

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: P238147

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238147  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-14)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-61SMDMB-3000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, DEEP TRIM MATTE BLACK  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3128.9 lumens  
Efficiency: N/A  
Efficacy: 82.3 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.95 / 1  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

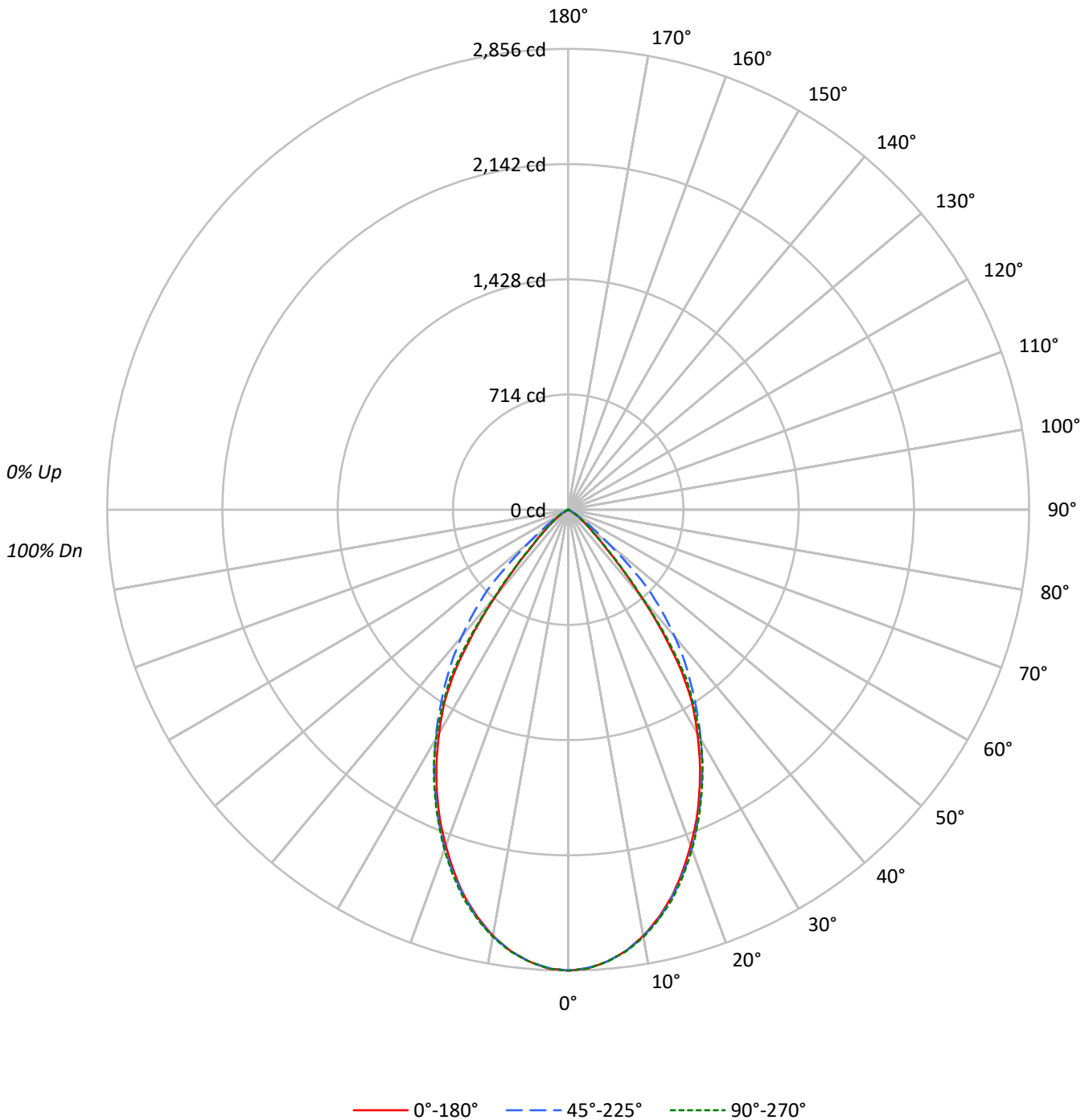
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	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	88	84	99	92	88	84	90	86	82	87	84	81	85	82	80	78					78			
4	95	87	81	76	93	86	80	76	83	79	75	81	77	74	80	76	73	72					72			
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	74	70	67	66					66			
6	85	75	68	64	83	74	68	63	73	67	63	71	66	63	70	65	62	61					61			
7	80	70	63	59	78	69	63	59	68	62	58	67	62	58	65	61	58	56					56			
8	76	65	59	54	74	65	58	54	63	58	54	62	57	54	61	57	53	52					52			
9	72	61	55	50	70	61	54	50	60	54	50	59	54	50	58	53	50	48					48			
10	68	57	51	47	67	57	51	47	56	51	47	55	50	47	54	50	46	45					45			

