

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: P937463

Luminaire Tested: SQ4-FB-100U-050D-93050-1D-UNV-STD-W-6-4000K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937463
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-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: -

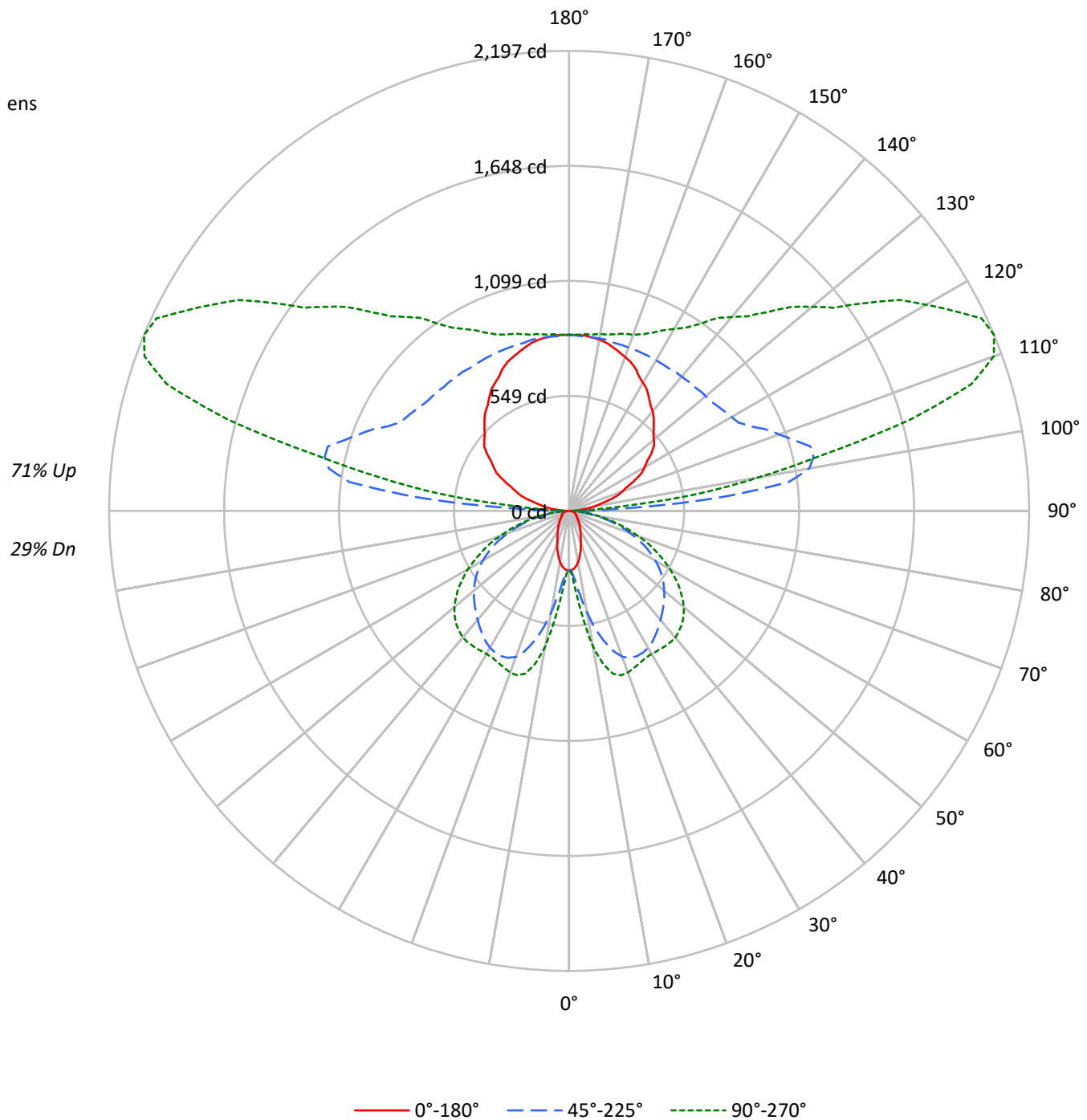
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7648.6 lumens
Efficiency: N/A
Efficacy: 123.8 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: Semi-Indirect

