

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: P522044

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P522044
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10050.1 lumens
Efficiency: N/A
Efficacy: 107.4 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

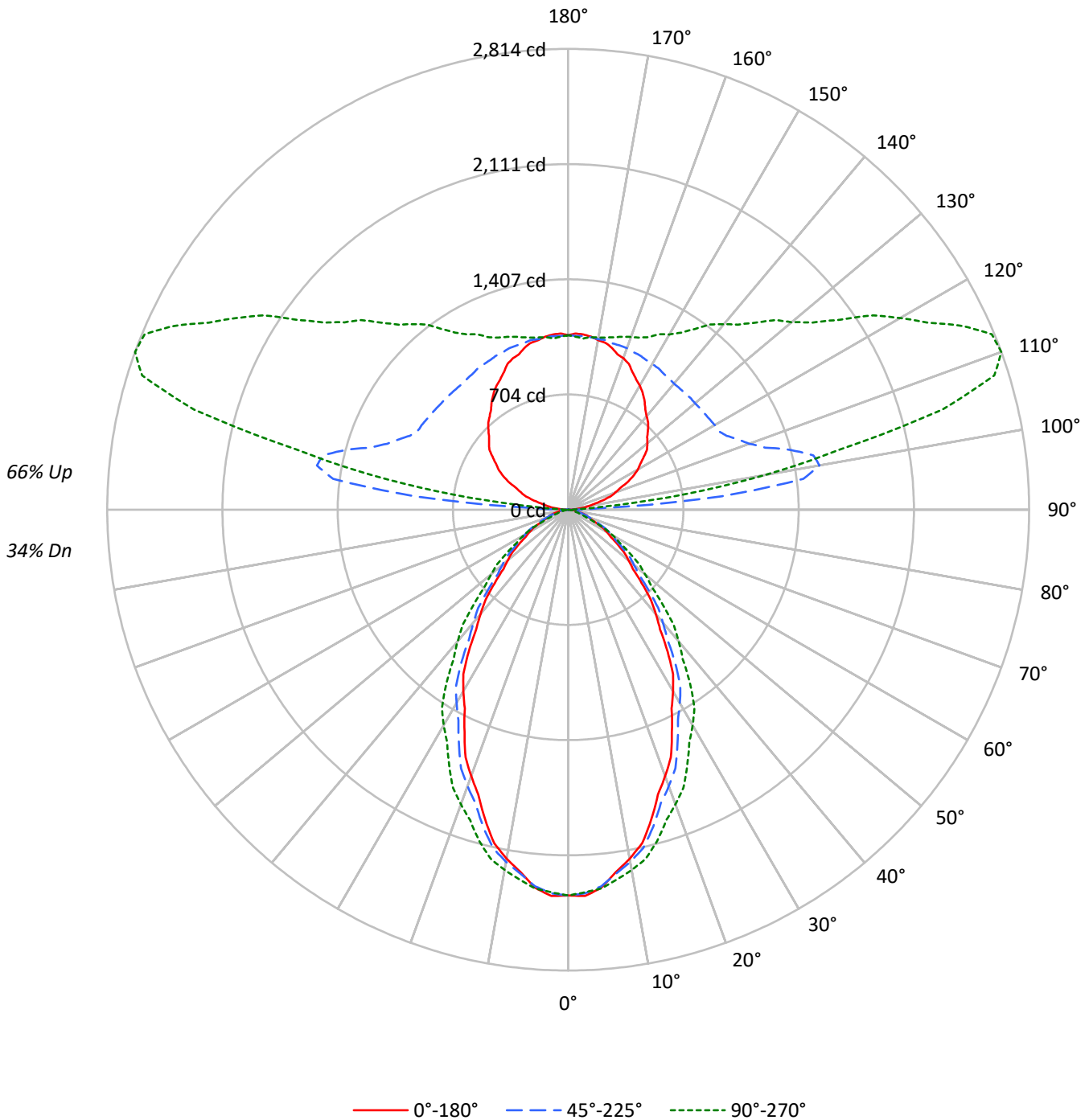
Input Watts (W): 93.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	21728	21728	21728
5°	21457	21380	21504
10°	20272	20456	20930
15°	18714	19148	20007
20°	16994	17633	18800
25°	15242	16073	17515
30°	13629	14521	16183
35°	11918	12779	14606
40°	10031	10828	12645
45°	8279	8993	10557
50°	6911	7534	8796
55°	5868	6466	7264
60°	5015	5606	5796
65°	3993	4716	3744
70°	3539	3679	2285
75°	3280	2984	1401
80°	3018	2747	1206
85°	2731	2519	984

