

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P937445

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-8-3500K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937445  
REPORT IS A COMBINATION OF REPORTS P933581 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-8-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

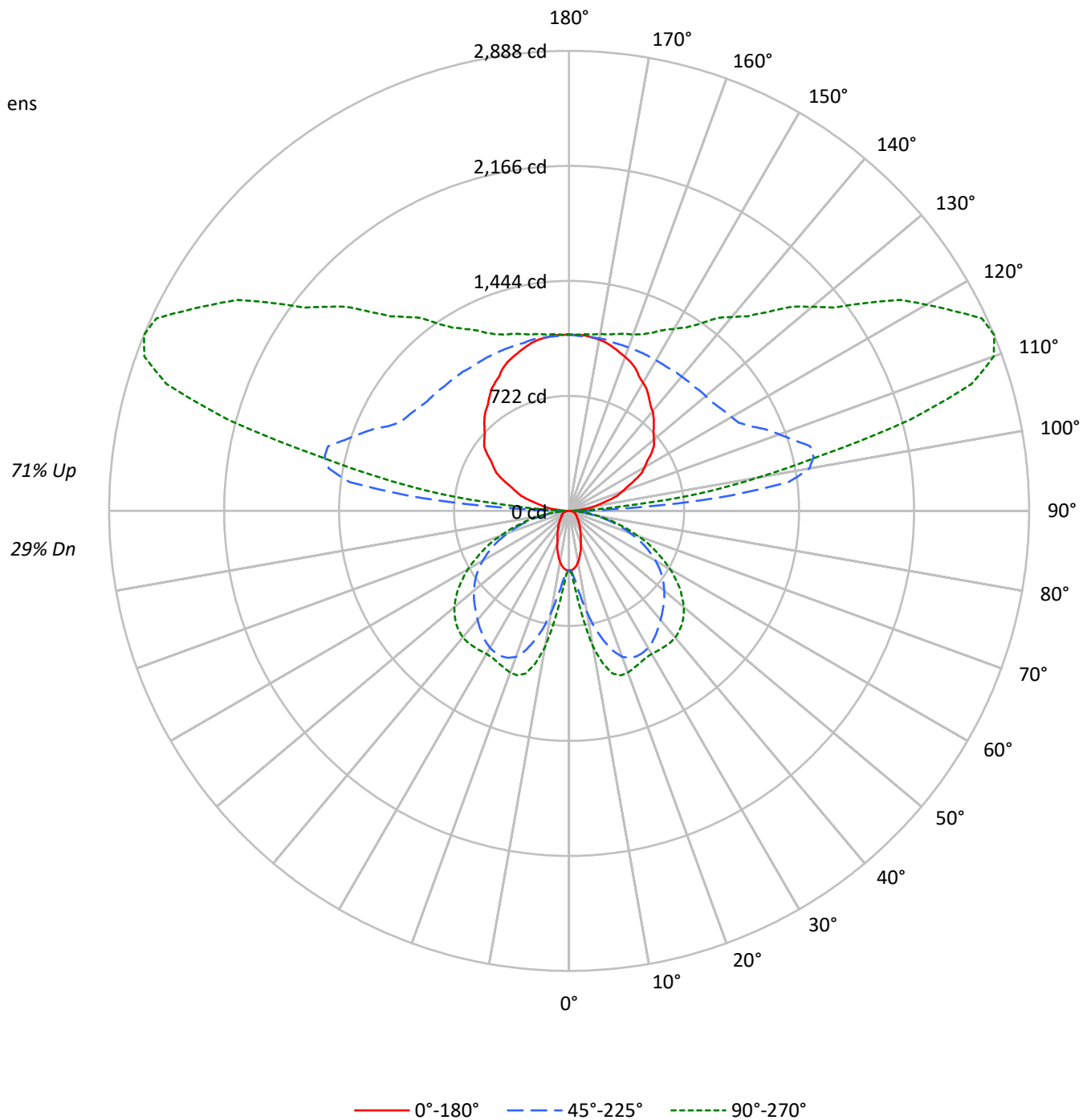
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10057.2 lumens  
Efficiency: N/A  
Efficacy: 122.1 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')  
CIE Type: Semi-Indirect

