

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-075U-050D-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 (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

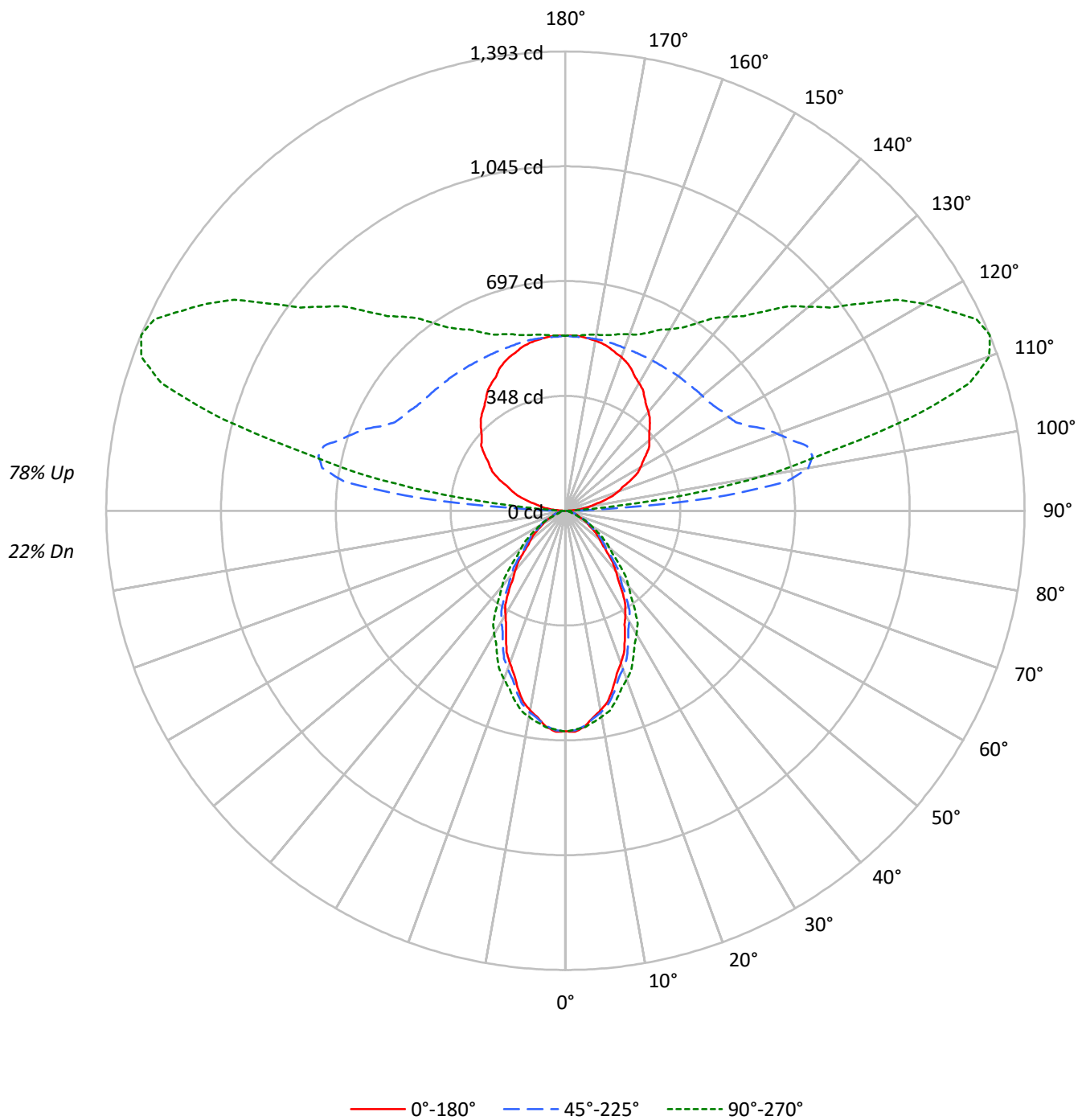
Lumens per Lamp: N/A
Luminaire Lumens: 4434.6 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 54.3
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-075U-050D-927-1D-UNV-STD-W-6

