

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: P485934

Luminaire Tested: **ORLG-24-2-INS-A125-LD4-3LO-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: P485934  
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-24-2-INS-A125-LD4-3LO-40-120-EDD-90  
Description: 2X2 ORL LED LUMINAIRE WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

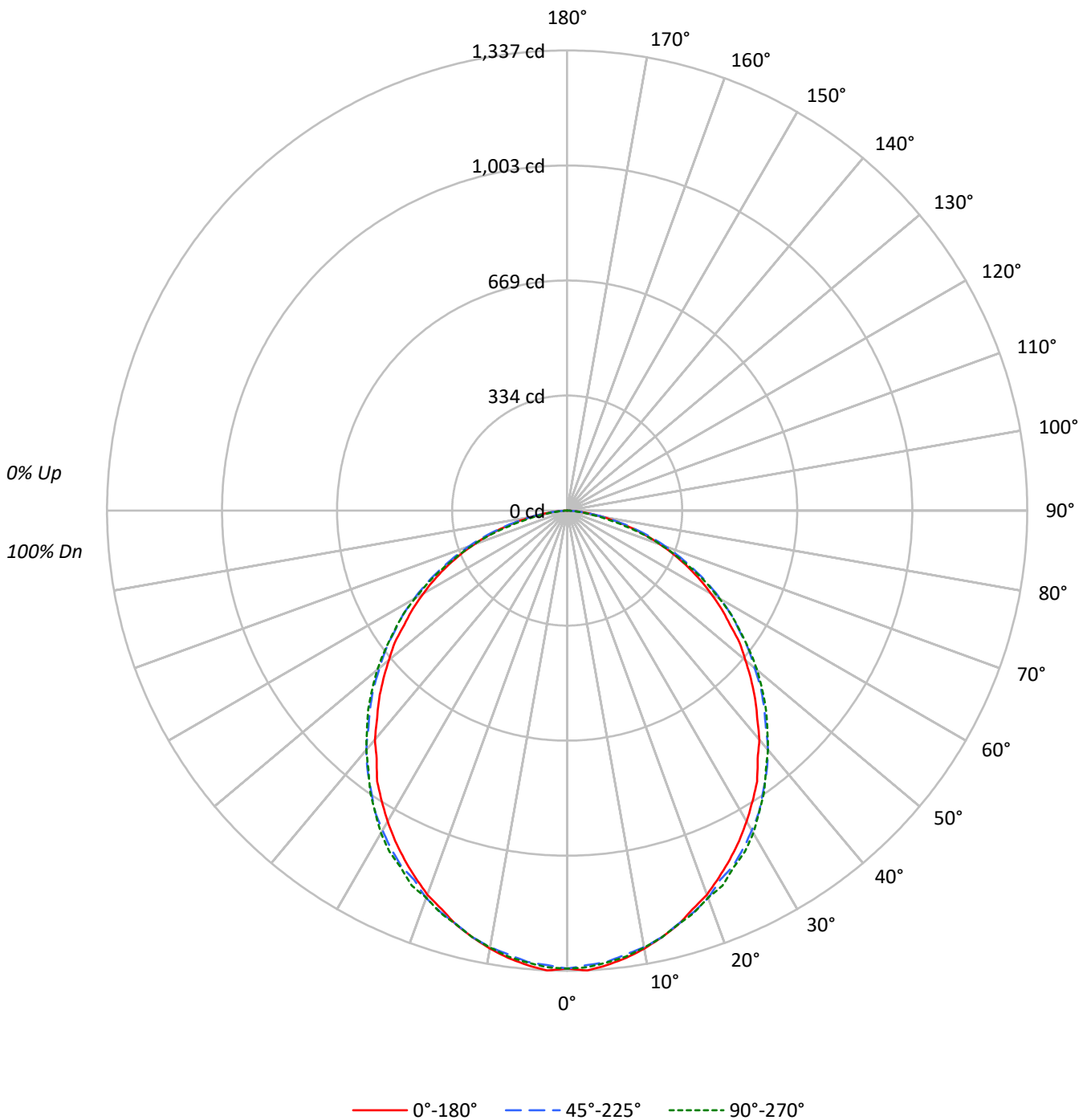
Lumens per Lamp: N/A  
Luminaire Lumens: 3418.3 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.21 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	3581	3581	3581
5°	3581	3556	3562
10°	3531	3519	3523
15°	3470	3466	3468
20°	3401	3430	3428
25°	3321	3385	3396
30°	3240	3335	3362
35°	3160	3263	3277
40°	3052	3190	3187
45°	2941	3079	3110
50°	2830	2976	3015
55°	2710	2871	2888
60°	2596	2768	2749
65°	2460	2599	2548
70°	2267	2387	2279
75°	2005	2088	1824
80°	1612	1635	1274
85°	1056	1010	741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.1	3.7
10°-20°	351.7	10.3
20°-30°	523.7	15.3
30°-40°	616.4	18.0
40°-50°	618.0	18.1
50°-60°	541.9	15.9
60°-70°	396.3	11.6
70°-80°	204.2	6.0
80°-90°	41.0	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°	1000.5	29.3
0°-40°	1616.9	47.3
0°-60°	2776.8	81.2
0°-90°	3418.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3418.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1331	1331	1331	1331	1331	
5°	1326	1317	1316	1325	1318	125
15°	1246	1248	1244	1252	1245	351
25°	1118	1123	1140	1156	1144	515
35°	962	966	993	1004	998	599
45°	773	776	809	819	817	596
