

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: P853532

Luminaire Tested: SQ2-BBM-0U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853532  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-BBM-0U-100D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: -  
Ballast/Driver: -

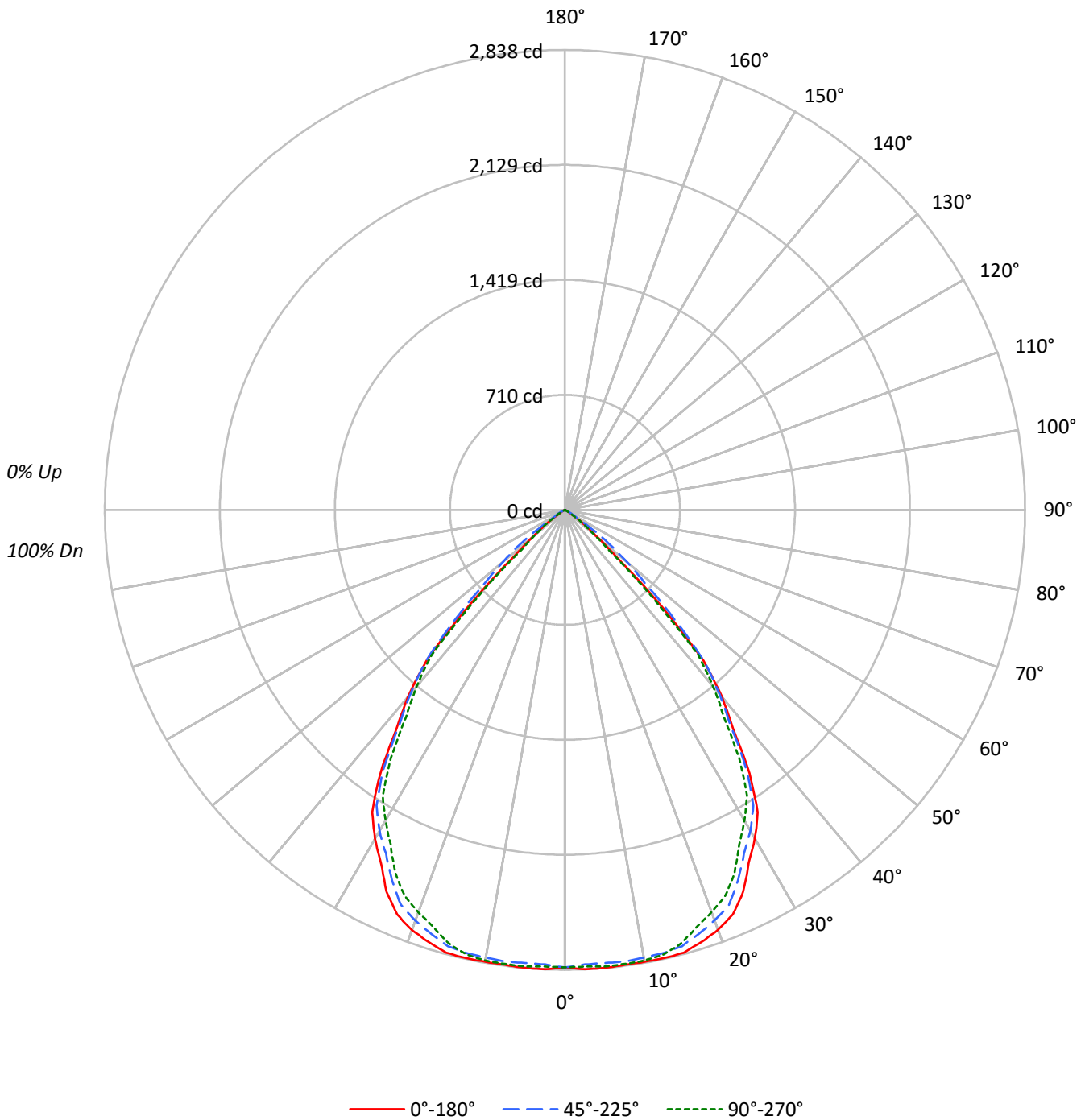
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4223.6 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.17 / 1.16  
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92				
2	106	101	96	93	104	99	95	92	96	92	89	93	90	88	90	88	86	84				
3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	67	86	78	71	67	76	70	66	74	69	66	72	68	65	63				
6	83	73	66	61	81	72	65	61	70	65	60	69	64	60	67	63	59	58				
7	78	67	61	56	76	67	60	56	65	59	55	64	59	55	63	58	55	53				
8	73	63	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49				
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45				
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41				

