

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: P938450

Luminaire Tested: SQ4-FB-150U-100D-930-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938450
REPORT IS A COMBINATION OF REPORTS P933631 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-930-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

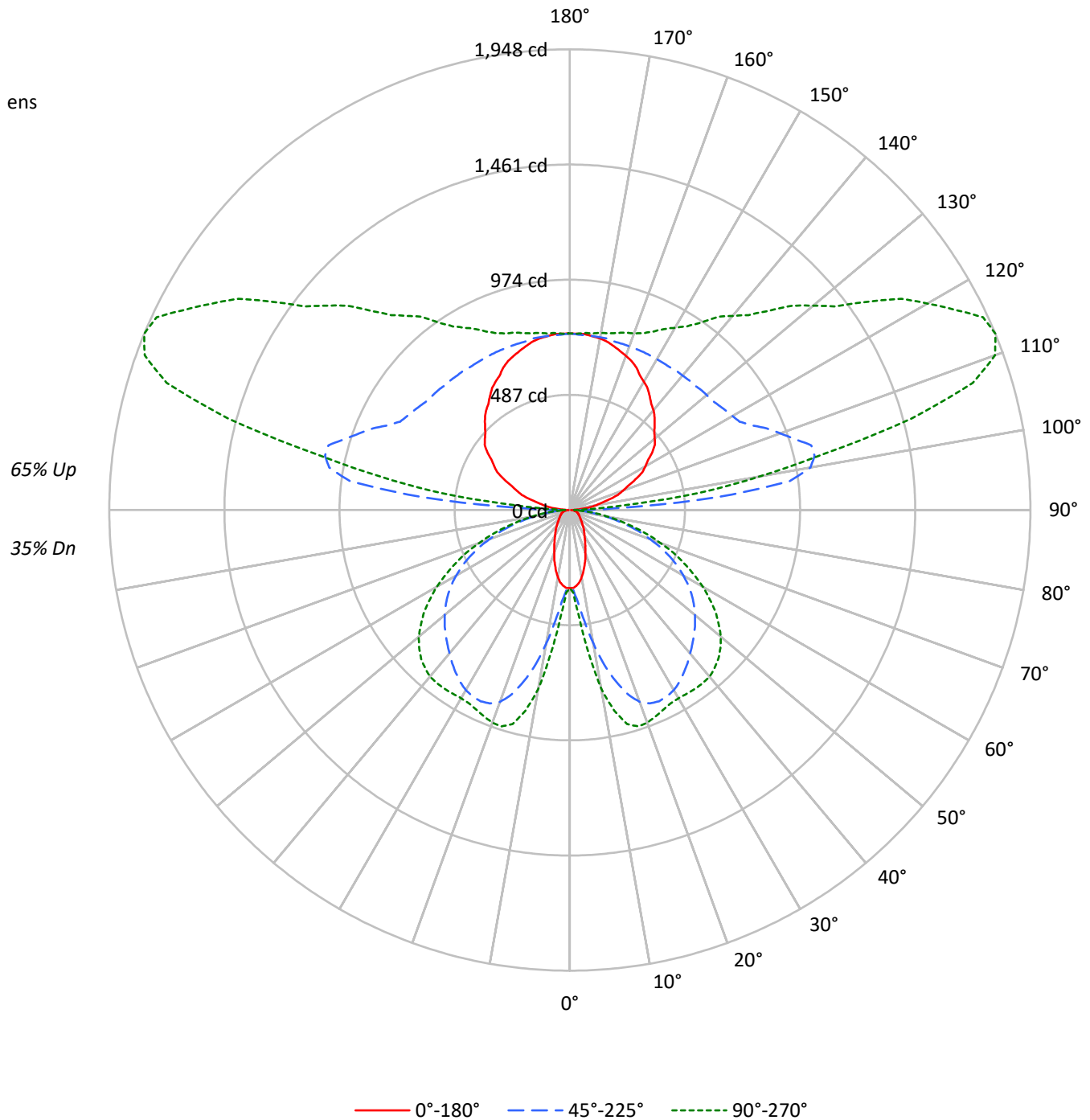
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7393.3 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 72.4
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				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	50	30	10	0	
RCR																						
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35				35
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35	28				28
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29	23				23
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24	19				19
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	16				16
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14				14
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15	12				12
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10				10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11	9				9
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10	8				8
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9	7				7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3062	3062	3062
5°	2988	3536	4116
10°	2707	5151	6823
15°	2298	6725	8239
20°	1869	7788	8396
25°	1558	8143	8227
30°	1311	8188	8211
35°	1158	8046	8423
40°	1007	7862	8642
45°	910	7726	8677
50°	833	7602	8533
55°	795	7424	8155
60°	811	7089	7557
65°	840	6582	6737
70°	889	5729	5691
75°	974	4659	4441
80°	1039	3219	2992
85°	878	1700	1532

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8677 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.7	0.6
10°-20°	189.2	2.6
20°-30°	330.9	4.5
30°-40°	426.0	5.8
40°-50°	475.8	6.4
50°-60°	455.7	6.2
60°-70°	361.2	4.9
70°-80°	212.4	2.9
80°-90°	61.8	0.8
90°-100°	363.8	4.9
100°-110°	956.4	12.9
110°-120°	991.6	13.4
120°-130°	795.4	10.8
130°-140°	624.1	8.4
140°-150°	479.0	6.5
150°-160°	345.0	4.7
160°-170°	211.1	2.9
170°-180°	71.3	1.0
0°-30°	562.8	7.6
