

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: P521071

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_4500K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521071  
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-125D-92765-1D-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 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: 5596.5 lumens  
Efficiency: N/A  
Efficacy: 78.3 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: General Diffuse

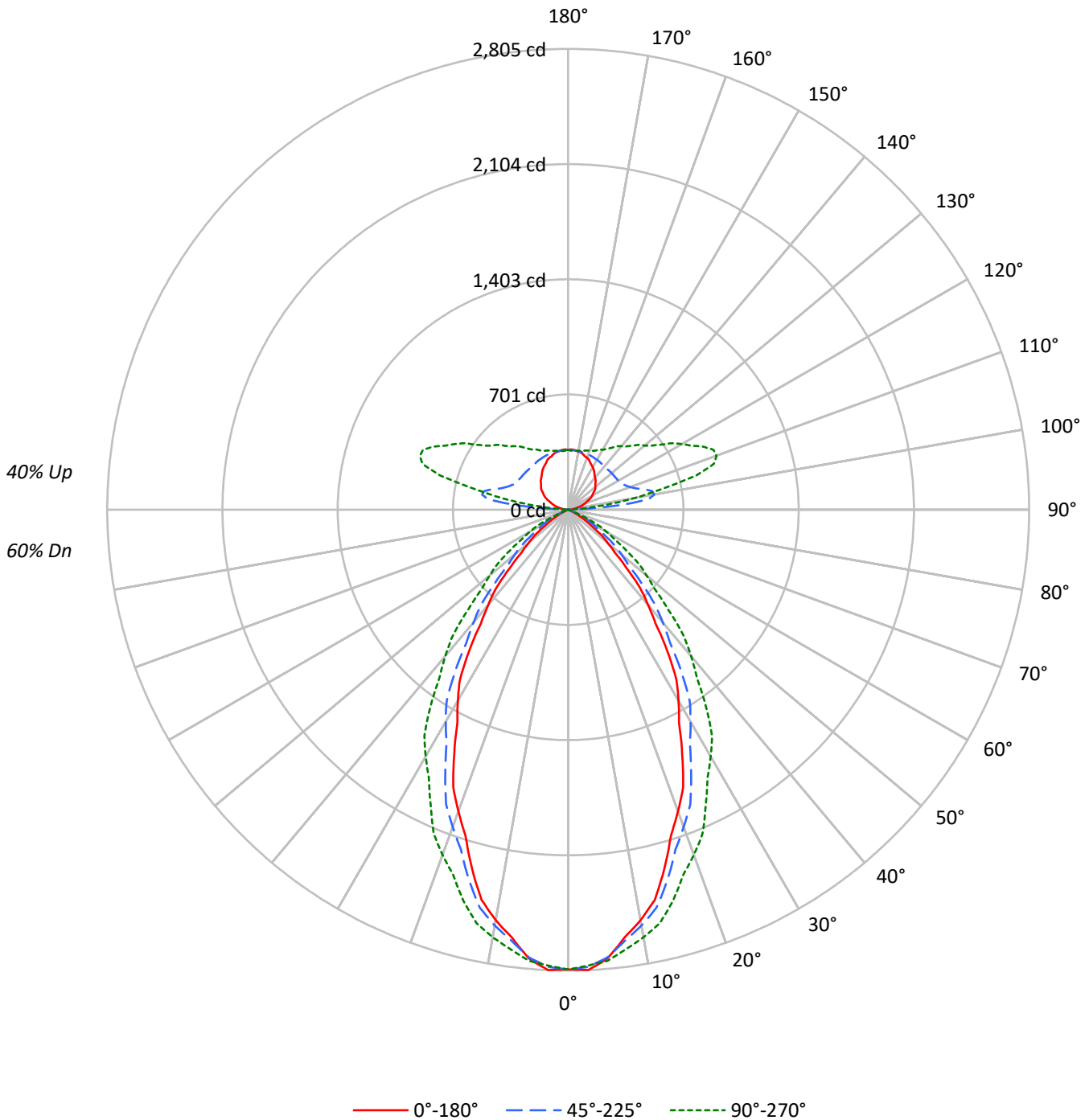
Input Watts (W): 71.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20									20									20									20									
RC	80									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	50	30	10	0													
RCR																																					
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60																			
1	102	99	95	92	95	92	90	87	81	79	77	70	69	68	61	60	59	54																			
2	95	89	83	79	89	83	79	75	74	70	68	65	62	60	56	55	53	49																			
3	88	80	74	69	82	75	70	66	67	63	60	59	56	54	52	50	48	44																			
4	82	72	66	60	77	68	62	58	61	56	53	54	51	48	48	45	43	40																			
5	76	66	59	53	71	62	56	51	56	51	47	50	46	43	44	42	39	37																			
6	71	60	53	48	66	57	51	46	51	46	43	46	42	39	41	38	36	33																			
7	66	55	48	43	62	52	46	42	47	42	39	43	39	36	38	35	33	31																			
8	62	51	44	39	58	48	42	38	44	39	35	40	36	33	36	33	30	28																			
9	58	47	40	36	55	45	39	34	41	36	32	37	33	30	33	30	28	26																			
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	31	28	26	24																			

