

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: P558885

Luminaire Tested: FSR-12-1-LD4-1STD-35-UNV-93-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558885
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-LD4-1STD-35-UNV-93-86-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 764.0 lumens
Efficiency: N/A
Efficacy: 92.0 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

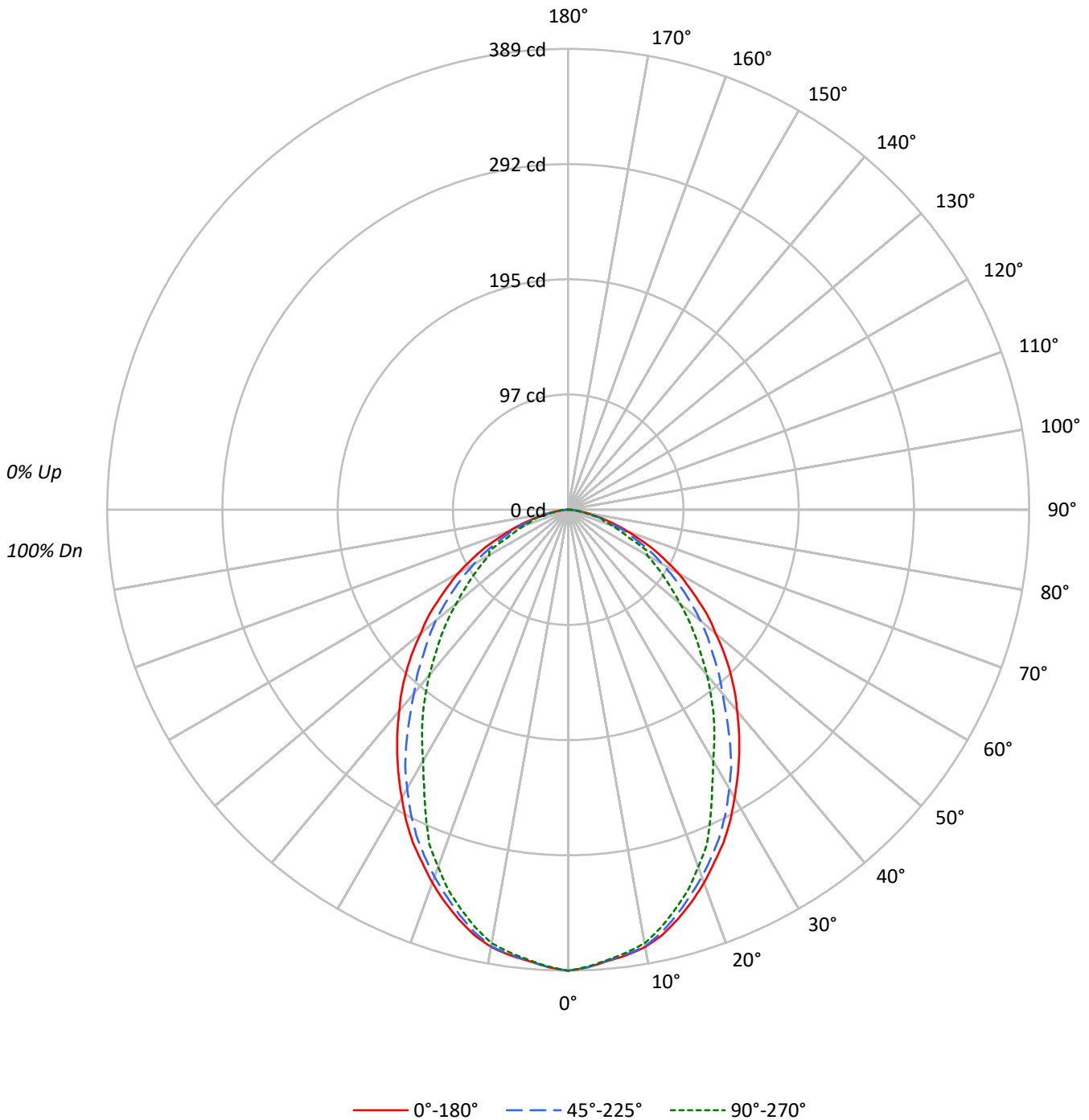
Input Watts (W): 8.3
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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					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	39	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°	4189	4189	4189
5°	4132	4128	4122
10°	4097	4091	4062
15°	3986	3946	3890
20°	3840	3778	3675
25°	3682	3601	3377
30°	3489	3377	3043
35°	3305	3122	2815
40°	3117	2845	2560
45°	2938	2630	2315
50°	2719	2442	2065
55°	2517	2213	1848
60°	2306	1976	1655
65°	2027	1729	1467
70°	1671	1514	1246
75°	1327	1160	1214
80°	893	837	781
85°	556	667	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2938 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	4.7
10°-20°	99.4	13.0
20°-30°	137.6	18.0
30°-40°	146.8	19.2
40°-50°	133.9	17.5
50°-60°	104.9	13.7
60°-70°	68.4	8.9
70°-80°	30.3	4.0
80°-90°	6.5	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°	273.3	35.8
0°-40°	420.0	55.0
0°-60°	658.8	86.2
0°-90°	764.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	764.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	389	389	389	389	389	
5°	382	382	382	382	382	36
15°	358	358	354	350	349	101
25°	310	308	303	292	284	142
35°	252	250	238	220	214	157
45°	193	189	173	158	152	149
55°	134	130	118	104	98	120
65°	80	75	68	69	58	78
75°	32	30	28	26	29	34
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°	389.2	389.2	389.2	389.2	389.2
2.5°	386.5	386.5	386.5	386.0	386.0
5°	382.4	382.0	382.0	381.5	381.5
7.5°	379.3	378.8	378.4	377.9	377.0
10°	374.8	374.8	374.3	372.1	371.6
12.5°	367.6	367.1	365.3	362.2	361.3
15°	357.7	357.7	354.1	350.5	349.1
17.5°	346.9	346.4	341.9	338.3	336.5
20°	335.2	334.3	329.8	323.9	320.8
22.5°	322.1	322.1	316.7	309.1	305.9
25°	310.0	308.2	303.2	292.4	284.3
27.5°	296.0	293.3	287.9	272.6	263.2
30°	280.7	279.4	271.7	251.9	244.8
32.5°	266.3	264.1	256.0	235.3	229.5
35°	251.5	249.7	237.6	219.6	214.2
37.5°	236.7	234.4	219.1	204.7	198.0
40°	221.8	219.1	202.5	189.4	182.2
42.5°	207.9	204.3	188.1	174.1	166.0
45°	193.0	189.0	172.8	158.4	152.1
47.5°	178.2	174.6	159.7	144.9	137.7
50°	162.4	159.3	145.8	130.9	123.3
52.5°	149.4	144.4	131.4	116.5	110.2
55°	134.1	130.0	117.9	103.9	98.5
57.5°	120.1	116.1	104.8	91.8	87.3
60°	107.1	101.2	91.8	80.5	76.9
62.5°	92.7	88.2	80.1	70.6	75.1
65°	79.6	75.1	67.9	69.3	57.6
67.5°	65.2	63.0	56.7	50.4	48.6
70°	53.1	50.4	48.1	41.4	39.6
72.5°	42.3	39.6	36.4	32.8	31.5
75°	31.9	29.7	27.9	26.5	29.2
77.5°	22.0	21.1	19.8	18.4	18.0
80°	14.4	13.9	13.5	13.0	12.6
82.5°	8.5	8.5	8.5	8.5	8.5
85°	4.5	4.9	5.4	5.8	6.3
87.5°	2.7	2.7	3.1	3.6	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)