

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: P521242

Luminaire Tested: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521242  
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-050D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7200.5 lumens  
Efficiency: N/A  
Efficacy: 116.1 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

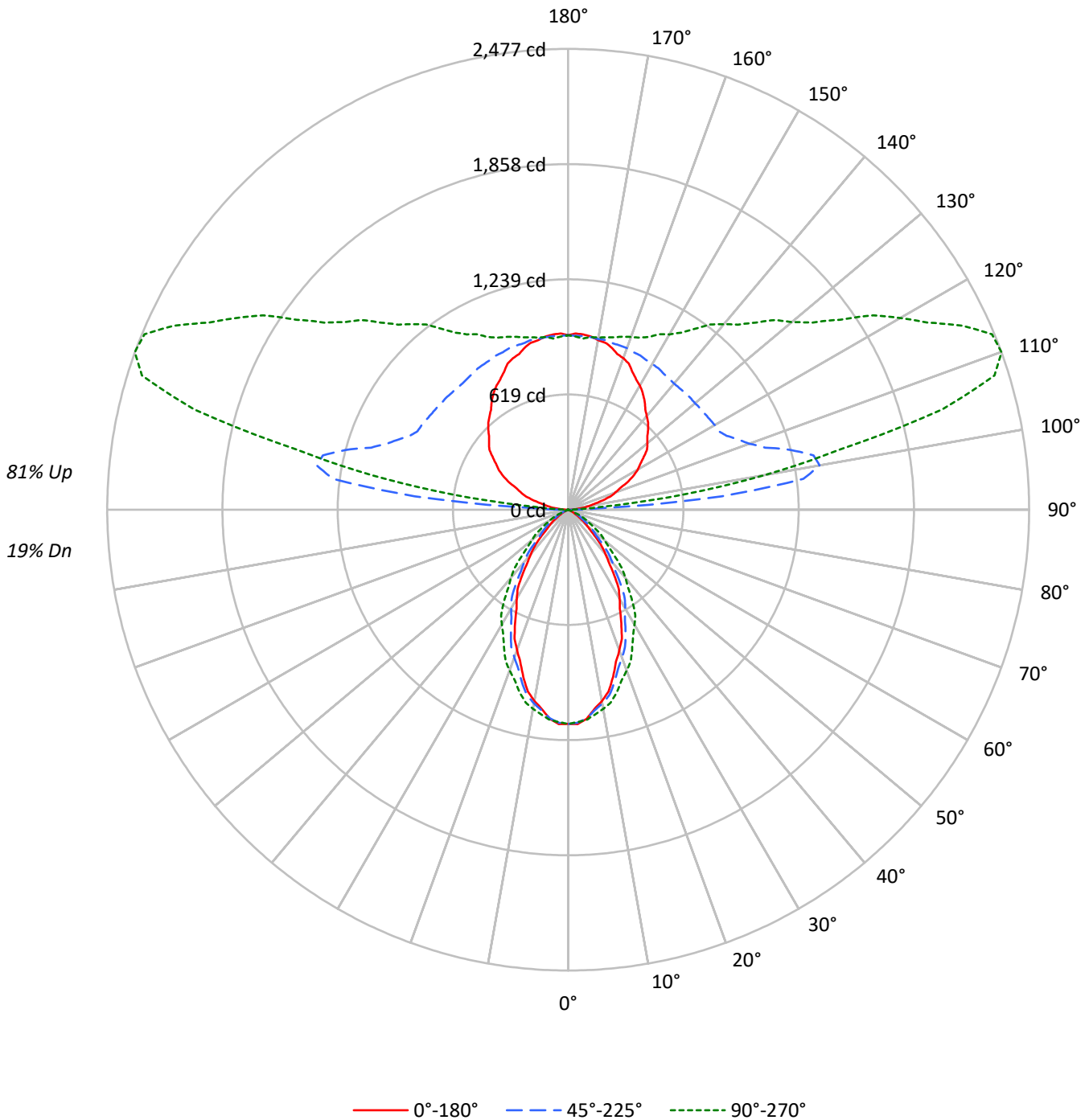
Input Watts (W): 62  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																				
0	100	100	100	100	88	88	88	88	66	66	66		46	46	46		28	28	28	19
1	92	88	84	81	81	78	75	72	59	57	55		41	40	40		25	25	25	17
2	84	77	72	67	74	69	64	60	52	49	47		37	36	34		23	23	22	16
3	77	69	62	57	68	61	56	51	47	43	40		34	31	30		21	20	19	14
4	71	61	54	49	62	54	48	44	42	38	35		30	28	26		19	18	17	13
5	65	55	47	42	57	49	43	38	38	34	30		27	25	23		18	17	16	12
6	60	49	42	36	53	44	38	33	34	30	27		25	22	20		16	15	14	11
7	55	44	37	32	49	40	34	29	31	27	24		23	20	18		15	14	13	10
8	51	40	33	28	46	36	30	26	28	24	21		21	18	16		14	13	12	9
9	48	37	30	25	42	33	27	23	26	22	19		19	17	15		13	12	11	8
10	45	34	27	23	40	30	25	21	24	20	17		18	15	13		12	11	10	8

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

	0°	45°	90°
0°	10621	10621	10621
5°	10450	10425	10502
10°	9778	9908	10185
15°	8889	9171	9682
20°	7890	8300	9028
25°	6871	7416	8295
30°	5886	6533	7600
35°	4880	5545	6762
40°	3749	4433	5762
45°	2710	3357	4636
50°	1847	2502	3677
55°	1200	1810	2858
60°	688	1275	2065
65°	183	777	1046
70°	89	240	299
75°	39	21	0
80°	32	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4636 cd/sqm

