

TEST REPORT					
Ecodesign and Energy labelling requirement for Electronic Displays Implementation measure (EU) 2019/2021 and (EU) 2019/2013					
Report Reference No.: N01A26030214P00401					
Date of issue: 2026-04-21					
Total number of pages: 29					
Testing laboratory: Guangdong GTG Testing Technology Co., Ltd.					
Address:: 1-2/F., Building A, and 1/F., Building B, No.11, & Room 102, Unit 1, and Room 101 Unit 2, Building 1, No.9, Zongbu 2nd Road, Songshan Lake High-Tech Industrial Development Zone, Dongguan, Guangdong, China					
Applicant.....: Shenzhen KTC Technology Co., Ltd.					
Address.....: Floor 1-5, Building 1, No. 4023 Wuhe Avenue, Gangtuo Community, Bantian, Longgang District, Shenzhen City, Guangdong Province, P.R. China					
Standard.....: (EU) 2019/2021 + Corr. 2020-2-24 + (EU) 2021/341 (EU) 2019/2013 + Corr. 2020-2-24 + (EU) 2021/340					
Standards/regulations (Test Procedure).....: Annex III and Annex IIIa to Commission Regulation (EU) 2019/2021 and amending Regulations in (EU) 2021/341 EN 50564:2011 IEC 62087-1:2015 (EN 62087-1:2016) IEC 62087-2:2015 (EN 62087-2:2016) IEC 62087-3:2015 (EN 62087-3:2016) IEC 62087-7:2018 (EN IEC 62087-7:2019)					
Test Result.....: Pass					
Test Report Form No.....: 01-P-N016-1B					
Test Report Form(s) Originator: GTG					
Master TRF: Dated 2025-11-05					
General disclaimer: The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the GTG, responsible for this Test Report.					
Tested by (name, function, signature):	KD Mo Project handler	Reviewed by (name, function, signature):	Apple Hu Reviewer	Approved by (name, function, signature):	Jacky Wu Approver
KD Mo		Apple Hu		Jacky Wu	



Test sample:	One (pre-production)
Type of test object:	LCD Monitor, LED Monitor, Gaming Monitor, LCD Gaming Monitor
Trademark:	
Model and/ or type reference:	M27P6S, ***27***** (The symbol "*" can be 0-9, A-Z, a-z, "/", "\", "_", "-", "(", ")", " ", "." or blank for the marketing purpose, only differences model names and appearance color. No safety or EMC concern.)
Rating(s):	Input: 100-240V~, 50/60Hz, 3A
Manufacturer:	Same as applicant
Address:	Same as applicant
Name and address of factory(ies) Name: N/A Address: N/A	
Order description:	☒ Complete test according to TRF
	☐ Partial test according to manufacturer's specifications
	☐ Preliminary test
	☐ Spot check
	☐ Others:
Date of receipt of test item:	2026-03-26
Date(s) of performance of test:	From 2026-03-31 to 2026-04-01

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

Test case verdicts

Test case does not apply to the test object.....: N/A (Not Applicable)

Test item does meet the requirement.....: P (Pass)

Test item does not meet the requirement.....: F (Fail)

Test case has not been checked: —

General remarks

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced except in full without the written approval of the testing laboratory.

The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to the update. No performance change shall occur as a result of rejecting the update.

A software update shall never have the effect of changing the product's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.

Summary of testing:

- All models are identical except for model name and trademark.
- The UUT equipped with type No. K270WD of TFT-LCD module, It is powered by an AC power supply through a detachable power cord.
- Unless otherwise specified, the model M27P6S was selected as representative for all tests.
- All tests were conducted under the normal/default configuration unless otherwise specified.

The product meets the requirements stage 1 and stage 2 of the implementation measure and it's amendments, under normal/default configuration.

Remark:

EEI limits for on-mode		
	Stage 1	Stage 2
Start Date	01.March.2021	01.March.2023

☐ deviation(s) found

☒ no deviations found

Additional information on non-standard test method(s)

Sub clause: N/A

Page: N/A

Rational: N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

Product type:	☐ television ☒ monitor ☐ digital signage display ☐ broadcast displays ☐ professional displays ☐ security displays ☐ digital interactive whiteboards ☐ digital photo frame ☐ status display ☐ control panel ☐ others:
Forced menu:	☐ yes ☒ no
Presence of ABC feature:	☐ yes; ☐ enabled in the normal configuration, ☐ persists in any other standard dynamic range configuration ☒ no
Availability of network connectivity: Additional functions: Size ratio: Screen resolution (pixels): Screen diagonal (cm/inch): Visible screen area (cm ² /dm ²): Refresh Rate (Hz) Panel technology used: Power supply type:	N/A N/A 16 : 9 3840 x 2160 68.4 cm / 27 inches 1999.2cm ² / 19.99 dm ² 60Hz TFT-LCD ☒ internal ☐ external:
HDR mode: Voice recognition sensor available:	☐ Standardised external: ☒ yes ☐ no ☐ yes ☒ no
Room presence sensor available	☐ yes ☒ no

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

Copy of marking plate:

