

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: P252946

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252946  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-41SWDH-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE 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: 2040.9 lumens  
Efficiency: N/A  
Efficacy: 81.6 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.1 / 1.15  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

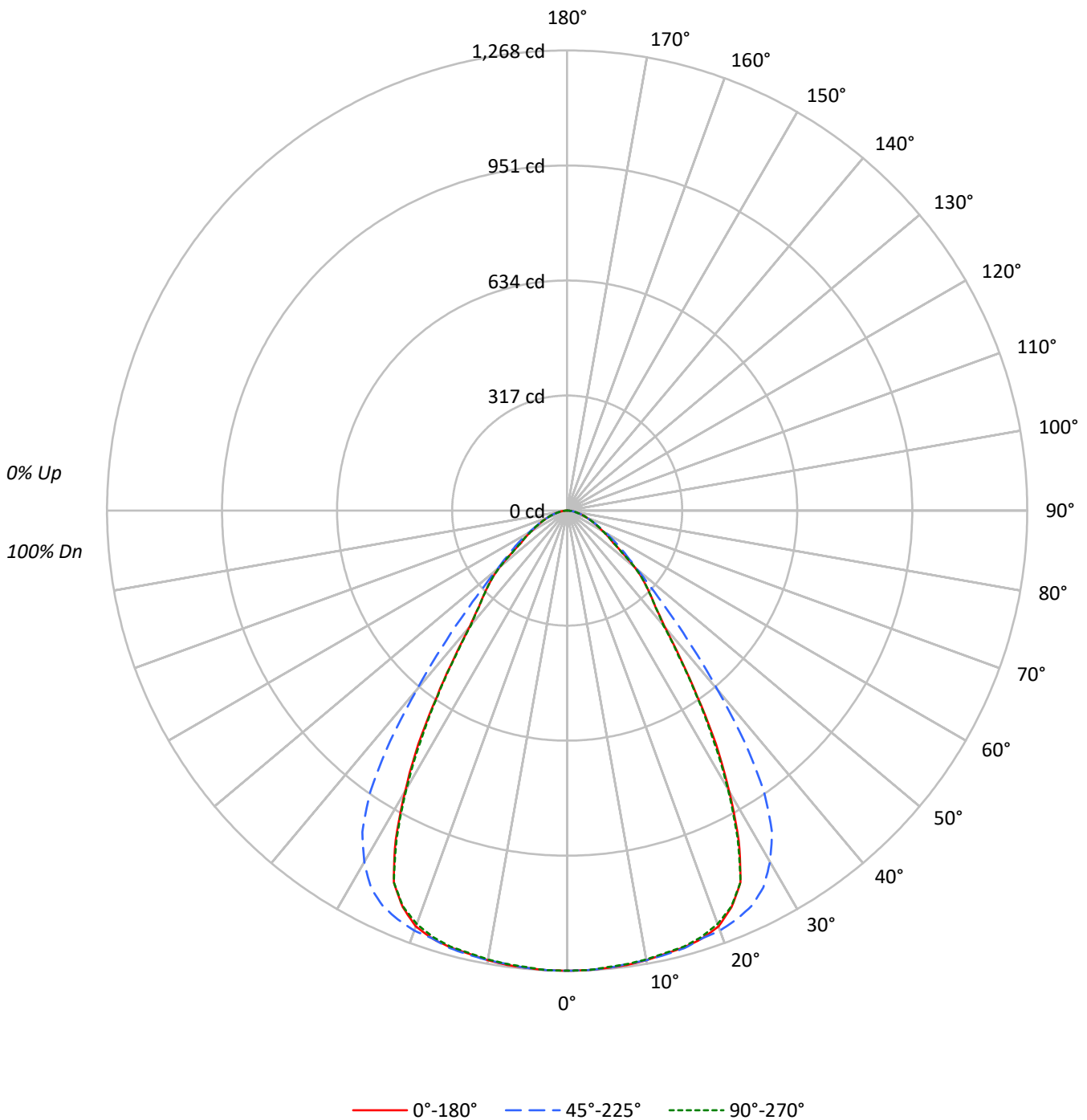
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80					80			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72					72			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	51	60	54	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	47	43	53	47	43	52	47	42	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°	97034	97034	97034
5°	97220	97220	97036
10°	97785	97785	97591
15°	98737	98928	98547
20°	99327	100313	98741
25°	95444	101559	95444
30°	78963	98814	78327
35°	58439	88452	57990
40°	41737	64419	41257
45°	34769	42866	34769
50°	29044	29901	29044
55°	20618	23847	20952
60°	17375	18845	17375
65°	14870	15304	14870
70°	12980	12980	12980
75°	11416	11416	11416
80°	9565	9565	9565
85°	8519	8519	8519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.5	5.9
10°-20°	352.0	17.2
20°-30°	526.1	25.8
30°-40°	468.3	22.9
40°-50°	278.7	13.7
50°-60°	157.8	7.7
60°-70°	84.6	4.1
70°-80°	41.4	2.0
80°-90°	11.5	0.6
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°	998.6	48.9
0°-40°	1466.9	71.9
0°-60°	1903.4	93.3
0°-90°	2040.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2040.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1265	1265	1265	1265	1263	121
