

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: P937210

Luminaire Tested: SQ4-FB-075U-100D-830-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937210
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-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

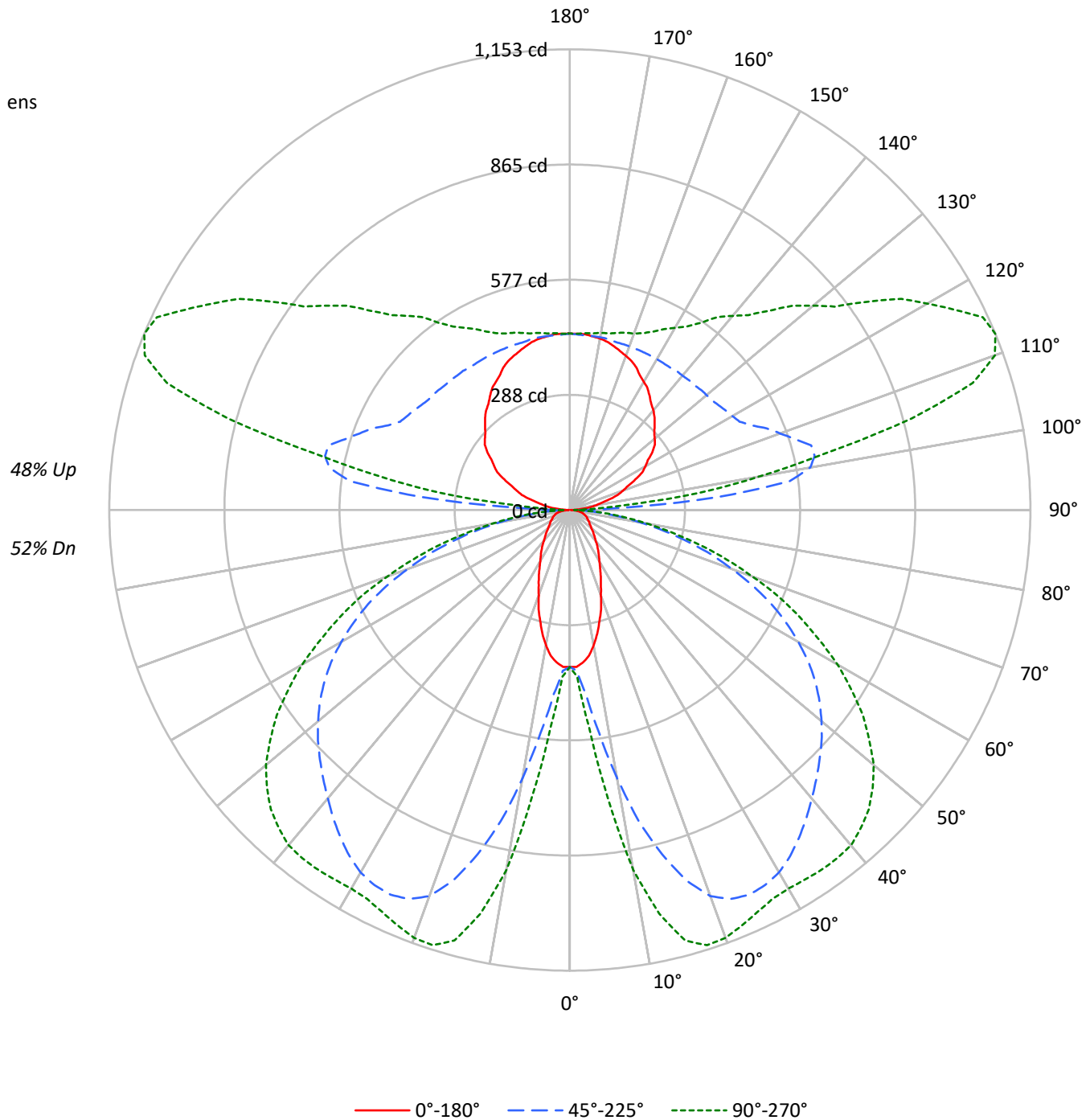
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5903.3 lumens
Efficiency: N/A
Efficacy: 115.3 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 (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				
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	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58	52
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	50	49	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	43	41	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	38	35	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	33	30	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	30	26	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	27	23	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	24	20	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	22	18	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	20	17	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3645	3645	3645
5°	3558	4210	4901
10°	3223	6133	8123
15°	2736	8007	9809
20°	2224	9272	9997
25°	1854	9694	9794
30°	1561	9749	9776
35°	1378	9579	10028
40°	1198	9360	10289
45°	1083	9198	10330
50°	991	9051	10159
55°	947	8839	9708
60°	966	8439	8998
65°	1000	7837	8020
70°	1059	6820	6775
75°	1161	5547	5288
80°	1240	3833	3562
85°	1043	2023	1823

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10330 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	0.9
10°-20°	225.2	3.8
20°-30°	394.0	6.7
30°-40°	507.1	8.6
40°-50°	566.4	9.6
50°-60°	542.5	9.2
60°-70°	430.0	7.3
70°-80°	252.8	4.3
80°-90°	71.9	1.2
90°-100°	215.3	3.6
100°-110°	565.9	9.6
110°-120°	586.8	9.9
120°-130°	470.7	8.0
130°-140°	369.3	6.3
140°-150°	283.4	4.8
150°-160°	204.1	3.5
160°-170°	124.9	2.1
170°-180°	42.2	0.7
0°-30°	670.0	11.3
0°-40°	1177.1	19.9
0°-60°	2286.1	38.7
0°-90°	3040.8	51.5
90°-120°	1367.9	23.2
90°-150°	2491.3	42.2
90°-180°	2863.0	48.5
