

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: P559355

Luminaire Tested: FSR-12-1-LD4-2LO-50-UNV-80-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559355
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-12-1-LD4-2LO-50-UNV-80-94-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

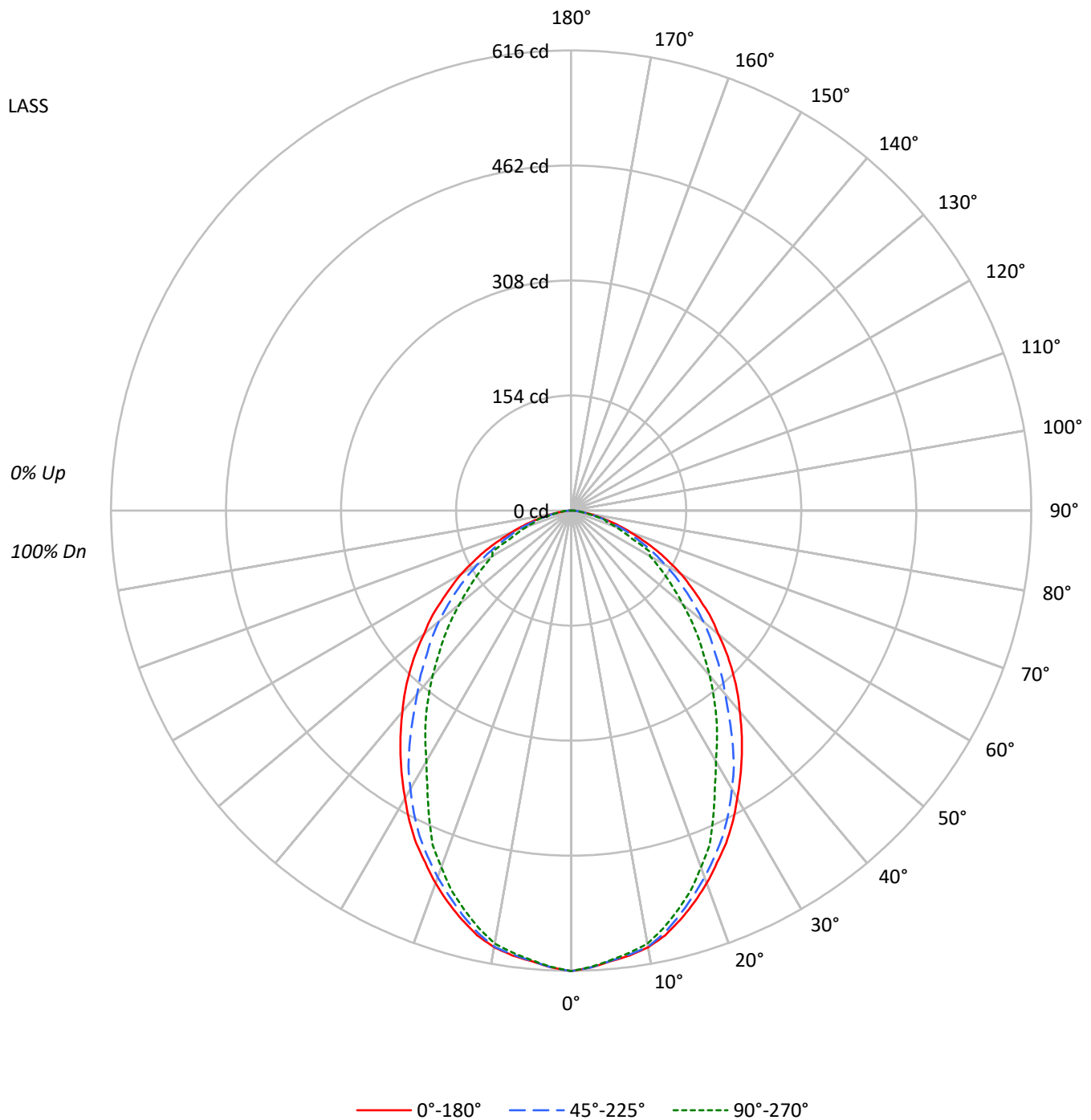
Lumens per Lamp: N/A
Luminaire Lumens: 1210.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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°	6635	6635	6635
5°	6545	6537	6528
10°	6488	6479	6433
15°	6313	6249	6161
20°	6081	5983	5819
25°	5830	5704	5348
30°	5526	5349	4818
35°	5234	4943	4457
40°	4936	4505	4055
45°	4654	4165	3666
50°	4307	3867	3269
55°	3984	3504	2928
60°	3651	3130	2622
65°	3212	2741	2323
70°	2647	2398	1973
75°	2104	1838	1926
80°	1413	1327	1240
85°	877	1062	1235

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4654 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	4.7
10°-20°	157.5	13.0
20°-30°	218.0	18.0
30°-40°	232.4	19.2
40°-50°	212.1	17.5
50°-60°	166.1	13.7
60°-70°	108.3	8.9
70°-80°	48.0	4.0
80°-90°	10.3	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°	432.8	35.8
0°-40°	665.3	55.0
0°-60°	1043.4	86.2
0°-90°	1210.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1210.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	616	616	616	616	616	
5°	606	605	605	604	604	57
15°	566	566	561	555	553	159
25°	491	488	480	463	450	225
35°	398	396	376	348	339	249
45°	306	299	274	251	241	235
55°	212	206	187	165	156	190
65°	126	119	108	110	91	124
75°	51	47	44	42	46	54
85°	7	8	9	9	10	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	616.4	616.4	616.4	616.4	616.4
2.5°	612.1	612.1	612.1	611.4	611.4
5°	605.7	605.0	605.0	604.2	604.2
7.5°	600.7	600.0	599.3	598.5	597.1
10°	593.6	593.6	592.8	589.3	588.6
12.5°	582.2	581.4	578.6	573.6	572.2
15°	566.5	566.5	560.8	555.1	552.9
17.5°	549.4	548.7	541.5	535.8	533.0
20°	530.9	529.4	522.3	513.0	508.0
22.5°	510.2	510.2	501.6	489.5	484.5
25°	490.9	488.1	480.3	463.2	450.3
27.5°	468.9	464.6	456.0	431.8	416.8
30°	444.6	442.5	430.4	399.0	387.6
32.5°	421.8	418.3	405.4	372.7	363.4
35°	398.3	395.5	376.2	347.7	339.2
37.5°	374.8	371.2	347.0	324.2	313.5
40°	351.3	347.0	320.6	300.0	288.6
42.5°	329.2	323.5	297.8	275.8	262.9
45°	305.7	299.3	273.6	250.8	240.8
47.5°	282.2	276.5	253.0	229.4	218.0
50°	257.2	252.2	230.9	207.4	195.2
52.5°	236.6	228.7	208.1	184.6	174.6
55°	212.3	205.9	186.7	164.6	156.0
57.5°	190.3	183.8	166.0	145.4	138.2
60°	169.6	160.3	145.4	127.5	121.8
62.5°	146.8	139.7	126.8	111.9	119.0
65°	126.1	119.0	107.6	109.7	91.2
67.5°	103.3	99.8	89.8	79.8	77.0
70°	84.1	79.8	76.2	65.6	62.7
72.5°	67.0	62.7	57.7	52.0	49.9
75°	50.6	47.0	44.2	42.0	46.3
77.5°	34.9	33.5	31.4	29.2	28.5
80°	22.8	22.1	21.4	20.7	20.0
82.5°	13.5	13.5	13.5	13.5	13.5
85°	7.1	7.8	8.6	9.3	10.0
87.5°	4.3	4.3	5.0	5.7	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)