

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: P557885

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-80-96-EDD**

Issue Date: 7/16/2021

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: P557885  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-4-LD4-3HI-50-UNV-80-96-EDD  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

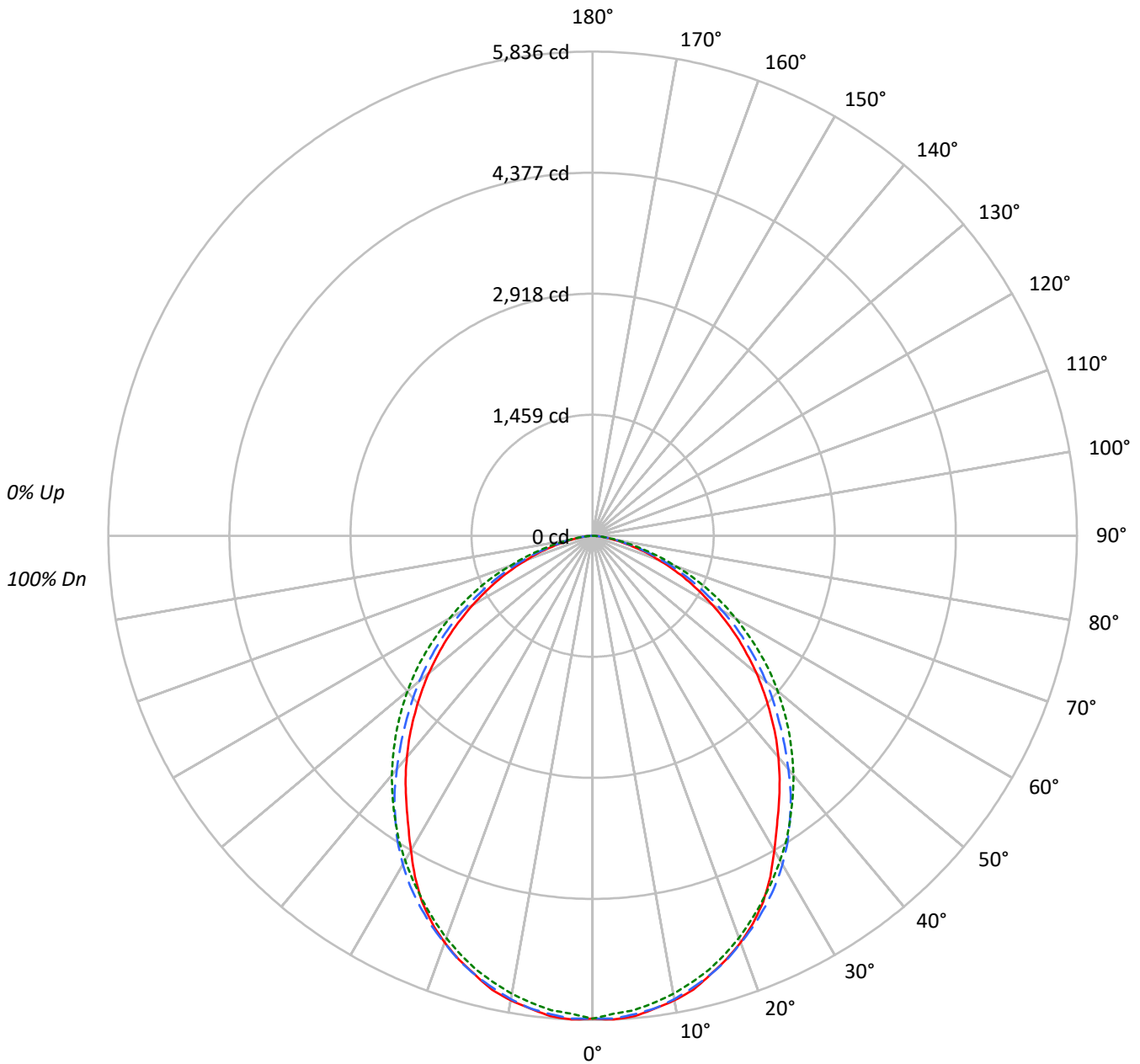
Lumens per Lamp: N/A  
Luminaire Lumens: 13458.0 lumens  
Efficiency: N/A  
Efficacy: 103.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 129.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

