

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: P252972

Luminaire Tested: **PRS440D010-S4M24-41SWDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252972
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-S4M24-41SWDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3190.5 lumens
Efficiency: N/A
Efficacy: 84.0 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

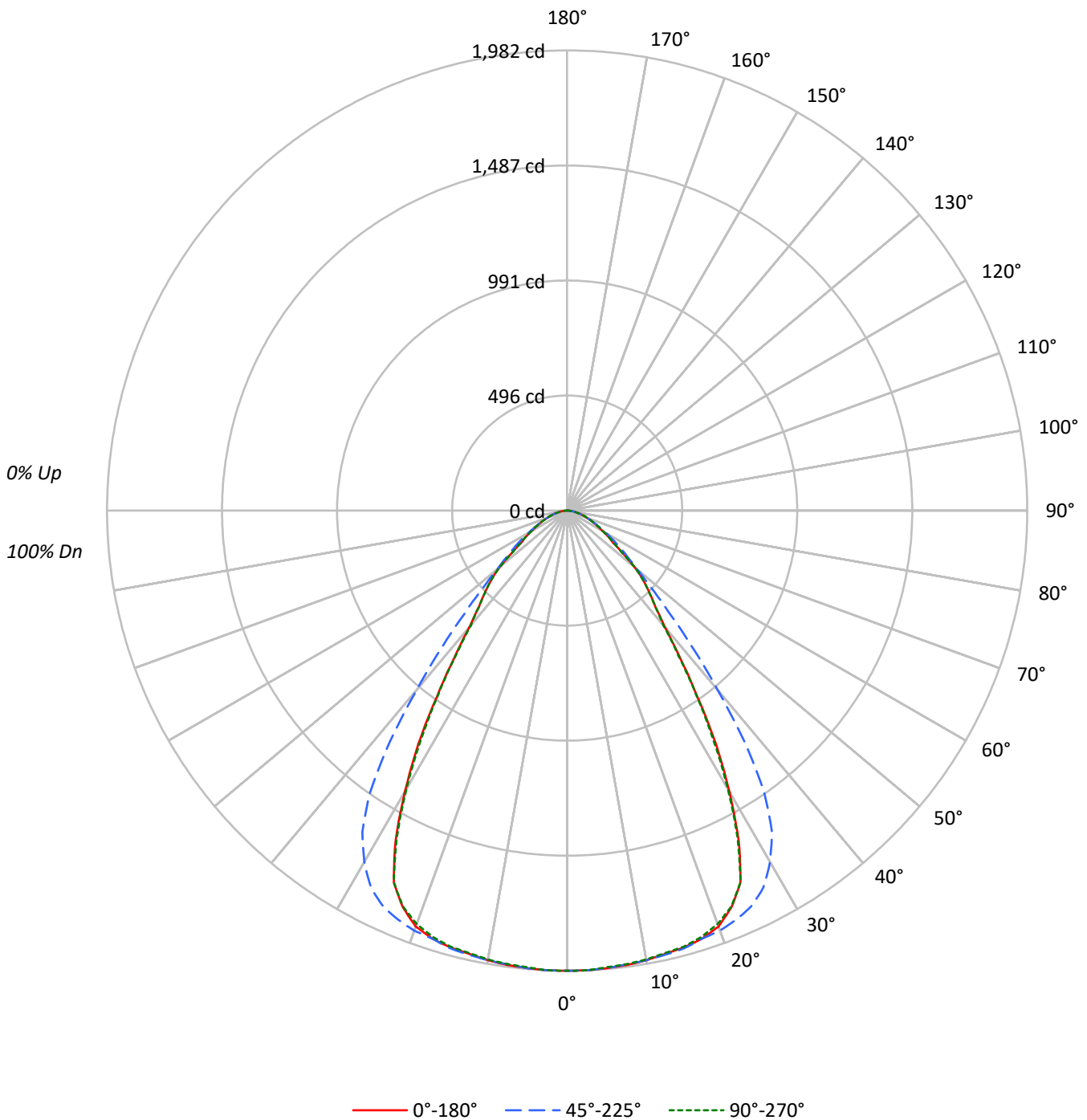
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	51	60	54	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	47	43	53	47	43	52	47	42	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°	151694	151694	151694
5°	151981	151981	151689
10°	152860	152860	152565
15°	154351	154652	154049
20°	155279	156811	154351
25°	149200	158761	149200
30°	123447	154470	122439
35°	91358	138266	90648
40°	65248	100710	64499
45°	54341	67017	54341
50°	45405	46751	45405
55°	32241	37272	32748
60°	27158	29469	27158
65°	23237	23926	23237
70°	20276	20276	20276
75°	17863	17863	17863
80°	14987	14987	14987
85°	13261	13261	13261



