

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: P558323

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-80-85-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: P558323
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-80-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

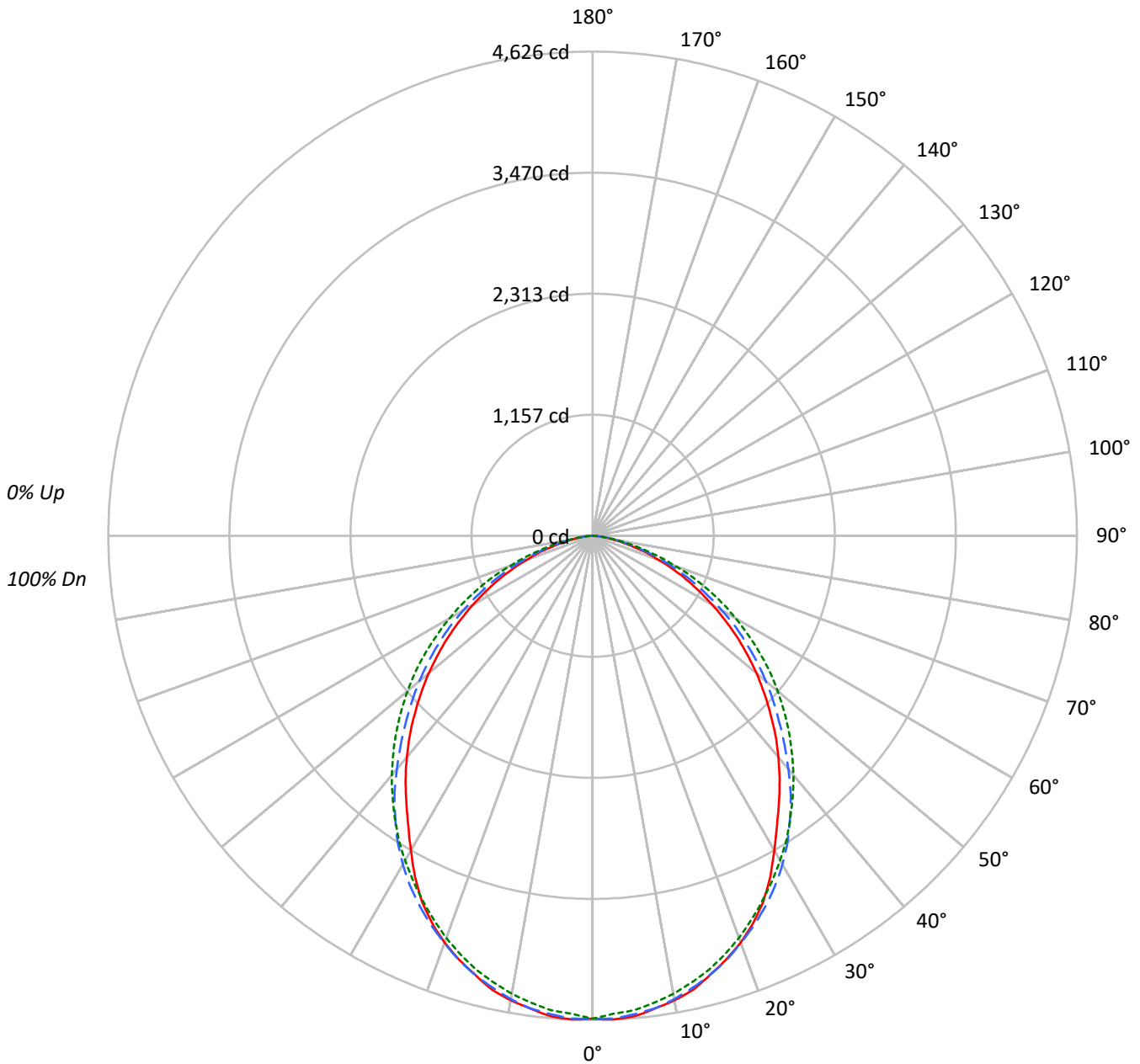
Lumens per Lamp: N/A
Luminaire Lumens: 10668.0 lumens
Efficiency: N/A
Efficacy: 106.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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

