

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: P489332

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-4HI-50-120-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: P489332  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P387254)  
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-P12125-LD4-4HI-50-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

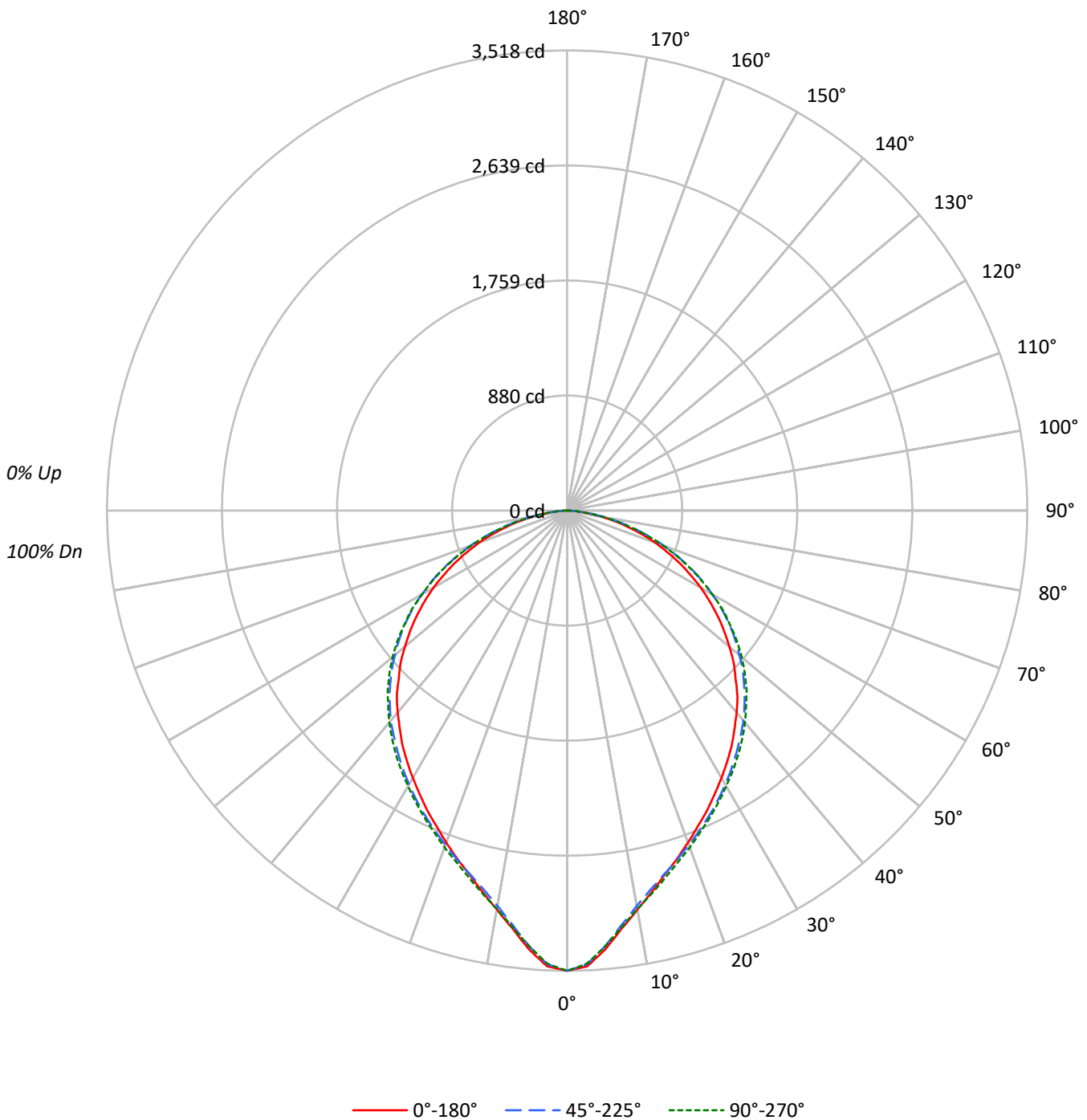
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8171.7 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
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	104	100	96	106	102	98	95		98	95	92		94	91	89			90	88	86	84
2	99	91	84	79	97	89	83	78		86	80	76		82	78	74			79	76	72	70
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62			70	65	61	59
4	83	71	62	55	81	70	61	55		67	60	54		65	59	54			63	57	53	51
5	76	63	54	48	74	62	54	48		60	53	47		58	52	46			56	51	46	44
6	70	57	48	42	68	56	48	42		54	47	41		53	46	41			51	45	40	38
7	65	52	43	37	64	51	43	37		49	42	37		48	41	36			47	41	36	34
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33			43	37	32	30
9	57	43	35	30	55	43	35	30		42	35	30		41	34	29			40	34	29	27
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27			37	31	27	25

