

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: P241692

Luminaire Tested: **PRS440D010-S4M24-44SNDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241692
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-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3498.4 lumens
Efficiency: N/A
Efficacy: 92.1 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

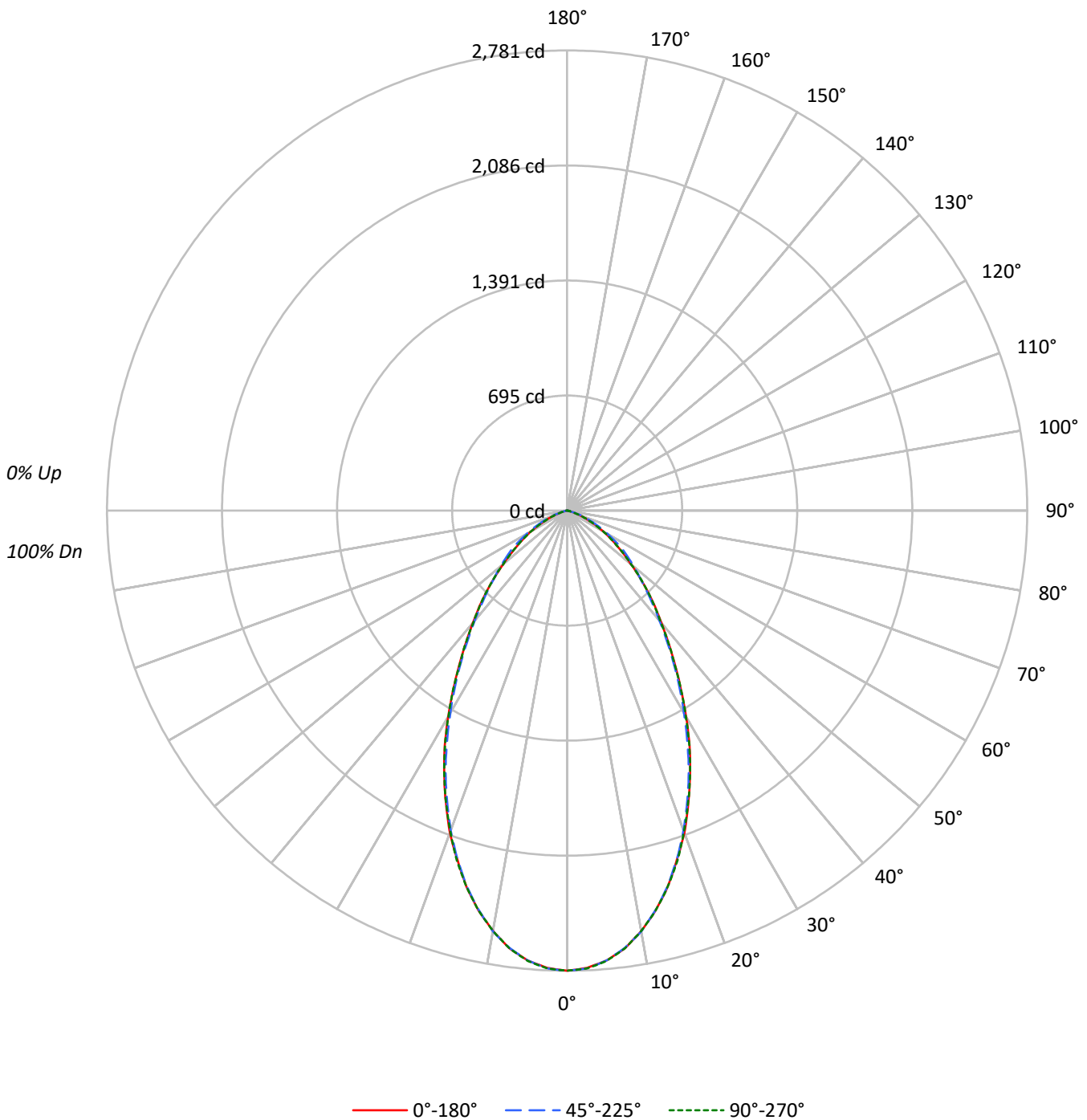
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241692

