

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: P521267

Luminaire Tested: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521267  
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-125U-100D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

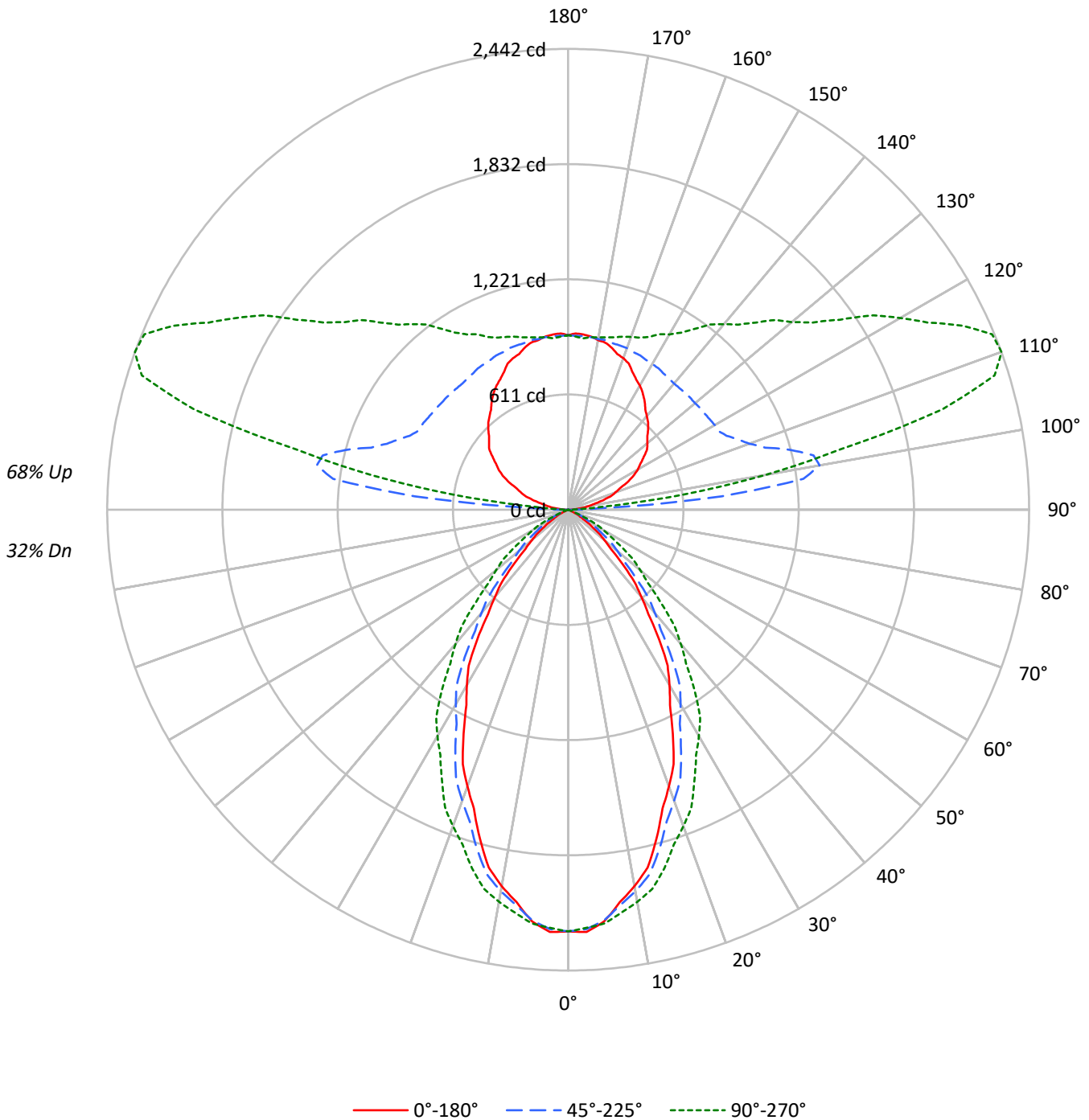
Lumens per Lamp: N/A  
Luminaire Lumens: 8411.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 83.7  
Input Voltage (V): 120  
Input Current (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: P521267

