

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: P521254

Luminaire Tested: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521254  
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-075D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 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: 7773.1 lumens  
Efficiency: N/A  
Efficacy: 106.2 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

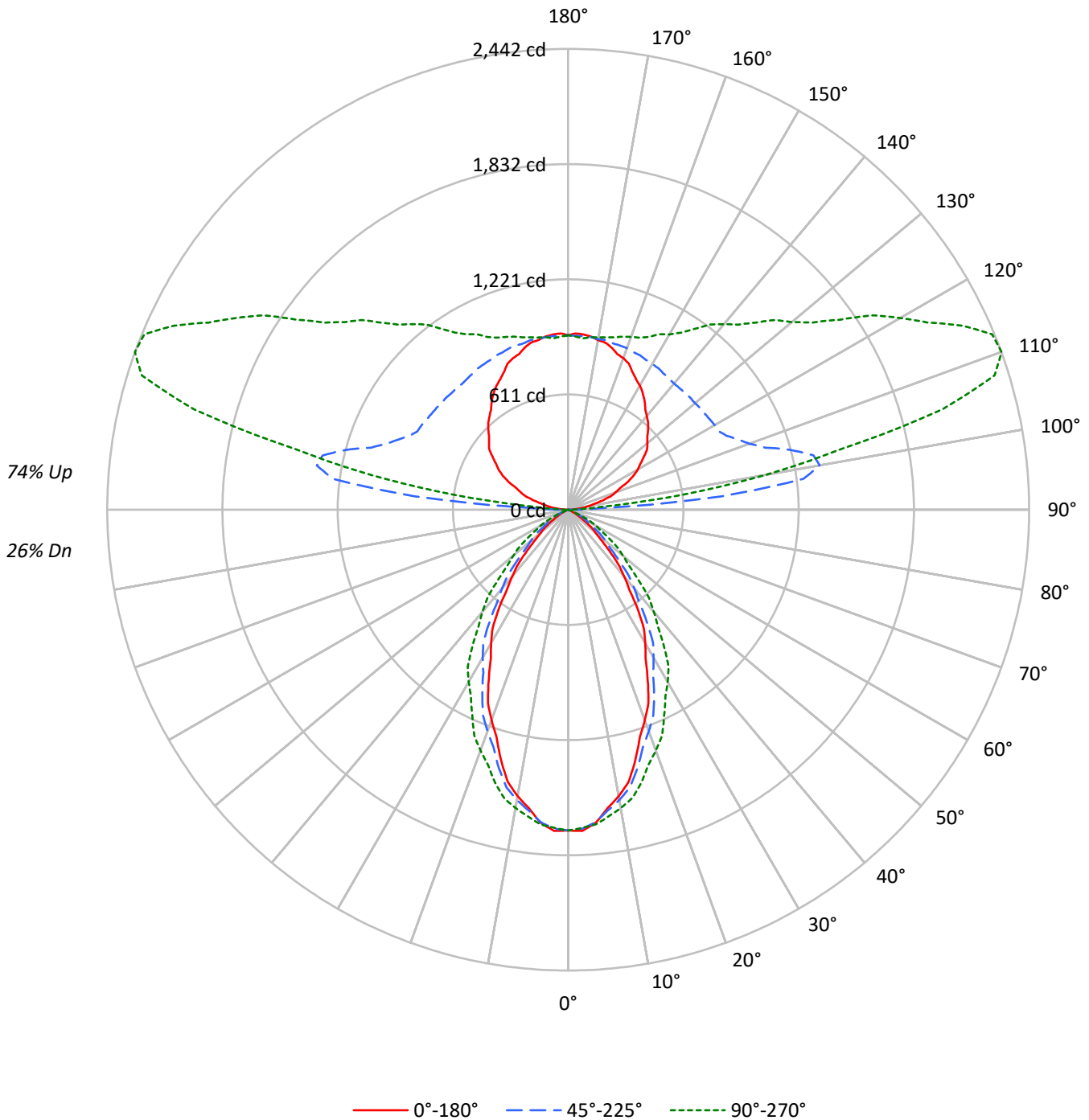
Input Watts (W): 73.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521254

