

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: P241917

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241917
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-55)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SNDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3039.1 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

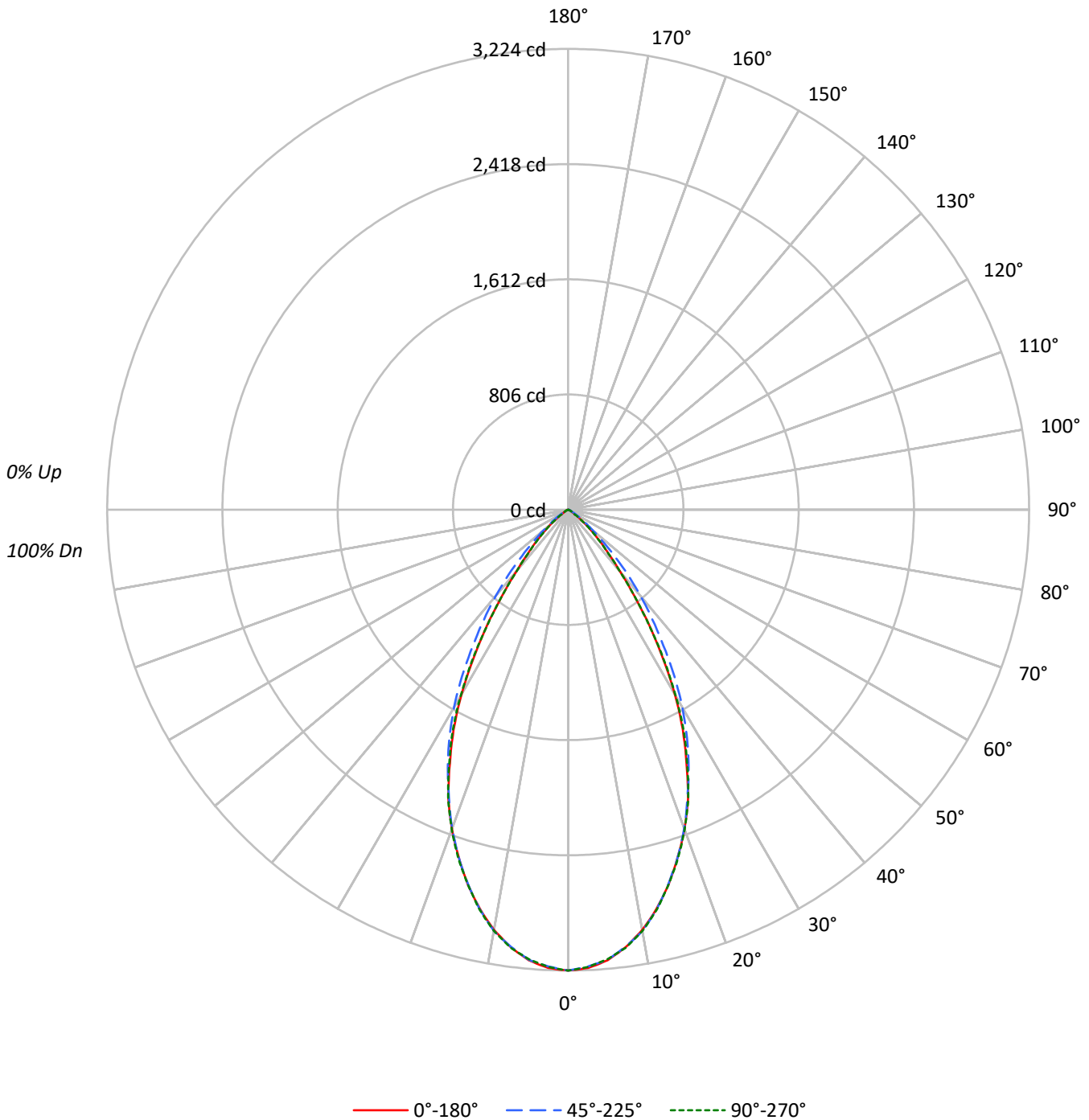
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	97	96	95	93		
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	91	89	87	86		
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	85	82	86	83	81		
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	77	75	81	77		
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73	73	73	70	76	72	69		
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	64	71	67	64		
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	60	67	63	60		
7	81	72	65	61	80	71	65	61	70	64	60	68	63	60	67	63	60	58	58	58	56	63	59	56		
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	52	60	55	52		
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	49	57	52	49		
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	46	53	49	48		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	246791	246791	246791
5°	243147	242855	242571
10°	232038	232613	232613
15°	214980	214687	214980
20°	193629	193327	193930
25°	165458	168296	166404
30°	131932	141168	132922
35°	92405	108449	92059
40°	56305	78677	55935
45°	33936	49286	33124
50°	19112	26662	18660
55°	6966	13945	6966
60°	4577	6858	4577
65°	2699	4057	2699
70°	1678	2507	1678
75°	1094	2218	1094
80°	1631	1631	1631
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.1	9.7
10°-20°	757.0	24.9
20°-30°	902.7	29.7
30°-40°	672.6	22.1
40°-50°	301.3	9.9
50°-60°	82.0	2.7
60°-70°	19.9	0.7
