

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: P554820

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-81-86-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: P554820
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-50-UNV-81-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

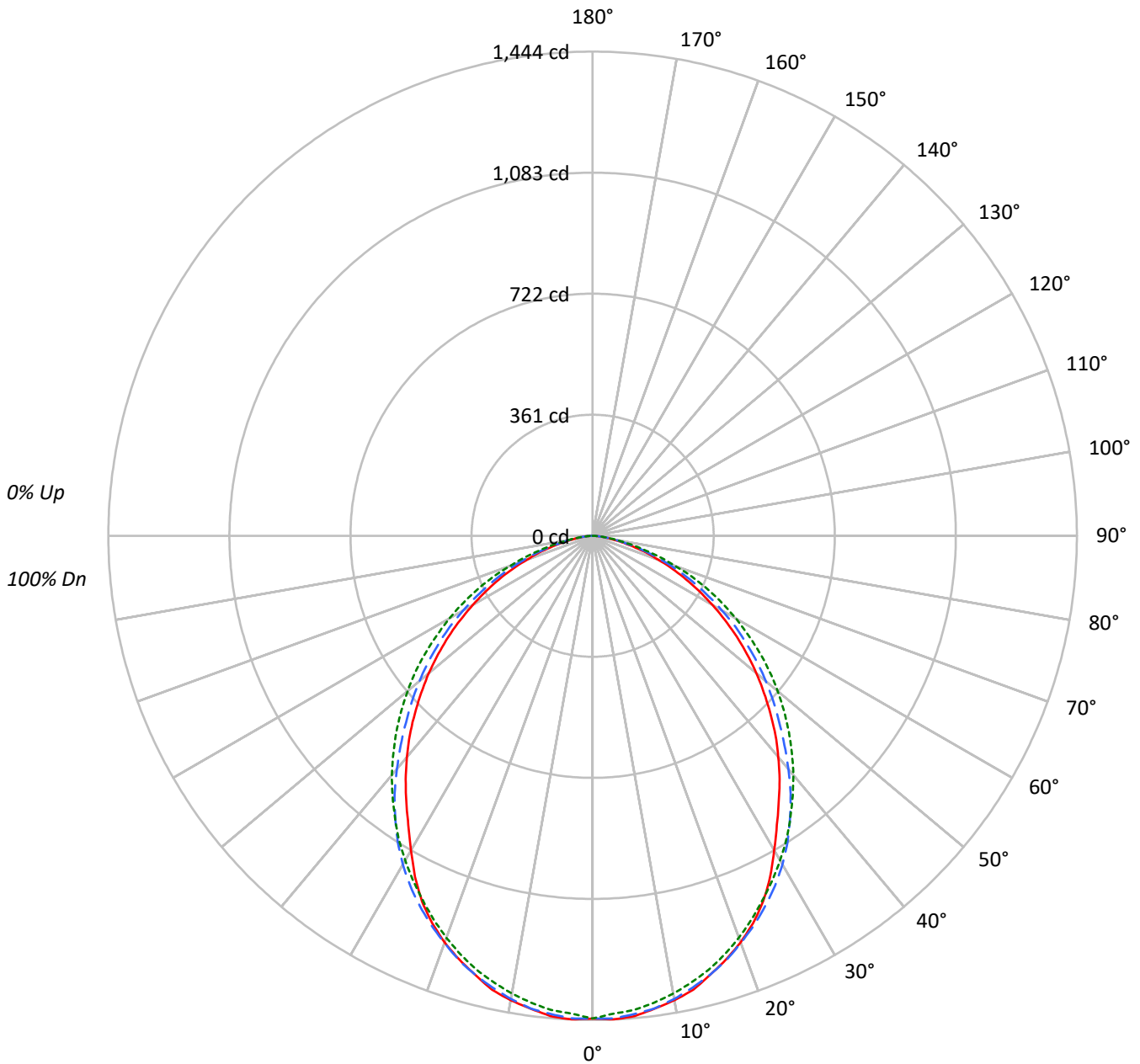
Lumens per Lamp: N/A
Luminaire Lumens: 3329.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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: P554820

