

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: P241737

Luminaire Tested: **PRS440D010-S4M24-44SNDH-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241737  
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: PRS440D010-S4M24-44SNDH-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3334.1 lumens  
Efficiency: N/A  
Efficacy: 87.7 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

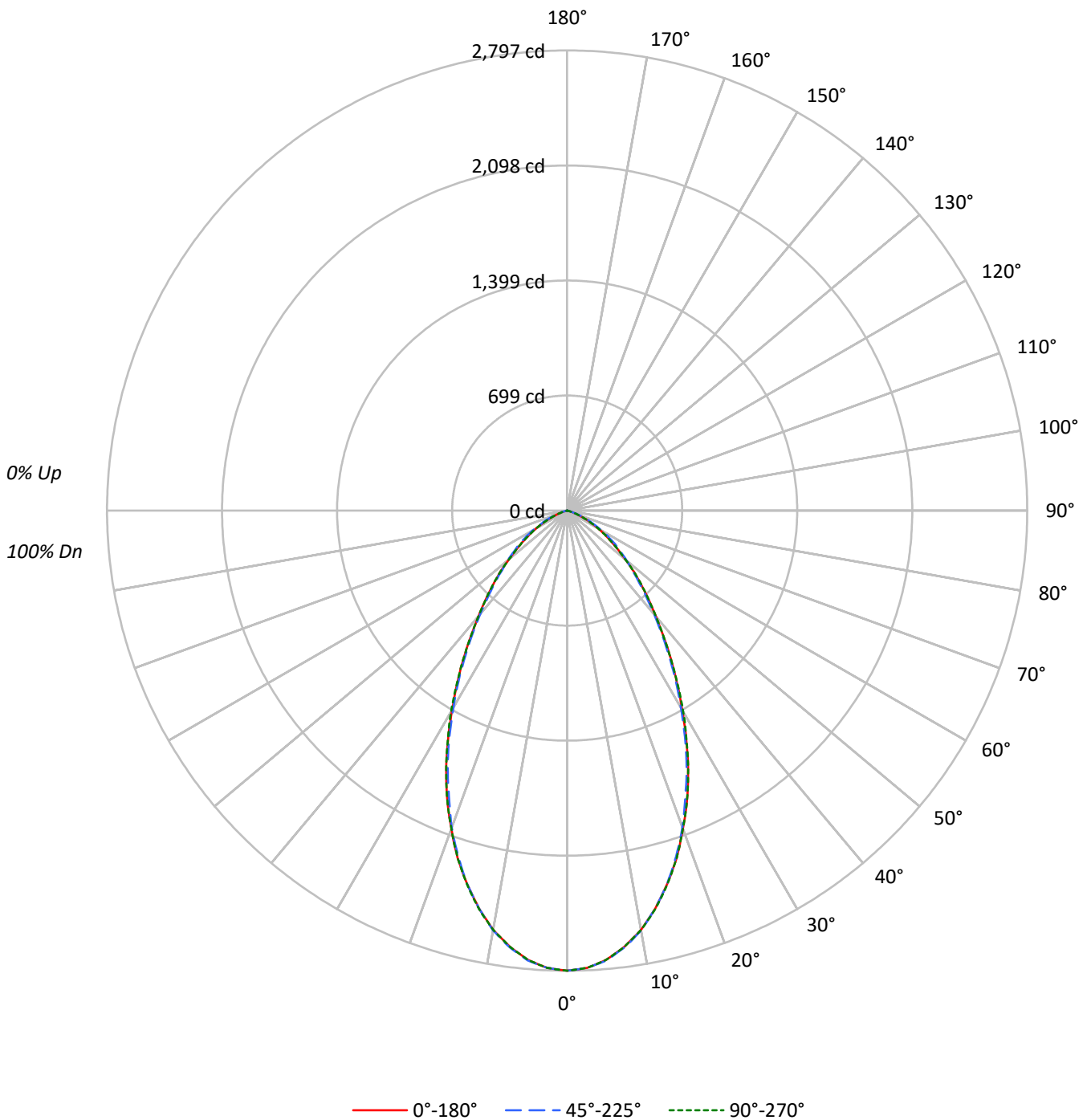
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	214077	214077	214077
5°	210592	210883	210592
10°	201127	201422	201127
15°	186119	186119	186420
20°	167595	166984	167595
25°	146962	145071	146962
30°	123438	122112	124755
35°	102581	100843	102581
40°	83573	82085	83953
45°	68716	67103	69117
50°	55134	56027	54694
55°	43358	47334	43358
60°	33159	36588	33159
65°	23002	26371	22314
70°	11705	15039	11705
75°	1094	4407	1094
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.8	7.7
10°-20°	655.4	19.7
20°-30°	790.3	23.7
30°-40°	683.1	20.5
40°-50°	489.0	14.7
50°-60°	302.5	9.1
60°-70°	137.8	4.1
70°-80°	19.2	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°	1702.5	51.1
0°-40°	2385.5	71.6
0°-60°	3177.0	95.3
0°-90°	3334.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3334.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2797	2797	2797	2797	2797	
5°	2741	2741	2745	2741	2741	257
15°	2349	2349	2349	2352	2352	656
25°	1740	1729	1718	1733	1740	794
35°	1098	1087	1079	1094	1098	687
45°	635	627	620	631	638	493
55°	325	332	355	332	325	294
65°	127	138	146	138	123	127
75°	4	8	15	8	4	15
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°	2796.8	2796.8	2796.8	2796.8	2796.8
2.5°	2781.9	2781.9	2781.9	2781.9	2781.9
5°	2740.8	2740.8	2744.6	2740.8	2740.8
7.5°	2673.6	2677.3	2677.3	2677.3	2673.6
10°	2587.7	2587.7	2591.5	2587.7	2587.7
12.5°	2475.7	2475.7	2475.7	2479.4	2479.4
15°	2348.7	2348.7	2348.7	2352.5	2352.5
17.5°	2214.3	2210.6	2203.1	2206.9	2214.3
20°	2057.5	2053.8	2050.0	2053.8	2057.5
22.5°	1904.4	1889.5	1878.3	1896.9	1904.4
25°	1740.1	1728.9	1717.7	1732.6	1740.1
27.5°	1568.3	1560.9	1549.7	1560.9	1572.1
30°	1396.6	1396.6	1381.6	1396.6	1411.5
32.5°	1243.5	1239.7	1228.5	1236.0	1247.2
35°	1097.8	1086.6	1079.2	1094.1	1097.8
37.5°	959.7	955.9	944.7	955.9	959.7
40°	836.4	829.0	821.5	832.7	840.2
42.5°	731.9	724.4	713.2	724.4	731.9
45°	634.8	627.3	619.9	631.1	638.5
47.5°	548.9	545.2	537.7	545.2	548.9
50°	463.0	470.5	470.5	466.8	459.3
52.5°	388.3	392.1	407.0	392.1	388.3
55°	324.9	332.3	354.7	332.3	324.9
57.5°	268.9	276.3	295.0	276.3	268.9
60°	216.6	227.8	239.0	227.8	216.6
62.5°	168.0	183.0	186.7	179.2	168.0
65°	127.0	138.2	145.6	138.2	123.2
67.5°	85.9	100.8	104.6	100.8	85.9
70°	52.3	67.2	67.2	67.2	52.3
72.5°	26.1	33.6	37.3	33.6	26.1
75°	3.7	7.5	14.9	7.5	3.7
77.5°	0.0	0.0	3.7	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)