

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: P854133

Luminaire Tested: SQ2-PP3-100U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854133
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-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

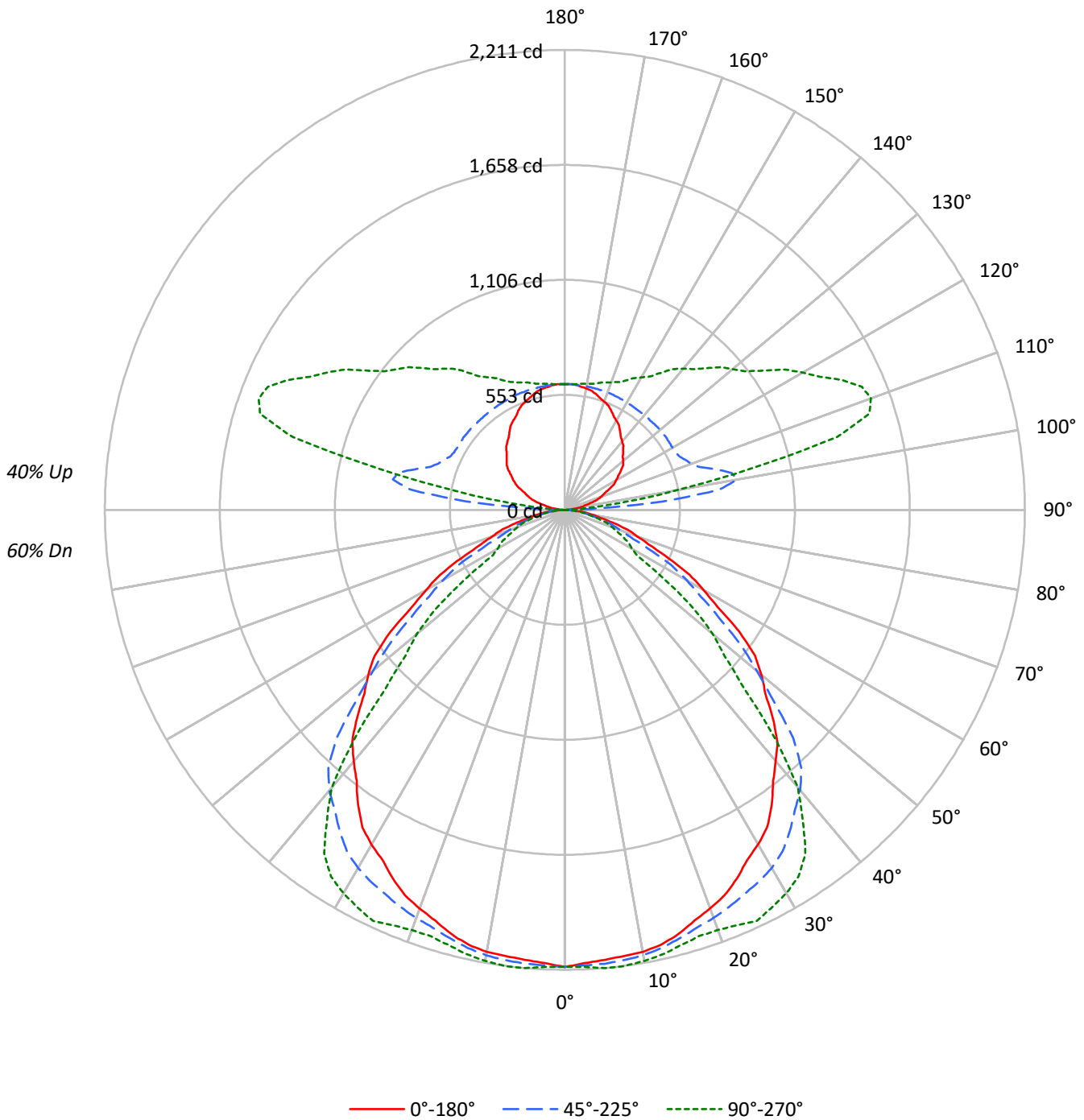
Lumens per Lamp: N/A
Luminaire Lumens: 9299.3 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 81.8
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: P854133

CATALOG NUMBER: SQ2-PP3-100U-125D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854133

