OVANN	0V-T880V	
Headphone	Data Cable: Shielded,	, Detachable, 2.0	m	
	ACS-EMC-HDD42	WD	WD Elements	WXA1A7396898
HDD#1	Data Cable: Shielded	, Detachable, 0.4	m	
	ACS-EMC-HDD43	WD	WD Elements	WX31E63TU717
HDD#2	Data Cable: Shielded	, Detachable, 0.4	m	
	ACS-EMC-HDD44	WD	WD Elements	WX11E73U9352
HDD#3	Data Cable: Shielded, Detachable, 0.4m			
	ACS-EMC-HDD45	WD	WD Elements	WXF1A19JNX5E
11. HDD#4 Data Cable: Shielded, Detachable, 0.4m				
Notebook		DELL	precision 5550	
	USB Keyboard USB Mouse Printer HDD01 GUVD Headphone HDD#1 GHDD#2 GHDD#3 HDD#4	HDMI Cable: ShieldedHDMI Cable: ShieldedACS-EMC-K03RUSB Cable: ShieldedUSB MouseACS-EMC-M03RUSB Cable: ShieldedPrinterACS-EMC-PT04PrinterUSB Cable: ShieldedPrinterACS-EMC-PT04USB Cable: ShieldedPower Cord(2C): Unstrational destriction of the state of	HDMI Cable: Shieldet, Detachable, IHDMI Cable: Shieldet, Detachable, IHDMI Cable: Shieldet, Detachable, IHDMI Cable: Shieldet, Undetachable, USB Cable: Shieldet, Undetachable, IUSB MouseACS-EMC-M03RPrinterACS-EMC-PT04PrinterACS-EMC-PT04HDD01TerasysACS-EMC-HDD01TerasysHDD01TerasysACS-EMC-HDD01TerasysHDD01TerasysACS-EMC-HDD01TerasysHDD01TerasysACS-EMC-HDD01TerasysHDD01TerasysACS-EMC-HDD01TerasysHDD1ACS-EMC-EP01ACS-EMC-EP01OVANNDVDData Cable: Shielded, Detachable, 2.0HDD#1ACS-EMC-HDD42ACS-EMC-HDD42WDDtaa Cable: Shielded, Detachable, 0.4HDD#3ACS-EMC-HDD43HDD#4ACS-EMC-HDD45ACS-EMC-HDD45WD	HDMI Cable:Detachable, 1.8mUSB ReyboardACS-EMC-K03RDELLSK-8120USB Cable:Shielded, Undetachable, 1.8mUSB MouseACS-EMC-M03RDELLM0C5UOUSB Cable:Shielded, Undetachable, 1.8mACS-EMC-PT04HPC9079APrinterACS-EMC-PT04HPC9079APower Cord(2C):Usb Cable:Shielded, Detachable, 1.8mPower Cord(2C):Usb Cable:Shielded, Detachable, 1.8mPOWer Cord(2C):Usb Cable:Shielded, Detachable, 1.8mPOWer Cord(2C):Usb Cable:Shielded, Detachable, 1.8mPOWer Cord(2C):Usb Cable:Shielded, Detachable, 1.8mPOWDACS-EMC-HDD01TerasysF12-UFPOwer Cord(2C):Usb Cable:Shielded, Detachable, 1.8mPOWERShielded, Detachable, 1.8mOVANNOV-310NC-KPOWEROrd(2C):Usb Cable:Shielded, Detachable, 1.8mPOWDACS-EMC-HDD41OVANNOV-T880VPACS-EMC-HDD42WDWD ElementsPHD#1ACS-EMC-HDD43WDWD ElementsPHD#3ACS-EMC-HDD44WDWD ElementsPHD#4ACS-EMC-HDD45WDWD ElementsPHD#4ACS-EMC-HDD45WDWD ElementsPHD#4ACS-EMC-HDD45WDWD ElementsPHD#4ACS-EMC-HDD45WDWD ElementsPHD#4ACS-EMC-HDD45WDWD ElementsPHD#4ACS-EMC-HDD45WDWD ElementsPHD#4ACS-EMC-HDD45 <t< td=""></t<>





Note 1: PC Mode, DVD Mode can not link the HDMI port at the same time. Note 2: The Type C Port can not Link to PC and Notebook at the same time.

