

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: P555659

Luminaire Tested: **FUSL-12-2-LD4-3LO-30-UNV-81-94-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: P555659  
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-LD4-3LO-30-UNV-81-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

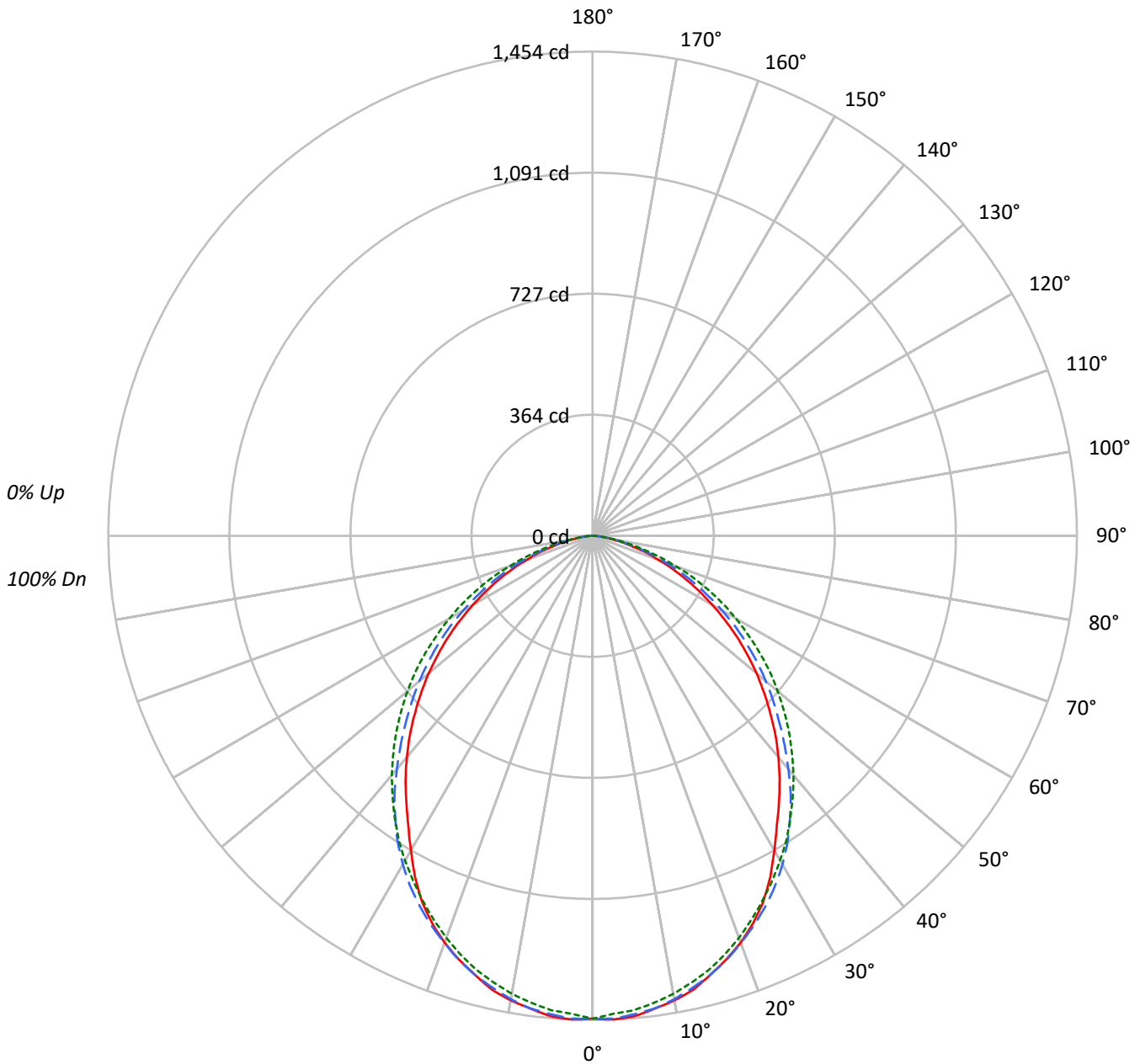
Lumens per Lamp: N/A  
Luminaire Lumens: 3353.0 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	7804	7804	7804
5°	7825	7792	7726
10°	7742	7721	7632
15°	7605	7605	7518
20°	7444	7453	7357
25°	7198	7288	7172
30°	6779	7083	6997
35°	6405	6790	6801
40°	6094	6423	6591
45°	5745	6033	6343
50°	5378	5686	6073
55°	4961	5290	5744
60°	4467	4828	5343
65°	3944	4292	4860
70°	3287	3655	4129
75°	2583	2920	3231
80°	1847	2055	2278
85°	1204	1204	1136



