

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: P560406

Luminaire Tested: FSR-12-2-LD4-2LO-35-UNV-82-87-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560406
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-LD4-2LO-35-UNV-82-87-EDD-90
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1662.0 lumens
Efficiency: N/A
Efficacy: 71.0 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

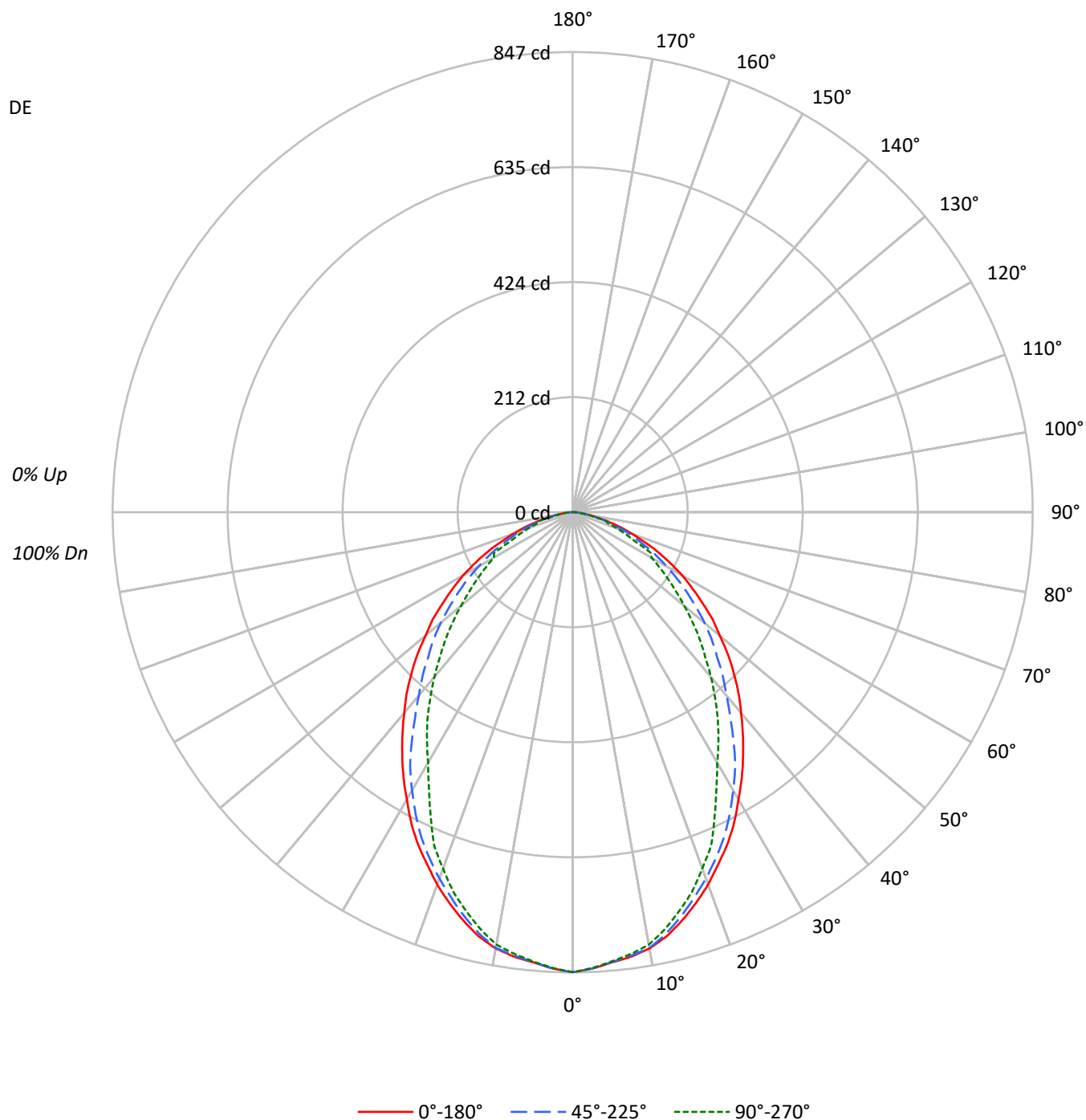
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4556	4556	4556
5°	4494	4489	4484
10°	4456	4450	4418
15°	4335	4292	4232
20°	4176	4109	3997
25°	4004	3918	3673
30°	3795	3674	3309
35°	3595	3395	3061
40°	3390	3094	2785
45°	3196	2860	2518
50°	2958	2655	2246
55°	2737	2406	2011
60°	2507	2150	1802
65°	2206	1882	1596
70°	1817	1648	1355
75°	1445	1262	1323
80°	970	911	849
85°	605	722	846

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3196 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.8	4.7
10°-20°	216.3	13.0
20°-30°	299.4	18.0
30°-40°	319.3	19.2
40°-50°	291.3	17.5
50°-60°	228.2	13.7
60°-70°	148.7	8.9
70°-80°	65.9	4.0
80°-90°	14.1	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°	594.5	35.8
0°-40°	913.8	55.0
0°-60°	1433.2	86.2
0°-90°	1662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1662.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	847	847	847	847	847	
5°	832	831	831	830	830	79
15°	778	778	770	762	760	219
25°	674	670	660	636	619	310
35°	547	543	517	478	466	342
45°	420	411	376	344	331	323
55°	292	283	256	226	214	262
65°	173	163	148	151	125	171
75°	70	65	61	58	64	74
85°	10	11	12	13	14	14
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	846.6	846.6	846.6	846.6	846.6
2.5°	840.7	840.7	840.7	839.7	839.7
5°	831.9	830.9	830.9	830.0	830.0
7.5°	825.1	824.1	823.1	822.1	820.2
10°	815.3	815.3	814.3	809.4	808.4
12.5°	799.6	798.6	794.7	787.9	785.9
15°	778.1	778.1	770.3	762.4	759.5
17.5°	754.6	753.6	743.8	736.0	732.1
20°	729.2	727.2	717.4	704.7	697.8
22.5°	700.8	700.8	689.0	672.4	665.5
25°	674.3	670.4	659.7	636.2	618.6
27.5°	644.0	638.1	626.4	593.1	572.6
30°	610.7	607.8	591.2	548.1	532.4
32.5°	579.4	574.5	556.9	511.9	499.2
35°	547.1	543.2	516.8	477.6	465.9
37.5°	514.8	509.9	476.6	445.3	430.6
40°	482.5	476.6	440.4	412.0	396.4
42.5°	452.2	444.3	409.1	378.8	361.2
45°	419.9	411.1	375.8	344.5	330.8
47.5°	387.6	379.7	347.4	315.2	299.5
50°	353.3	346.5	317.1	284.8	268.2
52.5°	324.9	314.2	285.8	253.5	239.8
55°	291.7	282.9	256.4	226.1	214.3
57.5°	261.3	252.5	228.0	199.7	189.9
60°	232.9	220.2	199.7	175.2	167.4
62.5°	201.6	191.8	174.2	153.7	163.4
65°	173.2	163.4	147.8	150.7	125.3
67.5°	141.9	137.0	123.3	109.6	105.7
70°	115.5	109.6	104.7	90.0	86.1
72.5°	92.0	86.1	79.3	71.4	68.5
75°	69.5	64.6	60.7	57.7	63.6
77.5°	48.0	46.0	43.1	40.1	39.1
80°	31.3	30.3	29.4	28.4	27.4
82.5°	18.6	18.6	18.6	18.6	18.6
85°	9.8	10.8	11.7	12.7	13.7
87.5°	5.9	5.9	6.9	7.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)