

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: P557287

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-93-87-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: P557287
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-LD4-2LO-35-UNV-93-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

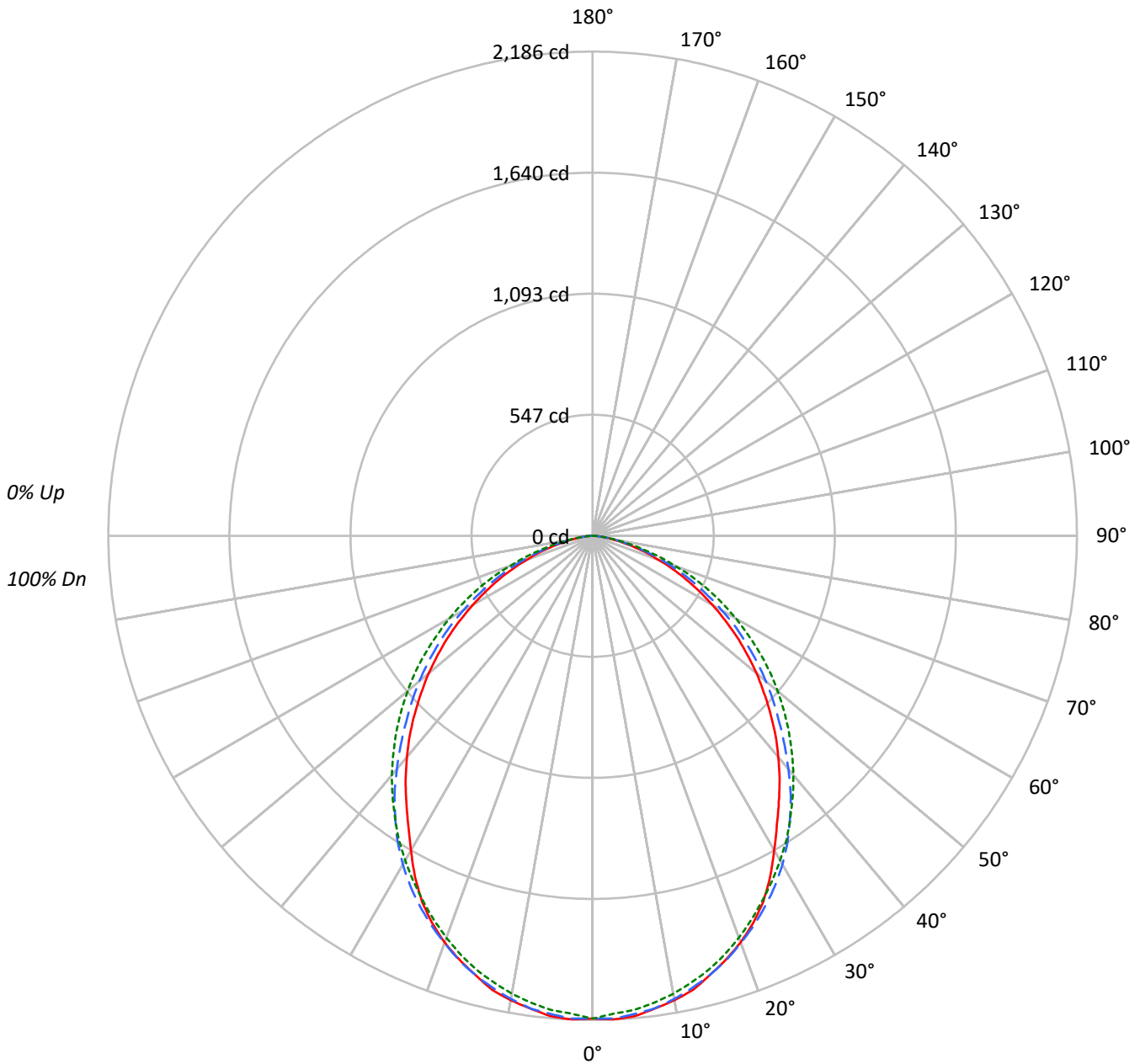
Lumens per Lamp: N/A
Luminaire Lumens: 5040.0 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: P557287

