

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: P854376

Luminaire Tested: SQ2-WBM-100U-050D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854376  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G3-2104-222-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-100U-050D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

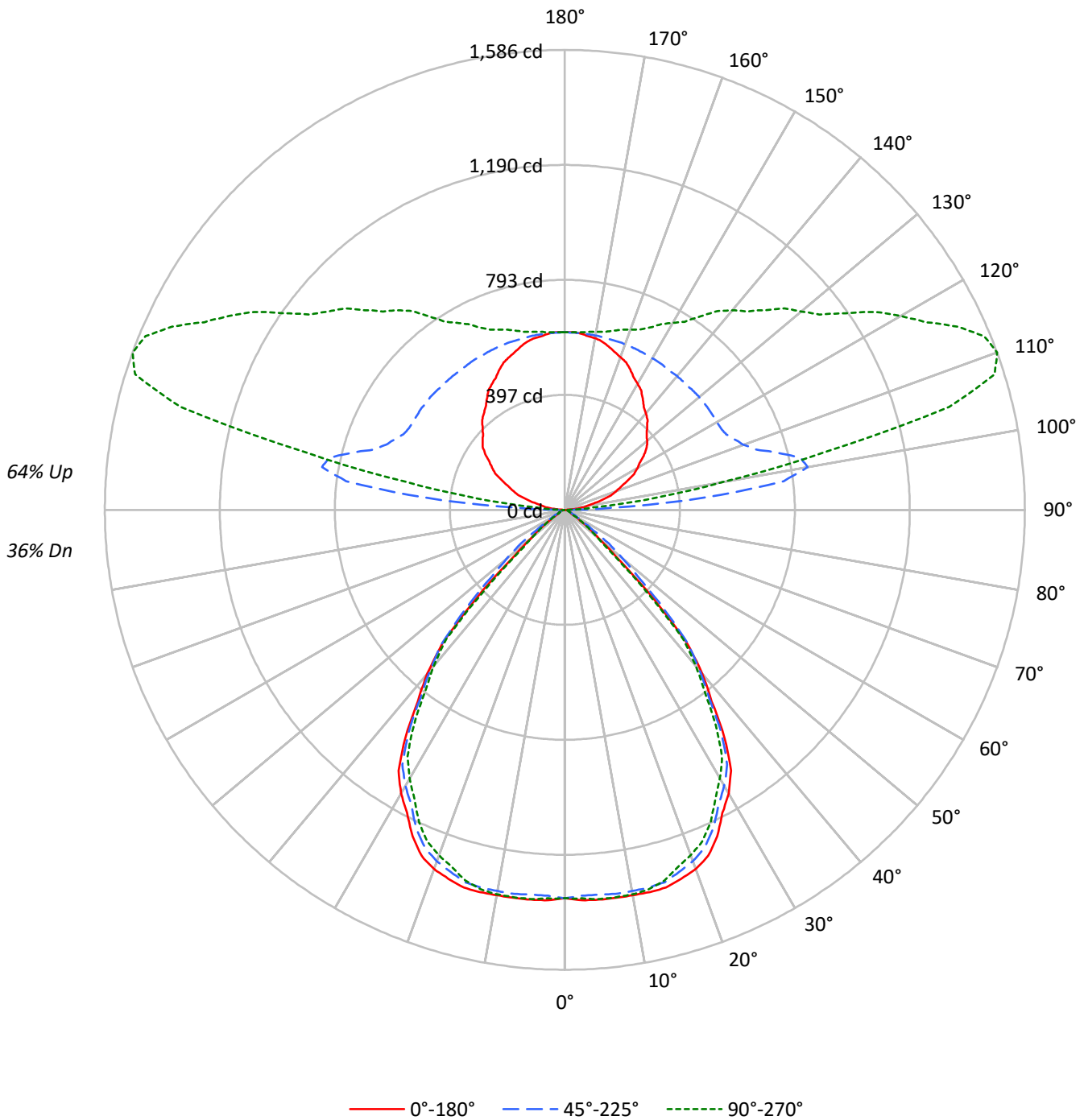
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5921.7 lumens  
Efficiency: N/A  
Efficacy: 116.8 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.19 / 1.17  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 50.7  
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: P854376

CATALOG NUMBER: SQ2-WBM-100U-050D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854376

CATALOG NUMBER: SQ2-WBM-100U-050D-930-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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	36
1	96	92	89	86	87	84	81	78	68	66	64	53	52	51	40	39	39	33
2	88	82	77	72	80	75	70	66	61	58	55	48	46	45	37	36	35	29
3	81	73	67	62	74	67	62	57	55	51	48	44	42	40	34	32	31	27
4	75	66	59	54	68	60	54	50	50	46	42	40	37	35	31	29	28	24
5	70	59	52	47	63	54	48	44	45	41	37	37	34	31	29	27	25	22
6	64	54	46	41	59	49	43	38	41	37	33	34	31	28	27	25	23	20
7	60	49	42	37	54	45	39	34	38	33	30	31	28	25	25	23	21	18
8	56	44	37	33	51	41	35	31	35	30	27	29	25	23	23	21	19	17
9	52	41	34	29	47	38	32	28	32	27	24	26	23	21	21	19	18	15
10	49	38	31	26	44	35	29	25	30	25	22	25	21	19	20	18	16	14

