

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: P558040

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-82-88-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: P558040
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-LD4-3LO-35-UNV-82-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

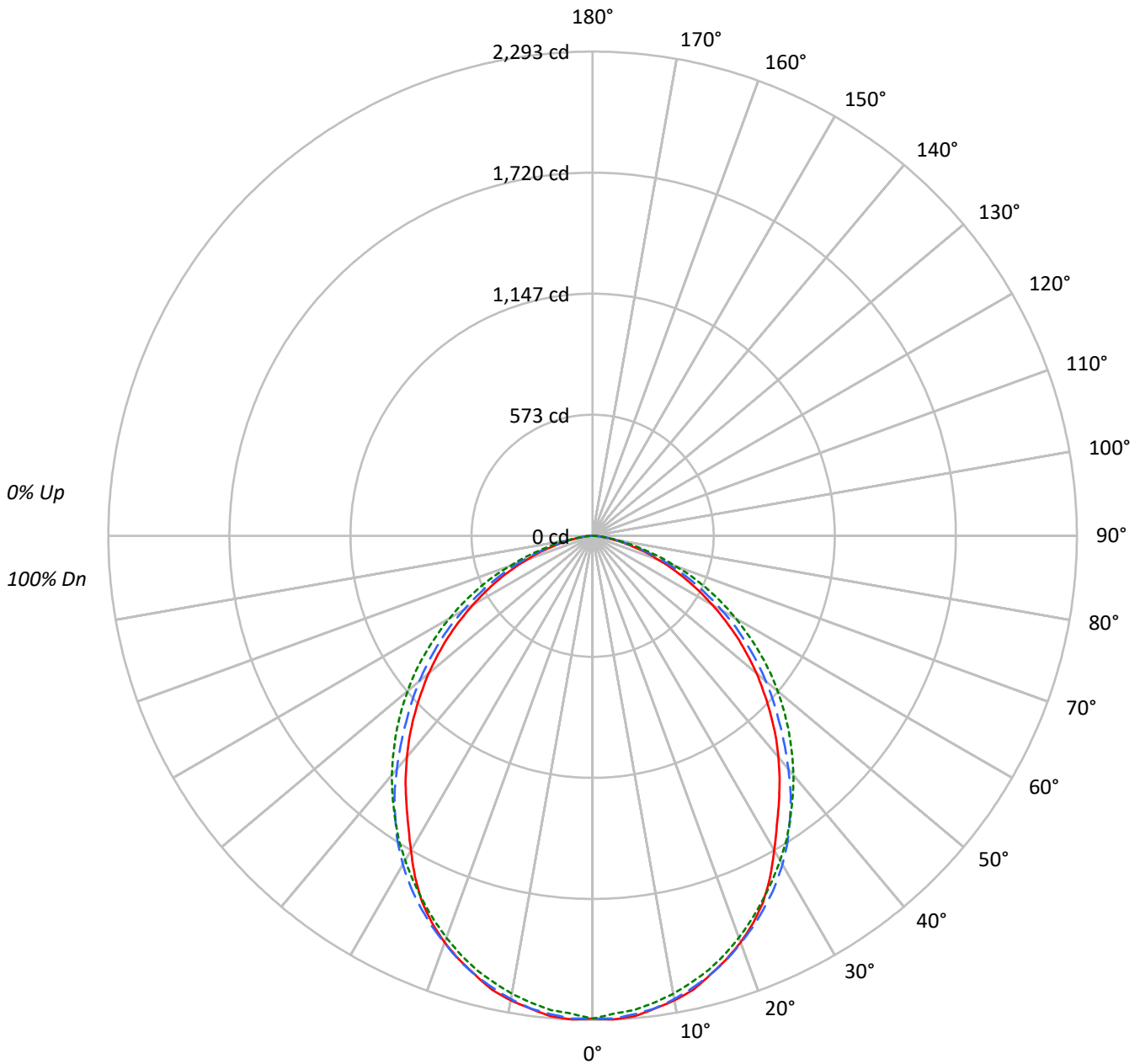
Lumens per Lamp: N/A
Luminaire Lumens: 5287.0 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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: P558040