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

	0°	45°	90°
0°	9467	9467	9467
5°	9090	9026	9026
10°	8460	8383	8448
15°	8028	8013	8091
20°	7733	7789	7849
25°	7512	7635	7679
30°	7331	7512	7558
35°	7205	7416	7491
40°	7078	7365	7426
45°	6932	7293	7380
50°	6779	7202	7298
55°	6590	7097	7127
60°	6354	6903	6888
65°	6022	6638	6593
70°	5623	6190	6114
75°	4963	5484	5429
80°	4032	4469	4249
85°	2797	2850	2742



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.9	3.8
10°-20°	814.3	10.0
20°-30°	1184.1	14.5
30°-40°	1409.0	17.2
40°-50°	1463.1	17.9
50°-60°	1325.5	16.2
60°-70°	1000.2	12.2
70°-80°	545.0	6.7
80°-90°	119.7	1.5
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
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0°-30°	2309.2	28.3
0°-40°	3718.3	45.5
0°-60°	6506.8	79.6
<b>0°-90°</b>	<b>8171.7</b>	<b>100.0</b>
90°-120°	0.0	0.0
90°-150°	0.0	0.0
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>
0°-180°	8171.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3518	3518	3518	3518	3518	
5°	3365	3357	3341	3340	3341	312
15°	2882	2874	2876	2896	2904	813
25°	2530	2551	2571	2592	2586	1166
35°	2193	2220	2258	2292	2280	1371
45°	1822	1854	1916	1938	1939	1408
55°	1405	1438	1513	1524	1519	1254
65°	946	973	1042	1041	1036	935
75°	477	497	528	531	522	508
85°	91	91	92	91	89	114
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3518.0	3518.0	3518.0	3518.0	3518.0
2.5°	3487.3	3483.7	3472.3	3467.9	3467.0
5°	3365.1	3357.2	3341.3	3339.6	3341.3
7.5°	3219.2	3210.3	3194.6	3200.7	3208.6
10°	3096.1	3074.1	3067.9	3076.7	3091.7
12.5°	2986.2	2968.6	2963.3	2986.2	2996.8
15°	2881.6	2874.5	2876.3	2895.7	2904.4
17.5°	2791.1	2786.7	2798.1	2813.0	2817.4
20°	2700.5	2709.3	2719.9	2735.7	2740.9
22.5°	2611.7	2628.4	2646.0	2667.1	2660.1
25°	2530.0	2551.1	2571.3	2592.4	2586.2
27.5°	2442.9	2467.5	2495.7	2518.5	2509.7
30°	2359.4	2390.2	2417.4	2445.5	2432.4
32.5°	2276.8	2305.8	2338.3	2372.6	2357.7
35°	2193.3	2219.7	2257.5	2291.8	2280.3
37.5°	2101.0	2133.5	2176.5	2206.4	2198.6
40°	2014.8	2044.7	2096.6	2115.9	2114.1
42.5°	1927.8	1952.4	2006.9	2028.9	2025.4
45°	1821.5	1854.0	1916.4	1937.5	1939.2
47.5°	1727.4	1754.7	1821.5	1838.1	1841.6
50°	1619.3	1653.6	1720.4	1740.5	1743.2
52.5°	1512.8	1549.8	1618.4	1632.4	1635.1
55°	1404.7	1438.1	1512.8	1523.5	1519.0
57.5°	1291.4	1331.8	1400.4	1405.6	1410.0
60°	1180.6	1215.7	1282.6	1289.6	1279.9
62.5°	1060.2	1096.2	1164.8	1166.5	1158.6
65°	945.8	973.1	1042.5	1040.8	1035.5
67.5°	826.3	859.7	910.7	912.4	908.1
70°	714.7	737.5	786.8	787.7	777.1
72.5°	594.3	618.9	658.4	653.2	650.5
75°	477.3	496.7	527.5	531.0	522.2
77.5°	370.1	384.2	407.0	404.4	394.7
80°	260.2	271.6	288.4	284.8	274.2
82.5°	166.1	173.2	183.7	179.3	174.9
85°	90.6	91.4	92.3	91.4	88.8
87.5°	33.4	34.3	34.3	33.4	30.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)