

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: P936637

Luminaire Tested: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-6-2700K

Issue Date: 12/17/2024

**Test Information**

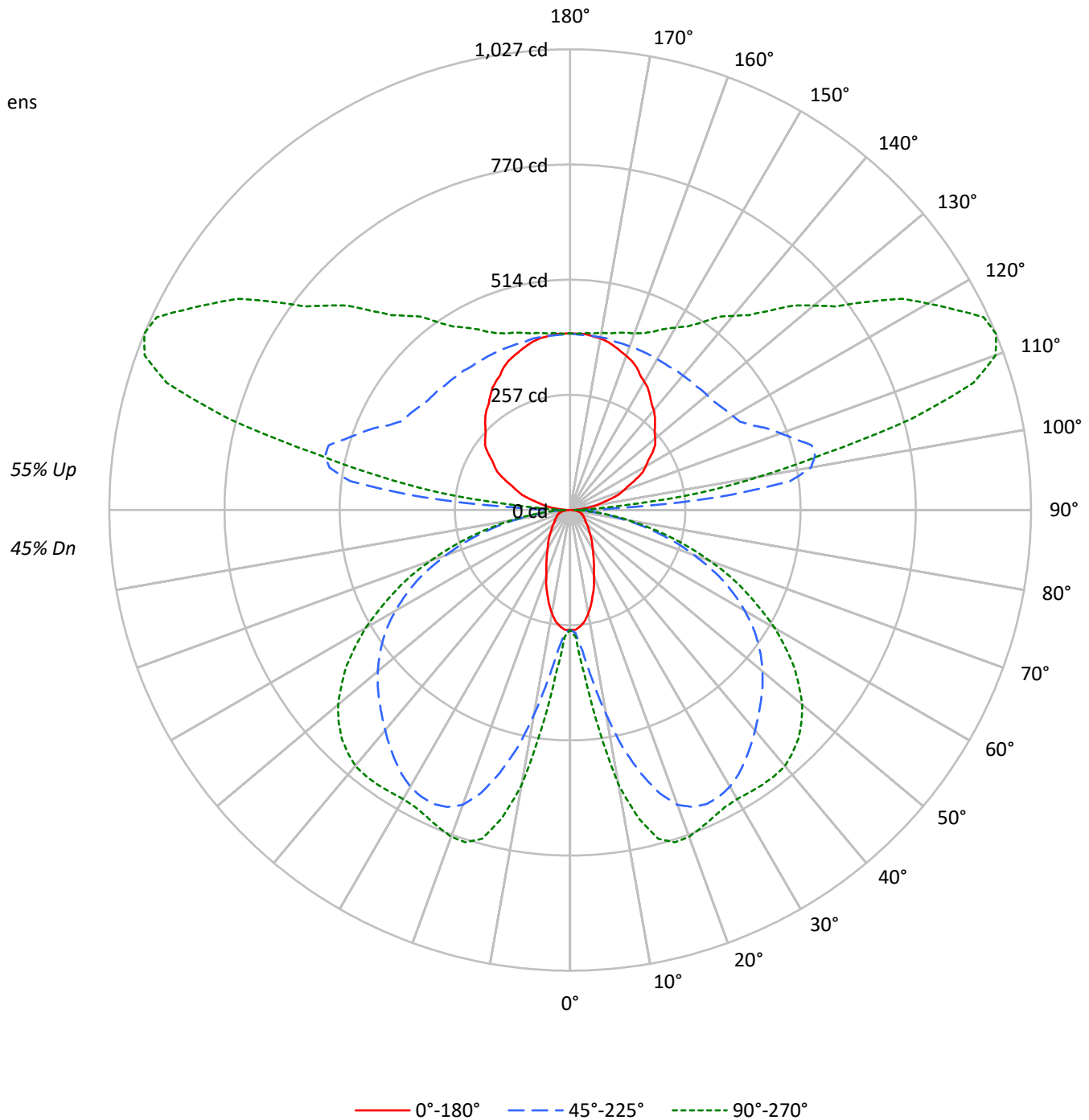
Test Method: LM-79-2019  
Report Number: P936637  
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-6-2700K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4619.1 lumens  
Efficiency: N/A  
Efficacy: 108.4 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 (A<sub>in</sub>): 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	
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°	1653	1653	1653
5°	1614	1910	2222
10°	1464	2784	3683
15°	1243	3635	4447
20°	1012	4212	4533
25°	844	4406	4441
30°	711	4434	4432
35°	629	4358	4547
40°	548	4262	4665
45°	496	4190	4683
50°	454	4126	4606
55°	435	4032	4402
60°	445	3854	4080
65°	461	3582	3636
70°	491	3122	3072
75°	542	2543	2398
80°	586	1761	1615
85°	513	934	827

