

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: P853597

Luminaire Tested: SQ2-BBN-075U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853597  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G3-2308-130-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBN-075U-050D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

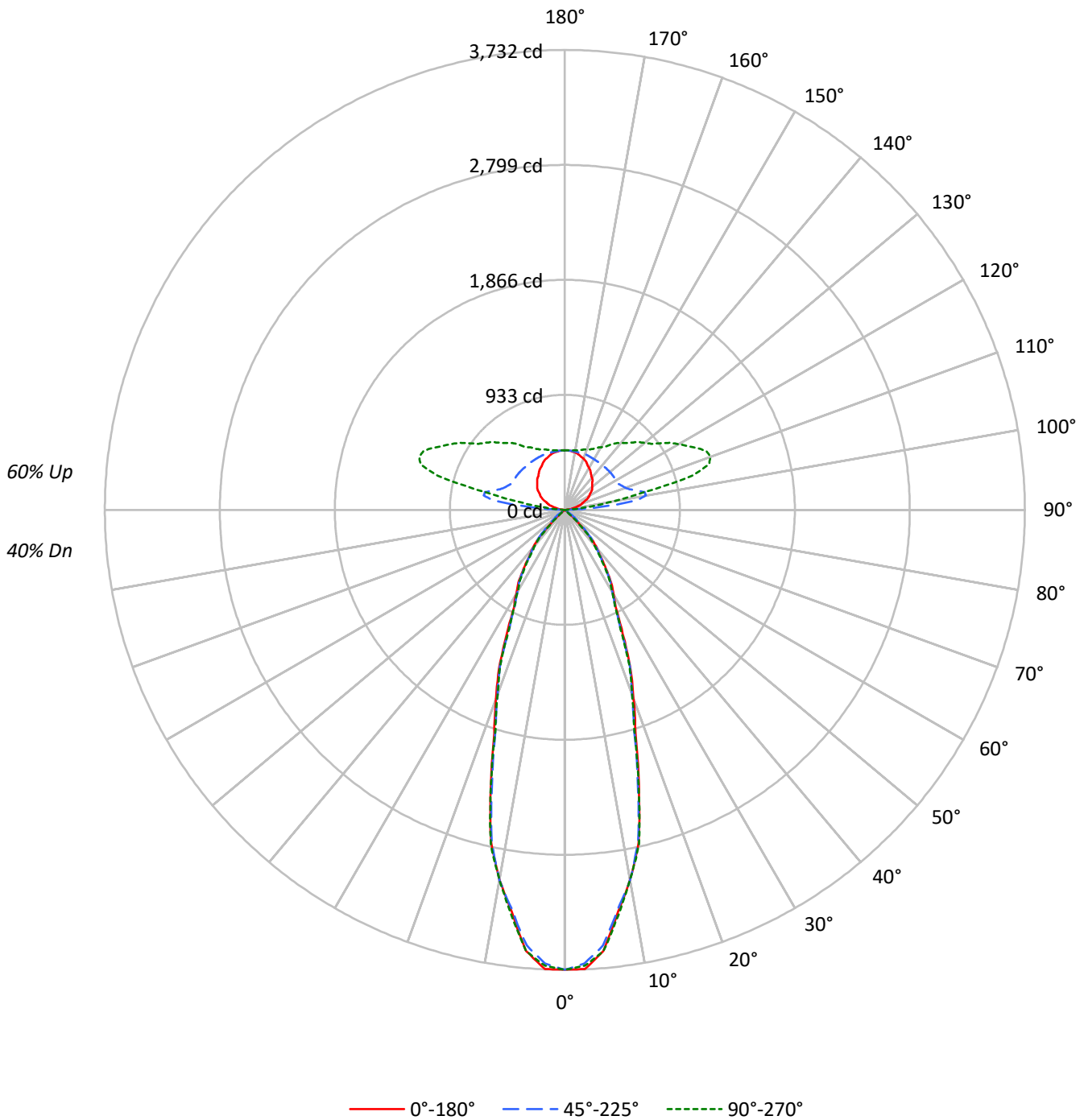
Lumens per Lamp: N/A  
Luminaire Lumens: 5007.8 lumens  
Efficiency: N/A  
Efficacy: 121.0 lumens/watt  
Spacing Criteria (0/90/45): 0.58 / 0.58 / 0.62  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 41.4  
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					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	0	
RCR																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	98	94	91	88	89	86	84	81	71	69	68	57	56	55	45	44	44	38				
2	91	85	80	76	83	78	74	70	65	62	60	53	51	50	42	41	40	35				
3	84	77	71	66	77	71	66	62	60	56	53	49	47	45	40	39	37	33				
4	79	70	64	59	72	65	59	55	55	51	48	46	43	41	38	36	35	31				
5	74	64	57	52	68	59	54	49	51	47	44	43	40	38	36	34	32	29				
6	69	59	52	47	63	55	49	45	47	43	40	40	37	35	34	32	30	28				
7	65	54	48	43	59	51	45	41	44	40	37	38	35	33	32	30	28	26				
8	61	50	44	39	56	47	41	38	41	37	34	36	32	30	30	28	27	25				
9	57	47	41	36	53	44	38	35	39	34	31	34	31	28	29	27	25	23				
10	54	44	38	34	50	41	36	32	36	32	29	32	29	27	27	25	24	22				

