

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: P521917

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521917
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 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: 6397.9 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

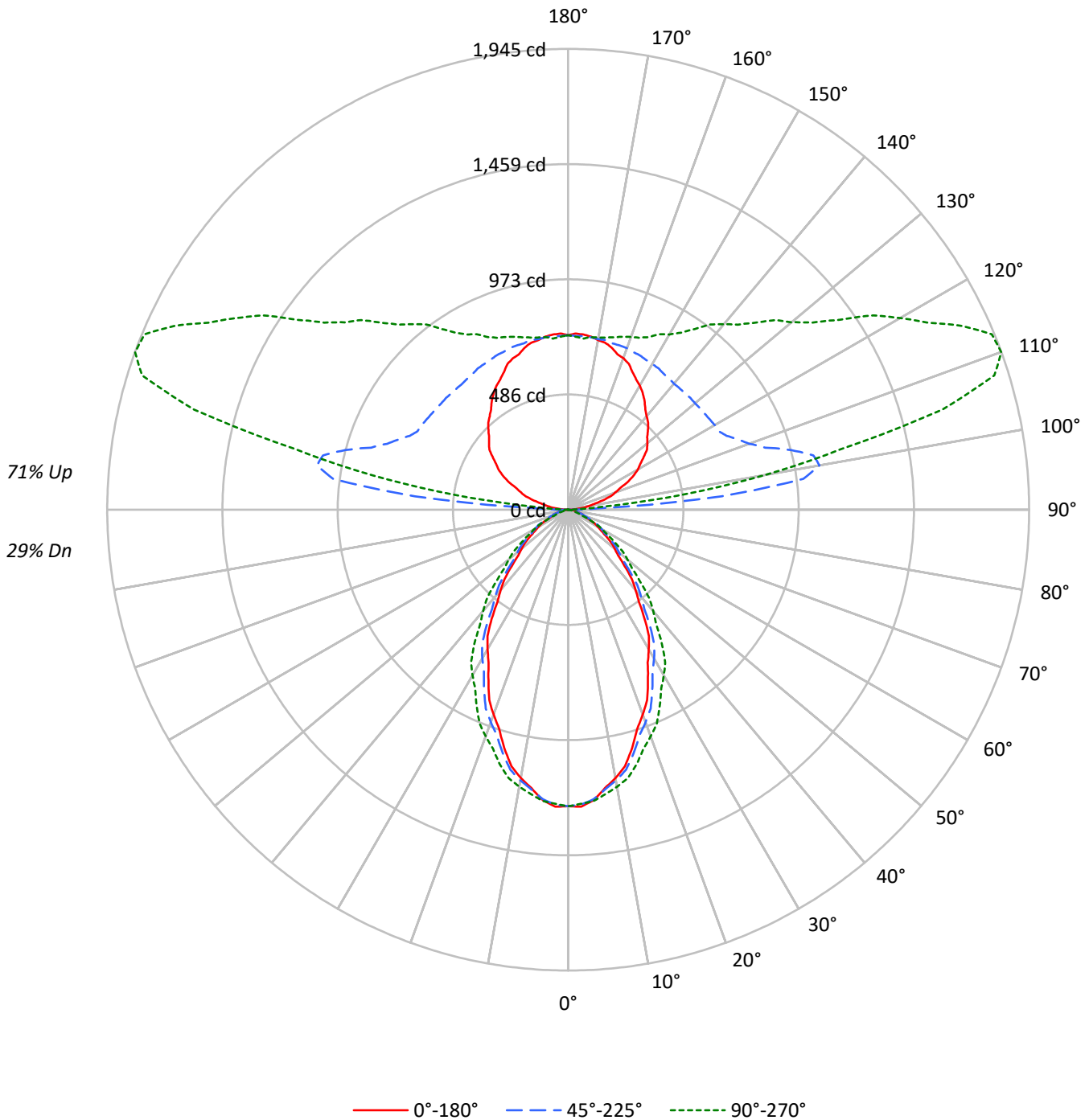
Input Watts (W): 53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29				
1	94	90	86	83	84	81	78	75	63	61	60	48	46	45	33	32	32	25				
2	86	79	74	69	77	71	67	63	56	53	50	43	41	39	30	29	28	22				
3	79	70	63	58	70	63	58	53	50	46	43	38	36	34	27	26	25	20				
4	72	62	55	50	65	56	50	45	45	41	37	35	32	29	25	23	22	18				
5	66	56	48	43	60	51	44	39	41	36	33	31	28	26	23	21	19	16				
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14				
7	57	45	38	33	51	41	35	30	33	29	25	26	23	21	19	17	16	13				
8	53	41	34	29	47	38	31	27	31	26	23	24	21	19	18	16	14	12				
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	17	15	13	11				
10	46	35	28	23	41	32	26	22	26	22	19	21	17	15	15	13	12	10				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11546	11546	11546
5°	11402	11361	11427
10°	10772	10870	11122
15°	9944	10175	10631
20°	9031	9370	9990
25°	8100	8541	9308
30°	7242	7716	8600
35°	6333	6791	7761
40°	5331	5753	6719
45°	4400	4779	5611
50°	3673	4003	4673
55°	3117	3436	3860
60°	2665	2978	3080
65°	2122	2506	1991
70°	1880	1956	1214
75°	1743	1586	745
80°	1605	1461	643
85°	1450	1334	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5611 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	1.8
10°-20°	298.6	4.7
20°-30°	386.7	6.0
30°-40°	378.7	5.9
40°-50°	289.9	4.5
50°-60°	193.2	3.0
60°-70°	105.4	1.6
70°-80°	43.9	0.7
80°-90°	12.4	0.2
90°-100°	335.6	5.2
100°-110°	954.8	14.9
110°-120°	914.8	14.3
120°-130°	724.0	11.3
130°-140°	581.1	9.1
140°-150°	455.0	7.1
150°-160°	332.9	5.2
160°-170°	206.2	3.2
170°-180°	70.0	1.1
0°-30°	800.1	12.5
