

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: P937550

Luminaire Tested: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937550
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

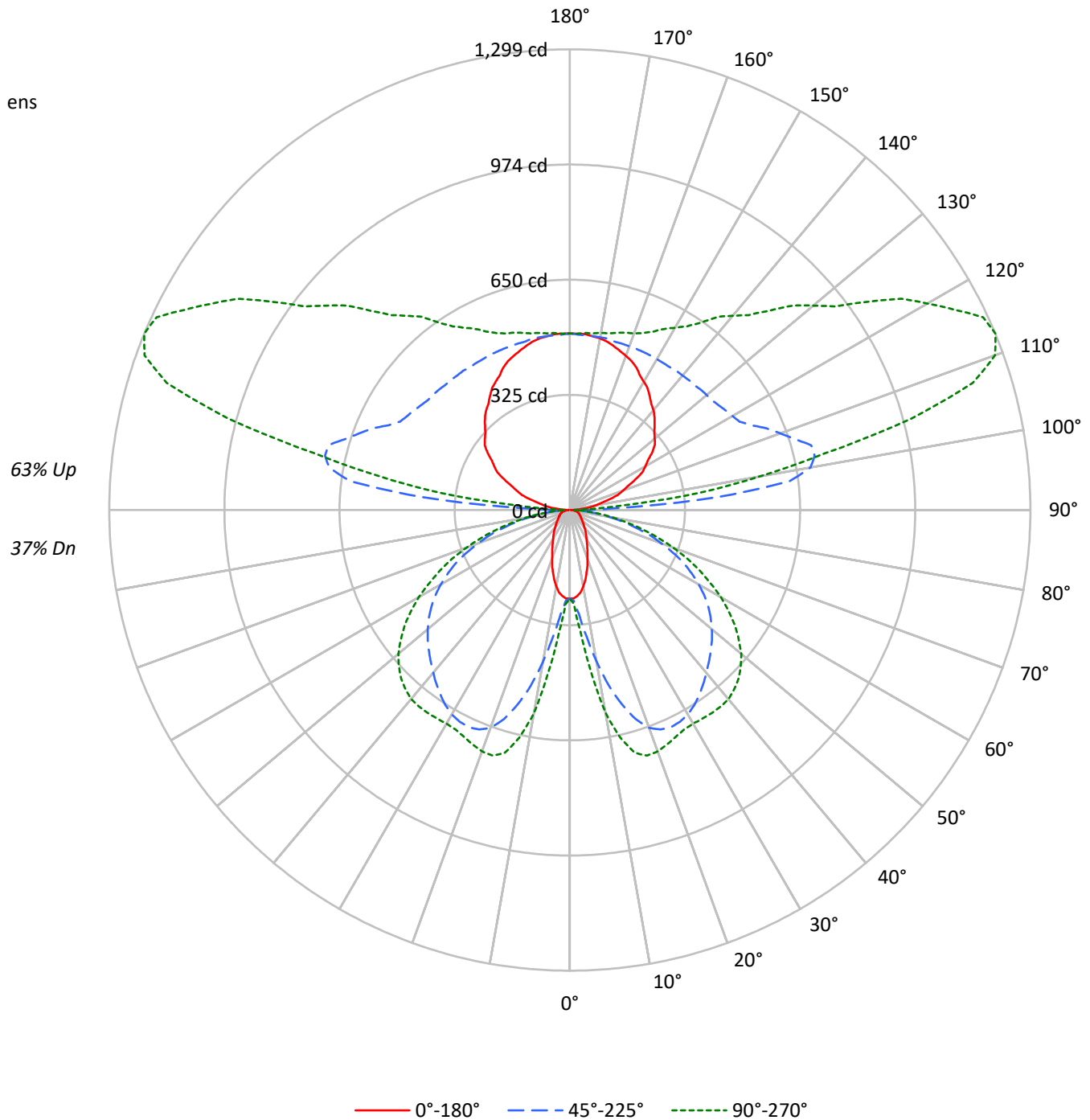
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5160.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 49.2
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

