

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: P210289

Luminaire Tested: **PR820D010 - PR8M12WDMW - 3500K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210289  
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 - 3500K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE WHITE FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2456.1 lumens  
Efficiency: N/A  
Efficacy: 111.6 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

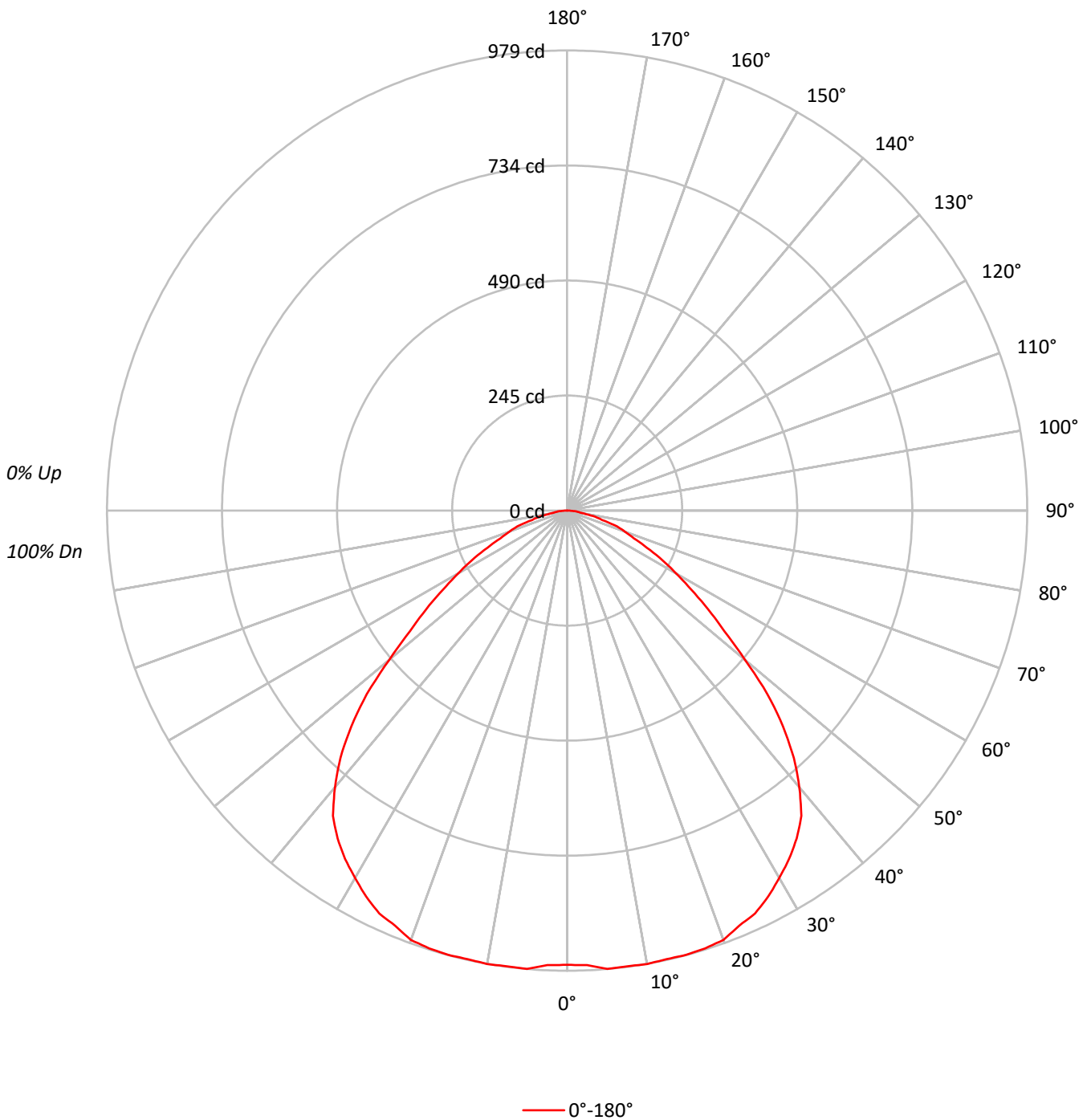
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	29800
5°	30301
10°	30667
15°	31235
20°	31893
25°	32183
30°	32135
35°	32054
40°	30939
45°	28337
50°	23670
55°	19682
60°	16541
65°	13666
70°	11757
75°	9222
80°	6393
85°	6722



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.2	3.8
10°-20°	276.9	11.3
20°-30°	434.8	17.7
30°-40°	530.0	21.6
40°-50°	495.3	20.2
50°-60°	330.4	13.5
60°-70°	190.1	7.7
70°-80°	87.7	3.6
80°-90°	17.8	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°	804.9	32.8
0°-40°	1334.9	54.3
0°-60°	2160.6	88.0
0°-90°	2456.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2456.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	966	
5°	979	93
15°	978	277
25°	946	435
35°	852	530
45°	650	495
55°	366	330
65°	187	190
75°	77	88
85°	19	18
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	966.4
2.5°	967.9
5°	978.9
7.5°	977.9
10°	979.4
12.5°	977.4
15°	978.4
17.5°	976.4
20°	971.9
22.5°	955.9
25°	945.9
27.5°	925.9
30°	902.5
32.5°	879.0
35°	851.5
37.5°	818.6
40°	768.6
42.5°	714.2
45°	649.8
47.5°	578.3
50°	493.4
52.5°	421.5
55°	366.1
57.5°	313.1
60°	268.2
62.5°	229.2
65°	187.3
67.5°	153.8
70°	130.4
72.5°	110.9
75°	77.4
77.5°	61.4
80°	36.0
82.5°	23.0
85°	19.0
87.5°	5.5
90°	0.0

(END OF REPORT)