

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: P938423

Luminaire Tested: SQ4-FB-150U-100D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

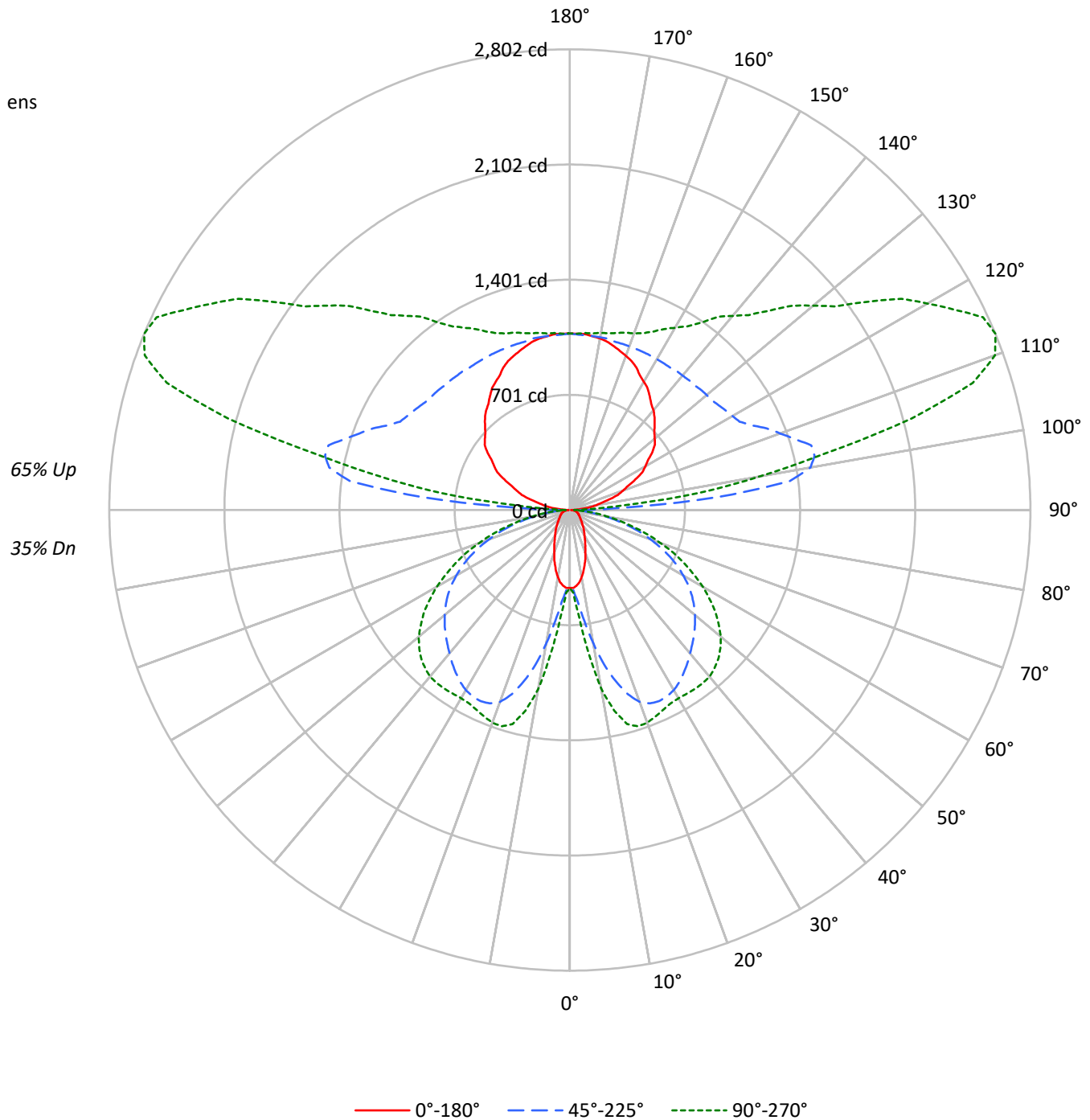
Test Method: LM-79-2019  
Report Number: P938423  
REPORT IS A COMBINATION OF REPORTS P933639 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-150U-100D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10633.7 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33  
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')  
CIE Type: Semi-Indirect  
  
Input Watts (W): 108.6  
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: P938423  
CATALOG NUMBER: SQ4-FB-150U-100D-927-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot







TEST NUMBER: P938423

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.4	0.6
10°-20°	272.1	2.6
20°-30°	475.9	4.5
30°-40°	612.6	5.8
40°-50°	684.3	6.4
50°-60°	655.4	6.2
60°-70°	519.4	4.9
70°-80°	305.4	2.9
80°-90°	89.0	0.8
90°-100°	523.2	4.9
100°-110°	1375.6	12.9
110°-120°	1426.3	13.4
120°-130°	1144.1	10.8
130°-140°	897.7	8.4
140°-150°	689.0	6.5
150°-160°	496.2	4.7
160°-170°	303.6	2.9
170°-180°	102.6	1.0
0°-30°	809.4	7.6
0°-40°	1422.0	13.4
0°-60°	2761.7	26.0
0°-90°	3675.5	34.6
90°-120°	3325.1	31.3
90°-150°	6055.9	56.9
90°-180°	6958.0	65.4
0°-180°	10633.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	462	496	558	632	655	43
15°	346	639	1077	1306	1347	96
25°	221	725	1283	1340	1341	102
35°	150	693	1209	1277	1328	93
45°	102	552	1068	1224	1279	79
55°	73	351	906	1053	1082	67
65°	58	186	673	757	768	57
75°	43	114	369	406	407	45
85°	15	35	92	101	102	16
90°	7	20	55	27	27	7
95°	69	271	901	465	316	77
105°	248	375	1521	2309	2154	263
115°	440	534	1218	2430	2774	435
125°	612	686	1108	1872	2209	544
135°	730	803	1073	1511	1714	565
145°	846	900	1060	1290	1390	530
155°	957	983	1060	1163	1197	440
165°	1032	1046	1060	1102	1115	291
175°	1073	1073	1067	1080	1080	102
180°	1073	1073	1073	1073	1073	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6	474.6
2.5°	474.6	474.6	477.6	479.2	482.2	483.7	486.8	489.9	499.0	500.5	503.6
