

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: P521212

Luminaire Tested: SQ4-BB-100U-100D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521212  
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-100D-92765-1D-UNV-STD-W-4\_3500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 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: 6920.5 lumens  
Efficiency: N/A  
Efficacy: 92.5 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

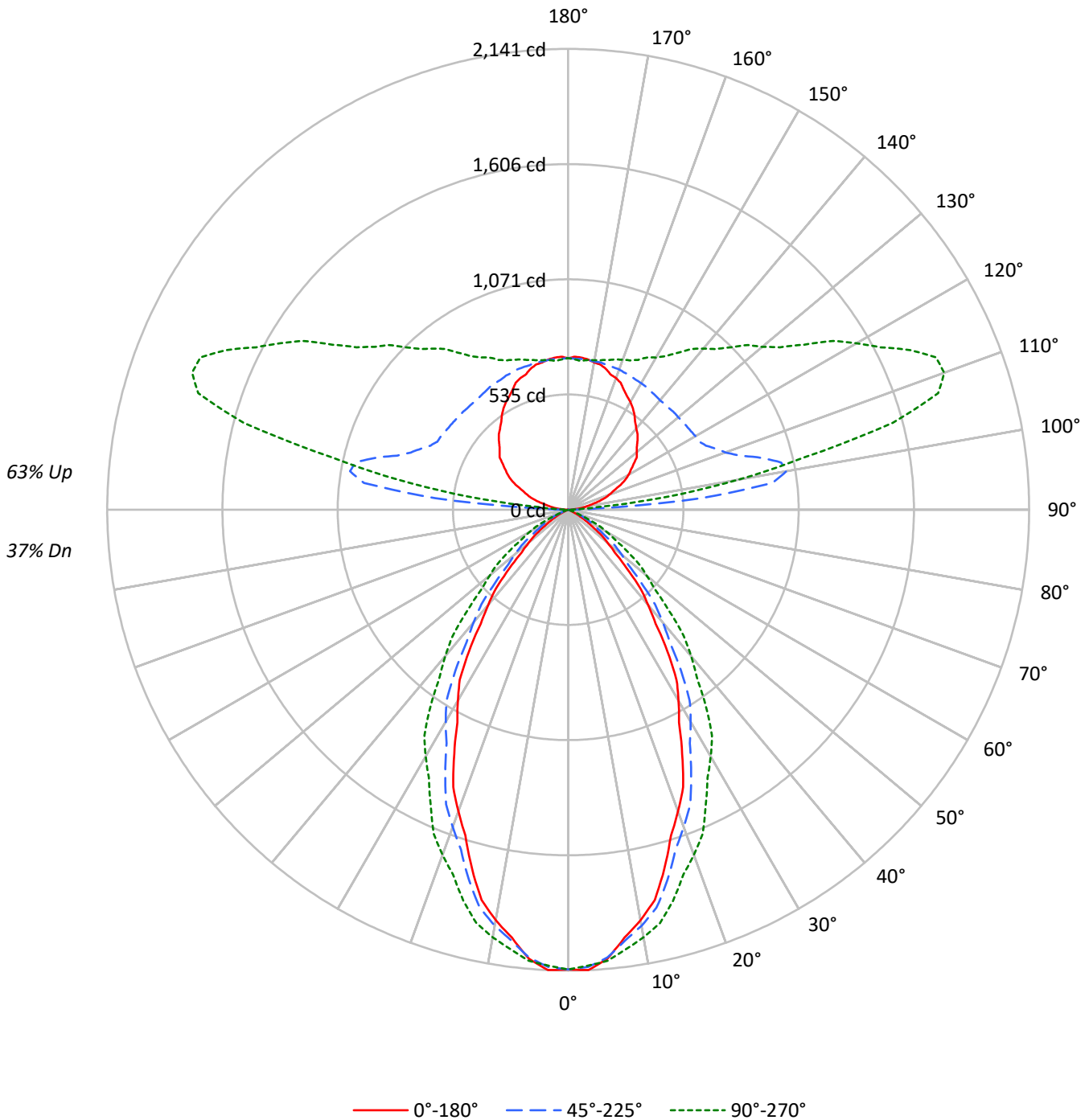
Input Watts (W): 74.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					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	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37				
1	96	92	89	86	87	84	81	79	68	67	65	54	53	52	41	40	40	34				
2	89	82	77	73	80	75	71	67	62	59	56	49	47	45	38	37	36	30				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	27				
4	75	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	59	52	47	63	55	48	44	46	41	38	37	34	32	29	27	26	23				
6	65	54	47	41	59	50	43	39	42	37	34	34	31	29	27	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	25	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	23	24	21	20	17				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	21	22	20	18	16				
10	49	38	31	27	45	35	29	26	30	26	23	25	22	20	21	18	17	15				

