

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: P489012

Luminaire Tested: **CLM-24-2-INS-A12125-LD4-5LO-27-120-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: P489012  
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-27-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH A12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

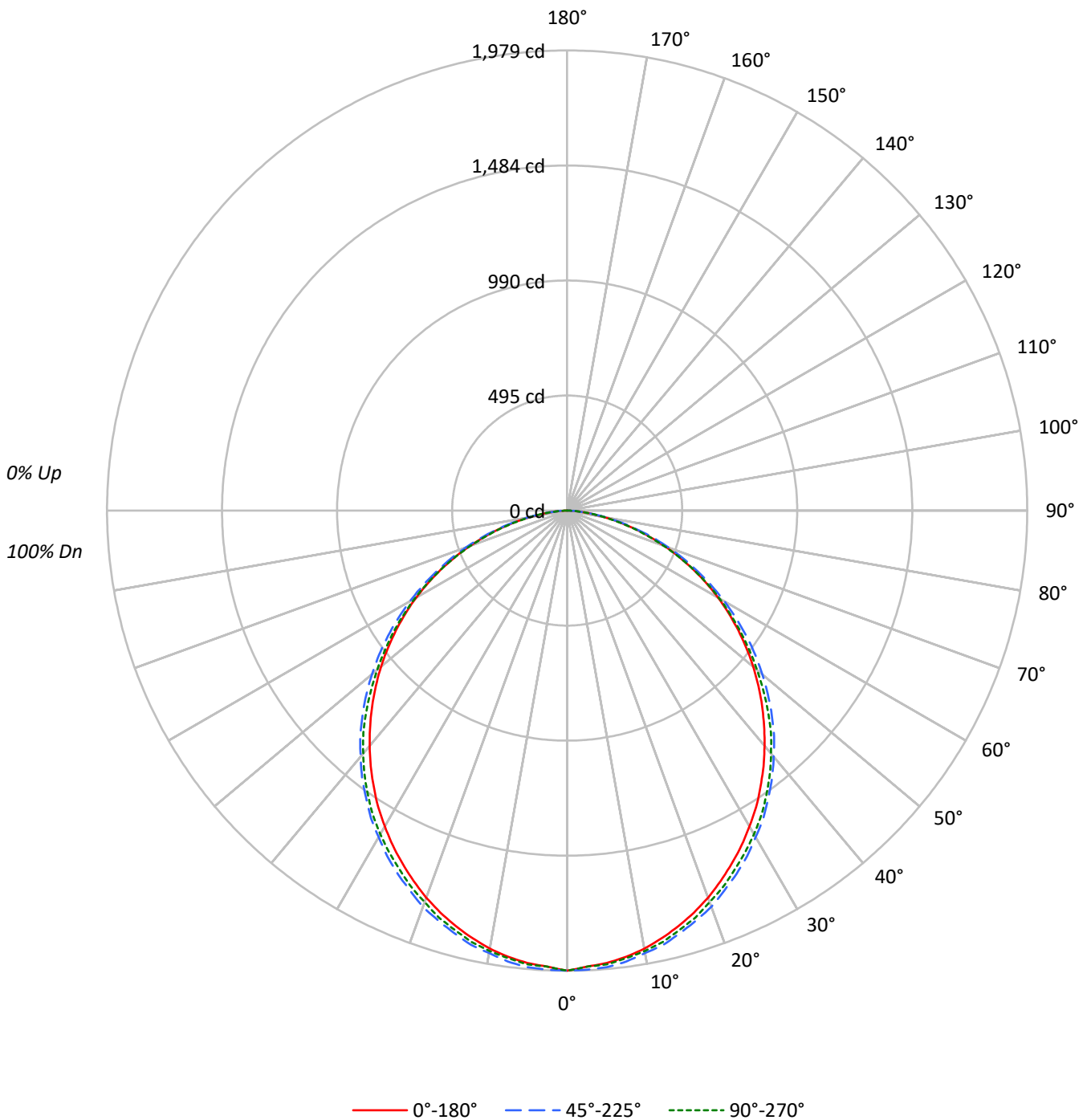
Lumens per Lamp: N/A  
Luminaire Lumens: 5201.9 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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°	5324	5324	5324
5°	5275	5325	5292
10°	5227	5280	5255
15°	5154	5238	5201
20°	5073	5194	5131
25°	4975	5119	5060
30°	4874	5039	4993
35°	4764	4953	4907
40°	4640	4854	4793
45°	4510	4738	4648
50°	4375	4586	4466
55°	4216	4413	4278
60°	4036	4204	4074
65°	3804	3950	3806
70°	3500	3641	3461
75°	3082	3221	3035
80°	2504	2613	2476
85°	1744	1859	1815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.3	3.6
10°-20°	528.1	10.2
20°-30°	787.6	15.1
30°-40°	933.3	17.9
40°-50°	944.4	18.2
50°-60°	824.8	15.9
60°-70°	602.7	11.6
70°-80°	320.7	6.2
80°-90°	74.1	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°	1502.0	28.9
0°-40°	2435.3	46.8
0°-60°	4204.4	80.8
0°-90°	5201.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5201.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1979	1979	1979	1979	1979	
5°	1953	1957	1971	1976	1959	185
15°	1850	1863	1880	1891	1867	522
25°	1675	1696	1724	1730	1704	772
35°	1450	1473	1508	1518	1494	907
45°	1185	1206	1245	1246	1221	914
55°	899	917	941	927	912	803
