

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-BB-100U-125D-927-1D-UNV-STD-W-6

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-BB-100U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

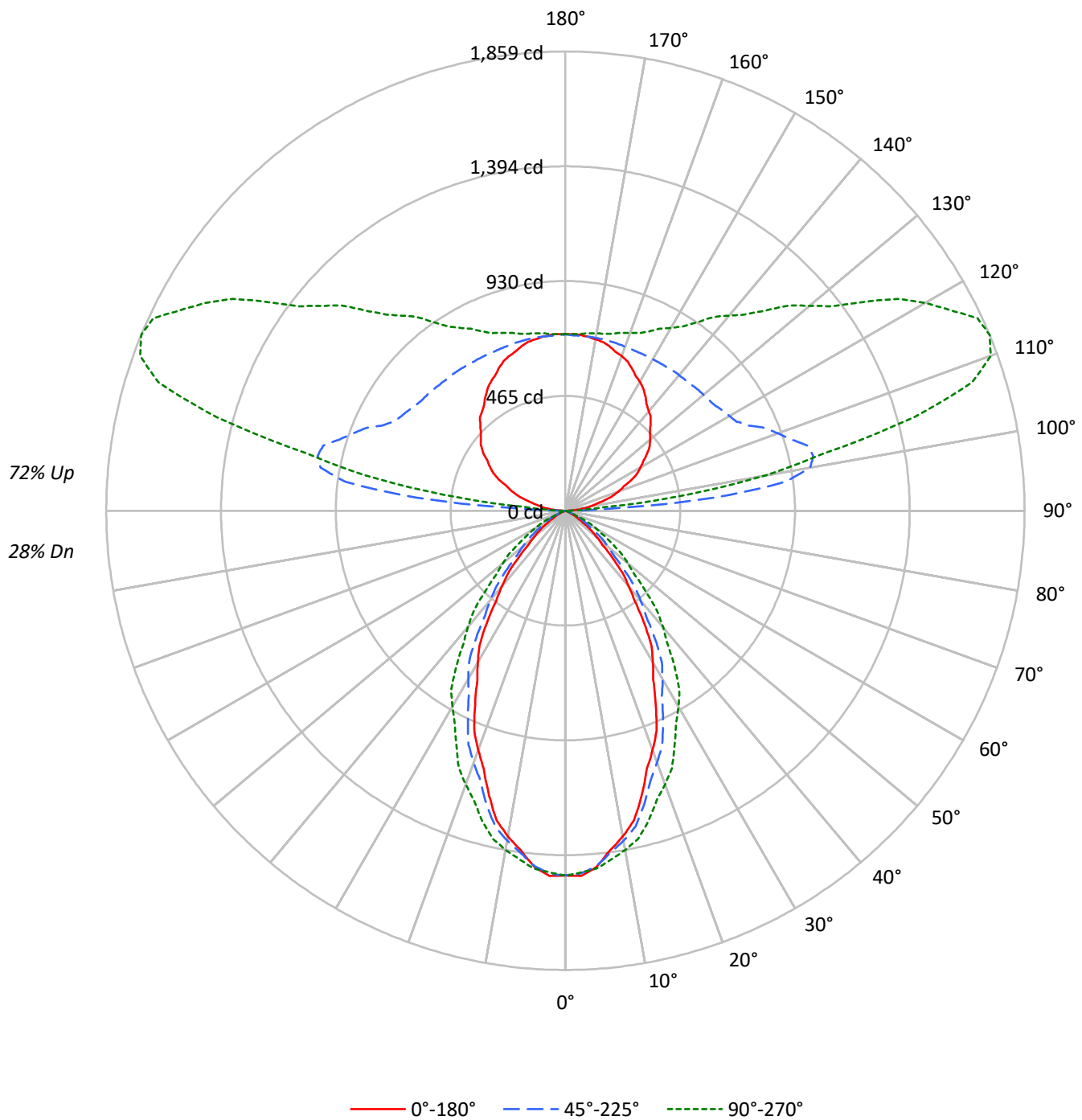
Lumens per Lamp: N/A
Luminaire Lumens: 6401.6 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.3
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

