

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-050D-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-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

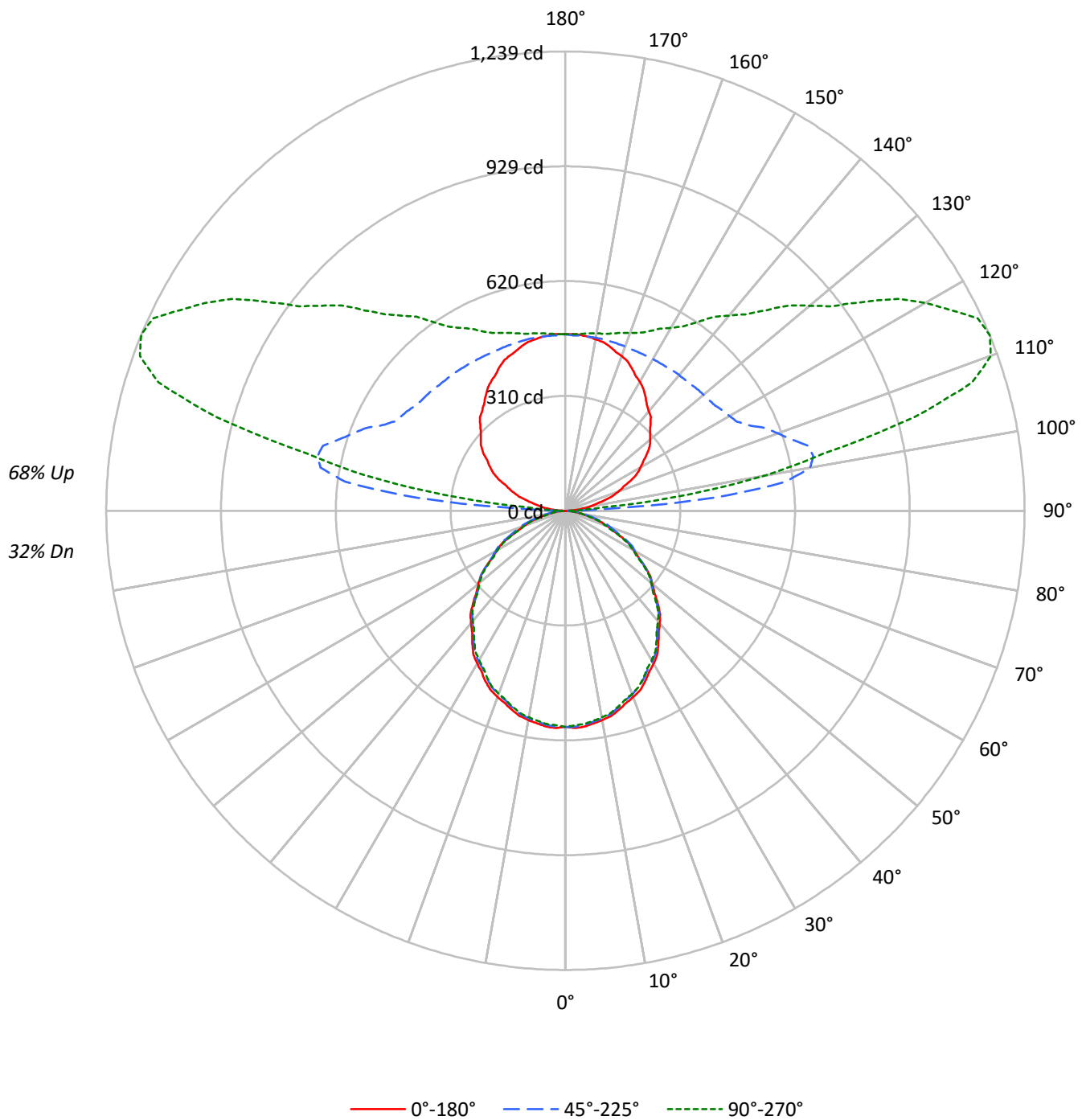
Lumens per Lamp: N/A
Luminaire Lumens: 4577.8 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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:

CATALOG NUMBER: SQ4-PW1-100U-050D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-100U-050D-927-1D-UNV-STD-W-4

