

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: P521641

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521641
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-125U-125D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1250 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: 10689.4 lumens
Efficiency: N/A
Efficacy: 109.9 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

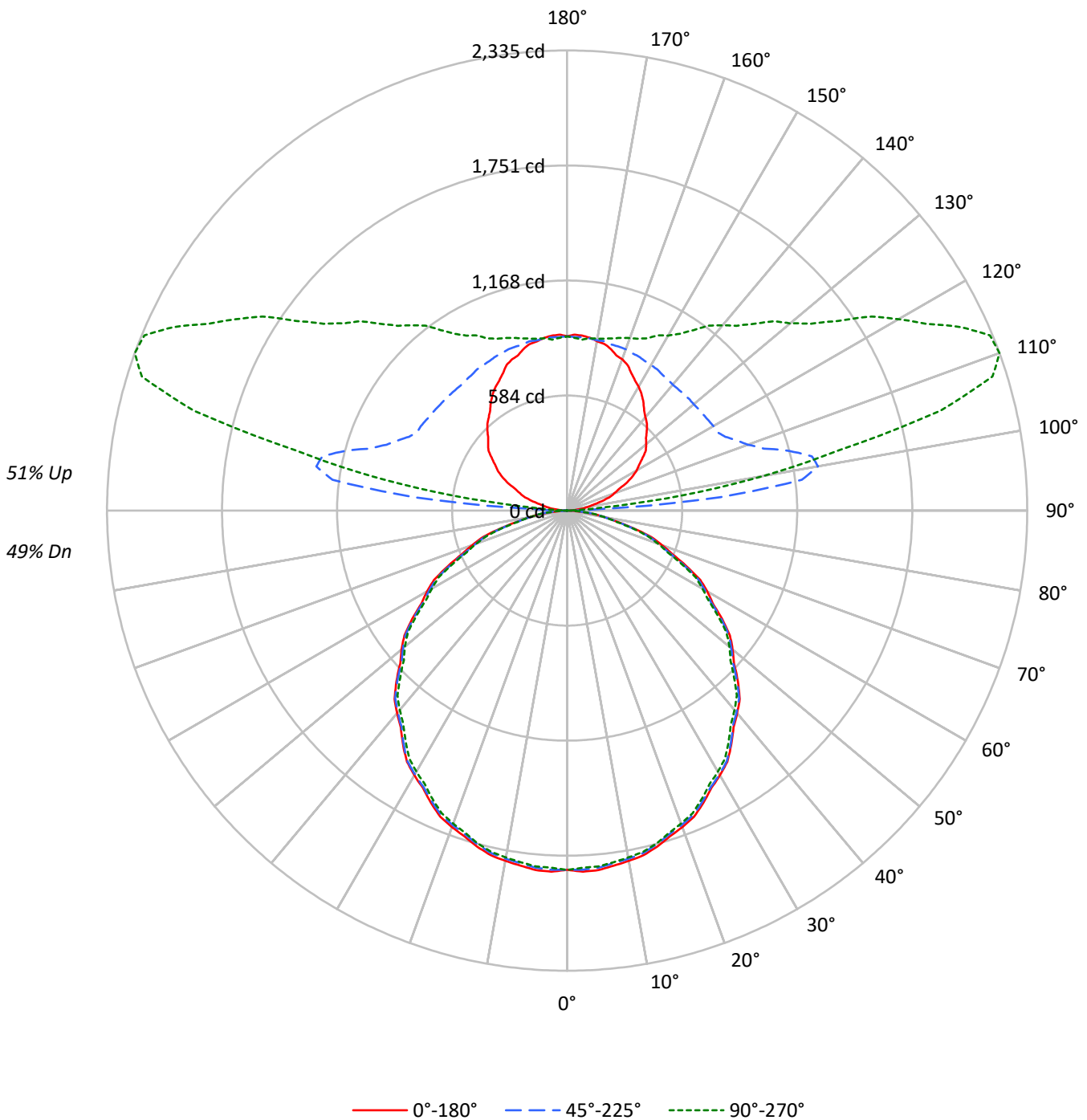
Input Watts (W): 97.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49																				
1	97	93	89	85	89	86	82	79	72	70	68	60	58	56	48	47	46	41																				
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	39	34																				
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	33	28																				
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28	24																				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21																				
6	62	50	42	36	57	46	39	34	39	34	29	33	29	25	27	24	21	18																				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16																				
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	23	19	17	14																				
9	50	37	30	25	46	35	28	23	30	24	20	25	21	18	21	18	15	13																				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12																				

