

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: P936711

Luminaire Tested: SQ4-FB-050U-075D-830-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936711
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

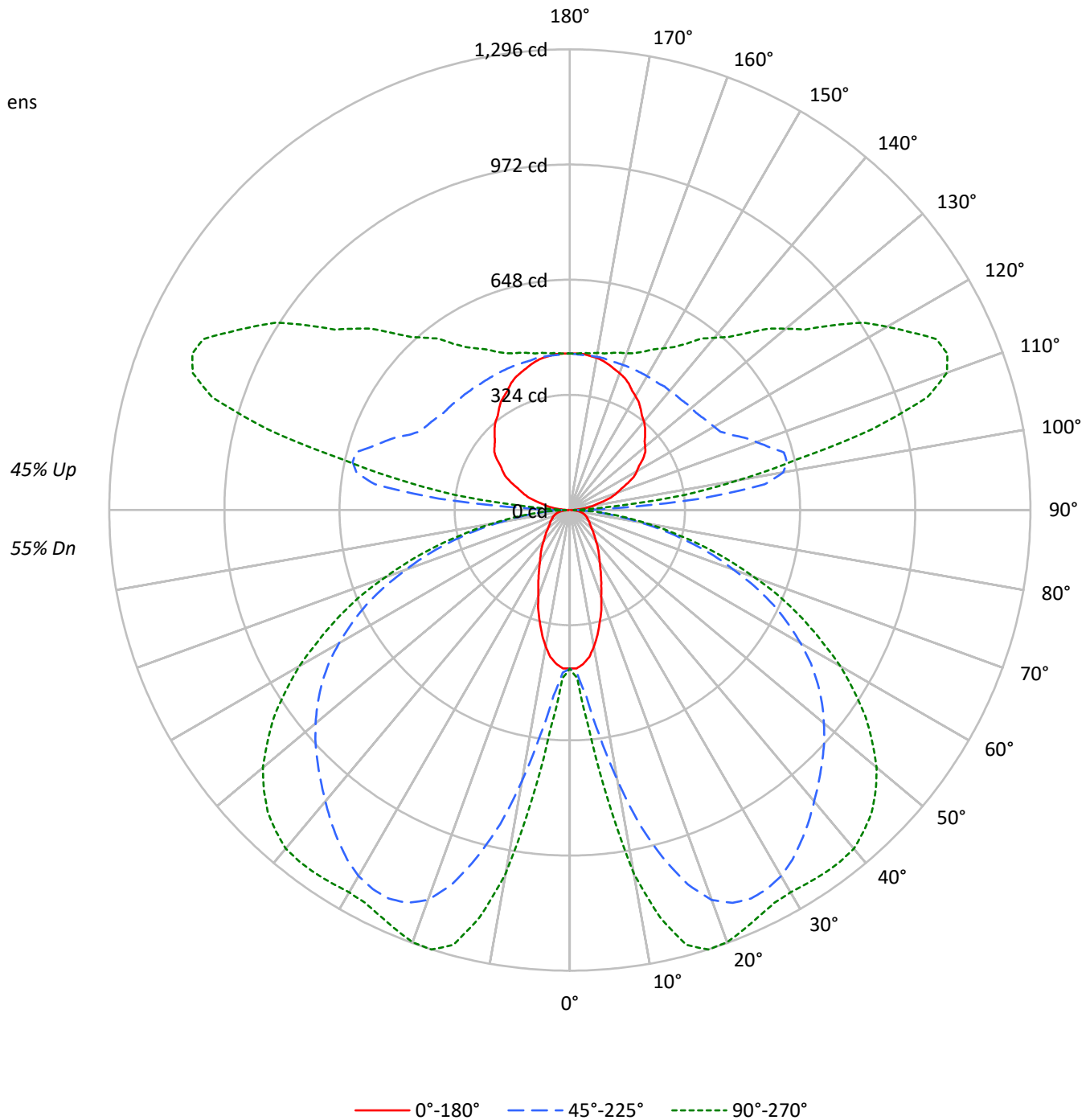
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6306.7 lumens
Efficiency: N/A
Efficacy: 115.5 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): 54.6
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

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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55			
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50	45			
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41	37			
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34	30			
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29	25			
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25	21			
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21	18			
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19	16			
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16	14			
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15	12			
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13	11			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2759	2759	2759
5°	2694	3188	3708
10°	2443	4646	6148
15°	2075	6068	7424
20°	1689	7031	7566
25°	1408	7356	7413
30°	1187	7400	7398
35°	1049	7275	7590
40°	913	7113	7788
45°	827	6994	7818
50°	758	6886	7689
55°	725	6730	7347
60°	742	6432	6809
65°	770	5979	6070
70°	818	5211	5128
75°	905	4245	4002
80°	980	2941	2696
85°	853	1557	1380

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7818 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.7	0.9
10°-20°	255.7	4.1
20°-30°	447.2	7.1
30°-40°	575.7	9.1
40°-50°	643.1	10.2
50°-60°	615.9	9.8
60°-70°	488.1	7.7
70°-80°	287.0	4.6
80°-90°	81.4	1.3
90°-100°	214.7	3.4
100°-110°	564.4	8.9
110°-120°	585.2	9.3
120°-130°	469.4	7.4
130°-140°	368.3	5.8
140°-150°	282.7	4.5
150°-160°	203.6	3.2
160°-170°	124.6	2.0
170°-180°	42.1	0.7
0°-30°	760.6	12.1
0°-40°	1336.4	21.2
0°-60°	2595.3	41.2
0°-90°	3451.8	54.7
90°-120°	1364.2	21.6
90°-150°	2484.6	39.4
