

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: P252872

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252872
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3432.3 lumens
Efficiency: N/A
Efficacy: 90.3 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

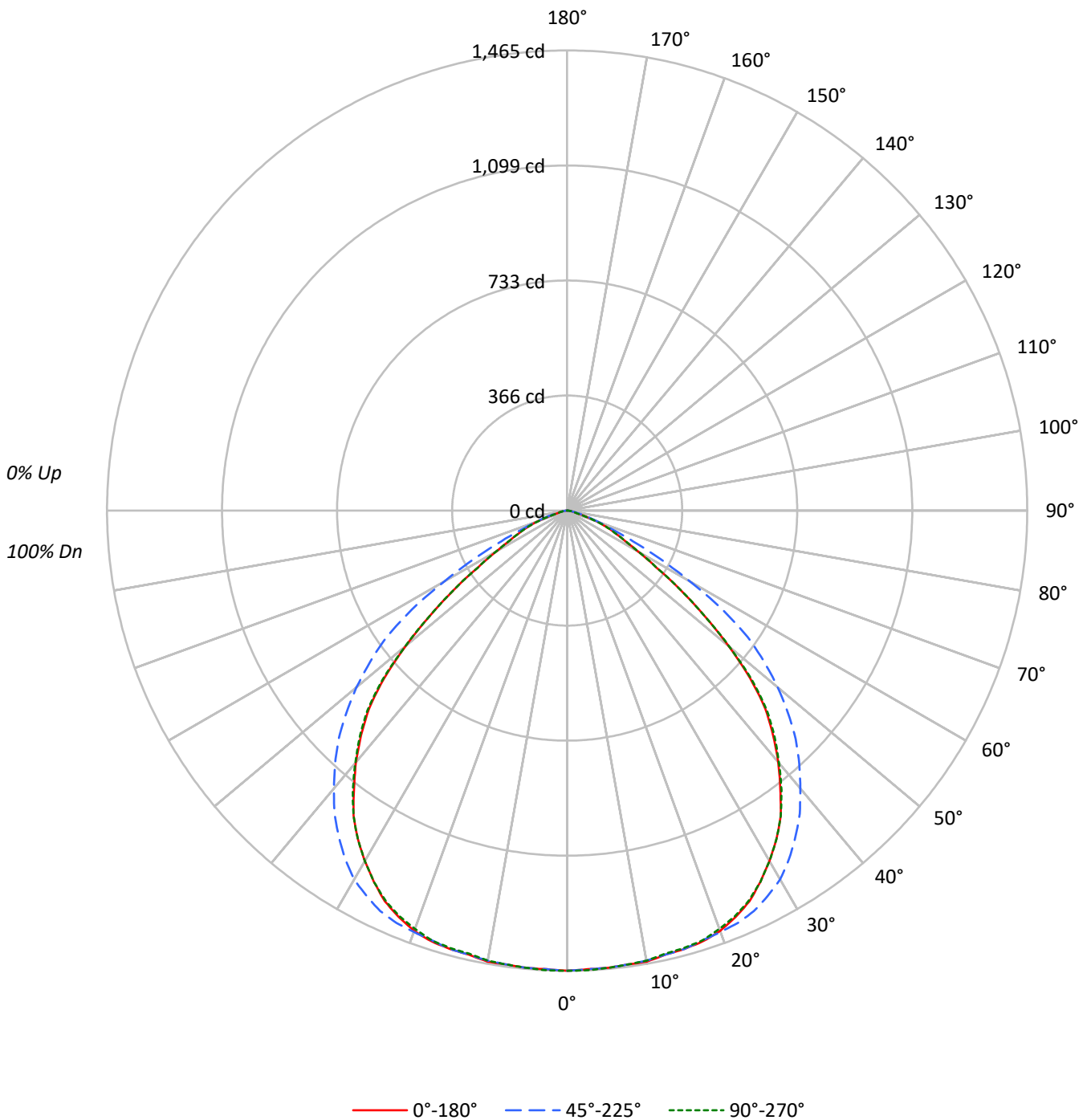
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252872

