

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: FAIL-SAFE

Report Number: P487213

Luminaire Tested: **ORLG-24-4-INS-A125-LD4-3HI-27-120-EDD**

Issue Date: 3/1/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P487213  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35355)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/1/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-4-INS-A125-LD4-3HI-27-120-EDD  
Description: 2X4 ORL LED LUMINAIRE WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

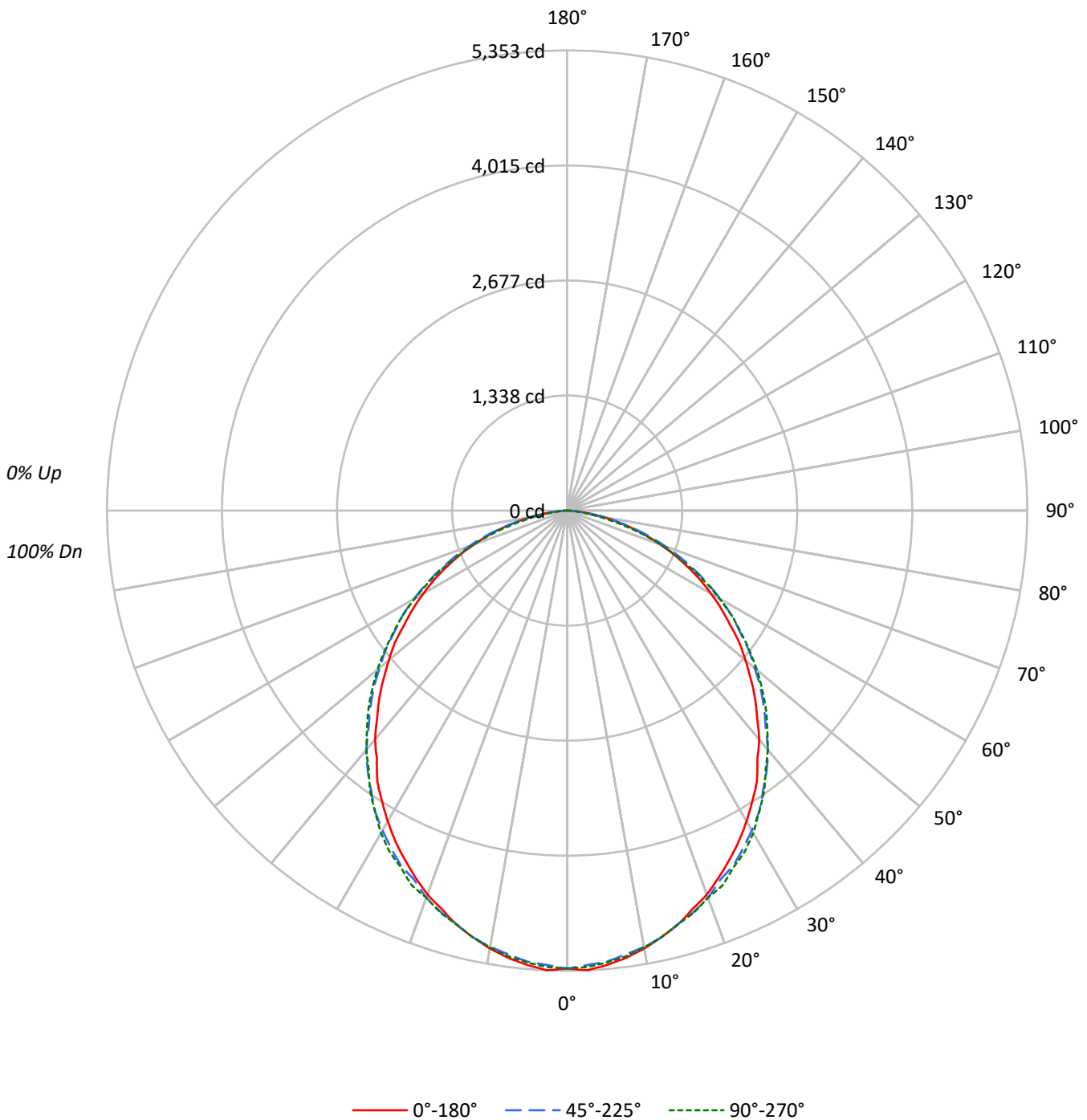
Lumens per Lamp: N/A  
Luminaire Lumens: 13681.1 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.21 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 132  
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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	79	97	90	84	79	86	81	77	83	79	75	80	76	73	71					71			
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	59	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31					31			
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26					26			

