

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: P937860

Luminaire Tested: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-4-5000K

Issue Date: 12/17/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P937860  
REPORT IS A COMBINATION OF REPORTS P933597 AND P933786  
Test Lab: INNOVATION CENTER  
Issue Date: 12/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4-FB-125U-050D-93050-1D-UNV-STD-W-4-5000K  
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L  
Light Source: -  
Ballast/Driver: -

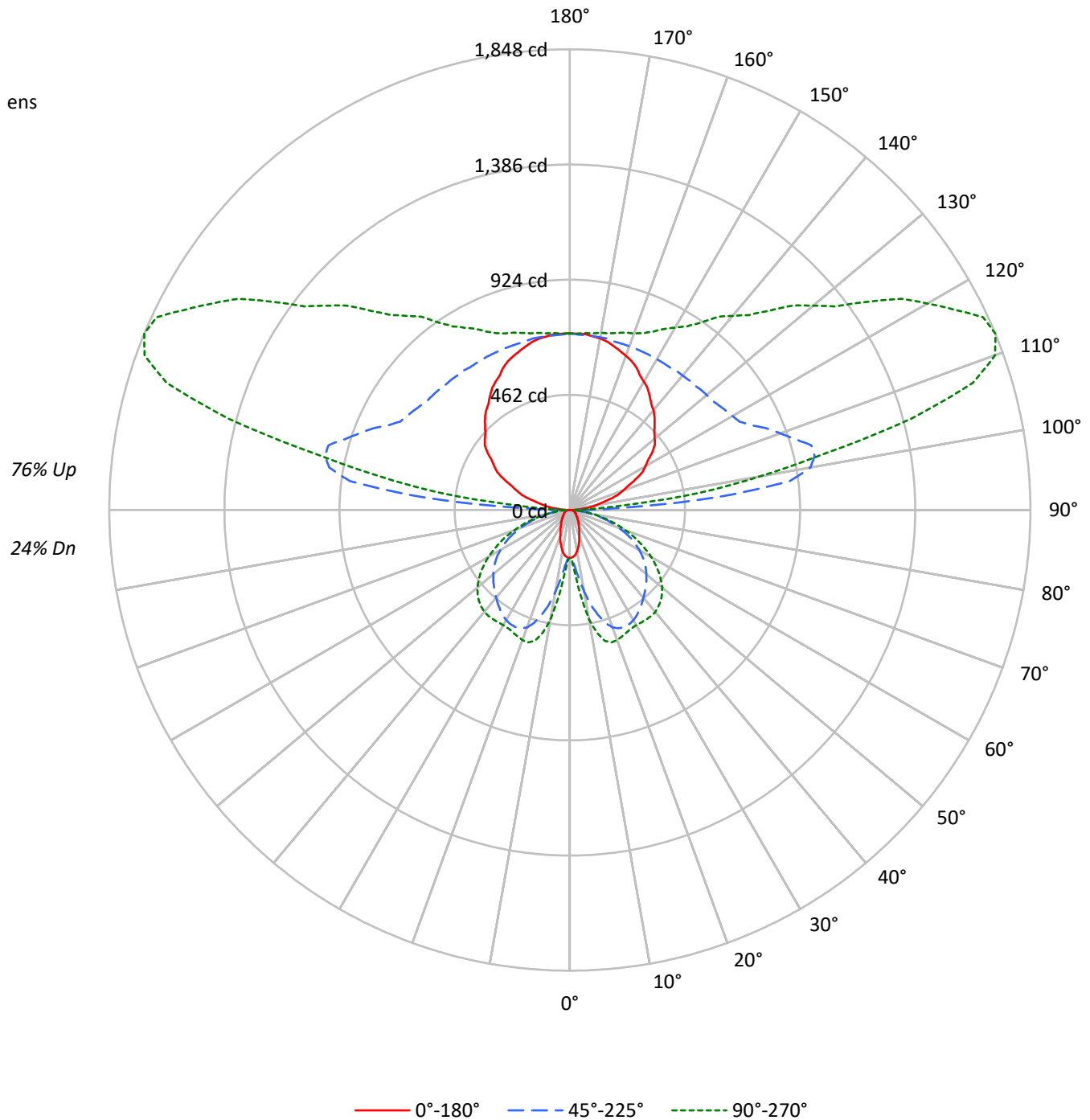
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6073.3 lumens  
Efficiency: N/A  
Efficacy: 127.6 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): 47.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27	20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22	16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19	13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13	10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12	8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10	7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8	6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7	5