CATALOG NUMBER: SQ2-PP3-100U-125D-930-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60		
1	101	96	93	89	94	90	87	84	79	76	74	68	66	65	58	57	56	51		
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	52	50	48	44		
3	84	75	68	62	79	71	64	59	62	57	53	54	50	47	47	44	42	38		
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	42	39	36	33		
5	71	60	52	46	66	56	49	44	50	44	40	44	39	36	38	35	32	29		
6	66	54	46	40	61	51	44	38	45	39	35	40	35	31	35	31	28	25		
7	61	49	41	35	57	46	39	34	41	35	31	36	31	28	32	28	25	23		
8	57	44	37	31	53	42	35	30	37	32	27	33	28	25	29	25	23	20		
9	53	41	33	28	49	38	32	27	34	29	25	30	26	23	27	23	20	18		
10	49	37	30	25	46	35	29	24	32	26	22	28	24	20	25	21	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35479	35479	35479
5°	35199	35501	35840
10°	35379	35644	36102
15°	35293	35642	36186
20°	35041	35880	36917
25°	34843	36332	38856
30°	34644	37069	39668
35°	34154	37176	39740
40°	33242	37110	36718
45°	32248	35429	27951
50°	30981	30223	23280
55°	28836	25436	16738
60°	24826	21826	12000
65°	20944	16860	11801
70°	17434	13270	11292
75°	14778	11447	10580
80°	12524	9930	9503
85°	9892	8170	5169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 35429 cd/sqm



TEST NUMBER: P854133

CATALOG NUMBER: SQ2-PP3-100U-125D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	2.2
10°-20°	605.5	6.5
20°-30°	948.7	10.2
30°-40°	1170.3	12.6
40°-50°	1101.8	11.8
50°-60°	780.1	8.4
60°-70°	444.5	4.8
70°-80°	219.9	2.4
80°-90°	54.8	0.6
90°-100°	252.6	2.7
100°-110°	764.0	8.2
110°-120°	745.8	8.0
120°-130°	609.5	6.6
130°-140°	497.5	5.3
140°-150°	387.3	4.2
150°-160°	279.2	3.0
160°-170°	170.9	1.8
170°-180°	57.7	0.6
0°-30°	1763.4	19.0
0°-40°	2933.7	31.5
0°-60°	4815.6	51.8
0°-90°	5534.9	59.5
90°-120°	1762.4	19.0
90°-150°	3256.6	35.0
90°-180°	3764.0	40.5
0°-180°	9299.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2172	2210	2190	2195	2211	207
15°	2111	2141	2132	2154	2165	595
25°	1956	2006	2039	2122	2181	901
35°	1733	1780	1886	1994	2016	1081
45°	1412	1519	1552	1315	1224	1087
55°	1024	1086	904	681	595	904
65°	548	578	441	311	309	550
75°	237	262	184	172	170	257
85°	53	49	44	35	28	63
90°	0	2	11	7	6	4
95°	31	99	477	176	111	37
105°	133	187	750	1425	1354	140
115°	236	282	607	1256	1475	234
125°	330	367	598	992	1167	294
135°	396	438	594	855	962	307
145°	462	497	594	736	804	290
155°	527	545	598	660	685	243
165°	576	583	601	624	631	162
175°	603	603	604	609	607	57
180°	605	605	605	605	605	



TEST NUMBER: P854133

CATALOG NUMBER: SQ2-PP3-100U-125D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2197.4	2197.4	2197.4	2197.4	2197.4
2.5°	2180.6	2211.5	2191.8	2195.6	2199.2
5°	2171.8	2210.4	2190.4	2195.4	2211.3
7.5°	2163.5	2203.0	2183.4	2191.8	2211.3
10°	2157.9	2191.9	2174.1	2186.1	2202.0
12.5°	2141.2	2173.4	2157.4	2173.1	2187.1
15°	2111.4	2140.9	2132.3	2153.5	2164.8
17.5°	2071.0	2106.9	2106.8	2136.8	2148.6
20°	2039.4	2082.6	2088.2	2125.9	2148.6
22.5°	2006.0	2056.4	2065.9	2122.5	2161.6
25°	1955.8	2005.8	2039.4	2122.1	2181.1
27.5°	1897.3	1946.8	2016.2	2108.8	2155.6
30°	1858.2	1905.9	1988.3	2084.5	2127.7
32.5°	1809.9	1859.4	1947.4	2051.0	2090.5
35°	1732.8	1780.5	1886.1	1993.5	2016.2
37.5°	1644.1	1698.1	1816.4	1876.4	1877.7
40°	1577.2	1647.6	1760.7	1771.6	1742.1
42.5°	1512.1	1602.5	1682.6	1633.7	1502.4
45°	1412.3	1519.0	1551.6	1315.0	1224.1
47.5°	1305.9	1411.3	1359.3	1102.8	1040.1
50°	1233.4	1333.3	1203.2	985.8	926.8
52.5°	1151.6	1240.7	1063.8	873.6	783.7
55°	1024.4	1085.7	903.6	680.9	594.6
57.5°	871.0	914.2	772.6	511.1	414.4
60°	768.8	802.9	675.9	419.3	371.6
62.5°	675.9	706.4	575.6	364.3	347.5
65°	548.2	577.7	441.3	311.2	308.9
67.5°	436.2	468.5	338.7	271.7	269.0
70°	369.3	403.4	281.1	243.8	239.2
72.5°	313.6	345.8	238.3	214.1	211.4
75°	236.9	261.9	183.5	171.8	169.6
77.5°	171.9	187.8	136.6	130.5	128.2
80°	134.7	141.5	106.8	104.5	102.2
82.5°	101.3	99.0	80.8	78.4	74.3
85°	53.4	48.9	44.1	34.7	27.9
87.5°	16.7	17.1	9.7	6.9	6.7
90°	0.0	1.9	11.4	6.6	5.7
92.5°	10.6	42.9	154.2	51.1	36.8
95°	31.3	99.1	476.7	176.1	111.1
97.5°	60.6	126.1	751.3	497.1	302.7
100°	78.8	142.9	839.4	811.5	545.0
102.5°	99.3	161.2	821.2	1138.2	907.4
105°	132.9	186.8	750.1	1424.6	1354.1
107.5°	164.8	216.3	681.8	1453.0	1534.7
110°	186.1	235.3	647.6	1417.2	1565.8



