

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: P252932

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252932
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3157.8 lumens
Efficiency: N/A
Efficacy: 83.1 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

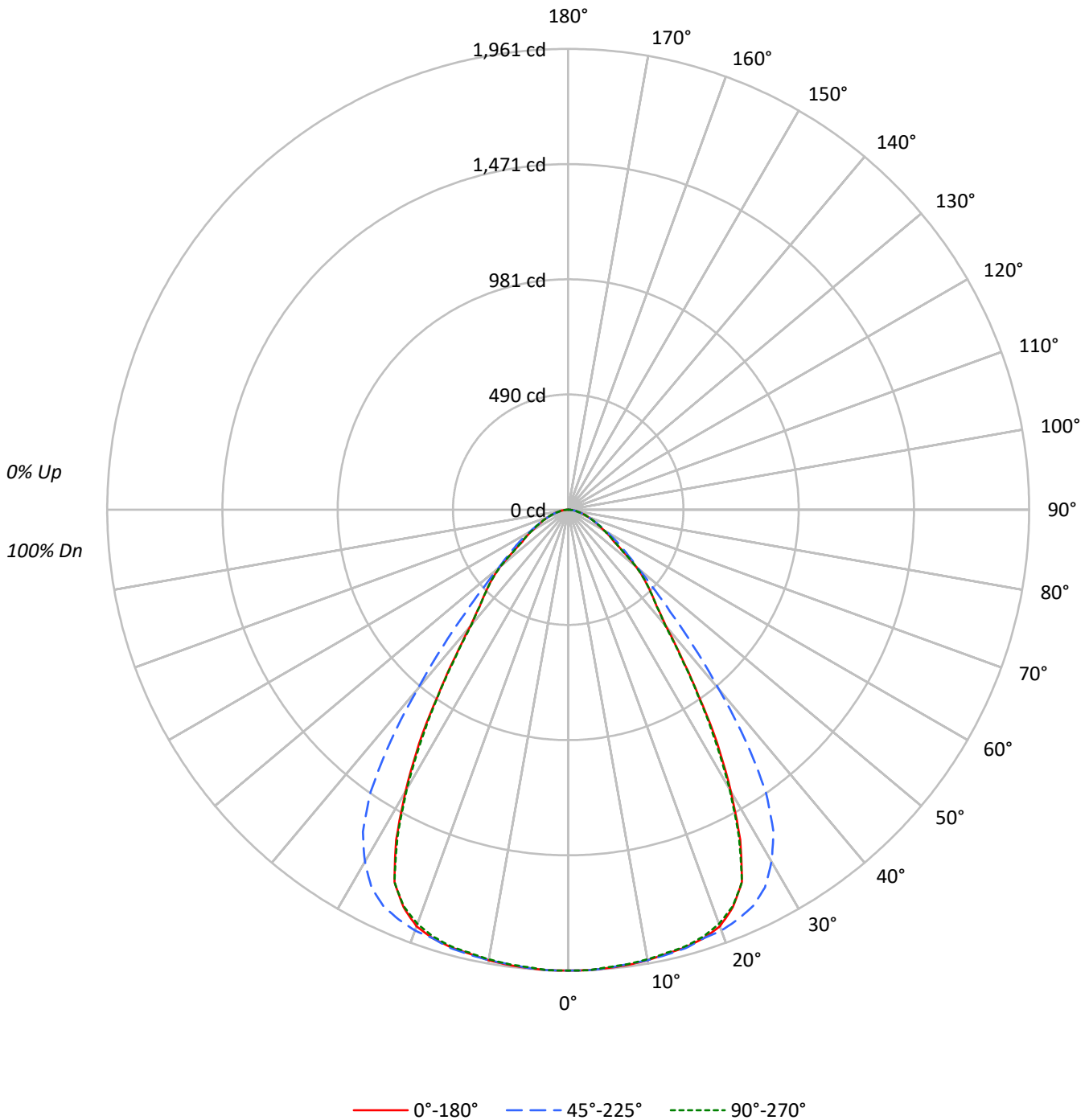
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	150132	150132	150132
5°	150421	150421	150137
10°	151290	151290	150995
15°	152766	153059	152473
20°	153683	155206	152770
25°	147672	157139	147672
30°	122174	152888	121184
35°	90415	136846	89723
40°	64578	99671	63839
45°	53789	66324	53789
50°	44929	46263	44929
55°	31908	36899	32401
60°	26882	29163	26882
65°	23002	23690	23002
70°	20075	20075	20075
75°	17685	17685	17685
80°	14811	14811	14811
85°	13086	13086	13086



