

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: P937284

Luminaire Tested: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-4-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937284
REPORT IS A COMBINATION OF REPORTS P933503 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-4-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

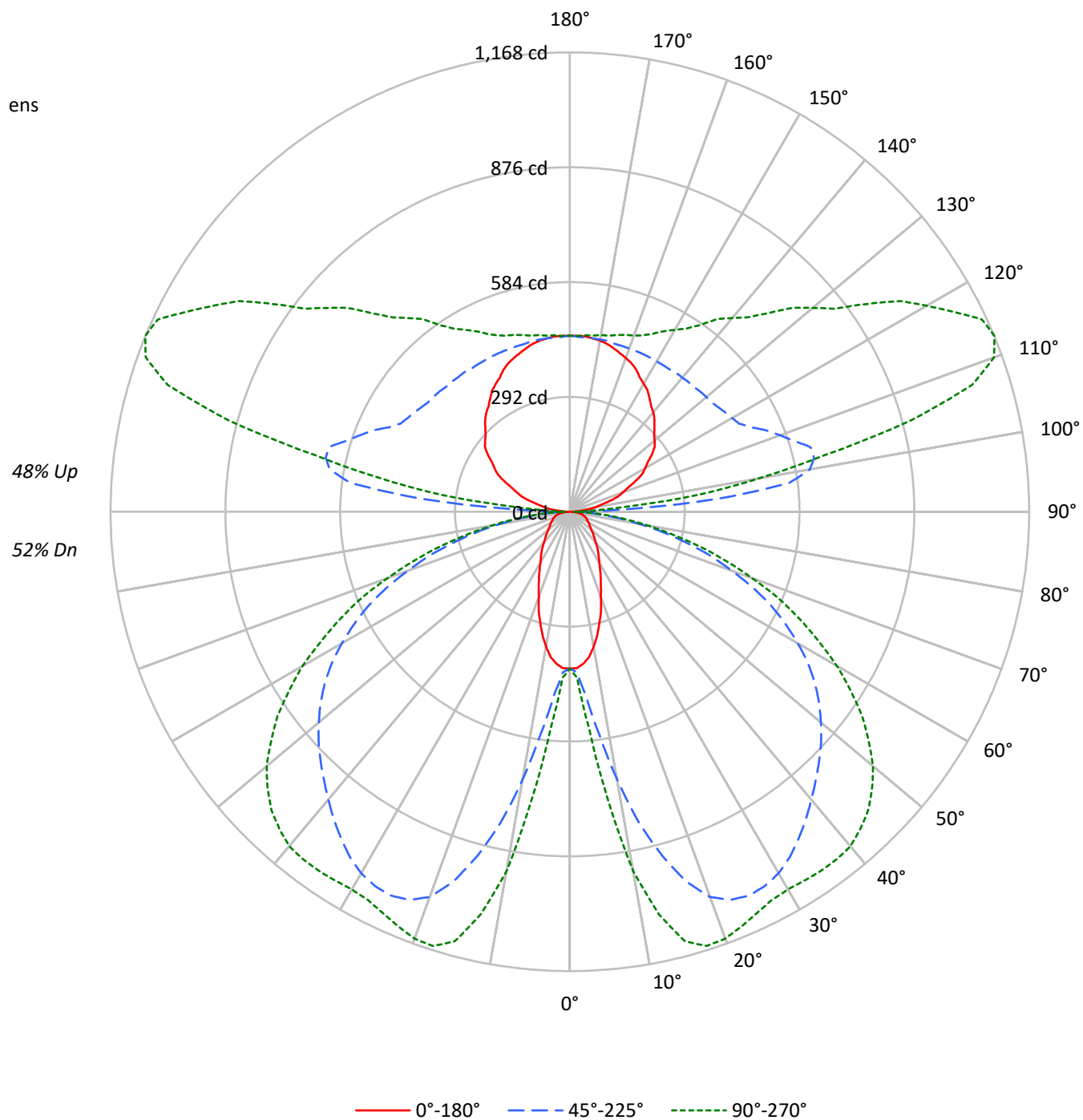
Lumens per Lamp: N/A
Luminaire Lumens: 5983.6 lumens
Efficiency: N/A
Efficacy: 116.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 51.2
Input Voltage (V): NR
Input Current (Ain): 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: P937284

