

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: P556138

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-93-94-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: P556138
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-12-2-LD4-3STD-50-UNV-93-94-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

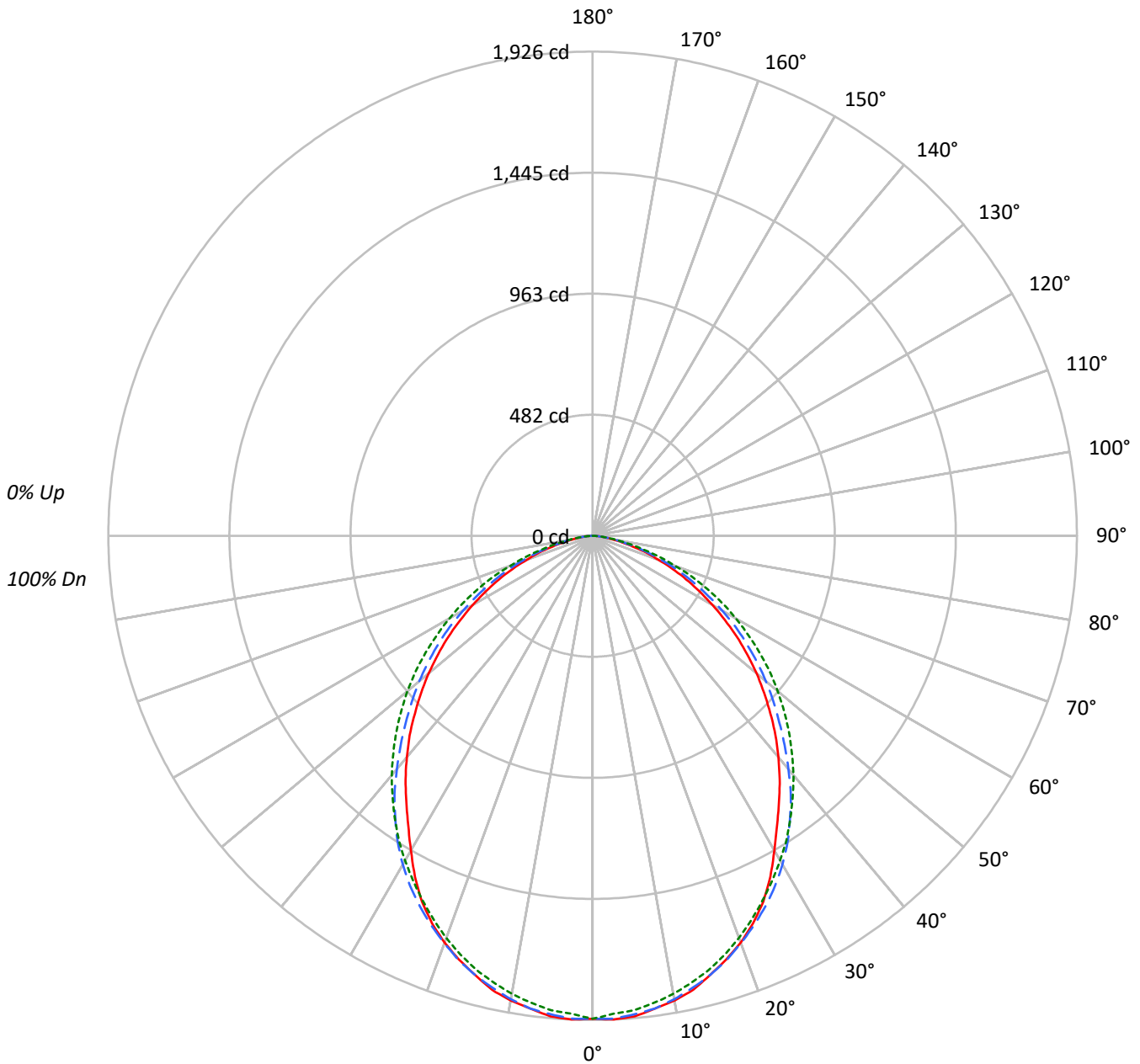
Lumens per Lamp: N/A
Luminaire Lumens: 4442.0 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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

