



Test Report

On Behalf of SHANGHAI MILANLUX LIGHTING CO,LTD LED BULBS

Model: MLB12D/W, MLB05D/W, MLB06D/W, MLB07D/W, MLB09D/W, MLB10D/W,

MLB11D/W, MLB15D/W, MLB18D/W, MLB20D/W, MLB24D/W, MLB30D/W,

Report No.: TMC220625103-S

MLB40D/W, MLB50D/W, MLB60D/W

Prepared for: SHANGHAI MILANLUX LIGHTING CO,LTD

517MILANLUX, SUNLAND-MEI CENTER, NO. 519 QIFAN ROAD,

SHANGHAI, CHINA

Prepared By: TMC Testing Services (Shenzhen) Co., Ltd.

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TEST REPORT EN 62560 Self-Ballasted LED-Lamp for general lighting services by voltage > 50V Safety specifications

Report No.: TMC220625103-S

Report Number.....: TMC220625103-S

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Name of Testing Laboratory

preparing the Report.....: TMC Testing Services(Shenzhen) Co., Ltd.

Applicant's name.....: SHANGHAI MILANLUX LIGHTING CO,LTD

Address...... 517MILANLUX,SUNLAND-MEI CENTER,NO.519 QIFAN

ROAD, SHANGHAI, CHINA

Test specification:

Standard.....: EN 62560:2012+A11:2019;

EN 62471:2008; EN 62493:2015

Test procedure.....: Type Test

Non-standard test method.....: N/A

Test Report Form No.....: IEC62560C

Test Report Form(s) Originator.....: DEKRA Certification B.V.

Master TRF.....: Dated 2018-12-21

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	4.6	P.	- 4 -	0.0		- 42
Test item description	: LED B	BULBS	1 Ell 1	131	1 12/1	1 12/1
Trade Mark	: N/A		*			
Manufacturer	: SHAN	GHAI I	MILANLUX LIGH	TING CO,LT	D AC	
Address	ECON P.R. C		DEVELOPMENT	ZONE, HU	OSHAN, LU'AI	N, Anhui,
Model:	MLB10	DD/W,	MLB05D/W, MLB MLB11D/W, MLB MLB30D/W, MLB	15D/W, MLI	318D/W, MLB	20D/W,
Ratings	: 85-265	5V~, 50	0/60Hz, 60W			
	-inC	P	-inC	-INC	-INC	-inC
Testing location/ address		1st Flo Park, I	esting Services(Sor, Block A1, Zon No. 2, Shihuan Ro hen, China	e A, Xinshic	lai Gongrong I	
Tested by (name, function, signatur	'e):	Bart D	eng	Bert	Deng ven Liv	\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.\.
Approved by (name, function, signa	ature).:	Seven	Liu	Sei	ven Liu	LEN
List of Attachments (including a total Attachment No. 1: 2 pages of photo do			pages in each at	tachment):	- NAC	- NAC
Summary of testing:	1	1	7.		7.	
Tests performed (name of test and the IEC 62560(ed.1); am1 IEC 62471:2008	test clai	use):	Testing location TMC Testing Set 1st Floor, Block Industrial Park, Baoan District,	ervices(Sher A1, Zone A No. 2, Shihi	, Xinshidai Go uan Road, Shi	ngrong
Summary of compliance with Nation List of countries addressed ☑ The product fulfils the requirements EN 62560:2012+A11:2019; EN 62471:2008; EN 62493:2015			S:	ne.	LINC	THIC

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

Report No.: TMC220625103-S

LED BULBS

Model: MLB12D/W

Rating: 85-265V~, 50/60Hz, 60W



Importer:xxxxxx Address:xxxxxx

SHANGHAI MILANLUX LIGHTING CO,LTD
MADE IN CHINA

Remarks:

- 1. Representative markings of MLB12D/W, markings of all models are identical except for the model name and rating.
- 2. Height of CE mark at least 5mm, height of WEEE symbol should not less than 7mm, height of other marks at least 5mm, height of letters and numerals at least 2mm.