(EUT: OLED Monitor)



# 2.4. Method of Exercising EUT

Operating System	Windows 7 of PC system
Test Program	BurnIn Test V9.0
Video Signal (Display Image)	"H" pattern
Audio	1kHz signal playing
USB Port	Hard drive data read and write
Type C Port	Upstream port / downstream port / Display Port/ power charge
Other	Other peripheral devices were driven and operated in turn

#### Display and video parameters

Function	Setting
Hardware acceleration	Maximum
Screen settings	High/medium/low effective resolution
Color quality	Highest color bit depth
Brightness, contrast, color saturation	Set the contrast and color saturation to the maximum value. Set the brightness to the maximum value or the maximum value before the cursor disappears
Other	Adjusted to obtain a typical picture using settings giving the highest performance



#### 2.5. Description of Test Facility Site Description

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

EMC Lab. : Accredited by NVLAP, USA NVLAP Code: 200372-0 Valid Date: Mar.31, 2024

> Certificated by FCC, USA Designation No: CN5022 Valid Date: Mar.31, 2024

Accredited by TAF, Taiwan Registration No: 1418 Valid Date: Nov.30, 2023

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

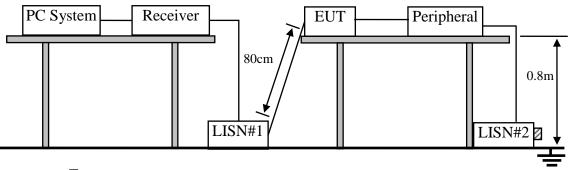
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 2 Conduction	±2.4dB (150kHz to 30MHz)
	±3.8dB (30~200MHz, Polarization: H)
Uncertainty for Radiation Emission test	±3.8dB (30~200MHz, Polarization: V)
in 10m chamber (Distance: 10m)	±4.0dB (200M~1GHz, Polarization: H)
	±4.4dB (200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in	±4.4dB (1-6GHz, Distance: 3m)
10m chamber (1GHz-18GHz)	±4.6dB (6-18GHz, Distance: 3m)
Uncertainty for S <sub>VSWR</sub> in 10m Chamber	±2.8dB (1-6GHz,Distance: 3m)
Oncertainty for SVSWR III form Chamber	±2.8dB (6-18GHz,Distance: 3m)
Uncertainty for test site temperature and	±0.6°C
humidity and Pressure	±3%
	±1kPa



# 3. POWER LINE CONDUCTED EMISSION TEST

3.1	. Test Equipments					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.
nem	Equipment	Manufacturer	WIGGET NO.	Schal NO.	Last Cal.	Interval
1.	2# Shielding Room	AUDIX	N/A	N/A	Sep.16,22	5 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100843	Oct.09,22	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ENV216	102834	Jul.01,22	1 Year
4.	L.I.S.N.#2	Kyoritsu	KNW-407	8-1636-1	Apr.01,23	1 Year
5.	RF Cable	Eastsheep	RG223	190425	Oct.09,22	1 Year
6.	Terminator	Hubersuhner	50Ω	No.4	Apr.02,23	1 Year
7.	Test Software	AUDIX	e3	210616	N/A	N/A
Note: N/A means Not applicable.						

#### 3.2.Block Diagram of Test Setup



 $\blacksquare$  :50 $\Omega$  Terminator

#### 3.3. Power Line Conducted Emission Class B Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	dB(µV)	$dB(\mu V)$		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
500kHz ~ 5MHz	56	46		
5MHz ~ 30MHz	60	50		

Notes: 1. \* Decreasing linearly with logarithm of frequency.

2. The lower limits shall apply at the transition frequencies.

3. Emission Level (dBµV) = Factor (L.I.S.N.) (dB) + Cable Loss (dB)+Reading (Receiver) (dBµV)



#### 3.4. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. #1). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N. #2). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4 on conducted Emission test.

