

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: P489297

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-3HI-50-120-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: P489297  
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-LD4-3HI-50-120-EDD  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

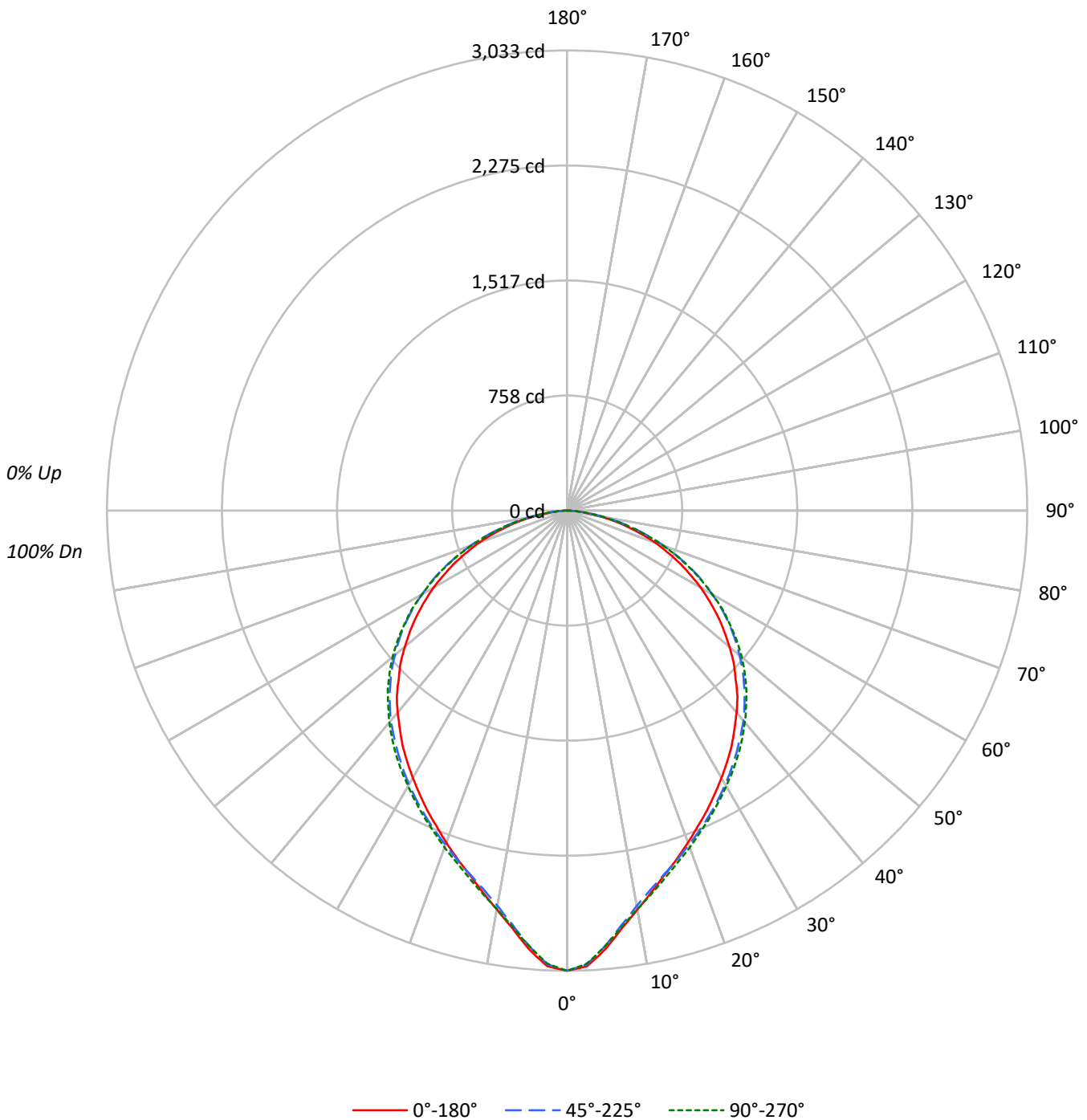
Lumens per Lamp: N/A  
Luminaire Lumens: 7044.5 lumens  
Efficiency: N/A  
Efficacy: 108.7 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	8161	8161	8161
5°	7836	7781	7781
10°	7293	7227	7283
15°	6920	6908	6975
20°	6667	6714	6766
25°	6476	6581	6620
30°	6320	6476	6516
35°	6211	6393	6458
40°	6101	6349	6402
45°	5976	6287	6362
50°	5844	6208	6291
55°	5682	6119	6144
60°	5477	5950	5938
65°	5192	5722	5684
70°	4847	5336	5271
75°	4278	4728	4680
80°	3476	3852	3663
85°	2411	2458	2362



