

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: P241919

Luminaire Tested: **PRS415D010-S4M12-41SMDH-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241919
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-56)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-41SMDH-3000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM HAZE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1146.1 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.95 / 0.98
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

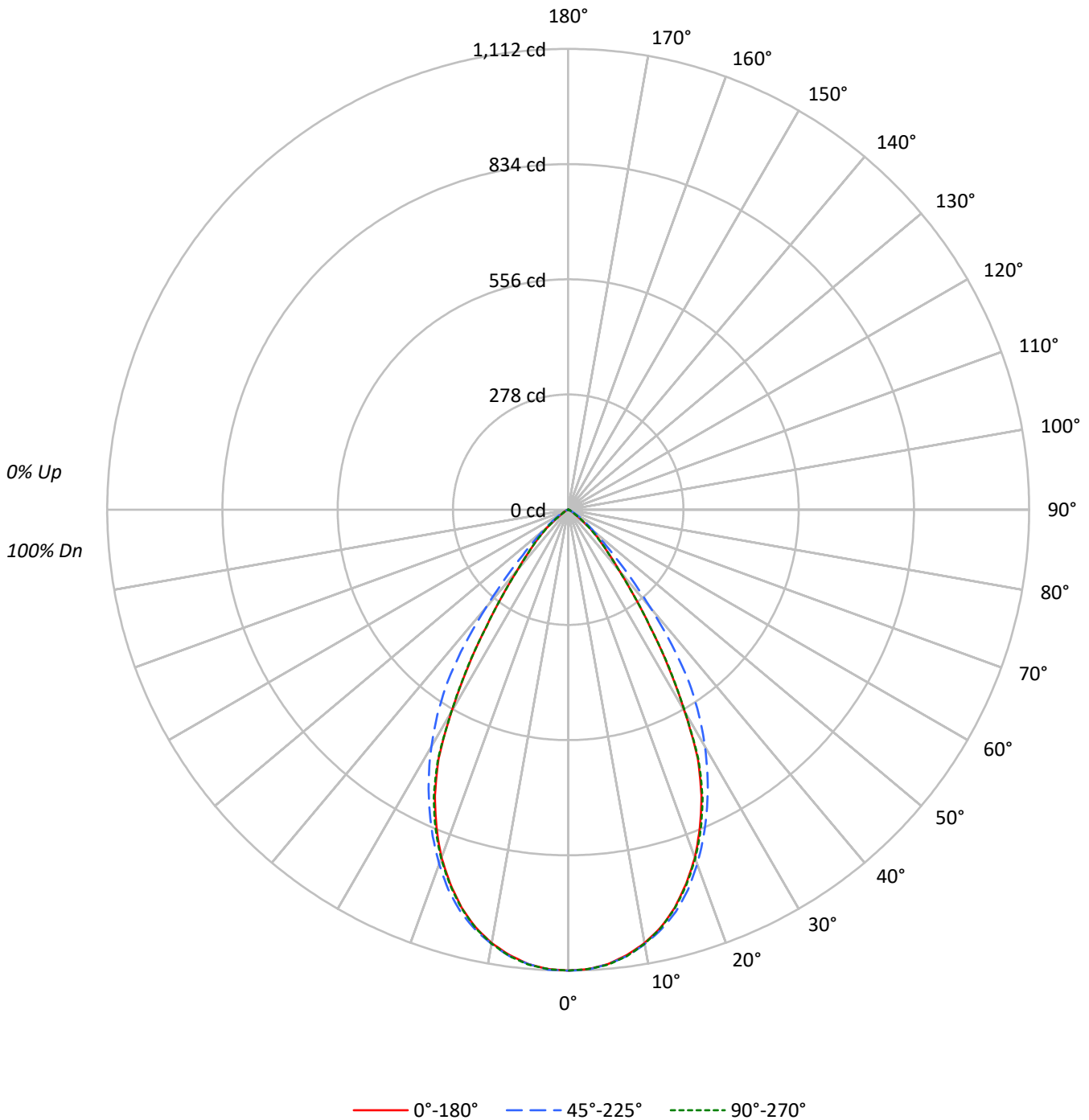
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93					93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85					85			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79					79			
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74	73					73			
5	90	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69	67					67			
6	86	76	70	65	84	75	69	65	74	68	65	72	68	64	71	67	64	62					62			
7	81	71	65	60	80	71	64	60	69	64	60	68	63	60	67	62	59	58					58			
8	77	67	60	56	76	66	60	56	65	60	56	64	59	55	63	59	55	54					54			
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50					50			
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48	47					47			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	85132	85132	85132
5°	84565	84565	84665
10°	82543	82737	82644
15°	78744	79561	78847
20°	72764	74133	72976
25°	64254	66965	64795
30°	49716	58369	49831
35°	31995	47515	31995
40°	19035	30735	18905
45°	12265	16724	12265
50°	7514	9348	7359
55°	3096	5325	3096
60°	1975	2756	1975
65°	1159	1630	1159
70°	873	1141	873
75°	769	769	384
80°	573	573	573
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.9	9.1
10°-20°	279.0	24.3
20°-30°	353.7	30.9
