

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: P521304

Luminaire Tested: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521304  
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-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 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: 8713.3 lumens  
Efficiency: N/A  
Efficacy: 104.9 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

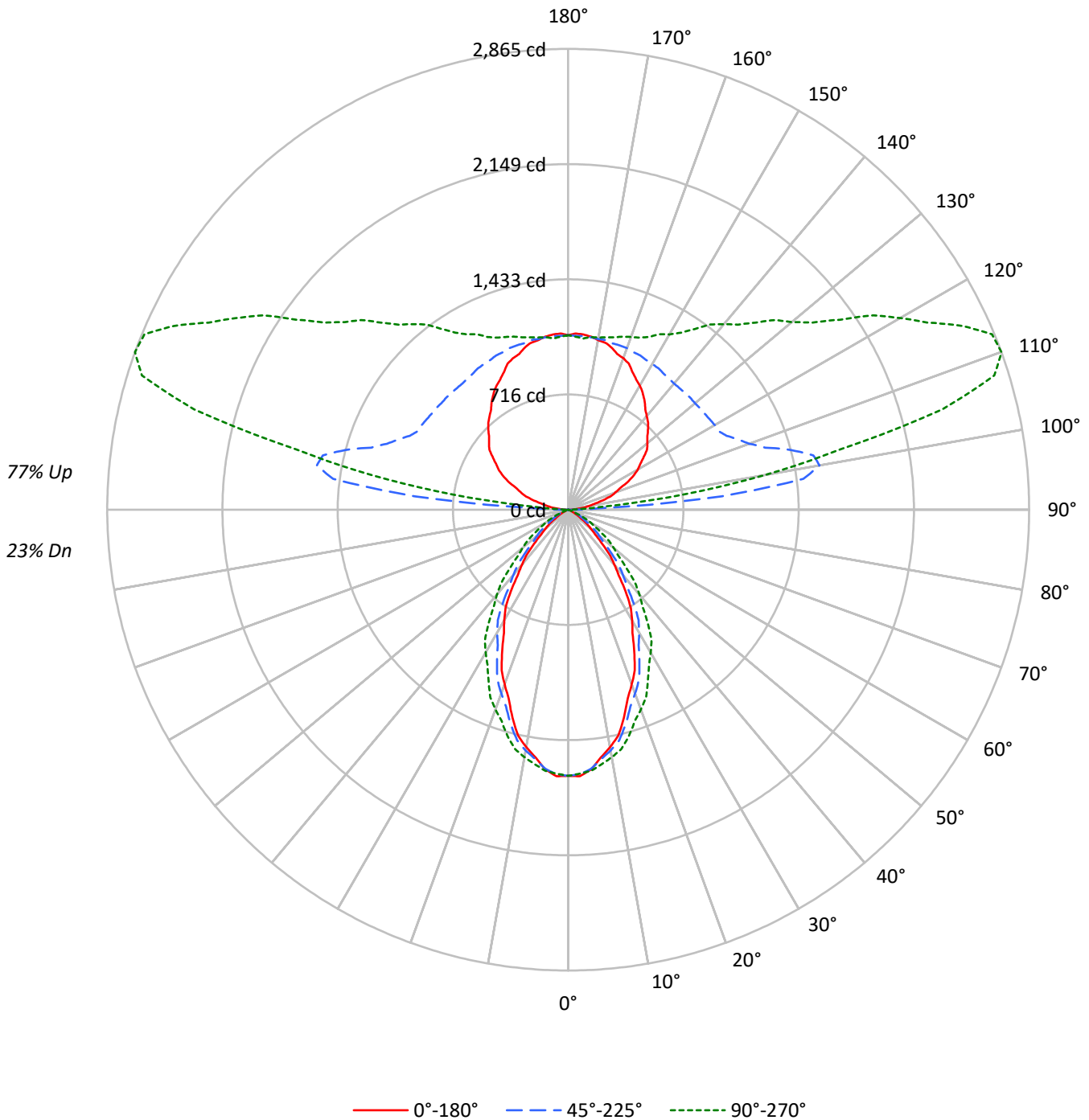
Input Watts (W): 83.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23																				
1	92	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21																				
2	85	78	73	68	75	70	65	62	54	51	49	40	38	36	26	25	25	19																				
3	78	70	63	58	69	62	57	52	48	45	42	36	34	32	24	23	22	17																				
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15																				
5	66	56	48	43	59	50	44	39	39	35	32	29	27	25	20	19	18	14																				
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13																				
7	56	45	38	33	50	41	35	30	32	28	25	25	22	20	17	16	14	12																				
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	14	13	11																				
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10																				
10	46	35	28	24	41	31	26	22	25	21	18	19	17	15	14	12	11	9																				

