

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P210169

Luminaire Tested: **PR820D010 - PR8M12WDMW - 3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210169  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29051)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR820D010 - PR8M12WDMW - 3000K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE WHITE FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2178.6 lumens  
Efficiency: N/A  
Efficacy: 99.0 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.39  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

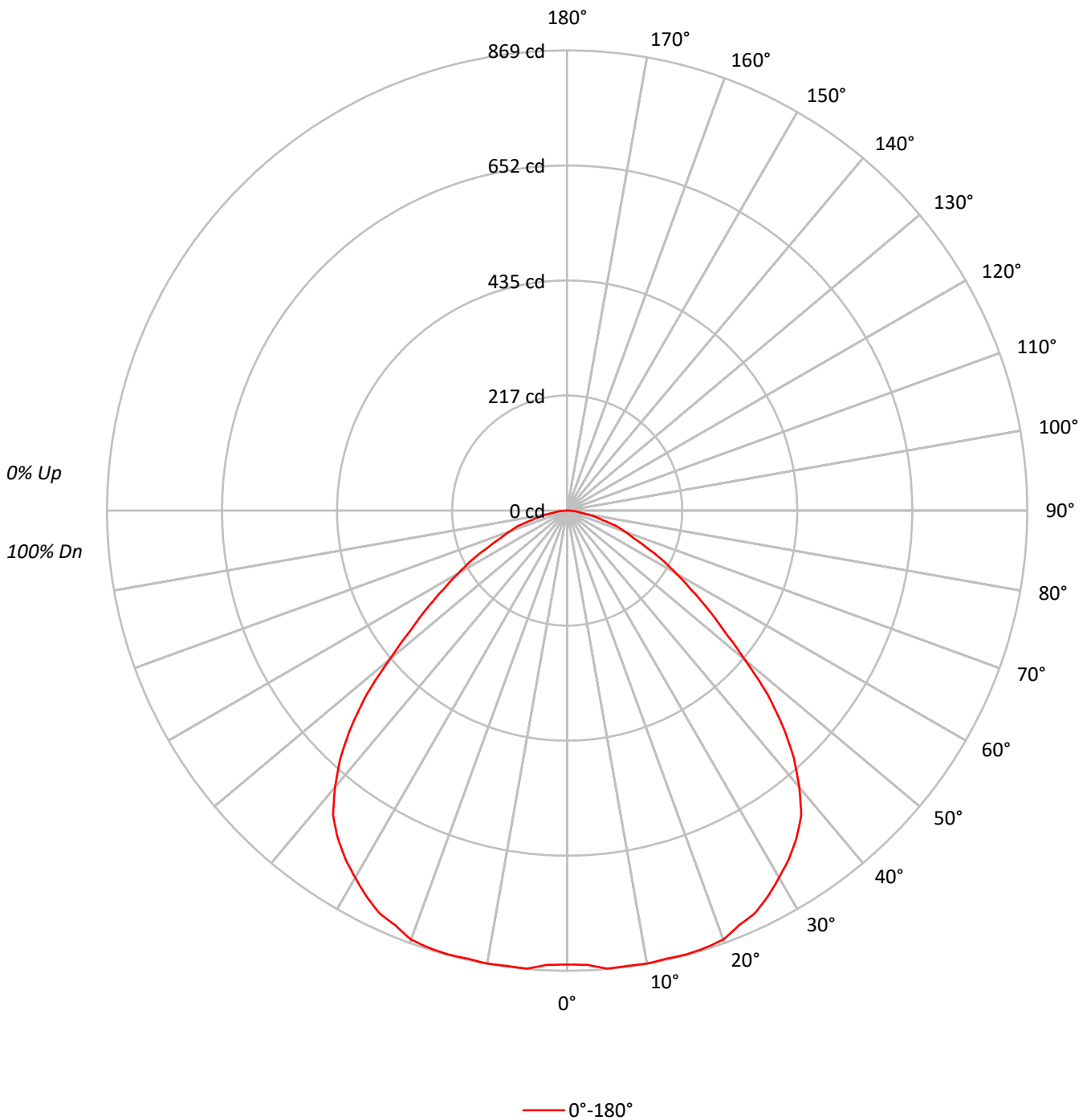
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95		96	94	92		92	91	89	87
2	102	94	88	83	99	92	87	82	89	84	80		86	82	79		83	80	77	75
3	93	84	77	71	91	82	76	70	79	74	69		77	72	68		74	70	67	65
4	86	75	67	61	84	74	66	61	71	65	60		69	64	59		67	62	58	56
5	80	68	59	53	78	67	59	53	64	58	52		63	57	52		61	56	51	49
6	74	61	53	47	72	60	52	47	59	52	46		57	51	46		55	50	46	44
7	68	56	48	42	67	55	47	42	53	46	41		52	46	41		51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34		44	38	33		43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31		41	35	30		40	34	30	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	26433
5°	26877
10°	27201
15°	27704
20°	28290
25°	28546
30°	28503
35°	28433
40°	27445
45°	25132
50°	20998
55°	17456
60°	14672
65°	12119
70°	10422
75°	8185
80°	5665
85°	5944



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.7	3.8
10°-20°	245.6	11.3
20°-30°	385.6	17.7
30°-40°	470.1	21.6
40°-50°	439.4	20.2
50°-60°	293.1	13.5
60°-70°	168.6	7.7
70°-80°	77.8	3.6
80°-90°	15.8	0.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	713.9	32.8
0°-40°	1184.0	54.3
0°-60°	1916.5	88.0
0°-90°	2178.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2178.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	857	
5°	868	83
15°	868	246
25°	839	386
35°	755	470
45°	576	439
55°	325	293
65°	166	169
75°	69	78
85°	17	16
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	857.2
2.5°	858.5
5°	868.3
7.5°	867.4
10°	868.7
12.5°	866.9
15°	867.8
17.5°	866.1
20°	862.1
22.5°	847.9
25°	839.0
27.5°	821.3
30°	800.5
32.5°	779.7
35°	755.3
37.5°	726.1
40°	681.8
42.5°	633.5
45°	576.3
47.5°	513.0
50°	437.7
52.5°	373.9
55°	324.7
57.5°	277.8
60°	237.9
62.5°	203.3
65°	166.1
67.5°	136.4
70°	115.6
72.5°	98.3
75°	68.7
77.5°	54.5
80°	31.9
82.5°	20.4
85°	16.8
87.5°	4.9
90°	0.0

(END OF REPORT)