

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: P521576

Luminaire Tested: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521576
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-38)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 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: 8477.9 lumens
Efficiency: N/A
Efficacy: 113.3 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

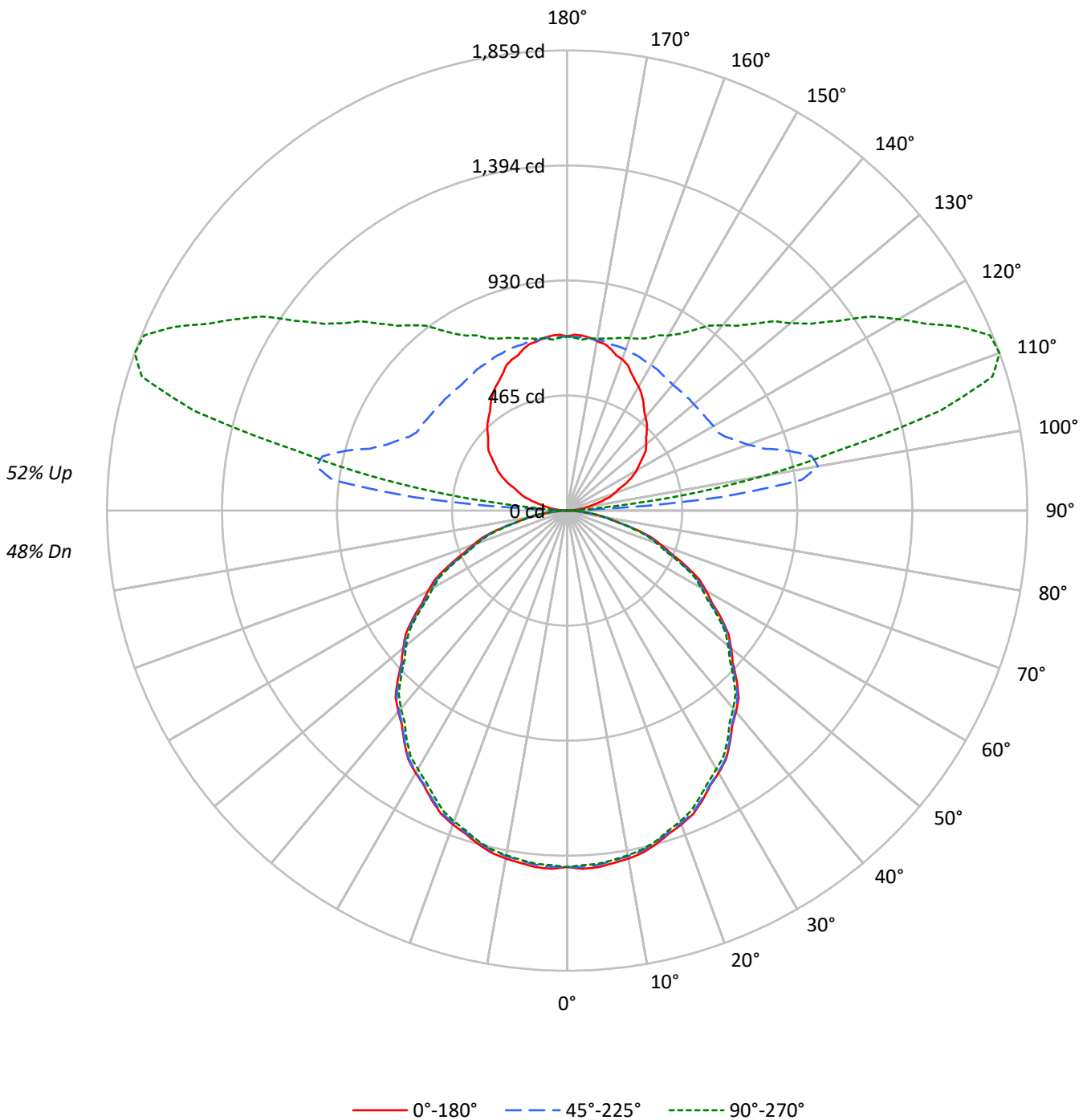
Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13286	13286	13286
5°	13392	13309	13272
10°	13378	13285	13247
15°	13315	13239	13210
20°	13255	13196	13117
25°	13153	13102	12959
30°	13040	13008	12848
35°	12908	12862	12727
40°	12779	12730	12574
45°	12630	12526	12382
50°	12416	12330	12186
55°	12241	12064	11919
60°	11957	11717	11551
65°	11570	11243	11068
70°	10898	10547	10359
75°	9839	9589	9447
80°	8129	8129	8023
85°	5716	6563	6775

