

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-PW1-025U-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PW1-025U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

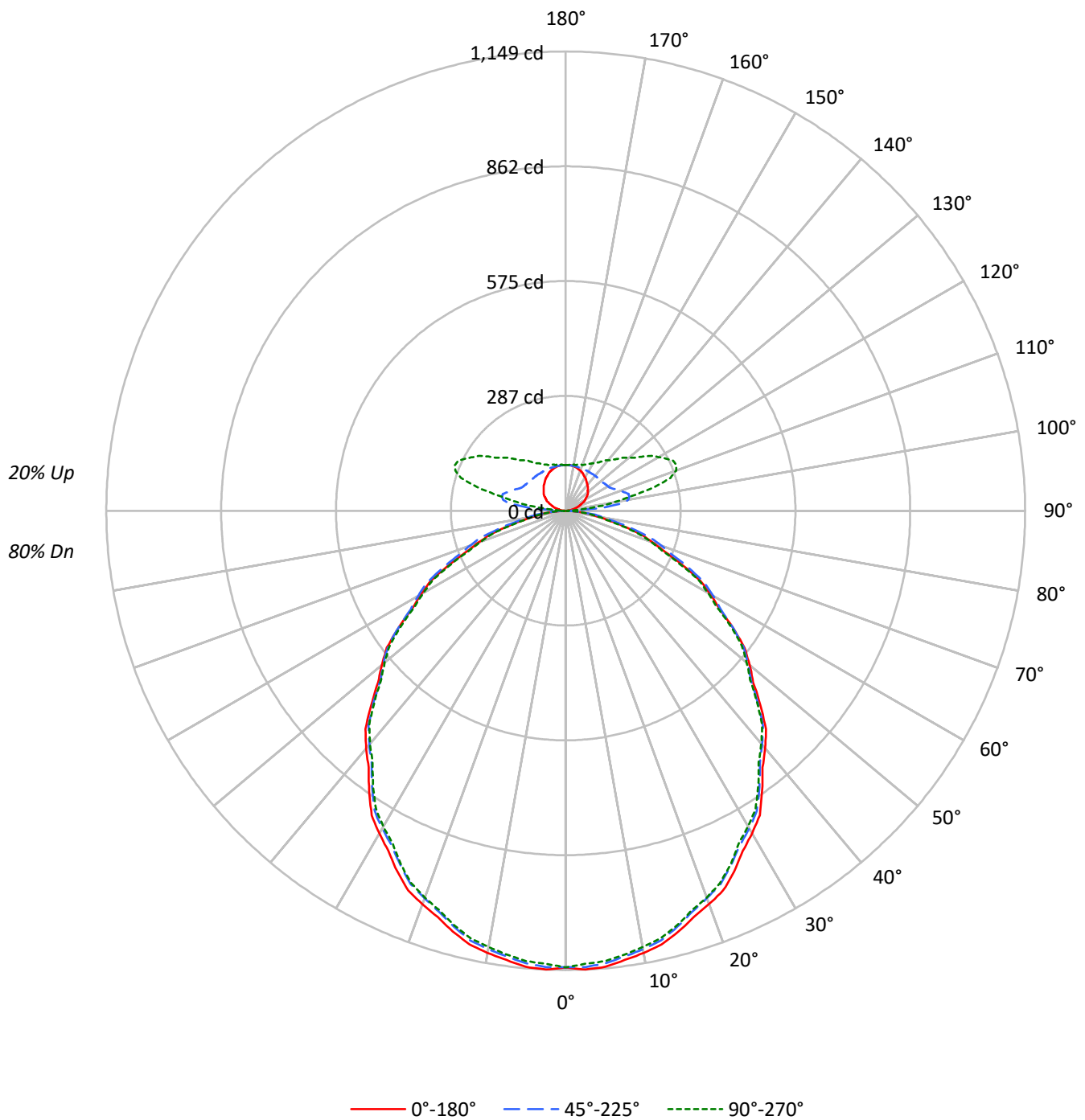
Lumens per Lamp: N/A
Luminaire Lumens: 3651.2 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.7
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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83
1	105	100	96	93	100	96	92	89	88	85	83	81	79	77	74	72	71
2	95	88	81	76	91	84	78	73	77	73	69	71	67	64	65	62	60
3	87	77	70	63	83	74	67	62	68	63	58	63	58	54	58	54	51
4	80	69	60	54	76	66	58	52	61	55	50	56	51	47	52	48	44
5	73	61	53	46	70	59	51	45	55	48	43	51	45	41	47	42	38
6	68	55	47	41	65	53	45	40	49	43	38	46	40	36	42	38	34
7	63	50	42	36	60	48	40	35	45	38	33	42	36	32	39	34	30
8	58	46	37	32	56	44	36	31	41	35	30	38	33	28	36	31	27
9	55	42	34	29	52	40	33	28	38	31	27	35	30	26	33	28	25
10	51	39	31	26	49	37	30	25	35	29	24	33	27	23	31	26	22

