

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: P241657

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241657
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-38)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SMDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

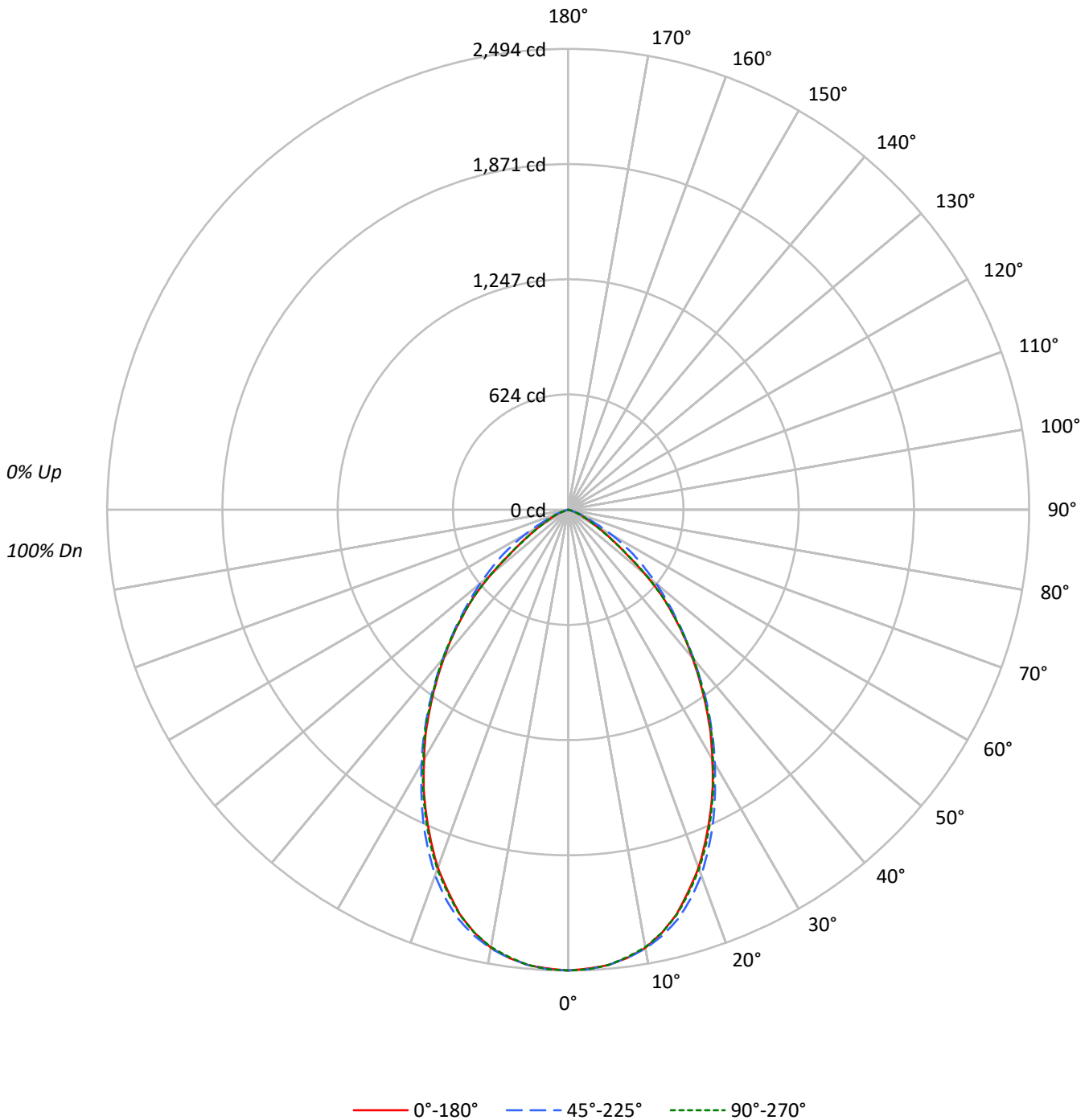
Lumens per Lamp: N/A
Luminaire Lumens: 3635.1 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.06
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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: P241657
CATALOG NUMBER: PRS440D010-S4M24-44SMDMB

