

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: P521199

Luminaire Tested: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521199
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-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6310.8 lumens
Efficiency: N/A
Efficacy: 98.1 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

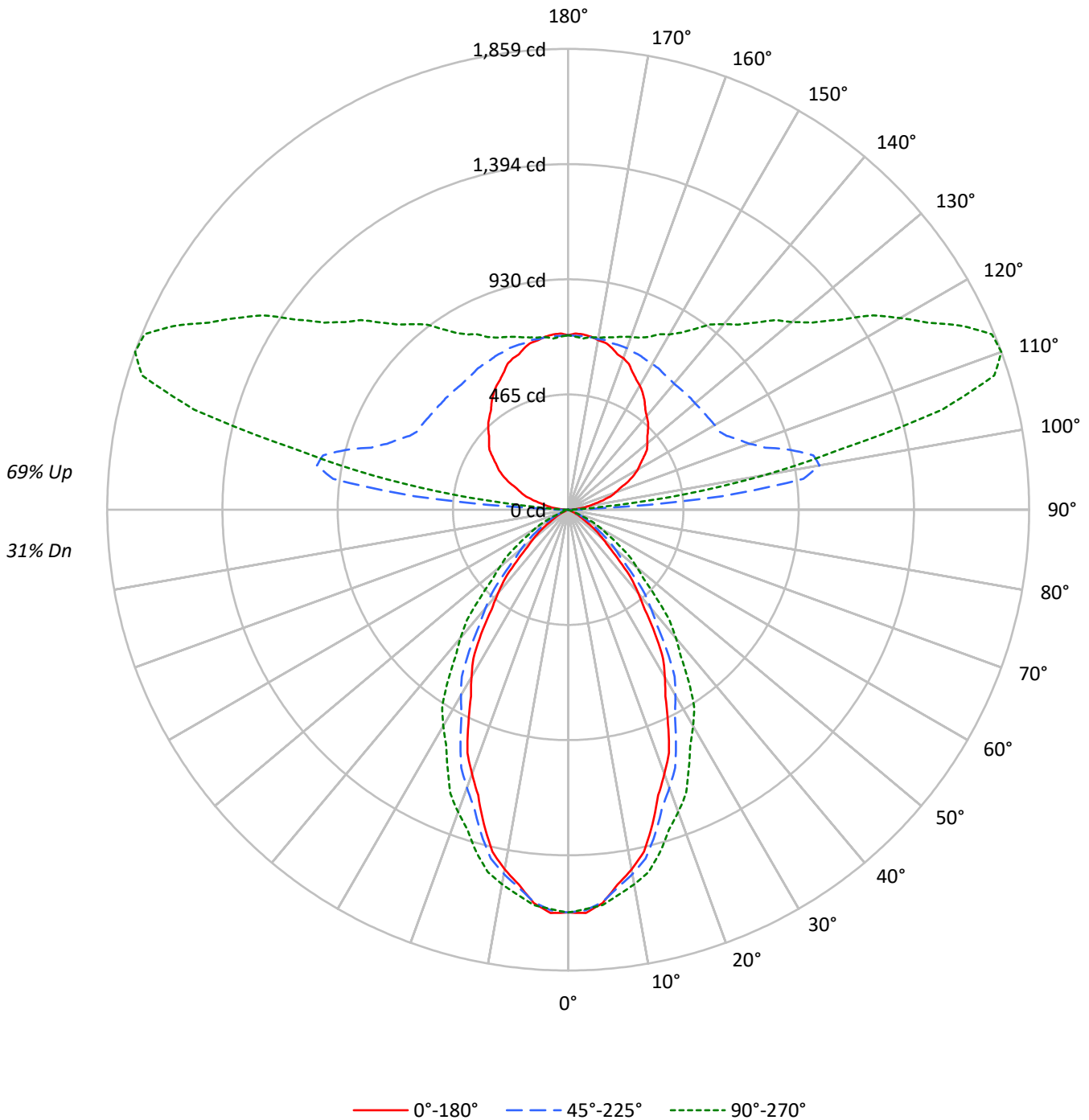
Input Watts (W): 64.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31				
1	95	91	87	84	85	82	79	77	65	63	62	50	49	48	36	35	35	28				
2	87	81	75	71	78	73	68	65	58	55	53	45	43	42	33	32	31	25				
3	80	72	65	60	72	65	60	55	53	49	46	41	38	36	30	29	28	23				
4	74	64	57	52	66	58	52	48	47	43	40	37	34	32	28	26	25	21				
5	68	58	51	45	61	53	46	42	43	39	35	34	31	29	25	24	22	19				
6	63	52	45	40	57	48	41	37	39	35	31	31	28	26	24	22	20	17				
7	58	47	40	35	53	43	37	33	36	31	28	29	25	23	22	20	18	16				
8	54	43	36	31	49	40	34	29	33	28	25	26	23	21	20	18	17	14				
9	51	40	33	28	46	36	30	26	30	26	23	24	21	19	19	17	16	13				
10	48	36	30	25	43	34	28	24	28	24	21	23	20	18	18	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14991	14991	14991
5°	14750	14713	14822
10°	13801	13984	14375
15°	12546	12944	13665
20°	11137	11716	12742
25°	9698	10467	11707
30°	8308	9221	10728
35°	6889	7827	9544
40°	5292	6258	8132
45°	3826	4739	6543
50°	2607	3531	5190
55°	1694	2554	4034
60°	972	1799	2915
65°	258	1098	1476
70°	127	340	424
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6543 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	2.3
10°-20°	379.2	6.0
20°-30°	474.7	7.5
30°-40°	438.5	6.9
40°-50°	294.6	4.7
50°-60°	152.2	2.4
60°-70°	47.7	0.8
70°-80°	3.0	0.0
80°-90°	0.1	0.0
90°-100°	320.7	5.1
