

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: P937106

Luminaire Tested: SQ4-FB-075U-050D-B50-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937106  
REPORT IS A COMBINATION OF REPORTS P933501 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-050D-B50-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

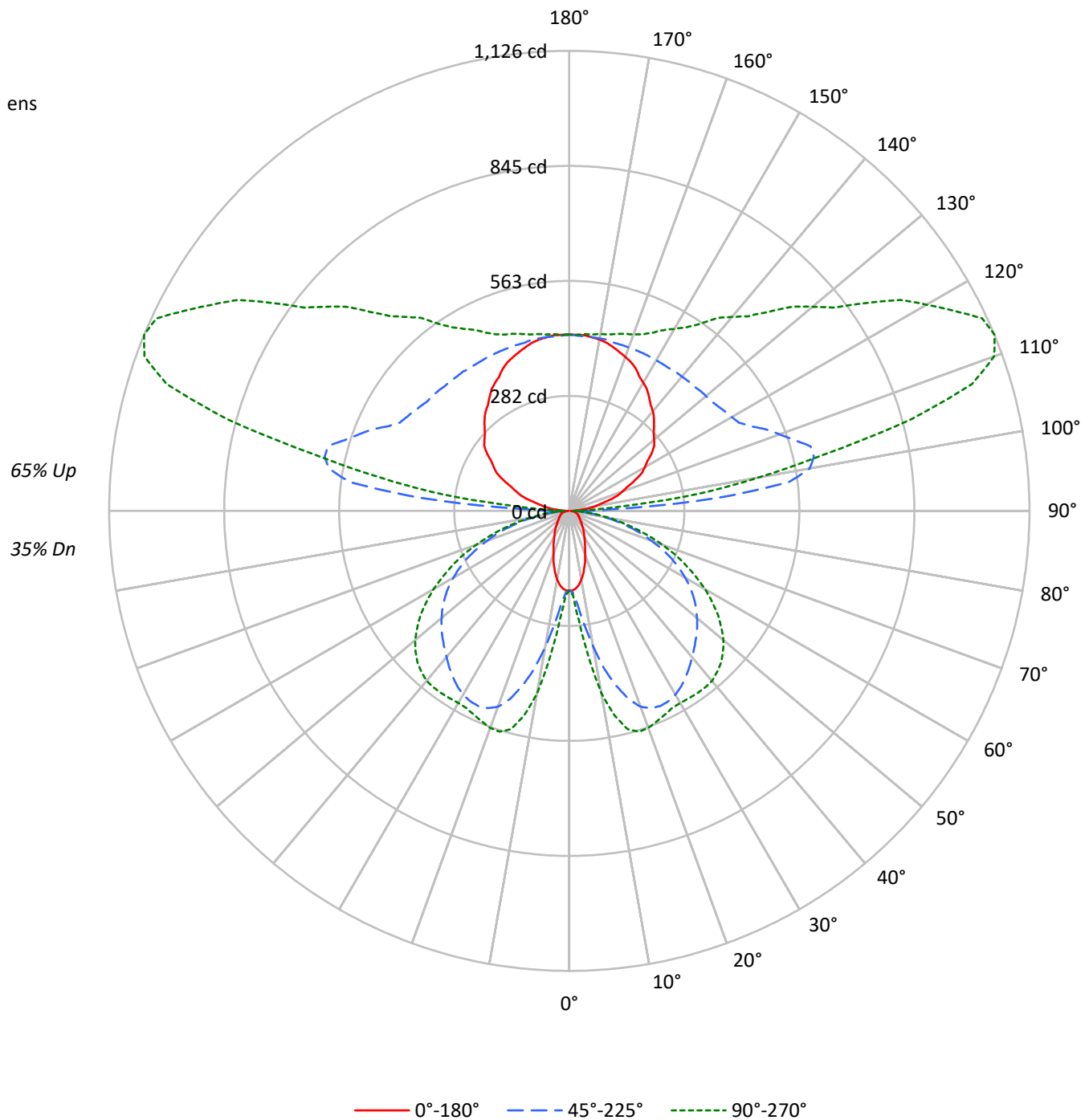
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4305.8 lumens  
Efficiency: N/A  
Efficacy: 125.2 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): 34.4  
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29				29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23				23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16				16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12				12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9				9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8				8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7				7

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

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2430
10°	1599	3042	4029
15°	1357	3971	4866
20°	1104	4599	4959
25°	920	4809	4858
30°	774	4835	4849
35°	684	4751	4974
40°	596	4644	5103
45°	536	4563	5124
50°	492	4489	5039
55°	470	4384	4815
60°	479	4186	4463
65°	496	3887	3977
70°	523	3383	3362
75°	577	2751	2623
80°	618	1902	1768
85°	522	1004	903

