

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: P554660

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-93-86-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: P554660  
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-30-UNV-93-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

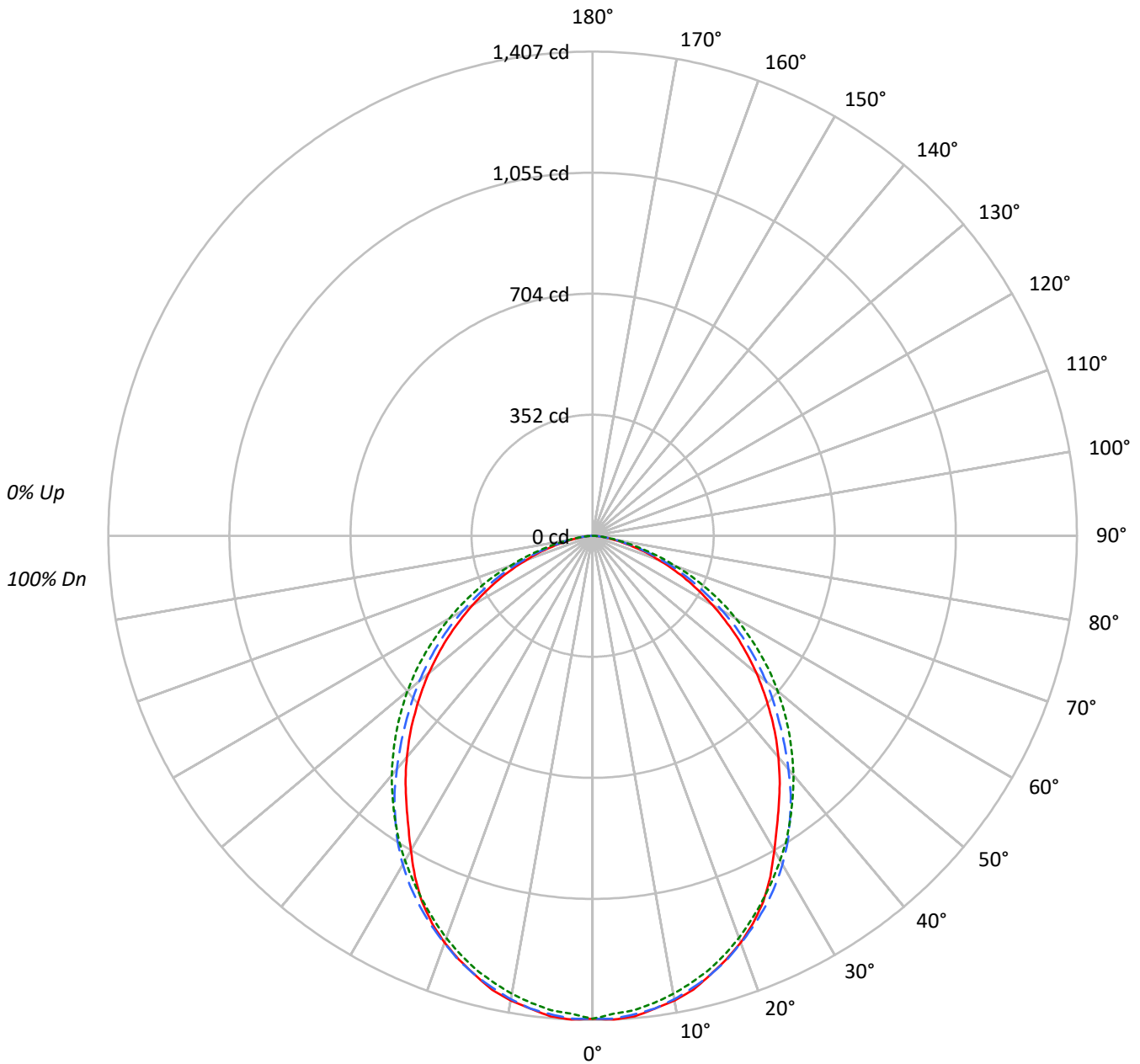
Lumens per Lamp: N/A  
Luminaire Lumens: 3245.0 lumens  
Efficiency: N/A  
Efficacy: 75.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	7553	7553	7553
5°	7573	7541	7477
10°	7492	7472	7386
15°	7360	7360	7276
20°	7204	7213	7121
25°	6967	7053	6941
30°	6560	6855	6771
35°	6199	6571	6581
40°	5897	6216	6379
45°	5560	5839	6139
50°	5205	5503	5878
55°	4800	5119	5560
60°	4324	4672	5171
65°	3818	4154	4703
70°	3182	3537	3995
75°	2499	2826	3127
80°	1788	1990	2207
85°	1167	1167	1099



