

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: P555715

Luminaire Tested: **FUSL-12-2-LD4-3LO-35-UNV-81-85-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: P555715  
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-35-UNV-81-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

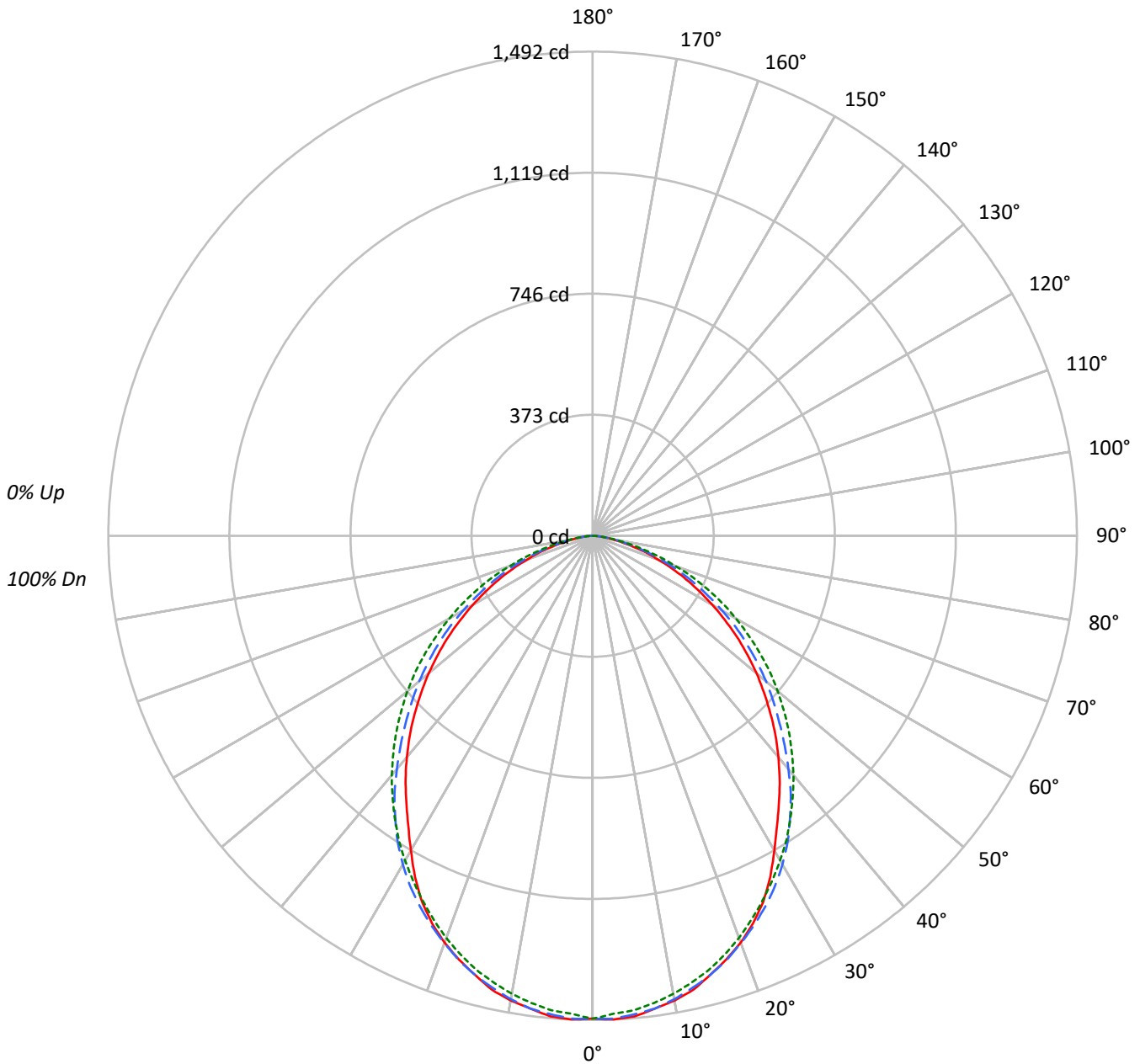
Lumens per Lamp: N/A  
Luminaire Lumens: 3441.0 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	8009	8009	8009
5°	8030	7996	7929
10°	7945	7923	7833
15°	7804	7804	7715
20°	7639	7649	7550
25°	7387	7479	7361
30°	6957	7269	7180
35°	6573	6968	6979
40°	6254	6591	6764
45°	5896	6192	6510
50°	5519	5835	6233
55°	5090	5429	5895
60°	4584	4954	5483
65°	4048	4405	4987
70°	3374	3751	4238
75°	2651	2996	3317
80°	1897	2108	2340
85°	1235	1235	1167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.1	4.1
10°-20°	393.6	11.4
20°-30°	575.2	16.7
30°-40°	652.9	19.0
40°-50°	630.3	18.3
50°-60°	520.0	15.1
60°-70°	346.2	10.1
70°-80°	155.0	4.5
80°-90°	27.7	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°	1108.9	32.2
0°-40°	1761.9	51.2
0°-60°	2912.1	84.6
0°-90°	3441.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3441.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1486	1486	1480	1472	1468	141
15°	1401	1404	1401	1394	1385	395
25°	1244	1254	1260	1250	1240	570
35°	1000	1014	1060	1066	1062	627
45°	775	788	814	851	855	598
55°	542	552	579	611	628	484
65°	318	326	346	370	392	315
