

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: P252967

Luminaire Tested: **PRS440D010-S4M24-41SWDMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252967
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-S4M24-41SWDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3354.6 lumens
Efficiency: N/A
Efficacy: 88.3 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

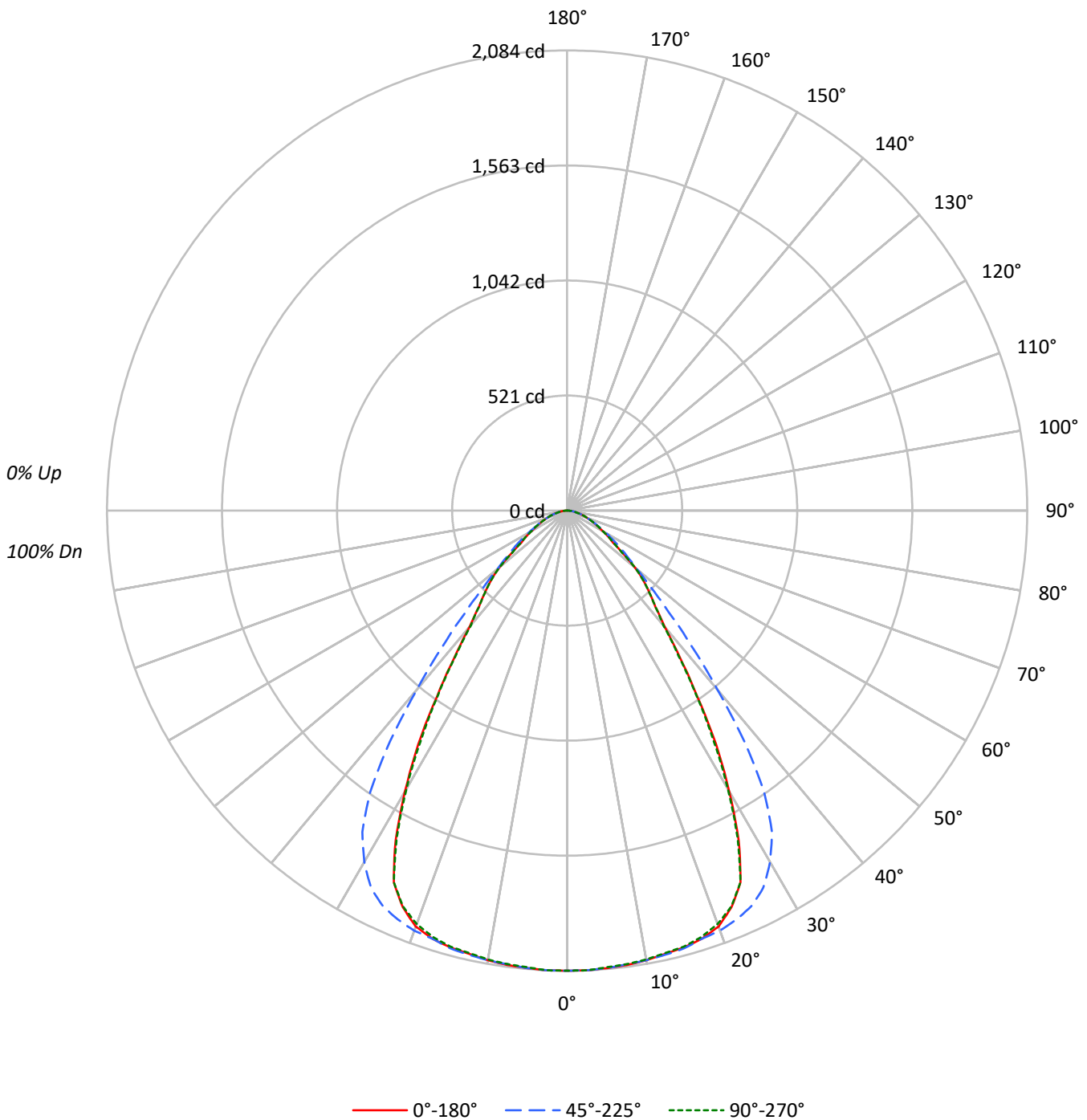
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	159493	159493	159493
5°	159795	159795	159496
10°	160718	160718	160407
15°	162291	162600	161974
20°	163262	164883	162292
25°	156878	166928	156878
30°	129793	162416	128741
35°	96059	145377	95311
40°	68605	105886	67816
45°	57144	70459	57144
50°	47739	49156	47739
55°	33896	39194	34430
60°	28551	30985	28551
65°	24433	25157	24433
70°	21328	21328	21328
75°	18780	18780	18780
80°	15736	15736	15736
85°	13964	13964	13964



