

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: P241723

Luminaire Tested: **PRS410D010-S4M12-44SNDH-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241723  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-43)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS410D010-S4M12-44SNDH-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 862.1 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.92  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

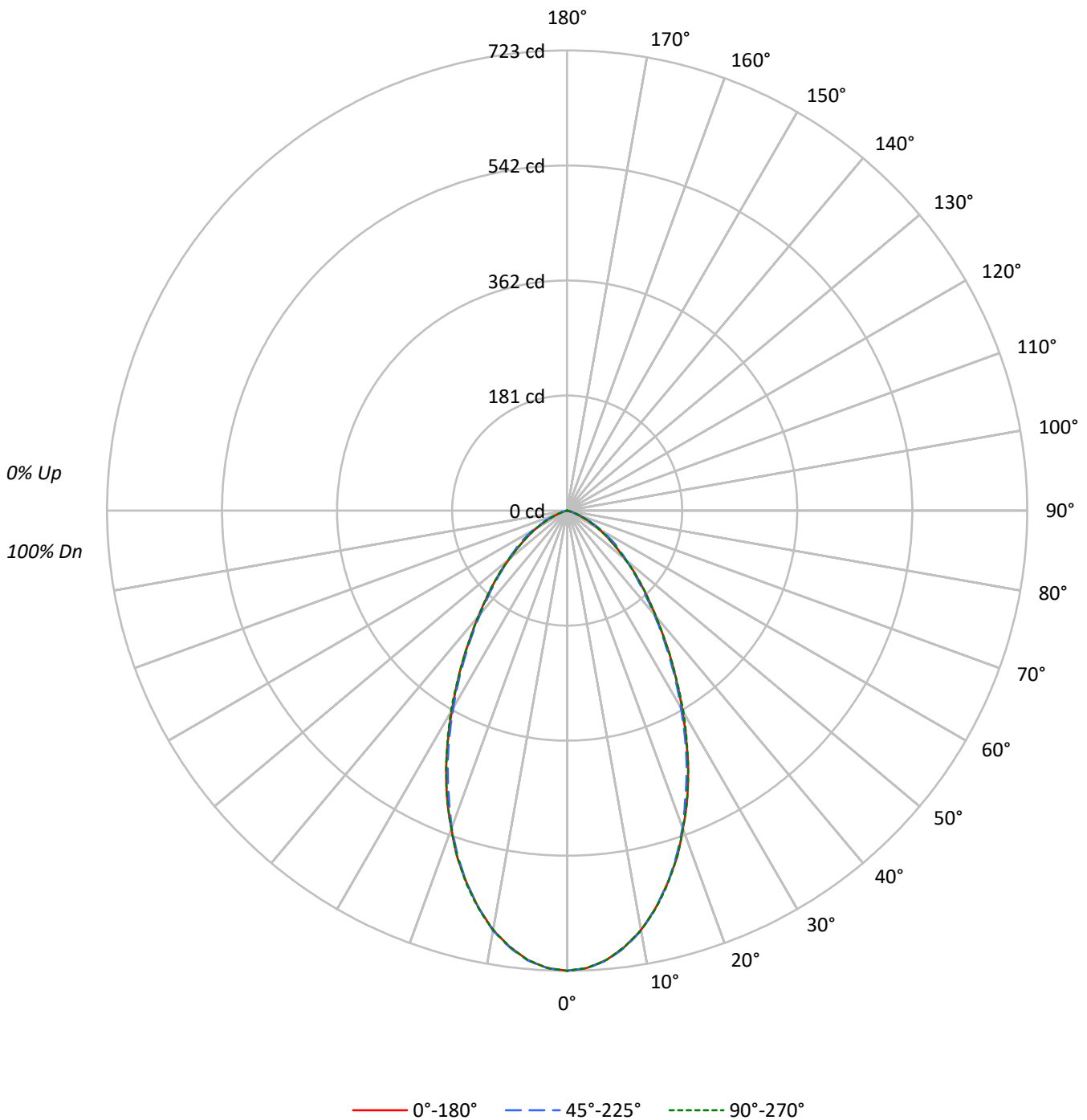
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	52	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40					40			

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

	0°	45°	90°
0°	55356	55356	55356
5°	54454	54530	54454
10°	52005	52083	52005
15°	48125	48125	48204
20°	43334	43180	43334
25°	37997	37507	37997
30°	31916	31571	32260
35°	26528	26070	26528
40°	21613	21223	21703
45°	17764	17352	17872
50°	14254	14492	14147
55°	11210	12237	11210
60°	8573	9461	8573
65°	5941	6828	5778
70°	3021	3894	3021
75°	296	1153	296
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.4	7.7
10°-20°	169.5	19.7
20°-30°	204.3	23.7
30°-40°	176.6	20.5
40°-50°	126.4	14.7
50°-60°	78.2	9.1
60°-70°	35.6	4.1
70°-80°	5.0	0.6
80°-90°	0.0	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°	440.2	51.1
0°-40°	616.8	71.6
0°-60°	821.5	95.3
0°-90°	862.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	862.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	709	709	710	709	709	66
15°	607	607	607	608	608	170
25°	450	447	444	448	450	205
35°	284	281	279	283	284	178
45°	164	162	160	163	165	127
55°	84	86	92	86	84	76
65°	33	36	38	36	32	33
75°	1	2	4	2	1	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	723.2	723.2	723.2	723.2	723.2
2.5°	719.3	719.3	719.3	719.3	719.3
5°	708.7	708.7	709.7	708.7	708.7
7.5°	691.3	692.3	692.3	692.3	691.3
10°	669.1	669.1	670.1	669.1	669.1
12.5°	640.2	640.2	640.2	641.1	641.1
15°	607.3	607.3	607.3	608.3	608.3
17.5°	572.6	571.6	569.7	570.6	572.6
20°	532.0	531.0	530.1	531.0	532.0
22.5°	492.4	488.6	485.7	490.5	492.4
25°	449.9	447.0	444.1	448.0	449.9
27.5°	405.5	403.6	400.7	403.6	406.5
30°	361.1	361.1	357.2	361.1	365.0
32.5°	321.5	320.6	317.7	319.6	322.5
35°	283.9	281.0	279.0	282.9	283.9
37.5°	248.1	247.2	244.3	247.2	248.1
40°	216.3	214.3	212.4	215.3	217.2
42.5°	189.2	187.3	184.4	187.3	189.2
45°	164.1	162.2	160.3	163.2	165.1
47.5°	141.9	141.0	139.0	141.0	141.9
50°	119.7	121.7	121.7	120.7	118.8
52.5°	100.4	101.4	105.2	101.4	100.4
55°	84.0	85.9	91.7	85.9	84.0
57.5°	69.5	71.4	76.3	71.4	69.5
60°	56.0	58.9	61.8	58.9	56.0
62.5°	43.4	47.3	48.3	46.3	43.4
65°	32.8	35.7	37.7	35.7	31.9
67.5°	22.2	26.1	27.0	26.1	22.2
70°	13.5	17.4	17.4	17.4	13.5
72.5°	6.8	8.7	9.7	8.7	6.8
75°	1.0	1.9	3.9	1.9	1.0
77.5°	0.0	0.0	1.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)