

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-150U-125D-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-BB-150U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

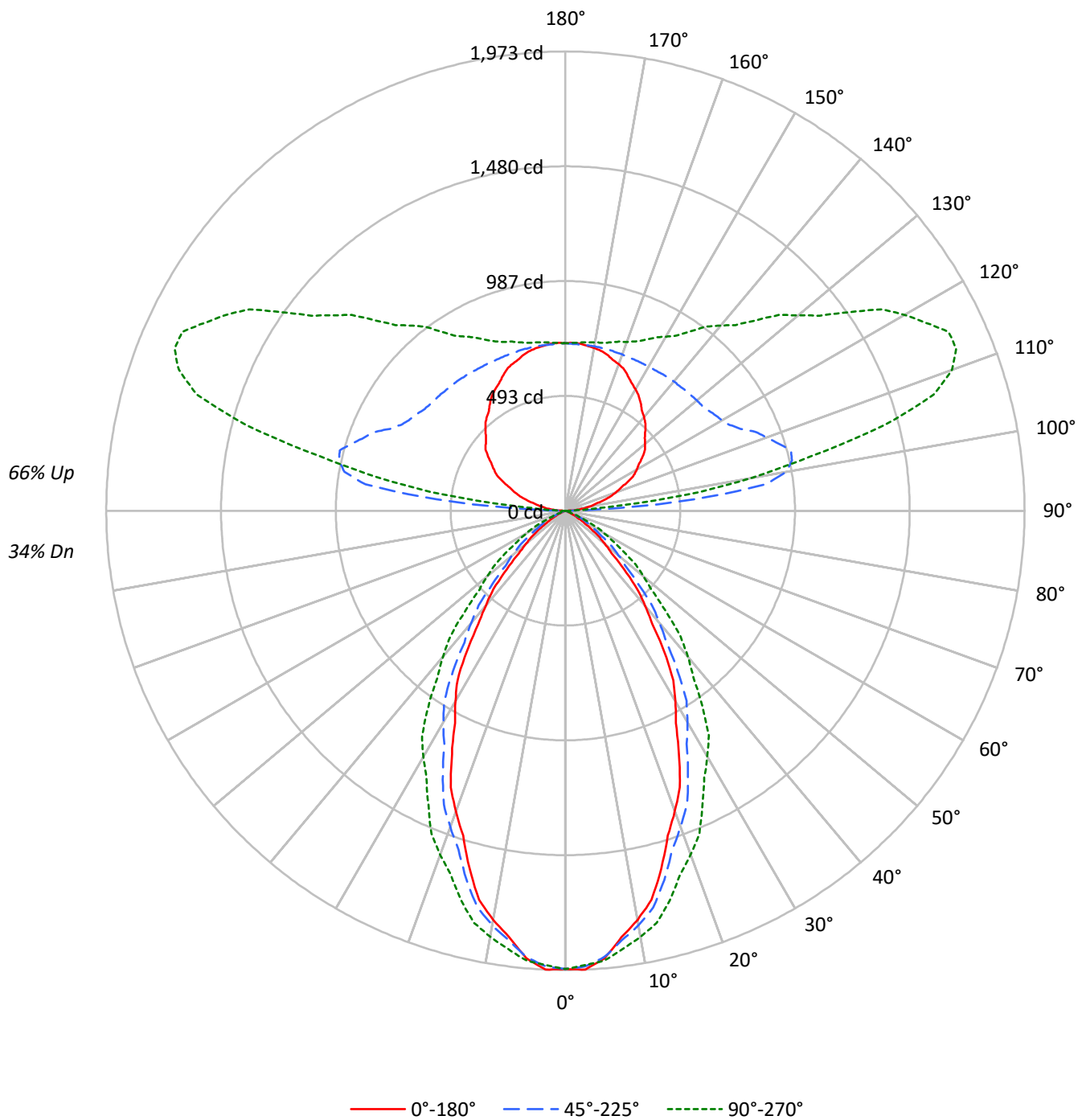
Lumens per Lamp: N/A
Luminaire Lumens: 6988.4 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.1
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	38	37
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27
5	69	59	51	46	62	54	47	43	44	40	36	36	32	30	27	26	24
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	24	21	20
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18164	18164	18164
5°	17871	17827	17959
10°	16721	16945	17417
15°	15201	15684	16557
20°	13494	14195	15439
25°	11751	12682	14185
30°	10065	11171	12998
35°	8346	9482	11564
40°	6412	7583	9853
45°	4636	5741	7928
50°	3158	4279	6288
55°	2052	3095	4887
60°	1177	2179	3532
65°	312	1332	1788
70°	154	410	513
75°	68	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7928 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.7	2.6
10°-20°	459.5	6.6
20°-30°	575.2	8.2
30°-40°	531.3	7.6
40°-50°	357.0	5.1
50°-60°	184.4	2.6
60°-70°	57.7	0.8
70°-80°	3.7	0.1
80°-90°	1.6	0.0
90°-100°	334.3	4.8
100°-110°	904.0	12.9
110°-120°	950.4	13.6
120°-130°	772.0	11.0
130°-140°	605.6	8.7
140°-150°	464.8	6.7
150°-160°	334.3	4.8
160°-170°	204.2	2.9
170°-180°	68.8	1.0
0°-30°	1214.3	17.4
0°-40°	1745.6	25.0
0°-60°	2287.0	32.7
0°-90°	2350.0	33.6
90°-120°	2188.8	31.3
90°-150°	4031.1	57.7
90°-180°	4638.0	66.4
0°-180°	6988.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1969	1969	1969	1969	1969	
