

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: P252997

Luminaire Tested: **PRS640D010-S6M24-64SWDC**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252997  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS640D010-S6M24-64SWDC  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, SHALLOW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4124.1 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.3 / 1.32 / 1.41  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

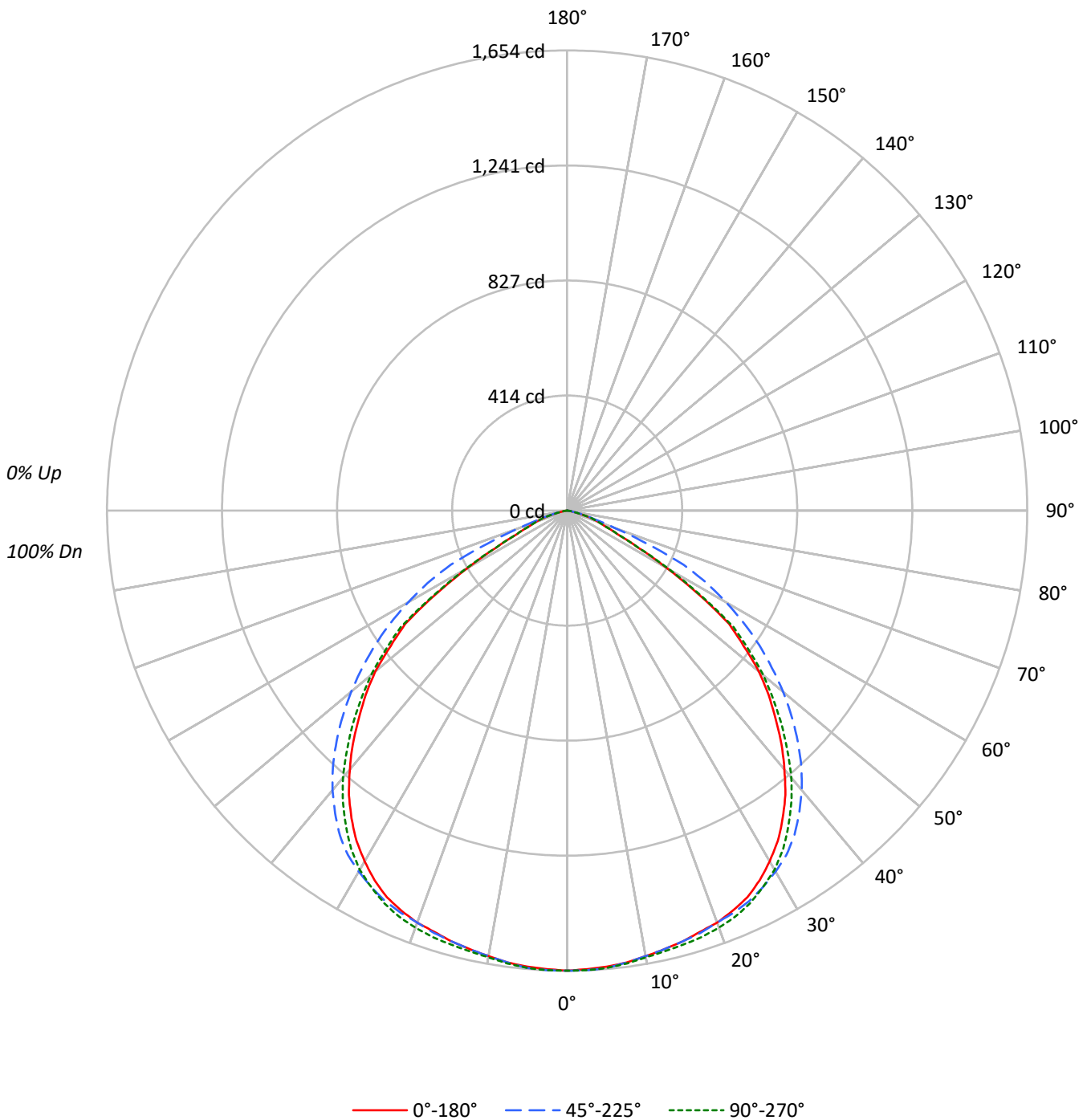
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90					88				
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78					76				
3	94	84	77	72	91	83	76	71	80	74	70	77	73	68	75	71	67					65				
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59					57				
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52					50				
6	74	61	53	47	72	60	52	47	59	52	46	57	51	46	55	50	46					44				
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41					39				
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36					35				
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33					31				
10	56	43	35	30	55	43	35	30	42	35	30	41	34	30	40	34	30					28				

