

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: CORELITE

Report Number:

Luminaire Tested: SQ4-F-100U-075D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

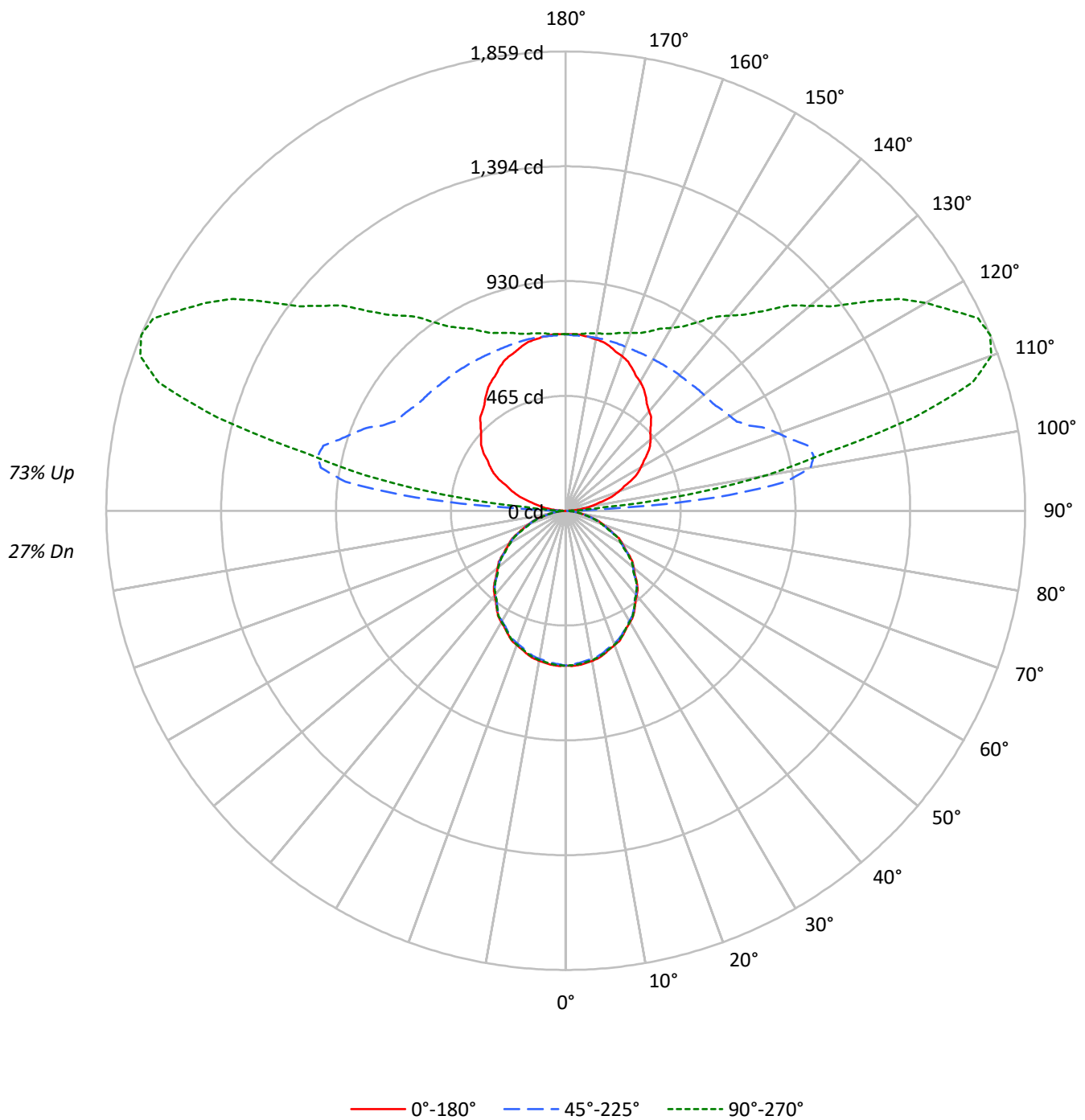
Lumens per Lamp: N/A
Luminaire Lumens: 6351.5 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
Input Voltage (V): 120
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:

CATALOG NUMBER: SQ4-F-100U-075D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-F-100U-075D-927-1D-UNV-STD-W-6

