

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: P557423

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-93-97-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: P557423
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-50-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

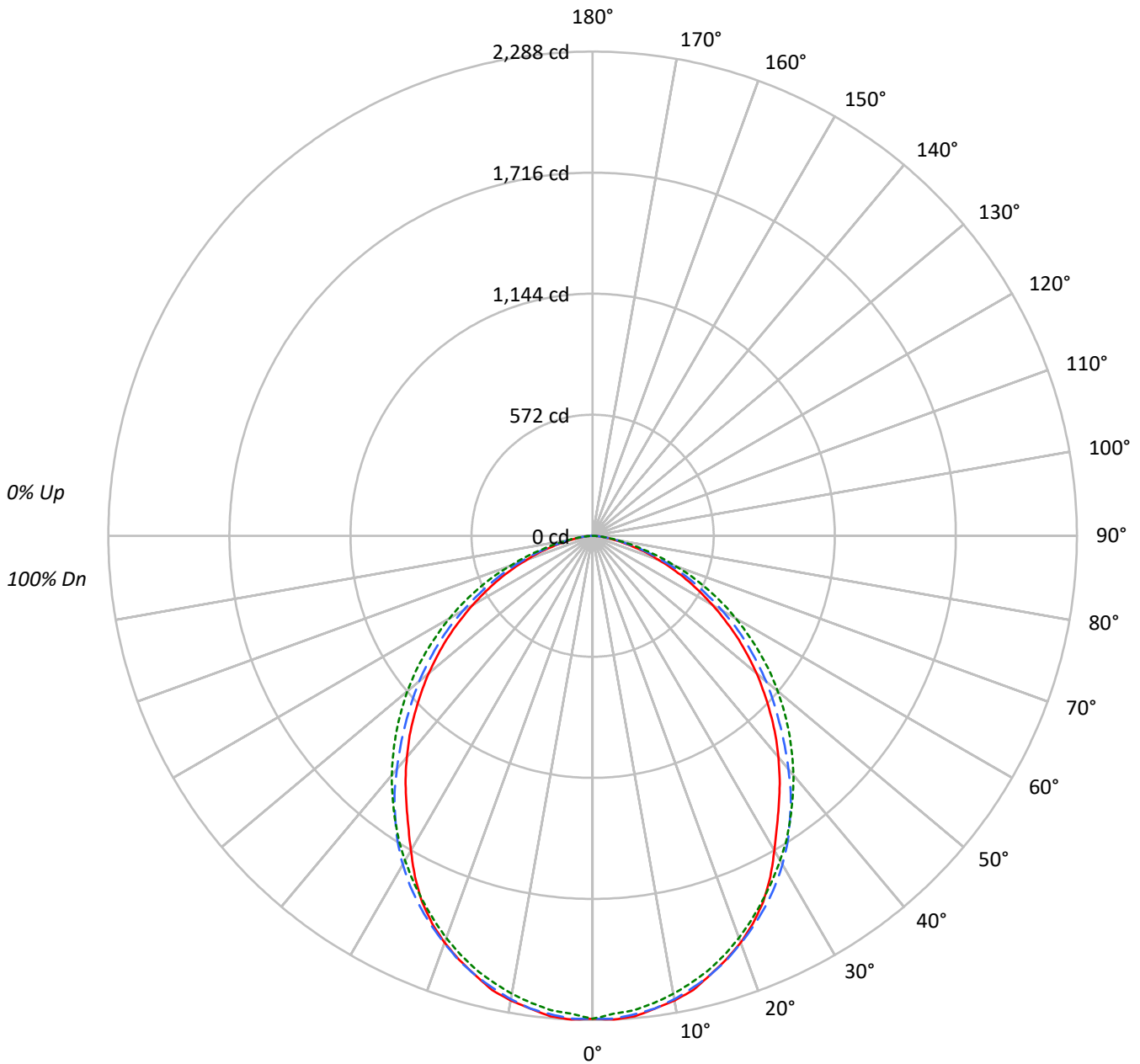
Lumens per Lamp: N/A
Luminaire Lumens: 5277.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557423