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-88-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558040

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-88-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°	6153	6153	6153
5°	6169	6143	6091
10°	6104	6087	6017
15°	5996	5996	5927
20°	5869	5876	5801
25°	5675	5746	5654
30°	5344	5584	5516
35°	5050	5353	5362
40°	4804	5064	5196
45°	4529	4757	5001
50°	4240	4483	4788
55°	3911	4170	4529
60°	3522	3806	4212
65°	3110	3384	3831
70°	2592	2882	3255
75°	2037	2302	2548
80°	1457	1619	1796
85°	948	948	895



TEST NUMBER: P558040

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-88-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.3	4.1
10°-20°	604.8	11.4
20°-30°	883.8	16.7
30°-40°	1003.2	19.0
40°-50°	968.4	18.3
50°-60°	798.9	15.1
60°-70°	532.0	10.1
70°-80°	238.1	4.5
80°-90°	42.6	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°	1703.9	32.2
0°-40°	2707.0	51.2
0°-60°	4474.4	84.6
0°-90°	5287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5287.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2286	2286	2286	2286	2286	
5°	2284	2283	2274	2262	2255	216
15°	2152	2157	2152	2142	2128	607
25°	1911	1926	1935	1921	1904	875
35°	1537	1558	1629	1638	1632	963
45°	1190	1210	1250	1307	1314	918
55°	834	848	889	938	965	744
65°	488	502	531	569	602	484
75°	196	206	221	232	245	214
85°	31	31	31	29	29	41
90°	0	0	0	0	0	



TEST NUMBER: P558040

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-82-88-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2286.5	2286.5	2286.5	2286.5	2286.5
2.5°	2292.6	2293.5	2288.2	2274.2	2265.4
5°	2283.9	2283.0	2274.2	2261.9	2254.9
7.5°	2258.4	2260.1	2257.5	2239.9	2230.3
10°	2233.8	2234.7	2227.6	2213.6	2202.2
12.5°	2202.2	2201.3	2191.6	2184.6	2166.1
15°	2152.1	2157.4	2152.1	2142.4	2127.5
17.5°	2103.8	2103.8	2107.3	2090.6	2079.2
20°	2049.3	2052.0	2052.0	2038.8	2025.6
22.5°	1986.1	1994.0	1996.6	1982.6	1966.8
25°	1911.4	1926.3	1935.1	1921.1	1904.4
27.5°	1820.9	1843.8	1870.1	1859.6	1841.1
30°	1719.9	1753.3	1797.2	1788.4	1775.3
32.5°	1624.2	1657.6	1718.2	1714.6	1707.6
35°	1537.2	1558.3	1629.4	1638.2	1632.1
37.5°	1454.6	1474.0	1540.7	1560.9	1555.7
40°	1367.7	1388.8	1441.5	1477.5	1479.2
42.5°	1281.6	1301.8	1344.8	1396.7	1396.7
45°	1190.2	1210.4	1250.0	1307.1	1314.1
47.5°	1100.6	1121.7	1160.4	1217.5	1228.9
50°	1012.8	1032.1	1070.8	1126.1	1143.7
52.5°	921.4	942.5	980.3	1031.2	1056.7
55°	833.6	847.7	888.9	938.1	965.4
57.5°	742.3	755.4	802.0	844.1	872.3
60°	654.4	671.1	707.1	750.2	782.7
62.5°	570.1	587.7	618.4	656.2	693.1
65°	488.4	501.6	531.4	569.2	601.7
67.5°	409.3	420.8	450.6	477.0	511.2
70°	329.4	344.3	366.3	391.8	413.7
72.5°	265.3	271.4	289.9	308.3	331.2
75°	195.9	206.4	221.4	231.9	245.1
77.5°	140.5	146.7	155.5	164.3	176.6
80°	94.0	96.6	104.5	106.3	115.9
82.5°	57.1	58.9	60.6	61.5	65.0
85°	30.7	30.7	30.7	29.0	29.0
87.5°	17.6	17.6	14.9	12.3	8.8
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)