

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: P488582

Luminaire Tested: **CLM-12-4-INS-A12125-LD4-2LO-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: P488582  
 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-12-4-INS-A12125-LD4-2LO-30-120-EDD-90  
 Description: 1X4 CLM LED LUMINAIRE WITH A12125 LENS  
 Light Source: -  
 Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

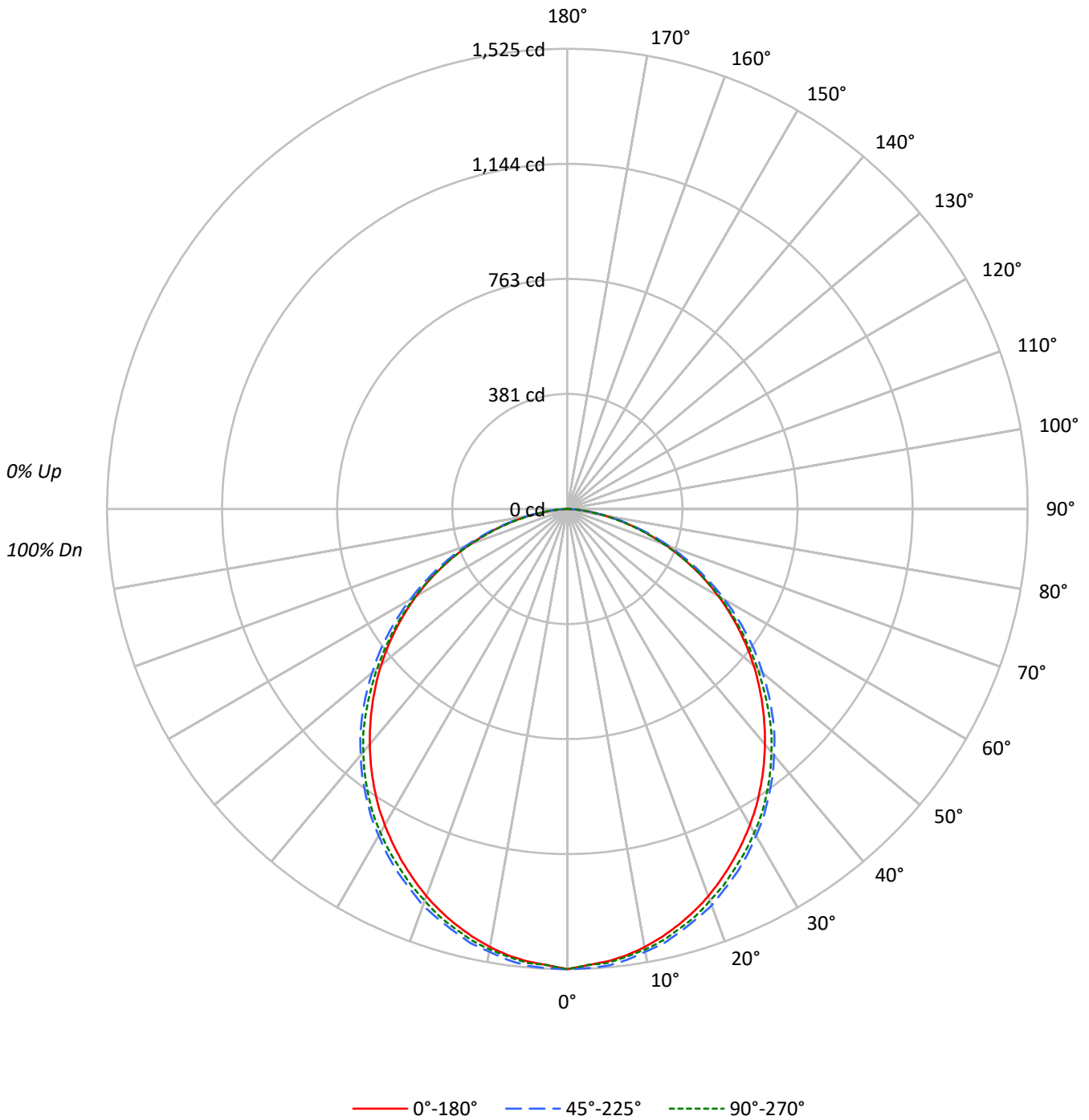
Lumens per Lamp: N/A  
 Luminaire Lumens: 4009.9 lumens  
 Efficiency: N/A  
 Efficacy: 85.7 lumens/watt  
 Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
 Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
 CIE Type: Direct  
  
 Input Watts (W): 46.8  
 Input Voltage (V): NR  
 Input Current (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



