

IP TEST REPORT

Project No.: L10-70075

Equipment Under Test: LED-SMD Lighting (100 W)

Model/Type	: Flood Light
IP	: 66
Rating	: 230 VAC , 50 HZ , 100 W
Dimension	: See Annex
Trade Mark	:

Manufacturer: AZAR TEYF CO.

Address: No.,4, 3th Flowers Alley, 5th Sanat St, Pasargad Industrial Park, Tehran- Saveh Highway, Iran.

Applicant: AZAR TEYF CO.

Address: No.,4, 3th Flowers Alley, 5th Sanat St, Pasargad Industrial Park, Tehran- Saveh Highway, Iran.

Tested According to: IEC 60529 2013/COR1:2019 AND IEC 60598-1 2020

Date of Sample Reception: 20-Jul-2022

Date of tests: 23-Jul-2022

Date of Issue: 10-Aug-2022

Total number of pages: 12

Prepared and tested by: Technical Expert

Verified by: Technical Manager

H. Montazeri

B. Hamidifard

Approved by:

Engineering Deputy of Test and Inspection

Chief Executive Officer

Prof. B. Vahidi / Prof. S. H. Fathi

S. M. Mirsadri

The statement of conformity decision on the measured values is made based on guard band w=U, r=1 rule (ISO/IEC Guide 98-4). The specific false accept/reject risk is up to 2.5%.

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1. GENERAL INFORMATION

1.1 Product Information

Equipment Under Test : LED-SMD Lighting (100 W)
S/N : 0103123
Normative Document : IEC 60529 2013/COR1:2019 AND IEC 60598-1 2020

1.2 Client Information

Applicant : AZAR TEYF CO.
Telephone : +98 21 56573311

1.3 Tests Performed

Marking
IP6X, Test for Protection Against Dust
IPX6, Test for Protection Against Water

PASSED
PASSED
PASSED

1.4 Results of Tests

See Page 4 – 7

2. PERFORMANCE and RESULTS of TESTS

2.1. Marking:



2.1.1 Test data

Location	: E.P.I.L.
Date	: 23-Jul-2022
Engineer of EPIL	: H. Montazeri
Normative document	: IEC 60529 2013/COR1:2019 AND IEC 60598-1 2020

2.1.2 Procedure of test

Compliance with The requirements of sub clause 3, IEC 60598-1 for marking shall be specified in the relevant product standard.

2.1.3 Acceptance conditions of test

Compliance with the requirements of sub clause 3 of IEC 60598-1 had checked by inspection.

2.1.4 Result of test

Test was done according to IEC 60598-1, sub clause 3 and it passed the test.

✓ PASSED
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2.2 IP6X, Test for Protection Against Dust

2.2.1 Test data

Location	: E.P.I.L.
Date	: 23-Jul-2022
Engineer of EPIL	: H. Montazeri
Normative Document	: IEC 60529 2013/COR1:2019 AND IEC 60598-1 2020

2.2.2 Ambient conditions

Ambient Temperature	: 20 °C
Relative Humidity	: 33 %
Atmospheric Pressure	: 86.5 kPa

2.2.3 Instrument used for the test

Dust Chamber

2.2.3 Procedure of test

The luminaire under test is placed in normal operating position in dust chamber and the powder circulation pump worked. Talcum powder shall be used. The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50 µm and the nominal width of a gap between wires 75 µm. The amount of talcum powder to be used is 2 kg per cubic meter of the test chamber volume. It shall not have been used for more than 20 tests. The duration of the test was 3 h.

2.2.4 Acceptance conditions of test

A voltage of substantially sine-wave form, with a frequency of 50 Hz or 60 Hz and the value specified in Table 10.2 of IEC 60598-1, shall be applied for 1 min across the insulation shown in that table. No deposit of talcum powder inside enclosures for dust-tight luminaires.

2.2.5 Result of test

The test was done according to IEC 60598-1 clause 9.2.2, and it passed the test.


PASSED
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2.3 IPX6, Test for Protection Against Water

2.3.1 Test data

Location	: E.P.I.L.
Date	: 24-Jul-2022
Engineer of EPIL	: H. Montazeri
Normative Document	: IEC 60529 2013/COR1:2019 AND IEC 60598-1 2020

2.3.2 Ambient conditions

Ambient Temperature	: 20 °C
Relative Humidity	: 33 %
Atmospheric Pressure	: 86.5 kPa

2.3.3 Instrument used for the test

Water Jet

2.3.4 Procedure of test

The conditions to be observed are as follows:
Internal diameter of the nozzle: 12.5 mm.
Delivery rate: 100 l/min $\pm$ 5%.
Distance from nozzle to enclosure surface: 3 m.
Before the test, the luminaire complete with lamp(s) shall be switched on and brought to a stable operating temperature at rated voltage.
Then luminaire is switched off and immediately subjected to a water jet for 15 min from all directions (According to IEC 60598-1).

