

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: P854097

Luminaire Tested: SQ2-PP3-050U-125D-930-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854097
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-125D-930-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

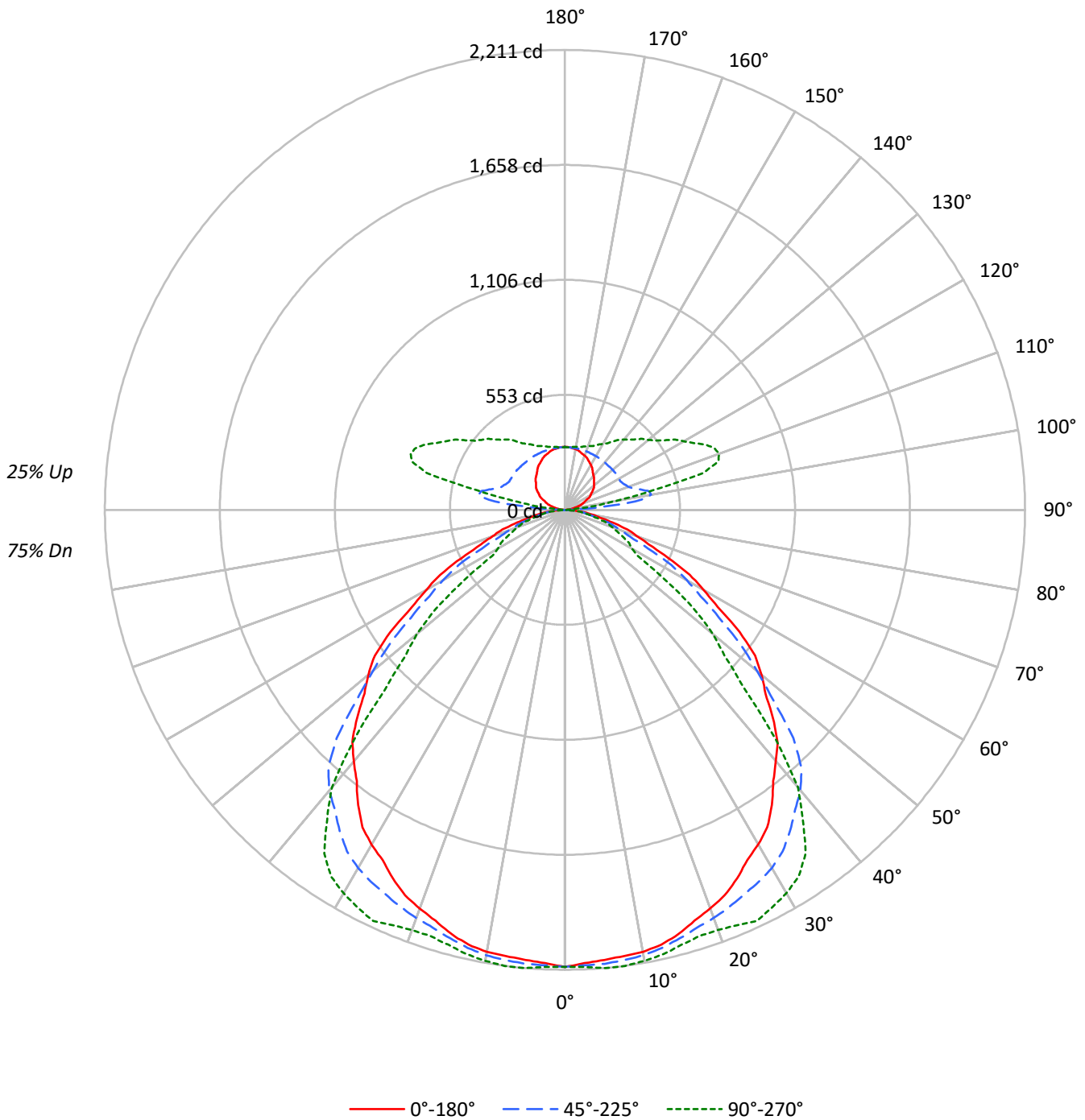
Lumens per Lamp: N/A
Luminaire Lumens: 7409.6 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 64
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: P854097

CATALOG NUMBER: SQ2-PP3-050U-125D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P854097

CATALOG NUMBER: SQ2-PP3-050U-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	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79	75		
1	104	100	96	93	99	95	92	89	87	84	82	78	77	75	71	70	68	65		
2	95	88	82	77	91	84	79	74	77	73	69	70	67	64	63	61	59	55		
3	88	78	71	65	83	75	68	63	68	63	59	62	58	55	57	53	51	48		
4	80	70	62	56	76	67	60	54	61	55	51	56	51	47	51	47	44	41		
5	74	62	54	48	70	60	52	47	55	49	44	51	45	41	46	42	39	36		
6	69	56	48	42	65	54	47	41	50	44	39	46	41	37	42	38	34	32		
7	64	51	43	37	60	49	42	36	45	39	34	42	37	33	39	34	31	28		
8	59	47	39	33	56	45	38	32	42	35	31	38	33	29	35	31	28	25		
9	55	43	35	30	53	41	34	29	38	32	28	35	30	26	33	28	25	23		
10	52	39	32	27	49	38	31	26	35	29	25	33	28	24	30	26	23	21		

