

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: P937431

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-2700K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937431
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-2700K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

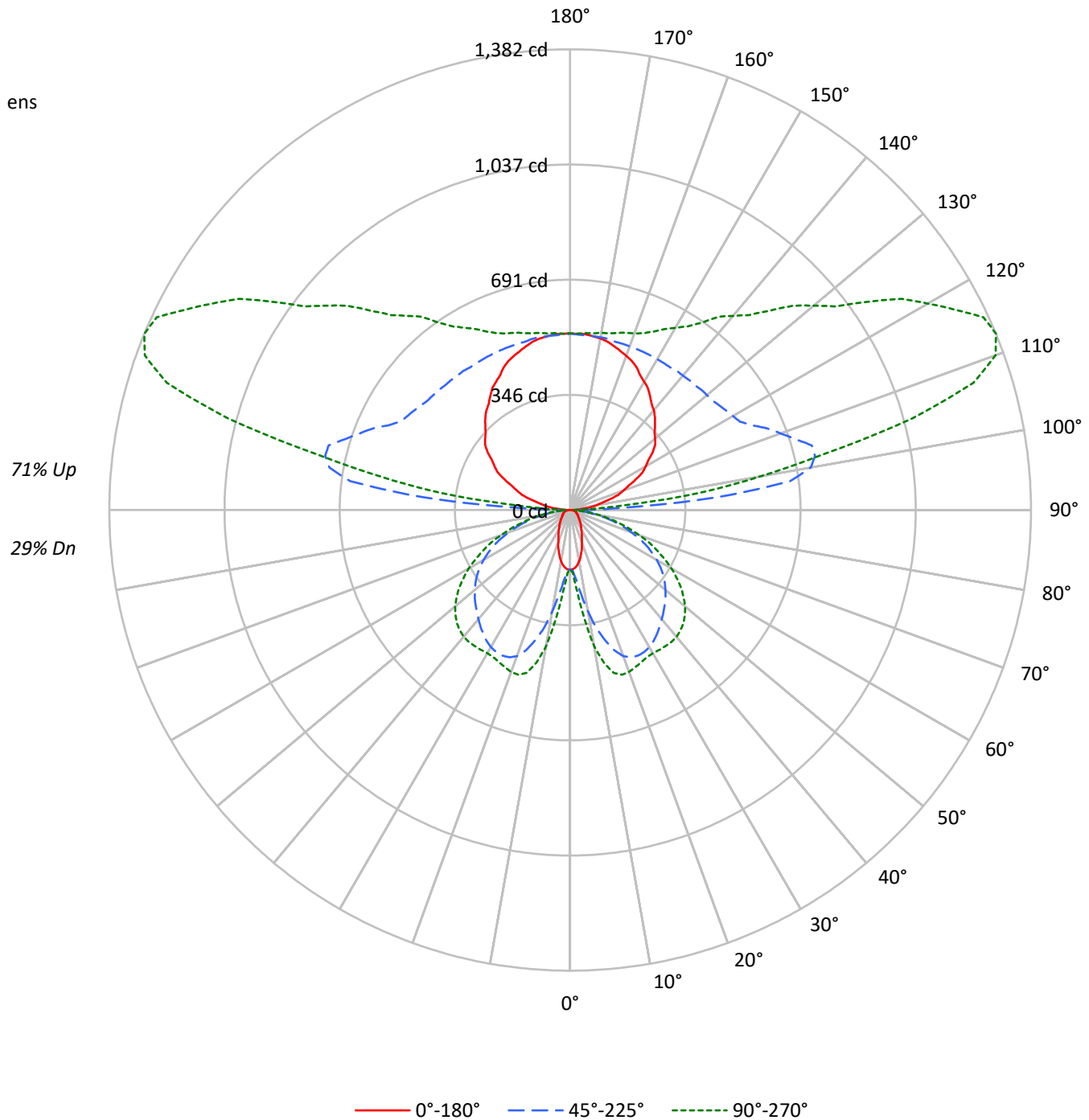
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4812.2 lumens
Efficiency: N/A
Efficacy: 116.8 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): 41.2
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

