

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: P555905

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-81-84-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: P555905  
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-LD4-3STD-30-UNV-81-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

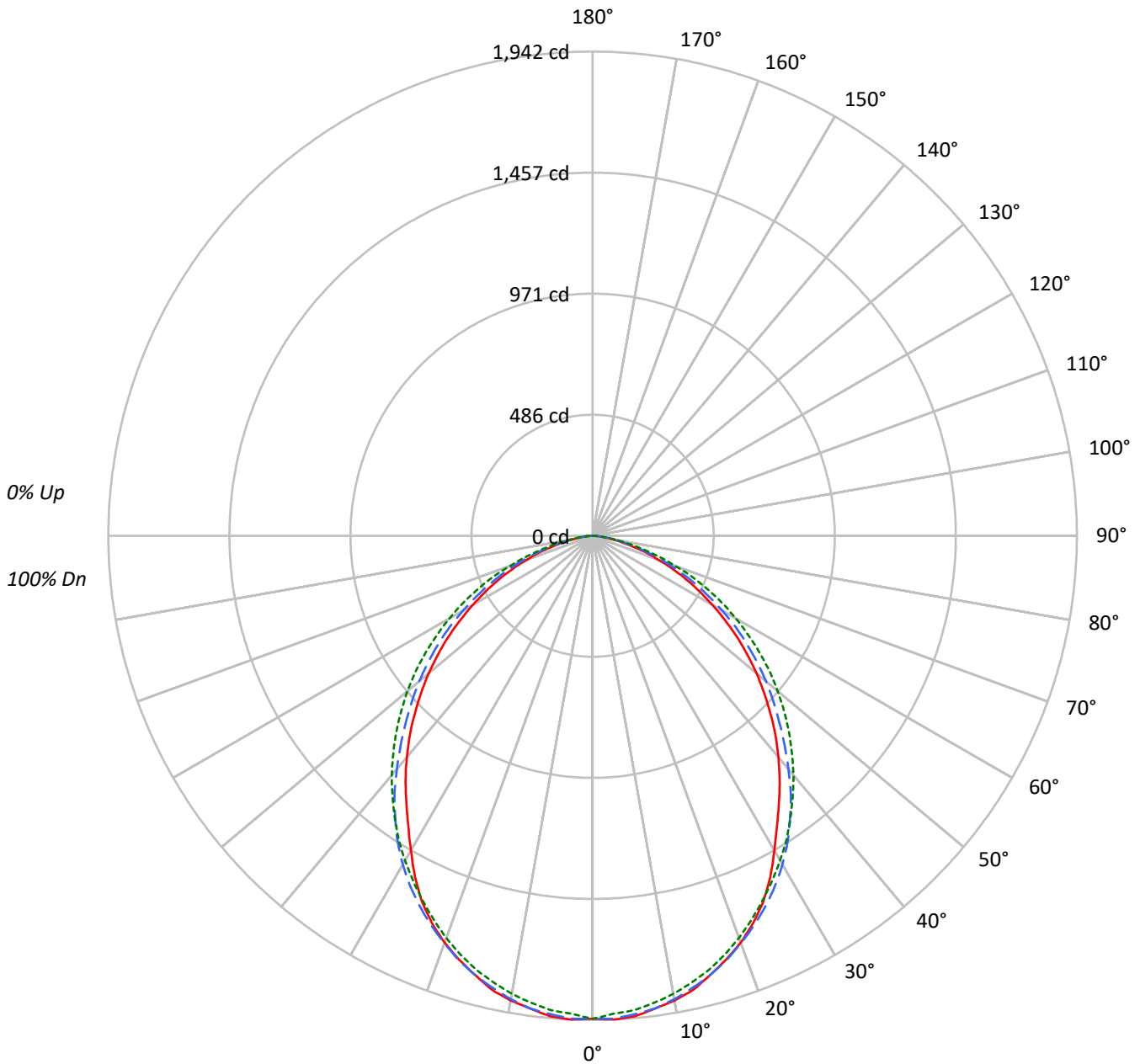
Lumens per Lamp: N/A  
Luminaire Lumens: 4479.0 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	10425	10425	10425
5°	10453	10408	10320
10°	10342	10314	10195
15°	10159	10159	10043
20°	9943	9956	9828
25°	9616	9735	9580
30°	9055	9462	9346
35°	8556	9069	9085
40°	8141	8580	8805
45°	7674	8060	8474
50°	7184	7595	8112
55°	6626	7066	7674
60°	5968	6448	7136
65°	5270	5733	6492
70°	4392	4883	5515
75°	3450	3899	4317
80°	2467	2746	3044
85°	1606	1606	1519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.4	4.1
10°-20°	512.4	11.4
20°-30°	748.7	16.7
30°-40°	849.9	19.0
40°-50°	820.4	18.3
50°-60°	676.8	15.1
60°-70°	450.7	10.1
70°-80°	201.7	4.5
80°-90°	36.1	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°	1443.5	32.2
0°-40°	2293.3	51.2
0°-60°	3790.5	84.6
0°-90°	4479.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4479.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1937	1937	1937	1937	1937	
5°	1935	1934	1927	1916	1910	183
15°	1823	1828	1823	1815	1802	514
25°	1619	1632	1639	1628	1613	742
35°	1302	1320	1380	1388	1383	816
45°	1008	1026	1059	1107	1113	778
55°	706	718	753	795	818	630
65°	414	425	450	482	510	410
