

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-PR1-125U-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-125U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

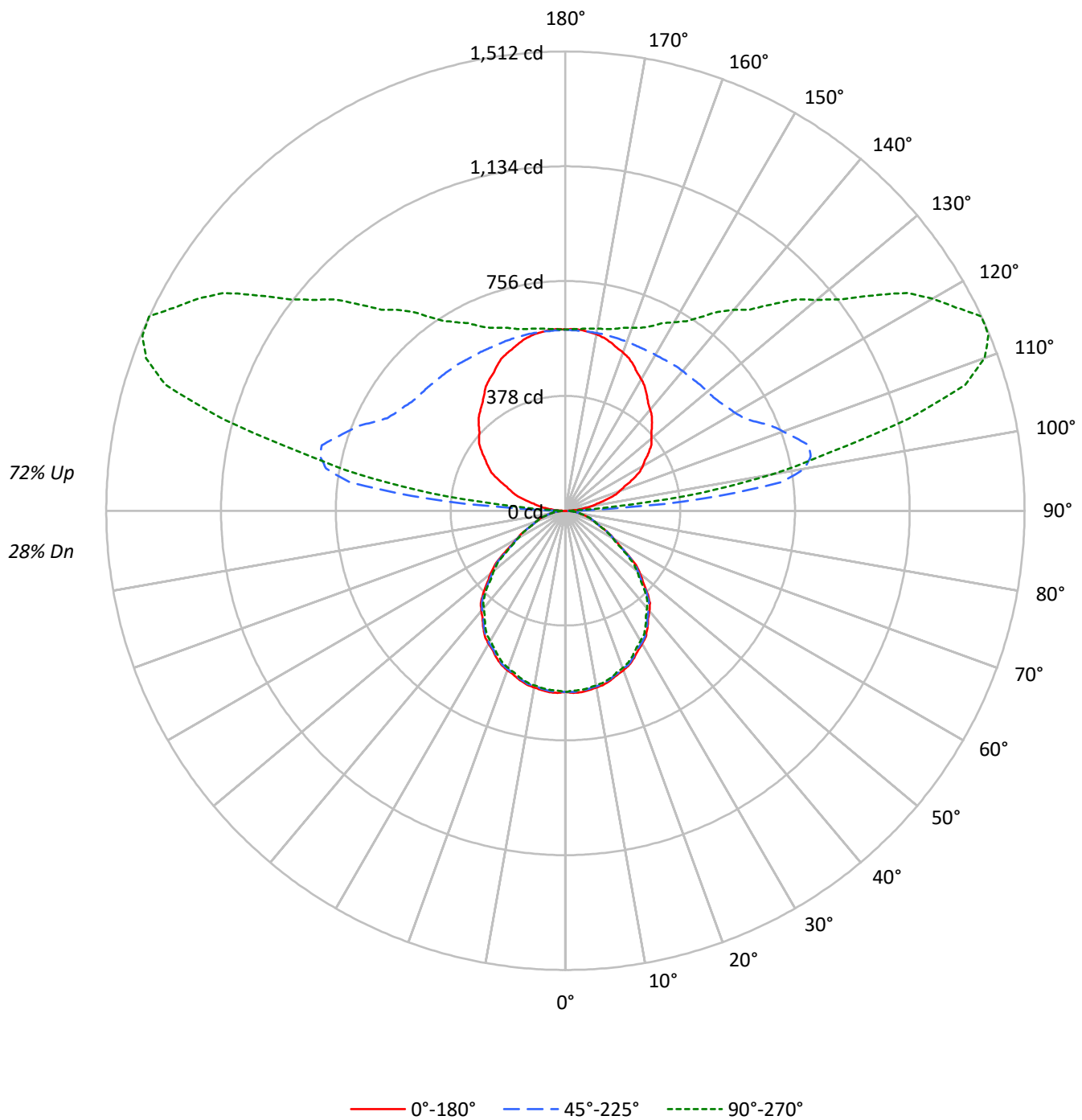
Lumens per Lamp: N/A
Luminaire Lumens: 5342.9 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 47.9
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:

