

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: P556040

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-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: P556040
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

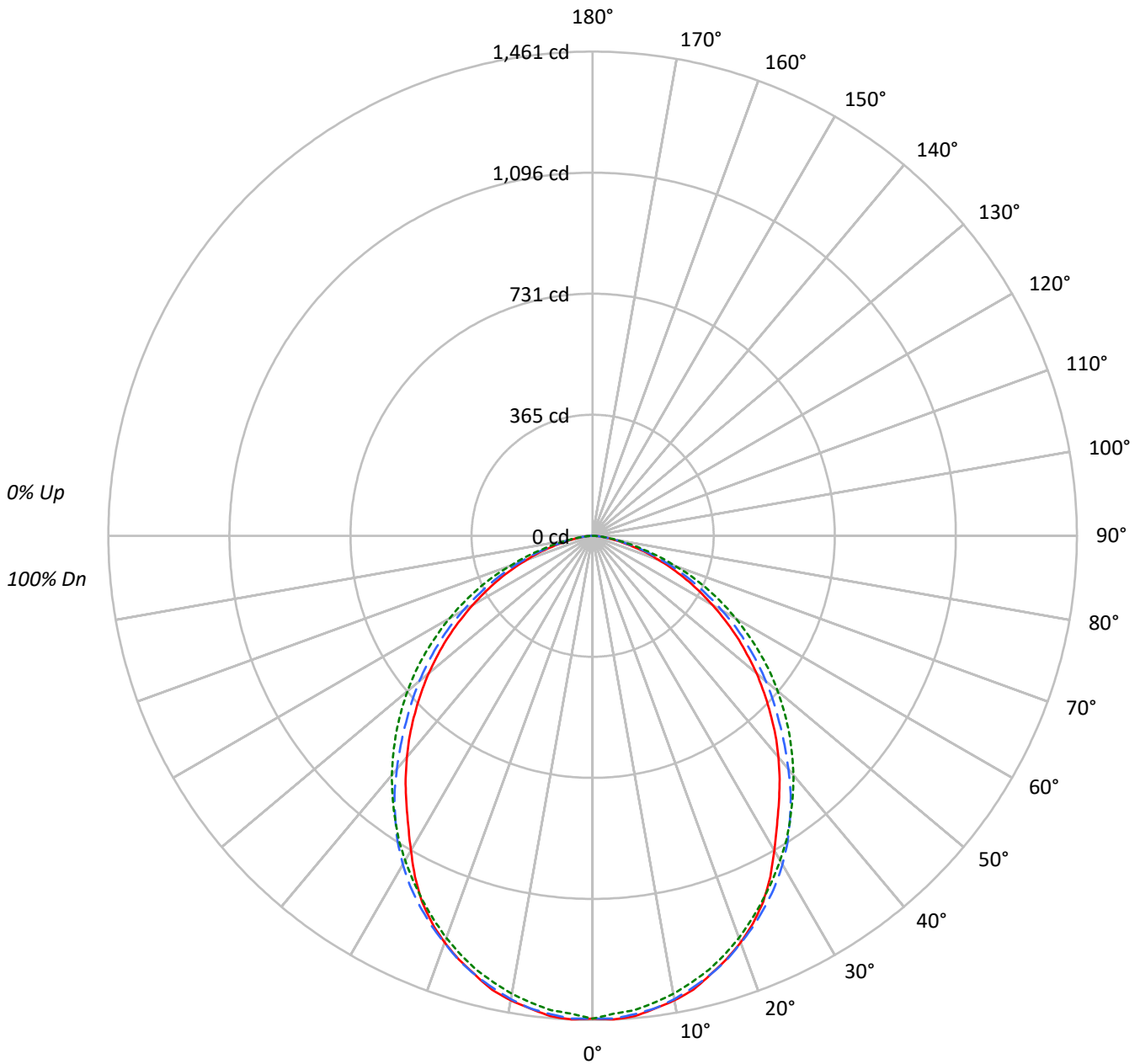
Lumens per Lamp: N/A
Luminaire Lumens: 3369.0 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
Input Voltage (V): NR
Input Current (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				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°	7842	7842	7842
5°	7862	7829	7763
10°	7779	7758	7669
15°	7641	7641	7554
20°	7479	7489	7393
25°	7233	7323	7206
30°	6811	7117	7030
35°	6435	6822	6833
40°	6123	6453	6622
45°	5772	6062	6374
50°	5404	5713	6102
55°	4984	5316	5773
60°	4489	4850	5368
65°	3963	4312	4883
70°	3303	3673	4148
75°	2595	2934	3248
80°	1857	2064	2290
85°	1210	1210	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	4.1
10°-20°	385.4	11.4
20°-30°	563.2	16.7
30°-40°	639.3	19.0
40°-50°	617.1	18.3
50°-60°	509.1	15.1
60°-70°	339.0	10.1
70°-80°	151.7	4.5
80°-90°	27.1	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°	1085.7	32.2
0°-40°	1725.0	51.2
0°-60°	2851.2	84.6
0°-90°	3369.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3369.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1457	1457	1457	1457	1457	
5°	1455	1455	1449	1441	1437	138
15°	1371	1375	1371	1365	1356	387
25°	1218	1228	1233	1224	1214	558
35°	980	993	1038	1044	1040	614
45°	758	771	796	833	837	585
55°	531	540	566	598	615	474
