

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: P521290

Luminaire Tested: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521290
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-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7912.7 lumens
Efficiency: N/A
Efficacy: 110.1 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

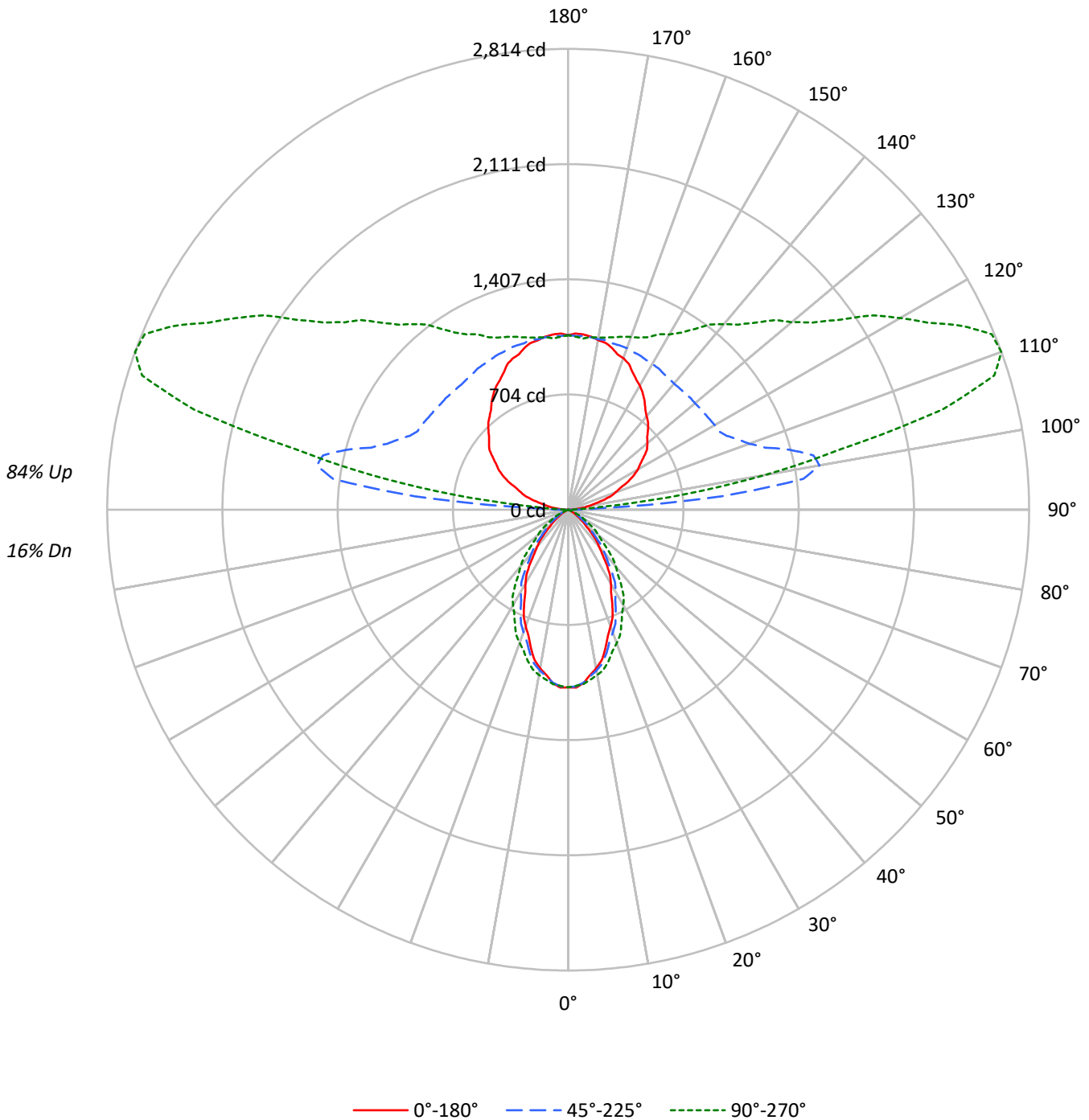
Input Watts (W): 71.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521290

