TEST REPORT

Kunde: *Client:*	Logos Lighting Co., Ltd
Adresse: *Address:*	5th Floor, Building A, Zhixuanhan Yuanling Industrial Park, Shiyan Town, Baoan District, Shenzhen City, Guangdong Province, China 518108
Hersteller: *Manufacturer:*	Logos Lighting Co., Ltd
Adresse: *Address:*	5th Floor, Building A, Zhixuanhan Yuanling Industrial Park, Shiyan Town, Baoan District, Shenzhen City, Guangdong Province, China 518108
Name der Marke: *Brand Name:*	LOGOS LED
Beschreibungdes Produkts: *Product Description:*	Flood light (LED High Mast Light)
Modelle: *Models:*	See model list on page 3 to 4
Bewertung: *Rating:*	See model list on page 3 to 4
Verfahren: *Method:*	IEC 62262:2002+A1:2021
Prüfergebnis*: *Test result*:*	Pass

Datum der Prüfung: *Date of Test:*	**Datum der Emission:** *Date of Issue:*	**Klassifizierung:** *Classification:*	**Gegenstand der Prüfung:** *Test item:*
2023/7/21	2025/4/29	Commission Test	IK10 Test

Prüflabor (Testlabor) / Testing Laboratory:
Shenzhen Southern LCS Compliance Testing Co., Ltd.
Room 101-201, Building 39, Xialang Industrial Zone, Heshuikou Community, Matian Street, Guangming District, Shenzhen, Guangdong, China

Test von/Test by:	**Check von/**Check by:	**Genehmigt von/**Approved by:
Yeoh Zhang/ Project Engineer	Torres He/ Director	Jesse Liu/ Manager

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2. This report shall not be reproduced, except in full, without the written approval of the Issuing Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the Testing Laboratory, responsible for this Test Report.
3. The general information of applicant and manufacturer (such as the name and address), product name, model/type reference, trademark and other similar information contained in this report are all provided by the applicant, the laboratory is not responsible for verifying its authenticity.

Modified Information

Version	Report No.	Revision Date	Summary
--	LCSB052923057S	/	Original Version
V1.0	LCSB04015067S	2025-04-29	Co-license

The declaration of identity dated 2025-04-29 from applicant confirm this:
The “Flood light (LED High Mast Light)” model “LGS-FLCR-30W, LGS-FLCR-50W,LGS-FLCR-100W,LGS-FLCR-150W,LGS-FLCR-200W,LGS-FLCR-240W,LGS-FLCR-300W,LGS-FLCR-400W,LGS-FLCR-500W,LGS-FLCR-30WB,LGS-FLCR-50WB,LGS-FLCR-100WB,LGS-FLCR-150WB,LGS-FLCR-200WB,LGS-FLCR-240WB,LGS-FLCR-300WB,LGS-FLCR-400WB,LGS-FLCR-500WB,LGS-GSHL-400W,LGS-GSHL-500W,LGS-GSHL-600W,LGS-GSHL-800W,LGS-GSHL-1000W,LGS-GSHL-1200W” of co-license holder “Name:Logos Lighting Co., Ltd. ” “Address: 5th Floor, Building A, Zhixuanhan Yuanling Industrial Park, Shiyan Town, Baoan District, Shenzhen City,Guangdong Province, China 518108”is the same “****” model “****” of license holder “Name:****” “Address:****”.(****:hided by commercial reason)
Existing approved test report “LCSB052923057S” dated 2023/7/21. This co-license test report is based on the test raw-data of existing approved test report, after construction/information review and verification, no additional tests were considered necessary.

Equipment used during test:

ID Number	Instrument	Model/ Type	Cal. Date	Due. Date
SLCS-S-182	IK tester	AGIKCJ	2023-05-09	2024-05-08
SLCS-S-135	Digital hygrometer thermometer	HTC-1	2023-05-09	2024-05-08
SLCS-S-088	Tape	5M	2023-05-10	2024-05-09
SLCS-E-024	Temperature and humidity barometer	HTC-1	2023-05-10	2024-05-09

General product information:
- Unless otherwise specified, the models LGS-FLCR-500W and LGS-GSHL-1200W were chosen as representative model to perform all test.
Model list for series 1 models: 100-277VAC, 50/60Hz

Model No.	Power	LED driver model No.

