

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: P556784

Luminaire Tested: **FUSL-12-4-LD4-1STD-40-UNV-80-84-EDD-90**

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: P556784
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-LD4-1STD-40-UNV-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

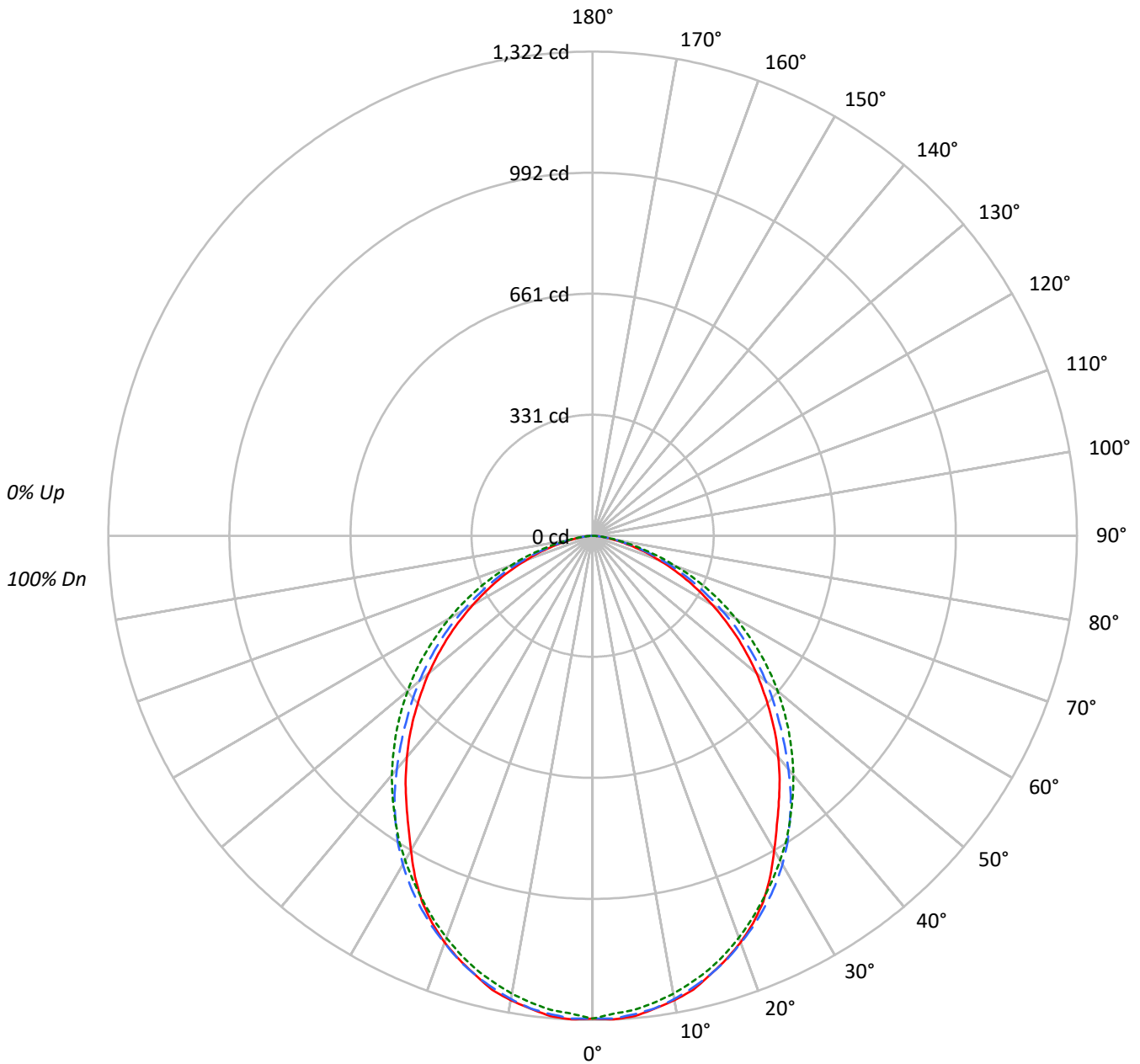
Lumens per Lamp: N/A
Luminaire Lumens: 3048.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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: P556784

