

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: P241929

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241929
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-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 1201.5 lumens
Efficiency: N/A
Efficacy: 100.1 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

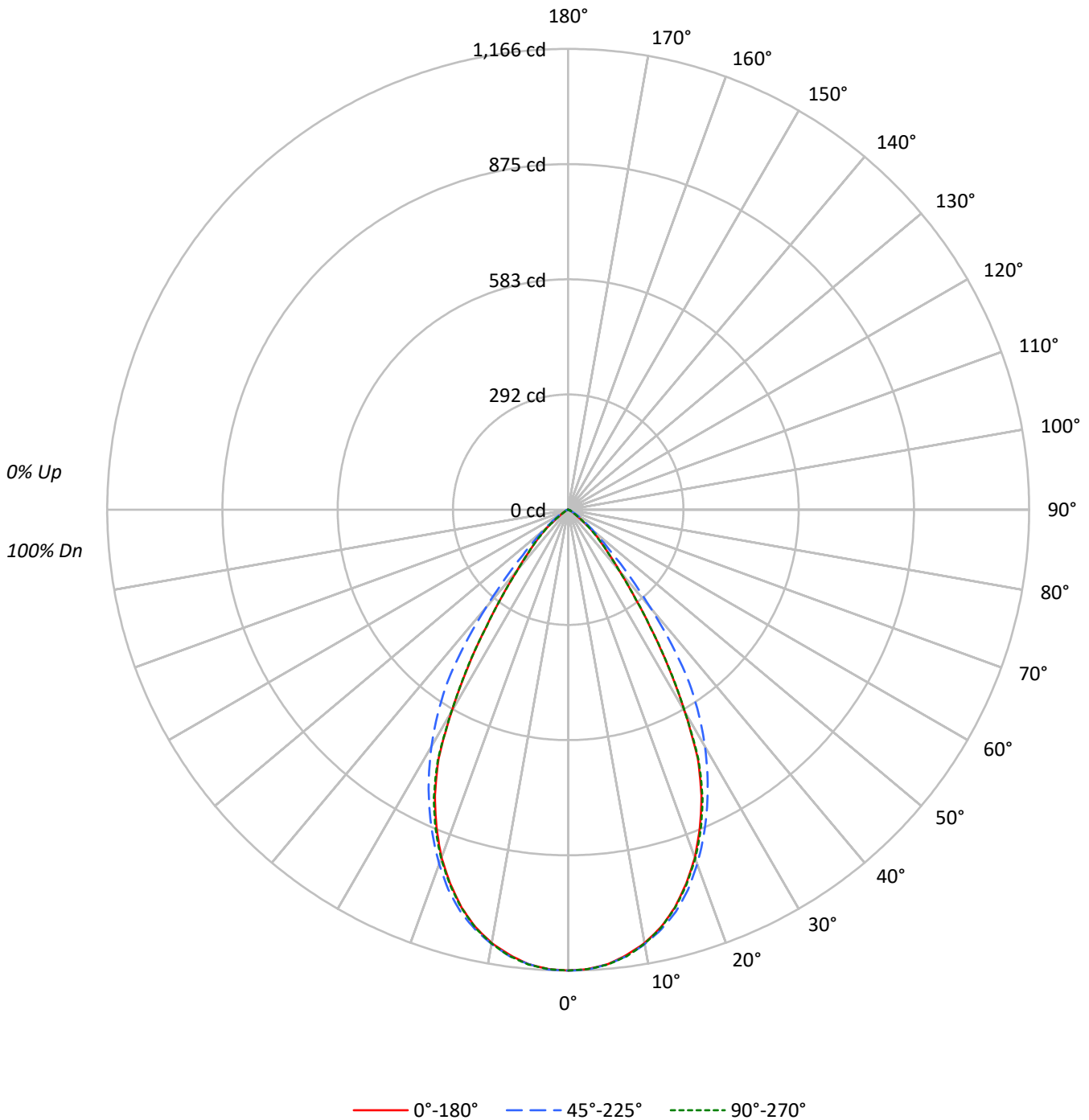
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	63	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°	89250	89250	89250
5°	88653	88653	88761
10°	86538	86748	86639
15°	82556	83412	82667
20°	76291	77717	76511
25°	67362	70209	67928
30°	52120	61189	52244
35°	33546	49814	33546
40°	19954	32224	19824
45°	12860	17525	12860
50°	7871	9800	7716
55°	3243	5578	3243
60°	2067	2893	2067
65°	1213	1703	1213
70°	895	1209	895
75°	799	799	384
80°	573	573	573
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	9.1
10°-20°	292.5	24.3
20°-30°	370.8	30.9
30°-40°	270.9	22.5
40°-50°	112.6	9.4
50°-60°	34.0	2.8
60°-70°	8.7	0.7
70°-80°	2.7	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°	772.2	64.3
0°-40°	1043.1	86.8
0°-60°	1189.7	99.0
0°-90°	1201.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1201.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1154	1154	1154	1154	1155	109
15°	1042	1047	1053	1047	1043	291
25°	798	816	831	822	804	359
35°	359	421	533	421	359	230
45°	119	136	162	135	119	95
55°	24	34	42	34	24	27
65°	7	8	9	8	7	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°	1166.0	1166.0	1166.0	1166.0	1166.0
2.5°	1163.3	1163.3	1164.6	1163.3	1163.3
5°	1153.8	1153.8	1153.8	1153.8	1155.2
7.5°	1136.3	1137.6	1139.0	1137.6	1139.0
10°	1113.4	1114.7	1116.1	1116.1	1114.7
12.5°	1082.3	1085.0	1087.7	1085.0	1083.7
15°	1041.8	1047.2	1052.6	1047.2	1043.2
17.5°	991.9	997.3	1008.1	998.6	994.6
20°	936.6	944.7	954.1	946.0	939.3
22.5°	870.4	885.3	894.7	885.3	875.8
25°	797.6	816.5	831.3	821.9	804.3
27.5°	709.8	742.2	763.8	746.3	713.9
30°	589.7	646.4	692.3	651.8	591.1
32.5°	472.3	531.7	615.4	534.4	475.0
35°	359.0	421.1	533.1	421.1	359.0
37.5°	268.6	323.9	430.5	319.8	268.6
40°	199.7	241.6	322.5	238.9	198.4
42.5°	153.8	179.5	233.5	178.1	152.5
45°	118.8	136.3	161.9	135.0	118.8
47.5°	91.8	103.9	114.7	103.9	90.4
50°	66.1	78.3	82.3	78.3	64.8
52.5°	41.8	55.3	59.4	54.0	43.2
55°	24.3	33.7	41.8	33.7	24.3
57.5°	17.5	20.2	29.7	20.2	17.5
60°	13.5	14.8	18.9	14.8	13.5
62.5°	9.4	10.8	12.1	10.8	9.4
65°	6.7	8.1	9.4	8.1	6.7
67.5°	5.4	6.7	6.7	6.7	5.4
70°	4.0	4.0	5.4	4.0	4.0
72.5°	2.7	2.7	4.0	4.0	2.7
75°	2.7	2.7	2.7	2.7	1.3
77.5°	1.3	1.3	2.7	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)