TEST NUMBER: P937550
CATALOG NUMBER: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31				31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25				25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21				21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17				17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15				15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13				13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11				11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10				10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9				9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8				8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2317	2317	2317
5°	2261	2676	3115
10°	2049	3898	5164
15°	1740	5089	6235
20°	1414	5893	6355
25°	1178	6163	6225
30°	993	6197	6214
35°	876	6089	6375
40°	762	5950	6541
45°	689	5847	6566
50°	631	5754	6458
55°	601	5618	6171
60°	614	5365	5719
65°	636	4981	5098
70°	673	4335	4308
75°	738	3525	3361
80°	791	2436	2265
85°	662	1286	1159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6566 cd/sqm



TEST NUMBER: P937550

CATALOG NUMBER: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.3	0.6
10°-20°	143.2	2.8
20°-30°	250.4	4.9
30°-40°	322.4	6.2
40°-50°	360.1	7.0
50°-60°	344.9	6.7
60°-70°	273.3	5.3
70°-80°	160.7	3.1
80°-90°	46.5	0.9
90°-100°	242.6	4.7
100°-110°	637.8	12.4
110°-120°	661.3	12.8
120°-130°	530.4	10.3
130°-140°	416.2	8.1
140°-150°	319.5	6.2
150°-160°	230.1	4.5
160°-170°	140.8	2.7
170°-180°	47.6	0.9
0°-30°	425.9	8.3
0°-40°	748.3	14.5
0°-60°	1453.3	28.2
0°-90°	1933.8	37.5
90°-120°	1541.7	29.9
90°-150°	2807.8	54.4
90°-180°	3226.0	62.5
0°-180°	5160.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	250	250	250	250	250	
5°	243	261	294	332	344	22
15°	182	336	567	687	709	51
25°	116	381	675	705	706	54
35°	79	365	636	672	699	49
45°	54	291	562	644	673	42
55°	38	185	477	554	569	35
65°	30	98	354	398	404	30
75°	22	60	194	214	214	24
85°	8	18	48	53	54	8
90°	3	9	25	13	13	3
95°	32	126	418	215	147	36
105°	115	174	705	1070	999	122
115°	204	248	565	1127	1286	202
125°	284	318	514	868	1024	252
135°	338	372	498	701	795	262
145°	392	418	491	598	645	246
155°	444	456	491	539	555	204
165°	479	485	491	511	517	135
175°	498	498	495	501	501	47
180°	498	498	498	498	498	



