

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: P936723

Luminaire Tested: SQ4-FB-050U-075D-927-1D-UNV-STD-W-6

Issue Date: 12/17/2024

**Test Information**

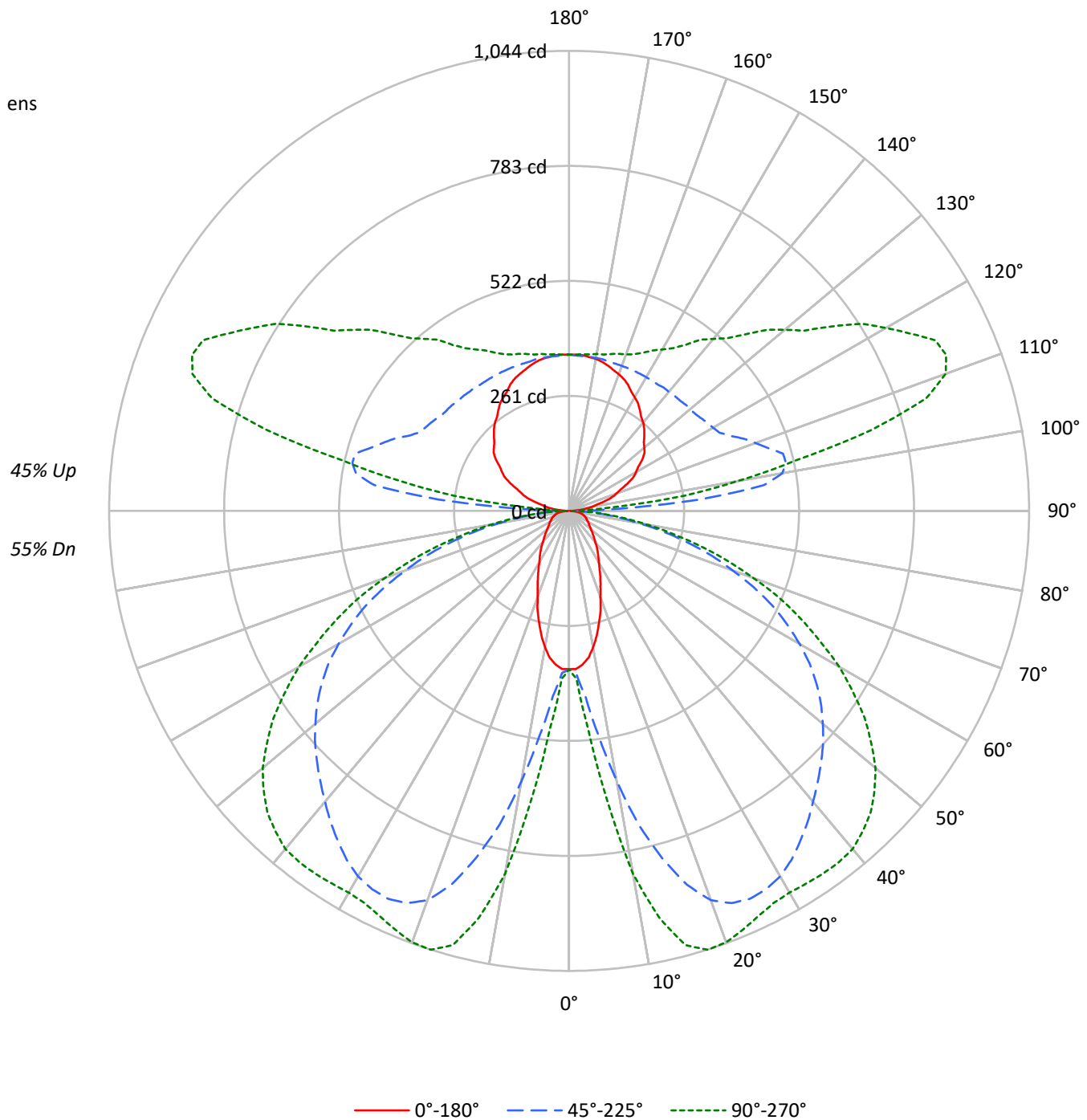
Test Method: LM-79-2019  
Report Number: P936723  
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-075D-927-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5079.6 lumens  
Efficiency: N/A  
Efficacy: 93.0 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 (Ain): 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				
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	60	60	60	55
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	50	50	50	45
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	41	41	41	37
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	34	34	34	30
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	29	29	29	25
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	25	25	25	21
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	21	21	21	18
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	19	19	19	16
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	16	16	16	14
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	15	15	15	12
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	13	13	13	11

