

## **ENERGY STAR Displays Template**

Release Date: TBD

**Description:** Information for certification bodies to provide to EPA on products certified as meeting the eligibility criteria for the ENERGY STAR® Program Requirements for Displays Version 7.0. Additional instructions for submitting this information to EPA are available at www.energystar.gov/qpx.

**Total Columns: 110** 

Name	Description	Required/ Optional	Multiple Select	Data Type	Restrictions	Enumerations				
Product Specific	Product Specific Information									
ENERGY STAR Specification Version		R	N	Enumeration Data		• 7.0				
Product Type		R	N	Enumeration Data		Monitor     Signage Display				
Display Type		R	N	Enumeration Data		<ul> <li>TN LCD</li> <li>IPS LCD</li> <li>VA LCD</li> <li>OLED</li> <li>Plasma</li> <li>Other</li> </ul>				

Other Display Type	Required if Display Type is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000	
Display Backlight Technology		R	N	Enumeration Data		<ul><li>CCFL</li><li>LED</li><li>OLED</li><li>Other</li><li>N/A</li></ul>
Other Display Backlight Technology	Required if Display Backlight Technology is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000	
Display Contrast Ratio	Indicate the maximum display contrast ratio at 0 degrees from the perpendicular as an integer relative to 1 (e.g., report 100 if the contrast ratio is 100:1).	R	N	Integer	Min Value: 1	
Image Height (in)		R	N	Decimal	No. of Decimal: 1	
Image Width (in)		R	N	Decimal	No. of Decimal: 1	
Diagonal Screen Size (in)		R	N	Decimal	No. of Decimal: 1	
Screen Area (sq in)		R	N	Decimal	No. of Decimal: 2	
Aspect Ratio	Indicate the number as a decimal rounded to the nearest hundredth, e.g., 1.78.	R	N	Decimal	No. of Decimal: 2	
Native Vertical Resolution (lines)		R	N	Integer		
Native Horizontal Resolution (lines)		R	N	Integer		

Total Native Resolution (megapixels)	Multiply the Native Vertical Resolution by the Native Horizontal Resolution and divide by 1,000,000.	R	N	Decimal	No. of Decimal: 1	
Native Pixel Density (Dp) (pixels/sq in)		R	N	Integer		
Screen Refresh Rate (Hz)		R	N	Integer		
Color Gamut	Report color gamut supported by the model as percentage of the CIE LUV 1976 <i>u' v'</i> color space and calculated per Section 5.18 Gamut Area of the Information Display Measurements Standard Version 1.03.	R	N	Decimal	No. of Decimal: 1	
Color Spaces Supported	Indicate the color spaces fully supported (100%) by the model.	R	Y	Enumeration Data		<ul> <li>sRGB</li> <li>Adobe RGB</li> <li>NTSC</li> <li>DCI-P3</li> <li>None</li> <li>Other</li> </ul>
Enhanced Performance Criteria	Indicate whether the model meets Enhanced Performance (EPD) I or II criteria. Report this information regardless of whether the Total Energy Consumption allowance is needed to meet the ENERGY STAR requirements.	R	N	Enumeration Data	Min Occurs: 0	EPD I (32.9% CIE     LUV/99% sRGB area or     greater)     EPD II (38.4 CIE     LUV/99% Adobe RGB     area or greater)     None

Reported Contrast Ratio at -85 degrees (Left) Horizontal Viewing Angle	Required if the model meets Enhanced Performance criteria. Provide the rated/reported display screen contrast ratio at a horizontal viewing angle of at least -85 degrees (left) from the perpendicular for a flat screen, and at least -83 degrees for a curved screen, with or without a screen cover glass. Indicate the contrast ratio as an integer relative to 1 (e.g., report 100 if the contrast ratio is 100:1).	O	N	Integer	Min Value: 1	
Reported Contrast Ratio at +85degrees (Right) Horizontal Viewing Angle	Required if the model meets Enhanced-Performance criteria. Provide the rated/reported display screen contrast ratio at a horizontal viewing angle of at least +85 degrees (right) from the perpendicular for a flat screen, and at least 83 degrees for a curved screen, with or without a screen cover glass. Indicate the contrast ratio as an integer relative to 1 (e.g., report 100 if the contrast ratio is 100:1).	0	N	Integer	Min Value: 1	
Is This Model Shipped With an		R	N	Enumeration Data		• Yes