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12630 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.3	1.6
10°-20°	390.5	4.6
20°-30°	590.6	7.0
30°-40°	711.2	8.4
40°-50°	738.6	8.7
50°-60°	669.5	7.9
60°-70°	509.9	6.0
70°-80°	284.9	3.4
80°-90°	73.9	0.9
90°-100°	320.7	3.8
100°-110°	912.7	10.8
110°-120°	874.4	10.3
120°-130°	692.1	8.2
130°-140°	555.5	6.6
140°-150°	434.9	5.1
150°-160°	318.2	3.8
160°-170°	197.1	2.3
170°-180°	66.9	0.8
0°-30°	1117.4	13.2
0°-40°	1828.6	21.6
0°-60°	3236.7	38.2
0°-90°	4105.3	48.4
90°-120°	2107.9	24.9
90°-150°	3790.4	44.7
90°-180°	4373.0	51.6
0°-180°	8477.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1446	1432	1437	1433	1433	137
15°	1394	1381	1386	1383	1383	393
25°	1292	1281	1287	1277	1273	595
35°	1146	1139	1142	1131	1130	717
45°	968	962	960	950	949	746
55°	761	758	750	741	741	678
65°	530	524	515	508	507	522
75°	276	272	269	265	265	292
85°	54	58	62	63	64	67
90°	0	0	0	0	0	4
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1440.0	1440.0	1440.0	1440.0	1440.0
2.5°	1448.8	1437.1	1440.8	1438.3	1433.6
5°	1446.0	1432.3	1437.0	1433.0	1433.0
7.5°	1436.0	1422.9	1426.0	1423.6	1423.6
10°	1428.0	1413.3	1418.0	1414.0	1414.0
12.5°	1415.2	1402.1	1406.8	1402.8	1402.0
15°	1394.0	1381.3	1386.0	1383.0	1383.0
17.5°	1368.4	1356.3	1362.4	1357.6	1356.0
20°	1350.0	1336.3	1344.0	1336.0	1336.0
22.5°	1327.6	1315.5	1322.4	1312.8	1311.2
25°	1292.0	1281.2	1287.0	1276.9	1273.0
27.5°	1252.0	1240.5	1249.0	1237.8	1235.6
30°	1224.0	1213.2	1221.0	1208.9	1206.0
32.5°	1193.6	1184.4	1189.8	1178.6	1176.4
35°	1146.0	1139.2	1142.0	1131.0	1130.0
37.5°	1095.4	1088.8	1091.4	1079.2	1078.4
40°	1061.0	1055.1	1057.0	1044.0	1044.0
42.5°	1025.8	1019.2	1019.4	1007.2	1006.4
45°	968.0	962.1	960.0	950.0	949.0
47.5°	906.6	903.9	900.6	890.6	890.6
50°	865.0	863.0	859.0	849.0	849.0
52.5°	822.6	821.4	815.8	807.4	805.8
55°	761.0	758.1	750.0	741.0	741.0
57.5°	693.6	691.3	682.2	675.0	673.2
60°	648.0	644.1	635.0	627.0	626.0
62.5°	600.8	597.7	587.8	580.6	578.8
65°	530.0	524.1	515.0	508.0	507.0
67.5°	455.2	448.6	440.6	434.8	432.8
70°	404.0	398.1	391.0	386.0	384.0
72.5°	353.6	347.7	341.4	338.0	337.6
75°	276.0	272.1	269.0	265.0	265.0
77.5°	200.2	197.9	196.2	194.2	194.2
80°	153.0	153.0	153.0	151.0	151.0
82.5°	109.8	112.1	113.8	112.6	112.6
85°	54.0	57.9	62.0	63.0	64.0
87.5°	15.2	19.9	24.8	25.6	26.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)