

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: P522042

Luminaire Tested: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522042
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-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9615.3 lumens
Efficiency: N/A
Efficacy: 103.1 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

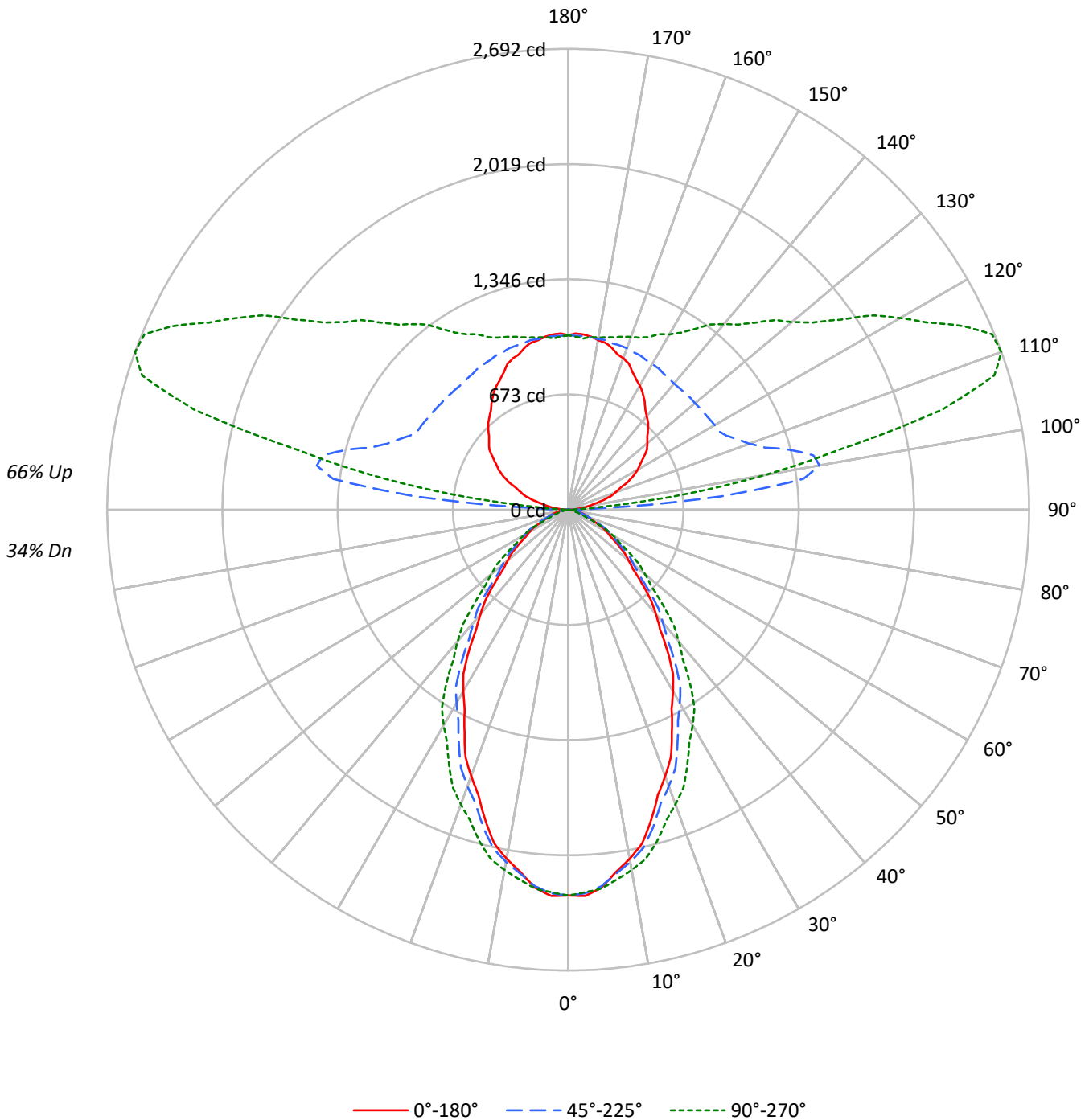
Input Watts (W): 93.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P522042

