

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: P238097

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-10)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SNDC-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, SHALLOW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4296.2 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.83 / 0.86  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

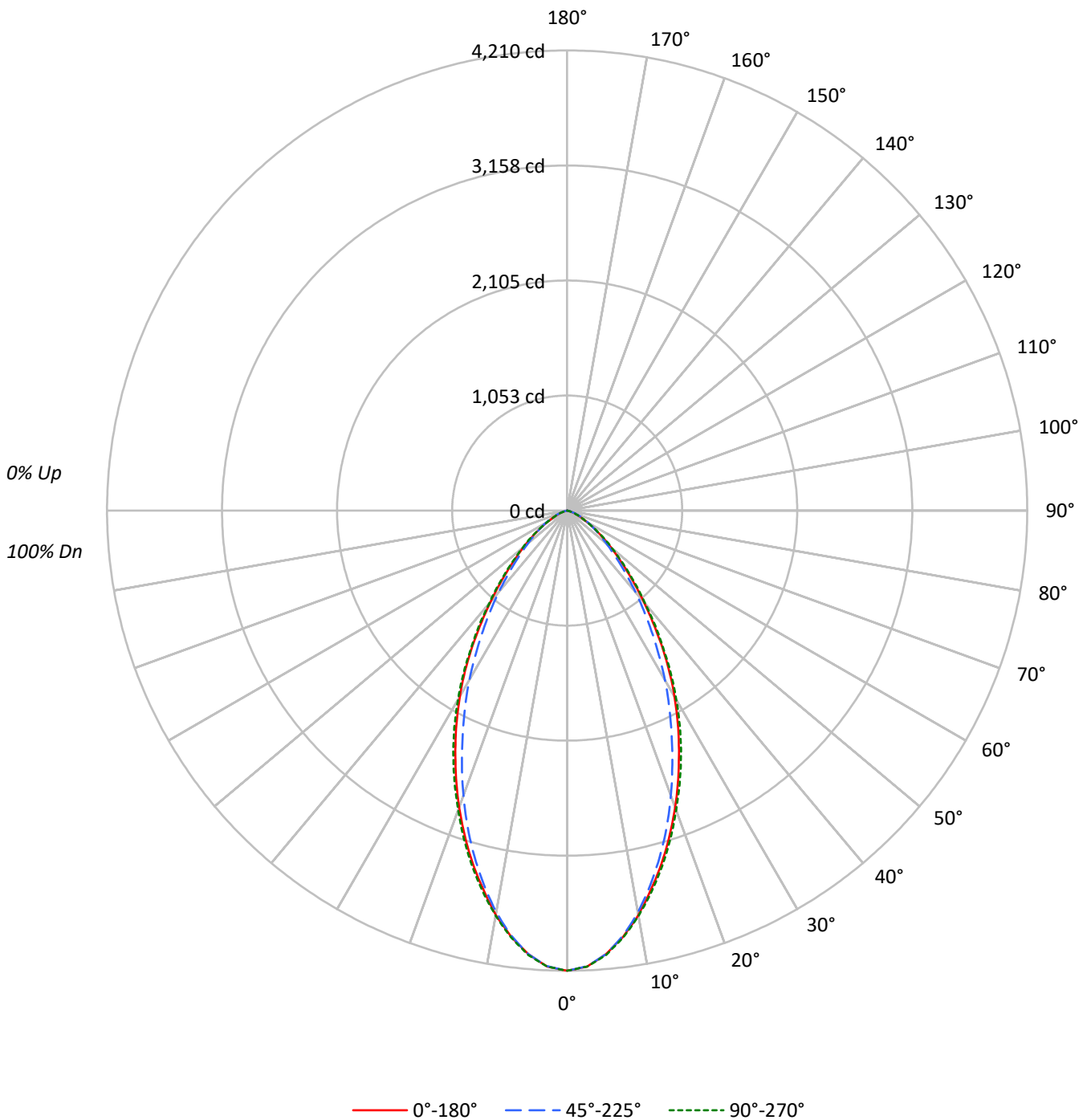
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	104	110	107	105	102	103	101	99	99	98	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83				83
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75				75
4	93	84	78	73	91	83	77	72	81	76	72	79	74	71	77	73	70	68				68
5	88	78	71	66	86	77	70	66	75	69	65	73	68	65	72	67	64	62				62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57				57
7	78	67	60	55	76	66	60	55	65	59	55	64	59	55	63	58	54	53				53
8	73	63	56	51	72	62	56	51	61	55	51	60	54	51	59	54	50	49				49
9	69	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45				45
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42				42

