

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: P556540

Luminaire Tested: **FUSL-12-4-LD4-1LO-40-UNV-80-96-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: P556540
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-LD4-1LO-40-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

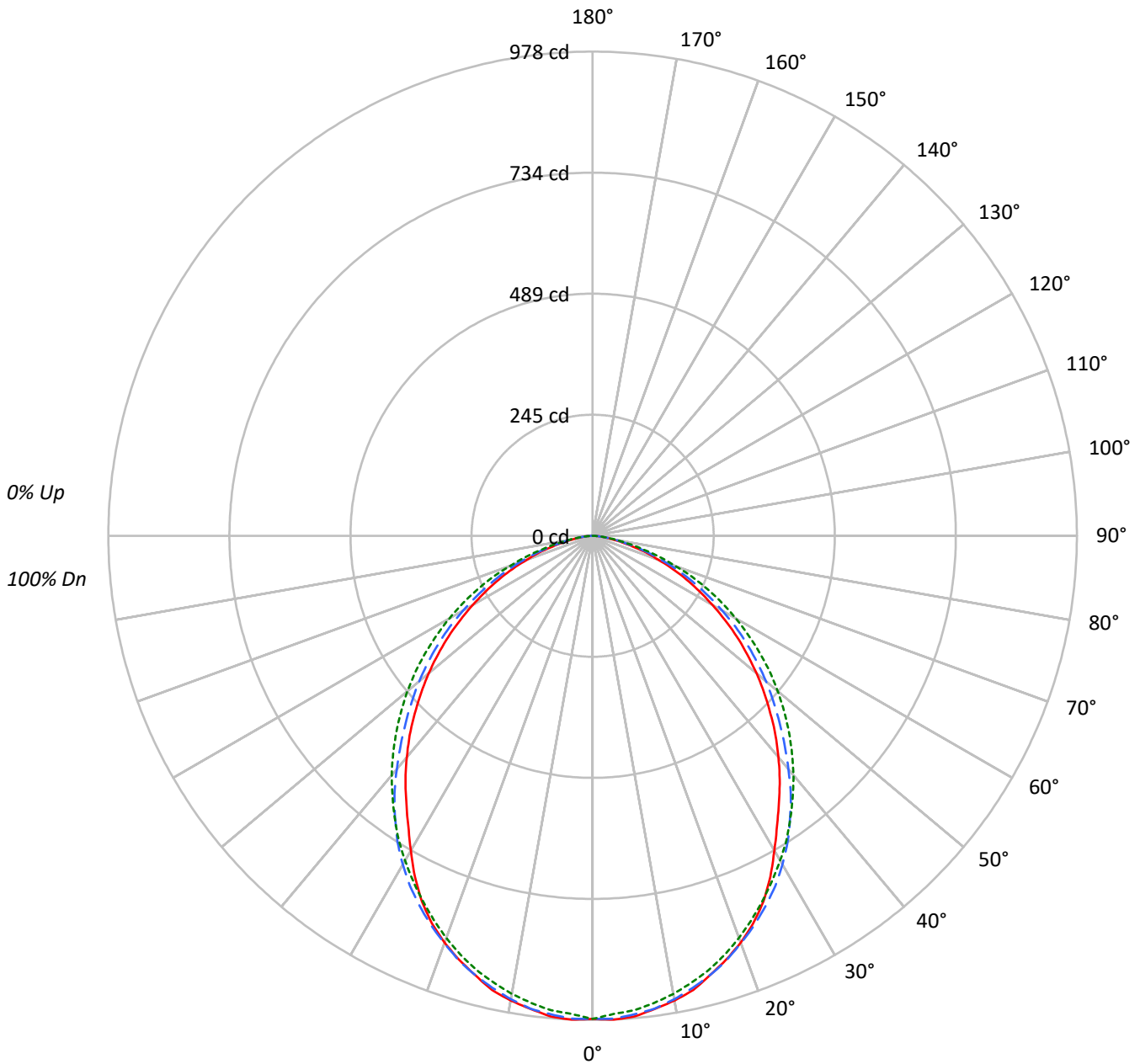
Lumens per Lamp: N/A
Luminaire Lumens: 2256.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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-12-4-LD4-1LO-40-UNV-80-96-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°	2626	2626	2626
5°	2632	2621	2599
10°	2605	2597	2568
15°	2558	2558	2529
20°	2504	2507	2475
25°	2422	2452	2413
30°	2280	2383	2354
35°	2155	2284	2288
40°	2050	2161	2217
45°	1933	2030	2134
50°	1809	1913	2043
55°	1669	1780	1932
60°	1503	1624	1798
65°	1327	1444	1635
70°	1106	1230	1389
75°	869	983	1088
80°	621	691	767
85°	404	404	383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	4.1
10°-20°	258.1	11.4
20°-30°	377.1	16.7
30°-40°	428.1	19.0
40°-50°	413.2	18.3
50°-60°	340.9	15.1
60°-70°	227.0	10.1
70°-80°	101.6	4.5
80°-90°	18.2	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°	727.0	32.2
0°-40°	1155.1	51.2
0°-60°	1909.2	84.6
0°-90°	2256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2256.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	976	976	976	976	976	
5°	974	974	970	965	962	92
15°	918	921	918	914	908	259
25°	816	822	826	820	813	374
35°	656	665	695	699	696	411
45°	508	516	533	558	561	392
55°	356	362	379	400	412	317
65°	208	214	227	243	257	207
75°	84	88	94	99	105	91
85°	13	13	13	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	975.7	975.7	975.7	975.7	975.7
2.5°	978.3	978.7	976.4	970.4	966.7
5°	974.5	974.2	970.4	965.2	962.2
7.5°	963.7	964.4	963.3	955.8	951.7
10°	953.2	953.5	950.5	944.6	939.7
12.5°	939.7	939.3	935.2	932.2	924.3
15°	918.3	920.6	918.3	914.2	907.8
17.5°	897.7	897.7	899.2	892.1	887.2
20°	874.5	875.6	875.6	870.0	864.3
22.5°	847.5	850.8	852.0	846.0	839.2
25°	815.6	822.0	825.7	819.7	812.6
27.5°	777.0	786.8	798.0	793.5	785.6
30°	733.9	748.1	766.9	763.1	757.5
32.5°	693.0	707.3	733.2	731.7	728.7
35°	655.9	664.9	695.3	699.0	696.4
37.5°	620.7	629.0	657.4	666.1	663.8
40°	583.6	592.6	615.1	630.5	631.2
42.5°	546.9	555.5	573.9	596.0	596.0
45°	507.9	516.5	533.4	557.7	560.7
47.5°	469.7	478.6	495.1	519.5	524.4
50°	432.2	440.4	456.9	480.5	488.0
52.5°	393.2	402.2	418.3	440.0	450.9
55°	355.7	361.7	379.3	400.3	411.9
57.5°	316.7	322.3	342.2	360.2	372.2
60°	279.2	286.4	301.7	320.1	334.0
62.5°	243.3	250.8	263.9	280.0	295.7
65°	208.4	214.0	226.8	242.9	256.8
67.5°	174.7	179.5	192.3	203.5	218.1
70°	140.6	146.9	156.3	167.2	176.5
72.5°	113.2	115.8	123.7	131.6	141.3
75°	83.6	88.1	94.5	99.0	104.6
77.5°	60.0	62.6	66.3	70.1	75.3
80°	40.1	41.2	44.6	45.4	49.5
82.5°	24.4	25.1	25.9	26.2	27.7
85°	13.1	13.1	13.1	12.4	12.4
87.5°	7.5	7.5	6.4	5.2	3.7
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)