

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: P521067

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521067  
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\_2700K  
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 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5174.7 lumens  
Efficiency: N/A  
Efficacy: 72.5 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

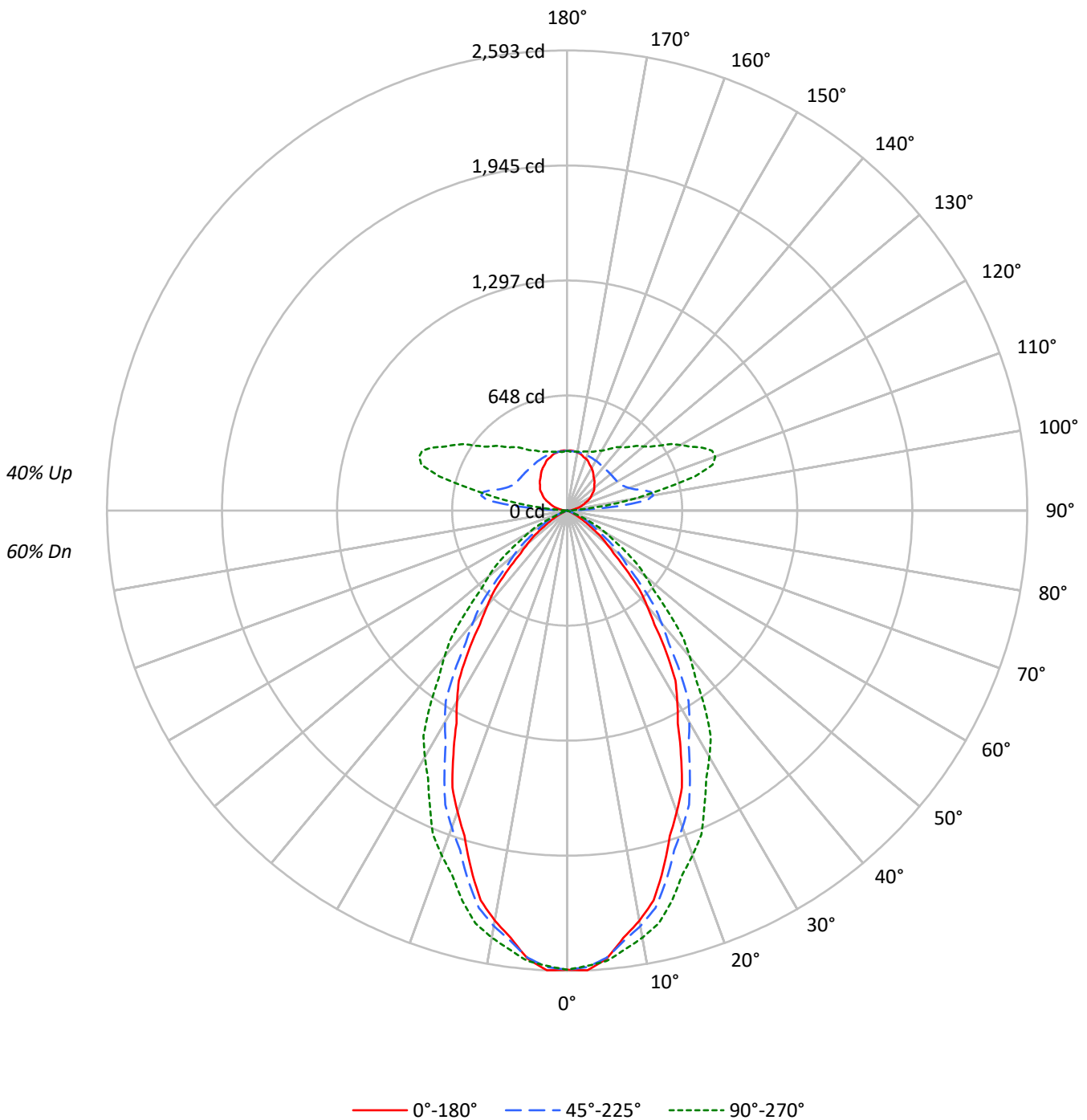
Input Watts (W): 71.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	23870	23870	23870
5°	23486	23429	23602
10°	21976	22269	22890
15°	19978	20612	21760
20°	17734	18656	20290
25°	15443	16667	18642
30°	13228	14682	17082
35°	10968	12463	15197
40°	8427	9965	12950
45°	6092	7546	10420
50°	4150	5624	8265
55°	2698	4066	6423
60°	1548	2864	4643
65°	410	1749	2349
70°	202	540	674
75°	89	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10420 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	236.1	4.6
10°-20°	603.8	11.7
20°-30°	755.9	14.6
30°-40°	698.2	13.5
40°-50°	469.2	9.1
50°-60°	242.3	4.7
60°-70°	75.9	1.5
70°-80°	4.8	0.1
80°-90°	0.1	0.0
90°-100°	153.2	3.0
100°-110°	435.9	8.4
110°-120°	417.6	8.1
120°-130°	330.5	6.4
130°-140°	265.3	5.1
140°-150°	207.7	4.0
150°-160°	152.0	2.9
160°-170°	94.1	1.8
170°-180°	31.9	0.6
0°-30°	1595.8	30.8
0°-40°	2294.1	44.3
0°-60°	3005.6	58.1
0°-90°	3086.4	59.6
90°-120°	1006.7	19.5
90°-150°	1810.2	35.0
90°-180°	2088.0	40.4
0°-180°	5174.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2587	2587	2587	2587	2587	
5°	2536	2510	2530	2539	2548	235
15°	2092	2084	2158	2230	2278	583
25°	1517	1529	1637	1749	1831	695
35°	974	998	1106	1237	1349	603
45°	467	495	578	691	799	367
55°	168	196	253	325	399	157
65°	19	36	80	97	108	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