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	198.0	5.9
10°-20°	578.6	17.2
20°-30°	864.7	25.8
30°-40°	769.7	22.9
40°-50°	458.0	13.7
50°-60°	259.4	7.7
60°-70°	139.1	4.1
70°-80°	68.1	2.0
80°-90°	18.9	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°	1641.3	48.9
0°-40°	2411.0	71.9
0°-60°	3128.5	93.3
0°-90°	3354.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3354.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2084	2084	2084	2084	2084	
5°	2080	2080	2080	2080	2076	198
15°	2048	2048	2052	2044	2044	578
25°	1858	1909	1976	1905	1858	828
35°	1028	1203	1556	1199	1020	649
45°	528	568	651	564	528	410
55°	254	282	294	282	258	242
65°	135	139	139	139	135	136
75°	64	64	64	64	64	69
85°	16	16	16	16	16	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2083.7	2083.7	2083.7	2083.7	2083.7
2.5°	2083.7	2083.7	2083.7	2083.7	2083.7
5°	2079.7	2079.7	2079.7	2079.7	2075.8
7.5°	2075.8	2071.8	2071.8	2071.8	2071.8
10°	2067.8	2067.8	2067.8	2063.8	2063.8
12.5°	2055.9	2055.9	2059.9	2055.9	2051.9
15°	2048.0	2048.0	2051.9	2044.0	2044.0
17.5°	2032.1	2036.1	2032.1	2032.1	2024.2
20°	2004.3	2016.2	2024.2	2012.2	1992.4
22.5°	1944.8	1976.5	2004.3	1972.6	1940.8
25°	1857.5	1909.1	1976.5	1905.1	1857.5
27.5°	1682.8	1813.8	1924.9	1801.9	1670.9
30°	1468.5	1627.3	1837.6	1615.4	1456.6
32.5°	1254.2	1412.9	1726.5	1405.0	1234.3
35°	1028.0	1202.6	1555.8	1198.6	1020.0
37.5°	837.4	996.2	1317.7	988.3	829.5
40°	686.6	809.7	1059.7	805.7	678.7
42.5°	591.4	658.8	837.4	654.9	591.4
45°	527.9	567.6	650.9	563.6	527.9
47.5°	468.3	500.1	512.0	496.1	468.3
50°	400.9	436.6	412.8	436.6	400.9
52.5°	317.5	361.2	345.3	365.1	313.5
55°	254.0	281.8	293.7	281.8	258.0
57.5°	222.3	230.2	246.1	230.2	222.3
60°	186.5	194.5	202.4	194.5	186.5
62.5°	158.8	166.7	166.7	166.7	162.7
65°	134.9	138.9	138.9	138.9	134.9
67.5°	115.1	115.1	115.1	115.1	115.1
70°	95.3	95.3	95.3	95.3	95.3
72.5°	79.4	79.4	79.4	79.4	79.4
75°	63.5	63.5	63.5	63.5	63.5
77.5°	51.6	51.6	47.6	51.6	47.6
80°	35.7	35.7	35.7	35.7	35.7
82.5°	27.8	27.8	27.8	27.8	27.8
85°	15.9	15.9	15.9	15.9	15.9
87.5°	7.9	7.9	7.9	7.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)