

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: P485881

Luminaire Tested: **ORLG-24-2-INS-A125-LD4-2HI-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: P485881  
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-LD4-2HI-27-120-EDD  
Description: 2X2 ORL LED LUMINAIRE WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

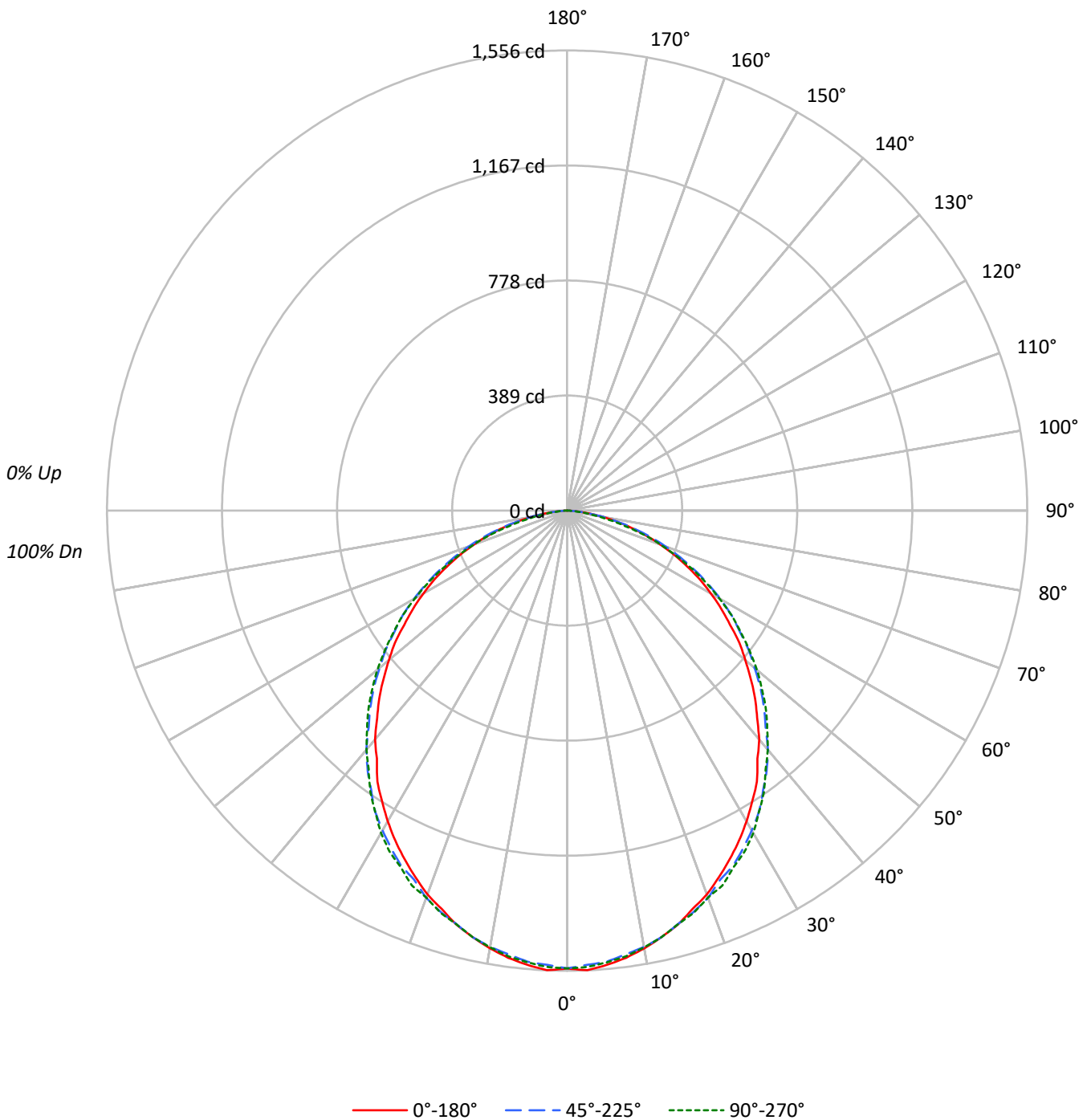
Lumens per Lamp: N/A  
Luminaire Lumens: 3976.4 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.21 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P485881

