

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: P937816

Luminaire Tested: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937816  
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

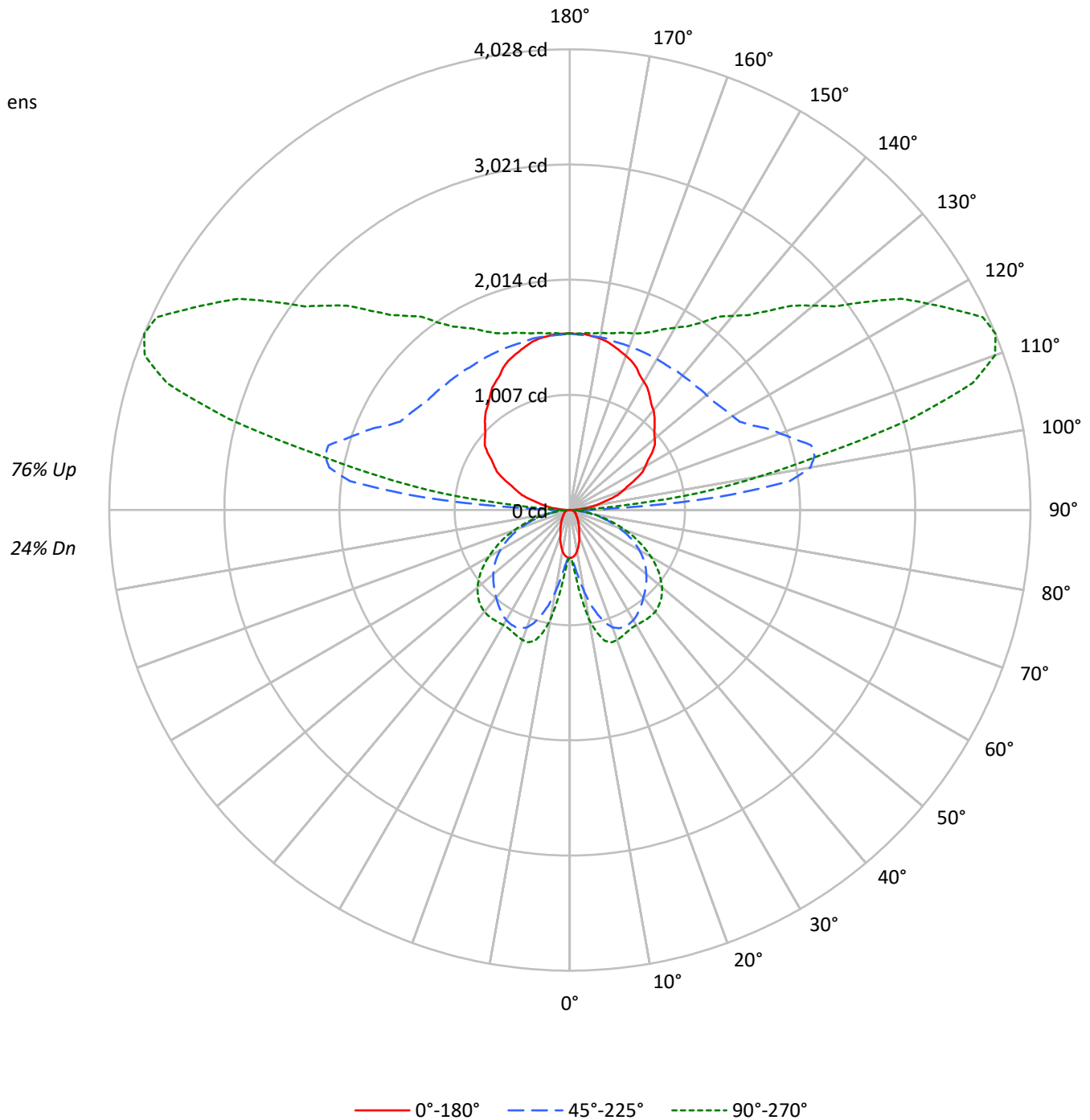
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13235.0 lumens  
Efficiency: N/A  
Efficacy: 139.0 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): 95.2  
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: P937816  
CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

