

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: P241634

Luminaire Tested: **PRS415D010-S4M12-44SNDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241634
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-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1036.6 lumens
Efficiency: N/A
Efficacy: 86.4 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

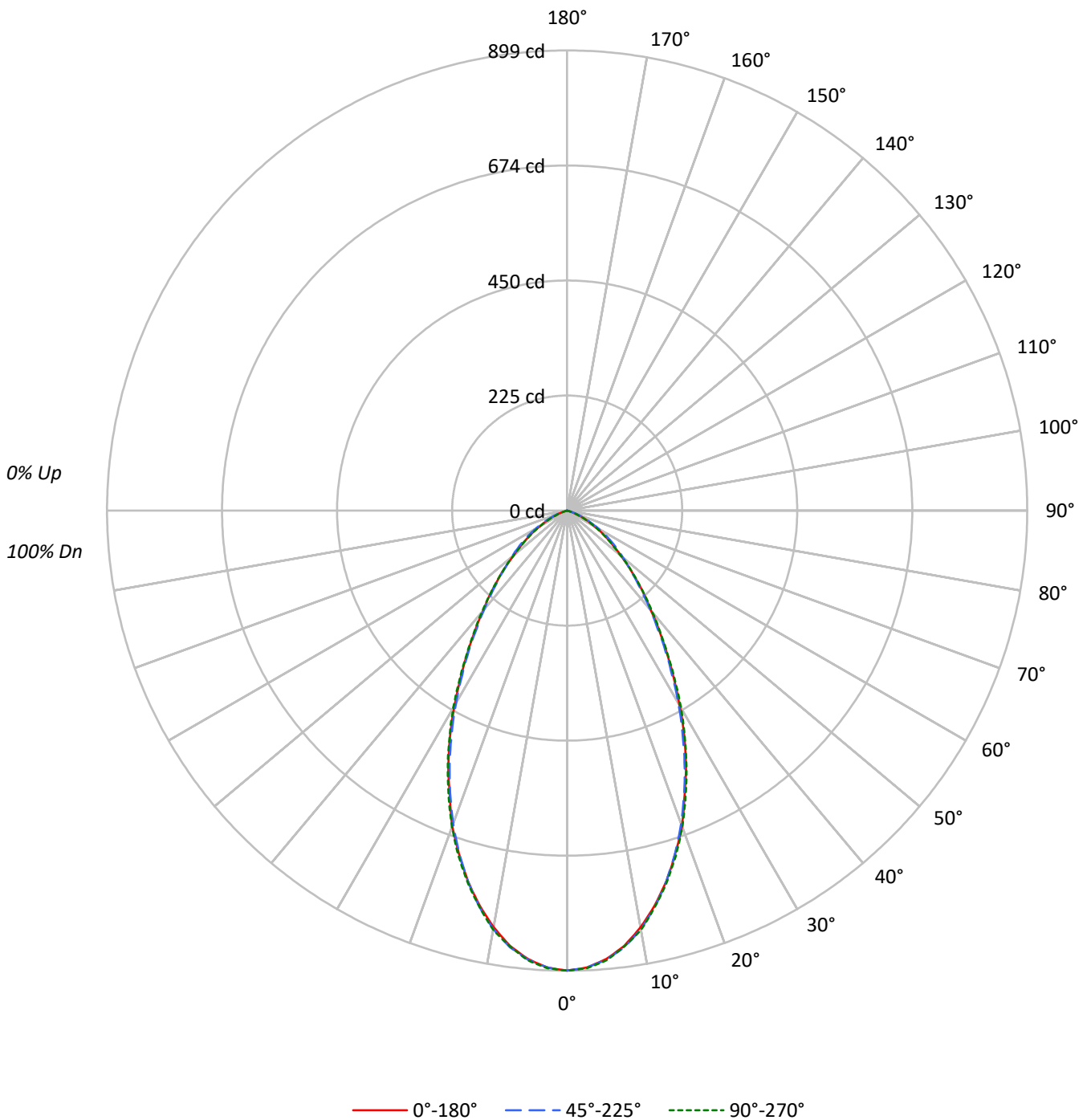
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	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°	68790	68790	68790
5°	67562	67662	67761
10°	64239	64534	64635
15°	59361	59361	59567
20°	53459	53036	53565
25°	46392	45843	46603
30°	38863	38403	39314
35°	31686	31322	31929
40°	25510	25250	25899
45°	20795	20372	20935
50°	16278	16886	16278
55°	12905	14106	12731
60°	9476	10854	9476
65°	6538	7697	6303
70°	3178	4319	3178
75°	0	1153	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.4	8.0
10°-20°	209.2	20.2
20°-30°	249.9	24.1
30°-40°	212.1	20.5
40°-50°	148.6	14.3
50°-60°	89.6	8.6
60°-70°	39.8	3.8
70°-80°	5.0	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°	541.6	52.2
0°-40°	753.6	72.7
0°-60°	991.9	95.7
0°-90°	1036.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1036.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	879	881	881	881	882	82
15°	749	749	749	753	752	209
25°	549	547	543	548	552	251
35°	339	338	335	340	342	213
45°	192	191	188	192	193	149
55°	97	98	106	98	95	87
65°	36	40	42	40	35	36
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°	898.7	898.7	898.7	898.7	898.7
2.5°	893.5	893.5	893.5	893.5	894.8
5°	879.3	880.6	880.6	880.6	881.9
7.5°	857.4	857.4	860.0	860.0	858.7
10°	826.5	826.5	830.3	831.6	831.6
12.5°	790.4	790.4	792.9	794.2	792.9
15°	749.1	749.1	749.1	753.0	751.7
17.5°	702.7	702.7	701.4	705.3	706.6
20°	656.3	653.7	651.1	653.7	657.6
22.5°	599.5	599.5	597.0	602.1	604.7
25°	549.3	546.7	542.8	548.0	551.8
27.5°	495.1	492.5	487.4	491.2	497.7
30°	439.7	438.4	434.5	438.4	444.8
32.5°	386.8	385.5	381.6	386.8	390.7
35°	339.1	337.8	335.2	340.4	341.7
37.5°	295.3	292.7	290.1	295.3	297.8
40°	255.3	255.3	252.7	255.3	259.2
42.5°	223.1	221.8	217.9	221.8	224.3
45°	192.1	190.8	188.2	192.1	193.4
47.5°	163.7	165.0	162.5	165.0	165.0
50°	136.7	140.5	141.8	140.5	136.7
52.5°	114.8	117.3	122.5	117.3	113.5
55°	96.7	98.0	105.7	98.0	95.4
57.5°	78.6	81.2	87.7	81.2	77.4
60°	61.9	67.0	70.9	65.8	61.9
62.5°	49.0	52.9	55.4	51.6	47.7
65°	36.1	40.0	42.5	40.0	34.8
67.5°	24.5	29.7	30.9	28.4	23.2
70°	14.2	18.1	19.3	18.1	14.2
72.5°	6.4	9.0	10.3	9.0	6.4
75°	0.0	1.3	3.9	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)