

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: P241787

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241787
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3580.5 lumens
Efficiency: N/A
Efficacy: 94.2 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

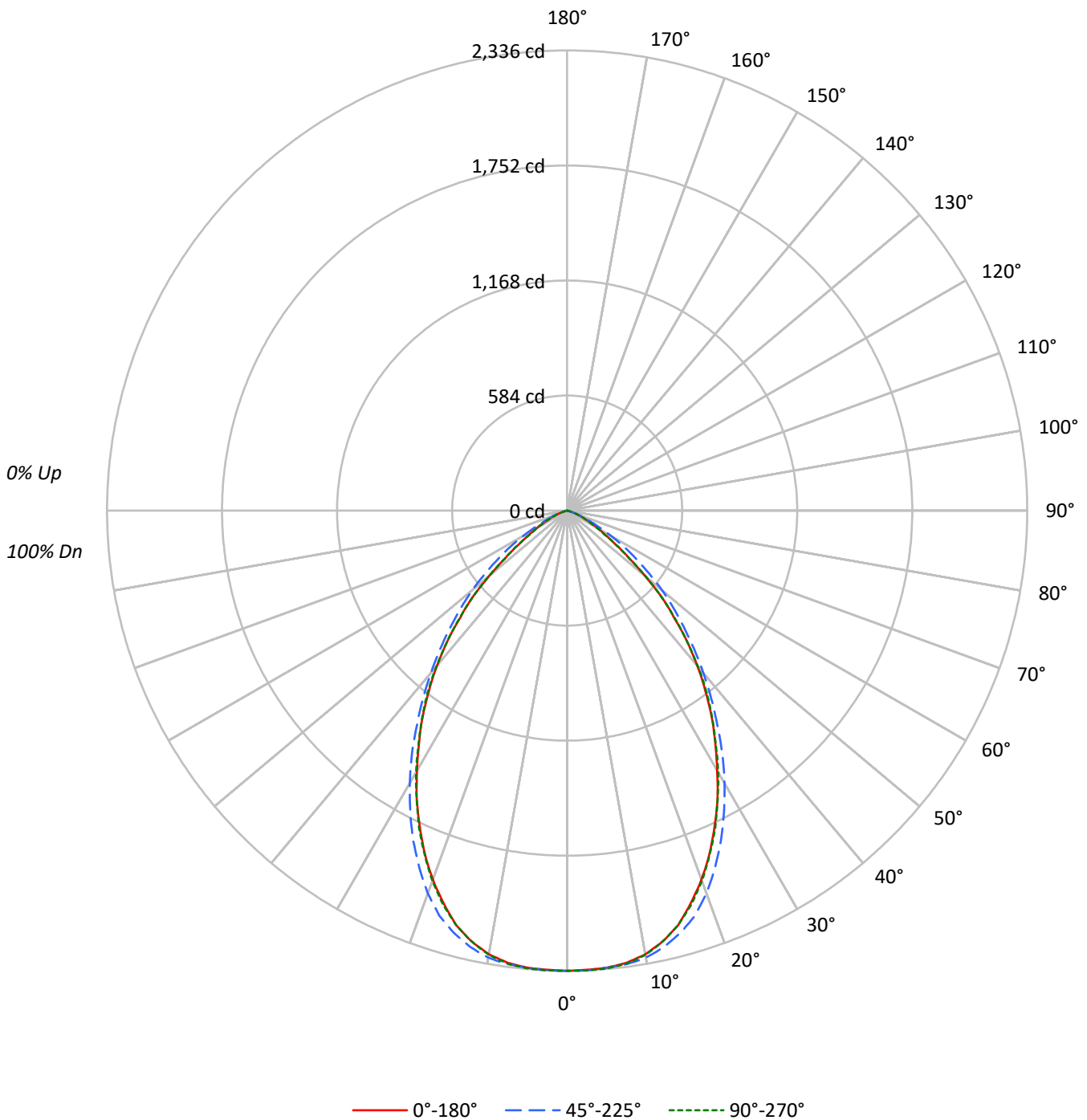
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	178836	178836	178836
5°	178974	178974	179250
10°	177747	179123	178027
15°	172545	175905	172545
20°	162390	168434	162960
25°	149564	156126	150155
30°	134645	141212	135582
35°	119569	124185	119896
40°	102778	107364	103128
45°	83027	90680	83795
50°	61457	74925	61874
55°	40569	57076	40569
60°	27050	39496	25979
65°	17931	23038	17931
70°	10295	11861	10295
75°	0	4170	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.4	6.2
10°-20°	615.8	17.2
20°-30°	831.7	23.2
30°-40°	819.5	22.9
40°-50°	625.9	17.5
50°-60°	332.1	9.3
60°-70°	119.1	3.3
70°-80°	15.0	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°	1668.9	46.6
0°-40°	2488.4	69.5
0°-60°	3446.5	96.3
0°-90°	3580.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3580.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2336	2336	2336	2336	2336	
5°	2329	2329	2329	2333	2333	221
15°	2177	2202	2220	2199	2177	609
25°	1771	1817	1849	1824	1778	812
35°	1280	1318	1329	1322	1283	796
45°	767	816	838	820	774	594
55°	304	357	428	357	304	283
65°	99	117	127	117	99	102
75°	0	4	14	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°	2336.4	2336.4	2336.4	2336.4	2336.4
2.5°	2332.9	2332.9	2336.4	2336.4	2336.4
5°	2329.3	2329.3	2329.3	2332.9	2332.9
7.5°	2315.2	2315.2	2322.3	2318.7	2318.7
10°	2286.9	2294.0	2304.6	2294.0	2290.5
12.5°	2241.0	2258.7	2269.3	2258.7	2241.0
15°	2177.4	2202.1	2219.8	2198.6	2177.4
17.5°	2089.0	2120.8	2156.1	2120.8	2096.1
20°	1993.6	2032.4	2067.8	2036.0	2000.6
22.5°	1887.5	1929.9	1961.7	1933.5	1891.0
25°	1770.9	1816.8	1848.6	1823.9	1777.9
27.5°	1654.2	1700.2	1724.9	1703.7	1654.2
30°	1523.4	1572.9	1597.7	1580.0	1534.0
32.5°	1399.7	1445.7	1466.9	1449.2	1403.3
35°	1279.6	1318.4	1329.0	1322.0	1283.1
37.5°	1152.3	1194.7	1201.8	1201.8	1162.9
40°	1028.6	1067.5	1074.5	1071.0	1032.1
42.5°	901.3	943.8	954.4	943.8	901.3
45°	767.0	816.5	837.7	820.0	774.1
47.5°	653.9	692.8	731.7	696.3	650.4
50°	516.1	583.2	629.2	579.7	519.6
52.5°	395.9	466.6	523.1	463.0	395.9
55°	304.0	357.0	427.7	357.0	304.0
57.5°	229.8	272.2	342.9	268.6	222.7
60°	176.7	208.5	258.0	201.5	169.7
62.5°	134.3	155.5	183.8	152.0	130.8
65°	99.0	116.6	127.2	116.6	99.0
67.5°	70.7	84.8	84.8	84.8	70.7
70°	46.0	56.6	53.0	56.6	46.0
72.5°	17.7	28.3	28.3	28.3	17.7
75°	0.0	3.5	14.1	3.5	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)