

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

Summary

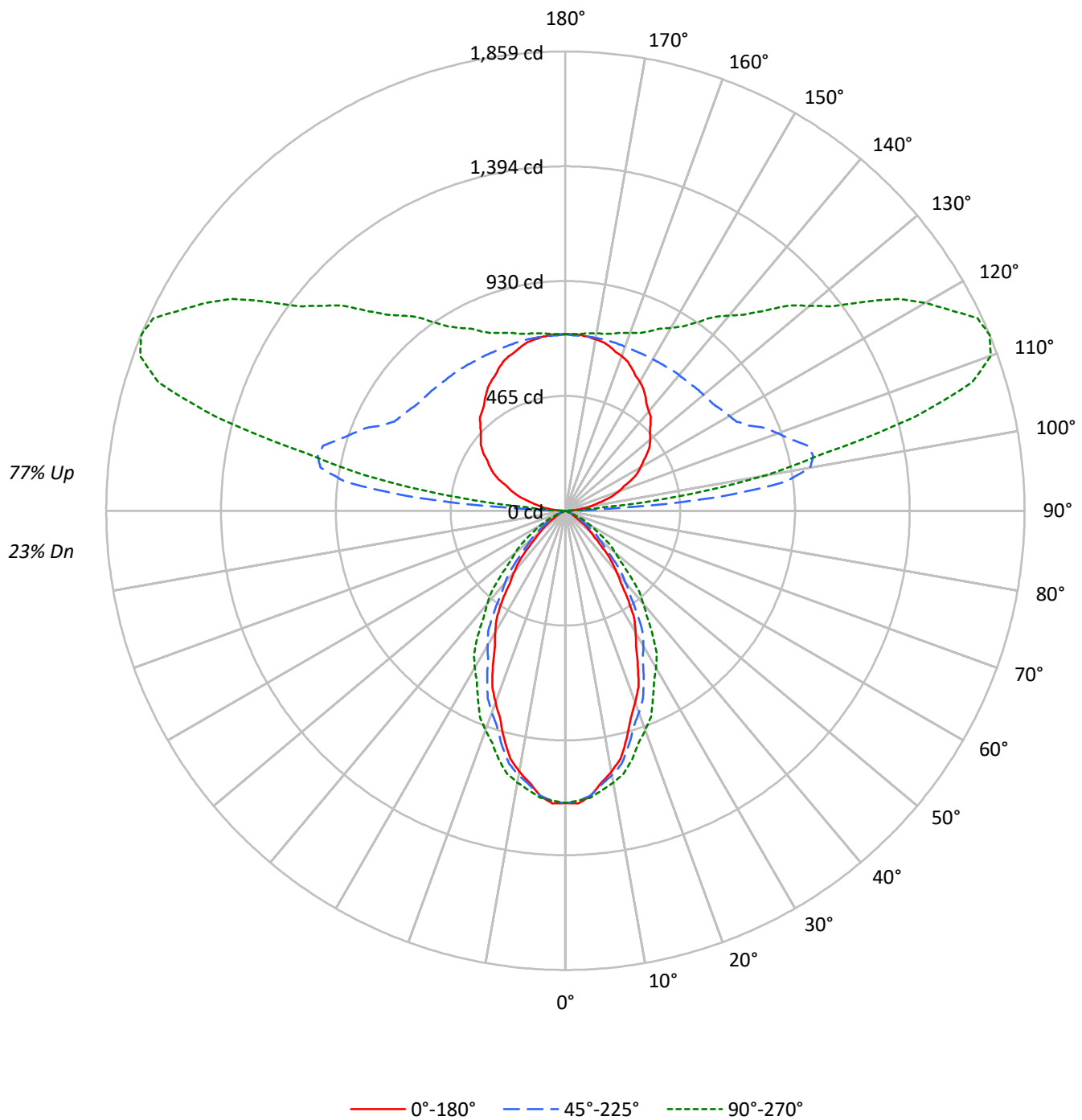
Lumens per Lamp: N/A
Luminaire Lumens: 6052.1 lumens
Efficiency: N/A
Efficacy: 65.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 92.9
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					10
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	101	101	101	101		90	90	90	90		69	69	69		49	49	49		32	32	32
1	93	89	85	82		82	79	76	74		61	59	58		44	43	43		29	29	28
2	85	78	73	69		75	70	66	62		55	52	49		40	38	37		27	26	25
3	78	70	63	58		69	62	57	53		49	45	42		36	34	32		24	23	22
4	72	62	55	50		64	56	50	45		44	40	37		33	30	28		22	21	20
5	66	56	48	43		59	50	44	39		40	35	32		30	27	25		21	19	18
6	61	50	43	38		54	45	39	34		36	32	28		27	24	22		19	18	16
7	57	45	38	33		50	41	35	30		33	28	25		25	22	20		18	16	15
8	53	41	34	29		47	37	31	27		30	26	23		23	20	18		16	15	14
9	49	38	31	26		44	34	28	24		28	23	20		21	18	16		15	14	12
10	46	35	28	24		41	32	26	22		25	21	18		20	17	15		14	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7279	7279	7279
5°	7162	7145	7198
10°	6702	6791	6981
15°	6093	6286	6636
20°	5408	5689	6188
25°	4710	5083	5685
30°	4034	4477	5210
35°	3345	3801	4634
40°	2570	3039	3949
45°	1858	2301	3178
50°	1266	1715	2520
55°	822	1241	1959
60°	472	873	1416
65°	125	533	716
70°	61	165	207
75°	26	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3178 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	1.8
10°-20°	276.2	4.6
20°-30°	345.8	5.7
30°-40°	319.4	5.3
40°-50°	214.6	3.5
50°-60°	110.9	1.8
60°-70°	34.7	0.6
70°-80°	2.2	0.0
80°-90°	1.5	0.0
90°-100°	334.3	5.5
100°-110°	923.0	15.3
110°-120°	951.9	15.7
120°-130°	765.0	12.6
130°-140°	601.2	9.9
140°-150°	461.1	7.6
