

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-6

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-6
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

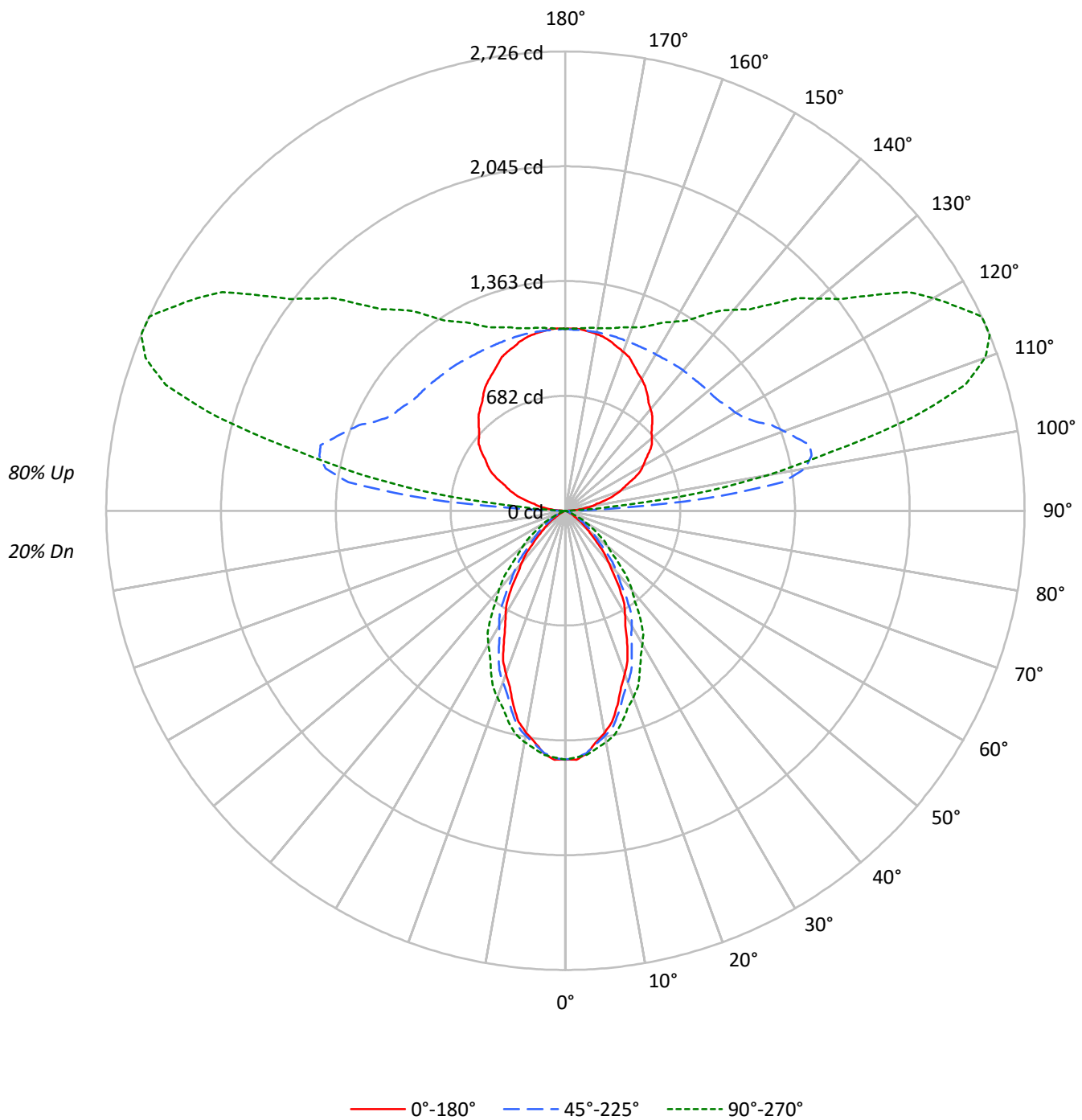
Lumens per Lamp: N/A
Luminaire Lumens: 8721.2 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 127.1
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29
1	92	88	85	81	81	78	75	73	59	58	56	42	41	40	26	26	26
2	84	78	72	68	74	69	65	61	53	50	47	38	36	35	24	23	23
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20
4	71	61	54	49	63	55	49	44	42	38	35	31	29	27	20	19	18
5	65	55	48	42	58	49	43	38	38	34	31	28	25	23	19	17	16
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15
7	56	45	37	32	49	40	34	30	31	27	24	23	21	19	16	14	13
8	52	41	33	29	46	36	30	26	29	25	21	22	19	17	15	13	12
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9082	9082	9082
5°	8935	8913	8980
10°	8360	8472	8709
15°	7601	7842	8279
20°	6747	7097	7719
25°	5876	6341	7093
30°	5033	5586	6499
35°	4173	4742	5782
40°	3206	3791	4927
45°	2317	2871	3964
50°	1579	2140	3144
55°	1026	1547	2444
60°	589	1090	1767
65°	156	665	894
70°	77	205	257
75°	33	17	0
80°	25	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3964 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.7	1.5
10°-20°	344.6	4.0
20°-30°	431.4	4.9
30°-40°	398.5	4.6
40°-50°	267.7	3.1
50°-60°	138.3	1.6
60°-70°	43.3	0.5
70°-80°	2.7	0.0
80°-90°	2.3	0.0
90°-100°	501.5	5.8
100°-110°	1356.0	15.5
110°-120°	1425.6	16.3
120°-130°	1158.0	13.3
130°-140°	908.4	10.4
140°-150°	697.2	8.0
150°-160°	501.4	5.7
160°-170°	306.3	3.5
170°-180°	103.3	1.2
0°-30°	910.7	10.4
0°-40°	1309.2	15.0
0°-60°	1715.2	19.7
0°-90°	1763.6	20.2
90°-120°	3283.2	37.6
90°-150°	6046.7	69.3
90°-180°	6958.0	79.8
0°-180°	8721.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1447	1432	1444	1449	1454	134
15°	1194	1189	1232	1273	1300	332
25°	866	873	934	998	1045	397
35°	556	570	632	706	770	344
45°	266	282	330	394	456	209
55°	96	112	144	185	228	89
65°	11	20	46	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	7	15	16	15	5
95°	78	273	834	432	257	81
105°	252	390	1504	2219	2128	265
115°	444	543	1248	2415	2726	438
125°	608	696	1124	1898	2229	542
135°	728	815	1094	1532	1734	563
145°	847	910	1079	1311	1411	530
155°	956	994	1070	1176	1215	441
165°	1041	1051	1074	1116	1122	293
175°	1080	1079	1076	1090	1087	103
180°	1079	1079	1079	1079	1079	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1476.5	1476.5	1476.5	1476.5	1476.5
2.5°	1479.9	1466.0	1469.6	1469.6	1465.6
5°	1447.2	1432.5	1443.6	1448.8	1454.4
7.5°	1386.1	1374.6	1395.9	1411.9	1423.5
10°	1338.6	1328.9	1356.5	1378.3	1394.4
12.5°	1283.8	1276.2	1309.6	1339.5	1360.1
15°	1193.6	1189.4	1231.5	1272.8	1300.1
17.5°	1097.1	1096.9	1144.9	1196.2	1229.1
20°	1030.8	1032.9	1084.3	1140.9	1179.3
22.5°	964.5	969.4	1024.3	1083.3	1127.3
25°	865.8	872.7	934.3	998.3	1045.1
27.5°	770.9	781.1	845.9	912.3	969.3
30°	708.6	720.5	786.5	856.4	915.0
32.5°	647.5	661.6	725.9	799.8	859.6
35°	555.7	569.7	631.5	705.8	770.0
37.5°	461.0	474.7	535.0	608.2	677.6
40°	399.3	414.7	472.2	543.1	613.6
42.5°	343.3	358.7	412.7	482.4	549.0
45°	266.4	282.5	330.0	394.3	455.7
47.5°	202.7	220.2	261.9	320.0	376.0
50°	165.0	182.5	223.6	274.8	328.6
52.5°	134.7	151.6	188.7	237.0	286.3
55°	95.7	111.8	144.3	185.3	227.9
57.5°	66.1	80.0	109.1	143.3	176.7
60°	47.9	61.1	88.6	116.3	143.6
62.5°	31.9	44.0	70.9	92.1	110.4
65°	10.7	20.5	45.7	55.1	61.4
67.5°	5.4	6.5	24.0	25.3	27.4
70°	4.3	4.3	11.4	12.2	14.3
72.5°	3.1	3.1	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.4	3.0	3.2	3.0
90°	2.3	6.9	15.1	16.2	15.1
92.5°	33.0	120.2	237.2	103.0	74.6
95°	77.8	273.2	834.0	431.6	256.7
97.5°	125.0	313.3	1300.1	1075.9	790.1
100°	160.3	329.5	1445.1	1507.0	1218.5
102.5°	192.8	352.1	1496.2	1833.9	1618.1
105°	252.1	389.5	1504.3	2219.0	2128.1
107.5°	306.9	432.3	1438.6	2459.1	2489.4
110°	349.6	463.2	1380.0	2523.6	2652.0