55°	578	591	612	621	616	519
65°	386	395	408	407	400	382
75°	193	194	201	187	175	204
85°	34	34	33	26	24	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1330.8	1330.8	1330.8	1330.8	1330.8
2.5°	1337.4	1330.8	1322.1	1329.4	1327.9
5°	1325.7	1317.0	1316.3	1325.0	1318.5
7.5°	1311.2	1309.7	1301.0	1310.4	1306.8
10°	1292.3	1290.8	1287.9	1294.4	1289.3
12.5°	1269.7	1268.2	1269.7	1273.3	1269.7
15°	1245.7	1247.9	1244.2	1252.2	1245.0
17.5°	1213.7	1215.9	1223.1	1226.0	1225.3
20°	1187.5	1188.9	1197.7	1209.3	1196.9
22.5°	1153.3	1156.9	1161.3	1182.4	1179.5
25°	1118.4	1123.4	1140.2	1156.2	1143.8
27.5°	1082.0	1087.1	1107.4	1119.1	1117.6
30°	1042.7	1047.8	1073.2	1089.3	1082.0
32.5°	1001.9	1010.7	1038.3	1052.1	1038.3
35°	961.9	966.3	993.2	1004.1	997.6
37.5°	908.8	925.5	952.5	959.7	948.1
40°	868.8	869.5	908.1	908.1	907.3
42.5°	817.1	828.8	854.2	868.1	860.8
45°	772.7	776.4	809.1	819.3	817.1
47.5°	724.0	738.5	762.5	774.2	768.4
50°	676.0	686.1	710.9	726.2	720.3
52.5°	631.6	639.6	665.0	673.8	668.0
55°	577.7	590.8	611.9	620.7	615.6
57.5°	531.2	540.6	566.8	569.7	566.8
60°	482.4	493.3	514.4	516.6	510.8
62.5°	435.8	443.1	462.0	462.8	456.2
65°	386.4	395.1	408.2	406.7	400.2
67.5°	337.6	343.4	355.8	350.7	343.4
70°	288.1	293.2	303.4	296.1	289.6
72.5°	240.1	243.8	252.5	241.6	233.6
75°	192.8	194.3	200.8	187.0	175.4
77.5°	146.3	147.7	151.3	137.5	124.4
80°	104.0	104.0	105.5	91.0	82.2
82.5°	65.5	65.5	64.8	53.8	48.8
85°	34.2	33.5	32.7	26.2	24.0
87.5°	12.4	12.4	10.2	9.5	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)