

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: P555922

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-82-85-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: P555922  
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-82-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

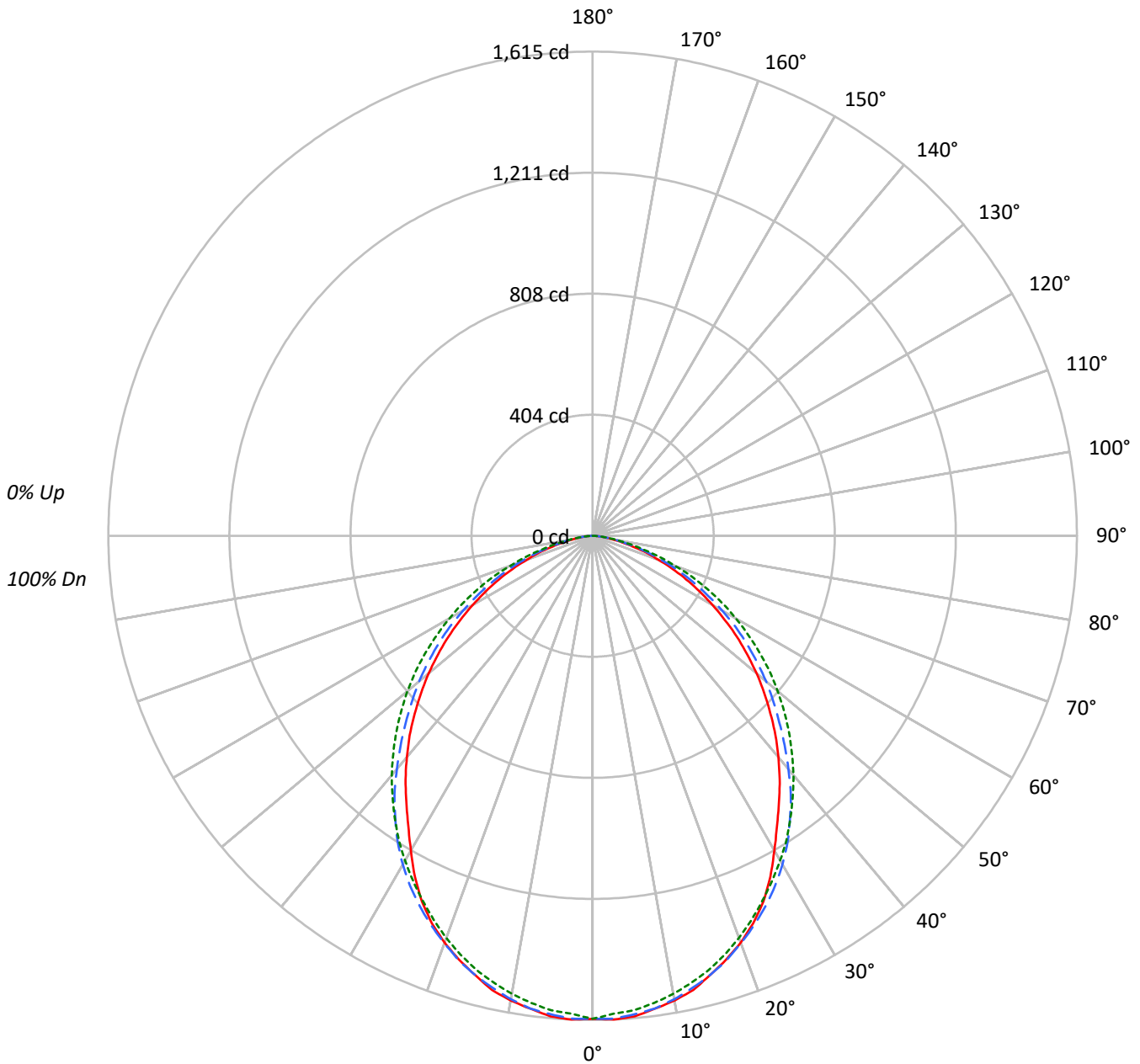
Lumens per Lamp: N/A  
Luminaire Lumens: 3725.0 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8670	8670	8670
5°	8693	8656	8583
10°	8601	8577	8479
15°	8449	8449	8352
20°	8270	8280	8174
25°	7997	8096	7967
30°	7531	7869	7773
35°	7116	7543	7555
40°	6770	7135	7322
45°	6383	6703	7047
50°	5975	6316	6747
55°	5511	5877	6382
60°	4963	5363	5935
65°	4382	4768	5398
70°	3652	4061	4587
75°	2870	3244	3591
80°	2052	2281	2532
85°	1340	1340	1260



