

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: P521238

Luminaire Tested: SQ4-BB-125U-050D-92765-1D-UNV-STD-W-4\_3500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521238  
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\_3500K  
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 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6786.0 lumens  
Efficiency: N/A  
Efficacy: 109.1 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

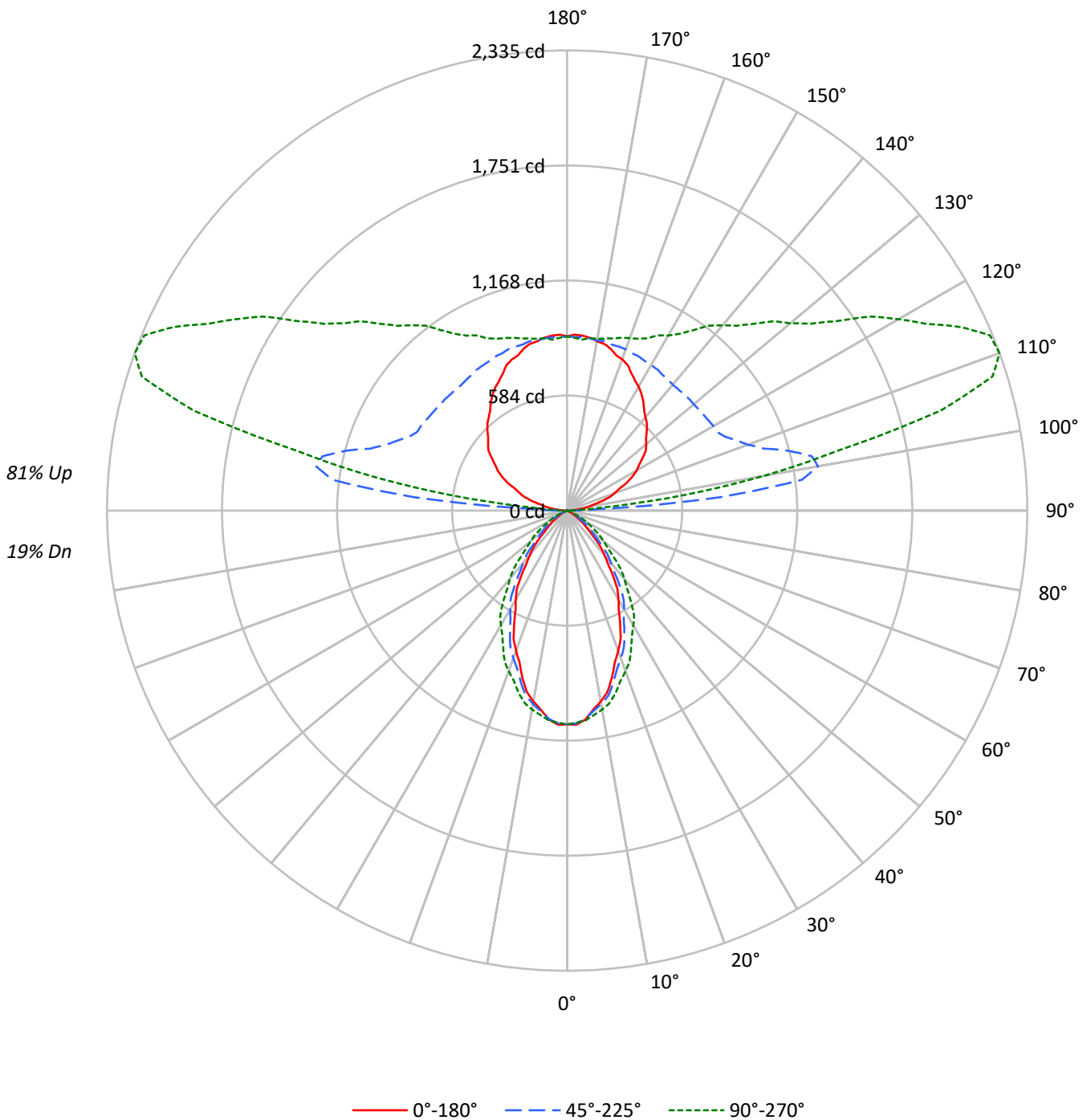
Input Watts (W): 62.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	10010	10010	10010
5°	9849	9825	9897
10°	9215	9338	9599
15°	8378	8643	9125
20°	7436	7823	8509
25°	6475	6989	7817
30°	5547	6157	7163
35°	4600	5226	6373
40°	3534	4178	5431
45°	2555	3164	4370
50°	1740	2358	3465
55°	1131	1705	2693
60°	650	1201	1947
65°	172	734	985
70°	84	227	283
75°	36	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4370 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.0	1.5
10°-20°	253.2	3.7
20°-30°	317.0	4.7
30°-40°	292.8	4.3
40°-50°	196.7	2.9
50°-60°	101.6	1.5
60°-70°	31.8	0.5
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	402.9	5.9
100°-110°	1146.3	16.9
110°-120°	1098.3	16.2
120°-130°	869.3	12.8
130°-140°	697.7	10.3
140°-150°	546.2	8.0
150°-160°	399.7	5.9
160°-170°	247.6	3.6
170°-180°	84.0	1.2
0°-30°	669.2	9.9
0°-40°	962.0	14.2
0°-60°	1260.3	18.6
0°-90°	1294.2	19.1
90°-120°	2647.5	39.0
90°-150°	4760.6	70.2
90°-180°	5492.0	80.9
0°-180°	6786.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1063	1053	1061	1064	1069	99
15°	877	874	905	935	955	244
25°	636	641	686	734	768	292
35°	408	419	464	519	566	253
45°	196	208	242	290	335	154
55°	70	82	106	136	167	66
65°	8	15	34	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	44	174	780	270	166	50
105°	178	270	1168	2063	1962	188
115°	331	400	886	1876	2204	326
125°	467	518	846	1403	1678	418
135°	572	619	835	1185	1340	441
145°	674	708	842	1026	1118	421
155°	770	788	862	927	965	356
165°	850	854	872	891	904	239
175°	891	886	882	877	871	84
180°	884	884	884	884	884	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.9	1084.9	1084.9	1084.9	1084.9
2.5°	1087.4	1077.2	1079.9	1079.8	1076.9
5°	1063.4	1052.6	1060.8	1064.5	1068.6
7.5°	1018.5	1010.1	1025.7	1037.5	1046.0