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
RCR																	
0	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35
1	93	88	85	81	83	79	76	73	62	60	58	46	44	43	31	30	29
2	84	77	71	66	75	69	64	60	54	51	48	40	38	36	27	26	25
3	77	68	61	55	68	61	55	50	47	43	40	35	33	30	24	22	21
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	19	18
5	64	53	45	39	57	48	41	36	37	33	29	28	25	22	19	17	16
6	59	47	40	34	52	43	36	31	34	29	25	25	22	19	17	15	14
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	16	14	12
8	50	39	31	26	45	35	28	24	28	23	19	21	17	15	14	12	11
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10
10	44	32	25	20	39	29	23	19	23	18	15	18	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3856	3856	3856
5°	3871	3821	3849
10°	3855	3805	3834
15°	3825	3778	3810
20°	3791	3746	3775
25°	3749	3710	3737
30°	3701	3661	3681
35°	3653	3615	3631
40°	3592	3555	3551
45°	3530	3486	3495
50°	3431	3405	3405
55°	3352	3309	3279
60°	3244	3189	3160
65°	3068	3011	2969
70°	2883	2811	2739
75°	2593	2498	2445
80°	2072	2033	2012
85°	1242	1404	1447

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3530 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-F-100U-075D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	0.9
10°-20°	168.4	2.7
20°-30°	253.1	4.0
30°-40°	302.0	4.8
40°-50°	309.7	4.9
50°-60°	276.0	4.3
60°-70°	205.8	3.2
70°-80°	111.6	1.8
80°-90°	27.1	0.4
90°-100°	334.3	5.3
100°-110°	923.0	14.5
110°-120°	951.9	15.0
120°-130°	765.0	12.0
130°-140°	601.2	9.5
140°-150°	461.1	7.3
150°-160°	331.4	5.2
160°-170°	202.6	3.2
170°-180°	68.3	1.1
0°-30°	480.7	7.6
0°-40°	782.7	12.3
0°-60°	1368.3	21.5
0°-90°	1712.7	27.0
90°-120°	2209.3	34.8
90°-150°	4036.5	63.6
90°-180°	4639.0	73.0
0°-180°	6351.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	627	626	619	624	623	59
15°	601	600	593	598	598	169
25°	552	552	547	550	551	254
35°	486	485	481	481	484	304
45°	406	404	401	401	402	312
55°	313	312	309	306	306	279
65°	211	211	207	205	204	210
75°	109	107	105	103	103	115
85°	18	19	20	20	20	24
90°	2	4	9	10	11	4
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

TEST NUMBER:

CATALOG NUMBER: SQ4-F-100U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.9	626.9	626.9	626.9	626.9
2.5°	629.1	627.8	622.3	626.8	626.4
5°	626.9	625.7	618.9	624.0	623.4
7.5°	621.7	620.5	613.8	618.9	618.8
10°	617.2	615.5	609.2	614.3	613.8
12.5°	611.3	609.6	603.3	608.4	607.9
15°	600.7	599.6	593.3	597.9	598.4
17.5°	588.7	586.6	580.9	585.4	585.9
20°	579.1	577.4	572.3	576.3	576.8
22.5°	569.1	567.4	562.3	566.3	566.8
25°	552.4	551.8	546.7	549.6	550.7
27.5°	534.3	532.8	528.6	530.8	531.9
30°	521.1	520.0	515.5	517.2	518.3
32.5°	507.5	506.8	502.7	503.6	505.1
35°	486.5	485.4	481.4	481.4	483.6
37.5°	463.2	462.0	458.6	458.1	459.0
40°	447.3	445.6	442.7	442.2	442.2
42.5°	430.9	429.7	425.9	424.9	426.2
45°	405.8	404.1	400.7	400.7	401.8
47.5°	378.6	377.9	374.0	372.1	372.6
50°	358.6	359.7	355.8	353.5	355.8
52.5°	341.3	340.7	337.1	334.9	335.8
55°	312.6	312.0	308.6	305.8	305.8
57.5°	283.7	282.3	278.7	276.6	278.2
60°	263.7	263.1	259.2	255.2	256.9
62.5°	243.7	242.7	238.7	236.1	237.3
65°	210.8	210.8	206.9	204.6	204.0
67.5°	182.1	179.4	177.2	174.5	173.7
70°	160.3	158.0	156.3	154.0	152.3
72.5°	138.9	137.6	134.9	132.6	132.3
75°	109.1	106.9	105.1	103.4	102.9
77.5°	77.6	77.2	75.6	74.7	75.0
80°	58.5	58.5	57.4	57.4	56.8
82.5°	41.3	41.7	41.5	40.6	40.5
85°	17.6	18.7	19.9	19.9	20.5
87.5°	3.6	6.3	6.8	7.1	7.3
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

TEST NUMBER:

CATALOG NUMBER: SQ4-F-100U-075D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)