

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: P557777

Luminaire Tested: **FUSL-12-4-LD4-3HI-35-UNV-82-84-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: P557777
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-35-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

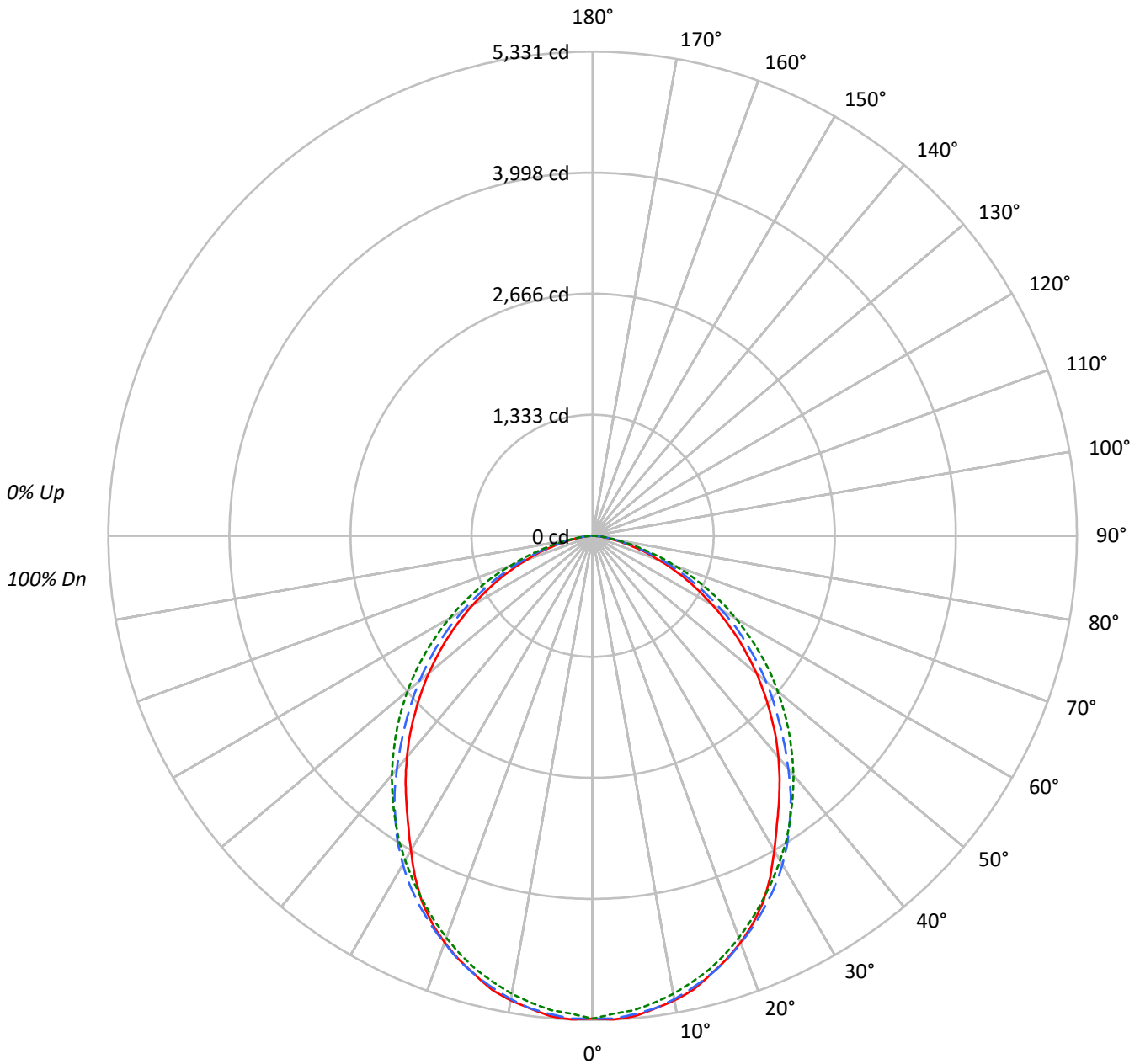
Lumens per Lamp: N/A
Luminaire Lumens: 12293.0 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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									
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°	14306	14306	14306
5°	14344	14284	14162
10°	14192	14153	13991
15°	13940	13940	13781
20°	13645	13663	13487
25°	13196	13359	13147
30°	12426	12985	12826
35°	11742	12446	12466
40°	11171	11774	12082
45°	10532	11061	11628
50°	9859	10423	11133
55°	9094	9697	10531
60°	8189	8848	9794
65°	7231	7868	8909
70°	6026	6701	7569
75°	4736	5351	5924
80°	3386	3766	4178
85°	2208	2208	2081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.6	4.1
10°-20°	1406.2	11.4
20°-30°	2054.9	16.7
30°-40°	2332.6	19.0
40°-50°	2251.7	18.3
50°-60°	1857.5	15.1
60°-70°	1237.0	10.1
70°-80°	553.5	4.5
80°-90°	99.0	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°	3961.7	32.2
0°-40°	6294.2	51.2
0°-60°	10403.5	84.6
0°-90°	12293.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12293.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5316	5316	5316	5316	5316	
5°	5310	5308	5288	5259	5243	503
15°	5004	5016	5004	4981	4947	1411
25°	4444	4479	4499	4467	4428	2035
35°	3574	3623	3789	3809	3795	2239
45°	2768	2814	2906	3039	3056	2135
55°	1938	1971	2067	2181	2245	1730