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CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-2700K

Luminous Intensity Polar Plot





TEST NUMBER: P937431

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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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1654	1654	1654
5°	1613	1910	2222
10°	1463	2782	3684
15°	1241	3631	4450
20°	1010	4205	4534
25°	841	4398	4443
30°	708	4422	4434
35°	625	4345	4549
40°	545	4247	4667
45°	492	4172	4686
50°	450	4105	4608
55°	430	4010	4403
60°	438	3828	4081
65°	454	3555	3638
70°	480	3093	3073
75°	528	2515	2399
80°	562	1739	1616
85°	472	918	827

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4686 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	0.5
10°-20°	102.2	2.1
20°-30°	178.7	3.7
30°-40°	230.0	4.8
40°-50°	256.9	5.3
50°-60°	246.1	5.1
60°-70°	195.0	4.1
70°-80°	114.7	2.4
80°-90°	33.9	0.7
90°-100°	258.0	5.4
100°-110°	678.4	14.1
110°-120°	703.4	14.6
120°-130°	564.2	11.7
130°-140°	442.7	9.2
140°-150°	339.8	7.1
150°-160°	244.7	5.1
160°-170°	149.7	3.1
170°-180°	50.6	1.1
0°-30°	303.9	6.3
0°-40°	533.9	11.1
0°-60°	1037.0	21.5
0°-90°	1380.6	28.7
90°-120°	1639.8	34.1
90°-150°	2986.5	62.1
90°-180°	3432.0	71.3
0°-180°	4812.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	178	178	178	178	178	
5°	174	186	210	237	246	16
15°	130	240	404	490	506	36
25°	83	272	482	503	504	38
35°	56	260	454	480	498	35
45°	38	207	401	460	480	30
55°	28	132	340	395	406	25
65°	22	70	253	284	288	22
75°	16	43	139	152	153	17
85°	6	13	34	38	38	6
90°	4	10	27	14	14	3
95°	34	134	444	229	156	38
105°	122	185	750	1139	1062	130
115°	217	264	601	1198	1368	214
125°	302	339	546	923	1089	268
135°	360	396	529	745	845	278
145°	417	444	523	636	686	262
155°	472	485	523	574	590	217
165°	509	516	523	543	550	144
175°	529	529	526	533	533	50
180°	529	529	529	529	529	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2
2.5°	178.2	178.2	179.4	179.9	181.1	181.7	182.8	183.9	187.4	187.9	189.1
5°	173.6	176.0	183.4	186.2	194.2	205.2	209.7	217.2	232.7	237.2	240.1
7.5°	166.7	171.9	190.2	194.8	214.9	243.5	255.6	271.6	296.2	308.3	318.0
10°	155.9	166.7	199.4	210.3	242.9	286.5	308.9	331.2	368.5	385.0	391.4
12.5°	143.8	161.6	209.2	224.0	271.0	334.6	361.6	386.2	428.6	451.0	454.4
15°	130.1	154.2	218.3	240.1	300.8	374.7	404.5	434.9	474.5	490.4	494.5
17.5°	118.0	148.4	226.9	249.8	323.7	410.8	441.2	466.4	498.5	509.4	512.2
20°	103.2	139.2	232.7	262.5	347.8	437.2	466.4	485.9	507.7	514.5	515.7
22.5°	92.2	129.5	236.1	267.0	363.9	453.2	477.9	493.3	508.2	510.5	511.1
25°	83.1	118.6	235.5	272.2	377.6	462.9	481.9	493.3	502.0	503.1	503.1
27.5°	74.5	106.6	233.2	273.3	387.9	465.2	480.2	488.2	492.2	494.5	494.5
30°	67.0	95.1	227.5	271.0	392.5	462.9	475.0	479.0	483.0	486.5	488.2
