

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: P937449

Luminaire Tested: SQ4-FB-100U-050D-930-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937449
REPORT IS A COMBINATION OF REPORTS P933557 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

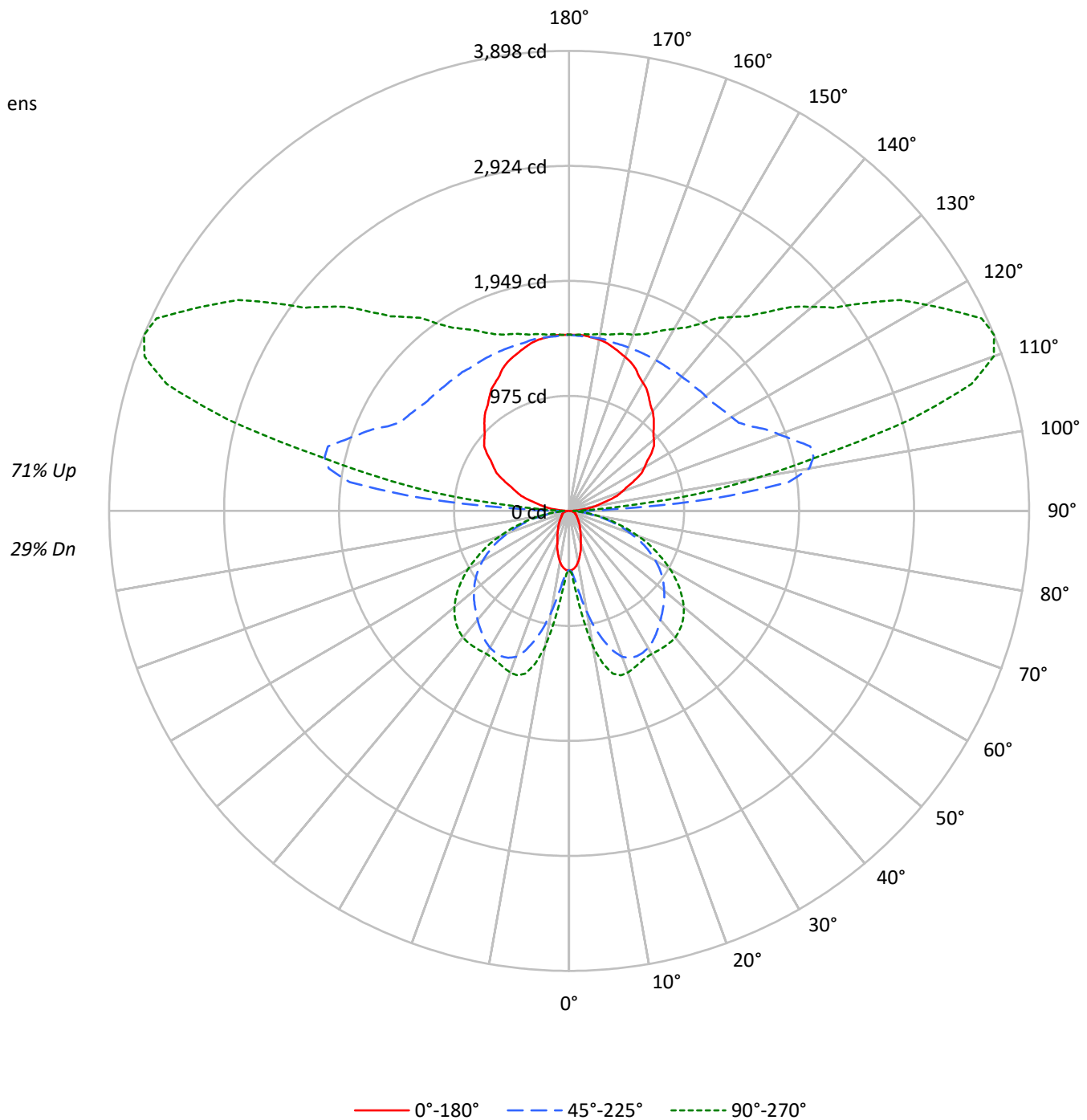
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13571.5 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 123.6
Input Voltage (V): NR
Input Current (A_{in}): 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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	0.5
10°-20°	288.1	2.1
20°-30°	503.9	3.7
30°-40°	648.7	4.8
40°-50°	724.5	5.3
50°-60°	693.9	5.1
60°-70°	550.0	4.1
70°-80°	323.4	2.4
80°-90°	95.5	0.7
90°-100°	727.8	5.4
100°-110°	1913.3	14.1
110°-120°	1983.9	14.6
120°-130°	1591.3	11.7
130°-140°	1248.6	9.2
140°-150°	958.4	7.1
150°-160°	690.2	5.1
160°-170°	422.3	3.1
170°-180°	142.7	1.1
0°-30°	857.0	6.3
0°-40°	1505.7	11.1
0°-60°	2924.1	21.5
0°-90°	3893.0	28.7
90°-120°	4625.0	34.1
90°-150°	8423.3	62.1
90°-180°	9679.0	71.3
0°-180°	13571.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	490	525	591	669	693	45
15°	367	677	1141	1383	1427	102
25°	234	768	1359	1419	1420	108
35°	158	734	1280	1352	1406	99
45°	108	585	1131	1296	1354	84
55°	78	372	960	1115	1146	71
65°	61	197	713	801	813	61
75°	45	121	391	430	431	47
85°	16	37	97	107	108	17
90°	10	28	76	38	38	9
95°	96	377	1254	646	440	107
105°	345	522	2115	3211	2996	365
115°	612	744	1694	3380	3858	605
125°	852	955	1541	2604	3072	756
135°	1015	1117	1493	2102	2384	785
145°	1177	1252	1474	1794	1934	738
155°	1331	1368	1474	1618	1665	611
165°	1436	1455	1474	1532	1551	405
175°	1493	1493	1484	1503	1503	142
180°	1493	1493	1493	1493	1493	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5
2.5°	502.5	502.5	505.7	507.3	510.5	512.2	515.4	518.7	528.4	530.0	533.2
5°	489.6	496.0	517.1	525.1	547.7	578.4	591.3	612.4	656.0	668.9	677.0
7.5°	470.2	484.7	536.4	549.3	605.9	686.7	720.6	765.9	835.4	869.2	896.7
10°	439.5	470.2	562.3	593.0	685.0	807.9	870.9	933.9	1038.9	1085.8	1103.6