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 CATALOG NUMBER: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7	249.7
2.5°	249.7	249.7	251.3	252.1	253.7	254.6	256.2	257.8	262.6	263.4	265.0
5°	243.3	246.5	257.0	261.0	272.2	287.5	293.9	304.3	326.0	332.4	336.5
7.5°	233.7	240.9	266.6	273.0	301.1	341.3	358.1	380.6	415.2	432.0	445.7
10°	218.4	233.7	279.4	294.7	340.5	401.5	432.8	464.1	516.3	539.6	548.4
12.5°	201.6	226.4	293.1	314.0	379.8	469.0	506.7	541.2	600.6	632.0	636.8
15°	182.3	216.0	305.9	336.5	421.6	525.2	566.9	609.5	664.9	687.4	693.0
17.5°	165.4	208.0	318.0	350.1	453.7	575.8	618.3	653.6	698.6	713.9	717.9
20°	144.5	195.1	326.0	367.8	487.4	612.7	653.6	680.9	711.5	721.1	722.7
22.5°	129.3	181.5	330.8	374.2	509.9	635.2	669.7	691.4	712.3	715.5	716.3
25°	116.4	166.2	330.0	381.4	529.2	648.8	675.3	691.4	703.4	705.0	705.0
27.5°	104.4	149.4	326.8	383.0	543.6	652.0	672.9	684.2	689.8	693.0	693.0
30°	94.0	133.3	318.8	379.8	550.1	648.8	665.7	671.3	676.9	681.7	684.2
32.5°	85.9	118.0	306.7	373.4	550.9	640.8	652.8	656.1	664.1	675.3	679.3
35°	78.7	102.8	293.1	364.6	546.0	627.9	636.0	639.2	655.2	672.1	677.7
37.5°	71.5	91.5	275.4	349.3	538.8	612.7	618.3	623.9	648.8	668.9	675.3
40°	64.2	81.9	254.6	332.4	527.6	594.2	599.0	607.9	640.8	664.1	670.5
42.5°	58.6	73.9	232.1	314.8	513.1	573.3	580.6	593.4	631.2	656.1	663.3
45°	53.8	65.8	208.0	290.7	494.6	551.7	562.1	579.8	619.9	644.0	650.4
47.5°	49.0	60.2	183.1	265.8	474.6	530.0	543.6	563.7	604.7	627.9	633.6
50°	45.0	54.6	158.2	239.3	452.9	506.7	522.8	543.6	585.4	607.1	614.3
52.5°	41.8	49.8	134.9	212.8	428.0	482.6	501.1	522.8	562.1	583.0	587.8
55°	38.5	45.8	114.8	184.7	402.3	456.9	477.0	497.9	536.4	554.1	557.3
57.5°	36.9	42.6	98.0	158.2	375.0	428.0	450.5	469.8	505.9	519.5	522.8
60°	34.5	40.2	85.1	135.7	345.3	400.7	420.0	439.2	469.8	481.0	483.4
62.5°	32.1	38.5	75.5	114.0	314.8	368.6	387.8	405.5	431.2	439.2	442.5
65°	30.5	36.9	68.3	98.0	283.5	334.9	354.1	369.4	390.3	398.3	399.9
67.5°	28.9	35.3	62.6	84.3	252.1	301.1	315.6	330.0	346.1	354.1	354.9
70°	26.5	33.7	57.8	74.7	220.0	262.6	274.6	289.9	302.7	306.7	309.2
72.5°	24.9	31.3	54.6	67.5	187.1	225.6	236.9	245.7	257.0	261.0	261.0
75°	22.5	28.1	51.4	60.2	153.4	184.7	194.3	203.2	212.0	213.6	211.2
77.5°	20.1	24.9	44.2	50.6	119.6	146.1	154.2	159.0	166.2	167.8	168.6
80°	16.9	21.7	34.5	39.3	86.7	107.6	113.2	117.2	123.7	123.7	125.3
82.5°	12.8	16.9	24.9	28.1	58.6	73.9	78.7	81.1	85.1	85.1	85.1
85°	8.0	10.4	16.1	18.5	35.3	45.0	48.2	49.0	52.2	53.0	53.0
87.5°	4.0	5.6	10.4	11.2	18.5	23.3	23.3	24.9	24.9	24.1	23.3
90°	3.4	6.0	8.7	9.3	14.7	21.8	25.4	22.6	16.9	12.7	12.7
92.5°	13.3	36.1	58.8	64.5	90.7	125.5	142.9	125.3	89.9	63.4	60.9
95°	32.0	73.6	115.2	125.6	223.0	352.8	417.8	372.8	282.9	215.4	207.8
97.5°	55.4	92.1	128.8	138.0	300.4	517.0	625.2	596.8	539.9	497.3	482.8
100°	73.5	106.7	140.0	148.3	328.6	568.9	689.1	691.1	695.2	698.4	681.0
102.5°	88.8	119.9	150.9	158.7	341.5	585.2	707.1	743.3	815.8	870.1	855.2
105°	114.9	141.2	167.4	174.0	351.1	587.1	705.1	786.3	948.7	1070.5	1062.5
107.5°	141.6	166.1	190.6	196.7	352.8	560.9	665.0	778.3	1004.8	1174.7	1176.6
110°	159.6	181.8	203.9	209.4	350.1	537.8	631.6	758.2	1011.5	1201.4	1209.7



