

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: P937233

Luminaire Tested: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

Issue Date: 12/17/2024

**Test Information**

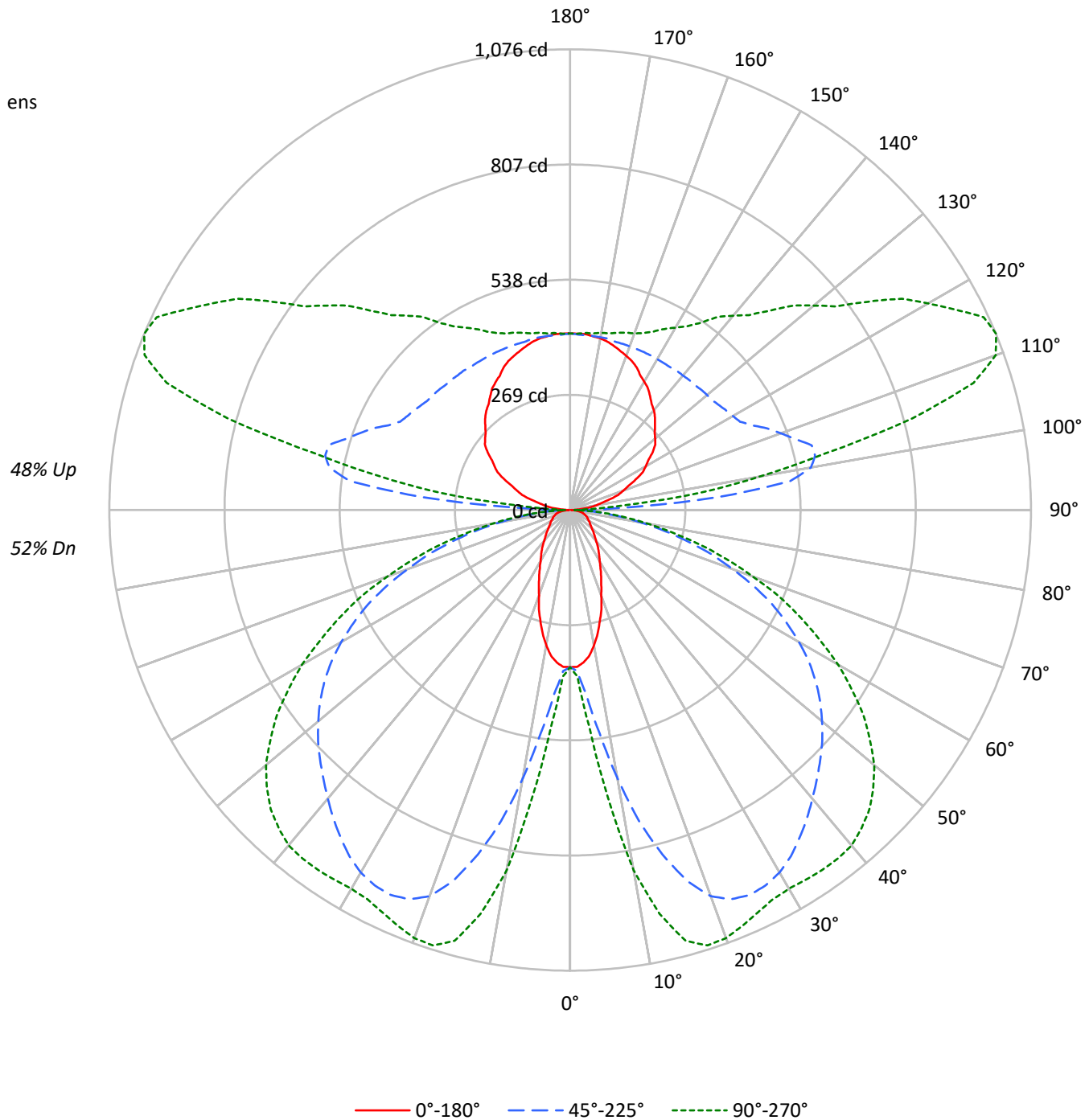
Test Method: LM-79-2019  
Report Number: P937233  
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5511.9 lumens  
Efficiency: N/A  
Efficacy: 107.7 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 (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: P937233  
CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P937233

CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**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°	3404	3404	3404
5°	3322	3931	4575
10°	3009	5726	7585
15°	2555	7476	9158
20°	2078	8657	9333
25°	1731	9052	9145
30°	1458	9103	9127
35°	1287	8944	9364
40°	1119	8740	9607
45°	1011	8588	9645
50°	927	8450	9485
55°	884	8252	9064
60°	902	7880	8401
65°	934	7316	7488
70°	988	6369	6326
75°	1082	5180	4937
80°	1156	3579	3327
85°	977	1890	1702

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9645 cd/sqm



TEST NUMBER: P937233

CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	0.9
10°-20°	210.3	3.8
20°-30°	367.8	6.7
30°-40°	473.5	8.6
40°-50°	528.9	9.6
50°-60°	506.6	9.2
60°-70°	401.4	7.3
70°-80°	236.1	4.3
80°-90°	67.2	1.2
90°-100°	201.0	3.6
100°-110°	528.4	9.6
110°-120°	547.9	9.9
120°-130°	439.5	8.0
130°-140°	344.8	6.3
140°-150°	264.7	4.8
150°-160°	190.6	3.5
160°-170°	116.6	2.1
170°-180°	39.4	0.7
0°-30°	625.6	11.3
0°-40°	1099.1	19.9
0°-60°	2134.5	38.7
0°-90°	2839.2	51.5
90°-120°	1277.2	23.2
90°-150°	2326.1	42.2
90°-180°	2673.0	48.5
0°-180°	5511.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	367	367	367	367	367	
5°	357	383	432	488	506	33
15°	268	494	833	1010	1041	75
25°	171	560	992	1036	1037	79
35°	116	536	934	987	1026	72
45°	79	427	826	946	988	61
55°	57	271	701	814	836	52
65°	45	144	520	585	593	44
75°	33	88	286	314	315	35
85°	12	27	71	78	79	12
90°	3	8	21	10	10	3
95°	27	104	346	178	122	30
105°	95	144	584	887	827	101
115°	169	205	468	933	1065	167
125°	235	264	426	719	848	209
135°	280	308	412	581	658	217
145°	325	346	407	495	534	204
155°	368	378	407	447	460	169
165°	396	402	407	423	428	112
175°	412	412	410	415	415	39
180°	412	412	412	412	412	



