

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: P556017

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-80-84-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: P556017  
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-40-UNV-80-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

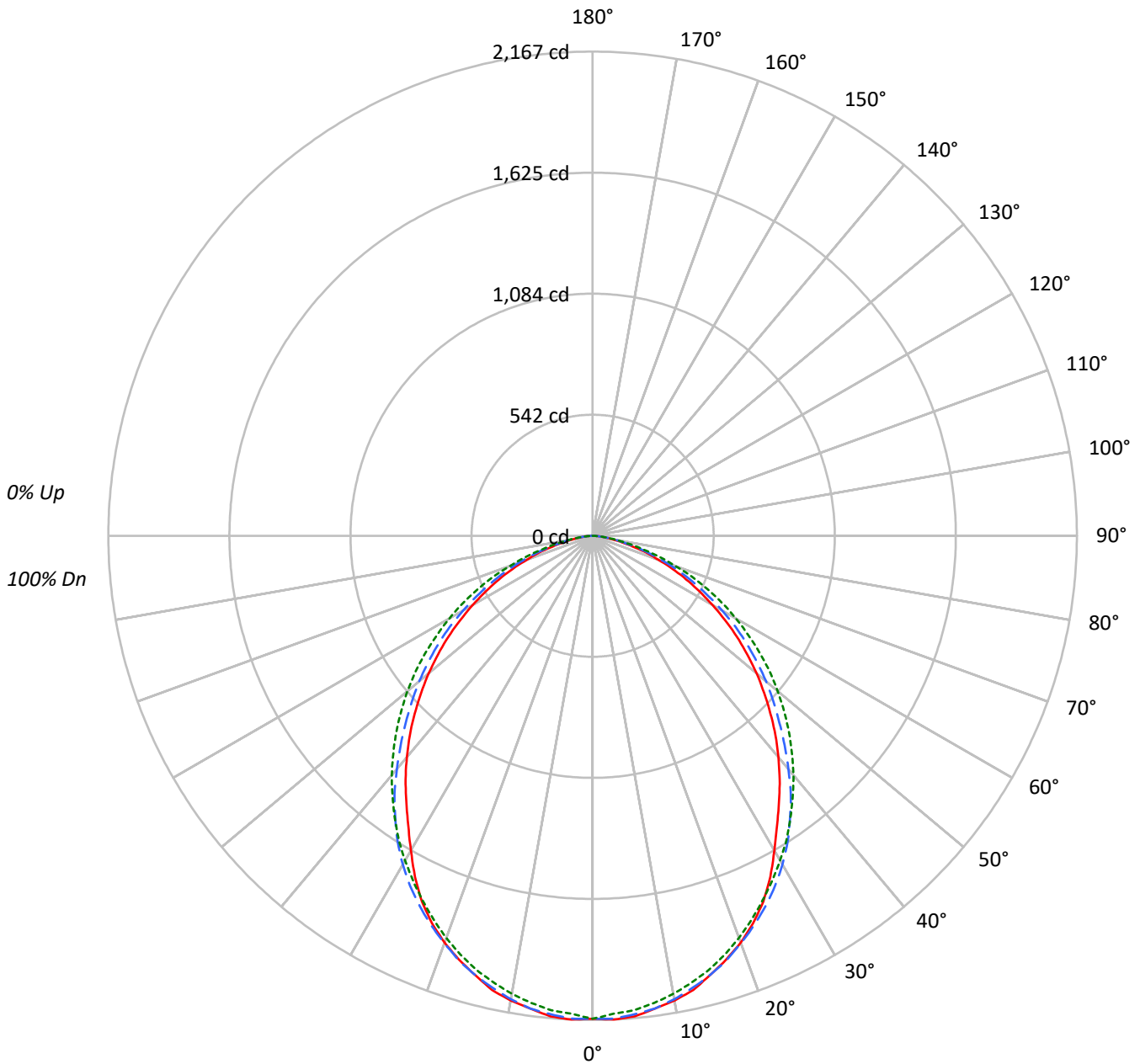
Lumens per Lamp: N/A  
Luminaire Lumens: 4998.0 lumens  
Efficiency: N/A  
Efficacy: 100.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
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°	11633	11633	11633
5°	11664	11615	11516
10°	11540	11509	11377
15°	11336	11336	11206
20°	11096	11110	10967
25°	10730	10863	10691
30°	10104	10559	10429
35°	9548	10121	10137
40°	9083	9574	9825
45°	8564	8993	9455
50°	8016	8475	9053
55°	7394	7886	8563
60°	6659	7196	7964
65°	5880	6398	7244
70°	4900	5449	6154
75°	3851	4352	4818
80°	2755	3062	3397
85°	1797	1797	1692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.5	4.1
10°-20°	571.7	11.4
20°-30°	835.5	16.7
30°-40°	948.4	19.0
40°-50°	915.5	18.3
50°-60°	755.2	15.1
60°-70°	502.9	10.1
70°-80°	225.1	4.5
80°-90°	40.3	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°	1610.7	32.2
0°-40°	2559.1	51.2
0°-60°	4229.8	84.6
0°-90°	4998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4998.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2162	2162	2162	2162	2162	
5°	2159	2158	2150	2138	2132	204
15°	2034	2039	2034	2025	2011	574
25°	1807	1821	1829	1816	1800	827
35°	1453	1473	1540	1549	1543	911
45°	1125	1144	1182	1236	1242	868
