

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: P241789

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241789  
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  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1351.2 lumens  
Efficiency: N/A  
Efficacy: 112.6 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

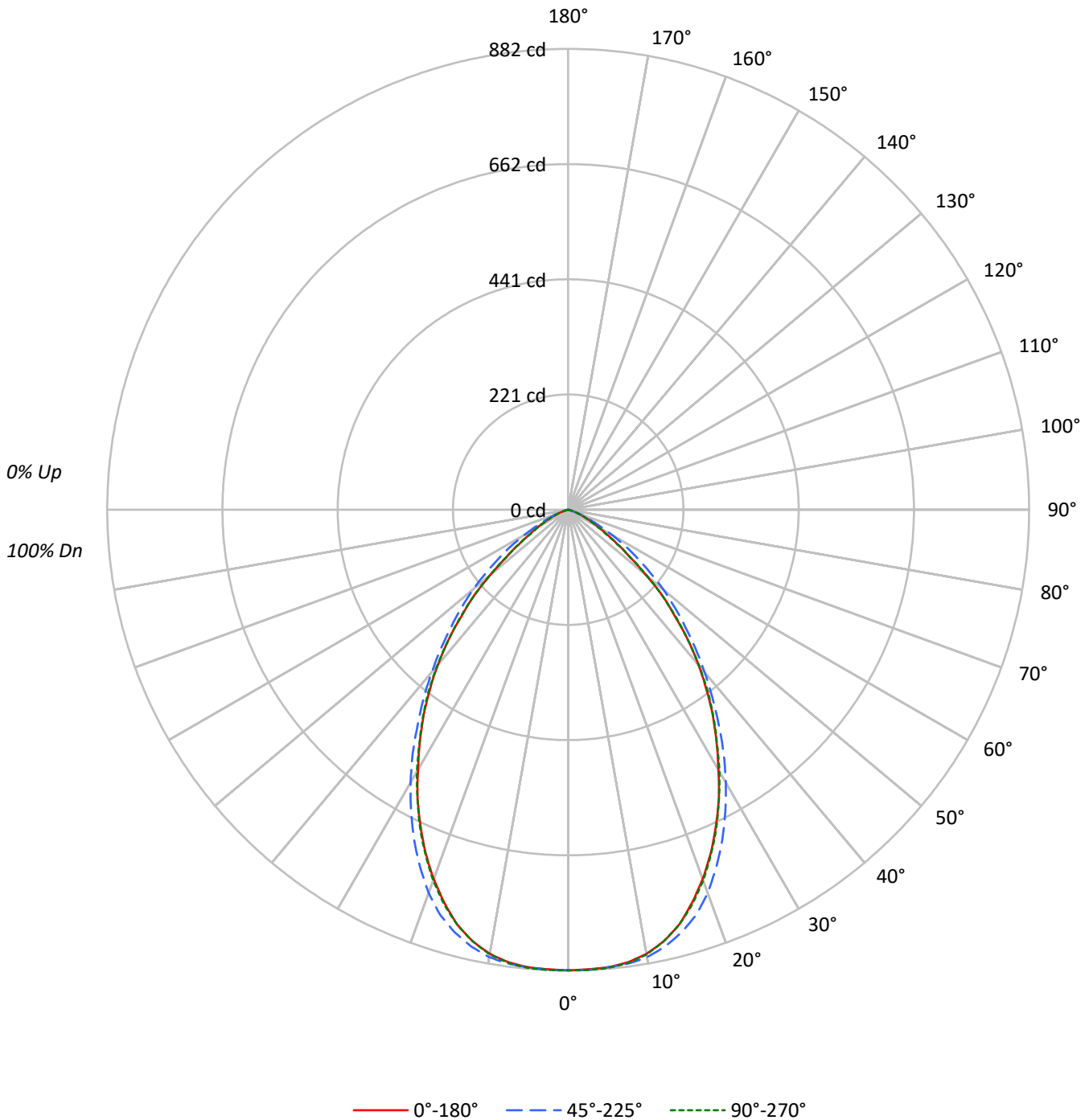
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	67488	67488	67488
5°	67546	67546	67646
10°	67084	67597	67185
15°	65114	66382	65114
20°	61279	63568	61499
25°	56442	58917	56670
30°	50812	53287	51166
35°	45123	46871	45245
40°	38789	40518	38919
45°	31338	34217	31619
50°	23197	28270	23352
55°	15307	21539	15307
60°	10211	14911	9798
65°	6774	8694	6774
70°	3872	4476	3872
75°	0	1567	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.5	6.2
10°-20°	232.4	17.2
20°-30°	313.9	23.2
30°-40°	309.3	22.9
40°-50°	236.2	17.5
50°-60°	125.3	9.3
60°-70°	44.9	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°	629.8	46.6
0°-40°	939.1	69.5
0°-60°	1300.7	96.3
0°-90°	1351.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1351.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	879	879	879	880	880	83
15°	822	831	838	830	822	230
25°	668	686	698	688	671	306
35°	483	498	502	499	484	300
45°	290	308	316	310	292	224
55°	115	135	161	135	115	107
65°	37	44	48	44	37	39
75°	0	1	5	1	0	4
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°	881.7	881.7	881.7	881.7	881.7
2.5°	880.4	880.4	881.7	881.7	881.7
5°	879.1	879.1	879.1	880.4	880.4
7.5°	873.7	873.7	876.4	875.1	875.1
10°	863.1	865.7	869.7	865.7	864.4
12.5°	845.7	852.4	856.4	852.4	845.7
15°	821.7	831.0	837.7	829.7	821.7
17.5°	788.4	800.4	813.7	800.4	791.0
20°	752.3	767.0	780.4	768.3	755.0
22.5°	712.3	728.3	740.3	729.7	713.7
25°	668.3	685.6	697.6	688.3	671.0
27.5°	624.3	641.6	651.0	643.0	624.3
30°	574.9	593.6	602.9	596.3	578.9
32.5°	528.2	545.6	553.6	546.9	529.6
35°	482.9	497.6	501.6	498.9	484.2
37.5°	434.9	450.9	453.5	453.5	438.9
40°	388.2	402.8	405.5	404.2	389.5
42.5°	340.2	356.2	360.2	356.2	340.2
45°	289.5	308.1	316.1	309.5	292.1
47.5°	246.8	261.5	276.1	262.8	245.4
50°	194.8	220.1	237.4	218.8	196.1
52.5°	149.4	176.1	197.4	174.7	149.4
55°	114.7	134.7	161.4	134.7	114.7
57.5°	86.7	102.7	129.4	101.4	84.0
60°	66.7	78.7	97.4	76.0	64.0
62.5°	50.7	58.7	69.4	57.4	49.4
65°	37.4	44.0	48.0	44.0	37.4
67.5°	26.7	32.0	32.0	32.0	26.7
70°	17.3	21.3	20.0	21.3	17.3
72.5°	6.7	10.7	10.7	10.7	6.7
75°	0.0	1.3	5.3	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)