

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: P489328

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-4HI-35-120-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: P489328  
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-35-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

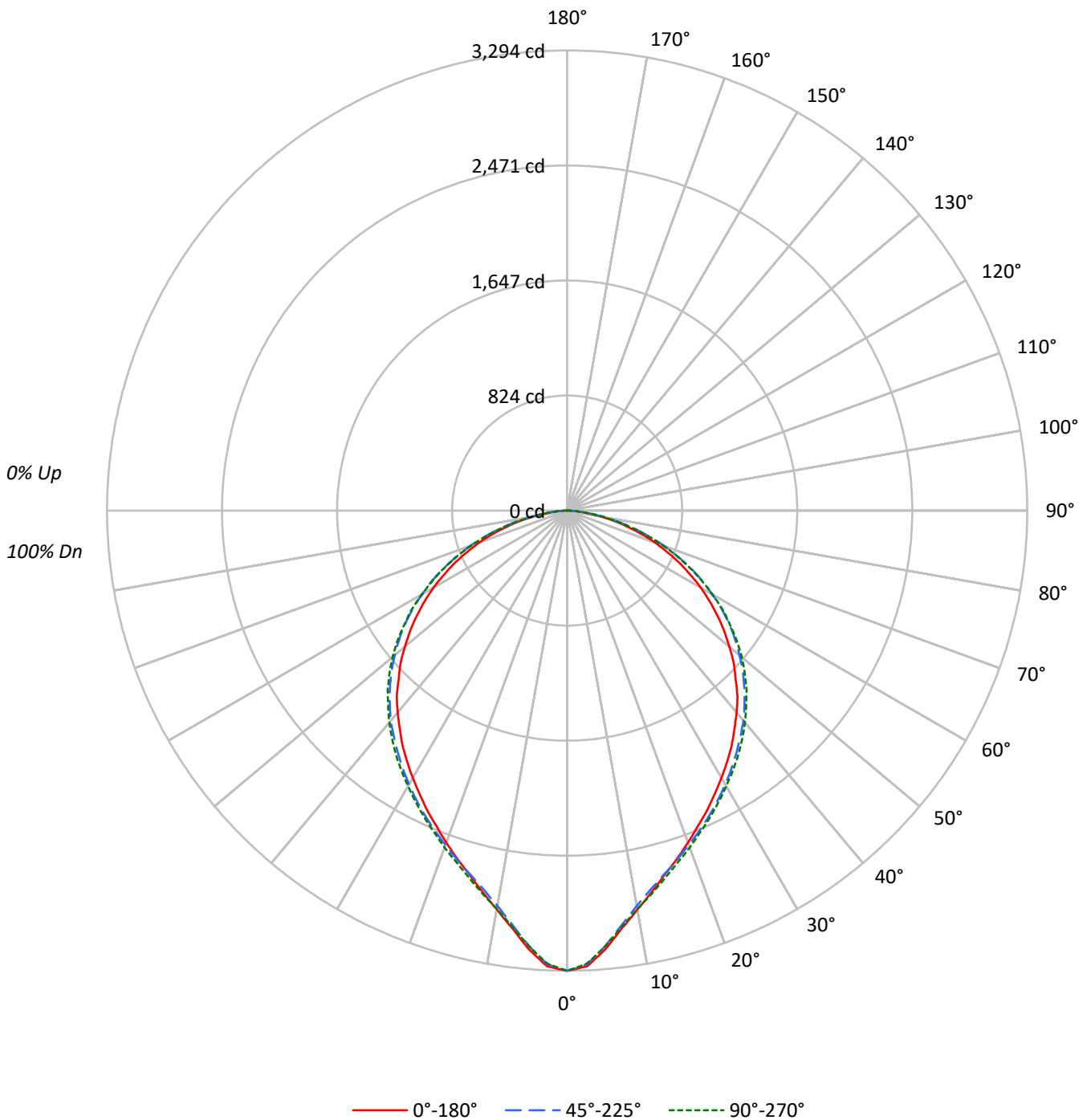
Lumens per Lamp: N/A  
Luminaire Lumens: 7651.7 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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°	8865	8865	8865
5°	8512	8451	8451
10°	7922	7850	7910
15°	7517	7503	7577
20°	7241	7293	7350
25°	7034	7149	7190
30°	6865	7034	7077
35°	6747	6944	7014
40°	6627	6896	6954
45°	6490	6829	6910
50°	6347	6744	6833
55°	6171	6646	6673
60°	5949	6463	6450
65°	5640	6216	6174
70°	5265	5796	5725
75°	4648	5135	5083
80°	3775	4184	3980
85°	2618	2668	2566



