

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: P938213

Luminaire Tested: SQ4-FB-150U-050D-835-1D-UNV-STD-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938213
REPORT IS A COMBINATION OF REPORTS P933621 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

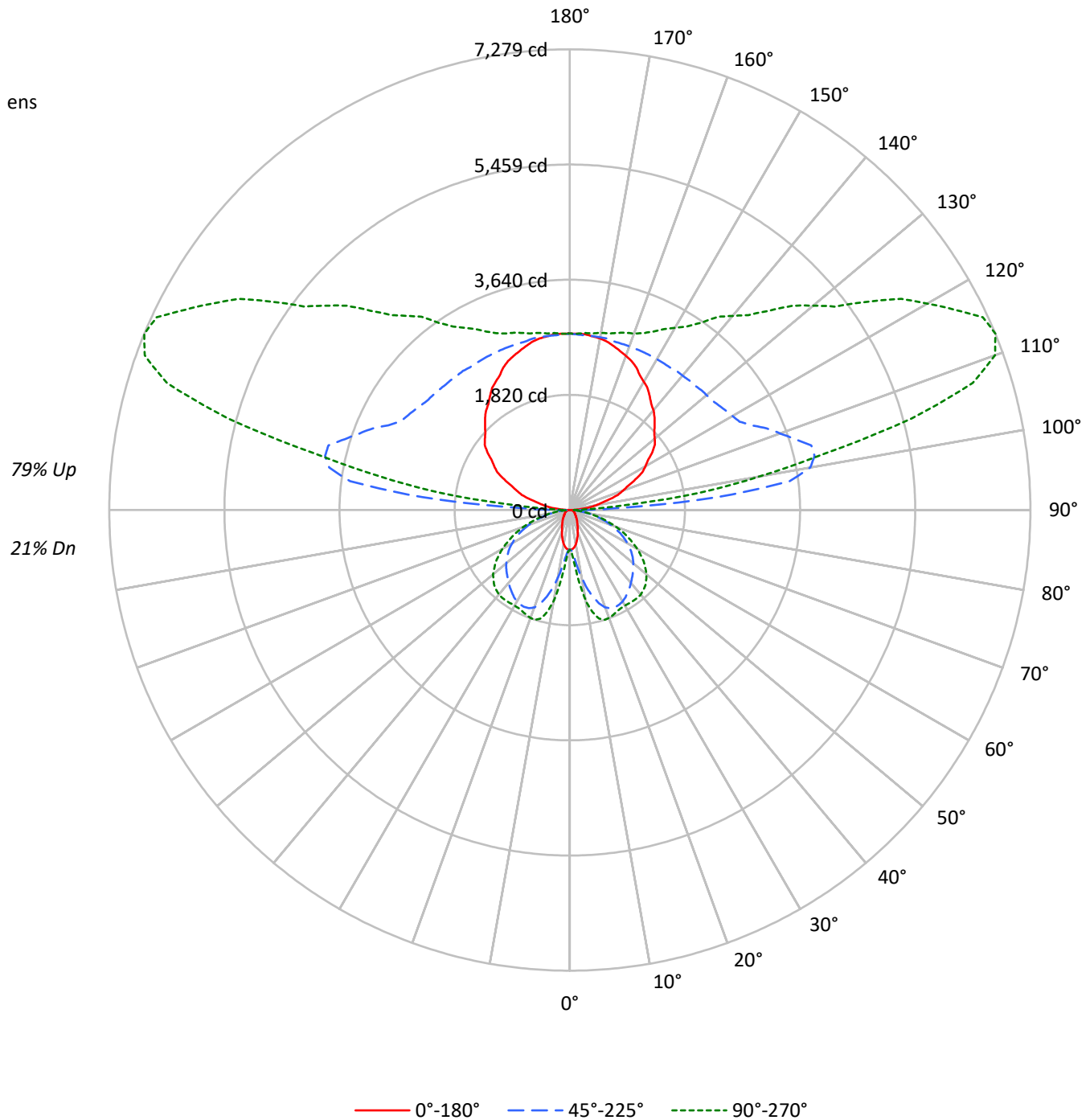
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22925.0 lumens
Efficiency: N/A
Efficacy: 137.4 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): 166.8
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°	80.9	0.4
10°-20°	358.8	1.6
20°-30°	627.5	2.7
30°-40°	807.8	3.5
40°-50°	902.3	3.9
50°-60°	864.2	3.8
60°-70°	684.9	3.0
70°-80°	402.7	1.8
80°-90°	122.5	0.5
90°-100°	1359.0	5.9
100°-110°	3572.9	15.6
110°-120°	3704.7	16.2
120°-130°	2971.6	13.0
130°-140°	2331.7	10.2
140°-150°	1789.6	7.8
150°-160°	1288.8	5.6
160°-170°	788.6	3.4
170°-180°	266.4	1.2
0°-30°	1067.2	4.7
0°-40°	1875.0	8.2
0°-60°	3641.5	15.9
0°-90°	4851.6	21.2
90°-120°	8636.6	37.7
90°-150°	15729.5	68.6
90°-180°	18073.0	78.8
0°-180°	22925.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	610	654	736	833	863	56
15°	457	843	1421	1722	1777	127
25°	292	956	1692	1767	1769	134
35°	197	914	1594	1684	1751	123
45°	135	728	1408	1614	1686	104
55°	97	463	1195	1388	1427	88
65°	76	246	887	998	1012	76
75°	56	151	487	535	537	59
85°	20	46	121	133	135	21
90°	19	52	142	71	71	17
95°	180	704	2341	1207	821	199
105°	644	975	3950	5997	5595	682
115°	1143	1388	3164	6311	7204	1129
125°	1590	1783	2878	4863	5737	1412
135°	1895	2086	2788	3926	4451	1467
145°	2199	2339	2752	3349	3611	1377
155°	2485	2554	2752	3022	3110	1142
165°	2681	2717	2752	2861	2896	757
175°	2788	2788	2771	2807	2807	265
180°	2788	2788	2788	2788	2788	



TEST NUMBER: P938213

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8	625.8
2.5°	625.8	625.8	629.8	631.8	635.8	637.8	641.9	645.9	658.0	660.0	664.0
5°	609.7	617.7	643.9	653.9	682.1	720.3	736.4	762.6	816.9	833.0	843.1
7.5°	585.5	603.6	668.0	684.1	754.6	855.2	897.4	953.8	1040.3	1082.5	1116.7
10°	547.3	585.5	700.2	738.5	853.1	1006.1	1084.5	1163.0	1293.8	1352.2	1374.3