12.5°	405.5	455.6	589.7	631.7	764.2	943.6	1019.6	1089.0	1208.6	1271.6	1281.3
15°	366.8	434.7	615.6	677.0	848.3	1056.7	1140.7	1226.3	1337.9	1383.1	1394.4
17.5°	332.8	418.4	639.8	704.5	912.9	1158.5	1244.1	1315.2	1405.7	1436.4	1444.5
20°	290.8	392.7	656.0	740.0	980.8	1232.8	1315.2	1370.2	1431.6	1450.9	1454.2
22.5°	260.2	365.1	665.7	753.0	1026.0	1278.1	1347.5	1391.2	1433.2	1439.6	1441.2
25°	234.3	334.4	664.1	767.5	1064.8	1305.5	1358.8	1391.2	1415.4	1418.7	1418.7
27.5°	210.1	300.6	657.6	770.7	1093.8	1312.0	1354.0	1376.6	1387.9	1394.4	1394.4
30°	189.0	268.2	641.4	764.2	1106.8	1305.5	1339.5	1350.8	1362.0	1371.8	1376.6
32.5°	172.9	237.5	617.2	751.3	1108.4	1289.4	1313.6	1320.1	1336.2	1358.8	1366.9
35°	158.4	206.9	589.7	733.5	1098.7	1263.5	1279.7	1286.2	1318.4	1352.4	1363.7
37.5°	143.8	184.2	554.2	702.9	1084.1	1232.8	1244.1	1255.4	1305.5	1345.9	1358.8
40°	129.3	164.8	512.2	668.9	1061.6	1195.7	1205.4	1223.1	1289.4	1336.2	1349.1
42.5°	118.0	148.6	466.9	633.4	1032.5	1153.7	1168.2	1194.1	1269.9	1320.1	1334.6
45°	108.2	132.5	418.4	584.9	995.3	1110.0	1131.0	1166.6	1247.4	1295.8	1308.7
47.5°	98.5	121.2	368.4	534.8	954.9	1066.4	1093.8	1134.2	1216.6	1263.5	1274.8
50°	90.5	109.9	318.3	481.5	911.2	1019.6	1051.8	1093.8	1177.9	1221.5	1236.1
52.5°	84.0	100.2	271.4	428.2	861.2	971.1	1008.2	1051.8	1131.0	1173.0	1182.7
55°	77.6	92.1	231.0	371.6	809.5	919.4	959.7	1001.7	1079.3	1114.9	1121.3
57.5°	74.4	85.6	197.1	318.3	754.6	861.2	906.4	945.2	1017.9	1045.4	1051.8
60°	69.5	80.8	171.3	273.1	694.8	806.3	845.1	883.8	945.2	967.9	972.7
62.5°	64.6	77.6	151.8	229.4	633.4	741.7	780.4	815.9	867.6	883.8	890.3
65°	61.4	74.4	137.3	197.1	570.4	673.8	712.6	743.3	785.3	801.4	804.6
67.5°	58.1	71.1	126.0	169.7	507.3	605.9	635.0	664.1	696.4	712.6	714.2
70°	53.3	67.9	116.4	150.2	442.7	528.4	552.6	583.3	609.2	617.2	622.1
72.5°	50.1	63.0	109.9	135.7	376.4	454.0	476.7	494.4	517.1	525.1	525.1
75°	45.2	56.5	103.4	121.2	308.6	371.6	391.0	408.8	426.6	429.8	424.9
77.5°	40.4	50.1	88.9	101.8	240.7	294.1	310.2	319.9	334.4	337.7	339.3