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

	0°	45°	90°
0°	19706	19706	19706
5°	19390	19342	19485
10°	18142	18384	18897
15°	16493	17016	17964
20°	14640	15401	16750
25°	12749	13759	15390
30°	10921	12120	14102
35°	9054	10289	12546
40°	6957	8226	10690
45°	5029	6229	8602
50°	3426	4642	6822
55°	2228	3357	5302
60°	1277	2364	3833
65°	338	1443	1941
70°	167	445	558
75°	75	36	0
80°	53	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8602 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.9	2.8
10°-20°	498.5	7.2
20°-30°	624.1	9.0
30°-40°	576.4	8.3
40°-50°	387.3	5.6
50°-60°	200.1	2.9
60°-70°	62.7	0.9
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	320.7	4.6
100°-110°	912.7	13.2
110°-120°	874.4	12.6
120°-130°	692.1	10.0
130°-140°	555.5	8.0
140°-150°	434.9	6.3
150°-160°	318.2	4.6
160°-170°	197.1	2.8
170°-180°	66.9	1.0
0°-30°	1317.5	19.0
0°-40°	1893.9	27.4
0°-60°	2481.3	35.9
0°-90°	2547.9	36.8
90°-120°	2107.9	30.5
90°-150°	3790.4	54.8
90°-180°	4373.0	63.2
0°-180°	6920.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2136	2136	2136	2136	2136	
5°	2094	2072	2088	2096	2104	194
15°	1727	1721	1782	1841	1881	481
25°	1252	1262	1352	1444	1512	574
35°	804	824	914	1021	1114	498
45°	385	409	477	570	659	303
55°	138	162	209	268	330	129
65°	16	30	66	80	89	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2135.9	2135.9	2135.9	2135.9	2135.9
2.5°	2140.9	2120.7	2126.0	2125.9	2120.2
5°	2093.6	2072.3	2088.4	2095.8	2103.9
7.5°	2005.1	1988.5	2019.4	2042.5	2059.2
10°	1936.5	1922.3	1962.3	1993.8	2017.1
12.5°	1857.1	1846.2	1894.5	1937.8	1967.5
15°	1726.7	1720.7	1781.5	1841.3	1880.7
17.5°	1587.0	1586.8	1656.2	1730.5	1778.0
20°	1491.1	1494.1	1568.6	1650.5	1706.0
22.5°	1395.2	1402.3	1481.8	1567.2	1630.8
25°	1252.4	1262.5	1351.6	1444.1	1511.8
27.5°	1115.2	1129.9	1223.7	1319.8	1402.2
30°	1025.1	1042.3	1137.7	1238.8	1323.7
32.5°	936.6	957.0	1050.1	1157.0	1243.5
35°	803.9	824.1	913.5	1021.0	1113.9
37.5°	666.9	686.7	774.0	879.8	980.2
40°	577.6	599.9	683.0	785.6	887.6
42.5°	496.6	518.9	597.1	697.8	794.2
45°	385.4	408.7	477.4	570.4	659.3
47.5°	293.3	318.5	378.8	462.9	544.0
50°	238.7	264.0	323.4	397.5	475.3
52.5°	194.9	219.3	273.0	342.8	414.2
55°	138.5	161.7	208.7	268.0	329.6
57.5°	95.7	115.7	157.9	207.4	255.6
60°	69.2	88.4	128.1	168.3	207.7
62.5°	46.1	63.7	102.5	133.3	159.8
65°	15.5	29.6	66.1	79.8	88.9
67.5°	7.9	9.5	34.7	36.6	39.7
70°	6.2	6.2	16.5	17.6	20.7
72.5°	4.5	4.5	6.6	8.5	9.1
75°	2.1	2.1	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)