

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: P853641

Luminaire Tested: SQ2-BBN-125U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853641  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2308-130-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBN-125U-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

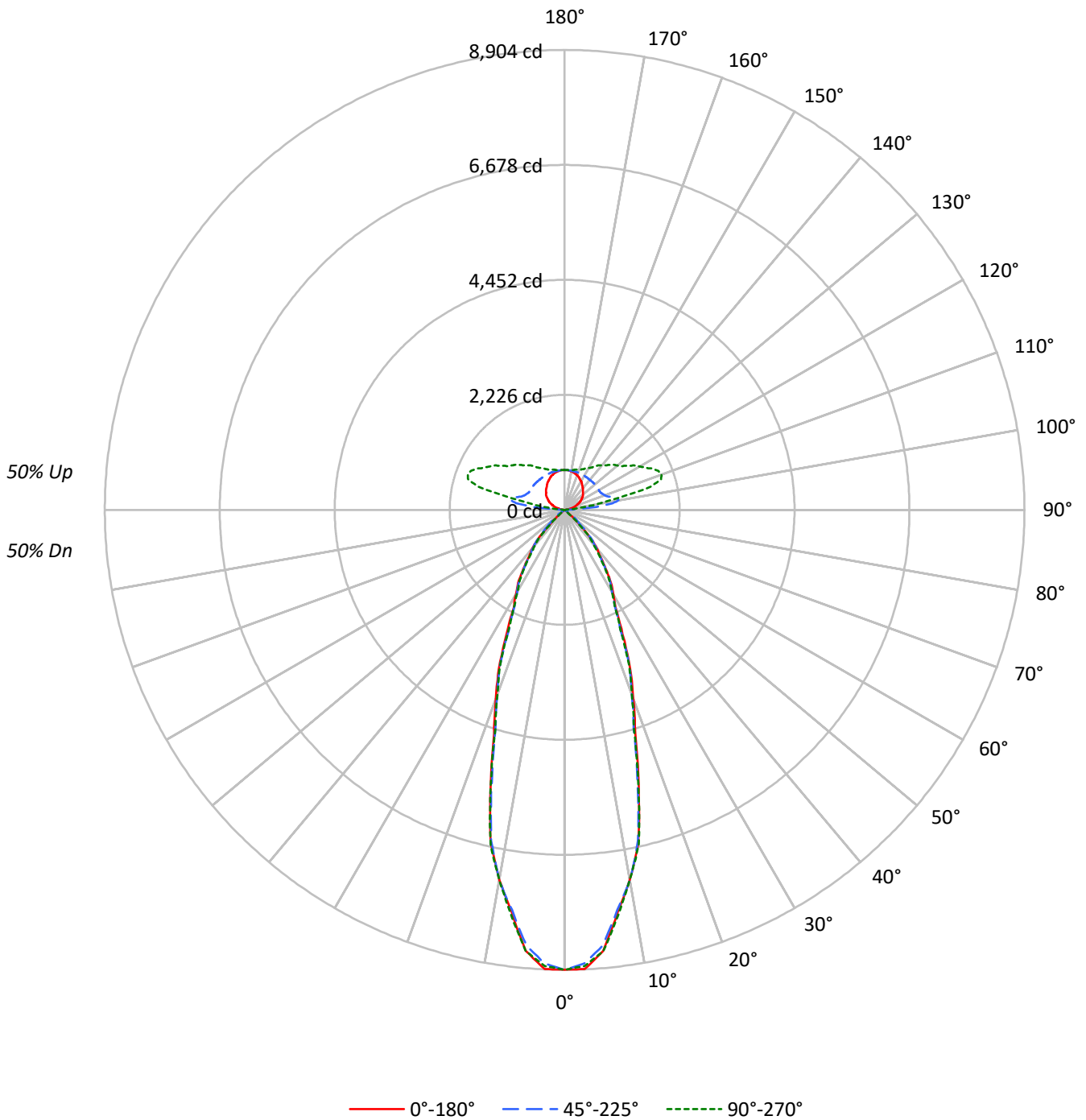
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9577.8 lumens  
Efficiency: N/A  
Efficacy: 102.2 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): 93.7  
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

