

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P560376

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-80-88-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)
Test Lab: INNOVATION CENTER
Issue Date: 7/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-12-2-LD4-2LO-35-UNV-80-88-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1610.0 lumens
Efficiency: N/A
Efficacy: 68.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

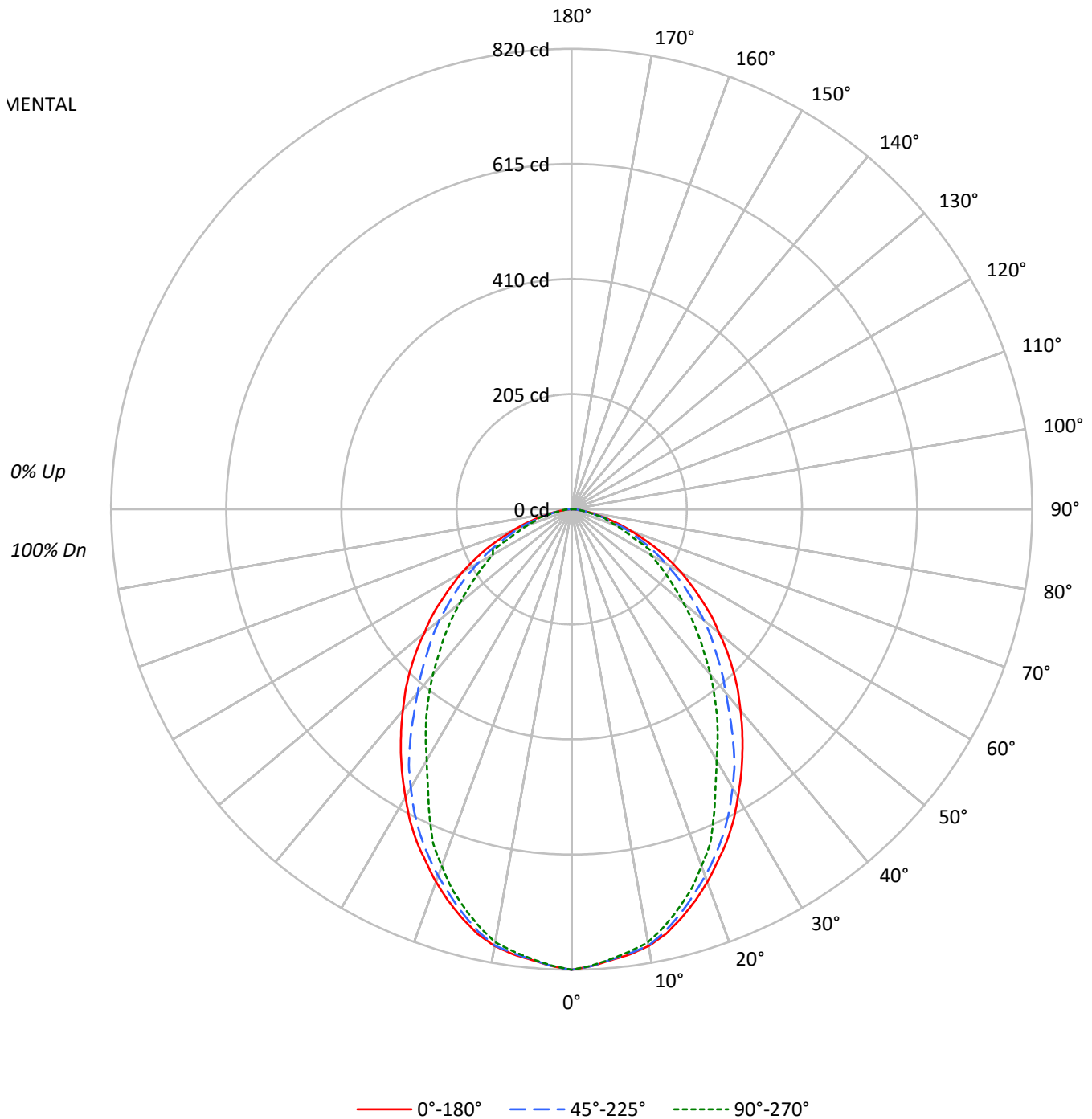
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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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	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	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87																												
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75																												
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65																												
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56																												
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50																												
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44																												
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40																												
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36																												
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33																												
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4414	4414	4414
5°	4354	4348	4344
10°	4316	4311	4280
15°	4199	4158	4099
20°	4045	3981	3872
25°	3879	3795	3558
30°	3677	3559	3205
35°	3482	3289	2965
40°	3284	2997	2698
45°	3095	2771	2439
50°	2866	2572	2175
55°	2651	2331	1948
60°	2428	2082	1745
65°	2137	1824	1546
70°	1761	1596	1312
75°	1399	1223	1281
80°	939	880	821
85°	587	704	821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3095 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	4.7
