

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: P521190

Luminaire Tested: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521190  
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-100U-050D-92765-1D-UNV-STD-W-4\_5700K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6012.8 lumens  
Efficiency: N/A  
Efficacy: 113.7 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: Semi-Indirect

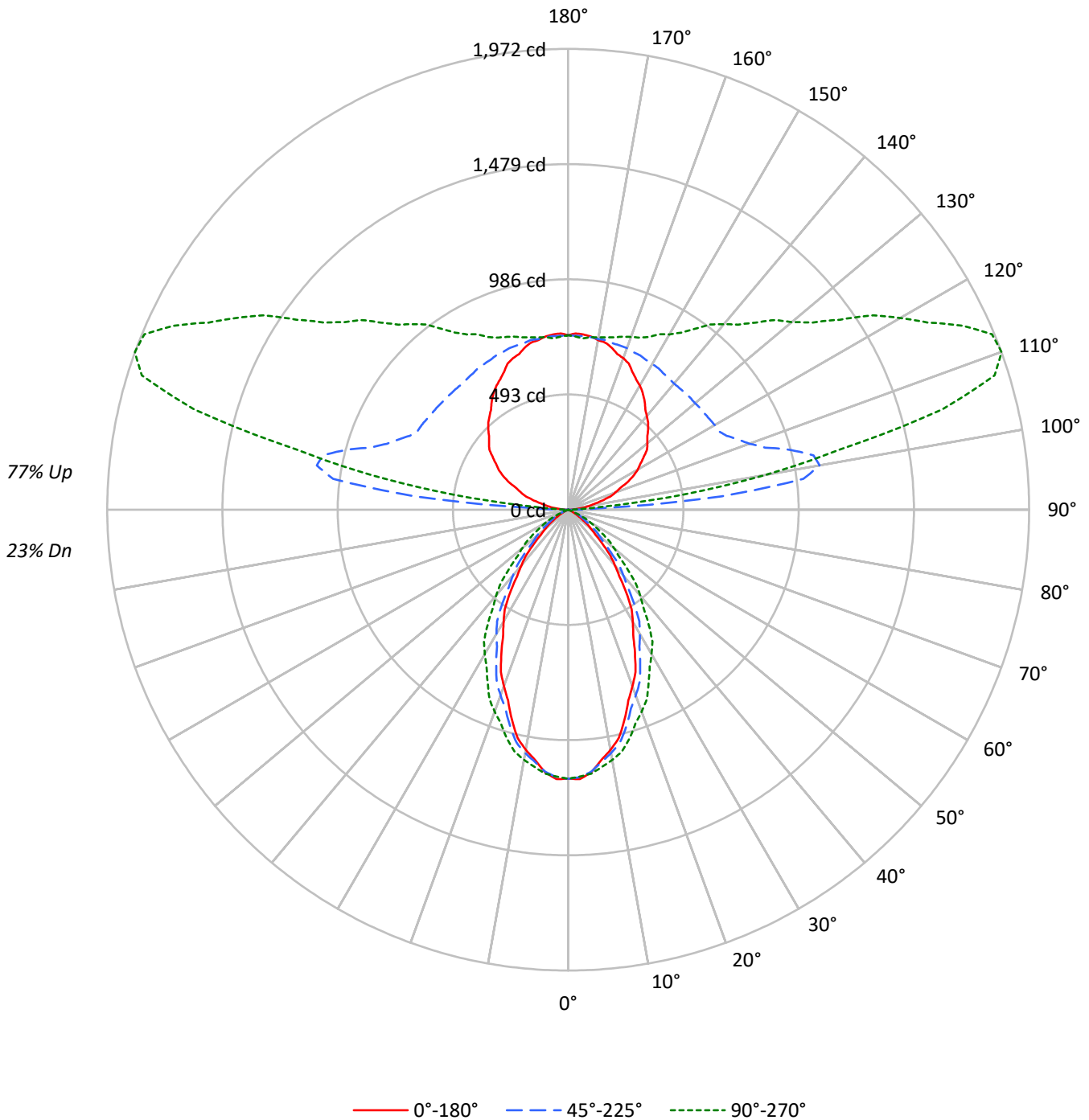
Input Watts (W): 52.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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

RF	20				20				20				20				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	0
RCR																		
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	93	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21
2	85	78	73	68	75	70	66	62	54	51	49	40	38	37	26	25	25	19
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15
5	66	56	48	43	59	50	44	39	39	35	32	30	27	25	20	19	18	14
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13
7	56	45	38	33	50	41	35	30	33	28	25	25	22	20	17	16	15	12
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	15	13	11
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10
10	46	35	28	24	41	31	26	22	25	21	18	20	17	15	14	12	11	9

