

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: P521318

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521318  
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\_4500K  
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 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9484.7 lumens  
Efficiency: N/A  
Efficacy: 101.5 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

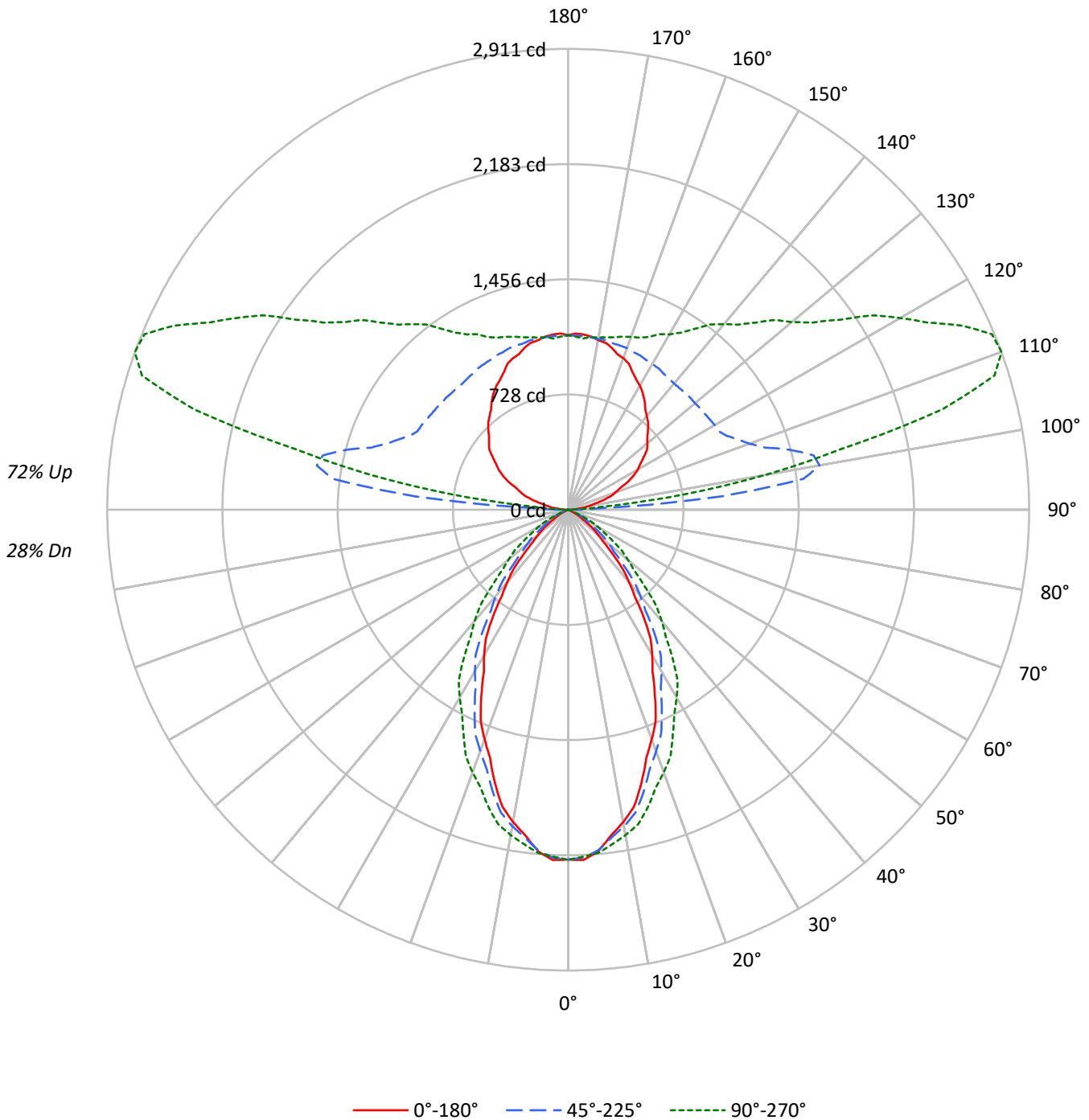
Input Watts (W): 93.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**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°	20391	20391	20391
5°	20062	20013	20161
10°	18772	19023	19553
15°	17066	17607	18588
20°	15149	15936	17332
25°	13192	14237	15925
30°	11300	12541	14592
35°	9370	10646	12982
40°	7199	8513	11062
45°	5203	6446	8901
50°	3545	4804	7059
55°	2305	3474	5487
60°	1321	2447	3965
65°	349	1493	2008
70°	173	461	577
75°	75	39	0
80°	58	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8901 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	201.7	2.1
10°-20°	515.8	5.4
20°-30°	645.7	6.8
30°-40°	596.4	6.3
40°-50°	400.8	4.2
50°-60°	207.0	2.2
60°-70°	64.8	0.7
70°-80°	4.1	0.0
80°-90°	0.1	0.0
90°-100°	502.4	5.3
100°-110°	1429.4	15.1
110°-120°	1369.6	14.4
120°-130°	1083.9	11.4
130°-140°	870.0	9.2
140°-150°	681.1	7.2
150°-160°	498.4	5.3
160°-170°	308.7	3.3
170°-180°	104.8	1.1
0°-30°	1363.2	14.4
0°-40°	1959.7	20.7
0°-60°	2567.4	27.1
0°-90°	2636.4	27.8
90°-120°	3301.4	34.8
90°-150°	5936.5	62.6
90°-180°	6848.0	72.2
