

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: P554704

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-82-84-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: P554704  
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-LD4-2HI-35-UNV-82-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

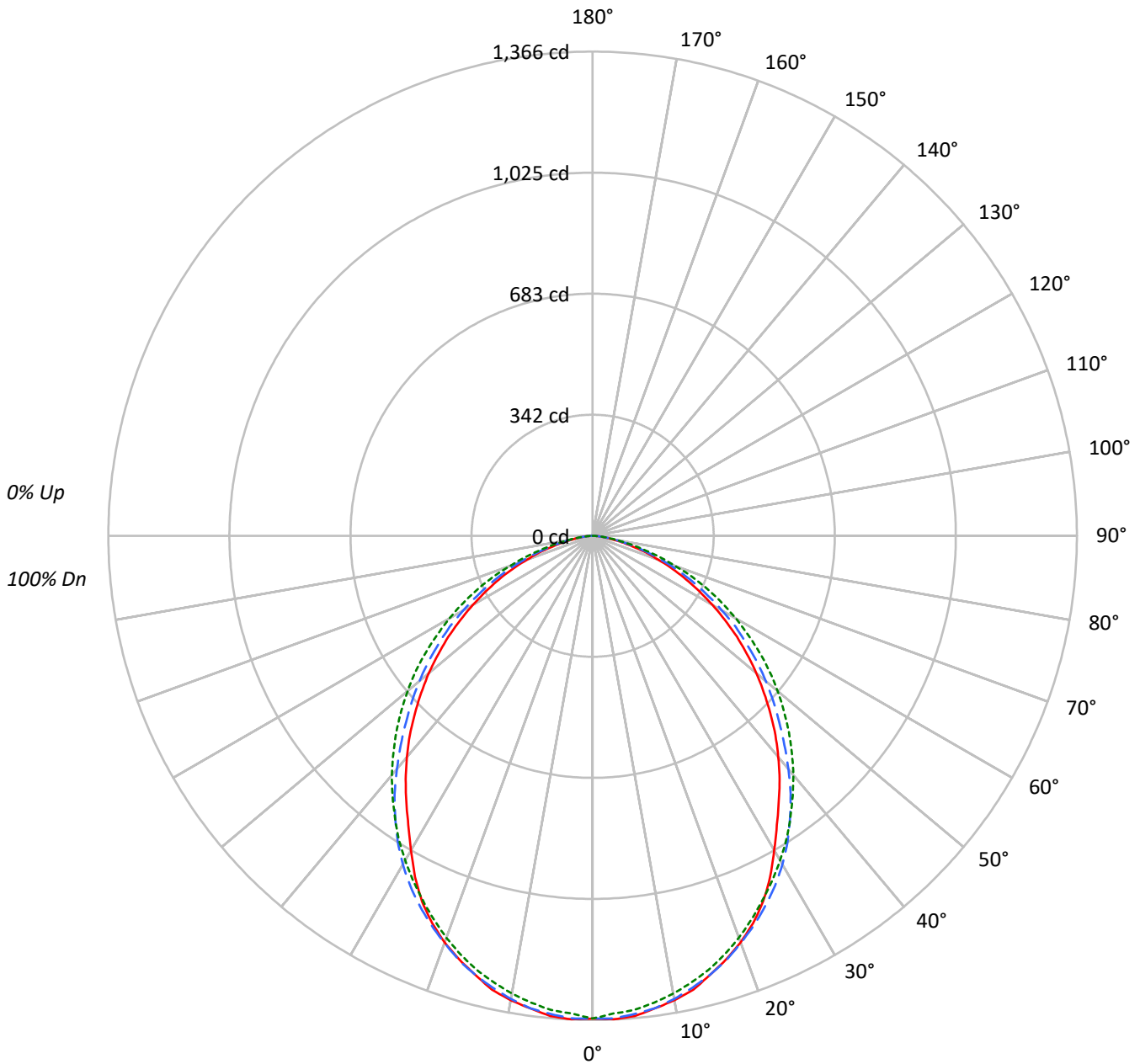
Lumens per Lamp: N/A  
Luminaire Lumens: 3149.0 lumens  
Efficiency: N/A  
Efficacy: 72.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	7330	7330	7330
5°	7349	7318	7256
10°	7271	7251	7168
15°	7142	7142	7061
20°	6991	7000	6910
25°	6761	6845	6736
30°	6366	6652	6571
35°	6016	6376	6387
40°	5723	6032	6190
45°	5396	5667	5957
50°	5050	5340	5704
55°	4659	4968	5395
60°	4196	4534	5018
65°	3705	4031	4564
70°	3087	3434	3877
75°	2427	2741	3036
80°	1736	1931	2142
85°	1130	1130	1068



