

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: P241792

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241792
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
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3976.6 lumens
Efficiency: N/A
Efficacy: 104.6 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

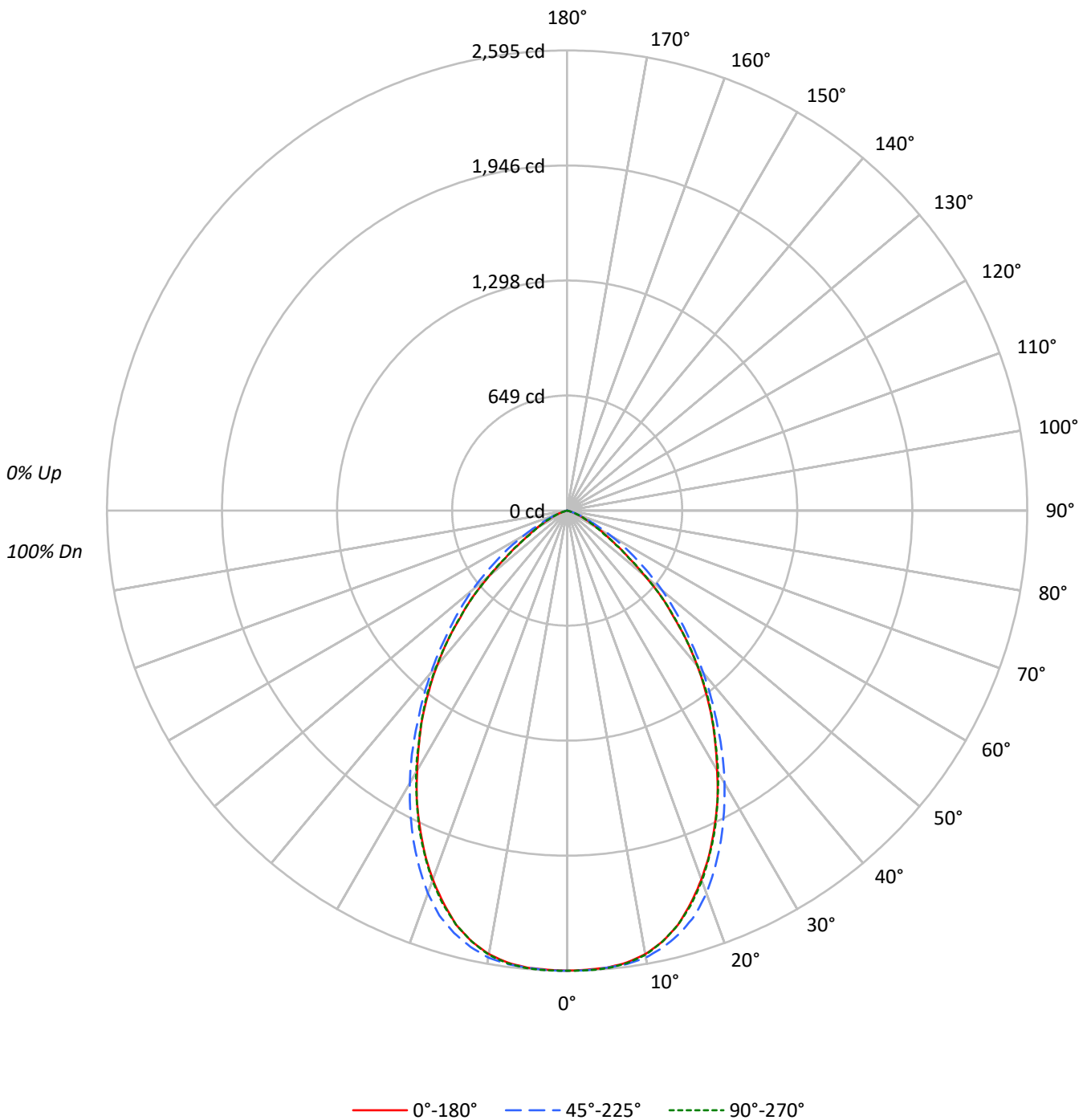
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	93	91
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	198622	198622	198622
5°	198774	198774	199082
10°	197412	198935	197715
15°	191627	195359	191627
20°	180351	187063	180987
25°	166109	173397	166767
30°	149547	156830	150581
35°	132791	137930	133155
40°	114149	119245	114539
45°	92217	100715	93061
50°	68245	83213	68721
55°	45052	63388	45052
60°	30051	43875	28842
65°	19905	25592	19905
70°	11414	13182	11414
75°	0	4643	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.9	6.2
10°-20°	683.9	17.2
20°-30°	923.7	23.2
30°-40°	910.2	22.9
40°-50°	695.2	17.5
50°-60°	368.9	9.3
60°-70°	132.2	3.3
70°-80°	16.6	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°	1853.5	46.6
0°-40°	2763.7	69.5
0°-60°	3827.8	96.3
0°-90°	3976.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3976.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2595	2595	2595	2595	2595	
5°	2587	2587	2587	2591	2591	245
15°	2418	2446	2465	2442	2418	676
25°	1967	2018	2053	2026	1975	902
35°	1421	1464	1476	1468	1425	884
45°	852	907	930	911	860	660
55°	338	396	475	396	338	315
65°	110	130	141	130	110	114
75°	0	4	16	4	0	12
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°	2594.9	2594.9	2594.9	2594.9	2594.9
2.5°	2591.0	2591.0	2594.9	2594.9	2594.9
5°	2587.0	2587.0	2587.0	2591.0	2591.0
7.5°	2571.3	2571.3	2579.2	2575.2	2575.2
10°	2539.9	2547.8	2559.5	2547.8	2543.8
12.5°	2488.9	2508.5	2520.3	2508.5	2488.9
15°	2418.2	2445.7	2465.3	2441.8	2418.2
17.5°	2320.1	2355.4	2394.7	2355.4	2327.9
20°	2214.1	2257.3	2296.5	2261.2	2221.9
22.5°	2096.3	2143.4	2178.8	2147.3	2100.2
25°	1966.8	2017.8	2053.1	2025.7	1974.6
27.5°	1837.2	1888.3	1915.7	1892.2	1837.2
30°	1692.0	1746.9	1774.4	1754.8	1703.7
32.5°	1554.6	1605.6	1629.2	1609.5	1558.5
35°	1421.1	1464.3	1476.1	1468.2	1425.0
37.5°	1279.8	1326.9	1334.7	1334.7	1291.5
40°	1142.4	1185.6	1193.4	1189.5	1146.3
42.5°	1001.0	1048.2	1059.9	1048.2	1001.0
45°	851.9	906.8	930.4	910.8	859.7
47.5°	726.3	769.4	812.6	773.4	722.3
50°	573.1	647.7	698.8	643.8	577.1
52.5°	439.7	518.2	581.0	514.3	439.7
55°	337.6	396.5	475.0	396.5	337.6
57.5°	255.2	302.3	380.8	298.4	247.3
60°	196.3	231.6	286.6	223.8	188.4
62.5°	149.2	172.7	204.1	168.8	145.3
65°	109.9	129.5	141.3	129.5	109.9
67.5°	78.5	94.2	94.2	94.2	78.5
70°	51.0	62.8	58.9	62.8	51.0
72.5°	19.6	31.4	31.4	31.4	19.6
75°	0.0	3.9	15.7	3.9	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)