

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: P521568

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521568
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 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: 8028.7 lumens
Efficiency: N/A
Efficacy: 125.6 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: General Diffuse

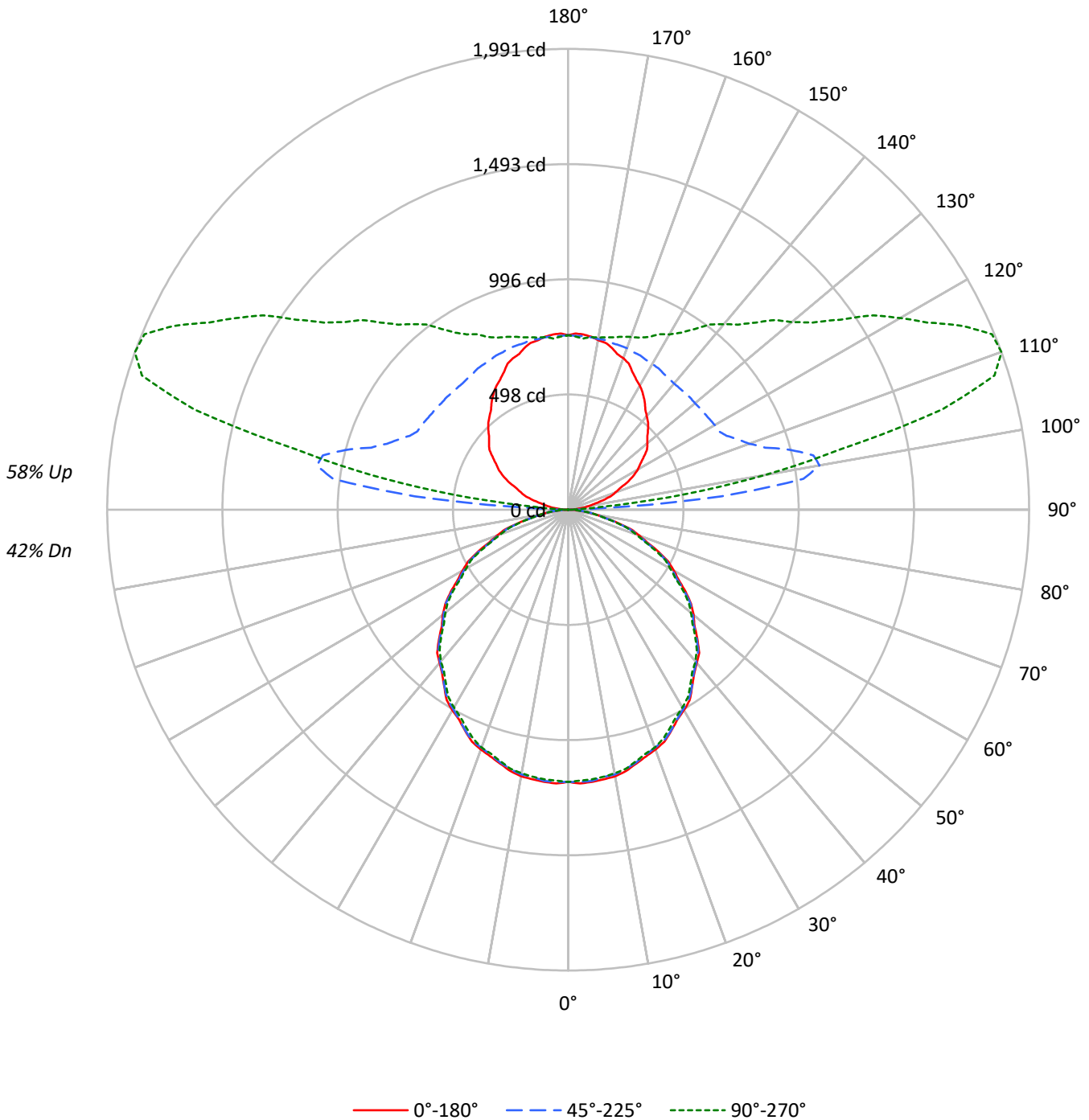
Input Watts (W): 63.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521568