12.5°	505.0	567.4	734.4	786.7	951.7	1175.1	1269.7	1356.2	1505.1	1583.6	1595.6
15°	456.8	541.3	766.6	843.1	1056.4	1315.9	1420.6	1527.2	1666.1	1722.4	1736.5
17.5°	414.5	521.1	796.8	877.3	1136.9	1442.7	1549.3	1637.9	1750.6	1788.8	1798.9
20°	362.2	489.0	816.9	921.6	1221.4	1535.3	1637.9	1706.3	1782.8	1806.9	1810.9
22.5°	324.0	454.7	829.0	937.7	1277.7	1591.6	1678.1	1732.5	1784.8	1792.8	1794.8
25°	291.8	416.5	827.0	955.8	1326.0	1625.8	1692.2	1732.5	1762.6	1766.7	1766.7
27.5°	261.6	374.3	818.9	959.8	1362.2	1633.9	1686.2	1714.3	1728.4	1736.5	1736.5
30°	235.4	334.0	798.8	951.7	1378.3	1625.8	1668.1	1682.2	1696.2	1708.3	1714.3
32.5°	215.3	295.8	768.6	935.6	1380.3	1605.7	1635.9	1643.9	1664.0	1692.2	1702.3
35°	197.2	257.6	734.4	913.5	1368.3	1573.5	1593.6	1601.7	1641.9	1684.2	1698.2
37.5°	179.1	229.4	690.2	875.3	1350.1	1535.3	1549.3	1563.4	1625.8	1676.1	1692.2
40°	161.0	205.2	637.8	833.0	1322.0	1489.0	1501.1	1523.2	1605.7	1664.0	1680.1
42.5°	146.9	185.1	581.5	788.8	1285.8	1436.7	1454.8	1487.0	1581.5	1643.9	1662.0
45°	134.8	165.0	521.1	728.4	1239.5	1382.3	1408.5	1452.8	1553.4	1613.7	1629.8
47.5°	122.7	150.9	458.8	666.0	1189.2	1328.0	1362.2	1412.5	1515.1	1573.5	1587.6
50°	112.7	136.8	396.4	599.6	1134.8	1269.7	1309.9	1362.2	1466.9	1521.2	1539.3
52.5°	104.6	124.8	338.0	533.2	1072.5	1209.3	1255.6	1309.9	1408.5	1460.8	1472.9
55°	96.6	114.7	287.7	462.8	1008.1	1144.9	1195.2	1247.5	1344.1	1388.4	1396.4
57.5°	92.6	106.6	245.5	396.4	939.7	1072.5	1128.8	1177.1	1267.6	1301.9	1309.9
60°	86.5	100.6	213.3	340.1	865.2	1004.1	1052.4	1100.6	1177.1	1205.3	1211.3
62.5°	80.5	96.6	189.1	285.7	788.8	923.6	971.9	1016.1	1080.5	1100.6	1108.7
65°	76.5	92.6	171.0	245.5	710.3	839.1	887.4	925.6	977.9	998.0	1002.0
67.5°	72.4	88.5	156.9	211.3	631.8	754.6	790.8	827.0	867.2	887.4	889.4
70°	66.4	84.5	144.9	187.1	551.3	658.0	688.2	726.4	758.6	768.6	774.7
72.5°	62.4	78.5	136.8	169.0	468.8	565.4	593.6	615.7	643.9	653.9	653.9
75°	56.3	70.4	128.8	150.9	384.3	462.8	486.9	509.1	531.2	535.2	529.2
