

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: P489288

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-3HI-27-120-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: P489288  
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-27-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

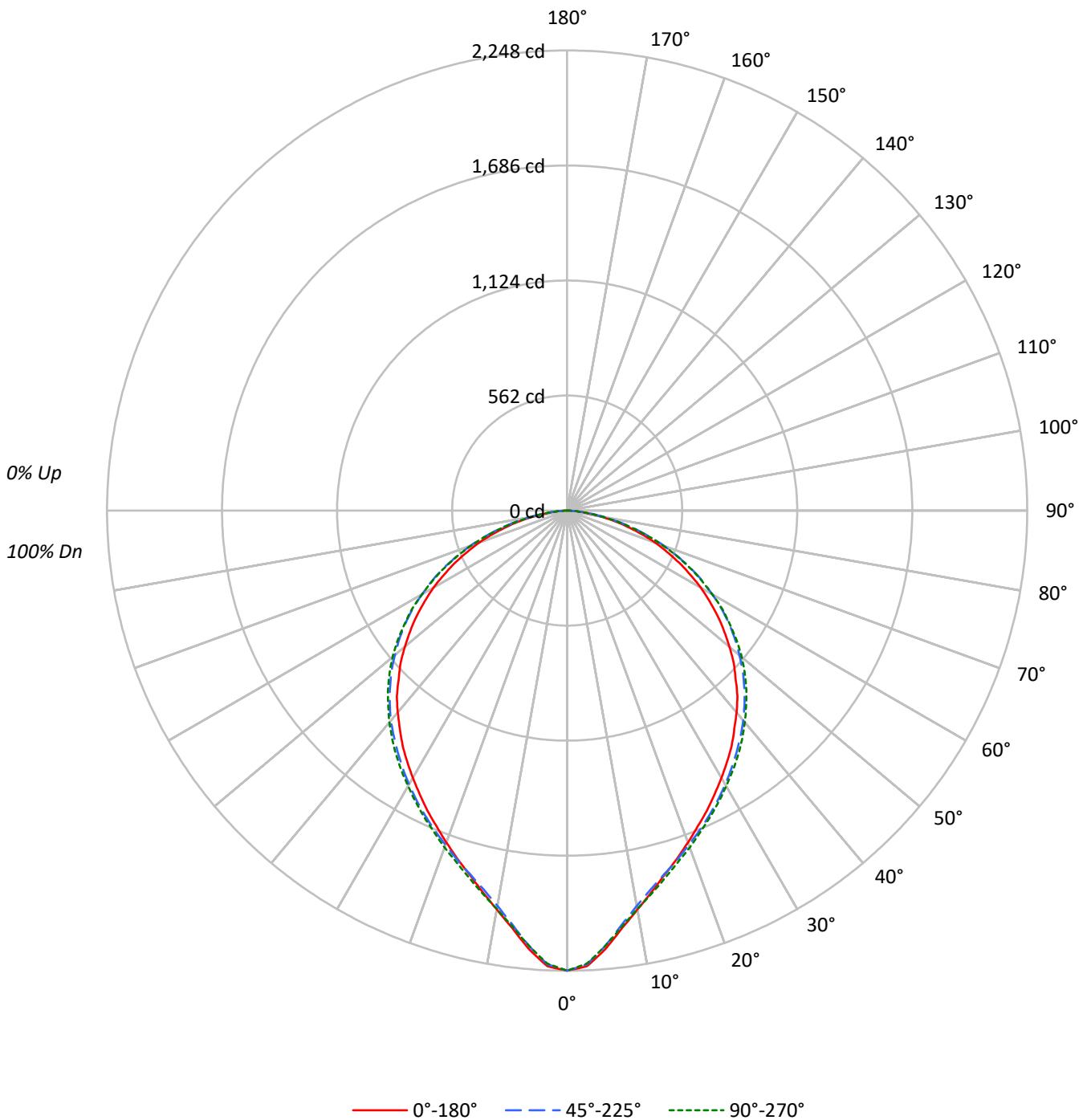
Lumens per Lamp: N/A  
Luminaire Lumens: 5220.8 lumens  
Efficiency: N/A  
Efficacy: 80.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	6048	6048	6048
5°	5807	5766	5766
10°	5405	5356	5397
15°	5129	5119	5170
20°	4941	4976	5015
25°	4799	4878	4906
30°	4684	4799	4829
35°	4603	4738	4786
40°	4522	4705	4745
45°	4429	4659	4715
50°	4331	4601	4662
55°	4211	4534	4553
60°	4059	4410	4401
65°	3848	4241	4213
70°	3592	3955	3906
75°	3171	3504	3468
80°	2576	2854	2715
85°	1788	1822	1751



