

1.0 Reference and Address							
Report Number	2502B1182SHA-1 Original Issued: 15-Apr-2025 Revised: None						
Standard(s)	ENERGY STAR® P	rogram Requireme	nts for Displays V	ersion 8.0			
	All Product Types and Screen Sizes	ENERGY STAR Test Method for Determining Display Energy – Rev. Nov-2021					
	Enhanced Performance Displays			Metrology (ICDM) Standard – Version 1.03			
Test Methods	Displays Claiming Full Network Connectivity	CTA-2037-A, Dete	ermination of Tele	vision Set Power Consumption			
	Displays Claiming High Dynamic Range (HDR)	VESA High-performance Monitor and Display Compliance Test Specification (DisplayHDR CTS) Version 1.0					
Test Materials	"IEC 62087:2011 Dynamic Broadcast-Content Signal" shall be used for testing, as specified in IEC 62087:2011, Section 11.6, "On (average) mode testing using dynamic broadcast-contentvideo signal."						
	"VESA FPDM2" shall be used only for products that cannot display the IEC 62087:2011 Dynamic Broadcast-Content Signal.						
Reference Standard	IEC 62301:2011,"Ho	IEC 62301:2011, "Household electrical appliances - Measurement of standby power"					
Applicant	Top Victory Electron Co.,Ltd.	ics (Taiwan)	Manufacturer 1	TPV Electronics(Fujian) Co., Ltd			
Address	10F.,No.230,Lianche City. Taipei Country		Address	Rongqiao Economic and Technological Development Zone, Fuqing City, Fujian Province			
Country	Taiwan		Country	P.R.China			
Contact	David.Cheng		Contact	Winter.Feng			
Phone	+886-2-82261668-23	375	Phone	+86-591-85285555			
FAX	+886-2-82261668-23	375	FAX	+86-591-85285447			
Email	David.cheng@tpv-te	ch.com	Email	winter.feng@tpv-tech.com			

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1.0 Reference a	1.0 Reference and Address						
Manufacturer 2	TPV Display Technology (Beihai) Co.,Ltd	Manufacturer 3	TPV Display Technology (China) Co., Ltd.				
Address	China Electronic Beihai Industry Park,Northeast of the Crossing between Taiwan Road and Jilin Road Beihai City,Guangxi	Address	No.106 Jinghai 3 Rd., BDA, Beijing City				
Country	China	Country	China				
Contact	Jiaping Chen	Contact	Nancy.Shang				
Phone	86-799-3132666-8255	Phone	86(10)64326699-8312				
FAX	86-779-2232270	FAX	NA				
Email	jiaping.Chen@tpv-tech.com	Email	lijia.shang@tpv-tech.com				
Manufacturer 4	L&T Display Technology (Fujian) Ltd.	Manufacturer 5	TPV Display Technology(Wuhan)Co.,Ltd				
Manufacturer 4 Address	L&T Display Technology (Fujian) Ltd. Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City,Fujian Province	Address					
	Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City,Fujian	Address	Technology(Wuhan)Co.,Ltd Unique No.11 Zhuankou Development District of Economic Technological Development Zone				
Address	Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City,Fujian Province	Address	Technology(Wuhan)Co.,Ltd Unique No.11 Zhuankou Development District of Economic Technological Development Zone Wuhan				
Address	Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City,Fujian Province P.R.China	Address Country	Technology(Wuhan)Co.,Ltd Unique No.11 Zhuankou Development District of Economic Technological Development Zone Wuhan China				
Address Country Contact	Optoelectronic Park, Rongqiao Economic and Technological Development Zone, Fuqing City,Fujian Province P.R.China Elaine Lin	Address Country Contact	Technology(Wuhan)Co.,Ltd Unique No.11 Zhuankou Development District of Economic Technological Development Zone Wuhan China Zhe.Zhou				

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2.0 Product Des	2.0 Product Description						
Product	Display (L	CD Monit	or)				
Brand Name	AOC						
Description	The produ	ct covere	ed by this re	port is a Display (L0	CD Monito	or)	
Models	24E4U						
Model Similarity	NA						
Ratings	100-240Va	ac,50/60H	Hz,1.5A				
Other Ratings	NA						
Date Available	03/15/2025			Market Availability	Yes	OEM	TPV Electronics(Fujia n) Co. Ltd
Major Markets	Canada, Ja	apan,Swit	tzerland,Ta	iwan,United States			
Trans Type	Initial Cert	ification:	Model Mee	ts ENERGY STAR I	Requirem	ents	
Notes							
UPC							
Reason no UPC		UPC Co	de Not Yet	Assigned - Partner	Will Provid	de Later	
Other reason no UPC							
Additional Model	Model Name and Number				Identifyi	ng Information	
Details							
(Optional)							
Original Certificat	te Actual Is	sued Dat	e for Model	Tested (Only Appli	es to Revi	ised Reports)	NA

3.0 Product Photographs

Photo 1 - External View (front)



Photo 2 - External View (back)



Report No. 2502B1182SHA-1 Top Victory Electronics (Taiwan) Co.,Ltd.

