

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: P241872

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241872
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-52)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SNDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP 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: 3151.1 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.93
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

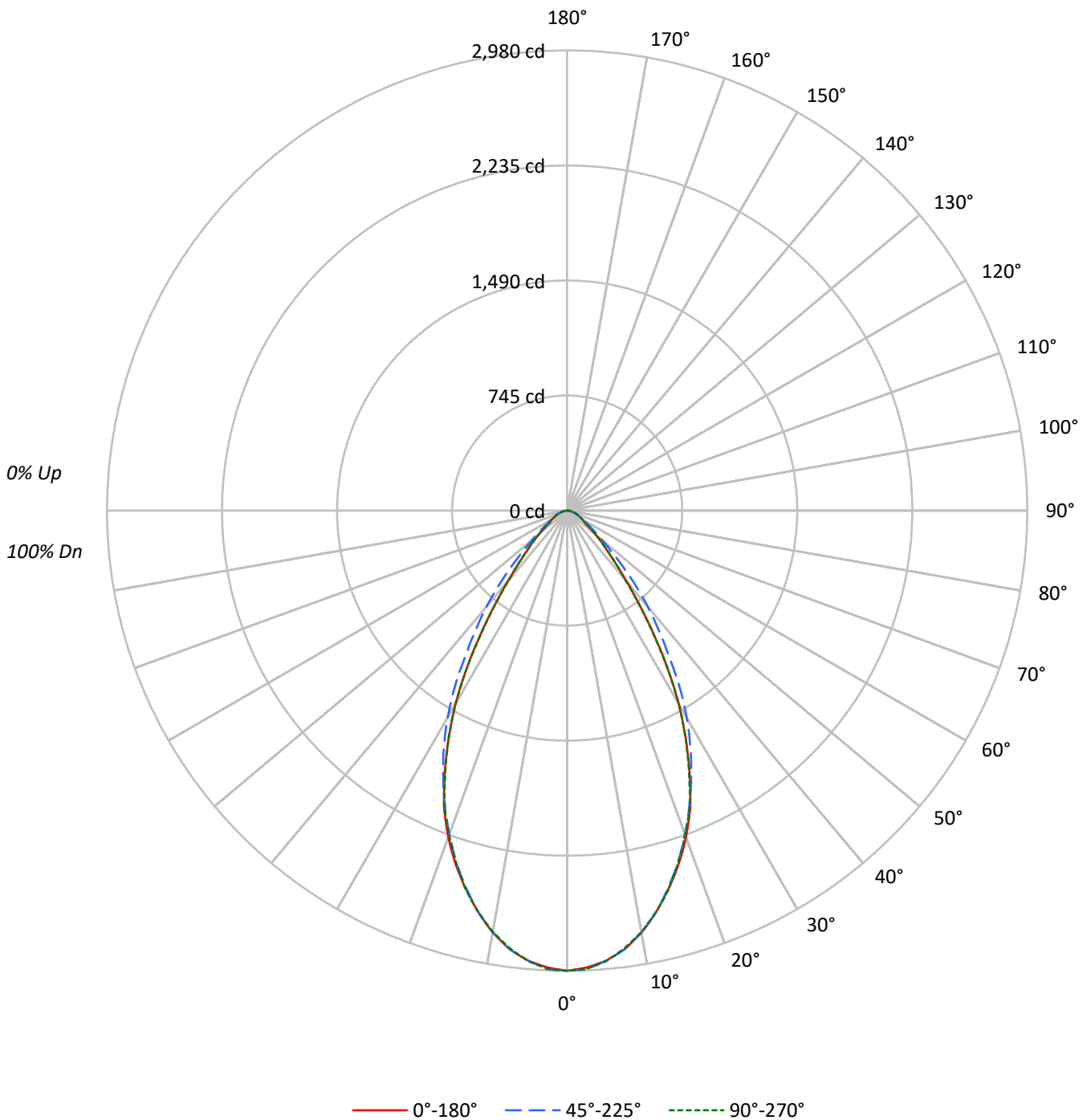
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91					91			
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83					83			
3	99	92	86	82	97	91	85	81	88	83	80	85	82	78	83	80	77	75					75			
4	94	85	79	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69					69			
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63					63			
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58					58			
7	79	68	61	57	77	67	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47					47			
10	67	56	50	46	66	56	50	46	55	49	45	54	49	45	53	49	45	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	228122	228122	228122
5°	224691	224691	224975
10°	215677	215389	215389
15°	200954	200359	201247
20°	183438	181614	182225
25°	158339	160551	157714
30°	127742	136987	127742
35°	91087	107141	90387
40°	59333	80975	58593
45°	39619	54579	40020
50°	28460	34688	28020
55°	18936	24421	18936
60°	17146	18294	17146
65°	15558	15558	15558
70°	14211	14211	14211
75°	12155	12155	12155
80°	11505	11505	11505
85°	9836	9836	9836



