

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: P487146

Luminaire Tested: **ORLG-24-4-INS-A125-LD4-1HI-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: P487146  
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-LD4-1HI-40-120-EDD-90  
Description: 2X4 ORL LED LUMINAIRE WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

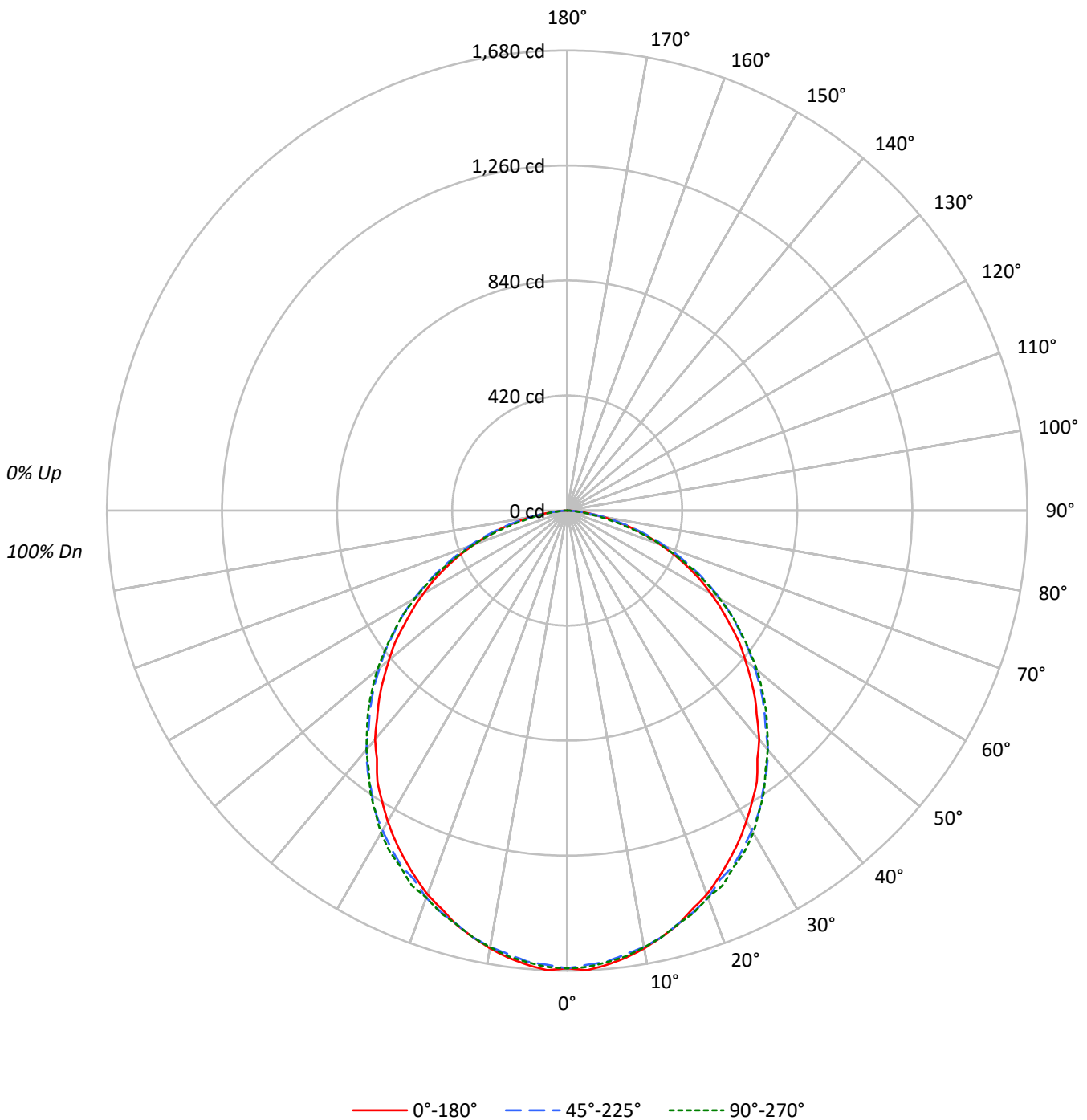
Lumens per Lamp: N/A  
Luminaire Lumens: 4292.9 lumens  
Efficiency: N/A  
Efficacy: 97.6 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.21 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 44  
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	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°	2249	2249	2249
5°	2249	2233	2236
10°	2217	2210	2212
15°	2179	2177	2178
20°	2135	2154	2152
25°	2085	2126	2133
30°	2034	2094	2111
35°	1984	2049	2058
40°	1916	2003	2001
45°	1846	1933	1953
50°	1777	1869	1894
55°	1702	1803	1814
60°	1630	1738	1726
65°	1545	1632	1600
70°	1424	1499	1431
75°	1259	1311	1145
80°	1013	1027	800
85°	662	634	466



