

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: P241832

Luminaire Tested: **PRS440D010-S4M24-41SMDMB-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241832  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-50)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS440D010-S4M24-41SMDMB-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM MATTE BLACK  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2357.6 lumens  
Efficiency: N/A  
Efficacy: 62.0 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.98  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

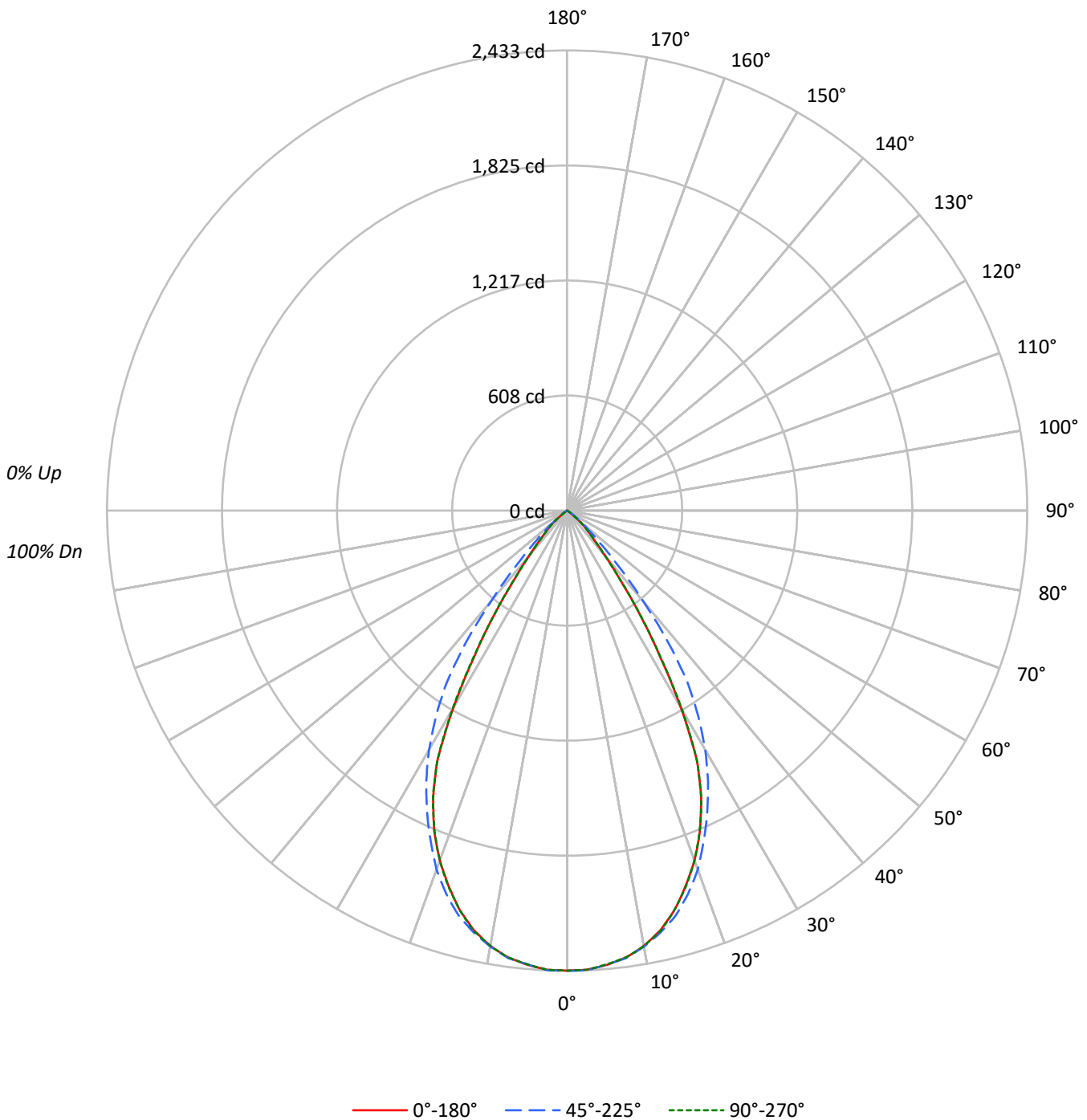
Input Watts (W): 38  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P241832