Test item particulars::	13/	11/1	1/1/1	1 12/
Classification of installation and use:		ted LED-Lamp voltage > 50\		ting
Supply Connection:	E27 Lamp	cap	MIL	- NIL
Degree of Protection:		11.	11.	11.
Possible test case verdicts:	(((- (
- test case does not apply to the test object:	N/A	NIN	- W	- WILL
- test object does meet the requirement:	P (Pass)	7.	7.	1.
- test object does not meet the requirement:	F (Fail)		. (
Testing::	Brown	1 W	190	1 1/2 C
Date of receipt of test item:	June 25, 20	022		
Date (s) of performance of tests::	June 25, 20	022 – July 08,	2022	
General remarks:		-7-		
This report shall not be reproduced except in full without	4 4 h		the testing along	watam. I
The test results presented in this report relate only to "(See Enclosure #)" refers to additional information as "(See appended table)" refers to a table appended to Throughout this report a □ comma / ⋈ point is u	opended to t the report.	he report.	ırator.	LIN.
According to the EU directives which have been aligne manufacturer and importer's name and address shall be on its packaging or in a document accompanying the p	e affixed on	the product or	r, where that is r	not possible,
100 100 100 100 100 100 100 100 100 100	VECET 00	inc	-aC	100
Manufacturer's Declaration per sub-clause 4.2.5 of		₹ <i>L</i> 11,	100	10,
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	☐ Yes ⊠ Not app	olicable	TWC	THIC
When differences exist; they shall be identified in t	he General	product infor	mation section	
Name and address of factory (ies)::	Same as n	nanufacturer	1/4.	1/4
General product information:	35	120	5	
 All models have similar construction except power a Unless otherwise specified, the model MLB12D/W w test. 			tive model to pe	rform all



× ×	EN 62560	The Things	- 1'm
Clause	Requirement + Test	Result - Remark	Verdict
(- aC - aC	
4	GENERAL REQUIREMENTS	THE THE	P
4.1	The lamp shall be so designed and constructed that in normal use cause no danger to the user.		Р
4.2	Self-ballasted LED-Lamp are non-repairable.	in in	Р
	1, 1, 1, 1,	4, 4,	1
5	MARKING	, ,	P
5.1	Mandatory marking	Who will	P
	- mark of origin	1, 1,	P
/	- rated supply voltage (V):		Р
	- rated wattage (W):	60W	P
- 1	- rated frequency (Hz)	50/60Hz	Р
5.2	Addition marking		Р
~	- rated current (A):	Mr. Mr.	P
	- weight significantly higher		Р
C.	- special conditions or restrictions	.((.	N/A
` <	Not suitable for dimming; symbol used	Lay Lay	P
C	- not suitable for water contact	anc anc	P
5.3	Marking durable and legible	14, 14,	Р
	rubbing 15 s water, 15 s petroleum; marking legible	24.	Р
C	on on on	anc anc	100
6	INTERCHANGEABILITY	In. In.	P
6.1	Cap interchangeability in accordance with IEC 6006	1-1	Р
inc.	Gauge in accordance with IEC 60061-3	anc anc	P
6.2	Bending moment and mass imparted by the lamp at	the lampholder	Р
C	Bending moment imparted by the lamp at the lampholder (Nm):	inc inc	P
` <	Mass not exceeding value table 2 or as specified in IEC 60061-1 (kg)	Lu, Lu,	P
{ -	PROTECTION AGAINST ACCIDENTAL CONTACT	WITH LIVE PARTS	. PN
	Internal, basic insulated or live metal parts not accessible	7, 7,	Р
C	Tested with a test finger with a force of 10 N	ain ainc	R
	Compliance checked with appropriate gauges	In. In.	TP.



