

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: P854370

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

Issue Date: 7/12/2024

**Test Information**

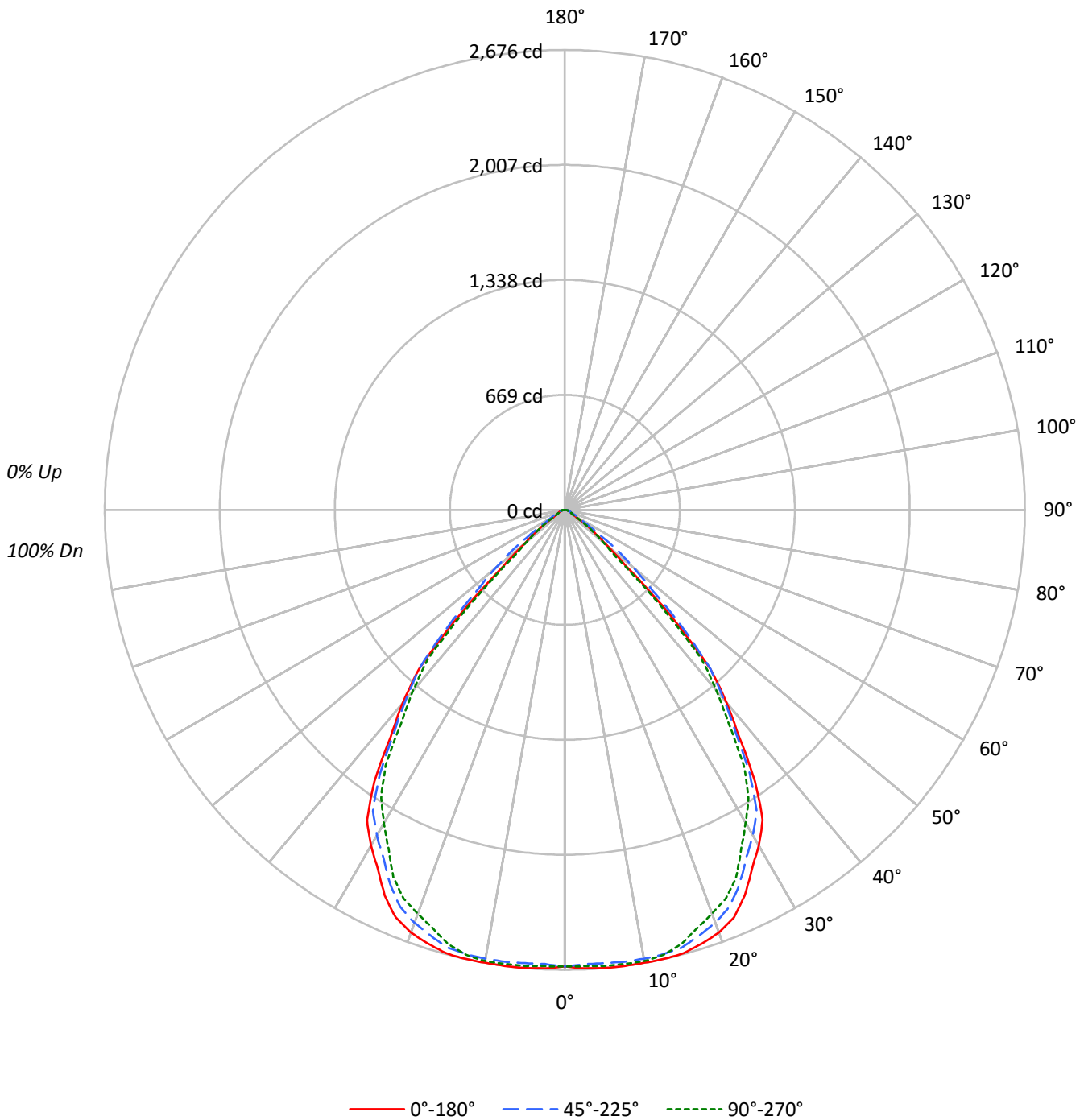
Test Method: LM-79-2019  
Report Number: P854370  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-100D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SURFACE LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4193.8 lumens  
Efficiency: N/A  
Efficacy: 110.1 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: Direct  
  
Input Watts (W): 38.1  
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	87	84	83				
3	99	92	86	81	97	90	85	80	87	83	79	85	81	78	83	79	77	75				
4	93	84	78	73	91	83	77	72	81	75	71	78	74	70	77	73	70	68				
5	87	77	70	65	85	76	70	65	74	69	64	73	68	64	71	67	63	62				
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56				
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	61	57	53	51				
8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	49	47				
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43				
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40				

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

	0°	45°	90°
0°	42908	42908	42908
5°	43366	42914	43195
10°	43868	43474	43710
15°	44645	44067	43729
20°	44983	43941	42967
25°	44121	42836	42013
30°	42049	40775	39217
35°	38047	36947	35792
40°	30895	30266	28928
45°	19788	21984	17790
50°	7754	13021	6983
55°	3654	5956	3654
60°	1741	2887	1586
65°	1582	1654	1471
70°	1496	1544	1407
75°	1497	1497	1379
80°	1432	1432	1339
85°	1241	1241	1241