150°-160°	331.4	5.5
160°-170°	202.6	3.3
170°-180°	68.3	1.1
0°-30°	730.0	12.1
0°-40°	1049.4	17.3
0°-60°	1374.9	22.7
0°-90°	1413.3	23.4
90°-120°	2209.3	36.5
90°-150°	4036.5	66.7
90°-180°	4639.0	76.7
0°-180°	6052.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1184	1184	1184	1184	1184	
5°	1160	1148	1157	1161	1166	108
15°	957	953	987	1020	1042	266
25°	694	700	749	800	838	318
35°	446	457	506	566	617	276
45°	214	226	264	316	365	168
55°	77	90	116	148	183	72
65°	9	16	37	44	49	14
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°	1183.5	1183.5	1183.5	1183.5	1183.5
2.5°	1186.3	1175.1	1178.0	1177.9	1174.8
5°	1160.0	1148.3	1157.2	1161.3	1165.8
7.5°	1111.0	1101.8	1118.9	1131.7	1141.0
10°	1073.0	1065.2	1087.3	1104.8	1117.7
12.5°	1029.0	1023.0	1049.8	1073.7	1090.2
15°	956.8	953.4	987.1	1020.3	1042.1
17.5°	879.4	879.2	917.7	958.9	985.2
20°	826.2	827.9	869.2	914.5	945.3
22.5°	773.1	777.0	821.1	868.4	903.6
25°	694.0	699.6	748.9	800.2	837.7
27.5°	617.9	626.1	678.0	731.3	777.0
30°	568.0	577.5	630.4	686.4	733.5
32.5°	519.0	530.3	581.9	641.1	689.0
35°	445.5	456.7	506.2	565.7	617.2
37.5°	369.5	380.5	428.9	487.5	543.1
40°	320.1	332.4	378.5	435.3	491.8
42.5°	275.2	287.5	330.8	386.7	440.1
45°	213.6	226.4	264.5	316.0	365.3
47.5°	162.5	176.5	209.9	256.5	301.4
50°	132.3	146.3	179.2	220.3	263.4
52.5°	108.0	121.5	151.3	190.0	229.5
55°	76.7	89.6	115.7	148.5	182.7
57.5°	53.0	64.1	87.5	114.9	141.7
60°	38.4	49.0	71.0	93.3	115.1
62.5°	25.5	35.3	56.8	73.9	88.5
65°	8.6	16.4	36.6	44.2	49.2
67.5°	4.4	5.2	19.2	20.3	22.0
70°	3.4	3.4	9.2	9.8	11.5
72.5°	2.5	2.5	3.7	4.7	5.0
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.5	0.0	0.0
80°	0.6	0.6	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)