

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: P936751

Luminaire Tested: SQ4-FB-050U-075D-930-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P936751  
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-930-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

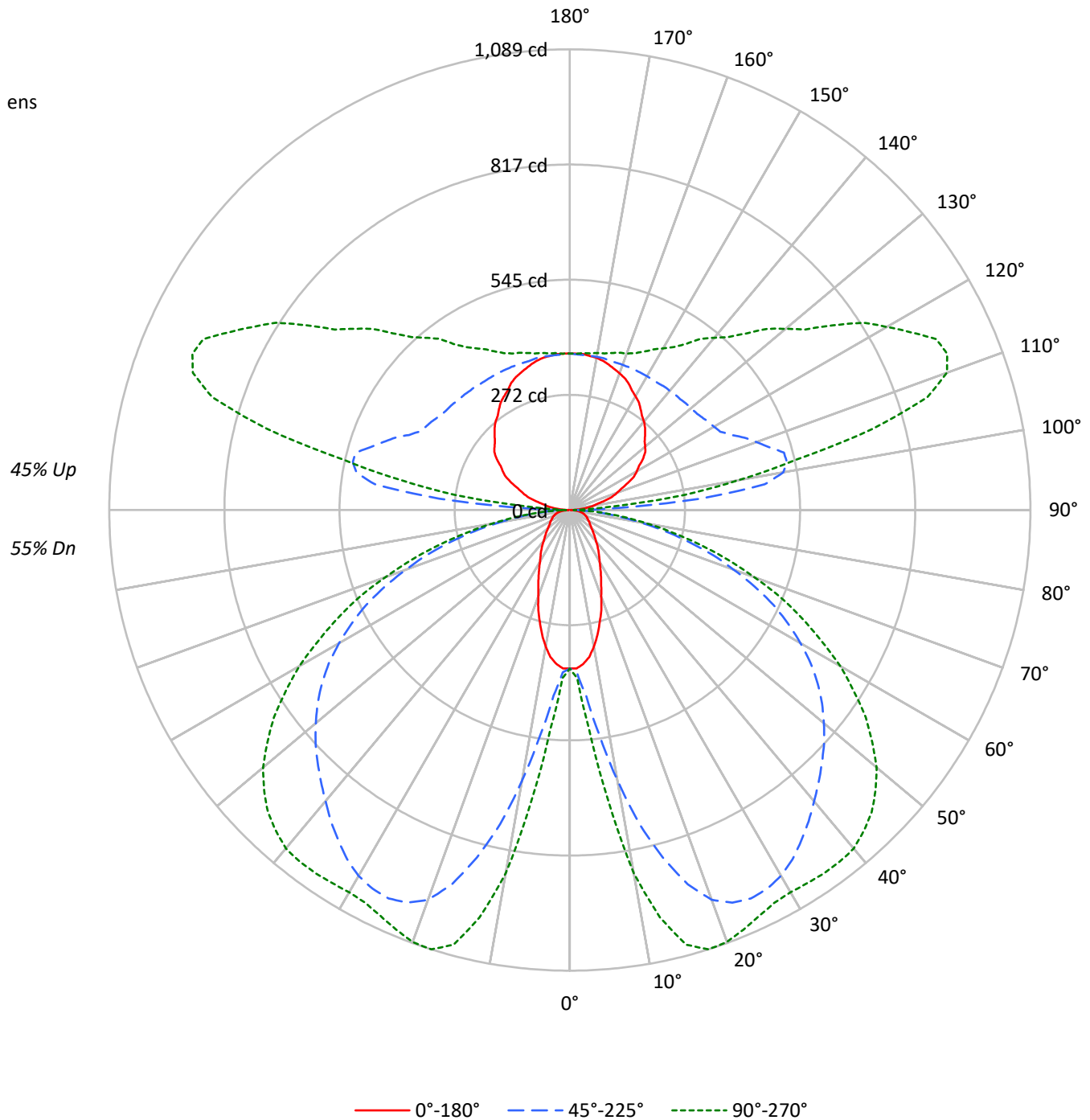
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5297.3 lumens  
Efficiency: N/A  
Efficacy: 97.0 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: General Diffuse

Input Watts (W): 54.6  
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

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20	
RC	80				70				50				30				10				0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45				45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37				37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30				30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25				25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21				21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18				18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16				16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14				14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12				12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11				11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2317	2317	2317
5°	2263	2677	3115
10°	2052	3902	5164
15°	1743	5097	6236
20°	1419	5905	6355
25°	1183	6179	6226
30°	997	6216	6215
35°	881	6111	6375
40°	768	5975	6541
45°	694	5875	6567
50°	637	5784	6458
55°	609	5653	6171
60°	623	5403	5720
65°	647	5022	5099
70°	687	4376	4307
75°	758	3566	3361
80°	823	2469	2265
85°	715	1309	1159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6567 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.5	0.9
10°-20°	214.8	4.1
20°-30°	375.7	7.1
30°-40°	483.6	9.1
40°-50°	540.1	10.2
50°-60°	517.3	9.8
60°-70°	410.0	7.7
70°-80°	241.1	4.6
80°-90°	68.4	1.3
90°-100°	180.3	3.4
100°-110°	474.0	8.9
110°-120°	491.5	9.3
120°-130°	394.3	7.4
130°-140°	309.4	5.8
140°-150°	237.4	4.5
150°-160°	171.0	3.2
160°-170°	104.6	2.0
170°-180°	35.3	0.7
0°-30°	638.9	12.1
0°-40°	1122.5	21.2
0°-60°	2180.0	41.2
