

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: P937432

Luminaire Tested: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-3000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937432
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-3000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

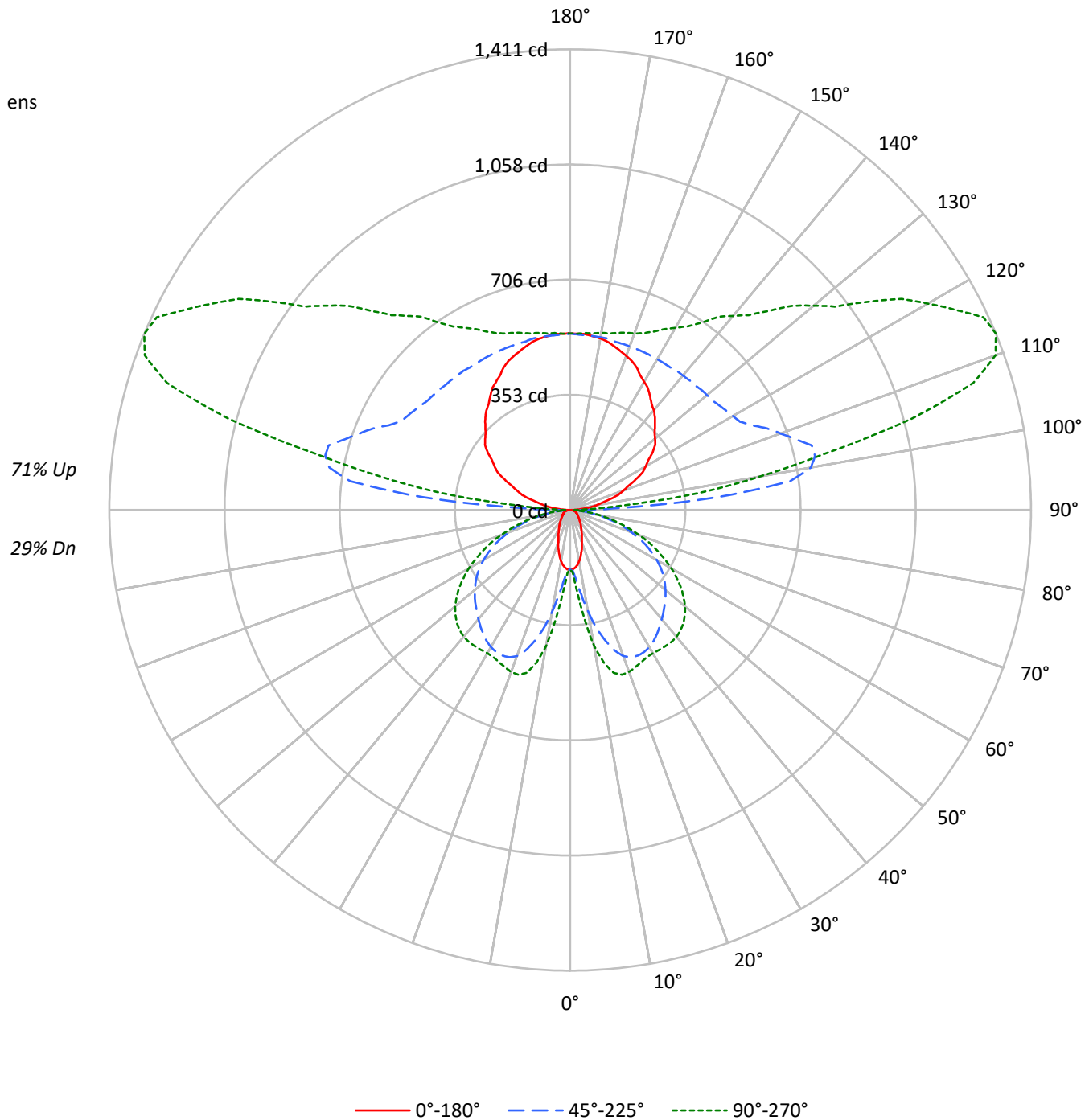
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4913.0 lumens
Efficiency: N/A
Efficacy: 119.2 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): 41.2
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: P937432
CATALOG NUMBER: SQ4-FB-100U-050D-92765-1D-UNV-STD-W-4-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P937432

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1688	1688	1688
5°	1648	1950	2270
10°	1493	2840	3762
15°	1267	3708	4543
20°	1030	4294	4630
25°	858	4490	4535
30°	724	4514	4528
35°	638	4436	4644
40°	555	4336	4765
45°	502	4260	4784
50°	460	4191	4704
55°	439	4093	4495
60°	446	3909	4167
65°	463	3628	3714
70°	490	3158	3137
75°	538	2567	2449
80°	576	1775	1651
85°	480	937	845

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4784 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	0.5
10°-20°	104.3	2.1
20°-30°	182.4	3.7
30°-40°	234.9	4.8
40°-50°	262.3	5.3
50°-60°	251.3	5.1
60°-70°	199.1	4.1
70°-80°	117.1	2.4
80°-90°	34.6	0.7
90°-100°	263.4	5.4
100°-110°	692.6	14.1
110°-120°	718.2	14.6
120°-130°	576.0	11.7
130°-140°	452.0	9.2
140°-150°	346.9	7.1
150°-160°	249.8	5.1
160°-170°	152.9	3.1
170°-180°	51.6	1.1
0°-30°	310.3	6.3
0°-40°	545.1	11.1
0°-60°	1058.7	21.5
0°-90°	1409.5	28.7
90°-120°	1674.2	34.1
90°-150°	3049.1	62.1
90°-180°	3504.0	71.3
0°-180°	4913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	182	182	182	182	182	
5°	177	190	214	242	251	16
15°	133	245	413	501	517	37
25°	85	278	492	514	514	39
35°	57	266	463	490	509	36
45°	39	212	410	469	490	30
55°	28	135	348	404	415	26
65°	22	71	258	290	294	22
75°	16	44	142	156	156	17
85°	6	13	35	39	39	6
90°	4	10	28	14	14	3
95°	35	136	454	234	159	39
