



IP DEGREE TEST REPORT

For
ACRILUX srl

Model No.: ATON series HEAD POLE

Applicant: ACRILUX Srl
SP 571 km 10+983
62019 Recanati (MC)

Manufacturer: ACRILUX Srl
SP 571 km 10+983
62019 Recanati (MC)

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Report number: ACX 027/308-10
Issued Date: November 25, 2020
Date(s) of Tests: November 17 - November 24, 2020

Note

The test data and result is based on the tested sample only.

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Date of issue:	November 25, 2020
Total number of pages:	6
Name of Testing Laboratory	First Group sas - Mogliano V.to - Treviso - Italy
Applicant's name:	ACRILUX Srl
Address:	SP 571 km 10+983 62019 Recanati (MC)
Test specification	
Standard:	IEC 60598-1:2014 (Eighth Edition) and IEC 60529: 1989 (Second Edition) + amendment 1: 1999
Non standard test method:	N/A
Trade Mark:	ACRILUX Srl
Model/Type designation:	ATON series
Test Item Description:	head pole, plastic enclosure
Ratings:	230V 25 to 45W
Class of equipment	CL I
TEST RESULT	IPx6
Marking	
Degree indication	IPx6
Degree symbols	no symbols
Possible test verdict	
N/A	test case does not apply to the test object
P (pass)	test object does meet the requirement
F (fail)	test object does not meet the requirement
Tested by:	Valter Benetton 
Date:	November 17 - November 24, 2020
Reviewed and approved by:	Giorgio Lovisetto 
Date:	November 25, 2020

General remarks:
<p>This report includes the following parts:</p> <ul style="list-style-type: none"> _ IEC 60598-1:2014 chapter 9 _ Annex 1: Photo Documentation _ Annex 2: reference tables of IEC 60529 <p>The test result presented in this report relate only to the object tested.</p> <p>This report shall not be reproduced except in full without the written approval of the testing laboratory.</p> <p>Unless otherwise specified, test are made under normal conditions at an ambient temperature within the range of 15°C to 35°C, RH 45% to 75% and an air pressure of 860mbar to 1060mbar.</p>

EN 60598-1
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RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE

	Tests for ingress of dust, solid objects and moisture:		-
	_ classification according to IP	IP65 (PMMA and PC version)	-
	_ mounting position during test	fixed floor	-
	_ fixing screws tightened; torque (Nm)	M5: 1,4Nm	-
	_ tests according to clauses	9.2.0	-
	IP2x: no contact with live parts		N/A
	IP3x and IP4x: no entry into enclosure		N/A
	IP3x and IP4x: no contact with live parts		N/A
	IP5x: no deposit in dust-proof luminaire		N/A
	IP6x: no talcum in dust-tight luminaire		N/A
	IPx3 and IPx4: for luminaires with drain holes – no hazardous water entry		N/A
	IPx4: no trace of water on part of lamp requiring protection from splashing water		N/A
	IPx4 IPx5 and IPx6: no trace of water on current-carrying parts or on insulation where it could become a hazard		N/A
	IPx4 IPx5 and IPx6: for luminaires without drain holes – no water entry	IPx6	P
	IPx7 and IPx8: no water in watertight luminaire		N/A
	No damage of protective shield or glass envelope		N/A

TEST RESULT, CONSIDERATION

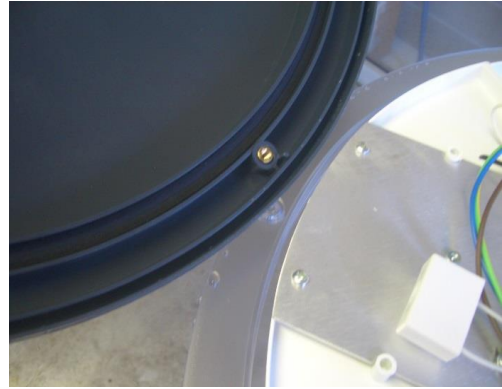
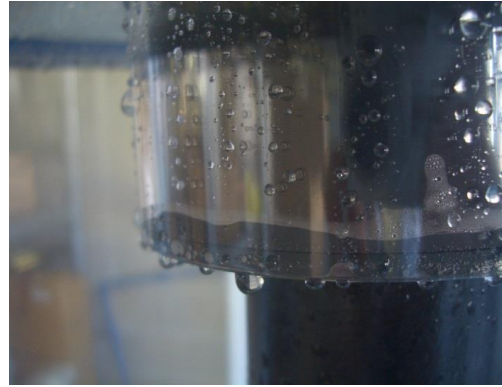
IPx6 result is valid for both version: version with black part in PA6 and transparent part in PC and version with black part in PA6 and transparent part in PMMA.

