

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: P252924

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252924  
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-S4M12-44SWDMB-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM MATTE BLACK  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1176.0 lumens  
Efficiency: N/A  
Efficacy: 98.0 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

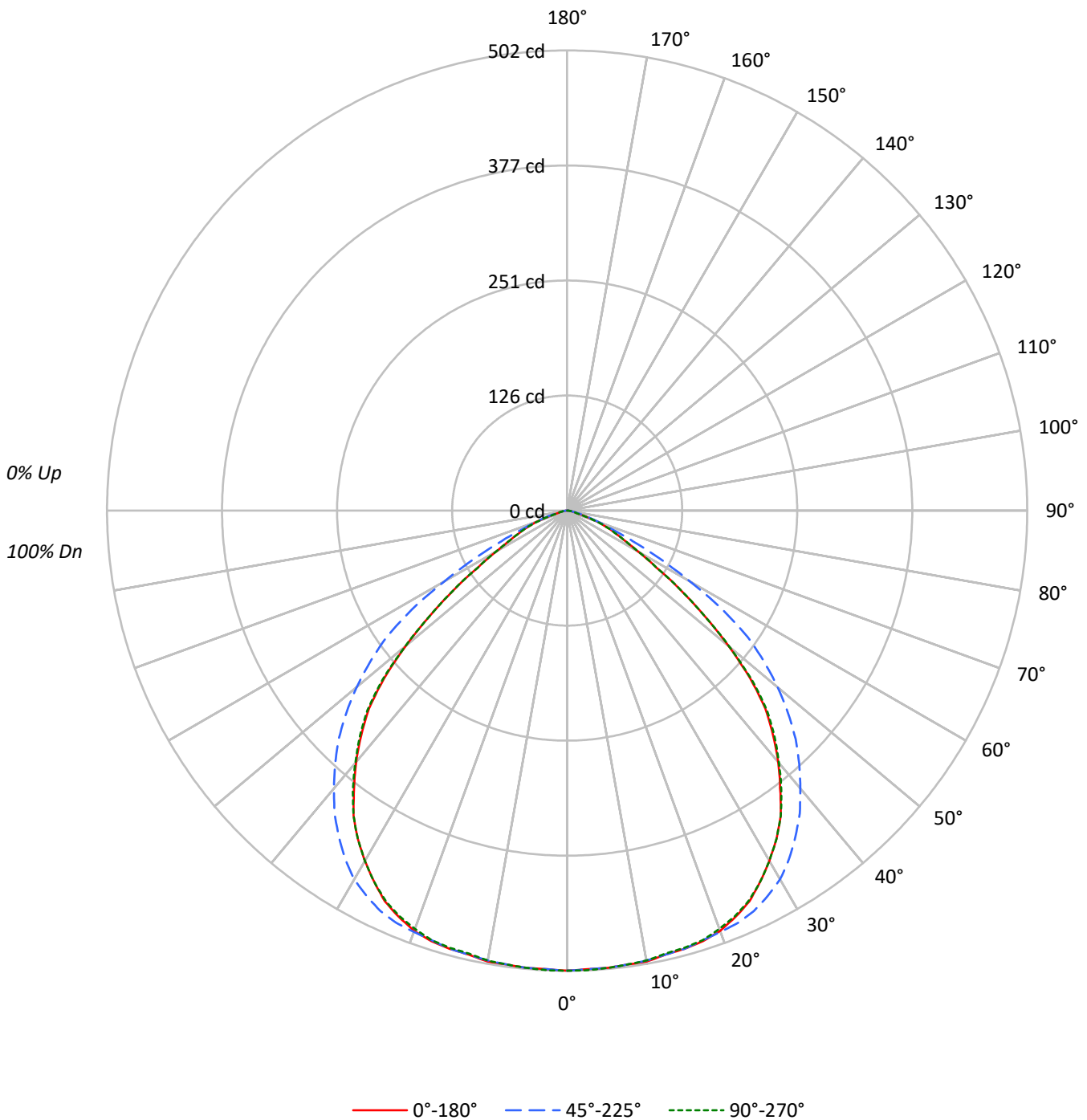
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	38417	38417	38417
5°	38479	38479	38479
10°	38831	38738	38738
15°	39218	39218	39130
20°	39742	39840	39555
25°	39728	40716	39635
30°	38995	41064	38995
35°	37956	40573	37956
40°	35811	39538	35921
45°	33102	38158	33362
50°	27388	35724	27519
55°	20097	32095	20258
60°	13579	23774	13763
65°	10360	14381	10360
70°	7587	8101	7318
75°	3105	4495	3105
80°	2557	2557	2557
85°	2020	2020	2020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.7	4.1
10°-20°	139.9	11.9
20°-30°	218.5	18.6
30°-40°	261.3	22.2
40°-50°	251.2	21.4
50°-60°	168.7	14.3
60°-70°	68.9	5.9
70°-80°	17.1	1.5
80°-90°	2.7	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°	406.1	34.5
0°-40°	667.4	56.8
0°-60°	1087.3	92.5
0°-90°	1176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1176.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	501	501	501	501	501	48
15°	495	495	495	494	494	140
25°	470	475	482	474	469	216
35°	406	418	434	419	406	252
45°	306	328	352	329	308	232
55°	151	182	240	183	152	137
65°	57	64	79	64	57	58
75°	10	12	15	12	10	15
85°	2	2	2	2	2	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	501.9	501.9	501.9	501.9	501.9
2.5°	500.8	500.8	500.8	501.9	501.9
5°	500.8	500.8	500.8	500.8	500.8
7.5°	499.6	499.6	499.6	499.6	499.6
10°	499.6	498.4	498.4	498.4	498.4
12.5°	496.1	496.1	496.1	496.1	494.9
15°	494.9	494.9	494.9	493.8	493.8
17.5°	492.6	492.6	491.4	491.4	491.4
20°	487.9	489.1	489.1	487.9	485.6
22.5°	479.8	483.3	486.8	482.1	478.6
25°	470.4	475.1	482.1	473.9	469.3
27.5°	456.4	463.4	473.9	463.4	456.4
30°	441.2	450.6	464.6	450.6	441.2
32.5°	424.9	435.4	450.6	435.4	424.9
35°	406.2	417.9	434.2	419.1	406.2
37.5°	381.7	398.1	416.7	400.4	384.0
40°	358.4	375.9	395.7	377.0	359.5
42.5°	332.7	352.5	374.7	353.7	335.0
45°	305.8	328.0	352.5	329.2	308.2
47.5°	270.8	297.7	326.8	301.2	273.2
50°	230.0	263.8	300.0	266.1	231.1
52.5°	189.1	221.8	270.8	224.1	189.1
55°	150.6	182.1	240.5	183.3	151.8
57.5°	115.6	143.6	200.8	145.9	115.6
60°	88.7	109.7	155.3	110.9	89.9
62.5°	70.0	82.9	114.4	81.7	70.0
65°	57.2	64.2	79.4	64.2	57.2
67.5°	45.5	50.2	52.5	50.2	45.5
70°	33.9	38.5	36.2	38.5	32.7
72.5°	19.8	24.5	24.5	24.5	18.7
75°	10.5	11.7	15.2	11.7	10.5
77.5°	8.2	8.2	9.3	8.2	8.2
80°	5.8	5.8	5.8	5.8	5.8
82.5°	3.5	3.5	3.5	3.5	3.5
85°	2.3	2.3	2.3	2.3	2.3
87.5°	1.2	1.2	1.2	1.2	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)