

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: P854102

Luminaire Tested: SQ2-PP3-075U-050D-940-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854102  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-11, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-075U-050D-940-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

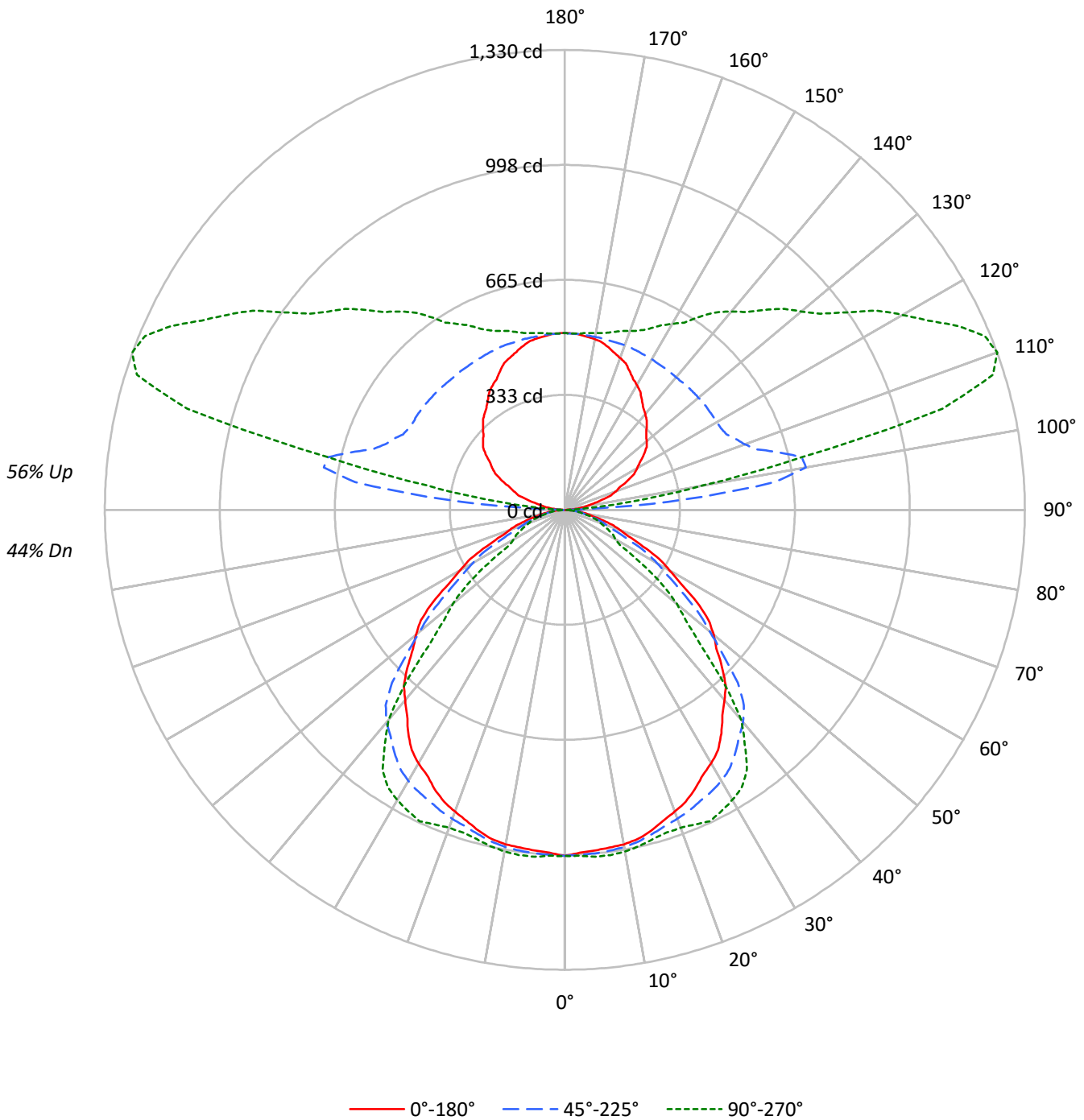
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5683.4 lumens  
Efficiency: N/A  
Efficacy: 138.3 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): 41.1  
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

TEST NUMBER: P854102

CATALOG NUMBER: SQ2-PP3-075U-050D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854102

CATALOG NUMBER: SQ2-PP3-075U-050D-940-UNV-STD-W-4

**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	97	93	89	86	89	85	82	79	71	69	67	58	56	55	46	45	44	38				
2	89	82	76	71	81	75	70	66	63	59	56	51	49	47	41	39	38	33				
3	81	72	65	60	74	66	60	55	56	51	48	46	43	40	37	34	33	28				
4	74	64	56	51	68	59	52	47	50	45	41	41	37	34	33	30	28	25				
5	68	57	49	43	62	53	46	41	45	39	35	37	33	30	30	27	25	21				
6	63	51	43	38	58	47	40	35	40	35	31	33	29	26	27	24	22	19				
7	58	46	39	33	53	43	36	31	36	31	27	30	26	23	25	22	20	17				
8	54	42	34	29	49	39	32	28	33	28	24	28	24	21	23	20	18	15				
9	50	38	31	26	46	36	29	25	30	25	22	26	22	19	21	18	16	14				
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	19	16	14	12				