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	2.9
10°-20°	303.7	8.3
20°-30°	450.5	12.3
30°-40°	527.2	14.4
40°-50°	524.8	14.4
50°-60°	453.2	12.4
60°-70°	326.2	8.9
70°-80°	171.1	4.7
80°-90°	43.0	1.2
90°-100°	55.9	1.5
100°-110°	147.0	4.0
110°-120°	152.5	4.2
120°-130°	122.3	3.3
130°-140°	95.9	2.6
140°-150°	73.6	2.0
150°-160°	53.0	1.5
160°-170°	32.5	0.9
170°-180°	11.0	0.3
0°-30°	861.9	23.6
0°-40°	1389.0	38.0
0°-60°	2367.1	64.8
0°-90°	2907.4	79.6
90°-120°	355.4	9.7
90°-150°	647.3	17.7
90°-180°	744.0	20.4
0°-180°	3651.2	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°	1	2	6	3	3	2
95°	7	29	96	50	34	8
105°	26	40	163	247	230	28
115°	47	57	130	260	296	46
125°	66	73	118	200	236	58
135°	78	86	115	162	183	60
145°	90	96	113	138	149	57
155°	102	105	113	124	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	

TEST NUMBER:

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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°	6.6	12.4	16.5	15.9	16.7
90°	0.7	2.2	5.9	2.9	2.9
92.5°	3.1	14.9	33.0	14.6	9.4
95°	7.4	28.9	96.4	49.7	33.8
97.5°	12.8	31.8	144.2	114.7	84.4
100°	16.9	34.2	158.9	161.0	125.0
102.5°	20.4	36.6	163.0	200.6	169.8
105°	26.5	40.1	162.6	246.8	230.2
107.5°	32.7	45.3	153.3	270.8	274.8
110°	36.8	48.3	145.6	277.0	294.2

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.9	51.8	138.6	273.1	299.5
115°	47.1	57.1	130.2	259.8	296.4
117.5°	53.1	62.3	124.5	241.3	282.0
120°	56.6	65.3	122.1	228.9	268.5
122.5°	60.2	68.8	120.3	216.6	255.5
125°	65.5	73.4	118.4	200.2	236.1
127.5°	69.7	77.8	116.8	186.9	217.3
130°	72.1	80.7	116.2	178.6	206.7
132.5°	74.4	83.1	115.6	171.5	196.7
135°	78.0	85.9	114.7	161.6	183.2
137.5°	81.6	89.4	114.6	154.1	171.8
140°	84.6	91.8	114.0	148.2	164.8
142.5°	86.9	93.6	114.0	144.1	158.3
145°	90.5	96.2	113.3	137.8	148.6
147.5°	94.0	99.6	113.3	132.6	141.5
150°	96.4	101.4	113.3	129.6	136.8
152.5°	98.7	102.6	113.3	127.2	132.7
155°	102.2	105.1	113.3	124.4	128.0
157.5°	104.9	107.6	113.3	121.9	124.5
160°	106.7	108.8	113.3	120.7	122.1
162.5°	108.4	110.0	113.3	119.5	120.9
165°	110.3	111.8	113.3	117.7	119.2
167.5°	112.1	112.8	114.0	117.0	117.5
170°	113.3	114.0	114.0	117.0	117.0
172.5°	113.9	114.0	114.0	116.4	115.8
175°	114.7	114.7	114.0	115.5	115.5
177.5°	114.7	114.7	114.2	115.3	114.7
180°	114.7	114.7	114.7	114.7	114.7

(END OF REPORT)