30°-40°	258.4	22.5
40°-50°	107.4	9.4
50°-60°	32.4	2.8
60°-70°	8.3	0.7
70°-80°	2.6	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°	736.6	64.3
0°-40°	994.9	86.8
0°-60°	1134.7	99.0
0°-90°	1146.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1146.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1112	1112	1112	1112	1112	
5°	1101	1101	1101	1101	1102	104
15°	994	999	1004	999	995	277
25°	761	779	793	784	767	342
35°	342	402	508	402	342	219
45°	113	130	154	129	113	91
55°	23	32	40	32	23	26
65°	6	8	9	8	6	7
75°	3	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°	1112.2	1112.2	1112.2	1112.2	1112.2
2.5°	1109.6	1109.6	1110.9	1109.6	1109.6
5°	1100.6	1100.6	1100.6	1100.6	1101.9
7.5°	1083.9	1085.1	1086.4	1085.1	1086.4
10°	1062.0	1063.3	1064.5	1064.5	1063.3
12.5°	1032.4	1034.9	1037.5	1034.9	1033.6
15°	993.7	998.9	1004.0	998.9	995.0
17.5°	946.1	951.3	961.6	952.6	948.7
20°	893.3	901.1	910.1	902.4	895.9
22.5°	830.3	844.4	853.4	844.4	835.4
25°	760.8	778.8	792.9	783.9	767.2
27.5°	677.1	708.0	728.6	711.8	680.9
30°	562.5	616.6	660.4	621.7	563.8
32.5°	450.5	507.2	587.0	509.7	453.1
35°	342.4	401.6	508.5	401.6	342.4
37.5°	256.2	308.9	410.6	305.1	256.2
40°	190.5	230.4	307.6	227.8	189.2
42.5°	146.7	171.2	222.7	169.9	145.5
45°	113.3	130.0	154.5	128.7	113.3
47.5°	87.5	99.1	109.4	99.1	86.2
50°	63.1	74.7	78.5	74.7	61.8
52.5°	39.9	52.8	56.6	51.5	41.2
55°	23.2	32.2	39.9	32.2	23.2
57.5°	16.7	19.3	28.3	19.3	16.7
60°	12.9	14.2	18.0	14.2	12.9
62.5°	9.0	10.3	11.6	10.3	9.0
65°	6.4	7.7	9.0	7.7	6.4
67.5°	5.1	6.4	6.4	6.4	5.1
70°	3.9	3.9	5.1	3.9	3.9
72.5°	2.6	2.6	3.9	3.9	2.6
75°	2.6	2.6	2.6	2.6	1.3
77.5°	1.3	1.3	2.6	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3
82.5°	0.0	1.3	1.3	1.3	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)