

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: P241654

Luminaire Tested: **PRS415D010-S4M12-44SMDMB**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-38)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SMDMB
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

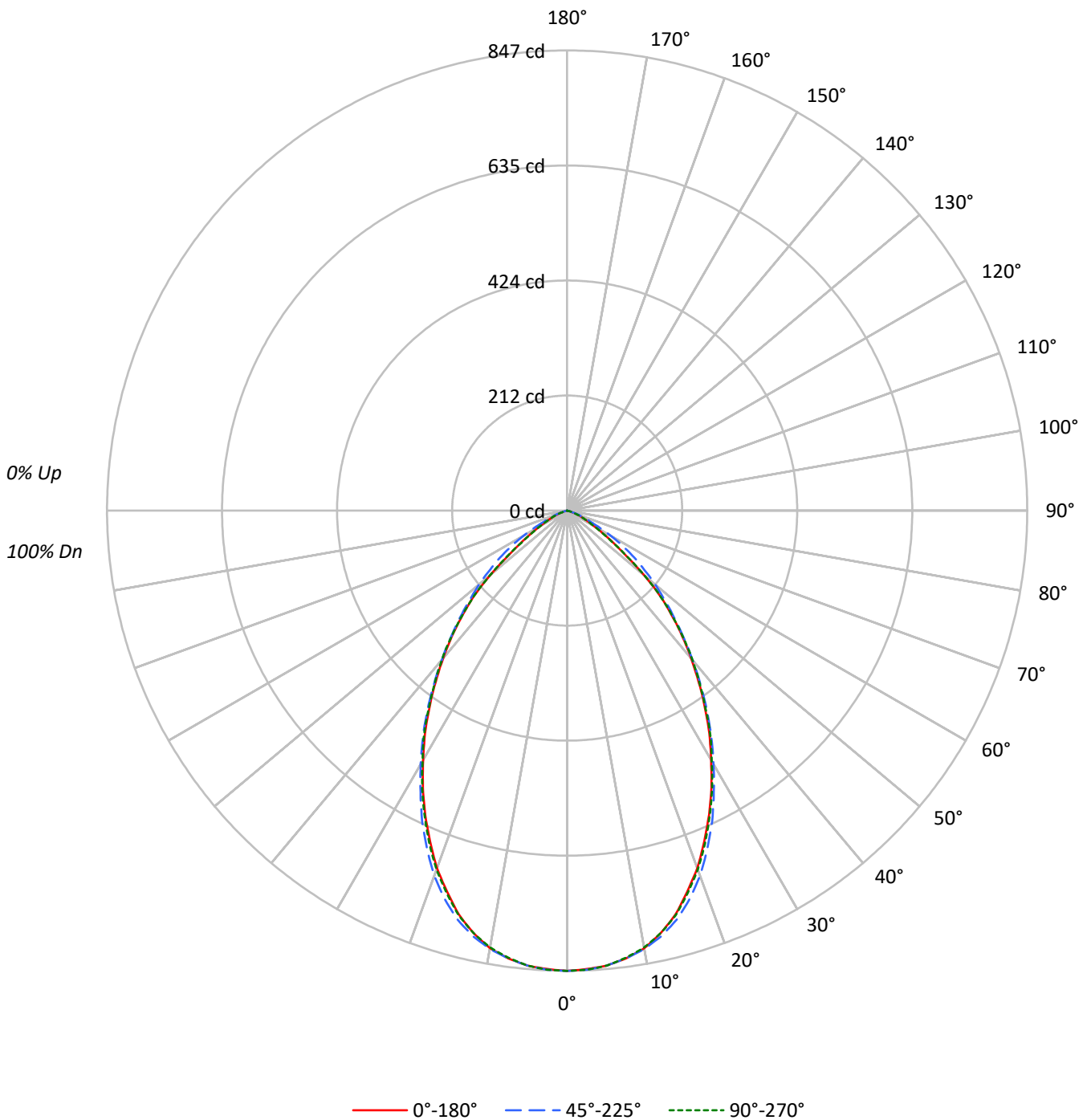
Lumens per Lamp: N/A
Luminaire Lumens: 1235.2 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 1.06
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

