

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: P557627

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-80-94-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: P557627  
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-LD4-2STD-50-UNV-80-94-EDD  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

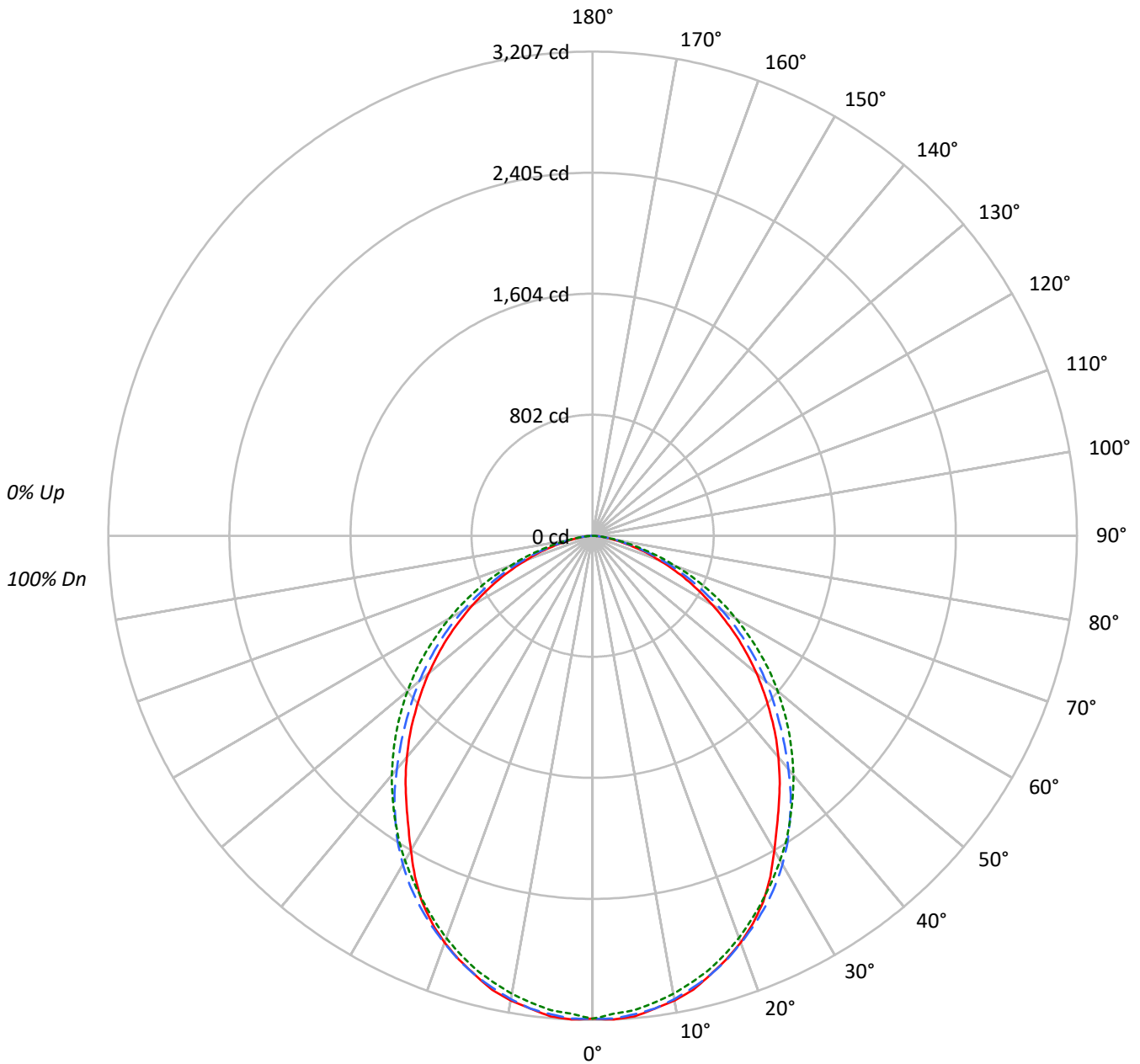
Lumens per Lamp: N/A  
Luminaire Lumens: 7396.0 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 66.6  
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°	8607	8607	8607
5°	8630	8594	8521
10°	8539	8515	8418
15°	8387	8387	8291
20°	8210	8220	8115
25°	7939	8038	7910
30°	7476	7812	7717
35°	7064	7488	7500
40°	6721	7084	7269
45°	6336	6655	6996
50°	5931	6271	6698
55°	5471	5834	6336
60°	4927	5324	5893
65°	4350	4734	5359
70°	3626	4032	4554
75°	2849	3220	3564
80°	2038	2266	2514
85°	1328	1328	1254



