

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: P936641

Luminaire Tested: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-6-5000K

Issue Date: 12/17/2024

**Test Information**

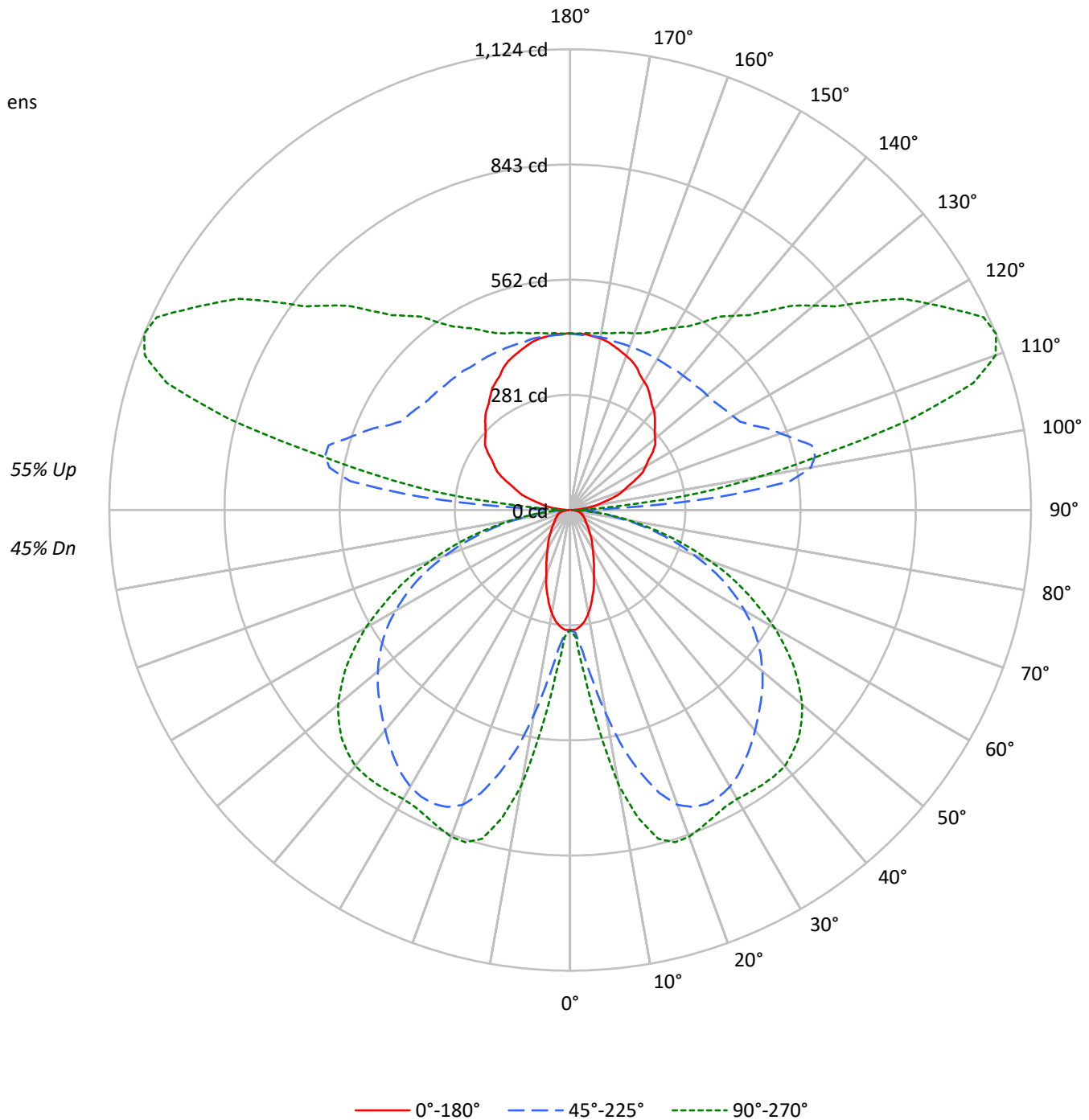
Test Method: LM-79-2019  
Report Number: P936641  
REPORT IS A COMBINATION OF REPORTS P933477 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-050U-050D-92765-1D-UNV-STD-W-6-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5054.9 lumens  
Efficiency: N/A  
Efficacy: 118.7 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°	1809	1809	1809
5°	1767	2090	2431
10°	1601	3046	4031
15°	1361	3978	4867
20°	1108	4609	4961
25°	924	4822	4860
30°	778	4852	4850
35°	688	4769	4976
40°	599	4664	5106
45°	542	4585	5126
50°	496	4515	5041
55°	475	4413	4817
60°	487	4217	4464
65°	505	3920	3979
70°	536	3416	3362
75°	594	2783	2624
80°	641	1927	1768
85°	560	1023	905

