

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: P241734

Luminaire Tested: **PRS415D010-S4M12-44SNDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241734
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-43)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SNDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW 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: 1205.6 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 0.88 / 0.88 / 0.92
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

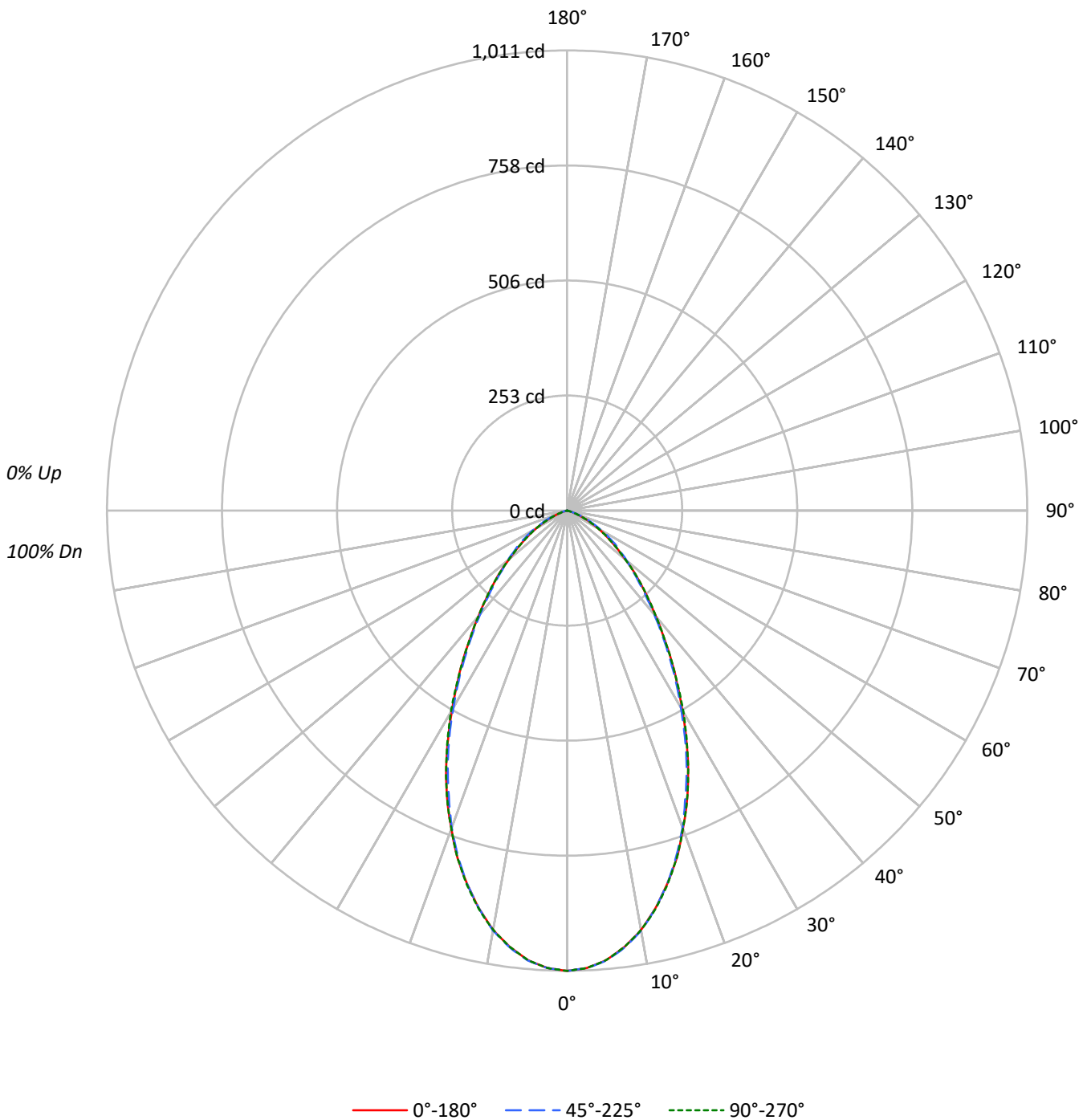
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50					50			
8	72	60	53	49	70	60	53	48	59	52	48	57	52	48	56	51	48	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	51	46	41	51	45	41	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	77408	77408	77408
5°	76152	76252	76152
10°	72727	72835	72727
15°	67302	67302	67412
20°	60603	60383	60603
25°	53140	52456	53140
30°	44634	44157	45112
35°	37097	36461	37097
40°	30226	29686	30356
45°	24843	24259	24995
50°	19934	20256	19779
55°	15680	17122	15680
60°	11987	13227	11987
65°	8313	9545	8078
70°	4230	5438	4230
75°	414	1597	414
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.9	7.7
10°-20°	237.0	19.7
20°-30°	285.8	23.7
30°-40°	247.0	20.5
40°-50°	176.8	14.7
50°-60°	109.4	9.1
60°-70°	49.9	4.1
70°-80°	7.0	0.6
80°-90°	0.0	0.0
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°	615.6	51.1
0°-40°	862.6	71.5
0°-60°	1148.8	95.3
0°-90°	1205.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1205.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1011	1011	1011	1011	1011	
5°	991	991	992	991	991	93
15°	849	849	849	851	851	237
25°	629	625	621	626	629	287
35°	397	393	390	396	397	248
45°	230	227	224	228	231	178
55°	118	120	128	120	118	106
65°	46	50	53	50	45	46
75°	1	3	5	3	1	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1011.3	1011.3	1011.3	1011.3	1011.3
2.5°	1005.9	1005.9	1005.9	1005.9	1005.9
5°	991.1	991.1	992.4	991.1	991.1
7.5°	966.8	968.1	968.1	968.1	966.8
10°	935.7	935.7	937.1	935.7	935.7
12.5°	895.2	895.2	895.2	896.6	896.6
15°	849.3	849.3	849.3	850.7	850.7
17.5°	800.7	799.4	796.7	798.0	800.7
20°	744.0	742.6	741.3	742.6	744.0
22.5°	688.6	683.2	679.2	685.9	688.6
25°	629.2	625.2	621.1	626.5	629.2
27.5°	567.1	564.4	560.4	564.4	568.5
30°	505.0	505.0	499.6	505.0	510.4
32.5°	449.6	448.3	444.2	446.9	451.0
35°	397.0	392.9	390.2	395.6	397.0
37.5°	347.0	345.7	341.6	345.7	347.0
40°	302.5	299.8	297.1	301.1	303.8
42.5°	264.7	262.0	257.9	262.0	264.7
45°	229.5	226.8	224.1	228.2	230.9
47.5°	198.5	197.1	194.4	197.1	198.5
50°	167.4	170.1	170.1	168.8	166.1
52.5°	140.4	141.8	147.2	141.8	140.4
55°	117.5	120.2	128.3	120.2	117.5
57.5°	97.2	99.9	106.7	99.9	97.2
60°	78.3	82.4	86.4	82.4	78.3
62.5°	60.8	66.2	67.5	64.8	60.8
65°	45.9	50.0	52.7	50.0	44.6
67.5°	31.1	36.5	37.8	36.5	31.1
70°	18.9	24.3	24.3	24.3	18.9
72.5°	9.5	12.2	13.5	12.2	9.5
75°	1.4	2.7	5.4	2.7	1.4
77.5°	0.0	0.0	1.4	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)