

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: P554661

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-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: P554661  
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-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

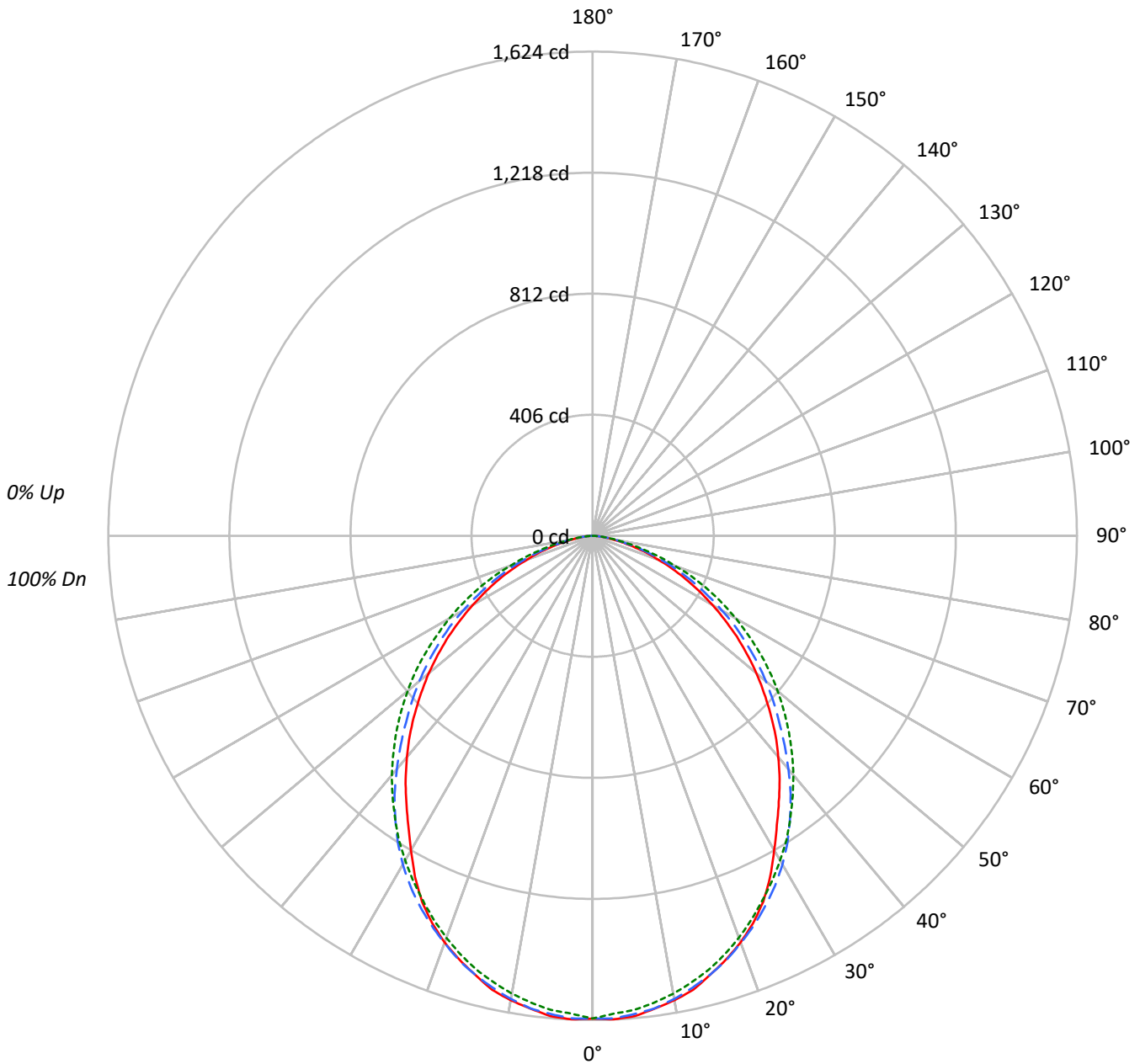
Lumens per Lamp: N/A  
Luminaire Lumens: 3744.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8714	8714	8714
5°	8737	8701	8627
10°	8645	8621	8523
15°	8491	8491	8394
20°	8312	8322	8215
25°	8038	8138	8008
30°	7569	7909	7813
35°	7152	7581	7594
40°	6804	7172	7359
45°	6416	6737	7083
50°	6005	6349	6781
55°	5539	5907	6414
60°	4988	5389	5965
65°	4405	4792	5426
70°	3671	4082	4611
75°	2884	3261	3610
80°	2064	2294	2545
85°	1346	1346	1266



