

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: P521317

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521317  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5-5-2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9334.1 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

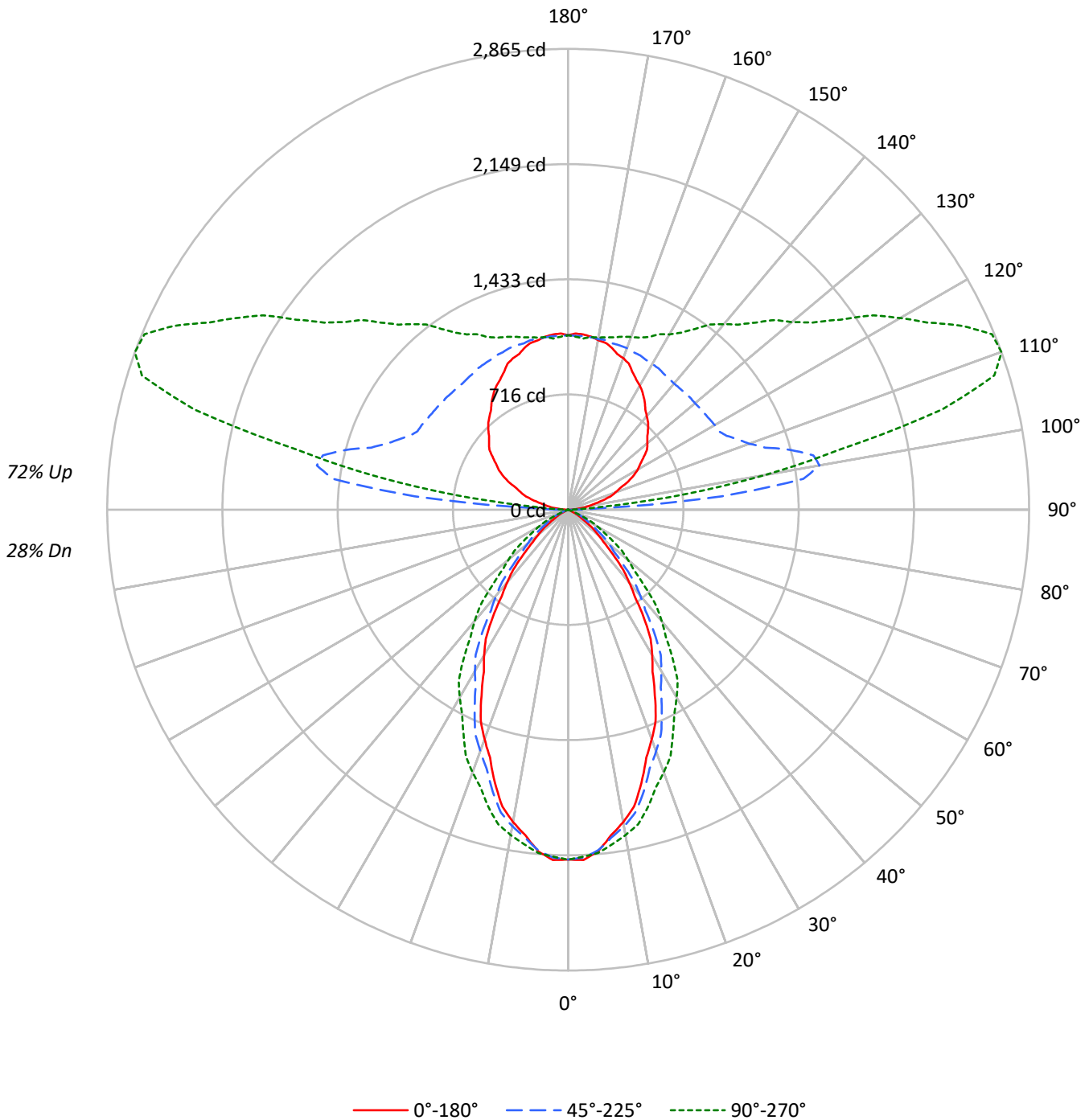
Input Watts (W): 93.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521317