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	268.0	3.8
10°-20°	701.9	10.0
20°-30°	1020.8	14.5
30°-40°	1214.7	17.2
40°-50°	1261.3	17.9
50°-60°	1142.6	16.2
60°-70°	862.2	12.2
70°-80°	469.8	6.7
80°-90°	103.2	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°	1990.7	28.3
0°-40°	3205.4	45.5
0°-60°	5609.2	79.6
0°-90°	7044.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7044.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3033	3033	3033	3033	3033	
5°	2901	2894	2880	2879	2880	269
15°	2484	2478	2480	2496	2504	701
25°	2181	2199	2217	2235	2230	1005
35°	1891	1914	1946	1976	1966	1182
45°	1570	1598	1652	1670	1672	1214
55°	1211	1240	1304	1313	1310	1081
65°	815	839	899	897	893	806
75°	412	428	455	458	450	438
85°	78	79	80	79	76	99
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3032.8	3032.8	3032.8	3032.8	3032.8
2.5°	3006.2	3003.2	2993.3	2989.5	2988.8
5°	2900.9	2894.1	2880.4	2878.9	2880.4
7.5°	2775.1	2767.5	2753.9	2759.2	2766.0
10°	2669.0	2650.1	2644.7	2652.3	2665.2
12.5°	2574.3	2559.1	2554.5	2574.3	2583.4
15°	2484.1	2478.0	2479.6	2496.2	2503.8
17.5°	2406.1	2402.3	2412.1	2425.0	2428.8
20°	2328.0	2335.6	2344.7	2358.3	2362.8
22.5°	2251.5	2265.8	2281.0	2299.2	2293.1
25°	2181.0	2199.2	2216.6	2234.8	2229.5
27.5°	2106.0	2127.1	2151.4	2171.1	2163.5
30°	2033.9	2060.5	2084.0	2108.2	2096.9
32.5°	1962.8	1987.7	2015.8	2045.3	2032.5
35°	1890.7	1913.5	1946.1	1975.6	1965.8
37.5°	1811.2	1839.2	1876.3	1902.1	1895.3
40°	1736.9	1762.7	1807.4	1824.1	1822.5
42.5°	1661.9	1683.1	1730.1	1749.0	1746.0
45°	1570.2	1598.2	1652.0	1670.2	1671.7
47.5°	1489.1	1512.6	1570.2	1584.6	1587.6
50°	1395.9	1425.5	1483.0	1500.4	1502.8
52.5°	1304.2	1336.0	1395.1	1407.2	1409.6
55°	1211.0	1239.8	1304.2	1313.3	1309.5
57.5°	1113.2	1148.1	1207.2	1211.7	1215.5
60°	1017.7	1048.0	1105.6	1111.7	1103.4
62.5°	913.9	945.0	1004.1	1005.6	998.8
65°	815.4	838.9	898.7	897.3	892.7
67.5°	712.3	741.1	785.1	786.6	782.8
70°	616.1	635.8	678.2	679.0	669.9
72.5°	512.3	533.5	567.6	563.1	560.8
75°	411.5	428.2	454.7	457.7	450.1
77.5°	319.1	331.2	350.9	348.6	340.2
80°	224.3	234.2	248.6	245.6	236.4
82.5°	143.2	149.3	158.4	154.6	150.8
85°	78.1	78.8	79.6	78.8	76.5
87.5°	28.8	29.6	29.6	28.8	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)