32.5°	61.3	84.2	218.9	266.4	393.1	457.2	465.8	468.1	473.9	481.9	484.7
35°	56.1	73.4	209.2	260.2	389.7	448.1	453.8	456.1	467.5	479.6	483.6
37.5°	51.0	65.3	196.5	249.2	384.4	437.2	441.2	445.3	462.9	477.3	481.9
40°	45.9	58.4	181.7	237.2	376.5	424.0	427.5	433.7	457.2	473.9	478.5
42.5°	41.9	52.7	165.6	224.6	366.2	409.1	414.3	423.5	450.4	468.1	473.3
45°	38.4	47.0	148.4	207.4	352.9	393.7	401.1	413.7	442.4	459.5	464.1
47.5°	34.9	43.0	130.7	189.7	338.7	378.2	387.9	402.2	431.5	448.1	452.1
50°	32.1	38.9	112.9	170.7	323.2	361.6	373.0	387.9	417.8	433.2	438.3
52.5°	29.8	35.5	96.3	151.9	305.4	344.4	357.5	373.0	401.1	416.0	419.5
55°	27.5	32.6	81.9	131.8	287.1	326.0	340.4	355.2	382.7	395.4	397.7
57.5°	26.4	30.4	69.9	112.9	267.6	305.4	321.4	335.2	361.0	370.7	373.0
60°	24.6	28.6	60.7	96.9	246.4	286.0	299.7	313.5	335.2	343.2	345.0
62.5°	22.9	27.5	53.9	81.4	224.6	263.0	276.7	289.4	307.7	313.5	315.7
65°	21.8	26.4	48.7	69.9	202.3	238.9	252.7	263.6	278.4	284.2	285.4
67.5°	20.7	25.2	44.7	60.1	179.9	214.9	225.1	235.5	246.9	252.7	253.2
70°	18.9	24.1	41.3	53.3	157.0	187.4	195.9	206.9	216.0	218.9	220.6
72.5°	17.8	22.4	38.9	48.2	133.5	161.0	169.0	175.4	183.4	186.2	186.2
75°	16.1	20.1	36.6	43.0	109.4	131.8	138.6	144.9	151.3	152.4	150.7
77.5°	14.3	17.8	31.5	36.1	85.4	104.3	110.0	113.4	118.6	119.7	120.3
80°	12.0	15.5	24.6	28.1	61.9	76.8	80.8	83.6	88.2	88.2	89.4
82.5°	9.1	12.0	17.8	20.1	41.9	52.7	56.1	57.9	60.7	60.7	60.7
85°	5.7	7.4	11.4	13.2	25.2	32.1	34.4	34.9	37.2	37.8	37.8
87.5°	2.9	4.0	7.4	8.0	13.2	16.7	16.7	17.8	17.8	17.2	16.7
90°	3.6	6.4	9.2	9.9	15.6	23.2	27.0	24.0	18.0	13.5	13.5
92.5°	14.2	38.4	62.5	68.6	96.4	133.5	152.0	133.2	95.7	67.5	64.8
95°	34.1	78.3	122.6	133.6	237.2	375.3	444.4	396.6	300.9	229.2	221.0
97.5°	58.9	98.0	137.0	146.7	319.5	549.9	665.0	634.8	574.3	529.0	513.5
100°	78.2	113.5	148.9	157.8	349.5	605.1	732.9	735.1	739.5	742.8	724.4
102.5°	94.5	127.5	160.5	168.8	363.3	622.5	752.1	790.7	867.7	925.4	909.6
105°	122.2	150.2	178.1	185.1	373.4	624.5	750.0	836.4	1009.1	1138.6	1130.2
107.5°	150.7	176.7	202.8	209.3	375.3	596.6	707.3	827.8	1068.8	1249.5	1251.6
110°	169.8	193.4	216.9	222.8	372.4	572.0	671.8	806.5	1075.9	1277.9	1286.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.7	211.1	233.4	239.1	372.6	550.5	639.5	777.3	1053.0	1259.8	1273.3
115°	217.0	237.7	258.4	263.6	376.0	525.9	600.8	733.6	999.2	1198.3	1217.1
117.5°	245.1	263.9	282.7	287.4	383.0	510.4	574.1	694.0	933.6	1113.4	1134.3
120°	261.4	279.1	296.8	301.3	388.6	505.2	563.5	673.0	892.0	1056.2	1076.5
122.5°	277.5	295.4	313.2	317.7	396.8	502.5	555.3	653.8	851.1	999.0	1019.0
125°	302.0	318.2	334.5	338.6	407.8	500.2	546.4	630.2	797.7	923.3	941.8
127.5°	321.8	338.2	354.7	358.8	418.9	498.9	539.0	610.9	754.7	862.6	878.1
130°	332.5	350.2	367.9	372.3	426.9	499.8	536.1	600.2	728.2	824.2	838.6
