

**TEST REPORT****COMMISSION REGULATION (EU) 2019/2020**

laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012

COMMISSION DELEGATED REGULATION (EU) 2019/2015

supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of light sources and repealing Commission Delegated Regulation (EU) No 874/2012

Commission Regulation (EU) 2021/341 of 23 February 2021

Report Number.....: HUAP251113L5641S-R2

Date of issue.....: 2026-06-05

Total number of pages.....: 19 pages

Applicant's name.....: Glowils EU GmbH

Address.....: Wörthstraße 173, 47053 Duisburg, Germany

Test specification:

Test procedures: ☒ ErP –COMMISSION REGULATION (EU) 2019/2020
laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012
☒ ErP –COMMISSION DELEGATED REGULATION (EU) 2019/2015
supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of light sources and repealing Commission Delegated Regulation (EU) No 874/2012
☒ Commission Regulation (EU) 2021/341 of 23 February 2021

Test Report Form No.....: EU_2019_2020_A

Master TRF.....: 2020-05

This test report is based on the content of the internal test program. The test program considered selected clauses of the a.m. standard(s) and experience gained with product testing.

Test item description.....: Desk lamp

Trade Mark.....: edishine

Manufacturer.....: Kailin Lighting Co.,Ltd.
Foxin Industrial District,DaLangTwon,DongGuan
City,GuangDong ,China.

Model/Type reference.....: T165, T166, DHLTL10A, DHLTL10K, DHLTL10D, DHLTL10F

Ratings.....: Input: AC 220-240V, 50/60Hz, 60W



Testing procedure and testing location:

Testing Laboratory.....: Shenzhen Huapin Testing Technology Co., Ltd.

Address.....: Room 302, Comprehensive Building, Songbai Industrial Park, No 4, Yangyong Industrial Road, Tangxiayong Community, YanluoStreet, Bao'an District , Shenzhen.

Tested by (name + signature).....: Adam Yang

Adam Yang

Reviewer (name + signature).....: Kevi Cai

kevi cai

Approved (name + signature).....: Lody Guo

Lody Guo

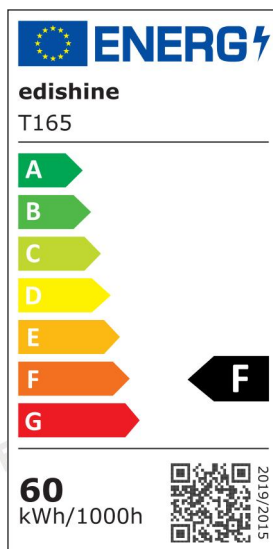
Summary of testing:**Tests performed (name of test and test clause):**

For the purpose of assessing the conformity of the product related to the ecodesign requirements set in Regulation

- ☒ (EU) 2019/2020
- ☒ (EU) 2019/2015
- ☒ (EU) 2021/341

Testing location:

Same as above

Copy of marking plate:**Summary of testing:**

These products meet the requirement of the implementation measure.



Test item particulars:	
Lamp cap	--
Mains or non-mains	mains
Connected light source(CLS)	No
R9 Colour rendering index	0
Lamp identification.....:	LED
Rated luminous flux (lm)	6000
Rated Ra.....:	80
Rated beam angle (°).....:	360
Rated life time (h).....:	30000
Rated CCT (K)	3000K
Flicker metric (W).....:	1.0
stroboscopic effect metric (W).....:	0.4
Colour consistency in McAdam ellipse	6
Colour rendering index range (Minimum)Ra.....:	80
Colour rendering index range (Maximum)Ra.....:	86
Luminous efficiency: lm/W.....:	100
Energy consumption (kwh/1000h).....:	60
Outer dimensions (Height x Width x Depth) (mm).....:	1200 x 600 x 600
Chromaticity coordinate (x).....:	0.413
Chromaticity coordinate (y).....:	0.437
Possible test case verdicts:	
- test case does not apply to the test object.....:	N/A
- test object does meet the requirement.....:	P (Pass)
- test object does not meet the requirement.....:	F (Fail)
Testing:	
Date of receipt of test item.....:	2025-08-12
Date (s) of performance of tests.....:	2025-08-12 to 2025-12-08
General remarks:	
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 Issuing testing laboratory. "(See Annex #)" refers to additional information appended to the report. Throughout this report a point is used as the decimal separator. Determination of the test result includes consideration of measurement uncertainty from the test equipment and methods	