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521317

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K

**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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	94	90	87	84	84	81	78	75	64	62	60	48	47	46	33	33	32	25				
2	86	80	74	70	77	72	67	64	57	54	51	43	41	40	30	29	29	23				
3	79	71	65	59	71	64	59	54	51	47	44	39	37	35	28	27	26	21				
4	73	63	56	51	65	57	51	47	46	42	39	35	33	31	26	24	23	19				
5	67	57	50	44	60	52	45	41	42	37	34	32	29	27	24	22	21	17				
6	62	51	44	39	56	47	40	36	38	33	30	30	27	24	22	20	19	16				
7	58	47	39	34	52	42	36	32	35	30	27	27	24	22	20	18	17	14				
8	54	42	35	31	48	39	33	28	32	27	24	25	22	20	19	17	16	13				
9	50	39	32	27	45	36	30	26	29	25	22	23	20	18	18	16	14	12				
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	16	15	13	11				

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

	0°	45°	90°
0°	20067	20067	20067
5°	19744	19695	19842
10°	18474	18720	19243
15°	16795	17328	18292
20°	14908	15683	17057
25°	12983	14011	15671
30°	11120	12342	14360
35°	9220	10477	12776
40°	7084	8377	10887
45°	5121	6343	8759
50°	3489	4728	6947
55°	2268	3420	5400
60°	1301	2408	3903
65°	345	1469	1976
70°	170	453	566
75°	75	39	0
80°	58	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8759 cd/sqm

TEST NUMBER: P521317

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	198.5	2.1
10°-20°	507.6	5.4
20°-30°	635.5	6.8
30°-40°	587.0	6.3
40°-50°	394.4	4.2
50°-60°	203.7	2.2
60°-70°	63.8	0.7
70°-80°	4.0	0.0
80°-90°	0.1	0.0
90°-100°	494.4	5.3
100°-110°	1406.7	15.1
110°-120°	1347.8	14.4
120°-130°	1066.7	11.4
130°-140°	856.2	9.2
140°-150°	670.3	7.2
150°-160°	490.5	5.3
160°-170°	303.8	3.3
170°-180°	103.1	1.1
0°-30°	1341.6	14.4
0°-40°	1928.5	20.7
0°-60°	2526.7	27.1
0°-90°	2594.6	27.8
90°-120°	3249.0	34.8
90°-150°	5842.2	62.6
90°-180°	6740.0	72.2
0°-180°	9334.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2132	2110	2127	2134	2142	198
15°	1758	1752	1814	1875	1915	490
25°	1275	1286	1376	1470	1539	585
35°	819	839	930	1040	1134	507
45°	392	416	486	581	671	308
55°	141	165	213	273	336	132
65°	16	30	67	81	90	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

TEST NUMBER: P521317

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2175.0	2175.0	2175.0	2175.0	2175.0
2.5°	2180.0	2159.5	2164.9	2164.8	2159.0
5°	2131.9	2110.2	2126.6	2134.1	2142.4
7.5°	2041.8	2024.9	2056.3	2079.8	2096.9
10°	1971.9	1957.5	1998.2	2030.3	2054.0
12.5°	1891.1	1880.0	1929.2	1973.2	2003.5
15°	1758.3	1752.1	1814.1	1875.0	1915.1
17.5°	1616.0	1615.8	1686.5	1762.1	1810.5
20°	1518.4	1521.5	1597.3	1680.7	1737.3
22.5°	1420.7	1427.9	1508.9	1595.8	1660.7
25°	1275.3	1285.6	1376.3	1470.5	1539.4
27.5°	1135.6	1150.6	1246.1	1343.9	1427.9
30°	1043.8	1061.3	1158.5	1261.5	1347.9
32.5°	953.8	974.5	1069.3	1178.2	1266.3
35°	818.6	839.2	930.2	1039.7	1134.3
37.5°	679.1	699.3	788.1	895.9	998.2
40°	588.2	610.8	695.5	800.0	903.9
42.5°	505.7	528.3	608.0	710.6	808.8
45°	392.5	416.2	486.1	580.8	671.3
47.5°	298.6	324.3	385.8	471.4	553.9
50°	243.1	268.8	329.4	404.8	484.0
52.5°	198.5	223.4	278.0	349.1	421.7
55°	141.0	164.7	212.6	272.9	335.7
57.5°	97.4	117.8	160.8	211.1	260.3
60°	70.5	90.0	130.5	171.4	211.5
62.5°	46.9	64.8	104.4	135.7	162.7
65°	15.8	30.2	67.3	81.2	90.5
67.5°	8.0	9.6	35.4	37.3	40.4
70°	6.3	6.3	16.8	18.0	21.0
72.5°	4.6	4.6	6.7	8.6	9.3
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.8	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

TEST NUMBER: P521317

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)