

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: P210196

Luminaire Tested: **PR820D010 - PR8M12WDMB - 4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210196  
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 - PR8M12WDMB - 4000K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE BLACK FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2090.2 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

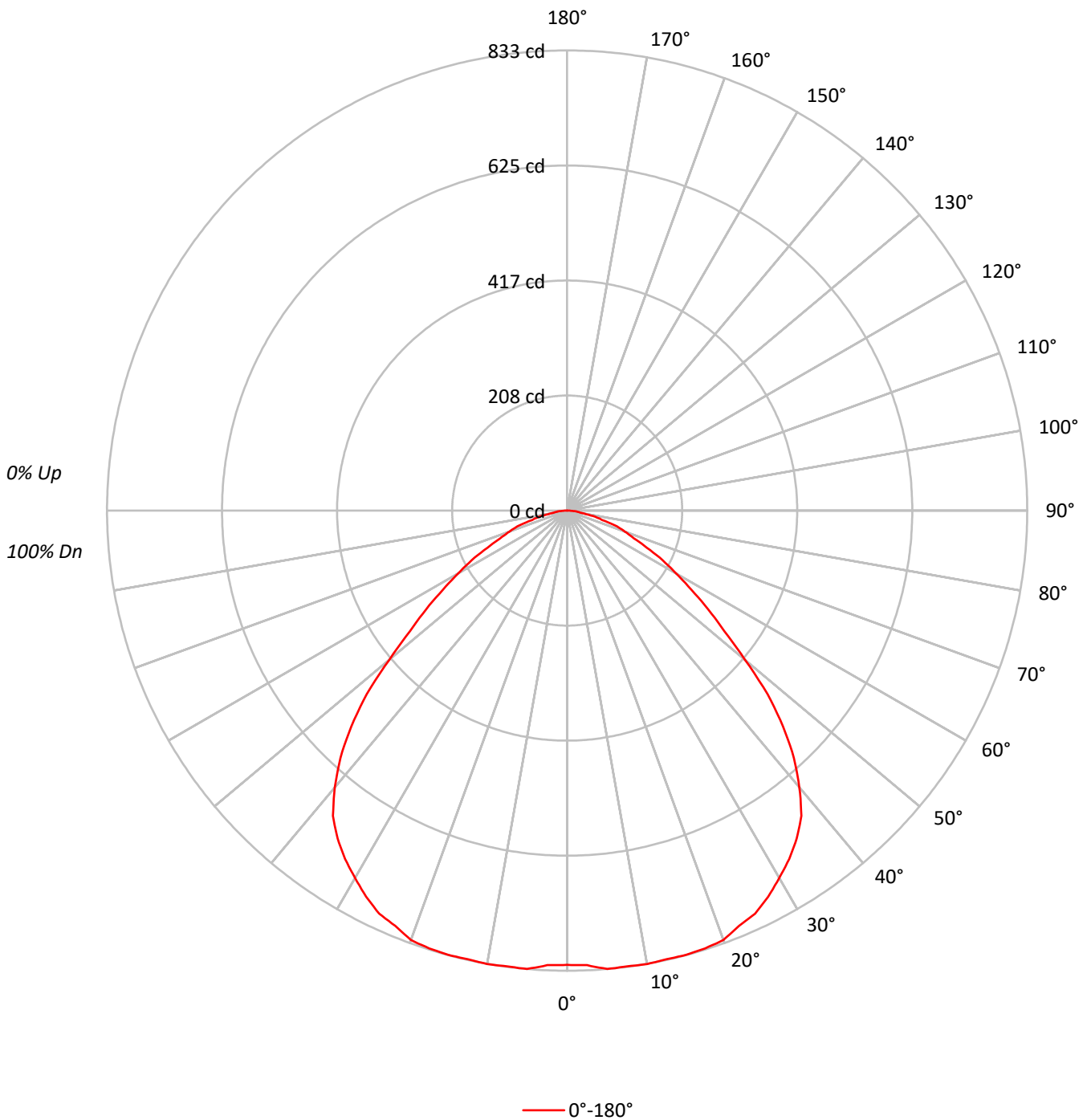
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	25360
5°	25785
10°	26095
15°	26580
20°	27142
25°	27389
30°	27346
35°	27277
40°	26330
45°	24111
50°	20144
55°	16747
60°	14074
65°	11631
70°	9999
75°	7851
80°	5434
85°	5732



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.4	3.8
10°-20°	235.6	11.3
20°-30°	370.0	17.7
30°-40°	451.0	21.6
40°-50°	421.5	20.2
50°-60°	281.2	13.5
60°-70°	161.8	7.7
70°-80°	74.6	3.6
80°-90°	15.2	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°	685.0	32.8
0°-40°	1136.0	54.3
0°-60°	1838.6	88.0
0°-90°	2090.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2090.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	822	
5°	833	79
15°	833	236
25°	805	370
35°	725	451
45°	553	422
55°	312	281
65°	159	162
75°	66	75
85°	16	15
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	822.4
2.5°	823.7
5°	833.0
7.5°	832.2
10°	833.4
12.5°	831.7
15°	832.6
17.5°	830.9
20°	827.1
22.5°	813.5
25°	805.0
27.5°	788.0
30°	768.0
32.5°	748.0
35°	724.6
37.5°	696.6
40°	654.1
42.5°	607.8
45°	552.9
47.5°	492.2
50°	419.9
52.5°	358.7
55°	311.5
57.5°	266.5
60°	228.2
62.5°	195.1
65°	159.4
67.5°	130.9
70°	110.9
72.5°	94.4
75°	65.9
77.5°	52.3
80°	30.6
82.5°	19.6
85°	16.2
87.5°	4.7
90°	0.0

(END OF REPORT)