

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: P556796

Luminaire Tested: **FUSL-12-4-LD4-1STD-40-UNV-80-96-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: P556796
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-12-4-LD4-1STD-40-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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

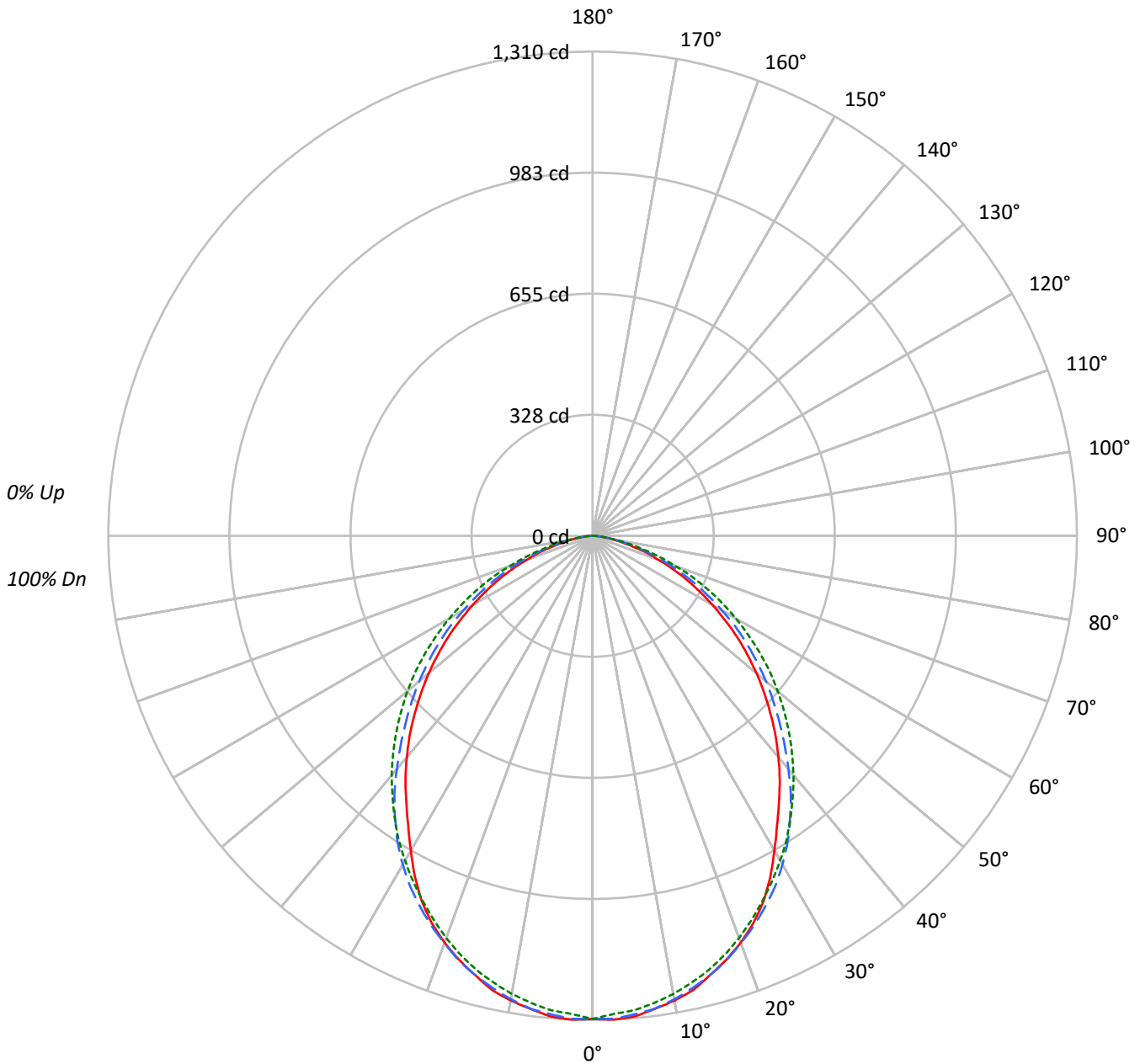
Lumens per Lamp: N/A
Luminaire Lumens: 3022.0 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	3517	3517	3517
5°	3526	3511	3482
10°	3489	3479	3439
15°	3427	3427	3388
20°	3355	3359	3316
25°	3244	3284	3232
30°	3055	3192	3153
35°	2887	3060	3065
40°	2746	2894	2970
45°	2589	2719	2858
50°	2424	2562	2737
55°	2236	2384	2589
60°	2013	2175	2408
65°	1778	1934	2190
70°	1482	1648	1861
75°	1164	1315	1457
80°	832	925	1027
85°	543	543	513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	4.1
10°-20°	345.7	11.4
20°-30°	505.2	16.7
30°-40°	573.4	19.0
40°-50°	553.5	18.3
50°-60°	456.6	15.1
60°-70°	304.1	10.1
70°-80°	136.1	4.5
80°-90°	24.3	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°	973.9	32.2
0°-40°	1547.3	51.2
0°-60°	2557.5	84.6
0°-90°	3022.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3022.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1307	1307	1307	1307	1307	
5°	1305	1305	1300	1293	1289	124
15°	1230	1233	1230	1225	1216	347
25°	1092	1101	1106	1098	1088	500
35°	879	891	931	936	933	551
45°	680	692	714	747	751	525
55°	476	484	508	536	552	425
