

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: P937050

Luminaire Tested: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937050
REPORT IS A COMBINATION OF REPORTS P933501 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

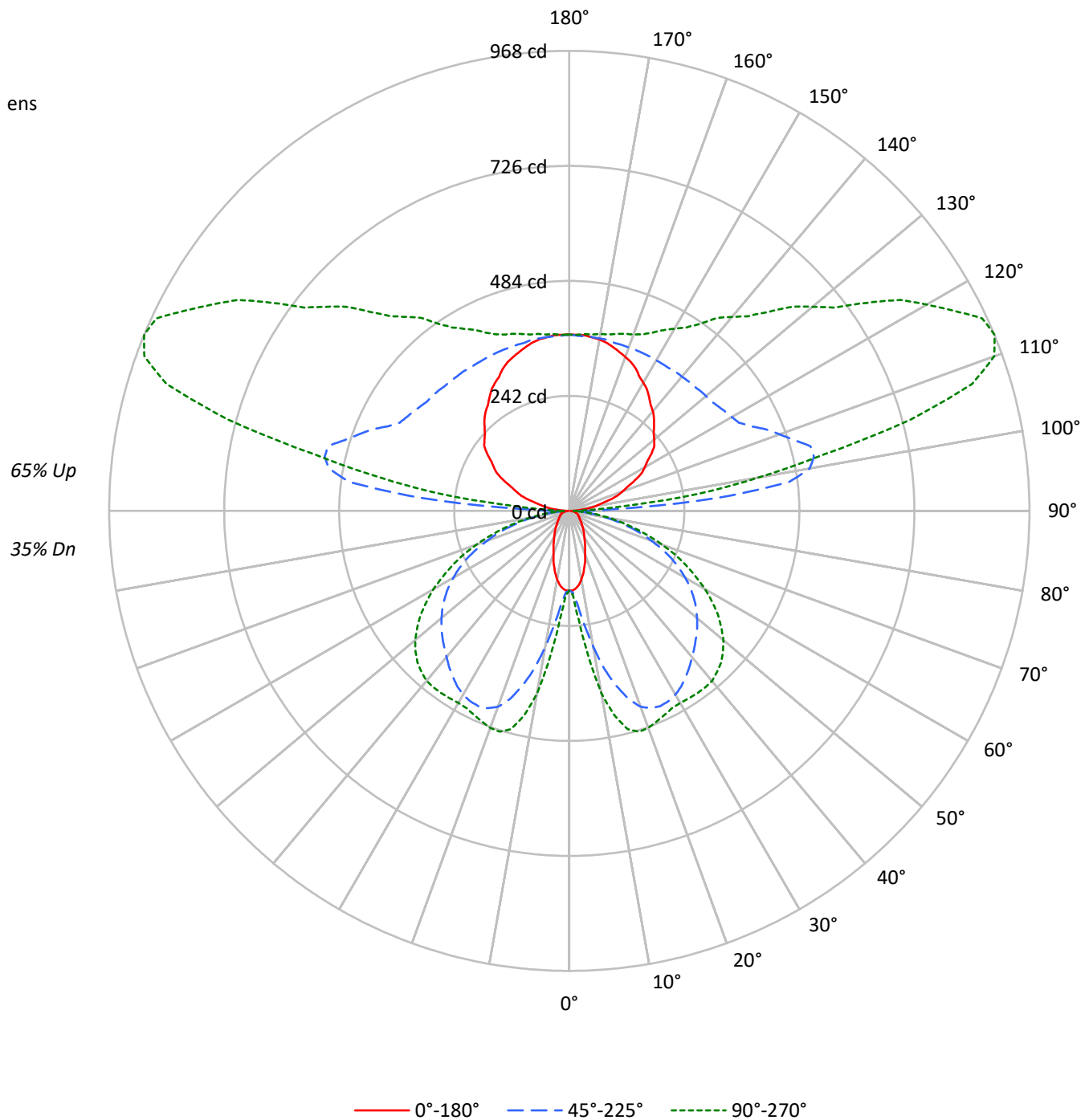
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3701.9 lumens
Efficiency: N/A
Efficacy: 107.6 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-Indirect

