

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: P489000

Luminaire Tested: **CLM-24-2-INS-A12125-LD4-5HI-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: P489000  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-115-8)  
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-A12125-LD4-5HI-27-120-EDD-90  
Description: 2X2 CLM LED LUMINAIRE WITH A12125 LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

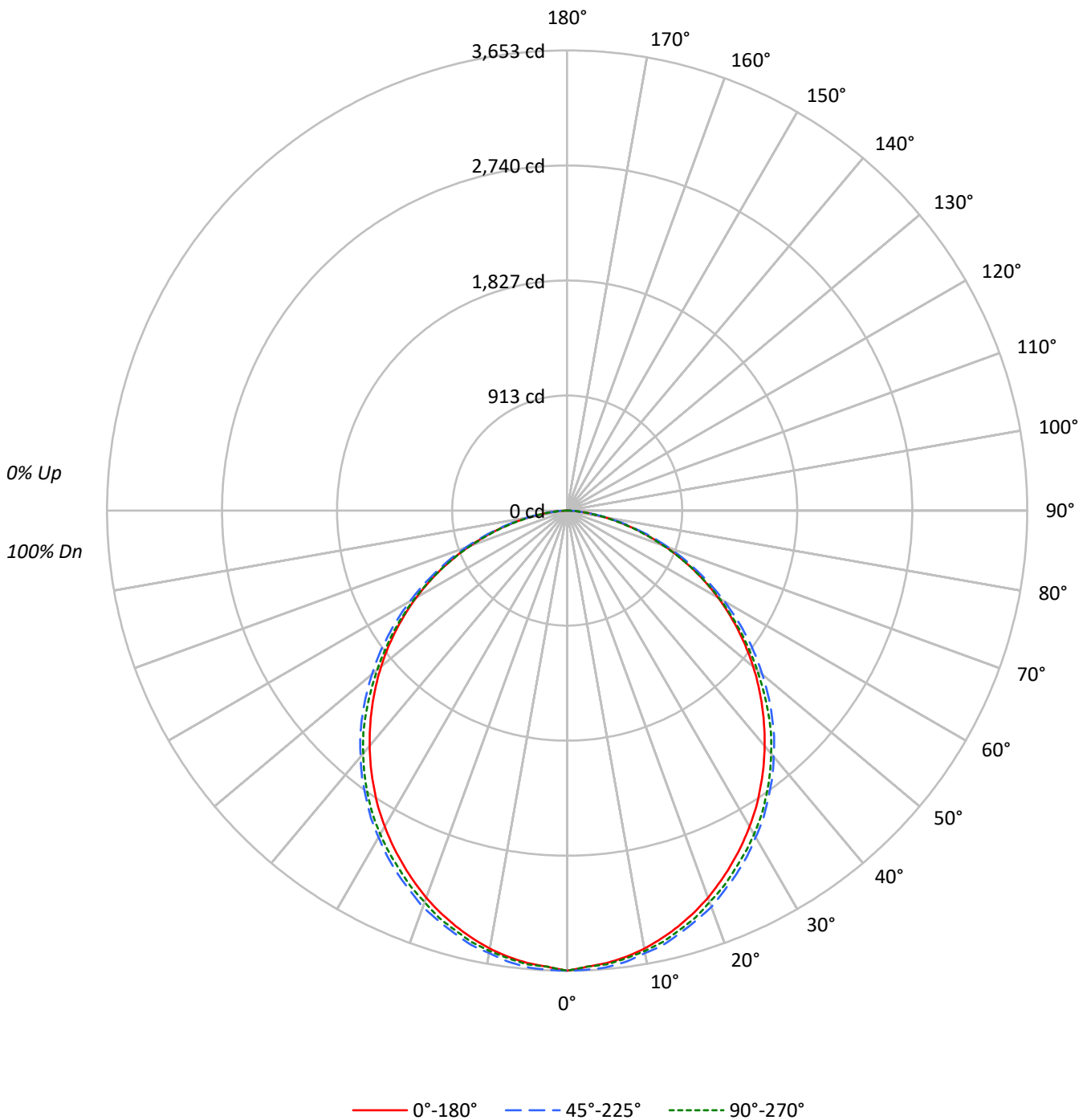
Lumens per Lamp: N/A  
Luminaire Lumens: 9603.6 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 108  
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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	48	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	9830	9830	9830
5°	9739	9830	9770
10°	9650	9747	9701
15°	9516	9670	9602
20°	9367	9589	9473
25°	9184	9450	9342
30°	8998	9303	9218
35°	8795	9144	9059
40°	8567	8962	8848
45°	8327	8747	8582
50°	8076	8467	8245
55°	7783	8147	7897
60°	7452	7761	7521
65°	7023	7292	7028
70°	6462	6722	6390
75°	5690	5947	5603
80°	4624	4824	4572
85°	3220	3430	3350



