

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: P522021

Luminaire Tested: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522021
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8747.6 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

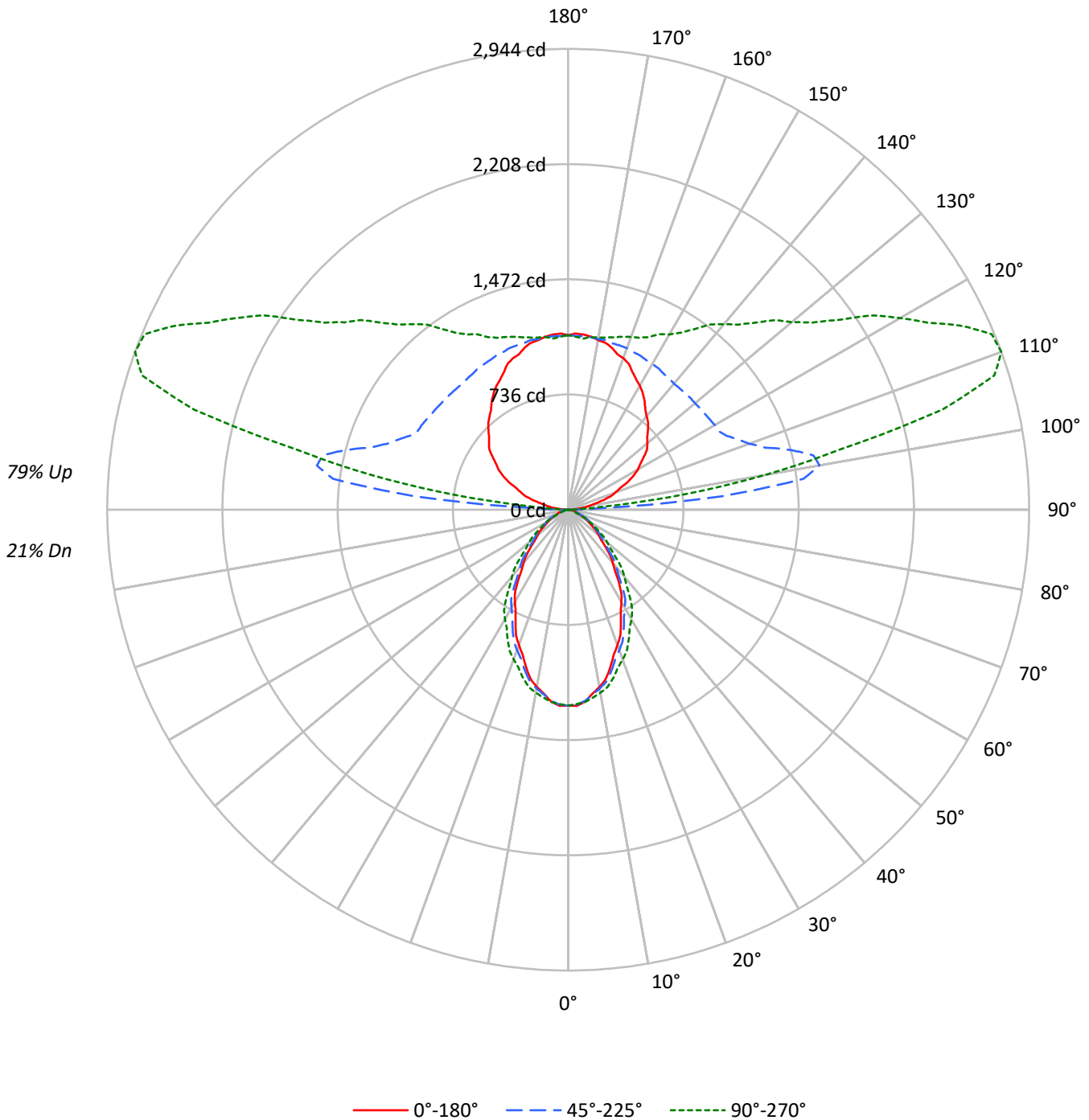
Input Watts (W): 71.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P522021

