

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: P238007

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238007  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-4)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SNDMW-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, SHALLOW TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4330.3 lumens  
Efficiency: N/A  
Efficacy: 114.0 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.83 / 0.85  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

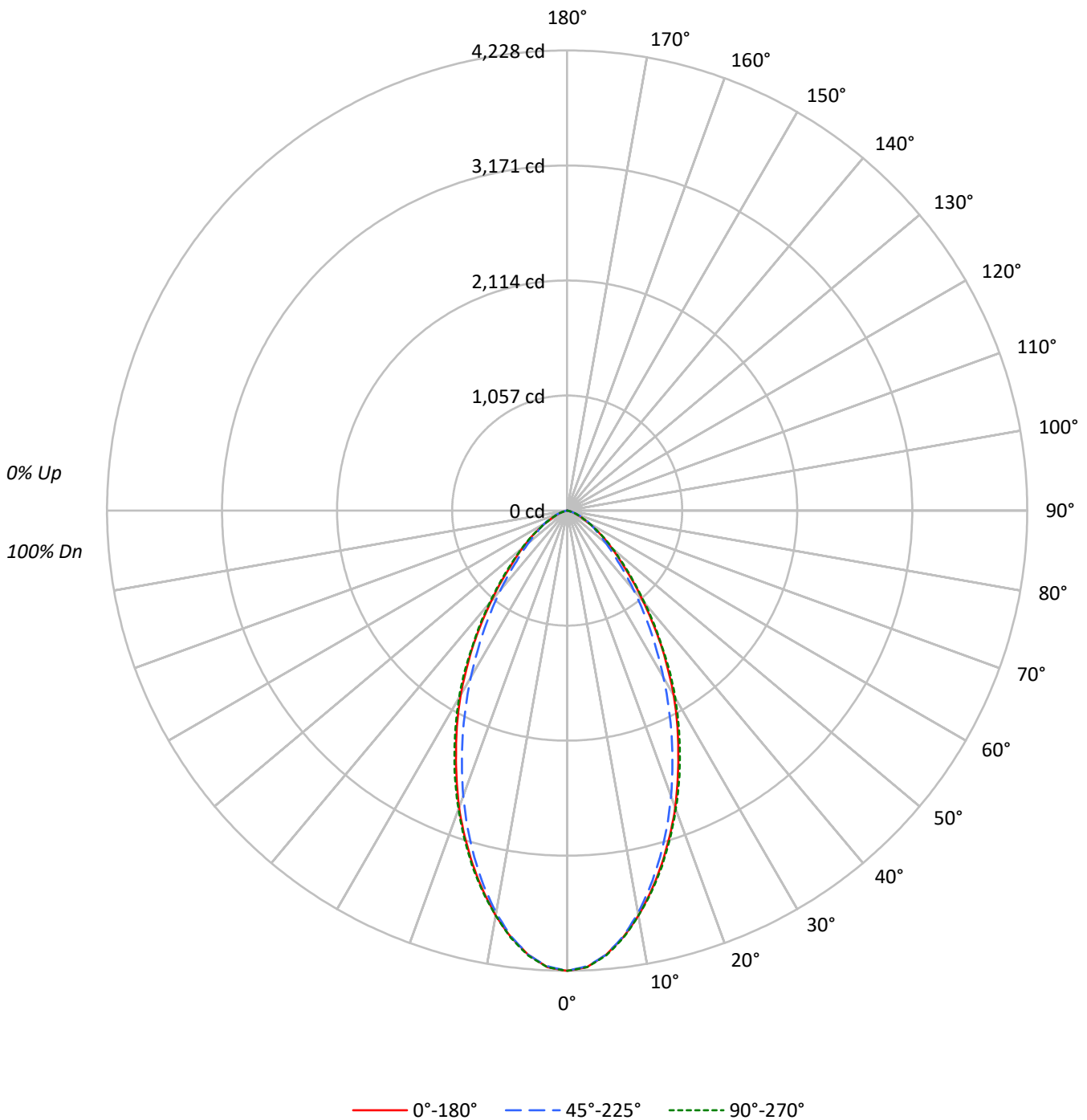
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	105	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82					82			
3	99	91	85	81	97	90	84	80	87	83	79	85	81	77	82	79	76	75					75			
4	93	84	77	72	91	83	77	72	81	75	71	78	74	70	76	73	69	68					68			
5	87	77	71	66	85	76	70	65	75	69	65	73	68	64	71	67	64	62					62			
6	82	72	65	60	81	71	64	60	69	64	59	68	63	59	66	62	58	57					57			
7	77	67	60	55	76	66	60	55	65	59	55	63	58	54	62	58	54	52					52			
8	73	62	56	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42					42			

