

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: P559273

Luminaire Tested: FSR-12-1-LD4-2LO-35-UNV-93-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559273
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-LD4-2LO-35-UNV-93-88-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 994.0 lumens
Efficiency: N/A
Efficacy: 85.0 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

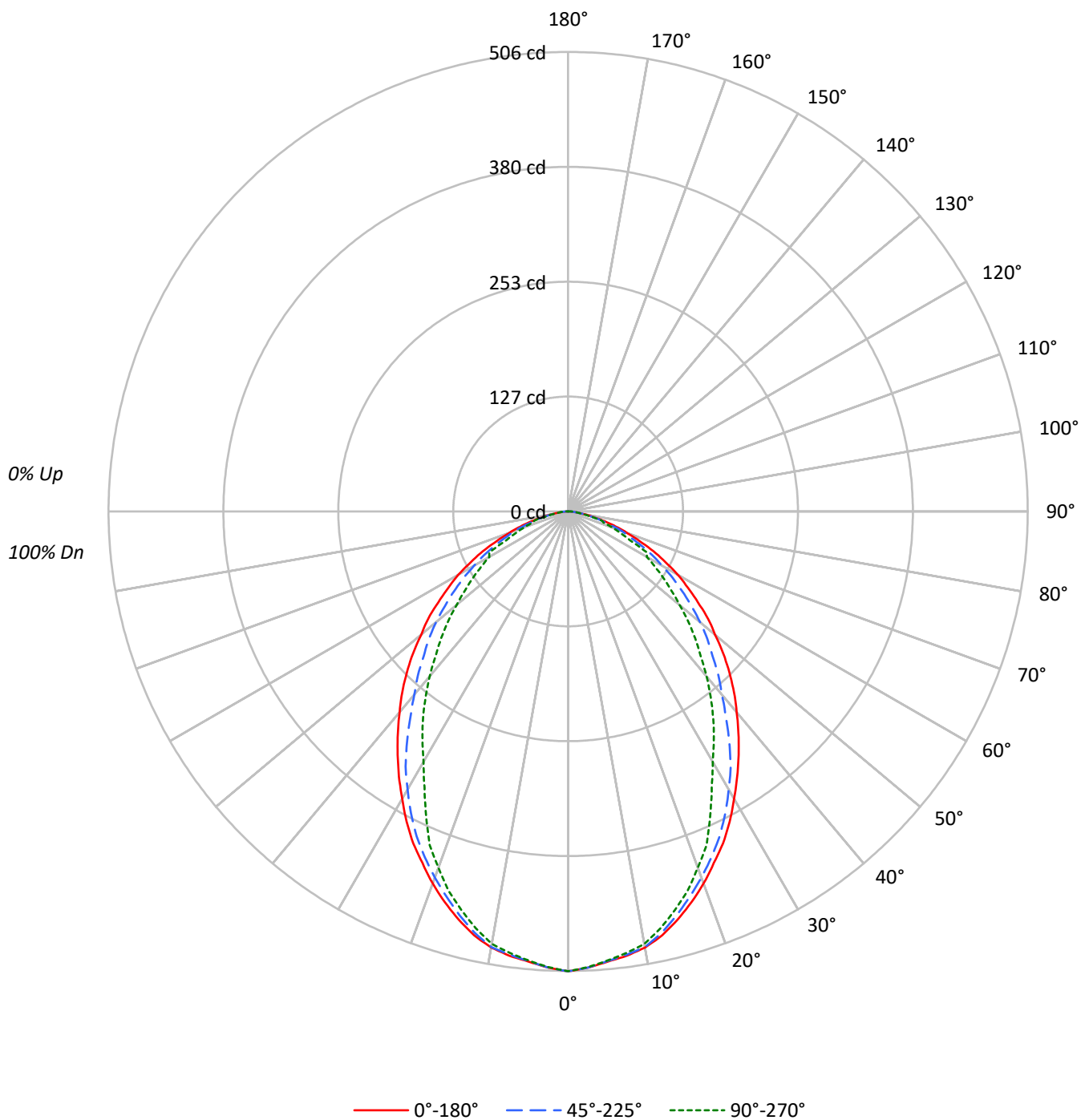
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	5450	5450	5450
5°	5377	5370	5364
10°	5329	5323	5285
15°	5186	5134	5061
20°	4995	4915	4781
25°	4790	4685	4393
30°	4540	4395	3957
35°	4300	4062	3661
40°	4055	3701	3332
45°	3822	3422	3011
50°	3538	3177	2686
55°	3273	2879	2406
60°	2999	2570	2155
65°	2639	2252	1908
70°	2175	1970	1621
75°	1730	1510	1580
80°	1159	1091	1017
85°	729	865	1013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3822 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	4.7
10°-20°	129.4	13.0
20°-30°	179.1	18.0
30°-40°	191.0	19.2
40°-50°	174.2	17.5
50°-60°	136.5	13.7
60°-70°	89.0	8.9
70°-80°	39.4	4.0
80°-90°	8.5	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°	355.6	35.8
0°-40°	546.5	55.0
0°-60°	857.2	86.2
0°-90°	994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	506	506	506	506	506	
5°	498	497	497	496	496	47
15°	465	465	461	456	454	131
25°	403	401	394	380	370	185
35°	327	325	309	286	279	205
45°	251	246	225	206	198	193
55°	174	169	153	135	128	156
65°	104	98	88	90	75	102
75°	42	39	36	34	38	45
85°	6	6	7	8	8	8
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	506.3	506.3	506.3	506.3	506.3
2.5°	502.8	502.8	502.8	502.2	502.2
5°	497.6	497.0	497.0	496.4	496.4
7.5°	493.5	492.9	492.3	491.7	490.5
10°	487.6	487.6	487.0	484.1	483.5
12.5°	478.2	477.6	475.3	471.2	470.0
15°	465.4	465.4	460.7	456.0	454.2
17.5°	451.3	450.7	444.9	440.2	437.8
20°	436.1	434.9	429.1	421.5	417.4
22.5°	419.1	419.1	412.1	402.1	398.0
25°	403.3	401.0	394.5	380.5	369.9
27.5°	385.2	381.7	374.6	354.7	342.4
30°	365.3	363.5	353.6	327.8	318.4
32.5°	346.5	343.6	333.1	306.1	298.5
35°	327.2	324.9	309.1	285.7	278.6
37.5°	307.9	305.0	285.1	266.3	257.6
40°	288.6	285.1	263.4	246.4	237.1
42.5°	270.4	265.8	244.7	226.5	216.0
45°	251.1	245.8	224.8	206.0	197.8
47.5°	231.8	227.1	207.8	188.5	179.1
50°	211.3	207.2	189.7	170.3	160.4
52.5°	194.3	187.9	170.9	151.6	143.4
55°	174.4	169.2	153.4	135.2	128.2
57.5°	156.3	151.0	136.4	119.4	113.6
60°	139.3	131.7	119.4	104.8	100.1
62.5°	120.6	114.7	104.2	91.9	97.8
65°	103.6	97.8	88.4	90.1	74.9
67.5°	84.9	81.9	73.8	65.6	63.2
70°	69.1	65.6	62.6	53.9	51.5
72.5°	55.0	51.5	47.4	42.7	41.0
75°	41.6	38.6	36.3	34.5	38.0
77.5°	28.7	27.5	25.8	24.0	23.4
80°	18.7	18.1	17.6	17.0	16.4
82.5°	11.1	11.1	11.1	11.1	11.1
85°	5.9	6.4	7.0	7.6	8.2
87.5°	3.5	3.5	4.1	4.7	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)