Input Watts (W): 82.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P937445  
CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-8-3500K

### Luminous Intensity Polar Plot







TEST NUMBER: P937445

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.2	0.5
10°-20°	213.5	2.1
20°-30°	373.4	3.7
30°-40°	480.7	4.8
40°-50°	536.9	5.3
50°-60°	514.2	5.1
60°-70°	407.5	4.1
70°-80°	239.6	2.4
80°-90°	70.8	0.7
90°-100°	539.3	5.4
100°-110°	1417.9	14.1
110°-120°	1470.2	14.6
120°-130°	1179.3	11.7
130°-140°	925.3	9.2
140°-150°	710.2	7.1
150°-160°	511.5	5.1
160°-170°	313.0	3.1
170°-180°	105.7	1.1
0°-30°	635.0	6.3
0°-40°	1115.7	11.1
0°-60°	2166.8	21.5
0°-90°	2884.7	28.7
90°-120°	3427.5	34.1
90°-150°	6242.3	62.1
90°-180°	7172.0	71.3
0°-180°	10057.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	372	372	372	372	372	
5°	363	389	438	496	514	33
15°	272	502	845	1025	1057	76
25°	174	569	1007	1051	1052	80
35°	117	544	948	1002	1042	73
45°	80	433	838	960	1003	62
55°	58	275	711	826	849	52
65°	46	146	528	594	602	45
75°	34	90	290	318	320	35
85°	12	28	72	79	80	13
90°	7	21	56	28	28	7
95°	71	279	929	479	326	79
105°	256	387	1568	2380	2220	271
115°	454	551	1256	2505	2859	448
125°	631	708	1142	1930	2277	560
135°	752	828	1106	1558	1767	582
145°	872	928	1092	1329	1433	547
155°	986	1014	1092	1199	1234	453
165°	1064	1078	1092	1135	1150	300
175°	1106	1106	1100	1114	1114	105
180°	1106	1106	1106	1106	1106	



