

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: P554700

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-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: P554700
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-35-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 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

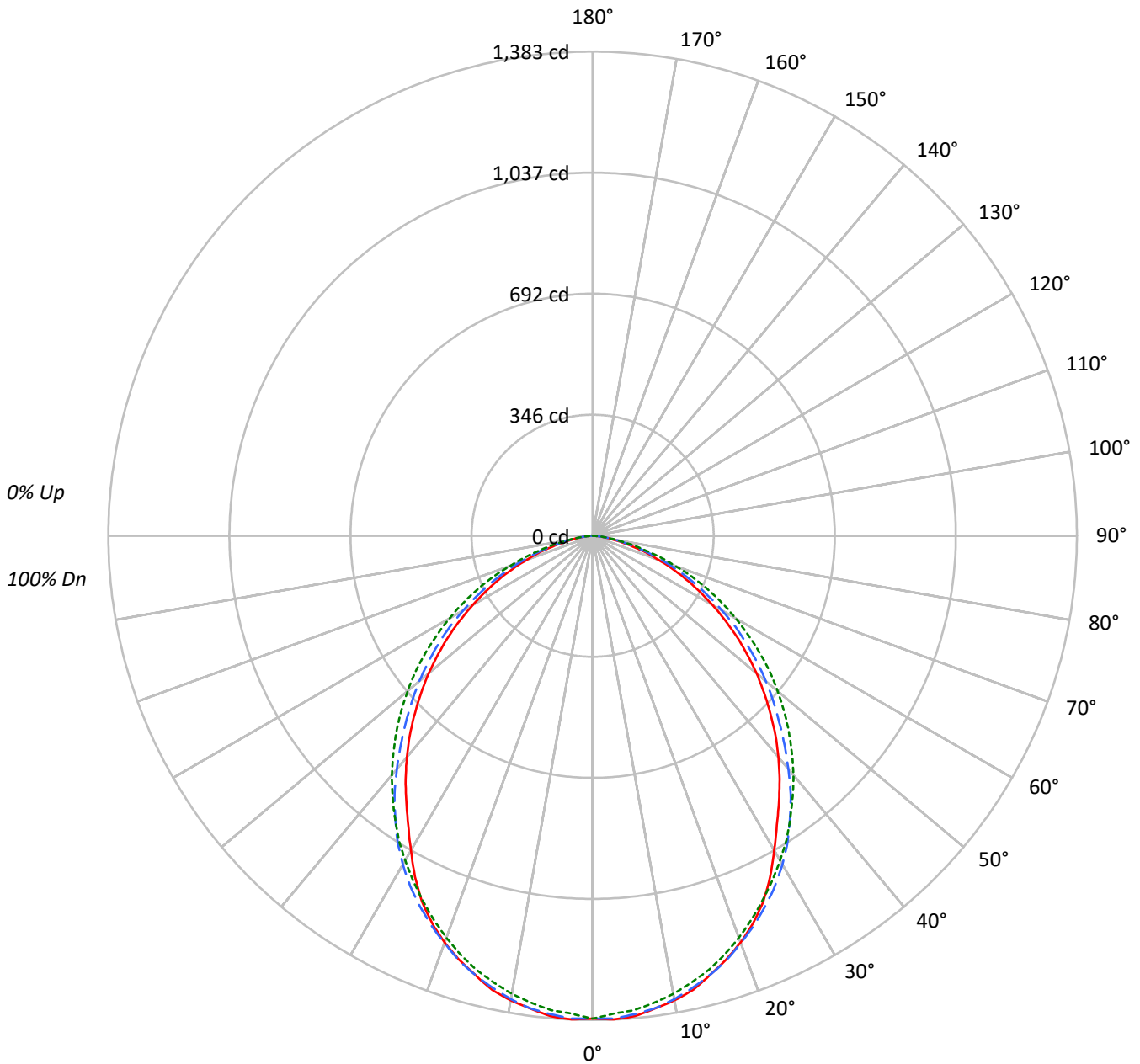
Lumens per Lamp: N/A
Luminaire Lumens: 3189.0 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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°	7423	7423	7423
5°	7443	7411	7348
10°	7364	7343	7259
15°	7233	7233	7150
20°	7080	7089	6998
25°	6846	6931	6821
30°	6447	6737	6655
35°	6092	6457	6468
40°	5796	6109	6268
45°	5464	5739	6033
50°	5115	5408	5776
55°	4718	5031	5464
60°	4249	4591	5082
65°	3752	4083	4621
70°	3127	3476	3928
75°	2458	2776	3073
80°	1757	1956	2166
85°	1142	1142	1081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.9	4.1
10°-20°	364.8	11.4
20°-30°	533.1	16.7
30°-40°	605.1	19.0
40°-50°	584.1	18.3
50°-60°	481.9	15.1
60°-70°	320.9	10.1
70°-80°	143.6	4.5
80°-90°	25.7	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°	1027.7	32.2
0°-40°	1632.8	51.2
0°-60°	2698.8	84.6
0°-90°	3189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3189.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1379	1379	1379	1379	1379	
5°	1378	1377	1372	1364	1360	130
15°	1298	1301	1298	1292	1283	366
25°	1153	1162	1167	1159	1149	528
35°	927	940	983	988	984	581
45°	718	730	754	788	793	554
