

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: P854092

Luminaire Tested: SQ2-PP3-050U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854092  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-10, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-050U-075D-935-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

**Summary**

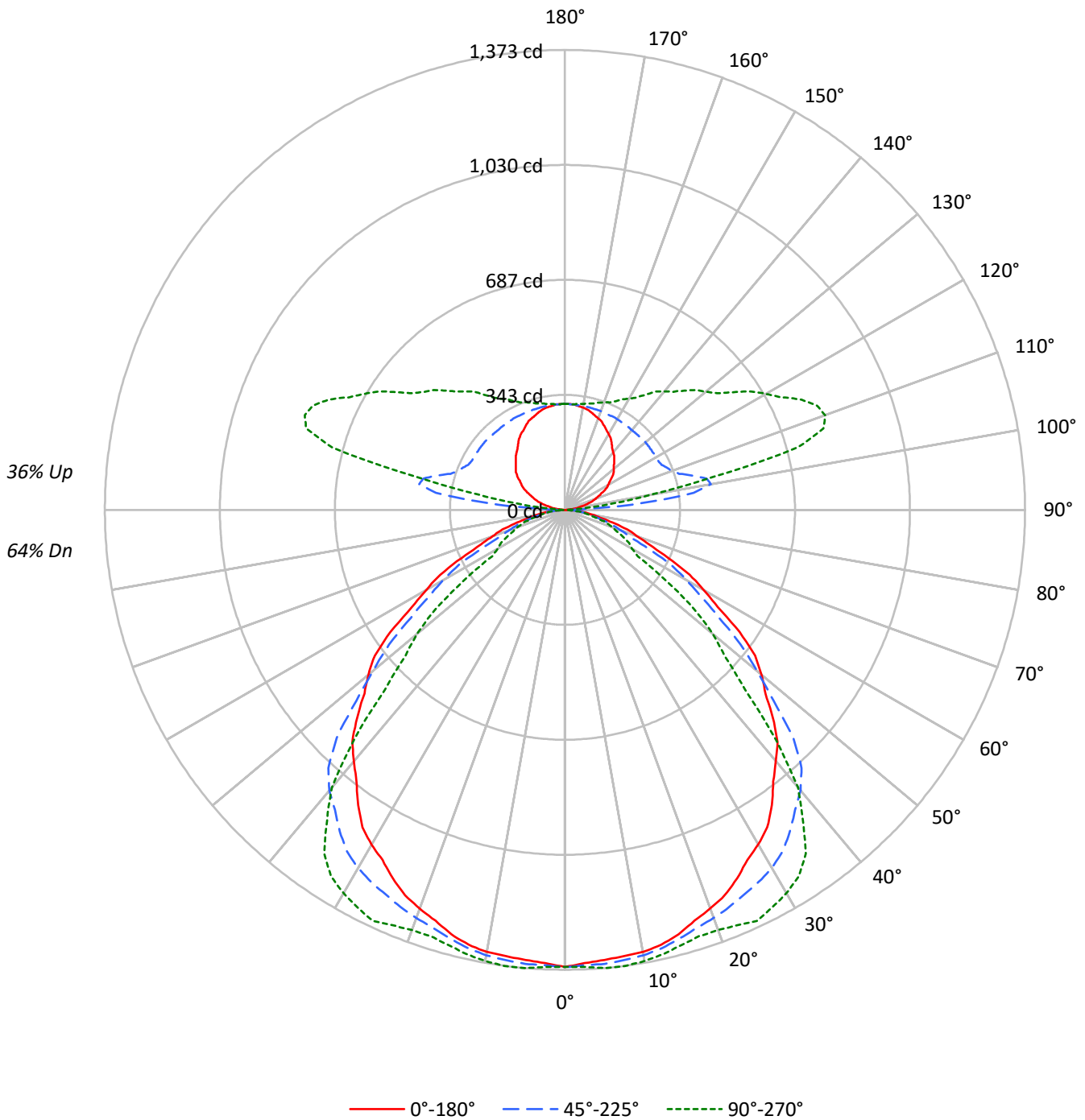
Lumens per Lamp: N/A  
Luminaire Lumens: 5402.8 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 41.5  
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: P854092

CATALOG NUMBER: SQ2-PP3-050U-075D-935-UNV-STD-W-4

### 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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64				
1	102	97	94	90	95	92	88	86	81	78	76	71	69	68	62	61	59	55				
2	93	86	80	75	87	81	76	71	72	68	64	63	60	57	55	53	51	47				
3	85	76	69	63	80	72	65	60	64	59	55	56	52	49	49	47	44	41				
4	78	68	60	54	73	64	57	52	57	51	47	50	46	43	44	41	38	35				
5	72	61	52	47	67	57	50	45	51	45	41	46	41	37	40	37	34	31				
6	67	54	46	41	62	52	44	39	46	40	36	41	37	33	37	33	30	27				
7	62	49	41	36	58	47	40	34	42	36	32	38	33	29	33	30	27	24				
8	57	45	37	32	54	43	36	31	38	33	28	35	30	26	31	27	24	22				
9	53	41	34	29	50	39	32	28	35	30	26	32	27	24	28	24	22	20				
10	50	38	31	26	47	36	29	25	33	27	23	29	25	21	26	22	20	18				

