

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: P559741

Luminaire Tested: FSR-12-2-LD4-1HI-50-UNV-80-96-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559741
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-LD4-1HI-50-UNV-80-96-EDD
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1905.0 lumens
Efficiency: N/A
Efficacy: 88.2 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

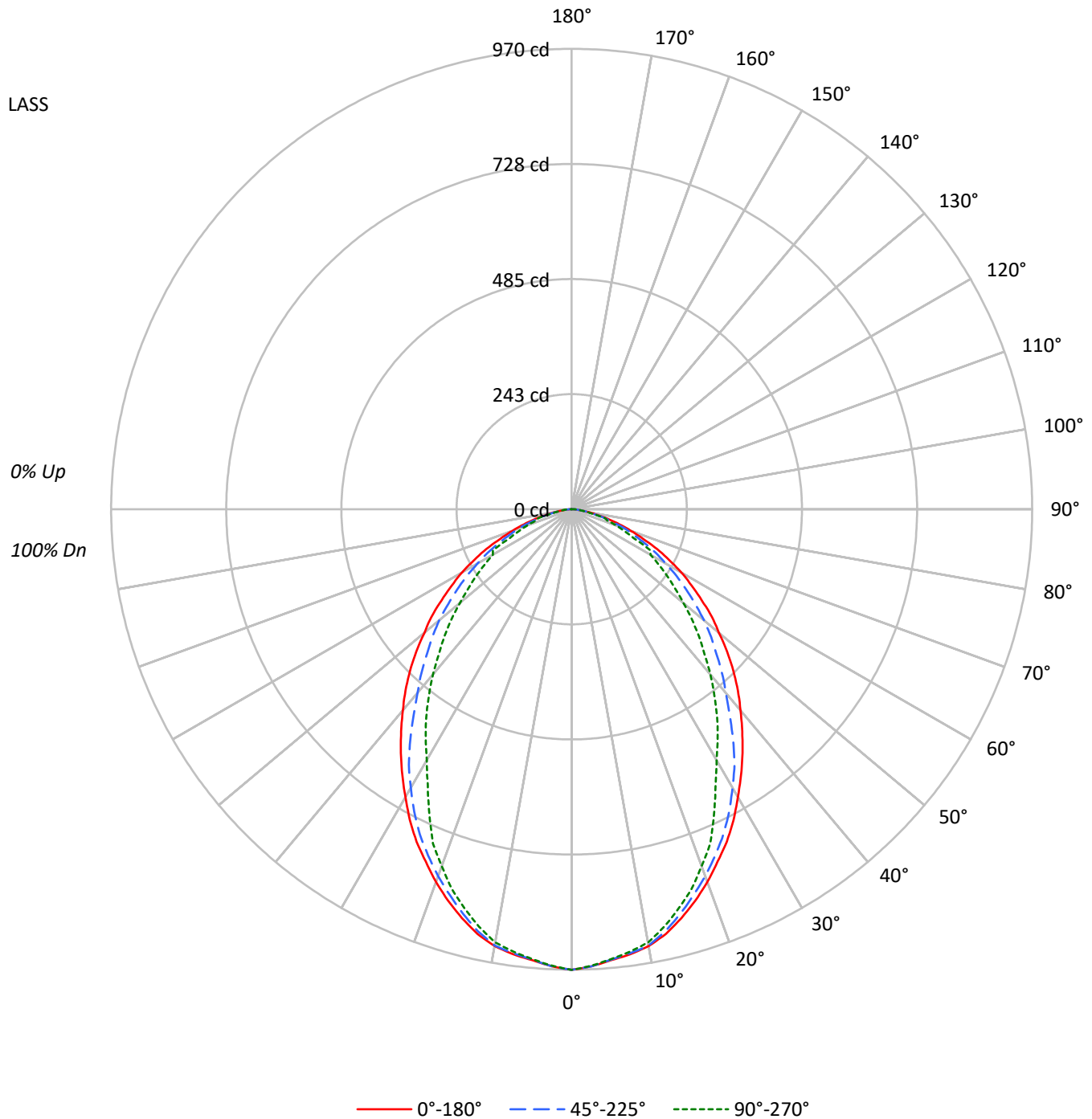
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559741

