

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: P521228

Luminaire Tested: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4\_5000K

Issue Date: 5-5-2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P521228  
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-125D-92765-1D-UNV-STD-W-4\_5000K  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7949.2 lumens  
Efficiency: N/A  
Efficacy: 90.3 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: General Diffuse

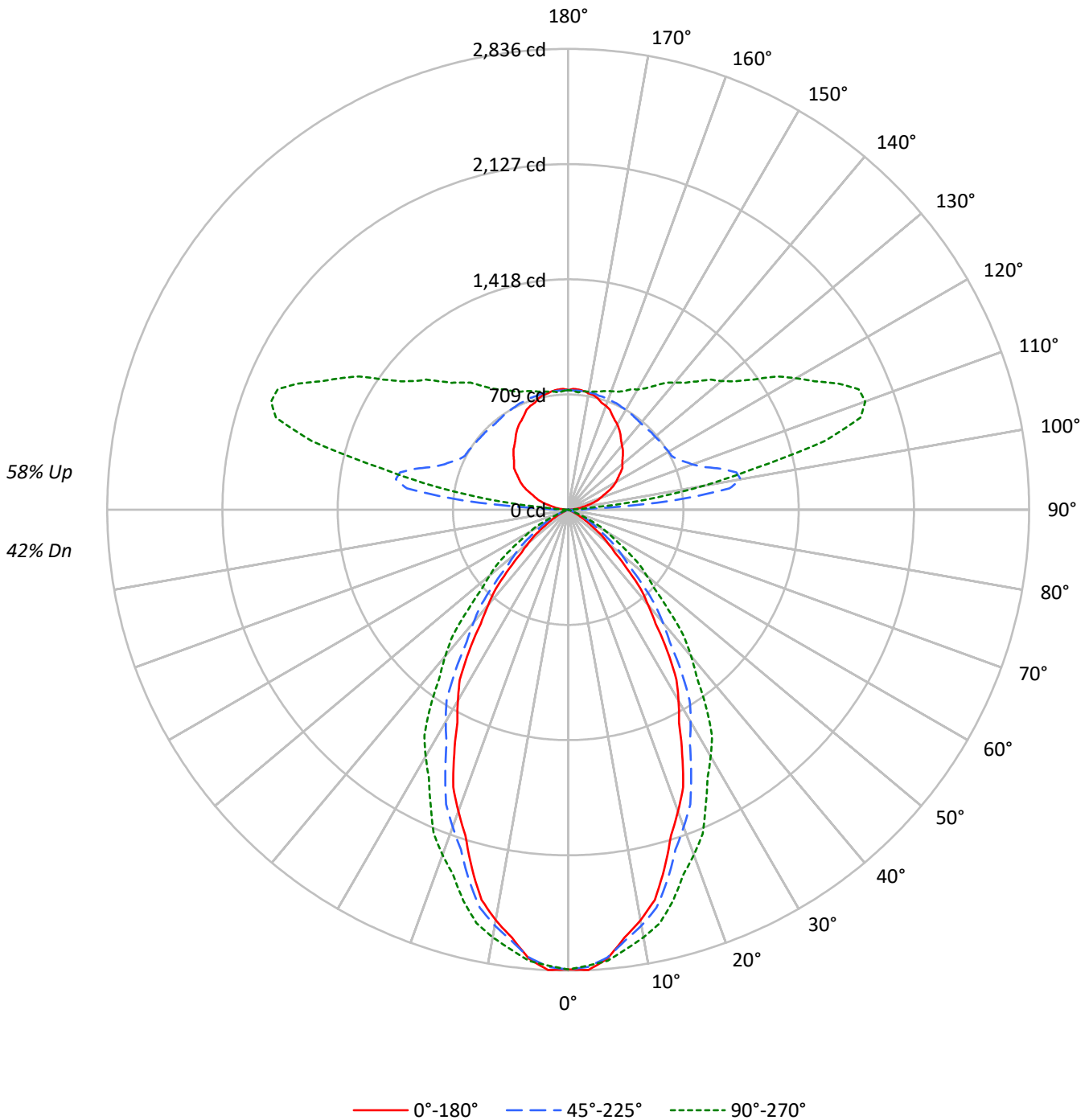
Input Watts (W): 88  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot



