

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: P252897

Luminaire Tested: **PRS440D010-S4M24-44SWDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252897
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SWDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3592.9 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

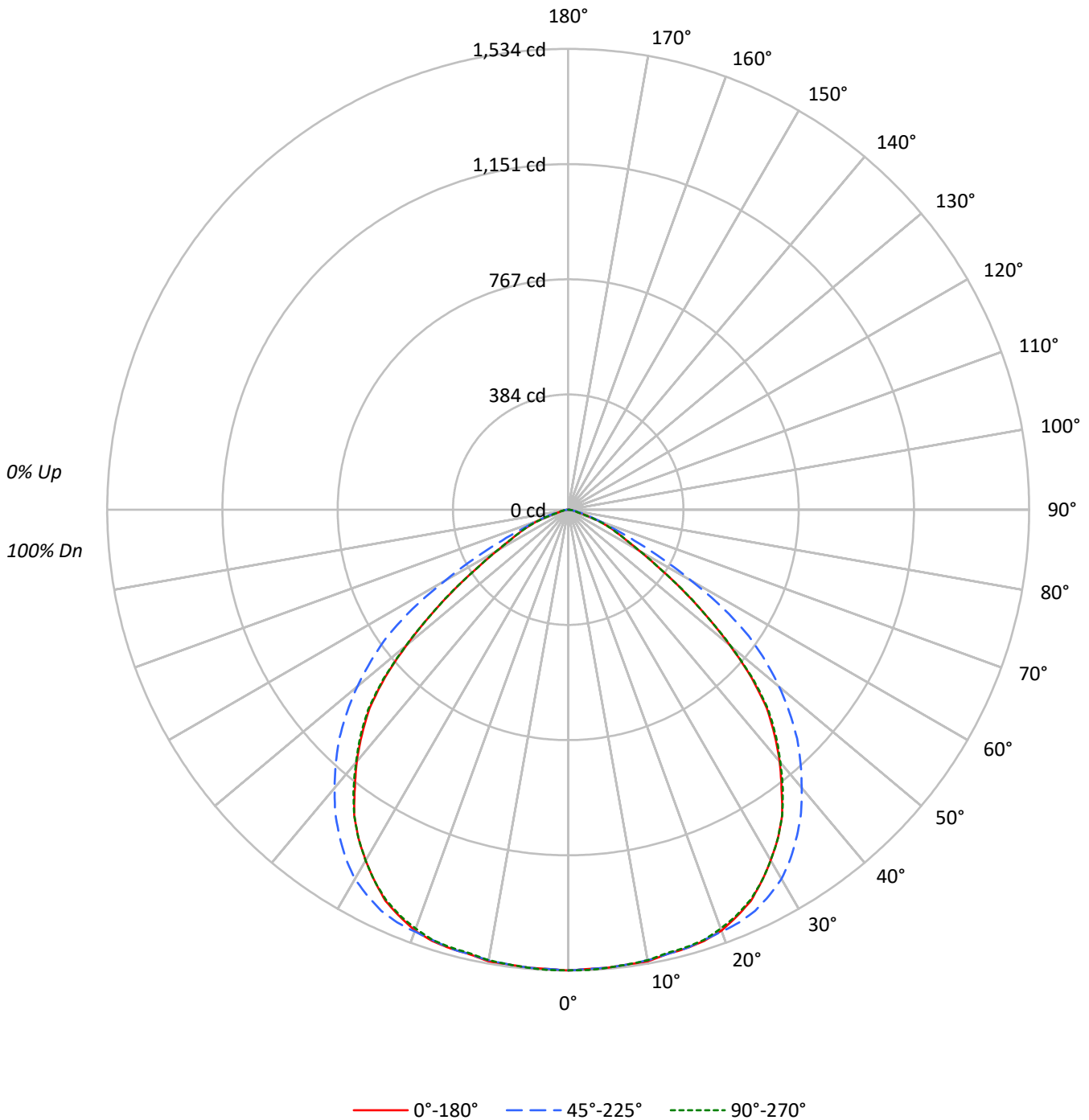
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	117387	117387	117387
5°	117559	117559	117559
10°	118638	118366	118366
15°	119832	119832	119547
20°	121434	121719	120848
25°	121389	124396	121085
30°	119151	125462	119151
35°	115971	123970	115971
40°	109403	120804	109762
45°	101148	116595	101916
50°	83666	109149	84095
55°	61400	98045	61867
60°	41502	72609	42038
65°	31659	43921	31659
70°	23141	24752	22357
75°	9493	13722	9493
80°	7846	7846	7846
85°	6235	6235	6235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.8	4.1
10°-20°	427.4	11.9
20°-30°	667.5	18.6
30°-40°	798.4	22.2
40°-50°	767.4	21.4
50°-60°	515.4	14.3
60°-70°	210.5	5.9
70°-80°	52.3	1.5
80°-90°	8.2	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°	1240.7	34.5
0°-40°	2039.1	56.8
0°-60°	3321.9	92.5
0°-90°	3592.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3592.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1534	1534	1534	1534	1534	
5°	1530	1530	1530	1530	1530	146
15°	1512	1512	1512	1509	1509	428
25°	1437	1452	1473	1448	1434	660
35°	1241	1277	1327	1280	1241	771
45°	934	1002	1077	1006	942	708