0°-40°	988.7	13.4
0°-60°	1920.2	26.0
0°-90°	2555.6	34.6
90°-120°	2311.7	31.3
90°-150°	4210.3	56.9
90°-180°	4838.0	65.4
0°-180°	7393.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	330	330	330	330	330	
5°	322	345	388	439	455	30
15°	241	444	749	908	937	67
25°	154	504	892	932	933	71
35°	104	482	840	888	923	65
45°	71	384	743	851	889	55
55°	51	244	630	732	752	46
65°	40	129	468	526	534	40
75°	30	80	257	282	283	31
85°	11	24	64	70	71	11
90°	5	14	38	19	19	5
95°	48	188	627	323	220	53
105°	172	261	1057	1605	1498	183
115°	306	372	847	1689	1928	302
125°	426	477	770	1302	1536	378
135°	507	558	746	1051	1192	393
145°	588	626	737	896	967	369
155°	665	684	737	809	832	306
165°	718	727	737	766	775	203
175°	746	746	742	751	751	71
180°	746	746	746	746	746	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0	330.0
2.5°	330.0	330.0	332.1	333.2	335.3	336.4	338.5	340.6	347.0	348.0	350.1
5°	321.5	325.8	339.5	344.8	359.7	379.8	388.3	402.1	430.8	439.2	444.5
7.5°	308.8	318.3	352.3	360.8	397.9	451.0	473.2	502.9	548.5	570.9	588.8
10°	288.6	308.8	369.2	389.4	449.8	530.5	571.9	613.3	682.2	713.0	724.7
12.5°	266.4	299.2	387.3	414.8	501.9	619.7	669.5	715.2	793.7	835.0	841.4
15°	240.8	285.4	404.2	444.5	557.0	694.0	749.1	805.3	878.6	908.3	915.7
17.5°	218.6	274.8	420.1	462.6	599.5	760.8	817.0	863.7	923.1	943.3	948.6
20°	191.0	257.8	430.8	486.0	644.1	809.6	863.7	899.8	940.1	952.8	954.9
22.5°	170.8	239.8	437.2	494.4	673.7	839.3	884.9	913.6	941.1	945.4	946.4
25°	153.9	219.6	436.1	504.0	699.3	857.3	892.3	913.6	929.5	931.6	931.6
27.5°	138.0	197.4	431.9	506.1	718.3	861.5	889.2	904.0	911.4	915.7	915.7
30°	124.1	176.1	421.3	501.9	726.8	857.3	879.6	887.0	894.5	900.8	904.0
32.5°	113.5	155.9	405.4	493.4	727.8	846.7	862.6	866.8	877.4	892.3	897.7
35°	104.0	135.8	387.3	481.7	721.5	829.7	840.3	844.6	865.8	888.1	895.5
37.5°	94.4	120.9	363.9	461.6	711.9	809.6	817.0	824.4	857.3	883.9	892.3
40°	84.9	108.2	336.4	439.2	697.1	785.2	791.5	803.2	846.7	877.4	885.9
42.5°	77.5	97.6	306.7	416.0	678.0	757.6	767.1	784.1	834.0	866.8	876.4
45°	71.1	87.0	274.8	384.1	653.6	729.0	742.7	766.1	819.1	850.9	859.5
47.5°	64.7	79.6	241.9	351.2	627.1	700.3	718.3	744.9	799.0	829.7	837.1
