

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: P555365

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-93-86-EDD**

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: P555365  
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-LD4-2STD-50-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

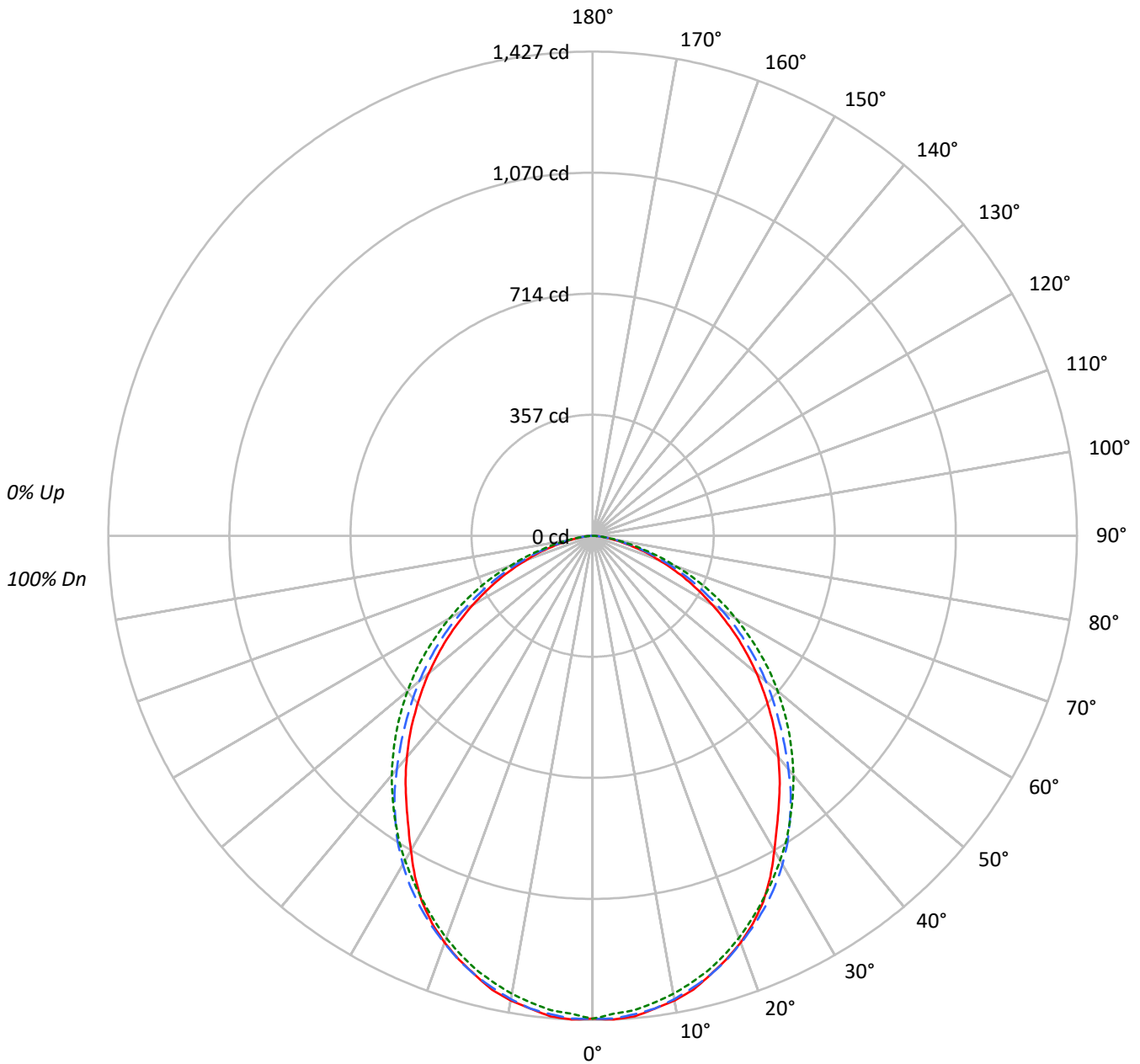
Lumens per Lamp: N/A  
Luminaire Lumens: 3291.0 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	7660	7660	7660
5°	7680	7648	7583
10°	7599	7578	7491
15°	7464	7464	7379
20°	7306	7316	7222
25°	7065	7153	7039
30°	6653	6952	6867
35°	6287	6664	6675
40°	5981	6304	6469
45°	5639	5922	6226
50°	5278	5580	5961
55°	4869	5192	5638
60°	4385	4738	5244
65°	3871	4213	4769
70°	3226	3588	4052
75°	2535	2865	3173
80°	1813	2018	2238
85°	1179	1179	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.0	4.1
10°-20°	376.5	11.4
20°-30°	550.1	16.7
30°-40°	624.5	19.0
40°-50°	602.8	18.3
50°-60°	497.3	15.1
60°-70°	331.1	10.1
70°-80°	148.2	4.5
80°-90°	26.5	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°	1060.6	32.2
0°-40°	1685.1	51.2
0°-60°	2785.2	84.6
0°-90°	3291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3291.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1423	1423	1423	1423	1423	
5°	1422	1421	1416	1408	1404	135
15°	1340	1343	1340	1334	1324	378
25°	1190	1199	1205	1196	1185	545
35°	957	970	1014	1020	1016	600
45°	741	754	778	814	818	572
55°	519	528	553	584	601	463