65°	1136	1166	1236	1324	1399	1126
75°	456	480	515	539	570	498
85°	72	72	72	67	67	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5316.4	5316.4	5316.4	5316.4	5316.4
2.5°	5330.7	5332.7	5320.5	5287.8	5267.4
5°	5310.3	5308.2	5287.8	5259.2	5242.9
7.5°	5251.0	5255.1	5249.0	5208.2	5185.7
10°	5193.9	5195.9	5179.6	5146.9	5120.3
12.5°	5120.3	5118.3	5095.8	5079.5	5036.6
15°	5003.9	5016.2	5003.9	4981.4	4946.7
17.5°	4891.6	4891.6	4899.8	4860.9	4834.4
20°	4765.0	4771.1	4771.1	4740.4	4709.8
22.5°	4617.9	4636.3	4642.4	4609.7	4573.0
25°	4444.3	4479.0	4499.4	4466.8	4428.0
27.5°	4233.9	4287.0	4348.3	4323.8	4280.9
30°	3999.0	4076.7	4178.8	4158.4	4127.7
32.5°	3776.4	3854.0	3995.0	3986.8	3970.5
35°	3574.2	3623.2	3788.7	3809.1	3794.8
37.5°	3382.2	3427.2	3582.4	3629.4	3617.1
40°	3180.0	3229.1	3351.6	3435.3	3439.4
42.5°	2979.9	3026.9	3126.9	3247.4	3247.4
45°	2767.5	2814.4	2906.4	3039.1	3055.5
47.5°	2559.1	2608.2	2698.0	2830.8	2857.3
50°	2354.9	2399.8	2489.7	2618.4	2659.2
52.5°	2142.5	2191.5	2279.3	2397.8	2457.0
55°	1938.3	1970.9	2066.9	2181.3	2244.6
57.5°	1725.8	1756.5	1864.7	1962.8	2028.1
60°	1521.6	1560.4	1644.1	1744.2	1819.8
62.5°	1325.5	1366.4	1437.9	1525.7	1611.5
65°	1135.6	1166.2	1235.7	1323.5	1399.1
67.5°	951.8	978.3	1047.8	1109.0	1188.7
70°	765.9	800.6	851.7	910.9	962.0
72.5°	616.8	631.1	674.0	716.9	770.0
75°	455.5	480.0	514.7	539.2	569.8
77.5°	326.8	341.1	361.5	381.9	410.5
80°	218.5	224.7	243.0	247.1	269.6
82.5°	132.8	136.8	140.9	143.0	151.1
85°	71.5	71.5	71.5	67.4	67.4
87.5°	40.8	40.8	34.7	28.6	20.4
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)