77.5°	50.3	62.4	110.7	126.8	299.8	366.2	386.3	398.4	416.5	420.5	422.5
80°	42.3	54.3	86.5	98.6	217.3	269.6	283.7	293.8	309.9	309.9	313.9
82.5°	32.2	42.3	62.4	70.4	146.9	185.1	197.2	203.2	213.3	213.3	213.3
85°	20.1	26.2	40.2	46.3	88.5	112.7	120.7	122.7	130.8	132.8	132.8
87.5°	10.1	14.1	26.2	28.2	46.3	58.4	58.4	62.4	62.4	60.4	58.4
90°	18.7	33.7	48.7	52.4	82.3	122.2	142.2	126.4	94.8	71.1	71.1
92.5°	74.8	202.0	329.3	361.1	507.7	703.1	800.8	701.8	503.9	355.5	341.4
95°	179.6	412.4	645.3	703.5	1249.3	1977.0	2340.8	2088.8	1584.9	1206.9	1164.1
97.5°	310.6	516.0	721.4	772.8	1682.8	2896.1	3502.7	3343.5	3025.0	2786.1	2704.6
100°	411.6	597.9	784.2	830.8	1840.6	3186.9	3860.1	3871.7	3895.0	3912.5	3815.4
102.5°	497.7	671.5	845.3	888.8	1912.9	3278.4	3961.2	4164.1	4569.9	4874.3	4791.1
105°	643.7	790.9	938.1	974.9	1966.6	3288.8	3949.9	4404.8	5314.6	5996.9	5952.2
107.5°	793.4	930.6	1067.8	1102.1	1976.5	3142.4	3725.4	4359.9	5628.9	6580.7	6591.5
110°	894.4	1018.3	1142.2	1173.2	1961.6	3012.7	3538.3	4247.7	5666.4	6730.4	6777.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	993.6	1111.7	1229.8	1259.3	1962.2	2899.4	3368.0	4094.0	5546.0	6635.0	6706.5
115°	1143.3	1252.2	1361.2	1388.4	1980.3	2769.5	3164.1	3863.5	5262.2	6311.3	6410.5
117.5°	1291.1	1390.0	1489.0	1513.7	2017.0	2688.1	3023.7	3654.9	4917.3	5864.1	5974.1
120°	1377.1	1470.3	1563.4	1586.7	2047.0	2660.7	2967.6	3544.3	4697.7	5562.8	5669.7
122.5°	1461.3	1555.3	1649.3	1672.8	2090.1	2646.4	2924.6	3443.9	4482.6	5261.6	5367.0
125°	1590.5	1676.1	1761.8	1783.2	2148.1	2634.6	2877.8	3319.0	4201.3	4863.0	4960.1
127.5°	1695.2	1781.7	1868.2	1889.8	2206.0	2627.7	2838.5	3217.3	3974.9	4543.1	4625.0
130°	1751.4	1844.5	1937.6	1960.9	2248.4	2631.8	2823.5	3160.7	3835.2	4341.0	4416.7
132.5°	1809.4	1902.5	1995.6	2018.9	2282.7	2634.5	2810.4	3112.3	3716.1	4168.9	4236.7
135°	1895.4	1980.2	2065.1	2086.3	2320.2	2632.1	2788.0	3040.8	3546.4	3925.6	3984.0
137.5°	1983.4	2067.4	2151.4	2172.4	2376.3	2648.2	2784.2	2997.9	3425.4	3746.0	3793.8
140°	2056.4	2133.7	2211.1	2230.4	2410.6	2650.9	2771.1	2955.7	3325.0	3601.9	3646.6
