

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: P558427

Luminaire Tested: **FUSL-12-4-LD4-3STD-50-UNV-82-94-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: P558427
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-LD4-3STD-50-UNV-82-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

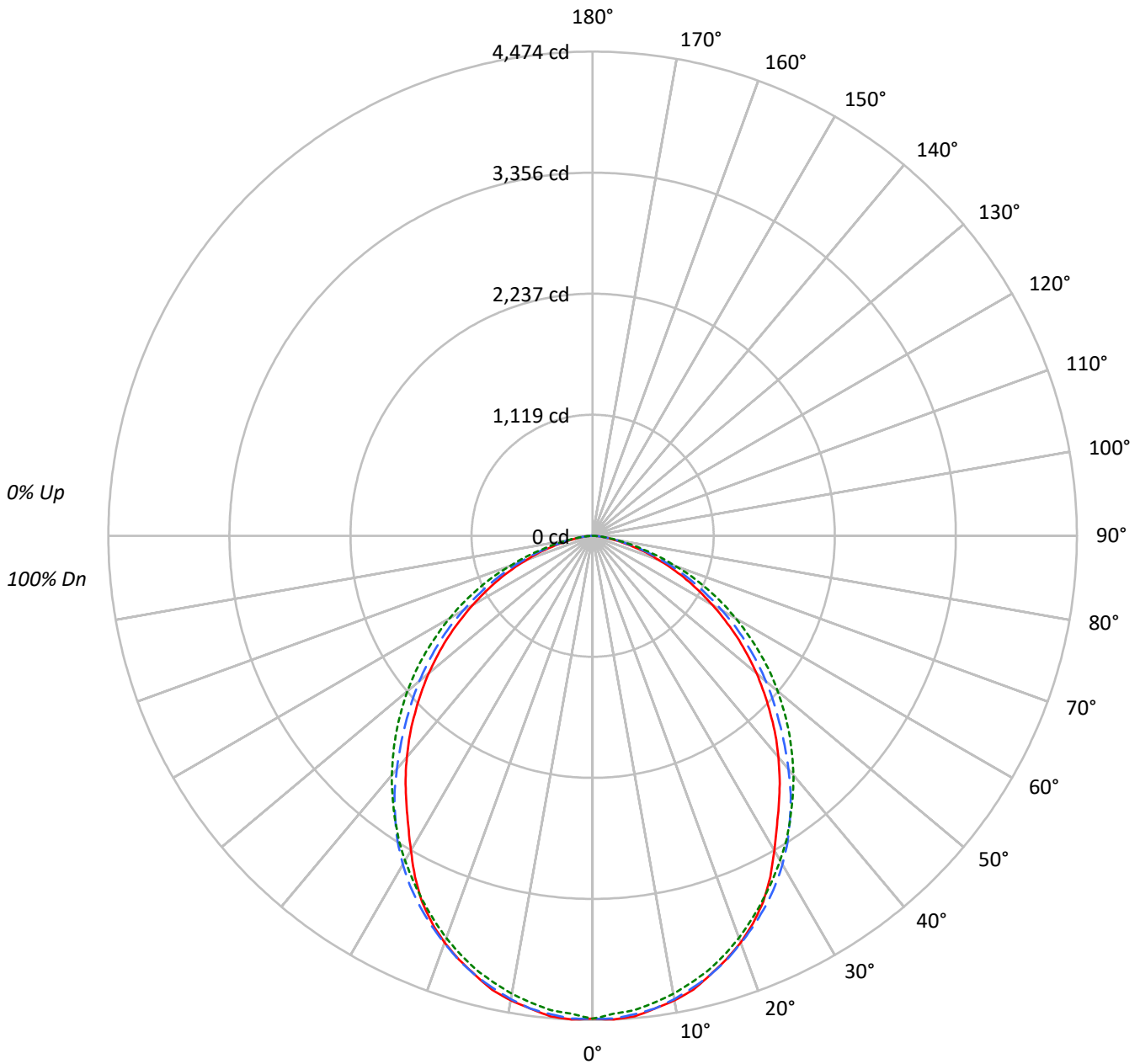
Lumens per Lamp: N/A
Luminaire Lumens: 10318.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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: P558427

CATALOG NUMBER: FUSL-12-4-LD4-3STD-50-UNV-82-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558427

