

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: P241662

Luminaire Tested: **PRS440D010-S4M24-44SMDMB-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241662
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-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3457.3 lumens
Efficiency: N/A
Efficacy: 91.0 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

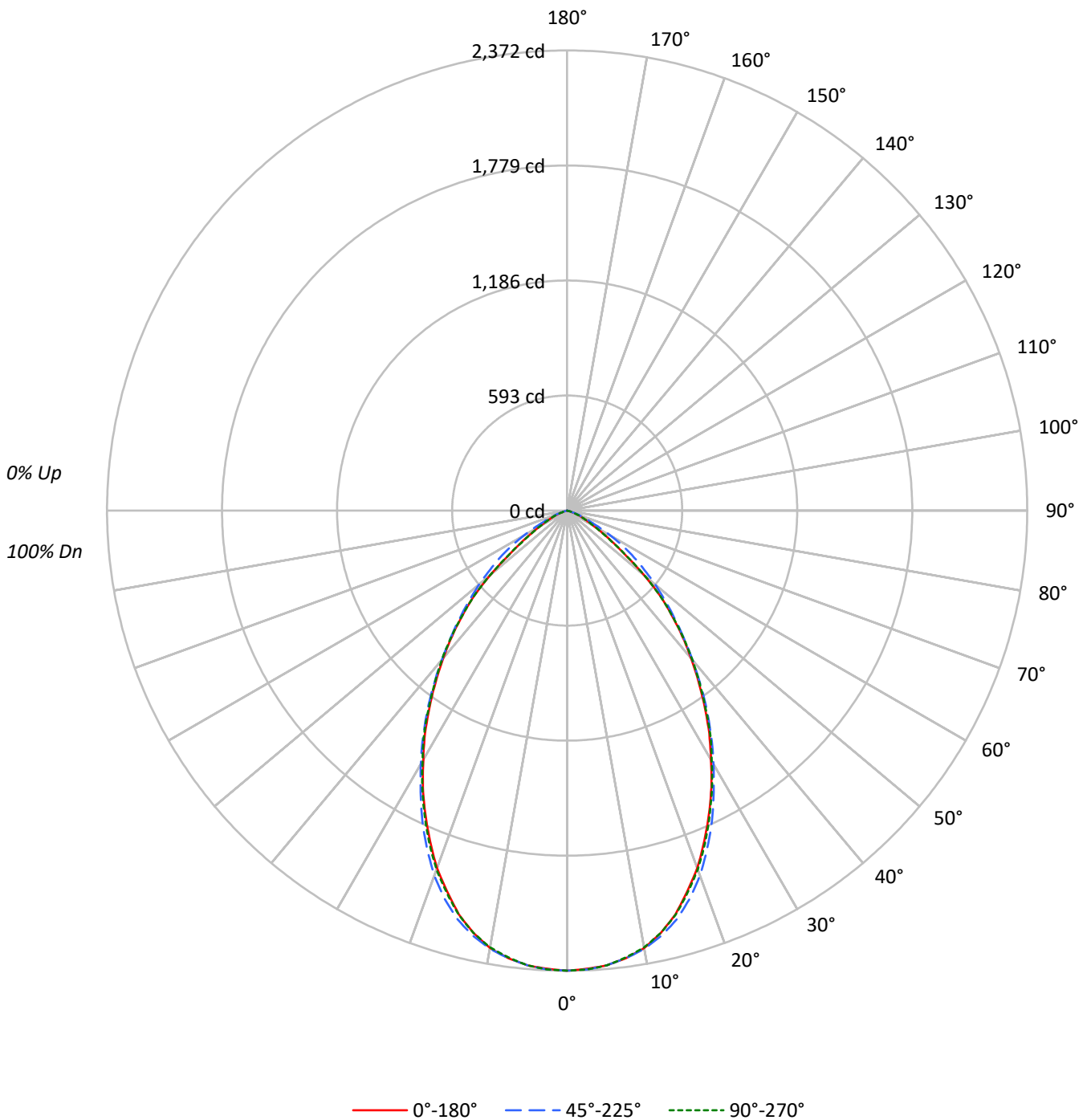
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	181530	181530	181530
5°	180787	180787	180787
10°	177950	178237	177654
15°	170770	172838	171063
20°	159718	163066	160329
25°	146042	149200	146675
30°	131048	133364	131711
35°	115513	117261	116214
40°	99271	100390	100390
45°	82475	84499	82875
50°	61374	70269	61815
55°	38874	56316	38380
60°	24586	39450	24019
65°	16228	22314	16228
70°	9198	11705	9198
75°	0	3312	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.5	6.4
10°-20°	606.6	17.5
20°-30°	802.8	23.2
30°-40°	781.9	22.6
40°-50°	598.8	17.3
50°-60°	319.3	9.2
60°-70°	111.1	3.2
70°-80°	14.2	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°	1631.9	47.2
0°-40°	2413.9	69.8
0°-60°	3332.0	96.4
0°-90°	3457.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3457.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2372	2372	2372	2372	2372	
5°	2353	2353	2353	2353	2353	223
15°	2155	2170	2181	2170	2159	602
25°	1729	1755	1767	1755	1737	793
35°	1236	1255	1255	1262	1244	771
45°	762	777	781	784	766	584
55°	291	336	422	340	288	273
65°	90	108	123	105	90	93
75°	0	4	11	4	0	10
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°	2371.6	2371.6	2371.6	2371.6	2371.6
2.5°	2364.2	2364.2	2367.9	2364.2	2367.9
5°	2352.9	2352.9	2352.9	2352.9	2352.9
7.5°	2326.8	2326.8	2326.8	2326.8	2323.1
10°	2289.5	2289.5	2293.2	2289.5	2285.7
12.5°	2229.7	2237.2	2244.6	2240.9	2229.7
15°	2155.0	2169.9	2181.1	2169.9	2158.7
17.5°	2057.9	2076.6	2099.0	2080.3	2065.4
20°	1960.8	1975.7	2001.9	1983.2	1968.3
22.5°	1845.0	1867.4	1886.1	1874.9	1856.2
25°	1729.2	1755.4	1766.6	1755.4	1736.7
27.5°	1609.7	1628.4	1635.9	1639.6	1617.2
30°	1482.7	1505.1	1508.9	1512.6	1490.2
32.5°	1363.2	1381.9	1381.9	1393.1	1374.4
35°	1236.2	1254.9	1254.9	1262.4	1243.7
37.5°	1113.0	1131.7	1127.9	1139.1	1120.5
40°	993.5	1008.4	1004.7	1012.1	1004.7
42.5°	877.7	892.6	888.9	896.4	885.2
45°	761.9	776.8	780.6	784.3	765.6
47.5°	649.9	668.5	679.7	676.0	649.9
50°	515.4	560.2	590.1	567.7	519.1
52.5°	384.7	448.2	500.5	451.9	392.2
55°	291.3	336.1	422.0	339.9	287.6
57.5°	216.6	254.0	339.9	250.2	212.9
60°	160.6	190.5	257.7	186.7	156.9
62.5°	119.5	141.9	179.3	138.2	119.5
65°	89.6	108.3	123.2	104.6	89.6
67.5°	67.2	78.4	82.2	78.4	63.5
70°	41.1	52.3	52.3	52.3	41.1
72.5°	18.7	26.1	29.9	26.1	18.7
75°	0.0	3.7	11.2	3.7	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)