TEST NUMBER: P937233

CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8	366.8
2.5°	366.8	366.8	369.2	370.3	372.7	373.9	376.2	378.6	385.7	386.9	389.2
5°	357.4	362.1	377.4	383.3	399.8	422.2	431.7	447.0	478.9	488.3	494.2
7.5°	343.2	353.8	391.6	401.1	442.3	501.3	526.0	559.0	609.7	634.6	654.6
10°	320.8	343.2	410.4	432.8	500.0	589.8	635.7	681.7	758.4	792.6	805.6
12.5°	296.1	332.6	430.5	461.1	557.9	688.8	744.3	795.0	882.3	928.2	935.3
15°	267.7	317.2	449.3	494.2	619.2	771.4	832.7	895.2	976.6	1009.6	1017.9
17.5°	243.0	305.5	467.0	514.2	666.4	845.7	908.2	960.1	1026.2	1048.6	1054.5
20°	212.3	286.6	478.9	540.2	716.0	899.9	960.1	1000.2	1045.0	1059.2	1061.5
22.5°	189.9	266.5	485.9	549.6	748.9	933.0	983.7	1015.5	1046.2	1050.9	1052.0
25°	171.0	244.1	484.8	560.2	777.3	953.0	991.9	1015.5	1033.2	1035.5	1035.5
27.5°	153.4	219.4	480.1	562.6	798.4	957.7	988.4	1004.9	1013.1	1017.9	1017.9
30°	138.0	195.8	468.3	557.9	807.9	953.0	977.8	986.0	994.3	1001.3	1004.9
32.5°	126.2	173.3	450.6	548.4	809.1	941.2	958.9	963.6	975.4	991.9	997.9
35°	115.6	150.9	430.5	535.5	802.0	922.3	934.1	938.9	962.4	987.2	995.4
37.5°	105.0	134.4	404.5	513.1	791.4	899.9	908.2	916.5	953.0	982.5	991.9
40°	94.3	120.3	373.9	488.3	774.9	872.8	879.9	892.9	941.2	975.4	984.8
42.5°	86.1	108.5	340.9	462.4	753.6	842.1	852.7	871.6	927.1	963.6	974.2
45°	79.0	96.7	305.5	426.9	726.5	810.3	825.6	851.6	910.6	945.9	955.4
47.5°	71.9	88.5	268.9	390.4	697.0	778.5	798.4	828.0	888.2	922.3	930.6
50°	66.1	80.2	232.3	351.5	665.2	744.3	767.8	798.4	859.9	891.6	902.3
52.5°	61.3	73.1	198.2	312.6	628.7	708.8	736.0	767.8	825.6	856.3	863.3
55°	56.6	67.2	168.7	271.3	590.9	671.1	700.6	731.2	787.9	813.8	818.5
57.5°	54.3	62.5	143.9	232.3	550.8	628.7	661.7	690.0	743.0	763.1	767.8
60°	50.7	59.0	125.1	199.3	507.2	588.5	616.9	645.2	690.0	706.5	710.0
62.5°	47.2	56.6	110.9	167.5	462.4	541.4	569.7	595.6	633.4	645.2	649.9
65°	44.8	54.3	100.2	143.9	416.3	491.8	520.1	542.5	573.2	585.0	587.3
67.5°	42.5	51.9	92.0	123.8	370.3	442.3	463.5	484.8	508.3	520.1	521.3
70°	38.9	49.5	84.9	109.7	323.1	385.7	403.4	425.8	444.6	450.6	454.1
72.5°	36.6	46.0	80.2	99.1	274.8	331.4	347.9	360.9	377.4	383.3	383.3
75°	33.0	41.2	75.5	88.5	225.3	271.3	285.5	298.4	311.3	313.8	310.2
77.5°	29.5	36.6	64.9	74.3	175.8	214.7	226.5	233.5	244.1	246.5	247.7
80°	24.7	31.9	50.7	57.8	127.4	158.1	166.3	172.2	181.6	181.6	184.0
82.5°	18.8	24.7	36.6	41.2	86.1	108.5	115.6	119.2	125.1	125.1	125.1
85°	11.8	15.4	23.6	27.1	51.9	66.1	70.8	71.9	76.7	77.8	77.8
87.5°	5.9	8.2	15.4	16.5	27.1	34.2	34.2	36.6	36.6	35.3	34.2
90°	2.8	5.0	7.2	7.8	12.2	18.1	21.1	18.7	14.0	10.5	10.5
92.5°	11.1	29.9	48.6	53.4	75.1	104.0	118.5	103.8	74.5	52.6	50.5
95°	26.6	61.1	95.5	104.1	184.8	292.3	346.2	308.8	234.3	178.4	172.1
97.5°	46.0	76.3	106.7	114.3	248.9	428.3	518.0	494.4	447.4	412.0	400.0
100°	60.9	88.4	116.0	122.8	272.2	471.3	570.8	572.5	576.0	578.6	564.2
102.5°	73.6	99.3	125.0	131.4	282.9	484.9	585.8	615.8	675.8	720.8	708.5
105°	95.2	116.9	138.7	144.2	290.8	486.4	584.1	651.4	786.0	886.8	880.2
107.5°	117.3	137.6	157.9	163.0	292.3	464.7	550.9	644.7	832.4	973.1	974.7
110°	132.3	150.6	169.0	173.5	290.1	445.5	523.3	628.1	837.9	995.3	1002.1



