

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: P485989

Luminaire Tested: **ORLG-24-2-INS-A125-LD4-5HI-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: P485989  
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-LD4-5HI-27-120-EDD  
Description: 2X2 ORL LED LUMINAIRE WITH A125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

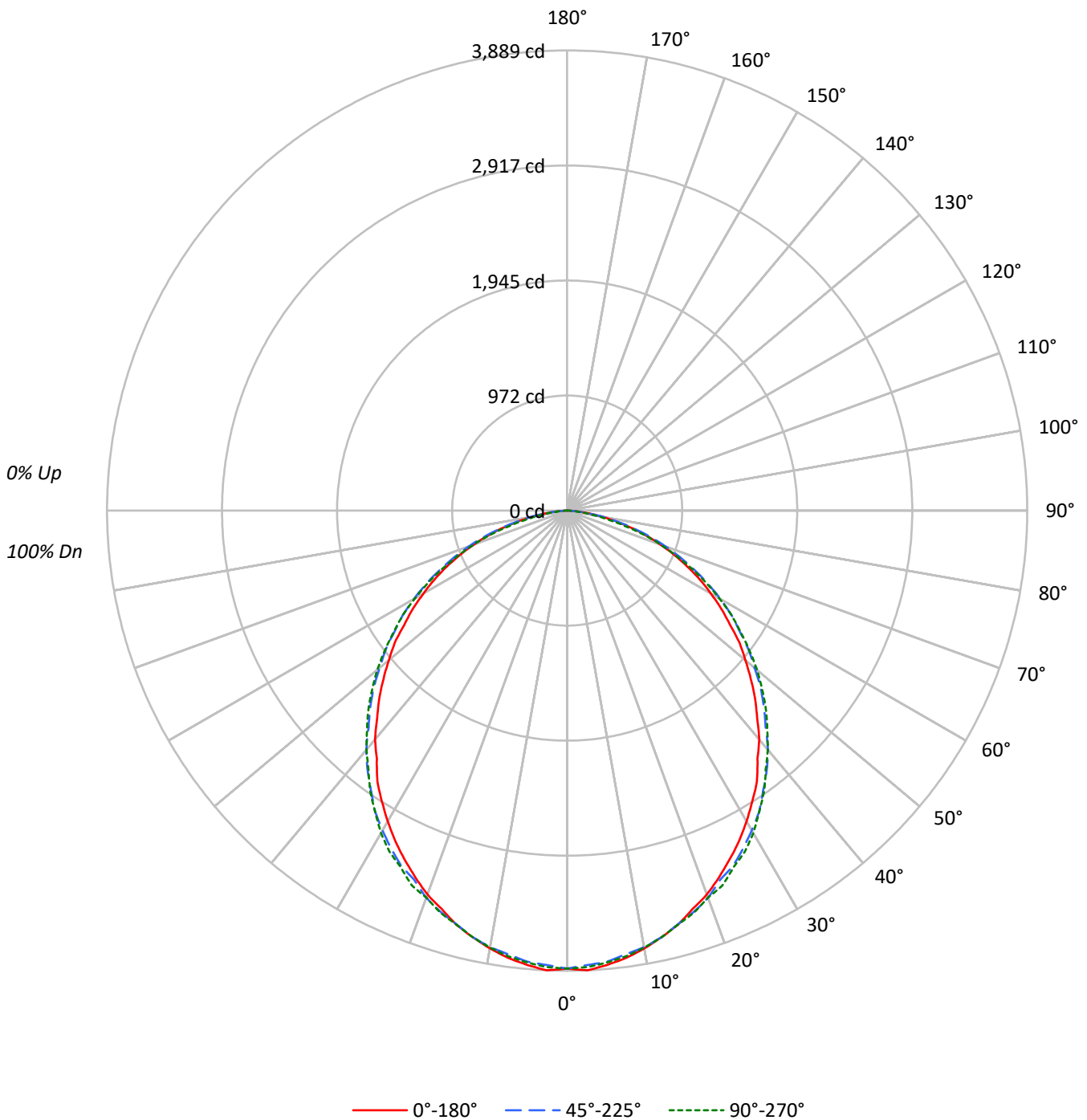
Lumens per Lamp: N/A  
Luminaire Lumens: 9941.0 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.21 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 110  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	10415	10415	10415
5°	10414	10340	10357
10°	10269	10234	10246
15°	10093	10081	10087
20°	9889	9974	9968
25°	9657	9845	9877
30°	9422	9698	9777
35°	9190	9489	9530
40°	8875	9277	9269
45°	8552	8955	9043
50°	8230	8655	8770
55°	7882	8349	8399
60°	7550	8051	7995
65°	7154	7559	7410
70°	6593	6943	6626
75°	5831	6072	5303
80°	4689	4754	3705
85°	3072	2939	2155



