

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: P937462

Luminaire Tested: SQ4-FB-100U-050D-93050-1D-UNV-STD-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937462
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-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

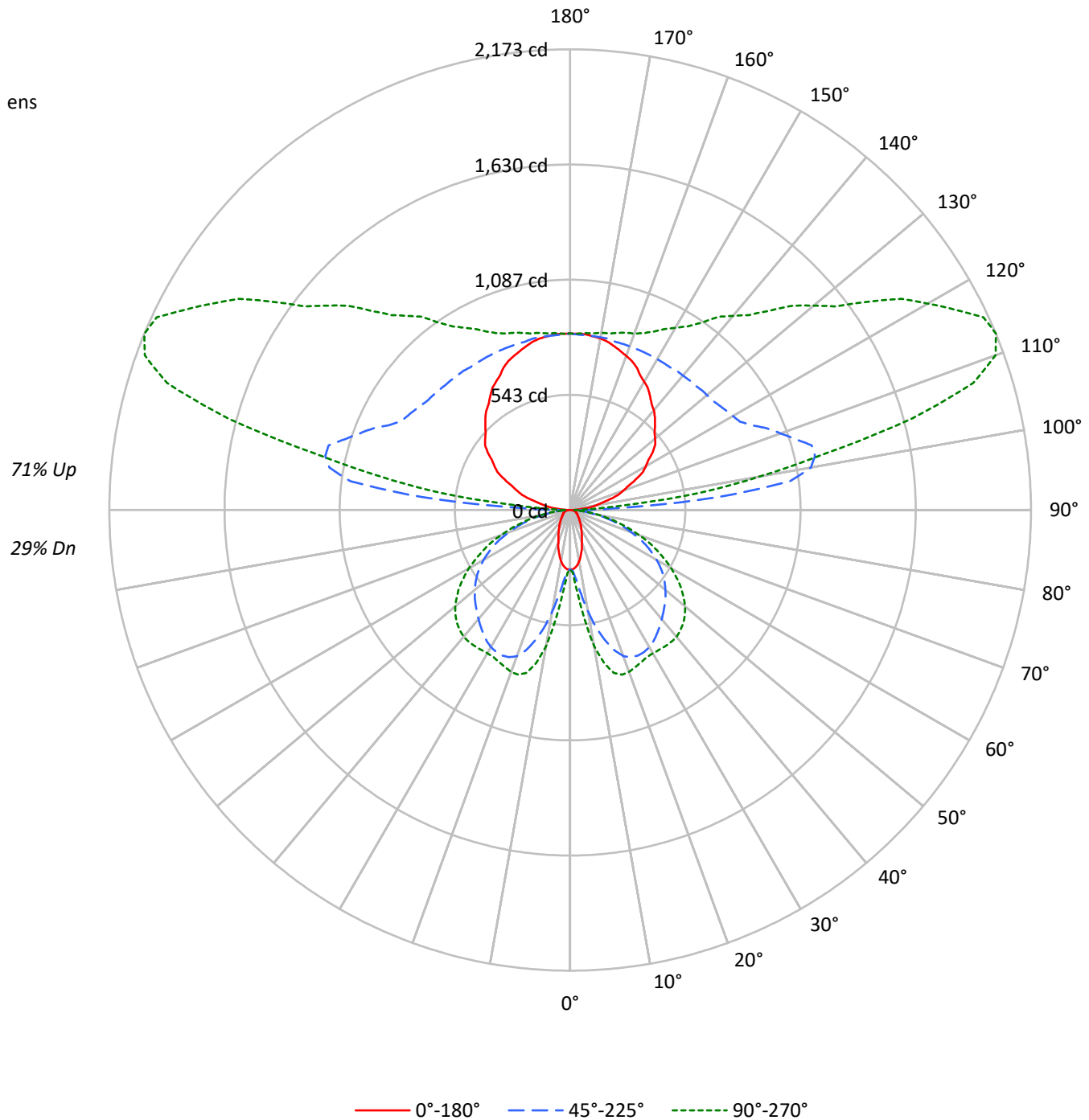
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7565.4 lumens
Efficiency: N/A
Efficacy: 122.4 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: 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





TEST NUMBER: P937462

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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°	1733	1733	1733
5°	1692	2002	2329
10°	1534	2918	3861
15°	1303	3811	4662
20°	1061	4415	4751
25°	885	4619	4655
30°	746	4647	4646
35°	659	4568	4766
40°	574	4467	4890
45°	519	4392	4910
50°	476	4325	4828
55°	455	4226	4614
60°	467	4039	4276
65°	483	3755	3811
70°	514	3273	3221
75°	567	2665	2514
80°	615	1847	1693
85°	537	979	866

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4910 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.2	0.5
10°-20°	160.6	2.1
20°-30°	280.9	3.7
30°-40°	361.5	4.8
40°-50°	403.8	5.3
50°-60°	386.8	5.1
60°-70°	306.5	4.1
70°-80°	180.2	2.4
80°-90°	53.2	0.7
90°-100°	405.7	5.4
100°-110°	1066.6	14.1
110°-120°	1106.0	14.6
120°-130°	887.1	11.7
130°-140°	696.1	9.2
140°-150°	534.3	7.1
150°-160°	384.8	5.1
160°-170°	235.4	3.1
170°-180°	79.5	1.1
0°-30°	477.7	6.3
0°-40°	839.2	11.1
0°-60°	1629.8	21.5
0°-90°	2169.8	28.7
90°-120°	2578.3	34.1
90°-150°	4695.8	62.1
90°-180°	5396.0	71.3
0°-180°	7565.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	280	280	280	280	280	
5°	273	293	330	373	386	25
15°	204	377	636	771	795	57
25°	131	428	757	791	792	60
35°	88	409	713	754	784	55
45°	60	326	630	722	755	47
55°	43	207	535	621	638	39
65°	34	110	397	447	453	34
75°	25	68	218	240	240	26
85°	9	21	54	59	60	10
90°	6	16	42	21	21	5
95°	54	210	699	360	245	60
105°	192	291	1179	1790	1670	204
115°	341	414	945	1884	2151	337
125°	475	532	859	1452	1713	422