0°-90°	2899.4	54.7
90°-120°	1145.9	21.6
90°-150°	2087.0	39.4
90°-180°	2398.0	45.3
0°-180°	5297.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	375	375	375	375	375	
5°	365	392	441	499	517	34
15°	273	505	850	1031	1064	76
25°	175	572	1013	1058	1059	80
35°	118	547	954	1008	1048	74
45°	81	436	843	966	1010	62
55°	58	277	716	831	854	53
65°	46	147	531	597	606	45
75°	34	90	292	320	322	35
85°	12	28	72	80	81	13
90°	2	7	19	9	9	3
95°	24	93	311	160	109	26
105°	85	129	524	796	742	91
115°	152	184	420	837	956	150
125°	211	237	382	645	761	187
135°	252	277	370	521	591	195
145°	292	310	365	444	479	183
155°	330	339	365	401	413	151
165°	356	360	365	380	384	100
175°	370	370	368	372	372	35
180°	370	370	370	370	370	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6	374.6
2.5°	374.6	374.6	377.0	378.2	380.6	381.8	384.2	386.6	393.9	395.1	397.5
5°	365.0	369.8	385.4	391.5	408.3	431.2	440.8	456.5	489.0	498.7	504.7
7.5°	350.5	361.4	399.9	409.5	451.7	511.9	537.2	570.9	622.7	648.0	668.5
10°	327.6	350.5	419.2	442.1	510.7	602.2	649.2	696.2	774.5	809.4	822.7
12.5°	302.3	339.7	439.6	471.0	569.7	703.4	760.0	811.8	901.0	948.0	955.2
15°	273.4	324.0	458.9	504.7	632.4	787.7	850.4	914.3	997.4	1031.1	1039.6
17.5°	248.1	312.0	477.0	525.2	680.5	863.6	927.5	980.5	1048.0	1070.9	1076.9
20°	216.8	292.7	489.0	551.7	731.1	919.1	980.5	1021.5	1067.3	1081.7	1084.1
22.5°	193.9	272.2	496.3	561.3	764.9	952.8	1004.6	1037.2	1068.5	1073.3	1074.5
25°	174.7	249.3	495.0	572.1	793.8	973.3	1013.1	1037.2	1055.2	1057.6	1057.6
27.5°	156.6	224.0	490.2	574.5	815.4	978.1	1009.5	1026.3	1034.7	1039.6	1039.6
30°	140.9	199.9	478.2	569.7	825.1	973.3	998.6	1007.0	1015.5	1022.7	1026.3
32.5°	128.9	177.1	460.1	560.1	826.3	961.3	979.3	984.2	996.2	1013.1	1019.1
35°	118.0	154.2	439.6	546.8	819.1	942.0	954.0	958.9	983.0	1008.2	1016.7
37.5°	107.2	137.3	413.1	524.0	808.2	919.1	927.5	936.0	973.3	1003.4	1013.1
40°	96.4	122.9	381.8	498.7	791.4	891.3	898.6	911.8	961.3	996.2	1005.8
42.5°	87.9	110.8	348.1	472.2	769.7	860.0	870.9	890.1	946.8	984.2	995.0
45°	80.7	98.8	312.0	436.0	742.0	827.5	843.2	869.6	930.0	966.1	975.7
47.5°	73.5	90.3	274.6	398.7	711.9	795.0	815.4	845.6	907.0	942.0	950.4
