

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: P241931

Luminaire Tested: **PRS430D010-S4M24-41SMDH-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241931  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-56)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-41SMDH-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2311.0 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.95 / 0.98  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

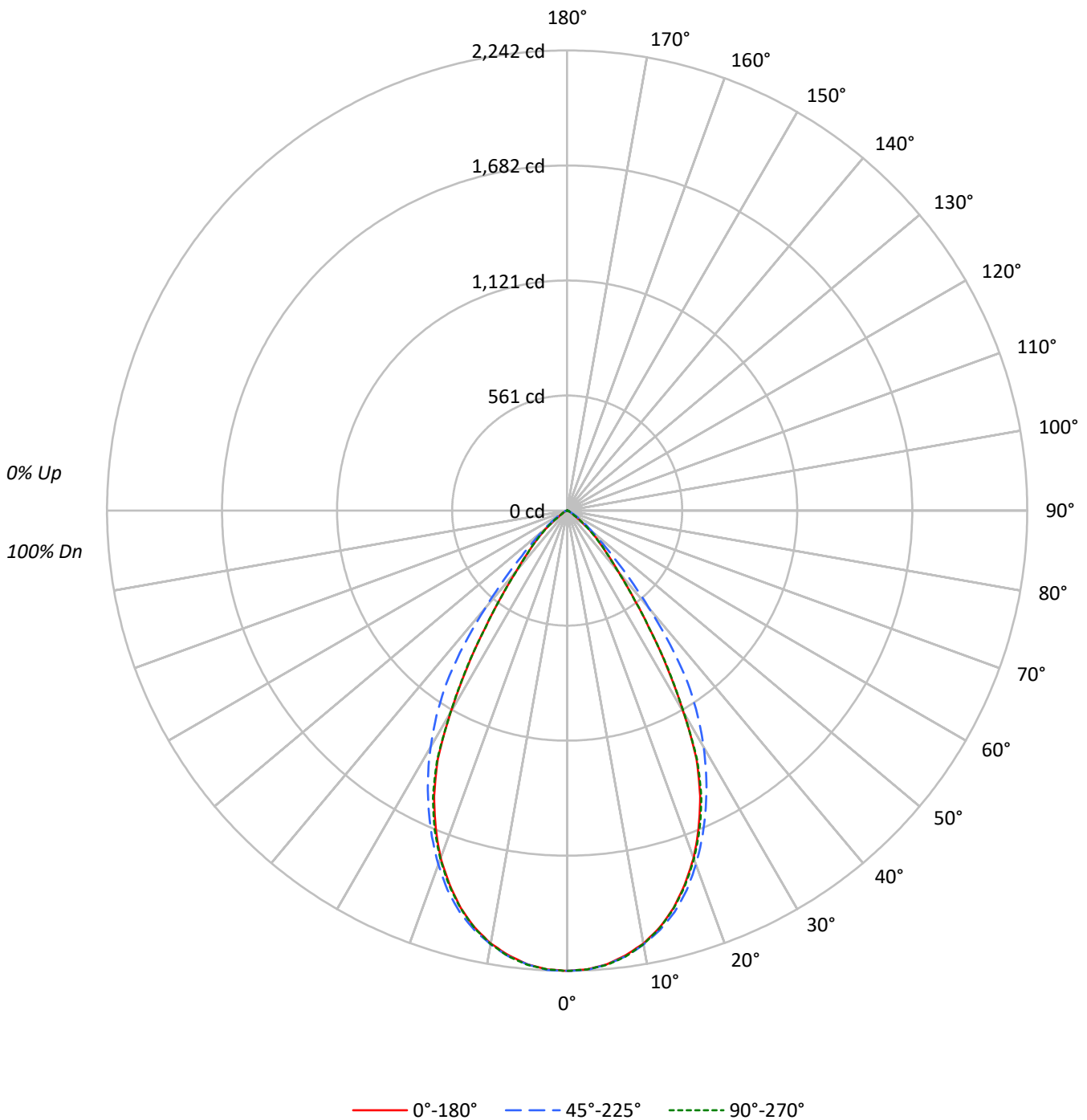
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95					93				
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87					85				
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80					79				
4	96	88	82	77	94	87	81	77	84	80	76	82	78	75	80	77	74					73				
5	90	82	75	71	89	81	75	71	79	74	70	77	73	69	76	72	69					67				
6	86	76	70	65	84	75	69	65	74	68	65	72	68	64	71	67	64					62				
7	81	71	65	60	80	71	64	60	69	64	60	68	63	60	67	62	59					58				
8	77	67	60	56	76	66	60	56	65	60	56	64	59	55	63	59	55					54				
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52					50				
10	69	59	53	49	68	59	53	49	58	52	49	57	52	49	56	52	48					47				

