

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: P241877

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241877
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-53)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SMDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3230.6 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.98 / 1.02
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

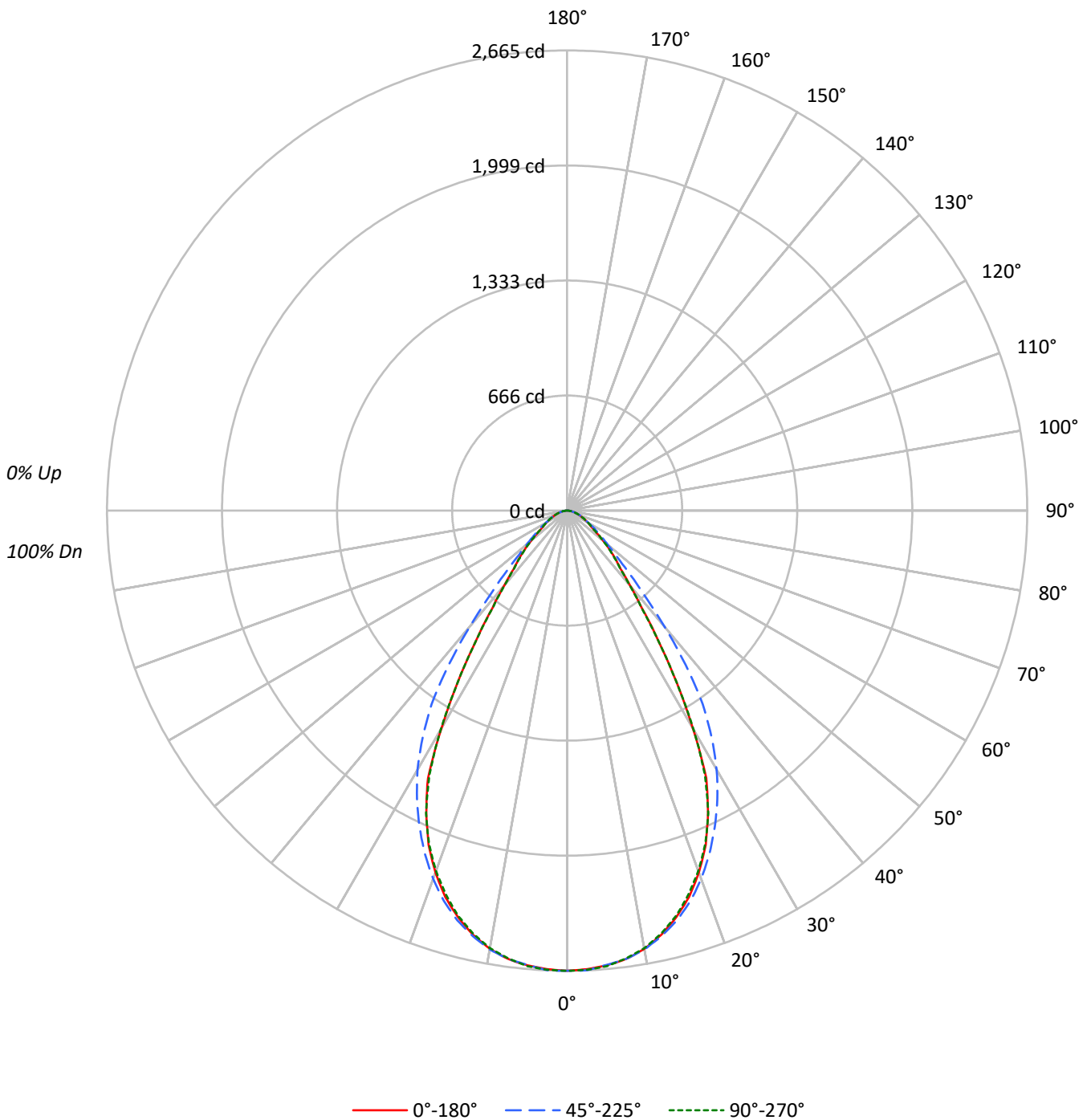
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241877

