

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: P854151

Luminaire Tested: SQ2-PP3-150U-075D-930-UNV-STD-W-4

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P854151  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/12/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ2-PP3-150U-075D-930-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

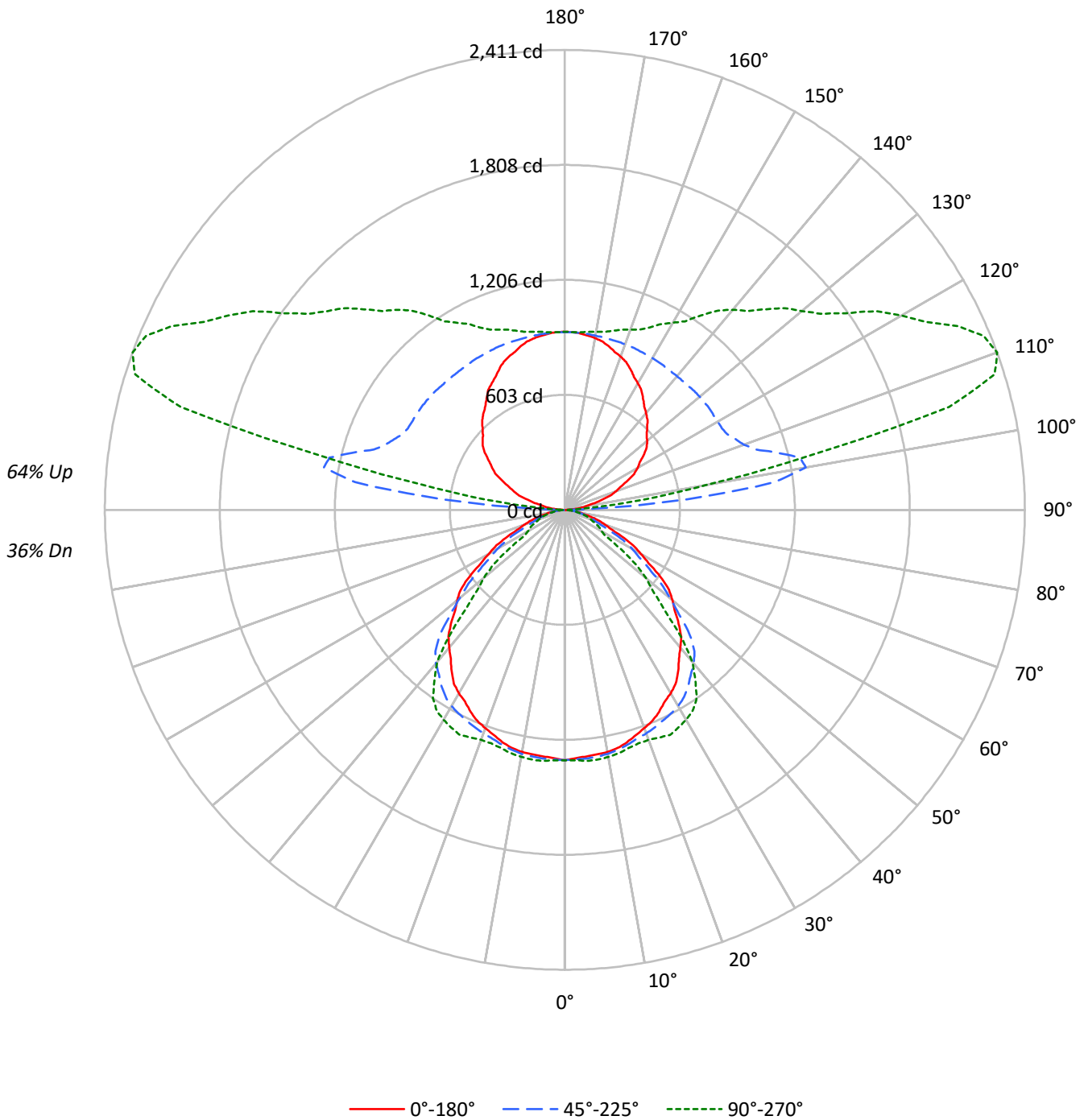
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9062.7 lumens  
Efficiency: N/A  
Efficacy: 108.8 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): 83.3  
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

TEST NUMBER: P854151

CATALOG NUMBER: SQ2-PP3-150U-075D-930-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P854151

CATALOG NUMBER: SQ2-PP3-150U-075D-930-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	0
RCR																		
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36
1	95	91	87	84	86	83	80	77	67	65	63	53	51	50	39	38	38	32
2	87	80	74	69	79	73	68	64	59	56	53	47	44	42	35	34	32	27
3	79	70	64	58	72	64	58	53	52	48	45	41	39	36	31	29	28	23
4	73	62	55	49	66	57	51	45	47	42	38	37	34	31	28	26	24	20
5	67	56	48	42	60	51	44	39	42	37	33	33	30	27	25	23	21	18
6	62	50	42	37	56	46	39	34	38	33	29	30	26	24	23	21	19	16
7	57	45	37	32	51	41	35	30	34	29	25	27	24	21	21	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	21	19	19	17	15	12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	18	15	13	11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10

