

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: P241914

Luminaire Tested: **PRS415D010-S4M12-41SNDH-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-55)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SNDH-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1098.9 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.87 / 0.91
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

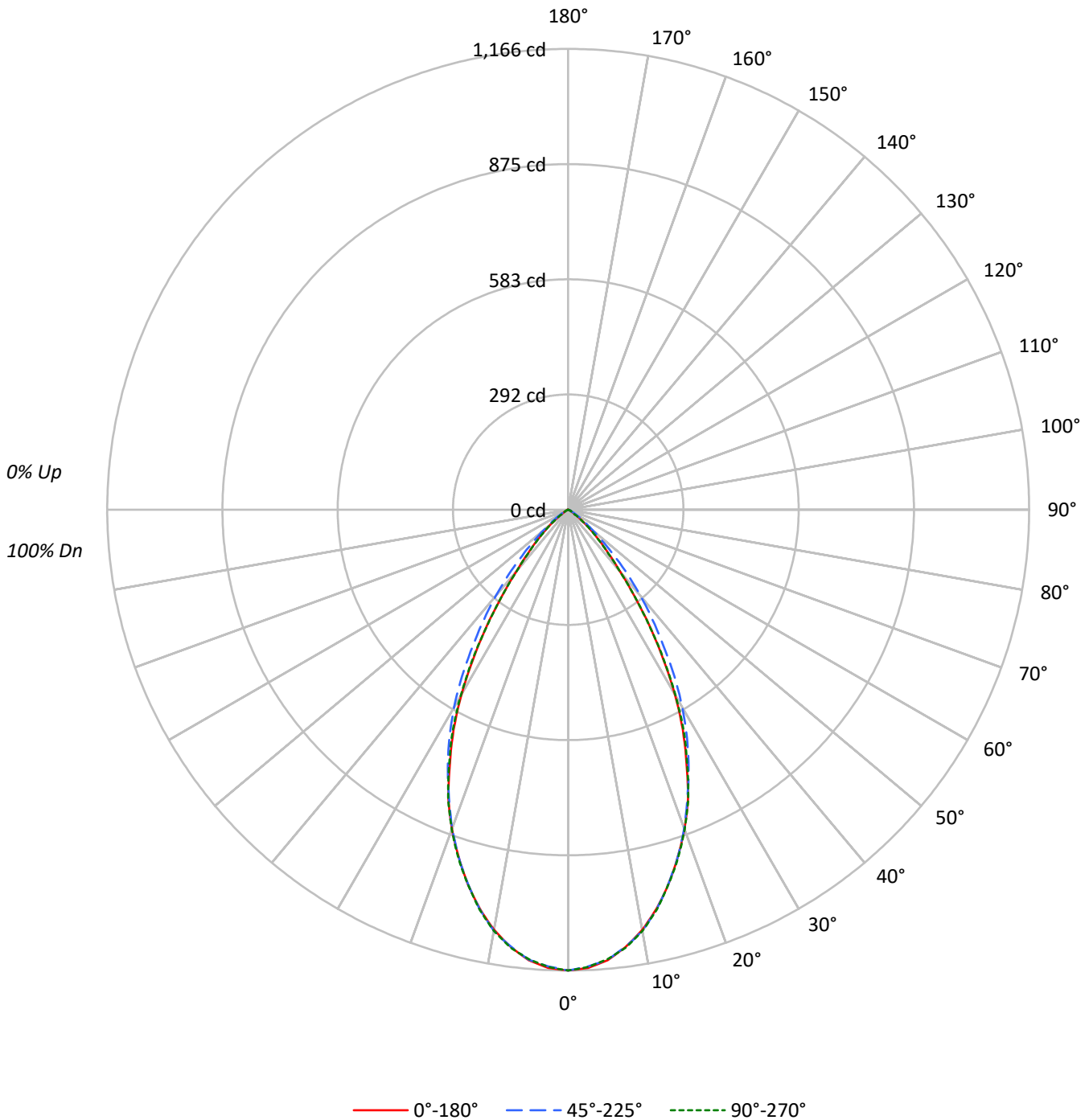
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100	100	100		
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93	93	93	93	93	93	93		
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86	86	86	86	86	86	86		
3	101	95	89	85	99	93	88	84	91	86	83	88	85	82	86	83	81	79	79	79	79	79	79	79		
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	74	73	73	73	73	73	73	73		
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67	67	67	67	67	67	67		
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	63	63	63	63	63	63	63		
7	81	72	65	61	80	71	65	61	70	64	60	68	64	60	67	63	60	58	58	58	58	58	58	58		
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54	54	54	54	54	54	54		
9	73	63	57	53	72	63	57	53	62	56	52	61	56	52	60	55	52	51	51	51	51	51	51	51		
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	48	48	48	48	48	48	48		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	89242	89242	89242
5°	87923	87816	87716
10°	83903	84113	84113
15°	77738	77635	77738
20°	70019	69905	70125
25°	59829	60859	60175
30°	47710	51042	48064
35°	33415	39218	33284
40°	20364	28447	20224
45°	12265	17818	11972
50°	6907	9646	6752
55°	2522	5044	2522
60°	1653	2480	1653
65°	978	1467	978
70°	604	895	604
75°	384	799	384
80°	573	573	573
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	9.7
10°-20°	273.8	24.9