65°	311	320	339	363	383	309
75°	125	132	141	148	156	136
85°	20	20	20	18	18	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1457.0	1457.0	1457.0	1457.0	1457.0
2.5°	1460.9	1461.5	1458.1	1449.2	1443.6
5°	1455.3	1454.8	1449.2	1441.3	1436.9
7.5°	1439.1	1440.2	1438.5	1427.3	1421.2
10°	1423.4	1424.0	1419.5	1410.5	1403.3
12.5°	1403.3	1402.7	1396.6	1392.1	1380.3
15°	1371.4	1374.7	1371.4	1365.2	1355.7
17.5°	1340.6	1340.6	1342.8	1332.2	1324.9
20°	1305.9	1307.6	1307.6	1299.2	1290.8
22.5°	1265.6	1270.6	1272.3	1263.3	1253.3
25°	1218.0	1227.5	1233.1	1224.2	1213.5
27.5°	1160.3	1174.9	1191.7	1185.0	1173.2
30°	1096.0	1117.2	1145.2	1139.6	1131.2
32.5°	1035.0	1056.2	1094.9	1092.6	1088.1
35°	979.5	993.0	1038.3	1043.9	1040.0
37.5°	926.9	939.2	981.8	994.7	991.3
40°	871.5	885.0	918.5	941.5	942.6
42.5°	816.7	829.5	857.0	890.0	890.0
45°	758.4	771.3	796.5	832.9	837.4
47.5°	701.4	714.8	739.4	775.8	783.1
50°	645.4	657.7	682.3	717.6	728.8
52.5°	587.2	600.6	624.7	657.1	673.4
55°	531.2	540.1	566.5	597.8	615.2
57.5°	473.0	481.4	511.0	537.9	555.8
60°	417.0	427.6	450.6	478.0	498.7
62.5°	363.3	374.5	394.1	418.1	441.6
65°	311.2	319.6	338.6	362.7	383.4
67.5°	260.8	268.1	287.1	303.9	325.8
70°	209.9	219.4	233.4	249.6	263.6
72.5°	169.0	173.0	184.7	196.5	211.0
75°	124.8	131.5	141.1	147.8	156.2
77.5°	89.6	93.5	99.1	104.7	112.5
80°	59.9	61.6	66.6	67.7	73.9
82.5°	36.4	37.5	38.6	39.2	41.4
85°	19.6	19.6	19.6	18.5	18.5
87.5°	11.2	11.2	9.5	7.8	5.6
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)