CATALOG NUMBER: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K

Luminous Intensity Polar Plot



TEST NUMBER: P521568

CATALOG NUMBER: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42				
1	96	91	88	84	87	84	80	77	69	66	64	55	54	52	43	42	41	35				
2	87	80	74	68	79	73	68	63	60	56	53	48	46	43	37	36	34	29				
3	79	70	63	57	72	64	58	53	53	48	44	43	39	36	33	31	29	24				
4	72	62	54	48	66	57	50	44	47	42	38	38	34	31	29	27	25	21				
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	24	21	18				
6	61	49	41	35	55	45	38	33	38	32	28	30	26	23	24	21	19	16				
7	56	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14				
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12				
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10851	10851	10851
5°	10932	10892	10833
10°	10958	10878	10828
15°	10845	10804	10753
20°	10822	10748	10737
25°	10730	10708	10588
30°	10658	10590	10510
35°	10508	10496	10363
40°	10411	10359	10295
45°	10287	10231	10119
50°	10146	10070	9933
55°	9958	9838	9699
60°	9724	9566	9389
65°	9400	9191	9027
70°	8813	8611	8408
75°	7942	7714	7600
80°	6487	6546	6429
85°	4647	5325	5325

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10287 cd/sqm

TEST NUMBER: P521568

CATALOG NUMBER: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.4	1.4
10°-20°	318.7	4.0
20°-30°	482.2	6.0
30°-40°	580.0	7.2
40°-50°	602.2	7.5
50°-60°	545.5	6.8
60°-70°	415.0	5.2
70°-80°	230.6	2.9
80°-90°	59.4	0.7
90°-100°	343.6	4.3
100°-110°	977.6	12.2
110°-120°	936.6	11.7
120°-130°	741.3	9.2
130°-140°	595.0	7.4
140°-150°	465.8	5.8
150°-160°	340.8	4.2
160°-170°	211.1	2.6
170°-180°	71.6	0.9
0°-30°	912.4	11.4
0°-40°	1492.4	18.6
0°-60°	2640.1	32.9
0°-90°	3345.1	41.7
90°-120°	2257.8	28.1
90°-150°	4059.9	50.6
90°-180°	4684.0	58.3
0°-180°	8028.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1176	1176	1176	1176	1176	
5°	1180	1170	1176	1171	1170	112
15°	1135	1126	1131	1130	1126	321
25°	1054	1045	1052	1041	1040	486
35°	933	929	932	921	920	585
45°	788	783	784	776	776	608
55°	619	618	612	606	603	553
65°	431	424	421	414	414	424
75°	223	220	216	214	213	236
85°	44	47	50	50	50	54
90°	0	0	0	0	0	3
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

TEST NUMBER: P521568

CATALOG NUMBER: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.1	1176.1	1176.1	1176.1	1176.1
2.5°	1183.8	1173.8	1177.0	1174.3	1171.8
5°	1180.4	1169.9	1176.1	1170.7	1169.7
7.5°	1174.8	1162.5	1165.4	1164.3	1164.3
10°	1169.7	1154.0	1161.1	1155.8	1155.8
12.5°	1156.0	1142.8	1148.3	1145.5	1147.2
15°	1135.4	1126.0	1131.1	1130.0	1125.8
17.5°	1117.6	1106.3	1110.1	1108.2	1106.5
20°	1102.2	1091.7	1094.7	1089.4	1093.6
22.5°	1085.1	1074.6	1080.1	1071.3	1071.3
25°	1054.0	1044.6	1051.9	1041.1	1040.1
27.5°	1021.0	1014.9	1019.7	1011.7	1008.8
30°	1000.4	991.0	994.0	988.6	986.5
32.5°	976.4	967.0	970.0	960.4	961.7
35°	933.0	928.8	931.9	921.2	920.1
37.5°	893.5	885.2	890.1	881.3	880.5
40°	864.4	856.0	860.1	854.8	854.8
42.5°	837.8	828.6	831.0	823.9	821.3
45°	788.4	783.1	784.1	775.5	775.5
47.5°	739.5	735.7	734.2	725.4	727.1
50°	706.9	700.7	701.6	692.0	692.0
52.5°	669.2	669.7	665.6	659.3	654.2
55°	619.1	618.1	611.6	606.2	603.0
57.5°	565.6	560.7	556.1	548.8	548.2
60°	527.0	523.9	518.4	511.9	508.8
62.5°	487.6	484.4	479.0	473.4	472.8
65°	430.6	424.3	421.0	414.5	413.5
67.5°	368.7	363.7	359.5	354.3	353.7
70°	326.7	322.5	319.2	314.8	311.7
72.5°	288.1	281.4	278.1	274.6	272.3
75°	222.8	219.7	216.4	214.2	213.2
77.5°	159.8	160.0	160.0	157.2	156.2
80°	122.1	123.2	123.2	122.1	121.0
82.5°	88.7	90.6	91.5	90.4	90.2
85°	43.9	47.1	50.3	50.3	50.3
87.5°	12.0	16.2	19.7	20.5	19.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

TEST NUMBER: P521568

CATALOG NUMBER: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)