

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: P560466

Luminaire Tested: FSR-12-2-LD4-2LO-40-UNV-82-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560466
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-40-UNV-82-85-EDD-90
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1762.0 lumens
Efficiency: N/A
Efficacy: 75.3 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

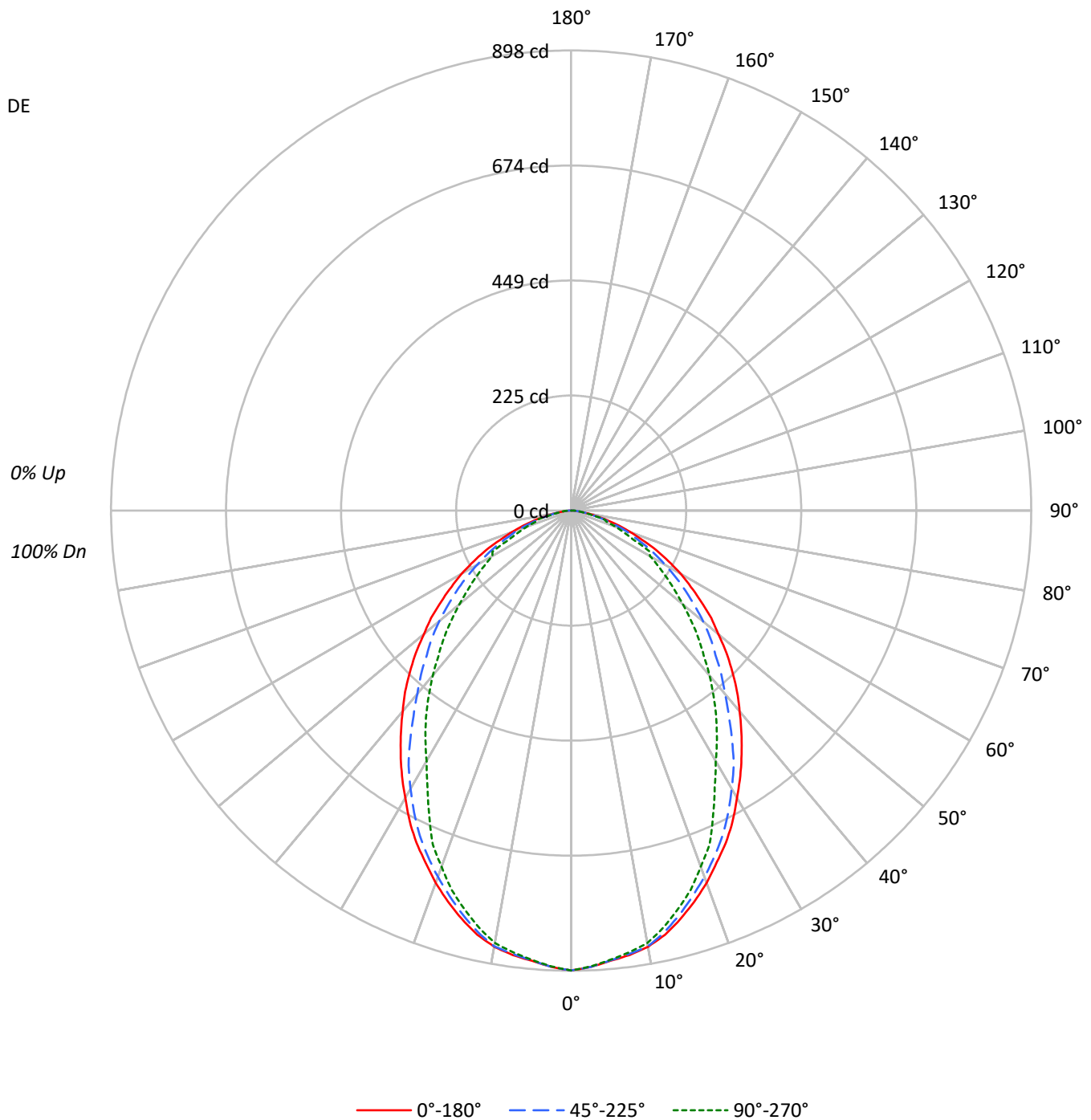
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P560466

