

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: P556401

Luminaire Tested: **FUSL-12-4-LD4-1LO-30-UNV-80-84-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: P556401
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-30-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

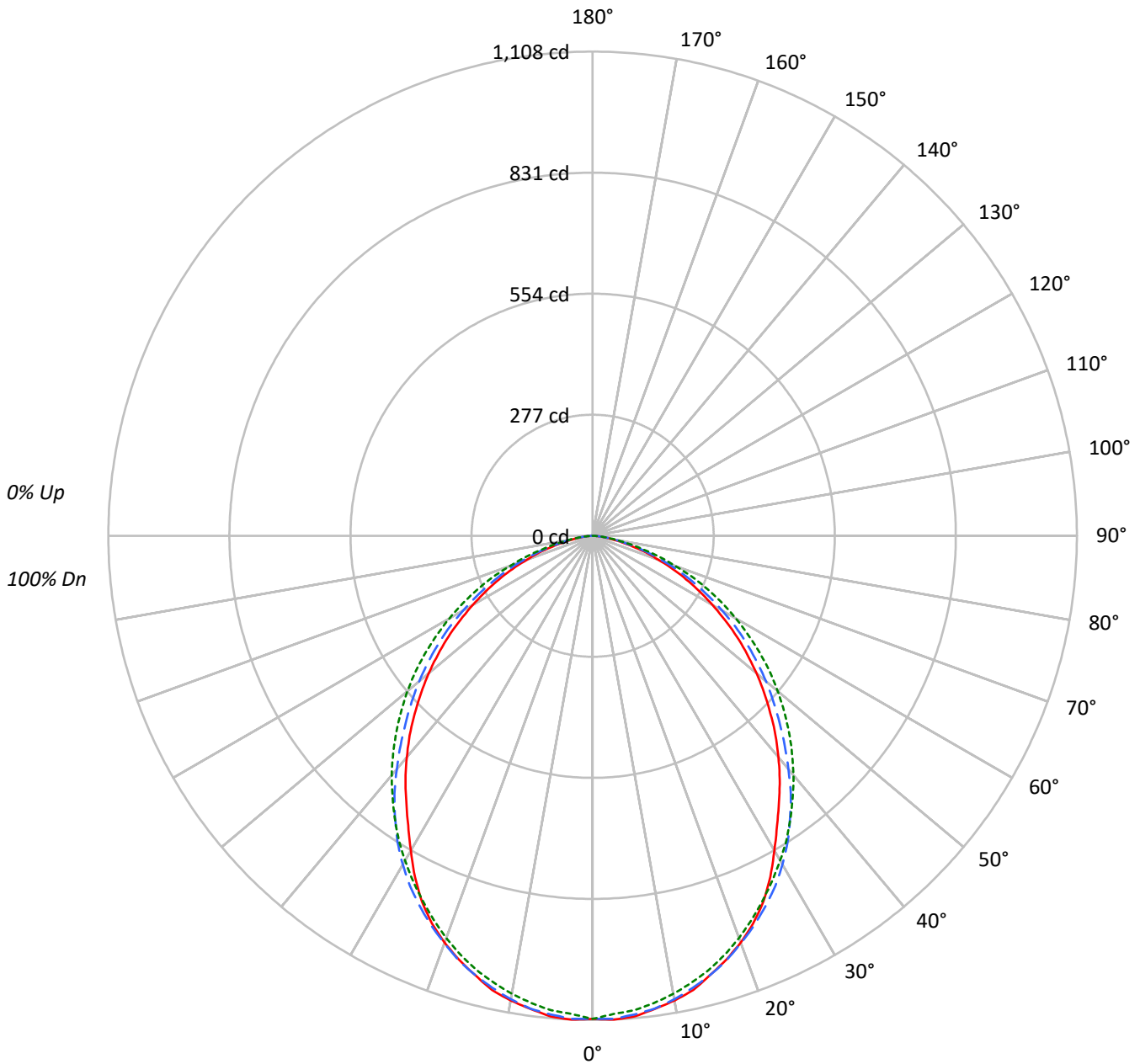
Lumens per Lamp: N/A
Luminaire Lumens: 2556.0 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P556401

