

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: P854335

Luminaire Tested: SQ2-WBM-025U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854335  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-025U-100D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

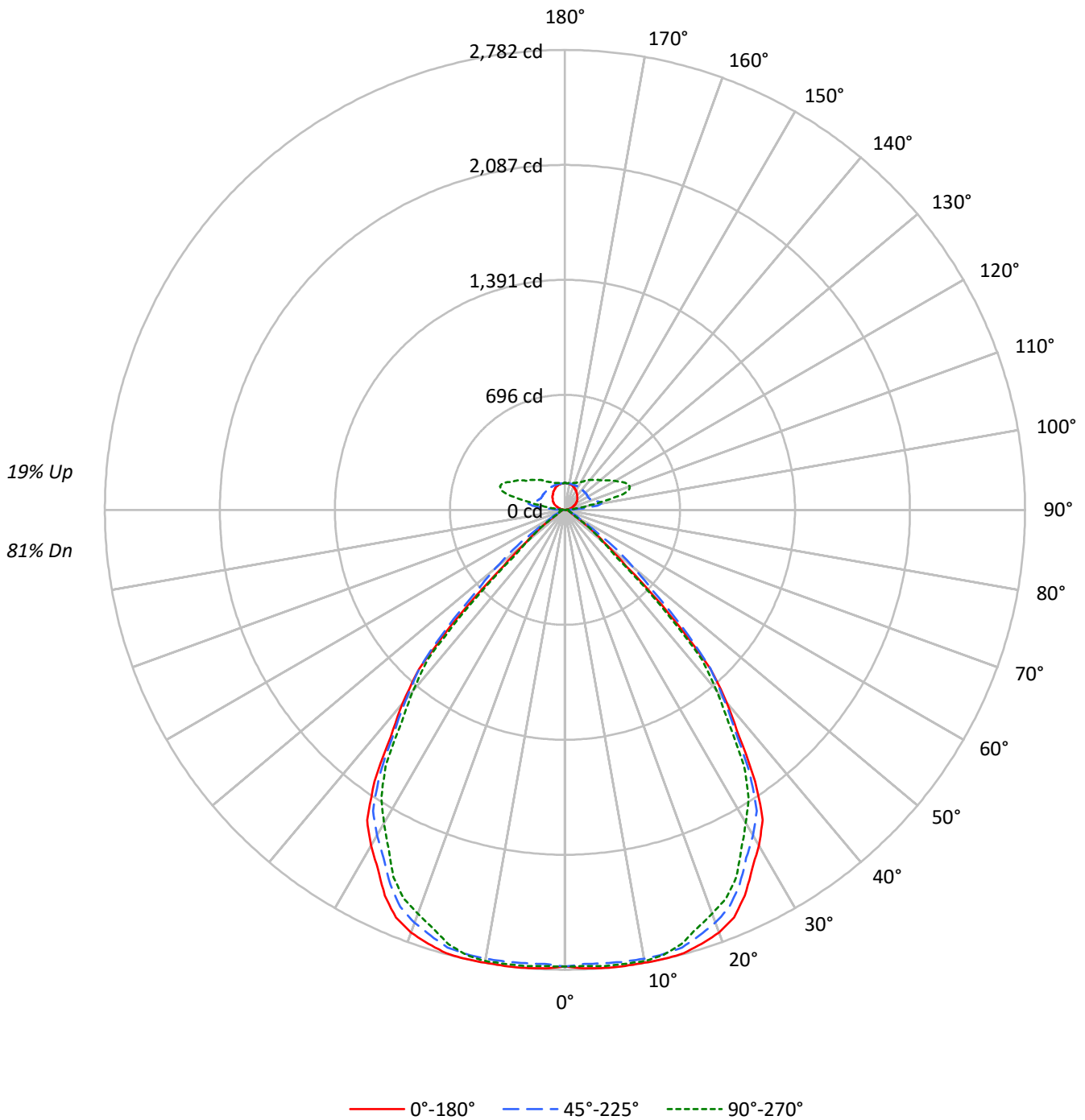
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5363.0 lumens  
Efficiency: N/A  
Efficacy: 117.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.18 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct  
  
Input Watts (W): 45.5  
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: P854335

CATALOG NUMBER: SQ2-WBM-025U-100D-935-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854335

CATALOG NUMBER: SQ2-WBM-025U-100D-935-UNV-STD-W-4

**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	110	110	110	110	101	101	101	92	92	92	85	85	85	81
1	108	104	101	99	103	100	98	95	93	91	89	86	84	83	80	78	77	74
2	101	95	90	86	97	91	87	83	85	82	79	79	77	74	74	72	70	67
3	94	86	80	75	90	83	78	74	78	74	70	73	70	67	68	66	63	61
4	88	79	72	67	84	76	70	66	72	67	63	67	63	60	63	60	57	55
5	82	72	65	60	79	70	64	59	66	61	57	62	58	54	59	55	52	50
6	77	66	59	54	74	64	58	53	61	55	51	58	53	49	54	51	48	46
7	72	61	54	49	69	59	53	48	56	51	47	53	49	45	51	47	44	42
8	67	56	49	45	65	55	48	44	52	47	43	50	45	41	47	43	40	38
9	63	52	45	41	61	51	45	40	48	43	39	46	41	38	44	40	37	35
10	60	49	42	37	58	47	41	37	45	40	36	43	38	35	41	37	34	32