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5124 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.2	0.6
10°-20°	111.7	2.6
20°-30°	195.4	4.5
30°-40°	251.5	5.8
40°-50°	281.0	6.5
50°-60°	269.1	6.3
60°-70°	213.3	5.0
70°-80°	125.4	2.9
80°-90°	36.5	0.8
90°-100°	210.3	4.9
100°-110°	552.9	12.8
110°-120°	573.3	13.3
120°-130°	459.8	10.7
130°-140°	360.8	8.4
140°-150°	276.9	6.4
150°-160°	199.4	4.6
160°-170°	122.0	2.8
170°-180°	41.2	1.0
0°-30°	332.3	7.7
0°-40°	583.9	13.6
0°-60°	1134.0	26.3
0°-90°	1509.1	35.0
90°-120°	1336.4	31.0
90°-150°	2433.9	56.5
90°-180°	2797.0	65.0
0°-180°	4305.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	229	259	269	18
15°	142	262	442	536	553	40
25°	91	298	527	550	551	42
35°	61	284	496	524	545	38
45°	42	227	439	502	525	32
55°	30	144	372	432	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	3	8	22	11	11	3
95°	28	109	362	187	127	31
105°	100	151	611	928	866	106
115°	177	215	490	977	1115	175
125°	246	276	445	752	888	219
135°	293	323	431	608	689	227
145°	340	362	426	518	559	213
155°	384	395	426	468	481	177
165°	415	420	426	443	448	117
175°	431	431	429	434	434	41
180°	431	431	431	431	431	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8
2.5°	194.8	194.8	196.1	196.7	198.0	198.7	199.9	201.1	204.9	205.5	206.8
5°	189.9	192.4	200.5	203.6	212.4	224.3	229.3	237.5	254.4	259.4	262.5
7.5°	182.3	188.0	208.0	213.0	235.0	266.3	279.5	297.0	323.9	337.1	347.7
10°	170.5	182.3	218.1	230.0	265.6	313.3	337.7	362.2	402.9	421.0	428.0
12.5°	157.3	176.7	228.7	245.0	296.4	365.9	395.4	422.4	468.7	493.2	496.9
15°	142.2	168.6	238.7	262.5	329.0	409.7	442.3	475.6	518.8	536.3	540.7
17.5°	129.1	162.3	248.2	273.2	354.0	449.3	482.5	510.1	545.1	557.0	560.1
20°	112.8	152.2	254.4	287.0	380.3	478.1	510.1	531.4	555.2	562.6	563.9
22.5°	100.9	141.6	258.2	292.0	397.9	495.6	522.6	539.5	555.7	558.3	558.9
25°	90.9	129.7	257.5	297.7	412.9	506.2	527.0	539.5	548.9	550.1	550.1
27.5°	81.4	116.6	255.0	298.9	424.2	508.7	525.1	533.9	538.3	540.7	540.7
30°	73.3	104.0	248.7	296.4	429.2	506.2	519.4	523.8	528.2	532.0	533.9
32.5°	67.1	92.1	239.4	291.3	429.8	500.0	509.4	511.9	518.2	527.0	530.0
35°	61.4	80.2	228.7	284.5	426.1	490.0	496.2	498.8	511.3	524.4	528.8
37.5°	55.8	71.5	214.9	272.5	420.4	478.1	482.5	486.9	506.2	521.9	527.0
40°	50.2	63.9	198.7	259.4	411.7	463.6	467.5	474.3	500.0	518.2	523.2
42.5°	45.8	57.6	181.1	245.6	400.4	447.4	453.0	463.1	492.5	511.9	517.5
45°	41.9	51.4	162.3	226.8	385.9	430.5	438.6	452.4	483.7	502.5	507.5
47.5°	38.2	47.0	142.9	207.4	370.3	413.6	424.2	439.8	471.9	490.0	494.4
50°	35.1	42.6	123.5	186.7	353.4	395.4	407.9	424.2	456.8	473.7	479.3
52.5°	32.6	38.9	105.3	166.1	334.0	376.6	391.0	407.9	438.6	454.9	458.7
55°	30.1	35.7	89.6	144.1	313.9	356.5	372.2	388.5	418.5	432.3	434.9
57.5°	28.9	33.3	76.4	123.5	292.6	334.0	351.5	366.5	394.7	405.4	407.9
60°	26.9	31.3	66.4	105.9	269.5	312.7	327.7	342.8	366.5	375.3	377.2
62.5°	25.0	30.1	58.9	89.0	245.6	287.6	302.6	316.4	336.4	342.8	345.2
65°	23.8	28.9	53.2	76.4	221.2	261.2	276.3	288.2	304.5	310.7	312.0
67.5°	22.6	27.6	48.8	65.8	196.7	235.0	246.2	257.5	270.0	276.3	276.9
70°	20.6	26.3	45.1	58.3	171.7	204.9	214.3	226.2	236.2	239.4	241.3
72.5°	19.4	24.5	42.6	52.7	146.0	176.1	184.8	191.8	200.5	203.6	203.6
75°	17.6	21.9	40.1	47.0	119.6	144.1	151.6	158.5	165.4	166.6	164.8
77.5°	15.7	19.4	34.5	39.5	93.4	114.0	120.3	124.0	129.7	130.9	131.6
80°	13.2	16.9	26.9	30.7	67.7	84.0	88.4	91.4	96.5	96.5	97.8
82.5°	10.0	13.2	19.4	21.9	45.8	57.6	61.4	63.3	66.4	66.4	66.4
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.6	38.2	40.7	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	2.9	5.2	7.6	8.1	12.8	19.0	22.0	19.6	14.7	11.0	11.0
92.5°	11.6	31.3	50.9	55.9	78.5	108.8	123.9	108.6	78.0	55.0	52.9
95°	27.8	63.9	99.9	108.9	193.3	305.9	362.2	323.2	245.2	186.7	180.1
97.5°	48.1	79.9	111.6	119.6	260.4	448.1	542.0	517.3	468.1	431.1	418.5
100°	63.7	92.5	121.3	128.5	284.8	493.2	597.3	599.1	602.7	605.4	590.4
102.5°	77.1	104.0	130.8	137.5	296.0	507.3	613.0	644.4	707.1	754.2	741.3
105°	99.6	122.4	145.1	150.8	304.3	508.9	611.2	681.6	822.4	927.9	921.0
107.5°	122.7	144.0	165.2	170.5	305.9	486.2	576.5	674.6	871.0	1018.2	1019.9
110°	138.4	157.6	176.8	181.6	303.6	466.2	547.5	657.3	876.7	1041.4	1048.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.7	172.0	190.3	194.8	303.6	448.7	521.2	633.5	858.2	1026.7	1037.8
115°	176.9	193.7	210.6	214.8	306.4	428.5	489.6	597.9	814.3	976.6	991.9
117.5°	199.8	215.1	230.4	234.2	312.1	415.9	467.8	565.5	760.8	907.4	924.4
120°	213.1	227.5	241.9	245.5	316.7	411.7	459.2	548.4	726.9	860.8	877.3
122.5°	226.1	240.7	255.2	258.8	323.4	409.5	452.5	532.8	693.6	814.2	830.5
125°	246.1	259.4	272.6	275.9	332.4	407.7	445.3	513.6	650.2	752.5	767.6
127.5°	262.4	275.7	289.1	292.4	341.4	406.7	439.3	497.9	615.1	703.0	715.7
130°	271.0	285.4	299.8	303.5	347.9	407.2	436.9	489.1	593.5	671.7	683.4
132.5°	280.0	294.4	308.8	312.4	353.2	407.7	434.9	481.6	575.1	645.1	655.6
135°	293.3	306.4	319.5	322.8	359.0	407.3	431.4	470.5	548.8	607.5	616.5
137.5°	306.9	319.9	332.9	336.1	367.7	409.8	430.9	463.9	530.0	579.6	587.0
140°	318.2	330.2	342.1	345.1	373.0	410.2	428.8	457.4	514.4	557.3	564.2
142.5°	326.9	337.9	348.9	351.7	377.4	411.7	428.8	453.9	504.1	541.7	547.7
145°	340.2	349.9	359.5	361.9	383.2	411.7	425.9	446.5	487.5	518.3	522.8
147.5°	353.5	362.9	372.3	374.6	391.7	414.5	425.9	442.1	474.4	498.6	502.3
150°	362.2	370.7	379.2	381.4	396.2	416.0	425.9	439.5	466.8	487.3	490.3
152.5°	371.2	377.6	384.1	385.6	399.1	416.9	425.9	437.6	460.8	478.3	480.5
155°	384.5	389.3	394.0	395.2	405.4	419.1	425.9	435.2	453.6	467.6	469.1
157.5°	394.3	399.0	403.7	404.8	411.8	421.2	425.9	433.1	447.5	458.3	459.3
160°	401.0	404.6	408.2	409.1	414.7	422.2	425.9	432.1	444.5	453.7	454.3
162.5°	407.7	410.4	413.1	413.8	417.8	423.2	425.9	431.1	441.5	449.3	449.9
165°	414.9	417.3	419.7	420.4	422.3	424.7	425.9	429.6	437.1	442.7	443.4
167.5°	421.5	422.6	423.8	424.1	425.7	427.8	428.8	431.2	436.2	439.8	440.1
170°	425.9	427.0	428.2	428.5	428.6	428.7	428.8	431.2	436.2	439.8	439.8
172.5°	428.2	428.5	428.7	428.8	428.8	428.8	428.8	430.8	434.6	437.5	437.3
175°	431.4	431.4	431.4	431.4	430.6	429.4	428.8	430.0	432.4	434.3	434.3
177.5°	431.4	431.4	431.4	431.4	430.8	429.8	429.4	430.3	432.3	433.7	433.5
180°	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4	431.4



