

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: P558717

Luminaire Tested: FSR-12-1-LD4-1LO-40-UNV-80-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558717
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-80-96-EDD
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

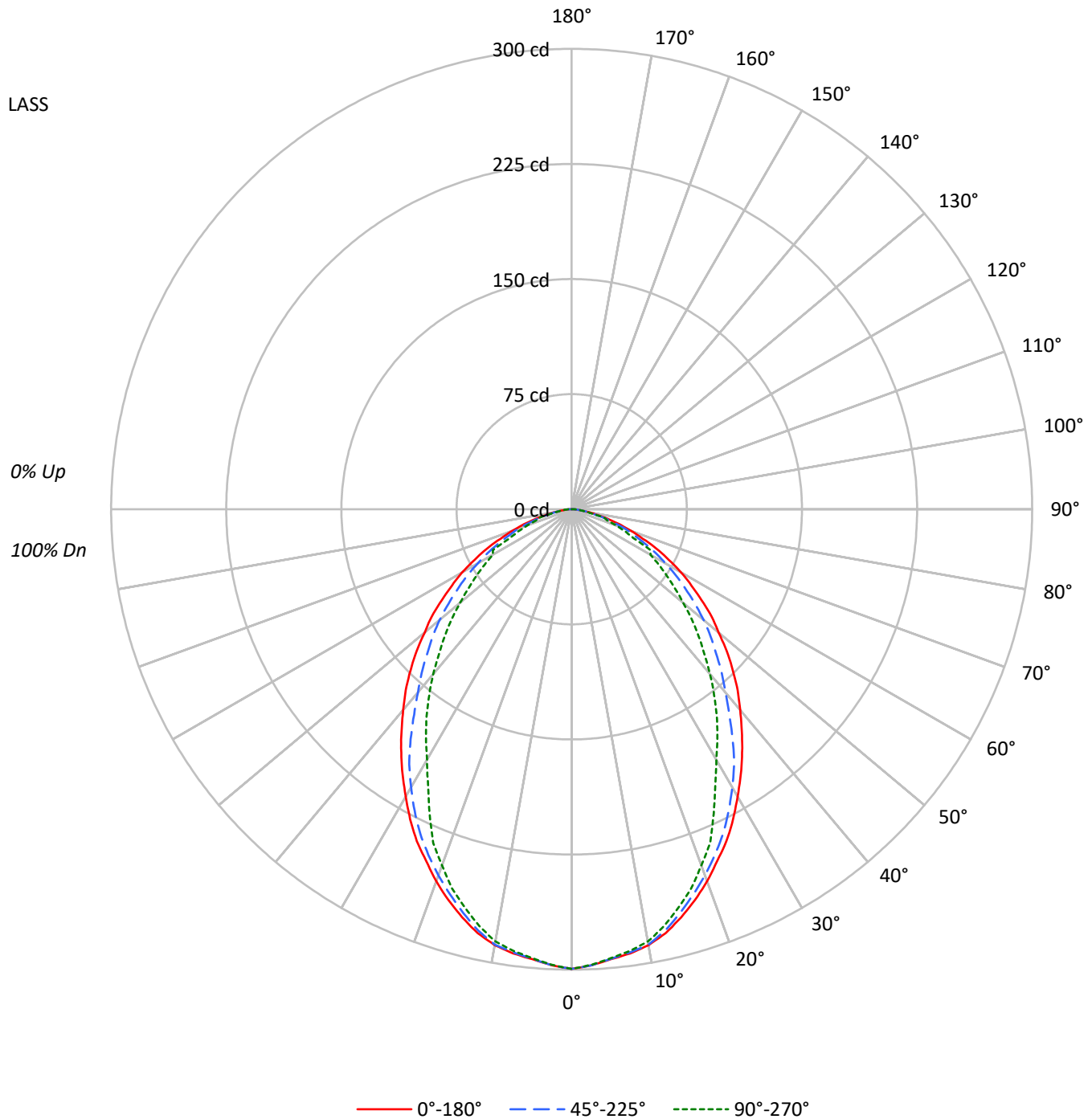
Lumens per Lamp: N/A
Luminaire Lumens: 588.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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												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°	3224	3224	3224
5°	3180	3177	3172
10°	3152	3149	3126
15°	3068	3037	2994
20°	2955	2907	2828
25°	2834	2772	2599
30°	2686	2599	2342
35°	2544	2402	2166
40°	2399	2189	1970
45°	2261	2025	1781
50°	2093	1879	1589
55°	1937	1702	1422
60°	1774	1520	1274
65°	1561	1332	1128
70°	1287	1168	960
75°	1023	894	936
80°	688	645	601
85°	432	519	593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2261 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.9	4.7
10°-20°	76.5	13.0
20°-30°	105.9	18.0
30°-40°	113.0	19.2
40°-50°	103.0	17.5
50°-60°	80.7	13.7
60°-70°	52.6	8.9
70°-80°	23.3	4.0
80°-90°	5.0	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°	210.3	35.8
0°-40°	323.3	55.0
0°-60°	507.1	86.2
0°-90°	588.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	588.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	300	300	300	300	300	
5°	294	294	294	294	294	28
15°	275	275	272	270	269	77
25°	239	237	233	225	219	110
35°	194	192	183	169	165	121
45°	148	145	133	122	117	114
55°	103	100	91	80	76	93
65°	61	58	52	53	44	60
75°	25	23	22	20	22	26
85°	4	4	4	4	5	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	299.5	299.5	299.5	299.5	299.5
2.5°	297.4	297.4	297.4	297.1	297.1
5°	294.3	294.0	294.0	293.6	293.6
7.5°	291.9	291.6	291.2	290.9	290.2
10°	288.4	288.4	288.1	286.4	286.0
12.5°	282.9	282.6	281.2	278.7	278.1
15°	275.3	275.3	272.5	269.7	268.7
17.5°	267.0	266.6	263.2	260.4	259.0
20°	258.0	257.3	253.8	249.3	246.9
22.5°	247.9	247.9	243.8	237.9	235.5
25°	238.6	237.2	233.4	225.1	218.8
27.5°	227.8	225.8	221.6	209.8	202.6
30°	216.1	215.0	209.1	193.9	188.4
32.5°	205.0	203.3	197.0	181.1	176.6
35°	193.6	192.2	182.8	169.0	164.8
37.5°	182.1	180.4	168.6	157.6	152.4
40°	170.7	168.6	155.8	145.8	140.2
42.5°	160.0	157.2	144.7	134.0	127.8
45°	148.5	145.4	133.0	121.9	117.0
47.5°	137.1	134.4	122.9	111.5	106.0
50°	125.0	122.6	112.2	100.8	94.9
52.5°	115.0	111.2	101.1	89.7	84.8
55°	103.2	100.1	90.7	80.0	75.8
57.5°	92.5	89.3	80.7	70.6	67.2
60°	82.4	77.9	70.6	62.0	59.2
62.5°	71.3	67.9	61.6	54.4	57.8
65°	61.3	57.8	52.3	53.3	44.3
67.5°	50.2	48.5	43.6	38.8	37.4
70°	40.9	38.8	37.1	31.9	30.5
72.5°	32.5	30.5	28.0	25.3	24.2
75°	24.6	22.9	21.5	20.4	22.5
77.5°	17.0	16.3	15.2	14.2	13.9
80°	11.1	10.7	10.4	10.0	9.7
82.5°	6.6	6.6	6.6	6.6	6.6
85°	3.5	3.8	4.2	4.5	4.8
87.5°	2.1	2.1	2.4	2.8	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)