**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



TEST NUMBER: P854102

CATALOG NUMBER: SQ2-PP3-075U-050D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.3	1.7
10°-20°	275.8	4.9
20°-30°	432.0	7.6
30°-40°	532.9	9.4
40°-50°	501.8	8.8
50°-60°	355.3	6.3
60°-70°	202.4	3.6
70°-80°	100.2	1.8
80°-90°	25.0	0.4
90°-100°	193.2	3.4
100°-110°	640.4	11.3
110°-120°	635.6	11.2
120°-130°	517.7	9.1
130°-140°	420.8	7.4
140°-150°	326.8	5.7
150°-160°	235.4	4.1
160°-170°	144.2	2.5
170°-180°	48.7	0.9
0°-30°	803.0	14.1
0°-40°	1336.0	23.5
0°-60°	2193.0	38.6
0°-90°	2520.6	44.3
90°-120°	1469.2	25.9
90°-150°	2734.5	48.1
90°-180°	3163.0	55.7
0°-180°	5683.4	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	1	3	4	4	2
95°	28	81	350	125	84	31
105°	112	160	641	1209	1131	118
115°	200	239	516	1074	1256	198
125°	279	310	507	844	995	248
135°	334	368	502	724	818	259
145°	388	417	501	623	682	243
155°	443	459	504	557	578	204
165°	486	492	507	527	532	137
175°	509	509	510	513	512	48
180°	511	511	511	511	511	



TEST NUMBER: P854102

CATALOG NUMBER: SQ2-PP3-075U-050D-940-UNV-STD-W-4

**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	7.8	4.0	3.4	3.4
90°	0.0	1.0	3.2	4.2	4.2
92.5°	8.5	32.7	96.2	31.2	26.2
95°	27.5	81.3	350.1	124.9	83.6
97.5°	50.6	106.8	611.1	356.4	225.3
100°	66.6	120.4	707.6	607.7	403.0
102.5°	84.4	136.5	701.6	928.7	701.6
105°	112.1	159.7	640.9	1209.2	1130.6
107.5°	140.5	182.9	582.8	1237.7	1297.5
110°	156.5	198.9	553.1	1209.5	1330.5



TEST NUMBER: P854102

CATALOG NUMBER: SQ2-PP3-075U-050D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.5	215.0	535.4	1159.5	1313.6
115°	199.9	239.2	516.1	1074.5	1256.5
117.5°	226.1	261.1	509.1	993.2	1184.1
120°	242.2	276.3	506.6	942.3	1127.4
122.5°	256.6	289.9	506.6	900.6	1071.6
125°	279.2	310.2	506.6	844.3	995.2
127.5°	297.8	328.2	505.3	801.7	930.7
130°	308.8	340.9	504.5	776.8	892.6
132.5°	319.0	351.9	503.6	756.3	860.5
135°	334.2	368.3	502.4	724.5	817.6
137.5°	350.7	383.6	501.1	693.8	775.9
140°	361.7	393.8	500.3	673.3	748.8
142.5°	371.9	403.1	501.1	652.8	720.0
145°	388.2	417.1	501.3	623.2	682.2
147.5°	405.7	429.9	501.5	598.1	642.0
150°	416.7	438.4	502.4	583.6	620.8
152.5°	426.9	447.8	503.2	571.6	601.4
155°	443.1	458.7	504.5	556.8	577.5
157.5°	459.0	471.0	505.8	546.3	561.0
160°	467.5	477.8	506.6	538.6	550.0
162.5°	475.9	483.8	506.6	533.5	542.4
165°	486.5	491.7	506.6	526.8	532.0
167.5°	496.2	498.9	507.7	520.8	523.5
170°	501.3	502.4	507.7	518.3	519.3
172.5°	504.7	505.7	508.5	515.7	515.9
175°	508.7	508.7	509.8	512.9	511.9
177.5°	510.8	510.8	510.0	511.6	510.0
180°	510.8	510.8	510.8	510.8	510.8



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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	16.66	17.44	17.67	18.46	19.81	13.05	13.84	14.06	14.86	16.21
	3H	17.75	18.45	18.77	19.47	20.85	14.15	14.85	15.17	15.88	17.25
	4H	18.09	18.75	19.12	19.78	21.16	14.61	15.28	15.65	16.30	17.68
	6H	18.30	18.91	19.34	19.94	21.33	14.95	15.56	16.00	16.60	17.99
	8H	18.34	18.93	19.39	19.97	21.36	15.04	15.62	16.09	16.67	18.05
	12H	18.36	18.91	19.41	19.95	21.36	15.05	15.60	16.10	16.64	18.05
4H	2H	16.76	17.42	17.80	18.45	19.83	13.76	14.42	14.80	15.45	16.83
	3H	18.06	18.61	19.11	19.66	21.06	15.00	15.55	16.05	16.61	18.00
	4H	18.53	19.03	19.58	20.08	21.50	15.55	16.06	16.61	17.11	18.52
	6H	18.86	19.29	19.93	20.37	21.78	15.99	16.42	17.06	17.49	18.90
	8H	18.96	19.36	20.02	20.42	21.85	16.11	16.51	17.17	17.58	19.00
	12H	18.99	19.35	20.07	20.43	21.86	16.13	16.50	17.22	17.58	19.01
8H	4H	18.54	18.94	19.61	20.01	21.43	15.82	16.22	16.89	17.29	18.71
	6H	18.97	19.30	20.06	20.41	21.83	16.37	16.70	17.45	17.80	19.23
	8H	19.13	19.42	20.22	20.51	21.95	16.55	16.84	17.65	17.93	19.37
	12H	19.21	19.47	20.31	20.55	22.04	16.62	16.88	17.72	17.96	19.45
12H	4H	18.50	18.86	19.58	19.94	21.37	15.83	16.19	16.91	17.27	18.70
	6H	18.96	19.25	20.05	20.34	21.78	16.42	16.71	17.51	17.80	19.24
	8H	19.13	19.39	20.23	20.47	21.95	16.62	16.88	17.72	17.96	19.45