

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-0U-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 ()
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-0U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

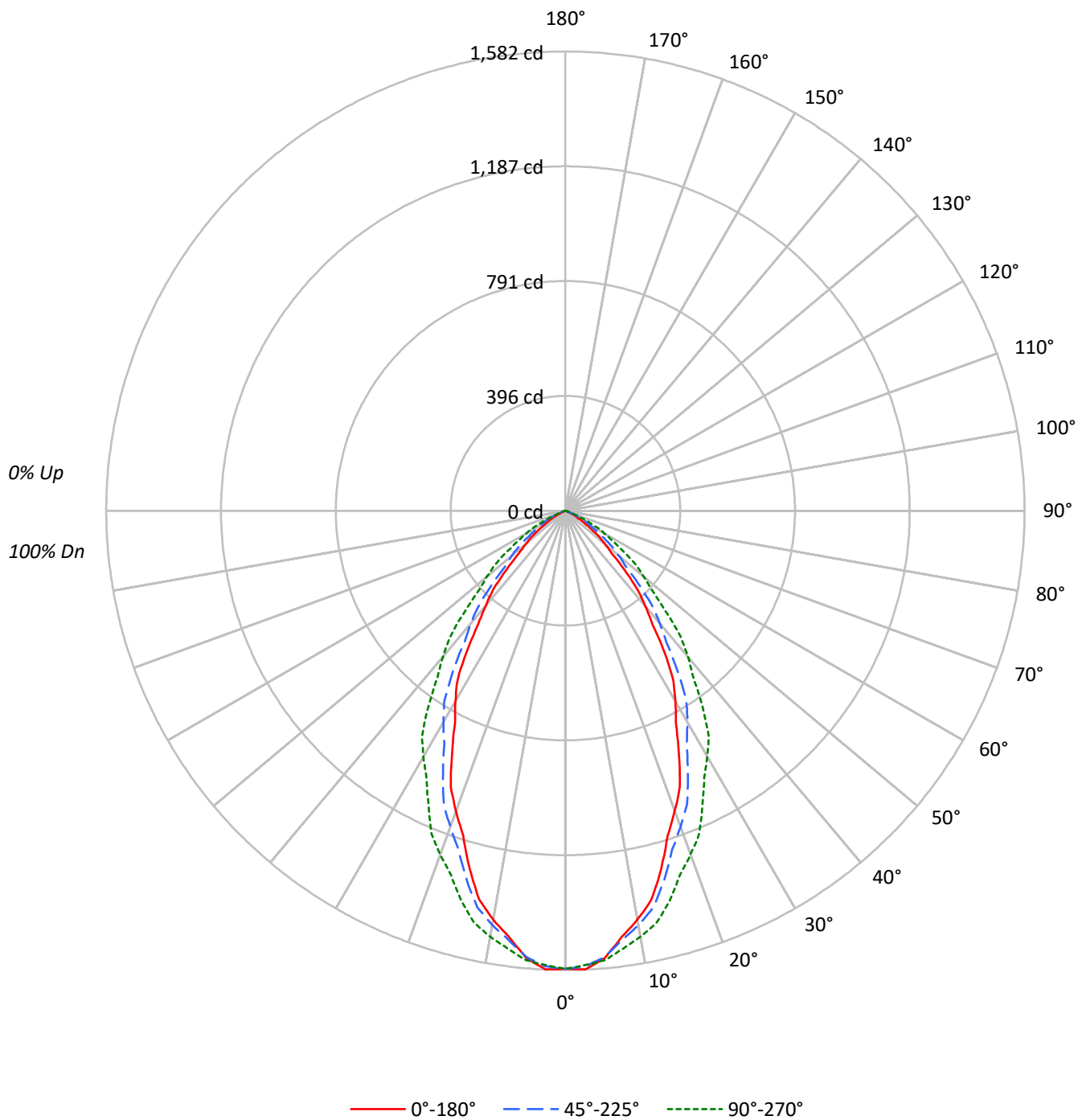
Lumens per Lamp: N/A
Luminaire Lumens: 1882.5 lumens
Efficiency: N/A
Efficacy: 57.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	109	106	104	110	107	104	102	103	101	99		99	98	96		96
2	106	100	95	91	103	98	94	90	95	91	88		92	89	86		89
3	99	91	85	81	97	90	84	80	87	82	79		85	81	77		82
4	93	84	77	72	91	82	76	72	80	75	71		78	74	70		76
5	87	77	70	65	85	76	70	65	74	68	64		72	67	64		71
6	82	71	64	59	80	70	64	59	69	63	58		67	62	58		66
7	77	66	59	54	75	65	59	54	64	58	53		62	57	53		61
8	72	61	54	50	71	61	54	49	59	53	49		58	53	49		57
9	68	57	50	46	67	57	50	46	56	50	46		55	49	45		54
10	65	54	47	42	63	53	47	42	52	46	42		51	46	42		51

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	7.7
10°-20°	368.3	19.6
20°-30°	461.1	24.5
30°-40°	425.9	22.6
40°-50°	286.2	15.2
50°-60°	147.8	7.9
60°-70°	46.3	2.5
70°-80°	2.9	0.2
80°-90°	0.1	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	973.4	51.7
0°-40°	1399.2	74.3
0°-60°	1833.2	97.4
0°-90°	1882.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1882.5	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°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)