

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: P590255

Luminaire Tested: FSR-24-2-LD4-2LO-35-UNV-93-86-EDD

Issue Date: 12/8/2021

Test Information

Test Method: LM-79-2019
Report Number: P590255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FSR-24-2-LD4-2LO-35-UNV-93-86-EDD
Description: 2X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2830.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

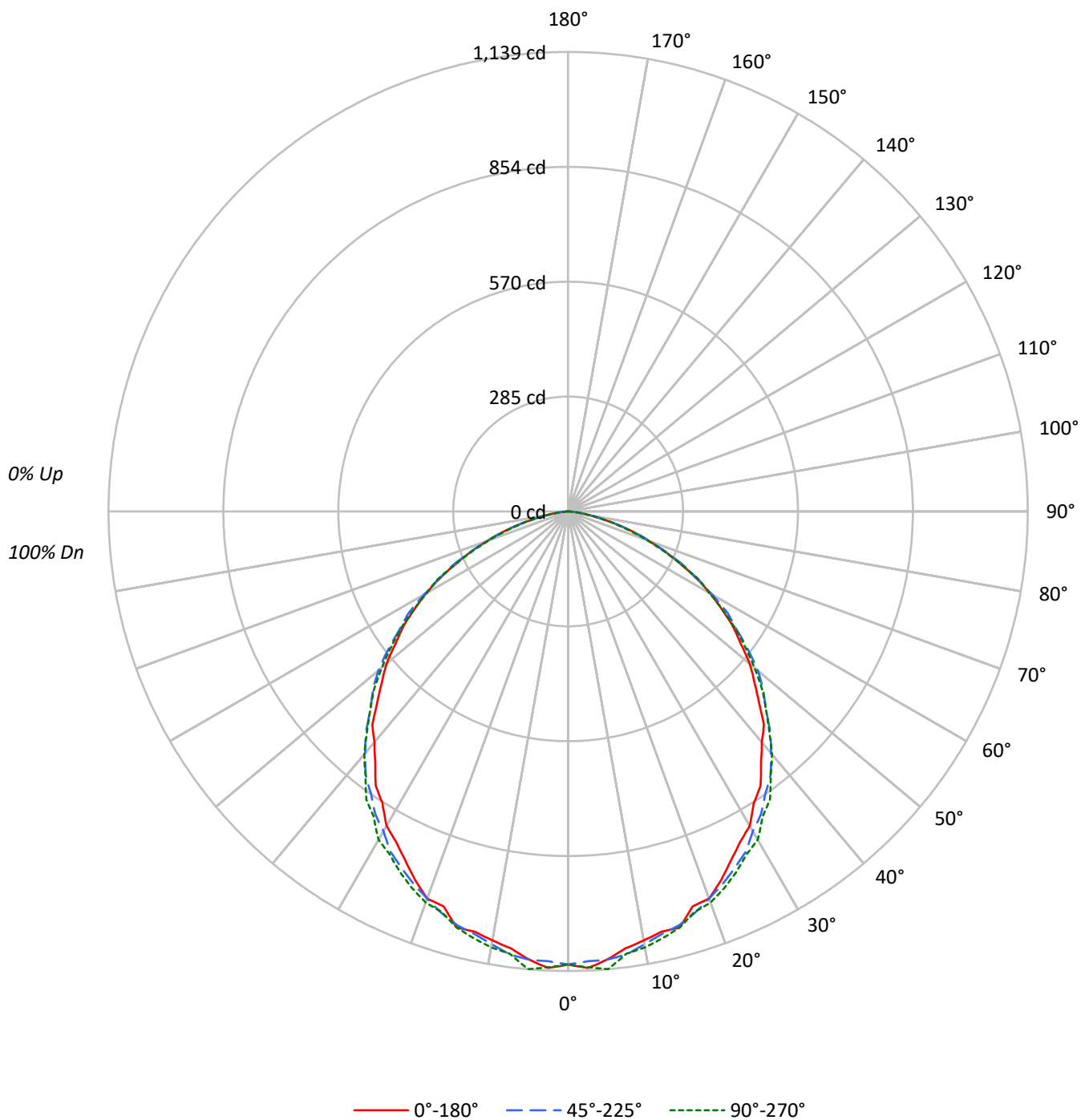
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P590255

