

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: P936661

Luminaire Tested: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936661
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

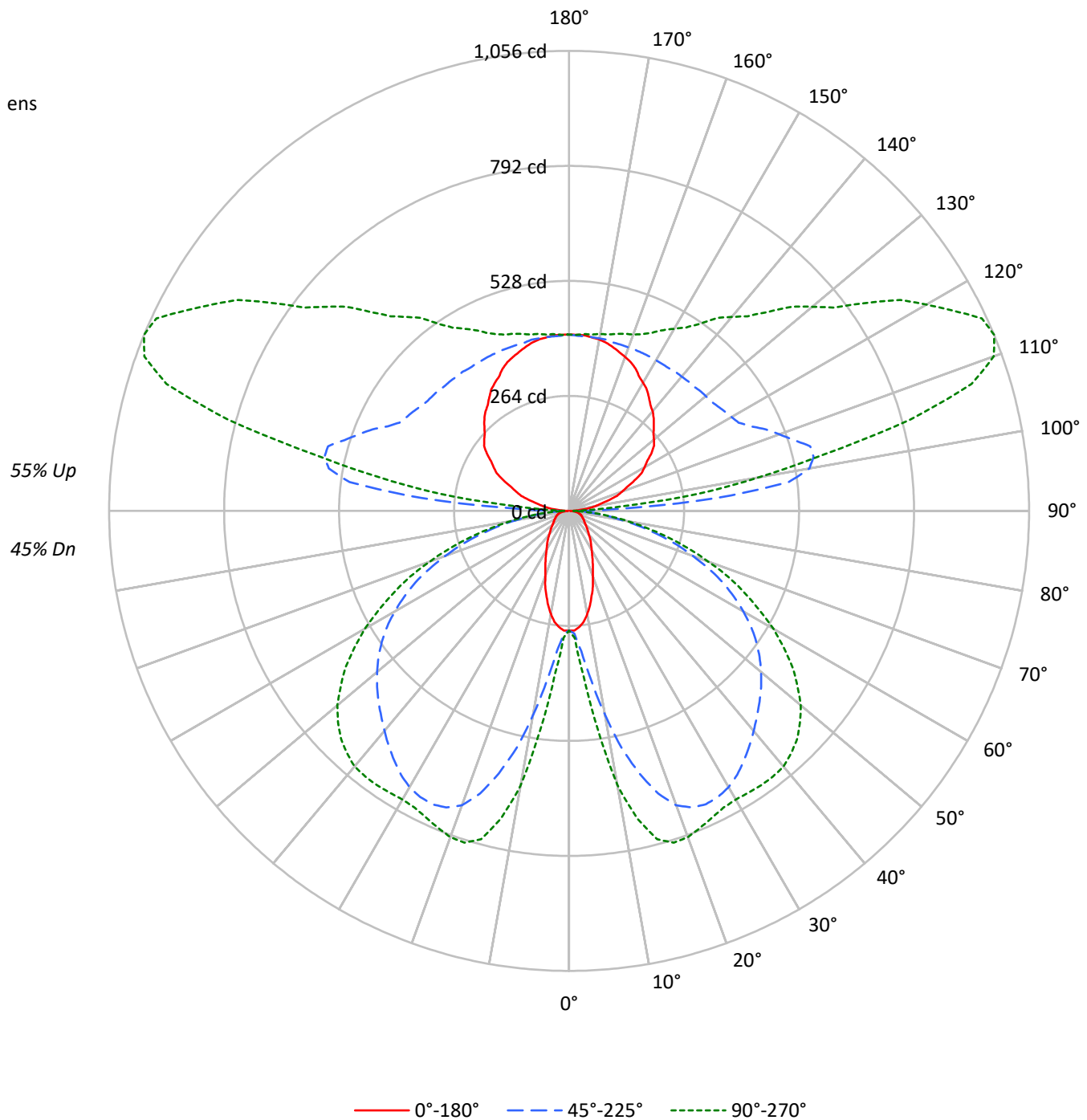
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4749.8 lumens
Efficiency: N/A
Efficacy: 111.5 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: General Diffuse

