

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: P241694

Luminaire Tested: **PRS415D010-S4M12-44SMDMW-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241694  
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-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1349.6 lumens  
Efficiency: N/A  
Efficacy: 112.5 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

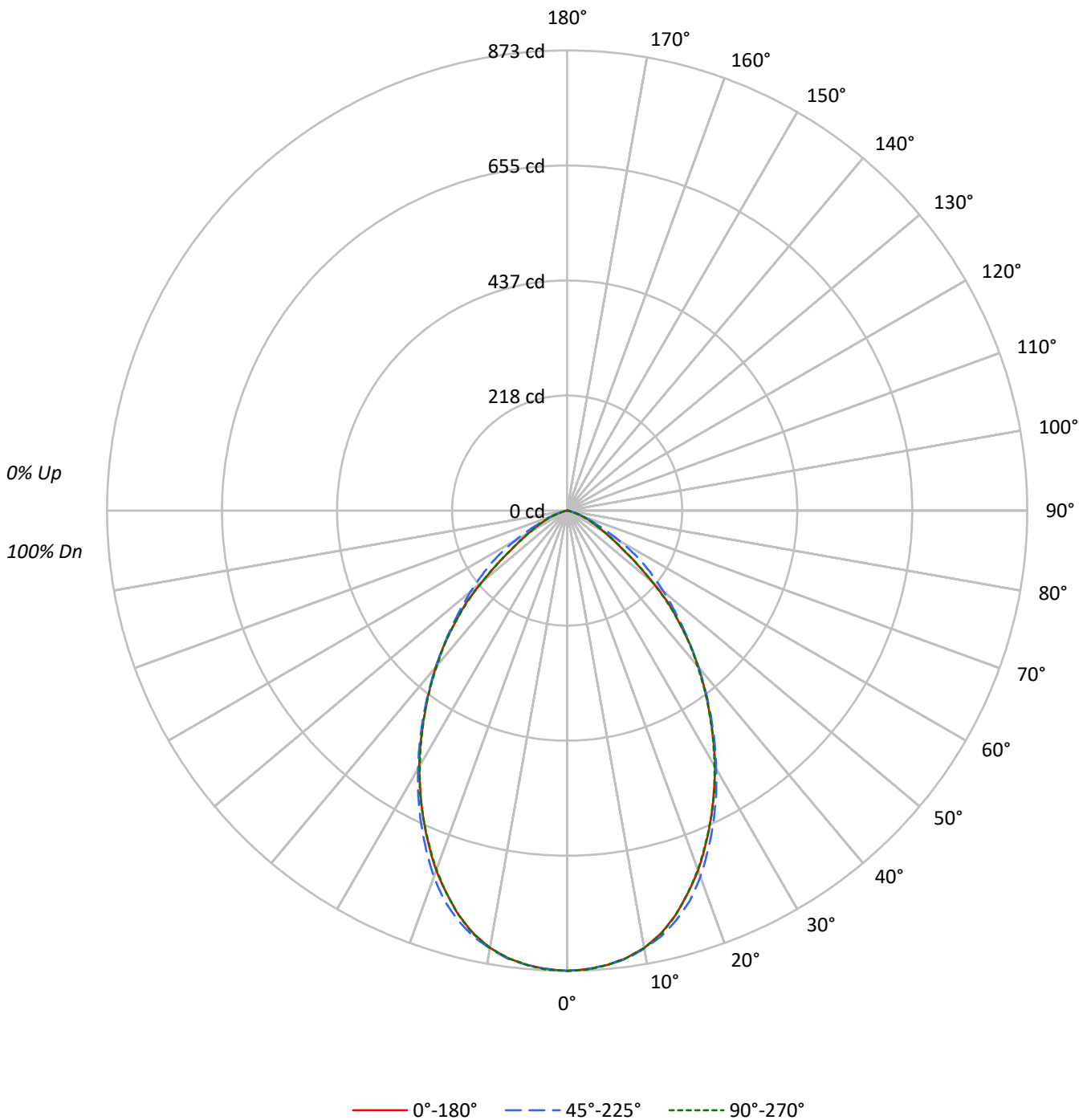
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92					90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82					80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73					71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65					63				
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59					57				
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53					51				
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48					47				
8	69	57	50	45	68	57	50	45	56	49	45	54	49	45	53	48	44					43				
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41					39				
10	61	50	43	38	60	49	43	38	48	42	38	47	42	38	47	41	38					36				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	66838	66838	66838
5°	66501	66501	66501
10°	65467	65568	65467
15°	62967	63680	62967
20°	59169	60212	59064
25°	54491	55361	54491
30°	49628	49973	49398
35°	44049	44404	44049
40°	38739	38739	38349
45°	32485	33319	32626
50°	25150	28377	25150
55°	17362	23714	17535
60°	12415	17544	12415
65°	9328	11193	9092
70°	6043	7206	6333
75°	2277	3815	2277
80°	1719	2292	1719
85°	1142	1142	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.9	6.1
10°-20°	223.7	16.6
20°-30°	298.8	22.1
30°-40°	296.8	22.0
40°-50°	236.0	17.5
50°-60°	137.9	10.2
60°-70°	58.1	4.3
70°-80°	14.3	1.1
