

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: P853617

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

Issue Date: 7/12/2024

**Test Information**

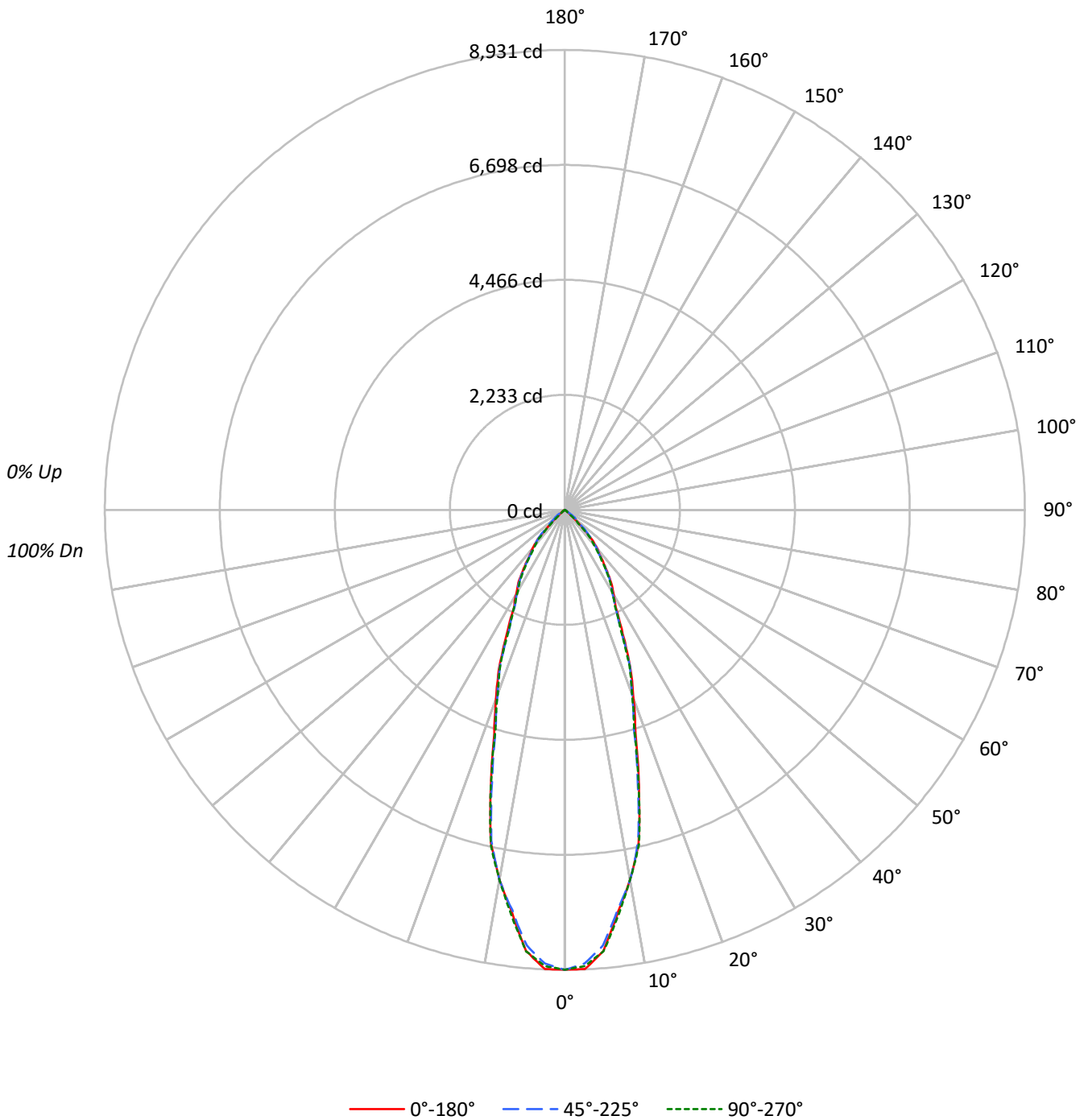
Test Method: LM-79-2019  
Report Number: P853617  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2308-130-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBN-125D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SURFACE LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4827.9 lumens  
Efficiency: N/A  
Efficacy: 96.9 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: Direct  
  
Input Watts (W): 49.8  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	90	81	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	68
7	85	77	71	67	84	76	71	67	75	70	66	74	69	66	72	69	66	64
8	82	73	67	63	80	72	67	63	71	66	63	70	66	62	69	65	62	61
9	78	69	63	60	77	69	63	60	68	63	59	67	62	59	66	62	59	58
10	75	66	60	57	74	65	60	57	64	60	56	64	59	56	63	59	56	55

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

	0°	45°	90°
0°	144205	144205	144205
5°	139383	137660	139461
10°	119619	119699	119619
15°	92847	91368	92632
20°	67010	65627	65572
25°	47513	45621	45706
30°	35350	34450	34120
35°	27506	26808	26237
40°	20354	19846	18590
45°	10401	12753	8380
50°	2263	7036	1658
55°	633	2854	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: 12753 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	772.3	16.0
10°-20°	1522.6	31.5
20°-30°	1228.3	25.4
30°-40°	853.3	17.7
40°-50°	394.2	8.2
50°-60°	55.4	1.1
60°-70°	1.9	0.0
70°-80°	0.0	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	3523.2	73.0
0°-40°	4376.5	90.6
0°-60°	4826.0	100.0
0°-90°	4827.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4827.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8931	8931	8931	8931	8931	
5°	8600	8554	8494	8598	8605	773
15°	5555	5625	5466	5543	5542	1529
25°	2667	2607	2561	2599	2566	1249
35°	1396	1396	1360	1336	1331	873
45°	456	544	558	507	367	368
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	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8931.4	8931.4	8931.4	8931.4	8931.4
2.5°	8926.3	8893.6	8815.6	8885.9	8864.5
5°	8599.9	8554.2	8493.6	8598.4	8604.7
7.5°	7879.4	7894.2	7837.9	7953.5	7941.2
10°	7296.1	7307.1	7301.0	7338.6	7296.1
12.5°	6620.1	6663.9	6581.2	6639.5	6657.5
15°	5554.6	5625.4	5466.1	5543.3	5541.7
17.5°	4555.4	4548.1	4465.9	4480.3	4475.5
20°	3900.0	3888.9	3819.5	3808.4	3816.3
22.5°	3338.5	3320.0	3295.4	3267.6	3278.0
25°	2667.0	2607.2	2560.8	2598.7	2565.6
27.5°	2140.7	2139.8	2101.4	2105.8	2112.1
30°	1896.1	1885.0	1847.8	1849.0	1830.1
32.5°	1678.4	1686.3	1640.5	1631.3	1612.5
35°	1395.5	1395.5	1360.1	1335.8	1331.1
37.5°	1133.1	1130.3	1105.1	1070.7	1058.4
40°	965.7	957.9	941.6	899.3	882.0
42.5°	775.2	796.3	780.6	738.2	712.1
45°	455.5	543.6	558.5	507.0	367.0
47.5°	195.7	292.7	372.8	243.0	126.5
50°	90.1	165.7	280.1	119.5	66.0
52.5°	52.8	90.6	208.0	69.9	41.5
55°	22.5	35.1	101.4	28.7	17.7
57.5°	8.4	15.3	38.3	12.4	6.8
60°	3.2	6.4	17.7	4.8	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	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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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	0.25	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.01	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