55°	503	511	536	566	582	449
65°	295	302	321	343	363	292
75°	118	124	134	140	148	129
85°	18	18	18	18	18	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1379.2	1379.2	1379.2	1379.2	1379.2
2.5°	1382.9	1383.4	1380.2	1371.7	1366.4
5°	1377.6	1377.0	1371.7	1364.3	1360.1
7.5°	1362.2	1363.3	1361.7	1351.1	1345.3
10°	1347.4	1347.9	1343.7	1335.2	1328.3
12.5°	1328.3	1327.8	1321.9	1317.7	1306.6
15°	1298.1	1301.3	1298.1	1292.3	1283.3
17.5°	1269.0	1269.0	1271.1	1261.0	1254.1
20°	1236.1	1237.7	1237.7	1229.7	1221.8
22.5°	1198.0	1202.7	1204.3	1195.8	1186.3
25°	1152.9	1161.9	1167.2	1158.7	1148.7
27.5°	1098.3	1112.1	1128.0	1121.7	1110.5
30°	1037.4	1057.6	1084.0	1078.7	1070.8
32.5°	979.7	999.8	1036.4	1034.2	1030.0
35°	927.2	939.9	982.8	988.1	984.4
37.5°	877.4	889.1	929.3	941.5	938.3
40°	825.0	837.7	869.5	891.2	892.2
42.5°	773.0	785.2	811.2	842.4	842.4
45°	717.9	730.1	754.0	788.4	792.6
47.5°	663.9	676.6	699.9	734.4	741.2
50°	610.9	622.6	645.9	679.2	689.8
52.5°	555.8	568.5	591.3	622.0	637.4
55°	502.8	511.3	536.2	565.9	582.3
57.5°	447.7	455.7	483.7	509.2	526.1
60°	394.7	404.8	426.5	452.5	472.1
62.5°	343.9	354.5	373.0	395.8	418.0
65°	294.6	302.5	320.6	343.3	362.9
67.5°	246.9	253.8	271.8	287.7	308.4
70°	198.7	207.7	220.9	236.3	249.6
72.5°	160.0	163.7	174.8	186.0	199.7
75°	118.2	124.5	133.5	139.9	147.8
77.5°	84.8	88.5	93.8	99.1	106.5
80°	56.7	58.3	63.1	64.1	69.9
82.5°	34.4	35.5	36.6	37.1	39.2
85°	18.5	18.5	18.5	17.5	17.5
87.5°	10.6	10.6	9.0	7.4	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)