

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: P556116

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-82-86-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: P556116
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-12-2-LD4-3STD-50-UNV-82-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

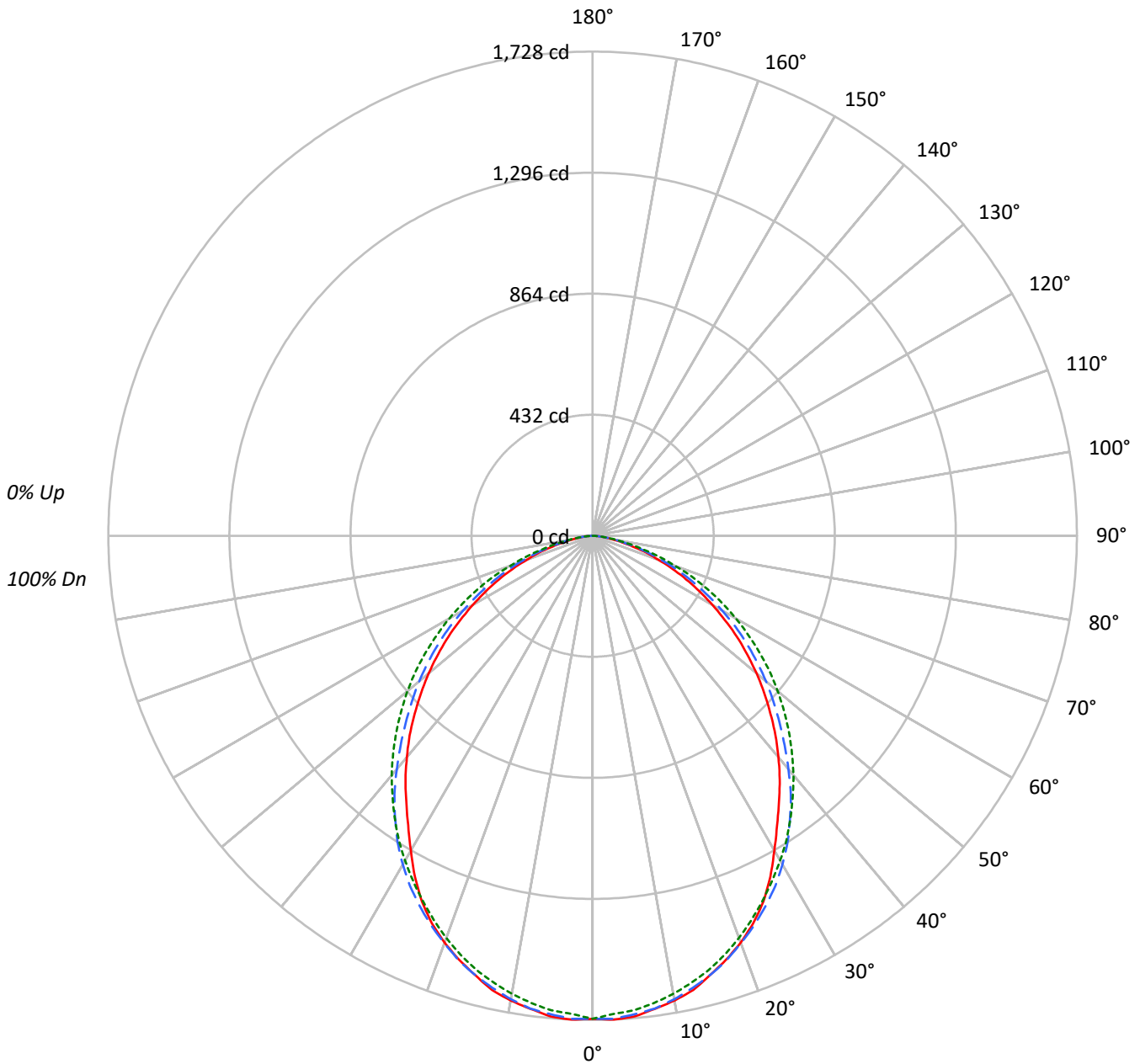
Lumens per Lamp: N/A
Luminaire Lumens: 3986.0 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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: P556116

CATALOG NUMBER: FUSL-12-2-LD4-3STD-50-UNV-82-86-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556116

