

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: P937570

Luminaire Tested: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937570  
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-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

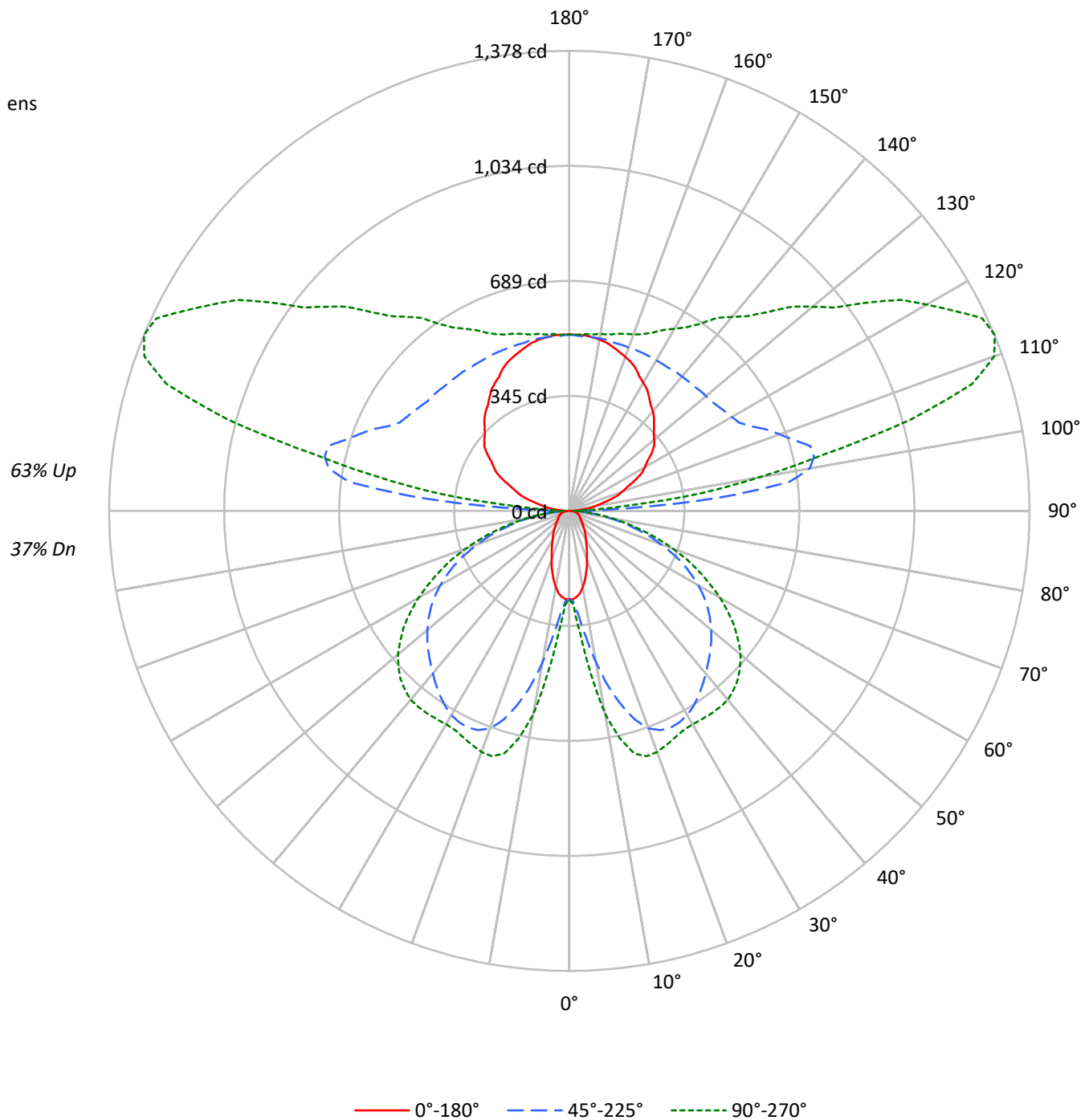
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5474.9 lumens  
Efficiency: N/A  
Efficacy: 111.3 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<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

