

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: P252931

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252931  
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-S4M24-41SWDC-3000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2196.1 lumens  
Efficiency: N/A  
Efficacy: 87.8 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

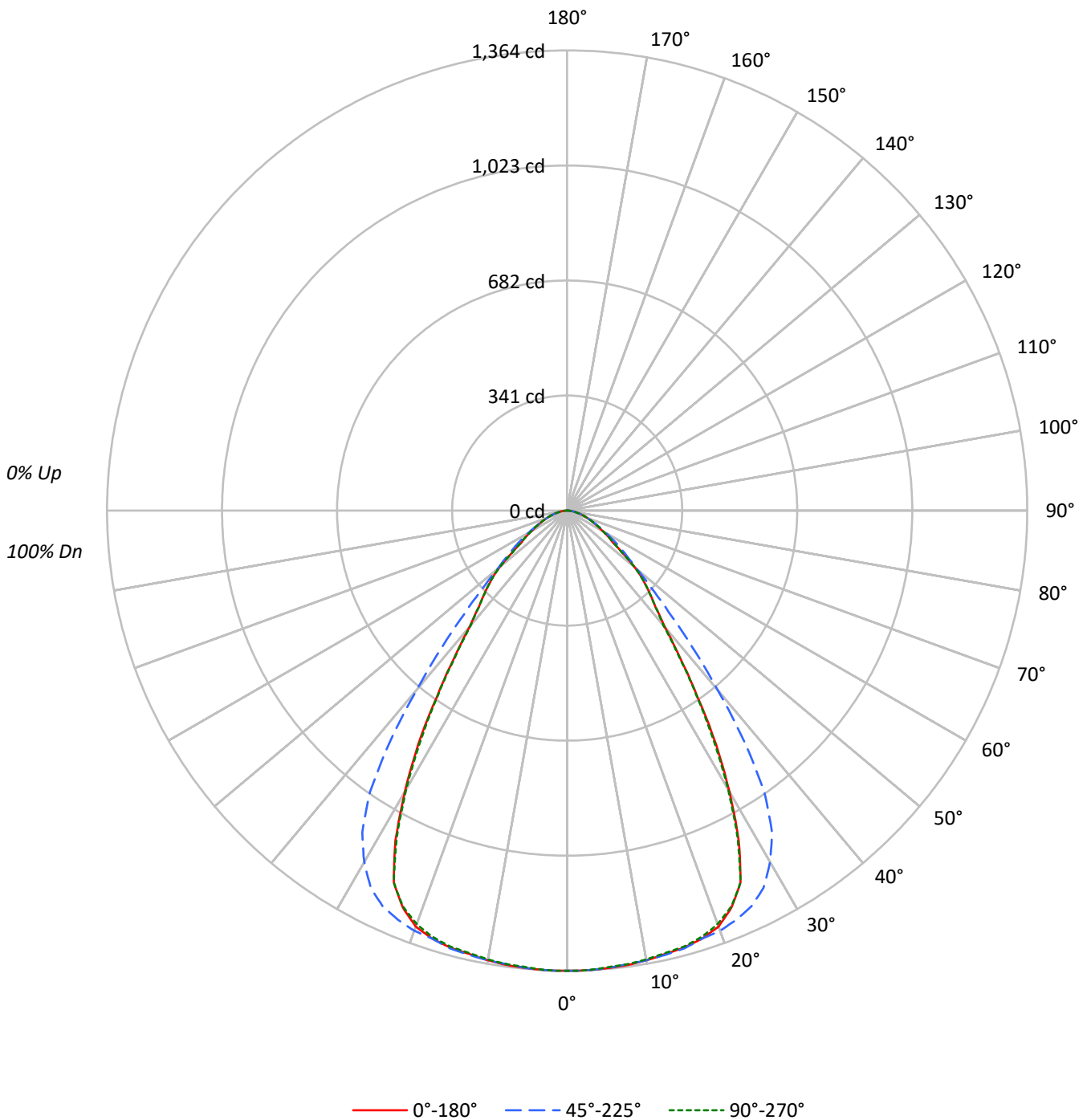
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	86	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	47	43	53	47	43	52	47	42	51	46	42	41
10	63	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38

