

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: P241796

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

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241796  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-47)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS430D010-S4M24-44SMDC-4000K  
Description: HALO COMMERCIAL 4" SQUARE, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM 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: 2630.3 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1.1  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

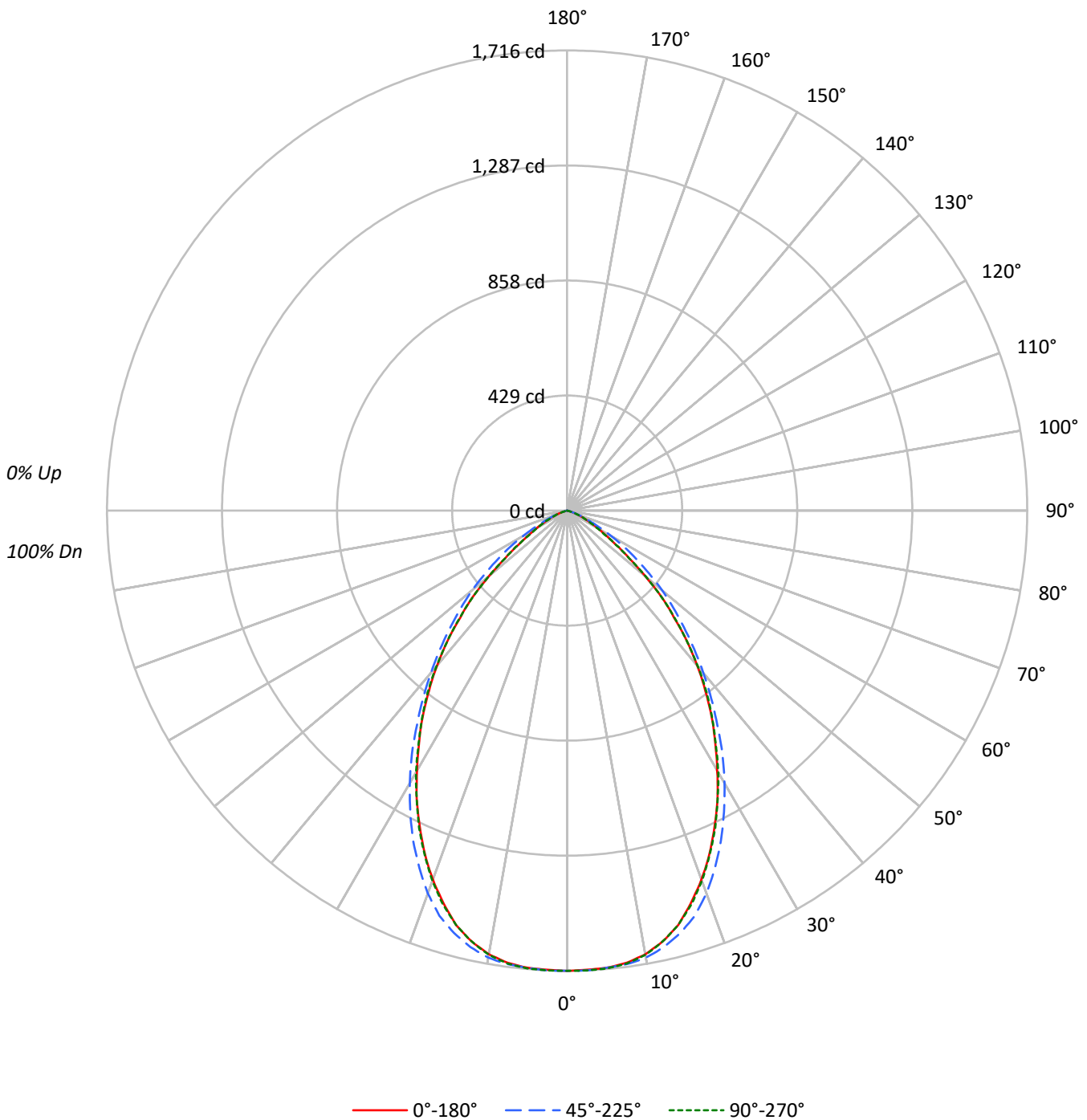
Input Watts (W): 25  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	91					91			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	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	46	69	58	51	46	57	51	46	56	50	46	55	49	46	44					44			
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40					40			
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°	131379	131379	131379
5°	131481	131481	131681
10°	130577	131587	130779
15°	126750	129222	126750
20°	119292	123731	119716
25°	109869	114692	110308
30°	98911	103737	99601
35°	87836	91228	88079
40°	75500	78877	75760
45°	60998	66616	61561
50°	45143	55039	45453
55°	29799	41930	29799
60°	19871	29025	19075
65°	13167	16934	13167
70°	7564	8706	7564
75°	0	3076	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.6	6.2
10°-20°	452.4	17.2
20°-30°	611.0	23.2
30°-40°	602.0	22.9
40°-50°	459.8	17.5
50°-60°	244.0	9.3
60°-70°	87.5	3.3
70°-80°	11.0	0.4
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°	1226.0	46.6
0°-40°	1828.0	69.5
0°-60°	2531.8	96.3
0°-90°	2630.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2630.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1711	1711	1711	1714	1714	162
15°	1600	1618	1631	1615	1600	447
25°	1301	1335	1358	1340	1306	596
35°	940	968	976	971	943	585
45°	564	600	615	602	569	436
55°	223	262	314	262	223	208
65°	73	86	94	86	73	75
75°	0	3	10	3	0	8
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°	1716.4	1716.4	1716.4	1716.4	1716.4
2.5°	1713.8	1713.8	1716.4	1716.4	1716.4
5°	1711.2	1711.2	1711.2	1713.8	1713.8
7.5°	1700.8	1700.8	1706.0	1703.4	1703.4
10°	1680.0	1685.2	1693.0	1685.2	1682.6
12.5°	1646.2	1659.2	1667.0	1659.2	1646.2
15°	1599.5	1617.7	1630.7	1615.1	1599.5
17.5°	1534.6	1558.0	1583.9	1558.0	1539.8
20°	1464.5	1493.0	1519.0	1495.6	1469.7
22.5°	1386.6	1417.7	1441.1	1420.3	1389.2
25°	1300.9	1334.7	1358.0	1339.8	1306.1
27.5°	1215.2	1249.0	1267.1	1251.6	1215.2
30°	1119.1	1155.5	1173.7	1160.7	1126.9
32.5°	1028.3	1062.0	1077.6	1064.6	1030.8
35°	940.0	968.5	976.3	971.1	942.6
37.5°	846.5	877.6	882.8	882.8	854.3
40°	755.6	784.2	789.4	786.8	758.2
42.5°	662.1	693.3	701.1	693.3	662.1
45°	563.5	599.8	615.4	602.4	568.7
47.5°	480.4	508.9	537.5	511.5	477.8
50°	379.1	428.4	462.2	425.8	381.7
52.5°	290.8	342.8	384.3	340.2	290.8
55°	223.3	262.3	314.2	262.3	223.3
57.5°	168.8	199.9	251.9	197.3	163.6
60°	129.8	153.2	189.6	148.0	124.6
62.5°	98.7	114.3	135.0	111.7	96.1
65°	72.7	85.7	93.5	85.7	72.7
67.5°	51.9	62.3	62.3	62.3	51.9
70°	33.8	41.5	38.9	41.5	33.8
72.5°	13.0	20.8	20.8	20.8	13.0
75°	0.0	2.6	10.4	2.6	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
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)