

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: P854330

Luminaire Tested: SQ2-WBM-025U-050D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854330  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G3-2104-222-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-WBM-025U-050D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

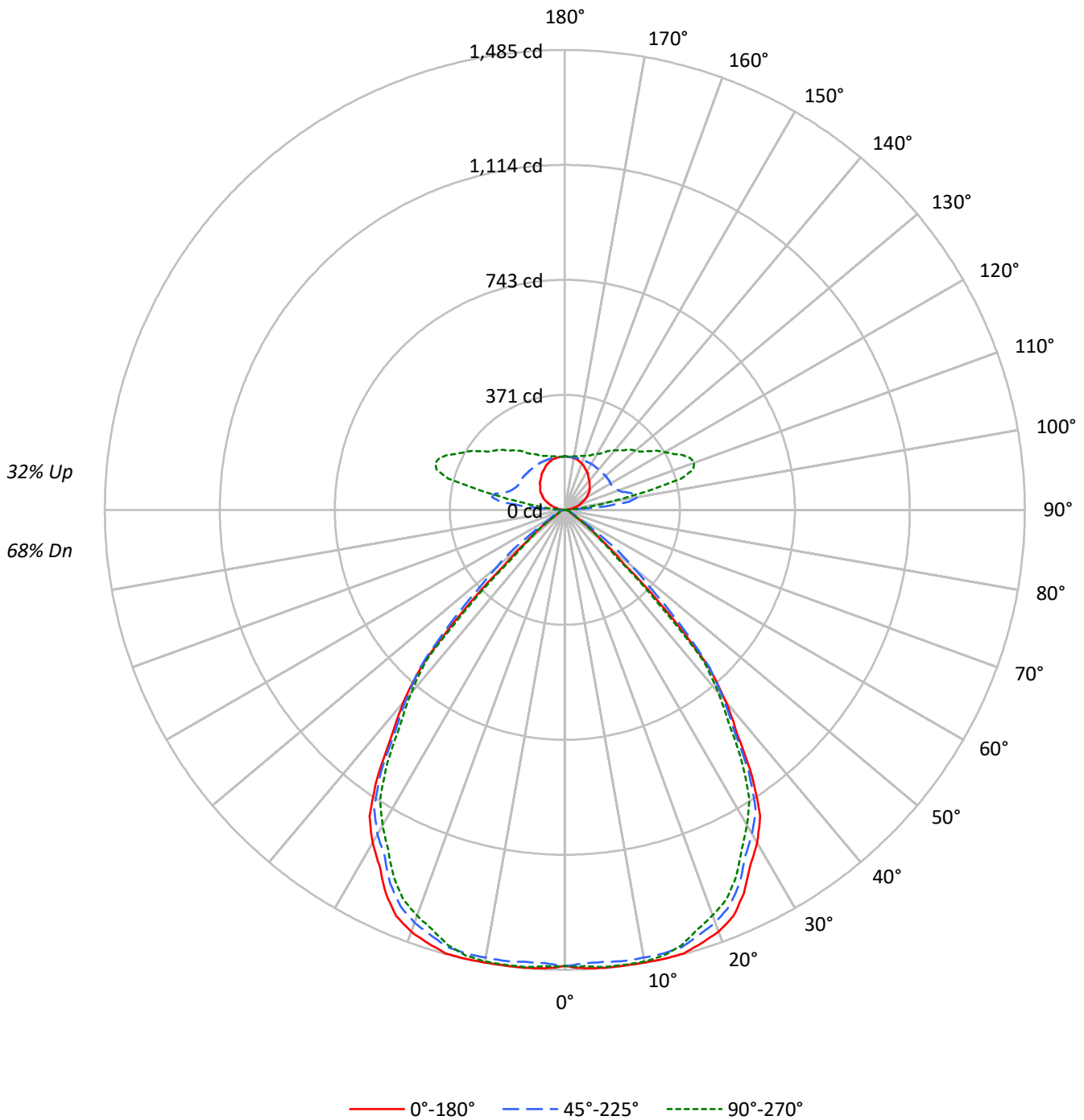
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3388.3 lumens  
Efficiency: N/A  
Efficacy: 132.9 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-Direct  
  
Input Watts (W): 25.5  
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

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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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	68
1	104	101	98	95	99	96	93	90	86	84	82	77	75	74	68	67	66	63
2	97	91	86	82	92	87	82	79	78	75	72	71	68	66	63	62	60	57
3	90	83	77	72	86	79	73	69	72	67	64	65	62	59	59	56	54	51
4	84	75	68	63	80	72	66	61	66	61	57	60	56	53	54	52	49	46
5	78	68	61	56	74	66	59	55	60	55	51	55	51	48	50	47	45	42
6	73	63	56	50	70	60	54	49	55	50	46	51	47	43	47	43	41	38
7	68	58	50	45	65	55	49	44	51	46	42	47	43	40	43	40	37	35
8	64	53	46	41	61	51	45	40	47	42	38	44	39	36	40	37	34	32
9	60	49	42	38	57	47	41	37	44	39	35	41	36	33	38	34	31	30
10	57	45	39	34	54	44	38	34	41	36	32	38	34	31	35	32	29	27

