

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: P520976

Luminaire Tested: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4\_2700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520976  
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-025U-050D-92765-1D-UNV-STD-W-4\_2700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 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: 3091.1 lumens  
Efficiency: N/A  
Efficacy: 89.3 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

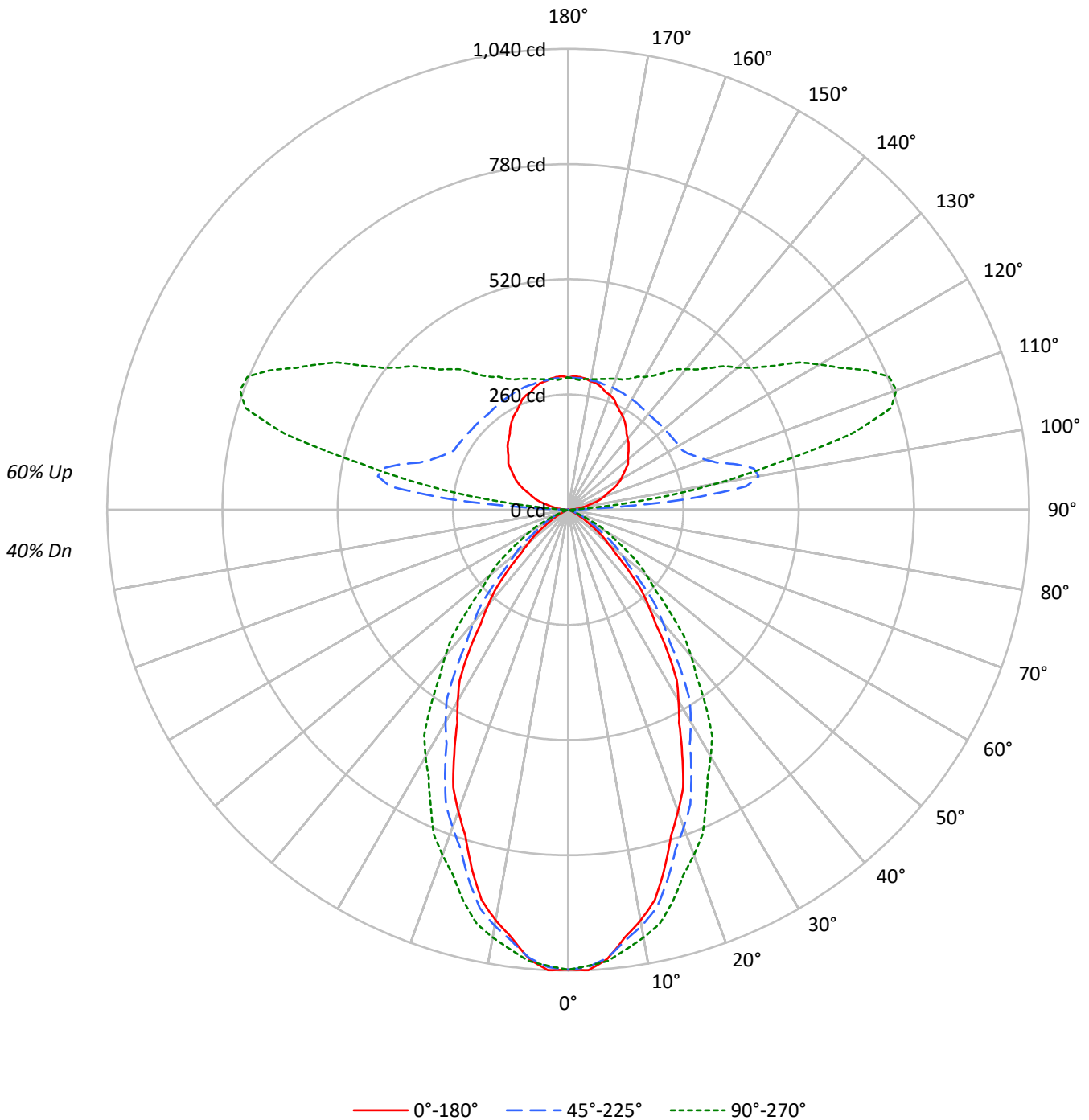
Input Watts (W): 34.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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									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	50	30	10	0														
RCR																																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40																				
1	97	93	90	87	88	85	83	80	70	68	67	56	55	54	44	43	42	37																				
2	89	83	78	73	82	76	72	68	63	60	58	51	49	48	40	39	38	33																				
3	83	74	68	63	75	68	63	59	57	53	50	47	44	42	37	35	34	30																				
4	76	67	60	55	70	62	56	51	52	48	44	43	40	37	34	32	31	27																				
5	71	60	53	48	65	56	50	45	47	43	39	39	36	33	32	29	28	25																				
6	66	55	47	42	60	51	44	40	43	38	35	36	33	30	29	27	25	22																				
7	61	50	43	38	56	46	40	36	40	35	31	33	30	27	27	25	23	21																				
8	57	46	39	34	52	42	36	32	36	32	28	31	27	25	25	23	21	19																				
9	53	42	35	31	49	39	33	29	34	29	26	29	25	23	24	21	20	17																				
10	50	39	32	28	46	36	30	26	31	27	24	27	23	21	22	20	18	16																				

