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SUMMARY TEST REPORT				
BS EN 60598-1: 2015 (Clause 9)				
BS EN 60529: 1992 + A1: 2000 + A2: 2013				
Degree of protection provided by enclosures				
	(IP Code) 1833			
Report Reference No:	L7980R1			
Compiled by (+ signature):	S. Coultas & M. Luke			
Approved by (+ signature):	J. Jones			
Date of issue:	19/09/2017			
Testing Laboratory:	Cranage EMC Testing			
Address:	UK Test Centre, Wallace Way, Tern Valley Business Park, Market Drayton, Shropshire, TF9 3AG.			
Testing location	As above			
Address:	As above			
Procedure:	UKAS			
Applicant's Name:	Sedna Lighting			
Address:	Unit H6, Capital Business Park, Cardiff, CF3 2PX.			
Test Specification:				
Standards:	BS EN 60529: 1992 + A1: 2000 + A2: 2013.			
	BS EN 60598-1: 2015 (Clause 9)			
Test procedure:	UKAS			
Test Result:	The EUT does complies with the test specification.			
EUT description:	LED Street Light			
Model:	Infinity High Power LED Street Light 60 W - WW(2800-3000K)			
Trademark:	SEDNA ighting			
Manufacturer:	Sedna Lighting			
Rating:	IP66			
Date of receipt of test item:	21/08/2017 (original) & 15/09/2017 (IPX6 retest)			
Date(s) of testing:	31/08/2017 (original) & 19/09/2017 (IPX6 retest)			



## **Test Results Summary**

## Test procedures in accordance with clause 9 of BS EN 60598-1 & BS EN 60529: 1992 + A1: 2000 + A2: 2013

Before testing, it was noted that the cable originally fitted to the luminaire was not of a suitable size. When the cable gland was tightened fully, the cable could easily be moved and light was visible through the gland. The cable as then replaced before testing, and the cable gland tightened to 2/3 of the required torque as per clause 4.12.5 (1.6 Nm).

Original cable: 3ASL/75, 250-440 V, ordinary duty, Q88228 –LF-. Cable tested: CMK, BASEC, 3183Y, H05VV-F, 3G 2.5 mm<sup>2</sup>, 300/500 V.

Rating	Test	Parameters	Pass Criteria	Result	
IP6X	Dust Chamber with 3. circulated. Duration: Temperature:	456 kg of powder being 3 hours 27.5 °C	No deposit of talcum powder in dust-proof luminaires, such that, if the powder were conductive, the insulation would fail to meet the requirements of	Pass	
	Humidity:	41 %	the standard. The luminaire shall withstand the electric strength test specified in section 10 after the test.		
	Air Pressure:	1009.4 hPa	Observations		
			No dust present.		
	Electric Strength Test		Performed with the control gear disconnected @ 2121 VDC	Pass	
IPX6	The sample was modified before testing. Additional silicone was added to the seal around the glass cover.		For luminaire without drain holes, there shall be no water entry. The luminaire shall withstand the electric	Pass	
	Water flow rate: 100 L/min strength test specified	strength test specified in section 10 after the test.			
	Nozzle size:	IPX6	Observations		
		3 minutes (360 degrees directional variation)			
	Distance:	3 m			
	Air temperature:	23.9 °C			
	Water temperature:	21.9 °C	No ingress observed.		
	Humidity:	49 %			
	Air Pressure:	1009.4 hPa			
	Mounting position:	Mounted on a pole as in normal use			
	Electric Strength Test		Performed with the control gear disconnected @ 2121 VDC	Pass	



## **Test Equipment**

Asset Number	Description	Date of Calibration	Calibration Due Date
AN 137	Thermocouple Reader	25/07/2017	25/07/2018
AN 305	Electric Strength Tester	30/08/2016	30/11/2017
AN 452	Stopwatch	03/10/2016	03/10/2018
AN 533	Torque Analyser	02/08/2016	02/08/2019
AN 534	Torque Driver	Verified using AN533	
AN 900	IPX6 Nozzle	13/07/2017	13/07/2020
AN 906	Petrol Water Pump	-	-
AN 1003	Water Drum	07/04/2017	07/04/2020
AN 1214	Barometric Pressure & Altitude Meter	09/12/2016	09/12/2017
AN 1321	Digital Calipers	25/10/2016	25/10/2017
AN 1408	Water Supply Barrel	N/A	N/A
AN 1417	Dust Chamber	19/06/2017	19/06/2018
AN 1424	Thermometer	05/07/2017	05/07/2018
AN 1438	Multifunctional Safety Tester	21/08/2017	21/08/2018



## Photos

Luminaire under test







IP6X



EUT in the dust chamber (post dust test)



Inside the EUT (post dust test)





Inside the EUT (post dust test)



Inside the EUT (post dust test)



IPX6



Modification made to the glass cover



IPX6 test setup





IPX6 test



Post IPX6 test





Inside the EUT (post IPX6 test)



Inside the EUT (post IPX6 test)





Inside the EUT (post IPX6 test)

End of Report