CATALOG NUMBER: PRS440D010-S4M24-41SMDMB-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P241832

CATALOG NUMBER: PRS440D010-S4M24-41SMDMB-3000K

**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	113	111	108	106	111	109	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80
4	97	89	84	79	95	88	83	79	86	82	78	84	80	77	82	79	76	75
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69
6	87	78	72	68	86	77	72	67	76	71	67	74	70	66	73	69	66	65
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60
8	78	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56
9	75	65	59	55	74	64	59	55	63	58	54	62	58	54	62	57	54	53
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	49

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	186207	186207	186207
5°	185289	185021	185021
10°	181665	181937	181665
15°	173448	175683	173448
20°	160427	164459	160427
25°	141549	148119	141853
30°	106256	129068	107193
35°	62447	103749	62774
40°	31095	62890	30735
45°	17222	28329	17222
50°	8419	11789	8419
55°	467	5191	467
60°	536	1087	536
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241832

CATALOG NUMBER: PRS440D010-S4M24-41SMDB-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.9	9.7
10°-20°	615.0	26.1
20°-30°	779.2	33.1
30°-40°	534.4	22.7
40°-50°	172.3	7.3
50°-60°	28.1	1.2
60°-70°	0.7	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°	1622.1	68.8
0°-40°	2156.5	91.5
0°-60°	2356.8	100.0
0°-90°	2357.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2357.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2433	2433	2433	2433	2433	
5°	2412	2415	2408	2415	2408	228
15°	2189	2203	2217	2203	2189	611
25°	1676	1726	1754	1722	1680	752
35°	668	824	1110	831	672	428
45°	159	198	262	194	159	130
55°	4	21	39	21	4	16
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	



TEST NUMBER: P241832

CATALOG NUMBER: PRS440D010-S4M24-41SMDMB-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2432.7	2432.7	2432.7	2432.7	2432.7
2.5°	2429.2	2429.2	2432.7	2429.2	2429.2
5°	2411.5	2415.1	2408.0	2415.1	2408.0
7.5°	2383.2	2379.7	2386.8	2379.7	2383.2
10°	2337.3	2333.7	2340.8	2333.7	2337.3
12.5°	2273.6	2277.2	2284.2	2280.7	2277.2
15°	2188.8	2202.9	2217.0	2202.9	2188.8
17.5°	2082.7	2100.4	2125.1	2100.4	2086.2
20°	1969.5	1987.2	2019.0	1990.7	1969.5
22.5°	1835.2	1870.5	1888.2	1867.0	1831.6
25°	1676.0	1725.5	1753.8	1722.0	1679.6
27.5°	1485.1	1562.9	1612.4	1562.9	1485.1
30°	1202.2	1354.3	1460.3	1354.3	1212.8
32.5°	912.3	1089.1	1290.6	1082.0	922.9
35°	668.3	823.9	1110.3	830.9	671.8
37.5°	456.1	594.0	876.9	587.0	459.7
40°	311.2	410.2	629.4	406.6	307.6
42.5°	219.2	279.3	417.2	279.3	215.7
45°	159.1	198.0	261.7	194.5	159.1
47.5°	116.7	145.0	162.7	141.4	113.2
50°	70.7	99.0	99.0	99.0	70.7
52.5°	31.8	56.6	60.1	56.6	31.8
55°	3.5	21.2	38.9	21.2	3.5
57.5°	3.5	3.5	21.2	3.5	3.5
60°	3.5	3.5	7.1	3.5	3.5
62.5°	0.0	0.0	3.5	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)