

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: P558482

Luminaire Tested: FSR-12-1-LD4-1HI-35-UNV-82-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558482
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-LD4-1HI-35-UNV-82-85-EDD-90
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 736.0 lumens
Efficiency: N/A
Efficacy: 68.1 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

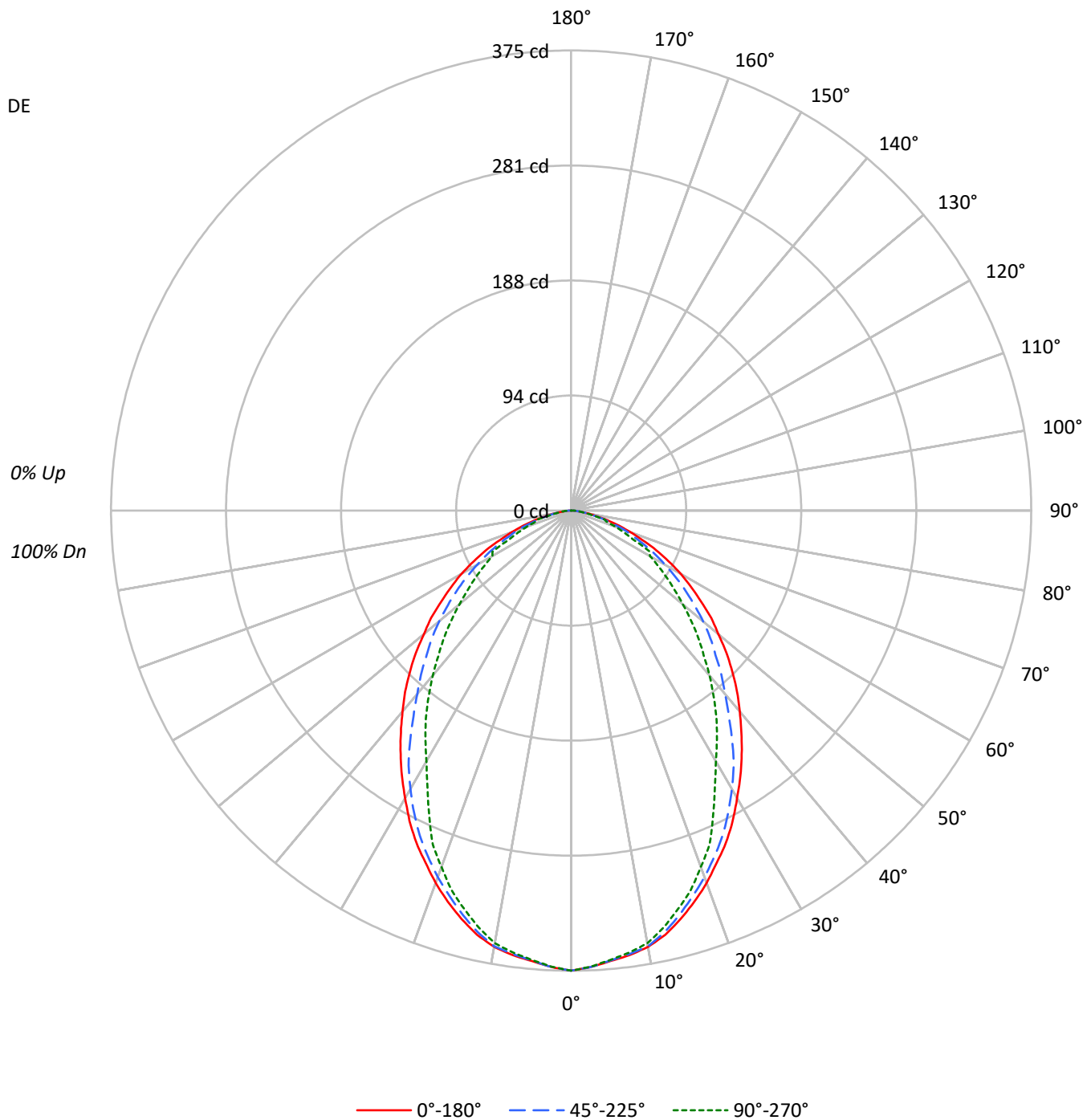
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	4035	4035	4035
5°	3981	3976	3971
10°	3946	3941	3913
15°	3840	3801	3748
20°	3699	3639	3540
25°	3546	3469	3253
30°	3362	3254	2931
35°	3184	3007	2711
40°	3003	2740	2466
45°	2830	2533	2230
50°	2621	2351	1989
55°	2425	2132	1781
60°	2222	1903	1595
65°	1954	1666	1414
70°	1608	1460	1199
75°	1281	1119	1173
80°	862	806	750
85°	531	642	753

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2830 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	4.7
10°-20°	95.8	13.0
20°-30°	132.6	18.0
30°-40°	141.4	19.2
40°-50°	129.0	17.5
50°-60°	101.1	13.7
60°-70°	65.8	8.9
70°-80°	29.2	4.0
80°-90°	6.3	0.8
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°	263.3	35.8
0°-40°	404.7	55.0
0°-60°	634.7	86.2
0°-90°	736.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	736.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	375	375	375	375	375	
5°	368	368	368	368	368	35
15°	345	345	341	338	336	97
25°	299	297	292	282	274	137
35°	242	240	229	212	206	151
45°	186	182	166	153	146	143
55°	129	125	114	100	95	116
65°	77	72	65	67	56	76
75°	31	29	27	26	28	33
85°	4	5	5	6	6	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	374.9	374.9	374.9	374.9	374.9
2.5°	372.3	372.3	372.3	371.9	371.9
5°	368.4	368.0	368.0	367.5	367.5
7.5°	365.4	364.9	364.5	364.1	363.2
10°	361.0	361.0	360.6	358.4	358.0
12.5°	354.1	353.7	351.9	348.9	348.0
15°	344.6	344.6	341.1	337.6	336.3
17.5°	334.2	333.7	329.4	325.9	324.2
20°	322.9	322.0	317.7	312.1	309.0
22.5°	310.3	310.3	305.1	297.8	294.7
25°	298.6	296.9	292.1	281.7	273.9
27.5°	285.2	282.6	277.4	262.7	253.6
30°	270.5	269.2	261.8	242.7	235.8
32.5°	256.6	254.4	246.6	226.7	221.0
35°	242.3	240.5	228.8	211.5	206.3
37.5°	228.0	225.8	211.1	197.2	190.7
40°	213.7	211.1	195.0	182.5	175.5
42.5°	200.2	196.8	181.2	167.7	159.9
45°	185.9	182.0	166.4	152.6	146.5
47.5°	171.6	168.2	153.9	139.6	132.6
50°	156.5	153.4	140.4	126.1	118.8
52.5°	143.9	139.1	126.6	112.3	106.2
55°	129.2	125.3	113.6	100.1	94.9
57.5°	115.7	111.8	101.0	88.4	84.1
60°	103.2	97.5	88.4	77.6	74.1
62.5°	89.3	85.0	77.1	68.0	72.4
65°	76.7	72.4	65.4	66.7	55.5
67.5°	62.8	60.7	54.6	48.5	46.8
70°	51.1	48.5	46.4	39.9	38.1
72.5°	40.7	38.1	35.1	31.6	30.3
75°	30.8	28.6	26.9	25.6	28.2
77.5°	21.2	20.4	19.1	17.8	17.3
80°	13.9	13.4	13.0	12.6	12.1
82.5°	8.2	8.2	8.2	8.2	8.2
85°	4.3	4.8	5.2	5.6	6.1
87.5°	2.6	2.6	3.0	3.5	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)