	EN 62560	No William	
Clause	Requirement + Test	Result - Remark	Verdic
/	/ / / /	, ,	
8	INSULATION RESISTANCE AND ELECTRIC STR	ENGTH	P
8.2	After storage 48 h at 91-95% relative humidity and 2 insulation resistance with d.c. 500 V (M Ω):	20-30 °C measuring of	Р
	\geq 4 M Ω for double or reinforced insulation:	>100 MΩ	P
3.3	Immediately after clause 8.2 electric strength test for	r 1 min	Р
(Double or reinforced insulation, 4U + 2000 V	3060V, 1min, no breakdown	Р
<u> </u>	No flashover or breakdown	LALL LALL	P
9	MECHANICAL STRENGTH	((Р
	Torsion resistance of unused lamps	My My	Р
9.2.1	Torque test		Р
C	B15d or E14 Cap 1,15 Nm		N/A
	B22d, E26, E26d or E27 Cap3,0 Nm	E27 Cap: 3.0Nm	P
	E11 or E12 Cap0,8 Nm		N/A
C	E17 Cap1,5 Nm	ac ac	N/A
. <	E39 or E40 Cap5,0 Nm	14, 14,	N/A
2.0	GX53 Cap3,0 Nm		N/A
9.3	Compliance criteria	anc anc	Р
	Clause 8 shall comply after the mechanical strength test.	Lu. Lu.	Р
0.4	Axial strength of Edison caps	20C 20C	P
· <	After full insertion into the gauge an axial force of Table 4 is applied to the central contact (N)	14, 14,	P
WC.	The insulation around the central contact shall remain intact	THE THE	- NIP
10	CAP TEMPERATURE RISE		Р
C <	The cap temperature rise Δt_s of the lamp shall not exceed 120 K.	See ANNEX 2	- Br
И	RESISTANCE TO HEAT		Р
· <	Parts of insulating material providing protection against electric shock, retaining live parts in position, ball-pressure test:	(see appended table)	P



. <	EN 62560	10,	10, 40,
Clause	Requirement + Test	Result - Remark	Verdic
<u> </u>	18C 3C 3C 3C	nC	.nC .n
12	RESISTANCE TO FLAME AND IGNITION	1 1 1 1	Ell Ell
	External parts of insulating material preventing electric shock glow-wire test 650 °C	(see appended tab	le) P
\leftarrow	electric shock glow-wire test 650°C	-nC	,nC .n
13	FAULT CONDITIONS	14, 1	P
13.2	Fault conditions: where diagram indicates fault condition impairs safety, electronic components	(see appended tab	le) P
~ ~	have been short-circuited or disconnected	NA	My Wh
13.3	When operated under fault conditions the lamp		Р
C.	- does not emit flames or molten material	. C.	Р
1	- does not produce flammable gases or smoke	1 kg	P
	- live parts not accessible		Р
<u> </u>	After the tests the insulation resistance with d.c. 1000 V complies with requirements of Cl. 8.1:	- WIC	WIC P
1	4, 4, 4,	1	1
14 (16)	CREEPAGE DISTANCES AND CLEARANCES		P
~	Creepage distances and clearances according to IEC 61347-1	(see appended tab	le) P
Č.	Conductive accessible parts according to IEC 60598-1	(see appended tab	le) P
~ ~	4) 4) 4) 4) 4)	~ 15/1 ×	47 49
15	ABNORMAL OPERATION		Р
C <	Non-dimmable self-ballasted lamps are tested on a dimmer or an electronic switch according the test circuit shown in Figure 8	THIC	WC P
. (.	Operate the lamp for 8 h at most onerous dimming level	. (.	P
W. 1	When operated under abnormal operation the lamp	1 My 11	III A
	- does not catch fire		Р
C	- does not produce flammable gases		P.
1	- live parts not accessible	1/1/1	THE TANK
16	TEST CONDITIONS FOR DIMMABLE LAMPS		N/A
<	Test are carried out at maximum power setting for Clause 10 and Clause 17	100	N/A
17	PHOTOBIOLOGICAL SAFETY	a'nC	an Ph
17.1	UV radiation	10. 1	N/A



