

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-050D-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-050D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

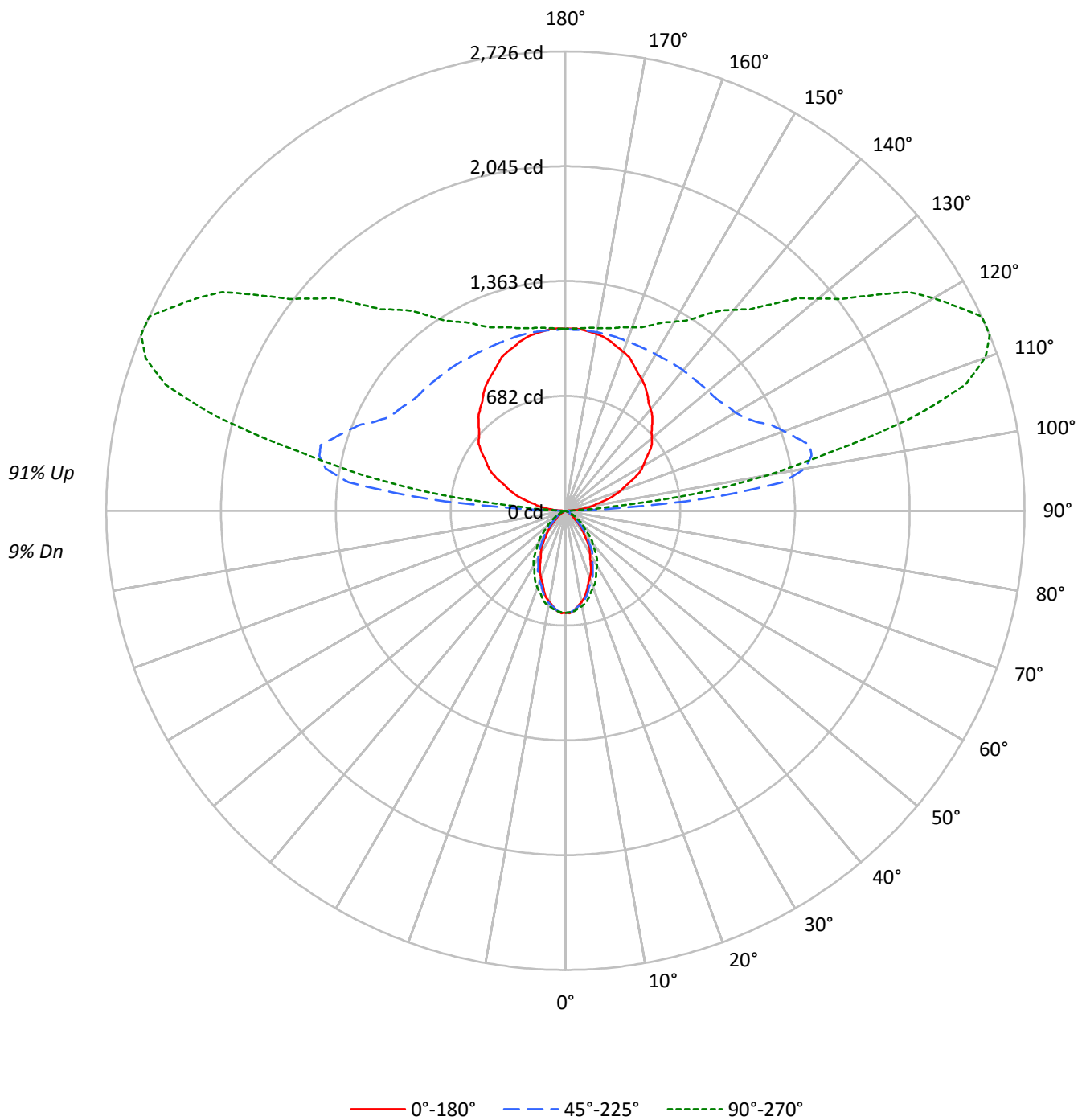
Lumens per Lamp: N/A
Luminaire Lumens: 7684.3 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Indirect

