

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: P521458

Luminaire Tested: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521458
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-075U-075D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6240.6 lumens
Efficiency: N/A
Efficacy: 112.2 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

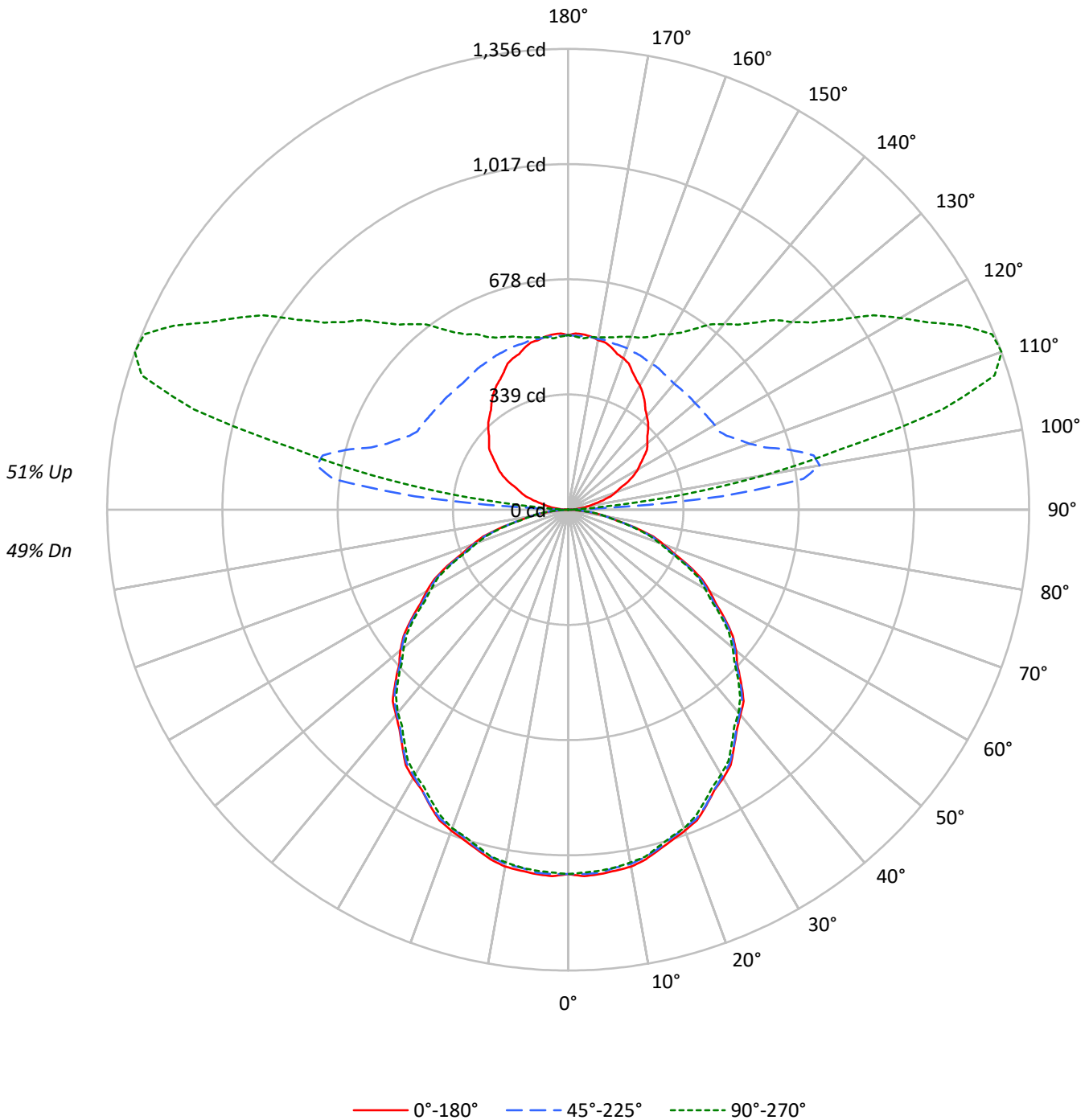
Input Watts (W): 55.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521458

