

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: P936922

Luminaire Tested: SQ4-FB-050U-125D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936922
REPORT IS A COMBINATION OF REPORTS P933472 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

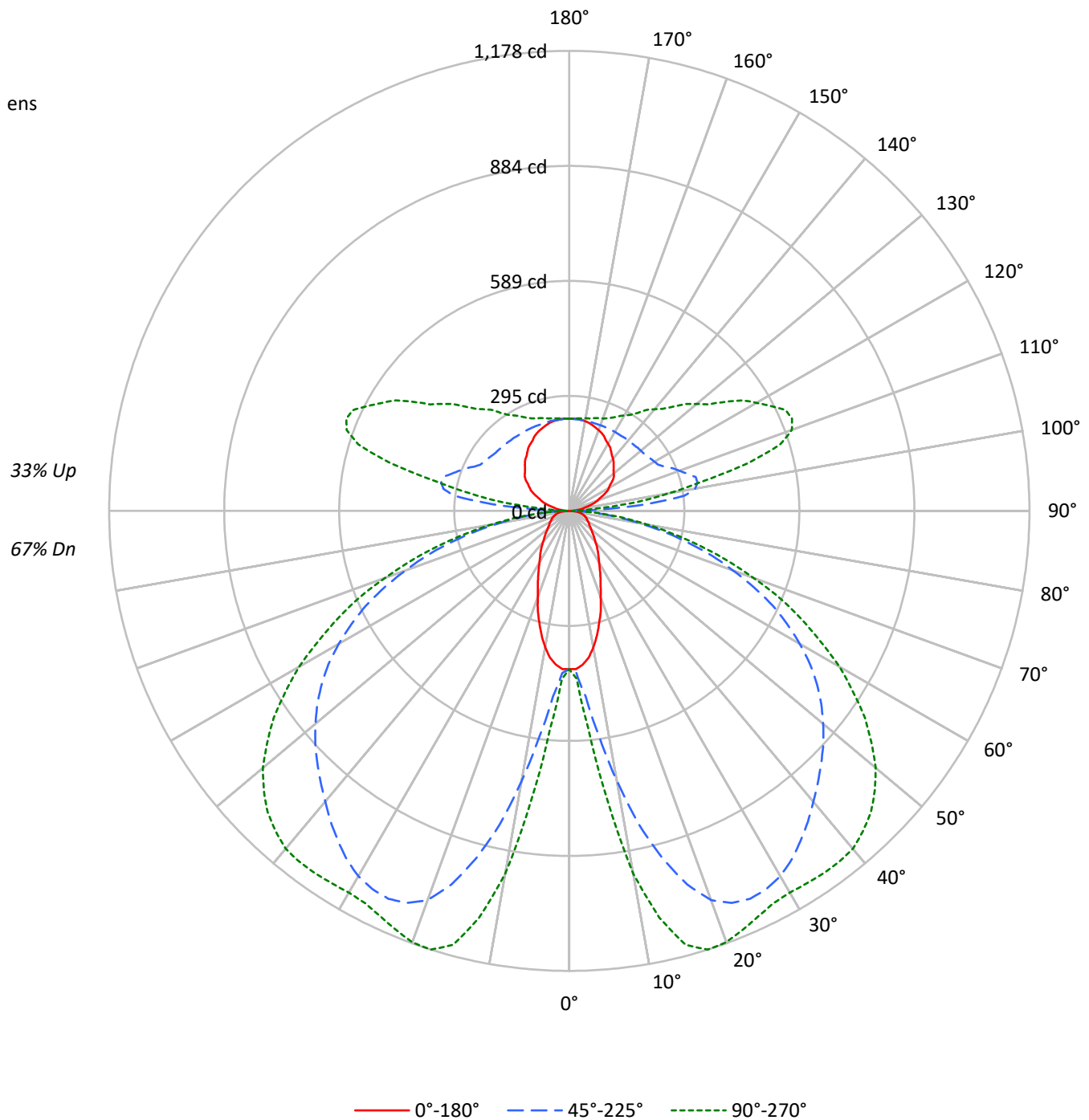
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4668.5 lumens
Efficiency: N/A
Efficacy: 83.4 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-Direct

Input Watts (W): 56
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59	55	55	55	55
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45	45	45	45
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41	37	37	37	37
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34	31	31	31	31
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29	26	26	26	26
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25	23	23	23	23
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22	20	20	20	20
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20	17	17	17	17
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17	15	15	15	15
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16	14	14	14	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3760	3760	3760
5°	3669	4343	5054
10°	3325	6325	8379
15°	2823	8258	10118
20°	2295	9563	10312
25°	1913	10000	10102
30°	1611	10055	10083
35°	1422	9880	10343
40°	1237	9655	10612
45°	1118	9488	10655
50°	1023	9335	10478
55°	976	9116	10014
60°	998	8704	9280
65°	1032	8083	8271
70°	1092	7035	6990
75°	1197	5721	5454
80°	1278	3953	3676
85°	1076	2087	1881

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10655 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.4	1.1
10°-20°	232.3	5.0
20°-30°	406.3	8.7
30°-40°	523.1	11.2
40°-50°	584.3	12.5
50°-60°	559.6	12.0
60°-70°	443.5	9.5
70°-80°	260.8	5.6
80°-90°	73.4	1.6
90°-100°	115.3	2.5
100°-110°	303.0	6.5
110°-120°	314.2	6.7
120°-130°	252.0	5.4
130°-140°	197.8	4.2
140°-150°	151.8	3.3
150°-160°	109.3	2.3
160°-170°	66.9	1.4
170°-180°	22.6	0.5
0°-30°	691.1	14.8
0°-40°	1214.1	26.0
0°-60°	2358.0	50.5
0°-90°	3135.6	67.2
90°-120°	732.5	15.7
90°-150°	1334.1	28.6
90°-180°	1533.0	32.8