142.5°	2112.5	2184.0	2255.5	2273.4	2439.3	2660.5	2771.1	2933.3	3257.6	3500.9	3539.4
145°	2198.6	2261.0	2323.3	2338.9	2476.7	2660.5	2752.4	2885.0	3150.3	3349.3	3378.4
147.5°	2284.6	2345.3	2406.0	2421.2	2531.6	2678.8	2752.4	2856.8	3065.5	3222.1	3246.2
150°	2340.8	2395.7	2450.6	2464.3	2560.3	2688.4	2752.4	2840.6	3016.9	3149.1	3168.6
152.5°	2398.8	2440.4	2481.9	2492.3	2579.0	2694.6	2752.4	2827.7	2978.2	3091.1	3105.9
155°	2484.9	2515.7	2546.4	2554.1	2620.2	2708.3	2752.4	2812.3	2932.1	3021.9	3031.7
157.5°	2548.5	2578.4	2608.3	2615.8	2661.3	2722.0	2752.4	2799.0	2892.1	2962.0	2968.9
160°	2591.5	2614.8	2638.1	2643.9	2680.1	2728.3	2752.4	2792.3	2872.1	2932.0	2936.0
162.5°	2634.5	2652.0	2669.4	2673.8	2700.0	2734.9	2752.4	2786.1	2853.5	2904.0	2907.7
165°	2681.3	2697.1	2712.9	2716.9	2728.7	2744.5	2752.4	2776.5	2824.7	2860.9	2864.9
167.5°	2724.4	2731.9	2739.3	2741.2	2751.2	2764.5	2771.1	2786.9	2818.5	2842.2	2843.9
170°	2752.4	2759.9	2767.4	2769.3	2769.9	2770.7	2771.1	2786.9	2818.5	2842.2	2842.2
172.5°	2767.4	2769.0	2770.7	2771.1	2771.1	2771.1	2771.1	2783.6	2808.6	2827.3	2825.8
175°	2788.0	2788.0	2788.0	2788.0	2782.4	2774.9	2771.1	2779.0	2794.8	2806.7	2806.7
177.5°	2788.0	2788.0	2788.0	2788.0	2783.6	2777.8	2774.9	2781.1	2793.6	2802.9	2801.2
180°	2788.0	2788.0	2788.0	2788.0	2788.0	2788.0	2788.0	2788.0	2788.0	2788.0	2788.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	625.8	625.8
2.5°	668.0	664.0
5°	859.2	863.2
7.5°	1157.0	1155.0
10°	1438.7	1456.8
12.5°	1643.9	1647.9
15°	1768.7	1776.7
17.5°	1817.0	1819.0
20°	1819.0	1815.0
22.5°	1796.8	1792.8
25°	1770.7	1768.7
27.5°	1746.5	1748.6
30°	1736.5	1742.5
32.5°	1736.5	1746.5
35°	1740.5	1750.6
37.5°	1738.5	1750.6
40°	1730.4	1744.5
42.5°	1708.3	1718.4
45°	1674.1	1686.2
47.5°	1629.8	1637.9
50°	1573.5	1581.5
52.5°	1503.1	1505.1
55°	1418.6	1426.6
57.5°	1328.0	1330.0
60°	1227.4	1233.4
62.5°	1120.8	1120.8
65°	1008.1	1012.1
67.5°	891.4	901.4
70°	772.7	774.7
72.5°	656.0	656.0
75°	535.2	537.2
77.5°	420.5	420.5
80°	311.9	313.9
82.5°	215.3	219.3
85°	134.8	134.8
87.5°	62.4	56.3
90°	71.1	71.1
