

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: P558200

Luminaire Tested: **FUSL-12-4-LD4-3STD-30-UNV-80-88-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: P558200
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-LD4-3STD-30-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

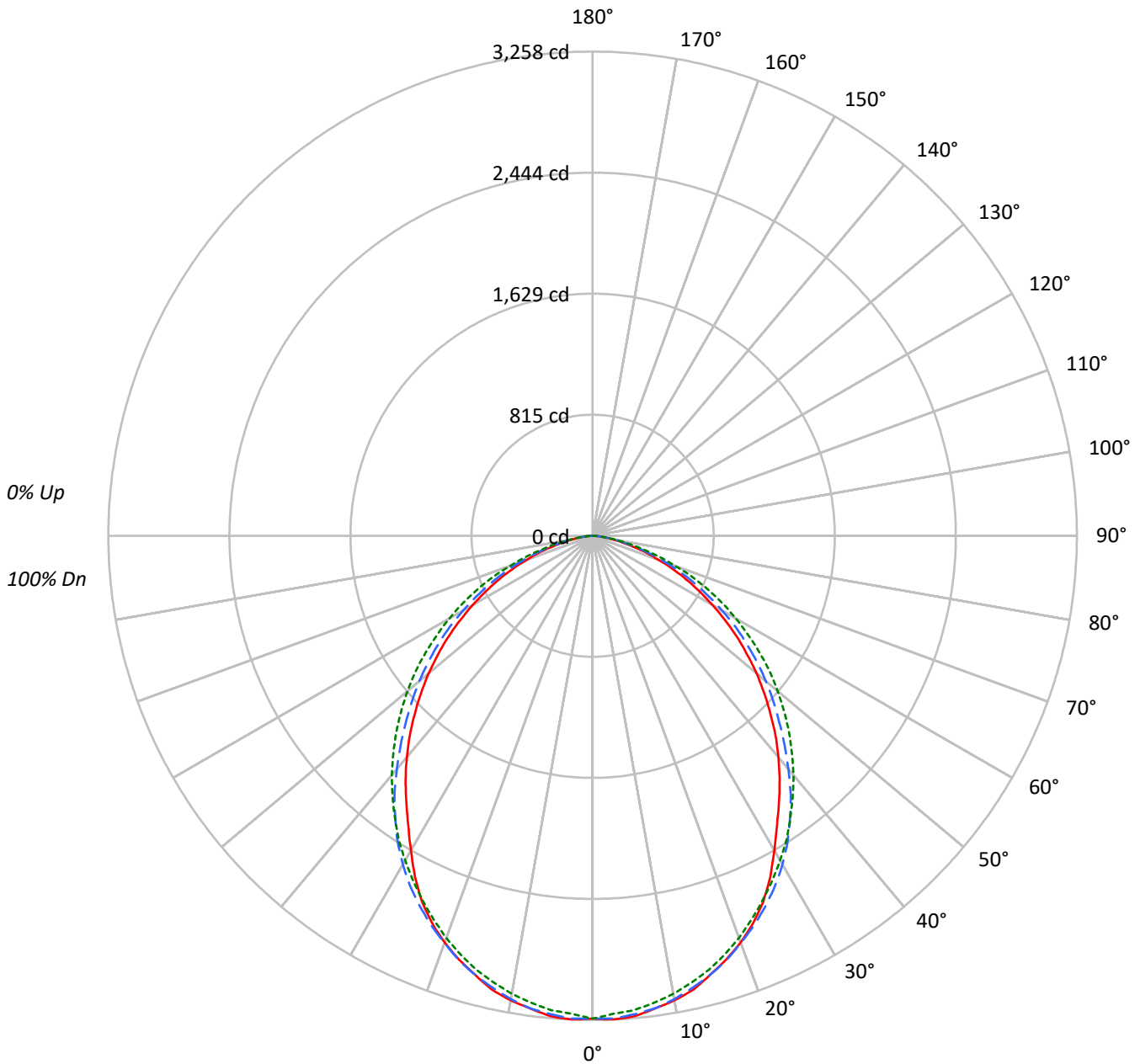
Lumens per Lamp: N/A
Luminaire Lumens: 7513.0 lumens
Efficiency: N/A
Efficacy: 75.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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