10	EN 62560	We Will	- Wall
Clause	Requirement + Test	Result - Remark	Verdict
C	The LED lamp doesn't exceed 2mW/klm	200 200	N/A
17.2	Blue light hazard	14. 14.	P
	Assessed according to IEC TR 62778		Р
C	LED lamps shall be RG0 or RG1	RG0	P

18	INGRESS PROTECTION	((P
18.1	Lamps shall be suitable for water contact unless marked with Figure 6	IP20	P
18.2	The lamp is subjected to an IPX4 test according to IEC 60598-1		N/A
	The lamp complies with the compliance provisions of 9.2 of IEC 60598-1	14, 14,	N/A
C	Lamps constructed so that it is sealed to exclude water need not to be tested	WC WC	N/A



W.	Me Me	EN 62560	Who is	ne who
Clause	Requirement + Test	./.	Result - Remark	Verdict

11 TABLE:	Ball Pressure Test of Th	nermoplastics	No.	P	
Allowed impres	sion diameter (mm)	2,0mm		_	
Object/ Part No./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diamet	er (mm)	
Enclosure		75°C	0,8mm		
Translucent cove	r	75°C	1.0mm	. (
Supplementary ir	formation:	LINE LEN	4 1/1	4 191	

12	TABLE: Resi	stance to heat and fire -	Glow wire tests		. (P. C
Glow	wire temperatu	re	650°C	1 191	100	_
Objed Mate	ct/ Part No./ rial	Manufactu tradema	,	Ignition of specified layer Yes/No	Duration of burning (tb) (s)	Verdict
Enclo	sure	7	7.	30s	No	0s
Trans	slucent cover	- / /	-	30s	No	0s
		of the sample extinguishe				Yes
Supp	lementary inform	ation:		,		

13	TABLE: tests of	fault conditions	P
Part	Simulated fault	Result	Hazard
Output	S-C	Shut down, recoverable, no damage	NO
Note:S-C	; short circuit ; O-C;	open circuit	1.

14	TABLE: Clea	BLE: Clearance And Creepage Distance Measurements				
Test Location	Working voltage	Measured cl (mm)	Required cl (mm)	Measured cr (mm)	Required cr (mm)	Verdict
L/N	85-265V~	3,2	1,5	3,2	2,5	Pass
Current-carrying parts and accessible parts	85-265V~	5,6	3,0	5,6	5,0	Pass

ANNEX 1	TAE	BLE: Cr	itical components in	formation	300	-10	Jn C
Object / par No.	t	Code	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Fuse	177	В	Various	Various	250V, T2A	IEC/EN 60127-4	VDE
PCB Board	. (В	Various	Various	V-0;130℃	UL796 UL94	UL

Supplementary information:

The codes above have the following meaning:

- A The component is replaceable with another one, also certified, with equivalent characteristics
- B The component is replaceable if authorised by the test house
- C Integrated component tested together with the appliance
- D Alternative component

ANNEX 2	TABLE: Temperature	measuremen	ts, thermal tes	sts of Section 10	Р
Jn.C	Type reference			60W	_
la.	Type reference			LED	-
	Supply wattage (W)			58.2W	_
4NC	Supply current (A)				_
	Calculated power factor	or		0.48	1 —
-	Table: measured temp	eratures corre	cted for ta = 2	5 °C:	Р
in .	- abnormal operating r	node		THE THE	_
	- test 1: rated voltage			230V~	_
		Temperature	measuremen	its, (°C)	
D (Clause 10 – normal	
Part		Ambient —	test 1	limit	Verdict
E27 Lamp o	cap	25℃	61.5	145	Pass
LED PCB	Lis In	25℃	80.1	90	Pass
Translucent cover		25℃	42.6	Ref	Pass
Plastic encl	osure, inside, near LED	25℃	59.3	Ref.	Pass
Sunnlement	tary information:				

¹⁾ Provided evidence ensures the agreed level of compliance. See OD-CB2039.



