

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: P521644

Luminaire Tested: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521644
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11182.9 lumens
Efficiency: N/A
Efficacy: 115.2 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

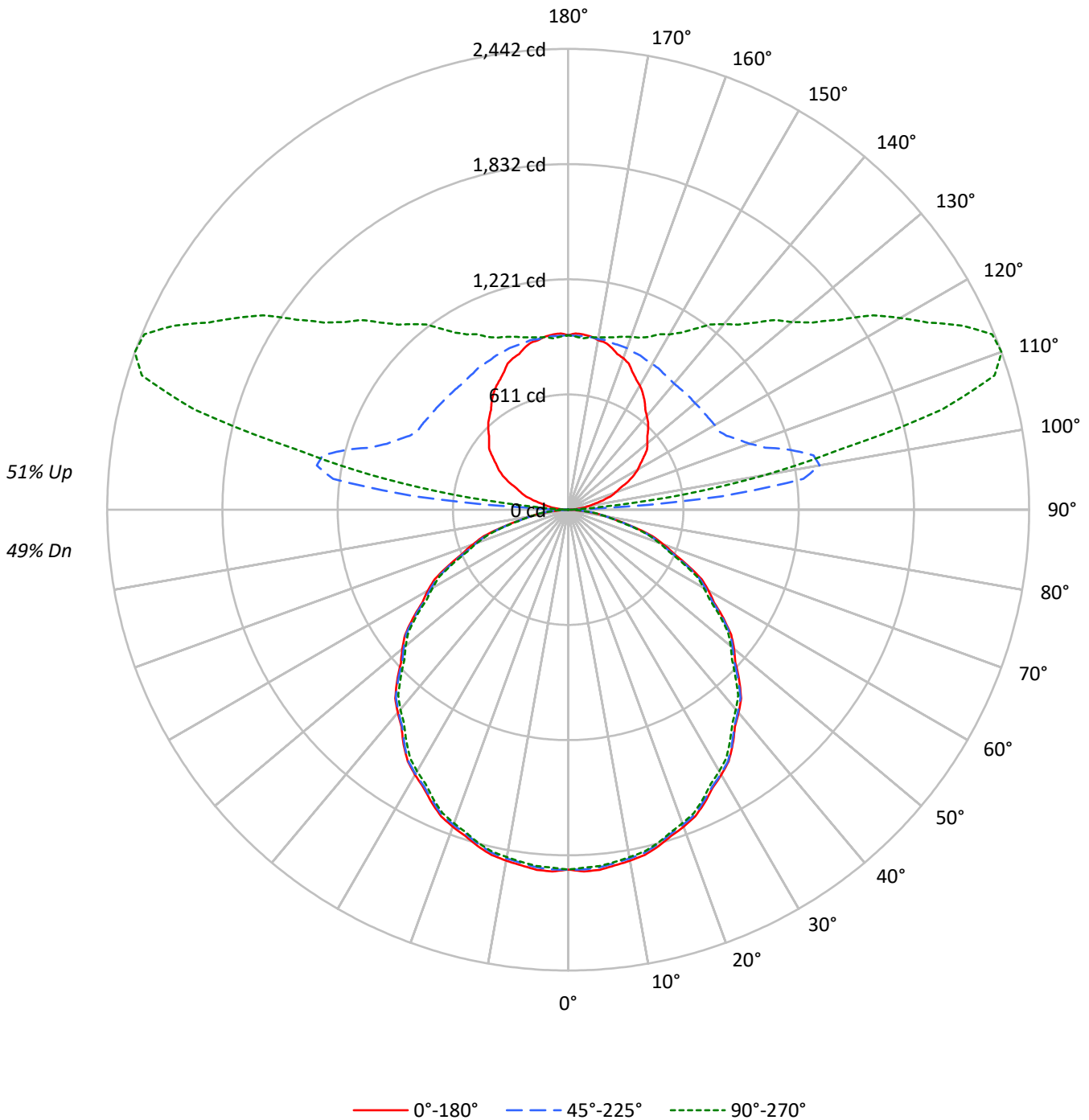
Input Watts (W): 97.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	17596	17596	17596
5°	17740	17625	17557
10°	17691	17583	17514
15°	17637	17527	17478
20°	17554	17441	17359
25°	17423	17327	17210
30°	17286	17231	17052
35°	17109	17050	16838
40°	16910	16846	16645
45°	16722	16612	16353
50°	16458	16323	16128
55°	16155	16003	15751
60°	15849	15559	15290
65°	15234	14913	14616
70°	14478	13971	13801
75°	13090	12715	12494
80°	10786	10786	10616
85°	7643	8744	9189

