

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: P559615

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

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559615
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-80-97-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

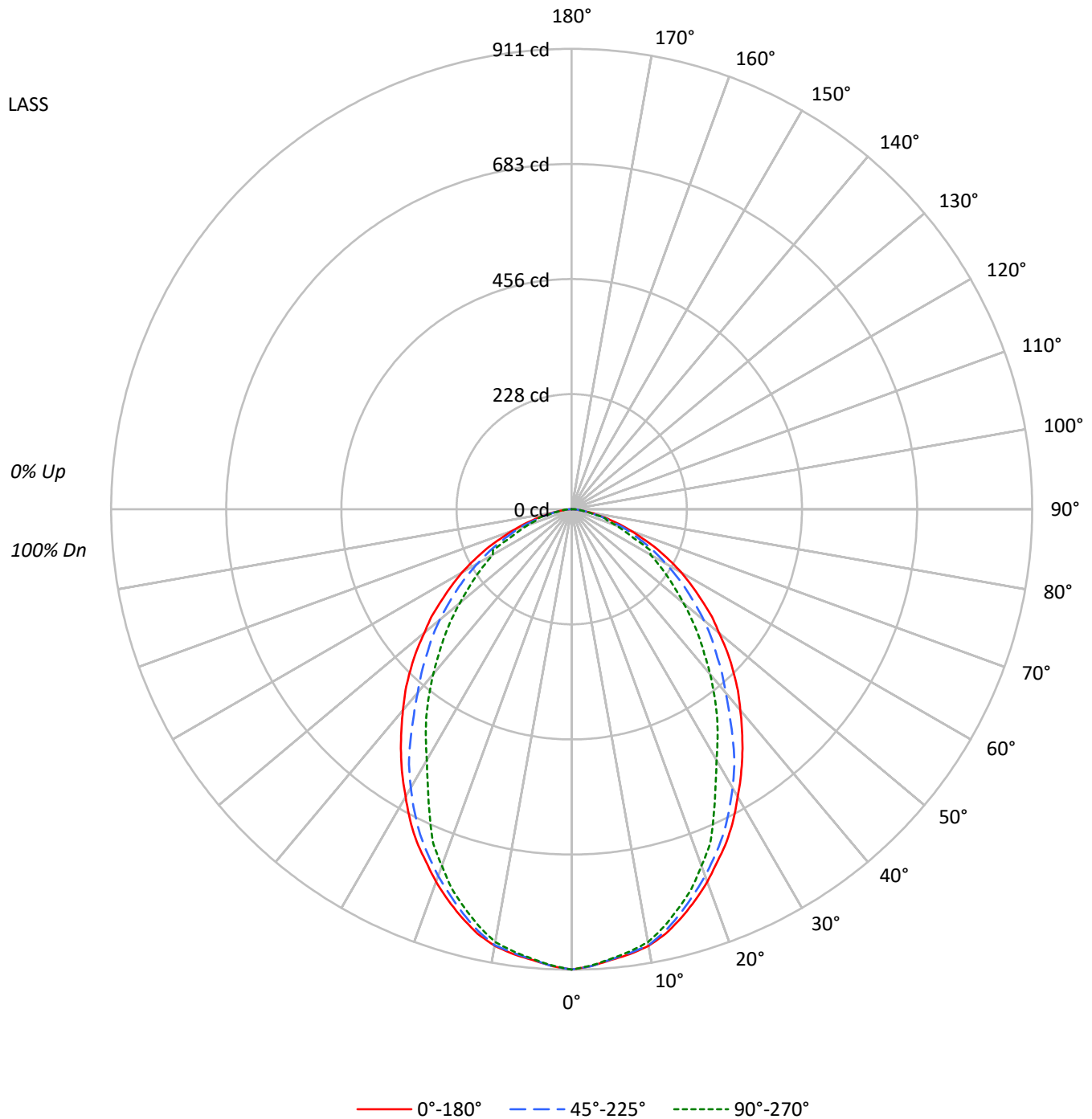
Lumens per Lamp: N/A
Luminaire Lumens: 1788.0 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					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°	4902	4902	4902
5°	4835	4829	4824
10°	4793	4787	4753
15°	4664	4617	4553
20°	4493	4420	4300
25°	4308	4214	3952
30°	4083	3952	3560
35°	3867	3652	3293
40°	3647	3329	2996
45°	3438	3077	2709
50°	3183	2856	2416
55°	2944	2589	2164
60°	2697	2312	1939
65°	2374	2025	1717
70°	1954	1773	1459
75°	1555	1358	1422
80°	1044	979	914
85°	648	778	908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3438 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.8	4.7
10°-20°	232.7	13.0
20°-30°	322.1	18.0
30°-40°	343.5	19.2
40°-50°	313.3	17.5
50°-60°	245.5	13.7
60°-70°	160.0	8.9
70°-80°	70.9	4.0
80°-90°	15.2	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°	639.6	35.8
0°-40°	983.1	55.0
0°-60°	1541.9	86.2
0°-90°	1788.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1788.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	895	894	894	893	893	85
15°	837	837	829	820	817	235
25°	726	721	710	684	666	333
35°	589	584	556	514	501	368
45°	452	442	404	371	356	348
55°	314	304	276	243	231	281
65°	186	176	159	162	135	184
75°	75	70	65	62	68	80
85°	10	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°	910.8	910.8	910.8	910.8	910.8
2.5°	904.5	904.5	904.5	903.4	903.4
5°	895.0	893.9	893.9	892.9	892.9
7.5°	887.6	886.6	885.5	884.5	882.4
10°	877.1	877.1	876.0	870.8	869.7
12.5°	860.2	859.2	855.0	847.6	845.5
15°	837.1	837.1	828.7	820.2	817.1
17.5°	811.8	810.8	800.2	791.8	787.6
20°	784.4	782.3	771.8	758.1	750.7
22.5°	753.9	753.9	741.3	723.4	716.0
25°	725.5	721.3	709.7	684.4	665.5
27.5°	692.8	686.5	673.9	638.1	616.0
30°	657.0	653.9	636.0	589.6	572.8
32.5°	623.3	618.1	599.1	550.7	537.0
35°	588.6	584.4	555.9	513.8	501.2
37.5°	553.8	548.6	512.8	479.1	463.3
40°	519.1	512.8	473.8	443.3	426.4
42.5°	486.5	478.0	440.1	407.5	388.5
45°	451.7	442.2	404.3	370.6	355.9
47.5°	417.0	408.5	373.8	339.0	322.2
50°	380.1	372.7	341.1	306.4	288.5
52.5°	349.6	338.0	307.5	272.7	258.0
55°	313.8	304.3	275.9	243.2	230.6
57.5°	281.1	271.7	245.3	214.8	204.3
60°	250.6	236.9	214.8	188.5	180.1
62.5°	216.9	206.4	187.4	165.3	175.8
65°	186.4	175.8	159.0	162.2	134.8
67.5°	152.7	147.4	132.7	117.9	113.7
70°	124.2	117.9	112.7	96.9	92.7
72.5°	99.0	92.7	85.3	76.9	73.7
75°	74.8	69.5	65.3	62.1	68.4
77.5°	51.6	49.5	46.3	43.2	42.1
80°	33.7	32.6	31.6	30.5	29.5
82.5°	20.0	20.0	20.0	20.0	20.0
85°	10.5	11.6	12.6	13.7	14.7
87.5°	6.3	6.3	7.4	8.4	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)