

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: P853573

Luminaire Tested: SQ2-BBN-025U-050D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853573  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBN-025U-050D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

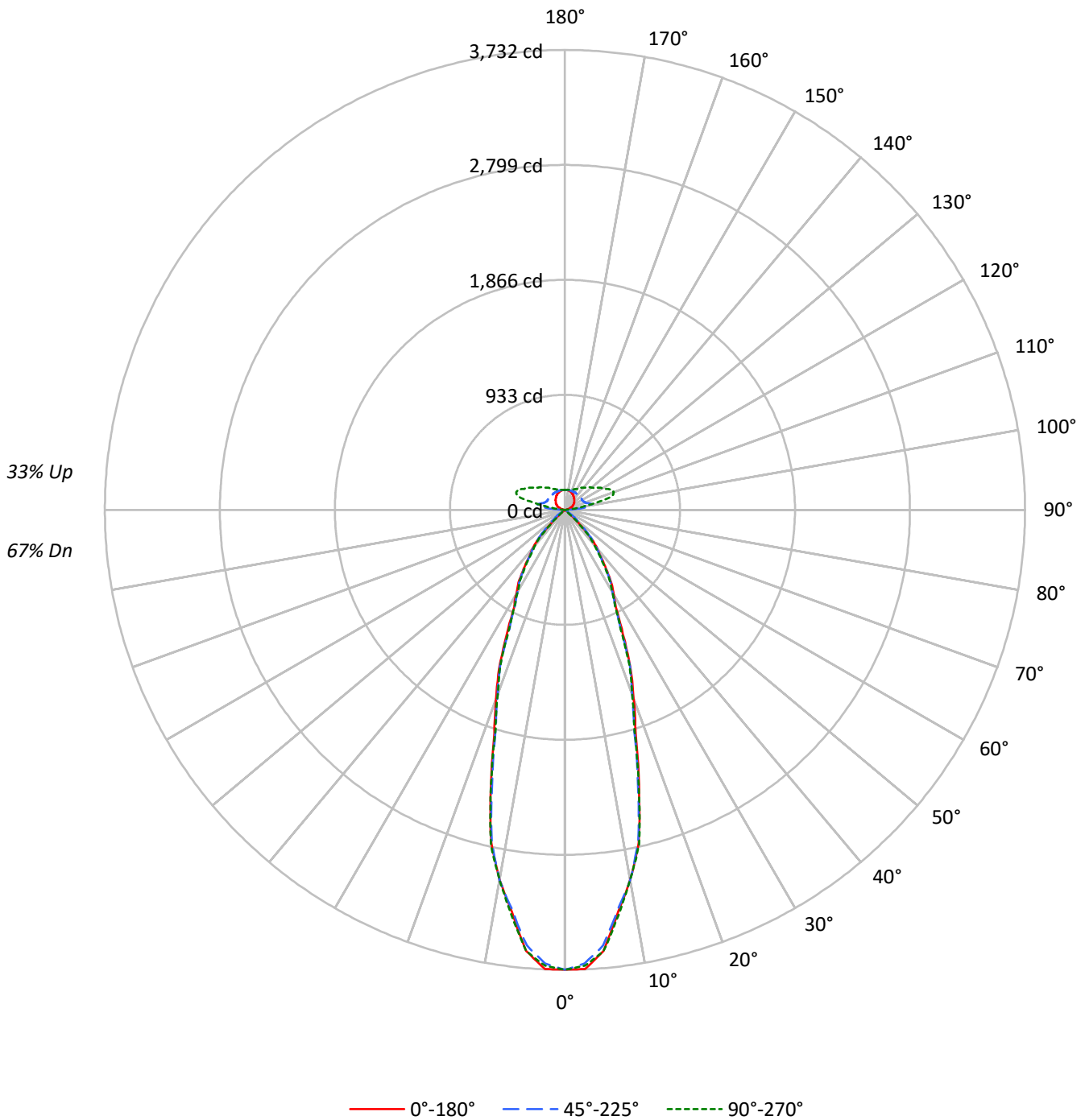
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3028.8 lumens  
Efficiency: N/A  
Efficacy: 118.8 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: Semi-Direct  
  
Input Watts (W): 25.5  
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				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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	71	71	71	67
1	105	102	99	96	99	96	94	92	86	84	83	77	76	74	68	67	67	63
2	99	93	89	85	93	89	85	82	80	77	75	72	70	68	65	63	62	59
3	93	86	80	76	88	82	77	73	75	71	68	68	65	63	61	60	58	55
4	87	79	73	69	83	76	71	67	70	66	62	64	61	58	58	56	54	51
5	82	74	67	63	78	71	65	61	65	61	58	60	57	54	55	53	51	48
6	78	69	62	58	74	66	60	56	61	57	53	57	53	51	52	50	48	45
7	74	64	58	54	70	62	56	52	58	53	50	54	50	47	50	47	45	43
8	70	60	54	50	67	58	53	49	54	50	47	51	47	44	47	44	42	41
9	66	57	51	47	64	55	49	46	51	47	44	48	45	42	45	42	40	38
10	63	53	48	44	61	52	46	43	49	44	41	46	42	40	43	40	38	37

