

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: P556743

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-81-87-EDD**

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: P556743
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-35-UNV-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

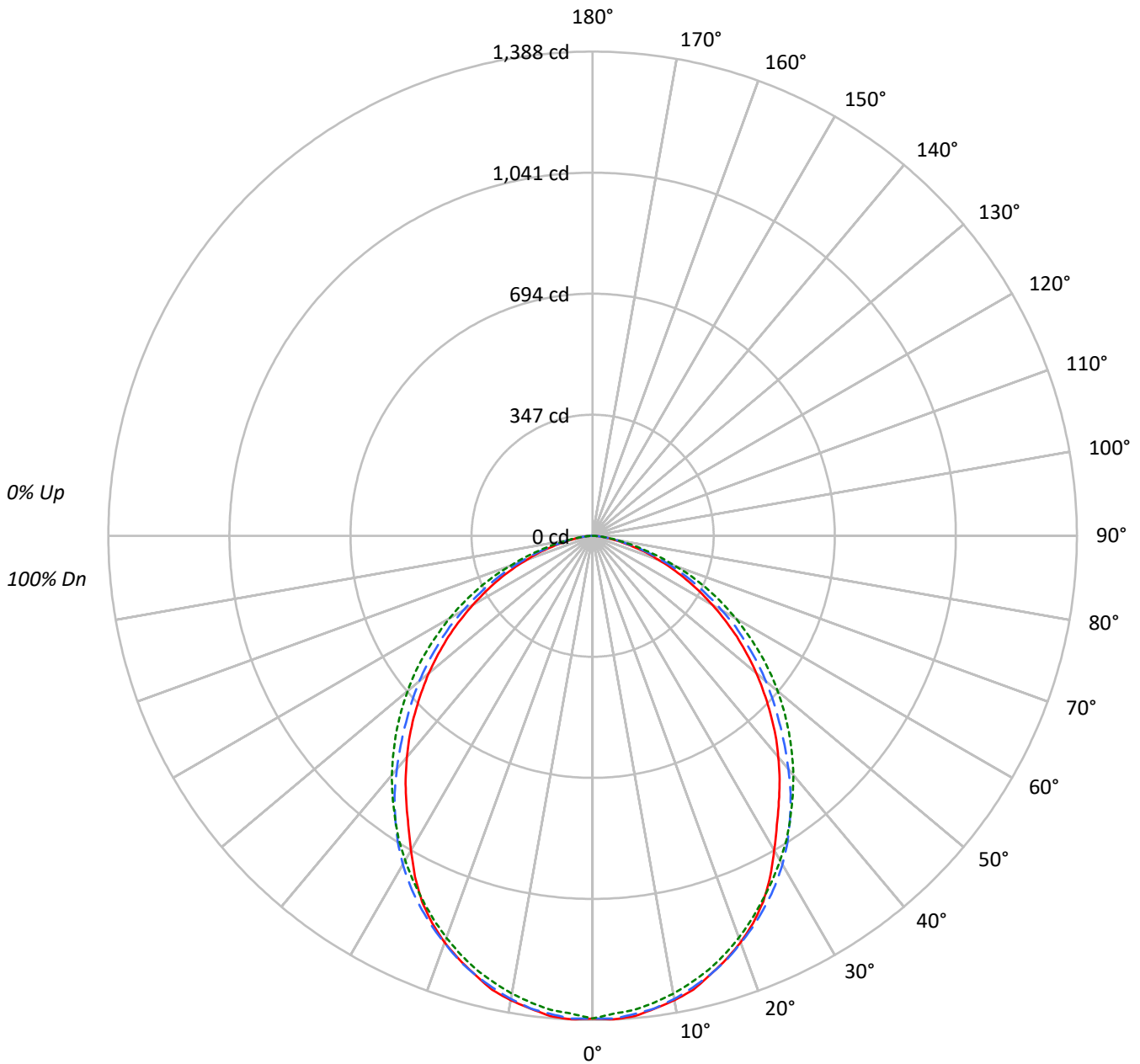
Lumens per Lamp: N/A
Luminaire Lumens: 3200.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (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: P556743

