

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-150U-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 (G3-1910-536-25)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-100D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

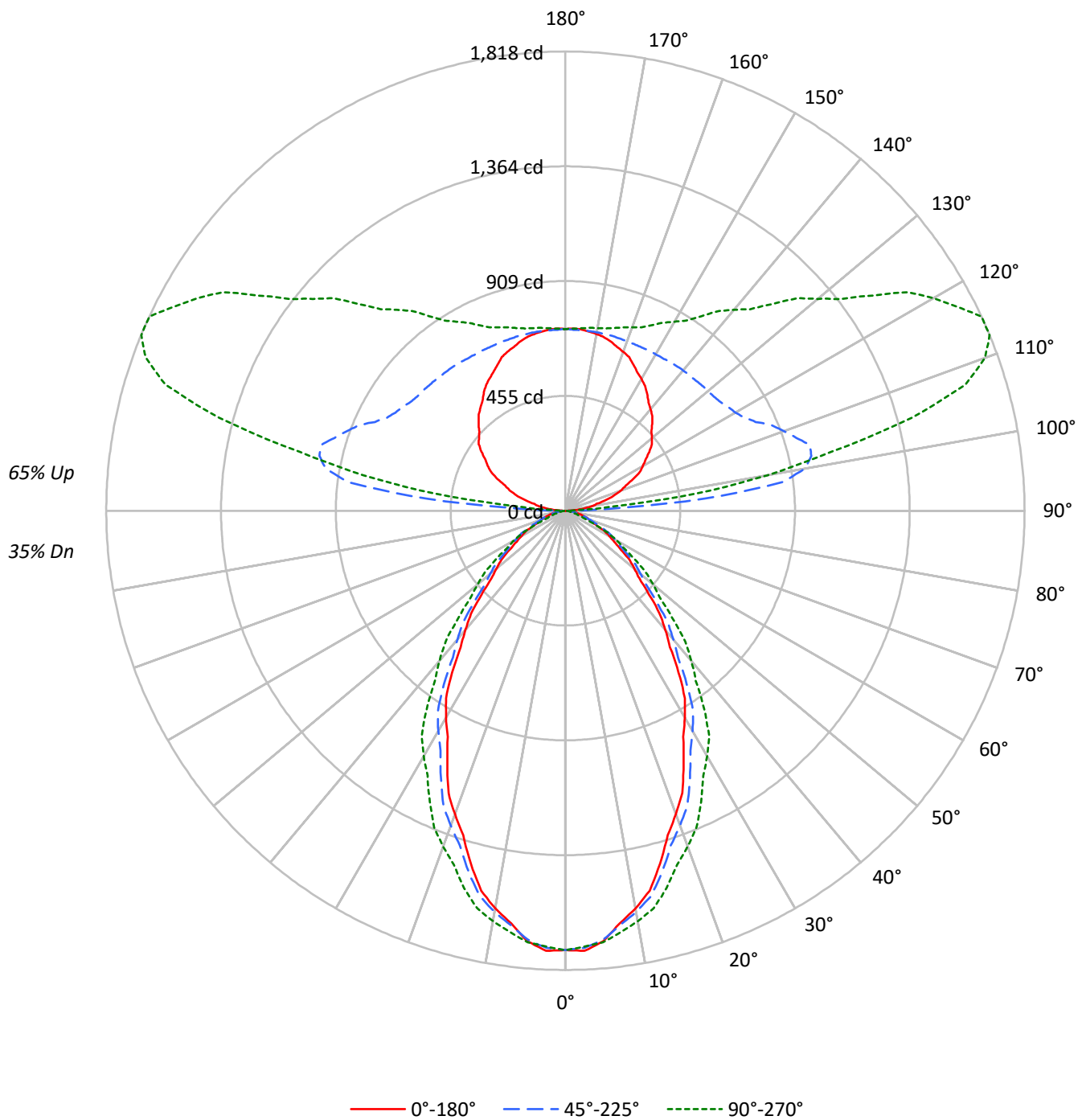
Lumens per Lamp: N/A
Luminaire Lumens: 7174.6 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 72.3
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14

