

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: P489808

Luminaire Tested: **CLM-24-4-INS-P12125-LD4-2LO-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: P489808  
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-LD4-2LO-35-120-EDD-90  
Description: 2X4 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

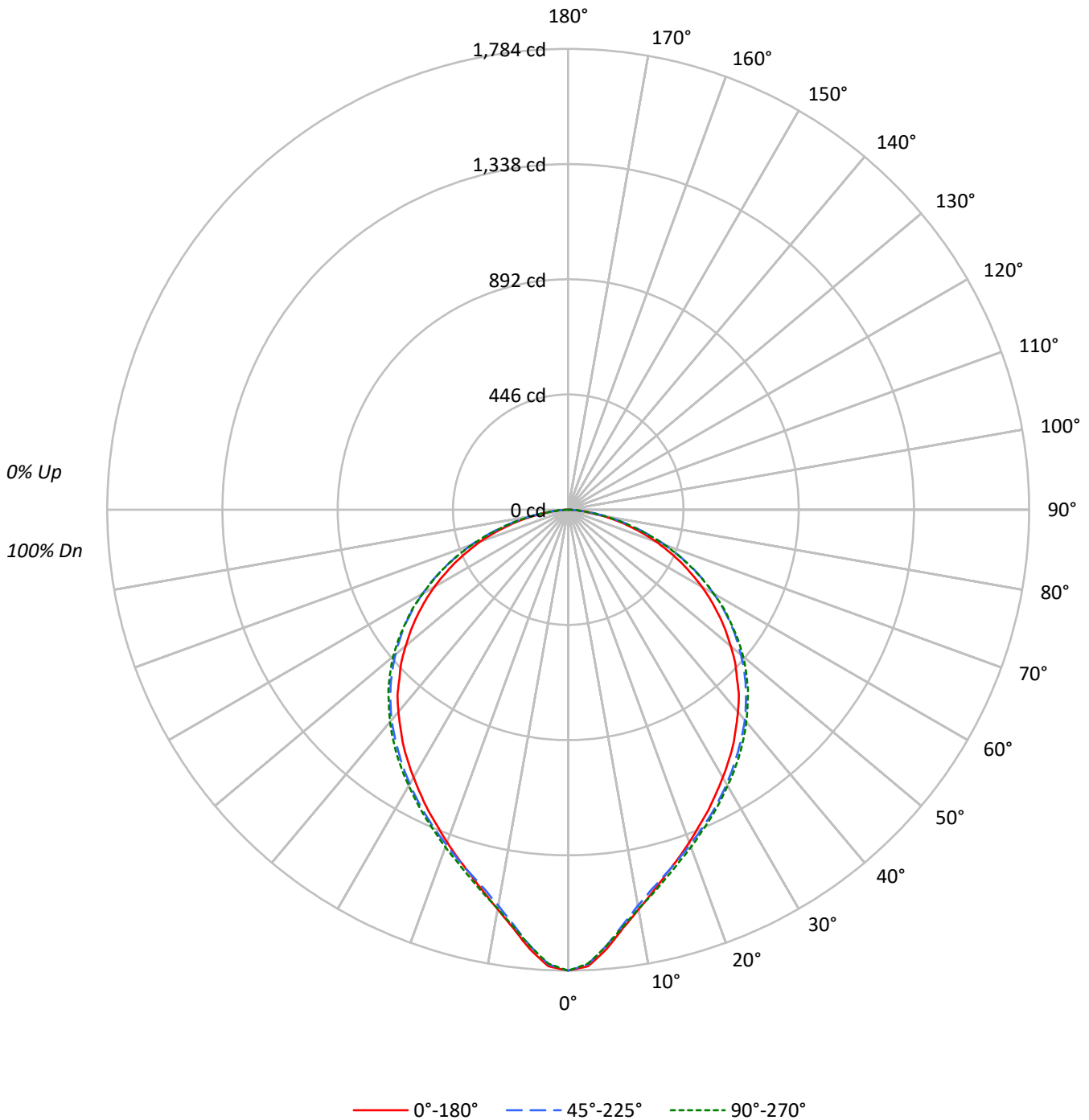
Lumens per Lamp: N/A  
Luminaire Lumens: 4144.8 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P489808

CATALOG NUMBER: CLM-24-4-INS-P12125-LD4-2LO-35-120-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P489808