CATALOG NUMBER: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P521458

CATALOG NUMBER: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_3000K

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	0
RCR																				
0	107	107	107	107	98	98	98	98	83	83	83		68	68	68		55	55	55	49
1	97	93	89	86	90	86	82	79	72	70	68		60	58	57		48	47	46	41
2	89	81	75	70	81	75	69	65	63	59	56		52	50	47		42	40	39	34
3	81	71	64	58	74	66	59	54	56	51	47		46	43	40		37	35	33	29
4	74	63	55	49	68	58	51	46	49	44	40		41	37	34		33	30	28	24
5	68	56	48	42	62	52	44	39	44	38	34		37	32	29		30	27	24	21
6	62	50	42	36	57	46	39	34	40	34	30		33	29	25		27	24	21	18
7	57	45	37	31	53	42	35	30	36	30	26		30	26	22		25	21	19	16
8	53	41	33	28	49	38	31	26	33	27	23		27	23	20		23	19	17	14
9	50	37	30	25	46	35	28	23	30	24	21		25	21	18		21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18		23	19	16		19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9893	9893	9893
5°	9967	9931	9876
10°	9991	9918	9872
15°	9888	9851	9804
20°	9866	9800	9790
25°	9782	9763	9653
30°	9717	9655	9582
35°	9580	9569	9449
40°	9492	9445	9386
45°	9379	9327	9225
50°	9251	9182	9056
55°	9080	8969	8844
60°	8866	8722	8560
65°	8571	8379	8230
70°	8036	7850	7666
75°	7240	7033	6926
80°	5914	5967	5866
85°	4234	4859	4859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9379 cd/sqm

TEST NUMBER: P521458

CATALOG NUMBER: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	1.6
10°-20°	290.6	4.7
20°-30°	439.7	7.0
30°-40°	528.8	8.5
40°-50°	549.0	8.8
50°-60°	497.4	8.0
60°-70°	378.4	6.1
70°-80°	210.3	3.4
80°-90°	54.2	0.9
90°-100°	234.1	3.8
100°-110°	666.0	10.7
110°-120°	638.1	10.2
120°-130°	505.0	8.1
130°-140°	405.4	6.5
140°-150°	317.4	5.1
150°-160°	232.2	3.7
160°-170°	143.8	2.3
170°-180°	48.8	0.8
0°-30°	831.8	13.3
0°-40°	1360.6	21.8
0°-60°	2407.0	38.6
0°-90°	3049.8	48.9
90°-120°	1538.2	24.6
90°-150°	2766.0	44.3
90°-180°	3191.0	51.1
0°-180°	6240.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1076	1067	1072	1067	1066	102
15°	1035	1027	1031	1030	1026	293
25°	961	952	959	949	948	443
35°	851	847	850	840	839	533
45°	719	714	715	707	707	555
55°	564	564	558	553	550	504
65°	393	387	384	378	377	386
75°	203	200	197	195	194	215
85°	40	43	46	46	46	49
90°	0	0	0	0	0	3
95°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

TEST NUMBER: P521458

CATALOG NUMBER: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1079.3	1070.1	1073.1	1070.7	1068.4
5°	1076.2	1066.6	1072.3	1067.4	1066.4
7.5°	1071.1	1059.8	1062.5	1061.5	1061.5
10°	1066.4	1052.1	1058.6	1053.7	1053.7
12.5°	1053.9	1041.9	1046.9	1044.4	1045.9
15°	1035.2	1026.6	1031.3	1030.2	1026.4
17.5°	1019.0	1008.6	1012.1	1010.3	1008.8
20°	1004.9	995.3	998.1	993.3	997.1
22.5°	989.3	979.7	984.8	976.8	976.8
25°	960.9	952.3	959.0	949.2	948.2
27.5°	930.9	925.3	929.7	922.4	919.7
30°	912.1	903.5	906.3	901.3	899.4
32.5°	890.2	881.6	884.4	875.6	876.8
35°	850.6	846.8	849.6	839.8	838.9
37.5°	814.7	807.0	811.5	803.5	802.7
40°	788.1	780.5	784.2	779.3	779.3
42.5°	763.9	755.5	757.6	751.1	748.8
45°	718.8	714.0	714.8	707.0	707.0
47.5°	674.2	670.8	669.3	661.4	662.9
50°	644.5	638.8	639.7	630.9	630.9
52.5°	610.2	610.5	606.8	601.1	596.5
55°	564.5	563.5	557.6	552.7	549.8
57.5°	515.6	511.2	507.0	500.4	499.8
60°	480.5	477.6	472.7	466.7	463.9
62.5°	444.5	441.7	436.7	431.6	431.1
65°	392.6	386.9	383.8	377.9	377.0
67.5°	336.1	331.6	327.7	323.0	322.5
70°	297.9	294.0	291.0	287.0	284.2
72.5°	262.7	256.6	253.5	250.3	248.2
75°	203.1	200.3	197.3	195.3	194.3
77.5°	145.7	145.9	145.9	143.3	142.4
80°	111.3	112.3	112.3	111.3	110.4
82.5°	80.9	82.6	83.4	82.4	82.2
85°	40.0	42.9	45.9	45.9	45.9
87.5°	10.9	14.8	18.0	18.7	18.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

TEST NUMBER: P521458

CATALOG NUMBER: SQ4-F-075U-075D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)