	ANNEX 3: EMF test result according to IEC/EN 62493						
4.2.d	MEASUREMENT RESULTS						
12.	Measuring with "Van der Hoofden" test head EUT operation model: ⊠ Normal operation □ Other operation:						
in C	Voltage:	85-265V~	Frequency:	50Hz	-IR-C		
D.	Temperature:	25°C	Humidity:	55% R.H.	1/1/2		
	Location of EuT	Measuring distance (cm)	Result (F)	Limit (F)	Verdict		
in C	MLB12D/W	50	0.08431	0,85	Р		

10	127	EN 62471	- Alle	- CAL	100
CI.	110	Requirement – Test	Result	110	Verdict
_		Tanana /			
C	Ars.	SCOPE	SAC.	- WIC	P _n (
	1/12	More sections applicable:	Yes	[√] No []	_
,	7D 4				
Annex	ZB 4	EXPOSURE LIMITS	MC	-anc	P
1.1	1/1/	General		112	P
C	THIN	The exposure limits in this standard is not less than 0,01 ms and not more than any 8-hour period and should be used as guides in the control of exposure	(NAC	THIC	P
-		Detailed spectral data of a light source are generally required only if the luminance of the	see	clause 4.3	Р
10	120	source exceeds 10 ⁴ cd.m -2	11/2	- W	1/2
1.3	1.	Hazard exposure limits	1	1.	Р
1.3.1		Actinic UV hazard exposure limit for the skin and ey	/e	7	Р
10	1 kg	The exposure limit for effective radiant exposure is 30 J·m ⁻² within any 8-hour period	MIC	TANC	- PI
C	THUC	To protect against injury of the eye or skin from ultraviolet radiation exposure produced by a broadband source, the effective integrated spectral irradiance, ES, of the light source shall not exceed the levels defined by:	(NIC	TANC	P TWICE
C	- W	The permissible time for exposure to ultraviolet radiation incident upon the unprotected eye or skin shall be computed by:	MC	MC	P
1.3.2	./.	Near-UV hazard exposure limit for the eye			Р
C	THI	For the spectral region 315 nm to 400 nm (UV-A) the total radiant exposure to the eye shall not exceed 10000 J·m ⁻² for exposure times less than 1000 s. For exposure times greater than 1000 s (approximately 16 minutes) the UV-A irradiance for the unprotected eye, EUVA shall not exceed 10 W.m -2	(W/C	THIC	P T NI
4NC	1 knc	The permissible time for exposure to ultraviolet radiation incident upon the unprotected eye for time less than 1000 s, shall be computed by:	N.	THINC	I IP
1.3.3		Retinal blue light hazard exposure limit			P
C	THIN	To protect against retinal photochemical injury from chronic blue-light exposure, the integrated spectral radiance of the light source weighted against the blue-light hazard function, B(λ), i.e., the blue-light weighted radiance, LB, shall not exceed	IN C	THINC	P
	1 600	the levels defined by:	12/1	100	1 611
1.3.4		Retinal blue light hazard exposure limit - small source	се		N/A
C	1 M	Thus the spectral irradiance at the eye Ελ, weighted against the blue-light hazard function B(λ) shall not exceed the levels defined by::	see	table 4.2	N/A



~ C	EN 62471	-n C	.n.C	.nC
CI.	Requirement – Test	Result	14,	Verdict
4.3.5	Retinal thermal hazard exposure limit	.10	٥,, ٥	N/A
4.3.6	Retinal thermal hazard exposure limit – weak visua stimulus	al	14	N/A
4.3.7	Infrared radiation hazard exposure limits for the ey	/e	. (P
4.3.8	Thermal hazard exposure limit for the skin	11/10	- PIN-	Р

