

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: P241876

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-53)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-41SMDMW-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, DEEP TRIM MATTE WHITE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2246.8 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 0.98 / 1.02  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

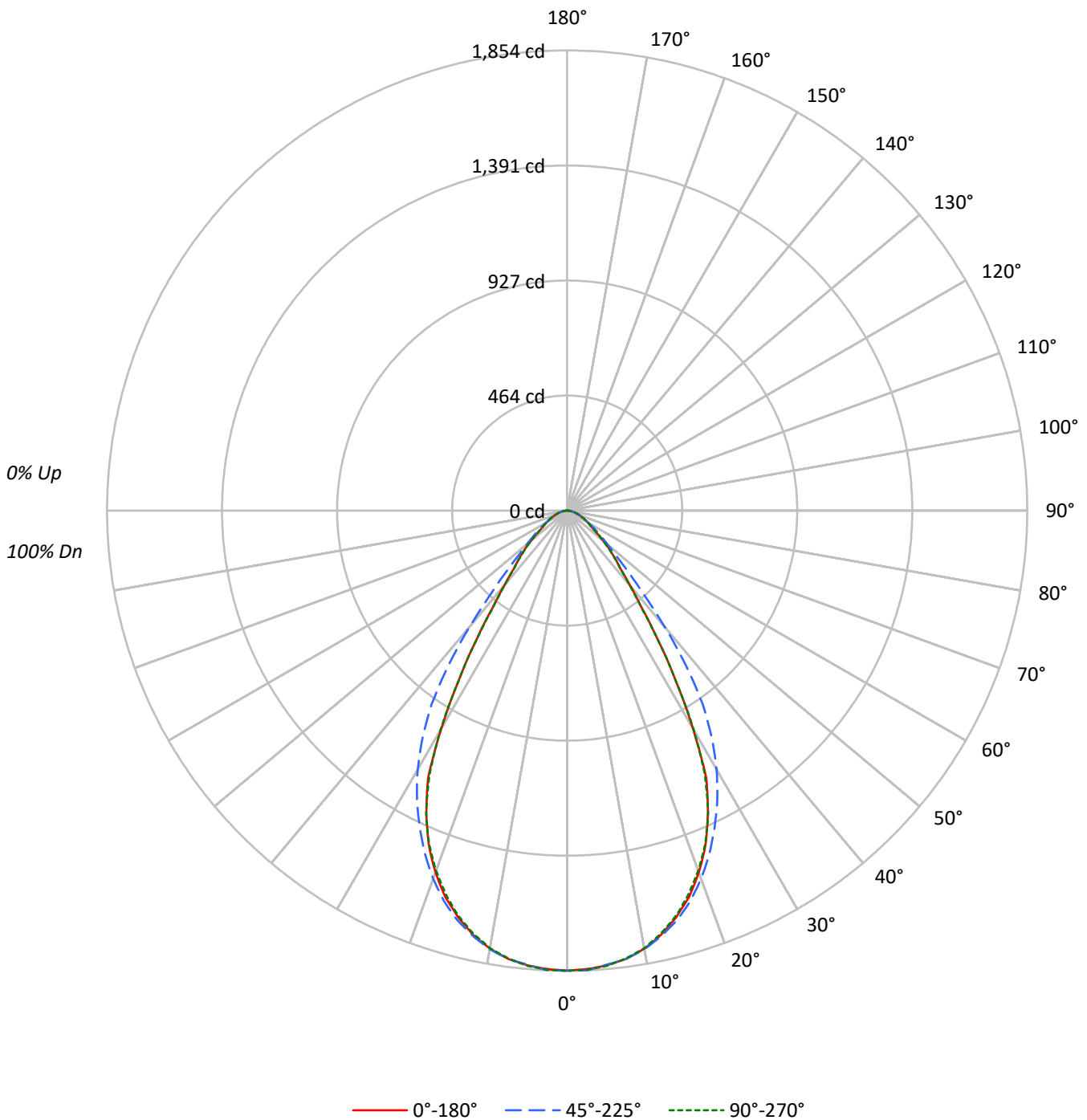
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	100	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82					82			
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74					74			
4	93	84	78	73	91	83	77	72	81	75	71	78	74	70	77	73	70	68					68			
5	87	78	71	66	86	77	70	66	75	69	65	73	68	64	71	67	64	62					62			
6	82	72	65	60	81	71	65	60	70	64	60	68	63	59	67	62	59	57					57			
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	62	58	54	53					53			
8	73	63	56	51	72	62	55	51	61	55	51	60	54	51	59	54	50	49					49			
9	69	59	52	47	68	58	52	47	57	51	47	56	51	47	55	50	47	45					45			
10	66	55	48	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42					42			