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

	0°	45°	90°
0°	21191	21191	21191
5°	21026	21206	21409
10°	21133	21292	21564
15°	21081	21290	21615
20°	20931	21431	22051
25°	20811	21702	23209
30°	20694	22143	23694
35°	20402	22206	23737
40°	19857	22167	21933
45°	19262	21162	16696
50°	18505	18053	13906
55°	17225	15192	9999
60°	14832	13039	7169
65°	12508	10071	7049
70°	10414	7926	6746
75°	8827	6837	6319
80°	7485	5932	5672
85°	5910	4891	3075

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 21162 cd/sqm



TEST NUMBER: P854151

CATALOG NUMBER: SQ2-PP3-150U-075D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.0	1.4
10°-20°	361.7	4.0
20°-30°	566.7	6.3
30°-40°	699.0	7.7
40°-50°	658.1	7.3
50°-60°	466.0	5.1
60°-70°	265.5	2.9
70°-80°	131.4	1.4
80°-90°	33.1	0.4
90°-100°	355.3	3.9
100°-110°	1163.6	12.8
110°-120°	1150.4	12.7
120°-130°	940.4	10.4
130°-140°	767.4	8.5
140°-150°	597.2	6.6
150°-160°	430.0	4.7
160°-170°	263.1	2.9
170°-180°	88.9	1.0
0°-30°	1053.3	11.6
0°-40°	1752.4	19.3
0°-60°	2876.5	31.7
0°-90°	3306.5	36.5
90°-120°	2669.3	29.5
90°-150°	4974.2	54.9
90°-180°	5756.0	63.5
0°-180°	9062.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1297	1320	1308	1311	1321	124
15°	1261	1279	1274	1286	1293	355
25°	1168	1198	1218	1268	1303	538
35°	1035	1064	1127	1191	1204	646
45°	844	907	927	786	731	649
55°	612	648	540	407	355	540
65°	327	345	264	186	184	329
75°	142	156	110	103	101	153
85°	32	29	26	21	17	37
90°	1	3	8	7	8	4
95°	50	144	646	230	150	57
105°	202	288	1155	2194	2085	213
115°	364	435	938	1939	2276	360
125°	507	565	925	1529	1796	451
135°	611	675	917	1319	1487	472
145°	714	766	915	1134	1243	447
155°	814	841	921	1015	1054	375
165°	888	897	925	961	971	250
175°	929	929	930	936	934	88
180°	933	933	933	933	933	



TEST NUMBER: P854151

CATALOG NUMBER: SQ2-PP3-150U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1312.5	1312.5	1312.5	1312.5	1312.5
2.5°	1302.6	1321.0	1309.2	1311.5	1313.7
5°	1297.3	1320.3	1308.4	1311.4	1320.9
7.5°	1292.3	1315.9	1304.2	1309.2	1320.9
10°	1289.0	1309.3	1298.7	1305.8	1315.3
12.5°	1279.0	1298.2	1288.7	1298.0	1306.4
15°	1261.2	1278.8	1273.7	1286.3	1293.1
17.5°	1237.1	1258.5	1258.4	1276.4	1283.4
20°	1218.2	1244.0	1247.3	1269.8	1283.4
22.5°	1198.2	1228.3	1234.0	1267.8	1291.2
25°	1168.2	1198.1	1218.2	1267.6	1302.8
27.5°	1133.3	1162.9	1204.3	1259.6	1287.6
30°	1110.0	1138.5	1187.7	1245.1	1270.9
32.5°	1081.1	1110.7	1163.3	1225.1	1248.7
35°	1035.1	1063.5	1126.6	1190.8	1204.3
37.5°	982.1	1014.3	1085.0	1120.8	1121.6
40°	942.1	984.1	1051.7	1058.2	1040.6
42.5°	903.2	957.2	1005.1	975.8	897.4
45°	843.6	907.3	926.8	785.5	731.2
47.5°	780.0	843.0	811.9	658.8	621.3
50°	736.7	796.4	718.7	588.9	553.6
52.5°	687.9	741.1	635.5	521.9	468.1
55°	611.9	648.5	539.7	406.7	355.2
57.5°	520.3	546.1	461.5	305.3	247.5
60°	459.3	479.6	403.8	250.5	222.0
62.5°	403.8	421.9	343.8	217.6	207.6
65°	327.4	345.1	263.6	185.9	184.5
67.5°	260.6	279.8	202.3	162.3	160.7
70°	220.6	241.0	167.9	145.6	142.9
72.5°	187.3	206.6	142.4	127.9	126.3
75°	141.5	156.4	109.6	102.6	101.3
77.5°	102.7	112.2	81.6	77.9	76.6
80°	80.5	84.5	63.8	62.4	61.0
82.5°	60.5	59.1	48.3	46.8	44.4
85°	31.9	29.2	26.4	20.7	16.6
87.5°	10.2	10.6	6.0	4.7	4.9
90°	1.0	2.8	7.7	6.7	7.7
92.5°	16.3	59.4	182.5	59.3	47.5
95°	49.8	144.5	646.0	230.1	149.5
97.5°	90.5	190.6	1108.4	670.5	415.6
100°	118.9	214.4	1282.4	1145.2	759.1
102.5°	151.1	244.4	1263.3	1687.5	1308.1
105°	202.2	288.5	1155.0	2194.3	2084.7
107.5°	252.7	331.8	1049.3	2241.7	2362.3
110°	285.6	362.5	998.7	2186.6	2410.6



