

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: P557229

Luminaire Tested: **FUSL-12-4-LD4-2LO-30-UNV-93-96-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: P557229
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-30-UNV-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

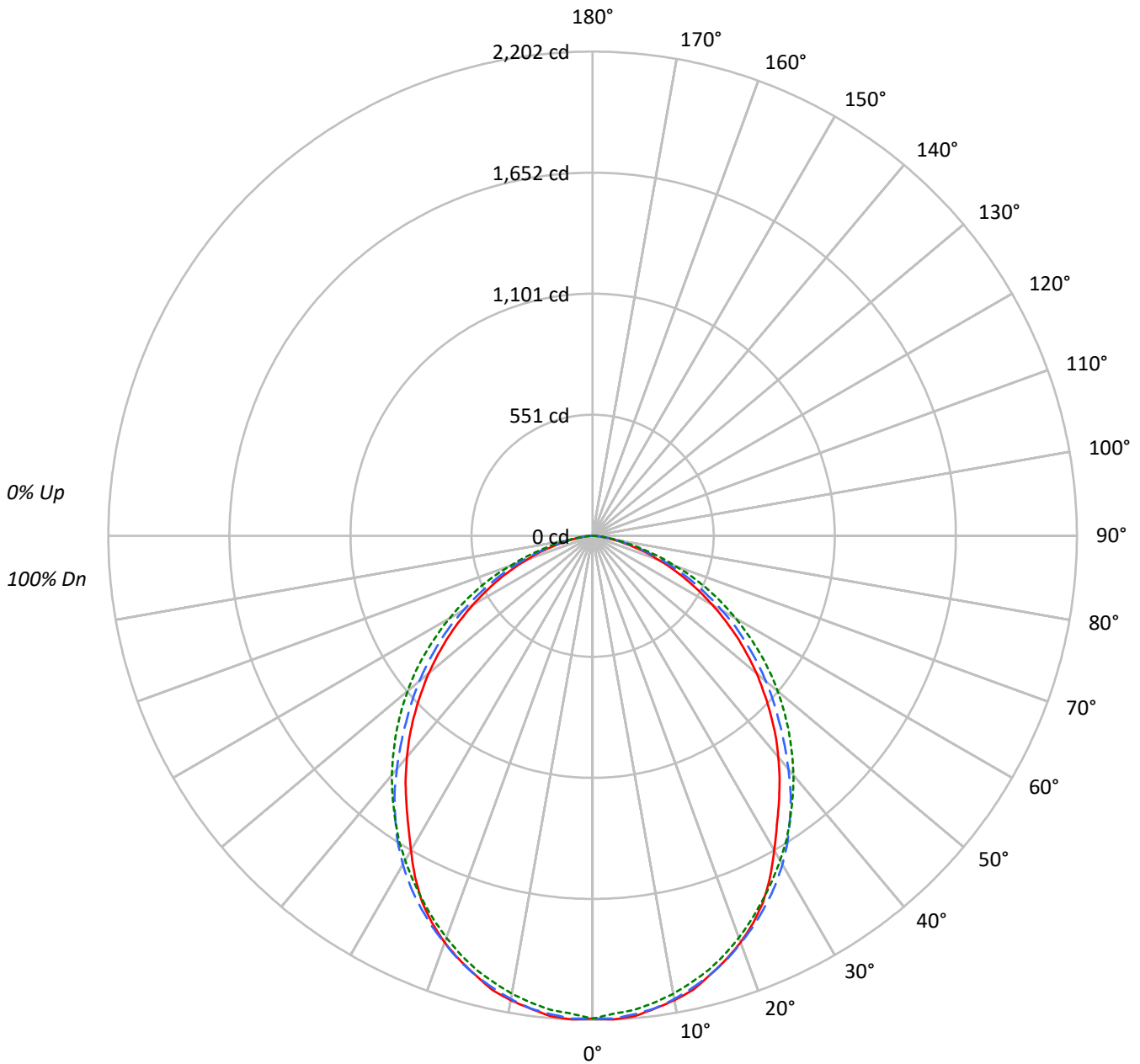
Lumens per Lamp: N/A
Luminaire Lumens: 5077.0 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): NR
Input Current (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: P557229

