

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: P521579

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521579
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8869.2 lumens
Efficiency: N/A
Efficacy: 118.9 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

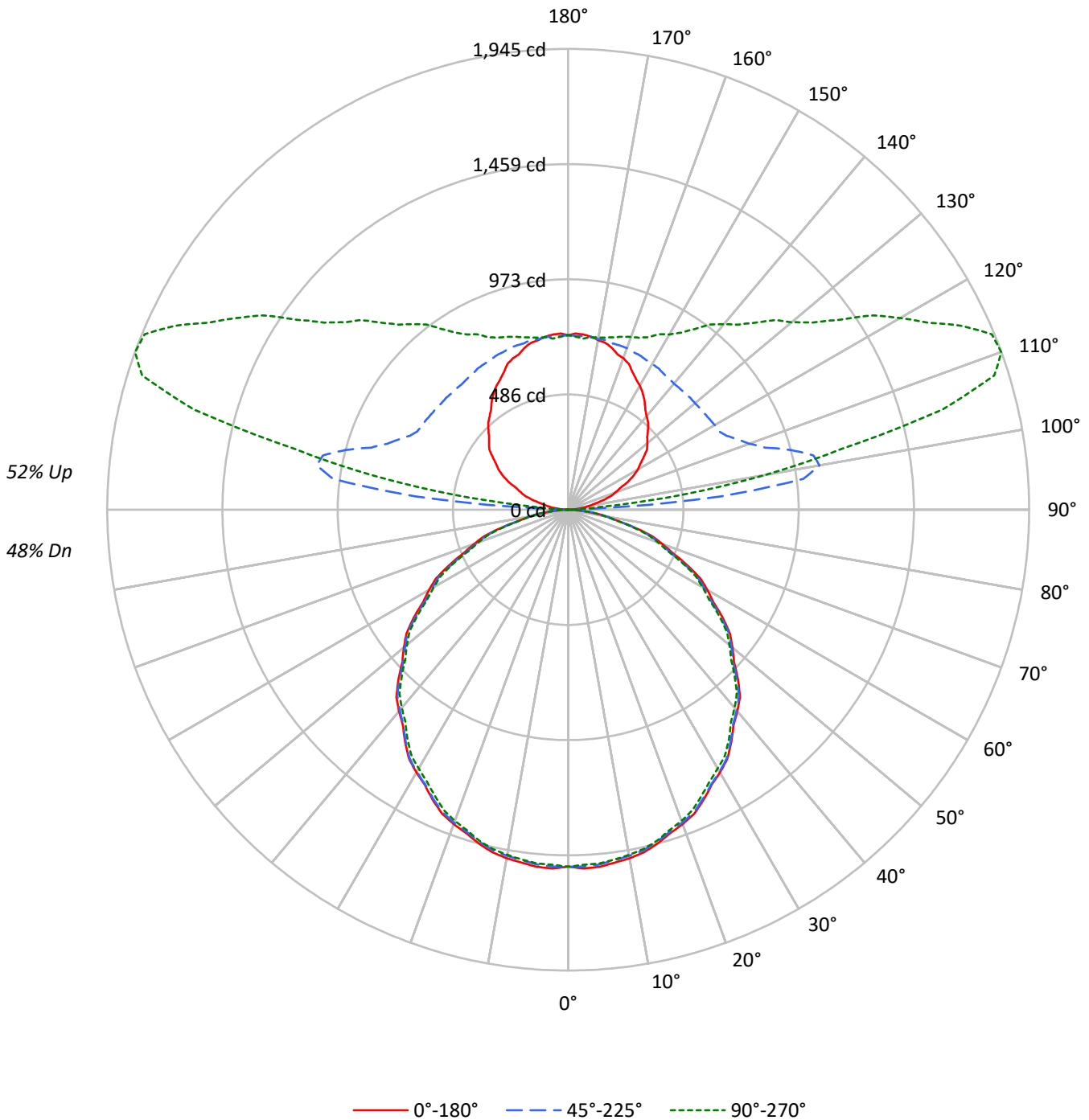
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	13899	13899	13899
5°	14011	13923	13885
10°	13996	13898	13859
15°	13930	13850	13820
20°	13866	13805	13723
25°	13759	13706	13558
30°	13642	13609	13442
35°	13503	13456	13315
40°	13369	13318	13154
45°	13214	13104	12954
50°	12988	12899	12749
55°	12806	12621	12469
60°	12509	12258	12084
65°	12105	11763	11579
70°	11403	11036	10836
75°	10291	10031	9881
80°	8506	8506	8395
85°	5981	6870	7093

