

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: P559550

Luminaire Tested: FSR-12-1-LD4-2STD-50-UNV-80-97-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559550
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-LD4-2STD-50-UNV-80-97-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 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: 1344.0 lumens
Efficiency: N/A
Efficacy: 81.0 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

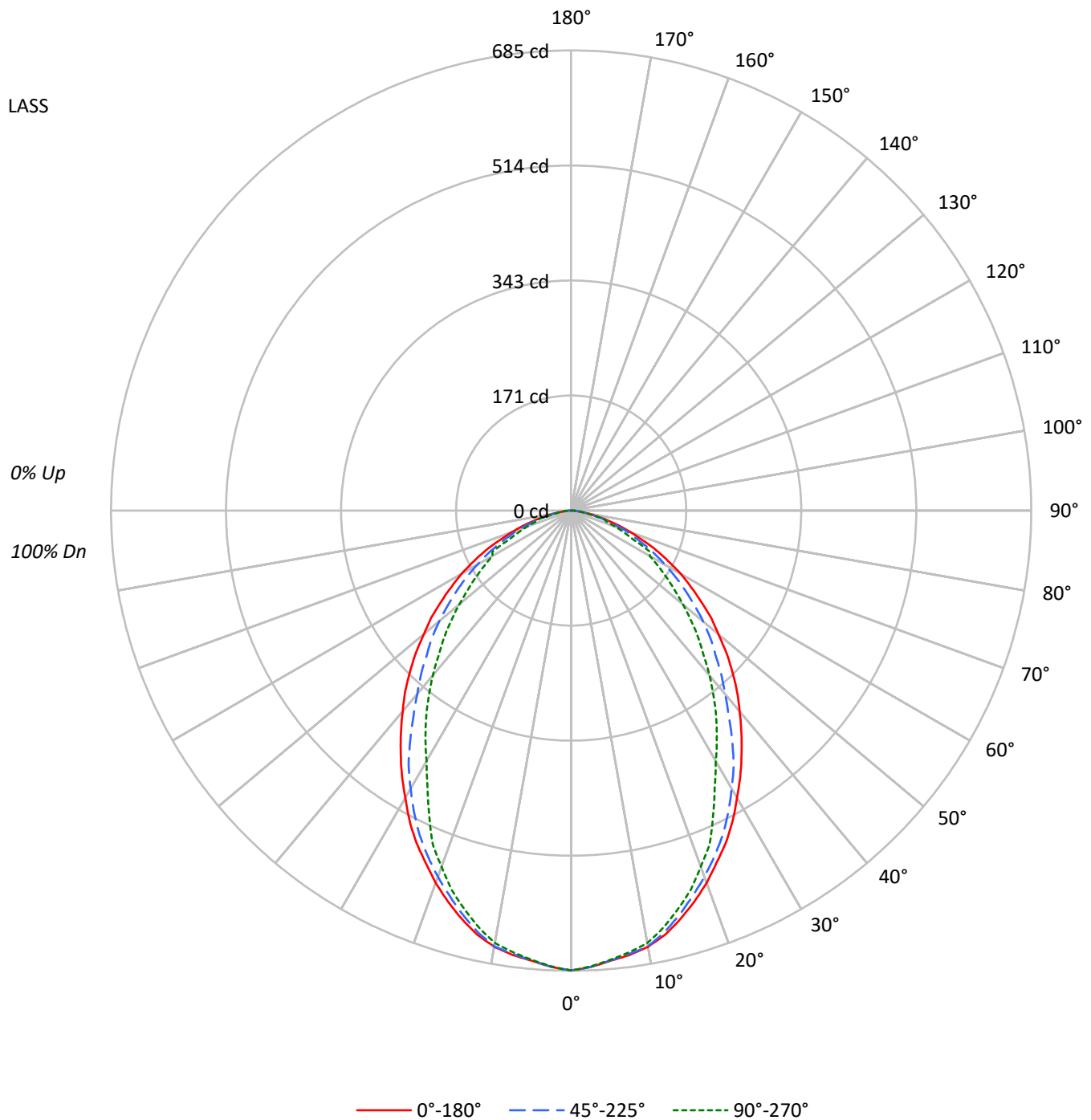
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7369	7369	7369
5°	7269	7261	7252
10°	7206	7197	7145
15°	7012	6941	6844
20°	6754	6645	6464
25°	6476	6335	5941
30°	6139	5941	5352
35°	5813	5491	4950
40°	5483	5005	4503
45°	5168	4626	4072
50°	4784	4294	3632
55°	4427	3892	3252
60°	4056	3477	2913
65°	3568	3044	2580
70°	2939	2666	2190
75°	2337	2042	2138
80°	1568	1469	1376
85°	976	1173	1371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5168 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.7	4.7
10°-20°	174.9	13.0
20°-30°	242.1	18.0
30°-40°	258.2	19.2
40°-50°	235.5	17.5
50°-60°	184.5	13.7
60°-70°	120.3	8.9
70°-80°	53.3	4.0
80°-90°	11.4	0.8
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°	480.8	35.8
0°-40°	738.9	55.0
0°-60°	1159.0	86.2
0°-90°	1344.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1344.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	685	685	685	685	685	
5°	673	672	672	671	671	64
15°	629	629	623	616	614	177
25°	545	542	533	514	500	250
35°	442	439	418	386	377	277
45°	340	332	304	279	268	262
55°	236	229	207	183	173	212
65°	140	132	120	122	101	138
75°	56	52	49	47	51	60
85°	8	9	10	10	11	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	684.6	684.6	684.6	684.6	684.6
2.5°	679.9	679.9	679.9	679.1	679.1
5°	672.7	672.0	672.0	671.2	671.2
7.5°	667.2	666.4	665.6	664.8	663.2
10°	659.3	659.3	658.5	654.5	653.7
12.5°	646.6	645.8	642.7	637.1	635.5
15°	629.2	629.2	622.9	616.5	614.2
17.5°	610.2	609.4	601.5	595.2	592.0
20°	589.6	588.1	580.1	569.9	564.3
22.5°	566.7	566.7	557.2	543.7	538.2
25°	545.3	542.2	533.4	514.5	500.2
27.5°	520.8	516.0	506.5	479.6	463.0
30°	493.9	491.5	478.0	443.2	430.6
32.5°	468.5	464.6	450.3	413.9	403.6
35°	442.4	439.3	417.9	386.2	376.7
37.5°	416.3	412.4	385.4	360.1	348.2
40°	390.2	385.4	356.2	333.2	320.5
42.5°	365.7	359.3	330.8	306.3	292.0
45°	339.5	332.4	303.9	278.6	267.5
47.5°	313.4	307.1	281.0	254.9	242.2
50°	285.7	280.2	256.4	230.3	216.9
52.5°	262.8	254.1	231.1	205.0	193.9
55°	235.9	228.7	207.4	182.8	173.3
57.5°	211.3	204.2	184.4	161.5	153.5
60°	188.4	178.1	161.5	141.7	135.3
62.5°	163.0	155.1	140.9	124.3	132.2
65°	140.1	132.2	119.5	121.9	101.3
67.5°	114.8	110.8	99.7	88.6	85.5
70°	93.4	88.6	84.7	72.8	69.6
72.5°	74.4	69.6	64.1	57.8	55.4
75°	56.2	52.2	49.1	46.7	51.4
77.5°	38.8	37.2	34.8	32.4	31.7
80°	25.3	24.5	23.7	23.0	22.2
82.5°	15.0	15.0	15.0	15.0	15.0
85°	7.9	8.7	9.5	10.3	11.1
87.5°	4.7	4.7	5.5	6.3	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)