

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: P521201

Luminaire Tested: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521201
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6529.9 lumens
Efficiency: N/A
Efficacy: 101.6 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

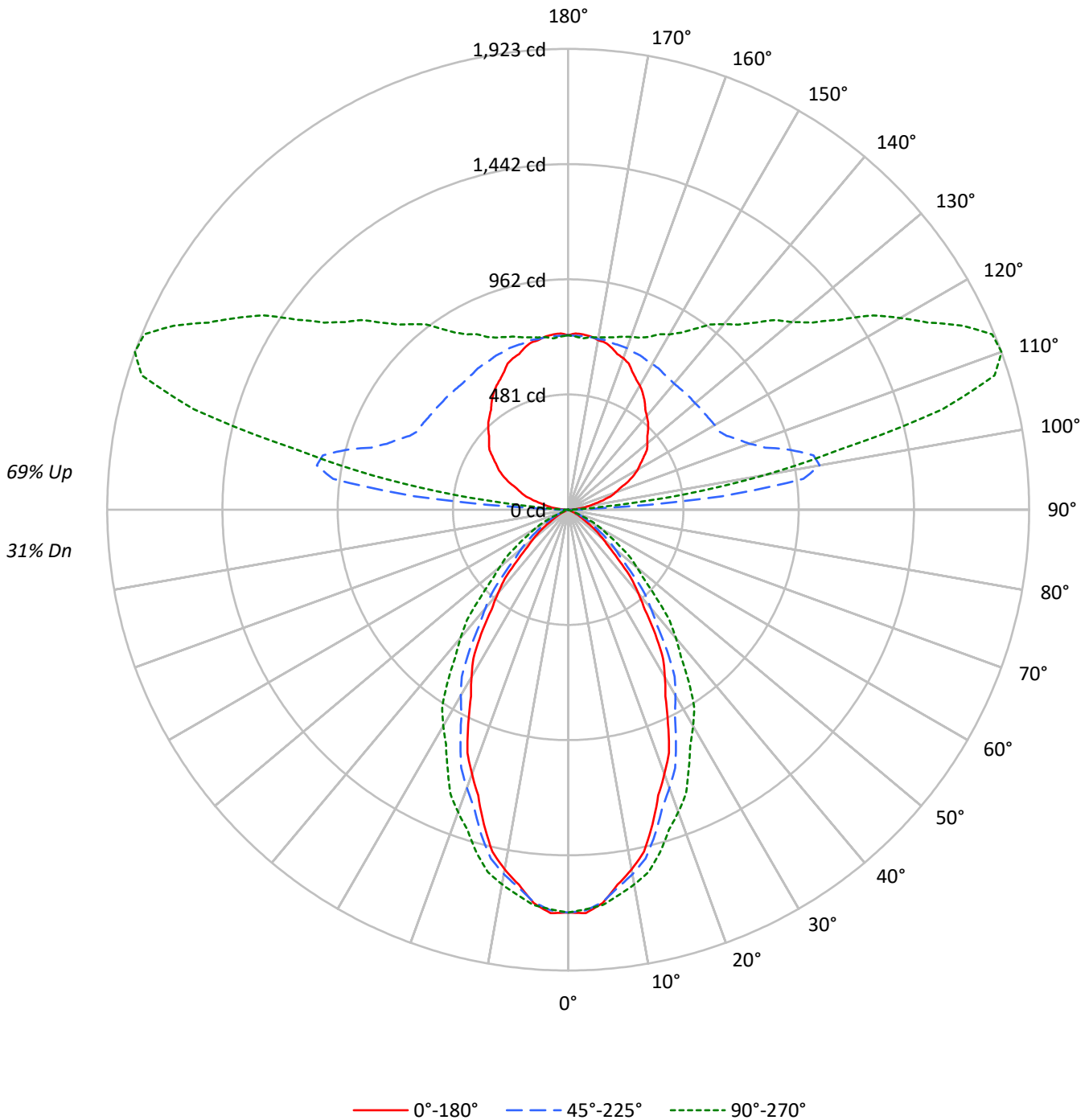
Input Watts (W): 64.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	15511	15511	15511
5°	15262	15224	15337
10°	14280	14471	14874
15°	12982	13393	14139
20°	11524	12123	13185
25°	10035	10830	12113
30°	8596	9540	11100
35°	7127	8098	9875
40°	5476	6475	8415
45°	3959	4903	6771
50°	2697	3654	5370
55°	1753	2643	4174
60°	1006	1862	3017
65°	266	1137	1526
70°	132	351	440
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6771 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.4	2.3
10°-20°	392.4	6.0
20°-30°	491.2	7.5
30°-40°	453.7	6.9
40°-50°	304.9	4.7
50°-60°	157.5	2.4
60°-70°	49.3	0.8
70°-80°	3.1	0.0
80°-90°	0.1	0.0
90°-100°	331.9	5.1
100°-110°	944.4	14.5
110°-120°	904.8	13.9
120°-130°	716.1	11.0
130°-140°	574.8	8.8
140°-150°	450.0	6.9
150°-160°	329.3	5.0
160°-170°	203.9	3.1
170°-180°	69.2	1.1
0°-30°	1037.0	15.9
0°-40°	1490.7	22.8
0°-60°	1953.1	29.9
0°-90°	2005.6	30.7
90°-120°	2181.1	33.4
90°-150°	3921.9	60.1
90°-180°	4524.0	69.3
0°-180°	6529.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1681	1681	1681	1681	1681	
