

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: P521643

Luminaire Tested: SQ4-F-125U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521643
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11060.5 lumens
Efficiency: N/A
Efficacy: 113.9 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

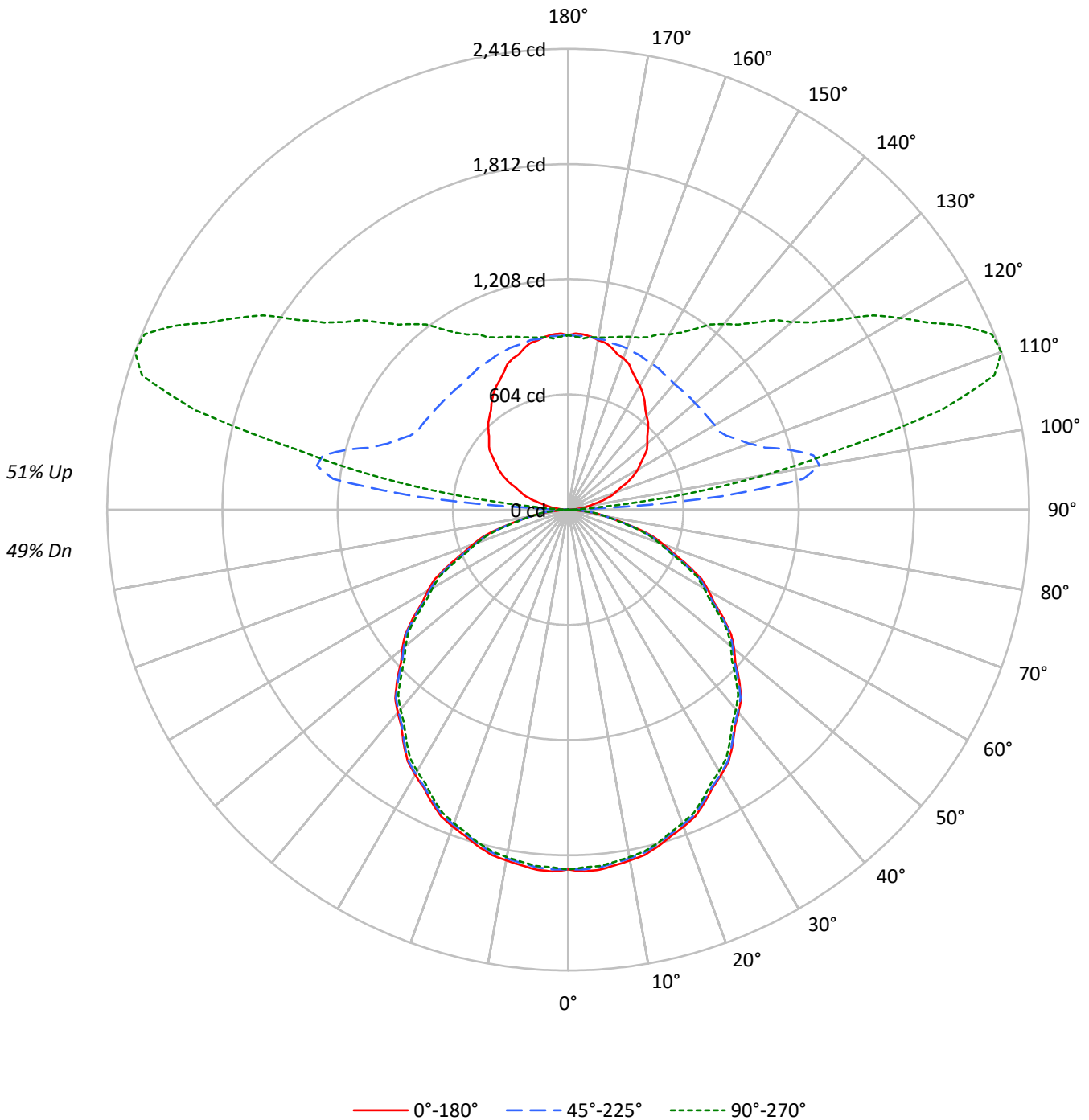
Input Watts (W): 97.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	17403	17403	17403
5°	17547	17432	17364
10°	17498	17391	17322
15°	17444	17335	17286
20°	17362	17251	17169
25°	17233	17138	17022
30°	17098	17042	16866
35°	16922	16863	16654
40°	16724	16662	16463
45°	16538	16431	16174
50°	16278	16143	15951
55°	15978	15828	15579
60°	15675	15389	15122
65°	15068	14751	14457
70°	14319	13817	13650
75°	12947	12576	12355
80°	10664	10664	10499
85°	7558	8649	9093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16538 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.5	1.6
10°-20°	511.3	4.6
20°-30°	773.2	7.0
30°-40°	931.4	8.4
40°-50°	967.0	8.7
50°-60°	876.6	7.9
60°-70°	668.7	6.0
70°-80°	374.0	3.4
80°-90°	97.2	0.9
90°-100°	416.8	3.8
100°-110°	1186.1	10.7
110°-120°	1136.4	10.3
120°-130°	899.4	8.1
130°-140°	721.9	6.5
140°-150°	565.2	5.1
150°-160°	413.5	3.7
160°-170°	256.2	2.3
170°-180°	86.9	0.8
0°-30°	1463.1	13.2
0°-40°	2394.4	21.6
0°-60°	4238.0	38.3
0°-90°	5378.0	48.6
90°-120°	2739.4	24.8
90°-150°	4925.9	44.5
90°-180°	5682.0	51.4
0°-180°	11060.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1895	1875	1882	1877	1875	180
15°	1826	1808	1815	1813	1810	515
25°	1693	1676	1684	1671	1672	780
35°	1502	1490	1497	1481	1479	939
45°	1268	1260	1259	1244	1240	977
55°	993	991	984	972	968	887
65°	690	686	676	667	662	684
75°	363	357	353	348	347	384
85°	71	78	82	82	86	89
90°	0	0	0	0	0	5
95°	45	180	807	279	172	52
105°	184	280	1209	2135	2030	195
115°	343	414	916	1942	2280	337
125°	484	536	875	1452	1736	433
135°	591	641	864	1226	1386	456
145°	697	733	871	1061	1157	436
155°	796	815	892	959	998	368
165°	880	883	903	922	936	247
175°	922	917	913	908	901	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.3	1886.3	1886.3	1886.3	1886.3
2.5°	1897.9	1882.5	1887.1	1883.7	1877.2
5°	1894.6	1875.4	1882.2	1876.9	1874.9
7.5°	1880.1	1862.1	1867.9	1864.7	1862.3
10°	1867.7	1850.5	1856.3	1853.1	1849.0
12.5°	1853.6	1835.6	1842.2	1837.4	1835.8
15°	1826.3	1808.1	1814.9	1812.8	1809.7
17.5°	1793.2	1774.8	1781.8	1777.6	1775.2
20°	1768.3	1749.1	1757.0	1748.7	1748.7