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

	0°	45°	90°
0°	122976	122976	122976
5°	121440	121440	121440
10°	117222	117379	117536
15°	110603	110763	111240
20°	101585	102405	102731
25°	91422	92438	92776
30°	79521	81649	81470
35°	64556	69996	66805
40°	39529	57593	40333
45°	18912	43262	19564
50°	10523	21522	10523
55°	6163	8843	6433
60°	1541	3996	1843
65°	0	1090	367
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	264.3	8.4
10°-20°	695.2	22.2
20°-30°	889.2	28.4
30°-40°	793.3	25.4
40°-50°	379.2	12.1
50°-60°	99.3	3.2
60°-70°	8.4	0.3
70°-80°	0.0	0.0
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°	1848.7	59.1
0°-40°	2642.0	84.4
0°-60°	3120.5	99.7
0°-90°	3128.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3128.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2856	2856	2856	2856	2856	
5°	2810	2810	2810	2813	2810	264
15°	2481	2481	2485	2492	2496	693
25°	1924	1932	1946	1953	1953	880
35°	1228	1289	1332	1307	1271	740
45°	311	428	710	432	321	271
55°	82	107	118	107	86	74
65°	0	4	11	0	4	2
75°	0	0	0	0	0	0
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°	2856.2	2856.2	2856.2	2856.2	2856.2
2.5°	2845.5	2845.5	2841.9	2845.5	2845.5
5°	2809.8	2809.8	2809.8	2813.3	2809.8
7.5°	2756.2	2756.2	2756.2	2759.8	2759.8
10°	2681.2	2681.2	2684.8	2688.4	2688.4
12.5°	2588.4	2588.4	2595.6	2599.1	2599.1
15°	2481.3	2481.3	2484.9	2492.0	2495.6
17.5°	2352.8	2356.3	2363.5	2370.6	2374.2
20°	2217.1	2220.7	2235.0	2242.1	2242.1
22.5°	2077.9	2081.4	2095.7	2102.9	2099.3
25°	1924.4	1931.5	1945.8	1952.9	1952.9
27.5°	1767.3	1778.0	1799.4	1795.8	1803.0
30°	1599.5	1617.3	1642.3	1642.3	1638.7
32.5°	1435.2	1456.7	1485.2	1470.9	1453.1
35°	1228.2	1288.9	1331.7	1306.7	1271.0
37.5°	967.5	1103.2	1181.7	1128.2	1006.8
40°	703.3	864.0	1024.7	885.4	717.6
42.5°	474.8	617.6	867.6	635.5	492.7
45°	310.6	428.4	710.5	432.0	321.3
47.5°	214.2	285.6	514.1	289.2	217.8
50°	157.1	199.9	321.3	199.9	157.1
52.5°	117.8	146.4	196.4	146.4	117.8
55°	82.1	107.1	117.8	107.1	85.7
57.5°	50.0	71.4	71.4	71.4	50.0
60°	17.9	39.3	46.4	39.3	21.4
62.5°	0.0	10.7	25.0	10.7	0.0
65°	0.0	3.6	10.7	0.0	3.6
67.5°	0.0	0.0	3.6	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
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)