CATALOG NUMBER: SQ4-FB-075U-100D-B2750-1D-UNV-W2A-W-4-3500K

Luminous Intensity Polar Plot



TEST NUMBER: P937284

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3606	4267	4967
10°	3267	6216	8233
15°	2773	8116	9942
20°	2255	9398	10133
25°	1879	9827	9927
30°	1582	9881	9908
35°	1397	9710	10165
40°	1215	9487	10429
45°	1098	9323	10470
50°	1005	9173	10297
55°	959	8959	9840
60°	978	8554	9120
65°	1013	7942	8129
70°	1071	6913	6867
75°	1177	5623	5360
80°	1254	3884	3611
85°	1060	2050	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	0.9
10°-20°	228.3	3.8
20°-30°	399.3	6.7
30°-40°	514.0	8.6
40°-50°	574.2	9.6
50°-60°	549.9	9.2
60°-70°	435.8	7.3
70°-80°	256.3	4.3
80°-90°	72.9	1.2
90°-100°	218.2	3.6
100°-110°	573.6	9.6
110°-120°	594.7	9.9
120°-130°	477.1	8.0
130°-140°	374.3	6.3
140°-150°	287.3	4.8
150°-160°	206.9	3.5
160°-170°	126.6	2.1
170°-180°	42.8	0.7
0°-30°	679.1	11.3
0°-40°	1193.1	19.9
0°-60°	2317.2	38.7
0°-90°	3082.2	51.5
90°-120°	1386.5	23.2
90°-150°	2525.2	42.2
90°-180°	2901.0	48.5
0°-180°	5983.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	549	36
15°	291	536	904	1096	1130	81
25°	186	608	1077	1124	1126	86
35°	126	581	1014	1072	1114	78
45°	86	464	896	1027	1073	66
55°	61	294	761	883	908	56
65°	49	156	565	635	644	48
75°	36	96	310	341	342	38
85°	13	30	77	84	86	14
90°	3	8	23	11	11	3
95°	29	113	376	194	132	32
105°	103	156	634	963	898	110
115°	184	223	508	1013	1156	181
125°	255	286	462	781	921	227
135°	304	335	448	630	715	235
145°	353	376	442	538	580	221
155°	399	410	442	485	499	183
165°	430	436	442	459	465	121
175°	448	448	445	451	451	42
180°	448	448	448	448	448	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	398.2	398.2	400.8	402.0	404.6	405.9	408.4	411.0	418.7	420.0	422.5
5°	388.0	393.1	409.7	416.1	434.0	458.3	468.6	485.3	519.9	530.0	536.4
7.5°	372.6	384.1	425.1	435.4	480.1	544.2	571.0	606.9	661.9	688.9	710.6
10°	348.3	372.6	445.5	469.9	542.8	640.2	690.1	740.0	823.3	860.4	874.5
12.5°	321.4	361.0	467.3	500.6	605.6	747.8	808.0	863.0	957.8	1007.7	1015.3
15°	290.6	344.4	487.8	536.4	672.2	837.4	904.0	971.8	1060.2	1096.0	1105.0
17.5°	263.8	331.6	507.0	558.2	723.5	918.0	985.9	1042.3	1114.0	1138.3	1144.7
20°	230.4	311.1	519.9	586.4	777.2	976.9	1042.3	1085.8	1134.4	1149.8	1152.3
22.5°	206.1	289.3	527.5	596.6	813.0	1012.8	1067.8	1102.4	1135.7	1140.8	1142.1
25°	185.7	265.0	526.3	608.1	843.8	1034.5	1076.8	1102.4	1121.6	1124.1	1124.1
