

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-WB-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-WB-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

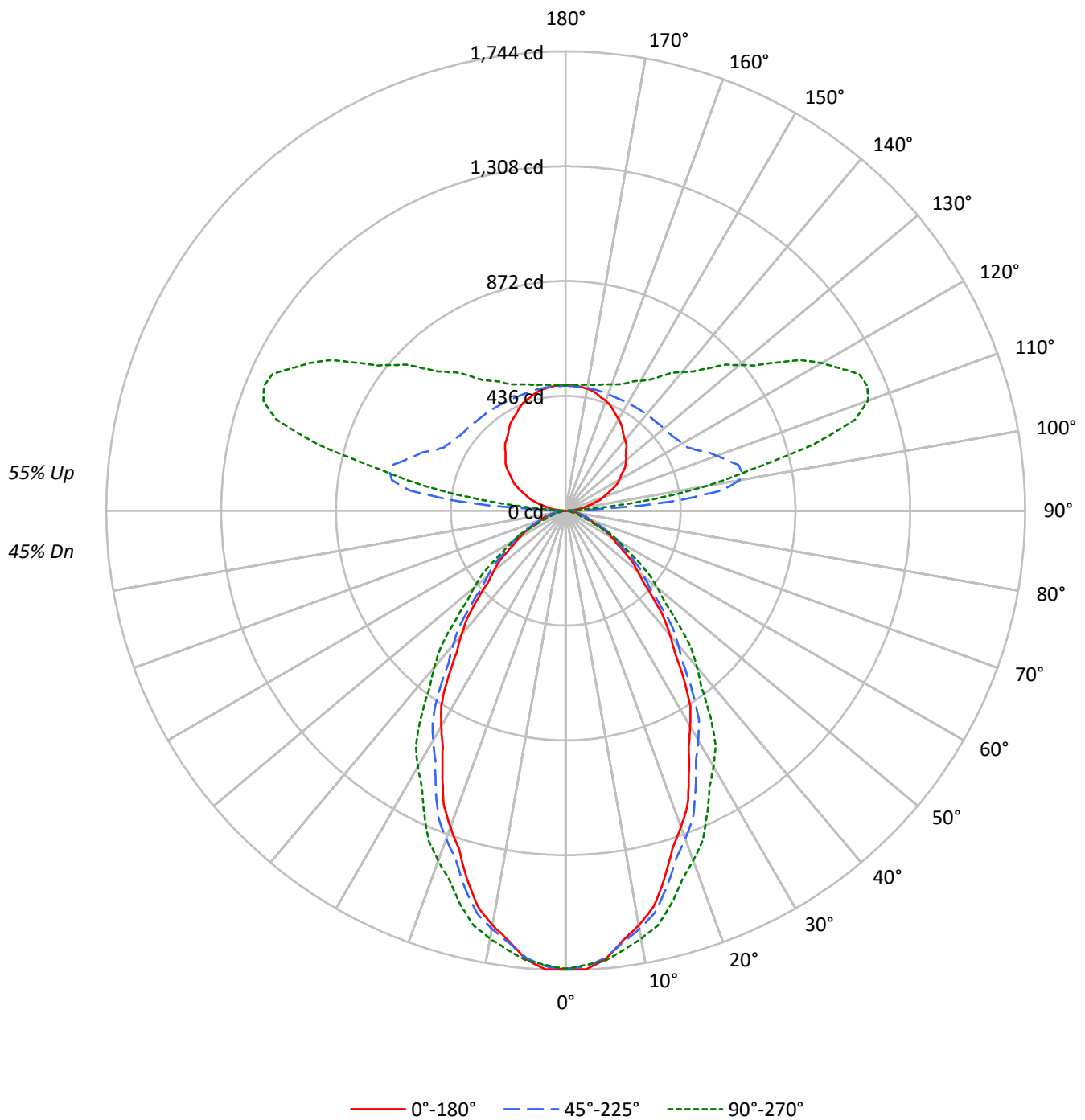
Lumens per Lamp: N/A
Luminaire Lumens: 5628.2 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	46	46
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35
4	76	66	59	54	70	61	55	50	52	47	44	44	40	38	36	33	31
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16048	16048	16048
5°	15848	15792	15883
10°	14973	15109	15459
15°	13822	14143	14777
20°	12552	13024	13886
25°	11258	11872	12937
30°	10066	10725	11953
35°	8803	9438	10789
40°	7409	7997	9340
45°	6114	6643	7797
50°	5106	5565	6496
55°	4333	4776	5364
60°	3703	4141	4281
65°	2949	3482	2766
70°	2614	2716	1689
75°	2420	2203	1034
80°	2232	2030	893
85°	2022	1863	730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7797 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.5	2.8
10°-20°	415.0	7.4
20°-30°	537.5	9.6
30°-40°	526.4	9.4
40°-50°	402.9	7.2
50°-60°	268.5	4.8
60°-70°	146.5	2.6
70°-80°	61.0	1.1
80°-90°	18.3	0.3
90°-100°	222.9	4.0
100°-110°	615.3	10.9
110°-120°	634.6	11.3
120°-130°	510.0	9.1
130°-140°	400.8	7.1
140°-150°	307.4	5.5
150°-160°	220.9	3.9
160°-170°	135.1	2.4
170°-180°	45.5	0.8
0°-30°	1112.1	19.8
0°-40°	1638.4	29.1
0°-60°	2309.8	41.0
0°-90°	2535.6	45.1
90°-120°	1472.8	26.2
90°-150°	2691.0	47.8
90°-180°	3093.0	55.0
0°-180°	5628.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1711	1694	1705	1709	1715	159
15°	1447	1442	1481	1521	1547	404
25°	1106	1109	1166	1217	1271	509
35°	782	785	838	894	958	486
45°	469	478	509	548	598	365
55°	269	281	297	308	334	244
65°	135	146	160	139	127	140
75°	68	68	62	42	29	73
85°	19	19	18	11	7	21
90°	2	3	6	7	8	3
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:

