

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: P238067

Luminaire Tested: **PRS640D010-S6M24-64SMDH-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-8)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SMDH-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM 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: 4198.1 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.95 / 1.01  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

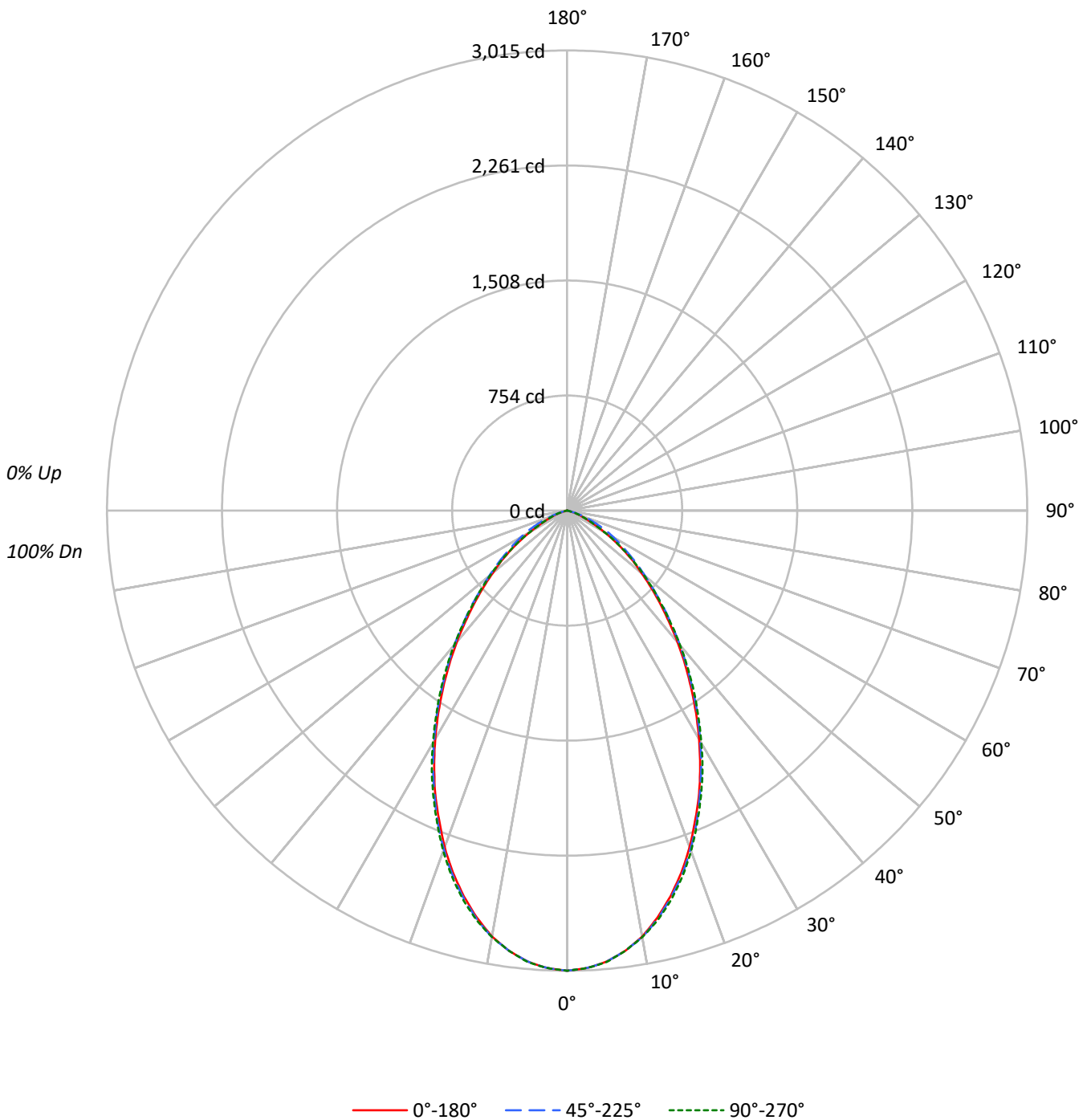
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	103	109	106	103	101	102	100	98	98	97	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	73	68	78	72	68	75	71	67	73	69	66	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52					52			
7	74	63	56	50	73	62	55	50	61	54	50	59	54	50	58	53	49	48					48			
8	70	58	51	46	68	58	51	46	56	50	46	55	50	45	54	49	45	44					44			
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	45	42	40					40			
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37					37			