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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	100	100	100	100	89	89	89	89	67	67	67	47	47	47	29	29	29	21																				
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	19																				
2	84	77	72	67	74	69	64	60	53	50	47	38	36	34	24	23	22	16																				
3	77	68	62	56	68	61	55	51	47	43	40	34	31	30	22	21	20	14																				
4	70	61	53	48	62	54	48	43	42	38	34	30	28	26	20	18	17	13																				
5	65	54	47	41	57	48	42	37	37	33	30	27	25	23	18	17	15	12																				
6	60	48	41	36	53	43	37	32	34	29	26	25	22	20	17	15	14	10																				
7	55	44	36	31	49	39	33	29	31	26	23	23	20	18	15	14	12	9																				
8	51	40	33	28	45	36	30	25	28	24	21	21	18	16	14	12	11	9																				
9	48	36	29	25	42	33	27	22	26	21	18	19	16	14	13	11	10	8																				
10	44	33	26	22	39	30	24	20	24	19	17	18	15	13	12	11	9	7																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11546	11546	11546
5°	11402	11361	11427
10°	10772	10870	11122
15°	9944	10175	10631
20°	9031	9370	9990
25°	8100	8541	9308
30°	7242	7716	8600
35°	6333	6791	7761
40°	5331	5753	6719
45°	4400	4779	5611
50°	3673	4003	4673
55°	3117	3436	3860
60°	2665	2978	3080
65°	2122	2506	1991
70°	1880	1956	1214
75°	1743	1586	745
80°	1605	1461	643
85°	1450	1334	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5611 cd/sqm

TEST NUMBER: P522021

CATALOG NUMBER: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	1.3
10°-20°	298.6	3.4
20°-30°	386.7	4.4
30°-40°	378.7	4.3
40°-50°	289.9	3.3
50°-60°	193.2	2.2
60°-70°	105.4	1.2
70°-80°	43.9	0.5
80°-90°	12.4	0.1
90°-100°	507.9	5.8
100°-110°	1445.2	16.5
110°-120°	1384.7	15.8
120°-130°	1095.9	12.5
130°-140°	879.7	10.1
140°-150°	688.7	7.9
150°-160°	503.9	5.8
160°-170°	312.1	3.6
170°-180°	105.9	1.2
0°-30°	800.1	9.1
0°-40°	1178.8	13.5
0°-60°	1661.8	19.0
0°-90°	1823.5	20.8
90°-120°	3337.9	38.2
90°-150°	6002.1	68.6
90°-180°	6924.0	79.2
0°-180°	8747.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1231	1219	1227	1230	1234	115
15°	1041	1037	1065	1094	1113	291
25°	796	798	839	876	914	366
35°	562	565	603	644	689	350
45°	337	344	366	394	430	263
55°	194	202	214	222	240	176
65°	97	105	115	100	91	101
75°	49	49	44	30	21	52
85°	14	14	13	8	5	15
90°	0	0	0	0	0	3
95°	55	219	983	340	210	63
105°	225	341	1473	2602	2473	238
115°	418	504	1117	2366	2778	411
125°	589	653	1066	1769	2115	527
135°	720	781	1053	1494	1689	556
145°	850	893	1062	1293	1409	531
155°	971	993	1087	1169	1216	449
165°	1072	1076	1100	1124	1140	302
175°	1123	1117	1113	1106	1098	106
180°	1115	1115	1115	1115	1115	