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	344.0	3.6
10°-20°	974.9	10.2
20°-30°	1454.0	15.1
30°-40°	1723.0	17.9
40°-50°	1743.4	18.2
50°-60°	1522.6	15.9
60°-70°	1112.7	11.6
70°-80°	592.0	6.2
80°-90°	136.8	1.4
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°	2772.9	28.9
0°-40°	4496.0	46.8
0°-60°	7762.1	80.8
0°-90°	9603.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9603.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3653	3653	3653	3653	3653	
5°	3605	3612	3639	3648	3617	342
15°	3416	3439	3471	3492	3447	963
25°	3093	3131	3183	3195	3146	1425
35°	2677	2719	2784	2803	2758	1674
45°	2188	2227	2298	2300	2255	1688
55°	1659	1692	1737	1712	1683	1483
65°	1103	1125	1145	1122	1104	1091
75°	547	560	572	551	539	582
85°	104	106	111	112	108	132
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3652.9	3652.9	3652.9	3652.9	3652.9
2.5°	3624.3	3636.1	3648.3	3653.6	3623.9
5°	3605.3	3612.1	3639.2	3647.5	3616.7
7.5°	3574.1	3584.4	3610.6	3614.4	3584.7
10°	3531.5	3549.7	3567.2	3586.3	3550.1
12.5°	3477.0	3501.8	3531.5	3534.9	3507.5
15°	3415.8	3438.6	3470.9	3491.9	3446.6
17.5°	3347.3	3369.3	3411.2	3415.0	3387.6
20°	3270.8	3298.2	3348.4	3357.2	3308.1
22.5°	3184.0	3220.9	3262.8	3271.1	3235.0
25°	3093.0	3131.1	3182.8	3194.6	3146.3
27.5°	2997.9	3034.4	3092.6	3101.0	3060.3
30°	2895.9	2930.1	2994.1	3008.2	2966.7
32.5°	2792.4	2826.6	2897.4	2909.2	2868.9
35°	2677.4	2719.3	2783.6	2803.0	2757.7
37.5°	2560.2	2600.9	2674.0	2691.5	2642.8
40°	2438.8	2479.1	2551.1	2565.5	2518.7
42.5°	2314.7	2355.1	2431.9	2434.2	2395.4
45°	2188.0	2226.8	2298.4	2300.3	2255.0
47.5°	2059.4	2098.6	2162.5	2155.3	2112.6
50°	1929.2	1966.5	2022.4	2008.0	1969.5
52.5°	1794.5	1830.6	1883.5	1859.9	1823.8
55°	1659.0	1692.5	1736.6	1711.5	1683.3
57.5°	1522.3	1556.2	1590.1	1564.6	1540.2
60°	1384.6	1414.3	1442.0	1416.2	1397.5
62.5°	1244.5	1270.0	1294.0	1269.3	1251.7
65°	1102.9	1125.4	1145.2	1122.3	1103.7
67.5°	962.1	981.2	999.4	975.8	956.4
70°	821.3	837.7	854.4	830.1	812.2
72.5°	682.4	696.9	711.7	688.1	672.5
75°	547.3	559.8	572.0	551.1	538.9
77.5°	418.3	428.9	437.3	424.0	412.2
80°	298.4	306.4	311.3	306.0	295.0
82.5°	191.8	197.5	200.2	199.8	192.6
85°	104.3	106.2	111.1	112.3	108.5
87.5°	40.3	43.0	44.1	47.6	43.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)