75°	128	134	144	151	160	139
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1488.1	1488.1	1488.1	1488.1	1488.1
2.5°	1492.1	1492.7	1489.3	1480.1	1474.4
5°	1486.4	1485.9	1480.1	1472.1	1467.6
7.5°	1469.8	1471.0	1469.3	1457.8	1451.6
10°	1453.8	1454.4	1449.8	1440.7	1433.3
12.5°	1433.3	1432.7	1426.4	1421.8	1409.8
15°	1400.7	1404.1	1400.7	1394.4	1384.7
17.5°	1369.2	1369.2	1371.5	1360.7	1353.2
20°	1333.8	1335.5	1335.5	1326.9	1318.3
22.5°	1292.6	1297.8	1299.5	1290.3	1280.0
25°	1244.0	1253.7	1259.5	1250.3	1239.5
27.5°	1185.1	1200.0	1217.2	1210.3	1198.3
30°	1119.4	1141.1	1169.7	1164.0	1155.4
32.5°	1057.1	1078.8	1118.3	1116.0	1111.4
35°	1000.5	1014.2	1060.5	1066.2	1062.2
37.5°	946.7	959.3	1002.8	1015.9	1012.5
40°	890.1	903.9	938.2	961.6	962.7
42.5°	834.1	847.3	875.3	909.0	909.0
45°	774.7	787.8	813.5	850.7	855.3
47.5°	716.3	730.1	755.2	792.4	799.8
50°	659.2	671.8	696.9	732.9	744.4
52.5°	599.7	613.4	638.0	671.2	687.8
55°	542.5	551.7	578.6	610.6	628.3
57.5°	483.1	491.7	522.0	549.4	567.7
60°	425.9	436.8	460.2	488.2	509.4
62.5°	371.0	382.5	402.5	427.1	451.1
65°	317.9	326.4	345.9	370.5	391.6
67.5°	266.4	273.8	293.3	310.4	332.7
70°	214.4	224.1	238.4	255.0	269.3
72.5°	172.7	176.7	188.7	200.7	215.5
75°	127.5	134.4	144.1	150.9	159.5
77.5°	91.5	95.5	101.2	106.9	114.9
80°	61.2	62.9	68.0	69.2	75.5
82.5°	37.2	38.3	39.4	40.0	42.3
85°	20.0	20.0	20.0	18.9	18.9
87.5°	11.4	11.4	9.7	8.0	5.7
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)