5	MEASUREMENT OF LAMPS AND LAMP SYSTE	MS C	Pac
5.1	Measurement conditions	14. 14.	Р
NC W	Measurement conditions shall be reported as part of the evaluation against the exposure limits and the assignment of risk classification.	WC WC	P
5.1.1	Lamp ageing (seasoning)	1, 1,	7
. C.	Seasoning of lamps shall be done as stated in the appropriate IEC lamp standard.		(
5.1.2	Test environment:	My Marie	P
NC THIN	For specific test conditions, see the appropriate IEC lamp standard or in absence of such standards, the appropriate national standards or manufacturer's recommendations.	CAUC LAUC	P
5.1.3	Extraneous radiation:		Р
UC LAN	Careful checks should be made to ensure that extraneous sources of radiation and reflections do not add significantly to the measurement results.	THIC THIC	THIC
5.1.4	Lamp operation:		Р
UC LAN	Operation of the test lamp shall be provided in accordance with:	LANC LANC	- PIC
7.	the appropriate IEC lamp standard, or	3.	
.((the manufacturer's recommendation	.((.	Р
5.1.5	Lamp system operation	My Killy	N/A
	The power source for operation of the test lamp shall be provided in accordance with:		N/A
100-01	the appropriate IEC standard, or	We will	N/A
41	the manufacturer's recommendation	1, 1,	N/A
5.2	Measurement procedure	, ,	P
5.2.1	Irradiance measurements:	will will	P
1/1/	Minimum aperture diameter 7mm.	1, 1,	Р
,	Maximum aperture diameter 50 mm.	, ,	Р
No LAN	The measurement shall be made in that position of the beam giving the maximum reading	THE THE	- PIIC



n - n	EN 62471	Jn. Jn.	, n C
CI.	Requirement – Test	Result	Verdict
	The measurement instrument is adequate	, ,	
No 11/1	calibrated.	WILL WILL	PIC
5.2.2	Radiance measurements	11.	N/A
5.2.2.1	Standard method	, ,	N/A
5.2.2.2	Alternative method	who who	P
5.2.3	Measurement of source size	11. 11.	Р
5.2.4	Pulse width measurement for pulsed sources:		N/A
5.3	Analysis methods	anc anc	P//C
5.3.1	Weighting curve interpolations:	110 110	Р
UC LAN	To standardize interpolated values, use linear interpolation on the log of given values to obtain intermediate points at the wavelength intervals desired.	See table 4.1	P TWIC
5.3.2	Calculations:		Р
5.3.3	Measurement uncertainty:	The Since	Р
110	The quality of all measurement results must be quantified by an analysis of the uncertainty.		Р
10 10	20, 20, 20,	Jac .ac	٠،، ٥
6	LAMP CLASSIFICATION	1 lg, 1 lg,	Р
,	For the purposes of this standard it was decided that the values shall be reported as follows:		Р
UC LAN	for lamps intended for general lighting service (GLS), see definition 3.11, the hazard values shall be reported as either irradiance or radiance values at a distance which produces an illuminance of 500 lux, but not at a distance less than 200 mm;	LING LING	N/A
anc anc	for all other light sources, including pulsed lamp sources, the hazard values shall be reported at a distance of 200 mm.	anc anc	P
6.1	Continuous wave lamps	1. 11.	Р
6.1.1	Exempt group		Р
NC THI	The philosophical basis for the exempt group classification is that the lamp does not pose any photobiological hazard for the end points in this standard. This requirement is met by any lamp thatdoes not pose	LING LING	THIC
Ve Lin	an actinic ultraviolet hazard (<i>E</i> s) within 8-hours exposure (30000 s), nor	LINE LINE	PILE
	a near-UV hazard (EUVA) within 1000 s, (about 16 min) nor	. ((((Р
V - W	a retinal blue-light hazard (<i>L</i> B) within 10000 s (about 2,8 h), nor	W. W.	- PU



