

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: P241689

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241689  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-40)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS415D010-S4M12-44SNDMW-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SHALLOW TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1265.0 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.94  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

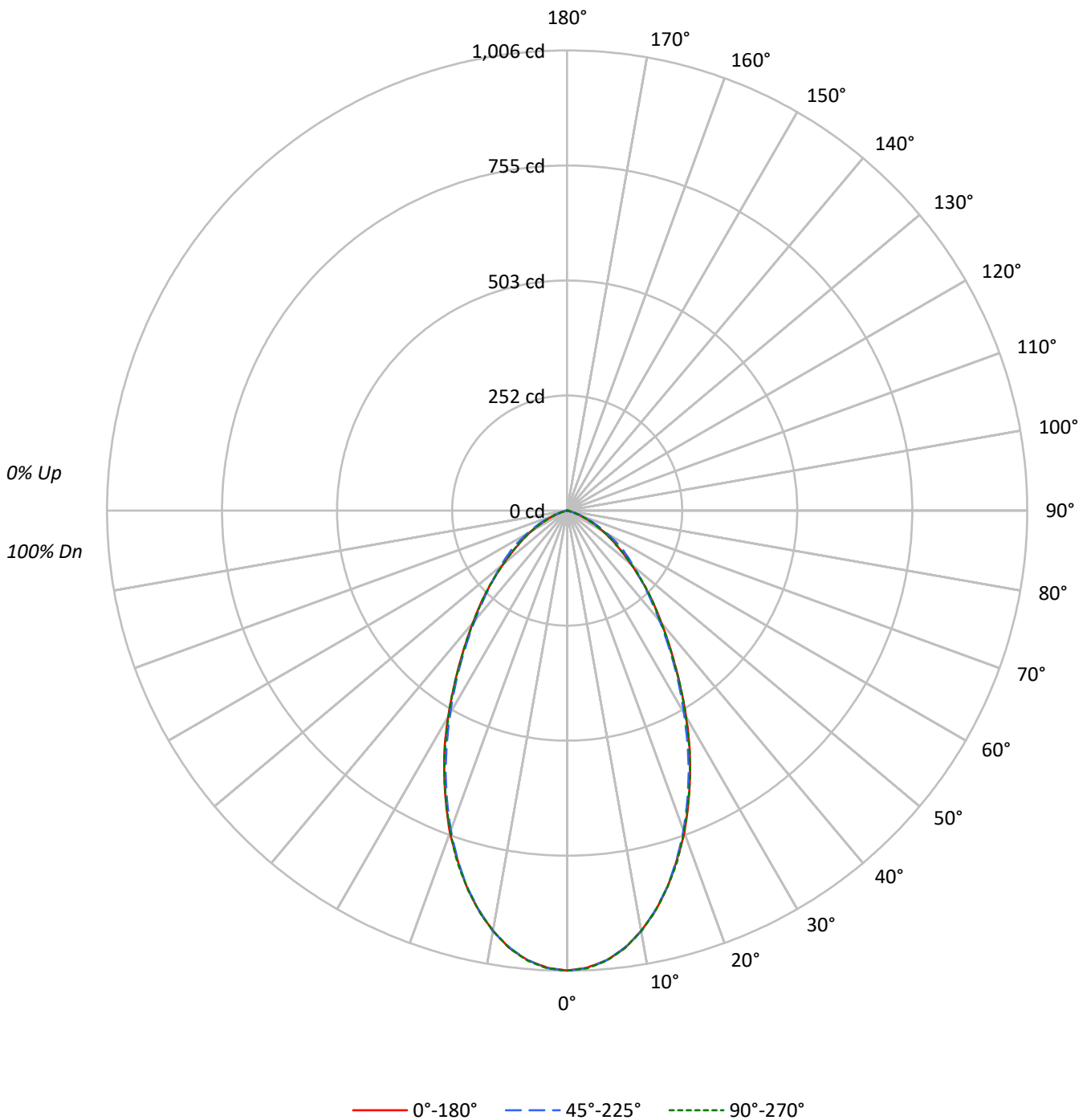
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72					72			
4	91	82	75	69	89	80	74	69	78	73	68	76	71	67	74	70	66	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	62	56	78	68	61	56	66	60	56	65	59	55	63	59	55	53					53			
7	75	64	56	51	73	63	56	51	62	55	51	60	55	51	59	54	50	49					49			
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45					45			
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	47	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

