

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: P489802

Luminaire Tested: **CLM-24-4-INS-P12125-LD4-2LO-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: P489802  
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-24-4-INS-P12125-LD4-2LO-20-120-EDD-90  
Description: 2X4 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

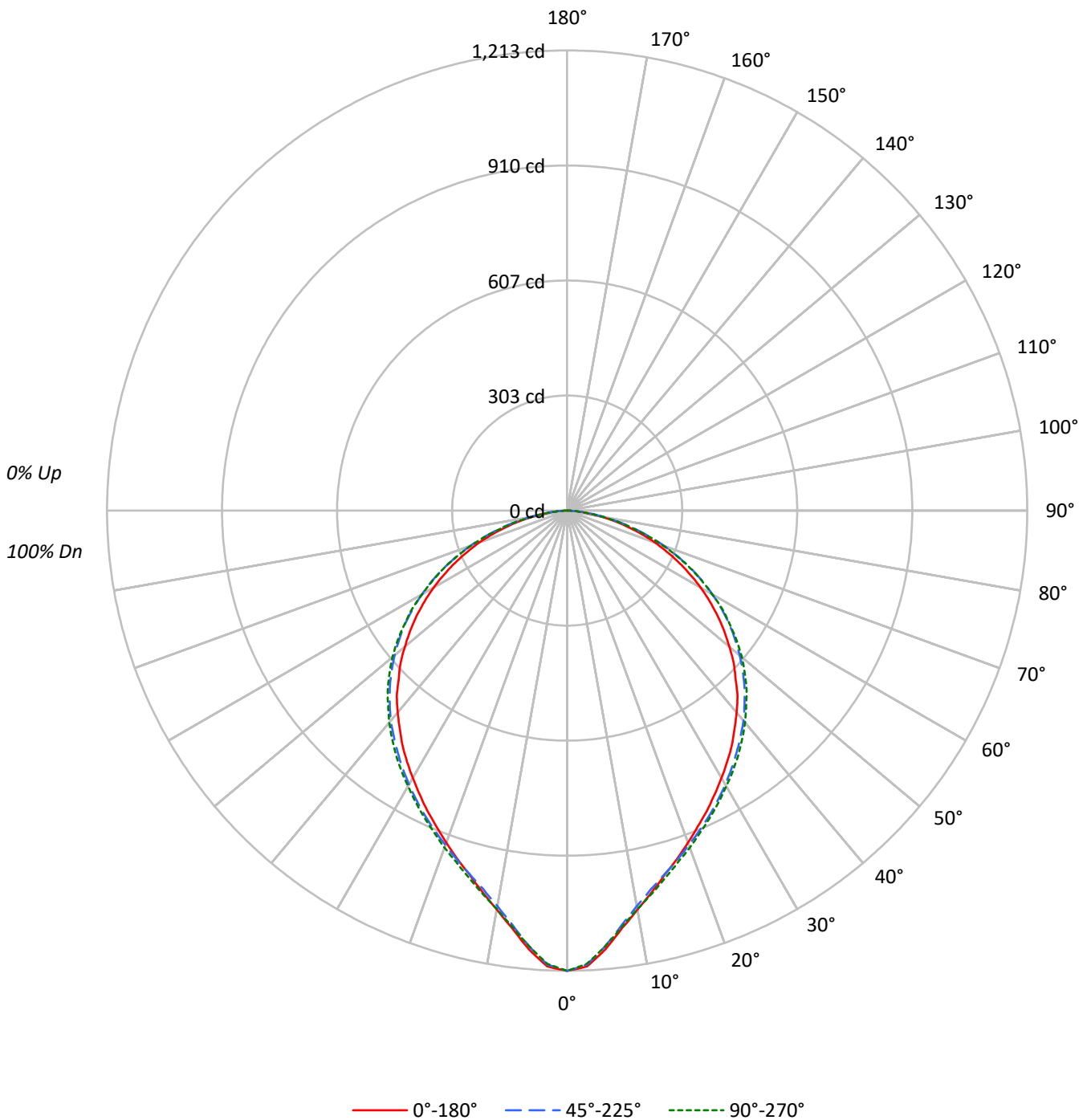
Lumens per Lamp: N/A  
Luminaire Lumens: 2818.5 lumens  
Efficiency: N/A  
Efficacy: 60.2 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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°	1633	1633	1633
5°	1568	1557	1557
10°	1459	1446	1457
15°	1384	1382	1395
20°	1334	1343	1354
25°	1295	1317	1324
30°	1264	1295	1304
35°	1243	1279	1292
40°	1221	1270	1281
45°	1195	1258	1273
50°	1169	1242	1259
55°	1137	1224	1229
60°	1096	1190	1188
65°	1039	1145	1137
70°	970	1068	1054
75°	856	946	936
80°	695	771	733
85°	482	491	472



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.2	3.8
10°-20°	280.9	10.0
20°-30°	408.4	14.5
30°-40°	486.0	17.2
40°-50°	504.6	17.9
50°-60°	457.2	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°	796.5	28.3
0°-40°	1282.5	45.5
0°-60°	2244.3	79.6
0°-90°	2818.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2818.5	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	992	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	526	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°	1202.8	1201.6	1197.6	1196.1	1195.8
5°	1160.7	1157.9	1152.5	1151.9	1152.5
7.5°	1110.3	1107.3	1101.8	1104.0	1106.7
10°	1067.9	1060.3	1058.2	1061.2	1066.3
12.5°	1030.0	1023.9	1022.1	1030.0	1033.6
15°	993.9	991.5	992.1	998.7	1001.8
17.5°	962.7	961.1	965.1	970.2	971.8
20°	931.4	934.5	938.1	943.6	945.4
22.5°	900.8	906.6	912.6	919.9	917.5
25°	872.6	879.9	886.9	894.1	892.0
27.5°	842.6	851.1	860.8	868.7	865.6
30°	813.8	824.4	833.8	843.5	839.0
32.5°	785.3	795.3	806.5	818.3	813.2
35°	756.5	765.6	778.6	790.5	786.5
37.5°	724.7	735.9	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	698.6
45°	628.2	639.4	661.0	668.3	668.9
47.5°	595.8	605.2	628.2	634.0	635.2
50°	558.5	570.3	593.4	600.3	601.3
52.5°	521.8	534.5	558.2	563.0	564.0
55°	484.5	496.0	521.8	525.5	523.9
57.5°	445.4	459.3	483.0	484.8	486.3
60°	407.2	419.3	442.4	444.8	441.5
62.5°	365.7	378.1	401.7	402.3	399.6
65°	326.2	335.6	359.6	359.0	357.2
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	213.5	227.1	225.3	224.4
75°	164.6	171.3	181.9	183.1	180.1
77.5°	127.7	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)