

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: P241746

Luminaire Tested: **PRS430D010-S4M24-44SMDH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241746  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-44)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-44SMDH  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SHALLOW TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2749.2 lumens  
Efficiency: N/A  
Efficacy: 110.0 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1 / 1.06  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

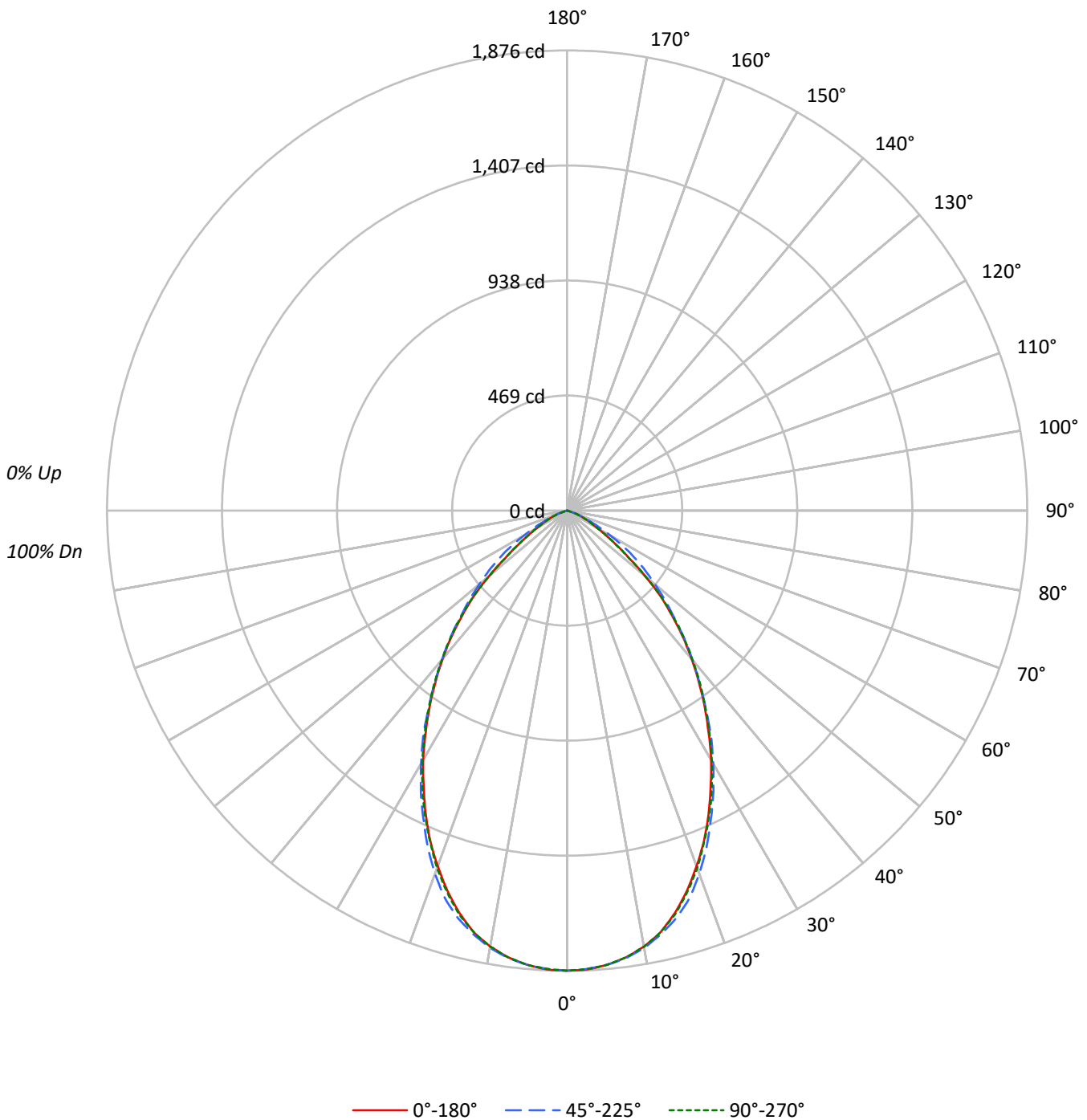
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	103	110	107	104	101	102	100	98	99	97	95	95	94	92	91					91			
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81					81			
3	98	90	83	79	96	88	83	78	85	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	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	50	60	54	50	59	54	50	48					48			
8	70	59	51	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	41					41			
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37					37			

