

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: P559569

Luminaire Tested: FSR-12-1-LD4-2STD-50-UNV-82-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559569
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-82-84-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1503.0 lumens
Efficiency: N/A
Efficacy: 90.5 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

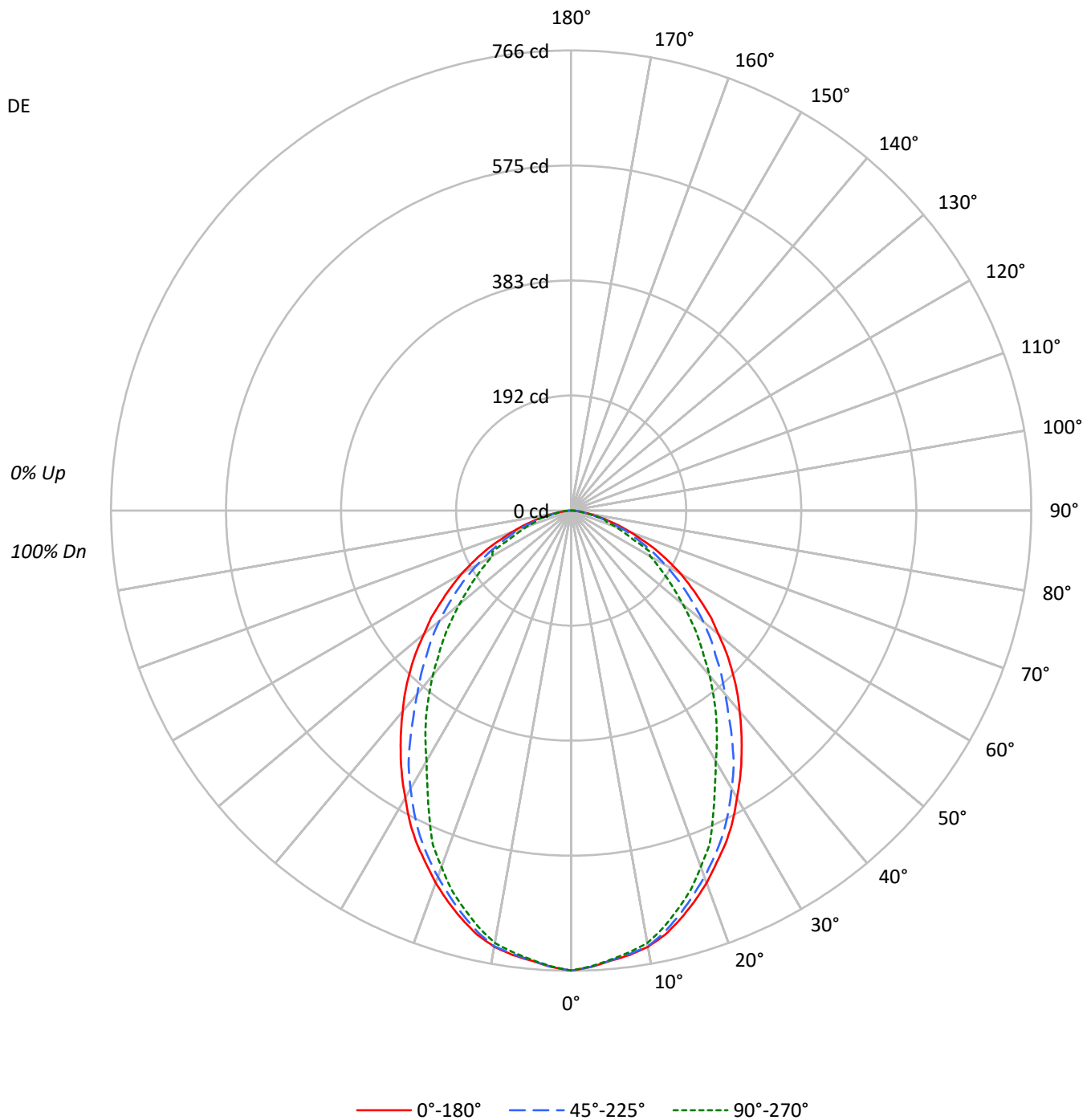
Input Watts (W): 16.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	8241	8241	8241
5°	8129	8119	8110
10°	8059	8049	7991
15°	7842	7763	7653
20°	7553	7432	7229
25°	7242	7086	6644
30°	6865	6645	5985
35°	6502	6140	5536
40°	6132	5597	5037
45°	5780	5174	4555
50°	5350	4803	4061
55°	4951	4352	3637
60°	4536	3888	3259
65°	3991	3403	2886
70°	3286	2980	2452
75°	2612	2283	2391
80°	1754	1649	1537
85°	1099	1309	1531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5780 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	4.7
10°-20°	195.6	13.0
20°-30°	270.8	18.0
30°-40°	288.7	19.2
40°-50°	263.4	17.5
50°-60°	206.4	13.7
60°-70°	134.5	8.9
70°-80°	59.6	4.0
80°-90°	12.8	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°	537.6	35.8
0°-40°	826.4	55.0
0°-60°	1296.1	86.2
0°-90°	1503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1503.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	766	766	766	766	766	
5°	752	751	751	751	751	71
15°	704	704	697	690	687	198
25°	610	606	597	575	559	280
35°	495	491	467	432	421	309
45°	380	372	340	312	299	292
55°	264	256	232	204	194	237
65°	157	148	134	136	113	154
75°	63	58	55	52	58	67
85°	9	10	11	12	12	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.6	765.6	765.6	765.6	765.6
2.5°	760.3	760.3	760.3	759.4	759.4
5°	752.3	751.4	751.4	750.6	750.6
7.5°	746.1	745.3	744.4	743.5	741.7
10°	737.3	737.3	736.4	732.0	731.1
12.5°	723.1	722.2	718.7	712.5	710.7
15°	703.7	703.7	696.6	689.5	686.8
17.5°	682.4	681.5	672.7	665.6	662.1
20°	659.4	657.6	648.8	637.3	631.1
22.5°	633.7	633.7	623.1	608.1	601.9
25°	609.8	606.3	596.6	575.3	559.4
27.5°	582.4	577.1	566.5	536.4	517.8
30°	552.3	549.6	534.6	495.7	481.5
32.5°	524.0	519.6	503.6	462.9	451.4
35°	494.8	491.2	467.3	431.9	421.3
37.5°	465.6	461.1	431.0	402.7	389.4
40°	436.4	431.0	398.3	372.6	358.5
42.5°	408.9	401.8	370.0	342.5	326.6
45°	379.7	371.7	339.9	311.6	299.2
47.5°	350.5	343.4	314.2	285.0	270.8
50°	319.5	313.3	286.8	257.6	242.5
52.5°	293.9	284.1	258.4	229.2	216.8
55°	263.8	255.8	231.9	204.5	193.8
57.5°	236.3	228.4	206.2	180.6	171.7
60°	210.7	199.1	180.6	158.4	151.4
62.5°	182.3	173.5	157.5	139.0	147.8
65°	156.7	147.8	133.6	136.3	113.3
67.5°	128.3	123.9	111.5	99.1	95.6
70°	104.4	99.1	94.7	81.4	77.9
72.5°	83.2	77.9	71.7	64.6	62.0
75°	62.8	58.4	54.9	52.2	57.5
77.5°	43.4	41.6	38.9	36.3	35.4
80°	28.3	27.4	26.6	25.7	24.8
82.5°	16.8	16.8	16.8	16.8	16.8
85°	8.9	9.7	10.6	11.5	12.4
87.5°	5.3	5.3	6.2	7.1	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)