

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: P853663

Luminaire Tested: SQ2-F-025U-100D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P853663  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-F-025U-100D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

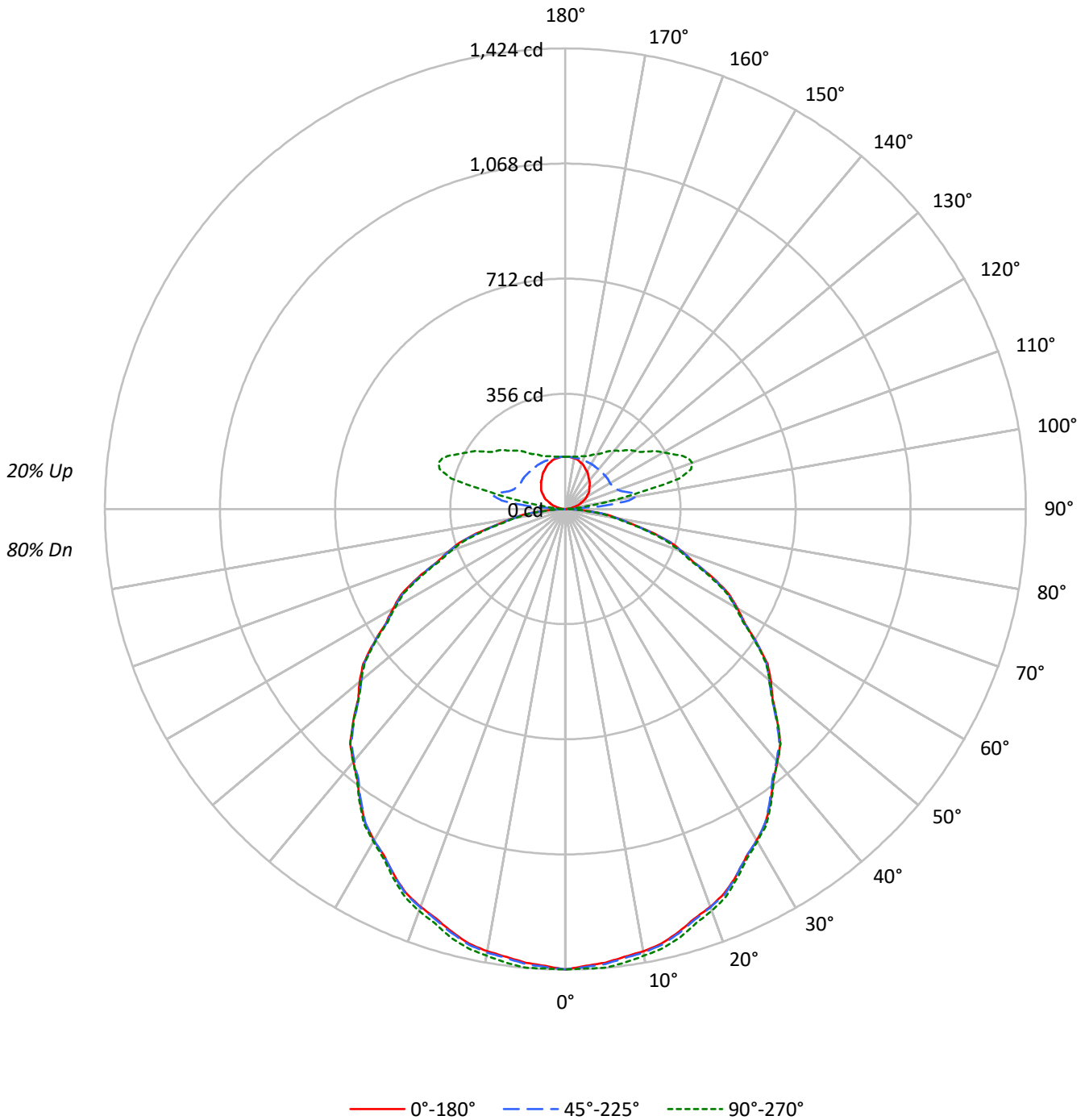
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4999.8 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 45  
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	50	30	10	0	
RCR																						
0	114	114	114	114	109	109	109	109	100	100	100	91	91	91	84	84	84	80				
1	104	100	95	92	100	95	92	88	88	85	82	80	78	76	74	72	70	67				
2	95	87	80	75	90	83	77	72	76	72	67	70	66	63	64	61	59	56				
3	86	76	68	62	82	73	66	60	67	61	57	62	57	53	57	53	50	47				
4	79	67	59	52	75	65	57	51	60	53	48	55	50	45	51	46	43	40				
5	73	60	51	45	69	58	50	44	53	47	41	49	44	39	46	41	37	34				
6	67	54	45	39	64	52	44	38	48	41	36	45	39	34	41	36	33	30				
7	62	49	40	34	59	47	39	34	44	37	32	41	35	30	38	33	29	27				
8	58	44	36	31	55	43	35	30	40	33	29	37	31	27	35	30	26	24				
9	54	41	33	27	51	39	32	27	37	30	26	34	29	24	32	27	23	21				
10	50	37	30	25	48	36	29	24	34	28	23	32	26	22	30	25	21	19				