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P522042

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_2700K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0	
RCR																						
0	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34				
1	95	91	88	84	86	82	80	77	66	64	63	52	50	49	38	37	37	30				
2	87	80	75	70	79	73	68	64	59	56	53	46	44	42	34	33	32	27				
3	80	71	65	59	72	65	59	55	53	49	46	42	39	37	31	30	28	24				
4	74	64	56	51	66	58	52	47	47	43	40	38	35	32	28	27	25	21				
5	68	57	50	44	61	52	46	41	43	38	35	34	31	28	26	24	22	19				
6	63	51	44	39	57	47	41	36	39	34	31	31	28	25	24	22	20	17				
7	58	47	39	34	53	43	36	32	35	31	27	29	25	23	22	20	18	15				
8	54	43	35	30	49	39	33	28	32	28	24	26	23	20	20	18	17	14				
9	50	39	32	27	46	36	30	25	30	25	22	24	21	19	19	17	15	13				
10	47	36	29	25	43	33	27	23	28	23	20	23	19	17	18	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20788	20788	20788
5°	20528	20455	20574
10°	19395	19571	20024
15°	17905	18320	19142
20°	16259	16871	17986
25°	14583	15378	16757
30°	13039	13892	15483
35°	11403	12226	13974
40°	9597	10359	12098
45°	7920	8604	10100
50°	6613	7208	8415
55°	5614	6186	6949
60°	4798	5364	5545
65°	3820	4510	3582
70°	3388	3520	2188
75°	3137	2855	1340
80°	2890	2625	1158
85°	2615	2403	942

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10100 cd/sqm

TEST NUMBER: P522042

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	2.1
10°-20°	537.5	5.6
20°-30°	696.3	7.2
30°-40°	681.8	7.1
40°-50°	521.9	5.4
50°-60°	347.8	3.6
60°-70°	189.8	2.0
70°-80°	79.1	0.8
80°-90°	22.4	0.2
90°-100°	464.5	4.8
100°-110°	1321.7	13.7
110°-120°	1266.3	13.2
120°-130°	1002.2	10.4
130°-140°	804.5	8.4
140°-150°	629.8	6.5
150°-160°	460.8	4.8
160°-170°	285.4	3.0
170°-180°	96.9	1.0
0°-30°	1440.5	15.0
0°-40°	2122.3	22.1
0°-60°	2992.0	31.1
0°-90°	3283.2	34.1
90°-120°	3052.5	31.7
90°-150°	5489.0	57.1
90°-180°	6332.0	65.9
0°-180°	9615.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2253	2253	2253	2253	2253	
5°	2216	2194	2209	2214	2222	206
15°	1874	1868	1918	1970	2004	523
25°	1432	1436	1511	1576	1646	659
35°	1012	1017	1086	1159	1241	629
45°	607	619	659	709	774	473
55°	349	364	385	399	432	316
65°	175	190	207	180	164	182
75°	88	88	80	55	38	94
85°	25	25	23	15	9	27
90°	0	0	0	0	0	3
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

TEST NUMBER: P522042

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2253.1	2253.1	2253.1	2253.1	2253.1
2.5°	2258.6	2238.5	2243.6	2243.5	2237.3
5°	2216.5	2194.3	2208.6	2213.7	2221.5
7.5°	2134.3	2117.5	2143.6	2162.9	2178.6
10°	2070.2	2055.7	2089.0	2117.1	2137.4
12.5°	1995.9	1983.7	2024.9	2062.7	2089.2
15°	1874.5	1867.7	1918.0	1970.1	2004.0
17.5°	1744.6	1741.3	1798.9	1859.8	1903.1
20°	1656.0	1655.0	1718.3	1781.7	1831.9
22.5°	1566.6	1568.7	1635.2	1701.2	1758.4
25°	1432.5	1436.4	1510.6	1576.5	1646.1
27.5°	1308.6	1310.3	1387.1	1456.6	1530.8
30°	1223.9	1228.8	1304.0	1376.0	1453.3
32.5°	1139.3	1144.9	1218.6	1293.0	1371.8
35°	1012.4	1017.2	1085.5	1158.6	1240.7
37.5°	881.5	888.0	948.7	1017.8	1098.6
40°	796.8	806.5	860.1	925.2	1004.5
42.5°	715.4	727.4	777.1	838.8	910.3
45°	607.0	618.6	659.4	709.3	774.1
47.5°	513.7	527.0	558.4	601.4	656.7
50°	460.7	473.3	502.2	534.1	586.3
52.5°	414.0	426.6	452.4	476.9	521.4
55°	349.0	363.5	384.6	399.2	432.0
57.5°	295.6	309.5	326.3	332.8	352.7
60°	260.0	275.5	290.7	289.9	300.5
62.5°	227.6	240.7	255.9	245.4	246.0
65°	175.0	189.5	206.6	180.5	164.1
67.5°	141.4	144.5	162.1	125.9	106.4
70°	125.6	125.6	130.5	97.5	81.1
72.5°	110.5	110.5	106.0	79.3	62.1
75°	88.0	88.0	80.1	55.0	37.6
77.5°	67.8	67.0	61.3	41.0	27.3
80°	54.4	54.4	49.4	32.4	21.8
82.5°	42.5	42.5	38.4	25.3	16.2
85°	24.7	24.7	22.7	14.7	8.9
87.5°	8.7	8.7	7.9	4.7	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

TEST NUMBER: P522042

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)