

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: P556056

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-82-88-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: P556056  
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-82-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

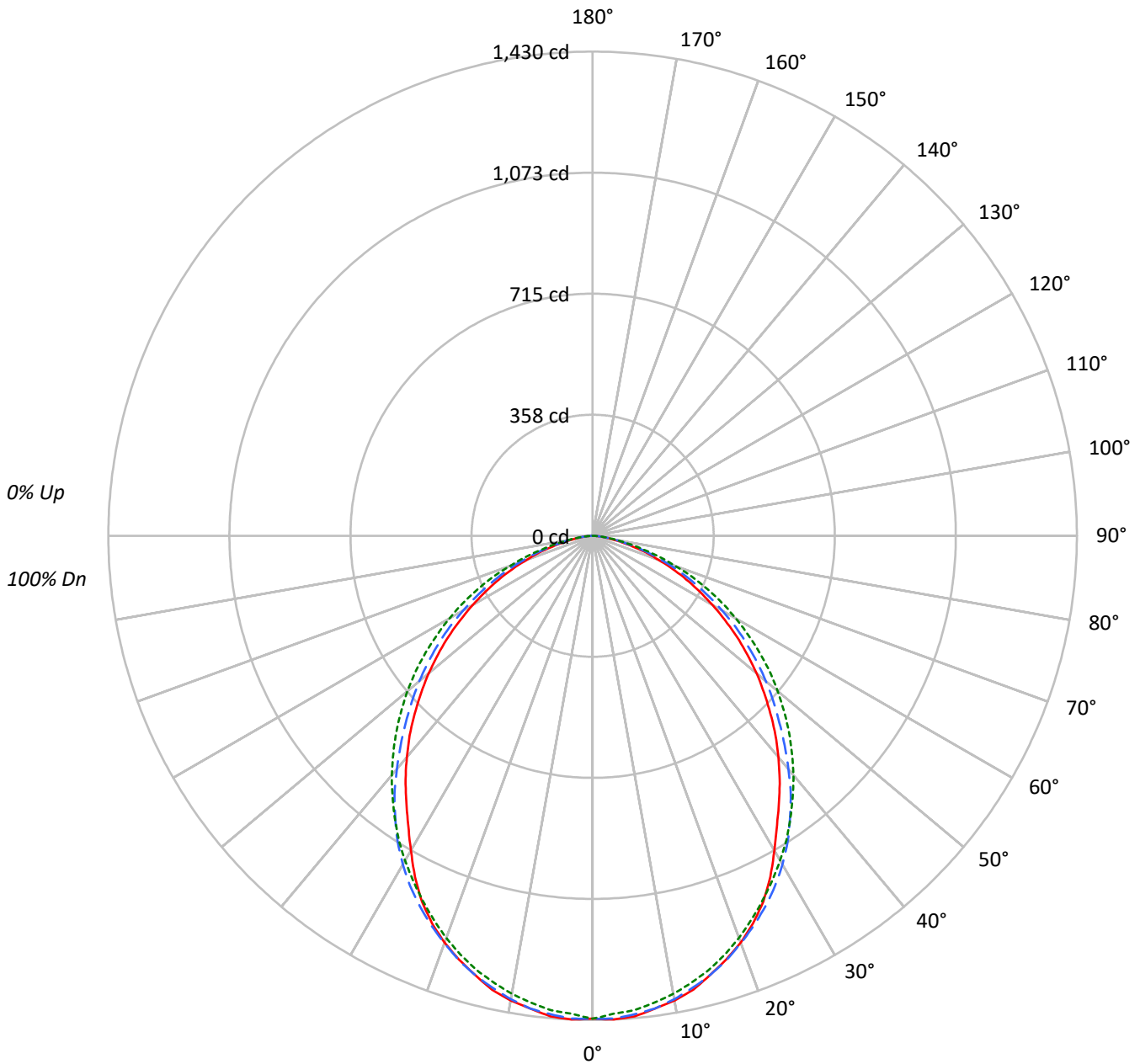
Lumens per Lamp: N/A  
Luminaire Lumens: 3298.0 lumens  
Efficiency: N/A  
Efficacy: 66.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (Ain): 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°	7676	7676	7676
5°	7697	7664	7599
10°	7615	7594	7507
15°	7480	7480	7394
20°	7322	7331	7237
25°	7080	7168	7054
30°	6668	6967	6882
35°	6300	6678	6689
40°	5994	6317	6483
45°	5651	5934	6239
50°	5290	5592	5973
55°	4879	5203	5651
60°	4394	4748	5255
65°	3880	4222	4779
70°	3234	3596	4061
75°	2541	2872	3179
80°	1816	2021	2241
85°	1186	1186	1118



