

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: P558749

Luminaire Tested: FSR-12-1-LD4-1LO-40-UNV-82-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558749
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-LD4-1LO-40-UNV-82-96-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 547.0 lumens
Efficiency: N/A
Efficacy: 94.3 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

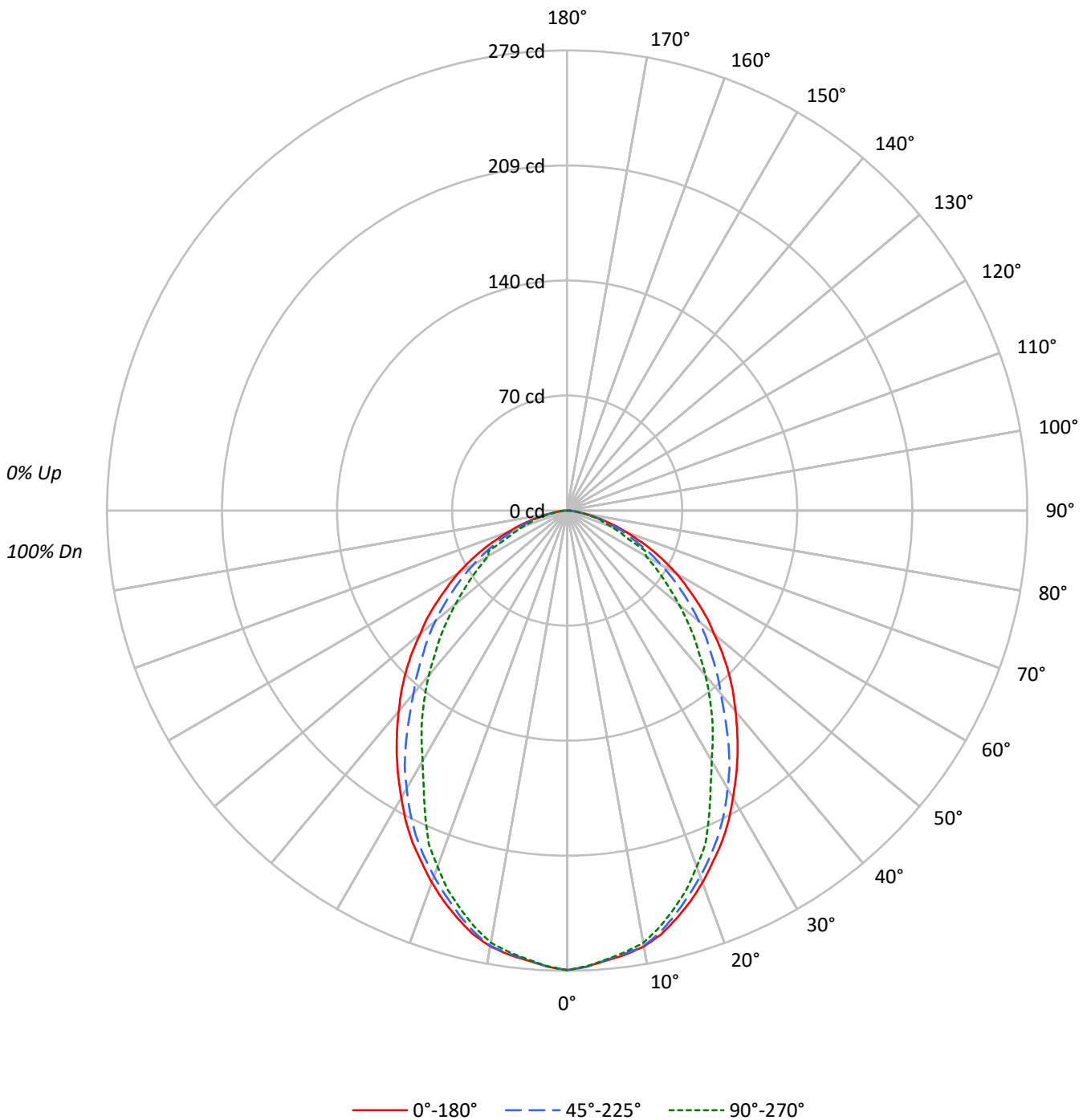
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	2999	2999	2999
5°	2958	2955	2952
10°	2933	2929	2908
15°	2854	2825	2786
20°	2749	2704	2631
25°	2635	2578	2418
30°	2498	2419	2178
35°	2367	2235	2014
40°	2231	2037	1834
45°	2104	1883	1658
50°	1948	1748	1479
55°	1802	1584	1323
60°	1651	1414	1186
65°	1452	1238	1049
70°	1196	1086	891
75°	952	832	869
80°	638	601	558
85°	395	482	556

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2104 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.9	4.7
10°-20°	71.2	13.0
20°-30°	98.5	18.0
30°-40°	105.1	19.2
40°-50°	95.9	17.5
50°-60°	75.1	13.7
60°-70°	48.9	8.9
70°-80°	21.7	4.0
80°-90°	4.7	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°	195.7	35.8
0°-40°	300.8	55.0
0°-60°	471.7	86.2
0°-90°	547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	547.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	279	279	279	279	279	
5°	274	274	274	273	273	26
15°	256	256	254	251	250	72
25°	222	221	217	209	204	102
35°	180	179	170	157	153	113
45°	138	135	124	113	109	106
55°	96	93	84	74	70	86
65°	57	54	49	50	41	56
75°	23	21	20	19	21	25
85°	3	4	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	278.6	278.6	278.6	278.6	278.6
2.5°	276.7	276.7	276.7	276.4	276.4
5°	273.8	273.5	273.5	273.2	273.2
7.5°	271.5	271.2	270.9	270.6	269.9
10°	268.3	268.3	268.0	266.4	266.1
12.5°	263.2	262.9	261.6	259.3	258.7
15°	256.1	256.1	253.5	250.9	250.0
17.5°	248.4	248.0	244.8	242.2	240.9
20°	240.0	239.3	236.1	231.9	229.7
22.5°	230.6	230.6	226.8	221.3	219.0
25°	221.9	220.7	217.1	209.4	203.6
27.5°	212.0	210.0	206.2	195.2	188.4
30°	201.0	200.0	194.6	180.4	175.2
32.5°	190.7	189.1	183.3	168.5	164.3
35°	180.1	178.8	170.1	157.2	153.3
37.5°	169.4	167.8	156.9	146.6	141.7
40°	158.8	156.9	145.0	135.6	130.5
42.5°	148.8	146.2	134.6	124.7	118.9
45°	138.2	135.3	123.7	113.4	108.9
47.5°	127.6	125.0	114.4	103.7	98.6
50°	116.3	114.0	104.4	93.7	88.3
52.5°	106.9	103.4	94.1	83.4	78.9
55°	96.0	93.1	84.4	74.4	70.5
57.5°	86.0	83.1	75.1	65.7	62.5
60°	76.7	72.5	65.7	57.7	55.1
62.5°	66.4	63.1	57.3	50.6	53.8
65°	57.0	53.8	48.6	49.6	41.2
67.5°	46.7	45.1	40.6	36.1	34.8
70°	38.0	36.1	34.5	29.6	28.3
72.5°	30.3	28.3	26.1	23.5	22.5
75°	22.9	21.3	20.0	19.0	20.9
77.5°	15.8	15.1	14.2	13.2	12.9
80°	10.3	10.0	9.7	9.3	9.0
82.5°	6.1	6.1	6.1	6.1	6.1
85°	3.2	3.5	3.9	4.2	4.5
87.5°	1.9	1.9	2.3	2.6	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)