

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: P557859

Luminaire Tested: **FUSL-12-4-LD4-3HI-40-UNV-93-85-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: P557859
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-LD4-3HI-40-UNV-93-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

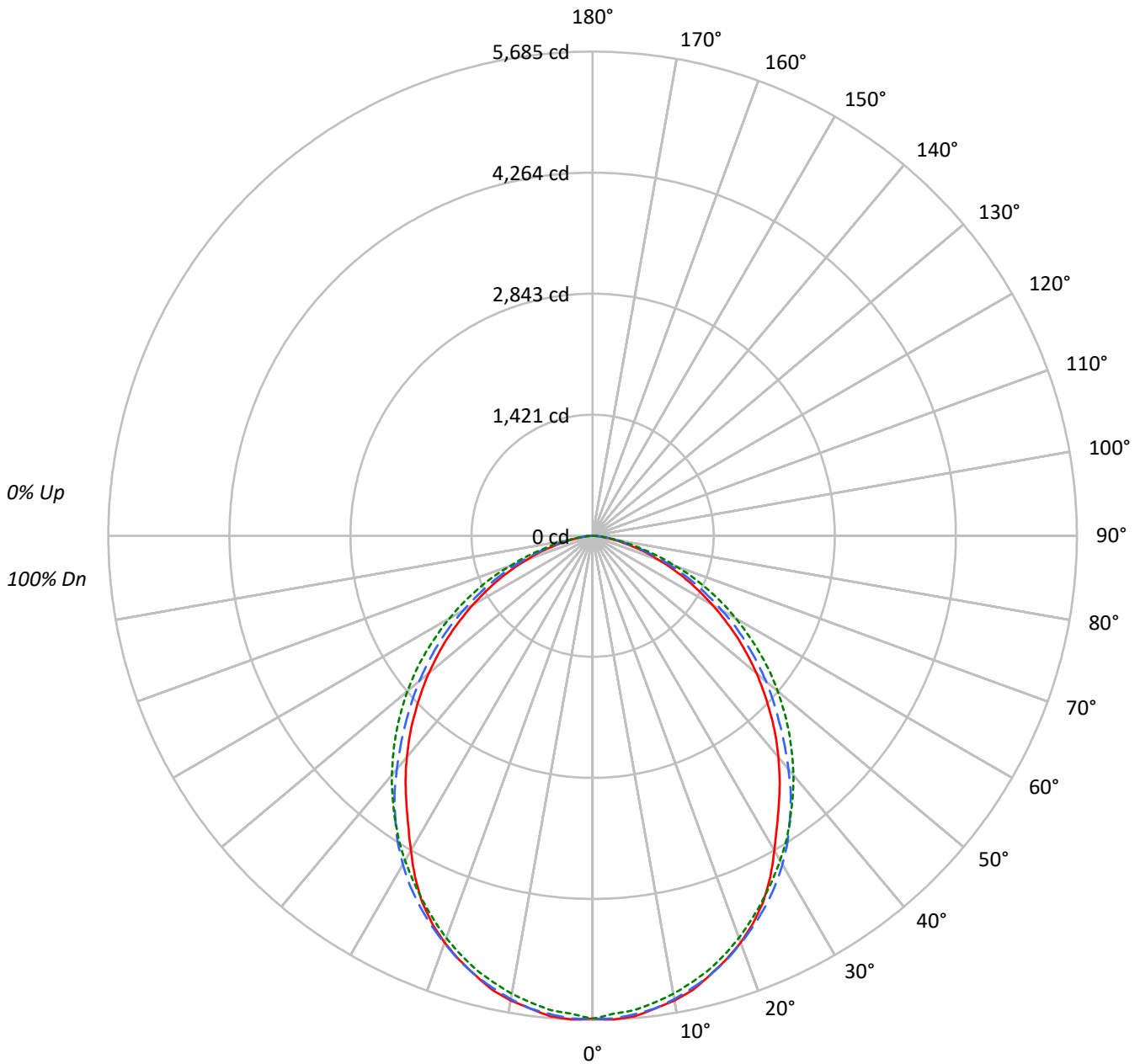
Lumens per Lamp: N/A
Luminaire Lumens: 13111.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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

TEST NUMBER: P557859

CATALOG NUMBER: FUSL-12-4-LD4-3HI-40-UNV-93-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557859