50°	59.4	72.2	209.0	316.2	598.4	669.5	690.7	718.3	773.5	802.1	811.7
52.5°	55.2	65.8	178.3	281.2	565.6	637.7	662.1	690.7	742.7	770.3	776.7
55°	50.9	60.5	151.8	244.0	531.6	603.7	630.3	657.8	708.8	732.1	736.4
57.5°	48.8	56.2	129.4	209.0	495.5	565.6	595.3	620.7	668.4	686.5	690.7
60°	45.6	53.1	112.5	179.3	456.3	529.4	555.0	580.4	620.7	635.6	638.7
62.5°	42.5	50.9	99.7	150.6	416.0	487.0	512.5	535.8	569.8	580.4	584.7
65°	40.3	48.8	90.2	129.4	374.5	442.5	467.9	488.1	515.7	526.3	528.4
67.5°	38.2	46.7	82.8	111.4	333.2	397.9	417.0	436.1	457.3	467.9	469.0
70°	35.0	44.6	76.4	98.7	290.7	347.0	362.9	383.0	400.0	405.4	408.5
72.5°	32.9	41.4	72.2	89.1	247.2	298.2	313.0	324.7	339.5	344.8	344.8
75°	29.7	37.1	67.9	79.6	202.7	244.0	256.8	268.4	280.1	282.3	279.0
77.5°	26.5	32.9	58.4	66.8	158.1	193.1	203.7	210.1	219.6	221.8	222.8
80°	22.2	28.7	45.6	52.0	114.6	142.2	149.6	154.9	163.4	163.4	165.5
82.5°	16.9	22.2	32.9	37.1	77.5	97.6	104.0	107.2	112.5	112.5	112.5
85°	10.6	13.8	21.2	24.4	46.7	59.4	63.7	64.7	69.0	70.0	70.0
87.5°	5.3	7.4	13.8	14.9	24.4	30.8	30.8	32.9	32.9	31.8	30.8
90°	5.0	9.0	13.0	14.1	22.1	32.8	38.1	33.8	25.4	19.0	19.0
92.5°	20.0	54.0	88.2	96.7	135.9	188.1	214.3	187.8	134.9	95.2	91.4
95°	48.1	110.4	172.7	188.3	334.4	529.2	626.6	559.1	424.2	323.0	311.6
97.5°	83.1	138.1	193.1	206.9	450.4	775.2	937.6	894.9	809.7	745.7	723.9
100°	110.2	160.0	209.9	222.4	492.6	853.0	1033.2	1036.4	1042.6	1047.3	1021.3
102.5°	133.2	179.8	226.3	237.9	512.1	877.5	1060.3	1114.6	1223.2	1304.7	1282.5
105°	172.3	211.8	251.1	261.0	526.4	880.2	1057.2	1179.0	1422.5	1605.2	1593.2
107.5°	212.4	249.1	285.9	295.0	529.1	841.1	997.2	1167.0	1506.7	1761.5	1764.4
110°	239.4	272.5	305.8	314.1	525.1	806.4	947.1	1137.0	1516.7	1801.5	1814.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	266.0	297.6	329.2	337.1	525.2	776.1	901.5	1095.9	1484.5	1776.0	1795.1
115°	306.0	335.2	364.3	371.6	530.1	741.3	846.9	1034.1	1408.5	1689.4	1715.9
117.5°	345.6	372.1	398.6	405.2	539.9	719.6	809.3	978.3	1316.2	1569.6	1599.1
120°	368.6	393.6	418.4	424.7	547.9	712.2	794.3	948.7	1257.4	1489.0	1517.6
122.5°	391.1	416.3	441.5	447.8	559.5	708.4	782.8	921.8	1199.8	1408.4	1436.6
