

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: P210119

Luminaire Tested: **PR820D010 - PR8M12MDMB - 3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210119  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29044)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR820D010 - PR8M12MDMB - 3000K  
Description: HALO 8" ROUND DOWNLIGHT, MEDIUM LENS, MATTE BLACK FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1992.4 lumens  
Efficiency: N/A  
Efficacy: 90.6 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.13  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

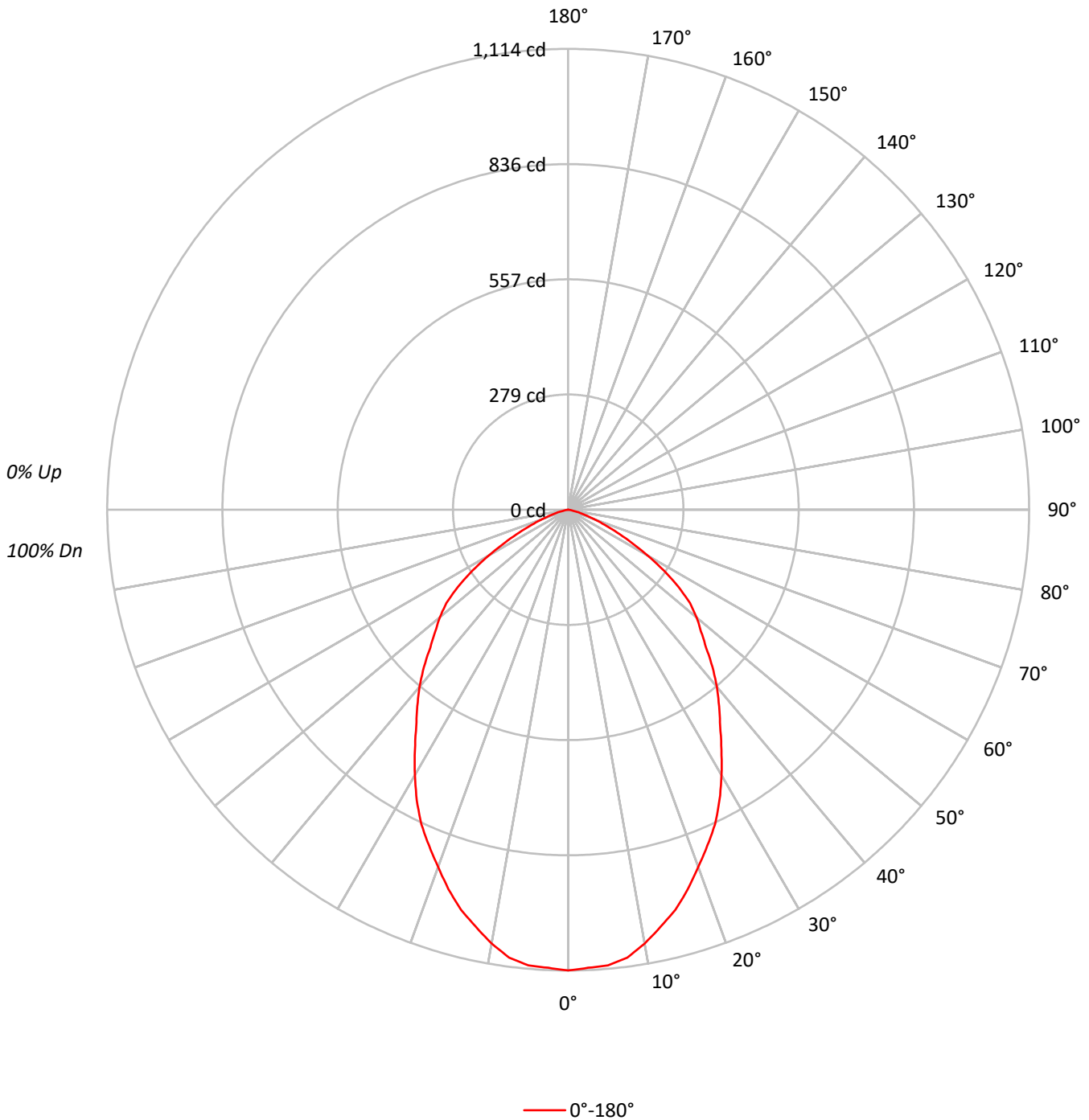
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	104	101	109	105	102	99	101	99	96		97	95	93		94	92	91	89
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72		79	75	71		77	73	70	68
4	88	78	70	64	86	76	69	64	74	68	63		72	67	62		70	65	61	60
5	82	70	62	57	80	69	62	56	67	61	56		65	60	55		64	59	55	53
6	76	64	56	50	74	63	56	50	61	55	50		60	54	49		58	53	49	47
7	71	59	51	45	69	58	50	45	56	50	45		55	49	44		54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	41		51	45	40		50	44	40	38
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

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

	0°
0°	34342
5°	34226
10°	33335
15°	31959
20°	30154
25°	28556
30°	26385
35°	24092
40°	22490
45°	20544
50°	19424
55°	17494
60°	13673
65°	9522
70°	6041
75°	3407
80°	959
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.3	5.2
10°-20°	280.5	14.1
20°-30°	384.1	19.3
30°-40°	402.6	20.2
40°-50°	367.0	18.4
50°-60°	286.4	14.4
60°-70°	133.3	6.7
70°-80°	33.2	1.7
80°-90°	1.0	0.0
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°	768.8	38.6
0°-40°	1171.5	58.8
0°-60°	1824.9	91.6
0°-90°	1992.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1992.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1114	
5°	1106	104
15°	1001	280
25°	839	384
35°	640	403
45°	471	367
55°	325	286
65°	130	133
75°	29	33
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1113.7
2.5°	1108.4
5°	1105.7
7.5°	1092.3
10°	1064.6
12.5°	1032.4
15°	1001.1
17.5°	961.8
20°	918.9
22.5°	878.7
25°	839.3
27.5°	792.0
30°	741.0
32.5°	689.2
35°	640.0
37.5°	598.9
40°	558.7
42.5°	515.8
45°	471.1
47.5°	435.3
50°	404.9
52.5°	371.0
55°	325.4
57.5°	274.4
60°	221.7
62.5°	171.6
65°	130.5
67.5°	94.7
70°	67.0
72.5°	45.6
75°	28.6
77.5°	16.1
80°	5.4
82.5°	0.9
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)