

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: P554690

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-81-85-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: P554690  
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-81-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

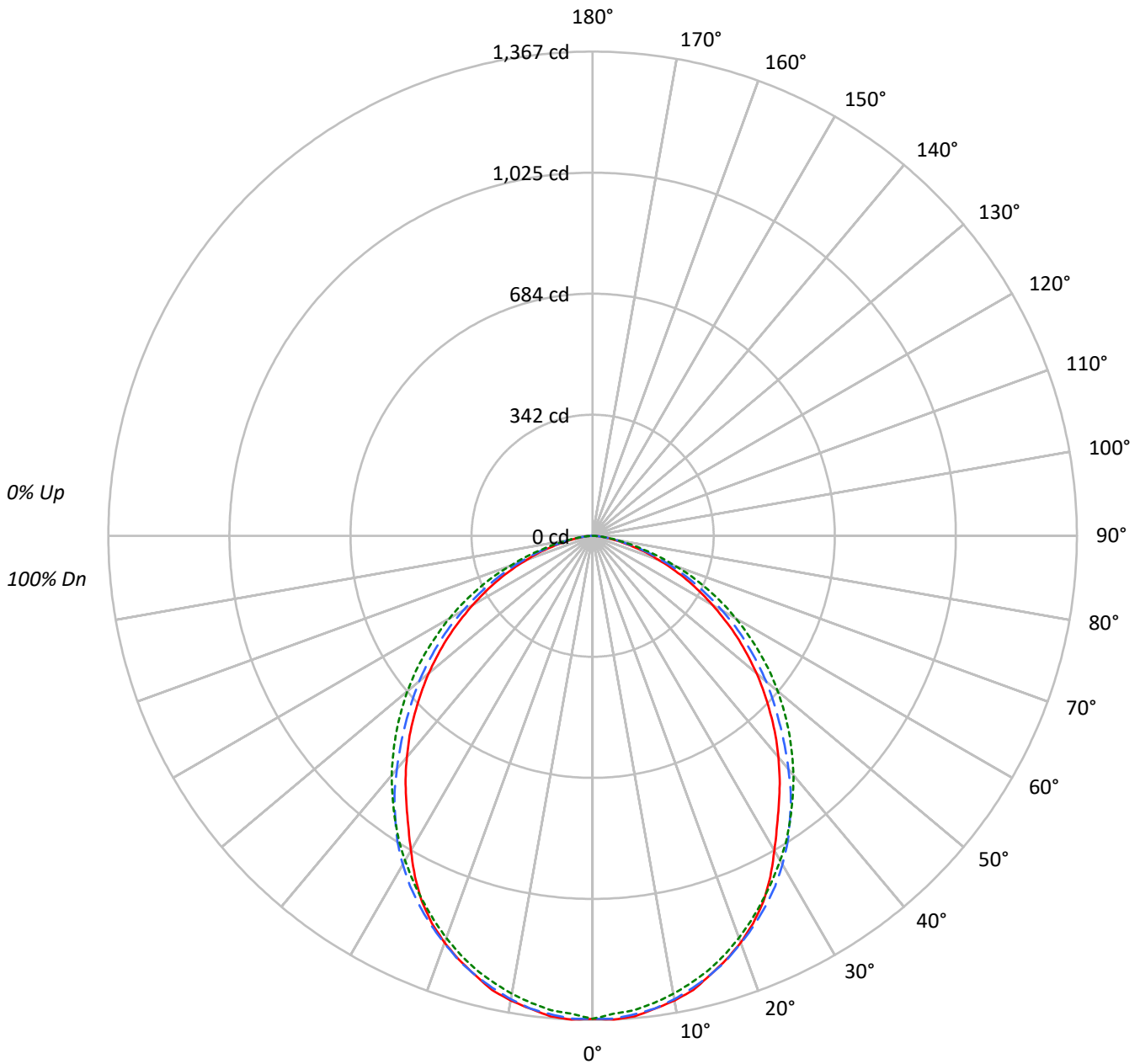
Lumens per Lamp: N/A  
Luminaire Lumens: 3153.0 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (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°	7339	7339	7339
5°	7358	7327	7265
10°	7280	7260	7177
15°	7151	7151	7070
20°	7000	7009	6919
25°	6769	6853	6744
30°	6374	6661	6579
35°	6023	6384	6395
40°	5730	6039	6198
45°	5402	5673	5965
50°	5057	5347	5711
55°	4664	4974	5402
60°	4201	4539	5025
65°	3710	4036	4569
70°	3091	3437	3882
75°	2429	2745	3040
80°	1739	1931	2142
85°	1130	1130	1068



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.4	4.1
10°-20°	360.7	11.4
20°-30°	527.1	16.7
30°-40°	598.3	19.0
40°-50°	577.5	18.3
50°-60°	476.4	15.1
60°-70°	317.3	10.1
70°-80°	142.0	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°	1016.1	32.2
0°-40°	1614.4	51.2
0°-60°	2668.4	84.6
0°-90°	3153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3153.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1364	1364	1364	1364	1364	
5°	1362	1362	1356	1349	1345	129
15°	1283	1287	1283	1278	1269	362
25°	1140	1149	1154	1146	1136	522
35°	917	929	972	977	973	574
45°	710	722	745	780	784	548
55°	497	506	530	560	576	444
65°	291	299	317	340	359	289
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°	1363.6	1363.6	1363.6	1363.6	1363.6
2.5°	1367.3	1367.8	1364.6	1356.3	1351.0
5°	1362.0	1361.5	1356.3	1348.9	1344.7
7.5°	1346.8	1347.9	1346.3	1335.8	1330.1
10°	1332.2	1332.7	1328.5	1320.1	1313.3
12.5°	1313.3	1312.8	1307.0	1302.8	1291.8
15°	1283.4	1286.6	1283.4	1277.7	1268.8
17.5°	1254.6	1254.6	1256.7	1246.8	1240.0
20°	1222.2	1223.7	1223.7	1215.9	1208.0
22.5°	1184.4	1189.1	1190.7	1182.3	1172.9
25°	1139.9	1148.8	1154.0	1145.7	1135.7
27.5°	1085.9	1099.6	1115.3	1109.0	1098.0
30°	1025.7	1045.6	1071.8	1066.6	1058.7
32.5°	968.6	988.5	1024.7	1022.6	1018.4
35°	916.7	929.3	971.7	977.0	973.3
37.5°	867.5	879.0	918.8	930.9	927.7
40°	815.6	828.2	859.6	881.1	882.2
42.5°	764.3	776.4	802.0	832.9	832.9
45°	709.8	721.9	745.4	779.5	783.7
47.5°	656.4	669.0	692.0	726.1	732.9
50°	604.0	615.5	638.6	671.6	682.1
52.5°	549.5	562.1	584.6	615.0	630.2
55°	497.1	505.5	530.1	559.5	575.7
57.5°	442.7	450.5	478.3	503.4	520.2
60°	390.3	400.2	421.7	447.4	466.8
62.5°	340.0	350.5	368.8	391.3	413.3
65°	291.3	299.1	316.9	339.5	358.8
67.5°	244.1	250.9	268.7	284.5	304.9
70°	196.4	205.4	218.4	233.6	246.7
72.5°	158.2	161.9	172.9	183.9	197.5
75°	116.8	123.1	132.0	138.3	146.2
77.5°	83.8	87.5	92.7	98.0	105.3
80°	56.1	57.6	62.3	63.4	69.1
82.5°	34.1	35.1	36.1	36.7	38.8
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)