55°	788	801	840	887	913	703
65°	462	474	502	538	569	458
75°	185	195	209	219	232	203
85°	29	29	29	27	27	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2161.5	2161.5	2161.5	2161.5	2161.5
2.5°	2167.3	2168.1	2163.2	2149.9	2141.6
5°	2159.0	2158.2	2149.9	2138.3	2131.6
7.5°	2134.9	2136.6	2134.1	2117.5	2108.4
10°	2111.7	2112.5	2105.9	2092.6	2081.8
12.5°	2081.8	2081.0	2071.8	2065.2	2047.7
15°	2034.5	2039.4	2034.5	2025.3	2011.2
17.5°	1988.8	1988.8	1992.1	1976.3	1965.5
20°	1937.3	1939.8	1939.8	1927.3	1914.9
22.5°	1877.5	1885.0	1887.5	1874.2	1859.2
25°	1806.9	1821.0	1829.3	1816.1	1800.3
27.5°	1721.4	1743.0	1767.9	1757.9	1740.5
30°	1625.9	1657.5	1699.0	1690.7	1678.2
32.5°	1535.4	1566.9	1624.2	1620.9	1614.3
35°	1453.2	1473.1	1540.4	1548.7	1542.9
37.5°	1375.1	1393.4	1456.5	1475.6	1470.6
40°	1292.9	1312.8	1362.7	1396.7	1398.4
42.5°	1211.5	1230.6	1271.3	1320.3	1320.3
45°	1125.2	1144.3	1181.6	1235.6	1242.3
47.5°	1040.5	1060.4	1096.9	1150.9	1161.7
50°	957.4	975.7	1012.2	1064.6	1081.2
52.5°	871.1	891.0	926.7	974.9	999.0
55°	788.0	801.3	840.4	886.9	912.6
57.5°	701.7	714.1	758.1	798.0	824.6
60°	618.6	634.4	668.5	709.2	739.9
62.5°	538.9	555.5	584.6	620.3	655.2
65°	461.7	474.2	502.4	538.1	568.8
67.5°	387.0	397.8	426.0	450.9	483.3
70°	311.4	325.5	346.3	370.4	391.1
72.5°	250.8	256.6	274.0	291.5	313.1
75°	185.2	195.1	209.3	219.2	231.7
77.5°	132.9	138.7	147.0	155.3	166.9
80°	88.9	91.3	98.8	100.5	109.6
82.5°	54.0	55.6	57.3	58.1	61.4
85°	29.1	29.1	29.1	27.4	27.4
87.5°	16.6	16.6	14.1	11.6	8.3
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)