2.3.5 Acceptance conditions of test

After testing the EUT shall be inspected for no trace of water on current-carrying parts or SELV parts where the voltage under load exceeds 12 V r.m.s. or 30 V ripple-free d.c. or on insulation where it could become a hazard for the user or surroundings, for example, where it could reduce the creepage distances below the values specified in Section 11 specified in IEC 60598.

A voltage of substantially sine-wave form, with a frequency of 50 Hz or 60 Hz and the value specified in Table 10.2 of IEC 60598-1, shall be applied for 1 min across the insulation shown in that table. For luminaires without drain holes, there shall be no water entry. For luminaires with drain holes, water entry including condensation is allowed during the tests if it can drain out effectively and provided it does not reduce the creepage and clearance distances below the minimum levels specified in the standard.

2.3.6 Result of test

Test was done according to IEC 60598-1 and it passed the test.

✓ PASSED

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3. FIGURES:



Figure 1: EUT

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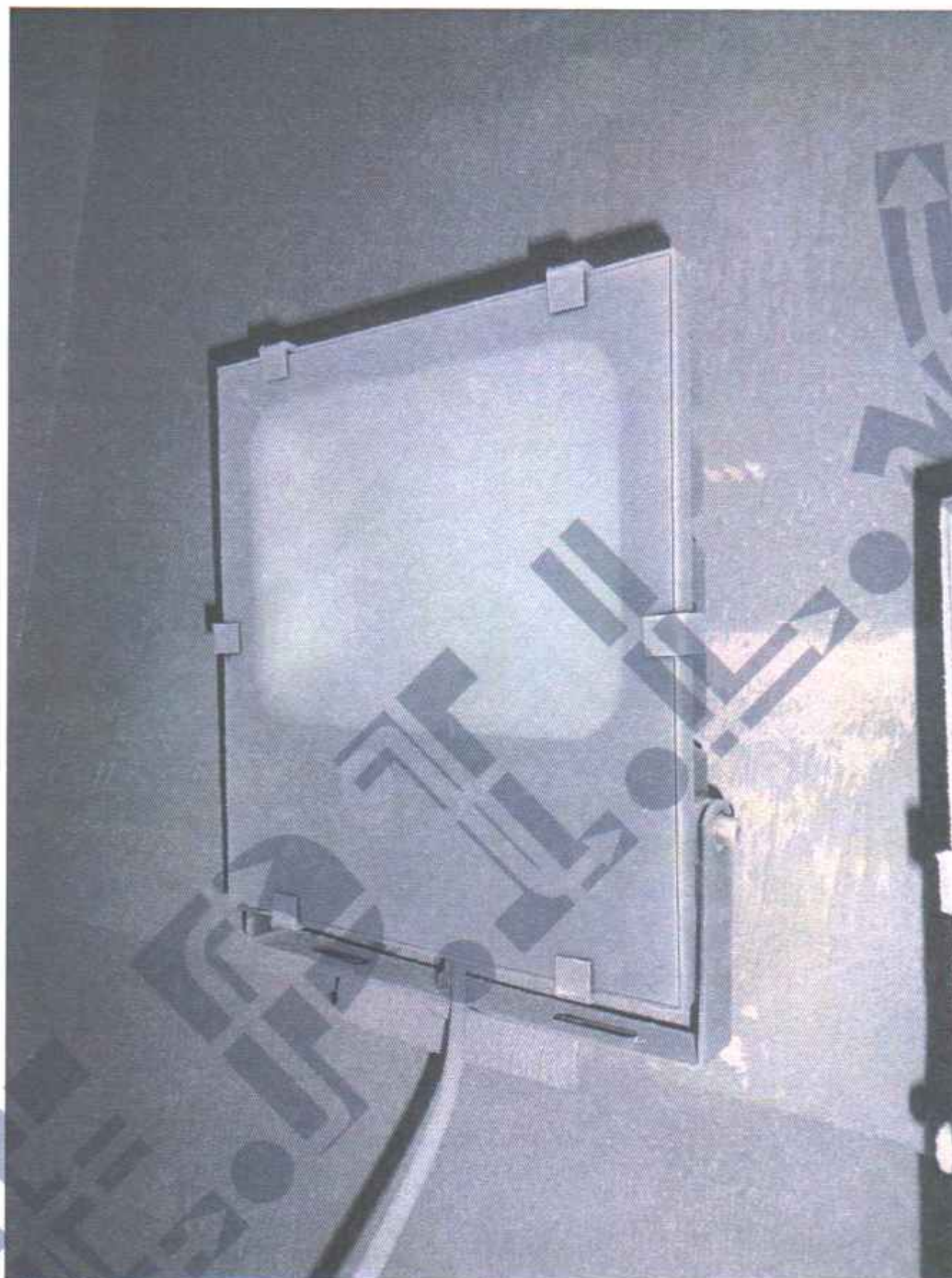