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

	0°	45°	90°
0°	141881	141881	141881
5°	141293	141101	141478
10°	139297	139484	139103
15°	134421	135396	134033
20°	126362	128562	125760
25°	113366	118762	113568
30°	89525	106468	90170
35°	59728	88901	59728
40°	39299	60921	38809
45°	29541	36989	29270
50°	22840	25174	22542
55°	16735	19350	16735
60°	14681	15431	14681
65°	12914	13366	12914
70°	11011	11548	11548
75°	10173	10173	10173
80°	8684	8684	8684
85°	6499	8607	6499



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.1	7.7
10°-20°	476.3	21.2
20°-30°	625.5	27.8
30°-40°	482.4	21.5
40°-50°	242.5	10.8
50°-60°	127.4	5.7
60°-70°	72.0	3.2
70°-80°	36.6	1.6
80°-90°	10.0	0.4
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°	1275.9	56.8
0°-40°	1758.3	78.3
0°-60°	2128.2	94.7
0°-90°	2246.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2246.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1839	1841	1836	1841	1841	174
15°	1696	1701	1709	1699	1691	475
25°	1342	1382	1406	1379	1345	606
35°	639	747	951	750	639	409
45°	273	300	342	298	270	214
55°	125	138	145	138	125	119
65°	71	71	74	71	71	71
75°	34	34	34	34	34	36
85°	7	7	10	7	7	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1853.6	1853.6	1853.6	1853.6	1853.6
2.5°	1848.7	1851.2	1853.6	1851.2	1851.2
5°	1838.9	1841.3	1836.4	1841.3	1841.3
7.5°	1821.7	1819.2	1821.7	1819.2	1819.2
10°	1792.2	1792.2	1794.6	1789.7	1789.7
12.5°	1750.4	1752.8	1755.3	1752.8	1745.5
15°	1696.3	1701.2	1708.6	1698.8	1691.4
17.5°	1632.4	1637.3	1649.6	1634.8	1622.5
20°	1551.3	1563.5	1578.3	1563.5	1543.9
22.5°	1457.8	1482.4	1497.2	1477.5	1452.9
25°	1342.3	1381.6	1406.2	1379.2	1344.7
27.5°	1214.5	1263.6	1310.3	1268.5	1202.2
30°	1012.9	1116.1	1204.6	1121.0	1020.2
32.5°	818.6	931.7	1084.2	931.7	818.6
35°	639.2	747.4	951.4	749.8	639.2
37.5°	494.1	587.6	784.2	587.6	489.2
40°	393.3	454.8	609.7	452.3	388.4
42.5°	319.6	363.8	452.3	361.4	314.7
45°	272.9	299.9	341.7	297.5	270.4
47.5°	231.1	253.2	260.6	250.8	228.6
50°	191.8	213.9	211.4	211.4	189.3
52.5°	154.9	172.1	174.5	172.1	154.9
55°	125.4	137.7	145.0	137.7	125.4
57.5°	108.2	113.1	122.9	113.1	110.6
60°	95.9	98.3	100.8	98.3	95.9
62.5°	83.6	83.6	83.6	83.6	83.6
65°	71.3	71.3	73.8	71.3	71.3
67.5°	59.0	61.5	61.5	61.5	59.0
70°	49.2	51.6	51.6	51.6	51.6
72.5°	41.8	41.8	41.8	41.8	41.8
75°	34.4	34.4	34.4	34.4	34.4
77.5°	27.0	27.0	27.0	27.0	27.0
80°	19.7	19.7	19.7	19.7	19.7
82.5°	12.3	14.8	14.8	14.8	12.3
85°	7.4	7.4	9.8	7.4	7.4
87.5°	4.9	4.9	4.9	4.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)