

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: P241794

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241794
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-47)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SMDC-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 1367.7 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.1
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

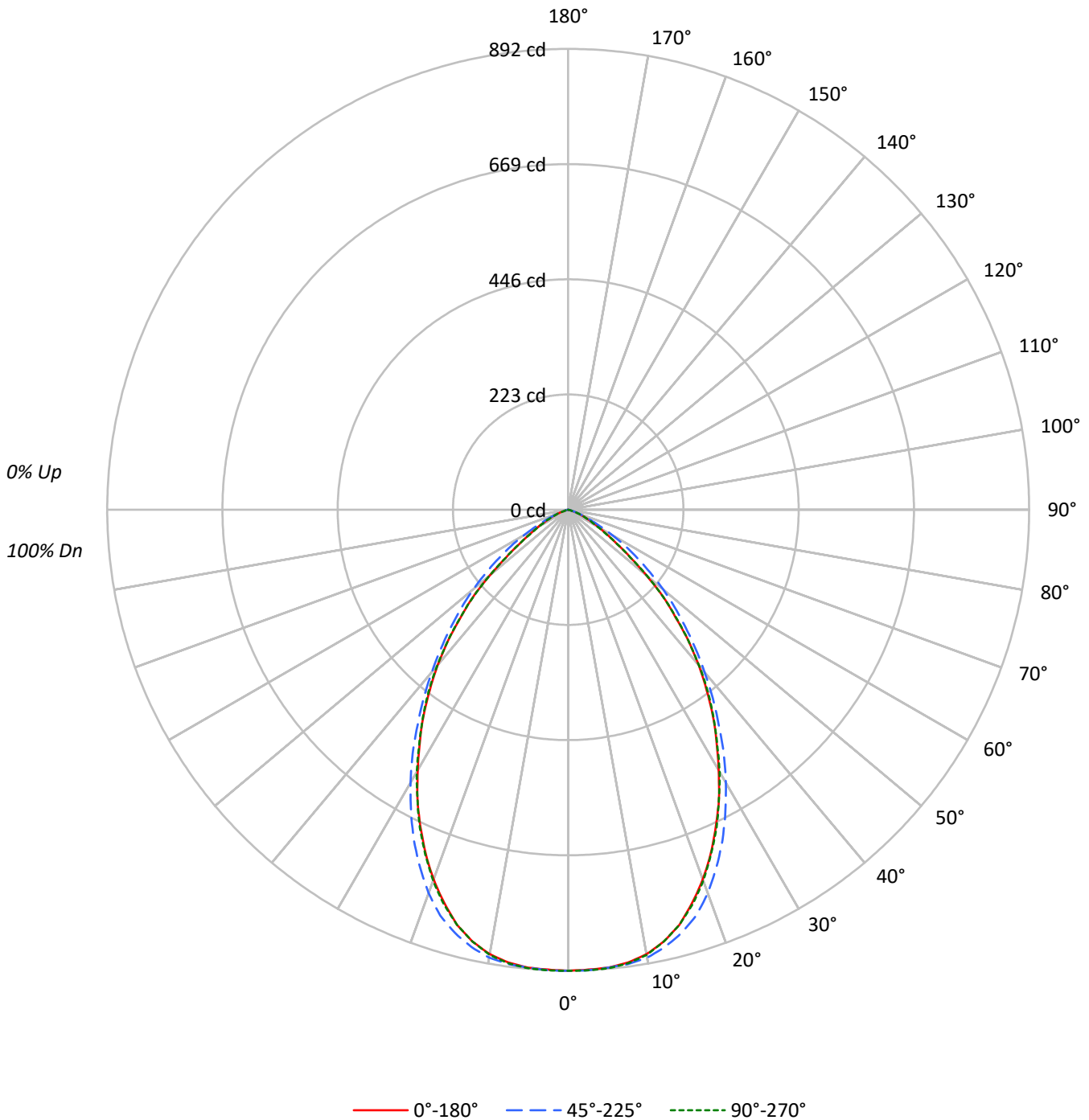
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241794

CATALOG NUMBER: PRS415D010-S4M12-44SMDC-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P241794

CATALOG NUMBER: PRS415D010-S4M12-44SMDC-4000K

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	112	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	93	91
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	51	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	68307	68307	68307
5°	68361	68361	68468
10°	67892	68421	68001
15°	65907	67191	65907
20°	62029	64334	62249
25°	57126	59635	57354
30°	51431	53932	51785
35°	45665	47431	45796
40°	39259	41007	39389
45°	31717	34640	32009
50°	23471	28615	23637
55°	15493	21806	15493
60°	10333	15094	9920
65°	6846	8802	6846
70°	3939	4543	3939
75°	0	1597	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241794

CATALOG NUMBER: PRS415D010-S4M12-44SMDC-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	6.2
10°-20°	235.2	17.2
20°-30°	317.7	23.2
30°-40°	313.0	22.9
40°-50°	239.1	17.5
50°-60°	126.9	9.3
60°-70°	45.5	3.3
70°-80°	5.7	0.4
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°	637.4	46.6
0°-40°	950.5	69.5
0°-60°	1316.4	96.3
0°-90°	1367.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1367.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	890	890	890	891	891	84
15°	832	841	848	840	832	232
25°	676	694	706	697	679	310
35°	489	504	508	505	490	304
45°	293	312	320	313	296	227
55°	116	136	163	136	116	108
65°	38	45	49	45	38	39
75°	0	1	5	1	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241794

CATALOG NUMBER: PRS415D010-S4M12-44SMDC-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.4	892.4	892.4	892.4	892.4
2.5°	891.1	891.1	892.4	892.4	892.4
5°	889.7	889.7	889.7	891.1	891.1
7.5°	884.3	884.3	887.0	885.7	885.7
10°	873.5	876.2	880.3	876.2	874.9
12.5°	856.0	862.7	866.8	862.7	856.0
15°	831.7	841.1	847.9	839.8	831.7
17.5°	797.9	810.1	823.6	810.1	800.6
20°	761.5	776.3	789.8	777.7	764.2
22.5°	720.9	737.1	749.3	738.5	722.3
25°	676.4	693.9	706.1	696.6	679.1
27.5°	631.8	649.4	658.8	650.7	631.8
30°	581.9	600.8	610.2	603.5	585.9
32.5°	534.6	552.2	560.3	553.5	536.0
35°	488.7	503.6	507.6	504.9	490.1
37.5°	440.1	456.3	459.0	459.0	444.2
40°	392.9	407.7	410.4	409.1	394.2
42.5°	344.3	360.5	364.5	360.5	344.3
45°	293.0	311.9	320.0	313.2	295.7
47.5°	249.8	264.6	279.5	266.0	248.4
50°	197.1	222.8	240.3	221.4	198.5
52.5°	151.2	178.2	199.8	176.9	151.2
55°	116.1	136.4	163.4	136.4	116.1
57.5°	87.8	104.0	131.0	102.6	85.1
60°	67.5	79.7	98.6	77.0	64.8
62.5°	51.3	59.4	70.2	58.1	50.0
65°	37.8	44.6	48.6	44.6	37.8
67.5°	27.0	32.4	32.4	32.4	27.0
70°	17.6	21.6	20.3	21.6	17.6
72.5°	6.8	10.8	10.8	10.8	6.8
75°	0.0	1.4	5.4	1.4	0.0
77.5°	0.0	0.0	0.0	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)