

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: P554850

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-93-85-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: P554850  
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-50-UNV-93-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

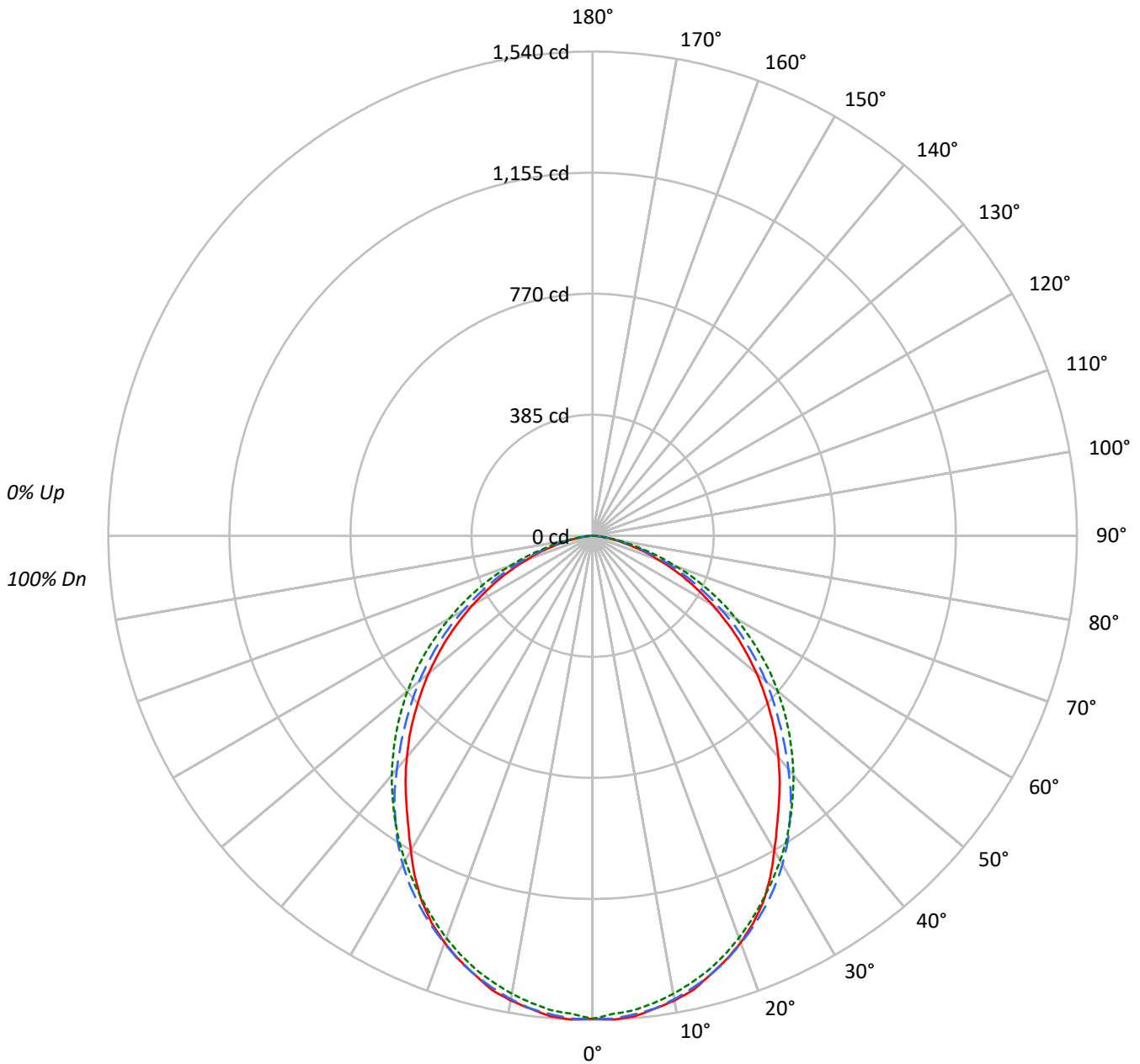
Lumens per Lamp: N/A  
Luminaire Lumens: 3552.0 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	8267	8267	8267
5°	8290	8255	8184
10°	8201	8179	8085
15°	8056	8056	7964
20°	7885	7896	7794
25°	7626	7720	7598
30°	7181	7503	7412
35°	6786	7192	7204
40°	6456	6804	6982
45°	6086	6392	6720
50°	5697	6023	6434
55°	5255	5604	6086
60°	4733	5114	5660
65°	4178	4546	5147
70°	3482	3873	4375
75°	2737	3092	3425
80°	1956	2176	2414
85°	1278	1278	1204



