

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-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-BB-100U-100D-927-1D-UNV-STD-W-4
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

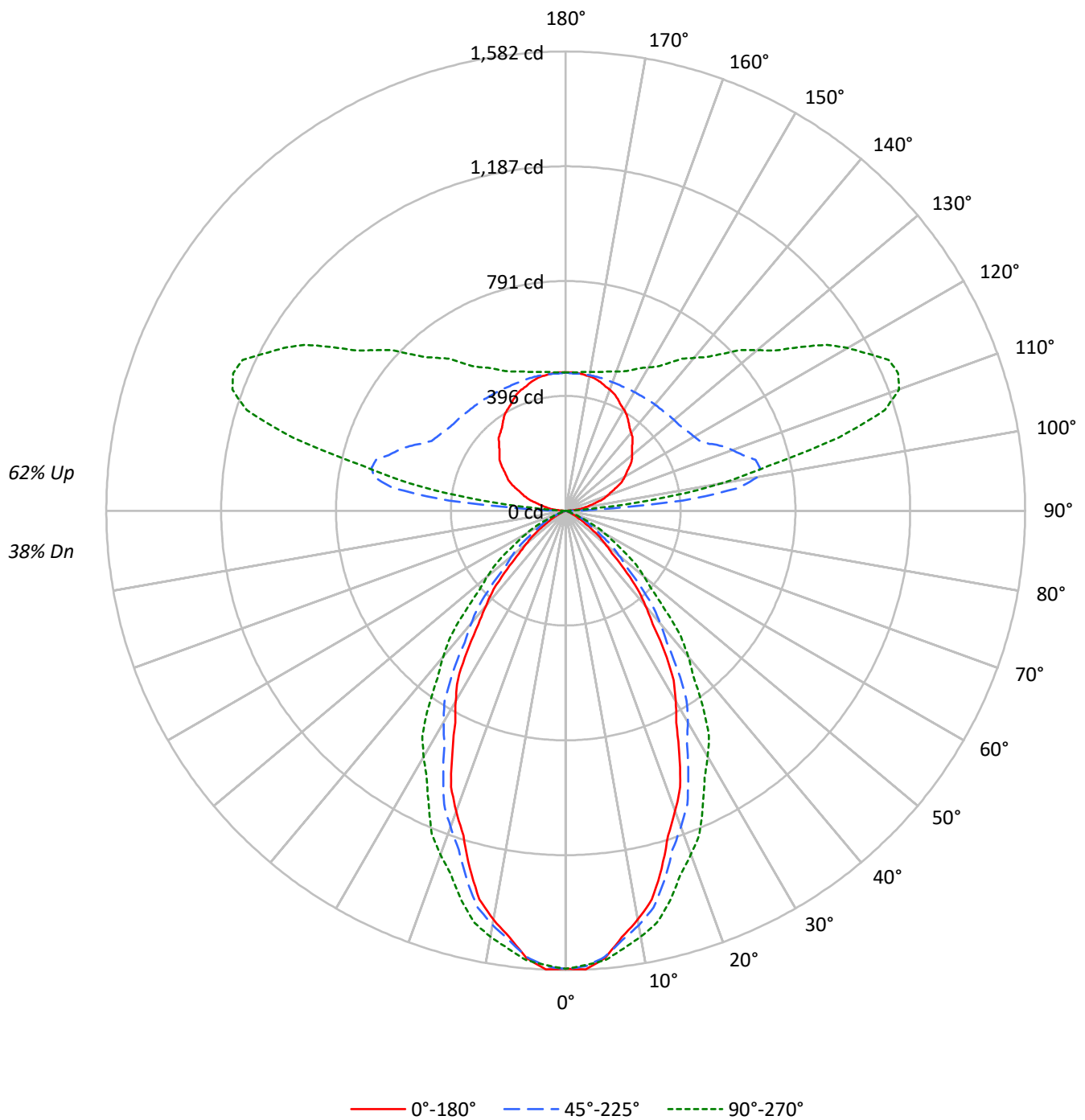
Lumens per Lamp: N/A
Luminaire Lumens: 4976.0 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 57.9
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45
1	96	93	89	86	88	84	82	79	69	67	65	55	54	53	42	41	41
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27
6	65	54	47	42	59	50	44	39	42	37	34	35	32	29	28	26	24
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20
9	53	41	35	30	48	39	32	28	33	28	25	28	24	22	23	20	19
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14559	14559	14559
5°	14325	14289	14395
10°	13404	13582	13961
15°	12185	12572	13271
20°	10816	11378	12375
25°	9420	10166	11370
30°	8068	8954	10419
35°	6690	7601	9270
40°	5140	6077	7898
45°	3716	4602	6356
50°	2532	3430	5041
55°	1646	2480	3917
60°	945	1747	2832
65°	251	1068	1434
70°	124	329	413
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 6356 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.0	2.9
10°-20°	368.3	7.4
20°-30°	461.1	9.3
30°-40°	425.9	8.6
40°-50°	286.2	5.8
50°-60°	147.8	3.0
60°-70°	46.3	0.9
70°-80°	2.9	0.1
80°-90°	1.0	0.0
90°-100°	222.9	4.5
100°-110°	615.3	12.4
110°-120°	634.6	12.8
120°-130°	510.0	10.2
130°-140°	400.8	8.1
140°-150°	307.4	6.2
150°-160°	220.9	4.4
160°-170°	135.1	2.7
170°-180°	45.5	0.9
0°-30°	973.4	19.6
0°-40°	1399.2	28.1
0°-60°	1833.2	36.8
0°-90°	1883.5	37.9
90°-120°	1472.8	29.6
90°-150°	2691.0	54.1
90°-180°	3093.0	62.2
0°-180°	4976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1578	1578	1578	1578	1578	
