

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: P559956

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-82-86-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559956
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-12-2-LD4-1LO-50-UNV-82-86-EDD-90
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 917.0 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

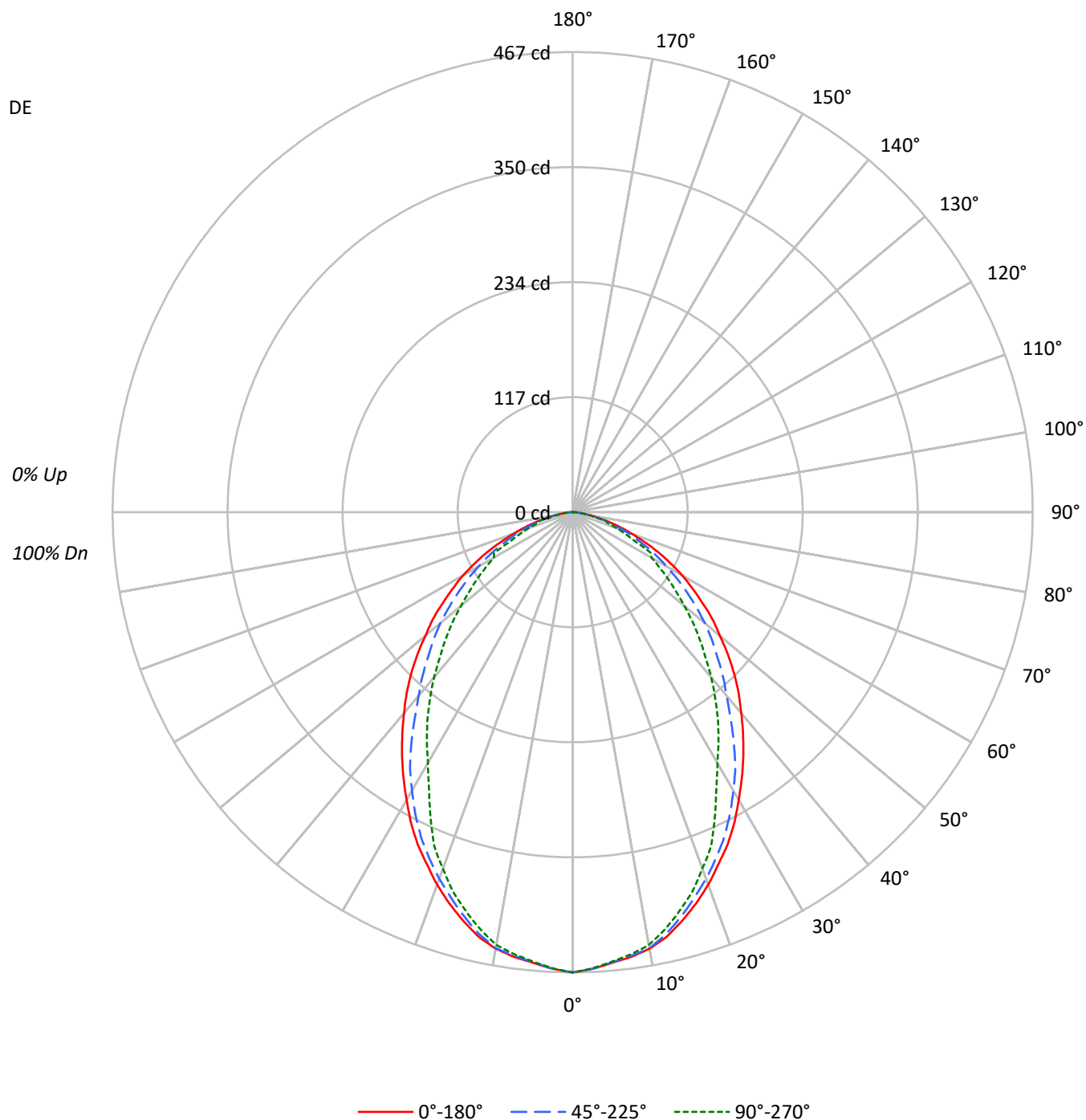
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	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
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2514	2514	2514
5°	2480	2477	2474
10°	2458	2455	2437
15°	2392	2368	2335
20°	2304	2267	2205
25°	2210	2162	2027
30°	2094	2027	1826
35°	1984	1873	1689
40°	1870	1707	1537
45°	1764	1579	1389
50°	1632	1465	1239
55°	1510	1328	1110
60°	1383	1186	994
65°	1217	1038	880
70°	1002	910	747
75°	796	697	730
80°	536	502	468
85°	333	401	469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1764 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	4.7
10°-20°	119.3	13.0
20°-30°	165.2	18.0
30°-40°	176.2	19.2
40°-50°	160.7	17.5
50°-60°	125.9	13.7
60°-70°	82.1	8.9
70°-80°	36.4	4.0
80°-90°	7.8	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°	328.0	35.8
0°-40°	504.2	55.0
0°-60°	790.8	86.2
0°-90°	917.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	917.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	467	467	467	467	467	
5°	459	458	458	458	458	44
15°	429	429	425	421	419	121
25°	372	370	364	351	341	171
35°	302	300	285	264	257	189
45°	232	227	207	190	182	178
55°	161	156	142	125	118	144
65°	96	90	82	83	69	94
75°	38	36	34	32	35	41
85°	5	6	6	7	8	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	467.1	467.1	467.1	467.1	467.1
2.5°	463.9	463.9	463.9	463.3	463.3
5°	459.0	458.5	458.5	457.9	457.9
7.5°	455.2	454.7	454.1	453.6	452.5
10°	449.8	449.8	449.3	446.6	446.0
12.5°	441.2	440.6	438.5	434.7	433.6
15°	429.3	429.3	425.0	420.7	419.0
17.5°	416.3	415.8	410.4	406.1	403.9
20°	402.3	401.2	395.8	388.8	385.0
22.5°	386.6	386.6	380.2	371.0	367.2
25°	372.1	369.9	364.0	351.0	341.3
27.5°	355.3	352.1	345.6	327.2	315.9
30°	337.0	335.3	326.2	302.4	293.8
32.5°	319.7	317.0	307.3	282.4	275.4
35°	301.9	299.7	285.1	263.5	257.0
37.5°	284.0	281.3	263.0	245.7	237.6
40°	266.2	263.0	243.0	227.3	218.7
42.5°	249.5	245.2	225.7	209.0	199.3
45°	231.7	226.8	207.4	190.1	182.5
47.5°	213.8	209.5	191.7	173.9	165.2
50°	194.9	191.2	175.0	157.1	148.0
52.5°	179.3	173.3	157.7	139.9	132.3
55°	160.9	156.1	141.5	124.7	118.3
57.5°	144.2	139.3	125.8	110.2	104.8
60°	128.5	121.5	110.2	96.7	92.3
62.5°	111.2	105.8	96.1	84.8	90.2
65°	95.6	90.2	81.5	83.2	69.1
67.5°	78.3	75.6	68.0	60.5	58.3
70°	63.7	60.5	57.8	49.7	47.5
72.5°	50.8	47.5	43.7	39.4	37.8
75°	38.3	35.6	33.5	31.9	35.1
77.5°	26.5	25.4	23.8	22.1	21.6
80°	17.3	16.7	16.2	15.7	15.1
82.5°	10.3	10.3	10.3	10.3	10.3
85°	5.4	5.9	6.5	7.0	7.6
87.5°	3.2	3.2	3.8	4.3	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)