

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-WB-100U-100D-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)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

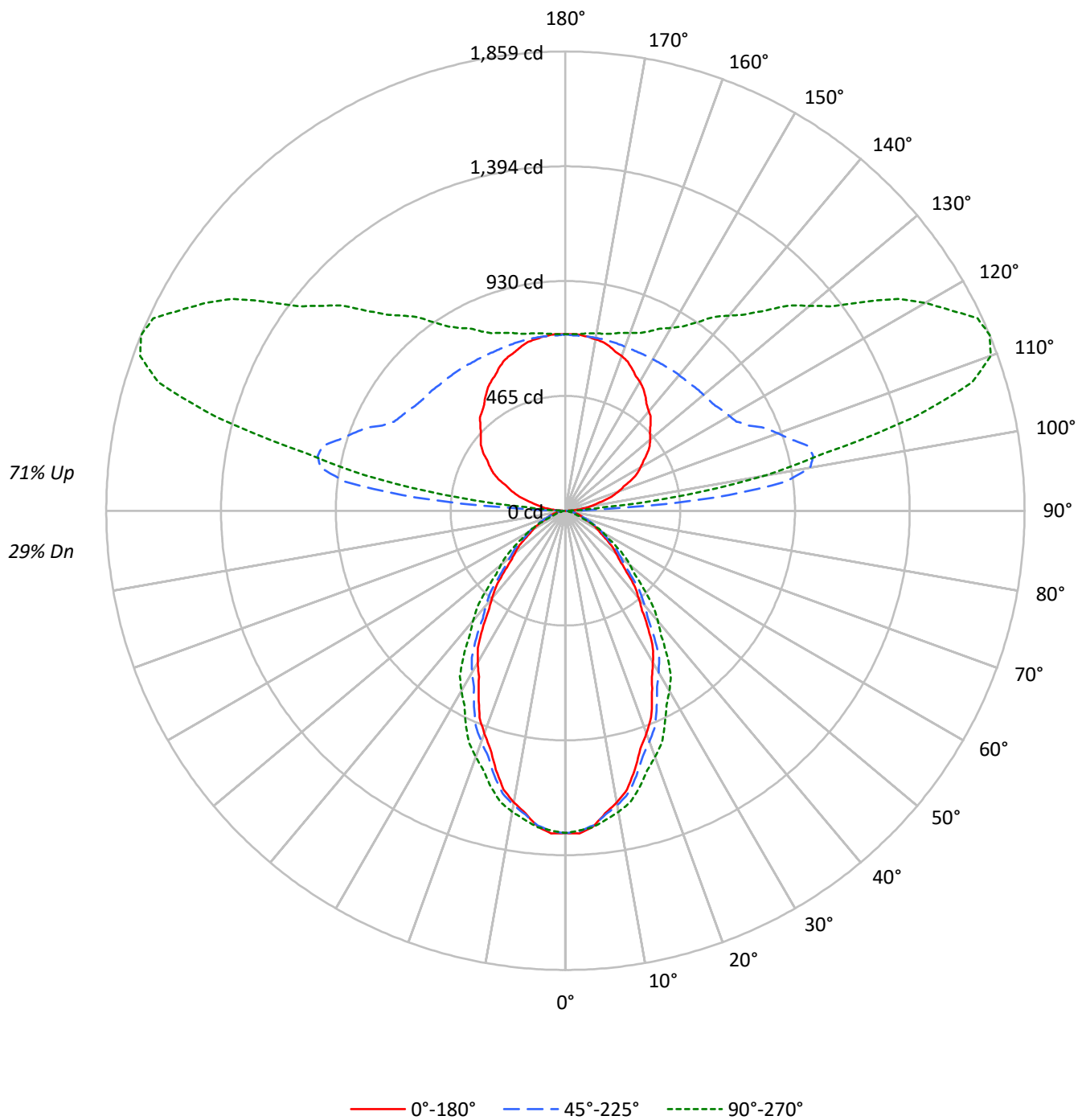
Lumens per Lamp: N/A
Luminaire Lumens: 6541.3 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 92.9
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-WB-100U-100D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-WB-100U-100D-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	92	92	92	92	72	72	72	54	54	54	37	37	37
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	32
2	86	79	74	69	77	71	67	63	57	53	51	43	41	39	30	29	28
3	79	70	64	58	71	63	58	53	50	47	43	39	36	34	28	26	25
4	72	62	55	50	65	57	50	46	45	41	38	35	32	30	25	23	22
5	67	56	48	43	60	51	44	40	41	36	33	32	29	26	23	21	20
6	61	50	43	38	55	46	39	35	37	32	29	29	26	23	21	19	18
7	57	46	38	33	51	41	35	31	34	29	26	26	23	21	19	18	16
8	53	41	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15
9	49	38	31	26	44	35	29	24	28	24	21	22	19	17	17	15	13
10	46	35	28	24	41	32	26	22	26	22	19	21	18	15	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8024	8024	8024
5°	7924	7896	7942
10°	7487	7555	7730
15°	6911	7071	7389
20°	6276	6512	6943
25°	5630	5936	6468
30°	5033	5362	5977
35°	4402	4719	5394
40°	3705	3999	4670
45°	3058	3321	3899
50°	2553	2783	3249
55°	2167	2388	2683
60°	1851	2070	2140
65°	1474	1741	1383
70°	1307	1360	843
75°	1210	1103	518
80°	1116	1013	446
85°	1009	932	367

