

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: P854338

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

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854338  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-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: -

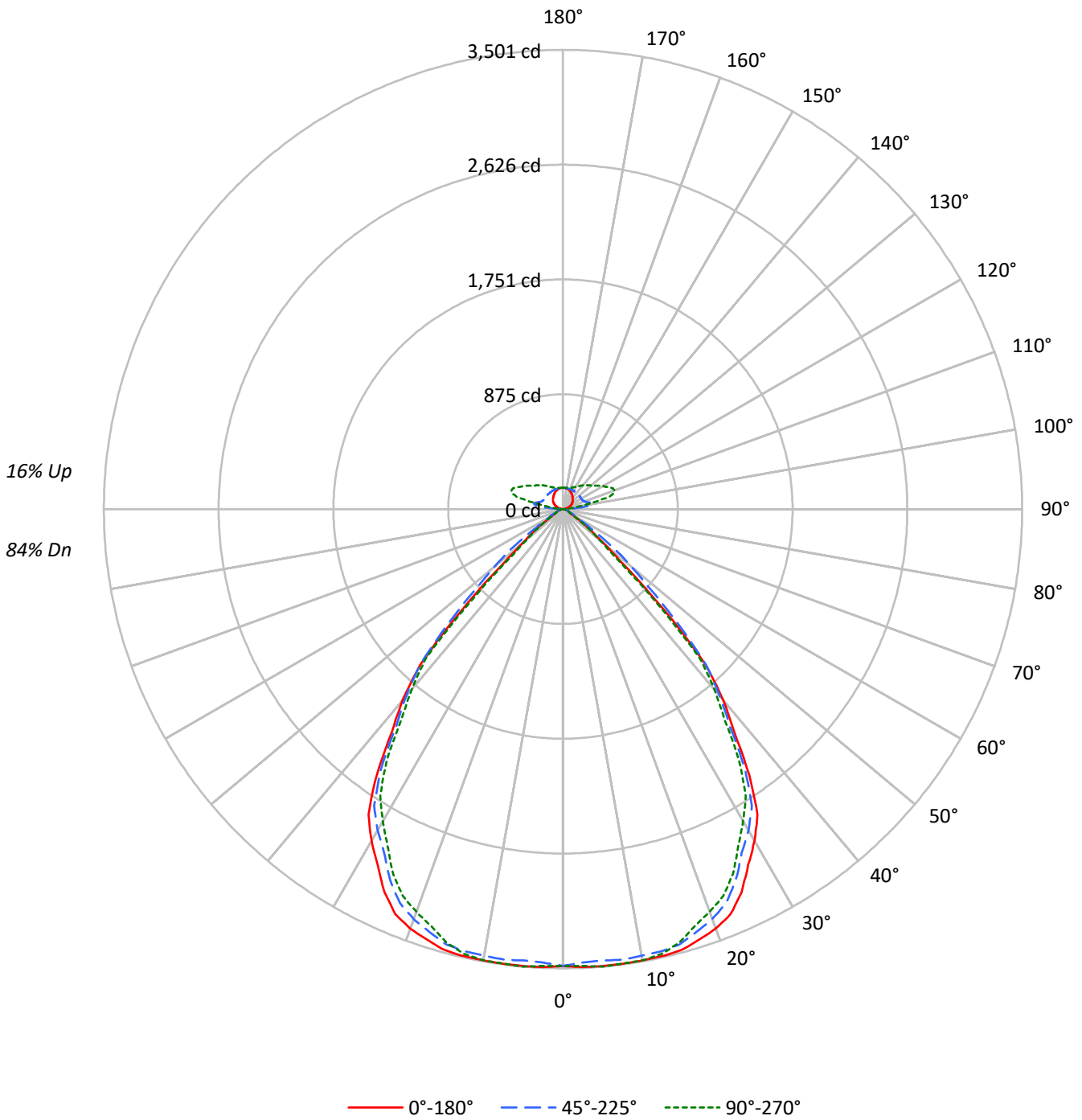
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6444.2 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.18 / 1.17  
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

