

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: P558551

Luminaire Tested: FSR-12-1-LD4-1HI-40-UNV-82-87-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558551
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-40-UNV-82-87-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 850.0 lumens
Efficiency: N/A
Efficacy: 78.7 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

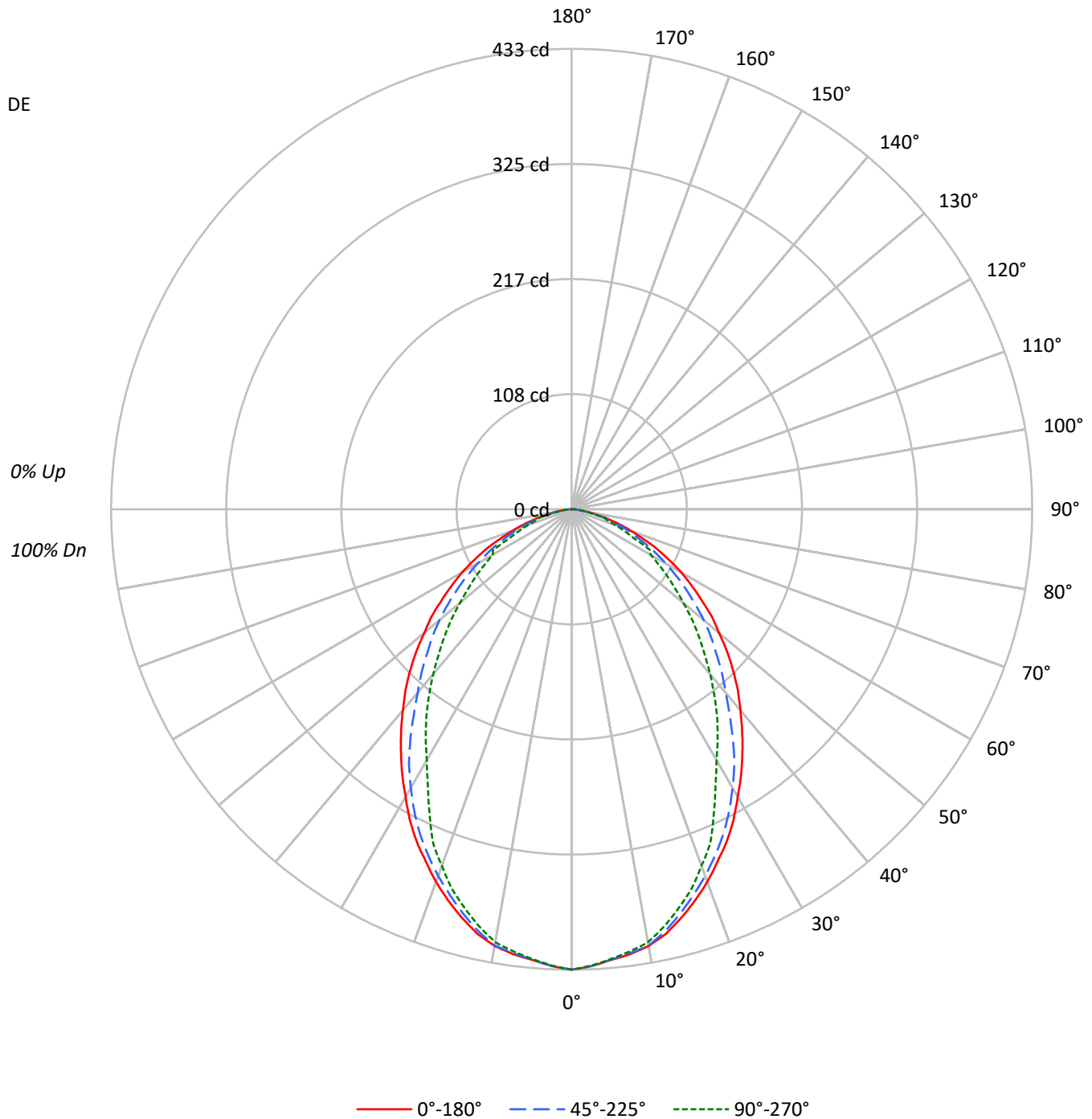
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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																												
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°	4661	4661	4661
5°	4598	4592	4587
10°	4558	4552	4520
15°	4434	4389	4328
20°	4271	4203	4088
25°	4096	4007	3757
30°	3882	3757	3384
35°	3677	3473	3131
40°	3468	3164	2848
45°	3268	2926	2576
50°	3026	2716	2298
55°	2800	2460	2057
60°	2564	2198	1843
65°	2257	1926	1633
70°	1860	1687	1385
75°	1476	1289	1352
80°	992	930	868
85°	618	741	865

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3268 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.3	4.7
10°-20°	110.6	13.0
20°-30°	153.1	18.0
30°-40°	163.3	19.2
40°-50°	149.0	17.5
50°-60°	116.7	13.7
60°-70°	76.1	9.0
70°-80°	33.7	4.0
80°-90°	7.2	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°	304.1	35.8
0°-40°	467.3	55.0
0°-60°	733.0	86.2
0°-90°	850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	850.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	433	433	433	433	433	
5°	426	425	425	424	424	40
15°	398	398	394	390	388	112
25°	345	343	337	325	316	158
35°	280	278	264	244	238	175
45°	215	210	192	176	169	165
55°	149	145	131	116	110	134
65°	89	84	76	77	64	87
75°	36	33	31	30	32	38
85°	5	6	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°	433.0	433.0	433.0	433.0	433.0
2.5°	430.0	430.0	430.0	429.5	429.5
5°	425.5	425.0	425.0	424.5	424.5
7.5°	422.0	421.5	421.0	420.5	419.5
10°	417.0	417.0	416.5	414.0	413.5
12.5°	409.0	408.5	406.4	402.9	401.9
15°	397.9	397.9	393.9	389.9	388.4
17.5°	385.9	385.4	380.4	376.4	374.4
20°	372.9	371.9	366.9	360.4	356.9
22.5°	358.4	358.4	352.4	343.9	340.4
25°	344.9	342.9	337.4	325.4	316.3
27.5°	329.4	326.4	320.4	303.3	292.8
30°	312.3	310.8	302.3	280.3	272.3
32.5°	296.3	293.8	284.8	261.8	255.3
35°	279.8	277.8	264.3	244.3	238.3
37.5°	263.3	260.8	243.8	227.8	220.2
40°	246.8	243.8	225.2	210.7	202.7
42.5°	231.3	227.3	209.2	193.7	184.7
45°	214.7	210.2	192.2	176.2	169.2
47.5°	198.2	194.2	177.7	161.2	153.2
50°	180.7	177.2	162.2	145.7	137.2
52.5°	166.2	160.7	146.2	129.6	122.6
55°	149.2	144.7	131.1	115.6	109.6
57.5°	133.6	129.1	116.6	102.1	97.1
60°	119.1	112.6	102.1	89.6	85.6
62.5°	103.1	98.1	89.1	78.6	83.6
65°	88.6	83.6	75.6	77.1	64.1
67.5°	72.6	70.1	63.1	56.1	54.1
70°	59.1	56.1	53.6	46.1	44.0
72.5°	47.1	44.0	40.5	36.5	35.0
75°	35.5	33.0	31.0	29.5	32.5
77.5°	24.5	23.5	22.0	20.5	20.0
80°	16.0	15.5	15.0	14.5	14.0
82.5°	9.5	9.5	9.5	9.5	9.5
85°	5.0	5.5	6.0	6.5	7.0
87.5°	3.0	3.0	3.5	4.0	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)