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521267

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_5000K

**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	103	103	103	103	92	92	92	92	73	73	73	56	56	56	39	39	39	39	39	39	32	
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	36	36	35	29	
2	87	81	75	71	79	73	69	65	59	56	53	46	44	42	33	32	32	33	32	32	26	
3	80	72	66	61	72	65	60	56	53	49	46	41	39	37	31	29	28	31	29	28	24	
4	74	65	58	52	67	59	53	48	48	44	40	38	35	33	28	27	25	28	27	25	21	
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	26	24	23	19	
6	63	52	45	40	57	48	42	37	39	35	32	32	28	26	24	22	21	24	22	21	18	
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	22	20	19	16	
8	55	44	36	32	50	40	34	30	33	29	25	27	24	21	21	19	17	21	19	17	15	
9	51	40	33	28	46	37	31	27	31	26	23	25	22	20	19	17	16	19	17	16	14	
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	18	16	15	13	

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

	0°	45°	90°
0°	20616	20616	20616
5°	20284	20234	20384
10°	18980	19233	19769
15°	17254	17801	18793
20°	15317	16112	17524
25°	13338	14395	16101
30°	11425	12680	14753
35°	9473	10763	13126
40°	7278	8607	11184
45°	5261	6516	8999
50°	3584	4857	7138
55°	2331	3513	5548
60°	1336	2474	4010
65°	354	1511	2030
70°	175	467	583
75°	78	39	0
80°	58	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8999 cd/sqm

TEST NUMBER: P521267

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.9	2.4
10°-20°	521.5	6.2
20°-30°	652.9	7.8
30°-40°	603.0	7.2
40°-50°	405.2	4.8
50°-60°	209.3	2.5
60°-70°	65.5	0.8
70°-80°	4.2	0.0
80°-90°	0.1	0.0
90°-100°	421.5	5.0
100°-110°	1199.2	14.3
110°-120°	1149.0	13.7
120°-130°	909.4	10.8
130°-140°	729.9	8.7
140°-150°	571.4	6.8
150°-160°	418.1	5.0
160°-170°	259.0	3.1
170°-180°	87.9	1.0
0°-30°	1378.3	16.4
0°-40°	1981.3	23.6
0°-60°	2595.8	30.9
0°-90°	2665.6	31.7
90°-120°	2769.7	32.9
90°-150°	4980.4	59.2
90°-180°	5745.0	68.3
0°-180°	8411.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2234	2234	2234	2234	2234	
5°	2190	2168	2185	2193	2201	203
15°	1806	1800	1864	1926	1968	503
25°	1310	1321	1414	1511	1582	601
35°	841	862	956	1068	1165	521
45°	403	428	499	597	690	317
55°	145	169	218	280	345	135
65°	16	31	69	84	93	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	46	182	816	282	174	52
105°	186	283	1222	2159	2052	197
115°	346	419	927	1963	2305	341
125°	489	542	884	1468	1755	438
135°	598	648	874	1240	1402	461
145°	705	741	881	1073	1169	440
155°	805	824	902	970	1009	372
165°	890	893	913	932	946	250
175°	932	927	923	918	911	88
180°	925	925	925	925	925	

