

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: P252909

Luminaire Tested: **PRS415D010-S4M12-44SWDMW-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SWDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1359.4 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

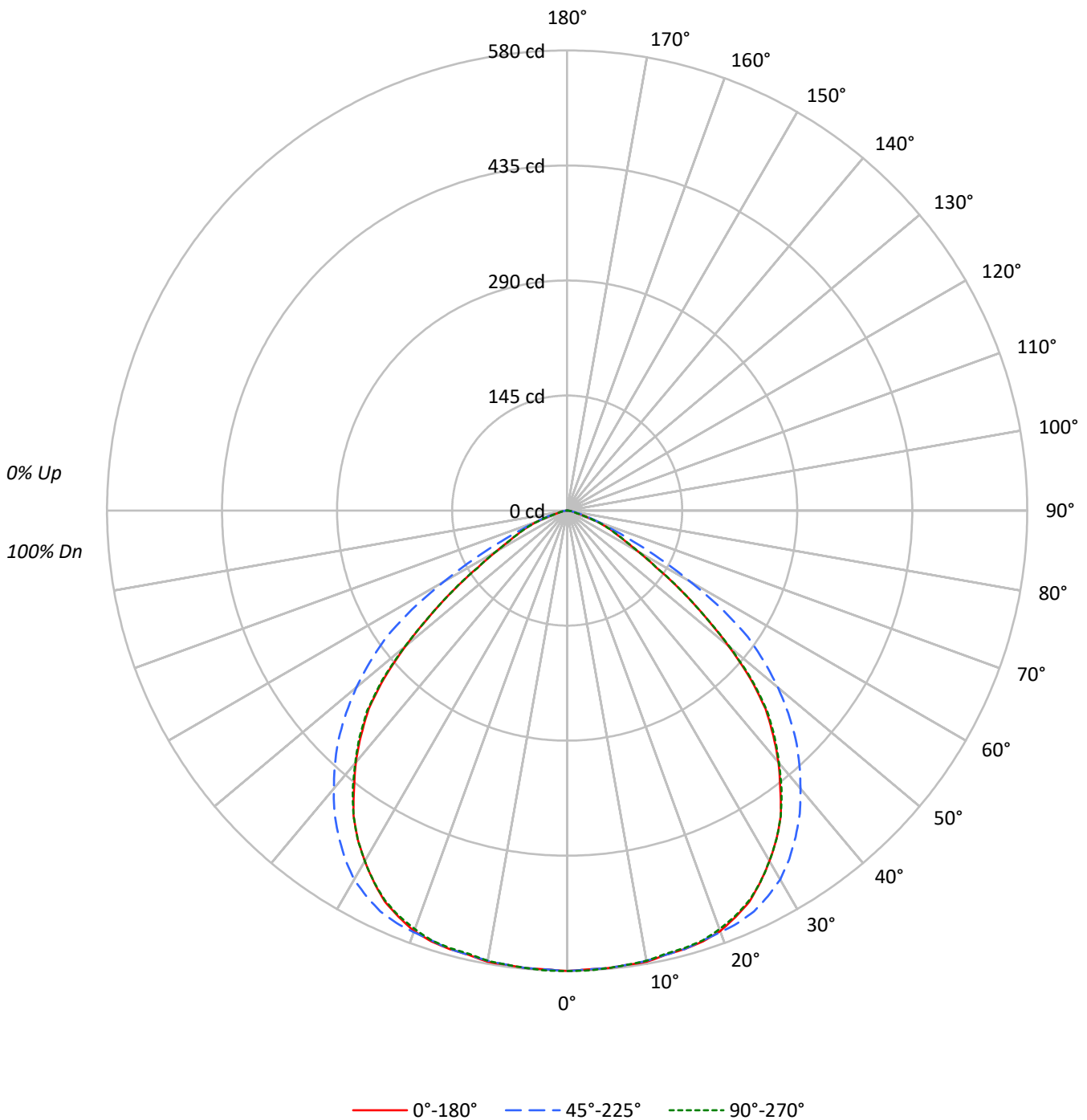
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	44418	44418	44418
5°	44480	44480	44480
10°	44893	44785	44785
15°	45343	45343	45232
20°	45949	46055	45729
25°	45927	47067	45818
30°	45085	47471	45085
35°	43880	46908	43880
40°	41397	45714	41527
45°	38277	44111	38569
50°	31663	41297	31818
55°	23234	37099	23407
60°	15707	27479	15906
65°	11972	16627	11972
70°	8750	9355	8460
75°	3578	5175	3578
80°	2953	2953	2953
85°	2371	2371	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	4.1
10°-20°	161.7	11.9
20°-30°	252.6	18.6
30°-40°	302.1	22.2
40°-50°	290.4	21.4
50°-60°	195.0	14.3
60°-70°	79.6	5.9
70°-80°	19.7	1.5
80°-90°	3.1	0.2
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°	469.5	34.5
0°-40°	771.6	56.8
0°-60°	1257.0	92.5
0°-90°	1359.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1359.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	580	580	580	580	580	
5°	579	579	579	579	579	55
15°	572	572	572	571	571	162
25°	544	549	557	548	542	250
35°	470	483	502	484	470	292
45°	354	379	408	381	356	268
55°	174	210	278	212	175	158
65°	66	74	92	74	66	67
75°	12	14	18	14	12	18
85°	3	3	3	3	3	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	580.3	580.3	580.3	580.3	580.3
2.5°	578.9	578.9	578.9	580.3	580.3
5°	578.9	578.9	578.9	578.9	578.9
7.5°	577.6	577.6	577.6	577.6	577.6
10°	577.6	576.2	576.2	576.2	576.2
12.5°	573.5	573.5	573.5	573.5	572.2
15°	572.2	572.2	572.2	570.8	570.8
17.5°	569.5	569.5	568.1	568.1	568.1
20°	564.1	565.4	565.4	564.1	561.4
22.5°	554.6	558.7	562.7	557.3	553.3
25°	543.8	549.2	557.3	547.9	542.5
27.5°	527.7	535.8	547.9	535.8	527.7
30°	510.1	520.9	537.1	520.9	510.1
32.5°	491.2	503.4	520.9	503.4	491.2
35°	469.6	483.1	502.0	484.5	469.6
37.5°	441.3	460.2	481.8	462.9	444.0
40°	414.3	434.5	457.5	435.9	415.6
42.5°	384.6	407.5	433.2	408.9	387.3
45°	353.6	379.2	407.5	380.6	356.3
47.5°	313.1	344.1	377.9	348.2	315.8
50°	265.9	305.0	346.8	307.7	267.2
52.5°	218.6	256.4	313.1	259.1	218.6
55°	174.1	210.5	278.0	211.9	175.4
57.5°	133.6	166.0	232.1	168.7	133.6
60°	102.6	126.9	179.5	128.2	103.9
62.5°	81.0	95.8	132.3	94.5	81.0
65°	66.1	74.2	91.8	74.2	66.1
67.5°	52.6	58.0	60.7	58.0	52.6
70°	39.1	44.5	41.8	44.5	37.8
72.5°	22.9	28.3	28.3	28.3	21.6
75°	12.1	13.5	17.5	13.5	12.1
77.5°	9.4	9.4	10.8	9.4	9.4
80°	6.7	6.7	6.7	6.7	6.7
82.5°	4.0	4.0	4.0	4.0	4.0
85°	2.7	2.7	2.7	2.7	2.7
87.5°	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)