

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: P489010

Luminaire Tested: **CLM-24-2-INS-A12125-LD4-5LO-20-120-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: P489010  
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-20-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH A12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

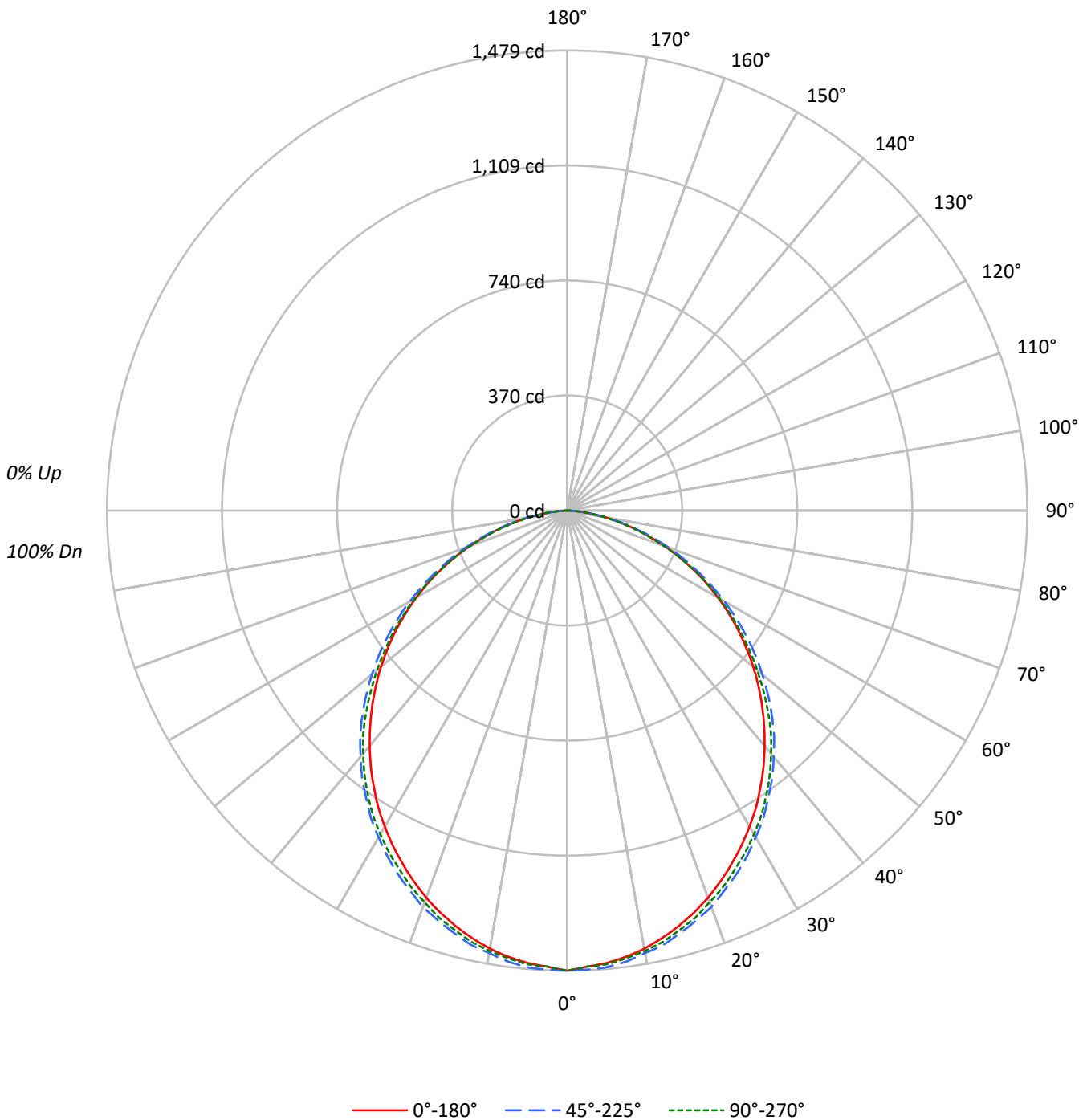
Lumens per Lamp: N/A  
Luminaire Lumens: 3888.3 lumens  
Efficiency: N/A  
Efficacy: 66.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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°	3980	3980	3980
5°	3943	3980	3955
10°	3907	3947	3928
15°	3853	3915	3888
20°	3792	3882	3836
25°	3718	3826	3782
30°	3643	3767	3732
35°	3561	3702	3668
40°	3469	3628	3582
45°	3371	3542	3475
50°	3270	3428	3338
55°	3151	3299	3197
60°	3017	3143	3045
65°	2844	2953	2846
70°	2616	2722	2587
75°	2304	2408	2269
80°	1872	1953	1850
85°	1303	1389	1355