70°-80°	6.5	0.2
80°-90°	1.0	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°	1955.9	64.4
0°-40°	2628.5	86.5
0°-60°	3011.7	99.1
0°-90°	3039.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3039.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3224	3224	3224	3224	3224	
5°	3164	3153	3161	3157	3157	296
15°	2713	2709	2709	2717	2713	757
25°	1959	1989	1993	1993	1970	893
35°	989	1078	1161	1078	985	618
45°	314	366	455	366	306	252
55°	52	82	104	82	52	63
65°	15	19	22	19	15	17
75°	4	8	8	8	4	5
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3224.2	3224.2	3224.2	3224.2	3224.2
2.5°	3209.3	3201.8	3198.1	3198.1	3201.8
5°	3164.5	3153.3	3160.7	3157.0	3157.0
7.5°	3086.1	3086.1	3082.4	3089.8	3089.8
10°	2985.4	2989.1	2992.8	2989.1	2992.8
12.5°	2858.5	2854.7	2862.2	2865.9	2865.9
15°	2712.9	2709.2	2709.2	2716.7	2712.9
17.5°	2548.7	2552.5	2548.7	2552.5	2556.2
20°	2377.1	2377.1	2373.4	2377.1	2380.8
22.5°	2190.5	2190.5	2179.3	2186.8	2194.2
25°	1959.1	1989.0	1992.7	1992.7	1970.3
27.5°	1735.2	1757.6	1798.7	1765.1	1753.9
30°	1492.7	1537.5	1597.2	1544.9	1503.9
32.5°	1235.2	1317.3	1380.7	1309.8	1246.4
35°	988.9	1078.5	1160.6	1078.5	985.2
37.5°	757.5	854.6	966.5	858.3	757.5
40°	563.5	656.8	787.4	653.0	559.8
42.5°	417.9	496.3	615.7	492.6	417.9
45°	313.5	365.7	455.3	365.7	306.0
47.5°	227.6	272.4	324.7	268.7	227.6
50°	160.5	194.0	223.9	194.0	156.7
52.5°	100.8	130.6	153.0	130.6	100.8
55°	52.2	82.1	104.5	82.1	52.2
57.5°	37.3	44.8	67.2	44.8	37.3
60°	29.9	33.6	44.8	33.6	29.9
62.5°	22.4	26.1	26.1	26.1	22.4
65°	14.9	18.7	22.4	18.7	14.9
67.5°	11.2	14.9	14.9	14.9	11.2
70°	7.5	11.2	11.2	11.2	7.5
72.5°	7.5	7.5	7.5	7.5	7.5
75°	3.7	7.5	7.5	7.5	3.7
77.5°	3.7	3.7	3.7	3.7	3.7
80°	3.7	3.7	3.7	3.7	3.7
82.5°	0.0	3.7	3.7	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)