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

	0°	45°	90°
0°	60250	60250	60250
5°	58235	57516	58268
10°	49978	50011	49978
15°	38793	38175	38703
20°	27996	27419	27397
25°	19851	19060	19096
30°	14769	14393	14255
35°	11491	11201	10961
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	10.7
10°-20°	636.2	21.0
20°-30°	513.2	16.9
30°-40°	356.5	11.8
40°-50°	164.7	5.4
50°-60°	23.1	0.8
60°-70°	0.8	0.0
70°-80°	0.0	0.0
80°-90°	0.5	0.0
90°-100°	65.9	2.2
100°-110°	205.1	6.8
110°-120°	200.7	6.6
120°-130°	163.8	5.4
130°-140°	134.0	4.4
140°-150°	104.6	3.5
150°-160°	75.5	2.5
160°-170°	46.1	1.5
170°-180°	15.6	0.5
0°-30°	1472.0	48.6
0°-40°	1828.5	60.4
0°-60°	2016.4	66.6
0°-90°	2017.7	66.6
90°-120°	471.7	15.6
90°-150°	874.1	28.9
90°-180°	1011.0	33.4
0°-180°	3028.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3732	3732	3732	3732	3732	
5°	3593	3574	3549	3592	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	3	3	0
95°	9	27	121	45	29	10
105°	36	51	202	386	368	38
115°	64	76	164	338	396	63
125°	89	99	162	266	312	79
135°	107	119	161	230	258	83
145°	125	135	161	198	216	79
155°	143	148	162	178	184	66
165°	157	158	163	168	170	44
175°	163	163	163	164	163	15
180°	163	163	163	163	163	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3731.6	3731.6	3731.6	3731.6	3731.6
2.5°	3729.5	3715.8	3683.2	3712.6	3703.7
5°	3593.1	3574.0	3548.7	3592.5	3595.1
7.5°	3292.1	3298.3	3274.8	3323.1	3317.9
10°	3048.4	3053.0	3050.4	3066.1	3048.4
12.5°	2765.9	2784.2	2749.7	2774.1	2781.6
15°	2320.8	2350.3	2283.8	2316.0	2315.4
17.5°	1903.3	1900.3	1865.9	1871.9	1869.9
20°	1629.4	1624.8	1595.8	1591.2	1594.5
22.5°	1394.9	1387.1	1376.9	1365.3	1369.6
25°	1114.3	1089.3	1069.9	1085.8	1071.9
27.5°	894.4	894.0	878.0	879.8	882.4
30°	792.2	787.6	772.0	772.5	764.6
32.5°	701.3	704.6	685.4	681.6	673.7
35°	583.0	583.0	568.3	558.1	556.1
37.5°	473.4	472.2	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	211.8	153.3
47.5°	81.8	122.3	155.7	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	0.6	0.6
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.2	38.2	12.5	10.2
95°	9.0	26.6	121.0	44.6	29.0
97.5°	16.4	34.6	200.3	124.7	78.6
100°	22.0	38.6	225.9	211.3	141.0
102.5°	27.6	43.4	221.1	301.8	236.9
105°	36.0	50.7	201.9	385.5	367.9
107.5°	44.4	58.1	183.5	391.9	411.3
110°	50.0	63.7	173.9	382.7	420.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.6	68.5	169.1	366.2	414.5
115°	64.0	75.7	163.9	338.2	395.9
117.5°	72.2	82.9	161.7	311.4	370.5
120°	77.0	87.7	160.9	296.2	352.9
122.5°	81.8	92.5	161.7	283.3	335.3
125°	89.0	98.7	161.9	266.0	311.9
127.5°	94.8	104.7	161.9	253.0	292.1
130°	98.0	108.7	161.9	245.7	280.9
132.5°	102.0	112.7	161.1	239.3	272.1
135°	107.0	118.7	160.9	229.6	257.9
137.5°	112.8	123.5	160.9	219.9	245.7
140°	116.0	126.7	160.9	213.5	236.9
142.5°	120.0	129.9	160.9	207.0	228.1
145°	125.0	134.7	160.9	198.3	215.9
147.5°	131.0	139.4	161.9	190.3	204.1
150°	135.0	141.8	161.9	186.2	196.9
152.5°	138.2	144.2	161.9	182.1	191.3
155°	143.0	147.8	161.9	178.1	183.9
157.5°	147.8	151.5	161.9	174.4	178.1
160°	151.0	153.9	161.9	172.0	174.9
162.5°	153.3	155.5	161.9	170.4	172.5
165°	156.9	157.9	162.9	168.0	169.9
167.5°	159.1	159.3	161.9	166.6	167.5
170°	159.9	160.9	161.9	165.0	165.9
172.5°	161.5	161.7	162.7	164.2	164.3
175°	162.9	162.9	162.9	163.9	162.9
177.5°	162.9	162.9	162.9	162.9	162.9
180°	162.9	162.9	162.9	162.9	162.9

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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