

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: P241727

Luminaire Tested: **PRS440D010-S4M24-44SNDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-43)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SNDH-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3156.4 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.92
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

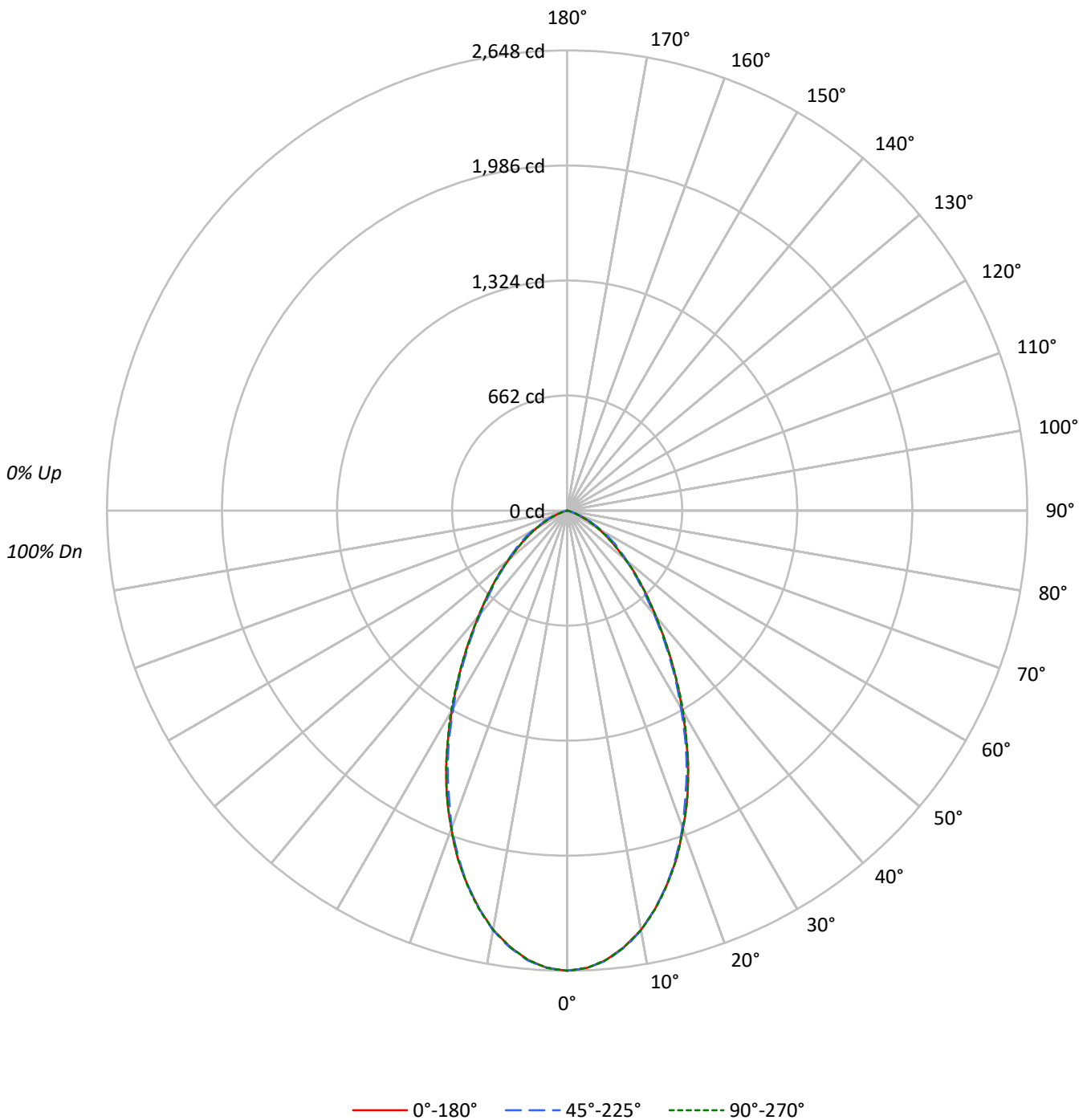
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	52	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	202672	202672	202672
5°	199373	199642	199373
10°	190409	190689	190409
15°	176206	176206	176483
20°	158660	158089	158660
25°	139133	137343	139133
30°	116853	115607	118108
35°	97115	95461	97115
40°	79127	77708	79477
45°	65057	63520	65436
50°	52205	53038	51776
55°	41049	44812	41049
60°	31383	34628	31383
65°	21770	24976	21136
70°	11078	14234	11078
75°	1035	4170	1035
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.1	7.7
10°-20°	620.5	19.7
20°-30°	748.2	23.7
30°-40°	646.7	20.5
40°-50°	462.9	14.7
50°-60°	286.3	9.1
60°-70°	130.5	4.1
70°-80°	18.2	0.6
80°-90°	0.0	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°	1611.8	51.1
0°-40°	2258.4	71.6
0°-60°	3007.7	95.3
0°-90°	3156.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3156.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2648	2648	2648	2648	2648	
5°	2595	2595	2598	2595	2595	243
15°	2224	2224	2224	2227	2227	621
25°	1647	1637	1626	1640	1647	752
35°	1039	1029	1022	1036	1039	650
45°	601	594	587	597	604	467
55°	308	315	336	315	308	279
65°	120	131	138	131	117	120
75°	4	7	14	7	4	14
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2647.8	2647.8	2647.8	2647.8	2647.8
2.5°	2633.7	2633.7	2633.7	2633.7	2633.7
5°	2594.8	2594.8	2598.3	2594.8	2594.8
7.5°	2531.1	2534.7	2534.7	2534.7	2531.1
10°	2449.8	2449.8	2453.4	2449.8	2449.8
12.5°	2343.8	2343.8	2343.8	2347.3	2347.3
15°	2223.6	2223.6	2223.6	2227.1	2227.1
17.5°	2096.3	2092.8	2085.7	2089.2	2096.3
20°	1947.8	1944.3	1940.8	1944.3	1947.8
22.5°	1802.9	1788.8	1778.2	1795.8	1802.9
25°	1647.4	1636.8	1626.2	1640.3	1647.4
27.5°	1484.7	1477.7	1467.1	1477.7	1488.3
30°	1322.1	1322.1	1308.0	1322.1	1336.3
32.5°	1177.2	1173.7	1163.1	1170.1	1180.7
35°	1039.3	1028.7	1021.6	1035.8	1039.3
37.5°	908.5	905.0	894.4	905.0	908.5
40°	791.9	784.8	777.7	788.3	795.4
42.5°	692.9	685.8	675.2	685.8	692.9
45°	601.0	593.9	586.8	597.4	604.5
47.5°	519.7	516.1	509.1	516.1	519.7
50°	438.4	445.4	445.4	441.9	434.8
52.5°	367.7	371.2	385.3	371.2	367.7
55°	307.6	314.6	335.8	314.6	307.6
57.5°	254.5	261.6	279.3	261.6	254.5
60°	205.0	215.6	226.2	215.6	205.0
62.5°	159.1	173.2	176.8	169.7	159.1
65°	120.2	130.8	137.9	130.8	116.7
67.5°	81.3	95.4	99.0	95.4	81.3
70°	49.5	63.6	63.6	63.6	49.5
72.5°	24.7	31.8	35.4	31.8	24.7
75°	3.5	7.1	14.1	7.1	3.5
77.5°	0.0	0.0	3.5	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	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)