TEST NUMBER: P937445

CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-8-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3	372.3
2.5°	372.3	372.3	374.7	376.0	378.3	379.5	382.0	384.4	391.5	392.7	395.1
5°	362.8	367.6	383.1	389.1	405.9	428.6	438.2	453.7	486.1	495.7	501.7
7.5°	348.4	359.2	397.5	407.0	449.0	508.8	534.0	567.5	618.9	644.1	664.5
10°	325.6	348.4	416.7	439.4	507.6	598.6	645.4	692.0	769.8	804.5	817.7
12.5°	300.5	337.6	437.0	468.1	566.3	699.2	755.5	806.9	895.6	942.2	949.4
15°	271.8	322.1	456.1	501.7	628.6	783.0	845.3	908.7	991.3	1024.8	1033.2
17.5°	246.6	310.1	474.2	522.0	676.4	858.4	921.9	974.6	1041.6	1064.4	1070.3
20°	215.5	290.9	486.1	548.3	726.8	913.5	974.6	1015.3	1060.8	1075.2	1077.6
22.5°	192.7	270.6	493.3	557.9	760.2	947.1	998.5	1030.9	1062.0	1066.8	1067.9
25°	173.6	247.8	492.1	568.7	789.0	967.4	1006.9	1030.9	1048.8	1051.2	1051.2
27.5°	155.7	222.7	487.3	571.1	810.6	972.2	1003.3	1020.1	1028.5	1033.2	1033.2
30°	140.1	198.8	475.3	566.3	820.1	967.4	992.5	1000.9	1009.3	1016.5	1020.1
32.5°	128.1	176.0	457.4	556.7	821.3	955.4	973.4	978.1	990.1	1006.9	1012.9
35°	117.3	153.3	437.0	543.5	814.2	936.3	948.2	953.1	977.0	1002.1	1010.4
37.5°	106.6	136.5	410.7	520.8	803.4	913.5	921.9	930.3	967.4	997.3	1006.9
40°	95.8	122.1	379.5	495.7	786.6	886.0	893.2	906.4	955.4	990.1	999.7
42.5°	87.4	110.1	346.0	469.3	765.1	854.9	865.7	884.8	941.1	978.1	988.9
45°	80.2	98.2	310.1	433.4	737.5	822.5	838.1	864.4	924.3	960.2	969.7
47.5°	73.0	89.8	273.0	396.3	707.6	790.2	810.6	840.5	901.5	936.3	944.7
50°	67.0	81.4	235.8	356.8	675.3	755.5	779.4	810.6	872.8	905.1	915.9
52.5°	62.2	74.3	201.1	317.2	638.1	719.5	747.1	779.4	838.1	869.2	876.4
55°	57.5	68.3	171.2	275.4	599.8	681.2	711.2	742.3	799.8	826.1	830.9
57.5°	55.1	63.5	146.0	235.8	559.1	638.1	671.7	700.4	754.3	774.6	779.4
60°	51.5	59.9	126.9	202.4	514.9	597.4	626.2	654.9	700.4	717.1	720.8
62.5°	47.9	57.5	112.6	170.0	469.3	549.6	578.2	604.7	643.0	654.9	659.7
65°	45.5	55.1	101.8	146.0	422.7	499.2	528.0	550.7	581.9	593.9	596.3
67.5°	43.1	52.7	93.4	125.7	376.0	449.0	470.5	492.1	516.0	528.0	529.1
70°	39.5	50.3	86.2	111.3	328.0	391.5	409.4	432.2	451.4	457.4	460.9
72.5°	37.1	46.7	81.4	100.6	278.9	336.4	353.2	366.3	383.1	389.1	389.1
75°	33.6	41.9	76.6	89.8	228.7	275.4	289.7	302.9	316.1	318.5	314.9
77.5°	29.9	37.1	65.9	75.4	178.4	217.9	229.8	237.1	247.8	250.2	251.5
80°	25.2	32.3	51.5	58.6	129.3	160.4	168.8	174.8	184.4	184.4	186.7
82.5°	19.2	25.2	37.1	41.9	87.4	110.1	117.3	121.0	126.9	126.9	126.9
85°	12.0	15.5	23.9	27.5	52.7	67.0	71.9	73.0	77.8	79.0	79.0
87.5°	6.0	8.4	15.5	16.8	27.5	34.7	34.7	37.1	37.1	35.9	34.7
90°	7.4	13.4	19.3	20.8	32.7	48.5	56.4	50.2	37.6	28.2	28.2
92.5°	29.7	80.2	130.8	143.4	201.5	279.0	317.8	278.5	200.0	141.1	135.5
95°	71.3	163.7	256.1	279.2	495.8	784.5	928.9	829.0	628.9	479.0	462.0
97.5°	123.3	204.8	286.4	306.7	667.9	1149.3	1390.1	1326.9	1200.5	1105.7	1073.4
100°	163.3	237.3	311.3	329.7	730.4	1264.8	1531.9	1536.6	1545.8	1552.7	1514.2
102.5°	197.5	266.4	335.4	352.7	759.1	1301.0	1572.0	1652.5	1813.6	1934.4	1901.4
105°	255.5	313.8	372.2	386.9	780.4	1305.2	1567.5	1748.0	2109.1	2379.9	2362.1
107.5°	314.8	369.3	423.7	437.4	784.4	1247.1	1478.4	1730.3	2233.9	2611.5	2615.8
110°	354.9	404.1	453.3	465.6	778.5	1195.6	1404.2	1685.7	2248.7	2671.0	2689.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	394.3	441.1	488.1	499.8	778.7	1150.7	1336.6	1624.7	2200.9	2633.1	2661.5
115°	453.7	496.9	540.2	551.0	785.9	1099.1	1255.6	1533.3	2088.4	2504.7	2544.1
