

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: P936674

Luminaire Tested: SQ4-FB-050U-050D-940-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936674
REPORT IS A COMBINATION OF REPORTS P933469 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

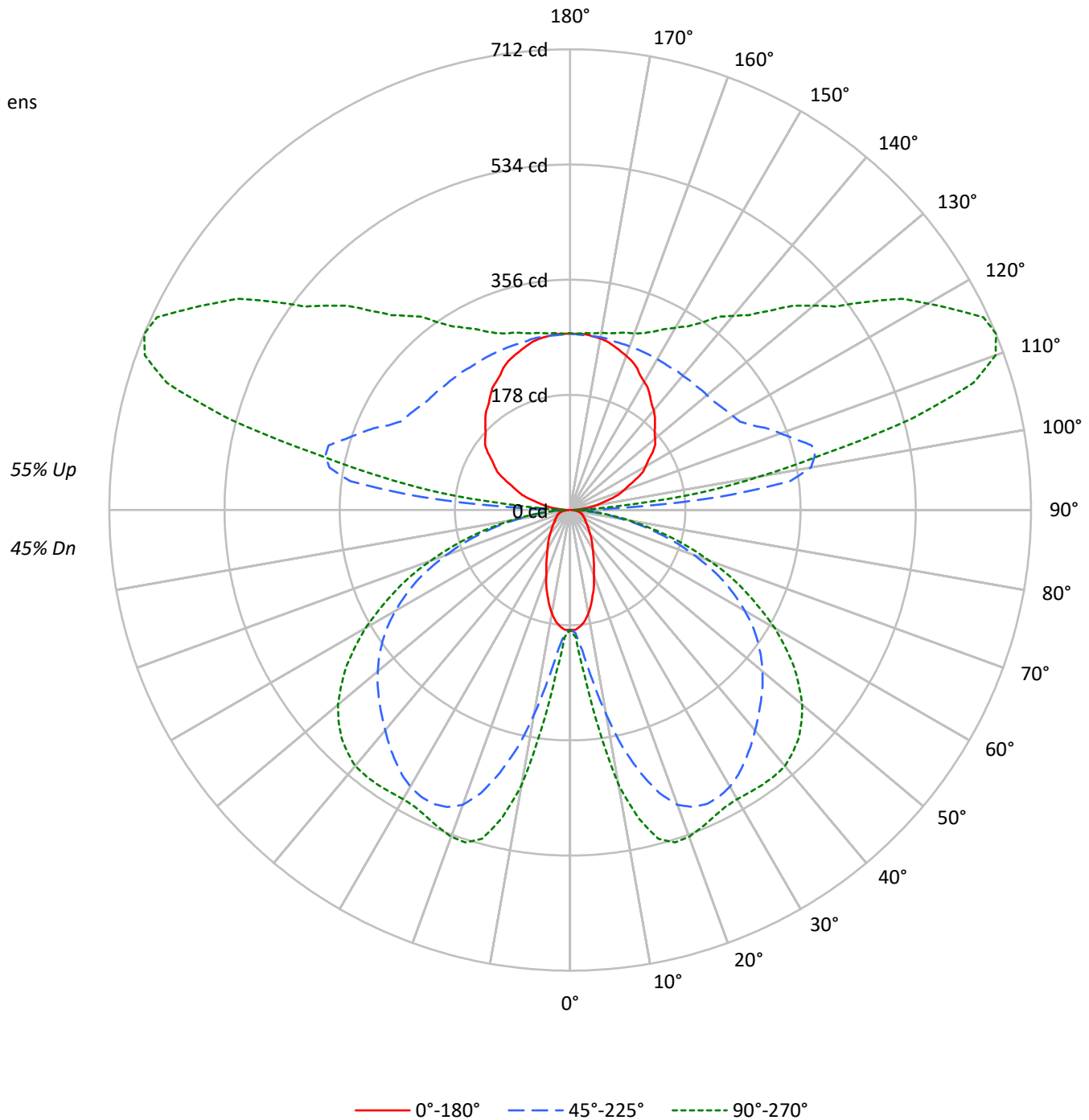
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3202.1 lumens
Efficiency: N/A
Efficacy: 112.7 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: General Diffuse

Input Watts (W): 28.4
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

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Luminous Intensity Polar Plot





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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1719	1719	1719
5°	1678	1985	2311
10°	1521	2892	3831
15°	1290	3776	4627
20°	1050	4372	4714
25°	874	4572	4619
30°	736	4597	4610
35°	649	4517	4728
40°	566	4414	4852
45°	511	4338	4871
50°	468	4268	4790
55°	447	4169	4578
60°	455	3980	4242
65°	471	3696	3782
70°	498	3216	3196
75°	548	2615	2493
80°	585	1808	1681
85°	489	955	860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.0	0.7
10°-20°	106.2	3.3
20°-30°	185.8	5.8
30°-40°	239.2	7.5
40°-50°	267.1	8.3
50°-60°	255.9	8.0
60°-70°	202.8	6.3
70°-80°	119.2	3.7
80°-90°	34.2	1.1
90°-100°	132.9	4.2
100°-110°	349.5	10.9
110°-120°	362.4	11.3
120°-130°	290.7	9.1
130°-140°	228.1	7.1
140°-150°	175.1	5.5
150°-160°	126.1	3.9
160°-170°	77.1	2.4
170°-180°	26.1	0.8
0°-30°	316.0	9.9
0°-40°	555.1	17.3
0°-60°	1078.1	33.7
0°-90°	1434.3	44.8
90°-120°	844.8	26.4
90°-150°	1538.5	48.0
90°-180°	1768.0	55.2
0°-180°	3202.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	185	185	185	185	185	
5°	180	194	218	247	256	17
15°	135	250	421	510	526	38
25°	86	283	501	523	524	40
35°	58	270	472	499	518	36
45°	40	216	417	478	499	31
55°	29	137	354	411	422	26
65°	23	73	263	295	300	22
75°	17	45	144	158	159	17
85°	6	14	36	39	40	6
90°	2	5	14	7	7	2
95°	18	69	229	118	80	20
105°	63	95	386	587	547	67
115°	112	136	310	617	705	110
