

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: P521184

Luminaire Tested: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521184
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 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: 5421.6 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

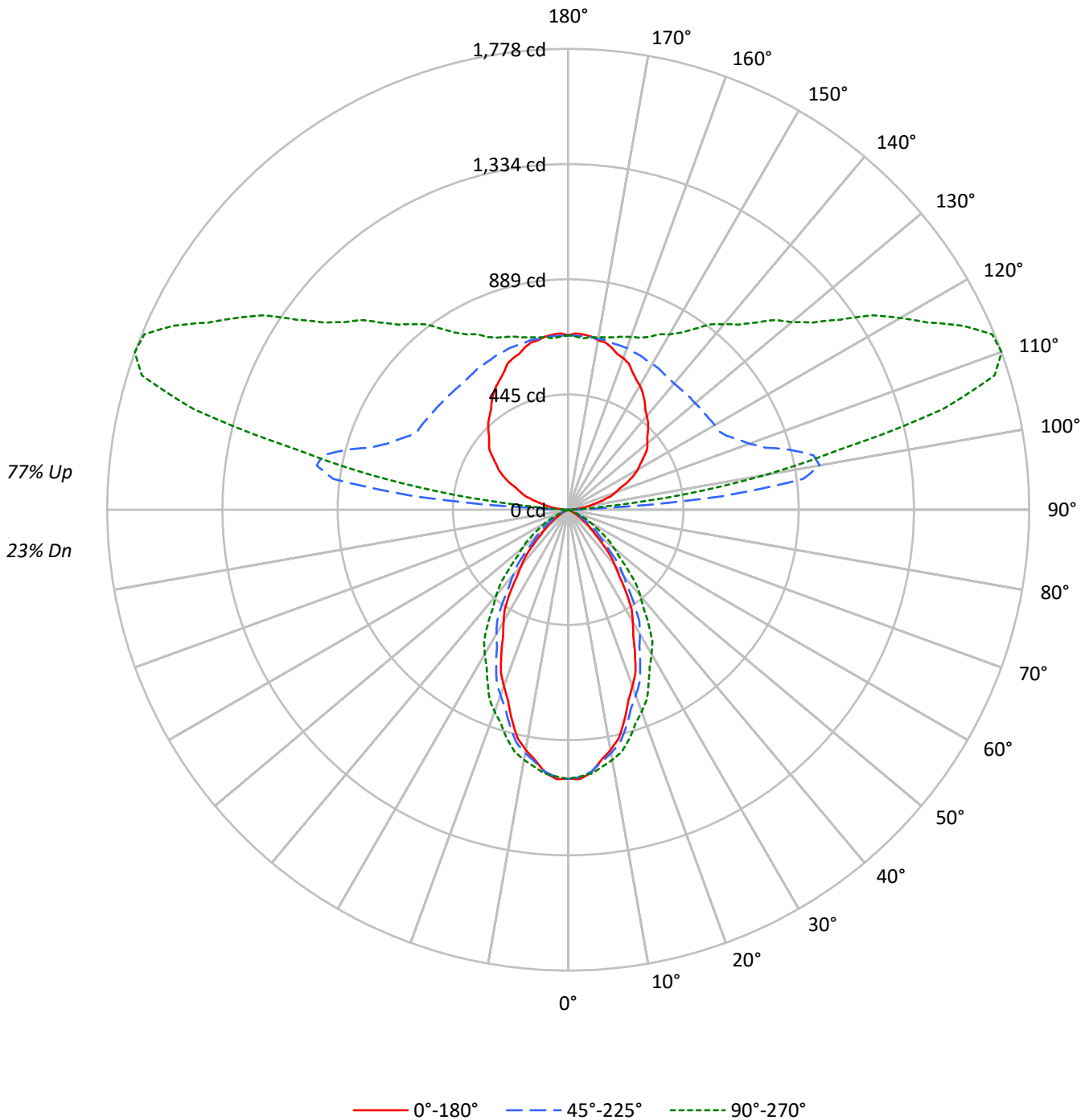
Input Watts (W): 52.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521184

