

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: P252927

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252927
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-S4M24-44SWDMB-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3252.1 lumens
Efficiency: N/A
Efficacy: 85.6 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

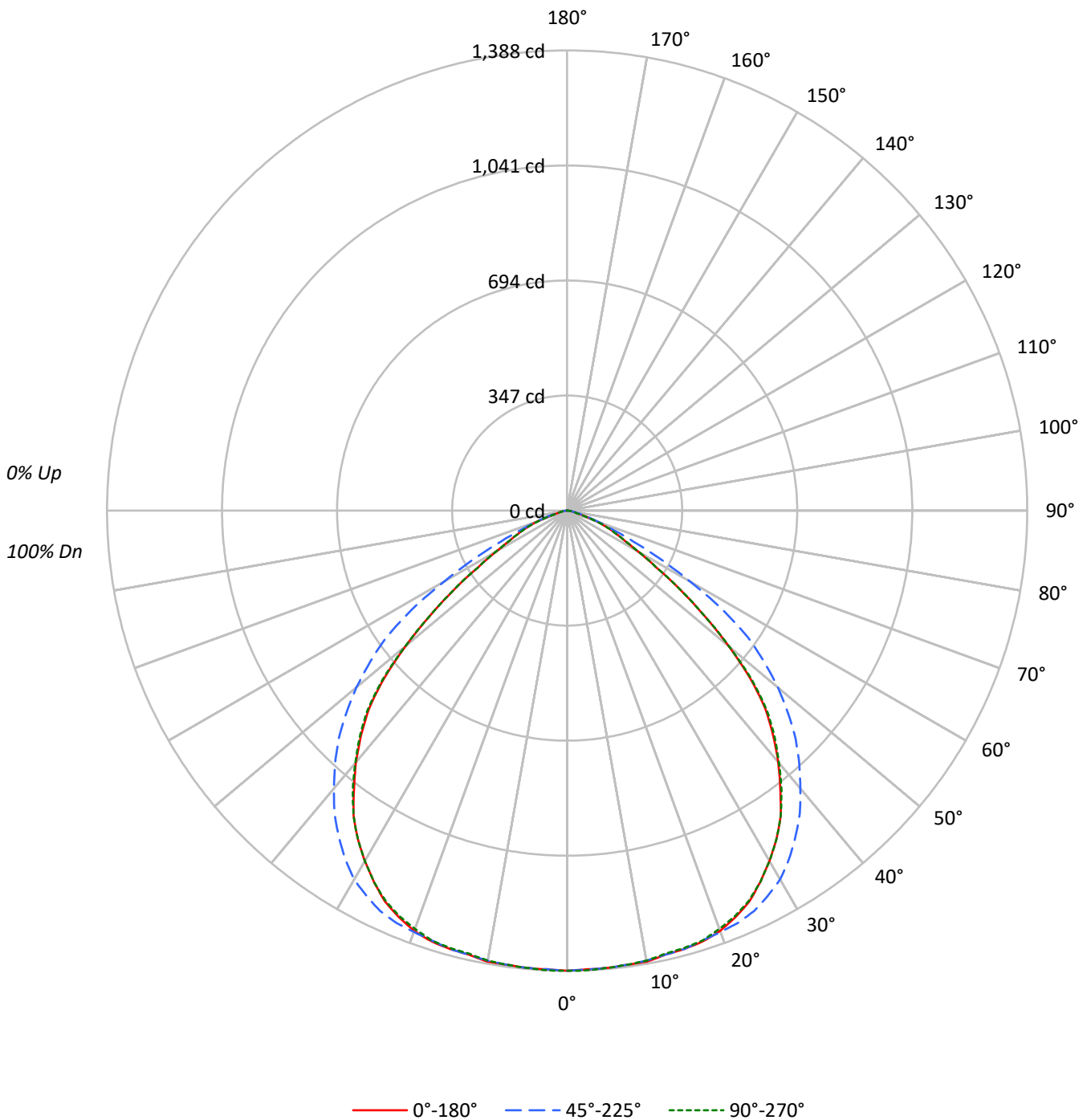
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	106250	106250	106250
5°	106410	106410	106410
10°	107392	107135	107135
15°	108461	108461	108207
20°	109916	110177	109387
25°	109878	112597	109599
30°	107847	113557	107847
35°	104973	112215	104973
40°	99021	109353	99351
45°	91557	105532	92250
50°	75723	98789	76116
55°	55568	88744	56009
60°	37552	65720	38057
65°	28653	39755	28653
70°	20947	22402	20231
75°	8606	12421	8606
80°	7097	7097	7097
85°	5709	5709	5709