TEST NUMBER: P854338

CATALOG NUMBER: SQ2-WBM-025U-125D-935-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854338

CATALOG NUMBER: SQ2-WBM-025U-125D-935-UNV-STD-W-4

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									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	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	108	105	102	99	104	101	99	96	94	92	91	88	87	85	82	81	80	77																											
	2	101	96	91	87	98	93	88	85	87	83	80	81	79	76	76	74	72	70																											
	3	95	87	81	76	91	85	79	75	80	75	72	75	72	69	71	68	66	63																											
	4	89	80	73	68	85	77	71	67	73	68	64	69	65	62	66	62	60	57																											
	5	83	73	66	61	80	71	65	60	67	62	58	64	60	56	61	57	54	52																											
	6	78	67	60	55	75	65	59	54	62	57	53	59	55	51	56	52	49	47																											
	7	73	62	55	50	70	60	54	49	58	52	48	55	50	46	52	48	45	43																											
	8	68	57	50	45	66	56	49	45	53	48	44	51	46	43	49	45	42	40																											
	9	64	53	46	42	62	52	45	41	50	44	40	48	43	39	46	41	38	37																											
	10	60	49	43	38	59	48	42	38	46	41	37	45	40	36	43	38	35	34																											

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

	0°	45°	90°
0°	56225	56225	56225
5°	56666	55987	56747
10°	57272	56667	57289
15°	58191	57424	57190
20°	58477	57156	56127
25°	57377	55561	54619
30°	54441	52709	51220
35°	48817	47656	46180
40°	40078	39192	37761
45°	25060	28458	22735
50°	9909	16832	8854
55°	4808	7645	4752
60°	2257	3739	2063
65°	2021	2174	1945
70°	1978	2025	1836
75°	1934	1934	1747
80°	1860	1860	1674
85°	1667	1667	1667

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 28458 cd/sqm

TEST NUMBER: P854338

CATALOG NUMBER: SQ2-WBM-025U-125D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.7	5.2
10°-20°	972.5	15.1
20°-30°	1437.8	22.3
30°-40°	1485.7	23.1
40°-50°	893.9	13.9
50°-60°	214.8	3.3
60°-70°	58.7	0.9
70°-80°	32.7	0.5
80°-90°	10.7	0.2
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°	2743.0	42.6
0°-40°	4228.7	65.6
0°-60°	5337.5	82.8
0°-90°	5439.5	84.4
90°-120°	468.6	7.3
90°-150°	868.4	13.5
90°-180°	1005.0	15.6
0°-180°	6444.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3482	3482	3482	3482	3482	
5°	3496	3486	3454	3503	3501	334
15°	3481	3508	3435	3436	3421	981
25°	3221	3245	3119	3075	3066	1472
35°	2477	2471	2418	2371	2343	1524
45°	1098	1246	1246	1178	996	850
55°	171	192	272	183	169	174
65°	53	56	57	53	51	54
75°	31	33	31	30	28	32
85°	9	10	9	9	9	10
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	



