

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: P252881

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252881  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1804-748-2)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-44SWDC-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, SHALLOW TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2521.4 lumens  
Efficiency: N/A  
Efficacy: 100.9 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

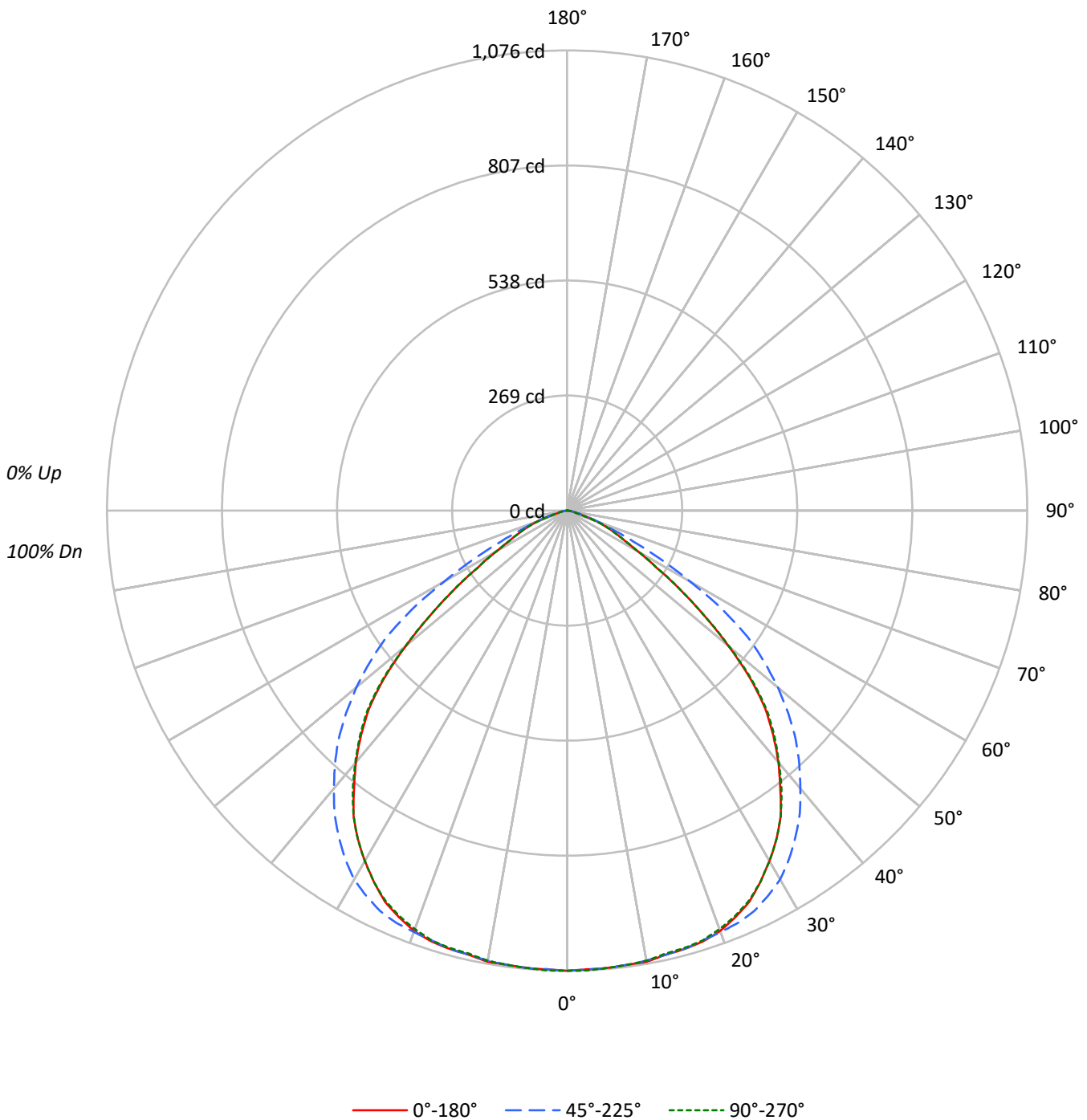
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90					88				
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	85	82	79					77				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	61					59				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	53					52				
6	75	63	55	49	73	62	54	49	60	53	48	59	53	48	57	52	48					46				
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43					41				
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38					37				
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35					33				
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32					30				