5°	462.4	468.5	488.3	496.0	517.3	546.3	558.5	578.3	619.5	631.8	639.4
7.5°	444.1	457.8	506.7	518.8	572.3	648.6	680.6	723.3	788.9	821.0	846.9
10°	415.0	444.1	531.1	560.0	647.0	763.0	822.5	882.0	981.2	1025.5	1042.3
12.5°	383.0	430.4	557.0	596.7	721.8	891.2	962.9	1028.5	1141.4	1201.0	1210.1
15°	346.4	410.5	581.4	639.4	801.1	998.0	1077.4	1158.2	1263.5	1306.2	1316.9
17.5°	314.4	395.2	604.3	665.4	862.2	1094.2	1175.0	1242.2	1327.6	1356.6	1364.2
20°	274.7	370.8	619.5	698.9	926.3	1164.3	1242.2	1294.1	1352.0	1370.4	1373.4
22.5°	245.7	344.9	628.7	711.1	969.0	1207.1	1272.7	1313.9	1353.6	1359.7	1361.2
25°	221.3	315.9	627.2	724.9	1005.6	1233.0	1283.4	1313.9	1336.8	1339.8	1339.8
27.5°	198.4	283.8	621.1	727.9	1033.1	1239.1	1278.7	1300.1	1310.8	1316.9	1316.9
30°	178.6	253.3	605.8	721.8	1045.3	1233.0	1265.0	1275.7	1286.4	1295.5	1300.1
32.5°	163.3	224.3	582.9	709.6	1046.8	1217.8	1240.6	1246.7	1262.0	1283.4	1291.0
35°	149.5	195.3	557.0	692.8	1037.7	1193.3	1208.6	1214.7	1245.2	1277.3	1287.9
37.5°	135.8	173.9	523.4	663.8	1023.9	1164.3	1175.0	1185.7	1233.0	1271.1	1283.4
40°	122.0	155.6	483.7	631.8	1002.5	1129.2	1138.4	1155.2	1217.8	1262.0	1274.2
42.5°	111.4	140.4	441.0	598.2	975.1	1089.6	1103.3	1127.7	1199.4	1246.7	1260.5
45°	102.3	125.1	395.2	552.4	940.0	1048.4	1068.2	1101.8	1178.0	1223.8	1236.1
47.5°	93.1	114.4	348.0	505.1	901.8	1007.2	1033.1	1071.2	1149.1	1193.3	1204.0
50°	85.5	103.8	300.6	454.8	860.6	962.9	993.5	1033.1	1112.4	1153.6	1167.4
52.5°	79.4	94.6	256.3	404.4	813.4	917.1	952.2	993.5	1068.2	1107.9	1117.0
55°	73.2	87.0	218.2	351.0	764.5	868.3	906.4	946.1	1019.3	1052.9	1059.1
57.5°	70.2	80.9	186.2	300.6	712.6	813.4	856.1	892.7	961.3	987.3	993.5
60°	65.6	76.3	161.8	257.9	656.2	761.5	798.1	834.7	892.7	914.1	918.6
62.5°	61.1	73.2	143.5	216.7	598.2	700.4	737.0	770.6	819.4	834.7	840.8
65°	58.0	70.2	129.7	186.2	538.7	636.3	673.0	701.9	741.7	756.9	759.9
67.5°	54.9	67.1	119.0	160.2	479.2	572.3	599.7	627.2	657.7	673.0	674.5
70°	50.4	64.1	109.9	141.9	418.1	499.0	521.9	550.9	575.3	582.9	587.5