117.5°	512.4	551.6	590.9	600.7	800.5	1066.8	1199.9	1450.4	1951.4	2327.1	2370.8
120°	546.6	583.5	620.5	629.7	812.4	1056.0	1177.7	1406.6	1864.3	2207.6	2250.0
122.5°	579.9	617.2	654.6	663.8	829.4	1050.2	1160.6	1366.7	1778.9	2088.1	2130.0
125°	631.2	665.2	699.2	707.7	852.5	1045.5	1142.0	1317.2	1667.3	1929.9	1968.5
127.5°	672.8	707.0	741.4	750.0	875.5	1042.8	1126.5	1276.8	1577.4	1802.9	1835.4
130°	695.0	731.9	768.9	778.2	892.3	1044.5	1120.5	1254.3	1522.0	1722.8	1752.7
132.5°	718.0	755.0	791.9	801.2	905.9	1045.5	1115.3	1235.1	1474.7	1654.4	1681.2
135°	752.2	785.9	819.6	828.0	920.8	1044.5	1106.4	1206.7	1407.4	1557.9	1581.1
137.5°	787.1	820.4	853.8	862.1	943.1	1051.0	1104.9	1189.7	1359.4	1486.6	1505.6
140°	816.0	846.7	877.4	885.1	956.6	1052.0	1099.7	1173.0	1319.6	1429.4	1447.2
142.5°	838.3	866.7	895.1	902.2	968.0	1055.8	1099.7	1164.1	1292.8	1389.4	1404.6
145°	872.5	897.3	922.1	928.2	983.0	1055.9	1092.3	1145.0	1250.2	1329.2	1340.7
147.5°	906.6	930.7	954.8	960.9	1004.7	1063.1	1092.3	1133.7	1216.6	1278.7	1288.2
150°	928.9	950.7	972.5	978.0	1016.1	1066.9	1092.3	1127.3	1197.3	1249.8	1257.5
152.5°	952.0	968.5	985.0	989.1	1023.5	1069.4	1092.3	1122.2	1181.9	1226.7	1232.6
155°	986.1	998.3	1010.5	1013.6	1039.8	1074.8	1092.3	1116.0	1163.6	1199.2	1203.1
157.5°	1011.3	1023.2	1035.2	1038.1	1056.1	1080.2	1092.3	1110.8	1147.7	1175.5	1178.2
160°	1028.5	1037.8	1047.0	1049.3	1063.6	1082.7	1092.3	1108.2	1139.9	1163.6	1165.2
162.5°	1045.5	1052.5	1059.5	1061.1	1071.5	1085.3	1092.3	1105.7	1132.4	1152.5	1154.0
165°	1064.1	1070.3	1076.6	1078.2	1082.9	1089.2	1092.3	1101.9	1121.0	1135.4	1137.0
167.5°	1081.1	1084.1	1087.1	1087.8	1091.8	1097.0	1099.7	1106.0	1118.5	1127.9	1128.5
170°	1092.3	1095.2	1098.3	1099.0	1099.3	1099.5	1099.7	1106.0	1118.5	1127.9	1127.9
172.5°	1098.3	1098.9	1099.5	1099.7	1099.7	1099.7	1099.7	1104.7	1114.6	1122.0	1121.5
175°	1106.4	1106.4	1106.4	1106.4	1104.2	1101.2	1099.7	1102.8	1109.1	1113.8	1113.8
177.5°	1106.4	1106.4	1106.4	1106.4	1104.7	1102.4	1101.2	1103.7	1108.6	1112.4	1111.8
180°	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4	1106.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	372.3	372.3
2.5°	397.5	395.1
5°	511.2	513.6
7.5°	688.4	687.2
10°	856.0	866.8
12.5°	978.1	980.5
15°	1052.4	1057.2
17.5°	1081.1	1082.3
20°	1082.3	1079.9
22.5°	1069.2	1066.8
25°	1053.6	1052.4
27.5°	1039.2	1040.4
30°	1033.2	1036.9
32.5°	1033.2	1039.2
35°	1035.6	1041.6
37.5°	1034.5	1041.6
40°	1029.6	1038.0
42.5°	1016.5	1022.5
45°	996.2	1003.3
47.5°	969.7	974.6
50°	936.3	941.1
52.5°	894.3	895.6
55°	844.1	848.9
57.5°	790.2	791.4
60°	730.3	733.9
62.5°	666.9	666.9
65°	599.8	602.3
67.5°	530.4	536.4
70°	459.8	460.9
72.5°	390.3	390.3
75°	318.5	319.6
77.5°	250.2	250.2
80°	185.6	186.7
82.5°	128.1	130.5
85°	80.2	80.2
87.5°	37.1	33.6
90°	28.2	28.2
92.5°	113.1	90.6
95°	394.0	326.0
97.5°	943.9	814.6
100°	1360.1	1205.9
102.5°	1769.4	1637.3
105°	2291.2	2220.2
107.5°	2633.1	2650.2
110°	2763.4	2837.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2775.0	2888.5
115°	2701.4	2858.9
117.5°	2545.4	2720.0
120°	2419.7	2589.3
122.5°	2297.2	2464.5
125°	2122.6	2276.7
127.5°	1965.5	2095.5
130°	1872.9	1993.0
132.5°	1788.9	1896.5
135°	1673.8	1766.6
137.5°	1581.5	1657.4
140°	1518.1	1589.0
142.5°	1465.7	1526.7
145°	1387.0	1433.1
147.5°	1326.5	1364.8
150°	1288.5	1319.6
152.5°	1256.0	1279.4
155°	1218.6	1234.1
157.5°	1189.1	1199.9
160°	1171.5	1177.7
162.5°	1159.9	1165.9
165°	1143.3	1149.5
167.5°	1131.2	1133.9
170°	1127.9	1127.9
172.5°	1119.2	1116.8
175°	1113.8	1113.8
177.5°	1109.1	1106.4
180°	1106.4	1106.4