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

	0°	45°	90°
0°	171649	171649	171649
5°	170514	170514	170706
10°	166431	166835	166633
15°	158780	160429	158986
20°	146726	149471	147150
25°	129548	135029	130645
30°	100246	117684	100476
35°	64513	95797	64513
40°	38379	61981	38120
45°	24724	33719	24724
50°	15147	18850	14837
55°	6232	10743	6232
60°	3980	5557	3980
65°	2355	3296	2355
70°	1746	2327	1746
75°	1538	1538	769
80°	1146	1146	1146
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.5	9.1
10°-20°	562.6	24.3
20°-30°	713.1	30.9
30°-40°	521.0	22.5
40°-50°	216.5	9.4
50°-60°	65.4	2.8
60°-70°	16.7	0.7
70°-80°	5.3	0.2
80°-90°	0.9	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°	1485.2	64.3
0°-40°	2006.1	86.8
0°-60°	2288.0	99.0
0°-90°	2311.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2311.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2242	2242	2242	2242	2242	
5°	2219	2219	2219	2219	2222	209
15°	2004	2014	2024	2014	2006	559
25°	1534	1570	1599	1581	1547	690
35°	690	810	1025	810	690	442
45°	228	262	312	260	228	183
55°	47	65	80	65	47	52
65°	13	16	18	16	13	14
75°	5	5	5	5	3	5
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°	2242.5	2242.5	2242.5	2242.5	2242.5
2.5°	2237.3	2237.3	2239.9	2237.3	2237.3
5°	2219.2	2219.2	2219.2	2219.2	2221.7
7.5°	2185.4	2188.0	2190.6	2188.0	2190.6
10°	2141.3	2143.9	2146.5	2146.5	2143.9
12.5°	2081.6	2086.8	2092.0	2086.8	2084.2
15°	2003.7	2014.1	2024.5	2014.1	2006.3
17.5°	1907.7	1918.1	1938.8	1920.7	1912.9
20°	1801.3	1816.9	1835.0	1819.4	1806.5
22.5°	1674.1	1702.6	1720.8	1702.6	1684.5
25°	1533.9	1570.3	1598.8	1580.7	1546.9
27.5°	1365.2	1427.5	1469.1	1435.3	1373.0
30°	1134.2	1243.2	1331.5	1253.6	1136.8
32.5°	908.4	1022.6	1183.5	1027.8	913.6
35°	690.4	809.8	1025.2	809.8	690.4
37.5°	516.5	622.9	828.0	615.1	516.5
40°	384.1	464.6	620.3	459.4	381.5
42.5°	295.9	345.2	449.0	342.6	293.3
45°	228.4	262.1	311.5	259.6	228.4
47.5°	176.5	199.9	220.6	199.9	173.9
50°	127.2	150.5	158.3	150.5	124.6
52.5°	80.5	106.4	114.2	103.8	83.1
55°	46.7	64.9	80.5	64.9	46.7
57.5°	33.7	38.9	57.1	38.9	33.7
60°	26.0	28.6	36.3	28.6	26.0
62.5°	18.2	20.8	23.4	20.8	18.2
65°	13.0	15.6	18.2	15.6	13.0
67.5°	10.4	13.0	13.0	13.0	10.4
70°	7.8	7.8	10.4	7.8	7.8
72.5°	5.2	5.2	7.8	7.8	5.2
75°	5.2	5.2	5.2	5.2	2.6
77.5°	2.6	2.6	5.2	2.6	2.6
80°	2.6	2.6	2.6	2.6	2.6
82.5°	0.0	2.6	2.6	2.6	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)