72.5°	47.3	59.5	103.8	128.2	355.6	428.8	450.1	466.9	488.3	496.0	496.0
75°	42.7	53.4	97.6	114.4	291.4	351.0	369.3	386.1	402.9	405.9	401.3
77.5°	38.1	47.3	83.9	96.2	227.4	277.7	293.0	302.1	315.9	318.9	320.5
80°	32.0	41.2	65.6	74.8	164.8	204.5	215.1	222.8	235.0	235.0	238.1
82.5°	24.4	32.0	47.3	53.4	111.4	140.4	149.5	154.2	161.8	161.8	161.8
85°	15.2	19.9	30.5	35.1	67.1	85.5	91.6	93.1	99.2	100.7	100.7
87.5°	7.6	10.7	19.9	21.3	35.1	44.3	44.3	47.3	47.3	45.8	44.3
90°	7.2	13.0	18.7	20.2	31.7	47.0	54.7	48.7	36.5	27.4	27.4
92.5°	28.8	77.8	126.8	139.1	195.5	270.7	308.3	270.2	194.0	136.9	131.4
95°	69.1	158.8	248.5	270.9	481.0	761.1	901.2	804.2	610.1	464.6	448.1
97.5°	119.6	198.7	277.7	297.5	647.9	1115.0	1348.6	1287.3	1164.6	1072.7	1041.3
100°	158.5	230.2	301.9	319.9	708.6	1227.0	1486.2	1490.6	1499.7	1506.4	1469.0
102.5°	191.7	258.6	325.5	342.2	736.5	1262.2	1525.1	1603.1	1759.4	1876.6	1844.5
105°	247.8	304.5	361.1	375.3	757.1	1266.2	1520.8	1695.8	2046.1	2308.8	2291.6
107.5°	305.5	358.3	411.1	424.3	760.9	1209.8	1434.3	1678.6	2167.2	2533.6	2537.8
110°	344.3	392.1	439.7	451.7	755.2	1159.9	1362.2	1635.3	2181.6	2591.2	2609.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	382.5	428.0	473.4	484.8	755.4	1116.3	1296.7	1576.2	2135.2	2554.5	2582.0
115°	440.1	482.1	524.1	534.5	762.4	1066.2	1218.1	1487.4	2025.9	2429.8	2468.0
117.5°	497.0	535.2	573.3	582.8	776.6	1035.0	1164.2	1407.2	1893.1	2257.6	2300.0
120°	530.2	566.1	602.0	610.9	788.1	1024.4	1142.5	1364.6	1808.7	2141.7	2182.8
122.5°	562.6	598.8	635.0	644.0	804.6	1018.9	1126.0	1325.9	1725.8	2025.7	2066.3
125°	612.3	645.3	678.3	686.5	827.0	1014.3	1108.0	1277.8	1617.5	1872.3	1909.6
127.5°	652.7	685.9	719.3	727.6	849.3	1011.6	1092.8	1238.6	1530.3	1749.1	1780.6
130°	674.3	710.2	746.1	755.0	865.7	1013.3	1087.1	1216.9	1476.6	1671.3	1700.4
132.5°	696.6	732.5	768.4	777.3	878.9	1014.3	1082.0	1198.2	1430.7	1605.0	1631.1
135°	729.7	762.4	795.1	803.3	893.3	1013.3	1073.4	1170.7	1365.4	1511.4	1533.8
137.5°	763.6	795.9	828.3	836.4	914.9	1019.6	1071.9	1154.2	1318.8	1442.2	1460.6