Input Watts (W): 34.4
Input Voltage (V): NR
Input Current (A_{in}): 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: P937050
CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P937050

CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29				29
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23				23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16				16
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12				12
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9				9
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8				8
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1554	1554	1554
5°	1517	1795	2090
10°	1374	2616	3464
15°	1167	3414	4183
20°	949	3954	4263
25°	790	4135	4176
30°	665	4157	4169
35°	588	4085	4276
40°	511	3992	4387
45°	462	3923	4405
50°	423	3860	4332
55°	405	3769	4140
60°	411	3599	3837
65°	427	3341	3419
70°	449	2908	2889
75°	495	2364	2254
80°	529	1636	1521
85°	447	865	778

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4405 cd/sqm



TEST NUMBER: P937050

CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	0.6
10°-20°	96.0	2.6
20°-30°	168.0	4.5
30°-40°	216.3	5.8
40°-50°	241.6	6.5
50°-60°	231.4	6.3
60°-70°	183.4	5.0
70°-80°	107.8	2.9
80°-90°	31.4	0.8
90°-100°	180.8	4.9
100°-110°	475.3	12.8
110°-120°	492.9	13.3
120°-130°	395.3	10.7
130°-140°	310.2	8.4
140°-150°	238.1	6.4
150°-160°	171.5	4.6
160°-170°	104.9	2.8
170°-180°	35.4	1.0
0°-30°	285.7	7.7
0°-40°	502.0	13.6
0°-60°	974.9	26.3
0°-90°	1297.5	35.0
90°-120°	1149.0	31.0
90°-150°	2092.6	56.5
90°-180°	2404.0	64.9
0°-180°	3701.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	168	168	168	168	168	
5°	163	175	197	223	231	15
15°	122	226	380	461	476	34
25°	78	256	453	473	474	36
35°	53	245	427	451	469	33
45°	36	195	377	432	451	28
55°	26	124	320	372	382	24
65°	20	66	238	267	271	20
75°	15	40	130	143	144	16
85°	5	12	32	36	36	6
90°	2	7	19	10	10	2
95°	24	94	311	160	109	27
105°	86	130	526	798	744	91
115°	152	185	421	840	958	150
125°	212	237	383	647	763	188
135°	252	278	371	522	592	195
145°	292	311	366	446	480	183
155°	331	340	366	402	414	152
165°	357	361	366	381	385	101
175°	371	371	369	373	373	35
180°	371	371	371	371	371	