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CATALOG NUMBER: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4\_5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	1.5
10°-20°	268.7	3.7
20°-30°	336.3	4.7
30°-40°	310.7	4.3
40°-50°	208.8	2.9
50°-60°	107.8	1.5
60°-70°	33.8	0.5
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	427.5	5.9
100°-110°	1216.3	16.9
110°-120°	1165.4	16.2
120°-130°	922.3	12.8
130°-140°	740.3	10.3
140°-150°	579.6	8.0
150°-160°	424.1	5.9
160°-170°	262.7	3.6
170°-180°	89.1	1.2
0°-30°	710.1	9.9
0°-40°	1020.7	14.2
0°-60°	1337.3	18.6
0°-90°	1373.3	19.1
90°-120°	2809.1	39.0
90°-150°	5051.4	70.2
90°-180°	5827.0	80.9
0°-180°	7200.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1128	1117	1126	1130	1134	105
15°	931	927	960	992	1014	259
25°	675	680	728	778	815	309
35°	433	444	492	550	600	268
45°	208	220	257	307	355	163
55°	75	87	112	144	178	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	46	184	828	286	177	53
105°	189	287	1240	2189	2081	200
115°	351	425	940	1991	2338	346
125°	496	550	897	1489	1780	444
135°	606	657	886	1258	1421	468
145°	715	752	894	1088	1186	447
155°	817	836	915	984	1024	378
165°	902	906	926	946	960	254
175°	945	940	936	931	924	90
180°	938	938	938	938	938	

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CATALOG NUMBER: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1153.8	1143.0	1145.8	1145.8	1142.7
5°	1128.3	1116.9	1125.6	1129.6	1133.9
7.5°	1080.7	1071.7	1088.4	1100.8	1109.8
10°	1043.7	1036.1	1057.6	1074.6	1087.1
12.5°	1000.9	995.0	1021.1	1044.4	1060.4
15°	930.6	927.4	960.1	992.4	1013.6
17.5°	855.3	855.2	892.6	932.7	958.3
20°	803.6	805.3	845.4	889.5	919.5
22.5°	752.0	755.8	798.6	844.6	878.9
25°	675.0	680.4	728.5	778.3	814.8
27.5°	601.0	609.0	659.5	711.3	755.8
30°	552.5	561.7	613.2	667.7	713.4
32.5°	504.8	515.8	566.0	623.6	670.2
35°	433.3	444.2	492.3	550.3	600.4
37.5°	359.4	370.1	417.1	474.2	528.3
40°	311.3	323.3	368.1	423.4	478.4
42.5°	267.7	279.6	321.8	376.1	428.1
45°	207.7	220.3	257.3	307.4	355.3
47.5°	158.1	171.7	204.2	249.5	293.2
50°	128.7	142.3	174.3	214.3	256.2
52.5°	105.0	118.2	147.1	184.8	223.2
55°	74.6	87.2	112.5	144.4	177.7
57.5°	51.6	62.4	85.1	111.8	137.8
60°	37.3	47.7	69.1	90.7	111.9
62.5°	24.8	34.3	55.2	71.8	86.1
65°	8.4	16.0	35.6	43.0	47.9
67.5°	4.2	5.1	18.7	19.8	21.4
70°	3.3	3.3	8.9	9.5	11.1
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	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°	14.3	75.7	175.5	51.1	38.5
95°	46.4	184.1	827.5	286.4	176.6
97.5°	85.2	215.7	1274.5	912.0	624.9
100°	112.4	234.4	1371.5	1389.2	1070.1
102.5°	142.3	254.6	1350.1	1778.2	1499.5
105°	189.0	286.7	1239.5	2189.4	2081.3
107.5°	236.5	324.0	1110.4	2305.4	2401.6
110°	269.3	351.3	1036.2	2261.0	2477.2

TEST NUMBER: P521242

CATALOG NUMBER: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	300.7	378.5	986.3	2156.1	2464.4
115°	351.3	424.6	939.9	1991.1	2338.1
117.5°	395.9	464.6	912.4	1810.7	2178.3
120°	431.6	489.1	909.6	1707.7	2059.9
122.5°	460.1	517.7	902.4	1617.2	1944.3
125°	495.8	549.9	897.1	1488.7	1779.9
127.5°	534.7	585.3	894.2	1411.9	1651.8
130°	554.7	605.2	890.0	1358.4	1567.7
132.5°	576.1	625.2	890.0	1316.7	1509.2
135°	606.4	657.0	886.4	1257.5	1421.4
137.5°	634.9	684.1	886.0	1207.4	1349.0
140°	656.3	706.9	884.6	1165.9	1301.9
142.5°	680.6	722.8	888.9	1132.8	1254.8
145°	715.2	751.8	893.5	1088.4	1186.0
147.5°	744.8	780.4	901.4	1043.5	1127.9
150°	770.5	794.9	904.2	1028.6	1087.9
152.5°	790.4	816.2	907.1	1008.6	1063.7
155°	816.8	836.0	914.9	983.6	1023.7
157.5°	849.6	861.2	916.7	972.3	1000.9
160°	866.8	875.5	923.8	963.6	988.0
162.5°	876.8	886.9	925.3	956.4	975.2
165°	902.4	905.9	925.6	945.6	959.5
167.5°	919.9	916.8	933.8	942.9	948.4
170°	925.6	923.9	931.0	932.9	939.9
172.5°	938.5	932.5	935.3	930.0	935.6
175°	945.2	940.0	936.3	930.8	923.8
177.5°	948.1	939.7	935.3	929.6	931.0
180°	938.1	938.1	938.1	938.1	938.1

(END OF REPORT)