

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: P252956

Luminaire Tested: **PRS430D010-S4M24-41SWDH-4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252956  
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-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2155.8 lumens  
Efficiency: N/A  
Efficacy: 86.2 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

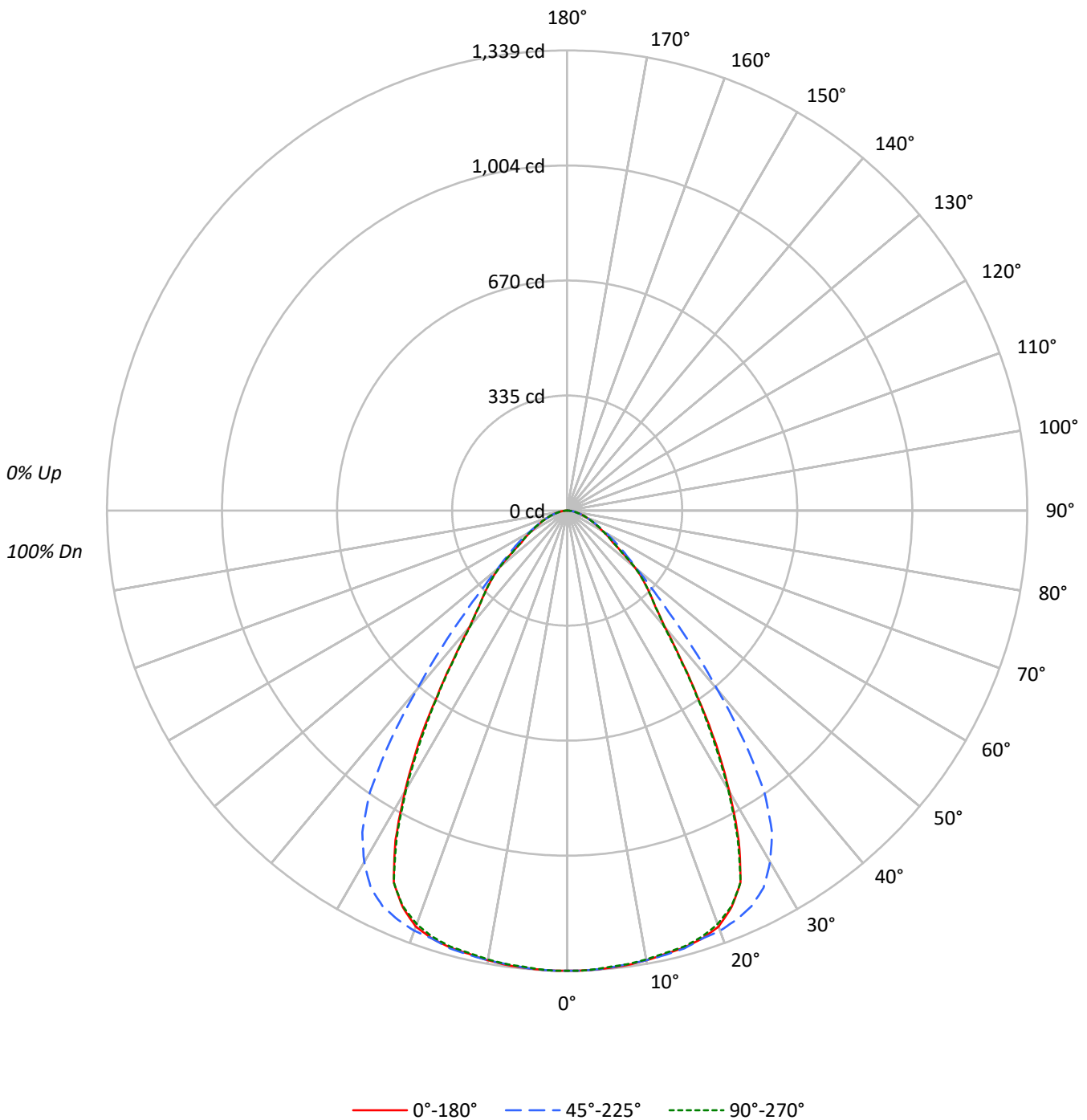
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	102499	102499	102499
5°	102691	102691	102499
10°	103288	103288	103086
15°	104292	104498	104094
20°	104923	105958	104296
25°	100815	107276	100815
30°	83409	104373	82737
35°	61728	93424	61251
40°	44095	68046	43585
45°	36718	45280	36718
50°	30675	31592	30675
55°	21779	25182	22126
60°	18355	19917	18355
65°	15703	16174	15703
70°	13696	13696	13696
75°	12066	12066	12066
80°	10138	10138	10138
85°	8958	8958	8958



