

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: P253047

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P253047  
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-S6M24-64SWDMB-4000K  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3638.5 lumens  
Efficiency: N/A  
Efficacy: 95.8 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

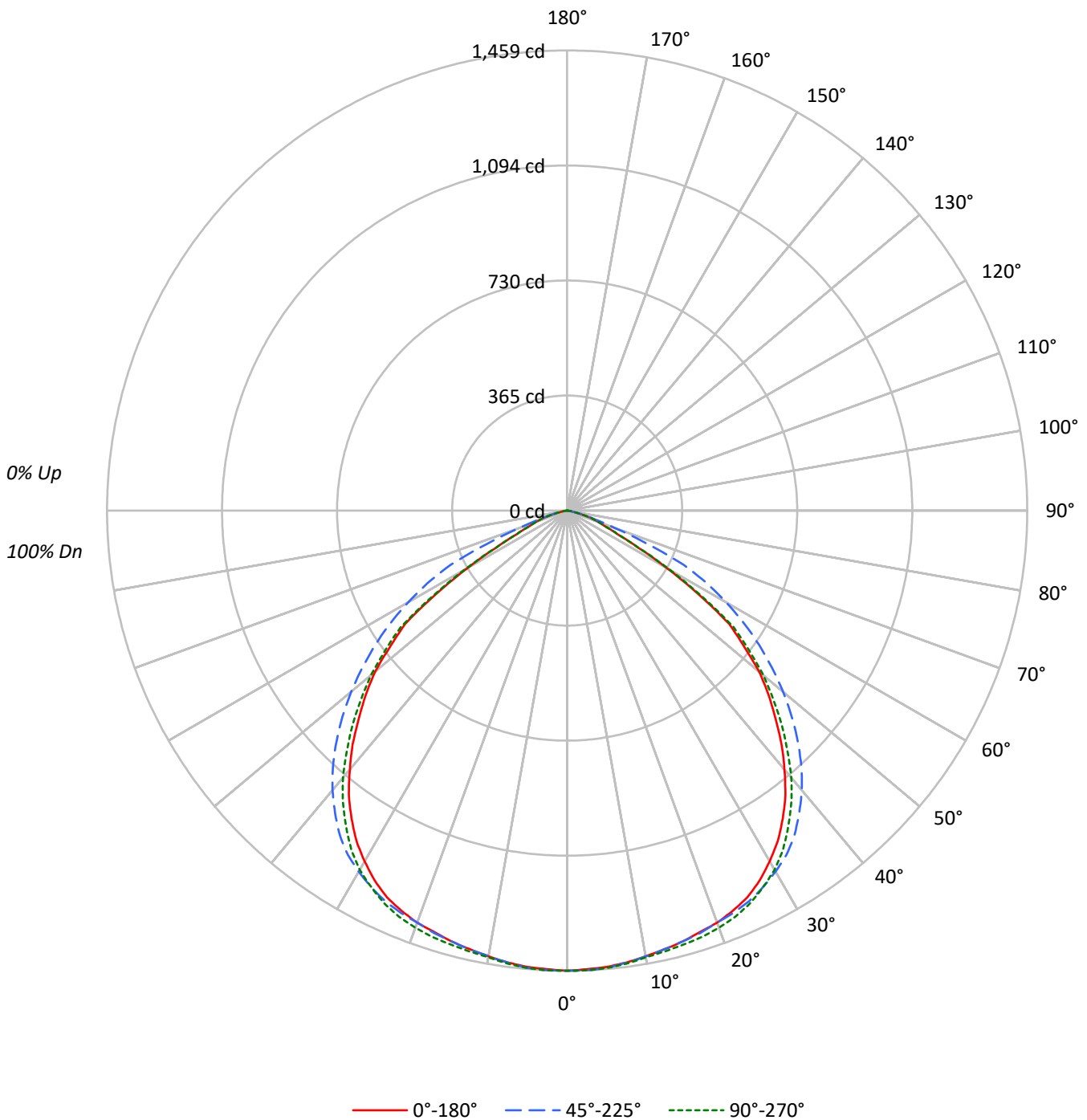
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	62814	62814	62814
5°	62756	62907	62907
10°	62734	62734	62882
15°	63046	63046	63501
20°	63707	63707	64490
25°	64262	64913	65241
30°	63846	65720	65382
35°	62643	66059	64261
40°	60246	65057	62174
45°	56926	62972	58594
50°	53218	59869	54363
55°	47043	55781	48327
60°	31551	50134	32438
65°	17798	41515	17798
70°	13369	20268	12929
75°	7968	9116	8551
80°	3397	4240	3397
85°	1680	1680	1680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.2	3.8
10°-20°	400.9	11.0
20°-30°	628.1	17.3
30°-40°	767.3	21.1
40°-50°	762.8	21.0
50°-60°	602.3	16.6
60°-70°	269.6	7.4
70°-80°	62.8	1.7
80°-90°	6.5	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°	1167.2	32.1
0°-40°	1934.5	53.2
0°-60°	3299.6	90.7
0°-90°	3638.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3638.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1452	1452	1456	1456	1456	138
15°	1414	1411	1414	1418	1425	400
25°	1353	1356	1366	1370	1373	622
35°	1192	1216	1257	1240	1223	743
45°	935	979	1034	1003	962	721
55°	627	675	743	688	644	536
65°	175	229	408	233	175	196
