

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: P521574

Luminaire Tested: SQ4-F-100U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521574
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8111.0 lumens
Efficiency: N/A
Efficacy: 108.7 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

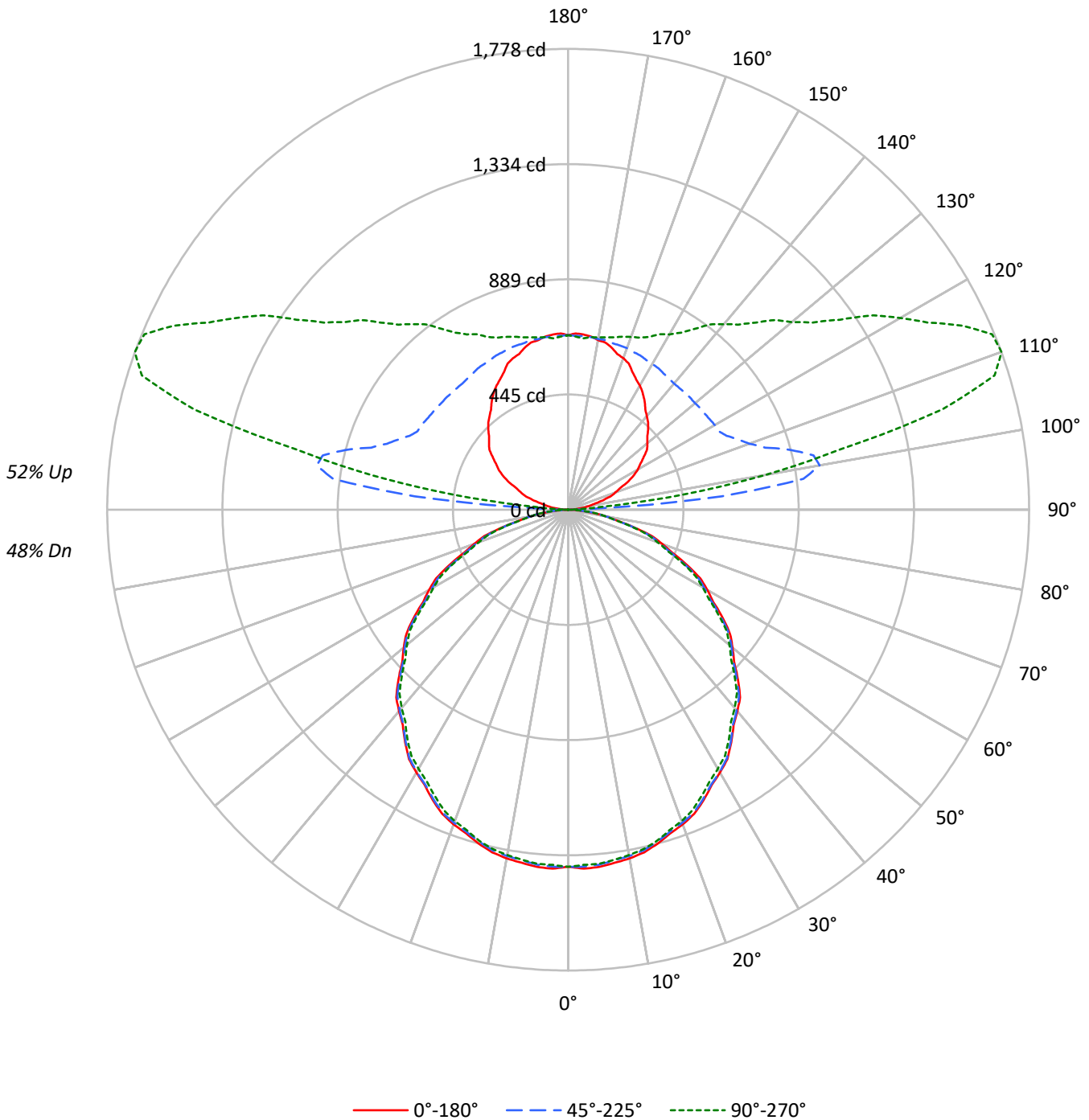
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	12711	12711	12711
5°	12812	12733	12697
10°	12799	12710	12674
15°	12739	12666	12639
20°	12681	12625	12550
25°	12583	12535	12398
30°	12475	12445	12292
35°	12349	12306	12177
40°	12226	12180	12029
45°	12084	11984	11846
50°	11879	11796	11659
55°	11712	11543	11403
60°	11440	11210	11051
65°	11071	10756	10590
70°	10426	10092	9911
75°	9414	9176	9037
80°	7778	7778	7678
85°	5473	6277	6479

