

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: P854422

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

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854422  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2308-130-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBN-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: -

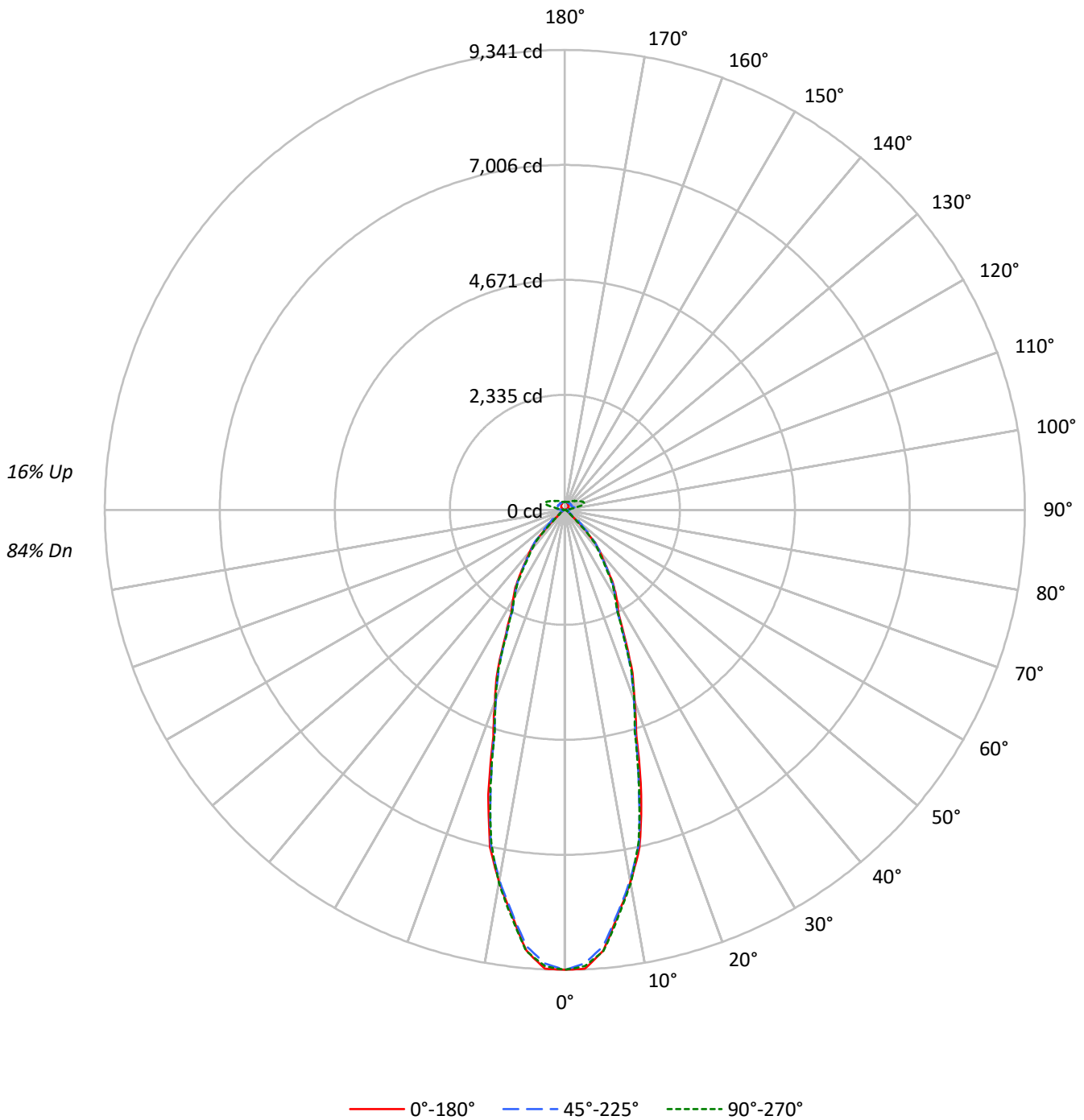
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6429.3 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Spacing Criteria (0/90/45): 0.59 / 0.58 / 0.63  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 57.1  
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	115	115	115	115	111	111	111	111	102	102	102	95	95	95	88	88	88	84
1	109	106	103	101	105	103	100	98	96	94	92	89	88	87	83	82	82	79
2	103	98	94	90	99	95	91	88	89	86	84	84	81	79	79	77	76	73
3	98	91	85	81	94	88	83	80	83	79	76	79	76	73	75	72	70	68
4	92	84	78	74	89	82	77	73	78	74	70	74	71	68	71	68	65	63
5	87	79	73	68	85	77	71	67	73	69	65	70	66	63	67	64	61	59
6	83	74	67	63	80	72	66	62	69	64	61	66	62	59	63	60	57	56
7	79	69	63	59	76	68	62	58	65	60	57	62	58	55	60	57	54	52
8	75	65	59	55	73	64	58	54	61	57	53	59	55	52	57	53	51	49
9	71	61	55	51	69	60	55	51	58	53	50	56	52	49	54	51	48	47
10	68	58	52	48	66	57	52	48	55	51	47	54	49	46	52	48	46	44