TEST NUMBER: P937570  
CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P937570

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

**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°	2459	2459	2459
5°	2400	2839	3305
10°	2174	4136	5479
15°	1846	5400	6616
20°	1501	6253	6743
25°	1250	6539	6605
30°	1053	6575	6593
35°	930	6461	6763
40°	809	6314	6940
45°	731	6204	6967
50°	669	6105	6852
55°	639	5961	6548
60°	651	5692	6069
65°	675	5285	5410
70°	713	4600	4570
75°	784	3741	3567
80°	838	2585	2403
85°	704	1364	1230

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6967 cd/sqm



TEST NUMBER: P937570

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.3	0.6
10°-20°	151.9	2.8
20°-30°	265.7	4.9
30°-40°	342.0	6.2
40°-50°	382.1	7.0
50°-60°	365.9	6.7
60°-70°	290.0	5.3
70°-80°	170.5	3.1
80°-90°	49.4	0.9
90°-100°	257.4	4.7
100°-110°	676.7	12.4
110°-120°	701.7	12.8
120°-130°	562.8	10.3
130°-140°	441.6	8.1
140°-150°	339.0	6.2
150°-160°	244.1	4.5
160°-170°	149.4	2.7
170°-180°	50.5	0.9
0°-30°	451.9	8.3
0°-40°	793.9	14.5
0°-60°	1541.9	28.2
0°-90°	2051.8	37.5
90°-120°	1635.7	29.9
90°-150°	2979.1	54.4
90°-180°	3423.0	62.5
0°-180°	5474.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	265	265	265	265	265	
5°	258	277	312	353	366	24
15°	193	357	602	729	752	54
25°	124	405	716	748	749	57
35°	84	387	675	713	741	52
45°	57	308	596	683	714	44
55°	41	196	506	588	604	37
65°	32	104	376	423	429	32
75°	24	64	206	227	228	25
85°	8	20	51	56	57	9
90°	4	10	27	14	14	4
95°	34	133	443	229	156	38
105°	122	185	748	1136	1060	129
115°	216	263	599	1195	1364	214
125°	301	338	545	921	1087	267
135°	359	395	528	744	843	278
145°	416	443	521	634	684	261
155°	471	484	521	572	589	216
165°	508	514	521	542	549	143
175°	528	528	525	532	532	50
180°	528	528	528	528	528	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0	265.0
2.5°	265.0	265.0	266.7	267.5	269.2	270.1	271.8	273.5	278.6	279.5	281.2
5°	258.2	261.6	272.6	276.9	288.8	305.0	311.8	322.9	345.9	352.7	357.0
7.5°	247.9	255.6	282.9	289.7	319.5	362.1	380.0	403.8	440.5	458.4	472.9
10°	231.7	247.9	296.5	312.7	361.2	426.0	459.2	492.5	547.8	572.5	581.9
12.5°	213.9	240.3	311.0	333.1	403.0	497.6	537.6	574.2	637.3	670.5	675.6
15°	193.4	229.2	324.6	357.0	447.3	557.2	601.5	646.7	705.5	729.3	735.3
17.5°	175.5	220.7	337.4	371.5	481.4	610.9	656.0	693.5	741.2	757.4	761.7
20°	153.4	207.0	345.9	390.2	517.2	650.1	693.5	722.5	754.9	765.1	766.8