0°-180°	4668.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	405	405	405	405	405	
5°	395	423	477	539	559	36
15°	296	546	920	1115	1150	82
25°	189	619	1096	1144	1145	87
35°	128	592	1032	1091	1134	80
45°	87	472	912	1045	1092	68
55°	62	300	774	899	924	57
65°	50	159	575	646	655	49
75°	36	98	315	347	348	38
85°	13	30	78	86	87	14
90°	2	4	12	6	6	2
95°	15	60	198	102	70	17
105°	55	83	335	509	475	58
115°	97	118	268	535	611	96
125°	135	151	244	412	487	120
135°	161	177	236	333	378	124
145°	186	198	234	284	306	117
155°	211	217	234	256	264	97
165°	228	230	234	243	246	64
175°	236	236	235	238	238	22
180°	236	236	236	236	236	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2	405.2
2.5°	405.2	405.2	407.8	409.1	411.7	413.0	415.6	418.3	426.0	427.4	430.0
5°	394.8	400.0	417.0	423.4	441.7	466.5	476.9	493.8	529.0	539.4	545.9
7.5°	379.1	390.9	432.6	443.0	488.6	553.7	581.1	617.6	673.6	700.9	723.1
10°	354.4	379.1	453.4	478.2	552.4	651.4	702.2	753.1	837.8	875.6	889.9
12.5°	327.0	367.4	475.6	509.4	616.3	760.9	822.1	878.2	974.6	1025.4	1033.2
15°	295.8	350.5	496.4	545.9	684.0	852.1	919.8	988.9	1078.8	1115.3	1124.4
17.5°	268.4	337.5	516.0	568.1	736.1	934.2	1003.2	1060.6	1133.5	1158.3	1164.8
20°	234.5	316.6	529.0	596.8	790.9	994.1	1060.6	1104.9	1154.4	1170.0	1172.6
22.5°	209.7	294.4	536.8	607.1	827.4	1030.6	1086.6	1121.8	1155.7	1160.9	1162.2
25°	189.0	269.7	535.5	618.8	858.6	1052.7	1095.8	1121.8	1141.4	1144.0	1144.0
27.5°	169.4	242.3	530.3	621.5	882.0	1058.0	1091.9	1110.1	1119.2	1124.4	1124.4
30°	152.5	216.3	517.3	616.3	892.5	1052.7	1080.1	1089.2	1098.3	1106.2	1110.1
32.5°	139.4	191.5	497.7	605.8	893.8	1039.7	1059.3	1064.4	1077.5	1095.8	1102.3
35°	127.7	166.8	475.6	591.5	886.0	1018.9	1031.9	1037.1	1063.1	1090.6	1099.6
37.5°	116.0	148.5	446.9	566.8	874.3	994.1	1003.2	1012.4	1052.7	1085.3	1095.8
40°	104.3	132.9	413.0	539.4	856.0	964.1	972.0	986.3	1039.7	1077.5	1087.9
42.5°	95.1	119.9	376.5	510.7	832.5	930.3	942.0	962.9	1024.1	1064.4	1076.2
45°	87.3	106.9	337.5	471.6	802.6	895.1	912.1	940.7	1005.9	1045.0	1055.4
47.5°	79.5	97.7	297.1	431.3	770.0	859.9	882.0	914.7	981.1	1018.9	1028.0
