

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: P521305

Luminaire Tested: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521305
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8853.9 lumens
Efficiency: N/A
Efficacy: 106.7 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

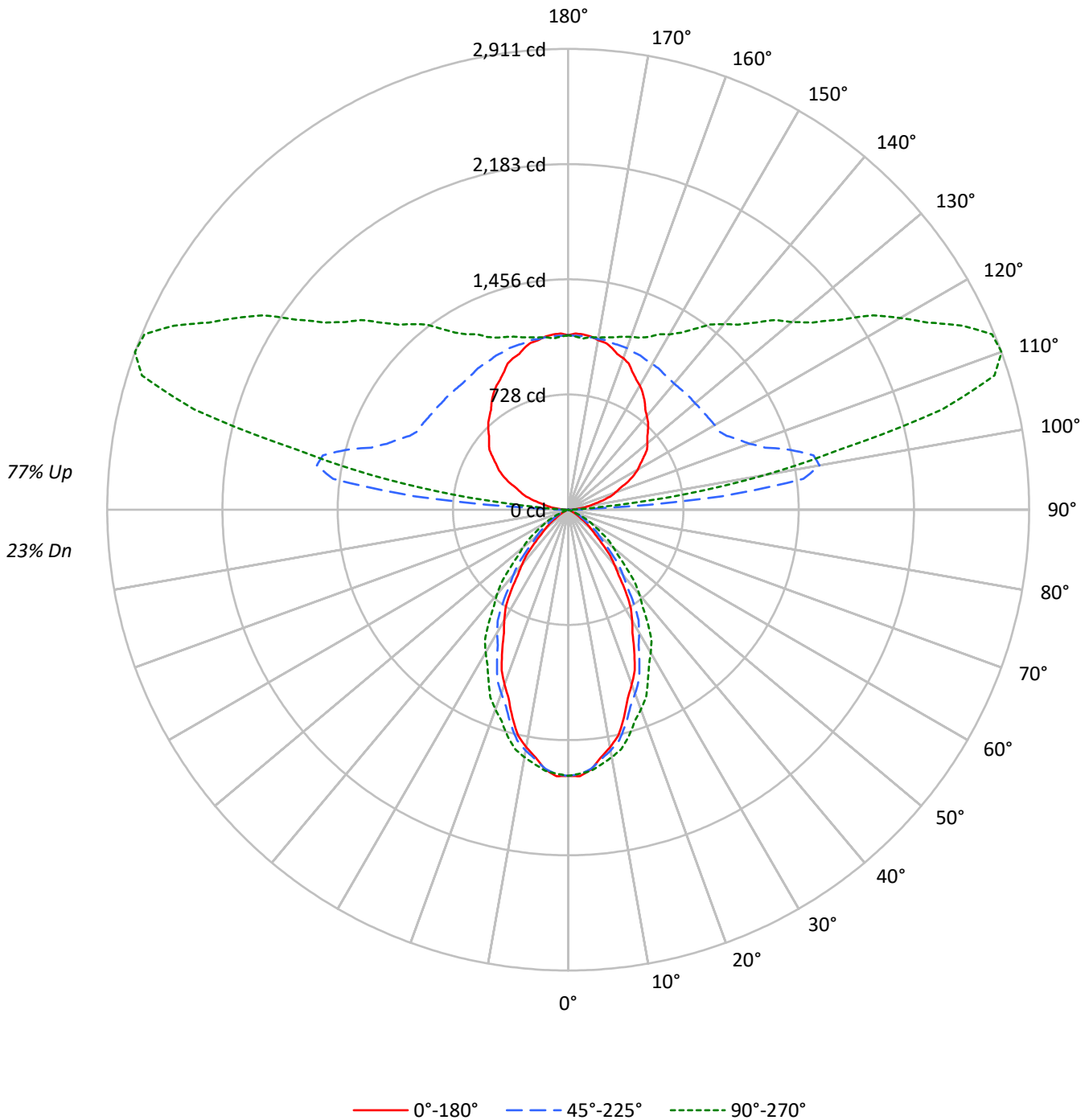
Input Watts (W): 83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23
1	92	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21
2	85	78	73	68	75	70	65	62	54	51	49	40	38	36	26	25	25	19
3	78	70	63	58	69	62	57	52	48	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15
5	66	56	48	43	59	50	44	39	39	35	32	29	27	25	20	19	18	14
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13
7	56	45	38	33	50	41	35	30	32	28	25	25	22	20	17	16	14	12
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	14	13	11
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10
10	46	35	28	24	41	31	26	22	25	21	18	19	17	15	14	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15511	15511	15511
5°	15262	15224	15337
10°	14280	14471	14874
15°	12982	13393	14139
20°	11524	12123	13185
25°	10035	10830	12113
30°	8596	9540	11100
35°	7127	8098	9875
40°	5476	6475	8415
45°	3959	4903	6771
50°	2697	3654	5370
55°	1753	2643	4174
60°	1006	1862	3017
65°	266	1137	1526
70°	132	351	440
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6771 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.4	1.7
10°-20°	392.4	4.4
20°-30°	491.2	5.5
30°-40°	453.7	5.1
40°-50°	304.9	3.4
50°-60°	157.5	1.8
60°-70°	49.3	0.6
70°-80°	3.1	0.0
80°-90°	0.1	0.0
90°-100°	502.4	5.7
100°-110°	1429.4	16.1
110°-120°	1369.6	15.5
120°-130°	1083.9	12.2
130°-140°	870.0	9.8
140°-150°	681.1	7.7
150°-160°	498.4	5.6
160°-170°	308.7	3.5
170°-180°	104.8	1.2
0°-30°	1037.0	11.7
0°-40°	1490.7	16.8
0°-60°	1953.1	22.1
0°-90°	2005.6	22.7
90°-120°	3301.4	37.3
90°-150°	5936.5	67.0
90°-180°	6848.0	77.3
0°-180°	8853.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1681	1681	1681	1681	1681	
5°	1648	1631	1644	1650	1656	153
15°	1359	1354	1402	1449	1480	379
25°	986	994	1064	1137	1190	452
35°	633	649	719	804	877	392
45°	303	322	376	449	519	238
55°	109	127	164	211	260	102
65°	12	23	52	63	70	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	54	216	972	337	208	62
105°	222	337	1457	2573	2446	235
115°	413	499	1105	2340	2748	407
125°	583	646	1054	1750	2092	522
135°	713	772	1042	1478	1670	550
145°	840	884	1050	1279	1394	525
155°	960	982	1075	1156	1203	444
165°	1061	1065	1088	1111	1128	298
175°	1111	1105	1100	1094	1086	105
180°	1102	1102	1102	1102	1102	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1681.2	1681.2	1681.2	1681.2	1681.2
