

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: P241962

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241962
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-58)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SNDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3169.8 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Spacing Criteria (0/90/45): 0.8 / 0.79 / 0.83
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

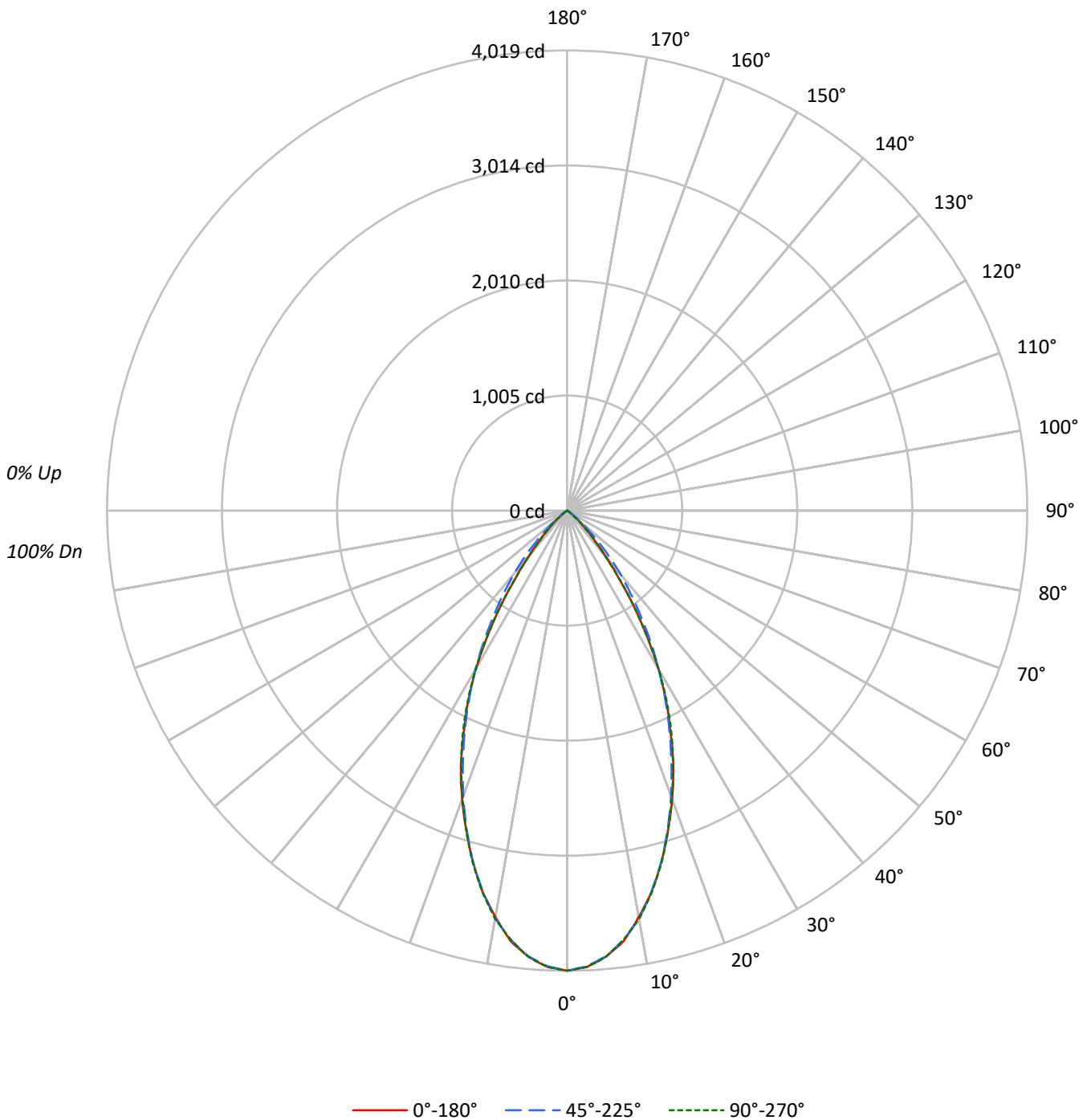
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	100	100	100	100	100		
1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94	94	94	94	94	94	94		
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	91	89	87	87	87	87	87	87	87		
3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	87	85	83	81	81	81	81	81	81	81		
4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	75	75	75	75	75	75	75		
5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70	70	70	70	70	70	70		
6	88	79	73	69	86	78	73	68	77	72	68	75	71	68	74	70	67	66	66	66	66	66	66	66		
7	83	74	68	64	82	74	68	64	72	67	63	71	67	63	70	66	63	61	61	61	61	61	61	61		
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58	58	58	58	58	58	58		
9	76	66	60	56	75	66	60	56	65	59	56	64	59	56	63	59	55	54	54	54	54	54	54	54		
10	72	62	57	53	71	62	57	53	61	56	53	60	56	52	60	55	52	51	51	51	51	51	51	51		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	307636	307636	307636
5°	300497	300213	300497
10°	280188	281058	281346
15°	251955	251654	252248
20°	218554	216127	217951
25°	180593	178389	182485
30°	140505	140841	141168
35°	93797	103917	94152
40°	52578	71963	51829
45°	26662	41199	25850
50°	11110	18219	11110
55°	494	6966	494
60°	566	1715	566
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°	363.7	11.5
10°-20°	883.0	27.9
20°-30°	973.0	30.7
30°-40°	664.1	21.0
40°-50°	247.5	7.8
50°-60°	37.5	1.2
60°-70°	0.9	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°	2219.8	70.0
0°-40°	2883.9	91.0
0°-60°	3168.9	100.0
0°-90°	3169.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3169.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4019	4019	4019	4019	4019	
5°	3911	3911	3907	3907	3911	364
15°	3180	3176	3176	3176	3183	884
25°	2138	2138	2112	2142	2161	977
35°	1004	1064	1112	1067	1008	628
45°	246	295	381	287	239	204
55°	4	30	52	30	4	22
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°	4019.1	4019.1	4019.1	4019.1	4019.1
2.5°	3989.3	3989.3	3981.8	3981.8	3989.3
5°	3910.9	3910.9	3907.2	3907.2	3910.9
7.5°	3791.5	3784.0	3780.3	3784.0	3780.3
10°	3604.9	3608.6	3616.1	3616.1	3619.8
12.5°	3410.8	3407.1	3407.1	3414.6	3414.6
15°	3179.5	3175.7	3175.7	3175.7	3183.2
17.5°	2929.4	2929.4	2918.2	2925.7	2929.4
20°	2683.1	2672.0	2653.3	2675.7	2675.7
22.5°	2425.7	2407.0	2377.1	2410.7	2414.5
25°	2138.3	2138.3	2112.2	2142.0	2160.7
27.5°	1869.6	1854.7	1854.7	1865.9	1884.5
30°	1589.7	1593.5	1593.5	1597.2	1597.2
32.5°	1287.5	1328.5	1350.9	1328.5	1287.5
35°	1003.8	1063.6	1112.1	1067.3	1007.6
37.5°	731.4	817.3	906.8	813.5	735.2
40°	526.2	604.5	720.2	597.1	518.7
42.5°	358.3	429.2	541.1	418.0	358.3
45°	246.3	294.8	380.6	287.3	238.8
47.5°	160.5	197.8	246.3	194.1	160.5
50°	93.3	126.9	153.0	119.4	93.3
52.5°	44.8	70.9	89.6	70.9	44.8
55°	3.7	29.9	52.2	29.9	3.7
57.5°	3.7	3.7	26.1	3.7	3.7
60°	3.7	3.7	11.2	3.7	3.7
62.5°	0.0	0.0	3.7	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)