

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: P489311

Luminaire Tested: **CLM-24-2-INS-P12125-LD4-3STD-20-120-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: P489311  
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-LD4-3STD-20-120-EDD  
Description: 2X2 CLM LED LUMINAIRE WITH P12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

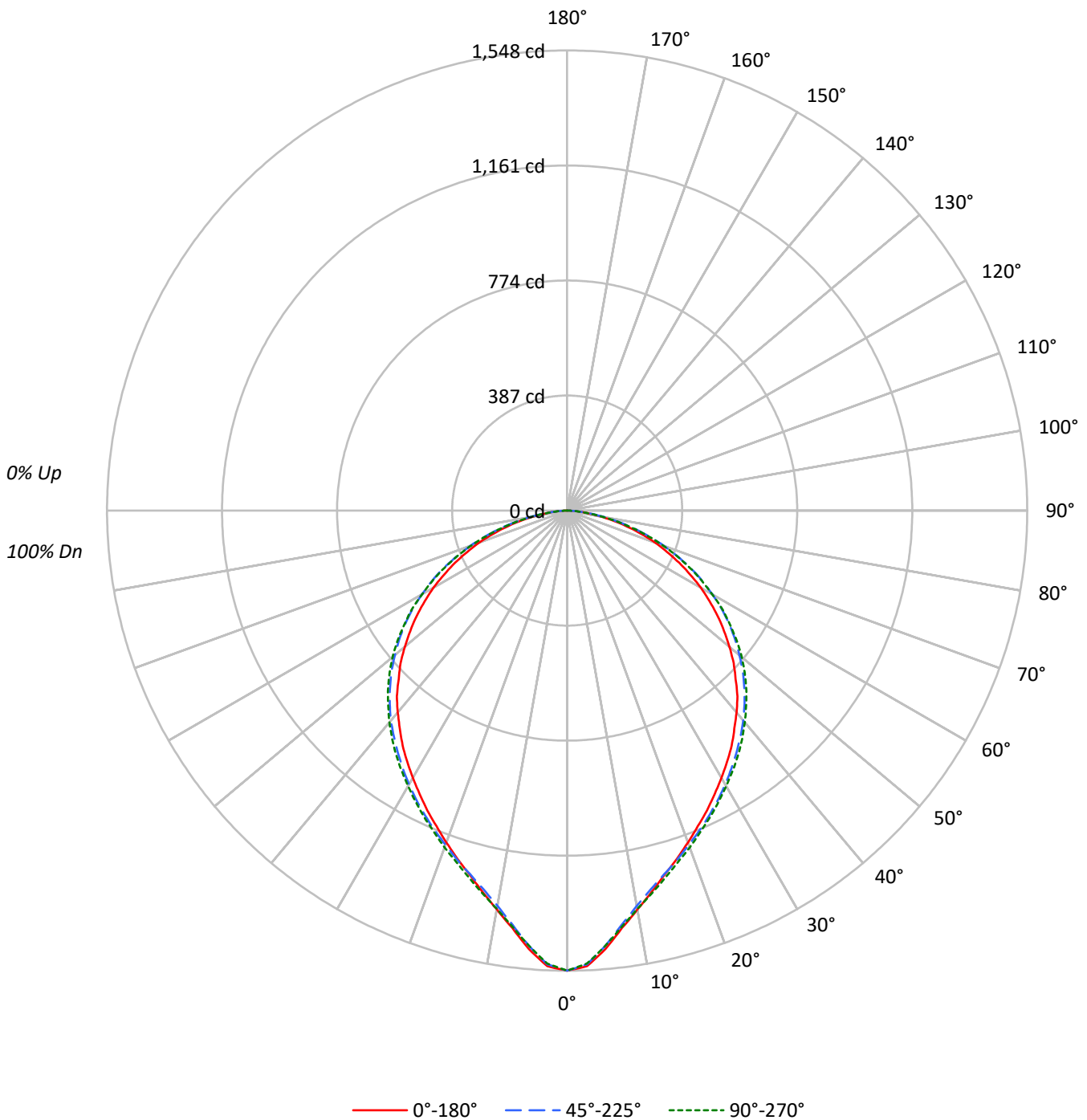
Lumens per Lamp: N/A  
Luminaire Lumens: 3595.0 lumens  
Efficiency: N/A  
Efficacy: 71.9 lumens/watt  
Spacing Criteria (0/90/45): 1.01 / 1.04 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	4165	4165	4165
5°	3999	3971	3971
10°	3722	3688	3716
15°	3532	3525	3560
20°	3402	3427	3453
25°	3305	3359	3378
30°	3225	3305	3325
35°	3170	3262	3296
40°	3114	3240	3267
45°	3049	3209	3247
50°	2982	3168	3211
55°	2899	3123	3135
60°	2795	3037	3031
65°	2649	2920	2901
70°	2474	2723	2690
75°	2183	2413	2388
80°	1774	1967	1869
85°	1229	1254	1207



