

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: P554084

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-UNV-93-86-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: P554084
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-LD4-1HI-50-UNV-93-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

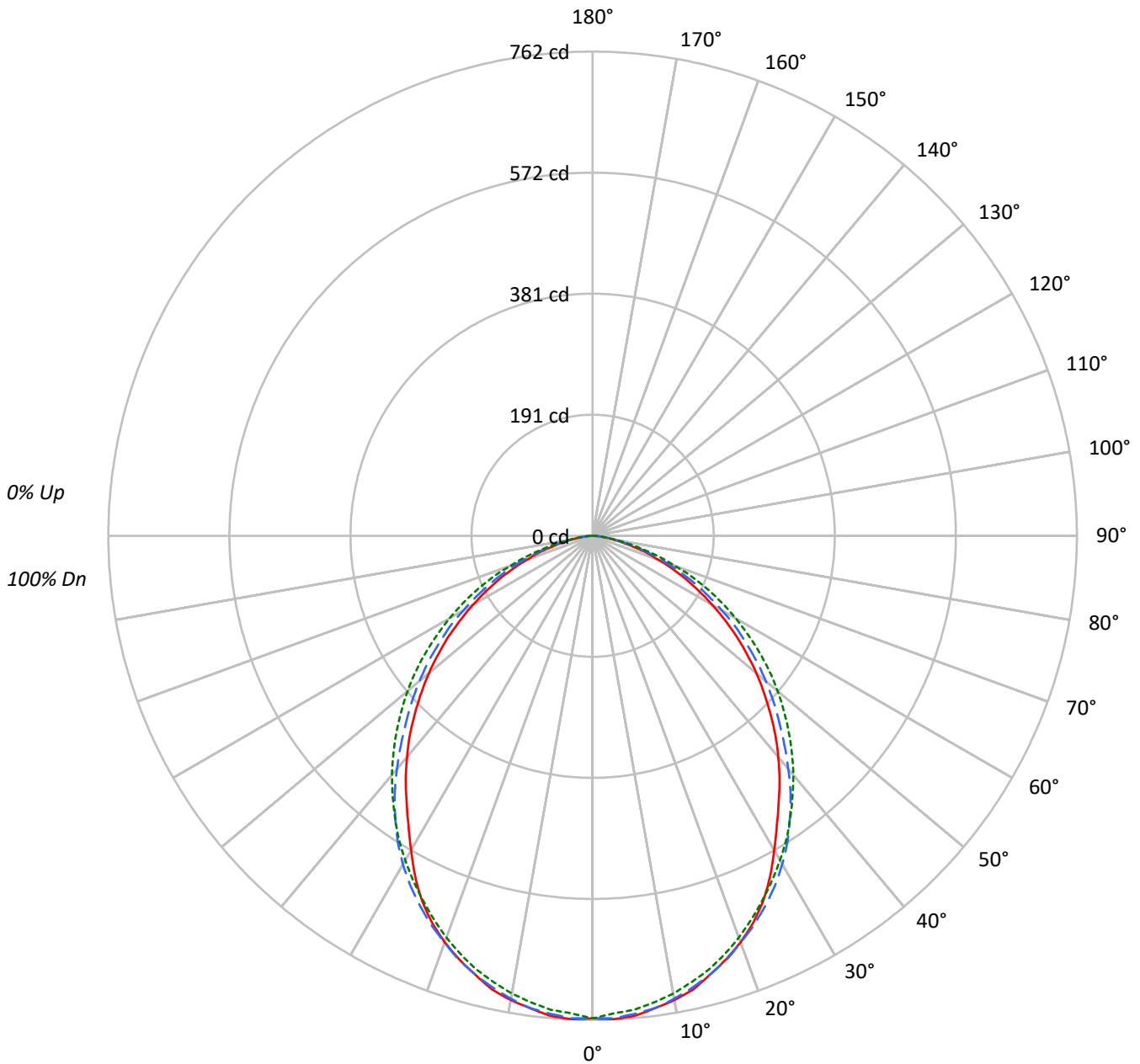
Lumens per Lamp: N/A
Luminaire Lumens: 1756.0 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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

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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°	4087	4087	4087
5°	4098	4081	4046
10°	4054	4044	3997
15°	3983	3983	3937
20°	3899	3903	3853
25°	3770	3817	3756
30°	3550	3709	3664
35°	3355	3556	3562
40°	3192	3364	3452
45°	3009	3160	3322
50°	2817	2977	3181
55°	2598	2771	3008
60°	2340	2528	2798
65°	2066	2248	2544
70°	1721	1915	2162
75°	1354	1528	1693
80°	967	1075	1193
85°	630	630	593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.5	4.1
10°-20°	200.9	11.4
20°-30°	293.5	16.7
30°-40°	333.2	19.0
40°-50°	321.7	18.3
50°-60°	265.3	15.1
60°-70°	176.7	10.1
70°-80°	79.1	4.5
80°-90°	14.1	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°	565.9	32.2
0°-40°	899.1	51.2
0°-60°	1486.1	84.6
0°-90°	1756.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	758	758	755	751	749	72
15°	715	716	715	712	707	202
25°	635	640	643	638	632	291
35°	511	518	541	544	542	320
45°	395	402	415	434	436	305
55°	277	282	295	312	321	247
65°	162	167	176	189	200	161
75°	65	69	74	77	81	71
85°	10	10	10	10	10	14
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.4	759.4	759.4	759.4	759.4
2.5°	761.5	761.8	760.0	755.3	752.4
5°	758.5	758.3	755.3	751.3	748.9
7.5°	750.1	750.7	749.8	744.0	740.8
10°	741.9	742.2	739.9	735.2	731.4
12.5°	731.4	731.1	727.9	725.6	719.5
15°	714.8	716.5	714.8	711.6	706.6
17.5°	698.7	698.7	699.9	694.4	690.6
20°	680.7	681.5	681.5	677.2	672.8
22.5°	659.6	662.3	663.1	658.5	653.2
25°	634.8	639.8	642.7	638.1	632.5
27.5°	604.8	612.4	621.1	617.6	611.5
30°	571.2	582.3	596.9	594.0	589.6
32.5°	539.4	550.5	570.7	569.5	567.2
35°	510.6	517.6	541.2	544.1	542.1
37.5°	483.1	489.6	511.7	518.4	516.7
40°	454.3	461.3	478.8	490.7	491.3
42.5°	425.7	432.4	446.7	463.9	463.9
45°	395.3	402.0	415.2	434.1	436.5
47.5°	365.6	372.6	385.4	404.4	408.2
50°	336.4	342.8	355.6	374.0	379.9
52.5°	306.0	313.0	325.6	342.5	351.0
55°	276.9	281.5	295.3	311.6	320.6
57.5°	246.5	250.9	266.4	280.4	289.7
60°	217.4	222.9	234.9	249.2	259.9
62.5°	189.3	195.2	205.4	217.9	230.2
65°	162.2	166.6	176.5	189.1	199.8
67.5°	136.0	139.7	149.7	158.4	169.8
70°	109.4	114.4	121.7	130.1	137.4
72.5°	88.1	90.2	96.3	102.4	110.0
75°	65.1	68.6	73.5	77.0	81.4
77.5°	46.7	48.7	51.6	54.6	58.6
80°	31.2	32.1	34.7	35.3	38.5
82.5°	19.0	19.5	20.1	20.4	21.6
85°	10.2	10.2	10.2	9.6	9.6
87.5°	5.8	5.8	5.0	4.1	2.9
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)