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

	0°	45°	90°
0°	104413	104413	104413
5°	104612	104612	104412
10°	105215	105215	105013
15°	106242	106448	106036
20°	106878	107937	106243
25°	102699	109278	102699
30°	84973	106327	84284
35°	62887	95171	62401
40°	44914	69315	44395
45°	37411	46125	37411
50°	31247	32176	31247
55°	22193	25662	22540
60°	18692	20284	18692
65°	15993	16464	15993
70°	13965	13965	13965
75°	12303	12303	12303
80°	10315	10315	10315
85°	9134	9134	9134



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.6	5.9
10°-20°	378.8	17.2
20°-30°	566.1	25.8
30°-40°	503.9	22.9
40°-50°	299.8	13.7
50°-60°	169.8	7.7
60°-70°	91.0	4.1
70°-80°	44.6	2.0
80°-90°	12.4	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°	1074.5	48.9
0°-40°	1578.4	71.9
0°-60°	2048.1	93.3
0°-90°	2196.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2196.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1362	1362	1362	1362	1359	130
15°	1341	1341	1343	1338	1338	379
25°	1216	1250	1294	1247	1216	542
35°	673	787	1018	785	668	425
45°	346	372	426	369	346	268
55°	166	184	192	184	169	159
65°	88	91	91	91	88	89
75°	42	42	42	42	42	45
85°	10	10	10	10	10	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1364.1	1364.1	1364.1	1364.1	1364.1
2.5°	1364.1	1364.1	1364.1	1364.1	1364.1
5°	1361.5	1361.5	1361.5	1361.5	1358.9
7.5°	1358.9	1356.3	1356.3	1356.3	1356.3
10°	1353.7	1353.7	1353.7	1351.1	1351.1
12.5°	1345.9	1345.9	1348.5	1345.9	1343.3
15°	1340.7	1340.7	1343.3	1338.1	1338.1
17.5°	1330.3	1332.9	1330.3	1330.3	1325.1
20°	1312.1	1319.9	1325.1	1317.3	1304.3
22.5°	1273.2	1293.9	1312.1	1291.3	1270.6
25°	1216.0	1249.8	1293.9	1247.2	1216.0
27.5°	1101.7	1187.4	1260.2	1179.6	1093.9
30°	961.4	1065.3	1203.0	1057.5	953.6
32.5°	821.1	925.0	1130.2	919.8	808.1
35°	673.0	787.3	1018.5	784.7	667.8
37.5°	548.2	652.2	862.6	647.0	543.0
40°	449.5	530.0	693.7	527.4	444.3
42.5°	387.1	431.3	548.2	428.7	387.1
45°	345.6	371.6	426.1	369.0	345.6
47.5°	306.6	327.4	335.2	324.8	306.6
50°	262.4	285.8	270.2	285.8	262.4
52.5°	207.9	236.4	226.0	239.0	205.3
55°	166.3	184.5	192.3	184.5	168.9
57.5°	145.5	150.7	161.1	150.7	145.5
60°	122.1	127.3	132.5	127.3	122.1
62.5°	103.9	109.1	109.1	109.1	106.5
65°	88.3	90.9	90.9	90.9	88.3
67.5°	75.3	75.3	75.3	75.3	75.3
70°	62.4	62.4	62.4	62.4	62.4
72.5°	52.0	52.0	52.0	52.0	52.0
75°	41.6	41.6	41.6	41.6	41.6
77.5°	33.8	33.8	31.2	33.8	31.2
80°	23.4	23.4	23.4	23.4	23.4
82.5°	18.2	18.2	18.2	18.2	18.2
85°	10.4	10.4	10.4	10.4	10.4
87.5°	5.2	5.2	5.2	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)