

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: P559932

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559932
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-80-96-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1009.0 lumens
Efficiency: N/A
Efficacy: 86.2 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

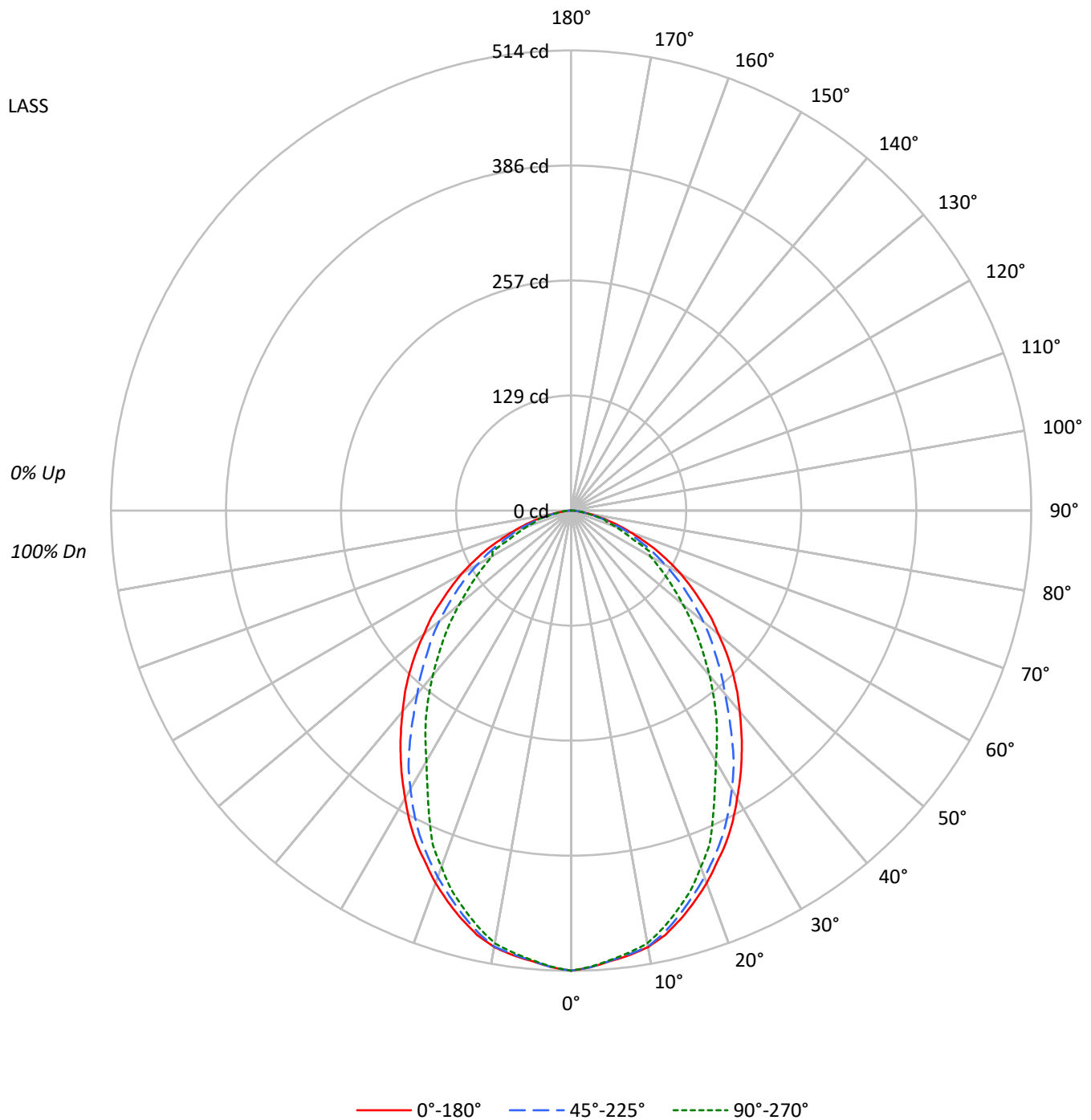
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2766	2766	2766
5°	2729	2726	2722
10°	2705	2702	2682
15°	2632	2605	2569
20°	2536	2494	2427
25°	2431	2378	2230
30°	2304	2230	2009
35°	2183	2061	1858
40°	2058	1879	1690
45°	1940	1737	1528
50°	1796	1612	1363
55°	1662	1461	1221
60°	1522	1305	1094
65°	1340	1142	969
70°	1103	1001	823
75°	878	765	803
80°	589	552	514
85°	364	438	513

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1940 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	4.7
10°-20°	131.3	13.0
20°-30°	181.8	18.0
30°-40°	193.8	19.2
40°-50°	176.8	17.5
50°-60°	138.5	13.7
60°-70°	90.3	8.9
70°-80°	40.0	4.0
80°-90°	8.6	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°	360.9	35.8
0°-40°	554.8	55.0
0°-60°	870.1	86.2
0°-90°	1009.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1009.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	505	504	504	504	504	48
15°	472	472	468	463	461	133
25°	409	407	400	386	376	188
35°	332	330	314	290	283	208
45°	255	250	228	209	201	196
55°	177	172	156	137	130	159
65°	105	99	90	92	76	104
75°	42	39	37	35	39	45
85°	6	6	7	8	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	514.0	514.0	514.0	514.0	514.0
2.5°	510.4	510.4	510.4	509.8	509.8
5°	505.1	504.5	504.5	503.9	503.9
7.5°	500.9	500.3	499.7	499.1	497.9
10°	495.0	495.0	494.4	491.4	490.8
12.5°	485.5	484.9	482.5	478.3	477.1
15°	472.4	472.4	467.6	462.9	461.1
17.5°	458.1	457.5	451.6	446.8	444.5
20°	442.7	441.5	435.5	427.8	423.7
22.5°	425.4	425.4	418.3	408.2	404.0
25°	409.4	407.0	400.5	386.2	375.5
27.5°	391.0	387.4	380.3	360.1	347.6
30°	370.8	369.0	358.9	332.7	323.2
32.5°	351.8	348.8	338.1	310.8	303.0
35°	332.2	329.8	313.7	290.0	282.8
37.5°	312.5	309.6	289.4	270.4	261.4
40°	292.9	289.4	267.4	250.2	240.6
42.5°	274.5	269.8	248.4	230.0	219.3
45°	254.9	249.6	228.2	209.2	200.8
47.5°	235.3	230.5	210.9	191.3	181.8
50°	214.5	210.3	192.5	172.9	162.8
52.5°	197.3	190.7	173.5	153.9	145.6
55°	177.1	171.7	155.7	137.3	130.1
57.5°	158.6	153.3	138.4	121.2	115.3
60°	141.4	133.7	121.2	106.4	101.6
62.5°	122.4	116.5	105.8	93.3	99.2
65°	105.2	99.2	89.7	91.5	76.1
67.5°	86.2	83.2	74.9	66.5	64.2
70°	70.1	66.5	63.6	54.7	52.3
72.5°	55.9	52.3	48.1	43.4	41.6
75°	42.2	39.2	36.8	35.1	38.6
77.5°	29.1	27.9	26.1	24.4	23.8
80°	19.0	18.4	17.8	17.2	16.6
82.5°	11.3	11.3	11.3	11.3	11.3
85°	5.9	6.5	7.1	7.7	8.3
87.5°	3.6	3.6	4.2	4.8	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)