



## TEST REPORT



Reference Standard: IEC 60529

Degree of Protection Provided by Enclosures (IP Code)

Report Reference No. .... :	53135
Date of issue ..... :	08 June 2022
Total Number of Pages ..... :	07
Applicant's Name ..... :	DECOLIGHT TRADING CO., LLC.
Address ..... :	Dubai, UAE.
Test specification:	
Standard(s) ..... :	IEC 60529, Edition 2.2 2013-08.
Test Report Form No. .... :	GMES/LAB/FRM/-21 Rev 02, Nov'21
Test Report Form(s) Originator ..... :	Gray Mackenzie Engineering Services LLC
Master TRF ..... :	25-November-2021
Client Document No. .... :	N/A
Client Reference No. .... :	N/A
Lab Reference No. .... :	N/A
Job No. .... :	25957
Data Sheet No. .... :	22134
Test Item Description ..... :	WEATHERPROOF LED MODULE STRIPLIGHT (IP67)
Trademark/Identification mark ..... :	DUVA ILUMINACION
Manufacturer name ..... :	Not Indicated
Model/Type reference ..... :	DUVA 45.09.24.67.30
Serial Number ..... :	Not Indicated
Ratings ..... :	24V, 9W/M, 5M, 3000k, IP67



**Testing Procedure and Testing Location:**

<input checked="" type="checkbox"/>	<b>Testing Laboratory:</b>	Gray Mackenzie Engineering Services LLC, Shed No.118 Al Jadaf, Dubai, U.A.E
<b>Tested By (name+signature).....:</b>		Syed Ali Zain Zaidi Testing Engineer 
<b>Approved By (name+signature).....:</b>		Vijaya Ratna Paul.Pitta Lab Incharge 

**Summary of Testing:**

The product Complies with the test requirements performed as per IP67 of IEC 60529.

**Note:** Only the test requested by the customer are conducted.

**Copy of Marking Plate:**



**Possible Test Case Verdicts:**

- test case does not apply to the test object .....: N/A
- test case does not conduct to the test object.....: N/C
- test object does meet the requirement.....: P (Pass)
- test object does not meet the requirement.....: F (Fail)

**Testing** .....

Date of receipt of test item .....: 03 June 2022  
Date (s) of performance of tests .....: 07 June 2022  
Laboratory Temperature.....: 23±2°C

**General Remarks:**

The test results presented in this report relate only to the object tested.  
This report shall not be reproduced in partial/full, without the written approval of the Issuing testing laboratory.  
“(See Enclosure #)” refers to additional information 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.



IEC 60529					
Clause	Requirement - Test			Result - Remark	Verdict
11	<b>GENERAL REQUIREMENTS FOR TESTS:</b>				P
11.1	Atmospheric conditions for water or dust tests		25°C, 60% RH at 90kPa		P
12	<b>TESTS FOR PROTECTION AGAINST ACCESS TO HAZARDOUS PARTS INDICATED BY THE FIRST CHARACTERISTIC NUMERAL:</b>				P
12.1	<b>Access probes:</b>				P
IP6X	The test wire of 1,0mm 100mm long shall not penetrate and adequate clearance shall be kept				N/A
12.3	<b>Acceptance conditions:</b>				P
	The protection is satisfactory if adequate clearance is kept between the access probe and hazardous parts.				P
	For the test of first characteristic numeral 1, the access probe 50 mm diameter shall not completely pass through the opening.			IP1X	N/A
	For the test of first characteristic numeral 2, the jointed test finger may penetrate to its 80 mm length, but the stop face ( $\varnothing$ 50 mm $\times$ 20 mm) shall not pass through the opening.			IP2X	N/A
	both joints of the test finger shall be successively bent				N/A
12.3.1	<b>For low-voltage equipment (rated voltages not exceeding 1000V a.c. and 1500 Vd.c.):</b>				P
	The access probe shall not touch hazardous live parts.				P
12.3.3	<b>For equipment with hazardous mechanical parts:</b>				N/A
	The access probe shall not touch hazardous mechanical parts.				N/A
13	<b>TESTS FOR PROTECTION AGAINST SOLID FOREIGN OBJECTS INDICATED BY THE FIRST CHARACTERISTIC NUMERAL:</b>				P
13.2	The object probe is pushed against any openings of the enclosure with the force specified in table 7.				N/A
	First Numeral	Test means	Test Force		-
	0	No test required	-	IP0X	-
	1	Rigid sphere 50.0mm $\varnothing$	50N	IP1X	N/A
	2	Rigid sphere 12.5mm $\varnothing$	30N	IP2X	N/A
	3	Rigid steel rod 2.5mm $\varnothing$	3N	IP3X	N/A
	4	Rigid steel rod 1.5mm $\varnothing$	1N	IP4X	N/A
	5	Dust chamber fig.2	-	IP5X	N/A
	6	Dust chamber fig.2	-	IP6X	P