External Power Supply (EPS)?						• No
Is Model Sold Through Enterprise Channels?		R	N	Enumeration Data		Yes No
Available Signal or Data Interfaces	Select all signal and data interfaces available with the model.	R	Y	Enumeration Data	Min Occurs: 1 Max Occurs: X	<ul> <li>Component</li> <li>Composite</li> <li>DisplayPort 1.2</li> <li>DisplayPort 1.3</li> <li>DVI</li> <li>HDMI 1.4</li> <li>HDMI 2.0</li> <li>HDMI 2.a</li> <li>IEEE 1394</li> <li>RF</li> <li>SVGA</li> <li>S-Video</li> <li>Thunderbolt</li> <li>USB 2.0</li> <li>USB 3.0</li> <li>USB 3.1</li> <li>USB-3.1 C</li> <li>VGA</li> <li>XGA</li> <li>Other</li> </ul>
Other Available Interfaces	Required if Available Interfaces is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000	
Model Features	Indicate all available features in the product. The features should include those not enabled during	R	Y	Enumeration Data	Min Occurs: 1 Max Occurs:	<ul> <li>3D</li> <li>Automatic Brightness Control</li> <li>Built-In Speakers</li> <li>Bluetooth</li> </ul>

	tests for ENERGY STAR certification.					<ul> <li>Curved Screen</li> <li>Camera Interface</li> <li>Energy Gauge</li> <li>Full Network Connectivity</li> <li>Flash Memory- card/Smart-card Reader</li> <li>Gesture Recognition</li> <li>High Dynamic Range</li> <li>Occupancy Sensor</li> <li>Plug-in Module (Removable)</li> <li>Plug-in Module (Non- removable)</li> <li>Touch Screen</li> <li>User Adjustable Backlight</li> <li>Other</li> <li>None</li> </ul>
Other Features	Required if Model Features is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000	
Features Enabled in Default On Mode	Indicate features enabled in the default tested On Mode.	R	Y	Enumeration Data		<ul> <li>3D</li> <li>Automatic Brightness Control</li> <li>Built-In Speakers</li> <li>Bluetooth</li> <li>Camera Interface</li> <li>Energy Gauge</li> <li>Full Network Connectivity</li> </ul>

						<ul> <li>Gesture Recognition</li> <li>High Dynamic Range</li> <li>Occupancy Sensor</li> <li>Touch Screen</li> <li>None</li> </ul>
Features Enabled in Default Sleep Mode	Indicate features enabled in the default tested Sleep Mode	R	Y	Enumeration Data		<ul> <li>Bluetooth</li> <li>Energy Gauge</li> <li>Full Network Connectivity</li> <li>Occupancy Sensor</li> <li>Touch Screen</li> <li>None</li> </ul>
Signal Interface	Provide the Signal Interface used for testing.	R	N	Enumeration Data	Min Occurs: 0	<ul> <li>DisplayPort 1.2</li> <li>DisplayPort 1.3</li> <li>DVI</li> <li>HDMI 1.4</li> <li>HDMI 2.0</li> <li>HDMI 2.a</li> <li>IEEE 1394</li> <li>SVGA</li> <li>Thunderbolt</li> <li>VGA</li> <li>XGA</li> <li>Other</li> </ul>
Other Interface	Required if the Signal Interface used for testing is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000	
Wireless Technologies Supported	Indicate the wireless band and frequency supported by the model.	R	Y	Enumeration Data		<ul> <li>IEEE 802.11ac, 5 GHz</li> <li>IEEE 802.11n, 5 GHz</li> </ul>