50°	73.0	88.6	256.6	388.2	734.8	822.1	848.2	882.0	949.8	985.0	996.8
52.5°	67.8	80.8	218.9	345.3	694.5	783.0	813.0	848.2	912.1	945.9	953.7
55°	62.5	74.2	186.3	299.7	652.7	741.4	773.9	807.8	870.3	899.0	904.2
57.5°	59.9	69.1	158.9	256.6	608.5	694.5	731.0	762.2	820.8	843.0	848.2
60°	56.1	65.1	138.1	220.2	560.3	650.2	681.4	712.7	762.2	780.5	784.3
62.5°	52.1	62.5	122.5	185.0	510.7	598.1	629.3	658.0	699.7	712.7	717.9
65°	49.5	59.9	110.7	158.9	459.9	543.3	574.6	599.4	633.2	646.3	648.9
67.5°	46.9	57.4	101.6	136.8	409.1	488.6	512.1	535.5	561.6	574.6	575.9
70°	43.0	54.7	93.8	121.2	357.0	426.0	445.6	470.3	491.2	497.7	501.7
72.5°	40.4	50.8	88.6	109.4	303.6	366.1	384.4	398.7	417.0	423.4	423.4
75°	36.5	45.6	83.4	97.7	248.9	299.7	315.3	329.6	344.0	346.6	342.7
77.5°	32.6	40.4	71.7	82.1	194.1	237.2	250.2	258.0	269.7	272.3	273.6
80°	27.3	35.2	56.1	63.8	140.7	174.6	183.7	190.2	200.7	200.7	203.3
82.5°	20.9	27.3	40.4	45.6	95.1	119.9	127.7	131.6	138.1	138.1	138.1
85°	13.0	16.9	26.0	30.0	57.4	73.0	78.2	79.5	84.7	86.0	86.0
87.5°	6.5	9.1	16.9	18.2	30.0	37.8	37.8	40.4	40.4	39.1	37.8
90°	1.6	2.8	4.2	4.5	7.0	10.4	12.1	10.7	8.0	6.0	6.0
92.5°	6.3	17.1	28.0	30.6	43.0	59.6	67.9	59.5	42.7	30.2	29.0
95°	15.2	35.0	54.7	59.7	106.0	167.6	198.5	177.1	134.4	102.3	98.7
97.5°	26.3	43.7	61.1	65.5	142.7	245.6	297.1	283.6	256.6	236.3	229.4
100°	34.9	50.7	66.5	70.5	156.1	270.3	327.4	328.4	330.4	331.9	323.6
102.5°	42.2	57.0	71.7	75.4	162.2	278.0	336.0	353.2	387.6	413.4	406.3
105°	54.6	67.1	79.5	82.7	166.8	279.0	335.0	373.6	450.8	508.7	504.9
107.5°	67.3	78.9	90.6	93.5	167.6	266.6	316.0	369.8	477.5	558.2	559.1
110°	75.8	86.3	96.9	99.5	166.4	255.6	300.1	360.3	480.6	570.9	574.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	84.2	94.2	104.3	106.8	166.4	245.9	285.7	347.3	470.4	562.8	568.9
115°	96.9	106.2	115.4	117.7	167.9	234.8	268.3	327.6	446.3	535.3	543.7
117.5°	109.5	117.9	126.3	128.4	171.1	228.0	256.5	310.0	417.0	497.3	506.7
120°	116.8	124.7	132.6	134.6	173.6	225.7	251.7	300.6	398.5	471.9	480.9
122.5°	124.0	132.0	139.9	141.9	177.3	224.5	248.0	292.1	380.2	446.3	455.2
125°	134.9	142.1	149.4	151.2	182.2	223.5	244.1	281.5	356.4	412.5	420.7
