

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: P252887

Luminaire Tested: **PRS440D010-S4M24-44SWDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252887
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3401.5 lumens
Efficiency: N/A
Efficacy: 89.5 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

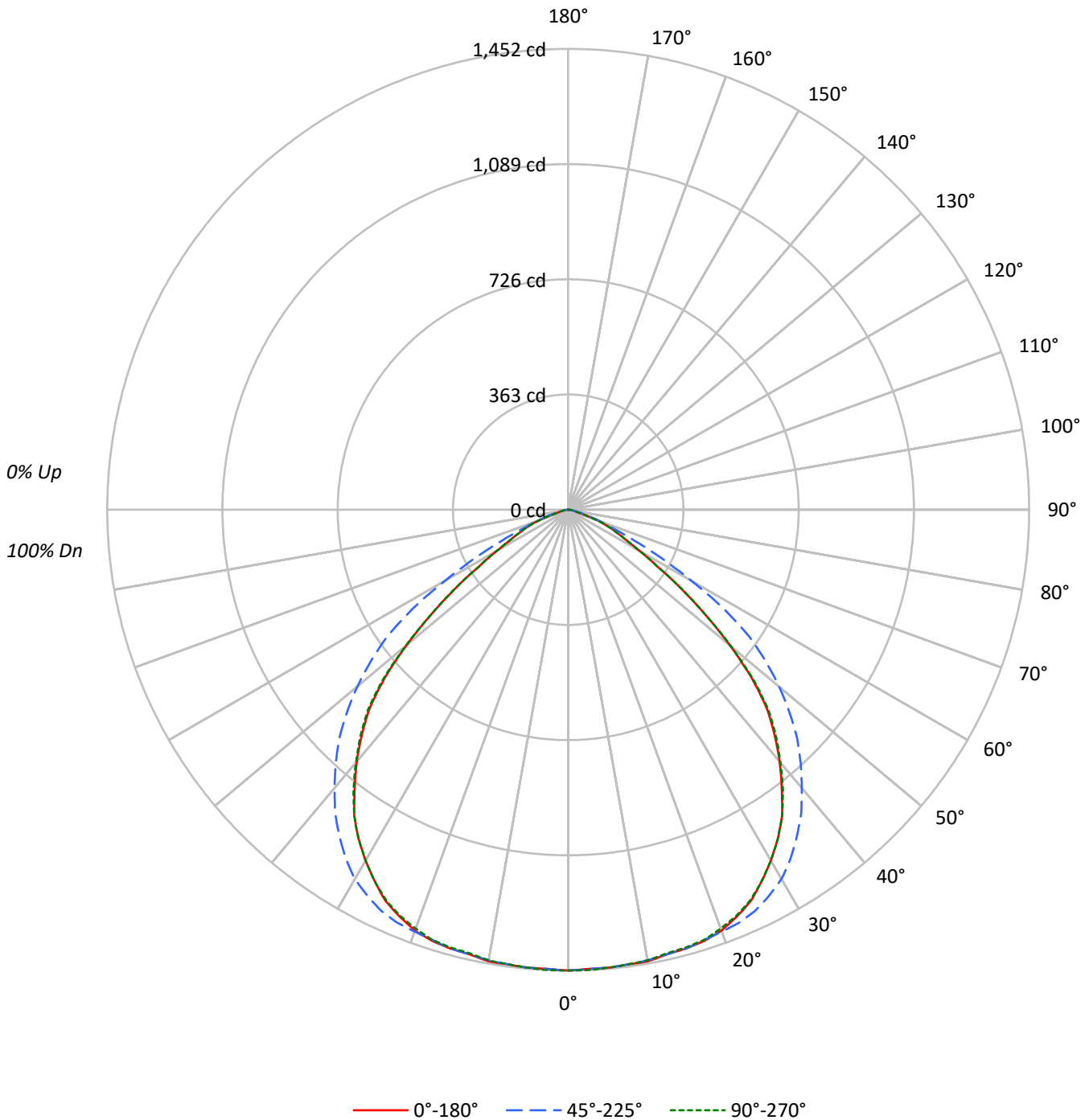
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	111133	111133	111133
5°	111297	111297	111297
10°	112319	112055	112055
15°	113445	113445	113176
20°	114959	115235	114413
25°	114920	117774	114633
30°	112805	118771	112805
35°	109795	117363	109795
40°	103577	114369	103907
45°	95757	110381	96493
50°	79212	103326	79605
55°	58131	92814	58571
60°	39282	68751	39803
65°	29957	41584	29957
70°	21910	23432	21149
75°	8991	12983	8991
80°	7449	7449	7449
85°	5972	5972	5972