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.1	3.7
10°-20°	441.7	10.3
20°-30°	657.6	15.3
30°-40°	774.1	18.0
40°-50°	776.1	18.1
50°-60°	680.6	15.9
60°-70°	497.7	11.6
70°-80°	256.5	6.0
80°-90°	51.4	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°	1256.5	29.3
0°-40°	2030.6	47.3
0°-60°	3487.3	81.2
0°-90°	4292.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4292.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1671	1671	1671	1671	1671	
5°	1665	1654	1653	1664	1656	158
15°	1564	1567	1563	1573	1564	440
25°	1404	1411	1432	1452	1436	647
35°	1208	1214	1247	1261	1253	752
45°	970	975	1016	1029	1026	748
55°	726	742	768	780	773	651
65°	485	496	513	511	503	480
75°	242	244	252	235	220	257
85°	43	42	41	33	30	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1671.3	1671.3	1671.3	1671.3	1671.3
2.5°	1679.5	1671.3	1660.4	1669.5	1667.7
5°	1664.9	1654.0	1653.0	1664.0	1655.8
7.5°	1646.6	1644.8	1633.9	1645.7	1641.2
10°	1622.9	1621.1	1617.4	1625.6	1619.2
12.5°	1594.6	1592.7	1594.6	1599.1	1594.6
15°	1564.4	1567.2	1562.6	1572.6	1563.5
17.5°	1524.2	1526.9	1536.1	1539.7	1538.8
20°	1491.3	1493.1	1504.1	1518.7	1503.2
22.5°	1448.4	1452.9	1458.4	1484.9	1481.3
25°	1404.5	1410.9	1431.9	1452.0	1436.5
27.5°	1358.8	1365.2	1390.8	1405.4	1403.6
30°	1309.5	1315.9	1347.8	1367.9	1358.8
32.5°	1258.3	1269.3	1304.0	1321.3	1304.0
35°	1208.0	1213.5	1247.3	1261.0	1252.8
37.5°	1141.3	1162.3	1196.2	1205.3	1190.7
40°	1091.1	1092.0	1140.4	1140.4	1139.5
42.5°	1026.2	1040.8	1072.8	1090.2	1081.0
45°	970.4	975.0	1016.1	1028.9	1026.2
47.5°	909.2	927.5	957.7	972.3	965.0
50°	848.9	861.7	892.8	912.0	904.7
52.5°	793.2	803.2	835.2	846.2	838.9
55°	725.5	742.0	768.5	779.5	773.1
57.5°	667.1	678.9	711.8	715.5	711.8
60°	605.8	619.5	646.0	648.8	641.5
62.5°	547.4	556.5	580.3	581.2	572.9
65°	485.2	496.2	512.6	510.8	502.6
67.5°	424.0	431.3	446.8	440.4	431.3
70°	361.9	368.3	381.1	371.9	363.7
72.5°	301.6	306.1	317.1	303.4	293.3
75°	242.2	244.0	252.2	234.8	220.2
77.5°	183.7	185.5	190.1	172.7	156.3
80°	130.7	130.7	132.5	114.2	103.3
82.5°	82.2	82.2	81.3	67.6	61.2
85°	42.9	42.0	41.1	32.9	30.2
87.5°	15.5	15.5	12.8	11.9	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)