

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: P854396

Luminaire Tested: SQ2-WBM-125U-100D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854396  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-13, G3-2104-222-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-125U-100D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

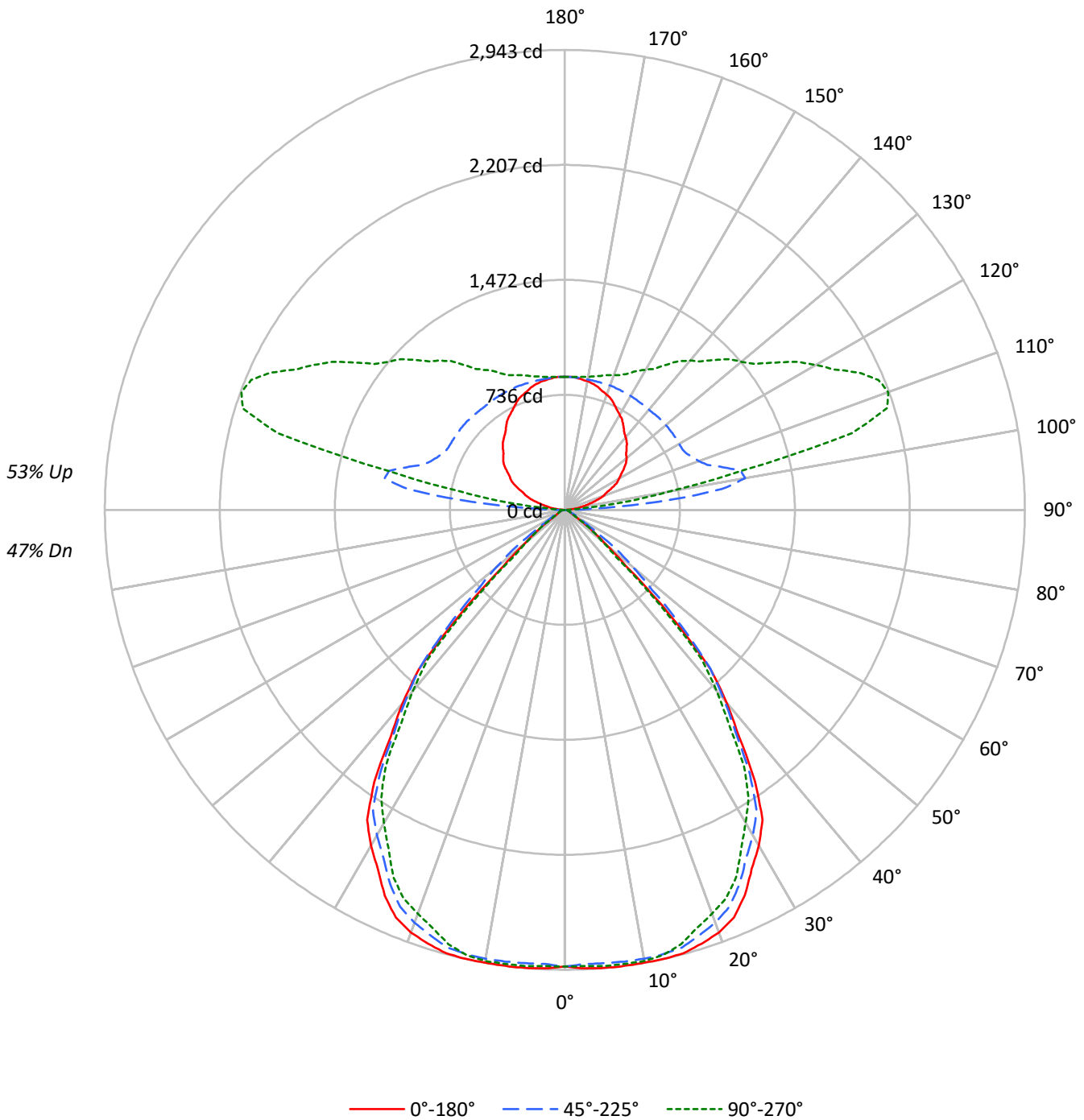
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9869.7 lumens  
Efficiency: N/A  
Efficacy: 120.4 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: General Diffuse  
  
Input Watts (W): 82  
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	0
RCR																		
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	99	95	92	89	91	88	85	82	74	72	70	61	60	59	49	49	48	43
2	91	85	80	76	84	79	74	71	67	64	61	56	54	52	46	44	43	39
3	85	76	70	65	78	71	66	61	61	57	54	51	48	46	42	40	39	35
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	35	32
5	73	62	55	50	67	58	52	47	50	46	42	43	40	37	36	34	32	29
6	67	57	49	44	62	53	47	42	46	41	38	39	36	33	33	31	29	26
7	63	52	45	40	58	48	42	38	42	37	34	36	33	30	31	28	26	24
8	59	47	40	36	54	44	38	34	39	34	31	34	30	27	29	26	24	22
9	55	44	37	32	51	41	35	31	36	31	28	31	28	25	27	24	22	20
10	51	40	34	29	48	38	32	28	33	29	25	29	26	23	25	22	21	19