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.1	4.1
10°-20°	371.2	11.4
20°-30°	542.4	16.7
30°-40°	615.7	19.0
40°-50°	594.4	18.3
50°-60°	490.3	15.1
60°-70°	326.5	10.1
70°-80°	146.1	4.5
80°-90°	26.1	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°	1045.8	32.2
0°-40°	1661.5	51.2
0°-60°	2746.2	84.6
0°-90°	3245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3245.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1402	1401	1396	1388	1384	133
15°	1321	1324	1321	1315	1306	372
25°	1173	1182	1188	1179	1169	537
35°	944	956	1000	1006	1002	591
45°	730	743	767	802	807	564
55°	512	520	546	576	592	457
65°	300	308	326	349	369	297
75°	120	127	136	142	150	131
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1403.4	1403.4	1403.4	1403.4	1403.4
2.5°	1407.2	1407.7	1404.5	1395.8	1390.4
5°	1401.8	1401.2	1395.8	1388.3	1384.0
7.5°	1386.1	1387.2	1385.6	1374.8	1368.9
10°	1371.0	1371.6	1367.3	1358.6	1351.6
12.5°	1351.6	1351.1	1345.2	1340.8	1329.5
15°	1320.9	1324.1	1320.9	1315.0	1305.8
17.5°	1291.2	1291.2	1293.4	1283.2	1276.1
20°	1257.8	1259.4	1259.4	1251.3	1243.3
22.5°	1219.0	1223.8	1225.5	1216.8	1207.1
25°	1173.2	1182.3	1187.7	1179.1	1168.9
27.5°	1117.6	1131.7	1147.8	1141.4	1130.0
30°	1055.6	1076.1	1103.1	1097.7	1089.6
32.5°	996.9	1017.4	1054.6	1052.4	1048.1
35°	943.5	956.4	1000.1	1005.5	1001.7
37.5°	892.8	904.7	945.6	958.0	954.8
40°	839.4	852.4	884.7	906.8	907.9
42.5°	786.6	799.0	825.4	857.2	857.2
45°	730.5	742.9	767.2	802.2	806.6
47.5°	675.5	688.5	712.2	747.2	754.3
50°	621.6	633.5	657.2	691.2	702.0
52.5°	565.6	578.5	601.7	632.9	648.6
55°	511.6	520.3	545.6	575.8	592.5
57.5°	455.6	463.7	492.2	518.1	535.4
60°	401.7	411.9	434.0	460.4	480.4
62.5°	349.9	360.7	379.6	402.7	425.4
65°	299.8	307.8	326.2	349.4	369.3
67.5°	251.2	258.2	276.6	292.8	313.8
70°	202.2	211.3	224.8	240.5	253.9
72.5°	162.8	166.6	177.9	189.2	203.3
75°	120.2	126.7	135.9	142.3	150.4
77.5°	86.3	90.0	95.4	100.8	108.4
80°	57.7	59.3	64.2	65.2	71.2
82.5°	35.0	36.1	37.2	37.7	39.9
85°	18.9	18.9	18.9	17.8	17.8
87.5°	10.8	10.8	9.2	7.5	5.4
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)