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4683 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.6	0.7
10°-20°	153.2	3.3
20°-30°	267.9	5.8
30°-40°	344.9	7.5
40°-50°	385.3	8.3
50°-60°	369.0	8.0
60°-70°	292.4	6.3
70°-80°	171.9	3.7
80°-90°	49.3	1.1
90°-100°	191.8	4.2
100°-110°	504.2	10.9
110°-120°	522.8	11.3
120°-130°	419.4	9.1
130°-140°	329.1	7.1
140°-150°	252.6	5.5
150°-160°	181.9	3.9
160°-170°	111.3	2.4
170°-180°	37.6	0.8
0°-30°	455.7	9.9
0°-40°	800.6	17.3
0°-60°	1554.8	33.7
0°-90°	2068.5	44.8
90°-120°	1218.9	26.4
90°-150°	2219.9	48.1
90°-180°	2551.0	55.2
0°-180°	4619.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	267	267	267	267	267	
5°	260	279	314	356	369	24
15°	195	360	606	735	759	54
25°	125	408	722	754	755	57
35°	84	390	680	719	747	53
45°	58	311	601	689	720	45
55°	41	198	510	593	609	38
65°	33	105	379	426	432	32
75°	24	64	208	229	229	25
85°	9	20	52	57	58	9
90°	3	7	20	10	10	3
95°	25	99	330	170	116	28
105°	91	138	557	846	790	96
115°	161	196	446	891	1017	159
125°	224	252	406	686	810	199
135°	268	294	394	554	628	207
145°	310	330	388	473	510	194
155°	351	360	388	426	439	161
165°	378	383	388	404	409	107
175°	394	394	391	396	396	37
180°	394	394	394	394	394	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2	267.2
2.5°	267.2	267.2	268.9	269.7	271.5	272.4	274.1	275.8	280.9	281.8	283.5
5°	260.3	263.8	274.9	279.2	291.3	307.6	314.4	325.6	348.8	355.7	360.0
7.5°	250.0	257.8	285.2	292.1	322.2	365.1	383.2	407.2	444.1	462.3	476.9
10°	233.7	250.0	298.9	315.3	364.3	429.5	463.1	496.6	552.4	577.3	586.8
12.5°	215.7	242.3	313.6	335.9	406.4	501.7	542.1	579.1	642.6	676.1	681.3
15°	195.0	231.1	327.3	360.0	451.1	561.8	606.5	652.1	711.4	735.4	741.5
17.5°	177.0	222.5	340.2	374.6	485.4	616.0	661.5	699.4	747.4	763.8	768.0
20°	154.7	208.7	348.8	393.5	521.5	655.5	699.4	728.6	761.2	771.5	773.2
22.5°	138.3	194.1	354.0	400.3	545.5	679.5	716.5	739.7	762.1	765.5	766.3
25°	124.6	177.8	353.1	408.1	566.2	694.1	722.5	739.7	752.6	754.3	754.3
27.5°	111.7	159.8	349.7	409.8	581.7	697.7	719.9	732.0	738.0	741.5	741.5
30°	100.5	142.6	341.1	406.4	588.5	694.1	712.3	718.2	724.2	729.4	732.0
32.5°	91.9	126.3	328.2	399.5	589.3	685.6	698.5	701.9	710.5	722.5	726.9
35°	84.2	110.0	313.6	390.1	584.2	671.9	680.4	683.9	701.1	719.1	725.1
37.5°	76.4	98.0	294.7	373.8	576.5	655.5	661.5	667.6	694.1	715.7	722.5
40°	68.8	87.6	272.4	355.7	564.5	635.7	640.9	650.3	685.6	710.5	717.4
42.5°	62.7	79.0	248.3	336.8	548.9	613.4	621.1	634.9	675.3	701.9	709.6
45°	57.6	70.5	222.5	311.0	529.2	590.2	601.4	620.3	663.2	689.0	695.9
47.5°	52.4	64.4	195.9	284.3	507.8	567.1	581.7	603.1	646.9	671.9	677.8
50°	48.1	58.4	169.3	256.0	484.5	542.1	559.3	581.7	626.3	649.5	657.3
52.5°	44.7	53.3	144.3	227.7	457.9	516.3	536.1	559.3	601.4	623.8	628.9
55°	41.3	48.9	122.8	197.6	430.4	488.8	510.3	532.6	573.9	592.8	596.3
57.5°	39.5	45.5	104.8	169.3	401.2	457.9	482.0	502.6	541.3	555.9	559.3
60°	37.0	43.0	91.1	145.2	369.4	428.7	449.4	469.9	502.6	514.6	517.2
62.5°	34.3	41.3	80.8	122.0	336.8	394.4	414.9	433.9	461.3	469.9	473.4
65°	32.6	39.5	73.0	104.8	303.3	358.2	378.9	395.2	417.5	426.1	427.8
67.5°	30.9	37.8	67.0	90.2	269.7	322.2	337.6	353.1	370.3	378.9	379.7