65°	597	610	620	608	598	591
75°	296	303	310	298	292	315
85°	56	58	60	61	59	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1978.6	1978.6	1978.6	1978.6	1978.6
2.5°	1963.2	1969.5	1976.1	1979.0	1963.0
5°	1952.8	1956.6	1971.2	1975.7	1959.0
7.5°	1935.9	1941.5	1955.7	1957.8	1941.7
10°	1912.9	1922.8	1932.2	1942.5	1923.0
12.5°	1883.4	1896.8	1912.9	1914.7	1899.9
15°	1850.2	1862.6	1880.1	1891.4	1866.9
17.5°	1813.1	1825.0	1847.7	1849.8	1834.9
20°	1771.6	1786.5	1813.7	1818.4	1791.8
22.5°	1724.6	1744.6	1767.3	1771.9	1752.3
25°	1675.4	1696.0	1724.0	1730.4	1704.2
27.5°	1623.8	1643.6	1675.2	1679.7	1657.6
30°	1568.6	1587.1	1621.8	1629.4	1606.9
32.5°	1512.5	1531.1	1569.4	1575.8	1554.0
35°	1450.3	1472.9	1507.8	1518.3	1493.8
37.5°	1386.8	1408.8	1448.4	1457.9	1431.5
40°	1321.0	1342.9	1381.8	1389.7	1364.3
42.5°	1253.8	1275.6	1317.3	1318.5	1297.5
45°	1185.2	1206.2	1244.9	1246.0	1221.4
47.5°	1115.5	1136.7	1171.3	1167.4	1144.3
50°	1045.0	1065.2	1095.5	1087.6	1066.8
52.5°	972.0	991.6	1020.2	1007.4	987.9
55°	898.6	916.7	940.7	927.1	911.8
57.5°	824.6	842.9	861.3	847.5	834.3
60°	750.0	766.0	781.1	767.1	757.0
62.5°	674.1	687.9	700.9	687.5	678.0
65°	597.4	609.6	620.3	607.9	597.8
67.5°	521.1	531.5	541.3	528.6	518.1
70°	444.9	453.7	462.8	449.6	439.9
72.5°	369.6	377.5	385.5	372.7	364.3
75°	296.4	303.2	309.8	298.5	291.9
77.5°	226.6	232.3	236.9	229.6	223.3
80°	161.6	165.9	168.6	165.7	159.8
82.5°	103.9	107.0	108.4	108.2	104.3
85°	56.5	57.5	60.2	60.8	58.8
87.5°	21.9	23.3	23.9	25.8	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)