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

	0°	45°	90°
0°	9577	9577	9577
5°	9423	9399	9469
10°	8817	8934	9183
15°	8015	8269	8729
20°	7114	7485	8140
25°	6196	6686	7479
30°	5308	5890	6853
35°	4400	5000	6097
40°	3381	3997	5196
45°	2444	3027	4181
50°	1665	2256	3316
55°	1083	1631	2577
60°	620	1150	1862
65°	164	701	943
70°	81	216	270
75°	36	18	0
80°	27	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4181 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.7	3.1
10°-20°	242.2	7.8
20°-30°	303.3	9.8
30°-40°	280.1	9.1
40°-50°	188.2	6.1
50°-60°	97.2	3.1
60°-70°	30.4	1.0
70°-80°	1.9	0.1
80°-90°	0.0	0.0
90°-100°	135.9	4.4
100°-110°	386.8	12.5
110°-120°	370.6	12.0
120°-130°	293.3	9.5
130°-140°	235.4	7.6
140°-150°	184.3	6.0
150°-160°	134.8	4.4
160°-170°	83.5	2.7
170°-180°	28.3	0.9
0°-30°	640.2	20.7
0°-40°	920.4	29.8
0°-60°	1205.8	39.0
0°-90°	1238.2	40.1
90°-120°	893.2	28.9
90°-150°	1606.2	52.0
90°-180°	1853.0	59.9
0°-180°	3091.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1017	1007	1015	1018	1022	94
15°	839	836	866	895	914	234
25°	609	614	657	702	735	279
35°	391	400	444	496	541	242
45°	187	199	232	277	320	147
55°	67	79	101	130	160	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1038.0	1038.0	1038.0	1038.0	1038.0
2.5°	1040.4	1030.6	1033.2	1033.1	1030.3
5°	1017.4	1007.1	1014.9	1018.5	1022.4
7.5°	974.4	966.4	981.3	992.6	1000.7
10°	941.1	934.2	953.6	968.9	980.2
12.5°	902.5	897.2	920.7	941.7	956.1
15°	839.1	836.2	865.7	894.8	913.9
17.5°	771.2	771.1	804.9	841.0	864.0
20°	724.6	726.1	762.3	802.1	829.1
22.5°	678.0	681.5	720.1	761.6	792.5
25°	608.6	613.5	656.8	701.8	734.7
27.5°	541.9	549.1	594.7	641.4	681.4
30°	498.2	506.5	552.9	602.0	643.3
32.5°	455.2	465.1	510.3	562.3	604.3
35°	390.7	400.5	443.9	496.2	541.3
37.5°	324.1	333.7	376.1	427.5	476.4
40°	280.7	291.5	331.9	381.8	431.4
42.5°	241.3	252.1	290.2	339.1	386.0
45°	187.3	198.6	232.0	277.2	320.4
47.5°	142.5	154.8	184.1	225.0	264.3
50°	116.0	128.3	157.2	193.2	231.0
52.5°	94.7	106.6	132.7	166.6	201.3
55°	67.3	78.6	101.4	130.2	160.2
57.5°	46.5	56.2	76.7	100.8	124.2
60°	33.6	43.0	62.3	81.8	100.9
62.5°	22.4	30.9	49.8	64.8	77.6
65°	7.5	14.4	32.1	38.8	43.2
67.5°	3.8	4.6	16.9	17.8	19.3
70°	3.0	3.0	8.0	8.6	10.0
72.5°	2.2	2.2	3.2	4.1	4.4
75°	1.0	1.0	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°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)