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

Luminous Intensity Polar Plot





TEST NUMBER: P241877

CATALOG NUMBER: PRS440D010-S4M24-41SMDMW-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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	100	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74
4	93	84	78	73	91	83	77	72	81	75	71	78	74	70	77	73	70	68
5	87	78	71	66	86	77	70	66	75	69	65	73	68	64	71	67	64	62
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	62	58	54	53
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	204011	204011	204011
5°	203161	202893	203438
10°	200295	200567	200015
15°	193283	194686	192720
20°	181687	184856	180824
25°	163009	170771	163305
30°	128723	153091	129660
35°	85883	127829	85883
40°	56515	87600	55805
45°	42477	53193	42087
50°	32830	36200	32414
55°	24061	27838	24061
60°	21111	22182	21111
65°	18565	19198	18565
70°	15823	16606	16606
75°	14639	14639	14639
80°	12475	12475	12475
85°	9309	12383	9309



TEST NUMBER: P241877

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	7.7
10°-20°	684.9	21.2
20°-30°	899.4	27.8
30°-40°	693.6	21.5
40°-50°	348.7	10.8
50°-60°	183.1	5.7
60°-70°	103.5	3.2
70°-80°	52.6	1.6
80°-90°	14.4	0.4
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°	1834.6	56.8
0°-40°	2528.3	78.3
0°-60°	3060.1	94.7
0°-90°	3230.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3230.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2665	2665	2665	2665	2665	
5°	2644	2648	2641	2648	2648	250
15°	2439	2446	2457	2443	2432	683
25°	1930	1987	2022	1983	1934	871
35°	919	1075	1368	1078	919	588
45°	392	431	491	428	389	308
55°	180	198	209	198	180	170
65°	102	102	106	102	102	102
75°	50	50	50	50	50	52
85°	11	11	14	11	11	13
90°	0	0	0	0	0	



TEST NUMBER: P241877

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2665.3	2665.3	2665.3	2665.3	2665.3
2.5°	2658.3	2661.8	2665.3	2661.8	2661.8
5°	2644.1	2647.7	2640.6	2647.7	2647.7
7.5°	2619.4	2615.8	2619.4	2615.8	2615.8
10°	2577.0	2577.0	2580.5	2573.4	2573.4
12.5°	2516.9	2520.4	2523.9	2520.4	2509.8
15°	2439.1	2446.2	2456.8	2442.6	2432.0
17.5°	2347.2	2354.3	2371.9	2350.7	2333.1
20°	2230.5	2248.2	2269.4	2248.2	2219.9
22.5°	2096.2	2131.6	2152.8	2124.5	2089.1
25°	1930.1	1986.6	2022.0	1983.1	1933.6
27.5°	1746.3	1817.0	1884.1	1824.0	1728.6
30°	1456.4	1604.9	1732.1	1611.9	1467.0
32.5°	1177.1	1339.7	1558.9	1339.7	1177.1
35°	919.1	1074.6	1368.0	1078.2	919.1
37.5°	710.5	844.8	1127.6	844.8	703.5
40°	565.6	654.0	876.7	650.4	558.5
42.5°	459.5	523.2	650.4	519.6	452.5
45°	392.4	431.3	491.4	427.7	388.8
47.5°	332.3	364.1	374.7	360.6	328.7
50°	275.7	307.5	304.0	304.0	272.2
52.5°	222.7	247.4	251.0	247.4	222.7
55°	180.3	198.0	208.6	198.0	180.3
57.5°	155.5	162.6	176.7	162.6	159.1
60°	137.9	141.4	144.9	141.4	137.9
62.5°	120.2	120.2	120.2	120.2	120.2
65°	102.5	102.5	106.0	102.5	102.5
67.5°	84.8	88.4	88.4	88.4	84.8
70°	70.7	74.2	74.2	74.2	74.2
72.5°	60.1	60.1	60.1	60.1	60.1
75°	49.5	49.5	49.5	49.5	49.5
77.5°	38.9	38.9	38.9	38.9	38.9
80°	28.3	28.3	28.3	28.3	28.3
82.5°	17.7	21.2	21.2	21.2	17.7
85°	10.6	10.6	14.1	10.6	10.6
87.5°	7.1	7.1	7.1	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)