CATALOG NUMBER: FUSL-12-4-LD4-3HI-40-UNV-93-85-EDD

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°	15258	15258	15258
5°	15299	15234	15105
10°	15137	15095	14922
15°	14868	14868	14698
20°	14553	14572	14385
25°	14074	14248	14022
30°	13253	13849	13679
35°	12523	13274	13296
40°	11914	12557	12886
45°	11233	11797	12402
50°	10515	11117	11874
55°	9698	10343	11232
60°	8734	9437	10446
65°	7712	8392	9501
70°	6427	7147	8072
75°	5051	5707	6319
80°	3612	4017	4455
85°	2353	2353	2220



TEST NUMBER: P557859

CATALOG NUMBER: FUSL-12-4-LD4-3HI-40-UNV-93-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	533.9	4.1
10°-20°	1499.8	11.4
20°-30°	2191.7	16.7
30°-40°	2487.8	19.0
40°-50°	2401.6	18.3
50°-60°	1981.1	15.1
60°-70°	1319.3	10.1
70°-80°	590.4	4.5
80°-90°	105.6	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°	4225.3	32.2
0°-40°	6713.1	51.2
0°-60°	11095.8	84.6
0°-90°	13111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13111.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5670	5670	5670	5670	5670	
5°	5664	5662	5640	5609	5592	536
15°	5337	5350	5337	5313	5276	1505
25°	4740	4777	4799	4764	4723	2171
35°	3812	3864	4041	4063	4047	2388
45°	2952	3002	3100	3241	3259	2277
55°	2067	2102	2204	2326	2394	1845
65°	1211	1244	1318	1412	1492	1201
75°	486	512	549	575	608	531
85°	76	76	76	72	72	103
90°	0	0	0	0	0	



TEST NUMBER: P557859

CATALOG NUMBER: FUSL-12-4-LD4-3HI-40-UNV-93-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5670.2	5670.2	5670.2	5670.2	5670.2
2.5°	5685.4	5687.6	5674.5	5639.7	5617.9
5°	5663.6	5661.5	5639.7	5609.2	5591.7
7.5°	5600.5	5604.8	5598.3	5554.7	5530.8
10°	5539.5	5541.6	5524.2	5489.4	5461.1
12.5°	5461.1	5458.9	5434.9	5417.5	5371.7
15°	5336.9	5350.0	5336.9	5312.9	5275.9
17.5°	5217.1	5217.1	5225.8	5184.4	5156.1
20°	5082.0	5088.6	5088.6	5055.9	5023.2
22.5°	4925.2	4944.8	4951.3	4916.5	4877.3
25°	4740.0	4777.1	4798.8	4764.0	4722.6
27.5°	4515.7	4572.3	4637.6	4611.5	4565.8
30°	4265.2	4347.9	4456.8	4435.1	4402.4
32.5°	4027.7	4110.5	4260.8	4252.1	4234.7
35°	3812.1	3864.3	4040.8	4062.6	4047.3
37.5°	3607.3	3655.2	3820.8	3870.9	3857.8
40°	3391.6	3443.9	3574.6	3663.9	3668.3
42.5°	3178.2	3228.3	3335.0	3463.5	3463.5
45°	2951.6	3001.7	3099.8	3241.3	3258.8
47.5°	2729.4	2781.7	2877.6	3019.2	3047.5
50°	2511.6	2559.5	2655.4	2792.6	2836.2
52.5°	2285.1	2337.3	2431.0	2557.3	2620.5
55°	2067.2	2102.1	2204.5	2326.4	2394.0
57.5°	1840.7	1873.4	1988.8	2093.4	2163.1
60°	1622.8	1664.2	1753.5	1860.3	1940.9
62.5°	1413.7	1457.3	1533.5	1627.2	1718.7
65°	1211.1	1243.8	1317.9	1411.6	1492.1
67.5°	1015.1	1043.4	1117.5	1182.8	1267.8
70°	816.9	853.9	908.4	971.5	1026.0
72.5°	657.9	673.1	718.8	764.6	821.2
75°	485.8	511.9	548.9	575.1	607.8
77.5°	348.5	363.8	385.6	407.3	437.8
80°	233.1	239.6	259.2	263.6	287.5
82.5°	141.6	145.9	150.3	152.5	161.2
85°	76.2	76.2	76.2	71.9	71.9
87.5°	43.6	43.6	37.0	30.5	21.8
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)