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	363.8	3.7
10°-20°	1022.9	10.3
20°-30°	1522.9	15.3
30°-40°	1792.6	18.0
40°-50°	1797.3	18.1
50°-60°	1576.0	15.9
60°-70°	1152.4	11.6
70°-80°	593.9	6.0
80°-90°	119.2	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°	2909.6	29.3
0°-40°	4702.1	47.3
0°-60°	8075.4	81.2
0°-90°	9941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3870	3870	3870	3870	3870	
5°	3855	3830	3828	3853	3834	365
15°	3623	3629	3618	3642	3621	1020
25°	3252	3267	3316	3362	3326	1498
35°	2797	2810	2888	2920	2901	1742
45°	2247	2258	2353	2383	2376	1732
55°	1680	1718	1780	1805	1790	1508
65°	1124	1149	1187	1183	1164	1111
75°	561	565	584	544	510	594
85°	100	97	95	76	70	130
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3870.3	3870.3	3870.3	3870.3	3870.3
2.5°	3889.3	3870.3	3844.9	3866.0	3861.8
5°	3855.4	3830.0	3827.9	3853.3	3834.3
7.5°	3813.1	3808.9	3783.5	3811.0	3800.4
10°	3758.1	3753.9	3745.4	3764.5	3749.6
12.5°	3692.5	3688.3	3692.5	3703.1	3692.5
15°	3622.7	3629.0	3618.4	3641.7	3620.6
17.5°	3529.6	3535.9	3557.1	3565.5	3563.4
20°	3453.4	3457.6	3483.0	3516.9	3480.9
22.5°	3353.9	3364.5	3377.2	3438.6	3430.1
25°	3252.4	3267.2	3315.8	3362.4	3326.4
27.5°	3146.6	3161.4	3220.6	3254.5	3250.3
30°	3032.3	3047.1	3121.2	3167.7	3146.6
32.5°	2913.8	2939.2	3019.6	3059.8	3019.6
35°	2797.4	2810.1	2888.4	2920.1	2901.1
37.5°	2642.9	2691.6	2769.9	2791.1	2757.2
40°	2526.6	2528.7	2640.8	2640.8	2638.7
42.5°	2376.3	2410.2	2484.2	2524.4	2503.3
45°	2247.2	2257.8	2353.0	2382.7	2376.3
47.5°	2105.5	2147.8	2217.6	2251.5	2234.5
50°	1965.8	1995.4	2067.4	2111.8	2094.9
52.5°	1836.7	1860.0	1934.1	1959.5	1942.5
55°	1680.1	1718.2	1779.6	1805.0	1790.2
57.5°	1544.7	1572.2	1648.4	1656.9	1648.4
60°	1402.9	1434.7	1496.0	1502.4	1485.5
62.5°	1267.5	1288.7	1343.7	1345.8	1326.8
65°	1123.6	1149.0	1187.1	1182.9	1163.8
67.5°	981.8	998.8	1034.7	1019.9	998.8
70°	838.0	852.8	882.4	861.2	842.2
72.5°	698.3	708.9	734.3	702.5	679.3
75°	560.8	565.0	584.0	543.8	510.0
77.5°	425.3	429.6	440.1	399.9	361.8
80°	302.6	302.6	306.8	264.5	239.1
82.5°	190.4	190.4	188.3	156.6	141.8
85°	99.5	97.3	95.2	76.2	69.8
87.5°	36.0	36.0	29.6	27.5	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)