

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: P936318

Luminaire Tested: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936318
REPORT IS A COMBINATION OF REPORTS P933438 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

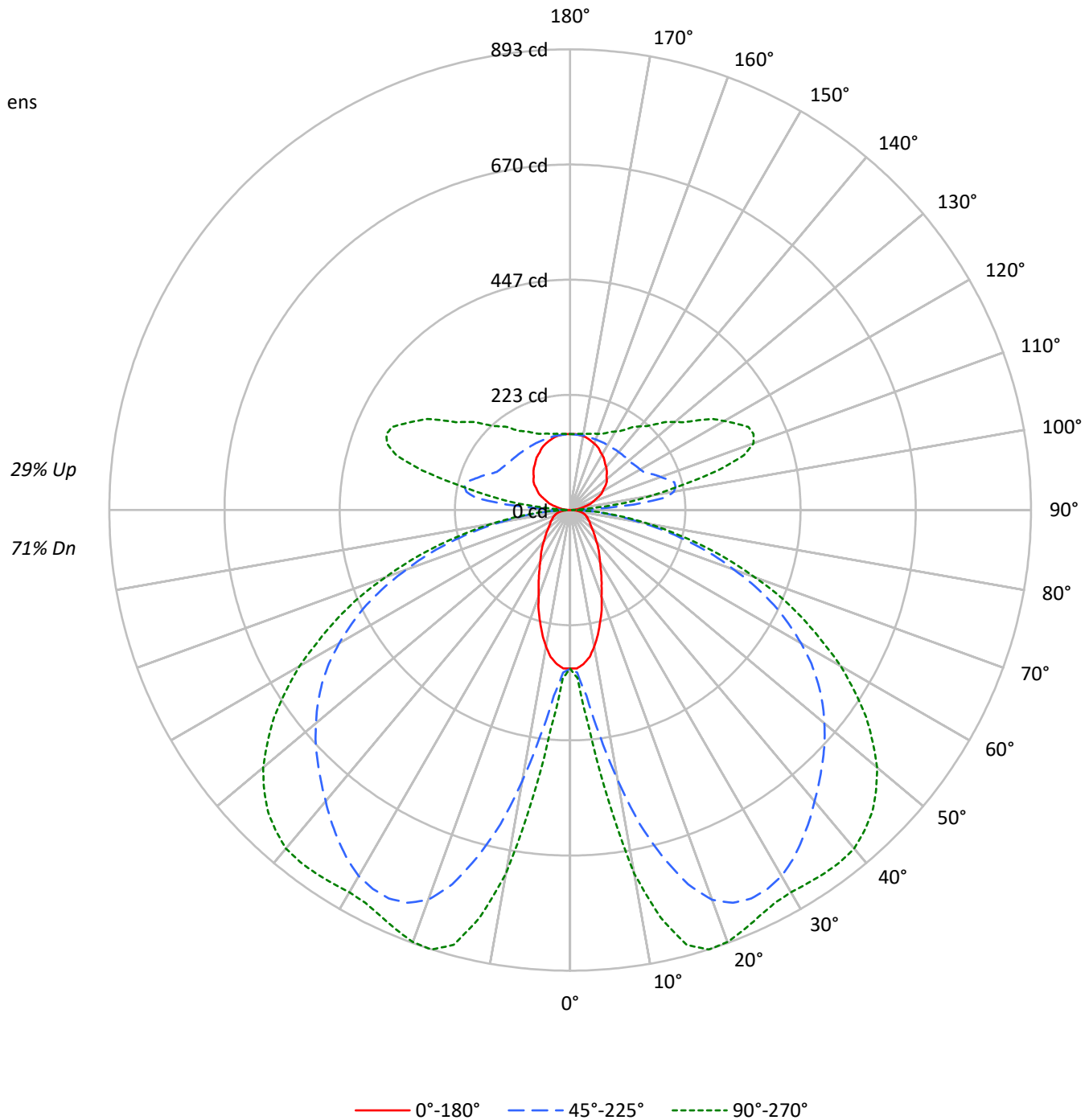
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3333.4 lumens
Efficiency: N/A
Efficacy: 111.1 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: Semi-Direct