105°	125	189	766	1162	1084	132
115°	222	269	613	1224	1396	219
125°	308	346	558	943	1112	274
135°	368	404	540	761	863	284
145°	426	453	534	649	700	267
155°	482	495	534	586	603	221
165°	520	527	534	555	562	147
175°	540	540	537	544	544	51
180°	540	540	540	540	540	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9	181.9
2.5°	181.9	181.9	183.1	183.7	184.9	185.5	186.6	187.7	191.3	191.8	193.1
5°	177.3	179.6	187.2	190.1	198.3	209.5	214.1	221.8	237.5	242.2	245.1
7.5°	170.2	175.5	194.2	198.9	219.4	248.6	260.9	277.3	302.4	314.7	324.7
10°	159.1	170.2	203.6	214.7	248.0	292.5	315.3	338.2	376.2	393.1	399.6
12.5°	146.9	165.0	213.6	228.7	276.7	341.7	369.1	394.3	437.6	460.4	463.9
15°	132.8	157.4	222.9	245.1	307.1	382.6	413.0	444.0	484.4	500.7	504.8
17.5°	120.5	151.6	231.7	255.1	330.5	419.4	450.5	476.2	508.9	520.1	523.0
20°	105.3	142.1	237.5	268.0	355.1	446.4	476.2	496.1	518.3	525.3	526.5
22.5°	94.2	132.2	241.0	272.6	371.5	462.7	487.9	503.7	518.9	521.2	521.8
25°	84.8	121.1	240.4	277.9	385.5	472.6	492.0	503.7	512.5	513.6	513.6
27.5°	76.0	108.8	238.1	279.1	396.1	475.0	490.3	498.5	502.6	504.8	504.8
30°	68.5	97.1	232.2	276.7	400.7	472.6	484.9	489.0	493.1	496.7	498.5
32.5°	62.6	86.0	223.5	272.0	401.3	466.8	475.6	478.0	483.8	492.0	494.9
35°	57.3	74.9	213.6	265.6	397.8	457.5	463.3	465.7	477.4	489.6	493.7
37.5°	52.1	66.7	200.7	254.5	392.5	446.4	450.5	454.6	472.6	487.3	492.0
40°	46.8	59.6	185.5	242.2	384.4	432.9	436.5	442.8	466.8	483.8	488.5
42.5°	42.7	53.8	169.1	229.3	373.8	417.7	422.9	432.4	459.8	478.0	483.2
45°	39.2	48.0	151.6	211.7	360.3	401.9	409.5	422.4	451.6	469.2	473.9
47.5°	35.7	43.9	133.4	193.7	345.8	386.1	396.1	410.6	440.6	457.5	461.6
50°	32.8	39.8	115.3	174.3	330.0	369.1	380.8	396.1	426.5	442.3	447.5
52.5°	30.4	36.3	98.3	155.0	311.8	351.6	365.0	380.8	409.5	424.7	428.3
55°	28.1	33.3	83.6	134.6	293.1	332.9	347.5	362.7	390.8	403.7	406.0
57.5°	26.9	31.0	71.3	115.3	273.2	311.8	328.1	342.2	368.5	378.5	380.8
60°	25.1	29.2	62.0	98.9	251.6	292.0	306.0	320.0	342.2	350.4	352.2
