

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: P238237

Luminaire Tested: **PRS640D010-S6M24-61SMDH-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-20)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-61SMDH-3000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, DEEP TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3729.0 lumens  
Efficiency: N/A  
Efficacy: 98.1 lumens/watt  
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

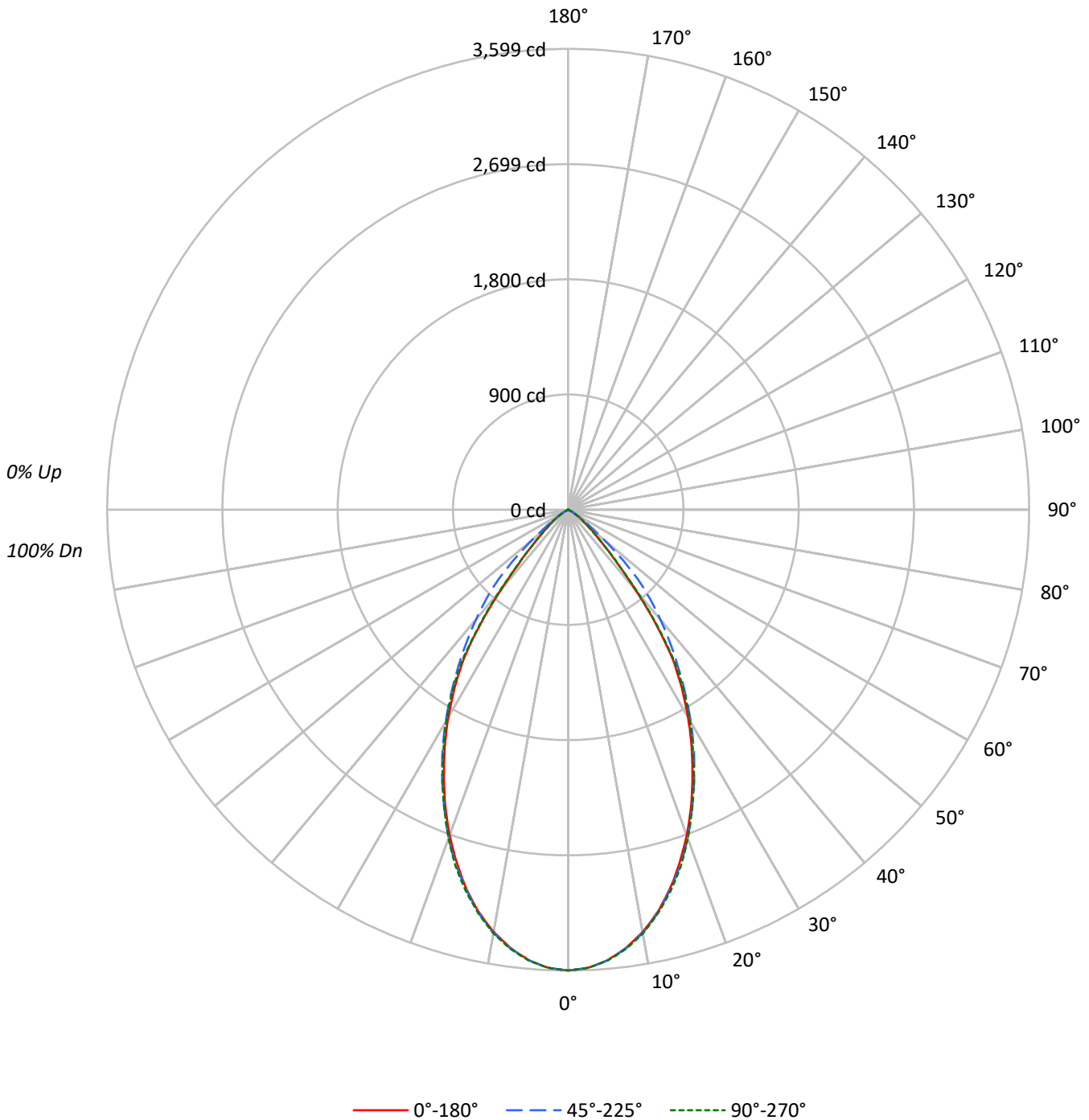
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	108	105	111	108	106	103	104	102	100	100	99	97	97	96	94	93					93			
2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85					85			
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78					78			
4	95	87	81	77	93	86	80	76	84	79	75	82	78	74	80	76	73	72					72			
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66					66			
6	85	75	69	64	83	74	68	64	73	67	63	71	67	63	70	66	63	61					61			
7	80	70	64	59	79	70	63	59	68	63	59	67	62	58	66	61	58	57					57			
8	76	66	59	55	75	65	59	55	64	58	54	63	58	54	62	57	54	52					52			
9	72	62	55	51	71	61	55	51	60	55	51	59	54	50	58	54	50	49					49			
10	68	58	52	48	67	57	51	47	57	51	47	56	51	47	55	50	47	46					46			

