

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: P937770

Luminaire Tested: SQ4-FB-100U-125D-935-1D-UNV-STD-W-4

Issue Date: 12/17/2024

**Test Information**

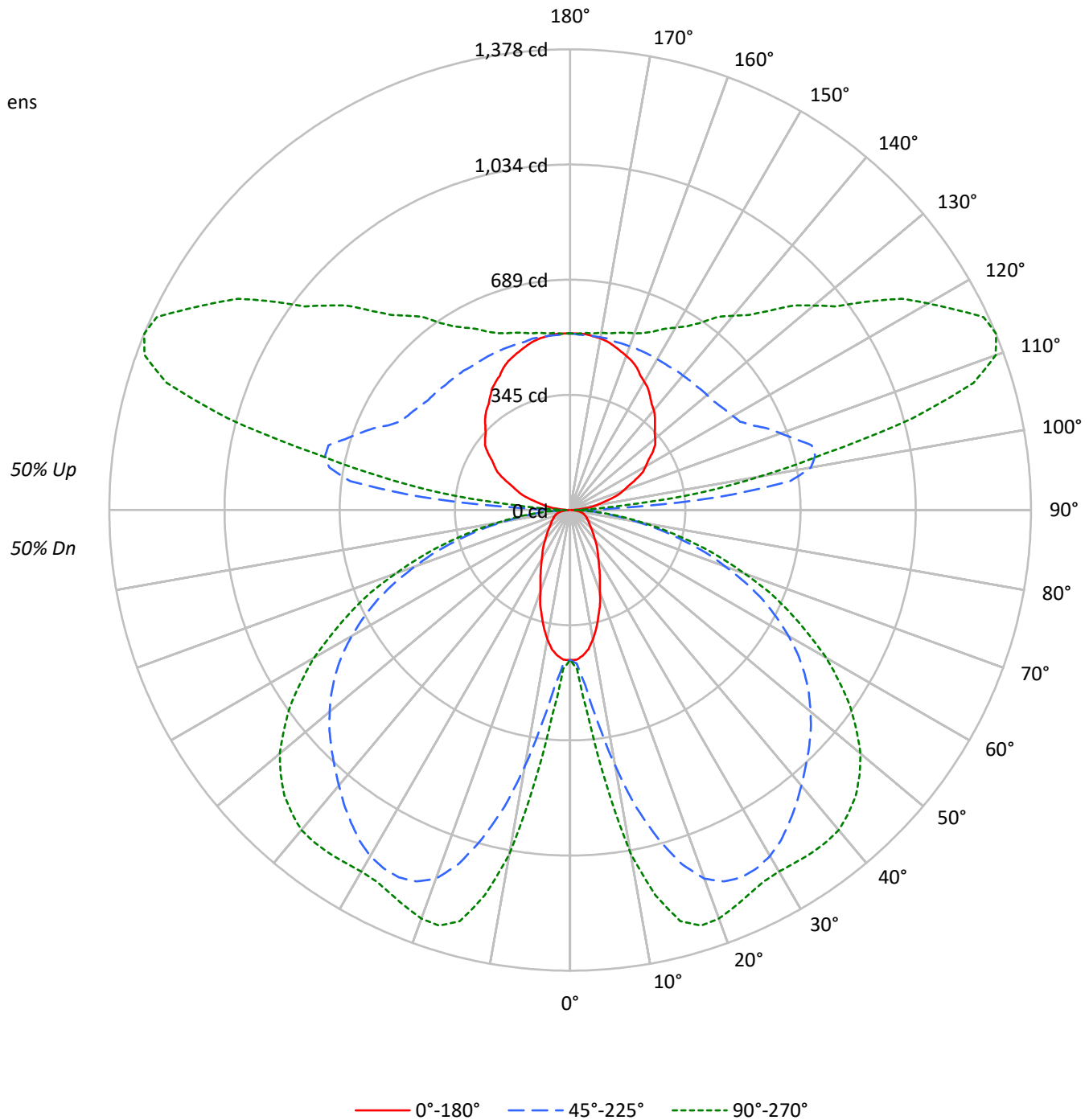
Test Method: LM-79-2019  
Report Number: P937770  
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-100U-125D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6893.5 lumens  
Efficiency: N/A  
Efficacy: 100.2 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: General Diffuse  
  
Input Watts (W): 68.8  
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47	47	47	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	38	38	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	32	32	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	27	27	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	23	23	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	20	20	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	17	17	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	15	15	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	14	14	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	12	12	12	10