90°-180°	2855.0	45.3
0°-180°	6306.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	434	466	525	594	615	40
15°	326	601	1012	1228	1266	91
25°	208	681	1206	1259	1261	96
35°	140	651	1136	1200	1248	88
45°	96	519	1004	1150	1202	74
55°	69	330	852	990	1017	63
65°	54	175	632	711	721	54
75°	40	108	347	381	383	42
85°	14	33	86	95	96	15
90°	3	8	22	11	11	3
95°	28	111	370	191	130	32
105°	102	154	624	947	884	108
115°	181	219	500	997	1138	178
125°	251	282	455	768	906	223
135°	299	330	440	620	703	232
145°	347	370	435	529	570	218
155°	392	403	435	477	491	180
165°	424	429	435	452	458	120
175°	440	440	438	443	443	42
180°	440	440	440	440	440	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0	446.0
2.5°	446.0	446.0	448.8	450.3	453.1	454.6	457.4	460.3	468.9	470.4	473.2
5°	434.5	440.2	458.9	466.0	486.1	513.4	524.8	543.5	582.2	593.7	600.8
7.5°	417.3	430.2	476.1	487.6	537.8	609.4	639.6	679.7	741.4	771.5	795.9
10°	390.0	417.3	499.0	526.3	608.0	717.0	772.9	828.9	922.1	963.6	979.4
12.5°	359.9	404.4	523.4	560.7	678.3	837.5	904.9	966.5	1072.6	1128.7	1137.3
15°	325.5	385.7	546.4	600.8	752.8	937.8	1012.4	1088.5	1187.4	1227.6	1237.6
17.5°	295.4	371.4	567.9	625.2	810.2	1028.2	1104.3	1167.4	1247.7	1274.9	1282.1
20°	258.1	348.5	582.2	656.8	870.4	1094.2	1167.4	1216.1	1270.6	1287.8	1290.7
22.5°	230.9	324.1	590.8	668.2	910.6	1134.4	1196.1	1234.8	1272.1	1277.8	1279.2
25°	207.9	296.8	589.4	681.2	945.0	1158.8	1206.1	1234.8	1256.3	1259.1	1259.1
27.5°	186.4	266.7	583.6	684.0	970.8	1164.5	1201.8	1221.9	1231.9	1237.6	1237.6
30°	167.8	238.0	569.3	678.3	982.3	1158.8	1188.9	1198.9	1209.0	1217.6	1221.9
32.5°	153.4	210.8	547.8	666.8	983.7	1144.4	1165.9	1171.7	1186.0	1206.1	1213.3
35°	140.5	183.6	523.4	651.0	975.1	1121.5	1135.8	1141.6	1170.2	1200.4	1210.4
37.5°	127.6	163.5	491.9	623.8	962.2	1094.2	1104.3	1114.3	1158.8	1194.6	1206.1
40°	114.7	146.3	454.6	593.7	942.1	1061.2	1069.8	1085.5	1144.4	1186.0	1197.5
42.5°	104.7	131.9	414.4	562.1	916.3	1023.9	1036.8	1059.7	1127.2	1171.7	1184.6
45°	96.1	117.6	371.4	519.1	883.3	985.2	1003.8	1035.3	1107.1	1150.2	1161.6
47.5°	87.5	107.6	327.0	474.7	847.5	946.4	970.8	1006.7	1079.8	1121.5	1131.5
