

ELECTRICAL LABORATORY- TEST REPORT
**Luminaries— Part 2-3: Particular Requirements- Luminaries for Road and
Street Lighting**

Test Report N°.....

Date of issue..... 23-10-2015

Sample date in..... 28-08-2015

Date of performance..... 30-08-2015 to 21-10-2015

Applicant.....

Customer.....

Sample description..... 15 W All in one Solar street Light

Sample condition..... Ok

Customer reference..... N/A

Trade mark / Manufacturer...

Model / Type / Reference..... SN-LD1 -15W

Ratings..... 15 W LED, 12.8 V, 15000 mA (through Battery)

Test method(s)..... IEC 60598-1:2014 & 60598-2-3:2002

Overall verdict

Pass



Fail






Page 1 of 25

REMARKS: This report is governed by, and incorporates by reference, the Condition of testing as posted at its date of issuance and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. **This report sets forth solely our findings with respect to the test samples identified herein.** It includes all of the test requested by you and the results thereof based upon the information that you provided us with. You have 10 calendar days from the date of issuance of this report to notify us of any material error or omission; provided, however, that such notice shall be written and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Tests are destructive and non reversible. The submitted samples will not return to their original conditions. The client acknowledges that any remaining part of the sample will be discarded if not retrieved in a period of 30 calendar days from the date of issuance of this report.

60598-2-3	60598-1	Requirement	Result/Remarks	Verdict
3.4	2.0	Classification of Luminaries		
	2.2	Classification according to type of protection against electric shock		N/A
	2.3	Classification according to degree of protection against ingress of dust, solid, objects and moisture		N/A
	02.4	Classification according to material of supporting surface for which the luminaries is designed	Luminaires not suitable for direct mounting on normally flammable surfaces	N/A
	2.5	Luminaires shall be classified according to whether they are intended for normal use or for rough service.		
		- Luminaires for normal use	Solar Street Light	P
		- Luminaires for rough service		N/A
3.5	3.0	Marking		
a)		Design attitude (normal operating position)	Max Mounting Height : 4 m – 5 m	P
b)		Weight including control gear	13.2 kg	P
c)		Overall dimensions	920x352x43 mm	P
d)		Maximum projected area subjected to wind force if more than 8 m above ground		N/A
e)		The range of cross-sectional areas of suspension wires suitable for the luminaire,		N/A
f)		suitability for use indoors	Outdoor application only	N/A
g)		dimensions of the compartment in which the connection box is placed;		N/A
h)		the torque setting in newton meter to be applied to any bolts or screws which fix the luminaire to its support.		N/A
i)		Maximum mounting height relevant to the selected method for protection against the falling of glass particles.		N/A
	3.2	Height of symbols and letters		
		- Symbols : ≥ 5 mm except that symbols for class II and class III luminaires and may be reduced to a minimum of 3 mm where the space available for marking is restricted		P
		- Letters : ≥ 2 mm		P

INSTITUTE OF TESTING AND CERTIFICATION (INDIA) PVT.LTD.

	3.2.3	Rated max. ambient temperature other than 25 °C (to be observed during Installation)		N/A
	3.2.4	Symbol for class II (to be observed during Installation)		N/A
	3.2.5	Symbol for class III (to be observed during Installation)		P
	3.2.6	Marking for IP number (to be observed after Installation)		N/A
	3.2.7	Makers model number or type (to be observed during Installation)	Provided	P
	3.2.8	Rated Wattage (to be observed during replacing lamp)		N/A
	3.2.9	Symbol for luminaires not suitable for direct mounting on normally flammable surfaces.  (to be observed during Installation)		N/A
	3.2.10	Special Lamps (to be observed during replacing lamp)		N/A
	3.2.11	Use of dichroic reflectorized "Cool Beam" lamp (to be observed during replacing lamp)		N/A
	3.2.12	Termination details or polarity (to be observed during Installation)		N/A
	3.2.13	Minimum distance from lighted object (to be observed after Installation)		N/A
	3.2.14	Rough service luminaires (to be observed after Installation)		N/A
	3.2.15	Symbol  Use with bowl mirror lamps (to be observed during replacing lamp)		N/A
	3.2.16	Replacement of cracked protective shield (to be observed during replacing lamp)		N/A
	3.2.17	Max. number of luminaries for interconnection (to be observed during Installation)		N/A
	3.2.18	Luminaires with ignitors for double ended discharge lamps (to be observed during replacing lamp)		N/A

60598-2-3	60598-1	Requirement	Result/Remarks	Verdict
	12.7	Thermal test in regard to fault conditions in ballasts/transformer or electronic devices in plastic luminaries		N/A
3.13	9	Resistance to dust, solid objects and moisture		
	9.2	Tests for ingress of dust, solid objects and moisture	IP 54 provided	P
	9.2.0	Tests for solid-object-proof luminaries		P
	9.2.1	Dust-proof luminaries		P
	9.2.2	Dust-tight luminaries		N/A
	9.2.3	Drip-proof luminaries		N/A
	9.2.4	Rain-proof luminaries		P
	9.2.5	Splash-proof luminaries		N/A
	9.2.6	Jet-proof luminaries		N/A
	9.2.7	Water-tight luminaries		N/A
	9.2.8	Pressure watertight luminaries		N/A
	9.3	Humidity test	Tested for 48hr at temp:25°C±2°C and RH: 93%±2%.	P
3.14	10	Insulation resistance and electric strength		
	10.2.1	Insulation Resistance	 <p>Measured value = >10 MΩ (Refer Table 3)</p>	P



	10.2.2	Electric Strength	 <p>No breakdown/ flashover occur</p>	P
	10.3	Touch current		N/A
3.15	13	Resistance to heat, fire and tracking		
	13.2	Resistance to heat (ball pressure test)		N/A
	13.3	Resistance to flame and ignition		N/A
	13.3.1	Needle flame test		N/A
	13.3.2	Glow wire test		N/A
	13.4	Resistance to tracking		N/A

Table: 3

Sr. No	TEST CONDUCTED	TEST CONDITIONS	TEST REQUIREMENTS	RESULTS
01	Earth Contact Resistance Test	Test Current: 10A Test Part: Between protective earth terminals and body that is part of the protective bonding circuit.	Calculated Earth Contact Resistance from current & drop in voltage shall not exceed 0.5 Ω (500 m Ω)	N/A
02	Insulation Resistance Test	Test Voltage: 100V D.C Test part: Between live part and metal part of the luminaire	Shall not be Less than 1 M Ohm	 <p>Pass: (Rmea : >10MΩ)</p>