

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: P554862

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-93-97-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: P554862  
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-93-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

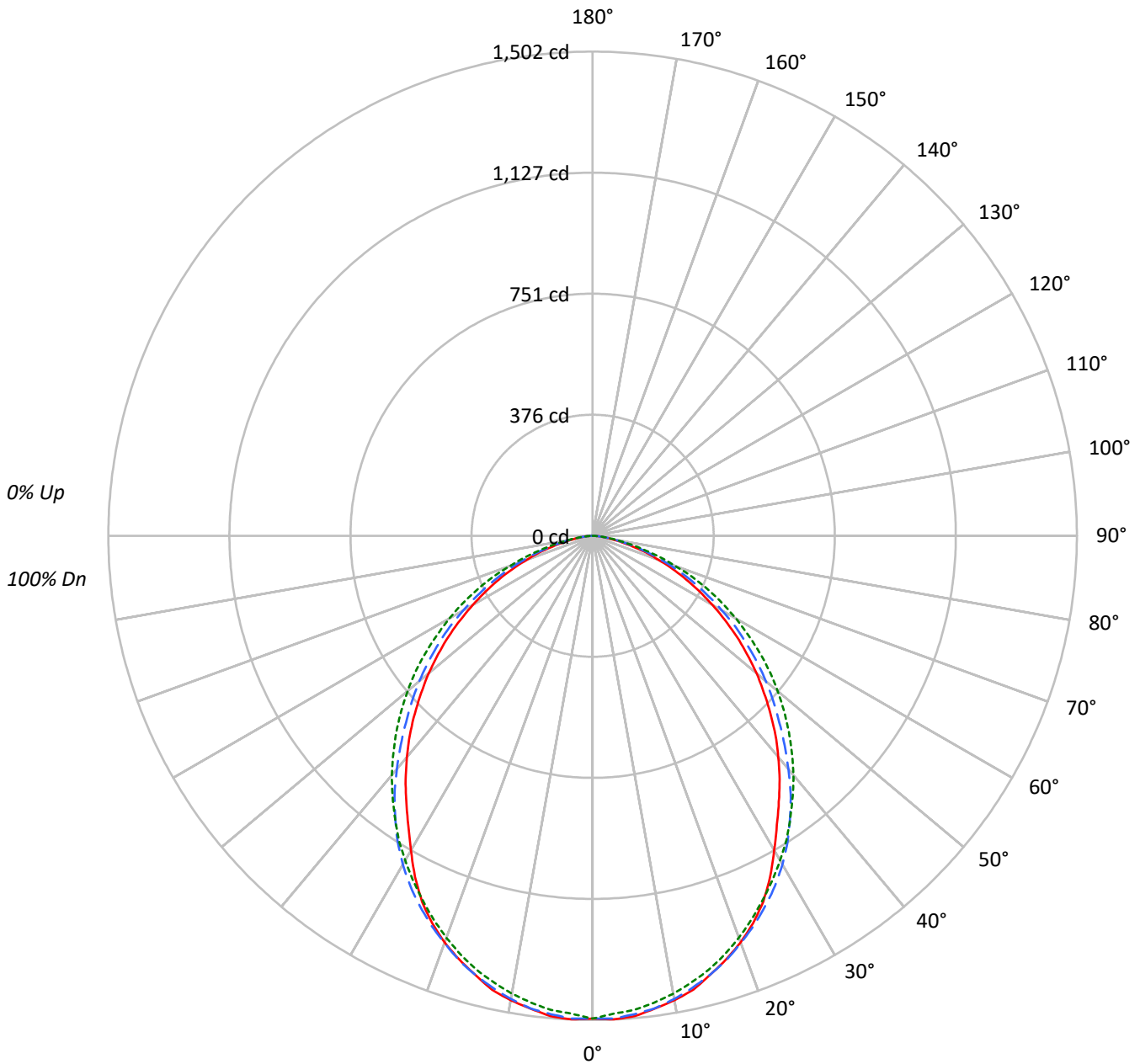
Lumens per Lamp: N/A  
Luminaire Lumens: 3463.0 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8061	8061	8061
5°	8082	8048	7979
10°	7996	7974	7883
15°	7854	7854	7764
20°	7688	7698	7599
25°	7435	7527	7407
30°	7001	7316	7226
35°	6615	7012	7023
40°	6294	6634	6807
45°	5934	6231	6551
50°	5555	5873	6272
55°	5123	5464	5933
60°	4613	4986	5518
65°	4074	4433	5019
70°	3396	3775	4264
75°	2668	3015	3337
80°	1909	2123	2352
85°	1241	1241	1173