TEST NUMBER: P937233

CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	146.9	164.4	181.8	186.2	290.2	428.8	498.1	605.5	820.1	981.2	991.8
115°	169.1	185.1	201.3	205.3	292.9	409.5	467.9	571.4	778.2	933.3	948.0
117.5°	190.9	205.6	220.2	223.9	298.3	397.5	447.1	540.5	727.1	867.2	883.4
120°	203.7	217.4	231.2	234.7	302.7	393.5	438.8	524.1	694.7	822.6	838.4
122.5°	216.1	230.0	243.9	247.3	309.0	391.3	432.5	509.2	662.9	778.1	793.7
125°	235.2	247.9	260.6	263.7	317.7	389.6	425.6	490.9	621.4	719.2	733.6
127.5°	250.7	263.5	276.3	279.5	326.3	388.6	419.8	475.9	587.9	671.9	684.0
130°	259.0	272.8	286.5	290.0	332.5	389.2	417.6	467.5	567.2	642.0	653.1
132.5°	267.6	281.4	295.1	298.6	337.6	389.6	415.6	460.2	549.6	616.5	626.5
135°	280.3	292.8	305.4	308.5	343.1	389.3	412.3	449.7	524.5	580.6	589.2
137.5°	293.3	305.7	318.1	321.3	351.4	391.7	411.8	443.4	506.6	554.0	561.0
140°	304.1	315.5	327.0	329.8	356.5	392.0	409.8	437.1	491.7	532.6	539.2
142.5°	312.4	322.9	333.5	336.2	360.7	393.5	409.8	433.8	481.7	517.7	523.4
145°	325.1	334.4	343.6	345.9	366.2	393.5	407.0	426.7	465.9	495.3	499.6
147.5°	337.9	346.8	355.8	358.0	374.4	396.1	407.0	422.5	453.4	476.5	480.1
150°	346.2	354.3	362.4	364.5	378.6	397.6	407.0	420.1	446.1	465.7	468.5
152.5°	354.7	360.9	367.0	368.6	381.4	398.5	407.0	418.2	440.4	457.1	459.3
155°	367.5	372.0	376.5	377.7	387.5	400.5	407.0	415.9	433.5	446.8	448.3
157.5°	376.9	381.3	385.8	386.9	393.6	402.6	407.0	413.9	427.7	438.0	439.0
160°	383.2	386.7	390.1	391.0	396.3	403.5	407.0	412.9	424.8	433.6	434.2
162.5°	389.6	392.2	394.8	395.4	399.3	404.4	407.0	412.0	421.9	429.4	430.0
165°	396.5	398.8	401.1	401.8	403.6	405.9	407.0	410.6	417.7	423.1	423.7
167.5°	402.8	403.9	405.1	405.3	406.9	408.8	409.8	412.1	416.9	420.3	420.6
170°	407.0	408.1	409.3	409.5	409.6	409.7	409.8	412.1	416.9	420.3	420.3
172.5°	409.3	409.5	409.7	409.8	409.8	409.8	409.8	411.7	415.3	418.1	417.9
175°	412.3	412.3	412.3	412.3	411.5	410.3	409.8	411.0	413.3	415.1	415.1
177.5°	412.3	412.3	412.3	412.3	411.7	410.8	410.3	411.2	413.1	414.5	414.3
180°	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3	412.3



