

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: P252947

Luminaire Tested: **PRS440D010-S4M24-41SWDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SWDH-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2934.6 lumens
Efficiency: N/A
Efficacy: 77.2 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

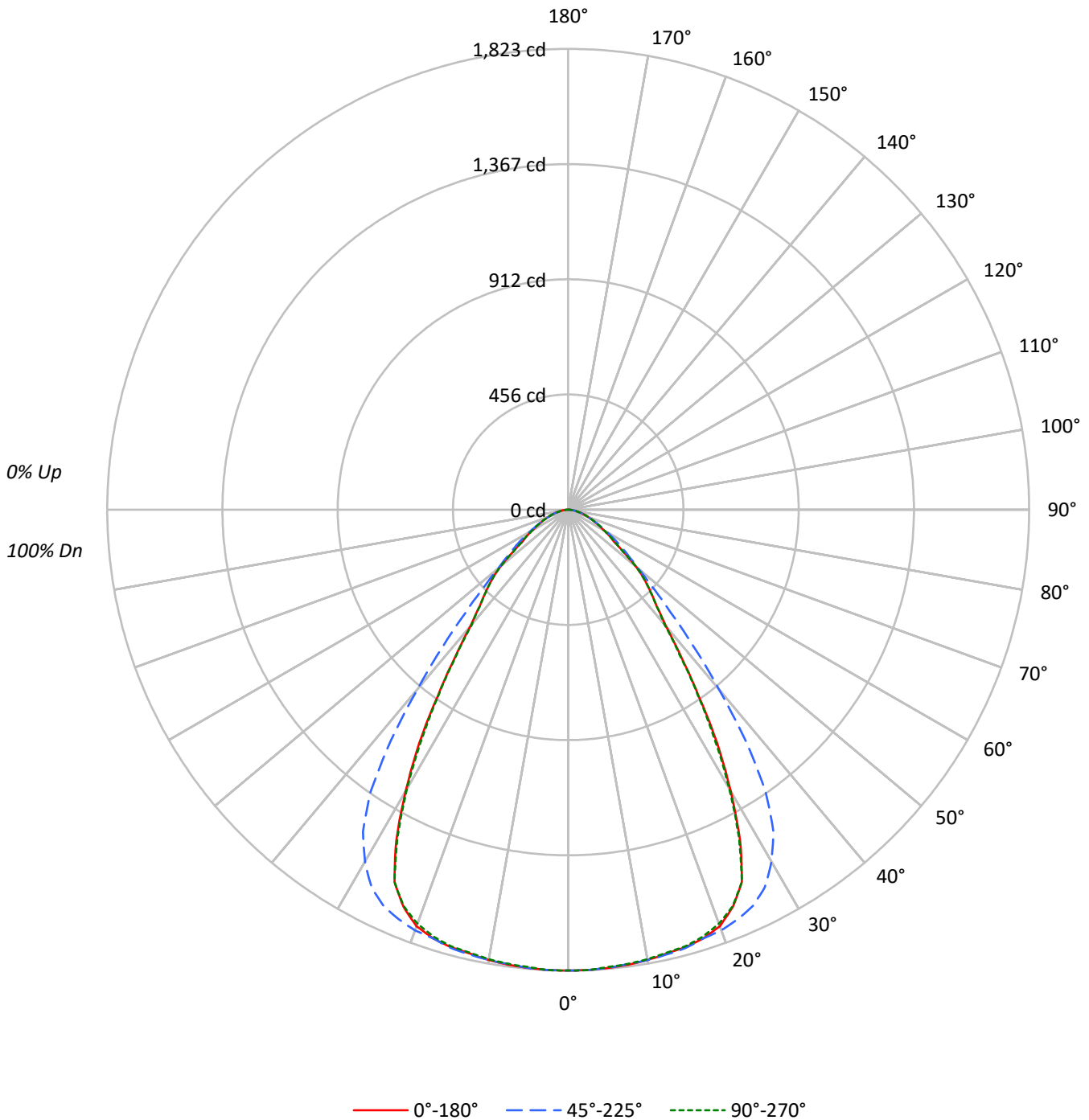
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42	41					41			
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	139523	139523	139523
5°	139795	139795	139526
10°	140603	140603	140331
15°	141973	142250	141695
20°	142825	144242	141977
25°	137233	146033	137233
30°	113548	142087	112629
35°	84033	127184	83379
40°	60022	92626	59323
45°	49989	61637	49989
50°	41761	43000	41761
55°	29652	34283	30120
60°	24984	27112	24984
65°	21390	22006	21390
70°	18642	18642	18642
75°	16443	16443	16443
80°	13753	13753	13753
85°	12207	12207	12207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	5.9
10°-20°	506.2	17.2
20°-30°	756.4	25.8
30°-40°	673.3	22.9
40°-50°	400.7	13.7
50°-60°	226.9	7.7
60°-70°	121.7	4.1
70°-80°	59.6	2.0
80°-90°	16.5	0.6
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°	1435.9	48.9
0°-40°	2109.2	71.9
0°-60°	2736.8	93.3
0°-90°	2934.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2934.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1819	1819	1819	1819	1816	173
15°	1792	1792	1795	1788	1788	506
25°	1625	1670	1729	1667	1625	725
35°	899	1052	1361	1049	892	568
45°	462	496	569	493	462	358