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-WB-075U-050D-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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30
1	92	88	85	81	81	78	75	73	60	58	56	43	42	41	28	27	27
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23
3	77	68	62	57	68	61	56	51	47	44	40	34	32	30	23	21	20
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18
5	65	54	47	41	58	49	42	38	38	34	30	28	25	23	19	17	16
6	60	49	41	36	53	44	37	33	34	30	27	25	23	20	17	16	14
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13
8	51	40	33	28	46	36	30	26	28	24	21	21	18	16	15	13	12
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4117	4117	4117
5°	4066	4052	4075
10°	3842	3876	3966
15°	3546	3628	3791
20°	3220	3342	3563
25°	2888	3046	3319
30°	2582	2751	3067
35°	2259	2422	2768
40°	1901	2051	2396
45°	1568	1704	2001
50°	1310	1428	1667
55°	1112	1226	1377
60°	950	1063	1099
65°	757	894	710
70°	671	698	433
75°	620	566	266
80°	574	521	230
85°	515	480	183

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2001 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-075U-050D-927-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.4	1.4
10°-20°	159.7	3.6
20°-30°	206.9	4.7
30°-40°	202.6	4.6
40°-50°	155.1	3.5
50°-60°	103.3	2.3
60°-70°	56.4	1.3
70°-80°	23.5	0.5
80°-90°	8.0	0.2
90°-100°	250.3	5.6
100°-110°	688.7	15.5
110°-120°	710.9	16.0
120°-130°	569.6	12.8
130°-140°	447.4	10.1
140°-150°	342.8	7.7
150°-160°	246.5	5.6
160°-170°	150.7	3.4
170°-180°	50.8	1.1
0°-30°	428.0	9.7
0°-40°	630.5	14.2
0°-60°	888.9	20.0
0°-90°	976.8	22.0
90°-120°	1650.0	37.2
90°-150°	3009.8	67.9
90°-180°	3458.0	78.0
0°-180°	4434.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	658	652	656	658	660	61
15°	557	555	570	585	595	156
25°	426	427	449	468	489	196
35°	301	302	322	344	369	187
45°	180	184	196	211	230	141
55°	104	108	114	119	128	94
65°	52	56	61	54	49	54
75°	26	26	24	16	11	28
85°	7	7	7	4	3	8
90°	1	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-075U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.4	669.4	669.4	669.4	669.4
2.5°	671.0	665.1	666.6	666.5	664.7
5°	658.5	651.9	656.2	657.7	660.0
7.5°	634.1	629.1	636.8	642.6	647.2
10°	615.1	610.7	620.6	629.0	635.0
12.5°	593.0	589.3	601.6	612.8	620.7
15°	556.9	554.9	569.8	585.3	595.4
17.5°	518.3	517.3	534.5	552.5	565.4
20°	492.0	491.7	510.5	529.3	544.3
22.5°	465.4	466.1	485.8	505.4	522.4
25°	425.6	426.8	448.8	468.4	489.0
27.5°	388.8	389.3	412.1	432.7	454.8
30°	363.6	365.1	387.4	408.8	431.8
32.5°	338.5	340.2	362.0	384.1	407.6
35°	300.8	302.2	322.5	344.2	368.6
37.5°	261.9	263.8	281.9	302.4	326.4
40°	236.7	239.6	255.5	274.9	298.4
42.5°	212.5	216.1	230.9	249.2	270.5
45°	180.3	183.8	195.9	210.7	230.0
47.5°	152.6	156.6	165.9	178.7	195.1
50°	136.9	140.6	149.2	158.7	174.2
52.5°	123.0	126.7	134.4	141.7	154.9
55°	103.7	108.0	114.3	118.6	128.4
57.5°	87.8	92.0	96.9	98.9	104.8
60°	77.2	81.8	86.4	86.1	89.3
62.5°	67.6	71.5	76.0	72.9	73.1
65°	52.0	56.3	61.4	53.6	48.8
67.5°	42.0	42.9	48.2	37.4	31.6
70°	37.3	37.3	38.8	29.0	24.1
72.5°	32.8	32.8	31.5	23.6	18.4
75°	26.1	26.1	23.8	16.3	11.2
77.5°	20.1	19.9	18.2	12.2	8.1
80°	16.2	16.2	14.7	9.6	6.5
82.5°	12.6	12.6	11.4	7.5	4.8
85°	7.3	7.3	6.8	4.4	2.6
87.5°	2.8	3.5	3.9	3.4	3.2
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

CATALOG NUMBER: SQ4-WB-075U-050D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)