

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: P555301

Luminaire Tested: **FUSL-12-2-LD4-2STD-40-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: P555301  
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-40-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 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

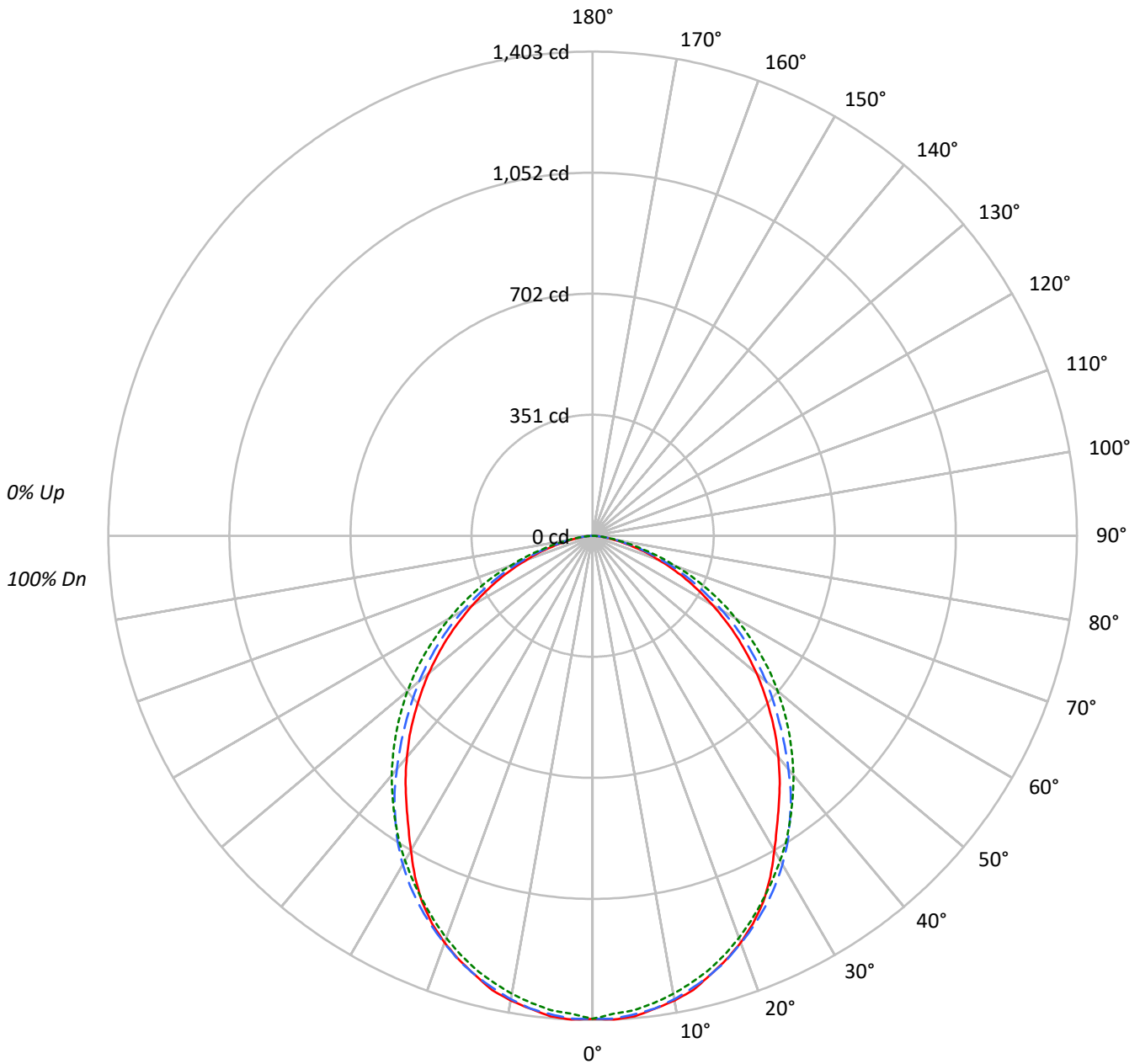
Lumens per Lamp: N/A  
Luminaire Lumens: 3236.0 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	7532	7532	7532
5°	7552	7520	7456
10°	7472	7452	7366
15°	7339	7339	7256
20°	7184	7193	7101
25°	6947	7033	6922
30°	6542	6836	6753
35°	6182	6552	6563
40°	5881	6199	6361
45°	5545	5823	6122
50°	5190	5488	5861
55°	4787	5105	5545
60°	4311	4659	5156
65°	3806	4143	4690
70°	3172	3528	3984
75°	2493	2818	3119
80°	1782	1984	2201
85°	1161	1161	1093



