

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: P937285

Luminaire Tested: SQ4-FB-075U-100D-B2750-1D-UNV-STD-W-4-4000K

Issue Date: 12/17/2024

**Test Information**

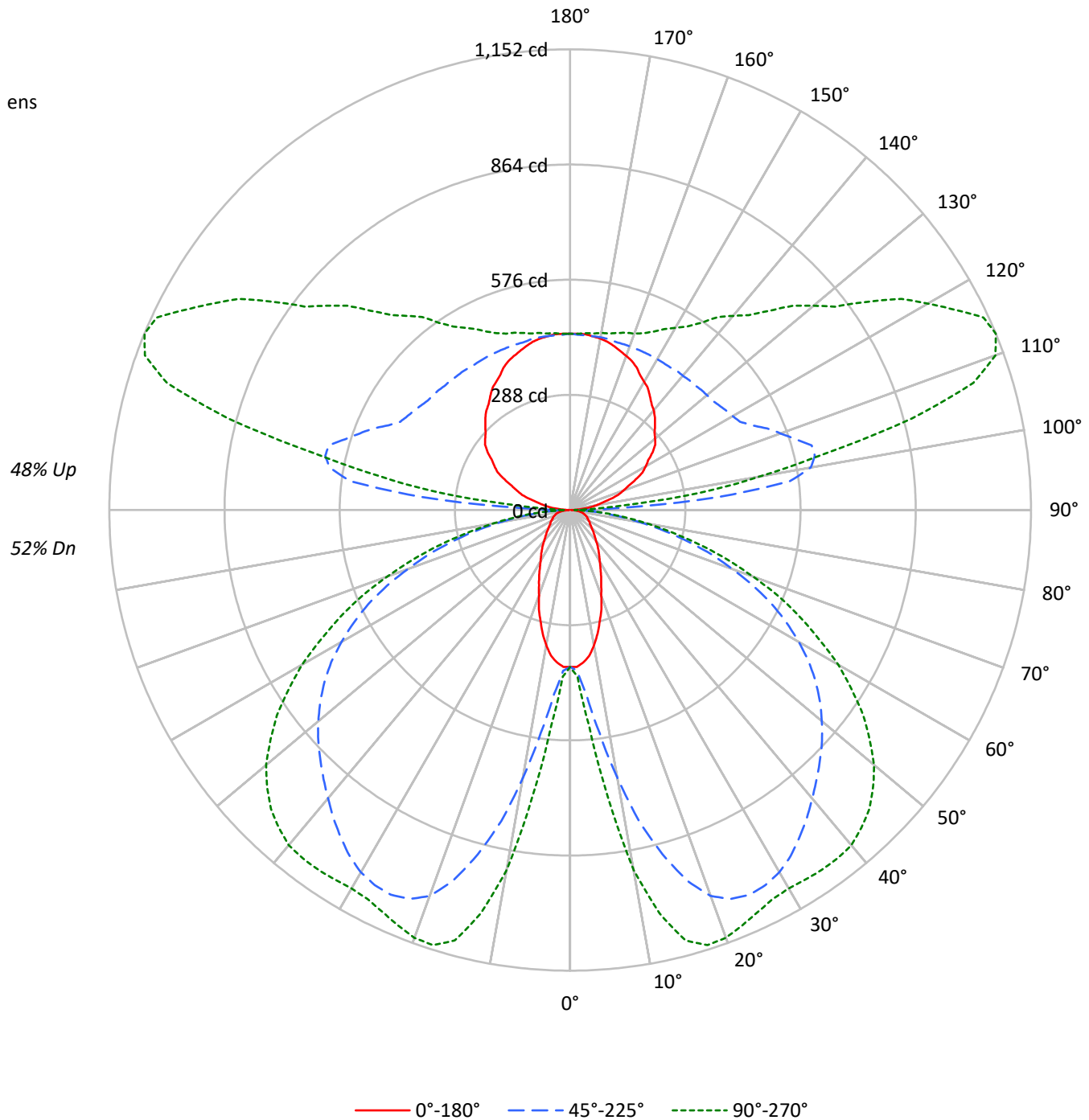
Test Method: LM-79-2019  
Report Number: P937285  
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-B2750-1D-UNV-STD-W-4-4000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5897.2 lumens  
Efficiency: N/A  
Efficacy: 115.2 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): 51.2  
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