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

	0°	45°	90°
0°	2222	2222	2222
5°	2170	2567	2987
10°	1968	3742	4952
15°	1672	4887	5979
20°	1360	5663	6094
25°	1134	5924	5970
30°	956	5961	5959
35°	845	5860	6113
40°	736	5729	6273
45°	666	5633	6297
50°	611	5547	6193
55°	584	5421	5918
60°	598	5181	5484
65°	620	4816	4889
70°	659	4197	4130
75°	727	3419	3223
80°	791	2369	2172
85°	692	1254	1112

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6297 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.5	0.9
10°-20°	205.9	4.1
20°-30°	360.2	7.1
30°-40°	463.7	9.1
40°-50°	517.9	10.2
50°-60°	496.1	9.8
60°-70°	393.1	7.7
70°-80°	231.2	4.6
80°-90°	65.6	1.3
90°-100°	172.9	3.4
100°-110°	454.6	8.9
110°-120°	471.3	9.3
120°-130°	378.1	7.4
130°-140°	296.6	5.8
140°-150°	227.7	4.5
150°-160°	164.0	3.2
160°-170°	100.3	2.0
170°-180°	33.9	0.7
0°-30°	612.6	12.1
0°-40°	1076.4	21.2
0°-60°	2090.4	41.2
0°-90°	2780.2	54.7
90°-120°	1098.8	21.6
90°-150°	2001.2	39.4
90°-180°	2299.0	45.3
0°-180°	5079.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	359	359	359	359	359	
5°	350	375	423	478	496	32
15°	262	484	815	989	1020	73
25°	168	549	971	1014	1015	77
35°	113	524	915	967	1005	71
45°	77	418	808	926	968	60
55°	55	266	686	797	819	51
65°	44	141	509	573	581	44
75°	32	87	280	307	308	34
85°	12	27	69	76	77	12
90°	2	7	18	9	9	3
95°	23	90	298	154	104	25
105°	82	124	502	763	712	87
115°	146	177	403	803	916	144
125°	202	227	366	619	730	180
135°	241	265	355	499	566	187
145°	280	298	350	426	460	175
155°	316	325	350	384	396	145
165°	341	346	350	364	368	96
175°	355	355	353	357	357	34
180°	355	355	355	355	355	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2	359.2
2.5°	359.2	359.2	361.5	362.7	365.0	366.1	368.4	370.8	377.7	378.8	381.2
5°	350.0	354.6	369.6	375.4	391.5	413.5	422.7	437.7	468.9	478.2	483.9
7.5°	336.1	346.5	383.5	392.7	433.1	490.9	515.1	547.5	597.1	621.4	641.0
10°	314.2	336.1	401.9	423.9	489.7	577.5	622.5	667.6	742.7	776.2	788.9
12.5°	289.9	325.7	421.6	451.6	546.3	674.5	728.8	778.5	863.9	909.1	916.0
15°	262.2	310.7	440.1	483.9	606.4	755.4	815.4	876.7	956.4	988.8	996.8
17.5°	237.9	299.1	457.4	503.6	652.6	828.1	889.4	940.2	1004.9	1026.9	1032.6
20°	207.9	280.7	468.9	529.0	701.1	881.3	940.2	979.5	1023.4	1037.3	1039.6
22.5°	186.0	261.0	475.9	538.2	733.4	913.7	963.3	994.5	1024.6	1029.2	1030.3
25°	167.5	239.1	474.7	548.6	761.1	933.3	971.4	994.5	1011.9	1014.2	1014.2
27.5°	150.2	214.8	470.1	550.9	781.9	937.9	968.0	984.1	992.2	996.8	996.8
30°	135.1	191.7	458.5	546.3	791.2	933.3	957.6	965.7	973.7	980.7	984.1
32.5°	123.6	169.8	441.2	537.1	792.3	921.8	939.1	943.7	955.3	971.4	977.2
35°	113.2	147.8	421.6	524.4	785.4	903.3	914.8	919.5	942.6	966.8	974.9
37.5°	102.8	131.7	396.2	502.4	775.0	881.3	889.4	897.5	933.3	962.2	971.4
40°	92.4	117.8	366.1	478.2	758.8	854.7	861.6	874.3	921.8	955.3	964.5
42.5°	84.3	106.3	333.8	452.8	738.0	824.7	835.1	853.5	907.9	943.7	954.1
45°	77.4	94.7	299.1	418.1	711.5	793.5	808.5	833.9	891.7	926.4	935.6
47.5°	70.5	86.6	263.3	382.3	682.6	762.3	781.9	810.8	869.7	903.3	911.4
50°	64.7	78.5	227.5	344.2	651.4	728.8	751.9	781.9	842.0	873.2	883.7
52.5°	60.1	71.6	194.0	306.1	615.6	694.2	720.7	751.9	808.5	838.5	845.5
55°	55.4	65.8	165.2	265.7	578.7	657.2	686.1	716.1	771.5	797.0	801.6
57.5°	53.1	61.2	140.9	227.5	539.4	615.6	648.0	675.7	727.6	747.3	751.9
60°	49.7	57.8	122.4	195.2	496.6	576.3	604.1	631.8	675.7	691.8	695.3
