

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: P210144

Luminaire Tested: **PR820D010 - PR8M12MDMMS - 3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210144  
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 - 3000K  
Description: HALO 8" ROUND DOWNLIGHT, MEDIUM LENS, MATTE METALLIC SILVER FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2113.0 lumens  
Efficiency: N/A  
Efficacy: 96.0 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

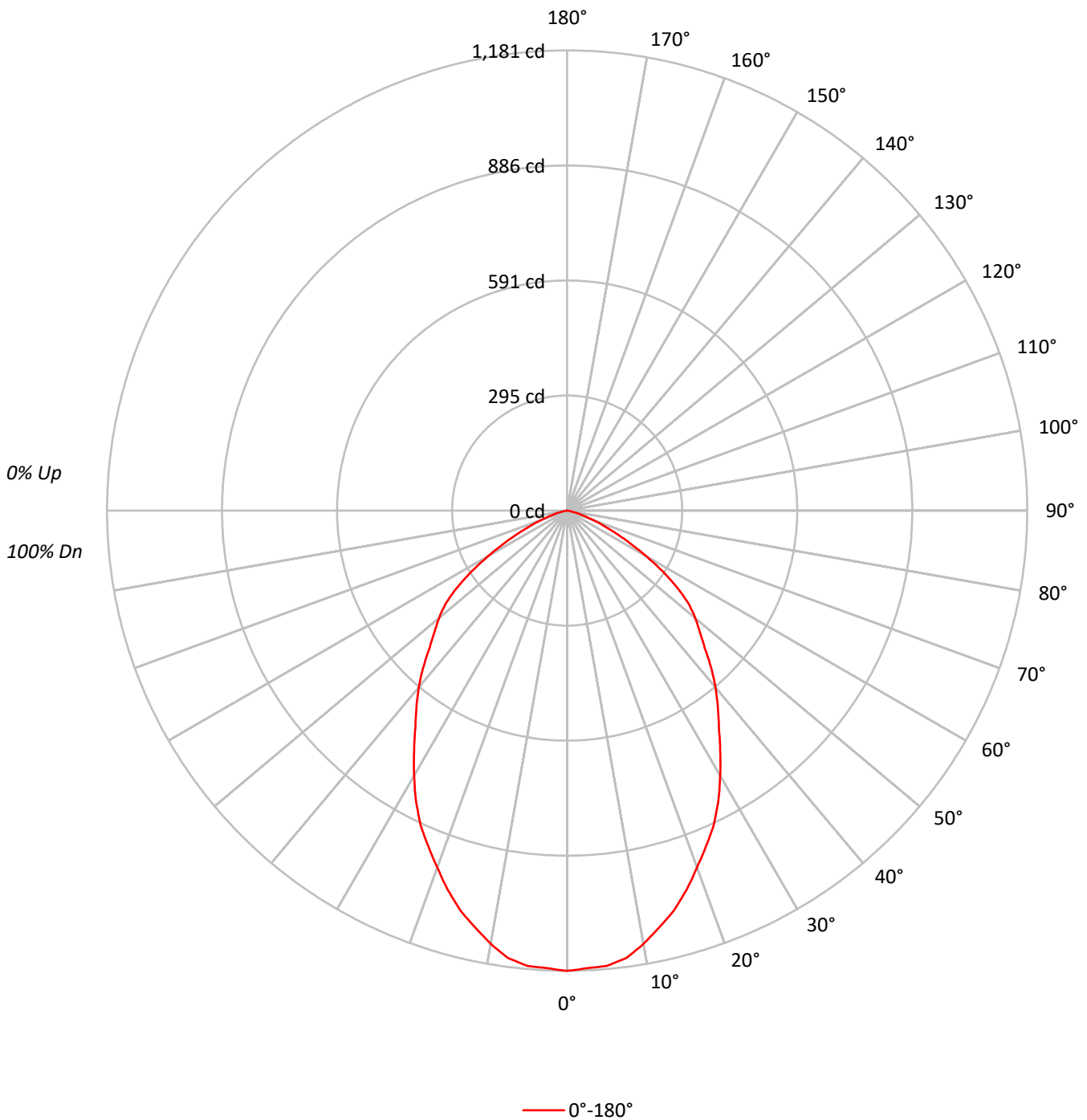
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	36424
5°	36300
10°	35354
15°	33894
20°	31979
25°	30288
30°	27983
35°	25553
40°	23850
45°	21787
50°	20600
55°	18553
60°	14499
65°	10098
70°	6410
75°	3610
80°	1012
85°	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.6	5.2
10°-20°	297.4	14.1
20°-30°	407.4	19.3
30°-40°	427.0	20.2
40°-50°	389.2	18.4
50°-60°	303.7	14.4
60°-70°	141.4	6.7
70°-80°	35.2	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°	815.4	38.6
0°-40°	1242.4	58.8
0°-60°	1935.3	91.6
0°-90°	2113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2113.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1181	
5°	1173	111
15°	1062	297
25°	890	407
35°	679	427
45°	500	389
55°	345	304
65°	138	141
75°	30	35
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1181.2
2.5°	1175.5
5°	1172.7
7.5°	1158.4
10°	1129.1
12.5°	1094.9
15°	1061.7
17.5°	1020.0
20°	974.5
22.5°	931.9
25°	890.2
27.5°	839.9
30°	785.9
32.5°	730.9
35°	678.8
37.5°	635.2
40°	592.5
42.5°	547.0
45°	499.6
47.5°	461.7
50°	429.4
52.5°	393.4
55°	345.1
57.5°	291.0
60°	235.1
62.5°	182.0
65°	138.4
67.5°	100.5
70°	71.1
72.5°	48.3
75°	30.3
77.5°	17.1
80°	5.7
82.5°	0.9
85°	0.0
87.5°	0.0
90°	0.0

(END OF REPORT)