

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: P558774

Luminaire Tested: FSR-12-1-LD4-1LO-50-UNV-80-87-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558774
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-LD4-1LO-50-UNV-80-87-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 492.0 lumens
Efficiency: N/A
Efficacy: 84.8 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

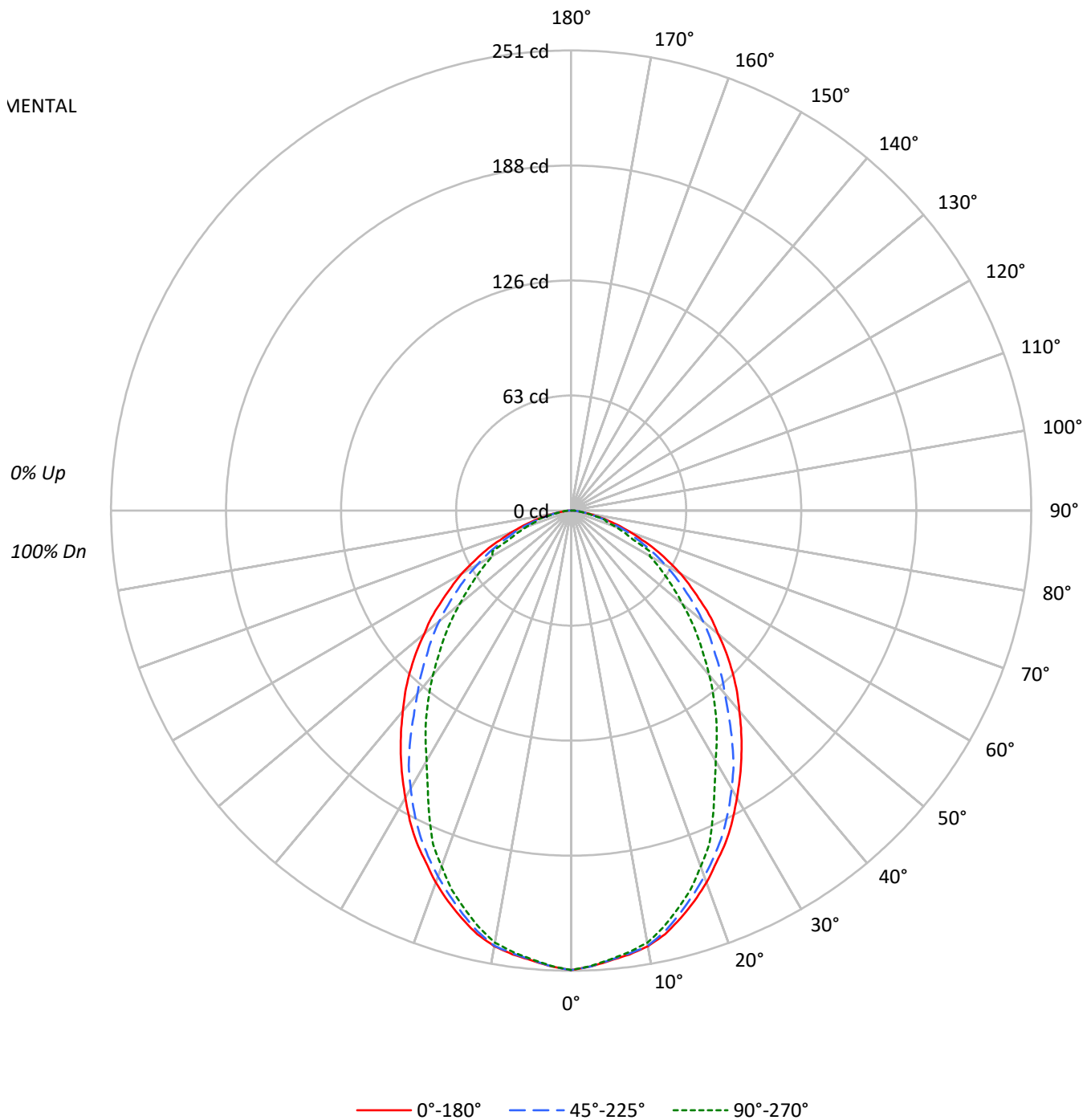
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	2697	2697	2697
5°	2661	2658	2655
10°	2637	2635	2616
15°	2566	2541	2505
20°	2473	2433	2367
25°	2371	2320	2175
30°	2247	2175	1959
35°	2129	2010	1812
40°	2007	1832	1648
45°	1892	1694	1490
50°	1752	1572	1330
55°	1620	1424	1192
60°	1485	1272	1066
65°	1307	1113	945
70°	1076	976	803
75°	857	749	782
80°	576	539	502
85°	358	432	506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1892 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	4.7
10°-20°	64.0	13.0
20°-30°	88.6	18.0
30°-40°	94.5	19.2
40°-50°	86.2	17.5
50°-60°	67.6	13.7
60°-70°	44.0	8.9
70°-80°	19.5	4.0
80°-90°	4.2	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°	176.0	35.8
0°-40°	270.5	55.0
0°-60°	424.3	86.2
0°-90°	492.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	251	251	251	251	251	
5°	246	246	246	246	246	23
15°	230	230	228	226	225	65
25°	200	198	195	188	183	92
35°	162	161	153	141	138	101
45°	124	122	111	102	98	96
55°	86	84	76	67	64	77
65°	51	48	44	45	37	51
75°	21	19	18	17	19	22
85°	3	3	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	250.6	250.6	250.6	250.6	250.6
2.5°	248.9	248.9	248.9	248.6	248.6
5°	246.3	246.0	246.0	245.7	245.7
7.5°	244.2	244.0	243.7	243.4	242.8
10°	241.3	241.3	241.1	239.6	239.3
12.5°	236.7	236.4	235.3	233.2	232.7
15°	230.3	230.3	228.0	225.7	224.8
17.5°	223.4	223.1	220.2	217.9	216.7
20°	215.9	215.3	212.4	208.6	206.6
22.5°	207.4	207.4	204.0	199.0	197.0
25°	199.6	198.5	195.3	188.3	183.1
27.5°	190.6	188.9	185.4	175.6	169.5
30°	180.8	179.9	175.0	162.2	157.6
32.5°	171.5	170.1	164.9	151.5	147.8
35°	162.0	160.8	153.0	141.4	137.9
37.5°	152.4	151.0	141.1	131.8	127.5
40°	142.8	141.1	130.4	122.0	117.3
42.5°	133.9	131.5	121.1	112.1	106.9
45°	124.3	121.7	111.3	102.0	97.9
47.5°	114.7	112.4	102.9	93.3	88.7
50°	104.6	102.6	93.9	84.3	79.4
52.5°	96.2	93.0	84.6	75.0	71.0
55°	86.3	83.7	75.9	66.9	63.5
57.5°	77.4	74.8	67.5	59.1	56.2
60°	69.0	65.2	59.1	51.9	49.5
62.5°	59.7	56.8	51.6	45.5	48.4
65°	51.3	48.4	43.7	44.6	37.1
67.5°	42.0	40.6	36.5	32.4	31.3
70°	34.2	32.4	31.0	26.7	25.5
72.5°	27.2	25.5	23.5	21.2	20.3
75°	20.6	19.1	18.0	17.1	18.8
77.5°	14.2	13.6	12.7	11.9	11.6
80°	9.3	9.0	8.7	8.4	8.1
82.5°	5.5	5.5	5.5	5.5	5.5
85°	2.9	3.2	3.5	3.8	4.1
87.5°	1.7	1.7	2.0	2.3	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)