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

	0°	45°	90°
0°	23791	23791	23791
5°	24052	23744	24018
10°	24330	24071	24279
15°	24789	24435	24329
20°	24917	24373	23953
25°	24346	23744	23291
30°	23152	22540	21929
35°	20808	20412	19681
40°	17100	16743	16252
45°	10821	12150	9757
50°	4197	7146	3853
55°	2024	3246	2055
60°	956	1605	888
65°	848	928	810
70°	850	850	798
75°	792	861	724
80°	790	790	688
85°	778	778	593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 12150 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.1	4.2
10°-20°	414.0	12.2
20°-30°	613.0	18.1
30°-40°	635.0	18.7
40°-50°	381.7	11.3
50°-60°	91.2	2.7
60°-70°	24.9	0.7
70°-80°	13.9	0.4
80°-90°	4.9	0.1
90°-100°	69.7	2.1
100°-110°	216.8	6.4
110°-120°	212.1	6.3
120°-130°	173.1	5.1
130°-140°	141.6	4.2
140°-150°	110.5	3.3
150°-160°	79.8	2.4
160°-170°	48.8	1.4
170°-180°	16.4	0.5
0°-30°	1168.1	34.5
0°-40°	1803.0	53.2
0°-60°	2275.9	67.2
0°-90°	2319.5	68.5
90°-120°	498.5	14.7
90°-150°	923.8	27.3
90°-180°	1069.0	31.5
0°-180°	3388.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1484	1479	1465	1484	1482	142
15°	1483	1492	1462	1463	1456	418
25°	1367	1379	1333	1316	1307	625
35°	1056	1054	1036	1016	998	649
45°	474	532	532	504	427	362
55°	72	82	115	77	73	73
65°	22	23	24	22	21	23
75°	13	14	14	13	12	14
85°	4	4	4	4	3	4
90°	0	1	3	3	3	1
95°	10	28	128	47	31	11
105°	38	54	213	407	389	40
115°	68	80	173	357	418	67
125°	94	104	171	281	330	83
135°	113	125	170	243	273	87
145°	132	142	170	210	228	83
155°	151	156	171	188	194	70
165°	166	167	172	178	180	47
175°	172	172	172	173	172	16
180°	172	172	172	172	172	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1473.5	1473.5	1473.5	1473.5	1473.5
2.5°	1481.9	1477.0	1465.0	1478.5	1475.2
5°	1484.0	1478.9	1465.0	1484.0	1481.9
7.5°	1484.0	1480.7	1469.0	1484.8	1481.7
10°	1484.0	1484.0	1468.2	1484.0	1480.9
12.5°	1484.9	1489.0	1467.3	1478.9	1474.1
15°	1483.0	1492.3	1461.8	1462.7	1455.5
17.5°	1467.1	1481.6	1439.6	1431.1	1421.2
20°	1450.2	1464.7	1418.5	1402.4	1394.1
22.5°	1420.6	1435.9	1386.3	1371.1	1362.0
25°	1366.6	1379.0	1332.8	1315.7	1307.4
27.5°	1295.1	1300.7	1260.6	1244.6	1235.5
30°	1241.8	1240.8	1209.0	1188.6	1176.2
32.5°	1173.3	1174.7	1145.6	1125.9	1109.4
35°	1055.7	1053.6	1035.6	1016.1	998.5
37.5°	915.4	916.8	897.6	876.9	870.1
40°	811.3	814.4	794.4	772.1	771.1
42.5°	684.4	707.3	692.8	669.7	665.3
45°	473.9	531.8	532.1	503.9	427.3
47.5°	263.6	336.0	379.3	299.1	223.6
50°	167.1	214.7	284.5	179.2	153.4
52.5°	118.9	142.5	210.9	127.8	111.9
55°	71.9	82.3	115.3	77.1	73.0
57.5°	44.0	53.1	67.5	52.3	43.6
60°	29.6	37.9	49.7	33.7	27.5
62.5°	26.2	28.7	38.7	27.0	25.0
65°	22.2	23.2	24.3	22.2	21.2
67.5°	19.7	20.7	20.5	19.7	18.6
70°	18.0	19.0	18.0	18.0	16.9
72.5°	16.3	16.5	16.3	15.4	15.2
75°	12.7	13.7	13.8	12.7	11.6
77.5°	10.2	11.0	10.2	10.1	9.1
80°	8.5	8.5	8.5	8.4	7.4
82.5°	6.8	6.8	6.8	6.7	5.7
85°	4.2	4.2	4.2	4.2	3.2
87.5°	1.7	1.9	2.3	1.5	1.5
90°	0.0	1.0	3.2	3.2	3.2
92.5°	3.4	11.9	40.4	13.3	10.8
95°	9.5	28.1	127.8	47.2	30.6
97.5°	17.3	36.5	211.7	131.8	83.0
100°	23.2	40.8	238.8	223.3	149.0
102.5°	29.2	45.9	233.7	319.0	250.4
105°	38.0	53.5	213.4	407.4	388.8
107.5°	46.9	61.4	194.0	414.2	434.6
110°	52.8	67.3	183.8	404.5	444.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	58.7	72.4	178.8	387.0	438.0
115°	67.6	80.0	173.3	357.4	418.4
117.5°	76.3	87.6	170.9	329.1	391.5
120°	81.3	92.7	170.1	313.0	372.9
122.5°	86.4	97.8	170.9	299.4	354.3
125°	94.0	104.4	171.1	281.1	329.6
127.5°	100.2	110.7	171.1	267.4	308.7
130°	103.5	114.9	171.1	259.7	296.9
132.5°	107.8	119.1	170.3	252.9	287.6
135°	113.0	125.4	170.1	242.6	272.6
137.5°	119.2	130.5	170.1	232.4	259.7
140°	122.6	133.9	170.1	225.6	250.4
142.5°	126.8	137.3	170.1	218.8	241.1
145°	132.1	142.4	170.1	209.6	228.2
147.5°	138.4	147.3	171.1	201.1	215.7
150°	142.6	149.9	171.1	196.8	208.1
152.5°	146.0	152.4	171.1	192.5	202.2
155°	151.1	156.2	171.1	188.2	194.4
157.5°	156.1	160.1	171.1	184.3	188.3
160°	159.5	162.6	171.1	181.8	184.9
162.5°	162.1	164.3	171.1	180.1	182.3
165°	165.9	166.9	172.2	177.5	179.6
167.5°	168.2	168.4	171.1	176.0	177.1
170°	169.0	170.1	171.1	174.3	175.4
172.5°	170.7	170.9	172.0	173.5	173.7
175°	172.2	172.2	172.2	173.2	172.2
177.5°	172.2	172.2	172.2	172.2	172.2
180°	172.2	172.2	172.2	172.2	172.2

