

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: P252877

Luminaire Tested: **PRS440D010-S4M24-44SWDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252877
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-S4M24-44SWDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" 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: 3812.1 lumens
Efficiency: N/A
Efficacy: 100.3 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

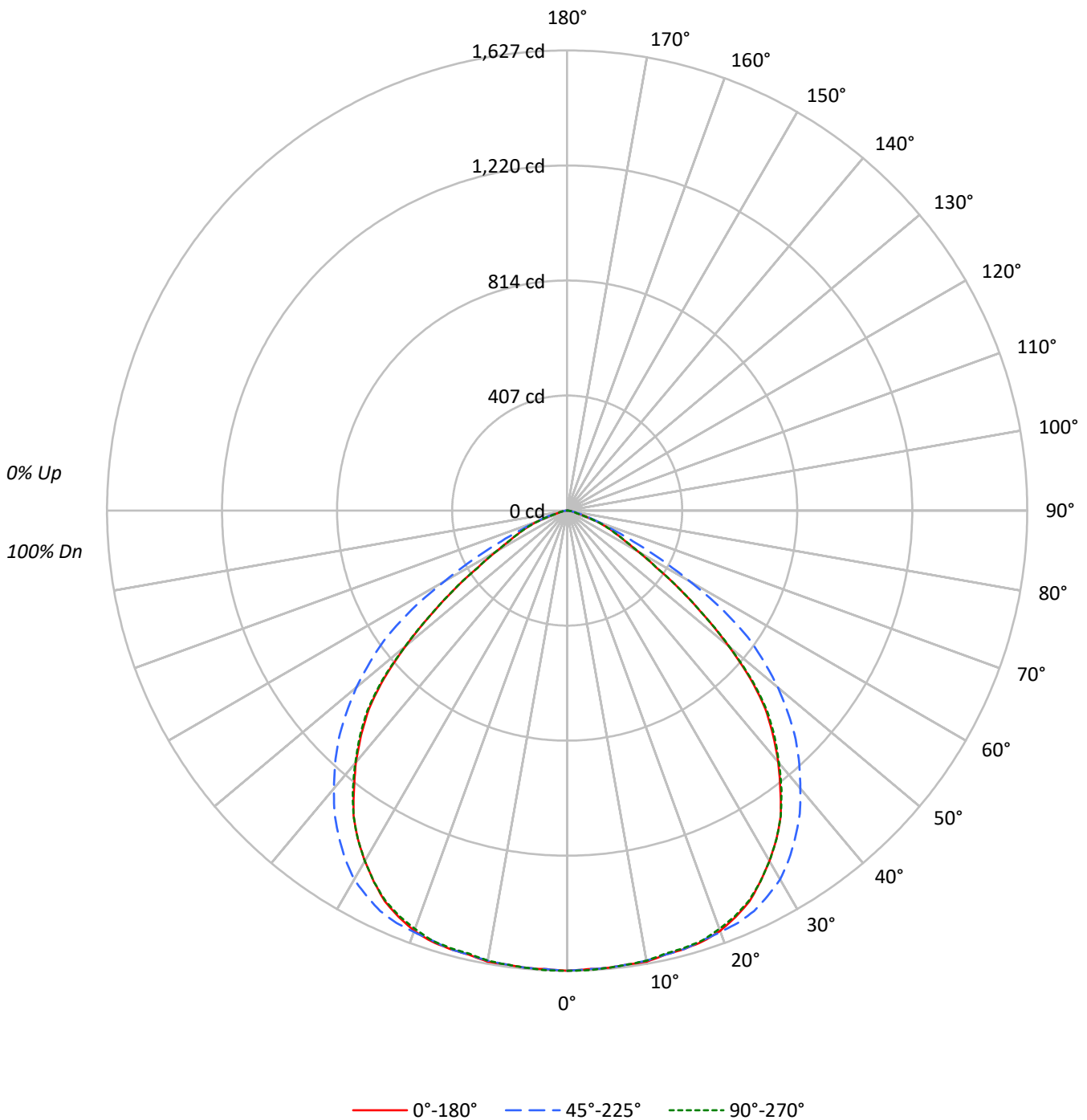
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	124544	124544	124544
5°	124728	124728	124728
10°	125874	125587	125587
15°	127138	127138	126837
20°	128839	129148	128220
25°	128787	131988	128475
30°	126417	133107	126417
35°	123045	131529	123045
40°	116077	128178	116457
45°	107318	123707	108140
50°	88763	115806	89215
55°	65137	104024	65644
60°	44028	77049	44609
65°	33579	46601	33579
70°	24551	26251	23723
75°	10085	14550	10085
80°	8331	8331	8331
85°	6675	6675	6675