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

	0°	45°	90°
0°	150820	150820	150820
5°	145621	144171	145783
10°	125870	125272	126169
15°	100160	97003	97391
20°	71153	70213	70725
25°	51190	50187	49832
30°	39112	38063	37970
35°	30703	30181	29396
40°	23260	22946	21829
45°	13015	15552	11615
50°	4579	9573	4037
55°	2798	5225	2660
60°	2141	2729	1979
65°	1964	2025	1838
70°	1879	1879	1723
75°	1759	1759	1653
80°	1543	1543	1543
85°	1538	1223	1223

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 15552 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	810.8	12.6
10°-20°	1611.5	25.1
20°-30°	1334.5	20.8
30°-40°	960.1	14.9
40°-50°	489.1	7.6
50°-60°	127.3	2.0
60°-70°	52.8	0.8
70°-80°	29.3	0.5
80°-90°	9.1	0.1
90°-100°	65.5	1.0
100°-110°	203.8	3.2
110°-120°	199.3	3.1
120°-130°	162.7	2.5
130°-140°	133.1	2.1
140°-150°	103.9	1.6
150°-160°	75.0	1.2
160°-170°	45.9	0.7
170°-180°	15.5	0.2
0°-30°	3756.9	58.4
0°-40°	4717.0	73.4
0°-60°	5333.4	83.0
0°-90°	5424.6	84.4
90°-120°	468.6	7.3
90°-150°	868.4	13.5
90°-180°	1005.0	15.6
0°-180°	6429.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9341	9341	9341	9341	9341	
5°	8985	8972	8895	9024	8995	810
15°	5992	5924	5803	5844	5826	1627
25°	2873	2869	2817	2792	2797	1352
35°	1558	1567	1531	1506	1491	977
45°	570	656	681	634	509	456
55°	99	116	186	107	94	98
65°	51	53	53	50	48	51
75°	28	28	28	26	26	30
85°	8	8	7	8	7	9
90°	0	1	3	3	3	1
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°	9341.1	9341.1	9341.1	9341.1	9341.1
2.5°	9326.5	9311.0	9221.8	9295.6	9277.5
5°	8984.8	8971.9	8895.3	9023.9	8994.8
7.5°	8279.2	8290.2	8245.4	8359.1	8327.9
10°	7677.4	7706.5	7640.9	7805.8	7695.6
12.5°	7013.2	6994.4	6948.9	6974.4	6913.4
15°	5992.1	5924.0	5803.2	5844.2	5826.4
17.5°	4826.5	4852.7	4747.9	4743.5	4723.4
20°	4141.1	4149.2	4086.4	4119.5	4116.2
22.5°	3589.6	3591.2	3511.1	3559.5	3530.3
25°	2873.4	2868.6	2817.1	2792.3	2797.2
27.5°	2356.4	2336.3	2297.4	2313.7	2301.7
30°	2097.9	2081.7	2041.6	2051.2	2036.6