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	2.2
10°-20°	415.0	5.8
20°-30°	537.5	7.5
30°-40°	526.4	7.3
40°-50°	402.9	5.6
50°-60°	268.5	3.7
60°-70°	146.5	2.0
70°-80°	61.0	0.9
80°-90°	18.8	0.3
90°-100°	334.3	4.7
100°-110°	904.0	12.6
110°-120°	950.4	13.2
120°-130°	772.0	10.8
130°-140°	605.6	8.4
140°-150°	464.8	6.5
150°-160°	334.3	4.7
160°-170°	204.2	2.8
170°-180°	68.8	1.0
0°-30°	1112.1	15.5
0°-40°	1638.4	22.8
0°-60°	2309.8	32.2
0°-90°	2536.2	35.3
90°-120°	2188.8	30.5
90°-150°	4031.1	56.2
90°-180°	4638.0	64.6
0°-180°	7174.6	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	5	10	11	10	4
95°	52	182	556	288	171	54
105°	168	260	1003	1479	1419	177
115°	296	362	832	1610	1818	292
125°	405	464	750	1265	1486	361
135°	486	543	730	1021	1156	375
145°	564	607	719	874	941	353
155°	637	662	713	784	810	294
165°	694	701	716	744	748	195
175°	720	719	717	726	725	68
180°	719	719	719	719	719	

TEST NUMBER:

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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	7.6	8.1	5.8	5.1
90°	1.5	4.6	10.1	10.8	10.1
92.5°	22.0	80.1	158.1	68.6	49.7
95°	51.9	182.1	556.0	287.8	171.1
97.5°	83.3	208.9	866.7	717.3	526.8
100°	106.9	219.7	963.4	1004.7	812.4
102.5°	128.6	234.7	997.4	1222.6	1078.8
105°	168.0	259.7	1002.9	1479.3	1418.7
107.5°	204.6	288.2	959.0	1639.4	1659.6
110°	233.1	308.8	920.0	1682.4	1768.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	258.5	329.4	884.1	1673.8	1817.5
115°	295.8	361.7	831.7	1610.1	1817.5
117.5°	332.4	394.2	797.2	1512.7	1747.9
120°	354.7	415.3	776.7	1442.8	1682.8
122.5°	375.7	435.1	764.3	1367.8	1609.7
125°	405.0	464.1	749.6	1265.0	1486.1
127.5°	432.0	490.0	741.0	1181.1	1375.5
130°	446.8	506.7	737.2	1129.2	1304.9
132.5°	462.3	521.5	733.5	1082.4	1244.2
135°	485.6	543.1	729.5	1021.4	1156.2
137.5°	508.9	563.3	726.1	971.9	1081.7
140°	525.1	575.8	724.9	940.0	1037.7
142.5°	540.5	588.2	722.4	911.3	996.8
145°	564.5	607.0	719.4	874.3	940.9
147.5°	586.4	623.9	716.0	840.8	892.0
150°	602.5	635.8	714.8	822.6	863.5
152.5°	617.4	646.4	714.2	805.7	839.3
155°	637.3	662.3	713.2	784.3	810.0
157.5°	658.1	675.5	713.4	769.4	786.3
160°	669.9	684.3	714.0	760.0	772.1
162.5°	679.2	691.1	714.6	752.5	761.6
165°	693.9	700.7	716.3	744.3	748.1
167.5°	703.9	708.6	716.5	737.3	739.1
170°	710.1	712.4	717.1	734.1	734.1
172.5°	715.1	715.5	717.1	730.4	729.8
175°	720.2	719.4	717.1	726.4	724.9
177.5°	721.9	720.1	717.0	723.1	721.3
180°	719.4	719.4	719.4	719.4	719.4

(END OF REPORT)