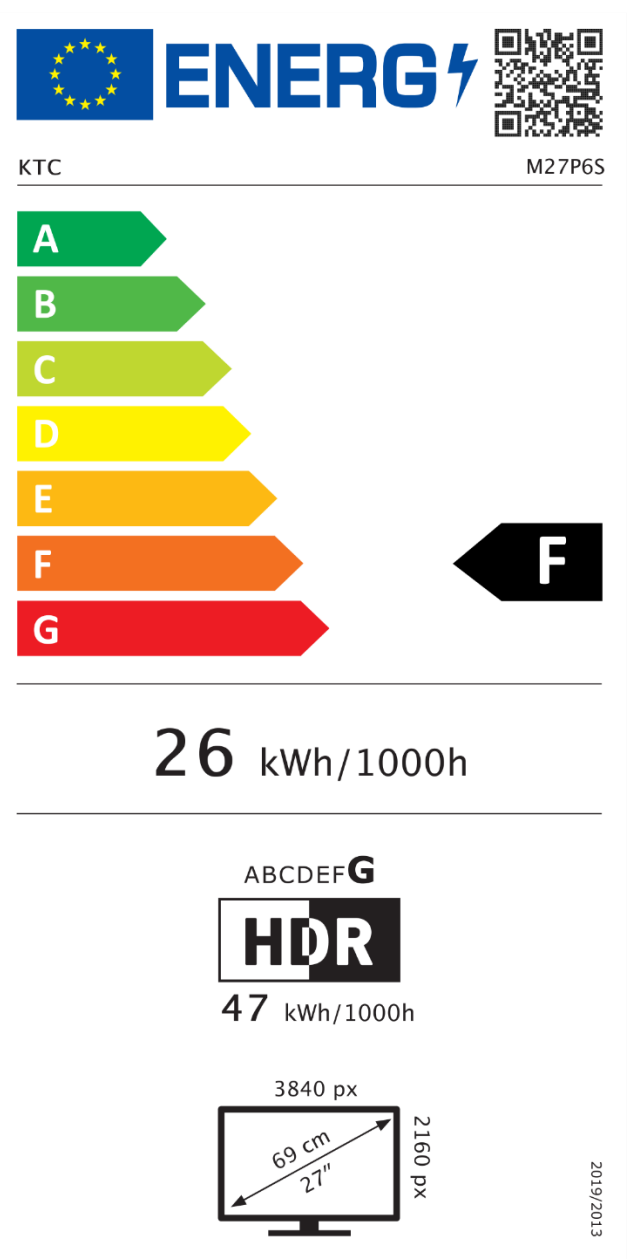


(Representative)

Note(s): This is a representative label; others are similar to it except for model name.

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

Energy Label (Representative):



Remarks:

1. Model can be replaced by other models or trademarks in this report.

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

0.	General		P
0.1	Ambient condition met requirement of: Ambient temperature $23 \pm 5^{\circ}\text{C}$; Airspeed $\leq 0.5\text{m/s}$. In on mode: For determining On mode power consumption for television sets with ABC enabled, $\leq 1\text{ lx}$ shall be confirmed at the surface of the ABC sensor assembly with the light sources off and the UUT in the Off or Disconnected mode. In the Standby, off and networked standby modes: Where the product has an ambient light sensor that affects the power consumption, the test shall be carried out with controlled ambient light conditions. Where the illuminance levels are externally defined (in a test procedure or in the instructions for use), these values shall be used. Where no illuminance levels are stated or defined, reference illuminance levels of $>300\text{ lx}$ and $<10\text{ lx}$ shall be used.	23.4°C to 23.7°C, Airspeed: 0.41 m/s	P
0.2	Power source meets requirement of:		P
	AC input: Voltage: $230\text{V} \pm 1\%$; Frequency: $50\text{Hz} \pm 1\%$; THD value: $<2\%$; ratio of peak value of test voltage to rms of 1.34 to 1.49.	Voltage: 230.2V to 230.4V Frequency: 50.0Hz THD: max. 1.361% Ratio of peak value of test voltage to rms: 1.41	P
	UUT with a standardized DC input:		N/A
0.3	Power measuring instrument		P
	The measurement shall be carried out directly by means of a wattmeter, a wattmeter with averaging function, or a watthour meter by dividing the reading by the measuring time. If the power consumption is expected to vary over time, such as in the case of a television set displaying a dynamic signal, a watthour meter or a wattmeter with an averaging function shall be used to carry out the measurement.		P
	The sampling rate of the watthour meter or wattmeter with averaging function shall be high enough to achieve an accurate measurement. The manufacturer's specification shall be used to determine the		P

Clause	Requirement-Test	Measuring result-Remark	Verdict
	appropriateness of the meter and suitable sampling rates to perform a measurement with the required accuracy.		
	The power measuring instrument used shall measure the real power consumed regardless of the power factor of the UUT.		P
	In the case of Standby, off and networked standby modes power measurement, it should be ascertained that the wattmeter or the watthour meter is suitable to measure the power consumption of power supplies working in a burst mode with a low duty cycle and the low power consumption levels in the Standby, off and network standby modes.		P
	For digital power meters a sampling rate of at least 10 kHz is recommended.		P
0.4	Measurement uncertainty		P
	Measurements of power of 0.5 W or greater shall be made with an uncertainty of less than or equal to 2 % at the 95 % confidence level. Measurements of power of less than 0.5 W shall be made with an uncertainty of less than or equal to 0.01 W at the 95 % confidence level. The power measuring instrument shall have a resolution of:		P
	- 0.01 W or better for power measurements of 10 W or less;		P
	- 0.1 W or better for power measurements of greater than 10 W up to 100 W;		P
	- 1 W or better for power measurements of greater than 100 W.		N/A
	For equipment connected to more than one phase, the power measuring instrument shall be equipped to measure the total power of all phases connected.		N/A
0.5	Luminance measuring device		P
	The contact luminance meter for display luminance measurement shall be rigged to align with the centre of the UUT screen.		P
	The LMD shall have an accuracy of $\pm 2\% \pm 2$ digits of the digitally displayed value or better.		P
0.6	Illuminance measuring instrument		P
	The illuminance measuring instrument shall have an accuracy of $\pm 2\% \pm 2$ digits or better.		P
0.7	Light source for product with ABC function		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	Projector		N/A
	Shall provide an illuminance at the ABC sensor of less than 12 lux and up to 150 lux for TVs and monitors and up to 20,000 lux for Digital Signage Display from a minimum distance of approximately 1.5 m from ABC sensor		N/A
	Solid state lamp engine (LED, Laser or LED /Laser combination). Colour gamut of projector shall be equal to or better than REC 709. Tilting Mounting platform allowing precise alignment of projector beam. This may be combined with or replaced by a built in Optical alignment feature.		N/A
	Dimmable LED Lamp		N/A
	have a diameter of 90 mm ± 5 mm		N/A
	The rated beam angle of the lamp shall be 40 ° ± 5 °		N/A
	The rated correlated colour temperature (CCT) shall be 2700 K ± 300 K throughout the illuminance range 12 lux to the peak illuminance required for testing.		N/A
	The rated colour rendering index (CRI) shall be 80 ± 3.		N/A
	The front surface of the lamp shall be clear (i.e., not coloured or coated with a spectrum modifying material) and may have a smooth or granular front surface; when shined against a uniform white surface, the diffusion pattern shall appear smooth to the naked eye.		N/A
	The lamp assembly shall not modify the spectrum of the LED source, including the IR and UV bands.		N/A
	The characteristics of the light shall not vary across the full range of dimming required for the ABC testing.		N/A