CATALOG NUMBER: SQ4-WB-100U-100D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.4	1739.4	1739.4	1739.4	1739.4
2.5°	1743.7	1728.2	1732.1	1732.0	1727.2
5°	1711.2	1694.0	1705.1	1709.0	1715.0
7.5°	1647.7	1634.7	1654.9	1669.8	1681.9
10°	1598.2	1587.0	1612.7	1634.5	1650.1
12.5°	1540.8	1531.4	1563.3	1592.4	1612.9
15°	1447.1	1441.9	1480.7	1521.0	1547.1
17.5°	1346.8	1344.3	1388.8	1435.8	1469.2
20°	1278.4	1277.7	1326.5	1375.5	1414.3
22.5°	1209.4	1211.1	1262.4	1313.3	1357.5
25°	1105.9	1108.9	1166.2	1217.1	1270.8
27.5°	1010.2	1011.6	1070.8	1124.5	1181.8
30°	944.9	948.6	1006.7	1062.3	1122.0
32.5°	879.6	883.9	940.8	998.2	1059.1
35°	781.6	785.3	838.0	894.4	957.9
37.5°	680.5	685.6	732.4	785.7	848.1
40°	615.2	622.6	664.0	714.3	775.5
42.5°	552.3	561.5	599.9	647.6	702.8
45°	468.6	477.6	509.1	547.6	597.6
47.5°	396.6	406.9	431.1	464.3	506.9
50°	355.7	365.4	387.7	412.3	452.6
52.5°	319.6	329.3	349.3	368.2	402.5
55°	269.4	280.6	296.9	308.2	333.5
57.5°	228.2	239.0	251.9	257.0	272.3
60°	200.7	212.7	224.4	223.8	232.0
62.5°	175.7	185.8	197.5	189.4	189.9
65°	135.1	146.3	159.5	139.4	126.7
67.5°	109.1	111.5	125.2	97.2	82.1
70°	96.9	96.9	100.7	75.3	62.6
72.5°	85.3	85.3	81.8	61.2	47.9
75°	67.9	67.9	61.8	42.4	29.0
77.5°	52.4	51.8	47.3	31.7	21.1
80°	42.0	42.0	38.2	25.0	16.8
82.5°	32.8	32.8	29.6	19.5	12.5
85°	19.1	19.1	17.6	11.3	6.9
87.5°	7.0	7.3	7.3	5.0	4.6
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)