70°	28.4	36.0	61.8	79.9	235.4	280.9	293.8	310.1	323.9	328.2	330.8
72.5°	26.6	33.5	58.4	72.2	200.2	241.4	253.4	262.9	274.9	279.2	279.2
75°	24.1	30.1	55.0	64.4	164.1	197.6	207.9	217.4	226.8	228.6	225.9
77.5°	21.4	26.6	47.2	54.2	128.0	156.4	164.9	170.1	177.8	179.5	180.4
80°	18.0	23.2	37.0	42.1	92.8	115.1	121.1	125.5	132.3	132.3	134.0
82.5°	13.8	18.0	26.6	30.1	62.7	79.0	84.2	86.8	91.1	91.1	91.1
85°	8.6	11.2	17.2	19.7	37.8	48.1	51.6	52.4	55.9	56.7	56.7
87.5°	4.3	6.0	11.2	12.0	19.7	24.9	24.9	26.6	26.6	25.8	24.9
90°	2.6	4.8	6.9	7.4	11.6	17.3	20.1	17.9	13.3	10.0	10.0
92.5°	10.6	28.5	46.5	51.0	71.7	99.2	113.0	99.0	71.1	50.1	48.2
95°	25.4	58.2	91.1	99.2	176.3	279.0	330.4	294.8	223.7	170.3	164.2
97.5°	43.8	72.9	101.8	109.1	237.5	408.8	494.4	471.9	426.9	393.2	381.6
100°	58.1	84.4	110.7	117.3	259.7	449.8	544.8	546.4	549.7	552.2	538.5
102.5°	70.2	94.8	119.3	125.5	270.0	462.7	559.0	587.6	645.0	687.9	676.2
105°	90.9	111.6	132.4	137.6	277.5	464.1	557.4	621.6	750.0	846.4	840.0
107.5°	112.0	131.4	150.7	155.5	279.0	443.5	525.7	615.2	794.3	928.7	930.2
110°	126.2	143.7	161.2	165.5	276.8	425.2	499.3	599.4	799.7	949.9	956.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	140.2	156.9	173.6	177.7	276.9	409.2	475.3	577.8	782.7	936.4	946.5
115°	161.3	176.7	192.1	195.9	279.5	390.8	446.5	545.3	742.7	890.7	904.7
117.5°	182.2	196.2	210.1	213.6	284.7	379.4	426.7	515.8	694.0	827.6	843.1
120°	194.3	207.5	220.6	224.0	288.9	375.5	418.8	500.2	663.0	785.0	800.1
122.5°	206.3	219.5	232.7	236.1	294.9	373.4	412.7	486.0	632.7	742.6	757.4
125°	224.5	236.5	248.6	251.6	303.1	371.8	406.1	468.4	592.9	686.3	700.0
127.5°	239.2	251.5	263.7	266.7	311.3	370.9	400.6	454.1	560.9	641.1	652.6
130°	247.2	260.3	273.5	276.7	317.3	371.4	398.5	446.0	541.3	612.7	623.3
132.5°	255.4	268.5	281.7	284.9	322.2	371.8	396.7	439.3	524.4	588.3	597.9
135°	267.5	279.5	291.4	294.4	327.5	371.5	393.5	429.2	500.5	554.0	562.3
137.5°	279.9	291.8	303.6	306.5	335.3	373.7	392.9	423.0	483.4	528.6	535.4
140°	290.2	301.2	312.0	314.7	340.2	374.1	391.1	417.2	469.3	508.3	514.6
142.5°	298.1	308.2	318.2	320.8	344.2	375.5	391.1	414.0	459.7	494.0	499.5
145°	310.3	319.1	327.9	330.1	349.6	375.5	388.5	407.2	444.6	472.7	476.8
147.5°	322.4	331.0	339.6	341.7	357.3	378.0	388.5	403.1	432.6	454.7	458.2
150°	330.4	338.1	345.8	347.8	361.4	379.4	388.5	400.9	425.8	444.4	447.1
152.5°	338.5	344.4	350.3	351.7	363.9	380.3	388.5	399.0	420.3	436.2	438.3
155°	350.7	355.1	359.3	360.4	369.8	382.2	388.5	396.9	413.8	426.5	427.8
157.5°	359.7	363.9	368.1	369.2	375.6	384.2	388.5	395.0	408.2	418.0	418.9
160°	365.7	369.0	372.2	373.1	378.2	385.0	388.5	394.1	405.4	413.8	414.3
162.5°	371.8	374.3	376.8	377.4	381.0	386.0	388.5	393.2	402.7	409.8	410.3
165°	378.4	380.6	382.8	383.4	385.1	387.3	388.5	391.9	398.6	403.7	404.3
167.5°	384.4	385.5	386.6	386.8	388.3	390.2	391.1	393.3	397.8	401.1	401.4
170°	388.5	389.5	390.6	390.8	390.9	391.0	391.1	393.3	397.8	401.1	401.1
172.5°	390.6	390.8	391.0	391.1	391.1	391.1	391.1	392.8	396.3	399.0	398.8
175°	393.5	393.5	393.5	393.5	392.7	391.6	391.1	392.2	394.4	396.1	396.1
177.5°	393.5	393.5	393.5	393.5	392.9	392.0	391.6	392.5	394.3	395.5	395.3
180°	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5	393.5



