

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: P521654

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521654
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8703.7 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

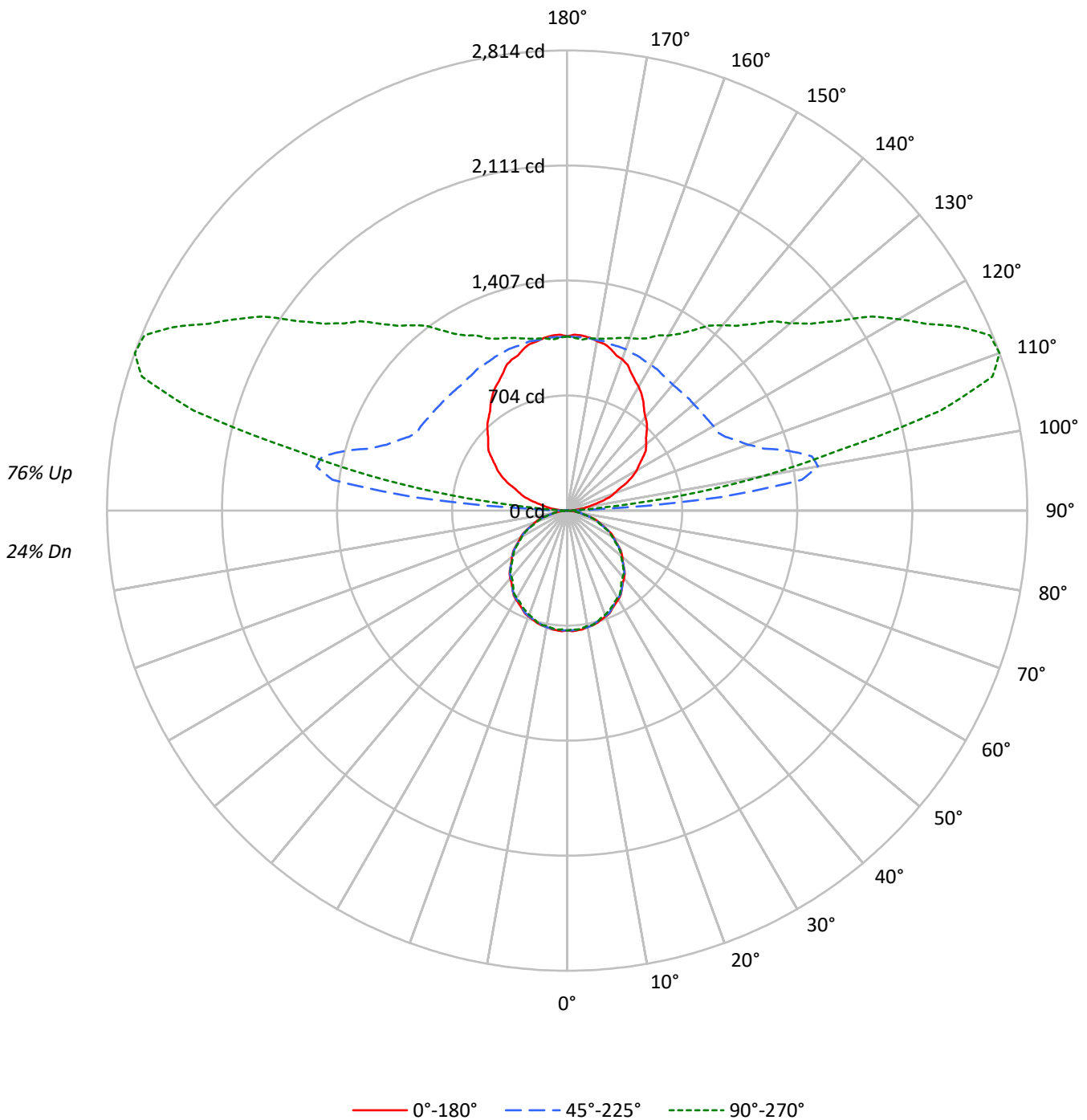
Input Watts (W): 71.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521654