(EU) 2019/2021			P
Annex II	Ecodesign requirements		P
A.	Energy Efficiency Requirements		P
1.	The energy efficiency index (EEI) of an electronic display shall be calculated using the following equation: $EEI = \frac{(P_{measured} + 1)}{(3 \times [90 \times \tanh(0,02 + 0,004 \times (A - 11)) + 4] + 3) + corr}$ Where: A represents the screen area in dm²; P_{measured} is the measured power in Watts in on mode in the normal	EEI: 0.804 P_{declared}= 23.2W A= 19.99dm² corr= 0 Declares: EEI: 0.897 P_{declared}= 26.0W A= 19.99dm²	

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	configuration, in standard dynamic range (SDR); corr is a correction factor of 10 for OLED electronic displays that do not apply the ABC allowance in point B (1). This shall apply until 28 February 2023. corr shall be zero in all other cases.														
	The EEI of an electronic display shall not exceed the maximum EEI (EEI_{max}) according to the limits in Table 1 from the dates indicated.	EEI_{max} : 1.10 (Stage 1); EEI_{max} : 0.90 (Stage 2)	P												
	The declared values of the on mode power ($P_{measured}$) and screen area (A) as listed in Table 5 of Annex VI of delegated Regulation 2019/2013 shall be used for the calculation of EEI.		P												
	Table 1 EEI limits for on-mode <table> <tr> <th></th><th>EEI_{max} for electronic displays with resolution up to HD</th><th>EEI_{max} for electronic displays with resolution above HD and up to UHD</th><th>EEI_{max} for electronic displays with resolution above UHD and for MicroLED displays</th></tr> <tr> <td>1 March 2021</td><td>0,90</td><td>1,10</td><td>n.a.</td></tr> <tr> <td>1 March 2023</td><td>0,75</td><td>0,90</td><td>0,90'</td></tr> </table>			EEI_{max} for electronic displays with resolution up to HD	EEI_{max} for electronic displays with resolution above HD and up to UHD	EEI_{max} for electronic displays with resolution above UHD and for MicroLED displays	1 March 2021	0,90	1,10	n.a.	1 March 2023	0,75	0,90	0,90'	
	EEI_{max} for electronic displays with resolution up to HD	EEI_{max} for electronic displays with resolution above HD and up to UHD	EEI_{max} for electronic displays with resolution above UHD and for MicroLED displays												
1 March 2021	0,90	1,10	n.a.												
1 March 2023	0,75	0,90	0,90'												
B.	Allowances and adjustments for the purpose of the EEI calculation and functional Requirements		P												
	From 1 March 2021, electronic displays shall meet the requirements listed below.		P												
1.	Electronic displays with automatic brightness control (ABC)		N/A												
	Electronic displays qualify for a 10 % reduction in $P_{measured}$, if they meet all of the following requirements:														
(a)	ABC is enabled in the normal configuration of the electronic display and persists in any other standard dynamic range configuration available to the end-user;		N/A												
(b)	the value of $P_{measured}$, in the normal configuration, is measured with ABC disabled or, if ABC cannot be disabled, in an ambient light condition of 100 lux measured at the ABC sensor;		N/A												
(c)	the value of $P_{measured}$ with ABC disabled, if applicable, shall be equal to or greater than the on mode power measured with ABC enabled in an ambient light condition of 100 lux measured at the ABC sensor;		N/A												