3.0 Product Photographs

Photo 3 - Main Board (TPV/ 715GF371)



Photo 4 - USB Board (TPV/715GB001)



2

3.0 Product Photographs

Photo 5 - Power Board (TPV/ 715G7610)



4.0 0	Critica	al Components					
Photo #	Item no. ¹	Name	Manufacturer/ trademark ²	Type / model ²	Technical data and securement means	Mark(s) of conformity ³	
1	1	LCD Panel	TPV	TPM238***(*can be 0-9, a-z,A-Z, "/", "\", "+","-", "." or blank)	23.8 inches, TFT type,with LED backlight,TPM238WF1 is tested model.	NR	
3	2	Main Board	TPV	715GF371	I/P: 19Vdc,2.5A Max	NR	
4	3	USB board	TPV	715GB001	O/P: 5Vdc,2.5A Max	NR	
5	4	Power Board	TPV	715G7610	I/P: 100-240Vac, 1.5A, 50-60Hz O/P: 19V,2.5A Max	NR	
NOTE	S:		•	•	•		
1) Not) Not all item numbers are indicated (called out) in the photos, as their location is obvious						

1) Not all item numbers are indicated (called out) in the photos, as their location is obvious.

2) "Various" means any type, from any manufacturer that complies with the "Technical data and securement means" and meets the "Mark(s) of conformity" can be used.

3) Indicates specific marks to be verified, which assures the agreed level of surveillance for the component. "NR" - indicates: a) Unlisted and only visual examination is necessary or b) marks are not required to be verified.

5.0 Critical Unlisted CEC Components

Periodic Evaluation of Critical Unlisted Components by the Intertek Component Evaluation Centers (CEC) is not required under the INTERTEK ENERGY STAR Program.

6.0 Critical Features

<u>Listed Component</u> - A component part, which has been previously Listed or Certified by an accredited Certification Organization with no restrictions and is used in the intended application within its ratings.

<u>Recognized Component</u> - A component part, which has been previously evaluated by an accredited certification body with restrictions and must be evaluated as part of the basic product considering the restrictions as specified by the Conditions of Acceptability.

<u>Unlisted Component</u> - A part that has not been previously evaluated to the appropriate designated component standard. It may also be a Listed or Recognized component that is being used outside of its evaluated Listing or component recognition.

<u>Construction Details</u> - For specific construction details, reference should be made to the photographs and descriptions. All dimensions are approximate unless specified as exact or within a tolerance. In addition to the specific construction details described in this Report, the following general requirements also apply.

1. Product Safety Compliance - NA

- 2. EMI Compliance NA
- 3. <u>Schematics</u> NA
- 4. <u>Installation, Operating and Safety Instructions</u> Instructions for installation and use of this product are provided by the manufacturer. Refer to Illustration No(s). 1 4 for details.
- 5. Package Markings NA
- 6. Warranty Information NA
- 7. Marking Label NA

Illustration 1 - Installation, Operating and Safety Instructions

Connecting the Monitor

Cable Connections In Back of Monitor and Computer:





- 1. Power
- DisplayPort
- 3. HDMI
- 4. D-SUB
- 5. USB Upstream
- 6. USB3.2 Gen1x2
- 7. AUDIO IN
- 8. Earphone
- 9. USB3.2 Gen1
- USB3.2 Gen1 downstream+chargin

Connect to PC

- 1. Connect the power cord to the back of the display firmly.
- 2. Turn off your computer and unplug its power cable.
- 3. Connect the display signal cable to the video connector on the back of your computer.
- 4. Plug the power cord of your computer and your display into a nearby outlet.
- 5. Turn on your computer and display.

If your monitor displays an image, installation is complete. If it does not display an image, please refer to Troubleshoot.

To protect equipment, always turn off the PC and LCD monitor before connecting.

