

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: P521032

Luminaire Tested: SQ4-BB-050U-050D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521032  
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-050U-050D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3597.7 lumens  
Efficiency: N/A  
Efficacy: 98.6 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

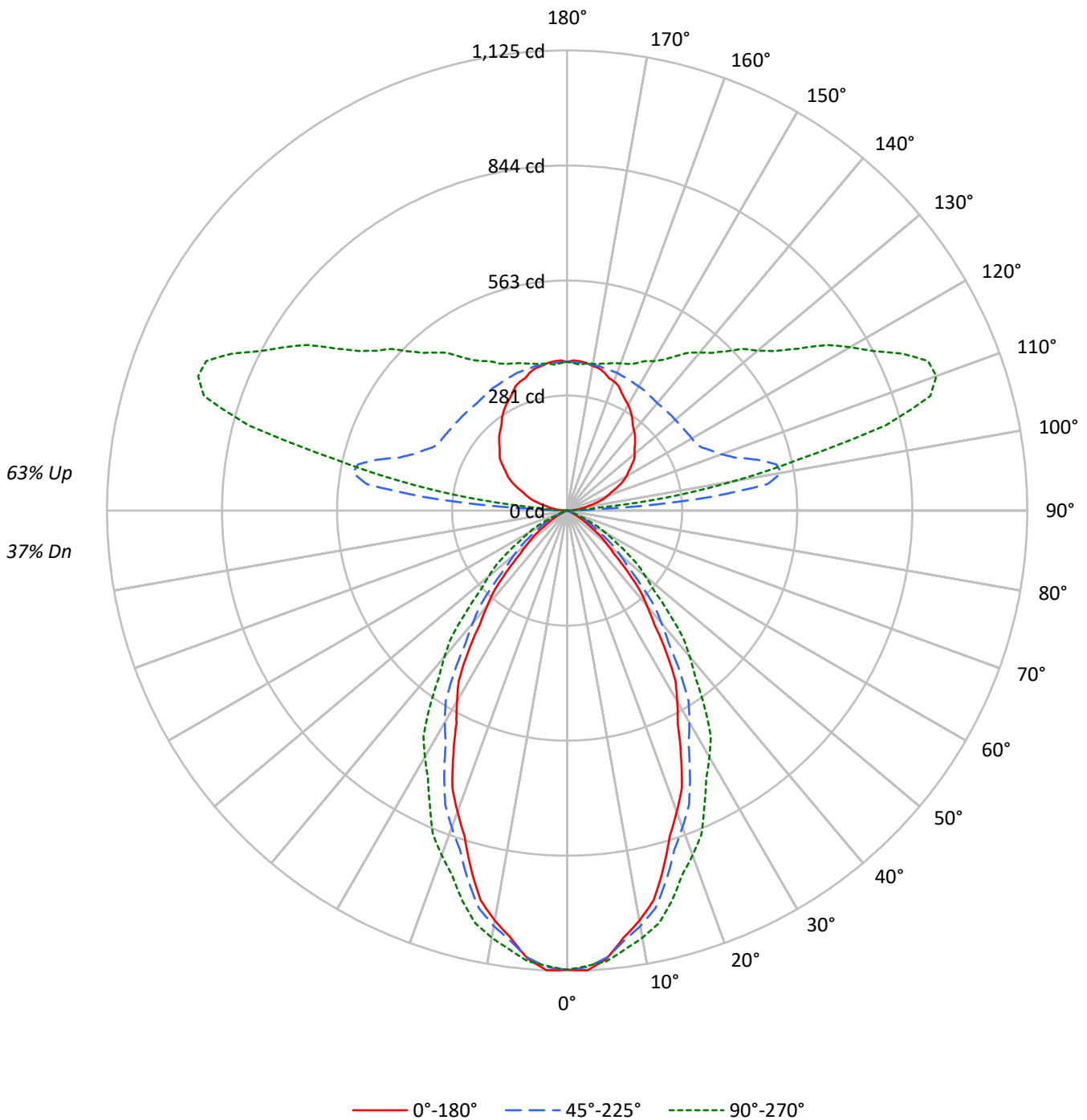
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	60	60	60	44	44	44	37				
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34				
2	89	82	77	73	81	75	71	67	62	59	56	49	47	46	38	37	36	31				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28				
4	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23				
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16				
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15				

