

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: P241817

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-49)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SNDMB-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2212.7 lumens
Efficiency: N/A
Efficacy: 58.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.85 / 0.89
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

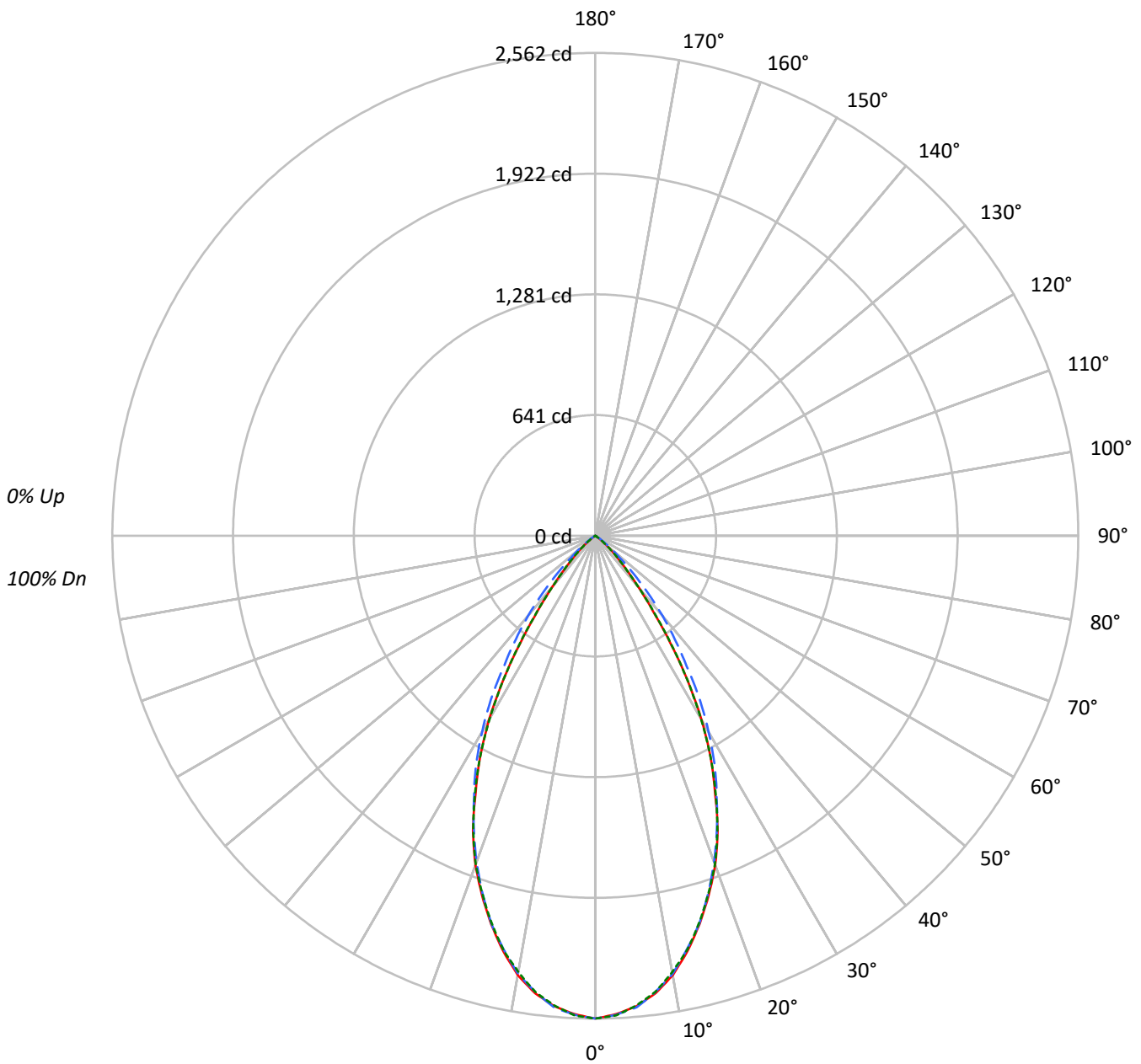
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



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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	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	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93					93			
2	108	103	99	95	106	101	98	94	98	95	92	95	93	90	92	90	88	87					87			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	81					81			
4	97	89	84	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75					75			
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70					70			
6	87	78	72	68	86	78	72	68	76	71	67	75	70	67	73	69	66	65					65			
7	83	74	67	63	82	73	67	63	72	66	63	70	66	62	69	65	62	61					61			
8	79	69	63	59	78	69	63	59	67	62	59	66	62	58	65	61	58	57					57			
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53					53			
10	71	62	56	52	70	61	56	52	60	55	52	60	55	51	59	54	51	50					50			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	196074	196074	196074
5°	192481	193019	192205
10°	183997	183445	182621
15°	169114	168828	168551
20°	151386	149944	151092
25°	126820	128610	127715
30°	99618	106177	98991
35°	64709	78903	65372
40°	35662	55426	34952
45°	17590	31360	18359
50°	7990	13885	7990
55°	467	5191	467
60°	0	1087	536
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.5	10.6
10°-20°	593.6	26.8
20°-30°	691.6	31.3
30°-40°	483.3	21.8
40°-50°	180.8	8.2
50°-60°	28.4	1.3
60°-70°	0.5	0.0
70°-80°	0.0	0.0
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°	1519.7	68.7
0°-40°	2003.0	90.5
0°-60°	2212.2	100.0
0°-90°	2212.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2212.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2562	2562	2562	2562	2562	
5°	2505	2509	2512	2502	2502	235
15°	2134	2134	2130	2130	2127	595
25°	1502	1523	1523	1526	1512	686
35°	692	770	844	774	700	436
45°	162	212	290	212	170	138
55°	4	21	39	25	4	16
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
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°	2561.6	2561.6	2561.6	2561.6	2561.6
2.5°	2540.4	2540.4	2543.9	2543.9	2547.4
5°	2505.1	2508.6	2512.1	2501.5	2501.5
7.5°	2448.5	2445.0	2441.5	2441.5	2441.5
10°	2367.3	2363.7	2360.2	2353.1	2349.6
12.5°	2257.7	2254.2	2247.1	2250.7	2250.7
15°	2134.1	2134.1	2130.5	2130.5	2127.0
17.5°	1999.8	1996.3	1989.2	1992.7	1992.7
20°	1858.5	1851.4	1840.8	1844.3	1854.9
22.5°	1695.9	1699.5	1685.3	1692.4	1692.4
25°	1501.6	1522.8	1522.8	1526.3	1512.2
27.5°	1325.0	1339.1	1370.9	1335.6	1325.0
30°	1127.1	1155.4	1201.3	1151.8	1120.0
32.5°	908.0	964.6	1031.7	968.1	908.0
35°	692.5	770.2	844.4	773.8	699.6
37.5°	498.2	586.5	692.5	593.6	505.3
40°	356.9	434.6	554.7	434.6	349.8
42.5°	243.8	303.9	413.4	307.4	243.8
45°	162.5	212.0	289.7	212.0	169.6
47.5°	109.5	144.9	187.3	144.9	109.5
50°	67.1	95.4	116.6	95.4	67.1
52.5°	31.8	53.0	67.1	53.0	31.8
55°	3.5	21.2	38.9	24.7	3.5
57.5°	3.5	3.5	21.2	3.5	3.5
60°	0.0	3.5	7.1	3.5	3.5
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	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)