0°-40°	1178.8	18.4
0°-60°	1661.8	26.0
0°-90°	1823.5	28.5
90°-120°	2205.2	34.5
90°-150°	3965.3	62.0
90°-180°	4574.0	71.5
0°-180°	6397.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1231	1219	1227	1230	1234	115
15°	1041	1037	1065	1094	1113	291
25°	796	798	839	876	914	366
35°	562	565	603	644	689	350
45°	337	344	366	394	430	263
55°	194	202	214	222	240	176
65°	97	105	115	100	91	101
75°	49	49	44	30	21	52
85°	14	14	13	8	5	15
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1251.4	1251.4	1251.4	1251.4	1251.4
2.5°	1254.5	1243.3	1246.1	1246.1	1242.6
5°	1231.1	1218.8	1226.7	1229.5	1233.8
7.5°	1185.4	1176.1	1190.6	1201.3	1210.0
10°	1149.8	1141.8	1160.3	1175.9	1187.2
12.5°	1108.5	1101.8	1124.7	1145.7	1160.4
15°	1041.1	1037.3	1065.3	1094.2	1113.0
17.5°	969.0	967.1	999.2	1033.0	1057.0
20°	919.8	919.2	954.3	989.6	1017.5
22.5°	870.1	871.3	908.2	944.9	976.6
25°	795.7	797.8	839.0	875.6	914.3
27.5°	726.8	727.8	770.4	809.0	850.2
30°	679.8	682.5	724.3	764.2	807.2
32.5°	632.8	635.9	676.8	718.1	761.9
35°	562.3	565.0	602.9	643.5	689.1
37.5°	489.6	493.2	526.9	565.3	610.2
40°	442.6	447.9	477.7	513.9	557.9
42.5°	397.3	404.0	431.6	465.9	505.6
45°	337.2	343.6	366.3	394.0	430.0
47.5°	285.3	292.7	310.1	334.0	364.7
50°	255.9	262.9	278.9	296.6	325.6
52.5°	230.0	236.9	251.3	264.9	289.6
55°	193.8	201.9	213.6	221.7	240.0
57.5°	164.2	171.9	181.2	184.9	195.9
60°	144.4	153.0	161.4	161.0	166.9
62.5°	126.4	133.7	142.1	136.3	136.6
65°	97.2	105.2	114.8	100.3	91.2
67.5°	78.5	80.2	90.1	69.9	59.1
70°	69.7	69.7	72.5	54.2	45.0
72.5°	61.4	61.4	58.9	44.0	34.5
75°	48.9	48.9	44.5	30.5	20.9
77.5°	37.7	37.2	34.0	22.8	15.2
80°	30.2	30.2	27.5	18.0	12.1
82.5°	23.6	23.6	21.3	14.1	9.0
85°	13.7	13.7	12.6	8.2	4.9
87.5°	4.8	4.8	4.4	2.6	2.2
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

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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)