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5126 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.8	0.7
10°-20°	167.6	3.3
20°-30°	293.2	5.8
30°-40°	377.5	7.5
40°-50°	421.6	8.3
50°-60°	403.8	8.0
60°-70°	320.0	6.3
70°-80°	188.2	3.7
80°-90°	53.9	1.1
90°-100°	209.9	4.2
100°-110°	551.8	10.9
110°-120°	572.2	11.3
120°-130°	458.9	9.1
130°-140°	360.1	7.1
140°-150°	276.4	5.5
150°-160°	199.1	3.9
160°-170°	121.8	2.4
170°-180°	41.1	0.8
0°-30°	498.7	9.9
0°-40°	876.1	17.3
0°-60°	1701.5	33.7
0°-90°	2263.6	44.8
90°-120°	1333.8	26.4
90°-150°	2429.3	48.1
90°-180°	2791.0	55.2
0°-180°	5054.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	285	306	344	389	403	26
15°	213	394	664	805	830	59
25°	136	447	791	825	826	63
35°	92	427	745	787	818	58
45°	63	340	658	754	788	49
55°	45	216	558	649	667	41
65°	36	115	415	466	473	35
75°	26	70	228	250	251	28
85°	9	22	56	62	63	10
90°	3	8	22	11	11	3
95°	28	109	362	186	127	31
105°	100	151	610	926	864	105
115°	177	214	489	975	1113	174
125°	246	275	444	751	886	218
135°	293	322	431	606	688	226
145°	340	361	425	517	558	213
155°	384	394	425	467	480	176
165°	414	420	425	442	447	117
175°	431	431	428	433	433	41
180°	431	431	431	431	431	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4
2.5°	292.4	292.4	294.2	295.2	297.1	298.1	299.9	301.8	307.4	308.4	310.2
5°	284.9	288.6	300.9	305.6	318.7	336.6	344.1	356.3	381.7	389.2	394.0
7.5°	273.6	282.1	312.1	319.7	352.6	399.6	419.3	445.7	486.0	505.9	521.8
10°	255.7	273.6	327.1	345.1	398.7	470.1	506.8	543.4	604.6	631.8	642.1
12.5°	236.0	265.2	343.1	367.6	444.7	549.0	593.3	633.7	703.3	739.9	745.5
15°	213.4	252.9	358.2	394.0	493.6	614.8	663.7	713.6	778.5	804.8	811.4
17.5°	193.7	243.5	372.3	410.0	531.2	674.1	723.9	765.3	818.0	835.8	840.5
20°	169.3	228.4	381.7	430.6	570.7	717.4	765.3	797.3	833.0	844.3	846.2
22.5°	151.3	212.5	387.3	438.1	597.0	743.7	784.1	809.5	833.9	837.7	838.6
25°	136.4	194.6	386.4	446.6	619.6	759.6	790.7	809.5	823.6	825.4	825.4
27.5°	122.3	174.9	382.7	448.5	636.5	763.5	787.9	801.0	807.6	811.4	811.4
30°	110.0	156.1	373.2	444.7	644.0	759.6	779.5	786.0	792.5	798.2	801.0
32.5°	100.6	138.2	359.1	437.2	644.9	750.3	764.4	768.1	777.5	790.7	795.4
35°	92.2	120.4	343.1	426.9	639.3	735.2	744.6	748.4	767.2	786.9	793.5
37.5°	83.7	107.2	322.5	409.0	630.8	717.4	723.9	730.6	759.6	783.2	790.7
40°	75.2	95.9	298.1	389.2	617.7	695.7	701.4	711.7	750.3	777.5	785.1
42.5°	68.6	86.5	271.7	368.6	600.7	671.3	679.7	694.8	739.0	768.1	776.6
45°	63.0	77.1	243.5	340.3	579.1	645.9	658.1	678.8	725.8	754.0	761.5
47.5°	57.4	70.5	214.3	311.2	555.7	620.6	636.5	660.0	707.9	735.2	741.8
50°	52.6	63.9	185.3	280.1	530.3	593.3	612.0	636.5	685.4	710.8	719.3
52.5°	48.9	58.3	158.0	249.2	501.1	565.0	586.7	612.0	658.1	682.6	688.2
55°	45.1	53.6	134.4	216.2	471.0	534.9	558.5	582.9	628.0	648.7	652.5
57.5°	43.3	49.8	114.7	185.3	439.0	501.1	527.5	550.0	592.3	608.3	612.0
60°	40.5	47.0	99.6	158.9	404.3	469.1	491.7	514.3	550.0	563.2	566.0
62.5°	37.6	45.1	88.4	133.5	368.6	431.6	454.1	474.8	504.8	514.3	518.0
65°	35.7	43.3	79.9	114.7	331.9	392.0	414.6	432.5	456.9	466.3	468.2
67.5°	33.8	41.4	73.4	98.7	295.2	352.6	369.5	386.4	405.2	414.6	415.6
70°	31.0	39.4	67.7	87.4	257.6	307.4	321.5	339.4	354.4	359.1	362.0