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10557 cd/sqm

TEST NUMBER: P522044

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.0	2.1
10°-20°	561.8	5.6
20°-30°	727.8	7.2
30°-40°	712.7	7.1
40°-50°	545.5	5.4
50°-60°	363.5	3.6
60°-70°	198.4	2.0
70°-80°	82.7	0.8
80°-90°	23.4	0.2
90°-100°	485.5	4.8
100°-110°	1381.5	13.7
110°-120°	1323.6	13.2
120°-130°	1047.6	10.4
130°-140°	840.8	8.4
140°-150°	658.3	6.5
150°-160°	481.7	4.8
160°-170°	298.3	3.0
170°-180°	101.2	1.0
0°-30°	1505.6	15.0
0°-40°	2218.3	22.1
0°-60°	3127.2	31.1
0°-90°	3431.6	34.1
90°-120°	3190.6	31.7
90°-150°	5737.2	57.1
90°-180°	6618.0	65.8
0°-180°	10050.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2355	2355	2355	2355	2355	
5°	2317	2294	2308	2314	2322	216
15°	1959	1952	2005	2059	2095	547
25°	1497	1501	1579	1648	1720	689
35°	1058	1063	1135	1211	1297	658
45°	634	647	689	741	809	495
55°	365	380	402	417	452	331
65°	183	198	216	189	172	190
75°	92	92	84	58	39	98
85°	26	26	24	15	9	28
90°	0	0	0	0	0	3
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	

TEST NUMBER: P522044

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2355.0	2355.0	2355.0	2355.0	2355.0
2.5°	2360.8	2339.8	2345.1	2344.9	2338.5
5°	2316.8	2293.5	2308.5	2313.8	2321.9
7.5°	2230.8	2213.2	2240.5	2260.7	2277.1
10°	2163.8	2148.7	2183.5	2212.9	2234.1
12.5°	2086.1	2073.4	2116.5	2156.0	2183.7
15°	1959.2	1952.1	2004.7	2059.2	2094.6
17.5°	1823.4	1820.0	1880.3	1943.9	1989.2
20°	1730.8	1729.8	1795.9	1862.2	1914.8
22.5°	1637.4	1639.7	1709.1	1778.1	1837.9
25°	1497.3	1501.4	1578.9	1647.8	1720.5
27.5°	1367.7	1369.6	1449.8	1522.4	1600.0
30°	1279.3	1284.3	1363.0	1438.2	1519.0
32.5°	1190.8	1196.7	1273.7	1351.4	1433.9
35°	1058.1	1063.2	1134.6	1211.0	1296.8
37.5°	921.3	928.2	991.6	1063.8	1148.3
40°	832.9	843.0	899.0	967.0	1049.9
42.5°	747.7	760.3	812.2	876.7	951.5
45°	634.5	646.6	689.2	741.4	809.1
47.5°	536.9	550.9	583.6	628.6	686.3
50°	481.5	494.7	524.9	558.2	612.8
52.5°	432.8	445.9	472.9	498.5	545.0
55°	364.8	379.9	402.0	417.2	451.6
57.5°	309.0	323.5	341.0	347.9	368.7
60°	271.8	287.9	303.8	303.0	314.1
62.5°	237.9	251.6	267.4	256.5	257.1
65°	182.9	198.1	216.0	188.7	171.5
67.5°	147.8	151.0	169.5	131.6	111.2
70°	131.2	131.2	136.4	101.9	84.7
72.5°	115.5	115.5	110.8	82.9	64.9
75°	92.0	92.0	83.7	57.5	39.3
77.5°	70.9	70.1	64.1	42.9	28.5
80°	56.8	56.8	51.7	33.8	22.7
82.5°	44.4	44.4	40.1	26.4	16.9
85°	25.8	25.8	23.8	15.4	9.3
87.5°	9.1	9.1	8.3	4.9	4.1
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

TEST NUMBER: P522044

CATALOG NUMBER: SQ4-WB-150U-100D-92765-1D-UNV-STD-W-4_3500K

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)