80°	34.0	43.6	69.5	79.2	174.5	216.5	227.8	235.9	248.8	248.8	252.1
82.5°	25.9	34.0	50.1	56.5	118.0	148.6	158.4	163.2	171.3	171.3	171.3
85°	16.1	21.0	32.3	37.2	71.1	90.5	96.9	98.5	105.0	106.6	106.6
87.5°	8.1	11.3	21.0	22.6	37.2	46.9	46.9	50.1	50.1	48.5	46.9
90°	10.0	18.1	26.0	28.0	44.1	65.4	76.1	67.7	50.7	38.1	38.1
92.5°	40.1	108.2	176.3	193.4	271.9	376.5	428.9	375.9	269.9	190.4	182.8
95°	96.2	220.9	345.6	376.8	669.0	1058.7	1253.5	1118.6	848.7	646.3	623.3
97.5°	166.3	276.3	386.3	413.9	901.1	1550.8	1875.7	1790.4	1619.9	1492.0	1448.4
100°	220.4	320.2	419.9	444.9	985.6	1706.6	2067.2	2073.4	2085.9	2095.2	2043.2
102.5°	266.5	359.6	452.7	475.9	1024.4	1755.7	2121.3	2229.9	2447.2	2610.2	2565.7
105°	344.7	423.5	502.4	522.0	1053.1	1761.2	2115.3	2358.9	2846.1	3211.4	3187.5
107.5°	424.9	498.3	571.8	590.2	1058.4	1682.8	1995.0	2334.8	3014.4	3524.0	3529.8
110°	479.0	545.3	611.6	628.3	1050.4	1613.3	1894.8	2274.7	3034.4	3604.2	3629.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	532.1	595.3	658.5	674.4	1050.8	1552.7	1803.6	2192.4	2970.0	3553.1	3591.4
115°	612.2	670.6	728.9	743.5	1060.4	1483.1	1694.4	2068.9	2818.0	3379.7	3432.8
117.5°	691.4	744.4	797.4	810.6	1080.2	1439.5	1619.2	1957.2	2633.3	3140.3	3199.2
120°	737.5	787.3	837.3	849.7	1096.3	1424.9	1589.2	1898.1	2515.7	2979.0	3036.2
122.5°	782.6	833.0	883.2	895.8	1119.3	1417.2	1566.2	1844.3	2400.5	2817.6	2874.1
125°	851.7	897.6	943.4	954.9	1150.3	1410.9	1541.1	1777.4	2249.8	2604.2	2656.2
127.5°	907.8	954.1	1000.5	1012.0	1181.4	1407.2	1520.1	1722.9	2128.6	2432.8	2476.7
130°	937.9	987.8	1037.6	1050.1	1204.1	1409.4	1512.0	1692.6	2053.8	2324.7	2365.2
132.5°	969.0	1018.8	1068.7	1081.2	1222.4	1410.8	1505.0	1666.6	1990.0	2232.5	2268.8
135°	1015.1	1060.4	1105.9	1117.2	1242.5	1409.5	1493.0	1628.4	1899.1	2102.2	2133.5
137.5°	1062.1	1107.1	1152.1	1163.3	1272.5	1418.2	1491.0	1605.4	1834.4	2006.1	2031.7
140°	1101.2	1142.7	1184.0	1194.4	1290.9	1419.6	1483.9	1582.8	1780.6	1928.9	1952.8
142.5°	1131.3	1169.6	1207.9	1217.4	1306.2	1424.7	1483.9	1570.8	1744.5	1874.8	1895.3
