

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: P554531

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-93-85-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: P554531
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-40-UNV-93-85-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

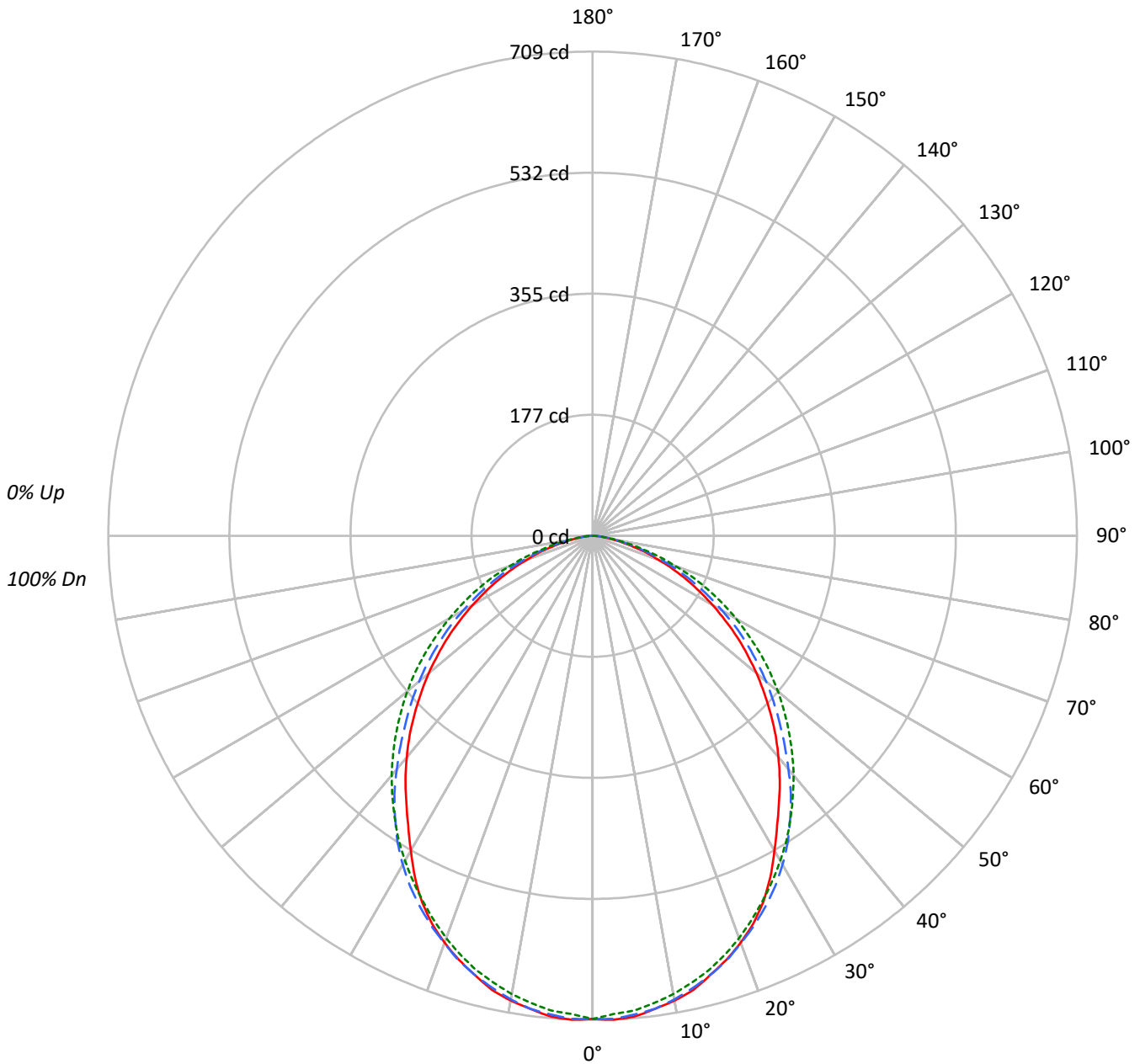
Lumens per Lamp: N/A
Luminaire Lumens: 1636.0 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3808	3808	3808
5°	3818	3802	3769
10°	3777	3767	3724
15°	3710	3710	3668
20°	3632	3637	3590
25°	3513	3556	3499
30°	3307	3456	3414
35°	3125	3313	3318
40°	2973	3133	3216
45°	2803	2944	3095
50°	2624	2774	2963
55°	2420	2581	2803
60°	2180	2355	2607
65°	1924	2094	2371
70°	1603	1783	2014
75°	1260	1424	1576
80°	902	1001	1113
85°	587	587	556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	4.1
10°-20°	187.1	11.4
20°-30°	273.5	16.7
30°-40°	310.4	19.0
40°-50°	299.7	18.3
50°-60°	247.2	15.1
60°-70°	164.6	10.1
70°-80°	73.7	4.5
80°-90°	13.2	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°	527.2	32.2
0°-40°	837.7	51.2
0°-60°	1384.5	84.6
0°-90°	1636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	707	706	704	700	698	67
15°	666	668	666	663	658	188
25°	592	596	599	594	589	271
35°	476	482	504	507	505	298
45°	368	375	387	404	407	284
55°	258	262	275	290	299	230
65°	151	155	164	176	186	150
75°	61	64	68	72	76	66
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.5	707.5	707.5	707.5	707.5
2.5°	709.4	709.7	708.1	703.7	701.0
5°	706.7	706.4	703.7	699.9	697.7
7.5°	698.8	699.4	698.6	693.1	690.1
10°	691.2	691.5	689.3	685.0	681.4
12.5°	681.4	681.2	678.2	676.0	670.3
15°	665.9	667.6	665.9	663.0	658.3
17.5°	651.0	651.0	652.1	646.9	643.4
20°	634.1	635.0	635.0	630.9	626.8
22.5°	614.6	617.0	617.8	613.5	608.6
25°	591.5	596.1	598.8	594.5	589.3
27.5°	563.5	570.5	578.7	575.4	569.7
30°	532.2	542.5	556.1	553.4	549.3
32.5°	502.6	512.9	531.7	530.6	528.4
35°	475.7	482.2	504.2	506.9	505.0
37.5°	450.1	456.1	476.8	483.0	481.4
40°	423.2	429.7	446.0	457.2	457.7
42.5°	396.6	402.8	416.1	432.2	432.2
45°	368.3	374.6	386.8	404.5	406.6
47.5°	340.6	347.1	359.1	376.7	380.3
50°	313.4	319.4	331.3	348.5	353.9
52.5°	285.1	291.7	303.3	319.1	327.0
55°	257.9	262.3	275.1	290.3	298.7
57.5°	229.7	233.8	248.2	261.2	269.9
60°	202.5	207.7	218.8	232.1	242.2
62.5°	176.4	181.8	191.4	203.0	214.5
65°	151.1	155.2	164.4	176.1	186.2
67.5°	126.7	130.2	139.4	147.6	158.2
70°	101.9	106.6	113.3	121.2	128.0
72.5°	82.1	84.0	89.7	95.4	102.5
75°	60.6	63.9	68.5	71.8	75.8
77.5°	43.5	45.4	48.1	50.8	54.6
80°	29.1	29.9	32.3	32.9	35.9
82.5°	17.7	18.2	18.8	19.0	20.1
85°	9.5	9.5	9.5	9.0	9.0
87.5°	5.4	5.4	4.6	3.8	2.7
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)