

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: P555237

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-UNV-93-86-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: P555237  
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-LD4-2STD-35-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

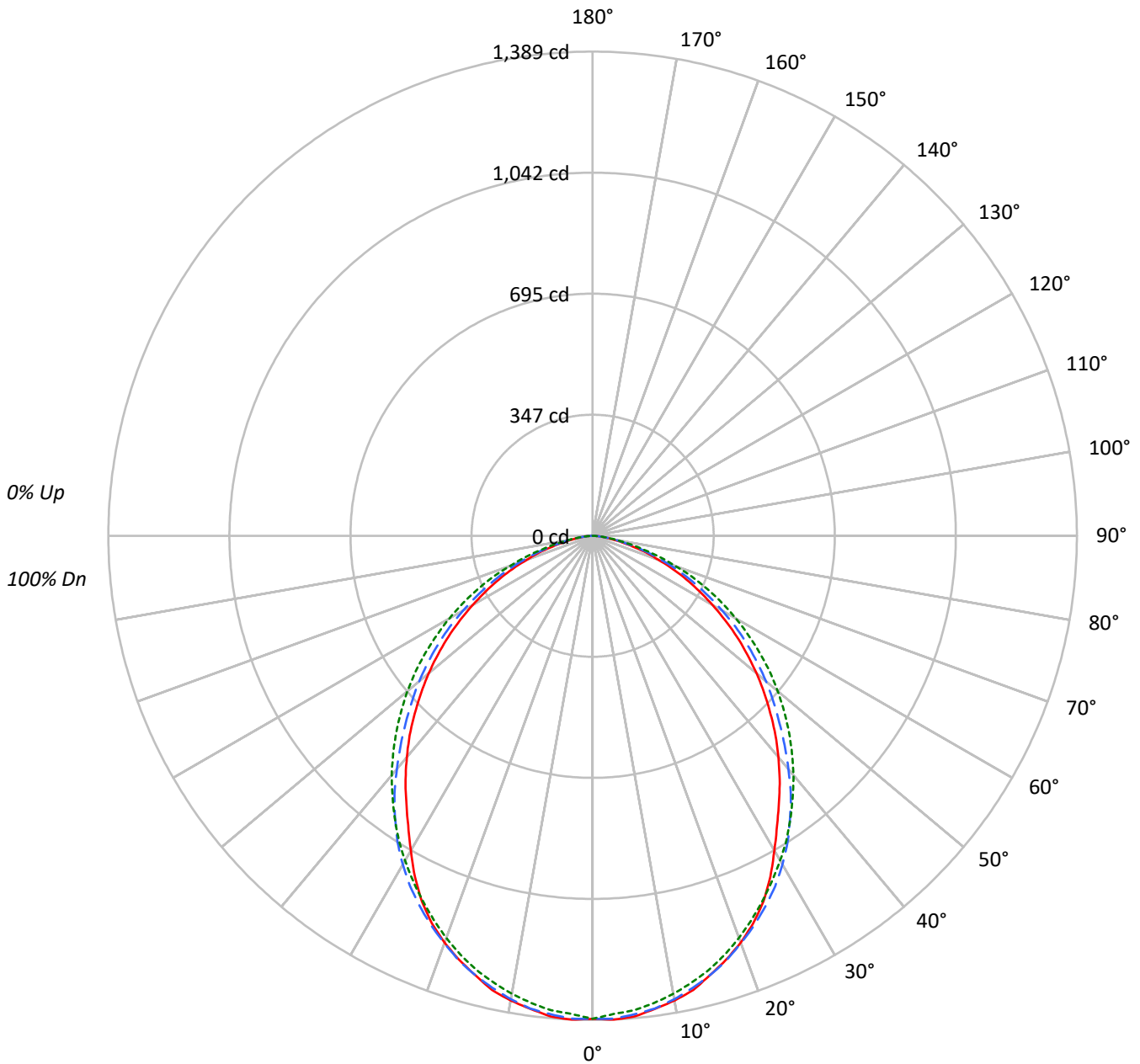
Lumens per Lamp: N/A  
Luminaire Lumens: 3204.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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°	7457	7457	7457
5°	7478	7446	7383
10°	7398	7378	7293
15°	7267	7267	7184
20°	7113	7122	7030
25°	6878	6964	6853
30°	6477	6768	6686
35°	6121	6488	6499
40°	5823	6137	6298
45°	5490	5766	6062
50°	5139	5433	5803
55°	4740	5055	5489
60°	4269	4612	5105
65°	3769	4102	4643
70°	3141	3493	3945
75°	2468	2789	3088
80°	1767	1962	2179
85°	1149	1149	1087