CATALOG NUMBER: FUSL-12-4-LD4-2LO-30-UNV-93-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557229

CATALOG NUMBER: FUSL-12-4-LD4-2LO-30-UNV-93-96-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°	5909	5909	5909
5°	5924	5899	5849
10°	5861	5845	5778
15°	5757	5757	5692
20°	5635	5643	5570
25°	5450	5518	5430
30°	5132	5363	5297
35°	4849	5140	5149
40°	4614	4862	4990
45°	4350	4568	4802
50°	4072	4304	4598
55°	3756	4005	4349
60°	3382	3654	4045
65°	2986	3249	3679
70°	2489	2767	3126
75°	1956	2210	2446
80°	1399	1556	1725
85°	911	911	858



TEST NUMBER: P557229

CATALOG NUMBER: FUSL-12-4-LD4-2LO-30-UNV-93-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	4.1
10°-20°	580.8	11.4
20°-30°	848.7	16.7
30°-40°	963.3	19.0
40°-50°	930.0	18.3
50°-60°	767.1	15.1
60°-70°	510.8	10.1
70°-80°	228.6	4.5
80°-90°	40.9	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°	1636.2	32.2
0°-40°	2599.5	51.2
0°-60°	4296.6	84.6
0°-90°	5077.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2196	2196	2196	2196	2196	
5°	2193	2192	2184	2172	2165	208
15°	2067	2072	2067	2057	2043	583
25°	1836	1850	1858	1845	1829	841
35°	1476	1496	1565	1573	1567	925
45°	1143	1162	1200	1255	1262	882
55°	800	814	854	901	927	714
65°	469	482	510	547	578	465
75°	188	198	213	223	235	206
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



TEST NUMBER: P557229

CATALOG NUMBER: FUSL-12-4-LD4-2LO-30-UNV-93-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2195.7	2195.7	2195.7	2195.7	2195.7
2.5°	2201.6	2202.4	2197.4	2183.9	2175.4
5°	2193.1	2192.3	2183.9	2172.1	2165.3
7.5°	2168.7	2170.4	2167.8	2151.0	2141.7
10°	2145.1	2145.9	2139.2	2125.7	2114.7
12.5°	2114.7	2113.9	2104.6	2097.8	2080.1
15°	2066.6	2071.7	2066.6	2057.3	2043.0
17.5°	2020.2	2020.2	2023.6	2007.6	1996.6
20°	1967.9	1970.5	1970.5	1957.8	1945.1
22.5°	1907.2	1914.8	1917.3	1903.8	1888.6
25°	1835.5	1849.8	1858.3	1844.8	1828.7
27.5°	1748.6	1770.5	1795.8	1785.7	1768.0
30°	1651.6	1683.7	1725.8	1717.4	1704.7
32.5°	1559.7	1591.7	1649.9	1646.5	1639.8
35°	1476.2	1496.4	1564.7	1573.2	1567.3
37.5°	1396.9	1415.4	1479.5	1498.9	1493.9
40°	1313.4	1333.6	1384.2	1418.8	1420.5
42.5°	1230.7	1250.1	1291.4	1341.2	1341.2
45°	1143.0	1162.4	1200.3	1255.2	1261.9
47.5°	1056.9	1077.2	1114.3	1169.1	1180.1
50°	972.6	991.1	1028.2	1081.4	1098.3
52.5°	884.8	905.1	941.4	990.3	1014.7
55°	800.5	814.0	853.6	900.9	927.0
57.5°	712.8	725.4	770.1	810.6	837.6
60°	628.4	644.4	679.0	720.4	751.6
62.5°	547.4	564.3	593.8	630.1	665.5
65°	469.0	481.6	510.3	546.6	577.8
67.5°	393.1	404.0	432.7	458.0	490.9
70°	316.3	330.7	351.7	376.2	397.3
72.5°	254.7	260.6	278.4	296.1	318.0
75°	188.1	198.2	212.6	222.7	235.3
77.5°	135.0	140.9	149.3	157.7	169.5
80°	90.3	92.8	100.4	102.1	111.3
82.5°	54.8	56.5	58.2	59.0	62.4
85°	29.5	29.5	29.5	27.8	27.8
87.5°	16.9	16.9	14.3	11.8	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)