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.7	4.1
10°-20°	453.4	11.9
20°-30°	708.2	18.6
30°-40°	847.1	22.2
40°-50°	814.2	21.4
50°-60°	546.9	14.3
60°-70°	223.3	5.9
70°-80°	55.5	1.5
80°-90°	8.8	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°	1316.4	34.5
0°-40°	2163.5	56.8
0°-60°	3524.5	92.5
0°-90°	3812.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3812.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1627	1627	1627	1627	1627	
5°	1623	1623	1623	1623	1623	155
15°	1604	1604	1604	1601	1601	454
25°	1525	1540	1563	1536	1521	700
35°	1317	1355	1408	1358	1317	818
45°	991	1063	1143	1067	999	751
55°	488	590	780	594	492	443
65°	185	208	257	208	185	187
75°	34	38	49	38	34	50
85°	8	8	8	8	8	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1627.1	1627.1	1627.1	1627.1	1627.1
2.5°	1623.3	1623.3	1623.3	1627.1	1627.1
5°	1623.3	1623.3	1623.3	1623.3	1623.3
7.5°	1619.5	1619.5	1619.5	1619.5	1619.5
10°	1619.5	1615.8	1615.8	1615.8	1615.8
12.5°	1608.2	1608.2	1608.2	1608.2	1604.4
15°	1604.4	1604.4	1604.4	1600.6	1600.6
17.5°	1596.8	1596.8	1593.0	1593.0	1593.0
20°	1581.7	1585.5	1585.5	1581.7	1574.1
22.5°	1555.2	1566.6	1577.9	1562.8	1551.4
25°	1524.9	1540.1	1562.8	1536.3	1521.2
27.5°	1479.5	1502.2	1536.3	1502.2	1479.5
30°	1430.3	1460.6	1506.0	1460.6	1430.3
32.5°	1377.4	1411.4	1460.6	1411.4	1377.4
35°	1316.8	1354.7	1407.6	1358.4	1316.8
37.5°	1237.4	1290.3	1350.9	1297.9	1244.9
40°	1161.7	1218.4	1282.8	1222.2	1165.5
42.5°	1078.4	1142.8	1214.7	1146.5	1086.0
45°	991.4	1063.3	1142.8	1067.1	999.0
47.5°	877.9	964.9	1059.5	976.3	885.4
50°	745.4	855.2	972.5	862.7	749.2
52.5°	613.0	719.0	877.9	726.5	613.0
55°	488.1	590.3	779.5	594.1	491.9
57.5°	374.6	465.4	650.8	473.0	374.6
60°	287.6	355.7	503.3	359.5	291.4
62.5°	227.0	268.7	370.8	264.9	227.0
65°	185.4	208.1	257.3	208.1	185.4
67.5°	147.6	162.7	170.3	162.7	147.6
70°	109.7	124.9	117.3	124.9	106.0
72.5°	64.3	79.5	79.5	79.5	60.5
75°	34.1	37.8	49.2	37.8	34.1
77.5°	26.5	26.5	30.3	26.5	26.5
80°	18.9	18.9	18.9	18.9	18.9
82.5°	11.4	11.4	11.4	11.4	11.4
85°	7.6	7.6	7.6	7.6	7.6
87.5°	3.8	3.8	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)