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-81-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556743

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-81-87-EDD

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°	3724	3724	3724
5°	3734	3718	3687
10°	3694	3684	3642
15°	3629	3629	3587
20°	3552	3557	3511
25°	3435	3478	3422
30°	3235	3380	3339
35°	3056	3240	3245
40°	2908	3065	3145
45°	2742	2879	3027
50°	2566	2713	2898
55°	2367	2524	2741
60°	2132	2303	2549
65°	1882	2048	2319
70°	1569	1744	1970
75°	1233	1393	1542
80°	882	981	1088
85°	574	574	540



TEST NUMBER: P556743

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-81-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	4.1
10°-20°	366.1	11.4
20°-30°	534.9	16.7
30°-40°	607.2	19.0
40°-50°	586.1	18.3
50°-60°	483.5	15.1
60°-70°	322.0	10.1
70°-80°	144.1	4.5
80°-90°	25.8	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°	1031.3	32.2
0°-40°	1638.5	51.2
0°-60°	2708.1	84.6
0°-90°	3200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3200.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1384	1384	1384	1384	1384	
5°	1382	1382	1376	1369	1365	131
15°	1303	1306	1303	1297	1288	367
25°	1157	1166	1171	1163	1153	530
35°	930	943	986	992	988	583
45°	720	733	757	791	795	556
55°	504	513	538	568	584	450
65°	296	304	322	344	364	293
75°	119	125	134	140	148	130
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



TEST NUMBER: P556743

CATALOG NUMBER: FUSL-12-4-LD4-1STD-35-UNV-81-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1383.9	1383.9	1383.9	1383.9	1383.9
2.5°	1387.6	1388.2	1385.0	1376.5	1371.2
5°	1382.3	1381.8	1376.5	1369.0	1364.8
7.5°	1366.9	1368.0	1366.4	1355.7	1349.9
10°	1352.0	1352.5	1348.3	1339.8	1332.9
12.5°	1332.9	1332.3	1326.5	1322.2	1311.1
15°	1302.6	1305.8	1302.6	1296.7	1287.7
17.5°	1273.3	1273.3	1275.5	1265.4	1258.4
20°	1240.4	1242.0	1242.0	1234.0	1226.0
22.5°	1202.1	1206.9	1208.5	1200.0	1190.4
25°	1156.9	1165.9	1171.3	1162.7	1152.6
27.5°	1102.1	1116.0	1131.9	1125.5	1114.4
30°	1041.0	1061.2	1087.8	1082.5	1074.5
32.5°	983.0	1003.2	1039.9	1037.8	1033.6
35°	930.4	943.2	986.2	991.6	987.8
37.5°	880.4	892.1	932.5	944.8	941.6
40°	827.8	840.6	872.5	894.3	895.3
42.5°	775.7	787.9	814.0	845.3	845.3
45°	720.4	732.6	756.6	791.1	795.4
47.5°	666.2	678.9	702.3	736.9	743.8
50°	613.0	624.7	648.1	681.6	692.2
52.5°	557.7	570.5	593.3	624.2	639.6
55°	504.5	513.1	538.0	567.8	584.3
57.5°	449.3	457.2	485.4	510.9	527.9
60°	396.1	406.2	428.0	454.0	473.7
62.5°	345.0	355.7	374.3	397.2	419.5
65°	295.6	303.6	321.7	344.5	364.2
67.5°	247.8	254.7	272.7	288.7	309.4
70°	199.4	208.4	221.7	237.1	250.4
72.5°	160.6	164.3	175.4	186.6	200.4
75°	118.6	124.9	134.0	140.4	148.3
77.5°	85.1	88.8	94.1	99.4	106.9
80°	56.9	58.5	63.3	64.3	70.2
82.5°	34.6	35.6	36.7	37.2	39.3
85°	18.6	18.6	18.6	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)