### Luminous Intensity Polar Plot







TEST NUMBER: P937816

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.0	0.4
10°-20°	239.1	1.8
20°-30°	418.3	3.2
30°-40°	538.5	4.1
40°-50°	601.5	4.5
50°-60°	576.1	4.4
60°-70°	456.5	3.4
70°-80°	268.5	2.0
80°-90°	80.5	0.6
90°-100°	752.1	5.7
100°-110°	1977.3	14.9
110°-120°	2050.2	15.5
120°-130°	1644.5	12.4
130°-140°	1290.4	9.7
140°-150°	990.4	7.5
150°-160°	713.3	5.4
160°-170°	436.4	3.3
170°-180°	147.4	1.1
0°-30°	711.4	5.4
0°-40°	1249.9	9.4
0°-60°	2427.4	18.3
0°-90°	3232.9	24.4
90°-120°	4779.7	36.1
90°-150°	8705.0	65.8
90°-180°	10002.0	75.6
0°-180°	13235.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	417	417	417	417	417	
5°	406	436	491	555	575	38
15°	304	562	947	1148	1184	85
25°	194	637	1128	1178	1179	90
35°	131	609	1062	1123	1167	82
45°	90	486	939	1076	1124	70
55°	64	308	797	926	951	59
65°	51	164	592	665	675	51
75°	38	101	325	357	358	39
85°	13	31	80	88	90	14
90°	10	29	79	39	39	9
95°	99	389	1295	668	455	110
105°	356	540	2186	3319	3096	378
115°	633	768	1751	3493	3987	625
125°	880	987	1593	2691	3175	781
135°	1049	1155	1543	2172	2464	812
145°	1217	1294	1523	1854	1998	762
155°	1375	1414	1523	1672	1721	632
165°	1484	1504	1523	1583	1603	419
175°	1543	1543	1534	1553	1553	146
180°	1543	1543	1543	1543	1543	



