

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: P855130

Luminaire Tested: SQ2-PP3-100U-050D-835-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P855130  
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-835-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

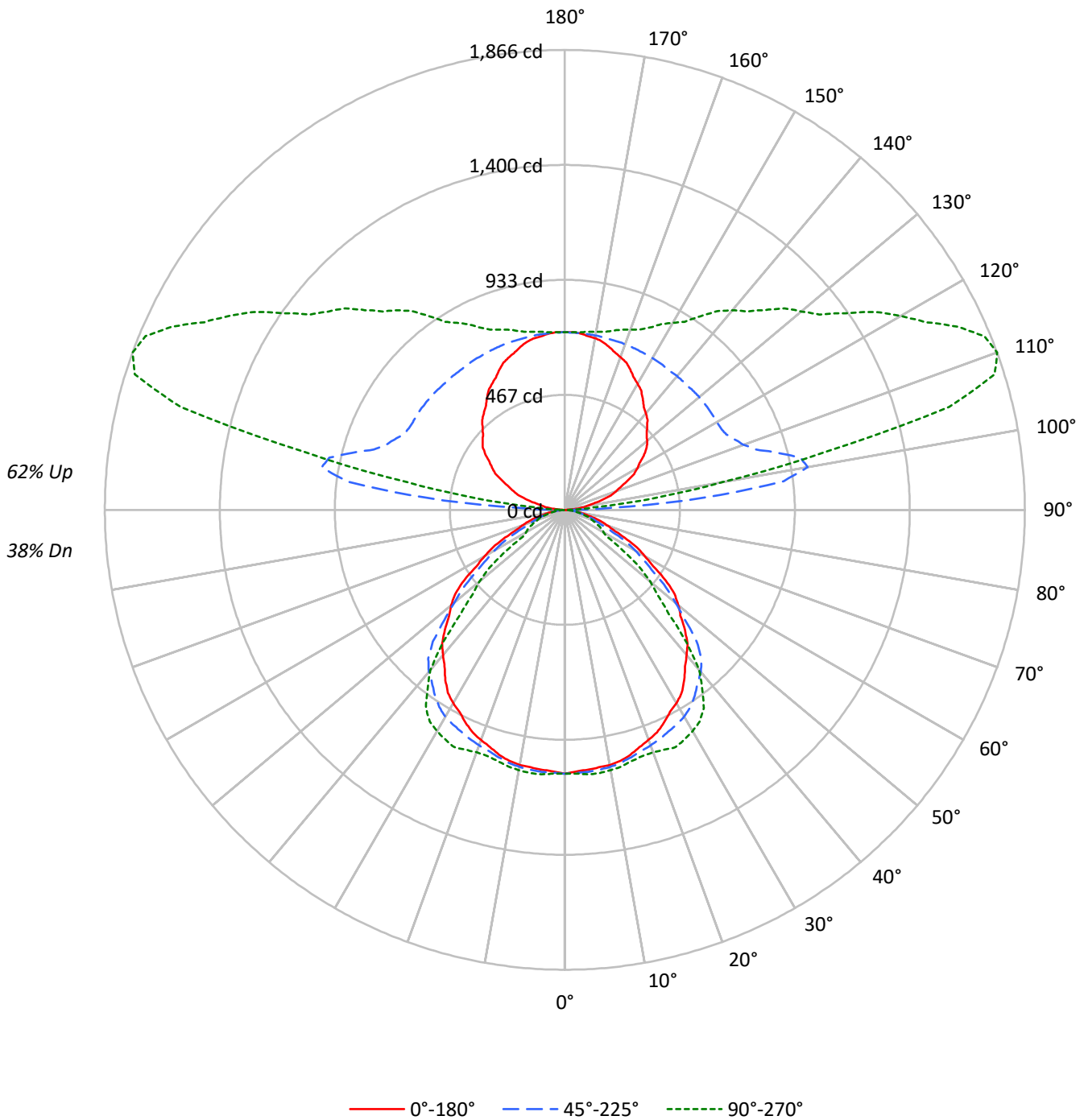
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7182.6 lumens  
Efficiency: N/A  
Efficacy: 142.5 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°	17286	17286	17286
5°	17149	17297	17460
10°	17236	17365	17588
15°	17195	17366	17630
20°	17072	17481	17986
25°	16976	17701	18930
30°	16878	18060	19326
35°	16640	18112	19362
40°	16195	18080	17888
45°	15712	17262	13618
50°	15094	14724	11341
55°	14049	12391	8155
60°	12096	10634	5848
65°	10204	8214	5750
70°	8493	6463	5504
75°	7199	5577	5153
80°	6100	4844	4630
85°	4817	3983	2519

