

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: P489314

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-3STD-30-120-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: P489314  
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-LD4-3STD-30-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

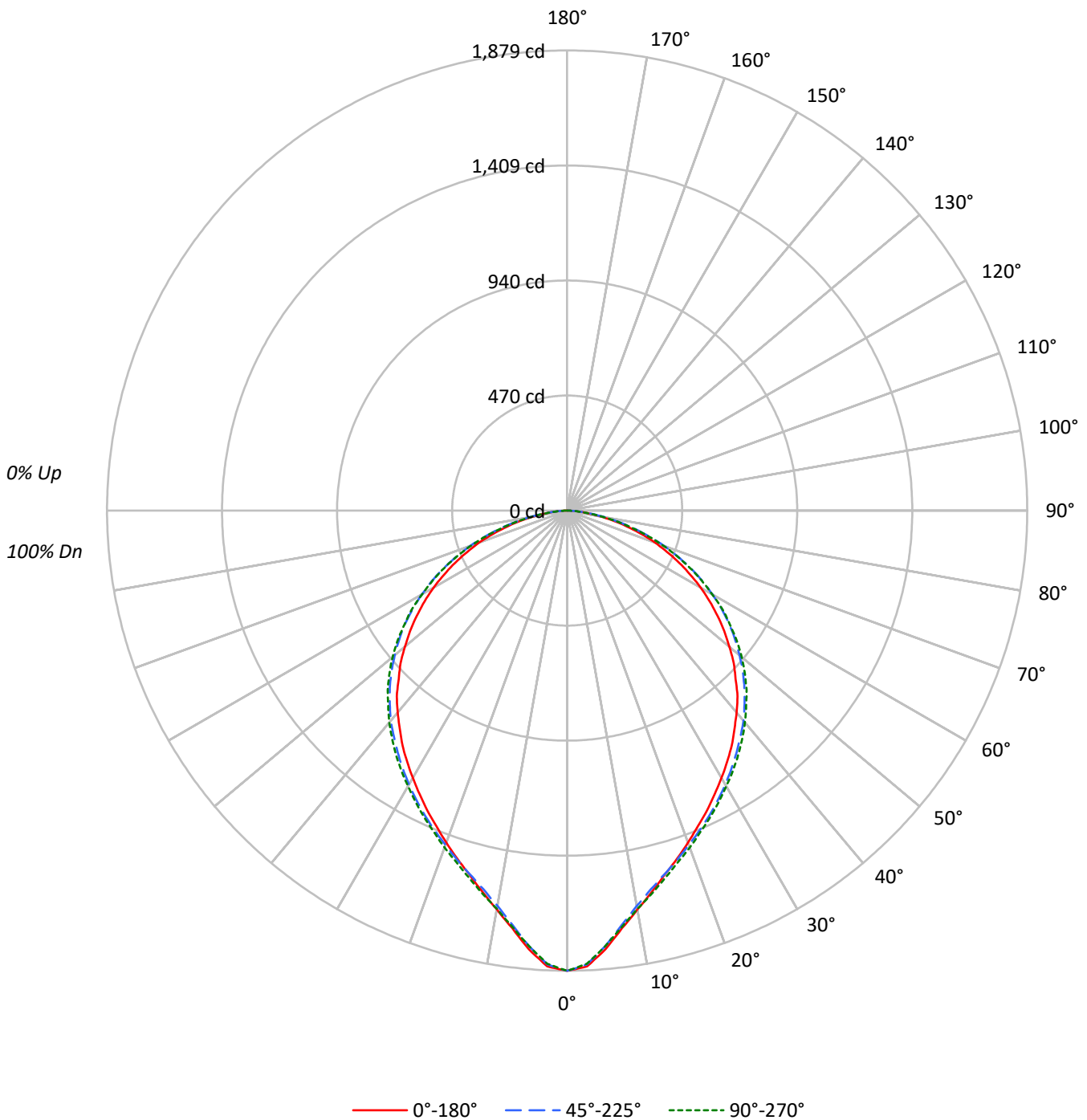
Lumens per Lamp: N/A  
Luminaire Lumens: 4365.3 lumens  
Efficiency: N/A  
Efficacy: 87.3 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	5057	5057	5057
5°	4856	4821	4821
10°	4519	4478	4513
15°	4288	4281	4322
20°	4131	4161	4193
25°	4013	4078	4102
30°	3916	4013	4038
35°	3849	3961	4002
40°	3781	3934	3967
45°	3703	3896	3942
50°	3621	3847	3898
55°	3521	3792	3807
60°	3394	3687	3680
65°	3217	3546	3522
70°	3004	3307	3266
75°	2651	2930	2900
80°	2154	2386	2270
85°	1494	1522	1463



