

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: P557705

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-81-88-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: P557705
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-LD4-3HI-30-UNV-81-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

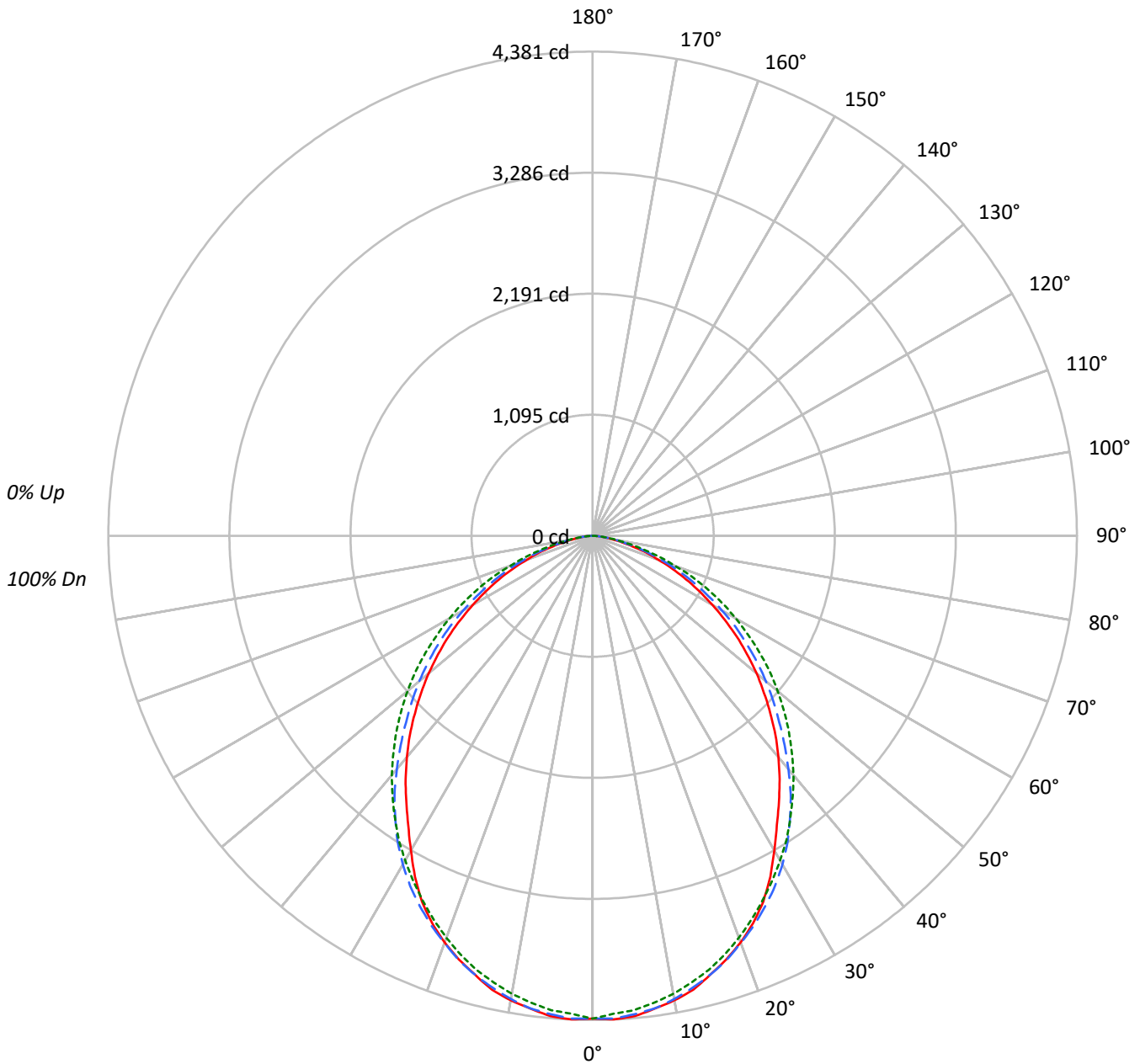
Lumens per Lamp: N/A
Luminaire Lumens: 10102.0 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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: P557705