Clause	Requirement-Test	Measuring result-Remark	Verdict
(d)	with ABC enabled, the measured value of the on mode power must decrease by 20 % or more when the ambient light condition, measured at the ABC sensor, is reduced from 100 lux to 12 lux; and		N/A
(e)	the ABC control of the display screen luminance meets all of the following characteristics when the ambient light condition measured at the ABC sensor changes:		N/A
	- the measured screen luminance at 60 lux is between 65 % and 95 % of the screen luminance measured at 100 lux;		N/A
	- the measured screen luminance at 35 lux is between 50 % and 80 % of the screen luminance measured at 100 lux; and		N/A
	- the measured screen luminance at 12 lux is between 35 % and 70 % of the screen luminance measured at 100 lux.		N/A
2.	Forced menu and set up menus		P
	Electronic displays may be placed on the market with a forced menu on initial activation proposing alternative settings. Where a forced menu is provided, the normal configuration shall be set as default choice, otherwise the normal configuration shall be the out-of-the-box setting.		P
	If the user selects a configuration other than the normal configuration and this configuration results in a higher power demand than the normal configuration, a warning message about the likely increase in energy use shall appear and confirmation of the action shall be explicitly requested.		P
	If the user selects a setting other than those that are part of the normal configuration and this setting results in a higher energy consumption than the normal configuration, a warning message about the likely increase in energy consumption shall appear and confirmation of the action explicitly requested.		P
	A change by the user in a single parameter in any setting shall not trigger any change in any other energy-relevant parameter, unless unavoidable. In such a case a warning message shall appear about the change of other parameters and the		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	confirmation of the change shall be explicitly requested.																																		
3.	Peak white luminance ratio		P																																
	In the normal configuration, the peak white luminance of the electronic display in a 100 lux ambient light viewing environment shall not be less than 220 cd/m ² or, if the electronic display is primarily intended for close viewing by a single user, not less than 150 cd/m ² .	Set as normal configuration: 152.36 cd/m ² ; Brightest on mode configuration: 493.24 cd/m ² . Declares: Set as normal configuration: 152 cd/m ² ; Brightest on mode configuration: 493 cd/m ² ;	P																																
	If the electronic display's peak white luminance in the normal configuration is set to lower values, it shall not be less than 65 % of the peak white luminance of the display, in a 100 lux ambient light viewing environment in the brightest on mode configuration.		N/A																																
C.	Off mode, Standby and Networked Standby mode requirements		P																																
	From 1 March 2021, electronic displays shall meet the requirements listed below.		P																																
1.	Power demand limits other than on-mode		P																																
	Electronic displays shall not exceed power demand limits in the different modes and conditions listed in Table 2:	Standby mode limit: 0.50W Off mode limit: 0.30W	P																																
	<i>Table 2</i> power demand limits other than on-mode, in Watts <table border="1"> <thead> <tr> <th></th><th>Off mode</th><th>Standby mode</th><th>Networked standby mode</th></tr> </thead> <tbody> <tr> <td>Maximum limits</td><td>0,30</td><td>0,50</td><td>2,00</td></tr> <tr> <td>Allowances for additional functions when present and enabled</td><td></td><td></td><td></td></tr> <tr> <td> Status display</td><td>0,0</td><td>0,20</td><td>0,20</td></tr> <tr> <td> Deactivation using room presence detection</td><td>0,0</td><td>0,50</td><td>0,50</td></tr> <tr> <td> Touch functionality, if usable for activation</td><td>0,0</td><td>1,00</td><td>1,00</td></tr> <tr> <td> HiNA function</td><td>0,0</td><td>0,0</td><td>4,00</td></tr> <tr> <td><i>Total maximum power demand with all additional functions when present and enabled</i></td><td><i>0,30</i></td><td><i>2,20</i></td><td><i>7,70</i></td></tr> </tbody> </table>			Off mode	Standby mode	Networked standby mode	Maximum limits	0,30	0,50	2,00	Allowances for additional functions when present and enabled				Status display	0,0	0,20	0,20	Deactivation using room presence detection	0,0	0,50	0,50	Touch functionality, if usable for activation	0,0	1,00	1,00	HiNA function	0,0	0,0	4,00	<i>Total maximum power demand with all additional functions when present and enabled</i>	<i>0,30</i>	<i>2,20</i>	<i>7,70</i>	
	Off mode	Standby mode	Networked standby mode																																
Maximum limits	0,30	0,50	2,00																																
Allowances for additional functions when present and enabled																																			
Status display	0,0	0,20	0,20																																
Deactivation using room presence detection	0,0	0,50	0,50																																
Touch functionality, if usable for activation	0,0	1,00	1,00																																
HiNA function	0,0	0,0	4,00																																
<i>Total maximum power demand with all additional functions when present and enabled</i>	<i>0,30</i>	<i>2,20</i>	<i>7,70</i>																																
2.	Availability of off, standby and networked standby modes		P																																
	Electronic displays shall provide off mode or standby mode or a networked standby mode or other modes which do not exceed the applicable power demand requirements for standby mode.	Standby mode and Off mode	P																																
	The configuration menu, instruction manuals and other documentation, if any, shall refer to off mode, standby		P																																

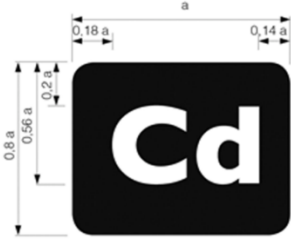
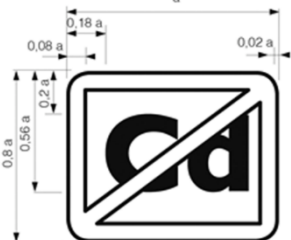
Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	mode or networked standby mode using those terms.		
	Automatic switch to off mode and/or standby mode and/or another mode which does not exceed the applicable power demand requirements for standby mode shall be set as default, including for networked displays where the network interface is enabled when in on mode.		P
	Networked electronic displays shall comply with the requirements for networked standby mode with the reactivation trigger device connected to the network and ready to activate a trigger instruction when required to.		N/A
	With networked standby mode disabled, networked electronic displays shall comply with the requirements of standby mode.		N/A
3.	Automatic standby in televisions		N/A
(a)	Televisions shall provide a power management function, enabled as delivered by the manufacturer that, within 4 hours following the last user interaction, shall switch the television from on mode into standby mode or networked standby mode or another mode which does not exceed the applicable power demand requirements respectively for standby or networked standby mode. Before such automatic switch, televisions shall show, for at least 20 seconds, an alert message warning the user of the impending switch, with possibility of delaying or temporarily cancelling it.		N/A
(b)	If the television provides a function allowing the user to shorten, extend or disable the 4-hour period for automatic mode transitions detailed in (a), a warning message shall appear about a potential increase in energy use and a confirmation of the new setting must be requested when an extension beyond the 4-hour period or disabling is selected.		N/A
(c)	If the television is equipped with a room presence sensor, the automatic transition from on mode into any mode as detailed in (a) applies if no presence is detected for no more than 1 hour.		N/A
(d)	Televisions with various selectable input sources shall prioritise the power management protocols of the signal source selected and displayed over those default power management		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	mechanisms described in the paragraphs (a) to (c) above.		
4.	Automatic standby in displays other than televisions		P
	Electronic displays other than televisions, with various selectable input sources shall switch, as configured in the normal configuration, into standby mode, networked standby mode or another mode which does not exceed the applicable power demand requirements respectively for standby or networked standby mode when no input is detected by any input source for over 10 seconds and, for digital interactive whiteboards and for broadcast displays, for over 60 minutes.		P
	Before triggering such a switch, a warning message shall be displayed and the switch completed within 10 minutes.		P
D.	Material efficiency requirements		P
	From 1 March 2021, electronic displays shall meet the requirements indicated below.		P
1.	Design for dismantling, recycling and recovery	Declared by the manufacturer	N/A
	(a) Manufacturers, importers or their authorised representatives shall ensure that joining, fastening or sealing techniques do not prevent the removal, using commonly available tools, of the components indicated in point 1 of Annex VII of Directive 2012/19/EU on WEEE or in Article 11 of Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators, when present.		N/A
	(b) The derogations indicated in Article 11 of Directive 2006/66/EC about permanent connection between the electronic display and the battery or accumulator apply.		N/A
	(c) Manufacturers, importers or their authorised representatives shall, without prejudice to point 1 of Article 15 of Directive 2012/19/EU, make available, on a free-access website, the dismantling information needed to access any of the products components referred to in point 1 of Annex VII of Directive 2012/19/EU.		N/A
	(d) This dismantling information shall include the sequence of dismantling steps, tools or technologies needed to access the targeted components.		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
	(e) This end of life information shall be available until at least 15 years after the placing on the market of the last unit of a product model.		N/A
2.	Marking of plastic components	Declared by the manufacturer	P
	Plastic components heavier than 50 g:		P
(a)	Shall be marked by specifying the type of polymer with the appropriate standard symbols or abbreviated terms set between the punctuation marks '>' and '<' as specified in available standards. The marking shall be legible.		P
	Plastic components are exempt from marking requirements in the following circumstances:	Except for plastic enclosure	P
	(i) the marking is not possible because of the shape or size;		P
	(ii) the marking would impact on the performance or functionality of the plastic component; and		P
	(iii) marking is technically not possible because of the molding method.		P
	For the following plastic components no marking is required:		P
	(i) packaging, tape, labels and stretch wraps;		P
	(ii) wiring, cables and connectors, rubber parts and anywhere not enough appropriate surface area is available for the marking to be of a legible size;		P
	(iii) PCB assemblies, PMMA boards, optical components, electrostatic discharge components, electromagnetic interference components, speakers;		P
	(iv) transparent parts where the marking would obstruct the function of the part in question.		P
(b)	Components containing flame retardants shall additionally be marked with the abbreviated term of the polymer followed by hyphen, then the symbol 'FR' followed by the code number of the flame retardant in parentheses. The marking on the enclosure and stand components shall be clearly visible and readable.		N/A
3.	Cadmium logo	Declared by the manufacturer	P
	Electronic displays with a screen panel in which concentration values of Cadmium (Cd) by weight in homogeneous materials exceed	A 'Cadmium free' logo used	P

