

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: P521589

Luminaire Tested: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521589
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-39)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 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: 9570.1 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

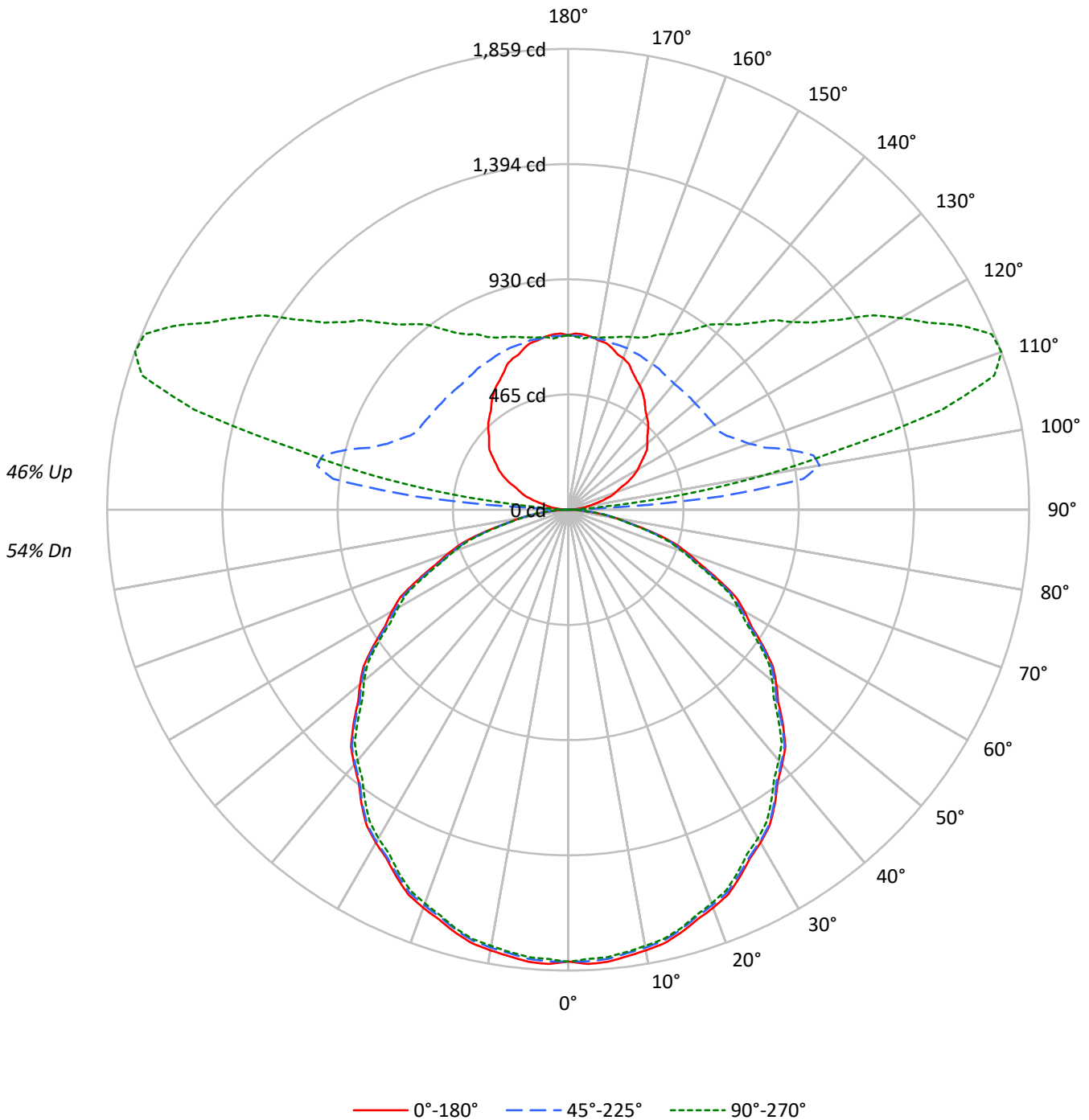
Input Watts (W): 88.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521589