140°	791.7	821.5	851.2	858.7	928.1	1020.6	1066.9	1138.0	1280.1	1386.8	1403.9
142.5°	813.3	840.8	868.4	875.3	939.2	1024.3	1066.9	1129.4	1254.2	1347.8	1362.6
145°	846.5	870.5	894.5	900.5	953.6	1024.3	1059.7	1110.7	1212.9	1289.5	1300.7
147.5°	879.6	903.0	926.3	932.2	974.7	1031.3	1059.7	1099.9	1180.2	1240.5	1249.8
150°	901.2	922.3	943.4	948.7	985.7	1035.0	1059.7	1093.6	1161.5	1212.4	1219.9
152.5°	923.5	939.6	955.6	959.6	992.9	1037.4	1059.7	1088.6	1146.6	1190.0	1195.7
155°	956.6	968.5	980.4	983.3	1008.8	1042.7	1059.7	1082.7	1128.8	1163.4	1167.2
157.5°	981.1	992.7	1004.2	1007.1	1024.6	1048.0	1059.7	1077.6	1113.5	1140.4	1143.0
160°	997.8	1006.7	1015.6	1017.9	1031.8	1050.4	1059.7	1075.1	1105.8	1128.8	1130.4
162.5°	1014.3	1021.0	1027.7	1029.4	1039.5	1053.0	1059.7	1072.6	1098.6	1118.0	1119.5
165°	1032.3	1038.4	1044.4	1046.0	1050.5	1056.6	1059.7	1069.0	1087.5	1101.5	1103.0
167.5°	1048.9	1051.7	1054.7	1055.4	1059.2	1064.4	1066.9	1073.0	1085.2	1094.2	1094.9
170°	1059.7	1062.5	1065.4	1066.1	1066.4	1066.8	1066.9	1073.0	1085.2	1094.2	1094.2
172.5°	1065.4	1066.1	1066.8	1066.9	1066.9	1066.9	1066.9	1071.7	1081.3	1088.5	1087.9
175°	1073.4	1073.4	1073.4	1073.4	1071.2	1068.4	1066.9	1069.9	1076.0	1080.5	1080.5
177.5°	1073.4	1073.4	1073.4	1073.4	1071.7	1069.5	1068.3	1070.7	1075.5	1079.2	1078.5
180°	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4	1073.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	474.6	474.6
2.5°	506.7	503.6
5°	651.6	654.7
7.5°	877.4	876.0
10°	1091.1	1104.8
12.5°	1246.7	1249.8
15°	1341.3	1347.4
17.5°	1378.0	1379.5
20°	1379.5	1376.5
22.5°	1362.7	1359.7
25°	1342.9	1341.3
27.5°	1324.6	1326.1
30°	1316.9	1321.5
32.5°	1316.9	1324.6
35°	1320.0	1327.6
37.5°	1318.5	1327.6
40°	1312.3	1323.0
42.5°	1295.5	1303.2
45°	1269.7	1278.7
47.5°	1236.1	1242.2
50°	1193.3	1199.4
52.5°	1139.9	1141.4
55°	1075.8	1081.9
57.5°	1007.2	1008.7
60°	930.9	935.4
62.5°	850.0	850.0
65°	764.5	767.5
67.5°	676.0	683.6
70°	586.0	587.5
72.5°	497.5	497.5
75°	405.9	407.4
77.5°	318.9	318.9
80°	236.5	238.1
82.5°	163.3	166.3
85°	102.3	102.3
87.5°	47.3	42.7
90°	27.4	27.4
92.5°	109.6	87.9