TEST NUMBER: P854133

CATALOG NUMBER: SQ2-PP3-100U-125D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.6	254.3	627.1	1357.4	1545.3
115°	236.4	281.9	606.8	1255.5	1474.6
117.5°	266.1	309.1	599.5	1160.1	1384.4
120°	285.8	326.7	597.3	1104.5	1319.9
122.5°	304.0	342.7	597.3	1055.5	1254.5
125°	330.4	366.7	598.2	991.5	1167.0
127.5°	351.9	389.4	597.3	943.3	1092.9
130°	365.6	404.6	597.3	915.6	1051.1
132.5°	377.7	417.5	596.5	890.3	1015.4
135°	396.0	437.7	594.4	855.1	961.9
137.5°	416.3	456.0	594.4	817.5	916.5
140°	429.2	468.2	594.4	793.1	886.9
142.5°	442.1	479.6	593.7	770.8	852.7
145°	462.4	496.8	594.4	735.6	804.3
147.5°	482.7	511.9	595.6	706.5	759.3
150°	495.7	522.6	596.3	690.4	734.9
152.5°	507.8	531.8	597.1	676.5	712.9
155°	527.0	544.6	598.2	659.6	684.6
157.5°	543.7	558.0	599.4	647.0	664.5
160°	553.6	565.7	600.1	639.3	652.3
162.5°	563.5	572.6	600.9	632.5	643.2
165°	576.4	582.9	601.1	624.0	631.4
167.5°	587.4	590.7	602.2	617.5	620.6
170°	593.5	595.3	603.0	614.4	615.3
172.5°	597.3	598.4	603.0	611.3	611.5
175°	603.0	603.0	603.9	608.6	606.8
177.5°	605.6	604.9	604.1	606.3	604.9
180°	604.9	604.9	604.9	604.9	604.9



TEST NUMBER: P854133

CATALOG NUMBER: SQ2-PP3-100U-125D-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	20.79	21.70	21.66	22.59	23.73	17.18	18.10	18.06	18.99	20.12
	3H	21.89	22.70	22.78	23.61	24.76	18.29	19.11	19.18	20.01	21.17
	4H	22.23	23.00	23.14	23.91	25.08	18.76	19.53	19.66	20.44	21.60
	6H	22.45	23.16	23.37	24.07	25.25	19.11	19.81	20.02	20.73	21.91
	8H	22.50	23.17	23.43	24.11	25.28	19.19	19.87	20.12	20.80	21.98
	12H	22.52	23.16	23.45	24.08	25.29	19.21	19.85	20.14	20.78	21.98
4H	2H	20.90	21.67	21.81	22.58	23.75	17.90	18.67	18.81	19.58	20.75
	3H	22.22	22.85	23.14	23.79	24.98	19.16	19.80	20.08	20.74	21.92
	4H	22.69	23.27	23.62	24.21	25.42	19.72	20.30	20.65	21.23	22.44
	6H	23.03	23.53	23.98	24.49	25.70	20.16	20.66	21.11	21.62	22.83
	8H	23.13	23.59	24.08	24.55	25.77	20.28	20.75	21.23	21.70	22.92
	12H	23.17	23.58	24.13	24.56	25.78	20.31	20.73	21.28	21.70	22.93
8H	4H	22.71	23.18	23.66	24.13	25.35	19.99	20.46	20.94	21.41	22.63
	6H	23.15	23.53	24.12	24.53	25.75	20.54	20.92	21.51	21.92	23.14
	8H	23.30	23.64	24.29	24.63	25.87	20.73	21.07	21.71	22.05	23.29
	12H	23.39	23.69	24.38	24.67	25.96	20.80	21.10	21.79	22.08	23.37
12H	4H	22.68	23.09	23.64	24.07	25.29	20.00	20.42	20.97	21.39	22.62
	6H	23.14	23.48	24.12	24.46	25.70	20.59	20.93	21.58	21.92	23.16
	8H	23.31	23.61	24.29	24.59	25.87	20.80	21.10	21.79	22.08	23.37