

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: P562273

Luminaire Tested: FSR-24-4-LD4-1LO-50-UNV-93-84-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P562273
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-24-4-LD4-1LO-50-UNV-93-84-EDD
Description: 2X4 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2999.0 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

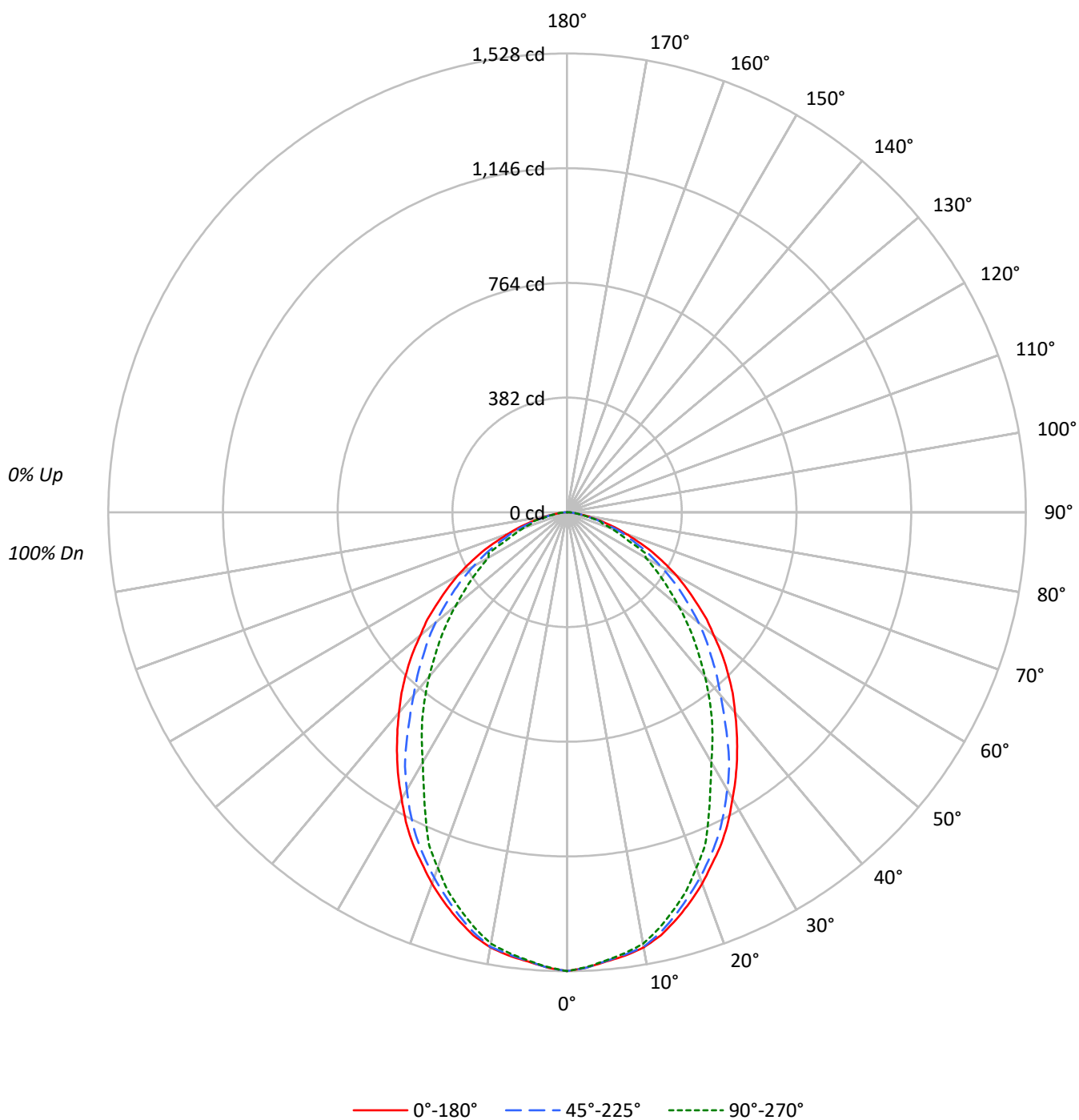
Input Watts (W): 23.4
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P562273

