

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: P489337

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-4LO-27-120-EDD**

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: P489337  
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-24-2-INS-P12125-LD4-4LO-27-120-EDD  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

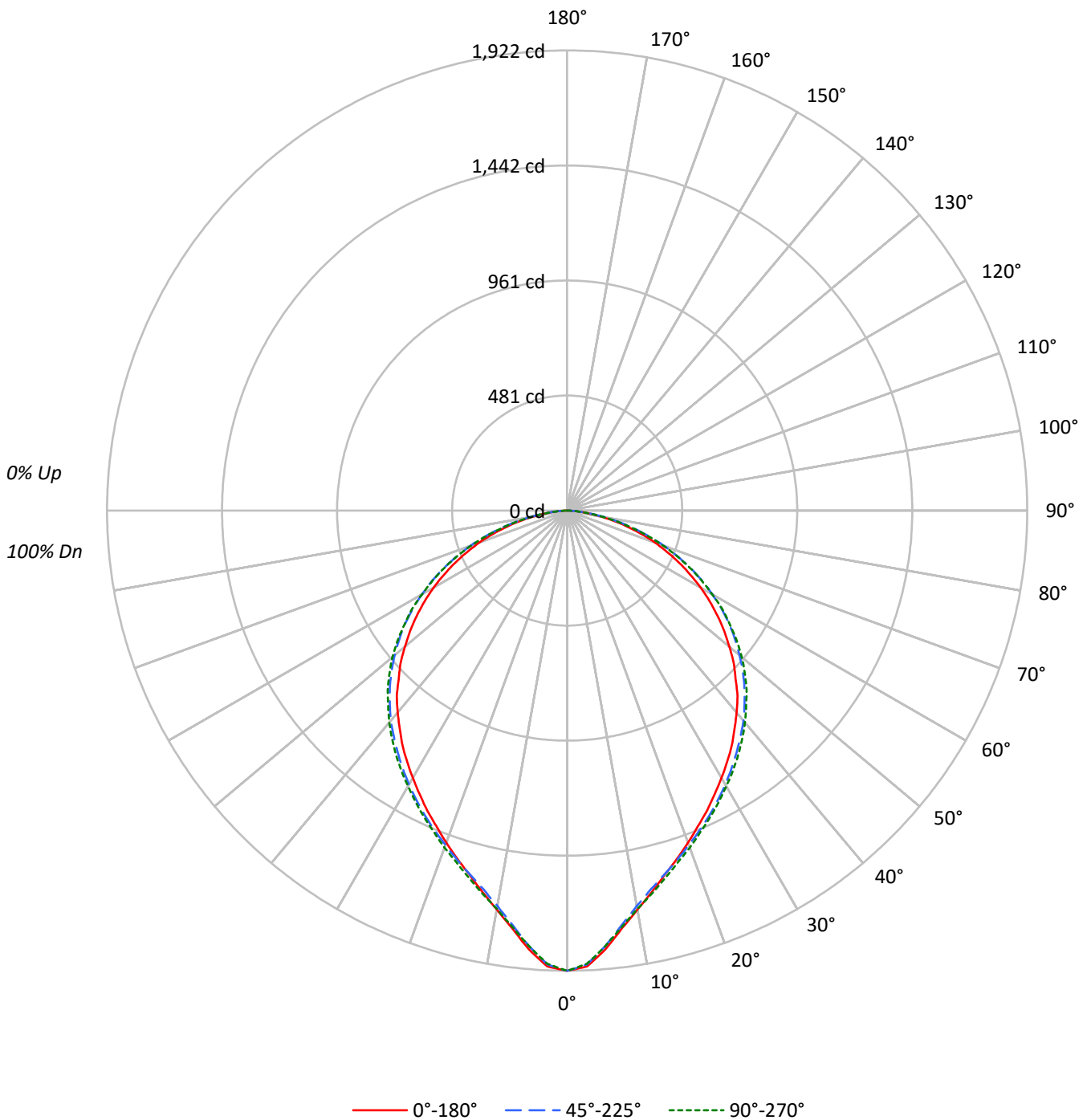
Lumens per Lamp: N/A  
Luminaire Lumens: 4465.4 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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				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°	5173	5173	5173
5°	4967	4932	4932
10°	4623	4581	4616
15°	4387	4379	4422
20°	4226	4256	4289
25°	4105	4172	4196
30°	4006	4105	4130
35°	3937	4052	4094
40°	3868	4025	4058
45°	3788	3985	4033
50°	3704	3936	3988
55°	3601	3879	3894
60°	3472	3772	3764
65°	3291	3628	3603
70°	3072	3382	3341
75°	2712	2996	2966
80°	2204	2442	2323
85°	1528	1556	1497