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: P241654
CATALOG NUMBER: PRS415D010-S4M12-44SMDMB

Luminous Intensity Polar Plot





TEST NUMBER: P241654

CATALOG NUMBER: PRS415D010-S4M12-44SMDMB

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	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	101	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	85	83	81				81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				73
4	91	82	75	70	89	81	74	70	78	73	69	76	72	68	74	70	67	65				65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59				59
6	80	69	62	56	78	68	61	56	66	60	56	65	60	55	64	59	55	53				53
7	75	64	56	51	73	63	56	51	62	55	51	60	55	50	59	54	50	48				48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44				44
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41				41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	64855	64855	64855
5°	64588	64588	64588
10°	63578	63679	63470
15°	61010	61755	61121
20°	57060	58257	57280
25°	52177	53309	52405
30°	46817	47648	47056
35°	41273	41890	41516
40°	35462	35861	35861
45°	29465	30191	29606
50°	21923	25102	22089
55°	13892	20124	13705
60°	8787	14099	8573
65°	5796	7969	5796
70°	3290	4185	3290
75°	0	1183	0
80°	0	0	0
85°	0	0	0



TEST NUMBER: P241654

CATALOG NUMBER: PRS415D010-S4M12-44SMDMB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	6.4
10°-20°	216.7	17.5
20°-30°	286.8	23.2
30°-40°	279.4	22.6
40°-50°	213.9	17.3
50°-60°	114.1	9.2
60°-70°	39.7	3.2
70°-80°	5.1	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°	583.1	47.2
0°-40°	862.4	69.8
0°-60°	1190.4	96.4
0°-90°	1235.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1235.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	841	841	841	841	841	80
15°	770	775	779	775	771	215
25°	618	627	631	627	620	283
35°	442	448	448	451	444	276
45°	272	278	279	280	274	209
55°	104	120	151	121	103	98
65°	32	39	44	37	32	33
75°	0	1	4	1	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P241654

CATALOG NUMBER: PRS415D010-S4M12-44SMDMB

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	847.3	847.3	847.3	847.3	847.3
2.5°	844.7	844.7	846.0	844.7	846.0
5°	840.6	840.6	840.6	840.6	840.6
7.5°	831.3	831.3	831.3	831.3	830.0
10°	818.0	818.0	819.3	818.0	816.6
12.5°	796.6	799.3	802.0	800.6	796.6
15°	769.9	775.3	779.3	775.3	771.3
17.5°	735.2	741.9	749.9	743.2	737.9
20°	700.5	705.9	715.2	708.5	703.2
22.5°	659.2	667.2	673.9	669.9	663.2
25°	617.8	627.2	631.2	627.2	620.5
27.5°	575.1	581.8	584.5	585.8	577.8
30°	529.7	537.7	539.1	540.4	532.4
32.5°	487.0	493.7	493.7	497.7	491.0
35°	441.7	448.3	448.3	451.0	444.3
37.5°	397.6	404.3	403.0	407.0	400.3
40°	354.9	360.3	358.9	361.6	358.9
42.5°	313.6	318.9	317.6	320.2	316.2
45°	272.2	277.5	278.9	280.2	273.5
47.5°	232.2	238.9	242.9	241.5	232.2
50°	184.1	200.2	210.8	202.8	185.5
52.5°	137.4	160.1	178.8	161.5	140.1
55°	104.1	120.1	150.8	121.4	102.7
57.5°	77.4	90.7	121.4	89.4	76.1
60°	57.4	68.1	92.1	66.7	56.0
62.5°	42.7	50.7	64.0	49.4	42.7
65°	32.0	38.7	44.0	37.4	32.0
67.5°	24.0	28.0	29.4	28.0	22.7
70°	14.7	18.7	18.7	18.7	14.7
72.5°	6.7	9.3	10.7	9.3	6.7
75°	0.0	1.3	4.0	1.3	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)