22.5°	1740.2	1721.0	1730.5	1718.1	1720.5
25°	1692.8	1675.6	1683.5	1671.1	1672.1
27.5°	1641.3	1625.1	1635.3	1619.3	1618.7
30°	1604.9	1588.7	1599.7	1582.1	1583.1
32.5°	1564.3	1550.5	1559.9	1543.2	1542.6
35°	1502.4	1490.3	1497.2	1480.6	1478.6
37.5°	1435.0	1426.0	1429.0	1413.2	1412.4
40°	1388.6	1380.5	1383.4	1366.9	1366.9
42.5°	1341.4	1334.1	1336.2	1318.0	1318.0
45°	1267.5	1260.5	1259.3	1243.6	1239.6
47.5°	1188.7	1183.0	1179.4	1165.3	1163.4
50°	1134.1	1130.0	1124.7	1112.3	1111.3
52.5°	1076.9	1075.3	1069.3	1056.0	1055.0
55°	993.3	991.3	984.0	971.5	968.5
57.5°	905.8	903.8	895.2	883.0	879.9
60°	849.5	843.4	834.0	822.5	819.5
62.5°	788.3	781.4	771.9	761.3	760.7
65°	690.2	686.1	675.7	667.3	662.2
67.5°	597.9	588.8	578.4	571.6	570.5
70°	530.8	521.7	512.2	507.0	506.0
72.5°	463.8	456.3	447.6	442.4	442.2
75°	363.2	357.1	352.8	347.6	346.6
77.5°	263.6	262.0	260.3	254.7	254.7
80°	200.7	200.7	200.7	197.6	197.6
82.5°	144.4	148.5	148.6	147.1	147.1
85°	71.4	78.5	81.7	81.8	85.9
87.5°	19.9	27.2	32.3	33.2	35.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.9	73.8	171.1	49.8	37.6
95°	45.2	179.6	807.0	279.3	172.2
97.5°	83.1	210.3	1242.8	889.3	609.4
100°	109.6	228.6	1337.4	1354.7	1043.5
102.5°	138.8	248.3	1316.6	1734.0	1462.3
105°	184.4	279.6	1208.7	2135.1	2029.6
107.5°	230.6	316.0	1082.8	2248.1	2342.0
110°	262.6	342.5	1010.5	2204.9	2415.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	369.1	961.8	2102.5	2403.2
115°	342.6	414.0	916.5	1941.7	2280.1
117.5°	386.1	453.1	889.8	1765.8	2124.2
120°	420.9	477.0	887.0	1665.2	2008.8
122.5°	448.7	504.8	880.0	1577.0	1896.1
125°	483.5	536.2	874.8	1451.7	1735.7
127.5°	521.4	570.7	872.0	1376.8	1610.8
130°	540.9	590.2	867.9	1324.7	1528.7
132.5°	561.8	609.7	867.9	1284.0	1471.7
135°	591.3	640.6	864.4	1226.3	1386.1
137.5°	619.1	667.1	864.0	1177.4	1315.5
140°	640.0	689.3	862.6	1137.0	1269.6
142.5°	663.7	704.8	866.8	1104.6	1223.7
145°	697.4	733.1	871.3	1061.3	1156.6
147.5°	726.3	761.0	879.0	1017.6	1099.9
150°	751.3	775.1	881.8	1003.1	1060.9
152.5°	770.8	796.0	884.5	983.5	1037.2
155°	796.5	815.2	892.2	959.2	998.3
157.5°	828.5	839.8	893.9	948.1	976.0
160°	845.2	853.7	900.9	939.7	963.5
162.5°	855.0	864.8	902.3	932.6	951.0
165°	880.0	883.4	902.6	922.1	935.7
167.5°	897.1	894.0	910.6	919.5	924.9
170°	902.6	900.9	907.9	909.7	916.5
172.5°	915.2	909.4	912.0	906.9	912.4
175°	921.8	916.7	913.1	907.7	900.9
177.5°	924.5	916.4	912.0	906.5	907.9
180°	914.8	914.8	914.8	914.8	914.8

(END OF REPORT)