LGS-FLCR-30W	30W	SS-40NL-E130Bx1pcs
LGS-FLCR-50W	50W	SS-60NL-E130Bx1pcs
LGS-FLCR-100W	100W	SS-100NL-E260Bx1pcs
LGS-FLCR-150W	150W	SS-150NL-E260Bx1pcs
LGS-FLCR-200W	200W	SS-200NL-E260Bx1pcs
LGS-FLCR-240W	240W	SS-240NL-E260Bx1pcs
LGS-FLCR-300W	300W	SS-150NL-E260Bx2pcs
LGS-FLCR-400W	400W	SS-200NL-E260Bx2pcs
LGS-FLCR-500W	480W	SS-240NL-E260Bx2pcs
LGS-FLCR-30WB	30W	SS-40NL-E130Bx1pcs
LGS-FLCR-50WB	50W	SS-60NL-E130Bx1pcs
LGS-FLCR-100WB	100W	SS-100NL-E260Bx1pcs
LGS-FLCR-150WB	150W	SS-150NL-E260Bx1pcs
LGS-FLCR-200WB	200W	SS-200NL-E260Bx1pcs
LGS-FLCR-240WB	240W	SS-240NL-E260Bx1pcs
LGS-FLCR-300WB	300W	SS-150NL-E260Bx2pcs
LGS-FLCR-400WB	400W	SS-200NL-E260Bx2pcs
LGS-FLCR-500WB	480W	SS-240NL-E260Bx2pcs

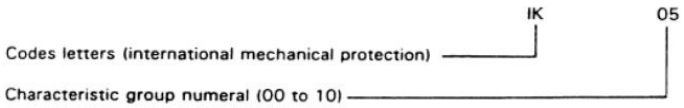
Parts	Thickness(mm)
Glass cover	3.6

Model list for series 2 models: 120-240VAC, 50/60Hz

Model No.	Power	LED driver model No.
LGS-GSHL-400W	400W	XLG-240-H-A x2pcs
LGS-GSHL-500W	480W	
LGS-GSHL-600W	600W	
LGS-GSHL-800W	800W	XLG-240-H-A x3pcs
LGS-GSHL-1000W	960W	XLG-240-H-A x4pcs
LGS-GSHL-1200W	1200W	XLG-320-H-A x4pcs

Parts	Thickness(mm)
Translucent cover	8.5

IEC 62262			
Clause	Requirement + Test	Result - Remark	Verdict

4	**Designations**		
4.1	Arrangement of the IK code 	IK10	--
4.2	Characteristic group numerals of the IK code and their meanings Each characteristic group numeral, represents an impact energy value as shown in Table1.	See table 1 of IEC 62262, IK10 Impact energy Joule 20J	--
4.3	Application of the IK code In general the degree of protection applies to the complete enclosure. If parts of the enclosure have differing degrees of protection, the latter shall be separately indicated.		N/A
4.4	**Marking**		
	In case where the relevant product committee decides that marking of the IK-code shall be required, the marking requirements shall be detailed in the relevant product standard.	IK10	P
	Where appropriate, such a standard should also specify the method of marking which is to be used when:		--
	—one part of an enclosure has different degree of protection to that of another part of the same enclosure;		N/A
	—the mounting position has an influence on the degree of protection.		N/A
5	**General requirements for tests**		
5.1	Atmospheric conditions for tests		P
	Unless otherwise specified in the relevant product standard, the test shall be carried out under the standard atmospheric conditions for tests described in IEC60068-1as:		--
	Temperature range15°C to 35°C	25°C	P
	Air pressure 86kPa to 106kPa (860mbar to 1060mbar)	96kPa	P
	When the altitude at which the test is performed is higher than 2000m the height of fall shall be adjusted where necessary to result in the specified impact energy.	Below 2000m	N/A
5.2	Enclosures under test		N/A
	Each enclosure under test shall be in a clean and new condition, complete with all their parts in place unless otherwise specified in the relevant product standard.		P
5.3	Specifications to be given in the relevant product standard		
	The relevant product standard shall specify:		--

