

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: P489388

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-5STD-35-120-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: P489388  
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-LD4-5STD-35-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

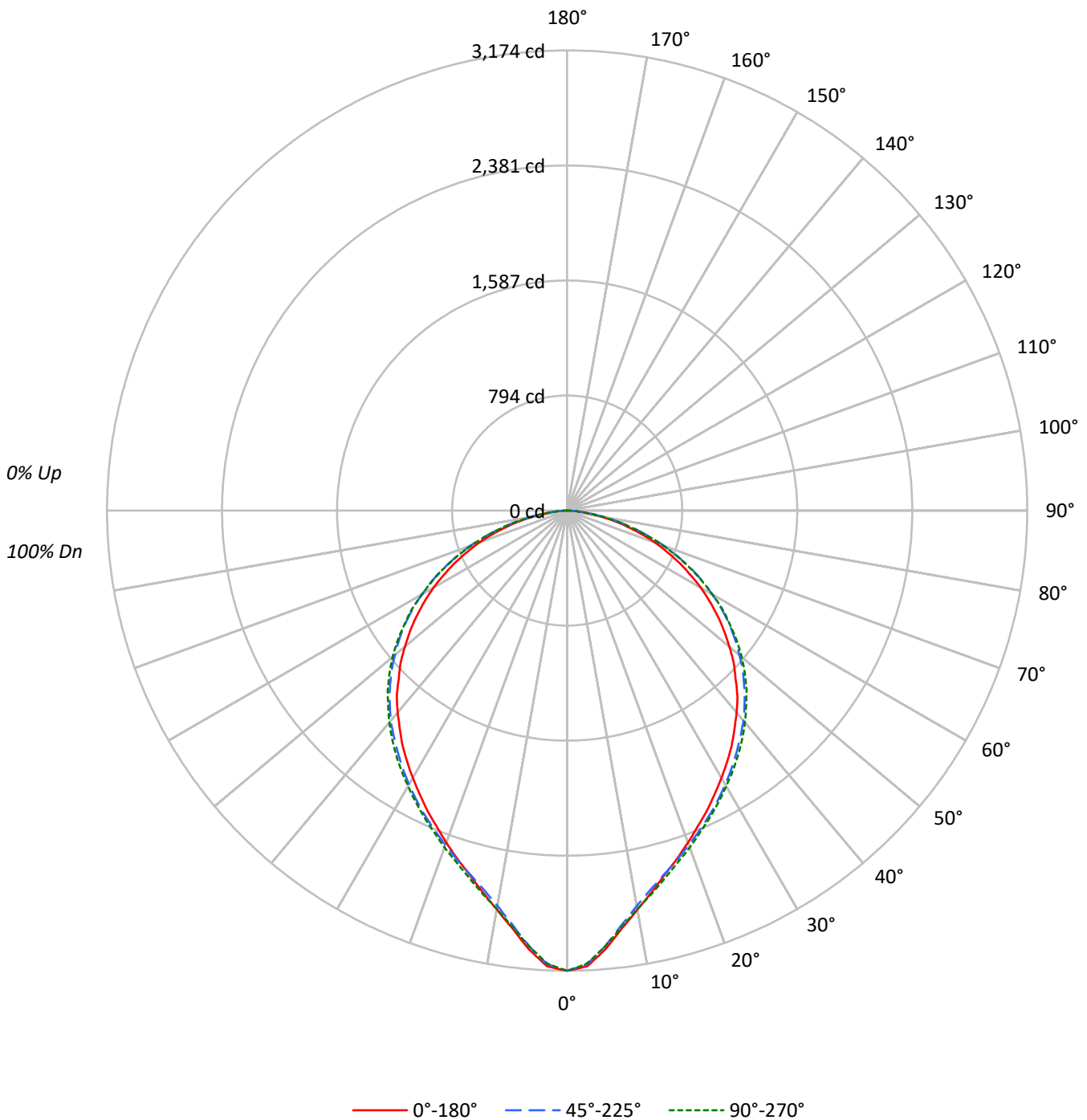
Lumens per Lamp: N/A  
Luminaire Lumens: 7372.7 lumens  
Efficiency: N/A  
Efficacy: 88.6 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 83.2  
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

TEST NUMBER: P489388

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-5STD-35-120-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P489388