27.5°	166.5	238.2	521.1	610.8	866.8	1039.6	1073.0	1090.9	1099.8	1105.0	1105.0
30°	149.8	212.5	508.3	605.6	877.0	1034.5	1061.4	1070.4	1079.4	1087.0	1090.9
32.5°	137.0	188.2	489.2	595.4	878.3	1021.7	1040.9	1046.0	1058.8	1076.8	1083.2
35°	125.5	163.9	467.3	581.3	870.6	1001.3	1014.1	1019.2	1044.8	1071.7	1080.6
37.5°	114.0	145.9	439.2	557.0	859.1	976.9	985.9	994.9	1034.5	1066.6	1076.8
40°	102.4	130.6	405.9	530.0	841.2	947.5	955.1	969.3	1021.7	1058.8	1069.1
42.5°	93.5	117.8	370.1	501.9	818.1	914.2	925.7	946.2	1006.4	1046.0	1057.6
45°	85.8	104.9	331.6	463.5	788.7	879.7	896.2	924.4	988.5	1026.8	1037.1
47.5°	78.1	96.0	292.0	423.8	756.7	845.1	866.8	898.8	964.2	1001.3	1010.2
50°	71.7	87.1	252.2	381.6	722.1	808.0	833.5	866.8	933.4	967.9	979.5
52.5°	66.6	79.4	215.1	339.3	682.5	769.5	798.9	833.5	896.2	929.6	937.2
55°	61.4	73.0	183.1	294.5	641.5	728.5	760.6	793.8	855.3	883.4	888.6
57.5°	58.9	67.8	156.2	252.2	598.0	682.5	718.3	749.0	806.6	828.4	833.5
60°	55.0	64.1	135.8	216.4	550.6	638.9	669.7	700.4	749.0	767.0	770.7
62.5°	51.3	61.4	120.3	181.8	501.9	587.7	618.4	646.6	687.6	700.4	705.5
65°	48.6	58.9	108.8	156.2	451.9	533.9	564.6	589.0	622.3	635.1	637.6
67.5°	46.1	56.3	99.9	134.4	402.0	480.1	503.2	526.3	551.8	564.6	565.9
70°	42.2	53.8	92.2	119.1	350.8	418.7	437.9	462.2	482.7	489.2	492.9
72.5°	39.7	49.9	87.1	107.6	298.4	359.8	377.7	391.8	409.7	416.1	416.1
75°	35.9	44.8	82.0	96.0	244.6	294.5	309.9	323.9	338.0	340.6	336.7
77.5°	32.0	39.7	70.4	80.6	190.8	233.0	245.8	253.5	265.0	267.6	268.9
80°	26.8	34.6	55.0	62.7	138.3	171.6	180.5	186.9	197.2	197.2	199.7
82.5°	20.4	26.8	39.7	44.8	93.5	117.8	125.5	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.3	71.7	76.8	78.1	83.2	84.5	84.5
87.5°	6.4	8.9	16.7	17.9	29.5	37.1	37.1	39.7	39.7	38.4	37.1
90°	3.0	5.4	7.8	8.4	13.3	19.7	22.9	20.3	15.2	11.4	11.4
92.5°	12.0	32.5	52.8	57.9	81.5	112.9	128.6	112.7	80.9	57.1	54.8
95°	28.9	66.3	103.7	113.0	200.6	317.3	375.8	335.3	254.4	193.7	186.8
97.5°	49.9	82.8	115.8	124.0	270.2	464.9	562.3	536.7	485.7	447.3	434.2
100°	66.1	95.9	125.9	133.3	295.4	511.6	619.7	621.5	625.3	628.1	612.5
102.5°	79.9	107.8	135.7	142.6	307.1	526.4	636.0	668.5	733.6	782.5	769.1
105°	103.3	126.9	150.6	156.5	315.7	528.0	634.1	707.2	853.2	962.7	955.5
107.5°	127.3	149.4	171.4	176.9	317.3	504.5	598.1	699.9	903.6	1056.4	1058.1
110°	143.6	163.5	183.4	188.4	314.9	483.6	568.0	681.9	909.6	1080.4	1087.9