50°	67.5	81.9	237.3	358.9	679.3	760.0	784.1	815.4	878.1	910.6	921.5
52.5°	62.6	74.7	202.4	319.2	642.0	723.9	751.6	784.1	843.2	874.5	881.7
55°	57.8	68.7	172.2	277.0	603.5	685.4	715.5	746.8	804.6	831.1	835.9
57.5°	55.4	63.8	146.9	237.3	562.5	642.0	675.7	704.6	758.8	779.3	784.1
60°	51.8	60.2	127.7	203.6	517.9	601.0	630.0	658.9	704.6	721.5	725.1
62.5°	48.2	57.8	113.2	171.0	472.2	552.9	581.8	608.3	646.8	658.9	663.7
65°	45.8	55.4	102.4	146.9	425.2	502.3	531.2	554.1	585.4	597.4	599.8
67.5°	43.4	53.0	94.0	126.5	378.2	451.7	473.4	495.0	519.1	531.2	532.4
70°	39.7	50.6	86.7	112.0	330.0	393.9	411.9	434.8	454.1	460.1	463.7
72.5°	37.3	47.0	81.9	101.2	280.6	338.5	355.3	368.6	385.4	391.5	391.5
75°	33.7	42.2	77.1	90.3	230.1	277.0	291.5	304.7	318.0	320.4	316.8
77.5°	30.1	37.3	66.2	75.9	179.5	219.2	231.3	238.5	249.3	251.7	252.9
80°	25.3	32.5	51.8	59.0	130.1	161.4	169.8	175.9	185.5	185.5	187.9
82.5°	19.3	25.3	37.3	42.2	87.9	110.8	118.0	121.7	127.7	127.7	127.7
85°	12.0	15.7	24.1	27.7	53.0	67.5	72.3	73.5	78.3	79.5	79.5
87.5°	6.0	8.4	15.7	16.9	27.7	34.9	34.9	37.3	37.3	36.1	34.9
90°	2.5	4.5	6.5	7.0	10.9	16.2	18.9	16.8	12.5	9.4	9.4
92.5°	10.0	26.8	43.7	47.9	67.4	93.3	106.2	93.1	66.8	47.1	45.3
95°	23.8	54.7	85.6	93.3	165.7	262.3	310.6	277.2	210.3	160.1	154.4
97.5°	41.2	68.5	95.7	102.5	223.3	384.3	464.8	443.7	401.3	369.6	358.8
100°	54.6	79.3	104.1	110.3	244.2	422.9	512.2	513.7	516.8	519.1	506.3
102.5°	66.0	89.1	112.2	118.0	253.8	435.0	525.6	552.5	606.3	646.7	635.7
105°	85.4	105.0	124.5	129.4	260.9	436.4	524.0	584.4	705.1	795.7	789.8
107.5°	105.3	123.5	141.6	146.2	262.3	416.9	494.2	578.4	746.8	873.1	874.5
110°	118.7	135.1	151.5	155.6	260.3	399.7	469.4	563.5	751.8	893.0	899.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	131.9	147.5	163.2	167.1	260.3	384.7	446.9	543.2	735.9	880.3	889.8
115°	151.7	166.1	180.6	184.2	262.7	367.5	419.8	512.6	698.2	837.4	850.5
117.5°	171.3	184.4	197.5	200.8	267.6	356.7	401.2	484.9	652.4	778.0	792.6
120°	182.7	195.0	207.4	210.5	271.6	353.0	393.7	470.2	623.3	738.0	752.3
122.5°	193.9	206.4	218.8	221.9	277.3	351.1	388.0	456.9	594.8	698.1	712.1
125°	211.0	222.4	233.8	236.6	285.0	349.5	381.8	440.4	557.4	645.2	658.1