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

	0°	45°	90°
0°	25816	25816	25816
5°	25400	25337	25526
10°	23767	24084	24755
15°	21607	22292	23533
20°	19179	20176	21944
25°	16702	18026	20161
30°	14307	15878	18474
35°	11862	13479	16436
40°	9114	10777	14005
45°	6588	8160	11269
50°	4488	6082	8938
55°	2918	4398	6946
60°	1674	3098	5021
65°	443	1891	2541
70°	219	585	731
75°	96	50	0
80°	74	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11269 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.4	4.6
10°-20°	653.0	11.7
20°-30°	817.5	14.6
30°-40°	755.1	13.5
40°-50°	507.4	9.1
50°-60°	262.1	4.7
60°-70°	82.1	1.5
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	165.7	3.0
100°-110°	471.4	8.4
110°-120°	451.7	8.1
120°-130°	357.5	6.4
130°-140°	286.9	5.1
140°-150°	224.6	4.0
150°-160°	164.4	2.9
160°-170°	101.8	1.8
170°-180°	34.5	0.6
0°-30°	1725.9	30.8
0°-40°	2481.1	44.3
0°-60°	3250.5	58.1
0°-90°	3337.9	59.6
90°-120°	1088.8	19.5
90°-150°	1957.8	35.0
90°-180°	2259.0	40.4
0°-180°	5596.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2798	2798	2798	2798	2798	
5°	2743	2715	2736	2746	2756	254
15°	2262	2254	2334	2412	2464	630
25°	1641	1654	1771	1892	1980	752
35°	1053	1080	1197	1338	1459	652
45°	505	535	625	747	864	397
55°	181	212	273	351	432	169
65°	20	39	87	104	116	34
75°	3	3	1	0	0	4
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°	2798.1	2798.1	2798.1	2798.1	2798.1
2.5°	2804.6	2778.1	2785.1	2785.0	2777.5
5°	2742.6	2714.8	2735.8	2745.6	2756.2
7.5°	2626.7	2605.0	2645.4	2675.7	2697.7
10°	2536.9	2518.3	2570.7	2612.0	2642.4
12.5°	2432.9	2418.6	2481.9	2538.6	2577.5
15°	2262.1	2254.1	2333.8	2412.1	2463.8
17.5°	2079.0	2078.8	2169.7	2267.0	2329.2
20°	1953.4	1957.4	2054.9	2162.2	2235.0
22.5°	1827.8	1837.0	1941.2	2053.0	2136.4
25°	1640.7	1653.9	1770.7	1891.8	1980.5
27.5°	1460.9	1480.2	1603.1	1729.0	1837.0
30°	1342.9	1365.4	1490.4	1622.9	1734.1
32.5°	1227.0	1253.7	1375.6	1515.8	1629.1
35°	1053.2	1079.7	1196.7	1337.5	1459.3
37.5°	873.7	899.6	1013.9	1152.6	1284.1
40°	756.7	785.8	894.8	1029.2	1162.8
42.5°	650.6	679.7	782.2	914.2	1040.5
45°	504.9	535.4	625.4	747.2	863.7
47.5°	384.2	417.3	496.3	606.4	712.6
50°	312.7	345.8	423.7	520.8	622.7
52.5°	255.3	287.3	357.7	449.1	542.6
55°	181.4	211.8	273.4	351.1	431.8
57.5°	125.4	151.6	206.8	271.6	334.9
60°	90.7	115.8	167.9	220.5	272.1
62.5°	60.4	83.4	134.3	174.6	209.3
65°	20.3	38.8	86.6	104.5	116.4
67.5°	10.3	12.4	45.5	48.0	52.0
70°	8.1	8.1	21.7	23.1	27.1
72.5°	6.0	6.0	8.7	11.1	11.9
75°	2.7	2.7	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	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)