62.5°	46.2	55.4	108.6	164.0	452.8	530.1	557.9	583.3	620.2	631.8	636.4
65°	43.9	53.1	98.2	140.9	407.7	481.6	509.4	531.3	561.3	572.9	575.2
67.5°	41.6	50.8	90.1	121.3	362.7	433.1	453.9	474.7	497.8	509.4	510.5
70°	38.1	48.5	83.2	107.4	316.5	377.7	395.0	417.0	435.4	441.2	444.7
72.5°	35.8	45.0	78.5	97.0	269.1	324.6	340.7	353.4	369.6	375.4	375.4
75°	32.3	40.4	73.9	86.6	220.6	265.7	279.5	292.2	304.9	307.2	303.8
77.5°	28.9	35.8	63.5	72.8	172.1	210.2	221.8	228.7	239.1	241.4	242.6
80°	24.3	31.2	49.7	56.6	124.7	154.8	162.9	168.6	177.9	177.9	180.2
82.5°	18.5	24.3	35.8	40.4	84.3	106.3	113.2	116.7	122.4	122.4	122.4
85°	11.6	15.0	23.1	26.6	50.8	64.7	69.3	70.5	75.1	76.2	76.2
87.5°	5.8	8.1	15.0	16.2	26.6	33.5	33.5	35.8	35.8	34.6	33.5
90°	2.4	4.3	6.2	6.7	10.5	15.6	18.1	16.1	12.0	9.0	9.0
92.5°	9.5	25.7	41.9	46.0	64.6	89.5	101.9	89.2	64.1	45.2	43.4
95°	22.9	52.4	82.1	89.5	158.9	251.6	297.8	265.8	201.7	153.5	148.1
97.5°	39.5	65.7	91.8	98.3	214.1	368.5	445.7	425.4	384.8	354.4	344.0
100°	52.4	76.1	99.8	105.7	234.2	405.5	491.1	492.6	495.6	497.8	485.5
102.5°	63.3	85.5	107.6	113.1	243.4	417.1	504.0	529.8	581.4	620.2	609.6
105°	81.9	100.6	119.4	124.0	250.2	418.4	502.5	560.4	676.1	763.0	757.3
107.5°	100.9	118.4	135.8	140.2	251.5	399.8	473.9	554.6	716.1	837.2	838.6
110°	113.8	129.5	145.3	149.2	249.6	383.3	450.1	540.4	721.0	856.3	862.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	126.4	141.4	156.5	160.2	249.6	368.9	428.5	520.9	705.6	844.2	853.2
115°	145.5	159.3	173.2	176.6	251.9	352.4	402.6	491.6	669.5	803.0	815.6
117.5°	164.2	176.9	189.4	192.6	256.6	342.0	384.7	465.0	625.6	746.1	760.1
120°	175.2	187.0	198.9	201.9	260.4	338.5	377.5	450.9	597.7	707.7	721.3
122.5°	186.0	197.9	209.8	212.8	265.9	336.6	372.1	438.1	570.3	669.4	682.8
125°	202.4	213.2	224.1	226.8	273.3	335.2	366.1	422.3	534.5	618.7	631.0
127.5°	215.7	226.7	237.7	240.5	280.7	334.3	361.1	409.3	505.7	578.0	588.4
130°	222.8	234.7	246.6	249.5	286.1	334.8	359.2	402.1	487.9	552.3	561.9
132.5°	230.2	242.1	253.9	256.9	290.4	335.2	357.6	396.0	472.8	530.4	539.0
135°	241.2	251.9	262.7	265.4	295.2	334.9	354.7	386.9	451.2	499.4	506.9
137.5°	252.3	263.0	273.7	276.4	302.3	336.9	354.2	381.4	435.7	476.6	482.6
140°	261.6	271.5	281.3	283.7	306.7	337.3	352.6	376.1	423.0	458.2	463.9
142.5°	268.7	277.8	286.9	289.2	310.3	338.5	352.6	373.2	414.4	445.4	450.3
145°	279.7	287.7	295.6	297.6	315.2	338.5	350.2	367.1	400.8	426.1	429.8
147.5°	290.7	298.4	306.2	308.1	322.1	340.8	350.2	363.4	390.0	409.9	413.0
150°	297.8	304.8	311.8	313.5	325.8	342.0	350.2	361.4	383.8	400.6	403.1
152.5°	305.2	310.5	315.8	317.1	328.1	342.8	350.2	359.7	378.9	393.2	395.1
155°	316.2	320.1	323.9	324.9	333.3	344.6	350.2	357.8	373.1	384.5	385.7
157.5°	324.2	328.0	331.9	332.8	338.6	346.3	350.2	356.1	368.0	376.8	377.7
160°	329.7	332.6	335.6	336.3	341.0	347.1	350.2	355.3	365.4	373.1	373.5
162.5°	335.2	337.4	339.6	340.2	343.5	348.0	350.2	354.5	363.1	369.4	369.9
165°	341.1	343.1	345.1	345.7	347.2	349.2	350.2	353.3	359.4	364.0	364.5
167.5°	346.6	347.5	348.5	348.7	350.0	351.7	352.6	354.6	358.6	361.6	361.8
170°	350.2	351.1	352.1	352.4	352.4	352.5	352.6	354.6	358.6	361.6	361.6
172.5°	352.1	352.4	352.5	352.6	352.6	352.6	352.6	354.1	357.3	359.7	359.5
175°	354.7	354.7	354.7	354.7	354.0	353.0	352.6	353.6	355.6	357.0	357.0
177.5°	354.7	354.7	354.7	354.7	354.2	353.4	353.0	353.8	355.4	356.6	356.4
180°	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7	354.7



