

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: P252936

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P252936  
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  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, DEEP TRIM SPECULAR  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2439.1 lumens  
Efficiency: N/A  
Efficacy: 97.6 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

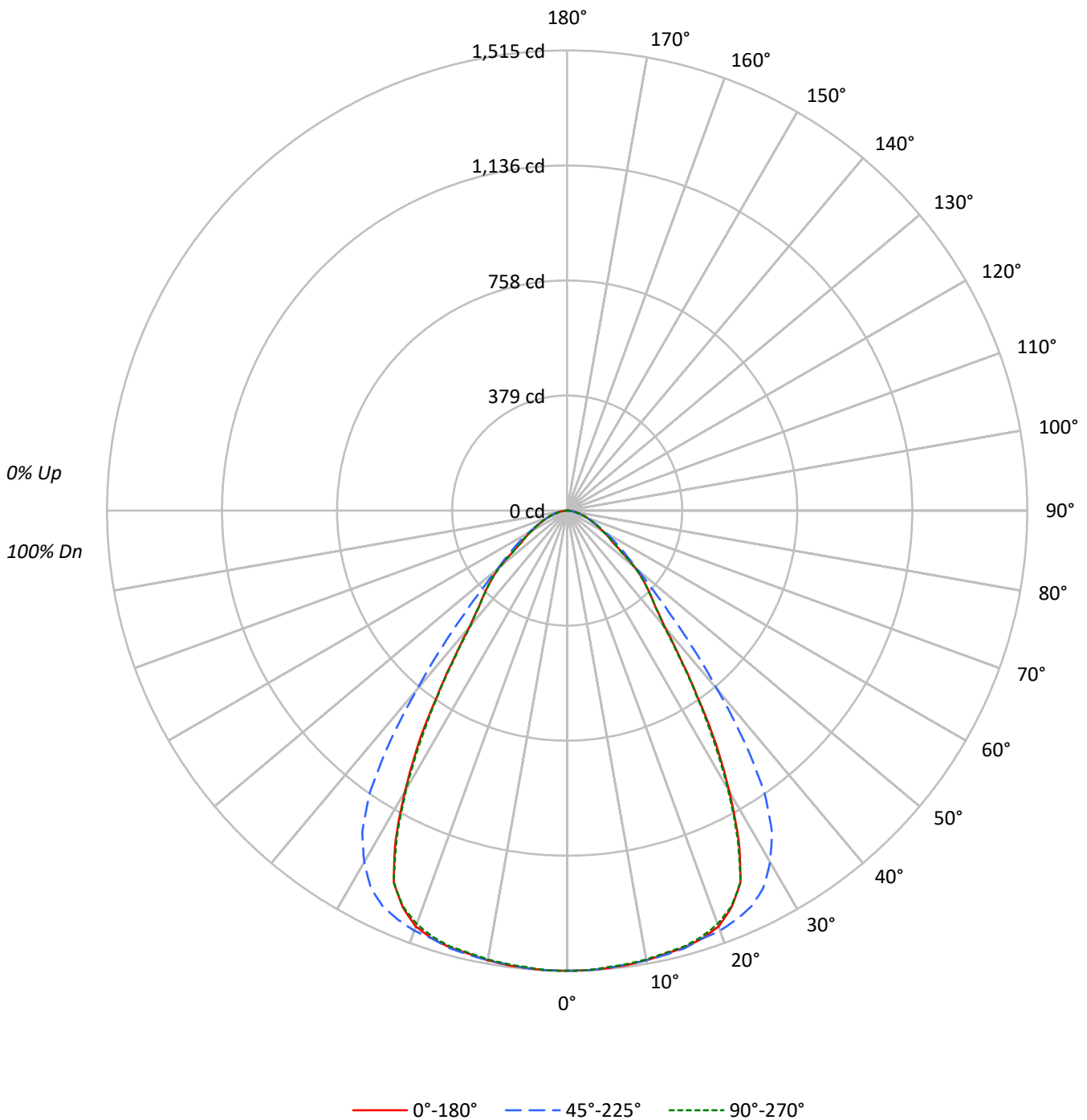
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	115963	115963	115963
5°	116183	116183	115961
10°	116851	116851	116633
15°	117994	118223	117764
20°	118706	119878	117997
25°	114058	121372	114058
30°	94368	118091	93608
35°	69839	105702	69297
40°	49880	76989	49311
45°	41546	51234	41546
50°	34712	35736	34712
55°	24648	28491	25035
60°	20759	22534	20759
65°	17768	18293	17768
70°	15509	15509	15509
75°	13663	13663	13663
80°	11461	11461	11461
85°	10100	10100	10100