125°	156	174	282	476	561	138
135°	185	204	273	384	435	143
145°	215	229	269	328	353	135
155°	243	250	269	296	304	112
165°	262	266	269	280	283	74
175°	273	273	271	275	275	26
180°	273	273	273	273	273	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2
2.5°	185.2	185.2	186.5	187.0	188.3	188.9	190.0	191.2	194.8	195.4	196.6
5°	180.5	182.9	190.7	193.6	201.9	213.3	218.0	225.8	241.9	246.6	249.6
7.5°	173.3	178.8	197.8	202.6	223.4	253.2	265.7	282.4	308.0	320.5	330.6
10°	162.1	173.3	207.3	218.6	252.5	297.8	321.1	344.4	383.1	400.3	406.9
12.5°	149.5	168.0	217.5	232.9	281.8	347.9	375.9	401.6	445.6	468.9	472.4
15°	135.2	160.3	227.0	249.6	312.8	389.6	420.6	452.2	493.3	509.9	514.1
17.5°	122.7	154.3	235.9	259.7	336.6	427.1	458.7	484.9	518.2	529.6	532.5
20°	107.3	144.7	241.9	272.9	361.6	454.6	484.9	505.2	527.8	534.9	536.2
22.5°	95.9	134.6	245.4	277.6	378.3	471.2	496.8	512.9	528.4	530.8	531.4
25°	86.4	123.3	244.8	283.0	392.6	481.3	501.0	512.9	521.9	523.0	523.0
27.5°	77.4	110.8	242.4	284.2	403.3	483.7	499.2	507.6	511.8	514.1	514.1
30°	69.7	98.9	236.5	281.8	408.0	481.3	493.8	498.0	502.2	505.8	507.6
32.5°	63.8	87.6	227.6	277.0	408.7	475.3	484.3	486.7	492.7	501.0	503.9
35°	58.3	76.3	217.5	270.5	405.1	465.8	471.8	474.2	486.1	498.6	502.8
37.5°	53.0	67.9	204.3	259.1	399.7	454.6	458.7	462.9	481.3	496.2	501.0
40°	47.7	60.7	188.9	246.6	391.4	440.8	444.4	450.9	475.3	492.7	497.5
42.5°	43.5	54.8	172.2	233.5	380.7	425.4	430.7	440.3	468.2	486.7	492.0
45°	39.9	48.8	154.3	215.6	366.9	409.3	417.0	430.1	459.9	477.7	482.5
47.5°	36.3	44.7	135.9	197.2	352.1	393.2	403.3	418.2	448.6	465.8	470.0
50°	33.4	40.5	117.4	177.5	336.0	375.9	387.8	403.3	434.3	450.4	455.7
52.5°	31.0	36.9	100.1	157.9	317.5	358.0	371.7	387.8	417.0	432.5	436.1
55°	28.6	33.9	85.2	137.0	298.5	338.9	353.9	369.3	397.9	411.1	413.5
57.5°	27.4	31.6	72.6	117.4	278.2	317.5	334.2	348.5	375.3	385.4	387.8
60°	25.6	29.7	63.1	100.7	256.2	297.3	311.6	325.9	348.5	356.8	358.7
62.5°	23.8	28.6	56.0	84.6	233.5	273.4	287.7	300.9	319.9	325.9	328.2