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-81-86-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P554820

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-81-86-EDD-90

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°	7748	7748	7748
5°	7769	7736	7670
10°	7686	7665	7578
15°	7550	7550	7464
20°	7391	7400	7305
25°	7147	7236	7121
30°	6730	7032	6947
35°	6359	6741	6752
40°	6050	6376	6544
45°	5704	5991	6298
50°	5339	5645	6029
55°	4925	5252	5704
60°	4436	4792	5304
65°	3916	4261	4825
70°	3264	3629	4099
75°	2564	2899	3209
80°	1835	2039	2263
85°	1198	1198	1130



TEST NUMBER: P554820

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-81-86-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.6	4.1
10°-20°	380.8	11.4
20°-30°	556.5	16.7
30°-40°	631.7	19.0
40°-50°	609.8	18.3
50°-60°	503.0	15.1
60°-70°	335.0	10.1
70°-80°	149.9	4.5
80°-90°	26.8	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°	1072.8	32.2
0°-40°	1704.5	51.2
0°-60°	2817.3	84.6
0°-90°	3329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1438	1438	1432	1424	1420	136
15°	1355	1358	1355	1349	1340	382
25°	1204	1213	1218	1210	1199	551
35°	968	981	1026	1032	1028	606
45°	749	762	787	823	827	578
55°	525	534	560	591	608	468
65°	308	316	335	358	379	305
75°	123	130	139	146	154	135
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



TEST NUMBER: P554820

CATALOG NUMBER: FUSL-12-2-LD4-2HI-50-UNV-81-86-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1439.7	1439.7	1439.7	1439.7	1439.7
2.5°	1443.6	1444.1	1440.8	1432.0	1426.4
5°	1438.0	1437.5	1432.0	1424.2	1419.8
7.5°	1422.0	1423.1	1421.5	1410.4	1404.3
10°	1406.5	1407.1	1402.6	1393.8	1386.6
12.5°	1386.6	1386.1	1380.0	1375.5	1363.9
15°	1355.1	1358.4	1355.1	1349.0	1339.6
17.5°	1324.7	1324.7	1326.9	1316.4	1309.2
20°	1290.4	1292.0	1292.0	1283.7	1275.4
22.5°	1250.5	1255.5	1257.2	1248.3	1238.4
25°	1203.5	1212.9	1218.5	1209.6	1199.1
27.5°	1146.6	1160.9	1177.5	1170.9	1159.3
30°	1083.0	1104.0	1131.6	1126.1	1117.8
32.5°	1022.7	1043.7	1081.9	1079.6	1075.2
35°	967.9	981.2	1026.0	1031.5	1027.7
37.5°	915.9	928.1	970.1	982.8	979.5
40°	861.2	874.4	907.6	930.3	931.4
42.5°	807.0	819.7	846.8	879.4	879.4
45°	749.4	762.2	787.1	823.0	827.4
47.5°	693.0	706.3	730.6	766.6	773.8
50°	637.7	649.9	674.2	709.1	720.1
52.5°	580.2	593.5	617.3	649.3	665.4
55°	524.9	533.7	559.7	590.7	607.9
57.5°	467.4	475.7	505.0	531.5	549.2
60°	412.1	422.6	445.2	472.3	492.8
62.5°	359.0	370.0	389.4	413.2	436.4
65°	307.5	315.8	334.6	358.4	378.9
67.5°	257.7	264.9	283.7	300.3	321.9
70°	207.4	216.8	230.6	246.7	260.5
72.5°	167.0	170.9	182.5	194.1	208.5
75°	123.3	130.0	139.4	146.0	154.3
77.5°	88.5	92.4	97.9	103.4	111.2
80°	59.2	60.8	65.8	66.9	73.0
82.5°	36.0	37.1	38.2	38.7	40.9
85°	19.4	19.4	19.4	18.3	18.3
87.5°	11.1	11.1	9.4	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)