135°	566	623	832	1172	1329	438
145°	656	698	822	1000	1078	411
155°	742	762	822	902	928	341
165°	800	811	822	854	865	226
175°	832	832	827	838	838	79
180°	832	832	832	832	832	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1	280.1
2.5°	280.1	280.1	281.8	282.7	284.6	285.5	287.3	289.1	294.5	295.4	297.2
5°	272.9	276.5	288.2	292.7	305.3	322.4	329.6	341.3	365.6	372.8	377.4
7.5°	262.1	270.2	298.9	306.2	337.7	382.7	401.6	426.9	465.6	484.5	499.9
10°	245.0	262.1	313.4	330.5	381.9	450.3	485.4	520.5	579.1	605.1	615.1
12.5°	226.1	254.0	328.7	352.1	426.0	525.9	568.3	607.0	673.6	708.7	714.1
15°	204.4	242.3	343.1	377.4	472.8	588.9	635.8	683.6	745.7	770.9	777.2
17.5°	185.5	233.2	356.6	392.7	508.8	645.7	693.4	733.1	783.5	800.6	805.1
20°	162.1	218.8	365.6	412.5	546.7	687.2	733.1	763.7	797.9	808.7	810.5
22.5°	145.0	203.5	371.0	419.6	571.8	712.3	751.1	775.3	798.8	802.4	803.3
25°	130.6	186.4	370.1	427.8	593.5	727.6	757.3	775.3	788.9	790.7	790.7
27.5°	117.1	167.5	366.5	429.6	609.7	731.3	754.7	767.3	773.5	777.2	777.2
30°	105.4	149.5	357.5	426.0	616.9	727.6	746.6	752.9	759.1	764.6	767.3
32.5°	96.3	132.4	344.0	418.7	617.8	718.7	732.2	735.8	744.7	757.3	761.9
35°	88.3	115.3	328.7	408.9	612.4	704.3	713.2	716.9	734.9	753.8	760.0
37.5°	80.1	102.7	308.9	391.8	604.2	687.2	693.4	699.8	727.6	750.2	757.3
40°	72.1	91.9	285.5	372.8	591.7	666.4	671.8	681.7	718.7	744.7	752.0
42.5°	65.7	82.8	260.3	353.0	575.4	643.0	651.1	665.5	707.8	735.8	743.8
45°	60.3	73.9	233.2	326.0	554.7	618.7	630.4	650.2	695.2	722.2	729.4
47.5°	55.0	67.5	205.3	298.0	532.3	594.4	609.7	632.2	678.1	704.3	710.5
50°	50.4	61.2	177.5	268.3	507.9	568.3	586.3	609.7	656.5	680.8	688.9
52.5°	46.8	55.9	151.3	238.7	480.0	541.2	562.0	586.3	630.4	653.8	659.2
55°	43.2	51.3	128.7	207.1	451.1	512.4	534.9	558.3	601.6	621.3	625.0
57.5°	41.5	47.7	109.9	177.5	420.5	480.0	505.2	526.8	567.4	582.7	586.3
60°	38.8	45.0	95.4	152.2	387.2	449.4	471.0	492.6	526.8	539.4	542.1
62.5°	36.0	43.2	84.7	127.9	353.0	413.4	434.9	454.8	483.6	492.6	496.2
