

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: P238102

Luminaire Tested: **PRS640D010-S6M24-64SMDC-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238102  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-11)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SMDC-3000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, SHALLOW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3993.3 lumens  
Efficiency: N/A  
Efficacy: 105.1 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 1.03  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

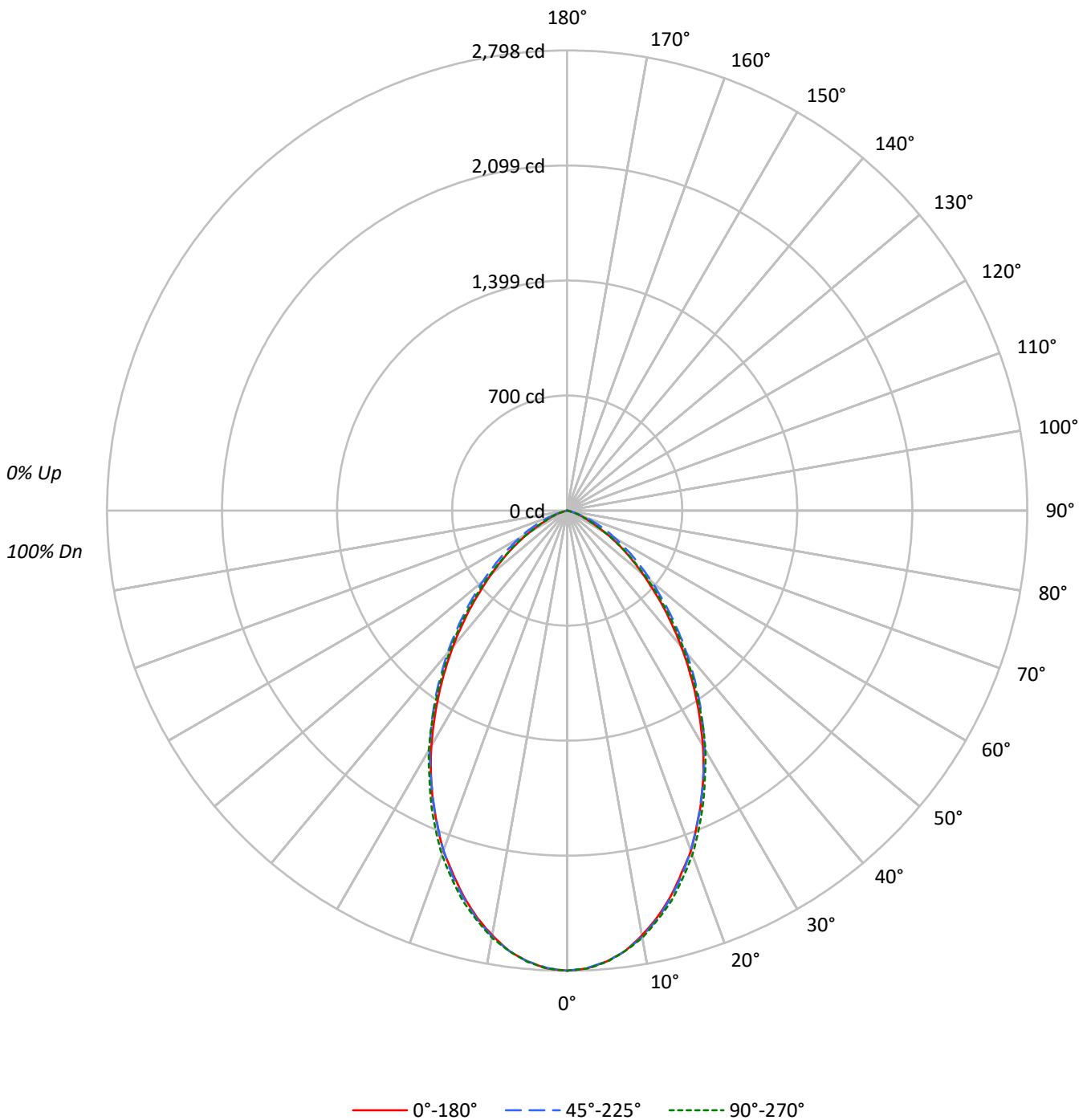
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	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	87	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	73	68	77	72	67	75	70	66	73	69	66	64					64			
5	84	74	67	61	83	73	66	61	71	65	60	69	64	60	67	63	59	57					57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	54	52					52			
7	74	63	55	50	73	62	55	50	60	54	50	59	53	49	58	53	49	47					47			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43					43			
9	66	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40					40			
10	62	50	43	39	61	50	43	39	49	43	38	48	42	38	47	42	38	37					37			

