

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: P554470

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-93-87-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: P554470
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-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

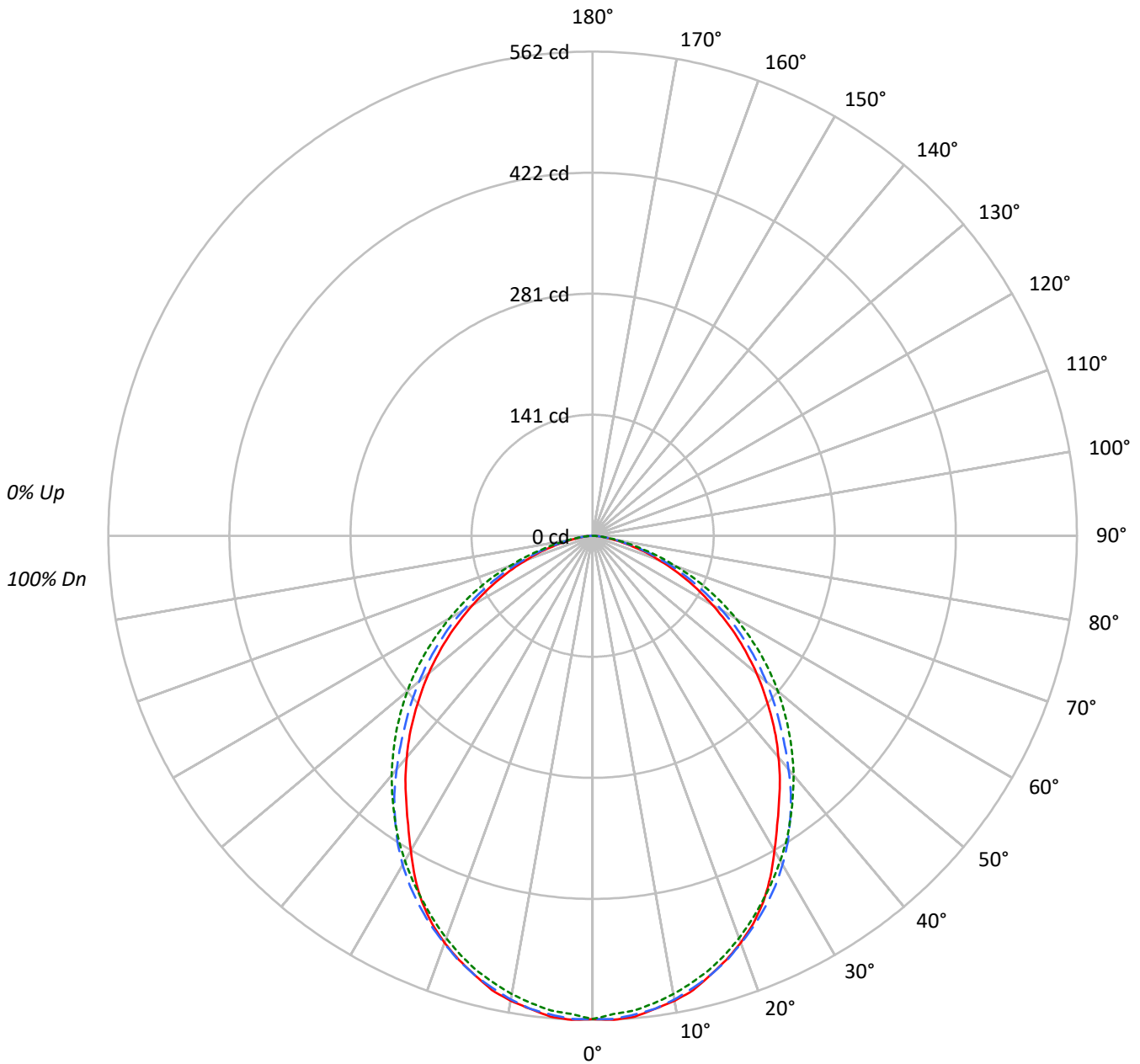
Lumens per Lamp: N/A
Luminaire Lumens: 1297.0 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3019	3019	3019
5°	3027	3014	2989
10°	2995	2987	2952
15°	2941	2941	2908
20°	2879	2883	2846
25°	2784	2819	2774
30°	2622	2740	2706
35°	2478	2626	2631
40°	2357	2484	2550
45°	2222	2334	2454
50°	2081	2200	2349
55°	1919	2046	2222
60°	1728	1868	2067
65°	1526	1661	1880
70°	1271	1415	1597
75°	1000	1129	1250
80°	716	793	880
85°	463	463	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	4.1
10°-20°	148.4	11.4
20°-30°	216.8	16.7
30°-40°	246.1	19.0
40°-50°	237.6	18.3
50°-60°	196.0	15.1
60°-70°	130.5	10.1
70°-80°	58.4	4.5
80°-90°	10.4	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°	418.0	32.2
0°-40°	664.1	51.2
0°-60°	1097.6	84.6
0°-90°	1297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	560	560	558	555	553	53
15°	528	529	528	526	522	149
25°	469	473	475	471	467	215
35°	377	382	400	402	400	236
45°	292	297	307	321	322	225
55°	204	208	218	230	237	183
65°	120	123	130	140	148	119
75°	48	51	54	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°	560.9	560.9	560.9	560.9	560.9
2.5°	562.4	562.6	561.3	557.9	555.7
5°	560.3	560.1	557.9	554.9	553.2
7.5°	554.0	554.5	553.8	549.5	547.1
10°	548.0	548.2	546.5	543.0	540.2
12.5°	540.2	540.0	537.6	535.9	531.4
15°	527.9	529.2	527.9	525.6	521.9
17.5°	516.1	516.1	517.0	512.9	510.1
20°	502.7	503.4	503.4	500.2	496.9
22.5°	487.2	489.2	489.8	486.4	482.5
25°	468.9	472.6	474.7	471.3	467.2
27.5°	446.7	452.3	458.8	456.2	451.7
30°	421.9	430.1	440.9	438.7	435.5
32.5°	398.4	406.6	421.5	420.6	418.9
35°	377.1	382.3	399.7	401.9	400.4
37.5°	356.9	361.6	378.0	382.9	381.6
40°	335.5	340.7	353.6	362.5	362.9
42.5°	314.4	319.4	329.9	342.6	342.6
45°	292.0	296.9	306.6	320.6	322.4
47.5°	270.0	275.2	284.7	298.7	301.5
50°	248.5	253.2	262.7	276.3	280.6
52.5°	226.0	231.2	240.5	253.0	259.2
55°	204.5	207.9	218.1	230.1	236.8
57.5°	182.1	185.3	196.7	207.1	214.0
60°	160.5	164.6	173.5	184.0	192.0
62.5°	139.9	144.2	151.7	161.0	170.0
65°	119.8	123.0	130.4	139.6	147.6
67.5°	100.4	103.2	110.5	117.0	125.4
70°	80.8	84.5	89.9	96.1	101.5
72.5°	65.1	66.6	71.1	75.6	81.2
75°	48.1	50.6	54.3	56.9	60.1
77.5°	34.5	36.0	38.1	40.3	43.3
80°	23.1	23.7	25.6	26.1	28.4
82.5°	14.0	14.4	14.9	15.1	15.9
85°	7.5	7.5	7.5	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)