TEST NUMBER: P937550

CATALOG NUMBER: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	177.4	198.4	219.5	224.8	350.3	517.5	601.2	730.8	989.9	1184.3	1197.1
115°	204.0	223.5	242.9	247.8	353.5	494.4	564.8	689.7	939.3	1126.6	1144.3
117.5°	230.5	248.1	265.8	270.2	360.1	479.9	539.8	652.4	877.8	1046.8	1066.4
120°	245.8	262.4	279.0	283.2	365.4	475.0	529.7	632.7	838.6	993.0	1012.1
122.5°	260.9	277.7	294.5	298.6	373.1	472.4	522.0	614.7	800.1	939.2	958.0
125°	283.9	299.2	314.5	318.3	383.4	470.2	513.7	592.5	749.9	868.0	885.4
127.5°	302.6	318.0	333.5	337.3	393.8	469.0	506.7	574.3	709.5	810.9	825.6
130°	312.6	329.2	345.9	350.0	401.3	469.8	504.0	564.3	684.6	774.9	788.4
132.5°	323.0	339.6	356.2	360.4	407.4	470.2	501.6	555.5	663.3	744.1	756.3
135°	338.4	353.5	368.7	372.4	414.2	469.8	497.7	542.8	633.0	700.7	711.1
137.5°	354.0	369.1	384.0	387.8	424.1	472.7	497.0	535.1	611.4	668.7	677.2
140°	367.1	380.9	394.7	398.1	430.3	473.2	494.6	527.6	593.5	643.0	650.9
142.5°	377.1	389.9	402.6	405.8	435.5	474.9	494.6	523.6	581.5	624.9	631.8
145°	392.4	403.6	414.7	417.5	442.1	475.0	491.4	515.0	562.3	597.8	603.1
147.5°	407.8	418.7	429.4	432.2	451.9	478.2	491.4	510.0	547.2	575.2	579.5
150°	417.8	427.6	437.4	439.9	457.1	480.0	491.4	507.1	538.5	562.1	565.6
152.5°	428.2	435.5	443.0	444.9	460.4	481.0	491.4	504.8	531.6	551.7	554.4
155°	443.6	449.0	454.6	455.9	467.7	483.5	491.4	502.0	523.4	539.4	541.1
157.5°	454.9	460.3	465.6	466.9	475.1	485.9	491.4	499.6	516.2	528.7	529.9
160°	462.6	466.8	470.9	471.9	478.4	487.0	491.4	498.5	512.7	523.4	524.1
162.5°	470.2	473.4	476.5	477.3	482.0	488.2	491.4	497.4	509.3	518.3	519.0
165°	478.6	481.4	484.2	484.9	487.1	489.9	491.4	495.7	504.3	510.7	511.4
167.5°	486.3	487.7	489.0	489.3	491.1	493.4	494.6	497.5	503.1	507.3	507.7
170°	491.4	492.6	494.0	494.3	494.4	494.6	494.6	497.5	503.1	507.3	507.3
172.5°	494.0	494.3	494.6	494.6	494.6	494.6	494.6	496.9	501.3	504.7	504.4
175°	497.7	497.7	497.7	497.7	496.7	495.3	494.6	496.1	498.9	501.0	501.0
177.5°	497.7	497.7	497.7	497.7	496.9	495.9	495.3	496.4	498.7	500.3	500.0
180°	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7