5°	1930	1910	1925	1932	1939	179
15°	1592	1586	1642	1697	1733	443
25°	1154	1164	1246	1331	1393	529
35°	741	760	842	941	1027	459
45°	355	377	440	526	608	279
55°	128	149	192	247	304	119
65°	14	27	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	5	10	11	10	3
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°	1968.7	1968.7	1968.7	1968.7	1968.7
2.5°	1973.2	1954.6	1959.5	1959.4	1954.2
5°	1929.6	1910.1	1924.9	1931.7	1939.1
7.5°	1848.1	1832.8	1861.2	1882.5	1898.0
10°	1784.8	1771.8	1808.7	1837.7	1859.1
12.5°	1711.7	1701.6	1746.2	1786.0	1813.4
15°	1591.5	1585.9	1642.0	1697.1	1733.4
17.5°	1462.7	1462.6	1526.6	1595.0	1638.7
20°	1374.4	1377.1	1445.8	1521.2	1572.5
22.5°	1286.0	1292.5	1365.8	1444.5	1503.1
25°	1154.3	1163.7	1245.8	1331.0	1393.4
27.5°	1027.9	1041.5	1127.9	1216.5	1292.4
30°	944.8	960.6	1048.6	1141.8	1220.1
32.5°	863.3	882.1	967.9	1066.4	1146.2
35°	741.0	759.6	841.9	941.0	1026.7
37.5°	614.7	632.9	713.4	810.9	903.5
40°	532.4	552.9	629.6	724.1	818.1
42.5°	457.7	478.2	550.3	643.2	732.0
45°	355.3	376.7	440.0	525.7	607.6
47.5°	270.3	293.6	349.2	426.7	501.4
50°	220.0	243.3	298.1	366.4	438.1
52.5°	179.6	202.2	251.6	316.0	381.7
55°	127.6	149.0	192.4	247.0	303.8
57.5°	88.2	106.6	145.5	191.1	235.6
60°	63.8	81.5	118.1	155.1	191.4
62.5°	42.5	58.7	94.5	122.8	147.2
65°	14.3	27.3	61.0	73.5	81.9
67.5°	7.2	8.7	32.0	33.8	36.6
70°	5.7	5.7	15.2	16.3	19.0
72.5°	4.2	4.2	6.1	7.8	8.4
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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	0.9	2.0	2.2	2.0
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)