

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: P252937

Luminaire Tested: **PRS440D010-S4M24-41SWDC**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252937
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SWDC
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3507.1 lumens
Efficiency: N/A
Efficacy: 92.3 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

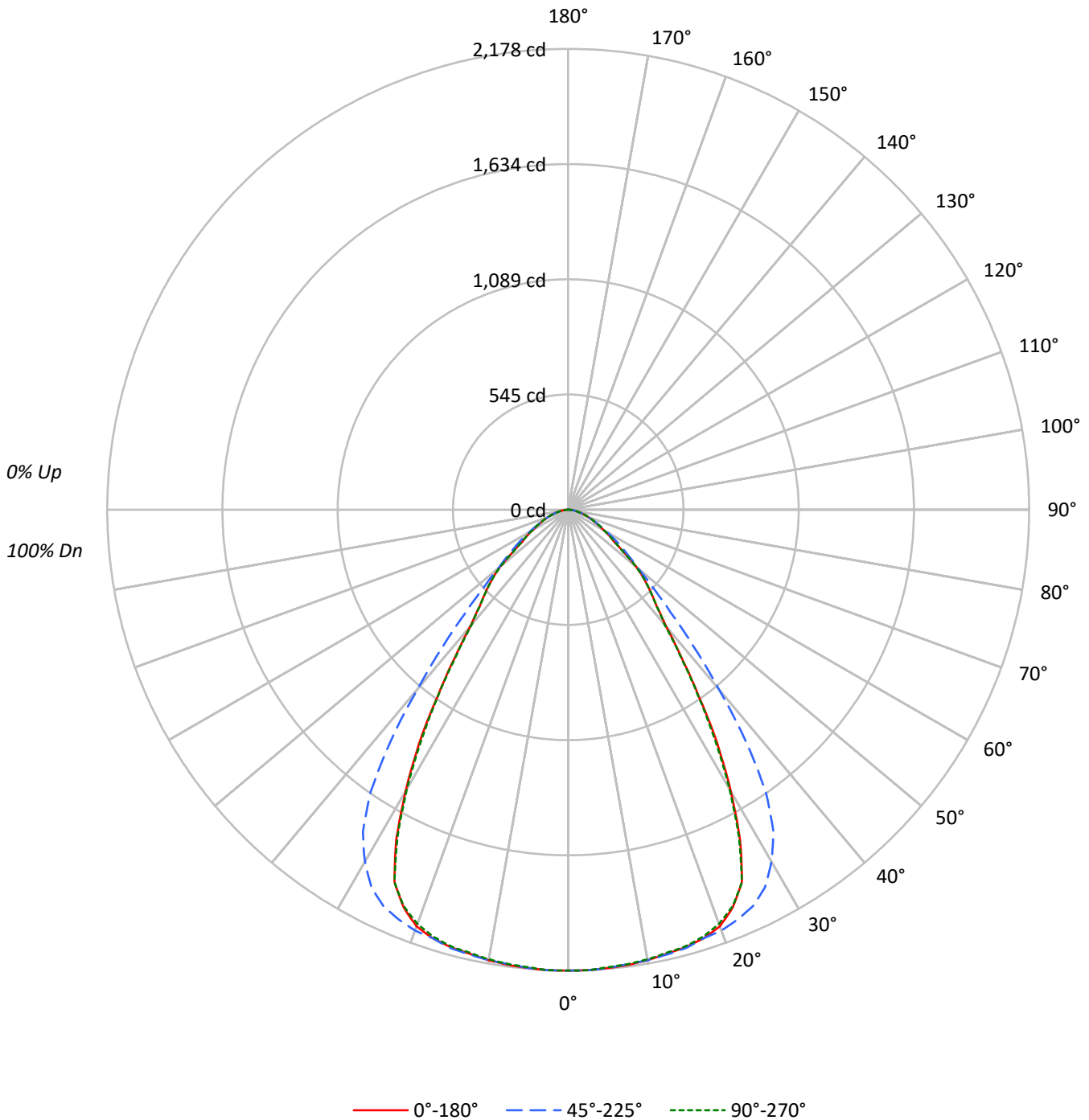
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90				90
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64				64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	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	51	60	54	50	59	54	50	48				48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44				44
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42	41				41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	166742	166742	166742
5°	167064	167064	166741
10°	168024	168024	167706
15°	169668	169993	169336
20°	170682	172377	169672
25°	164006	174520	164006
30°	135697	169796	134592
35°	100422	151984	99647
40°	71723	110702	70893
45°	59742	73663	59742
50°	49907	51383	49907
55°	35444	40982	35991
60°	29852	32393	29852
65°	25556	26298	25556
70°	22290	22290	22290
75°	19637	19637	19637
80°	16442	16442	16442
85°	14579	14579	14579



