

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: P241859

Luminaire Tested: **PRS415D010-S4M12-41SNDMW-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241859
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-52)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SNDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1086.8 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.93
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

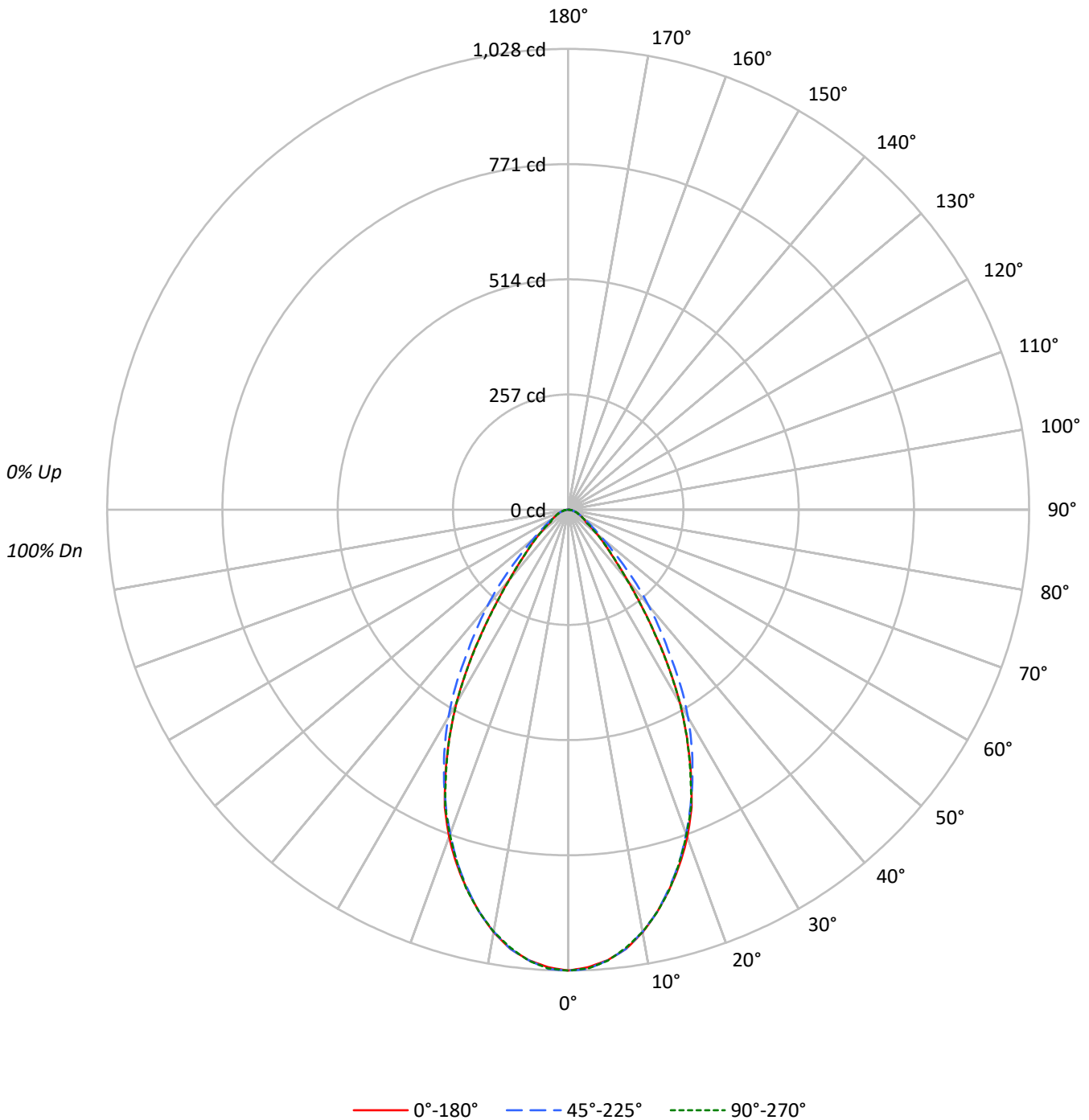
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	85	83
3	99	92	86	82	97	91	85	81	88	83	80	85	82	78	83	80	77	75
4	94	85	79	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63
6	83	73	66	62	82	72	66	61	71	65	61	69	64	60	68	63	60	58
7	79	68	61	57	77	67	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	53	49	57	52	48	56	52	48	47
10	67	56	50	46	66	56	50	46	55	49	45	54	49	45	53	49	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	78687	78687	78687
5°	77497	77497	77596
10°	74390	74289	74289
15°	69314	69108	69409
20°	63275	62639	62851
25°	54618	55378	54398
30°	44060	47250	44060
35°	31415	36956	31172
40°	20464	27928	20204
45°	13661	18824	13802
50°	9812	11968	9669
55°	6539	8421	6539
60°	5909	6307	5909
65°	5361	5361	5361
70°	4901	4901	4901
75°	4200	4200	4200
80°	3967	3967	3967
85°	3425	3425	3425



