

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: P521200

Luminaire Tested: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521200  
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-100U-075D-92765-1D-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 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: 6426.2 lumens  
Efficiency: N/A  
Efficacy: 99.9 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

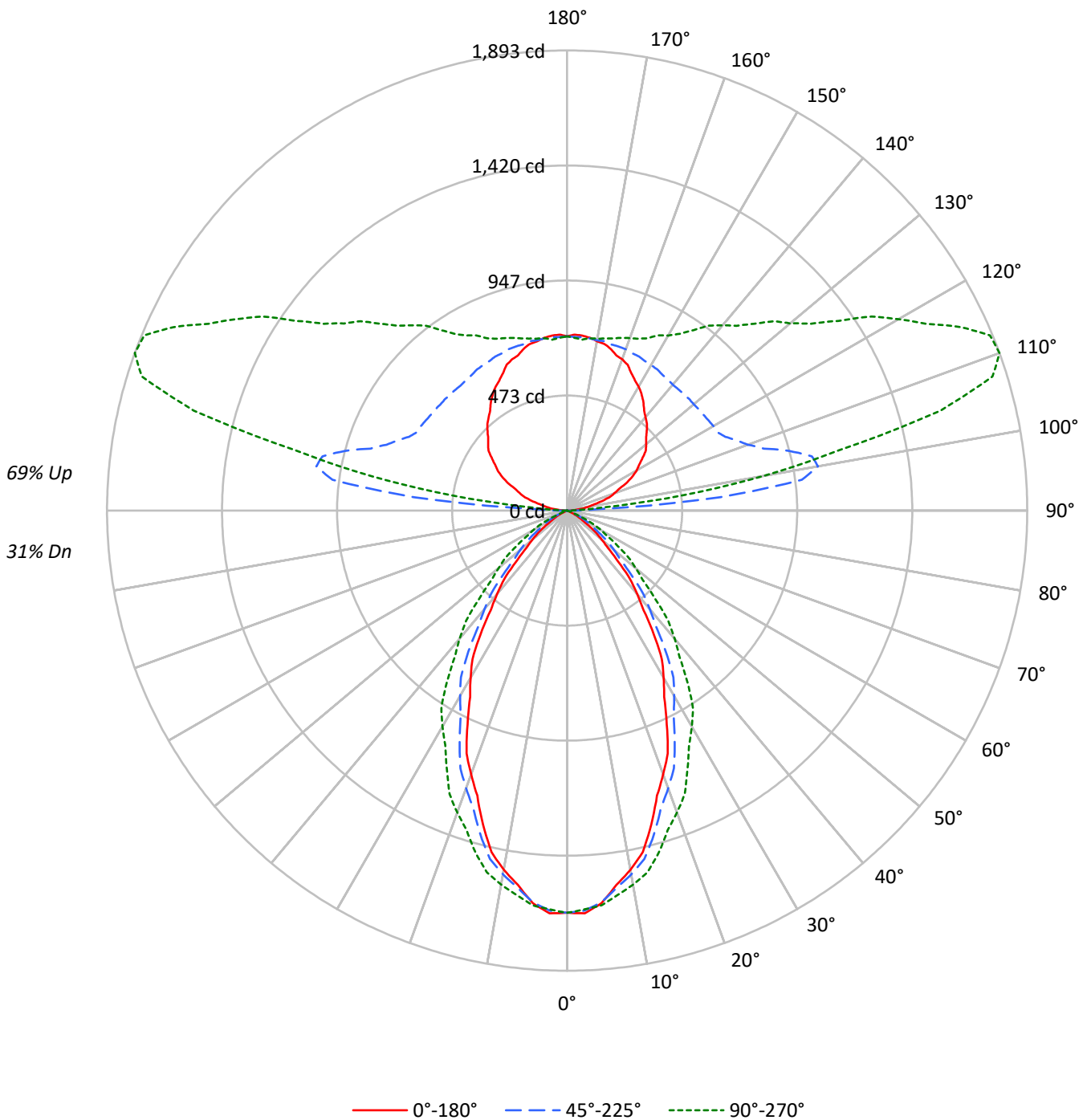
Input Watts (W): 64.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521200