IEC 60529			
Clause	Requirement - Test	Result - Remark	Verdict
13.3	<b>Acceptance conditions for first characteristic numerals 1, 2, 3, 4:</b>		N/A
	The protection is satisfactory if the full diameter of the probe specified in table 7 does not pass through any opening.		N/A
13.5	<b>Special conditions for first characteristic numeral 5:</b>		N/A
13.5.2	The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location		N/A
13.6	<b>Special conditions for first characteristic numeral 6:</b>		P
13.6.1	<b>Test conditions for first characteristic numeral 6:</b>		P
	The enclosure shall be deemed category 1, whether reductions in pressure below the atmospheric pressure are present or not.		P
13.6.2	<b>Acceptance conditions for first characteristic numeral 6:</b>		P
	The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test.		P
<b>14</b>	<b>TESTS FOR PROTECTION AGAINST WATER INDICATED BY THE SECOND CHARACTERISTIC NUMERAL:</b>		<b>P</b>
14.2.1	The test is made with a device which produces a uniform flow of water drops over the whole area of the enclosure.	IPX1	N/A
	The duration of test is 10 min.		
14.2.2	The dripping device is the same as specified in 14.2.1 adjusted to provide the water flow rate specified in table 8	IPX2	N/A
	The enclosure is tested for 2,5 min in each of four fixed positions of tilt		
	The total duration of the test is 10 min.		
14.2.3	The test is made using one of the two test devices described in figure 4 and in figure 5 in accordance with the relevant product standard.	IPX3	N/A
	a) using the test device as in figure 4 (oscillating tube):		
	b) using the test device as in figure 5 (spray nozzle):		
14.2.4	The test is made using one of the two test devices described in figure 4 and in figure 5 in accordance with the relevant product standard.	IPX4	N/A
	a) using the test device as in figure 4 (oscillating tube):		
	b) using the test device as in figure 5 (spray nozzle):		

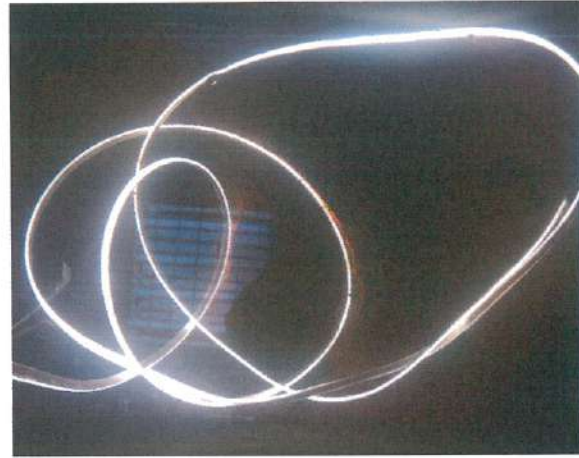
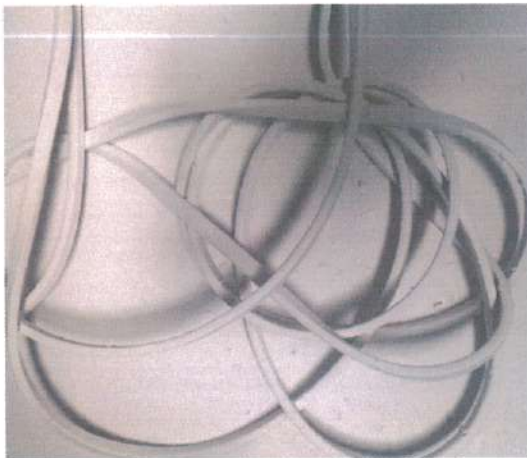
IEC 60529			
Clause	Requirement - Test	Result - Remark	Verdict
14.2.5	<b>Test for second characteristic numeral 5 with the 6,3 mm nozzle:</b>		N/A
	The test is made by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as shown in figure 6.	IPX5	N/A
	- test duration per square meter of enclosure surface area likely to be sprayed: 1 min;		
	- minimum test duration: 3 min;		
	- distance from nozzle to enclosure surface: between 2,5 m and 3 m.		
14.2.6	<b>Test for second characteristic numeral 6 with the 12,5 mm nozzle:</b>		N/A
	The test is made by spraying the enclosure from all practicable directions with a stream of water from a standard test nozzle as shown in figure 6.		N/A
	- test duration per square metre of enclosure surface area likely to be sprayed: 1 min;		
	- minimum test duration: 3 min;		
	- distance from nozzle to enclosure surface: between 2,5 m and 3 m.		
14.2.7	<b>Test for second characteristic numeral 7: temporary immersion between 0,15 m and 1 m</b>		P
	The test is made by completely immersing the enclosure in water in its service position as specified by the manufacturer so that the following conditions are satisfied:	IPX7	P
	- the lowest point of enclosures with a height less than 850 mm is located 1 000 mm below the surface of the water		P
	- the highest point of enclosures with a height equal to or greater than 850 mm is located 150 mm below the surface of the water		
	- the duration of the test is 30 min;		
	- the water temperature does not differ from that of the equipment by more than 5 K.		
14.3	<b>Acceptance conditions:</b>		P
	In general, if any water has entered, it shall not:		P
	- be sufficient to interfere with the correct operation of the equipment or impair safety;		P
	- deposit on insulation parts where it could lead to tracking along the creepage distances;		P

**PHOTOGRAPH OF TEST OBJECT:**

Before Test :



Under Test:



After Test :