CATALOG NUMBER: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P521654

CATALOG NUMBER: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24				
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20				
2	84	76	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17				
3	76	67	60	54	67	60	54	49	46	42	39	34	31	29	22	20	19	14				
4	69	59	52	46	61	53	46	41	41	36	33	30	27	24	19	18	16	12				
5	64	52	45	39	56	47	40	35	36	32	28	27	23	21	17	16	14	10				
6	58	47	39	33	52	42	35	30	33	28	24	24	21	18	16	14	12	9				
7	54	42	34	29	48	38	31	26	29	25	21	22	18	16	14	12	11	8				
8	50	38	31	25	44	34	28	23	27	22	19	20	16	14	13	11	10	7				
9	46	35	27	22	41	31	25	20	24	20	17	18	15	13	12	10	9	6				
10	43	31	25	20	38	28	22	18	22	18	15	17	13	11	11	9	8	6				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6763	6763	6763
5°	6807	6761	6770
10°	6773	6792	6708
15°	6791	6724	6753
20°	6765	6735	6667
25°	6688	6648	6607
30°	6669	6626	6563
35°	6566	6566	6465
40°	6516	6456	6371
45°	6393	6393	6302
50°	6316	6272	6186
55°	6209	6145	6048
60°	6071	5960	5868
65°	5829	5698	5589
70°	5557	5368	5233
75°	4955	4812	4741
80°	4091	4038	3985
85°	2964	3282	3282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6393 cd/sqm

TEST NUMBER: P521654

CATALOG NUMBER: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.4	0.8
10°-20°	198.8	2.3
20°-30°	300.4	3.5
30°-40°	361.8	4.2
40°-50°	375.1	4.3
50°-60°	340.1	3.9
60°-70°	258.5	3.0
70°-80°	144.0	1.7
80°-90°	37.1	0.4
90°-100°	485.5	5.6
100°-110°	1381.5	15.9
110°-120°	1323.6	15.2
120°-130°	1047.6	12.0
130°-140°	840.8	9.7
140°-150°	658.3	7.6
150°-160°	481.7	5.5
160°-170°	298.3	3.4
170°-180°	101.2	1.2
0°-30°	568.6	6.5
0°-40°	930.4	10.7
0°-60°	1645.7	18.9
0°-90°	2085.3	24.0
90°-120°	3190.6	36.7
90°-150°	5737.2	65.9
90°-180°	6618.0	76.0
0°-180°	8703.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	733	733	733	733	733	
5°	735	726	730	731	731	70
15°	711	704	704	704	707	200
25°	657	652	653	649	649	304
35°	583	577	583	576	574	366
45°	490	487	490	481	483	379
55°	386	385	382	378	376	344
65°	267	266	261	258	256	264
75°	139	137	135	133	133	148
85°	28	30	31	32	31	34
90°	0	0	0	0	0	3
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

TEST NUMBER: P521654

CATALOG NUMBER: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	733.0	733.0	733.0	733.0	733.0
2.5°	738.6	730.8	732.2	732.9	727.4
5°	735.0	726.2	730.0	731.0	731.0
7.5°	731.8	725.0	727.4	724.4	724.0
10°	723.0	720.1	725.0	718.0	716.0
12.5°	719.0	714.5	715.4	714.0	716.0
15°	711.0	704.2	704.0	704.1	707.0
17.5°	698.6	689.8	695.6	689.4	688.6
20°	689.0	680.2	686.0	679.0	679.0
22.5°	679.4	669.0	674.8	665.3	663.0
25°	657.0	652.1	653.0	649.0	649.0
27.5°	641.2	630.4	634.0	628.4	628.8
30°	626.0	615.2	622.0	614.0	616.0
32.5°	610.8	604.0	607.6	598.9	602.4
35°	583.0	577.1	583.0	576.0	574.0
37.5°	558.6	552.5	554.4	549.9	545.0
40°	541.0	534.2	536.0	530.0	529.0
42.5°	521.8	517.3	517.6	512.4	513.0
45°	490.0	487.1	490.0	481.0	483.0
47.5°	461.6	458.1	457.8	451.9	454.2
50°	440.0	438.0	437.0	431.0	431.0
52.5°	417.6	415.6	414.6	410.2	409.4
55°	386.0	385.0	382.0	378.0	376.0
57.5°	351.4	349.4	347.8	343.6	342.0
60°	329.0	327.0	323.0	318.0	318.0
62.5°	304.2	302.2	297.4	295.5	292.4
65°	267.0	266.0	261.0	258.0	256.0
67.5°	230.0	226.9	224.6	220.8	218.8
70°	206.0	202.1	199.0	196.0	194.0
72.5°	179.6	176.5	173.4	171.9	169.2
75°	139.0	137.0	135.0	133.0	133.0
77.5°	101.0	100.4	98.4	98.4	97.4
80°	77.0	78.0	76.0	76.0	75.0
82.5°	55.4	56.4	56.0	56.8	55.8
85°	28.0	30.0	31.0	32.0	31.0
87.5°	8.0	10.3	12.0	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

TEST NUMBER: P521654

CATALOG NUMBER: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)