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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°	10339	10339	10339
5°	10366	10323	10235
10°	10257	10228	10111
15°	10074	10074	9960
20°	9861	9874	9747
25°	9536	9655	9501
30°	8980	9384	9269
35°	8485	8995	9009
40°	8073	8509	8731
45°	7611	7993	8404
50°	7124	7532	8045
55°	6572	7008	7611
60°	5918	6395	7078
65°	5225	5686	6437
70°	4356	4843	5470
75°	3423	3868	4282
80°	2448	2721	3019
85°	1593	1593	1507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.9	4.1
10°-20°	508.1	11.4
20°-30°	742.5	16.7
30°-40°	842.9	19.0
40°-50°	813.6	18.3
50°-60°	671.2	15.1
60°-70°	447.0	10.1
70°-80°	200.0	4.5
80°-90°	35.8	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°	1431.5	32.2
0°-40°	2274.4	51.2
0°-60°	3759.2	84.6
0°-90°	4442.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4442.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1921	1921	1921	1921	1921	
5°	1919	1918	1911	1900	1894	182
15°	1808	1813	1808	1800	1788	510
25°	1606	1618	1626	1614	1600	735
35°	1292	1309	1369	1376	1371	809
45°	1000	1017	1050	1098	1104	772
55°	700	712	747	788	811	625
65°	410	421	446	478	506	407
75°	165	173	186	195	206	180
85°	26	26	26	24	24	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1921.1	1921.1	1921.1	1921.1	1921.1
2.5°	1926.2	1927.0	1922.5	1910.7	1903.3
5°	1918.8	1918.1	1910.7	1900.4	1894.5
7.5°	1897.4	1898.9	1896.7	1881.9	1873.8
10°	1876.8	1877.5	1871.6	1859.8	1850.2
12.5°	1850.2	1849.5	1841.3	1835.4	1819.9
15°	1808.1	1812.6	1808.1	1800.0	1787.5
17.5°	1767.5	1767.5	1770.5	1756.5	1746.9
20°	1721.8	1724.0	1724.0	1712.9	1701.9
22.5°	1668.6	1675.3	1677.5	1665.7	1652.4
25°	1605.9	1618.5	1625.8	1614.0	1600.0
27.5°	1529.9	1549.1	1571.2	1562.4	1546.9
30°	1445.0	1473.1	1510.0	1502.6	1491.5
32.5°	1364.6	1392.6	1443.6	1440.6	1434.7
35°	1291.5	1309.2	1369.0	1376.4	1371.2
37.5°	1222.2	1238.4	1294.5	1311.5	1307.0
40°	1149.1	1166.8	1211.1	1241.3	1242.8
42.5°	1076.8	1093.7	1129.9	1173.4	1173.4
45°	1000.0	1017.0	1050.2	1098.2	1104.1
47.5°	924.7	942.4	974.9	1022.9	1032.5
50°	850.9	867.2	899.6	946.1	960.9
52.5°	774.2	791.9	823.6	866.4	887.8
55°	700.4	712.2	746.9	788.2	811.1
57.5°	623.6	634.7	673.8	709.2	732.8
60°	549.8	563.8	594.1	630.3	657.6
62.5°	479.0	493.7	519.6	551.3	582.3
65°	410.3	421.4	446.5	478.2	505.5
67.5°	343.9	353.5	378.6	400.7	429.5
70°	276.8	289.3	307.8	329.2	347.6
72.5°	222.9	228.0	243.5	259.0	278.2
75°	164.6	173.4	186.0	194.8	205.9
77.5°	118.1	123.2	130.6	138.0	148.3
80°	79.0	81.2	87.8	89.3	97.4
82.5°	48.0	49.4	50.9	51.7	54.6
85°	25.8	25.8	25.8	24.4	24.4
87.5°	14.8	14.8	12.5	10.3	7.4
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)