Input Watts (W): 30
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: P936318
CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





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CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

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
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	71		
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62	58		
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51	48		
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43	39		
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36	33		
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31	28		
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27	24		
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23	21		
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21	18		
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18	16		
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16	14		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2852	2852	2852
5°	2783	3293	3833
10°	2521	4796	6354
15°	2140	6262	7672
20°	1740	7251	7819
25°	1450	7583	7660
30°	1221	7625	7645
35°	1078	7492	7844
40°	937	7321	8048
45°	848	7194	8079
50°	775	7079	7946
55°	740	6913	7593
60°	756	6600	7036
65°	781	6129	6273
70°	828	5335	5300
75°	908	4338	4136
80°	969	2998	2786
85°	820	1583	1426

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8079 cd/sqm



TEST NUMBER: P936318

CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.2
10°-20°	176.2	5.3
20°-30°	308.1	9.2
30°-40°	396.6	11.9
40°-50°	443.0	13.3
50°-60°	424.3	12.7
60°-70°	336.3	10.1
70°-80°	197.7	5.9
80°-90°	55.5	1.7
90°-100°	71.9	2.2
100°-110°	189.0	5.7
110°-120°	195.9	5.9
120°-130°	157.1	4.7
130°-140°	123.3	3.7
140°-150°	94.6	2.8
150°-160°	68.2	2.0
160°-170°	41.7	1.3
170°-180°	14.1	0.4
0°-30°	524.0	15.7
0°-40°	920.7	27.6
0°-60°	1788.1	53.6
0°-90°	2377.6	71.3
90°-120°	456.8	13.7
90°-150°	831.9	25.0
90°-180°	956.0	28.7
0°-180°	3333.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	307	307	307	307	307	
5°	299	321	362	409	424	28
15°	224	414	698	846	872	62
25°	143	469	831	868	868	66
35°	97	449	782	827	860	60
45°	66	358	692	792	828	51
55°	47	227	587	682	700	43
65°	38	120	436	490	497	37
75°	28	74	239	263	264	29
85°	10	23	59	65	66	10
90°	1	3	8	4	4	1
95°	10	37	124	64	44	11
105°	34	52	209	317	296	36
115°	60	73	167	334	381	60
125°	84	94	152	257	303	75
135°	100	110	147	208	235	78
145°	116	124	146	177	191	73
155°	131	135	146	160	164	60
165°	142	144	146	151	153	40
175°	147	147	146	148	148	14
180°	147	147	147	147	147	