65°	34.2	41.5	76.5	109.9	317.9	375.5	397.2	414.3	437.6	446.7	448.5
67.5°	32.4	39.7	70.3	94.5	282.7	337.7	353.9	370.1	388.1	397.2	398.1
70°	29.7	37.8	64.8	83.7	246.7	294.5	308.0	325.1	339.5	344.0	346.8
72.5°	27.9	35.1	61.2	75.7	209.9	253.0	265.6	275.6	288.2	292.7	292.7
75°	25.2	31.5	57.7	67.5	172.0	207.1	217.9	227.9	237.7	239.6	236.8
77.5°	22.5	27.9	49.5	56.8	134.2	163.9	172.9	178.3	186.4	188.2	189.1
80°	18.9	24.4	38.8	44.1	97.2	120.7	127.0	131.5	138.7	138.7	140.5
82.5°	14.4	18.9	27.9	31.5	65.7	82.8	88.3	91.0	95.4	95.4	95.4
85°	9.0	11.7	18.0	20.7	39.7	50.4	54.1	55.0	58.6	59.4	59.4
87.5°	4.5	6.3	11.7	12.6	20.7	26.1	26.1	27.9	27.9	27.0	26.1
90°	5.6	10.0	14.5	15.7	24.6	36.5	42.4	37.7	28.3	21.2	21.2
92.5°	22.4	60.3	98.3	107.8	151.6	209.9	239.0	209.5	150.4	106.1	101.9
95°	53.6	123.1	192.7	210.0	373.0	590.2	698.8	623.6	473.1	360.3	347.5
97.5°	92.8	154.1	215.4	230.7	502.4	864.6	1045.7	998.2	903.1	831.7	807.4
100°	122.9	178.5	234.1	248.0	549.5	951.4	1152.4	1155.8	1162.8	1168.0	1139.0
102.5°	148.6	200.5	252.4	265.4	571.1	978.8	1182.5	1243.1	1364.3	1455.2	1430.4
105°	192.1	236.1	280.1	291.1	587.1	981.9	1179.2	1315.0	1586.6	1790.3	1776.9
107.5°	236.8	277.8	318.8	329.0	590.1	938.1	1112.2	1301.6	1680.4	1964.6	1967.8
110°	267.0	304.0	341.0	350.2	585.6	899.4	1056.3	1268.0	1691.6	2009.3	2023.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	296.6	331.9	367.2	375.9	585.8	865.6	1005.4	1222.2	1655.7	1980.8	2002.1
115°	341.3	373.8	406.3	414.4	591.2	826.7	944.6	1153.3	1571.0	1884.2	1913.8
117.5°	385.4	415.0	444.5	451.9	602.1	802.5	902.7	1091.1	1468.0	1750.6	1783.5
120°	411.1	439.0	466.7	473.7	611.1	794.3	885.9	1058.1	1402.4	1660.7	1692.6
122.5°	436.3	464.3	492.4	499.4	623.9	790.0	873.1	1028.2	1338.2	1570.7	1602.3
125°	474.8	500.4	526.0	532.4	641.3	786.5	859.1	990.8	1254.2	1451.8	1480.8
127.5°	506.1	531.9	557.8	564.2	658.6	784.5	847.4	960.5	1186.6	1356.3	1380.8
130°	522.9	550.7	578.5	585.4	671.3	785.7	842.9	943.6	1144.9	1296.0	1318.5
132.5°	540.1	568.0	595.7	602.7	681.5	786.5	839.0	929.2	1109.4	1244.6	1264.8
