



## Compliance Testing Report For Australian Standard AS/NZS 60598.1:2017 Luminaires – Part 1: General requirements and tests (Partial Testing to Clause 9.2 - Resistance to Dust, Solid Objects and Moisture)

Client:	Darkon Pty Ltd
Address:	110 Cromwell St, Collingwood, VIC 3066, Australia
Report Number:	1002DARHIPIP_5981P
Date of Testing:	19 <sup>th</sup> September 2017 and 21 <sup>st</sup> September 2017
File Number:	DAR170816
Equipment Name:	HIP IP
Equipment Model Number:	HIP IP / 1168 / SM / WHT / OPAL V + LT60 / HE / 400mA / 3K / NON DIM
Equipment tradename/brand name:	HIP IP
Equipment Description:	IP rated linear LED luminaire
Result:	<b>COMPLIES*</b>
Complied By:	Zhimou Qin 
Approved By:	Viral Patel 
Date of Issue:	2 <sup>nd</sup> October 2017
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## **SUMMARY OF COMPLIANCE WITH AUSTRALIAN STANDARD AS/NZS 60598.1:2017 - CLAUSE 9.2 - RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE**

The EUT (Equipment Under Test) known as a HIP IP, IP rated linear LED luminaire, model number HIP IP / 1168 / SM / WHT / OPAL V + LT60 / HE / 400mA / 3K / NON DIM was supplied for AS/NZS 60598.1:2017, IP55 testing only by Darkon Pty Ltd of 110 Cromwell St, Collingwood, VIC 3066, Australia.

The EUT consisted of:

1 x HIP IP, IP rated linear LED luminaire, class I, rated at 240VAC, 50/60 Hz, 0.5A Max.

### **NOTE:**

The EUT was tested according to the requirements of IP55 of AS/NZS 60598.1:2017 clause 9.2 with reference to AS 60529:2004.

The HIP IP, IP rated linear LED luminaire, model number HIP IP / 1168 / SM / WHT / OPAL V + LT60 / HE / 400mA / 3K / NON DIM **COMPLIES** with the tested clauses for IP55 of AS/NZS 60598.1.

### **Special Condition for compliance to IP55 rating**

The EUT is required to be indelibly marked with the IP55 number.

### **Method**

Testing was performed in accordance with the standard.

### **Possible Test Case Verdicts:**

- Test case does not apply to the test object .....N (N.A)
- Test object does meet the requirements .....P (Pass)
- Test object does not meet the requirements .....F (Fail)
- Testing was not performed.....NT
- Noted .....ND

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AS/NZS 60598.1			
Clause	Requirement – Test	Result - Remark	Verdict
9	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		—
9.1	General		—
9.2	Tests for ingress of dust, solid objects and moisture		P
	- classification according to IP .....	IP55	P
	- mounting position during test.....	Positioned as in normal use.	P
	- fixing screws tightened; torque (Nm) .....		P
	- tests according to clauses .....		P
	- electric strength test afterwards	See Table 10.2.2	P
	a) no deposit in dust-proof luminaire	Result: No deposit of talcum powder observed	P
	b) no talcum in dust-tight luminaire		N
	c) no trace of water on current-carrying parts or where it could become a hazard	Result: No water entry observed	P
	d) i) For luminaires without drain holes – no water entry		P
	d) ii) For luminaires with drain holes – no hazardous water entry		N
	e) no water in watertight luminaire		N
	f) no contact with live parts (IP2X)		N
	f) no entry into enclosure (IP3X and IP4X)		N
	f) no contact with live parts (IP3X and IP4X)		N
	g) no trace of water on any part of a lamp requiring protection from splashing water		N
	h) no damage, cracking or breakage		N
9.2.0	Tests	IP55	P
9.2.1	Dust-proof luminaires		P
9.2.2	Dust –tight luminaires		N
9.2.3	Drip-proof luminaires		N
9.2.4	Rain-proof luminaires		N
9.2.5	Splash-proof luminaires		N
9.2.6	Jet-proof luminaires		P
9.2.7	Powerful water jet-proof luminaires		N
9.2.8	Watertight luminaires		N