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

	0°	45°	90°
0°	22034	22034	22034
5°	21861	22049	22258
10°	21972	22138	22422
15°	21919	22136	22474
20°	21763	22283	22928
25°	21640	22564	24132
30°	21517	23021	24636
35°	21212	23089	24681
40°	20645	23048	22803
45°	20027	22003	17358
50°	19241	18771	14458
55°	17909	15797	10396
60°	15419	13556	7453
65°	13005	10472	7331
70°	10829	8242	7015
75°	9177	7112	6569
80°	7782	6174	5904
85°	6150	5076	3205

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 22003 cd/sqm



TEST NUMBER: P854092

CATALOG NUMBER: SQ2-PP3-050U-075D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	2.4
10°-20°	376.1	7.0
20°-30°	589.2	10.9
30°-40°	726.8	13.5
40°-50°	684.3	12.7
50°-60°	484.5	9.0
60°-70°	276.1	5.1
70°-80°	136.6	2.5
80°-90°	33.8	0.6
90°-100°	126.1	2.3
100°-110°	399.9	7.4
110°-120°	392.1	7.3
120°-130°	319.0	5.9
130°-140°	260.1	4.8
140°-150°	202.8	3.8
150°-160°	146.1	2.7
160°-170°	89.3	1.7
170°-180°	30.1	0.6
0°-30°	1095.2	20.3
0°-40°	1822.0	33.7
0°-60°	2990.8	55.4
0°-90°	3437.2	63.6
90°-120°	918.0	17.0
90°-150°	1700.0	31.5
90°-180°	1966.0	36.4
0°-180°	5402.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1349	1373	1360	1364	1373	128
15°	1311	1330	1324	1337	1344	370
25°	1215	1246	1267	1318	1355	559
35°	1076	1106	1171	1238	1252	671
45°	877	943	964	817	760	675
55°	636	674	561	423	369	561
65°	340	359	274	193	192	342
75°	147	163	114	107	105	159
85°	33	30	27	22	17	39
90°	0	1	3	3	3	2
95°	17	51	229	85	55	20
105°	70	98	394	751	720	73
115°	124	148	318	662	778	123
125°	172	193	314	519	611	153
135°	208	228	312	446	503	161
145°	243	261	312	385	419	152
155°	277	286	312	344	357	128
165°	302	304	314	326	328	85
175°	316	315	316	318	316	30
180°	316	316	316	316	316	



TEST NUMBER: P854092

CATALOG NUMBER: SQ2-PP3-050U-075D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1364.7	1364.7	1364.7	1364.7	1364.7
2.5°	1354.3	1373.5	1361.2	1363.6	1365.8
5°	1348.8	1372.8	1360.4	1363.5	1373.3
7.5°	1343.6	1368.2	1356.0	1361.2	1373.3
10°	1340.2	1361.3	1350.3	1357.7	1367.6
12.5°	1329.8	1349.8	1339.9	1349.6	1358.3
15°	1311.3	1329.6	1324.3	1337.4	1344.5
17.5°	1286.2	1308.5	1308.4	1327.1	1334.4
20°	1266.6	1293.4	1296.9	1320.3	1334.4
22.5°	1245.8	1277.1	1283.0	1318.2	1342.5
25°	1214.7	1245.7	1266.6	1317.9	1354.6
27.5°	1178.3	1209.0	1252.2	1309.7	1338.7
30°	1154.1	1183.7	1234.8	1294.6	1321.4
32.5°	1124.1	1154.8	1209.5	1273.8	1298.3
35°	1076.2	1105.8	1171.4	1238.1	1252.2
37.5°	1021.1	1054.6	1128.1	1165.3	1166.2
40°	979.5	1023.2	1093.5	1100.3	1081.9
42.5°	939.1	995.3	1045.0	1014.6	933.1
45°	877.1	943.4	963.6	816.7	760.2
47.5°	811.0	876.5	844.2	684.9	646.0
50°	766.0	828.1	747.3	612.3	575.6
52.5°	715.2	770.5	660.7	542.6	486.7
55°	636.2	674.3	561.2	422.9	369.3
57.5°	541.0	567.8	479.8	317.4	257.4
60°	477.5	498.7	419.8	260.4	230.8
62.5°	419.8	438.7	357.5	226.2	215.8
65°	340.4	358.8	274.1	193.3	191.9
67.5°	270.9	290.9	210.3	168.7	167.1
70°	229.4	250.5	174.6	151.4	148.6
72.5°	194.7	214.8	148.0	133.0	131.3
75°	147.1	162.7	114.0	106.7	105.3
77.5°	106.8	116.6	84.8	81.0	79.6
80°	83.7	87.9	66.4	64.9	63.5
82.5°	62.9	61.5	50.2	48.7	46.2
85°	33.2	30.4	27.4	21.5	17.3
87.5°	10.4	10.6	5.2	4.1	4.1
90°	0.0	1.0	3.0	3.0	3.0
92.5°	5.6	22.1	70.7	23.5	16.5
95°	16.9	51.0	228.9	84.9	54.7
97.5°	31.5	66.1	387.8	242.3	148.7
100°	41.8	74.9	441.9	402.9	261.8
102.5°	53.0	84.5	432.4	591.7	452.9
105°	69.7	97.9	394.2	750.8	719.6
107.5°	86.4	112.5	357.7	767.4	809.4
110°	97.5	122.8	339.4	748.3	826.1