5°	1547	1531	1543	1548	1554	143
15°	1276	1271	1316	1360	1389	355
25°	925	933	999	1067	1117	424
35°	594	609	675	754	823	368
45°	285	302	353	421	487	224
55°	102	120	154	198	244	95
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	3	6	7	8	2
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:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1578.0	1578.0	1578.0	1578.0	1578.0
2.5°	1581.7	1566.8	1570.7	1570.6	1566.4
5°	1546.7	1531.0	1542.9	1548.4	1554.3
7.5°	1481.4	1469.1	1491.9	1509.0	1521.4
10°	1430.7	1420.2	1449.8	1473.1	1490.2
12.5°	1372.0	1364.0	1399.7	1431.6	1453.6
15°	1275.7	1271.2	1316.2	1360.3	1389.4
17.5°	1172.5	1172.3	1223.6	1278.5	1313.6
20°	1101.6	1103.9	1158.9	1219.4	1260.4
22.5°	1030.8	1036.0	1094.8	1157.8	1204.9
25°	925.3	932.7	998.6	1066.9	1116.9
27.5°	823.9	834.8	904.1	975.1	1036.0
30°	757.3	770.0	840.5	915.3	978.0
32.5°	692.0	707.1	775.8	854.8	918.7
35°	594.0	608.9	674.9	754.3	823.0
37.5°	492.7	507.4	571.8	650.0	724.2
40°	426.8	443.2	504.6	580.4	655.8
42.5°	366.9	383.3	441.1	515.6	586.8
45°	284.8	301.9	352.7	421.4	487.1
47.5°	216.7	235.3	279.9	342.0	401.9
50°	176.4	195.0	239.0	293.7	351.2
52.5°	144.0	162.0	201.7	253.3	306.0
55°	102.3	119.5	154.2	198.0	243.5
57.5°	70.7	85.5	116.7	153.2	188.9
60°	51.2	65.3	94.7	124.3	153.5
62.5°	34.0	47.0	75.7	98.5	118.0
65°	11.5	21.9	48.9	58.9	65.7
67.5°	5.8	7.0	25.7	27.1	29.3
70°	4.6	4.6	12.2	13.0	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.6	1.2	1.4	1.5
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:

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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)