50°	80.3	97.5	282.5	427.3	808.8	904.9	933.5	970.8	1045.4	1084.1	1097.1
52.5°	74.6	88.9	240.9	380.0	764.3	861.8	894.8	933.5	1003.8	1041.1	1049.7
55°	68.8	81.7	205.1	329.8	718.4	815.9	851.8	889.1	957.9	989.5	995.2
57.5°	66.0	76.0	174.9	282.5	669.7	764.3	804.5	838.9	903.4	927.8	933.5
60°	61.7	71.7	152.0	242.3	616.6	715.6	750.0	784.4	838.9	859.0	863.3
62.5°	57.4	68.8	134.8	203.6	562.1	658.2	692.6	724.2	770.1	784.4	790.1
65°	54.5	66.0	121.9	174.9	506.2	598.0	632.4	659.6	696.9	711.3	714.1
67.5°	51.6	63.1	111.9	150.6	450.3	537.8	563.6	589.4	618.1	632.4	633.8
70°	47.3	60.2	103.2	133.4	392.9	468.9	490.4	517.7	540.6	547.8	552.1
72.5°	44.5	55.9	97.5	120.5	334.1	403.0	423.0	438.8	458.9	466.0	466.0
75°	40.2	50.2	91.8	107.6	273.9	329.8	347.0	362.8	378.6	381.4	377.1
77.5°	35.8	44.5	78.9	90.3	213.7	261.0	275.3	283.9	296.8	299.7	301.1
80°	30.1	38.7	61.7	70.3	154.9	192.2	202.2	209.4	220.8	220.8	223.7
82.5°	22.9	30.1	44.5	50.2	104.7	131.9	140.5	144.8	152.0	152.0	152.0
85°	14.3	18.6	28.7	33.0	63.1	80.3	86.0	87.5	93.2	94.6	94.6
87.5°	7.2	10.0	18.6	20.1	33.0	41.6	41.6	44.5	44.5	43.0	41.6
90°	3.0	5.4	7.7	8.3	13.0	19.3	22.5	20.0	14.9	11.2	11.2
92.5°	11.9	31.9	52.0	57.1	80.2	111.1	126.5	110.8	79.5	56.1	53.9
95°	28.4	65.1	101.9	111.1	197.3	312.3	369.8	330.0	250.4	190.6	183.8
97.5°	49.0	81.5	114.0	122.1	265.9	457.5	553.3	528.2	477.8	440.0	427.1
100°	65.0	94.5	123.9	131.3	290.7	503.4	609.7	611.6	615.3	618.1	602.8
102.5°	78.6	106.1	133.6	140.4	302.2	517.9	625.7	657.7	721.9	770.0	756.9
105°	101.7	124.9	148.2	154.0	310.6	519.5	623.9	695.8	839.5	947.3	940.2
107.5°	125.3	147.0	168.6	174.1	312.2	496.4	588.4	688.6	889.1	1039.5	1041.2
110°	141.3	160.8	180.4	185.3	309.8	475.9	558.9	670.9	895.1	1063.2	1070.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.0	175.6	194.3	198.9	309.9	458.0	532.0	646.7	876.1	1048.1	1059.3
115°	180.6	197.8	215.0	219.3	312.8	437.5	499.8	610.3	831.2	996.9	1012.6
117.5°	203.9	219.6	235.2	239.1	318.6	424.7	477.6	577.3	776.8	926.3	943.7
120°	217.5	232.2	246.9	250.7	323.3	420.3	468.7	559.8	742.0	878.7	895.6
122.5°	230.9	245.7	260.5	264.2	330.1	418.0	461.9	544.0	708.1	831.1	847.8
125°	251.2	264.7	278.3	281.6	339.3	416.1	454.6	524.3	663.7	768.1	783.4
