

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: P487194

Luminaire Tested: **ORLG-24-4-INS-A125-LD4-2LO-40-120-EDD-90**

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: P487194  
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-LD4-2LO-40-120-EDD-90  
Description: 2X4 ORL LED LUMINAIRE WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

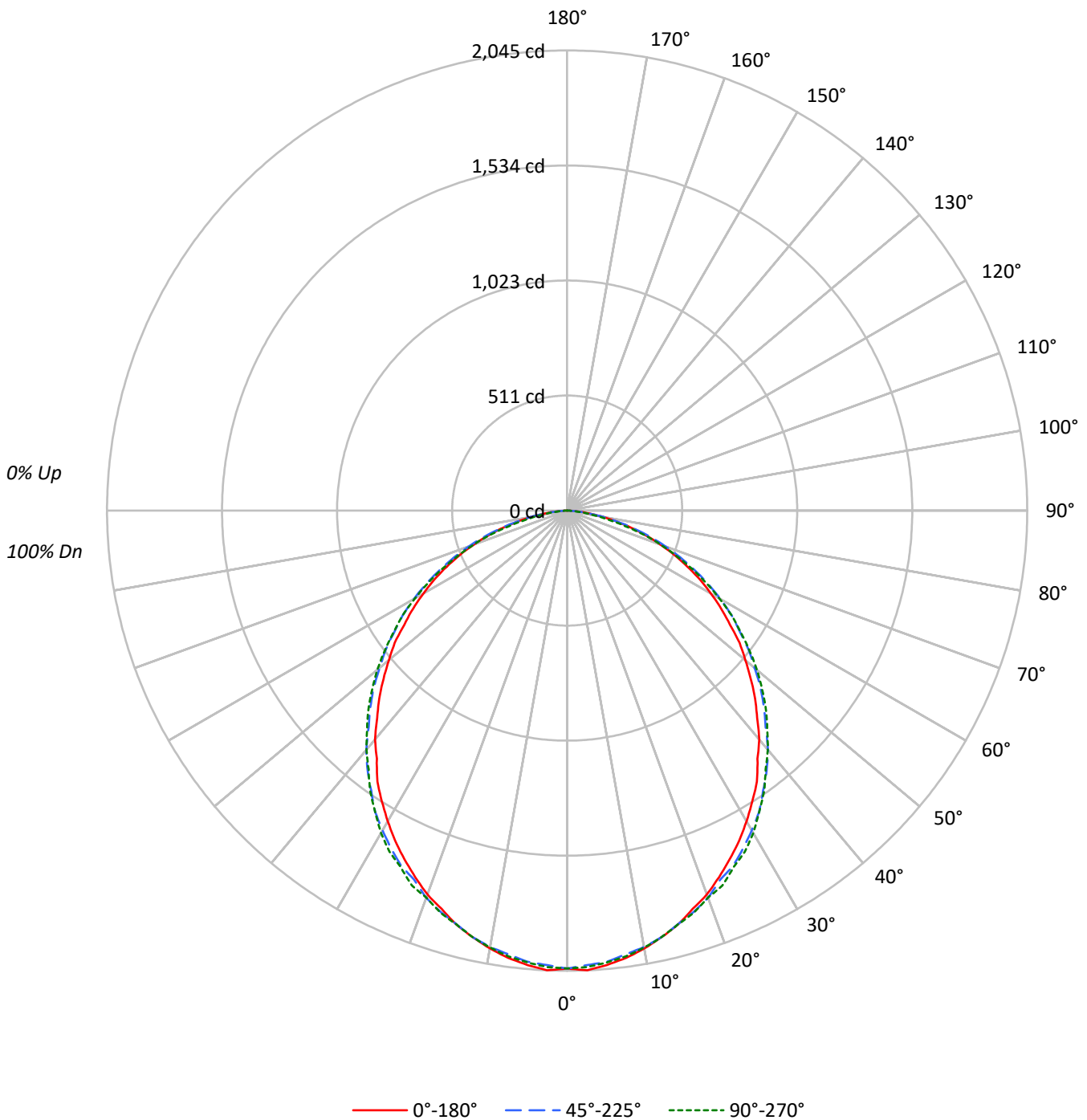
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5227.0 lumens  
Efficiency: N/A  
Efficacy: 111.7 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): 46.8  
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	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																												
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85																												
2	100	92	85	79	97	90	84	79	86	81	77	83	79	75	80	76	73	71																												
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60																												
4	83	72	63	57	81	70	62	56	68	61	55	66	59	55	63	58	54	52																												
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45																												
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39																												
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35																												
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31																												
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28																												
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26																												