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	291.1	3.8
10°-20°	762.4	10.0
20°-30°	1108.7	14.5
30°-40°	1319.4	17.2
40°-50°	1370.0	17.9
50°-60°	1241.1	16.2
60°-70°	936.5	12.2
70°-80°	510.3	6.7
80°-90°	112.1	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°	2162.3	28.3
0°-40°	3481.6	45.5
0°-60°	6092.7	79.6
0°-90°	7651.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7651.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3294	3294	3294	3294	3294	
5°	3151	3144	3129	3127	3129	292
15°	2698	2692	2693	2711	2720	762
25°	2369	2389	2408	2427	2422	1092
35°	2054	2078	2114	2146	2135	1284
45°	1706	1736	1794	1814	1816	1318
55°	1315	1347	1417	1426	1422	1174
65°	886	911	976	975	970	876
75°	447	465	494	497	489	476
85°	85	86	86	86	83	107
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3294.2	3294.2	3294.2	3294.2	3294.2
2.5°	3265.4	3262.1	3251.4	3247.2	3246.4
5°	3151.0	3143.5	3128.7	3127.1	3128.7
7.5°	3014.3	3006.0	2991.3	2997.0	3004.4
10°	2899.1	2878.5	2872.7	2880.9	2894.9
12.5°	2796.1	2779.7	2774.7	2796.1	2806.1
15°	2698.2	2691.6	2693.3	2711.4	2719.6
17.5°	2613.5	2609.3	2620.0	2634.0	2638.2
20°	2528.7	2536.9	2546.8	2561.6	2566.5
22.5°	2445.5	2461.1	2477.6	2497.4	2490.8
25°	2369.0	2388.7	2407.7	2427.4	2421.7
27.5°	2287.5	2310.5	2336.9	2358.3	2350.0
30°	2209.2	2238.1	2263.6	2289.9	2277.6
32.5°	2131.9	2159.1	2189.5	2221.6	2207.6
35°	2053.7	2078.4	2113.8	2145.9	2135.2
37.5°	1967.3	1997.7	2038.0	2066.0	2058.7
40°	1886.6	1914.6	1963.2	1981.3	1979.6
42.5°	1805.1	1828.2	1879.2	1899.8	1896.5
45°	1705.5	1736.0	1794.4	1814.2	1815.8
47.5°	1617.5	1643.0	1705.5	1721.2	1724.4
50°	1516.2	1548.3	1610.9	1629.8	1632.3
52.5°	1416.6	1451.1	1515.4	1528.5	1531.0
55°	1315.3	1346.6	1416.6	1426.5	1422.4
57.5°	1209.2	1247.0	1311.3	1316.2	1320.3
60°	1105.4	1138.4	1200.9	1207.5	1198.5
62.5°	992.7	1026.4	1090.7	1092.3	1084.9
65°	885.7	911.2	976.2	974.6	969.6
67.5°	773.7	805.0	852.8	854.4	850.3
70°	669.2	690.6	736.7	737.5	727.7
72.5°	556.5	579.5	616.5	611.6	609.1
75°	447.0	465.1	493.9	497.2	488.9
77.5°	346.6	359.7	381.1	378.7	369.6
80°	243.6	254.3	270.0	266.7	256.8
82.5°	155.5	162.2	172.1	167.9	163.8
85°	84.8	85.6	86.4	85.6	83.1
87.5°	31.3	32.1	32.1	31.3	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)