127.5°	267.8	281.4	295.1	298.6	348.5	415.1	448.4	508.2	627.8	717.6	730.5
130°	276.7	291.4	306.1	309.7	355.2	415.7	446.0	499.2	605.8	685.7	697.7
132.5°	285.8	300.6	315.3	318.9	360.6	416.1	444.0	491.7	587.0	658.5	669.2
135°	299.4	312.8	326.2	329.5	366.5	415.8	440.4	480.4	560.2	620.1	629.3
137.5°	313.3	326.6	339.8	343.1	375.3	418.2	439.8	473.5	541.0	591.7	599.2
140°	324.8	337.1	349.2	352.3	380.8	418.7	437.8	466.9	525.2	568.9	576.0
142.5°	333.6	344.9	356.2	359.1	385.3	420.3	437.8	463.4	514.5	553.0	559.1
145°	347.3	357.2	367.0	369.5	391.3	420.3	434.8	455.7	497.6	529.1	533.6
147.5°	360.9	370.4	380.1	382.5	399.9	423.1	434.8	451.2	484.2	509.0	512.8
150°	369.8	378.5	387.1	389.3	404.5	424.7	434.8	448.7	476.6	497.4	500.5
152.5°	378.9	385.5	392.1	393.7	407.4	425.6	434.8	446.6	470.4	488.2	490.5
155°	392.5	397.4	402.2	403.4	413.9	427.8	434.8	444.3	463.2	477.3	478.9
157.5°	402.6	407.3	412.0	413.2	420.4	430.0	434.8	442.2	456.9	467.9	468.9
160°	409.4	413.0	416.6	417.6	423.3	431.0	434.8	441.1	453.7	463.2	463.8
162.5°	416.1	418.9	421.7	422.4	426.5	432.0	434.8	440.1	450.8	458.7	459.3
165°	423.5	426.0	428.5	429.1	431.1	433.5	434.8	438.6	446.2	451.9	452.6
167.5°	430.3	431.4	432.7	433.0	434.6	436.7	437.8	440.2	445.2	448.9	449.2
170°	434.8	435.9	437.2	437.5	437.6	437.7	437.8	440.2	445.2	448.9	448.9
172.5°	437.2	437.5	437.7	437.8	437.8	437.8	437.8	439.7	443.6	446.5	446.4
175°	440.4	440.4	440.4	440.4	439.6	438.3	437.8	439.0	441.5	443.3	443.3
177.5°	440.4	440.4	440.4	440.4	439.8	438.8	438.3	439.3	441.3	442.7	442.4
180°	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4	440.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	446.0	446.0
2.5°	476.1	473.2
5°	612.3	615.2
7.5°	824.6	823.1
10°	1025.3	1038.2
12.5°	1171.7	1174.5
15°	1260.6	1266.3
17.5°	1295.0	1296.4
20°	1296.4	1293.6
22.5°	1280.7	1277.8
25°	1262.0	1260.6
27.5°	1244.8	1246.2
30°	1237.6	1241.9
32.5°	1237.6	1244.8
35°	1240.5	1247.7
37.5°	1239.1	1247.7
40°	1233.3	1243.4
42.5°	1217.6	1224.7
45°	1193.2	1201.8
47.5°	1161.6	1167.4
50°	1121.5	1127.2
52.5°	1071.2	1072.6
55°	1011.0	1016.7
57.5°	946.4	947.9
60°	874.7	879.0
62.5°	798.7	798.7
65°	718.4	721.3
67.5°	635.3	642.4