62.5°	23.4	28.1	55.0	83.1	229.3	268.5	282.5	295.4	314.1	320.0	322.3
65°	22.2	26.9	49.7	71.3	206.5	243.9	257.9	269.1	284.3	290.1	291.3
67.5°	21.1	25.7	45.6	61.4	183.7	219.4	229.9	240.4	252.1	257.9	258.6
70°	19.3	24.6	42.1	54.4	160.3	191.3	200.0	211.2	220.5	223.5	225.2
72.5°	18.1	22.8	39.8	49.2	136.3	164.4	172.6	179.0	187.2	190.1	190.1
75°	16.4	20.5	37.4	43.9	111.7	134.6	141.5	148.0	154.4	155.6	153.8
77.5°	14.7	18.1	32.2	36.9	87.2	106.5	112.3	115.8	121.1	122.3	122.9
80°	12.3	15.8	25.1	28.7	63.2	78.4	82.5	85.4	90.1	90.1	91.3
82.5°	9.3	12.3	18.1	20.5	42.7	53.8	57.3	59.1	62.0	62.0	62.0
85°	5.8	7.6	11.7	13.4	25.7	32.8	35.1	35.7	38.0	38.6	38.6
87.5°	3.0	4.1	7.6	8.2	13.4	17.0	17.0	18.1	18.1	17.5	17.0
90°	3.7	6.5	9.4	10.1	16.0	23.7	27.6	24.5	18.4	13.8	13.8
92.5°	14.5	39.2	63.8	70.0	98.5	136.3	155.2	136.0	97.7	68.9	66.2
95°	34.8	80.0	125.1	136.4	242.2	383.2	453.7	404.9	307.2	234.0	225.7
97.5°	60.2	100.0	139.9	149.8	326.2	561.4	679.0	648.1	586.4	540.1	524.3
100°	79.8	115.9	152.0	161.1	356.8	617.8	748.3	750.6	755.0	758.4	739.6
102.5°	96.4	130.2	163.9	172.3	370.9	635.5	767.9	807.2	885.9	944.8	928.7
105°	124.8	153.3	181.8	189.0	381.3	637.5	765.7	853.9	1030.2	1162.5	1153.9
107.5°	153.8	180.4	207.0	213.6	383.2	609.1	722.1	845.2	1091.2	1275.7	1277.8
110°	173.4	197.4	221.4	227.4	380.2	584.0	685.9	823.4	1098.4	1304.7	1313.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	192.6	215.5	238.3	244.1	380.4	562.0	652.9	793.6	1075.0	1286.2	1300.0
115°	221.6	242.7	263.8	269.1	383.9	536.9	613.4	749.0	1020.1	1223.5	1242.6
117.5°	250.3	269.5	288.6	293.4	391.0	521.1	586.2	708.5	953.2	1136.8	1158.1
120°	266.9	285.0	303.0	307.6	396.8	515.8	575.3	687.1	910.7	1078.4	1099.1
122.5°	283.3	301.5	319.8	324.3	405.1	513.0	566.9	667.5	868.9	1019.9	1040.3
125°	308.4	324.9	341.5	345.7	416.4	510.7	557.8	643.4	814.4	942.7	961.5
127.5°	328.6	345.3	362.2	366.3	427.6	509.4	550.3	623.7	770.5	880.7	896.5
130°	339.5	357.5	375.6	380.1	435.8	510.2	547.4	612.8	743.5	841.5	856.2
132.5°	350.7	368.8	386.8	391.4	442.5	510.7	544.8	603.3	720.3	808.1	821.3