CATALOG NUMBER: PRS440D010-S4M24-44SWDC-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P252872

CATALOG NUMBER: PRS440D010-S4M24-44SWDC-3000K

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°	112136	112136	112136
5°	112303	112303	112303
10°	113337	113073	113073
15°	114475	114475	114206
20°	116009	116286	115447
25°	115958	118838	115671
30°	113831	119850	113831
35°	110794	118429	110794
40°	104517	115408	104856
45°	96634	111377	97370
50°	79927	104267	80332
55°	58651	93668	59105
60°	39634	69364	40155
65°	30228	41965	30228
70°	22111	23633	21350
75°	9079	13101	9079
80°	7494	7494	7494
85°	5972	5972	5972



TEST NUMBER: P252872

CATALOG NUMBER: PRS440D010-S4M24-44SWDC-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.3	4.1
10°-20°	408.3	11.9
20°-30°	637.7	18.6
30°-40°	762.7	22.2
40°-50°	733.1	21.4
50°-60°	492.4	14.3
60°-70°	201.0	5.9
70°-80°	49.9	1.5
80°-90°	7.9	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°	1185.2	34.5
0°-40°	1948.0	56.8
0°-60°	3173.5	92.5
0°-90°	3432.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3432.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1462	1462	1462	1462	1462	139
15°	1445	1445	1445	1441	1441	409
25°	1373	1387	1407	1383	1370	630
35°	1186	1220	1267	1223	1186	736
45°	893	957	1029	961	900	676
55°	440	532	702	535	443	399
65°	167	187	232	187	167	169
75°	31	34	44	34	31	45
85°	7	7	7	7	7	8
90°	0	0	0	0	0	



TEST NUMBER: P252872

CATALOG NUMBER: PRS440D010-S4M24-44SWDC-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1465.0	1465.0	1465.0	1465.0	1465.0
2.5°	1461.6	1461.6	1461.6	1465.0	1465.0
5°	1461.6	1461.6	1461.6	1461.6	1461.6
7.5°	1458.2	1458.2	1458.2	1458.2	1458.2
10°	1458.2	1454.8	1454.8	1454.8	1454.8
12.5°	1448.0	1448.0	1448.0	1448.0	1444.6
15°	1444.6	1444.6	1444.6	1441.2	1441.2
17.5°	1437.8	1437.8	1434.4	1434.4	1434.4
20°	1424.2	1427.6	1427.6	1424.2	1417.3
22.5°	1400.3	1410.5	1420.7	1407.1	1396.9
25°	1373.0	1386.7	1407.1	1383.3	1369.6
27.5°	1332.2	1352.6	1383.3	1352.6	1332.2
30°	1287.9	1315.1	1356.0	1315.1	1287.9
32.5°	1240.2	1270.8	1315.1	1270.8	1240.2
35°	1185.7	1219.7	1267.4	1223.1	1185.7
37.5°	1114.1	1161.8	1216.3	1168.6	1120.9
40°	1046.0	1097.1	1155.0	1100.5	1049.4
42.5°	971.0	1028.9	1093.7	1032.3	977.8
45°	892.7	957.4	1028.9	960.8	899.5
47.5°	790.4	868.8	954.0	879.0	797.3
50°	671.2	770.0	875.6	776.8	674.6
52.5°	551.9	647.3	790.4	654.2	551.9
55°	439.5	531.5	701.9	534.9	442.9
57.5°	337.3	419.1	586.0	425.9	337.3
60°	258.9	320.3	453.1	323.7	262.3
62.5°	204.4	241.9	333.9	238.5	204.4
65°	166.9	187.4	231.7	187.4	166.9
67.5°	132.9	146.5	153.3	146.5	132.9
70°	98.8	112.4	105.6	112.4	95.4
72.5°	57.9	71.5	71.5	71.5	54.5
75°	30.7	34.1	44.3	34.1	30.7
77.5°	23.8	23.8	27.3	23.8	23.8
80°	17.0	17.0	17.0	17.0	17.0
82.5°	10.2	10.2	10.2	10.2	10.2
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)