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

	0°	45°	90°
0°	15662	15662	15662
5°	15704	15637	15504
10°	15537	15494	15317
15°	15261	15261	15087
20°	14938	14958	14766
25°	14446	14626	14393
30°	13604	14215	14041
35°	12855	13626	13648
40°	12230	12889	13227
45°	11530	12109	12730
50°	10793	11411	12188
55°	9955	10616	11529
60°	8965	9688	10722
65°	7916	8614	9752
70°	6597	7336	8286
75°	5184	5859	6486
80°	3707	4124	4573
85°	2418	2418	2279



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	548.0	4.1
10°-20°	1539.5	11.4
20°-30°	2249.7	16.7
30°-40°	2553.6	19.0
40°-50°	2465.1	18.3
50°-60°	2033.5	15.1
60°-70°	1354.2	10.1
70°-80°	606.0	4.5
80°-90°	108.4	0.8
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°	4337.1	32.2
0°-40°	6890.7	51.2
0°-60°	11389.4	84.6
0°-90°	13458.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13458.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5820	5820	5820	5820	5820	
5°	5814	5811	5789	5758	5740	550
15°	5478	5492	5478	5454	5416	1544
25°	4866	4904	4926	4890	4848	2228
35°	3913	3967	4148	4170	4154	2452
45°	3030	3081	3182	3327	3345	2338
55°	2122	2158	2263	2388	2457	1894
65°	1243	1277	1353	1449	1532	1233
75°	499	526	564	590	624	545
85°	78	78	78	74	74	106
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5820.2	5820.2	5820.2	5820.2	5820.2
2.5°	5835.9	5838.1	5824.7	5788.9	5766.6
5°	5813.5	5811.3	5788.9	5757.6	5739.7
7.5°	5748.7	5753.2	5746.5	5701.7	5677.1
10°	5686.1	5688.3	5670.4	5634.7	5605.6
12.5°	5605.6	5603.3	5578.8	5560.9	5513.9
15°	5478.1	5491.5	5478.1	5453.5	5415.5
17.5°	5355.2	5355.2	5364.1	5321.6	5292.5
20°	5216.5	5223.2	5223.2	5189.7	5156.2
22.5°	5055.5	5075.7	5082.4	5046.6	5006.3
25°	4865.5	4903.5	4925.8	4890.1	4847.6
27.5°	4635.2	4693.3	4760.4	4733.6	4686.6
30°	4378.0	4463.0	4574.8	4552.4	4518.9
32.5°	4134.3	4219.3	4373.6	4364.6	4346.7
35°	3913.0	3966.6	4147.7	4170.1	4154.4
37.5°	3702.8	3752.0	3921.9	3973.3	3959.9
40°	3481.4	3535.1	3669.2	3760.9	3765.4
42.5°	3262.3	3313.7	3423.3	3555.2	3555.2
45°	3029.7	3081.2	3181.8	3327.1	3345.0
47.5°	2801.7	2855.3	2953.7	3099.1	3128.1
50°	2578.1	2627.3	2725.7	2866.5	2911.2
52.5°	2345.5	2399.2	2495.3	2625.0	2689.9
55°	2121.9	2157.7	2262.8	2388.0	2457.3
57.5°	1889.4	1922.9	2041.4	2148.8	2220.3
60°	1665.8	1708.3	1800.0	1909.5	1992.3
62.5°	1451.1	1495.9	1574.1	1670.3	1764.2
65°	1243.2	1276.7	1352.8	1448.9	1531.6
67.5°	1042.0	1071.0	1147.1	1214.1	1301.3
70°	838.5	876.5	932.4	997.2	1053.1
72.5°	675.3	690.9	737.9	784.8	843.0
75°	498.6	525.5	563.5	590.3	623.8
77.5°	357.8	373.4	395.8	418.1	449.4
80°	239.2	246.0	266.1	270.6	295.1
82.5°	145.3	149.8	154.3	156.5	165.5
85°	78.3	78.3	78.3	73.8	73.8
87.5°	44.7	44.7	38.0	31.3	22.4
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)