125°	425.8	448.6	471.6	477.3	574.9	705.2	770.3	888.4	1124.5	1301.7	1327.7
127.5°	453.8	476.9	500.0	505.8	590.4	703.3	759.8	861.2	1064.0	1216.1	1238.0
130°	468.8	493.7	518.6	524.8	601.8	704.5	755.8	846.0	1026.6	1161.9	1182.2
132.5°	484.3	509.3	534.2	540.4	611.0	705.2	752.3	833.0	994.7	1115.8	1134.0
135°	507.3	530.1	552.7	558.4	621.0	704.5	746.2	813.9	949.2	1050.7	1066.4
137.5°	530.9	553.3	575.8	581.5	636.1	708.9	745.3	802.4	916.9	1002.7	1015.5
140°	550.5	571.2	591.9	597.0	645.3	709.6	741.7	791.1	890.0	964.1	976.0
142.5°	565.5	584.6	603.7	608.5	652.9	712.1	741.7	785.2	872.0	937.1	947.4
145°	588.5	605.2	621.8	626.0	663.0	712.2	736.8	772.2	843.2	896.5	904.3
147.5°	611.5	627.8	644.0	648.1	677.7	717.1	736.8	764.7	820.5	862.4	868.8
150°	626.6	641.3	655.9	659.6	685.3	719.6	736.8	760.4	807.5	842.9	848.1
152.5°	642.1	653.2	664.3	667.1	690.3	721.3	736.8	756.9	797.2	827.4	831.3
155°	665.1	673.4	681.6	683.7	701.3	724.9	736.8	752.8	784.9	808.9	811.5
157.5°	682.1	690.2	698.1	700.1	712.3	728.6	736.8	749.2	774.1	792.8	794.6
160°	693.6	699.9	706.2	707.7	717.4	730.3	736.8	747.4	768.8	784.8	785.8
162.5°	705.2	709.9	714.5	715.7	722.7	732.1	736.8	745.7	763.8	777.3	778.3
165°	717.7	721.9	726.2	727.2	730.4	734.7	736.8	743.2	756.1	765.7	766.8
167.5°	729.2	731.2	733.2	733.7	736.4	740.0	741.7	746.0	754.4	760.8	761.2
170°	736.8	738.8	740.8	741.2	741.4	741.7	741.7	746.0	754.4	760.8	760.8
172.5°	740.8	741.2	741.7	741.7	741.7	741.7	741.7	745.1	751.8	756.7	756.3
175°	746.2	746.2	746.2	746.2	744.7	742.7	741.7	743.8	748.1	751.3	751.3
177.5°	746.2	746.2	746.2	746.2	745.1	743.6	742.8	744.5	747.8	750.2	749.8
180°	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2	746.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	330.0	330.0
2.5°	352.3	350.1
5°	453.1	455.2
7.5°	610.1	609.0
10°	758.7	768.1
12.5°	866.8	869.0
15°	932.7	936.9
17.5°	958.1	959.2
20°	959.2	957.0
22.5°	947.5	945.4
25°	933.7	932.7
27.5°	921.0	922.0
30°	915.7	918.9
32.5°	915.7	921.0
35°	917.8	923.1
37.5°	916.7	923.1
40°	912.5	919.9
42.5°	900.8	906.1
45°	882.8	889.2
47.5°	859.5	863.7
50°	829.7	834.0
52.5°	792.6	793.7
55°	748.0	752.3
57.5°	700.3	701.3
60°	647.2	650.4
62.5°	591.0	591.0
65°	531.6	533.7
67.5°	470.1	475.4
70°	407.4	408.5