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1776	1776	1776
5°	1734	2052	2388
10°	1571	2989	3959
15°	1334	3902	4780
20°	1085	4519	4872
25°	904	4725	4774
30°	760	4750	4765
35°	671	4669	4887
40°	585	4562	5014
45°	527	4482	5034
50°	484	4411	4951
55°	461	4308	4732
60°	470	4113	4385
65°	488	3819	3908
70°	515	3323	3302
75°	567	2702	2577
80°	604	1868	1737
85°	505	988	888

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5034 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.8	0.4
10°-20°	109.8	1.8
20°-30°	192.0	3.2
30°-40°	247.2	4.1
40°-50°	276.1	4.5
50°-60°	264.4	4.4
60°-70°	209.5	3.5
70°-80°	123.2	2.0
80°-90°	36.9	0.6
90°-100°	345.1	5.7
100°-110°	907.3	14.9
110°-120°	940.8	15.5
120°-130°	754.6	12.4
130°-140°	592.1	9.7
140°-150°	454.5	7.5
150°-160°	327.3	5.4
160°-170°	200.3	3.3
170°-180°	67.7	1.1
0°-30°	326.5	5.4
0°-40°	573.7	9.4
0°-60°	1114.2	18.3
0°-90°	1483.9	24.4
90°-120°	2193.1	36.1
90°-150°	3994.3	65.8
90°-180°	4589.0	75.6
0°-180°	6073.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	191	191	191	191	191	
5°	187	200	225	255	264	17
15°	140	258	435	527	544	39
25°	89	292	518	540	541	41
35°	60	280	488	515	536	38
45°	41	223	431	494	516	32
55°	30	142	366	425	436	27
65°	23	75	272	305	310	23
75°	17	46	149	164	164	18
85°	6	14	37	41	41	6
90°	5	13	36	18	18	4
95°	46	179	594	306	209	51
105°	163	248	1003	1523	1421	173
115°	290	353	803	1603	1829	287
125°	404	453	731	1235	1457	359
135°	481	530	708	997	1130	372
145°	558	594	699	850	917	350
155°	631	648	699	767	790	290
165°	681	690	699	726	736	192
175°	708	708	704	713	713	67
180°	708	708	708	708	708	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4	191.4
2.5°	191.4	191.4	192.7	193.3	194.6	195.2	196.4	197.6	201.3	201.9	203.2
5°	186.6	189.0	197.0	200.1	208.7	220.4	225.3	233.4	250.0	254.8	258.0
7.5°	179.1	184.7	204.4	209.3	230.9	261.6	274.6	291.8	318.3	331.2	341.7
10°	167.5	179.1	214.3	225.9	261.0	307.8	331.8	355.9	395.9	413.7	420.5
12.5°	154.5	173.6	224.7	240.7	291.2	359.6	388.5	415.0	460.5	484.5	488.2
15°	139.8	165.6	234.6	258.0	323.2	402.6	434.6	467.3	509.8	526.9	531.3
17.5°	126.8	159.5	243.8	268.4	347.8	441.4	474.1	501.2	535.6	547.3	550.3
20°	110.9	149.6	250.0	282.0	373.7	469.8	501.2	522.1	545.5	552.8	554.1
22.5°	99.1	139.1	253.7	286.9	390.9	486.9	513.5	530.1	546.0	548.5	549.1