In both version water does not entry in electricated part.

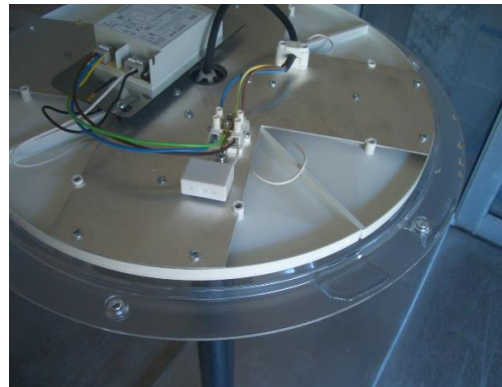
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ANNEX 1 | PHOTO DOCUMENTATION

POLICARBONATE version



PMMA version



ANNEX 2	IEC 60529 REFERENCES
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First characteristic numeral	Degree of protection against access to hazardous parts and solid foreign object		Condition and test
	Brief description	Definition	
0	Non-protected	-	no test required
1	protected against access to hazardous parts with the back of the hand protected against solid foreign objects of 50 mm Ø and greater	the access probe, sphere of 50 mm Ø, shall have adequate clearance from hazardous parts the object probe, sphere of 50 mm Ø, shall not fully penetrate	rigid sphere without handle or guard 50 mm diameter. Test force 50N ±10%
2	protected against access to hazardous parts with a finger protected against solid foreign objects of 12,5 mm Ø and greater	the jointed test finger of 12 mm Ø, 80 mm length, shall have adequate clearance from hazardous parts the object probe, sphere of 12,5 mm Ø, shall not fully penetrate	rigid sphere without handle or guard 12,5 mm diameter. Test force 30N ±10%
3	protected against access to hazardous parts with a tool protected against solid foreign objects of 2,5 mm Ø and greater	the access probe of 2,5 mm Ø shall not penetrate the object probe, sphere of 2,5 mm Ø, shall not penetrate at all	rigid steel rod 2,5 mm diameter with edges free from burrs. Test force 3N ±10%
4	protected against access to hazardous parts with a wire protected against solid foreign objects of 1,0 mm Ø and greater	the access probe of 1,0 mm Ø shall not penetrate the object probe, sphere of 1,0 mm Ø, shall not penetrate at all	rigid steel wire 1,0 mm diameter with edges free from burrs. Test force 1N ±10%
5	protected against access to hazardous parts with a wire dust-protected	the access probe of 1,0 mm Ø shall not penetrate ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety	dust chamber with or without underpressure
6	protected against access to hazardous parts with a wire dust-tight	the access probe of 1,0 mm Ø shall not penetrate no ingress of dust	dust chamber with underpressure

Second characteristic numeral	Degree of protection against water		Condition and test
	Brief description	Definition	
0	Non-protected	-	no test required
1	protected against vertically falling water drops	vertically falling drops shall have no harmful effects	drip box, enclosure on turnable, water flow rate 1 mm/min, duration of test 10 min
2	protected against vertically falling water drops when enclosure tiled up to 15°	vertically falling drops shall have no harmful effects when the enclosure is tilted at any any angle up to 15° on either side of the vertical	drip box, enclosure in 4 fixed positions of 15° tilt, water flow rate 3 mm/min, duration of test 2,5 min por each position of tilt
3	protected against spraying water	water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effect	oscillating tube spray ± 60° from vertical, distance max 200 mm, water flow rate 0,07 l/min for hole, duration of test 10 min; or spray nozzle spray ± 60° from vertical, water flow rate 10 l/min, duration of test 1 min/m ² at least 5 min
4	protected against splashing water	water splashed against the enclosure from any direction shall have no harmful effects	as for numeral 3
5	protected against water jets	water projected in jets against the enclosure from any direction shall have no harmful effects	water jet hose nozzle, nozzle 6,3 mm diameter, distance 2,5 to 3 m, water flow rate 12,5 l/min, duration of test 1 min/m ² at least 3 min
6	protected against powerful water jets	water projected in powerful jets against the enclosure from any direction shall have no harmful effects	water jet hose nozzle, nozzle 12,5 mm diameter, distance 2,5 to 3 m, water flow rate 100 l/min, duration of test 1 min/m ² at least 3 min
7	protected against the effects of temporary immersion in water	ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time	immersion tank, water-level on enclosure: 0,15 m abovetop, 1 m above bottom, duration of test 30 min
8	protected against the effects of continuous immersion in water	ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agree between manufacturer and user but which are more severe than for numeral 7	immersion tank, water-level by agreement, duration of test by agreement