80°-90°	2.1	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°	604.5	44.8
0°-40°	901.2	66.8
0°-60°	1275.1	94.5
0°-90°	1349.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1349.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	866	866	866	866	866	82
15°	795	800	804	800	795	222
25°	645	654	656	653	645	296
35°	471	479	475	476	471	295
45°	300	308	308	308	301	232
55°	130	148	178	148	131	121
65°	52	57	62	57	50	52
75°	8	9	13	10	8	12
85°	1	1	1	1	1	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	873.2	873.2	873.2	873.2	873.2
2.5°	870.6	870.6	870.6	870.6	871.9
5°	865.5	865.5	865.5	865.5	865.5
7.5°	856.4	856.4	857.7	857.7	856.4
10°	842.3	842.3	843.6	843.6	842.3
12.5°	821.7	824.2	826.8	824.2	823.0
15°	794.6	799.8	803.6	799.8	794.6
17.5°	761.1	767.6	775.3	767.6	761.1
20°	726.4	732.8	739.2	731.5	725.1
22.5°	686.4	694.2	698.0	692.9	685.1
25°	645.2	654.2	655.5	653.0	645.2
27.5°	602.7	609.2	611.7	610.5	604.0
30°	561.5	568.0	565.4	566.7	558.9
32.5°	516.4	522.9	520.3	520.3	515.2
35°	471.4	479.1	475.2	476.5	471.4
37.5°	428.9	432.7	431.4	432.7	427.6
40°	387.7	390.2	387.7	390.2	383.8
42.5°	345.2	349.0	346.4	349.0	343.9
45°	300.1	307.8	307.8	307.8	301.4
47.5°	261.4	267.9	271.7	267.9	257.6
50°	211.2	230.5	238.3	229.2	211.2
52.5°	167.4	186.7	207.3	186.7	168.7
55°	130.1	148.1	177.7	148.1	131.4
57.5°	103.0	115.9	146.8	115.9	103.0
60°	81.1	91.4	114.6	91.4	81.1
62.5°	64.4	72.1	85.0	72.1	64.4
65°	51.5	56.7	61.8	56.7	50.2
67.5°	39.9	43.8	45.1	43.8	38.6
70°	27.0	32.2	32.2	32.2	28.3
72.5°	16.7	20.6	21.9	20.6	16.7
75°	7.7	9.0	12.9	10.3	7.7
77.5°	6.4	6.4	6.4	6.4	6.4
80°	3.9	5.2	5.2	5.2	3.9
82.5°	2.6	2.6	2.6	2.6	2.6
85°	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)