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	267.2	267.2
2.5°	285.2	283.5
5°	366.8	368.6
7.5°	494.0	493.2
10°	614.3	622.0
12.5°	701.9	703.6
15°	755.2	758.6
17.5°	775.8	776.7
20°	776.7	775.0
22.5°	767.2	765.5
25°	756.1	755.2
27.5°	745.7	746.6
30°	741.5	744.0
32.5°	741.5	745.7
35°	743.2	747.4
37.5°	742.3	747.4
40°	738.8	744.9
42.5°	729.4	733.7
45°	714.8	719.9
47.5°	695.9	699.4
50°	671.9	675.3
52.5°	641.8	642.6
55°	605.7	609.2
57.5°	567.1	567.9
60°	524.1	526.7
62.5°	478.6	478.6
65°	430.4	432.1
67.5°	380.6	384.9
70°	329.9	330.8
72.5°	280.1	280.1
75°	228.6	229.4
77.5°	179.5	179.5
80°	133.2	134.0
82.5°	91.9	93.6
85°	57.6	57.6
87.5°	26.6	24.1
90°	10.0	10.0
92.5°	40.1	32.2
95°	140.1	115.9
97.5°	335.7	289.7
100°	483.7	428.9
102.5°	629.2	582.3
105°	814.8	789.6
107.5°	936.3	942.4
110°	982.7	1009.0