						<ul> <li>IEEE 802.11n, 2.4 GHz</li> <li>IEEE 802.11g, 2.4 GHz</li> <li>IEEE 802.11b, 2.4 GHz</li> <li>IEEE 802.11a, 5 GHz</li> <li>Other</li> <li>None</li> </ul>
Low Power Wireless Technologies	Indicate whether the model supports low power wireless technologies.	R	Y	Enumeration Data		<ul><li>ZigBee</li><li>Bluetooth</li><li>Other</li><li>None</li></ul>
Ethernet Supported	Indicate whether the model supports Ethernet.	R	Y	Enumeration Data		<ul> <li>Fast Ethernet (100 Mbit/s)</li> <li>Gigabit Ethernet (1000 Mbit/s)</li> <li>Fast Energy Efficient Ethernet (IEEE 802.3az)</li> <li>Gigabit Energy Efficient Ethernet (IEEE 802.3az)</li> <li>None</li> <li>Other</li> </ul>
Power Source	Indicate available power sources	R	Y	Enumeration Data		<ul> <li>Ac power supply</li> <li>Power over Ethernet (PoE)</li> <li>USB</li> <li>Other</li> </ul>
Other Power Source	Required if the Power Source is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000	

VESA FPDM2 Test Pattern Used?	Indicate if the VESA FPDM2 test pattern was used for testing. The VESA FPDM2 test pattern can only be used if the model is not capable of displaying IEC signals.	R	N	Enumeration Data		•	Yes No
Mechanism for Automatically Entering Sleep or Off Mode?	Indicate all mechanisms enabled by default that allow the model to automatically enter Sleep or Off Mode.	R	Y	Enumeration Data	Min Occurs: 1 Max Occurs: 4	•	Display Power Management Signaling Timer Sensor Other
Other Mechanism for Automatically Entering Sleep or Off Mode	Required if Mechanism for Automatically Entering Sleep or Off Mode is Other.	0	N	Text	Min Occurs: 0 Max Length: 1000		
Default Delay Time to Sleep (min)	Required for products that have an internal default delay time after which the product transitions from On Mode to Sleep or Off Mode. Indicate the Default Delay Time to Sleep in minutes.	0	N	Integer	Min Occurs: 0		
Does Model Have a Forced Menu at Initial Start-up?		R	N	Enumeration Data		•	Yes No
User Interface	Indicate Yes if model is designed in accordance with the user interface standard, IEEE P1621: Standard for User Interface	R	N	Enumeration Data		•	Yes No

Mariana Marana d	Elements in Power Control of Electronic Devices Employed in Office/Consumer Environments.		, i	Designation	No. of Dociment 4	
Maximum Measured Luminance (cd/m^2)	Provide the maximum screen luminance of the On Mode setting in which the display controls, such as brightness and contrast level, are manually configured to a maximum level. Indicate the number in candelas per square meter.	R	N	Decimal	No. of Decimal: 1	
Maximum Reported Luminance (cd/m^2)	Provide the maximum screen luminance of the On Mode preset setting in which the display is brightest, as specified by the manufacturer, for example, in the user manual. Indicate the number in candelas per square meter, which will appear on the ENERGY STAR list of certified products.	R	N	Decimal	No. of Decimal: 1	
As-shipped Luminance (cd/m^2)	Required for all models except models with Automatic Brightness Control (ABC) enabled by default. Indicate the number in candelas per square meter.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 1	
As-tested Luminance (cd/m^2)	Luminance used for On Mode testing (LON). Indicate the	R	N	Decimal	No. of Decimal: 1	

	number in candelas per square meter.					
On Mode Power at 12 Lux at 115 Volts (W)	Required if ABC is enabled by default and the model was tested at 115 volts. Indicate the 115 volt power consumption at 12 lux ambient light conditions (P12) in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
On Mode Power at 300 Lux at 115 Volts (W)	Required if ABC is enabled by default and the model was tested at 115 volts. Indicate the 115 volt power consumption at 300 lux ambient light conditions (P300) in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Measured On Mode Power at 115 Volts (W)	Required if the model was tested at 115 volts. Provide the measured On Mode power for products without ABC enabled by default or for models with ABC, but with the ABC disabled (PON) in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Reported On Mode Power at 115 Volts (W)	Required if the model was tested at 115 volts. Provide the rated/reported Average On Mode Power at 115 volts, which will appear on the ENERGY STAR list of certified products, in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Maximum On Mode Power Limit for Signage Certification (W)	Required if the model is a Signage Display. Provide the Maximum On Mode Power limit	0	N	Decimal	Number of Decimals: 1	