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16722 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	1.6
10°-20°	516.9	4.6
20°-30°	781.8	7.0
30°-40°	941.7	8.4
40°-50°	977.7	8.7
50°-60°	886.3	7.9
60°-70°	676.1	6.0
70°-80°	378.2	3.4
80°-90°	98.3	0.9
90°-100°	421.5	3.8
100°-110°	1199.2	10.7
110°-120°	1149.0	10.3
120°-130°	909.4	8.1
130°-140°	729.9	6.5
140°-150°	571.4	5.1
150°-160°	418.1	3.7
160°-170°	259.0	2.3
170°-180°	87.9	0.8
0°-30°	1479.2	13.2
0°-40°	2420.9	21.6
0°-60°	4284.9	38.3
0°-90°	5437.5	48.6
90°-120°	2769.7	24.8
90°-150°	4980.4	44.5
90°-180°	5745.0	51.4
0°-180°	11182.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1907	1907	1907	1907	1907	
5°	1916	1896	1903	1898	1896	182
15°	1846	1828	1835	1833	1830	521
25°	1712	1694	1702	1690	1691	789
35°	1519	1507	1514	1497	1495	950
45°	1282	1274	1273	1257	1253	987
55°	1004	1002	995	982	979	897
65°	698	694	683	675	670	692
75°	367	361	357	352	350	388
85°	72	79	83	83	87	90
90°	0	0	0	0	0	5
95°	46	182	816	282	174	52
105°	186	283	1222	2159	2052	197
115°	346	419	927	1963	2305	341
125°	489	542	884	1468	1755	438
135°	598	648	874	1240	1402	461
145°	705	741	881	1073	1169	440
155°	805	824	902	970	1009	372
165°	890	893	913	932	946	250
175°	932	927	923	918	911	88
180°	925	925	925	925	925	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1907.2	1907.2	1907.2	1907.2	1907.2
2.5°	1918.9	1903.3	1908.0	1904.5	1898.0
5°	1915.5	1896.1	1903.0	1897.7	1895.7
7.5°	1900.9	1882.7	1888.5	1885.4	1882.9
10°	1888.3	1870.9	1876.8	1873.6	1869.5
12.5°	1874.1	1855.9	1862.6	1857.8	1856.1
15°	1846.5	1828.1	1835.0	1832.8	1829.8
17.5°	1813.0	1794.4	1801.5	1797.3	1794.8
20°	1787.9	1768.5	1776.4	1768.0	1768.0
22.5°	1759.4	1740.0	1749.6	1737.1	1739.6
25°	1711.5	1694.1	1702.1	1689.6	1690.6
27.5°	1659.4	1643.1	1653.4	1637.2	1636.6
30°	1622.6	1606.2	1617.4	1599.6	1600.6
32.5°	1581.6	1567.7	1577.2	1560.2	1559.6
35°	1519.0	1506.8	1513.8	1497.0	1495.0
37.5°	1450.8	1441.8	1444.8	1428.8	1428.0
40°	1404.0	1395.8	1398.7	1382.0	1382.0
42.5°	1356.3	1348.9	1351.0	1332.6	1332.6
45°	1281.6	1274.4	1273.2	1257.4	1253.3
47.5°	1201.8	1196.1	1192.4	1178.2	1176.3
50°	1146.6	1142.5	1137.2	1124.6	1123.6
52.5°	1088.9	1087.2	1081.1	1067.7	1066.7
55°	1004.3	1002.3	994.9	982.3	979.2
57.5°	915.8	913.8	905.1	892.7	889.7
60°	858.9	852.8	843.2	831.6	828.6
62.5°	797.0	790.0	780.4	769.8	769.1
65°	697.8	693.7	683.1	674.7	669.5
67.5°	604.5	595.3	584.8	577.9	576.9
70°	536.7	527.5	517.9	512.6	511.6
72.5°	468.9	461.3	452.6	447.3	447.1
75°	367.2	361.1	356.7	351.5	350.5
77.5°	266.6	264.9	263.2	257.6	257.6
80°	203.0	203.0	203.0	199.8	199.8
82.5°	146.0	150.1	150.2	148.8	148.8
85°	72.2	79.3	82.6	82.7	86.8
87.5°	20.1	27.5	32.6	33.5	36.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.1	74.6	173.0	50.4	38.0
95°	45.7	181.5	815.9	282.4	174.1
97.5°	84.1	212.7	1256.6	899.2	616.2
100°	110.8	231.1	1352.2	1369.7	1055.1
102.5°	140.3	251.0	1331.1	1753.2	1478.5
105°	186.4	282.7	1222.1	2158.7	2052.1
107.5°	233.2	319.5	1094.8	2273.0	2367.9
110°	265.5	346.3	1021.6	2229.2	2442.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	296.5	373.2	972.4	2125.8	2429.8
115°	346.4	418.6	926.7	1963.1	2305.3
117.5°	390.4	458.1	899.6	1785.3	2147.7
120°	425.5	482.3	896.8	1683.7	2031.0
122.5°	453.7	510.4	889.8	1594.5	1917.0
125°	488.8	542.1	884.5	1467.8	1754.9
127.5°	527.2	577.0	881.7	1392.1	1628.7
130°	546.9	596.7	877.5	1339.3	1545.7
132.5°	568.0	616.5	877.5	1298.2	1488.0
135°	597.9	647.7	873.9	1239.8	1401.5
137.5°	626.0	674.5	873.6	1190.5	1330.1
140°	647.1	697.0	872.2	1149.5	1283.6
142.5°	671.0	712.6	876.4	1116.9	1237.2
145°	705.1	741.2	881.0	1073.1	1169.4
147.5°	734.3	769.4	888.7	1028.8	1112.0
150°	759.6	783.7	891.5	1014.2	1072.6
152.5°	779.3	804.8	894.3	994.4	1048.7
155°	805.4	824.3	902.1	969.8	1009.3
157.5°	837.7	849.1	903.8	958.6	986.8
160°	854.6	863.2	910.9	950.1	974.2
162.5°	864.4	874.4	912.3	942.9	961.5
165°	889.8	893.2	912.6	932.3	946.0
167.5°	907.0	903.9	920.7	929.6	935.1
170°	912.6	910.9	917.9	919.8	926.7
172.5°	925.3	919.4	922.1	917.0	922.5
175°	932.0	926.8	923.2	917.7	910.9
177.5°	934.8	926.5	922.1	916.5	917.9
180°	924.9	924.9	924.9	924.9	924.9

(END OF REPORT)