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.0	4.1
10°-20°	396.1	11.4
20°-30°	578.9	16.7
30°-40°	657.1	19.0
40°-50°	634.3	18.3
50°-60°	523.3	15.1
60°-70°	348.5	10.1
70°-80°	155.9	4.5
80°-90°	27.9	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°	1116.0	32.2
0°-40°	1773.1	51.2
0°-60°	2930.7	84.6
0°-90°	3463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1496	1495	1490	1482	1477	142
15°	1410	1413	1410	1403	1394	397
25°	1252	1262	1268	1258	1247	573
35°	1007	1021	1067	1073	1069	631
45°	780	793	819	856	861	601
55°	546	555	582	614	632	487
65°	320	328	348	373	394	317
75°	128	135	145	152	160	140
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°	1497.7	1497.7	1497.7	1497.7	1497.7
2.5°	1501.7	1502.3	1498.8	1489.6	1483.8
5°	1495.9	1495.4	1489.6	1481.5	1476.9
7.5°	1479.2	1480.4	1478.7	1467.2	1460.8
10°	1463.1	1463.7	1459.1	1449.9	1442.4
12.5°	1442.4	1441.8	1435.5	1430.9	1418.8
15°	1409.6	1413.1	1409.6	1403.3	1393.5
17.5°	1378.0	1378.0	1380.3	1369.4	1361.9
20°	1342.3	1344.0	1344.0	1335.4	1326.8
22.5°	1300.9	1306.1	1307.8	1298.6	1288.2
25°	1252.0	1261.8	1267.5	1258.3	1247.4
27.5°	1192.7	1207.7	1224.9	1218.0	1206.0
30°	1126.6	1148.4	1177.2	1171.4	1162.8
32.5°	1063.8	1085.7	1125.4	1123.1	1118.5
35°	1006.9	1020.7	1067.3	1073.0	1069.0
37.5°	952.8	965.5	1009.2	1022.4	1019.0
40°	895.8	909.6	944.2	967.8	968.9
42.5°	839.4	852.7	880.9	914.8	914.8
45°	779.6	792.8	818.7	856.1	860.7
47.5°	720.9	734.7	760.0	797.4	804.9
50°	663.4	676.0	701.4	737.6	749.1
52.5°	603.6	617.4	642.1	675.5	692.2
55°	546.0	555.2	582.3	614.5	632.3
57.5°	486.2	494.8	525.3	552.9	571.3
60°	428.6	439.6	463.2	491.4	512.6
62.5°	373.4	384.9	405.1	429.8	454.0
65°	319.9	328.5	348.1	372.8	394.1
67.5°	268.1	275.6	295.2	312.4	334.9
70°	215.8	225.5	239.9	256.6	271.0
72.5°	173.8	177.8	189.9	202.0	216.9
75°	128.3	135.2	145.0	151.9	160.5
77.5°	92.1	96.1	101.8	107.6	115.6
80°	61.6	63.3	68.5	69.6	75.9
82.5°	37.4	38.5	39.7	40.3	42.6
85°	20.1	20.1	20.1	19.0	19.0
87.5°	11.5	11.5	9.8	8.1	5.8
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)