

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: P937722

Luminaire Tested: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937722
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-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

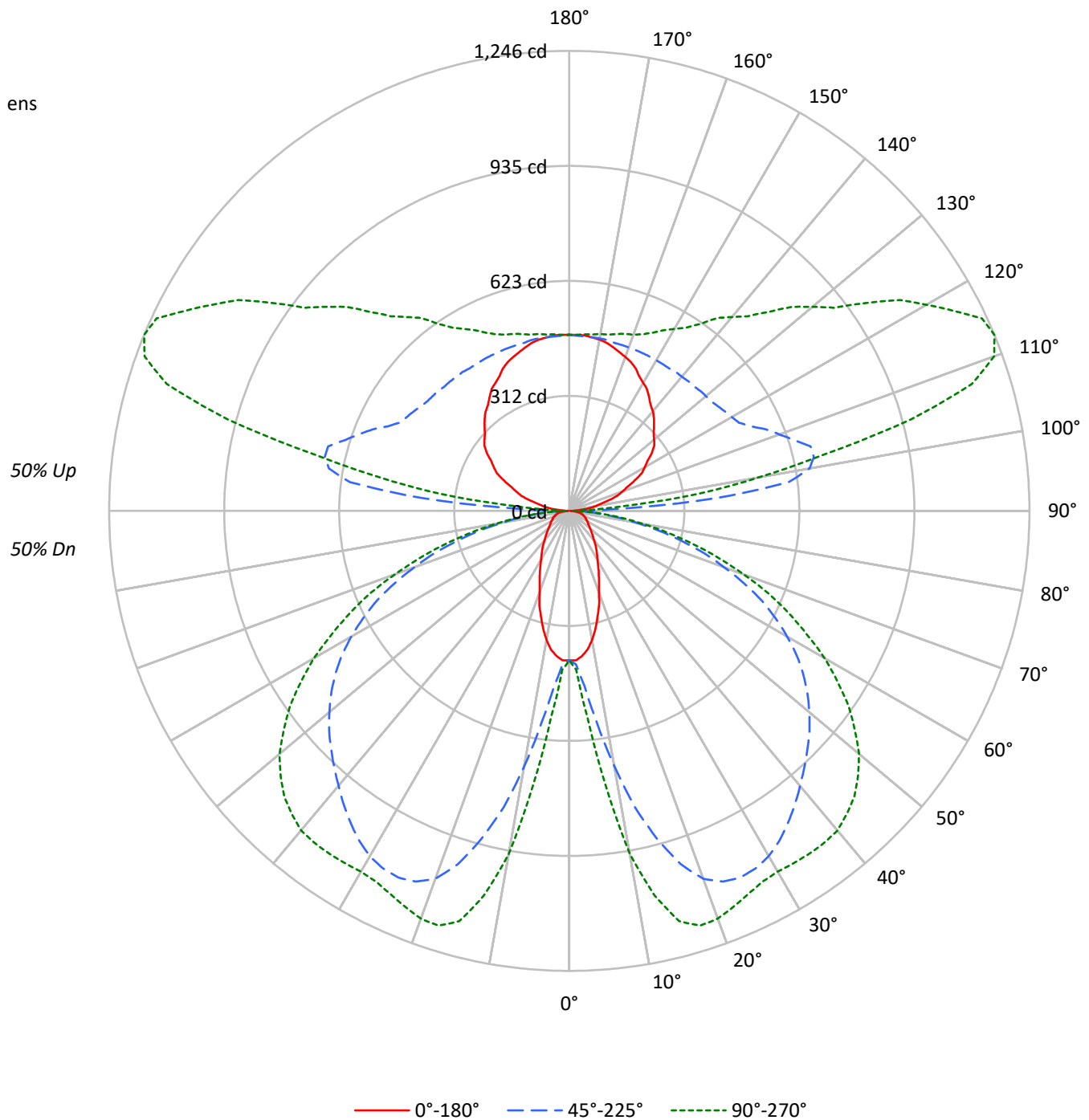
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6230.1 lumens
Efficiency: N/A
Efficacy: 90.6 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 (Ain): 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: P937722
CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P937722

CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-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	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	49	48	47	41
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38	42	40	38	34
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32	37	34	32	28
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27	33	30	27	23
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23	29	26	23	20
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20	26	23	20	17
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17	24	20	17	15
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15	22	18	15	13
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14	20	16	14	11
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3760	3760	3760
5°	3669	4343	5054
10°	3325	6325	8379
15°	2823	8258	10118
20°	2295	9563	10312
25°	1913	10000	10102
30°	1611	10055	10083
35°	1422	9880	10343
40°	1237	9655	10612
45°	1118	9488	10655
50°	1023	9335	10478
55°	976	9116	10014
60°	998	8704	9280
65°	1032	8083	8271
70°	1092	7035	6990
75°	1197	5721	5454
80°	1278	3953	3676
85°	1076	2087	1881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10655 cd/sqm



TEST NUMBER: P937722

CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	0.8
10°-20°	232.3	3.7
20°-30°	406.3	6.5
30°-40°	523.1	8.4
40°-50°	584.3	9.4
50°-60°	559.6	9.0
60°-70°	443.5	7.1
70°-80°	260.8	4.2
80°-90°	74.3	1.2
90°-100°	232.6	3.7
100°-110°	611.6	9.8
110°-120°	634.1	10.2
120°-130°	508.6	8.2
130°-140°	399.1	6.4
140°-150°	306.3	4.9
150°-160°	220.6	3.5
160°-170°	135.0	2.2
170°-180°	45.6	0.7
0°-30°	691.1	11.1
0°-40°	1214.1	19.5
0°-60°	2358.0	37.8
0°-90°	3136.5	50.3
90°-120°	1478.3	23.7
90°-150°	2692.4	43.2
90°-180°	3094.0	49.7
0°-180°	6230.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	395	423	477	539	559	36
15°	296	546	920	1115	1150	82
25°	189	619	1096	1144	1145	87
35°	128	592	1032	1091	1134	80
45°	87	472	912	1045	1092	68
55°	62	300	774	899	924	57
65°	50	159	575	646	655	49
75°	36	98	315	347	348	38
85°	13	30	78	86	87	14
90°	3	9	24	12	12	4
95°	31	120	401	207	141	34
105°	110	167	676	1026	958	117
115°	196	238	542	1080	1233	193
125°	272	305	493	832	982	242
135°	324	357	477	672	762	251
145°	376	400	471	573	618	236
155°	425	437	471	517	532	195
165°	459	465	471	490	496	130
175°	477	477	474	480	480	45
180°	477	477	477	477	477	