General product information:

1. The product is Desk lamp and indoor use.
2. This report is based on the original report number HUAP251113L5641S, add additional model. The new report number is HUAP251113L5641S-R1. The original report number HUAP251113L5641S is now invalid.
3. This report is based on the original report number HUAP251113L5641S-R1, add dimension information, and updated the data. The new report number is HUAP251113L5641S-R2. The original report number HUAP251113L5641S-R1 is now invalid.

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

1	Subject matter and scope		—
	Type: T-165		—
	Light sources.....:	Yes ☒ No ☐	—
	Separate control gears.....:	Yes ☐ No ☒	—

2	Definitions		P
	Chromaticity coordinates		—
	$0,270 < x < 0,530$ $- 2,3172 x^2 + 2,3653 x - 0,2199 < y <$ $- 2,3172 x^2 + 2,3653 x - 0,1595$		P

Annex I	Definitions applicable for the Annexes		P
	Directional light source		N/A
	A light source having at least 80 % of total luminous flux within a solid angle of π sr (corresponding to a cone with angle of 120°);		N/A
	Non-directional light source		P
	A light source that is not a directional light source;		P
	Useful luminous flux		P
	For non-directional light sources it is the total flux emitted in a solid angle of 4π sr (corresponding to a 360° sphere);		P
	For directional light sources with beam angle $\geq 90^\circ$ it is the flux emitted in a solid angle of π sr (corresponding to a cone with angle of 120°);		N/A
	For directional light sources with beam angle $< 90^\circ$ it is the flux emitted in a solid angle of $0,586\pi$ sr (corresponding to a cone with angle of 90°);		N/A
	Beam angle		N/A

Annex II	Ecodesign requirements		P
1. (a)	Energy efficiency requirements		P
	On-mode Power P_{on} (W):	60	P
	Maximum allowed power P_{onmax} (W): $P_{onmax} = C \times (L + \Phi_{use}/(F \times \eta)) \times R$		P
	Rated Φ_{use} (lm):	6000	P
	Basic values for correction factor (C):		P

Clause	Requirement + Test	Result - Remark	Verdict
	Efficacy factor (F) is:		P
	1,00 for non-directional light sources 0,85 for directional light sources		P
	0,85 for directional light sources		N/A
	CRI factor (R) is		P
	0,65 for CRI ≤ 25		N/A
	(CRI+80)/160 for CRI > 25		P
	Threshold efficacy (η) (lm/W):		P
	End loss factor (L) (W):		P
	The standby power P _{sb} of a light source shall not exceed 0,5 W		N/A
	The networked standby power P _{net} of a connected light source shall not exceed 0,5 W		N/A
1. (b)	Minimum energy efficiency for separate control gear at full-load:		N/A
	Control gear for LED or OLED light sources $P_{cg} 0,81 / (1,09 \times P_{cg} 0,81 + 2,10)$		N/A
	The no-load power P _{no} of a separate control gear shall not exceed 0.5 W		N/A
	The standby power P _{sb} of a separate control gear shall not exceed 0.5 W		N/A
	The networked standby power P _{net} of a connected separate control gear shall not exceed 0.5 W		N/A
2	Functional requirements		P
	Colour Rendering Index CRI: ≥ 80	≥ 80	P
	Displacement Factor DF at Power Input P _{on} for LED and OLED MLS:		P
	No limit at P _{on} ≤ 5 W DF ≥ 0.5 at 5 W < P _{on} ≤ 10 W, DF ≥ 0.7 at 10 W < P _{on} ≤ 25 W DF ≥ 0.9 at 25 W < P _{on}	>0.5	P
	Lumen maintenance factor (for LED and OLED) $X_{LMF,MIN} \% = 100 \times e^{\frac{(3000 \times \ln(0.7))}{L_{70}}}$ If the calculated value for X _{LMF,MIN} exceeds 96,0 %, an X _{LMF,MIN} value of 96,0 % shall be used	>96.0%	P