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20					
RC	80				70				50				30					
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	4104	4104	4104
5°	4066	4105	4079
10°	4029	4070	4050
15°	3973	4038	4009
20°	3911	4004	3956
25°	3835	3946	3901
30°	3757	3884	3849
35°	3672	3818	3783
40°	3577	3742	3694
45°	3477	3652	3583
50°	3372	3535	3443
55°	3250	3402	3298
60°	3111	3240	3140
65°	2932	3045	2934
70°	2698	2807	2668
75°	2376	2483	2339
80°	1931	2015	1909
85°	1343	1433	1399



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.6	3.6
10°-20°	407.1	10.2
20°-30°	607.1	15.1
30°-40°	719.4	17.9
40°-50°	728.0	18.2
50°-60°	635.8	15.9
60°-70°	464.6	11.6
70°-80°	247.2	6.2
80°-90°	57.1	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
<b>0°-30°</b>	<b>1157.8</b>	<b>28.9</b>
<b>0°-40°</b>	<b>1877.3</b>	<b>46.8</b>
<b>0°-60°</b>	<b>3241.0</b>	<b>80.8</b>
<b>0°-90°</b>	<b>4009.9</b>	<b>100.0</b>
90°-120°	0.0	0.0
90°-150°	0.0	0.0
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>
<b>0°-180°</b>	<b>4009.9</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1505	1508	1520	1523	1510	143
15°	1426	1436	1449	1458	1439	402
25°	1292	1307	1329	1334	1314	595
35°	1118	1135	1162	1170	1152	699
45°	914	930	960	960	942	705
55°	693	707	725	715	703	619
65°	460	470	478	469	461	456
75°	228	234	239	230	225	243
85°	44	44	46	47	45	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1525.2	1525.2	1525.2	<i>1525.2</i>	1525.2
2.5°	<i>1513.3</i>	<i>1518.2</i>	<i>1523.3</i>	<i>1525.5</i>	<i>1513.1</i>
5°	1505.4	1508.2	1519.5	<i>1523.0</i>	1510.1
7.5°	1492.3	1496.6	1507.6	<i>1509.2</i>	1496.8
10°	1474.5	1482.2	1489.5	<i>1497.4</i>	1482.3
12.5°	1451.8	1462.1	1474.5	<i>1476.0</i>	1464.5
15°	1426.2	1435.8	1449.3	<i>1458.0</i>	1439.1
17.5°	1397.6	1406.8	1424.3	<i>1425.9</i>	1414.5
20°	1365.7	1377.1	1398.1	<i>1401.7</i>	1381.3
22.5°	1329.4	1344.9	1362.3	<i>1365.8</i>	1350.7
25°	1291.5	1307.4	1329.0	<i>1333.9</i>	1313.7
27.5°	1251.7	1267.0	1291.3	<i>1294.8</i>	1277.8
30°	1209.2	1223.5	1250.1	<i>1256.0</i>	1238.7
32.5°	1165.9	1180.2	1209.8	<i>1214.7</i>	1197.9
35°	1117.9	1135.4	1162.3	<i>1170.4</i>	1151.5
37.5°	1069.0	1086.0	1116.5	<i>1123.8</i>	1103.5
40°	1018.3	1035.1	1065.2	<i>1071.2</i>	1051.7
42.5°	966.5	983.3	1015.4	<i>1016.4</i>	1000.2
45°	913.6	929.8	959.7	<i>960.5</i>	941.5
47.5°	859.9	876.2	902.9	<i>899.9</i>	882.1
50°	805.5	821.1	844.5	<i>838.4</i>	822.4
52.5°	749.3	764.4	786.4	<i>776.6</i>	761.5
55°	692.7	706.7	725.1	<i>714.6</i>	702.9
57.5°	635.6	649.8	663.9	<i>653.3</i>	643.1
60°	578.1	590.5	602.1	<i>591.3</i>	583.5
62.5°	519.6	530.3	540.3	<i>530.0</i>	522.7
65°	460.5	469.9	478.2	<i>468.6</i>	460.8
67.5°	401.7	409.7	417.3	<i>407.4</i>	399.3
70°	342.9	349.8	356.8	<i>346.6</i>	339.1
72.5°	284.9	291.0	297.2	<i>287.3</i>	280.8
75°	228.5	233.8	238.8	<i>230.1</i>	225.0
77.5°	174.6	179.1	182.6	<i>177.0</i>	172.1
80°	124.6	127.9	130.0	<i>127.8</i>	123.2
82.5°	80.1	82.5	83.6	<i>83.4</i>	80.4
85°	43.5	44.3	46.4	<i>46.9</i>	45.3
87.5°	16.8	18.0	18.4	<i>19.9</i>	18.3
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)