The bandwidth of the (R&S ESCI) was set at 9kHz.

The frequency range from 150kHz to 30MHz is checked. The test results are recorded in Section 3.5.



### 3.5. Conducted Disturbance at Mains Terminals Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

#### EUT: OLED MonitorModel No. : AG456UCZD

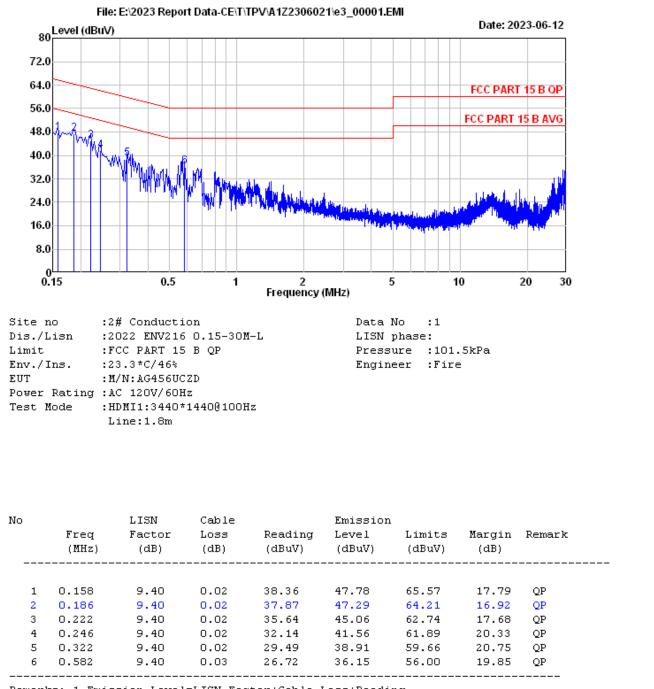
The EUT with following test modes were pre-tested:

No.	Test Mode	Input Port	Cable Length	Resolution & Frequency	
1.				640*480@60Hz	
2.		HDMI 1/2	1.8m	1280*1024@75Hz	
3.				3440*1440@100Hz	
4.		HDMI 1	1.5m	3440*1440@100Hz	
	PC Mode	C Mode Type C		640*480@60Hz	
5.			1.8m	1280*1024@75Hz	
				3440*1440@240Hz	
6.				640*480@60Hz	
7.		DP	1.8m	1280*1024@75Hz	
8.				3440*1440@240Hz	
9.	PIP Mode	HDMI+DP	1.8m	3440*1440@100Hz	
10.	PBP Mode	HDMI+DP	1.8m	1720*1440@60Hz	
11.	DVD Mode	HDMI 1/2	1.8m	Color Bar	

The result of worst test mode is presented in the report as below and the test data are listed in next pages.

No.	No. Test Mode	Test ModeCableInputLengthPort		Resolution &	Reference Test Data No.	
		Length	FOIL	Frequency	Line	Neutral
1.	PC Mode	1.8m	HDMI 1	3440*1440@100Hz	#1	#2

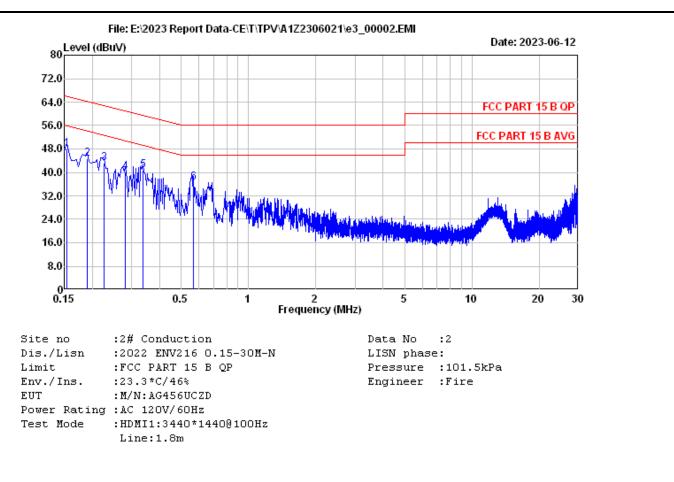




Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.