0°-180°	9484.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2166	2144	2161	2169	2177	201
15°	1787	1780	1843	1905	1946	498
25°	1296	1306	1398	1494	1564	594
35°	832	853	945	1056	1153	515
45°	399	423	494	590	682	313
55°	143	167	216	277	341	134
65°	16	31	68	82	92	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2210.1	2210.1	2210.1	2210.1	2210.1
2.5°	2215.2	2194.3	2199.8	2199.7	2193.8
5°	2166.2	2144.3	2160.9	2168.6	2176.9
7.5°	2074.7	2057.6	2089.5	2113.4	2130.7
10°	2003.7	1989.1	2030.5	2063.1	2087.1
12.5°	1921.6	1910.3	1960.3	2005.1	2035.8
15°	1786.7	1780.4	1843.3	1905.2	1946.0
17.5°	1642.1	1641.9	1713.7	1790.6	1839.7
20°	1542.9	1546.0	1623.1	1707.8	1765.3
22.5°	1443.7	1451.0	1533.3	1621.6	1687.4
25°	1295.9	1306.4	1398.5	1494.2	1564.3
27.5°	1153.9	1169.2	1266.2	1365.6	1450.9
30°	1060.7	1078.4	1177.2	1281.9	1369.7
32.5°	969.1	990.3	1086.5	1197.2	1286.7
35°	831.9	852.8	945.2	1056.4	1152.6
37.5°	690.1	710.6	800.8	910.3	1014.3
40°	597.7	620.7	706.8	812.9	918.5
42.5°	513.9	536.9	617.8	722.1	821.8
45°	398.8	422.9	494.0	590.2	682.2
47.5°	303.4	329.6	392.0	479.0	562.8
50°	247.0	273.1	334.7	411.3	491.8
52.5°	201.7	227.0	282.5	354.7	428.5
55°	143.3	167.3	216.0	277.3	341.1
57.5°	99.0	119.7	163.4	214.6	264.5
60°	71.6	91.5	132.6	174.1	214.9
62.5°	47.7	65.9	106.1	137.9	165.3
65°	16.0	30.7	68.4	82.5	92.0
67.5°	8.1	9.8	35.9	37.9	41.1
70°	6.4	6.4	17.1	18.2	21.4
72.5°	4.7	4.7	6.8	8.8	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	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°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)