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

	0°	45°	90°
0°	15265	15265	15265
5°	15019	14982	15093
10°	14053	14241	14638
15°	12776	13181	13915
20°	11340	11930	12975
25°	9876	10658	11922
30°	8459	9389	10924
35°	7014	7970	9719
40°	5390	6372	8281
45°	3896	4825	6664
50°	2654	3596	5285
55°	1726	2601	4107
60°	989	1832	2969
65°	262	1118	1502
70°	129	345	432
75°	57	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6664 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.0	1.7
10°-20°	386.1	4.4
20°-30°	483.4	5.5
30°-40°	446.5	5.1
40°-50°	300.0	3.4
50°-60°	155.0	1.8
60°-70°	48.5	0.6
70°-80°	3.1	0.0
80°-90°	0.1	0.0
90°-100°	494.4	5.7
100°-110°	1406.7	16.1
110°-120°	1347.8	15.5
120°-130°	1066.7	12.2
130°-140°	856.2	9.8
140°-150°	670.3	7.7
150°-160°	490.5	5.6
160°-170°	303.8	3.5
170°-180°	103.1	1.2
0°-30°	1020.5	11.7
0°-40°	1467.1	16.8
0°-60°	1922.1	22.1
0°-90°	1973.7	22.7
90°-120°	3249.0	37.3
90°-150°	5842.2	67.0
90°-180°	6740.0	77.4
0°-180°	8713.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1622	1605	1618	1624	1630	150
15°	1338	1333	1380	1426	1457	373
25°	970	978	1047	1119	1171	445
35°	623	638	708	791	863	386
45°	299	317	370	442	511	235
55°	107	125	162	208	255	100
65°	12	23	51	62	69	20
75°	2	2	1	0	0	2
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	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1654.5	1654.5	1654.5	1654.5	1654.5
2.5°	1658.4	1642.7	1646.8	1646.7	1642.4
5°	1621.7	1605.3	1617.7	1623.5	1629.7
7.5°	1553.2	1540.4	1564.2	1582.1	1595.1
10°	1500.0	1489.1	1520.1	1544.5	1562.5
12.5°	1438.6	1430.1	1467.5	1501.0	1524.1
15°	1337.6	1332.9	1380.0	1426.3	1456.8
17.5°	1229.3	1229.2	1283.0	1340.5	1377.3
20°	1155.0	1157.4	1215.1	1278.5	1321.5
22.5°	1080.8	1086.2	1147.8	1214.0	1263.3
25°	970.1	978.0	1047.0	1118.6	1171.1
27.5°	863.8	875.3	947.9	1022.3	1086.2
30°	794.0	807.4	881.3	959.6	1025.4
32.5°	725.5	741.3	813.4	896.3	963.3
35°	622.7	638.4	707.6	790.9	862.9
37.5°	516.6	532.0	599.5	681.5	759.3
40°	447.5	464.7	529.1	608.5	687.6
42.5°	384.7	401.9	462.5	540.6	615.2
45°	298.6	316.6	369.8	441.8	510.7
47.5°	227.2	246.7	293.4	358.6	421.4
50°	184.9	204.5	250.5	307.9	368.2
52.5°	151.0	169.9	211.5	265.6	320.8
55°	107.3	125.3	161.7	207.6	255.3
57.5°	74.1	89.6	122.3	160.6	198.0
60°	53.6	68.5	99.3	130.4	160.9
62.5°	35.7	49.3	79.4	103.2	123.7
65°	12.0	23.0	51.2	61.8	68.8
67.5°	6.1	7.3	26.9	28.4	30.7
70°	4.8	4.8	12.8	13.7	16.0
72.5°	3.5	3.5	5.1	6.6	7.0
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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

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**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)