

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: P559571

Luminaire Tested: FSR-12-1-LD4-2STD-50-UNV-82-85-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559571
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-LD4-2STD-50-UNV-82-85-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1473.0 lumens
Efficiency: N/A
Efficacy: 88.7 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

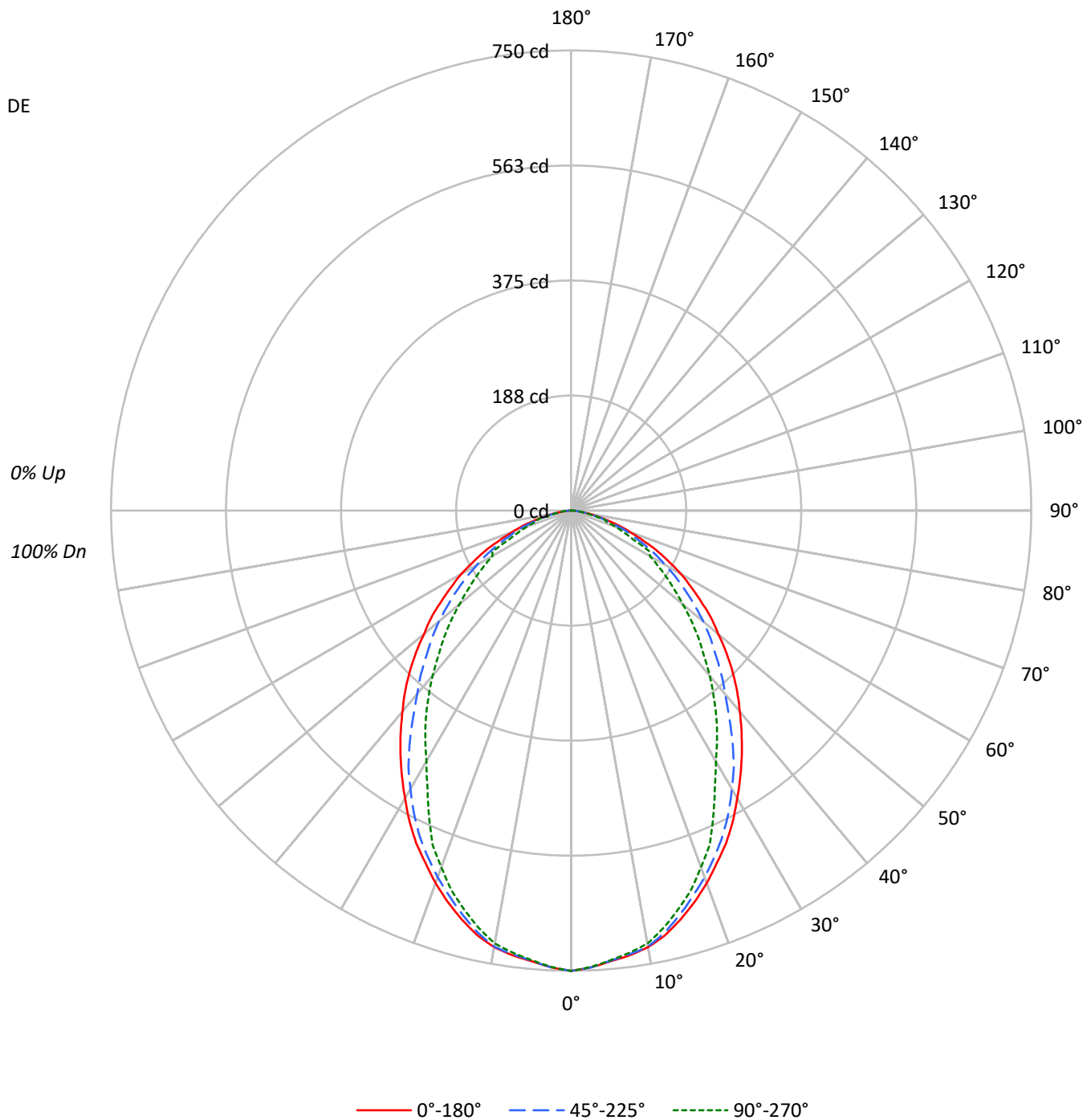
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	8076	8076	8076
5°	7967	7957	7948
10°	7898	7888	7831
15°	7685	7608	7501
20°	7402	7283	7085
25°	7099	6943	6511
30°	6728	6512	5865
35°	6372	6018	5426
40°	6008	5484	4936
45°	5664	5071	4463
50°	5243	4706	3980
55°	4851	4266	3566
60°	4443	3810	3193
65°	3910	3337	2827
70°	3223	2921	2401
75°	2562	2237	2346
80°	1723	1612	1506
85°	1074	1284	1494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5664 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.8	4.7
10°-20°	191.7	13.0
20°-30°	265.4	18.0
30°-40°	283.0	19.2
40°-50°	258.1	17.5
50°-60°	202.2	13.7
60°-70°	131.8	8.9
70°-80°	58.4	4.0
80°-90°	12.5	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°	526.9	35.8
0°-40°	809.9	55.0
0°-60°	1270.3	86.2
0°-90°	1473.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1473.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	737	736	736	736	736	70
15°	690	690	683	676	673	194
25°	598	594	585	564	548	274
35°	485	481	458	423	413	303
45°	372	364	333	305	293	287
55°	258	251	227	200	190	232
65°	154	145	131	134	111	151
75°	62	57	54	51	56	66
85°	9	10	10	11	12	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	750.3	750.3	750.3	750.3	750.3
2.5°	745.1	745.1	745.1	744.3	744.3
5°	737.3	736.4	736.4	735.6	735.6
7.5°	731.2	730.4	729.5	728.6	726.9
10°	722.6	722.6	721.7	717.4	716.5
12.5°	708.7	707.8	704.4	698.3	696.5
15°	689.6	689.6	682.7	675.7	673.1
17.5°	668.8	667.9	659.2	652.3	648.8
20°	646.2	644.5	635.8	624.5	618.5
22.5°	621.1	621.1	610.7	595.9	589.9
25°	597.7	594.2	584.6	563.8	548.2
27.5°	570.8	565.6	555.2	525.7	507.4
30°	541.3	538.7	523.9	485.8	471.9
32.5°	513.5	509.2	493.6	453.7	442.4
35°	484.9	481.4	458.0	423.3	412.9
37.5°	456.3	451.9	422.4	394.7	381.7
40°	427.6	422.4	390.3	365.2	351.3
42.5°	400.8	393.8	362.6	335.7	320.1
45°	372.1	364.3	333.1	305.3	293.2
47.5°	343.5	336.6	307.9	279.3	265.4
50°	313.1	307.1	281.0	252.4	237.7
52.5°	288.0	278.4	253.3	224.7	212.5
55°	258.5	250.7	227.3	200.4	190.0
57.5°	231.6	223.8	202.1	177.0	168.3
60°	206.4	195.2	177.0	155.3	148.3
62.5°	178.7	170.0	154.4	136.2	144.9
65°	153.5	144.9	131.0	133.6	111.0
67.5°	125.8	121.4	109.3	97.2	93.7
70°	102.4	97.2	92.8	79.8	76.3
72.5°	81.5	76.3	70.3	63.3	60.7
75°	61.6	57.3	53.8	51.2	56.4
77.5°	42.5	40.8	38.2	35.6	34.7
80°	27.8	26.9	26.0	25.2	24.3
82.5°	16.5	16.5	16.5	16.5	16.5
85°	8.7	9.5	10.4	11.3	12.1
87.5°	5.2	5.2	6.1	6.9	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)