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

	0°	45°	90°
0°	82376	82376	82376
5°	82499	82499	82499
10°	83258	83064	83064
15°	84093	84093	83895
20°	85219	85423	84812
25°	85191	87302	84980
30°	83621	88040	83621
35°	81388	87004	81388
40°	76779	84782	77029
45°	70979	81825	71531
50°	58719	76593	59016
55°	43091	68806	43424
60°	29117	50963	29500
65°	22205	30826	22205
70°	16248	17367	15688
75°	6654	9612	6654
80°	5510	5510	5510
85°	4391	4391	4391



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.3	4.1
10°-20°	299.9	11.9
20°-30°	468.5	18.6
30°-40°	560.3	22.2
40°-50°	538.5	21.4
50°-60°	361.7	14.3
60°-70°	147.7	5.9
70°-80°	36.7	1.5
80°-90°	5.8	0.2
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°	870.7	34.5
0°-40°	1431.0	56.8
0°-60°	2331.3	92.5
0°-90°	2521.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2521.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1074	1074	1074	1074	1074	102
15°	1061	1061	1061	1059	1059	300
25°	1009	1019	1034	1016	1006	463
35°	871	896	931	898	871	541
45°	656	703	756	706	661	497
55°	323	390	516	393	325	293
65°	123	138	170	138	123	124
75°	22	25	32	25	22	33
85°	5	5	5	5	5	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1076.2	1076.2	1076.2	1076.2	1076.2
2.5°	1073.7	1073.7	1073.7	1076.2	1076.2
5°	1073.7	1073.7	1073.7	1073.7	1073.7
7.5°	1071.2	1071.2	1071.2	1071.2	1071.2
10°	1071.2	1068.7	1068.7	1068.7	1068.7
12.5°	1063.7	1063.7	1063.7	1063.7	1061.2
15°	1061.2	1061.2	1061.2	1058.7	1058.7
17.5°	1056.2	1056.2	1053.7	1053.7	1053.7
20°	1046.2	1048.7	1048.7	1046.2	1041.2
22.5°	1028.7	1036.2	1043.7	1033.7	1026.2
25°	1008.7	1018.7	1033.7	1016.2	1006.2
27.5°	978.6	993.6	1016.2	993.6	978.6
30°	946.1	966.1	996.1	966.1	946.1
32.5°	911.0	933.6	966.1	933.6	911.0
35°	871.0	896.0	931.1	898.5	871.0
37.5°	818.4	853.5	893.5	858.5	823.4
40°	768.4	805.9	848.5	808.4	770.9
42.5°	713.3	755.9	803.4	758.4	718.3
45°	655.7	703.3	755.9	705.8	660.8
47.5°	580.7	638.2	700.8	645.7	585.7
50°	493.1	565.6	643.2	570.7	495.6
52.5°	405.5	475.5	580.7	480.5	405.5
55°	322.9	390.4	515.6	392.9	325.4
57.5°	247.8	307.9	430.5	312.9	247.8
60°	190.2	235.3	332.9	237.8	192.7
62.5°	150.2	177.7	245.3	175.2	150.2
65°	122.6	137.7	170.2	137.7	122.6
67.5°	97.6	107.6	112.6	107.6	97.6
70°	72.6	82.6	77.6	82.6	70.1
72.5°	42.5	52.6	52.6	52.6	40.0
75°	22.5	25.0	32.5	25.0	22.5
77.5°	17.5	17.5	20.0	17.5	17.5
80°	12.5	12.5	12.5	12.5	12.5
82.5°	7.5	7.5	7.5	7.5	7.5
85°	5.0	5.0	5.0	5.0	5.0
87.5°	2.5	2.5	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)