

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: P855129

Luminaire Tested: SQ2-PP3-100U-075D-835-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P855129  
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-075D-835-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

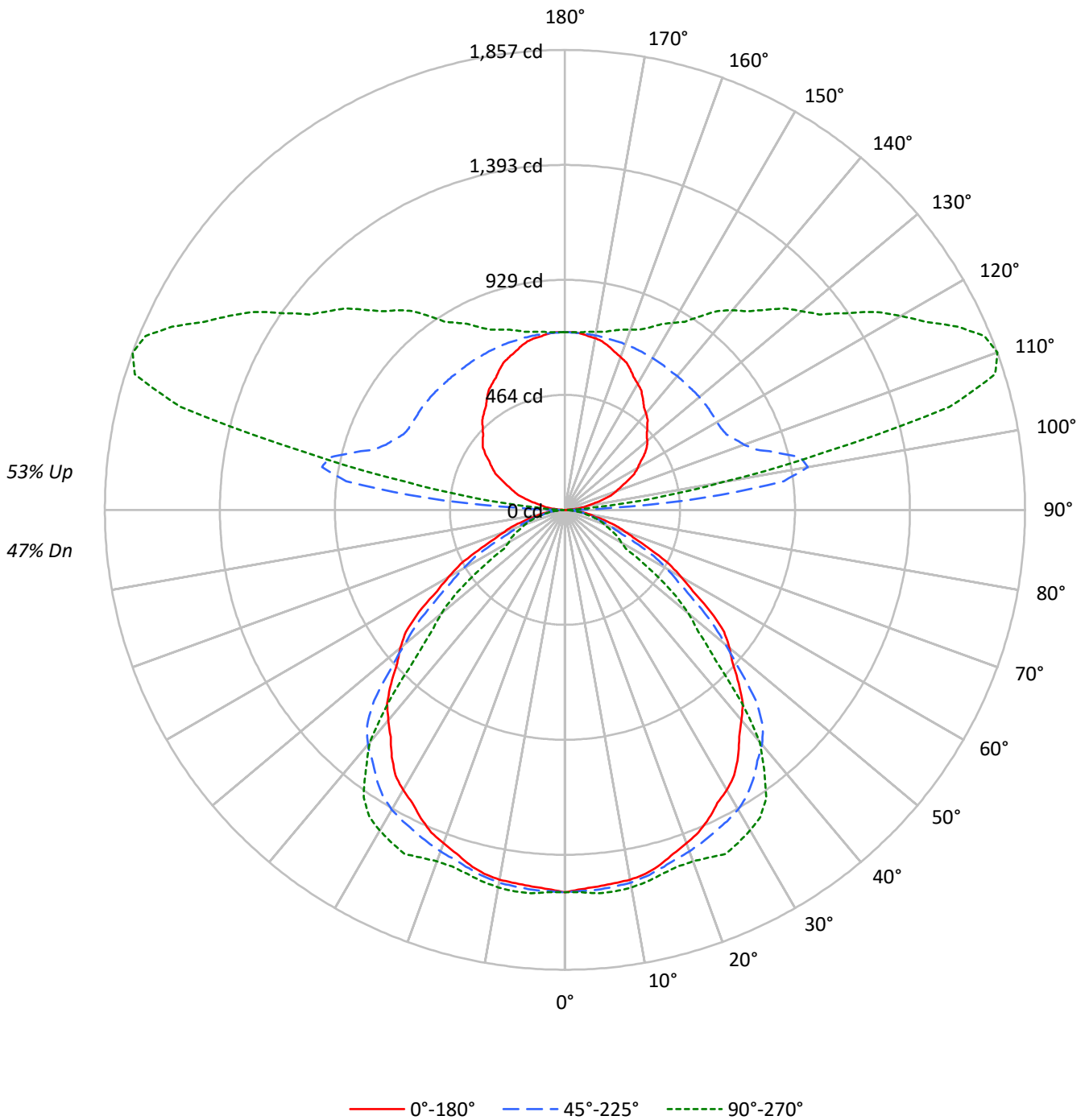
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8355.5 lumens  
Efficiency: N/A  
Efficacy: 140.9 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: General Diffuse  
  
Input Watts (W): 59.3  
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									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	50	30	10	50	30	10	50	30	10	0																
RCR	0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47																											
	1	98	93	90	86	89	86	83	80	72	70	68	59	58	56	48	47	46	40																											
	2	89	82	76	71	82	76	71	66	64	60	57	53	50	48	42	41	39	34																											
	3	82	73	66	60	75	67	61	56	57	52	48	47	44	41	38	36	34	30																											
	4	75	64	57	51	69	60	53	48	50	45	41	42	38	35	34	32	29	26																											
	5	69	57	50	44	63	53	46	41	45	40	36	38	34	31	31	28	26	23																											
	6	63	52	44	38	58	48	41	36	41	35	31	34	30	27	28	25	23	20																											
	7	59	47	39	33	54	43	36	32	37	32	28	31	27	24	26	23	20	18																											
	8	54	42	35	30	50	39	33	28	34	28	25	29	24	21	24	21	18	16																											
	9	51	39	31	26	47	36	29	25	31	26	22	26	22	19	22	19	16	14																											
	10	47	35	28	24	43	33	27	22	28	23	20	24	20	17	20	17	15	13																											