TEST NUMBER: P937816

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1	417.1
2.5°	417.1	417.1	419.8	421.2	423.8	425.2	427.9	430.6	438.6	439.9	442.6
5°	406.4	411.8	429.2	435.9	454.7	480.2	490.9	508.3	544.6	555.3	562.0
7.5°	390.3	402.4	445.3	456.0	503.0	570.0	598.2	635.8	693.4	721.6	744.4
10°	364.8	390.3	466.8	492.3	568.7	670.6	723.0	775.3	862.4	901.3	916.1
12.5°	336.7	378.2	489.6	524.4	634.4	783.3	846.4	904.0	1003.3	1055.6	1063.6
15°	304.5	360.8	511.0	562.0	704.2	877.2	947.0	1018.0	1110.6	1148.1	1157.5
17.5°	276.3	347.4	531.2	584.8	757.8	961.7	1032.8	1091.8	1166.9	1192.4	1199.1
20°	241.4	325.9	544.6	614.3	814.2	1023.4	1091.8	1137.4	1188.4	1204.5	1207.2
22.5°	215.9	303.1	552.6	625.0	851.7	1061.0	1118.6	1154.9	1189.7	1195.1	1196.4
25°	194.5	277.6	551.3	637.1	883.9	1083.8	1128.0	1154.9	1175.0	1177.7	1177.7
27.5°	174.4	249.5	545.9	639.8	908.1	1089.1	1124.0	1142.8	1152.2	1157.5	1157.5
30°	156.9	222.7	532.5	634.4	918.8	1083.8	1111.9	1121.3	1130.7	1138.8	1142.8
32.5°	143.5	197.2	512.4	623.7	920.1	1070.3	1090.5	1095.8	1109.2	1128.0	1134.7
35°	131.4	171.7	489.6	608.9	912.1	1048.9	1062.3	1067.7	1094.5	1122.7	1132.0
37.5°	119.4	152.9	460.1	583.5	900.0	1023.4	1032.8	1042.2	1083.8	1117.3	1128.0
40°	107.3	136.8	425.2	555.3	881.2	992.6	1000.6	1015.4	1070.3	1109.2	1120.0
42.5°	97.9	123.4	387.6	525.8	857.1	957.7	969.8	991.2	1054.3	1095.8	1107.9
45°	89.9	110.0	347.4	485.5	826.2	921.5	938.9	968.4	1035.5	1075.7	1086.4
47.5°	81.8	100.6	305.8	444.0	792.7	885.3	908.1	941.6	1010.0	1048.9	1058.3
50°	75.1	91.2	264.2	399.7	756.5	846.4	873.2	908.1	977.8	1014.0	1026.1
52.5°	69.7	83.2	225.3	355.4	714.9	806.1	837.0	873.2	938.9	973.8	981.8
55°	64.4	76.5	191.8	308.5	672.0	763.2	796.7	831.6	896.0	925.5	930.9
57.5°	61.7	71.1	163.6	264.2	626.4	714.9	752.5	784.7	845.0	867.8	873.2
60°	57.7	67.1	142.2	226.7	576.8	669.3	701.5	733.7	784.7	803.4	807.5
62.5°	53.7	64.4	126.1	190.5	525.8	615.7	647.8	677.4	720.3	733.7	739.1
65°	51.0	61.7	114.0	163.6	473.5	559.3	591.5	617.0	651.9	665.3	668.0
67.5°	48.3	59.0	104.6	140.8	421.2	503.0	527.1	551.3	578.1	591.5	592.8
70°	44.3	56.3	96.6	124.7	367.5	438.6	458.7	484.2	505.7	512.4	516.4
72.5°	41.6	52.3	91.2	112.7	312.5	376.9	395.7	410.4	429.2	435.9	435.9
75°	37.6	46.9	85.8	100.6	256.2	308.5	324.6	339.3	354.1	356.8	352.8
77.5°	33.5	41.6	73.8	84.5	199.9	244.1	257.5	265.6	277.6	280.3	281.7
80°	28.2	36.2	57.7	65.7	144.9	179.7	189.1	195.8	206.6	206.6	209.2
82.5°	21.5	28.2	41.6	46.9	97.9	123.4	131.4	135.5	142.2	142.2	142.2
85°	13.4	17.4	26.8	30.8	59.0	75.1	80.5	81.8	87.2	88.5	88.5
87.5°	6.7	9.4	17.4	18.8	30.8	38.9	38.9	41.6	41.6	40.2	38.9
90°	10.4	18.7	26.9	29.0	45.6	67.7	78.7	69.9	52.4	39.3	39.3
92.5°	41.4	111.8	182.3	199.9	281.0	389.1	443.2	388.4	278.9	196.7	188.9
95°	99.4	228.3	357.2	389.4	691.4	1094.1	1295.4	1156.0	877.1	667.9	644.2
97.5°	171.9	285.6	399.3	427.7	931.3	1602.8	1938.5	1850.4	1674.1	1541.9	1496.8
100°	227.8	330.9	434.0	459.8	1018.6	1763.7	2136.3	2142.7	2155.6	2165.3	2111.6
102.5°	275.4	371.6	467.8	491.9	1058.7	1814.4	2192.2	2304.5	2529.1	2697.5	2651.5
105°	356.2	437.7	519.1	539.5	1088.3	1820.1	2186.0	2437.7	2941.2	3318.8	3294.1
107.5°	439.1	515.0	590.9	609.9	1093.8	1739.1	2061.7	2412.9	3115.2	3641.9	3647.9
110°	495.0	563.6	632.2	649.3	1085.6	1667.3	1958.2	2350.8	3135.9	3724.7	3750.5



