

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: P521681

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521681
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-150U-100D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10920.0 lumens
Efficiency: N/A
Efficacy: 116.7 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: Semi-Indirect

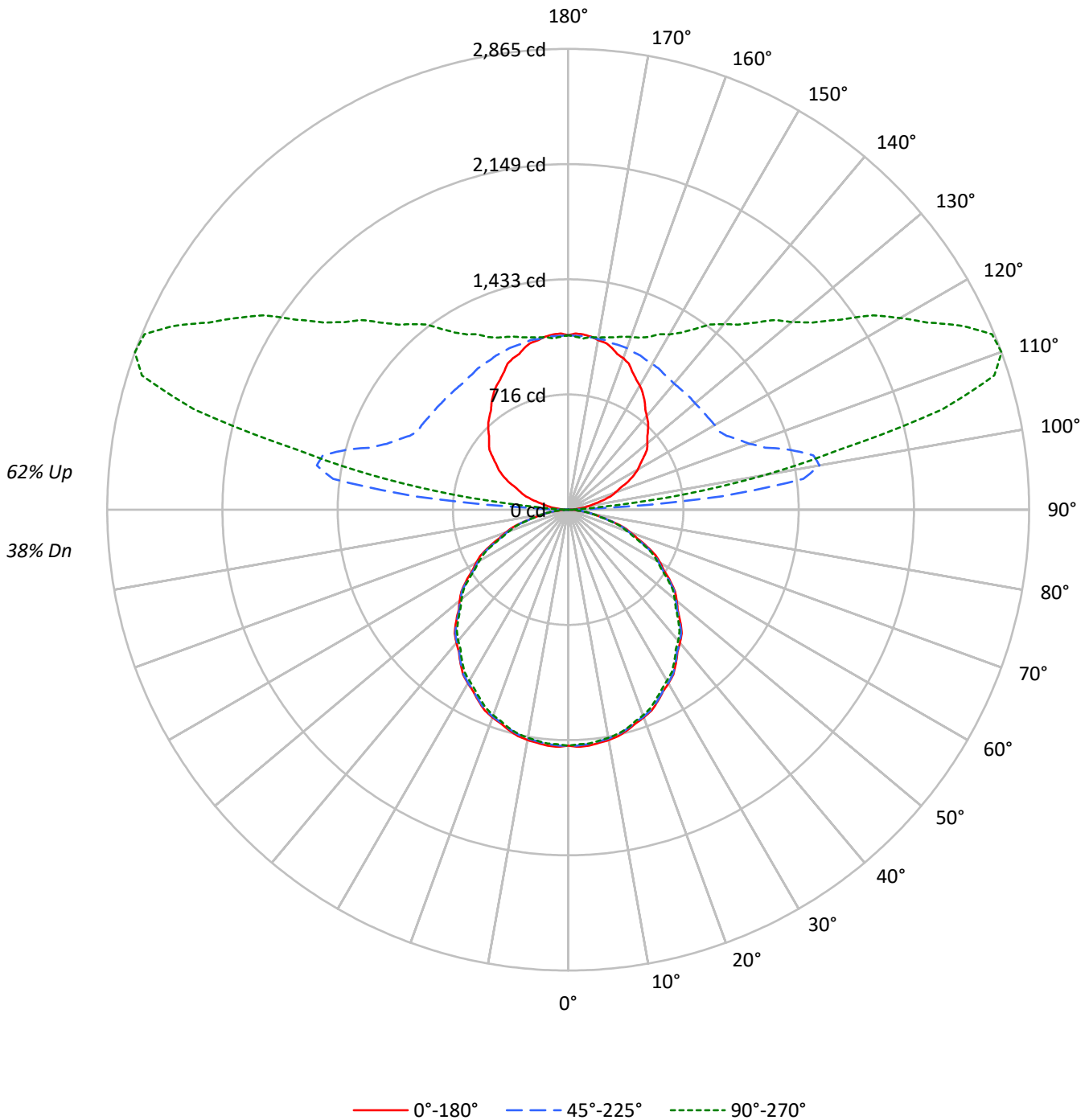
Input Watts (W): 93.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	95	91	87	83	86	83	79	76	67	65	63	53	51	50	40	39	38	32				
2	86	79	73	68	78	72	67	62	59	55	52	46	44	42	35	33	32	27				
3	79	69	62	56	71	63	57	52	52	47	43	41	38	35	31	29	27	22				
4	72	61	53	47	65	56	49	44	46	41	37	36	33	30	27	25	23	19				
5	66	54	46	40	60	50	43	37	41	35	31	32	29	26	25	22	20	16				
6	61	49	41	35	55	44	37	32	37	31	27	29	25	22	22	20	18	14				
7	56	44	36	30	51	40	33	28	33	28	24	26	23	20	20	18	15	13				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	19	16	14	11				
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10				
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13528	13528	13528
5°	13637	13552	13514
10°	13623	13527	13490
15°	13559	13481	13452
20°	13497	13437	13357
25°	13393	13341	13196
30°	13279	13245	13084
35°	13144	13098	12960
40°	13012	12963	12804
45°	12861	12756	12609
50°	12642	12555	12409
55°	12465	12284	12138
60°	12177	11931	11763
65°	11782	11448	11271
70°	11098	10742	10547
75°	10017	9764	9618
80°	8278	8278	8172
85°	5822	6680	6902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12861 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	1.3
10°-20°	397.7	3.6
20°-30°	601.4	5.5
30°-40°	724.2	6.6
40°-50°	752.1	6.9
50°-60°	681.7	6.2
60°-70°	519.2	4.8
70°-80°	290.1	2.7
80°-90°	75.3	0.7
90°-100°	494.4	4.5
100°-110°	1406.7	12.9
110°-120°	1347.8	12.3
120°-130°	1066.7	9.8
130°-140°	856.2	7.8
140°-150°	670.3	6.1
150°-160°	490.5	4.5
160°-170°	303.8	2.8
170°-180°	103.1	0.9
0°-30°	1137.9	10.4
