

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: P521321

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521321
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9818.4 lumens
Efficiency: N/A
Efficacy: 105.7 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

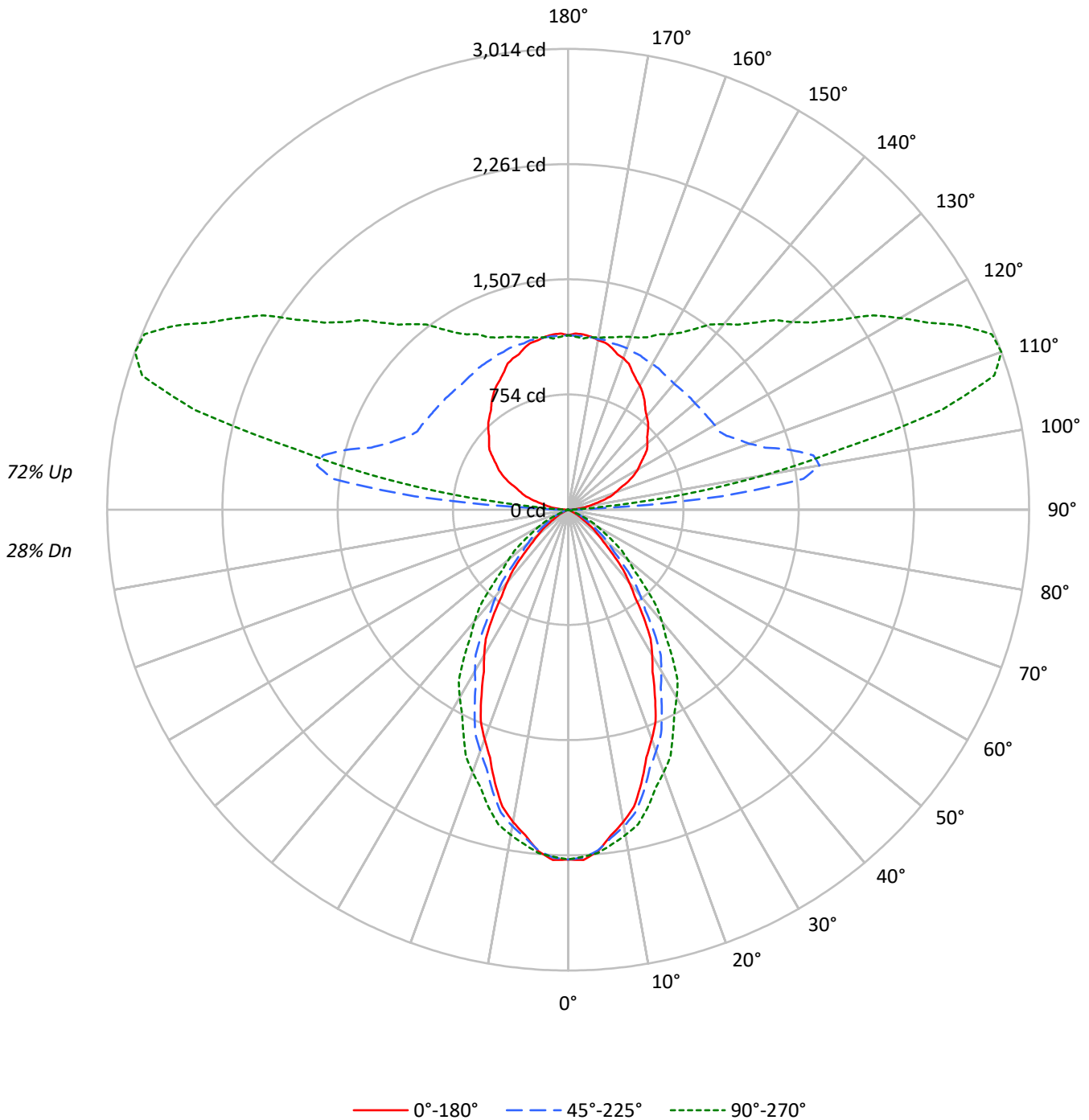
Input Watts (W): 92.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	21109	21109	21109
5°	20769	20717	20871
10°	19432	19692	20242
15°	17666	18226	19242
20°	15682	16497	17942
25°	13656	14739	16484
30°	11698	12982	15106
35°	9699	11021	13439
40°	7452	8811	11451
45°	5387	6673	9214
50°	3670	4972	7307
55°	2385	3597	5680
60°	1369	2532	4106
65°	362	1546	2078
70°	178	477	596
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	2.1
10°-20°	533.9	5.4
20°-30°	668.4	6.8
30°-40°	617.4	6.3
40°-50°	414.9	4.2
50°-60°	214.3	2.2
60°-70°	67.1	0.7
70°-80°	4.2	0.0
80°-90°	0.1	0.0
90°-100°	520.1	5.3
100°-110°	1479.7	15.1
110°-120°	1417.7	14.4
120°-130°	1122.1	11.4
130°-140°	900.6	9.2
140°-150°	705.1	7.2
150°-160°	515.9	5.3
160°-170°	319.6	3.3
170°-180°	108.4	1.1
0°-30°	1411.2	14.4
0°-40°	2028.6	20.7
0°-60°	2657.8	27.1
0°-90°	2729.2	27.8
90°-120°	3417.5	34.8
90°-150°	6145.3	62.6
90°-180°	7089.0	72.2
0°-180°	9818.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2288	2288	2288	2288	2288	
5°	2242	2220	2237	2245	2254	208