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

	0°	45°	90°
0°	7167	7167	7167
5°	7166	7115	7127
10°	7066	7042	7050
15°	6945	6937	6941
20°	6805	6863	6859
25°	6645	6775	6796
30°	6483	6674	6728
35°	6324	6529	6558
40°	6107	6384	6378
45°	5885	6162	6223
50°	5663	5956	6035
55°	5424	5745	5779
60°	5196	5540	5501
65°	4923	5201	5099
70°	4537	4777	4559
75°	4012	4179	3648
80°	3226	3272	2550
85°	2113	2022	1484



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	500.6	3.7
10°-20°	1407.7	10.3
20°-30°	2095.9	15.3
30°-40°	2467.0	18.0
40°-50°	2473.5	18.1
50°-60°	2169.0	15.9
60°-70°	1586.0	11.6
70°-80°	817.4	6.0
80°-90°	164.0	1.2
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°	4004.3	29.3
0°-40°	6471.2	47.3
0°-60°	11113.7	81.2
0°-90°	13681.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13681.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5326	5326	5326	5326	5326	
5°	5306	5271	5268	5303	5277	502
15°	4986	4994	4980	5012	4983	1403
25°	4476	4496	4563	4627	4578	2062
35°	3850	3867	3975	4019	3993	2398
45°	3093	3107	3238	3279	3270	2383
55°	2312	2365	2449	2484	2464	2076
65°	1546	1581	1634	1628	1602	1530
75°	772	778	804	748	702	818
85°	137	134	131	105	96	179
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5326.4	5326.4	5326.4	5326.4	5326.4
2.5°	5352.6	5326.4	5291.4	5320.5	5314.7
5°	5306.0	5271.0	5268.1	5303.1	5276.9
7.5°	5247.7	5241.9	5207.0	5244.8	5230.3
10°	5172.0	5166.2	5154.5	5180.8	5160.4
12.5°	5081.7	5075.9	5081.7	5096.3	5081.7
15°	4985.6	4994.4	4979.8	5011.8	4982.7
17.5°	4857.5	4866.2	4895.4	4907.0	4904.1
20°	4752.7	4758.5	4793.4	4840.0	4790.5
22.5°	4615.8	4630.4	4647.8	4732.3	4720.6
25°	4476.0	4496.4	4563.4	4627.4	4577.9
27.5°	4330.4	4350.8	4432.3	4478.9	4473.1
30°	4173.1	4193.5	4295.5	4359.5	4330.4
32.5°	4010.1	4045.0	4155.7	4211.0	4155.7
35°	3849.9	3867.4	3975.1	4018.8	3992.6
37.5°	3637.3	3704.3	3812.0	3841.2	3794.6
40°	3477.1	3480.0	3634.4	3634.4	3631.5
42.5°	3270.4	3317.0	3418.9	3474.2	3445.1
45°	3092.7	3107.3	3238.3	3279.1	3270.4
47.5°	2897.6	2955.9	3052.0	3098.5	3075.3
50°	2705.4	2746.2	2845.2	2906.3	2883.0
52.5°	2527.8	2559.8	2661.7	2696.7	2673.4
55°	2312.3	2364.7	2449.1	2484.1	2463.7
57.5°	2125.9	2163.7	2268.6	2280.2	2268.6
60°	1930.8	1974.5	2058.9	2067.6	2044.3
62.5°	1744.4	1773.5	1849.2	1852.1	1825.9
65°	1546.4	1581.3	1633.7	1627.9	1601.7
67.5°	1351.2	1374.5	1424.1	1403.7	1374.5
70°	1153.2	1173.6	1214.4	1185.3	1159.0
72.5°	961.0	975.6	1010.5	966.8	934.8
75°	771.7	777.5	803.8	748.4	701.8
77.5°	585.3	591.2	605.7	550.4	498.0
80°	416.4	416.4	422.3	364.0	329.1
82.5°	262.1	262.1	259.2	215.5	195.1
85°	136.9	134.0	131.0	104.8	96.1
87.5°	49.5	49.5	40.8	37.9	40.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)