CATALOG NUMBER: FSR-12-2-LD4-2LO-40-UNV-82-85-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P560466

CATALOG NUMBER: FSR-12-2-LD4-2LO-40-UNV-82-85-EDD-90

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°	4830	4830	4830
5°	4765	4759	4754
10°	4723	4718	4684
15°	4596	4550	4486
20°	4427	4356	4237
25°	4245	4153	3894
30°	4024	3895	3508
35°	3811	3600	3245
40°	3594	3280	2952
45°	3388	3032	2669
50°	3136	2815	2380
55°	2901	2551	2132
60°	2659	2279	1910
65°	2339	1996	1691
70°	1926	1747	1437
75°	1533	1337	1402
80°	1029	964	902
85°	642	772	895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3388 cd/sqm



TEST NUMBER: P560466

CATALOG NUMBER: FSR-12-2-LD4-2LO-40-UNV-82-85-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	4.7
10°-20°	229.3	13.0
20°-30°	317.4	18.0
30°-40°	338.5	19.2
40°-50°	308.8	17.5
50°-60°	241.9	13.7
60°-70°	157.7	8.9
70°-80°	69.8	4.0
80°-90°	15.0	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°	630.3	35.8
0°-40°	968.8	55.0
0°-60°	1519.5	86.2
0°-90°	1762.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	898	898	898	898	898	
5°	882	881	881	880	880	84
15°	825	825	817	808	805	232
25°	715	711	699	674	656	328
35°	580	576	548	506	494	363
45°	445	436	398	365	351	343
55°	309	300	272	240	227	277
65°	184	173	157	160	133	181
75°	74	68	64	61	67	79
85°	10	11	12	14	14	14
90°	0	0	0	0	0	



TEST NUMBER: P560466

CATALOG NUMBER: FSR-12-2-LD4-2LO-40-UNV-82-85-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	897.5	897.5	897.5	897.5	897.5
2.5°	891.3	891.3	891.3	890.3	890.3
5°	882.0	880.9	880.9	879.9	879.9
7.5°	874.7	873.7	872.6	871.6	869.5
10°	864.3	864.3	863.3	858.1	857.1
12.5°	847.7	846.7	842.5	835.3	833.2
15°	824.9	824.9	816.6	808.3	805.2
17.5°	800.0	799.0	788.6	780.3	776.1
20°	773.0	770.9	760.6	747.1	739.8
22.5°	742.9	742.9	730.5	712.8	705.6
25°	714.9	710.8	699.4	674.5	655.8
27.5°	682.8	676.5	664.1	628.8	607.0
30°	647.5	644.4	626.7	581.1	564.5
32.5°	614.3	609.1	590.4	542.7	529.2
35°	580.0	575.9	547.9	506.4	493.9
37.5°	545.8	540.6	505.3	472.1	456.6
40°	511.5	505.3	466.9	436.8	420.2
42.5°	479.4	471.1	433.7	401.6	382.9
45°	445.1	435.8	398.4	365.2	350.7
47.5°	410.9	402.6	368.4	334.1	317.5
50°	374.6	367.3	336.2	301.9	284.3
52.5°	344.5	333.1	303.0	268.7	254.2
55°	309.2	299.9	271.9	239.7	227.2
57.5°	277.0	267.7	241.8	211.7	201.3
60°	247.0	233.5	211.7	185.7	177.4
62.5°	213.7	203.4	184.7	162.9	173.3
65°	183.7	173.3	156.7	159.8	132.8
67.5°	150.5	145.3	130.7	116.2	112.1
70°	122.4	116.2	111.0	95.5	91.3
72.5°	97.5	91.3	84.0	75.7	72.6
75°	73.7	68.5	64.3	61.2	67.4
77.5°	50.8	48.8	45.7	42.5	41.5
80°	33.2	32.2	31.1	30.1	29.1
82.5°	19.7	19.7	19.7	19.7	19.7
85°	10.4	11.4	12.5	13.5	14.5
87.5°	6.2	6.2	7.3	8.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)