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

	0°	45°	90°
0°	60251	60251	60251
5°	58237	57517	58269
10°	49980	50013	49980
15°	38793	38175	38703
20°	27998	27419	27397
25°	19851	19062	19098
30°	14769	14393	14255
35°	11493	11201	10963
40°	8505	8292	7767
45°	4345	5329	3500
50°	947	2939	693
55°	265	1194	208
60°	42	239	23
65°	0	27	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5329 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.7	6.4
10°-20°	636.2	12.7
20°-30°	513.2	10.2
30°-40°	356.5	7.1
40°-50°	164.7	3.3
50°-60°	23.1	0.5
60°-70°	0.8	0.0
70°-80°	0.0	0.0
80°-90°	0.6	0.0
90°-100°	182.6	3.6
100°-110°	605.5	12.1
110°-120°	600.9	12.0
120°-130°	489.5	9.8
130°-140°	397.8	7.9
140°-150°	308.9	6.2
150°-160°	222.6	4.4
160°-170°	136.3	2.7
170°-180°	46.0	0.9
0°-30°	1472.1	29.4
0°-40°	1828.6	36.5
0°-60°	2016.4	40.3
0°-90°	2017.8	40.3
90°-120°	1389.0	27.7
90°-150°	2585.2	51.6
90°-180°	2990.0	59.7
0°-180°	5007.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3732	3732	3732	3732	3732	
5°	3593	3574	3549	3593	3595	323
15°	2321	2350	2284	2316	2315	639
25°	1114	1089	1070	1086	1072	522
35°	583	583	568	558	556	365
45°	190	227	233	212	153	154
55°	9	15	42	12	7	12
65°	0	0	1	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	1	3	4	4	1
95°	26	77	331	118	79	30
105°	106	151	606	1143	1069	112
115°	189	226	488	1016	1188	187
125°	264	293	479	798	941	235
135°	316	348	475	685	773	245
145°	367	394	474	589	645	230
155°	419	434	477	526	546	193
165°	460	465	479	498	503	130
175°	481	481	482	485	484	46
180°	483	483	483	483	483	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3731.7	3731.7	3731.7	3731.7	3731.7
2.5°	3729.6	3715.9	3683.3	3712.7	3703.7
5°	3593.2	3574.1	3548.8	3592.6	3595.2
7.5°	3292.2	3298.4	3274.8	3323.1	3318.0
10°	3048.5	3053.1	3050.5	3066.2	3048.5
12.5°	2766.0	2784.3	2749.7	2774.1	2781.6
15°	2320.8	2350.4	2283.8	2316.1	2315.4
17.5°	1903.3	1900.3	1865.9	1871.9	1870.0
20°	1629.5	1624.9	1595.8	1591.2	1594.5
22.5°	1394.9	1387.1	1376.9	1365.3	1369.6
25°	1114.3	1089.4	1070.0	1085.8	1072.0
27.5°	894.4	894.0	878.0	879.8	882.5
30°	792.2	787.6	772.0	772.5	764.6
32.5°	701.3	704.6	685.4	681.6	673.7
35°	583.1	583.1	568.3	558.1	556.2
37.5°	473.4	472.3	461.7	447.4	442.2
40°	403.5	400.2	393.4	375.8	368.5
42.5°	323.9	332.7	326.2	308.4	297.5
45°	190.3	227.1	233.4	211.9	153.3
47.5°	81.8	122.3	155.8	101.5	52.9
50°	37.7	69.2	117.0	49.9	27.6
52.5°	22.1	37.8	86.9	29.2	17.4
55°	9.4	14.7	42.4	12.0	7.4
57.5°	3.5	6.4	16.0	5.2	2.8
60°	1.3	2.7	7.4	2.0	0.7
62.5°	0.3	1.1	3.6	0.9	0.1
65°	0.0	0.0	0.7	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.2	0.6	0.8	0.8
90°	0.0	1.0	3.0	4.0	4.0
92.5°	8.0	30.9	91.0	29.5	24.8
95°	26.0	76.8	331.0	118.1	79.0
97.5°	47.8	101.0	577.7	336.9	213.0
100°	63.0	113.8	668.9	574.5	381.0
102.5°	79.8	129.1	663.3	878.0	663.3
105°	106.0	151.0	605.9	1143.2	1068.9
107.5°	132.8	172.9	550.9	1170.1	1226.6
110°	148.0	188.1	522.9	1143.5	1257.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	164.0	203.3	506.1	1096.2	1241.8
115°	189.0	226.1	487.9	1015.8	1187.9
117.5°	213.8	246.8	481.3	939.0	1119.5
120°	229.0	261.2	478.9	890.9	1065.9
122.5°	242.6	274.1	478.9	851.4	1013.1
125°	264.0	293.3	478.9	798.1	940.9
127.5°	281.6	310.3	477.7	757.9	879.9
130°	292.0	322.3	476.9	734.4	843.9
132.5°	301.6	332.7	476.1	715.0	813.5
135°	316.0	348.2	474.9	684.9	772.9
137.5°	331.6	362.6	473.7	655.9	733.5
140°	342.0	372.3	472.9	636.5	707.9
142.5°	351.6	381.1	473.7	617.2	680.7
145°	367.0	394.3	473.9	589.2	644.9
147.5°	383.6	406.4	474.1	565.5	606.9
150°	394.0	414.5	474.9	551.7	586.9
152.5°	403.5	423.3	475.7	540.4	568.5
155°	418.9	433.6	476.9	526.4	545.9
157.5°	433.9	445.3	478.1	516.5	530.3
160°	441.9	451.7	478.9	509.2	519.9
162.5°	449.9	457.4	478.9	504.3	512.7
165°	459.9	464.8	478.9	498.0	502.9
167.5°	469.1	471.7	479.9	492.4	494.9
170°	473.9	474.9	479.9	490.0	490.9
172.5°	477.1	478.1	480.7	487.5	487.7
175°	480.9	480.9	481.9	484.9	483.9
177.5°	482.9	482.9	482.1	483.7	482.1
180°	482.9	482.9	482.9	482.9	482.9

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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00