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.7	4.1
10°-20°	426.1	11.4
20°-30°	622.7	16.7
30°-40°	706.8	19.0
40°-50°	682.3	18.3
50°-60°	562.9	15.1
60°-70°	374.8	10.1
70°-80°	167.7	4.5
80°-90°	30.0	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°	1200.5	32.2
0°-40°	1907.3	51.2
0°-60°	3152.4	84.6
0°-90°	3725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3725.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1611	1611	1611	1611	1611	
5°	1609	1608	1602	1594	1589	152
15°	1516	1520	1516	1510	1499	427
25°	1347	1357	1363	1354	1342	617
35°	1083	1098	1148	1154	1150	679
45°	839	853	881	921	926	647
55°	587	597	626	661	680	524
65°	344	353	374	401	424	341
75°	138	145	156	163	173	151
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°	1611.0	1611.0	1611.0	1611.0	1611.0
2.5°	1615.3	1615.9	1612.2	1602.3	1596.1
5°	1609.1	1608.5	1602.3	1593.6	1588.7
7.5°	1591.2	1592.4	1590.5	1578.2	1571.4
10°	1573.8	1574.5	1569.5	1559.6	1551.6
12.5°	1551.6	1550.9	1544.1	1539.2	1526.2
15°	1516.3	1520.0	1516.3	1509.5	1498.9
17.5°	1482.2	1482.2	1484.7	1473.0	1464.9
20°	1443.9	1445.7	1445.7	1436.4	1427.2
22.5°	1399.3	1404.9	1406.7	1396.8	1385.7
25°	1346.7	1357.2	1363.4	1353.5	1341.7
27.5°	1283.0	1299.0	1317.6	1310.2	1297.2
30°	1211.8	1235.3	1266.2	1260.1	1250.8
32.5°	1144.3	1167.8	1210.5	1208.1	1203.1
35°	1083.1	1097.9	1148.0	1154.2	1149.9
37.5°	1024.9	1038.5	1085.5	1099.8	1096.1
40°	963.6	978.5	1015.6	1041.0	1042.2
42.5°	903.0	917.2	947.5	984.0	984.0
45°	838.6	852.8	880.7	920.9	925.9
47.5°	775.5	790.3	817.6	857.8	865.8
50°	713.6	727.2	754.4	793.4	805.8
52.5°	649.2	664.1	690.7	726.6	744.5
55°	587.3	597.2	626.3	661.0	680.2
57.5°	523.0	532.2	565.0	594.8	614.6
60°	461.1	472.8	498.2	528.5	551.4
62.5°	401.7	414.0	435.7	462.3	488.3
65°	344.1	353.4	374.4	401.0	423.9
67.5°	288.4	296.4	317.5	336.1	360.2
70°	232.1	242.6	258.1	276.0	291.5
72.5°	186.9	191.2	204.2	217.2	233.3
75°	138.0	145.4	156.0	163.4	172.7
77.5°	99.0	103.4	109.5	115.7	124.4
80°	66.2	68.1	73.6	74.9	81.7
82.5°	40.2	41.5	42.7	43.3	45.8
85°	21.7	21.7	21.7	20.4	20.4
87.5°	12.4	12.4	10.5	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)