

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: P521072

Luminaire Tested: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521072  
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\_5000K  
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 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5658.3 lumens  
Efficiency: N/A  
Efficacy: 79.1 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: General Diffuse

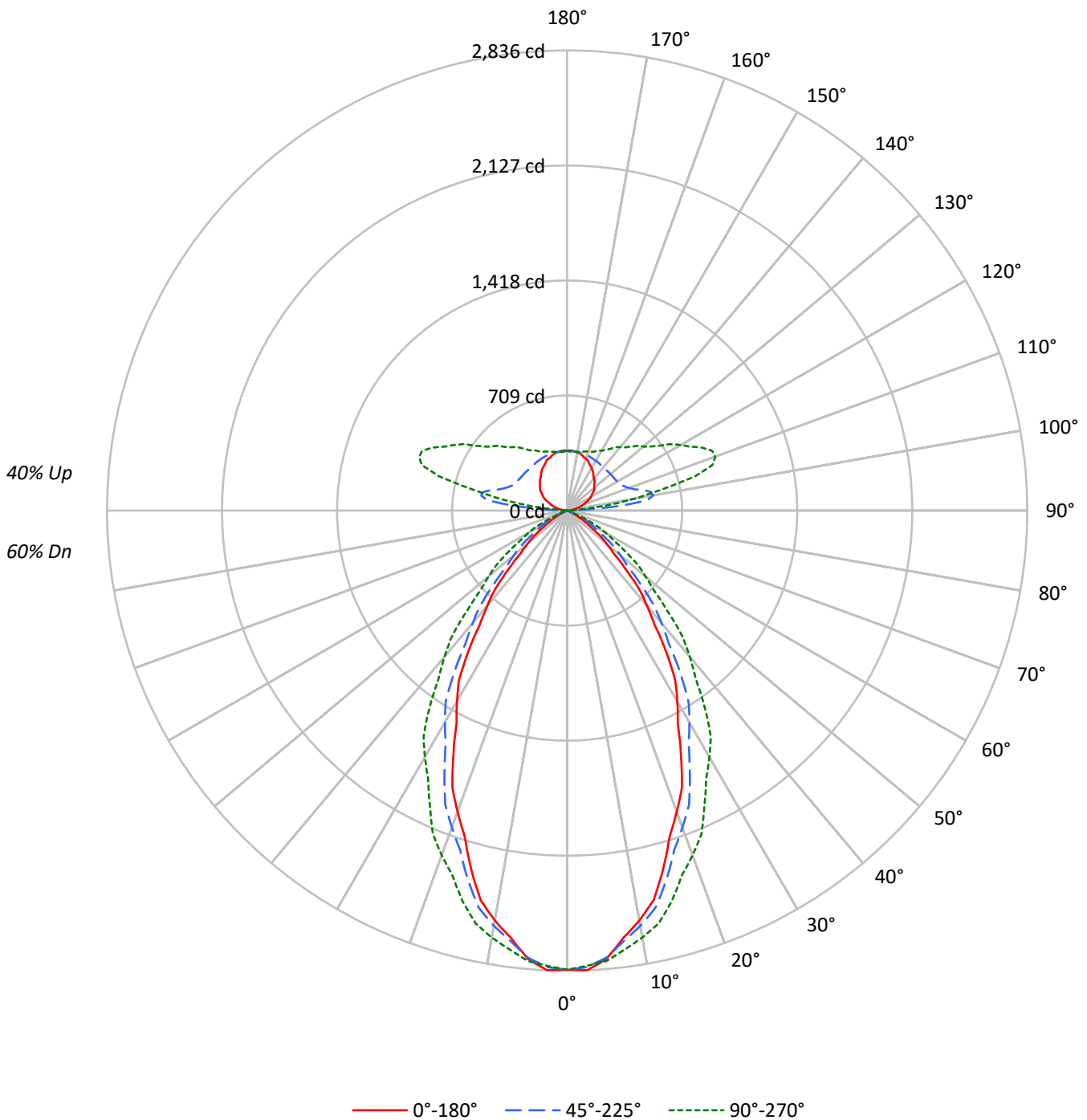
Input Watts (W): 71.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	84	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°	26102	26102	26102
5°	25682	25618	25808
10°	24029	24350	25030
15°	21846	22538	23793
20°	19391	20400	22186
25°	16888	18224	20384
30°	14464	16054	18679
35°	11993	13627	16618
40°	9215	10896	14160
45°	6661	8250	11393
50°	4539	6149	9037
55°	2950	4448	7023
60°	1692	3131	5076
65°	448	1912	2570
70°	221	591	739
75°	96	50	0
80°	74	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11393 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.2	4.6
10°-20°	660.3	11.7
20°-30°	826.6	14.6
30°-40°	763.5	13.5
40°-50°	513.0	9.1
50°-60°	265.0	4.7
60°-70°	83.0	1.5
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	167.5	3.0
100°-110°	476.6	8.4
110°-120°	456.7	8.1
120°-130°	361.4	6.4
130°-140°	290.1	5.1
140°-150°	227.1	4.0
150°-160°	166.2	2.9
160°-170°	102.9	1.8
170°-180°	34.9	0.6
0°-30°	1745.0	30.8
0°-40°	2508.5	44.3
0°-60°	3286.5	58.1
0°-90°	3374.8	59.6
90°-120°	1100.8	19.5
90°-150°	1979.5	35.0
90°-180°	2283.0	40.3
0°-180°	5658.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2773	2745	2766	2776	2787	257
15°	2287	2279	2360	2439	2491	637
25°	1659	1672	1790	1913	2002	761
35°	1065	1092	1210	1352	1475	660
45°	510	541	632	756	873	401
55°	183	214	276	355	437	171
65°	20	39	88	106	118	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

