

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: P252942

Luminaire Tested: **PRS440D010-S4M24-41SWDC-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252942
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-S4M24-41SWDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3335.5 lumens
Efficiency: N/A
Efficacy: 87.8 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

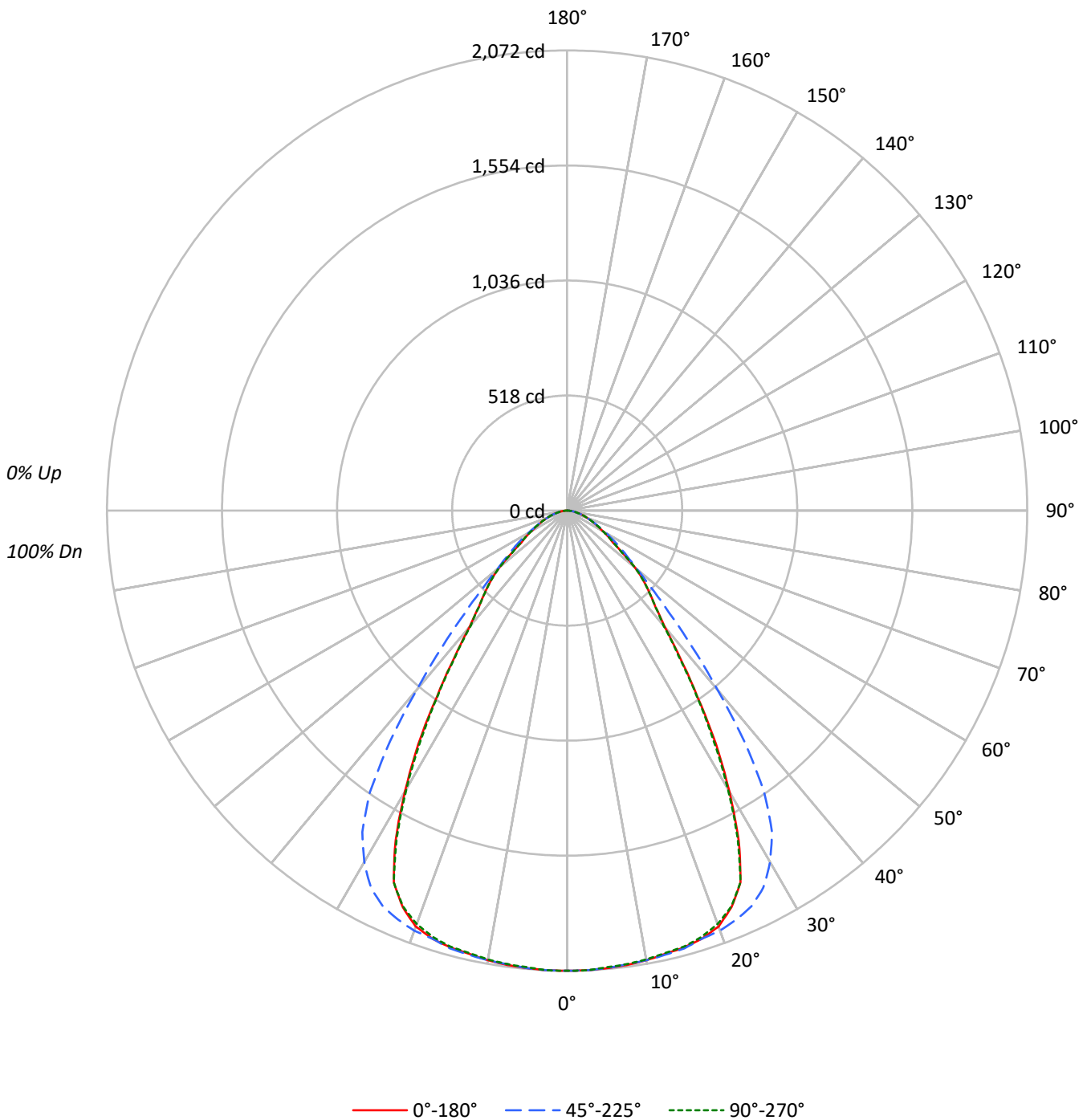
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	158583	158583	158583
5°	158889	158889	158581
10°	159801	159801	159498
15°	161364	161681	161055
20°	162333	163938	161372
25°	155982	165982	155982
30°	129051	161497	128008
35°	95507	144555	94769
40°	68216	105286	67426
45°	56820	70059	56820
50°	47465	48871	47465
55°	33709	38967	34230
60°	28398	30816	28398
65°	24306	25012	24306
70°	21194	21194	21194
75°	18661	18661	18661
80°	15648	15648	15648
85°	13876	13876	13876