CATALOG NUMBER: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P521589

CATALOG NUMBER: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54				
1	99	94	90	87	91	87	84	81	75	72	70	63	62	60	53	52	50	45				
2	90	82	76	70	83	76	71	66	65	61	58	56	52	50	46	44	42	38				
3	82	72	64	58	75	67	60	55	58	53	48	49	45	42	41	38	36	32				
4	75	64	55	49	69	59	52	47	51	45	41	43	39	36	36	33	31	27				
5	68	57	48	42	63	53	45	40	46	40	35	39	34	31	33	29	27	23				
6	63	51	42	36	58	47	40	35	41	35	31	35	30	27	30	26	23	20				
7	58	46	38	32	54	43	35	30	37	31	27	32	27	24	27	23	21	18				
8	54	41	34	28	50	39	32	27	34	28	24	29	25	21	25	21	18	16				
9	50	38	30	25	47	35	29	24	31	25	21	27	22	19	23	19	17	14				
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	21	18	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16819	16819	16819
5°	16958	16847	16782
10°	16910	16807	16742
15°	16859	16754	16706
20°	16780	16672	16593
25°	16654	16563	16451
30°	16524	16470	16300
35°	16354	16298	16095
40°	16163	16103	15910
45°	15984	15879	15631
50°	15731	15602	15416
55°	15442	15297	15056
60°	15149	14873	14614
65°	14561	14256	13972
70°	13838	13353	13191
75°	12512	12156	11942
80°	10308	10308	10148
85°	7304	8363	8786

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15984 cd/sqm

TEST NUMBER: P521589

CATALOG NUMBER: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	1.8
10°-20°	494.1	5.2
20°-30°	747.3	7.8
30°-40°	900.1	9.4
40°-50°	934.5	9.8
50°-60°	847.2	8.9
60°-70°	646.3	6.8
70°-80°	361.5	3.8
80°-90°	94.0	1.0
90°-100°	320.7	3.4
100°-110°	912.7	9.5
110°-120°	874.4	9.1
120°-130°	692.1	7.2
130°-140°	555.5	5.8
140°-150°	434.9	4.5
150°-160°	318.2	3.3
160°-170°	197.1	2.1
170°-180°	66.9	0.7
0°-30°	1414.0	14.8
0°-40°	2314.1	24.2
0°-60°	4095.8	42.8
0°-90°	5197.6	54.3
90°-120°	2107.9	22.0
90°-150°	3790.4	39.6
90°-180°	4373.0	45.7
0°-180°	9570.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1831	1812	1819	1814	1812	174
15°	1765	1747	1754	1752	1749	498
25°	1636	1619	1627	1615	1616	754
35°	1452	1440	1447	1431	1429	908
45°	1225	1218	1217	1202	1198	944
55°	960	958	951	939	936	858
65°	667	663	653	645	640	661
75°	351	345	341	336	335	371
85°	69	76	79	79	83	86
90°	0	0	0	0	0	4
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

TEST NUMBER: P521589

CATALOG NUMBER: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1823.0	1823.0	1823.0	1823.0	1823.0
2.5°	1834.2	1819.3	1823.8	1820.5	1814.2
5°	1831.0	1812.4	1819.0	1814.0	1812.0
7.5°	1817.0	1799.6	1805.2	1802.1	1799.8
10°	1805.0	1788.4	1794.0	1790.9	1787.0
12.5°	1791.4	1774.0	1780.4	1775.8	1774.2
15°	1765.0	1747.4	1754.0	1751.9	1749.0
17.5°	1733.0	1715.2	1722.0	1717.9	1715.6
20°	1709.0	1690.4	1698.0	1690.0	1690.0
22.5°	1681.8	1663.2	1672.4	1660.5	1662.8
25°	1636.0	1619.4	1627.0	1615.0	1616.0
27.5°	1586.2	1570.6	1580.4	1565.0	1564.4
30°	1551.0	1535.4	1546.0	1529.0	1530.0
32.5°	1511.8	1498.5	1507.6	1491.4	1490.8
35°	1452.0	1440.3	1447.0	1431.0	1429.0
37.5°	1386.8	1378.2	1381.0	1365.8	1365.0
40°	1342.0	1334.2	1337.0	1321.0	1321.0
42.5°	1296.4	1289.4	1291.4	1273.8	1273.8
45°	1225.0	1218.2	1217.0	1201.9	1198.0
47.5°	1148.8	1143.3	1139.8	1126.2	1124.4
50°	1096.0	1092.1	1087.0	1075.0	1074.0
52.5°	1040.8	1039.2	1033.4	1020.6	1019.6
55°	960.0	958.0	951.0	938.9	936.0
57.5°	875.4	873.4	865.2	853.3	850.4
60°	821.0	815.1	806.0	794.9	792.0
62.5°	761.8	755.2	746.0	735.8	735.2
65°	667.0	663.1	653.0	644.9	640.0
67.5°	577.8	569.0	559.0	552.4	551.4
70°	513.0	504.2	495.0	490.0	489.0
72.5°	448.2	441.0	432.6	427.6	427.4
75°	351.0	345.1	341.0	336.0	335.0
77.5°	254.8	253.2	251.6	246.2	246.2
80°	194.0	194.0	194.0	191.0	191.0
82.5°	139.6	143.5	143.6	142.2	142.2
85°	69.0	75.8	79.0	79.1	83.0
87.5°	19.2	26.2	31.2	32.1	34.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

TEST NUMBER: P521589

CATALOG NUMBER: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)