

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: P521084

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521084
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-075U-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4720.0 lumens
Efficiency: N/A
Efficacy: 106.3 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

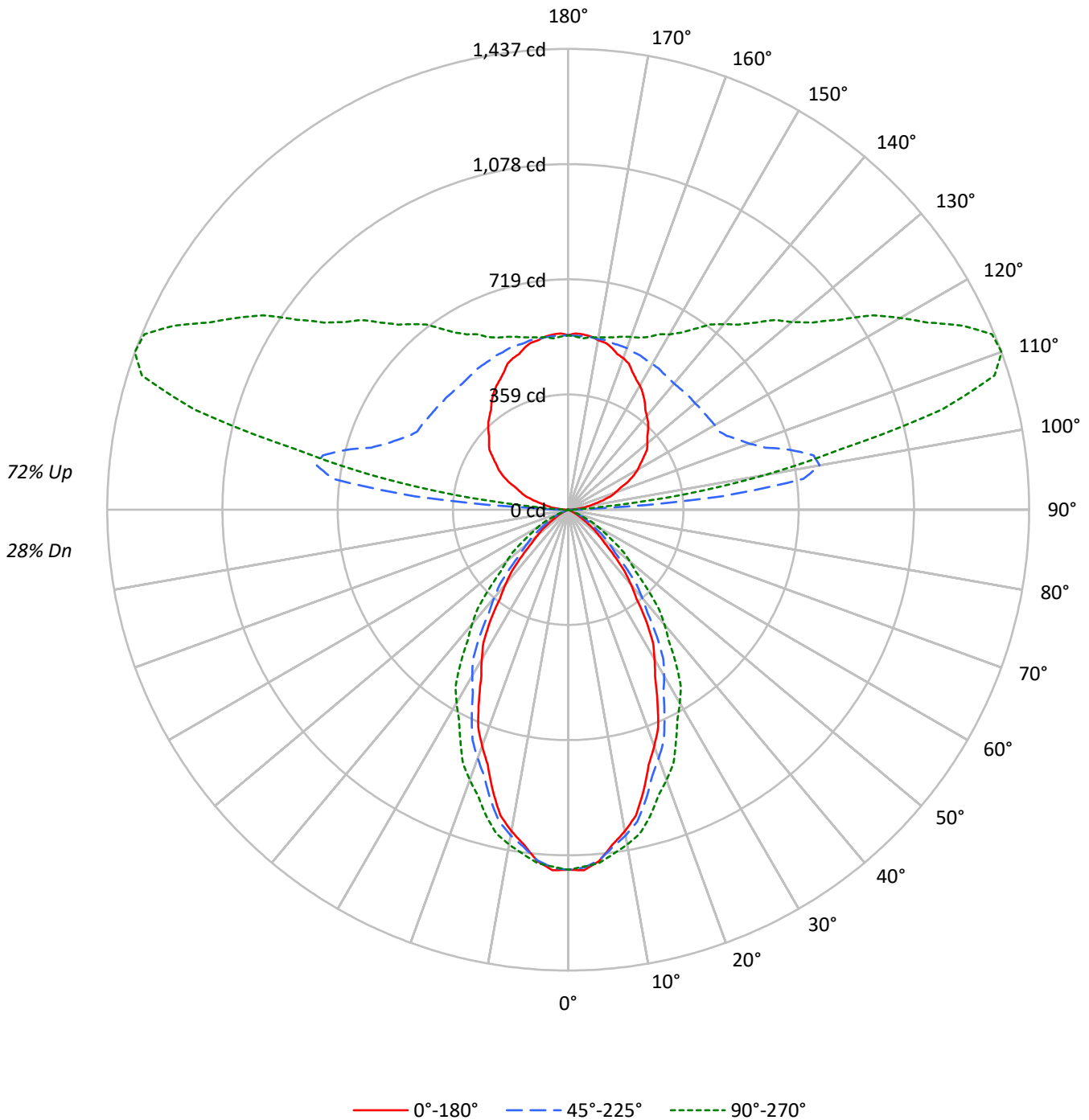
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521084

