

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: P554764

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-81-96-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: P554764
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-40-UNV-81-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

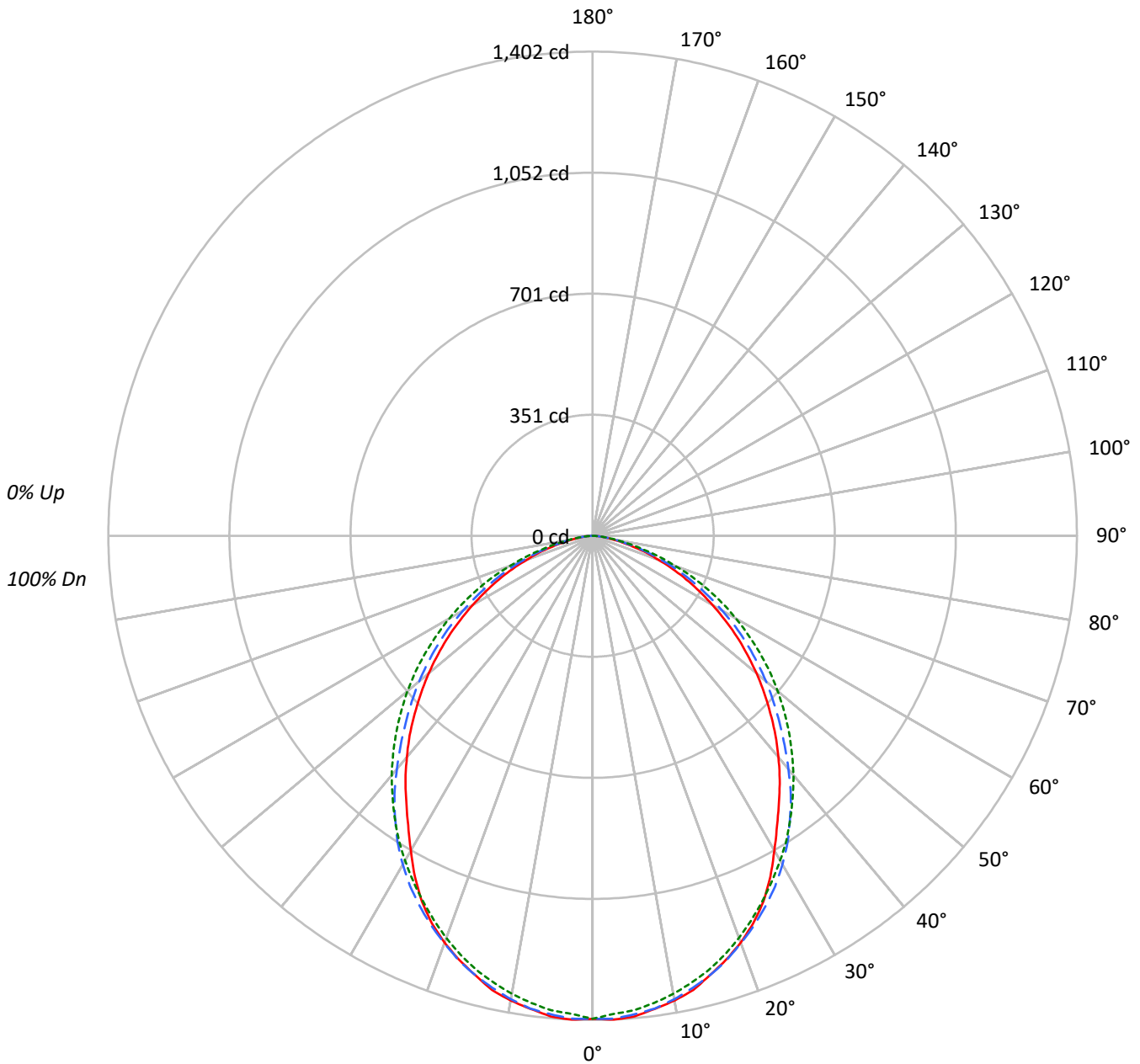
Lumens per Lamp: N/A
Luminaire Lumens: 3234.0 lumens
Efficiency: N/A
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P554764

