

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: P252885

Luminaire Tested: **PRS420D010-S4M12-44SWDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252885
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: PRS420D010-S4M12-44SWDH-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1989.9 lumens
Efficiency: N/A
Efficacy: 99.5 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

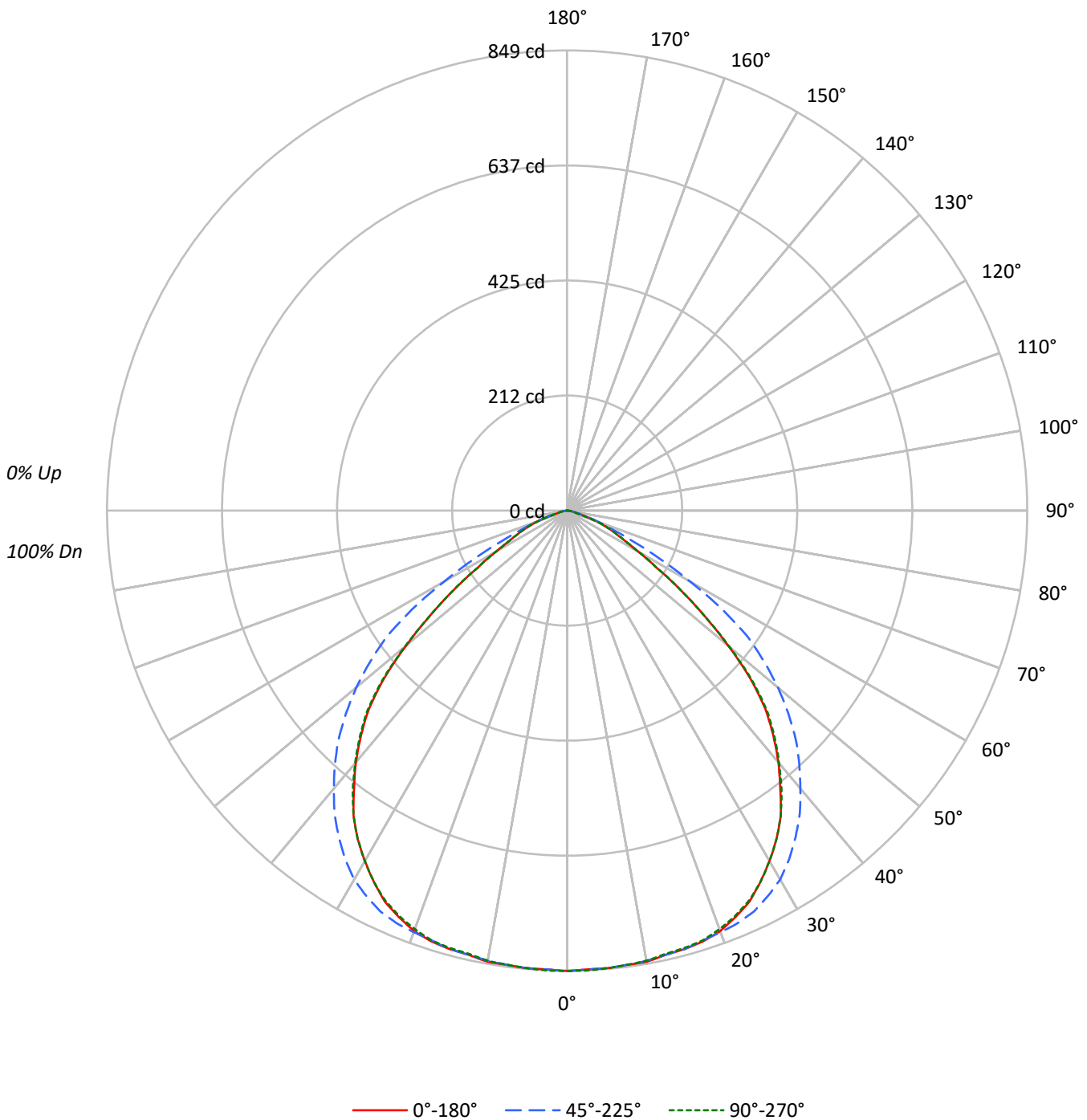
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	65008	65008	65008
5°	65111	65111	65111
10°	65708	65553	65553
15°	66366	66366	66208
20°	67250	67413	66932
25°	67227	68899	67058
30°	65988	69479	65988
35°	64232	68661	64232
40°	60592	66907	60792
45°	56019	64570	56452
50°	46334	60445	46572
55°	34003	54301	34270
60°	22978	40216	23285
65°	17532	24324	17532
70°	12824	13696	12376
75°	5264	7601	5264
80°	4364	4364	4364
85°	3513	3513	3513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	4.1
10°-20°	236.7	11.9
20°-30°	369.7	18.6
30°-40°	442.2	22.2
40°-50°	425.0	21.4
50°-60°	285.5	14.3
60°-70°	116.5	5.9
70°-80°	29.0	1.5
80°-90°	4.6	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
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0°-30°	687.1	34.5
0°-40°	1129.3	56.8
0°-60°	1839.8	92.5
0°-90°	1989.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1989.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	849	849	849	849	849	
5°	847	847	847	847	847	81
15°	838	838	838	836	836	237
25°	796	804	816	802	794	365
35°	687	707	735	709	687	427
45°	518	555	596	557	522	392
55°	255	308	407	310	257	231
65°	97	109	134	109	97	98
75°	18	20	26	20	18	26
85°	4	4	4	4	4	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	849.3	849.3	849.3	849.3	849.3
2.5°	847.4	847.4	847.4	849.3	849.3
5°	847.4	847.4	847.4	847.4	847.4
7.5°	845.4	845.4	845.4	845.4	845.4
10°	845.4	843.4	843.4	843.4	843.4
12.5°	839.5	839.5	839.5	839.5	837.5
15°	837.5	837.5	837.5	835.5	835.5
17.5°	833.5	833.5	831.6	831.6	831.6
20°	825.6	827.6	827.6	825.6	821.7
22.5°	811.8	817.7	823.7	815.8	809.8
25°	796.0	803.9	815.8	801.9	794.0
27.5°	772.3	784.2	801.9	784.2	772.3
30°	746.6	762.4	786.1	762.4	746.6
32.5°	719.0	736.8	762.4	736.8	719.0
35°	687.4	707.1	734.8	709.1	687.4
37.5°	645.9	673.5	705.2	677.5	649.8
40°	606.4	636.0	669.6	638.0	608.4
42.5°	562.9	596.5	634.0	598.5	566.9
45°	517.5	555.0	596.5	557.0	521.5
47.5°	458.2	503.7	553.1	509.6	462.2
50°	389.1	446.4	507.6	450.3	391.1
52.5°	320.0	375.3	458.2	379.2	320.0
55°	254.8	308.1	406.9	310.1	256.8
57.5°	195.5	243.0	339.7	246.9	195.5
60°	150.1	185.7	262.7	187.6	152.1
62.5°	118.5	140.2	193.6	138.3	118.5
65°	96.8	108.6	134.3	108.6	96.8
67.5°	77.0	84.9	88.9	84.9	77.0
70°	57.3	65.2	61.2	65.2	55.3
72.5°	33.6	41.5	41.5	41.5	31.6
75°	17.8	19.8	25.7	19.8	17.8
77.5°	13.8	13.8	15.8	13.8	13.8
80°	9.9	9.9	9.9	9.9	9.9
82.5°	5.9	5.9	5.9	5.9	5.9
85°	4.0	4.0	4.0	4.0	4.0
87.5°	2.0	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)