

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: P488964

Luminaire Tested: **CLM-24-2-INS-A12125-LD4-4HI-27-120-EDD-90**

Issue Date: 3/11/2021

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: P488964  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/11/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: CLM-24-2-INS-A12125-LD4-4HI-27-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH A12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

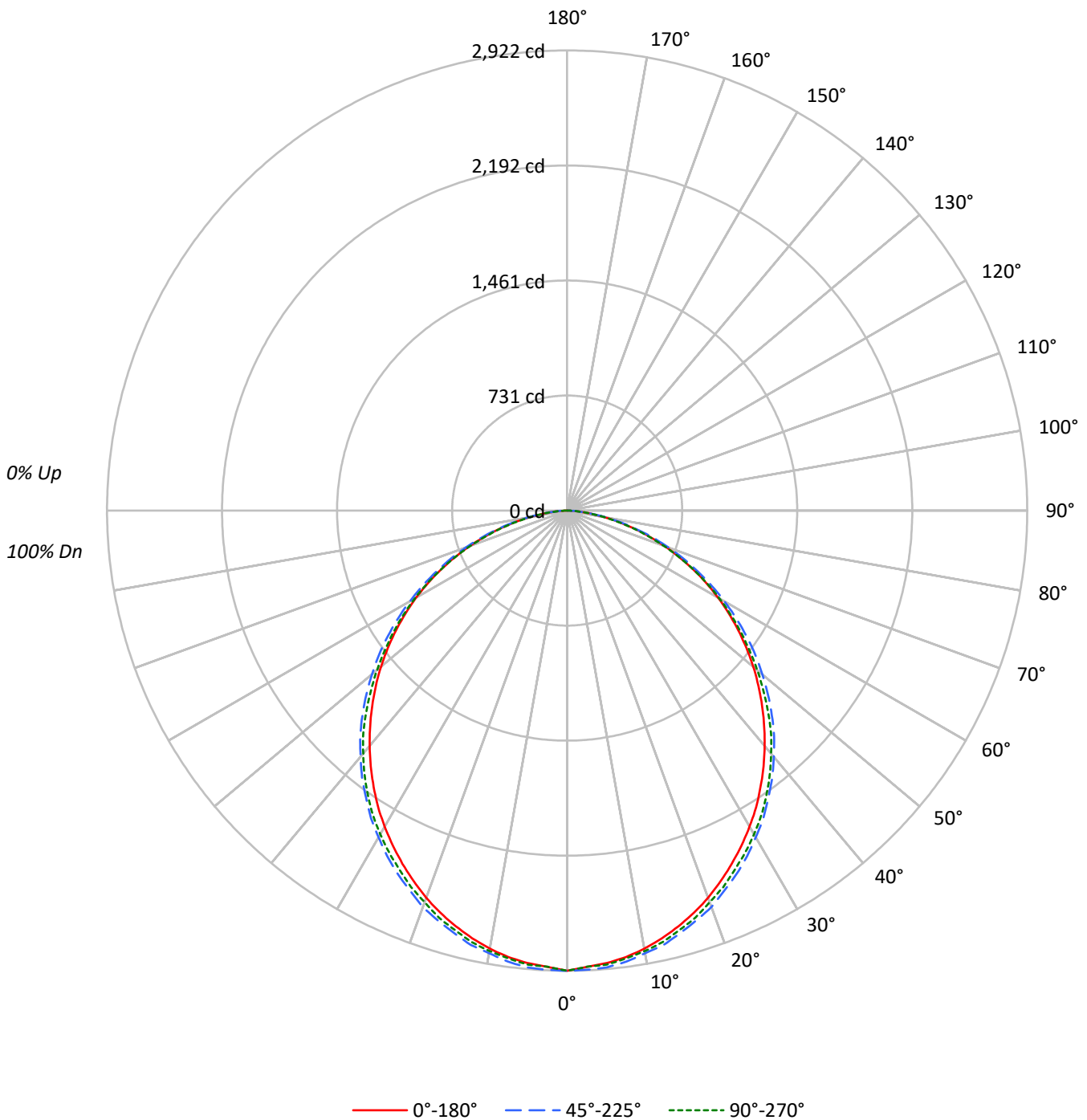
Lumens per Lamp: N/A  
Luminaire Lumens: 7682.9 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 86.4  
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	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	7864	7864	7864
5°	7791	7864	7816
10°	7720	7798	7761
15°	7613	7736	7682
20°	7493	7671	7579
25°	7347	7560	7474
30°	7199	7443	7374
35°	7036	7316	7248
40°	6854	7169	7078
45°	6661	6997	6865
50°	6461	6774	6596
55°	6227	6518	6318
60°	5962	6209	6017
65°	5619	5833	5622
70°	5169	5378	5112
75°	4552	4758	4482
80°	3699	3860	3657
85°	2575	2745	2680