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

	0°	45°	90°
0°	76972	76972	76972
5°	75814	75814	75914
10°	72493	72594	72493
15°	67381	67278	67381
20°	61019	60579	60799
25°	53689	53123	53689
30°	45934	45094	45810
35°	38339	37835	38218
40°	31965	31425	31825
45°	26737	26304	26889
50°	21696	22661	21696
55°	17469	19630	17655
60°	13839	15492	13839
65°	10016	11736	10016
70°	6043	7542	6043
75°	1981	3194	1981
80°	1763	1763	1763
85°	1142	1142	1142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.5	7.3
10°-20°	237.1	18.7
20°-30°	289.3	22.9
30°-40°	255.7	20.2
40°-50°	190.8	15.1
50°-60°	123.8	9.8
60°-70°	61.0	4.8
70°-80°	13.2	1.0
80°-90°	1.6	0.1
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°	618.9	48.9
0°-40°	874.6	69.1
0°-60°	1189.1	94.0
0°-90°	1265.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1265.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	987	987	987	988	988	93
15°	850	850	849	850	850	237
25°	636	634	629	633	636	291
35°	410	408	405	408	409	258
45°	247	247	243	246	248	191
55°	131	135	147	136	132	119
65°	55	62	65	61	55	56
75°	7	8	11	8	7	11
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°	1005.6	1005.6	1005.6	1005.6	1005.6
2.5°	1000.2	1000.2	1001.5	1001.5	1001.5
5°	986.7	986.7	986.7	988.0	988.0
7.5°	965.1	963.7	963.7	965.1	965.1
10°	932.7	932.7	934.0	931.3	932.7
12.5°	894.9	894.9	893.5	894.9	894.9
15°	850.3	850.3	849.0	850.3	850.3
17.5°	799.1	799.1	797.7	800.4	801.8
20°	749.1	747.8	743.7	746.4	746.4
22.5°	692.4	691.1	685.7	689.7	691.1
25°	635.7	634.4	629.0	633.0	635.7
27.5°	579.0	573.6	568.2	575.0	577.7
30°	519.7	515.6	510.2	515.6	518.3
32.5°	463.0	461.6	456.2	460.3	463.0
35°	410.3	407.6	404.9	407.6	409.0
37.5°	363.1	360.4	356.3	360.4	363.1
40°	319.9	317.2	314.5	315.8	318.5
42.5°	283.4	280.8	276.7	279.4	282.1
45°	247.0	247.0	243.0	245.7	248.4
47.5°	213.3	216.0	214.6	216.0	214.6
50°	182.2	187.6	190.3	187.6	182.2
52.5°	155.2	159.3	167.4	159.3	155.2
55°	130.9	135.0	147.1	136.3	132.3
57.5°	110.7	114.7	124.2	114.7	110.7
60°	90.4	95.8	101.2	95.8	90.4
62.5°	72.9	78.3	82.3	78.3	71.5
65°	55.3	62.1	64.8	60.7	55.3
67.5°	40.5	45.9	48.6	45.9	40.5
70°	27.0	32.4	33.7	32.4	27.0
72.5°	16.2	20.2	20.2	18.9	16.2
75°	6.7	8.1	10.8	8.1	6.7
77.5°	5.4	5.4	5.4	5.4	5.4
80°	4.0	4.0	4.0	4.0	4.0
82.5°	2.7	2.7	2.7	2.7	2.7
85°	1.3	1.3	1.3	1.3	1.3
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)