TEST NUMBER: P937050

CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5	167.5
2.5°	167.5	167.5	168.6	169.1	170.2	170.8	171.8	172.9	176.2	176.7	177.8
5°	163.2	165.4	172.4	175.1	182.6	192.9	197.1	204.2	218.7	223.0	225.7
7.5°	156.7	161.6	178.8	183.2	202.0	228.9	240.3	255.4	278.5	289.8	299.0
10°	146.5	156.7	187.5	197.7	228.4	269.3	290.4	311.4	346.4	362.0	367.9
12.5°	135.2	151.9	196.7	210.6	254.8	314.6	339.9	363.1	402.9	424.0	427.2
15°	122.3	144.9	205.2	225.7	282.8	352.3	380.3	408.9	446.1	461.1	464.9
17.5°	111.0	139.6	213.4	234.9	304.3	386.2	414.8	438.5	468.6	478.9	481.6
20°	97.0	130.9	218.7	246.8	327.0	411.1	438.5	456.8	477.3	483.7	484.9
22.5°	86.7	121.7	221.9	251.0	342.1	426.1	449.3	463.8	477.8	480.0	480.5
25°	78.1	111.5	221.4	255.9	355.0	435.2	453.1	463.8	471.9	473.0	473.0
27.5°	70.0	100.2	219.2	257.0	364.7	437.4	451.4	459.0	462.8	464.9	464.9
30°	63.0	89.5	213.8	254.8	369.0	435.2	446.5	450.3	454.1	457.4	459.0
32.5°	57.7	79.2	205.8	250.5	369.5	429.8	438.0	440.1	445.5	453.1	455.7
35°	52.8	69.0	196.7	244.6	366.3	421.3	426.6	428.8	439.6	450.9	454.7
37.5°	47.9	61.4	184.8	234.3	361.4	411.1	414.8	418.6	435.2	448.7	453.1
40°	43.1	54.9	170.8	223.0	354.0	398.6	401.9	407.8	429.8	445.5	449.8
42.5°	39.3	49.5	155.7	211.2	344.2	384.6	389.5	398.1	423.4	440.1	444.9
45°	36.1	44.2	139.6	195.0	331.8	370.1	377.1	389.0	415.9	432.0	436.4
47.5°	32.8	40.4	122.9	178.3	318.4	355.6	364.7	378.1	405.7	421.3	425.0
50°	30.2	36.6	106.2	160.5	303.9	339.9	350.7	364.7	392.7	407.3	412.1
52.5°	28.0	33.4	90.5	142.8	287.2	323.8	336.1	350.7	377.1	391.1	394.4
55°	25.9	30.7	77.0	123.9	269.9	306.5	320.0	334.0	359.8	371.7	373.9
57.5°	24.8	28.6	65.7	106.2	251.6	287.2	302.2	315.1	339.3	348.5	350.7
60°	23.1	26.9	57.1	91.1	231.7	268.8	281.8	294.7	315.1	322.6	324.3
62.5°	21.5	25.9	50.7	76.5	211.2	247.2	260.2	272.1	289.2	294.7	296.8
65°	20.5	24.8	45.8	65.7	190.2	224.6	237.5	247.8	261.8	267.2	268.3
67.5°	19.4	23.7	42.0	56.5	169.1	202.0	211.7	221.4	232.1	237.5	238.1
70°	17.7	22.6	38.8	50.1	147.6	176.2	184.2	194.5	203.1	205.8	207.4
72.5°	16.7	21.0	36.6	45.3	125.5	151.4	158.9	164.9	172.4	175.1	175.1
75°	15.1	18.9	34.4	40.4	102.9	123.9	130.3	136.3	142.2	143.3	141.6
77.5°	13.5	16.7	29.6	34.0	80.3	98.0	103.4	106.6	111.5	112.6	113.1
80°	11.3	14.5	23.1	26.4	58.2	72.2	76.0	78.6	82.9	82.9	84.1
82.5°	8.6	11.3	16.7	18.9	39.3	49.5	52.8	54.4	57.1	57.1	57.1
85°	5.4	7.0	10.8	12.4	23.7	30.2	32.4	32.8	35.0	35.6	35.6
87.5°	2.7	3.8	7.0	7.5	12.4	15.7	15.7	16.7	16.7	16.1	15.7
90°	2.5	4.5	6.5	7.0	11.0	16.3	19.0	16.9	12.6	9.5	9.5
92.5°	10.0	26.9	43.8	48.0	67.5	93.5	106.6	93.4	67.1	47.3	45.4
95°	23.9	54.9	85.9	93.6	166.2	263.0	311.4	277.8	210.8	160.5	154.8
97.5°	41.4	68.7	96.0	102.8	223.9	385.3	466.0	444.8	402.5	370.7	359.8
100°	54.8	79.5	104.3	110.5	244.8	424.0	513.5	515.0	518.2	520.5	507.6
102.5°	66.2	89.4	112.4	118.2	254.5	436.2	527.0	554.0	608.0	648.4	637.3
105°	85.6	105.2	124.8	129.7	261.6	437.6	525.5	586.0	707.0	797.8	791.8
107.5°	105.5	123.8	142.1	146.6	263.0	418.0	495.6	580.0	748.8	875.4	876.9
110°	119.0	135.5	152.0	156.1	261.0	400.8	470.7	565.1	753.8	895.3	901.5