0°-180°	5903.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	393	393	393	393	393	
5°	383	410	462	523	542	35
15°	287	529	892	1081	1115	80
25°	183	600	1062	1109	1110	84
35°	124	574	1000	1057	1099	77
45°	85	457	884	1013	1059	65
55°	61	290	750	872	896	55
65°	48	154	557	627	635	48
75°	35	95	306	336	337	37
85°	13	29	76	83	85	13
90°	3	8	23	11	11	3
95°	28	112	371	191	130	32
105°	102	154	626	950	886	108
115°	181	220	501	1000	1141	179
125°	252	282	456	770	909	224
135°	300	330	442	622	705	232
145°	348	370	436	530	572	218
155°	394	404	436	479	492	181
165°	425	430	436	453	459	120
175°	442	442	439	444	444	42
180°	442	442	442	442	442	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	392.8	392.8	392.8	392.8	392.8	392.8	392.8	392.8	392.8	392.8	392.8
2.5°	392.8	392.8	395.4	396.6	399.1	400.5	403.0	405.4	413.1	414.3	416.8
5°	382.8	387.8	404.2	410.5	428.2	452.2	462.3	478.8	512.9	522.9	529.2
7.5°	367.6	379.0	419.4	429.5	473.7	536.9	563.4	598.7	653.0	679.6	701.0
10°	343.6	367.6	439.6	463.6	535.6	631.6	680.9	730.1	812.2	848.8	862.8
12.5°	317.1	356.2	461.1	493.9	597.5	737.7	797.1	851.4	944.9	994.1	1001.7
15°	286.7	339.8	481.3	529.2	663.2	826.2	891.9	958.8	1046.0	1081.3	1090.1
17.5°	260.2	327.1	500.2	550.8	713.7	905.7	972.6	1028.3	1099.0	1123.0	1129.3
20°	227.3	307.0	512.9	578.6	766.8	963.8	1028.3	1071.2	1119.2	1134.4	1136.9
22.5°	203.3	285.5	520.4	588.6	802.1	999.2	1053.5	1087.6	1120.4	1125.5	1126.7
25°	183.2	261.5	519.2	600.0	832.5	1020.6	1062.3	1087.6	1106.6	1109.1	1109.1
27.5°	164.2	235.0	514.1	602.6	855.1	1025.7	1058.6	1076.3	1085.1	1090.1	1090.1
30°	147.8	209.7	501.5	597.5	865.3	1020.6	1047.2	1056.0	1064.9	1072.4	1076.3
32.5°	135.2	185.7	482.6	587.4	866.5	1008.0	1026.9	1032.0	1044.6	1062.3	1068.7
35°	123.8	161.7	461.1	573.5	859.0	987.8	1000.5	1005.5	1030.8	1057.3	1066.1
37.5°	112.4	144.0	433.3	549.5	847.6	963.8	972.6	981.5	1020.6	1052.3	1062.3
40°	101.0	128.9	400.5	522.9	829.9	934.8	942.3	956.3	1008.0	1044.6	1054.8
42.5°	92.3	116.2	365.1	495.2	807.2	901.9	913.3	933.5	992.9	1032.0	1043.4
45°	84.6	103.5	327.1	457.3	778.1	867.9	884.2	912.0	975.2	1013.1	1023.2
47.5°	77.1	94.7	288.0	418.2	746.5	833.7	855.1	886.8	951.2	987.8	996.6