65°	22.6	27.4	50.6	72.6	210.3	248.4	262.7	274.0	289.5	295.4	296.7
67.5°	21.5	26.2	46.4	62.5	187.0	223.4	234.1	244.8	256.7	262.7	263.3
70°	19.6	25.0	42.9	55.4	163.2	194.8	203.7	215.1	224.6	227.6	229.4
72.5°	18.5	23.3	40.5	50.1	138.8	167.4	175.7	182.3	190.7	193.6	193.6
75°	16.7	20.9	38.1	44.7	113.8	137.0	144.1	150.7	157.3	158.4	156.6
77.5°	14.9	18.5	32.8	37.6	88.8	108.4	114.4	117.9	123.3	124.5	125.1
80°	12.5	16.1	25.6	29.2	64.4	79.8	84.0	86.9	91.7	91.7	93.0
82.5°	9.5	12.5	18.5	20.9	43.5	54.8	58.3	60.2	63.1	63.1	63.1
85°	5.9	7.7	11.9	13.7	26.2	33.4	35.8	36.3	38.7	39.3	39.3
87.5°	3.0	4.2	7.7	8.3	13.7	17.3	17.3	18.5	18.5	17.8	17.3
90°	1.9	3.3	4.8	5.2	8.1	12.0	13.9	12.3	9.2	6.9	6.9
92.5°	7.3	19.7	32.2	35.3	49.6	68.7	78.3	68.6	49.3	34.8	33.4
95°	17.6	40.3	63.1	68.8	122.2	193.3	228.9	204.2	155.0	118.0	113.8
97.5°	30.4	50.4	70.5	75.6	164.5	283.3	342.6	327.1	295.9	272.5	264.5
100°	40.2	58.4	76.7	81.3	180.0	311.7	377.6	378.7	381.0	382.7	373.2
102.5°	48.7	65.7	82.7	86.9	187.1	320.7	387.4	407.3	447.0	476.8	468.6
105°	63.0	77.3	91.7	95.4	192.3	321.7	386.4	430.9	519.8	586.6	582.3
107.5°	77.6	91.0	104.4	107.8	193.3	307.4	364.4	426.5	550.6	643.7	644.8
110°	87.5	99.5	111.7	114.7	191.9	294.7	346.1	415.5	554.3	658.4	662.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	97.1	108.7	120.2	123.2	191.9	283.6	329.4	400.5	542.5	649.0	656.1
115°	111.8	122.5	133.1	135.8	193.7	270.8	309.5	377.8	514.7	617.3	627.0
117.5°	126.3	136.0	145.6	148.0	197.3	262.9	295.8	357.5	480.9	573.6	584.3
120°	134.7	143.9	152.9	155.2	200.2	260.3	290.3	346.7	459.5	544.2	554.6
122.5°	143.0	152.2	161.3	163.7	204.4	258.9	286.0	336.8	438.5	514.7	525.0
125°	155.6	163.9	172.3	174.4	210.1	257.7	281.5	324.7	411.0	475.7	485.2
127.5°	165.8	174.3	182.8	184.9	215.8	257.1	277.7	314.7	388.8	444.4	452.3
130°	171.3	180.4	189.5	191.8	220.0	257.4	276.2	309.2	375.2	424.6	432.0
132.5°	177.0	186.1	195.2	197.5	223.3	257.7	274.9	304.4	363.5	407.8	414.4
135°	185.4	193.7	202.0	204.1	227.0	257.4	272.7	297.4	346.9	384.0	389.7
