

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: P252898

Luminaire Tested: **PRS410D010-S4M12-44SWDMW-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252898
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-S4M12-44SWDMW-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW 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: 972.1 lumens
Efficiency: N/A
Efficacy: 97.2 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

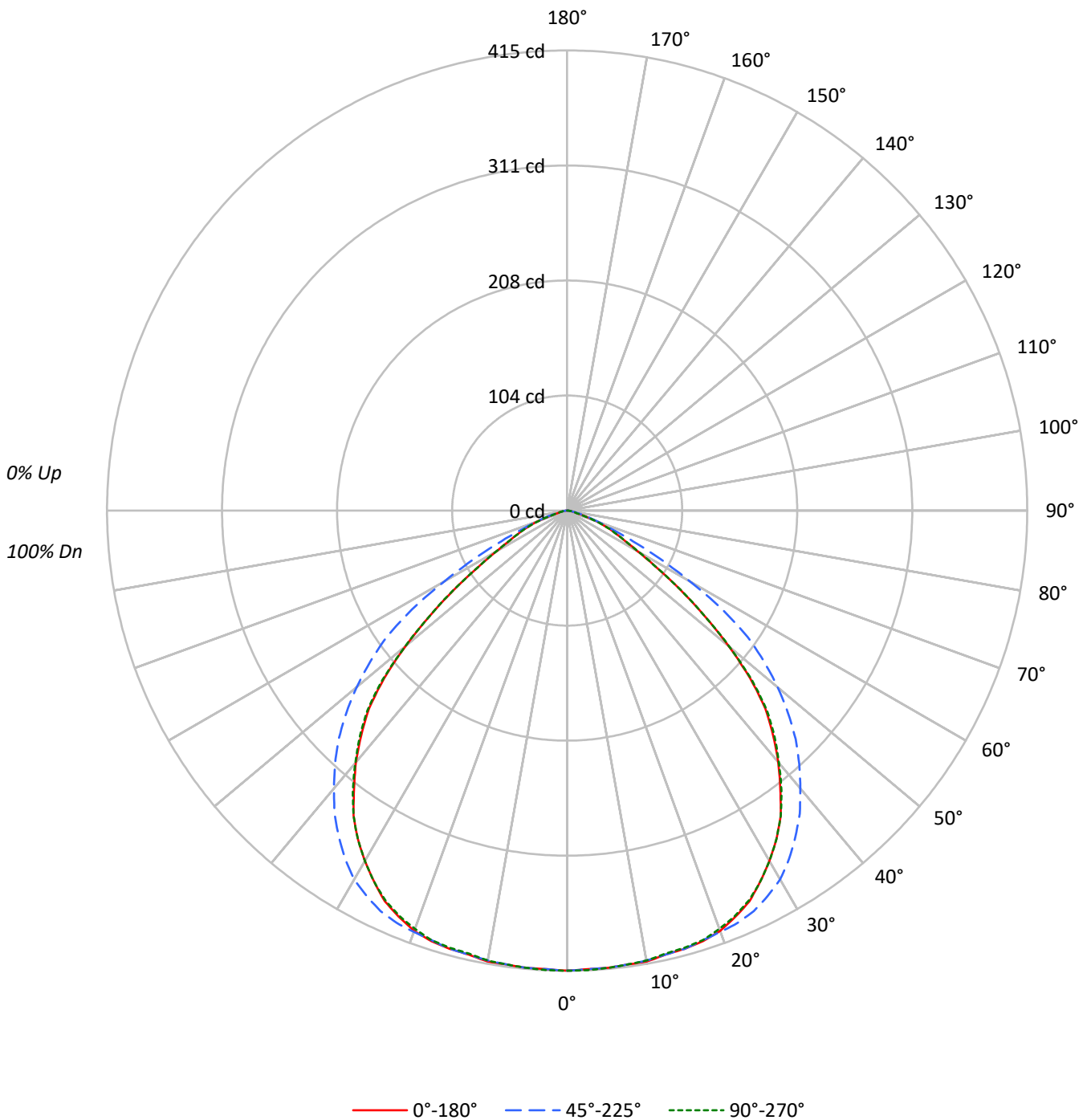
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	31758	31758	31758
5°	31810	31810	31810
10°	32100	32030	32030
15°	32426	32426	32347
20°	32859	32933	32696
25°	32845	33656	32761
30°	32243	33949	32243
35°	31378	33546	31378
40°	29606	32684	29696
45°	27365	31544	27582
50°	22637	29532	22756
55°	16614	26530	16735
60°	11221	19641	11374
65°	8567	11881	8567
70°	6266	6692	6043
75°	2573	3697	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°	115.6	11.9
20°-30°	180.6	18.6
30°-40°	216.0	22.2
40°-50°	207.6	21.4
50°-60°	139.5	14.3
60°-70°	56.9	5.9
70°-80°	14.1	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°	335.7	34.5
0°-40°	551.7	56.8
0°-60°	898.8	92.5
0°-90°	972.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	972.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	414	414	414	414	414	39
15°	409	409	409	408	408	116
25°	389	393	398	392	388	178
35°	336	346	359	346	336	209
45°	253	271	291	272	255	192
55°	124	150	199	152	125	113
65°	47	53	66	53	47	48
75°	9	10	12	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°	414.9	414.9	414.9	414.9	414.9
2.5°	414.0	414.0	414.0	414.9	414.9
5°	414.0	414.0	414.0	414.0	414.0
7.5°	413.0	413.0	413.0	413.0	413.0
10°	413.0	412.1	412.1	412.1	412.1
12.5°	410.1	410.1	410.1	410.1	409.2
15°	409.2	409.2	409.2	408.2	408.2
17.5°	407.2	407.2	406.3	406.3	406.3
20°	403.4	404.3	404.3	403.4	401.4
22.5°	396.6	399.5	402.4	398.5	395.6
25°	388.9	392.8	398.5	391.8	387.9
27.5°	377.3	383.1	391.8	383.1	377.3
30°	364.8	372.5	384.1	372.5	364.8
32.5°	351.3	359.9	372.5	359.9	351.3
35°	335.8	345.5	359.0	346.4	335.8
37.5°	315.6	329.1	344.5	331.0	317.5
40°	296.3	310.7	327.1	311.7	297.2
42.5°	275.0	291.4	309.8	292.4	277.0
45°	252.8	271.2	291.4	272.1	254.8
47.5°	223.9	246.1	270.2	249.0	225.8
50°	190.1	218.1	248.0	220.0	191.1
52.5°	156.3	183.3	223.9	185.3	156.3
55°	124.5	150.5	198.8	151.5	125.4
57.5°	95.5	118.7	166.0	120.6	95.5
60°	73.3	90.7	128.3	91.7	74.3
62.5°	57.9	68.5	94.6	67.5	57.9
65°	47.3	53.1	65.6	53.1	47.3
67.5°	37.6	41.5	43.4	41.5	37.6
70°	28.0	31.8	29.9	31.8	27.0
72.5°	16.4	20.3	20.3	20.3	15.4
75°	8.7	9.6	12.5	9.6	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)