

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: P489510

Luminaire Tested: **CLM-24-4-INS-A12125-LD4-4HI-40-120-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: P489510  
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-24-4-INS-A12125-LD4-4HI-40-120-EDD-90  
Description: 2X4 CLM LED LUMINAIRE WITH A12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

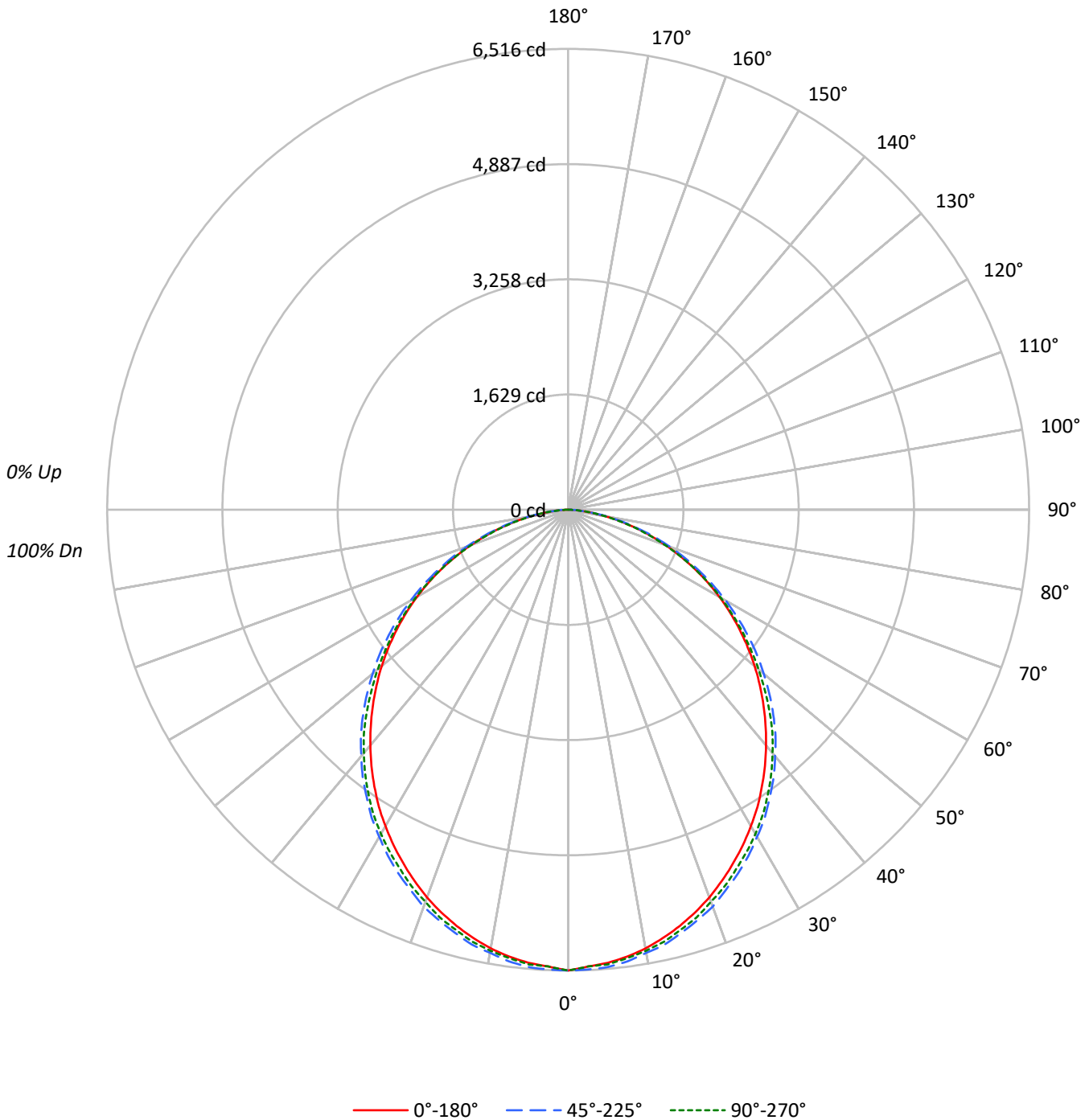
Lumens per Lamp: N/A  
Luminaire Lumens: 17130.8 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 172.8  
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°	8767	8767	8767
5°	8686	8768	8714
10°	8607	8694	8652
15°	8487	8624	8564
20°	8354	8552	8449
25°	8191	8429	8332
30°	8025	8298	8222
35°	7845	8156	8080
40°	7641	7993	7891
45°	7426	7801	7654
50°	7203	7551	7354
55°	6942	7267	7044
60°	6646	6922	6708
65°	6264	6504	6268
70°	5763	5996	5699
75°	5075	5305	4997
80°	4124	4303	4076
85°	2871	3060	2987



