

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: P854336

Luminaire Tested: SQ2-WBM-025U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854336  
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-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

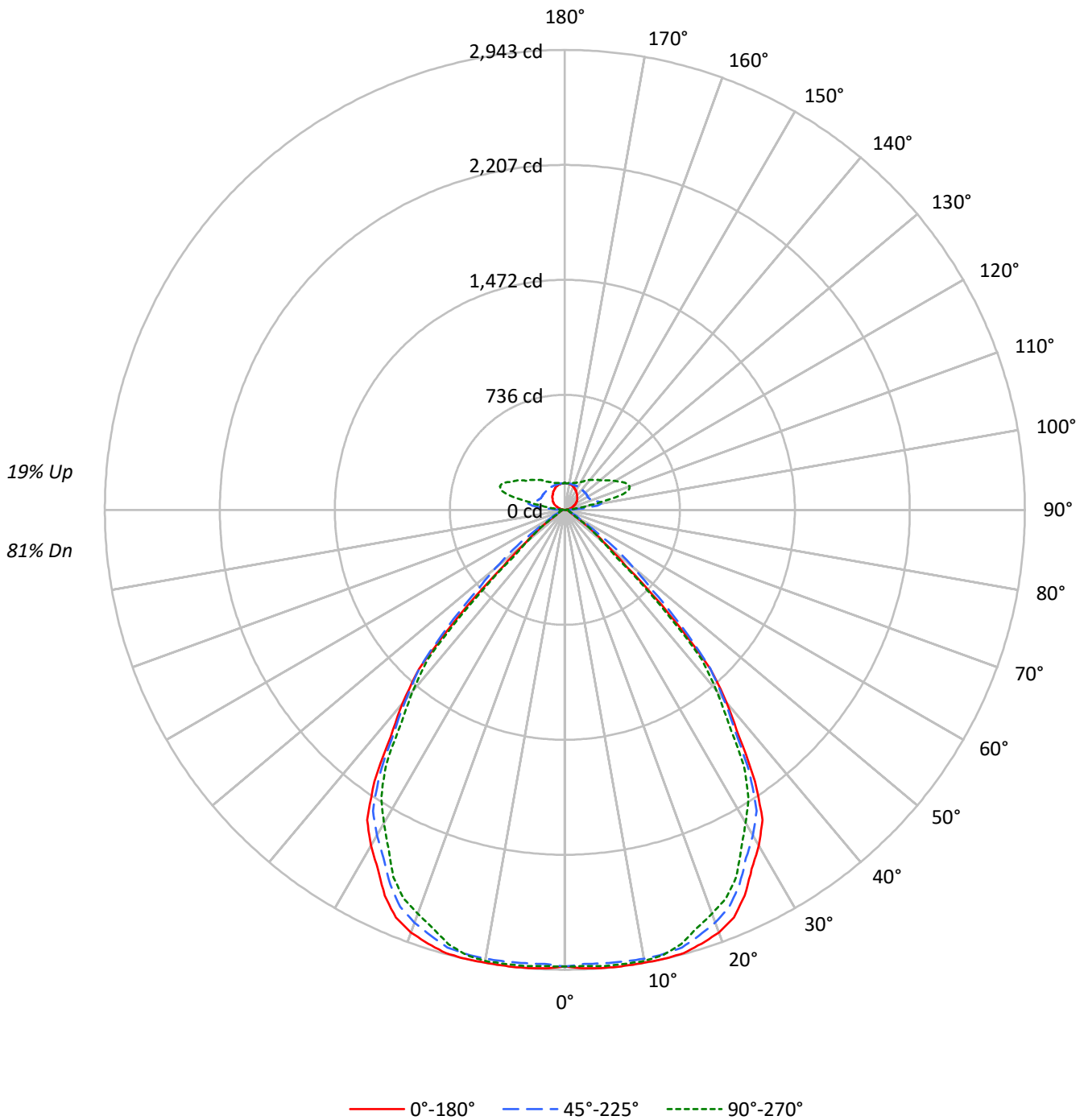
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5672.8 lumens  
Efficiency: N/A  
Efficacy: 124.7 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: P854336

CATALOG NUMBER: SQ2-WBM-025U-100D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854336

CATALOG NUMBER: SQ2-WBM-025U-100D-940-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°	47180	47180	47180
5°	47686	47188	47496
10°	48237	47803	48063
15°	49091	48455	48084
20°	49462	48318	47245
25°	48515	47101	46198
30°	46236	44836	43121
35°	41837	40627	39356
40°	33970	33280	31809
45°	21758	24172	19559
50°	8528	14318	7676
55°	4020	6550	4020
60°	1912	3178	1741
65°	1738	1819	1616
70°	1648	1699	1548
75°	1647	1647	1516
80°	1571	1571	1478
85°	1371	1371	1371