IEC 62262			
Clause	Requirement + Test	Result - Remark	Verdict
	—the definition of “enclosure” as it applies to the particular type of equipment;		N/A
	—the test equipment (e.g. pendulum hammer, spring hammer or vertical hammer, seeClause7);		P
	—the number of samples to be tested;	1	P
	—the conditions for mounting, assembling and positioning the samples, e.g. by the use of an artificial surface(ceiling, floor or wall), in order to stimulate intended service conditions as far as possible;		P
	—the pre-conditioning, if any, which is to be used;		N/A
	—whether to be tested energized;	No energized	N/A
	—whether to be tested with any moving parts in motion;	No moving parts	N/A
	—the number of impacts and their points of application (see 6.3).		P
	In the absence of such specifications in the relevant product standard, conditions of this standard shall apply.		P
6	**Test to verify the protection against mechanical impacts**		
6.1	The tests specified in this standard are type tests.		--
6.2	In order to verify the protection against mechanical impacts blows shall be applied to the enclosure to be tested. The device to be used for this test are described in Clause7.		P
6.3	During the test the enclosure shall be mounted, according to the manufacturer instructions for use, on a rigid support. A support is considered to be sufficiently rigid if its displacement is less than or equal to 0,1mm under the effect of an impact directly applied and whose energy corresponds to the degree of protection. Alternative mounting and support, suitable for the product, may be specified in the relevant product standard.	Displacement is less than or equal to 0,1mm	P
6.4	The number of impacts shall be five on each exposed face unless otherwise specified in the relevant product standard. The impacts shall be evenly distributed on the faces of the enclosure (s) under test. In no case shall more than three impacts be applied in the surroundings of the same	5 points, 3 times per point	P
6.5	Test evaluation The relevant product standard shall specify the criteria upon which the acceptance or rejection of the enclosure is to be based on particularly:		P
	—admissible damages;	No damage	P
	—verification criteria relative to the continuity of the safety and reliability of the equipment.	No broken	P

IEC 62262			
Clause	Requirement + Test	Result - Remark	Verdict

7	**Test apparatus**		
	The test shall be done by using one of the test apparatus as described in EN60068-2-75.		P
	The striking surface shall be visually examined before each impact in order to ensure that there is no damage that might affect the result of the test.	See Figure 1	P
7.1	Test Ehc: Vertical hammer		N/A
7.1.1	The hammer consists basically of a striking element which falls freely from rest through a vertical height, selected from table2 of IEC 60068-2-75, on to the specimen surface held in a horizontal plane. The characteristics of the striking element shall comply with table 1 of IEC 60068-2-75. The fall of the striking element shall be along a guide way, for example a tube, with negligible braking. This guide way shall not rest on the specimen and the striking element shall be free of the guide way on striking the specimen. In order to reduce the friction, the length l of the striking element shall not be smaller than its diameter D, and a small gap (for example 1 mm) shall be provided between the striking element and the guide way.		N/A
7.1.2	Height of fall		N/A
	The height of fall is given in table2 of IEC 60068-2-75, the equivalent mass stated therein being equal to the actual mass of the striking element.		N/A
7.2	Test Eha: Pendulum hammer		P
7.2.1	Test apparatus		P
7.2.1.1	Test apparatus for severities not exceeding 1 J		N/A
7.2.1.2	Test apparatus for severities of 2 J and above		P
7.2.2	Height of fall		P
	To produce impacts of the required severity, the striking element is released from a height depending on the equivalent mass of the pendulum, according to Table 2 of IEC 60068-2-75.		P
7.2.3	Testing		P
	In order to avoid secondary impacts, i.e. rebounds, the hammer is retained after the initial impact by grasping the striking element whilst avoiding the arm so that distortion is prevented.		P
7.3	Test Ehb: Spring hammer		N/A

IEC 62262			
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7.3.1	Test apparatus		N/A
7.3.2	Influence of earth's gravity		N/A
	The downward/upward variation is taken into account when establishing the actual energy delivered.		N/A
7.3.3	Calibration		N/A
	The spring hammer is calibrated.		N/A

IEC 62262			
Clause	Requirement + Test	Result - Remark	Verdict

REMARKS:

1. The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

2. Characterization & Condition of Sample: Normal.

Table 1 of IEC 62262-2002:

Table 1- Relation between IK code and impact energy

IK code	IK00	IK01	IK02	IK03	IK04	IK05	IK06	IK07	IK08	IK09	IK10
Impact energy Joule	a	0,14	0,2	0,35	0,5	0,7	1	2	5	10	20
Not protected according to this standard											

NOTE 1 When higher impact energy is required the value of 50 Joule is recommended.

NOTE 2 A characteristic group numeral of two figures has been chosen to avoid confusion with some former national standards which used a single numeral for a specific impact energy.

