

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: P558584

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-88-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558584
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-80-88-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 728.0 lumens
Efficiency: N/A
Efficacy: 67.4 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

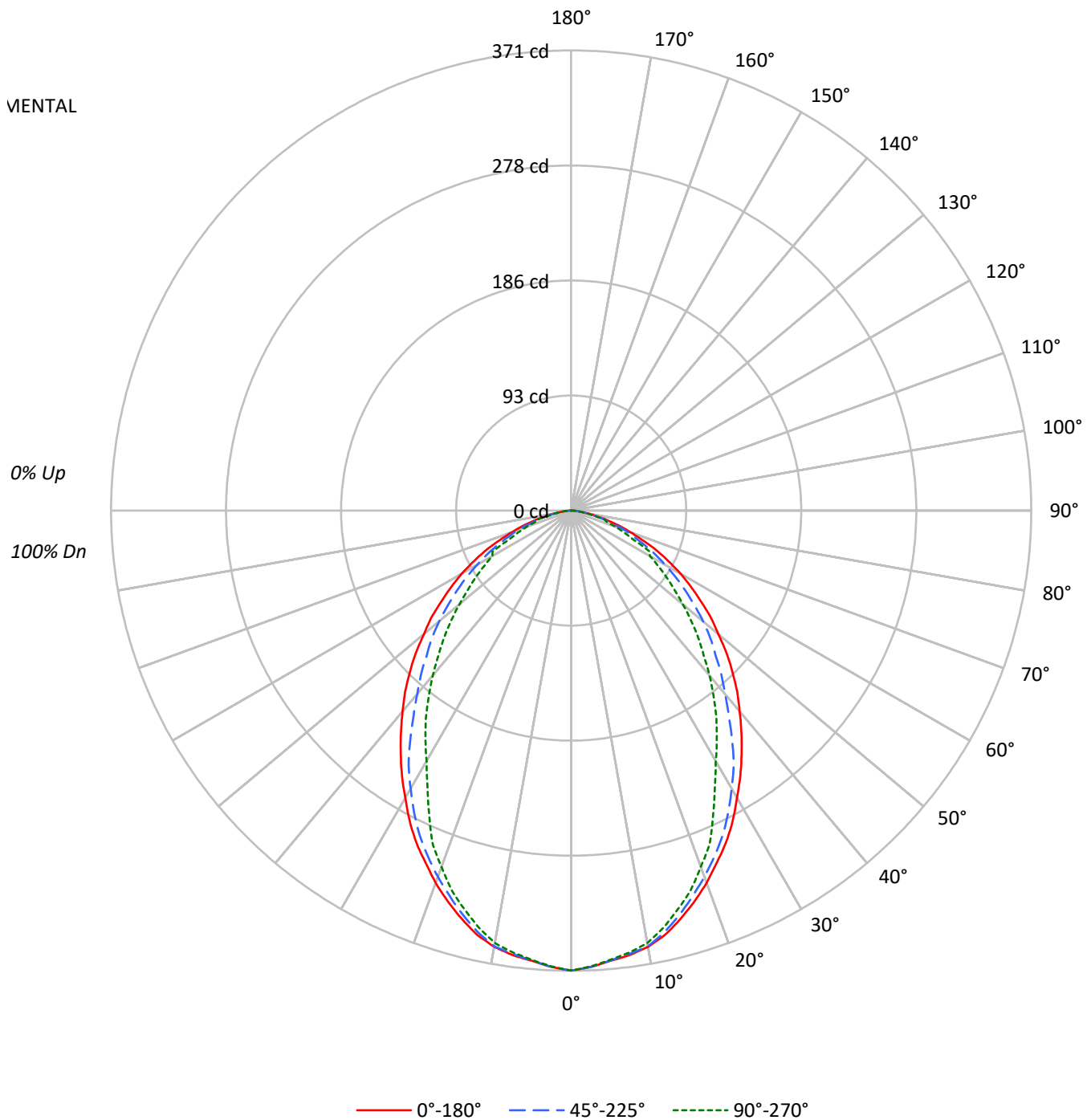
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	38	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°	3991	3991	3991
5°	3937	3933	3928
10°	3903	3899	3870
15°	3798	3760	3707
20°	3659	3599	3502
25°	3508	3432	3217
30°	3325	3218	2898
35°	3148	2975	2682
40°	2970	2710	2439
45°	2799	2506	2206
50°	2592	2326	1968
55°	2398	2107	1762
60°	2196	1884	1578
65°	1933	1648	1398
70°	1592	1445	1186
75°	1264	1106	1160
80°	849	800	744
85°	531	630	741

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2799 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.5	4.7
10°-20°	94.7	13.0
20°-30°	131.2	18.0
30°-40°	139.9	19.2
40°-50°	127.6	17.5
50°-60°	100.0	13.7
60°-70°	65.1	8.9
70°-80°	28.9	4.0
80°-90°	6.2	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°	260.4	35.8
0°-40°	400.3	55.0
0°-60°	627.8	86.2
0°-90°	728.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	728.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	371	371	371	371	371	
5°	364	364	364	364	364	35
15°	341	341	337	334	333	96
25°	295	294	289	279	271	136
35°	240	238	226	209	204	150
45°	184	180	165	151	145	142
55°	128	124	112	99	94	115
65°	76	72	65	66	55	75
75°	30	28	27	25	28	33
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°	370.8	370.8	370.8	370.8	370.8
2.5°	368.3	368.3	368.3	367.8	367.8
5°	364.4	364.0	364.0	363.5	363.5
7.5°	361.4	361.0	360.5	360.1	359.3
10°	357.1	357.1	356.7	354.5	354.1
12.5°	350.3	349.8	348.1	345.1	344.3
15°	340.8	340.8	337.4	334.0	332.7
17.5°	330.5	330.1	325.8	322.4	320.7
20°	319.4	318.5	314.2	308.7	305.7
22.5°	307.0	307.0	301.8	294.5	291.5
25°	295.4	293.7	289.0	278.7	270.9
27.5°	282.1	279.5	274.4	259.8	250.8
30°	267.5	266.2	258.9	240.1	233.2
32.5°	253.8	251.7	243.9	224.2	218.6
35°	239.6	237.9	226.4	209.2	204.1
37.5°	225.5	223.4	208.8	195.1	188.6
40°	211.4	208.8	192.9	180.5	173.6
42.5°	198.1	194.6	179.2	165.9	158.2
45°	183.9	180.1	164.6	150.9	144.9
47.5°	169.8	166.3	152.2	138.0	131.2
50°	154.8	151.8	138.9	124.8	117.5
52.5°	142.3	137.6	125.2	111.0	105.0
55°	127.8	123.9	112.3	99.0	93.9
57.5°	114.5	110.6	99.9	87.5	83.2
60°	102.0	96.5	87.5	76.7	73.3
62.5°	88.3	84.0	76.3	67.3	71.6
65°	75.9	71.6	64.7	66.0	54.9
67.5°	62.2	60.0	54.0	48.0	46.3
70°	50.6	48.0	45.9	39.4	37.7
72.5°	40.3	37.7	34.7	31.3	30.0
75°	30.4	28.3	26.6	25.3	27.9
77.5°	21.0	20.1	18.9	17.6	17.1
80°	13.7	13.3	12.9	12.4	12.0
82.5°	8.1	8.1	8.1	8.1	8.1
85°	4.3	4.7	5.1	5.6	6.0
87.5°	2.6	2.6	3.0	3.4	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)