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 24332 cd/sqm



TEST NUMBER: P854336

CATALOG NUMBER: SQ2-WBM-025U-100D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	279.9	4.9
10°-20°	820.3	14.5
20°-30°	1217.4	21.5
30°-40°	1264.5	22.3
40°-50°	761.0	13.4
50°-60°	182.4	3.2
60°-70°	49.5	0.9
70°-80°	27.8	0.5
80°-90°	9.1	0.2
90°-100°	69.2	1.2
100°-110°	215.2	3.8
110°-120°	210.5	3.7
120°-130°	171.8	3.0
130°-140°	140.6	2.5
140°-150°	109.7	1.9
150°-160°	79.2	1.4
160°-170°	48.4	0.9
170°-180°	16.3	0.3
0°-30°	2317.6	40.9
0°-40°	3582.1	63.1
0°-60°	4525.6	79.8
0°-90°	4611.9	81.3
90°-120°	494.8	8.7
90°-150°	917.0	16.2
90°-180°	1061.0	18.7
0°-180°	5672.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2922	2922	2922	2922	2922	
5°	2942	2935	2912	2942	2930	281
15°	2937	2958	2899	2897	2877	828
25°	2723	2742	2644	2609	2593	1246
35°	2123	2103	2061	2020	1997	1300
45°	953	1066	1059	1008	857	728
55°	143	161	233	155	143	147
65°	46	46	48	45	42	45
75°	26	28	26	25	24	27
85°	7	8	7	7	7	8
90°	0	1	3	3	3	1
95°	9	28	127	47	30	11
105°	38	53	212	404	386	40
115°	67	79	172	355	415	66
125°	93	104	170	279	327	83
135°	112	124	169	241	271	87
145°	131	141	169	208	226	82
155°	150	155	170	187	193	69
165°	165	166	171	176	178	46
175°	171	171	171	172	171	16
180°	171	171	171	171	171	



TEST NUMBER: P854336

CATALOG NUMBER: SQ2-WBM-025U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2922.1	2922.1	2922.1	2922.1	2922.1
2.5°	2936.5	2929.9	2908.6	2932.0	2922.1
5°	2942.2	2934.9	2911.5	2941.9	2930.5
7.5°	2943.0	2943.4	2915.7	2942.5	2929.9
10°	2942.2	2948.4	2915.7	2940.9	2931.6
12.5°	2943.0	2953.4	2912.4	2930.6	2916.4
15°	2936.9	2957.6	2898.8	2897.3	2876.6
17.5°	2910.0	2935.7	2856.1	2831.6	2807.2
20°	2878.7	2903.5	2812.1	2776.6	2749.7
22.5°	2824.6	2850.2	2749.5	2711.6	2692.2
25°	2723.3	2741.9	2643.9	2608.7	2593.2
27.5°	2590.0	2596.0	2510.7	2469.7	2443.2
30°	2480.0	2485.2	2404.9	2358.4	2312.9
32.5°	2354.0	2345.1	2283.9	2233.2	2186.0
35°	2122.6	2102.9	2061.2	2019.5	1996.7
37.5°	1829.2	1824.2	1793.9	1743.7	1716.4
40°	1611.7	1628.3	1579.0	1542.3	1509.2
42.5°	1379.1	1419.6	1376.8	1324.9	1296.8
45°	952.9	1065.6	1058.6	1007.6	856.6
47.5°	529.8	671.7	757.0	593.8	439.3
50°	339.5	436.7	570.0	358.4	305.6
52.5°	238.0	291.3	421.1	254.0	225.3
55°	142.8	161.4	232.7	155.2	142.8
57.5°	86.3	104.3	132.2	104.0	84.4
60°	59.2	74.7	98.4	69.4	53.9
62.5°	51.6	57.2	76.4	54.4	48.9
65°	45.5	46.5	47.6	45.4	42.3
67.5°	39.1	41.2	40.2	39.3	37.0
70°	34.9	37.0	36.0	35.9	32.8
72.5°	31.5	33.6	32.6	31.7	29.4
75°	26.4	27.5	26.4	25.4	24.3
77.5°	20.3	21.3	21.2	20.3	19.2
80°	16.9	18.0	16.9	16.9	15.9
82.5°	13.5	13.7	13.5	12.7	12.5
85°	7.4	8.4	7.4	7.4	7.4
87.5°	2.5	2.7	3.2	3.2	3.2
90°	0.0	1.0	3.1	3.1	3.1
92.5°	3.4	11.8	40.1	13.2	10.7
95°	9.4	27.9	126.9	46.8	30.4
97.5°	17.2	36.3	210.2	130.8	82.4
100°	23.1	40.5	237.0	221.7	147.9
102.5°	28.9	45.6	232.0	316.6	248.5
105°	37.8	53.1	211.8	404.4	385.9
107.5°	46.6	60.9	192.5	411.1	431.4
110°	52.4	66.8	182.5	401.5	441.5



