

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: P241661

Luminaire Tested: **PRS430D010-S4M24-44SMDMB-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241661  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-38)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-44SMDMB-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 2404.4 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 1.06  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

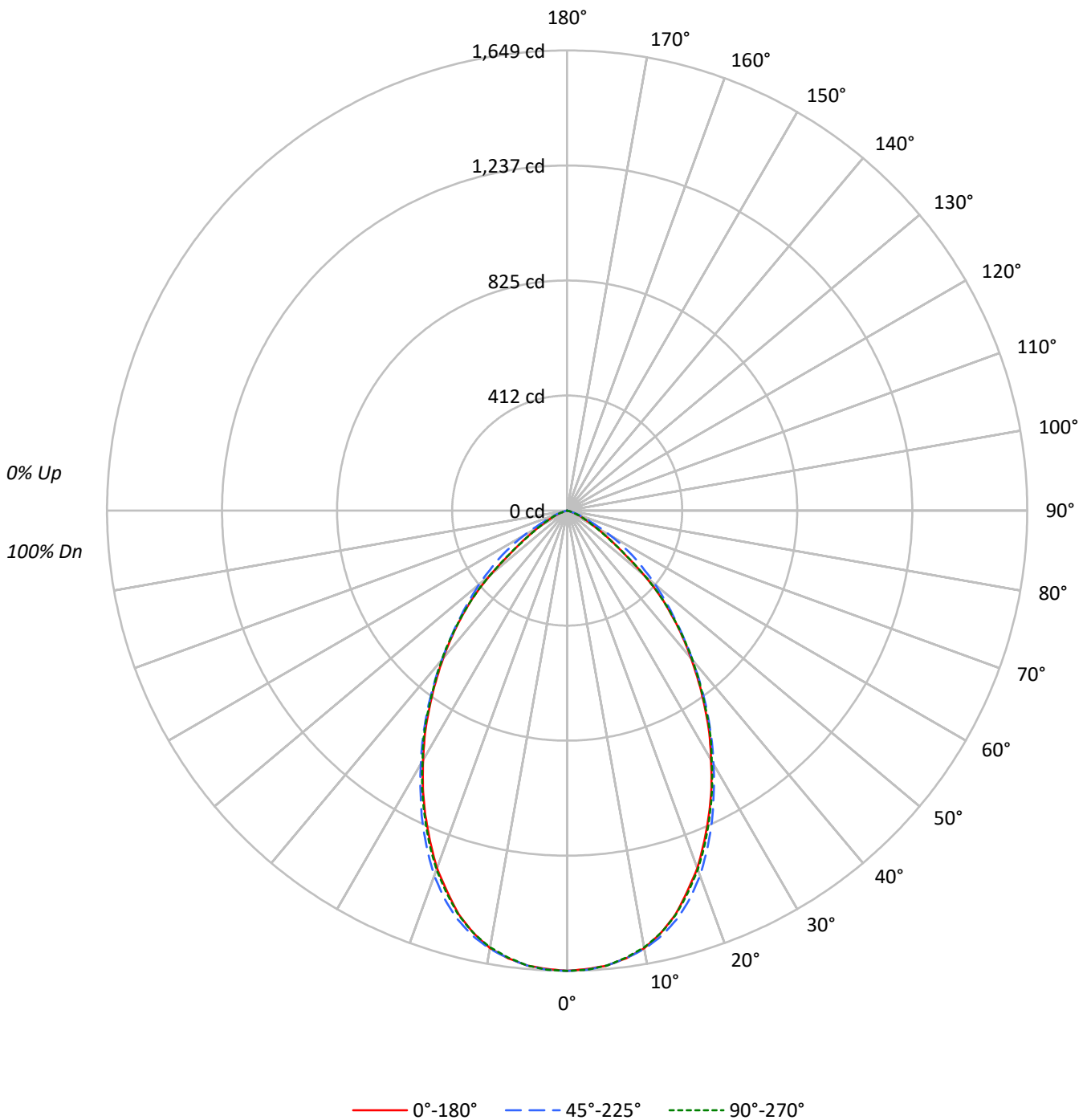
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	101	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73					73			
4	91	82	75	70	89	81	74	70	78	73	69	76	72	68	74	70	67	65					65			
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59					59			
6	80	69	62	56	78	68	61	56	66	60	56	65	60	55	64	59	55	53					53			
7	75	64	56	51	73	63	56	51	62	55	51	60	55	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	42	41					41			
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38					38			