TEST NUMBER: P937816

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	549.9	615.2	680.6	696.9	1085.9	1604.6	1863.9	2265.7	3069.2	3671.9	3711.5
115°	632.7	693.0	753.2	768.3	1095.9	1532.7	1751.1	2138.1	2912.2	3492.8	3547.7
117.5°	714.5	769.3	824.0	837.7	1116.3	1487.7	1673.4	2022.7	2721.3	3245.3	3306.2
120°	762.1	813.7	865.2	878.1	1132.8	1472.5	1642.3	1961.5	2599.8	3078.6	3137.7
122.5°	808.7	860.7	912.7	925.7	1156.6	1464.5	1618.5	1905.9	2480.8	2911.9	2970.2
125°	880.2	927.6	975.0	986.8	1188.7	1458.0	1592.6	1836.8	2325.1	2691.3	2745.0
127.5°	938.2	986.1	1033.9	1045.9	1220.9	1454.2	1570.9	1780.5	2199.8	2514.2	2559.5
130°	969.2	1020.8	1072.3	1085.2	1244.3	1456.5	1562.6	1749.2	2122.5	2402.4	2444.3
132.5°	1001.3	1052.9	1104.4	1117.3	1263.3	1458.0	1555.3	1722.4	2056.5	2307.1	2344.6
135°	1049.0	1095.9	1142.9	1154.6	1284.0	1456.6	1542.9	1682.8	1962.6	2172.5	2204.8
137.5°	1097.6	1144.1	1190.6	1202.2	1315.1	1465.6	1540.8	1659.1	1895.7	2073.1	2099.6
140°	1138.0	1180.8	1223.6	1234.3	1334.1	1467.1	1533.6	1635.8	1840.1	1993.4	2018.1
142.5°	1169.1	1208.7	1248.2	1258.1	1349.9	1472.4	1533.6	1623.3	1802.8	1937.4	1958.7
145°	1216.7	1251.2	1285.8	1294.4	1370.7	1472.4	1523.2	1596.6	1743.5	1853.6	1869.7
147.5°	1264.4	1298.0	1331.6	1340.0	1401.1	1482.5	1523.2	1581.0	1696.5	1783.2	1796.5
150°	1295.4	1325.8	1356.2	1363.8	1416.9	1487.8	1523.2	1572.0	1669.6	1742.8	1753.6
152.5°	1327.5	1350.5	1373.5	1379.3	1427.3	1491.2	1523.2	1564.9	1648.2	1710.7	1718.9
155°	1375.2	1392.2	1409.2	1413.5	1450.1	1498.8	1523.2	1556.4	1622.7	1672.4	1677.8
157.5°	1410.4	1426.9	1443.5	1447.6	1472.8	1506.4	1523.2	1549.0	1600.5	1639.2	1643.0
160°	1434.2	1447.1	1460.0	1463.2	1483.2	1509.9	1523.2	1545.3	1589.5	1622.6	1624.8
162.5°	1458.0	1467.6	1477.3	1479.7	1494.2	1513.5	1523.2	1541.8	1579.1	1607.1	1609.2
165°	1483.9	1492.7	1501.4	1503.6	1510.1	1518.8	1523.2	1536.6	1563.3	1583.3	1585.5
167.5°	1507.7	1511.8	1516.0	1517.0	1522.5	1529.9	1533.6	1542.3	1559.8	1572.9	1573.8
170°	1523.2	1527.4	1531.6	1532.6	1532.9	1533.4	1533.6	1542.3	1559.8	1572.9	1572.9
172.5°	1531.5	1532.4	1533.4	1533.6	1533.6	1533.6	1533.6	1540.5	1554.3	1564.7	1563.9
175°	1542.9	1542.9	1542.9	1542.9	1539.8	1535.7	1533.6	1538.0	1546.7	1553.3	1553.3
177.5°	1542.9	1542.9	1542.9	1542.9	1540.5	1537.3	1535.7	1539.1	1546.0	1551.2	1550.3
180°	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9	1542.9



