

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: P559947

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-81-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559947
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-LD4-1LO-50-UNV-81-94-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1114.0 lumens
Efficiency: N/A
Efficacy: 95.2 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

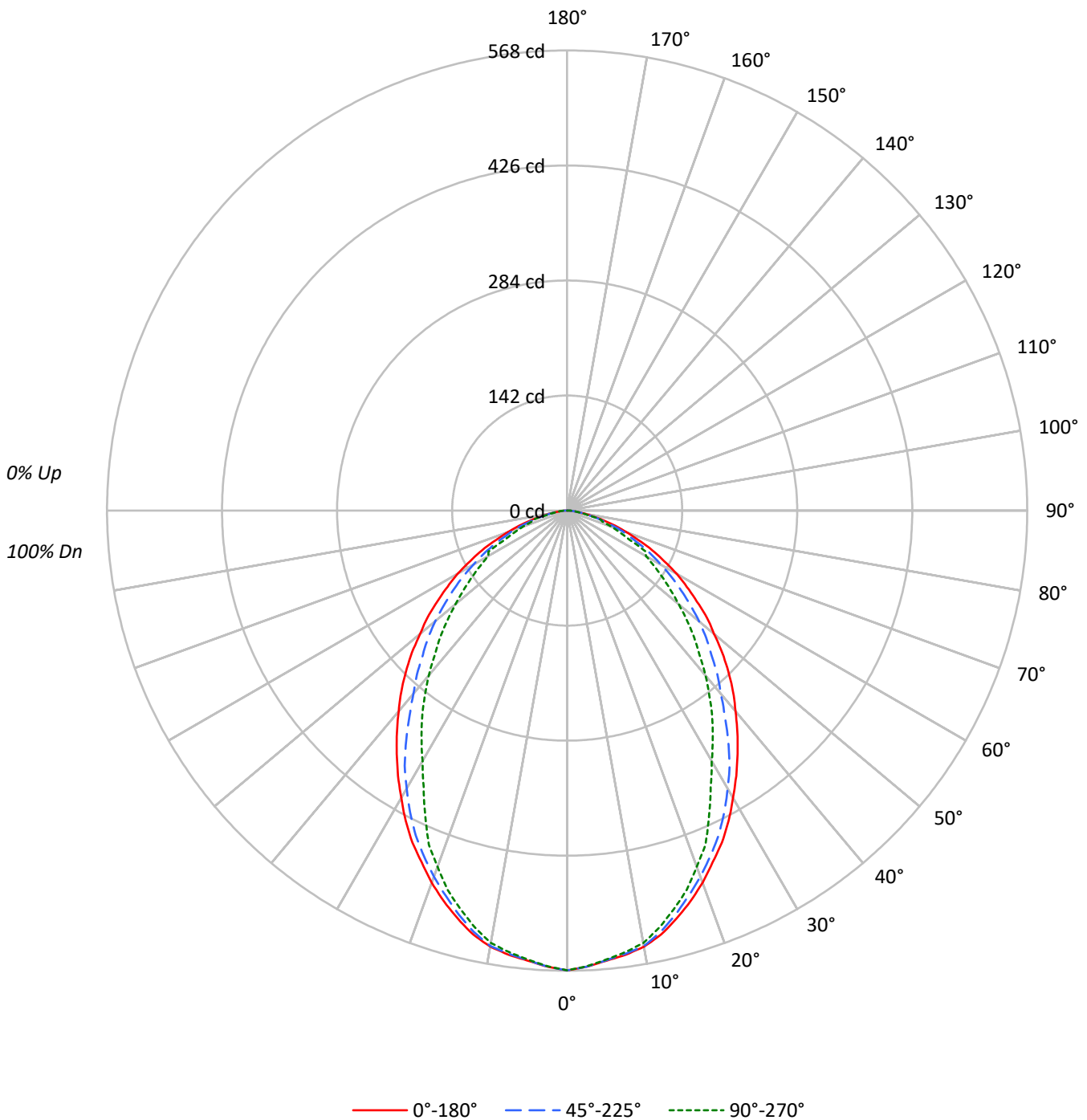
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	3054	3054	3054
5°	3012	3009	3005
10°	2987	2983	2961
15°	2906	2877	2837
20°	2799	2754	2679
25°	2684	2626	2462
30°	2544	2462	2218
35°	2409	2276	2052
40°	2272	2074	1867
45°	2142	1917	1687
50°	1983	1780	1505
55°	1834	1613	1348
60°	1680	1440	1208
65°	1479	1262	1070
70°	1218	1105	908
75°	969	846	886
80°	651	611	570
85°	408	488	568

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2142 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	4.7
10°-20°	145.0	13.0
20°-30°	200.7	18.0
30°-40°	214.0	19.2
40°-50°	195.2	17.5
50°-60°	153.0	13.7
60°-70°	99.7	8.9
70°-80°	44.2	4.0
80°-90°	9.5	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°	398.5	35.8
0°-40°	612.5	55.0
0°-60°	960.7	86.2
0°-90°	1114.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1114.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	558	557	557	556	556	53
15°	522	522	516	511	509	147
25°	452	449	442	426	415	208
35°	367	364	346	320	312	229
45°	281	276	252	231	222	217
55°	196	190	172	152	144	175
65°	116	110	99	101	84	114
75°	47	43	41	39	43	50
85°	7	7	8	8	9	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.5	567.5	567.5	567.5	567.5
2.5°	563.5	563.5	563.5	562.9	562.9
5°	557.6	557.0	557.0	556.3	556.3
7.5°	553.0	552.4	551.7	551.1	549.7
10°	546.5	546.5	545.8	542.5	541.9
12.5°	536.0	535.3	532.7	528.1	526.8
15°	521.5	521.5	516.3	511.0	509.1
17.5°	505.8	505.1	498.6	493.3	490.7
20°	488.7	487.4	480.9	472.3	467.7
22.5°	469.7	469.7	461.8	450.7	446.1
25°	452.0	449.4	442.2	426.4	414.6
27.5°	431.7	427.7	419.9	397.5	383.8
30°	409.4	407.4	396.2	367.4	356.9
32.5°	388.4	385.1	373.3	343.1	334.6
35°	366.7	364.1	346.4	320.1	312.3
37.5°	345.1	341.8	319.5	298.5	288.6
40°	323.4	319.5	295.2	276.2	265.7
42.5°	303.1	297.8	274.2	253.9	242.1
45°	281.4	275.5	251.9	230.9	221.7
47.5°	259.8	254.5	232.9	211.2	200.7
50°	236.8	232.2	212.6	190.9	179.7
52.5°	217.8	210.6	191.6	169.9	160.7
55°	195.5	189.6	171.9	151.5	143.7
57.5°	175.2	169.3	152.9	133.8	127.3
60°	156.1	147.6	133.8	117.4	112.2
62.5°	135.1	128.6	116.8	103.0	109.6
65°	116.1	109.6	99.1	101.0	84.0
67.5°	95.1	91.8	82.7	73.5	70.9
70°	77.4	73.5	70.2	60.4	57.7
72.5°	61.7	57.7	53.1	47.9	45.9
75°	46.6	43.3	40.7	38.7	42.6
77.5°	32.1	30.8	28.9	26.9	26.2
80°	21.0	20.3	19.7	19.0	18.4
82.5°	12.5	12.5	12.5	12.5	12.5
85°	6.6	7.2	7.9	8.5	9.2
87.5°	3.9	3.9	4.6	5.2	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)