

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: P241687

Luminaire Tested: **PRS440D010-S4M24-44SNDMW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241687
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-40)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SNDMW
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW 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: 3678.3 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.94
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

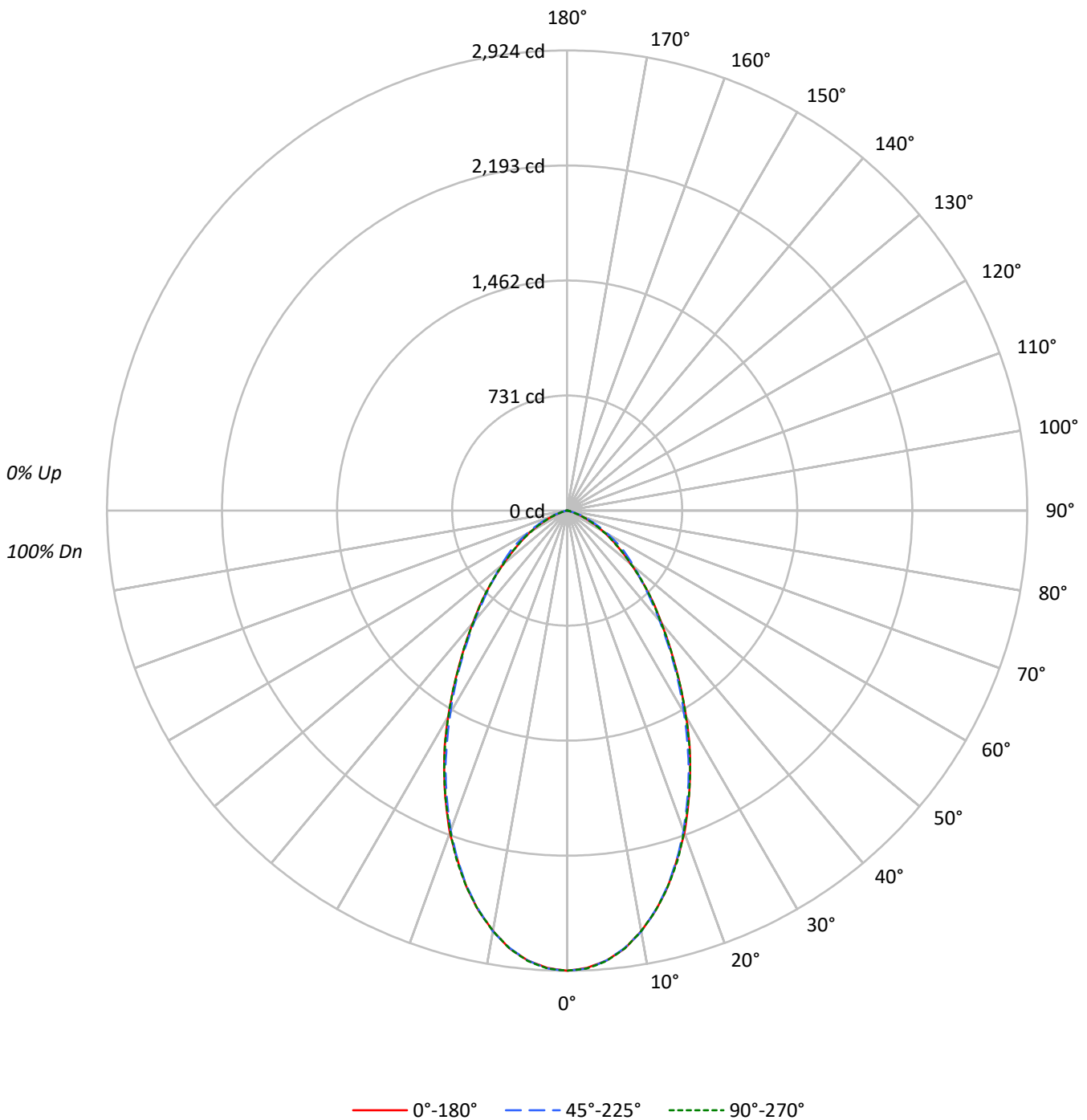
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	73	68	76	71	67	74	70	66	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	64	56	51	73	63	56	51	62	55	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	223805	223805	223805
5°	220442	220442	220742
10°	210788	211091	210788
15°	195938	195629	195938
20°	177427	176148	176792
25°	156117	154462	156117
30°	133549	131119	133205
35°	111486	110019	111122
40°	92946	91377	92546
45°	77744	76467	78166
50°	63089	65899	63089
55°	50804	57090	51325
60°	40262	45069	40262
65°	29142	34122	29142
70°	17568	21955	17568
75°	5797	9286	5797
80°	5201	5201	5201
85°	3425	3425	3425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.0	7.3
10°-20°	689.3	18.7
20°-30°	841.2	22.9
30°-40°	743.5	20.2
40°-50°	554.8	15.1
50°-60°	359.9	9.8
60°-70°	177.3	4.8
70°-80°	38.5	1.0
80°-90°	4.8	0.1
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°	1799.5	48.9
0°-40°	2543.0	69.1
0°-60°	3457.7	94.0
0°-90°	3678.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3678.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2924	2924	2924	2924	2924	