100°-110°	912.7	14.5
110°-120°	874.4	13.9
120°-130°	692.1	11.0
130°-140°	555.5	8.8
140°-150°	434.9	6.9
150°-160°	318.2	5.0
160°-170°	197.1	3.1
170°-180°	66.9	1.1
0°-30°	1002.2	15.9
0°-40°	1440.7	22.8
0°-60°	1887.5	29.9
0°-90°	1938.3	30.7
90°-120°	2107.9	33.4
90°-150°	3790.4	60.1
90°-180°	4373.0	69.3
0°-180°	6310.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1593	1576	1589	1594	1600	148
15°	1314	1309	1355	1401	1431	366
25°	953	960	1028	1098	1150	437
35°	612	627	695	777	847	379
45°	293	311	363	434	502	230
55°	105	123	159	204	251	98
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1624.8	1624.8	1624.8	1624.8	1624.8
2.5°	1628.6	1613.2	1617.3	1617.2	1612.9
5°	1592.6	1576.4	1588.6	1594.3	1600.4
7.5°	1525.3	1512.7	1536.1	1553.7	1566.5
10°	1473.1	1462.3	1492.7	1516.7	1534.4
12.5°	1412.7	1404.4	1441.2	1474.1	1496.7
15°	1313.5	1308.9	1355.2	1400.7	1430.6
17.5°	1207.2	1207.1	1259.9	1316.4	1352.5
20°	1134.3	1136.6	1193.3	1255.5	1297.8
22.5°	1061.4	1066.7	1127.2	1192.2	1240.6
25°	952.7	960.4	1028.2	1098.5	1150.0
27.5°	848.3	859.5	930.9	1004.0	1066.7
30°	779.8	792.8	865.5	942.4	1007.0
32.5°	712.5	728.0	798.8	880.2	946.0
35°	611.6	626.9	694.9	776.7	847.4
37.5°	507.3	522.4	588.8	669.3	745.7
40°	439.4	456.3	519.6	597.6	675.2
42.5°	377.8	394.7	454.2	530.8	604.2
45°	293.2	310.9	363.2	433.9	501.5
47.5°	223.1	242.3	288.2	352.1	413.8
50°	181.6	200.8	246.0	302.4	361.6
52.5°	148.3	166.9	207.7	260.8	315.1
55°	105.3	123.0	158.8	203.9	250.8
57.5°	72.8	88.0	120.1	157.7	194.5
60°	52.7	67.3	97.5	128.0	158.0
62.5°	35.1	48.4	78.0	101.4	121.5
65°	11.8	22.6	50.3	60.7	67.6
67.5°	6.0	7.2	26.4	27.9	30.2
70°	4.7	4.7	12.6	13.4	15.7
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)