2.5°	1685.1	1669.2	1673.4	1673.3	1668.9
5°	1647.9	1631.2	1643.8	1649.6	1656.0
7.5°	1578.2	1565.2	1589.5	1607.7	1620.9
10°	1524.2	1513.1	1544.6	1569.4	1587.7
12.5°	1461.8	1453.2	1491.2	1525.3	1548.6
15°	1359.1	1354.4	1402.2	1449.3	1480.3
17.5°	1249.2	1249.0	1303.7	1362.1	1399.5
20°	1173.7	1176.1	1234.7	1299.1	1342.9
22.5°	1098.2	1103.8	1166.4	1233.5	1283.6
25°	985.8	993.7	1063.9	1136.7	1189.9
27.5°	877.8	889.4	963.2	1038.8	1103.7
30°	806.9	820.4	895.5	975.1	1041.9
32.5°	737.2	753.3	826.5	910.7	978.8
35°	632.8	648.7	719.0	803.6	876.8
37.5°	524.9	540.5	609.2	692.5	771.6
40°	454.7	472.2	537.6	618.4	698.7
42.5°	390.9	408.4	470.0	549.3	625.1
45°	303.4	321.7	375.8	448.9	518.9
47.5°	230.8	250.7	298.2	364.4	428.2
50°	187.9	207.8	254.6	312.9	374.1
52.5°	153.4	172.6	214.9	269.8	326.0
55°	109.0	127.3	164.3	210.9	259.5
57.5°	75.3	91.1	124.3	163.2	201.2
60°	54.5	69.6	100.9	132.5	163.5
62.5°	36.3	50.1	80.7	104.9	125.7
65°	12.2	23.3	52.1	62.8	69.9
67.5°	6.2	7.5	27.3	28.8	31.2
70°	4.9	4.9	13.0	13.9	16.3
72.5°	3.6	3.6	5.2	6.7	7.2
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	0.0	0.0
80°	0.8	0.8	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.8	88.9	206.2	60.0	45.3
95°	54.5	216.4	972.5	336.6	207.5
97.5°	100.2	253.5	1497.8	1071.8	734.4
100°	132.0	275.5	1611.8	1632.6	1257.6
102.5°	167.3	299.2	1586.6	2089.8	1762.3
105°	222.2	336.9	1456.7	2573.1	2446.0
107.5°	277.9	380.8	1305.0	2709.3	2822.4
110°	316.5	412.8	1217.8	2657.2	2911.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	353.4	444.8	1159.1	2533.9	2896.2
115°	412.9	499.0	1104.6	2340.0	2747.8
117.5°	465.3	546.1	1072.3	2128.0	2560.0
120°	507.2	574.9	1068.9	2006.9	2420.8
122.5°	540.8	608.4	1060.6	1900.6	2285.0
125°	582.7	646.2	1054.3	1749.5	2091.8
127.5°	628.4	687.8	1050.9	1659.3	1941.3
130°	651.8	711.3	1045.9	1596.4	1842.4
132.5°	677.0	734.8	1045.9	1547.4	1773.6
135°	712.6	772.1	1041.7	1477.8	1670.5
137.5°	746.2	804.0	1041.3	1419.0	1585.4
140°	771.3	830.7	1039.6	1370.2	1530.1
142.5°	799.8	849.4	1044.6	1331.3	1474.7
145°	840.5	883.5	1050.1	1279.1	1393.8
147.5°	875.3	917.1	1059.3	1226.3	1325.5
150°	905.5	934.2	1062.7	1208.9	1278.5
152.5°	928.9	959.3	1066.0	1185.3	1250.0
155°	960.0	982.5	1075.2	1156.0	1203.1
157.5°	998.5	1012.0	1077.3	1142.6	1176.3
160°	1018.6	1028.9	1085.7	1132.5	1161.2
162.5°	1030.4	1042.3	1087.4	1123.9	1146.1
165°	1060.6	1064.7	1087.8	1111.2	1127.6
167.5°	1081.1	1077.4	1097.4	1108.1	1114.6
170°	1087.8	1085.8	1094.1	1096.4	1104.6
172.5°	1102.9	1095.9	1099.1	1093.0	1099.5
175°	1110.9	1104.7	1100.4	1093.9	1085.7
177.5°	1114.2	1104.4	1099.1	1092.5	1094.1
180°	1102.5	1102.5	1102.5	1102.5	1102.5

(END OF REPORT)