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### Luminous Intensity Polar Plot





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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	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	10

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

	0°	45°	90°
0°	3641	3641	3641
5°	3554	4205	4895
10°	3220	6127	8115
15°	2733	7998	9798
20°	2222	9262	9986
25°	1852	9684	9783
30°	1559	9738	9765
35°	1377	9569	10018
40°	1197	9350	10278
45°	1082	9189	10319
50°	991	9041	10148
55°	945	8829	9697
60°	964	8430	8988
65°	998	7829	8011
70°	1056	6814	6768
75°	1158	5541	5282
80°	1240	3828	3558
85°	1043	2020	1821

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10319 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.8	0.9
10°-20°	225.0	3.8
20°-30°	393.5	6.7
30°-40°	506.6	8.6
40°-50°	565.9	9.6
50°-60°	542.0	9.2
60°-70°	429.5	7.3
70°-80°	252.6	4.3
80°-90°	71.9	1.2
90°-100°	215.0	3.6
100°-110°	565.3	9.6
110°-120°	586.1	9.9
120°-130°	470.2	8.0
130°-140°	368.9	6.3
140°-150°	283.1	4.8
150°-160°	203.9	3.5
160°-170°	124.8	2.1
170°-180°	42.2	0.7
0°-30°	669.3	11.3
0°-40°	1175.9	19.9
0°-60°	2283.7	38.7
0°-90°	3037.6	51.5
90°-120°	1366.5	23.2
90°-150°	2488.7	42.2
90°-180°	2860.0	48.5
0°-180°	5897.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	392	392	392	392	392	
5°	382	410	462	522	541	35
15°	286	529	891	1080	1114	80
25°	183	599	1061	1108	1109	84
35°	124	573	999	1056	1098	77
45°	84	457	883	1012	1058	65
55°	60	290	750	871	895	55
65°	48	154	556	626	635	48
75°	35	95	305	336	337	37
85°	13	29	76	83	84	13
90°	3	8	22	11	11	3
95°	28	111	370	191	130	32
105°	102	154	625	949	885	108
115°	181	220	501	998	1140	179
125°	252	282	455	769	908	223
135°	300	330	441	621	704	232
145°	348	370	436	530	571	218
155°	393	404	436	478	492	181
165°	424	430	436	453	458	120
175°	441	441	438	444	444	42
180°	441	441	441	441	441	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4
2.5°	392.4	392.4	395.0	396.2	398.7	400.0	402.5	405.0	412.7	413.9	416.4
5°	382.4	387.4	403.8	410.1	427.7	451.7	461.8	478.3	512.4	522.4	528.7
7.5°	367.2	378.6	419.0	429.1	473.2	536.3	562.8	598.1	652.4	678.9	700.3
10°	343.2	367.2	439.1	463.1	535.0	631.0	680.2	729.3	811.4	847.9	861.9
12.5°	316.8	355.8	460.6	493.4	596.9	737.0	796.3	850.5	943.9	993.1	1000.6
15°	286.4	339.4	480.7	528.7	662.5	825.3	890.9	957.8	1044.9	1080.2	1089.0
17.5°	260.0	326.8	499.7	550.2	713.0	904.8	971.6	1027.2	1097.9	1121.8	1128.1
20°	227.1	306.7	512.4	578.0	766.0	962.8	1027.2	1070.1	1118.0	1133.2	1135.7
22.5°	203.1	285.2	519.9	588.0	801.2	998.2	1052.4	1086.5	1119.3	1124.3	1125.6
25°	183.0	261.2	518.7	599.4	831.6	1019.6	1061.2	1086.5	1105.4	1107.9	1107.9
27.5°	164.1	234.7	513.6	601.9	854.2	1024.6	1057.5	1075.1	1083.9	1089.0	1089.0
30°	147.6	209.4	501.0	596.9	864.4	1019.6	1046.1	1054.9	1063.8	1071.3	1075.1
32.5°	135.0	185.5	482.1	586.8	865.6	1007.0	1025.9	1030.9	1043.5	1061.2	1067.6
35°	123.7	161.5	460.6	572.9	858.1	986.8	999.4	1004.5	1029.7	1056.2	1065.0
37.5°	112.3	143.8	432.8	548.9	846.7	962.8	971.6	980.5	1019.6	1051.2	1061.2
40°	100.9	128.7	400.0	522.4	829.0	933.8	941.3	955.3	1007.0	1043.5	1053.7
42.5°	92.2	116.1	364.7	494.7	806.3	900.9	912.3	932.6	991.9	1030.9	1042.3
45°	84.5	103.4	326.8	456.8	777.3	866.9	883.3	911.1	974.2	1012.0	1022.1
47.5°	77.0	94.6	287.7	417.7	745.8	832.9	854.2	885.9	950.2	986.8	995.6
50°	70.7	85.9	248.6	376.1	711.7	796.3	821.5	854.2	920.0	953.9	965.3
52.5°	65.6	78.2	212.0	334.4	672.6	758.4	787.4	821.5	883.3	916.1	923.7
55°	60.5	71.9	180.5	290.2	632.2	718.0	749.6	782.3	843.0	870.7	875.7