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

	0°	45°	90°
0°	24936	24936	24936
5°	24739	24951	25188
10°	24866	25053	25374
15°	24806	25051	25432
20°	24629	25218	25947
25°	24488	25536	27310
30°	24350	26053	27880
35°	24005	26128	27932
40°	23364	26083	25804
45°	22665	24900	19644
50°	21775	21243	16362
55°	20268	17878	11764
60°	17450	15342	8435
65°	14716	11851	8298
70°	12255	9328	7940
75°	10387	8047	7436
80°	8805	6983	6685
85°	6966	5743	3631

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 24900 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.0	1.8
10°-20°	425.6	5.1
20°-30°	666.7	8.0
30°-40°	822.5	9.8
40°-50°	774.4	9.3
50°-60°	548.3	6.6
60°-70°	312.4	3.7
70°-80°	154.6	1.8
80°-90°	39.1	0.5
90°-100°	299.6	3.6
100°-110°	906.1	10.8
110°-120°	884.6	10.6
120°-130°	722.8	8.7
130°-140°	590.0	7.1
140°-150°	459.3	5.5
150°-160°	331.1	4.0
160°-170°	202.7	2.4
170°-180°	68.4	0.8
0°-30°	1239.4	14.8
0°-40°	2061.9	24.7
0°-60°	3384.6	40.5
0°-90°	3890.7	46.6
90°-120°	2090.4	25.0
90°-150°	3862.5	46.2
90°-180°	4465.0	53.4
0°-180°	8355.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1526	1554	1540	1543	1554	145
15°	1484	1505	1499	1514	1522	418
25°	1375	1410	1433	1491	1533	633
35°	1218	1251	1326	1401	1417	760
45°	993	1068	1090	924	860	764
55°	720	763	635	479	418	635
65°	385	406	310	219	217	387
75°	166	184	129	121	119	180
85°	38	34	31	24	20	44
90°	0	2	14	8	7	3
95°	37	118	565	209	132	44
105°	158	222	890	1690	1606	166
115°	280	334	720	1489	1749	277
125°	392	435	710	1176	1384	348
135°	470	519	705	1014	1141	364
145°	548	589	705	872	954	343
155°	625	646	710	782	812	288
165°	684	691	713	740	749	193
175°	715	715	716	722	720	68
180°	717	717	717	717	717	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1544.4	1544.4	1544.4	1544.4	1544.4
2.5°	1532.6	1554.3	1540.4	1543.1	1545.6
5°	1526.4	1553.5	1539.5	1543.0	1554.1
7.5°	1520.5	1548.3	1534.5	1540.4	1554.1
10°	1516.7	1540.5	1528.1	1536.5	1547.7
12.5°	1504.9	1527.5	1516.3	1527.3	1537.1
15°	1484.0	1504.7	1498.7	1513.5	1521.5
17.5°	1455.5	1480.8	1480.7	1501.8	1510.1
20°	1433.4	1463.7	1467.7	1494.1	1510.1
22.5°	1409.8	1445.2	1451.9	1491.8	1519.3
25°	1374.6	1409.7	1433.4	1491.4	1533.0
27.5°	1333.4	1368.2	1417.1	1482.1	1515.0
30°	1306.1	1339.6	1397.4	1465.1	1495.4
32.5°	1272.1	1306.8	1368.7	1441.5	1469.2
35°	1217.9	1251.4	1325.6	1401.1	1417.1
37.5°	1155.5	1193.5	1276.6	1318.7	1319.7
40°	1108.5	1157.9	1237.5	1245.2	1224.3
42.5°	1062.7	1126.3	1182.6	1148.2	1056.0
45°	992.6	1067.6	1090.5	924.2	860.3
47.5°	917.8	991.9	955.4	775.1	731.1
50°	866.9	937.1	845.7	692.9	651.4
52.5°	809.4	871.9	747.7	614.0	550.8
55°	720.0	763.1	635.1	478.6	417.9
57.5°	612.2	642.6	543.0	359.2	291.3
60°	540.4	564.4	475.1	294.7	261.2
62.5°	475.1	496.5	404.6	256.0	244.2
65°	385.2	406.0	310.2	218.8	217.2
67.5°	306.6	329.2	238.0	190.9	189.1
70°	259.6	283.5	197.6	171.3	168.2
72.5°	220.3	243.1	167.5	150.5	148.6
75°	166.5	184.1	129.0	120.7	119.2
77.5°	120.9	132.0	96.0	91.7	90.1
80°	94.7	99.5	75.1	73.4	71.9
82.5°	71.2	69.6	56.8	55.1	52.3
85°	37.6	34.4	31.0	24.3	19.6
87.5°	11.8	12.2	7.9	5.5	5.3
90°	0.0	2.2	13.5	7.8	6.8
92.5°	12.6	50.9	182.9	60.7	43.7
95°	37.1	117.6	565.4	208.9	131.7
97.5°	71.9	149.6	891.1	589.6	359.1
100°	93.5	169.4	995.5	962.5	646.4
102.5°	117.8	191.1	973.9	1350.0	1076.2
105°	157.6	221.6	889.7	1689.7	1605.9
107.5°	195.6	256.5	808.6	1723.3	1820.2
110°	220.8	279.1	768.1	1681.0	1857.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	245.1	301.7	743.7	1609.9	1832.8
115°	280.4	334.4	719.6	1489.2	1749.0
117.5°	315.5	366.7	711.1	1376.0	1642.0
120°	338.9	387.5	708.4	1309.9	1565.4
122.5°	360.7	406.4	708.4	1251.8	1487.9
125°	391.9	434.9	709.6	1176.0	1384.1
127.5°	417.4	461.8	708.4	1118.8	1296.2
130°	433.5	479.8	708.4	1085.9	1246.8
132.5°	448.0	495.1	707.5	1056.0	1204.3
135°	469.6	519.2	705.0	1014.2	1140.8
137.5°	493.7	540.8	705.0	969.6	1087.0
140°	509.0	555.3	705.0	940.6	1051.9
142.5°	524.4	568.9	704.1	914.2	1011.4
145°	548.5	589.3	705.0	872.4	953.9
147.5°	572.5	607.1	706.4	838.0	900.5
150°	587.9	619.8	707.3	818.9	871.7
152.5°	602.3	630.7	708.2	802.3	845.6
155°	625.0	646.0	709.6	782.2	812.0
157.5°	644.8	661.8	710.9	767.4	788.1
160°	656.6	670.9	711.8	758.3	773.7
162.5°	668.2	679.1	712.6	750.1	762.9
165°	683.6	691.3	712.8	740.1	748.9
167.5°	696.7	700.6	714.2	732.3	736.0
170°	703.9	706.0	715.1	728.7	729.8
172.5°	708.4	709.7	715.1	725.1	725.3
175°	715.1	715.1	716.2	721.9	719.6
177.5°	718.3	717.4	716.5	719.2	717.4
180°	717.4	717.4	717.4	717.4	717.4