TEST NUMBER: P937722

CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2
2.5°	405.2	405.2	407.8	409.1	411.7	413.0	415.6	418.3	426.0	427.4	430.0
5°	394.8	400.0	417.0	423.4	441.7	466.5	476.9	493.8	529.0	539.4	545.9
7.5°	379.1	390.9	432.6	443.0	488.6	553.7	581.1	617.6	673.6	700.9	723.1
10°	354.4	379.1	453.4	478.2	552.4	651.4	702.2	753.1	837.8	875.6	889.9
12.5°	327.0	367.4	475.6	509.4	616.3	760.9	822.1	878.2	974.6	1025.4	1033.2
15°	295.8	350.5	496.4	545.9	684.0	852.1	919.8	988.9	1078.8	1115.3	1124.4
17.5°	268.4	337.5	516.0	568.1	736.1	934.2	1003.2	1060.6	1133.5	1158.3	1164.8
20°	234.5	316.6	529.0	596.8	790.9	994.1	1060.6	1104.9	1154.4	1170.0	1172.6
22.5°	209.7	294.4	536.8	607.1	827.4	1030.6	1086.6	1121.8	1155.7	1160.9	1162.2
25°	189.0	269.7	535.5	618.8	858.6	1052.7	1095.8	1121.8	1141.4	1144.0	1144.0
27.5°	169.4	242.3	530.3	621.5	882.0	1058.0	1091.9	1110.1	1119.2	1124.4	1124.4
30°	152.5	216.3	517.3	616.3	892.5	1052.7	1080.1	1089.2	1098.3	1106.2	1110.1
32.5°	139.4	191.5	497.7	605.8	893.8	1039.7	1059.3	1064.4	1077.5	1095.8	1102.3
35°	127.7	166.8	475.6	591.5	886.0	1018.9	1031.9	1037.1	1063.1	1090.6	1099.6
37.5°	116.0	148.5	446.9	566.8	874.3	994.1	1003.2	1012.4	1052.7	1085.3	1095.8
40°	104.3	132.9	413.0	539.4	856.0	964.1	972.0	986.3	1039.7	1077.5	1087.9
42.5°	95.1	119.9	376.5	510.7	832.5	930.3	942.0	962.9	1024.1	1064.4	1076.2
45°	87.3	106.9	337.5	471.6	802.6	895.1	912.1	940.7	1005.9	1045.0	1055.4
47.5°	79.5	97.7	297.1	431.3	770.0	859.9	882.0	914.7	981.1	1018.9	1028.0
50°	73.0	88.6	256.6	388.2	734.8	822.1	848.2	882.0	949.8	985.0	996.8
52.5°	67.8	80.8	218.9	345.3	694.5	783.0	813.0	848.2	912.1	945.9	953.7
55°	62.5	74.2	186.3	299.7	652.7	741.4	773.9	807.8	870.3	899.0	904.2
57.5°	59.9	69.1	158.9	256.6	608.5	694.5	731.0	762.2	820.8	843.0	848.2
60°	56.1	65.1	138.1	220.2	560.3	650.2	681.4	712.7	762.2	780.5	784.3
62.5°	52.1	62.5	122.5	185.0	510.7	598.1	629.3	658.0	699.7	712.7	717.9
65°	49.5	59.9	110.7	158.9	459.9	543.3	574.6	599.4	633.2	646.3	648.9
67.5°	46.9	57.4	101.6	136.8	409.1	488.6	512.1	535.5	561.6	574.6	575.9
70°	43.0	54.7	93.8	121.2	357.0	426.0	445.6	470.3	491.2	497.7	501.7
72.5°	40.4	50.8	88.6	109.4	303.6	366.1	384.4	398.7	417.0	423.4	423.4
75°	36.5	45.6	83.4	97.7	248.9	299.7	315.3	329.6	344.0	346.6	342.7
77.5°	32.6	40.4	71.7	82.1	194.1	237.2	250.2	258.0	269.7	272.3	273.6
80°	27.3	35.2	56.1	63.8	140.7	174.6	183.7	190.2	200.7	200.7	203.3
82.5°	20.9	27.3	40.4	45.6	95.1	119.9	127.7	131.6	138.1	138.1	138.1
85°	13.0	16.9	26.0	30.0	57.4	73.0	78.2	79.5	84.7	86.0	86.0
87.5°	6.5	9.1	16.9	18.2	30.0	37.8	37.8	40.4	40.4	39.1	37.8
90°	3.2	5.8	8.3	8.9	14.1	20.9	24.3	21.6	16.2	12.2	12.2
92.5°	12.8	34.6	56.4	61.8	86.9	120.4	137.1	120.1	86.2	60.8	58.4
95°	30.7	70.6	110.5	120.4	213.8	338.3	400.6	357.5	271.3	206.6	199.3
97.5°	53.1	88.3	123.5	132.3	288.1	495.7	599.5	572.3	517.7	476.9	462.9
100°	70.5	102.3	134.2	142.2	315.1	545.5	660.7	662.7	666.7	669.7	653.0
102.5°	85.2	115.0	144.7	152.2	327.5	561.2	678.1	712.8	782.2	834.3	820.0
105°	110.2	135.4	160.5	166.9	336.6	562.9	676.1	754.0	909.7	1026.5	1018.9
107.5°	135.8	159.3	182.8	188.6	338.3	537.8	637.6	746.3	963.5	1126.4	1128.3
110°	153.1	174.3	195.5	200.8	335.7	515.7	605.6	727.0	969.9	1152.0	1160.0



