

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: P252892

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252892
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
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3777.6 lumens
Efficiency: N/A
Efficacy: 99.4 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

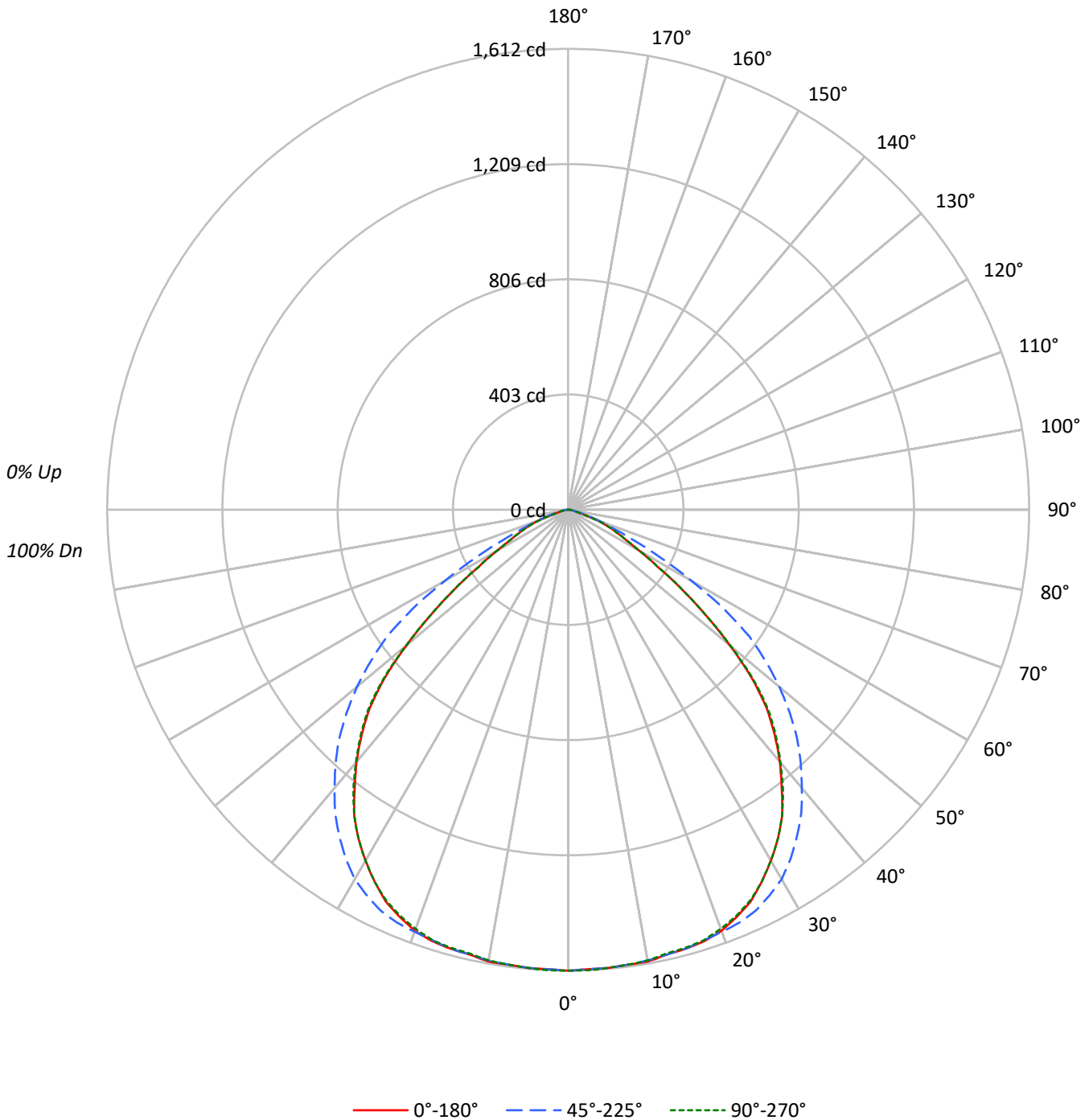
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	123426	123426	123426
5°	123606	123606	123606
10°	124747	124452	124452
15°	125997	125997	125696
20°	127682	127983	127071
25°	127630	130797	127318
30°	125285	131914	125285
35°	121942	130352	121942
40°	115028	127019	115408
45°	106354	122592	107166
50°	87965	114758	88417
55°	64549	103090	65057
60°	43630	76344	44196
65°	33271	46185	33271
70°	24327	26005	23499
75°	9966	14403	9966
80°	8243	8243	8243
85°	6587	6587	6587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.3	4.1
10°-20°	449.4	11.9
20°-30°	701.9	18.6
30°-40°	839.5	22.2
40°-50°	806.9	21.4
50°-60°	541.9	14.3
60°-70°	221.3	5.9
70°-80°	54.9	1.5
80°-90°	8.6	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°	1304.5	34.5
0°-40°	2144.0	56.8
0°-60°	3492.8	92.5
0°-90°	3777.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3777.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1612	1612	1612	1612	1612	
5°	1609	1609	1609	1609	1609	153
15°	1590	1590	1590	1586	1586	450
25°	1511	1526	1549	1522	1508	694
35°	1305	1342	1395	1346	1305	810
45°	982	1054	1132	1058	990	744
