

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: P253087

Luminaire Tested: **PRS640D010-S6M24-61SWDMW**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P253087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-61SWDMW  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3830.7 lumens  
Efficiency: N/A  
Efficacy: 100.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

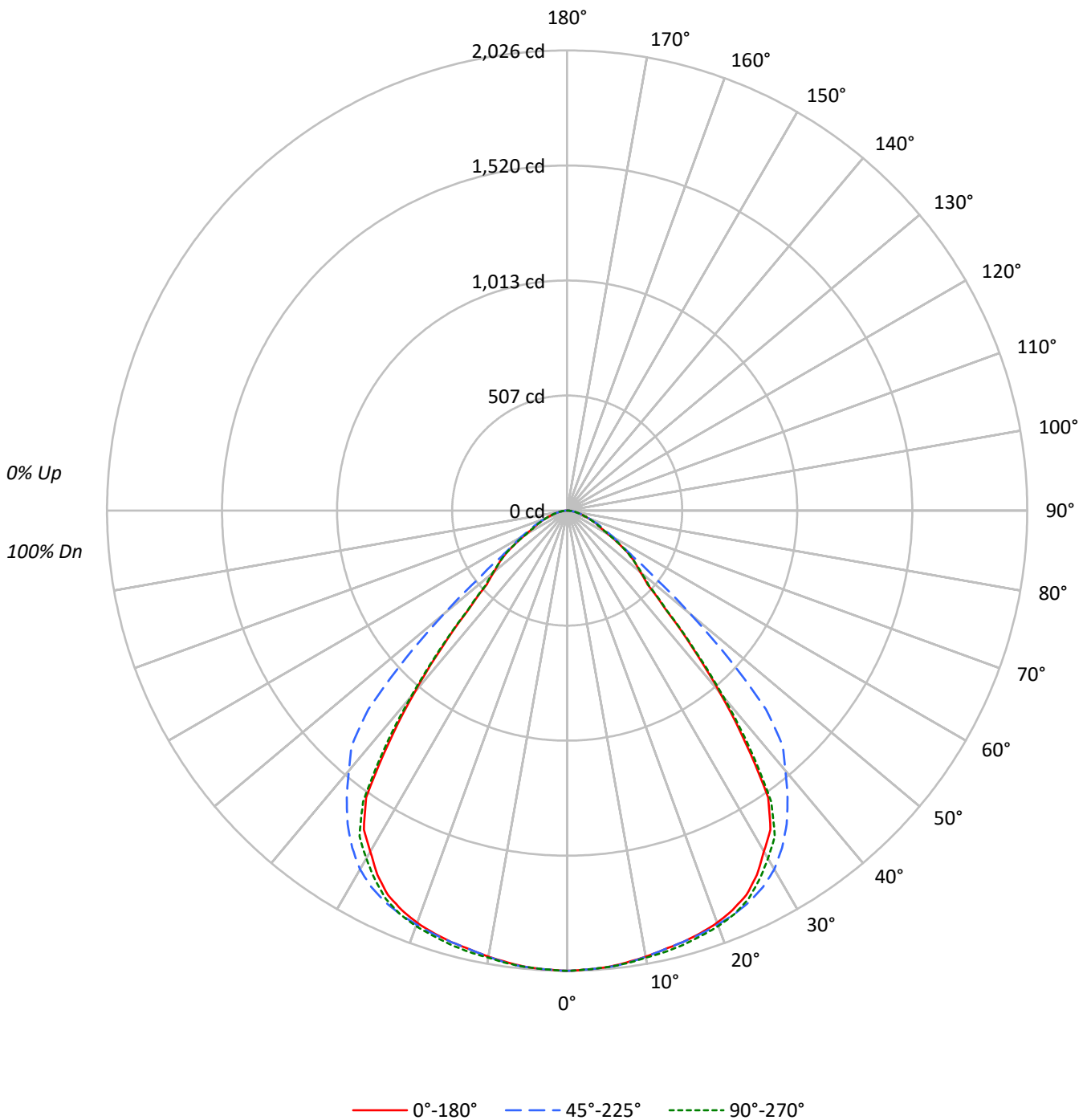
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	109	106	103	100	102	99	97	98	96	94	94	93	91					89				
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81					79				
3	97	88	82	76	94	87	81	76	84	79	75	81	77	73	79	75	72					70				
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65					63				
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58					56				
6	78	67	59	54	76	66	59	54	64	58	53	63	57	53	61	56	52					51				
7	73	61	54	49	71	61	53	48	59	53	48	58	52	48	57	51	47					46				
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43					42				
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	43	40					38				
10	60	49	42	37	59	48	41	37	47	41	37	46	41	37	46	40	36					35				

