

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: P554474

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-94-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: P554474
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-35-UNV-93-94-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

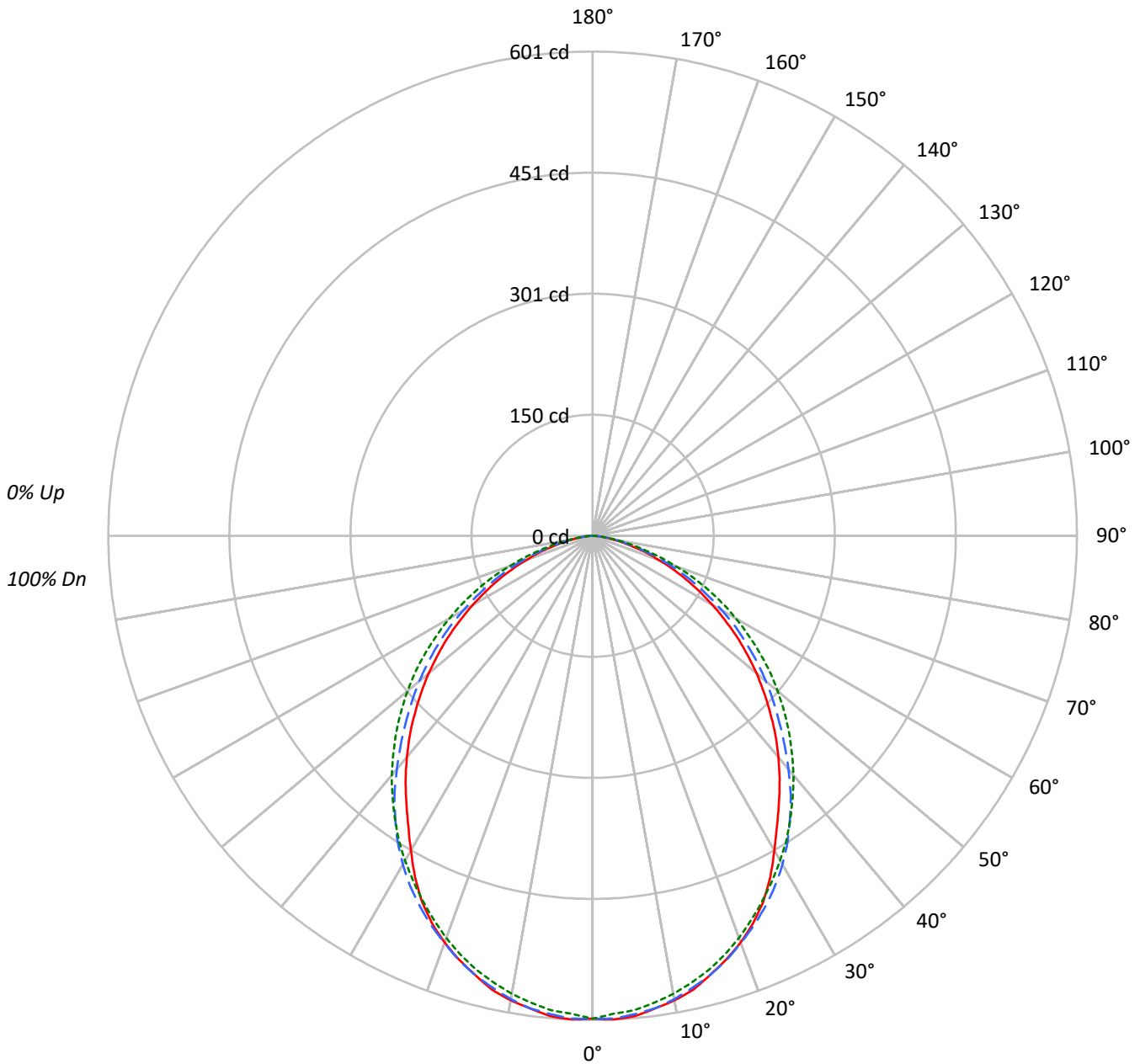
Lumens per Lamp: N/A
Luminaire Lumens: 1386.0 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	3226	3226	3226
5°	3234	3221	3193
10°	3200	3192	3155
15°	3144	3144	3107
20°	3077	3081	3041
25°	2976	3013	2964
30°	2802	2928	2892
35°	2648	2807	2811
40°	2519	2655	2725
45°	2375	2494	2622
50°	2223	2350	2510
55°	2050	2186	2375
60°	1847	1996	2209
65°	1630	1774	2008
70°	1360	1511	1707
75°	1069	1206	1335
80°	762	849	942
85°	500	500	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	4.1
10°-20°	158.5	11.4
20°-30°	231.7	16.7
30°-40°	263.0	19.0
40°-50°	253.9	18.3
50°-60°	209.4	15.1
60°-70°	139.5	10.1
70°-80°	62.4	4.5
80°-90°	11.2	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°	446.7	32.2
0°-40°	709.7	51.2
0°-60°	1173.0	84.6
0°-90°	1386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	599	599	599	599	599	
5°	599	598	596	593	591	57
15°	564	566	564	562	558	159
25°	501	505	507	504	499	229
35°	403	408	427	430	428	252
45°	312	317	328	343	344	241
55°	218	222	233	246	253	195
65°	128	132	139	149	158	127
75°	51	54	58	61	64	56
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	599.4	599.4	599.4	599.4	599.4
2.5°	601.0	601.3	599.9	596.2	593.9
5°	598.7	598.5	596.2	593.0	591.1
7.5°	592.0	592.5	591.8	587.2	584.7
10°	585.6	585.8	584.0	580.3	577.3
12.5°	577.3	577.1	574.5	572.7	567.9
15°	564.2	565.6	564.2	561.6	557.7
17.5°	551.5	551.5	552.4	548.1	545.1
20°	537.2	537.9	537.9	534.5	531.0
22.5°	520.7	522.7	523.4	519.7	515.6
25°	501.1	505.0	507.3	503.6	499.2
27.5°	477.4	483.3	490.3	487.5	482.7
30°	450.9	459.6	471.1	468.8	465.4
32.5°	425.8	434.5	450.4	449.5	447.7
35°	403.0	408.5	427.2	429.5	427.9
37.5°	381.3	386.4	403.9	409.2	407.8
40°	358.5	364.1	377.9	387.3	387.8
42.5°	336.0	341.3	352.6	366.1	366.1
45°	312.0	317.3	327.7	342.7	344.5
47.5°	288.5	294.1	304.2	319.2	322.2
50°	265.5	270.6	280.7	295.2	299.8
52.5°	241.6	247.1	257.0	270.3	277.0
55°	218.5	222.2	233.0	245.9	253.1
57.5°	194.6	198.0	210.2	221.3	228.7
60°	171.6	175.9	185.4	196.7	205.2
62.5°	149.4	154.1	162.1	172.0	181.7
65°	128.0	131.5	139.3	149.2	157.7
67.5°	107.3	110.3	118.1	125.0	134.0
70°	86.4	90.3	96.0	102.7	108.5
72.5°	69.5	71.2	76.0	80.8	86.8
75°	51.4	54.1	58.0	60.8	64.2
77.5°	36.8	38.5	40.8	43.1	46.3
80°	24.6	25.3	27.4	27.9	30.4
82.5°	15.0	15.4	15.9	16.1	17.0
85°	8.1	8.1	8.1	7.6	7.6
87.5°	4.6	4.6	3.9	3.2	2.3
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)