72.5°	29.2	36.6	63.9	79.0	219.1	264.1	277.3	287.7	300.9	305.6	305.6
75°	26.4	32.9	60.2	70.5	179.6	216.2	227.5	237.9	248.2	250.1	247.2
77.5°	23.5	29.2	51.7	59.3	140.1	171.1	180.5	186.2	194.6	196.5	197.4
80°	19.7	25.4	40.5	46.1	101.5	126.0	132.5	137.3	144.8	144.8	146.7
82.5°	15.0	19.7	29.2	32.9	68.6	86.5	92.2	95.0	99.6	99.6	99.6
85°	9.4	12.2	18.8	21.6	41.4	52.6	56.5	57.4	61.1	62.1	62.1
87.5°	4.7	6.5	12.2	13.2	21.6	27.3	27.3	29.2	29.2	28.2	27.3
90°	2.9	5.2	7.6	8.1	12.7	18.9	22.0	19.5	14.6	10.9	10.9
92.5°	11.6	31.2	50.8	55.8	78.4	108.6	123.7	108.3	77.8	54.9	52.7
95°	27.8	63.7	99.6	108.6	192.9	305.4	361.5	322.7	244.8	186.4	179.7
97.5°	48.0	79.7	111.4	119.4	259.9	447.4	541.0	516.4	467.2	430.2	417.6
100°	63.6	92.3	121.1	128.3	284.2	492.2	596.2	597.9	601.6	604.3	589.3
102.5°	76.8	103.8	130.6	137.3	295.5	506.3	611.8	643.1	705.8	752.8	740.0
105°	99.5	122.2	144.9	150.6	303.7	507.9	610.0	680.3	820.8	926.2	919.3
107.5°	122.5	143.8	164.9	170.2	305.3	485.3	575.3	673.3	869.3	1016.3	1018.0
110°	138.1	157.2	176.4	181.1	302.9	465.3	546.4	656.0	875.2	1039.5	1046.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.5	171.7	189.9	194.5	303.0	447.8	520.2	632.3	856.6	1024.7	1035.7
115°	176.6	193.4	210.2	214.4	305.8	427.7	488.7	596.7	812.7	974.7	990.0
117.5°	199.4	214.7	229.9	233.8	311.5	415.2	467.0	564.5	759.4	905.6	922.6
120°	212.6	227.0	241.4	245.1	316.1	410.9	458.3	547.4	725.5	859.1	875.6
122.5°	225.7	240.2	254.7	258.4	322.8	408.7	451.6	531.8	692.3	812.6	828.9
125°	245.6	258.8	272.1	275.4	331.7	406.9	444.5	512.6	648.9	751.0	766.0
127.5°	261.8	275.2	288.5	291.9	340.7	405.8	438.4	496.9	613.8	701.6	714.2
130°	270.5	284.9	299.3	302.8	347.2	406.4	436.0	488.1	592.3	670.5	682.1
132.5°	279.5	293.9	308.3	311.8	352.6	406.9	434.1	480.7	573.9	643.8	654.3
135°	292.7	305.8	318.9	322.2	358.4	406.5	430.6	469.7	547.7	606.3	615.3
137.5°	306.3	319.3	332.2	335.5	367.0	408.9	430.0	463.0	529.0	578.5	585.9
140°	317.6	329.6	341.4	344.4	372.3	409.4	428.0	456.5	513.5	556.2	563.2
142.5°	326.2	337.2	348.3	351.1	376.7	410.9	428.0	453.1	503.1	540.6	546.6
145°	339.6	349.2	358.8	361.3	382.6	410.9	425.1	445.6	486.5	517.3	521.8
147.5°	352.9	362.2	371.6	374.0	391.0	413.7	425.1	441.2	473.4	497.6	501.4
150°	361.5	370.1	378.5	380.6	395.5	415.2	425.1	438.8	466.0	486.3	489.3
152.5°	370.4	376.9	383.3	384.9	398.3	416.1	425.1	436.7	460.0	477.4	479.6
155°	383.8	388.6	393.2	394.4	404.6	418.3	425.1	434.4	452.9	466.7	468.2
157.5°	393.6	398.2	402.9	404.0	411.0	420.4	425.1	432.3	446.7	457.4	458.5
160°	400.2	403.8	407.3	408.3	413.9	421.4	425.1	431.3	443.6	452.9	453.4
162.5°	406.9	409.6	412.3	413.0	417.0	422.4	425.1	430.3	440.7	448.5	449.0
165°	414.1	416.5	418.9	419.6	421.5	423.9	425.1	428.8	436.2	441.8	442.5
167.5°	420.7	421.8	423.0	423.3	424.9	427.0	428.0	430.4	435.3	438.9	439.2
170°	425.1	426.2	427.4	427.7	427.8	427.9	428.0	430.4	435.3	438.9	438.9
172.5°	427.4	427.7	427.9	428.0	428.0	428.0	428.0	429.9	433.7	436.6	436.4
175°	430.6	430.6	430.6	430.6	429.8	428.6	428.0	429.2	431.6	433.4	433.4
177.5°	430.6	430.6	430.6	430.6	430.0	429.0	428.6	429.5	431.5	432.9	432.6
180°	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6	430.6