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	4.1
10°-20°	383.6	11.4
20°-30°	560.5	16.7
30°-40°	636.2	19.0
40°-50°	614.2	18.3
50°-60°	506.7	15.1
60°-70°	337.4	10.1
70°-80°	151.0	4.5
80°-90°	27.0	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°	1080.6	32.2
0°-40°	1716.8	51.2
0°-60°	2837.6	84.6
0°-90°	3353.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3353.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1450	1450	1450	1450	1450	
5°	1448	1448	1442	1434	1430	137
15°	1365	1368	1365	1359	1349	385
25°	1212	1222	1227	1218	1208	555
35°	975	988	1033	1039	1035	611
45°	755	768	793	829	833	582
55°	529	538	564	595	612	472
65°	310	318	337	361	382	307
75°	124	131	140	147	155	136
85°	20	20	20	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1450.1	1450.1	1450.1	1450.1	1450.1
2.5°	1454.0	1454.5	1451.2	1442.3	1436.7
5°	1448.4	1447.9	1442.3	1434.5	1430.0
7.5°	1432.3	1433.4	1431.7	1420.6	1414.4
10°	1416.7	1417.2	1412.8	1403.8	1396.6
12.5°	1396.6	1396.0	1389.9	1385.5	1373.8
15°	1364.9	1368.2	1364.9	1358.7	1349.3
17.5°	1334.2	1334.2	1336.4	1325.9	1318.6
20°	1299.7	1301.3	1301.3	1293.0	1284.6
22.5°	1259.6	1264.6	1266.2	1257.3	1247.3
25°	1212.2	1221.7	1227.3	1218.3	1207.8
27.5°	1154.8	1169.3	1186.0	1179.3	1167.6
30°	1090.8	1111.9	1139.8	1134.2	1125.9
32.5°	1030.0	1051.2	1089.7	1087.4	1083.0
35°	974.9	988.3	1033.4	1039.0	1035.1
37.5°	922.5	934.8	977.1	989.9	986.6
40°	867.4	880.7	914.2	937.0	938.1
42.5°	812.8	825.6	852.9	885.8	885.8
45°	754.8	767.7	792.7	828.9	833.4
47.5°	698.0	711.4	735.9	772.1	779.4
50°	642.3	654.6	679.1	714.2	725.3
52.5°	584.4	597.7	621.7	654.0	670.2
55°	528.7	537.6	563.8	595.0	612.2
57.5°	470.7	479.1	508.6	535.4	553.2
60°	415.0	425.6	448.5	475.7	496.4
62.5°	361.5	372.7	392.2	416.1	439.5
65°	309.7	318.1	337.0	361.0	381.6
67.5°	259.6	266.8	285.8	302.5	324.2
70°	208.9	218.4	232.3	248.5	262.4
72.5°	168.2	172.1	183.8	195.5	210.0
75°	124.2	130.9	140.4	147.1	155.4
77.5°	89.1	93.0	98.6	104.2	112.0
80°	59.6	61.3	66.3	67.4	73.5
82.5°	36.2	37.3	38.4	39.0	41.2
85°	19.5	19.5	19.5	18.4	18.4
87.5°	11.1	11.1	9.5	7.8	5.6
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)