 If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.





No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.154	9.50	0.02	38.60	48.12	65.78	17.66	QP
2	0.190	9.50	0.02	35.16	44.68	64.04	19.36	QP
3	0.226	9.50	0.02	33.53	43.05	62.60	19.55	QP
4	0.282	9.50	0.02	30.52	40.04	60.76	20.72	QP
5	0.338	9.50	0.03	31.29	40.82	59.25	18.43	QP
6	0.570	9.50	0.03	27.11	36.64	56.00	19.36	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss+Reading.

2. If the average limit is met when using a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



# 4. RADIATED EMISSION TEST

### 4.1. Test Equipments

4.1.1.For frequency range 30MHz~1000MHz (In 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber(NSA)	AUDIX	N/A	N/A	Aug.12,22	5 Year
2.	10m Chamber(SE)	AUDIX	N/A	N/A	Sep.16,22	5 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	103669	Oct.09,22	1 Year
4.	Signal Analyzer	Rohde & Schwarz	FSV30	103670	Jul.08,22	1 Year
5.	EMI Test Receiver	Rohde & Schwarz	ESR3	102891	Oct.10,22	1 Year
6.	Amplifier	EMCI	EMC9135	980348	Feb.23,23	1 Year
7.	Amplifier	EMCI	EMC9135	980347	Apr.02,23	1 Year
8.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	429	Sep.19,22	1 Year
9.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	01313	Aug.04,22	1 Year
10.	RF Cable	SPUMA	CFD400NL-LW	NO.4	Apr.02,23	1 Year
11.	RF Cable	SPUMA	CFD400-NM-NM	160727+160728	Apr.02,23	1 Year
12.	Coaxial Switch	Anritsu	MP59B	6201397220	Apr.02,23	1 Year
13.	Coaxial Switch	Anritsu	MP59B	6201397221	Apr.02,23	1 Year
14.	Coaxial Switch	Anritsu	MP59B	6201397224	Apr.02,23	1 Year
15.	Test Software	AUDIX	e3	210616	N/A	N/A
Note: 1	N/A means Not application	able.				

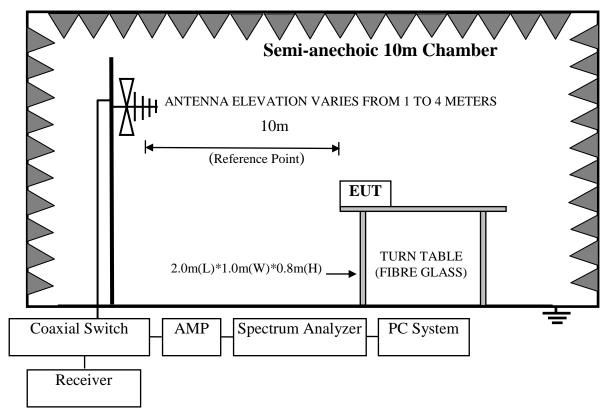
#### 4.1.2.For frequency range above 1GHz (In 10m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	10m Chamber(Svswr)	AUDIX	N/A	N/A	Aug.08,22	5 Year
2.	10m Chamber(SE)	AUDIX	N/A	N/A	Sep.16,22	5 Year
3.	Signal Analyzer	Rohde & Schwarz	FSV30	103669	Oct.09,22	1 Year
4.	Horn Antenna	ETS	3117	00218552	Jan.29,23	1 Year
5.	Amplifier	KEYSIGHT	83017A	39500711	Apr.02,23	1 Year
6.	RF Cable	EMCI	EMC104-SM-S M-15000	190408	Apr.02,23	1 Year
7.	Test Software	AUDIX	e3	210616	N/A	N/A
Note:	N/A means Not applica	ble.				

