

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: P241921

Luminaire Tested: **PRS430D010-S4M24-41SMDH-3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241921  
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-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2187.8 lumens  
Efficiency: N/A  
Efficacy: 87.5 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

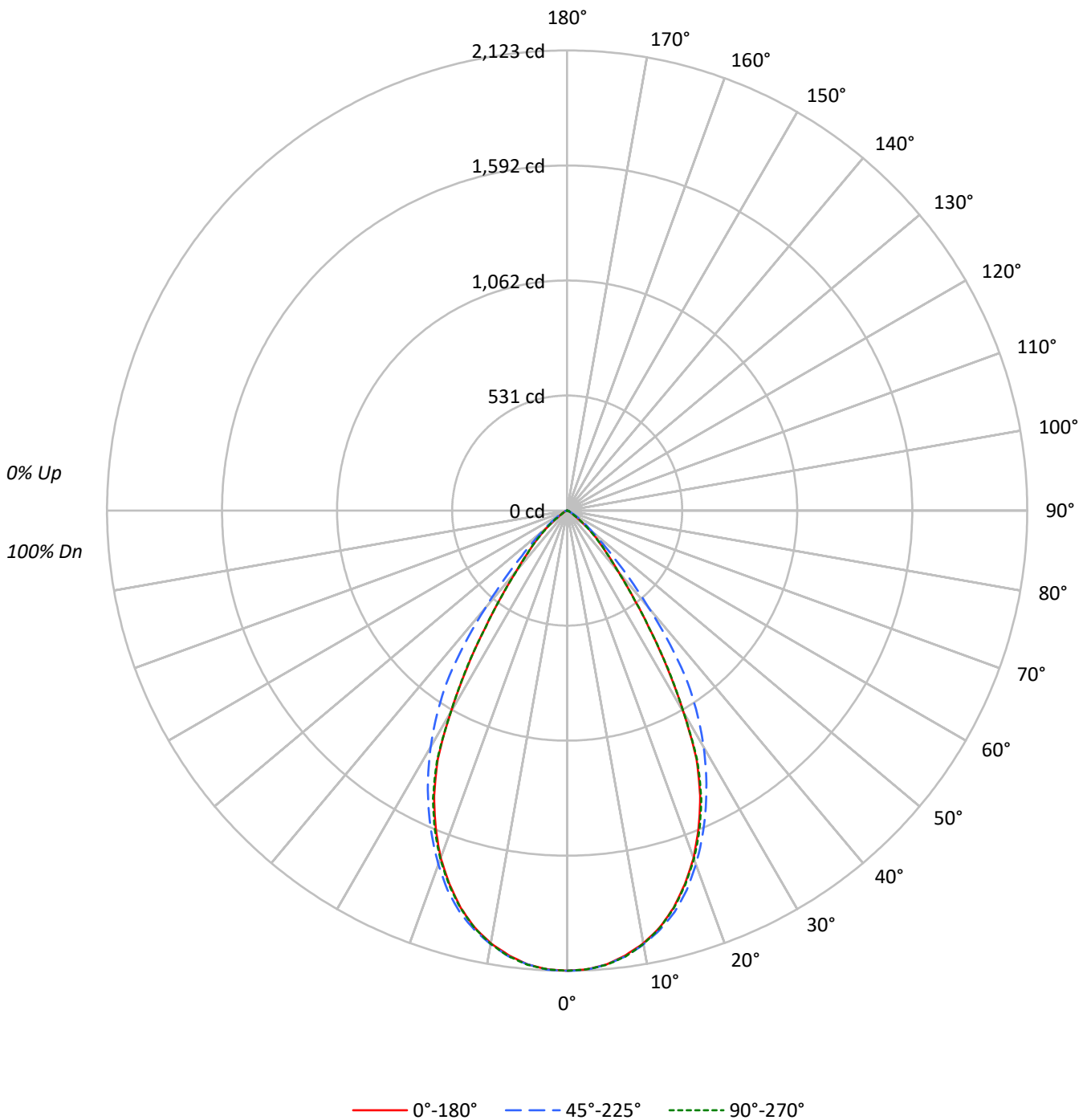
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	162502	162502	162502
5°	161424	161424	161616
10°	157563	157943	157749
15°	150317	151878	150515
20°	138907	141505	139306
25°	122647	127833	123686
30°	94907	111409	95120
35°	61074	90695	61074
40°	36341	58683	36091
45°	23403	31923	23403
50°	14337	17850	14040
55°	5898	10169	5898
60°	3766	5266	3766
65°	2228	3115	2228
70°	1656	2193	1656
75°	1449	1449	739
80°	1102	1102	1102
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.3	9.1
10°-20°	532.6	24.3
20°-30°	675.1	30.9
30°-40°	493.2	22.5
40°-50°	205.0	9.4
50°-60°	61.9	2.8
60°-70°	15.8	0.7
70°-80°	5.0	0.2
80°-90°	0.8	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°	1406.0	64.3
0°-40°	1899.2	86.8
0°-60°	2166.1	99.0
0°-90°	2187.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2187.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2123	2123	2123	2123	2123	
5°	2101	2101	2101	2101	2103	198
15°	1897	1907	1917	1907	1899	530
25°	1452	1487	1514	1496	1464	654
35°	654	767	971	767	654	419
45°	216	248	295	246	216	173
55°	44	61	76	61	44	50
65°	12	15	17	15	12	14
75°	5	5	5	5	2	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°	2123.0	2123.0	2123.0	2123.0	2123.0
2.5°	2118.1	2118.1	2120.6	2118.1	2118.1
5°	2100.9	2100.9	2100.9	2100.9	2103.4
7.5°	2069.0	2071.4	2073.9	2071.4	2073.9
10°	2027.2	2029.6	2032.1	2032.1	2029.6
12.5°	1970.7	1975.6	1980.5	1975.6	1973.1
15°	1896.9	1906.8	1916.6	1906.8	1899.4
17.5°	1806.0	1815.9	1835.5	1818.3	1810.9
20°	1705.3	1720.0	1737.2	1722.5	1710.2
22.5°	1584.9	1611.9	1629.1	1611.9	1594.7
25°	1452.2	1486.6	1513.6	1496.4	1464.5
27.5°	1292.5	1351.5	1390.8	1358.8	1299.9
30°	1073.8	1177.0	1260.5	1186.8	1076.2
32.5°	860.0	968.1	1120.5	973.0	864.9
35°	653.6	766.6	970.6	766.6	653.6
37.5°	489.0	589.7	783.8	582.4	489.0
40°	363.7	439.8	587.3	434.9	361.2
42.5°	280.1	326.8	425.1	324.3	277.7
45°	216.2	248.2	294.9	245.7	216.2
47.5°	167.1	189.2	208.9	189.2	164.6
50°	120.4	142.5	149.9	142.5	117.9
52.5°	76.2	100.7	108.1	98.3	78.6
55°	44.2	61.4	76.2	61.4	44.2
57.5°	31.9	36.9	54.1	36.9	31.9
60°	24.6	27.0	34.4	27.0	24.6
62.5°	17.2	19.7	22.1	19.7	17.2
65°	12.3	14.7	17.2	14.7	12.3
67.5°	9.8	12.3	12.3	12.3	9.8
70°	7.4	7.4	9.8	7.4	7.4
72.5°	4.9	4.9	7.4	7.4	4.9
75°	4.9	4.9	4.9	4.9	2.5
77.5°	2.5	2.5	4.9	2.5	2.5
80°	2.5	2.5	2.5	2.5	2.5
82.5°	0.0	2.5	2.5	2.5	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)