

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: P854126

Luminaire Tested: SQ2-PP3-100U-050D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854126  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-100U-050D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

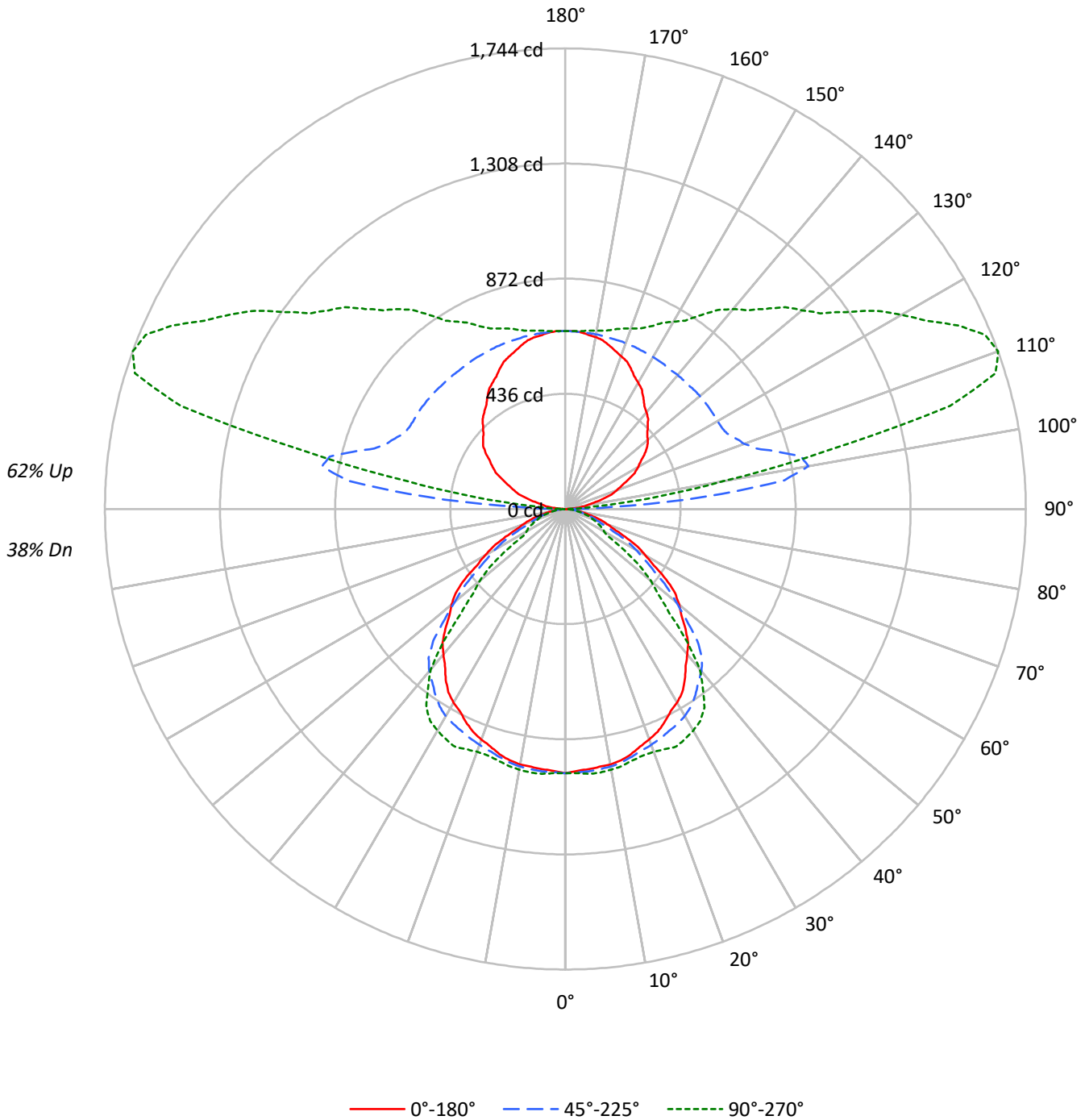
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6713.6 lumens  
Efficiency: N/A  
Efficacy: 133.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 50.4  
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	38
1	95	91	88	84	86	83	80	77	68	65	63	53	52	51	40	39	39	32
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	34	33	28
3	80	71	64	58	72	65	59	54	53	49	45	42	39	37	32	30	28	24
4	73	63	55	49	66	57	51	46	47	42	39	38	34	32	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	37	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	38	32	52	41	35	30	34	29	26	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	24	29	24	20	23	20	17	18	16	14	12
10	46	34	27	23	42	31	25	21	26	22	18	21	18	15	17	14	13	10

