

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: P241742

Luminaire Tested: **PRS440D010-S4M24-44SMDH-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241742  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-44)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS440D010-S4M24-44SMDH-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 3559.4 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 1.06  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

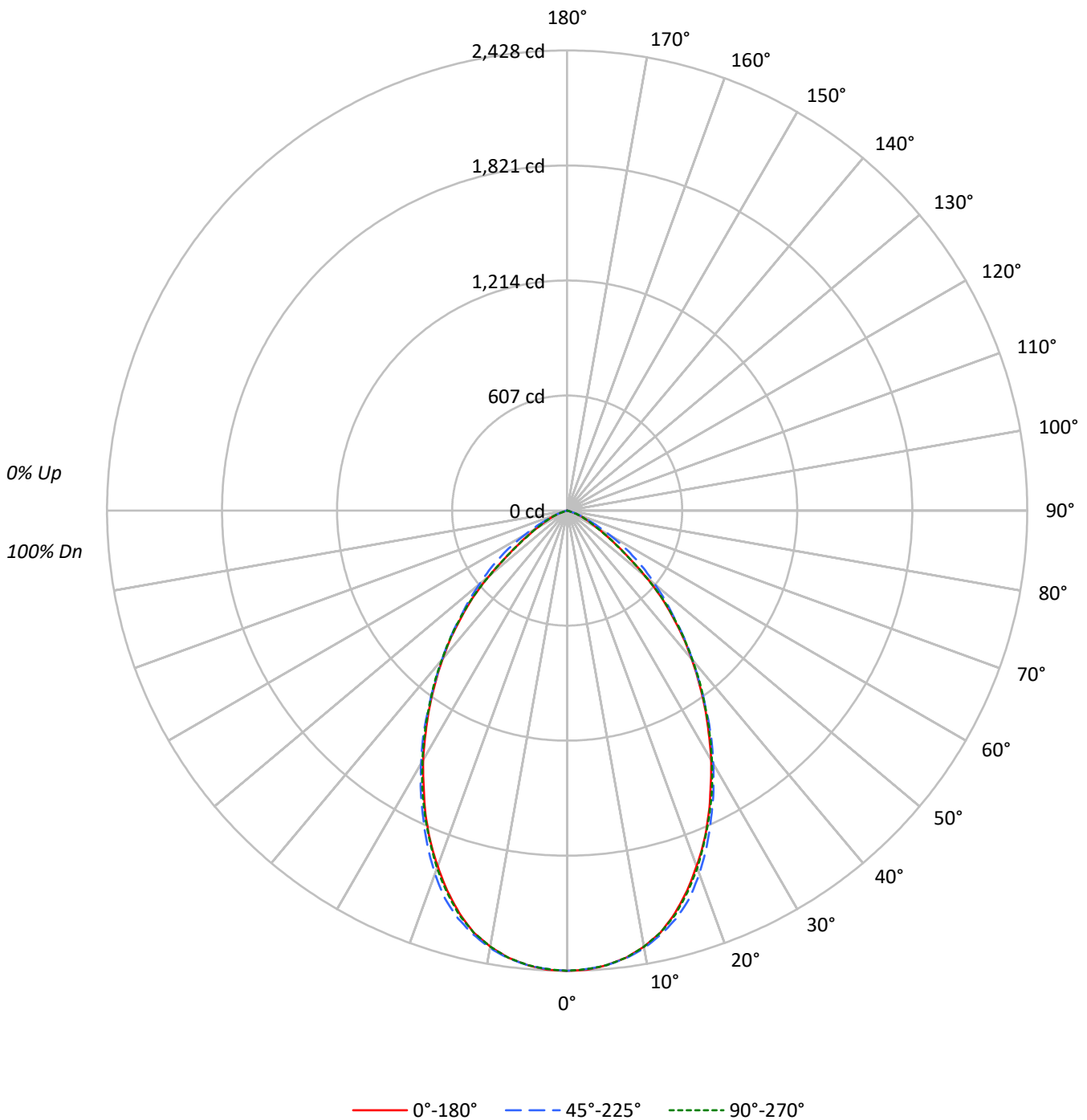
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	185886	185886	185886
5°	184959	184959	184959
10°	181603	182154	181603
15°	174233	176475	174795
20°	162683	166137	163547
25°	149268	151658	149868
30°	134345	136219	134972
35°	118251	119242	118915
40°	102079	102778	102778
45°	84564	86480	85711
50°	63982	71984	63982
55°	42450	58024	41983
60°	28137	40583	28137
65°	19850	24324	19198
70°	11078	12667	11078
75°	1035	4170	1035
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.7	6.4
10°-20°	619.5	17.4
20°-30°	819.4	23.0
30°-40°	798.5	22.4
40°-50°	615.3	17.3
50°-60°	336.3	9.4
60°-70°	124.5	3.5
70°-80°	18.1	0.5
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°	1666.6	46.8
0°-40°	2465.1	69.3
0°-60°	3416.8	96.0
0°-90°	3559.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3559.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2428	2428	2428	2428	2428	
5°	2407	2407	2407	2407	2407	228
15°	2199	2213	2227	2216	2206	615
25°	1767	1789	1796	1796	1774	810
35°	1266	1280	1276	1290	1273	790
45°	781	802	799	806	792	602
55°	318	357	435	361	315	296
65°	110	120	134	120	106	110
75°	4	7	14	7	4	13
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°	2428.5	2428.5	2428.5	2428.5	2428.5
2.5°	2424.9	2421.4	2421.4	2421.4	2421.4
5°	2407.2	2407.2	2407.2	2407.2	2407.2
7.5°	2379.0	2379.0	2382.5	2379.0	2379.0
10°	2336.5	2340.1	2343.6	2343.6	2336.5
12.5°	2280.0	2287.1	2290.6	2287.1	2280.0
15°	2198.7	2212.8	2227.0	2216.4	2205.8
17.5°	2103.2	2120.9	2145.7	2124.5	2110.3
20°	1997.2	2018.4	2039.6	2025.5	2007.8
22.5°	1887.6	1905.3	1923.0	1915.9	1891.2
25°	1767.4	1788.6	1795.7	1795.7	1774.5
27.5°	1640.2	1664.9	1672.0	1668.5	1654.3
30°	1520.0	1537.7	1541.2	1544.7	1527.1
32.5°	1389.2	1406.9	1413.9	1417.5	1399.8
35°	1265.5	1279.6	1276.1	1290.2	1272.6
37.5°	1141.8	1155.9	1148.8	1163.0	1152.4
40°	1021.6	1028.6	1028.6	1039.3	1028.6
42.5°	904.9	912.0	915.5	919.1	912.0
45°	781.2	802.4	798.9	805.9	791.8
47.5°	668.1	685.8	699.9	692.8	671.6
50°	537.3	579.7	604.5	586.8	537.3
52.5°	413.6	463.1	519.6	466.6	413.6
55°	318.1	357.0	434.8	360.6	314.6
57.5°	240.4	272.2	350.0	272.2	240.4
60°	183.8	208.6	265.1	208.6	183.8
62.5°	141.4	159.1	190.9	159.1	141.4
65°	109.6	120.2	134.3	120.2	106.0
67.5°	77.8	88.4	88.4	88.4	77.8
70°	49.5	60.1	56.6	60.1	49.5
72.5°	21.2	31.8	35.3	31.8	21.2
75°	3.5	7.1	14.1	7.1	3.5
77.5°	0.0	3.5	3.5	3.5	3.5
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)