

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: P558383

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-93-97-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: P558383
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-LD4-3STD-40-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

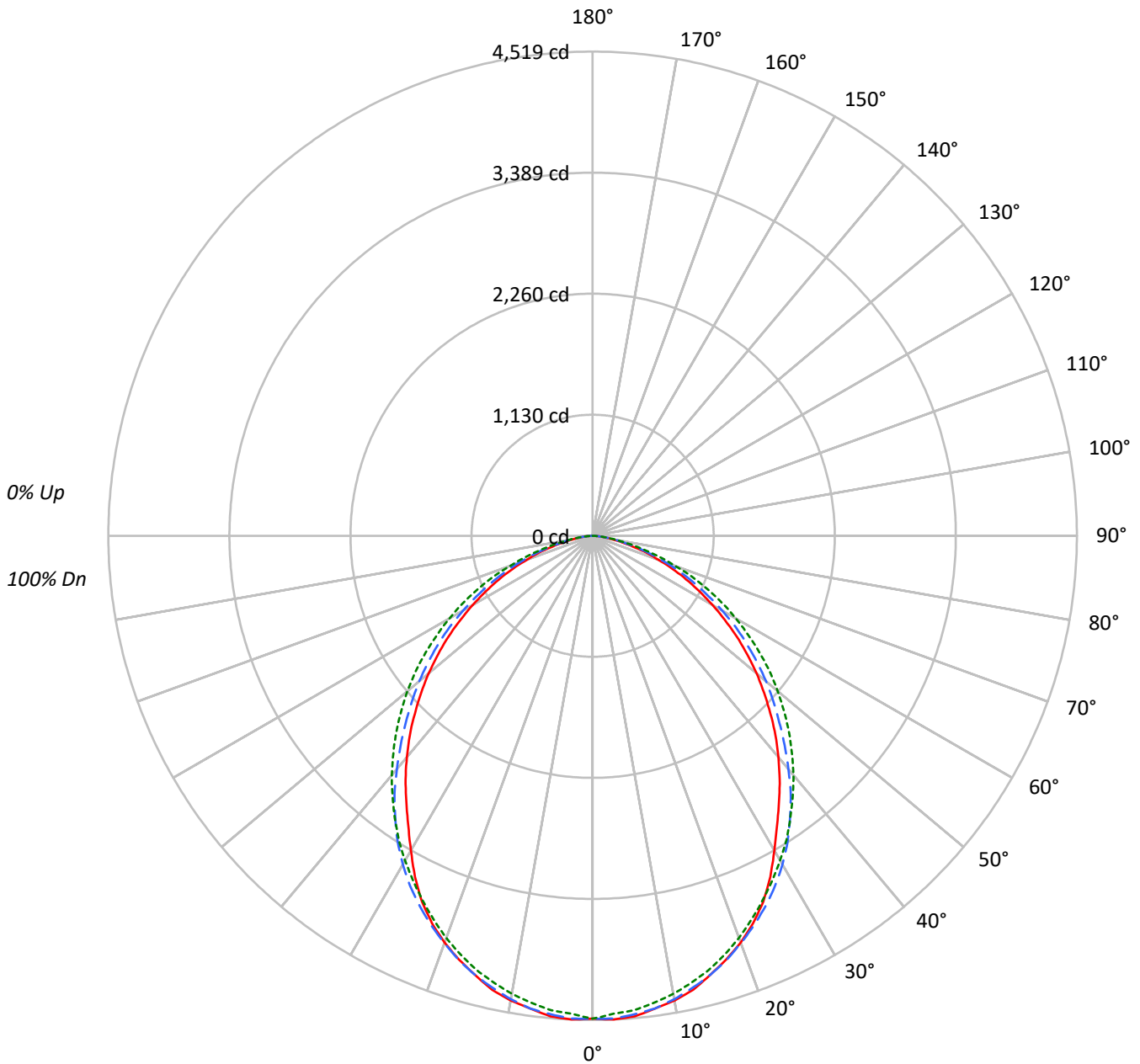
Lumens per Lamp: N/A
Luminaire Lumens: 10422.0 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (A_{in}): 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°	12129	12129	12129
5°	12161	12110	12007
10°	12032	11999	11862
15°	11819	11819	11684
20°	11568	11583	11435
25°	11188	11326	11146
30°	10535	11008	10874
35°	9954	10552	10569
40°	9471	9982	10243
45°	8929	9377	9858
50°	8358	8837	9438
55°	7709	8221	8928
60°	6943	7502	8303
65°	6130	6670	7552
70°	5109	5681	6417
75°	4014	4537	5023
80°	2872	3194	3543
85°	1871	1871	1763



