

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-075D-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-075D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

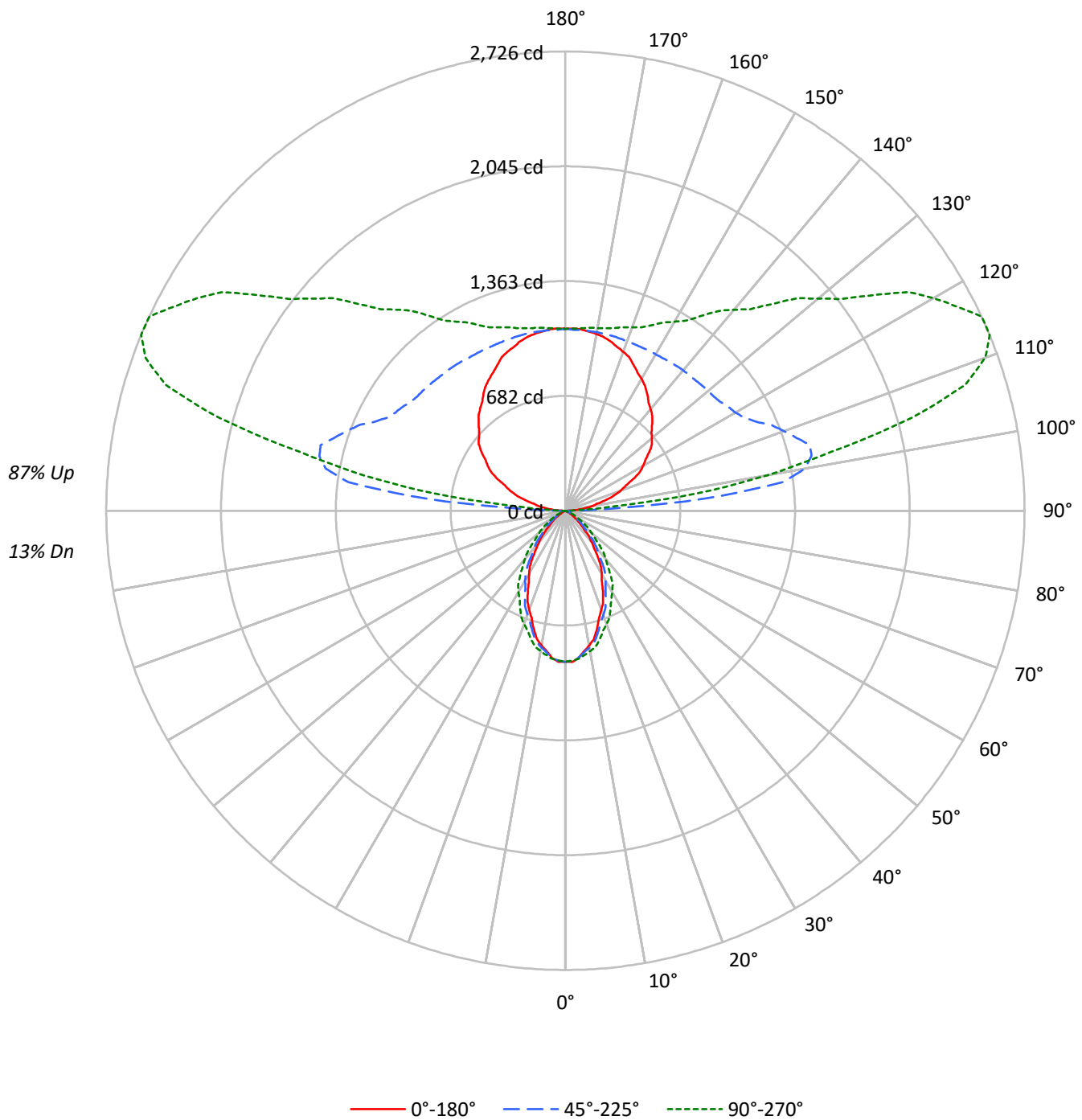
Lumens per Lamp: N/A
Luminaire Lumens: 8029.8 lumens
Efficiency: N/A
Efficacy: 82.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 97.8
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	98	98	98	98	86	86	86	86	63	63	63	42	42	42	22	22	22
1	90	86	83	80	79	76	73	70	56	54	52	37	36	36	20	20	20
2	82	76	70	66	72	67	62	58	49	46	44	33	32	30	19	18	17
3	75	67	60	55	66	59	53	49	44	40	37	30	28	26	17	16	15
4	69	59	52	47	60	52	46	42	39	35	32	27	25	23	15	14	14
5	63	53	46	40	55	47	41	36	35	31	28	24	22	20	14	13	12
6	58	47	40	35	51	42	36	31	32	27	24	22	20	18	13	12	11
7	54	43	36	30	47	38	32	27	29	25	21	20	18	16	12	11	10
8	50	39	32	27	44	34	28	24	26	22	19	18	16	14	11	10	9
9	46	35	28	24	41	31	26	22	24	20	17	17	14	13	10	9	8
10	43	32	26	21	38	29	23	19	22	18	15	16	13	11	10	8	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5517	5517	5517
5°	5428	5414	5454
10°	5078	5146	5290
15°	4617	4763	5029
20°	4098	4311	4689
25°	3569	3851	4308
30°	3057	3393	3947
35°	2535	2880	3512
40°	1947	2303	2993
45°	1407	1744	2408
50°	959	1299	1910
55°	623	939	1484
60°	358	662	1073
65°	95	405	543
70°	47	124	156
75°	21	10	0
80°	14	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 2408 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	1.0
10°-20°	209.3	2.6
20°-30°	262.0	3.3
30°-40°	242.0	3.0
40°-50°	162.6	2.0
50°-60°	84.0	1.0
60°-70°	26.3	0.3
70°-80°	1.7	0.0
80°-90°	2.3	0.0
90°-100°	501.5	6.2
100°-110°	1356.0	16.9
110°-120°	1425.6	17.8
120°-130°	1158.0	14.4