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

	0°	45°	90°
0°	4160	4160	4160
5°	4060	4805	5592
10°	3678	6998	9271
15°	3123	9137	11195
20°	2539	10581	11409
25°	2116	11065	11178
30°	1782	11125	11156
35°	1573	10932	11444
40°	1369	10683	11743
45°	1237	10498	11789
50°	1133	10330	11594
55°	1081	10086	11079
60°	1103	9631	10269
65°	1142	8944	9153
70°	1206	7785	7733
75°	1325	6331	6034
80°	1413	4375	4066
85°	1192	2309	2081

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11789 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.0	0.8
10°-20°	257.0	3.7
20°-30°	449.6	6.5
30°-40°	578.8	8.4
40°-50°	646.5	9.4
50°-60°	619.2	9.0
60°-70°	490.7	7.1
70°-80°	288.5	4.2
80°-90°	82.2	1.2
90°-100°	257.4	3.7
100°-110°	676.7	9.8
110°-120°	701.7	10.2
120°-130°	562.8	8.2
130°-140°	441.6	6.4
140°-150°	339.0	4.9
150°-160°	244.1	3.5
160°-170°	149.4	2.2
170°-180°	50.5	0.7
0°-30°	764.7	11.1
0°-40°	1343.4	19.5
0°-60°	2609.1	37.8
0°-90°	3470.5	50.3
90°-120°	1635.7	23.7
90°-150°	2979.1	43.2
90°-180°	3423.0	49.7
0°-180°	6893.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	448	448	448	448	448	
5°	437	468	528	597	618	40
15°	327	604	1018	1234	1273	91
25°	209	685	1212	1266	1267	96
35°	141	654	1142	1207	1254	88
45°	97	522	1009	1156	1208	75
55°	69	332	856	995	1022	63
65°	55	176	636	715	725	54
75°	40	108	349	384	385	42
85°	14	33	86	95	97	15
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°	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3	448.3
2.5°	448.3	448.3	451.2	452.7	455.6	457.0	459.9	462.8	471.4	472.9	475.8
5°	436.8	442.6	461.4	468.5	488.7	516.1	527.6	546.4	585.3	596.8	604.1
7.5°	419.5	432.5	478.7	490.2	540.6	612.7	643.0	683.4	745.3	775.6	800.1
10°	392.1	419.5	501.7	529.1	611.2	720.8	777.0	833.3	927.0	968.8	984.7
12.5°	361.8	406.6	526.2	563.7	681.9	841.9	909.7	971.7	1078.4	1134.6	1143.2
15°	327.3	387.8	549.3	604.1	756.8	942.8	1017.8	1094.2	1193.7	1234.0	1244.2
17.5°	297.0	373.4	570.9	628.6	814.5	1033.6	1110.1	1173.5	1254.2	1281.7	1288.8
20°	259.5	350.3	585.3	660.3	875.1	1100.0	1173.5	1222.5	1277.3	1294.6	1297.5
22.5°	232.1	325.8	593.9	671.8	915.5	1140.3	1202.3	1241.3	1278.8	1284.6	1285.9
25°	209.1	298.5	592.6	684.8	950.1	1164.9	1212.5	1241.3	1262.9	1265.8	1265.8
27.5°	187.4	268.1	586.8	687.6	976.0	1170.6	1208.1	1228.3	1238.4	1244.2	1244.2
30°	168.7	239.3	572.4	681.9	987.6	1164.9	1195.1	1205.2	1215.3	1224.0	1228.3
32.5°	154.3	211.9	550.7	670.4	989.0	1150.5	1172.1	1177.8	1192.3	1212.5	1219.6
35°	141.3	184.5	526.2	654.5	980.3	1127.4	1141.8	1147.6	1176.4	1206.7	1216.7
37.5°	128.3	164.4	494.5	627.2	967.4	1100.0	1110.1	1120.2	1164.9	1200.9	1212.5
40°	115.4	147.1	457.0	596.8	947.2	1066.8	1075.5	1091.3	1150.5	1192.3	1203.8
42.5°	105.2	132.7	416.6	565.1	921.2	1029.4	1042.3	1065.4	1133.2	1177.8	1190.8
45°	96.6	118.3	373.4	521.8	888.0	990.4	1009.2	1040.9	1113.0	1156.2	1167.8
47.5°	87.9	108.1	328.7	477.2	852.0	951.5	976.0	1012.1	1085.5	1127.4	1137.5
50°	80.8	98.1	284.0	429.6	813.1	909.7	938.6	976.0	1050.9	1089.9	1102.9
52.5°	75.0	89.4	242.2	382.0	768.4	866.4	899.6	938.6	1009.2	1046.7	1055.3
55°	69.2	82.1	206.2	331.6	722.2	820.3	856.3	893.8	963.0	994.7	1000.5
57.5°	66.3	76.4	175.9	284.0	673.3	768.4	808.8	843.4	908.2	932.8	938.6
60°	62.0	72.1	152.8	243.7	619.9	719.4	754.0	788.6	843.4	863.6	867.8
62.5°	57.7	69.2	135.6	204.7	565.1	661.7	696.3	728.0	774.2	788.6	794.3
65°	54.8	66.3	122.5	175.9	508.9	601.2	635.8	663.2	700.7	715.1	718.0
67.5°	51.9	63.5	112.5	151.4	452.7	540.6	566.6	592.6	621.4	635.8	637.2
70°	47.5	60.6	103.8	134.1	395.0	471.4	493.1	520.4	543.5	550.7	555.1
72.5°	44.7	56.2	98.1	121.1	335.9	405.1	425.3	441.2	461.4	468.5	468.5
75°	40.4	50.4	92.3	108.1	275.4	331.6	348.9	364.7	380.6	383.5	379.1
77.5°	36.0	44.7	79.3	90.8	214.8	262.4	276.8	285.4	298.5	301.3	302.7
80°	30.2	38.9	62.0	70.6	155.7	193.1	203.3	210.4	222.0	222.0	224.9
82.5°	23.1	30.2	44.7	50.4	105.2	132.7	141.3	145.6	152.8	152.8	152.8
85°	14.4	18.7	28.8	33.1	63.5	80.8	86.5	87.9	93.7	95.2	95.2
87.5°	7.2	10.1	18.7	20.2	33.1	41.8	41.8	44.7	44.7	43.3	41.8
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



