

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: P521931

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521931  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7409.5 lumens  
Efficiency: N/A  
Efficacy: 115.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

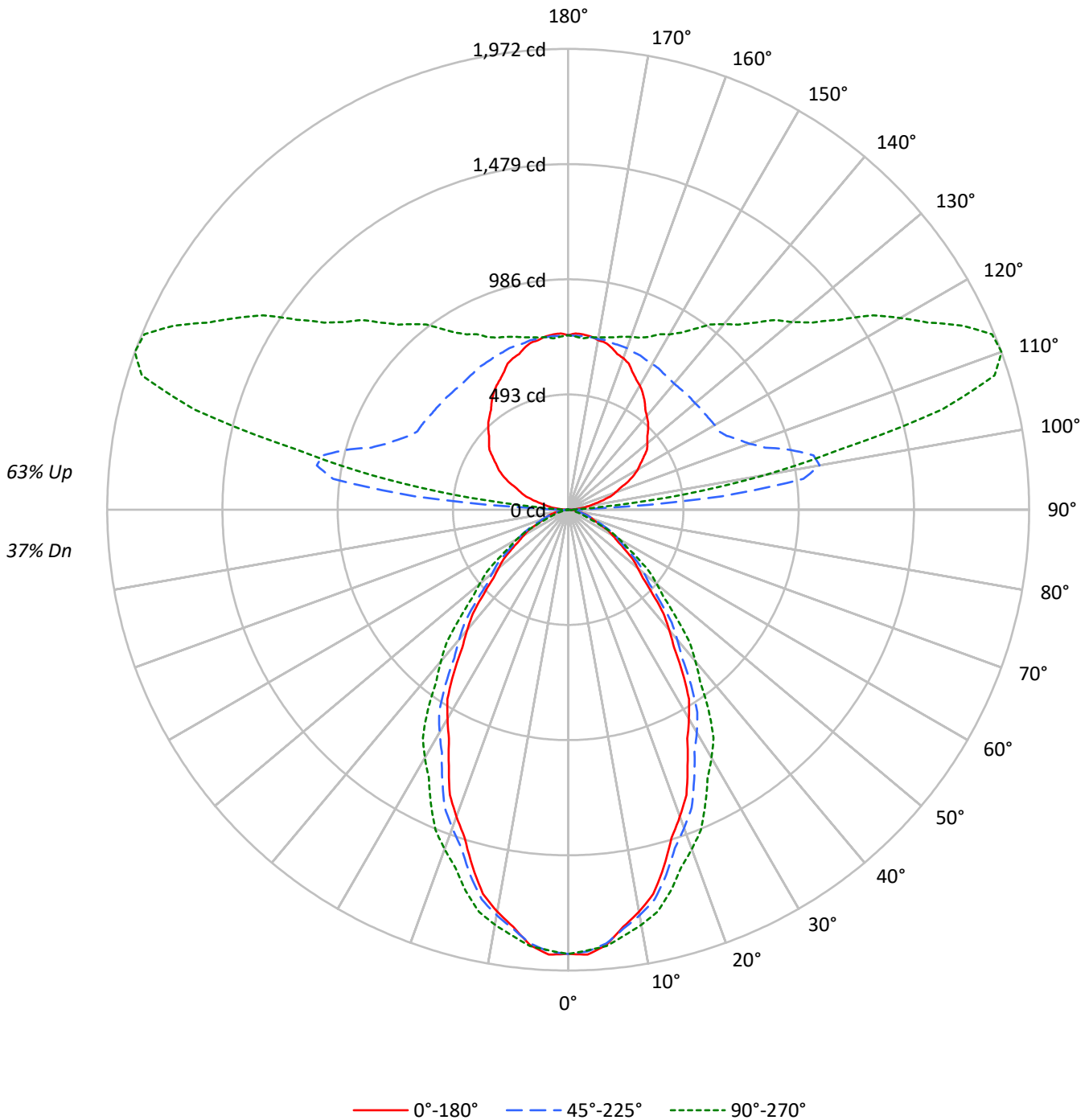
Input Watts (W): 64.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521931

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K

### Luminous Intensity Polar Plot



TEST NUMBER: P521931

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	104	104	104	104	94	94	94	94	76	76	76		60	60	60		45	45	45	37
1	96	92	88	85	87	84	81	78	68	66	64		54	53	51		41	40	39	33
2	88	81	76	71	80	74	69	65	61	57	55		48	46	44		37	36	34	29
3	81	72	66	60	73	66	60	56	54	50	47		44	41	39		33	32	30	26
4	74	64	57	52	67	59	53	48	49	44	41		39	36	34		31	29	27	23
5	69	58	50	45	62	53	47	42	44	39	36		36	32	30		28	26	24	21
6	63	52	45	39	58	48	42	37	40	35	32		33	29	27		26	23	22	19
7	59	47	40	35	53	44	37	33	37	32	28		30	27	24		24	21	20	17
8	55	43	36	31	50	40	34	29	34	29	25		28	24	22		22	20	18	16
9	51	40	33	28	47	37	30	26	31	26	23		26	22	20		21	18	16	14
10	48	36	30	25	44	34	28	24	29	24	21		24	20	18		19	17	15	13

