

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: P556981

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-80-86-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: P556981
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-LD4-2HI-35-UNV-80-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

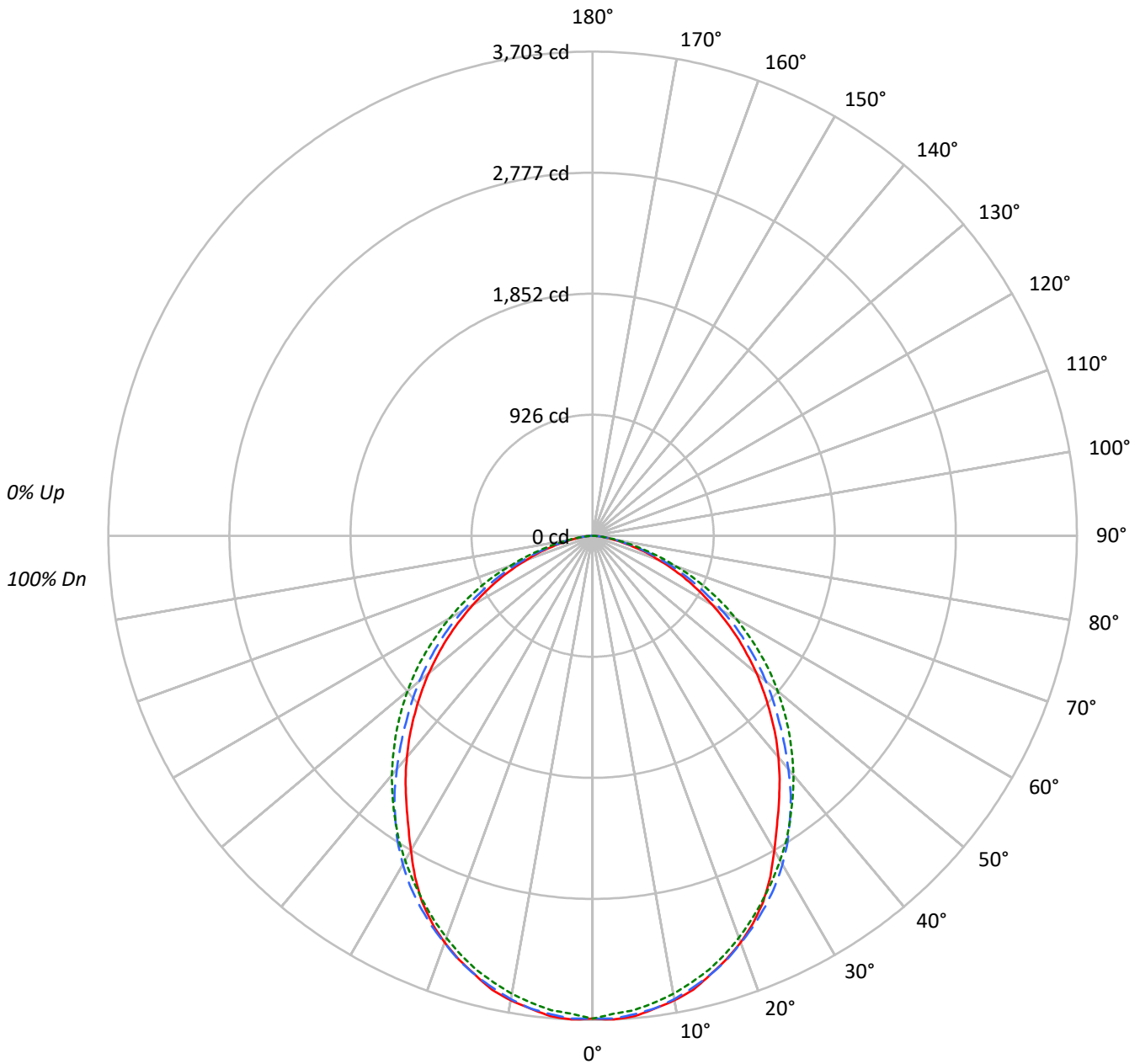
Lumens per Lamp: N/A
Luminaire Lumens: 8539.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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: P556981