Clause	Requirement + Test	Result - Remark	Verdict
	Survival Factor (for LED and OLED): At least 9 light sources of the test sample must be operational after completing the test in Annex V of this Regulation.	>90%	P
	Colour consistency for LED and OLED light sources: Variation of chromaticity coordinates within a six-step MacAdam ellipse or less		P
	Flicker for LED and OLED MLS: $P_{st} LM \leq 1.0$ at full-load		P
	Stroboscopic effect for LED and OLED MLS: $SVM \leq 0.4$ at full-load		P
3.(a)	Information to be displayed on the light source itself		P
	Useful luminous flux (lm)		P
	Correlated colour temperature (K)		P
	Beam angle (°) For directional light sources		P
3.(b)	Information to be visibly displayed on the packaging		P
3.(b)(1)	Light source placed on the market, not in a containing product		P
	(a) Useful luminous flux (lm): - In a font at least twice as large as the display of the on-mode power (P_{on}) - Clearly indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)		P
	(b) Correlated Colour Temperature, rounded to the nearest 100 K		P
	(c) Beam angle in degrees For directional light sources		P
	(d) electrical interface details, e.g. cap- or connector-type, type of power supply (e.g. 230 V AC 50 Hz, 12 V DC)		P
	(e) L70B50 lifetime for LED and OLED light sources, expressed in hours		N/A
	(f) on-mode power (P_{on}), expressed in W		P
	(g) standby power (P_{sb}), expressed in W and rounded to the second decimal. If the value is zero, it may be omitted from the packaging		P
	(h) networked standby power (P_{net}) for CLS, expressed in W and rounded to the second decimal. If the value is zero, it may be omitted from the packaging		N/A
	(i) Colour Rendering Index, rounded to the nearest integer		P



Clause	Requirement + Test	Result - Remark	Verdict
	(j) Clear indication to this effect, if CRI < 80, and the light source is intended for use in outdoor applications, industrial applications or other applications where lighting standards allow a CRI < 80.		N/A
	(k) Information on non-standard conditions (such as ambient temperature $T_a \neq 25^\circ \text{C}$ or specific thermal management is necessary)		N/A
	(l) a warning if the light source cannot be dimmed or can be dimmed only with specific dimmers or with specific wired or wireless dimming methods. In the latter cases a list of compatible dimmers and/or methods shall be provided on the manufacturer's website		N/A
	(m) if the light source contains mercury: a warning of this, including the mercury content in mg rounded to the first decimal place		N/A
	(n) if the light source is within the scope of Directive 2012/19/EU, without prejudice to marking obligations pursuant to Article 14(4) of Directive 2012/19/EU, or contains mercury: a warning that it shall not be disposed of as unsorted municipal waste		N/A
3.(b)(2)	Separate control gears		N/A
	For separate control gear placed on the market as a stand-alone product, not as a part of a containing product		N/A
	(a) the maximum output power of the control gear (for HL, LED and OLED) or the power of the light source for which the control gear is intended (for FL and HID)		N/A
	(b) the type of light source(s) for which it is intended		N/A
	(c) the efficiency in full-load, expressed in percentage		N/A
	(d) the no-load power (P_{no}), expressed in W and rounded to the second decimal, or the indication that the gear is not intended to operate in no-load mode. If the value is zero, it may be omitted from the packaging but shall nonetheless be declared in the technical documentation and on websites		N/A

