

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: P853582

Luminaire Tested: SQ2-BBN-025U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853582  
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-125D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

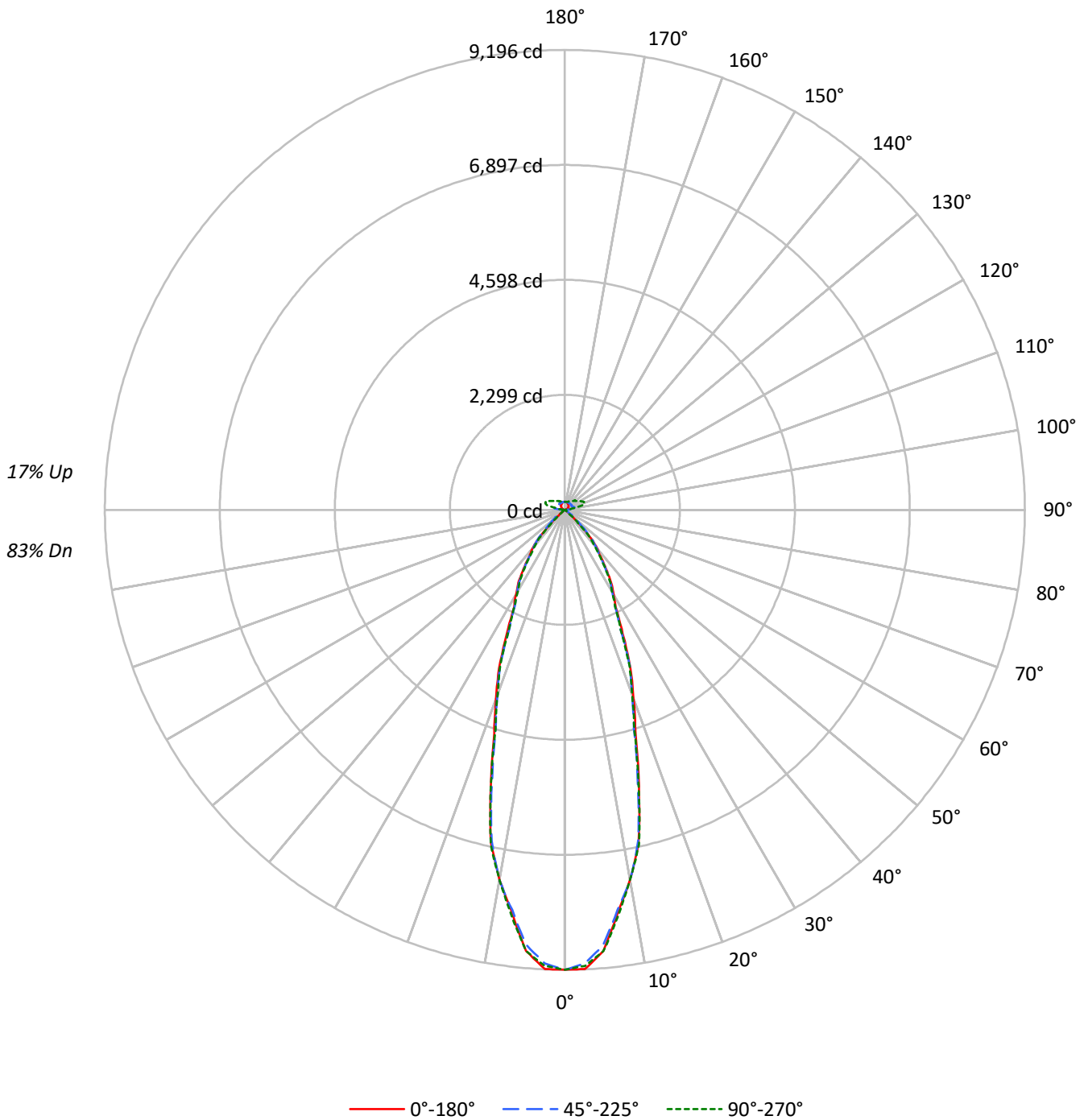
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5975.9 lumens  
Efficiency: N/A  
Efficacy: 104.5 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): 57.2  
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
RCR																				
0	115	115	115	115	110	110	110	110	102	102	102	94	94	94	87	87	87	83		
1	109	106	104	101	105	103	100	98	95	94	92	89	88	87	83	82	81	78		
2	103	98	94	91	100	95	92	89	89	87	84	84	82	80	79	77	76	73		
3	98	92	86	82	95	89	84	81	84	80	77	79	76	74	75	73	71	69		
4	93	85	80	75	90	83	78	74	79	75	71	75	72	69	71	69	66	64		
5	88	80	74	70	85	78	72	68	74	70	66	71	67	64	68	65	62	60		
6	84	75	69	65	81	73	68	64	70	65	62	67	63	60	64	61	59	57		
7	80	70	64	60	77	69	63	59	66	61	58	63	60	57	61	58	55	54		
8	76	66	60	56	74	65	60	56	63	58	55	60	56	53	58	55	52	51		
9	72	63	57	53	70	62	56	53	59	55	52	57	53	50	55	52	49	48		
10	69	60	54	50	67	59	53	50	57	52	49	55	51	48	53	50	47	46		

