

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: P555040

Luminaire Tested: **FUSL-12-2-LD4-2LO-40-UNV-93-84-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: P555040
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-93-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

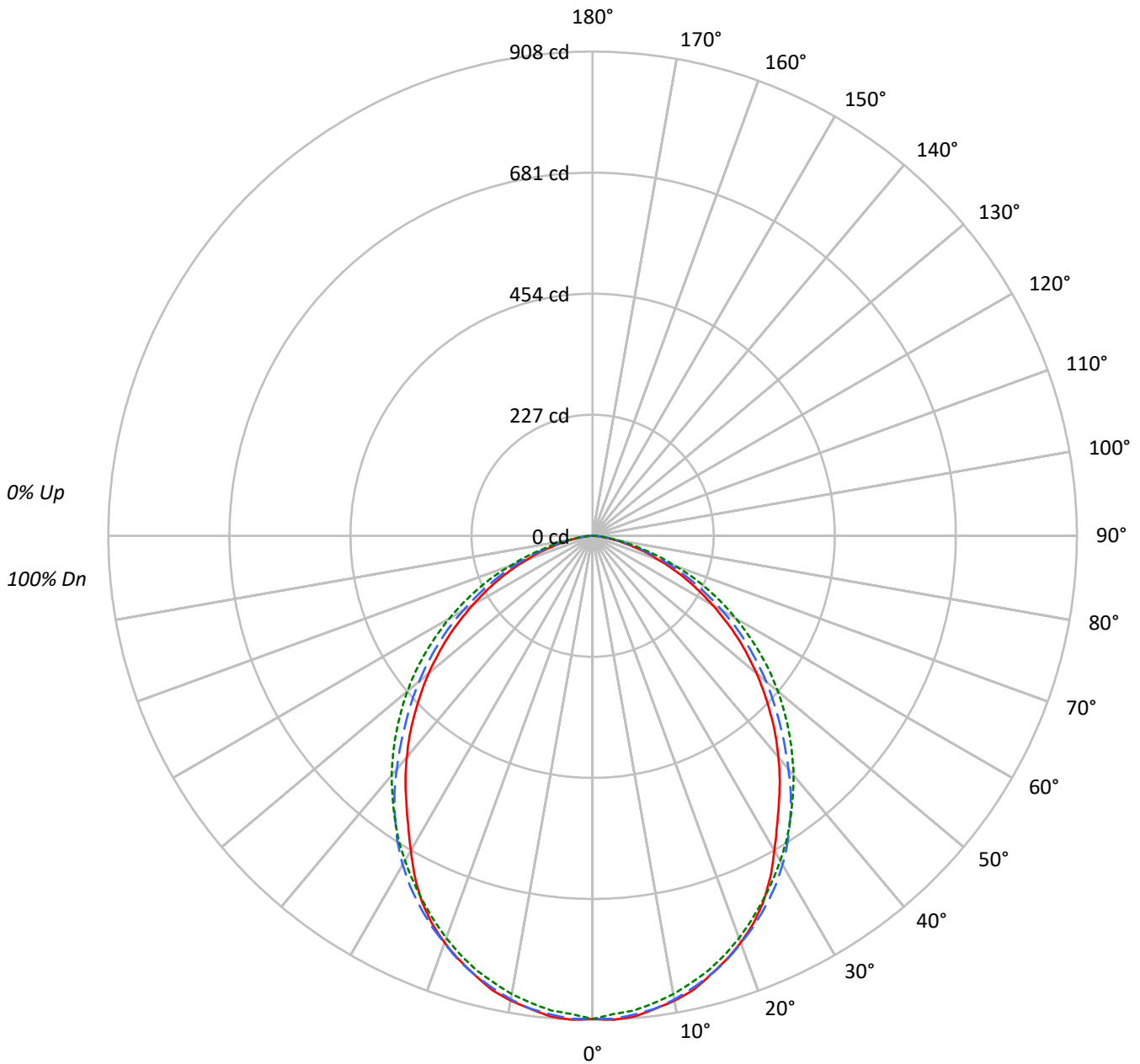
Lumens per Lamp: N/A
Luminaire Lumens: 2095.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
Input Voltage (V): NR
Input Current (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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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°	4876	4876	4876
5°	4889	4869	4827
10°	4837	4824	4769
15°	4752	4752	4697
20°	4651	4657	4597
25°	4498	4554	4481
30°	4235	4426	4372
35°	4002	4242	4249
40°	3807	4013	4118
45°	3589	3770	3963
50°	3360	3553	3795
55°	3099	3305	3589
60°	2791	3016	3338
65°	2464	2682	3036
70°	2054	2283	2579
75°	1614	1824	2019
80°	1153	1283	1423
85°	753	753	710



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	4.1
10°-20°	239.6	11.4
20°-30°	350.2	16.7
30°-40°	397.5	19.0
40°-50°	383.7	18.3
50°-60°	316.5	15.1
60°-70°	210.8	10.1
70°-80°	94.3	4.5
80°-90°	16.9	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°	675.2	32.2
0°-40°	1072.7	51.2
0°-60°	1773.0	84.6
0°-90°	2095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	905	905	901	896	894	86
15°	853	855	853	849	843	240
25°	757	763	767	761	755	347
35°	609	618	646	649	647	382
45°	472	480	495	518	521	364
55°	330	336	352	372	382	295
65°	194	199	211	226	238	192
75°	78	82	88	92	97	85
85°	12	12	12	12	12	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.0	906.0	906.0	906.0	906.0
2.5°	908.5	908.8	906.7	901.2	897.7
5°	905.0	904.6	901.2	896.3	893.5
7.5°	894.9	895.6	894.5	887.6	883.8
10°	885.1	885.5	882.7	877.1	872.6
12.5°	872.6	872.3	868.4	865.7	858.3
15°	852.8	854.9	852.8	848.9	843.0
17.5°	833.6	833.6	835.0	828.4	823.9
20°	812.1	813.1	813.1	807.9	802.7
22.5°	787.0	790.1	791.2	785.6	779.3
25°	757.4	763.3	766.8	761.2	754.6
27.5°	721.6	730.6	741.0	736.9	729.6
30°	681.5	694.8	712.2	708.7	703.5
32.5°	643.6	656.8	680.8	679.4	676.7
35°	609.1	617.5	645.7	649.2	646.7
37.5°	576.4	584.1	610.5	618.5	616.4
40°	541.9	550.3	571.2	585.5	586.2
42.5°	507.8	515.8	532.9	553.4	553.4
45°	471.6	479.6	495.3	517.9	520.7
47.5°	436.1	444.5	459.8	482.4	487.0
50°	401.3	409.0	424.3	446.2	453.2
52.5°	365.1	373.5	388.4	408.6	418.7
55°	330.3	335.9	352.2	371.7	382.5
57.5°	294.1	299.3	317.8	334.5	345.6
60°	259.3	265.9	280.2	297.3	310.1
62.5°	225.9	232.9	245.0	260.0	274.6
65°	193.5	198.7	210.6	225.6	238.4
67.5°	162.2	166.7	178.6	189.0	202.6
70°	130.5	136.4	145.1	155.2	163.9
72.5°	105.1	107.6	114.9	122.2	131.2
75°	77.6	81.8	87.7	91.9	97.1
77.5°	55.7	58.1	61.6	65.1	70.0
80°	37.2	38.3	41.4	42.1	45.9
82.5°	22.6	23.3	24.0	24.4	25.8
85°	12.2	12.2	12.2	11.5	11.5
87.5°	7.0	7.0	5.9	4.9	3.5
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)