CATALOG NUMBER: FSR-24-2-LD4-2LO-35-UNV-93-86-EDD

Luminous Intensity Polar Plot



TEST NUMBER: P590255

CATALOG NUMBER: FSR-24-2-LD4-2LO-35-UNV-93-86-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62		
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53		
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46		
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41		
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36		
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32		
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29		
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3022	3022	3022
5°	3012	3013	3076
10°	2951	2976	2997
15°	2974	2958	2974
20°	2924	2924	2955
25°	2834	2896	2928
30°	2795	2844	2920
35°	2729	2801	2863
40°	2623	2749	2761
45°	2544	2634	2638
50°	2460	2571	2522
55°	2344	2389	2373
60°	2192	2214	2174
65°	1954	2004	1940
70°	1677	1682	1636
75°	1328	1325	1274
80°	890	865	831
85°	485	479	448

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 2702 cd/sqm

TEST NUMBER: P590255

CATALOG NUMBER: FSR-24-2-LD4-2LO-35-UNV-93-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.7
10°-20°	299.4	10.6
20°-30°	448.5	15.8
30°-40°	531.5	18.8
40°-50°	532.5	18.8
50°-60°	452.0	16.0
60°-70°	304.8	10.8
70°-80°	133.9	4.7
80°-90°	21.8	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°	853.5	30.2
0°-40°	1385.0	48.9
0°-60°	2369.6	83.7
0°-90°	2830.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2830.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1115	1112	1115	1112	1139	105
15°	1068	1055	1062	1067	1068	297
25°	954	960	975	988	986	441
35°	831	833	852	872	872	516
45°	668	681	692	710	693	517
55°	500	496	509	506	506	444
65°	307	303	315	303	305	305
75°	128	125	127	118	122	137
85°	16	15	16	15	14	23
90°	0	0	0	0	0	

TEST NUMBER: P590255

CATALOG NUMBER: FSR-24-2-LD4-2LO-35-UNV-93-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.9	1122.9	1122.9	1122.9	1122.9
2.5°	1132.6	1124.0	1116.1	1125.3	1131.0
5°	1114.9	1112.3	1115.3	1112.0	1138.8
7.5°	1092.0	1102.0	1107.8	1104.2	1105.8
10°	1079.8	1076.3	1089.2	1098.2	1096.9
12.5°	1066.8	1072.0	1072.7	1082.4	1083.3
15°	1067.5	1055.2	1061.7	1067.2	1067.6
17.5°	1026.0	1039.4	1043.9	1056.5	1040.8
20°	1021.0	1011.2	1021.0	1033.9	1031.8
22.5°	989.8	978.9	999.8	1011.2	1010.5
25°	954.4	959.6	975.3	988.0	986.0
27.5°	923.4	929.5	951.8	969.3	958.0
30°	899.5	896.4	915.3	930.9	939.6
32.5°	856.7	867.7	889.7	905.3	897.0
35°	830.7	833.2	852.5	872.2	871.6
37.5°	785.4	796.8	823.9	829.4	824.4
40°	746.6	758.1	782.6	788.5	786.1
42.5°	718.1	720.1	741.1	748.0	737.1
45°	668.4	680.8	692.1	710.0	693.2
47.5°	626.0	631.8	656.2	661.0	652.1
50°	587.6	589.6	614.1	608.2	602.4
52.5°	539.3	547.9	561.7	560.5	553.7
55°	499.6	496.3	509.3	505.8	505.7
57.5°	451.9	457.7	468.4	462.9	454.1
60°	407.2	407.4	411.3	405.1	403.9
62.5°	357.5	359.3	360.1	352.4	364.9
65°	306.9	302.9	314.8	302.7	304.7
67.5°	260.4	262.4	261.3	253.7	256.6
70°	213.1	215.7	213.8	205.3	207.9
72.5°	169.9	166.7	168.8	158.0	163.0
75°	127.7	125.1	127.4	118.4	122.5
77.5°	87.0	89.0	87.6	82.8	85.5
80°	57.4	55.8	55.8	53.1	53.6
82.5°	33.5	31.9	31.5	30.6	31.9
85°	15.7	15.2	15.5	15.1	14.5
87.5°	5.7	5.8	5.8	5.5	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)