

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: P521485

Luminaire Tested: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521485
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-075U-125D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

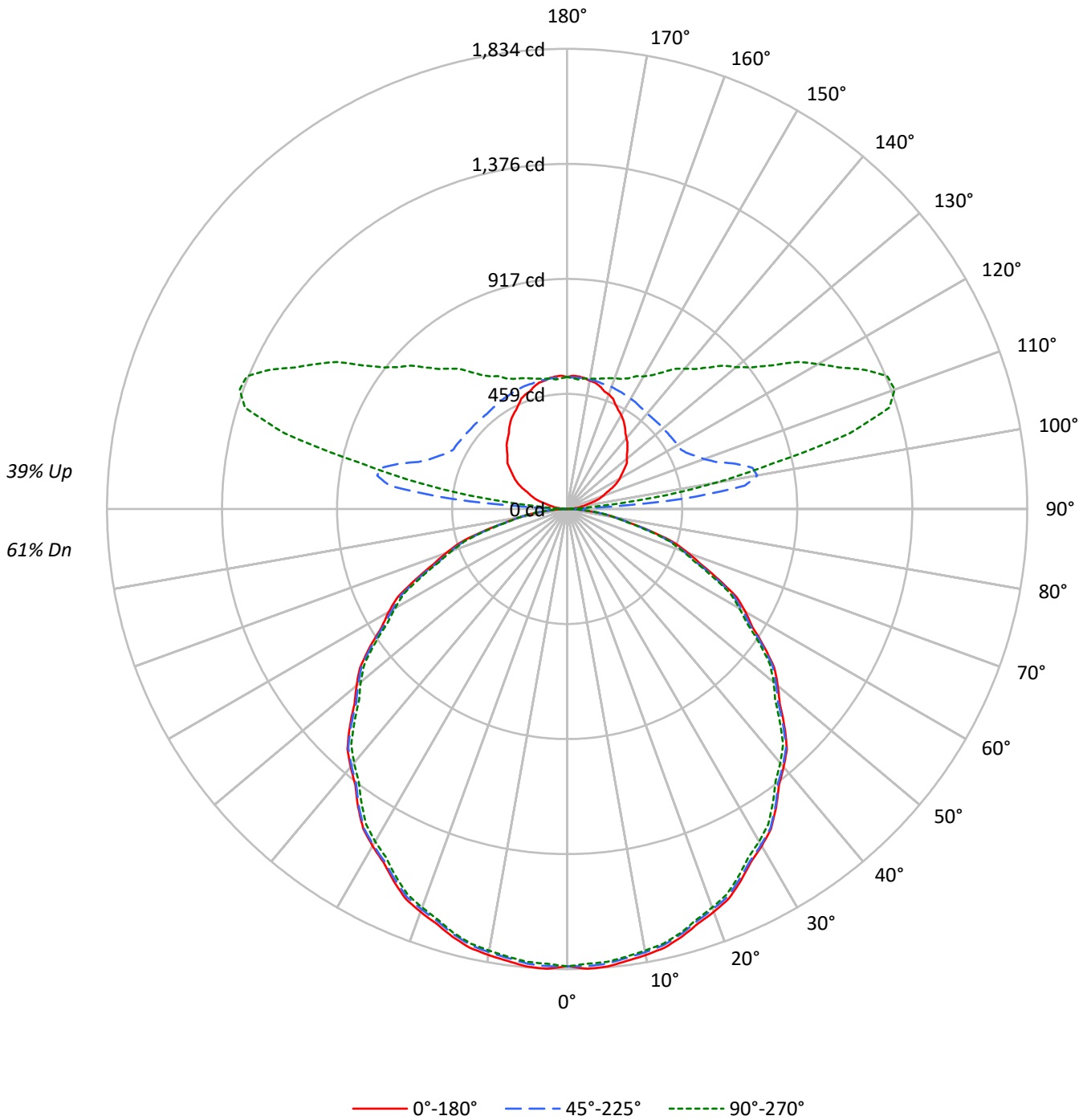
Lumens per Lamp: N/A
Luminaire Lumens: 8464.9 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 79.5
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61																				
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	59	57	56	51																				
2	91	83	77	72	85	78	73	68	69	64	60	60	56	53	51	49	47	43																				
3	83	73	65	59	77	69	62	56	60	55	51	52	48	45	45	42	40	36																				
4	76	65	56	50	71	61	53	48	53	48	43	47	42	38	40	37	34	31																				
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26																				
6	64	52	43	37	60	49	41	35	43	37	32	38	33	29	33	29	26	23																				
7	59	47	38	33	55	44	36	31	39	33	28	34	29	26	30	26	23	20																				
8	55	42	34	29	51	40	33	28	36	29	25	31	26	23	27	23	20	18																				
9	51	39	31	26	48	37	29	25	33	27	23	29	24	20	25	21	18	16																				
10	48	35	28	23	45	34	27	22	30	24	20	27	22	18	23	20	17	15																				

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

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CATALOG NUMBER: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	2.0
10°-20°	494.1	5.8
20°-30°	747.3	8.8
30°-40°	900.1	10.6
40°-50°	934.5	11.0
50°-60°	847.2	10.0
60°-70°	646.3	7.6
70°-80°	361.5	4.3
80°-90°	94.0	1.1
90°-100°	239.7	2.8
100°-110°	682.0	8.1
110°-120°	653.4	7.7
120°-130°	517.2	6.1
130°-140°	415.1	4.9
140°-150°	325.0	3.8
150°-160°	237.8	2.8
160°-170°	147.3	1.7
170°-180°	50.0	0.6
0°-30°	1414.0	16.7
0°-40°	2314.1	27.3
0°-60°	4095.8	48.4
0°-90°	5197.6	61.4
90°-120°	1575.1	18.6
90°-150°	2832.3	33.5
90°-180°	3267.0	38.6
0°-180°	8464.9	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°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

TEST NUMBER: P521485

CATALOG NUMBER: SQ4-F-075U-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°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

TEST NUMBER: P521485

CATALOG NUMBER: SQ4-F-075U-125D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)