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.5	8.7
10°-20°	707.7	22.5
20°-30°	860.3	27.3
30°-40°	665.9	21.1
40°-50°	343.0	10.9
50°-60°	155.3	4.9
60°-70°	86.1	2.7
70°-80°	45.3	1.4
80°-90°	13.1	0.4
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°	1842.5	58.5
0°-40°	2508.4	79.6
0°-60°	3006.6	95.4
0°-90°	3151.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3151.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2980	2980	2980	2980	2980	
5°	2924	2932	2924	2928	2928	275
15°	2536	2536	2528	2532	2540	709
25°	1875	1897	1901	1894	1867	853
35°	975	1072	1147	1068	967	613
45°	366	422	504	422	370	295
55°	142	164	183	164	142	140
65°	86	86	86	86	86	84
75°	41	41	41	41	41	45
85°	11	11	11	11	11	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2980.3	2980.3	2980.3	2980.3	2980.3
2.5°	2961.6	2965.4	2972.9	2969.1	2969.1
5°	2924.3	2931.8	2924.3	2928.0	2928.0
7.5°	2864.5	2864.5	2864.5	2857.1	2857.1
10°	2774.9	2771.2	2771.2	2771.2	2771.2
12.5°	2662.9	2666.6	2662.9	2666.6	2662.9
15°	2535.9	2535.9	2528.4	2532.2	2539.6
17.5°	2401.4	2397.7	2390.2	2386.5	2390.2
20°	2252.0	2240.8	2229.6	2237.1	2237.1
22.5°	2084.0	2080.3	2069.0	2072.8	2076.5
25°	1874.8	1897.2	1901.0	1893.5	1867.4
27.5°	1662.0	1688.1	1729.2	1688.1	1662.0
30°	1445.3	1486.4	1549.9	1486.4	1445.3
32.5°	1210.1	1284.8	1355.7	1288.5	1206.3
35°	974.8	1071.9	1146.6	1068.1	967.3
37.5°	765.6	859.0	971.0	862.7	761.9
40°	593.8	679.7	810.4	679.7	586.4
42.5°	463.1	537.8	653.6	534.1	463.1
45°	366.0	422.0	504.2	422.0	369.7
47.5°	298.8	339.9	380.9	339.9	298.8
50°	239.0	268.9	291.3	268.9	235.3
52.5°	186.7	212.9	227.8	212.9	186.7
55°	141.9	164.3	183.0	164.3	141.9
57.5°	127.0	130.7	149.4	130.7	127.0
60°	112.0	112.0	119.5	112.0	112.0
62.5°	97.1	100.8	100.8	100.8	97.1
65°	85.9	85.9	85.9	85.9	85.9
67.5°	71.0	74.7	74.7	74.7	71.0
70°	63.5	63.5	63.5	63.5	63.5
72.5°	52.3	52.3	52.3	52.3	52.3
75°	41.1	41.1	41.1	41.1	41.1
77.5°	33.6	33.6	33.6	33.6	33.6
80°	26.1	26.1	26.1	26.1	26.1
82.5°	18.7	18.7	18.7	18.7	18.7
85°	11.2	11.2	11.2	11.2	11.2
87.5°	3.7	3.7	3.7	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)