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	1.6
10°-20°	373.6	4.6
20°-30°	565.0	7.0
30°-40°	680.4	8.4
40°-50°	706.6	8.7
50°-60°	640.5	7.9
60°-70°	487.8	6.0
70°-80°	272.6	3.4
80°-90°	70.7	0.9
90°-100°	306.9	3.8
100°-110°	873.2	10.8
110°-120°	836.6	10.3
120°-130°	662.1	8.2
130°-140°	531.5	6.6
140°-150°	416.1	5.1
150°-160°	304.4	3.8
160°-170°	188.6	2.3
170°-180°	64.0	0.8
0°-30°	1069.1	13.2
0°-40°	1749.5	21.6
0°-60°	3096.6	38.2
0°-90°	3927.7	48.4
90°-120°	2016.7	24.9
90°-150°	3626.3	44.7
90°-180°	4183.0	51.6
0°-180°	8111.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1383	1370	1375	1371	1371	131
15°	1334	1322	1326	1323	1323	376
25°	1236	1226	1231	1222	1218	569
35°	1096	1090	1093	1082	1081	686
45°	926	920	918	909	908	713
55°	728	725	718	709	709	649
65°	507	502	493	486	485	500
75°	264	260	257	254	254	279
85°	52	55	59	60	61	64
90°	0	0	0	0	0	3
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

TEST NUMBER: P521574

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.7	1377.7	1377.7	1377.7	1377.7
2.5°	1386.1	1374.9	1378.5	1376.1	1371.6
5°	1383.4	1370.3	1374.8	1371.0	1371.0
7.5°	1373.9	1361.3	1364.3	1362.0	1362.0
10°	1366.2	1352.2	1356.7	1352.8	1352.8
12.5°	1354.0	1341.4	1345.9	1342.1	1341.3
15°	1333.7	1321.5	1326.0	1323.2	1323.2
17.5°	1309.2	1297.6	1303.5	1298.8	1297.3
20°	1291.6	1278.5	1285.9	1278.2	1278.2
22.5°	1270.2	1258.6	1265.2	1256.0	1254.5
25°	1236.1	1225.8	1231.3	1221.7	1217.9
27.5°	1197.8	1186.8	1195.0	1184.2	1182.1
30°	1171.0	1160.8	1168.2	1156.6	1153.8
32.5°	1142.0	1133.2	1138.3	1127.6	1125.5
35°	1096.4	1089.9	1092.6	1082.0	1081.1
37.5°	1048.0	1041.6	1044.2	1032.5	1031.7
40°	1015.1	1009.5	1011.3	998.8	998.8
42.5°	981.4	975.1	975.3	963.6	962.9
45°	926.1	920.5	918.5	908.9	907.9
47.5°	867.4	864.8	861.6	852.1	852.1
50°	827.6	825.7	821.8	812.3	812.3
52.5°	787.0	785.9	780.5	772.4	770.9
55°	728.1	725.3	717.6	708.9	708.9
57.5°	663.6	661.3	652.7	645.8	644.1
60°	620.0	616.2	607.5	599.9	598.9
62.5°	574.8	571.8	562.4	555.4	553.8
65°	507.1	501.5	492.7	486.0	485.1
67.5°	435.5	429.1	421.5	415.9	414.1
70°	386.5	380.9	374.1	369.3	367.4
72.5°	338.3	332.7	326.6	323.4	323.0
75°	264.1	260.3	257.4	253.5	253.5
77.5°	191.5	189.3	187.7	185.8	185.8
80°	146.4	146.4	146.4	144.5	144.5
82.5°	105.0	107.3	108.9	107.7	107.7
85°	51.7	55.4	59.3	60.3	61.2
87.5°	14.5	19.0	23.7	24.5	25.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)