75°	166	175	188	196	208	181
85°	26	26	26	25	25	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1937.1	1937.1	1937.1	1937.1	1937.1
2.5°	1942.3	1943.0	1938.5	1926.6	1919.2
5°	1934.8	1934.1	1926.6	1916.2	1910.3
7.5°	1913.2	1914.7	1912.5	1897.6	1889.4
10°	1892.4	1893.1	1887.2	1875.3	1865.6
12.5°	1865.6	1864.9	1856.7	1850.7	1835.1
15°	1823.2	1827.7	1823.2	1815.0	1802.4
17.5°	1782.3	1782.3	1785.2	1771.1	1761.4
20°	1736.1	1738.4	1738.4	1727.2	1716.0
22.5°	1682.5	1689.2	1691.5	1679.6	1666.2
25°	1619.3	1631.9	1639.4	1627.5	1613.3
27.5°	1542.6	1562.0	1584.3	1575.4	1559.8
30°	1457.1	1485.3	1522.6	1515.1	1503.9
32.5°	1376.0	1404.2	1455.6	1452.6	1446.6
35°	1302.3	1320.1	1380.4	1387.9	1382.7
37.5°	1232.3	1248.7	1305.3	1322.4	1317.9
40°	1158.7	1176.5	1221.2	1251.7	1253.2
42.5°	1085.7	1102.8	1139.3	1183.2	1183.2
45°	1008.3	1025.5	1058.9	1107.3	1113.3
47.5°	932.4	950.3	983.0	1031.4	1041.1
50°	858.0	874.4	907.1	954.0	968.9
52.5°	780.6	798.5	830.5	873.6	895.2
55°	706.2	718.1	753.1	794.8	817.8
57.5°	628.8	640.0	679.4	715.1	739.0
60°	554.4	568.5	599.0	635.5	663.0
62.5°	483.0	497.8	523.9	555.9	587.1
65°	413.8	424.9	450.2	482.2	509.8
67.5°	346.8	356.5	381.8	404.1	433.1
70°	279.1	291.7	310.3	331.9	350.5
72.5°	224.7	229.9	245.6	261.2	280.5
75°	165.9	174.9	187.5	196.5	207.6
77.5°	119.1	124.3	131.7	139.2	149.6
80°	79.6	81.9	88.6	90.0	98.2
82.5°	48.4	49.9	51.3	52.1	55.1
85°	26.0	26.0	26.0	24.6	24.6
87.5°	14.9	14.9	12.7	10.4	7.4
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)