TEST NUMBER: P936318
 CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3	307.3
2.5°	307.3	307.3	309.2	310.2	312.2	313.2	315.2	317.1	323.1	324.1	326.0
5°	299.4	303.3	316.2	321.1	334.9	353.7	361.6	374.5	401.1	409.0	414.0
7.5°	287.5	296.4	328.0	335.9	370.5	419.9	440.6	468.3	510.8	531.5	548.3
10°	268.7	287.5	343.8	362.6	418.9	494.0	532.5	571.1	635.3	663.9	674.8
12.5°	248.0	278.6	360.6	386.3	467.3	577.0	623.4	665.9	739.0	777.6	783.5
15°	224.3	265.8	376.4	414.0	518.7	646.2	697.5	749.9	818.1	845.7	852.6
17.5°	203.5	255.9	391.2	430.8	558.2	708.4	760.8	804.2	859.6	878.3	883.3
20°	177.8	240.1	401.1	452.5	599.7	753.8	804.2	837.8	875.4	887.2	889.2
22.5°	159.1	223.3	407.1	460.4	627.4	781.5	824.0	850.7	876.4	880.3	881.3
25°	143.3	204.5	406.1	469.3	651.1	798.3	830.9	850.7	865.5	867.5	867.5
27.5°	128.4	183.8	402.1	471.3	668.9	802.3	827.9	841.8	848.7	852.6	852.6
30°	115.6	164.0	392.2	467.3	676.8	798.3	819.1	826.0	832.9	838.8	841.8
32.5°	105.7	145.2	377.4	459.4	677.8	788.4	803.2	807.2	817.1	830.9	835.8
35°	96.8	126.5	360.6	448.6	671.8	772.6	782.5	786.4	806.2	827.0	833.9
37.5°	87.9	112.6	338.9	429.8	662.9	753.8	760.8	767.7	798.3	823.0	830.9
40°	79.0	100.8	313.2	409.0	649.1	731.1	737.0	747.9	788.4	817.1	825.0
42.5°	72.1	90.9	285.5	387.3	631.3	705.4	714.3	730.1	776.6	807.2	816.1
45°	66.2	81.0	255.9	357.7	608.6	678.8	691.6	713.3	762.7	792.4	800.3
47.5°	60.3	74.1	225.3	327.0	583.9	652.1	668.9	693.6	744.0	772.6	779.5
50°	55.3	67.2	194.6	294.4	557.2	623.4	643.2	668.9	720.3	746.9	755.8
52.5°	51.4	61.3	166.0	261.8	526.6	593.8	616.5	643.2	691.6	717.3	723.2
55°	47.4	56.3	141.3	227.2	495.0	562.2	586.9	612.6	660.0	681.7	685.7
57.5°	45.4	52.4	120.5	194.6	461.4	526.6	554.3	578.0	622.4	639.2	643.2
60°	42.5	49.4	104.7	167.0	424.8	493.0	516.7	540.4	578.0	591.8	594.8
62.5°	39.5	47.4	92.9	140.3	387.3	453.5	477.2	498.9	530.6	540.4	544.4
65°	37.5	45.4	84.0	120.5	348.8	412.0	435.7	454.5	480.2	490.0	492.0
67.5°	35.6	43.5	77.1	103.7	310.2	370.5	388.3	406.1	425.8	435.7	436.7
70°	32.6	41.5	71.1	91.9	270.7	323.1	337.9	356.7	372.5	377.4	380.4
72.5°	30.6	38.5	67.2	83.0	230.2	277.6	291.5	302.3	316.2	321.1	321.1
75°	27.7	34.6	63.2	74.1	188.7	227.2	239.1	250.0	260.8	262.8	259.8
77.5°	24.7	30.6	54.3	62.2	147.2	179.8	189.7	195.6	204.5	206.5	207.5
80°	20.7	26.7	42.5	48.4	106.7	132.4	139.3	144.2	152.2	152.2	154.1
82.5°	15.8	20.7	30.6	34.6	72.1	90.9	96.8	99.8	104.7	104.7	104.7
85°	9.9	12.8	19.8	22.7	43.5	55.3	59.3	60.3	64.2	65.2	65.2
87.5°	4.9	6.9	12.8	13.8	22.7	28.7	28.7	30.6	30.6	29.6	28.7
90°	1.0	1.8	2.6	2.8	4.3	6.4	7.5	6.7	5.0	3.8	3.8
92.5°	4.0	10.7	17.4	19.1	26.9	37.2	42.4	37.1	26.7	18.8	18.0
95°	9.5	21.8	34.2	37.2	66.1	104.5	123.8	110.5	83.8	63.8	61.6
97.5°	16.4	27.3	38.1	40.9	89.0	153.1	185.2	176.9	160.0	147.3	143.0
100°	21.7	31.6	41.5	44.0	97.3	168.6	204.1	204.7	206.0	206.9	201.7
102.5°	26.3	35.5	44.8	47.0	101.2	173.4	209.5	220.2	241.7	257.8	253.3
105°	34.1	41.9	49.6	51.6	104.0	173.9	208.9	233.0	281.1	317.1	314.8
107.5°	42.0	49.2	56.5	58.3	104.5	166.2	197.0	230.6	297.7	348.1	348.7
110°	47.3	53.8	60.4	62.0	103.7	159.4	187.1	224.7	299.7	356.0	358.4



