

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: P252878

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P252878
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-S4M12-44SWDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 982.9 lumens
Efficiency: N/A
Efficacy: 98.3 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

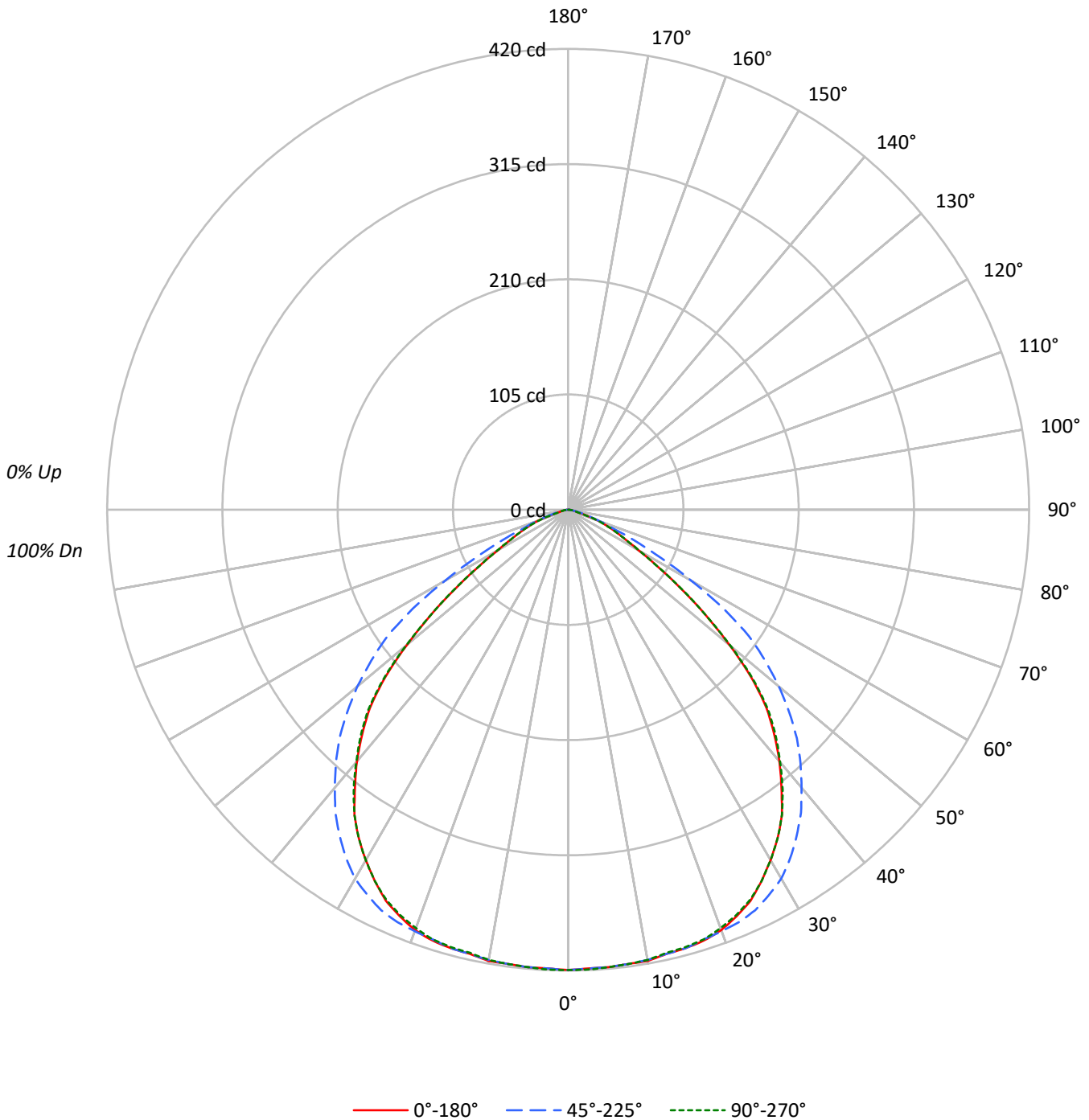
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	32110	32110	32110
5°	32156	32156	32156
10°	32458	32380	32380
15°	32783	32783	32704
20°	33218	33299	33055
25°	33208	34027	33124
30°	32596	34320	32596
35°	31724	33910	31724
40°	29926	33044	30026
45°	27668	31890	27885
50°	22887	29853	23006
55°	16801	26823	16921
60°	11344	19871	11497
65°	8657	12008	8657
70°	6333	6759	6110
75°	2603	3756	2603
80°	2160	2160	2160
85°	1756	1756	1756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	4.1
10°-20°	116.9	11.9
20°-30°	182.6	18.6
30°-40°	218.4	22.2
40°-50°	209.9	21.4
50°-60°	141.0	14.3
60°-70°	57.6	5.9
70°-80°	14.3	1.5
80°-90°	2.3	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°	339.4	34.5
0°-40°	557.8	56.8
0°-60°	908.7	92.5
0°-90°	982.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	982.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	418	418	418	418	418	40
15°	414	414	414	413	413	117
25°	393	397	403	396	392	180
35°	340	349	363	350	340	211
45°	256	274	295	275	258	194
55°	126	152	201	153	127	114
65°	48	54	66	54	48	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°	419.5	419.5	419.5	419.5	419.5
2.5°	418.5	418.5	418.5	419.5	419.5
5°	418.5	418.5	418.5	418.5	418.5
7.5°	417.6	417.6	417.6	417.6	417.6
10°	417.6	416.6	416.6	416.6	416.6
12.5°	414.6	414.6	414.6	414.6	413.7
15°	413.7	413.7	413.7	412.7	412.7
17.5°	411.7	411.7	410.7	410.7	410.7
20°	407.8	408.8	408.8	407.8	405.8
22.5°	401.0	403.9	406.8	402.9	400.0
25°	393.2	397.1	402.9	396.1	392.2
27.5°	381.5	387.3	396.1	387.3	381.5
30°	368.8	376.6	388.3	376.6	368.8
32.5°	355.1	363.9	376.6	363.9	355.1
35°	339.5	349.3	362.9	350.2	339.5
37.5°	319.0	332.7	348.3	334.6	321.0
40°	299.5	314.1	330.7	315.1	300.5
42.5°	278.0	294.6	313.2	295.6	280.0
45°	255.6	274.1	294.6	275.1	257.6
47.5°	226.3	248.8	273.2	251.7	228.3
50°	192.2	220.5	250.7	222.4	193.2
52.5°	158.0	185.4	226.3	187.3	158.0
55°	125.9	152.2	201.0	153.2	126.8
57.5°	96.6	120.0	167.8	121.9	96.6
60°	74.1	91.7	129.8	92.7	75.1
62.5°	58.5	69.3	95.6	68.3	58.5
65°	47.8	53.7	66.3	53.7	47.8
67.5°	38.0	42.0	43.9	42.0	38.0
70°	28.3	32.2	30.2	32.2	27.3
72.5°	16.6	20.5	20.5	20.5	15.6
75°	8.8	9.8	12.7	9.8	8.8
77.5°	6.8	6.8	7.8	6.8	6.8
80°	4.9	4.9	4.9	4.9	4.9
82.5°	2.9	2.9	2.9	2.9	2.9
85°	2.0	2.0	2.0	2.0	2.0
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)