

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: P521295

Luminaire Tested: SQ4-BB-150U-050D-92765-1D-UNV-STD-W-4\_6500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521295  
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\_6500K  
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 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8475.5 lumens  
Efficiency: N/A  
Efficacy: 118.9 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

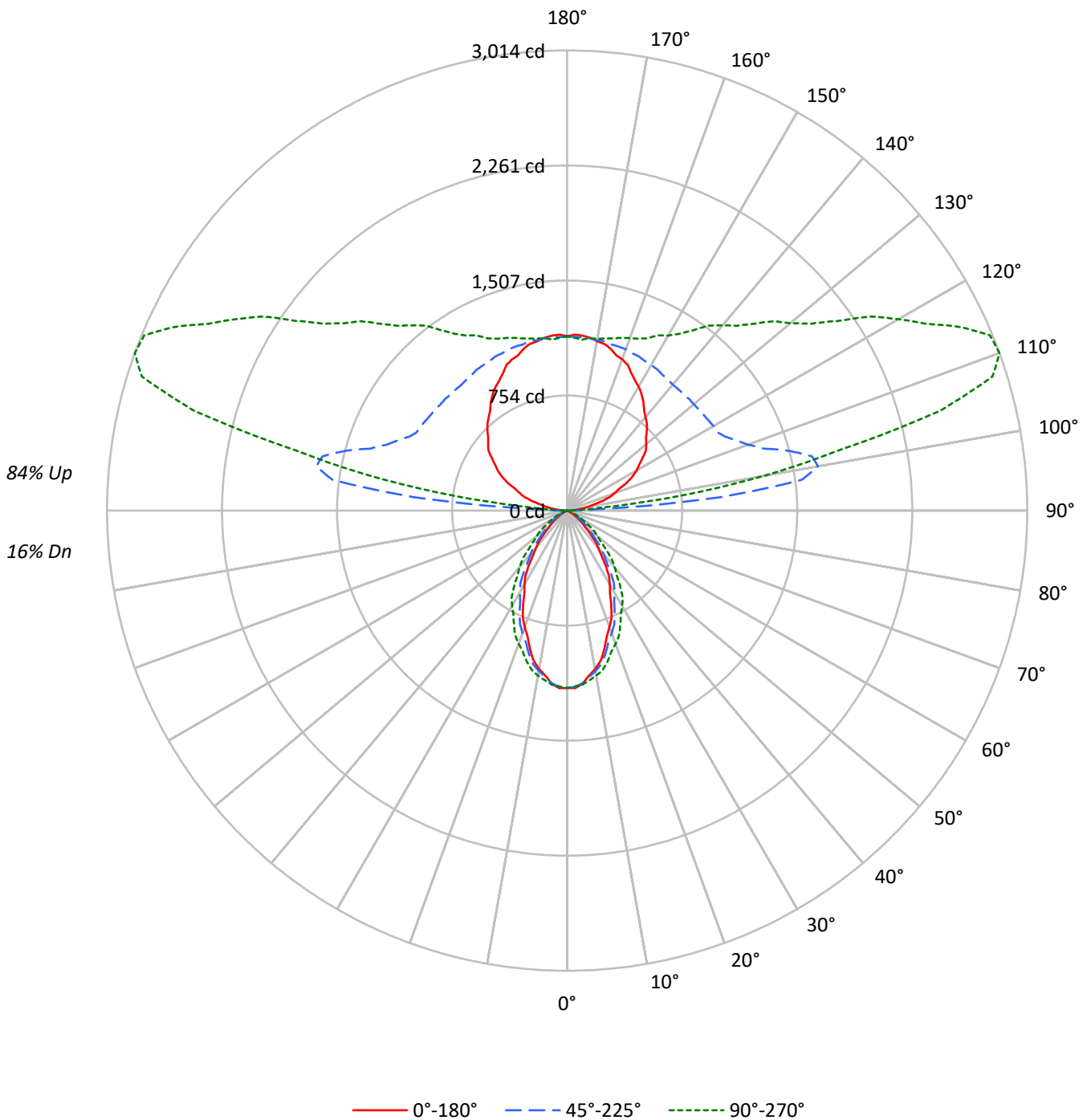
Input Watts (W): 71.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**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	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°	10722	10722	10722
5°	10549	10523	10602
10°	9871	10002	10281
15°	8974	9258	9773
20°	7966	8379	9113
25°	6937	7486	8373
30°	5941	6595	7673
35°	4926	5598	6827
40°	3785	4476	5816
45°	2736	3389	4680
50°	1865	2526	3712
55°	1211	1827	2884
60°	696	1286	2085
65°	183	786	1057
70°	92	243	302
75°	39	21	0
80°	32	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4680 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.1	1.3
10°-20°	271.2	3.2
20°-30°	339.5	4.0
30°-40°	313.6	3.7
40°-50°	210.7	2.5
50°-60°	108.8	1.3
60°-70°	34.1	0.4
70°-80°	2.2	0.0
80°-90°	0.0	0.0
90°-100°	520.1	6.1
100°-110°	1479.7	17.5
110°-120°	1417.7	16.7
120°-130°	1122.1	13.2
130°-140°	900.6	10.6
140°-150°	705.1	8.3
150°-160°	515.9	6.1
160°-170°	319.6	3.8
170°-180°	108.4	1.3
0°-30°	716.8	8.5
0°-40°	1030.4	12.2
0°-60°	1350.0	15.9
0°-90°	1386.3	16.4
90°-120°	3417.5	40.3
90°-150°	6145.3	72.5
90°-180°	7089.0	83.6
0°-180°	8475.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1139	1128	1136	1140	1145	106
15°	940	936	969	1002	1023	262
25°	681	687	735	786	822	312
35°	437	448	497	556	606	271
45°	210	222	260	310	359	165
55°	75	88	114	146	179	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1162.1	1162.1	1162.1	1162.1	1162.1
2.5°	1164.8	1153.8	1156.7	1156.6	1153.5
5°	1139.0	1127.5	1136.2	1140.3	1144.7
7.5°	1090.9	1081.9	1098.7	1111.2	1120.4
10°	1053.6	1045.9	1067.6	1084.8	1097.4
12.5°	1010.4	1004.5	1030.8	1054.3	1070.4
15°	939.5	936.2	969.3	1001.8	1023.2
17.5°	863.4	863.3	901.1	941.5	967.3
20°	811.3	812.9	853.4	898.0	928.2
22.5°	759.1	762.9	806.2	852.6	887.3
25°	681.4	686.9	735.4	785.7	822.5
27.5°	606.7	614.8	665.8	718.1	762.9
30°	557.7	567.1	619.0	674.0	720.2
32.5°	509.6	520.7	571.3	629.5	676.6
35°	437.4	448.4	497.0	555.5	606.1
37.5°	362.9	373.6	421.1	478.7	533.3
40°	314.3	326.4	371.6	427.4	482.9
42.5°	270.2	282.3	324.8	379.7	432.1
45°	209.7	222.3	259.7	310.3	358.7
47.5°	159.6	173.3	206.1	251.9	295.9
50°	129.9	143.6	176.0	216.3	258.6
52.5°	106.0	119.3	148.5	186.5	225.3
55°	75.3	88.0	113.6	145.8	179.3
57.5°	52.1	62.9	85.9	112.8	139.1
60°	37.7	48.1	69.7	91.6	113.0
62.5°	25.1	34.6	55.8	72.5	86.9
65°	8.4	16.1	36.0	43.4	48.4
67.5°	4.3	5.2	18.9	19.9	21.6
70°	3.4	3.4	9.0	9.6	11.2
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	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°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)