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot



TEST NUMBER: P521084

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_4500K

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28																				
1	94	90	87	84	84	81	78	76	64	62	60	48	47	46	34	33	33	26																				
2	86	80	75	70	77	72	68	64	57	54	52	43	42	40	31	30	29	23																				
3	79	71	65	60	71	64	59	55	51	48	45	39	37	35	28	27	26	21																				
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	24	23	19																				
5	67	57	50	44	61	52	46	41	42	38	34	33	30	28	24	22	21	17																				
6	62	52	44	39	56	47	41	36	38	34	30	30	27	25	22	20	19	16																				
7	58	47	40	35	52	43	36	32	35	30	27	27	24	22	21	19	17	15																				
8	54	43	36	31	48	39	33	29	32	27	24	25	22	20	19	17	16	13																				
9	50	39	32	28	45	36	30	26	29	25	22	23	20	18	18	16	15	12																				
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	17	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10357	10357	10357
5°	10190	10165	10240
10°	9535	9662	9932
15°	8668	8943	9441
20°	7695	8094	8804
25°	6700	7232	8089
30°	5740	6371	7412
35°	4759	5407	6595
40°	3657	4324	5619
45°	2643	3274	4521
50°	1801	2440	3585
55°	1171	1765	2786
60°	672	1242	2015
65°	177	760	1020
70°	89	235	294
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4521 cd/sqm

TEST NUMBER: P521084

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	2.2
10°-20°	262.0	5.6
20°-30°	328.0	6.9
30°-40°	303.0	6.4
40°-50°	203.6	4.3
50°-60°	105.2	2.2
60°-70°	32.9	0.7
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	248.0	5.3
100°-110°	705.7	15.0
110°-120°	676.1	14.3
120°-130°	535.1	11.3
130°-140°	429.5	9.1
140°-150°	336.2	7.1
150°-160°	246.0	5.2
160°-170°	152.4	3.2
170°-180°	51.7	1.1
0°-30°	692.4	14.7
0°-40°	995.4	21.1
0°-60°	1304.1	27.6
0°-90°	1339.2	28.4
90°-120°	1629.8	34.5
90°-150°	2930.6	62.1
90°-180°	3381.0	71.6
0°-180°	4720.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1100	1089	1098	1102	1106	102
15°	908	904	936	968	988	253
25°	658	664	710	759	795	302
35°	422	433	480	537	586	262
45°	203	215	251	300	346	159
55°	73	85	110	141	173	68
65°	8	16	35	42	47	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

TEST NUMBER: P521084

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.6	1122.6	1122.6	1122.6	1122.6
2.5°	1125.2	1114.6	1117.4	1117.3	1114.3
5°	1100.3	1089.2	1097.6	1101.5	1105.7
7.5°	1053.8	1045.1	1061.3	1073.5	1082.3
10°	1017.8	1010.3	1031.3	1047.9	1060.1
12.5°	976.1	970.3	995.7	1018.4	1034.1
15°	907.5	904.3	936.3	967.7	988.4
17.5°	834.1	834.0	870.5	909.5	934.5
20°	783.7	785.3	824.4	867.4	896.7
22.5°	733.3	737.0	778.8	823.7	857.1
25°	658.2	663.5	710.4	759.0	794.6
27.5°	586.1	593.9	643.1	693.7	737.0
30°	538.8	547.8	598.0	651.1	695.7
32.5°	492.3	503.0	551.9	608.1	653.6
35°	422.5	433.2	480.1	536.6	585.5
37.5°	350.5	360.9	406.8	462.4	515.2
40°	303.6	315.3	359.0	412.9	466.5
42.5°	261.0	272.7	313.8	366.8	417.4
45°	202.6	214.8	250.9	299.8	346.5
47.5°	154.1	167.4	199.1	243.3	285.9
50°	125.5	138.7	170.0	208.9	249.8
52.5°	102.4	115.3	143.5	180.2	217.7
55°	72.8	85.0	109.7	140.9	173.2
57.5°	50.3	60.8	83.0	109.0	134.4
60°	36.4	46.5	67.3	88.5	109.2
62.5°	24.2	33.5	53.9	70.1	84.0
65°	8.1	15.6	34.8	41.9	46.7
67.5°	4.1	5.0	18.2	19.3	20.9
70°	3.3	3.3	8.7	9.3	10.9
72.5°	2.4	2.4	3.5	4.5	4.8
75°	1.1	1.1	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°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

TEST NUMBER: P521084

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)