50°	70.7	85.9	248.8	376.5	712.4	797.1	822.4	855.1	920.9	954.9	966.3
52.5°	65.7	78.3	212.2	334.8	673.3	759.2	788.2	822.4	884.2	917.1	924.6
55°	60.6	72.0	180.7	290.5	632.9	718.7	750.4	783.2	843.9	871.6	876.7
57.5°	58.1	66.9	154.1	248.8	589.9	673.3	708.7	739.0	795.8	817.3	822.4
60°	54.3	63.2	133.9	213.5	543.2	630.3	660.7	691.0	739.0	756.7	760.4
62.5°	50.6	60.6	118.7	179.3	495.2	579.8	610.1	637.9	678.4	691.0	696.1
65°	48.0	58.1	107.4	154.1	445.9	526.8	557.1	581.1	613.9	626.6	629.0
67.5°	45.5	55.5	98.6	132.6	396.6	473.7	496.5	519.2	544.4	557.1	558.3
70°	41.7	53.1	90.9	117.5	346.1	413.1	432.0	456.0	476.2	482.6	486.3
72.5°	39.2	49.2	85.9	106.1	294.4	355.0	372.6	386.5	404.2	410.5	410.5
75°	35.4	44.2	80.9	94.7	241.3	290.5	305.7	319.6	333.5	336.0	332.2
77.5°	31.5	39.2	69.5	79.5	188.2	229.9	242.5	250.1	261.5	264.0	265.3
80°	26.5	34.1	54.3	61.9	136.4	169.3	178.1	184.4	194.5	194.5	197.0
82.5°	20.2	26.5	39.2	44.2	92.3	116.2	123.8	127.6	133.9	133.9	133.9
85°	12.6	16.4	25.2	29.1	55.5	70.7	75.8	77.1	82.1	83.4	83.4
87.5°	6.3	8.8	16.4	17.7	29.1	36.6	36.6	39.2	39.2	37.9	36.6
90°	3.0	5.4	7.7	8.3	13.1	19.4	22.6	20.1	15.0	11.3	11.3
92.5°	11.9	32.0	52.1	57.2	80.4	111.4	126.9	111.2	79.8	56.3	54.1
95°	28.5	65.4	102.3	111.5	197.9	313.1	370.7	330.8	251.0	191.1	184.3
97.5°	49.2	81.7	114.2	122.4	266.5	458.7	554.8	529.5	479.1	441.3	428.4
100°	65.2	94.6	124.2	131.5	291.5	504.8	611.4	613.2	616.9	619.7	604.3
102.5°	78.9	106.4	133.8	140.7	303.0	519.3	627.4	659.5	723.8	772.0	758.8
105°	101.9	125.2	148.6	154.4	311.5	520.9	625.6	697.7	841.8	949.8	942.7
107.5°	125.6	147.4	169.1	174.6	313.1	497.7	590.0	690.5	891.5	1042.2	1044.0
110°	141.7	161.3	181.0	185.8	310.7	477.1	560.4	672.7	897.4	1065.9	1073.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	157.4	176.1	194.7	199.4	310.8	459.3	533.4	648.5	878.4	1050.8	1062.2
115°	181.1	198.3	215.6	219.9	313.7	438.6	501.1	611.9	833.4	999.6	1015.3
117.5°	204.5	220.2	235.8	239.8	319.5	425.7	478.9	578.9	778.8	928.8	946.2
120°	218.2	232.9	247.6	251.3	324.2	421.4	470.0	561.4	744.1	881.0	898.0
122.5°	231.4	246.4	261.2	264.9	331.0	419.1	463.2	545.4	709.9	833.3	850.1
125°	251.9	265.5	279.1	282.4	340.2	417.3	455.8	525.7	665.5	770.2	785.6