Illustration 2 - Installation, Operating and Safety Instructions

Safety

National Conventions

The following subsections describe national conventions used in this document.

Notes, Cautions, and Warnings

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, cautions, and warnings, and they are used as follows:

X

NOTE: A NOTE indicates important information that helps you make better use of your computer system.

Δ

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

Δ

WARNING: A WARNING indicates the potential for bodily harm and tells you how to avoid the problem. Some warnings may appear in alternate formats and may be unaccompanied by an icon. In such cases, the specific presentation of the warning is mandated by regulatory authority.

Power

The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.

The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.

Inplug the unit during a lightning storm or when it will not be used for long periods of time. This will protect the monitor from damage due to power surges.

🛕 Do not overload power strips and extension cords. Overloading can result in fire or electric shock.

To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC, Min. 5A.

The wall socket shall be installed near the equipment and shall be easily accessible.

Illustration 3 - Installation, Operating and Safety Instructions

Installation

Do not place the monitor on an unstable cart, stand, tripod, bracket, or table. If the monitor falls, it can injure a person and cause serious damage to this product. Use only a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with this product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer. A product and cart combination should be moved with care.

Never push any object into the slot on the monitor cabinet. It could damage circuit parts causing a fire or electric shock. Never spill liquids on the monitor.

Do not place the front of the product on the floor.

If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.

Leave some space around the monitor as shown below. Otherwise, air-circulation may be inadequate hence overheating may cause a fire or damage to the monitor.

To avoid potential damage, for example the panel peeling from the bezel, ensure that the monitor does not tilt downward by more than -5 degrees. If the -5 degree downward tilt angle maximum is exceeded, the monitor damage will not be covered under warranty.

See below the recommended ventilation areas around the monitor when the monitor is installed on the wall or on the stand:

Installed with stand



Cleaning

Clean the cabinet regularly with a water-dampened, soft cloth.

When cleaning use a soft cotton or microfiber cloth. The cloth should be damp and almost dry, do not allow liquid into the case.



Please disconnect the power cord before cleaning the product.

Illustration 4 - Installation, Operating and Safety Instructions

Other

If the product is emitting a strange smell, sound or smoke, disconnect the power plug IMMEDIATELY and contact a Service Center.

A Make sure that the ventilating openings are not blocked by a table or curtain.

A Do not engage the LCD monitor in severe vibration or high impact conditions during operation.

Do not knock or drop the monitor during operation or transportation.

The power cords shall be safety approved. For Germany, it shall be H03VV-F, 3G, 0.75 mm², or better. For other countries, the suitable types shall be used accordingly.

Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphones and headphones output voltage and therefore the sound pressure level.

8.0 Test Summary								
Evaluation Period	03/04/2025 - 04/15/2025	Proiect No.	2502B1182SHA					
Sample Rec. Date	4-Mar-2025 Condition Prototype		0250304-55-001					
	Intertek Testing Services [Shanghai FTZ] Co., Ltd. (11							
Test Location	Building 86, No.1198, Qinzhou North Road, Shanghai,							
Test Procedure Testing Lab Test type Qualification								
	result includes consideration of measurement uncertain							
	ct was tested as indicated below with results in conformation	ance to the releva	nt test criteria.					
	ments were evaluated:							
Required Submittal In			Submittal Data					
Model Name and/or N	Number tested		24E4U					
Date tested	44.1		03/04/2025					
Serial number of Unit			1 sample					
ENERGY_STAR_Spe			8.0					
Product_Type*	-		Monitor					
Tiled_Display_System								
Maximum_Tiled_Con	figuration							
Panel_Type* Other_Panel_Type			IPS LCD					
			00.0					
Diagonal_Screen_Siz Screen_Area_sq_in*	۲۵_۱۱۱ ۲۵		23.8 242.18					
Display_Contrast_Ra	tio*							
Native_Vertical_Resc			1500 1080					
Native_Venical_Resc Native_Horizontal_Re								
Total_Native_Resolut			1920 2.1					
Native_Pixel_Density			8562					
As_Tested_Screen_F			60					
Maximum_Screen_R			120					
	-							
Color_Gamut	Enhanced_Performance_Criteria* No							
	Ratio_at_85_deg_Left_Horiz_Viewing_Angle							
	Ratio_at_85_deg_Right_Horiz_Viewing_Angle							
High_Dynamic_Rang			N/A					
Other_Available_Inter			14/7 (
Other Features								
Signal_Interface*			DisplayPort 1.2					
Other Interface								
USB_C_with_Power_	_Delivery_Supported*		No					
Maximum_Power_De								
Other_Power_Source								
Does_Model_Have_a	a_Forced_Menu_at_Initial_Start_up*		No					
	_Luminance_cd_m_2*		345.3					
Maximum_Reported_	_Luminance_cd_m_2*		300					
As_shipped_Luminar			286.4					
As_tested_Luminance			200					
	_12_Lux_at_115_Volts_W							
	_300_Lux_at_115_Volts_W							
	_Power_at_115_Volts_W		12.85					
• – – – –	Power_at_115_Volts_W		12.85					
	_Power_Limit_for_Signage_Certification_W							
	de_Power_at_115_Volts_W		0.16					
	de_Power_at_115_Volts_W		0.16					
	cted_Sleep_Mode_Power_at_115_Volts_W		0.16					
Maximum_Sleep_Mo	laximum_Sleep_Mode_Power_Limit_for_Signage_Certification_W							