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.1	3.8
10°-20°	435.0	10.0
20°-30°	632.5	14.5
30°-40°	752.7	17.2
40°-50°	781.6	17.9
50°-60°	708.1	16.2
60°-70°	534.3	12.2
70°-80°	291.1	6.7
80°-90°	64.0	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°	1233.6	28.3
0°-40°	1986.3	45.5
0°-60°	3475.9	79.6
0°-90°	4365.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4365.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1879	1879	1879	1879	1879	
5°	1798	1793	1785	1784	1785	167
15°	1539	1536	1536	1547	1552	434
25°	1352	1363	1374	1385	1382	623
35°	1172	1186	1206	1224	1218	732
45°	973	990	1024	1035	1036	752
55°	750	768	808	814	812	670
65°	505	520	557	556	553	499
75°	255	265	282	284	279	272
85°	48	49	49	49	47	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1879.3	1879.3	1879.3	1879.3	1879.3
2.5°	1862.9	1861.0	1854.9	1852.5	1852.1
5°	1797.6	1793.4	1784.9	1784.0	1784.9
7.5°	1719.7	1715.0	1706.5	1709.8	1714.0
10°	1653.9	1642.2	1638.9	1643.6	1651.6
12.5°	1595.2	1585.8	1583.0	1595.2	1600.9
15°	1539.3	1535.6	1536.5	1546.9	1551.5
17.5°	1491.0	1488.6	1494.7	1502.7	1505.1
20°	1442.6	1447.3	1452.9	1461.4	1464.2
22.5°	1395.2	1404.1	1413.5	1424.8	1421.0
25°	1351.5	1362.8	1373.6	1384.8	1381.6
27.5°	1305.0	1318.1	1333.2	1345.4	1340.7
30°	1260.4	1276.8	1291.4	1306.4	1299.4
32.5°	1216.3	1231.8	1249.1	1267.4	1259.5
35°	1171.6	1185.7	1205.9	1224.3	1218.1
37.5°	1122.3	1139.7	1162.7	1178.7	1174.5
40°	1076.3	1092.3	1120.0	1130.3	1129.4
42.5°	1029.8	1043.0	1072.1	1083.8	1081.9
45°	973.0	990.4	1023.7	1035.0	1035.9
47.5°	922.8	937.3	973.0	981.9	983.8
50°	865.0	883.3	919.0	929.8	931.2
52.5°	808.2	827.9	864.5	872.0	873.5
55°	750.4	768.2	808.2	813.8	811.5
57.5°	689.8	711.4	748.1	750.9	753.2
60°	630.6	649.4	685.1	688.9	683.7
62.5°	566.3	585.6	622.2	623.1	618.9
65°	505.3	519.8	556.9	556.0	553.2
67.5°	441.4	459.2	486.5	487.4	485.1
70°	381.8	394.0	420.3	420.8	415.1
72.5°	317.5	330.6	351.7	348.9	347.5
75°	255.0	265.3	281.8	283.7	278.9
77.5°	197.7	205.2	217.4	216.0	210.8
80°	139.0	145.1	154.0	152.2	146.5
82.5°	88.7	92.5	98.2	95.8	93.4
85°	48.4	48.8	49.3	48.8	47.4
87.5°	17.8	18.3	18.3	17.8	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)