22.5°	137.2	192.6	351.0	397.0	541.0	673.9	710.6	733.6	755.7	759.1	760.0
25°	123.5	176.4	350.2	404.7	561.5	688.4	716.5	733.6	746.4	748.1	748.1
27.5°	110.8	158.5	346.8	406.4	576.8	691.8	714.0	725.9	731.9	735.3	735.3
30°	99.7	141.4	338.2	403.0	583.6	688.4	706.3	712.3	718.2	723.3	725.9
32.5°	91.2	125.2	325.5	396.2	584.5	679.9	692.7	696.1	704.6	716.5	720.8
35°	83.5	109.1	311.0	386.8	579.4	666.3	674.8	678.2	695.2	713.1	719.1
37.5°	75.8	97.1	292.2	370.6	571.7	650.1	656.0	662.0	688.4	709.7	716.5
40°	68.2	86.9	270.1	352.7	559.8	630.5	635.6	645.0	679.9	704.6	711.4
42.5°	62.2	78.4	246.2	334.0	544.4	608.3	616.0	629.6	669.7	696.1	703.8
45°	57.1	69.9	220.7	308.4	524.8	585.3	596.4	615.1	657.7	683.3	690.1
47.5°	52.0	63.9	194.3	282.0	503.5	562.3	576.8	598.1	641.6	666.3	672.2
50°	47.7	57.9	167.8	253.9	480.5	537.6	554.7	576.8	621.1	644.1	651.8
52.5°	44.3	52.8	143.1	225.8	454.1	512.1	531.6	554.7	596.4	618.6	623.7
55°	40.9	48.6	121.8	196.0	426.9	484.8	506.1	528.2	569.1	587.9	591.3
57.5°	39.2	45.2	103.9	167.8	397.9	454.1	478.0	498.4	536.8	551.2	554.7
60°	36.6	42.6	90.3	144.0	366.4	425.1	445.6	466.0	498.4	510.3	512.9
62.5°	34.1	40.9	80.1	121.0	334.0	391.1	411.5	430.3	457.5	466.0	469.5
65°	32.4	39.2	72.4	103.9	300.8	355.3	375.7	391.9	414.1	422.6	424.3
67.5°	30.7	37.5	66.5	89.5	267.5	319.5	334.8	350.2	367.2	375.7	376.6
70°	28.1	35.8	61.3	79.2	233.4	278.6	291.4	307.6	321.2	325.5	328.0
72.5°	26.4	33.2	57.9	71.6	198.5	239.4	251.3	260.7	272.6	276.9	276.9
75°	23.9	29.8	54.5	63.9	162.7	196.0	206.2	215.6	224.9	226.6	224.1
77.5°	21.3	26.4	46.9	53.7	126.9	155.1	163.6	168.7	176.4	178.1	178.9
80°	17.9	23.0	36.6	41.7	92.0	114.2	120.1	124.4	131.2	131.2	132.9
82.5°	13.6	17.9	26.4	29.8	62.2	78.4	83.5	86.1	90.3	90.3	90.3
85°	8.5	11.1	17.0	19.6	37.5	47.7	51.1	52.0	55.4	56.2	56.2
87.5°	4.3	6.0	11.1	11.9	19.6	24.7	24.7	26.4	26.4	25.6	24.7
90°	3.6	6.4	9.2	9.9	15.6	23.2	26.9	23.9	18.0	13.5	13.5
92.5°	14.1	38.3	62.4	68.4	96.2	133.2	151.7	132.9	95.4	67.3	64.7
95°	34.0	78.1	122.3	133.3	236.6	374.4	443.3	395.6	300.2	228.6	220.5
97.5°	58.8	97.7	136.7	146.4	318.7	548.5	663.4	633.2	572.9	527.6	512.2
100°	78.0	113.2	148.5	157.4	348.6	603.6	731.1	733.3	737.7	741.0	722.6
102.5°	94.2	127.2	160.1	168.4	362.4	620.9	750.3	788.7	865.5	923.1	907.4
105°	121.9	149.8	177.6	184.6	372.5	622.9	748.1	834.3	1006.6	1135.8	1127.4
107.5°	150.3	176.3	202.3	208.7	374.4	595.1	705.5	825.8	1066.1	1246.4	1248.4
110°	169.4	192.9	216.3	222.2	371.5	570.6	670.1	804.5	1073.2	1274.7	1283.5