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.8	3.8
10°-20°	358.2	10.0
20°-30°	520.9	14.5
30°-40°	619.9	17.2
40°-50°	643.6	17.9
50°-60°	583.1	16.2
60°-70°	440.0	12.2
70°-80°	239.7	6.7
80°-90°	52.7	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°	1015.9	28.3
0°-40°	1635.8	45.5
0°-60°	2862.5	79.6
0°-90°	3595.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3595.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1548	1548	1548	1548	1548	
5°	1480	1477	1470	1469	1470	137
15°	1268	1265	1265	1274	1278	358
25°	1113	1122	1131	1140	1138	513
35°	965	976	993	1008	1003	603
45°	801	816	843	852	853	619
55°	618	633	666	670	668	552
65°	416	428	459	458	456	411
75°	210	218	232	234	230	224
85°	40	40	41	40	39	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1547.7	1547.7	1547.7	1547.7	1547.7
2.5°	1534.2	1532.6	1527.6	1525.6	1525.3
5°	1480.4	1476.9	1470.0	1469.2	1470.0
7.5°	1416.2	1412.3	1405.4	1408.1	1411.6
10°	1362.1	1352.4	1349.7	1353.6	1360.1
12.5°	1313.7	1306.0	1303.7	1313.7	1318.4
15°	1267.7	1264.6	1265.4	1273.9	1277.7
17.5°	1227.9	1225.9	1231.0	1237.5	1239.5
20°	1188.0	1191.9	1196.6	1203.5	1205.8
22.5°	1149.0	1156.3	1164.1	1173.3	1170.3
25°	1113.0	1122.3	1131.2	1140.5	1137.8
27.5°	1074.7	1085.5	1097.9	1108.0	1104.1
30°	1038.0	1051.5	1063.5	1075.9	1070.1
32.5°	1001.6	1014.4	1028.7	1043.8	1037.2
35°	964.9	976.5	993.1	1008.2	1003.2
37.5°	924.3	938.6	957.5	970.7	967.2
40°	886.4	899.5	922.4	930.9	930.1
42.5°	848.1	858.9	882.9	892.6	891.0
45°	801.3	815.6	843.1	852.4	853.1
47.5°	759.9	771.9	801.3	808.6	810.2
50°	712.4	727.5	756.8	765.7	766.9
52.5°	665.6	681.8	712.0	718.1	719.3
55°	618.0	632.7	665.6	670.2	668.3
57.5°	568.1	585.9	616.1	618.4	620.3
60°	519.4	534.8	564.2	567.3	563.1
62.5°	466.4	482.3	512.4	513.2	509.7
65°	416.1	428.1	458.6	457.9	455.6
67.5°	363.5	378.2	400.7	401.4	399.5
70°	314.4	324.5	346.1	346.5	341.9
72.5°	261.4	272.3	289.6	287.3	286.2
75°	210.0	218.5	232.1	233.6	229.7
77.5°	162.8	169.0	179.1	177.9	173.6
80°	114.5	119.5	126.9	125.3	120.6
82.5°	73.1	76.2	80.8	78.9	77.0
85°	39.8	40.2	40.6	40.2	39.1
87.5°	14.7	15.1	15.1	14.7	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)