TEST NUMBER: P854336

CATALOG NUMBER: SQ2-WBM-025U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	58.3	71.8	177.4	384.1	434.8
115°	67.1	79.4	172.0	354.8	415.3
117.5°	75.7	87.0	169.7	326.7	388.7
120°	80.8	92.0	168.8	310.7	370.2
122.5°	85.8	97.1	169.7	297.2	351.7
125°	93.3	103.6	169.9	279.0	327.2
127.5°	99.4	109.9	169.9	265.4	306.4
130°	102.8	114.1	169.9	257.8	294.7
132.5°	107.0	118.2	169.1	251.0	285.5
135°	112.2	124.5	168.8	240.8	270.6
137.5°	118.3	129.6	168.8	230.7	257.8
140°	121.7	132.9	168.8	223.9	248.5
142.5°	125.8	136.3	168.8	217.2	239.3
145°	131.1	141.3	168.8	208.1	226.5
147.5°	137.4	146.2	169.9	199.6	214.1
150°	141.6	148.8	169.9	195.3	206.6
152.5°	144.9	151.3	169.9	191.1	200.7
155°	150.0	155.1	169.9	186.8	193.0
157.5°	155.0	158.9	169.9	183.0	186.9
160°	158.4	161.4	169.9	180.5	183.5
162.5°	160.9	163.1	169.9	178.8	181.0
165°	164.7	165.7	170.9	176.2	178.3
167.5°	167.0	167.2	169.9	174.7	175.8
170°	167.8	168.8	169.9	173.1	174.1
172.5°	169.5	169.7	170.7	172.2	172.4
175°	170.9	170.9	170.9	172.0	170.9
177.5°	170.9	170.9	170.9	170.9	170.9
180°	170.9	170.9	170.9	170.9	170.9

-----

TEST NUMBER: P854336

CATALOG NUMBER: SQ2-WBM-025U-100D-940-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	8.97	9.91	9.63	10.56	11.31	8.68	9.63	9.35	10.28	11.03
	3H	9.49	10.32	10.17	10.99	11.77	9.20	10.03	9.88	10.70	11.48
	4H	9.77	10.54	10.46	11.22	12.02	9.45	10.23	10.15	10.90	11.71
	6H	10.00	10.71	10.71	11.40	12.21	9.67	10.38	10.38	11.07	11.89
	8H	10.08	10.75	10.80	11.45	12.27	9.75	10.42	10.47	11.12	11.94
	12H	10.12	10.76	10.84	11.45	12.30	9.79	10.43	10.51	11.13	11.97
4H	2H	9.00	9.77	9.70	10.45	11.25	8.74	9.51	9.44	10.19	10.99
	3H	9.73	10.36	10.44	11.08	11.90	9.47	10.10	10.18	10.82	11.64
	4H	10.15	10.71	10.87	11.43	12.28	9.85	10.42	10.58	11.14	11.99
	6H	10.53	11.01	11.27	11.76	12.62	10.21	10.70	10.96	11.44	12.31
	8H	10.66	11.11	11.41	11.85	12.72	10.34	10.79	11.09	11.53	12.40
	12H	10.74	11.14	11.50	11.91	12.78	10.42	10.82	11.19	11.59	12.46
8H	4H	10.23	10.69	10.98	11.43	12.30	9.96	10.42	10.71	11.16	12.03
	6H	10.74	11.11	11.52	11.89	12.77	10.44	10.81	11.22	11.60	12.47
	8H	10.95	11.28	11.74	12.07	12.95	10.65	10.98	11.44	11.76	12.65
	12H	11.11	11.40	11.90	12.17	13.12	10.80	11.09	11.59	11.86	12.82
12H	4H	10.21	10.61	10.98	11.38	12.25	9.95	10.35	10.71	11.11	11.99
	6H	10.75	11.08	11.54	11.87	12.76	10.47	10.80	11.26	11.58	12.47
	8H	11.00	11.29	11.79	12.06	13.02	10.71	11.00	11.49	11.77	12.72