

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: P241922

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-56)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS440D010-S4M24-41SMDH-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3145.8 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.95 / 0.98
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

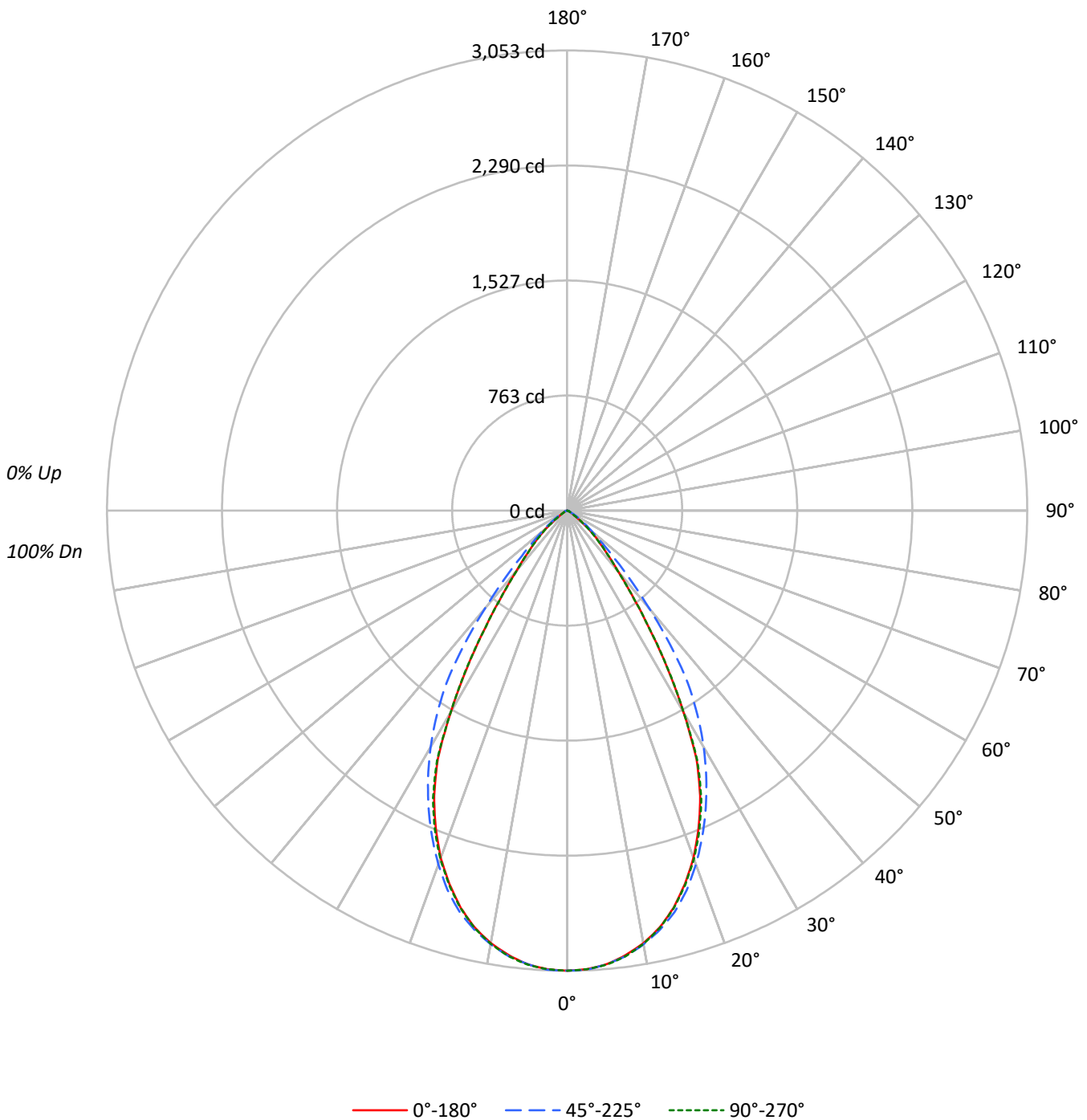
Input Watts (W): 38
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93					93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85					85			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79					79			
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73					73			
5	90	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67					67			
6	86	76	70	65	84	75	69	65	74	68	65	72	68	64	71	67	64	62					62			
7	81	71	65	60	80	71	64	60	69	64	60	68	63	60	67	62	59	58					58			
8	77	67	60	56	76	66	60	56	65	60	56	64	59	55	63	59	55	54					54			
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50					50			
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	233664	233664	233664
5°	232113	232113	232382
10°	226558	227102	226830
15°	216145	218387	216422
20°	199730	203477	200308
25°	176353	183811	177848
30°	136466	160197	136775
35°	87817	130408	87817
40°	52248	84373	51899
45°	33655	45897	33655
50°	20613	25662	20196
55°	8487	14613	8487
60°	5404	7578	5404
65°	3206	4474	3206
70°	2372	3156	2372
75°	2100	2100	1035
80°	1543	1543	1543
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.2	9.1
10°-20°	765.8	24.3
20°-30°	970.7	30.9
30°-40°	709.2	22.5
40°-50°	294.7	9.4
50°-60°	89.0	2.8
60°-70°	22.7	0.7
70°-80°	7.2	0.2
80°-90°	1.2	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°	2021.8	64.3