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

	0°	45°	90°
0°	21632	21632	21632
5°	21870	21590	21840
10°	22123	21887	22076
15°	22539	22218	22121
20°	22656	22161	21780
25°	22137	21590	21178
30°	21052	20495	19939
35°	18920	18559	17895
40°	15548	15224	14779
45°	9839	11047	8873
50°	3818	6498	3504
55°	1841	2950	1869
60°	869	1460	807
65°	772	844	734
70°	774	774	727
75°	717	780	661
80°	716	716	623
85°	704	704	537

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11047 cd/sqm



TEST NUMBER: P854376

CATALOG NUMBER: SQ2-WBM-100U-050D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.3	2.2
10°-20°	376.4	6.4
20°-30°	557.4	9.4
30°-40°	577.4	9.8
40°-50°	347.0	5.9
50°-60°	83.0	1.4
60°-70°	22.6	0.4
70°-80°	12.6	0.2
80°-90°	5.1	0.1
90°-100°	255.8	4.3
100°-110°	773.7	13.1
110°-120°	755.2	12.8
120°-130°	617.2	10.4
130°-140°	503.8	8.5
140°-150°	392.2	6.6
150°-160°	282.7	4.8
160°-170°	173.1	2.9
170°-180°	58.4	1.0
0°-30°	1062.1	17.9
0°-40°	1639.5	27.7
0°-60°	2069.5	34.9
0°-90°	2109.8	35.6
90°-120°	1784.7	30.1
90°-150°	3297.8	55.7
90°-180°	3812.0	64.4
0°-180°	5921.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1349	1345	1332	1349	1348	129
15°	1348	1357	1329	1330	1323	380
25°	1243	1254	1212	1196	1189	568
35°	960	958	942	924	908	590
45°	431	484	484	458	389	329
55°	65	75	105	70	66	67
65°	20	21	22	20	19	21
75°	12	12	12	12	11	13
85°	4	4	4	4	3	4
90°	0	2	12	7	6	2
95°	32	100	483	178	112	38
105°	135	189	760	1443	1371	141
115°	239	286	614	1271	1493	237
125°	335	371	606	1004	1182	297
135°	401	443	602	866	974	310
145°	468	503	602	745	814	293
155°	534	552	606	668	693	246
165°	584	590	609	632	639	164
175°	611	611	612	616	614	58
180°	612	612	612	612	612	

TEST NUMBER: P854376

CATALOG NUMBER: SQ2-WBM-100U-050D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1339.8	1339.8	1339.8	1339.8	1339.8
2.5°	1347.5	1343.0	1332.1	1344.3	1341.3
5°	1349.4	1344.7	1332.1	1349.4	1347.5
7.5°	1349.4	1346.4	1335.7	1350.1	1347.3
10°	1349.4	1349.4	1335.0	1349.3	1346.5
12.5°	1350.2	1353.9	1334.2	1344.7	1340.4
15°	1348.4	1356.9	1329.2	1330.0	1323.4
17.5°	1334.0	1347.2	1309.0	1301.3	1292.3
20°	1318.6	1331.8	1289.8	1275.2	1267.6
22.5°	1291.7	1305.6	1260.5	1246.7	1238.4
25°	1242.6	1253.9	1211.9	1196.3	1188.8
27.5°	1177.6	1182.7	1146.3	1131.7	1123.4
30°	1129.2	1128.2	1099.3	1080.8	1069.5
32.5°	1066.8	1068.1	1041.6	1023.8	1008.7
35°	959.9	958.0	941.6	923.9	907.9
37.5°	832.3	833.7	816.2	797.4	791.2
40°	737.7	740.5	722.3	702.1	701.2
42.5°	622.3	643.2	630.0	608.9	605.0
45°	430.9	483.5	483.8	458.2	388.6
47.5°	239.7	305.5	344.9	272.0	203.3
50°	152.0	195.2	258.7	163.0	139.5
52.5°	108.1	129.5	191.8	116.2	101.8
55°	65.4	74.8	104.8	70.1	66.4
57.5°	40.0	48.3	61.4	47.5	39.6
60°	26.9	34.5	45.2	30.6	25.0
62.5°	23.9	26.1	35.2	24.6	22.7
65°	20.2	21.1	22.1	20.2	19.2
67.5°	17.9	18.8	18.7	17.9	16.9
70°	16.4	17.3	16.4	16.3	15.4
72.5°	14.8	15.0	14.8	14.0	13.8
75°	11.5	12.5	12.5	11.5	10.6
77.5°	9.2	10.0	9.2	9.2	8.3
80°	7.7	7.7	7.7	7.7	6.7
82.5°	6.2	6.2	6.2	6.1	5.2
85°	3.8	3.8	3.8	3.8	2.9
87.5°	1.5	1.9	3.8	2.1	1.9
90°	0.0	1.9	11.5	6.7	5.8
92.5°	10.8	43.5	156.2	51.8	37.3
95°	31.7	100.4	482.7	178.3	112.5
97.5°	61.3	127.7	760.8	503.4	306.5
100°	79.8	144.7	850.0	821.8	551.9
102.5°	100.6	163.2	831.5	1152.6	918.8
105°	134.6	189.1	759.6	1442.6	1371.2
107.5°	166.9	219.0	690.4	1471.3	1554.0
110°	188.5	238.3	655.8	1435.2	1585.6



