

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: P558652

Luminaire Tested: FSR-12-1-LD4-1LO-35-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558652
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-35-UNV-80-96-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 487.0 lumens
Efficiency: N/A
Efficacy: 84.0 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

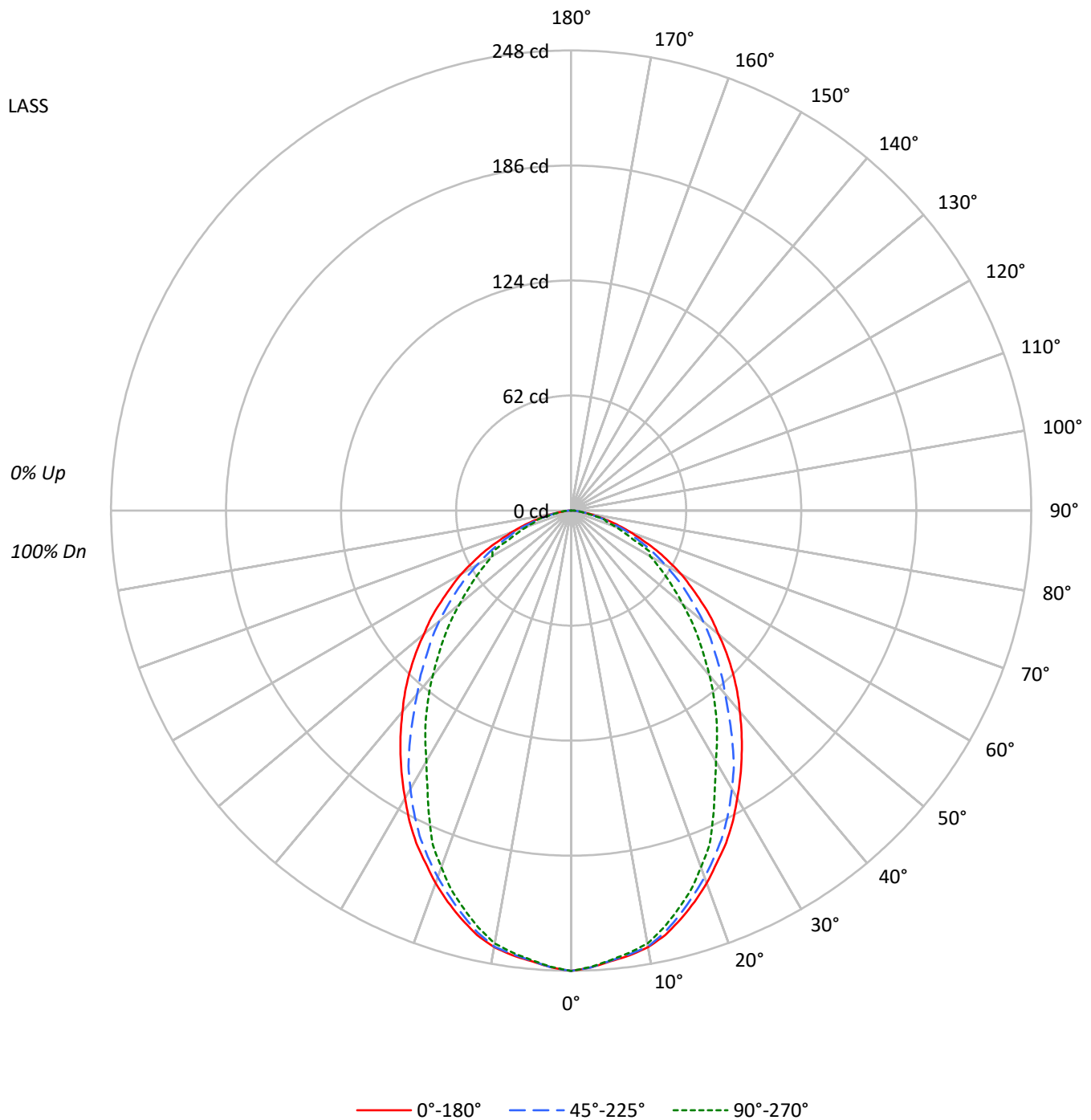
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	2671	2671	2671
5°	2634	2631	2628
10°	2611	2608	2589
15°	2541	2515	2479
20°	2448	2408	2342
25°	2347	2296	2152
30°	2225	2153	1939
35°	2106	1989	1794
40°	1987	1814	1631
45°	1872	1676	1475
50°	1733	1556	1316
55°	1605	1409	1179
60°	1470	1259	1055
65°	1294	1103	935
70°	1064	966	793
75°	848	740	774
80°	570	533	496
85°	358	420	494

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1872 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	4.7
10°-20°	63.4	13.0
20°-30°	87.7	18.0
30°-40°	93.6	19.2
40°-50°	85.3	17.5
50°-60°	66.9	13.7
60°-70°	43.6	8.9
70°-80°	19.3	4.0
80°-90°	4.1	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°	174.2	35.8
0°-40°	267.8	55.0
0°-60°	420.0	86.2
0°-90°	487.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	487.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	248	248	248	248	248	
5°	244	244	244	243	243	23
15°	228	228	226	223	222	64
25°	198	196	193	186	181	91
35°	160	159	151	140	136	100
45°	123	120	110	101	97	95
55°	86	83	75	66	63	77
65°	51	48	43	44	37	50
75°	20	19	18	17	19	22
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°	248.1	248.1	248.1	248.1	248.1
2.5°	246.4	246.4	246.4	246.1	246.1
5°	243.8	243.5	243.5	243.2	243.2
7.5°	241.8	241.5	241.2	240.9	240.3
10°	238.9	238.9	238.6	237.2	236.9
12.5°	234.3	234.0	232.9	230.9	230.3
15°	228.0	228.0	225.7	223.4	222.5
17.5°	221.1	220.8	218.0	215.7	214.5
20°	213.7	213.1	210.2	206.5	204.5
22.5°	205.3	205.3	201.9	197.0	195.0
25°	197.6	196.4	193.3	186.4	181.2
27.5°	188.7	187.0	183.5	173.8	167.8
30°	179.0	178.1	173.2	160.6	156.0
32.5°	169.8	168.3	163.2	150.0	146.3
35°	160.3	159.2	151.4	140.0	136.5
37.5°	150.9	149.4	139.7	130.5	126.2
40°	141.4	139.7	129.1	120.7	116.1
42.5°	132.5	130.2	119.9	111.0	105.8
45°	123.0	120.5	110.1	100.9	96.9
47.5°	113.6	111.3	101.8	92.3	87.8
50°	103.5	101.5	92.9	83.5	78.6
52.5°	95.2	92.1	83.7	74.3	70.3
55°	85.5	82.9	75.1	66.2	62.8
57.5°	76.6	74.0	66.8	58.5	55.6
60°	68.3	64.5	58.5	51.3	49.0
62.5°	59.1	56.2	51.0	45.0	47.9
65°	50.8	47.9	43.3	44.2	36.7
67.5°	41.6	40.2	36.1	32.1	31.0
70°	33.8	32.1	30.7	26.4	25.2
72.5°	27.0	25.2	23.2	20.9	20.1
75°	20.4	18.9	17.8	16.9	18.6
77.5°	14.1	13.5	12.6	11.8	11.5
80°	9.2	8.9	8.6	8.3	8.0
82.5°	5.4	5.4	5.4	5.4	5.4
85°	2.9	3.2	3.4	3.7	4.0
87.5°	1.7	1.7	2.0	2.3	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)