

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: P554450

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-82-85-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: P554450
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-LD4-1STD-35-UNV-82-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

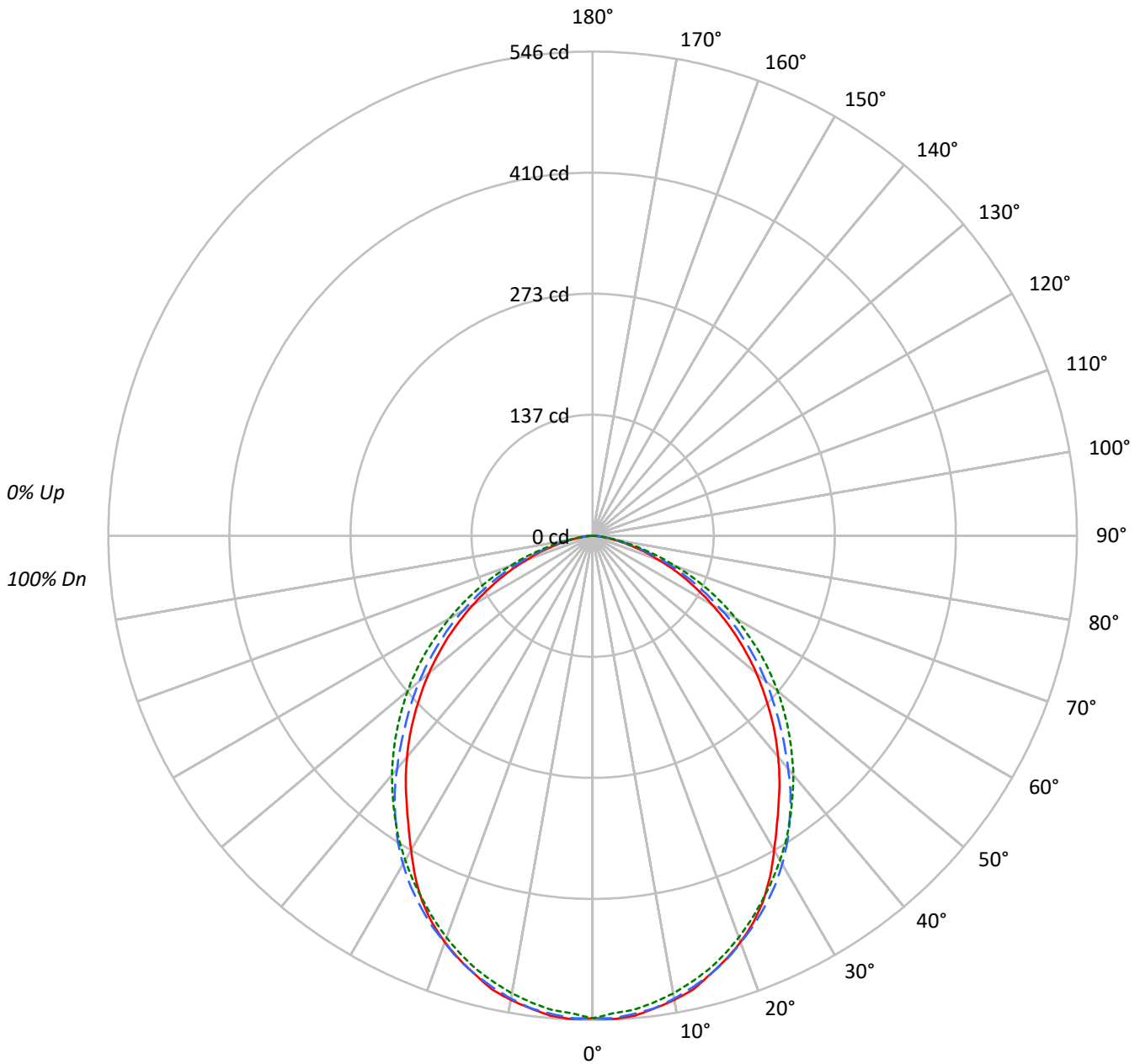
Lumens per Lamp: N/A
Luminaire Lumens: 1258.0 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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: P554450

CATALOG NUMBER: FUSL-12-2-LD4-1STD-35-UNV-82-85-EDD-90

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°	2928	2928	2928
5°	2936	2923	2898
10°	2905	2896	2864
15°	2853	2853	2820
20°	2793	2796	2761
25°	2701	2734	2691
30°	2543	2657	2625
35°	2403	2547	2551
40°	2286	2410	2473
45°	2156	2264	2380
50°	2018	2133	2278
55°	1862	1985	2155
60°	1676	1812	2004
65°	1480	1611	1824
70°	1234	1372	1548
75°	969	1096	1212
80°	694	772	855
85°	451	451	426



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	4.1
10°-20°	143.9	11.4
20°-30°	210.3	16.7
30°-40°	238.7	19.0
40°-50°	230.4	18.3
50°-60°	190.1	15.1
60°-70°	126.6	10.1
70°-80°	56.7	4.5
80°-90°	10.1	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°	405.4	32.2
0°-40°	644.1	51.2
0°-60°	1064.6	84.6
0°-90°	1258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	544	544	544	544	544	
5°	543	543	541	538	536	51
15°	512	513	512	510	506	144
25°	455	458	460	457	453	208
35°	366	371	388	390	388	229
45°	283	288	297	311	313	219
55°	198	202	212	223	230	177
65°	116	119	126	135	143	115
75°	47	49	53	55	58	51
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	544.1	544.1	544.1	544.1	544.1
2.5°	545.5	545.7	544.5	541.1	539.0
5°	543.4	543.2	541.1	538.2	536.5
7.5°	537.4	537.8	537.2	533.0	530.7
10°	531.5	531.7	530.0	526.7	524.0
12.5°	524.0	523.8	521.5	519.8	515.4
15°	512.1	513.3	512.1	509.8	506.2
17.5°	500.6	500.6	501.4	497.4	494.7
20°	487.6	488.2	488.2	485.1	482.0
22.5°	472.6	474.5	475.1	471.7	468.0
25°	454.8	458.4	460.4	457.1	453.1
27.5°	433.3	438.7	445.0	442.5	438.1
30°	409.2	417.2	427.6	425.5	422.4
32.5°	386.5	394.4	408.8	408.0	406.3
35°	365.8	370.8	387.7	389.8	388.3
37.5°	346.1	350.7	366.6	371.4	370.2
40°	325.4	330.4	343.0	351.6	352.0
42.5°	304.9	309.8	320.0	332.3	332.3
45°	283.2	288.0	297.4	311.0	312.7
47.5°	261.9	266.9	276.1	289.7	292.4
50°	241.0	245.6	254.8	268.0	272.1
52.5°	219.3	224.3	233.3	245.4	251.4
55°	198.4	201.7	211.5	223.2	229.7
57.5°	176.6	179.7	190.8	200.9	207.5
60°	155.7	159.7	168.3	178.5	186.2
62.5°	135.6	139.8	147.1	156.1	164.9
65°	116.2	119.3	126.5	135.4	143.2
67.5°	97.4	100.1	107.2	113.5	121.6
70°	78.4	81.9	87.2	93.2	98.4
72.5°	63.1	64.6	69.0	73.4	78.8
75°	46.6	49.1	52.7	55.2	58.3
77.5°	33.4	34.9	37.0	39.1	42.0
80°	22.4	23.0	24.9	25.3	27.6
82.5°	13.6	14.0	14.4	14.6	15.5
85°	7.3	7.3	7.3	6.9	6.9
87.5°	4.2	4.2	3.6	2.9	2.1
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)