

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: P556795

Luminaire Tested: **FUSL-12-4-LD4-1STD-40-UNV-80-94-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: P556795
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-12-4-LD4-1STD-40-UNV-80-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

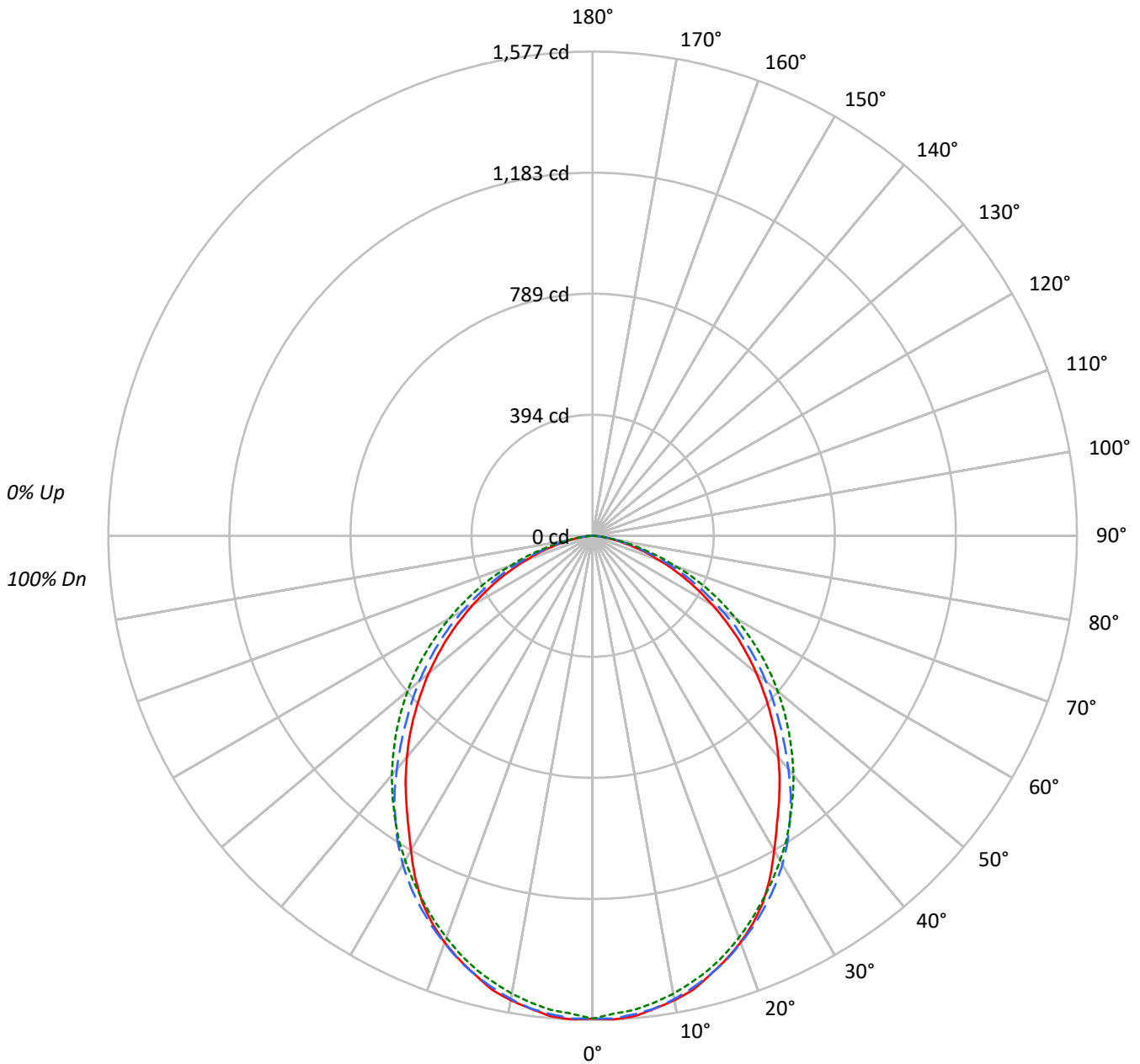
Lumens per Lamp: N/A
Luminaire Lumens: 3636.0 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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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CATALOG NUMBER: FUSL-12-4-LD4-1STD-40-UNV-80-94-EDD