Table 2 of IEC 60068-2-75:

Table 2- Height of tall

Energy J	0,14	0,2		(0,3)	0,35	(0,4)	0,5		0,7	1	2	5	10	20	50
Equivalent mass kg	0,25	(0,2)	0,25	(0,2)	0,25	(0,2)	(0,2)	0,25	0,25	0,25	0,5	1,7	5	5	10
Height of tall mm±1%	56	(100)	80	(150)	140	(200)	(250)	200	280	400	400	300	200	400	500

NOTES

1 See note in 3.2.2.

2 In this part of IEC 60068, the energy, J, is calculated taking the standard acceleration clue to the earth's Gravity(g_n), rounded up to the nearest whole number, that is 10m/s².

IEC 62262			
Clause	Requirement + Test	Result - Remark	Verdict

Table 1 of IEC 60068-2-75

Table 1 - Co-ordinated charateristics of the striking elements

Energy value J	≤1 ±10%	2 ±5%	5 ±5%	10 ±5%	20 ±5%	50 ±5%
Equivalent mass ±2% kg	0,25 (0,2)	0,5	1,7	5	5	10
Material	Polyamide[1)]	Steel[2)]				
R mm	10	25	25	50	50	50
D mm	18,5 (20)	35	60	80	100	125
f mm	6,2 (10)	7	10	20	20	25
r mm	--	--	6	--	10	17
l mm	To be adjusted to match the equivalent mass, see annex A.					

1) 85≤HRR≤100, Rockwell hardness according to ISO 2039-2.
2) Fe 490-2, according to ISO 1052: Rockwell hardness: HRE 80...85 according to ISO 6508.

NOTE - The values shown in brackets for the equivalent mass and the diameter of the striking element for the energy value equal to or less than 1 J are those in the current test Ef. The values currently in test Eg are also shown for these two parameters. For co-ordination purposes, the values in brackets will be deleted five years from the publication of this standard.

Figure1— Example sketch of a striking element

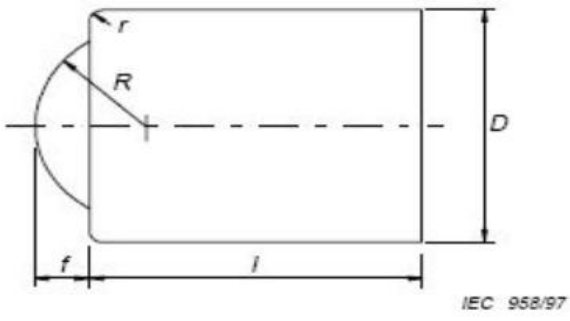


Figure 1 – Example sketch of a striking element

Photo Documentation:

