

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: P554438

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-81-87-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: P554438
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-81-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375
CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

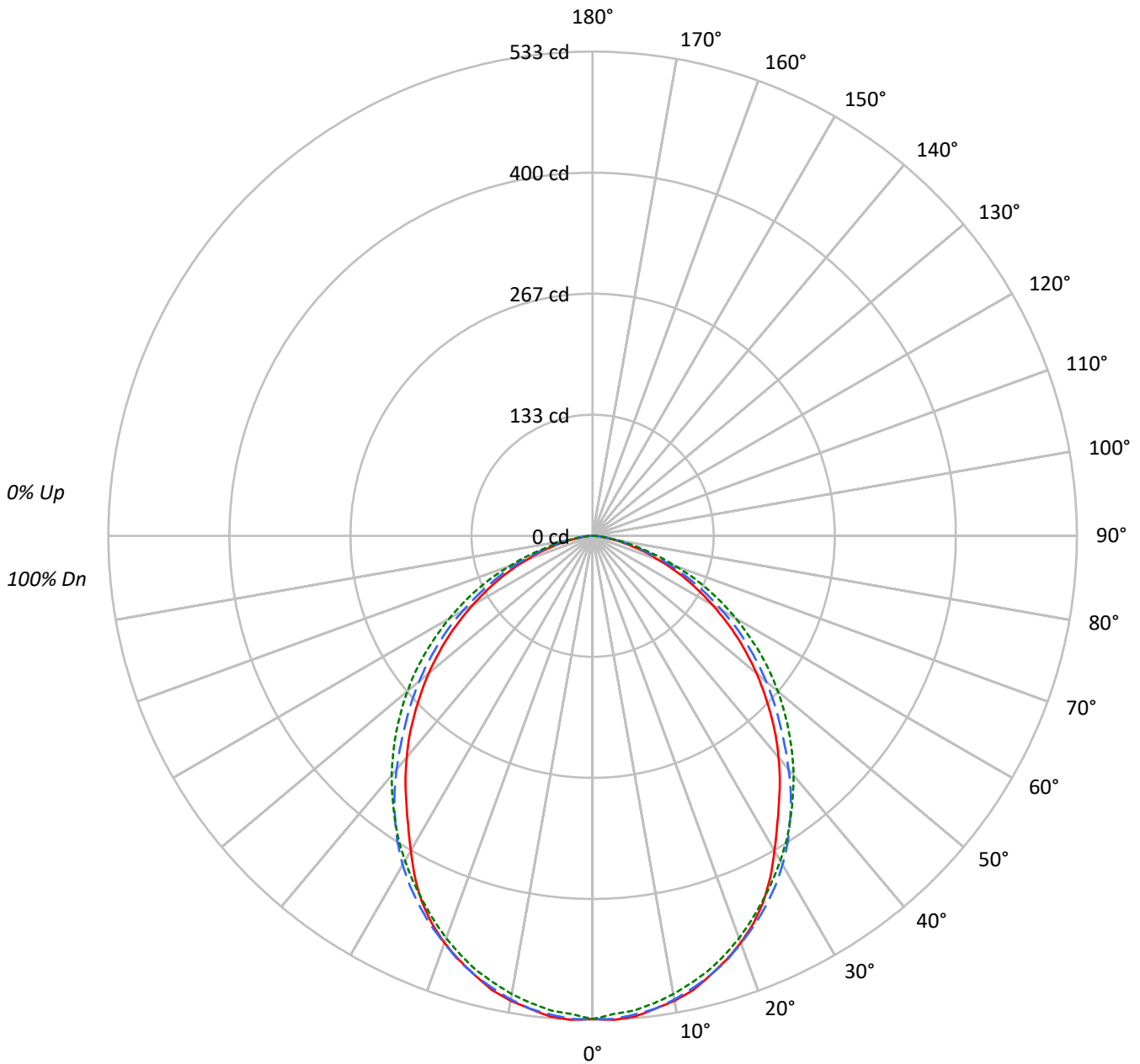
Lumens per Lamp: N/A
Luminaire Lumens: 1230.0 lumens
Efficiency: N/A
Efficacy: 74.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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

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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°	2863	2863	2863
5°	2870	2858	2834
10°	2840	2833	2800
15°	2790	2790	2758
20°	2731	2734	2699
25°	2641	2673	2631
30°	2486	2598	2567
35°	2349	2491	2495
40°	2236	2356	2418
45°	2108	2213	2327
50°	1973	2086	2228
55°	1819	1940	2107
60°	1638	1771	1960
65°	1447	1574	1783
70°	1205	1341	1515
75°	948	1071	1185
80°	679	753	837
85°	445	445	414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	4.1
10°-20°	140.7	11.4
20°-30°	205.6	16.7
30°-40°	233.4	19.0
40°-50°	225.3	18.3
50°-60°	185.9	15.1
60°-70°	123.8	10.1
70°-80°	55.4	4.5
80°-90°	9.9	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°	396.4	32.2
0°-40°	629.8	51.2
0°-60°	1040.9	84.6
0°-90°	1230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1230.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	532	532	532	532	532	
5°	531	531	529	526	525	50
15°	501	502	501	498	495	141
25°	445	448	450	447	443	204
35°	358	362	379	381	380	224
45°	277	282	291	304	306	214
55°	194	197	207	218	225	173
65°	114	117	124	132	140	113
75°	46	48	52	54	57	50
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°	531.9	531.9	531.9	531.9	531.9
2.5°	533.4	533.6	532.4	529.1	527.0
5°	531.3	531.1	529.1	526.2	524.6
7.5°	525.4	525.8	525.2	521.1	518.9
10°	519.7	519.9	518.3	515.0	512.3
12.5°	512.3	512.1	509.9	508.2	503.9
15°	500.7	501.9	500.7	498.4	495.0
17.5°	489.4	489.4	490.3	486.4	483.7
20°	476.8	477.4	477.4	474.3	471.2
22.5°	462.1	463.9	464.5	461.2	457.6
25°	444.7	448.2	450.2	446.9	443.0
27.5°	423.6	428.9	435.1	432.6	428.3
30°	400.1	407.9	418.1	416.1	413.0
32.5°	377.9	385.6	399.7	398.9	397.3
35°	357.6	362.5	379.1	381.1	379.7
37.5°	338.4	342.9	358.4	363.1	361.9
40°	318.2	323.1	335.4	343.7	344.1
42.5°	298.2	302.9	312.9	324.9	324.9
45°	276.9	281.6	290.8	304.1	305.7
47.5°	256.1	261.0	270.0	283.2	285.9
50°	235.6	240.1	249.1	262.0	266.1
52.5°	214.4	219.3	228.1	239.9	245.8
55°	193.9	197.2	206.8	218.3	224.6
57.5°	172.7	175.7	186.6	196.4	202.9
60°	152.2	156.1	164.5	174.5	182.1
62.5°	132.6	136.7	143.9	152.7	161.2
65°	113.6	116.7	123.6	132.4	140.0
67.5°	95.2	97.9	104.8	111.0	118.9
70°	76.6	80.1	85.2	91.1	96.3
72.5°	61.7	63.1	67.4	71.7	77.0
75°	45.6	48.0	51.5	54.0	57.0
77.5°	32.7	34.1	36.2	38.2	41.1
80°	21.9	22.5	24.3	24.7	27.0
82.5°	13.3	13.7	14.1	14.3	15.1
85°	7.2	7.2	7.2	6.7	6.7
87.5°	4.1	4.1	3.5	2.9	2.0
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)