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-93-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557287

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-93-87-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°	5866	5866	5866
5°	5881	5856	5806
10°	5819	5803	5736
15°	5716	5716	5650
20°	5594	5602	5530
25°	5410	5477	5390
30°	5095	5324	5258
35°	4814	5103	5111
40°	4580	4827	4953
45°	4318	4535	4767
50°	4042	4273	4564
55°	3728	3976	4318
60°	3357	3628	4015
65°	2965	3226	3652
70°	2471	2747	3103
75°	1941	2194	2429
80°	1389	1543	1712
85°	905	905	852



TEST NUMBER: P557287

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-93-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.2	4.1
10°-20°	576.5	11.4
20°-30°	842.5	16.7
30°-40°	956.3	19.0
40°-50°	923.2	18.3
50°-60°	761.6	15.1
60°-70°	507.1	10.1
70°-80°	226.9	4.5
80°-90°	40.6	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°	1624.2	32.2
0°-40°	2580.6	51.2
0°-60°	4265.3	84.6
0°-90°	5040.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5040.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2180	2180	2180	2180	2180	
5°	2177	2176	2168	2156	2150	206
15°	2052	2057	2052	2042	2028	578
25°	1822	1836	1845	1831	1815	834
35°	1465	1486	1553	1562	1556	918
45°	1135	1154	1192	1246	1253	875
55°	795	808	847	894	920	709
65°	466	478	507	543	574	462
75°	187	197	211	221	234	204
85°	29	29	29	28	28	39
90°	0	0	0	0	0	



TEST NUMBER: P557287

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-93-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2179.7	2179.7	2179.7	2179.7	2179.7
2.5°	2185.5	2186.4	2181.3	2167.9	2159.6
5°	2177.2	2176.3	2167.9	2156.2	2149.5
7.5°	2152.9	2154.5	2152.0	2135.3	2126.1
10°	2129.4	2130.3	2123.6	2110.2	2099.3
12.5°	2099.3	2098.4	2089.2	2082.5	2065.0
15°	2051.6	2056.6	2051.6	2042.3	2028.1
17.5°	2005.5	2005.5	2008.8	1992.9	1982.1
20°	1953.6	1956.1	1956.1	1943.5	1931.0
22.5°	1893.3	1900.8	1903.3	1889.9	1874.9
25°	1822.1	1836.3	1844.7	1831.3	1815.4
27.5°	1735.9	1757.6	1782.8	1772.7	1755.1
30°	1639.6	1671.4	1713.3	1704.9	1692.3
32.5°	1548.3	1580.1	1637.9	1634.5	1627.8
35°	1465.4	1485.5	1553.3	1561.7	1555.8
37.5°	1386.7	1405.1	1468.7	1488.0	1483.0
40°	1303.8	1323.9	1374.1	1408.5	1410.1
42.5°	1221.7	1241.0	1282.0	1331.4	1331.4
45°	1134.6	1153.9	1191.6	1246.0	1252.7
47.5°	1049.2	1069.3	1106.2	1160.6	1171.5
50°	965.5	983.9	1020.8	1073.5	1090.3
52.5°	878.4	898.5	934.5	983.1	1007.4
55°	794.7	808.1	847.4	894.3	920.3
57.5°	707.6	720.1	764.5	804.7	831.5
60°	623.8	639.7	674.1	715.1	746.1
62.5°	543.5	560.2	589.5	625.5	660.7
65°	465.6	478.1	506.6	542.6	573.6
67.5°	390.2	401.1	429.6	454.7	487.3
70°	314.0	328.2	349.2	373.5	394.4
72.5°	252.9	258.7	276.3	293.9	315.7
75°	186.7	196.8	211.0	221.1	233.6
77.5°	134.0	139.8	148.2	156.6	168.3
80°	89.6	92.1	99.6	101.3	110.5
82.5°	54.4	56.1	57.8	58.6	62.0
85°	29.3	29.3	29.3	27.6	27.6
87.5°	16.7	16.7	14.2	11.7	8.4
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)