

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: P558826

Luminaire Tested: FSR-12-1-LD4-1LO-50-UNV-93-94-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558826
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-93-94-EDD-90
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPER GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 527.0 lumens
Efficiency: N/A
Efficacy: 90.9 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

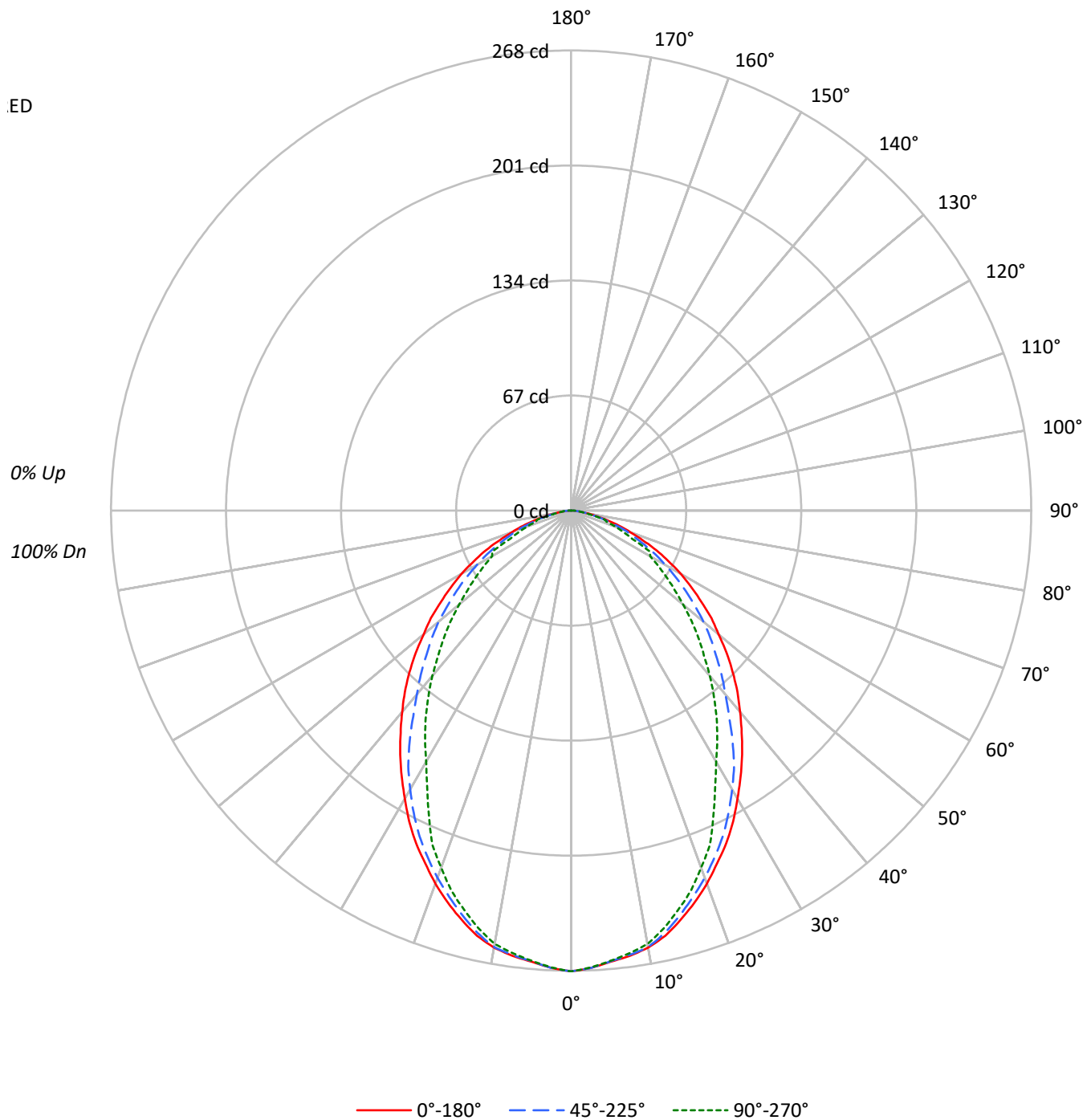
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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																												
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°	2889	2889	2889
5°	2850	2847	2844
10°	2825	2822	2801
15°	2749	2721	2683
20°	2648	2606	2535
25°	2539	2485	2329
30°	2408	2329	2098
35°	2280	2154	1941
40°	2150	1963	1766
45°	2026	1815	1597
50°	1876	1685	1423
55°	1736	1526	1276
60°	1591	1363	1143
65°	1398	1195	1011
70°	1152	1045	859
75°	915	799	840
80°	614	576	539
85°	383	457	531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2026 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.0	4.7
10°-20°	68.6	13.0
20°-30°	94.9	18.0
30°-40°	101.2	19.2
40°-50°	92.4	17.5
50°-60°	72.4	13.7
60°-70°	47.2	8.9
70°-80°	20.9	4.0
80°-90°	4.5	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°	188.5	35.8
0°-40°	289.7	55.0
0°-60°	454.5	86.2
0°-90°	527.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	527.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	268	268	268	268	268	
5°	264	264	264	263	263	25
15°	247	247	244	242	241	69
25°	214	213	209	202	196	98
35°	174	172	164	151	148	108
45°	133	130	119	109	105	103
55°	92	90	81	72	68	83
65°	55	52	47	48	40	54
75°	22	20	19	18	20	24
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°	268.4	268.4	268.4	268.4	268.4
2.5°	266.6	266.6	266.6	266.3	266.3
5°	263.8	263.5	263.5	263.2	263.2
7.5°	261.6	261.3	261.0	260.7	260.1
10°	258.5	258.5	258.2	256.7	256.3
12.5°	253.6	253.2	252.0	249.8	249.2
15°	246.7	246.7	244.2	241.8	240.8
17.5°	239.3	239.0	235.9	233.4	232.1
20°	231.2	230.6	227.5	223.4	221.3
22.5°	222.2	222.2	218.5	213.2	211.0
25°	213.8	212.6	209.2	201.7	196.1
27.5°	204.2	202.3	198.6	188.1	181.6
30°	193.7	192.7	187.4	173.8	168.8
32.5°	183.7	182.2	176.6	162.3	158.3
35°	173.5	172.2	163.9	151.4	147.7
37.5°	163.2	161.7	151.1	141.2	136.6
40°	153.0	151.1	139.7	130.7	125.7
42.5°	143.4	140.9	129.7	120.1	114.5
45°	133.1	130.3	119.2	109.2	104.9
47.5°	122.9	120.4	110.2	99.9	95.0
50°	112.0	109.9	100.6	90.3	85.0
52.5°	103.0	99.6	90.6	80.4	76.0
55°	92.5	89.7	81.3	71.7	68.0
57.5°	82.9	80.1	72.3	63.3	60.2
60°	73.9	69.8	63.3	55.6	53.1
62.5°	63.9	60.8	55.2	48.7	51.8
65°	54.9	51.8	46.9	47.8	39.7
67.5°	45.0	43.4	39.1	34.8	33.5
70°	36.6	34.8	33.2	28.6	27.3
72.5°	29.2	27.3	25.1	22.7	21.7
75°	22.0	20.5	19.2	18.3	20.2
77.5°	15.2	14.6	13.7	12.7	12.4
80°	9.9	9.6	9.3	9.0	8.7
82.5°	5.9	5.9	5.9	5.9	5.9
85°	3.1	3.4	3.7	4.0	4.3
87.5°	1.9	1.9	2.2	2.5	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)