135°	565.8	591.2	616.5	622.9	692.7	785.7	832.3	907.8	1058.7	1172.0	1189.4
137.5°	592.1	617.1	642.3	648.6	709.4	790.7	831.2	895.0	1022.6	1118.3	1132.6
140°	613.9	637.0	660.1	665.8	719.7	791.4	827.3	882.4	992.6	1075.3	1088.6
142.5°	630.7	652.1	673.4	678.7	728.2	794.2	827.3	875.7	972.5	1045.1	1056.6
145°	656.4	675.0	693.6	698.3	739.4	794.3	821.7	861.3	940.5	999.9	1008.6
147.5°	682.0	700.1	718.2	722.8	755.7	799.7	821.7	852.9	915.2	961.9	969.1
150°	698.8	715.2	731.6	735.7	764.3	802.6	821.7	848.0	900.6	940.1	945.9
152.5°	716.2	728.6	741.0	744.1	770.0	804.4	821.7	844.2	889.1	922.8	927.2
155°	741.9	751.0	760.1	762.4	782.2	808.6	821.7	839.6	875.3	902.1	905.1
157.5°	760.8	769.8	778.7	780.9	794.5	812.7	821.7	835.6	863.4	884.3	886.4
160°	773.6	780.6	787.6	789.3	800.1	814.6	821.7	833.6	857.4	875.3	876.5
162.5°	786.5	791.7	796.9	798.3	806.0	816.5	821.7	831.7	851.9	866.9	868.0
165°	800.5	805.2	809.9	811.1	814.6	819.4	821.7	828.9	843.3	854.1	855.3
167.5°	813.3	815.5	817.8	818.3	821.3	825.3	827.3	832.0	841.4	848.5	849.0
170°	821.7	824.0	826.2	826.7	826.9	827.2	827.3	832.0	841.4	848.5	848.5
172.5°	826.2	826.6	827.2	827.3	827.3	827.3	827.3	831.0	838.5	844.0	843.6
175°	832.3	832.3	832.3	832.3	830.6	828.3	827.3	829.6	834.3	837.9	837.9
177.5°	832.3	832.3	832.3	832.3	831.0	829.3	828.4	830.3	834.0	836.8	836.2
180°	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3	832.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	280.1	280.1
2.5°	298.9	297.2
5°	384.5	386.3
7.5°	517.8	517.0
10°	643.9	652.0
12.5°	735.8	737.6
15°	791.6	795.2
17.5°	813.2	814.1
20°	814.1	812.3
22.5°	804.2	802.4
25°	792.5	791.6
27.5°	781.7	782.6
30°	777.2	779.9
32.5°	777.2	781.7
35°	779.0	783.5
37.5°	778.1	783.5
40°	774.4	780.8
42.5°	764.6	769.1
45°	749.3	754.7
47.5°	729.4	733.1
50°	704.3	707.8
52.5°	672.7	673.6
55°	634.9	638.5
57.5°	594.4	595.3
60°	549.4	552.0
62.5°	501.6	501.6
65°	451.1	452.9
67.5°	399.0	403.4
70°	345.9	346.8
72.5°	293.6	293.6
75°	239.6	240.5
77.5°	188.2	188.2
80°	139.6	140.5
82.5°	96.3	98.1
85°	60.3	60.3
87.5°	27.9	25.2
90°	21.2	21.2
