

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: P936664

Luminaire Tested: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

**Test Information**

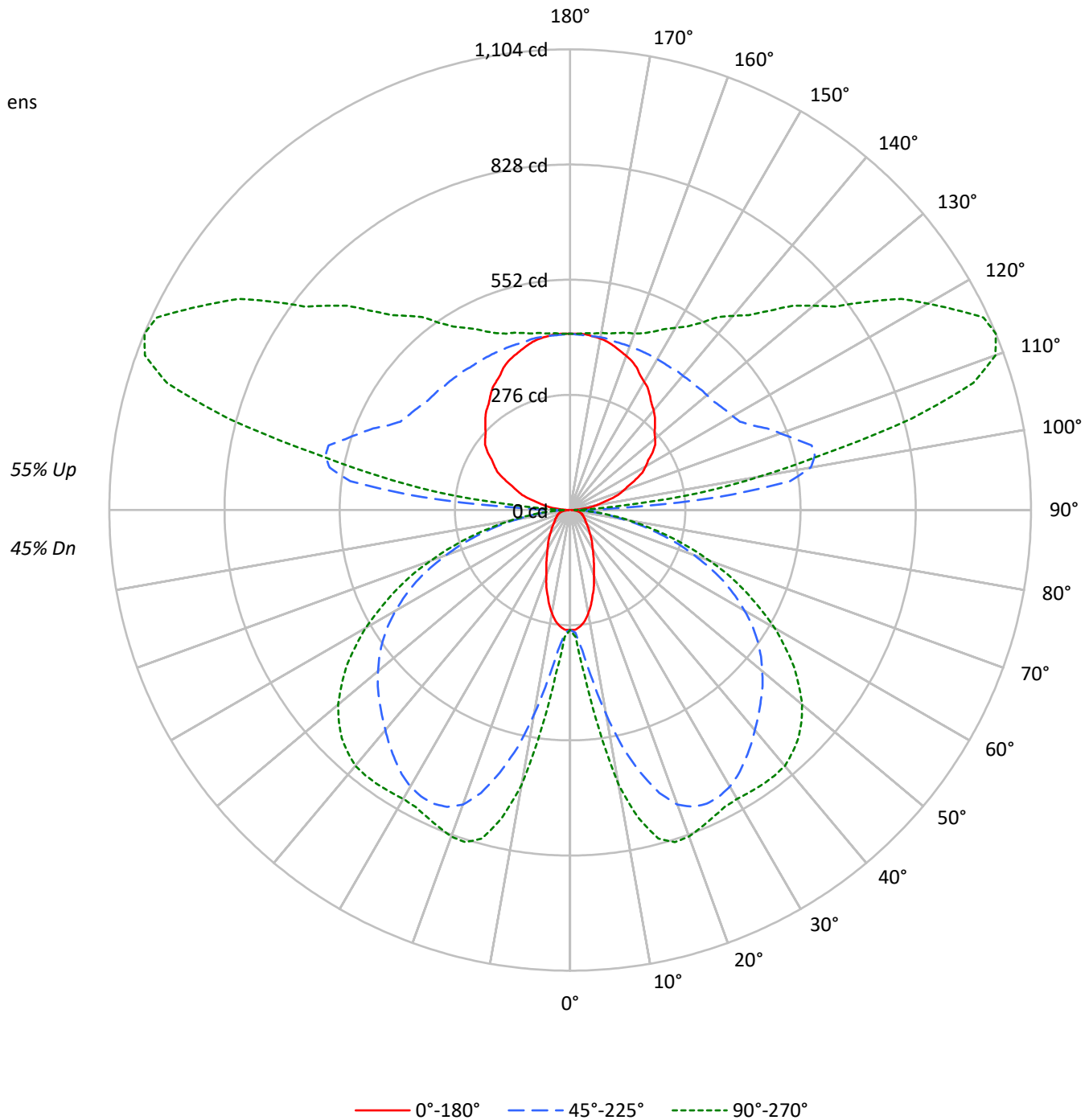
Test Method: LM-79-2019  
Report Number: P936664  
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4962.9 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

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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°	1776	1776	1776
5°	1734	2052	2387
10°	1573	2991	3957
15°	1336	3906	4779
20°	1088	4526	4870
25°	907	4734	4771
30°	764	4764	4762
35°	676	4682	4885
40°	589	4579	5012
45°	533	4502	5032
50°	488	4433	4949
55°	467	4332	4730
60°	477	4140	4383
65°	496	3849	3907
70°	528	3354	3301
75°	583	2733	2576
80°	631	1892	1736
85°	554	1003	889