CATALOG NUMBER: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4\_5000K

### Luminous Intensity Polar Plot



TEST NUMBER: P521254

CATALOG NUMBER: SQ4-BB-125U-075D-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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	34	34	34	26				
1	93	90	86	83	83	80	77	75	63	61	59	46	45	44	32	31	31	24				
2	86	79	74	69	76	71	67	63	56	53	50	42	40	39	29	28	27	22				
3	79	70	64	59	70	63	58	54	50	47	44	38	36	34	27	25	24	19				
4	73	63	56	51	65	57	51	46	45	41	38	34	32	30	24	23	22	18				
5	67	56	49	44	60	51	45	40	41	37	33	31	29	26	22	21	20	16				
6	62	51	44	38	55	46	40	35	37	33	29	29	26	24	21	19	18	15				
7	57	46	39	34	51	42	36	31	34	29	26	26	23	21	19	18	16	13				
8	53	42	35	30	48	38	32	28	31	27	24	24	21	19	18	16	15	12				
9	50	38	32	27	45	35	29	25	29	24	21	22	20	17	17	15	14	11				
10	46	35	29	24	42	32	27	23	26	22	19	21	18	16	16	14	13	11				

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

	0°	45°	90°
0°	15683	15683	15683
5°	15430	15393	15506
10°	14438	14631	15038
15°	13126	13542	14296
20°	11651	12256	13330
25°	10146	10950	12248
30°	8691	9646	11222
35°	7206	8188	9985
40°	5537	6547	8508
45°	4002	4957	6846
50°	2727	3695	5430
55°	1773	2672	4219
60°	1017	1882	3050
65°	269	1148	1543
70°	132	356	442
75°	57	29	0
80°	43	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6846 cd/sqm

TEST NUMBER: P521254

CATALOG NUMBER: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.1	2.0
10°-20°	396.7	5.1
20°-30°	496.6	6.4
30°-40°	458.7	5.9
40°-50°	308.2	4.0
50°-60°	159.2	2.0
60°-70°	49.9	0.6
70°-80°	3.1	0.0
80°-90°	0.1	0.0
90°-100°	421.5	5.4
100°-110°	1199.2	15.4
110°-120°	1149.0	14.8
120°-130°	909.4	11.7
130°-140°	729.9	9.4
140°-150°	571.4	7.4
150°-160°	418.1	5.4
160°-170°	259.0	3.3
170°-180°	87.9	1.1
0°-30°	1048.5	13.5
0°-40°	1507.2	19.4
0°-60°	1974.7	25.4
0°-90°	2027.7	26.1
90°-120°	2769.7	35.6
90°-150°	4980.4	64.1
90°-180°	5745.0	73.9
0°-180°	7773.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1666	1649	1662	1668	1674	154
15°	1374	1369	1418	1465	1497	383
25°	997	1005	1076	1149	1203	457
35°	640	656	727	812	886	396
45°	307	325	380	454	525	241
55°	110	129	166	213	262	103
65°	12	24	53	64	71	21
75°	2	2	1	0	0	2
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: P521254

CATALOG NUMBER: SQ4-BB-125U-075D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1699.8	1699.8	1699.8	1699.8	1699.8
2.5°	1703.8	1687.7	1691.9	1691.8	1687.3
5°	1666.1	1649.2	1662.0	1667.9	1674.3
7.5°	1595.7	1582.5	1607.1	1625.5	1638.8
10°	1541.1	1529.8	1561.7	1586.8	1605.2
12.5°	1477.9	1469.3	1507.7	1542.1	1565.8
15°	1374.2	1369.3	1417.8	1465.3	1496.7
17.5°	1263.0	1262.8	1318.1	1377.2	1415.0
20°	1186.7	1189.1	1248.3	1313.5	1357.7
22.5°	1110.4	1116.0	1179.3	1247.2	1297.9
25°	996.7	1004.7	1075.6	1149.2	1203.1
27.5°	887.5	899.2	973.8	1050.3	1115.9
30°	815.8	829.5	905.4	985.9	1053.4
32.5°	745.4	761.6	835.7	920.8	989.6
35°	639.8	655.9	727.0	812.5	886.5
37.5°	530.8	546.5	615.9	700.2	780.1
40°	459.7	477.4	543.6	625.2	706.4
42.5°	395.2	412.9	475.2	555.4	632.1
45°	306.7	325.2	379.9	453.9	524.7
47.5°	233.4	253.5	301.5	368.4	432.9
50°	190.0	210.1	257.4	316.4	378.3
52.5°	155.1	174.6	217.3	272.8	329.6
55°	110.2	128.7	166.1	213.3	262.3
57.5°	76.2	92.1	125.7	165.0	203.5
60°	55.1	70.4	102.0	133.9	165.3
62.5°	36.7	50.7	81.6	106.1	127.1
65°	12.3	23.6	52.6	63.5	70.7
67.5°	6.2	7.5	27.6	29.2	31.6
70°	4.9	4.9	13.2	14.0	16.4
72.5°	3.6	3.6	5.3	6.8	7.2
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	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: P521254

CATALOG NUMBER: SQ4-BB-125U-075D-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)