

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: P556515

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-93-85-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: P556515
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-93-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

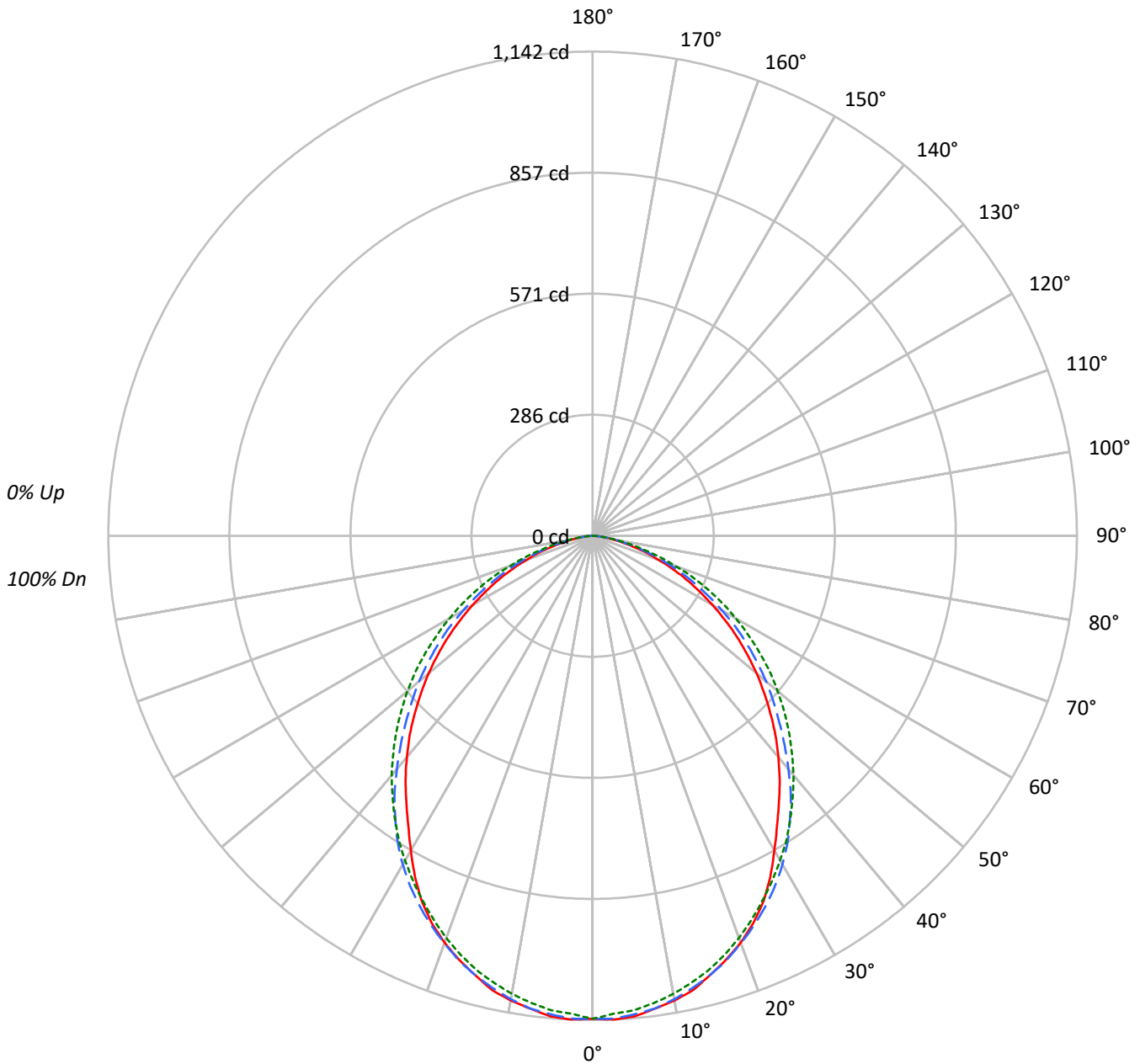
Lumens per Lamp: N/A
Luminaire Lumens: 2634.0 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P556515