92.5°	284.8	228.3
95°	992.7	821.4
97.5°	2378.6	2052.6
100°	3427.1	3038.7
102.5°	4458.5	4125.8
105°	5773.5	5594.7
107.5°	6634.8	6678.0
110°	6963.3	7149.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	6992.6	7278.7
115°	6807.1	7203.8
117.5°	6414.0	6853.9
120°	6097.1	6524.6
122.5°	5788.7	6210.3
125°	5348.5	5736.9
127.5°	4952.7	5280.3
130°	4719.4	5022.1
132.5°	4507.7	4778.8
135°	4217.7	4451.4
137.5°	3985.1	4176.3
140°	3825.4	4004.2
142.5°	3693.2	3847.0
145°	3494.9	3611.3
147.5°	3342.7	3439.1
150°	3246.8	3325.0
152.5°	3164.9	3223.9
155°	3070.7	3109.8
157.5°	2996.3	3023.7
160°	2951.8	2967.6
162.5°	2922.7	2937.7
165°	2880.7	2896.5
167.5°	2850.5	2857.2
170°	2842.2	2842.2
172.5°	2820.0	2814.2
175°	2806.7	2806.7
177.5°	2794.6	2788.0
180°	2788.0	2788.0



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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	0.00	0.39	0.90	1.55	3.18	12.92	13.59	14.09	14.74	16.37
	3H	0.42	1.01	1.59	2.18	3.82	14.75	15.35	15.92	16.51	18.15
	4H	0.71	1.27	1.89	2.44	4.08	15.39	15.96	16.57	17.12	18.77
	6H	0.95	1.47	2.14	2.63	4.29	15.81	16.34	17.00	17.50	19.16
	8H	1.01	1.51	2.20	2.68	4.34	15.93	16.43	17.12	17.61	19.26
	12H	1.02	1.49	2.22	2.66	4.34	16.00	16.47	17.19	17.64	19.31
4H	2H	6.93	7.50	8.12	8.66	10.31	13.17	13.74	14.36	14.90	16.55
	3H	8.48	8.95	9.67	10.14	11.80	15.20	15.68	16.40	16.86	18.52
	4H	8.56	9.00	9.76	10.17	11.85	15.96	16.40	17.16	17.58	19.25
	6H	8.56	8.93	9.76	10.13	11.80	16.50	16.87	17.70	18.07	19.73
	8H	8.53	8.88	9.73	10.07	11.75	16.66	17.00	17.85	18.19	19.88
	12H	8.48	8.80	9.69	9.99	11.68	16.74	17.06	17.96	18.26	19.95
8H	4H	9.99	10.34	11.19	11.53	13.22	16.01	16.36	17.21	17.54	19.23
	6H	10.23	10.51	11.44	11.74	13.43	16.63	16.92	17.85	18.15	19.83
	8H	10.24	10.49	11.46	11.70	13.40	16.85	17.10	18.07	18.31	20.01
	12H	10.20	10.42	11.43	11.63	13.36	16.99	17.21	18.22	18.41	20.15
12H	4H	10.13	10.44	11.34	11.64	13.33	15.95	16.27	17.16	17.47	19.15
	6H	10.48	10.73	11.71	11.94	13.64	16.61	16.86	17.83	18.07	19.77
	8H	10.54	10.76	11.77	11.97	13.70	16.83	17.05	18.06	18.26	19.99