57.5°	58.1	66.8	153.9	248.6	589.3	672.6	707.9	738.2	794.9	816.4	821.5
60°	54.2	63.1	133.8	213.3	542.6	629.6	660.0	690.3	738.2	755.9	759.6
62.5°	50.5	60.5	118.6	179.2	494.7	579.2	609.5	637.3	677.7	690.3	695.3
65°	47.9	58.1	107.2	153.9	445.4	526.2	556.5	580.4	613.3	625.9	628.4
67.5°	45.5	55.5	98.5	132.5	396.2	473.2	495.9	518.7	543.9	556.5	557.7
70°	41.6	53.0	90.8	117.4	345.7	412.7	431.6	455.5	475.7	482.1	485.8
72.5°	39.2	49.2	85.9	106.0	294.0	354.6	372.3	386.1	403.8	410.1	410.1
75°	35.3	44.1	80.8	94.6	241.0	290.2	305.4	319.3	333.1	335.7	331.9
77.5°	31.5	39.2	69.4	79.5	188.0	229.7	242.3	249.8	261.2	263.8	265.0
80°	26.5	34.1	54.2	61.8	136.3	169.1	177.9	184.2	194.3	194.3	196.8
82.5°	20.2	26.5	39.2	44.1	92.2	116.1	123.7	127.5	133.8	133.8	133.8
85°	12.6	16.4	25.2	29.0	55.5	70.7	75.7	77.0	82.0	83.3	83.3
87.5°	6.3	8.8	16.4	17.7	29.0	36.6	36.6	39.2	39.2	37.8	36.6
90°	3.0	5.3	7.7	8.3	13.1	19.4	22.5	20.1	15.0	11.3	11.3
92.5°	11.8	32.0	52.0	57.1	80.3	111.3	126.7	111.1	79.7	56.2	54.1
95°	28.5	65.3	102.2	111.4	197.7	312.8	370.3	330.4	250.7	190.9	184.1
97.5°	49.2	81.7	114.1	122.2	266.3	458.2	554.2	529.0	478.6	440.8	427.9
100°	65.1	94.5	124.1	131.4	291.2	504.2	610.7	612.5	616.3	619.0	603.7
102.5°	78.8	106.3	133.7	140.6	302.6	518.8	626.8	658.9	723.0	771.2	758.0
105°	101.8	125.1	148.4	154.2	311.1	520.4	625.0	697.0	840.9	948.8	941.7
107.5°	125.5	147.3	168.9	174.4	312.8	497.2	589.4	689.8	890.5	1041.1	1042.9
110°	141.5	161.1	180.8	185.7	310.4	476.6	559.8	672.0	896.5	1064.8	1072.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.2	175.9	194.5	199.2	310.5	458.8	532.9	647.8	877.5	1049.7	1061.1
115°	180.9	198.1	215.4	219.6	313.3	438.2	500.6	611.3	832.6	998.5	1014.2
117.5°	204.3	219.9	235.6	239.5	319.2	425.3	478.4	578.3	777.9	927.8	945.2
120°	217.9	232.6	247.3	251.1	323.8	421.0	469.5	560.8	743.3	880.1	897.0
122.5°	231.2	246.1	260.9	264.6	330.6	418.7	462.7	544.8	709.2	832.5	849.2
125°	251.6	265.2	278.8	282.1	339.9	416.9	455.3	525.2	664.8	769.4	784.8
127.5°	268.3	281.9	295.6	299.0	349.1	415.8	449.1	509.1	629.0	718.8	731.8
130°	277.1	291.8	306.6	310.3	355.7	416.4	446.7	500.1	606.8	686.8	698.8
132.5°	286.3	301.0	315.7	319.4	361.2	416.9	444.6	492.4	588.0	659.6	670.3
135°	299.9	313.2	326.7	330.0	367.1	416.5	441.1	481.1	561.2	621.1	630.4
137.5°	313.8	327.1	340.4	343.7	376.0	419.1	440.5	474.3	542.0	592.7	600.2
140°	325.4	337.6	349.8	352.9	381.4	419.4	438.4	467.7	526.0	569.8	576.9
142.5°	334.2	345.5	356.8	359.7	385.9	421.0	438.4	464.1	515.4	553.9	560.0
145°	347.8	357.7	367.6	370.1	391.8	421.0	435.5	456.5	498.4	529.9	534.5
147.5°	361.5	371.0	380.7	383.1	400.5	423.8	435.5	452.0	485.0	509.8	513.6
150°	370.3	379.0	387.7	389.9	405.1	425.4	435.5	449.4	477.3	498.2	501.3
152.5°	379.5	386.1	392.7	394.3	408.1	426.3	435.5	447.4	471.2	489.1	491.3
155°	393.2	398.0	402.8	404.1	414.6	428.5	435.5	444.9	463.8	478.1	479.6
157.5°	403.2	408.0	412.8	413.9	421.1	430.7	435.5	442.8	457.5	468.6	469.7
160°	410.0	413.7	417.3	418.3	424.0	431.7	435.5	441.8	454.5	463.9	464.5
162.5°	416.9	419.6	422.4	423.1	427.2	432.7	435.5	440.8	451.4	459.5	460.0
165°	424.2	426.7	429.2	429.8	431.8	434.2	435.5	439.3	446.9	452.7	453.3
167.5°	431.0	432.1	433.4	433.7	435.3	437.4	438.4	440.9	446.0	449.7	450.0
170°	435.5	436.6	437.9	438.2	438.2	438.3	438.4	440.9	446.0	449.7	449.7
172.5°	437.9	438.2	438.3	438.4	438.4	438.4	438.4	440.4	444.4	447.3	447.1
175°	441.1	441.1	441.1	441.1	440.3	439.0	438.4	439.7	442.2	444.1	444.1
177.5°	441.1	441.1	441.1	441.1	440.4	439.5	439.0	440.0	442.0	443.5	443.2
180°	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1	441.1



