

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-PW1-100U-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

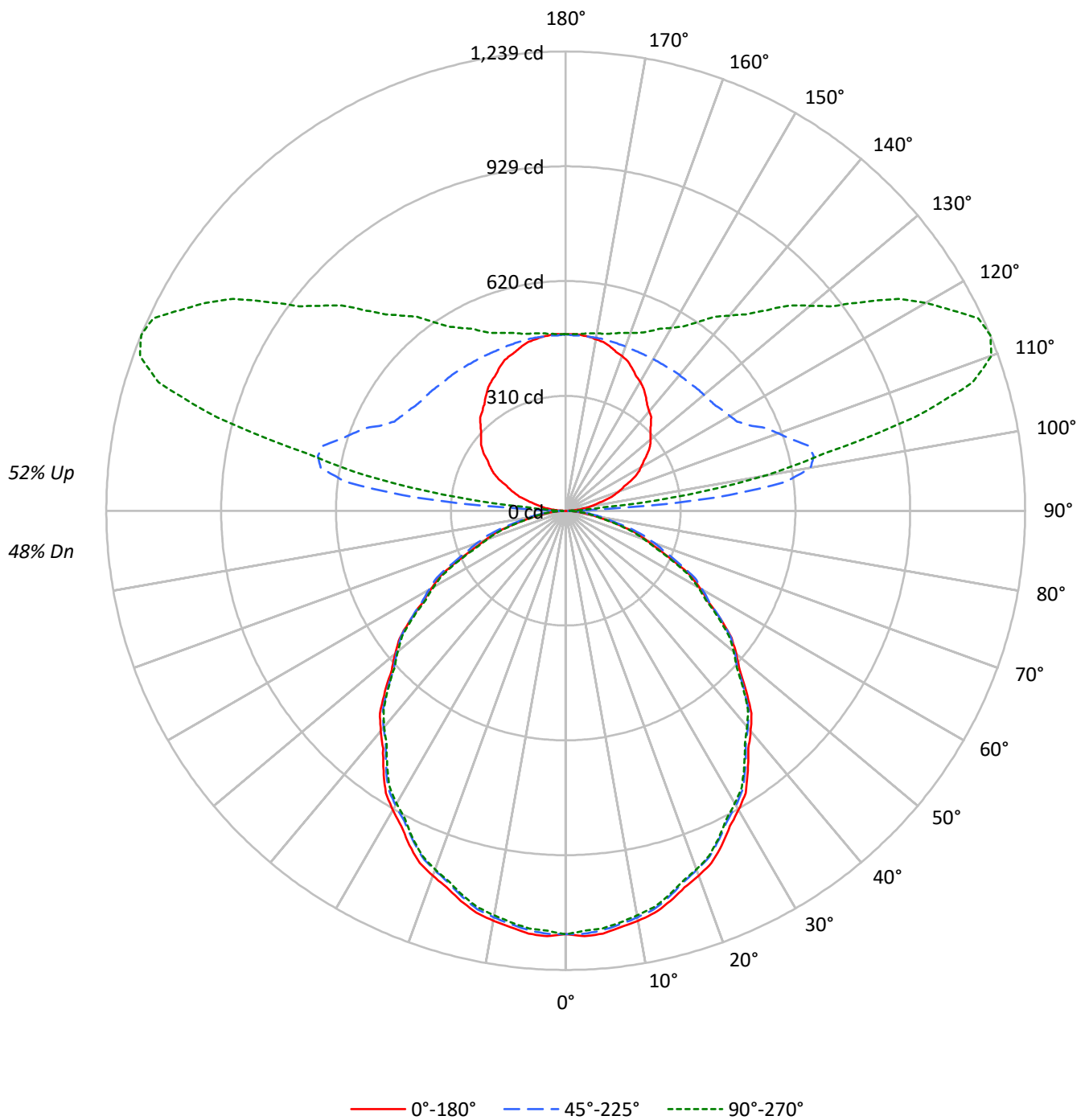
Lumens per Lamp: N/A
Luminaire Lumens: 6000.4 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 57.9
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:

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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14

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	1.8
10°-20°	303.7	5.1
20°-30°	450.5	7.5
30°-40°	527.2	8.8
40°-50°	524.8	8.7
50°-60°	453.2	7.6
60°-70°	326.2	5.4
70°-80°	171.1	2.9
80°-90°	43.4	0.7
90°-100°	222.9	3.7
100°-110°	615.3	10.3
110°-120°	634.6	10.6
120°-130°	510.0	8.5
130°-140°	400.8	6.7
140°-150°	307.4	5.1
150°-160°	220.9	3.7
160°-170°	135.1	2.3
170°-180°	45.5	0.8
0°-30°	861.9	14.4
0°-40°	1389.0	23.1
0°-60°	2367.1	39.4
0°-90°	2907.8	48.5
90°-120°	1472.8	24.5
90°-150°	2691.0	44.8
90°-180°	3093.0	51.5
0°-180°	6000.4	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	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-100U-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	12.6	16.5	16.7	17.6
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)