

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: P521068

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521068  
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\_3000K  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5282.0 lumens  
Efficiency: N/A  
Efficacy: 73.9 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

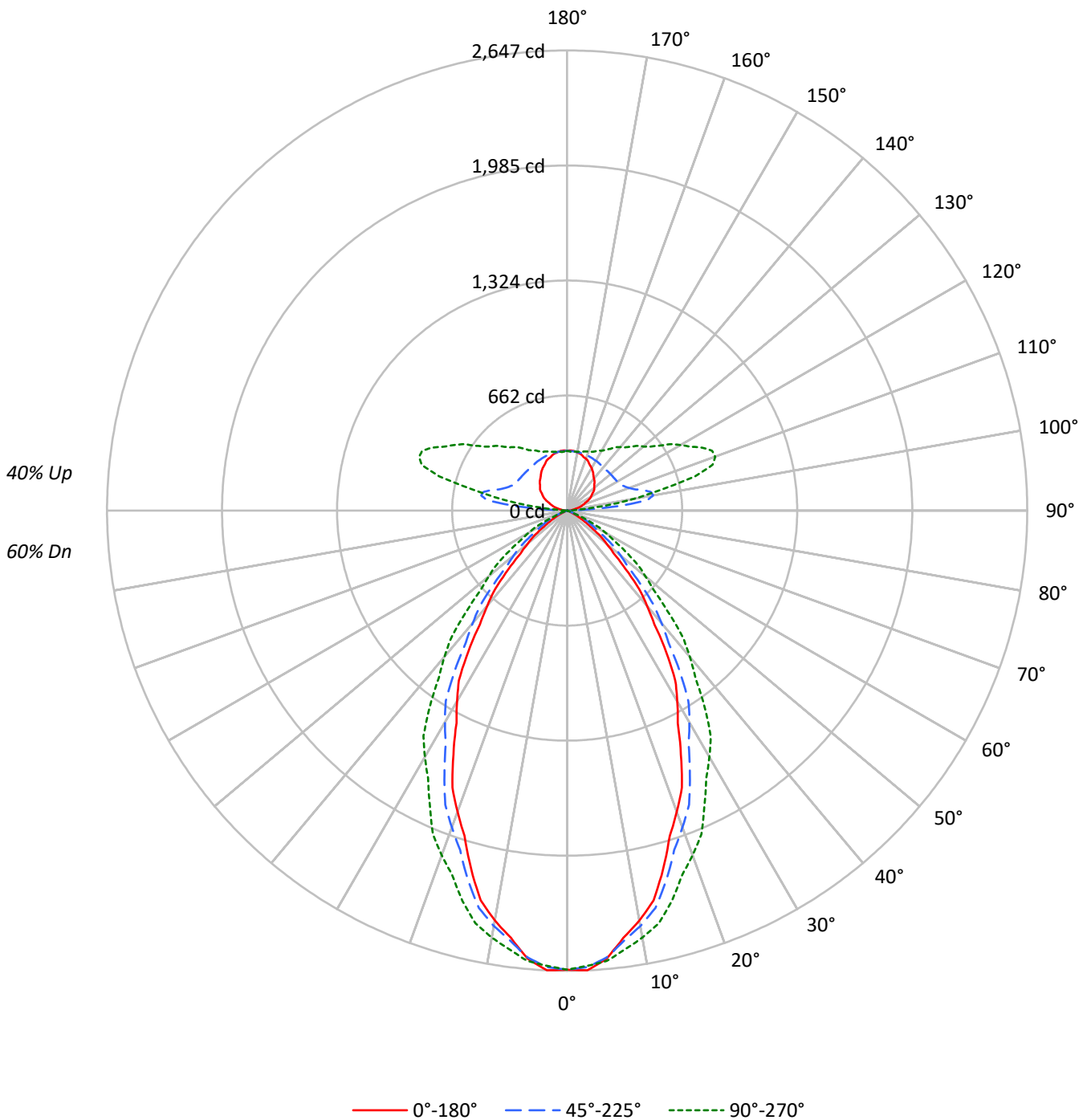
Input Watts (W): 71.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	24365	24365	24365
5°	23973	23914	24092
10°	22431	22730	23364
15°	20392	21039	22210
20°	18101	19042	20711
25°	15764	17012	19028
30°	13502	14986	17436
35°	11196	12721	15513
40°	8602	10171	13218
45°	6219	7702	10635
50°	4236	5740	8436
55°	2754	4152	6556
60°	1580	2923	4739
65°	419	1786	2399
70°	208	550	691
75°	93	46	0
80°	69	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10635 cd/sqm