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5032 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.1	0.7
10°-20°	164.6	3.3
20°-30°	287.9	5.8
30°-40°	370.6	7.5
40°-50°	413.9	8.3
50°-60°	396.5	8.0
60°-70°	314.2	6.3
70°-80°	184.7	3.7
80°-90°	52.9	1.1
90°-100°	206.1	4.2
100°-110°	541.8	10.9
110°-120°	561.8	11.3
120°-130°	450.6	9.1
130°-140°	353.5	7.1
140°-150°	271.4	5.5
150°-160°	195.4	3.9
160°-170°	119.6	2.4
170°-180°	40.4	0.8
0°-30°	489.6	9.9
0°-40°	860.2	17.3
0°-60°	1670.6	33.7
0°-90°	2222.4	44.8
90°-120°	1309.6	26.4
90°-150°	2385.1	48.1
90°-180°	2740.0	55.2
0°-180°	4962.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	287	287	287	287	287	
5°	280	300	338	382	396	26
15°	210	387	652	790	815	58
25°	134	438	776	810	811	62
35°	90	419	731	773	803	56
45°	62	334	646	740	774	48
55°	44	212	548	637	654	40
65°	35	113	407	458	464	35
75°	26	69	223	246	246	27
85°	9	21	55	61	62	10
90°	3	8	22	11	11	3
95°	27	107	355	183	124	30
105°	98	148	599	909	848	103
115°	173	210	480	957	1092	171
125°	241	270	436	737	870	214
135°	287	316	423	595	675	222
145°	333	355	417	508	548	209
155°	377	387	417	458	472	173
165°	406	412	417	434	439	115
175°	423	423	420	426	426	40
180°	423	423	423	423	423	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1	287.1
2.5°	287.1	287.1	288.9	289.8	291.7	292.7	294.5	296.3	301.8	302.7	304.6
5°	279.7	283.4	295.4	300.0	312.9	330.5	337.8	349.8	374.8	382.1	386.8
7.5°	268.6	277.0	306.4	313.9	346.2	392.3	411.7	437.6	477.2	496.7	512.3
10°	251.1	268.6	321.2	338.8	391.4	461.5	497.6	533.5	593.6	620.3	630.5
12.5°	231.7	260.4	336.9	360.9	436.6	539.1	582.5	622.2	690.5	726.4	732.0
15°	209.5	248.3	351.7	386.8	484.6	603.7	651.7	700.7	764.3	790.1	796.7
17.5°	190.1	239.1	365.5	402.5	521.5	661.8	710.8	751.4	803.1	820.6	825.2
20°	166.2	224.3	374.8	422.8	560.3	704.3	751.4	782.8	817.8	829.0	830.8
22.5°	148.6	208.6	380.3	430.1	586.1	730.1	769.9	794.7	818.8	822.4	823.4
25°	133.9	191.1	379.4	438.5	608.3	745.8	776.3	794.7	808.6	810.4	810.4
27.5°	120.0	171.7	375.7	440.3	625.0	749.6	773.5	786.5	792.9	796.7	796.7
30°	108.0	153.3	366.4	436.6	632.3	745.8	765.3	771.7	778.1	783.7	786.5
32.5°	98.7	135.7	352.6	429.2	633.2	736.6	750.5	754.2	763.3	776.3	781.0
35°	90.5	118.2	336.9	419.1	627.7	721.9	731.0	734.8	753.2	772.6	779.0
37.5°	82.1	105.3	316.6	401.6	619.4	704.3	710.8	717.3	745.8	768.9	776.3
40°	73.9	94.2	292.7	382.1	606.5	683.0	688.6	698.7	736.6	763.3	770.8
42.5°	67.4	84.9	266.8	361.8	589.8	659.1	667.3	682.1	725.5	754.2	762.4
45°	61.9	75.7	239.1	334.1	568.6	634.1	646.1	666.4	712.6	740.3	747.6
47.5°	56.3	69.2	210.4	305.5	545.6	609.3	625.0	648.0	695.1	721.9	728.3
50°	51.7	62.8	181.9	275.0	520.6	582.5	600.9	625.0	672.9	697.8	706.2
52.5°	48.0	57.3	155.1	244.7	492.0	554.7	576.0	600.9	646.1	670.2	675.7
55°	44.3	52.6	132.0	212.3	462.4	525.2	548.3	572.3	616.6	636.9	640.6
57.5°	42.5	48.9	112.6	181.9	431.0	492.0	517.9	540.0	581.5	597.2	600.9
60°	39.7	46.2	97.8	156.0	396.9	460.6	482.8	504.9	540.0	552.9	555.7
62.5°	36.9	44.3	86.8	131.0	361.8	423.7	445.8	466.2	495.6	504.9	508.6
65°	35.1	42.5	78.5	112.6	325.9	384.9	407.1	424.6	448.6	457.8	459.7
67.5°	33.2	40.7	72.0	96.9	289.8	346.2	362.8	379.4	397.8	407.1	408.0
70°	30.5	38.7	66.4	85.8	252.9	301.8	315.7	333.2	348.0	352.6	355.4
72.5°	28.6	36.0	62.8	77.5	215.1	259.3	272.3	282.5	295.4	300.0	300.0
75°	25.9	32.3	59.1	69.2	176.3	212.3	223.4	233.6	243.6	245.6	242.7
77.5°	23.0	28.6	50.7	58.2	137.6	168.0	177.2	182.8	191.1	192.9	193.8
80°	19.4	25.0	39.7	45.2	99.7	123.7	130.1	134.8	142.2	142.2	144.0
82.5°	14.8	19.4	28.6	32.3	67.4	84.9	90.5	93.2	97.8	97.8	97.8
85°	9.3	12.0	18.4	21.2	40.7	51.7	55.4	56.3	60.0	60.9	60.9
87.5°	4.6	6.4	12.0	12.9	21.2	26.8	26.8	28.6	28.6	27.7	26.8
90°	2.8	5.1	7.4	8.0	12.5	18.5	21.6	19.2	14.3	10.7	10.7
92.5°	11.4	30.7	49.9	54.8	77.0	106.6	121.4	106.4	76.4	53.9	51.8
95°	27.3	62.5	97.8	106.6	189.4	299.8	355.0	316.8	240.3	183.0	176.5
97.5°	47.1	78.3	109.4	117.2	255.2	439.2	531.2	507.0	458.7	422.4	410.0
100°	62.4	90.7	118.9	126.0	279.1	483.3	585.3	587.0	590.6	593.3	578.6
102.5°	75.4	101.9	128.2	134.8	290.1	497.1	600.6	631.4	693.0	739.1	726.5
105°	97.6	119.9	142.2	147.8	298.2	498.7	598.9	667.9	805.8	909.3	902.6
107.5°	120.3	141.1	161.9	167.1	299.7	476.5	564.8	661.0	853.5	997.8	999.5
110°	135.6	154.4	173.2	177.8	297.4	456.8	536.5	644.0	859.2	1020.6	1027.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	150.7	168.6	186.5	191.0	297.5	439.7	510.7	620.8	841.0	1006.1	1016.9
115°	173.4	189.9	206.4	210.5	300.3	419.9	479.8	585.9	797.9	957.0	972.0
117.5°	195.7	210.8	225.8	229.5	305.9	407.6	458.5	554.2	745.6	889.2	905.9
120°	208.8	222.9	237.0	240.6	310.4	403.4	449.9	537.4	712.3	843.5	859.7
122.5°	221.6	235.8	250.1	253.7	316.9	401.2	443.4	522.2	679.7	797.8	813.8
125°	241.2	254.1	267.1	270.4	325.7	399.5	436.4	503.3	637.1	737.4	752.1
127.5°	257.0	270.2	283.3	286.6	334.5	398.5	430.4	487.8	602.7	688.8	701.2
130°	265.6	279.7	293.8	297.3	340.9	399.0	428.1	479.2	581.5	658.3	669.7
132.5°	274.4	288.5	302.7	306.1	346.2	399.5	426.2	472.0	563.5	632.1	642.4
135°	287.4	300.3	313.1	316.3	351.8	399.1	422.8	461.1	537.8	595.2	604.1
137.5°	300.7	313.5	326.1	329.4	360.3	401.5	422.1	454.5	519.3	568.0	575.2
140°	311.8	323.6	335.2	338.2	365.5	402.0	420.2	448.2	504.2	546.1	552.9
142.5°	320.3	331.1	341.9	344.7	369.8	403.4	420.2	444.8	493.9	530.8	536.7
145°	333.4	342.9	352.3	354.7	375.6	403.4	417.4	437.5	477.7	507.9	512.3
147.5°	346.4	355.6	364.9	367.2	383.9	406.2	417.4	433.2	464.8	488.6	492.3
150°	355.0	363.3	371.6	373.7	388.3	407.6	417.4	430.8	457.5	477.5	480.4
152.5°	363.7	370.0	376.3	377.9	391.0	408.6	417.4	428.7	451.6	468.7	470.9
155°	376.8	381.5	386.1	387.3	397.3	410.7	417.4	426.5	444.6	458.2	459.7
157.5°	386.4	390.9	395.5	396.6	403.5	412.8	417.4	424.4	438.6	449.1	450.1
160°	393.0	396.4	399.9	400.8	406.4	413.7	417.4	423.4	435.5	444.6	445.2
162.5°	399.5	402.1	404.8	405.4	409.4	414.7	417.4	422.5	432.7	440.3	440.9
165°	406.5	408.9	411.3	412.0	413.8	416.2	417.4	421.0	428.3	433.8	434.4
167.5°	413.1	414.2	415.3	415.6	417.2	419.2	420.2	422.6	427.4	430.9	431.2
170°	417.4	418.5	419.7	419.9	420.0	420.1	420.2	422.6	427.4	430.9	430.9
172.5°	419.7	419.9	420.1	420.2	420.2	420.2	420.2	422.0	425.8	428.7	428.5
175°	422.8	422.8	422.8	422.8	422.0	420.8	420.2	421.4	423.8	425.5	425.5
177.5°	422.8	422.8	422.8	422.8	422.1	421.2	420.8	421.7	423.6	425.0	424.7
180°	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8	422.8