Clause	Requirement + Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

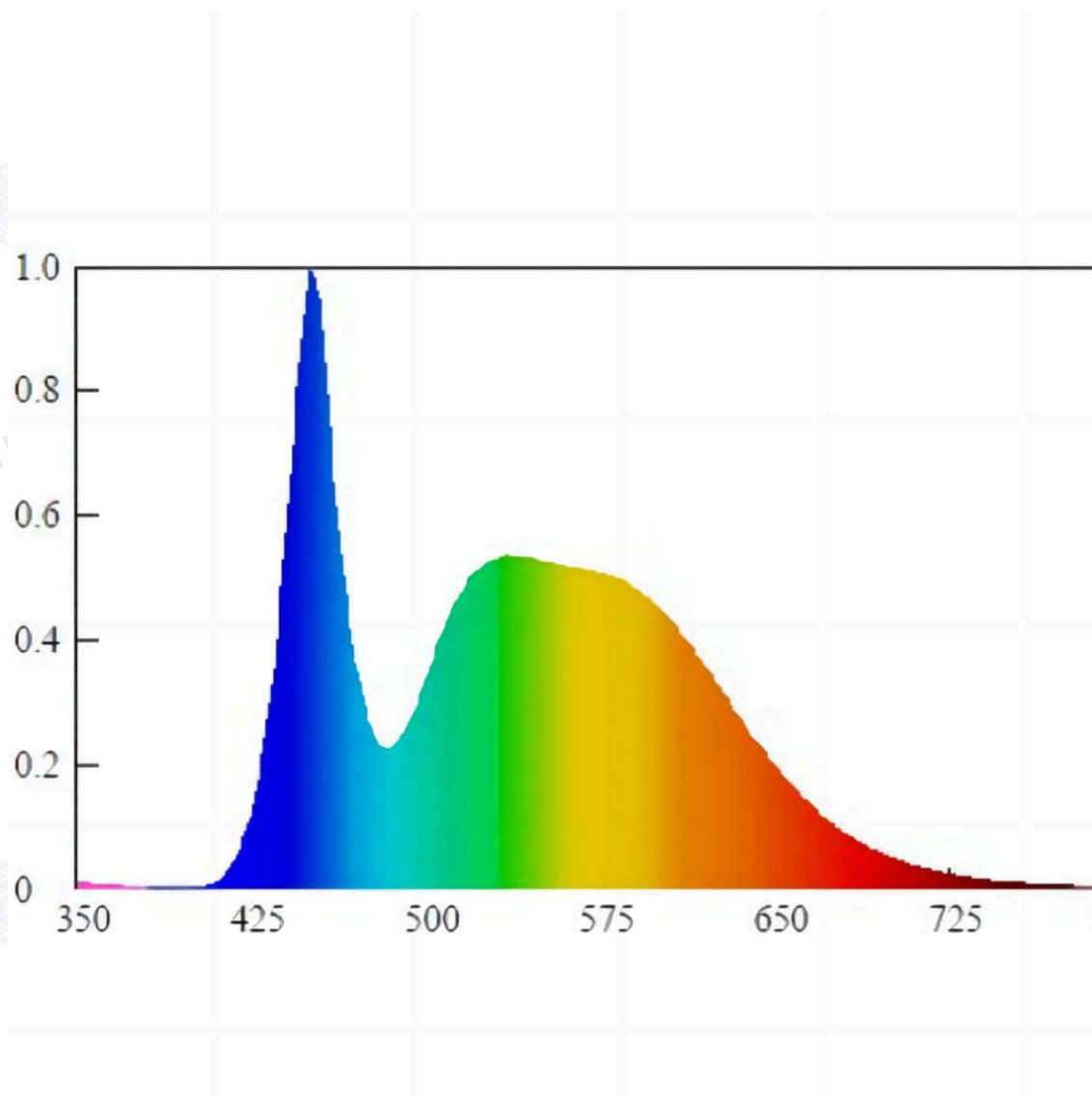
	(e) the standby power (Psb), expressed in W and rounded to the second decimal. If the value is zero, it may be omitted from the packaging but shall nonetheless be declared in		N/A
	(f) the networked standby power (Pnet), expressed in W and rounded to the second decimal. If the value is zero, it may be omitted from the packaging but shall nonetheless be declared in the technical documentation and on websites		N/A
	(g) a warning if the control gear is not suitable for dimming of light sources or can be used only with specific types of dimmable light sources or using specific wired or wireless dimming methods. In the latter cases, detailed information on the conditions in which the control gear can be used for dimming shall be provided on the Manufacturer's or importer's website		N/A
	(h) a QR-code redirecting to a free-access website of the manufacturer, importer or authorised representative, or the internet address for such a website, where full information on the control gear can be found		N/A
3.(c)	Information to be visibly displayed on a free-access website of the manufacturer, importer or authorised representative		P
	Separate control gears For any separate control gear that is placed on the EU market, the following information shall be displayed on at least one free-access website:		N/A
	(a) the information specified in point 3(b)(2), except 3(b)(2)(h)		P
	(b) the outer dimensions in mm	1200 x 600 x 600	P
	(c) the mass in grams of the control gear, without packaging, and without lighting control parts and non-lighting parts, if any and if they can be physically separated from the control gear		N/A
	(d) instructions on how to remove lighting control parts and non-lighting parts, if any, or how to switch them off or minimise their power consumption during control-gear testing for market surveillance purposes		N/A