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	4.1
10°-20°	366.5	11.4
20°-30°	535.6	16.7
30°-40°	607.9	19.0
40°-50°	586.9	18.3
50°-60°	484.1	15.1
60°-70°	322.4	10.1
70°-80°	144.3	4.5
80°-90°	25.8	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°	1032.6	32.2
0°-40°	1640.5	51.2
0°-60°	2711.5	84.6
0°-90°	3204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3204.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1384	1384	1378	1371	1366	131
15°	1304	1307	1304	1298	1289	368
25°	1158	1167	1173	1164	1154	530
35°	932	944	988	993	989	584
45°	721	734	758	792	796	557
55°	505	514	539	568	585	451
65°	296	304	322	345	365	293
75°	119	125	134	140	148	130
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°	1385.6	1385.6	1385.6	1385.6	1385.6
2.5°	1389.4	1389.9	1386.7	1378.2	1372.9
5°	1384.1	1383.5	1378.2	1370.7	1366.5
7.5°	1368.6	1369.7	1368.1	1357.4	1351.6
10°	1353.7	1354.2	1350.0	1341.5	1334.5
12.5°	1334.5	1334.0	1328.2	1323.9	1312.7
15°	1304.2	1307.4	1304.2	1298.3	1289.3
17.5°	1274.9	1274.9	1277.1	1266.9	1260.0
20°	1241.9	1243.5	1243.5	1235.5	1227.5
22.5°	1203.6	1208.4	1210.0	1201.5	1191.9
25°	1158.3	1167.4	1172.7	1164.2	1154.1
27.5°	1103.5	1117.4	1133.3	1126.9	1115.8
30°	1042.3	1062.5	1089.1	1083.8	1075.8
32.5°	984.3	1004.5	1041.2	1039.1	1034.8
35°	931.6	944.3	987.5	992.8	989.1
37.5°	881.5	893.2	933.7	945.9	942.8
40°	828.8	841.6	873.5	895.4	896.4
42.5°	776.7	788.9	815.0	846.4	846.4
45°	721.3	733.5	757.5	792.1	796.4
47.5°	667.0	679.8	703.2	737.8	744.7
50°	613.8	625.5	648.9	682.4	693.1
52.5°	558.4	571.2	594.1	625.0	640.4
55°	505.2	513.7	538.7	568.5	585.0
57.5°	449.8	457.8	486.0	511.6	528.6
60°	396.6	406.7	428.5	454.6	474.3
62.5°	345.5	356.1	374.8	397.6	420.0
65°	296.0	304.0	322.1	344.9	364.6
67.5°	248.1	255.0	273.1	289.1	309.8
70°	199.6	208.7	222.0	237.4	250.7
72.5°	160.8	164.5	175.7	186.8	200.7
75°	118.7	125.1	134.1	140.5	148.5
77.5°	85.2	88.9	94.2	99.5	107.0
80°	57.0	58.6	63.3	64.4	70.3
82.5°	34.6	35.7	36.7	37.3	39.4
85°	18.6	18.6	18.6	17.6	17.6
87.5°	10.6	10.6	9.0	7.5	5.3
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)