

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: P557422

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-93-97-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: P557422
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-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

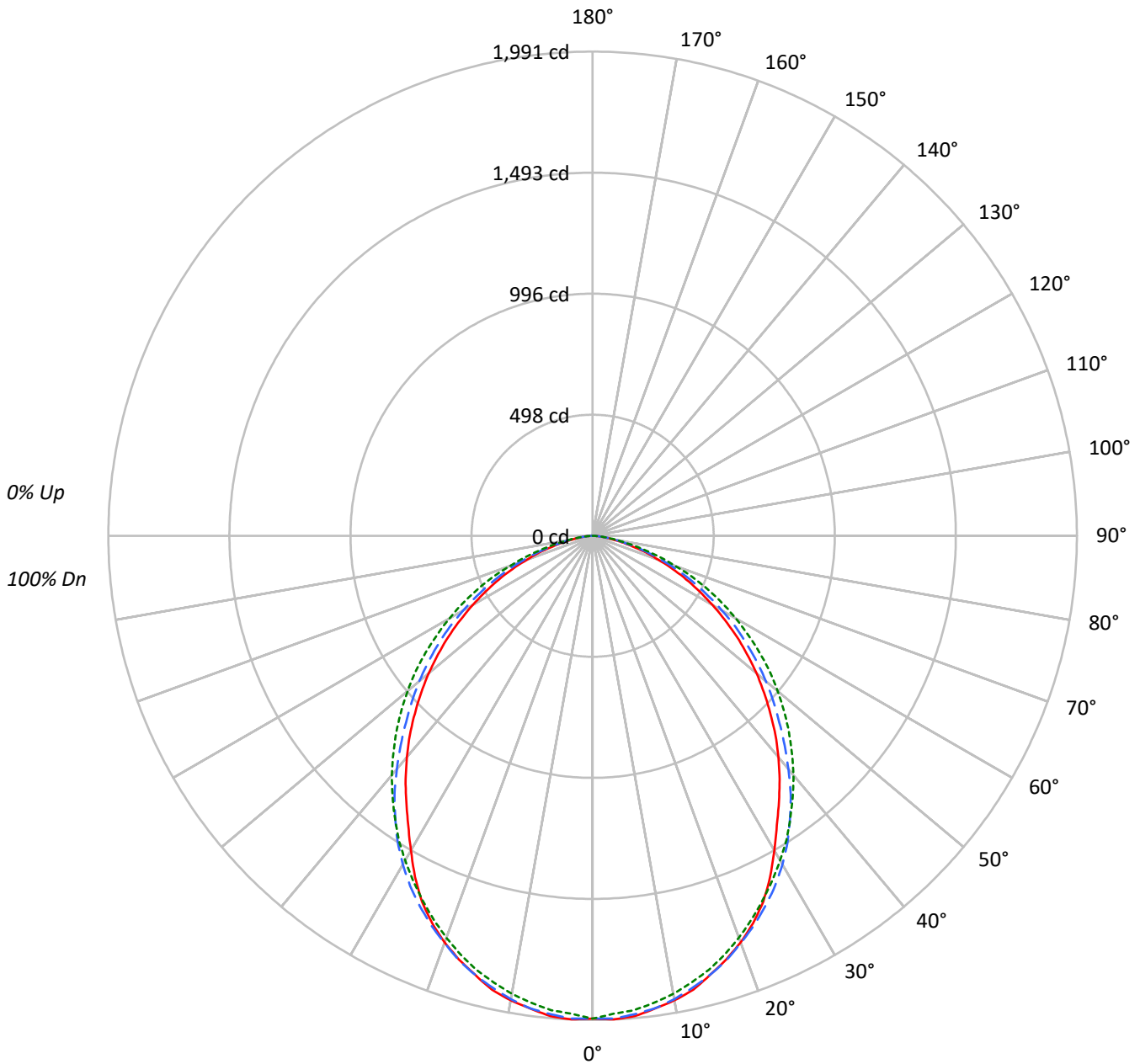
Lumens per Lamp: N/A
Luminaire Lumens: 4591.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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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°	5343	5343	5343
5°	5357	5334	5289
10°	5300	5286	5225
15°	5206	5206	5147
20°	5096	5103	5037
25°	4928	4989	4910
30°	4641	4849	4790
35°	4385	4648	4656
40°	4172	4397	4512
45°	3933	4131	4343
50°	3682	3893	4158
55°	3396	3621	3933
60°	3059	3305	3658
65°	2700	2939	3327
70°	2250	2503	2827
75°	1769	1998	2213
80°	1265	1407	1561
85°	824	824	778