TEST NUMBER: P937570

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	188.2	210.5	232.9	238.5	371.6	549.1	637.9	775.4	1050.3	1256.6	1270.2
115°	216.5	237.1	257.7	262.9	375.1	524.6	599.3	731.8	996.7	1195.4	1214.1
117.5°	244.5	263.3	282.0	286.7	382.0	509.2	572.7	692.2	931.3	1110.7	1131.5
120°	260.8	278.4	296.1	300.5	387.7	504.0	562.1	671.3	889.7	1053.6	1073.9
122.5°	276.8	294.6	312.4	316.9	395.8	501.2	553.9	652.2	848.9	996.5	1016.4
125°	301.3	317.5	333.6	337.7	406.8	498.9	545.0	628.6	795.7	921.0	939.4
127.5°	321.0	337.4	353.8	357.9	417.8	497.7	537.6	609.4	752.8	860.4	875.9
130°	331.7	349.3	367.0	371.4	425.8	498.5	534.8	598.7	726.4	822.2	836.5
132.5°	342.7	360.3	377.9	382.4	432.3	498.9	532.2	589.4	703.8	789.5	802.4
135°	359.0	375.1	391.2	395.2	439.5	498.5	528.1	576.0	671.6	743.5	754.5
137.5°	375.6	391.6	407.4	411.4	450.0	501.6	527.3	567.8	648.7	709.5	718.5
140°	389.4	404.1	418.8	422.4	456.6	502.1	524.8	559.8	629.7	682.2	690.6
142.5°	400.1	413.6	427.2	430.6	462.0	503.9	524.8	555.5	616.9	663.0	670.4
145°	416.4	428.2	440.0	443.0	469.1	504.0	521.3	546.5	596.7	634.3	639.9
147.5°	432.7	444.2	455.6	458.5	479.5	507.4	521.3	541.1	580.6	610.3	614.9
150°	443.3	453.7	464.1	466.7	485.0	509.2	521.3	538.0	571.4	596.4	600.1
152.5°	454.3	462.1	470.0	472.0	488.5	510.3	521.3	535.6	564.0	585.4	588.2
155°	470.6	476.4	482.3	483.8	496.3	513.0	521.3	532.7	555.3	572.3	574.2
157.5°	482.7	488.4	494.0	495.4	504.0	515.5	521.3	530.1	547.8	561.0	562.2
160°	490.8	495.3	499.6	500.7	507.6	516.7	521.3	528.9	544.0	555.3	556.1
162.5°	498.9	502.3	505.6	506.4	511.4	518.0	521.3	527.7	540.4	550.0	550.6
165°	507.8	510.8	513.8	514.5	516.8	519.8	521.3	525.9	535.1	541.9	542.6
167.5°	516.0	517.4	518.9	519.2	521.1	523.6	524.8	527.8	533.8	538.3	538.6
170°	521.3	522.7	524.2	524.5	524.6	524.7	524.8	527.8	533.8	538.3	538.3
172.5°	524.2	524.5	524.7	524.8	524.8	524.8	524.8	527.2	531.9	535.5	535.2
175°	528.1	528.1	528.1	528.1	527.0	525.5	524.8	526.4	529.3	531.6	531.6
177.5°	528.1	528.1	528.1	528.1	527.2	526.1	525.5	526.7	529.1	530.9	530.5
180°	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1	528.1