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 17262 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.9	1.4
10°-20°	295.0	4.1
20°-30°	462.2	6.4
30°-40°	570.2	7.9
40°-50°	536.8	7.5
50°-60°	380.1	5.3
60°-70°	216.6	3.0
70°-80°	107.1	1.5
80°-90°	27.5	0.4
90°-100°	301.0	4.2
100°-110°	910.3	12.7
110°-120°	888.6	12.4
120°-130°	726.1	10.1
130°-140°	592.7	8.3
140°-150°	461.4	6.4
150°-160°	332.6	4.6
160°-170°	203.6	2.8
170°-180°	68.8	1.0
0°-30°	859.1	12.0
0°-40°	1429.3	19.9
0°-60°	2346.2	32.7
0°-90°	2697.4	37.6
90°-120°	2099.9	29.2
90°-150°	3880.2	54.0
90°-180°	4485.0	62.4
0°-180°	7182.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1058	1077	1067	1070	1077	101
15°	1029	1043	1039	1049	1055	290
25°	953	977	994	1034	1063	439
35°	844	867	919	971	982	526
45°	688	740	756	641	596	530
55°	499	529	440	332	290	440
65°	267	281	215	152	150	268
75°	115	128	89	84	83	125
85°	26	24	22	17	14	30
90°	0	2	14	8	7	3
95°	37	118	568	210	132	44
105°	158	223	894	1697	1613	166
115°	282	336	723	1496	1757	279
125°	394	437	713	1181	1390	350
135°	472	522	708	1019	1146	365
145°	551	592	708	876	958	345
155°	628	649	713	786	816	289
165°	687	694	716	744	752	194
175°	718	718	720	725	723	68
180°	721	721	721	721	721	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1070.6	1070.6	1070.6	1070.6	1070.6
2.5°	1062.4	1077.5	1067.8	1069.6	1071.5
5°	1058.1	1076.9	1067.2	1069.6	1077.3
7.5°	1054.0	1073.3	1063.8	1067.8	1077.3
10°	1051.3	1068.0	1059.2	1065.1	1072.8
12.5°	1043.2	1058.9	1051.1	1058.7	1065.6
15°	1028.7	1043.1	1038.9	1049.2	1054.7
17.5°	1009.0	1026.5	1026.4	1041.0	1046.8
20°	993.6	1014.6	1017.4	1035.7	1046.8
22.5°	977.3	1001.9	1006.5	1034.1	1053.1
25°	952.9	977.2	993.6	1033.9	1062.6
27.5°	924.3	948.4	982.3	1027.4	1050.2
30°	905.3	928.5	968.7	1015.6	1036.6
32.5°	881.8	905.9	948.8	999.3	1018.5
35°	844.2	867.4	918.9	971.2	982.3
37.5°	801.0	827.4	885.0	914.2	914.8
40°	768.4	802.7	857.8	863.1	848.7
42.5°	736.7	780.7	819.8	795.9	732.0
45°	688.1	740.1	756.0	640.6	596.4
47.5°	636.2	687.6	662.2	537.3	506.8
50°	600.9	649.6	586.2	480.3	451.5
52.5°	561.1	604.4	518.3	425.6	381.8
55°	499.1	528.9	440.2	331.8	289.7
57.5°	424.4	445.4	376.4	249.1	201.9
60°	374.6	391.2	329.3	204.3	181.1
62.5°	329.3	344.1	280.4	177.4	169.3
65°	267.1	281.4	215.0	151.6	150.5
67.5°	212.5	228.3	165.0	132.4	131.0
70°	179.9	196.6	136.9	118.8	116.6
72.5°	152.8	168.5	116.1	104.3	103.0
75°	115.4	127.7	89.4	83.7	82.6
77.5°	83.7	91.4	66.5	63.6	62.5
80°	65.6	68.9	52.1	50.9	49.8
82.5°	49.3	48.2	39.4	38.3	36.2
85°	26.0	23.8	21.5	16.9	13.6
87.5°	8.1	8.6	6.3	4.3	4.1
90°	0.0	2.3	13.6	7.9	6.8
92.5°	12.7	51.2	183.8	60.9	43.9
95°	37.3	118.0	568.0	209.8	132.4
97.5°	72.2	150.3	895.1	592.3	360.7
100°	93.9	170.2	1000.2	966.9	649.3
102.5°	118.4	192.0	978.4	1356.2	1081.1
105°	158.4	222.6	893.8	1697.4	1613.3
107.5°	196.5	257.7	812.3	1731.1	1828.5
110°	221.7	280.4	771.6	1688.7	1865.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	246.1	303.1	747.1	1617.3	1841.2
115°	281.7	335.9	722.9	1495.9	1757.0
117.5°	317.0	368.4	714.3	1382.2	1649.5
120°	340.5	389.2	711.6	1315.9	1572.6
122.5°	362.2	408.3	711.6	1257.6	1494.7
125°	393.7	436.8	712.7	1181.3	1390.5
127.5°	419.3	464.0	711.6	1123.9	1302.2
130°	435.6	482.1	711.6	1090.9	1252.4
132.5°	450.1	497.4	710.7	1060.7	1209.9
135°	471.8	521.6	708.2	1018.8	1146.0
137.5°	496.0	543.3	708.2	974.0	1091.9
140°	511.4	557.8	708.2	944.9	1056.7
142.5°	526.8	571.5	707.3	918.3	1016.0
145°	551.0	591.9	708.2	876.4	958.3
147.5°	575.2	610.0	709.6	841.8	904.7
150°	590.6	622.6	710.5	822.6	875.7
152.5°	605.1	633.6	711.4	806.1	849.4
155°	628.0	648.9	712.7	785.8	815.7
157.5°	647.8	664.9	714.1	770.9	791.7
160°	659.5	674.0	715.0	761.7	777.2
162.5°	671.3	682.2	715.9	753.6	766.4
165°	686.7	694.5	716.1	743.5	752.3
167.5°	699.8	703.9	717.5	735.7	739.4
170°	707.1	709.3	718.4	732.0	733.1
172.5°	711.6	712.9	718.4	728.3	728.6
175°	718.4	718.4	719.5	725.2	722.9
177.5°	721.5	720.6	719.7	722.5	720.6
180°	720.6	720.6	720.6	720.6	720.6