TEST NUMBER: P937284

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	159.5	178.5	197.4	202.1	315.0	465.5	540.7	657.3	890.3	1065.1	1076.7
115°	183.5	201.0	218.5	222.9	317.9	444.6	507.9	620.3	844.8	1013.2	1029.1
117.5°	207.3	223.2	239.1	243.0	323.8	431.5	485.4	586.7	789.3	941.4	959.0
120°	221.1	236.0	251.0	254.8	328.6	427.1	476.4	569.0	754.2	893.0	910.2
122.5°	234.6	249.7	264.7	268.5	335.5	424.8	469.5	552.8	719.6	844.7	861.6
125°	255.3	269.1	282.9	286.2	344.9	423.0	462.0	532.9	674.5	780.7	796.3
127.5°	272.2	286.0	299.9	303.4	354.2	421.9	455.7	516.6	638.2	729.4	742.5
130°	281.2	296.1	311.0	314.8	361.0	422.5	453.3	507.5	615.7	696.9	709.0
132.5°	290.5	305.4	320.4	324.1	366.5	423.0	451.2	499.6	596.6	669.3	680.1
135°	304.3	317.8	331.5	334.9	372.5	422.6	447.6	488.2	569.4	630.2	639.6
137.5°	318.4	331.9	345.4	348.7	381.5	425.2	447.0	481.3	549.9	601.4	609.0
140°	330.1	342.5	354.9	358.0	387.0	425.6	444.9	474.5	533.7	578.2	585.4
142.5°	339.2	350.6	362.0	364.9	391.6	427.1	444.9	470.9	523.0	562.0	568.2
145°	352.9	363.0	373.0	375.5	397.6	427.1	441.9	463.2	505.7	537.7	542.3
147.5°	366.8	376.5	386.2	388.7	406.4	430.0	441.9	458.6	492.2	517.3	521.1
150°	375.8	384.6	393.4	395.6	411.0	431.6	441.9	456.0	484.3	505.5	508.6
152.5°	385.1	391.8	398.5	400.1	414.1	432.6	441.9	454.0	478.1	496.2	498.6
155°	398.9	403.9	408.7	410.0	420.6	434.8	441.9	451.5	470.6	485.1	486.6
157.5°	409.1	414.0	418.8	420.0	427.2	437.0	441.9	449.3	464.2	475.5	476.6
160°	416.0	419.8	423.5	424.4	430.2	438.0	441.9	448.3	461.1	470.7	471.3
162.5°	423.0	425.8	428.6	429.3	433.4	439.1	441.9	447.3	458.0	466.2	466.8
165°	430.4	432.9	435.5	436.1	438.1	440.6	441.9	445.7	453.5	459.3	460.0
167.5°	437.3	438.5	439.7	440.0	441.7	443.8	444.9	447.4	452.5	456.3	456.6
170°	441.9	443.0	444.3	444.6	444.7	444.8	444.9	447.4	452.5	456.3	456.3
172.5°	444.3	444.6	444.8	444.9	444.9	444.9	444.9	446.9	450.9	453.9	453.7
175°	447.6	447.6	447.6	447.6	446.7	445.4	444.9	446.1	448.6	450.6	450.6
177.5°	447.6	447.6	447.6	447.6	446.9	445.9	445.4	446.4	448.5	450.0	449.7
180°	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6	447.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.2	398.2
2.5°	425.1	422.5
5°	546.7	549.3
7.5°	736.2	734.9
10°	915.5	926.9
12.5°	1046.0	1048.7
15°	1125.5	1130.5
17.5°	1156.2	1157.5
20°	1157.5	1154.9
22.5°	1143.4	1140.8
25°	1126.8	1125.5
27.5°	1111.3	1112.6
30°	1105.0	1108.8
32.5°	1105.0	1111.3
35°	1107.6	1114.0
37.5°	1106.2	1114.0
40°	1101.2	1110.1
42.5°	1087.0	1093.4
45°	1065.3	1073.0
47.5°	1037.1	1042.3
50°	1001.3	1006.4
52.5°	956.4	957.8
55°	902.6	907.8
57.5°	845.1	846.3
60°	781.0	784.9
62.5°	713.2	713.2
65°	641.5	644.0
67.5°	567.3	573.6
70°	491.7	492.9
72.5°	417.4	417.4
75°	340.6	341.9
77.5°	267.6	267.6
80°	198.5	199.7
82.5°	137.0	139.5
85°	85.8	85.8
87.5°	39.7	35.9
90°	11.4	11.4
92.5°	45.7	36.6
95°	159.4	131.9
97.5°	381.9	329.6
100°	550.2	487.8
102.5°	715.7	662.3
105°	926.8	898.2
107.5°	1065.1	1072.1
110°	1117.8	1147.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1122.6	1168.5
115°	1092.8	1156.5
117.5°	1029.7	1100.3
120°	978.8	1047.4
122.5°	929.3	997.0
125°	858.6	920.9
127.5°	795.1	847.7
130°	757.7	806.2
132.5°	723.6	767.2
135°	677.1	714.6
137.5°	639.7	670.5
140°	614.2	642.8
142.5°	592.8	617.5
145°	561.1	579.8
147.5°	536.6	552.1
150°	521.2	533.8
152.5°	508.0	517.5
155°	492.9	499.2
157.5°	481.0	485.4
160°	473.8	476.4
162.5°	469.2	471.6
165°	462.5	465.0
167.5°	457.7	458.7
170°	456.3	456.3
172.5°	452.7	451.7
175°	450.6	450.6
177.5°	448.6	447.6
180°	447.6	447.6