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 22128 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.6	6.1
10°-20°	746.0	17.8
20°-30°	1107.2	26.4
30°-40°	1150.0	27.4
40°-50°	692.1	16.5
50°-60°	165.9	4.0
60°-70°	45.0	1.1
70°-80°	25.2	0.6
80°-90°	7.9	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2107.7	50.3
0°-40°	3257.7	77.7
0°-60°	4115.7	98.1
0°-90°	4193.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4193.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2658	2658	2658	2658	2658	
5°	2676	2669	2648	2676	2665	255
15°	2671	2690	2636	2635	2616	753
25°	2477	2494	2404	2372	2358	1133
35°	1930	1912	1874	1837	1816	1182
45°	867	969	963	916	779	662
55°	130	147	212	141	130	134
65°	41	42	43	41	38	41
75°	24	25	24	23	22	25
85°	7	8	7	7	7	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2657.5	2657.5	2657.5	2657.5	2657.5
2.5°	2670.5	2664.5	2645.1	2666.5	2657.5
5°	2675.7	2669.1	2647.8	2675.5	2665.1
7.5°	2676.5	2676.9	2651.7	2676.0	2664.6
10°	2675.7	2681.4	2651.7	2674.6	2666.1
12.5°	2676.5	2685.9	2648.6	2665.2	2652.3
15°	2670.9	2689.7	2636.3	2634.9	2616.1
17.5°	2646.5	2669.8	2597.4	2575.2	2553.0
20°	2618.0	2640.6	2557.4	2525.1	2500.7
22.5°	2568.8	2592.1	2500.5	2466.0	2448.4
25°	2476.6	2493.6	2404.5	2372.4	2358.3
27.5°	2355.4	2360.9	2283.3	2246.0	2221.9
30°	2255.4	2260.1	2187.1	2144.8	2103.5
32.5°	2140.8	2132.7	2077.1	2030.9	1988.0
35°	1930.3	1912.5	1874.5	1836.6	1815.9
37.5°	1663.5	1659.0	1631.4	1585.8	1561.0
40°	1465.8	1480.8	1436.0	1402.6	1372.5
42.5°	1254.2	1291.1	1252.1	1204.9	1179.4
45°	866.6	969.1	962.8	916.4	779.1
47.5°	481.9	610.9	688.5	540.0	399.5
50°	308.7	397.1	518.4	325.9	278.0
52.5°	216.4	264.9	383.0	231.0	204.9
55°	129.8	146.8	211.6	141.1	129.8
57.5°	78.5	94.8	120.2	94.6	76.8
60°	53.9	68.0	89.4	63.2	49.1
62.5°	46.9	52.0	69.4	49.5	44.4
65°	41.4	42.3	43.3	41.3	38.5
67.5°	35.6	37.5	36.5	35.7	33.7
70°	31.7	33.6	32.7	32.6	29.8
72.5°	28.7	30.5	29.6	28.8	26.7
75°	24.0	25.0	24.0	23.1	22.1
77.5°	18.5	19.4	19.2	18.4	17.5
80°	15.4	16.3	15.4	15.4	14.4
82.5°	12.3	12.5	12.3	11.5	11.3
85°	6.7	7.7	6.7	6.7	6.7
87.5°	2.3	2.3	2.3	2.3	2.3
90°	0.0	0.0	0.0	0.0	0.0



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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	10.14	11.32	10.50	11.63	11.95	9.86	11.04	10.22	11.35	11.66
	3H	10.68	11.71	11.06	12.04	12.41	10.39	11.42	10.77	11.75	12.12
	4H	10.96	11.92	11.37	12.27	12.66	10.65	11.61	11.05	11.96	12.35
	6H	11.21	12.08	11.62	12.46	12.85	10.88	11.76	11.29	12.13	12.52
	8H	11.29	12.12	11.72	12.51	12.92	10.96	11.78	11.39	12.18	12.58
	12H	11.33	12.12	11.77	12.51	12.94	11.00	11.79	11.44	12.18	12.61
4H	2H	10.19	11.15	10.60	11.51	11.89	9.93	10.89	10.34	11.25	11.63
	3H	10.94	11.72	11.36	12.13	12.53	10.68	11.46	11.10	11.87	12.27
	4H	11.36	12.05	11.80	12.47	12.92	11.07	11.76	11.50	12.18	12.62
	6H	11.75	12.34	12.21	12.79	13.26	11.43	12.02	11.90	12.47	12.94
	8H	11.88	12.43	12.35	12.88	13.35	11.56	12.11	12.03	12.56	13.03
	12H	11.96	12.45	12.45	12.94	13.41	11.64	12.13	12.13	12.61	13.09
8H	4H	11.45	12.01	11.93	12.45	12.93	11.18	11.73	11.65	12.18	12.66
	6H	11.96	12.41	12.46	12.91	13.39	11.66	12.11	12.17	12.61	13.10
	8H	12.16	12.57	12.69	13.08	13.58	11.86	12.26	12.39	12.78	13.28
	12H	12.33	12.69	12.85	13.18	13.76	12.02	12.38	12.54	12.87	13.45
12H	4H	11.44	11.92	11.93	12.41	12.88	11.17	11.66	11.66	12.14	12.62
	6H	11.96	12.37	12.49	12.89	13.38	11.68	12.08	12.21	12.60	13.10
	8H	12.22	12.58	12.74	13.07	13.65	11.93	12.28	12.44	12.78	13.36