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.5	4.1
10°-20°	428.3	11.4
20°-30°	625.9	16.7
30°-40°	710.4	19.0
40°-50°	685.8	18.3
50°-60°	565.7	15.1
60°-70°	376.7	10.1
70°-80°	168.6	4.5
80°-90°	30.2	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°	1206.6	32.2
0°-40°	1917.0	51.2
0°-60°	3168.5	84.6
0°-90°	3744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3744.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1619	1619	1619	1619	1619	
5°	1617	1617	1610	1602	1597	153
15°	1524	1528	1524	1517	1507	430
25°	1354	1364	1370	1360	1349	620
35°	1089	1104	1154	1160	1156	682
45°	843	857	885	926	931	650
55°	590	600	630	664	684	527
65°	346	355	376	403	426	343
75°	139	146	157	164	174	152
85°	22	22	22	20	20	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1619.2	1619.2	1619.2	1619.2	1619.2
2.5°	1623.5	1624.2	1620.4	1610.5	1604.3
5°	1617.3	1616.7	1610.5	1601.8	1596.8
7.5°	1599.3	1600.5	1598.7	1586.2	1579.4
10°	1581.9	1582.5	1577.5	1567.6	1559.5
12.5°	1559.5	1558.8	1552.0	1547.0	1534.0
15°	1524.0	1527.7	1524.0	1517.2	1506.6
17.5°	1489.8	1489.8	1492.3	1480.5	1472.4
20°	1451.2	1453.1	1453.1	1443.8	1434.4
22.5°	1406.4	1412.0	1413.9	1404.0	1392.8
25°	1353.6	1364.1	1370.4	1360.4	1348.6
27.5°	1289.5	1305.7	1324.3	1316.9	1303.8
30°	1218.0	1241.6	1272.7	1266.5	1257.2
32.5°	1150.2	1173.8	1216.7	1214.2	1209.3
35°	1088.6	1103.5	1153.9	1160.1	1155.8
37.5°	1030.1	1043.8	1091.1	1105.4	1101.6
40°	968.5	983.5	1020.8	1046.3	1047.5
42.5°	907.6	921.9	952.4	989.1	989.1
45°	842.9	857.2	885.2	925.6	930.6
47.5°	779.4	794.4	821.7	862.2	870.2
50°	717.2	730.9	758.3	797.5	809.9
52.5°	652.5	667.5	694.2	730.3	748.3
55°	590.3	600.3	629.5	664.3	683.6
57.5°	525.6	535.0	567.9	597.8	617.7
60°	463.4	475.2	500.7	531.2	554.2
62.5°	403.7	416.1	437.9	464.7	490.8
65°	345.9	355.2	376.3	403.1	426.1
67.5°	289.9	298.0	319.1	337.8	362.0
70°	233.3	243.8	259.4	277.4	293.0
72.5°	187.9	192.2	205.3	218.3	234.5
75°	138.7	146.2	156.8	164.2	173.6
77.5°	99.5	103.9	110.1	116.3	125.0
80°	66.6	68.4	74.0	75.3	82.1
82.5°	40.4	41.7	42.9	43.5	46.0
85°	21.8	21.8	21.8	20.5	20.5
87.5°	12.4	12.4	10.6	8.7	6.2
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)