8.0 Test Summary	
Number_of_Sleep_Modes_in_Addition_to_Default_Sleep_Mode*	0
Other_Mechanism_for_Automatically_Entering_Sleep_or_Off_Mode	
Default_Delay_Time_to_Sleep_min	
Measured_Off_Mode_Power_at_115_Volts_W	0.13
Reported Off Mode Power at 115 Volts W	0.13
Measured_Total_Energy_Consumption_at_115_Volts_kWh	40.31
Reported_Total_Energy_Consumption_at_115_Volts_kWh	40.31
Max_Total_Energy_Consumption_Limit_for_Monitor_kWh	45.73
On_Mode_Power_at_12_Lux_at_230_Volts_W	10110
On_Mode_Power_at_300_Lux_at_230_Volts_W	
Measured_On_Mode_Power_at_230_Volts_W	13
Measured_Sleep_Mode_Power_at_230_Volts_W	0.22
Measured_Disconnected_Sleep_Mode_Power_at_230_Volts_W	0.22
Measured_Off_Mode_Power_at_230_Volts_W	0.2
Measured_Total_Energy_Consumption_at_230_Volts_kWh	41.12
True_Power_Factor_PF_During_On_Mode_Testing_at_115_Volts_W	0.5
True_Power_Factor_PF_During_On_Mode_Testing_at_230_Volts_W	0.39
Color Spaces Supported*	None
	Display,HDMI,US
Available_Signal_or_Data_Interfaces*	B,VGA
Model_Features*	Built-In Speakers
Features_Enabled_in_Default_On_Mode*	Built-In Speakers
Features_Enabled_in_Default_Sleep_Mode*	None
Wireless_Technologies_Supported*	None
Ethernet_Supported*	None
	Ac to dc internal
Power_Source*	power supply
	Display Power
Machaniam for Automatically Entering Sloop or Off Made*	Management
Mechanism_for_Automatically_Entering_Sleep_or_Off_Mode*	Signaling
On_Mode_Power_at_12_Lux_at_100_Volts_50Hz_W	
On Mode Power at 300 Lux at 100 Volts 50Hz W	
Measured_On_Mode_Power_at_100_Volts_50Hz_W	12.01
Measured_OII_Mode_Power_at_100_Volts_50Hz_W	12.91
	0.15
Measured_Disconnected_Sleep_Mode_Power_at_100_Volts_50Hz_W	0.15
Measured_Off_Mode_Power_at_100_Volts_50Hz_W	0.13
Measured_Total_Energy_Consumption_at_100_Volts_50Hz_kWh	40.45
On_Mode_Power_at_12_Lux_at_100_Volts_60Hz_W	
On_Mode_Power_at_300_Lux_at_100_Volts_60Hz_W	
Measured_On_Mode_Power_at_100_Volts_60Hz_W	12.91
Measured_Sleep_Mode_Power_at_100_Volts_60Hz_W	0.15
Measured_Disconnected_Sleep_Mode_Power_at_100_Volts_60Hz_W	0.15
Measured_Off_Mode_Power_at_100_Volts_60Hz_W	0.13
Measured_Total_Energy_Consumption_at_100_Volts_60Hz_kWh	40.45

8.1	Signatures	

A representative sample	ole of the product covered by this rep	oort has been evalu	ated and found to comply with the
applicable requirement	ts of the standards indicated in Sect	ion 1.0.	
Completed by:	Henry Huang	Reviewed by:	Carl Dong
Title:	Engineer	Title:	Engineer
Signature:	Henry Huang	Signature:	Carl Pong.