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

	0°	45°	90°
0°	143572	143572	143572
5°	142861	142861	142861
10°	140269	140696	140269
15°	134579	136307	135007
20°	125654	128325	126322
25°	115300	117141	115756
30°	103764	105213	104250
35°	91340	92097	91844
40°	78847	79387	79387
45°	65317	66789	66205
50°	49418	55599	49418
55°	32789	44812	32428
60°	21738	31352	21738
65°	15323	18800	14833
70°	8549	9780	8549
75°	799	3224	799
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.8	6.4
10°-20°	478.5	17.4
20°-30°	632.9	23.0
30°-40°	616.8	22.4
40°-50°	475.3	17.3
50°-60°	259.8	9.4
60°-70°	96.1	3.5
70°-80°	14.0	0.5
80°-90°	0.0	0.0
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°	1287.2	46.8
0°-40°	1904.0	69.3
0°-60°	2639.1	96.0
0°-90°	2749.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2749.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1876	1876	1876	1876	1876	
5°	1859	1859	1859	1859	1859	176
15°	1698	1709	1720	1712	1704	475
25°	1365	1382	1387	1387	1371	625
35°	978	988	986	997	983	610
45°	603	620	617	622	612	465
55°	246	276	336	278	243	229
65°	85	93	104	93	82	85
75°	3	6	11	6	3	10
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1875.7	1875.7	1875.7	1875.7	1875.7
2.5°	1873.0	1870.3	1870.3	1870.3	1870.3
5°	1859.3	1859.3	1859.3	1859.3	1859.3
7.5°	1837.5	1837.5	1840.2	1837.5	1837.5
10°	1804.7	1807.5	1810.2	1810.2	1804.7
12.5°	1761.0	1766.5	1769.2	1766.5	1761.0
15°	1698.3	1709.2	1720.1	1711.9	1703.7
17.5°	1624.5	1638.2	1657.3	1640.9	1630.0
20°	1542.6	1559.0	1575.4	1564.5	1550.8
22.5°	1458.0	1471.6	1485.3	1479.8	1460.7
25°	1365.2	1381.5	1387.0	1387.0	1370.6
27.5°	1266.9	1286.0	1291.4	1288.7	1277.8
30°	1174.0	1187.7	1190.4	1193.1	1179.5
32.5°	1073.0	1086.7	1092.1	1094.9	1081.2
35°	977.5	988.4	985.6	996.6	982.9
37.5°	881.9	892.8	887.3	898.3	890.1
40°	789.1	794.5	794.5	802.7	794.5
42.5°	699.0	704.4	707.1	709.9	704.4
45°	603.4	619.8	617.0	622.5	611.6
47.5°	516.0	529.7	540.6	535.1	518.8
50°	415.0	447.8	466.9	453.2	415.0
52.5°	319.4	357.7	401.4	360.4	319.4
55°	245.7	275.8	335.8	278.5	243.0
57.5°	185.7	210.2	270.3	210.2	185.7
60°	142.0	161.1	204.8	161.1	142.0
62.5°	109.2	122.9	147.4	122.9	109.2
65°	84.6	92.8	103.8	92.8	81.9
67.5°	60.1	68.3	68.3	68.3	60.1
70°	38.2	46.4	43.7	46.4	38.2
72.5°	16.4	24.6	27.3	24.6	16.4
75°	2.7	5.5	10.9	5.5	2.7
77.5°	0.0	2.7	2.7	2.7	2.7
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)