Clause	Requirement-Test	Measuring result-Remark	Verdict
	0,01 % as defined in Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment, shall be labelled with the 'Cadmium inside' logo. The logo shall be clearly visible durable, legible and indelible. The logo shall be in the form of the following graphic: Cadmium inside  Cadmium free 		
	The dimension of 'a' shall be greater than 9 mm and the typeface to be used is 'Gill Sans'.		P
	An additional 'Cadmium inside' logo shall be firmly attached internally on the display panel or molded in a position clearly visible to workers once the external back cover bearing the external logo is removed.		N/A
	A 'Cadmium free' logo shall be used if concentration values of Cadmium (Cd) by weight in any homogeneous material part of the display do not exceed 0,01 % as defined in Directive 2011/65/EU.	A 'Cadmium free' logo was firmly attached internally on the display panel	P
4.	Halogenated flame retardants	Declared by the manufacturer	N/A
	The use of halogenated flame retardants is not allowed in the enclosure and stand of electronic displays.	No halogenated flame retardants used	N/A
5.	Design for repair and reuse		N/A
(a)	Availability of spare parts:	Declared by the manufacturer	N/A
	(1) manufacturers, importers or authorised representatives of electronic displays shall make available to professional repairers at		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
	least the following spare parts: internal power supply, connectors to connect external equipment (cable, antenna, USB, DVD and Blu-Ray), capacitors above 400 microfarads, batteries and accumulators, DVD/Blu-Ray module if applicable and HD/SSD module if applicable for a minimum period of seven years after placing the last unit of the model on the market;		
	(2) manufacturers, importers or authorised representatives of electronic displays shall make available to professional repairers and end-users at least the following spare parts: external power supply and remote control for a minimum period of seven years after placing the last unit of the model on the market;		N/A
	(3) manufacturers shall ensure that these spare parts can be replaced with the use of commonly available tools and without permanent damage to the appliance;		N/A
	(4) the list of spare parts concerned by point 1 and the procedure for ordering them shall be publicly available on the free access website of the manufacturer, importer or authorised representative, at the latest two years after the placing on the market of the first unit of a model and until the end of the period of availability of these spare parts; and		N/A
	(5) the list of spare parts concerned by point 2 and the procedure for ordering them and the repair instructions shall be publicly available on the manufacturer's, the importer's or authorised representative's free access website, at the moment of the placing on the market of the first unit of a model and until the end of the period of availability of these spare parts.		N/A
(b)	Access to repair and maintenance information	Declared by the manufacturer	N/A
	After a period of two years after the placing on the market of the first unit of a model or of an equivalent model, and until the end of the period mentioned under (a), the manufacturer, importer or authorised representative shall provide access to the appliance repair and maintenance information to professional repairers in the following conditions:		N/A
	(1) the manufacturer's, importer's or authorised representative's website		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	shall indicate the process for professional repairers to register for access to information; to accept such a request, manufacturers, importers or authorised representative may require the professional repairer to demonstrate that:		
	(i) the professional repairer has the technical competence to repair electronic displays and complies with the applicable regulations for repairers of electrical equipment in the Member States where it operates. Reference to an official registration system as professional repairer, where such system exists in the Member States concerned, shall be accepted as proof of compliance with this point;		N/A
	(ii) the professional repairer is covered by insurance covering liabilities resulting from its activity, regardless of whether this is required by the Member State;		N/A
	(2) the manufacturers, importers or authorised representatives shall accept or refuse the registration within 5 working days from the date of request by the professional repairer;		N/A
	(3) manufacturers, importers or authorised representatives may charge reasonable and proportionate fees for access to the repair and maintenance information or for receiving regular updates. A fee is reasonable if it does not discourage access by failing to take into account the extent to which the professional repairer uses the information.		N/A
	Once registered, a professional repairer shall have access to the requested repair and maintenance information within one working day after requesting it. The available repair and maintenance information shall include:		N/A
	- the unequivocal appliance identification;		N/A
	- a disassembly map or exploded view;		N/A
	- list of necessary repair and test equipment;		N/A
	- component and diagnosis information (such as minimum and maximum theoretical values for measurements);		N/A
	- wiring and connection diagrams;		N/A