TEST NUMBER: P522021

CATALOG NUMBER: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1251.4	1251.4	1251.4	1251.4	1251.4
2.5°	1254.5	1243.3	1246.1	1246.1	1242.6
5°	1231.1	1218.8	1226.7	1229.5	1233.8
7.5°	1185.4	1176.1	1190.6	1201.3	1210.0
10°	1149.8	1141.8	1160.3	1175.9	1187.2
12.5°	1108.5	1101.8	1124.7	1145.7	1160.4
15°	1041.1	1037.3	1065.3	1094.2	1113.0
17.5°	969.0	967.1	999.2	1033.0	1057.0
20°	919.8	919.2	954.3	989.6	1017.5
22.5°	870.1	871.3	908.2	944.9	976.6
25°	795.7	797.8	839.0	875.6	914.3
27.5°	726.8	727.8	770.4	809.0	850.2
30°	679.8	682.5	724.3	764.2	807.2
32.5°	632.8	635.9	676.8	718.1	761.9
35°	562.3	565.0	602.9	643.5	689.1
37.5°	489.6	493.2	526.9	565.3	610.2
40°	442.6	447.9	477.7	513.9	557.9
42.5°	397.3	404.0	431.6	465.9	505.6
45°	337.2	343.6	366.3	394.0	430.0
47.5°	285.3	292.7	310.1	334.0	364.7
50°	255.9	262.9	278.9	296.6	325.6
52.5°	230.0	236.9	251.3	264.9	289.6
55°	193.8	201.9	213.6	221.7	240.0
57.5°	164.2	171.9	181.2	184.9	195.9
60°	144.4	153.0	161.4	161.0	166.9
62.5°	126.4	133.7	142.1	136.3	136.6
65°	97.2	105.2	114.8	100.3	91.2
67.5°	78.5	80.2	90.1	69.9	59.1
70°	69.7	69.7	72.5	54.2	45.0
72.5°	61.4	61.4	58.9	44.0	34.5
75°	48.9	48.9	44.5	30.5	20.9
77.5°	37.7	37.2	34.0	22.8	15.2
80°	30.2	30.2	27.5	18.0	12.1
82.5°	23.6	23.6	21.3	14.1	9.0
85°	13.7	13.7	12.6	8.2	4.9
87.5°	4.8	4.8	4.4	2.6	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.0	89.9	208.5	60.7	45.8
95°	55.1	218.8	983.3	340.3	209.8
97.5°	101.3	256.3	1514.4	1083.6	742.6
100°	133.5	278.6	1629.6	1650.7	1271.5
102.5°	169.1	302.6	1604.2	2112.9	1781.8
105°	224.6	340.7	1472.8	2601.5	2473.1
107.5°	281.0	385.0	1319.4	2739.3	2853.7
110°	320.0	417.4	1231.2	2686.6	2943.5

TEST NUMBER: P522021

CATALOG NUMBER: SQ4-WB-150U-050D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.3	449.7	1171.9	2561.9	2928.3
115°	417.5	504.5	1116.8	2365.9	2778.2
117.5°	470.5	552.1	1084.2	2151.6	2588.3
120°	512.8	581.2	1080.8	2029.1	2447.6
122.5°	546.7	615.1	1072.3	1921.6	2310.3
125°	589.1	653.4	1065.9	1768.9	2114.9
127.5°	635.3	695.4	1062.5	1677.6	1962.8
130°	659.1	719.1	1057.5	1614.1	1862.7
132.5°	684.5	742.9	1057.5	1564.5	1793.2
135°	720.5	780.6	1053.2	1494.2	1689.0
137.5°	754.4	812.9	1052.8	1434.7	1602.9
140°	779.9	839.9	1051.1	1385.4	1547.0
142.5°	808.7	858.8	1056.2	1346.0	1491.0
145°	849.8	893.3	1061.7	1293.2	1409.2
147.5°	885.0	927.2	1071.0	1239.9	1340.2
150°	915.5	944.5	1074.4	1222.2	1292.7
152.5°	939.2	969.9	1077.8	1198.4	1263.9
155°	970.6	993.4	1087.1	1168.7	1216.4
157.5°	1009.6	1023.2	1089.2	1155.3	1189.3
160°	1029.9	1040.3	1097.7	1145.0	1174.0
162.5°	1041.8	1053.8	1099.4	1136.4	1158.8
165°	1072.3	1076.4	1099.8	1123.5	1140.1
167.5°	1093.1	1089.3	1109.6	1120.3	1127.0
170°	1099.8	1097.8	1106.2	1108.5	1116.8
172.5°	1115.1	1108.1	1111.3	1105.1	1111.7
175°	1123.2	1116.9	1112.6	1106.0	1097.7
177.5°	1126.5	1116.6	1111.3	1104.5	1106.2
180°	1114.7	1114.7	1114.7	1114.7	1114.7

(END OF REPORT)