

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: P936237

Luminaire Tested: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

**Test Information**

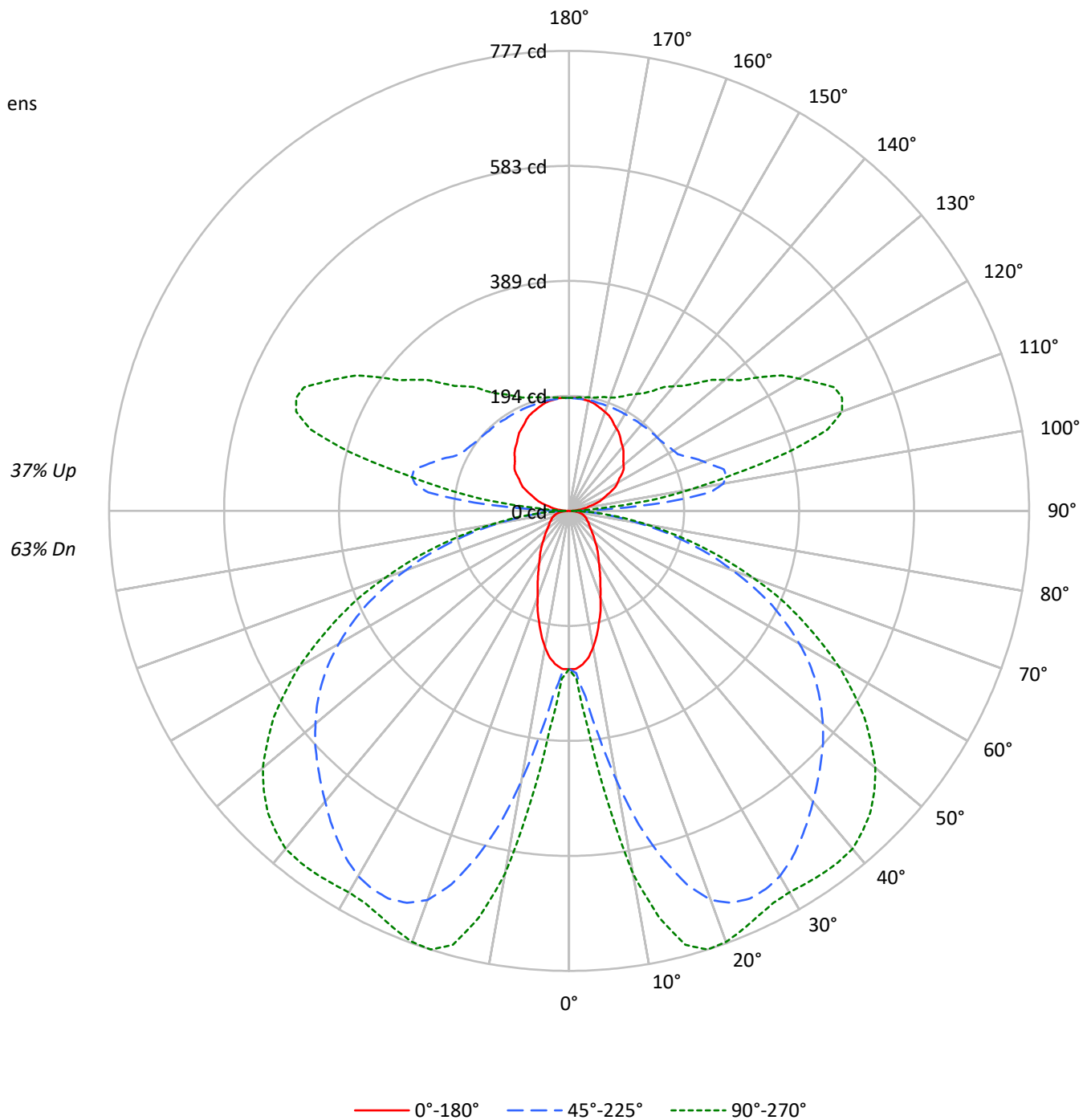
Test Method: LM-79-2019  
Report Number: P936237  
REPORT IS A COMBINATION OF REPORTS P933445 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3307.2 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: 6' x H: 0.1')  
CIE Type: Semi-Direct  
  
