

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: P241704

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

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P241704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-41)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS415D010-S4M12-44SMDMW-4000K
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE WHITE
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1414.9 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.01 / 1.08
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')
CIE Type: Direct

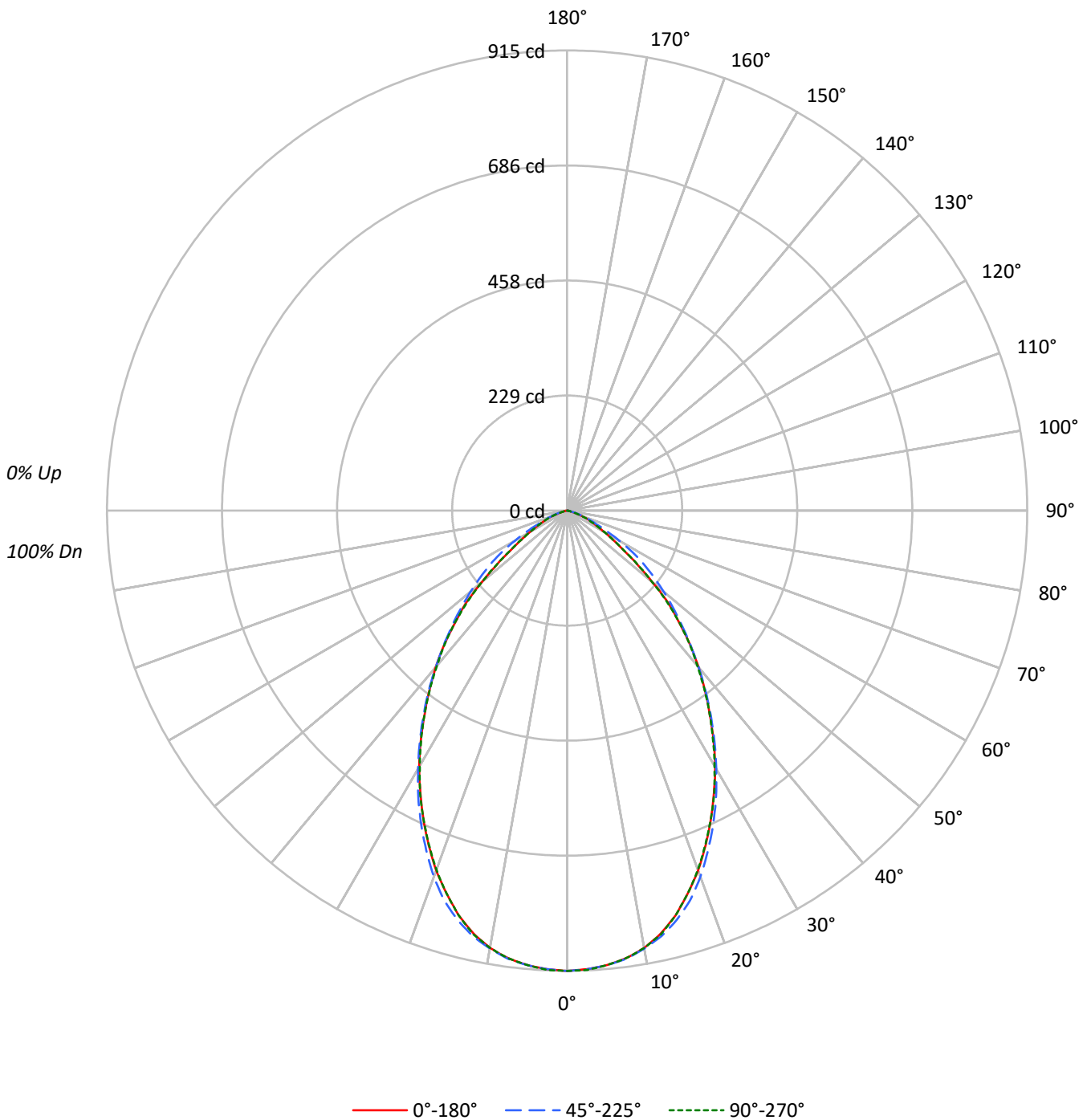
Input Watts (W): 12
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P241704