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

	0°	45°	90°
0°	148474	148474	148474
5°	143509	141736	143589
10°	123160	123242	123160
15°	95595	94073	95375
20°	68993	67570	67512
25°	48920	46971	47060
30°	36396	35469	35128
35°	28320	27601	27013
40°	20957	20434	19142
45°	10709	13132	8627
50°	2331	7244	1706
55°	653	2939	512
60°	107	588	55
65°	0	65	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: 13132 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	795.2	13.3
10°-20°	1567.7	26.2
20°-30°	1264.6	21.2
30°-40°	878.5	14.7
40°-50°	405.9	6.8
50°-60°	57.0	1.0
60°-70°	1.9	0.0
70°-80°	0.0	0.0
80°-90°	0.5	0.0
90°-100°	65.5	1.1
100°-110°	203.8	3.4
110°-120°	199.3	3.3
120°-130°	162.7	2.7
130°-140°	133.1	2.2
140°-150°	103.9	1.7
150°-160°	75.0	1.3
160°-170°	45.9	0.8
170°-180°	15.5	0.3
0°-30°	3627.5	60.7
0°-40°	4506.0	75.4
0°-60°	4968.9	83.1
0°-90°	4971.3	83.2
90°-120°	468.6	7.8
90°-150°	868.4	14.5
90°-180°	1005.0	16.8
0°-180°	5975.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9196	9196	9196	9196	9196	
5°	8854	8808	8745	8853	8859	796
15°	5719	5792	5628	5707	5706	1574
25°	2746	2684	2637	2676	2642	1286
35°	1437	1437	1400	1375	1370	899
45°	469	560	575	522	378	379
55°	23	36	104	30	18	29
65°	0	0	2	0	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	1	3	3	3	0
95°	9	26	120	44	29	10
105°	36	50	201	383	366	38
115°	64	75	163	336	393	63
125°	88	98	161	264	310	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	183	65
165°	156	157	162	167	169	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9195.8	9195.8	9195.8	9195.8	9195.8
2.5°	9190.5	9156.8	9076.5	9148.9	9126.9
5°	8854.5	8807.5	8745.1	8853.0	8859.4
7.5°	8112.7	8127.9	8069.9	8189.0	8176.3
10°	7512.1	7523.5	7517.1	7555.9	7512.1
12.5°	6816.1	6861.1	6776.0	6836.1	6854.5
15°	5719.0	5791.9	5627.9	5707.4	5705.8
17.5°	4690.2	4682.8	4598.1	4612.9	4608.0
20°	4015.4	4004.1	3932.6	3921.1	3929.2
22.5°	3437.4	3418.3	3393.0	3364.4	3375.1
25°	2746.0	2684.4	2636.6	2675.6	2641.6
27.5°	2204.1	2203.1	2163.7	2168.1	2174.6
30°	1952.2	1940.8	1902.5	1903.7	1884.2
32.5°	1728.1	1736.2	1689.0	1679.6	1660.2
35°	1436.8	1436.8	1400.3	1375.4	1370.5
37.5°	1166.7	1163.8	1137.8	1102.4	1089.8
40°	994.3	986.2	969.5	926.0	908.2
42.5°	798.1	819.8	803.7	760.0	733.1
45°	469.0	559.7	575.1	522.1	377.8
47.5°	201.5	301.3	383.8	250.2	130.3
50°	92.8	170.6	288.4	123.0	67.9
52.5°	54.4	93.2	214.1	71.9	42.8
55°	23.2	36.2	104.4	29.6	18.2
57.5°	8.6	15.7	39.4	12.8	7.0
60°	3.3	6.6	18.2	4.9	1.7
62.5°	0.7	2.6	8.9	2.3	0.3
65°	0.0	0.0	1.7	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	11.1	37.9	12.5	10.1
95°	8.9	26.4	120.2	44.3	28.8
97.5°	16.3	34.3	199.0	123.9	78.1
100°	21.8	38.4	224.4	209.9	140.0
102.5°	27.4	43.1	219.7	299.8	235.4
105°	35.8	50.3	200.6	382.9	365.5
107.5°	44.1	57.7	182.3	389.3	408.6
110°	49.7	63.2	172.8	380.2	418.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.2	68.0	168.0	363.8	411.7
115°	63.6	75.2	162.9	336.0	393.3
117.5°	71.7	82.4	160.7	309.4	368.0
120°	76.5	87.2	159.9	294.2	350.6
122.5°	81.2	91.9	160.7	281.4	333.1
125°	88.4	98.1	160.9	264.2	309.8
127.5°	94.1	104.1	160.9	251.3	290.2
130°	97.3	108.0	160.9	244.1	279.1
132.5°	101.3	112.0	160.1	237.7	270.3
135°	106.3	117.9	159.9	228.1	256.2
137.5°	112.0	122.7	159.9	218.5	244.1
140°	115.2	125.9	159.9	212.1	235.4
142.5°	119.2	129.1	159.9	205.7	226.6
145°	124.1	133.8	159.9	197.0	214.5
147.5°	130.1	138.4	160.9	189.0	202.8
150°	134.1	140.9	160.9	185.0	195.6
152.5°	137.2	143.3	160.9	181.0	190.1
155°	142.0	146.9	160.9	176.9	182.7
157.5°	146.8	150.5	160.9	173.3	177.0
160°	150.0	152.9	160.9	170.9	173.8
162.5°	152.3	154.5	160.9	169.3	171.4
165°	155.9	156.9	161.9	166.9	168.8
167.5°	158.1	158.3	160.9	165.5	166.4
170°	158.9	159.9	160.9	163.9	164.9
172.5°	160.5	160.7	161.7	163.1	163.3
175°	161.9	161.9	161.9	162.8	161.9
177.5°	161.9	161.9	161.9	161.9	161.9
180°	161.9	161.9	161.9	161.9	161.9

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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