

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: P241772

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241772
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-46)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SNDC-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW 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: 3170.5 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

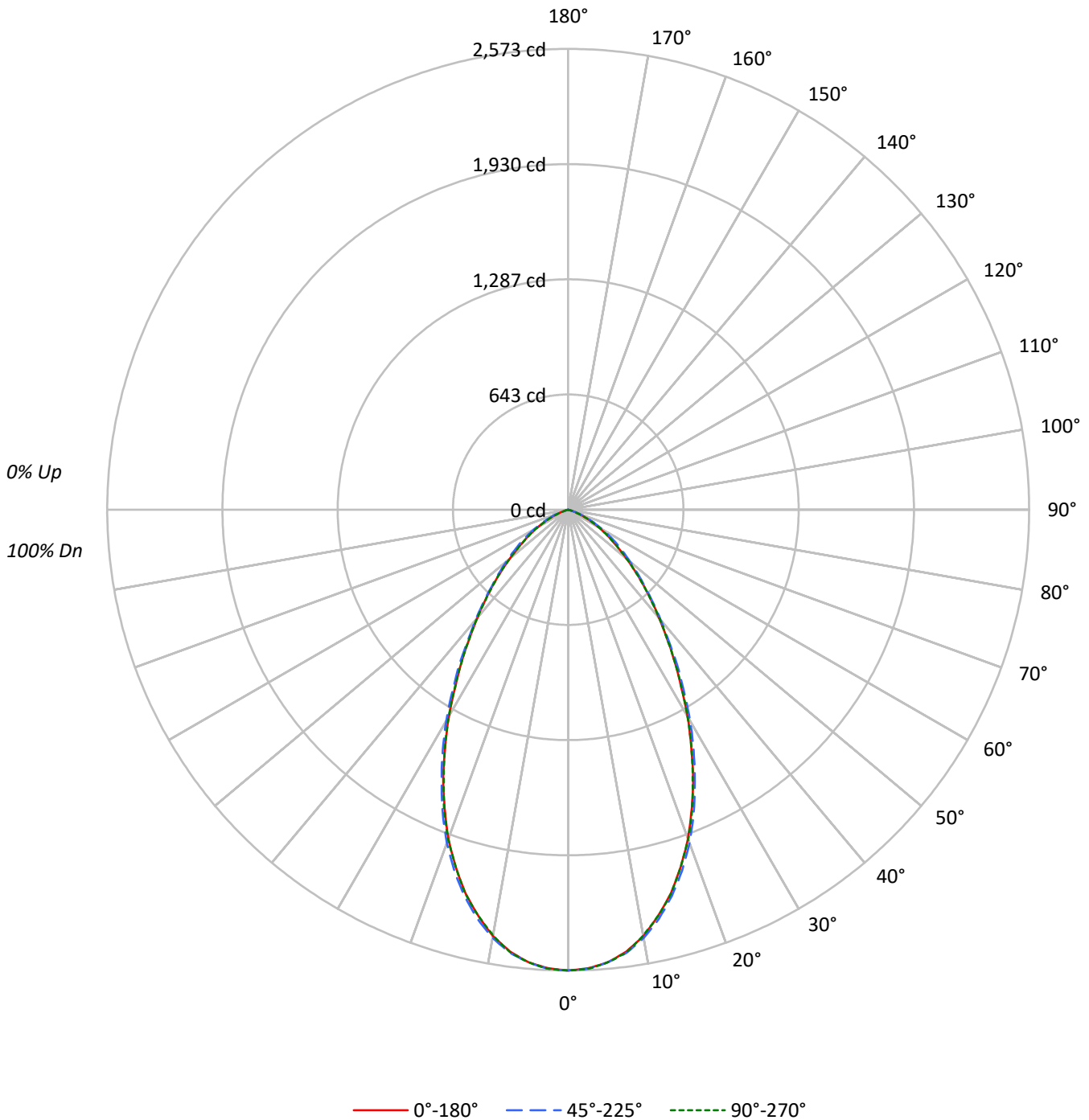
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	45	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	196931	196931	196931
5°	194963	194963	194963
10°	187883	188707	187603
15°	175588	176990	175873
20°	159189	161209	159482
25°	139387	141177	138787
30°	117755	120256	117755
35°	96759	99067	96759
40°	78747	80156	79097
45°	63888	65036	63888
50°	50502	53443	50502
55°	39621	43865	39621
60°	30296	33541	30296
65°	20484	23690	20484
70°	10272	13450	10272
75°	0	3135	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.5	7.5
10°-20°	621.1	19.6
20°-30°	760.7	24.0
30°-40°	658.9	20.8
40°-50°	467.3	14.7
50°-60°	282.5	8.9
60°-70°	126.1	4.0
70°-80°	15.4	0.5
80°-90°	0.0	0.0
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°	1620.3	51.1
0°-40°	2279.2	71.9
0°-60°	3029.0	95.5
0°-90°	3170.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3170.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2573	2573	2573	2573	2573	
5°	2537	2537	2537	2537	2537	238
15°	2216	2226	2234	2230	2219	618
25°	1650	1672	1672	1668	1643	753
35°	1036	1057	1060	1053	1036	649
45°	590	604	601	608	590	458
55°	297	311	329	314	297	268
65°	113	127	131	127	113	114
75°	0	4	11	4	0	11
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2572.8	2572.8	2572.8	2572.8	2572.8
2.5°	2562.2	2562.2	2565.7	2565.7	2565.7
5°	2537.4	2537.4	2537.4	2537.4	2537.4
7.5°	2488.0	2488.0	2495.0	2491.5	2491.5
10°	2417.3	2417.3	2427.9	2420.8	2413.7
12.5°	2321.9	2332.5	2339.5	2332.5	2321.9
15°	2215.8	2226.4	2233.5	2230.0	2219.4
17.5°	2088.6	2106.3	2113.4	2106.3	2088.6
20°	1954.3	1968.5	1979.1	1968.5	1957.9
22.5°	1802.4	1820.0	1830.6	1820.0	1809.4
25°	1650.4	1671.6	1671.6	1668.1	1643.3
27.5°	1484.3	1509.0	1516.1	1509.0	1487.8
30°	1332.3	1350.0	1360.6	1350.0	1332.3
32.5°	1173.3	1198.0	1201.6	1198.0	1176.8
35°	1035.5	1056.7	1060.2	1053.1	1035.5
37.5°	904.7	925.9	918.8	925.9	904.7
40°	788.1	805.8	802.2	805.8	791.6
42.5°	685.6	699.7	696.2	699.7	682.1
45°	590.2	604.3	600.8	607.9	590.2
47.5°	505.4	519.5	523.0	519.5	505.4
50°	424.1	445.3	448.8	445.3	424.1
52.5°	353.4	371.1	385.2	374.6	353.4
55°	296.9	311.0	328.7	314.5	296.9
57.5°	243.8	258.0	272.1	261.5	243.8
60°	197.9	212.0	219.1	212.0	197.9
62.5°	152.0	169.6	173.2	169.6	152.0
65°	113.1	127.2	130.8	127.2	113.1
67.5°	77.7	91.9	91.9	91.9	77.7
70°	45.9	56.5	60.1	60.1	45.9
72.5°	17.7	28.3	31.8	28.3	21.2
75°	0.0	3.5	10.6	3.5	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)