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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	18.39	19.19	19.38	20.19	21.51	14.78	15.59	15.78	16.59	17.91
	3H	19.48	20.19	20.48	21.20	22.55	15.88	16.60	16.89	17.61	18.95
	4H	19.82	20.49	20.83	21.51	22.86	16.34	17.02	17.36	18.03	19.38
	6H	20.03	20.65	21.06	21.67	23.03	16.69	17.31	17.71	18.33	19.69
	8H	20.08	20.67	21.11	21.70	23.06	16.77	17.36	17.80	18.40	19.75
	12H	20.09	20.65	21.13	21.68	23.06	16.78	17.35	17.82	18.37	19.76
4H	2H	18.49	19.17	19.51	20.18	21.53	15.49	16.17	16.51	17.18	18.53
	3H	19.79	20.35	20.82	21.39	22.76	16.73	17.30	17.77	18.34	19.70
	4H	20.26	20.78	21.30	21.81	23.20	17.29	17.80	18.33	18.83	20.22
	6H	20.60	21.04	21.65	22.09	23.48	17.72	18.16	18.77	19.22	20.60
	8H	20.69	21.10	21.74	22.15	23.55	17.84	18.26	18.89	19.30	20.70
	12H	20.72	21.09	21.79	22.16	23.56	17.87	18.24	18.94	19.30	20.71
8H	4H	20.28	20.69	21.33	21.74	23.13	17.56	17.97	18.61	19.02	20.41
	6H	20.71	21.05	21.78	22.14	23.53	18.10	18.44	19.17	19.53	20.93
	8H	20.86	21.16	21.94	22.24	23.65	18.29	18.58	19.36	19.66	21.07
	12H	20.95	21.21	22.03	22.28	23.74	18.36	18.62	19.44	19.69	21.15
12H	4H	20.23	20.60	21.30	21.67	23.07	17.56	17.93	18.63	19.00	20.40
	6H	20.70	20.99	21.77	22.07	23.48	18.15	18.45	19.23	19.53	20.94
	8H	20.86	21.13	21.95	22.20	23.65	18.36	18.62	19.44	19.69	21.15