

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: P558629

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-93-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558629
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-93-86-EDD
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 963.0 lumens
Efficiency: N/A
Efficacy: 89.2 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

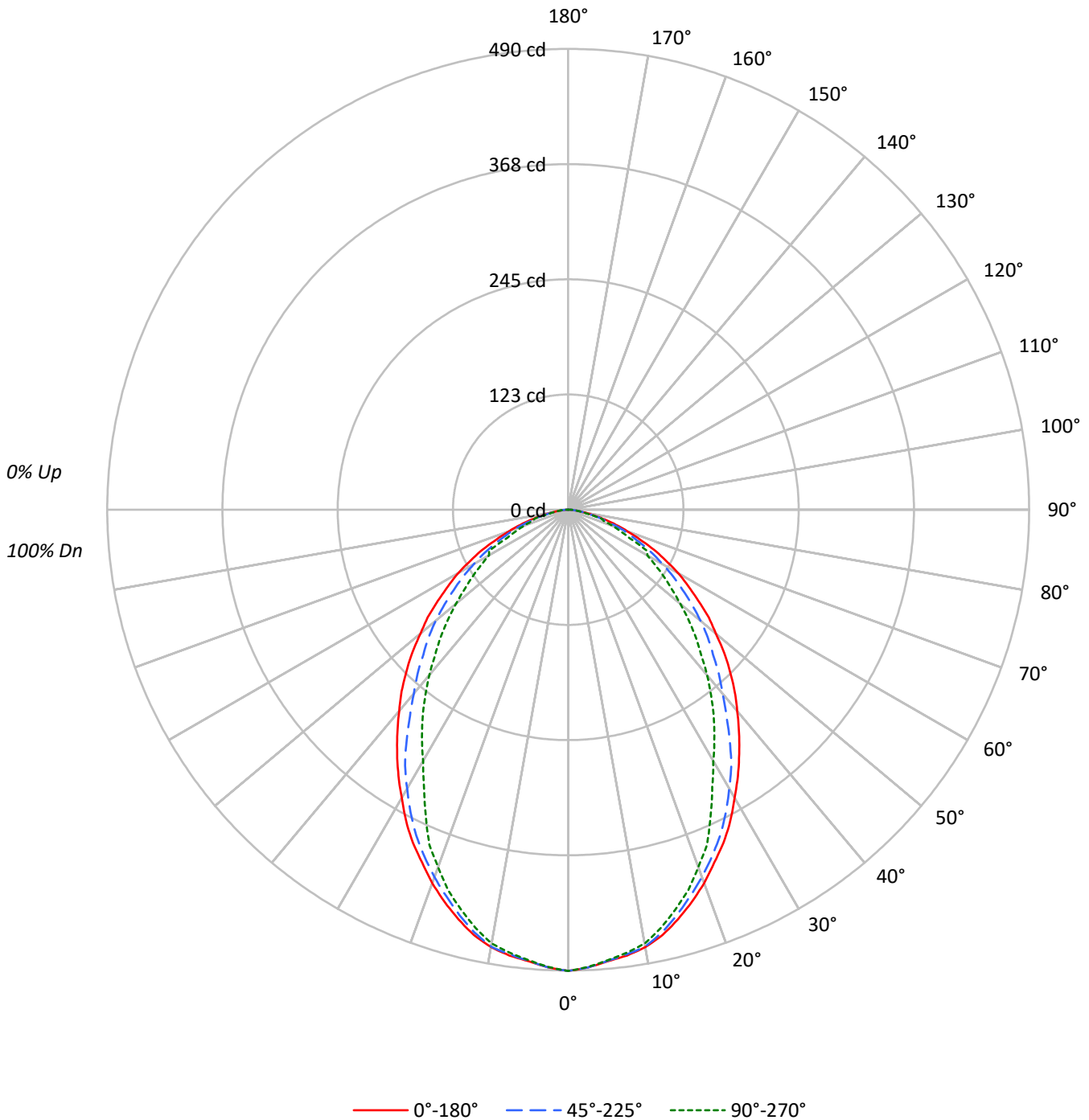
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	5280	5280	5280
5°	5208	5203	5196
10°	5163	5157	5120
15°	5024	4973	4904
20°	4840	4762	4631
25°	4640	4539	4257
30°	4399	4257	3834
35°	4165	3934	3547
40°	3929	3586	3228
45°	3704	3315	2918
50°	3428	3076	2602
55°	3172	2789	2331
60°	2906	2491	2088
65°	2557	2180	1849
70°	2105	1910	1570
75°	1676	1464	1535
80°	1122	1054	986
85°	704	840	976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3704 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.7	4.7
10°-20°	125.3	13.0
20°-30°	173.5	18.0
30°-40°	185.0	19.2
40°-50°	168.8	17.5
50°-60°	132.2	13.7
60°-70°	86.2	8.9
70°-80°	38.2	4.0
80°-90°	8.2	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°	344.5	35.8
0°-40°	529.5	55.0
0°-60°	830.5	86.2
0°-90°	963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	963.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	490	490	490	490	490	
5°	482	482	482	481	481	46
15°	451	451	446	442	440	127
25°	391	388	382	369	358	179
35°	317	315	299	277	270	198
45°	243	238	218	200	192	187
55°	169	164	149	131	124	152
65°	100	95	86	87	73	99
75°	40	37	35	34	37	43
85°	6	6	7	7	8	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	490.5	490.5	490.5	490.5	490.5
2.5°	487.1	487.1	487.1	486.6	486.6
5°	482.0	481.5	481.5	480.9	480.9
7.5°	478.1	477.5	476.9	476.4	475.2
10°	472.4	472.4	471.8	469.0	468.4
12.5°	463.3	462.8	460.5	456.5	455.4
15°	450.8	450.8	446.3	441.8	440.1
17.5°	437.2	436.7	431.0	426.5	424.2
20°	422.5	421.4	415.7	408.3	404.3
22.5°	406.0	406.0	399.2	389.6	385.6
25°	390.7	388.5	382.2	368.6	358.4
27.5°	373.2	369.7	362.9	343.7	331.8
30°	353.9	352.2	342.5	317.6	308.5
32.5°	335.7	332.9	322.7	296.6	289.2
35°	317.0	314.7	299.4	276.7	269.9
37.5°	298.3	295.5	276.2	258.0	249.5
40°	279.6	276.2	255.2	238.7	229.7
42.5°	262.0	257.5	237.0	219.5	209.3
45°	243.3	238.2	217.8	199.6	191.7
47.5°	224.6	220.0	201.3	182.6	173.5
50°	204.7	200.8	183.7	165.0	155.4
52.5°	188.3	182.0	165.6	146.9	138.9
55°	169.0	163.9	148.6	131.0	124.2
57.5°	151.4	146.3	132.1	115.7	110.0
60°	135.0	127.6	115.7	101.5	97.0
62.5°	116.8	111.2	100.9	89.0	94.7
65°	100.4	94.7	85.6	87.3	72.6
67.5°	82.2	79.4	71.5	63.5	61.2
70°	66.9	63.5	60.7	52.2	49.9
72.5°	53.3	49.9	45.9	41.4	39.7
75°	40.3	37.4	35.2	33.5	36.9
77.5°	27.8	26.7	25.0	23.3	22.7
80°	18.1	17.6	17.0	16.4	15.9
82.5°	10.8	10.8	10.8	10.8	10.8
85°	5.7	6.2	6.8	7.4	7.9
87.5°	3.4	3.4	4.0	4.5	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)