

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: P556474

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-80-94-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: P556474
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-35-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

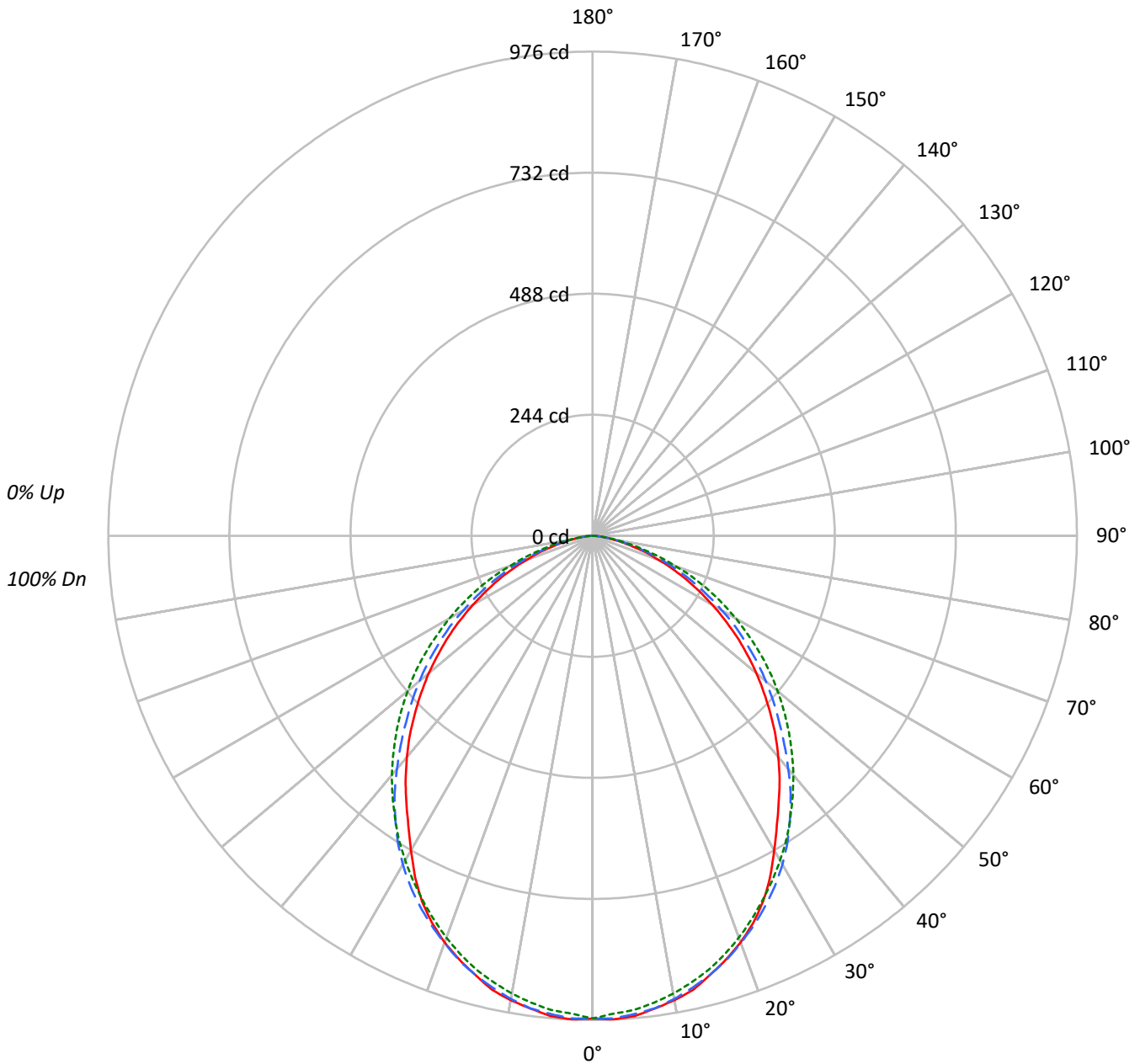
Lumens per Lamp: N/A
Luminaire Lumens: 2250.0 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P556474

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-80-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556474

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-80-94-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°	2619	2619	2619
5°	2625	2614	2592
10°	2598	2590	2561
15°	2552	2552	2522
20°	2497	2501	2468
25°	2415	2445	2407
30°	2274	2376	2348
35°	2149	2278	2282
40°	2044	2155	2211
45°	1928	2025	2128
50°	1804	1908	2038
55°	1665	1775	1927
60°	1499	1619	1793
65°	1323	1440	1631
70°	1103	1227	1386
75°	867	979	1084
80°	620	690	764
85°	404	404	380



TEST NUMBER: P556474

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-80-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.6	4.1
10°-20°	257.4	11.4
20°-30°	376.1	16.7
30°-40°	426.9	19.0
40°-50°	412.1	18.3
50°-60°	340.0	15.1
60°-70°	226.4	10.1
70°-80°	101.3	4.5
80°-90°	18.1	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°	725.1	32.2
0°-40°	1152.0	51.2
0°-60°	1904.1	84.6
0°-90°	2250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	972	972	968	963	960	92
15°	916	918	916	912	905	258
25°	813	820	824	818	810	373
35°	654	663	693	697	695	410
45°	506	515	532	556	559	391
55°	355	361	378	399	411	317
65°	208	214	226	242	256	206
75°	83	88	94	99	104	91
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



TEST NUMBER: P556474

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-80-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.1	973.1	973.1	973.1	973.1
2.5°	975.7	976.1	973.8	967.8	964.1
5°	971.9	971.6	967.8	962.6	959.6
7.5°	961.1	961.9	960.7	953.3	949.1
10°	950.6	951.0	948.0	942.0	937.2
12.5°	937.2	936.8	932.7	929.7	921.9
15°	915.9	918.1	915.9	911.8	905.4
17.5°	895.3	895.3	896.8	889.7	884.8
20°	872.1	873.3	873.3	867.6	862.0
22.5°	845.2	848.6	849.7	843.7	837.0
25°	813.4	819.8	823.5	817.6	810.5
27.5°	774.9	784.7	795.9	791.4	783.5
30°	731.9	746.2	764.8	761.1	755.5
32.5°	691.2	705.4	731.2	729.7	726.7
35°	654.2	663.2	693.4	697.2	694.6
37.5°	619.1	627.3	655.7	664.3	662.0
40°	582.0	591.0	613.4	628.8	629.5
42.5°	545.4	554.0	572.3	594.4	594.4
45°	506.5	515.1	532.0	556.3	559.2
47.5°	468.4	477.4	493.8	518.1	523.0
50°	431.0	439.2	455.7	479.2	486.7
52.5°	392.1	401.1	417.2	438.9	449.7
55°	354.8	360.7	378.3	399.2	410.8
57.5°	315.9	321.5	341.3	359.2	371.2
60°	278.5	285.6	300.9	319.2	333.1
62.5°	242.6	250.1	263.2	279.2	294.9
65°	207.8	213.5	226.2	242.2	256.1
67.5°	174.2	179.1	191.8	203.0	217.6
70°	140.2	146.5	155.9	166.7	176.1
72.5°	112.9	115.5	123.4	131.2	140.9
75°	83.4	87.8	94.2	98.7	104.3
77.5°	59.8	62.4	66.2	69.9	75.1
80°	40.0	41.1	44.5	45.2	49.3
82.5°	24.3	25.0	25.8	26.2	27.7
85°	13.1	13.1	13.1	12.3	12.3
87.5°	7.5	7.5	6.4	5.2	3.7
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)