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	613.7	3.6
10°-20°	1739.0	10.2
20°-30°	2593.7	15.1
30°-40°	3073.5	17.9
40°-50°	3109.9	18.2
50°-60°	2716.1	15.9
60°-70°	1984.8	11.6
70°-80°	1056.1	6.2
80°-90°	244.1	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°	4946.3	28.9
0°-40°	8019.9	46.8
0°-60°	13845.9	80.8
0°-90°	17130.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17130.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6516	6516	6516	6516	6516	
5°	6431	6443	6492	6506	6452	610
15°	6093	6134	6191	6229	6148	1718
25°	5517	5585	5678	5699	5612	2542
35°	4776	4851	4965	5000	4919	2987
45°	3903	3972	4100	4103	4022	3011
55°	2959	3019	3098	3053	3003	2645
65°	1967	2008	2043	2002	1969	1947
75°	976	999	1020	983	961	1038
85°	186	189	198	200	194	236
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6515.9	6515.9	6515.9	6515.9	6515.9
2.5°	6465.0	6486.1	6507.8	6517.3	6464.4
5°	6431.1	6443.3	6491.5	6506.4	6451.5
7.5°	6375.4	6393.7	6440.6	6447.4	6394.4
10°	6299.4	6332.0	6363.2	6397.1	6332.6
12.5°	6202.3	6246.4	6299.4	6305.5	6256.6
15°	6093.0	6133.7	6191.4	6228.8	6148.0
17.5°	5970.8	6010.2	6084.9	6091.6	6042.8
20°	5834.3	5883.2	5972.8	5988.5	5900.9
22.5°	5679.6	5745.4	5820.1	5835.0	5770.5
25°	5517.3	5585.2	5677.5	5698.6	5612.3
27.5°	5347.6	5412.8	5516.6	5531.6	5458.9
30°	5165.6	5226.7	5340.8	5365.9	5291.9
32.5°	4981.0	5042.1	5168.4	5189.4	5117.4
35°	4776.0	4850.6	4965.4	5000.0	4919.2
37.5°	4566.9	4639.5	4769.9	4801.1	4714.2
40°	4350.3	4422.3	4550.6	4576.4	4492.9
42.5°	4129.0	4200.9	4338.1	4342.2	4272.9
45°	3902.9	3972.2	4099.8	4103.2	4022.4
47.5°	3673.5	3743.4	3857.4	3844.5	3768.5
50°	3441.3	3507.8	3607.6	3581.8	3513.2
52.5°	3200.9	3265.4	3359.8	3317.7	3253.2
55°	2959.3	3019.0	3097.8	3052.9	3002.7
57.5°	2715.5	2776.0	2836.4	2790.9	2747.5
60°	2469.8	2522.7	2572.3	2526.1	2492.9
62.5°	2220.0	2265.4	2308.2	2264.1	2232.9
65°	1967.4	2007.5	2042.8	2002.0	1968.8
67.5°	1716.2	1750.2	1782.8	1740.7	1706.0
70°	1465.0	1494.2	1524.1	1480.7	1448.7
72.5°	1217.2	1243.0	1269.5	1227.4	1199.6
75°	976.2	998.6	1020.4	983.0	961.3
77.5°	746.1	765.1	780.0	756.3	735.2
80°	532.2	546.5	555.3	545.8	526.1
82.5°	342.2	352.3	357.1	356.4	343.5
85°	186.0	189.4	198.2	200.3	193.5
87.5°	72.0	76.7	78.8	84.9	78.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)