

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: P521320

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521320
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9726.3 lumens
Efficiency: N/A
Efficacy: 104.2 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

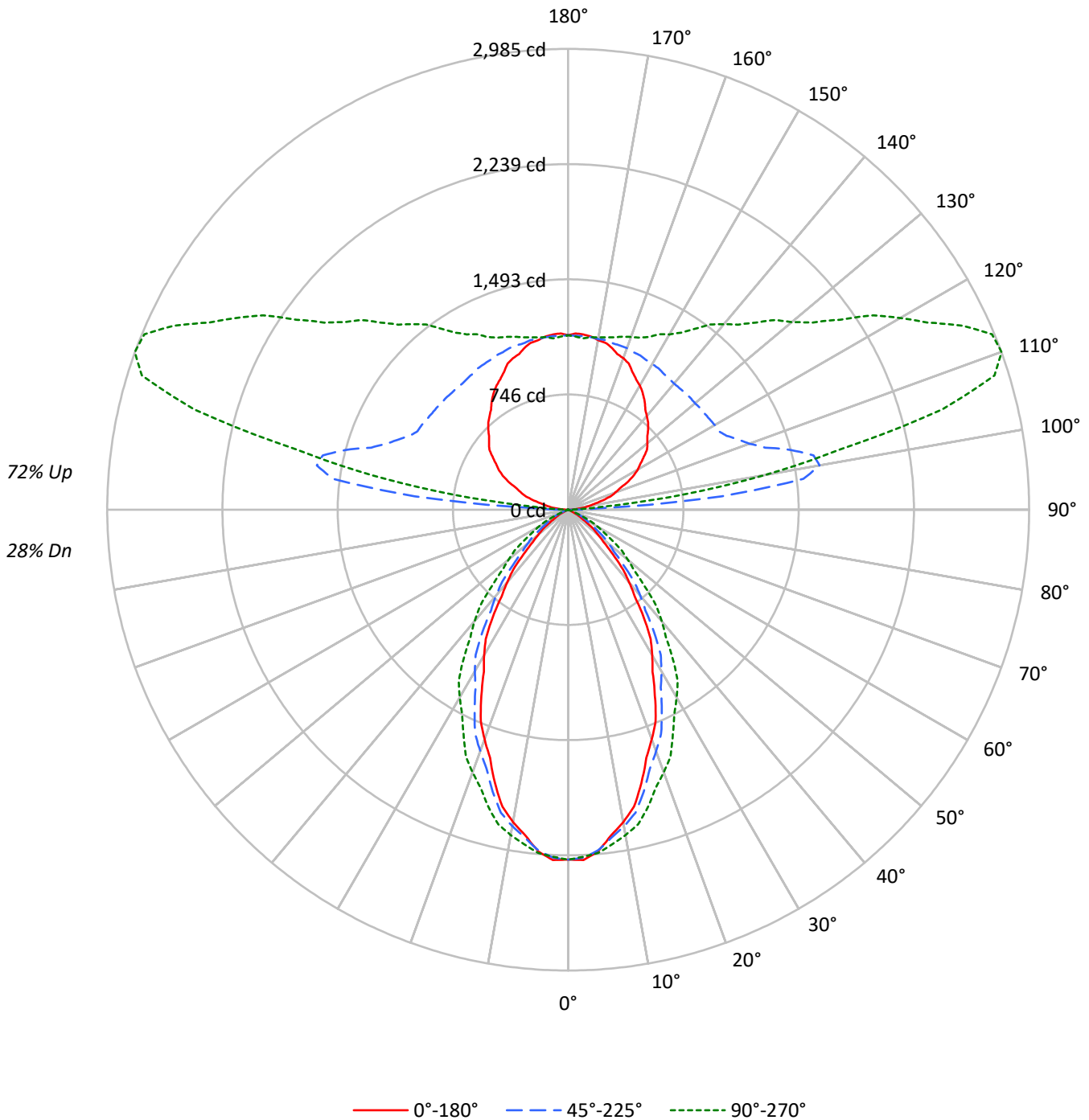
Input Watts (W): 93.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521320

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5700K

Luminous Intensity Polar Plot



TEST NUMBER: P521320

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	20910	20910	20910
5°	20573	20522	20675
10°	19250	19507	20051
15°	17501	18056	19060
20°	15535	16342	17773
25°	13528	14600	16330
30°	11588	12861	14964
35°	9607	10917	13313
40°	7382	8729	11344
45°	5337	6610	9127
50°	3636	4926	7240
55°	2363	3563	5627
60°	1356	2510	4067
65°	358	1533	2059
70°	178	472	591
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9127 cd/sqm

