

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: P210146

Luminaire Tested: **PR820D010 - PR8M12MDMMS - 4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210146  
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 - PR8M12MDMMS - 4000K  
Description: HALO 8" ROUND DOWNLIGHT, MEDIUM LENS, MATTE METALLIC SILVER FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2235.7 lumens  
Efficiency: N/A  
Efficacy: 101.6 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

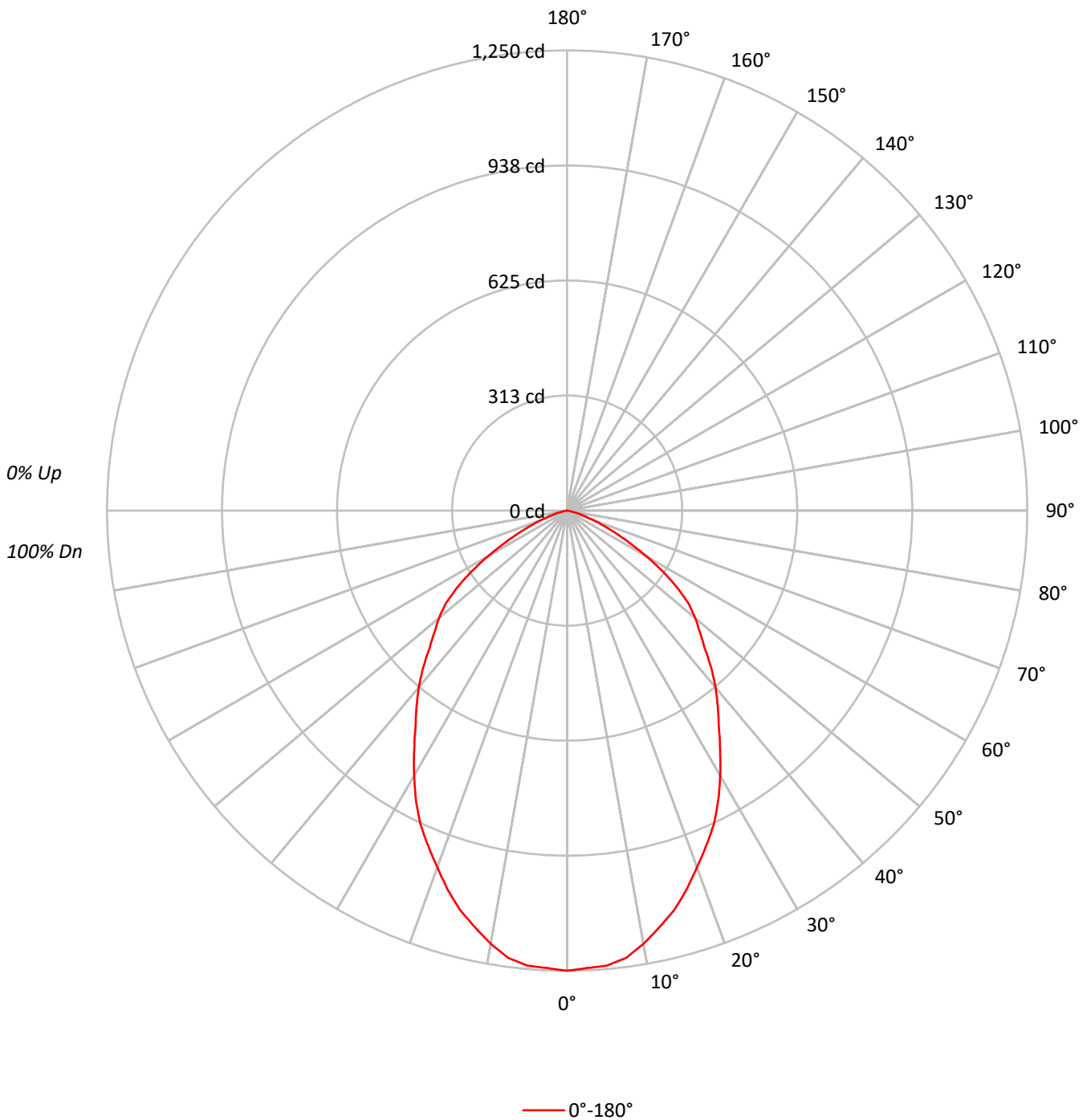
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	38539
5°	38405
10°	37405
15°	35864
20°	33836
25°	32044
30°	29607
35°	27036
40°	25235
45°	23052
50°	21799
55°	19628
60°	15338
65°	10682
70°	6780
75°	3824
80°	1065
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.0	5.2
10°-20°	314.7	14.1
20°-30°	431.0	19.3
30°-40°	451.8	20.2
40°-50°	411.8	18.4
50°-60°	321.4	14.4
60°-70°	149.6	6.7
70°-80°	37.3	1.7
80°-90°	1.1	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°	862.7	38.6
0°-40°	1314.5	58.8
0°-60°	2047.7	91.6
0°-90°	2235.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2235.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1250	
5°	1241	117
15°	1123	315
25°	942	431
35°	718	452
45°	529	412
55°	365	321
65°	146	150
75°	32	37
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1249.8
2.5°	1243.7
5°	1240.7
7.5°	1225.7
10°	1194.6
12.5°	1158.5
15°	1123.4
17.5°	1079.2
20°	1031.1
22.5°	986.0
25°	941.8
27.5°	888.7
30°	831.5
32.5°	773.3
35°	718.2
37.5°	672.0
40°	626.9
42.5°	578.7
45°	528.6
47.5°	488.5
50°	454.4
52.5°	416.3
55°	365.1
57.5°	307.9
60°	248.7
62.5°	192.6
65°	146.4
67.5°	106.3
70°	75.2
72.5°	51.2
75°	32.1
77.5°	18.1
80°	6.0
82.5°	1.0
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)