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.0	5.9
10°-20°	420.7	17.2
20°-30°	628.7	25.8
30°-40°	559.6	22.9
40°-50°	333.0	13.7
50°-60°	188.6	7.7
60°-70°	101.1	4.1
70°-80°	49.5	2.0
80°-90°	13.7	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°	1193.4	48.9
0°-40°	1753.0	71.9
0°-60°	2274.6	93.3
0°-90°	2439.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2439.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1515	1515	1515	1515	1515	
5°	1512	1512	1512	1512	1509	144
15°	1489	1489	1492	1486	1486	420
25°	1350	1388	1437	1385	1350	602
35°	747	874	1131	872	742	472
45°	384	413	473	410	384	298
55°	185	205	214	205	188	176
65°	98	101	101	101	98	99
75°	46	46	46	46	46	50
85°	12	12	12	12	12	14
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1515.0	1515.0	1515.0	1515.0	1515.0
2.5°	1515.0	1515.0	1515.0	1515.0	1515.0
5°	1512.1	1512.1	1512.1	1512.1	1509.2
7.5°	1509.2	1506.3	1506.3	1506.3	1506.3
10°	1503.4	1503.4	1503.4	1500.6	1500.6
12.5°	1494.8	1494.8	1497.7	1494.8	1491.9
15°	1489.0	1489.0	1491.9	1486.1	1486.1
17.5°	1477.5	1480.4	1477.5	1477.5	1471.7
20°	1457.3	1465.9	1471.7	1463.0	1448.6
22.5°	1414.0	1437.1	1457.3	1434.2	1411.1
25°	1350.5	1388.0	1437.1	1385.1	1350.5
27.5°	1223.5	1318.8	1399.6	1310.1	1214.9
30°	1067.7	1183.1	1336.1	1174.5	1059.1
32.5°	911.9	1027.3	1255.3	1021.5	897.5
35°	747.4	874.4	1131.2	871.5	741.6
37.5°	608.9	724.3	958.1	718.5	603.1
40°	499.2	588.7	770.5	585.8	493.5
42.5°	430.0	479.0	608.9	476.1	430.0
45°	383.8	412.7	473.3	409.8	383.8
47.5°	340.5	363.6	372.3	360.7	340.5
50°	291.5	317.4	300.1	317.4	291.5
52.5°	230.9	262.6	251.1	265.5	228.0
55°	184.7	204.9	213.5	204.9	187.6
57.5°	161.6	167.4	178.9	167.4	161.6
60°	135.6	141.4	147.2	141.4	135.6
62.5°	115.4	121.2	121.2	121.2	118.3
65°	98.1	101.0	101.0	101.0	98.1
67.5°	83.7	83.7	83.7	83.7	83.7
70°	69.3	69.3	69.3	69.3	69.3
72.5°	57.7	57.7	57.7	57.7	57.7
75°	46.2	46.2	46.2	46.2	46.2
77.5°	37.5	37.5	34.6	37.5	34.6
80°	26.0	26.0	26.0	26.0	26.0
82.5°	20.2	20.2	20.2	20.2	20.2
85°	11.5	11.5	11.5	11.5	11.5
87.5°	5.8	5.8	5.8	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)