Photo 1: Overall view of model LGS-FLCR-500W

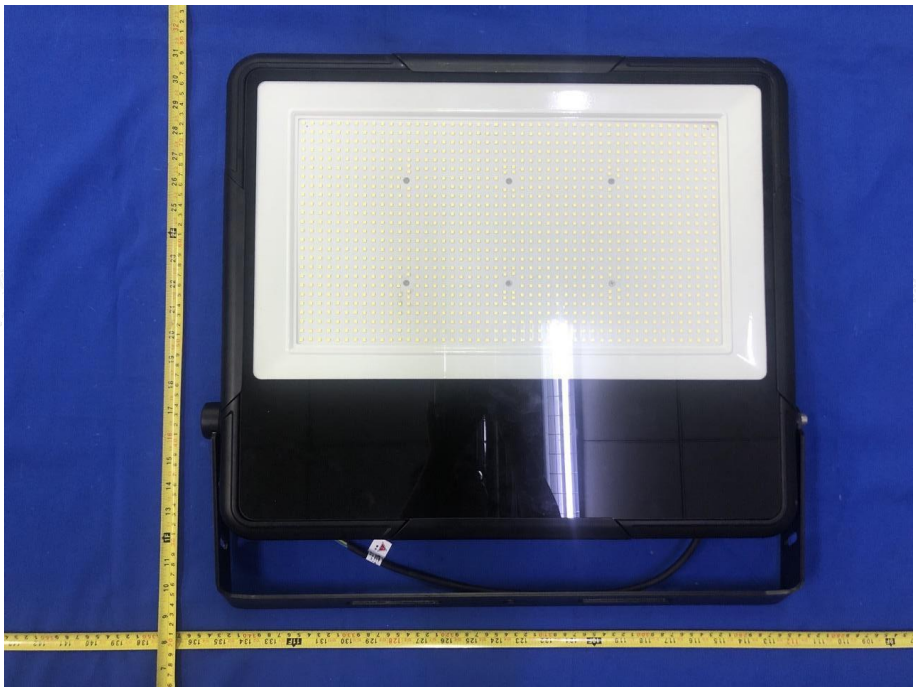


Photo 2: Overall view of model LGS-FLCR-500W

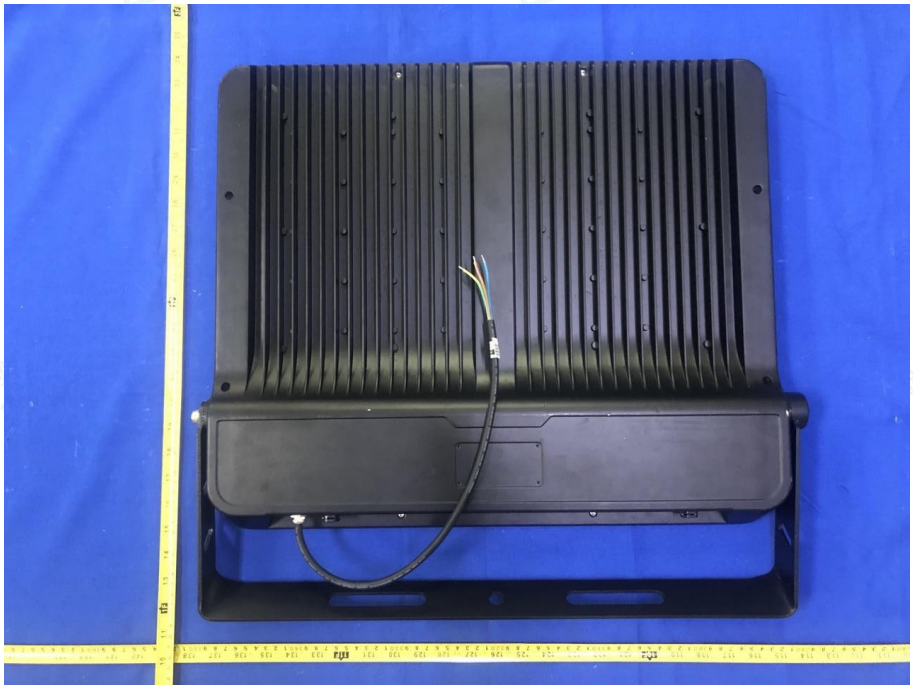
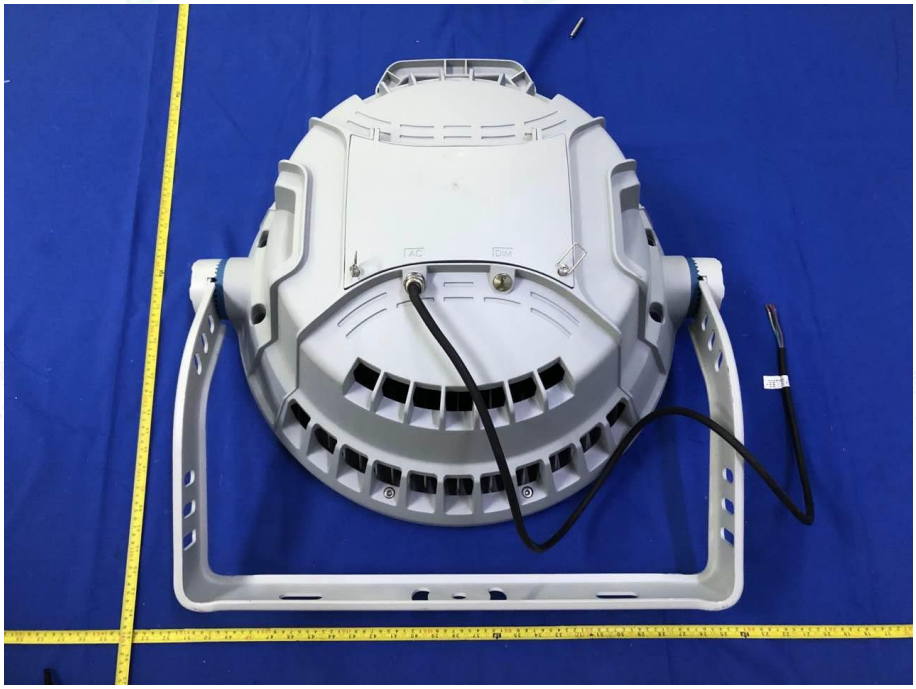


Photo Documentation:

Photo 3: Overall view of model LGS-GSHL-1200W

Photo 4: Overall view of model LGS-GSHL-1200W



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