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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	5.58	6.41	6.40	7.22	8.22	5.18	6.01	5.99	6.82	7.81
	3H	6.10	6.84	6.93	7.66	8.68	5.70	6.44	6.53	7.26	8.28
	4H	6.35	7.04	7.20	7.87	8.91	5.94	6.63	6.78	7.46	8.49
	6H	6.57	7.20	7.42	8.04	9.08	6.13	6.76	6.99	7.60	8.65
	8H	6.64	7.24	7.51	8.09	9.14	6.19	6.79	7.05	7.64	8.69
	12H	6.69	7.26	7.56	8.11	9.18	6.21	6.78	7.08	7.63	8.70
4H	2H	5.60	6.29	6.45	7.12	8.16	5.23	5.92	6.08	6.75	7.79
	3H	6.34	6.90	7.19	7.76	8.81	5.98	6.54	6.83	7.40	8.45
	4H	6.72	7.23	7.59	8.10	9.17	6.34	6.85	7.21	7.72	8.79
	6H	7.07	7.51	7.96	8.39	9.48	6.67	7.11	7.56	8.00	9.08
	8H	7.21	7.61	8.09	8.49	9.58	6.79	7.19	7.67	8.07	9.16
	12H	7.30	7.66	8.20	8.56	9.66	6.85	7.21	7.75	8.11	9.21
8H	4H	6.81	7.22	7.70	8.10	9.19	6.46	6.87	7.35	7.75	8.84
	6H	7.28	7.61	8.19	8.54	9.63	6.92	7.25	7.83	8.18	9.27
	8H	7.49	7.79	8.41	8.70	9.81	7.12	7.41	8.04	8.33	9.44
	12H	7.66	7.92	8.59	8.83	9.99	7.26	7.52	8.18	8.43	9.59
12H	4H	6.79	7.15	7.69	8.05	9.14	6.44	6.81	7.35	7.71	8.80
	6H	7.30	7.59	8.22	8.51	9.62	6.95	7.24	7.87	8.16	9.27
	8H	7.54	7.80	8.46	8.71	9.87	7.18	7.44	8.10	8.35	9.51