

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: P521211

Luminaire Tested: SQ4-BB-100U-100D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521211  
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\_3000K  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6758.3 lumens  
Efficiency: N/A  
Efficacy: 90.4 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

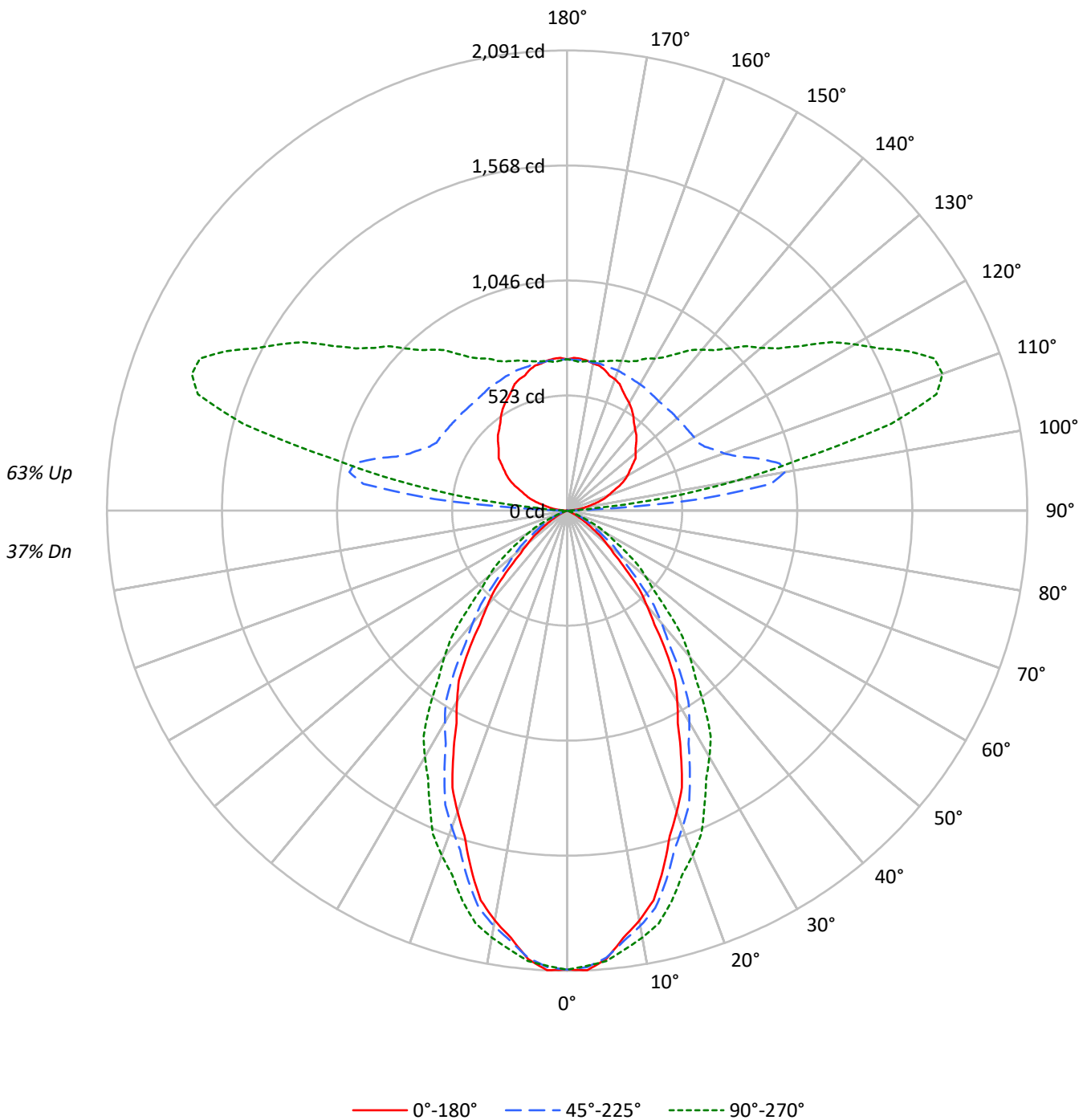
Input Watts (W): 74.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	19245	19245	19245
5°	18935	18888	19029
10°	17717	17953	18454
15°	16107	16617	17543
20°	14297	15041	16358
25°	12451	13437	15030
30°	10665	11836	13772
35°	8843	10048	12252
40°	6794	8033	10440
45°	4911	6083	8400
50°	3346	4534	6663
55°	2175	3278	5178
60°	1247	2308	3742
65°	330	1410	1895
70°	165	434	545
75°	71	36	0
80°	53	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8400 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.4	2.8
10°-20°	486.8	7.2
20°-30°	609.4	9.0
30°-40°	562.9	8.3
40°-50°	378.3	5.6
50°-60°	195.4	2.9
60°-70°	61.2	0.9
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	313.2	4.6
100°-110°	891.3	13.2
110°-120°	853.9	12.6
120°-130°	675.9	10.0
130°-140°	542.5	8.0
140°-150°	424.7	6.3
150°-160°	310.7	4.6
160°-170°	192.5	2.8
170°-180°	65.3	1.0
0°-30°	1286.6	19.0
0°-40°	1849.5	27.4
0°-60°	2423.1	35.9
0°-90°	2488.3	36.8
90°-120°	2058.5	30.5
90°-150°	3701.5	54.8
90°-180°	4270.0	63.2
0°-180°	6758.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2044	2024	2039	2047	2055	190
15°	1686	1680	1740	1798	1837	470
25°	1223	1233	1320	1410	1476	561
35°	785	805	892	997	1088	486
45°	376	399	466	557	644	296
55°	135	158	204	262	322	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

TEST NUMBER: P521211

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2085.9	2085.9	2085.9	2085.9	2085.9
2.5°	2090.7	2071.0	2076.2	2076.1	2070.5
5°	2044.5	2023.8	2039.4	2046.7	2054.6
7.5°	1958.1	1941.9	1972.0	1994.6	2011.0
10°	1891.1	1877.3	1916.3	1947.1	1969.8
12.5°	1813.6	1802.9	1850.1	1892.4	1921.4
15°	1686.3	1680.3	1739.7	1798.1	1836.6
17.5°	1549.8	1549.6	1617.4	1689.9	1736.3
20°	1456.2	1459.1	1531.9	1611.8	1666.1
22.5°	1362.5	1369.4	1447.1	1530.4	1592.6
25°	1223.1	1232.9	1319.9	1410.2	1476.4
27.5°	1089.1	1103.5	1195.0	1288.9	1369.4
30°	1001.1	1017.8	1111.0	1209.8	1292.7
32.5°	914.7	934.6	1025.5	1129.9	1214.4
35°	785.1	804.8	892.1	997.1	1087.8
37.5°	651.3	670.6	755.8	859.2	957.3
40°	564.1	585.8	667.0	767.2	866.8
42.5°	485.0	506.7	583.1	681.5	775.6
45°	376.4	399.1	466.2	557.0	643.8
47.5°	286.4	311.1	369.9	452.1	531.2
50°	233.1	257.8	315.9	388.2	464.2
52.5°	190.3	214.2	266.6	334.8	404.5
55°	135.2	157.9	203.8	261.7	321.9
57.5°	93.4	113.0	154.2	202.5	249.7
60°	67.6	86.4	125.1	164.4	202.8
62.5°	45.0	62.2	100.1	130.2	156.0
65°	15.1	29.0	64.6	77.9	86.8
67.5°	7.7	9.2	33.9	35.8	38.8
70°	6.1	6.1	16.1	17.2	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	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°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)