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CATALOG NUMBER: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.0	4.6
10°-20°	616.3	11.7
20°-30°	771.6	14.6
30°-40°	712.7	13.5
40°-50°	478.9	9.1
50°-60°	247.4	4.7
60°-70°	77.5	1.5
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	156.4	3.0
100°-110°	444.9	8.4
110°-120°	426.3	8.1
120°-130°	337.4	6.4
130°-140°	270.8	5.1
140°-150°	212.0	4.0
150°-160°	155.1	2.9
160°-170°	96.1	1.8
170°-180°	32.6	0.6
0°-30°	1628.9	30.8
0°-40°	2341.6	44.3
0°-60°	3067.9	58.1
0°-90°	3150.3	59.6
90°-120°	1027.6	19.5
90°-150°	1847.8	35.0
90°-180°	2132.0	40.4
0°-180°	5282.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2641	2641	2641	2641	2641	
5°	2588	2562	2582	2591	2601	240
15°	2135	2127	2203	2277	2325	595
25°	1548	1561	1671	1786	1869	710
35°	994	1019	1129	1262	1377	616
45°	477	505	590	705	815	374
55°	171	200	258	331	408	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

TEST NUMBER: P521068

CATALOG NUMBER: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2640.9	2640.9	2640.9	2640.9	2640.9
2.5°	2647.0	2622.0	2628.6	2628.4	2621.4
5°	2588.5	2562.2	2582.1	2591.3	2601.3
7.5°	2479.1	2458.6	2496.7	2525.3	2546.1
10°	2394.3	2376.8	2426.2	2465.2	2493.9
12.5°	2296.2	2282.7	2342.4	2395.9	2432.6
15°	2134.9	2127.4	2202.6	2276.6	2325.3
17.5°	1962.2	1961.9	2047.8	2139.6	2198.3
20°	1843.6	1847.4	1939.4	2040.7	2109.4
22.5°	1725.1	1733.8	1832.1	1937.7	2016.4
25°	1548.5	1561.0	1671.1	1785.5	1869.2
27.5°	1378.8	1397.1	1513.0	1631.8	1733.7
30°	1267.4	1288.6	1406.7	1531.7	1636.6
32.5°	1158.0	1183.3	1298.3	1430.6	1537.5
35°	994.0	1019.0	1129.4	1262.4	1377.3
37.5°	824.6	849.1	956.9	1087.8	1212.0
40°	714.2	741.7	844.5	971.3	1097.5
42.5°	614.0	641.5	738.2	862.8	982.0
45°	476.6	505.3	590.3	705.2	815.1
47.5°	362.6	393.8	468.4	572.4	672.5
50°	295.1	326.4	399.9	491.5	587.7
52.5°	241.0	271.2	337.5	423.9	512.1
55°	171.2	199.9	258.1	331.4	407.6
57.5°	118.3	143.0	195.2	256.4	316.1
60°	85.6	109.3	158.4	208.1	256.8
62.5°	57.0	78.7	126.7	164.8	197.5
65°	19.2	36.7	81.8	98.6	109.9
67.5°	9.7	11.7	42.9	45.3	49.1
70°	7.7	7.7	20.4	21.8	25.6
72.5°	5.6	5.6	8.2	10.5	11.2
75°	2.6	2.6	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°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

TEST NUMBER: P521068

CATALOG NUMBER: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_3000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)