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

Luminous Intensity Polar Plot





TEST NUMBER: P241704

CATALOG NUMBER: PRS415D010-S4M12-44SMDMW-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	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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80					80			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47					47			
8	69	57	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39					39			
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	70068	70068	70068
5°	69713	69713	69713
10°	68630	68739	68630
15°	66018	66763	66018
20°	62029	63128	61923
25°	57126	58038	57126
30°	52032	52386	51793
35°	46179	46553	46179
40°	40608	40608	40208
45°	34055	34932	34196
50°	26364	29746	26364
55°	18202	24862	18376
60°	13028	18401	13028
65°	9780	11736	9545
70°	6356	7564	6647
75°	2396	3993	2396
80°	1807	2380	1807
85°	1230	1230	1230



TEST NUMBER: P241704

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	6.1
10°-20°	234.5	16.6
20°-30°	313.3	22.1
30°-40°	311.1	22.0
40°-50°	247.5	17.5
50°-60°	144.5	10.2
60°-70°	60.9	4.3
70°-80°	15.0	1.1
80°-90°	2.2	0.2
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°	633.7	44.8
0°-40°	944.8	66.8
0°-60°	1336.8	94.5
0°-90°	1414.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1414.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	915	915	915	915	915	
5°	907	907	907	907	907	86
15°	833	838	842	838	833	233
25°	676	686	687	684	676	310
35°	494	502	498	500	494	309
45°	315	323	323	323	316	243
55°	136	155	186	155	138	127
65°	54	59	65	59	53	54
75°	8	10	14	11	8	13
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



TEST NUMBER: P241704

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	915.4	915.4	915.4	915.4	915.4
2.5°	912.7	912.7	912.7	912.7	914.1
5°	907.3	907.3	907.3	907.3	907.3
7.5°	897.9	897.9	899.2	899.2	897.9
10°	883.0	883.0	884.4	884.4	883.0
12.5°	861.4	864.1	866.8	864.1	862.8
15°	833.1	838.5	842.5	838.5	833.1
17.5°	798.0	804.7	812.8	804.7	798.0
20°	761.5	768.3	775.0	766.9	760.2
22.5°	719.7	727.8	731.8	726.4	718.3
25°	676.4	685.9	687.2	684.5	676.4
27.5°	631.9	638.6	641.3	640.0	633.2
30°	588.7	595.4	592.7	594.1	586.0
32.5°	541.4	548.2	545.5	545.5	540.1
35°	494.2	502.3	498.2	499.6	494.2
37.5°	449.6	453.7	452.3	453.7	448.3
40°	406.4	409.1	406.4	409.1	402.4
42.5°	361.9	365.9	363.2	365.9	360.5
45°	314.6	322.7	322.7	322.7	315.9
47.5°	274.1	280.8	284.9	280.8	270.0
50°	221.4	241.7	249.8	240.3	221.4
52.5°	175.5	195.8	217.4	195.8	176.9
55°	136.4	155.3	186.3	155.3	137.7
57.5°	108.0	121.5	153.9	121.5	108.0
60°	85.1	95.9	120.2	95.9	85.1
62.5°	67.5	75.6	89.1	75.6	67.5
65°	54.0	59.4	64.8	59.4	52.7
67.5°	41.9	45.9	47.3	45.9	40.5
70°	28.4	33.8	33.8	33.8	29.7
72.5°	17.6	21.6	23.0	21.6	17.6
75°	8.1	9.5	13.5	10.8	8.1
77.5°	6.8	6.8	6.8	6.8	6.8
80°	4.1	5.4	5.4	5.4	4.1
82.5°	2.7	2.7	2.7	2.7	2.7
85°	1.4	1.4	1.4	1.4	1.4
87.5°	1.4	1.4	1.4	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)