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AS/NZS 60598.1					
Clause	Requirement – Test	Result - Remark			Verdict
9.2.9	Pressure watertight luminaires				N
10.2.2	Electric strength				P
Insulation of parts		Test voltage V			
		Class I luminaires	Class II luminaires	Class III luminaires	
SELV:					
Between current-carrying parts of different polarity					
Between current-carrying parts and the mounting surface *					
Between current-carrying parts and metal parts of the luminaire					
Between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal					
Insulating bushings as described in Section 5					
Other than SELV:					
Between live parts of different polarity		-	-		
Between live parts and the mounting surface *		b	1480 V		
Between live parts and metal parts of the luminaire		b	1480 V		
Between live parts which can become of different polarity through action of a switch		-	-		
Between the outer surface of a flexible cord or cable where it is clamped in a cord anchorage and accessible metal		b	1480 V		
Insulating bushings as described in Section 5		-	-		
Between Live parts to foil around external unearthed glass enclosure		b	1480 V		
Basic insulation for voltages of SELV (a)		500			
Basic insulation for voltages other than SELV (b)		2U + 1000			
Supplementary insulation (c)		2U+1000			
Double or reinforced insulation (d)		4U + 2000			
* The mounting surface is covered with metal foil for the purpose of this test.					
U = working voltage					

\*\*\* END OF REPORT BODY \*\*\*

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### Appendix 1 – Photographic Record of Sample



Figure 1: Sample



Figure 2: Sample

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### Appendix 1 – Photographic Record of Sample