32.5°	1865.9	1866.5	1825.5	1820.6	1809.9
35°	1557.7	1567.4	1531.2	1506.0	1491.4
37.5°	1282.6	1291.7	1261.1	1224.3	1212.0
40°	1103.6	1110.1	1088.7	1045.4	1035.7
42.5°	908.8	936.0	915.1	874.1	852.7
45°	570.0	655.9	681.1	633.5	508.7
47.5°	288.3	407.3	485.9	358.8	236.3
50°	182.3	264.9	381.1	215.8	160.7
52.5°	139.9	182.3	304.2	159.4	128.9
55°	99.4	115.6	185.6	107.4	94.5
57.5°	76.9	86.0	111.0	81.3	73.2
60°	66.3	72.8	84.5	69.4	61.3
62.5°	59.7	63.5	68.6	58.9	56.0
65°	51.4	53.0	53.0	49.7	48.1
67.5°	43.7	45.4	45.1	43.4	41.8
70°	39.8	41.4	39.8	38.1	36.5
72.5°	34.5	36.1	34.5	34.1	32.5
75°	28.2	28.2	28.2	26.5	26.5
77.5°	21.9	22.2	20.5	20.5	19.2
80°	16.6	18.2	16.6	16.6	16.6
82.5°	13.9	14.2	12.6	12.6	12.6
85°	8.3	8.3	6.6	8.2	6.6
87.5°	2.7	2.8	3.2	3.2	3.2
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	7.32	8.21	7.95	8.82	9.51	6.94	7.83	7.57	8.43	9.12
	3H	8.38	9.16	9.02	9.78	10.51	7.94	8.73	8.59	9.35	10.08
	4H	8.81	9.54	9.47	10.17	10.92	8.37	9.10	9.03	9.74	10.48
	6H	9.13	9.80	9.80	10.44	11.20	8.71	9.38	9.38	10.02	10.78
	8H	9.23	9.86	9.92	10.52	11.28	8.81	9.44	9.50	10.11	10.87
	12H	9.30	9.90	9.98	10.55	11.34	8.86	9.46	9.55	10.12	10.90
4H	2H	7.55	8.28	8.22	8.92	9.66	7.22	7.95	7.89	8.59	9.33
	3H	8.86	9.45	9.53	10.13	10.89	8.47	9.07	9.15	9.75	10.51
	4H	9.42	9.96	10.11	10.64	11.43	9.03	9.57	9.72	10.25	11.04
	6H	9.88	10.33	10.59	11.04	11.85	9.49	9.95	10.21	10.66	11.47
	8H	10.03	10.46	10.75	11.16	11.97	9.65	10.08	10.36	10.78	11.59
	12H	10.14	10.52	10.87	11.24	12.06	9.74	10.11	10.47	10.84	11.66
8H	4H	9.56	9.99	10.28	10.69	11.50	9.21	9.64	9.93	10.34	11.15
	6H	10.15	10.49	10.89	11.24	12.06	9.80	10.14	10.54	10.89	11.71
	8H	10.39	10.69	11.15	11.44	12.28	10.03	10.34	10.79	11.09	11.92
	12H	10.58	10.85	11.34	11.58	12.48	10.21	10.47	10.96	11.21	12.11
12H	4H	9.54	9.92	10.27	10.65	11.46	9.20	9.58	9.93	10.31	11.12
	6H	10.16	10.47	10.92	11.22	12.05	9.83	10.13	10.59	10.88	11.72
	8H	10.44	10.71	11.20	11.44	12.34	10.10	10.37	10.86	11.10	12.00