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.3	5.9
10°-20°	550.3	17.2
20°-30°	822.4	25.8
30°-40°	732.0	22.9
40°-50°	435.6	13.7
50°-60°	246.7	7.7
60°-70°	132.3	4.1
70°-80°	64.8	2.0
80°-90°	18.0	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°	1561.0	48.9
0°-40°	2293.1	71.9
0°-60°	2975.4	93.3
0°-90°	3190.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3190.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1982	1982	1982	1982	1982	
5°	1978	1978	1978	1978	1974	188
15°	1948	1948	1952	1944	1944	550
25°	1767	1816	1880	1812	1767	788
35°	978	1144	1480	1140	970	618
45°	502	540	619	536	502	390
55°	242	268	279	268	245	230
65°	128	132	132	132	128	129
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°	1981.8	1981.8	1981.8	1981.8	1981.8
2.5°	1981.8	1981.8	1981.8	1981.8	1981.8
5°	1978.0	1978.0	1978.0	1978.0	1974.2
7.5°	1974.2	1970.4	1970.4	1970.4	1970.4
10°	1966.7	1966.7	1966.7	1962.9	1962.9
12.5°	1955.3	1955.3	1959.1	1955.3	1951.6
15°	1947.8	1947.8	1951.6	1944.0	1944.0
17.5°	1932.7	1936.5	1932.7	1932.7	1925.1
20°	1906.3	1917.6	1925.1	1913.8	1894.9
22.5°	1849.6	1879.8	1906.3	1876.1	1845.9
25°	1766.6	1815.7	1879.8	1811.9	1766.6
27.5°	1600.5	1725.1	1830.8	1713.7	1589.2
30°	1396.7	1547.7	1747.7	1536.3	1385.3
32.5°	1192.8	1343.8	1642.0	1336.3	1174.0
35°	977.7	1143.8	1479.7	1140.0	970.1
37.5°	796.5	947.5	1253.2	939.9	788.9
40°	653.0	770.1	1007.9	766.3	645.5
42.5°	562.4	626.6	796.5	622.8	562.4
45°	502.0	539.8	619.1	536.0	502.0
47.5°	445.4	475.6	486.9	471.8	445.4
50°	381.3	415.2	392.6	415.2	381.3
52.5°	302.0	343.5	328.4	347.3	298.2
55°	241.6	268.0	279.3	268.0	245.4
57.5°	211.4	218.9	234.0	218.9	211.4
60°	177.4	185.0	192.5	185.0	177.4
62.5°	151.0	158.5	158.5	158.5	154.8
65°	128.3	132.1	132.1	132.1	128.3
67.5°	109.5	109.5	109.5	109.5	109.5
70°	90.6	90.6	90.6	90.6	90.6
72.5°	75.5	75.5	75.5	75.5	75.5
75°	60.4	60.4	60.4	60.4	60.4
77.5°	49.1	49.1	45.3	49.1	45.3
80°	34.0	34.0	34.0	34.0	34.0
82.5°	26.4	26.4	26.4	26.4	26.4
85°	15.1	15.1	15.1	15.1	15.1
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)