

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: P521575

Luminaire Tested: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521575
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8279.1 lumens
Efficiency: N/A
Efficacy: 110.7 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

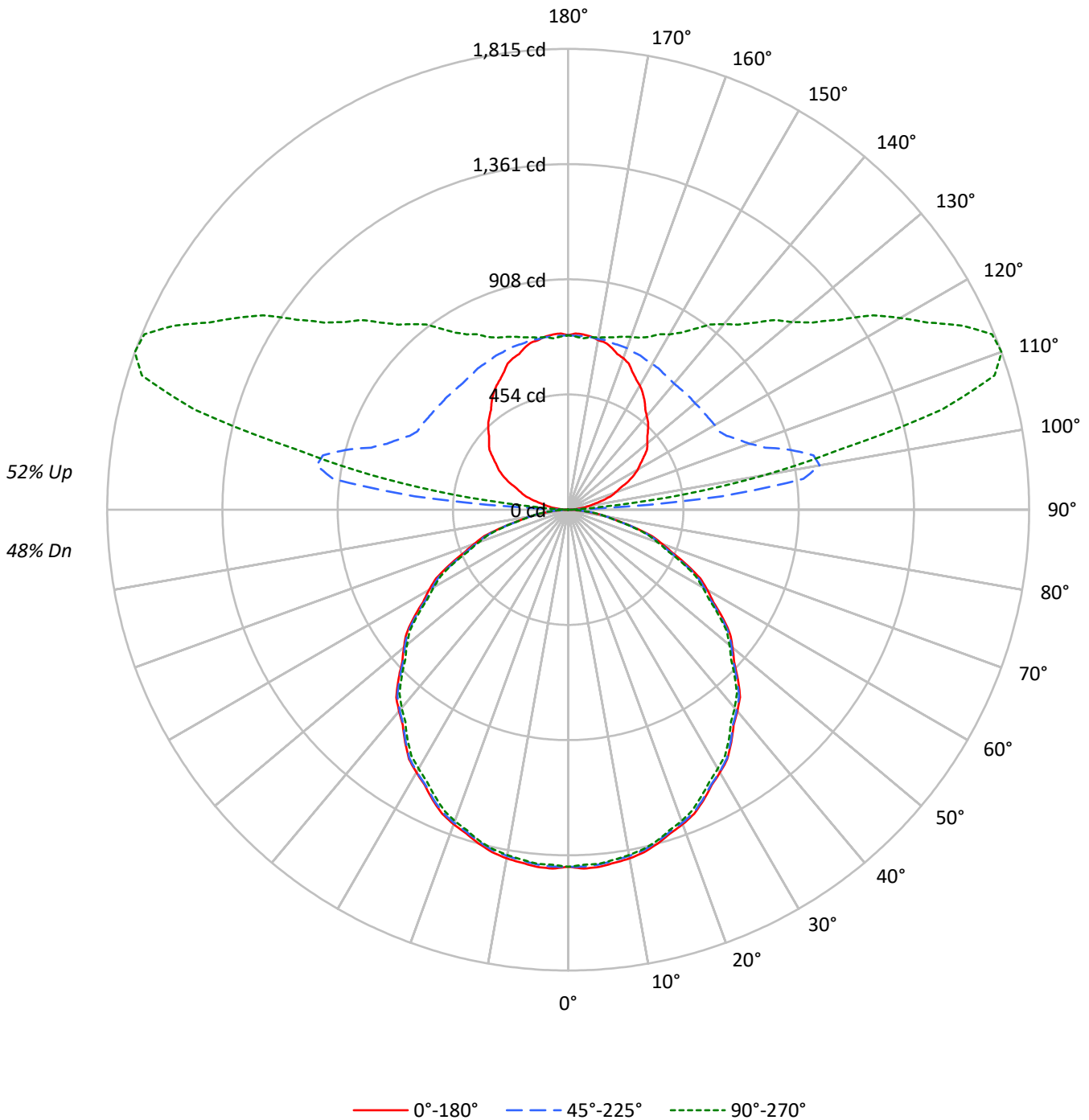
Input Watts (W): 74.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	12975	12975	12975
5°	13078	12997	12960
10°	13064	12974	12937
15°	13003	12928	12900
20°	12944	12887	12810
25°	12844	12794	12656
30°	12734	12703	12547
35°	12605	12561	12429
40°	12479	12432	12279
45°	12334	12232	12093
50°	12124	12041	11900
55°	11955	11781	11639
60°	11677	11442	11280
65°	11300	10979	10809
70°	10642	10299	10116
75°	9607	9365	9226
80°	7938	7938	7837
85°	5579	6404	6616