15°	1246	1246	1248	1244	1244	352
25°	1130	1162	1202	1159	1130	504
35°	625	732	947	729	621	395
45°	321	345	396	343	321	249
55°	154	171	179	171	157	147
65°	82	84	84	84	82	83
75°	39	39	39	39	39	42
85°	10	10	10	10	10	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1267.7	1267.7	1267.7	1267.7	1267.7
2.5°	1267.7	1267.7	1267.7	1267.7	1267.7
5°	1265.3	1265.3	1265.3	1265.3	1262.9
7.5°	1262.9	1260.5	1260.5	1260.5	1260.5
10°	1258.1	1258.1	1258.1	1255.6	1255.6
12.5°	1250.8	1250.8	1253.2	1250.8	1248.4
15°	1246.0	1246.0	1248.4	1243.6	1243.6
17.5°	1236.3	1238.7	1236.3	1236.3	1231.5
20°	1219.4	1226.7	1231.5	1224.3	1212.2
22.5°	1183.2	1202.5	1219.4	1200.1	1180.8
25°	1130.1	1161.5	1202.5	1159.1	1130.1
27.5°	1023.8	1103.5	1171.1	1096.3	1016.6
30°	893.4	990.0	1118.0	982.8	886.2
32.5°	763.0	859.6	1050.4	854.8	751.0
35°	625.4	731.7	946.6	729.2	620.6
37.5°	509.5	606.1	801.7	601.3	504.7
40°	417.7	492.6	644.7	490.2	412.9
42.5°	359.8	400.8	509.5	398.4	359.8
45°	321.2	345.3	396.0	342.9	321.2
47.5°	284.9	304.3	311.5	301.8	284.9
50°	243.9	265.6	251.1	265.6	243.9
52.5°	193.2	219.7	210.1	222.2	190.8
55°	154.5	171.4	178.7	171.4	157.0
57.5°	135.2	140.1	149.7	140.1	135.2
60°	113.5	118.3	123.1	118.3	113.5
62.5°	96.6	101.4	101.4	101.4	99.0
65°	82.1	84.5	84.5	84.5	82.1
67.5°	70.0	70.0	70.0	70.0	70.0
70°	58.0	58.0	58.0	58.0	58.0
72.5°	48.3	48.3	48.3	48.3	48.3
75°	38.6	38.6	38.6	38.6	38.6
77.5°	31.4	31.4	29.0	31.4	29.0
80°	21.7	21.7	21.7	21.7	21.7
82.5°	16.9	16.9	16.9	16.9	16.9
85°	9.7	9.7	9.7	9.7	9.7
87.5°	4.8	4.8	4.8	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)