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

	0°	45°	90°
0°	44603	44603	44603
5°	45081	44611	44903
10°	45602	45193	45439
15°	46410	45809	45458
20°	46761	45678	44665
25°	45865	44530	43675
30°	43712	42388	40766
35°	39551	38410	37207
40°	32115	31461	30070
45°	20569	22852	18493
50°	8061	13536	7257
55°	3800	6193	3800
60°	1808	3003	1647
65°	1643	1719	1528
70°	1558	1605	1463
75°	1560	1560	1435
80°	1488	1488	1395
85°	1297	1297	1297

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 23003 cd/sqm



TEST NUMBER: P854335

CATALOG NUMBER: SQ2-WBM-025U-100D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	264.6	4.9
10°-20°	775.5	14.5
20°-30°	1150.9	21.5
30°-40°	1195.5	22.3
40°-50°	719.4	13.4
50°-60°	172.5	3.2
60°-70°	46.8	0.9
70°-80°	26.2	0.5
80°-90°	8.6	0.2
90°-100°	65.4	1.2
100°-110°	203.4	3.8
110°-120°	199.0	3.7
120°-130°	162.5	3.0
130°-140°	132.9	2.5
140°-150°	103.7	1.9
150°-160°	74.9	1.4
160°-170°	45.8	0.9
170°-180°	15.4	0.3
0°-30°	2191.0	40.9
0°-40°	3386.5	63.1
0°-60°	4278.4	79.8
0°-90°	4360.0	81.3
90°-120°	467.8	8.7
90°-150°	867.0	16.2
90°-180°	1003.0	18.7
0°-180°	5363.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2762	2762	2762	2762	2762	
5°	2782	2775	2752	2781	2770	265
15°	2776	2796	2740	2739	2720	783
25°	2574	2592	2500	2466	2452	1178
35°	2007	1988	1949	1909	1888	1229
45°	901	1007	1001	953	810	688
55°	135	153	220	147	135	139
65°	43	44	45	43	40	43
75°	25	26	25	24	23	26
85°	7	8	7	7	7	8
90°	0	1	3	3	3	1
95°	9	26	120	44	29	10
105°	36	50	200	382	365	38
115°	64	75	163	335	393	63
125°	88	98	161	264	309	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	182	65
165°	156	157	162	167	168	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	

TEST NUMBER: P854335

CATALOG NUMBER: SQ2-WBM-025U-100D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2762.5	2762.5	2762.5	2762.5	2762.5
2.5°	2776.1	2769.8	2749.7	2771.9	2762.5
5°	2781.5	2774.7	2752.5	2781.3	2770.5
7.5°	2782.3	2782.7	2756.5	2781.8	2769.9
10°	2781.5	2787.4	2756.5	2780.3	2771.5
12.5°	2782.3	2792.1	2753.3	2770.6	2757.1
15°	2776.5	2796.1	2740.5	2739.1	2719.5
17.5°	2751.1	2775.4	2700.1	2677.0	2653.9
20°	2721.5	2745.0	2658.5	2625.0	2599.5
22.5°	2670.3	2694.6	2599.3	2563.5	2545.1
25°	2574.5	2592.1	2499.6	2466.2	2451.6
27.5°	2448.6	2454.2	2373.6	2334.8	2309.8
30°	2344.6	2349.5	2273.6	2229.6	2186.6
32.5°	2225.4	2217.0	2159.2	2111.2	2066.6
35°	2006.6	1988.1	1948.7	1909.2	1887.7
37.5°	1729.3	1724.6	1695.9	1648.5	1622.7
40°	1523.7	1539.4	1492.7	1458.0	1426.7
42.5°	1303.8	1342.1	1301.6	1252.6	1226.0
45°	900.8	1007.4	1000.8	952.6	809.9
47.5°	500.9	635.0	715.7	561.4	415.3
50°	320.9	412.8	538.9	338.8	288.9
52.5°	225.0	275.4	398.1	240.1	213.0
55°	135.0	152.6	220.0	146.7	135.0
57.5°	81.6	98.6	125.0	98.4	79.8
60°	56.0	70.7	93.0	65.7	51.0
62.5°	48.8	54.1	72.2	51.5	46.2
65°	43.0	44.0	45.0	42.9	40.0
67.5°	37.0	38.9	38.0	37.1	35.0
70°	33.0	34.9	34.0	33.9	31.0
72.5°	29.8	31.7	30.8	29.9	27.8
75°	25.0	26.0	25.0	24.0	23.0
77.5°	19.2	20.2	20.0	19.2	18.2
80°	16.0	17.0	16.0	16.0	15.0
82.5°	12.8	13.0	12.8	12.0	11.8
85°	7.0	8.0	7.0	7.0	7.0
87.5°	2.4	2.6	3.0	3.0	3.0
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	37.9	12.4	10.1
95°	8.9	26.4	120.0	44.3	28.8
97.5°	16.3	34.3	198.7	123.7	77.9
100°	21.8	38.3	224.1	209.6	139.8
102.5°	27.4	43.1	219.3	299.3	235.0
105°	35.7	50.2	200.3	382.3	364.9
107.5°	44.0	57.6	182.0	388.7	407.9
110°	49.6	63.1	172.5	379.6	417.4