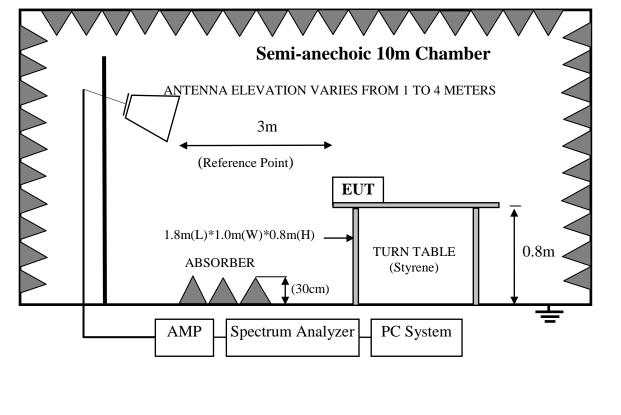


### 4.2. Block Diagram of Test Setup

4.2.1.Test Setup Diagram for 30MHz~1000MHz (In 10m Anechoic Chamber)



4.2.2.For frequency range above 1GHz (In 10m Anechoic Chamber)





#### 4.3. Radiated Emission Limits

All emanations from a Class B computing devices or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified below:

Frequency (MHz)	Distance (Meters)	Field strengths limits (dBµV/m)
30 ~ 230	10	30
230~1000	10	37
Above 1000	3	74(Peak) 54(Average)

#### FCC §15.109/CISPR 22, Class B

Notes: (1) Emission Level  $(dB\mu V/m) = Reading (Receiver) (dB\mu V) + Antenna Factor$ (dB/m) + Cable Loss (dB)

Emission Level  $(dB\mu V/m) = Reading (Spectrum) (dB\mu V) + Antenna Factor$ (dB/m) - Amp Factor (dB) + Cable Loss (dB)(above 1000MHz)

#### (2) The lower limits shall apply at the transition frequencies.

#### 4.4. Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 10m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4 on radiated emission test.

The bandwidth setting on the test receiver is 120kHz.

The resolution bandwidth of the Signal Analyzer was set at 1MHz. (For above 1GHz)

The frequency range from 30MHz to 1000MHz was pre-scanned with a peak detector and all final readings of measurement from Test Receiver are Quasi-Peak values.

The frequency range from 1GHz to 18GHz was checked and all final readings of measurement were with Peak and Average detector, measurement distance was 10m at semi-anechoic chamber. the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. The portion of the test volume that was obstructed by absorber placed on the floor (30cm maximum).

Finally, selected operating situations at Anechoic Chamber measurement, all the test results are listed in section 4.5.



#### 4.5. Radiated Disturbance Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

EUT: OLED Monitor Model No. : AG456UCZD

#### For frequency range 30MHz~1000MHz

The EUT with following test modes were pre-tested:

No.	Test Mode	Input Port	Cable Length	Resolution & Frequency
1.				640*480@60Hz
2.		HDMI 1/2	1.8m	1280*1024@75Hz
3.				3440*1440@100Hz
4.		HDMI 1	1.5m	3440*1440@100Hz
	DC Mode			640*480@60Hz
5.	PC Mode	Type C	1.8m	1280*1024@75Hz
				3440*1440@240Hz
6.				640*480@60Hz
7.		DP	1.8m	1280*1024@75Hz
8.				3440*1440@240Hz
9.	PIP Mode	HDMI+DP	1.8m	3440*1440@100Hz
10.	PBP Mode	HDMI+DP	1.8m	1720*1440@60Hz
11.	R-Load	Type C		20V/4.5A
12.	DVD Mode	HDMI 1/2	1.8m	Color Bar

The result of worst test mode is presented in the report as below and the test data are listed in next pages.

No.	Test Mode	est Mode Input Cable Port Length		Resolution &	Reference Test Data No.	
		Port	Length	Frequency	Horizontal	Vertical
1.	PC Mode	HDMI 1	1.8m	3440*1440@100Hz	#6	#5



#### For frequency range 1GHz~18GHz

The EUT with below test mode were measured within Anechoic Chamber and the test results listed in next pages.