TEST NUMBER: P937233

CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	366.8	366.8
2.5°	391.6	389.2
5°	503.6	506.0
7.5°	678.2	677.0
10°	843.3	853.9
12.5°	963.6	966.0
15°	1036.8	1041.4
17.5°	1065.1	1066.2
20°	1066.2	1063.8
22.5°	1053.3	1050.9
25°	1037.9	1036.8
27.5°	1023.7	1024.9
30°	1017.9	1021.4
32.5°	1017.9	1023.7
35°	1020.3	1026.2
37.5°	1019.0	1026.2
40°	1014.4	1022.6
42.5°	1001.3	1007.2
45°	981.3	988.4
47.5°	955.4	960.1
50°	922.3	927.1
52.5°	881.0	882.3
55°	831.5	836.2
57.5°	778.5	779.6
60°	719.5	723.0
62.5°	657.0	657.0
65°	590.9	593.2
67.5°	522.5	528.4
70°	452.9	454.1
72.5°	384.5	384.5
75°	313.8	314.9
77.5°	246.5	246.5
80°	182.8	184.0
82.5°	126.2	128.5
85°	79.0	79.0
87.5°	36.6	33.0
90°	10.5	10.5
92.5°	42.1	33.7
95°	146.8	121.5
97.5°	351.8	303.6
100°	506.8	449.3
102.5°	659.3	610.1
105°	853.8	827.4
107.5°	981.2	987.6
110°	1029.7	1057.3





TEST NUMBER: P937233

CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1034.1	1076.4
115°	1006.7	1065.3
117.5°	948.5	1013.6
120°	901.6	964.8
122.5°	856.0	918.4
125°	791.0	848.3
127.5°	732.4	780.9
130°	697.9	742.7
132.5°	666.6	706.7
135°	623.8	658.3
137.5°	589.3	617.6
140°	565.7	592.2
142.5°	546.1	568.9
145°	516.8	534.1
147.5°	494.3	508.6
150°	480.1	491.7
152.5°	468.0	476.7
155°	454.1	459.9
157.5°	443.1	447.1
160°	436.5	438.8
162.5°	432.2	434.4
165°	426.0	428.4
167.5°	421.6	422.6
170°	420.3	420.3
172.5°	417.0	416.1
175°	415.1	415.1
177.5°	413.3	412.3
180°	412.3	412.3



TEST NUMBER: P937233  
 CATALOG NUMBER: SQ4-FB-075U-100D-92765-1D-UNV-STD-W-4-3500K

**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	5.39	6.30	6.32	7.26	8.50	18.52	19.44	19.46	20.40	21.64
	3H	6.09	6.92	7.04	7.88	9.15	20.35	21.17	21.30	22.14	23.41
	4H	6.39	7.17	7.36	8.15	9.42	20.99	21.77	21.95	22.74	24.02
	6H	6.65	7.37	7.62	8.35	9.64	21.41	22.13	22.38	23.11	24.40
	8H	6.72	7.40	7.70	8.40	9.69	21.53	22.21	22.50	23.21	24.49
	12H	6.74	7.39	7.72	8.38	9.69	21.59	22.24	22.57	23.23	24.54
4H	2H	12.58	13.36	13.55	14.33	15.61	18.80	19.58	19.77	20.56	21.83
	3H	14.16	14.81	15.13	15.81	17.10	20.84	21.49	21.82	22.49	23.79
	4H	14.25	14.85	15.24	15.85	17.16	21.60	22.20	22.59	23.19	24.51
	6H	14.27	14.78	15.27	15.80	17.12	22.13	22.65	23.13	23.66	24.98
	8H	14.25	14.73	15.25	15.74	17.07	22.29	22.77	23.29	23.78	25.11
	12H	14.21	14.64	15.23	15.67	17.00	22.37	22.81	23.39	23.84	25.17
8H	4H	15.69	16.18	16.69	17.19	18.52	21.67	22.15	22.67	23.16	24.49
	6H	15.94	16.34	16.96	17.39	18.72	22.28	22.69	23.31	23.74	25.06
	8H	15.96	16.31	16.99	17.35	18.69	22.50	22.85	23.53	23.89	25.24
	12H	15.93	16.24	16.97	17.27	18.66	22.64	22.95	23.67	23.98	25.37
12H	4H	15.84	16.27	16.86	17.30	18.63	21.62	22.06	22.64	23.09	24.42
	6H	16.19	16.55	17.23	17.59	18.93	22.27	22.62	23.30	23.66	25.01
	8H	16.27	16.58	17.30	17.61	19.00	22.49	22.81	23.53	23.84	25.23