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.2	3.6
10°-20°	779.9	10.2
20°-30°	1163.2	15.1
30°-40°	1378.4	17.9
40°-50°	1394.8	18.2
50°-60°	1218.1	15.9
60°-70°	890.1	11.6
70°-80°	473.6	6.2
80°-90°	109.5	1.4
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°	2218.4	28.9
0°-40°	3596.8	46.8
0°-60°	6209.7	80.8
0°-90°	7682.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7682.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2922	2922	2922	2922	2922	
5°	2884	2890	2911	2918	2893	273
15°	2733	2751	2777	2794	2757	770
25°	2474	2505	2546	2556	2517	1140
35°	2142	2175	2227	2242	2206	1340
45°	1750	1782	1839	1840	1804	1350
55°	1327	1354	1389	1369	1347	1186
65°	882	900	916	898	883	873
75°	438	448	458	441	431	465
85°	83	85	89	90	87	106
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2922.3	2922.3	2922.3	2922.3	2922.3
2.5°	2899.5	2908.9	2918.6	2922.9	2899.2
5°	2884.2	2889.7	2911.3	2918.0	2893.4
7.5°	2859.3	2867.5	2888.5	2891.6	2867.8
10°	2825.2	2839.8	2853.8	2869.0	2840.1
12.5°	2781.6	2801.4	2825.2	2827.9	2806.0
15°	2732.6	2750.9	2776.8	2793.5	2757.3
17.5°	2677.8	2695.5	2729.0	2732.0	2710.1
20°	2616.6	2638.5	2678.7	2685.7	2646.5
22.5°	2547.2	2576.7	2610.2	2616.9	2588.0
25°	2474.4	2504.9	2546.3	2555.7	2517.1
27.5°	2398.3	2427.5	2474.1	2480.8	2448.2
30°	2316.7	2344.1	2395.3	2406.5	2373.3
32.5°	2233.9	2261.3	2317.9	2327.4	2295.1
35°	2141.9	2175.4	2226.9	2242.4	2206.2
37.5°	2048.2	2080.7	2139.2	2153.2	2114.2
40°	1951.0	1983.3	2040.9	2052.4	2015.0
42.5°	1851.8	1884.1	1945.6	1947.4	1916.3
45°	1750.4	1781.5	1838.7	1840.2	1804.0
47.5°	1647.5	1678.8	1730.0	1724.2	1690.1
50°	1543.4	1573.2	1618.0	1606.4	1575.6
52.5°	1435.6	1464.5	1506.8	1487.9	1459.0
55°	1327.2	1354.0	1389.3	1369.2	1346.7
57.5°	1217.9	1245.0	1272.1	1251.7	1232.2
60°	1107.7	1131.4	1153.6	1132.9	1118.0
62.5°	995.6	1016.0	1035.2	1015.4	1001.4
65°	882.4	900.3	916.1	897.9	883.0
67.5°	769.7	784.9	799.5	780.7	765.1
70°	657.0	670.1	683.5	664.0	649.7
72.5°	545.9	557.5	569.4	550.5	538.0
75°	437.8	447.9	457.6	440.9	431.1
77.5°	334.6	343.1	349.8	339.2	329.7
80°	238.7	245.1	249.1	244.8	236.0
82.5°	153.5	158.0	160.2	159.8	154.1
85°	83.4	84.9	88.9	89.8	86.8
87.5°	32.3	34.4	35.3	38.1	35.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)