

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: P558581

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558581
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-80-86-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRON
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 961.0 lumens
Efficiency: N/A
Efficacy: 89.0 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

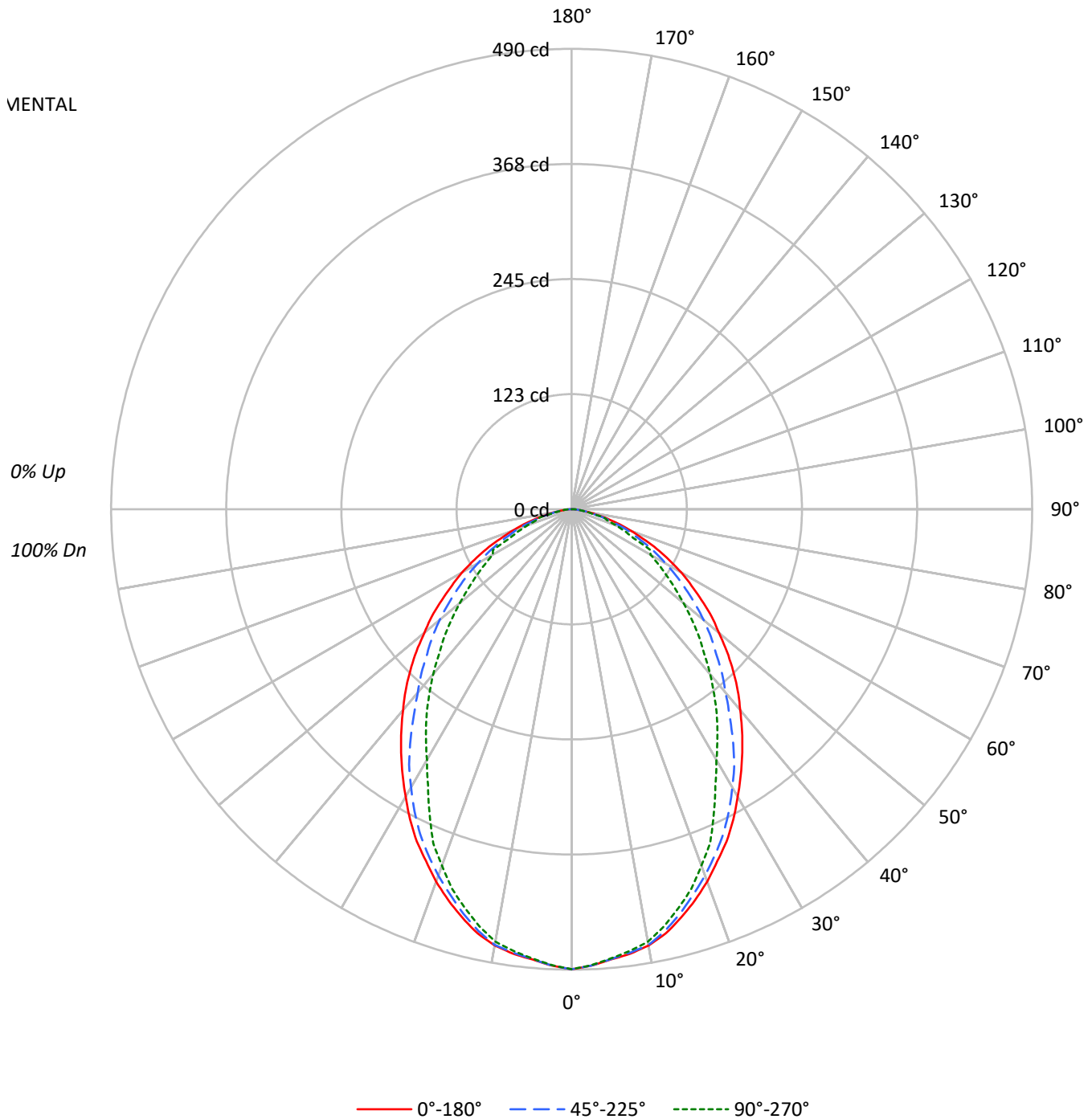
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	5269	5269	5269
5°	5197	5192	5185
10°	5152	5146	5109
15°	5014	4963	4894
20°	4829	4751	4622
25°	4631	4530	4248
30°	4389	4248	3827
35°	4156	3926	3540
40°	3920	3579	3221
45°	3696	3308	2912
50°	3421	3071	2597
55°	3164	2783	2325
60°	2900	2484	2084
65°	2552	2178	1844
70°	2102	1907	1567
75°	1672	1460	1530
80°	1122	1054	979
85°	704	840	976

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3696 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.6	4.7
10°-20°	125.1	13.0
20°-30°	173.1	18.0
30°-40°	184.6	19.2
40°-50°	168.4	17.5
50°-60°	131.9	13.7
60°-70°	86.0	8.9
70°-80°	38.1	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°	343.8	35.8
0°-40°	528.4	55.0
0°-60°	828.7	86.2
0°-90°	961.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	961.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	490	490	490	490	490	
5°	481	480	480	480	480	46
15°	450	450	445	441	439	126
25°	390	388	381	368	358	179
35°	316	314	299	276	269	198
45°	243	238	217	199	191	187
55°	169	164	148	131	124	151
65°	100	94	86	87	72	99
75°	40	37	35	33	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°	489.5	489.5	489.5	489.5	489.5
2.5°	486.1	486.1	486.1	485.6	485.6
5°	481.0	480.5	480.5	479.9	479.9
7.5°	477.1	476.5	475.9	475.4	474.2
10°	471.4	471.4	470.8	468.0	467.4
12.5°	462.4	461.8	459.5	455.6	454.4
15°	449.9	449.9	445.4	440.9	439.2
17.5°	436.3	435.8	430.1	425.6	423.3
20°	421.6	420.5	414.8	407.5	403.5
22.5°	405.2	405.2	398.4	388.8	384.8
25°	389.9	387.7	381.4	367.8	357.7
27.5°	372.4	369.0	362.2	342.9	331.1
30°	353.1	351.4	341.8	316.9	307.9
32.5°	335.0	332.2	322.0	296.0	288.6
35°	316.3	314.1	298.8	276.2	269.4
37.5°	297.7	294.8	275.6	257.5	249.0
40°	279.0	275.6	254.7	238.3	229.2
42.5°	261.5	256.9	236.6	219.0	208.8
45°	242.8	237.7	217.3	199.2	191.3
47.5°	224.1	219.6	200.9	182.2	173.2
50°	204.3	200.3	183.4	164.7	155.1
52.5°	187.9	181.7	165.2	146.6	138.7
55°	168.6	163.6	148.3	130.7	123.9
57.5°	151.1	146.0	131.9	115.4	109.8
60°	134.7	127.3	115.4	101.3	96.8
62.5°	116.6	110.9	100.7	88.8	94.5
65°	100.2	94.5	85.5	87.2	72.4
67.5°	82.1	79.2	71.3	63.4	61.1
70°	66.8	63.4	60.6	52.1	49.8
72.5°	53.2	49.8	45.8	41.3	39.6
75°	40.2	37.4	35.1	33.4	36.8
77.5°	27.7	26.6	24.9	23.2	22.6
80°	18.1	17.5	17.0	16.4	15.8
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)