

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: P252899

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252899  
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-S4M12-44SWDMW-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE 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: 1296.8 lumens  
Efficiency: N/A  
Efficacy: 108.1 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

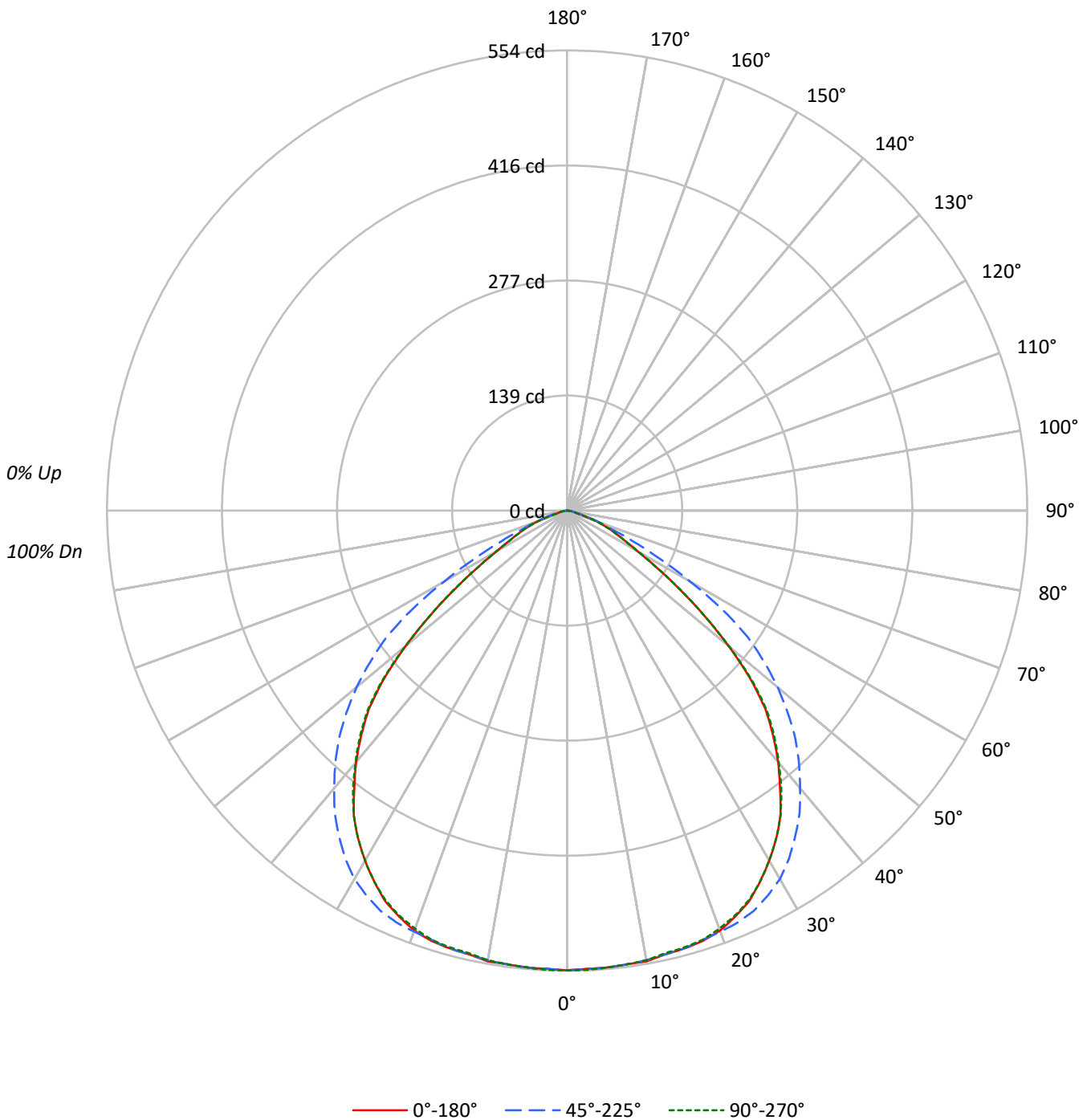
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	42367	42367	42367
5°	42429	42429	42429
10°	42818	42717	42717
15°	43251	43251	43148
20°	43831	43929	43620
25°	43807	44897	43706
30°	43008	45279	43008
35°	41862	44740	41862
40°	39489	43605	39618
45°	36512	42076	36783
50°	30199	39392	30354
55°	22166	35391	22326
60°	14972	26208	15171
65°	11428	15848	11428
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°	154.2	11.9
20°-30°	240.9	18.6
30°-40°	288.2	22.2
40°-50°	277.0	21.4
50°-60°	186.0	14.3
60°-70°	76.0	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°	447.8	34.5
0°-40°	736.0	56.8
0°-60°	1198.9	92.5
0°-90°	1296.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1296.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	554	554	554	554	554	
5°	552	552	552	552	552	53
15°	546	546	546	544	544	154
25°	519	524	532	523	518	238
35°	448	461	479	462	448	278
45°	337	362	389	363	340	255
55°	166	201	265	202	167	151
65°	63	71	88	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°	553.5	553.5	553.5	553.5	553.5
2.5°	552.2	552.2	552.2	553.5	553.5
5°	552.2	552.2	552.2	552.2	552.2
7.5°	550.9	550.9	550.9	550.9	550.9
10°	550.9	549.6	549.6	549.6	549.6
12.5°	547.1	547.1	547.1	547.1	545.8
15°	545.8	545.8	545.8	544.5	544.5
17.5°	543.2	543.2	541.9	541.9	541.9
20°	538.1	539.3	539.3	538.1	535.5
22.5°	529.0	532.9	536.8	531.6	527.8
25°	518.7	523.9	531.6	522.6	517.5
27.5°	503.3	511.0	522.6	511.0	503.3
30°	486.6	496.9	512.3	496.9	486.6
32.5°	468.5	480.1	496.9	480.1	468.5
35°	448.0	460.8	478.8	462.1	448.0
37.5°	420.9	438.9	459.5	441.5	423.5
40°	395.2	414.5	436.4	415.8	396.5
42.5°	366.9	388.7	413.2	390.0	369.4
45°	337.3	361.7	388.7	363.0	339.8
47.5°	298.6	328.2	360.4	332.1	301.2
50°	253.6	290.9	330.8	293.5	254.9
52.5°	208.5	244.6	298.6	247.1	208.5
55°	166.1	200.8	265.2	202.1	167.3
57.5°	127.4	158.3	221.4	160.9	127.4
60°	97.8	121.0	171.2	122.3	99.1
62.5°	77.2	91.4	126.1	90.1	77.2
65°	63.1	70.8	87.5	70.8	63.1
67.5°	50.2	55.4	57.9	55.4	50.2
70°	37.3	42.5	39.9	42.5	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)