TEST NUMBER: P521072

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2829.1	2829.1	2829.1	2829.1	2829.1
2.5°	2835.6	2808.9	2815.9	2815.8	2808.3
5°	2773.0	2744.9	2766.1	2775.9	2786.6
7.5°	2655.8	2633.9	2674.7	2705.3	2727.5
10°	2564.9	2546.2	2599.1	2640.9	2671.7
12.5°	2459.8	2445.4	2509.4	2566.6	2606.0
15°	2287.1	2279.0	2359.6	2438.8	2491.0
17.5°	2102.0	2101.8	2193.7	2292.1	2355.0
20°	1975.0	1979.0	2077.7	2186.1	2259.7
22.5°	1848.0	1857.4	1962.7	2075.8	2160.1
25°	1658.9	1672.2	1790.2	1912.7	2002.4
27.5°	1477.1	1496.6	1620.8	1748.1	1857.3
30°	1357.7	1380.5	1506.9	1640.9	1753.3
32.5°	1240.6	1267.6	1390.9	1532.5	1647.1
35°	1064.8	1091.6	1209.9	1352.3	1475.4
37.5°	883.4	909.6	1025.1	1165.3	1298.3
40°	765.1	794.5	904.7	1040.5	1175.7
42.5°	657.8	687.2	790.8	924.3	1052.0
45°	510.5	541.3	632.3	755.5	873.2
47.5°	388.4	421.9	501.8	613.1	720.5
50°	316.2	349.6	428.4	526.5	629.6
52.5°	258.1	290.5	361.6	454.1	548.6
55°	183.4	214.2	276.5	355.0	436.6
57.5°	126.7	153.2	209.1	274.6	338.6
60°	91.7	117.1	169.7	222.9	275.1
62.5°	61.0	84.3	135.8	176.5	211.6
65°	20.5	39.3	87.6	105.7	117.7
67.5°	10.4	12.5	46.0	48.5	52.6
70°	8.2	8.2	21.9	23.4	27.4
72.5°	6.0	6.0	8.8	11.2	12.0
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°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)