CATALOG NUMBER: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P521290

CATALOG NUMBER: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	25	25	25	16																			
1	91	87	83	80	80	77	74	71	57	56	54	40	39	38	23	23	22	15																			
2	83	77	71	67	73	68	63	59	51	48	46	35	34	32	21	20	20	13																			
3	76	68	61	56	67	60	55	50	45	42	39	32	30	28	19	18	17	12																			
4	70	60	53	48	61	53	48	43	41	37	34	29	26	24	18	16	16	11																			
5	64	54	46	41	56	48	42	37	36	32	29	26	23	21	16	15	14	10																			
6	59	48	41	36	52	43	37	32	33	29	26	24	21	19	15	14	13	9																			
7	55	44	36	31	48	39	33	28	30	26	23	22	19	17	14	12	11	8																			
8	51	40	32	28	45	35	29	25	27	23	20	20	17	15	13	11	10	8																			
9	47	36	29	25	42	32	26	22	25	21	18	18	16	14	12	10	9	7																			
10	44	33	26	22	39	30	24	20	23	19	16	17	14	12	11	10	9	7																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10010	10010	10010
5°	9849	9825	9897
10°	9215	9338	9599
15°	8378	8643	9125
20°	7436	7823	8509
25°	6475	6989	7817
30°	5547	6157	7163
35°	4600	5226	6373
40°	3534	4178	5431
45°	2555	3164	4370
50°	1740	2358	3465
55°	1131	1705	2693
60°	650	1201	1947
65°	172	734	985
70°	84	227	283
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4370 cd/sqm

TEST NUMBER: P521290

CATALOG NUMBER: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	1.3
10°-20°	253.2	3.2
20°-30°	317.0	4.0
30°-40°	292.8	3.7
40°-50°	196.7	2.5
50°-60°	101.6	1.3
60°-70°	31.8	0.4
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	485.5	6.1
100°-110°	1381.5	17.5
110°-120°	1323.6	16.7
120°-130°	1047.6	13.2
130°-140°	840.8	10.6
140°-150°	658.3	8.3
150°-160°	481.7	6.1
160°-170°	298.3	3.8
170°-180°	101.2	1.3
0°-30°	669.2	8.5
0°-40°	962.0	12.2
0°-60°	1260.3	15.9
0°-90°	1294.2	16.4
90°-120°	3190.6	40.3
90°-150°	5737.2	72.5
90°-180°	6618.0	83.6
0°-180°	7912.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1063	1053	1061	1064	1069	99
15°	877	874	905	935	955	244
25°	636	641	686	734	768	292
35°	408	419	464	519	566	253
45°	196	208	242	290	335	154
55°	70	82	106	136	167	66
65°	8	15	34	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

TEST NUMBER: P521290

CATALOG NUMBER: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.9	1084.9	1084.9	1084.9	1084.9
2.5°	1087.4	1077.2	1079.9	1079.8	1076.9
5°	1063.4	1052.6	1060.8	1064.5	1068.6
7.5°	1018.5	1010.1	1025.7	1037.5	1046.0
10°	983.6	976.4	996.7	1012.8	1024.6
12.5°	943.3	937.8	962.3	984.3	999.4
15°	877.1	874.0	904.9	935.3	955.3
17.5°	806.1	806.0	841.3	879.0	903.1
20°	757.4	758.9	796.8	838.3	866.6
22.5°	708.7	712.3	752.7	796.0	828.4
25°	636.1	641.3	686.5	733.5	767.9
27.5°	566.4	573.9	621.6	670.4	712.3
30°	520.7	529.4	577.9	629.3	672.4
32.5°	475.7	486.1	533.4	587.7	631.6
35°	408.4	418.6	464.0	518.6	565.8
37.5°	338.8	348.8	393.1	446.9	497.9
40°	293.4	304.7	346.9	399.0	450.9
42.5°	252.3	263.5	303.3	354.5	403.4
45°	195.8	207.6	242.5	289.7	334.9
47.5°	149.0	161.8	192.4	235.1	276.3
50°	121.2	134.1	164.3	201.9	241.4
52.5°	99.0	111.4	138.7	174.1	210.4
55°	70.3	82.1	106.0	136.1	167.4
57.5°	48.6	58.8	80.2	105.3	129.9
60°	35.2	44.9	65.1	85.5	105.5
62.5°	23.4	32.3	52.1	67.7	81.1
65°	7.9	15.1	33.6	40.5	45.1
67.5°	4.0	4.8	17.6	18.6	20.2
70°	3.1	3.1	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

TEST NUMBER: P521290

CATALOG NUMBER: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)