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	301.2	4.1
10°-20°	846.0	11.4
20°-30°	1236.3	16.7
30°-40°	1403.4	19.0
40°-50°	1354.7	18.3
50°-60°	1117.6	15.1
60°-70°	744.2	10.1
70°-80°	333.0	4.5
80°-90°	59.6	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°	2383.5	32.2
0°-40°	3786.9	51.2
0°-60°	6259.2	84.6
0°-90°	7396.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7396.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3199	3199	3199	3199	3199	
5°	3195	3194	3181	3164	3154	302
15°	3011	3018	3011	2997	2976	849
25°	2674	2695	2707	2687	2664	1225
35°	2150	2180	2279	2292	2283	1347
45°	1665	1693	1749	1828	1838	1285
55°	1166	1186	1244	1312	1350	1041
65°	683	702	743	796	842	677
75°	274	289	310	324	343	300
85°	43	43	43	41	41	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3198.6	3198.6	3198.6	3198.6	3198.6
2.5°	3207.2	3208.4	3201.0	3181.4	3169.1
5°	3194.9	3193.7	3181.4	3164.2	3154.3
7.5°	3159.3	3161.7	3158.0	3133.5	3119.9
10°	3124.9	3126.1	3116.2	3096.6	3080.6
12.5°	3080.6	3079.4	3065.9	3056.0	3030.2
15°	3010.6	3017.9	3010.6	2997.1	2976.2
17.5°	2943.0	2943.0	2947.9	2924.6	2908.6
20°	2866.8	2870.5	2870.5	2852.1	2833.6
22.5°	2778.3	2789.4	2793.1	2773.4	2751.3
25°	2673.9	2694.8	2707.1	2687.4	2664.0
27.5°	2547.3	2579.3	2616.1	2601.4	2575.6
30°	2406.0	2452.7	2514.1	2501.8	2483.4
32.5°	2272.1	2318.8	2403.5	2398.6	2388.8
35°	2150.4	2179.9	2279.4	2291.7	2283.1
37.5°	2034.9	2061.9	2155.3	2183.6	2176.2
40°	1913.2	1942.7	2016.5	2066.8	2069.3
42.5°	1792.8	1821.1	1881.3	1953.8	1953.8
45°	1665.0	1693.3	1748.6	1828.5	1838.3
47.5°	1539.7	1569.2	1623.3	1703.1	1719.1
50°	1416.8	1443.8	1497.9	1575.3	1599.9
52.5°	1289.0	1318.5	1371.3	1442.6	1478.3
55°	1166.1	1185.8	1243.6	1312.4	1350.5
57.5°	1038.3	1056.8	1121.9	1180.9	1220.2
60°	915.5	938.8	989.2	1049.4	1094.9
62.5°	797.5	822.1	865.1	917.9	969.5
65°	683.2	701.6	743.4	796.3	841.7
67.5°	572.6	588.6	630.4	667.2	715.2
70°	460.8	481.7	512.4	548.0	578.8
72.5°	371.1	379.7	405.5	431.3	463.3
75°	274.0	288.8	309.7	324.4	342.8
77.5°	196.6	205.2	217.5	229.8	247.0
80°	131.5	135.2	146.2	148.7	162.2
82.5°	79.9	82.3	84.8	86.0	90.9
85°	43.0	43.0	43.0	40.6	40.6
87.5°	24.6	24.6	20.9	17.2	12.3
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)