

LIA LABORATORY DECISION SHEET

Standard(s) (incl. year)	Subclause(s)	Enquiry No.	Year
IEC/EN 60598-1:2015/A1:2018; IEC/EN 60598-2-X series	4, 9, 12	EF-1 LIA_11_2020	2020
		Decision No.	
		DS-1 LIA_11_2020	
Subject	Keywords		
IP rated product - testing process	IP test		
Question			
What is the procedure of testing of luminaire with IP classification greater than IP20?			
Decision			
4.13 Mechanical strength / Impact test (or IK test against EN 62262, IK rating as requested by client) -> 12.3 Endurance test -> 9.2 IP test -> 12.4/5/6 Thermal test -> 9.3 Humidity test			
Explanatory Notes			
<p>Luminaires have to be tested against relevant part 2 of the IEC/EN 60598-1 series of standards. Each part 2 of IEC/EN 60598 series specifies how to proceed with assessment of products which IP rating is greater than IP20.</p> <p>The testing process shall be as below: (*Note: Safety standard EN 60598-2-1:1989 was used as a reference. Requirements specified in other parts 2 of IEC/EN 60598 are identical (requirements related to IP assessment).</p> <p>1.13 Resistance to dust and moisture</p> <p>The provisions of Section Nine of Publication 598-1 apply. For luminaires with an IP classification greater than IP20 the order of the tests specified in Section Nine of Publication598-1 shall be as specified in Clause 1.12 of this Section of Publication598-2.</p> <p>Based on that luminaires with IP rating greater than IP20 shall be tested as specified in clause 1.12</p> <p>1.12 Endurance tests and thermal tests</p> <p>The provisions of Section Twelve of Publication598-1 apply. Luminaires with an IP classification greater than IP20 shall be subjected to the relevant tests of Clauses 12.4, 12.5 and 12.6 of Section Twelve of Publication 598-1 after the test(s) of Clause 9.2 but before the test(s) of Clause 9.3 of Section Nine of Publication 598-1 specified in Clause 1.13 of this Section of Publication598-2.</p> <p>Clause 1.12 specifies the testing sequence for luminaires with IP rating greater than IP20. Based on information above testing sequence is: 12.3 Endurance test -> 9.2 IP test -> 12.4/5/6 Thermal test -> 9.3 Humidity test In addition, with full safety assessment, these test shall be carried out after the mechanical strength test, as specified by clause 4.13 of IEC/EN 60598-1</p>			

So the sequence shall be: 4.13 Mechanical strength / Impact test -> 12.3 Endurance test -> 9.2 IP test -> 12.4/5/6 Thermal test -> 9.3 Humidity test

In addition decision as agreed during the CTL ETF5 OSM LUM meeting in Leicester (2019) shall be taken into account:

9.1.12	9.4.13.1	LIA	GB LIA/07/2019
Question	What is the test process/order, when we test IK and IP rated luminaires?		
Decision	IK test, endurance test followed by IP.		

Date	Name	Signature
22/06/2020	Anton Borovy	