

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: P489334

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-4LO-20-120-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: P489334  
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-20-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

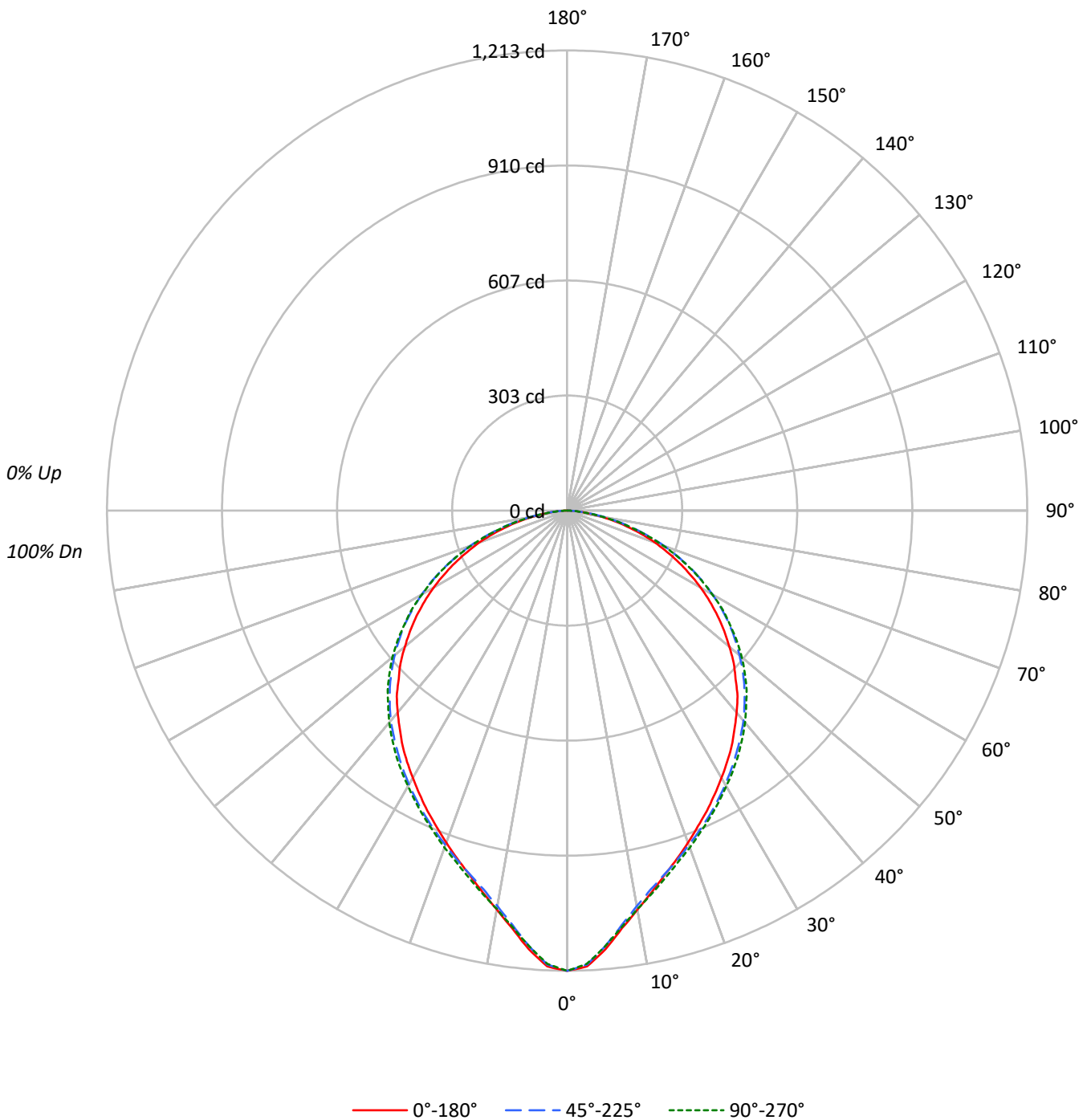
Lumens per Lamp: N/A  
Luminaire Lumens: 2818.4 lumens  
Efficiency: N/A  
Efficacy: 60.2 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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	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°	3265	3265	3265
5°	3135	3113	3113
10°	2918	2891	2914
15°	2769	2764	2791
20°	2667	2686	2707
25°	2591	2633	2648
30°	2528	2591	2607
35°	2485	2558	2584
40°	2441	2540	2562
45°	2391	2515	2545
50°	2338	2484	2517
55°	2273	2448	2458
60°	2192	2380	2376
65°	2077	2290	2274
70°	1939	2135	2109
75°	1711	1891	1873
80°	1390	1542	1466
85°	963	982	945