5°	1648	1631	1644	1650	1656	153
15°	1359	1354	1402	1449	1480	379
25°	986	994	1064	1137	1190	452
35°	633	649	719	804	877	392
45°	303	322	376	449	519	238
55°	109	127	164	211	260	102
65°	12	23	52	63	70	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1681.2	1681.2	1681.2	1681.2	1681.2
2.5°	1685.1	1669.2	1673.4	1673.3	1668.9
5°	1647.9	1631.2	1643.8	1649.6	1656.0
7.5°	1578.2	1565.2	1589.5	1607.7	1620.9
10°	1524.2	1513.1	1544.6	1569.4	1587.7
12.5°	1461.8	1453.2	1491.2	1525.3	1548.6
15°	1359.1	1354.4	1402.2	1449.3	1480.3
17.5°	1249.2	1249.0	1303.7	1362.1	1399.5
20°	1173.7	1176.1	1234.7	1299.1	1342.9
22.5°	1098.2	1103.8	1166.4	1233.5	1283.6
25°	985.8	993.7	1063.9	1136.7	1189.9
27.5°	877.8	889.4	963.2	1038.8	1103.7
30°	806.9	820.4	895.5	975.1	1041.9
32.5°	737.2	753.3	826.5	910.7	978.8
35°	632.8	648.7	719.0	803.6	876.8
37.5°	524.9	540.5	609.2	692.5	771.6
40°	454.7	472.2	537.6	618.4	698.7
42.5°	390.9	408.4	470.0	549.3	625.1
45°	303.4	321.7	375.8	448.9	518.9
47.5°	230.8	250.7	298.2	364.4	428.2
50°	187.9	207.8	254.6	312.9	374.1
52.5°	153.4	172.6	214.9	269.8	326.0
55°	109.0	127.3	164.3	210.9	259.5
57.5°	75.3	91.1	124.3	163.2	201.2
60°	54.5	69.6	100.9	132.5	163.5
62.5°	36.3	50.1	80.7	104.9	125.7
65°	12.2	23.3	52.1	62.8	69.9
67.5°	6.2	7.5	27.3	28.8	31.2
70°	4.9	4.9	13.0	13.9	16.3
72.5°	3.6	3.6	5.2	6.7	7.2
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)