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-93-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556515

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-93-85-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°	3065	3065	3065
5°	3073	3061	3035
10°	3041	3033	2998
15°	2987	2987	2953
20°	2924	2928	2890
25°	2828	2863	2817
30°	2663	2782	2748
35°	2516	2667	2671
40°	2394	2523	2589
45°	2257	2370	2492
50°	2112	2233	2385
55°	1948	2078	2256
60°	1755	1896	2098
65°	1549	1686	1909
70°	1291	1436	1622
75°	1015	1147	1269
80°	725	807	896
85°	472	472	445



TEST NUMBER: P556515

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-93-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	4.1
10°-20°	301.3	11.4
20°-30°	440.3	16.7
30°-40°	499.8	19.0
40°-50°	482.5	18.3
50°-60°	398.0	15.1
60°-70°	265.0	10.1
70°-80°	118.6	4.5
80°-90°	21.2	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°	848.9	32.2
0°-40°	1348.7	51.2
0°-60°	2229.1	84.6
0°-90°	2634.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2634.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1139	1139	1139	1139	1139	
5°	1138	1137	1133	1127	1123	108
15°	1072	1075	1072	1067	1060	302
25°	952	960	964	957	949	436
35°	766	776	812	816	813	480
45°	593	603	623	651	655	458
55°	415	422	443	467	481	371
65°	243	250	265	284	300	241
75°	98	103	110	116	122	107
85°	15	15	15	14	14	21
90°	0	0	0	0	0	



TEST NUMBER: P556515

CATALOG NUMBER: FUSL-12-4-LD4-1LO-35-UNV-93-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1139.1	1139.1	1139.1	1139.1	1139.1
2.5°	1142.2	1142.6	1140.0	1133.0	1128.6
5°	1137.8	1137.4	1133.0	1126.9	1123.4
7.5°	1125.1	1126.0	1124.7	1115.9	1111.1
10°	1112.9	1113.3	1109.8	1102.8	1097.1
12.5°	1097.1	1096.7	1091.9	1088.4	1079.2
15°	1072.2	1074.8	1072.2	1067.4	1059.9
17.5°	1048.1	1048.1	1049.9	1041.5	1035.9
20°	1021.0	1022.3	1022.3	1015.7	1009.2
22.5°	989.5	993.4	994.7	987.7	979.8
25°	952.3	959.7	964.1	957.1	948.8
27.5°	907.2	918.6	931.7	926.5	917.3
30°	856.9	873.5	895.4	891.0	884.4
32.5°	809.2	825.8	856.0	854.2	850.7
35°	765.8	776.3	811.8	816.2	813.1
37.5°	724.7	734.3	767.6	777.7	775.0
40°	681.4	691.9	718.1	736.1	737.0
42.5°	638.5	648.6	670.0	695.8	695.8
45°	593.0	603.0	622.7	651.2	654.7
47.5°	548.3	558.8	578.1	606.5	612.2
50°	504.6	514.2	533.5	561.0	569.8
52.5°	459.1	469.6	488.4	513.8	526.5
55°	415.3	422.3	442.9	467.4	480.9
57.5°	369.8	376.4	399.6	420.6	434.6
60°	326.0	334.3	352.3	373.7	389.9
62.5°	284.0	292.8	308.1	326.9	345.3
65°	243.3	249.9	264.8	283.6	299.8
67.5°	203.9	209.6	224.5	237.6	254.7
70°	164.1	171.5	182.5	195.2	206.1
72.5°	132.2	135.2	144.4	153.6	165.0
75°	97.6	102.8	110.3	115.5	122.1
77.5°	70.0	73.1	77.5	81.8	88.0
80°	46.8	48.1	52.1	53.0	57.8
82.5°	28.4	29.3	30.2	30.6	32.4
85°	15.3	15.3	15.3	14.4	14.4
87.5°	8.8	8.8	7.4	6.1	4.4
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)