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.6	3.8
10°-20°	520.2	10.0
20°-30°	756.5	14.5
30°-40°	900.2	17.2
40°-50°	934.7	17.9
50°-60°	846.8	16.2
60°-70°	639.0	12.2
70°-80°	348.2	6.7
80°-90°	76.5	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°	1475.3	28.3
0°-40°	2375.6	45.5
0°-60°	4157.1	79.6
0°-90°	5220.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5220.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2248	2248	2248	2248	2248	
5°	2150	2145	2135	2134	2135	200
15°	1841	1836	1838	1850	1856	520
25°	1616	1630	1643	1656	1652	745
35°	1401	1418	1442	1464	1457	876
45°	1164	1184	1224	1238	1239	900
55°	898	919	966	973	970	801
65°	604	622	666	665	662	597
75°	305	317	337	339	334	325
85°	58	58	59	58	57	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2247.6	2247.6	2247.6	2247.6	2247.6
2.5°	2228.0	2225.7	2218.4	2215.6	2215.0
5°	2149.9	2144.9	2134.7	2133.6	2134.7
7.5°	2056.7	2051.0	2041.0	2044.9	2049.9
10°	1978.1	1964.0	1960.1	1965.7	1975.2
12.5°	1907.8	1896.6	1893.2	1907.8	1914.6
15°	1841.0	1836.5	1837.6	1850.0	1855.6
17.5°	1783.2	1780.4	1787.7	1797.2	1800.0
20°	1725.3	1730.9	1737.7	1747.8	1751.1
22.5°	1668.6	1679.2	1690.5	1704.0	1699.5
25°	1616.4	1629.8	1642.8	1656.2	1652.3
27.5°	1560.8	1576.5	1594.5	1609.1	1603.4
30°	1507.4	1527.1	1544.5	1562.4	1554.0
32.5°	1454.6	1473.2	1493.9	1515.8	1506.3
35°	1401.3	1418.1	1442.3	1464.2	1456.9
37.5°	1342.3	1363.1	1390.6	1409.7	1404.6
40°	1287.3	1306.4	1339.5	1351.8	1350.7
42.5°	1231.6	1247.4	1282.2	1296.2	1294.0
45°	1163.7	1184.5	1224.3	1237.8	1238.9
47.5°	1103.6	1121.0	1163.7	1174.4	1176.6
50°	1034.5	1056.4	1099.1	1112.0	1113.7
52.5°	966.5	990.1	1033.9	1042.9	1044.6
55°	897.5	918.8	966.5	973.3	970.5
57.5°	825.0	850.9	894.7	898.0	900.8
60°	754.2	776.7	819.4	823.9	817.7
62.5°	677.3	700.3	744.2	745.3	740.2
65°	604.3	621.7	666.1	665.0	661.6
67.5°	527.9	549.2	581.9	583.0	580.2
70°	456.6	471.2	502.7	503.2	496.5
72.5°	379.7	395.4	420.6	417.3	415.6
75°	305.0	317.3	337.0	339.2	333.6
77.5°	236.5	245.4	260.0	258.4	252.2
80°	166.2	173.5	184.2	182.0	175.2
82.5°	106.1	110.7	117.4	114.6	111.8
85°	57.9	58.4	59.0	58.4	56.7
87.5°	21.3	21.9	21.9	21.3	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)