TEST NUMBER: P854092

CATALOG NUMBER: SQ2-PP3-050U-075D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	108.7	132.4	329.1	715.3	814.2
115°	124.4	147.8	318.5	661.6	778.4
117.5°	139.7	161.9	314.3	609.8	727.6
120°	149.3	170.7	313.5	577.9	691.8
122.5°	158.9	179.5	313.5	552.2	658.3
125°	172.2	192.6	313.5	518.7	611.1
127.5°	183.9	203.6	313.5	492.7	571.5
130°	191.1	211.5	313.5	477.4	548.4
132.5°	198.3	218.7	312.7	465.3	529.3
135°	208.0	228.5	311.5	446.2	502.7
137.5°	217.6	239.0	311.3	428.0	478.4
140°	224.0	245.4	310.5	415.1	460.8
142.5°	231.9	252.5	311.3	402.3	444.9
145°	242.9	261.4	311.5	385.0	419.0
147.5°	253.8	269.6	311.7	369.7	397.5
150°	261.8	274.4	312.5	360.8	383.2
152.5°	268.1	279.2	312.5	353.6	372.1
155°	276.7	286.4	312.5	343.7	357.3
157.5°	285.9	292.5	313.5	337.6	347.0
160°	290.6	296.5	313.5	333.6	341.4
162.5°	295.4	299.7	313.5	330.4	335.8
165°	301.6	304.5	313.5	325.5	328.5
167.5°	307.4	308.1	314.5	322.2	324.7
170°	310.5	310.5	314.5	320.5	321.5
172.5°	312.1	312.9	314.5	318.9	319.1
175°	315.5	314.6	315.5	317.5	316.5
177.5°	316.5	315.7	315.7	317.3	315.7
180°	316.5	316.5	316.5	316.5	316.5

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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	19.47	20.43	20.31	21.28	22.35	15.87	16.82	16.70	17.68	18.74
	3H	20.57	21.43	21.43	22.29	23.39	16.98	17.83	17.83	18.70	19.79
	4H	20.92	21.73	21.79	22.60	23.70	17.45	18.25	18.31	19.12	20.23
	6H	21.14	21.88	22.02	22.76	23.88	17.80	18.54	18.68	19.42	20.53
	8H	21.19	21.90	22.08	22.79	23.91	17.89	18.59	18.77	19.49	20.60
	12H	21.21	21.88	22.10	22.77	23.91	17.90	18.57	18.80	19.46	20.60
4H	2H	19.59	20.40	20.46	21.27	22.37	16.59	17.40	17.47	18.27	19.37
	3H	20.91	21.58	21.79	22.48	23.60	17.85	18.52	18.74	19.42	20.54
	4H	21.39	21.99	22.28	22.89	24.04	18.41	19.02	19.31	19.92	21.06
	6H	21.73	22.25	22.64	23.17	24.32	18.86	19.38	19.77	20.30	21.45
	8H	21.83	22.31	22.74	23.23	24.39	18.98	19.47	19.89	20.38	21.54
	12H	21.87	22.30	22.80	23.24	24.41	19.01	19.45	19.94	20.39	21.55
8H	4H	21.41	21.90	22.33	22.82	23.98	18.69	19.18	19.60	20.10	21.26
	6H	21.85	22.25	22.79	23.21	24.37	19.24	19.64	20.18	20.60	21.76
	8H	22.00	22.36	22.95	23.31	24.49	19.43	19.78	20.38	20.73	21.91
	12H	22.09	22.41	23.05	23.35	24.58	19.50	19.82	20.45	20.76	21.99
12H	4H	21.38	21.81	22.31	22.75	23.92	18.70	19.14	19.64	20.08	21.24
	6H	21.84	22.19	22.78	23.14	24.32	19.29	19.65	20.24	20.60	21.78
	8H	22.01	22.33	22.96	23.27	24.50	19.51	19.82	20.46	20.76	21.99