92.5°	85.0	68.1
95°	296.3	245.2
97.5°	710.1	612.8
100°	1023.1	907.1
102.5°	1331.0	1231.7
105°	1723.6	1670.2
107.5°	1980.8	1993.7
110°	2078.8	2134.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2087.5	2172.9
115°	2032.2	2150.6
117.5°	1914.8	2046.1
120°	1820.3	1947.8
122.5°	1728.1	1854.0
125°	1596.7	1712.6
127.5°	1478.6	1576.4
130°	1409.0	1499.3
132.5°	1345.7	1426.7
135°	1259.2	1328.9
137.5°	1189.7	1246.8
140°	1142.1	1195.4
142.5°	1102.6	1148.5
145°	1043.4	1078.1
147.5°	997.9	1026.7
150°	969.3	992.6
152.5°	944.8	962.5
155°	916.7	928.3
157.5°	894.5	902.7
160°	881.3	885.9
162.5°	872.5	877.0
165°	860.0	864.7
167.5°	851.0	853.0
170°	848.5	848.5
172.5°	841.9	840.2
175°	837.9	837.9
177.5°	834.3	832.3
180°	832.3	832.3



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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	0.54	1.25	1.65	2.37	3.91	13.70	14.42	14.82	15.53	17.08
	3H	1.23	1.88	2.36	3.00	4.56	15.53	16.17	16.65	17.29	18.85
	4H	1.52	2.14	2.66	3.26	4.82	16.16	16.77	17.29	17.89	19.46
	6H	1.77	2.33	2.91	3.45	5.03	16.58	17.14	17.72	18.27	19.84
	8H	1.83	2.37	2.98	3.51	5.08	16.69	17.23	17.84	18.37	19.94
	12H	1.84	2.35	2.99	3.49	5.08	16.75	17.26	17.90	18.40	19.99
4H	2H	7.73	8.34	8.87	9.46	11.03	13.96	14.57	15.10	15.69	17.26
	3H	9.28	9.79	10.43	10.94	12.52	15.99	16.50	17.13	17.65	19.22
	4H	9.37	9.84	10.52	10.98	12.57	16.74	17.21	17.89	18.35	19.95
	6H	9.37	9.77	10.53	10.93	12.52	17.27	17.67	18.43	18.83	20.42
	8H	9.34	9.72	10.50	10.87	12.48	17.42	17.80	18.58	18.95	20.56
	12H	9.29	9.64	10.47	10.80	12.41	17.51	17.85	18.68	19.01	20.62
8H	4H	10.80	11.17	11.95	12.33	13.93	16.79	17.17	17.95	18.32	19.92
	6H	11.03	11.34	12.21	12.54	14.14	17.41	17.72	18.59	18.91	20.52
	8H	11.05	11.32	12.23	12.49	14.11	17.62	17.90	18.81	19.07	20.69
	12H	11.01	11.25	12.20	12.42	14.07	17.76	18.00	18.94	19.17	20.82
12H	4H	10.93	11.27	12.10	12.44	14.05	16.74	17.08	17.91	18.24	19.85
	6H	11.29	11.56	12.47	12.73	14.35	17.39	17.66	18.57	18.83	20.46
	8H	11.35	11.59	12.54	12.76	14.41	17.61	17.85	18.80	19.02	20.67