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	292.4	292.4
2.5°	312.1	310.2
5°	401.5	403.3
7.5°	540.6	539.7
10°	672.2	680.7
12.5°	768.1	770.0
15°	826.5	830.2
17.5°	849.0	849.9
20°	849.9	848.1
22.5°	839.6	837.7
25°	827.4	826.5
27.5°	816.1	817.0
30°	811.4	814.2
32.5°	811.4	816.1
35°	813.3	818.0
37.5°	812.4	818.0
40°	808.5	815.2
42.5°	798.2	802.9
45°	782.3	787.9
47.5°	761.5	765.3
50°	735.2	739.0
52.5°	702.3	703.3
55°	662.8	666.6
57.5°	620.6	621.5
60°	573.5	576.3
62.5°	523.7	523.7
65°	471.0	472.9
67.5°	416.5	421.2
70°	361.1	362.0
72.5°	306.5	306.5
75°	250.1	251.1
77.5°	196.5	196.5
80°	145.7	146.7
82.5°	100.6	102.4
85°	63.0	63.0
87.5°	29.2	26.4
90°	10.9	10.9
92.5°	43.9	35.2
95°	153.3	126.8
97.5°	367.3	317.1
100°	529.3	469.3
102.5°	688.6	637.2
105°	891.7	864.0
107.5°	1024.6	1031.4
110°	1075.4	1104.2





