

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: P489342

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-4LO-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: P489342  
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-LD4-4LO-40-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

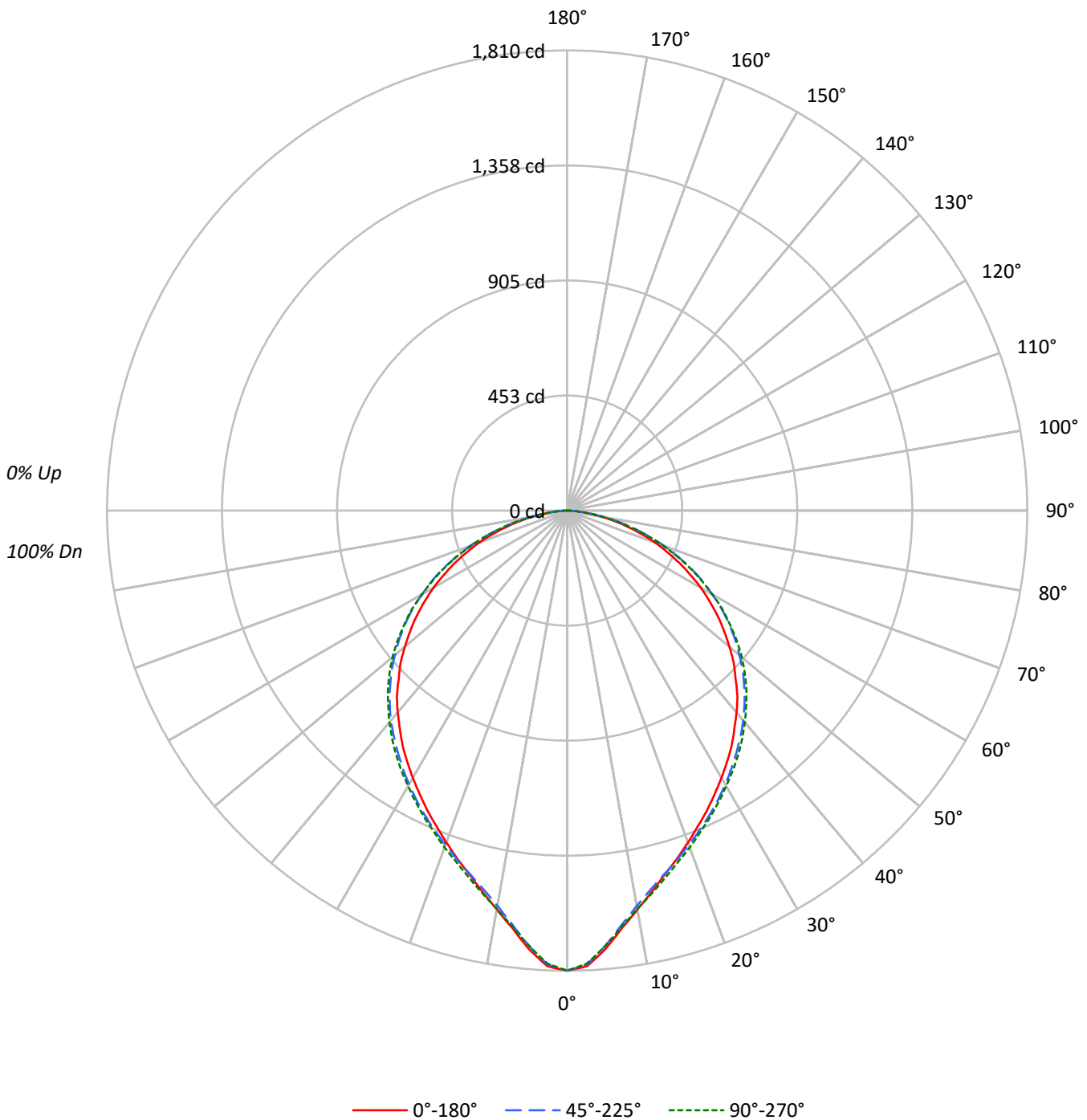
Lumens per Lamp: N/A  
Luminaire Lumens: 4203.5 lumens  
Efficiency: N/A  
Efficacy: 89.8 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 46.8  
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°	4870	4870	4870
5°	4676	4643	4643
10°	4352	4312	4345
15°	4130	4122	4162
20°	3978	4007	4038
25°	3864	3927	3950
30°	3771	3864	3888
35°	3706	3815	3853
40°	3641	3789	3820
45°	3566	3752	3796
50°	3487	3705	3754
55°	3390	3651	3666
60°	3268	3550	3543
65°	3098	3415	3392
70°	2892	3184	3145
75°	2552	2821	2793
80°	2073	2298	2187
85°	1439	1467	1411