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

	0°	45°	90°
0°	120465	120465	120465
5°	118920	118920	119071
10°	114668	114983	115294
15°	108312	108628	109426
20°	100857	100692	102002
25°	91840	91669	93028
30°	82077	83141	83673
35°	71373	73439	72687
40°	60651	63467	62062
45°	50259	53741	51568
50°	40210	44758	41409
55°	31655	36744	32188
60°	22466	28925	22768
65°	14558	21843	14925
70°	9895	13495	9895
75°	4758	5939	4758
80°	0	893	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	259.0	6.5
10°-20°	682.9	17.1
20°-30°	888.9	22.3
30°-40°	862.2	21.6
40°-50°	666.4	16.7
50°-60°	412.2	10.3
60°-70°	181.7	4.6
70°-80°	39.9	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°	1830.8	45.8
0°-40°	2693.0	67.4
0°-60°	3771.6	94.4
0°-90°	3993.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3993.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2798	2798	2798	2798	2798	
5°	2752	2755	2752	2755	2755	259
15°	2430	2433	2437	2451	2455	680
25°	1933	1930	1930	1948	1958	886
35°	1358	1372	1397	1386	1383	847
45°	825	858	883	872	847	637
55°	422	454	490	461	429	378
65°	143	172	214	172	146	151
75°	29	36	36	36	29	33
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°	2797.9	2797.9	2797.9	2797.9	2797.9
2.5°	2787.2	2787.2	2783.6	2787.2	2787.2
5°	2751.5	2755.0	2751.5	2755.0	2755.0
7.5°	2701.4	2701.4	2701.4	2705.0	2701.4
10°	2622.8	2626.4	2630.0	2633.5	2637.1
12.5°	2533.5	2537.1	2540.6	2547.8	2547.8
15°	2429.9	2433.4	2437.0	2451.3	2454.9
17.5°	2311.9	2315.5	2322.7	2337.0	2340.5
20°	2201.2	2190.4	2197.6	2208.3	2226.2
22.5°	2065.4	2065.4	2065.4	2079.7	2094.0
25°	1933.2	1929.6	1929.6	1947.5	1958.2
27.5°	1793.8	1793.8	1797.4	1808.1	1815.2
30°	1650.9	1650.9	1672.3	1668.7	1683.0
32.5°	1500.8	1511.5	1533.0	1525.8	1529.4
35°	1357.9	1372.2	1397.2	1386.5	1382.9
37.5°	1214.9	1232.8	1261.4	1250.7	1239.9
40°	1079.1	1104.2	1129.2	1114.9	1104.2
42.5°	946.9	975.5	1004.1	989.8	975.5
45°	825.4	857.6	882.6	871.9	846.9
47.5°	703.9	743.3	768.3	757.5	732.5
50°	600.3	639.6	668.2	650.3	618.2
52.5°	507.4	543.1	571.7	550.3	518.1
55°	421.7	453.8	489.5	461.0	428.8
57.5°	339.5	375.2	407.4	382.3	346.6
60°	260.9	300.2	335.9	307.3	264.4
62.5°	193.0	232.3	275.1	235.8	196.5
65°	142.9	171.5	214.4	171.5	146.5
67.5°	107.2	125.1	160.8	128.6	107.2
70°	78.6	92.9	107.2	92.9	78.6
72.5°	53.6	64.3	64.3	64.3	53.6
75°	28.6	35.7	35.7	35.7	28.6
77.5°	3.6	10.7	14.3	10.7	3.6
80°	0.0	0.0	3.6	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)