

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: P555014

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-UNV-81-87-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: P555014
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-LD4-2LO-40-UNV-81-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375
CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

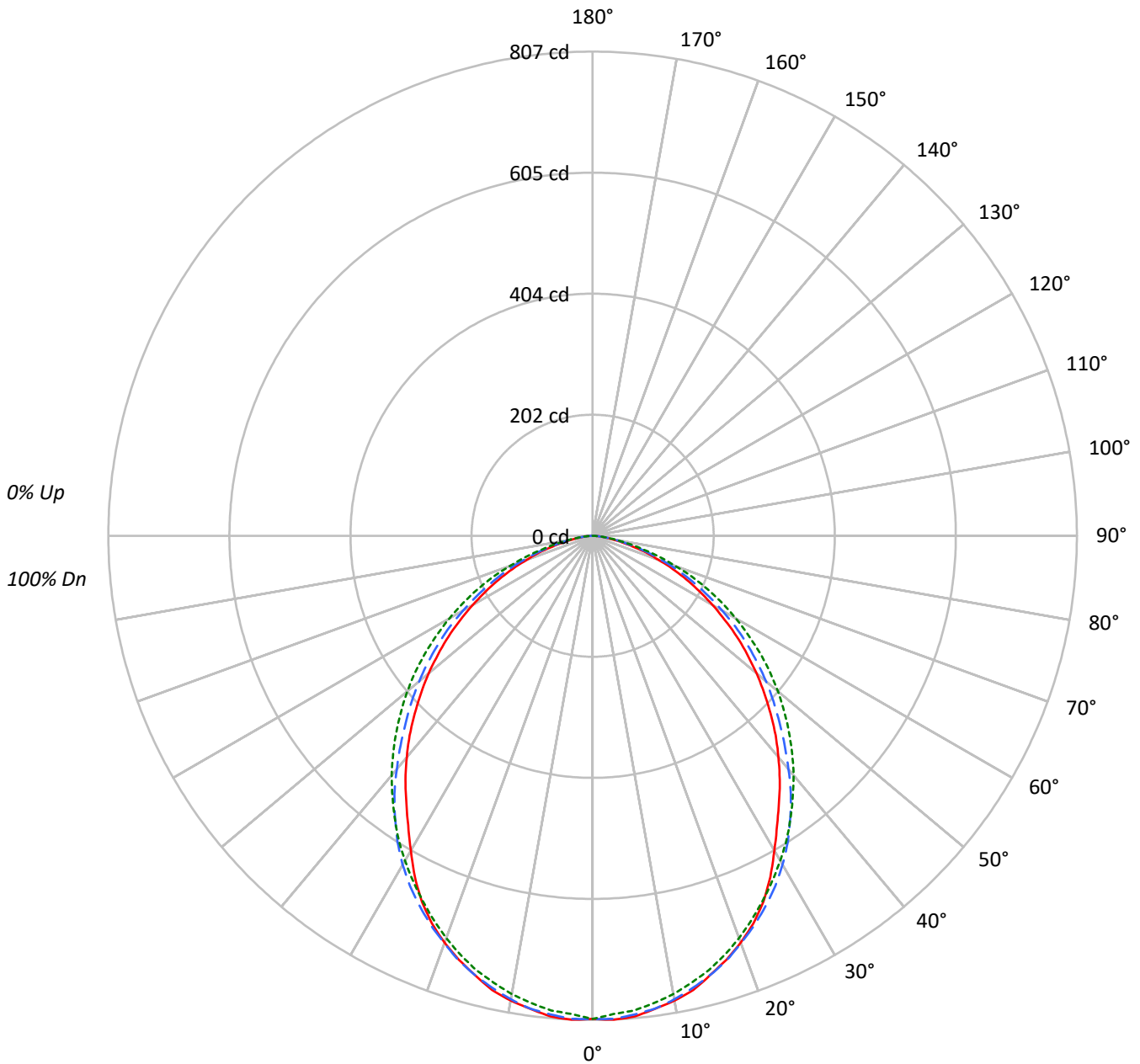
Lumens per Lamp: N/A
Luminaire Lumens: 1862.0 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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									
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°	4334	4334	4334
5°	4345	4327	4290
10°	4299	4287	4239
15°	4223	4223	4175
20°	4133	4139	4086
25°	3998	4047	3983
30°	3764	3934	3885
35°	3557	3771	3777
40°	3384	3567	3660
45°	3191	3350	3522
50°	2987	3157	3373
55°	2755	2938	3190
60°	2481	2680	2967
65°	2190	2384	2699
70°	1825	2030	2293
75°	1435	1622	1795
80°	1026	1141	1265
85°	667	667	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	4.1
10°-20°	213.0	11.4
20°-30°	311.3	16.7
30°-40°	353.3	19.0
40°-50°	341.1	18.3
50°-60°	281.4	15.1
60°-70°	187.4	10.1
70°-80°	83.9	4.5
80°-90°	15.0	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°	600.1	32.2
0°-40°	953.4	51.2
0°-60°	1575.8	84.6
0°-90°	1862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	805	805	805	805	805	
5°	804	804	801	797	794	76
15°	758	760	758	754	749	214
25°	673	678	682	677	671	308
35°	541	549	574	577	575	339
45°	419	426	440	460	463	323
55°	294	298	313	330	340	262
65°	172	177	187	200	212	171
75°	69	73	78	82	86	75
85°	11	11	11	10	10	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.3	805.3	805.3	805.3	805.3
2.5°	807.4	807.7	805.9	800.9	797.8
5°	804.3	804.0	800.9	796.6	794.1
7.5°	795.4	796.0	795.1	788.9	785.5
10°	786.7	787.0	784.5	779.6	775.6
12.5°	775.6	775.3	771.9	769.4	762.9
15°	757.9	759.8	757.9	754.5	749.3
17.5°	740.9	740.9	742.2	736.3	732.3
20°	721.7	722.7	722.7	718.0	713.4
22.5°	699.5	702.2	703.2	698.2	692.7
25°	673.2	678.4	681.5	676.6	670.7
27.5°	641.3	649.3	658.6	654.9	648.4
30°	605.7	617.5	633.0	629.9	625.2
32.5°	572.0	583.8	605.1	603.9	601.4
35°	541.4	548.8	573.9	577.0	574.8
37.5°	512.3	519.1	542.6	549.7	547.9
40°	481.7	489.1	507.7	520.3	521.0
42.5°	451.4	458.5	473.6	491.9	491.9
45°	419.2	426.3	440.2	460.3	462.8
47.5°	387.6	395.1	408.7	428.8	432.8
50°	356.7	363.5	377.1	396.6	402.8
52.5°	324.5	331.9	345.2	363.2	372.2
55°	293.6	298.5	313.1	330.4	340.0
57.5°	261.4	266.1	282.4	297.3	307.2
60°	230.5	236.4	249.0	264.2	275.6
62.5°	200.8	207.0	217.8	231.1	244.1
65°	172.0	176.6	187.2	200.5	211.9
67.5°	144.2	148.2	158.7	168.0	180.0
70°	116.0	121.3	129.0	138.0	145.7
72.5°	93.4	95.6	102.1	108.6	116.6
75°	69.0	72.7	78.0	81.7	86.3
77.5°	49.5	51.7	54.8	57.9	62.2
80°	33.1	34.0	36.8	37.4	40.8
82.5°	20.1	20.7	21.3	21.7	22.9
85°	10.8	10.8	10.8	10.2	10.2
87.5°	6.2	6.2	5.3	4.3	3.1
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)