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	4.1
10°-20°	404.6	11.9
20°-30°	631.9	18.6
30°-40°	755.9	22.2
40°-50°	726.5	21.4
50°-60°	488.0	14.3
60°-70°	199.2	5.9
70°-80°	49.5	1.5
80°-90°	7.8	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°	1174.6	34.5
0°-40°	1930.4	56.8
0°-60°	3144.9	92.5
0°-90°	3401.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3401.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1448	1448	1448	1448	1448	138
15°	1432	1432	1432	1428	1428	405
25°	1361	1374	1394	1371	1357	624
35°	1175	1209	1256	1212	1175	730
45°	885	949	1020	952	891	670
55°	436	527	696	530	439	395
65°	165	186	230	186	165	167
75°	30	34	44	34	30	44
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°	1451.9	1451.9	1451.9	1451.9	1451.9
2.5°	1448.5	1448.5	1448.5	1451.9	1451.9
5°	1448.5	1448.5	1448.5	1448.5	1448.5
7.5°	1445.1	1445.1	1445.1	1445.1	1445.1
10°	1445.1	1441.7	1441.7	1441.7	1441.7
12.5°	1435.0	1435.0	1435.0	1435.0	1431.6
15°	1431.6	1431.6	1431.6	1428.2	1428.2
17.5°	1424.8	1424.8	1421.5	1421.5	1421.5
20°	1411.3	1414.7	1414.7	1411.3	1404.6
22.5°	1387.7	1397.8	1408.0	1394.5	1384.3
25°	1360.7	1374.2	1394.5	1370.8	1357.3
27.5°	1320.2	1340.4	1370.8	1340.4	1320.2
30°	1276.3	1303.3	1343.8	1303.3	1276.3
32.5°	1229.0	1259.4	1303.3	1259.4	1229.0
35°	1175.0	1208.8	1256.0	1212.1	1175.0
37.5°	1104.1	1151.4	1205.4	1158.1	1110.8
40°	1036.6	1087.2	1144.6	1090.6	1039.9
42.5°	962.3	1019.7	1083.8	1023.1	969.0
45°	884.6	948.8	1019.7	952.1	891.4
47.5°	783.3	861.0	945.4	871.1	790.1
50°	665.2	763.1	867.7	769.8	668.5
52.5°	547.0	641.5	783.3	648.3	547.0
55°	435.6	526.7	695.5	530.1	438.9
57.5°	334.3	415.3	580.7	422.1	334.3
60°	256.6	317.4	449.1	320.8	260.0
62.5°	202.6	239.7	330.9	236.3	202.6
65°	165.4	185.7	229.6	185.7	165.4
67.5°	131.7	145.2	151.9	145.2	131.7
70°	97.9	111.4	104.7	111.4	94.5
72.5°	57.4	70.9	70.9	70.9	54.0
75°	30.4	33.8	43.9	33.8	30.4
77.5°	23.6	23.6	27.0	23.6	23.6
80°	16.9	16.9	16.9	16.9	16.9
82.5°	10.1	10.1	10.1	10.1	10.1
85°	6.8	6.8	6.8	6.8	6.8
87.5°	3.4	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)