127.5°	268.5	282.2	295.9	299.3	349.4	416.2	449.6	509.6	629.6	719.6	732.6
130°	277.4	292.2	306.9	310.6	356.1	416.8	447.2	500.7	607.4	687.6	699.5
132.5°	286.6	301.3	316.1	319.8	361.6	417.3	445.1	492.9	588.6	660.3	671.0
135°	300.2	313.6	327.0	330.4	367.5	416.9	441.6	481.6	561.7	621.8	631.1
137.5°	314.1	327.4	340.7	344.1	376.4	419.5	441.0	474.8	542.5	593.3	600.8
140°	325.7	337.9	350.2	353.2	381.8	419.9	438.9	468.2	526.6	570.4	577.5
142.5°	334.6	345.9	357.2	360.0	386.3	421.4	438.9	464.6	516.0	554.5	560.6
145°	348.2	358.1	368.0	370.4	392.2	421.4	435.9	457.0	498.9	530.5	535.1
147.5°	361.8	371.4	381.1	383.5	400.9	424.3	435.9	452.5	485.6	510.3	514.1
150°	370.7	379.4	388.1	390.3	405.5	425.8	435.9	449.9	477.8	498.7	501.8
152.5°	379.9	386.5	393.1	394.7	408.5	426.8	435.9	447.9	471.7	489.6	491.9
155°	393.6	398.5	403.2	404.5	415.0	429.0	435.9	445.4	464.3	478.6	480.1
157.5°	403.6	408.4	413.2	414.3	421.5	431.2	435.9	443.3	458.0	469.1	470.2
160°	410.4	414.1	417.8	418.7	424.5	432.1	435.9	442.2	455.0	464.4	465.0
162.5°	417.3	420.1	422.8	423.5	427.6	433.2	435.9	441.3	451.9	459.9	460.5
165°	424.7	427.1	429.6	430.3	432.2	434.7	435.9	439.8	447.4	453.1	453.8
167.5°	431.4	432.6	433.8	434.1	435.7	437.8	438.9	441.4	446.5	450.2	450.5
170°	435.9	437.1	438.3	438.6	438.7	438.8	438.9	441.4	446.5	450.2	450.2
172.5°	438.3	438.6	438.8	438.9	438.9	438.9	438.9	440.9	444.8	447.8	447.6
175°	441.6	441.6	441.6	441.6	440.7	439.5	438.9	440.1	442.6	444.5	444.5
177.5°	441.6	441.6	441.6	441.6	440.9	440.0	439.5	440.4	442.4	444.0	443.7
180°	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6	441.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	392.8	392.8
2.5°	419.4	416.8
5°	539.4	542.0
7.5°	726.4	725.0
10°	903.2	914.5
12.5°	1032.0	1034.6
15°	1110.4	1115.4
17.5°	1140.7	1141.9
20°	1141.9	1139.4
22.5°	1128.1	1125.5
25°	1111.6	1110.4
27.5°	1096.4	1097.7
30°	1090.1	1094.0
32.5°	1090.1	1096.4
35°	1092.7	1099.0
37.5°	1091.4	1099.0
40°	1086.4	1095.2
42.5°	1072.4	1078.8
45°	1051.0	1058.6
47.5°	1023.2	1028.3
50°	987.8	992.9
52.5°	943.6	944.9
55°	890.5	895.6
57.5°	833.7	835.0
60°	770.5	774.4
62.5°	703.6	703.6
65°	632.9	635.4
67.5°	559.6	566.0