TEST NUMBER: P937816

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	417.1	417.1
2.5°	445.3	442.6
5°	572.7	575.4
7.5°	771.2	769.9
10°	959.0	971.1
12.5°	1095.8	1098.5
15°	1179.0	1184.4
17.5°	1211.2	1212.5
20°	1212.5	1209.8
22.5°	1197.8	1195.1
25°	1180.3	1179.0
27.5°	1164.2	1165.6
30°	1157.5	1161.6
32.5°	1157.5	1164.2
35°	1160.2	1166.9
37.5°	1158.9	1166.9
40°	1153.5	1162.9
42.5°	1138.8	1145.5
45°	1116.0	1124.0
47.5°	1086.4	1091.8
50°	1048.9	1054.3
52.5°	1001.9	1003.3
55°	945.6	951.0
57.5°	885.3	886.6
60°	818.2	822.2
62.5°	747.1	747.1
65°	672.0	674.7
67.5°	594.2	600.9
70°	515.1	516.4
72.5°	437.3	437.3
75°	356.8	358.1
77.5°	280.3	280.3
80°	207.9	209.2
82.5°	143.5	146.2
85°	89.9	89.9
87.5°	41.6	37.6
90°	39.3	39.3
92.5°	157.6	126.3
95°	549.4	454.6
97.5°	1316.4	1136.0
100°	1896.6	1681.7
102.5°	2467.4	2283.3
105°	3195.1	3096.2
107.5°	3671.8	3695.7
110°	3853.6	3956.7





TEST NUMBER: P937816

CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	3869.8	4028.1
115°	3767.2	3986.7
117.5°	3549.6	3793.1
120°	3374.3	3610.8
122.5°	3203.6	3436.9
125°	2960.0	3174.9
127.5°	2740.9	2922.2
130°	2611.8	2779.3
132.5°	2494.7	2644.7
135°	2334.2	2463.5
137.5°	2205.4	2311.3
140°	2117.1	2216.0
142.5°	2043.8	2129.0
145°	1934.1	1998.5
147.5°	1849.9	1903.3
150°	1796.9	1840.1
152.5°	1751.5	1784.2
155°	1699.4	1721.0
157.5°	1658.2	1673.4
160°	1633.5	1642.3
162.5°	1617.5	1625.8
165°	1594.2	1603.0
167.5°	1577.5	1581.2
170°	1572.9	1572.9
172.5°	1560.6	1557.4
175°	1553.3	1553.3
177.5°	1546.6	1542.9
180°	1542.9	1542.9



TEST NUMBER: P937816  
 CATALOG NUMBER: SQ4-FB-125U-050D-835-1D-UNV-STD-W-8

**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	0.28	0.97	1.43	2.11	3.70	13.46	14.15	14.61	15.29	16.88
	3H	0.98	1.59	2.13	2.74	4.34	15.29	15.91	16.44	17.05	18.66
	4H	1.27	1.85	2.43	3.00	4.61	15.93	16.51	17.09	17.66	19.27
	6H	1.51	2.05	2.68	3.19	4.82	16.35	16.89	17.52	18.03	19.66
	8H	1.57	2.08	2.74	3.25	4.86	16.46	16.98	17.64	18.14	19.76
	12H	1.58	2.07	2.76	3.22	4.86	16.53	17.01	17.70	18.17	19.81
4H	2H	7.48	8.06	8.65	9.21	10.82	13.72	14.30	14.89	15.45	17.06
	3H	9.03	9.52	10.20	10.69	12.31	15.75	16.23	16.92	17.41	19.03
	4H	9.12	9.57	10.29	10.73	12.37	16.50	16.96	17.68	18.11	19.76
	6H	9.12	9.50	10.30	10.68	12.32	17.03	17.42	18.21	18.60	20.23
	8H	9.09	9.45	10.27	10.62	12.27	17.19	17.55	18.37	18.72	20.37
	12H	9.04	9.36	10.23	10.55	12.20	17.27	17.60	18.47	18.79	20.44
8H	4H	10.55	10.91	11.73	12.08	13.73	16.55	16.91	17.73	18.08	19.73
	6H	10.78	11.08	11.98	12.29	13.94	17.17	17.47	18.37	18.68	20.33
	8H	10.80	11.05	12.00	12.25	13.91	17.39	17.65	18.59	18.84	20.51
	12H	10.75	10.98	11.96	12.17	13.87	17.52	17.75	18.73	18.94	20.64
12H	4H	10.68	11.01	11.88	12.19	13.85	16.49	16.82	17.69	18.00	19.66
	6H	11.04	11.30	12.24	12.49	14.16	17.15	17.41	18.36	18.60	20.27
	8H	11.10	11.32	12.31	12.52	14.21	17.37	17.60	18.58	18.79	20.49