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3899 cd/sqm

TEST NUMBER:

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.7	1.8
10°-20°	311.2	4.8
20°-30°	403.2	6.2
30°-40°	394.8	6.0
40°-50°	302.2	4.6
50°-60°	201.4	3.1
60°-70°	109.9	1.7
70°-80°	45.8	0.7
80°-90°	14.4	0.2
90°-100°	334.3	5.1
100°-110°	923.0	14.1
110°-120°	951.9	14.6
120°-130°	765.0	11.7
130°-140°	601.2	9.2
140°-150°	461.1	7.0
150°-160°	331.4	5.1
160°-170°	202.6	3.1
170°-180°	68.3	1.0
0°-30°	834.1	12.8
0°-40°	1228.8	18.8
0°-60°	1732.4	26.5
0°-90°	1902.5	29.1
90°-120°	2209.3	33.8
90°-150°	4036.5	61.7
90°-180°	4639.0	70.9
0°-180°	6541.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1283	1270	1279	1282	1286	119
15°	1085	1081	1110	1141	1160	303
25°	830	832	875	913	953	381
35°	586	589	628	671	718	364
45°	352	358	382	411	448	274
55°	202	210	223	231	250	183
65°	101	110	120	104	95	105
75°	51	51	46	32	22	54
85°	14	14	13	8	5	16
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-WB-100U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.6	1304.6	1304.6	1304.6	1304.6
2.5°	1307.8	1296.1	1299.1	1299.0	1295.4
5°	1283.4	1270.5	1278.8	1281.8	1286.3
7.5°	1235.8	1226.0	1241.1	1252.3	1261.4
10°	1198.7	1190.3	1209.6	1225.8	1237.6
12.5°	1155.6	1148.6	1172.5	1194.3	1209.7
15°	1085.3	1081.4	1110.5	1140.7	1160.3
17.5°	1010.1	1008.2	1041.6	1076.9	1101.9
20°	958.8	958.3	994.9	1031.6	1060.7
22.5°	907.1	908.3	946.8	985.0	1018.1
25°	829.5	831.7	874.7	912.8	953.1
27.5°	757.7	758.7	803.1	843.4	886.4
30°	708.7	711.5	755.0	796.7	841.5
32.5°	659.7	662.9	705.6	748.6	794.3
35°	586.2	589.0	628.5	670.8	718.4
37.5°	510.4	514.2	549.3	589.3	636.1
40°	461.4	467.0	498.0	535.7	581.6
42.5°	414.2	421.2	449.9	485.7	527.1
45°	351.5	358.2	381.8	410.7	448.2
47.5°	297.4	305.2	323.3	348.2	380.2
50°	266.8	274.0	290.8	309.2	339.5
52.5°	239.7	247.0	261.9	276.2	301.9
55°	202.1	210.5	222.7	231.1	250.2
57.5°	171.2	179.2	188.9	192.7	204.2
60°	150.5	159.5	168.3	167.9	174.0
62.5°	131.8	139.4	148.1	142.1	142.4
65°	101.3	109.7	119.6	104.5	95.0
67.5°	81.9	83.6	93.9	72.9	61.6
70°	72.7	72.7	75.6	56.5	46.9
72.5°	64.0	64.0	61.4	45.9	35.9
75°	50.9	50.9	46.4	31.8	21.8
77.5°	39.3	38.8	35.5	23.7	15.8
80°	31.5	31.5	28.6	18.8	12.6
82.5°	24.6	24.6	22.2	14.6	9.4
85°	14.3	14.3	13.2	8.5	5.2
87.5°	5.5	5.9	6.4	4.8	4.6
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-WB-100U-100D-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)