

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: P521086

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5700K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521086  
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\_5700K  
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 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4840.2 lumens  
Efficiency: N/A  
Efficacy: 109.5 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

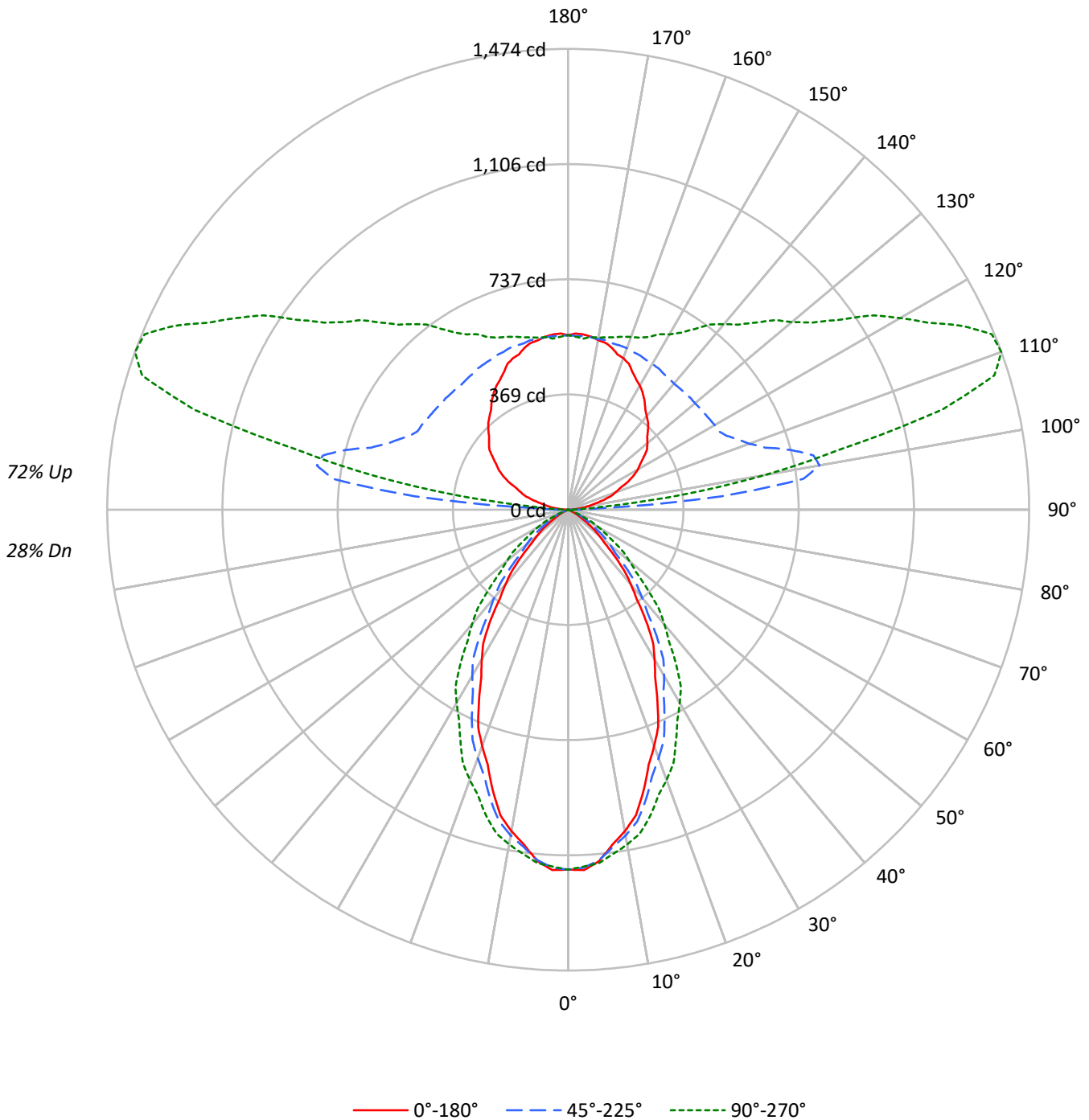
Input Watts (W): 44.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P521086