TEST NUMBER: P558323

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558323

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-85-EDD

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°	12415	12415	12415
5°	12448	12396	12290
10°	12316	12282	12142
15°	12098	12098	11959
20°	11842	11857	11704
25°	11451	11594	11409
30°	10783	11268	11131
35°	10190	10801	10818
40°	9694	10217	10485
45°	9140	9599	10091
50°	8555	9045	9661
55°	7891	8415	9139
60°	7107	7679	8499
65°	6275	6828	7731
70°	5230	5815	6568
75°	4110	4644	5141
80°	2938	3268	3626
85°	1914	1914	1806



TEST NUMBER: P558323

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.4	4.1
10°-20°	1220.3	11.4
20°-30°	1783.3	16.7
30°-40°	2024.2	19.0
40°-50°	1954.1	18.3
50°-60°	1612.0	15.1
60°-70°	1073.5	10.1
70°-80°	480.4	4.5
80°-90°	85.9	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°	3438.0	32.2
0°-40°	5462.2	51.2
0°-60°	9028.3	84.6
0°-90°	10668.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10668.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4614	4614	4614	4614	4614	
5°	4608	4606	4589	4564	4550	436
15°	4342	4353	4342	4323	4293	1224
25°	3857	3887	3905	3876	3843	1766
35°	3102	3144	3288	3306	3293	1943
45°	2402	2442	2522	2637	2652	1853
55°	1682	1710	1794	1893	1948	1501
65°	986	1012	1072	1148	1214	977
75°	395	416	447	468	494	432
85°	62	62	62	58	58	84
90°	0	0	0	0	0	



TEST NUMBER: P558323

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4613.6	4613.6	4613.6	4613.6	4613.6
2.5°	4626.0	4627.8	4617.2	4588.8	4571.1
5°	4608.3	4606.5	4588.8	4564.0	4549.8
7.5°	4556.9	4560.5	4555.1	4519.7	4500.2
10°	4507.3	4509.1	4494.9	4466.5	4443.5
12.5°	4443.5	4441.7	4422.2	4408.0	4370.8
15°	4342.5	4353.1	4342.5	4323.0	4292.8
17.5°	4245.0	4245.0	4252.1	4218.4	4195.3
20°	4135.1	4140.4	4140.4	4113.8	4087.2
22.5°	4007.5	4023.4	4028.7	4000.4	3968.5
25°	3856.8	3886.9	3904.7	3876.3	3842.6
27.5°	3674.2	3720.3	3773.5	3752.2	3715.0
30°	3470.4	3537.8	3626.4	3608.7	3582.1
32.5°	3277.2	3344.6	3466.9	3459.8	3445.6
35°	3101.8	3144.3	3287.9	3305.6	3293.2
37.5°	2935.1	2974.1	3108.8	3149.6	3139.0
40°	2759.7	2802.2	2908.6	2981.2	2984.8
42.5°	2586.0	2626.7	2713.6	2818.2	2818.2
45°	2401.6	2442.4	2522.2	2637.4	2651.6
47.5°	2220.9	2263.4	2341.4	2456.6	2479.6
50°	2043.6	2082.6	2160.6	2272.3	2307.7
52.5°	1859.3	1901.8	1978.0	2080.8	2132.2
55°	1682.0	1710.4	1793.7	1893.0	1947.9
57.5°	1497.7	1524.3	1618.2	1703.3	1760.0
60°	1320.5	1354.1	1426.8	1513.7	1579.2
62.5°	1150.3	1185.8	1247.8	1324.0	1398.4
65°	985.5	1012.1	1072.3	1148.5	1214.1
67.5°	826.0	849.0	909.3	962.4	1031.6
70°	664.7	694.8	739.1	790.5	834.8
72.5°	535.3	547.7	584.9	622.1	668.2
75°	395.3	416.5	446.7	467.9	494.5
77.5°	283.6	296.0	313.7	331.4	356.3
80°	189.6	195.0	210.9	214.5	234.0
82.5°	115.2	118.8	122.3	124.1	131.2
85°	62.0	62.0	62.0	58.5	58.5
87.5°	35.4	35.4	30.1	24.8	17.7
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)