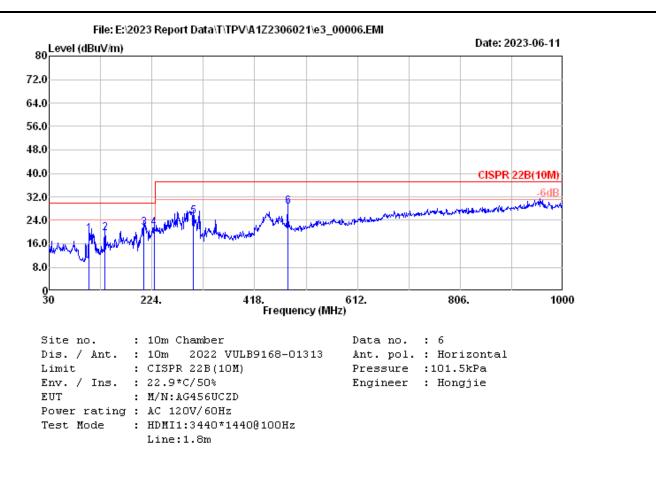
No.	Test Mode	Input Port	Cable Length	Resolution & Frequency
1.		HDMI 1/2	1.8m	1280*1024@75Hz
2.			1.0111	3440*1440@100Hz
3.		HDMI 1	1.5m	3440*1440@100Hz
4	PC Mode		1.8m	1280*1024@75Hz
4.		Type C	1.0111	3440*1440@240Hz
5.		DP	1.8m	1280*1024@75Hz
6.		DP	1.0111	3440*1440@240Hz
7.	PIP Mode	HDMI+DP	1.8m	3440*1440@100Hz
8.	PBP Mode	HDMI+DP	1.8m	1720*1440@60Hz
9.	R-Load	Type C		20V/4.5A
10.	DVD Mode	HDMI 1/2	1.8m	Color Bar

The EUT with following test modes were pre-tested:.

The result of worst test mode is presented in the report as below and the test data are listed in next pages.

No.	Test Mode	InputCableFest ModePortLength		Resolution &	Reference Test Data No.	
		Port	Length	Frequency	Horizontal	Vertical
1.	PC Mode	HDMI 1	1.8m	3440*1440@100Hz	#10	#9





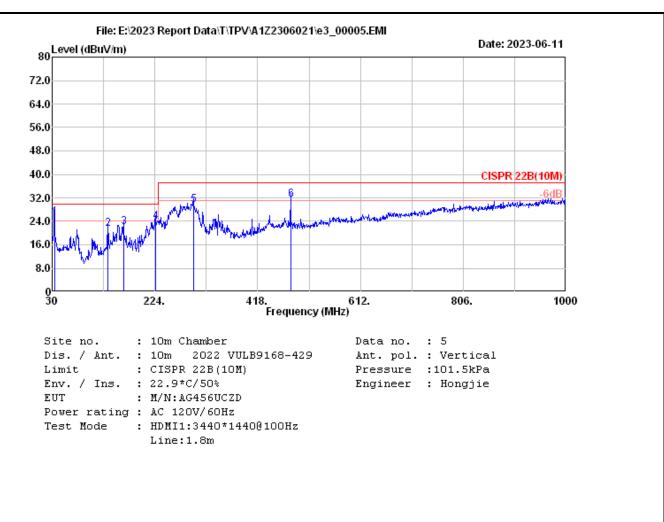
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1 1	105.660	15.49	1.03	2.93	19.45	30.00	10.55	QP
2 1	135.730	18.53	1.19	0.02	19.74	30.00	10.26	QP
3 2	209.450	16.50	1.57	3.36	21.43	30.00	8.57	QP
4 2	227.880	17.03	1.65	2.67	21.35	30.00	8.65	QP
53	301.600	19.23	1.98	4.30	25.51	37.00	11.49	QP
6 4	480.080	23.30	2.87	2.55	28.72	37.00	8.28	QP*

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

 The worst emission was detected at 480.080MHz with corrected signal level of 28.72dBµV/m (Antenna height 1.89m; Turntable degree 237°).

3. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.