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

	0°	45°	90°
0°	10357	10357	10357
5°	10190	10165	10240
10°	9535	9662	9932
15°	8668	8943	9441
20°	7695	8094	8804
25°	6700	7232	8089
30°	5740	6371	7412
35°	4759	5407	6595
40°	3657	4324	5619
45°	2643	3274	4521
50°	1801	2440	3585
55°	1171	1765	2786
60°	672	1242	2015
65°	177	760	1020
70°	89	235	294
75°	39	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4521 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.4	2.8
10°-20°	262.0	7.3
20°-30°	328.0	9.1
30°-40°	303.0	8.4
40°-50°	203.6	5.7
50°-60°	105.2	2.9
60°-70°	32.9	0.9
70°-80°	2.1	0.1
80°-90°	0.0	0.0
90°-100°	165.7	4.6
100°-110°	471.4	13.1
110°-120°	451.7	12.6
120°-130°	357.5	9.9
130°-140°	286.9	8.0
140°-150°	224.6	6.2
150°-160°	164.4	4.6
160°-170°	101.8	2.8
170°-180°	34.5	1.0
0°-30°	692.4	19.2
0°-40°	995.4	27.7
0°-60°	1304.1	36.2
0°-90°	1339.2	37.2
90°-120°	1088.8	30.3
90°-150°	1957.8	54.4
90°-180°	2259.0	62.8
0°-180°	3597.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1100	1089	1098	1102	1106	102
15°	908	904	936	968	988	253
25°	658	664	710	759	795	302
35°	422	433	480	537	586	262
45°	203	215	251	300	346	159
55°	73	85	110	141	173	68
65°	8	16	35	42	47	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	18	71	321	111	68	21
105°	73	111	480	849	807	78
115°	136	165	364	772	906	134
125°	192	213	348	577	690	172
135°	235	255	344	487	551	181
145°	277	291	346	422	460	173
155°	317	324	355	381	397	146
165°	350	351	359	366	372	98
175°	366	364	363	361	358	35
180°	364	364	364	364	364	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1122.6	1122.6	1122.6	1122.6	1122.6
2.5°	1125.2	1114.6	1117.4	1117.3	1114.3
5°	1100.3	1089.2	1097.6	1101.5	1105.7
7.5°	1053.8	1045.1	1061.3	1073.5	1082.3
10°	1017.8	1010.3	1031.3	1047.9	1060.1
12.5°	976.1	970.3	995.7	1018.4	1034.1
15°	907.5	904.3	936.3	967.7	988.4
17.5°	834.1	834.0	870.5	909.5	934.5
20°	783.7	785.3	824.4	867.4	896.7
22.5°	733.3	737.0	778.8	823.7	857.1
25°	658.2	663.5	710.4	759.0	794.6
27.5°	586.1	593.9	643.1	693.7	737.0
30°	538.8	547.8	598.0	651.1	695.7
32.5°	492.3	503.0	551.9	608.1	653.6
35°	422.5	433.2	480.1	536.6	585.5
37.5°	350.5	360.9	406.8	462.4	515.2
40°	303.6	315.3	359.0	412.9	466.5
42.5°	261.0	272.7	313.8	366.8	417.4
45°	202.6	214.8	250.9	299.8	346.5
47.5°	154.1	167.4	199.1	243.3	285.9
50°	125.5	138.7	170.0	208.9	249.8
52.5°	102.4	115.3	143.5	180.2	217.7
55°	72.8	85.0	109.7	140.9	173.2
57.5°	50.3	60.8	83.0	109.0	134.4
60°	36.4	46.5	67.3	88.5	109.2
62.5°	24.2	33.5	53.9	70.1	84.0
65°	8.1	15.6	34.8	41.9	46.7
67.5°	4.1	5.0	18.2	19.3	20.9
70°	3.3	3.3	8.7	9.3	10.9
72.5°	2.4	2.4	3.5	4.5	4.8
75°	1.1	1.1	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°	5.5	29.3	68.0	19.8	14.9
95°	18.0	71.4	320.7	111.0	68.4
97.5°	33.0	83.6	494.0	353.5	242.2
100°	43.5	90.9	531.6	538.4	414.7
102.5°	55.2	98.7	523.3	689.2	581.2
105°	73.3	111.1	480.4	848.6	806.7
107.5°	91.7	125.6	430.4	893.5	930.8
110°	104.4	136.1	401.6	876.3	960.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	116.5	146.7	382.3	835.7	955.2
115°	136.2	164.6	364.3	771.7	906.2
117.5°	153.5	180.1	353.6	701.8	844.3
120°	167.3	189.6	352.5	661.9	798.4
122.5°	178.3	200.6	349.8	626.8	753.6
125°	192.2	213.1	347.7	577.0	689.9
127.5°	207.2	226.8	346.6	547.2	640.2
130°	215.0	234.6	344.9	526.5	607.6
132.5°	223.3	242.3	344.9	510.3	584.9
135°	235.0	254.6	343.5	487.4	550.9
137.5°	246.1	265.1	343.4	468.0	522.9
140°	254.4	274.0	342.9	451.9	504.6
142.5°	263.8	280.1	344.5	439.0	486.4
145°	277.2	291.4	346.3	421.8	459.7
147.5°	288.7	302.4	349.4	404.4	437.1
150°	298.6	308.1	350.5	398.7	421.7
152.5°	306.4	316.4	351.6	390.9	412.3
155°	316.6	324.0	354.6	381.2	396.8
157.5°	329.3	333.8	355.3	376.8	387.9
160°	335.9	339.3	358.1	373.5	382.9
162.5°	339.8	343.7	358.6	370.7	378.0
165°	349.8	351.1	358.8	366.5	371.9
167.5°	356.5	355.3	361.9	365.4	367.6
170°	358.8	358.1	360.8	361.6	364.3
172.5°	363.7	361.4	362.5	360.5	362.6
175°	366.4	364.3	362.9	360.8	358.1
177.5°	367.5	364.2	362.5	360.3	360.8
180°	363.6	363.6	363.6	363.6	363.6

(END OF REPORT)