. (. (EN 62471	a.C.		. (
CI.	144	Requirement – Test	Result	140	Verdict
00		a retinal thermal hazard (<i>L</i> R) within 10 s, nor		٥.	P.C
2	1.64	an infrared radiation hazard for the eye (<i>E</i> IR) within 1000 s.	1411	100	Р
6.1.2		Risk Group 1 (Low-Risk)			N/A
N.C.	L WILL	The philosophical basis for this classification is that the lamp does not pose a hazard due to normalbehavioral limitations on exposure. This requirement is met by any lamp that exceeds the limits for the Exempt Group but that does not pose	LINC	THIC	N/A
31	144	an actinic ultraviolet hazard (<i>E</i> s) within 10000 s, nor	Lille	TEN	N/A
1.00	5	a near ultraviolet hazard (EUVA) within 300 s, nor	50		N/A
WC.	200	a retinal blue-light hazard (LB) within 100 s, nor	-inC	-in-C	N/A
9.	1/2,	a retinal thermal hazard (LR) within 10 s, nor	11/2	14.	N/A
-		an infrared radiation hazard for the eye (<i>E</i> IR) within 100 s.			N/A
6.1.3	-1011	Risk Group 2 (Moderate-Risk)	- W	- Will	N/A
anc.	- W	The philosophical basis for the Risk Group 2 (Moderate-Risk) classification is that the lamp does notpose a hazard due to the aversion response to very bright light sources or due to thermal discomfort. This requirement is met by any lamp that exceeds the limits for Risk Group 1 (Low-Risk), but that doesnot pose	(MC	THIC	N/A
W.C	T WILL	an actinic ultraviolet hazard (<i>E</i> s) within 1000 s exposure, nor	MIC	THIC	N/A
		a near ultraviolet hazard (EUVA) within 100 s, nor	7		N/A
20	-10	a retinal blue-light hazard (<i>L</i> B) within 0,25 s (aversion response), nor	-inC	-mC	N/A
19.	In.	a retinal thermal hazard (<i>L</i> R) within 0,25 s (aversion response), nor	112.	In.	N/A
		an infrared radiation hazard for the eye (<i>E</i> IR) within 10 s.	-nC	-mC	N/A
6.1.4	10,	Risk Group 3 (High-Risk)	61.	161,	N/A
W.C	TEN	The philosophical basis for this classification is that the lamp may pose a hazard even for momentary or brief exposure. Lamps which exceed the limits for Risk Group 2 (Moderate-Risk) are in Risk Group3 (High-Risk).	L MUC	THIC	N/A
6.2		Pulsed lamps	- A C		N/A
37	164	Pulsed lamp criteria shall apply to a single pulse and to any group of pulses within 0,25 second.	1611	Len	N/A



aC.	nc nc nc	EN 62471	.nC	300	an C
CI.	Requirement – Test	14.	Result	16,	Verdict

aC aC	Lumina	nce Test Results	0	
Symbol	FOV(mrad)	Units	Results	1 1/2/2
L1	1.7	cd/m ²	1.831E+06	
L2	11	cd/m ²	2.766E+05	
L3	100	cd/m ²	1.539E+04	4 191
	Over viev	v of Classification	on	
Hazard	.((.	Risk Group	.((.	. (.
Actinic UV	My Thy	Exempt Group		
Near UV		Exempt Group	p	
Blue light	.((.	Exempt Group	۰.۵. ۵.	. (.
Retinal thermal	4/10	Exempt Group	0 4/1 / 1/1	1 ky
Retinal thermal, weak visua	al stimulus	Exempt Group	p	
IR radiation, eye	. ((.	Exempt Group	p . C C	
Classification group	W. W.	Exempt Group		



Attachment No.1

Photo Documentation

Report No.: TMC220625103-S



Fig. 1



Fig. 2

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