

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: P558745

Luminaire Tested: FSR-12-1-LD4-1LO-40-UNV-82-88-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558745
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-82-88-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 466.0 lumens
Efficiency: N/A
Efficacy: 80.3 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

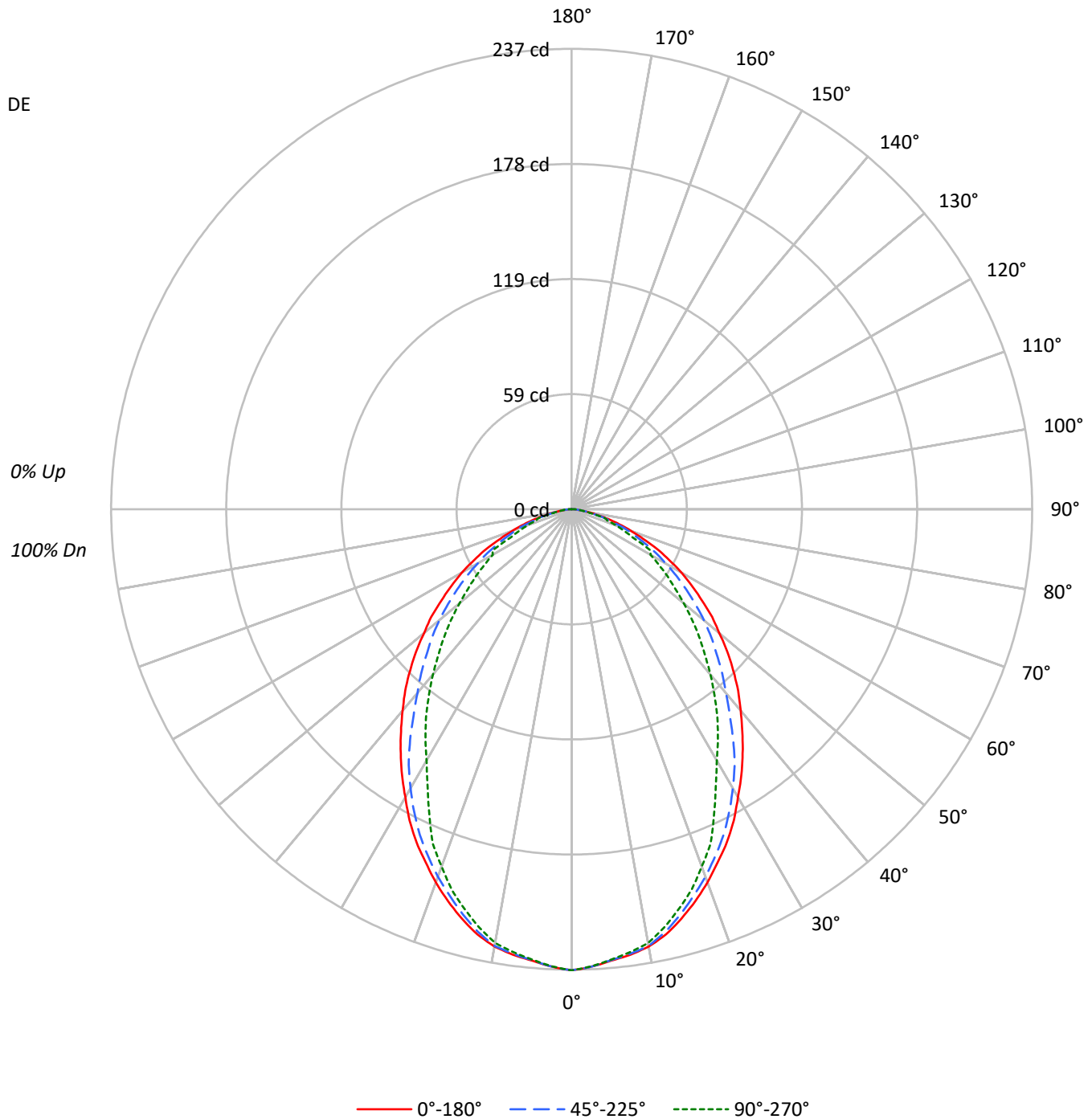
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	35	44	39	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°	2555	2555	2555
5°	2521	2518	2514
10°	2499	2495	2478
15°	2432	2407	2374
20°	2341	2305	2242
25°	2246	2197	2059
30°	2128	2061	1856
35°	2016	1904	1716
40°	1901	1735	1561
45°	1792	1604	1413
50°	1659	1489	1259
55°	1535	1349	1128
60°	1406	1206	1010
65°	1238	1054	894
70°	1020	925	758
75°	811	707	740
80°	545	508	477
85°	333	408	469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1792 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.1	4.7
10°-20°	60.6	13.0
20°-30°	84.0	18.0
30°-40°	89.5	19.2
40°-50°	81.7	17.5
50°-60°	64.0	13.7
60°-70°	41.7	8.9
70°-80°	18.5	4.0
80°-90°	4.0	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°	166.7	35.8
0°-40°	256.2	55.0
0°-60°	401.9	86.2
0°-90°	466.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	466.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	237	237	237	237	237	
5°	233	233	233	233	233	22
15°	218	218	216	214	213	61
25°	189	188	185	178	173	87
35°	153	152	145	134	131	96
45°	118	115	105	97	93	91
55°	82	79	72	63	60	73
65°	49	46	41	42	35	48
75°	20	18	17	16	18	21
85°	3	3	3	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	237.4	237.4	237.4	237.4	237.4
2.5°	235.7	235.7	235.7	235.5	235.5
5°	233.3	233.0	233.0	232.7	232.7
7.5°	231.3	231.1	230.8	230.5	230.0
10°	228.6	228.6	228.3	226.9	226.7
12.5°	224.2	223.9	222.8	220.9	220.4
15°	218.2	218.2	216.0	213.8	213.0
17.5°	211.6	211.3	208.6	206.4	205.3
20°	204.4	203.9	201.2	197.6	195.7
22.5°	196.5	196.5	193.2	188.5	186.6
25°	189.1	188.0	185.0	178.4	173.4
27.5°	180.6	178.9	175.6	166.3	160.5
30°	171.2	170.4	165.8	153.7	149.3
32.5°	162.5	161.1	156.1	143.5	140.0
35°	153.4	152.3	144.9	133.9	130.6
37.5°	144.3	143.0	133.6	124.9	120.7
40°	135.3	133.6	123.5	115.5	111.1
42.5°	126.8	124.6	114.7	106.2	101.3
45°	117.7	115.3	105.4	96.6	92.8
47.5°	108.7	106.5	97.4	88.4	84.0
50°	99.1	97.1	88.9	79.9	75.2
52.5°	91.1	88.1	80.1	71.1	67.2
55°	81.8	79.3	71.9	63.4	60.1
57.5°	73.3	70.8	63.9	56.0	53.2
60°	65.3	61.7	56.0	49.1	46.9
62.5°	56.5	53.8	48.8	43.1	45.8
65°	48.6	45.8	41.4	42.3	35.1
67.5°	39.8	38.4	34.6	30.7	29.6
70°	32.4	30.7	29.4	25.2	24.1
72.5°	25.8	24.1	22.2	20.0	19.2
75°	19.5	18.1	17.0	16.2	17.8
77.5°	13.4	12.9	12.1	11.3	11.0
80°	8.8	8.5	8.2	8.0	7.7
82.5°	5.2	5.2	5.2	5.2	5.2
85°	2.7	3.0	3.3	3.6	3.8
87.5°	1.6	1.6	1.9	2.2	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)