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0														
RCR																																						
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23																				
1	93	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21																				
2	85	78	73	68	75	70	66	62	54	51	49	40	38	37	26	25	25	19																				
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17																				
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15																				
5	66	56	48	43	59	50	44	39	39	35	32	30	27	25	20	19	18	14																				
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13																				
7	56	45	38	33	50	41	35	30	33	28	25	25	22	20	17	16	15	12																				
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	15	13	11																				
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10																				
10	46	35	28	24	41	31	26	22	25	21	18	20	17	15	14	12	11	9																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9577	9577	9577
5°	9423	9399	9469
10°	8817	8934	9183
15°	8015	8269	8729
20°	7114	7485	8140
25°	6196	6686	7479
30°	5308	5890	6853
35°	4400	5000	6097
40°	3381	3997	5196
45°	2444	3027	4181
50°	1665	2256	3316
55°	1083	1631	2577
60°	620	1150	1862
65°	164	701	943
70°	81	216	270
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4181 cd/sqm

TEST NUMBER: P521184

CATALOG NUMBER: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	1.7
10°-20°	242.2	4.5
20°-30°	303.3	5.6
30°-40°	280.1	5.2
40°-50°	188.2	3.5
50°-60°	97.2	1.8
60°-70°	30.4	0.6
70°-80°	1.9	0.0
80°-90°	0.0	0.0
90°-100°	306.9	5.7
100°-110°	873.2	16.1
110°-120°	836.6	15.4
120°-130°	662.1	12.2
130°-140°	531.5	9.8
140°-150°	416.1	7.7
150°-160°	304.4	5.6
160°-170°	188.6	3.5
170°-180°	64.0	1.2
0°-30°	640.2	11.8
0°-40°	920.4	17.0
0°-60°	1205.8	22.2
0°-90°	1238.2	22.8
90°-120°	2016.7	37.2
90°-150°	3626.3	66.9
90°-180°	4183.0	77.2
0°-180°	5421.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1017	1007	1015	1018	1022	94
15°	839	836	866	895	914	234
25°	609	614	657	702	735	279
35°	391	400	444	496	541	242
45°	187	199	232	277	320	147
55°	67	79	101	130	160	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

TEST NUMBER: P521184

CATALOG NUMBER: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1038.0	1038.0	1038.0	1038.0	1038.0
2.5°	1040.4	1030.6	1033.2	1033.1	1030.3
5°	1017.4	1007.1	1014.9	1018.5	1022.4
7.5°	974.4	966.4	981.3	992.6	1000.7
10°	941.1	934.2	953.6	968.9	980.2
12.5°	902.5	897.2	920.7	941.7	956.1
15°	839.1	836.2	865.7	894.8	913.9
17.5°	771.2	771.1	804.9	841.0	864.0
20°	724.6	726.1	762.3	802.1	829.1
22.5°	678.0	681.5	720.1	761.6	792.5
25°	608.6	613.5	656.8	701.8	734.7
27.5°	541.9	549.1	594.7	641.4	681.4
30°	498.2	506.5	552.9	602.0	643.3
32.5°	455.2	465.1	510.3	562.3	604.3
35°	390.7	400.5	443.9	496.2	541.3
37.5°	324.1	333.7	376.1	427.5	476.4
40°	280.7	291.5	331.9	381.8	431.4
42.5°	241.3	252.1	290.2	339.1	386.0
45°	187.3	198.6	232.0	277.2	320.4
47.5°	142.5	154.8	184.1	225.0	264.3
50°	116.0	128.3	157.2	193.2	231.0
52.5°	94.7	106.6	132.7	166.6	201.3
55°	67.3	78.6	101.4	130.2	160.2
57.5°	46.5	56.2	76.7	100.8	124.2
60°	33.6	43.0	62.3	81.8	100.9
62.5°	22.4	30.9	49.8	64.8	77.6
65°	7.5	14.4	32.1	38.8	43.2
67.5°	3.8	4.6	16.9	17.8	19.3
70°	3.0	3.0	8.0	8.6	10.0
72.5°	2.2	2.2	3.2	4.1	4.4
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

TEST NUMBER: P521184

CATALOG NUMBER: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)