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	359.2	359.2
2.5°	383.5	381.2
5°	493.2	495.5
7.5°	664.1	663.0
10°	825.8	836.2
12.5°	943.7	946.0
15°	1015.3	1019.9
17.5°	1043.0	1044.2
20°	1044.2	1041.9
22.5°	1031.5	1029.2
25°	1016.5	1015.3
27.5°	1002.6	1003.8
30°	996.8	1000.3
32.5°	996.8	1002.6
35°	999.2	1004.9
37.5°	998.0	1004.9
40°	993.4	1001.5
42.5°	980.7	986.4
45°	961.0	968.0
47.5°	935.6	940.2
50°	903.3	907.9
52.5°	862.8	863.9
55°	814.3	818.9
57.5°	762.3	763.5
60°	704.6	708.0
62.5°	643.3	643.3
65°	578.7	581.0
67.5°	511.7	517.4
70°	443.5	444.7
72.5°	376.5	376.5
75°	307.2	308.4
77.5°	241.4	241.4
80°	179.0	180.2
82.5°	123.6	125.9
85°	77.4	77.4
87.5°	35.8	32.3
90°	9.0	9.0
92.5°	36.2	29.0
95°	126.3	104.5
97.5°	302.6	261.2
100°	436.1	386.6
102.5°	567.3	524.9
105°	734.6	711.8
107.5°	844.1	849.6
110°	885.9	909.6





