

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: P556633

Luminaire Tested: **FUSL-12-4-LD4-1LO-50-UNV-82-88-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: P556633
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-LD4-1LO-50-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

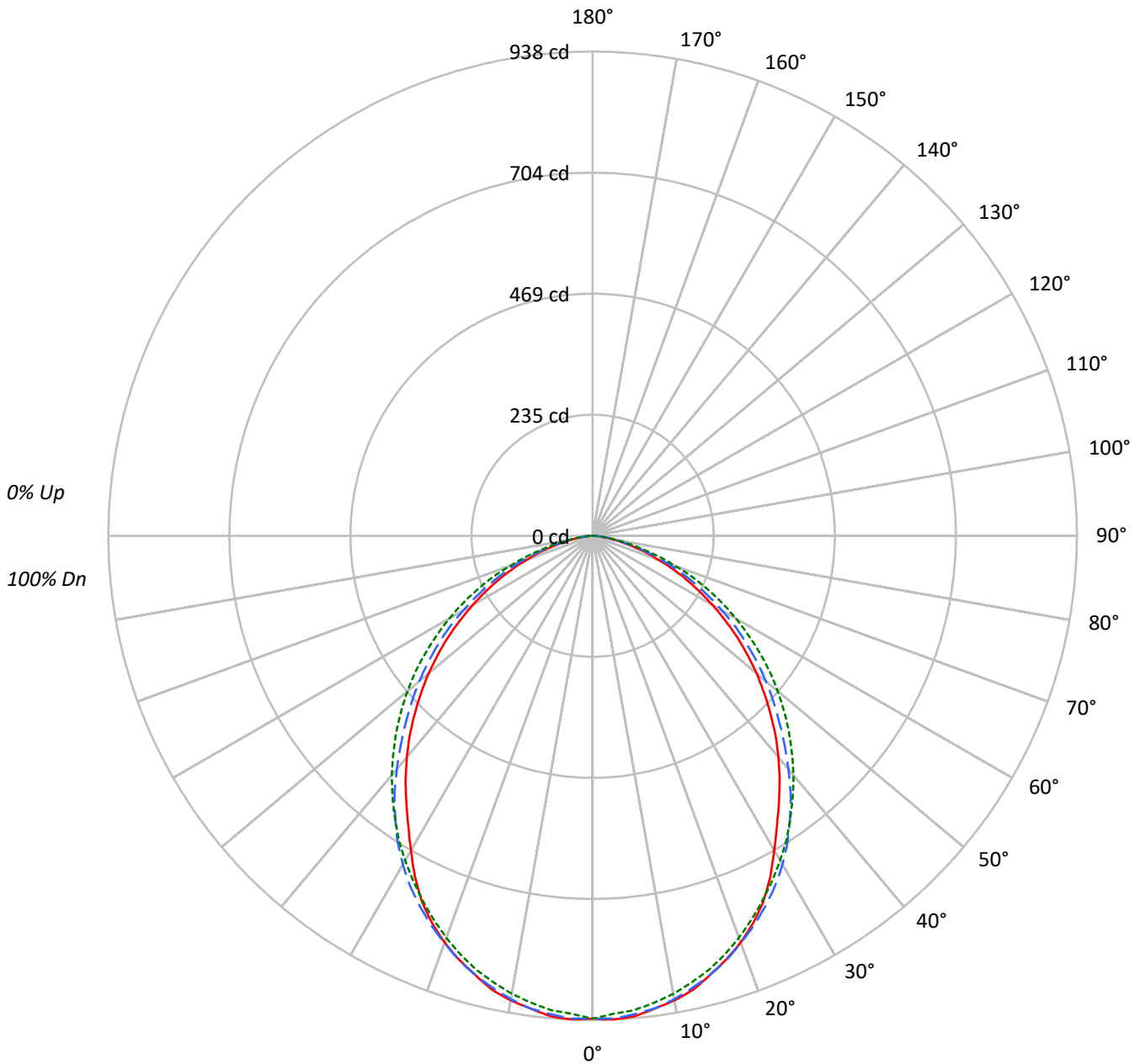
Lumens per Lamp: N/A
Luminaire Lumens: 2163.0 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P556633