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.53	1.25	1.64	2.36	3.90	13.71	14.43	14.83	15.54	17.08
	3H	1.22	1.87	2.35	2.99	4.55	15.54	16.18	16.66	17.30	18.86
	4H	1.52	2.13	2.65	3.25	4.81	16.18	16.79	17.31	17.91	19.48
	6H	1.76	2.32	2.90	3.45	5.02	16.60	17.16	17.74	18.29	19.86
	8H	1.82	2.36	2.97	3.50	5.07	16.72	17.25	17.86	18.39	19.96
	12H	1.84	2.34	2.99	3.48	5.07	16.78	17.29	17.93	18.42	20.02
4H	2H	7.73	8.34	8.87	9.46	11.03	13.97	14.58	15.11	15.70	17.27
	3H	9.28	9.79	10.43	10.94	12.52	16.00	16.51	17.15	17.66	19.24
	4H	9.37	9.84	10.52	10.98	12.58	16.76	17.23	17.91	18.37	19.96
	6H	9.37	9.78	10.53	10.94	12.52	17.29	17.69	18.45	18.85	20.44
	8H	9.35	9.72	10.50	10.87	12.48	17.45	17.82	18.60	18.98	20.58
	12H	9.29	9.64	10.47	10.80	12.41	17.53	17.88	18.71	19.04	20.65
8H	4H	10.80	11.18	11.96	12.33	13.94	16.81	17.18	17.96	18.33	19.94
	6H	11.04	11.35	12.21	12.54	14.14	17.43	17.74	18.61	18.93	20.54
	8H	11.05	11.33	12.24	12.50	14.12	17.65	17.92	18.83	19.09	20.71
	12H	11.02	11.25	12.20	12.42	14.08	17.78	18.02	18.97	19.19	20.85
12H	4H	10.94	11.28	12.11	12.44	14.05	16.75	17.09	17.92	18.26	19.87
	6H	11.29	11.57	12.48	12.74	14.36	17.41	17.68	18.59	18.85	20.48
	8H	11.36	11.60	12.54	12.77	14.42	17.63	17.87	18.82	19.04	20.70