TEST NUMBER: P937050

CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	132.2	147.9	163.6	167.5	261.1	385.8	448.1	544.7	737.8	882.7	892.2
115°	152.1	166.5	181.1	184.7	263.5	368.4	420.9	514.0	700.1	839.6	852.8
117.5°	171.8	184.9	198.1	201.4	268.4	357.6	402.2	486.2	654.1	780.1	794.7
120°	183.2	195.6	208.0	211.1	272.3	354.0	394.8	471.5	625.0	740.0	754.3
122.5°	194.4	206.9	219.4	222.5	278.0	352.0	389.1	458.1	596.3	700.0	714.0
125°	211.6	223.0	234.4	237.2	285.8	350.5	382.9	441.6	559.0	647.0	659.9
127.5°	225.6	237.0	248.5	251.4	293.5	349.6	377.7	428.1	528.9	604.4	615.3
130°	233.0	245.4	257.8	260.9	299.1	350.1	375.6	420.5	510.2	577.5	587.6
132.5°	240.7	253.1	265.5	268.6	303.7	350.5	373.9	414.0	494.4	554.6	563.6
135°	252.1	263.4	274.7	277.5	308.7	350.2	370.9	404.6	471.8	522.3	530.1
137.5°	263.9	275.0	286.2	289.0	316.1	352.4	370.4	398.9	455.7	498.3	504.7
140°	273.6	283.9	294.1	296.7	320.7	352.7	368.7	393.2	442.3	479.2	485.1
142.5°	281.0	290.5	300.0	302.4	324.5	354.0	368.7	390.3	433.4	465.7	470.9
145°	292.5	300.8	309.1	311.2	329.5	354.0	366.2	383.8	419.1	445.6	449.4
147.5°	303.9	312.0	320.1	322.1	336.8	356.4	366.2	380.1	407.8	428.6	431.9
150°	311.4	318.7	326.0	327.9	340.6	357.7	366.2	377.9	401.3	418.9	421.5
152.5°	319.1	324.7	330.2	331.6	343.1	358.5	366.2	376.2	396.2	411.2	413.1
155°	330.6	334.7	338.7	339.7	348.6	360.3	366.2	374.1	390.0	402.0	403.3
157.5°	339.0	343.0	347.1	348.0	354.0	362.2	366.2	372.4	384.7	394.0	394.9
160°	344.7	347.9	350.9	351.7	356.5	363.0	366.2	371.5	382.1	390.1	390.6
162.5°	350.5	352.8	355.2	355.7	359.2	363.8	366.2	370.7	379.6	386.3	386.8
165°	356.7	358.8	360.9	361.4	363.0	365.1	366.2	369.4	375.8	380.6	381.2
167.5°	362.4	363.4	364.4	364.6	366.0	367.8	368.7	370.7	375.0	378.1	378.4
170°	366.2	367.1	368.2	368.4	368.5	368.6	368.7	370.7	375.0	378.1	378.1
172.5°	368.2	368.4	368.6	368.7	368.7	368.7	368.7	370.3	373.6	376.1	376.0
175°	370.9	370.9	370.9	370.9	370.2	369.1	368.7	369.7	371.8	373.4	373.4
177.5°	370.9	370.9	370.9	370.9	370.3	369.5	369.1	369.9	371.6	372.9	372.7
180°	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9	370.9



