

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: P521913

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521913
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5972.3 lumens
Efficiency: N/A
Efficacy: 112.5 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

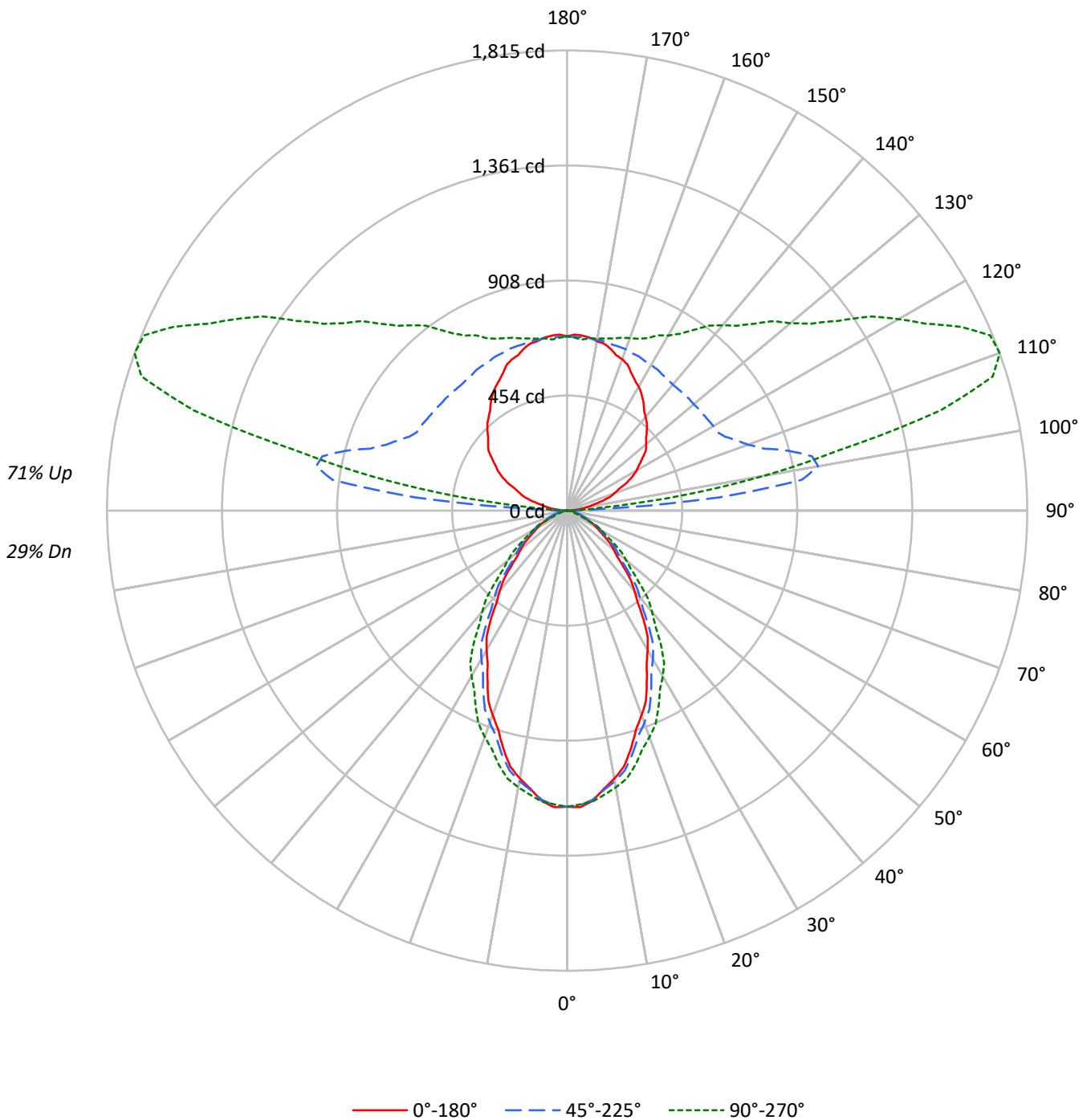
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	10778	10778	10778
5°	10643	10605	10667
10°	10055	10147	10382
15°	9282	9498	9924
20°	8430	8747	9325
25°	7561	7973	8688
30°	6761	7203	8027
35°	5912	6339	7246
40°	4975	5370	6272
45°	4106	4461	5236
50°	3429	3738	4363
55°	2910	3207	3603
60°	2487	2781	2875
65°	1980	2338	1858
70°	1756	1826	1133
75°	1626	1479	695
80°	1498	1360	600
85°	1355	1249	487

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5236 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.1	1.8
10°-20°	278.7	4.7
20°-30°	361.0	6.0
30°-40°	353.5	5.9
40°-50°	270.6	4.5
50°-60°	180.3	3.0
60°-70°	98.4	1.6
70°-80°	41.0	0.7
80°-90°	11.6	0.2
90°-100°	313.2	5.2
100°-110°	891.3	14.9
110°-120°	853.9	14.3
120°-130°	675.9	11.3
130°-140°	542.5	9.1
140°-150°	424.7	7.1
150°-160°	310.7	5.2
160°-170°	192.5	3.2
170°-180°	65.3	1.1
0°-30°	746.8	12.5
0°-40°	1100.3	18.4
0°-60°	1551.2	26.0
0°-90°	1702.2	28.5
90°-120°	2058.5	34.5
90°-150°	3701.5	62.0
90°-180°	4270.0	71.5
0°-180°	5972.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1149	1138	1145	1148	1152	107
15°	972	968	994	1021	1039	271
25°	743	745	783	817	853	342
35°	525	527	563	601	643	326
45°	315	321	342	368	401	245
55°	181	188	199	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	1168.2	1168.2
2.5°	1171.0	1160.6	1163.2	1163.2	1160.0
5°	1149.2	1137.7	1145.1	1147.7	1151.8
7.5°	1106.5	1097.8	1111.4	1121.4	1129.5
10°	1073.3	1065.8	1083.1	1097.7	1108.2
12.5°	1034.8	1028.5	1049.9	1069.4	1083.2
15°	971.8	968.3	994.4	1021.4	1039.0
17.5°	904.5	902.8	932.7	964.3	986.7
20°	858.6	858.1	890.9	923.7	949.8
22.5°	812.2	813.3	847.8	882.0	911.7
25°	742.7	744.7	783.2	817.4	853.4
27.5°	678.4	679.3	719.1	755.2	793.7
30°	634.6	637.1	676.1	713.4	753.5
32.5°	590.7	593.6	631.8	670.4	711.2
35°	524.9	527.4	562.8	600.7	643.3
37.5°	457.0	460.4	491.9	527.7	569.6
40°	413.1	418.1	445.9	479.7	520.8
42.5°	370.9	377.1	402.9	434.9	472.0
45°	314.7	320.7	341.9	367.8	401.3
47.5°	266.3	273.3	289.5	311.8	340.5
50°	238.9	245.4	260.4	276.9	304.0
52.5°	214.7	221.2	234.6	247.3	270.3
55°	180.9	188.5	199.4	207.0	224.0
57.5°	153.3	160.5	169.1	172.6	182.9
60°	134.8	142.8	150.7	150.3	155.8
62.5°	118.0	124.8	132.7	127.2	127.5
65°	90.7	98.2	107.1	93.6	85.1
67.5°	73.3	74.9	84.1	65.3	55.2
70°	65.1	65.1	67.7	50.6	42.0
72.5°	57.3	57.3	54.9	41.1	32.2
75°	45.6	45.6	41.5	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.1
80°	28.2	28.2	25.6	16.8	11.3
82.5°	22.0	22.0	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)