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.8	4.1
10°-20°	370.2	11.4
20°-30°	540.9	16.7
30°-40°	614.0	19.0
40°-50°	592.7	18.3
50°-60°	489.0	15.1
60°-70°	325.6	10.1
70°-80°	145.7	4.5
80°-90°	26.1	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°	1042.9	32.2
0°-40°	1656.9	51.2
0°-60°	2738.6	84.6
0°-90°	3236.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3236.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1400	1400	1400	1400	1400	
5°	1398	1397	1392	1384	1380	132
15°	1317	1320	1317	1311	1302	371
25°	1170	1179	1184	1176	1166	536
35°	941	954	997	1003	999	590
45°	728	741	765	800	804	562
55°	510	519	544	574	591	455
65°	299	307	325	348	368	296
75°	120	126	136	142	150	131
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1399.5	1399.5	1399.5	1399.5	1399.5
2.5°	1403.2	1403.8	1400.6	1392.0	1386.6
5°	1397.9	1397.3	1392.0	1384.4	1380.1
7.5°	1382.3	1383.4	1381.7	1371.0	1365.1
10°	1367.2	1367.8	1363.5	1354.9	1347.9
12.5°	1347.9	1347.3	1341.4	1337.1	1325.8
15°	1317.2	1320.5	1317.2	1311.3	1302.2
17.5°	1287.7	1287.7	1289.8	1279.6	1272.6
20°	1254.3	1255.9	1255.9	1247.9	1239.8
22.5°	1215.6	1220.5	1222.1	1213.5	1203.8
25°	1169.9	1179.1	1184.4	1175.8	1165.6
27.5°	1114.5	1128.5	1144.6	1138.2	1126.9
30°	1052.7	1073.1	1100.0	1094.6	1086.6
32.5°	994.1	1014.5	1051.6	1049.5	1045.2
35°	940.9	953.8	997.3	1002.7	998.9
37.5°	890.3	902.2	943.0	955.4	952.2
40°	837.1	850.0	882.3	904.3	905.4
42.5°	784.4	796.8	823.1	854.9	854.9
45°	728.5	740.9	765.1	800.0	804.3
47.5°	673.7	686.6	710.2	745.2	752.2
50°	619.9	631.7	655.4	689.3	700.0
52.5°	564.0	576.9	600.0	631.2	646.8
55°	510.2	518.8	544.1	574.2	590.9
57.5°	454.3	462.4	490.9	516.7	533.9
60°	400.5	410.8	432.8	459.1	479.0
62.5°	348.9	359.7	378.5	401.6	424.2
65°	298.9	307.0	325.3	348.4	368.3
67.5°	250.5	257.5	275.8	291.9	312.9
70°	201.6	210.8	224.2	239.8	253.2
72.5°	162.4	166.1	177.4	188.7	202.7
75°	119.9	126.3	135.5	141.9	150.0
77.5°	86.0	89.8	95.2	100.5	108.1
80°	57.5	59.1	64.0	65.1	71.0
82.5°	34.9	36.0	37.1	37.6	39.8
85°	18.8	18.8	18.8	17.7	17.7
87.5°	10.8	10.8	9.1	7.5	5.4
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)