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	194.8	194.8
2.5°	208.0	206.8
5°	267.6	268.8
7.5°	360.2	359.7
10°	448.0	453.6
12.5°	511.9	513.1
15°	550.8	553.3
17.5°	565.8	566.5
20°	566.5	565.2
22.5°	559.6	558.3
25°	551.4	550.8
27.5°	543.9	544.5
30°	540.7	542.7
32.5°	540.7	543.9
35°	542.0	545.1
37.5°	541.3	545.1
40°	538.8	543.2
42.5°	532.0	535.1
45°	521.3	525.1
47.5°	507.5	510.1
50°	490.0	492.5
52.5°	468.0	468.7
55°	441.8	444.2
57.5°	413.6	414.1
60°	382.2	384.1
62.5°	349.0	349.0
65°	313.9	315.1
67.5°	277.6	280.7
70°	240.6	241.3
72.5°	204.3	204.3
75°	166.6	167.3
77.5°	130.9	130.9
80°	97.1	97.8
82.5°	67.1	68.3
85°	41.9	41.9
87.5°	19.4	17.6
90°	11.0	11.0
92.5°	44.1	35.3
95°	153.6	127.1
97.5°	368.1	317.7
100°	530.3	470.2
102.5°	689.9	638.4
105°	893.4	865.7
107.5°	1026.7	1033.4
110°	1077.5	1106.3