TEST NUMBER: P937050

CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	167.5	167.5
2.5°	178.8	177.8
5°	230.1	231.1
7.5°	309.7	309.2
10°	385.2	390.0
12.5°	440.1	441.2
15°	473.5	475.7
17.5°	486.5	487.0
20°	487.0	485.9
22.5°	481.1	480.0
25°	474.1	473.5
27.5°	467.6	468.1
30°	464.9	466.5
32.5°	464.9	467.6
35°	466.0	468.6
37.5°	465.4	468.6
40°	463.3	467.0
42.5°	457.4	460.0
45°	448.2	451.4
47.5°	436.4	438.5
50°	421.3	423.4
52.5°	402.4	402.9
55°	379.8	381.9
57.5°	355.6	356.1
60°	328.6	330.2
62.5°	300.1	300.1
65°	269.9	270.9
67.5°	238.7	241.3
70°	206.9	207.4
72.5°	175.6	175.6
75°	143.3	143.8
77.5°	112.6	112.6
80°	83.5	84.1
82.5°	57.7	58.7
85°	36.1	36.1
87.5°	16.7	15.1
90°	9.5	9.5
92.5°	37.9	30.4
95°	132.1	109.3
97.5°	316.5	273.1
100°	455.9	404.2
102.5°	593.1	548.9
105°	768.1	744.3
107.5°	882.7	888.4
110°	926.3	951.2



TEST NUMBER: P937050

CATALOG NUMBER: SQ4-FB-075U-050D-930-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	930.3	968.3
115°	905.6	958.4
117.5°	853.3	911.8
120°	811.1	868.0
122.5°	770.1	826.2
125°	711.5	763.2
127.5°	658.9	702.5
130°	627.9	668.1
132.5°	599.7	635.7
135°	561.1	592.2
137.5°	530.1	555.6
140°	508.9	532.7
142.5°	491.3	511.8
145°	464.9	480.4
147.5°	444.7	457.5
150°	431.9	442.4
152.5°	421.0	428.9
155°	408.5	413.7
157.5°	398.6	402.2
160°	392.7	394.8
162.5°	388.8	390.8
165°	383.3	385.4
167.5°	379.3	380.1
170°	378.1	378.1
172.5°	375.2	374.4
175°	373.4	373.4
177.5°	371.8	370.9
180°	370.9	370.9



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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	0.97	1.74	2.04	2.81	4.28	14.11	14.88	15.18	15.95	17.42
	3H	1.67	2.36	2.75	3.44	4.93	15.93	16.62	17.01	17.70	19.19
	4H	1.97	2.62	3.06	3.70	5.20	16.56	17.21	17.65	18.30	19.79
	6H	2.21	2.81	3.31	3.90	5.41	16.97	17.58	18.07	18.66	20.17
	8H	2.28	2.85	3.38	3.95	5.45	17.09	17.66	18.19	18.76	20.26
	12H	2.29	2.84	3.40	3.93	5.46	17.14	17.69	18.25	18.79	20.31
4H	2H	8.15	8.80	9.25	9.89	11.38	14.38	15.03	15.47	16.11	17.61
	3H	9.71	10.26	10.82	11.37	12.87	16.40	16.94	17.50	18.06	19.56
	4H	9.80	10.31	10.91	11.41	12.93	17.15	17.65	18.26	18.75	20.28
	6H	9.81	10.24	10.93	11.37	12.88	17.67	18.10	18.79	19.23	20.75
	8H	9.78	10.19	10.90	11.30	12.84	17.83	18.23	18.94	19.34	20.88
	12H	9.74	10.10	10.87	11.23	12.77	17.91	18.27	19.04	19.40	20.94
8H	4H	11.23	11.63	12.35	12.75	14.28	17.20	17.61	18.32	18.72	20.26
	6H	11.47	11.80	12.61	12.96	14.49	17.82	18.15	18.95	19.31	20.84
	8H	11.48	11.78	12.63	12.92	14.47	18.03	18.32	19.17	19.46	21.01
	12H	11.45	11.71	12.60	12.84	14.43	18.16	18.42	19.31	19.55	21.14
12H	4H	11.37	11.73	12.50	12.86	14.40	17.15	17.52	18.29	18.65	20.19
	6H	11.72	12.01	12.87	13.15	14.70	17.80	18.09	18.94	19.23	20.78
	8H	11.79	12.04	12.93	13.18	14.76	18.02	18.27	19.16	19.41	20.99