CATALOG NUMBER: FUSL-12-4-LD4-3STD-50-UNV-82-94-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°	12008	12008	12008
5°	12040	11989	11887
10°	11912	11879	11743
15°	11701	11701	11567
20°	11453	11468	11320
25°	11076	11213	11035
30°	10430	10898	10765
35°	9855	10447	10463
40°	9376	9882	10141
45°	8840	9283	9760
50°	8275	8748	9344
55°	7633	8139	8839
60°	6873	7427	8220
65°	6069	6604	7477
70°	5058	5625	6353
75°	3975	4492	4973
80°	2842	3161	3507
85°	1853	1853	1748



TEST NUMBER: P558427

CATALOG NUMBER: FUSL-12-4-LD4-3STD-50-UNV-82-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.1	4.1
10°-20°	1180.3	11.4
20°-30°	1724.8	16.7
30°-40°	1957.8	19.0
40°-50°	1890.0	18.3
50°-60°	1559.1	15.1
60°-70°	1038.2	10.1
70°-80°	464.6	4.5
80°-90°	83.1	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°	3325.2	32.2
0°-40°	5283.0	51.2
0°-60°	8732.1	84.6
0°-90°	10318.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4462	4462	4462	4462	4462	
5°	4457	4455	4438	4414	4401	422
15°	4200	4210	4200	4181	4152	1184
25°	3730	3759	3777	3749	3717	1708
35°	3000	3041	3180	3197	3185	1880
45°	2323	2362	2439	2551	2565	1792
55°	1627	1654	1735	1831	1884	1452
65°	953	979	1037	1111	1174	945
75°	382	403	432	453	478	418
85°	60	60	60	57	57	81
90°	0	0	0	0	0	



TEST NUMBER: P558427

CATALOG NUMBER: FUSL-12-4-LD4-3STD-50-UNV-82-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4462.3	4462.3	4462.3	4462.3	4462.3
2.5°	4474.3	4476.0	4465.7	4438.3	4421.1
5°	4457.1	4455.4	4438.3	4414.3	4400.6
7.5°	4407.4	4410.8	4405.7	4371.4	4352.6
10°	4359.4	4361.1	4347.4	4320.0	4297.7
12.5°	4297.7	4296.0	4277.1	4263.4	4227.4
15°	4200.0	4210.3	4200.0	4181.1	4152.0
17.5°	4105.7	4105.7	4112.6	4080.0	4057.7
20°	3999.4	4004.6	4004.6	3978.8	3953.1
22.5°	3876.0	3891.4	3896.6	3869.1	3838.3
25°	3730.3	3759.4	3776.6	3749.1	3716.6
27.5°	3553.7	3598.3	3649.7	3629.1	3593.1
30°	3356.6	3421.7	3507.4	3490.3	3464.6
32.5°	3169.7	3234.8	3353.1	3346.3	3332.6
35°	3000.0	3041.1	3180.0	3197.1	3185.1
37.5°	2838.8	2876.6	3006.8	3046.3	3036.0
40°	2669.1	2710.3	2813.1	2883.4	2886.8
42.5°	2501.1	2540.6	2624.6	2725.7	2725.7
45°	2322.8	2362.3	2439.4	2550.8	2564.6
47.5°	2148.0	2189.1	2264.6	2376.0	2398.3
50°	1976.6	2014.3	2089.7	2197.7	2232.0
52.5°	1798.3	1839.4	1913.1	2012.6	2062.3
55°	1626.9	1654.3	1734.9	1830.9	1884.0
57.5°	1448.6	1474.3	1565.1	1647.4	1702.3
60°	1277.1	1309.7	1380.0	1464.0	1527.4
62.5°	1112.6	1146.9	1206.9	1280.6	1352.6
65°	953.1	978.9	1037.1	1110.9	1174.3
67.5°	798.9	821.1	879.4	930.9	997.7
70°	642.9	672.0	714.9	764.6	807.4
72.5°	517.7	529.7	565.7	601.7	646.3
75°	382.3	402.9	432.0	452.6	478.3
77.5°	274.3	286.3	303.4	320.6	344.6
80°	183.4	188.6	204.0	207.4	226.3
82.5°	111.4	114.9	118.3	120.0	126.9
85°	60.0	60.0	60.0	56.6	56.6
87.5°	34.3	34.3	29.1	24.0	17.1
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)