

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: P558638

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-93-97-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558638
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-50-UNV-93-97-EDD-90
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPER
GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 826.0 lumens
Efficiency: N/A
Efficacy: 76.5 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

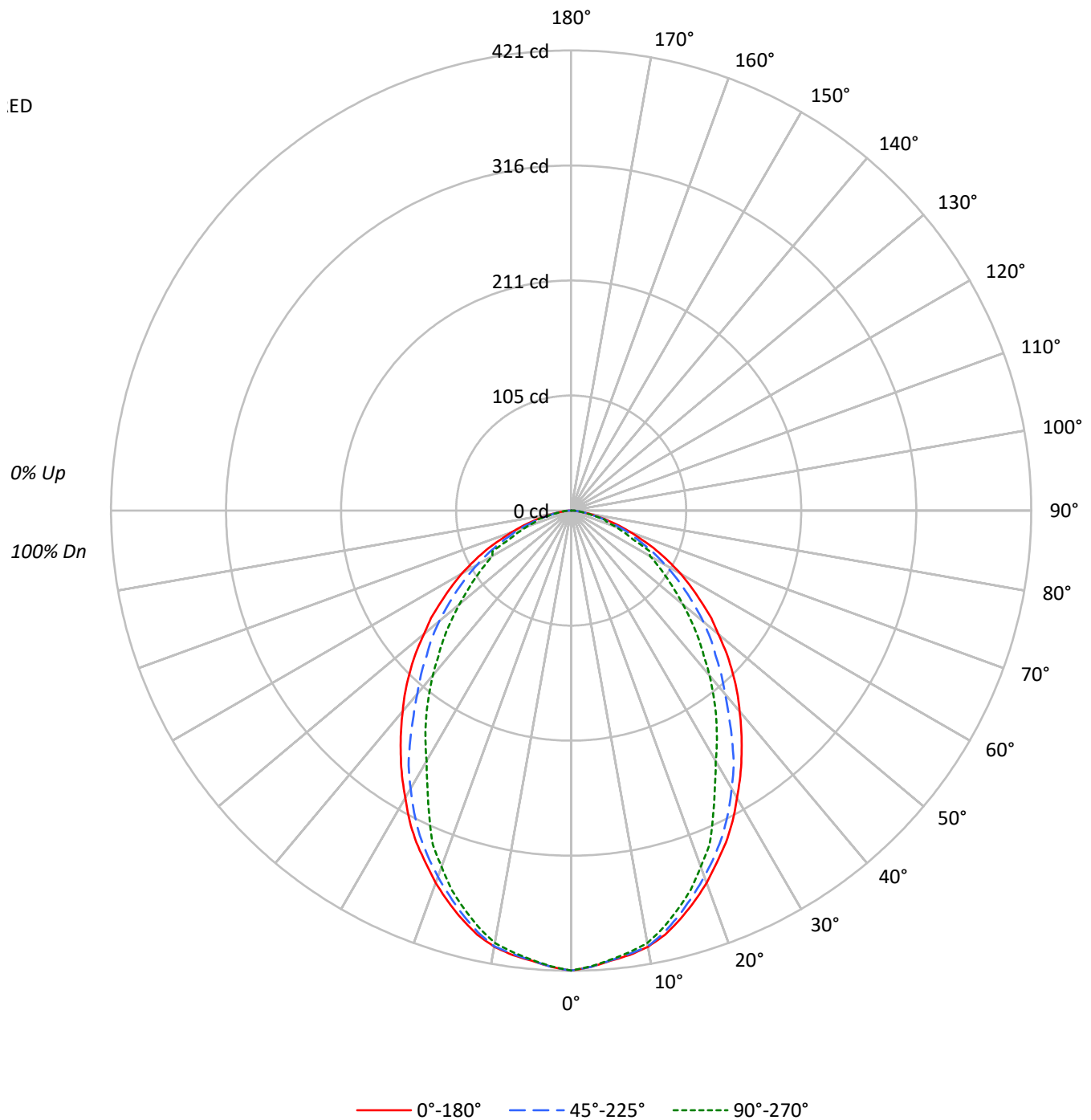
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	4529	4529	4529
5°	4468	4462	4457
10°	4429	4423	4392
15°	4309	4266	4207
20°	4151	4084	3972
25°	3980	3893	3651
30°	3772	3652	3289
35°	3573	3374	3042
40°	3370	3076	2768
45°	3177	2844	2503
50°	2941	2639	2232
55°	2721	2391	1999
60°	2493	2136	1791
65°	2193	1869	1587
70°	1806	1637	1347
75°	1435	1256	1314
80°	967	905	843
85°	605	716	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3177 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	4.7
10°-20°	107.5	13.0
20°-30°	148.8	18.0
30°-40°	158.7	19.2
40°-50°	144.8	17.5
50°-60°	113.4	13.7
60°-70°	73.9	8.9
70°-80°	32.7	4.0
80°-90°	7.0	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°	295.5	35.8
0°-40°	454.1	55.0
0°-60°	712.3	86.2
0°-90°	826.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	826.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	421	421	421	421	421	
5°	414	413	413	412	412	39
15°	387	387	383	379	378	109
25°	335	333	328	316	307	154
35°	272	270	257	237	232	170
45°	209	204	187	171	164	161
55°	145	141	127	112	106	130
65°	86	81	73	75	62	85
75°	34	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°	420.8	420.8	420.8	420.8	420.8
2.5°	417.8	417.8	417.8	417.3	417.3
5°	413.5	413.0	413.0	412.5	412.5
7.5°	410.1	409.6	409.1	408.6	407.6
10°	405.2	405.2	404.7	402.3	401.8
12.5°	397.4	396.9	395.0	391.6	390.6
15°	386.7	386.7	382.8	378.9	377.5
17.5°	375.0	374.5	369.7	365.8	363.8
20°	362.4	361.4	356.5	350.2	346.8
22.5°	348.3	348.3	342.4	334.2	330.8
25°	335.1	333.2	327.8	316.2	307.4
27.5°	320.1	317.1	311.3	294.8	284.6
30°	303.5	302.1	293.8	272.4	264.6
32.5°	288.0	285.5	276.8	254.4	248.1
35°	271.9	270.0	256.8	237.4	231.5
37.5°	255.9	253.4	236.9	221.3	214.0
40°	239.8	236.9	218.9	204.8	197.0
42.5°	224.7	220.8	203.3	188.2	179.5
45°	208.7	204.3	186.8	171.2	164.4
47.5°	192.6	188.7	172.7	156.6	148.8
50°	175.6	172.2	157.6	141.5	133.3
52.5°	161.5	156.1	142.0	126.0	119.2
55°	145.0	140.6	127.4	112.4	106.5
57.5°	129.9	125.5	113.3	99.2	94.4
60°	115.8	109.4	99.2	87.1	83.2
62.5°	100.2	95.3	86.6	76.4	81.2
65°	86.1	81.2	73.4	74.9	62.3
67.5°	70.5	68.1	61.3	54.5	52.5
70°	57.4	54.5	52.0	44.8	42.8
72.5°	45.7	42.8	39.4	35.5	34.0
75°	34.5	32.1	30.2	28.7	31.6
77.5°	23.8	22.9	21.4	19.9	19.5
80°	15.6	15.1	14.6	14.1	13.6
82.5°	9.2	9.2	9.2	9.2	9.2
85°	4.9	5.4	5.8	6.3	6.8
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)