

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: P936663

Luminaire Tested: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936663
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-6-4000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

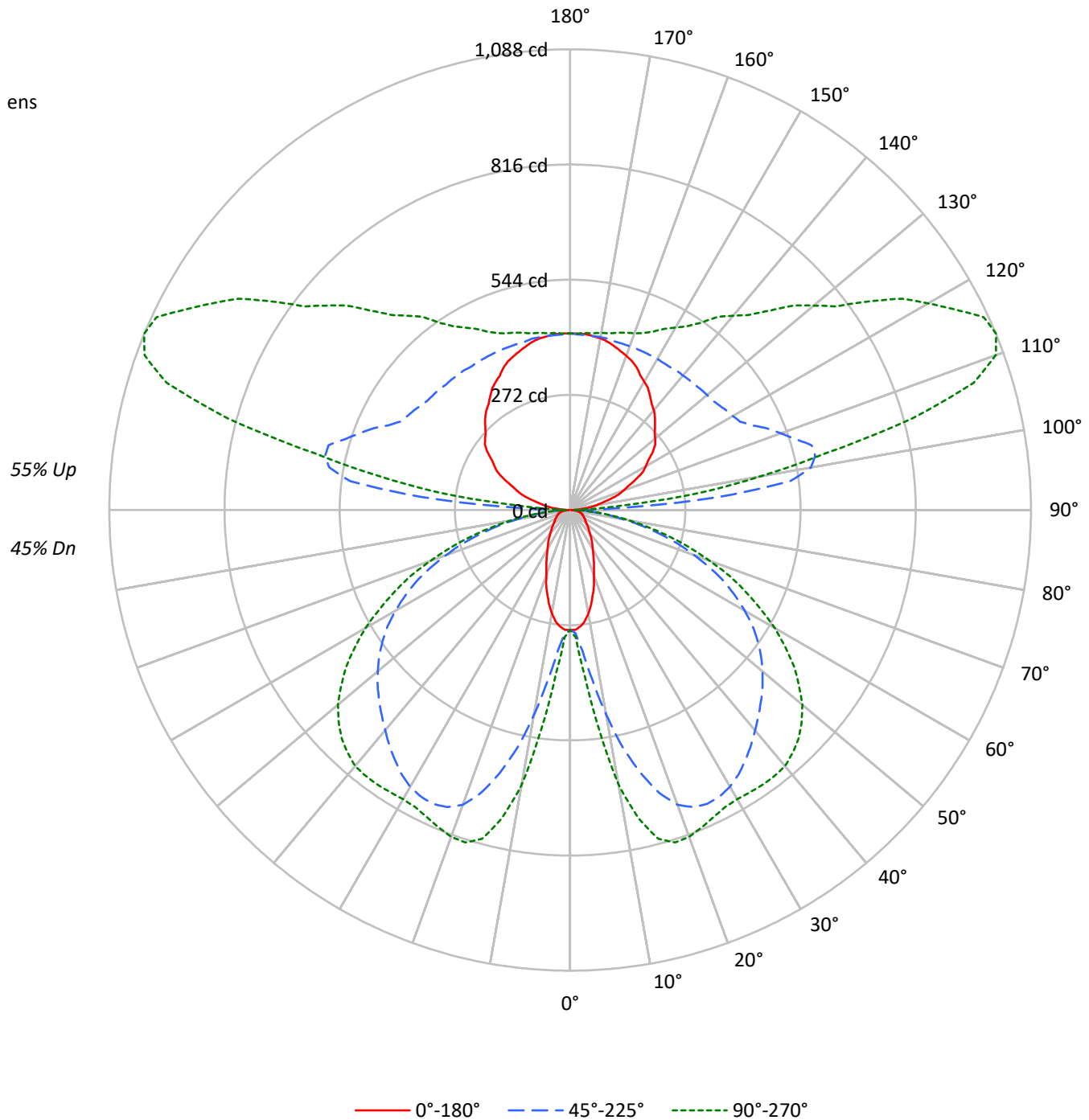
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4895.1 lumens
Efficiency: N/A
Efficacy: 114.9 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_{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: P936663
CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P936663