Figure 3: Sample

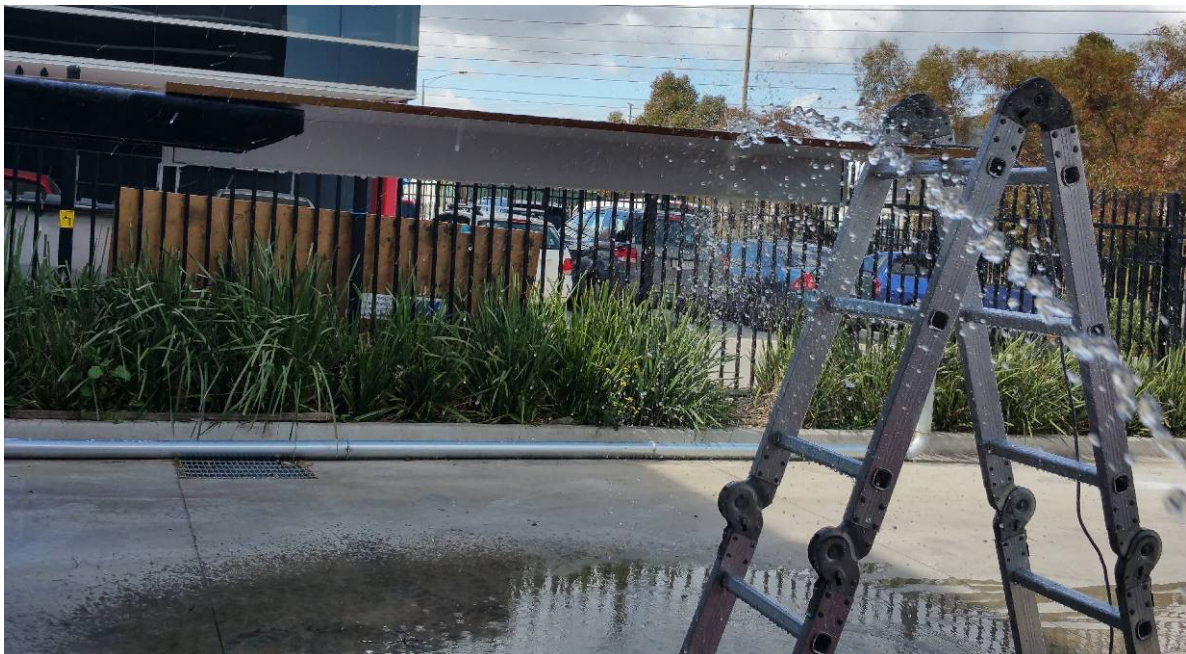


Figure 4: IPX5 water test setup

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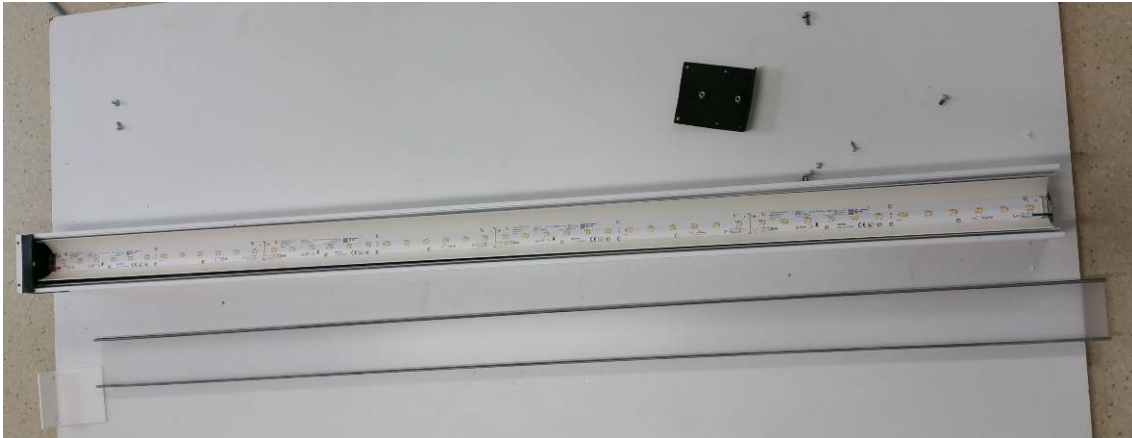


Figure 5: Post IPX5 water test



Figure 6: Post IPX5 water test



Figure 7: Post IPX5 water test

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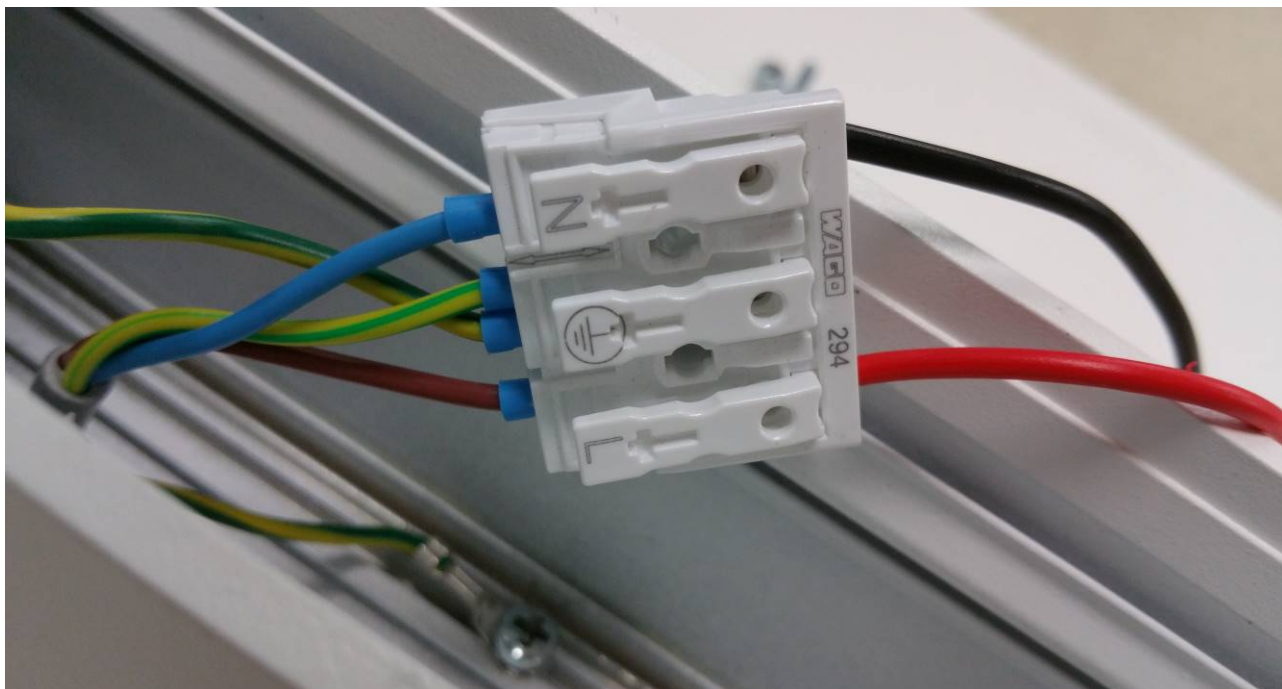


Figure 8: Post IPX5 water test



Figure 9: IP5X dust test setup

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### Appendix 1 – Photographic Record of Sample



Figure 10: Post IP5X dust test



Figure 11: Post IP5X dust test



Figure 12: Post IP5X dust test

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## Appendix 2 Rating Label



Figure 13: Rating label

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