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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5383	5383	5383
5°	5417	5374	5350
10°	5374	5331	5302
15°	5317	5258	5238
20°	5254	5173	5162
25°	5181	5086	5071
30°	5071	4994	4961
35°	4926	4858	4828
40°	4773	4698	4680
45°	4588	4528	4507
50°	4396	4361	4330
55°	4192	4192	4126
60°	3936	4012	3869
65°	3602	3781	3513
70°	3175	3480	3091
75°	2713	3116	2638
80°	2104	2619	2131
85°	1366	2011	1800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4588 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PW1-100U-050D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.2
10°-20°	155.1	3.4
20°-30°	230.1	5.0
30°-40°	269.2	5.9
40°-50°	268.0	5.9
50°-60°	231.4	5.1
60°-70°	166.6	3.6
70°-80°	87.4	1.9
80°-90°	22.6	0.5
90°-100°	222.9	4.9
100°-110°	615.3	13.4
110°-120°	634.6	13.9
120°-130°	510.0	11.1
130°-140°	400.8	8.8
140°-150°	307.4	6.7
150°-160°	220.9	4.8
160°-170°	135.1	3.0
170°-180°	45.5	1.0
0°-30°	440.1	9.6
0°-40°	709.3	15.5
0°-60°	1208.7	26.4
0°-90°	1485.3	32.4
90°-120°	1472.8	32.2
90°-150°	2691.0	58.8
90°-180°	3093.0	67.6
0°-180°	4577.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	585	578	580	579	578	55
15°	557	550	550	549	548	157
25°	509	500	500	497	498	234
35°	437	431	431	427	429	273
45°	352	349	347	346	345	271
55°	261	260	261	257	256	232
65°	165	170	173	166	161	164
75°	76	83	87	82	74	82
85°	13	17	19	18	17	17
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-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.4	583.4	583.4	583.4	583.4
2.5°	586.7	581.9	583.4	582.1	579.3
5°	584.9	578.4	580.3	578.7	577.7
7.5°	579.0	572.9	574.4	572.7	572.1
10°	573.6	567.6	569.0	566.9	565.9
12.5°	567.5	561.0	562.4	560.4	559.8
15°	556.7	549.6	550.5	549.4	548.4
17.5°	544.1	537.0	537.1	535.5	535.3
20°	535.1	527.5	526.9	524.8	525.8
22.5°	525.2	517.3	516.6	513.7	515.1
25°	508.9	500.3	499.6	496.6	498.1
27.5°	490.0	481.5	481.5	477.2	478.8
30°	476.0	467.9	468.8	463.7	465.7
32.5°	461.2	453.9	454.4	449.3	451.3
35°	437.4	431.4	431.3	427.2	428.7
37.5°	413.2	407.8	407.0	404.6	405.0
40°	396.3	391.8	390.1	388.6	388.6
42.5°	378.6	374.5	372.9	371.7	371.3
45°	351.6	348.6	347.0	345.9	345.4
47.5°	324.9	322.0	320.6	319.9	319.4
50°	306.3	304.3	303.8	302.2	301.7
52.5°	287.8	286.6	286.1	284.1	283.6
55°	260.6	260.1	260.6	257.0	256.5
57.5°	232.2	233.0	234.7	229.8	228.6
60°	213.3	215.3	217.4	211.7	209.7
62.5°	194.0	197.2	200.2	193.6	190.8
65°	165.0	170.0	173.2	166.4	160.9
67.5°	137.0	143.3	147.1	139.8	133.5
70°	117.7	124.7	129.0	121.7	114.6
72.5°	100.8	108.7	112.2	105.2	98.2
75°	76.1	83.1	87.4	81.6	74.0
77.5°	54.0	60.6	64.1	59.1	52.8
80°	39.6	46.6	49.3	45.1	40.1
82.5°	28.1	33.9	35.8	33.2	29.8
85°	12.9	16.9	19.0	18.0	17.0
87.5°	3.6	6.7	9.0	9.2	9.7
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:

CATALOG NUMBER: SQ4-PW1-100U-050D-927-1D-UNV-STD-W-4

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)