127.5°	143.8	151.2	158.5	160.3	187.1	222.9	240.8	272.9	337.1	385.3	392.2
130°	148.5	156.5	164.3	166.3	190.7	223.2	239.5	268.1	325.3	368.2	374.6
132.5°	153.5	161.4	169.2	171.2	193.7	223.5	238.4	264.0	315.2	353.6	359.4
135°	160.8	167.9	175.2	176.9	196.8	223.2	236.5	257.9	300.8	332.9	337.9
137.5°	168.2	175.3	182.5	184.3	201.6	224.6	236.2	254.3	290.5	317.7	321.8
140°	174.4	181.0	187.6	189.2	204.4	224.8	235.0	250.7	282.1	305.5	309.3
142.5°	179.2	185.3	191.3	192.8	206.9	225.6	235.0	248.8	276.3	296.9	300.1
145°	186.5	191.7	197.0	198.4	210.1	225.7	233.5	244.7	267.2	284.1	286.5
147.5°	193.8	199.0	204.0	205.4	214.8	227.2	233.5	242.3	260.0	273.3	275.4
150°	198.5	203.1	207.8	209.0	217.1	228.0	233.5	240.9	255.9	267.1	268.8
152.5°	203.4	207.0	210.5	211.4	218.8	228.5	233.5	239.9	252.6	262.2	263.4
155°	210.7	213.4	216.0	216.6	222.2	229.7	233.5	238.5	248.7	256.3	257.2
157.5°	216.1	218.7	221.2	221.8	225.7	230.8	233.5	237.4	245.3	251.3	251.9
160°	219.8	221.8	223.8	224.2	227.3	231.4	233.5	236.9	243.6	248.7	249.0
162.5°	223.5	224.9	226.4	226.8	229.0	232.0	233.5	236.3	242.0	246.3	246.6
165°	227.5	228.8	230.2	230.5	231.5	232.8	233.5	235.5	239.5	242.6	242.9
167.5°	231.1	231.7	232.3	232.5	233.3	234.5	235.0	236.4	239.1	241.1	241.2
170°	233.5	234.1	234.7	234.8	234.9	235.0	235.0	236.4	239.1	241.1	241.1
172.5°	234.7	234.8	235.0	235.0	235.0	235.0	235.0	236.1	238.2	239.8	239.6
175°	236.5	236.5	236.5	236.5	236.0	235.3	235.0	235.7	237.1	238.1	238.1
177.5°	236.5	236.5	236.5	236.5	236.1	235.6	235.4	235.9	237.0	237.8	237.6
180°	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5	236.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	405.2	405.2
2.5°	432.6	430.0
5°	556.3	558.9
7.5°	749.2	747.9
10°	931.5	943.3
12.5°	1064.4	1067.1
15°	1145.3	1150.5
17.5°	1176.6	1177.9
20°	1177.9	1175.3
22.5°	1163.5	1160.9
25°	1146.5	1145.3
27.5°	1130.9	1132.2
30°	1124.4	1128.4
32.5°	1124.4	1130.9
35°	1127.0	1133.5
37.5°	1125.7	1133.5
40°	1120.5	1129.6
42.5°	1106.2	1112.6
45°	1084.0	1091.9
47.5°	1055.4	1060.6
50°	1018.9	1024.1
52.5°	973.3	974.6
55°	918.5	923.8
57.5°	859.9	861.2
60°	794.8	798.7
62.5°	725.7	725.7
65°	652.7	655.3
67.5°	577.2	583.7
70°	500.3	501.7