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

	0°	45°	90°
0°	154953	154953	154953
5°	152615	152615	152770
10°	146418	146733	146886
15°	136710	137026	137503
20°	124000	125145	125145
25°	109066	110591	110420
30°	93014	95142	94610
35°	74690	78442	76193
40°	45554	62809	46959
45°	24131	46739	24350
50°	13872	24154	13872
55°	8580	10449	8580
60°	3074	4917	3074
65°	723	1824	723
70°	453	453	453
75°	599	599	599
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	331.6	8.9
10°-20°	858.8	23.0
20°-30°	1060.0	28.4
30°-40°	905.3	24.3
40°-50°	433.2	11.6
50°-60°	121.8	3.3
60°-70°	15.9	0.4
70°-80°	2.4	0.1
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°	2250.4	60.3
0°-40°	3155.7	84.6
0°-60°	3710.7	99.5
0°-90°	3729.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3729.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3599	3599	3599	3599	3599	
5°	3531	3535	3531	3535	3535	331
15°	3067	3070	3074	3085	3085	856
25°	2296	2306	2328	2328	2324	1050
35°	1421	1475	1492	1492	1450	856
45°	396	493	768	496	400	333
55°	114	132	139	128	114	103
65°	7	7	18	7	7	11
75°	4	4	4	4	4	2
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°	3598.9	3598.9	3598.9	3598.9	3598.9
2.5°	3581.1	3581.1	3581.1	3581.1	3581.1
5°	3531.1	3534.7	3531.1	3534.7	3534.7
7.5°	3452.6	3456.1	3456.1	3459.7	3459.7
10°	3349.0	3352.6	3356.2	3356.2	3359.7
12.5°	3220.5	3220.5	3227.6	3231.2	3231.2
15°	3067.0	3070.5	3074.1	3084.8	3084.8
17.5°	2892.0	2899.2	2909.9	2913.4	2920.6
20°	2706.3	2706.3	2731.3	2727.8	2731.3
22.5°	2506.4	2517.1	2527.8	2535.0	2527.8
25°	2295.8	2306.5	2327.9	2327.9	2324.3
27.5°	2085.1	2095.8	2124.4	2113.7	2106.5
30°	1870.9	1881.6	1913.7	1895.9	1903.0
32.5°	1649.5	1681.7	1699.5	1699.5	1681.7
35°	1421.0	1474.6	1492.4	1492.4	1449.6
37.5°	1124.7	1253.2	1303.2	1263.9	1139.0
40°	810.5	978.3	1117.5	996.1	835.5
42.5°	567.7	710.5	946.2	721.2	574.8
45°	396.3	492.7	767.6	496.3	399.9
47.5°	278.5	342.8	557.0	342.8	278.5
50°	207.1	242.8	360.6	239.2	207.1
52.5°	157.1	178.5	221.4	174.9	157.1
55°	114.3	132.1	139.2	128.5	114.3
57.5°	71.4	89.3	89.3	89.3	67.8
60°	35.7	50.0	57.1	50.0	35.7
62.5°	10.7	21.4	35.7	21.4	10.7
65°	7.1	7.1	17.9	7.1	7.1
67.5°	7.1	7.1	7.1	7.1	7.1
70°	3.6	3.6	3.6	3.6	3.6
72.5°	3.6	3.6	3.6	3.6	3.6
75°	3.6	3.6	3.6	3.6	3.6
77.5°	0.0	0.0	0.0	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)