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	392.4	392.4
2.5°	419.0	416.4
5°	538.8	541.4
7.5°	725.6	724.3
10°	902.3	913.6
12.5°	1030.9	1033.5
15°	1109.2	1114.2
17.5°	1139.5	1140.7
20°	1140.7	1138.2
22.5°	1126.9	1124.3
25°	1110.5	1109.2
27.5°	1095.3	1096.5
30°	1089.0	1092.8
32.5°	1089.0	1095.3
35°	1091.6	1097.9
37.5°	1090.2	1097.9
40°	1085.3	1094.0
42.5°	1071.3	1077.6
45°	1049.9	1057.5
47.5°	1022.1	1027.2
50°	986.8	991.9
52.5°	942.6	943.9
55°	889.6	894.6
57.5°	832.9	834.1
60°	769.7	773.6
62.5°	702.9	702.9
65°	632.2	634.7
67.5°	559.1	565.4
70°	484.6	485.8
72.5°	411.4	411.4
75°	335.7	336.9
77.5°	263.8	263.8
80°	195.6	196.8
82.5°	135.0	137.5
85°	84.5	84.5
87.5°	39.2	35.3
90°	11.3	11.3
92.5°	45.1	36.1
95°	157.1	130.0
97.5°	376.4	324.8
100°	542.2	480.7
102.5°	705.4	652.7
105°	913.5	885.2
107.5°	1049.7	1056.6
110°	1101.7	1131.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1106.4	1151.6
115°	1077.0	1139.8
117.5°	1014.8	1084.4
120°	964.6	1032.3
122.5°	915.8	982.6
125°	846.2	907.6
127.5°	783.6	835.4
130°	746.7	794.6
132.5°	713.2	756.1
135°	667.4	704.3
137.5°	630.5	660.8
140°	605.3	633.5
142.5°	584.3	608.6
145°	552.9	571.4
147.5°	528.9	544.2
150°	513.7	526.1
152.5°	500.7	510.1
155°	485.8	492.0
157.5°	474.1	478.4
160°	467.0	469.5
162.5°	462.4	464.8
165°	455.8	458.3
167.5°	451.0	452.1
170°	449.7	449.7
172.5°	446.2	445.2
175°	444.1	444.1
177.5°	442.2	441.1
180°	441.1	441.1