132.5°	343.5	361.2	378.9	383.3	433.4	500.2	533.6	590.9	705.5	791.5	804.4
135°	359.9	376.0	392.1	396.1	440.6	499.8	529.4	577.4	673.3	745.3	756.4
137.5°	376.6	392.6	408.4	412.5	451.2	502.8	528.6	569.2	650.3	711.2	720.3
140°	390.4	405.1	419.8	423.5	457.7	503.3	526.1	561.2	631.3	683.9	692.4
142.5°	401.1	414.7	428.3	431.7	463.2	505.1	526.1	556.9	618.5	664.7	672.0
145°	417.4	429.3	441.1	444.1	470.3	505.2	522.6	547.8	598.1	635.9	641.5
147.5°	433.8	445.3	456.8	459.7	480.7	508.6	522.6	542.5	582.1	611.8	616.4
150°	444.4	454.8	465.2	467.9	486.2	510.5	522.6	539.4	572.8	597.9	601.6
152.5°	455.4	463.3	471.2	473.2	489.7	511.6	522.6	536.9	565.4	586.9	589.7
155°	471.8	477.6	483.5	485.0	497.5	514.3	522.6	534.0	556.7	573.7	575.6
157.5°	483.9	489.6	495.2	496.7	505.3	516.8	522.6	531.4	549.1	562.4	563.6
160°	492.1	496.5	500.9	502.0	508.9	518.0	522.6	530.2	545.4	556.7	557.5
162.5°	500.2	503.5	506.8	507.7	512.6	519.3	522.6	529.0	541.8	551.3	552.0
165°	509.1	512.0	515.0	515.8	518.1	521.1	522.6	527.3	536.4	543.2	544.0
167.5°	517.3	518.7	520.2	520.5	522.4	524.9	526.1	529.1	535.1	539.6	540.0
170°	522.6	524.0	525.5	525.8	525.9	526.1	526.1	529.1	535.1	539.6	539.6
172.5°	525.5	525.8	526.1	526.1	526.1	526.1	526.1	528.5	533.2	536.8	536.6
175°	529.4	529.4	529.4	529.4	528.3	526.8	526.1	527.7	530.7	532.9	532.9
177.5°	529.4	529.4	529.4	529.4	528.5	527.4	526.8	528.0	530.4	532.2	531.9
180°	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4	529.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	178.2	178.2
2.5°	190.2	189.1
5°	244.7	245.8
7.5°	329.4	328.9
10°	409.7	414.8
12.5°	468.1	469.3
15°	503.7	506.0
17.5°	517.4	518.0
20°	518.0	516.8
22.5°	511.7	510.5
25°	504.3	503.7
27.5°	497.4	498.0
30°	494.5	496.2
32.5°	494.5	497.4
35°	495.7	498.5
37.5°	495.1	498.5
40°	492.7	496.8
42.5°	486.5	489.3
45°	476.7	480.2
47.5°	464.1	466.4
50°	448.1	450.4
52.5°	428.0	428.6
55°	404.0	406.2
57.5°	378.2	378.7
60°	349.5	351.2
62.5°	319.2	319.2
65°	287.1	288.2
67.5°	253.8	256.7
70°	220.0	220.6
72.5°	186.8	186.8
75°	152.4	153.0
77.5°	119.7	119.7
80°	88.8	89.4
82.5°	61.3	62.4
85°	38.4	38.4
87.5°	17.8	16.1
90°	13.5	13.5
92.5°	54.1	43.3
95°	188.5	156.0
97.5°	451.6	389.7
100°	650.7	577.0
102.5°	846.5	783.4
105°	1096.2	1062.3
107.5°	1259.8	1268.0
110°	1322.1	1357.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1327.7	1382.0
115°	1292.5	1367.8
117.5°	1217.8	1301.3
120°	1157.7	1238.8
122.5°	1099.1	1179.1
125°	1015.5	1089.3
127.5°	940.4	1002.6
130°	896.1	953.5
132.5°	855.8	907.3
135°	800.7	845.2
137.5°	756.7	793.0
140°	726.4	760.3
142.5°	701.2	730.5
145°	663.6	685.7
147.5°	634.7	653.0
150°	616.4	631.3
152.5°	600.9	612.2
155°	583.0	590.5
157.5°	568.9	574.1
160°	560.5	563.5
162.5°	554.9	557.7
165°	547.0	550.0
167.5°	541.2	542.5
170°	539.6	539.6
172.5°	535.5	534.3
175°	532.9	532.9
177.5°	530.7	529.4
180°	529.4	529.4