TEST NUMBER: P854376

CATALOG NUMBER: SQ2-WBM-100U-050D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	209.2	257.6	635.0	1374.5	1564.8
115°	239.4	285.5	614.4	1271.4	1493.3
117.5°	269.4	313.0	607.1	1174.8	1401.9
120°	289.4	330.8	604.8	1118.4	1336.5
122.5°	307.9	347.0	604.8	1068.8	1270.4
125°	334.6	371.3	605.8	1004.0	1181.7
127.5°	356.3	394.3	604.8	955.2	1106.7
130°	370.2	409.7	604.8	927.2	1064.4
132.5°	382.5	422.7	604.0	901.5	1028.3
135°	401.0	443.3	601.9	865.9	974.0
137.5°	421.5	461.8	601.9	827.9	928.1
140°	434.6	474.1	601.9	803.1	898.1
142.5°	447.7	485.7	601.2	780.5	863.5
145°	468.3	503.1	601.9	744.9	814.4
147.5°	488.8	518.4	603.1	715.4	768.8
150°	501.9	529.2	603.8	699.1	744.2
152.5°	514.2	538.5	604.6	685.1	721.9
155°	533.7	551.5	605.8	667.9	693.3
157.5°	550.6	565.1	606.9	655.2	672.9
160°	560.6	572.8	607.7	647.4	660.6
162.5°	570.6	579.8	608.5	640.4	651.3
165°	583.7	590.2	608.7	631.9	639.4
167.5°	594.8	598.2	609.8	625.3	628.5
170°	601.0	602.8	610.6	622.1	623.1
172.5°	604.8	605.9	610.6	619.0	619.2
175°	610.6	610.6	611.5	616.3	614.4
177.5°	613.3	612.5	611.7	614.0	612.5
180°	612.5	612.5	612.5	612.5	612.5

-----



TEST NUMBER: P854376

CATALOG NUMBER: SQ2-WBM-100U-050D-930-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	2.04	2.70	3.14	3.77	5.24	1.63	2.29	2.73	3.36	4.84
	3H	2.55	3.13	3.65	4.22	5.71	2.14	2.72	3.25	3.81	5.30
	4H	2.79	3.34	3.91	4.43	5.93	2.37	2.92	3.49	4.01	5.51
	6H	3.00	3.50	4.12	4.60	6.10	2.56	3.07	3.68	4.16	5.66
	8H	3.07	3.55	4.20	4.66	6.16	2.62	3.09	3.74	4.20	5.70
	12H	3.12	3.57	4.25	4.67	6.19	2.64	3.09	3.77	4.19	5.71
4H	2H	2.04	2.59	3.17	3.68	5.18	1.67	2.22	2.79	3.31	4.81
	3H	2.77	3.22	3.89	4.34	5.84	2.40	2.85	3.52	3.97	5.48
	4H	3.15	3.57	4.28	4.67	6.20	2.77	3.18	3.89	4.29	5.81
	6H	3.49	3.85	4.63	4.98	6.50	3.09	3.45	4.23	4.57	6.10
	8H	3.62	3.96	4.76	5.07	6.61	3.21	3.54	4.34	4.65	6.19
	12H	3.71	4.01	4.86	5.14	6.68	3.26	3.56	4.41	4.69	6.23
8H	4H	3.23	3.57	4.37	4.68	6.22	2.88	3.21	4.01	4.33	5.87
	6H	3.70	3.97	4.85	5.13	6.66	3.34	3.61	4.49	4.77	6.30
	8H	3.91	4.15	5.07	5.29	6.84	3.54	3.78	4.70	4.92	6.47
	12H	4.08	4.29	5.24	5.42	7.01	3.68	3.89	4.84	5.03	6.62
12H	4H	3.20	3.50	4.35	4.63	6.17	2.85	3.15	4.00	4.28	5.82
	6H	3.72	3.96	4.88	5.10	6.65	3.37	3.61	4.53	4.75	6.30
	8H	3.96	4.17	5.12	5.30	6.89	3.60	3.81	4.76	4.94	6.53