

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: P521316

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521316
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-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9166.4 lumens
Efficiency: N/A
Efficacy: 97.9 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

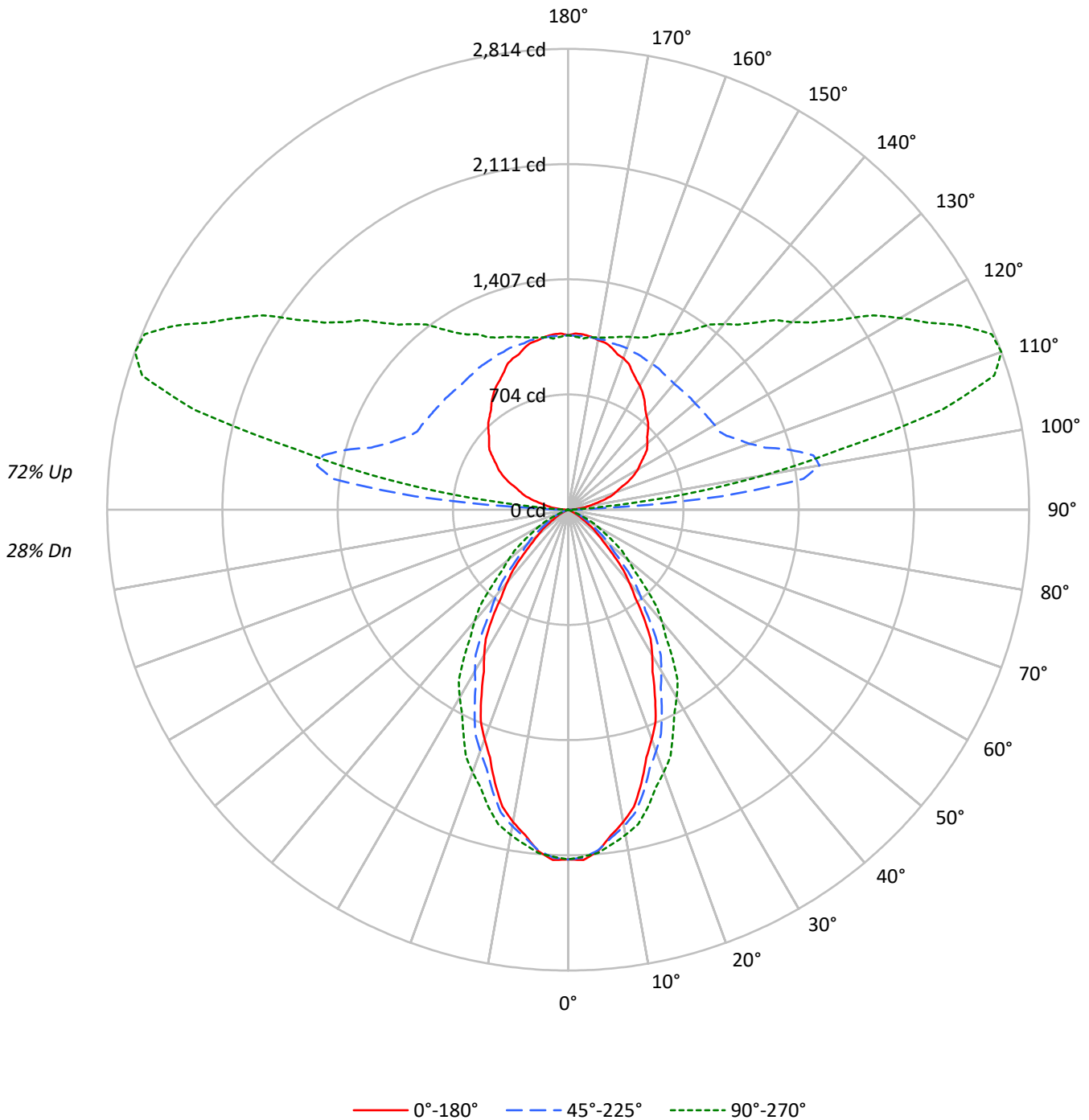
Input Watts (W): 93.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	50	30	10	0														
RCR																																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28																				
1	94	90	87	84	84	81	78	75	64	62	60	48	47	46	33	33	32	25																				
2	86	80	74	70	77	72	67	64	57	54	51	43	41	40	30	29	29	23																				
3	79	71	65	59	71	64	59	54	51	47	44	39	37	35	28	27	26	21																				
4	73	63	56	51	65	57	51	47	46	42	39	35	33	31	26	24	23	19																				
5	67	57	50	44	60	52	45	41	42	37	34	32	29	27	24	22	21	17																				
6	62	51	44	39	56	47	40	36	38	33	30	30	27	24	22	20	19	16																				
7	58	47	39	34	52	42	36	32	35	30	27	27	24	22	20	18	17	14																				
8	54	42	35	31	48	39	33	28	32	27	24	25	22	20	19	17	16	13																				
9	50	39	32	27	45	36	30	26	29	25	22	23	20	18	18	16	14	12																				
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	16	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19706	19706	19706
5°	19390	19342	19485
10°	18142	18384	18897
15°	16493	17016	17964
20°	14640	15401	16750
25°	12749	13759	15390
30°	10921	12120	14102
35°	9054	10289	12546
40°	6957	8226	10690
45°	5029	6229	8602
50°	3426	4642	6822
55°	2228	3357	5302
60°	1277	2364	3833
65°	338	1443	1941
70°	167	445	558
75°	75	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8602 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.9	2.1
10°-20°	498.5	5.4
20°-30°	624.1	6.8
30°-40°	576.4	6.3
40°-50°	387.3	4.2
