

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: P241782

Luminaire Tested: **PRS440D010-S4M24-44SNDC-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241782
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-46)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-44SNDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3349.0 lumens
Efficiency: N/A
Efficacy: 88.1 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

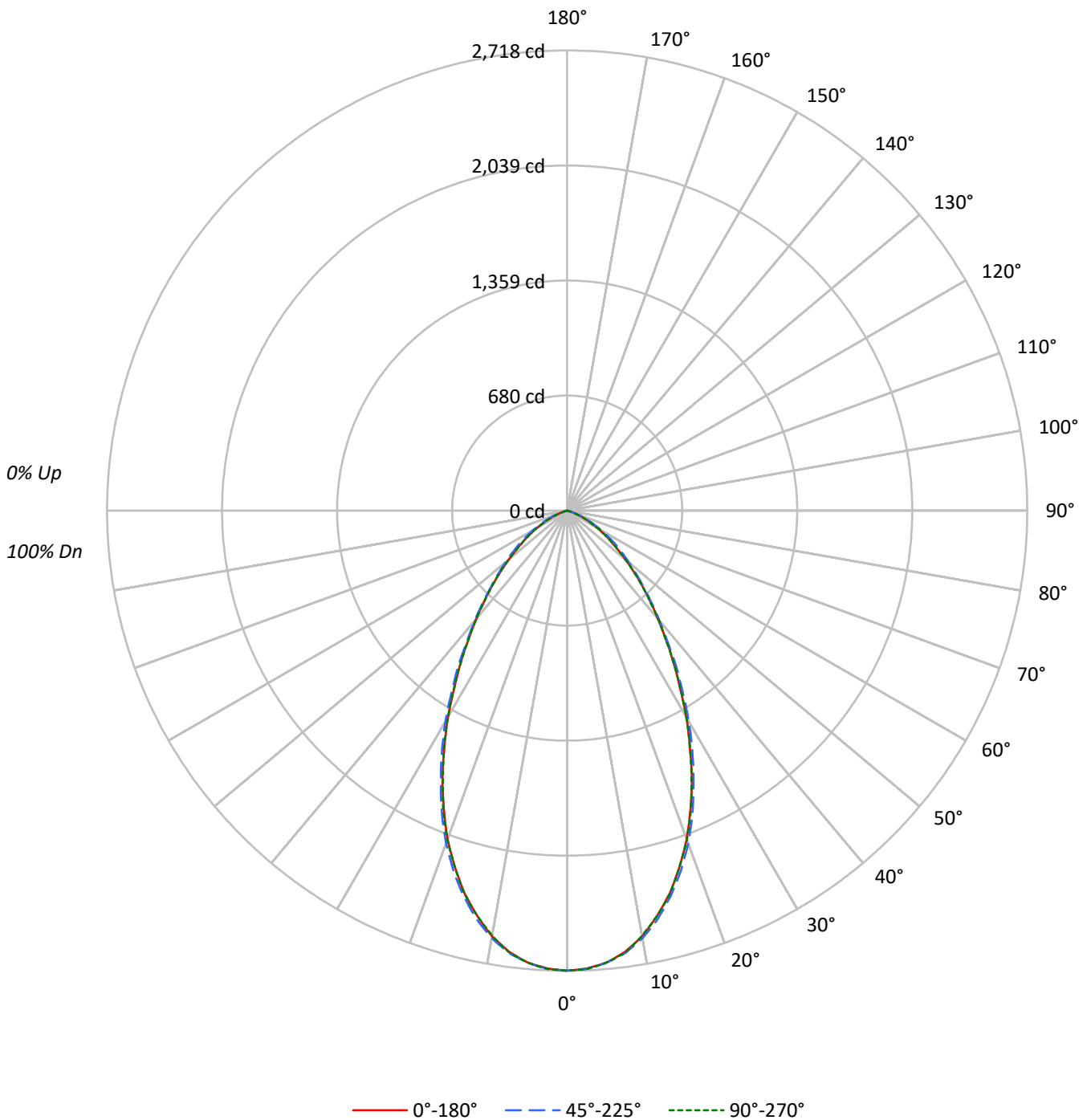
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	81	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	45	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	208014	208014	208014
5°	205943	205943	205943
10°	198453	199324	198166
15°	185477	186951	185771
20°	168149	170283	168459
25°	147233	149124	146599
30°	124384	127026	124384
35°	102207	104646	102207
40°	83184	84672	83553
45°	67482	68695	67482
50°	53348	56456	53348
55°	41850	46334	41850
60°	31995	35424	31995
65°	21643	25012	21643
70°	10854	14211	10854
75°	0	3312	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.0	7.5
10°-20°	656.0	19.6
20°-30°	803.5	24.0
30°-40°	696.0	20.8
40°-50°	493.6	14.7
50°-60°	298.4	8.9
60°-70°	133.2	4.0
70°-80°	16.3	0.5
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°	1711.5	51.1
0°-40°	2407.5	71.9
0°-60°	3199.5	95.5
0°-90°	3349.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3349.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2718	2718	2718	2718	2718	
5°	2680	2680	2680	2680	2680	252
15°	2341	2352	2359	2356	2344	653
25°	1743	1766	1766	1762	1736	795
35°	1094	1116	1120	1112	1094	685
45°	623	638	635	642	623	484
55°	314	328	347	332	314	283
65°	120	134	138	134	120	121
75°	0	4	11	4	0	11
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°	2717.6	2717.6	2717.6	2717.6	2717.6
2.5°	2706.4	2706.4	2710.1	2710.1	2710.1
5°	2680.3	2680.3	2680.3	2680.3	2680.3
7.5°	2628.0	2628.0	2635.5	2631.7	2631.7
10°	2553.3	2553.3	2564.5	2557.1	2549.6
12.5°	2452.6	2463.8	2471.2	2463.8	2452.6
15°	2340.6	2351.8	2359.2	2355.5	2344.3
17.5°	2206.2	2224.8	2232.3	2224.8	2206.2
20°	2064.3	2079.3	2090.5	2079.3	2068.1
22.5°	1903.8	1922.5	1933.7	1922.5	1911.3
25°	1743.3	1765.7	1765.7	1762.0	1735.8
27.5°	1567.8	1594.0	1601.4	1594.0	1571.6
30°	1407.3	1426.0	1437.2	1426.0	1407.3
32.5°	1239.3	1265.5	1269.2	1265.5	1243.1
35°	1093.8	1116.2	1119.9	1112.4	1093.8
37.5°	955.6	978.0	970.6	978.0	955.6
40°	832.5	851.1	847.4	851.1	836.2
42.5°	724.2	739.1	735.4	739.1	720.5
45°	623.4	638.3	634.6	642.1	623.4
47.5°	533.8	548.7	552.5	548.7	533.8
50°	448.0	470.4	474.1	470.4	448.0
52.5°	373.3	392.0	406.9	395.7	373.3
55°	313.6	328.5	347.2	332.2	313.6
57.5°	257.6	272.5	287.4	276.2	257.6
60°	209.0	224.0	231.4	224.0	209.0
62.5°	160.5	179.2	182.9	179.2	160.5
65°	119.5	134.4	138.1	134.4	119.5
67.5°	82.1	97.1	97.1	97.1	82.1
70°	48.5	59.7	63.5	63.5	48.5
72.5°	18.7	29.9	33.6	29.9	22.4
75°	0.0	3.7	11.2	3.7	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)