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	279.9	2.8
10°-20°	820.3	8.3
20°-30°	1217.4	12.3
30°-40°	1264.5	12.8
40°-50°	761.0	7.7
50°-60°	182.4	1.8
60°-70°	49.5	0.5
70°-80°	27.8	0.3
80°-90°	9.6	0.1
90°-100°	325.9	3.3
100°-110°	1061.2	10.8
110°-120°	1049.7	10.6
120°-130°	857.8	8.7
130°-140°	701.1	7.1
140°-150°	546.1	5.5
150°-160°	393.6	4.0
160°-170°	240.6	2.4
170°-180°	81.2	0.8
0°-30°	2317.6	23.5
0°-40°	3582.1	36.3
0°-60°	4525.6	45.9
0°-90°	4612.4	46.7
90°-120°	2436.8	24.7
90°-150°	4541.8	46.0
90°-180°	5257.0	53.3
0°-180°	9869.7	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	3	7	6	6	2
95°	44	134	597	213	131	51
105°	180	260	1051	2008	1901	192
115°	333	398	856	1765	2076	330
125°	463	516	845	1393	1642	412
135°	560	618	841	1202	1356	432
145°	654	702	838	1036	1134	409
155°	746	771	844	927	962	344
165°	814	822	846	878	888	229
175°	849	849	849	855	853	81
180°	852	852	852	852	852	



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**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	3.2	4.0	3.8	3.8
90°	0.0	3.1	7.3	6.3	6.3
92.5°	15.1	54.2	173.4	57.1	44.0
95°	44.0	134.2	597.4	213.0	131.0
97.5°	82.8	174.6	1013.9	617.5	376.9
100°	108.0	198.1	1170.7	1043.9	677.1
102.5°	136.5	223.4	1151.4	1544.4	1174.3
105°	180.3	260.2	1051.2	2007.8	1901.2
107.5°	227.6	302.9	956.1	2048.0	2160.9
110°	262.0	330.7	910.8	1998.1	2202.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	290.5	358.4	882.3	1908.0	2171.0
115°	333.3	397.9	856.3	1764.7	2076.3
117.5°	377.3	435.5	846.2	1633.5	1943.6
120°	402.5	459.9	843.7	1552.7	1853.0
122.5°	426.8	483.3	844.5	1482.7	1762.5
125°	463.3	516.5	844.8	1393.3	1642.3
127.5°	494.5	549.0	844.5	1326.4	1534.0
130°	514.6	569.9	843.7	1288.1	1473.6
132.5°	532.2	590.0	842.9	1252.6	1426.7
135°	559.7	618.1	840.6	1202.5	1356.2
137.5°	586.5	645.3	838.3	1151.6	1288.1
140°	605.8	662.2	837.4	1117.0	1246.2
142.5°	624.2	678.1	837.4	1084.0	1199.2
145°	654.0	702.2	838.5	1035.6	1134.0
147.5°	682.9	724.7	839.9	994.5	1070.5
150°	702.2	739.1	841.6	969.9	1034.5
152.5°	721.5	751.8	842.5	951.2	1002.6
155°	746.2	770.8	843.7	927.3	962.1
157.5°	769.7	787.3	845.0	909.7	934.1
160°	784.0	798.3	845.8	898.7	918.1
162.5°	796.5	807.6	845.8	889.3	903.9
165°	814.4	821.5	845.8	877.5	887.7
167.5°	826.9	831.4	846.0	868.6	873.9
170°	835.3	837.4	846.9	862.6	864.7
172.5°	841.2	842.4	848.5	859.2	858.8
175°	848.9	848.9	848.9	855.2	853.1
177.5°	852.1	851.3	850.4	854.5	851.3
180°	852.1	852.1	852.1	852.1	852.1



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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	5.94	6.65	6.96	7.65	8.98	5.66	6.37	6.68	7.37	8.70
	3H	6.45	7.08	7.48	8.09	9.44	6.16	6.79	7.19	7.80	9.15
	4H	6.72	7.31	7.76	8.32	9.68	6.40	6.99	7.44	8.01	9.37
	6H	6.95	7.49	7.99	8.51	9.87	6.62	7.16	7.66	8.18	9.55
	8H	7.02	7.53	8.07	8.56	9.93	6.69	7.20	7.74	8.23	9.60
	12H	7.05	7.54	8.11	8.56	9.95	6.72	7.21	7.78	8.24	9.62
4H	2H	5.95	6.54	6.99	7.55	8.91	5.69	6.28	6.73	7.29	8.65
	3H	6.67	7.15	7.72	8.20	9.57	6.41	6.89	7.46	7.94	9.31
	4H	7.08	7.52	8.13	8.56	9.95	6.78	7.23	7.84	8.26	9.66
	6H	7.45	7.83	8.52	8.89	10.28	7.14	7.52	8.20	8.57	9.96
	8H	7.58	7.94	8.65	8.99	10.39	7.26	7.62	8.33	8.67	10.07
	12H	7.66	7.97	8.74	9.04	10.45	7.34	7.66	8.42	8.72	10.13
8H	4H	7.16	7.51	8.22	8.56	9.96	6.89	7.24	7.95	8.29	9.69
	6H	7.66	7.95	8.75	9.05	10.45	7.37	7.66	8.45	8.75	10.15
	8H	7.88	8.13	8.97	9.21	10.63	7.58	7.83	8.67	8.91	10.33
	12H	8.03	8.26	9.13	9.33	10.79	7.73	7.95	8.82	9.02	10.48
12H	4H	7.13	7.45	8.21	8.51	9.92	6.87	7.18	7.94	8.25	9.65
	6H	7.68	7.94	8.78	9.01	10.43	7.40	7.65	8.49	8.73	10.15
	8H	7.93	8.15	9.02	9.22	10.68	7.63	7.85	8.72	8.93	10.39