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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°	1751	1751	1751
5°	1711	2024	2355
10°	1551	2950	3903
15°	1317	3853	4714
20°	1072	4464	4804
25°	895	4670	4706
30°	753	4698	4697
35°	666	4619	4818
40°	581	4516	4944
45°	525	4440	4964
50°	481	4372	4881
55°	460	4273	4665
60°	471	4084	4323
65°	489	3796	3853
70°	521	3309	3256
75°	574	2695	2541
80°	622	1867	1712
85°	543	990	876

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4964 cd/sqm



TEST NUMBER: P936663

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	0.7
10°-20°	162.3	3.3
20°-30°	283.9	5.8
30°-40°	365.5	7.5
40°-50°	408.3	8.3
50°-60°	391.0	8.0
60°-70°	309.9	6.3
70°-80°	182.2	3.7
80°-90°	52.2	1.1
90°-100°	203.2	4.2
100°-110°	534.4	10.9
110°-120°	554.1	11.3
120°-130°	444.4	9.1
130°-140°	348.7	7.1
140°-150°	267.7	5.5
150°-160°	192.8	3.9
160°-170°	117.9	2.4
170°-180°	39.8	0.8
0°-30°	482.9	9.9
0°-40°	848.4	17.3
0°-60°	1647.7	33.7
0°-90°	2192.1	44.8
90°-120°	1291.7	26.4
90°-150°	2352.5	48.1
90°-180°	2703.0	55.2
0°-180°	4895.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	283	283	283	283	283	
5°	276	296	333	377	391	25
15°	207	382	643	779	804	58
25°	132	432	766	799	800	61
35°	89	413	721	762	792	56
45°	61	330	637	730	763	47
55°	44	209	541	628	646	40
65°	35	111	402	452	458	34
75°	26	68	220	242	243	27
85°	9	21	55	60	61	10
90°	3	8	21	11	11	3
95°	27	105	350	180	123	30
105°	96	146	591	897	837	102
115°	171	208	473	944	1077	169
125°	238	267	430	727	858	211
135°	284	312	417	587	666	219
145°	329	350	412	501	540	206
155°	372	382	412	452	465	171
165°	401	406	412	428	433	113
175°	417	417	414	420	420	40
180°	417	417	417	417	417	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	283.1	283.1	283.1	283.1	283.1	283.1	283.1	283.1	283.1	283.1	283.1
2.5°	283.1	283.1	284.9	285.8	287.8	288.7	290.5	292.3	297.7	298.6	300.4
5°	275.9	279.5	291.4	295.9	308.7	325.9	333.2	345.0	369.7	376.9	381.5
7.5°	264.9	273.2	302.2	309.6	341.4	387.0	406.1	431.6	470.7	489.9	505.4
10°	247.7	264.9	316.8	334.2	386.1	455.2	490.8	526.3	585.5	611.8	621.8
12.5°	228.6	256.8	332.3	356.0	430.7	531.7	574.5	613.7	681.0	716.5	722.0
15°	206.6	244.9	346.9	381.5	478.0	595.4	642.8	691.1	753.9	779.3	785.8
17.5°	187.5	235.8	360.5	397.0	514.4	652.8	701.0	741.1	792.1	809.4	813.9
20°	163.9	221.2	369.7	417.0	552.7	694.7	741.1	772.1	806.7	817.6	819.4
22.5°	146.5	205.7	375.1	424.2	578.1	720.1	759.3	783.9	807.6	811.2	812.1
