

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: P559894

Luminaire Tested: FSR-12-2-LD4-1LO-40-UNV-82-87-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559894
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-LD4-1LO-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 843.0 lumens
Efficiency: N/A
Efficacy: 72.1 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

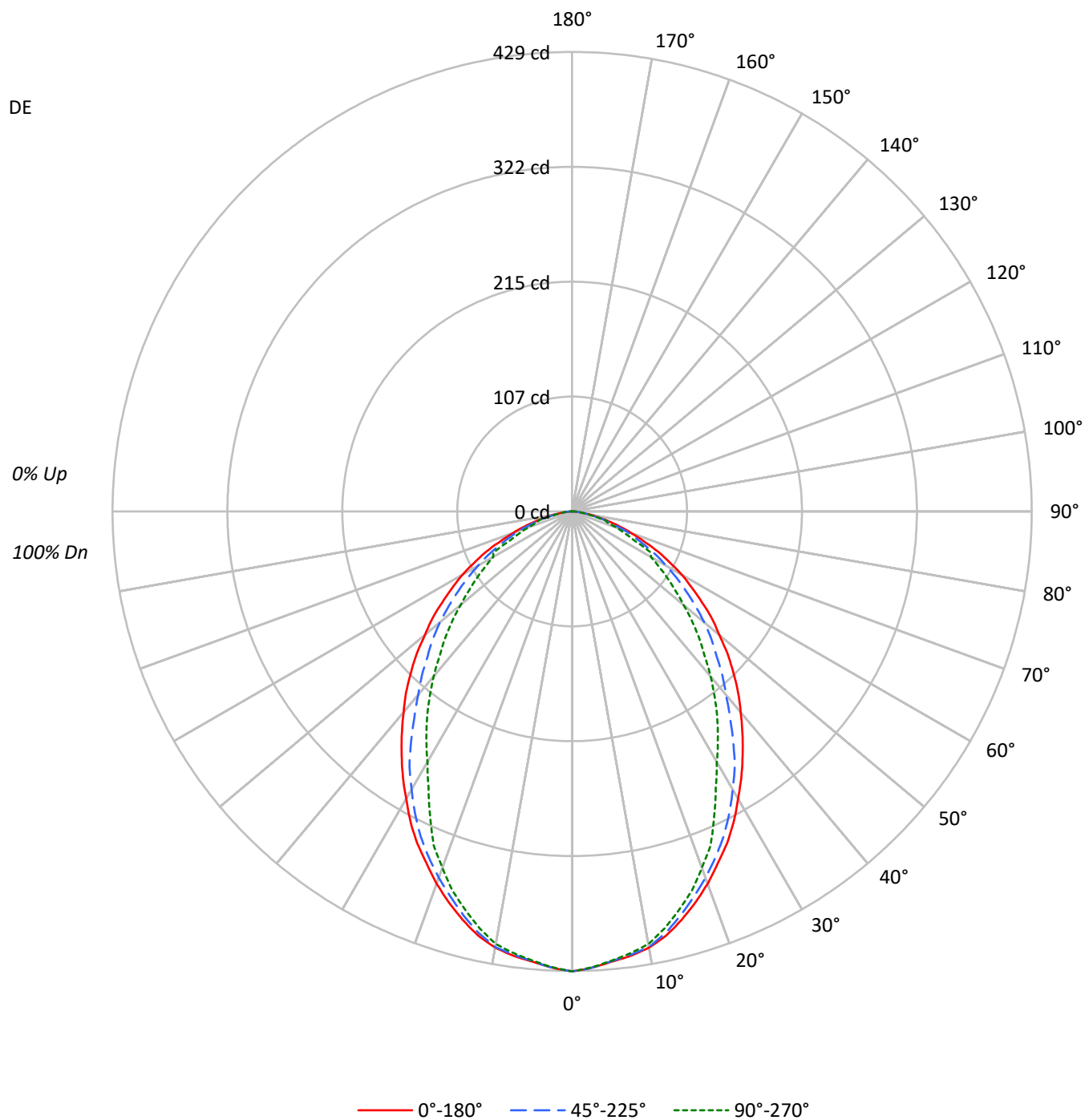
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	100							
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87							
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75							
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65							
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56							
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50							
6	74	62	53	47	72	61	53	47	59	52	47	57	51	47	56	50	46	44							
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40							
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36							
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33							
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30							