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.6	4.1
10°-20°	406.3	11.4
20°-30°	593.8	16.7
30°-40°	674.0	19.0
40°-50°	650.6	18.3
50°-60°	536.7	15.1
60°-70°	357.4	10.1
70°-80°	159.9	4.5
80°-90°	28.6	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°	1144.7	32.2
0°-40°	1818.7	51.2
0°-60°	3006.0	84.6
0°-90°	3552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3552.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1536	1536	1536	1536	1536	
5°	1534	1534	1528	1520	1515	145
15°	1446	1449	1446	1439	1429	408
25°	1284	1294	1300	1291	1279	588
35°	1033	1047	1095	1101	1096	647
45°	800	813	840	878	883	617
55°	560	570	597	630	649	500
65°	328	337	357	382	404	325
75°	132	139	149	156	165	144
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1536.1	1536.1	1536.1	1536.1	1536.1
2.5°	1540.3	1540.9	1537.3	1527.9	1522.0
5°	1534.4	1533.8	1527.9	1519.6	1514.9
7.5°	1517.3	1518.4	1516.7	1504.9	1498.4
10°	1500.7	1501.3	1496.6	1487.2	1479.5
12.5°	1479.5	1478.9	1472.4	1467.7	1455.3
15°	1445.9	1449.4	1445.9	1439.4	1429.3
17.5°	1413.4	1413.4	1415.8	1404.5	1396.9
20°	1376.8	1378.6	1378.6	1369.7	1360.9
22.5°	1334.3	1339.6	1341.4	1332.0	1321.3
25°	1284.2	1294.2	1300.1	1290.6	1279.4
27.5°	1223.4	1238.7	1256.4	1249.3	1236.9
30°	1155.5	1177.9	1207.4	1201.5	1192.7
32.5°	1091.2	1113.6	1154.3	1152.0	1147.2
35°	1032.8	1046.9	1094.7	1100.6	1096.5
37.5°	977.3	990.3	1035.1	1048.7	1045.1
40°	918.9	933.0	968.4	992.6	993.8
42.5°	861.0	874.6	903.5	938.3	938.3
45°	799.6	813.2	839.8	878.1	882.9
47.5°	739.5	753.6	779.6	817.9	825.6
50°	680.4	693.4	719.4	756.6	768.4
52.5°	619.1	633.2	658.6	692.8	709.9
55°	560.0	569.5	597.2	630.3	648.6
57.5°	498.7	507.5	538.8	567.1	586.0
60°	439.7	450.9	475.1	504.0	525.8
62.5°	383.0	394.8	415.5	440.8	465.6
65°	328.1	337.0	357.0	382.4	404.2
67.5°	275.0	282.7	302.7	320.4	343.5
70°	221.3	231.3	246.1	263.2	278.0
72.5°	178.2	182.4	194.7	207.1	222.5
75°	131.6	138.7	148.7	155.8	164.7
77.5°	94.4	98.6	104.5	110.4	118.6
80°	63.1	64.9	70.2	71.4	77.9
82.5°	38.4	39.5	40.7	41.3	43.7
85°	20.7	20.7	20.7	19.5	19.5
87.5°	11.8	11.8	10.0	8.3	5.9
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)