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

	0°	45°	90°
0°	71197	71197	71197
5°	71132	71300	71300
10°	71106	71106	71276
15°	71457	71457	71979
20°	72211	72211	73099
25°	72842	73578	73944
30°	72367	74490	74107
35°	71000	74879	72839
40°	68289	73741	70470
45°	64525	71381	66413
50°	60318	67860	61624
55°	53319	63227	54783
60°	35762	56825	36770
65°	20172	47058	20172
70°	15144	22962	14666
75°	9033	10331	9682
80°	3843	4810	3843
85°	1927	1927	1927



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.7	3.8
10°-20°	454.4	11.0
20°-30°	711.9	17.3
30°-40°	869.7	21.1
40°-50°	864.7	21.0
50°-60°	682.7	16.6
60°-70°	305.6	7.4
70°-80°	71.2	1.7
80°-90°	7.4	0.2
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°	1322.9	32.1
0°-40°	2192.6	53.2
0°-60°	3740.0	90.7
0°-90°	4124.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4124.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1646	1646	1650	1650	1650	156
15°	1603	1599	1603	1607	1615	453
25°	1533	1537	1549	1553	1556	705
35°	1351	1378	1425	1405	1386	843
45°	1060	1110	1172	1137	1091	818
55°	710	765	842	780	730	607
65°	198	260	462	264	198	222
75°	54	66	62	66	58	62
85°	4	4	4	4	4	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1653.6	1653.6	1653.6	1653.6	1653.6
2.5°	1649.7	1653.6	1653.6	1653.6	1653.6
5°	1645.8	1645.8	1649.7	1649.7	1649.7
7.5°	1638.1	1638.1	1638.1	1641.9	1641.9
10°	1626.4	1626.4	1626.4	1630.3	1630.3
12.5°	1614.8	1614.8	1614.8	1618.7	1622.5
15°	1603.1	1599.2	1603.1	1607.0	1614.8
17.5°	1587.6	1591.5	1591.5	1599.2	1607.0
20°	1576.0	1576.0	1576.0	1587.6	1595.4
22.5°	1556.5	1556.5	1564.3	1572.1	1579.8
25°	1533.3	1537.1	1548.8	1552.7	1556.5
27.5°	1498.3	1510.0	1525.5	1529.4	1525.5
30°	1455.6	1471.2	1498.3	1494.4	1490.6
32.5°	1409.0	1428.5	1467.3	1455.6	1444.0
35°	1350.8	1378.0	1424.6	1405.2	1385.8
37.5°	1288.7	1323.6	1370.2	1350.8	1323.6
40°	1215.0	1257.7	1312.0	1284.8	1253.8
42.5°	1141.2	1187.8	1246.0	1211.1	1172.3
45°	1059.7	1110.2	1172.3	1137.3	1090.7
47.5°	982.1	1032.5	1094.6	1051.9	1005.4
50°	900.5	947.1	1013.1	966.5	920.0
52.5°	799.6	861.7	927.7	877.3	822.9
55°	710.3	764.7	842.3	780.2	729.8
57.5°	559.0	667.6	753.0	679.3	574.5
60°	415.3	520.1	659.9	535.7	427.0
62.5°	287.2	384.3	566.7	388.2	291.1
65°	198.0	260.1	461.9	264.0	198.0
67.5°	147.5	174.7	310.5	174.7	147.5
70°	120.3	128.1	182.4	128.1	116.5
72.5°	89.3	100.9	100.9	100.9	93.2
75°	54.3	66.0	62.1	66.0	58.2
77.5°	23.3	31.1	38.8	34.9	23.3
80°	15.5	15.5	19.4	15.5	15.5
82.5°	11.6	11.6	11.6	11.6	11.6
85°	3.9	3.9	3.9	3.9	3.9
87.5°	3.9	3.9	3.9	3.9	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)