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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	16.16	16.90	17.22	17.96	19.40	12.56	13.29	13.62	14.36	15.80
	3H	17.24	17.90	18.32	18.97	20.43	13.65	14.31	14.72	15.38	16.84
	4H	17.58	18.20	18.66	19.28	20.74	14.11	14.73	15.19	15.80	17.27
	6H	17.79	18.36	18.88	19.44	20.92	14.45	15.02	15.54	16.10	17.57
	8H	17.83	18.38	18.93	19.47	20.94	14.53	15.07	15.63	16.16	17.64
	12H	17.84	18.36	18.95	19.45	20.94	14.54	15.06	15.64	16.14	17.64
4H	2H	16.25	16.87	17.34	17.95	19.41	13.25	13.88	14.34	14.95	16.41
	3H	17.55	18.07	18.65	19.17	20.64	14.49	15.01	15.59	16.11	17.59
	4H	18.02	18.49	19.12	19.58	21.08	15.04	15.52	16.14	16.61	18.11
	6H	18.35	18.75	19.46	19.87	21.36	15.48	15.88	16.59	16.99	18.49
	8H	18.44	18.82	19.55	19.92	21.43	15.59	15.97	16.70	17.08	18.59
	12H	18.47	18.81	19.60	19.93	21.44	15.62	15.96	16.74	17.08	18.59
8H	4H	18.03	18.41	19.14	19.51	21.02	15.31	15.69	16.42	16.79	18.30
	6H	18.45	18.77	19.58	19.91	21.42	15.85	16.16	16.98	17.31	18.81
	8H	18.61	18.88	19.75	20.01	21.54	16.03	16.31	17.17	17.43	18.96
	12H	18.69	18.93	19.83	20.06	21.62	16.10	16.34	17.24	17.47	19.03
12H	4H	17.98	18.32	19.11	19.44	20.95	15.31	15.65	16.43	16.77	18.28
	6H	18.44	18.72	19.58	19.84	21.37	15.90	16.17	17.04	17.30	18.83
	8H	18.61	18.85	19.75	19.97	21.53	16.10	16.34	17.24	17.47	19.03