25°	132.1	188.5	374.2	432.5	600.0	735.6	765.7	783.9	797.5	799.3	799.3
27.5°	118.4	169.4	370.6	434.3	616.4	739.3	763.0	775.7	782.1	785.8	785.8
30°	106.5	151.2	361.4	430.7	623.7	735.6	754.8	761.1	767.5	773.0	775.7
32.5°	97.4	133.9	347.8	423.3	624.6	726.6	740.2	743.9	752.9	765.7	770.3
35°	89.2	116.6	332.3	413.4	619.1	712.0	721.1	724.8	743.0	762.1	768.4
37.5°	81.0	103.8	312.3	396.1	610.9	694.7	701.0	707.5	735.6	758.4	765.7
40°	72.9	92.9	288.7	376.9	598.2	673.7	679.2	689.2	726.6	752.9	760.2
42.5°	66.4	83.7	263.1	356.9	581.7	650.1	658.2	672.8	715.6	743.9	752.0
45°	61.0	74.7	235.8	329.6	560.8	625.5	637.3	657.3	702.9	730.2	737.4
47.5°	55.6	68.2	207.6	301.3	538.1	600.9	616.4	639.1	685.6	712.0	718.3
50°	51.0	61.9	179.4	271.3	513.5	574.5	592.7	616.4	663.8	688.3	696.5
52.5°	47.3	56.5	153.0	241.3	485.3	547.2	568.2	592.7	637.3	661.0	666.5
55°	43.7	51.9	130.2	209.4	456.1	518.0	540.8	564.5	608.2	628.2	631.9
57.5°	41.9	48.2	111.1	179.4	425.2	485.3	510.8	532.6	573.6	589.1	592.7
60°	39.2	45.5	96.5	153.9	391.5	454.3	476.2	498.0	532.6	545.4	548.1
62.5°	36.4	43.7	85.6	129.3	356.9	417.9	439.7	459.8	488.9	498.0	501.6
65°	34.6	41.9	77.4	111.1	321.4	379.6	401.5	418.8	442.4	451.6	453.4
67.5°	32.8	40.1	71.1	95.6	285.8	341.4	357.8	374.2	392.4	401.5	402.4
70°	30.1	38.2	65.5	84.6	249.5	297.7	311.4	328.7	343.2	347.8	350.6
72.5°	28.2	35.5	61.9	76.5	212.2	255.8	268.6	278.6	291.4	295.9	295.9
75°	25.5	31.9	58.3	68.2	173.9	209.4	220.3	230.4	240.3	242.2	239.4
77.5°	22.7	28.2	50.1	57.4	135.7	165.7	174.8	180.3	188.5	190.3	191.2
80°	19.1	24.6	39.2	44.6	98.3	122.0	128.4	133.0	140.2	140.2	142.0
82.5°	14.6	19.1	28.2	31.9	66.4	83.7	89.2	92.0	96.5	96.5	96.5
85°	9.1	11.9	18.2	20.9	40.1	51.0	54.7	55.6	59.2	60.1	60.1
87.5°	4.5	6.3	11.9	12.8	20.9	26.4	26.4	28.2	28.2	27.3	26.4
90°	2.8	5.1	7.3	7.9	12.3	18.3	21.3	18.9	14.1	10.6	10.6
92.5°	11.2	30.2	49.2	54.0	75.9	105.2	119.8	104.9	75.3	53.1	51.1
95°	26.9	61.6	96.5	105.2	186.8	295.7	350.1	312.5	237.1	180.5	174.1
97.5°	46.4	77.2	107.9	115.6	251.7	433.2	523.9	500.1	452.4	416.6	404.4
100°	61.6	89.4	117.3	124.3	275.3	476.7	577.3	579.0	582.6	585.2	570.7
102.5°	74.4	100.5	126.5	133.0	286.1	490.3	592.4	622.8	683.5	729.0	716.6
105°	96.3	118.3	140.3	145.8	294.1	491.9	590.7	658.8	794.8	896.9	890.2
107.5°	118.7	139.2	159.7	164.8	295.6	470.0	557.1	652.0	841.8	984.2	985.8
110°	133.8	152.2	170.8	175.4	293.4	450.6	529.2	635.2	847.5	1006.6	1013.6