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	5.9
10°-20°	604.9	17.2
20°-30°	904.0	25.8
30°-40°	804.7	22.9
40°-50°	478.9	13.7
50°-60°	271.2	7.7
60°-70°	145.4	4.1
70°-80°	71.2	2.0
80°-90°	19.7	0.6
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	48.9
0°-40°	2520.6	71.9
0°-60°	3270.7	93.3
0°-90°	3507.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3507.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2178	2178	2178	2178	2178	
5°	2174	2174	2174	2174	2170	207
15°	2141	2141	2145	2137	2137	605
25°	1942	1996	2066	1992	1942	866
35°	1075	1257	1626	1253	1066	679
45°	552	593	680	589	552	428
55°	266	295	307	295	270	253
65°	141	145	145	145	141	142
75°	66	66	66	66	66	72
85°	17	17	17	17	17	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2178.4	2178.4	2178.4	2178.4	2178.4
2.5°	2178.4	2178.4	2178.4	2178.4	2178.4
5°	2174.3	2174.3	2174.3	2174.3	2170.1
7.5°	2170.1	2166.0	2166.0	2166.0	2166.0
10°	2161.8	2161.8	2161.8	2157.7	2157.7
12.5°	2149.4	2149.4	2153.5	2149.4	2145.2
15°	2141.1	2141.1	2145.2	2136.9	2136.9
17.5°	2124.5	2128.6	2124.5	2124.5	2116.2
20°	2095.4	2107.9	2116.2	2103.7	2083.0
22.5°	2033.2	2066.4	2095.4	2062.2	2029.0
25°	1941.9	1995.8	2066.4	1991.7	1941.9
27.5°	1759.3	1896.2	2012.4	1883.8	1746.9
30°	1535.3	1701.2	1921.1	1688.8	1522.8
32.5°	1311.2	1477.2	1805.0	1468.9	1290.4
35°	1074.7	1257.2	1626.5	1253.1	1066.4
37.5°	875.5	1041.5	1377.6	1033.2	867.2
40°	717.8	846.5	1107.9	842.3	709.5
42.5°	618.3	688.8	875.5	684.6	618.3
45°	551.9	593.4	680.5	589.2	551.9
47.5°	489.6	522.8	535.3	518.7	489.6
50°	419.1	456.4	431.5	456.4	419.1
52.5°	331.9	377.6	361.0	381.7	327.8
55°	265.6	294.6	307.1	294.6	269.7
57.5°	232.4	240.7	257.3	240.7	232.4
60°	195.0	203.3	211.6	203.3	195.0
62.5°	166.0	174.3	174.3	174.3	170.1
65°	141.1	145.2	145.2	145.2	141.1
67.5°	120.3	120.3	120.3	120.3	120.3
70°	99.6	99.6	99.6	99.6	99.6
72.5°	83.0	83.0	83.0	83.0	83.0
75°	66.4	66.4	66.4	66.4	66.4
77.5°	53.9	53.9	49.8	53.9	49.8
80°	37.3	37.3	37.3	37.3	37.3
82.5°	29.0	29.0	29.0	29.0	29.0
85°	16.6	16.6	16.6	16.6	16.6
87.5°	8.3	8.3	8.3	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)