

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: P241822

Luminaire Tested: **PRS440D010-S4M24-41SNDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-49)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SNDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

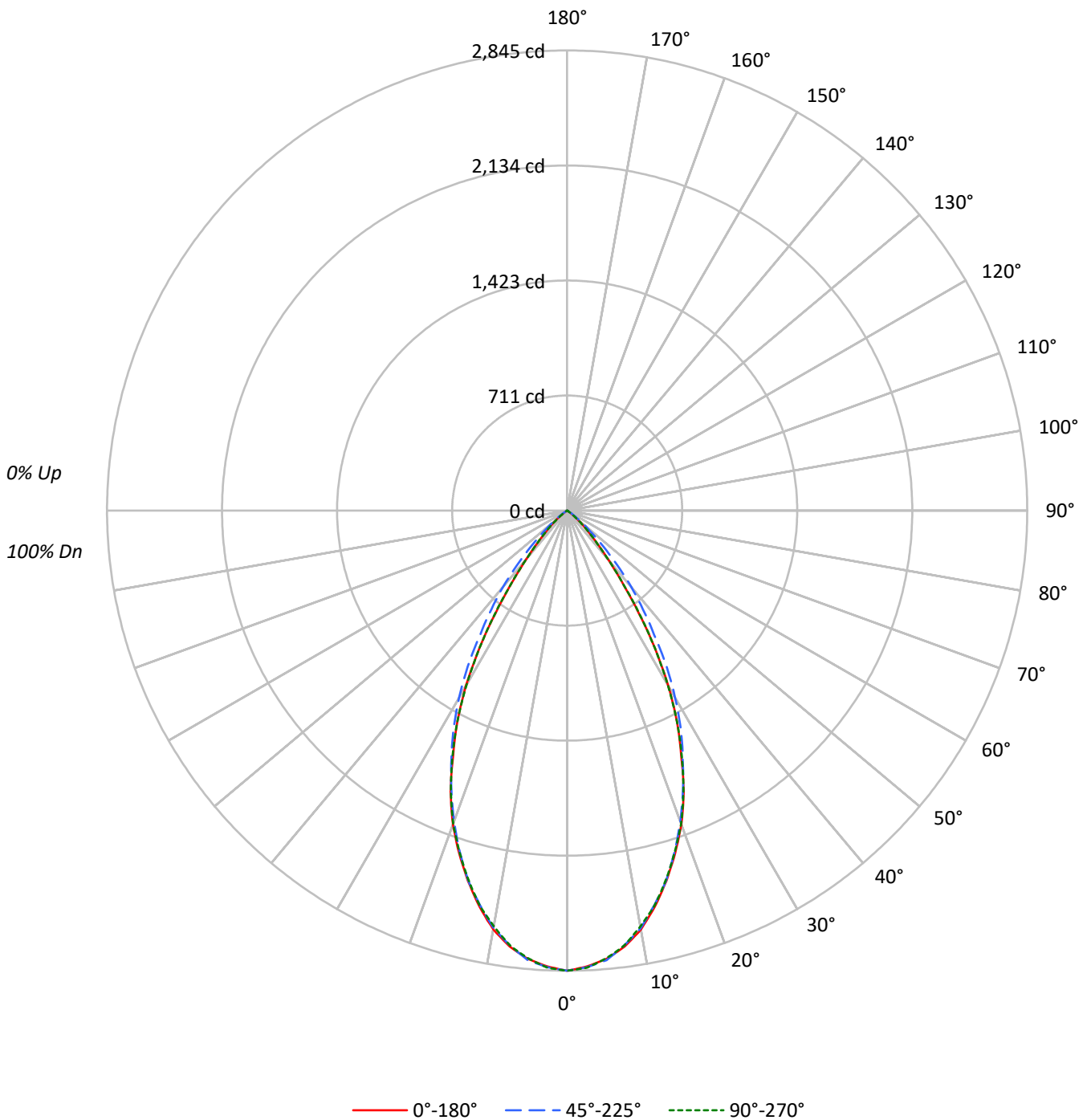
Lumens per Lamp: N/A
Luminaire Lumens: 2457.4 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.89
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	95	106	101	98	94	98	95	92	95	93	90	92	90	88	87					87			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81					81			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75					75			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70					70			
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65					65			
7	83	74	67	63	82	73	67	63	72	66	63	70	66	62	69	65	62	61					61			
8	79	69	63	59	78	69	63	59	67	62	59	66	62	58	65	61	58	57					57			
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53					53			
10	71	62	56	52	70	61	56	52	60	55	52	60	55	51	59	54	51	50					50			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	217758	217758	217758
5°	213773	214372	213465
10°	204345	203738	202821
15°	187815	187506	187197
20°	168133	166528	167807
25°	140848	142841	141844
30°	110640	117923	109942
35°	71866	87639	72605
40°	39598	61561	38819
45°	19539	34834	20394
50°	8883	15421	8883
55°	520	5765	520
60°	0	1194	597
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.5	10.6
10°-20°	659.2	26.8
20°-30°	768.2	31.3
30°-40°	536.7	21.8
40°-50°	200.8	8.2
50°-60°	31.5	1.3
60°-70°	0.5	0.0
70°-80°	0.0	0.0
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°	1687.8	68.7
0°-40°	2224.6	90.5
0°-60°	2456.9	100.0
0°-90°	2457.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2457.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2845	2845	2845	2845	2845	
5°	2782	2786	2790	2778	2778	261
15°	2370	2370	2366	2366	2362	661
25°	1668	1691	1691	1695	1680	762
35°	769	855	938	859	777	485
45°	180	235	322	235	188	153
55°	4	24	43	28	4	17
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
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°	2844.9	2844.9	2844.9	2844.9	2844.9
2.5°	2821.4	2821.4	2825.3	2825.3	2829.3
5°	2782.2	2786.1	2790.0	2778.2	2778.2
7.5°	2719.4	2715.5	2711.5	2711.5	2711.5
10°	2629.1	2625.2	2621.3	2613.4	2609.5
12.5°	2507.5	2503.6	2495.7	2499.6	2499.6
15°	2370.1	2370.1	2366.2	2366.2	2362.3
17.5°	2221.0	2217.1	2209.3	2213.2	2213.2
20°	2064.1	2056.2	2044.4	2048.4	2060.1
22.5°	1883.6	1887.5	1871.8	1879.6	1879.6
25°	1667.7	1691.3	1691.3	1695.2	1679.5
27.5°	1471.5	1487.2	1522.5	1483.3	1471.5
30°	1251.8	1283.2	1334.2	1279.2	1243.9
32.5°	1008.5	1071.3	1145.8	1075.2	1008.5
35°	769.1	855.4	937.9	859.4	777.0
37.5°	553.3	651.4	769.1	659.2	561.1
40°	396.3	482.7	616.1	482.7	388.5
42.5°	270.8	337.5	459.1	341.4	270.8
45°	180.5	235.4	321.8	235.4	188.4
47.5°	121.6	160.9	208.0	160.9	121.6
50°	74.6	105.9	129.5	105.9	74.6
52.5°	35.3	58.9	74.6	58.9	35.3
55°	3.9	23.5	43.2	27.5	3.9
57.5°	3.9	3.9	23.5	3.9	3.9
60°	0.0	3.9	7.8	3.9	3.9
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	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)