

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: P252893

Luminaire Tested: **PRS410D010-S4M12-44SWDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252893
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: PRS410D010-S4M12-44SWDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 974.0 lumens
Efficiency: N/A
Efficacy: 97.4 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

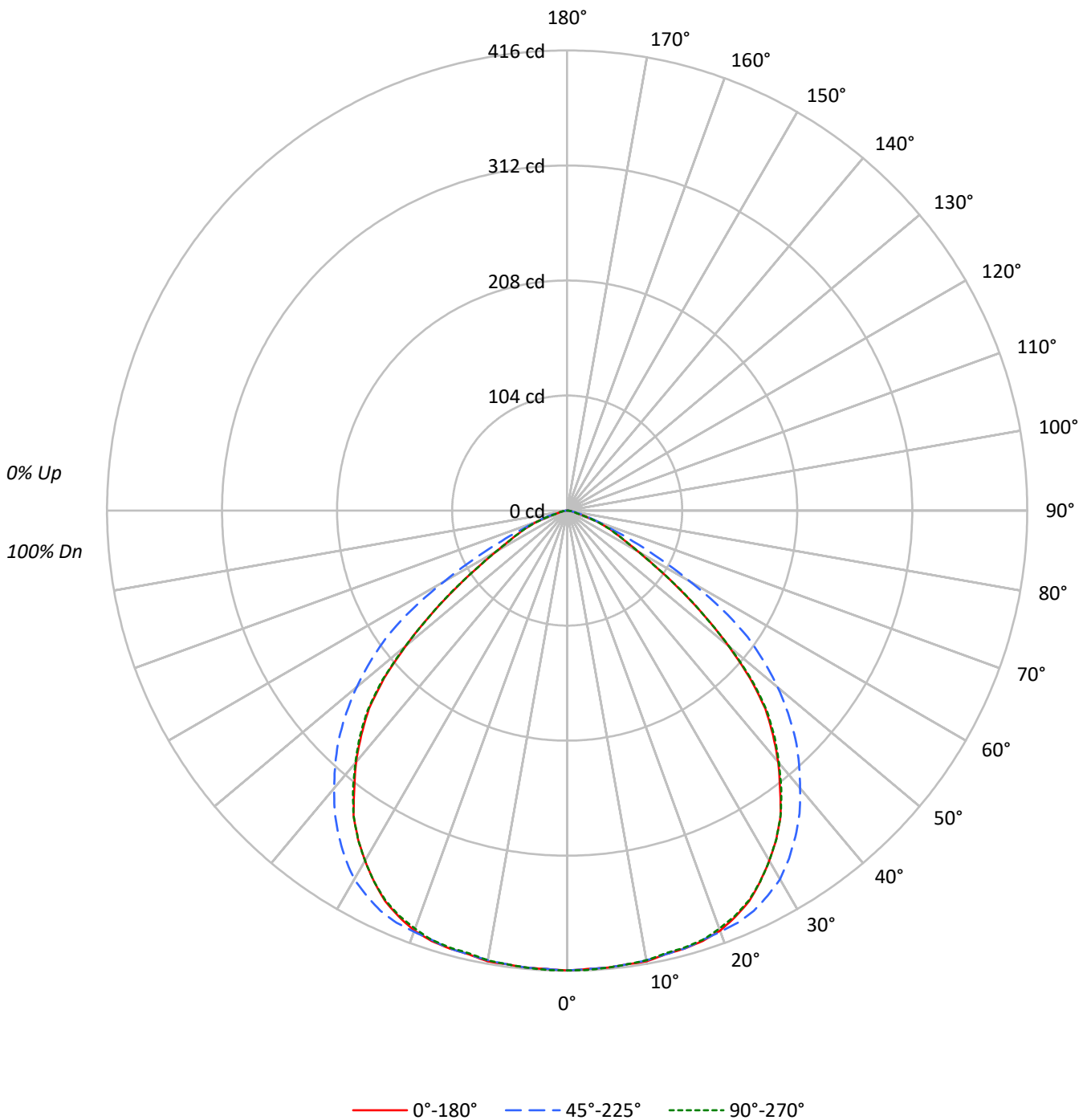
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	31819	31819	31819
5°	31871	31871	31871
10°	32162	32085	32085
15°	32482	32482	32411
20°	32916	32998	32762
25°	32904	33723	32828
30°	32305	34010	32305
35°	31443	33611	31443
40°	29656	32744	29756
45°	27419	31609	27625
50°	22685	29591	22792
55°	16641	26583	16775
60°	11252	19687	11390
65°	8585	11899	8585
70°	6266	6714	6065
75°	2573	3726	2573
80°	2116	2116	2116
85°	1669	1669	1669



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	4.1
10°-20°	115.8	11.9
20°-30°	181.0	18.6
30°-40°	216.4	22.2
40°-50°	208.0	21.4
50°-60°	139.7	14.3
60°-70°	57.1	5.9
70°-80°	14.2	1.5
80°-90°	2.2	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°	336.3	34.5
0°-40°	552.8	56.8
0°-60°	900.5	92.5
0°-90°	974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	416	416	416	416	416	
5°	415	415	415	415	415	40
15°	410	410	410	409	409	116
25°	390	394	399	392	389	179
35°	336	346	360	347	336	209
45°	253	272	292	273	255	192
55°	125	151	199	152	126	113
65°	47	53	66	53	47	48
75°	9	10	13	10	9	13
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	415.7	415.7	415.7	415.7	415.7
2.5°	414.8	414.8	414.8	415.7	415.7
5°	414.8	414.8	414.8	414.8	414.8
7.5°	413.8	413.8	413.8	413.8	413.8
10°	413.8	412.8	412.8	412.8	412.8
12.5°	410.9	410.9	410.9	410.9	409.9
15°	409.9	409.9	409.9	409.0	409.0
17.5°	408.0	408.0	407.0	407.0	407.0
20°	404.1	405.1	405.1	404.1	402.2
22.5°	397.4	400.3	403.2	399.3	396.4
25°	389.6	393.5	399.3	392.5	388.7
27.5°	378.0	383.8	392.5	383.8	378.0
30°	365.5	373.2	384.8	373.2	365.5
32.5°	351.9	360.6	373.2	360.6	351.9
35°	336.5	346.1	359.7	347.1	336.5
37.5°	316.1	329.7	345.2	331.6	318.1
40°	296.8	311.3	327.7	312.3	297.8
42.5°	275.5	292.0	310.3	292.9	277.5
45°	253.3	271.7	292.0	272.6	255.2
47.5°	224.3	246.5	270.7	249.4	226.2
50°	190.5	218.5	248.5	220.4	191.4
52.5°	156.6	183.7	224.3	185.6	156.6
55°	124.7	150.8	199.2	151.8	125.7
57.5°	95.7	118.9	166.3	120.9	95.7
60°	73.5	90.9	128.6	91.8	74.4
62.5°	58.0	68.6	94.7	67.7	58.0
65°	47.4	53.2	65.7	53.2	47.4
67.5°	37.7	41.6	43.5	41.6	37.7
70°	28.0	31.9	30.0	31.9	27.1
72.5°	16.4	20.3	20.3	20.3	15.5
75°	8.7	9.7	12.6	9.7	8.7
77.5°	6.8	6.8	7.7	6.8	6.8
80°	4.8	4.8	4.8	4.8	4.8
82.5°	2.9	2.9	2.9	2.9	2.9
85°	1.9	1.9	1.9	1.9	1.9
87.5°	1.0	1.0	1.0	1.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)