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.4	5.9
10°-20°	544.7	17.2
20°-30°	813.9	25.8
30°-40°	724.5	22.9
40°-50°	431.2	13.7
50°-60°	244.2	7.7
60°-70°	130.9	4.1
70°-80°	64.1	2.0
80°-90°	17.8	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°	1545.0	48.9
0°-40°	2269.6	71.9
0°-60°	2944.9	93.3
0°-90°	3157.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3157.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1958	1958	1958	1958	1954	187
15°	1928	1928	1932	1924	1924	544
25°	1748	1797	1861	1793	1748	780
35°	968	1132	1464	1128	960	611
45°	497	534	613	530	497	386
55°	239	265	276	265	243	228
65°	127	131	131	131	127	128
75°	60	60	60	60	60	65
85°	15	15	15	15	15	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1961.4	1961.4	1961.4	1961.4	1961.4
2.5°	1961.4	1961.4	1961.4	1961.4	1961.4
5°	1957.7	1957.7	1957.7	1957.7	1954.0
7.5°	1954.0	1950.2	1950.2	1950.2	1950.2
10°	1946.5	1946.5	1946.5	1942.7	1942.7
12.5°	1935.3	1935.3	1939.0	1935.3	1931.5
15°	1927.8	1927.8	1931.5	1924.1	1924.1
17.5°	1912.9	1916.6	1912.9	1912.9	1905.4
20°	1886.7	1897.9	1905.4	1894.2	1875.5
22.5°	1830.7	1860.6	1886.7	1856.8	1826.9
25°	1748.5	1797.0	1860.6	1793.3	1748.5
27.5°	1584.1	1707.4	1812.0	1696.2	1572.9
30°	1382.3	1531.8	1729.8	1520.6	1371.1
32.5°	1180.6	1330.0	1625.2	1322.6	1161.9
35°	967.6	1132.0	1464.5	1128.3	960.2
37.5°	788.3	937.7	1240.4	930.3	780.8
40°	646.3	762.2	997.5	758.4	638.9
42.5°	556.7	620.2	788.3	616.4	556.7
45°	496.9	534.3	612.7	530.5	496.9
47.5°	440.9	470.7	482.0	467.0	440.9
50°	377.3	411.0	388.5	411.0	377.3
52.5°	298.9	340.0	325.0	343.7	295.1
55°	239.1	265.3	276.5	265.3	242.8
57.5°	209.2	216.7	231.6	216.7	209.2
60°	175.6	183.1	190.5	183.1	175.6
62.5°	149.4	156.9	156.9	156.9	153.2
65°	127.0	130.8	130.8	130.8	127.0
67.5°	108.3	108.3	108.3	108.3	108.3
70°	89.7	89.7	89.7	89.7	89.7
72.5°	74.7	74.7	74.7	74.7	74.7
75°	59.8	59.8	59.8	59.8	59.8
77.5°	48.6	48.6	44.8	48.6	44.8
80°	33.6	33.6	33.6	33.6	33.6
82.5°	26.2	26.2	26.2	26.2	26.2
85°	14.9	14.9	14.9	14.9	14.9
87.5°	7.5	7.5	7.5	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)