9.0 Correlation Page For Multiple Listings The following products, which are identical to those identified in this report except for model number and Company name. BASIC LISTEE Top Victory Electronics (Taiwan) Co., Ltd. 10F.,No.230,Liancheng Rd. Zhonghe City. Taipei Country 23553 Address EPA ID 1065104 Country Taiwan Display (LCD Monitor) Product Contact David.Cheng +886-2-82261668-2375 Phone FAX +886-2-82261668-2375 David.cheng@tpv-tech.com Email

MULTIPLE LISTEE 1	None		
Address			
Country		EPA ID	
Contact			
Phone			
FAX			
Email			
Brand Name			
Date Available		Market Availability	OEM
Major Markets			
Trans Type			
Notes			
UPC			
Reason no UPC			
Other reason no UPC			
ASSOCIATED			
MANUFACTURER			
Address			
Country			
MULTIPLE	LISTEE 1 MODELS	BASIC LISTEE MO	DELS
Additional Model	Model Name and Number	Identifying Informa	ation
Details (Optional)			
Detaile (Optional)			

9.0 Correlation Page For Multiple Listings

MULTIPLE LISTEE 2	None		
Address			
Country		EPA ID	
Contact			
Phone			
FAX			
Email			
Brand Name			
Date Available		Market Availability	OEM
Major Markets			
Trans Type			
Notes			
UPC			
Reason no UPC			
Other reason no UPC			
ASSOCIATED			
MANUFACTURER			
Address			
Country			
MULTIPLE	LISTEE 2 MODELS	BASIC LISTEE MOI	DELS
Additional Model	Model Name and Number	Identifying Informa	tion
Details (Optional)			

10.0 General Information

The Applicant has agreed to produce products in accordance with the requirements of this report and to maintain compliance with all ENERGY STAR Product Specification requirements.

Changes to Product Design / Alternate Components

As part of this agreement, the Applicant also has agreed to notify Intertek and to request authorization prior to making any changes to the product (including but not limited to using alternate parts, components or materials) which may effect compliance with the ENERGY STAR Product Specification. Those parts, components or materials identified as critical have been listed in Section 4.0 of this report.

Product Surveillance

Under this Program, market surveillance is conducted on an annual basis. For each Product Type defined in the EPA ENERGY STAR Program, Intertek will select 10% of those certified products for Verification Testing in accordance with the requirements of the EPA ENERGY STAR Product Specification.

The primary source for products under Verification Testing will be the retail market. Applicants whose products are selected for Verification Testing are required to provide a list of locations where the product might be obtained. The Applicant is responsible for the cost of procurement and the Verification Tests. Should products not be readily available on the retail market, the Applicant is required to provide access to distribution warehouses to allow selection of those products. Should the product not be available on the retail market or if procurement from the retail market is not feasible, then alternate arrangements for Verification Testing will be made by the Intertek Certification Body.

As a general rule under the Verification Testing requirements, the products must achieve energy values within 5% of the required Tier Limit.

Compliance with ENERGY STAR Product Specifications under Verification Testing

Products found non-compliant with ENERGY STAR Product Specification under Verification Testing, will be reported to the EPA within 48 hours and the product removed from the ENERGY STAR Program. If it is determined during Verification Testing that changes have been made to product design or critical components, the Certification Body may increase Verification Testing frequency of those products.

10.1 Evaluation of Unlisted Components

Because Unlisted Components are uncontrolled, and they do not fall under a third party follow up program, Intertek may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The Unlisted Components in Section 5.0 require testing and/or evaluation as indicated.

Note to Intertek Follow Up Inspector: The Component Evaluation Center, CEC, will notify you in writing when these components must be selected and sent to the CEC for re-evaluation

Ship the samples to: Intertek Testing Services Shanghai Limited ETL Component Evaluation Center Building No. 86, 1198 Qinzhou Road (North) Shanghai 200233, China Attn: Ms. Angela Han Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return must accompany the initial component shipment.

11.0 Manufacturing and Production Tests

Manufacturing and Production tests are not required under the INTERTEK ENERGY STAR Program. However, Intertek encourages the use of such ongoing product testing to ensure compliance with the EPA ENERGY STAR Product Specifications.

12.0 Revision Summary				
The following	changes are in com	pliance wit	th the d	eclaration of Section 8.1:
Date/	Project Handler/			eclaration of Section 8.1:
Proj # Site ID	Reviewer	Section	Item	Description of Change
				None
L				
l				