CATALOG NUMBER: PRS440D010-S4M24-44SNDMW-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P241692

CATALOG NUMBER: PRS440D010-S4M24-44SNDMW-4000K

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°	212860	212860	212860
5°	209654	209654	209946
10°	200474	200762	200474
15°	186349	186056	186349
20°	168752	167530	168141
25°	148483	146903	148483
30°	127018	124711	126691
35°	106029	104637	105683
40°	88399	86901	88020
45°	73945	72732	74345
50°	60005	62672	60005
55°	48322	54301	48816
60°	38287	42864	38287
65°	27711	32456	27711
70°	16718	20880	16718
75°	5530	8843	5530
80°	4937	4937	4937
85°	3249	3249	3249



TEST NUMBER: P241692

CATALOG NUMBER: PRS440D010-S4M24-44SNDMW-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.8	7.3
10°-20°	655.6	18.7
20°-30°	800.1	22.9
30°-40°	707.1	20.2
40°-50°	527.7	15.1
50°-60°	342.3	9.8
60°-70°	168.6	4.8
70°-80°	36.6	1.0
80°-90°	4.6	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°	1711.5	48.9
0°-40°	2418.6	69.1
0°-60°	3288.6	94.0
0°-90°	3498.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3498.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2781	2781	2781	2781	2781	
5°	2729	2729	2729	2732	2732	256
15°	2352	2352	2348	2352	2352	656
25°	1758	1754	1739	1751	1758	805
35°	1135	1127	1120	1127	1131	713
45°	683	683	672	679	687	529
55°	362	373	407	377	366	329
65°	153	172	179	168	153	155
75°	19	22	30	22	19	32
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



TEST NUMBER: P241692

CATALOG NUMBER: PRS440D010-S4M24-44SNDMW-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2780.9	2780.9	2780.9	2780.9	2780.9
2.5°	2765.9	2765.9	2769.7	2769.7	2769.7
5°	2728.6	2728.6	2728.6	2732.4	2732.4
7.5°	2668.9	2665.2	2665.2	2668.9	2668.9
10°	2579.3	2579.3	2583.0	2575.6	2579.3
12.5°	2474.8	2474.8	2471.1	2474.8	2474.8
15°	2351.6	2351.6	2347.9	2351.6	2351.6
17.5°	2209.8	2209.8	2206.0	2213.5	2217.2
20°	2071.7	2067.9	2056.7	2064.2	2064.2
22.5°	1914.9	1911.2	1896.2	1907.4	1911.2
25°	1758.1	1754.4	1739.4	1750.6	1758.1
27.5°	1601.3	1586.4	1571.5	1590.1	1597.6
30°	1437.1	1425.9	1411.0	1425.9	1433.4
32.5°	1280.3	1276.6	1261.7	1272.9	1280.3
35°	1134.7	1127.3	1119.8	1127.3	1131.0
37.5°	1004.1	996.6	985.4	996.6	1004.1
40°	884.7	877.2	869.7	873.5	880.9
42.5°	783.9	776.4	765.2	772.7	780.1
45°	683.1	683.1	671.9	679.4	686.8
47.5°	589.8	597.2	593.5	597.2	593.5
50°	503.9	518.8	526.3	518.8	503.9
52.5°	429.3	440.5	462.9	440.5	429.3
55°	362.1	373.3	406.9	377.0	365.8
57.5°	306.1	317.3	343.4	317.3	306.1
60°	250.1	265.0	280.0	265.0	250.1
62.5°	201.6	216.5	227.7	216.5	197.8
65°	153.0	171.7	179.2	168.0	153.0
67.5°	112.0	126.9	134.4	126.9	112.0
70°	74.7	89.6	93.3	89.6	74.7
72.5°	44.8	56.0	56.0	52.3	44.8
75°	18.7	22.4	29.9	22.4	18.7
77.5°	14.9	14.9	14.9	14.9	14.9
80°	11.2	11.2	11.2	11.2	11.2
82.5°	7.5	7.5	7.5	7.5	7.5
85°	3.7	3.7	3.7	3.7	3.7
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)