CATALOG NUMBER: FUSL-12-2-LD4-3STD-50-UNV-82-86-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°	9277	9277	9277
5°	9303	9263	9184
10°	9204	9178	9074
15°	9040	9040	8937
20°	8849	8860	8747
25°	8558	8663	8526
30°	8058	8421	8318
35°	7614	8071	8085
40°	7244	7635	7835
45°	6830	7173	7540
50°	6394	6759	7220
55°	5897	6289	6829
60°	5311	5738	6352
65°	4689	5103	5777
70°	3907	4346	4908
75°	3071	3471	3843
80°	2197	2442	2709
85°	1433	1433	1352



TEST NUMBER: P556116

CATALOG NUMBER: FUSL-12-2-LD4-3STD-50-UNV-82-86-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	4.1
10°-20°	456.0	11.4
20°-30°	666.3	16.7
30°-40°	756.3	19.0
40°-50°	730.1	18.3
50°-60°	602.3	15.1
60°-70°	401.1	10.1
70°-80°	179.5	4.5
80°-90°	32.1	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°	1284.6	32.2
0°-40°	2040.9	51.2
0°-60°	3373.3	84.6
0°-90°	3986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3986.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1724	1724	1724	1724	1724	
5°	1722	1721	1715	1705	1700	163
15°	1622	1626	1622	1615	1604	457
25°	1441	1452	1459	1448	1436	660
35°	1159	1175	1228	1235	1230	726
45°	897	913	942	985	991	692
55°	628	639	670	707	728	561
65°	368	378	401	429	454	365
75°	148	156	167	175	185	161
85°	23	23	23	22	22	31
90°	0	0	0	0	0	



TEST NUMBER: P556116

CATALOG NUMBER: FUSL-12-2-LD4-3STD-50-UNV-82-86-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1723.8	1723.8	1723.8	1723.8	1723.8
2.5°	1728.5	1729.1	1725.2	1714.6	1707.9
5°	1721.9	1721.2	1714.6	1705.3	1700.0
7.5°	1702.6	1704.0	1702.0	1688.7	1681.5
10°	1684.1	1684.8	1679.5	1668.9	1660.3
12.5°	1660.3	1659.6	1652.3	1647.0	1633.1
15°	1622.5	1626.5	1622.5	1615.2	1604.0
17.5°	1586.1	1586.1	1588.7	1576.2	1567.6
20°	1545.0	1547.0	1547.0	1537.1	1527.2
22.5°	1497.4	1503.3	1505.3	1494.7	1482.8
25°	1441.1	1452.3	1458.9	1448.3	1435.8
27.5°	1372.8	1390.1	1409.9	1402.0	1388.1
30°	1296.7	1321.9	1355.0	1348.3	1338.4
32.5°	1224.5	1249.7	1295.4	1292.7	1287.4
35°	1158.9	1174.8	1228.5	1235.1	1230.5
37.5°	1096.7	1111.3	1161.6	1176.8	1172.8
40°	1031.1	1047.0	1086.8	1113.9	1115.2
42.5°	966.2	981.5	1013.9	1053.0	1053.0
45°	897.4	912.6	942.4	985.4	990.7
47.5°	829.8	845.7	874.8	917.9	926.5
50°	763.6	778.1	807.3	849.0	862.3
52.5°	694.7	710.6	739.1	777.5	796.7
55°	628.5	639.1	670.2	707.3	727.8
57.5°	559.6	569.5	604.6	636.4	657.6
60°	493.4	506.0	533.1	565.6	590.1
62.5°	429.8	443.0	466.2	494.7	522.5
65°	368.2	378.1	400.7	429.1	453.6
67.5°	308.6	317.2	339.7	359.6	385.4
70°	248.3	259.6	276.2	295.4	311.9
72.5°	200.0	204.6	218.5	232.5	249.7
75°	147.7	155.6	166.9	174.8	184.8
77.5°	106.0	110.6	117.2	123.8	133.1
80°	70.9	72.8	78.8	80.1	87.4
82.5°	43.0	44.4	45.7	46.4	49.0
85°	23.2	23.2	23.2	21.9	21.9
87.5°	13.2	13.2	11.3	9.3	6.6
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)