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.9	5.9
10°-20°	575.3	17.2
20°-30°	859.8	25.8
30°-40°	765.3	22.9
40°-50°	455.4	13.7
50°-60°	258.0	7.7
60°-70°	138.3	4.1
70°-80°	67.7	2.0
80°-90°	18.8	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°	1632.0	48.9
0°-40°	2397.3	71.9
0°-60°	3110.7	93.3
0°-90°	3335.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3335.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2072	2072	2072	2072	2072	
5°	2068	2068	2068	2068	2064	197
15°	2036	2036	2040	2032	2032	575
25°	1847	1898	1965	1894	1847	824
35°	1022	1196	1547	1192	1014	646
45°	525	564	647	560	525	407
55°	253	280	292	280	256	241
65°	134	138	138	138	134	135
75°	63	63	63	63	63	68
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°	2071.8	2071.8	2071.8	2071.8	2071.8
2.5°	2071.8	2071.8	2071.8	2071.8	2071.8
5°	2067.9	2067.9	2067.9	2067.9	2063.9
7.5°	2063.9	2060.0	2060.0	2060.0	2060.0
10°	2056.0	2056.0	2056.0	2052.1	2052.1
12.5°	2044.2	2044.2	2048.2	2044.2	2040.3
15°	2036.3	2036.3	2040.3	2032.4	2032.4
17.5°	2020.5	2024.5	2020.5	2020.5	2012.6
20°	1992.9	2004.7	2012.6	2000.8	1981.1
22.5°	1933.7	1965.3	1992.9	1961.3	1929.8
25°	1846.9	1898.2	1965.3	1894.2	1846.9
27.5°	1673.3	1803.5	1914.0	1791.6	1661.4
30°	1460.1	1618.0	1827.2	1606.2	1448.3
32.5°	1247.0	1404.9	1716.7	1397.0	1227.3
35°	1022.1	1195.7	1547.0	1191.8	1014.2
37.5°	832.7	990.5	1310.2	982.6	824.8
40°	682.7	805.1	1053.7	801.1	674.8
42.5°	588.0	655.1	832.7	651.1	588.0
45°	524.9	564.3	647.2	560.4	524.9
47.5°	465.7	497.2	509.1	493.3	465.7
50°	398.6	434.1	410.4	434.1	398.6
52.5°	315.7	359.1	343.3	363.1	311.8
55°	252.6	280.2	292.0	280.2	256.5
57.5°	221.0	228.9	244.7	228.9	221.0
60°	185.5	193.4	201.3	193.4	185.5
62.5°	157.9	165.7	165.7	165.7	161.8
65°	134.2	138.1	138.1	138.1	134.2
67.5°	114.4	114.4	114.4	114.4	114.4
70°	94.7	94.7	94.7	94.7	94.7
72.5°	78.9	78.9	78.9	78.9	78.9
75°	63.1	63.1	63.1	63.1	63.1
77.5°	51.3	51.3	47.4	51.3	47.4
80°	35.5	35.5	35.5	35.5	35.5
82.5°	27.6	27.6	27.6	27.6	27.6
85°	15.8	15.8	15.8	15.8	15.8
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)