CATALOG NUMBER: FUSL-12-4-LD4-1LO-30-UNV-80-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556401

CATALOG NUMBER: FUSL-12-4-LD4-1LO-30-UNV-80-84-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°	2975	2975	2975
5°	2982	2970	2945
10°	2951	2943	2909
15°	2898	2898	2865
20°	2837	2841	2804
25°	2744	2778	2734
30°	2584	2700	2667
35°	2441	2588	2592
40°	2323	2448	2512
45°	2190	2300	2418
50°	2050	2167	2315
55°	1891	2016	2190
60°	1703	1840	2037
65°	1503	1636	1852
70°	1253	1393	1574
75°	985	1112	1232
80°	704	783	869
85°	460	460	432



TEST NUMBER: P556401

CATALOG NUMBER: FUSL-12-4-LD4-1LO-30-UNV-80-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.1	4.1
10°-20°	292.4	11.4
20°-30°	427.3	16.7
30°-40°	485.0	19.0
40°-50°	468.2	18.3
50°-60°	386.2	15.1
60°-70°	257.2	10.1
70°-80°	115.1	4.5
80°-90°	20.6	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°	823.7	32.2
0°-40°	1308.7	51.2
0°-60°	2163.1	84.6
0°-90°	2556.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1104	1104	1100	1094	1090	105
15°	1040	1043	1040	1036	1028	293
25°	924	931	936	929	921	423
35°	743	753	788	792	789	466
45°	575	585	604	632	635	444
55°	403	410	430	454	467	360
65°	236	242	257	275	291	234
75°	95	100	107	112	118	104
85°	15	15	15	14	14	20
90°	0	0	0	0	0	



TEST NUMBER: P556401

CATALOG NUMBER: FUSL-12-4-LD4-1LO-30-UNV-80-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1105.4	1105.4	1105.4	1105.4	1105.4
2.5°	1108.4	1108.8	1106.3	1099.5	1095.2
5°	1104.1	1103.7	1099.5	1093.5	1090.1
7.5°	1091.8	1092.7	1091.4	1082.9	1078.2
10°	1079.9	1080.3	1077.0	1070.2	1064.6
12.5°	1064.6	1064.2	1059.5	1056.1	1047.2
15°	1040.4	1043.0	1040.4	1035.8	1028.5
17.5°	1017.1	1017.1	1018.8	1010.7	1005.2
20°	990.7	992.0	992.0	985.6	979.3
22.5°	960.2	964.0	965.3	958.5	950.8
25°	924.1	931.3	935.5	928.7	920.7
27.5°	880.3	891.4	904.1	899.0	890.1
30°	831.5	847.6	868.9	864.6	858.2
32.5°	785.2	801.3	830.6	828.9	825.5
35°	743.2	753.4	787.8	792.0	789.0
37.5°	703.2	712.6	744.9	754.6	752.1
40°	661.2	671.4	696.9	714.3	715.1
42.5°	619.6	629.4	650.2	675.2	675.2
45°	575.4	585.2	604.3	631.9	635.3
47.5°	532.1	542.3	561.0	588.6	594.1
50°	489.6	499.0	517.7	544.4	552.9
52.5°	445.5	455.7	473.9	498.6	510.9
55°	403.0	409.8	429.8	453.5	466.7
57.5°	358.8	365.2	387.7	408.1	421.7
60°	316.4	324.4	341.9	362.7	378.4
62.5°	275.6	284.1	299.0	317.2	335.1
65°	236.1	242.5	256.9	275.2	290.9
67.5°	197.9	203.4	217.9	230.6	247.2
70°	159.2	166.5	177.1	189.4	200.0
72.5°	128.2	131.2	140.1	149.1	160.1
75°	94.7	99.8	107.0	112.1	118.5
77.5°	67.9	70.9	75.2	79.4	85.4
80°	45.4	46.7	50.5	51.4	56.1
82.5°	27.6	28.5	29.3	29.7	31.4
85°	14.9	14.9	14.9	14.0	14.0
87.5°	8.5	8.5	7.2	5.9	4.2
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)