CATALOG NUMBER: CLM-24-4-INS-P12125-LD4-2LO-35-120-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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°	2401	2401	2401
5°	2305	2289	2289
10°	2146	2126	2142
15°	2036	2032	2052
20°	1961	1975	1991
25°	1905	1936	1947
30°	1859	1905	1917
35°	1827	1881	1900
40°	1795	1868	1883
45°	1758	1850	1872
50°	1719	1827	1851
55°	1671	1800	1807
60°	1611	1750	1747
65°	1527	1684	1672
70°	1426	1570	1551
75°	1259	1391	1377
80°	1023	1134	1078
85°	709	722	695



TEST NUMBER: P489808

CATALOG NUMBER: CLM-24-4-INS-P12125-LD4-2LO-35-120-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	3.8
10°-20°	413.0	10.0
20°-30°	600.6	14.5
30°-40°	714.7	17.2
40°-50°	742.1	17.9
50°-60°	672.3	16.2
60°-70°	507.3	12.2
70°-80°	276.4	6.7
80°-90°	60.7	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°	1171.3	28.3
0°-40°	1885.9	45.5
0°-60°	3300.3	79.6
0°-90°	4144.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4144.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1784	1784	1784	1784	1784	
5°	1707	1703	1695	1694	1695	158
15°	1462	1458	1459	1469	1473	413
25°	1283	1294	1304	1315	1312	591
35°	1112	1126	1145	1162	1157	696
45°	924	940	972	983	984	714
55°	712	729	767	773	770	636
65°	480	494	529	528	525	474
75°	242	252	268	269	265	258
85°	46	46	47	46	45	58
90°	0	0	0	0	0	



TEST NUMBER: P489808

CATALOG NUMBER: CLM-24-4-INS-P12125-LD4-2LO-35-120-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	<i>1784.4</i>	<i>1784.4</i>	<i>1784.4</i>	<i>1784.4</i>	<i>1784.4</i>
2.5°	<i>1768.8</i>	1767.0	1761.2	1759.0	1758.5
5°	<i>1706.8</i>	1702.8	1694.8	1693.9	1694.8
7.5°	<i>1632.8</i>	1628.3	1620.3	1623.4	1627.5
10°	<i>1570.4</i>	1559.2	1556.1	1560.6	1568.1
12.5°	<i>1514.6</i>	1505.7	1503.0	1514.6	1520.0
15°	<i>1461.6</i>	1458.0	1458.9	1468.7	1473.2
17.5°	<i>1415.7</i>	1413.4	1419.2	1426.8	1429.0
20°	<i>1369.7</i>	1374.2	1379.5	1387.6	1390.2
22.5°	<i>1324.7</i>	1333.2	1342.1	1352.8	1349.2
25°	<i>1283.2</i>	1293.9	1304.2	1314.9	1311.8
27.5°	<i>1239.1</i>	1251.6	1265.8	1277.4	1273.0
30°	<i>1196.7</i>	1212.3	1226.2	1240.4	1233.7
32.5°	<i>1154.8</i>	1169.5	1186.0	1203.4	1195.8
35°	<i>1112.5</i>	1125.8	1145.0	1162.4	1156.6
37.5°	<i>1065.7</i>	1082.1	1104.0	1119.1	1115.2
40°	<i>1022.0</i>	1037.1	1063.4	1073.2	1072.3
42.5°	<i>977.8</i>	990.3	1017.9	1029.1	1027.3
45°	<i>923.9</i>	940.4	972.0	982.7	983.6
47.5°	<i>876.2</i>	890.0	923.9	932.3	934.1
50°	<i>821.3</i>	838.7	872.6	882.8	884.2
52.5°	<i>767.3</i>	786.1	820.9	828.0	829.3
55°	<i>712.5</i>	729.4	767.3	772.7	770.5
57.5°	<i>655.0</i>	675.5	710.3	712.9	715.2
60°	<i>598.8</i>	616.6	650.5	654.1	649.2
62.5°	<i>537.7</i>	556.0	590.8	591.7	587.7
65°	<i>479.7</i>	493.6	528.8	527.9	525.2
67.5°	<i>419.1</i>	436.0	461.9	462.8	460.6
70°	<i>362.5</i>	374.1	399.1	399.5	394.2
72.5°	<i>301.4</i>	313.9	333.9	331.3	330.0
75°	<i>242.1</i>	251.9	267.5	269.3	264.9
77.5°	<i>187.7</i>	194.8	206.4	205.1	200.2
80°	<i>132.0</i>	137.8	146.3	144.5	139.1
82.5°	<i>84.3</i>	87.9	93.2	91.0	88.7
85°	<i>45.9</i>	46.4	46.8	46.4	45.0
87.5°	<i>16.9</i>	17.4	17.4	16.9	15.6
90°	<i>0.0</i>	0.0	0.0	0.0	0.0

(END OF REPORT)