TEST NUMBER: P936663

CATALOG NUMBER: SQ4-FB-050U-050D-93050-1D-UNV-STD-W-6-4000K

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	148.6	166.3	183.9	188.4	293.5	433.7	503.7	612.3	829.5	992.3	1003.0
115°	171.0	187.3	203.6	207.6	296.2	414.2	473.2	577.9	787.0	943.9	958.7
117.5°	193.1	207.9	222.7	226.4	301.7	402.1	452.2	546.6	735.4	877.0	893.5
120°	205.9	219.9	233.8	237.3	306.1	397.9	443.8	530.1	702.6	831.9	848.0
122.5°	218.6	232.6	246.7	250.2	312.6	395.7	437.4	515.0	670.5	786.9	802.7
125°	237.9	250.6	263.5	266.7	321.2	394.0	430.4	496.4	628.4	727.3	741.8
127.5°	253.5	266.5	279.4	282.7	329.9	393.0	424.5	481.2	594.4	679.4	691.6
130°	262.0	275.9	289.8	293.3	336.3	393.6	422.3	472.7	573.6	649.3	660.6
132.5°	270.6	284.6	298.5	302.0	341.4	394.0	420.4	465.5	555.8	623.5	633.6
135°	283.5	296.2	308.8	312.0	347.0	393.7	417.0	454.8	530.4	587.1	595.9
137.5°	296.6	309.2	321.7	324.9	355.4	396.0	416.4	448.3	512.2	560.2	567.4
140°	307.6	319.2	330.7	333.6	360.5	396.5	414.5	442.1	497.3	538.7	545.4
142.5°	315.9	326.6	337.3	340.0	364.8	397.9	414.5	438.7	487.2	523.5	529.3
145°	328.8	338.2	347.5	349.8	370.5	397.9	411.7	431.5	471.1	500.9	505.3
147.5°	341.7	350.7	359.9	362.2	378.6	400.6	411.7	427.2	458.5	481.9	485.5
150°	350.1	358.4	366.5	368.6	383.0	402.1	411.7	424.9	451.2	471.0	473.9
152.5°	358.7	365.0	371.2	372.7	385.7	403.0	411.7	422.9	445.4	462.3	464.4
155°	371.7	376.3	380.8	382.0	391.8	405.1	411.7	420.6	438.6	451.9	453.4
157.5°	381.2	385.6	390.1	391.2	398.0	407.1	411.7	418.6	432.6	443.0	444.0
160°	387.6	391.0	394.5	395.4	400.8	408.0	411.7	417.6	429.6	438.6	439.1
162.5°	394.0	396.6	399.3	399.9	403.8	409.0	411.7	416.7	426.8	434.3	434.8
165°	401.0	403.3	405.7	406.3	408.1	410.5	411.7	415.3	422.4	427.9	428.5
167.5°	407.4	408.5	409.7	409.9	411.5	413.5	414.5	416.8	421.5	425.1	425.3
170°	411.7	412.8	413.9	414.2	414.3	414.4	414.5	416.8	421.5	425.1	425.1
172.5°	413.9	414.2	414.4	414.5	414.5	414.5	414.5	416.3	420.0	422.8	422.6
175°	417.0	417.0	417.0	417.0	416.2	415.0	414.5	415.6	418.0	419.7	419.7
177.5°	417.0	417.0	417.0	417.0	416.4	415.5	415.0	415.9	417.8	419.2	418.9
180°	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0	417.0