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**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



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	448.3	448.3
2.5°	478.7	475.8
5°	615.6	618.5
7.5°	829.0	827.5
10°	1030.7	1043.8
12.5°	1177.8	1180.7
15°	1267.3	1273.0
17.5°	1301.9	1303.3
20°	1303.3	1300.4
22.5°	1287.4	1284.6
25°	1268.6	1267.3
27.5°	1251.3	1252.8
30°	1244.2	1248.5
32.5°	1244.2	1251.3
35°	1247.1	1254.2
37.5°	1245.6	1254.2
40°	1239.8	1249.9
42.5°	1224.0	1231.1
45°	1199.4	1208.1
47.5°	1167.8	1173.5
50°	1127.4	1133.2
52.5°	1076.9	1078.4
55°	1016.4	1022.1
57.5°	951.5	953.0
60°	879.4	883.8
62.5°	803.0	803.0
65°	722.2	725.1
67.5°	638.7	645.9
70°	553.6	555.1
72.5°	470.0	470.0
75°	383.5	384.9
77.5°	301.3	301.3
80°	223.5	224.9
82.5°	154.3	157.1
85°	96.6	96.6
87.5°	44.7	40.4
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





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**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	5.98	6.88	6.92	7.85	9.11	19.12	20.02	20.06	20.99	22.25
	3H	6.69	7.50	7.64	8.48	9.76	20.94	21.75	21.90	22.73	24.02
	4H	6.99	7.76	7.96	8.74	10.03	21.58	22.35	22.55	23.33	24.62
	6H	7.24	7.95	8.22	8.94	10.24	22.00	22.71	22.98	23.70	25.00
	8H	7.31	7.99	8.30	8.99	10.29	22.12	22.79	23.10	23.80	25.10
	12H	7.33	7.97	8.32	8.97	10.30	22.18	22.82	23.17	23.82	25.15
4H	2H	13.17	13.94	14.15	14.92	16.22	19.40	20.17	20.37	21.15	22.44
	3H	14.75	15.39	15.73	16.40	17.71	21.43	22.08	22.42	23.09	24.39
	4H	14.84	15.43	15.84	16.44	17.77	22.19	22.78	23.19	23.78	25.11
	6H	14.86	15.37	15.86	16.39	17.72	22.72	23.23	23.73	24.25	25.58
	8H	14.83	15.31	15.84	16.33	17.68	22.87	23.35	23.88	24.37	25.72
	12H	14.79	15.22	15.82	16.26	17.61	22.96	23.39	23.99	24.43	25.78
8H	4H	16.28	16.76	17.29	17.78	19.12	22.25	22.73	23.26	23.75	25.09
	6H	16.53	16.92	17.56	17.98	19.32	22.87	23.27	23.91	24.33	25.67
	8H	16.54	16.89	17.59	17.94	19.30	23.09	23.43	24.13	24.48	25.84
	12H	16.51	16.82	17.56	17.86	19.27	23.22	23.53	24.27	24.57	25.98
12H	4H	16.42	16.85	17.45	17.89	19.24	22.21	22.64	23.24	23.68	25.03
	6H	16.78	17.13	17.82	18.18	19.54	22.86	23.21	23.90	24.25	25.61
	8H	16.85	17.16	17.90	18.20	19.60	23.08	23.39	24.13	24.43	25.83