65°	279	287	304	325	344	277
75°	112	118	126	133	140	122
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1306.9	1306.9	1306.9	1306.9	1306.9
2.5°	1310.5	1311.0	1307.9	1299.9	1294.9
5°	1305.4	1304.9	1299.9	1292.9	1288.9
7.5°	1290.9	1291.9	1290.4	1280.3	1274.8
10°	1276.8	1277.3	1273.3	1265.3	1258.7
12.5°	1258.7	1258.2	1252.7	1248.7	1238.2
15°	1230.1	1233.1	1230.1	1224.6	1216.1
17.5°	1202.5	1202.5	1204.5	1195.0	1188.4
20°	1171.4	1172.9	1172.9	1165.3	1157.8
22.5°	1135.2	1139.7	1141.2	1133.2	1124.2
25°	1092.5	1101.1	1106.1	1098.1	1088.5
27.5°	1040.8	1053.9	1068.9	1062.9	1052.4
30°	983.1	1002.2	1027.3	1022.3	1014.7
32.5°	928.4	947.4	982.1	980.1	976.1
35°	878.7	890.7	931.4	936.4	932.9
37.5°	831.5	842.5	880.7	892.2	889.2
40°	781.8	793.8	823.9	844.5	845.5
42.5°	732.5	744.1	768.7	798.3	798.3
45°	680.3	691.9	714.5	747.1	751.1
47.5°	629.1	641.2	663.3	695.9	702.4
50°	578.9	590.0	612.0	643.7	653.7
52.5°	526.7	538.7	560.3	589.5	604.0
55°	476.5	484.5	508.1	536.2	551.8
57.5°	424.3	431.8	458.4	482.5	498.6
60°	374.1	383.6	404.2	428.8	447.4
62.5°	325.9	335.9	353.5	375.1	396.1
65°	279.2	286.7	303.8	325.4	343.9
67.5°	234.0	240.5	257.6	272.6	292.2
70°	188.3	196.8	209.4	223.9	236.5
72.5°	151.6	155.1	165.7	176.2	189.3
75°	112.0	118.0	126.5	132.6	140.1
77.5°	80.3	83.8	88.9	93.9	100.9
80°	53.7	55.2	59.7	60.8	66.3
82.5°	32.6	33.6	34.6	35.1	37.2
85°	17.6	17.6	17.6	16.6	16.6
87.5°	10.0	10.0	8.5	7.0	5.0
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)