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**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	64	64	64	49	49	49	42				
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39				
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35				
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32				
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29				
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26				
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24				
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22				
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20				
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19				
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	26102	26102	26102
5°	25682	25618	25808
10°	24029	24350	25030
15°	21846	22538	23793
20°	19391	20400	22186
25°	16888	18224	20384
30°	14464	16054	18679
35°	11993	13627	16618
40°	9215	10896	14160
45°	6661	8250	11393
50°	4539	6149	9037
55°	2950	4448	7023
60°	1692	3131	5076
65°	448	1912	2570
70°	221	591	739
75°	96	50	0
80°	74	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11393 cd/sqm

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CATALOG NUMBER: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4\_5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.2	3.2
10°-20°	660.3	8.3
20°-30°	826.6	10.4
30°-40°	763.5	9.6
40°-50°	513.0	6.5
50°-60°	265.0	3.3
60°-70°	83.0	1.0
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	335.6	4.2
100°-110°	954.8	12.0
110°-120°	914.8	11.5
120°-130°	724.0	9.1
130°-140°	581.1	7.3
140°-150°	455.0	5.7
150°-160°	332.9	4.2
160°-170°	206.2	2.6
170°-180°	70.0	0.9
0°-30°	1745.0	22.0
0°-40°	2508.5	31.6
0°-60°	3286.5	41.3
0°-90°	3374.8	42.5
90°-120°	2205.2	27.7
90°-150°	3965.3	49.9
90°-180°	4574.0	57.5
0°-180°	7949.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2773	2745	2766	2776	2787	257
15°	2287	2279	2360	2439	2491	637
25°	1659	1672	1790	1913	2002	761
35°	1065	1092	1210	1352	1475	660
45°	510	541	632	756	873	401
55°	183	214	276	355	437	171
65°	20	39	88	106	118	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

TEST NUMBER: P521228

CATALOG NUMBER: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2829.1	2829.1	2829.1	2829.1	2829.1
2.5°	2835.6	2808.9	2815.9	2815.8	2808.3
5°	2773.0	2744.9	2766.1	2775.9	2786.6
7.5°	2655.8	2633.9	2674.7	2705.3	2727.5
10°	2564.9	2546.2	2599.1	2640.9	2671.7
12.5°	2459.8	2445.4	2509.4	2566.6	2606.0
15°	2287.1	2279.0	2359.6	2438.8	2491.0
17.5°	2102.0	2101.8	2193.7	2292.1	2355.0
20°	1975.0	1979.0	2077.7	2186.1	2259.7
22.5°	1848.0	1857.4	1962.7	2075.8	2160.1
25°	1658.9	1672.2	1790.2	1912.7	2002.4
27.5°	1477.1	1496.6	1620.8	1748.1	1857.3
30°	1357.7	1380.5	1506.9	1640.9	1753.3
32.5°	1240.6	1267.6	1390.9	1532.5	1647.1
35°	1064.8	1091.6	1209.9	1352.3	1475.4
37.5°	883.4	909.6	1025.1	1165.3	1298.3
40°	765.1	794.5	904.7	1040.5	1175.7
42.5°	657.8	687.2	790.8	924.3	1052.0
45°	510.5	541.3	632.3	755.5	873.2
47.5°	388.4	421.9	501.8	613.1	720.5
50°	316.2	349.6	428.4	526.5	629.6
52.5°	258.1	290.5	361.6	454.1	548.6
55°	183.4	214.2	276.5	355.0	436.6
57.5°	126.7	153.2	209.1	274.6	338.6
60°	91.7	117.1	169.7	222.9	275.1
62.5°	61.0	84.3	135.8	176.5	211.6
65°	20.5	39.3	87.6	105.7	117.7
67.5°	10.4	12.5	46.0	48.5	52.6
70°	8.2	8.2	21.9	23.4	27.4
72.5°	6.0	6.0	8.8	11.2	12.0
75°	2.7	2.7	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	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°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

TEST NUMBER: P521228

CATALOG NUMBER: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4\_5000K

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)