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1080.0	1124.1
115°	1051.3	1112.6
117.5°	990.6	1058.6
120°	941.6	1007.7
122.5°	894.0	959.1
125°	826.0	886.0
127.5°	764.9	815.5
130°	728.9	775.6
132.5°	696.2	738.0
135°	651.4	687.5
137.5°	615.5	645.0
140°	590.7	618.4
142.5°	570.4	594.1
145°	539.8	557.7
147.5°	516.2	531.1
150°	501.5	513.5
152.5°	488.8	497.9
155°	474.3	480.3
157.5°	462.8	467.0
160°	455.9	458.3
162.5°	451.4	453.7
165°	444.9	447.4
167.5°	440.2	441.3
170°	438.9	438.9
172.5°	435.5	434.6
175°	433.4	433.4
177.5°	431.6	430.6
180°	430.6	430.6



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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	2.56	3.41	3.56	4.42	5.76	15.73	16.58	16.72	17.59	18.93
	3H	3.27	4.03	4.27	5.05	6.41	17.56	18.33	18.57	19.34	20.71
	4H	3.57	4.29	4.58	5.31	6.68	18.20	18.93	19.22	19.95	21.32
	6H	3.82	4.48	4.84	5.51	6.89	18.63	19.30	19.66	20.32	21.71
	8H	3.88	4.52	4.92	5.56	6.94	18.75	19.38	19.78	20.43	21.80
	12H	3.90	4.50	4.94	5.54	6.95	18.81	19.42	19.85	20.45	21.86
4H	2H	9.77	10.49	10.79	11.51	12.88	16.00	16.73	17.02	17.75	19.12
	3H	11.34	11.94	12.37	12.99	14.38	18.04	18.65	19.07	19.70	21.08
	4H	11.43	11.99	12.47	13.03	14.43	18.80	19.36	19.84	20.40	21.81
	6H	11.44	11.92	12.49	12.99	14.39	19.34	19.82	20.39	20.88	22.28
	8H	11.42	11.87	12.47	12.92	14.34	19.50	19.95	20.55	21.00	22.42
	12H	11.37	11.78	12.44	12.85	14.27	19.59	19.99	20.66	21.07	22.49
8H	4H	12.87	13.32	13.92	14.38	15.79	18.86	19.31	19.91	20.37	21.79
	6H	13.11	13.48	14.19	14.58	16.00	19.49	19.86	20.56	20.96	22.37
	8H	13.13	13.46	14.21	14.54	15.97	19.71	20.03	20.79	21.11	22.55
	12H	13.10	13.39	14.18	14.46	15.94	19.85	20.13	20.93	21.21	22.69
12H	4H	13.01	13.42	14.08	14.49	15.91	18.82	19.22	19.89	20.29	21.72
	6H	13.37	13.70	14.45	14.78	16.21	19.47	19.80	20.55	20.88	22.31
	8H	13.44	13.73	14.53	14.80	16.28	19.70	19.99	20.78	21.06	22.54