Figure 2: EUT after IP6X

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Figure 3: EUT under IPX6

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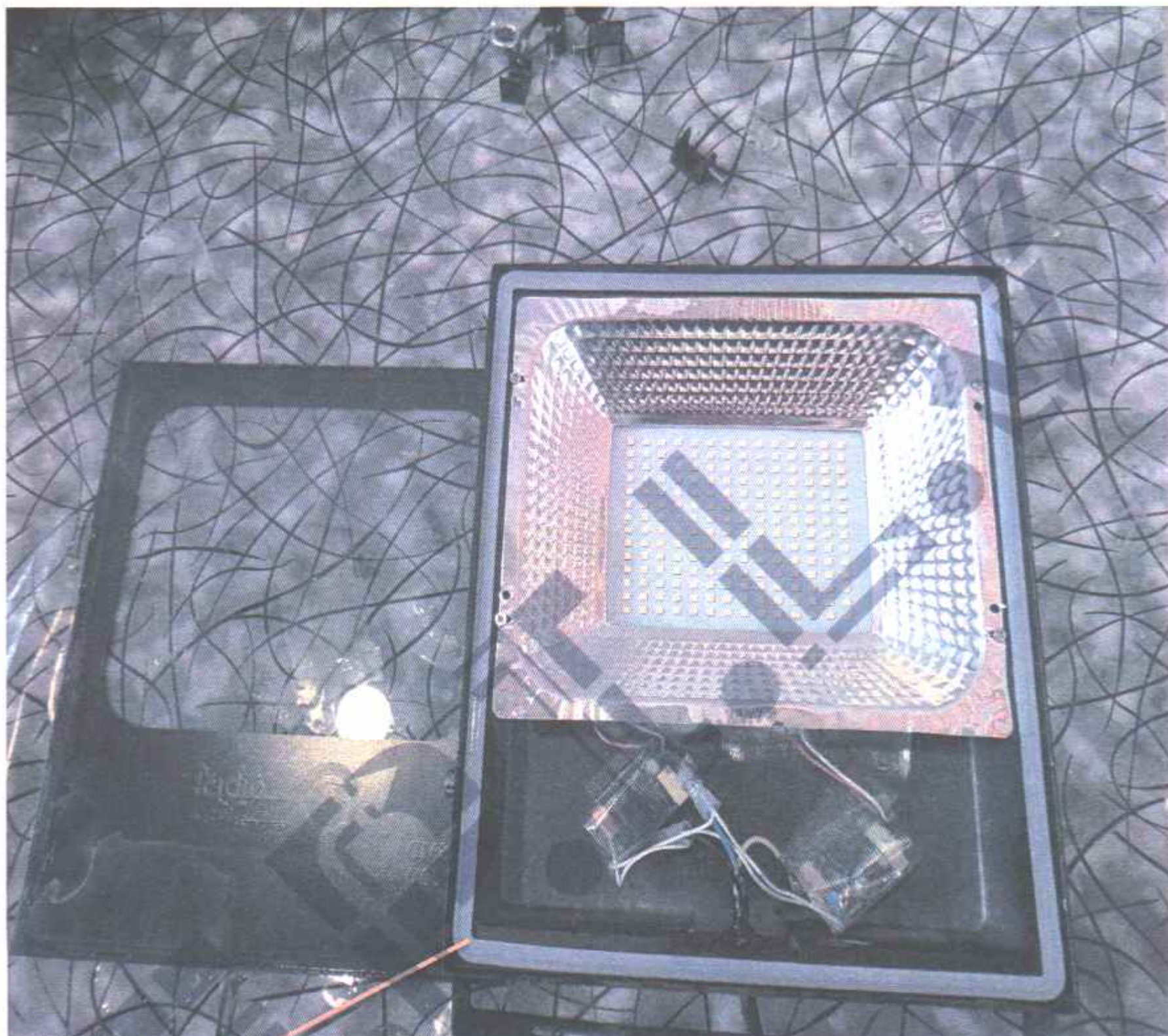