130°-140°	908.4	11.3
140°-150°	697.2	8.7
150°-160°	501.4	6.2
160°-170°	306.3	3.8
170°-180°	103.3	1.3
0°-30°	553.2	6.9
0°-40°	795.2	9.9
0°-60°	1041.9	13.0
0°-90°	1072.1	13.4
90°-120°	3283.2	40.9
90°-150°	6046.7	75.3
90°-180°	6958.0	86.7
0°-180°	8029.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	879	870	877	880	883	81
15°	725	722	748	773	790	202
25°	526	530	568	606	635	241
35°	338	346	384	429	468	209
45°	162	172	200	240	277	127
55°	58	68	88	112	138	54
65°	6	12	28	34	37	11
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	896.9	896.9	896.9	896.9	896.9
2.5°	898.9	890.5	892.7	892.6	890.3
5°	879.1	870.2	876.9	880.0	883.4
7.5°	841.9	835.0	847.9	857.6	864.7
10°	813.1	807.2	824.0	837.2	847.0
12.5°	779.8	775.2	795.5	813.7	826.1
15°	725.0	722.5	748.0	773.1	789.7
17.5°	666.4	666.3	695.4	726.6	746.6
20°	626.1	627.4	658.6	693.0	716.4
22.5°	585.8	588.8	622.2	658.0	684.8
25°	525.9	530.1	567.5	606.4	634.8
27.5°	468.3	474.5	513.8	554.2	588.8
30°	430.4	437.6	477.7	520.2	555.8
32.5°	393.3	401.9	440.9	485.8	522.1
35°	337.6	346.1	383.6	428.7	467.7
37.5°	280.0	288.3	325.0	369.4	411.6
40°	242.5	251.9	286.8	329.9	372.7
42.5°	208.5	217.9	250.7	293.0	333.5
45°	161.8	171.6	200.5	239.5	276.8
47.5°	123.1	133.7	159.1	194.4	228.4
50°	100.2	110.8	135.8	166.9	199.6
52.5°	81.8	92.1	114.6	144.0	173.9
55°	58.1	67.9	87.6	112.5	138.4
57.5°	40.2	48.6	66.3	87.1	107.3
60°	29.1	37.1	53.8	70.7	87.2
62.5°	19.4	26.7	43.0	56.0	67.1
65°	6.5	12.4	27.8	33.5	37.3
67.5°	3.3	4.0	14.6	15.4	16.7
70°	2.6	2.6	6.9	7.4	8.7
72.5°	1.9	1.9	2.8	3.6	3.8
75°	0.9	0.9	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	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)