Input Watts (W): 84.1
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	97	97	97	97	85	85	85	85	61	61	61	39	39	39	19	19	19
1	89	85	82	78	77	74	71	69	53	52	50	35	34	33	17	17	16
2	81	75	69	64	70	65	61	57	47	44	42	31	29	28	15	15	14
3	74	66	59	54	64	57	52	48	42	38	36	27	26	24	14	13	13
4	68	58	51	46	59	51	45	41	37	33	30	25	22	21	13	12	11
5	62	52	44	39	54	45	39	35	33	29	26	22	20	18	12	11	10
6	57	46	39	34	50	41	35	30	30	26	23	20	18	16	11	10	9
7	53	42	34	29	46	37	31	26	27	23	20	18	16	14	10	9	8
8	49	38	31	26	43	33	27	23	25	21	18	17	14	12	9	8	7
9	45	34	27	23	40	30	24	20	22	19	16	15	13	11	8	7	7
10	42	31	25	20	37	28	22	18	21	17	14	14	12	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3735	3735	3735
5°	3675	3666	3693
10°	3439	3484	3582
15°	3126	3225	3405
20°	2775	2919	3175
25°	2417	2608	2917
30°	2070	2298	2673
35°	1716	1950	2378
40°	1318	1559	2027
45°	953	1180	1630
50°	650	880	1293
55°	423	636	1005
60°	242	448	727
65°	64	274	368
70°	32	85	106
75°	14	7	0
80°	11	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 1630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	0.7
10°-20°	141.7	1.8
20°-30°	177.4	2.3
30°-40°	163.9	2.1
40°-50°	110.1	1.4
50°-60°	56.9	0.7
60°-70°	17.8	0.2
70°-80°	1.1	0.0
80°-90°	2.3	0.0
90°-100°	501.5	6.5
100°-110°	1356.0	17.6
110°-120°	1425.6	18.6
120°-130°	1158.0	15.1
130°-140°	908.4	11.8
140°-150°	697.2	9.1
150°-160°	501.4	6.5
160°-170°	306.3	4.0
170°-180°	103.3	1.3
0°-30°	374.6	4.9
0°-40°	538.5	7.0
0°-60°	705.5	9.2
0°-90°	726.7	9.5
90°-120°	3283.2	42.7
90°-150°	6046.7	78.7
90°-180°	6958.0	90.5
0°-180°	7684.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	595	589	594	596	598	55
15°	491	489	506	524	535	137
25°	356	359	384	411	430	163
35°	229	234	260	290	317	142
45°	110	116	136	162	187	86
55°	39	46	59	76	94	37
65°	4	8	19	23	25	7
75°	1	1	0	0	0	1
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°	607.3	607.3	607.3	607.3	607.3
2.5°	608.7	602.9	604.4	604.4	602.8
5°	595.2	589.2	593.8	595.9	598.2
7.5°	570.1	565.4	574.1	580.7	585.5
10°	550.6	546.5	557.9	566.9	573.5
12.5°	528.0	524.9	538.6	550.9	559.4
15°	490.9	489.2	506.5	523.5	534.7
17.5°	451.2	451.1	470.9	492.0	505.5
20°	423.9	424.8	446.0	469.3	485.1
22.5°	396.7	398.7	421.3	445.6	463.7
25°	356.1	358.9	384.3	410.6	429.8
27.5°	317.1	321.3	347.9	375.2	398.7
30°	291.4	296.3	323.5	352.2	376.3
32.5°	266.3	272.1	298.6	329.0	353.5
35°	228.6	234.3	259.7	290.3	316.7
37.5°	189.6	195.2	220.1	250.1	278.7
40°	164.2	170.5	194.2	223.4	252.4
42.5°	141.2	147.5	169.8	198.4	225.8
45°	109.6	116.2	135.7	162.2	187.4
47.5°	83.4	90.6	107.7	131.6	154.7
50°	67.9	75.0	92.0	113.0	135.1
52.5°	55.4	62.4	77.6	97.5	117.8
55°	39.4	46.0	59.3	76.2	93.7
57.5°	27.2	32.9	44.9	59.0	72.7
60°	19.7	25.1	36.4	47.8	59.1
62.5°	13.1	18.1	29.1	37.9	45.4
65°	4.4	8.4	18.8	22.7	25.3
67.5°	2.2	2.7	9.9	10.4	11.3
70°	1.8	1.8	4.7	5.0	5.9
72.5°	1.3	1.3	1.9	2.4	2.6
75°	0.6	0.6	0.3	0.0	0.0
77.5°	0.3	0.3	0.2	0.0	0.0
80°	0.3	0.3	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

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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)