

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: P554120

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-81-88-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: P554120
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-LD4-1LO-30-UNV-81-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

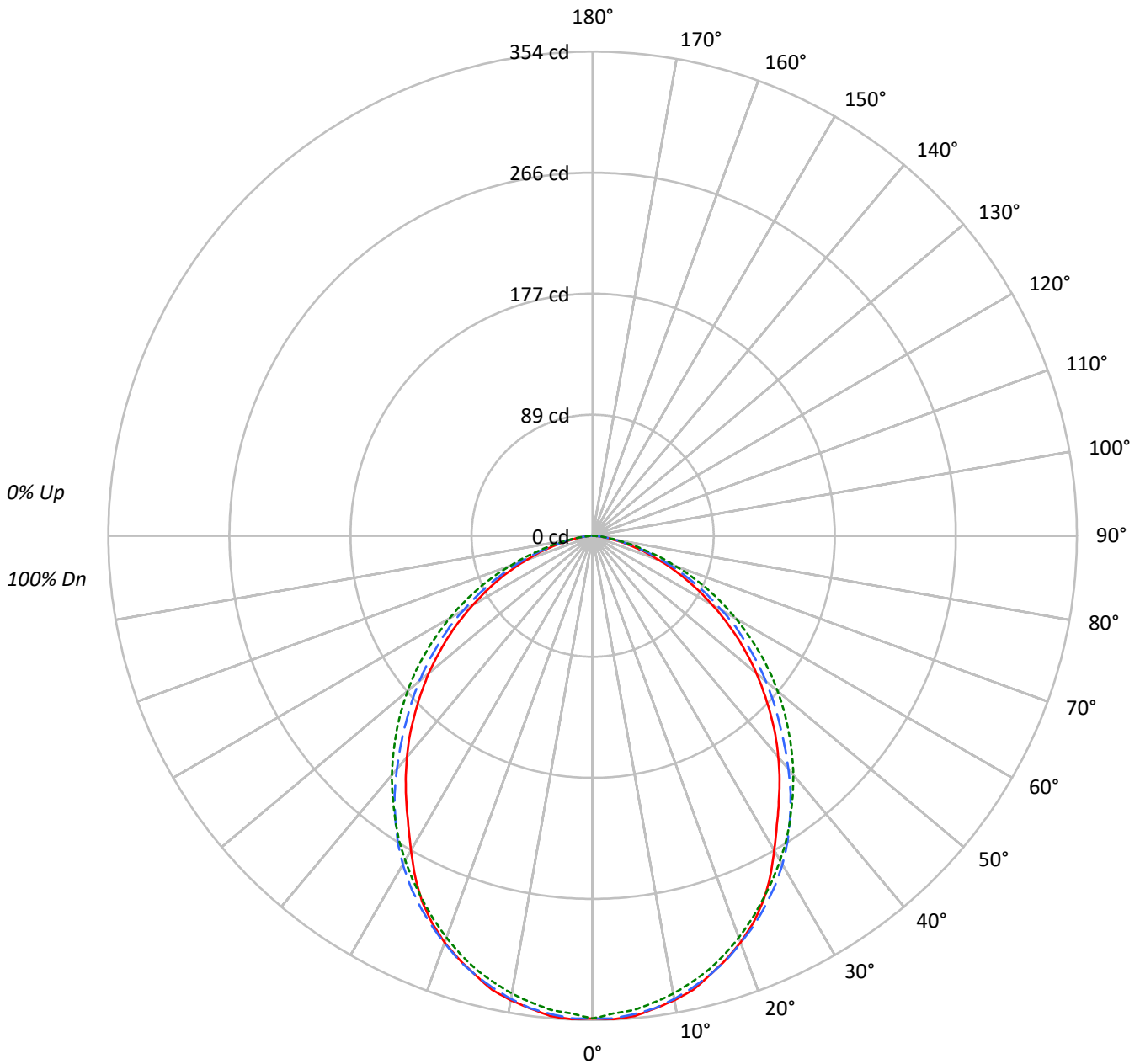
Lumens per Lamp: N/A
Luminaire Lumens: 816.0 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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: P554120

CATALOG NUMBER: FUSL-12-2-LD4-1LO-30-UNV-81-88-EDD-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1899	1899	1899
5°	1904	1896	1880
10°	1884	1879	1858
15°	1851	1851	1830
20°	1812	1814	1790
25°	1752	1774	1745
30°	1650	1724	1703
35°	1559	1652	1655
40°	1483	1563	1604
45°	1398	1468	1544
50°	1309	1384	1478
55°	1208	1287	1398
60°	1087	1174	1300
65°	960	1044	1183
70°	799	889	1006
75°	628	711	786
80°	449	499	555
85°	290	290	278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.2	4.1
10°-20°	93.3	11.4
20°-30°	136.4	16.7
30°-40°	154.8	19.0
40°-50°	149.5	18.3
50°-60°	123.3	15.1
60°-70°	82.1	10.1
70°-80°	36.7	4.5
80°-90°	6.6	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°	263.0	32.2
0°-40°	417.8	51.2
0°-60°	690.6	84.6
0°-90°	816.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	816.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	353	353	353	353	353	
5°	352	352	351	349	348	33
15°	332	333	332	331	328	94
25°	295	297	299	296	294	135
35°	237	240	252	253	252	149
45°	184	187	193	202	203	142
55°	129	131	137	145	149	115
65°	75	77	82	88	93	75
75°	30	32	34	36	38	33
85°	5	5	5	4	4	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	352.9	352.9	352.9	352.9	352.9
2.5°	353.8	354.0	353.2	351.0	349.6
5°	352.5	352.4	351.0	349.1	348.0
7.5°	348.6	348.8	348.4	345.7	344.2
10°	344.8	344.9	343.8	341.6	339.9
12.5°	339.9	339.7	338.3	337.2	334.3
15°	332.2	333.0	332.2	330.7	328.4
17.5°	324.7	324.7	325.2	322.7	320.9
20°	316.3	316.7	316.7	314.7	312.6
22.5°	306.5	307.8	308.2	306.0	303.6
25°	295.0	297.3	298.7	296.5	293.9
27.5°	281.0	284.6	288.6	287.0	284.2
30°	265.5	270.6	277.4	276.0	274.0
32.5°	250.7	255.8	265.2	264.6	263.6
35°	237.3	240.5	251.5	252.8	251.9
37.5°	224.5	227.5	237.8	240.9	240.1
40°	211.1	214.3	222.5	228.0	228.3
42.5°	197.8	200.9	207.6	215.6	215.6
45°	183.7	186.8	192.9	201.7	202.8
47.5°	169.9	173.1	179.1	187.9	189.7
50°	156.3	159.3	165.3	173.8	176.5
52.5°	142.2	145.5	151.3	159.2	163.1
55°	128.7	130.8	137.2	144.8	149.0
57.5°	114.6	116.6	123.8	130.3	134.6
60°	101.0	103.6	109.1	115.8	120.8
62.5°	88.0	90.7	95.4	101.3	107.0
65°	75.4	77.4	82.0	87.9	92.9
67.5°	63.2	64.9	69.5	73.6	78.9
70°	50.8	53.1	56.5	60.5	63.9
72.5°	40.9	41.9	44.7	47.6	51.1
75°	30.2	31.9	34.2	35.8	37.8
77.5°	21.7	22.6	24.0	25.4	27.3
80°	14.5	14.9	16.1	16.4	17.9
82.5°	8.8	9.1	9.4	9.5	10.0
85°	4.7	4.7	4.7	4.5	4.5
87.5°	2.7	2.7	2.3	1.9	1.4
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)