

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: P521685

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521685
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11486.6 lumens
Efficiency: N/A
Efficacy: 123.6 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

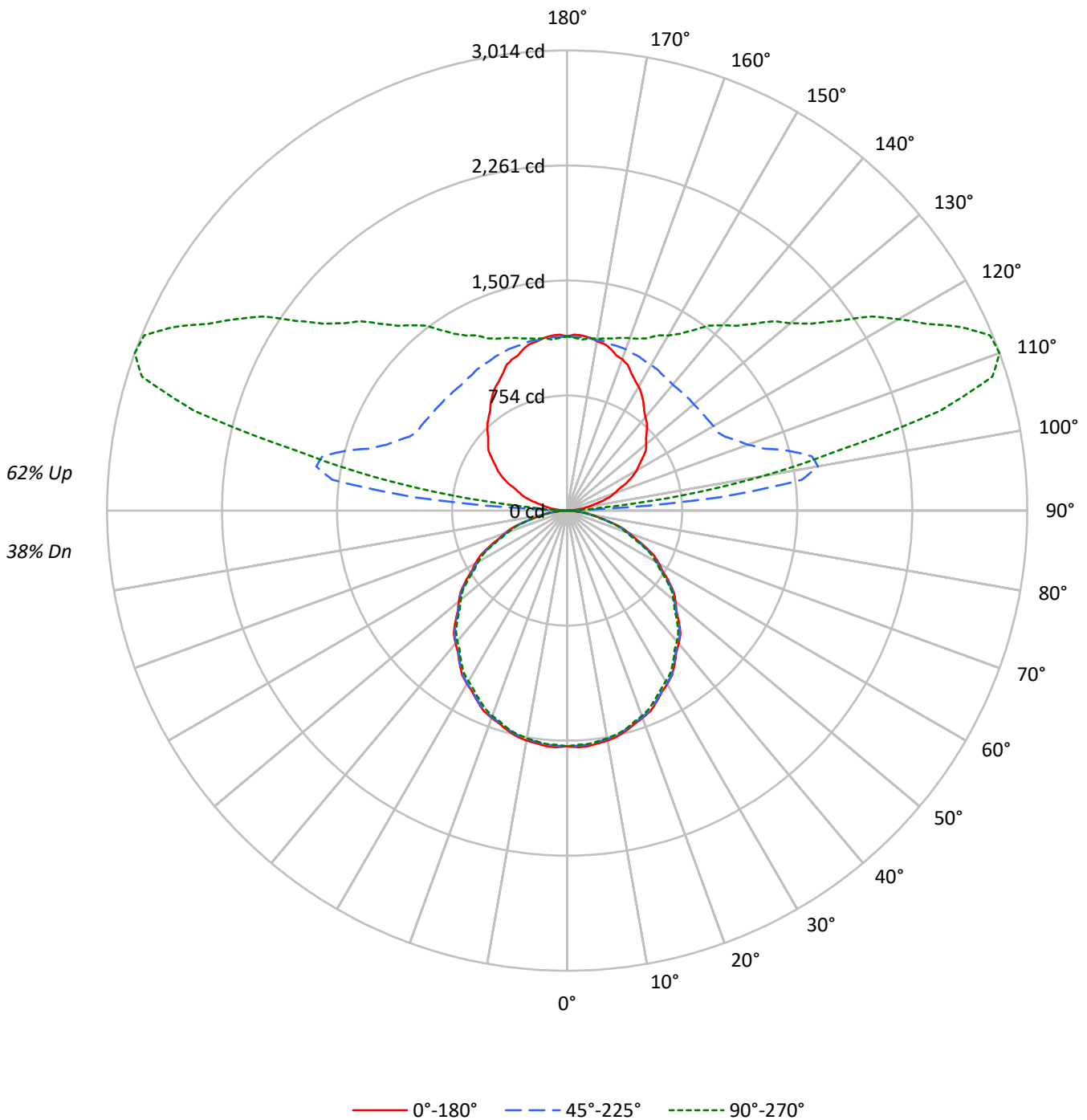
Input Watts (W): 92.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	14230	14230	14230
5°	14345	14255	14215
10°	14330	14230	14190
15°	14263	14180	14150
20°	14197	14134	14050
25°	14088	14033	13880
30°	13968	13934	13762
35°	13825	13777	13633
40°	13688	13636	13469
45°	13529	13417	13263
50°	13298	13207	13053
55°	13111	12921	12767
60°	12808	12551	12372
65°	12393	12042	11856
70°	11672	11297	11095
75°	10537	10270	10117
80°	8708	8708	8591
85°	6119	7029	7262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13529 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.0	1.3
10°-20°	418.3	3.6
20°-30°	632.6	5.5
30°-40°	761.7	6.6
40°-50°	791.1	6.9
50°-60°	717.1	6.2
60°-70°	546.1	4.8
70°-80°	305.1	2.7
80°-90°	79.2	0.7
90°-100°	520.1	4.5
100°-110°	1479.7	12.9
110°-120°	1417.7	12.3
120°-130°	1122.1	9.8
130°-140°	900.6	7.8
140°-150°	705.1	6.1
150°-160°	515.9	4.5
160°-170°	319.6	2.8
170°-180°	108.4	0.9
0°-30°	1196.9	10.4
0°-40°	1958.6	17.1
0°-60°	3466.9	30.2
0°-90°	4397.3	38.3
90°-120°	3417.5	29.8
90°-150°	6145.3	53.5
90°-180°	7089.0	61.7
0°-180°	11486.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1549	1534	1539	1535	1535	147
15°	1493	1480	1485	1481	1481	421
25°	1384	1372	1378	1368	1364	637
35°	1228	1220	1223	1211	1210	768
45°	1037	1031	1028	1018	1016	799