25°	89.3	127.5	253.0	292.5	405.7	497.4	517.8	530.1	539.3	540.5	540.5
27.5°	80.0	114.5	250.5	293.7	416.8	499.9	515.9	524.6	528.9	531.3	531.3
30°	72.0	102.2	244.4	291.2	421.7	497.4	510.3	514.6	519.0	522.7	524.6
32.5°	65.9	90.5	235.2	286.2	422.3	491.2	500.5	503.0	509.1	517.8	520.8
35°	60.3	78.8	224.7	279.5	418.7	481.4	487.6	490.0	502.3	515.3	519.6
37.5°	54.8	70.2	211.2	267.8	413.1	469.8	474.1	478.4	497.4	512.8	517.8
40°	49.3	62.8	195.2	254.8	404.5	455.5	459.3	466.0	491.2	509.1	514.1
42.5°	45.0	56.6	177.9	241.4	393.4	439.6	445.1	455.0	483.9	503.0	508.5
45°	41.2	50.5	159.5	222.8	379.2	423.0	430.9	444.5	475.3	493.7	498.7
47.5°	37.5	46.2	140.4	203.8	363.9	406.4	416.8	432.1	463.6	481.4	485.7
50°	34.5	41.8	121.3	183.4	347.3	388.5	400.8	416.8	448.8	465.5	471.0
52.5°	32.0	38.2	103.4	163.2	328.2	370.0	384.1	400.8	430.9	446.9	450.7
55°	29.5	35.1	88.0	141.6	308.4	350.3	365.7	381.7	411.2	424.8	427.3
57.5°	28.4	32.7	75.1	121.3	287.5	328.2	345.3	360.1	387.8	398.3	400.8
60°	26.4	30.7	65.2	104.1	264.8	307.2	322.0	336.8	360.1	368.7	370.7
62.5°	24.6	29.5	57.9	87.5	241.4	282.6	297.3	310.9	330.6	336.8	339.2
65°	23.4	28.4	52.3	75.1	217.3	256.7	271.5	283.2	299.2	305.3	306.6
67.5°	22.2	27.1	48.0	64.6	193.3	230.9	241.9	253.0	265.3	271.5	272.1
70°	20.3	25.9	44.3	57.3	168.7	201.3	210.5	222.3	232.1	235.2	237.0
72.5°	19.1	24.0	41.8	51.8	143.4	173.0	181.6	188.4	197.0	200.1	200.1
75°	17.3	21.6	39.4	46.2	117.6	141.6	148.9	155.7	162.5	163.7	161.9
77.5°	15.4	19.1	33.9	38.8	91.8	112.1	118.2	121.9	127.5	128.7	129.3
80°	12.9	16.6	26.4	30.2	66.5	82.5	86.8	89.8	94.8	94.8	96.1
82.5°	9.8	12.9	19.1	21.6	45.0	56.6	60.3	62.2	65.2	65.2	65.2
85°	6.1	8.0	12.3	14.1	27.1	34.5	37.0	37.5	40.0	40.7	40.7
87.5°	3.1	4.3	8.0	8.6	14.1	17.9	17.9	19.1	19.1	18.4	17.9
90°	4.8	8.5	12.4	13.3	20.9	31.0	36.1	32.0	24.0	18.1	18.1
92.5°	19.0	51.3	83.6	91.7	128.9	178.6	203.4	178.2	128.0	90.3	86.7
95°	45.6	104.7	163.9	178.7	317.2	502.0	594.4	530.4	402.5	306.5	295.6
97.5°	78.8	131.0	183.2	196.2	427.3	735.3	889.4	849.0	768.1	707.5	686.8
100°	104.5	151.9	199.1	211.0	467.4	809.2	980.2	983.1	989.1	993.5	968.8
102.5°	126.4	170.5	214.6	225.7	485.7	832.5	1005.9	1057.5	1160.5	1237.8	1216.7
105°	163.4	200.9	238.2	247.6	499.4	835.2	1003.0	1118.6	1349.6	1522.8	1511.4