TEST NUMBER: P853641

CATALOG NUMBER: SQ2-BBN-125U-125D-930-UNV-STD-W-4

### 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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	100	97	94	91	93	90	87	85	77	75	74	65	64	63	54	53	52	47
2	94	88	83	79	87	82	78	75	71	68	66	60	59	57	51	50	49	44
3	88	80	75	70	81	75	70	66	65	62	59	56	54	52	48	46	45	41
4	82	74	67	63	76	69	64	60	61	57	54	53	50	48	45	44	42	39
5	77	68	61	56	72	64	58	54	56	52	49	49	46	44	43	41	39	36
6	72	63	56	51	67	59	53	49	53	48	45	46	43	41	41	39	37	34
7	68	58	52	47	64	55	49	45	49	45	42	44	41	38	39	36	35	32
8	64	54	48	43	60	51	46	42	46	42	39	41	38	36	37	34	33	31
9	61	51	44	40	57	48	43	39	43	39	36	39	36	33	35	33	31	29
10	58	47	41	37	54	45	40	36	41	37	34	37	34	32	33	31	29	28

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

	0°	45°	90°
0°	143771	143771	143771
5°	138962	137245	139039
10°	119258	119337	119258
15°	92567	91092	92353
20°	66807	65428	65373
25°	47370	45483	45569
30°	35242	34345	34015
35°	27423	26727	26158
40°	20293	19785	18535
45°	10369	12714	8355
50°	2258	7013	1653
55°	633	2846	498
60°	103	572	52
65°	0	61	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: 12714 cd/sqm



TEST NUMBER: P853641

CATALOG NUMBER: SQ2-BBN-125U-125D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	770.0	8.0
10°-20°	1518.0	15.8
20°-30°	1224.6	12.8
30°-40°	850.7	8.9
40°-50°	393.0	4.1
50°-60°	55.2	0.6
60°-70°	1.9	0.0
70°-80°	0.0	0.0
80°-90°	1.1	0.0
90°-100°	295.3	3.1
100°-110°	961.5	10.0
110°-120°	951.1	9.9
120°-130°	777.3	8.1
130°-140°	635.3	6.6
140°-150°	494.8	5.2
150°-160°	356.7	3.7
160°-170°	218.0	2.3
170°-180°	73.6	0.8
0°-30°	3512.6	36.7
0°-40°	4363.3	45.6
0°-60°	4811.4	50.2
0°-90°	4814.4	50.3
90°-120°	2208.0	23.1
90°-150°	4115.4	43.0
90°-180°	4764.0	49.7
0°-180°	9577.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8904	8904	8904	8904	8904	
5°	8574	8528	8468	8572	8579	771
15°	5538	5608	5450	5526	5525	1524
25°	2659	2599	2553	2591	2558	1245
35°	1391	1391	1356	1332	1327	871
45°	454	542	557	506	366	367
55°	22	35	101	29	18	28
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	3	7	6	6	2
95°	40	122	541	193	119	46
105°	163	236	952	1819	1723	174
115°	302	360	776	1599	1881	299
125°	420	468	765	1262	1488	374
135°	507	560	762	1090	1229	392
145°	593	636	760	938	1028	371
155°	676	698	764	840	872	311
165°	738	744	766	795	804	208
175°	769	769	769	775	773	73
180°	772	772	772	772	772	