CATALOG NUMBER: FUSL-12-2-LD4-2HI-40-UNV-81-96-EDD-90

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°	7527	7527	7527
5°	7547	7515	7452
10°	7467	7447	7361
15°	7335	7335	7251
20°	7179	7189	7096
25°	6943	7029	6918
30°	6538	6832	6748
35°	6178	6548	6559
40°	5878	6195	6357
45°	5542	5820	6118
50°	5187	5484	5858
55°	4784	5103	5541
60°	4309	4655	5153
65°	3804	4140	4688
70°	3171	3526	3983
75°	2491	2816	3117
80°	1782	1980	2197
85°	1161	1161	1093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.7	4.1
10°-20°	369.9	11.4
20°-30°	540.6	16.7
30°-40°	613.6	19.0
40°-50°	592.4	18.3
50°-60°	488.7	15.1
60°-70°	325.4	10.1
70°-80°	145.6	4.5
80°-90°	26.0	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°	1042.2	32.2
0°-40°	1655.9	51.2
0°-60°	2736.9	84.6
0°-90°	3234.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3234.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1399	1399	1399	1399	1399	
5°	1397	1396	1391	1384	1379	132
15°	1316	1320	1316	1310	1301	371
25°	1169	1178	1184	1175	1165	535
35°	940	953	997	1002	998	589
45°	728	740	765	800	804	562
55°	510	518	544	574	590	455
65°	299	307	325	348	368	296
75°	120	126	135	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°	1398.6	1398.6	1398.6	1398.6	1398.6
2.5°	1402.4	1402.9	1399.7	1391.1	1385.7
5°	1397.0	1396.5	1391.1	1383.6	1379.3
7.5°	1381.4	1382.5	1380.9	1370.1	1364.2
10°	1366.4	1366.9	1362.6	1354.0	1347.0
12.5°	1347.0	1346.5	1340.6	1336.3	1325.0
15°	1316.4	1319.6	1316.4	1310.5	1301.4
17.5°	1286.9	1286.9	1289.0	1278.8	1271.8
20°	1253.5	1255.2	1255.2	1247.1	1239.0
22.5°	1214.9	1219.7	1221.3	1212.7	1203.0
25°	1169.2	1178.3	1183.7	1175.1	1164.9
27.5°	1113.8	1127.8	1143.9	1137.5	1126.2
30°	1052.1	1072.5	1099.3	1094.0	1085.9
32.5°	993.5	1013.9	1051.0	1048.8	1044.5
35°	940.3	953.2	996.7	1002.1	998.3
37.5°	889.8	901.6	942.4	954.8	951.6
40°	836.6	849.5	881.7	903.8	904.8
42.5°	783.9	796.3	822.6	854.3	854.3
45°	728.1	740.4	764.6	799.5	803.8
47.5°	673.3	686.1	709.8	744.7	751.7
50°	619.5	631.3	655.0	688.8	699.6
52.5°	563.6	576.5	599.6	630.8	646.4
55°	509.9	518.5	543.8	573.8	590.5
57.5°	454.0	462.1	490.6	516.4	533.6
60°	400.3	410.5	432.5	458.9	478.7
62.5°	348.7	359.5	378.3	401.4	423.9
65°	298.7	306.8	325.1	348.2	368.1
67.5°	250.4	257.4	275.6	291.8	312.7
70°	201.5	210.6	224.1	239.6	253.1
72.5°	162.3	166.0	177.3	188.6	202.6
75°	119.8	126.3	135.4	141.9	149.9
77.5°	86.0	89.7	95.1	100.5	108.0
80°	57.5	59.1	63.9	65.0	70.9
82.5°	34.9	36.0	37.1	37.6	39.8
85°	18.8	18.8	18.8	17.7	17.7
87.5°	10.7	10.7	9.1	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)