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.3	4.1
10°-20°	377.3	11.4
20°-30°	551.3	16.7
30°-40°	625.8	19.0
40°-50°	604.1	18.3
50°-60°	498.3	15.1
60°-70°	331.9	10.1
70°-80°	148.5	4.5
80°-90°	26.6	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°	1062.8	32.2
0°-40°	1688.6	51.2
0°-60°	2791.1	84.6
0°-90°	3298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3298.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1426	1426	1426	1426	1426	
5°	1425	1424	1419	1411	1407	135
15°	1342	1346	1342	1336	1327	378
25°	1192	1202	1207	1198	1188	546
35°	959	972	1016	1022	1018	601
45°	742	755	780	815	820	573
55°	520	529	554	585	602	464
65°	305	313	332	355	375	302
75°	122	129	138	145	153	134
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1426.3	1426.3	1426.3	1426.3	1426.3
2.5°	1430.1	1430.7	1427.4	1418.6	1413.1
5°	1424.7	1424.1	1418.6	1411.0	1406.6
7.5°	1408.8	1409.9	1408.2	1397.3	1391.2
10°	1393.4	1394.0	1389.6	1380.8	1373.7
12.5°	1373.7	1373.1	1367.1	1362.7	1351.2
15°	1342.5	1345.8	1342.5	1336.4	1327.1
17.5°	1312.3	1312.3	1314.5	1304.1	1297.0
20°	1278.4	1280.0	1280.0	1271.8	1263.6
22.5°	1238.9	1243.8	1245.5	1236.7	1226.8
25°	1192.3	1201.6	1207.1	1198.4	1187.9
27.5°	1135.9	1150.1	1166.6	1160.0	1148.5
30°	1072.9	1093.7	1121.1	1115.6	1107.4
32.5°	1013.1	1034.0	1071.8	1069.6	1065.2
35°	958.9	972.1	1016.4	1021.9	1018.1
37.5°	907.4	919.5	961.1	973.7	970.4
40°	853.1	866.3	899.2	921.6	922.7
42.5°	799.5	812.1	838.9	871.2	871.2
45°	742.5	755.1	779.7	815.3	819.7
47.5°	686.6	699.7	723.8	759.5	766.6
50°	631.8	643.8	667.9	702.5	713.4
52.5°	574.8	587.9	611.5	643.3	659.2
55°	520.0	528.8	554.5	585.2	602.2
57.5°	463.0	471.2	500.3	526.6	544.1
60°	408.2	418.6	441.1	467.9	488.2
62.5°	355.6	366.6	385.8	409.3	432.3
65°	304.7	312.9	331.5	355.1	375.3
67.5°	255.3	262.5	281.1	297.5	318.9
70°	205.5	214.8	228.5	244.4	258.1
72.5°	165.5	169.3	180.8	192.3	206.6
75°	122.2	128.8	138.1	144.7	152.9
77.5°	87.7	91.5	97.0	102.5	110.1
80°	58.6	60.3	65.2	66.3	72.3
82.5°	35.6	36.7	37.8	38.4	40.5
85°	19.2	19.2	19.2	18.1	18.1
87.5°	11.0	11.0	9.3	7.7	5.5
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)