CATALOG NUMBER: SQ4-PR1-125U-050D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	89	85	82	83	80	77	74	62	60	58	47	45	44	32	31	31
2	85	78	72	67	76	70	65	61	55	51	49	41	39	37	28	27	26
3	77	68	61	56	69	61	56	51	48	44	41	36	34	31	25	24	22
4	71	61	53	47	63	54	48	43	43	39	35	32	29	27	23	21	19
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	20	18	17
6	60	48	40	35	53	43	37	32	35	30	26	26	23	20	18	16	15
7	55	43	36	30	49	39	33	28	31	26	23	24	20	18	17	15	13
8	51	39	32	27	46	35	29	25	28	24	20	22	18	16	15	13	12
9	47	36	29	24	42	32	26	22	26	21	18	20	17	14	14	12	11
10	44	33	26	21	40	30	23	19	24	19	16	18	15	13	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5507	5507	5507
5°	5556	5513	5485
10°	5539	5500	5471
15°	5514	5480	5450
20°	5486	5451	5411
25°	5448	5412	5349
30°	5390	5351	5275
35°	5309	5263	5188
40°	5189	5133	5040
45°	4978	4890	4790
50°	4605	4494	4405
55°	4018	3928	3846
60°	3386	3358	3292
65°	2930	2941	2919
70°	2689	2703	2703
75°	2584	2584	2602
80°	2433	2460	2433
85°	1958	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4978 cd/sqm

TEST NUMBER:

CATALOG NUMBER: SQ4-PR1-125U-050D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.1
10°-20°	161.5	3.0
20°-30°	243.6	4.6
30°-40°	290.2	5.4
40°-50°	286.1	5.4
50°-60°	218.7	4.1
60°-70°	135.3	2.5
70°-80°	76.9	1.4
80°-90°	24.8	0.5
90°-100°	278.9	5.2
100°-110°	751.4	14.1
110°-120°	788.6	14.8
120°-130°	639.9	12.0
130°-140°	501.9	9.4
140°-150°	385.3	7.2
150°-160°	277.0	5.2
160°-170°	169.3	3.2
170°-180°	57.1	1.1
0°-30°	461.5	8.6
0°-40°	751.7	14.1
0°-60°	1256.5	23.5
0°-90°	1493.5	28.0
90°-120°	1819.0	34.0
90°-150°	3346.1	62.6
90°-180°	3849.0	72.0
0°-180°	5342.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	600	593	595	593	592	57
15°	577	571	574	572	571	163
25°	535	529	532	526	525	246
35°	471	466	467	461	461	294
45°	382	376	375	368	367	292
55°	250	246	244	240	239	224
65°	134	133	135	134	134	136
75°	72	72	72	73	73	77
85°	18	20	21	21	21	22
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-PR1-125U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.9	596.9	596.9	596.9	596.9
2.5°	600.6	595.3	596.9	595.6	592.7
5°	599.9	593.4	595.3	593.2	592.2
7.5°	595.3	588.9	590.8	588.7	588.1
10°	591.2	585.2	587.1	585.0	584.0
12.5°	586.7	580.2	582.6	580.1	579.1
15°	577.3	571.3	573.7	571.6	570.6
17.5°	567.0	560.6	563.0	560.6	559.3
20°	558.8	552.8	555.2	551.6	551.1
22.5°	549.8	543.7	546.2	541.3	541.2
25°	535.2	528.6	531.6	525.9	525.4
27.5°	517.8	511.8	514.2	508.4	507.8
30°	505.9	499.8	502.3	496.1	495.1
32.5°	492.3	486.7	488.7	482.5	481.9
35°	471.4	465.9	467.3	461.1	460.6
37.5°	447.7	442.6	443.5	436.7	436.2
40°	430.8	425.8	426.2	419.0	418.5
42.5°	412.3	407.3	406.8	399.6	399.1
45°	381.5	376.4	374.8	368.1	367.1
47.5°	346.3	341.3	338.2	332.7	332.0
50°	320.8	315.8	313.1	308.4	306.9
52.5°	293.2	288.2	285.9	281.7	280.2
55°	249.8	245.8	244.2	240.1	239.1
57.5°	208.6	205.9	205.4	201.4	201.0
60°	183.5	182.0	182.0	178.4	178.4
62.5°	162.1	161.0	161.8	159.5	159.1
65°	134.2	133.2	134.7	133.7	133.7
67.5°	112.1	112.1	113.0	112.6	112.6
70°	99.7	99.7	100.2	100.2	100.2
72.5°	88.6	88.2	89.6	89.5	89.1
75°	72.5	72.5	72.5	73.0	73.0
77.5°	56.4	56.5	57.0	56.8	56.4
80°	45.8	46.3	46.3	45.8	45.8
82.5°	35.1	35.6	35.6	35.5	35.1
85°	18.5	19.5	20.6	20.6	20.6
87.5°	5.7	7.9	10.0	10.2	9.8
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:

CATALOG NUMBER: SQ4-PR1-125U-050D-927-1D-UNV-STD-W-4

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)