

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: P489014

Luminaire Tested: **CLM-24-2-INS-A12125-LD4-5LO-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: P489014  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)  
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-A12125-LD4-5LO-30-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH A12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

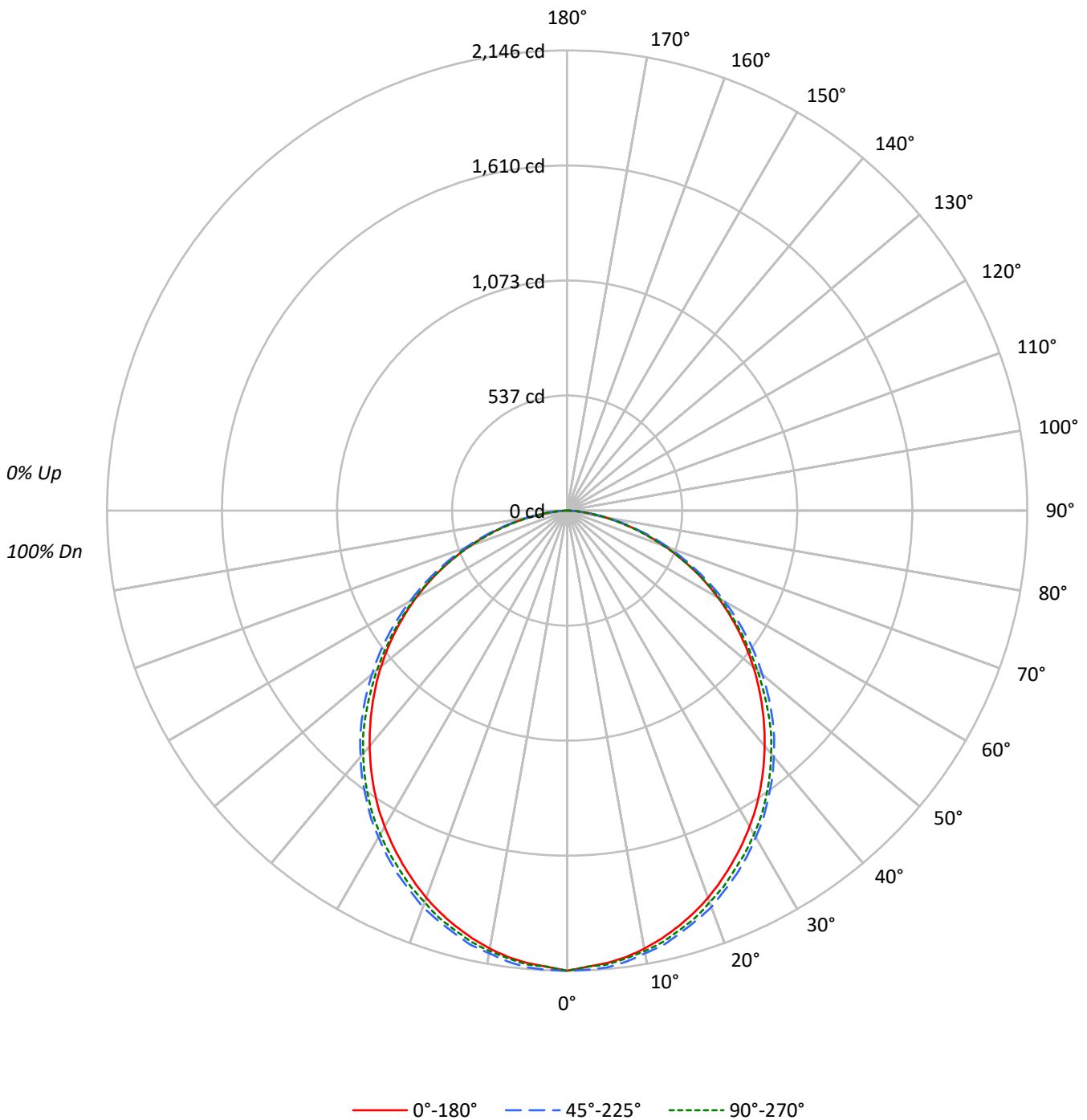
Lumens per Lamp: N/A  
Luminaire Lumens: 5642.7 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 58.5  
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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5776	5776	5776
5°	5722	5776	5740
10°	5670	5727	5700
15°	5591	5682	5642
20°	5503	5634	5566
25°	5396	5553	5489
30°	5287	5466	5416
35°	5168	5373	5323
40°	5034	5265	5199
45°	4893	5139	5042
50°	4745	4975	4845
55°	4573	4787	4640
60°	4378	4560	4419
65°	4126	4285	4129
70°	3797	3950	3755
75°	3344	3494	3292
80°	2717	2834	2686
85°	1893	2016	1967