50°-60°	200.1	2.2
60°-70°	62.7	0.7
70°-80°	3.9	0.0
80°-90°	0.1	0.0
90°-100°	485.5	5.3
100°-110°	1381.5	15.1
110°-120°	1323.6	14.4
120°-130°	1047.6	11.4
130°-140°	840.8	9.2
140°-150°	658.3	7.2
150°-160°	481.7	5.3
160°-170°	298.3	3.3
170°-180°	101.2	1.1
0°-30°	1317.5	14.4
0°-40°	1893.9	20.7
0°-60°	2481.3	27.1
0°-90°	2547.9	27.8
90°-120°	3190.6	34.8
90°-150°	5737.2	62.6
90°-180°	6618.0	72.2
0°-180°	9166.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2136	2136	2136	2136	2136	
5°	2094	2072	2088	2096	2104	194
15°	1727	1721	1782	1841	1881	481
25°	1252	1262	1352	1444	1512	574
35°	804	824	914	1021	1114	498
45°	385	409	477	570	659	303
55°	138	162	209	268	330	129
65°	16	30	66	80	89	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2135.9	2135.9	2135.9	2135.9	2135.9
2.5°	2140.9	2120.7	2126.0	2125.9	2120.2
5°	2093.6	2072.3	2088.4	2095.8	2103.9
7.5°	2005.1	1988.5	2019.4	2042.5	2059.2
10°	1936.5	1922.3	1962.3	1993.8	2017.1
12.5°	1857.1	1846.2	1894.5	1937.8	1967.5
15°	1726.7	1720.7	1781.5	1841.3	1880.7
17.5°	1587.0	1586.8	1656.2	1730.5	1778.0
20°	1491.1	1494.1	1568.6	1650.5	1706.0
22.5°	1395.2	1402.3	1481.8	1567.2	1630.8
25°	1252.4	1262.5	1351.6	1444.1	1511.8
27.5°	1115.2	1129.9	1223.7	1319.8	1402.2
30°	1025.1	1042.3	1137.7	1238.8	1323.7
32.5°	936.6	957.0	1050.1	1157.0	1243.5
35°	803.9	824.1	913.5	1021.0	1113.9
37.5°	666.9	686.7	774.0	879.8	980.2
40°	577.6	599.9	683.0	785.6	887.6
42.5°	496.6	518.9	597.1	697.8	794.2
45°	385.4	408.7	477.4	570.4	659.3
47.5°	293.3	318.5	378.8	462.9	544.0
50°	238.7	264.0	323.4	397.5	475.3
52.5°	194.9	219.3	273.0	342.8	414.2
55°	138.5	161.7	208.7	268.0	329.6
57.5°	95.7	115.7	157.9	207.4	255.6
60°	69.2	88.4	128.1	168.3	207.7
62.5°	46.1	63.7	102.5	133.3	159.8
65°	15.5	29.6	66.1	79.8	88.9
67.5°	7.9	9.5	34.7	36.6	39.7
70°	6.2	6.2	16.5	17.6	20.7
72.5°	4.5	4.5	6.6	8.5	9.1
75°	2.1	2.1	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)