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	889.7	926.0
115°	866.0	916.5
117.5°	816.0	872.0
120°	775.7	830.1
122.5°	736.5	790.1
125°	680.4	729.9
127.5°	630.1	671.8
130°	600.4	638.9
132.5°	573.5	608.0
135°	536.6	566.3
137.5°	507.0	531.4
140°	486.6	509.4
142.5°	469.9	489.4
145°	444.7	459.5
147.5°	425.3	437.5
150°	413.1	423.0
152.5°	402.6	410.2
155°	390.7	395.6
157.5°	381.2	384.7
160°	375.5	377.5
162.5°	371.8	373.8
165°	366.5	368.5
167.5°	362.7	363.5
170°	361.6	361.6
172.5°	358.7	358.0
175°	357.0	357.0
177.5°	355.6	354.7
180°	354.7	354.7



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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	4.20	5.14	5.10	6.08	7.27	17.36	18.31	18.27	19.24	20.44
	3H	4.91	5.76	5.83	6.70	7.92	19.20	20.05	20.12	21.00	22.22
	4H	5.21	6.02	6.14	6.96	8.19	19.85	20.66	20.78	21.60	22.83
	6H	5.46	6.21	6.41	7.16	8.41	20.28	21.02	21.22	21.98	23.22
	8H	5.54	6.25	6.49	7.22	8.46	20.40	21.11	21.35	22.08	23.32
	12H	5.56	6.23	6.51	7.20	8.47	20.47	21.15	21.43	22.11	23.38
4H	2H	11.41	12.22	12.35	13.17	14.40	17.65	18.45	18.58	19.40	20.63
	3H	12.99	13.67	13.94	14.64	15.89	19.69	20.37	20.64	21.35	22.59
	4H	13.09	13.71	14.05	14.68	15.95	20.46	21.08	21.42	22.05	23.32
	6H	13.10	13.64	14.08	14.63	15.90	21.00	21.54	21.97	22.53	23.80
	8H	13.08	13.58	14.06	14.57	15.86	21.16	21.66	22.14	22.65	23.94
	12H	13.04	13.50	14.04	14.50	15.79	21.26	21.71	22.25	22.72	24.01
8H	4H	14.54	15.04	15.51	16.03	17.31	20.53	21.03	21.50	22.02	23.30
	6H	14.78	15.20	15.78	16.23	17.51	21.16	21.57	22.16	22.60	23.89
	8H	14.80	15.17	15.81	16.19	17.49	21.38	21.74	22.39	22.76	24.06
	12H	14.78	15.10	15.79	16.11	17.46	21.52	21.85	22.54	22.86	24.20
12H	4H	14.68	15.14	15.68	16.14	17.43	20.49	20.94	21.48	21.94	23.23
	6H	15.04	15.41	16.05	16.43	17.73	21.14	21.51	22.15	22.53	23.83
	8H	15.12	15.44	16.13	16.45	17.80	21.38	21.70	22.39	22.71	24.06