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: P854097

CATALOG NUMBER: SQ2-PP3-050U-125D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.2	2.8
10°-20°	605.5	8.2
20°-30°	948.7	12.8
30°-40°	1170.3	15.8
40°-50°	1101.8	14.9
50°-60°	780.1	10.5
60°-70°	444.5	6.0
70°-80°	219.9	3.0
80°-90°	54.1	0.7
90°-100°	120.3	1.6
100°-110°	381.5	5.1
110°-120°	374.1	5.0
120°-130°	304.4	4.1
130°-140°	248.2	3.3
140°-150°	193.5	2.6
150°-160°	139.4	1.9
160°-170°	85.2	1.1
170°-180°	28.8	0.4
0°-30°	1763.4	23.8
0°-40°	2933.7	39.6
0°-60°	4815.6	65.0
0°-90°	5534.2	74.7
90°-120°	875.9	11.8
90°-150°	1622.1	21.9
90°-180°	1875.0	25.3
0°-180°	7409.6	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	1	3	3	3	3
95°	16	49	218	81	52	19
105°	66	93	376	716	687	70
115°	119	141	304	631	743	117
125°	164	184	299	495	583	146
135°	198	218	297	426	480	153
145°	232	249	297	367	400	145
155°	264	273	298	328	341	122
165°	288	290	299	311	313	81
175°	301	300	301	303	302	29
180°	302	302	302	302	302	



TEST NUMBER: P854097

CATALOG NUMBER: SQ2-PP3-050U-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	16.9	8.0	6.1	6.1
90°	0.0	0.9	2.8	2.8	2.8
92.5°	5.3	21.1	67.4	22.5	15.8
95°	16.1	48.6	218.4	81.0	52.2
97.5°	30.0	63.1	370.0	231.2	141.9
100°	39.9	71.5	421.7	384.4	249.8
102.5°	50.5	80.6	412.6	564.5	432.1
105°	66.5	93.4	376.1	716.4	686.6
107.5°	82.4	107.3	341.3	732.2	772.3
110°	93.1	117.2	323.9	714.0	788.3



TEST NUMBER: P854097

CATALOG NUMBER: SQ2-PP3-050U-125D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.7	126.4	314.0	682.5	776.9
115°	118.7	141.0	303.9	631.2	742.7
117.5°	133.3	154.5	299.9	581.9	694.2
120°	142.5	162.9	299.2	551.4	660.0
122.5°	151.6	171.3	299.2	526.9	628.1
125°	164.3	183.8	299.2	494.9	583.1
127.5°	175.5	194.3	299.2	470.1	545.3
130°	182.3	201.8	299.2	455.5	523.3
132.5°	189.2	208.7	298.4	444.0	505.1
135°	198.5	218.0	297.3	425.7	479.6
137.5°	207.6	228.0	297.1	408.3	456.4
140°	213.7	234.1	296.3	396.1	439.7
142.5°	221.3	241.0	297.1	383.8	424.5
145°	231.7	249.4	297.3	367.3	399.8
147.5°	242.2	257.2	297.4	352.8	379.3
150°	249.8	261.8	298.2	344.3	365.6
152.5°	255.9	266.4	298.2	337.4	355.0
155°	264.0	273.3	298.2	327.9	340.9
157.5°	272.8	279.1	299.2	322.2	331.1
160°	277.3	282.9	299.2	318.3	325.8
162.5°	281.9	286.0	299.2	315.2	320.4
165°	287.8	290.5	299.2	310.6	313.4
167.5°	293.3	294.0	300.1	307.4	309.8
170°	296.3	296.3	300.1	305.8	306.8
172.5°	297.8	298.6	300.1	304.3	304.5
175°	301.1	300.1	301.1	302.9	302.0
177.5°	302.0	301.3	301.2	302.7	301.2
180°	302.0	302.0	302.0	302.0	302.0



TEST NUMBER: P854097

CATALOG NUMBER: SQ2-PP3-050U-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	21.99	23.08	22.71	23.81	24.68	18.39	19.47	19.11	20.21	21.08
	3H	23.11	24.07	23.84	24.82	25.72	19.51	20.48	20.24	21.22	22.13
	4H	23.46	24.37	24.21	25.12	26.04	19.98	20.89	20.74	21.65	22.56
	6H	23.69	24.52	24.45	25.29	26.22	20.34	21.18	21.11	21.94	22.87
	8H	23.74	24.54	24.52	25.32	26.25	20.43	21.23	21.21	22.01	22.94
	12H	23.76	24.52	24.54	25.30	26.25	20.46	21.21	21.24	21.99	22.95
4H	2H	22.13	23.04	22.89	23.79	24.71	19.13	20.04	19.89	20.79	21.71
	3H	23.46	24.21	24.23	25.00	25.94	20.40	21.15	21.17	21.94	22.88
	4H	23.94	24.62	24.73	25.41	26.38	20.97	21.65	21.75	22.44	23.40
	6H	24.29	24.88	25.09	25.69	26.66	21.42	22.01	22.22	22.82	23.79
	8H	24.39	24.94	25.19	25.75	26.73	21.54	22.09	22.35	22.90	23.88
	12H	24.44	24.93	25.26	25.76	26.75	21.58	22.07	22.41	22.91	23.89
8H	4H	23.98	24.53	24.78	25.34	26.32	21.26	21.80	22.06	22.61	23.60
	6H	24.42	24.87	25.25	25.72	26.70	21.81	22.26	22.64	23.12	24.10
	8H	24.57	24.98	25.42	25.83	26.83	21.99	22.40	22.84	23.25	24.25
	12H	24.67	25.02	25.51	25.86	26.92	22.08	22.43	22.92	23.27	24.33
12H	4H	23.95	24.44	24.77	25.27	26.26	21.27	21.77	22.10	22.60	23.58
	6H	24.40	24.81	25.25	25.66	26.66	21.86	22.27	22.71	23.12	24.11
	8H	24.58	24.94	25.43	25.78	26.84	22.08	22.44	22.92	23.28	24.33