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	8.7
10°-20°	244.1	22.5
20°-30°	296.7	27.3
30°-40°	229.7	21.1
40°-50°	118.3	10.9
50°-60°	53.6	4.9
60°-70°	29.7	2.7
70°-80°	15.6	1.4
80°-90°	4.5	0.4
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°	635.5	58.5
0°-40°	865.2	79.6
0°-60°	1037.0	95.4
0°-90°	1086.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1086.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1028	1028	1028	1028	1028	
5°	1009	1011	1009	1010	1010	95
15°	875	875	872	873	876	245
25°	647	654	656	653	644	294
35°	336	370	396	368	334	211
45°	126	146	174	146	128	102
55°	49	57	63	57	49	48
65°	30	30	30	30	30	29
75°	14	14	14	14	14	16
85°	4	4	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1028.0	1028.0	1028.0	1028.0	1028.0
2.5°	1021.5	1022.8	1025.4	1024.1	1024.1
5°	1008.6	1011.2	1008.6	1009.9	1009.9
7.5°	988.0	988.0	988.0	985.4	985.4
10°	957.1	955.8	955.8	955.8	955.8
12.5°	918.5	919.7	918.5	919.7	918.5
15°	874.7	874.7	872.1	873.4	875.9
17.5°	828.3	827.0	824.4	823.1	824.4
20°	776.8	772.9	769.0	771.6	771.6
22.5°	718.8	717.5	713.6	714.9	716.2
25°	646.7	654.4	655.7	653.1	644.1
27.5°	573.2	582.2	596.4	582.2	573.2
30°	498.5	512.7	534.6	512.7	498.5
32.5°	417.4	443.1	467.6	444.4	416.1
35°	336.2	369.7	395.5	368.4	333.6
37.5°	264.1	296.3	334.9	297.6	262.8
40°	204.8	234.4	279.5	234.4	202.2
42.5°	159.7	185.5	225.4	184.2	159.7
45°	126.2	145.6	173.9	145.6	127.5
47.5°	103.1	117.2	131.4	117.2	103.1
50°	82.4	92.7	100.5	92.7	81.2
52.5°	64.4	73.4	78.6	73.4	64.4
55°	49.0	56.7	63.1	56.7	49.0
57.5°	43.8	45.1	51.5	45.1	43.8
60°	38.6	38.6	41.2	38.6	38.6
62.5°	33.5	34.8	34.8	34.8	33.5
65°	29.6	29.6	29.6	29.6	29.6
67.5°	24.5	25.8	25.8	25.8	24.5
70°	21.9	21.9	21.9	21.9	21.9
72.5°	18.0	18.0	18.0	18.0	18.0
75°	14.2	14.2	14.2	14.2	14.2
77.5°	11.6	11.6	11.6	11.6	11.6
80°	9.0	9.0	9.0	9.0	9.0
82.5°	6.4	6.4	6.4	6.4	6.4
85°	3.9	3.9	3.9	3.9	3.9
87.5°	1.3	1.3	1.3	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)