0°-40°	2730.9	86.8
0°-60°	3114.7	99.0
0°-90°	3145.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3145.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3053	3053	3053	3053	3053	
5°	3021	3021	3021	3021	3024	285
15°	2728	2742	2756	2742	2731	762
25°	2088	2138	2176	2152	2106	940
35°	940	1102	1396	1102	940	602
45°	311	357	424	353	311	248
55°	64	88	110	88	64	71
65°	18	21	25	21	18	20
75°	7	7	7	7	4	7
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°	3052.7	3052.7	3052.7	3052.7	3052.7
2.5°	3045.6	3045.6	3049.1	3045.6	3045.6
5°	3020.9	3020.9	3020.9	3020.9	3024.4
7.5°	2974.9	2978.5	2982.0	2978.5	2982.0
10°	2914.9	2918.4	2921.9	2921.9	2918.4
12.5°	2833.6	2840.7	2847.7	2840.7	2837.1
15°	2727.6	2741.7	2755.9	2741.7	2731.1
17.5°	2596.9	2611.0	2639.3	2614.6	2604.0
20°	2452.0	2473.2	2498.0	2476.8	2459.1
22.5°	2278.9	2317.8	2342.5	2317.8	2293.0
25°	2088.1	2137.6	2176.4	2151.7	2105.8
27.5°	1858.5	1943.2	1999.8	1953.8	1869.1
30°	1544.0	1692.4	1812.5	1706.5	1547.5
32.5°	1236.6	1392.1	1611.1	1399.1	1243.7
35°	939.8	1102.4	1395.6	1102.4	939.8
37.5°	703.1	848.0	1127.1	837.4	703.1
40°	522.9	632.4	844.4	625.4	519.4
42.5°	402.8	469.9	611.2	466.4	399.2
45°	310.9	356.9	424.0	353.3	310.9
47.5°	240.3	272.1	300.3	272.1	236.7
50°	173.1	204.9	215.5	204.9	169.6
52.5°	109.5	144.9	155.5	141.3	113.1
55°	63.6	88.3	109.5	88.3	63.6
57.5°	45.9	53.0	77.7	53.0	45.9
60°	35.3	38.9	49.5	38.9	35.3
62.5°	24.7	28.3	31.8	28.3	24.7
65°	17.7	21.2	24.7	21.2	17.7
67.5°	14.1	17.7	17.7	17.7	14.1
70°	10.6	10.6	14.1	10.6	10.6
72.5°	7.1	7.1	10.6	10.6	7.1
75°	7.1	7.1	7.1	7.1	3.5
77.5°	3.5	3.5	7.1	3.5	3.5
80°	3.5	3.5	3.5	3.5	3.5
82.5°	0.0	3.5	3.5	3.5	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)