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-93-97-EDD

Luminous Intensity Polar Plot





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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°	6141	6141	6141
5°	6158	6132	6079
10°	6092	6075	6006
15°	5984	5984	5916
20°	5857	5865	5790
25°	5665	5735	5644
30°	5334	5574	5506
35°	5040	5343	5351
40°	4795	5054	5186
45°	4521	4748	4991
50°	4232	4474	4779
55°	3903	4163	4520
60°	3515	3799	4204
65°	3104	3377	3824
70°	2587	2877	3249
75°	2033	2297	2543
80°	1454	1616	1793
85°	948	948	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.9	4.1
10°-20°	603.6	11.4
20°-30°	882.1	16.7
30°-40°	1001.3	19.0
40°-50°	966.6	18.3
50°-60°	797.4	15.1
60°-70°	531.0	10.1
70°-80°	237.6	4.5
80°-90°	42.5	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°	1700.6	32.2
0°-40°	2701.9	51.2
0°-60°	4465.9	84.6
0°-90°	5277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5277.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2282	2282	2282	2282	2282	
5°	2280	2279	2270	2258	2251	216
15°	2148	2153	2148	2138	2124	606
25°	1908	1923	1932	1917	1901	874
35°	1534	1555	1626	1635	1629	961
45°	1188	1208	1248	1305	1312	917
55°	832	846	887	936	964	743
65°	488	501	530	568	601	483
75°	196	206	221	232	245	214
85°	31	31	31	29	29	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2282.2	2282.2	2282.2	2282.2	2282.2
2.5°	2288.3	2289.2	2283.9	2269.9	2261.1
5°	2279.5	2278.7	2269.9	2257.6	2250.6
7.5°	2254.1	2255.9	2253.2	2235.7	2226.1
10°	2229.6	2230.4	2223.4	2209.4	2198.0
12.5°	2198.0	2197.1	2187.5	2180.5	2162.1
15°	2148.0	2153.3	2148.0	2138.4	2123.5
17.5°	2099.8	2099.8	2103.3	2086.7	2075.3
20°	2045.4	2048.1	2048.1	2034.9	2021.8
22.5°	1982.3	1990.2	1992.8	1978.8	1963.0
25°	1907.8	1922.7	1931.5	1917.4	1900.8
27.5°	1817.5	1840.3	1866.6	1856.1	1837.7
30°	1716.7	1750.0	1793.8	1785.1	1771.9
32.5°	1621.1	1654.4	1714.9	1711.4	1704.4
35°	1534.3	1555.3	1626.4	1635.1	1629.0
37.5°	1451.9	1471.2	1537.8	1558.0	1552.7
40°	1365.1	1386.1	1438.7	1474.7	1476.4
42.5°	1279.2	1299.3	1342.3	1394.0	1394.0
45°	1188.0	1208.2	1247.6	1304.6	1311.6
47.5°	1098.6	1119.6	1158.2	1215.2	1226.6
50°	1010.9	1030.2	1068.8	1124.0	1141.5
52.5°	919.7	940.7	978.4	1029.3	1054.7
55°	832.0	846.1	887.3	936.4	963.5
57.5°	740.8	754.0	800.5	842.6	870.6
60°	653.2	669.8	705.8	748.7	781.2
62.5°	569.0	586.5	617.2	654.9	691.8
65°	487.5	500.6	530.4	568.1	600.6
67.5°	408.6	420.0	449.8	476.1	510.3
70°	328.8	343.7	365.6	391.0	412.9
72.5°	264.8	270.9	289.3	307.7	330.5
75°	195.5	206.0	220.9	231.5	244.6
77.5°	140.3	146.4	155.2	164.0	176.2
80°	93.8	96.4	104.3	106.1	115.7
82.5°	57.0	58.7	60.5	61.4	64.9
85°	30.7	30.7	30.7	28.9	28.9
87.5°	17.5	17.5	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)