72.5°	345.9	345.9
75°	282.3	283.3
77.5°	221.8	221.8
80°	164.5	165.5
82.5°	113.5	115.6
85°	71.1	71.1
87.5°	32.9	29.7
90°	19.0	19.0
92.5°	76.2	61.1
95°	265.7	219.9
97.5°	636.7	549.4
100°	917.3	813.4
102.5°	1193.4	1104.4
105°	1545.4	1497.5
107.5°	1775.9	1787.5
110°	1863.8	1913.7



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1871.7	1948.2
115°	1822.1	1928.2
117.5°	1716.8	1834.5
120°	1632.0	1746.4
122.5°	1549.5	1662.3
125°	1431.6	1535.6
127.5°	1325.7	1413.4
130°	1263.2	1344.2
132.5°	1206.5	1279.1
135°	1128.9	1191.5
137.5°	1066.7	1117.9
140°	1023.9	1071.8
142.5°	988.6	1029.7
145°	935.5	966.7
147.5°	894.7	920.6
150°	869.1	890.0
152.5°	847.2	862.9
155°	822.0	832.4
157.5°	802.0	809.3
160°	790.1	794.3
162.5°	782.3	786.3
165°	771.0	775.3
167.5°	763.0	764.8
170°	760.8	760.8
172.5°	754.8	753.3
175°	751.3	751.3
177.5°	748.0	746.2
180°	746.2	746.2



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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	3.27	4.03	4.34	5.11	6.58	16.41	17.17	17.48	18.25	19.72
	3H	3.97	4.65	5.05	5.74	7.23	18.23	18.91	19.31	20.00	21.49
	4H	4.26	4.91	5.36	6.00	7.50	18.86	19.51	19.95	20.59	22.09
	6H	4.51	5.11	5.61	6.20	7.71	19.27	19.87	20.37	20.96	22.47
	8H	4.57	5.14	5.68	6.25	7.75	19.38	19.95	20.49	21.06	22.56
	12H	4.59	5.13	5.70	6.23	7.76	19.44	19.98	20.55	21.08	22.61
4H	2H	10.45	11.10	11.55	12.19	13.68	16.67	17.32	17.77	18.41	19.91
	3H	12.01	12.55	13.12	13.67	15.18	18.69	19.24	19.80	20.35	21.86
	4H	12.10	12.60	13.21	13.70	15.23	19.45	19.95	20.56	21.05	22.58
	6H	12.11	12.53	13.23	13.66	15.19	19.97	20.40	21.09	21.52	23.05
	8H	12.08	12.48	13.20	13.60	15.14	20.12	20.52	21.24	21.64	23.18
	12H	12.03	12.40	13.17	13.53	15.07	20.20	20.56	21.34	21.70	23.24
8H	4H	13.53	13.93	14.65	15.05	16.59	19.50	19.90	20.62	21.02	22.56
	6H	13.76	14.10	14.91	15.26	16.79	20.11	20.44	21.25	21.60	23.14
	8H	13.78	14.07	14.93	15.21	16.77	20.32	20.61	21.47	21.75	23.31
	12H	13.74	14.00	14.90	15.14	16.73	20.45	20.71	21.61	21.85	23.44
12H	4H	13.66	14.02	14.80	15.16	16.70	19.45	19.81	20.58	20.94	22.49
	6H	14.02	14.31	15.17	15.45	17.01	20.09	20.38	21.24	21.53	23.08
	8H	14.08	14.34	15.23	15.48	17.07	20.31	20.57	21.46	21.71	23.30