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-81-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557705

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-81-88-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°	11757	11757	11757
5°	11788	11738	11638
10°	11663	11631	11498
15°	11456	11456	11325
20°	11213	11228	11084
25°	10844	10978	10804
30°	10211	10670	10540
35°	9649	10228	10245
40°	9180	9675	9929
45°	8655	9089	9556
50°	8102	8565	9149
55°	7473	7969	8654
60°	6730	7272	8048
65°	5942	6465	7321
70°	4952	5507	6220
75°	3892	4398	4869
80°	2783	3095	3433
85°	1812	1812	1711



TEST NUMBER: P557705

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-81-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.3	4.1
10°-20°	1155.6	11.4
20°-30°	1688.7	16.7
30°-40°	1916.8	19.0
40°-50°	1850.4	18.3
50°-60°	1526.4	15.1
60°-70°	1016.5	10.1
70°-80°	454.9	4.5
80°-90°	81.4	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°	3255.6	32.2
0°-40°	5172.4	51.2
0°-60°	8549.2	84.6
0°-90°	10102.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10102.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4369	4369	4369	4369	4369	
5°	4364	4362	4345	4322	4308	413
15°	4112	4122	4112	4094	4065	1159
25°	3652	3681	3698	3671	3639	1673
35°	2937	2978	3113	3130	3118	1840
45°	2274	2313	2388	2497	2511	1755
55°	1593	1620	1698	1792	1845	1422
65°	933	958	1015	1088	1150	925
75°	374	394	423	443	468	409
85°	59	59	59	55	55	79
90°	0	0	0	0	0	



TEST NUMBER: P557705

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-81-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4368.9	4368.9	4368.9	4368.9	4368.9
2.5°	4380.6	4382.3	4372.2	4345.4	4328.6
5°	4363.8	4362.1	4345.4	4321.9	4308.4
7.5°	4315.1	4318.5	4313.5	4279.9	4261.4
10°	4268.2	4269.8	4256.4	4229.5	4207.7
12.5°	4207.7	4206.1	4187.6	4174.2	4138.9
15°	4112.1	4122.1	4112.1	4093.6	4065.1
17.5°	4019.7	4019.7	4026.5	3994.6	3972.8
20°	3915.7	3920.7	3920.7	3895.5	3870.4
22.5°	3794.8	3809.9	3815.0	3788.1	3757.9
25°	3652.2	3680.7	3697.5	3670.6	3638.8
27.5°	3479.3	3522.9	3573.3	3553.2	3517.9
30°	3286.3	3350.1	3434.0	3417.2	3392.0
32.5°	3103.3	3167.1	3282.9	3276.2	3262.8
35°	2937.2	2977.5	3113.4	3130.2	3118.5
37.5°	2779.4	2816.3	2943.9	2982.5	2972.4
40°	2613.3	2653.5	2754.2	2823.1	2826.4
42.5°	2448.8	2487.4	2569.6	2668.6	2668.6
45°	2274.2	2312.8	2388.4	2497.4	2510.9
47.5°	2103.0	2143.3	2217.2	2326.3	2348.1
50°	1935.2	1972.1	2046.0	2151.7	2185.3
52.5°	1760.6	1800.9	1873.1	1970.4	2019.1
55°	1592.8	1619.6	1698.5	1792.5	1844.6
57.5°	1418.2	1443.4	1532.4	1612.9	1666.6
60°	1250.4	1282.3	1351.1	1433.3	1495.4
62.5°	1089.3	1122.8	1181.6	1253.8	1324.3
65°	933.2	958.4	1015.4	1087.6	1149.7
67.5°	782.1	803.9	861.0	911.4	976.8
70°	629.4	657.9	699.9	748.6	790.5
72.5°	506.9	518.6	553.9	589.1	632.8
75°	374.3	394.4	423.0	443.1	468.3
77.5°	268.5	280.3	297.1	313.9	337.4
80°	179.6	184.6	199.7	203.1	221.5
82.5°	109.1	112.5	115.8	117.5	124.2
85°	58.7	58.7	58.7	55.4	55.4
87.5°	33.6	33.6	28.5	23.5	16.8
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)