

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: P489870

Luminaire Tested: **CLM-24-4-INS-P12125-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: P489870
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-24-4-INS-P12125-LD4-4HI-40-120-EDD-90
Description: 2X4 CLM LED LUMINAIRE WITH P12125 LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

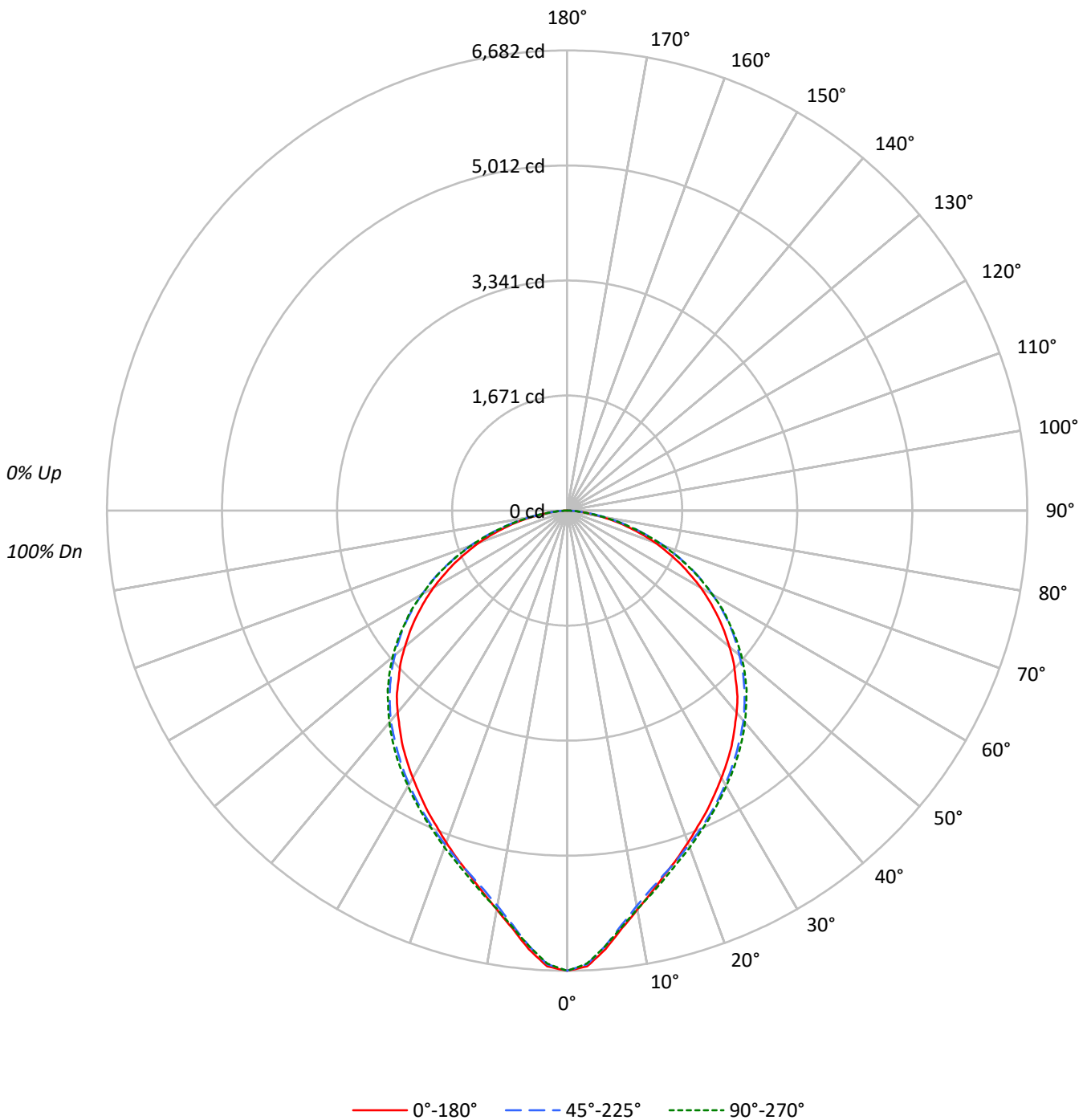
Lumens per Lamp: N/A
Luminaire Lumens: 15521.3 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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°	8991	8991	8991
5°	8633	8572	8572
10°	8034	7961	8023
15°	7624	7610	7684
20°	7344	7397	7454
25°	7134	7251	7293
30°	6962	7134	7178
35°	6843	7043	7114
40°	6722	6994	7053
45°	6583	6926	7009
50°	6438	6840	6931
55°	6259	6741	6768
60°	6034	6555	6542
65°	5720	6304	6262
70°	5340	5879	5807
75°	4713	5208	5156
80°	3829	4244	4036
85°	2655	2706	2603



