

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: P558579

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558579
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-LD4-1HI-50-UNV-80-85-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 972.0 lumens
Efficiency: N/A
Efficacy: 90.0 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

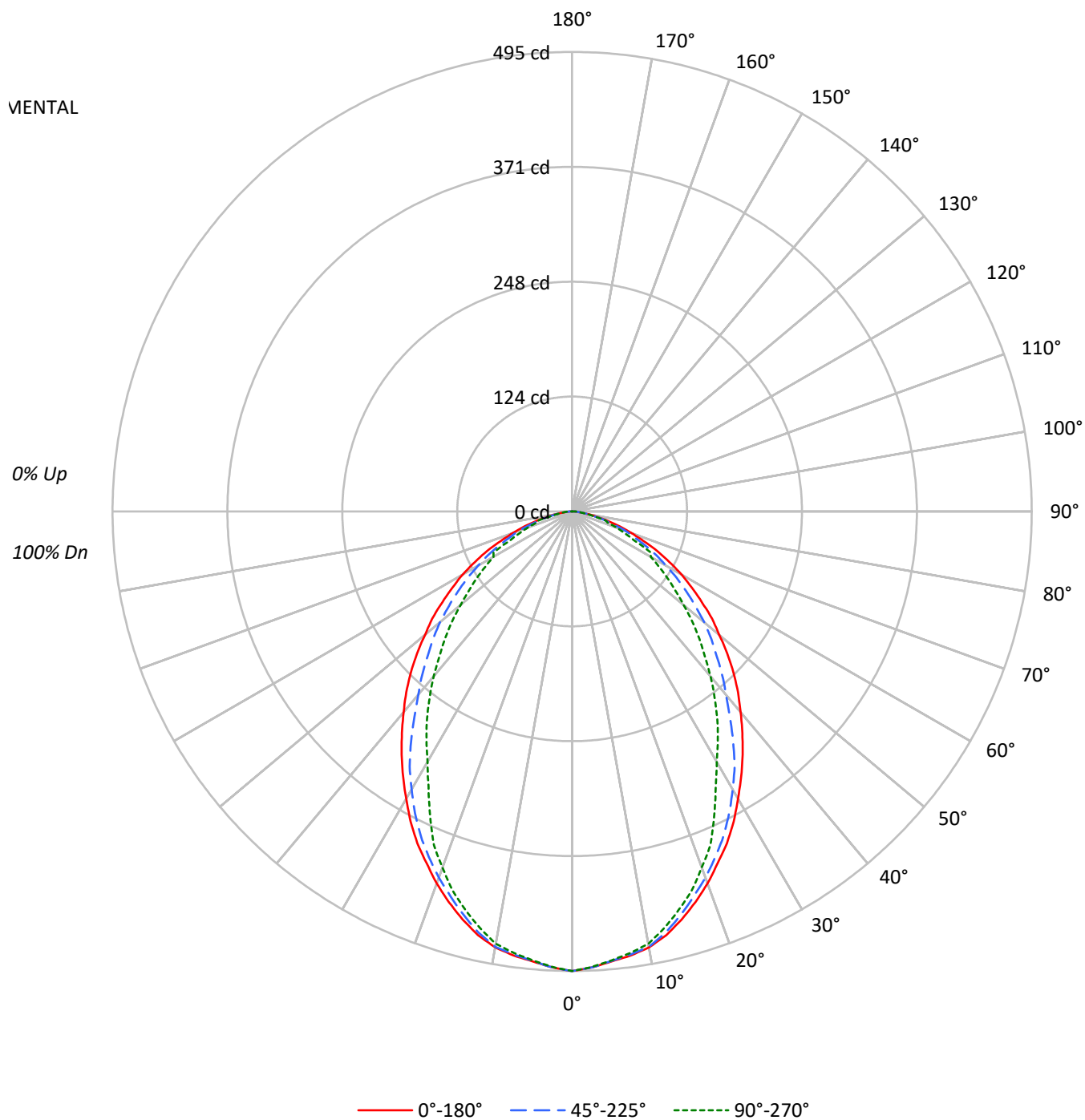
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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		87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75		75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65		65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56		56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		50
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44		44
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40		40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36		36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33		33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30		30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5329	5329	5329
5°	5257	5251	5245
10°	5211	5205	5168
15°	5071	5020	4950
20°	4884	4806	4675
25°	4684	4582	4297
30°	4440	4297	3870
35°	4205	3971	3581
40°	3965	3620	3257
45°	3739	3346	2946
50°	3460	3106	2626
55°	3202	2815	2353
60°	2932	2514	2108
65°	2580	2201	1867
70°	2124	1926	1586
75°	1688	1476	1547
80°	1134	1066	992
85°	704	852	988

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3739 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.1	4.7
10°-20°	126.5	13.0
20°-30°	175.1	18.0
30°-40°	186.7	19.2
40°-50°	170.4	17.5
50°-60°	133.5	13.7
60°-70°	87.0	8.9
70°-80°	38.5	4.0
80°-90°	8.3	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°	347.7	35.8
0°-40°	534.4	55.0
0°-60°	838.2	86.2
0°-90°	972.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	972.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	495	495	495	495	495	
5°	486	486	486	485	485	46
15°	455	455	450	446	444	128
25°	394	392	386	372	362	181
35°	320	318	302	279	272	200
45°	246	240	220	202	194	189
55°	171	165	150	132	125	153
65°	101	96	86	88	73	100
75°	41	38	36	34	37	44
85°	6	6	7	7	8	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	495.1	495.1	495.1	495.1	495.1
2.5°	491.7	491.7	491.7	491.1	491.1
5°	486.5	486.0	486.0	485.4	485.4
7.5°	482.5	482.0	481.4	480.8	479.7
10°	476.8	476.8	476.2	473.4	472.8
12.5°	467.6	467.1	464.8	460.8	459.6
15°	455.1	455.1	450.5	445.9	444.2
17.5°	441.3	440.7	435.0	430.4	428.2
20°	426.4	425.3	419.6	412.1	408.1
22.5°	409.8	409.8	403.0	393.2	389.2
25°	394.4	392.1	385.8	372.1	361.8
27.5°	376.6	373.2	366.3	346.9	334.9
30°	357.2	355.5	345.7	320.5	311.4
32.5°	338.9	336.0	325.7	299.4	291.9
35°	320.0	317.7	302.2	279.3	272.5
37.5°	301.1	298.2	278.8	260.4	251.9
40°	282.2	278.8	257.6	241.0	231.8
42.5°	264.4	259.9	239.3	221.5	211.2
45°	245.6	240.4	219.8	201.5	193.5
47.5°	226.7	222.1	203.2	184.3	175.2
50°	206.6	202.6	185.5	166.6	156.8
52.5°	190.0	183.7	167.1	148.3	140.2
55°	170.6	165.4	150.0	132.2	125.4
57.5°	152.8	147.7	133.4	116.8	111.0
60°	136.2	128.8	116.8	102.5	97.9
62.5°	117.9	112.2	101.9	89.9	95.6
65°	101.3	95.6	86.4	88.1	73.3
67.5°	83.0	80.1	72.1	64.1	61.8
70°	67.5	64.1	61.2	52.7	50.4
72.5°	53.8	50.4	46.4	41.8	40.1
75°	40.6	37.8	35.5	33.8	37.2
77.5°	28.0	26.9	25.2	23.5	22.9
80°	18.3	17.7	17.2	16.6	16.0
82.5°	10.9	10.9	10.9	10.9	10.9
85°	5.7	6.3	6.9	7.4	8.0
87.5°	3.4	3.4	4.0	4.6	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)