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.2	4.1
10°-20°	360.2	11.4
20°-30°	526.4	16.7
30°-40°	597.5	19.0
40°-50°	576.8	18.3
50°-60°	475.8	15.1
60°-70°	316.9	10.1
70°-80°	141.8	4.5
80°-90°	25.4	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°	1014.8	32.2
0°-40°	1612.4	51.2
0°-60°	2665.0	84.6
0°-90°	3149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3149.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1360	1360	1354	1347	1343	129
15°	1282	1285	1282	1276	1267	361
25°	1138	1147	1153	1144	1134	521
35°	916	928	970	976	972	574
45°	709	721	744	778	783	547
55°	496	505	530	559	575	443
65°	291	299	316	339	358	288
75°	117	123	132	138	146	128
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1361.9	1361.9	1361.9	1361.9	1361.9
2.5°	1365.5	1366.0	1362.9	1354.5	1349.3
5°	1360.3	1359.8	1354.5	1347.2	1343.0
7.5°	1345.1	1346.2	1344.6	1334.1	1328.4
10°	1330.5	1331.0	1326.8	1318.4	1311.6
12.5°	1311.6	1311.1	1305.4	1301.2	1290.2
15°	1281.8	1285.0	1281.8	1276.1	1267.2
17.5°	1253.0	1253.0	1255.1	1245.2	1238.4
20°	1220.6	1222.2	1222.2	1214.3	1206.5
22.5°	1182.9	1187.6	1189.2	1180.8	1171.4
25°	1138.5	1147.4	1152.6	1144.2	1134.3
27.5°	1084.6	1098.2	1113.9	1107.6	1096.6
30°	1024.4	1044.3	1070.4	1065.2	1057.4
32.5°	967.4	987.3	1023.4	1021.3	1017.1
35°	915.6	928.1	970.5	975.7	972.1
37.5°	866.4	877.9	917.7	929.7	926.6
40°	814.6	827.2	858.6	880.0	881.1
42.5°	763.3	775.4	801.0	831.9	831.9
45°	708.9	721.0	744.5	778.5	782.7
47.5°	655.6	668.1	691.1	725.1	731.9
50°	603.2	614.7	637.8	670.7	681.2
52.5°	548.8	561.4	583.9	614.2	629.4
55°	496.5	504.9	529.5	558.8	575.0
57.5°	442.1	449.9	477.7	502.8	519.5
60°	389.8	399.7	421.2	446.8	466.2
62.5°	339.5	350.0	368.3	390.8	412.8
65°	290.9	298.7	316.5	339.0	358.4
67.5°	243.8	250.6	268.4	284.1	304.5
70°	196.2	205.1	218.2	233.3	246.4
72.5°	158.0	161.7	172.7	183.6	197.2
75°	116.7	122.9	131.8	138.1	146.0
77.5°	83.7	87.4	92.6	97.8	105.2
80°	56.0	57.6	62.3	63.3	69.1
82.5°	34.0	35.1	36.1	36.6	38.7
85°	18.3	18.3	18.3	17.3	17.3
87.5°	10.5	10.5	8.9	7.3	5.2
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)