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

	0°	45°	90°
0°	22985	22985	22985
5°	22822	22885	23073
10°	22768	22832	22991
15°	22629	22695	22922
20°	22495	22527	22728
25°	22287	22287	22425
30°	22057	22057	22130
35°	21790	21715	21867
40°	21503	21420	21503
45°	21169	21080	21169
50°	20851	20657	20705
55°	20366	20310	20200
60°	19853	19730	19604
65°	19266	19045	18819
70°	18128	18038	17670
75°	17062	16700	16213
80°	15146	14784	14245
85°	12208	11134	10411

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 21299 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.6	2.7
10°-20°	384.5	7.7
20°-30°	578.5	11.6
30°-40°	692.2	13.8
40°-50°	714.2	14.3
50°-60°	644.3	12.9
60°-70°	491.7	9.8
70°-80°	282.7	5.7
80°-90°	74.1	1.5
90°-100°	65.4	1.3
100°-110°	203.4	4.1
110°-120°	199.0	4.0
120°-130°	162.5	3.2
130°-140°	132.9	2.7
140°-150°	103.7	2.1
150°-160°	74.9	1.5
160°-170°	45.8	0.9
170°-180°	15.4	0.3
0°-30°	1097.6	22.0
0°-40°	1789.8	35.8
0°-60°	3148.3	63.0
0°-90°	3996.8	79.9
90°-120°	467.8	9.4
90°-150°	867.0	17.3
90°-180°	1003.0	20.1
0°-180°	4999.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1424	1424	1424	1424	1424	
5°	1408	1427	1412	1414	1424	134
15°	1354	1371	1358	1364	1371	382
25°	1251	1264	1251	1253	1259	576
35°	1106	1113	1102	1106	1109	691
45°	927	933	923	925	927	715
55°	724	727	722	718	718	647
65°	504	502	498	494	493	496
75°	274	272	268	262	260	288
85°	66	62	60	54	56	76
90°	0	1	3	3	3	3
95°	9	26	120	44	29	10
105°	36	50	200	382	365	38
115°	64	75	163	335	393	63
125°	88	98	161	264	309	78
135°	106	118	160	228	256	82
145°	124	134	160	197	214	78
155°	142	147	161	177	182	65
165°	156	157	162	167	168	44
175°	162	162	162	163	162	15
180°	162	162	162	162	162	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1423.6	1423.6	1423.6	1423.6	1423.6
2.5°	1414.3	1431.0	1417.4	1420.6	1422.1
5°	1408.1	1427.1	1412.0	1414.1	1423.6
7.5°	1396.5	1417.0	1400.4	1404.1	1414.7
10°	1388.7	1407.7	1392.6	1394.7	1402.3
12.5°	1376.3	1395.3	1380.2	1383.8	1391.4
15°	1353.8	1370.9	1357.7	1363.7	1371.3
17.5°	1327.8	1346.0	1331.3	1336.5	1342.9
20°	1309.2	1324.4	1311.1	1313.3	1322.8
22.5°	1285.9	1301.1	1289.4	1290.0	1297.9
25°	1251.0	1264.3	1251.0	1253.1	1258.8
27.5°	1211.1	1222.4	1211.1	1213.1	1218.0
30°	1183.1	1194.5	1183.1	1185.1	1187.0
32.5°	1152.1	1162.0	1150.5	1152.6	1157.5
35°	1105.5	1113.1	1101.7	1105.6	1109.4
37.5°	1055.9	1061.6	1052.0	1054.0	1057.4
40°	1020.2	1025.9	1016.3	1018.3	1020.2
42.5°	984.5	988.7	979.1	981.1	984.5
45°	927.1	932.8	923.2	925.2	927.1
47.5°	868.9	872.3	864.3	862.8	866.2
50°	830.1	832.0	822.4	822.4	824.3
52.5°	788.2	790.1	783.6	780.5	782.4
55°	723.5	727.2	721.5	717.6	717.6
57.5°	658.3	661.7	654.4	652.5	652.1
60°	614.8	616.7	611.0	609.0	607.1
62.5°	571.4	571.8	566.0	564.0	562.1
65°	504.3	502.4	498.5	494.5	492.6
67.5°	429.0	430.9	427.1	420.9	420.9
70°	384.0	385.9	382.1	374.3	374.3
72.5°	340.6	339.4	337.1	330.8	327.8
75°	273.5	271.6	267.7	261.8	259.9
77.5°	206.4	204.5	202.5	195.2	196.7
80°	162.9	161.0	159.0	153.2	153.2
82.5°	124.1	120.7	118.7	112.9	112.9
85°	65.9	62.2	60.1	54.4	56.2
87.5°	18.6	17.3	16.1	13.0	13.0
90°	0.0	1.0	3.0	3.0	3.0
92.5°	3.2	11.1	37.9	12.4	10.1
95°	8.9	26.4	120.0	44.3	28.8
97.5°	16.3	34.3	198.7	123.7	77.9
100°	21.8	38.3	224.1	209.6	139.8
102.5°	27.4	43.1	219.3	299.3	235.0
105°	35.7	50.2	200.3	382.3	364.9
107.5°	44.0	57.6	182.0	388.7	407.9
110°	49.6	63.1	172.5	379.6	417.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	55.1	67.9	167.8	363.2	411.1
115°	63.5	75.1	162.6	335.4	392.6
117.5°	71.6	82.2	160.4	308.9	367.4
120°	76.3	87.0	159.6	293.8	350.0
122.5°	81.1	91.8	160.4	281.0	332.5
125°	88.2	97.9	160.6	263.8	309.3
127.5°	94.0	103.9	160.6	250.9	289.7
130°	97.2	107.8	160.6	243.7	278.6
132.5°	101.1	111.8	159.8	237.3	269.9
135°	106.1	117.7	159.6	227.7	255.8
137.5°	111.8	122.5	159.6	218.1	243.7
140°	115.0	125.7	159.6	211.7	235.0
142.5°	119.0	128.9	159.6	205.3	226.2
145°	123.9	133.6	159.6	196.7	214.2
147.5°	129.9	138.2	160.6	188.7	202.5
150°	133.8	140.6	160.6	184.7	195.3
152.5°	137.0	143.0	160.6	180.7	189.8
155°	141.8	146.6	160.6	176.6	182.4
157.5°	146.5	150.2	160.6	173.0	176.7
160°	149.7	152.6	160.6	170.6	173.5
162.5°	152.1	154.2	160.6	169.0	171.1
165°	155.7	156.6	161.6	166.6	168.5
167.5°	157.8	158.0	160.6	165.2	166.2
170°	158.6	159.6	160.6	163.6	164.6
172.5°	160.2	160.4	161.4	162.8	163.0
175°	161.6	161.6	161.6	162.6	161.6
177.5°	161.6	161.6	161.6	161.6	161.6
180°	161.6	161.6	161.6	161.6	161.6

