

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: P560508

Luminaire Tested: FSR-12-2-LD4-2LO-50-UNV-80-96-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P560508
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-12-2-LD4-2LO-50-UNV-80-96-EDD-90
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2018.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

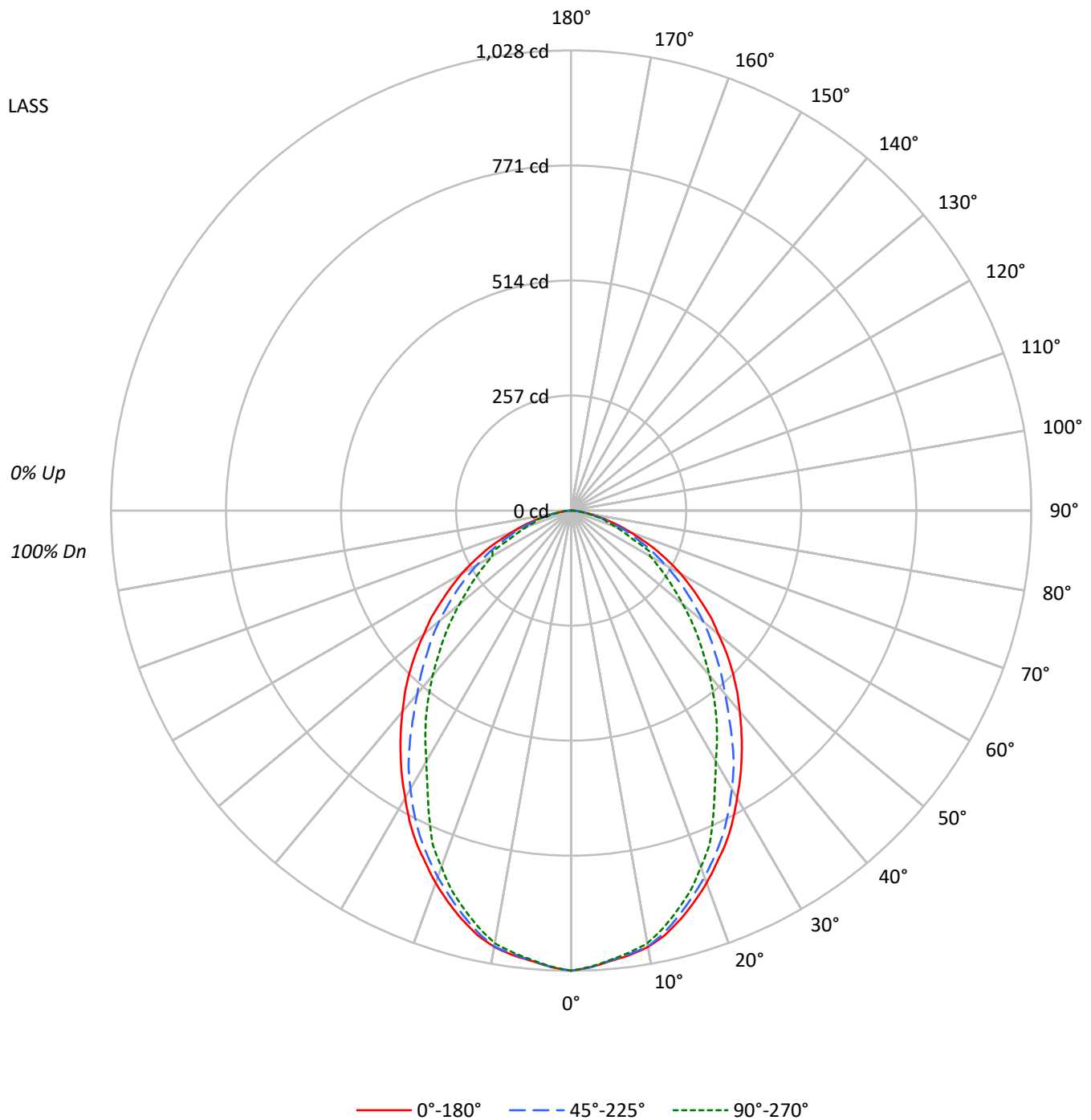
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	5532	5532	5532
5°	5457	5451	5444
10°	5410	5403	5364
15°	5264	5211	5138
20°	5070	4989	4853
25°	4862	4757	4460
30°	4608	4461	4018
35°	4365	4123	3717
40°	4116	3757	3381
45°	3880	3473	3057
50°	3592	3224	2726
55°	3323	2922	2442
60°	3044	2609	2187
65°	2678	2285	1937
70°	2206	2002	1646
75°	1755	1533	1605
80°	1178	1106	1032
85°	735	883	1025

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3880 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.7	4.7
10°-20°	262.6	13.0
20°-30°	363.6	18.0
30°-40°	387.7	19.2
40°-50°	353.7	17.5
50°-60°	277.1	13.7
60°-70°	180.6	8.9
70°-80°	80.0	4.0
80°-90°	17.2	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°	721.9	35.8
0°-40°	1109.5	55.0
0°-60°	1740.2	86.2
0°-90°	2018.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2018.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1028	1028	1028	1028	1028	
5°	1010	1009	1009	1008	1008	96
15°	945	945	935	926	922	266
25°	819	814	801	772	751	376
35°	664	660	628	580	566	415
45°	510	499	456	418	402	393
55°	354	343	311	274	260	318
65°	210	198	179	183	152	207
75°	84	78	74	70	77	90
85°	12	13	14	15	17	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1027.9	1027.9	1027.9	1027.9	1027.9
2.5°	1020.8	1020.8	1020.8	1019.6	1019.6
5°	1010.1	1008.9	1008.9	1007.7	1007.7
7.5°	1001.8	1000.6	999.4	998.2	995.9
10°	989.9	989.9	988.7	982.8	981.6
12.5°	970.9	969.7	965.0	956.6	954.3
15°	944.8	944.8	935.2	925.7	922.2
17.5°	916.2	915.0	903.2	893.7	888.9
20°	885.3	883.0	871.1	855.6	847.3
22.5°	850.9	850.9	836.6	816.4	808.1
25°	818.8	814.0	801.0	772.4	751.1
27.5°	781.9	774.8	760.6	720.2	695.2
30°	741.5	738.0	717.8	665.5	646.5
32.5°	703.5	697.6	676.2	621.5	606.1
35°	664.3	659.5	627.5	579.9	565.7
37.5°	625.1	619.1	578.7	540.7	522.9
40°	585.9	578.7	534.8	500.3	481.3
42.5°	549.0	539.5	496.7	459.9	438.5
45°	509.8	499.1	456.3	418.3	401.7
47.5°	470.6	461.1	421.9	382.7	363.6
50°	429.0	420.7	385.0	345.8	325.6
52.5°	394.5	381.5	347.0	307.8	291.2
55°	354.1	343.4	311.4	274.5	260.3
57.5°	317.3	306.6	276.9	242.4	230.5
60°	282.8	267.4	242.4	212.7	203.2
62.5°	244.8	232.9	211.5	186.6	198.5
65°	210.3	198.5	179.4	183.0	152.1
67.5°	172.3	166.4	149.7	133.1	128.3
70°	140.2	133.1	127.2	109.3	104.6
72.5°	111.7	104.6	96.3	86.8	83.2
75°	84.4	78.4	73.7	70.1	77.2
77.5°	58.2	55.9	52.3	48.7	47.5
80°	38.0	36.8	35.7	34.5	33.3
82.5°	22.6	22.6	22.6	22.6	22.6
85°	11.9	13.1	14.3	15.4	16.6
87.5°	7.1	7.1	8.3	9.5	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)