55°	484	585	772	589	488	439
65°	184	206	255	206	184	185
75°	34	38	49	38	34	49
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°	1612.5	1612.5	1612.5	1612.5	1612.5
2.5°	1608.7	1608.7	1608.7	1612.5	1612.5
5°	1608.7	1608.7	1608.7	1608.7	1608.7
7.5°	1605.0	1605.0	1605.0	1605.0	1605.0
10°	1605.0	1601.2	1601.2	1601.2	1601.2
12.5°	1593.7	1593.7	1593.7	1593.7	1590.0
15°	1590.0	1590.0	1590.0	1586.2	1586.2
17.5°	1582.5	1582.5	1578.7	1578.7	1578.7
20°	1567.5	1571.2	1571.2	1567.5	1560.0
22.5°	1541.2	1552.5	1563.7	1548.7	1537.5
25°	1511.2	1526.2	1548.7	1522.5	1507.5
27.5°	1466.2	1488.7	1522.5	1488.7	1466.2
30°	1417.5	1447.5	1492.5	1447.5	1417.5
32.5°	1365.0	1398.7	1447.5	1398.7	1365.0
35°	1305.0	1342.5	1395.0	1346.2	1305.0
37.5°	1226.2	1278.7	1338.7	1286.2	1233.7
40°	1151.2	1207.5	1271.2	1211.2	1155.0
42.5°	1068.7	1132.5	1203.7	1136.2	1076.2
45°	982.5	1053.7	1132.5	1057.5	990.0
47.5°	870.0	956.2	1050.0	967.5	877.5
50°	738.7	847.5	963.7	855.0	742.5
52.5°	607.5	712.5	870.0	720.0	607.5
55°	483.7	585.0	772.5	588.7	487.5
57.5°	371.2	461.2	645.0	468.7	371.2
60°	285.0	352.5	498.7	356.2	288.7
62.5°	225.0	266.2	367.5	262.5	225.0
65°	183.7	206.2	255.0	206.2	183.7
67.5°	146.2	161.2	168.7	161.2	146.2
70°	108.7	123.7	116.2	123.7	105.0
72.5°	63.7	78.7	78.7	78.7	60.0
75°	33.7	37.5	48.7	37.5	33.7
77.5°	26.2	26.2	30.0	26.2	26.2
80°	18.7	18.7	18.7	18.7	18.7
82.5°	11.2	11.2	11.2	11.2	11.2
85°	7.5	7.5	7.5	7.5	7.5
87.5°	3.7	3.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)