

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: P521592

Luminaire Tested: SQ4-F-100U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521592
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-100U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 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: 10011.9 lumens
Efficiency: N/A
Efficacy: 113.8 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

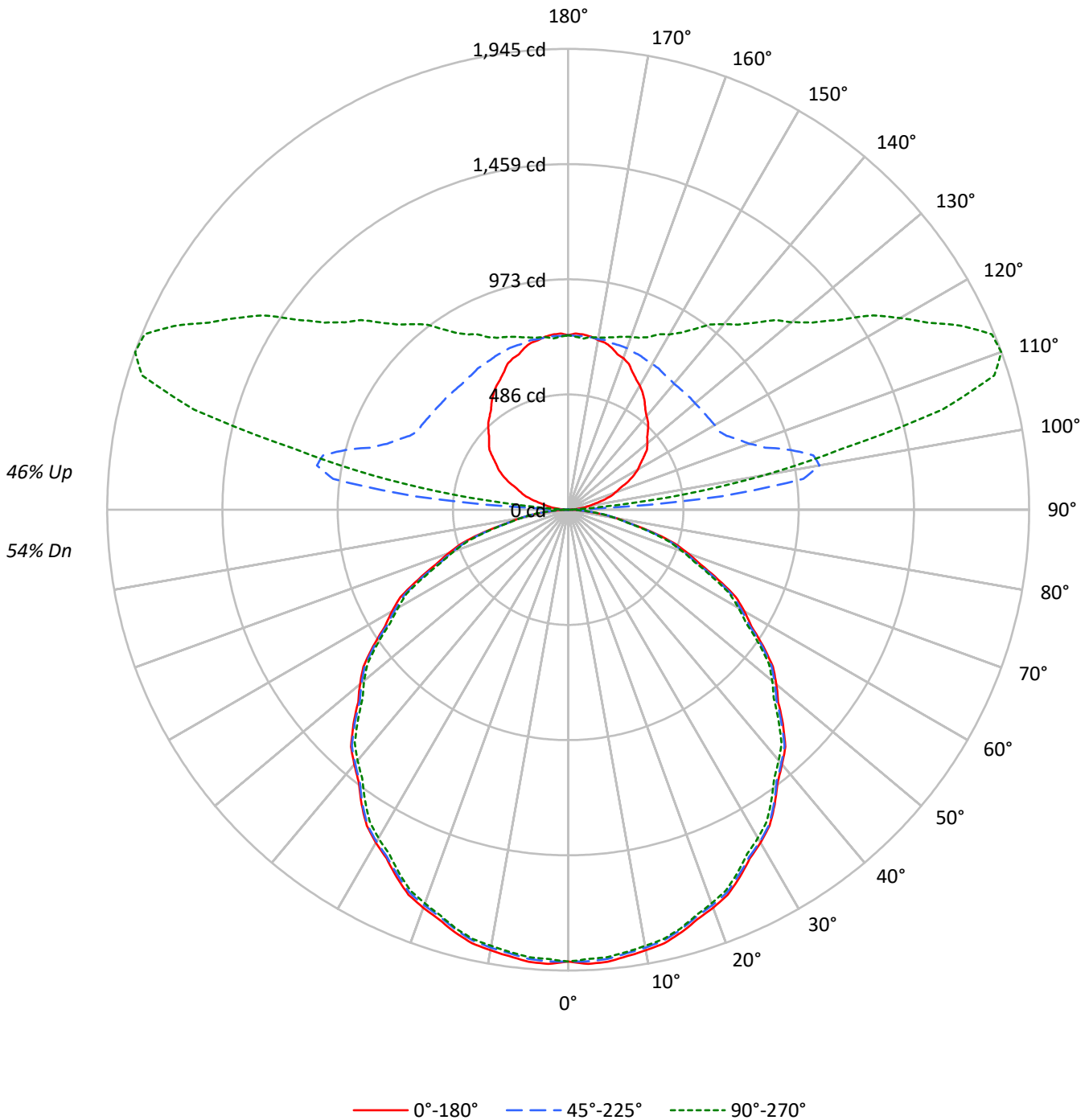
Input Watts (W): 88
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54				
1	99	94	90	87	91	87	84	81	75	72	70	63	62	60	53	52	50	45				
2	90	82	76	70	83	76	71	66	65	61	58	56	52	50	46	44	42	38				
3	82	72	64	58	75	67	60	55	58	53	48	49	45	42	41	38	36	32				
4	75	64	55	49	69	59	52	47	51	45	41	43	39	36	36	33	31	27				
5	68	57	48	42	63	53	45	40	46	40	35	39	34	31	33	29	27	23				
6	63	51	42	36	58	47	40	35	41	35	31	35	30	27	30	26	23	20				
7	58	46	38	32	54	43	35	30	37	31	27	32	27	24	27	23	21	18				
8	54	41	34	28	50	39	32	27	34	28	24	29	25	21	25	21	18	16				
9	50	38	30	25	47	35	29	24	31	25	21	27	22	19	23	19	17	14				
10	47	35	27	22	44	33	26	21	29	23	19	25	20	17	21	18	15	13				

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	1.8
10°-20°	516.9	5.2
20°-30°	781.8	7.8
30°-40°	941.7	9.4
40°-50°	977.7	9.8
50°-60°	886.3	8.9
60°-70°	676.1	6.8
70°-80°	378.2	3.8
80°-90°	98.3	1.0
90°-100°	335.6	3.4
100°-110°	954.8	9.5
110°-120°	914.8	9.1
120°-130°	724.0	7.2
130°-140°	581.1	5.8
140°-150°	455.0	4.5
150°-160°	332.9	3.3
160°-170°	206.2	2.1
170°-180°	70.0	0.7
0°-30°	1479.2	14.8
0°-40°	2420.9	24.2
0°-60°	4284.9	42.8
0°-90°	5437.5	54.3
90°-120°	2205.2	22.0
90°-150°	3965.3	39.6
90°-180°	4574.0	45.7
0°-180°	10011.9	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	4
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

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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°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)