

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: P241797

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-47)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SMDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3782.1 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.1
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

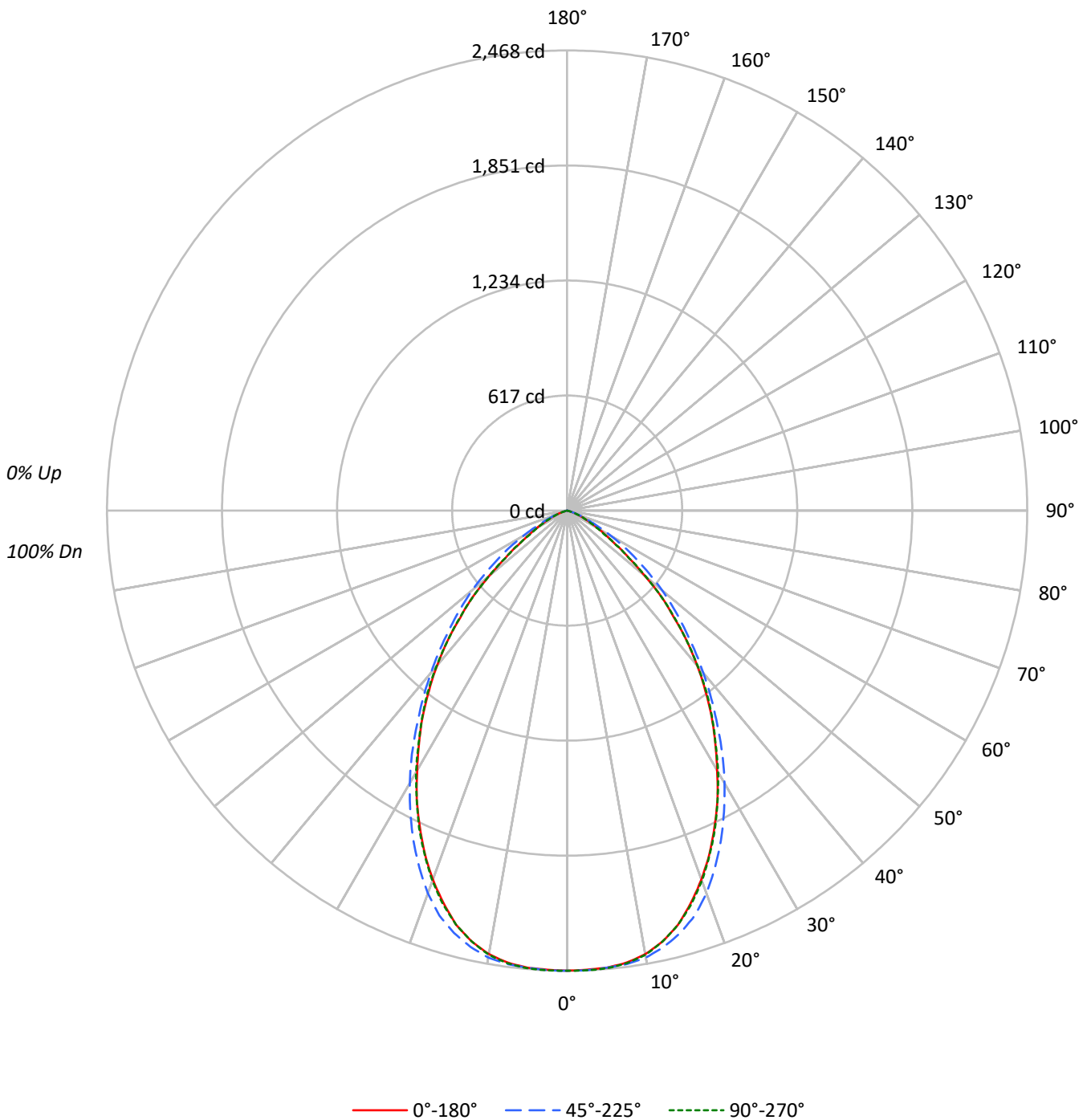
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	102	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44					44			
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	188901	188901	188901
5°	189054	189054	189339
10°	187758	189204	188046
15°	182252	185802	182252
20°	171530	177916	172132
25°	157984	164918	158609
30°	142229	149158	143219
35°	126297	131174	126642
40°	108563	113410	108933
45°	87703	95789	88515
50°	64911	79141	65351
55°	42851	60292	42851
60°	28581	41731	27433
65°	18927	24342	18927
70°	10854	12533	10854
75°	0	4407	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	233.8	6.2
10°-20°	650.4	17.2
20°-30°	878.5	23.2
30°-40°	865.7	22.9
40°-50°	661.2	17.5
50°-60°	350.8	9.3
60°-70°	125.8	3.3
70°-80°	15.8	0.4
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°	1762.8	46.6
0°-40°	2628.5	69.5
0°-60°	3640.5	96.3
0°-90°	3782.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3782.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2468	2468	2468	2468	2468	
5°	2460	2460	2460	2464	2464	233
15°	2300	2326	2345	2322	2300	643
25°	1871	1919	1953	1927	1878	858
35°	1352	1393	1404	1396	1355	841
45°	810	862	885	866	818	627
55°	321	377	452	377	321	299
65°	104	123	134	123	104	108
75°	0	4	15	4	0	11
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°	2467.9	2467.9	2467.9	2467.9	2467.9
2.5°	2464.2	2464.2	2467.9	2467.9	2467.9
5°	2460.5	2460.5	2460.5	2464.2	2464.2
7.5°	2445.5	2445.5	2453.0	2449.3	2449.3
10°	2415.7	2423.1	2434.3	2423.1	2419.4
12.5°	2367.1	2385.8	2397.0	2385.8	2367.1
15°	2299.9	2326.1	2344.7	2322.3	2299.9
17.5°	2206.6	2240.2	2277.5	2240.2	2214.0
20°	2105.8	2146.8	2184.2	2150.6	2113.2
22.5°	1993.8	2038.6	2072.2	2042.3	1997.5
25°	1870.6	1919.1	1952.7	1926.6	1878.0
27.5°	1747.3	1795.9	1822.0	1799.6	1747.3
30°	1609.2	1661.5	1687.6	1668.9	1620.4
32.5°	1478.5	1527.1	1549.5	1530.8	1482.3
35°	1351.6	1392.6	1403.8	1396.4	1355.3
37.5°	1217.2	1262.0	1269.4	1269.4	1228.4
40°	1086.5	1127.6	1135.0	1131.3	1090.2
42.5°	952.1	996.9	1008.1	996.9	952.1
45°	810.2	862.5	884.9	866.2	817.7
47.5°	690.7	731.8	772.9	735.5	687.0
50°	545.1	616.1	664.6	612.3	548.8
52.5°	418.2	492.8	552.6	489.1	418.2
55°	321.1	377.1	451.8	377.1	321.1
57.5°	242.7	287.5	362.2	283.8	235.2
60°	186.7	220.3	272.6	212.8	179.2
62.5°	141.9	164.3	194.1	160.5	138.1
65°	104.5	123.2	134.4	123.2	104.5
67.5°	74.7	89.6	89.6	89.6	74.7
70°	48.5	59.7	56.0	59.7	48.5
72.5°	18.7	29.9	29.9	29.9	18.7
75°	0.0	3.7	14.9	3.7	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)