

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: P521683

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521683
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

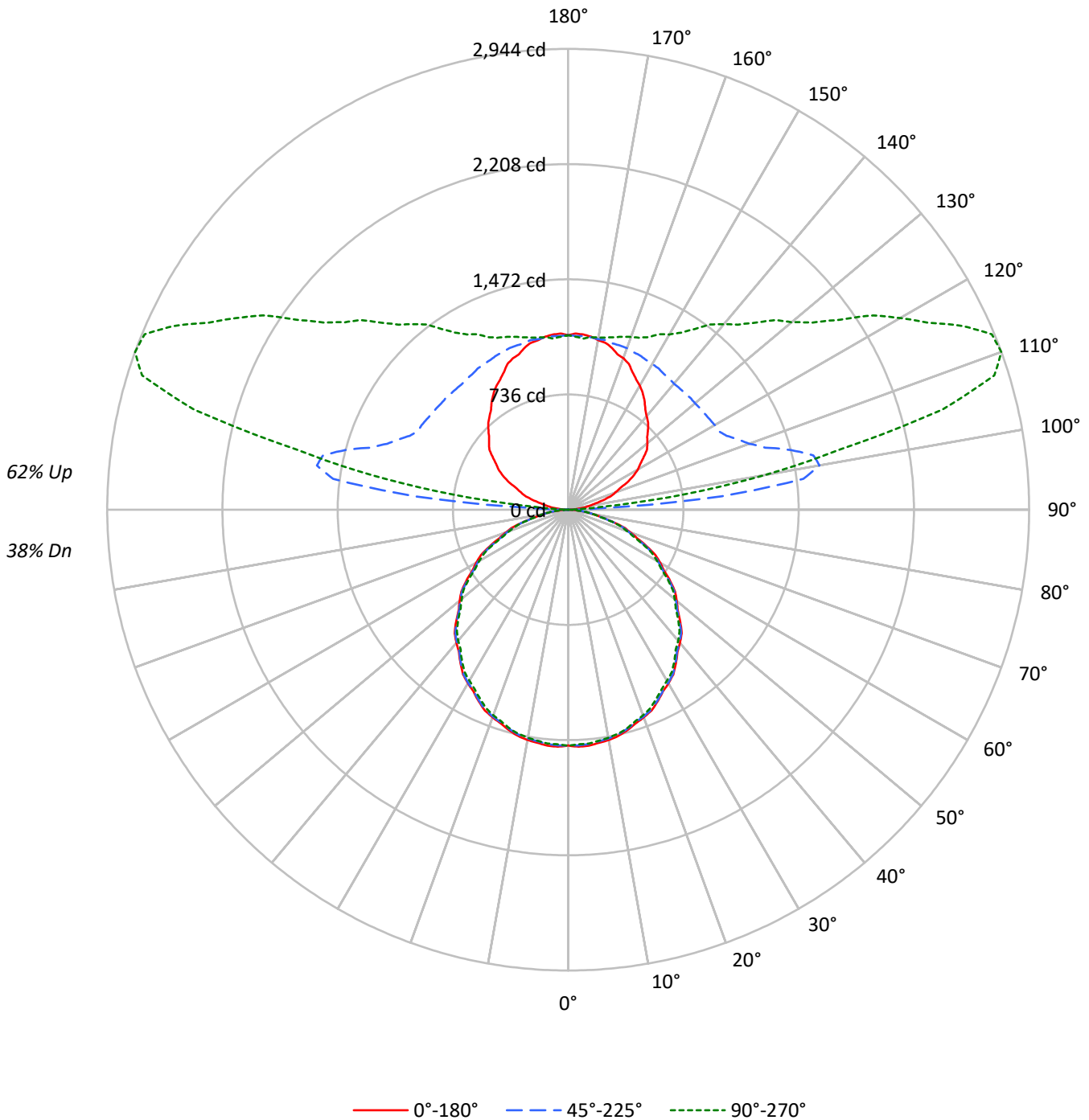
Lumens per Lamp: N/A
Luminaire Lumens: 11218.9 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 93.4
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°	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	1.3
10°-20°	408.6	3.6
20°-30°	617.8	5.5
30°-40°	744.0	6.6
40°-50°	772.7	6.9
50°-60°	700.4	6.2
60°-70°	533.4	4.8
70°-80°	298.0	2.7
80°-90°	77.3	0.7
90°-100°	507.9	4.5
100°-110°	1445.2	12.9
110°-120°	1384.7	12.3
120°-130°	1095.9	9.8
130°-140°	879.7	7.8
140°-150°	688.7	6.1
150°-160°	503.9	4.5
160°-170°	312.1	2.8
170°-180°	105.9	0.9
0°-30°	1169.0	10.4
0°-40°	1913.0	17.1
0°-60°	3386.1	30.2
0°-90°	4294.9	38.3
90°-120°	3337.9	29.8
90°-150°	6002.1	53.5
90°-180°	6924.0	61.7
0°-180°	11218.9	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	5
95°	55	219	983	340	210	63
105°	225	341	1473	2602	2473	238
115°	418	504	1117	2366	2778	411
125°	589	653	1066	1769	2115	527
135°	720	781	1053	1494	1689	556
145°	850	893	1062	1293	1409	531
155°	971	993	1087	1169	1216	449
165°	1072	1076	1100	1124	1140	302
175°	1123	1117	1113	1106	1098	106
180°	1115	1115	1115	1115	1115	