10°	983.6	976.4	996.7	1012.8	1024.6
12.5°	943.3	937.8	962.3	984.3	999.4
15°	877.1	874.0	904.9	935.3	955.3
17.5°	806.1	806.0	841.3	879.0	903.1
20°	757.4	758.9	796.8	838.3	866.6
22.5°	708.7	712.3	752.7	796.0	828.4
25°	636.1	641.3	686.5	733.5	767.9
27.5°	566.4	573.9	621.6	670.4	712.3
30°	520.7	529.4	577.9	629.3	672.4
32.5°	475.7	486.1	533.4	587.7	631.6
35°	408.4	418.6	464.0	518.6	565.8
37.5°	338.8	348.8	393.1	446.9	497.9
40°	293.4	304.7	346.9	399.0	450.9
42.5°	252.3	263.5	303.3	354.5	403.4
45°	195.8	207.6	242.5	289.7	334.9
47.5°	149.0	161.8	192.4	235.1	276.3
50°	121.2	134.1	164.3	201.9	241.4
52.5°	99.0	111.4	138.7	174.1	210.4
55°	70.3	82.1	106.0	136.1	167.4
57.5°	48.6	58.8	80.2	105.3	129.9
60°	35.2	44.9	65.1	85.5	105.5
62.5°	23.4	32.3	52.1	67.7	81.1
65°	7.9	15.1	33.6	40.5	45.1
67.5°	4.0	4.8	17.6	18.6	20.2
70°	3.1	3.1	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	13.4	71.3	165.4	48.1	36.3
95°	43.7	173.5	779.9	269.9	166.4
97.5°	80.3	203.3	1201.1	859.5	589.0
100°	105.9	220.9	1292.6	1309.2	1008.5
102.5°	134.1	240.0	1272.4	1675.9	1413.2
105°	178.2	270.2	1168.2	2063.4	1961.5
107.5°	222.9	305.4	1046.5	2172.7	2263.4
110°	253.8	331.0	976.6	2130.9	2334.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	356.7	929.5	2032.0	2322.6
115°	331.1	400.1	885.8	1876.5	2203.6
117.5°	373.1	437.9	859.9	1706.5	2053.0
120°	406.8	461.0	857.2	1609.4	1941.3
122.5°	433.7	487.9	850.5	1524.1	1832.4
125°	467.3	518.2	845.5	1403.0	1677.5
127.5°	503.9	551.6	842.8	1330.6	1556.8
130°	522.7	570.4	838.7	1280.2	1477.4
132.5°	542.9	589.3	838.7	1240.9	1422.3
135°	571.5	619.1	835.4	1185.1	1339.6
137.5°	598.4	644.7	835.0	1137.9	1271.4
140°	618.5	666.2	833.7	1098.8	1227.0
142.5°	641.4	681.2	837.7	1067.6	1182.6
145°	674.0	708.5	842.1	1025.7	1117.7
147.5°	701.9	735.4	849.5	983.4	1063.0
150°	726.1	749.1	852.2	969.4	1025.3
152.5°	744.9	769.3	854.9	950.5	1002.4
155°	769.8	787.9	862.3	927.0	964.8
157.5°	800.7	811.6	863.9	916.3	943.3
160°	816.9	825.1	870.7	908.2	931.2
162.5°	826.3	835.8	872.0	901.3	919.1
165°	850.5	853.8	872.3	891.1	904.3
167.5°	867.0	864.0	880.1	888.6	893.9
170°	872.3	870.7	877.4	879.2	885.8
172.5°	884.4	878.9	881.4	876.5	881.8
175°	890.8	885.9	882.4	877.2	870.7
177.5°	893.5	885.6	881.4	876.1	877.4
180°	884.1	884.1	884.1	884.1	884.1

(END OF REPORT)