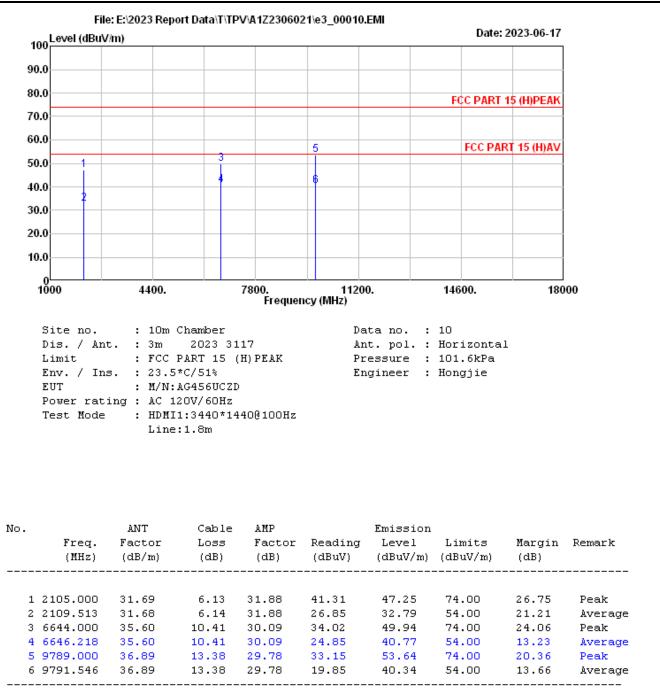


No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	34.850	19.55	0.80	5.00	25.35	30.00	4.65	QP*
2	135.730	18.57	1.64	1.07	21.28	30.00	8.72	QP
3	164.830	18.96	1.80	1.18	21.94	30.00	8.06	QP
4	224.970	16.80	2.11	4.96	23.87	30.00	6.13	QP
5	296.750	19.21	2.48	7.98	29.67	37.00	7.33	QP
6	480.080	23.46	3.28	4.81	31.55 	37.00	5.45	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

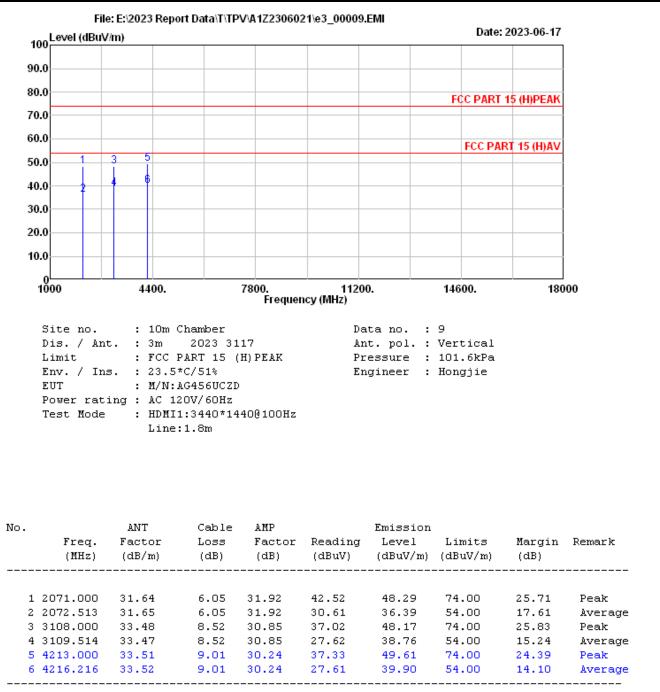
- The worst emission was detected at 34.850MHz with corrected signal level of 25.35dBµV/m (Antenna height 2.21m; Turntable degree 181°).
- 3. 0° was the table front facing the antenna. Degree is calculated from 0° clockwise facing the antenna.





Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading-Amp Factor.





Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading-Amp Factor.



# 5. DEVIATION TO TEST SPECIFICATIONS [NONE]



# 6. PHOTOGRAPH

6.1. Photos of Power Line Conducted Emission Test







6.2. Photos of Radiated Emission Test (In 10m Anechoic Chamber)