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	590.5	3.8
10°-20°	1546.6	10.0
20°-30°	2249.1	14.5
30°-40°	2676.3	17.2
40°-50°	2779.0	17.9
50°-60°	2517.6	16.2
60°-70°	1899.8	12.2
70°-80°	1035.1	6.7
80°-90°	227.4	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
0°-30°	4386.1	28.3
0°-40°	7062.5	45.5
0°-60°	12359.0	79.6
0°-90°	15521.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15521.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6682	6682	6682	6682	6682	
5°	6392	6377	6346	6343	6346	593
15°	5473	5460	5463	5500	5517	1545
25°	4805	4846	4884	4924	4912	2214
35°	4166	4216	4288	4353	4331	2604
45°	3460	3521	3640	3680	3683	2674
55°	2668	2732	2874	2894	2885	2382
65°	1796	1848	1980	1977	1967	1776
75°	907	943	1002	1008	992	966
85°	172	174	175	174	169	217
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6682.2	6682.2	6682.2	6682.2	6682.2
2.5°	6623.7	6617.0	6595.3	6586.9	6585.2
5°	6391.6	6376.6	6346.5	6343.2	6346.5
7.5°	6114.4	6097.7	6067.8	6079.4	6094.4
10°	5880.7	5839.0	5827.2	5843.9	5872.3
12.5°	5671.9	5638.6	5628.5	5671.9	5692.1
15°	5473.2	5459.9	5463.3	5500.0	5516.6
17.5°	5301.3	5293.0	5314.7	5343.1	5351.4
20°	5129.3	5146.1	5166.1	5196.2	5206.1
22.5°	4960.7	4992.4	5025.9	5065.9	5052.5
25°	4805.4	4845.5	4883.9	4923.9	4912.3
27.5°	4640.1	4686.8	4740.3	4783.7	4767.0
30°	4481.4	4539.9	4591.7	4645.1	4620.1
32.5°	4324.6	4379.6	4441.4	4506.5	4478.1
35°	4165.9	4216.0	4287.8	4353.0	4331.3
37.5°	3990.6	4052.4	4134.1	4190.9	4176.0
40°	3827.0	3883.7	3982.2	4019.0	4015.6
42.5°	3661.6	3708.5	3811.9	3853.7	3847.0
45°	3459.7	3521.4	3639.9	3680.1	3683.3
47.5°	3281.0	3332.8	3459.7	3491.3	3498.0
50°	3075.6	3140.8	3267.6	3306.0	3311.1
52.5°	2873.5	2943.6	3073.9	3100.6	3105.7
55°	2668.1	2731.6	2873.5	2893.7	2885.3
57.5°	2452.8	2529.6	2659.9	2669.8	2678.2
60°	2242.3	2309.2	2436.1	2449.4	2431.1
62.5°	2013.7	2082.1	2212.4	2215.7	2200.6
65°	1796.5	1848.3	1980.2	1976.9	1966.9
67.5°	1569.5	1632.9	1729.8	1733.1	1724.9
70°	1357.4	1400.8	1494.4	1496.1	1476.1
72.5°	1128.8	1175.5	1250.5	1240.6	1235.6
75°	906.6	943.4	1001.9	1008.5	991.8
77.5°	703.0	729.7	773.1	768.1	749.7
80°	494.2	515.9	547.7	541.0	520.9
82.5°	315.5	329.0	349.0	340.6	332.3
85°	172.0	173.6	175.3	173.6	168.6
87.5°	63.4	65.1	65.1	63.4	58.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)