

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: P556109

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-81-96-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: P556109
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-81-96-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

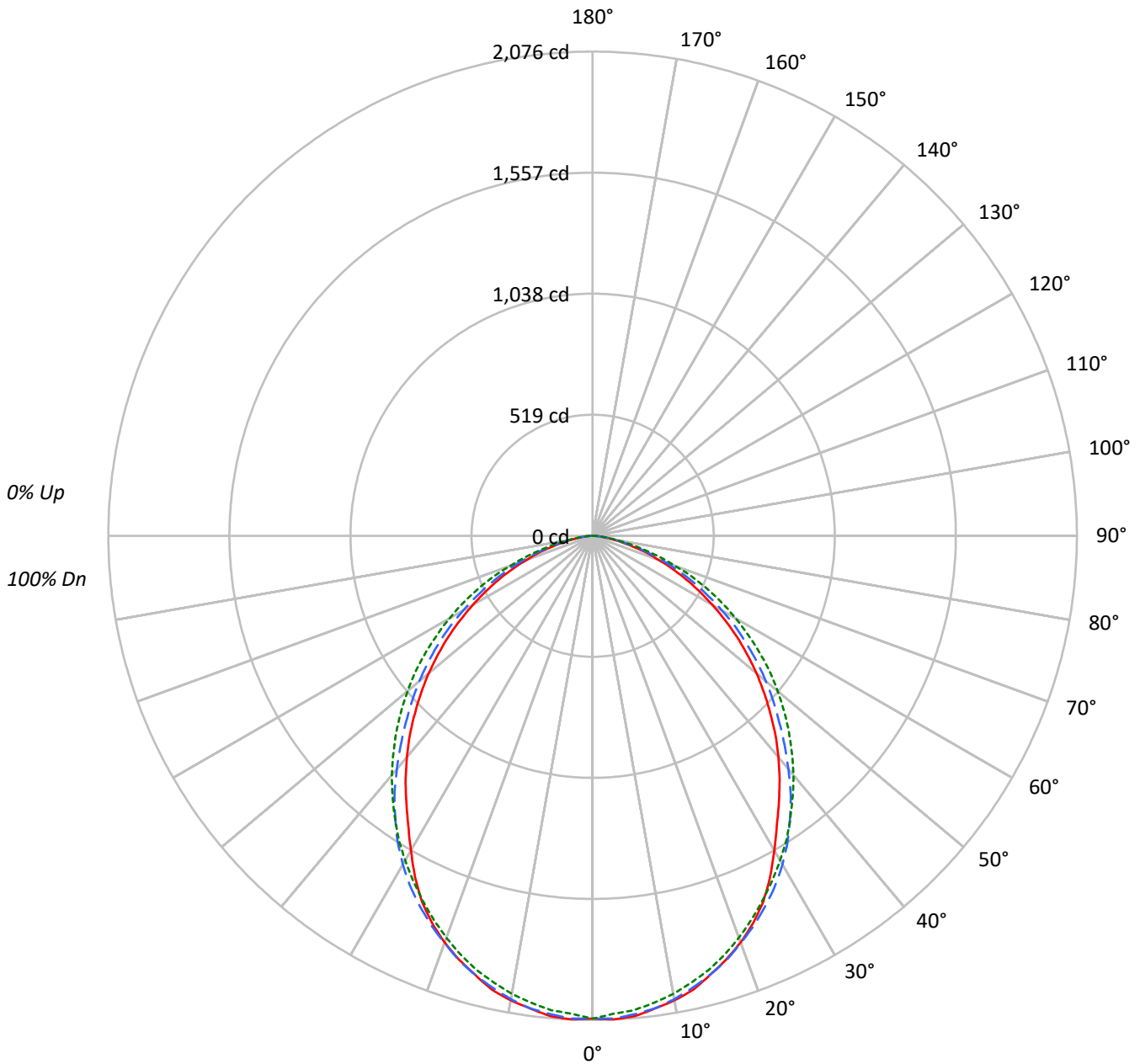
Lumens per Lamp: N/A
Luminaire Lumens: 4787.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	11142	11142	11142
5°	11172	11124	11030
10°	11053	11023	10897
15°	10857	10857	10733
20°	10627	10641	10504
25°	10277	10405	10239
30°	9678	10113	9989
35°	9144	9693	9709
40°	8700	9169	9409
45°	8203	8614	9056
50°	7678	8117	8670
55°	7082	7553	8202
60°	6378	6891	7627
65°	5631	6128	6938
70°	4694	5220	5895
75°	3689	4167	4614
80°	2638	2932	3254
85°	1717	1717	1618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.9	4.1
10°-20°	547.6	11.4
20°-30°	800.2	16.7
30°-40°	908.3	19.0
40°-50°	876.8	18.3
50°-60°	723.3	15.1
60°-70°	481.7	10.1
70°-80°	215.6	4.5
80°-90°	38.6	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°	1542.7	32.2
0°-40°	2451.0	51.2
0°-60°	4051.2	84.6
0°-90°	4787.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4787.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2070	2070	2070	2070	2070	
5°	2068	2067	2059	2048	2042	196
15°	1949	1953	1949	1940	1926	549
25°	1731	1744	1752	1739	1724	793
35°	1392	1411	1475	1483	1478	872
45°	1078	1096	1132	1184	1190	831
55°	755	768	805	849	874	674
65°	442	454	481	515	545	438