5°	2869	2869	2869	2873	2873	269
15°	2473	2473	2469	2473	2473	690
25°	1848	1845	1829	1841	1848	846
35°	1193	1185	1177	1185	1189	749
45°	718	718	706	714	722	556
55°	381	392	428	396	385	345
65°	161	180	188	177	161	163
75°	20	24	31	24	20	33
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2923.9	2923.9	2923.9	2923.9	2923.9
2.5°	2908.2	2908.2	2912.1	2912.1	2912.1
5°	2869.0	2869.0	2869.0	2872.9	2872.9
7.5°	2806.2	2802.3	2802.3	2806.2	2806.2
10°	2712.0	2712.0	2715.9	2708.1	2712.0
12.5°	2602.1	2602.1	2598.2	2602.1	2602.1
15°	2472.6	2472.6	2468.7	2472.6	2472.6
17.5°	2323.4	2323.4	2319.5	2327.4	2331.3
20°	2178.2	2174.3	2162.5	2170.4	2170.4
22.5°	2013.4	2009.5	1993.8	2005.5	2009.5
25°	1848.5	1844.6	1828.9	1840.7	1848.5
27.5°	1683.7	1668.0	1652.3	1671.9	1679.8
30°	1511.0	1499.2	1483.5	1499.2	1507.1
32.5°	1346.2	1342.3	1326.6	1338.3	1346.2
35°	1193.1	1185.3	1177.4	1185.3	1189.2
37.5°	1055.8	1047.9	1036.1	1047.9	1055.8
40°	930.2	922.3	914.5	918.4	926.2
42.5°	824.2	816.3	804.6	812.4	820.3
45°	718.2	718.2	706.4	714.3	722.1
47.5°	620.1	628.0	624.0	628.0	624.0
50°	529.8	545.5	553.4	545.5	529.8
52.5°	451.3	463.1	486.7	463.1	451.3
55°	380.7	392.5	427.8	396.4	384.6
57.5°	321.8	333.6	361.1	333.6	321.8
60°	263.0	278.7	294.4	278.7	263.0
62.5°	211.9	227.6	239.4	227.6	208.0
65°	160.9	180.5	188.4	176.6	160.9
67.5°	117.7	133.4	141.3	133.4	117.7
70°	78.5	94.2	98.1	94.2	78.5
72.5°	47.1	58.9	58.9	54.9	47.1
75°	19.6	23.5	31.4	23.5	19.6
77.5°	15.7	15.7	15.7	15.7	15.7
80°	11.8	11.8	11.8	11.8	11.8
82.5°	7.8	7.8	7.8	7.8	7.8
85°	3.9	3.9	3.9	3.9	3.9
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)