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	287.1	287.1
2.5°	306.4	304.6
5°	394.2	396.0
7.5°	530.8	529.9
10°	660.0	668.3
12.5°	754.2	756.0
15°	811.4	815.1
17.5°	833.5	834.5
20°	834.5	832.6
22.5°	824.3	822.4
25°	812.3	811.4
27.5°	801.2	802.2
30°	796.7	799.4
32.5°	796.7	801.2
35°	798.5	803.1
37.5°	797.6	803.1
40°	793.8	800.3
42.5°	783.7	788.3
45°	768.0	773.5
47.5°	747.6	751.4
50°	721.9	725.5
52.5°	689.6	690.5
55°	650.7	654.5
57.5°	609.3	610.2
60°	563.1	565.9
62.5°	514.2	514.2
65°	462.4	464.3
67.5°	408.9	413.5
70°	354.5	355.4
72.5°	300.9	300.9
75°	245.6	246.5
77.5°	192.9	192.9
80°	143.1	144.0
82.5°	98.7	100.6
85°	61.9	61.9
87.5°	28.6	25.9
90°	10.7	10.7
92.5°	43.1	34.6
95°	150.5	124.5
97.5°	360.7	311.3
100°	519.7	460.8
102.5°	676.1	625.6
105°	875.5	848.3
107.5°	1006.0	1012.6
110°	1055.8	1084.1