75°	177	187	200	210	222	194
85°	28	28	28	26	26	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2070.3	2070.3	2070.3	2070.3	2070.3
2.5°	2075.8	2076.6	2071.8	2059.1	2051.2
5°	2067.9	2067.1	2059.1	2048.0	2041.6
7.5°	2044.8	2046.4	2044.0	2028.1	2019.4
10°	2022.5	2023.3	2017.0	2004.2	1993.9
12.5°	1993.9	1993.1	1984.4	1978.0	1961.3
15°	1948.6	1953.3	1948.6	1939.8	1926.3
17.5°	1904.8	1904.8	1908.0	1892.9	1882.6
20°	1855.5	1857.9	1857.9	1846.0	1834.0
22.5°	1798.2	1805.4	1807.8	1795.1	1780.8
25°	1730.6	1744.2	1752.1	1739.4	1724.3
27.5°	1648.7	1669.4	1693.3	1683.7	1667.0
30°	1557.3	1587.5	1627.3	1619.3	1607.4
32.5°	1470.6	1500.8	1555.7	1552.5	1546.1
35°	1391.8	1410.9	1475.3	1483.3	1477.7
37.5°	1317.1	1334.6	1395.0	1413.3	1408.5
40°	1238.3	1257.4	1305.1	1337.8	1339.3
42.5°	1160.4	1178.7	1217.7	1264.6	1264.6
45°	1077.7	1096.0	1131.8	1183.5	1189.8
47.5°	996.6	1015.6	1050.6	1102.3	1112.7
50°	917.0	934.5	969.5	1019.6	1035.5
52.5°	834.3	853.4	887.6	933.7	956.8
55°	754.8	767.5	804.9	849.4	874.1
57.5°	672.1	684.0	726.1	764.3	789.8
60°	592.5	607.6	640.2	679.2	708.6
62.5°	516.2	532.1	559.9	594.1	627.5
65°	442.2	454.1	481.2	515.4	544.8
67.5°	370.6	381.0	408.0	431.9	462.9
70°	298.3	311.8	331.7	354.7	374.6
72.5°	240.2	245.8	262.5	279.2	299.8
75°	177.4	186.9	200.4	210.0	221.9
77.5°	127.3	132.8	140.8	148.7	159.9
80°	85.1	87.5	94.6	96.2	105.0
82.5°	51.7	53.3	54.9	55.7	58.9
85°	27.8	27.8	27.8	26.2	26.2
87.5°	15.9	15.9	13.5	11.1	8.0
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)