TEST NUMBER: P521267

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2234.5	2234.5	2234.5	2234.5	2234.5
2.5°	2239.7	2218.6	2224.2	2224.0	2218.1
5°	2190.2	2168.0	2184.8	2192.6	2201.0
7.5°	2097.7	2080.3	2112.6	2136.8	2154.3
10°	2025.9	2011.1	2052.9	2085.9	2110.2
12.5°	1942.9	1931.4	1982.0	2027.2	2058.3
15°	1806.4	1800.1	1863.7	1926.3	1967.5
17.5°	1660.3	1660.1	1732.7	1810.4	1860.1
20°	1560.0	1563.1	1641.0	1726.7	1784.8
22.5°	1459.6	1467.0	1550.2	1639.5	1706.1
25°	1310.2	1320.8	1414.0	1510.8	1581.6
27.5°	1166.7	1182.1	1280.2	1380.7	1467.0
30°	1072.4	1090.4	1190.2	1296.0	1384.8
32.5°	979.9	1001.2	1098.6	1210.5	1300.9
35°	841.1	862.2	955.6	1068.1	1165.4
37.5°	697.7	718.4	809.7	920.4	1025.5
40°	604.3	627.6	714.6	821.9	928.6
42.5°	519.6	542.8	624.6	730.1	830.9
45°	403.2	427.5	499.4	596.7	689.7
47.5°	306.8	333.2	396.3	484.3	569.1
50°	249.7	276.1	338.4	415.9	497.3
52.5°	203.9	229.5	285.6	358.7	433.3
55°	144.9	169.2	218.4	280.4	344.9
57.5°	100.1	121.0	165.2	216.9	267.5
60°	72.4	92.5	134.1	176.1	217.3
62.5°	48.2	66.6	107.2	139.4	167.1
65°	16.2	31.0	69.2	83.5	93.0
67.5°	8.2	9.9	36.3	38.3	41.5
70°	6.5	6.5	17.3	18.4	21.6
72.5°	4.8	4.8	6.9	8.9	9.5
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	14.1	74.6	173.0	50.4	38.0
95°	45.7	181.5	815.9	282.4	174.1
97.5°	84.1	212.7	1256.6	899.2	616.2
100°	110.8	231.1	1352.2	1369.7	1055.1
102.5°	140.3	251.0	1331.1	1753.2	1478.5
105°	186.4	282.7	1222.1	2158.7	2052.1
107.5°	233.2	319.5	1094.8	2273.0	2367.9
110°	265.5	346.3	1021.6	2229.2	2442.4

TEST NUMBER: P521267

CATALOG NUMBER: SQ4-BB-125U-100D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	296.5	373.2	972.4	2125.8	2429.8
115°	346.4	418.6	926.7	1963.1	2305.3
117.5°	390.4	458.1	899.6	1785.3	2147.7
120°	425.5	482.3	896.8	1683.7	2031.0
122.5°	453.7	510.4	889.8	1594.5	1917.0
125°	488.8	542.1	884.5	1467.8	1754.9
127.5°	527.2	577.0	881.7	1392.1	1628.7
130°	546.9	596.7	877.5	1339.3	1545.7
132.5°	568.0	616.5	877.5	1298.2	1488.0
135°	597.9	647.7	873.9	1239.8	1401.5
137.5°	626.0	674.5	873.6	1190.5	1330.1
140°	647.1	697.0	872.2	1149.5	1283.6
142.5°	671.0	712.6	876.4	1116.9	1237.2
145°	705.1	741.2	881.0	1073.1	1169.4
147.5°	734.3	769.4	888.7	1028.8	1112.0
150°	759.6	783.7	891.5	1014.2	1072.6
152.5°	779.3	804.8	894.3	994.4	1048.7
155°	805.4	824.3	902.1	969.8	1009.3
157.5°	837.7	849.1	903.8	958.6	986.8
160°	854.6	863.2	910.9	950.1	974.2
162.5°	864.4	874.4	912.3	942.9	961.5
165°	889.8	893.2	912.6	932.3	946.0
167.5°	907.0	903.9	920.7	929.6	935.1
170°	912.6	910.9	917.9	919.8	926.7
172.5°	925.3	919.4	922.1	917.0	922.5
175°	932.0	926.8	923.2	917.7	910.9
177.5°	934.8	926.5	922.1	916.5	917.9
180°	924.9	924.9	924.9	924.9	924.9

(END OF REPORT)