CATALOG NUMBER: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521200

CATALOG NUMBER: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

**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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31																				
1	95	91	87	84	85	82	79	77	65	63	62	50	49	48	36	35	35	28																				
2	87	81	75	71	78	73	68	65	58	55	53	45	43	42	33	32	31	25																				
3	80	72	65	60	72	65	60	55	53	49	46	41	38	36	30	29	28	23																				
4	74	64	57	52	66	58	52	48	47	43	40	37	34	32	28	26	25	21																				
5	68	58	51	45	61	53	46	42	43	39	35	34	31	29	25	24	22	19																				
6	63	52	45	40	57	48	41	37	39	35	31	31	28	26	24	22	20	17																				
7	58	47	40	35	53	43	37	33	36	31	28	29	25	23	22	20	18	16																				
8	54	43	36	31	49	40	34	29	33	28	25	26	23	21	20	18	17	14																				
9	51	40	33	28	46	36	30	26	30	26	23	24	21	19	19	17	16	13																				
10	48	36	30	25	43	34	28	24	28	24	21	23	20	18	18	16	14	12																				

**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

TEST NUMBER: P521200

CATALOG NUMBER: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.0	2.3
10°-20°	386.1	6.0
20°-30°	483.4	7.5
30°-40°	446.5	6.9
40°-50°	300.0	4.7
50°-60°	155.0	2.4
60°-70°	48.5	0.8
70°-80°	3.1	0.0
80°-90°	0.1	0.0
90°-100°	326.6	5.1
100°-110°	929.4	14.5
110°-120°	890.4	13.9
120°-130°	704.7	11.0
130°-140°	565.7	8.8
140°-150°	442.8	6.9
150°-160°	324.0	5.0
160°-170°	200.7	3.1
170°-180°	68.1	1.1
0°-30°	1020.5	15.9
0°-40°	1467.1	22.8
0°-60°	1922.1	29.9
0°-90°	1973.7	30.7
90°-120°	2146.4	33.4
90°-150°	3859.7	60.1
90°-180°	4453.0	69.3
0°-180°	6426.2	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	1
95°	35	141	632	219	135	40
105°	144	219	947	1673	1590	153
115°	268	324	718	1521	1786	264
125°	379	420	686	1138	1360	339
135°	463	502	677	961	1086	358
145°	546	574	683	832	906	341
155°	624	639	699	752	782	289
165°	690	692	707	722	733	194
175°	722	718	715	711	706	68
180°	717	717	717	717	717	

TEST NUMBER: P521200

CATALOG NUMBER: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

**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°	10.9	57.8	134.1	39.0	29.4
95°	35.4	140.7	632.3	218.9	134.9
97.5°	65.1	164.8	973.8	696.8	477.5
100°	85.9	179.1	1047.9	1061.5	817.6
102.5°	108.7	194.6	1031.6	1358.7	1145.8
105°	144.4	219.1	947.1	1672.9	1590.3
107.5°	180.7	247.6	848.4	1761.5	1835.1
110°	205.8	268.4	791.7	1727.6	1892.8

TEST NUMBER: P521200

CATALOG NUMBER: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4\_4000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	229.8	289.2	753.6	1647.4	1883.0
115°	268.5	324.4	718.2	1521.4	1786.5
117.5°	302.5	355.0	697.2	1383.6	1664.4
120°	329.8	373.8	695.0	1304.8	1574.0
122.5°	351.6	395.6	689.5	1235.7	1485.7
125°	378.8	420.1	685.5	1137.5	1360.0
127.5°	408.5	447.2	683.3	1078.8	1262.2
130°	423.8	462.5	680.0	1037.9	1197.8
132.5°	440.2	477.7	680.0	1006.0	1153.1
135°	463.3	502.0	677.3	960.8	1086.1
137.5°	485.1	522.7	677.0	922.6	1030.8
140°	501.5	540.1	675.9	890.9	994.8
142.5°	520.0	552.3	679.2	865.5	958.8
145°	546.5	574.4	682.7	831.6	906.2
147.5°	569.1	596.3	688.7	797.3	861.8
150°	588.7	607.4	690.9	786.0	831.3
152.5°	604.0	623.7	693.1	770.6	812.7
155°	624.1	638.8	699.1	751.6	782.2
157.5°	649.2	658.0	700.4	742.9	764.8
160°	662.3	668.9	705.9	736.3	755.0
162.5°	669.9	677.6	707.0	730.8	745.1
165°	689.5	692.2	707.3	722.5	733.1
167.5°	702.9	700.5	713.5	720.4	724.7
170°	707.3	705.9	711.3	712.8	718.2
172.5°	717.1	712.5	714.6	710.6	714.9
175°	722.2	718.3	715.4	711.2	705.9
177.5°	724.4	718.0	714.6	710.3	711.3
180°	716.8	716.8	716.8	716.8	716.8

(END OF REPORT)