

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:

Luminaire Tested: SQ4-PW1-125U-100D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-125U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

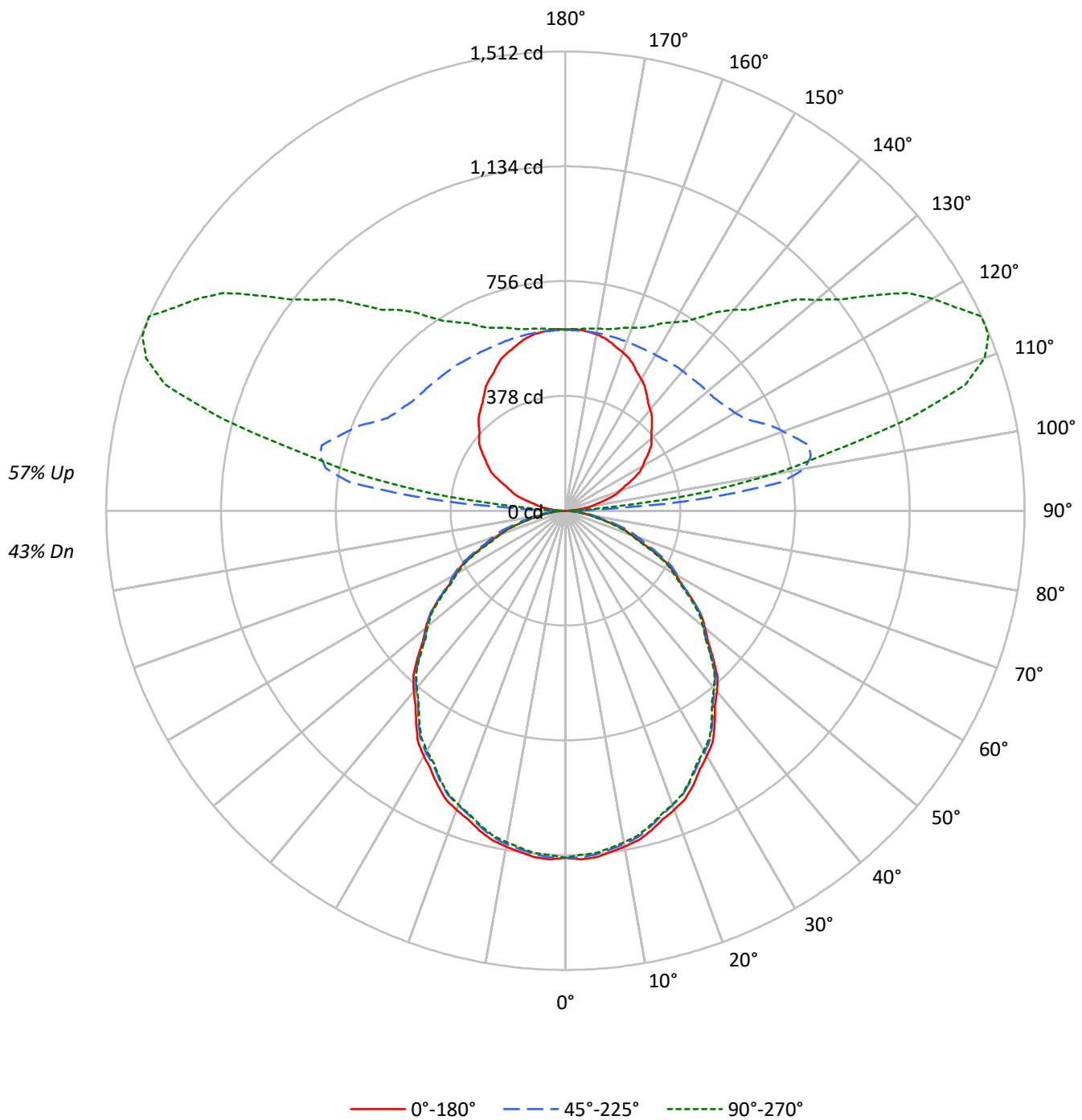
Lumens per Lamp: N/A
Luminaire Lumens: 6757.7 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 64.5
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