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

	0°	45°	90°
0°	16157	16157	16157
5°	16029	16167	16321
10°	16111	16233	16441
15°	16072	16231	16478
20°	15957	16338	16811
25°	15866	16545	17696
30°	15776	16882	18064
35°	15554	16929	18096
40°	15137	16899	16720
45°	14684	16134	12727
50°	14109	13762	10603
55°	13132	11583	7623
60°	11305	9939	5464
65°	9536	7679	5375
70°	7940	6043	5146
75°	6731	5215	4816
80°	5709	4528	4324
85°	4502	3724	2353

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 16134 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.3	1.4
10°-20°	275.8	4.1
20°-30°	432.0	6.4
30°-40°	532.9	7.9
40°-50°	501.8	7.5
50°-60°	355.3	5.3
60°-70°	202.4	3.0
70°-80°	100.2	1.5
80°-90°	25.7	0.4
90°-100°	281.3	4.2
100°-110°	850.9	12.7
110°-120°	830.6	12.4
120°-130°	678.7	10.1
130°-140°	554.0	8.3
140°-150°	431.3	6.4
150°-160°	310.9	4.6
160°-170°	190.3	2.8
170°-180°	64.3	1.0
0°-30°	803.0	12.0
0°-40°	1336.0	19.9
0°-60°	2193.0	32.7
0°-90°	2521.3	37.6
90°-120°	1962.8	29.2
90°-150°	3626.9	54.0
90°-180°	4192.0	62.4
0°-180°	6713.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	989	1007	998	1000	1007	94
15°	962	975	971	981	986	271
25°	891	913	929	966	993	410
35°	789	811	859	908	918	492
45°	643	692	707	599	557	495
55°	466	494	412	310	271	412
65°	250	263	201	142	141	251
75°	108	119	84	78	77	117
85°	24	22	20	16	13	29
90°	0	2	13	7	6	3
95°	35	110	531	196	124	41
105°	148	208	835	1587	1508	155
115°	263	314	676	1398	1642	260
125°	368	408	666	1104	1300	327
135°	441	488	662	952	1071	341
145°	515	553	662	819	896	323
155°	587	606	666	734	762	270
165°	642	649	669	695	703	181
175°	672	672	673	678	676	64
180°	674	674	674	674	674	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1000.7	1000.7	1000.7	1000.7	1000.7
2.5°	993.0	1007.1	998.1	999.8	1001.5
5°	989.0	1006.6	997.5	999.8	1007.0
7.5°	985.2	1003.2	994.3	998.1	1007.0
10°	982.7	998.2	990.1	995.5	1002.8
12.5°	975.1	989.7	982.5	989.6	996.0
15°	961.5	975.0	971.0	980.7	985.8
17.5°	943.1	959.5	959.4	973.1	978.4
20°	928.7	948.4	950.9	968.1	978.4
22.5°	913.5	936.5	940.8	966.6	984.4
25°	890.6	913.4	928.7	966.4	993.3
27.5°	864.0	886.5	918.1	960.3	981.6
30°	846.2	867.9	905.5	949.3	968.9
32.5°	824.2	846.8	886.8	934.0	952.0
35°	789.1	810.8	858.9	907.8	918.1
37.5°	748.7	773.3	827.2	854.5	855.1
40°	718.2	750.3	801.8	806.8	793.3
42.5°	688.6	729.8	766.3	743.9	684.2
45°	643.1	691.7	706.6	598.8	557.4
47.5°	594.7	642.7	619.0	502.2	473.7
50°	561.7	607.2	547.9	448.9	422.1
52.5°	524.4	565.0	484.5	397.9	356.9
55°	466.5	494.4	411.5	310.1	270.8
57.5°	396.7	416.3	351.8	232.8	188.7
60°	350.1	365.6	307.8	191.0	169.2
62.5°	307.8	321.7	262.1	165.9	158.2
65°	249.6	263.1	201.0	141.7	140.7
67.5°	198.7	213.3	154.2	123.7	122.5
70°	168.2	183.7	128.0	111.0	109.0
72.5°	142.8	157.5	108.5	97.5	96.3
75°	107.9	119.3	83.6	78.3	77.2
77.5°	78.3	85.5	62.2	59.4	58.4
80°	61.4	64.5	48.7	47.6	46.5
82.5°	46.1	45.1	36.8	35.7	33.8
85°	24.3	22.3	20.1	15.8	12.7
87.5°	7.6	8.0	5.9	4.0	3.8
90°	0.0	2.1	12.7	7.4	6.3
92.5°	11.8	47.8	171.7	57.0	41.0
95°	34.9	110.4	530.9	196.1	123.7
97.5°	67.5	140.5	836.7	553.6	337.1
100°	87.8	159.1	934.8	903.8	607.0
102.5°	110.6	179.5	914.5	1267.6	1010.5
105°	148.0	208.0	835.4	1586.6	1508.0
107.5°	183.6	240.9	759.3	1618.1	1709.1
110°	207.3	262.1	721.2	1578.4	1743.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	230.1	283.3	698.4	1511.7	1721.0
115°	263.3	314.0	675.7	1398.3	1642.3
117.5°	296.3	344.3	667.7	1292.0	1541.8
120°	318.3	363.8	665.2	1230.0	1469.9
122.5°	338.6	381.6	665.2	1175.5	1397.1
125°	368.0	408.3	666.2	1104.2	1299.6
127.5°	391.9	433.7	665.2	1050.5	1217.2
130°	407.1	450.6	665.2	1019.7	1170.6
132.5°	420.7	464.9	664.3	991.5	1130.9
135°	441.0	487.5	662.0	952.3	1071.2
137.5°	463.6	507.9	662.0	910.5	1020.7
140°	478.0	521.4	662.0	883.3	987.7
142.5°	492.4	534.1	661.1	858.4	949.6
145°	515.0	553.3	662.0	819.2	895.7
147.5°	537.6	570.1	663.3	786.8	845.6
150°	552.0	582.0	664.1	768.9	818.5
152.5°	565.5	592.2	664.9	753.4	794.0
155°	586.9	606.5	666.2	734.5	762.4
157.5°	605.5	621.4	667.5	720.6	740.0
160°	616.5	630.0	668.3	712.0	726.5
162.5°	627.5	637.6	669.2	704.3	716.3
165°	641.9	649.1	669.4	695.0	703.2
167.5°	654.2	657.9	670.7	687.7	691.2
170°	660.9	663.0	671.5	684.2	685.3
172.5°	665.2	666.4	671.5	680.8	681.0
175°	671.5	671.5	672.6	677.8	675.7
177.5°	674.5	673.6	672.8	675.3	673.6
180°	673.6	673.6	673.6	673.6	673.6