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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	5.67	6.58	6.60	7.54	8.79	18.81	19.72	19.74	20.68	21.93
	3H	6.38	7.20	7.33	8.17	9.44	20.64	21.46	21.58	22.43	23.70
	4H	6.68	7.46	7.64	8.43	9.71	21.27	22.05	22.23	23.03	24.30
	6H	6.93	7.65	7.91	8.63	9.92	21.70	22.41	22.67	23.39	24.68
	8H	7.00	7.69	7.98	8.68	9.97	21.81	22.50	22.79	23.49	24.78
	12H	7.02	7.67	8.01	8.66	9.98	21.87	22.53	22.86	23.52	24.83
4H	2H	12.87	13.65	13.83	14.62	15.89	19.09	19.87	20.06	20.84	22.12
	3H	14.44	15.09	15.42	16.10	17.39	21.13	21.78	22.10	22.78	24.07
	4H	14.54	15.14	15.53	16.13	17.45	21.89	22.48	22.87	23.48	24.79
	6H	14.55	15.07	15.55	16.09	17.40	22.42	22.93	23.41	23.95	25.26
	8H	14.53	15.01	15.53	16.03	17.35	22.57	23.05	23.57	24.07	25.39
	12H	14.49	14.93	15.51	15.95	17.29	22.66	23.10	23.68	24.12	25.46
8H	4H	15.98	16.46	16.98	17.47	18.80	21.95	22.43	22.95	23.45	24.77
	6H	16.22	16.62	17.25	17.68	19.00	22.57	22.97	23.60	24.02	25.35
	8H	16.24	16.60	17.28	17.63	18.98	22.78	23.14	23.82	24.18	25.52
	12H	16.21	16.52	17.25	17.56	18.95	22.92	23.23	23.96	24.27	25.66
12H	4H	16.12	16.56	17.14	17.58	18.92	21.91	22.34	22.93	23.37	24.71
	6H	16.48	16.83	17.51	17.87	19.22	22.55	22.91	23.59	23.95	25.29
	8H	16.55	16.86	17.59	17.90	19.28	22.78	23.09	23.82	24.12	25.51