Clause	Requirement + Test	Result - Remark	Verdict
	(e) if the control gear can be used with dimmable light sources, a list of minimum characteristics that the light sources should have to be fully compatible with the control gear during dimming, and possibly a list of compatible dimmable light sources		N/A
	(f) recommendations on how to dispose of it at the end of its life in line with Directive 2012/19/EU.		N/A

ANNEX II	Energy efficiency classes and calculation method		P																
	$\eta_{TM} = (\Phi_{use}/P_{on}) \times F_{TM} \text{ (lm/W)}.$	100	P																
	Tested Φ_{use} :	6000	P																
	Tested P_{on} :	60	P																
	Factors F_{TM} by light source type		P																
	<table><tr><th>Light source type</th><th>Factor F_{TM}</th></tr><tr><td>Non-directional (NDLS) operating on mains (MLS)</td><td>1,000</td></tr><tr><td>Non-directional (NDLS) not operating on mains (NMLS)</td><td>0,926</td></tr><tr><td>Directional (DLS) operating on mains (MLS)</td><td>1,176</td></tr><tr><td>Directional (DLS) not operating on mains (NMLS)</td><td>1,089</td></tr></table>	Light source type	Factor F_{TM}	Non-directional (NDLS) operating on mains (MLS)	1,000	Non-directional (NDLS) not operating on mains (NMLS)	0,926	Directional (DLS) operating on mains (MLS)	1,176	Directional (DLS) not operating on mains (NMLS)	1,089								
Light source type	Factor F_{TM}																		
Non-directional (NDLS) operating on mains (MLS)	1,000																		
Non-directional (NDLS) not operating on mains (NMLS)	0,926																		
Directional (DLS) operating on mains (MLS)	1,176																		
Directional (DLS) not operating on mains (NMLS)	1,089																		
	Energy efficiency classes of light sources	F	P																
	<table><tr><th>Energy efficiency class</th><th>Total mains efficacy η_{TM} (lm/W)</th></tr><tr><td>A</td><td>$210 \leq \eta_{TM}$</td></tr><tr><td>B</td><td>$185 \leq \eta_{TM} < 210$</td></tr><tr><td>C</td><td>$160 \leq \eta_{TM} < 185$</td></tr><tr><td>D</td><td>$135 \leq \eta_{TM} < 160$</td></tr><tr><td>E</td><td>$110 \leq \eta_{TM} < 135$</td></tr><tr><td>F</td><td>$85 \leq \eta_{TM} < 110$</td></tr><tr><td>G</td><td>$\eta_{TM} < 85$</td></tr></table>	Energy efficiency class	Total mains efficacy η_{TM} (lm/W)	A	$210 \leq \eta_{TM}$	B	$185 \leq \eta_{TM} < 210$	C	$160 \leq \eta_{TM} < 185$	D	$135 \leq \eta_{TM} < 160$	E	$110 \leq \eta_{TM} < 135$	F	$85 \leq \eta_{TM} < 110$	G	$\eta_{TM} < 85$		
Energy efficiency class	Total mains efficacy η_{TM} (lm/W)																		
A	$210 \leq \eta_{TM}$																		
B	$185 \leq \eta_{TM} < 210$																		
C	$160 \leq \eta_{TM} < 185$																		
D	$135 \leq \eta_{TM} < 160$																		
E	$110 \leq \eta_{TM} < 135$																		
F	$85 \leq \eta_{TM} < 110$																		
G	$\eta_{TM} < 85$																		