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°	4232	4232	4232
5°	4243	4225	4189
10°	4198	4186	4138
15°	4123	4123	4076
20°	4036	4041	3989
25°	3903	3951	3889
30°	3675	3841	3794
35°	3473	3681	3687
40°	3304	3482	3574
45°	3115	3271	3439
50°	2916	3083	3293
55°	2690	2868	3115
60°	2422	2617	2897
65°	2139	2327	2635
70°	1782	1982	2238
75°	1400	1582	1752
80°	1001	1114	1235
85°	651	651	614



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	4.1
10°-20°	415.9	11.4
20°-30°	607.8	16.7
30°-40°	689.9	19.0
40°-50°	666.0	18.3
50°-60°	549.4	15.1
60°-70°	365.9	10.1
70°-80°	163.7	4.5
80°-90°	29.3	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°	1171.8	32.2
0°-40°	1861.7	51.2
0°-60°	3077.1	84.6
0°-90°	3636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1572	1572	1572	1572	1572	
5°	1571	1570	1564	1556	1551	149
15°	1480	1484	1480	1473	1463	417
25°	1314	1325	1331	1321	1310	602
35°	1057	1072	1121	1127	1122	662
45°	819	832	860	899	904	632
55°	573	583	611	645	664	512
65°	336	345	366	392	414	333
75°	135	142	152	160	168	147
85°	21	21	21	20	20	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1572.5	1572.5	1572.5	1572.5	1572.5
2.5°	1576.7	1577.3	1573.7	1564.0	1558.0
5°	1570.7	1570.1	1564.0	1555.6	1550.7
7.5°	1553.1	1554.4	1552.5	1540.5	1533.8
10°	1536.2	1536.8	1532.0	1522.3	1514.5
12.5°	1514.5	1513.9	1507.2	1502.4	1489.7
15°	1480.0	1483.7	1480.0	1473.4	1463.1
17.5°	1446.8	1446.8	1449.2	1437.8	1429.9
20°	1409.4	1411.2	1411.2	1402.1	1393.1
22.5°	1365.9	1371.3	1373.1	1363.5	1352.6
25°	1314.5	1324.8	1330.8	1321.2	1309.7
27.5°	1252.3	1268.0	1286.1	1278.9	1266.2
30°	1182.8	1205.8	1236.0	1230.0	1220.9
32.5°	1117.0	1139.9	1181.6	1179.2	1174.4
35°	1057.2	1071.7	1120.6	1126.6	1122.4
37.5°	1000.4	1013.7	1059.6	1073.5	1069.9
40°	940.6	955.1	991.3	1016.1	1017.3
42.5°	881.4	895.3	924.9	960.5	960.5
45°	818.6	832.5	859.6	898.9	903.7
47.5°	756.9	771.4	798.0	837.3	845.1
50°	696.5	709.8	736.4	774.5	786.5
52.5°	633.7	648.2	674.2	709.2	726.7
55°	573.3	583.0	611.4	645.2	663.9
57.5°	510.5	519.5	551.5	580.5	599.9
60°	450.1	461.5	486.3	515.9	538.3
62.5°	392.1	404.1	425.3	451.3	476.6
65°	335.9	344.9	365.5	391.5	413.8
67.5°	281.5	289.4	309.9	328.0	351.6
70°	226.5	236.8	251.9	269.4	284.5
72.5°	182.4	186.7	199.4	212.0	227.7
75°	134.7	142.0	152.2	159.5	168.5
77.5°	96.7	100.9	106.9	113.0	121.4
80°	64.6	66.5	71.9	73.1	79.7
82.5°	39.3	40.5	41.7	42.3	44.7
85°	21.1	21.1	21.1	19.9	19.9
87.5°	12.1	12.1	10.3	8.5	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)