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5700K

### Luminous Intensity Polar Plot



TEST NUMBER: P521086

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5700K

**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°	10621	10621	10621
5°	10450	10425	10502
10°	9778	9908	10185
15°	8889	9171	9682
20°	7890	8300	9028
25°	6871	7416	8295
30°	5886	6533	7600
35°	4880	5545	6762
40°	3749	4433	5762
45°	2710	3357	4636
50°	1847	2502	3677
55°	1200	1810	2858
60°	688	1275	2065
65°	183	777	1046
70°	89	240	299
75°	39	21	0
80°	32	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4636 cd/sqm

TEST NUMBER: P521086

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	2.2
10°-20°	268.7	5.6
20°-30°	336.3	6.9
30°-40°	310.7	6.4
40°-50°	208.8	4.3
50°-60°	107.8	2.2
60°-70°	33.8	0.7
70°-80°	2.1	0.0
80°-90°	0.0	0.0
90°-100°	254.3	5.3
100°-110°	723.6	15.0
110°-120°	693.3	14.3
120°-130°	548.7	11.3
130°-140°	440.5	9.1
140°-150°	344.8	7.1
150°-160°	252.3	5.2
160°-170°	156.3	3.2
170°-180°	53.0	1.1
0°-30°	710.1	14.7
0°-40°	1020.7	21.1
0°-60°	1337.3	27.6
0°-90°	1373.3	28.4
90°-120°	1671.3	34.5
90°-150°	3005.3	62.1
90°-180°	3467.0	71.6
0°-180°	4840.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1128	1117	1126	1130	1134	105
15°	931	927	960	992	1014	259
25°	675	680	728	778	815	309
35°	433	444	492	550	600	268
45°	208	220	257	307	355	163
55°	75	87	112	144	178	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

TEST NUMBER: P521086

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1153.8	1143.0	1145.8	1145.8	1142.7
5°	1128.3	1116.9	1125.6	1129.6	1133.9
7.5°	1080.7	1071.7	1088.4	1100.8	1109.8
10°	1043.7	1036.1	1057.6	1074.6	1087.1
12.5°	1000.9	995.0	1021.1	1044.4	1060.4
15°	930.6	927.4	960.1	992.4	1013.6
17.5°	855.3	855.2	892.6	932.7	958.3
20°	803.6	805.3	845.4	889.5	919.5
22.5°	752.0	755.8	798.6	844.6	878.9
25°	675.0	680.4	728.5	778.3	814.8
27.5°	601.0	609.0	659.5	711.3	755.8
30°	552.5	561.7	613.2	667.7	713.4
32.5°	504.8	515.8	566.0	623.6	670.2
35°	433.3	444.2	492.3	550.3	600.4
37.5°	359.4	370.1	417.1	474.2	528.3
40°	311.3	323.3	368.1	423.4	478.4
42.5°	267.7	279.6	321.8	376.1	428.1
45°	207.7	220.3	257.3	307.4	355.3
47.5°	158.1	171.7	204.2	249.5	293.2
50°	128.7	142.3	174.3	214.3	256.2
52.5°	105.0	118.2	147.1	184.8	223.2
55°	74.6	87.2	112.5	144.4	177.7
57.5°	51.6	62.4	85.1	111.8	137.8
60°	37.3	47.7	69.1	90.7	111.9
62.5°	24.8	34.3	55.2	71.8	86.1
65°	8.4	16.0	35.6	43.0	47.9
67.5°	4.2	5.1	18.7	19.8	21.4
70°	3.3	3.3	8.9	9.5	11.1
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	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°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

TEST NUMBER: P521086

CATALOG NUMBER: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4\_5700K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)