135°	367.5	383.9	400.4	404.4	449.8	510.2	540.5	589.5	687.4	760.9	772.3
137.5°	384.5	400.8	417.0	421.1	460.6	513.4	539.7	581.1	664.0	726.1	735.4
140°	398.6	413.6	428.6	432.4	467.3	513.9	537.2	572.9	644.5	698.2	706.9
142.5°	409.5	423.4	437.2	440.7	472.9	515.7	537.2	568.6	631.4	678.6	686.1
145°	426.2	438.3	450.3	453.4	480.1	515.8	533.6	559.3	610.7	649.2	654.9
147.5°	442.9	454.7	466.4	469.3	490.8	519.3	533.6	553.8	594.3	624.6	629.3
150°	453.7	464.4	475.0	477.7	496.4	521.2	533.6	550.7	584.8	610.4	614.2
152.5°	465.0	473.0	481.1	483.1	499.9	522.3	533.6	548.2	577.3	599.2	602.1
155°	481.7	487.6	493.7	495.1	508.0	525.1	533.6	545.2	568.4	585.7	587.7
157.5°	494.0	499.8	505.6	507.1	515.9	527.7	533.6	542.6	560.6	574.1	575.5
160°	502.4	506.9	511.4	512.5	519.6	528.9	533.6	541.4	556.8	568.4	569.2
162.5°	510.7	514.1	517.5	518.3	523.4	530.2	533.6	540.1	553.1	562.9	563.6
165°	519.7	522.8	525.8	526.6	529.0	532.0	533.6	538.3	547.6	554.6	555.4
167.5°	528.1	529.6	531.1	531.4	533.3	535.9	537.2	540.2	546.3	551.0	551.3
170°	533.6	535.0	536.5	536.8	536.9	537.1	537.2	540.2	546.3	551.0	551.0
172.5°	536.5	536.8	537.1	537.2	537.2	537.2	537.2	539.6	544.4	548.1	547.8
175°	540.5	540.5	540.5	540.5	539.4	537.9	537.2	538.7	541.8	544.1	544.1
177.5°	540.5	540.5	540.5	540.5	539.6	538.5	537.9	539.1	541.5	543.4	543.0
180°	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5	540.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	181.9	181.9
2.5°	194.2	193.1
5°	249.8	251.0
7.5°	336.3	335.8
10°	418.3	423.5
12.5°	478.0	479.1
15°	514.2	516.6
17.5°	528.3	528.9
20°	528.9	527.7
22.5°	522.4	521.2
25°	514.8	514.2
27.5°	507.8	508.4
30°	504.8	506.7
32.5°	504.8	507.8
35°	506.0	508.9
37.5°	505.4	508.9
40°	503.1	507.2
42.5°	496.7	499.6
45°	486.7	490.3
47.5°	473.9	476.2
50°	457.5	459.8
52.5°	437.0	437.6
55°	412.5	414.7
57.5°	386.1	386.7
60°	356.8	358.6
62.5°	325.9	325.9
65°	293.1	294.2
67.5°	259.2	262.0
70°	224.6	225.2
72.5°	190.7	190.7
75°	155.6	156.2
77.5°	122.3	122.3
80°	90.7	91.3
82.5°	62.6	63.7
85°	39.2	39.2
87.5°	18.1	16.4