TEST NUMBER: P936318

CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	52.6	58.8	65.0	66.6	103.7	153.3	178.1	216.6	293.3	350.9	354.7
115°	60.5	66.2	71.9	73.4	104.7	146.5	167.4	204.3	278.3	333.7	339.0
117.5°	68.3	73.5	78.7	80.0	106.7	142.2	160.0	193.4	260.0	310.1	316.0
120°	72.8	77.8	82.7	83.9	108.2	140.7	156.9	187.4	248.5	294.2	299.9
122.5°	77.3	82.2	87.1	88.4	110.5	139.9	154.6	182.1	237.0	278.2	283.8
125°	84.1	88.6	93.2	94.4	113.6	139.3	152.2	175.5	222.2	257.2	262.3
127.5°	89.6	94.3	98.8	100.0	116.7	138.9	150.1	170.1	210.2	240.3	244.6
130°	92.6	97.5	102.5	103.7	119.0	139.2	149.3	167.2	202.8	229.6	233.6
132.5°	95.7	100.7	105.6	106.8	120.7	139.3	148.6	164.6	196.5	220.5	224.1
135°	100.3	104.7	109.3	110.4	122.7	139.2	147.4	160.7	187.5	207.6	210.6
137.5°	104.9	109.4	113.8	114.9	125.7	140.0	147.2	158.5	181.1	198.1	200.7
140°	108.8	112.8	117.0	118.0	127.5	140.2	146.5	156.3	175.9	190.5	192.9
142.5°	111.7	115.5	119.3	120.2	129.0	140.7	146.5	155.1	172.3	185.2	187.2
145°	116.3	119.5	122.9	123.7	131.0	140.7	145.5	152.5	166.6	177.1	178.7
147.5°	120.8	124.0	127.3	128.0	133.9	141.7	145.5	151.1	162.1	170.4	171.7
150°	123.8	126.7	129.6	130.3	135.4	142.2	145.5	150.2	159.6	166.6	167.6
152.5°	126.9	129.0	131.2	131.8	136.3	142.5	145.5	149.5	157.5	163.5	164.3
155°	131.4	133.0	134.7	135.1	138.5	143.2	145.5	148.7	155.1	159.9	160.4
157.5°	134.8	136.3	137.9	138.3	140.7	144.0	145.5	148.0	152.9	156.6	157.0
160°	137.0	138.2	139.5	139.8	141.7	144.2	145.5	147.6	151.9	155.0	155.2
162.5°	139.3	140.2	141.2	141.4	142.8	144.6	145.5	147.3	150.9	153.5	153.7
165°	141.8	142.6	143.5	143.7	144.2	145.1	145.5	146.8	149.4	151.3	151.5
167.5°	144.1	144.4	144.8	144.9	145.4	146.1	146.5	147.3	149.0	150.3	150.4
170°	145.5	145.9	146.3	146.4	146.4	146.5	146.5	147.3	149.0	150.3	150.3
172.5°	146.3	146.4	146.5	146.5	146.5	146.5	146.5	147.2	148.5	149.5	149.4
175°	147.4	147.4	147.4	147.4	147.1	146.7	146.5	146.9	147.8	148.4	148.4
177.5°	147.4	147.4	147.4	147.4	147.2	146.9	146.7	147.0	147.7	148.2	148.1
180°	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4	147.4



