

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: P521678

Luminaire Tested: SQ4-F-150U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521678
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10259.8 lumens
Efficiency: N/A
Efficacy: 110.0 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

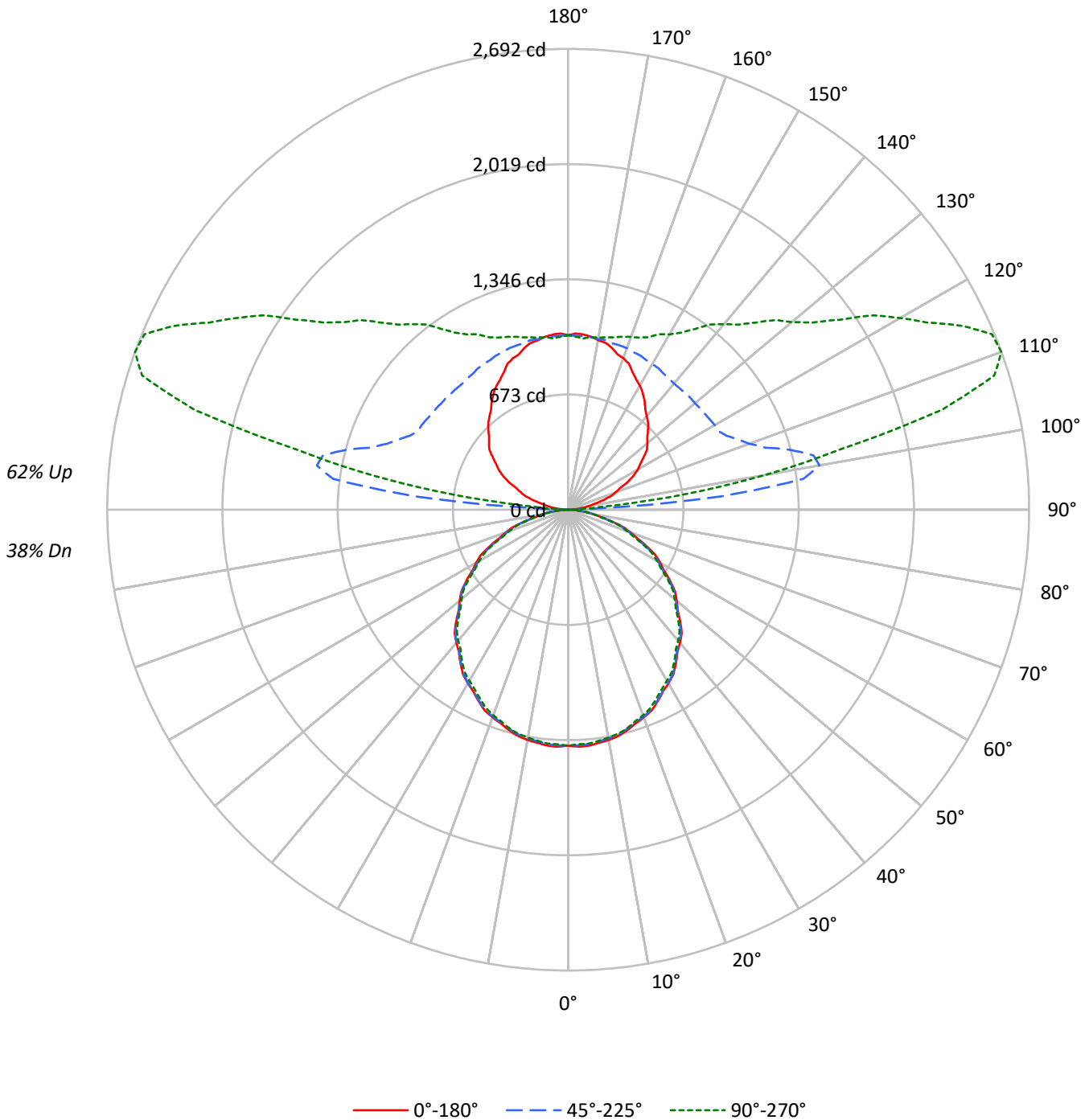
Input Watts (W): 93.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	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	1.3
10°-20°	373.6	3.6
20°-30°	565.0	5.5
30°-40°	680.4	6.6
40°-50°	706.6	6.9
50°-60°	640.5	6.2
60°-70°	487.8	4.8
70°-80°	272.6	2.7
80°-90°	70.7	0.7
90°-100°	464.5	4.5
100°-110°	1321.7	12.9
110°-120°	1266.3	12.3
120°-130°	1002.2	9.8
130°-140°	804.5	7.8
140°-150°	629.8	6.1
150°-160°	460.8	4.5
160°-170°	285.4	2.8
170°-180°	96.9	0.9
0°-30°	1069.1	10.4
0°-40°	1749.5	17.1
0°-60°	3096.6	30.2
0°-90°	3927.7	38.3
90°-120°	3052.5	29.8
90°-150°	5489.0	53.5
90°-180°	6332.0	61.7
0°-180°	10259.8	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	4
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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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°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)