Input Watts (W): 33  
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: P936237  
CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**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	50	30	10	0
RCR																					
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	68	68	68	68	68	68	63
1	100	95	91	87	93	89	86	82	78	75	73	68	66	64	59	57	56	59	57	56	51
2	90	82	76	70	84	77	71	66	68	63	59	59	55	52	51	48	46	51	48	46	42
3	82	72	64	57	76	67	60	55	59	53	49	51	47	43	44	41	38	44	41	38	34
4	75	63	54	48	69	59	52	46	52	46	41	45	40	37	39	35	32	39	35	32	29
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	35	31	28	35	31	28	24
6	63	50	41	35	58	47	39	33	41	35	30	36	31	27	31	27	24	31	27	24	21
7	58	45	36	30	54	42	34	29	37	31	26	33	27	23	28	24	21	28	24	21	18
8	53	40	32	26	50	38	31	25	34	27	23	30	24	21	26	22	18	26	22	18	16
9	50	37	29	23	46	35	27	22	31	25	20	27	22	18	24	19	16	24	19	16	14
10	46	34	26	21	43	32	25	20	28	22	18	25	20	16	22	18	15	22	18	15	13

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

	0°	45°	90°
0°	1653	1653	1653
5°	1614	1910	2222
10°	1464	2784	3683
15°	1243	3635	4447
20°	1012	4212	4533
25°	844	4406	4441
30°	711	4434	4432
35°	629	4358	4547
40°	548	4262	4665
45°	496	4190	4683
50°	454	4126	4606
55°	435	4032	4402
60°	445	3854	4080
65°	461	3582	3636
70°	491	3122	3072
75°	542	2543	2398
80°	586	1761	1615
85°	513	934	827

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4683 cd/sqm



TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	1.0
10°-20°	153.2	4.6
20°-30°	267.9	8.1
30°-40°	344.9	10.4
40°-50°	385.3	11.6
50°-60°	369.0	11.2
60°-70°	292.4	8.8
70°-80°	171.9	5.2
80°-90°	48.5	1.5
90°-100°	93.2	2.8
100°-110°	245.0	7.4
110°-120°	254.1	7.7
120°-130°	203.8	6.2
130°-140°	159.9	4.8
140°-150°	122.7	3.7
150°-160°	88.4	2.7
160°-170°	54.1	1.6
170°-180°	18.3	0.6
0°-30°	455.7	13.8
0°-40°	800.6	24.2
0°-60°	1554.8	47.0
0°-90°	2067.7	62.5
90°-120°	592.3	17.9
90°-150°	1078.7	32.6
90°-180°	1239.0	37.5
0°-180°	3307.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	260	279	314	356	369	24
15°	195	360	606	735	759	54
25°	125	408	722	754	755	57
35°	84	390	680	719	747	53
45°	58	311	601	689	720	45
55°	41	198	510	593	609	38
65°	33	105	379	426	432	32
75°	24	64	208	229	229	25
85°	9	20	52	57	58	9
90°	1	4	10	5	5	2
95°	12	48	160	83	56	14
105°	44	67	271	411	384	47
115°	78	95	217	433	494	77
125°	109	122	197	334	393	97
135°	130	143	191	269	305	101
145°	151	160	189	230	248	94
155°	170	175	189	207	213	78
165°	184	186	189	196	199	52
175°	191	191	190	192	192	18
180°	191	191	191	191	191	



TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2
2.5°	267.2	267.2	268.9	269.7	271.5	272.4	274.1	275.8	280.9	281.8	283.5
5°	260.3	263.8	274.9	279.2	291.3	307.6	314.4	325.6	348.8	355.7	360.0
7.5°	250.0	257.8	285.2	292.1	322.2	365.1	383.2	407.2	444.1	462.3	476.9
10°	233.7	250.0	298.9	315.3	364.3	429.5	463.1	496.6	552.4	577.3	586.8
12.5°	215.7	242.3	313.6	335.9	406.4	501.7	542.1	579.1	642.6	676.1	681.3
15°	195.0	231.1	327.3	360.0	451.1	561.8	606.5	652.1	711.4	735.4	741.5
17.5°	177.0	222.5	340.2	374.6	485.4	616.0	661.5	699.4	747.4	763.8	768.0
20°	154.7	208.7	348.8	393.5	521.5	655.5	699.4	728.6	761.2	771.5	773.2
22.5°	138.3	194.1	354.0	400.3	545.5	679.5	716.5	739.7	762.1	765.5	766.3
25°	124.6	177.8	353.1	408.1	566.2	694.1	722.5	739.7	752.6	754.3	754.3
27.5°	111.7	159.8	349.7	409.8	581.7	697.7	719.9	732.0	738.0	741.5	741.5
30°	100.5	142.6	341.1	406.4	588.5	694.1	712.3	718.2	724.2	729.4	732.0
32.5°	91.9	126.3	328.2	399.5	589.3	685.6	698.5	701.9	710.5	722.5	726.9
35°	84.2	110.0	313.6	390.1	584.2	671.9	680.4	683.9	701.1	719.1	725.1
37.5°	76.4	98.0	294.7	373.8	576.5	655.5	661.5	667.6	694.1	715.7	722.5
40°	68.8	87.6	272.4	355.7	564.5	635.7	640.9	650.3	685.6	710.5	717.4
42.5°	62.7	79.0	248.3	336.8	548.9	613.4	621.1	634.9	675.3	701.9	709.6
45°	57.6	70.5	222.5	311.0	529.2	590.2	601.4	620.3	663.2	689.0	695.9
47.5°	52.4	64.4	195.9	284.3	507.8	567.1	581.7	603.1	646.9	671.9	677.8
50°	48.1	58.4	169.3	256.0	484.5	542.1	559.3	581.7	626.3	649.5	657.3
52.5°	44.7	53.3	144.3	227.7	457.9	516.3	536.1	559.3	601.4	623.8	628.9
55°	41.3	48.9	122.8	197.6	430.4	488.8	510.3	532.6	573.9	592.8	596.3
57.5°	39.5	45.5	104.8	169.3	401.2	457.9	482.0	502.6	541.3	555.9	559.3
60°	37.0	43.0	91.1	145.2	369.4	428.7	449.4	469.9	502.6	514.6	517.2
62.5°	34.3	41.3	80.8	122.0	336.8	394.4	414.9	433.9	461.3	469.9	473.4
65°	32.6	39.5	73.0	104.8	303.3	358.2	378.9	395.2	417.5	426.1	427.8
67.5°	30.9	37.8	67.0	90.2	269.7	322.2	337.6	353.1	370.3	378.9	379.7
70°	28.4	36.0	61.8	79.9	235.4	280.9	293.8	310.1	323.9	328.2	330.8
72.5°	26.6	33.5	58.4	72.2	200.2	241.4	253.4	262.9	274.9	279.2	279.2
75°	24.1	30.1	55.0	64.4	164.1	197.6	207.9	217.4	226.8	228.6	225.9
77.5°	21.4	26.6	47.2	54.2	128.0	156.4	164.9	170.1	177.8	179.5	180.4
80°	18.0	23.2	37.0	42.1	92.8	115.1	121.1	125.5	132.3	132.3	134.0
82.5°	13.8	18.0	26.6	30.1	62.7	79.0	84.2	86.8	91.1	91.1	91.1
85°	8.6	11.2	17.2	19.7	37.8	48.1	51.6	52.4	55.9	56.7	56.7
87.5°	4.3	6.0	11.2	12.0	19.7	24.9	24.9	26.6	26.6	25.8	24.9
90°	1.3	2.3	3.3	3.6	5.6	8.4	9.7	8.6	6.5	4.9	4.9
92.5°	5.1	13.8	22.5	24.8	34.8	48.3	54.9	48.1	34.5	24.3	23.4
95°	12.3	28.3	44.2	48.3	85.7	135.6	160.5	143.2	108.6	82.8	79.9
97.5°	21.3	35.4	49.5	53.0	115.4	198.6	240.2	229.2	207.5	191.1	185.5
100°	28.3	41.0	53.8	57.0	126.2	218.6	264.7	265.5	267.1	268.3	261.6
102.5°	34.2	46.1	58.0	61.0	131.2	224.8	271.6	285.5	313.4	334.3	328.6
105°	44.2	54.2	64.3	66.9	134.9	225.5	270.8	302.0	364.5	411.3	408.2
107.5°	54.4	63.8	73.2	75.6	135.6	215.5	255.5	299.0	386.1	451.3	452.1
110°	61.3	69.9	78.3	80.5	134.5	206.6	242.7	291.3	388.6	461.6	464.7



TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	68.2	76.3	84.3	86.4	134.5	198.8	231.0	280.8	380.3	455.0	459.9
115°	78.4	85.9	93.4	95.2	135.8	189.9	216.9	265.0	360.9	432.8	439.6
117.5°	88.6	95.3	102.1	103.8	138.3	184.3	207.4	250.7	337.2	402.1	409.6
120°	94.5	100.9	107.2	108.8	140.4	182.5	203.5	243.1	322.2	381.5	388.9
122.5°	100.2	106.7	113.1	114.7	143.3	181.5	200.5	236.2	307.4	360.9	368.1
125°	109.1	115.0	120.9	122.3	147.3	180.7	197.4	227.6	288.2	333.5	340.2
127.5°	116.2	122.1	128.1	129.6	151.3	180.2	194.7	220.6	272.6	311.6	317.2
130°	120.1	126.5	132.8	134.4	154.2	180.5	193.6	216.8	263.0	297.7	302.9
132.5°	124.1	130.5	136.8	138.5	156.6	180.7	192.8	213.4	254.9	285.9	290.5
135°	130.0	135.8	141.6	143.1	159.1	180.6	191.2	208.6	243.3	269.2	273.2
137.5°	136.1	141.8	147.5	149.0	163.0	181.7	191.0	205.7	235.0	256.9	260.2
140°	141.0	146.3	151.6	153.0	165.4	181.8	190.0	202.7	228.1	247.0	250.1
142.5°	144.9	149.7	154.7	155.9	167.2	182.4	190.0	201.1	223.4	240.1	242.7
145°	150.8	155.0	159.3	160.4	169.9	182.4	188.8	197.8	216.0	229.7	231.6
147.5°	156.6	160.8	165.0	166.0	173.6	183.7	188.8	195.9	210.2	221.0	222.6
150°	160.5	164.2	168.1	169.0	175.6	184.4	188.8	194.8	206.9	215.9	217.3
152.5°	164.5	167.3	170.2	170.9	176.9	184.8	188.8	193.9	204.2	212.0	213.0
155°	170.4	172.5	174.7	175.2	179.7	185.8	188.8	192.9	201.1	207.2	207.9
157.5°	174.8	176.8	178.9	179.4	182.5	186.7	188.8	191.9	198.3	203.1	203.6
160°	177.7	179.4	180.9	181.3	183.8	187.1	188.8	191.5	197.0	201.1	201.3
162.5°	180.6	181.8	183.0	183.4	185.2	187.6	188.8	191.1	195.7	199.2	199.4
165°	183.9	184.9	186.0	186.3	187.1	188.2	188.8	190.4	193.7	196.2	196.4
167.5°	186.8	187.3	187.8	188.0	188.7	189.6	190.0	191.2	193.3	194.9	195.0
170°	188.8	189.3	189.8	189.9	190.0	190.0	190.0	191.2	193.3	194.9	194.9
172.5°	189.8	189.9	190.0	190.0	190.0	190.0	190.0	190.9	192.6	193.9	193.8
175°	191.2	191.2	191.2	191.2	190.8	190.3	190.0	190.6	191.7	192.5	192.5
177.5°	191.2	191.2	191.2	191.2	190.9	190.5	190.3	190.7	191.6	192.3	192.2
180°	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2	191.2



TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	267.2	267.2
2.5°	285.2	283.5
5°	366.8	368.6
7.5°	494.0	493.2
10°	614.3	622.0
12.5°	701.9	703.6
15°	755.2	758.6
17.5°	775.8	776.7
20°	776.7	775.0
22.5°	767.2	765.5
25°	756.1	755.2
27.5°	745.7	746.6
30°	741.5	744.0
32.5°	741.5	745.7
35°	743.2	747.4
37.5°	742.3	747.4
40°	738.8	744.9
42.5°	729.4	733.7
45°	714.8	719.9
47.5°	695.9	699.4
50°	671.9	675.3
52.5°	641.8	642.6
55°	605.7	609.2
57.5°	567.1	567.9
60°	524.1	526.7
62.5°	478.6	478.6
65°	430.4	432.1
67.5°	380.6	384.9
70°	329.9	330.8
72.5°	280.1	280.1
75°	228.6	229.4
77.5°	179.5	179.5
80°	133.2	134.0
82.5°	91.9	93.6
85°	57.6	57.6
87.5°	26.6	24.1
90°	4.9	4.9
92.5°	19.5	15.6
95°	68.1	56.4
97.5°	163.1	140.8
100°	235.1	208.4
102.5°	305.8	283.0
105°	396.0	383.7
107.5°	455.0	458.0
110°	477.5	490.4





TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	479.5	499.2
115°	466.8	494.0
117.5°	439.9	470.0
120°	418.2	447.5
122.5°	397.0	425.9
125°	366.8	393.4
127.5°	339.7	362.2
130°	323.6	344.4
132.5°	309.1	327.7
135°	289.2	305.3
137.5°	273.3	286.4
140°	262.3	274.6
142.5°	253.2	263.8
145°	239.7	247.7
147.5°	229.2	235.8
150°	222.7	228.1
152.5°	217.0	221.1
155°	210.5	213.3
157.5°	205.5	207.4
160°	202.4	203.5
162.5°	200.5	201.5
165°	197.6	198.7
167.5°	195.5	195.9
170°	194.9	194.9
172.5°	193.4	193.0
175°	192.5	192.5
177.5°	191.7	191.2
180°	191.2	191.2



TEST NUMBER: P936237

CATALOG NUMBER: SQ4-FB-025U-050D-92765-1D-UNV-STD-W-6-2700K

**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	3.81	4.85	4.64	5.71	6.79	16.98	18.01	17.81	18.88	19.95
	3H	4.53	5.46	5.37	6.33	7.44	18.82	19.76	19.67	20.63	21.73
	4H	4.84	5.72	5.70	6.60	7.71	19.47	20.36	20.34	21.24	22.35
	6H	5.09	5.91	5.97	6.80	7.92	19.91	20.73	20.78	21.61	22.74
	8H	5.17	5.95	6.05	6.85	7.98	20.03	20.81	20.92	21.72	22.84
	12H	5.19	5.93	6.08	6.83	7.99	20.10	20.85	20.99	21.75	22.90
4H	2H	11.04	11.92	11.91	12.80	13.92	17.27	18.16	18.14	19.04	20.15
	3H	12.62	13.37	13.50	14.28	15.41	19.33	20.07	20.21	20.98	22.11
	4H	12.73	13.40	13.62	14.31	15.47	20.10	20.78	20.99	21.68	22.84
	6H	12.75	13.34	13.65	14.27	15.42	20.65	21.23	21.55	22.16	23.32
	8H	12.73	13.28	13.64	14.20	15.38	20.81	21.36	21.72	22.28	23.46
	12H	12.70	13.19	13.62	14.13	15.31	20.91	21.41	21.84	22.35	23.53
8H	4H	14.18	14.73	15.09	15.66	16.83	20.18	20.73	21.09	21.65	22.82
	6H	14.43	14.89	15.37	15.86	17.03	20.81	21.27	21.75	22.23	23.40
	8H	14.45	14.86	15.40	15.82	17.00	21.03	21.43	21.98	22.39	23.58
	12H	14.43	14.79	15.38	15.74	16.98	21.18	21.54	22.13	22.49	23.72
12H	4H	14.33	14.83	15.26	15.77	16.95	20.14	20.63	21.07	21.58	22.75
	6H	14.69	15.10	15.64	16.06	17.24	20.80	21.20	21.74	22.16	23.35
	8H	14.77	15.13	15.72	16.08	17.32	21.03	21.39	21.98	22.34	23.58