TEST NUMBER: P854151

CATALOG NUMBER: SQ2-PP3-150U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	317.1	391.7	968.1	2090.6	2377.6
115°	364.2	435.4	938.4	1939.0	2276.4
117.5°	410.0	476.6	927.0	1790.0	2132.6
120°	439.9	502.7	924.0	1703.1	2036.8
122.5°	466.8	528.1	924.0	1628.2	1937.9
125°	507.0	565.1	924.9	1529.1	1796.2
127.5°	541.2	600.4	923.8	1456.0	1688.5
130°	562.6	622.6	923.0	1411.8	1621.7
132.5°	581.8	643.3	920.7	1373.8	1564.2
135°	610.6	675.2	917.3	1318.8	1486.6
137.5°	640.8	704.9	915.2	1261.5	1413.2
140°	662.3	724.2	914.4	1225.3	1368.7
142.5°	683.8	741.9	914.4	1186.7	1316.6
145°	714.1	766.5	915.3	1134.4	1243.1
147.5°	745.9	789.6	916.7	1089.0	1171.1
150°	765.8	804.2	918.2	1062.6	1132.0
152.5°	785.8	819.7	919.0	1040.9	1098.2
155°	813.7	840.9	921.1	1015.0	1054.3
157.5°	838.9	858.5	923.2	994.6	1023.1
160°	855.0	870.9	924.0	983.0	1005.4
162.5°	868.8	881.7	924.0	973.6	990.1
165°	888.5	896.9	924.9	960.6	970.9
167.5°	905.2	909.3	926.1	950.6	956.2
170°	914.4	916.3	926.8	945.1	947.0
172.5°	921.3	922.4	929.1	941.2	941.6
175°	928.8	928.8	929.7	936.4	934.5
177.5°	932.6	931.8	931.1	935.6	932.6
180°	932.6	932.6	932.6	932.6	932.6



TEST NUMBER: P854151

CATALOG NUMBER: SQ2-PP3-150U-075D-930-UNV-STD-W-4

**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	16.74	17.47	17.81	18.54	20.00	13.14	13.87	14.21	14.94	16.39
	3H	17.83	18.48	18.91	19.56	21.03	14.23	14.89	15.31	15.96	17.43
	4H	18.16	18.78	19.26	19.86	21.34	14.69	15.31	15.78	16.39	17.87
	6H	18.37	18.94	19.47	20.02	21.51	15.03	15.60	16.13	16.68	18.17
	8H	18.42	18.96	19.52	20.06	21.54	15.11	15.65	16.21	16.75	18.23
	12H	18.43	18.94	19.54	20.03	21.54	15.12	15.63	16.23	16.72	18.23
4H	2H	16.83	17.45	17.93	18.53	20.01	13.84	14.45	14.93	15.53	17.01
	3H	18.13	18.64	19.24	19.75	21.24	15.07	15.59	16.18	16.69	18.18
	4H	18.60	19.07	19.71	20.17	21.68	15.62	16.09	16.73	17.19	18.70
	6H	18.93	19.33	20.05	20.45	21.96	16.06	16.46	17.17	17.58	19.08
	8H	19.02	19.40	20.14	20.51	22.03	16.18	16.55	17.29	17.66	19.18
	12H	19.05	19.39	20.18	20.52	22.04	16.20	16.54	17.33	17.66	19.19
8H	4H	18.61	18.98	19.72	20.09	21.62	15.89	16.26	17.00	17.37	18.89
	6H	19.04	19.35	20.17	20.50	22.02	16.43	16.74	17.57	17.89	19.41
	8H	19.19	19.46	20.34	20.60	22.13	16.61	16.88	17.76	18.02	19.56
	12H	19.27	19.51	20.42	20.64	22.22	16.68	16.92	17.83	18.05	19.62
12H	4H	18.56	18.90	19.69	20.02	21.55	15.89	16.23	17.02	17.35	18.88
	6H	19.02	19.30	20.17	20.43	21.97	16.48	16.75	17.62	17.89	19.42
	8H	19.19	19.43	20.34	20.56	22.13	16.68	16.92	17.83	18.05	19.63