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.9	3.8
10°-20°	418.9	10.0
20°-30°	609.1	14.5
30°-40°	724.8	17.2
40°-50°	752.6	17.9
50°-60°	681.8	16.2
60°-70°	514.5	12.2
70°-80°	280.3	6.7
80°-90°	61.6	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°	1187.9	28.3
0°-40°	1912.7	45.5
0°-60°	3347.1	79.6
0°-90°	4203.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4203.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1810	1810	1810	1810	1810	
5°	1731	1727	1719	1718	1719	161
15°	1482	1479	1480	1490	1494	418
25°	1301	1312	1323	1334	1330	600
35°	1128	1142	1161	1179	1173	705
45°	937	954	986	997	998	724
55°	723	740	778	784	781	645
65°	486	501	536	535	533	481
75°	246	256	271	273	269	262
85°	47	47	48	47	46	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1809.7	1809.7	1809.7	1809.7	1809.7
2.5°	1793.8	1792.0	1786.1	1783.9	1783.4
5°	1731.0	1726.9	1718.8	1717.9	1718.8
7.5°	1655.9	1651.4	1643.3	1646.4	1650.5
10°	1592.6	1581.3	1578.1	1582.7	1590.3
12.5°	1536.1	1527.0	1524.3	1536.1	1541.5
15°	1482.3	1478.7	1479.6	1489.5	1494.0
17.5°	1435.7	1433.4	1439.3	1447.0	1449.3
20°	1389.1	1393.7	1399.1	1407.2	1409.9
22.5°	1343.5	1352.0	1361.1	1371.9	1368.3
25°	1301.4	1312.3	1322.7	1333.5	1330.4
27.5°	1256.6	1269.3	1283.8	1295.5	1291.0
30°	1213.7	1229.5	1243.5	1258.0	1251.2
32.5°	1171.2	1186.1	1202.8	1220.5	1212.8
35°	1128.2	1141.8	1161.2	1178.9	1173.0
37.5°	1080.7	1097.5	1119.6	1135.0	1130.9
40°	1036.4	1051.8	1078.5	1088.4	1087.5
42.5°	991.6	1004.3	1032.4	1043.7	1041.8
45°	937.0	953.7	985.8	996.6	997.5
47.5°	888.6	902.6	937.0	945.5	947.3
50°	832.9	850.6	884.9	895.3	896.7
52.5°	778.2	797.2	832.5	839.7	841.1
55°	722.6	739.8	778.2	783.7	781.4
57.5°	664.3	685.1	720.4	723.0	725.3
60°	607.3	625.4	659.7	663.4	658.4
62.5°	545.4	563.9	599.2	600.0	596.0
65°	486.5	500.6	536.3	535.4	532.7
67.5°	425.0	442.2	468.5	469.4	467.1
70°	367.6	379.4	404.7	405.2	399.7
72.5°	305.7	318.3	338.7	336.0	334.6
75°	245.5	255.5	271.3	273.1	268.6
77.5°	190.4	197.6	209.4	208.0	203.0
80°	133.8	139.7	148.3	146.5	141.1
82.5°	85.4	89.1	94.5	92.2	90.0
85°	46.6	47.0	47.5	47.0	45.7
87.5°	17.2	17.6	17.6	17.2	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)