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.9	3.8
10°-20°	445.0	10.0
20°-30°	647.0	14.5
30°-40°	770.0	17.2
40°-50°	799.5	17.9
50°-60°	724.3	16.2
60°-70°	546.6	12.2
70°-80°	297.8	6.7
80°-90°	65.4	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°	1261.9	28.3
0°-40°	2031.8	45.5
0°-60°	3555.6	79.6
0°-90°	4465.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4465.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1922	1922	1922	1922	1922	
5°	1839	1834	1826	1825	1826	171
15°	1575	1571	1572	1582	1587	444
25°	1382	1394	1405	1417	1413	637
35°	1198	1213	1234	1252	1246	749
45°	995	1013	1047	1059	1060	769
55°	768	786	827	832	830	685
65°	517	532	570	569	566	511
75°	261	271	288	290	285	278
85°	50	50	50	50	48	62
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1922.4	1922.4	1922.4	1922.4	1922.4
2.5°	1905.6	1903.7	1897.4	1895.0	1894.5
5°	1838.8	1834.5	1825.9	1824.9	1825.9
7.5°	1759.1	1754.3	1745.7	1749.0	1753.3
10°	1691.8	1679.8	1676.5	1681.3	1689.4
12.5°	1631.8	1622.2	1619.3	1631.8	1637.6
15°	1574.6	1570.8	1571.8	1582.3	1587.1
17.5°	1525.2	1522.8	1529.0	1537.2	1539.6
20°	1475.7	1480.5	1486.3	1494.9	1497.8
22.5°	1427.2	1436.3	1445.9	1457.4	1453.6
25°	1382.5	1394.0	1405.1	1416.6	1413.2
27.5°	1334.9	1348.4	1363.8	1376.3	1371.4
30°	1289.3	1306.1	1321.0	1336.4	1329.2
32.5°	1244.2	1260.0	1277.8	1296.5	1288.3
35°	1198.5	1212.9	1233.6	1252.3	1246.1
37.5°	1148.1	1165.8	1189.4	1205.7	1201.4
40°	1101.0	1117.3	1145.7	1156.2	1155.3
42.5°	1053.4	1066.9	1096.7	1108.7	1106.8
45°	995.3	1013.1	1047.2	1058.7	1059.7
47.5°	943.9	958.8	995.3	1004.4	1006.4
50°	884.8	903.6	940.1	951.1	952.6
52.5°	826.7	846.9	884.3	892.0	893.5
55°	767.6	785.9	826.7	832.5	830.1
57.5°	705.7	727.8	765.2	768.1	770.5
60°	645.1	664.3	700.8	704.7	699.4
62.5°	579.3	599.0	636.5	637.4	633.1
65°	516.9	531.8	569.7	568.8	565.9
67.5°	451.5	469.8	497.7	498.6	496.2
70°	390.5	403.0	429.9	430.4	424.7
72.5°	324.7	338.2	359.8	356.9	355.5
75°	260.8	271.4	288.2	290.2	285.3
77.5°	202.2	209.9	222.4	221.0	215.7
80°	142.2	148.4	157.6	155.7	149.9
82.5°	90.8	94.6	100.4	98.0	95.6
85°	49.5	49.9	50.4	49.9	48.5
87.5°	18.3	18.7	18.7	18.3	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)