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	1.6
10°-20°	408.6	4.6
20°-30°	617.8	7.0
30°-40°	744.0	8.4
40°-50°	772.7	8.7
50°-60°	700.4	7.9
60°-70°	533.4	6.0
70°-80°	298.0	3.4
80°-90°	77.3	0.9
90°-100°	335.6	3.8
100°-110°	954.8	10.8
110°-120°	914.8	10.3
120°-130°	724.0	8.2
130°-140°	581.1	6.6
140°-150°	455.0	5.1
150°-160°	332.9	3.8
160°-170°	206.2	2.3
170°-180°	70.0	0.8
0°-30°	1169.0	13.2
0°-40°	1913.0	21.6
0°-60°	3386.1	38.2
0°-90°	4294.9	48.4
90°-120°	2205.2	24.9
90°-150°	3965.3	44.7
90°-180°	4574.0	51.6
0°-180°	8869.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1513	1498	1503	1499	1499	144
15°	1458	1445	1450	1447	1447	411
25°	1352	1340	1346	1336	1332	623
35°	1199	1192	1195	1183	1182	750
45°	1013	1007	1004	994	993	780
55°	796	793	785	775	775	710
65°	554	548	539	531	530	547
75°	289	285	281	277	277	306
85°	56	61	65	66	67	71
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°	1506.5	1506.5	1506.5	1506.5	1506.5
2.5°	1515.7	1503.4	1507.3	1504.7	1499.8
5°	1512.8	1498.4	1503.3	1499.2	1499.2
7.5°	1502.3	1488.6	1491.8	1489.3	1489.3
10°	1493.9	1478.6	1483.5	1479.3	1479.3
12.5°	1480.5	1466.8	1471.7	1467.5	1466.7
15°	1458.4	1445.1	1450.0	1446.9	1446.9
17.5°	1431.6	1418.9	1425.3	1420.2	1418.6
20°	1412.3	1398.0	1406.0	1397.7	1397.7
22.5°	1388.9	1376.2	1383.5	1373.4	1371.7
25°	1351.6	1340.4	1346.4	1335.9	1331.8
27.5°	1309.8	1297.7	1306.7	1294.9	1292.6
30°	1280.5	1269.3	1277.4	1264.7	1261.7
32.5°	1248.7	1239.1	1244.7	1233.0	1230.7
35°	1198.9	1191.7	1194.7	1183.2	1182.2
37.5°	1146.0	1139.0	1141.8	1129.0	1128.2
40°	1110.0	1103.8	1105.8	1092.2	1092.2
42.5°	1073.2	1066.2	1066.5	1053.7	1052.9
45°	1012.7	1006.6	1004.3	993.8	992.8
47.5°	948.5	945.6	942.2	931.7	931.7
50°	904.9	902.9	898.7	888.2	888.2
52.5°	860.6	859.4	853.5	844.6	843.0
55°	796.1	793.1	784.6	775.2	775.2
57.5°	725.6	723.2	713.7	706.1	704.3
60°	677.9	673.8	664.3	655.9	654.9
62.5°	628.5	625.3	614.9	607.4	605.5
65°	554.5	548.3	538.8	531.4	530.4
67.5°	476.2	469.3	460.9	454.8	452.8
70°	422.7	416.5	409.1	403.8	401.7
72.5°	369.9	363.8	357.2	353.6	353.2
75°	288.7	284.7	281.4	277.2	277.2
77.5°	209.4	207.0	205.3	203.2	203.2
80°	160.1	160.1	160.1	158.0	158.0
82.5°	114.9	117.3	119.1	117.8	117.8
85°	56.5	60.6	64.9	65.9	67.0
87.5°	15.9	20.8	25.9	26.8	27.6
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)