95°	382.2	316.2
97.5°	915.8	790.3
100°	1319.5	1169.9
102.5°	1716.5	1588.4
105°	2222.8	2153.9
107.5°	2554.4	2571.0
110°	2680.8	2752.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	2692.2	2802.3
115°	2620.7	2773.5
117.5°	2469.4	2638.8
120°	2347.4	2512.0
122.5°	2228.6	2390.9
125°	2059.1	2208.7
127.5°	1906.8	2033.0
130°	1817.0	1933.5
132.5°	1735.4	1839.8
135°	1623.9	1713.8
137.5°	1534.3	1607.9
140°	1472.8	1541.6
142.5°	1421.9	1481.1
145°	1345.5	1390.3
147.5°	1286.9	1324.1
150°	1250.0	1280.1
152.5°	1218.4	1241.2
155°	1182.2	1197.3
157.5°	1153.6	1164.2
160°	1136.4	1142.5
162.5°	1125.2	1131.0
165°	1109.0	1115.1
167.5°	1097.5	1100.0
170°	1094.2	1094.2
172.5°	1085.7	1083.5
175°	1080.5	1080.5
177.5°	1075.9	1073.4
180°	1073.4	1073.4



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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	3.14	3.90	4.21	4.98	6.45	16.30	17.06	17.37	18.14	19.61
	3H	3.83	4.52	4.91	5.60	7.09	18.13	18.81	19.21	19.90	21.39
	4H	4.13	4.78	5.22	5.86	7.36	18.76	19.41	19.86	20.50	22.00
	6H	4.37	4.97	5.47	6.06	7.57	19.18	19.78	20.29	20.87	22.38
	8H	4.44	5.01	5.54	6.11	7.62	19.30	19.87	20.41	20.98	22.48
	12H	4.45	4.99	5.56	6.09	7.62	19.36	19.90	20.47	21.00	22.53
4H	2H	10.33	10.98	11.43	12.07	13.56	16.56	17.21	17.66	18.30	19.80
	3H	11.89	12.43	13.00	13.55	15.06	18.59	19.14	19.70	20.25	21.76
	4H	11.98	12.48	13.09	13.58	15.11	19.35	19.85	20.46	20.96	22.49
	6H	11.98	12.41	13.10	13.54	15.06	19.88	20.31	21.00	21.44	22.96
	8H	11.96	12.36	13.08	13.48	15.02	20.04	20.44	21.16	21.56	23.10
	12H	11.91	12.27	13.05	13.40	14.95	20.12	20.49	21.26	21.62	23.16
8H	4H	13.41	13.81	14.53	14.93	16.47	19.40	19.80	20.52	20.92	22.46
	6H	13.65	13.98	14.79	15.14	16.68	20.02	20.36	21.17	21.52	23.05
	8H	13.67	13.96	14.81	15.10	16.65	20.24	20.53	21.39	21.67	23.23
	12H	13.63	13.88	14.78	15.02	16.61	20.38	20.63	21.53	21.77	23.36
12H	4H	13.55	13.91	14.69	15.04	16.59	19.35	19.72	20.49	20.85	22.39
	6H	13.90	14.20	15.05	15.34	16.89	20.01	20.30	21.15	21.44	22.99
	8H	13.97	14.22	15.12	15.36	16.95	20.23	20.48	21.38	21.62	23.21