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

	0°	45°	90°
0°	45583	45583	45583
5°	45979	45483	45859
10°	46424	46009	46303
15°	47280	46589	46307
20°	47400	46345	45400
25°	46337	44961	44076
30°	43682	42636	41275
35°	39133	38445	36902
40°	31748	31213	29986
45°	19322	21907	17342
50°	6164	12381	5632
55°	2145	4495	2204
60°	171	1298	36
65°	0	80	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 21907 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.8	6.4
10°-20°	789.0	18.7
20°-30°	1162.9	27.5
30°-40°	1190.9	28.2
40°-50°	686.2	16.2
50°-60°	120.2	2.8
60°-70°	4.6	0.1
70°-80°	0.0	0.0
80°-90°	0.0	0.0
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°	2221.7	52.6
0°-40°	3412.6	80.8
0°-60°	4219.0	99.9
0°-90°	4223.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4223.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2823	2823	2823	2823	2823	
5°	2837	2831	2806	2840	2830	270
15°	2828	2851	2787	2787	2770	796
25°	2601	2621	2524	2501	2474	1187
35°	1985	1974	1950	1903	1872	1218
45°	846	946	959	912	760	648
55°	76	92	160	86	78	85
65°	0	1	2	1	0	1
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2823.2	2823.2	2823.2	2823.2	2823.2
2.5°	2837.6	2830.1	2807.9	2830.6	2820.6
5°	2836.9	2830.7	2806.3	2839.9	2829.5
7.5°	2831.6	2830.2	2811.3	2837.7	2825.9
10°	2831.6	2836.8	2806.3	2833.5	2824.2
12.5°	2833.3	2845.1	2801.2	2822.5	2809.0
15°	2828.5	2851.2	2787.2	2786.8	2770.3
17.5°	2796.7	2823.6	2743.0	2721.1	2699.0
20°	2758.7	2789.7	2697.3	2666.1	2642.3
22.5°	2703.7	2733.9	2639.8	2604.3	2580.5
25°	2601.0	2620.7	2523.8	2501.0	2474.1
27.5°	2455.5	2467.1	2391.8	2352.3	2328.1
30°	2343.0	2351.2	2286.9	2243.9	2213.9
32.5°	2212.6	2209.3	2162.5	2118.7	2090.4
35°	1985.4	1974.1	1950.5	1903.3	1872.2
37.5°	1706.0	1703.9	1680.6	1639.6	1607.2
40°	1506.3	1504.2	1480.9	1444.4	1422.7
42.5°	1264.2	1303.5	1276.1	1231.4	1217.9
45°	846.2	946.5	959.4	911.5	759.5
47.5°	436.6	570.7	668.1	520.4	360.5
50°	245.4	344.7	492.9	279.1	224.2
52.5°	159.9	207.9	344.0	178.1	150.6
55°	76.2	91.7	159.7	86.5	78.3
57.5°	27.3	42.2	69.8	42.8	26.4
60°	5.3	17.7	40.2	12.4	1.1
62.5°	1.9	5.2	23.3	3.3	1.1
65°	0.0	1.0	2.1	1.0	0.0
67.5°	0.0	0.8	0.8	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	5.34	6.47	5.70	6.78	7.10	4.80	5.94	5.17	6.25	6.56
	3H	5.17	6.16	5.55	6.49	6.86	4.64	5.63	5.02	5.96	6.33
	4H	5.08	6.00	5.49	6.35	6.74	4.55	5.46	4.95	5.81	6.20
	6H	4.99	5.82	5.40	6.20	6.59	4.45	5.29	4.87	5.66	6.06
	8H	4.93	5.72	5.37	6.11	6.52	4.40	5.19	4.83	5.58	5.99
	12H	4.88	5.63	5.32	6.02	6.45	4.35	5.10	4.78	5.48	5.91
4H	2H	5.09	6.01	5.50	6.36	6.75	4.56	5.47	4.96	5.83	6.21
	3H	4.92	5.65	5.33	6.06	6.47	4.38	5.12	4.80	5.53	5.93
	4H	4.81	5.46	5.25	5.88	6.33	4.27	4.93	4.71	5.35	5.80
	6H	4.71	5.27	5.18	5.72	6.19	4.17	4.73	4.64	5.18	5.65
	8H	4.64	5.16	5.11	5.61	6.08	4.11	4.63	4.58	5.08	5.55
	12H	4.58	5.03	5.07	5.52	6.00	4.05	4.50	4.54	4.99	5.46
8H	4H	4.64	5.16	5.11	5.61	6.08	4.11	4.63	4.58	5.08	5.55
	6H	4.52	4.94	5.03	5.44	5.92	3.98	4.40	4.49	4.91	5.39
	8H	4.44	4.82	4.97	5.34	5.84	3.91	4.29	4.44	4.81	5.30
	12H	4.39	4.72	4.91	5.22	5.80	3.85	4.19	4.37	4.69	5.26
12H	4H	4.58	5.03	5.07	5.52	6.00	4.05	4.50	4.54	4.99	5.46
	6H	4.44	4.82	4.97	5.34	5.84	3.91	4.29	4.44	4.81	5.30
	8H	4.39	4.72	4.91	5.22	5.80	3.85	4.19	4.37	4.69	5.26