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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42
2	88	80	74	69	80	74	69	64	61	57	54	50	47	45	39	37	36
3	80	71	64	58	73	65	59	54	54	49	46	44	41	38	34	32	30
4	73	63	55	49	67	58	51	45	48	43	39	39	35	32	31	28	26
5	67	56	48	42	61	51	44	39	43	38	33	35	31	28	28	25	23
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	17	14
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	18	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10541	10541	10541
5°	10609	10526	10478
10°	10525	10439	10383
15°	10413	10298	10258
20°	10289	10131	10111
25°	10144	9960	9930
30°	9930	9780	9716
35°	9648	9512	9455
40°	9347	9202	9165
45°	8983	8866	8826
50°	8611	8539	8481
55°	8208	8208	8080
60°	7708	7857	7578
65°	7054	7405	6879
70°	6218	6817	6056
75°	5311	6099	5169
80°	4118	5133	4171
85°	2668	3938	3515

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8983 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	1.6
10°-20°	303.7	4.5
20°-30°	450.5	6.7
30°-40°	527.2	7.8
40°-50°	524.8	7.8
50°-60°	453.2	6.7
60°-70°	326.2	4.8
70°-80°	171.1	2.5
80°-90°	43.8	0.6
90°-100°	278.9	4.1
100°-110°	751.4	11.1
110°-120°	788.6	11.7
120°-130°	639.9	9.5
130°-140°	501.9	7.4
140°-150°	385.3	5.7
150°-160°	277.0	4.1
160°-170°	169.3	2.5
170°-180°	57.1	0.8
0°-30°	861.9	12.8
0°-40°	1389.0	20.6
0°-60°	2367.1	35.0
0°-90°	2908.2	43.0
90°-120°	1819.0	26.9
90°-150°	3346.1	49.5
90°-180°	3849.0	57.0
0°-180°	6757.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1146	1133	1136	1133	1131	108
15°	1090	1076	1078	1076	1074	307
25°	996	980	978	972	975	458
35°	857	845	844	837	840	535
45°	688	683	680	677	676	531
55°	510	509	510	503	502	455
65°	323	333	339	326	315	320
75°	149	163	171	160	145	160
85°	25	33	37	35	33	33
90°	2	4	9	10	10	4
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-125U-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1142.5	1142.5	1142.5	1142.5	1142.5
2.5°	1148.9	1139.5	1142.5	1140.0	1134.4
5°	1145.5	1132.7	1136.5	1133.4	1131.4
7.5°	1133.8	1122.0	1124.8	1121.5	1120.4
10°	1123.4	1111.6	1114.3	1110.2	1108.3
12.5°	1111.3	1098.7	1101.4	1097.4	1096.2
15°	1090.2	1076.4	1078.1	1076.0	1074.0
17.5°	1065.6	1051.6	1051.9	1048.7	1048.3
20°	1047.9	1033.1	1031.8	1027.8	1029.8
22.5°	1028.5	1013.0	1011.6	1006.1	1008.8
25°	996.5	979.8	978.4	972.4	975.4
27.5°	959.5	943.0	943.0	934.6	937.8
30°	932.1	916.4	918.0	908.0	912.0
32.5°	903.1	889.0	889.8	879.9	883.8
35°	856.6	844.8	844.5	836.6	839.5
37.5°	809.1	798.7	797.0	792.4	793.2
40°	776.1	767.2	764.0	761.0	761.0
42.5°	741.5	733.4	730.2	728.0	727.2
45°	688.5	682.6	679.5	677.4	676.4
47.5°	636.2	630.7	627.9	626.5	625.5
50°	599.9	596.0	594.9	591.9	590.9
52.5°	563.7	561.3	560.3	556.4	555.4
55°	510.3	509.4	510.3	503.3	502.3
57.5°	454.8	456.4	459.6	450.1	447.7
60°	417.7	421.7	425.8	414.6	410.7
62.5°	379.9	386.2	392.0	379.2	373.7
65°	323.1	333.0	339.2	325.9	315.1
67.5°	268.4	280.6	288.1	273.7	261.5
70°	230.5	244.3	252.7	238.3	224.5
72.5°	197.5	212.8	219.6	206.0	192.3
75°	149.0	162.8	171.1	159.7	145.0
77.5°	105.7	118.7	125.6	115.7	103.5
80°	77.5	91.3	96.6	88.4	78.5
82.5°	55.0	66.4	70.1	65.1	58.4
85°	25.2	33.0	37.2	35.2	33.2
87.5°	6.7	12.9	17.1	17.3	18.1
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)