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.2	3.8
10°-20°	280.8	10.0
20°-30°	408.4	14.5
30°-40°	486.0	17.2
40°-50°	504.6	17.9
50°-60°	457.1	16.2
60°-70°	345.0	12.2
70°-80°	188.0	6.7
80°-90°	41.3	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°	796.4	28.3
0°-40°	1282.4	45.5
0°-60°	2244.2	79.6
0°-90°	2818.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2818.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1213	1213	1213	1213	1213	
5°	1161	1158	1152	1152	1152	108
15°	994	991	992	999	1002	281
25°	873	880	887	894	892	402
35°	756	766	779	790	786	473
45°	628	639	661	668	669	486
55°	484	496	522	525	524	433
65°	326	336	360	359	357	323
75°	165	171	182	183	180	175
85°	31	32	32	32	31	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1213.4	1213.4	1213.4	1213.4	1213.4
2.5°	1202.7	1201.5	1197.6	1196.1	1195.8
5°	1160.6	1157.9	1152.4	1151.8	1152.4
7.5°	1110.3	1107.2	1101.8	1103.9	1106.6
10°	1067.8	1060.3	1058.1	1061.2	1066.3
12.5°	1029.9	1023.9	1022.0	1029.9	1033.6
15°	993.8	991.4	992.0	998.7	1001.7
17.5°	962.6	961.1	965.1	970.2	971.7
20°	931.4	934.4	938.1	943.5	945.3
22.5°	900.8	906.5	912.6	919.9	917.5
25°	872.6	879.9	886.8	894.1	892.0
27.5°	842.6	851.0	860.8	868.6	865.6
30°	813.7	824.4	833.8	843.5	838.9
32.5°	785.3	795.3	806.5	818.3	813.2
35°	756.5	765.6	778.6	790.4	786.5
37.5°	724.6	735.8	750.7	761.0	758.3
40°	694.9	705.2	723.1	729.8	729.2
42.5°	664.9	673.4	692.2	699.8	698.5
45°	628.2	639.4	660.9	668.2	668.8
47.5°	595.8	605.2	628.2	634.0	635.2
50°	558.5	570.3	593.3	600.3	601.2
52.5°	521.8	534.5	558.2	563.0	563.9
55°	484.5	496.0	521.8	525.4	523.9
57.5°	445.4	459.3	483.0	484.8	486.3
60°	407.2	419.3	442.3	444.8	441.4
62.5°	365.7	378.1	401.7	402.3	399.6
65°	326.2	335.6	359.6	359.0	357.1
67.5°	285.0	296.5	314.1	314.7	313.2
70°	246.5	254.4	271.4	271.7	268.0
72.5°	205.0	213.4	227.1	225.3	224.4
75°	164.6	171.3	181.9	183.1	180.1
77.5°	127.6	132.5	140.4	139.5	136.1
80°	89.7	93.7	99.5	98.2	94.6
82.5°	57.3	59.7	63.4	61.9	60.3
85°	31.2	31.5	31.8	31.5	30.6
87.5°	11.5	11.8	11.8	11.5	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)