107.5°	201.4	236.3	271.2	279.9	502.0	798.0	946.1	1107.2	1429.4	1671.0	1673.8
110°	227.1	258.6	290.0	297.9	498.1	765.1	898.5	1078.7	1438.9	1709.1	1721.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	252.3	282.3	312.2	319.7	498.2	736.3	855.3	1039.7	1408.4	1684.9	1703.1
115°	290.3	318.0	345.7	352.6	502.9	703.2	803.4	981.0	1336.3	1602.7	1627.8
117.5°	327.9	353.0	378.2	384.4	512.3	682.7	767.8	928.1	1248.6	1489.1	1516.9
120°	349.7	373.4	397.1	403.0	519.9	675.7	753.6	900.1	1192.9	1412.6	1439.8
122.5°	371.1	395.0	418.8	424.8	530.8	672.0	742.7	874.6	1138.3	1336.1	1362.9
125°	403.9	425.6	447.4	452.8	545.5	669.0	730.8	842.8	1066.8	1234.9	1259.5
127.5°	430.5	452.4	474.4	479.9	560.2	667.3	720.8	816.9	1009.4	1153.6	1174.5
130°	444.7	468.4	492.1	497.9	571.0	668.4	717.0	802.6	973.9	1102.3	1121.5
132.5°	459.5	483.2	506.8	512.7	579.7	669.0	713.7	790.3	943.7	1058.7	1075.8
135°	481.3	502.9	524.4	529.8	589.2	668.4	708.0	772.2	900.6	996.9	1011.8
137.5°	503.6	524.9	546.3	551.6	603.4	672.5	707.0	761.2	869.8	951.2	963.3
140°	522.2	541.8	561.4	566.4	612.2	673.2	703.7	750.6	844.4	914.7	926.0
142.5°	536.4	554.6	572.7	577.3	619.4	675.6	703.7	744.9	827.2	889.0	898.7
145°	558.3	574.1	590.0	593.9	628.9	675.6	698.9	732.6	800.0	850.5	858.0
147.5°	580.2	595.6	611.0	614.9	642.8	680.2	698.9	725.4	778.5	818.2	824.4
150°	594.4	608.3	622.3	625.8	650.2	682.7	698.9	721.3	766.1	799.7	804.6
152.5°	609.2	619.7	630.3	632.9	655.0	684.2	698.9	718.0	756.3	784.9	788.7
155°	631.0	638.8	646.6	648.5	665.3	687.7	698.9	714.2	744.5	767.4	769.9
157.5°	647.2	654.8	662.3	664.2	675.8	691.2	698.9	710.8	734.4	752.1	753.9
160°	658.1	664.0	669.9	671.4	680.6	692.8	698.9	709.0	729.3	744.5	745.5
162.5°	669.0	673.4	677.9	679.0	685.6	694.5	698.9	707.5	724.6	737.5	738.4
165°	680.8	684.9	688.9	689.9	693.0	696.9	698.9	705.1	717.3	726.4	727.5
167.5°	691.9	693.7	695.6	696.1	698.6	702.0	703.7	707.7	715.7	721.8	722.2
170°	698.9	700.8	702.8	703.2	703.4	703.6	703.7	707.7	715.7	721.8	721.8
172.5°	702.8	703.1	703.6	703.7	703.7	703.7	703.7	706.8	713.1	717.9	717.5
175°	708.0	708.0	708.0	708.0	706.5	704.6	703.7	705.7	709.7	712.7	712.7
177.5°	708.0	708.0	708.0	708.0	706.9	705.3	704.6	706.2	709.4	711.8	711.3
180°	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0	708.0



