

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: P554498

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-81-85-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: P554498
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-LD4-1STD-40-UNV-81-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

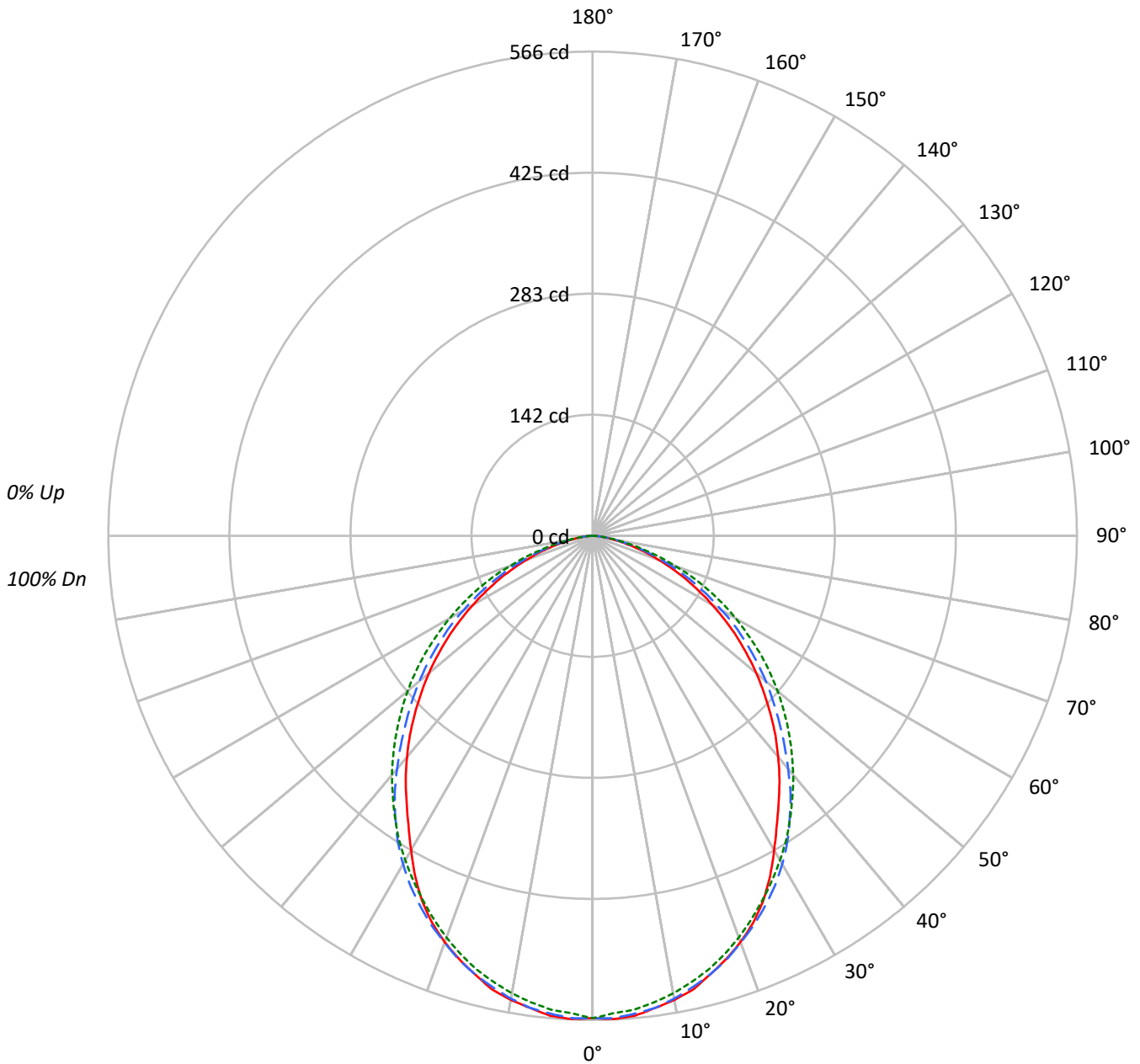
Lumens per Lamp: N/A
Luminaire Lumens: 1304.0 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	3035	3035	3035
5°	3043	3030	3004
10°	3011	3002	2968
15°	2958	2958	2924
20°	2895	2899	2861
25°	2799	2834	2789
30°	2636	2755	2721
35°	2491	2641	2644
40°	2370	2498	2563
45°	2235	2347	2467
50°	2092	2211	2362
55°	1929	2058	2234
60°	1737	1877	2077
65°	1535	1670	1890
70°	1278	1421	1605
75°	1004	1135	1256
80°	719	800	886
85°	469	469	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	4.1
10°-20°	149.2	11.4
20°-30°	218.0	16.7
30°-40°	247.4	19.0
40°-50°	238.9	18.3
50°-60°	197.0	15.1
60°-70°	131.2	10.1
70°-80°	58.7	4.5
80°-90°	10.5	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°	420.2	32.2
0°-40°	667.7	51.2
0°-60°	1103.6	84.6
0°-90°	1304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1304.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	564	564	564	564	564	
5°	563	563	561	558	556	53
15°	531	532	531	528	525	150
25°	471	475	477	474	470	216
35°	379	384	402	404	402	238
45°	294	298	308	322	324	227
55°	206	209	219	231	238	184
65°	120	124	131	140	148	119
75°	48	51	55	57	60	53
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	563.9	563.9	563.9	563.9	563.9
2.5°	565.5	565.7	564.4	560.9	558.7
5°	563.3	563.1	560.9	557.9	556.1
7.5°	557.0	557.4	556.8	552.5	550.1
10°	550.9	551.2	549.4	546.0	543.1
12.5°	543.1	542.9	540.5	538.8	534.3
15°	530.8	532.1	530.8	528.4	524.7
17.5°	518.9	518.9	519.7	515.6	512.8
20°	505.5	506.1	506.1	502.9	499.6
22.5°	489.9	491.8	492.5	489.0	485.1
25°	471.4	475.1	477.3	473.8	469.7
27.5°	449.1	454.8	461.3	458.7	454.1
30°	424.2	432.4	443.3	441.1	437.9
32.5°	400.6	408.8	423.8	422.9	421.2
35°	379.1	384.3	401.9	404.1	402.5
37.5°	358.8	363.5	380.0	385.0	383.7
40°	337.3	342.5	355.5	364.4	364.8
42.5°	316.1	321.1	331.7	344.5	344.5
45°	293.6	298.5	308.3	322.4	324.1
47.5°	271.5	276.7	286.2	300.3	303.1
50°	249.8	254.6	264.1	277.7	282.1
52.5°	227.3	232.5	241.8	254.3	260.6
55°	205.6	209.1	219.3	231.4	238.1
57.5°	183.1	186.3	197.8	208.2	215.1
60°	161.4	165.5	174.4	185.0	193.0
62.5°	140.6	144.9	152.5	161.8	170.9
65°	120.5	123.7	131.1	140.4	148.4
67.5°	101.0	103.8	111.1	117.6	126.1
70°	81.2	84.9	90.3	96.6	102.0
72.5°	65.4	66.9	71.5	76.0	81.7
75°	48.3	50.9	54.6	57.2	60.4
77.5°	34.7	36.2	38.3	40.5	43.5
80°	23.2	23.8	25.8	26.2	28.6
82.5°	14.1	14.5	14.9	15.2	16.0
85°	7.6	7.6	7.6	7.1	7.1
87.5°	4.3	4.3	3.7	3.0	2.2
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)