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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	102	102	102	102	91	91	91	91	71	71	71	52	52	52	35	35	35
1	94	90	87	83	84	81	78	75	63	62	60	47	46	45	33	32	32
2	86	80	74	70	77	72	67	63	57	54	51	43	41	40	30	29	28
3	79	71	64	59	71	64	59	54	51	47	44	39	37	35	28	26	25
4	73	63	56	51	65	57	51	47	46	42	39	35	33	31	25	24	23
5	67	57	50	44	60	52	45	41	41	37	34	32	29	27	23	22	20
6	62	51	44	39	56	47	40	36	38	33	30	29	26	24	22	20	19
7	58	47	39	34	52	42	36	32	34	30	27	27	24	22	20	18	17
8	54	42	35	31	48	39	33	28	32	27	24	25	22	20	19	17	15
9	50	39	32	27	45	35	30	25	29	25	22	23	20	18	17	16	14
10	47	36	29	25	42	33	27	23	27	23	20	21	18	16	16	14	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9082	9082	9082
5°	8935	8913	8980
10°	8360	8472	8709
15°	7601	7842	8279
20°	6747	7097	7719
25°	5876	6341	7093
30°	5033	5586	6499
35°	4173	4742	5782
40°	3206	3791	4927
45°	2317	2871	3964
50°	1579	2140	3144
55°	1026	1547	2444
60°	589	1090	1767
65°	156	665	894
70°	77	205	257
75°	33	17	0
80°	25	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3964 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	2.1
10°-20°	344.6	5.4
20°-30°	431.4	6.7
30°-40°	398.5	6.2
40°-50°	267.7	4.2
50°-60°	138.3	2.2
60°-70°	43.3	0.7
70°-80°	2.7	0.0
80°-90°	1.5	0.0
90°-100°	334.3	5.2
100°-110°	923.0	14.4
110°-120°	951.9	14.9
120°-130°	765.0	11.9
130°-140°	601.2	9.4
140°-150°	461.1	7.2
150°-160°	331.4	5.2
160°-170°	202.6	3.2
170°-180°	68.3	1.1
0°-30°	910.7	14.2
0°-40°	1309.2	20.5
0°-60°	1715.2	26.8
0°-90°	1762.8	27.5
90°-120°	2209.3	34.5
90°-150°	4036.5	63.1
90°-180°	4639.0	72.5
0°-180°	6401.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1447	1432	1444	1449	1454	134
15°	1194	1189	1232	1273	1300	332
25°	866	873	934	998	1045	397
35°	556	570	632	706	770	344
45°	266	282	330	394	456	209
55°	96	112	144	185	228	89
65°	11	20	46	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	4	9	10	11	4
95°	49	181	607	249	162	53
105°	164	254	1016	1550	1460	175
115°	295	356	818	1619	1841	290
125°	404	460	741	1255	1472	360
135°	487	539	721	1016	1146	377
145°	564	603	712	865	931	353
155°	636	658	706	776	801	293
165°	689	698	709	737	742	194
175°	714	715	710	721	718	68
180°	714	714	714	714	714	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1476.5	1476.5	1476.5	1476.5	1476.5
2.5°	1479.9	1466.0	1469.6	1469.6	1465.6
5°	1447.2	1432.5	1443.6	1448.8	1454.4
7.5°	1386.1	1374.6	1395.9	1411.9	1423.5
10°	1338.6	1328.9	1356.5	1378.3	1394.4
12.5°	1283.8	1276.2	1309.6	1339.5	1360.1
15°	1193.6	1189.4	1231.5	1272.8	1300.1
17.5°	1097.1	1096.9	1144.9	1196.2	1229.1
20°	1030.8	1032.9	1084.3	1140.9	1179.3
22.5°	964.5	969.4	1024.3	1083.3	1127.3
25°	865.8	872.7	934.3	998.3	1045.1
27.5°	770.9	781.1	845.9	912.3	969.3
30°	708.6	720.5	786.5	856.4	915.0
32.5°	647.5	661.6	725.9	799.8	859.6
35°	555.7	569.7	631.5	705.8	770.0
37.5°	461.0	474.7	535.0	608.2	677.6
40°	399.3	414.7	472.2	543.1	613.6
42.5°	343.3	358.7	412.7	482.4	549.0
45°	266.4	282.5	330.0	394.3	455.7
47.5°	202.7	220.2	261.9	320.0	376.0
50°	165.0	182.5	223.6	274.8	328.6
52.5°	134.7	151.6	188.7	237.0	286.3
55°	95.7	111.8	144.3	185.3	227.9
57.5°	66.1	80.0	109.1	143.3	176.7
60°	47.9	61.1	88.6	116.3	143.6
62.5°	31.9	44.0	70.9	92.1	110.4
65°	10.7	20.5	45.7	55.1	61.4
67.5°	5.4	6.5	24.0	25.3	27.4
70°	4.3	4.3	11.4	12.2	14.3
72.5°	3.1	3.1	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	0.9	1.8	2.1	2.3
90°	2.3	4.5	9.1	10.3	11.4
92.5°	20.6	85.3	152.6	55.7	43.4
95°	49.1	180.9	606.6	249.3	162.2
97.5°	81.3	202.6	898.5	691.8	501.0
100°	105.1	215.7	1006.4	1013.5	823.6
102.5°	127.9	230.5	1027.4	1252.2	1072.2
105°	164.5	253.8	1015.5	1550.3	1459.9
107.5°	203.3	282.9	958.9	1694.1	1727.2
110°	230.7	302.2	915.0	1725.0	1832.3

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	255.4	324.2	873.9	1700.6	1858.8
115°	294.7	356.1	817.9	1619.1	1841.4
117.5°	329.0	390.2	781.1	1504.5	1757.3
120°	351.8	412.1	766.5	1426.8	1681.5
122.5°	373.8	431.4	754.6	1354.3	1595.6
125°	404.4	460.2	741.4	1254.6	1472.4
127.5°	430.4	486.3	733.6	1170.3	1358.2
130°	447.8	503.6	729.9	1118.8	1289.7
132.5°	464.2	517.4	726.3	1075.5	1230.3
135°	486.6	539.1	720.8	1016.2	1145.7
137.5°	511.8	559.6	718.1	966.4	1077.0
140°	525.5	572.4	716.2	933.2	1030.4
142.5°	541.0	584.3	714.4	903.7	989.2
145°	564.3	603.4	711.7	865.1	931.0
147.5°	586.7	620.9	709.1	832.5	883.7
150°	603.1	631.1	708.2	813.1	854.4
152.5°	615.9	642.1	707.3	796.5	830.7
155°	636.3	657.5	705.9	776.2	800.8
157.5°	655.0	671.3	706.2	761.4	778.1
160°	666.0	680.5	707.1	753.1	765.3
162.5°	675.1	687.8	708.0	745.7	755.3
165°	688.8	697.7	709.4	736.9	742.5
167.5°	699.3	704.7	710.5	731.6	733.4
170°	704.8	709.3	710.5	728.8	728.8
172.5°	709.4	712.1	710.5	725.1	724.2
175°	713.9	715.1	710.5	720.7	718.5
177.5°	715.8	714.9	710.3	716.6	714.9
180°	713.9	713.9	713.9	713.9	713.9

(END OF REPORT)