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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	15.92	16.66	16.99	17.72	19.16	12.32	13.06	13.38	14.12	15.56
	3H	17.01	17.67	18.08	18.74	20.20	13.41	14.07	14.49	15.14	16.60
	4H	17.35	17.97	18.43	19.04	20.51	13.87	14.50	14.96	15.57	17.03
	6H	17.55	18.13	18.65	19.20	20.68	14.21	14.78	15.30	15.86	17.34
	8H	17.60	18.15	18.70	19.24	20.71	14.29	14.84	15.39	15.93	17.40
	12H	17.61	18.13	18.71	19.21	20.71	14.30	14.82	15.40	15.91	17.40
4H	2H	16.02	16.64	17.11	17.71	19.18	13.02	13.64	14.11	14.71	16.18
	3H	17.31	17.83	18.41	18.93	20.41	14.26	14.78	15.35	15.87	17.35
	4H	17.78	18.26	18.88	19.35	20.85	14.81	15.28	15.91	16.37	17.87
	6H	18.11	18.52	19.22	19.63	21.13	15.24	15.65	16.35	16.76	18.25
	8H	18.21	18.58	19.32	19.69	21.20	15.36	15.74	16.47	16.84	18.35
	12H	18.24	18.58	19.36	19.70	21.21	15.38	15.73	16.51	16.84	18.36
8H	4H	17.79	18.17	18.90	19.28	20.78	15.07	15.45	16.18	16.56	18.06
	6H	18.22	18.53	19.35	19.68	21.18	15.61	15.93	16.74	17.07	18.58
	8H	18.38	18.65	19.51	19.78	21.30	15.80	16.07	16.94	17.20	18.73
	12H	18.46	18.70	19.60	19.82	21.39	15.87	16.11	17.01	17.23	18.79
12H	4H	17.75	18.09	18.87	19.21	20.72	15.07	15.42	16.20	16.53	18.05
	6H	18.21	18.48	19.35	19.61	21.14	15.67	15.94	16.80	17.07	18.59
	8H	18.37	18.62	19.51	19.74	21.30	15.87	16.11	17.01	17.23	18.80