55°	222	246	257	246	226	212
65°	118	122	122	122	118	119
75°	56	56	56	56	56	60
85°	14	14	14	14	14	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1822.8	1822.8	1822.8	1822.8	1822.8
2.5°	1822.8	1822.8	1822.8	1822.8	1822.8
5°	1819.4	1819.4	1819.4	1819.4	1815.9
7.5°	1815.9	1812.4	1812.4	1812.4	1812.4
10°	1809.0	1809.0	1809.0	1805.5	1805.5
12.5°	1798.5	1798.5	1802.0	1798.5	1795.1
15°	1791.6	1791.6	1795.1	1788.1	1788.1
17.5°	1777.7	1781.2	1777.7	1777.7	1770.8
20°	1753.4	1763.8	1770.8	1760.3	1743.0
22.5°	1701.3	1729.1	1753.4	1725.6	1697.9
25°	1624.9	1670.1	1729.1	1666.6	1624.9
27.5°	1472.2	1586.7	1684.0	1576.3	1461.7
30°	1284.7	1423.6	1607.6	1413.1	1274.3
32.5°	1097.2	1236.1	1510.4	1229.1	1079.8
35°	899.3	1052.0	1361.1	1048.6	892.3
37.5°	732.6	871.5	1152.7	864.5	725.7
40°	600.7	708.3	927.0	704.8	593.7
42.5°	517.3	576.4	732.6	572.9	517.3
45°	461.8	496.5	569.4	493.0	461.8
47.5°	409.7	437.5	447.9	434.0	409.7
50°	350.7	381.9	361.1	381.9	350.7
52.5°	277.8	316.0	302.1	319.4	274.3
55°	222.2	246.5	256.9	246.5	225.7
57.5°	194.4	201.4	215.3	201.4	194.4
60°	163.2	170.1	177.1	170.1	163.2
62.5°	138.9	145.8	145.8	145.8	142.4
65°	118.1	121.5	121.5	121.5	118.1
67.5°	100.7	100.7	100.7	100.7	100.7
70°	83.3	83.3	83.3	83.3	83.3
72.5°	69.4	69.4	69.4	69.4	69.4
75°	55.6	55.6	55.6	55.6	55.6
77.5°	45.1	45.1	41.7	45.1	41.7
80°	31.2	31.2	31.2	31.2	31.2
82.5°	24.3	24.3	24.3	24.3	24.3
85°	13.9	13.9	13.9	13.9	13.9
87.5°	6.9	6.9	6.9	6.9	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)