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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.5	1.6
10°-20°	494.1	4.6
20°-30°	747.3	7.0
30°-40°	900.1	8.4
40°-50°	934.5	8.7
50°-60°	847.2	7.9
60°-70°	646.3	6.0
70°-80°	361.5	3.4
80°-90°	94.0	0.9
90°-100°	402.9	3.8
100°-110°	1146.3	10.7
110°-120°	1098.3	10.3
120°-130°	869.3	8.1
130°-140°	697.7	6.5
140°-150°	546.2	5.1
150°-160°	399.7	3.7
160°-170°	247.6	2.3
170°-180°	84.0	0.8
0°-30°	1414.0	13.2
0°-40°	2314.1	21.6
0°-60°	4095.8	38.3
0°-90°	5197.6	48.6
90°-120°	2647.5	24.8
90°-150°	4760.6	44.5
90°-180°	5492.0	51.4
0°-180°	10689.4	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°	44	174	780	270	166	50
105°	178	270	1168	2063	1962	188
115°	331	400	886	1876	2204	326
125°	467	518	846	1403	1678	418
135°	572	619	835	1185	1340	441
145°	674	708	842	1026	1118	421
155°	770	788	862	927	965	356
165°	850	854	872	891	904	239
175°	891	886	882	877	871	84
180°	884	884	884	884	884	

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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°	13.4	71.3	165.4	48.1	36.3
95°	43.7	173.5	779.9	269.9	166.4
97.5°	80.3	203.3	1201.1	859.5	589.0
100°	105.9	220.9	1292.6	1309.2	1008.5
102.5°	134.1	240.0	1272.4	1675.9	1413.2
105°	178.2	270.2	1168.2	2063.4	1961.5
107.5°	222.9	305.4	1046.5	2172.7	2263.4
110°	253.8	331.0	976.6	2130.9	2334.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	356.7	929.5	2032.0	2322.6
115°	331.1	400.1	885.8	1876.5	2203.6
117.5°	373.1	437.9	859.9	1706.5	2053.0
120°	406.8	461.0	857.2	1609.4	1941.3
122.5°	433.7	487.9	850.5	1524.1	1832.4
125°	467.3	518.2	845.5	1403.0	1677.5
127.5°	503.9	551.6	842.8	1330.6	1556.8
130°	522.7	570.4	838.7	1280.2	1477.4
132.5°	542.9	589.3	838.7	1240.9	1422.3
135°	571.5	619.1	835.4	1185.1	1339.6
137.5°	598.4	644.7	835.0	1137.9	1271.4
140°	618.5	666.2	833.7	1098.8	1227.0
142.5°	641.4	681.2	837.7	1067.6	1182.6
145°	674.0	708.5	842.1	1025.7	1117.7
147.5°	701.9	735.4	849.5	983.4	1063.0
150°	726.1	749.1	852.2	969.4	1025.3
152.5°	744.9	769.3	854.9	950.5	1002.4
155°	769.8	787.9	862.3	927.0	964.8
157.5°	800.7	811.6	863.9	916.3	943.3
160°	816.9	825.1	870.7	908.2	931.2
162.5°	826.3	835.8	872.0	901.3	919.1
165°	850.5	853.8	872.3	891.1	904.3
167.5°	867.0	864.0	880.1	888.6	893.9
170°	872.3	870.7	877.4	879.2	885.8
172.5°	884.4	878.9	881.4	876.5	881.8
175°	890.8	885.9	882.4	877.2	870.7
177.5°	893.5	885.6	881.4	876.1	877.4
180°	884.1	884.1	884.1	884.1	884.1

(END OF REPORT)