127.5°	224.9	236.4	247.9	250.8	292.7	348.7	376.6	426.9	527.3	602.7	613.6
130°	232.4	244.8	257.1	260.2	298.3	349.1	374.6	419.3	508.9	576.0	586.0
132.5°	240.1	252.5	264.8	267.9	302.9	349.5	372.9	413.0	493.0	553.1	562.1
135°	251.5	262.7	274.0	276.8	307.9	349.2	369.9	403.5	470.6	520.8	528.6
137.5°	263.1	274.3	285.4	288.2	315.3	351.3	369.4	397.7	454.4	497.0	503.3
140°	272.9	283.1	293.3	295.9	319.8	351.7	367.7	392.2	441.2	477.9	483.8
142.5°	280.2	289.7	299.2	301.6	323.6	353.0	367.7	389.2	432.2	464.5	469.6
145°	291.7	300.0	308.3	310.4	328.7	353.0	365.2	382.8	418.0	444.4	448.2
147.5°	303.1	311.2	319.3	321.3	335.9	355.4	365.2	379.0	406.7	427.5	430.7
150°	310.6	317.9	325.1	327.0	339.7	356.7	365.2	376.9	400.3	417.8	420.4
152.5°	318.2	323.8	329.3	330.7	342.2	357.5	365.2	375.2	395.2	410.1	412.0
155°	329.7	333.8	337.8	338.9	347.6	359.3	365.2	373.2	389.1	400.9	402.2
157.5°	338.1	342.1	346.1	347.1	353.1	361.2	365.2	371.4	383.8	393.0	393.9
160°	343.8	346.9	349.9	350.8	355.6	362.0	365.2	370.5	381.1	389.1	389.5
162.5°	349.5	351.9	354.2	354.8	358.2	362.9	365.2	369.7	378.6	385.3	385.8
165°	355.7	357.8	359.9	360.5	362.1	364.2	365.2	368.4	374.8	379.6	380.1
167.5°	361.4	362.4	363.4	363.7	365.0	366.8	367.7	369.8	374.0	377.1	377.3
170°	365.2	366.2	367.2	367.5	367.5	367.6	367.7	369.8	374.0	377.1	377.1
172.5°	367.2	367.5	367.6	367.7	367.7	367.7	367.7	369.3	372.6	375.1	374.9
175°	369.9	369.9	369.9	369.9	369.2	368.2	367.7	368.7	370.8	372.4	372.4
177.5°	369.9	369.9	369.9	369.9	369.4	368.6	368.2	369.0	370.7	371.9	371.6
180°	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9	369.9



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	374.6	374.6
2.5°	399.9	397.5
5°	514.3	516.7
7.5°	692.6	691.4
10°	861.2	872.1
12.5°	984.2	986.6
15°	1058.8	1063.7
17.5°	1087.7	1088.9
20°	1088.9	1086.5
22.5°	1075.7	1073.3
25°	1060.0	1058.8
27.5°	1045.6	1046.8
30°	1039.6	1043.2
32.5°	1039.6	1045.6
35°	1042.0	1048.0
37.5°	1040.8	1048.0
40°	1036.0	1044.4
42.5°	1022.7	1028.7
45°	1002.2	1009.5
47.5°	975.7	980.5
50°	942.0	946.8
52.5°	899.8	901.0
55°	849.2	854.0
57.5°	795.0	796.2
60°	734.7	738.4
62.5°	670.9	670.9
65°	603.5	605.9
67.5°	533.6	539.6