Input Watts (W): 42.6
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: P936661
CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42	37
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16	13
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1699	1699	1699
5°	1660	1964	2285
10°	1505	2862	3787
15°	1278	3738	4573
20°	1041	4332	4661
25°	868	4531	4567
30°	732	4559	4558
35°	646	4482	4675
40°	563	4383	4798
45°	509	4309	4816
50°	466	4242	4736
55°	447	4146	4527
60°	457	3963	4195
65°	475	3684	3739
70°	505	3210	3160
75°	558	2615	2465
80°	602	1811	1661
85°	531	959	850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4816 cd/sqm



TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.5	0.7
10°-20°	157.5	3.3
20°-30°	275.5	5.8
30°-40°	354.7	7.5
40°-50°	396.2	8.3
50°-60°	379.4	8.0
60°-70°	300.7	6.3
70°-80°	176.8	3.7
80°-90°	50.7	1.1
90°-100°	197.2	4.2
100°-110°	518.5	10.9
110°-120°	537.6	11.3
120°-130°	431.2	9.1
130°-140°	338.4	7.1
140°-150°	259.7	5.5
150°-160°	187.0	3.9
160°-170°	114.4	2.4
170°-180°	38.7	0.8
0°-30°	468.6	9.9
0°-40°	823.3	17.3
0°-60°	1598.8	33.7
0°-90°	2127.0	44.8
90°-120°	1253.4	26.4
90°-150°	2282.7	48.1
90°-180°	2623.0	55.2
0°-180°	4749.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	275	275	275	275	275	
5°	268	287	323	366	379	25
15°	200	370	624	756	780	56
25°	128	420	743	776	777	59
35°	87	401	700	739	769	54
45°	59	320	618	708	740	46
55°	42	203	525	610	626	39
65°	34	108	390	438	444	33
75°	25	66	214	235	236	26
85°	9	20	53	58	59	9
90°	3	8	21	10	10	3
95°	26	102	340	175	119	29
105°	94	142	573	870	812	99
115°	166	202	459	916	1045	164
125°	231	259	418	706	832	205
135°	275	303	405	570	646	213
145°	319	340	400	486	524	200
155°	361	371	400	438	451	166
165°	389	394	400	415	420	110
175°	405	405	402	407	407	38
180°	405	405	405	405	405	



TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7
2.5°	274.7	274.7	276.5	277.4	279.2	280.1	281.8	283.6	288.9	289.8	291.5
5°	267.7	271.2	282.7	287.1	299.5	316.3	323.3	334.8	358.7	365.7	370.2
7.5°	257.1	265.1	293.3	300.4	331.3	375.5	394.0	418.8	456.7	475.3	490.4
10°	240.3	257.1	307.4	324.3	374.6	441.7	476.2	510.6	568.1	593.6	603.4
12.5°	221.8	249.2	322.4	345.4	417.9	515.9	557.5	595.5	660.8	695.3	700.5
15°	200.5	237.7	336.6	370.2	463.8	577.7	623.7	670.6	731.5	756.2	762.5
17.5°	182.0	228.8	349.8	385.2	499.1	633.4	680.2	719.2	768.6	785.4	789.8
20°	159.1	214.7	358.7	404.6	536.3	674.1	719.2	749.2	782.7	793.4	795.1
22.5°	142.2	199.6	364.0	411.7	561.0	698.8	736.8	760.6	783.6	787.1	788.0
25°	128.1	182.9	363.1	419.7	582.2	713.8	743.0	760.6	773.9	775.6	775.6
27.5°	114.9	164.3	359.6	421.4	598.1	717.4	740.3	752.7	758.9	762.5	762.5
30°	103.4	146.7	350.7	417.9	605.1	713.8	732.4	738.6	744.7	750.1	752.7
32.5°	94.5	129.9	337.4	410.8	606.0	705.0	718.3	721.8	730.6	743.0	747.4
35°	86.6	113.1	322.4	401.1	600.8	690.9	699.7	703.3	720.9	739.4	745.6
37.5°	78.6	100.7	303.0	384.3	592.8	674.1	680.2	686.5	713.8	735.9	743.0
40°	70.7	90.1	280.1	365.7	580.5	653.7	659.1	668.7	705.0	730.6	737.7
42.5°	64.5	81.2	255.3	346.3	564.5	630.8	638.7	652.8	694.4	721.8	729.7
45°	59.2	72.5	228.8	319.8	544.2	606.9	618.4	637.8	682.0	708.5	715.6
47.5°	53.9	66.2	201.4	292.4	522.1	583.1	598.1	620.2	665.2	690.9	697.0
50°	49.4	60.1	174.1	263.2	498.3	557.5	575.1	598.1	644.1	667.9	675.9
52.5°	45.9	54.8	148.4	234.2	470.9	530.9	551.3	575.1	618.4	641.4	646.7
55°	42.4	50.3	126.3	203.2	442.6	502.7	524.8	547.7	590.1	609.5	613.1
57.5°	40.7	46.8	107.8	174.1	412.5	470.9	495.6	516.8	556.6	571.6	575.1
60°	38.0	44.2	93.6	149.3	379.9	440.8	462.1	483.2	516.8	529.2	531.8
62.5°	35.3	42.4	83.1	125.4	346.3	405.5	426.7	446.2	474.4	483.2	486.8
65°	33.6	40.7	75.1	107.8	311.9	368.4	389.6	406.4	429.3	438.2	439.9
67.5°	31.8	38.9	68.9	92.7	277.4	331.3	347.2	363.1	380.7	389.6	390.5
70°	29.2	37.1	63.6	82.1	242.1	288.9	302.1	318.9	333.1	337.4	340.2
72.5°	27.4	34.4	60.1	74.2	205.9	248.2	260.6	270.3	282.7	287.1	287.1
75°	24.8	30.9	56.6	66.2	168.7	203.2	213.8	223.5	233.2	235.0	232.3
77.5°	22.0	27.4	48.6	55.7	131.7	160.8	169.6	175.0	182.9	184.6	185.5
80°	18.5	23.9	38.0	43.3	95.4	118.4	124.5	129.0	136.0	136.0	137.8
82.5°	14.1	18.5	27.4	30.9	64.5	81.2	86.6	89.2	93.6	93.6	93.6
85°	8.9	11.5	17.7	20.3	38.9	49.4	53.0	53.9	57.4	58.3	58.3
87.5°	4.4	6.1	11.5	12.4	20.3	25.6	25.6	27.4	27.4	26.5	25.6
90°	2.7	4.9	7.1	7.6	11.9	17.7	20.6	18.4	13.7	10.3	10.3
92.5°	10.9	29.3	47.8	52.4	73.7	102.1	116.2	101.8	73.1	51.6	49.5
95°	26.1	59.8	93.6	102.1	181.3	286.9	339.7	303.2	230.0	175.1	168.9
97.5°	45.1	74.9	104.7	112.2	244.3	420.4	508.4	485.3	439.0	404.3	392.4
100°	59.7	86.8	113.8	120.6	267.1	462.5	560.2	561.8	565.3	567.8	553.8
102.5°	72.2	97.5	122.7	129.0	277.6	475.8	574.8	604.3	663.2	707.4	695.4
105°	93.5	114.8	136.1	141.5	285.4	477.3	573.2	639.2	771.2	870.3	863.8
107.5°	115.1	135.1	154.9	159.9	286.9	456.0	540.6	632.6	816.8	955.0	956.6
110°	129.8	147.7	165.7	170.2	284.7	437.2	513.5	616.4	822.4	976.8	983.5



TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	144.2	161.3	178.5	182.8	284.7	420.8	488.8	594.2	804.9	962.9	973.2
115°	165.9	181.7	197.5	201.5	287.4	401.9	459.2	560.7	763.7	915.9	930.3
117.5°	187.3	201.7	216.1	219.7	292.7	390.1	438.8	530.4	713.6	851.0	867.0
120°	199.8	213.3	226.9	230.3	297.0	386.1	430.6	514.3	681.7	807.2	822.8
122.5°	212.1	225.7	239.3	242.8	303.3	384.0	424.4	499.8	650.6	763.6	778.9
125°	230.8	243.2	255.7	258.7	311.7	382.3	417.6	481.7	609.7	705.7	719.8
127.5°	246.0	258.6	271.1	274.3	320.1	381.4	411.9	466.9	576.8	659.3	671.1
130°	254.2	267.7	281.2	284.6	326.3	381.9	409.7	458.6	556.6	630.0	641.0
132.5°	262.6	276.1	289.7	293.0	331.3	382.3	407.9	451.7	539.3	605.0	614.8
135°	275.1	287.4	299.7	302.8	336.7	382.0	404.6	441.3	514.7	569.7	578.2
137.5°	287.8	300.0	312.1	315.2	344.8	384.3	404.0	435.0	497.0	543.6	550.5
140°	298.4	309.7	320.8	323.7	349.8	384.7	402.2	429.0	482.5	522.7	529.2
142.5°	306.5	316.9	327.3	329.9	354.0	386.1	402.2	425.7	472.7	508.0	513.6
145°	319.1	328.1	337.2	339.5	359.5	386.1	399.5	418.7	457.2	486.1	490.3
147.5°	331.6	340.3	349.2	351.4	367.4	388.7	399.5	414.6	444.9	467.6	471.1
150°	339.7	347.7	355.6	357.6	371.6	390.1	399.5	412.3	437.8	457.0	459.8
152.5°	348.1	354.1	360.2	361.7	374.2	391.0	399.5	410.3	432.2	448.5	450.7
155°	360.6	365.1	369.5	370.6	380.2	393.0	399.5	408.1	425.5	438.5	439.9
157.5°	369.9	374.2	378.5	379.6	386.2	395.1	399.5	406.2	419.7	429.8	430.8
160°	376.1	379.4	382.8	383.6	388.9	395.9	399.5	405.2	416.8	425.5	426.1
162.5°	382.3	384.9	387.4	388.0	391.8	396.9	399.5	404.4	414.1	421.4	421.9
165°	389.1	391.4	393.7	394.3	396.0	398.3	399.5	403.0	409.9	415.2	415.8
167.5°	395.3	396.4	397.5	397.8	399.3	401.2	402.2	404.5	409.0	412.5	412.7
170°	399.5	400.5	401.6	401.9	402.0	402.1	402.2	404.5	409.0	412.5	412.5
172.5°	401.6	401.9	402.1	402.2	402.2	402.2	402.2	403.9	407.5	410.3	410.1
175°	404.6	404.6	404.6	404.6	403.8	402.7	402.2	403.3	405.6	407.3	407.3
177.5°	404.6	404.6	404.6	404.6	404.0	403.1	402.7	403.6	405.4	406.7	406.5
180°	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6	404.6



TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	274.7	274.7
2.5°	293.3	291.5
5°	377.2	379.0
7.5°	508.0	507.1
10°	631.7	639.6
12.5°	721.8	723.5
15°	776.6	780.1
17.5°	797.8	798.6
20°	798.6	796.9
22.5°	788.9	787.1
25°	777.5	776.6
27.5°	766.8	767.7
30°	762.5	765.1
32.5°	762.5	766.8
35°	764.2	768.6
37.5°	763.3	768.6
40°	759.7	766.0
42.5°	750.1	754.5
45°	735.1	740.3
47.5°	715.6	719.2
50°	690.9	694.4
52.5°	660.0	660.8
55°	622.8	626.4
57.5°	583.1	584.0
60°	538.9	541.6
62.5°	492.1	492.1
65°	442.6	444.3
67.5°	391.4	395.8
70°	339.3	340.2
72.5°	288.0	288.0
75°	235.0	235.9
77.5°	184.6	184.6
80°	136.9	137.8
82.5°	94.5	96.3
85°	59.2	59.2
87.5°	27.4	24.8
90°	10.3	10.3
92.5°	41.3	33.1
95°	144.0	119.2
97.5°	345.2	297.9
100°	497.4	441.0
102.5°	647.0	598.7
105°	837.9	811.9
107.5°	962.8	969.1
110°	1010.5	1037.5



TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1014.8	1056.2
115°	987.8	1045.4
117.5°	930.8	994.7
120°	884.8	946.9
122.5°	840.1	901.2
125°	776.2	832.5
127.5°	718.7	766.3
130°	684.9	728.8
132.5°	654.2	693.5
135°	612.1	646.0
137.5°	578.4	606.1
140°	555.1	581.1
142.5°	535.9	558.2
145°	507.2	524.1
147.5°	485.1	499.1
150°	471.2	482.5
152.5°	459.3	467.9
155°	445.6	451.3
157.5°	434.8	438.8
160°	428.3	430.6
162.5°	424.1	426.3
165°	418.1	420.4
167.5°	413.7	414.6
170°	412.5	412.5
172.5°	409.2	408.4
175°	407.3	407.3
177.5°	405.6	404.6
180°	404.6	404.6



TEST NUMBER: P936661

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-3000K

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	2.35	3.20	3.34	4.21	5.55	15.51	16.36	16.51	17.37	18.71
	3H	3.05	3.82	4.06	4.84	6.20	17.35	18.11	18.35	19.13	20.49
	4H	3.35	4.07	4.37	5.10	6.47	17.99	18.71	19.00	19.73	21.10
	6H	3.60	4.27	4.63	5.29	6.68	18.41	19.08	19.44	20.11	21.49
	8H	3.67	4.30	4.70	5.35	6.72	18.53	19.17	19.56	20.21	21.59
	12H	3.68	4.29	4.72	5.33	6.73	18.60	19.20	19.63	20.24	21.64
4H	2H	9.55	10.28	10.58	11.30	12.67	15.79	16.51	16.81	17.53	18.90
	3H	11.12	11.73	12.15	12.78	14.16	17.83	18.43	18.86	19.48	20.86
	4H	11.21	11.77	12.25	12.81	14.22	18.59	19.14	19.63	20.19	21.59
	6H	11.23	11.70	12.27	12.77	14.17	19.12	19.60	20.17	20.67	22.07
	8H	11.20	11.65	12.25	12.71	14.12	19.28	19.73	20.33	20.79	22.20
	12H	11.16	11.56	12.23	12.64	14.06	19.37	19.78	20.44	20.85	22.27
8H	4H	12.66	13.10	13.71	14.16	15.58	18.65	19.10	19.70	20.15	21.57
	6H	12.90	13.27	13.97	14.37	15.78	19.27	19.64	20.35	20.74	22.16
	8H	12.91	13.24	14.00	14.32	15.76	19.49	19.82	20.57	20.90	22.33
	12H	12.88	13.17	13.97	14.25	15.72	19.63	19.92	20.72	21.00	22.47
12H	4H	12.80	13.20	13.87	14.27	15.70	18.60	19.01	19.67	20.08	21.50
	6H	13.15	13.48	14.24	14.56	16.00	19.26	19.58	20.34	20.67	22.10
	8H	13.22	13.51	14.31	14.59	16.06	19.48	19.77	20.57	20.85	22.32