72.5°	424.7	424.7
75°	346.6	347.9
77.5°	272.3	272.3
80°	202.0	203.3
82.5°	139.4	142.0
85°	87.3	87.3
87.5°	40.4	36.5
90°	6.0	6.0
92.5°	24.2	19.3
95°	84.2	69.7
97.5°	201.7	174.1
100°	290.7	257.7
102.5°	378.1	350.0
105°	489.7	474.6
107.5°	562.7	566.4
110°	590.6	606.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	593.1	617.4
115°	577.3	611.0
117.5°	544.0	581.4
120°	517.1	553.4
122.5°	491.0	526.8
125°	453.6	486.6
127.5°	420.0	447.8
130°	400.3	426.0
132.5°	382.3	405.3
135°	357.7	377.5
137.5°	338.0	354.2
140°	324.5	339.6
142.5°	313.2	326.3
145°	296.4	306.3
147.5°	283.5	291.7
150°	275.4	282.1
152.5°	268.4	273.4
155°	260.5	263.8
157.5°	254.2	256.5
160°	250.4	251.7
162.5°	247.9	249.2
165°	244.3	245.7
167.5°	241.8	242.3
170°	241.1	241.1
172.5°	239.2	238.7
175°	238.1	238.1
177.5°	237.1	236.5
180°	236.5	236.5



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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	7.02	8.11	7.80	8.93	9.93	20.16	21.25	20.94	22.07	23.07
	3H	7.74	8.73	8.54	9.55	10.58	22.00	22.99	22.80	23.81	24.84
	4H	8.05	8.99	8.87	9.82	10.86	22.65	23.58	23.46	24.41	25.45
	6H	8.31	9.18	9.14	10.02	11.07	23.08	23.94	23.90	24.78	25.83
	8H	8.39	9.21	9.23	10.07	11.13	23.20	24.02	24.03	24.88	25.94
	12H	8.42	9.20	9.26	10.06	11.14	23.27	24.05	24.11	24.91	25.99
4H	2H	14.24	15.17	15.06	16.01	17.04	20.46	21.40	21.28	22.23	23.27
	3H	15.83	16.61	16.66	17.48	18.54	22.51	23.30	23.35	24.16	25.22
	4H	15.93	16.65	16.78	17.51	18.60	23.28	24.00	24.13	24.86	25.94
	6H	15.96	16.58	16.82	17.47	18.55	23.82	24.44	24.68	25.33	26.42
	8H	15.94	16.52	16.81	17.41	18.51	23.98	24.56	24.85	25.45	26.55
	12H	15.91	16.44	16.80	17.34	18.44	24.08	24.61	24.97	25.51	26.61
8H	4H	17.39	17.97	18.26	18.85	19.95	23.36	23.94	24.23	24.83	25.93
	6H	17.64	18.13	18.54	19.05	20.15	23.99	24.47	24.88	25.40	26.50
	8H	17.67	18.09	18.57	19.01	20.13	24.21	24.64	25.11	25.55	26.67
	12H	17.64	18.02	18.55	18.93	20.10	24.35	24.73	25.26	25.64	26.81
12H	4H	17.54	18.07	18.43	18.97	20.07	23.33	23.85	24.21	24.75	25.86
	6H	17.90	18.33	18.81	19.25	20.36	23.98	24.41	24.88	25.32	26.44
	8H	17.98	18.36	18.89	19.27	20.44	24.21	24.59	25.12	25.50	26.67