

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: P241639

Luminaire Tested: **PRS415D010-S4M12-44SNDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241639
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-37)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SNDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

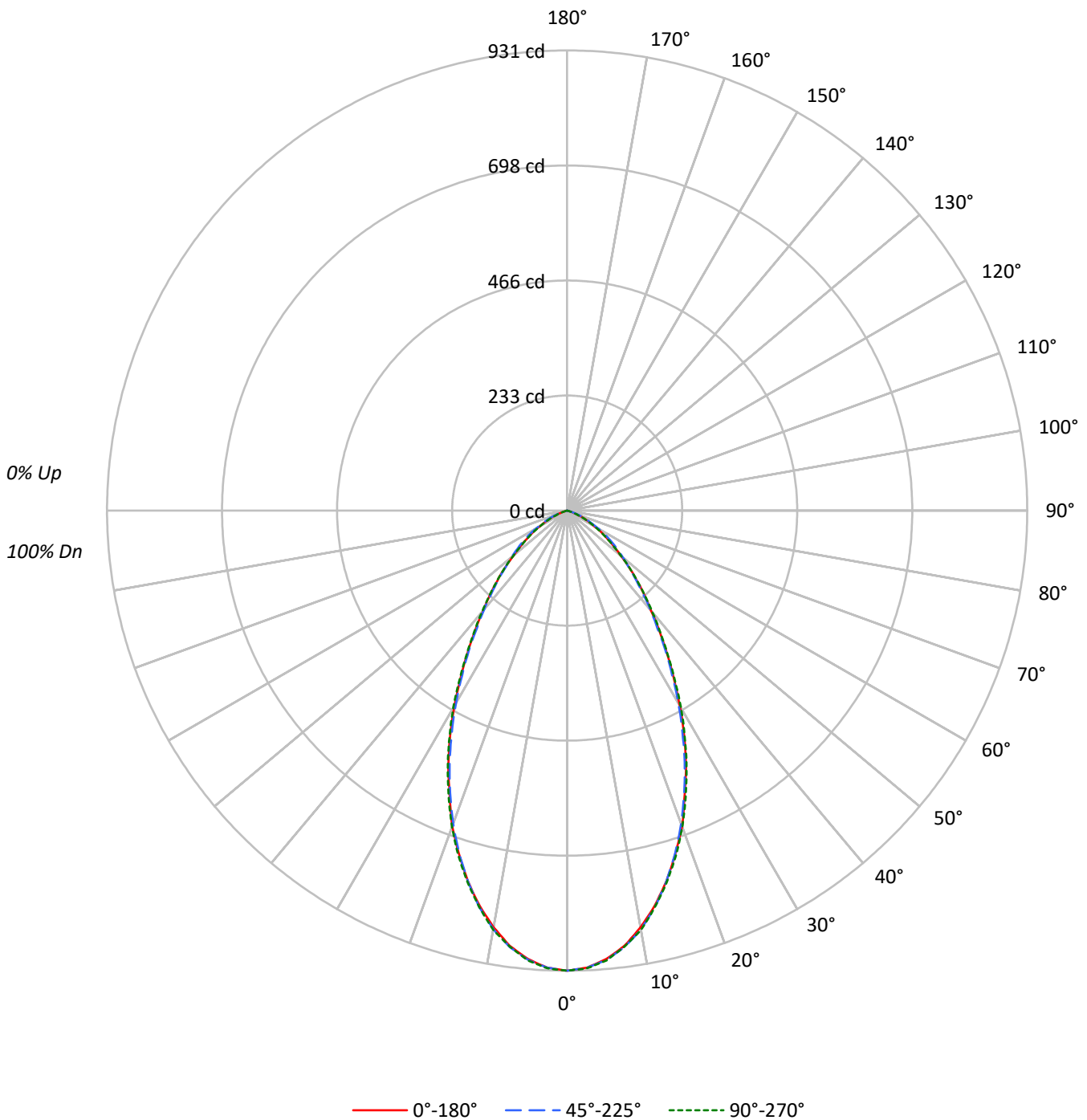
Lumens per Lamp: N/A
Luminaire Lumens: 1073.8 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

Input Watts (W): 12
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	101	99	99	97	96	95	94	93	91					91			
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82					82			
3	98	91	85	80	96	89	84	79	87	82	78	84	80	77	82	78	75	74					74			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67					67			
5	86	76	70	64	85	75	69	64	74	68	63	72	67	63	70	66	62	61					61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47					47			
9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	54	49	45	43					43			
10	64	53	47	42	63	53	47	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	71254	71254	71254
5°	69982	70090	70189
10°	66540	66851	66952
15°	61485	61485	61699
20°	55374	54934	55480
25°	48047	47490	48275
30°	40250	39782	40728
35°	32817	32443	33069
40°	26419	26159	26819
45°	21541	21108	21682
50°	16862	17493	16862
55°	13372	14613	13185
60°	9813	11252	9813
65°	6774	7987	6538
70°	3290	4476	3290
75°	0	1183	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	8.0
10°-20°	216.7	20.2
20°-30°	258.9	24.1
30°-40°	219.6	20.5
40°-50°	154.0	14.3
50°-60°	92.8	8.6
60°-70°	41.2	3.8
70°-80°	5.1	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°	561.0	52.2
0°-40°	780.6	72.7
0°-60°	1027.4	95.7
0°-90°	1073.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1073.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	911	912	912	912	914	85
15°	776	776	776	780	779	216
25°	569	566	562	568	572	260
35°	351	350	347	353	354	220
45°	199	198	195	199	200	154
55°	100	102	110	102	99	90
65°	37	41	44	41	36	38
75°	0	1	4	1	0	4
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°	930.9	930.9	930.9	930.9	930.9
2.5°	925.5	925.5	925.5	925.5	926.9
5°	910.8	912.2	912.2	912.2	913.5
7.5°	888.1	888.1	890.8	890.8	889.5
10°	856.1	856.1	860.1	861.4	861.4
12.5°	818.7	818.7	821.4	822.7	821.4
15°	775.9	775.9	775.9	780.0	778.6
17.5°	727.9	727.9	726.5	730.5	731.9
20°	679.8	677.1	674.4	677.1	681.1
22.5°	621.0	621.0	618.4	623.7	626.4
25°	568.9	566.3	562.3	567.6	571.6
27.5°	512.8	510.2	504.8	508.8	515.5
30°	455.4	454.1	450.1	454.1	460.8
32.5°	400.7	399.3	395.3	400.7	404.7
35°	351.2	349.9	347.2	352.6	353.9
37.5°	305.8	303.2	300.5	305.8	308.5
40°	264.4	264.4	261.8	264.4	268.4
42.5°	231.0	229.7	225.7	229.7	232.4
45°	199.0	197.7	195.0	199.0	200.3
47.5°	169.6	170.9	168.3	170.9	170.9
50°	141.6	145.6	146.9	145.6	141.6
52.5°	118.9	121.5	126.9	121.5	117.5
55°	100.2	101.5	109.5	101.5	98.8
57.5°	81.5	84.1	90.8	84.1	80.1
60°	64.1	69.4	73.5	68.1	64.1
62.5°	50.8	54.8	57.4	53.4	49.4
65°	37.4	41.4	44.1	41.4	36.1
67.5°	25.4	30.7	32.1	29.4	24.0
70°	14.7	18.7	20.0	18.7	14.7
72.5°	6.7	9.3	10.7	9.3	6.7
75°	0.0	1.3	4.0	1.3	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)