65°	304	312	331	354	374	301
75°	122	128	138	144	153	133
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1423.3	1423.3	1423.3	1423.3	1423.3
2.5°	1427.1	1427.6	1424.4	1415.6	1410.1
5°	1421.6	1421.1	1415.6	1408.0	1403.6
7.5°	1405.8	1406.9	1405.2	1394.3	1388.3
10°	1390.5	1391.0	1386.6	1377.9	1370.8
12.5°	1370.8	1370.2	1364.2	1359.8	1348.4
15°	1339.6	1342.9	1339.6	1333.6	1324.3
17.5°	1309.5	1309.5	1311.7	1301.3	1294.2
20°	1275.6	1277.3	1277.3	1269.1	1260.9
22.5°	1236.3	1241.2	1242.8	1234.1	1224.2
25°	1189.8	1199.1	1204.6	1195.8	1185.4
27.5°	1133.5	1147.7	1164.1	1157.5	1146.1
30°	1070.6	1091.4	1118.7	1113.2	1105.0
32.5°	1011.0	1031.8	1069.5	1067.3	1062.9
35°	956.9	970.0	1014.3	1019.7	1015.9
37.5°	905.5	917.5	959.1	971.6	968.4
40°	851.3	864.5	897.3	919.7	920.8
42.5°	797.8	810.3	837.1	869.4	869.4
45°	740.9	753.5	778.1	813.6	818.0
47.5°	685.1	698.2	722.3	757.8	764.9
50°	630.4	642.5	666.5	701.0	711.9
52.5°	573.6	586.7	610.2	641.9	657.8
55°	518.9	527.6	553.3	584.0	600.9
57.5°	462.0	470.2	499.2	525.5	543.0
60°	407.4	417.7	440.2	467.0	487.2
62.5°	354.9	365.8	384.9	408.4	431.4
65°	304.0	312.2	330.8	354.3	374.5
67.5°	254.8	261.9	280.5	296.9	318.2
70°	205.0	214.3	228.0	243.9	257.5
72.5°	165.1	169.0	180.4	191.9	206.1
75°	121.9	128.5	137.8	144.4	152.6
77.5°	87.5	91.3	96.8	102.2	109.9
80°	58.5	60.1	65.1	66.2	72.2
82.5°	35.5	36.6	37.7	38.3	40.5
85°	19.1	19.1	19.1	18.0	18.0
87.5°	10.9	10.9	9.3	7.7	5.5
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)