137.5°	194.0	202.2	210.5	212.5	232.5	259.0	272.3	293.2	335.0	366.4	371.1
140°	201.1	208.7	216.3	218.2	235.8	259.3	271.0	289.1	325.3	352.4	356.7
142.5°	206.6	213.7	220.6	222.4	238.6	260.2	271.0	286.9	318.6	342.4	346.1
145°	215.1	221.1	227.2	228.7	242.2	260.3	269.2	282.2	308.1	327.6	330.4
147.5°	223.5	229.5	235.3	236.8	247.7	262.0	269.2	279.5	299.9	315.2	317.5
150°	228.9	234.3	239.7	241.0	250.4	262.9	269.2	277.9	295.1	308.0	310.0
152.5°	234.6	238.7	242.8	243.8	252.3	263.6	269.2	276.6	291.4	302.4	303.8
155°	243.0	246.1	249.1	249.8	256.3	264.9	269.2	275.1	286.8	295.6	296.6
157.5°	249.3	252.2	255.1	255.8	260.3	266.2	269.2	273.8	282.9	289.8	290.5
160°	253.5	255.7	258.1	258.6	262.1	266.8	269.2	273.1	281.0	286.8	287.2
162.5°	257.7	259.4	261.1	261.5	264.1	267.6	269.2	272.5	279.1	284.1	284.4
165°	262.3	263.8	265.4	265.8	266.9	268.4	269.2	271.6	276.3	279.8	280.2
167.5°	266.5	267.2	267.9	268.1	269.1	270.4	271.0	272.6	275.7	278.0	278.2
170°	269.2	270.0	270.7	270.8	270.9	271.0	271.0	272.6	275.7	278.0	278.0
172.5°	270.7	270.8	271.0	271.0	271.0	271.0	271.0	272.3	274.7	276.5	276.3
175°	272.7	272.7	272.7	272.7	272.2	271.4	271.0	271.8	273.4	274.6	274.6
177.5°	272.7	272.7	272.7	272.7	272.3	271.7	271.5	272.1	273.3	274.2	274.0
180°	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7	272.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	185.2	185.2
2.5°	197.8	196.6
5°	254.4	255.6
7.5°	342.5	342.0
10°	426.0	431.3
12.5°	486.7	487.9
15°	523.7	526.1
17.5°	538.0	538.6
20°	538.6	537.3
22.5°	532.0	530.8
25°	524.3	523.7
27.5°	517.1	517.7
30°	514.1	515.9
32.5°	514.1	517.1
35°	515.3	518.2
37.5°	514.7	518.2
40°	512.3	516.5
42.5°	505.8	508.7
45°	495.6	499.2
47.5°	482.5	484.9
50°	465.8	468.2
52.5°	445.0	445.6
55°	420.0	422.3
57.5°	393.2	393.7
60°	363.4	365.1
62.5°	331.8	331.8
65°	298.5	299.6
67.5°	263.9	266.8
70°	228.7	229.4
72.5°	194.2	194.2
75°	158.4	159.0
77.5°	124.5	124.5
80°	92.4	93.0
82.5°	63.8	64.9
85°	39.9	39.9
87.5°	18.5	16.7
90°	6.9	6.9