70°	550.7	552.1
72.5°	467.5	467.5
75°	381.4	382.9
77.5°	299.7	299.7
80°	222.3	223.7
82.5°	153.4	156.3
85°	96.1	96.1
87.5°	44.5	40.2
90°	11.2	11.2
92.5°	44.9	36.0
95°	156.8	129.7
97.5°	375.7	324.3
100°	541.4	480.0
102.5°	704.3	651.7
105°	912.0	883.7
107.5°	1048.0	1054.9
110°	1099.9	1129.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1104.6	1149.7
115°	1075.2	1137.9
117.5°	1013.2	1082.7
120°	963.1	1030.7
122.5°	914.4	981.0
125°	844.8	906.2
127.5°	782.3	834.1
130°	745.5	793.3
132.5°	712.0	754.9
135°	666.2	703.1
137.5°	629.5	659.7
140°	604.2	632.5
142.5°	583.4	607.6
145°	552.1	570.4
147.5°	528.0	543.2
150°	512.9	525.2
152.5°	499.9	509.3
155°	485.1	491.2
157.5°	473.3	477.6
160°	466.2	468.7
162.5°	461.7	464.0
165°	455.1	457.5
167.5°	450.3	451.3
170°	448.9	448.9
172.5°	445.4	444.5
175°	443.3	443.3
177.5°	441.5	440.4
180°	440.4	440.4



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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	4.95	5.89	5.85	6.83	8.02	18.11	19.06	19.02	19.99	21.19
	3H	5.66	6.51	6.58	7.45	8.67	19.95	20.81	20.87	21.75	22.97
	4H	5.96	6.77	6.89	7.72	8.95	20.60	21.41	21.53	22.35	23.58
	6H	6.22	6.96	7.16	7.91	9.16	21.03	21.78	21.98	22.73	23.97
	8H	6.29	7.00	7.24	7.97	9.21	21.15	21.86	22.10	22.83	24.08
	12H	6.31	6.98	7.27	7.95	9.22	21.22	21.90	22.18	22.86	24.13
4H	2H	12.16	12.97	13.10	13.92	15.15	18.40	19.21	19.34	20.15	21.38
	3H	13.74	14.42	14.69	15.39	16.64	20.45	21.12	21.40	22.10	23.35
	4H	13.84	14.46	14.80	15.43	16.70	21.21	21.83	22.17	22.80	24.07
	6H	13.86	14.39	14.83	15.39	16.65	21.75	22.29	22.73	23.28	24.55
	8H	13.84	14.34	14.81	15.32	16.61	21.92	22.42	22.89	23.40	24.69
	12H	13.80	14.25	14.79	15.25	16.54	22.01	22.46	23.01	23.47	24.76
8H	4H	15.29	15.79	16.26	16.78	18.06	21.28	21.78	22.26	22.77	24.05
	6H	15.53	15.95	16.54	16.98	18.26	21.91	22.33	22.91	23.36	24.64
	8H	15.55	15.92	16.56	16.94	18.24	22.13	22.50	23.14	23.51	24.81
	12H	15.53	15.85	16.54	16.86	18.21	22.28	22.60	23.29	23.61	24.96
12H	4H	15.44	15.89	16.43	16.89	18.18	21.24	21.69	22.23	22.70	23.99
	6H	15.79	16.16	16.80	17.18	18.48	21.90	22.26	22.90	23.28	24.58
	8H	15.87	16.19	16.88	17.20	18.55	22.13	22.45	23.14	23.46	24.81