Input Watts (W): 61.8
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

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	0.5
10°-20°	162.3	2.1
20°-30°	283.9	3.7
30°-40°	365.5	4.8
40°-50°	408.3	5.3
50°-60°	391.0	5.1
60°-70°	309.9	4.1
70°-80°	182.2	2.4
80°-90°	53.8	0.7
90°-100°	410.2	5.4
100°-110°	1078.4	14.1
110°-120°	1118.1	14.6
120°-130°	896.9	11.7
130°-140°	703.7	9.2
140°-150°	540.2	7.1
150°-160°	389.0	5.1
160°-170°	238.0	3.1
170°-180°	80.4	1.1
0°-30°	482.9	6.3
0°-40°	848.4	11.1
0°-60°	1647.7	21.5
0°-90°	2193.7	28.7
90°-120°	2606.7	34.1
90°-150°	4747.5	62.1
90°-180°	5455.0	71.3
0°-180°	7648.6	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°	6	16	43	22	22	5
95°	54	212	706	364	248	60
105°	194	294	1192	1810	1689	206
115°	345	419	955	1905	2174	341
125°	480	538	869	1468	1732	426
135°	572	630	841	1185	1344	443
145°	664	706	831	1011	1090	416
155°	750	771	831	912	939	345
165°	809	820	831	864	874	228
175°	841	841	836	847	847	80
180°	841	841	841	841	841	



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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°	5.6	10.1	14.7	15.8	24.9	36.9	42.9	38.1	28.6	21.5	21.5
92.5°	22.6	61.0	99.4	109.0	153.2	212.2	241.7	211.8	152.1	107.3	103.0
95°	54.2	124.5	194.8	212.4	377.1	596.7	706.5	630.4	478.3	364.2	351.3
97.5°	93.8	155.8	217.8	233.3	507.9	874.1	1057.2	1009.2	913.0	840.9	816.3
100°	124.3	180.5	236.7	250.7	555.5	961.8	1165.0	1168.6	1175.6	1180.9	1151.5
102.5°	150.3	202.8	255.2	268.3	577.4	989.5	1195.5	1256.8	1379.3	1471.2	1446.1
105°	194.2	238.7	283.1	294.3	593.6	992.7	1192.2	1329.5	1604.0	1810.0	1796.5
107.5°	239.4	280.9	322.3	332.6	596.6	948.4	1124.4	1315.9	1698.9	1986.2	1989.5
110°	269.9	307.3	344.8	354.1	592.1	909.3	1067.9	1282.0	1710.2	2031.4	2045.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	299.9	335.5	371.2	380.1	592.2	875.1	1016.5	1235.6	1673.9	2002.6	2024.1
115°	345.0	377.9	410.8	419.0	597.7	835.8	954.9	1166.0	1588.3	1904.9	1934.9
117.5°	389.7	419.5	449.4	456.8	608.7	811.3	912.6	1103.1	1484.1	1769.9	1803.1
120°	415.6	443.8	471.9	478.9	617.9	803.1	895.7	1069.7	1417.8	1679.0	1711.2
122.5°	441.1	469.4	497.8	504.9	630.8	798.7	882.7	1039.5	1352.9	1588.0	1619.9
125°	480.0	505.9	531.8	538.2	648.4	795.2	868.6	1001.7	1268.0	1467.8	1497.1
127.5°	511.7	537.8	563.9	570.4	665.8	793.1	856.7	971.1	1199.7	1371.2	1395.9
130°	528.6	556.8	584.8	591.9	678.7	794.4	852.2	953.9	1157.5	1310.2	1333.0
132.5°	546.1	574.2	602.3	609.4	689.0	795.2	848.2	939.4	1121.6	1258.3	1278.7
135°	572.1	597.7	623.3	629.7	700.3	794.4	841.4	917.7	1070.4	1184.9	1202.5
137.5°	598.6	623.9	649.4	655.7	717.2	799.3	840.4	904.9	1033.9	1130.6	1145.0
140°	620.7	644.0	667.4	673.2	727.6	800.1	836.4	892.1	1003.6	1087.1	1100.6
142.5°	637.6	659.2	680.8	686.2	736.3	803.0	836.4	885.3	983.2	1056.6	1068.2
145°	663.6	682.4	701.2	705.9	747.6	803.1	830.8	870.8	950.9	1010.9	1019.7
147.5°	689.6	707.8	726.1	730.7	764.0	808.5	830.8	862.3	925.3	972.5	979.7
150°	706.5	723.0	739.6	743.8	772.7	811.4	830.8	857.4	910.5	950.4	956.3
152.5°	724.0	736.6	749.1	752.3	778.4	813.3	830.8	853.5	898.9	932.9	937.4
155°	750.0	759.2	768.5	770.8	790.8	817.5	830.8	848.9	885.0	912.0	915.0
157.5°	769.2	778.3	787.2	789.5	803.2	821.6	830.8	844.8	872.9	894.0	896.1
160°	782.1	789.2	796.3	798.0	808.9	823.5	830.8	842.8	866.9	885.0	886.2
162.5°	795.2	800.4	805.7	807.0	814.9	825.5	830.8	840.9	861.3	876.5	877.6
165°	809.3	814.0	818.8	820.0	823.6	828.4	830.8	838.0	852.6	863.5	864.7
167.5°	822.2	824.5	826.8	827.3	830.3	834.4	836.4	841.2	850.7	857.8	858.4
170°	830.8	833.0	835.3	835.8	836.0	836.3	836.4	841.2	850.7	857.8	857.8
172.5°	835.3	835.7	836.3	836.4	836.4	836.4	836.4	840.2	847.7	853.3	852.8
175°	841.4	841.4	841.4	841.4	839.7	837.5	836.4	838.7	843.5	847.1	847.1
177.5°	841.4	841.4	841.4	841.4	840.2	838.5	837.5	839.4	843.2	846.0	845.4
180°	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4	841.4