CATALOG NUMBER: FUSL-12-4-LD4-1STD-40-UNV-80-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556784

CATALOG NUMBER: FUSL-12-4-LD4-1STD-40-UNV-80-84-EDD-90

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°	3547	3547	3547
5°	3557	3542	3512
10°	3519	3509	3469
15°	3456	3456	3417
20°	3383	3388	3344
25°	3272	3312	3260
30°	3081	3219	3180
35°	2911	3086	3091
40°	2770	2919	2996
45°	2611	2742	2883
50°	2444	2584	2760
55°	2255	2404	2611
60°	2031	2194	2428
65°	1793	1951	2209
70°	1494	1662	1876
75°	1174	1327	1469
80°	840	934	1035
85°	546	546	516



TEST NUMBER: P556784

CATALOG NUMBER: FUSL-12-4-LD4-1STD-40-UNV-80-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.1	4.1
10°-20°	348.7	11.4
20°-30°	509.5	16.7
30°-40°	578.3	19.0
40°-50°	558.3	18.3
50°-60°	460.6	15.1
60°-70°	306.7	10.1
70°-80°	137.2	4.5
80°-90°	24.5	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°	982.3	32.2
0°-40°	1560.6	51.2
0°-60°	2579.5	84.6
0°-90°	3048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3048.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1318	1318	1318	1318	1318	
5°	1317	1316	1311	1304	1300	125
15°	1241	1244	1241	1235	1226	350
25°	1102	1111	1116	1108	1098	505
35°	886	898	939	944	941	555
45°	686	698	721	754	758	529
55°	481	489	512	541	556	429
65°	282	289	306	328	347	279
75°	113	119	128	134	141	123
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



TEST NUMBER: P556784

CATALOG NUMBER: FUSL-12-4-LD4-1STD-40-UNV-80-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1318.2	1318.2	1318.2	1318.2	1318.2
2.5°	1321.7	1322.2	1319.2	1311.1	1306.0
5°	1316.7	1316.2	1311.1	1304.0	1300.0
7.5°	1302.0	1303.0	1301.5	1291.3	1285.8
10°	1287.8	1288.3	1284.3	1276.1	1269.6
12.5°	1269.6	1269.1	1263.5	1259.4	1248.8
15°	1240.7	1243.7	1240.7	1235.1	1226.5
17.5°	1212.8	1212.8	1214.9	1205.3	1198.7
20°	1181.5	1183.0	1183.0	1175.4	1167.8
22.5°	1145.0	1149.5	1151.1	1143.0	1133.8
25°	1101.9	1110.6	1115.6	1107.5	1097.9
27.5°	1049.8	1063.0	1078.1	1072.1	1061.4
30°	991.5	1010.8	1036.1	1031.0	1023.5
32.5°	936.3	955.6	990.5	988.5	984.5
35°	886.2	898.4	939.4	944.5	940.9
37.5°	838.6	849.8	888.2	899.9	896.8
40°	788.5	800.6	831.0	851.8	852.8
42.5°	738.8	750.5	775.3	805.2	805.2
45°	686.2	697.8	720.6	753.5	757.6
47.5°	634.5	646.7	669.0	701.9	708.5
50°	583.9	595.0	617.3	649.2	659.3
52.5°	531.2	543.4	565.2	594.5	609.2
55°	480.6	488.7	512.5	540.8	556.5
57.5°	427.9	435.5	462.4	486.7	502.9
60°	377.3	386.9	407.7	432.5	451.2
62.5°	328.7	338.8	356.5	378.3	399.6
65°	281.6	289.2	306.4	328.2	346.9
67.5°	236.0	242.6	259.8	275.0	294.7
70°	189.9	198.5	211.2	225.9	238.5
72.5°	152.9	156.5	167.1	177.7	190.9
75°	112.9	119.0	127.6	133.7	141.3
77.5°	81.0	84.6	89.6	94.7	101.8
80°	54.2	55.7	60.3	61.3	66.8
82.5°	32.9	33.9	34.9	35.4	37.5
85°	17.7	17.7	17.7	16.7	16.7
87.5°	10.1	10.1	8.6	7.1	5.1
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)