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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°	17.0	89.9	208.5	60.7	45.8
95°	55.1	218.8	983.3	340.3	209.8
97.5°	101.3	256.3	1514.4	1083.6	742.6
100°	133.5	278.6	1629.6	1650.7	1271.5
102.5°	169.1	302.6	1604.2	2112.9	1781.8
105°	224.6	340.7	1472.8	2601.5	2473.1
107.5°	281.0	385.0	1319.4	2739.3	2853.7
110°	320.0	417.4	1231.2	2686.6	2943.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.3	449.7	1171.9	2561.9	2928.3
115°	417.5	504.5	1116.8	2365.9	2778.2
117.5°	470.5	552.1	1084.2	2151.6	2588.3
120°	512.8	581.2	1080.8	2029.1	2447.6
122.5°	546.7	615.1	1072.3	1921.6	2310.3
125°	589.1	653.4	1065.9	1768.9	2114.9
127.5°	635.3	695.4	1062.5	1677.6	1962.8
130°	659.1	719.1	1057.5	1614.1	1862.7
132.5°	684.5	742.9	1057.5	1564.5	1793.2
135°	720.5	780.6	1053.2	1494.2	1689.0
137.5°	754.4	812.9	1052.8	1434.7	1602.9
140°	779.9	839.9	1051.1	1385.4	1547.0
142.5°	808.7	858.8	1056.2	1346.0	1491.0
145°	849.8	893.3	1061.7	1293.2	1409.2
147.5°	885.0	927.2	1071.0	1239.9	1340.2
150°	915.5	944.5	1074.4	1222.2	1292.7
152.5°	939.2	969.9	1077.8	1198.4	1263.9
155°	970.6	993.4	1087.1	1168.7	1216.4
157.5°	1009.6	1023.2	1089.2	1155.3	1189.3
160°	1029.9	1040.3	1097.7	1145.0	1174.0
162.5°	1041.8	1053.8	1099.4	1136.4	1158.8
165°	1072.3	1076.4	1099.8	1123.5	1140.1
167.5°	1093.1	1089.3	1109.6	1120.3	1127.0
170°	1099.8	1097.8	1106.2	1108.5	1116.8
172.5°	1115.1	1108.1	1111.3	1105.1	1111.7
175°	1123.2	1116.9	1112.6	1106.0	1097.7
177.5°	1126.5	1116.6	1111.3	1104.5	1106.2
180°	1114.7	1114.7	1114.7	1114.7	1114.7

(END OF REPORT)