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1082.0	1126.3
115°	1053.4	1114.7
117.5°	992.5	1060.6
120°	943.4	1009.6
122.5°	895.7	961.0
125°	827.6	887.7
127.5°	766.3	817.1
130°	730.3	777.1
132.5°	697.5	739.4
135°	652.7	688.8
137.5°	616.6	646.2
140°	592.0	619.6
142.5°	571.4	595.2
145°	540.8	558.8
147.5°	517.2	532.2
150°	502.4	514.5
152.5°	489.7	498.8
155°	475.1	481.2
157.5°	463.6	467.8
160°	456.7	459.2
162.5°	452.2	454.6
165°	445.8	448.2
167.5°	441.1	442.2
170°	439.8	439.8
172.5°	436.4	435.4
175°	434.3	434.3
177.5°	432.4	431.4
180°	431.4	431.4



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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	1.50	2.26	2.57	3.34	4.81	14.64	15.40	15.71	16.48	17.95
	3H	2.20	2.88	3.27	3.97	5.45	16.45	17.14	17.53	18.23	19.71
	4H	2.49	3.14	3.58	4.23	5.72	17.08	17.74	18.17	18.82	20.31
	6H	2.74	3.34	3.84	4.43	5.93	17.50	18.10	18.60	19.19	20.69
	8H	2.80	3.38	3.91	4.48	5.98	17.61	18.18	18.71	19.29	20.78
	12H	2.82	3.36	3.92	4.46	5.98	17.67	18.21	18.77	19.31	20.83
4H	2H	8.68	9.33	9.77	10.42	11.91	14.90	15.55	16.00	16.64	18.13
	3H	10.24	10.78	11.34	11.90	13.40	16.92	17.47	18.03	18.58	20.09
	4H	10.33	10.83	11.44	11.93	13.46	17.68	18.18	18.78	19.28	20.80
	6H	10.34	10.77	11.45	11.89	13.41	18.20	18.63	19.31	19.75	21.27
	8H	10.31	10.71	11.43	11.83	13.36	18.35	18.75	19.47	19.87	21.40
	12H	10.26	10.63	11.40	11.76	13.30	18.43	18.79	19.56	19.92	21.46
8H	4H	11.76	12.16	12.87	13.28	14.81	17.73	18.13	18.84	19.25	20.78
	6H	11.99	12.33	13.13	13.49	15.02	18.34	18.67	19.48	19.83	21.36
	8H	12.01	12.30	13.15	13.44	14.99	18.55	18.84	19.70	19.98	21.53
	12H	11.97	12.23	13.12	13.37	14.95	18.68	18.94	19.83	20.08	21.66
12H	4H	11.89	12.26	13.02	13.39	14.92	17.68	18.04	18.81	19.17	20.71
	6H	12.25	12.54	13.39	13.68	15.23	18.32	18.61	19.47	19.75	21.30
	8H	12.31	12.57	13.46	13.70	15.29	18.54	18.80	19.69	19.93	21.52