

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: P521639

Luminaire Tested: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521639
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10227.0 lumens
Efficiency: N/A
Efficacy: 105.4 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

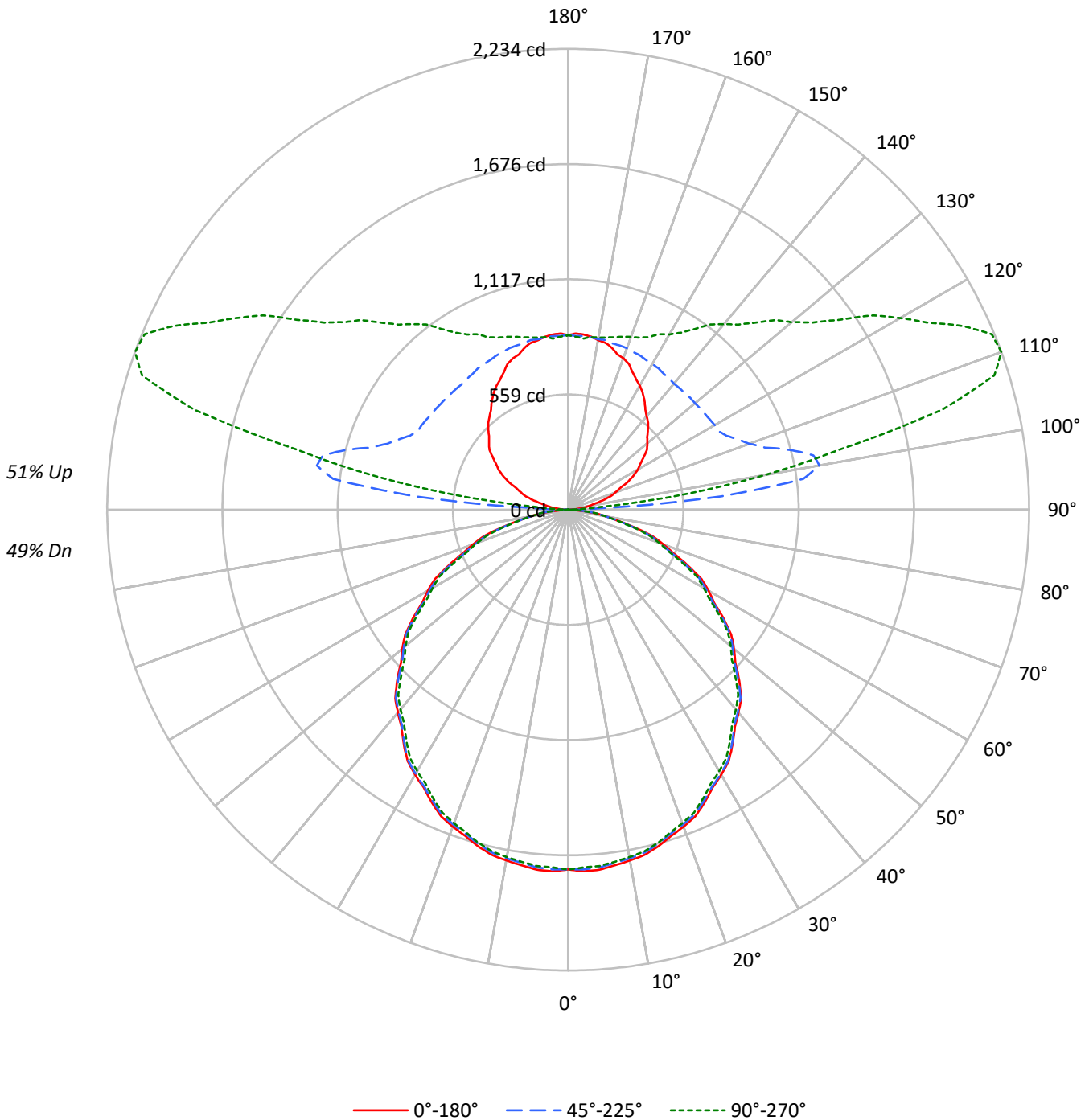
Input Watts (W): 97
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521639

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Luminous Intensity Polar Plot



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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	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°	16091	16091	16091
5°	16224	16118	16056
10°	16179	16080	16017
15°	16129	16029	15983
20°	16054	15950	15875
25°	15934	15846	15739
30°	15809	15758	15595
35°	15647	15593	15399
40°	15463	15407	15222
45°	15292	15193	14955
50°	15051	14928	14748
55°	14774	14636	14404
60°	14494	14229	13981
65°	13930	13640	13367
70°	13240	12776	12619
75°	11970	11628	11425
80°	9861	9861	9707
85°	6987	8003	8405

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15292 cd/sqm

TEST NUMBER: P521639

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.1	1.6
10°-20°	472.7	4.6
20°-30°	715.0	7.0
30°-40°	861.2	8.4
40°-50°	894.1	8.7
50°-60°	810.6	7.9
60°-70°	618.3	6.0
70°-80°	345.8	3.4
80°-90°	89.9	0.9
90°-100°	385.4	3.8
100°-110°	1096.7	10.7
110°-120°	1050.8	10.3
120°-130°	831.6	8.1
130°-140°	667.5	6.5
140°-150°	522.6	5.1
150°-160°	382.4	3.7
160°-170°	236.8	2.3
170°-180°	80.4	0.8
0°-30°	1352.8	13.2
0°-40°	2214.0	21.6
0°-60°	3918.6	38.3
0°-90°	4972.7	48.6
90°-120°	2532.9	24.8
90°-150°	4554.7	44.5
90°-180°	5254.0	51.4
0°-180°	10227.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1744	1744	1744	1744	1744	
5°	1752	1734	1740	1736	1734	166
15°	1689	1672	1678	1676	1673	476
25°	1565	1549	1557	1545	1546	721
35°	1389	1378	1384	1369	1367	868
45°	1172	1166	1164	1150	1146	903
55°	918	917	910	898	896	820
65°	638	634	625	617	612	633
75°	336	330	326	321	320	355
85°	66	73	76	76	79	82
90°	0	0	0	0	0	4
95°	42	166	746	258	159	48
105°	170	258	1118	1974	1877	180
115°	317	383	848	1795	2108	312
125°	447	496	809	1342	1605	400
135°	547	592	799	1134	1282	422
145°	645	678	806	981	1069	403
155°	736	754	825	887	923	340
165°	814	817	835	853	865	229
175°	852	848	844	839	833	81
180°	846	846	846	846	846	