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

	0°	45°	90°
0°	2738	2738	2738
5°	2738	2718	2723
10°	2700	2691	2694
15°	2653	2650	2652
20°	2600	2622	2621
25°	2539	2588	2597
30°	2477	2550	2570
35°	2416	2495	2506
40°	2333	2439	2437
45°	2248	2354	2378
50°	2164	2275	2306
55°	2072	2195	2208
60°	1985	2117	2102
65°	1881	1987	1948
70°	1733	1825	1742
75°	1533	1596	1394
80°	1233	1250	974
85°	807	773	567



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.3	3.7
10°-20°	537.8	10.3
20°-30°	800.8	15.3
30°-40°	942.5	18.0
40°-50°	945.0	18.1
50°-60°	828.7	15.9
60°-70°	606.0	11.6
70°-80°	312.3	6.0
80°-90°	62.7	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°	1529.9	29.3
0°-40°	2472.4	47.3
0°-60°	4246.1	81.2
0°-90°	5227.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5227.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2035	2035	2035	2035	2035	
5°	2027	2014	2013	2026	2016	192
15°	1905	1908	1903	1915	1904	536
25°	1710	1718	1744	1768	1749	788
35°	1471	1478	1519	1535	1525	916
45°	1182	1187	1237	1253	1250	911
55°	883	904	936	949	941	793
65°	591	604	624	622	612	584
75°	295	297	307	286	268	312
85°	52	51	50	40	37	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2035.0	2035.0	2035.0	2035.0	2035.0
2.5°	2045.0	2035.0	2021.6	2032.8	2030.5
5°	2027.2	2013.8	2012.7	2026.1	2016.1
7.5°	2004.9	2002.7	1989.4	2003.8	1998.3
10°	1976.0	1973.8	1969.3	1979.4	1971.6
12.5°	1941.5	1939.3	1941.5	1947.1	1941.5
15°	1904.8	1908.1	1902.6	1914.8	1903.7
17.5°	1855.9	1859.2	1870.3	1874.8	1873.7
20°	1815.8	1818.0	1831.4	1849.2	1830.3
22.5°	1763.5	1769.1	1775.7	1808.0	1803.6
25°	1710.1	1717.9	1743.5	1768.0	1749.0
27.5°	1654.5	1662.3	1693.4	1711.2	1709.0
30°	1594.4	1602.2	1641.1	1665.6	1654.5
32.5°	1532.1	1545.4	1587.7	1608.9	1587.7
35°	1470.9	1477.6	1518.7	1535.4	1525.4
37.5°	1389.7	1415.3	1456.4	1467.6	1449.7
40°	1328.5	1329.6	1388.6	1388.6	1387.4
42.5°	1249.5	1267.3	1306.2	1327.4	1316.2
45°	1181.6	1187.2	1237.2	1252.8	1249.5
47.5°	1107.1	1129.3	1166.0	1183.8	1174.9
50°	1033.6	1049.2	1087.0	1110.4	1101.5
52.5°	965.8	978.0	1016.9	1030.3	1021.4
55°	883.4	903.5	935.7	949.1	941.3
57.5°	812.2	826.7	866.7	871.2	866.7
60°	737.7	754.4	786.6	790.0	781.1
62.5°	666.5	677.6	706.5	707.6	697.6
65°	590.8	604.2	624.2	622.0	611.9
67.5°	516.3	525.2	544.1	536.3	525.2
70°	440.6	448.4	464.0	452.8	442.8
72.5°	367.2	372.7	386.1	369.4	357.2
75°	294.8	297.1	307.1	285.9	268.1
77.5°	223.6	225.9	231.4	210.3	190.3
80°	159.1	159.1	161.3	139.1	125.7
82.5°	100.1	100.1	99.0	82.3	74.5
85°	52.3	51.2	50.1	40.1	36.7
87.5°	18.9	18.9	15.6	14.5	15.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)