15°	1850	1843	1908	1972	2014	515
25°	1342	1352	1448	1547	1619	615
35°	861	883	978	1094	1193	533
45°	413	438	511	611	706	324
55°	148	173	224	287	353	138
65°	17	32	71	85	95	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2287.9	2287.9	2287.9	2287.9	2287.9
2.5°	2293.2	2271.5	2277.2	2277.1	2271.0
5°	2242.5	2219.7	2236.9	2244.9	2253.5
7.5°	2147.7	2130.0	2163.0	2187.8	2205.7
10°	2074.2	2059.1	2101.9	2135.7	2160.6
12.5°	1989.2	1977.5	2029.3	2075.6	2107.4
15°	1849.5	1843.0	1908.2	1972.3	2014.5
17.5°	1699.9	1699.7	1774.1	1853.6	1904.4
20°	1597.2	1600.4	1680.2	1767.9	1827.4
22.5°	1494.5	1502.0	1587.2	1678.6	1746.8
25°	1341.5	1352.3	1447.8	1546.8	1619.3
27.5°	1194.5	1210.3	1310.7	1413.7	1502.0
30°	1098.0	1116.4	1218.6	1327.0	1417.9
32.5°	1003.2	1025.1	1124.8	1239.3	1332.0
35°	861.1	882.8	978.5	1093.6	1193.2
37.5°	714.4	735.6	829.0	942.4	1050.0
40°	618.7	642.5	731.6	841.5	950.8
42.5°	532.0	555.8	639.5	747.5	850.7
45°	412.9	437.7	511.4	610.9	706.2
47.5°	314.1	341.2	405.8	495.8	582.6
50°	255.7	282.7	346.4	425.8	509.1
52.5°	208.8	234.9	292.4	367.2	443.6
55°	148.3	173.2	223.6	287.1	353.1
57.5°	102.5	123.9	169.1	222.1	273.8
60°	74.2	94.7	137.2	180.3	222.5
62.5°	49.4	68.2	109.8	142.8	171.1
65°	16.6	31.8	70.8	85.4	95.2
67.5°	8.4	10.1	37.2	39.3	42.5
70°	6.6	6.6	17.7	18.9	22.1
72.5°	4.9	4.9	7.1	9.1	9.7
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)