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12334 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	1.6
10°-20°	381.4	4.6
20°-30°	576.7	7.0
30°-40°	694.5	8.4
40°-50°	721.2	8.7
50°-60°	653.8	7.9
60°-70°	497.9	6.0
70°-80°	278.2	3.4
80°-90°	72.2	0.9
90°-100°	313.2	3.8
100°-110°	891.3	10.8
110°-120°	853.9	10.3
120°-130°	675.9	8.2
130°-140°	542.5	6.6
140°-150°	424.7	5.1
150°-160°	310.7	3.8
160°-170°	192.5	2.3
170°-180°	65.3	0.8
0°-30°	1091.2	13.2
0°-40°	1785.7	21.6
0°-60°	3160.8	38.2
0°-90°	4009.1	48.4
90°-120°	2058.5	24.9
90°-150°	3701.5	44.7
90°-180°	4270.0	51.6
0°-180°	8279.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1406	1406	1406	1406	1406	
5°	1412	1399	1403	1399	1399	134
15°	1361	1349	1354	1351	1351	384
25°	1262	1251	1257	1247	1243	581
35°	1119	1112	1115	1104	1104	700
45°	945	940	938	928	927	728
55°	743	740	732	724	724	663
65°	518	512	503	496	495	510
75°	270	266	263	259	259	285
85°	53	57	60	62	62	66
90°	0	0	0	0	0	3
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

TEST NUMBER: P521575

CATALOG NUMBER: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1406.3	1406.3	1406.3	1406.3	1406.3
2.5°	1414.8	1403.4	1407.0	1404.6	1400.0
5°	1412.1	1398.7	1403.3	1399.4	1399.4
7.5°	1402.3	1389.6	1392.6	1390.2	1390.2
10°	1394.5	1380.2	1384.8	1380.9	1380.9
12.5°	1382.0	1369.2	1373.8	1369.9	1369.1
15°	1361.3	1348.9	1353.5	1350.6	1350.6
17.5°	1336.3	1324.5	1330.5	1325.8	1324.2
20°	1318.4	1305.0	1312.5	1304.7	1304.7
22.5°	1296.5	1284.6	1291.4	1282.0	1280.5
25°	1261.7	1251.2	1256.8	1247.0	1243.2
27.5°	1222.7	1211.4	1219.7	1208.7	1206.6
30°	1195.3	1184.8	1192.4	1180.6	1177.7
32.5°	1165.6	1156.7	1161.9	1150.9	1148.8
35°	1119.1	1112.5	1115.2	1104.5	1103.5
37.5°	1069.7	1063.2	1065.8	1053.9	1053.1
40°	1036.1	1030.4	1032.2	1019.5	1019.5
42.5°	1001.8	995.3	995.5	983.6	982.8
45°	945.3	939.6	937.5	927.7	926.8
47.5°	885.4	882.7	879.5	869.7	869.7
50°	844.7	842.8	838.9	829.1	829.1
52.5°	803.3	802.2	796.7	788.4	786.9
55°	743.2	740.3	732.4	723.6	723.6
57.5°	677.3	675.1	666.2	659.1	657.4
60°	632.8	629.0	620.1	612.3	611.3
62.5°	586.7	583.7	574.0	567.0	565.2
65°	517.6	511.9	502.9	496.1	495.1
67.5°	444.5	438.0	430.3	424.6	422.7
70°	394.5	388.8	381.8	376.9	375.0
72.5°	345.3	339.6	333.4	330.1	329.7
75°	269.5	265.7	262.7	258.8	258.8
77.5°	195.5	193.2	191.6	189.6	189.6
80°	149.4	149.4	149.4	147.5	147.5
82.5°	107.2	109.5	111.1	110.0	110.0
85°	52.7	56.6	60.5	61.5	62.5
87.5°	14.8	19.4	24.2	25.0	25.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)