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-80-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556981

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-80-86-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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°	9938	9938	9938
5°	9964	9922	9837
10°	9858	9831	9719
15°	9683	9683	9573
20°	9478	9491	9369
25°	9166	9280	9133
30°	8631	9019	8909
35°	8156	8645	8659
40°	7759	8178	8392
45°	7316	7683	8077
50°	6848	7240	7733
55°	6317	6736	7315
60°	5688	6147	6803
65°	5023	5465	6188
70°	4186	4655	5257
75°	3290	3717	4115
80°	2352	2616	2903
85°	1535	1535	1445



TEST NUMBER: P556981

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-80-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.7	4.1
10°-20°	976.8	11.4
20°-30°	1427.4	16.7
30°-40°	1620.3	19.0
40°-50°	1564.1	18.3
50°-60°	1290.3	15.1
60°-70°	859.2	10.1
70°-80°	384.5	4.5
80°-90°	68.8	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°	2751.9	32.2
0°-40°	4372.1	51.2
0°-60°	7226.5	84.6
0°-90°	8539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8539.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3693	3693	3693	3693	3693	
5°	3689	3687	3673	3653	3642	349
15°	3476	3484	3476	3460	3436	980
25°	3087	3111	3125	3103	3076	1414
35°	2483	2517	2632	2646	2636	1556
45°	1922	1955	2019	2111	2122	1483
55°	1346	1369	1436	1515	1559	1202
65°	789	810	858	919	972	782
75°	316	333	358	374	396	346
85°	50	50	50	47	47	67
90°	0	0	0	0	0	



TEST NUMBER: P556981

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-80-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3692.9	3692.9	3692.9	3692.9	3692.9
2.5°	3702.8	3704.2	3695.7	3673.0	3658.8
5°	3688.6	3687.2	3673.0	3653.2	3641.8
7.5°	3647.5	3650.3	3646.1	3617.7	3602.1
10°	3607.8	3609.2	3597.8	3575.1	3556.7
12.5°	3556.7	3555.3	3539.7	3528.3	3498.5
15°	3475.8	3484.3	3475.8	3460.2	3436.1
17.5°	3397.8	3397.8	3403.5	3376.5	3358.1
20°	3309.8	3314.1	3314.1	3292.8	3271.5
22.5°	3207.7	3220.5	3224.7	3202.0	3176.5
25°	3087.1	3111.2	3125.4	3102.7	3075.8
27.5°	2941.0	2977.9	3020.4	3003.4	2973.6
30°	2777.8	2831.7	2902.7	2888.5	2867.2
32.5°	2623.2	2677.1	2775.0	2769.3	2758.0
35°	2482.7	2516.8	2631.7	2645.9	2636.0
37.5°	2349.4	2380.6	2488.4	2521.0	2512.5
40°	2208.9	2243.0	2328.1	2386.3	2389.1
42.5°	2069.9	2102.5	2172.0	2255.7	2255.7
45°	1922.3	1955.0	2018.8	2111.0	2122.4
47.5°	1777.6	1811.7	1874.1	1966.3	1984.8
50°	1635.8	1667.0	1729.4	1818.8	1847.2
52.5°	1488.2	1522.3	1583.3	1665.6	1706.7
55°	1346.4	1369.1	1435.7	1515.2	1559.2
57.5°	1198.8	1220.1	1295.3	1363.4	1408.8
60°	1056.9	1083.9	1142.1	1211.6	1264.1
62.5°	920.7	949.1	998.8	1059.8	1119.4
65°	788.8	810.1	858.3	919.3	971.8
67.5°	661.1	679.6	727.8	770.4	825.7
70°	532.0	556.1	591.6	632.7	668.2
72.5°	428.4	438.4	468.2	498.0	534.9
75°	316.4	333.4	357.5	374.5	395.8
77.5°	227.0	236.9	251.1	265.3	285.2
80°	151.8	156.1	168.8	171.7	187.3
82.5°	92.2	95.1	97.9	99.3	105.0
85°	49.7	49.7	49.7	46.8	46.8
87.5°	28.4	28.4	24.1	19.9	14.2
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)