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

	0°	45°	90°
0°	182052	182052	182052
5°	177038	177038	177362
10°	165217	164063	165217
15°	149770	146909	150443
20°	133021	127830	133713
25°	114786	107788	116396
30°	97225	88028	98727
35°	78779	69449	79572
40°	60898	53260	62174
45°	45978	39999	47585
50°	35655	31107	36666
55°	27204	24651	27774
60°	19831	20804	19831
65°	14232	16158	13845
70°	9983	11405	9983
75°	5656	6288	5656
80°	1884	1884	1884
85°	1877	1877	1877



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	380.6	8.8
10°-20°	928.5	21.4
20°-30°	1073.3	24.8
30°-40°	880.4	20.3
40°-50°	556.5	12.9
50°-60°	315.9	7.3
60°-70°	150.0	3.5
70°-80°	41.9	1.0
80°-90°	3.1	0.1
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°	2382.4	55.0
0°-40°	3262.9	75.4
0°-60°	4135.3	95.5
0°-90°	4330.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4330.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4228	4228	4228	4228	4228	
5°	4096	4096	4096	4108	4104	381
15°	3360	3334	3296	3341	3375	938
25°	2416	2329	2269	2348	2450	1108
35°	1499	1389	1321	1412	1514	935
45°	755	695	657	706	782	596
55°	362	347	328	355	370	328
65°	140	147	159	147	136	142
75°	34	38	38	38	34	38
85°	4	4	4	4	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4228.3	4228.3	4228.3	4228.3	4228.3
2.5°	4198.1	4194.3	4190.5	4194.3	4198.1
5°	4096.2	4096.2	4096.2	4107.5	4103.7
7.5°	3952.7	3948.9	3945.2	3956.5	3960.3
10°	3779.0	3763.9	3752.6	3771.5	3779.0
12.5°	3575.2	3556.3	3533.6	3560.1	3586.5
15°	3360.0	3333.6	3295.8	3341.1	3375.1
17.5°	3133.5	3084.4	3046.6	3095.7	3148.6
20°	2903.2	2842.8	2789.9	2842.8	2918.3
22.5°	2657.8	2578.5	2525.7	2593.6	2688.0
25°	2416.2	2329.3	2268.9	2348.2	2450.1
27.5°	2185.9	2080.2	2012.2	2102.8	2216.1
30°	1955.6	1842.3	1770.6	1861.2	1985.8
32.5°	1721.5	1612.0	1536.5	1634.7	1755.5
35°	1498.8	1389.3	1321.3	1411.9	1513.9
37.5°	1279.8	1177.9	1125.0	1196.8	1310.0
40°	1083.5	992.9	947.6	1011.8	1106.2
42.5°	913.6	830.6	792.8	845.7	936.3
45°	755.1	694.6	656.9	706.0	781.5
47.5°	634.2	581.4	551.2	592.7	653.1
50°	532.3	490.8	464.4	498.3	547.4
52.5°	445.5	411.5	388.9	419.1	456.8
55°	362.4	347.3	328.4	354.9	370.0
57.5°	286.9	283.1	283.1	286.9	290.7
60°	230.3	230.3	241.6	234.1	230.3
62.5°	177.4	185.0	203.9	185.0	177.4
65°	139.7	147.2	158.6	147.2	135.9
67.5°	105.7	113.3	120.8	113.3	101.9
70°	79.3	86.8	90.6	86.8	79.3
72.5°	56.6	60.4	60.4	60.4	52.9
75°	34.0	37.8	37.8	37.8	34.0
77.5°	11.3	18.9	18.9	18.9	11.3
80°	7.6	7.6	7.6	7.6	7.6
82.5°	3.8	3.8	3.8	3.8	3.8
85°	3.8	3.8	3.8	3.8	3.8
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)