70°	485.1	486.3
72.5°	411.8	411.8
75°	336.0	337.3
77.5°	264.0	264.0
80°	195.8	197.0
82.5°	135.2	137.7
85°	84.6	84.6
87.5°	39.2	35.4
90°	11.3	11.3
92.5°	45.1	36.1
95°	157.3	130.1
97.5°	376.8	325.1
100°	542.8	481.3
102.5°	706.1	653.4
105°	914.4	886.1
107.5°	1050.8	1057.7
110°	1102.8	1132.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1107.5	1152.8
115°	1078.2	1141.0
117.5°	1015.8	1085.5
120°	965.7	1033.3
122.5°	916.8	983.6
125°	847.1	908.6
127.5°	784.4	836.3
130°	747.5	795.4
132.5°	713.9	756.9
135°	668.1	705.0
137.5°	631.2	661.5
140°	605.9	634.2
142.5°	584.9	609.3
145°	553.5	572.0
147.5°	529.4	544.7
150°	514.2	526.7
152.5°	501.2	510.6
155°	486.3	492.5
157.5°	474.6	478.9
160°	467.5	470.0
162.5°	462.9	465.3
165°	456.3	458.8
167.5°	451.5	452.6
170°	450.2	450.2
172.5°	446.6	445.7
175°	444.5	444.5
177.5°	442.6	441.6
180°	441.6	441.6



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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	5.62	6.54	6.56	7.50	8.74	18.76	19.68	19.70	20.63	21.88
	3H	6.33	7.15	7.28	8.12	9.39	20.59	21.41	21.54	22.38	23.65
	4H	6.63	7.41	7.59	8.38	9.66	21.23	22.01	22.19	22.98	24.26
	6H	6.89	7.61	7.86	8.58	9.87	21.65	22.37	22.62	23.34	24.64
	8H	6.96	7.64	7.94	8.64	9.92	21.76	22.45	22.74	23.44	24.73
	12H	6.98	7.63	7.96	8.62	9.93	21.83	22.48	22.81	23.47	24.78
4H	2H	12.82	13.60	13.79	14.57	15.85	19.04	19.82	20.01	20.80	22.07
	3H	14.39	15.05	15.37	16.05	17.34	21.08	21.73	22.06	22.73	24.03
	4H	14.49	15.09	15.48	16.08	17.40	21.84	22.44	22.82	23.43	24.75
	6H	14.51	15.02	15.50	16.04	17.35	22.37	22.88	23.37	23.90	25.22
	8H	14.49	14.97	15.49	15.98	17.31	22.52	23.01	23.53	24.02	25.35
	12H	14.44	14.88	15.46	15.91	17.24	22.61	23.05	23.63	24.08	25.41
8H	4H	15.93	16.41	16.93	17.43	18.75	21.90	22.39	22.90	23.40	24.73
	6H	16.18	16.58	17.20	17.63	18.96	22.52	22.92	23.55	23.98	25.30
	8H	16.20	16.55	17.23	17.59	18.93	22.74	23.09	23.77	24.13	25.47
	12H	16.17	16.48	17.20	17.51	18.90	22.87	23.19	23.91	24.22	25.61
12H	4H	16.07	16.51	17.09	17.54	18.87	21.86	22.30	22.88	23.32	24.66
	6H	16.43	16.79	17.47	17.82	19.17	22.51	22.86	23.54	23.90	25.25
	8H	16.50	16.81	17.54	17.85	19.24	22.73	23.04	23.77	24.08	25.47