

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: P557743

Luminaire Tested: **FUSL-12-4-LD4-3HI-30-UNV-93-97-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: P557743
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-LD4-3HI-30-UNV-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

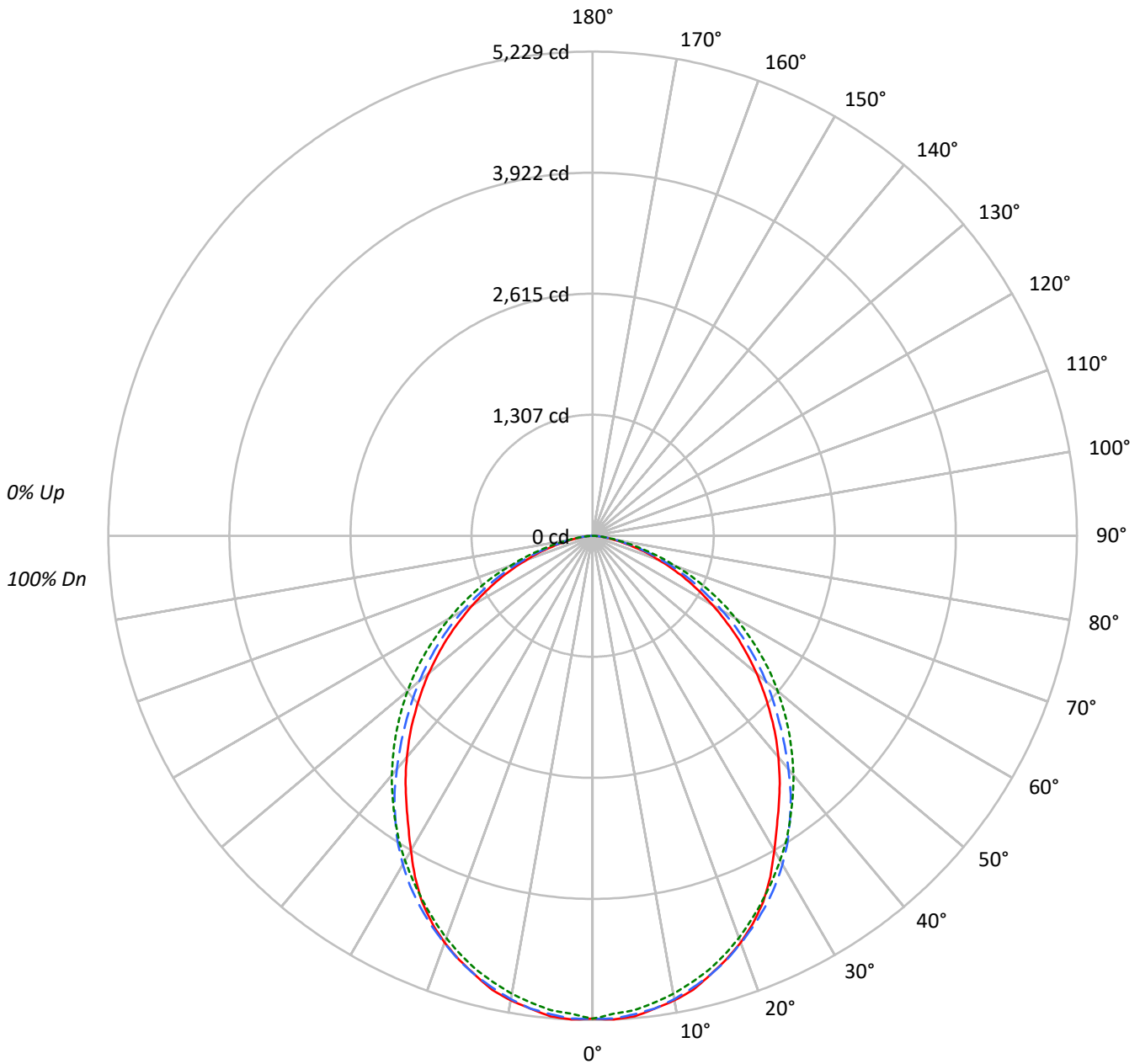
Lumens per Lamp: N/A
Luminaire Lumens: 12059.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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: P557743