10°-20°	209.5	13.0
20°-30°	290.1	18.0
30°-40°	309.3	19.2
40°-50°	282.2	17.5
50°-60°	221.0	13.7
60°-70°	144.1	8.9
70°-80°	63.8	4.0
80°-90°	13.7	0.9
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°	575.9	35.8
0°-40°	885.2	55.0
0°-60°	1388.4	86.2
0°-90°	1610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1610.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	806	805	805	804	804	77
15°	754	754	746	739	736	212
25°	653	650	639	616	599	300
35°	530	526	501	463	451	331
45°	407	398	364	334	320	313
55°	282	274	248	219	208	253
65°	168	158	143	146	121	165
75°	67	63	59	56	62	72
85°	10	10	11	12	13	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	820.1	820.1	820.1	820.1	820.1
2.5°	814.4	814.4	814.4	813.5	813.5
5°	805.9	804.9	804.9	804.0	804.0
7.5°	799.3	798.3	797.4	796.4	794.5
10°	789.8	789.8	788.8	784.1	783.1
12.5°	774.6	773.7	769.9	763.2	761.3
15°	753.7	753.7	746.2	738.6	735.7
17.5°	731.0	730.0	720.6	713.0	709.2
20°	706.3	704.4	695.0	682.6	676.0
22.5°	678.8	678.8	667.5	651.3	644.7
25°	653.2	649.5	639.0	616.3	599.2
27.5°	623.9	618.2	606.8	574.6	554.6
30°	591.6	588.8	572.7	530.9	515.8
32.5°	561.3	556.5	539.5	495.9	483.5
35°	530.0	526.2	500.6	462.7	451.3
37.5°	498.7	494.0	461.7	431.4	417.2
40°	467.4	461.7	426.6	399.2	384.0
42.5°	438.0	430.4	396.3	366.9	349.9
45°	406.7	398.2	364.1	333.7	320.5
47.5°	375.5	367.9	336.6	305.3	290.1
50°	342.3	335.6	307.2	275.9	259.8
52.5°	314.8	304.3	276.8	245.6	232.3
55°	282.5	274.0	248.4	219.0	207.6
57.5°	253.1	244.6	220.9	193.4	183.9
60°	225.6	213.3	193.4	169.7	162.1
62.5°	195.3	185.8	168.8	148.9	158.3
65°	167.8	158.3	143.2	146.0	121.4
67.5°	137.5	132.7	119.5	106.2	102.4
70°	111.9	106.2	101.4	87.2	83.4
72.5°	89.1	83.4	76.8	69.2	66.4
75°	67.3	62.6	58.8	55.9	61.6
77.5°	46.5	44.6	41.7	38.9	37.9
80°	30.3	29.4	28.4	27.5	26.5
82.5°	18.0	18.0	18.0	18.0	18.0
85°	9.5	10.4	11.4	12.3	13.3
87.5°	5.7	5.7	6.6	7.6	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)