

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-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-PW1-125U-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

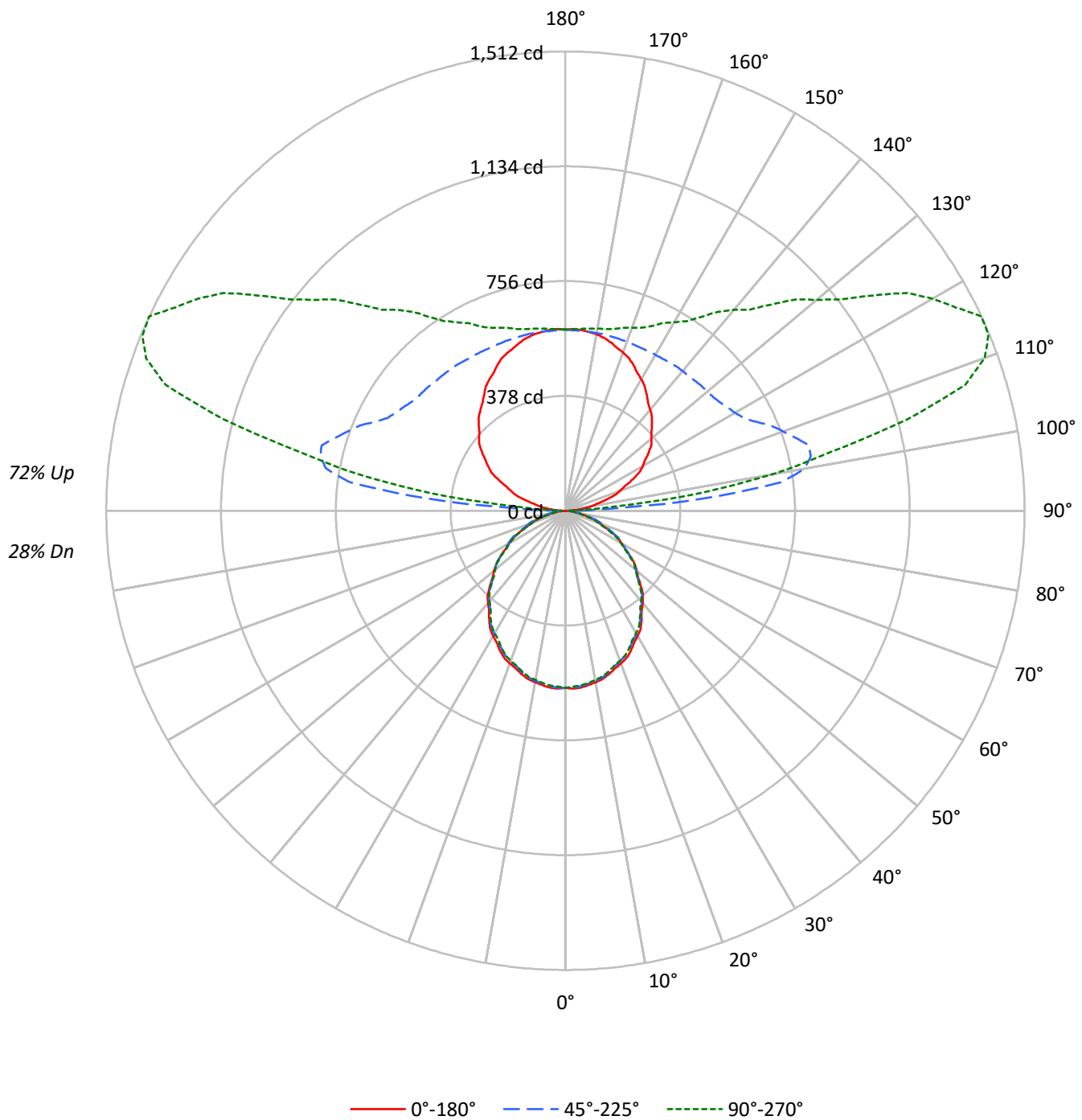
Lumens per Lamp: N/A
Luminaire Lumens: 5335.1 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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

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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				0
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	79	76	74	62	60	58	46	45	44	32	31	30
2	85	77	72	67	75	69	65	60	55	51	48	41	39	37	28	27	26
3	77	68	61	55	69	61	55	50	48	44	41	36	33	31	25	23	22
4	70	60	53	47	63	54	48	43	43	38	34	32	29	26	22	20	19
5	65	53	46	40	58	48	41	36	38	33	30	29	25	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	23	20	18	16	14	13
8	51	39	31	26	45	35	29	24	28	23	20	21	18	16	15	13	11
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.9	1.0
10°-20°	155.1	2.9
20°-30°	230.1	4.3
30°-40°	269.2	5.0
40°-50°	268.0	5.0
50°-60°	231.4	4.3
60°-70°	166.6	3.1
70°-80°	87.4	1.6
80°-90°	23.1	0.4
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°	440.1	8.2
0°-40°	709.3	13.3
0°-60°	1208.7	22.7
0°-90°	1485.7	27.8
90°-120°	1819.0	34.1
90°-150°	3346.1	62.7
90°-180°	3849.0	72.1
0°-180°	5335.1	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	4	9	10	10	3
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-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	7.0	9.6	9.8	10.2
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

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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)