

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: P559806

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-97-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559806
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-35-UNV-80-97-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 911.0 lumens
Efficiency: N/A
Efficacy: 77.9 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

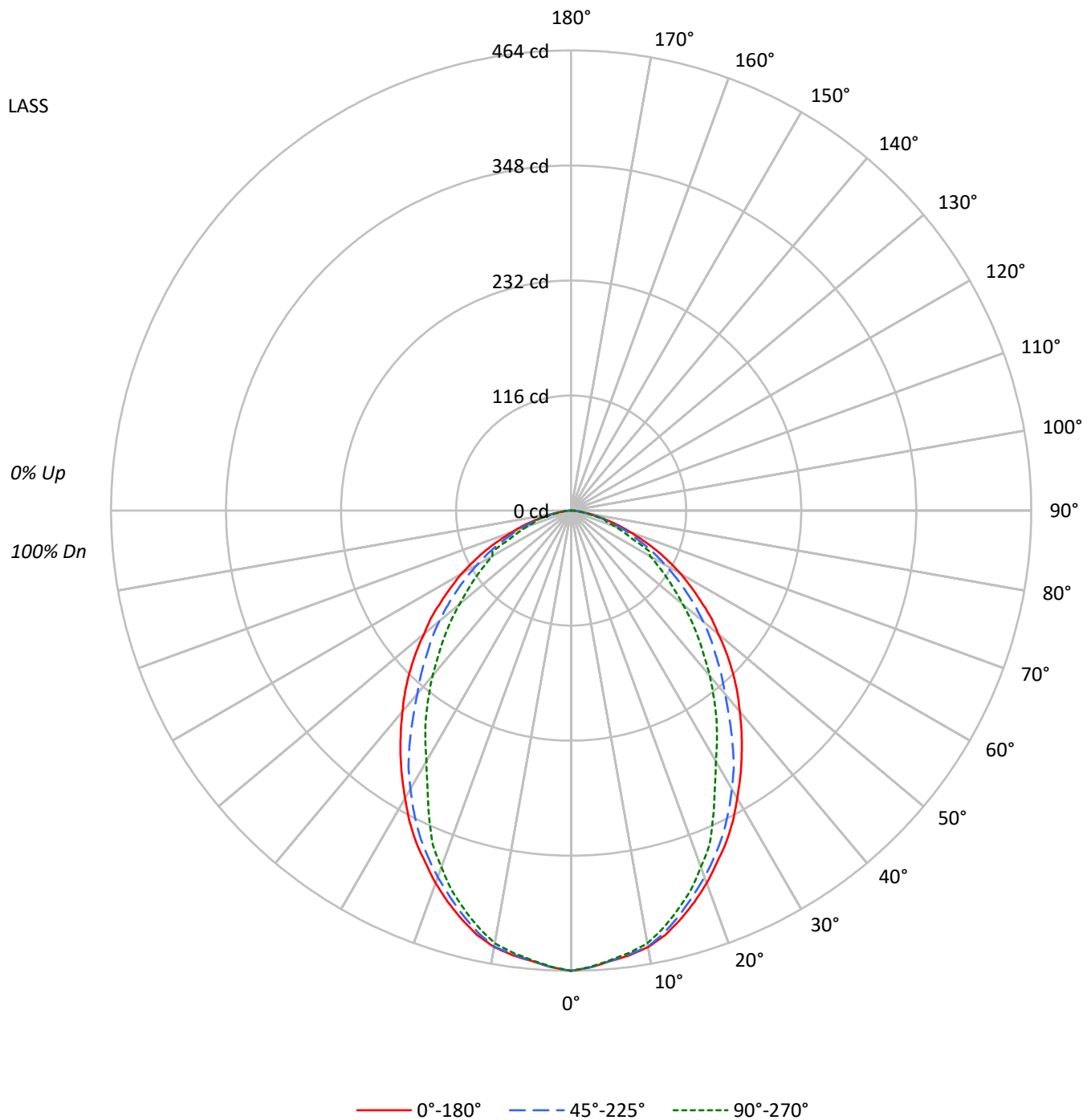
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2498	2498	2498
5°	2464	2461	2458
10°	2442	2439	2422
15°	2376	2352	2320
20°	2289	2252	2191
25°	2195	2147	2014
30°	2081	2014	1813
35°	1970	1861	1678
40°	1858	1696	1527
45°	1751	1568	1380
50°	1622	1455	1231
55°	1500	1319	1103
60°	1375	1178	987
65°	1210	1032	875
70°	996	903	743
75°	792	692	726
80°	533	499	465
85°	333	395	463

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1751 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.2	4.7
10°-20°	118.6	13.0
20°-30°	164.1	18.0
30°-40°	175.0	19.2
40°-50°	159.7	17.5
50°-60°	125.1	13.7
60°-70°	81.5	8.9
70°-80°	36.1	4.0
80°-90°	7.8	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°	325.9	35.8
0°-40°	500.9	55.0
0°-60°	785.6	86.2
0°-90°	911.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	911.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	456	456	456	455	455	43
15°	426	426	422	418	416	120
25°	370	368	362	349	339	170
35°	300	298	283	262	255	187
45°	230	225	206	189	181	177
55°	160	155	141	124	118	143
65°	95	90	81	83	69	94
75°	38	35	33	32	35	41
85°	5	6	6	7	8	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	464.1	464.1	464.1	464.1	464.1
2.5°	460.8	460.8	460.8	460.3	460.3
5°	456.0	455.5	455.5	454.9	454.9
7.5°	452.2	451.7	451.2	450.6	449.6
10°	446.9	446.9	446.3	443.7	443.1
12.5°	438.3	437.8	435.6	431.9	430.8
15°	426.5	426.5	422.2	417.9	416.3
17.5°	413.6	413.1	407.7	403.4	401.3
20°	399.7	398.6	393.2	386.3	382.5
22.5°	384.1	384.1	377.7	368.6	364.8
25°	369.6	367.5	361.6	348.7	339.1
27.5°	353.0	349.8	343.3	325.1	313.8
30°	334.8	333.2	324.0	300.4	291.8
32.5°	317.6	314.9	305.3	280.6	273.6
35°	299.9	297.7	283.3	261.8	255.4
37.5°	282.2	279.5	261.3	244.1	236.0
40°	264.5	261.3	241.4	225.9	217.3
42.5°	247.9	243.6	224.2	207.6	198.0
45°	230.1	225.3	206.0	188.8	181.3
47.5°	212.4	208.2	190.4	172.7	164.2
50°	193.7	189.9	173.8	156.1	147.0
52.5°	178.1	172.2	156.7	138.9	131.4
55°	159.9	155.0	140.6	123.9	117.5
57.5°	143.2	138.4	125.0	109.4	104.1
60°	127.7	120.7	109.4	96.0	91.7
62.5°	110.5	105.1	95.5	84.2	89.6
65°	95.0	89.6	81.0	82.6	68.7
67.5°	77.8	75.1	67.6	60.1	57.9
70°	63.3	60.1	57.4	49.4	47.2
72.5°	50.4	47.2	43.5	39.2	37.6
75°	38.1	35.4	33.3	31.7	34.9
77.5°	26.3	25.2	23.6	22.0	21.5
80°	17.2	16.6	16.1	15.6	15.0
82.5°	10.2	10.2	10.2	10.2	10.2
85°	5.4	5.9	6.4	7.0	7.5
87.5°	3.2	3.2	3.8	4.3	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)