

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: P241952

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241952
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW 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: 3000.9 lumens
Efficiency: N/A
Efficacy: 79.0 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

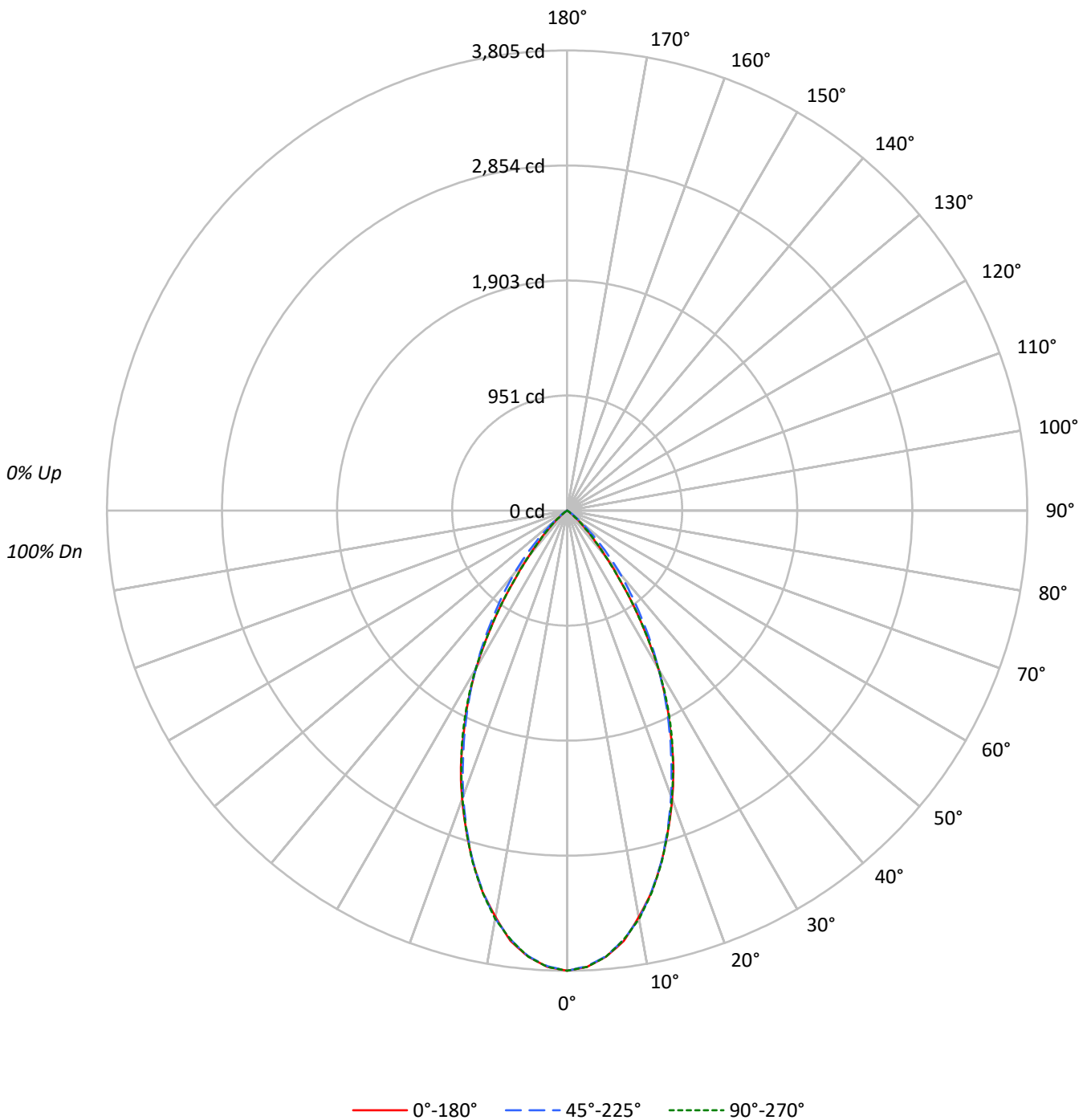
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	291240	291240	291240
5°	284484	284216	284484
10°	265257	266081	266353
15°	238523	238246	238808
20°	206914	204609	206336
25°	170973	168879	172764
30°	133019	133337	133647
35°	88807	98376	89135
40°	49770	68136	49071
45°	25244	39013	24475
50°	10515	17243	10515
55°	467	6606	467
60°	536	1623	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°	344.3	11.5
10°-20°	836.0	27.9
20°-30°	921.2	30.7
30°-40°	628.8	21.0
40°-50°	234.3	7.8
50°-60°	35.5	1.2
60°-70°	0.8	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°	2101.5	70.0
0°-40°	2730.2	91.0
0°-60°	3000.0	100.0
0°-90°	3000.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3000.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3805	3805	3805	3805	3805	
5°	3702	3702	3699	3699	3702	345
15°	3010	3006	3006	3006	3014	837
25°	2024	2024	2000	2028	2046	925
35°	950	1007	1053	1010	954	594
45°	233	279	360	272	226	193
55°	4	28	50	28	4	21
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°	3804.9	3804.9	3804.9	3804.9	3804.9
2.5°	3776.7	3776.7	3769.6	3769.6	3776.7
5°	3702.5	3702.5	3699.0	3699.0	3702.5
7.5°	3589.4	3582.4	3578.8	3582.4	3578.8
10°	3412.8	3416.3	3423.4	3423.4	3426.9
12.5°	3229.1	3225.5	3225.5	3232.6	3232.6
15°	3010.0	3006.5	3006.5	3006.5	3013.6
17.5°	2773.3	2773.3	2762.7	2769.8	2773.3
20°	2540.2	2529.6	2511.9	2533.1	2533.1
22.5°	2296.4	2278.7	2250.5	2282.3	2285.8
25°	2024.4	2024.4	1999.6	2027.9	2045.6
27.5°	1770.0	1755.9	1755.9	1766.5	1784.1
30°	1505.0	1508.6	1508.6	1512.1	1512.1
32.5°	1218.9	1257.7	1278.9	1257.7	1218.9
35°	950.4	1006.9	1052.8	1010.4	953.9
37.5°	692.4	773.7	858.5	770.2	696.0
40°	498.1	572.3	681.9	565.3	491.1
42.5°	339.2	406.3	512.3	395.7	339.2
45°	233.2	279.1	360.4	272.0	226.1
47.5°	151.9	187.2	233.2	183.7	151.9
50°	88.3	120.1	144.8	113.1	88.3
52.5°	42.4	67.1	84.8	67.1	42.4
55°	3.5	28.3	49.5	28.3	3.5
57.5°	3.5	3.5	24.7	3.5	3.5
60°	3.5	3.5	10.6	3.5	3.5
62.5°	0.0	0.0	3.5	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)