Luminous Intensity Polar Plot





TEST NUMBER: P241657

CATALOG NUMBER: PRS440D010-S4M24-44SMDMB

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	103	100	98		99	97	95		95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77		83	79	76		81	77	74	73
4	91	82	75	70	89	81	74	70	78	73	69		76	72	68		74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62		70	65	61		69	64	61	59
6	80	69	62	56	78	68	61	56	66	60	56		65	60	55		64	59	55	53
7	75	64	56	51	73	63	56	51	62	55	51		60	55	50		59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46		56	50	46		55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43		52	47	43		51	46	42	41
10	63	51	44	40	61	51	44	40	50	44	39		49	43	39		48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	190869	190869	190869
5°	190092	190092	190092
10°	187098	187401	186795
15°	179550	181729	179867
20°	167929	171448	168573
25°	153558	156869	154217
30°	137792	140222	138490
35°	121456	123297	122194
40°	104377	105546	105546
45°	86718	88840	87140
50°	64530	73889	64994
55°	40876	59211	40355
60°	25856	41487	25244
65°	17061	23473	17061
70°	9668	12309	9668
75°	0	3490	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241657

CATALOG NUMBER: PRS440D010-S4M24-44SMDMB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.0	6.4
10°-20°	637.7	17.5
20°-30°	844.1	23.2
30°-40°	822.2	22.6
40°-50°	629.6	17.3
50°-60°	335.7	9.2
60°-70°	116.8	3.2
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°	1715.9	47.2
0°-40°	2538.0	69.8
0°-60°	3503.4	96.4
0°-90°	3635.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3635.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2494	2494	2494	2494	2494	
5°	2474	2474	2474	2474	2474	234
15°	2266	2282	2293	2282	2270	633
25°	1818	1846	1857	1846	1826	833
35°	1300	1320	1320	1327	1308	811
45°	801	817	821	825	805	614
55°	306	353	444	357	302	287
65°	94	114	130	110	94	98
75°	0	4	12	4	0	11
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241657

CATALOG NUMBER: PRS440D010-S4M24-44SMDMB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2493.6	2493.6	2493.6	2493.6	2493.6
2.5°	2485.8	2485.8	2489.7	2485.8	2489.7
5°	2474.0	2474.0	2474.0	2474.0	2474.0
7.5°	2446.5	2446.5	2446.5	2446.5	2442.6
10°	2407.2	2407.2	2411.1	2407.2	2403.3
12.5°	2344.4	2352.2	2360.1	2356.2	2344.4
15°	2265.8	2281.6	2293.3	2281.6	2269.8
17.5°	2163.7	2183.4	2206.9	2187.3	2171.6
20°	2061.6	2077.4	2104.8	2085.2	2069.5
22.5°	1939.9	1963.5	1983.1	1971.3	1951.7
25°	1818.2	1845.7	1857.4	1845.7	1826.0
27.5°	1692.5	1712.1	1720.0	1723.9	1700.4
30°	1559.0	1582.6	1586.5	1590.4	1566.9
32.5°	1433.3	1453.0	1453.0	1464.7	1445.1
35°	1299.8	1319.5	1319.5	1327.3	1307.7
37.5°	1170.2	1189.9	1185.9	1197.7	1178.1
40°	1044.6	1060.3	1056.3	1064.2	1056.3
42.5°	922.8	938.5	934.6	942.5	930.7
45°	801.1	816.8	820.7	824.7	805.0
47.5°	683.3	702.9	714.7	710.8	683.3
50°	541.9	589.0	620.5	596.9	545.8
52.5°	404.5	471.2	526.2	475.2	412.3
55°	306.3	353.4	443.7	357.4	302.4
57.5°	227.8	267.0	357.4	263.1	223.8
60°	168.9	200.3	271.0	196.3	164.9
62.5°	125.7	149.2	188.5	145.3	125.7
65°	94.2	113.9	129.6	110.0	94.2
67.5°	70.7	82.5	86.4	82.5	66.8
70°	43.2	55.0	55.0	55.0	43.2
72.5°	19.6	27.5	31.4	27.5	19.6
75°	0.0	3.9	11.8	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)