

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: P252874

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252874  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS415D010-S4M12-44SWDC  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE 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: 1295.3 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

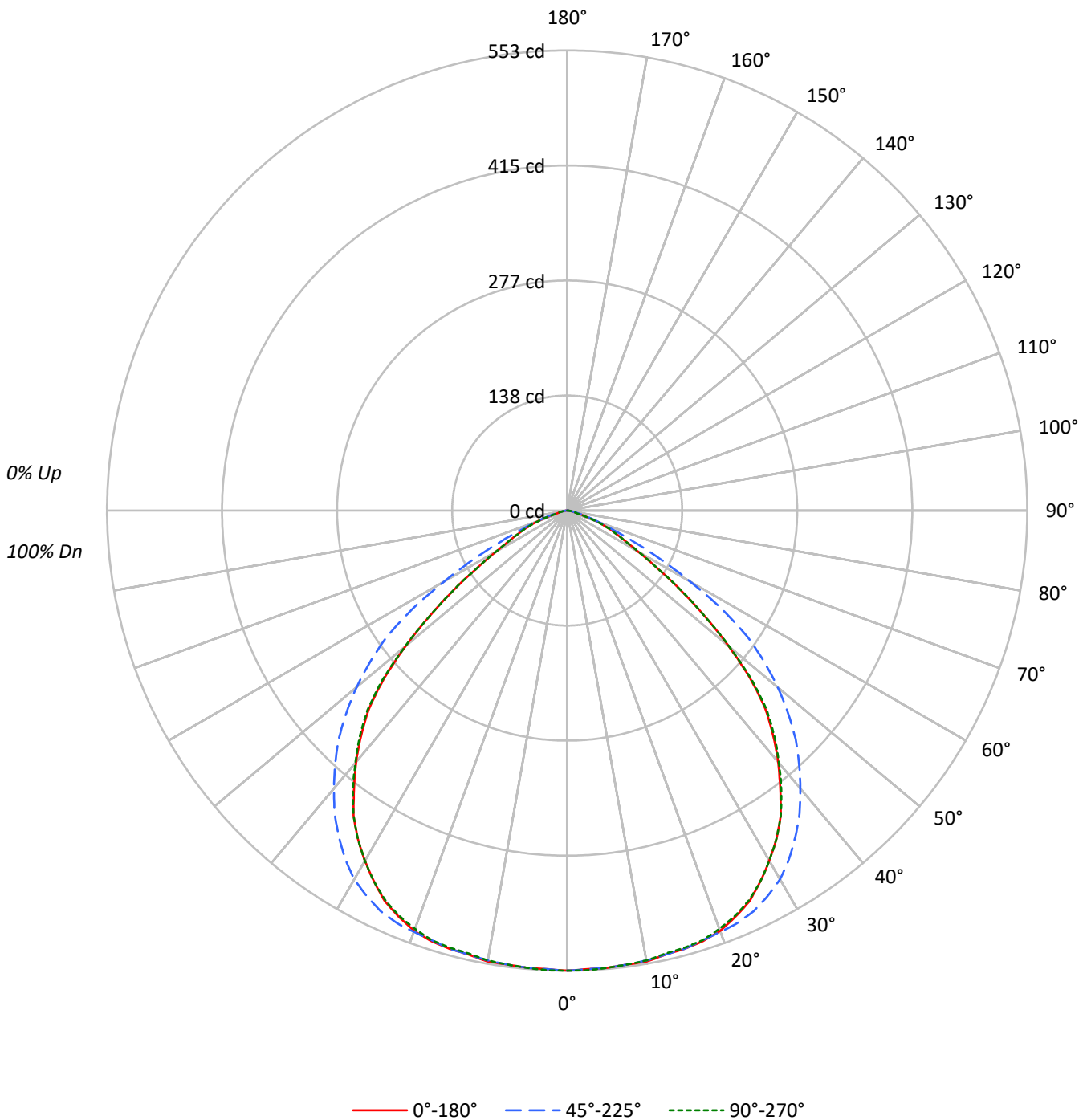
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61	59
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53	52
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48	46
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

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

	0°	45°	90°
0°	42321	42321	42321
5°	42383	42383	42383
10°	42772	42671	42671
15°	43204	43204	43101
20°	43782	43880	43571
25°	43765	44846	43655
30°	42955	45226	42955
35°	41815	44693	41815
40°	39439	43555	39568
45°	36469	42033	36740
50°	30163	39344	30318
55°	22139	35351	22313
60°	14957	26178	15156
65°	11410	15830	11410
70°	8348	8930	8057
75°	3431	4939	3431
80°	2821	2821	2821
85°	2283	2283	2283



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.6	4.1
10°-20°	154.1	11.9
20°-30°	240.7	18.6
30°-40°	287.8	22.2
40°-50°	276.7	21.4
50°-60°	185.8	14.3
60°-70°	75.9	5.9
70°-80°	18.9	1.5
80°-90°	3.0	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°	447.3	34.5
0°-40°	735.1	56.8
0°-60°	1197.6	92.5
0°-90°	1295.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1295.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	552	552	552	552	552	53
15°	545	545	545	544	544	154
25°	518	523	531	522	517	238
35°	448	460	478	462	448	278
45°	337	361	388	363	339	255
55°	166	201	265	202	167	150
65°	63	71	87	71	63	64
75°	12	13	17	13	12	17
85°	3	3	3	3	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	552.9	552.9	552.9	552.9	552.9
2.5°	551.6	551.6	551.6	552.9	552.9
5°	551.6	551.6	551.6	551.6	551.6
7.5°	550.3	550.3	550.3	550.3	550.3
10°	550.3	549.0	549.0	549.0	549.0
12.5°	546.5	546.5	546.5	546.5	545.2
15°	545.2	545.2	545.2	543.9	543.9
17.5°	542.6	542.6	541.3	541.3	541.3
20°	537.5	538.7	538.7	537.5	534.9
22.5°	528.5	532.3	536.2	531.0	527.2
25°	518.2	523.3	531.0	522.0	516.9
27.5°	502.7	510.5	522.0	510.5	502.7
30°	486.0	496.3	511.7	496.3	486.0
32.5°	468.0	479.6	496.3	479.6	468.0
35°	447.5	460.3	478.3	461.6	447.5
37.5°	420.5	438.5	459.0	441.0	423.0
40°	394.7	414.0	435.9	415.3	396.0
42.5°	366.4	388.3	412.7	389.6	369.0
45°	336.9	361.3	388.3	362.6	339.4
47.5°	298.3	327.9	360.0	331.7	300.9
50°	253.3	290.6	330.4	293.2	254.6
52.5°	208.3	244.3	298.3	246.9	208.3
55°	165.9	200.6	264.9	201.9	167.2
57.5°	127.3	158.2	221.2	160.7	127.3
60°	97.7	120.9	171.0	122.1	99.0
62.5°	77.1	91.3	126.0	90.0	77.1
65°	63.0	70.7	87.4	70.7	63.0
67.5°	50.1	55.3	57.9	55.3	50.1
70°	37.3	42.4	39.9	42.4	36.0
72.5°	21.9	27.0	27.0	27.0	20.6
75°	11.6	12.9	16.7	12.9	11.6
77.5°	9.0	9.0	10.3	9.0	9.0
80°	6.4	6.4	6.4	6.4	6.4
82.5°	3.9	3.9	3.9	3.9	3.9
85°	2.6	2.6	2.6	2.6	2.6
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)