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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	5.62	6.53	6.55	7.49	8.74	18.76	19.67	19.69	20.63	21.88
	3H	6.33	7.15	7.27	8.12	9.39	20.59	21.41	21.53	22.38	23.65
	4H	6.63	7.41	7.59	8.38	9.66	21.22	22.00	22.18	22.98	24.25
	6H	6.88	7.60	7.85	8.58	9.87	21.64	22.36	22.62	23.34	24.63
	8H	6.95	7.64	7.93	8.63	9.92	21.76	22.45	22.74	23.44	24.73
	12H	6.97	7.62	7.96	8.61	9.93	21.82	22.48	22.81	23.46	24.78
4H	2H	12.82	13.60	13.78	14.57	15.84	19.04	19.82	20.01	20.79	22.07
	3H	14.39	15.04	15.37	16.04	17.34	21.08	21.73	22.05	22.73	24.02
	4H	14.49	15.09	15.47	16.08	17.40	21.83	22.43	22.82	23.43	24.74
	6H	14.50	15.02	15.50	16.04	17.35	22.36	22.88	23.36	23.90	25.21
	8H	14.48	14.96	15.48	15.98	17.30	22.52	23.00	23.52	24.02	25.34
	12H	14.44	14.88	15.46	15.90	17.24	22.61	23.05	23.63	24.07	25.41
8H	4H	15.93	16.41	16.93	17.42	18.75	21.90	22.38	22.90	23.40	24.72
	6H	16.17	16.57	17.20	17.63	18.95	22.52	22.92	23.55	23.97	25.30
	8H	16.19	16.54	17.23	17.58	18.93	22.73	23.09	23.77	24.13	25.47
	12H	16.16	16.47	17.20	17.51	18.90	22.87	23.18	23.91	24.22	25.60
12H	4H	16.07	16.51	17.09	17.53	18.87	21.86	22.29	22.88	23.32	24.65
	6H	16.43	16.78	17.46	17.82	19.17	22.50	22.86	23.54	23.90	25.24
	8H	16.50	16.81	17.54	17.85	19.23	22.73	23.04	23.77	24.07	25.46