0°-40°	1862.0	17.1
0°-60°	3295.8	30.2
0°-90°	4180.4	38.3
90°-120°	3249.0	29.8
90°-150°	5842.2	53.5
90°-180°	6740.0	61.7
0°-180°	10920.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1466	1466	1466	1466	1466	
5°	1472	1458	1463	1459	1459	140
15°	1420	1407	1411	1408	1408	400
25°	1316	1305	1310	1300	1296	606
35°	1167	1160	1163	1152	1151	730
45°	986	980	978	967	966	759
55°	775	772	764	755	755	691
65°	540	534	524	517	516	532
75°	281	277	274	270	270	297
85°	55	59	63	64	65	69
90°	0	0	0	0	0	4
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1466.3	1466.3	1466.3	1466.3	1466.3
2.5°	1475.3	1463.4	1467.2	1464.6	1459.8
5°	1472.5	1458.5	1463.3	1459.2	1459.2
7.5°	1462.3	1448.9	1452.1	1449.6	1449.6
10°	1454.1	1439.2	1443.9	1439.9	1439.9
12.5°	1441.1	1427.7	1432.5	1428.4	1427.6
15°	1419.5	1406.6	1411.4	1408.3	1408.3
17.5°	1393.4	1381.1	1387.3	1382.4	1380.8
20°	1374.7	1360.8	1368.6	1360.4	1360.4
22.5°	1351.9	1339.5	1346.6	1336.8	1335.2
25°	1315.6	1304.7	1310.5	1300.3	1296.3
27.5°	1274.9	1263.2	1271.8	1260.4	1258.2
30°	1246.4	1235.4	1243.3	1231.0	1228.1
32.5°	1215.4	1206.1	1211.6	1200.1	1197.9
35°	1167.0	1160.0	1162.9	1151.7	1150.7
37.5°	1115.4	1108.7	1111.4	1098.9	1098.1
40°	1080.4	1074.4	1076.3	1063.1	1063.1
42.5°	1044.6	1037.8	1038.0	1025.6	1024.8
45°	985.7	979.7	977.6	967.4	966.4
47.5°	923.2	920.4	917.1	906.9	906.9
50°	880.8	878.8	874.7	864.5	864.5
52.5°	837.6	836.5	830.7	822.1	820.5
55°	774.9	771.9	763.7	754.6	754.6
57.5°	706.3	703.9	694.7	687.3	685.5
60°	659.9	655.9	646.6	638.4	637.5
62.5°	611.8	608.6	598.6	591.2	589.4
65°	539.7	533.7	524.4	517.3	516.3
67.5°	463.5	456.8	448.7	442.7	440.7
70°	411.4	405.4	398.2	393.0	391.0
72.5°	360.1	354.1	347.6	344.2	343.8
75°	281.0	277.1	273.9	269.8	269.8
77.5°	203.9	201.5	199.8	197.8	197.8
80°	155.8	155.8	155.8	153.8	153.8
82.5°	111.8	114.2	115.9	114.7	114.7
85°	55.0	59.0	63.1	64.2	65.2
87.5°	15.5	20.3	25.3	26.1	26.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)