TEST CHART



Annex 1 – Results of Measurements

S./No	Luminous Flux Φ_{total} (lm)	Disp. Factor	Power Pon (W)	Efficacy (lm/W)	SDCM	Color Rendering (Ra)	Lamp Life (3600h)
1#	6013	0.72	60.0	99.72	6.3	78.9	Surviving
2#	5994	0.64	60.0	100.23	5.9	80.6	Surviving
3#	5992	0.65	60.0	100.13	6.1	80.5	Surviving
4#	6003	0.73	60.0	100.03	6.1	81.4	Surviving
5#	6015	0.67	60.0	99.9	5.6	79.5	Surviving
6#	5984	0.75	60.0	99.98	6.3	79.3	Surviving
7#	5992	0.74	60.0	100.02	5.5	80.2	Surviving
8#	6003	0.69	60.0	100.07	5.8	81.5	Surviving
9#	5998	0.65	60.0	99.9	6.5	80.4	Surviving
10#	6004	0.73	60.0	100.08	6.3	81.2	Surviving
Average	6000	0.70	60.0	100.01	6.0	80.4	--

S./No	Color Temperature (K)	No-Load Power Pno	Standby Power Psb	Network Sb. Power Pnet	Flicker Pst LM	Stroboscopic Effect SVM	Total Luminous flux (lm) After 30000h	Lumen Maintenance at 3600h (%)
1#	2983	N/A	N/A	N/A	1.01	0.405	5601	93.15
2#	2995	N/A	N/A	N/A	1.02	0.402	5582	93.13
3#	3005	N/A	N/A	N/A	1.01	0.393	5580	93.12
4#	3016	N/A	N/A	N/A	1.03	0.405	5591	93.14
5#	3008	N/A	N/A	N/A	1.02	0.397	5603	93.15
6#	2994	N/A	N/A	N/A	1.02	0.406	5572	93.11
7#	2995	N/A	N/A	N/A	1.02	0.405	5580	93.12
8#	3006	N/A	N/A	N/A	1.01	0.398	5591	93.14
9#	2996	N/A	N/A	N/A	1.01	0.405	5586	93.13
10#	3004	N/A	N/A	N/A	1.03	0.399	5592	93.14
Average	3000	N/A	N/A	N/A	1.02	0.402	5588	93.13