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.3	5.9
10°-20°	371.9	17.2
20°-30°	555.7	25.8
30°-40°	494.6	22.9
40°-50°	294.4	13.7
50°-60°	166.7	7.7
60°-70°	89.4	4.1
70°-80°	43.8	2.0
80°-90°	12.2	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°	1054.8	48.9
0°-40°	1549.4	71.9
0°-60°	2010.5	93.3
0°-90°	2155.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2155.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1336	1336	1336	1336	1334	127
15°	1316	1316	1319	1314	1314	372
25°	1194	1227	1270	1224	1194	532
35°	661	773	1000	770	656	417
45°	339	365	418	362	339	263
55°	163	181	189	181	166	156
65°	87	89	89	89	87	87
75°	41	41	41	41	41	44
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°	1339.1	1339.1	1339.1	1339.1	1339.1
2.5°	1339.1	1339.1	1339.1	1339.1	1339.1
5°	1336.5	1336.5	1336.5	1336.5	1334.0
7.5°	1334.0	1331.4	1331.4	1331.4	1331.4
10°	1328.9	1328.9	1328.9	1326.3	1326.3
12.5°	1321.2	1321.2	1323.8	1321.2	1318.7
15°	1316.1	1316.1	1318.7	1313.6	1313.6
17.5°	1305.9	1308.5	1305.9	1305.9	1300.8
20°	1288.1	1295.7	1300.8	1293.2	1280.4
22.5°	1249.8	1270.2	1288.1	1267.7	1247.3
25°	1193.7	1226.8	1270.2	1224.3	1193.7
27.5°	1081.5	1165.6	1237.1	1158.0	1073.8
30°	943.7	1045.8	1180.9	1038.1	936.1
32.5°	806.0	908.0	1109.5	902.9	793.2
35°	660.6	772.8	999.8	770.3	655.5
37.5°	538.2	640.2	846.8	635.1	533.1
40°	441.3	520.3	681.0	517.8	436.2
42.5°	380.0	423.4	538.2	420.9	380.0
45°	339.2	364.7	418.3	362.2	339.2
47.5°	301.0	321.4	329.0	318.8	301.0
50°	257.6	280.6	265.3	280.6	257.6
52.5°	204.0	232.1	221.9	234.7	201.5
55°	163.2	181.1	188.7	181.1	165.8
57.5°	142.8	147.9	158.1	147.9	142.8
60°	119.9	125.0	130.1	125.0	119.9
62.5°	102.0	107.1	107.1	107.1	104.6
65°	86.7	89.3	89.3	89.3	86.7
67.5°	74.0	74.0	74.0	74.0	74.0
70°	61.2	61.2	61.2	61.2	61.2
72.5°	51.0	51.0	51.0	51.0	51.0
75°	40.8	40.8	40.8	40.8	40.8
77.5°	33.2	33.2	30.6	33.2	30.6
80°	23.0	23.0	23.0	23.0	23.0
82.5°	17.9	17.9	17.9	17.9	17.9
85°	10.2	10.2	10.2	10.2	10.2
87.5°	5.1	5.1	5.1	5.1	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)