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

	0°	45°	90°
0°	10621	10621	10621
5°	10450	10425	10502
10°	9778	9908	10185
15°	8889	9171	9682
20°	7890	8300	9028
25°	6871	7416	8295
30°	5886	6533	7600
35°	4880	5545	6762
40°	3749	4433	5762
45°	2710	3357	4636
50°	1847	2502	3677
55°	1200	1810	2858
60°	688	1275	2065
65°	183	777	1046
70°	89	240	299
75°	39	21	0
80°	32	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4636 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	1.7
10°-20°	268.7	4.5
20°-30°	336.3	5.6
30°-40°	310.7	5.2
40°-50°	208.8	3.5
50°-60°	107.8	1.8
60°-70°	33.8	0.6
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	340.3	5.7
100°-110°	968.4	16.1
110°-120°	927.8	15.4
120°-130°	734.4	12.2
130°-140°	589.4	9.8
140°-150°	461.5	7.7
150°-160°	337.6	5.6
160°-170°	209.1	3.5
170°-180°	71.0	1.2
0°-30°	710.1	11.8
0°-40°	1020.7	17.0
0°-60°	1337.3	22.2
0°-90°	1373.3	22.8
90°-120°	2236.6	37.2
90°-150°	4021.8	66.9
90°-180°	4640.0	77.2
0°-180°	6012.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1128	1117	1126	1130	1134	105
15°	931	927	960	992	1014	259
25°	675	680	728	778	815	309
35°	433	444	492	550	600	268
45°	208	220	257	307	355	163
55°	75	87	112	144	178	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	37	147	659	228	141	42
105°	150	228	987	1743	1657	159
115°	280	338	748	1585	1862	275
125°	395	438	714	1185	1417	353
135°	483	523	706	1001	1132	373
145°	569	599	711	866	944	356
155°	650	666	728	783	815	301
165°	718	721	737	753	764	202
175°	753	748	746	741	736	71
180°	747	747	747	747	747	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1153.8	1143.0	1145.8	1145.8	1142.7
5°	1128.3	1116.9	1125.6	1129.6	1133.9
7.5°	1080.7	1071.7	1088.4	1100.8	1109.8
10°	1043.7	1036.1	1057.6	1074.6	1087.1
12.5°	1000.9	995.0	1021.1	1044.4	1060.4
15°	930.6	927.4	960.1	992.4	1013.6
17.5°	855.3	855.2	892.6	932.7	958.3
20°	803.6	805.3	845.4	889.5	919.5
22.5°	752.0	755.8	798.6	844.6	878.9
25°	675.0	680.4	728.5	778.3	814.8
27.5°	601.0	609.0	659.5	711.3	755.8
30°	552.5	561.7	613.2	667.7	713.4
32.5°	504.8	515.8	566.0	623.6	670.2
35°	433.3	444.2	492.3	550.3	600.4
37.5°	359.4	370.1	417.1	474.2	528.3
40°	311.3	323.3	368.1	423.4	478.4
42.5°	267.7	279.6	321.8	376.1	428.1
45°	207.7	220.3	257.3	307.4	355.3
47.5°	158.1	171.7	204.2	249.5	293.2
50°	128.7	142.3	174.3	214.3	256.2
52.5°	105.0	118.2	147.1	184.8	223.2
55°	74.6	87.2	112.5	144.4	177.7
57.5°	51.6	62.4	85.1	111.8	137.8
60°	37.3	47.7	69.1	90.7	111.9
62.5°	24.8	34.3	55.2	71.8	86.1
65°	8.4	16.0	35.6	43.0	47.9
67.5°	4.2	5.1	18.7	19.8	21.4
70°	3.3	3.3	8.9	9.5	11.1
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	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°	11.4	60.2	139.7	40.7	30.7
95°	36.9	146.6	658.9	228.0	140.6
97.5°	67.9	171.7	1014.7	726.1	497.6
100°	89.5	186.6	1092.0	1106.1	852.0
102.5°	113.3	202.7	1074.9	1415.8	1193.9
105°	150.5	228.3	986.9	1743.2	1657.1
107.5°	188.3	258.0	884.1	1835.5	1912.1
110°	214.4	279.7	825.0	1800.2	1972.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	239.4	301.3	785.2	1716.7	1962.1
115°	279.7	338.0	748.3	1585.3	1861.6
117.5°	315.2	369.9	726.5	1441.7	1734.4
120°	343.6	389.5	724.2	1359.6	1640.1
122.5°	366.4	412.2	718.5	1287.6	1548.1
125°	394.8	437.8	714.2	1185.3	1417.1
127.5°	425.7	466.0	712.0	1124.1	1315.2
130°	441.6	481.9	708.6	1081.5	1248.2
132.5°	458.7	497.8	708.6	1048.3	1201.6
135°	482.8	523.1	705.7	1001.2	1131.7
137.5°	505.5	544.7	705.4	961.3	1074.1
140°	522.6	562.8	704.3	928.3	1036.6
142.5°	541.9	575.5	707.7	901.9	999.1
145°	569.4	598.6	711.4	866.5	944.3
147.5°	593.0	621.3	717.7	830.8	898.0
150°	613.4	632.9	719.9	819.0	866.2
152.5°	629.3	649.9	722.2	803.0	846.9
155°	650.3	665.6	728.4	783.1	815.1
157.5°	676.5	685.6	729.9	774.1	796.9
160°	690.1	697.1	735.5	767.2	786.7
162.5°	698.1	706.1	736.7	761.4	776.4
165°	718.5	721.3	737.0	752.8	763.9
167.5°	732.4	729.9	743.5	750.7	755.1
170°	737.0	735.6	741.2	742.8	748.3
172.5°	747.2	742.5	744.6	740.5	744.9
175°	752.6	748.4	745.5	741.1	735.5
177.5°	754.9	748.2	744.6	740.1	741.2
180°	746.9	746.9	746.9	746.9	746.9

(END OF REPORT)