TEST NUMBER: P936318

CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	307.3	307.3
2.5°	328.0	326.0
5°	421.9	423.9
7.5°	568.1	567.1
10°	706.4	715.3
12.5°	807.2	809.2
15°	868.5	872.4
17.5°	892.2	893.2
20°	893.2	891.2
22.5°	882.3	880.3
25°	869.4	868.5
27.5°	857.6	858.6
30°	852.6	855.6
32.5°	852.6	857.6
35°	854.6	859.6
37.5°	853.6	859.6
40°	849.7	856.6
42.5°	838.8	843.8
45°	822.0	827.9
47.5°	800.3	804.2
50°	772.6	776.6
52.5°	738.0	739.0
55°	696.5	700.5
57.5°	652.1	653.1
60°	602.7	605.6
62.5°	550.3	550.3
65°	495.0	497.0
67.5°	437.7	442.6
70°	379.4	380.4
72.5°	322.1	322.1
75°	262.8	263.8
77.5°	206.5	206.5
80°	153.1	154.1
82.5°	105.7	107.7
85°	66.2	66.2
87.5°	30.6	27.7
90°	3.8	3.8
92.5°	15.0	12.1
95°	52.6	43.5
97.5°	125.8	108.6
100°	181.3	160.7
102.5°	235.7	218.2
105°	305.4	295.9
107.5°	350.9	353.2
110°	368.2	378.1



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CATALOG NUMBER: SQ4-FB-025U-075D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	369.8	384.9
115°	360.0	381.0
117.5°	339.2	362.5
120°	322.5	345.0
122.5°	306.1	328.4
125°	282.9	303.4
127.5°	261.9	279.2
130°	249.6	265.6
132.5°	238.4	252.7
135°	223.1	235.4
137.5°	210.7	220.9
140°	202.2	211.7
142.5°	195.3	203.4
145°	184.9	191.0
147.5°	176.8	181.9
150°	171.7	175.9
152.5°	167.4	170.5
155°	162.4	164.5
157.5°	158.5	160.0
160°	156.1	156.9
162.5°	154.5	155.3
165°	152.3	153.1
167.5°	150.7	151.1
170°	150.3	150.3
172.5°	149.1	148.8
175°	148.4	148.4
177.5°	147.8	147.4
180°	147.4	147.4



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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	6.37	7.52	7.11	8.29	9.22	19.51	20.66	20.25	21.43	22.36
	3H	7.10	8.14	7.85	8.92	9.88	21.36	22.40	22.11	23.18	24.13
	4H	7.41	8.39	8.18	9.18	10.15	22.00	22.99	22.78	23.78	24.74
	6H	7.68	8.59	8.46	9.38	10.37	22.44	23.35	23.22	24.14	25.13
	8H	7.75	8.62	8.55	9.44	10.42	22.56	23.43	23.36	24.25	25.23
	12H	7.78	8.61	8.58	9.42	10.43	22.63	23.46	23.43	24.27	25.28
4H	2H	13.60	14.58	14.37	15.37	16.34	19.82	20.81	20.60	21.59	22.56
	3H	15.19	16.02	15.98	16.84	17.83	21.88	22.70	22.67	23.53	24.51
	4H	15.30	16.05	16.10	16.88	17.89	22.65	23.40	23.45	24.22	25.24
	6H	15.33	15.98	16.15	16.83	17.85	23.19	23.85	24.01	24.69	25.71
	8H	15.31	15.93	16.14	16.77	17.80	23.35	23.97	24.18	24.81	25.84
	12H	15.29	15.84	16.13	16.70	17.74	23.45	24.01	24.30	24.87	25.91
8H	4H	16.76	17.37	17.59	18.22	19.25	22.73	23.35	23.56	24.19	25.22
	6H	17.02	17.53	17.87	18.41	19.44	23.36	23.87	24.22	24.76	25.79
	8H	17.04	17.49	17.90	18.37	19.42	23.58	24.03	24.45	24.91	25.96
	12H	17.02	17.42	17.89	18.29	19.40	23.73	24.13	24.60	25.00	26.10
12H	4H	16.92	17.47	17.76	18.33	19.37	22.70	23.25	23.55	24.12	25.16
	6H	17.28	17.73	18.14	18.61	19.66	23.35	23.81	24.22	24.68	25.73
	8H	17.36	17.76	18.23	18.63	19.73	23.59	23.99	24.46	24.86	25.96