TEST NUMBER: P937722

CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	170.1	190.3	210.4	215.5	335.9	496.3	576.5	700.8	949.3	1135.7	1147.9
115°	195.7	214.3	232.9	237.6	339.0	474.1	541.6	661.4	900.7	1080.3	1097.2
117.5°	221.0	237.9	254.9	259.1	345.3	460.2	517.6	625.6	841.7	1003.8	1022.6
120°	235.7	251.6	267.6	271.6	350.4	455.5	508.0	606.7	804.1	952.2	970.5
122.5°	250.2	266.3	282.4	286.4	357.7	453.0	500.6	589.4	767.2	900.6	918.6
125°	272.3	286.9	301.5	305.2	367.7	450.9	492.6	568.1	719.1	832.4	849.0
127.5°	290.1	304.9	319.8	323.5	377.6	449.8	485.9	550.7	680.4	777.6	791.6
130°	299.8	315.7	331.6	335.6	384.8	450.5	483.3	541.1	656.5	743.1	756.0
132.5°	309.7	325.6	341.6	345.6	390.7	450.9	481.0	532.7	636.0	713.6	725.2
135°	324.5	339.0	353.5	357.1	397.2	450.5	477.2	520.5	607.0	671.9	681.9
137.5°	339.5	353.9	368.2	371.8	406.7	453.3	476.6	513.1	586.3	641.2	649.3
140°	352.0	365.2	378.5	381.8	412.6	453.8	474.3	505.9	569.1	616.5	624.2
142.5°	361.6	373.8	386.1	389.2	417.6	455.4	474.3	502.0	557.6	599.2	605.8
145°	376.3	387.0	397.6	400.3	424.0	455.5	471.2	493.9	539.2	573.3	578.3
147.5°	391.1	401.5	411.8	414.4	433.4	458.5	471.2	489.0	524.8	551.6	555.7
150°	400.6	410.0	419.4	421.8	438.3	460.2	471.2	486.3	516.4	539.0	542.3
152.5°	410.6	417.6	424.8	426.6	441.4	461.2	471.2	484.0	509.7	529.1	531.6
155°	425.3	430.6	435.9	437.2	448.5	463.6	471.2	481.4	501.9	517.2	518.9
157.5°	436.2	441.4	446.4	447.8	455.5	465.9	471.2	479.1	495.0	507.0	508.1
160°	443.6	447.6	451.5	452.5	458.8	467.0	471.2	478.0	491.6	501.9	502.6
162.5°	450.9	453.9	456.9	457.7	462.2	468.2	471.2	476.9	488.4	497.0	497.7
165°	458.9	461.6	464.3	465.0	467.1	469.8	471.2	475.3	483.6	489.7	490.4
167.5°	466.3	467.6	468.9	469.2	470.9	473.2	474.3	477.0	482.4	486.5	486.8
170°	471.2	472.4	473.7	474.0	474.1	474.2	474.3	477.0	482.4	486.5	486.5
172.5°	473.7	474.0	474.2	474.3	474.3	474.3	474.3	476.5	480.7	483.9	483.7
175°	477.2	477.2	477.2	477.2	476.2	474.9	474.3	475.7	478.4	480.4	480.4
177.5°	477.2	477.2	477.2	477.2	476.5	475.5	474.9	476.0	478.2	479.8	479.5
180°	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2