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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	21.25	22.49	21.90	23.15	23.92	21.18	22.41	21.82	23.07	23.84
	3H	23.06	24.17	23.72	24.85	25.65	22.94	24.05	23.60	24.73	25.53
	4H	23.74	24.79	24.42	25.47	26.29	23.58	24.63	24.26	25.32	26.13
	6H	24.22	25.20	24.92	25.89	26.72	24.04	25.01	24.73	25.71	26.54
	8H	24.37	25.30	25.08	26.02	26.85	24.17	25.10	24.87	25.81	26.65
	12H	24.46	25.34	25.17	26.05	26.91	24.24	25.12	24.95	25.83	26.69
4H	2H	21.85	22.90	22.53	23.58	24.40	21.79	22.84	22.47	23.52	24.34
	3H	23.87	24.75	24.56	25.47	26.30	23.76	24.64	24.46	25.36	26.20
	4H	24.67	25.47	25.39	26.20	27.06	24.53	25.33	25.24	26.06	26.92
	6H	25.28	25.98	26.02	26.73	27.60	25.10	25.80	25.84	26.55	27.42
	8H	25.48	26.13	26.22	26.88	27.76	25.28	25.93	26.02	26.68	27.56
	12H	25.60	26.19	26.36	26.96	27.85	25.37	25.96	26.13	26.73	27.62
8H	4H	24.95	25.60	25.69	26.35	27.23	24.82	25.47	25.56	26.22	27.11
	6H	25.68	26.22	26.45	27.01	27.90	25.52	26.06	26.29	26.85	27.73
	8H	25.96	26.44	26.74	27.23	28.13	25.76	26.24	26.54	27.04	27.94
	12H	26.14	26.57	26.92	27.35	28.31	25.91	26.34	26.70	27.12	28.08
12H	4H	24.96	25.55	25.72	26.32	27.21	24.84	25.43	25.60	26.20	27.09
	6H	25.73	26.21	26.51	27.00	27.91	25.57	26.05	26.35	26.85	27.75
	8H	26.04	26.47	26.82	27.25	28.21	25.86	26.28	26.64	27.06	28.02