TEST NUMBER: P521320

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.8	2.1
10°-20°	528.9	5.4
20°-30°	662.2	6.8
30°-40°	611.6	6.3
40°-50°	411.0	4.2
50°-60°	212.3	2.2
60°-70°	66.5	0.7
70°-80°	4.2	0.0
80°-90°	0.1	0.0
90°-100°	515.2	5.3
100°-110°	1465.8	15.1
110°-120°	1404.4	14.4
120°-130°	1111.5	11.4
130°-140°	892.2	9.2
140°-150°	698.5	7.2
150°-160°	511.1	5.3
160°-170°	316.6	3.3
170°-180°	107.4	1.1
0°-30°	1397.9	14.4
0°-40°	2009.6	20.7
0°-60°	2632.8	27.1
0°-90°	2703.6	27.8
90°-120°	3385.4	34.8
90°-150°	6087.6	62.6
90°-180°	7023.0	72.2
0°-180°	9726.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2266	2266	2266	2266	2266	
5°	2221	2199	2216	2224	2232	206
15°	1832	1826	1890	1954	1996	510
25°	1329	1340	1434	1532	1604	609
35°	853	874	969	1083	1182	528
45°	409	434	507	605	700	321
55°	147	172	222	284	350	137
65°	16	32	70	85	94	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	56	222	997	345	213	64
105°	228	346	1494	2639	2508	241
115°	423	512	1133	2400	2818	417
125°	598	663	1081	1794	2145	535
135°	731	792	1068	1516	1713	564
145°	862	906	1077	1312	1429	538
155°	984	1008	1103	1185	1234	455
165°	1088	1092	1116	1140	1156	306
175°	1139	1133	1128	1122	1113	108
180°	1131	1131	1131	1131	1131	

TEST NUMBER: P521320

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2266.4	2266.4	2266.4	2266.4	2266.4
2.5°	2271.6	2250.2	2255.8	2255.7	2249.7
5°	2221.4	2198.9	2215.9	2223.8	2232.4
7.5°	2127.6	2110.0	2142.7	2167.2	2185.0
10°	2054.7	2039.7	2082.2	2115.6	2140.3
12.5°	1970.5	1959.0	2010.2	2056.1	2087.6
15°	1832.2	1825.7	1890.3	1953.7	1995.5
17.5°	1683.9	1683.7	1757.4	1836.2	1886.6
20°	1582.2	1585.4	1664.4	1751.3	1810.2
22.5°	1480.4	1487.9	1572.3	1662.9	1730.4
25°	1328.9	1339.6	1434.2	1532.3	1604.1
27.5°	1183.3	1198.9	1298.4	1400.4	1487.9
30°	1087.7	1105.9	1207.2	1314.5	1404.6
32.5°	993.8	1015.5	1114.2	1227.7	1319.5
35°	853.0	874.5	969.3	1083.3	1182.0
37.5°	707.6	728.7	821.2	933.5	1040.1
40°	612.9	636.5	724.8	833.6	941.9
42.5°	527.0	550.5	633.5	740.5	842.7
45°	409.0	433.6	506.6	605.2	699.5
47.5°	311.2	338.0	402.0	491.2	577.2
50°	253.3	280.1	343.2	421.8	504.4
52.5°	206.8	232.7	289.7	363.8	439.5
55°	146.9	171.6	221.5	284.4	349.8
57.5°	101.5	122.8	167.5	220.0	271.3
60°	73.5	93.8	136.0	178.6	220.4
62.5°	48.9	67.6	108.8	141.4	169.5
65°	16.4	31.5	70.2	84.6	94.3
67.5°	8.3	10.0	36.8	38.9	42.1
70°	6.6	6.6	17.5	18.7	21.9
72.5°	4.8	4.8	7.0	9.0	9.6
75°	2.2	2.2	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°	17.2	91.2	211.5	61.6	46.4
95°	55.9	221.9	997.3	345.2	212.8
97.5°	102.7	259.9	1535.9	1099.1	753.1
100°	135.4	282.5	1652.8	1674.2	1289.6
102.5°	171.5	306.9	1627.1	2143.0	1807.2
105°	227.8	345.5	1493.8	2638.6	2508.3
107.5°	285.0	390.5	1338.2	2778.3	2894.3
110°	324.6	423.3	1248.8	2724.8	2985.4

TEST NUMBER: P521320

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	362.4	456.1	1188.6	2598.4	2970.0
115°	423.4	511.7	1132.7	2399.6	2817.8
117.5°	477.2	560.0	1099.6	2182.2	2625.2
120°	520.1	589.5	1096.2	2058.0	2482.5
122.5°	554.5	623.9	1087.6	1949.0	2343.2
125°	597.5	662.7	1081.1	1794.1	2145.0
127.5°	644.4	705.3	1077.7	1701.5	1990.7
130°	668.4	729.4	1072.5	1637.1	1889.3
132.5°	694.2	753.5	1072.5	1586.8	1818.8
135°	730.8	791.7	1068.2	1515.5	1713.0
137.5°	765.2	824.4	1067.8	1455.1	1625.8
140°	791.0	851.9	1066.1	1405.1	1569.0
142.5°	820.2	871.0	1071.2	1365.2	1512.3
145°	861.9	906.0	1076.8	1311.6	1429.3
147.5°	897.6	940.4	1086.3	1257.5	1359.2
150°	928.5	957.9	1089.7	1239.6	1311.1
152.5°	952.6	983.7	1093.2	1215.5	1281.9
155°	984.4	1007.5	1102.6	1185.4	1233.7
157.5°	1023.9	1037.8	1104.8	1171.7	1206.2
160°	1044.6	1055.1	1113.4	1161.3	1190.7
162.5°	1056.6	1068.8	1115.1	1152.6	1175.3
165°	1087.6	1091.8	1115.5	1139.5	1156.3
167.5°	1108.6	1104.8	1125.4	1136.3	1143.0
170°	1115.5	1113.4	1122.0	1124.3	1132.7
172.5°	1131.0	1123.8	1127.1	1120.8	1127.5
175°	1139.2	1132.8	1128.4	1121.8	1113.4
177.5°	1142.6	1132.5	1127.1	1120.3	1122.0
180°	1130.6	1130.6	1130.6	1130.6	1130.6

(END OF REPORT)