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**CANDELA DISTRIBUTION (continued):**

	80°	90°
0°	191.4	191.4
2.5°	204.4	203.2
5°	262.9	264.1
7.5°	354.0	353.4
10°	440.2	445.7
12.5°	503.0	504.2
15°	541.2	543.6
17.5°	555.9	556.6
20°	556.6	555.3
22.5°	549.8	548.5
25°	541.8	541.2
27.5°	534.4	535.0
30°	531.3	533.2
32.5°	531.3	534.4
35°	532.5	535.6
37.5°	531.9	535.6
40°	529.4	533.7
42.5°	522.7	525.7
45°	512.2	515.9
47.5°	498.7	501.2
50°	481.4	483.9
52.5°	459.9	460.5
55°	434.1	436.5
57.5°	406.4	406.9
60°	375.5	377.4
62.5°	342.9	342.9
65°	308.4	309.6
67.5°	272.7	275.8
70°	236.4	237.0
72.5°	200.7	200.7
75°	163.7	164.4
77.5°	128.7	128.7
80°	95.4	96.1
82.5°	65.9	67.1
85°	41.2	41.2
87.5°	19.1	17.3
90°	18.1	18.1
92.5°	72.3	58.0
95°	252.1	208.6
97.5°	604.0	521.3
100°	870.3	771.6
102.5°	1132.2	1047.7
105°	1466.1	1420.7
107.5°	1684.8	1695.8
110°	1768.2	1815.5





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**CANDELA DISTRIBUTION (continued):**

	80°	90°
112.5°	1775.6	1848.3
115°	1728.6	1829.3
117.5°	1628.7	1740.4
120°	1548.2	1656.8
122.5°	1469.9	1577.0
125°	1358.1	1456.7
127.5°	1257.6	1340.8
130°	1198.4	1275.3
132.5°	1144.6	1213.5
135°	1071.0	1130.3
137.5°	1011.9	1060.5
140°	971.4	1016.8
142.5°	937.8	976.9
145°	887.5	917.1
147.5°	848.8	873.3
150°	824.5	844.4
152.5°	803.6	818.7
155°	779.8	789.7
157.5°	760.9	767.8
160°	749.6	753.6
162.5°	742.2	746.0
165°	731.5	735.5
167.5°	723.9	725.5
170°	721.8	721.8
172.5°	716.1	714.6
175°	712.7	712.7
177.5°	709.7	708.0
180°	708.0	708.0



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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	0.00	0.66	1.12	1.80	3.39	13.11	13.80	14.26	14.94	16.53
	3H	0.67	1.28	1.82	2.43	4.04	14.92	15.54	16.08	16.68	18.29
	4H	0.96	1.55	2.12	2.69	4.30	15.55	16.14	16.71	17.28	18.89
	6H	1.20	1.74	2.37	2.89	4.51	15.96	16.50	17.13	17.65	19.27
	8H	1.26	1.78	2.43	2.94	4.55	16.07	16.58	17.24	17.74	19.36
	12H	1.27	1.76	2.45	2.92	4.56	16.12	16.61	17.30	17.77	19.41
4H	2H	7.14	7.73	8.31	8.87	10.49	13.37	13.95	14.54	15.10	16.71
	3H	8.70	9.19	9.87	10.36	11.98	15.38	15.87	16.56	17.04	18.67
	4H	8.78	9.24	9.96	10.39	12.04	16.13	16.58	17.31	17.74	19.38
	6H	8.78	9.17	9.97	10.35	11.99	16.65	17.03	17.83	18.21	19.85
	8H	8.76	9.12	9.94	10.29	11.94	16.80	17.16	17.98	18.33	19.98
	12H	8.70	9.03	9.90	10.22	11.87	16.87	17.20	18.07	18.38	20.04
8H	4H	10.20	10.56	11.38	11.74	13.39	16.18	16.54	17.36	17.71	19.36
	6H	10.44	10.74	11.64	11.95	13.60	16.78	17.08	17.98	18.30	19.94
	8H	10.45	10.71	11.66	11.91	13.57	16.99	17.25	18.20	18.45	20.11
	12H	10.41	10.64	11.62	11.83	13.53	17.12	17.35	18.33	18.54	20.24
12H	4H	10.33	10.66	11.53	11.85	13.50	16.12	16.45	17.32	17.63	19.29
	6H	10.69	10.95	11.89	12.14	13.81	16.77	17.03	17.97	18.22	19.89
	8H	10.75	10.98	11.96	12.17	13.87	16.98	17.21	18.19	18.40	20.10