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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°	21.5	21.5
92.5°	85.9	68.9
95°	299.6	247.9
97.5°	717.9	619.5
100°	1034.3	917.1
102.5°	1345.6	1245.2
105°	1742.5	1688.6
107.5°	2002.6	2015.6
110°	2101.7	2157.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2110.5	2196.8
115°	2054.5	2174.3
117.5°	1935.9	2068.7
120°	1840.3	1969.3
122.5°	1747.1	1874.4
125°	1614.3	1731.5
127.5°	1494.9	1593.7
130°	1424.5	1515.8
132.5°	1360.5	1442.4
135°	1273.0	1343.5
137.5°	1202.8	1260.5
140°	1154.6	1208.6
142.5°	1114.7	1161.1
145°	1054.9	1090.0
147.5°	1008.9	1038.0
150°	979.9	1003.6
152.5°	955.2	973.0
155°	926.8	938.6
157.5°	904.3	912.6
160°	890.9	895.7
162.5°	882.1	886.6
165°	869.5	874.2
167.5°	860.4	862.3
170°	857.8	857.8
172.5°	851.1	849.4
175°	847.1	847.1
177.5°	843.4	841.4
180°	841.4	841.4



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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	0.58	1.29	1.69	2.41	3.95	13.74	14.46	14.86	15.57	17.11
	3H	1.27	1.91	2.39	3.03	4.59	15.56	16.21	16.69	17.33	18.89
	4H	1.56	2.17	2.70	3.30	4.86	16.20	16.81	17.33	17.93	19.50
	6H	1.80	2.37	2.95	3.49	5.07	16.62	17.18	17.76	18.30	19.88
	8H	1.87	2.40	3.01	3.54	5.11	16.73	17.27	17.88	18.41	19.98
	12H	1.88	2.39	3.03	3.52	5.12	16.79	17.30	17.94	18.43	20.03
4H	2H	7.76	8.37	8.90	9.50	11.06	14.00	14.61	15.14	15.73	17.30
	3H	9.32	9.83	10.47	10.98	12.56	16.02	16.53	17.17	17.68	19.26
	4H	9.41	9.88	10.56	11.01	12.61	16.78	17.25	17.93	18.39	19.99
	6H	9.41	9.81	10.57	10.97	12.56	17.31	17.71	18.46	18.87	20.46
	8H	9.38	9.76	10.54	10.91	12.52	17.46	17.84	18.62	18.99	20.60
	12H	9.33	9.67	10.50	10.84	12.45	17.55	17.89	18.72	19.05	20.66
8H	4H	10.84	11.21	11.99	12.36	13.97	16.83	17.21	17.98	18.36	19.96
	6H	11.07	11.38	12.25	12.58	14.18	17.45	17.76	18.62	18.95	20.55
	8H	11.09	11.36	12.27	12.53	14.15	17.66	17.93	18.84	19.11	20.73
	12H	11.05	11.29	12.23	12.46	14.11	17.80	18.03	18.98	19.20	20.86
12H	4H	10.97	11.31	12.14	12.48	14.09	16.77	17.12	17.95	18.28	19.89
	6H	11.33	11.60	12.51	12.77	14.39	17.43	17.70	18.61	18.87	20.49
	8H	11.39	11.63	12.57	12.80	14.45	17.65	17.89	18.83	19.06	20.71