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-5STD-35-120-EDD-90

**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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70					70			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59					59			
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44					44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30					30			
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27					27			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8541	8541	8541
5°	8201	8143	8143
10°	7633	7563	7622
15°	7243	7230	7300
20°	6977	7027	7082
25°	6777	6888	6928
30°	6614	6777	6819
35°	6501	6691	6759
40°	6386	6645	6700
45°	6254	6580	6658
50°	6116	6498	6584
55°	5946	6404	6430
60°	5732	6227	6215
65°	5434	5989	5949
70°	5073	5585	5516
75°	4478	4948	4898
80°	3637	4032	3834
85°	2523	2572	2473



TEST NUMBER: P489388

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-5STD-35-120-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	280.5	3.8
10°-20°	734.7	10.0
20°-30°	1068.3	14.5
30°-40°	1271.3	17.2
40°-50°	1320.0	17.9
50°-60°	1195.9	16.2
60°-70°	902.4	12.2
70°-80°	491.7	6.7
80°-90°	108.0	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°	2083.4	28.3
0°-40°	3354.7	45.5
0°-60°	5870.6	79.6
0°-90°	7372.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7372.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3174	3174	3174	3174	3174	
5°	3036	3029	3015	3013	3015	282
15°	2600	2594	2595	2612	2620	734
25°	2283	2302	2320	2339	2333	1052
35°	1979	2003	2037	2068	2057	1237
45°	1643	1673	1729	1748	1750	1270
55°	1267	1298	1365	1374	1370	1132
65°	853	878	941	939	934	844
75°	431	448	476	479	471	459
85°	82	82	83	82	80	103
90°	0	0	0	0	0	



TEST NUMBER: P489388

CATALOG NUMBER: CLM-24-2-INS-P12125-LD4-5STD-35-120-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3174.1	3174.1	3174.1	3174.1	3174.1
2.5°	3146.3	3143.1	3132.8	3128.8	3128.0
5°	3036.1	3028.9	3014.6	3013.1	3014.6
7.5°	2904.4	2896.4	2882.2	2887.7	2894.9
10°	2793.4	2773.5	2767.9	2775.9	2789.4
12.5°	2694.2	2678.3	2673.6	2694.2	2703.8
15°	2599.8	2593.5	2595.1	2612.5	2620.4
17.5°	2518.2	2514.2	2524.5	2538.0	2542.0
20°	2436.5	2444.4	2453.9	2468.2	2472.9
22.5°	2356.4	2371.4	2387.3	2406.3	2400.0
25°	2282.6	2301.6	2319.9	2338.9	2333.4
27.5°	2204.1	2226.2	2251.7	2272.3	2264.3
30°	2128.7	2156.5	2181.1	2206.4	2194.6
32.5°	2054.2	2080.4	2109.7	2140.6	2127.1
35°	1978.8	2002.6	2036.7	2067.7	2057.4
37.5°	1895.6	1924.9	1963.7	1990.7	1983.6
40°	1817.8	1844.8	1891.6	1909.1	1907.4
42.5°	1739.3	1761.5	1810.7	1830.5	1827.3
45°	1643.4	1672.7	1729.0	1748.1	1749.6
47.5°	1558.5	1583.1	1643.4	1658.4	1661.6
50°	1460.9	1491.9	1552.1	1570.3	1572.8
52.5°	1364.9	1398.2	1460.1	1472.8	1475.2
55°	1267.4	1297.5	1364.9	1374.5	1370.5
57.5°	1165.1	1201.6	1263.5	1268.2	1272.2
60°	1065.1	1096.9	1157.1	1163.5	1154.8
62.5°	956.5	989.0	1050.9	1052.4	1045.3
65°	853.4	878.0	940.6	939.1	934.3
67.5°	745.5	775.6	821.7	823.2	819.3
70°	644.8	665.4	709.8	710.6	701.1
72.5°	536.2	558.3	594.0	589.3	586.9
75°	430.7	448.1	475.9	479.1	471.1
77.5°	333.9	346.6	367.2	364.9	356.1
80°	234.7	245.1	260.2	257.0	247.4
82.5°	149.9	156.3	165.8	161.8	157.8
85°	81.7	82.5	83.3	82.5	80.1
87.5°	30.1	30.9	30.9	30.1	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)