Clause	Requirement-Test	Measuring result-Remark	Verdict
	- diagnostic fault and error codes (including manufacturer-specific codes, where applicable); and		N/A
	- data records of reported failure incidents stored on the electronic display (where applicable).		N/A
(c)	Maximum delivery time of spare parts	Declared by the manufacturer	N/A
	(1) during the period mentioned under point 5(a)(1) and point 5(a)(2), the manufacturer, importer or authorised representatives shall ensure the delivery of the spare parts for electronic displays within 15 working days after having received the order;		N/A
	(2) in the case of spare parts available only to professional repairers, this availability may be limited to professional repairers registered in accordance with point (b).		N/A
E.	Information availability requirements		N/A
	From 1 March 2021, the product manufacturer, importer or authorised representative shall make available the information set out below when placing on the market the first unit of a model or of an equivalent model.	Declared by the manufacturer	N/A
	The information shall be provided free of charge to third parties dealing with professional repair and reuse of electronic displays (including third party maintenance actors, brokers and spare parts providers).	Declared by the manufacturer	N/A
1.	Availability of software and firmware updates		N/A
(a)	The latest available version of the firmware shall be made available for a minimum period of eight years after the placing on the market of the last unit of a certain product model, free of charge or at a fair, transparent and non-discriminatory cost. The latest available security update to the firmware shall be made available until at least eight years after the placing on the market of the last product of a certain product model, free of charge.		N/A
(b)	Information on the minimum guaranteed availability of software and firmware updates, availability of spare parts and product support shall be indicated in the product information sheet as from Annex V of Regulation (EU) 2019/2013.		N/A
Annex III	Measurement methods and calculations		P

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

1.	General		P
2.	Measurements of on mode power demand applied		P
	Measurements of peak white luminance applied		P
	Measurements of Standard Dynamic Range, High Dynamic Range, screen luminance for Automatic Brightness Control, Peak White luminance ratio and other luminance measurements shall be made as detailed in Table 3a.		P
Annex IIIa	Transitional methods		P
1.	ADDITIONAL ELEMENTS FOR MEASUREMENTS AND CALCULATIONS		P
1.1.	Summary of order of testing		P
1.2	Details of testing		P
1.2.1.	UUT (display) and measuring instrument set up		P
1.2.2.	Check of correct implementation of "normal configuration" and energy impact warnings.		P
1.2.3.	Audio Setting		P
1.2.4.	Identifying the peak white luminance pattern for peak white luminance measurements		P
1.2.5.	Determination of ABC ambient light control range and latency of ABC action.		N/A
1.2.5.1	ABC Latency Profiling		N/A
1.2.5.2	Light Source Illumination Control		N/A
1.2.5.3	Light Source Colour Temperature Control		N/A
1.2.5.4	Data Recording		N/A
1.2.6.	Display luminance measurements		P
1.2.7.	Measurement of on-mode power		P
1.2.8.	Measure power requirement of low power and off modes		P

(EU) 2019/2013		P
Annex II		P
A.	Energy efficiency classes	P

Clause	Requirement-Test	Measuring result-Remark	Verdict																
	The energy efficiency class of an electronic display shall be determined on the basis of its energy efficiency index for labelling (EEl_{label}) as set out in Table 1. The EEl_{label} of an electronic display shall be determined in accordance with part B of this Annex.	SDR energy efficiency class: F HDR energy efficiency class: G Declares: SDR energy efficiency class: F HDR energy efficiency class: G	P																
	Table 1 Energy efficiency classes of electronic displays <table><tr><th>Energy Efficiency Class</th><th>Energy Efficiency Index (EEl_{label})</th></tr><tr><td>A</td><td>$EEl_{label} < 0,30$</td></tr><tr><td>B</td><td>$0,30 \leq EEl_{label} < 0,40$</td></tr><tr><td>C</td><td>$0,40 \leq EEl_{label} < 0,50$</td></tr><tr><td>D</td><td>$0,50 \leq EEl_{label} < 0,60$</td></tr><tr><td>E</td><td>$0,60 \leq EEl_{label} < 0,75$</td></tr><tr><td>F</td><td>$0,75 \leq EEl_{label} < 0,90$</td></tr><tr><td>G</td><td>$0,90 \leq EEl_{label}$</td></tr></table>		Energy Efficiency Class	Energy Efficiency Index (EEl_{label})	A	$EEl_{label} < 0,30$	B	$0,30 \leq EEl_{label} < 0,40$	C	$0,40 \leq EEl_{label} < 0,50$	D	$0,50 \leq EEl_{label} < 0,60$	E	$0,60 \leq EEl_{label} < 0,75$	F	$0,75 \leq EEl_{label} < 0,90$	G	$0,90 \leq EEl_{label}$	
Energy Efficiency Class	Energy Efficiency Index (EEl_{label})																		
A	$EEl_{label} < 0,30$																		
B	$0,30 \leq EEl_{label} < 0,40$																		
C	$0,40 \leq EEl_{label} < 0,50$																		
D	$0,50 \leq EEl_{label} < 0,60$																		
E	$0,60 \leq EEl_{label} < 0,75$																		
F	$0,75 \leq EEl_{label} < 0,90$																		
G	$0,90 \leq EEl_{label}$																		
B.	Energy Efficiency Index (EEl_{label})		P																
	The Energy Efficiency Index (EEl_{label}) of the electronic display shall be calculated using the following equation: $EEl_{label} = \frac{(P_{measured} + 1)}{(3 \times [90 \times \tanh(0,025 + 0,0035 \times (A - 11)) + 4]}$ where: A represents the viewing surface area in dm²; P_{measured} is the measured power in on mode in Watts in the normal configuration and set as indicated in Table 2; corr₁ is a correction factor set as indicated in Table 3.	SDR EEl_{label} : 0.801 P _{declared} = 23.2W A= 19.99dm ² corr= 0 HDR EEl_{label} : 1.288 P _{declared} = 38.0W A= 19.99dm ² corr= 0 Declares: SDR EEl_{label} : 0.893 P _{declared} = 26.0W A= 19.99dm ² corr= 0 HDR EEl_{label} : 1.588 P _{declared} = 47.0W A= 19.99dm ² corr= 0	P																
	The declared values of the on mode power (P _{measured}) and viewing surface area (A) as listed in Table 5 of Annex VI shall be used for the EEI calculation.		P																

Clause	Requirement-Test	Measuring result-Remark	Verdict
--------	------------------	-------------------------	---------

