

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: P559830

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-82-87-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559830
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-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: 831.0 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

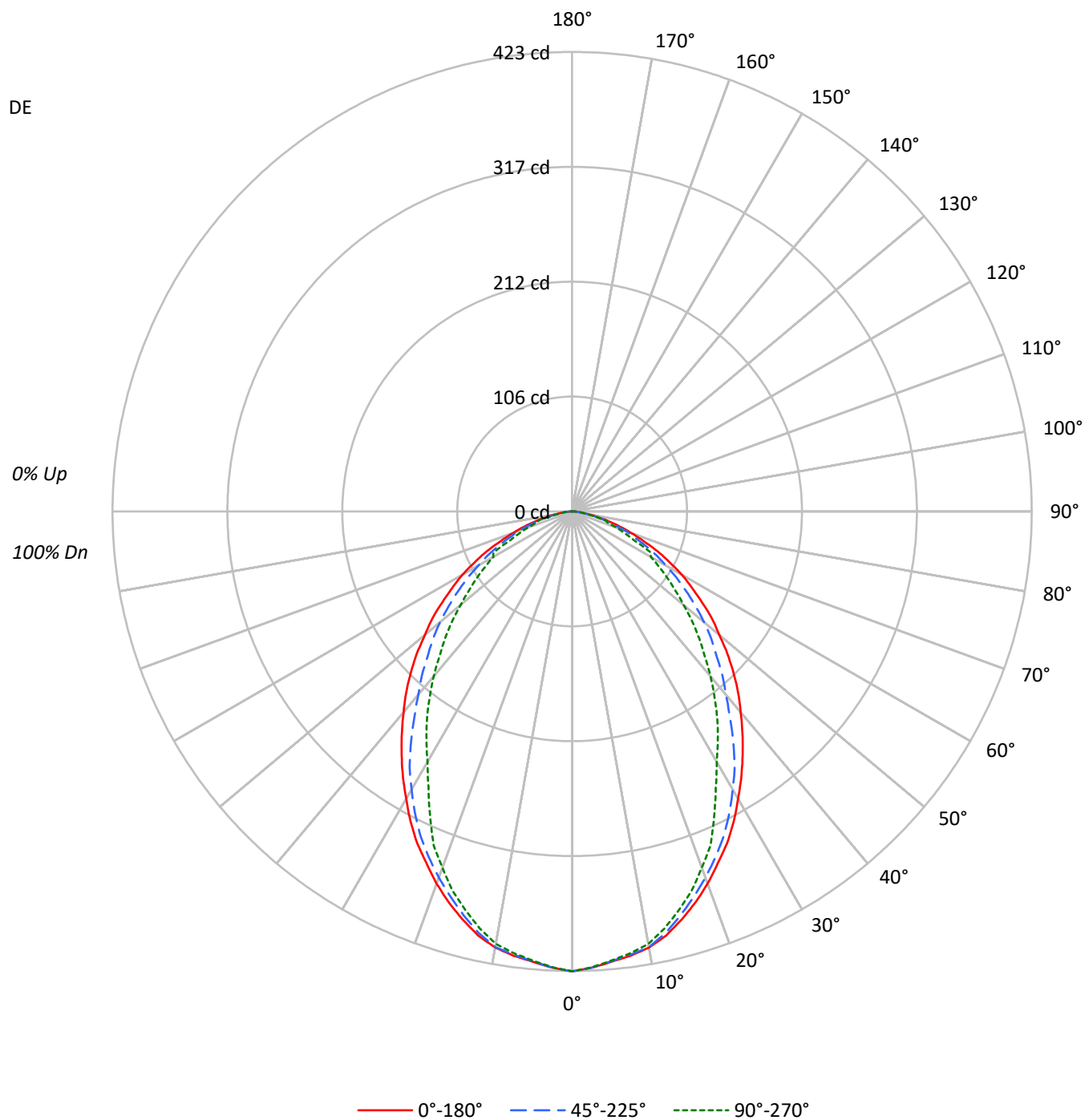
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0		
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	48	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°	2278	2278	2278
5°	2247	2245	2242
10°	2228	2225	2209
15°	2167	2146	2116
20°	2088	2054	1998
25°	2002	1958	1837
30°	1898	1837	1654
35°	1798	1698	1530
40°	1695	1547	1392
45°	1598	1430	1259
50°	1479	1328	1123
55°	1368	1203	1006
60°	1254	1074	901
65°	1103	941	797
70°	908	825	678
75°	722	630	661
80°	487	456	425
85°	303	364	426

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1598 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.4	4.7
10°-20°	108.1	13.0
20°-30°	149.7	18.0
30°-40°	159.6	19.2
40°-50°	145.6	17.5
50°-60°	114.1	13.7
60°-70°	74.4	8.9
70°-80°	32.9	4.0
80°-90°	7.1	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°	297.3	35.8
0°-40°	456.9	55.0
0°-60°	716.6	86.2
0°-90°	831.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	831.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	423	423	423	423	423	
5°	416	416	416	415	415	39
15°	389	389	385	381	380	109
25°	337	335	330	318	309	155
35°	274	272	258	239	233	171
45°	210	206	188	172	165	162
55°	146	141	128	113	107	131
65°	87	82	74	75	63	85
75°	35	32	30	29	32	37
85°	5	5	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°	423.3	423.3	423.3	423.3	423.3
2.5°	420.4	420.4	420.4	419.9	419.9
5°	416.0	415.5	415.5	415.0	415.0
7.5°	412.5	412.0	411.6	411.1	410.1
10°	407.6	407.6	407.2	404.7	404.2
12.5°	399.8	399.3	397.4	393.9	393.0
15°	389.0	389.0	385.1	381.2	379.7
17.5°	377.3	376.8	371.9	368.0	366.0
20°	364.6	363.6	358.7	352.3	348.9
22.5°	350.4	350.4	344.5	336.2	332.8
25°	337.2	335.2	329.8	318.1	309.3
27.5°	322.0	319.1	313.2	296.6	286.3
30°	305.4	303.9	295.6	274.0	266.2
32.5°	289.7	287.3	278.4	255.9	249.6
35°	273.6	271.6	258.4	238.8	232.9
37.5°	257.4	255.0	238.3	222.7	215.3
40°	241.3	238.3	220.2	206.0	198.2
42.5°	226.1	222.2	204.6	189.4	180.6
45°	209.9	205.5	187.9	172.3	165.4
47.5°	193.8	189.9	173.7	157.6	149.7
50°	176.7	173.2	158.6	142.4	134.1
52.5°	162.5	157.1	142.9	126.7	119.9
55°	145.8	141.4	128.2	113.0	107.2
57.5°	130.7	126.3	114.0	99.8	94.9
60°	116.5	110.1	99.8	87.6	83.7
62.5°	100.8	95.9	87.1	76.8	81.7
65°	86.6	81.7	73.9	75.4	62.6
67.5°	71.0	68.5	61.7	54.8	52.9
70°	57.7	54.8	52.4	45.0	43.1
72.5°	46.0	43.1	39.6	35.7	34.3
75°	34.7	32.3	30.3	28.9	31.8
77.5°	24.0	23.0	21.5	20.1	19.6
80°	15.7	15.2	14.7	14.2	13.7
82.5°	9.3	9.3	9.3	9.3	9.3
85°	4.9	5.4	5.9	6.4	6.9
87.5°	2.9	2.9	3.4	3.9	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)