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

	0°	45°	90°
0°	129817	129817	129817
5°	128195	128195	128359
10°	123902	124068	124068
15°	116567	117075	117579
20°	107546	108238	108756
25°	97165	97702	98420
30°	85925	86676	87426
35°	74379	75573	76167
40°	63203	64479	64692
45°	52390	54229	53540
50°	42467	44738	43726
55°	33712	36827	34275
60°	24042	30216	24042
65°	15761	23065	16148
70°	10449	14250	10927
75°	5024	6272	5024
80°	0	942	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	279.0	6.6
10°-20°	734.7	17.5
20°-30°	942.9	22.5
30°-40°	896.2	21.3
40°-50°	684.3	16.3
50°-60°	427.6	10.2
60°-70°	191.0	4.5
70°-80°	42.2	1.0
80°-90°	0.1	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°	1956.6	46.6
0°-40°	2852.8	68.0
0°-60°	3964.7	94.4
0°-90°	4198.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4198.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3015	3015	3015	3015	3015	
5°	2966	2966	2966	2970	2970	279
15°	2615	2619	2626	2634	2638	732
25°	2045	2049	2057	2064	2072	936
35°	1415	1430	1438	1442	1449	885
45°	860	879	891	894	879	666
55°	449	476	491	483	457	403
65°	155	177	226	181	158	162
75°	30	38	38	38	30	35
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°	3015.1	3015.1	3015.1	3015.1	3015.1
2.5°	3000.0	3000.0	3000.0	3000.0	3000.0
5°	2966.1	2966.1	2966.1	2969.9	2969.9
7.5°	2909.5	2909.5	2909.5	2913.2	2909.5
10°	2834.0	2834.0	2837.8	2837.8	2837.8
12.5°	2732.1	2735.9	2739.7	2743.4	2747.2
15°	2615.1	2618.9	2626.5	2634.0	2637.8
17.5°	2486.8	2486.8	2501.9	2513.2	2513.2
20°	2347.2	2351.0	2362.3	2366.1	2373.6
22.5°	2192.5	2203.8	2215.1	2218.9	2222.7
25°	2045.3	2049.1	2056.6	2064.2	2071.7
27.5°	1886.8	1890.6	1901.9	1905.7	1920.8
30°	1728.3	1735.9	1743.4	1751.0	1758.5
32.5°	1569.8	1577.4	1588.7	1592.5	1600.0
35°	1415.1	1430.2	1437.8	1441.5	1449.1
37.5°	1267.9	1283.0	1286.8	1298.1	1298.1
40°	1124.5	1139.6	1147.2	1154.7	1151.0
42.5°	984.9	1003.8	1011.3	1022.7	1011.3
45°	860.4	879.3	890.6	894.4	879.3
47.5°	743.4	766.0	769.8	773.6	766.0
50°	634.0	656.6	667.9	671.7	652.8
52.5°	543.4	562.3	573.6	569.8	554.7
55°	449.1	475.5	490.6	483.0	456.6
57.5°	362.3	392.5	415.1	396.2	369.8
60°	279.2	313.2	350.9	320.8	279.2
62.5°	207.6	241.5	290.6	241.5	207.6
65°	154.7	177.4	226.4	181.1	158.5
67.5°	113.2	132.1	169.8	132.1	117.0
70°	83.0	98.1	113.2	98.1	86.8
72.5°	56.6	67.9	67.9	67.9	56.6
75°	30.2	37.7	37.7	37.7	30.2
77.5°	3.8	11.3	15.1	11.3	3.8
80°	0.0	0.0	3.8	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)