	Table 2 Measurement of P_{measured} <table><tr><th>Dynamic Range level</th><th>P_{measured}</th></tr><tr><td>Standard Dynamic Range (SDR): $P_{\text{measured}}_{\text{SDR}}$</td><td>Power demand in Watts (W) in on mode, measured when displaying standardised test sequences of moving picture from dynamic broadcast content. Where allowances are applicable according to part C of this Annex, they should be deducted from P_{measured}.</td></tr><tr><td>High Dynamic Range (HDR) $P_{\text{measured}}_{\text{HDR}}$</td><td>Power demand in Watts (W) in on mode, measured as for $P_{\text{measured}}_{\text{SDR}}$ but with the HDR functionality activated by metadata in the standardised HDR test sequences. Where allowances are applicable according to part C of this Annex, they should be deducted from P_{measured}.</td></tr></table>		Dynamic Range level	P_{measured}	Standard Dynamic Range (SDR): $P_{\text{measured}}_{\text{SDR}}$	Power demand in Watts (W) in on mode, measured when displaying standardised test sequences of moving picture from dynamic broadcast content. Where allowances are applicable according to part C of this Annex, they should be deducted from P_{measured} .	High Dynamic Range (HDR) $P_{\text{measured}}_{\text{HDR}}$	Power demand in Watts (W) in on mode, measured as for $P_{\text{measured}}_{\text{SDR}}$ but with the HDR functionality activated by metadata in the standardised HDR test sequences. Where allowances are applicable according to part C of this Annex, they should be deducted from P_{measured} .			
Dynamic Range level	P_{measured}										
Standard Dynamic Range (SDR): $P_{\text{measured}}_{\text{SDR}}$	Power demand in Watts (W) in on mode, measured when displaying standardised test sequences of moving picture from dynamic broadcast content. Where allowances are applicable according to part C of this Annex, they should be deducted from P_{measured} .										
High Dynamic Range (HDR) $P_{\text{measured}}_{\text{HDR}}$	Power demand in Watts (W) in on mode, measured as for $P_{\text{measured}}_{\text{SDR}}$ but with the HDR functionality activated by metadata in the standardised HDR test sequences. Where allowances are applicable according to part C of this Annex, they should be deducted from P_{measured} .										
	Table 3 corr_i value <table><tr><th>Electronic Display type</th><th>corr_i value</th></tr><tr><td>Television</td><td>0,0</td></tr><tr><td>Monitor</td><td>0,0</td></tr><tr><td>Digital signage</td><td>$0,00062 \cdot (\text{lum} - 500) \cdot A$ <i>where 'lum' is the peak white luminance, in cd/m², of the brightest on mode configuration of the electronic display and A is the screen area in dm²</i></td></tr></table>		Electronic Display type	corr_i value	Television	0,0	Monitor	0,0	Digital signage	$0,00062 \cdot (\text{lum} - 500) \cdot A$ <i>where 'lum' is the peak white luminance, in cd/m², of the brightest on mode configuration of the electronic display and A is the screen area in dm²</i>	
Electronic Display type	corr_i value										
Television	0,0										
Monitor	0,0										
Digital signage	$0,00062 \cdot (\text{lum} - 500) \cdot A$ <i>where 'lum' is the peak white luminance, in cd/m², of the brightest on mode configuration of the electronic display and A is the screen area in dm²</i>										
C.	Allowances and adjustments for the purpose of the $\text{EEI}_{\text{label}}$ calculation		N/A								
	Electronic displays with automatic brightness control (ABC) shall qualify for a 10 % reduction in P_{measured} if they meet all of the following requirements:	No ABC function	N/A								
(a)	ABC is enabled in the normal configuration of the electronic display and persists in any other standard dynamic range configuration available to the end user;		N/A								
(b)	the value of P_{measured} , in the normal configuration, is measured, with ABC disabled or if ABC cannot be disabled, in an ambient light condition of 100 lux measured at the ABC sensor;		N/A								
(c)	if applicable, the value of P_{measured} with ABC disabled shall be equal to or greater than the on mode power measured with ABC enabled in an ambient light condition of 100 lux measured at the ABC sensor;		N/A								
(d)	with ABC enabled, the measured value of the on mode power must decrease by 20 % or more when the ambient light condition, measured at the ABC sensor, is reduced from 100 lux to 12 lux;		N/A								
(e)	the ABC control of the display screen luminance meets all of the following characteristics when the ambient light condition measured at the ABC		N/A								

Clause	Requirement-Test	Measuring result-Remark	Verdict
	sensor changes:		
	- the measured screen luminance at 60 lux is between 65 % and 95 % of the screen luminance measured at 100 lux;		N/A
	- the measured screen luminance at 35 lux is between 50 % and 80 % of the screen luminance measured at 100 lux;		N/A
	- the measured screen luminance at 12 lux is between 35 % and 70 % of the screen luminance measured at 100 lux.		N/A
Annex III	Label for electronic displays		P
1.	LABEL	See Attachment 3 for details	
Annex IV	Measurement methods and calculations		P
1.	Measurments of on mode power demand applied		P
2.	Measurments of peak white luminance applied		P
	Measurements of Standard Dynamic Range, High Dynamic Range, screen luminance for Automatic Brightness Control, Peak White luminance ratio and other luminance measurements shall be made as detailed in Annex III, Table 3a of Commission Regulation (EU) 2019/2021.		P