TEST NUMBER: P937570

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	265.0	265.0
2.5°	282.9	281.2
5°	363.8	365.5
7.5°	489.9	489.0
10°	609.2	616.8
12.5°	696.1	697.8
15°	748.9	752.3
17.5°	769.4	770.2
20°	770.2	768.5
22.5°	760.8	759.1
25°	749.8	748.9
27.5°	739.5	740.4
30°	735.3	737.8
32.5°	735.3	739.5
35°	737.0	741.2
37.5°	736.1	741.2
40°	732.7	738.7
42.5°	723.3	727.6
45°	708.9	714.0
47.5°	690.1	693.5
50°	666.3	669.7
52.5°	636.4	637.3
55°	600.7	604.1
57.5°	562.3	563.2
60°	519.7	522.3
62.5°	474.6	474.6
65°	426.9	428.6
67.5°	377.4	381.7
70°	327.2	328.0
72.5°	277.8	277.8
75°	226.6	227.5
77.5°	178.1	178.1
80°	132.1	132.9
82.5°	91.2	92.9
85°	57.1	57.1
87.5°	26.4	23.9
90°	13.5	13.5
92.5°	53.9	43.2
95°	188.0	155.6
97.5°	450.5	388.8
100°	649.1	575.5
102.5°	844.4	781.5
105°	1093.5	1059.6
107.5°	1256.6	1264.8
110°	1318.8	1354.1





TEST NUMBER: P937570

CATALOG NUMBER: SQ4-FB-100U-075D-935-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1324.3	1378.5
115°	1289.2	1364.4
117.5°	1214.8	1298.1
120°	1154.8	1235.7
122.5°	1096.4	1176.2
125°	1012.9	1086.6
127.5°	938.1	1000.1
130°	893.8	951.2
132.5°	853.7	905.1
135°	798.8	843.1
137.5°	754.8	791.0
140°	724.5	758.4
142.5°	699.5	728.6
145°	661.9	684.0
147.5°	633.1	651.4
150°	614.9	629.7
152.5°	599.4	610.6
155°	581.6	589.0
157.5°	567.5	572.7
160°	559.1	562.1
162.5°	553.5	556.4
165°	545.6	548.6
167.5°	539.8	541.1
170°	538.3	538.3
172.5°	534.1	533.0
175°	531.6	531.6
177.5°	529.3	528.1
180°	528.1	528.1



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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	2.85	3.63	3.90	4.69	6.13	15.99	16.77	17.04	17.83	19.27
	3H	3.55	4.25	4.61	5.32	6.78	17.81	18.51	18.87	19.58	21.03
	4H	3.84	4.51	4.92	5.58	7.04	18.44	19.11	19.51	20.18	21.64
	6H	4.09	4.71	5.17	5.78	7.26	18.85	19.47	19.93	20.54	22.02
	8H	4.16	4.74	5.24	5.83	7.30	18.96	19.55	20.05	20.64	22.11
	12H	4.17	4.73	5.26	5.81	7.31	19.02	19.58	20.11	20.67	22.16
4H	2H	10.03	10.70	11.11	11.77	13.23	16.25	16.92	17.33	17.99	19.46
	3H	11.59	12.15	12.68	13.25	14.72	18.28	18.84	19.36	19.94	21.41
	4H	11.68	12.20	12.78	13.29	14.78	19.03	19.55	20.12	20.63	22.13
	6H	11.69	12.13	12.79	13.24	14.73	19.55	20.00	20.65	21.11	22.60
	8H	11.67	12.08	12.77	13.18	14.69	19.71	20.12	20.81	21.22	22.73
	12H	11.62	11.99	12.74	13.11	14.62	19.79	20.16	20.91	21.28	22.79
8H	4H	13.11	13.53	14.21	14.63	16.13	19.09	19.50	20.19	20.60	22.11
	6H	13.35	13.69	14.47	14.84	16.34	19.70	20.04	20.82	21.19	22.69
	8H	13.37	13.67	14.50	14.79	16.32	19.91	20.21	21.04	21.34	22.86
	12H	13.33	13.60	14.47	14.72	16.28	20.04	20.31	21.18	21.43	22.99
12H	4H	13.25	13.62	14.37	14.74	16.25	19.03	19.41	20.15	20.53	22.04
	6H	13.61	13.91	14.73	15.03	16.55	19.68	19.98	20.81	21.11	22.63
	8H	13.67	13.93	14.80	15.06	16.62	19.90	20.16	21.03	21.29	22.85