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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	0.37	1.08	1.48	2.20	3.74	13.50	14.22	14.62	15.33	16.88
	3H	1.06	1.70	2.18	2.83	4.39	15.32	15.96	16.44	17.08	18.64
	4H	1.35	1.97	2.49	3.09	4.65	15.95	16.56	17.08	17.68	19.24
	6H	1.60	2.16	2.74	3.29	4.86	16.36	16.92	17.50	18.04	19.62
	8H	1.66	2.20	2.81	3.34	4.91	16.47	17.00	17.61	18.14	19.71
	12H	1.67	2.18	2.82	3.32	4.91	16.52	17.03	17.67	18.16	19.76
4H	2H	7.54	8.15	8.68	9.27	10.84	13.76	14.37	14.90	15.50	17.06
	3H	9.10	9.61	10.24	10.75	12.33	15.78	16.29	16.93	17.44	19.02
	4H	9.18	9.65	10.33	10.79	12.39	16.53	17.00	17.68	18.14	19.73
	6H	9.19	9.59	10.34	10.75	12.34	17.05	17.45	18.20	18.61	20.20
	8H	9.16	9.54	10.32	10.69	12.29	17.20	17.58	18.35	18.73	20.33
	12H	9.11	9.45	10.28	10.61	12.22	17.28	17.62	18.45	18.78	20.39
8H	4H	10.61	10.98	11.76	12.13	13.74	16.58	16.95	17.73	18.11	19.71
	6H	10.84	11.15	12.02	12.35	13.95	17.19	17.50	18.36	18.69	20.29
	8H	10.86	11.13	12.04	12.30	13.92	17.40	17.67	18.58	18.84	20.46
	12H	10.82	11.06	12.00	12.23	13.88	17.53	17.77	18.71	18.93	20.59
12H	4H	10.74	11.08	11.91	12.24	13.85	16.52	16.87	17.70	18.03	19.64
	6H	11.09	11.37	12.28	12.54	14.16	17.17	17.44	18.35	18.61	20.24
	8H	11.16	11.40	12.34	12.56	14.22	17.38	17.62	18.57	18.79	20.45