TEST NUMBER: P854335

CATALOG NUMBER: SQ2-WBM-025U-100D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.1	67.9	167.8	363.2	411.1
115°	63.5	75.1	162.6	335.4	392.6
117.5°	71.6	82.2	160.4	308.9	367.4
120°	76.3	87.0	159.6	293.8	350.0
122.5°	81.1	91.8	160.4	281.0	332.5
125°	88.2	97.9	160.6	263.8	309.3
127.5°	94.0	103.9	160.6	250.9	289.7
130°	97.2	107.8	160.6	243.7	278.6
132.5°	101.1	111.8	159.8	237.3	269.9
135°	106.1	117.7	159.6	227.7	255.8
137.5°	111.8	122.5	159.6	218.1	243.7
140°	115.0	125.7	159.6	211.7	235.0
142.5°	119.0	128.9	159.6	205.3	226.2
145°	123.9	133.6	159.6	196.7	214.2
147.5°	129.9	138.2	160.6	188.7	202.5
150°	133.8	140.6	160.6	184.7	195.3
152.5°	137.0	143.0	160.6	180.7	189.8
155°	141.8	146.6	160.6	176.6	182.4
157.5°	146.5	150.2	160.6	173.0	176.7
160°	149.7	152.6	160.6	170.6	173.5
162.5°	152.1	154.2	160.6	169.0	171.1
165°	155.7	156.6	161.6	166.6	168.5
167.5°	157.8	158.0	160.6	165.2	166.2
170°	158.6	159.6	160.6	163.6	164.6
172.5°	160.2	160.4	161.4	162.8	163.0
175°	161.6	161.6	161.6	162.6	161.6
177.5°	161.6	161.6	161.6	161.6	161.6
180°	161.6	161.6	161.6	161.6	161.6

-----



TEST NUMBER: P854335

CATALOG NUMBER: SQ2-WBM-025U-100D-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	8.77	9.72	9.44	10.37	11.12	8.49	9.43	9.16	10.09	10.84
	3H	9.30	10.13	9.97	10.79	11.58	9.01	9.84	9.68	10.50	11.29
	4H	9.57	10.35	10.27	11.02	11.83	9.26	10.03	9.96	10.71	11.51
	6H	9.81	10.52	10.52	11.21	12.02	9.48	10.19	10.19	10.88	11.69
	8H	9.89	10.56	10.61	11.26	12.08	9.55	10.23	10.28	10.93	11.75
	12H	9.93	10.56	10.65	11.26	12.10	9.60	10.24	10.32	10.93	11.77
4H	2H	8.80	9.58	9.50	10.25	11.06	8.54	9.32	9.25	10.00	10.80
	3H	9.54	10.17	10.25	10.89	11.70	9.28	9.91	9.99	10.63	11.44
	4H	9.95	10.52	10.68	11.24	12.09	9.66	10.23	10.38	10.94	11.80
	6H	10.33	10.82	11.08	11.56	12.43	10.02	10.50	10.76	11.25	12.11
	8H	10.47	10.92	11.21	11.66	12.53	10.14	10.60	10.89	11.34	12.21
	12H	10.55	10.95	11.31	11.71	12.59	10.23	10.63	10.99	11.39	12.27
8H	4H	10.04	10.49	10.79	11.23	12.10	9.77	10.22	10.52	10.96	11.83
	6H	10.55	10.91	11.32	11.70	12.57	10.25	10.62	11.03	11.40	12.28
	8H	10.76	11.09	11.55	11.87	12.76	10.45	10.78	11.24	11.57	12.46
	12H	10.92	11.21	11.70	11.98	12.93	10.61	10.90	11.39	11.67	12.62
12H	4H	10.02	10.42	10.78	11.18	12.06	9.75	10.15	10.52	10.92	11.79
	6H	10.56	10.89	11.35	11.67	12.56	10.27	10.60	11.06	11.39	12.28
	8H	10.81	11.10	11.60	11.87	12.82	10.51	10.80	11.30	11.58	12.53