TEST NUMBER: P936663

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	283.1	283.1
2.5°	302.2	300.4
5°	388.8	390.6
7.5°	523.5	522.6
10°	651.0	659.1
12.5°	743.9	745.7
15°	800.3	804.0
17.5°	822.2	823.1
20°	823.1	821.3
22.5°	813.0	811.2
25°	801.2	800.3
27.5°	790.3	791.2
30°	785.8	788.5
32.5°	785.8	790.3
35°	787.6	792.1
37.5°	786.7	792.1
40°	783.0	789.4
42.5°	773.0	777.5
45°	757.5	763.0
47.5°	737.4	741.1
50°	712.0	715.6
52.5°	680.1	681.0
55°	641.8	645.6
57.5°	600.9	601.8
60°	555.4	558.1
62.5°	507.2	507.2
65°	456.1	457.9
67.5°	403.3	407.9
70°	349.7	350.6
72.5°	296.8	296.8
75°	242.2	243.1
77.5°	190.3	190.3
80°	141.1	142.0
82.5°	97.4	99.2
85°	61.0	61.0
87.5°	28.2	25.5
90°	10.6	10.6
92.5°	42.5	34.1
95°	148.4	122.8
97.5°	355.7	307.0
100°	512.6	454.5
102.5°	666.8	617.0
105°	863.5	836.7
107.5°	992.2	998.8
110°	1041.4	1069.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1045.8	1088.5
115°	1018.0	1077.4
117.5°	959.3	1025.1
120°	911.9	975.9
122.5°	865.8	928.8
125°	799.9	858.0
127.5°	740.7	789.8
130°	705.8	751.1
132.5°	674.2	714.7
135°	630.8	665.7
137.5°	596.0	624.7
140°	572.1	598.9
142.5°	552.3	575.3
145°	522.7	540.1
147.5°	499.9	514.3
150°	485.6	497.3
152.5°	473.3	482.2
155°	459.3	465.1
157.5°	448.1	452.2
160°	441.4	443.8
162.5°	437.1	439.4
165°	430.9	433.2
167.5°	426.3	427.3
170°	425.1	425.1
172.5°	421.7	420.9
175°	419.7	419.7
177.5°	418.0	417.0
180°	417.0	417.0



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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	2.45	3.30	3.45	4.31	5.65	15.62	16.47	16.61	17.48	18.82
	3H	3.16	3.92	4.16	4.94	6.30	17.45	18.21	18.45	19.23	20.59
	4H	3.46	4.18	4.47	5.20	6.57	18.09	18.82	19.11	19.84	21.21
	6H	3.71	4.37	4.73	5.40	6.78	18.52	19.19	19.54	20.21	21.59
	8H	3.77	4.41	4.81	5.45	6.83	18.64	19.27	19.67	20.31	21.69
	12H	3.79	4.40	4.83	5.43	6.84	18.70	19.31	19.74	20.34	21.75
4H	2H	9.66	10.38	10.68	11.40	12.77	15.89	16.61	16.91	17.64	19.01
	3H	11.23	11.83	12.26	12.88	14.26	17.93	18.54	18.96	19.59	20.97
	4H	11.32	11.87	12.36	12.92	14.32	18.69	19.25	19.73	20.29	21.70
	6H	11.33	11.81	12.38	12.87	14.27	19.23	19.71	20.28	20.77	22.17
	8H	11.31	11.75	12.36	12.81	14.23	19.39	19.83	20.44	20.89	22.31
	12H	11.26	11.67	12.33	12.74	14.16	19.48	19.88	20.55	20.95	22.38
8H	4H	12.76	13.21	13.81	14.27	15.68	18.75	19.20	19.80	20.26	21.67
	6H	13.00	13.37	14.08	14.47	15.89	19.38	19.75	20.45	20.85	22.26
	8H	13.02	13.35	14.10	14.43	15.86	19.59	19.92	20.68	21.00	22.44
	12H	12.99	13.27	14.07	14.35	15.83	19.73	20.02	20.82	21.10	22.57
12H	4H	12.90	13.31	13.97	14.38	15.80	18.70	19.11	19.77	20.18	21.60
	6H	13.26	13.59	14.34	14.67	16.10	19.36	19.69	20.44	20.77	22.20
	8H	13.33	13.61	14.41	14.69	16.17	19.59	19.87	20.67	20.95	22.43