145°	1177.4	1210.8	1244.2	1252.5	1326.3	1424.8	1474.0	1545.0	1687.0	1793.6	1809.2
147.5°	1223.5	1256.0	1288.5	1296.6	1355.7	1434.6	1474.0	1529.9	1641.7	1725.5	1738.4
150°	1253.5	1282.9	1312.3	1319.7	1371.1	1439.7	1474.0	1521.2	1615.6	1686.4	1696.8
152.5°	1284.6	1306.8	1329.1	1334.7	1381.1	1443.0	1474.0	1514.3	1594.8	1655.3	1663.2
155°	1330.7	1347.1	1363.7	1367.7	1403.2	1450.4	1474.0	1506.0	1570.1	1618.2	1623.4
157.5°	1364.7	1380.8	1396.8	1400.8	1425.2	1457.8	1474.0	1498.9	1548.7	1586.2	1589.9
160°	1387.7	1400.3	1412.7	1415.8	1435.2	1461.1	1474.0	1495.3	1538.1	1570.1	1572.2
162.5°	1410.8	1420.1	1429.5	1431.8	1445.9	1464.6	1474.0	1492.0	1528.0	1555.1	1557.1
165°	1435.8	1444.3	1452.8	1454.9	1461.2	1469.7	1474.0	1486.9	1512.7	1532.0	1534.1
167.5°	1458.9	1462.9	1466.9	1468.0	1473.3	1480.4	1483.9	1492.5	1509.4	1522.1	1523.0
170°	1474.0	1478.0	1482.0	1483.0	1483.3	1483.7	1483.9	1492.5	1509.4	1522.1	1522.1
172.5°	1481.9	1482.8	1483.7	1483.9	1483.9	1483.9	1483.9	1490.6	1504.0	1514.1	1513.3
175°	1493.0	1493.0	1493.0	1493.0	1490.0	1486.0	1483.9	1488.2	1496.6	1503.0	1503.0
177.5°	1493.0	1493.0	1493.0	1493.0	1490.7	1487.6	1486.0	1489.3	1496.0	1501.0	1500.1
180°	1493.0	1493.0	1493.0	1493.0	1493.0	1493.0	1493.0	1493.0	1493.0	1493.0	1493.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	502.5	502.5
2.5°	536.4	533.2
5°	689.9	693.1
7.5°	929.1	927.5
10°	1155.3	1169.8
12.5°	1320.1	1323.3
15°	1420.3	1426.7
17.5°	1459.1	1460.7
20°	1460.7	1457.4
22.5°	1442.8	1439.6
25°	1421.9	1420.3
27.5°	1402.4	1404.1
30°	1394.4	1399.2
32.5°	1394.4	1402.4
35°	1397.6	1405.7
37.5°	1396.0	1405.7
40°	1389.5	1400.8
42.5°	1371.8	1379.9
45°	1344.3	1354.0
47.5°	1308.7	1315.2
50°	1263.5	1269.9
52.5°	1207.0	1208.6
55°	1139.1	1145.6
57.5°	1066.4	1068.0
60°	985.6	990.4
62.5°	900.0	900.0
65°	809.5	812.7
67.5°	715.8	723.8
70°	620.5	622.1
72.5°	526.8	526.8
75°	429.8	431.4
77.5°	337.7	337.7
80°	250.5	252.1
82.5°	172.9	176.1
85°	108.2	108.2
87.5°	50.1	45.2
90°	38.1	38.1
92.5°	152.5	122.2
95°	531.6	439.9