CATALOG NUMBER: ORLG-24-2-INS-A125-LD4-2HI-27-120-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P485881

CATALOG NUMBER: ORLG-24-2-INS-A125-LD4-2HI-27-120-EDD

**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°	4166	4166	4166
5°	4166	4136	4143
10°	4107	4094	4098
15°	4037	4032	4035
20°	3956	3990	3987
25°	3863	3938	3951
30°	3769	3879	3911
35°	3676	3796	3812
40°	3550	3711	3708
45°	3421	3582	3617
50°	3292	3462	3508
55°	3153	3339	3360
60°	3020	3221	3198
65°	2862	3023	2964
70°	2637	2777	2651
75°	2332	2429	2121
80°	1875	1901	1481
85°	1229	1176	861



TEST NUMBER: P485881

CATALOG NUMBER: ORLG-24-2-INS-A125-LD4-2HI-27-120-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	3.7
10°-20°	409.2	10.3
20°-30°	609.2	15.3
30°-40°	717.0	18.0
40°-50°	718.9	18.1
50°-60°	630.4	15.9
60°-70°	461.0	11.6
70°-80°	237.6	6.0
80°-90°	47.7	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°	1163.8	29.3
0°-40°	1880.9	47.3
0°-60°	3230.2	81.2
0°-90°	3976.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3976.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1548	1548	1548	1548	1548	
5°	1542	1532	1531	1541	1534	146
15°	1449	1452	1447	1457	1448	408
25°	1301	1307	1326	1345	1331	599
35°	1119	1124	1155	1168	1160	697
45°	899	903	941	953	950	693
55°	672	687	712	722	716	603
65°	449	460	475	473	466	445
75°	224	226	234	218	204	238
85°	40	39	38	30	28	52
90°	0	0	0	0	0	



TEST NUMBER: P485881

CATALOG NUMBER: ORLG-24-2-INS-A125-LD4-2HI-27-120-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1548.1	1548.1	1548.1	1548.1	1548.1
2.5°	1555.7	1548.1	1537.9	1546.4	1544.7
5°	1542.2	1532.0	1531.2	1541.3	1533.7
7.5°	1525.2	1523.6	1513.4	1524.4	1520.2
10°	1503.2	1501.5	1498.2	1505.8	1499.9
12.5°	1477.0	1475.3	1477.0	1481.2	1477.0
15°	1449.1	1451.6	1447.4	1456.7	1448.2
17.5°	1411.8	1414.4	1422.8	1426.2	1425.4
20°	1381.4	1383.0	1393.2	1406.7	1392.4
22.5°	1341.6	1345.8	1350.9	1375.4	1372.0
25°	1300.9	1306.9	1326.3	1345.0	1330.6
27.5°	1258.6	1264.6	1288.3	1301.8	1300.1
30°	1212.9	1218.8	1248.5	1267.1	1258.6
32.5°	1165.5	1175.7	1207.8	1223.9	1207.8
35°	1119.0	1124.0	1155.4	1168.1	1160.4
37.5°	1057.2	1076.6	1108.0	1116.4	1102.9
40°	1010.6	1011.5	1056.3	1056.3	1055.5
42.5°	950.5	964.1	993.7	1009.8	1001.3
45°	898.9	903.1	941.2	953.1	950.5
47.5°	842.2	859.1	887.0	900.6	893.8
50°	786.3	798.2	827.0	844.7	838.0
52.5°	734.7	744.0	773.6	783.8	777.0
55°	672.1	687.3	711.8	722.0	716.1
57.5°	617.9	628.9	659.4	662.7	659.4
60°	561.2	573.9	598.4	601.0	594.2
62.5°	507.0	515.5	537.5	538.3	530.7
65°	449.4	459.6	474.8	473.1	465.5
67.5°	392.7	399.5	413.9	408.0	399.5
70°	335.2	341.1	353.0	344.5	336.9
72.5°	279.3	283.6	293.7	281.0	271.7
75°	224.3	226.0	233.6	217.5	204.0
77.5°	170.1	171.8	176.1	160.0	144.7
80°	121.0	121.0	122.7	105.8	95.6
82.5°	76.2	76.2	75.3	62.6	56.7
85°	39.8	38.9	38.1	30.5	27.9
87.5°	14.4	14.4	11.8	11.0	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)