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1060.3	1103.6
115°	1032.1	1092.3
117.5°	972.6	1039.3
120°	924.5	989.4
122.5°	877.8	941.6
125°	811.0	869.9
127.5°	750.9	800.7
130°	715.6	761.5
132.5°	683.5	724.6
135°	639.5	675.0
137.5°	604.3	633.3
140°	580.0	607.1
142.5°	560.0	583.3
145°	530.0	547.6
147.5°	506.8	521.4
150°	492.3	504.2
152.5°	479.9	488.9
155°	465.6	471.5
157.5°	454.4	458.5
160°	447.6	449.9
162.5°	443.2	445.4
165°	436.8	439.2
167.5°	432.2	433.2
170°	430.9	430.9
172.5°	427.6	426.7
175°	425.5	425.5
177.5°	423.8	422.8
180°	422.8	422.8



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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	2.50	3.35	3.49	4.36	5.70	15.67	16.51	16.66	17.52	18.87
	3H	3.20	3.97	4.21	4.99	6.35	17.50	18.26	18.50	19.28	20.64
	4H	3.50	4.23	4.52	5.25	6.62	18.14	18.86	19.16	19.89	21.25
	6H	3.75	4.42	4.78	5.45	6.83	18.57	19.23	19.59	20.26	21.64
	8H	3.82	4.46	4.85	5.50	6.88	18.68	19.32	19.72	20.36	21.74
	12H	3.84	4.44	4.88	5.48	6.88	18.75	19.35	19.79	20.39	21.79
4H	2H	9.71	10.43	10.73	11.45	12.82	15.94	16.66	16.96	17.68	19.05
	3H	11.27	11.88	12.30	12.93	14.31	17.98	18.58	19.01	19.63	21.02
	4H	11.37	11.92	12.41	12.96	14.37	18.74	19.30	19.78	20.34	21.74
	6H	11.38	11.86	12.43	12.92	14.32	19.28	19.75	20.32	20.82	22.22
	8H	11.35	11.80	12.40	12.86	14.28	19.43	19.88	20.49	20.94	22.36
	12H	11.31	11.72	12.38	12.79	14.21	19.52	19.93	20.59	21.00	22.42
8H	4H	12.81	13.25	13.86	14.31	15.73	18.80	19.25	19.85	20.31	21.72
	6H	13.05	13.42	14.12	14.52	15.93	19.42	19.80	20.50	20.90	22.31
	8H	13.07	13.39	14.15	14.48	15.91	19.64	19.97	20.72	21.05	22.48
	12H	13.03	13.32	14.12	14.40	15.87	19.78	20.07	20.87	21.15	22.62
12H	4H	12.95	13.35	14.02	14.43	15.85	18.75	19.16	19.82	20.23	21.65
	6H	13.31	13.63	14.39	14.72	16.15	19.41	19.73	20.49	20.82	22.25
	8H	13.38	13.66	14.46	14.74	16.21	19.63	19.92	20.72	21.00	22.47