92.5°	27.9	22.3
95°	97.1	80.4
97.5°	232.7	200.8
100°	335.2	297.2
102.5°	436.1	403.6
105°	564.8	547.3
107.5°	649.0	653.2
110°	681.1	699.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	684.0	712.0
115°	665.8	704.6
117.5°	627.4	670.4
120°	596.4	638.2
122.5°	566.3	607.5
125°	523.1	561.1
127.5°	484.4	516.5
130°	461.7	491.2
132.5°	440.9	467.4
135°	412.6	435.4
137.5°	389.7	408.5
140°	374.2	391.7
142.5°	361.2	376.3
145°	341.9	353.2
147.5°	327.0	336.4
150°	317.6	325.3
152.5°	309.6	315.3
155°	300.4	304.2
157.5°	293.1	295.8
160°	288.8	290.3
162.5°	285.9	287.4
165°	281.8	283.4
167.5°	278.8	279.5
170°	278.0	278.0
172.5°	275.8	275.3
175°	274.6	274.6
177.5°	273.4	272.7
180°	272.7	272.7



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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	2.37	3.22	3.37	4.23	5.57	15.52	16.37	16.51	17.38	18.72
	3H	3.08	3.84	4.08	4.86	6.22	17.34	18.10	18.34	19.12	20.48
	4H	3.38	4.10	4.39	5.12	6.49	17.97	18.70	18.99	19.72	21.09
	6H	3.63	4.30	4.66	5.32	6.71	18.39	19.06	19.42	20.09	21.47
	8H	3.70	4.33	4.73	5.38	6.75	18.51	19.14	19.54	20.19	21.56
	12H	3.71	4.32	4.75	5.36	6.76	18.57	19.17	19.61	20.21	21.61
4H	2H	9.57	10.29	10.59	11.31	12.68	15.79	16.52	16.81	17.54	18.91
	3H	11.14	11.74	12.17	12.79	14.17	17.82	18.43	18.85	19.48	20.86
	4H	11.23	11.79	12.27	12.83	14.23	18.58	19.13	19.62	20.17	21.58
	6H	11.24	11.72	12.29	12.79	14.19	19.10	19.58	20.15	20.65	22.05
	8H	11.22	11.67	12.27	12.72	14.14	19.26	19.71	20.31	20.76	22.18
	12H	11.17	11.58	12.24	12.65	14.07	19.34	19.75	20.41	20.82	22.24
8H	4H	12.66	13.11	13.71	14.17	15.59	18.64	19.08	19.69	20.14	21.56
	6H	12.91	13.28	13.98	14.38	15.79	19.25	19.62	20.33	20.72	22.14
	8H	12.92	13.25	14.01	14.33	15.77	19.47	19.79	20.55	20.88	22.31
	12H	12.89	13.18	13.98	14.26	15.73	19.60	19.89	20.69	20.97	22.44
12H	4H	12.80	13.21	13.87	14.28	15.70	18.59	18.99	19.66	20.07	21.49
	6H	13.16	13.49	14.24	14.57	16.00	19.24	19.56	20.32	20.65	22.08
	8H	13.23	13.52	14.32	14.60	16.07	19.46	19.75	20.54	20.82	22.30