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	4.1
10°-20°	525.2	11.4
20°-30°	767.4	16.7
30°-40°	871.1	19.0
40°-50°	840.9	18.3
50°-60°	693.7	15.1
60°-70°	462.0	10.1
70°-80°	206.7	4.5
80°-90°	37.0	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°	1479.6	32.2
0°-40°	2350.7	51.2
0°-60°	3885.3	84.6
0°-90°	4591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4591.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1986	1986	1986	1986	1986	
5°	1983	1982	1975	1964	1958	188
15°	1869	1873	1869	1860	1847	527
25°	1660	1673	1680	1668	1654	760
35°	1335	1353	1415	1423	1417	836
45°	1034	1051	1085	1135	1141	797
55°	724	736	772	815	838	646
65°	424	436	462	494	522	421
75°	170	179	192	201	213	186
85°	27	27	27	25	25	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1985.5	1985.5	1985.5	1985.5	1985.5
2.5°	1990.8	1991.6	1987.0	1974.8	1967.2
5°	1983.2	1982.4	1974.8	1964.1	1958.0
7.5°	1961.1	1962.6	1960.3	1945.1	1936.7
10°	1939.7	1940.5	1934.4	1922.2	1912.3
12.5°	1912.3	1911.5	1903.1	1897.0	1881.0
15°	1868.8	1873.4	1868.8	1860.4	1847.4
17.5°	1826.8	1826.8	1829.9	1815.4	1805.5
20°	1779.5	1781.8	1781.8	1770.4	1758.9
22.5°	1724.6	1731.5	1733.8	1721.6	1707.8
25°	1659.8	1672.8	1680.4	1668.2	1653.7
27.5°	1581.2	1601.1	1623.9	1614.8	1598.8
30°	1493.5	1522.5	1560.6	1553.0	1541.6
32.5°	1410.4	1439.3	1492.0	1488.9	1482.8
35°	1334.8	1353.2	1414.9	1422.6	1417.2
37.5°	1263.1	1279.9	1337.9	1355.4	1350.9
40°	1187.6	1205.9	1251.7	1283.0	1284.5
42.5°	1112.9	1130.4	1167.8	1212.8	1212.8
45°	1033.6	1051.1	1085.4	1135.0	1141.1
47.5°	955.8	974.1	1007.6	1057.2	1067.1
50°	879.5	896.3	929.8	977.9	993.1
52.5°	800.1	818.5	851.3	895.5	917.6
55°	723.9	736.1	771.9	814.6	838.3
57.5°	644.5	656.0	696.4	733.0	757.4
60°	568.3	582.8	614.0	651.4	679.6
62.5°	495.0	510.3	537.0	569.8	601.8
65°	424.1	435.5	461.5	494.3	522.5
67.5°	355.5	365.4	391.3	414.2	443.9
70°	286.0	299.0	318.1	340.2	359.3
72.5°	230.4	235.7	251.7	267.7	287.6
75°	170.1	179.3	192.2	201.4	212.8
77.5°	122.0	127.4	135.0	142.6	153.3
80°	81.6	83.9	90.8	92.3	100.7
82.5°	49.6	51.1	52.6	53.4	56.4
85°	26.7	26.7	26.7	25.2	25.2
87.5°	15.3	15.3	13.0	10.7	7.6
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)