

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: P559613

Luminaire Tested: FSR-12-2-LD4-1HI-35-UNV-80-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559613
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-LD4-1HI-35-UNV-80-96-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1855.0 lumens
Efficiency: N/A
Efficacy: 85.9 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

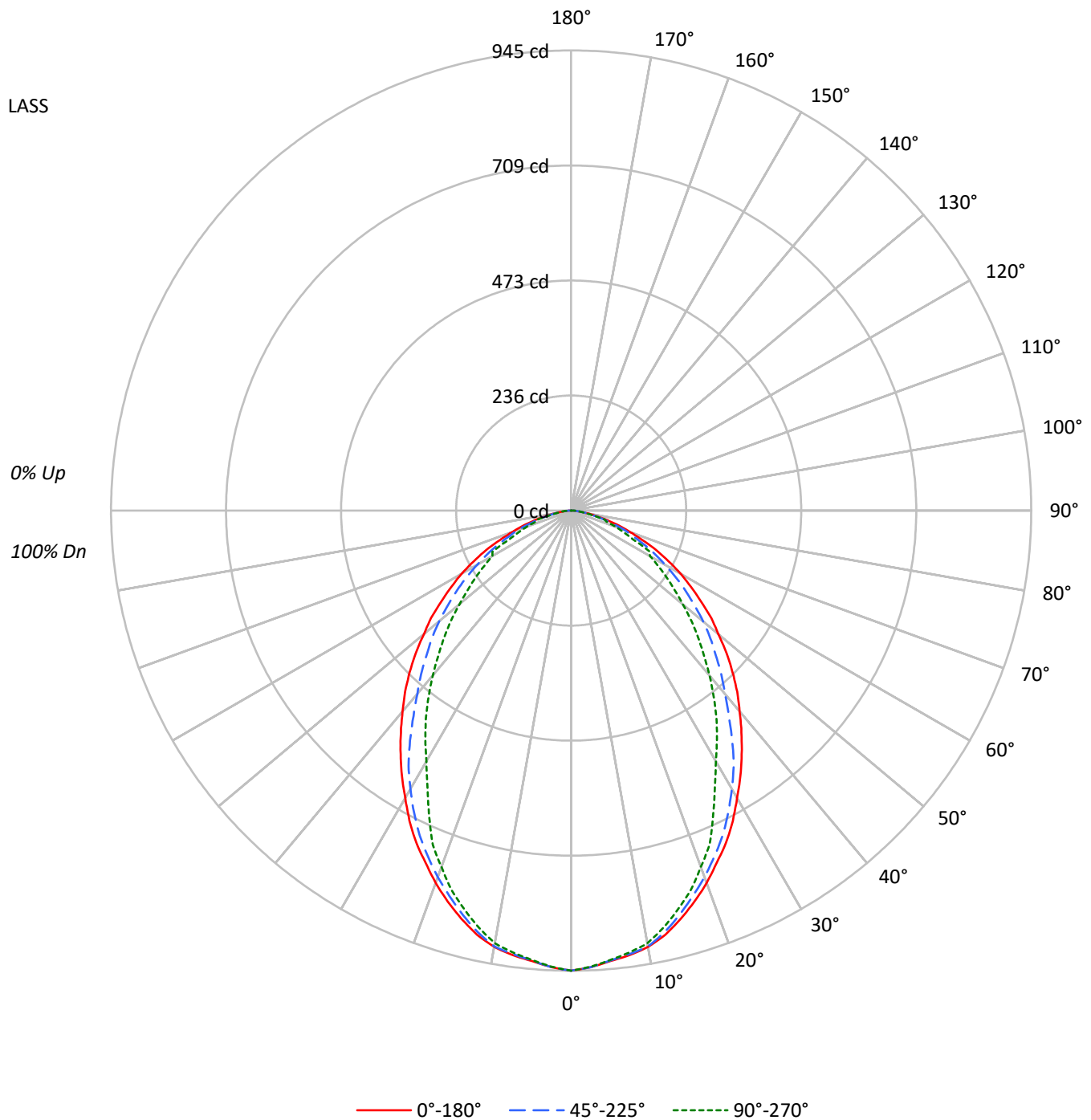
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	5085	5085	5085
5°	5016	5010	5004
10°	4973	4967	4931
15°	4839	4790	4723
20°	4661	4586	4461
25°	4470	4372	4100
30°	4236	4100	3693
35°	4012	3790	3416
40°	3783	3454	3108
45°	3567	3193	2810
50°	3302	2963	2506
55°	3054	2685	2244
60°	2799	2398	2011
65°	2463	2100	1780
70°	2028	1840	1512
75°	1614	1408	1476
80°	1085	1017	948
85°	673	809	945

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3567 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.0	4.7
10°-20°	241.4	13.0
20°-30°	334.2	18.0
30°-40°	356.3	19.2
40°-50°	325.1	17.5
50°-60°	254.7	13.7
60°-70°	166.0	8.9
70°-80°	73.5	4.0
80°-90°	15.8	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°	663.5	35.8
0°-40°	1019.9	55.0
0°-60°	1599.7	86.2
0°-90°	1855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	928	927	927	926	926	88
15°	868	868	860	851	848	244
25°	753	748	736	710	690	346
35°	611	606	577	533	520	382
45°	469	459	420	384	369	361
55°	326	316	286	252	239	292
65°	193	182	165	168	140	191
75°	78	72	68	64	71	83
85°	11	12	13	14	15	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.9	944.9	944.9	944.9	944.9
2.5°	938.4	938.4	938.4	937.3	937.3
5°	928.5	927.4	927.4	926.3	926.3
7.5°	920.9	919.8	918.7	917.6	915.4
10°	910.0	910.0	908.9	903.4	902.3
12.5°	892.5	891.4	887.0	879.4	877.2
15°	868.4	868.4	859.7	851.0	847.7
17.5°	842.2	841.1	830.2	821.5	817.1
20°	813.8	811.6	800.7	786.5	778.9
22.5°	782.1	782.1	769.0	750.5	742.8
25°	752.7	748.3	736.3	710.0	690.4
27.5°	718.8	712.2	699.1	662.0	639.0
30°	681.6	678.4	659.8	611.7	594.3
32.5°	646.7	641.2	621.6	571.3	557.1
35°	610.6	606.3	576.8	533.1	520.0
37.5°	574.6	569.1	532.0	497.0	480.6
40°	538.5	532.0	491.6	459.9	442.4
42.5°	504.7	495.9	456.6	422.8	403.1
45°	468.6	458.8	419.5	384.5	369.2
47.5°	432.6	423.8	387.8	351.7	334.3
50°	394.4	386.7	353.9	317.9	299.3
52.5°	362.7	350.7	319.0	282.9	267.6
55°	325.5	315.7	286.2	252.3	239.2
57.5°	291.7	281.8	254.5	222.8	211.9
60°	260.0	245.8	222.8	195.5	186.8
62.5°	225.0	214.1	194.4	171.5	182.4
65°	193.4	182.4	164.9	168.2	139.8
67.5°	158.4	152.9	137.6	122.3	118.0
70°	128.9	122.3	116.9	100.5	96.1
72.5°	102.7	96.1	88.5	79.7	76.5
75°	77.6	72.1	67.7	64.5	71.0
77.5°	53.5	51.3	48.1	44.8	43.7
80°	35.0	33.9	32.8	31.7	30.6
82.5°	20.8	20.8	20.8	20.8	20.8
85°	10.9	12.0	13.1	14.2	15.3
87.5°	6.6	6.6	7.6	8.7	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)