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

	0°	45°	90°
0°	126251	126251	126251
5°	125734	125734	125734
10°	123752	123955	123550
15°	118762	120205	118968
20°	111081	113403	111497
25°	101567	103763	102006
30°	91142	92751	91602
35°	80332	81547	80818
40°	69035	69814	69814
45°	57361	58768	57642
50°	42678	48871	42988
55°	27037	39167	26690
60°	17100	27433	16702
65°	11284	15522	11284
70°	6401	8146	6401
75°	0	2307	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.8	6.4
10°-20°	421.8	17.5
20°-30°	558.3	23.2
30°-40°	543.8	22.6
40°-50°	416.5	17.3
50°-60°	222.1	9.2
60°-70°	77.2	3.2
70°-80°	9.9	0.4
80°-90°	0.0	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°	1134.9	47.2
0°-40°	1678.7	69.8
0°-60°	2317.3	96.4
0°-90°	2404.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2404.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1636	1636	1636	1636	1636	155
15°	1499	1509	1517	1509	1501	419
25°	1203	1221	1229	1221	1208	551
35°	860	873	873	878	865	536
45°	530	540	543	546	532	406
55°	203	234	294	236	200	190
65°	62	75	86	73	62	65
75°	0	3	8	3	0	7
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°	1649.4	1649.4	1649.4	1649.4	1649.4
2.5°	1644.2	1644.2	1646.8	1644.2	1646.8
5°	1636.4	1636.4	1636.4	1636.4	1636.4
7.5°	1618.2	1618.2	1618.2	1618.2	1615.6
10°	1592.2	1592.2	1594.8	1592.2	1589.6
12.5°	1550.7	1555.9	1561.1	1558.5	1550.7
15°	1498.7	1509.1	1516.9	1509.1	1501.3
17.5°	1431.2	1444.2	1459.8	1446.8	1436.4
20°	1363.7	1374.0	1392.2	1379.2	1368.8
22.5°	1283.1	1298.7	1311.7	1303.9	1290.9
25°	1202.6	1220.8	1228.6	1220.8	1207.8
27.5°	1119.5	1132.5	1137.7	1140.3	1124.7
30°	1031.2	1046.8	1049.4	1052.0	1036.4
32.5°	948.1	961.0	961.0	968.8	955.9
35°	859.7	872.7	872.7	877.9	864.9
37.5°	774.0	787.0	784.4	792.2	779.2
40°	690.9	701.3	698.7	703.9	698.7
42.5°	610.4	620.8	618.2	623.4	615.6
45°	529.9	540.3	542.9	545.5	532.5
47.5°	452.0	464.9	472.7	470.1	452.0
50°	358.4	389.6	410.4	394.8	361.0
52.5°	267.5	311.7	348.1	314.3	272.7
55°	202.6	233.8	293.5	236.4	200.0
57.5°	150.7	176.6	236.4	174.0	148.1
60°	111.7	132.5	179.2	129.9	109.1
62.5°	83.1	98.7	124.7	96.1	83.1
65°	62.3	75.3	85.7	72.7	62.3
67.5°	46.8	54.5	57.1	54.5	44.2
70°	28.6	36.4	36.4	36.4	28.6
72.5°	13.0	18.2	20.8	18.2	13.0
75°	0.0	2.6	7.8	2.6	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	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)