TEST NUMBER: P853641

CATALOG NUMBER: SQ2-BBN-125U-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8904.5	8904.5	8904.5	8904.5	8904.5
2.5°	8899.3	8866.7	8788.9	8859.1	8837.7
5°	8573.9	8528.4	8468.0	8572.4	8578.7
7.5°	7855.6	7870.4	7814.2	7929.5	7917.3
10°	7274.1	7285.1	7278.9	7316.5	7274.1
12.5°	6600.1	6643.7	6561.3	6619.5	6637.4
15°	5537.8	5608.4	5449.6	5526.5	5525.0
17.5°	4541.6	4534.4	4452.4	4466.7	4462.0
20°	3888.2	3877.2	3807.9	3796.9	3804.7
22.5°	3328.5	3309.9	3285.5	3257.8	3268.1
25°	2659.0	2599.4	2553.1	2590.8	2557.9
27.5°	2134.2	2133.3	2095.1	2099.4	2105.7
30°	1890.3	1879.4	1842.2	1843.4	1824.5
32.5°	1673.4	1681.2	1635.5	1626.4	1607.6
35°	1391.3	1391.3	1356.0	1331.8	1327.1
37.5°	1129.7	1126.9	1101.8	1067.5	1055.2
40°	962.8	955.0	938.7	896.6	879.4
42.5°	772.8	793.8	778.3	736.0	709.9
45°	454.1	542.0	556.8	505.5	365.9
47.5°	195.1	291.8	371.6	242.2	126.1
50°	89.9	165.2	279.2	119.1	65.8
52.5°	52.6	90.3	207.3	69.6	41.4
55°	22.5	35.0	101.1	28.6	17.7
57.5°	8.3	15.2	38.2	12.4	6.7
60°	3.2	6.3	17.7	4.7	1.6
62.5°	0.6	2.5	8.7	2.2	0.3
65°	0.0	0.0	1.6	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	0.6	1.3	1.1	1.1
90°	0.0	2.8	6.6	5.7	5.7
92.5°	13.7	49.1	157.1	51.8	39.9
95°	39.9	121.6	541.3	193.0	118.7
97.5°	75.0	158.2	918.7	559.5	341.5
100°	97.8	179.5	1060.8	945.9	613.5
102.5°	123.6	202.4	1043.3	1399.4	1064.0
105°	163.3	235.8	952.5	1819.3	1722.7
107.5°	206.3	274.4	866.3	1855.7	1958.1
110°	237.4	299.6	825.3	1810.5	1995.3



TEST NUMBER: P853641

CATALOG NUMBER: SQ2-BBN-125U-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	263.3	324.7	799.4	1728.9	1967.2
115°	302.0	360.5	775.9	1599.0	1881.3
117.5°	341.9	394.6	766.8	1480.1	1761.1
120°	364.7	416.7	764.5	1407.0	1679.1
122.5°	386.7	438.0	765.3	1343.5	1597.0
125°	419.8	468.0	765.4	1262.5	1488.2
127.5°	448.1	497.5	765.3	1201.8	1390.0
130°	466.3	516.4	764.5	1167.2	1335.3
132.5°	482.3	534.6	763.7	1135.0	1292.7
135°	507.1	560.1	761.7	1089.6	1228.9
137.5°	531.4	584.7	759.6	1043.5	1167.2
140°	548.9	600.0	758.8	1012.2	1129.2
142.5°	565.6	614.5	758.8	982.3	1086.6
145°	592.6	636.2	759.8	938.4	1027.6
147.5°	618.8	656.7	761.1	901.1	970.0
150°	636.3	669.7	762.6	878.8	937.3
152.5°	653.8	681.3	763.4	861.9	908.5
155°	676.2	698.5	764.5	840.2	871.8
157.5°	697.5	713.4	765.6	824.3	846.4
160°	710.4	723.4	766.4	814.3	831.9
162.5°	721.8	731.8	766.4	805.8	819.0
165°	737.9	744.4	766.4	795.1	804.4
167.5°	749.3	753.4	766.6	787.0	791.9
170°	756.9	758.8	767.3	781.6	783.5
172.5°	762.2	763.3	768.9	778.5	778.2
175°	769.2	769.2	769.2	774.9	773.0
177.5°	772.1	771.4	770.6	774.3	771.3
180°	772.1	772.1	772.1	772.1	772.1

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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