TEST NUMBER: P558200

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-88-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558200

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-88-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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°	8744	8744	8744
5°	8767	8730	8655
10°	8674	8650	8551
15°	8520	8520	8422
20°	8340	8350	8243
25°	8065	8165	8035
30°	7594	7936	7839
35°	7176	7607	7619
40°	6827	7196	7384
45°	6437	6760	7107
50°	6025	6370	6804
55°	5558	5926	6436
60°	5005	5408	5986
65°	4419	4809	5444
70°	3683	4095	4626
75°	2895	3271	3621
80°	2070	2301	2554
85°	1349	1349	1272



TEST NUMBER: P558200

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-88-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.9	4.1
10°-20°	859.4	11.4
20°-30°	1255.9	16.7
30°-40°	1425.6	19.0
40°-50°	1376.2	18.3
50°-60°	1135.2	15.1
60°-70°	756.0	10.1
70°-80°	338.3	4.5
80°-90°	60.5	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°	2421.2	32.2
0°-40°	3846.8	51.2
0°-60°	6358.2	84.6
0°-90°	7513.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7513.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3249	3249	3249	3249	3249	
5°	3245	3244	3232	3214	3204	307
15°	3058	3066	3058	3044	3023	862
25°	2716	2737	2750	2730	2706	1244
35°	2184	2214	2316	2328	2319	1369
45°	1691	1720	1776	1857	1867	1305
55°	1185	1205	1263	1333	1372	1057
65°	694	713	755	809	855	688
75°	278	293	315	330	348	304
85°	44	44	44	41	41	59
90°	0	0	0	0	0	



TEST NUMBER: P558200

CATALOG NUMBER: FUSL-12-4-LD4-3STD-30-UNV-80-88-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3249.2	3249.2	3249.2	3249.2	3249.2
2.5°	3257.9	3259.2	3251.7	3231.7	3219.2
5°	3245.4	3244.2	3231.7	3214.2	3204.2
7.5°	3209.2	3211.7	3208.0	3183.0	3169.3
10°	3174.3	3175.5	3165.5	3145.6	3129.3
12.5°	3129.3	3128.1	3114.4	3104.4	3078.2
15°	3058.2	3065.7	3058.2	3044.5	3023.2
17.5°	2989.5	2989.5	2994.5	2970.8	2954.6
20°	2912.2	2915.9	2915.9	2897.2	2878.5
22.5°	2822.3	2833.5	2837.3	2817.3	2794.8
25°	2716.2	2737.4	2749.9	2729.9	2706.2
27.5°	2587.6	2620.1	2657.5	2642.5	2616.3
30°	2444.1	2491.5	2553.9	2541.4	2522.7
32.5°	2308.0	2355.4	2441.6	2436.6	2426.6
35°	2184.4	2214.4	2315.5	2328.0	2319.2
37.5°	2067.1	2094.6	2189.4	2218.1	2210.6
40°	1943.5	1973.5	2048.4	2099.5	2102.0
42.5°	1821.2	1849.9	1911.1	1984.7	1984.7
45°	1691.4	1720.1	1776.3	1857.4	1867.4
47.5°	1564.0	1594.0	1648.9	1730.1	1746.3
50°	1439.2	1466.7	1521.6	1600.2	1625.2
52.5°	1309.4	1339.4	1393.0	1465.4	1501.6
55°	1184.6	1204.6	1263.2	1333.1	1371.8
57.5°	1054.8	1073.5	1139.6	1199.6	1239.5
60°	929.9	953.7	1004.8	1066.0	1112.2
62.5°	810.1	835.1	878.8	932.4	984.9
65°	694.0	712.7	755.2	808.9	855.0
67.5°	581.7	597.9	640.3	677.8	726.5
70°	468.1	489.3	520.5	556.7	587.9
72.5°	377.0	385.7	411.9	438.1	470.6
75°	278.4	293.3	314.6	329.5	348.3
77.5°	199.7	208.5	220.9	233.4	250.9
80°	133.6	137.3	148.5	151.0	164.8
82.5°	81.1	83.6	86.1	87.4	92.4
85°	43.7	43.7	43.7	41.2	41.2
87.5°	25.0	25.0	21.2	17.5	12.5
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)