CATALOG NUMBER: FSR-24-4-LD4-1LO-50-UNV-93-84-EDD

Luminous Intensity Polar Plot



TEST NUMBER: P562273

CATALOG NUMBER: FSR-24-4-LD4-1LO-50-UNV-93-84-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	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°	2056	2056	2056
5°	2028	2025	2023
10°	2010	2008	1993
15°	1956	1936	1909
20°	1884	1854	1803
25°	1806	1767	1657
30°	1712	1657	1493
35°	1622	1532	1381
40°	1529	1396	1256
45°	1442	1290	1136
50°	1335	1198	1013
55°	1235	1085	907
60°	1131	970	813
65°	995	849	720
70°	820	744	611
75°	652	569	597
80°	438	411	383
85°	273	327	381

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1442 cd/sqm

TEST NUMBER: P562273

CATALOG NUMBER: FSR-24-4-LD4-1LO-50-UNV-93-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	4.7
10°-20°	390.3	13.0
20°-30°	540.3	18.0
30°-40°	576.1	19.2
40°-50°	525.6	17.5
50°-60°	411.8	13.7
60°-70°	268.4	8.9
70°-80°	118.9	4.0
80°-90°	25.5	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°	1072.8	35.8
0°-40°	1648.9	55.0
0°-60°	2586.2	86.2
0°-90°	2999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1528	1528	1528	1528	1528	
5°	1501	1499	1499	1498	1498	142
15°	1404	1404	1390	1376	1370	395
25°	1217	1210	1190	1148	1116	559
35°	987	980	932	862	841	617
45°	758	742	678	622	597	584
55°	526	510	463	408	387	472
65°	313	295	267	272	226	308
75°	125	117	110	104	115	134
85°	18	19	21	23	25	25
90°	0	0	0	0	0	

TEST NUMBER: P562273

CATALOG NUMBER: FSR-24-4-LD4-1LO-50-UNV-93-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1527.7	1527.7	1527.7	1527.7	1527.7
2.5°	1517.1	1517.1	1517.1	1515.3	1515.3
5°	1501.2	1499.4	1499.4	1497.6	1497.6
7.5°	1488.8	1487.0	1485.3	1483.5	1480.0
10°	1471.1	1471.1	1469.4	1460.5	1458.8
12.5°	1442.9	1441.1	1434.0	1421.7	1418.2
15°	1404.0	1404.0	1389.9	1375.8	1370.5
17.5°	1361.6	1359.9	1342.2	1328.1	1321.0
20°	1315.7	1312.2	1294.5	1271.6	1259.2
22.5°	1264.5	1264.5	1243.3	1213.3	1200.9
25°	1216.8	1209.8	1190.3	1147.9	1116.2
27.5°	1162.1	1151.5	1130.3	1070.2	1033.2
30°	1102.0	1096.7	1066.7	989.0	960.7
32.5°	1045.5	1036.7	1004.9	923.7	900.7
35°	987.2	980.2	932.5	861.8	840.6
37.5°	929.0	920.1	860.1	803.6	777.1
40°	870.7	860.1	794.7	743.5	715.3
42.5°	815.9	801.8	738.2	683.5	651.7
45°	757.6	741.7	678.2	621.7	596.9
47.5°	699.4	685.2	627.0	568.7	540.4
50°	637.6	625.2	572.2	513.9	483.9
52.5°	586.3	566.9	515.7	457.4	432.7
55°	526.3	510.4	462.7	408.0	386.8
57.5°	471.5	455.6	411.5	360.3	342.6
60°	420.3	397.4	360.3	316.1	302.0
62.5°	363.8	346.1	314.4	277.3	294.9
65°	312.6	294.9	266.7	272.0	226.1
67.5°	256.1	247.2	222.5	197.8	190.7
70°	208.4	197.8	189.0	162.5	155.4
72.5°	166.0	155.4	143.1	128.9	123.6
75°	125.4	116.6	109.5	104.2	114.8
77.5°	86.5	83.0	77.7	72.4	70.6
80°	56.5	54.7	53.0	51.2	49.4
82.5°	33.6	33.6	33.6	33.6	33.6
85°	17.7	19.4	21.2	23.0	24.7
87.5°	10.6	10.6	12.4	14.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)