90°	13.8	13.8
92.5°	55.2	44.2
95°	192.5	159.2
97.5°	461.0	397.9
100°	664.3	589.1
102.5°	864.3	799.8
105°	1119.2	1084.5
107.5°	1286.2	1294.5
110°	1349.8	1385.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1355.5	1411.0
115°	1319.6	1396.5
117.5°	1243.3	1328.6
120°	1182.0	1264.8
122.5°	1122.1	1203.8
125°	1036.8	1112.1
127.5°	960.1	1023.6
130°	914.9	973.5
132.5°	873.8	926.4
135°	817.5	862.9
137.5°	772.5	809.6
140°	741.6	776.2
142.5°	715.9	745.8
145°	677.5	700.1
147.5°	648.0	666.7
150°	629.3	644.5
152.5°	613.5	625.0
155°	595.3	602.8
157.5°	580.9	586.2
160°	572.2	575.3
162.5°	566.6	569.4
165°	558.5	561.5
167.5°	552.5	553.8
170°	551.0	551.0
172.5°	546.7	545.5
175°	544.1	544.1
177.5°	541.8	540.5
180°	540.5	540.5



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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	0.43	1.15	1.55	2.26	3.81	13.58	14.29	14.69	15.41	16.95
	3H	1.13	1.77	2.25	2.89	4.45	15.39	16.03	16.51	17.15	18.71
	4H	1.42	2.03	2.55	3.15	4.72	16.02	16.63	17.15	17.75	19.32
	6H	1.66	2.23	2.81	3.35	4.93	16.43	16.99	17.57	18.12	19.69
	8H	1.73	2.26	2.87	3.40	4.97	16.54	17.07	17.68	18.21	19.78
	12H	1.74	2.25	2.89	3.38	4.98	16.59	17.10	17.74	18.24	19.83
4H	2H	7.61	8.22	8.75	9.34	10.91	13.83	14.45	14.97	15.57	17.13
	3H	9.17	9.68	10.31	10.82	12.40	15.85	16.36	17.00	17.51	19.09
	4H	9.25	9.72	10.40	10.86	12.46	16.60	17.07	17.75	18.21	19.81
	6H	9.26	9.66	10.41	10.82	12.41	17.12	17.52	18.28	18.68	20.27
	8H	9.23	9.61	10.39	10.76	12.36	17.27	17.65	18.43	18.80	20.40
	12H	9.18	9.52	10.35	10.68	12.29	17.35	17.69	18.52	18.85	20.46
8H	4H	10.68	11.05	11.83	12.20	13.81	16.65	17.03	17.81	18.18	19.78
	6H	10.91	11.22	12.09	12.42	14.02	17.26	17.57	18.44	18.77	20.37
	8H	10.93	11.20	12.11	12.37	13.99	17.47	17.74	18.65	18.91	20.54
	12H	10.89	11.13	12.08	12.30	13.95	17.60	17.84	18.79	19.01	20.66
12H	4H	10.81	11.15	11.98	12.31	13.92	16.60	16.94	17.77	18.10	19.71
	6H	11.17	11.44	12.35	12.61	14.23	17.24	17.51	18.42	18.69	20.31
	8H	11.23	11.47	12.41	12.64	14.29	17.46	17.70	18.64	18.87	20.52