

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: P241707

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241707
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-41)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SMDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 3912.8 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.08
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

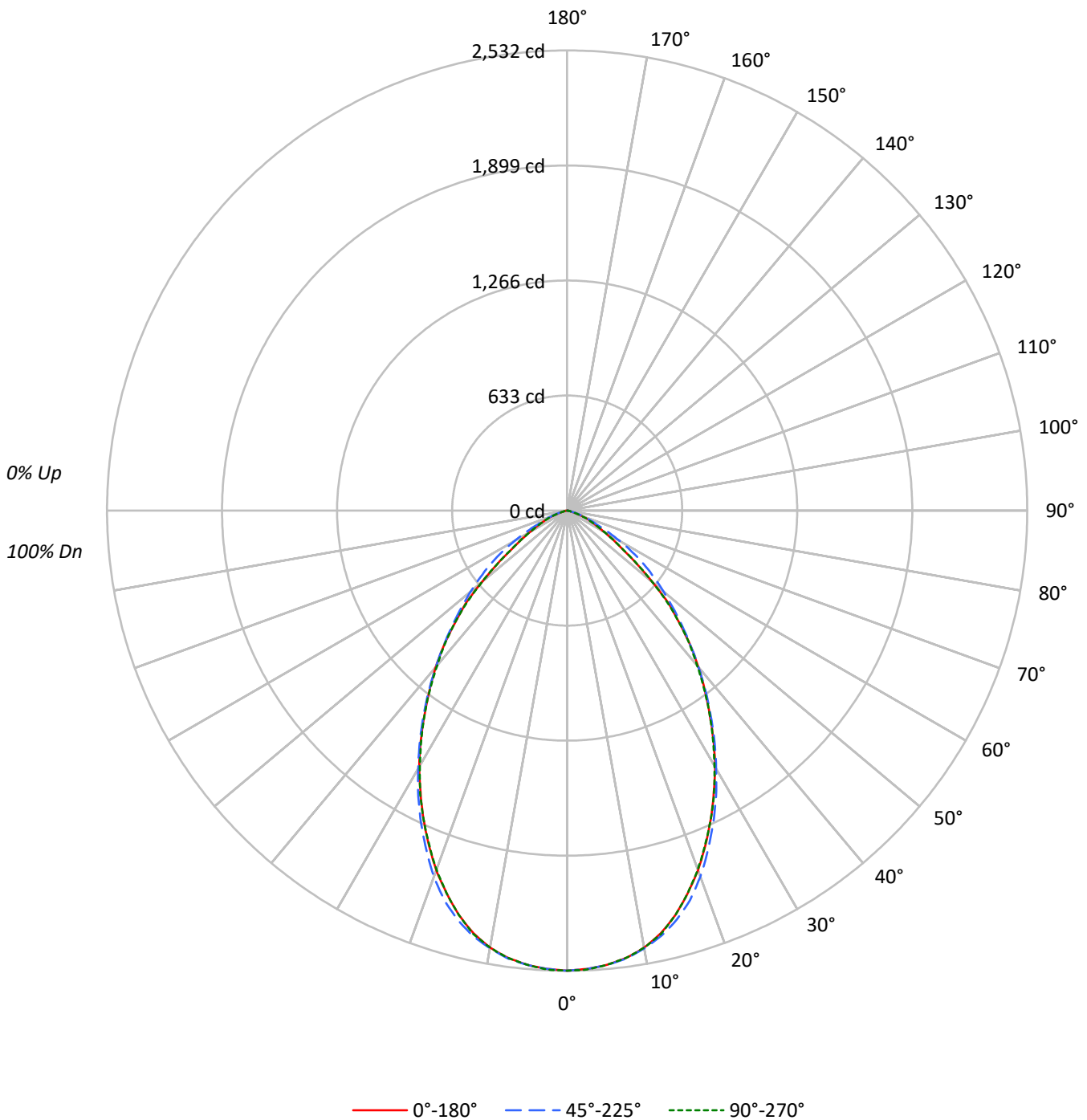
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80					80			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	57	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39					39			
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	193777	193777	193777
5°	192796	192796	192796
10°	189802	190090	189802
15°	182561	184637	182561
20°	171538	174584	171236
25°	157992	160518	157992
30°	143890	144880	143227
35°	127698	128745	127698
40°	112300	112300	111181
45°	94176	96601	94577
50°	72925	82261	72925
55°	50324	68766	50831
60°	36006	50871	36006
65°	27059	32456	26371
70°	17546	20880	18374
75°	6625	11031	6625
80°	4937	6568	4937
85°	3249	3249	3249



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	237.5	6.1
10°-20°	648.6	16.6
20°-30°	866.4	22.1
30°-40°	860.4	22.0
40°-50°	684.3	17.5
50°-60°	399.7	10.2
60°-70°	168.5	4.3
70°-80°	41.3	1.1
80°-90°	6.0	0.2
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°	1752.5	44.8
0°-40°	2612.9	66.8
0°-60°	3697.0	94.5
0°-90°	3912.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3912.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2532	2532	2532	2532	2532	
5°	2509	2509	2509	2509	2509	237
15°	2304	2319	2330	2319	2304	645
25°	1871	1897	1901	1893	1871	859
35°	1367	1389	1378	1382	1367	855
45°	870	892	892	892	874	672
55°	377	429	515	429	381	352
65°	149	164	179	164	146	150
75°	22	26	37	30	22	35
85°	4	4	4	4	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2531.6	2531.6	2531.6	2531.6	2531.6
2.5°	2524.1	2524.1	2524.1	2524.1	2527.9
5°	2509.2	2509.2	2509.2	2509.2	2509.2
7.5°	2483.1	2483.1	2486.8	2486.8	2483.1
10°	2442.0	2442.0	2445.7	2445.7	2442.0
12.5°	2382.2	2389.7	2397.2	2389.7	2386.0
15°	2303.8	2318.8	2330.0	2318.8	2303.8
17.5°	2206.7	2225.4	2247.8	2225.4	2206.7
20°	2105.9	2124.6	2143.3	2120.9	2102.2
22.5°	1990.2	2012.6	2023.8	2008.8	1986.4
25°	1870.7	1896.8	1900.6	1893.1	1870.7
27.5°	1747.5	1766.1	1773.6	1769.9	1751.2
30°	1628.0	1646.7	1639.2	1642.9	1620.5
32.5°	1497.3	1516.0	1508.5	1508.5	1493.6
35°	1366.6	1389.0	1377.8	1381.5	1366.6
37.5°	1243.4	1254.6	1250.9	1254.6	1239.7
40°	1123.9	1131.4	1123.9	1131.4	1112.7
42.5°	1000.7	1011.9	1004.4	1011.9	997.0
45°	870.0	892.4	892.4	892.4	873.7
47.5°	758.0	776.7	787.9	776.7	746.8
50°	612.4	668.4	690.8	664.6	612.4
52.5°	485.4	541.4	601.2	541.4	489.1
55°	377.1	429.4	515.3	429.4	380.9
57.5°	298.7	336.1	425.7	336.1	298.7
60°	235.2	265.1	332.3	265.1	235.2
62.5°	186.7	209.1	246.4	209.1	186.7
65°	149.4	164.3	179.2	164.3	145.6
67.5°	115.8	127.0	130.7	127.0	112.0
70°	78.4	93.3	93.3	93.3	82.1
72.5°	48.5	59.7	63.5	59.7	48.5
75°	22.4	26.1	37.3	29.9	22.4
77.5°	18.7	18.7	18.7	18.7	18.7
80°	11.2	14.9	14.9	14.9	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°	3.7	3.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)