Figure 4: EUT after IPX6

Note : (Gasket was used in the EUT for sealing)

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4. ANNEX:

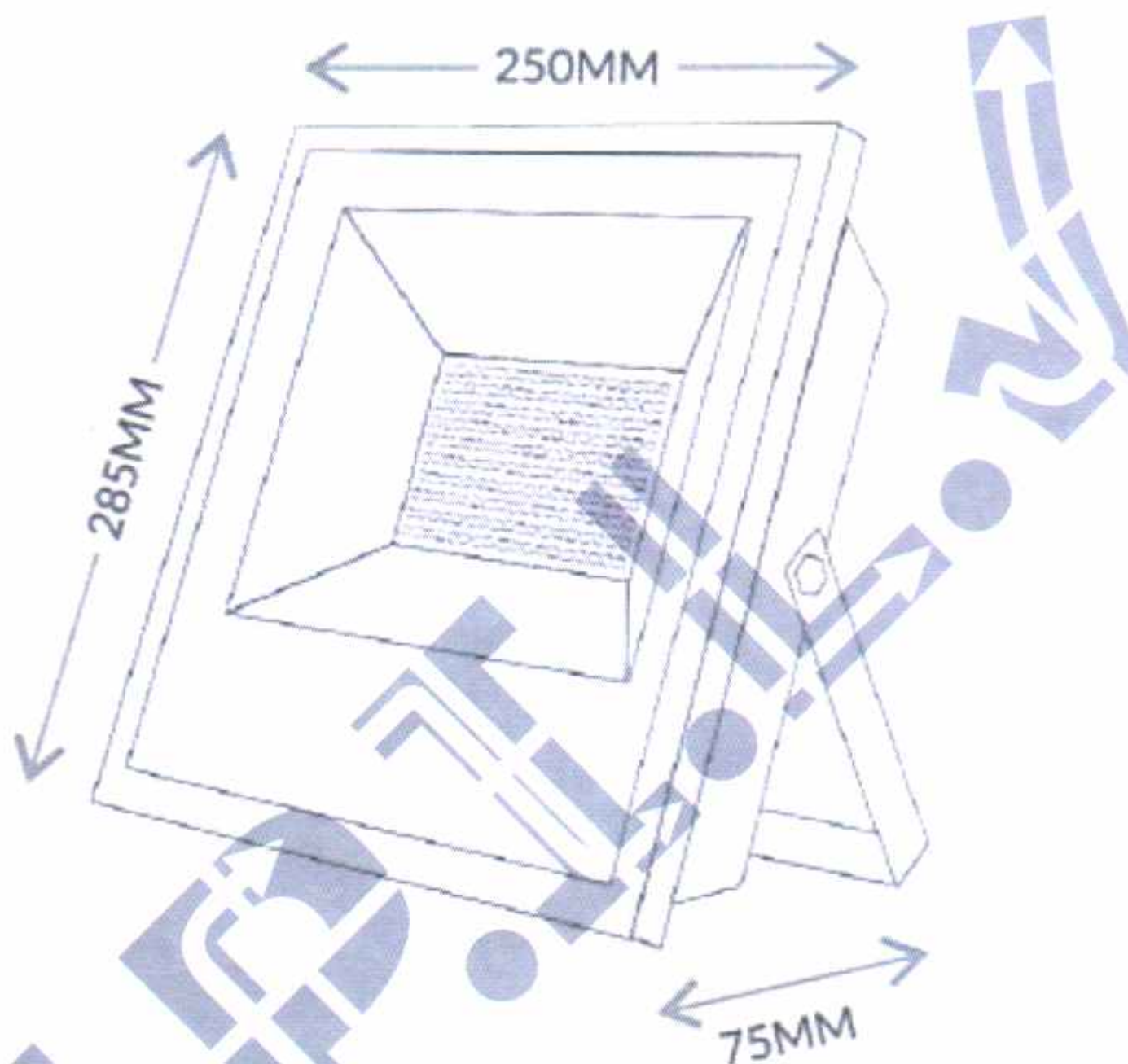


Figure 5: Dimension

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