

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: P554858

Luminaire Tested: **FUSL-12-2-LD4-2HI-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: P554858
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-LD4-2HI-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

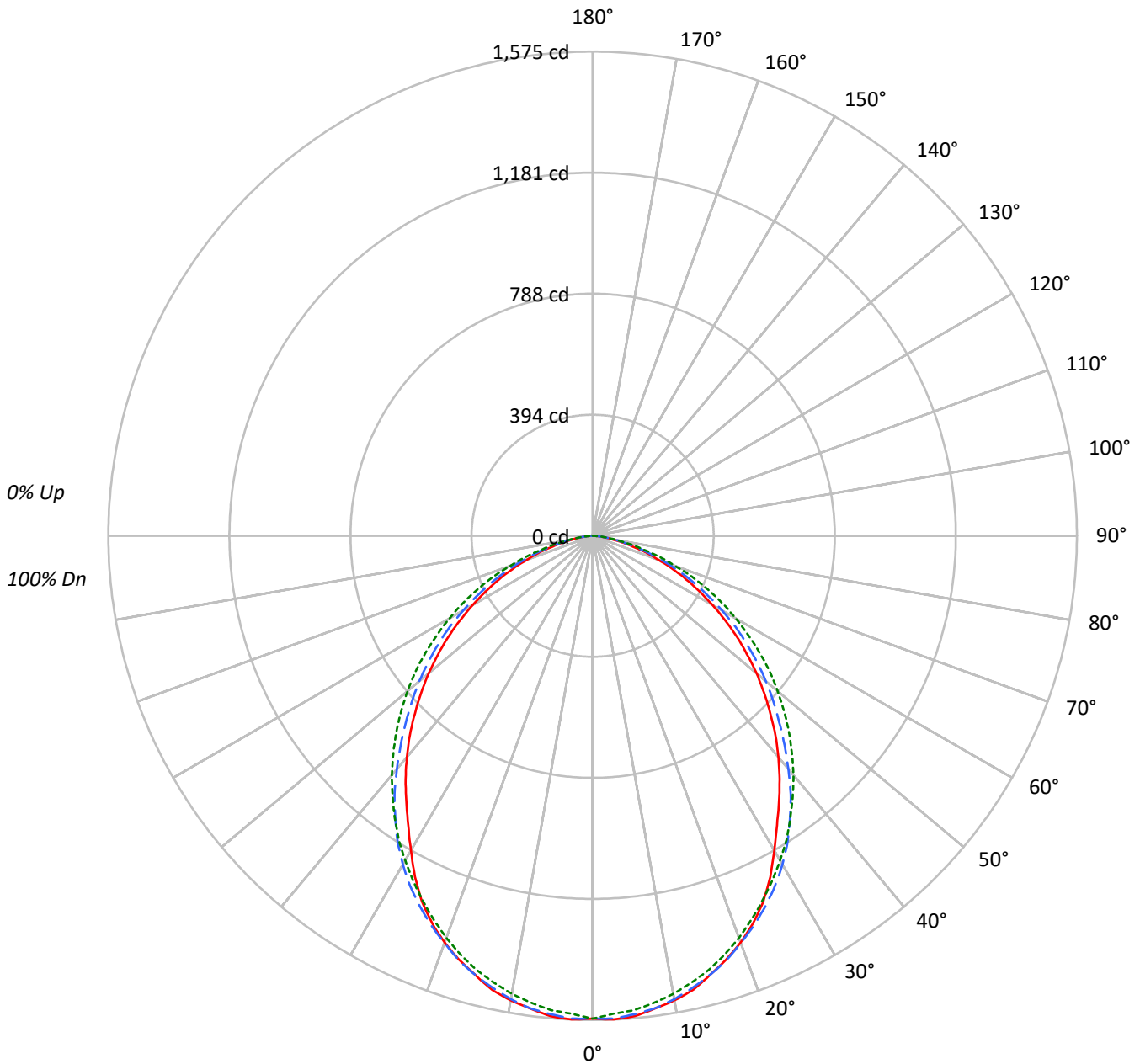
Lumens per Lamp: N/A
Luminaire Lumens: 3632.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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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CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-93-94-EDD-90