TEST NUMBER: P521639

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1744.1	1744.1	1744.1	1744.1	1744.1
2.5°	1754.8	1740.6	1744.9	1741.7	1735.7
5°	1751.8	1734.0	1740.3	1735.5	1733.6
7.5°	1738.4	1721.7	1727.1	1724.2	1721.9
10°	1726.9	1711.0	1716.4	1713.4	1709.7
12.5°	1713.9	1697.2	1703.4	1698.9	1697.4
15°	1688.6	1671.8	1678.1	1676.1	1673.3
17.5°	1658.0	1641.0	1647.5	1643.6	1641.4
20°	1635.1	1617.3	1624.5	1616.9	1616.9
22.5°	1609.0	1591.3	1600.0	1588.6	1590.9
25°	1565.2	1549.3	1556.6	1545.2	1546.1
27.5°	1517.6	1502.6	1512.0	1497.3	1496.7
30°	1483.9	1468.9	1479.1	1462.9	1463.8
32.5°	1446.4	1433.7	1442.4	1426.9	1426.3
35°	1389.2	1378.0	1384.4	1369.0	1367.2
37.5°	1326.8	1318.6	1321.3	1306.7	1305.9
40°	1283.9	1276.5	1279.2	1263.9	1263.9
42.5°	1240.3	1233.6	1235.5	1218.7	1218.7
45°	1172.0	1165.5	1164.4	1149.9	1146.2
47.5°	1099.1	1093.9	1090.5	1077.4	1075.8
50°	1048.6	1044.8	1040.0	1028.5	1027.5
52.5°	995.8	994.3	988.7	976.4	975.5
55°	918.5	916.6	909.9	898.3	895.5
57.5°	837.5	835.7	827.8	816.4	813.6
60°	785.5	779.9	771.1	760.5	757.7
62.5°	728.8	722.5	713.7	704.0	703.4
65°	638.1	634.4	624.8	617.0	612.3
67.5°	552.8	544.4	534.8	528.5	527.5
70°	490.8	482.4	473.6	468.8	467.8
72.5°	428.8	421.9	413.9	409.1	408.9
75°	335.8	330.2	326.2	321.4	320.5
77.5°	243.8	242.3	240.7	235.5	235.5
80°	185.6	185.6	185.6	182.7	182.7
82.5°	133.6	137.3	137.4	136.0	136.0
85°	66.0	72.6	75.6	75.7	79.4
87.5°	18.4	25.1	29.9	30.7	32.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	12.9	68.2	158.2	46.1	34.7
95°	41.8	166.0	746.2	258.3	159.2
97.5°	76.9	194.5	1149.2	822.3	563.5
100°	101.3	211.4	1236.6	1252.6	964.9
102.5°	128.3	229.6	1217.3	1603.4	1352.1
105°	170.5	258.5	1117.6	1974.1	1876.7
107.5°	213.2	292.2	1001.2	2078.7	2165.5
110°	242.8	316.7	934.3	2038.7	2233.7

TEST NUMBER: P521639

CATALOG NUMBER: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	271.1	341.3	889.3	1944.1	2222.1
115°	316.8	382.8	847.5	1795.3	2108.2
117.5°	357.0	419.0	822.7	1632.7	1964.1
120°	389.2	441.0	820.1	1539.7	1857.4
122.5°	414.9	466.8	813.7	1458.2	1753.2
125°	447.1	495.8	808.9	1342.3	1604.9
127.5°	482.1	527.7	806.3	1273.1	1489.4
130°	500.1	545.7	802.4	1224.8	1413.5
132.5°	519.4	563.8	802.4	1187.2	1360.8
135°	546.8	592.4	799.2	1133.9	1281.7
137.5°	572.5	616.8	798.9	1088.7	1216.4
140°	591.8	637.4	797.6	1051.3	1173.9
142.5°	613.7	651.7	801.5	1021.4	1131.5
145°	644.8	677.9	805.7	981.3	1069.4
147.5°	671.5	703.6	812.7	940.9	1017.0
150°	694.7	716.7	815.3	927.5	980.9
152.5°	712.7	736.0	817.9	909.4	959.1
155°	736.5	753.8	825.0	886.9	923.1
157.5°	766.1	776.5	826.6	876.7	902.5
160°	781.5	789.4	833.0	868.9	890.9
162.5°	790.5	799.7	834.3	862.3	879.3
165°	813.7	816.8	834.6	852.6	865.2
167.5°	829.5	826.6	842.0	850.2	855.2
170°	834.6	833.0	839.4	841.2	847.5
172.5°	846.2	840.8	843.3	838.6	843.6
175°	852.3	847.6	844.3	839.3	833.0
177.5°	854.9	847.3	843.3	838.2	839.4
180°	845.9	845.9	845.9	845.9	845.9

(END OF REPORT)