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17538	17538	17538
5°	17319	17257	17358
10°	16363	16511	16894
15°	15105	15456	16149
20°	13717	14233	15174
25°	12304	12974	14137
30°	11001	11720	13062
35°	9620	10315	11790
40°	8097	8739	10206
45°	6682	7259	8522
50°	5579	6082	7099
55°	4736	5220	5863
60°	4048	4525	4680
65°	3222	3805	3024
70°	2857	2970	1845
75°	2645	2410	1130
80°	2439	2216	972
85°	2212	2032	794

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8522 cd/sqm

TEST NUMBER: P521931

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.4	2.4
10°-20°	453.5	6.1
20°-30°	587.4	7.9
30°-40°	575.2	7.8
40°-50°	440.3	5.9
50°-60°	293.4	4.0
60°-70°	160.1	2.2
70°-80°	66.7	0.9
80°-90°	18.9	0.3
90°-100°	340.3	4.6
100°-110°	968.4	13.1
110°-120°	927.8	12.5
120°-130°	734.4	9.9
130°-140°	589.4	8.0
140°-150°	461.5	6.2
150°-160°	337.6	4.6
160°-170°	209.1	2.8
170°-180°	71.0	1.0
0°-30°	1215.3	16.4
0°-40°	1790.5	24.2
0°-60°	2524.2	34.1
0°-90°	2769.9	37.4
90°-120°	2236.6	30.2
90°-150°	4021.8	54.3
90°-180°	4640.0	62.6
0°-180°	7409.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1901	1901	1901	1901	1901	
5°	1870	1851	1863	1868	1874	174
15°	1581	1576	1618	1662	1691	442
25°	1209	1212	1274	1330	1389	556
35°	854	858	916	977	1047	531
45°	512	522	556	598	653	399
55°	294	307	324	337	364	267
65°	148	160	174	152	138	153
75°	74	74	68	46	32	79
85°	21	21	19	12	8	23
90°	0	0	0	0	0	3
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

TEST NUMBER: P521931

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1900.9	1900.9	1900.9	1900.9	1900.9
2.5°	1905.5	1888.6	1892.8	1892.7	1887.5
5°	1870.0	1851.2	1863.3	1867.6	1874.2
7.5°	1800.6	1786.4	1808.4	1824.8	1838.0
10°	1746.6	1734.3	1762.4	1786.1	1803.3
12.5°	1683.8	1673.6	1708.4	1740.2	1762.6
15°	1581.4	1575.7	1618.1	1662.1	1690.7
17.5°	1471.8	1469.0	1517.7	1569.1	1605.6
20°	1397.1	1396.3	1449.6	1503.1	1545.5
22.5°	1321.7	1323.5	1379.6	1435.2	1483.5
25°	1208.6	1211.8	1274.5	1330.0	1388.7
27.5°	1104.0	1105.4	1170.2	1228.8	1291.5
30°	1032.6	1036.7	1100.1	1160.8	1226.1
32.5°	961.2	965.9	1028.1	1090.8	1157.4
35°	854.1	858.2	915.8	977.4	1046.8
37.5°	743.7	749.2	800.4	858.6	926.8
40°	672.3	680.4	725.6	780.5	847.4
42.5°	603.5	613.6	655.6	707.7	768.0
45°	512.1	521.9	556.3	598.4	653.1
47.5°	433.4	444.6	471.1	507.3	554.0
50°	388.7	399.3	423.7	450.6	494.6
52.5°	349.3	359.9	381.7	402.4	439.9
55°	294.4	306.7	324.5	336.8	364.5
57.5°	249.4	261.1	275.2	280.8	297.6
60°	219.4	232.4	245.2	244.6	253.6
62.5°	192.0	203.1	215.9	207.0	207.5
65°	147.6	159.9	174.3	152.3	138.5
67.5°	119.3	121.9	136.8	106.2	89.7
70°	105.9	105.9	110.1	82.3	68.4
72.5°	93.2	93.2	89.4	66.9	52.4
75°	74.2	74.2	67.6	46.4	31.7
77.5°	57.2	56.6	51.7	34.6	23.0
80°	45.9	45.9	41.7	27.3	18.3
82.5°	35.9	35.9	32.4	21.3	13.7
85°	20.9	20.9	19.2	12.4	7.5
87.5°	7.3	7.3	6.7	4.0	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

TEST NUMBER: P521931

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)