Table 1		Peak Luminance Measurement					
T _{amb} (23 °C±5 °C) (°C):		23.7			Rh (10-80%) (%):		59.0
Airspeed (≤0.5m/s) (m/s):		0.41			CF of voltage: (≥1.34, ≤1.49)		1.40
Input terminal:		HDMI			Video signal:		Box and outline dynamic test pattern: L50
Test voltage (V)	Frequency (Hz)	THD of Voltage (%)	Illuminance level (lux)	Input current (A)	Luminance (cd/m ²)	Power (W)	Remark
Product without ABC function							
230.4	50	0.988	--	0.396	152.36	23.83	Normal configuration Energy save mode
230.4	50	1.174	--	0.398	493.24	35.95	Brightest pre-set configuration Player2 mode
Product with ABC function							
--	--	--	--	--	--	--	Normal configuration at 100 lux.
--	--	--	--	--	--	--	Brightest pre-set configuration at 100 lux.
--	--	--	--	--	--	--	Normal configuration at 60 lux. $L_{60 \text{ lux}} / L_{100 \text{ lux}} = \frac{\quad}{\quad}$
--	--	--	--	--	--	--	Normal configuration at 35 lux. $L_{35 \text{ lux}} / L_{100 \text{ lux}} = \frac{\quad}{\quad}$
--	--	--	--	--	--	--	Normal configuration at 12 lux. $P_{12 \text{ lux}} / P_{100 \text{ lux}} = \frac{\quad}{\quad}$ $L_{12 \text{ lux}} / L_{100 \text{ lux}} = \frac{\quad}{\quad}$
--	--	--	--	--	--	--	Normal configuration with ABC off.
Supplementary information:							

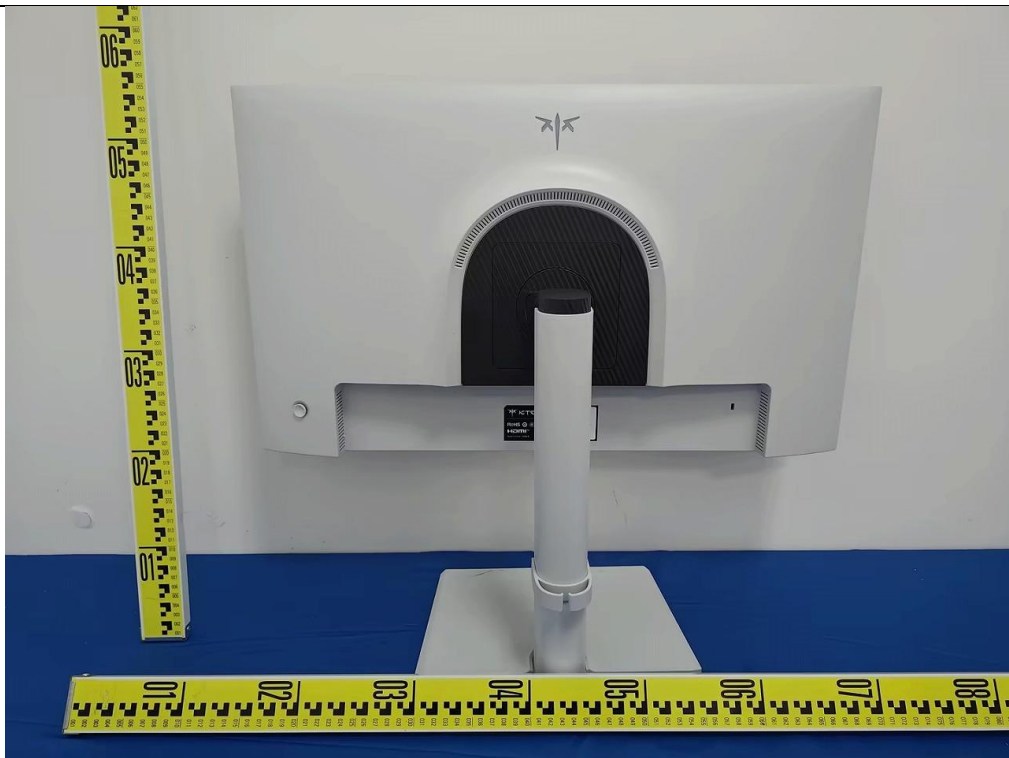
Table 2		Power measurement - On Mode					
T _{amb} (23 °C±5 °C) (°C):		23.4			Rh (10-80%) (%):	61.0	
Airspeed (≤0.5m/s) (m/s):		0.41			CF of voltage: (≥1.34, ≤1.49)	1.41	
Input terminal:		HDMI			Video signal:	SDR: HD Dynamic Video Power.mp4 HDR: HDR-HLG power, HDR_HDR10 Power	
Test voltage (V)	Frequency (Hz)	THD of Voltage (%)	Illuminance level (lux)	Input current (A)	CF of current	Power (W)	Remark
230.2	50	1.093	--	0.400	1.4018	23.16	SDR, normal configuration
230.2	50	1.303	--	0.410	1.4106	37.61	HDR-HLG power, normal configuration
230.2	50	1.361	--	0.410	1.4015	38.11	HDR-HDR10 power, normal configuration
Supplementary information: For UUT with ABC function, switch off ABC. If it cannot be switched off shall be tested in the 100 lux ambient.							

Table 3		Power measurement - Standby mode, Off mode, Networked standby mode					
T _{amb} (23 °C±5 °C) (°C):		23.4		Rh (10-80%) (%):		59.0	
Airspeed (≤0.5m/s) (m/s):		0.41		CF of voltage: (≥1.34, ≤1.49)		1.41	
Test voltage (V)	Frequency (Hz)	THD of Voltage (%)	Input current (A)	CF of current	PF	Power (W)	Remark
230.3	50.0	1.104	0.405	1.400	0.04	0.28	Off mode (by pressing off button)
230.3	50.0	1.150	0.424	1.401	0.004	0.30	Other than TV: Auto-Standby mode without signal input; Time: 25 seconds; Warning message: 10 seconds; Message persist time: 15 seconds (HDMI mode)
Supplementary information: All tests were conducted under the normal/default configuration.							

Equipment No.	Name	Manufacture	Type/Model	Cal. Date.	Next Cal. Date
01-P-531	Timer	HENSE	/	2025/12/22	2026/12/21
01-P-509	Tapeline	/	Hilock-19	2025/12/18	2026/12/17
01-P-120	Hybrid Recorder	Rongxin	TWC-2A	2025/08/08	2026/08/07
01-P-302	Power Parameter Meter	YOKOGAWA	WT310E	2025/12/26	2026/12/25
01-P-497	Illuminance Meter	KONICA	T-10A	2026/03/20	2027/03/18
01-P-539	Anemometer	Shenzhen Everbest Machinery Industry Co., Ltd.	DT-3880	2025/12/30	2026/12/29



External view -1



External view -2



Terminals view -1

- End of Test Report -