CATALOG NUMBER: FSR-12-2-LD4-1HI-50-UNV-80-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P559741

CATALOG NUMBER: FSR-12-2-LD4-1HI-50-UNV-80-96-EDD

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	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°	5223	5223	5223
5°	5152	5145	5139
10°	5107	5101	5064
15°	4969	4919	4850
20°	4787	4710	4581
25°	4590	4490	4210
30°	4350	4211	3793
35°	4120	3892	3508
40°	3886	3547	3192
45°	3663	3279	2886
50°	3391	3044	2574
55°	3137	2758	2305
60°	2874	2464	2065
65°	2529	2157	1829
70°	2083	1888	1553
75°	1655	1447	1516
80°	1113	1044	973
85°	692	834	969

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3663 cd/sqm



TEST NUMBER: P559741

CATALOG NUMBER: FSR-12-2-LD4-1HI-50-UNV-80-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.3	4.7
10°-20°	247.9	13.0
20°-30°	343.2	18.0
30°-40°	366.0	19.2
40°-50°	333.9	17.5
50°-60°	261.5	13.7
60°-70°	170.5	8.9
70°-80°	75.5	4.0
80°-90°	16.2	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°	681.4	35.8
0°-40°	1047.4	55.0
0°-60°	1642.8	86.2
0°-90°	1905.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1905.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	954	952	952	951	951	91
15°	892	892	883	874	870	251
25°	773	768	756	729	709	355
35°	627	623	592	548	534	392
45°	481	471	431	395	379	371
55°	334	324	294	259	246	300
65°	199	187	169	173	144	196
75°	80	74	70	66	73	85
85°	11	12	14	15	16	16
90°	0	0	0	0	0	



TEST NUMBER: P559741

CATALOG NUMBER: FSR-12-2-LD4-1HI-50-UNV-80-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.4	970.4	970.4	970.4	970.4
2.5°	963.7	963.7	963.7	962.5	962.5
5°	953.6	952.4	952.4	951.3	951.3
7.5°	945.7	944.6	943.5	942.3	940.1
10°	934.5	934.5	933.4	927.8	926.6
12.5°	916.5	915.4	910.9	903.1	900.8
15°	891.9	891.9	882.9	873.9	870.5
17.5°	864.9	863.8	852.6	843.6	839.1
20°	835.8	833.5	822.3	807.7	799.9
22.5°	803.2	803.2	789.8	770.7	762.8
25°	772.9	768.5	756.1	729.2	709.0
27.5°	738.2	731.4	718.0	679.8	656.3
30°	700.0	696.7	677.6	628.2	610.3
32.5°	664.1	658.5	638.3	586.7	572.1
35°	627.1	622.6	592.3	547.5	534.0
37.5°	590.1	584.5	546.3	510.4	493.6
40°	553.1	546.3	504.8	472.3	454.3
42.5°	518.3	509.3	468.9	434.1	414.0
45°	481.3	471.2	430.8	394.9	379.2
47.5°	444.2	435.3	398.2	361.2	343.3
50°	405.0	397.1	363.5	326.5	307.4
52.5°	372.4	360.1	327.6	290.6	274.8
55°	334.3	324.2	293.9	259.1	245.7
57.5°	299.5	289.4	261.4	228.9	217.6
60°	267.0	252.4	228.9	200.8	191.8
62.5°	231.1	219.9	199.7	176.1	187.3
65°	198.6	187.3	169.4	172.8	143.6
67.5°	162.7	157.1	141.4	125.6	121.2
70°	132.4	125.6	120.0	103.2	98.7
72.5°	105.5	98.7	90.9	81.9	78.5
75°	79.6	74.0	69.6	66.2	72.9
77.5°	55.0	52.7	49.4	46.0	44.9
80°	35.9	34.8	33.7	32.5	31.4
82.5°	21.3	21.3	21.3	21.3	21.3
85°	11.2	12.3	13.5	14.6	15.7
87.5°	6.7	6.7	7.9	9.0	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)