TEST NUMBER: P854338

CATALOG NUMBER: SQ2-WBM-025U-125D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3482.3	3482.3	3482.3	3482.3	3482.3
2.5°	3495.1	3486.5	3459.2	3491.0	3485.5
5°	3496.3	3485.6	3454.4	3503.3	3501.3
7.5°	3495.7	3490.1	3463.6	3501.1	3493.5
10°	3493.3	3496.2	3456.4	3497.2	3494.3
12.5°	3491.7	3504.8	3452.4	3481.2	3473.5
15°	3481.3	3507.7	3435.4	3436.1	3421.4
17.5°	3443.4	3475.4	3381.7	3353.9	3335.3
20°	3403.4	3434.7	3326.5	3285.2	3266.6
22.5°	3341.1	3370.0	3249.8	3207.7	3192.3
25°	3220.7	3245.1	3118.8	3074.7	3065.9
27.5°	3058.3	3068.7	2952.6	2909.4	2894.3
30°	2920.1	2921.1	2827.2	2775.6	2747.3
32.5°	2759.5	2752.7	2680.2	2628.5	2593.1
35°	2476.7	2470.8	2417.8	2371.2	2342.9
37.5°	2144.3	2143.3	2092.8	2052.6	2024.1
40°	1901.5	1908.3	1859.5	1809.2	1791.6
42.5°	1610.6	1661.2	1619.8	1564.8	1553.5
45°	1097.5	1246.0	1246.3	1178.3	995.7
47.5°	627.8	787.9	897.0	694.4	515.5
50°	394.5	515.6	670.1	422.8	352.5
52.5°	280.2	339.6	495.9	297.4	263.0
55°	170.8	192.3	271.6	183.4	168.8
57.5°	103.5	123.6	157.4	123.0	103.9
60°	69.9	88.5	115.8	81.5	63.9
62.5°	61.9	68.8	91.1	64.2	57.5
65°	52.9	55.9	56.9	52.9	50.9
67.5°	46.7	48.7	47.7	46.7	43.7
70°	41.9	43.9	42.9	41.9	38.9
72.5°	37.2	39.1	38.1	37.1	35.0
75°	31.0	32.9	31.0	29.9	28.0
77.5°	24.0	25.7	24.8	23.9	22.0
80°	20.0	20.9	20.0	19.9	18.0
82.5°	16.0	16.2	15.2	15.2	14.0
85°	9.0	10.0	9.0	9.0	9.0
87.5°	3.2	3.4	3.8	3.8	3.0
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



TEST NUMBER: P854338

CATALOG NUMBER: SQ2-WBM-025U-125D-935-UNV-STD-W-4

**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



TEST NUMBER: P854338

CATALOG NUMBER: SQ2-WBM-025U-125D-935-UNV-STD-W-4

**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	9.84	10.81	10.46	11.42	12.10	9.51	10.48	10.13	11.08	11.77
	3H	10.36	11.22	11.00	11.84	12.57	10.02	10.88	10.66	11.50	12.23
	4H	10.64	11.44	11.30	12.07	12.81	10.27	11.07	10.92	11.70	12.44
	6H	10.87	11.61	11.54	12.25	13.00	10.48	11.21	11.14	11.85	12.61
	8H	10.95	11.64	11.63	12.30	13.06	10.55	11.24	11.23	11.90	12.66
	12H	10.99	11.65	11.67	12.31	13.09	10.59	11.25	11.28	11.91	12.69
4H	2H	9.87	10.67	10.53	11.30	12.05	9.57	10.37	10.23	11.00	11.74
	3H	10.61	11.26	11.28	11.94	12.69	10.30	10.95	10.97	11.63	12.38
	4H	11.02	11.61	11.71	12.29	13.08	10.67	11.26	11.36	11.94	12.73
	6H	11.40	11.90	12.11	12.60	13.41	11.02	11.52	11.73	12.22	13.03
	8H	11.53	12.00	12.24	12.69	13.51	11.14	11.61	11.85	12.31	13.12
	12H	11.61	12.02	12.34	12.75	13.57	11.23	11.64	11.96	12.37	13.18
8H	4H	11.11	11.58	11.82	12.28	13.09	10.79	11.25	11.50	11.95	12.76
	6H	11.60	11.98	12.34	12.73	13.54	11.25	11.63	11.99	12.38	13.19
	8H	11.81	12.15	12.57	12.90	13.73	11.45	11.79	12.21	12.54	13.37
	12H	11.98	12.28	12.73	13.01	13.91	11.62	11.92	12.37	12.65	13.55
12H	4H	11.09	11.50	11.81	12.23	13.04	10.77	11.18	11.50	11.91	12.72
	6H	11.62	11.95	12.37	12.70	13.53	11.28	11.62	12.03	12.37	13.20
	8H	11.86	12.16	12.61	12.90	13.79	11.52	11.82	12.27	12.55	13.45