

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: P559901

Luminaire Tested: FSR-12-2-LD4-1LO-40-UNV-82-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559901
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-82-96-EDD
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1061.0 lumens
Efficiency: N/A
Efficacy: 90.7 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

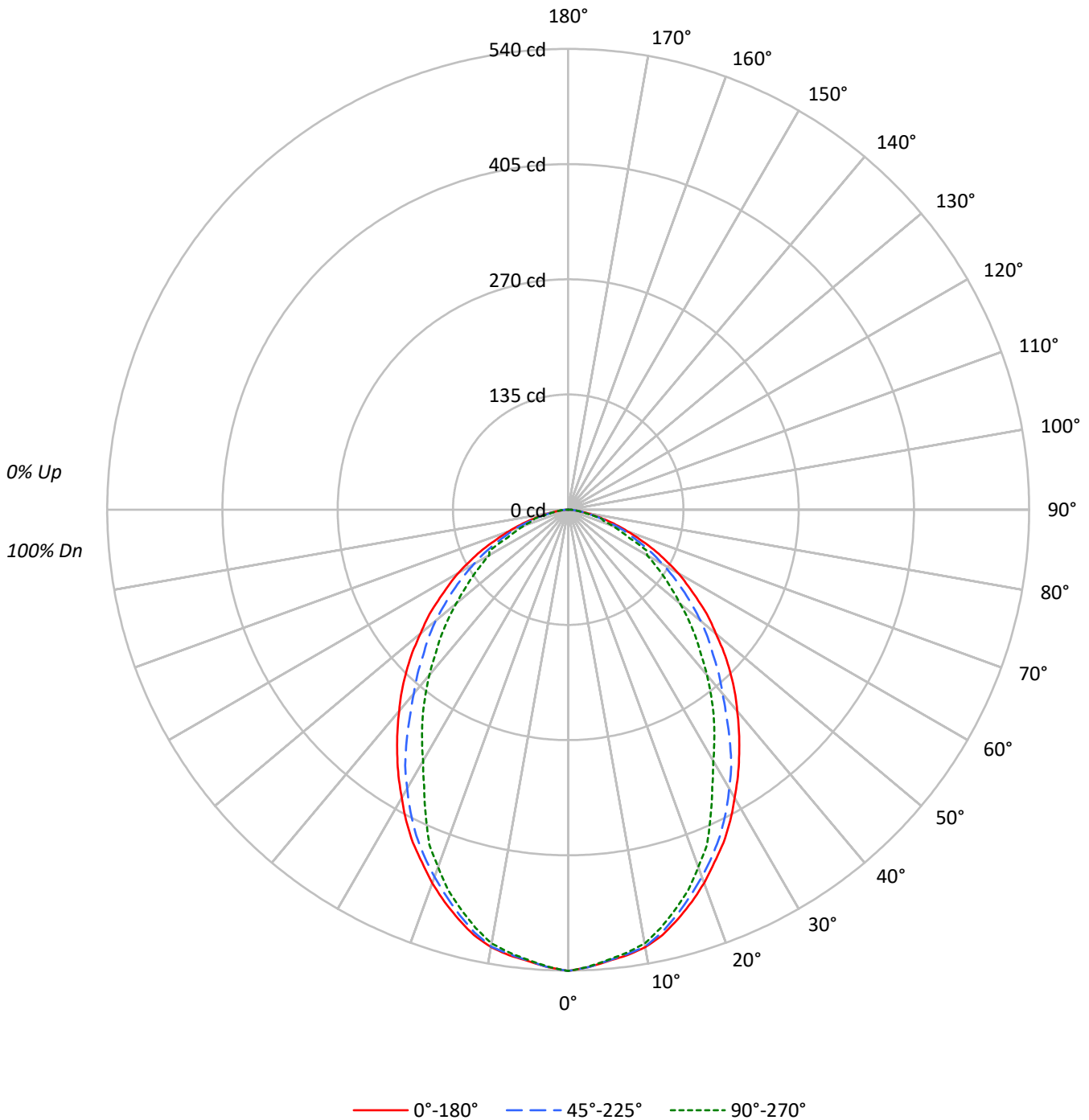
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					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	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				
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°	2909	2909	2909
5°	2869	2866	2862
10°	2845	2841	2820
15°	2768	2740	2702
20°	2666	2623	2552
25°	2556	2501	2345
30°	2423	2345	2112
35°	2295	2167	1954
40°	2164	1976	1777
45°	2040	1826	1607
50°	1889	1695	1433
55°	1747	1536	1284
60°	1601	1372	1150
65°	1408	1201	1019
70°	1160	1053	865
75°	923	805	844
80°	620	580	542
85°	383	463	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2040 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	4.7
10°-20°	138.1	13.0
20°-30°	191.2	18.0
30°-40°	203.8	19.2
40°-50°	185.9	17.5
50°-60°	145.7	13.7
60°-70°	94.9	8.9
70°-80°	42.1	4.0
80°-90°	9.0	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°	379.5	35.8
0°-40°	583.4	55.0
0°-60°	915.0	86.2
0°-90°	1061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	540	540	540	540	540	
5°	531	530	530	530	530	50
15°	497	497	492	487	485	140
25°	430	428	421	406	395	198
35°	349	347	330	305	297	218
45°	268	262	240	220	211	206
55°	186	181	164	144	137	167
65°	111	104	94	96	80	109
75°	44	41	39	37	41	48
85°	6	7	8	8	9	9
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	540.5	540.5	540.5	540.5	540.5
2.5°	536.7	536.7	536.7	536.1	536.1
5°	531.1	530.5	530.5	529.8	529.8
7.5°	526.7	526.1	525.5	524.8	523.6
10°	520.5	520.5	519.8	516.7	516.1
12.5°	510.5	509.8	507.3	503.0	501.7
15°	496.7	496.7	491.7	486.7	484.9
17.5°	481.7	481.1	474.9	469.9	467.4
20°	465.5	464.2	458.0	449.9	445.5
22.5°	447.4	447.4	439.9	429.2	424.9
25°	430.5	428.0	421.1	406.1	394.9
27.5°	411.1	407.4	399.9	378.6	365.5
30°	389.9	388.0	377.4	349.9	339.9
32.5°	369.9	366.8	355.5	326.8	318.7
35°	349.3	346.8	329.9	304.9	297.4
37.5°	328.6	325.5	304.3	284.3	274.9
40°	308.0	304.3	281.2	263.0	253.0
42.5°	288.7	283.7	261.2	241.8	230.6
45°	268.0	262.4	239.9	219.9	211.2
47.5°	247.4	242.4	221.8	201.2	191.2
50°	225.6	221.2	202.4	181.8	171.2
52.5°	207.4	200.6	182.4	161.8	153.1
55°	186.2	180.6	163.7	144.3	136.8
57.5°	166.8	161.2	145.6	127.5	121.2
60°	148.7	140.6	127.5	111.8	106.8
62.5°	128.7	122.5	111.2	98.1	104.3
65°	110.6	104.3	94.3	96.2	80.0
67.5°	90.6	87.5	78.7	70.0	67.5
70°	73.7	70.0	66.9	57.5	55.0
72.5°	58.7	55.0	50.6	45.6	43.7
75°	44.4	41.2	38.7	36.9	40.6
77.5°	30.6	29.4	27.5	25.6	25.0
80°	20.0	19.4	18.7	18.1	17.5
82.5°	11.9	11.9	11.9	11.9	11.9
85°	6.2	6.9	7.5	8.1	8.7
87.5°	3.7	3.7	4.4	5.0	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)