20°-30°	326.4	29.7
30°-40°	243.2	22.1
40°-50°	108.9	9.9
50°-60°	29.6	2.7
60°-70°	7.2	0.7
70°-80°	2.3	0.2
80°-90°	0.4	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°	707.3	64.4
0°-40°	950.5	86.5
0°-60°	1089.0	99.1
0°-90°	1098.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1098.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1144	1140	1143	1142	1142	107
15°	981	980	980	982	981	274
25°	708	719	721	721	712	323
35°	358	390	420	390	356	224
45°	113	132	165	132	111	91
55°	19	30	38	30	19	23
65°	5	7	8	7	5	6
75°	1	3	3	3	1	2
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°	1165.9	1165.9	1165.9	1165.9	1165.9
2.5°	1160.5	1157.8	1156.4	1156.4	1157.8
5°	1144.3	1140.2	1142.9	1141.6	1141.6
7.5°	1115.9	1115.9	1114.6	1117.3	1117.3
10°	1079.5	1080.9	1082.2	1080.9	1082.2
12.5°	1033.6	1032.3	1035.0	1036.3	1036.3
15°	981.0	979.7	979.7	982.4	981.0
17.5°	921.6	923.0	921.6	923.0	924.3
20°	859.6	859.6	858.2	859.6	860.9
22.5°	792.1	792.1	788.0	790.7	793.4
25°	708.4	719.2	720.6	720.6	712.5
27.5°	627.5	635.6	650.4	638.3	634.2
30°	539.8	555.9	577.5	558.6	543.8
32.5°	446.6	476.3	499.3	473.6	450.7
35°	357.6	390.0	419.7	390.0	356.2
37.5°	273.9	309.0	349.5	310.4	273.9
40°	203.8	237.5	284.7	236.1	202.4
42.5°	151.1	179.5	222.6	178.1	151.1
45°	113.3	132.2	164.6	132.2	110.6
47.5°	82.3	98.5	117.4	97.2	82.3
50°	58.0	70.2	81.0	70.2	56.7
52.5°	36.4	47.2	55.3	47.2	36.4
55°	18.9	29.7	37.8	29.7	18.9
57.5°	13.5	16.2	24.3	16.2	13.5
60°	10.8	12.1	16.2	12.1	10.8
62.5°	8.1	9.4	9.4	9.4	8.1
65°	5.4	6.7	8.1	6.7	5.4
67.5°	4.0	5.4	5.4	5.4	4.0
70°	2.7	4.0	4.0	4.0	2.7
72.5°	2.7	2.7	2.7	2.7	2.7
75°	1.3	2.7	2.7	2.7	1.3
77.5°	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3
82.5°	0.0	1.3	1.3	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)