CATALOG NUMBER: FUSL-12-4-LD4-3HI-30-UNV-93-97-EDD

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°	14034	14034	14034
5°	14071	14012	13893
10°	13922	13884	13725
15°	13675	13675	13519
20°	13386	13403	13231
25°	12945	13105	12897
30°	12190	12737	12582
35°	11518	12209	12229
40°	10958	11549	11852
45°	10331	10850	11407
50°	9671	10224	10921
55°	8921	9513	10330
60°	8033	8680	9608
65°	7093	7718	8739
70°	5911	6574	7425
75°	4645	5250	5812
80°	3322	3694	4099
85°	2164	2164	2041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	491.0	4.1
10°-20°	1379.4	11.4
20°-30°	2015.8	16.7
30°-40°	2288.2	19.0
40°-50°	2208.9	18.3
50°-60°	1822.2	15.1
60°-70°	1213.4	10.1
70°-80°	543.0	4.5
80°-90°	97.1	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°	3886.3	32.2
0°-40°	6174.4	51.2
0°-60°	10205.5	84.6
0°-90°	12059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5215	5215	5215	5215	5215	
5°	5209	5207	5187	5159	5143	493
15°	4909	4921	4909	4887	4853	1384
25°	4360	4394	4414	4382	4344	1997
35°	3506	3554	3717	3737	3723	2197
45°	2715	2761	2851	2981	2997	2095
55°	1901	1933	2028	2140	2202	1697
65°	1114	1144	1212	1298	1372	1105
75°	447	471	505	529	559	489
85°	70	70	70	66	66	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5215.2	5215.2	5215.2	5215.2	5215.2
2.5°	5229.2	5231.2	5219.2	5187.2	5167.1
5°	5209.2	5207.2	5187.2	5159.1	5143.1
7.5°	5151.1	5155.1	5149.1	5109.0	5087.0
10°	5095.0	5097.0	5081.0	5048.9	5022.9
12.5°	5022.9	5020.9	4998.8	4982.8	4940.7
15°	4908.7	4920.7	4908.7	4886.6	4852.6
17.5°	4798.5	4798.5	4806.5	4768.4	4742.4
20°	4674.3	4680.3	4680.3	4650.2	4620.2
22.5°	4530.0	4548.0	4554.0	4522.0	4485.9
25°	4359.7	4393.8	4413.8	4381.7	4343.7
27.5°	4153.3	4205.4	4265.5	4241.5	4199.4
30°	3922.9	3999.1	4099.2	4079.2	4049.1
32.5°	3704.5	3780.7	3918.9	3910.9	3894.9
35°	3506.2	3554.3	3716.6	3736.6	3722.6
37.5°	3317.9	3361.9	3514.2	3560.3	3548.3
40°	3119.5	3167.6	3287.8	3369.9	3374.0
42.5°	2923.2	2969.2	3067.4	3185.6	3185.6
45°	2714.8	2760.9	2851.0	2981.3	2997.3
47.5°	2510.4	2558.5	2646.7	2776.9	2802.9
50°	2310.1	2354.2	2442.3	2568.5	2608.6
52.5°	2101.7	2149.8	2235.9	2352.2	2410.3
55°	1901.4	1933.4	2027.6	2139.8	2201.9
57.5°	1693.0	1723.0	1829.2	1925.4	1989.5
60°	1492.6	1530.7	1612.8	1711.0	1785.2
62.5°	1300.3	1340.4	1410.5	1496.6	1580.8
65°	1114.0	1144.0	1212.1	1298.3	1372.4
67.5°	933.6	959.7	1027.8	1087.9	1166.1
70°	751.3	785.4	835.5	893.6	943.7
72.5°	605.1	619.1	661.2	703.2	755.3
75°	446.8	470.8	504.9	528.9	559.0
77.5°	320.6	334.6	354.6	374.7	402.7
80°	214.4	220.4	238.4	242.4	264.5
82.5°	130.2	134.2	138.2	140.2	148.3
85°	70.1	70.1	70.1	66.1	66.1
87.5°	40.1	40.1	34.1	28.0	20.0
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)