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.4	4.1
10°-20°	1192.2	11.4
20°-30°	1742.2	16.7
30°-40°	1977.6	19.0
40°-50°	1909.0	18.3
50°-60°	1574.8	15.1
60°-70°	1048.7	10.1
70°-80°	469.3	4.5
80°-90°	83.9	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°	3358.7	32.2
0°-40°	5336.3	51.2
0°-60°	8820.1	84.6
0°-90°	10422.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10422.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4507	4507	4507	4507	4507	
5°	4502	4500	4483	4459	4445	426
15°	4242	4253	4242	4223	4194	1196
25°	3768	3797	3815	3787	3754	1726
35°	3030	3072	3212	3229	3217	1899
45°	2346	2386	2464	2577	2590	1810
55°	1643	1671	1752	1849	1903	1467
65°	963	989	1048	1122	1186	955
75°	386	407	436	457	483	422
85°	61	61	61	57	57	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4507.2	4507.2	4507.2	4507.2	4507.2
2.5°	4519.4	4521.1	4510.7	4483.0	4465.7
5°	4502.1	4500.3	4483.0	4458.8	4444.9
7.5°	4451.8	4455.3	4450.1	4415.5	4396.4
10°	4403.4	4405.1	4391.2	4363.5	4341.0
12.5°	4341.0	4339.3	4320.2	4306.4	4270.0
15°	4242.3	4252.7	4242.3	4223.3	4193.8
17.5°	4147.1	4147.1	4154.0	4121.1	4098.6
20°	4039.7	4044.9	4044.9	4018.9	3993.0
22.5°	3915.1	3930.6	3935.8	3908.1	3877.0
25°	3767.9	3797.3	3814.6	3786.9	3754.0
27.5°	3589.5	3634.5	3686.5	3665.7	3629.3
30°	3390.4	3456.2	3542.8	3525.5	3499.5
32.5°	3201.7	3267.5	3386.9	3380.0	3366.1
35°	3030.2	3071.8	3212.0	3229.4	3217.2
37.5°	2867.5	2905.6	3037.2	3077.0	3066.6
40°	2696.0	2737.6	2841.5	2912.5	2915.9
42.5°	2526.3	2566.2	2651.0	2753.2	2753.2
45°	2346.3	2386.1	2464.0	2576.6	2590.4
47.5°	2169.6	2211.2	2287.4	2399.9	2422.4
50°	1996.5	2034.6	2110.8	2219.9	2254.5
52.5°	1816.4	1858.0	1932.4	2032.8	2083.1
55°	1643.2	1671.0	1752.3	1849.3	1903.0
57.5°	1463.2	1489.1	1580.9	1664.0	1719.4
60°	1290.0	1322.9	1393.9	1478.8	1542.8
62.5°	1123.8	1158.4	1219.0	1293.5	1366.2
65°	962.7	988.7	1047.6	1122.0	1186.1
67.5°	806.9	829.4	888.3	940.2	1007.8
70°	649.3	678.8	722.1	772.3	815.6
72.5°	522.9	535.1	571.4	607.8	652.8
75°	386.1	406.9	436.4	457.1	483.1
77.5°	277.0	289.2	306.5	323.8	348.0
80°	185.3	190.5	206.1	209.5	228.6
82.5°	112.6	116.0	119.5	121.2	128.1
85°	60.6	60.6	60.6	57.1	57.1
87.5°	34.6	34.6	29.4	24.2	17.3
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)