

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: P521809

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521809
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-075U-050D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 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: 4893.0 lumens
Efficiency: N/A
Efficacy: 110.2 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

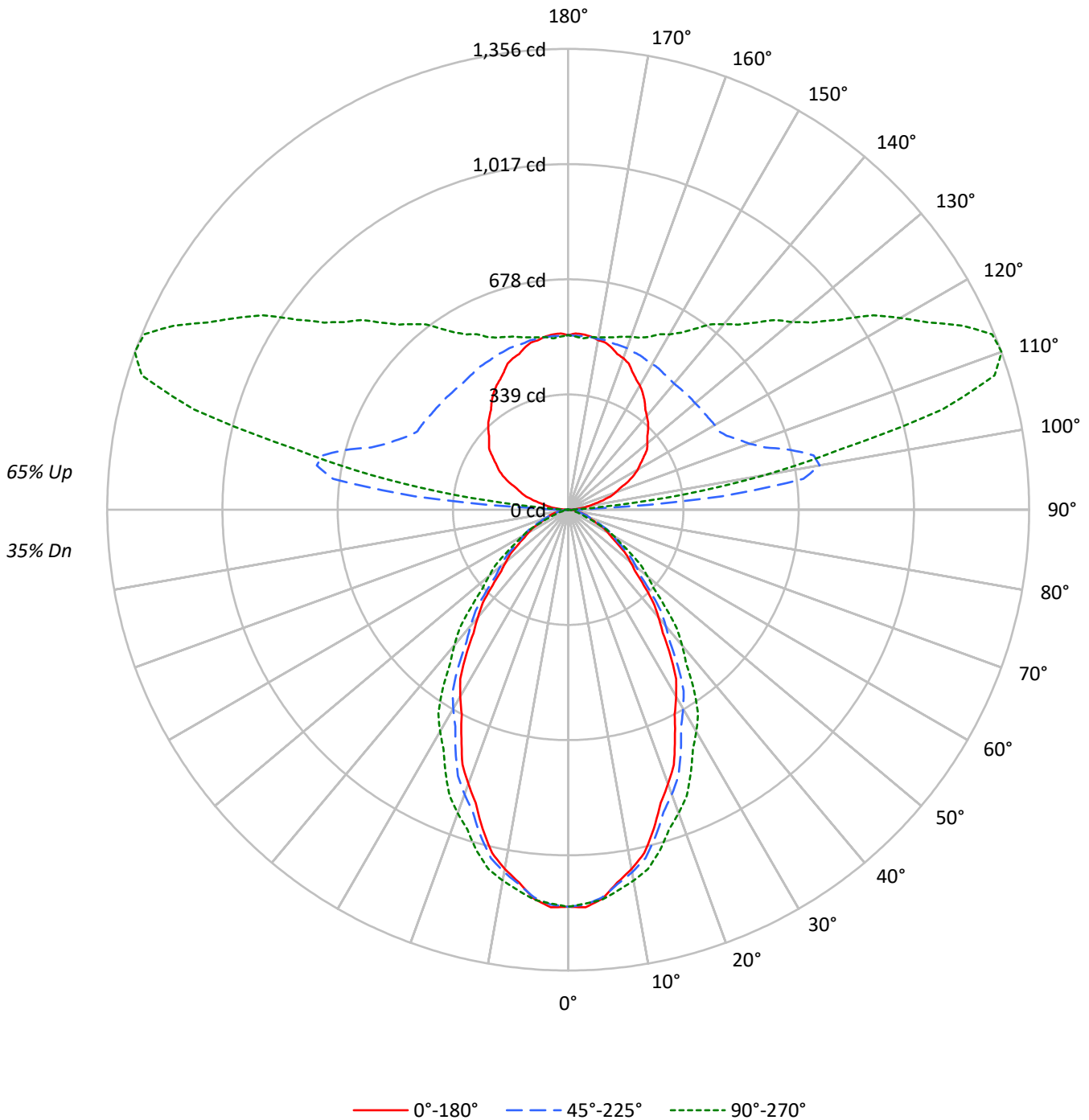
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35																				
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	38	38	37	31																				
2	87	81	75	70	79	73	69	65	59	56	53	47	45	43	35	34	33	27																				
3	80	72	65	60	72	65	60	55	53	49	46	42	39	37	32	30	29	24																				
4	74	64	57	51	67	58	52	47	48	43	40	38	35	33	29	27	25	21																				
5	68	57	50	44	61	52	46	41	43	38	35	34	31	29	26	24	23	19																				
6	63	52	44	39	57	47	41	36	39	34	31	31	28	26	24	22	20	17																				
7	58	47	39	34	53	43	37	32	36	31	27	29	25	23	22	20	19	16																				
8	54	43	35	31	49	39	33	29	33	28	25	27	23	21	21	19	17	14																				
9	50	39	32	27	46	36	30	26	30	25	22	25	21	19	19	17	15	13																				
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12																				

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	2.2
10°-20°	278.7	5.7
20°-30°	361.0	7.4
30°-40°	353.5	7.2
40°-50°	270.6	5.5
50°-60°	180.3	3.7
60°-70°	98.4	2.0
70°-80°	41.0	0.8
80°-90°	11.6	0.2
90°-100°	234.1	4.8
100°-110°	666.0	13.6
110°-120°	638.1	13.0
120°-130°	505.0	10.3
130°-140°	405.4	8.3
140°-150°	317.4	6.5
150°-160°	232.2	4.7
160°-170°	143.8	2.9
170°-180°	48.8	1.0
0°-30°	746.8	15.3
0°-40°	1100.3	22.5
0°-60°	1551.2	31.7
0°-90°	1702.2	34.8
90°-120°	1538.2	31.4
90°-150°	2766.0	56.5
90°-180°	3191.0	65.2
0°-180°	4893.0	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°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

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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°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)