75°	48	58	55	58	51	54
85°	3	3	3	3	3	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1458.9	1458.9	1458.9	1458.9	1458.9
2.5°	1455.5	1458.9	1458.9	1458.9	1458.9
5°	1452.0	1452.0	1455.5	1455.5	1455.5
7.5°	1445.2	1445.2	1445.2	1448.6	1448.6
10°	1434.9	1434.9	1434.9	1438.3	1438.3
12.5°	1424.6	1424.6	1424.6	1428.1	1431.5
15°	1414.4	1410.9	1414.4	1417.8	1424.6
17.5°	1400.7	1404.1	1404.1	1410.9	1417.8
20°	1390.4	1390.4	1390.4	1400.7	1407.5
22.5°	1373.3	1373.3	1380.1	1387.0	1393.8
25°	1352.7	1356.2	1366.4	1369.9	1373.3
27.5°	1321.9	1332.2	1345.9	1349.3	1345.9
30°	1284.2	1297.9	1321.9	1318.5	1315.1
32.5°	1243.1	1260.3	1294.5	1284.2	1274.0
35°	1191.8	1215.7	1256.8	1239.7	1222.6
37.5°	1137.0	1167.8	1208.9	1191.8	1167.8
40°	1071.9	1109.6	1157.5	1133.6	1106.2
42.5°	1006.8	1047.9	1099.3	1068.5	1034.2
45°	934.9	979.4	1034.2	1003.4	962.3
47.5°	866.4	911.0	965.7	928.1	887.0
50°	794.5	835.6	893.8	852.7	811.6
52.5°	705.5	760.3	818.5	774.0	726.0
55°	626.7	674.7	743.1	688.3	643.8
57.5°	493.1	589.0	664.4	599.3	506.8
60°	366.4	458.9	582.2	472.6	376.7
62.5°	253.4	339.0	500.0	342.5	256.8
65°	174.7	229.4	407.5	232.9	174.7
67.5°	130.1	154.1	274.0	154.1	130.1
70°	106.2	113.0	161.0	113.0	102.7
72.5°	78.8	89.0	89.0	89.0	82.2
75°	47.9	58.2	54.8	58.2	51.4
77.5°	20.5	27.4	34.2	30.8	20.5
80°	13.7	13.7	17.1	13.7	13.7
82.5°	10.3	10.3	10.3	10.3	10.3
85°	3.4	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	3.4	3.4	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)