

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: P489224

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-1HI-50-120-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: P489224  
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-LD4-1HI-50-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

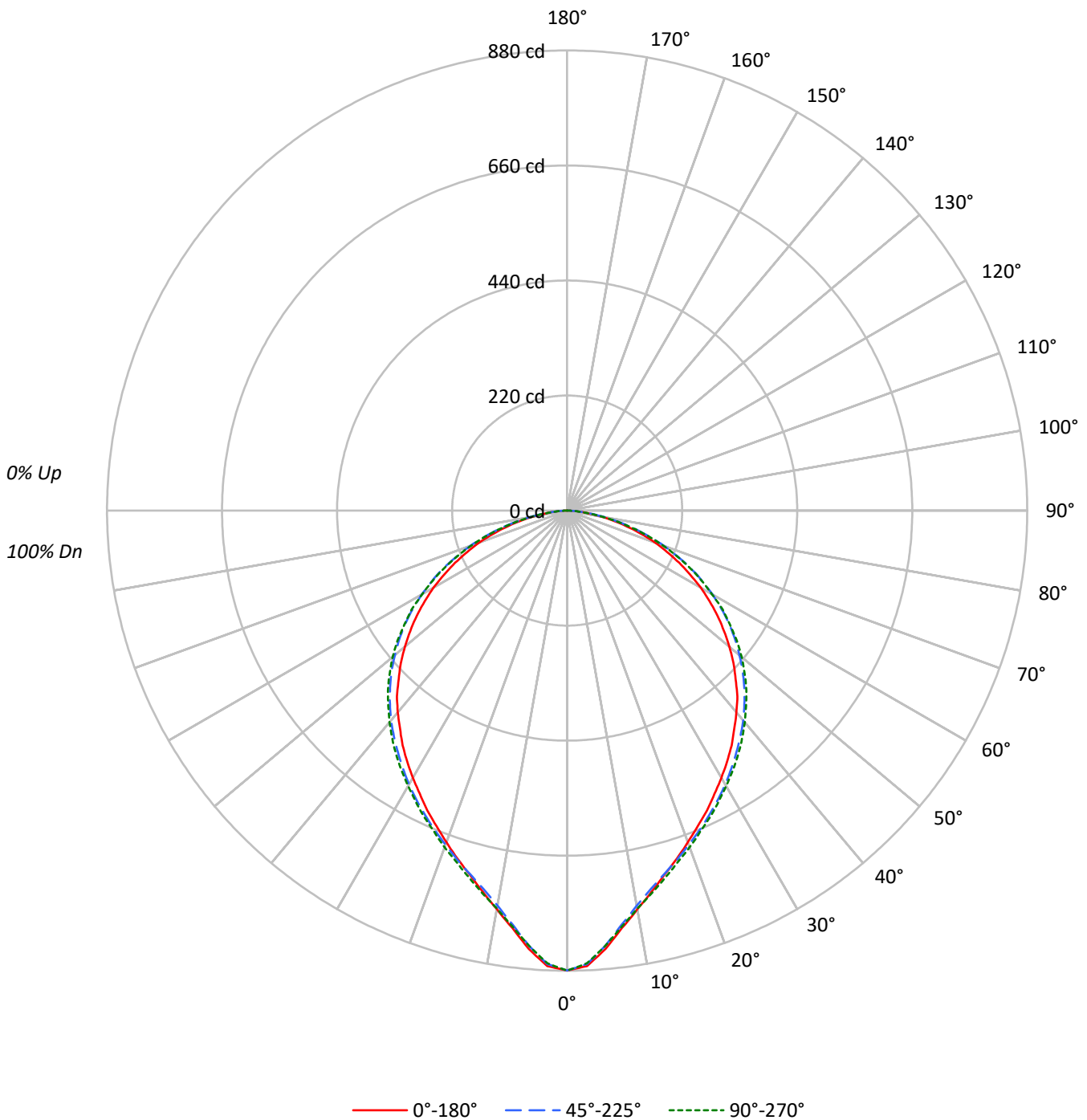
Lumens per Lamp: N/A  
Luminaire Lumens: 2042.9 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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°	2367	2367	2367
5°	2273	2256	2256
10°	2115	2096	2112
15°	2007	2003	2023
20°	1933	1947	1962
25°	1878	1909	1920
30°	1833	1878	1890
35°	1801	1854	1873
40°	1769	1841	1857
45°	1733	1823	1845
50°	1695	1801	1824
55°	1648	1774	1782
60°	1588	1725	1722
65°	1506	1659	1649
70°	1406	1548	1529
75°	1240	1371	1357
80°	1007	1117	1063
85°	698	713	685



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	3.8
10°-20°	203.6	10.0
20°-30°	296.0	14.5
30°-40°	352.3	17.2
40°-50°	365.8	17.9
50°-60°	331.4	16.2
60°-70°	250.0	12.2
70°-80°	136.2	6.7
80°-90°	29.9	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°	577.3	28.3
0°-40°	929.6	45.5
0°-60°	1626.7	79.6
0°-90°	2042.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2042.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	841	839	835	835	835	78
15°	720	719	719	724	726	203
25°	632	638	643	648	647	291
35°	548	555	564	573	570	343
45°	455	464	479	484	485	352
55°	351	360	378	381	380	314
65°	236	243	261	260	259	234
75°	119	124	132	133	130	127
85°	23	23	23	23	22	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	879.5	879.5	879.5	879.5	879.5
2.5°	871.8	870.9	868.1	867.0	866.7
5°	841.3	839.3	835.3	834.9	835.3
7.5°	804.8	802.6	798.6	800.2	802.1
10°	774.0	768.5	767.0	769.2	772.9
12.5°	746.5	742.1	740.8	746.5	749.2
15°	720.4	718.6	719.1	723.9	726.1
17.5°	697.8	696.7	699.5	703.2	704.4
20°	675.1	677.3	680.0	683.9	685.2
22.5°	652.9	657.1	661.5	666.8	665.0
25°	632.5	637.8	642.8	648.1	646.6
27.5°	610.7	616.9	623.9	629.6	627.4
30°	589.8	597.5	604.4	611.4	608.1
32.5°	569.2	576.4	584.6	593.1	589.4
35°	548.3	554.9	564.4	572.9	570.1
37.5°	525.2	533.4	544.1	551.6	549.6
40°	503.7	511.2	524.1	529.0	528.5
42.5°	481.9	488.1	501.7	507.2	506.3
45°	455.4	463.5	479.1	484.4	484.8
47.5°	431.8	438.7	455.4	459.5	460.4
50°	404.8	413.4	430.1	435.1	435.8
52.5°	378.2	387.4	404.6	408.1	408.8
55°	351.2	359.5	378.2	380.9	379.8
57.5°	322.8	332.9	350.1	351.4	352.5
60°	295.1	303.9	320.6	322.4	320.0
62.5°	265.0	274.0	291.2	291.6	289.6
65°	236.5	243.3	260.6	260.2	258.9
67.5°	206.6	214.9	227.7	228.1	227.0
70°	178.7	184.4	196.7	196.9	194.3
72.5°	148.6	154.7	164.6	163.3	162.6
75°	119.3	124.2	131.9	132.7	130.5
77.5°	92.5	96.0	101.8	101.1	98.7
80°	65.0	67.9	72.1	71.2	68.6
82.5°	41.5	43.3	45.9	44.8	43.7
85°	22.6	22.8	23.1	22.8	22.2
87.5°	8.4	8.6	8.6	8.4	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)