TEST NUMBER: P937550

CATALOG NUMBER: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	249.7	249.7
2.5°	266.6	265.0
5°	342.9	344.5
7.5°	461.7	460.9
10°	574.1	581.4
12.5°	656.1	657.7
15°	705.8	709.0
17.5°	725.1	725.9
20°	725.9	724.3
22.5°	717.1	715.5
25°	706.6	705.8
27.5°	697.0	697.8
30°	693.0	695.4
32.5°	693.0	697.0
35°	694.6	698.6
37.5°	693.8	698.6
40°	690.6	696.2
42.5°	681.7	685.8
45°	668.1	672.9
47.5°	650.4	653.6
50°	627.9	631.2
52.5°	599.8	600.6
55°	566.1	569.3
57.5°	530.0	530.8
60°	489.8	492.2
62.5°	447.3	447.3
65°	402.3	403.9
67.5°	355.7	359.7
70°	308.4	309.2
72.5°	261.8	261.8
75°	213.6	214.4
77.5°	167.8	167.8
80°	124.5	125.3
82.5°	85.9	87.5
85°	53.8	53.8
87.5°	24.9	22.5
90°	12.7	12.7
92.5°	50.8	40.7
95°	177.2	146.6
97.5°	424.5	366.4
100°	611.7	542.4
102.5°	795.9	736.5
105°	1030.6	998.7
107.5°	1184.3	1192.1
110°	1243.0	1276.2



TEST NUMBER: P937550

CATALOG NUMBER: SQ4-FB-100U-075D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1248.2	1299.3
115°	1215.1	1285.9
117.5°	1144.9	1223.5
120°	1088.4	1164.7
122.5°	1033.3	1108.5
125°	954.7	1024.1
127.5°	884.1	942.6
130°	842.4	896.5
132.5°	804.6	853.0
135°	752.8	794.6
137.5°	711.4	745.5
140°	682.9	714.8
142.5°	659.3	686.7
145°	623.9	644.6
147.5°	596.7	613.9
150°	579.5	593.5
152.5°	564.9	575.5
155°	548.1	555.1
157.5°	534.9	539.8
160°	526.9	529.7
162.5°	521.7	524.4
165°	514.2	517.1
167.5°	508.8	510.0
170°	507.3	507.3
172.5°	503.4	502.4
175°	501.0	501.0
177.5°	498.9	497.7
180°	497.7	497.7



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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	2.65	3.43	3.70	4.49	5.93	15.78	16.57	16.83	17.63	19.06
	3H	3.34	4.05	4.40	5.12	6.57	17.60	18.31	18.66	19.37	20.83
	4H	3.64	4.31	4.71	5.38	6.84	18.23	18.90	19.30	19.97	21.43
	6H	3.89	4.50	4.97	5.58	7.05	18.65	19.26	19.73	20.34	21.81
	8H	3.95	4.54	5.04	5.63	7.10	18.76	19.35	19.84	20.44	21.90
	12H	3.97	4.53	5.06	5.61	7.10	18.82	19.37	19.91	20.46	21.95
4H	2H	9.82	10.49	10.90	11.56	13.03	16.05	16.72	17.13	17.79	19.25
	3H	11.39	11.95	12.47	13.04	14.52	18.07	18.63	19.16	19.73	21.20
	4H	11.48	11.99	12.57	13.08	14.58	18.83	19.34	19.92	20.43	21.92
	6H	11.49	11.93	12.59	13.04	14.53	19.35	19.79	20.45	20.90	22.39
	8H	11.46	11.87	12.56	12.98	14.48	19.50	19.91	20.60	21.02	22.52
	12H	11.41	11.79	12.53	12.90	14.41	19.58	19.96	20.70	21.07	22.58
8H	4H	12.91	13.32	14.01	14.42	15.93	18.88	19.29	19.98	20.40	21.90
	6H	13.15	13.49	14.27	14.63	16.13	19.49	19.84	20.62	20.98	22.48
	8H	13.16	13.46	14.29	14.59	16.11	19.70	20.00	20.83	21.13	22.65
	12H	13.13	13.39	14.26	14.51	16.07	19.84	20.10	20.97	21.22	22.78
12H	4H	13.04	13.42	14.16	14.53	16.04	18.83	19.20	19.95	20.32	21.83
	6H	13.40	13.70	14.53	14.83	16.35	19.48	19.78	20.60	20.90	22.42
	8H	13.47	13.73	14.60	14.85	16.41	19.69	19.96	20.83	21.08	22.64