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.3	3.6
10°-20°	394.7	10.2
20°-30°	588.7	15.1
30°-40°	697.6	17.9
40°-50°	705.9	18.2
50°-60°	616.5	15.9
60°-70°	450.5	11.6
70°-80°	239.7	6.2
80°-90°	55.4	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°	1122.7	28.9
0°-40°	1820.3	46.8
0°-60°	3142.7	80.8
0°-90°	3888.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3888.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1460	1462	1473	1477	1464	138
15°	1383	1392	1405	1414	1396	390
25°	1252	1268	1289	1293	1274	577
35°	1084	1101	1127	1135	1116	678
45°	886	902	931	931	913	683
55°	672	685	703	693	682	600
65°	447	456	464	454	447	442
75°	222	227	232	223	218	236
85°	42	43	45	46	44	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1479.0	1479.0	1479.0	1479.0	1479.0
2.5°	1467.4	1472.2	1477.1	1479.3	1467.3
5°	1459.7	1462.5	1473.4	1476.8	1464.3
7.5°	1447.1	1451.2	1461.9	1463.4	1451.4
10°	1429.8	1437.2	1444.3	1452.0	1437.4
12.5°	1407.8	1417.8	1429.8	1431.2	1420.1
15°	1383.0	1392.2	1405.3	1413.8	1395.5
17.5°	1355.2	1364.2	1381.1	1382.7	1371.6
20°	1324.3	1335.4	1355.7	1359.2	1339.4
22.5°	1289.1	1304.1	1321.0	1324.4	1309.8
25°	1252.3	1267.7	1288.7	1293.4	1273.9
27.5°	1213.8	1228.6	1252.1	1255.5	1239.1
30°	1172.5	1186.4	1212.2	1217.9	1201.1
32.5°	1130.6	1144.4	1173.1	1177.9	1161.5
35°	1084.0	1101.0	1127.0	1134.9	1116.5
37.5°	1036.6	1053.1	1082.6	1089.7	1070.0
40°	987.4	1003.8	1032.9	1038.7	1019.8
42.5°	937.2	953.5	984.6	985.6	969.9
45°	885.9	901.6	930.6	931.3	913.0
47.5°	833.8	849.7	875.5	872.6	855.4
50°	781.1	796.2	818.8	813.0	797.4
52.5°	726.5	741.2	762.6	753.0	738.4
55°	671.7	685.2	703.1	692.9	681.5
57.5°	616.4	630.1	643.8	633.5	623.6
60°	560.6	572.6	583.9	573.4	565.8
62.5°	503.9	514.2	523.9	513.9	506.8
65°	446.6	455.6	463.7	454.4	446.9
67.5°	389.5	397.2	404.6	395.1	387.2
70°	332.5	339.2	345.9	336.1	328.8
72.5°	276.3	282.1	288.2	278.6	272.3
75°	221.6	226.7	231.6	223.1	218.2
77.5°	169.3	173.7	177.1	171.7	166.9
80°	120.8	124.0	126.0	123.9	119.4
82.5°	77.7	80.0	81.1	80.9	78.0
85°	42.2	43.0	45.0	45.5	43.9
87.5°	16.3	17.4	17.9	19.3	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)