70°	462.5	463.7
72.5°	392.7	392.7
75°	320.4	321.6
77.5°	251.7	251.7
80°	186.7	187.9
82.5°	128.9	131.3
85°	80.7	80.7
87.5°	37.3	33.7
90°	9.4	9.4
92.5°	37.7	30.3
95°	131.7	109.0
97.5°	315.6	272.4
100°	454.7	403.2
102.5°	591.6	547.4
105°	766.1	742.3
107.5°	880.2	886.0
110°	923.9	948.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	927.8	965.7
115°	903.1	955.8
117.5°	851.0	909.4
120°	808.9	865.7
122.5°	768.1	824.0
125°	709.6	761.2
127.5°	657.1	700.6
130°	626.2	666.3
132.5°	598.1	634.0
135°	559.6	590.6
137.5°	528.8	554.2
140°	507.5	531.3
142.5°	490.0	510.4
145°	463.7	479.2
147.5°	443.5	456.3
150°	430.8	441.2
152.5°	419.9	427.8
155°	407.4	412.6
157.5°	397.6	401.2
160°	391.6	393.7
162.5°	387.8	389.8
165°	382.2	384.3
167.5°	378.2	379.1
170°	377.1	377.1
172.5°	374.1	373.4
175°	372.4	372.4
177.5°	370.8	369.9
180°	369.9	369.9



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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	4.34	5.29	5.25	6.22	7.42	17.51	18.45	18.41	19.39	20.59
	3H	5.05	5.91	5.97	6.85	8.07	19.35	20.20	20.27	21.14	22.36
	4H	5.35	6.16	6.29	7.11	8.34	19.99	20.80	20.93	21.75	22.98
	6H	5.61	6.36	6.56	7.31	8.55	20.42	21.17	21.37	22.12	23.37
	8H	5.68	6.39	6.63	7.36	8.60	20.54	21.26	21.50	22.23	23.47
	12H	5.70	6.38	6.66	7.34	8.61	20.61	21.29	21.57	22.26	23.52
4H	2H	11.56	12.37	12.50	13.31	14.54	17.79	18.60	18.73	19.55	20.78
	3H	13.13	13.81	14.08	14.79	16.04	19.84	20.52	20.79	21.49	22.74
	4H	13.23	13.85	14.19	14.82	16.09	20.61	21.23	21.57	22.20	23.47
	6H	13.25	13.79	14.22	14.78	16.05	21.15	21.68	22.12	22.68	23.95
	8H	13.23	13.73	14.20	14.72	16.00	21.31	21.81	22.28	22.80	24.08
	12H	13.19	13.64	14.18	14.65	15.94	21.40	21.86	22.40	22.86	24.15
8H	4H	14.68	15.18	15.66	16.17	17.46	20.68	21.18	21.65	22.16	23.45
	6H	14.93	15.34	15.93	16.37	17.66	21.30	21.72	22.31	22.75	24.03
	8H	14.95	15.32	15.96	16.33	17.63	21.52	21.89	22.53	22.91	24.21
	12H	14.92	15.24	15.93	16.26	17.60	21.67	21.99	22.68	23.00	24.35
12H	4H	14.83	15.28	15.82	16.29	17.58	20.63	21.09	21.63	22.09	23.38
	6H	15.19	15.56	16.20	16.57	17.87	21.29	21.66	22.30	22.67	23.97
	8H	15.26	15.58	16.28	16.60	17.94	21.52	21.84	22.53	22.86	24.20