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

	0°	45°	90°
0°	181243	181243	181243
5°	176062	176062	176386
10°	164234	163241	164562
15°	148932	146071	149940
20°	132329	127143	133544
25°	114966	107432	117118
30°	97603	88967	99294
35°	79373	70642	80366
40°	61325	54536	62388
45°	46203	41149	47817
50°	34898	31355	36164
55°	25222	24374	26070
60°	17877	19504	18204
65°	12307	14232	12307
70°	8082	9504	8082
75°	3776	4392	3776
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	378.6	8.8
10°-20°	923.7	21.5
20°-30°	1074.5	25.0
30°-40°	888.8	20.7
40°-50°	560.7	13.1
50°-60°	305.1	7.1
60°-70°	134.0	3.1
70°-80°	30.8	0.7
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°	2376.8	55.3
0°-40°	3265.6	76.0
0°-60°	4131.4	96.2
0°-90°	4296.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4296.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4210	4210	4210	4210	4210	
5°	4074	4077	4074	4077	4081	379
15°	3341	3303	3277	3322	3364	932
25°	2420	2326	2261	2356	2465	1109
35°	1510	1397	1344	1420	1529	940
45°	759	698	676	710	785	595
55°	336	332	325	340	347	310
65°	121	132	140	132	121	125
75°	23	26	26	30	23	26
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°	4209.5	4209.5	4209.5	4209.5	4209.5
2.5°	4175.5	4171.8	4171.8	4175.5	4175.5
5°	4073.6	4077.4	4073.6	4077.4	4081.1
7.5°	3930.1	3926.4	3922.6	3933.9	3937.7
10°	3756.5	3745.1	3733.8	3752.7	3764.0
12.5°	3548.8	3529.9	3511.1	3541.3	3571.5
15°	3341.2	3303.4	3277.0	3322.3	3363.8
17.5°	3118.4	3069.4	3031.6	3084.5	3144.9
20°	2888.1	2824.0	2774.9	2839.1	2914.6
22.5°	2654.1	2574.8	2514.4	2597.4	2691.8
25°	2420.0	2325.6	2261.4	2355.8	2465.3
27.5°	2193.5	2084.0	2019.8	2110.4	2235.0
30°	1963.2	1849.9	1789.5	1880.1	1997.2
32.5°	1736.7	1623.4	1555.4	1646.0	1766.9
35°	1510.1	1396.9	1344.0	1419.5	1529.0
37.5°	1283.6	1189.2	1147.7	1211.9	1321.4
40°	1091.1	1004.2	970.3	1019.3	1110.0
42.5°	913.6	834.4	807.9	857.0	943.8
45°	758.8	698.4	675.8	709.8	785.3
47.5°	626.7	581.4	562.5	596.5	649.4
50°	521.0	487.0	468.1	494.6	539.9
52.5°	426.6	404.0	388.9	411.5	441.7
55°	336.0	332.2	324.7	339.8	347.3
57.5°	268.0	268.0	271.8	271.8	271.8
60°	207.6	215.2	226.5	219.0	211.4
62.5°	158.6	169.9	181.2	169.9	162.3
65°	120.8	132.1	139.7	132.1	120.8
67.5°	90.6	98.2	105.7	98.2	90.6
70°	64.2	71.7	75.5	71.7	64.2
72.5°	41.5	49.1	49.1	49.1	41.5
75°	22.7	26.4	26.4	30.2	22.7
77.5°	3.8	7.6	11.3	11.3	3.8
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)