

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: P558578

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558578
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-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 845.0 lumens
Efficiency: N/A
Efficacy: 78.2 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

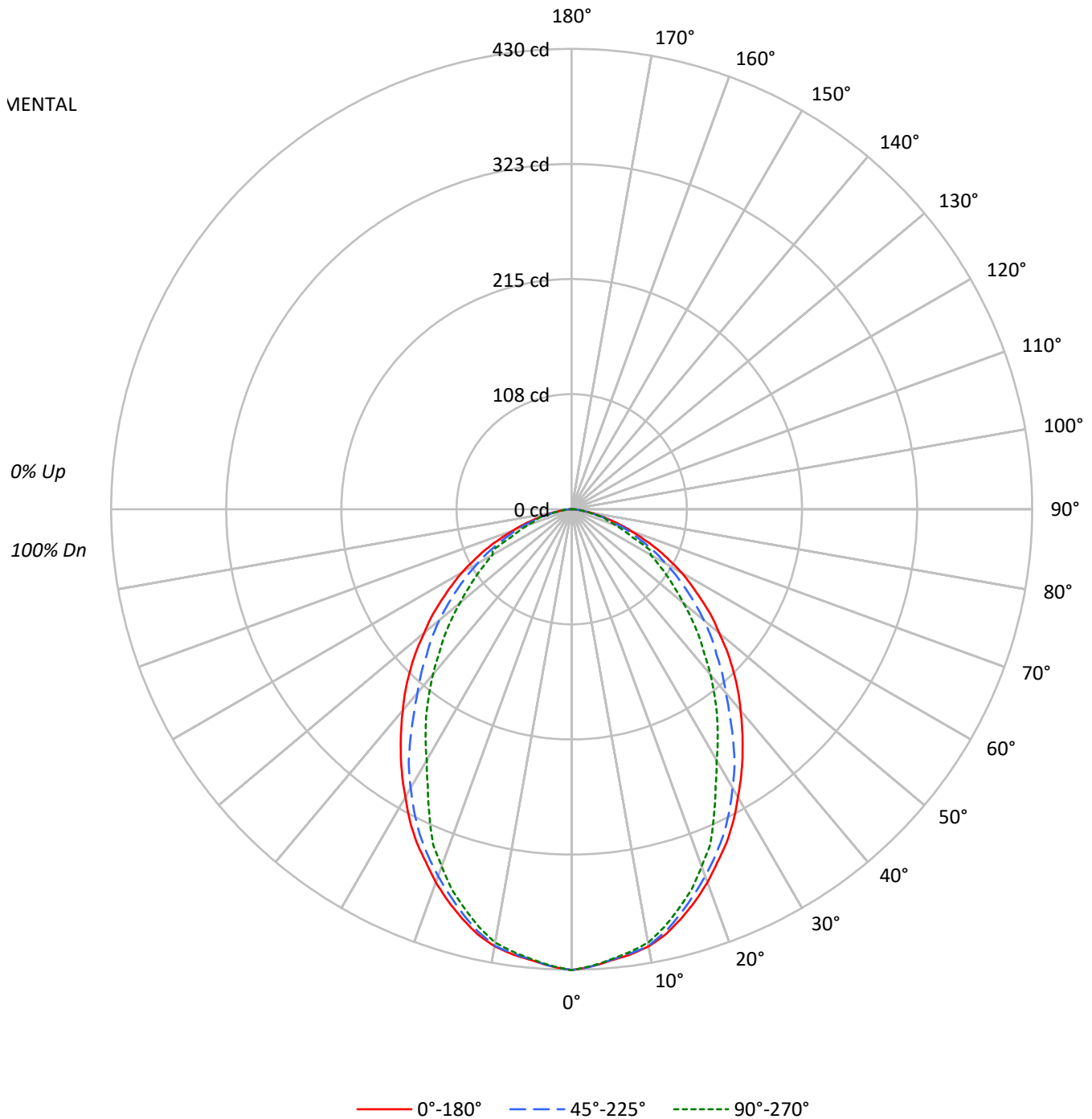
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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												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°	4633	4633	4633
5°	4571	4565	4560
10°	4530	4525	4492
15°	4408	4364	4303
20°	4246	4178	4064
25°	4073	3983	3735
30°	3859	3736	3365
35°	3656	3452	3113
40°	3447	3146	2831
45°	3250	2909	2560
50°	3008	2699	2282
55°	2783	2447	2046
60°	2549	2185	1832
65°	2244	1913	1622
70°	1847	1674	1378
75°	1468	1285	1343
80°	986	924	862
85°	618	741	865

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3250 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.1	4.7
10°-20°	110.0	13.0
20°-30°	152.2	18.0
30°-40°	162.3	19.2
40°-50°	148.1	17.5
50°-60°	116.0	13.7
60°-70°	75.6	8.9
70°-80°	33.5	4.0
80°-90°	7.2	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°	302.3	35.8
0°-40°	464.6	55.0
0°-60°	728.7	86.2
0°-90°	845.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	845.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	430	430	430	430	430	
5°	423	422	422	422	422	40
15°	396	396	392	388	386	111
25°	343	341	335	323	314	157
35°	278	276	263	243	237	174
45°	214	209	191	175	168	164
55°	148	144	130	115	109	133
65°	88	83	75	77	64	87
75°	35	33	31	29	32	38
85°	5	6	6	6	7	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	430.4	430.4	430.4	430.4	430.4
2.5°	427.4	427.4	427.4	426.9	426.9
5°	423.0	422.5	422.5	422.0	422.0
7.5°	419.5	419.0	418.5	418.0	417.0
10°	414.5	414.5	414.0	411.5	411.0
12.5°	406.5	406.0	404.1	400.6	399.6
15°	395.6	395.6	391.6	387.6	386.1
17.5°	383.7	383.2	378.2	374.2	372.2
20°	370.7	369.7	364.7	358.3	354.8
22.5°	356.3	356.3	350.3	341.9	338.4
25°	342.9	340.9	335.4	323.4	314.5
27.5°	327.4	324.4	318.5	301.6	291.1
30°	310.5	309.0	300.6	278.7	270.7
32.5°	294.6	292.1	283.1	260.2	253.8
35°	278.2	276.2	262.7	242.8	236.9
37.5°	261.7	259.3	242.3	226.4	218.9
40°	245.3	242.3	223.9	209.5	201.5
42.5°	229.9	225.9	208.0	192.6	183.6
45°	213.5	209.0	191.1	175.2	168.2
47.5°	197.1	193.1	176.7	160.2	152.3
50°	179.6	176.2	161.2	144.8	136.3
52.5°	165.2	159.7	145.3	128.9	121.9
55°	148.3	143.8	130.4	114.9	109.0
57.5°	132.9	128.4	115.9	101.5	96.5
60°	118.4	112.0	101.5	89.1	85.1
62.5°	102.5	97.5	88.6	78.1	83.1
65°	88.1	83.1	75.1	76.6	63.7
67.5°	72.2	69.7	62.7	55.7	53.7
70°	58.7	55.7	53.2	45.8	43.8
72.5°	46.8	43.8	40.3	36.3	34.8
75°	35.3	32.8	30.9	29.4	32.3
77.5°	24.4	23.4	21.9	20.4	19.9
80°	15.9	15.4	14.9	14.4	13.9
82.5°	9.5	9.5	9.5	9.5	9.5
85°	5.0	5.5	6.0	6.5	7.0
87.5°	3.0	3.0	3.5	4.0	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)