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	986.9	1027.2
115°	960.6	1016.7
117.5°	905.2	967.3
120°	860.4	920.8
122.5°	817.0	876.4
125°	754.8	809.6
127.5°	698.9	745.2
130°	666.0	708.8
132.5°	636.2	674.4
135°	595.2	628.2
137.5°	562.4	589.4
140°	539.8	565.1
142.5°	521.2	542.9
145°	493.3	509.7
147.5°	471.7	485.3
150°	458.2	469.3
152.5°	446.6	455.0
155°	433.4	438.9
157.5°	422.9	426.7
160°	416.6	418.8
162.5°	412.5	414.6
165°	406.6	408.8
167.5°	402.3	403.2
170°	401.1	401.1
172.5°	397.9	397.2
175°	396.1	396.1
177.5°	394.4	393.5
180°	393.5	393.5



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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	2.25	3.10	3.24	4.11	5.45	15.42	16.27	16.41	17.28	18.62
	3H	2.95	3.72	3.96	4.74	6.10	17.25	18.01	18.25	19.03	20.39
	4H	3.25	3.98	4.27	5.00	6.37	17.89	18.61	18.91	19.64	21.01
	6H	3.50	4.17	4.53	5.19	6.58	18.32	18.98	19.34	20.01	21.39
	8H	3.57	4.20	4.60	5.25	6.63	18.43	19.07	19.47	20.11	21.49
	12H	3.59	4.19	4.62	5.23	6.63	18.50	19.10	19.54	20.14	21.54
4H	2H	9.46	10.18	10.48	11.20	12.57	15.69	16.41	16.71	17.43	18.80
	3H	11.02	11.63	12.06	12.68	14.06	17.73	18.33	18.76	19.38	20.77
	4H	11.12	11.67	12.16	12.71	14.12	18.49	19.05	19.53	20.09	21.49
	6H	11.13	11.61	12.18	12.67	14.07	19.03	19.50	20.08	20.57	21.97
	8H	11.10	11.55	12.15	12.61	14.03	19.19	19.63	20.24	20.69	22.11
	12H	11.06	11.47	12.13	12.54	13.96	19.28	19.68	20.34	20.75	22.17
8H	4H	12.56	13.01	13.61	14.06	15.48	18.55	19.00	19.60	20.06	21.47
	6H	12.80	13.17	13.87	14.27	15.68	19.18	19.55	20.25	20.65	22.06
	8H	12.82	13.14	13.90	14.23	15.66	19.39	19.72	20.47	20.80	22.23
	12H	12.79	13.07	13.87	14.15	15.62	19.53	19.82	20.62	20.90	22.37
12H	4H	12.70	13.10	13.77	14.18	15.60	18.50	18.91	19.57	19.98	21.40
	6H	13.06	13.38	14.14	14.47	15.90	19.16	19.49	20.24	20.57	22.00
	8H	13.13	13.41	14.21	14.49	15.96	19.39	19.67	20.47	20.75	22.22