Annex 2 – Photo**Photo 1****Photo 2**

Photo 3



Photo 4



Photo 5



Photo 6



Photo 7

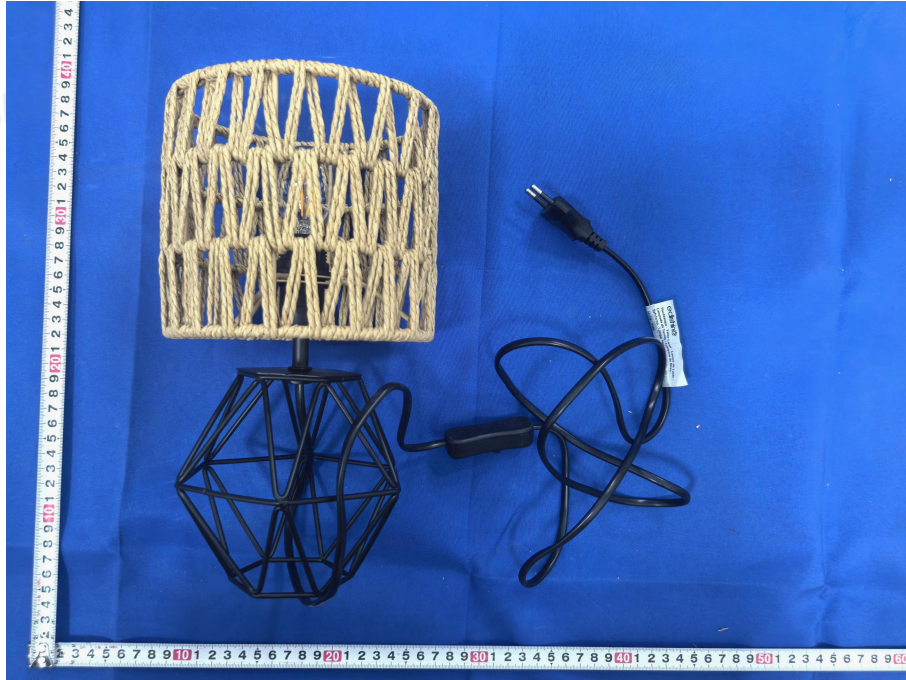


Photo 8

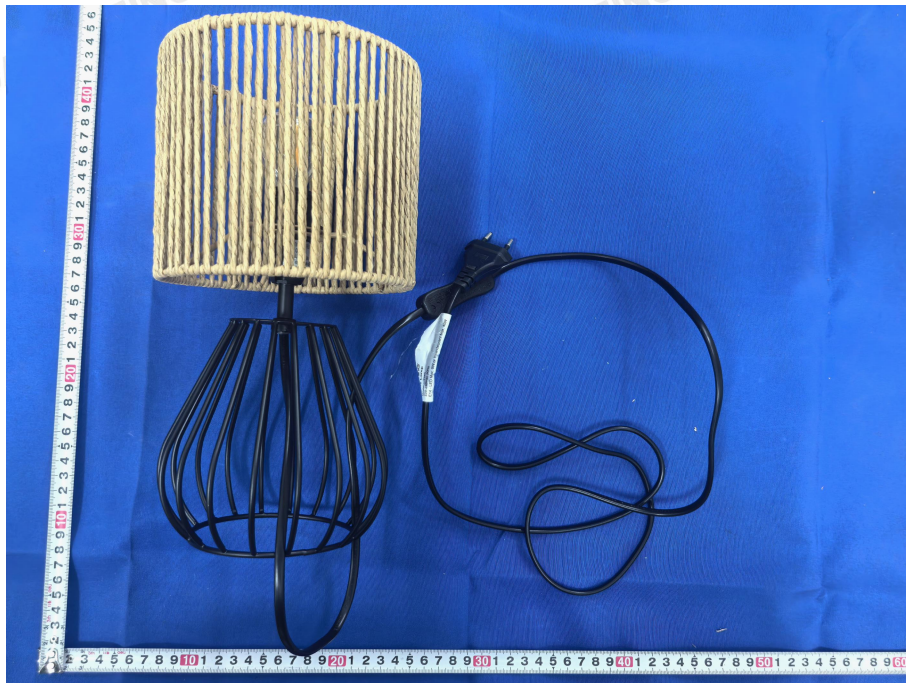


Photo 9



Photo 10



Photo 11



-----End of Report-----