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2311	2311	2311
5°	2280	2277	2274
10°	2260	2257	2241
15°	2199	2177	2146
20°	2118	2084	2027
25°	2031	1987	1863
30°	1925	1863	1679
35°	1823	1722	1553
40°	1719	1570	1413
45°	1621	1451	1277
50°	1500	1346	1139
55°	1388	1221	1020
60°	1272	1090	914
65°	1119	955	809
70°	922	836	688
75°	732	640	672
80°	493	462	431
85°	309	371	432

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1621 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.0	4.7
10°-20°	109.7	13.0
20°-30°	151.9	18.0
30°-40°	161.9	19.2
40°-50°	147.7	17.5
50°-60°	115.8	13.7
60°-70°	75.4	8.9
70°-80°	33.4	4.0
80°-90°	7.2	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°	301.5	35.8
0°-40°	463.5	55.0
0°-60°	727.0	86.2
0°-90°	843.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	843.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	429	429	429	429	429	
5°	422	422	422	421	421	40
15°	395	395	391	387	385	111
25°	342	340	335	323	314	157
35°	278	276	262	242	236	173
45°	213	208	191	175	168	164
55°	148	144	130	115	109	133
65°	88	83	75	76	64	87
75°	35	33	31	29	32	38
85°	5	6	6	6	7	7
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	429.4	429.4	429.4	429.4	429.4
2.5°	426.4	426.4	426.4	425.9	425.9
5°	422.0	421.5	421.5	421.0	421.0
7.5°	418.5	418.0	417.5	417.0	416.0
10°	413.5	413.5	413.0	410.5	410.1
12.5°	405.6	405.1	403.1	399.6	398.6
15°	394.7	394.7	390.7	386.7	385.2
17.5°	382.7	382.3	377.3	373.3	371.3
20°	369.8	368.8	363.9	357.4	354.0
22.5°	355.4	355.4	349.5	341.0	337.6
25°	342.0	340.1	334.6	322.7	313.7
27.5°	326.7	323.7	317.7	300.8	290.4
30°	309.8	308.3	299.8	278.0	270.1
32.5°	293.9	291.4	282.5	259.6	253.2
35°	277.5	275.5	262.1	242.3	236.3
37.5°	261.1	258.6	241.8	225.9	218.4
40°	244.7	241.8	223.4	209.0	201.1
42.5°	229.4	225.4	207.5	192.1	183.2
45°	213.0	208.5	190.6	174.7	167.8
47.5°	196.6	192.6	176.2	159.9	151.9
50°	179.2	175.7	160.8	144.5	136.0
52.5°	164.8	159.4	145.0	128.6	121.6
55°	147.9	143.5	130.1	114.7	108.7
57.5°	132.5	128.1	115.7	101.3	96.3
60°	118.2	111.7	101.3	88.9	84.9
62.5°	102.3	97.3	88.4	77.9	82.9
65°	87.9	82.9	75.0	76.5	63.5
67.5°	72.0	69.5	62.6	55.6	53.6
70°	58.6	55.6	53.1	45.7	43.7
72.5°	46.7	43.7	40.2	36.2	34.8
75°	35.2	32.8	30.8	29.3	32.3
77.5°	24.3	23.3	21.8	20.4	19.9
80°	15.9	15.4	14.9	14.4	13.9
82.5°	9.4	9.4	9.4	9.4	9.4
85°	5.0	5.5	6.0	6.5	7.0
87.5°	3.0	3.0	3.5	4.0	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)