	for Certification with applicable allowances included.				Min Value:1  Max Value: 2500	
Measured Sleep Mode Power at 115 Volts (W)	Required if the model was tested at 115 Volts. Provide the measured default Sleep Mode Power at 115 Volts (PSLEEP), in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Reported Sleep Mode Power at 115 Volts (W)	Required if the model was tested at 115 volts. Provide the rated/reported Average Sleep Mode Power at 115 volts, which will appear on the ENERGY STAR list of certified products, in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Measured Disconnected Sleep Mode Power at 115 Volts (W)	Required if the model was tested with a data/network connection and at 115 volts. Provide the measured Sleep Mode Power with data/networking features deactivated and without any bridge connection established at 115 volts based on test data in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Maximum Sleep Mode Power Limit for Signage Certification (W)	Required if the model is a Signage Display. Provide the Maximum Sleep Mode Power limit for Certification with applicable allowances included.	0	N	Decimal	Number of Decimals: 1 Min Value:1 Max Value: 6	

Measured Off Mode Power at 115 Volts (W)	Required if the model has an Off Mode and if it was tested at 115 volts. Provide the measured Off Mode Power at 115 volts (POFF) in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2 Max Value: 0.50	
Reported Off Mode Power at 115 Volts (W)	Required if the model has an Off Mode and if it was tested at 115 volts. Provide the rated/reported Average Off Mode Power at 115 volts, which will appear on the ENERGY STAR list of certified products, in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2 Max Value: 0.50	
Measured Total Energy Consumption at 115 Volts (kWh)	Required if the model is a Monitor and was tested at 115 volts. Provide the Total Energy Consumption at 115 volts based on test data in kilowatthours.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Reported Total Energy Consumption at 115 Volts (kWh)	Required if the model is a Monitor and was tested at 115 volts. Provide the rated/reported Total Energy Consumption at 115 volts, which will appear on the ENERGY STAR list of certified products, in kilowatt-hours.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Maximum Total Energy Consumption Limit for Monitor Certification (kWh)	Required if the model is a Monitor. Provide the Maximum Total Energy Consumption limit for Certification with applicable allowances included.	0	N	Decimal	Number of Decimals: 1 Min Value:1	

					Max Value: 500	
On Mode Power at 12 Lux at 230 Volts (W)	Required if ABC is enabled by default and the model was tested at 230 volts. Indicate the 230 volt power consumption at 12 lux ambient light conditions (P12) in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
On Mode Power at 300 Lux at 230 Volts (W)	Required if ABC is enabled by default and the model was tested at 230 volts. Indicate the 230 volt power consumption at 300 lux ambient light conditions (P300) in watts.	O	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Measured On Mode Power at 230 Volts (W)	Required if the model was tested at 230 volts. Provide the measured On Mode power for products without ABC enabled by default or for models with ABC, but with the ABC disabled (PON) in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Measured Sleep Mode Power at 230 Volts (W)	Required if the model was tested at 230 volts. Provide the measured Sleep Mode Power at 230 volts (PSLEEP), in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	
Measured Disconnected Sleep Mode Power at 230 Volts (W)	Required if the model was tested with a data/network connection and at 230 volts. Provide the measured Sleep Mode Power with	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2	

	data/networking features deactivated and without any bridge connection established at 230 volts based on test data in watts.					
Measured Off Mode Power at 230 Volts (W)	Required if the model has an Off Mode and if it was tested at 230 volts. Provide the measured Off Mode Power at 230 volts (POFF) based on test data in watts.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2 Max Value: 0.50	
Measured Total Energy Consumption at 230 Volts (kWh)	Required if the model is a Monitor and was tested at 115 volts. Provide the Total Energy Consumption at 230 volts based on test data in kilowatthours.	0	N	Decimal	Min Occurs: 0 No. of Decimal: 2 Max Value: 1000	
True Power Factor (PF) During On Mode Testing	Indicate the power factor (PF) averaged over the entire duration of On Mode testing.	R	N	Decimal	No. of Decimal: 2 Max Value: 1.00	
Number of Sleep Modes in Addition to Default Sleep Mode		R	N	Enumeration Data		• 0 • 1 • 2 • 3 or more