55°	815	812	803	794	794	727
65°	568	561	552	544	543	560
75°	296	291	288	284	284	313
85°	58	62	66	68	69	72
90°	0	0	0	0	0	5
95°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1542.4	1542.4	1542.4	1542.4	1542.4
2.5°	1551.9	1539.3	1543.3	1540.6	1535.6
5°	1548.9	1534.2	1539.2	1534.9	1534.9
7.5°	1538.1	1524.1	1527.4	1524.9	1524.9
10°	1529.6	1513.9	1518.9	1514.6	1514.6
12.5°	1515.9	1501.8	1506.9	1502.6	1501.7
15°	1493.2	1479.5	1484.6	1481.4	1481.4
17.5°	1465.7	1452.7	1459.3	1454.1	1452.5
20°	1446.0	1431.4	1439.6	1431.0	1431.0
22.5°	1422.0	1409.0	1416.5	1406.1	1404.5
25°	1383.9	1372.4	1378.5	1367.7	1363.5
27.5°	1341.1	1328.7	1337.8	1325.8	1323.5
30°	1311.1	1299.5	1307.9	1294.9	1291.8
32.5°	1278.5	1268.7	1274.4	1262.4	1260.1
35°	1227.5	1220.2	1223.2	1211.4	1210.4
37.5°	1173.3	1166.2	1169.0	1155.9	1155.1
40°	1136.5	1130.2	1132.2	1118.3	1118.3
42.5°	1098.8	1091.6	1091.9	1078.8	1078.0
45°	1036.9	1030.6	1028.3	1017.6	1016.5
47.5°	971.1	968.2	964.7	953.9	953.9
50°	926.5	924.4	920.1	909.4	909.4
52.5°	881.1	879.9	873.8	864.8	863.1
55°	815.1	812.0	803.3	793.7	793.7
57.5°	742.9	740.4	730.7	723.0	721.1
60°	694.1	689.9	680.2	671.6	670.5
62.5°	643.5	640.2	629.6	621.9	620.0
65°	567.7	561.4	551.6	544.1	543.1
67.5°	487.6	480.5	471.9	465.7	463.6
70°	432.7	426.5	418.8	413.4	411.3
72.5°	378.8	372.5	365.7	362.0	361.6
75°	295.6	291.4	288.1	283.8	283.8
77.5°	214.4	211.9	210.2	208.0	208.0
80°	163.9	163.9	163.9	161.7	161.7
82.5°	117.6	120.1	121.9	120.6	120.6
85°	57.8	62.0	66.4	67.5	68.6
87.5°	16.3	21.3	26.6	27.4	28.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)