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.7	494.1	1326.1	2510.7	2726.3
115°	443.7	542.6	1247.6	2415.1	2726.3
117.5°	498.6	591.2	1195.8	2269.0	2621.8
120°	532.0	622.9	1165.1	2164.2	2524.2
122.5°	563.6	652.7	1146.5	2051.8	2414.5
125°	607.5	696.1	1124.4	1897.5	2229.1
127.5°	648.0	735.0	1111.4	1771.6	2063.3
130°	670.3	760.0	1105.9	1693.8	1957.3
132.5°	693.5	782.3	1100.3	1623.7	1866.3
135°	728.3	814.7	1094.2	1532.1	1734.3
137.5°	763.4	845.0	1089.1	1457.9	1622.6
140°	787.6	863.7	1087.3	1410.1	1556.6
142.5°	810.8	882.4	1083.6	1366.9	1495.2
145°	846.8	910.4	1079.1	1311.4	1411.4
147.5°	879.6	935.9	1074.0	1261.2	1338.0
150°	903.7	953.7	1072.2	1233.9	1295.2
152.5°	926.0	969.7	1071.2	1208.5	1259.0
155°	956.0	993.5	1069.9	1176.4	1215.1
157.5°	987.1	1013.3	1070.1	1154.1	1179.5
160°	1004.8	1026.4	1071.0	1140.0	1158.1
162.5°	1018.7	1036.7	1071.9	1128.7	1142.3
165°	1040.8	1051.0	1074.5	1116.4	1122.1
167.5°	1055.9	1063.0	1074.7	1105.9	1108.7
170°	1065.2	1068.6	1075.7	1101.2	1101.2
172.5°	1072.6	1073.3	1075.7	1095.6	1094.7
175°	1080.3	1079.2	1075.7	1089.5	1087.3
177.5°	1082.9	1080.1	1075.4	1084.7	1081.9
180°	1079.1	1079.1	1079.1	1079.1	1079.1

(END OF REPORT)