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-82-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556633

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-82-88-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°	2517	2517	2517
5°	2524	2513	2492
10°	2497	2490	2462
15°	2453	2453	2425
20°	2401	2404	2373
25°	2322	2351	2313
30°	2186	2285	2257
35°	2066	2190	2193
40°	1965	2072	2126
45°	1853	1946	2046
50°	1735	1834	1959
55°	1600	1706	1853
60°	1441	1557	1723
65°	1272	1384	1568
70°	1061	1179	1332
75°	833	942	1043
80°	597	663	735
85°	389	389	367



TEST NUMBER: P556633

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-82-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.1	4.1
10°-20°	247.4	11.4
20°-30°	361.6	16.7
30°-40°	410.4	19.0
40°-50°	396.2	18.3
50°-60°	326.8	15.1
60°-70°	217.6	10.1
70°-80°	97.4	4.5
80°-90°	17.4	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°	697.1	32.2
0°-40°	1107.5	51.2
0°-60°	1830.5	84.6
0°-90°	2163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2163.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	935	935	935	935	935	
5°	934	934	930	925	922	88
15°	880	883	880	876	870	248
25°	782	788	792	786	779	358
35°	629	638	667	670	668	394
45°	487	495	511	535	538	376
55°	341	347	364	384	395	304
65°	200	205	217	233	246	198
75°	80	84	91	95	100	88
85°	13	13	13	12	12	17
90°	0	0	0	0	0	



TEST NUMBER: P556633

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-82-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.4	935.4	935.4	935.4	935.4
2.5°	938.0	938.3	936.2	930.4	926.8
5°	934.4	934.0	930.4	925.4	922.5
7.5°	923.9	924.7	923.6	916.4	912.4
10°	913.9	914.2	911.4	905.6	900.9
12.5°	900.9	900.6	896.6	893.8	886.2
15°	880.5	882.6	880.5	876.5	870.4
17.5°	860.7	860.7	862.1	855.3	850.6
20°	838.4	839.5	839.5	834.1	828.7
22.5°	812.5	815.8	816.8	811.1	804.6
25°	782.0	788.1	791.7	785.9	779.1
27.5°	745.0	754.3	765.1	760.8	753.2
30°	703.6	717.3	735.3	731.7	726.3
32.5°	664.5	678.1	702.9	701.5	698.6
35°	628.9	637.5	666.6	670.2	667.7
37.5°	595.1	603.0	630.3	638.6	636.4
40°	559.5	568.2	589.7	604.5	605.2
42.5°	524.3	532.6	550.2	571.4	571.4
45°	486.9	495.2	511.4	534.7	537.6
47.5°	450.3	458.9	474.7	498.1	502.8
50°	414.4	422.3	438.1	460.7	467.9
52.5°	377.0	385.6	401.1	421.9	432.3
55°	341.0	346.8	363.7	383.8	394.9
57.5°	303.7	309.1	328.1	345.4	356.9
60°	267.7	274.6	289.3	306.9	320.2
62.5°	233.2	240.4	253.0	268.4	283.5
65°	199.8	205.2	217.4	232.9	246.2
67.5°	167.5	172.1	184.4	195.1	209.2
70°	134.8	140.9	149.9	160.3	169.3
72.5°	108.5	111.0	118.6	126.1	135.5
75°	80.1	84.5	90.6	94.9	100.3
77.5°	57.5	60.0	63.6	67.2	72.2
80°	38.5	39.5	42.8	43.5	47.4
82.5°	23.4	24.1	24.8	25.2	26.6
85°	12.6	12.6	12.6	11.9	11.9
87.5°	7.2	7.2	6.1	5.0	3.6
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)