55°	460	556	735	560	464	417
65°	175	196	242	196	175	176
75°	32	36	46	36	32	47
85°	7	7	7	7	7	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1533.6	1533.6	1533.6	1533.6	1533.6
2.5°	1530.0	1530.0	1530.0	1533.6	1533.6
5°	1530.0	1530.0	1530.0	1530.0	1530.0
7.5°	1526.4	1526.4	1526.4	1526.4	1526.4
10°	1526.4	1522.9	1522.9	1522.9	1522.9
12.5°	1515.7	1515.7	1515.7	1515.7	1512.2
15°	1512.2	1512.2	1512.2	1508.6	1508.6
17.5°	1505.0	1505.0	1501.5	1501.5	1501.5
20°	1490.8	1494.3	1494.3	1490.8	1483.6
22.5°	1465.8	1476.5	1487.2	1472.9	1462.3
25°	1437.3	1451.6	1472.9	1448.0	1433.7
27.5°	1394.5	1415.9	1448.0	1415.9	1394.5
30°	1348.1	1376.7	1419.5	1376.7	1348.1
32.5°	1298.2	1330.3	1376.7	1330.3	1298.2
35°	1241.1	1276.8	1326.7	1280.4	1241.1
37.5°	1166.2	1216.2	1273.2	1223.3	1173.4
40°	1094.9	1148.4	1209.0	1152.0	1098.5
42.5°	1016.4	1077.1	1144.8	1080.6	1023.6
45°	934.4	1002.2	1077.1	1005.7	941.5
47.5°	827.4	909.4	998.6	920.1	834.6
50°	702.6	806.0	916.6	813.2	706.2
52.5°	577.8	677.6	827.4	684.8	577.8
55°	460.1	556.4	734.7	559.9	463.6
57.5°	353.1	438.7	613.4	445.8	353.1
60°	271.1	335.2	474.3	338.8	274.6
62.5°	214.0	253.2	349.5	249.7	214.0
65°	174.8	196.2	242.5	196.2	174.8
67.5°	139.1	153.4	160.5	153.4	139.1
70°	103.4	117.7	110.6	117.7	99.9
72.5°	60.6	74.9	74.9	74.9	57.1
75°	32.1	35.7	46.4	35.7	32.1
77.5°	25.0	25.0	28.5	25.0	25.0
80°	17.8	17.8	17.8	17.8	17.8
82.5°	10.7	10.7	10.7	10.7	10.7
85°	7.1	7.1	7.1	7.1	7.1
87.5°	3.6	3.6	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)