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°	8453	8453	8453
5°	8476	8440	8368
10°	8386	8363	8267
15°	8237	8237	8143
20°	8063	8073	7970
25°	7798	7894	7769
30°	7342	7672	7579
35°	6938	7355	7366
40°	6601	6957	7139
45°	6224	6536	6871
50°	5826	6159	6579
55°	5374	5730	6223
60°	4839	5229	5788
65°	4273	4649	5265
70°	3561	3959	4472
75°	2799	3163	3502
80°	2002	2225	2470
85°	1303	1303	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.9	4.1
10°-20°	415.5	11.4
20°-30°	607.1	16.7
30°-40°	689.2	19.0
40°-50°	665.3	18.3
50°-60°	548.8	15.1
60°-70°	365.5	10.1
70°-80°	163.5	4.5
80°-90°	29.2	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°	1170.5	32.2
0°-40°	1859.6	51.2
0°-60°	3073.7	84.6
0°-90°	3632.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3632.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1571	1571	1571	1571	1571	
5°	1569	1568	1562	1554	1549	148
15°	1478	1482	1478	1472	1462	417
25°	1313	1323	1329	1320	1308	601
35°	1056	1070	1119	1125	1121	662
45°	818	832	859	898	903	631
55°	573	582	611	644	663	511
65°	336	345	365	391	413	333
75°	135	142	152	159	168	147
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1570.7	1570.7	1570.7	1570.7	1570.7
2.5°	1575.0	1575.6	1572.0	1562.3	1556.3
5°	1568.9	1568.3	1562.3	1553.8	1549.0
7.5°	1551.4	1552.6	1550.8	1538.8	1532.1
10°	1534.5	1535.1	1530.3	1520.7	1512.8
12.5°	1512.8	1512.2	1505.6	1500.7	1488.1
15°	1478.4	1482.0	1478.4	1471.8	1461.5
17.5°	1445.2	1445.2	1447.6	1436.2	1428.3
20°	1407.8	1409.6	1409.6	1400.6	1391.5
22.5°	1364.4	1369.8	1371.6	1362.0	1351.1
25°	1313.1	1323.3	1329.4	1319.7	1308.3
27.5°	1250.9	1266.6	1284.7	1277.5	1264.8
30°	1181.5	1204.5	1234.6	1228.6	1219.5
32.5°	1115.8	1138.7	1180.3	1177.9	1173.1
35°	1056.0	1070.5	1119.4	1125.4	1121.2
37.5°	999.3	1012.6	1058.4	1072.3	1068.7
40°	939.6	954.0	990.2	1015.0	1016.2
42.5°	880.4	894.3	923.9	959.5	959.5
45°	817.7	831.5	858.7	897.9	902.7
47.5°	756.1	770.6	797.1	836.4	844.2
50°	695.8	709.0	735.6	773.6	785.7
52.5°	633.0	647.5	673.4	708.4	725.9
55°	572.7	582.3	610.7	644.5	663.2
57.5°	509.9	519.0	550.9	579.9	599.2
60°	449.6	461.0	485.8	515.3	537.7
62.5°	391.6	403.7	424.8	450.8	476.1
65°	335.5	344.6	365.1	391.0	413.4
67.5°	281.2	289.0	309.6	327.7	351.2
70°	226.3	236.5	251.6	269.1	284.2
72.5°	182.2	186.5	199.1	211.8	227.5
75°	134.6	141.8	152.1	159.3	168.4
77.5°	96.5	100.8	106.8	112.8	121.3
80°	64.6	66.4	71.8	73.0	79.7
82.5°	39.2	40.4	41.6	42.2	44.7
85°	21.1	21.1	21.1	19.9	19.9
87.5°	12.1	12.1	10.3	8.4	6.0
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)