TEST NUMBER: P521067

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2587.2	2587.2	2587.2	2587.2	2587.2
2.5°	2593.2	2568.8	2575.2	2575.1	2568.2
5°	2535.9	2510.2	2529.7	2538.6	2548.4
7.5°	2428.8	2408.7	2446.0	2474.0	2494.4
10°	2345.7	2328.5	2377.0	2415.1	2443.3
12.5°	2249.5	2236.3	2294.8	2347.2	2383.2
15°	2091.6	2084.2	2157.9	2230.3	2278.1
17.5°	1922.3	1922.1	2006.2	2096.1	2153.7
20°	1806.2	1809.9	1900.1	1999.2	2066.5
22.5°	1690.0	1698.6	1794.9	1898.3	1975.4
25°	1517.0	1529.3	1637.2	1749.2	1831.2
27.5°	1350.8	1368.7	1482.2	1598.7	1698.5
30°	1241.7	1262.5	1378.1	1500.6	1603.4
32.5°	1134.5	1159.3	1272.0	1401.5	1506.3
35°	973.8	998.3	1106.5	1236.7	1349.3
37.5°	807.8	831.8	937.5	1065.7	1187.3
40°	699.7	726.6	827.4	951.6	1075.2
42.5°	601.6	628.5	723.2	845.3	962.0
45°	466.9	495.0	578.3	690.9	798.6
47.5°	355.2	385.8	458.9	560.7	658.9
50°	289.1	319.7	391.8	481.5	575.8
52.5°	236.1	265.7	330.7	415.3	501.7
55°	167.7	195.9	252.8	324.6	399.3
57.5°	115.9	140.1	191.3	251.2	309.7
60°	83.9	107.1	155.2	203.9	251.6
62.5°	55.8	77.1	124.2	161.4	193.5
65°	18.8	35.9	80.1	96.6	107.6
67.5°	9.5	11.5	42.1	44.4	48.1
70°	7.5	7.5	20.0	21.4	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
75°	2.5	2.5	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)