TEST NUMBER: P937722

CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	405.2	405.2
2.5°	432.6	430.0
5°	556.3	558.9
7.5°	749.2	747.9
10°	931.5	943.3
12.5°	1064.4	1067.1
15°	1145.3	1150.5
17.5°	1176.6	1177.9
20°	1177.9	1175.3
22.5°	1163.5	1160.9
25°	1146.5	1145.3
27.5°	1130.9	1132.2
30°	1124.4	1128.4
32.5°	1124.4	1130.9
35°	1127.0	1133.5
37.5°	1125.7	1133.5
40°	1120.5	1129.6
42.5°	1106.2	1112.6
45°	1084.0	1091.9
47.5°	1055.4	1060.6
50°	1018.9	1024.1
52.5°	973.3	974.6
55°	918.5	923.8
57.5°	859.9	861.2
60°	794.8	798.7
62.5°	725.7	725.7
65°	652.7	655.3
67.5°	577.2	583.7
70°	500.3	501.7
72.5°	424.7	424.7
75°	346.6	347.9
77.5°	272.3	272.3
80°	202.0	203.3
82.5°	139.4	142.0
85°	87.3	87.3
87.5°	40.4	36.5
90°	12.2	12.2
92.5°	48.7	39.0
95°	169.9	140.6
97.5°	407.1	351.4
100°	586.6	520.1
102.5°	763.1	706.2
105°	988.2	957.6
107.5°	1135.7	1143.1
110°	1191.9	1223.8



TEST NUMBER: P937722

CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1196.9	1245.9
115°	1165.2	1233.1
117.5°	1097.9	1173.2
120°	1043.7	1116.8
122.5°	990.8	1063.0
125°	915.5	982.0
127.5°	847.8	903.8
130°	807.8	859.6
132.5°	771.5	818.0
135°	721.9	761.9
137.5°	682.1	714.9
140°	654.8	685.4
142.5°	632.2	658.5
145°	598.2	618.2
147.5°	572.2	588.7
150°	555.7	569.1
152.5°	541.7	551.9
155°	525.6	532.3
157.5°	512.9	517.6
160°	505.3	508.0
162.5°	500.3	502.8
165°	493.1	495.8
167.5°	487.9	489.0
170°	486.5	486.5
172.5°	482.7	481.7
175°	480.4	480.4
177.5°	478.4	477.2
180°	477.2	477.2



TEST NUMBER: P937722
 CATALOG NUMBER: SQ4-FB-100U-125D-927-1D-UNV-STD-W-4

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	5.62	6.53	6.57	7.49	8.76	18.76	19.67	19.71	20.63	21.90
	3H	6.33	7.14	7.29	8.12	9.41	20.59	21.40	21.55	22.38	23.66
	4H	6.63	7.40	7.60	8.38	9.68	21.23	22.00	22.20	22.98	24.27
	6H	6.89	7.60	7.87	8.58	9.89	21.65	22.36	22.63	23.34	24.65
	8H	6.96	7.63	7.95	8.64	9.94	21.76	22.44	22.75	23.44	24.75
	12H	6.98	7.62	7.97	8.62	9.95	21.83	22.47	22.82	23.47	24.80
4H	2H	12.82	13.59	13.80	14.57	15.86	19.04	19.81	20.02	20.79	22.09
	3H	14.39	15.04	15.38	16.05	17.36	21.08	21.72	22.07	22.73	24.04
	4H	14.49	15.08	15.49	16.08	17.42	21.84	22.43	22.83	23.43	24.76
	6H	14.50	15.01	15.51	16.04	17.37	22.37	22.88	23.37	23.90	25.23
	8H	14.48	14.96	15.49	15.98	17.32	22.52	23.00	23.53	24.02	25.36
	12H	14.44	14.87	15.47	15.91	17.26	22.61	23.04	23.64	24.08	25.43
8H	4H	15.93	16.41	16.94	17.43	18.77	21.90	22.38	22.91	23.40	24.74
	6H	16.17	16.57	17.21	17.63	18.97	22.52	22.92	23.56	23.98	25.32
	8H	16.19	16.54	17.23	17.59	18.95	22.73	23.08	23.78	24.13	25.49
	12H	16.16	16.47	17.21	17.51	18.92	22.87	23.18	23.92	24.22	25.62
12H	4H	16.07	16.50	17.10	17.54	18.89	21.86	22.29	22.89	23.32	24.67
	6H	16.43	16.78	17.47	17.83	19.19	22.50	22.85	23.55	23.90	25.26
	8H	16.50	16.81	17.55	17.85	19.25	22.73	23.04	23.78	24.08	25.48