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

	0°	45°	90°
0°	87248	87248	87248
5°	87236	87236	87236
10°	87204	87204	87379
15°	87674	87674	88204
20°	88485	88847	89209
25°	88728	90239	89674
30°	86154	90688	87928
35°	81081	88581	82332
40°	58841	84027	60179
45°	36942	75333	37666
50°	28153	47283	28689
55°	24704	26491	24704
60°	18101	20150	18101
65°	14946	16158	14946
70°	12475	12979	12475
75°	10547	10547	10547
80°	8852	8852	8852
85°	7855	7855	7855



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.9	5.0
10°-20°	557.4	14.6
20°-30°	867.4	22.6
30°-40°	991.3	25.9
40°-50°	663.1	17.3
50°-60°	317.4	8.3
60°-70°	154.7	4.0
70°-80°	69.6	1.8
80°-90°	17.8	0.5
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°	1616.8	42.2
0°-40°	2608.0	68.1
0°-60°	3588.5	93.7
0°-90°	3830.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3830.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2026	2026	2026	2026	2026	
5°	2018	2018	2018	2018	2018	192
15°	1967	1967	1967	1975	1979	556
25°	1868	1880	1900	1896	1888	855
35°	1543	1630	1685	1654	1566	916
45°	607	781	1237	793	619	503
55°	329	353	353	357	329	287
65°	147	151	159	151	147	147
75°	63	63	63	63	63	68
85°	16	16	16	16	16	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2026.4	2026.4	2026.4	2026.4	2026.4
2.5°	2022.4	2022.4	2022.4	2022.4	2022.4
5°	2018.4	2018.4	2018.4	2018.4	2018.4
7.5°	2006.5	2006.5	2010.5	2006.5	2010.5
10°	1994.6	1994.6	1994.6	1998.6	1998.6
12.5°	1978.8	1978.8	1978.8	1986.7	1990.7
15°	1966.9	1966.9	1966.9	1974.8	1978.8
17.5°	1951.0	1951.0	1955.0	1962.9	1962.9
20°	1931.2	1935.1	1939.1	1947.0	1947.0
22.5°	1903.4	1911.4	1923.3	1927.2	1923.3
25°	1867.7	1879.6	1899.5	1895.5	1887.6
27.5°	1808.3	1836.0	1867.7	1851.9	1832.0
30°	1732.9	1776.5	1824.1	1792.4	1768.6
32.5°	1665.5	1701.2	1760.7	1725.0	1701.2
35°	1542.6	1629.8	1685.3	1653.6	1566.4
37.5°	1292.7	1487.1	1594.1	1510.8	1324.5
40°	1046.9	1253.1	1495.0	1269.0	1070.7
42.5°	812.9	1011.2	1403.8	1027.1	828.8
45°	606.7	781.2	1237.2	793.1	618.6
47.5°	479.8	579.0	963.6	590.9	487.8
50°	420.3	460.0	705.9	467.9	428.3
52.5°	376.7	400.5	491.7	404.5	376.7
55°	329.1	352.9	352.9	356.9	329.1
57.5°	265.7	301.4	277.6	301.4	269.7
60°	210.2	237.9	234.0	237.9	210.2
62.5°	170.5	186.4	190.3	186.4	170.5
65°	146.7	150.7	158.6	150.7	146.7
67.5°	122.9	126.9	126.9	126.9	119.0
70°	99.1	103.1	103.1	103.1	99.1
72.5°	79.3	83.3	83.3	83.3	79.3
75°	63.4	63.4	63.4	63.4	63.4
77.5°	47.6	51.6	47.6	51.6	47.6
80°	35.7	35.7	35.7	35.7	35.7
82.5°	23.8	23.8	23.8	23.8	23.8
85°	15.9	15.9	15.9	15.9	15.9
87.5°	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)