97.5°	1273.8	1099.2
100°	1835.3	1627.3
102.5°	2387.6	2209.5
105°	3091.7	2996.0
107.5°	3553.0	3576.2
110°	3728.9	3828.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3744.6	3897.8
115°	3645.3	3857.7
117.5°	3434.8	3670.4
120°	3265.1	3494.0
122.5°	3099.8	3325.6
125°	2864.1	3072.1
127.5°	2652.2	2827.7
130°	2527.3	2689.4
132.5°	2414.0	2559.2
135°	2258.6	2383.8
137.5°	2134.1	2236.5
140°	2048.6	2144.3
142.5°	1977.7	2060.1
145°	1871.6	1933.9
147.5°	1790.0	1841.7
150°	1738.7	1780.6
152.5°	1694.8	1726.4
155°	1644.4	1665.3
157.5°	1604.6	1619.2
160°	1580.7	1589.2
162.5°	1565.1	1573.2
165°	1542.6	1551.1
167.5°	1526.5	1530.0
170°	1522.1	1522.1
172.5°	1510.1	1507.0
175°	1503.0	1503.0
177.5°	1496.6	1493.0
180°	1493.0	1493.0



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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	0.17	0.89	1.28	2.00	3.54	13.36	14.08	14.48	15.19	16.74
	3H	0.86	1.51	1.99	2.63	4.19	15.20	15.84	16.32	16.96	18.52
	4H	1.15	1.77	2.29	2.89	4.45	15.84	16.45	16.97	17.57	19.14
	6H	1.40	1.96	2.54	3.08	4.66	16.26	16.83	17.41	17.95	19.53
	8H	1.46	2.00	2.61	3.14	4.71	16.38	16.92	17.53	18.06	19.63
	12H	1.47	1.98	2.62	3.12	4.71	16.45	16.96	17.60	18.09	19.68
4H	2H	7.38	7.99	8.52	9.11	10.67	13.62	14.23	14.76	15.35	16.92
	3H	8.93	9.44	10.08	10.59	12.17	15.65	16.17	16.80	17.31	18.89
	4H	9.02	9.49	10.17	10.62	12.22	16.42	16.89	17.57	18.03	19.62
	6H	9.02	9.42	10.17	10.58	12.17	16.95	17.36	18.11	18.52	20.10
	8H	8.99	9.37	10.15	10.52	12.12	17.11	17.49	18.27	18.64	20.25
	12H	8.94	9.28	10.11	10.45	12.06	17.20	17.55	18.38	18.71	20.32
8H	4H	10.45	10.83	11.61	11.98	13.59	16.47	16.84	17.62	17.99	19.60
	6H	10.69	11.00	11.86	12.19	13.79	17.09	17.40	18.27	18.60	20.20
	8H	10.70	10.97	11.88	12.15	13.77	17.31	17.59	18.49	18.76	20.38
	12H	10.66	10.90	11.85	12.07	13.73	17.45	17.69	18.64	18.86	20.52
12H	4H	10.59	10.93	11.76	12.09	13.70	16.41	16.75	17.58	17.92	19.53
	6H	10.95	11.22	12.13	12.39	14.01	17.07	17.35	18.26	18.52	20.14
	8H	11.01	11.25	12.19	12.42	14.07	17.30	17.54	18.49	18.71	20.36