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.0	4.1
10°-20°	386.8	11.9
20°-30°	604.2	18.6
30°-40°	722.7	22.2
40°-50°	694.6	21.4
50°-60°	466.5	14.3
60°-70°	190.5	5.9
70°-80°	47.3	1.5
80°-90°	7.5	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°	1123.0	34.5
0°-40°	1845.7	56.8
0°-60°	3006.8	92.5
0°-90°	3252.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3252.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1385	1385	1385	1385	1385	132
15°	1369	1369	1369	1366	1366	387
25°	1301	1314	1333	1311	1298	597
35°	1123	1156	1201	1159	1123	698
45°	846	907	975	910	852	641
55°	416	504	665	507	420	378
65°	158	178	220	178	158	160
75°	29	32	42	32	29	42
85°	6	6	6	6	6	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1388.1	1388.1	1388.1	1388.1	1388.1
2.5°	1384.9	1384.9	1384.9	1388.1	1388.1
5°	1384.9	1384.9	1384.9	1384.9	1384.9
7.5°	1381.7	1381.7	1381.7	1381.7	1381.7
10°	1381.7	1378.4	1378.4	1378.4	1378.4
12.5°	1372.0	1372.0	1372.0	1372.0	1368.7
15°	1368.7	1368.7	1368.7	1365.5	1365.5
17.5°	1362.3	1362.3	1359.1	1359.1	1359.1
20°	1349.4	1352.6	1352.6	1349.4	1342.9
22.5°	1326.8	1336.5	1346.1	1333.2	1323.6
25°	1301.0	1313.9	1333.2	1310.6	1297.7
27.5°	1262.2	1281.6	1310.6	1281.6	1262.2
30°	1220.2	1246.1	1284.8	1246.1	1220.2
32.5°	1175.1	1204.1	1246.1	1204.1	1175.1
35°	1123.4	1155.7	1200.9	1158.9	1123.4
37.5°	1055.6	1100.8	1152.5	1107.3	1062.1
40°	991.0	1039.5	1094.4	1042.7	994.3
42.5°	920.0	974.9	1036.2	978.1	926.5
45°	845.8	907.1	974.9	910.3	852.2
47.5°	748.9	823.2	903.9	832.9	755.4
50°	635.9	729.6	829.6	736.0	639.2
52.5°	523.0	613.4	748.9	619.8	523.0
55°	416.4	503.6	665.0	506.8	419.7
57.5°	319.6	397.1	555.2	403.5	319.6
60°	245.3	303.4	429.3	306.7	248.6
62.5°	193.7	229.2	316.4	226.0	193.7
65°	158.2	177.5	219.5	177.5	158.2
67.5°	125.9	138.8	145.3	138.8	125.9
70°	93.6	106.5	100.1	106.5	90.4
72.5°	54.9	67.8	67.8	67.8	51.7
75°	29.1	32.3	42.0	32.3	29.1
77.5°	22.6	22.6	25.8	22.6	22.6
80°	16.1	16.1	16.1	16.1	16.1
82.5°	9.7	9.7	9.7	9.7	9.7
85°	6.5	6.5	6.5	6.5	6.5
87.5°	3.2	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)