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.1	3.6
10°-20°	572.8	10.2
20°-30°	854.3	15.1
30°-40°	1012.4	17.9
40°-50°	1024.4	18.2
50°-60°	894.6	15.9
60°-70°	653.8	11.6
70°-80°	347.8	6.2
80°-90°	80.4	1.4
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°	1629.3	28.9
0°-40°	2641.6	46.8
0°-60°	4560.7	80.8
0°-90°	5642.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5642.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2146	2146	2146	2146	2146	
5°	2118	2122	2138	2143	2125	201
15°	2007	2020	2039	2052	2025	566
25°	1817	1840	1870	1877	1849	837
35°	1573	1598	1636	1647	1620	984
45°	1286	1308	1350	1352	1325	992
55°	975	994	1020	1006	989	871
65°	648	661	673	659	648	641
75°	322	329	336	324	317	342
85°	61	62	65	66	64	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2146.3	2146.3	2146.3	2146.3	2146.3
2.5°	2129.5	2136.4	2143.6	2146.7	2129.3
5°	2118.3	2122.4	2138.2	2143.2	2125.0
7.5°	2100.0	2106.0	2121.5	2123.7	2106.3
10°	2074.9	2085.7	2096.0	2107.1	2085.9
12.5°	2043.0	2057.5	2074.9	2077.0	2060.9
15°	2007.0	2020.4	2039.4	2051.7	2025.1
17.5°	1966.7	1979.7	2004.3	2006.5	1990.4
20°	1921.8	1937.9	1967.4	1972.5	1943.7
22.5°	1870.8	1892.5	1917.1	1922.0	1900.8
25°	1817.3	1839.7	1870.1	1877.0	1848.6
27.5°	1761.4	1782.9	1817.1	1822.0	1798.1
30°	1701.5	1721.6	1759.2	1767.5	1743.1
32.5°	1640.7	1660.8	1702.4	1709.3	1685.6
35°	1573.2	1597.7	1635.5	1646.9	1620.3
37.5°	1504.3	1528.2	1571.1	1581.4	1552.8
40°	1432.9	1456.6	1498.9	1507.4	1479.9
42.5°	1360.0	1383.7	1428.9	1430.3	1407.4
45°	1285.6	1308.4	1350.4	1351.5	1324.9
47.5°	1210.0	1233.0	1270.6	1266.3	1241.3
50°	1133.5	1155.4	1188.3	1179.8	1157.2
52.5°	1054.4	1075.6	1106.7	1092.8	1071.6
55°	974.7	994.4	1020.4	1005.6	989.1
57.5°	894.5	914.4	934.3	919.3	905.0
60°	813.5	831.0	847.3	832.1	821.1
62.5°	731.2	746.2	760.3	745.8	735.5
65°	648.0	661.2	672.9	659.4	648.5
67.5°	565.3	576.5	587.2	573.4	562.0
70°	482.6	492.2	502.0	487.7	477.2
72.5°	400.9	409.4	418.2	404.3	395.1
75°	321.6	328.9	336.1	323.8	316.6
77.5°	245.8	252.0	256.9	249.1	242.2
80°	175.3	180.0	182.9	179.8	173.3
82.5°	112.7	116.1	117.6	117.4	113.2
85°	61.3	62.4	65.3	66.0	63.7
87.5°	23.7	25.3	25.9	28.0	25.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)