

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: P938160

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938160
REPORT IS A COMBINATION OF REPORTS P933600 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

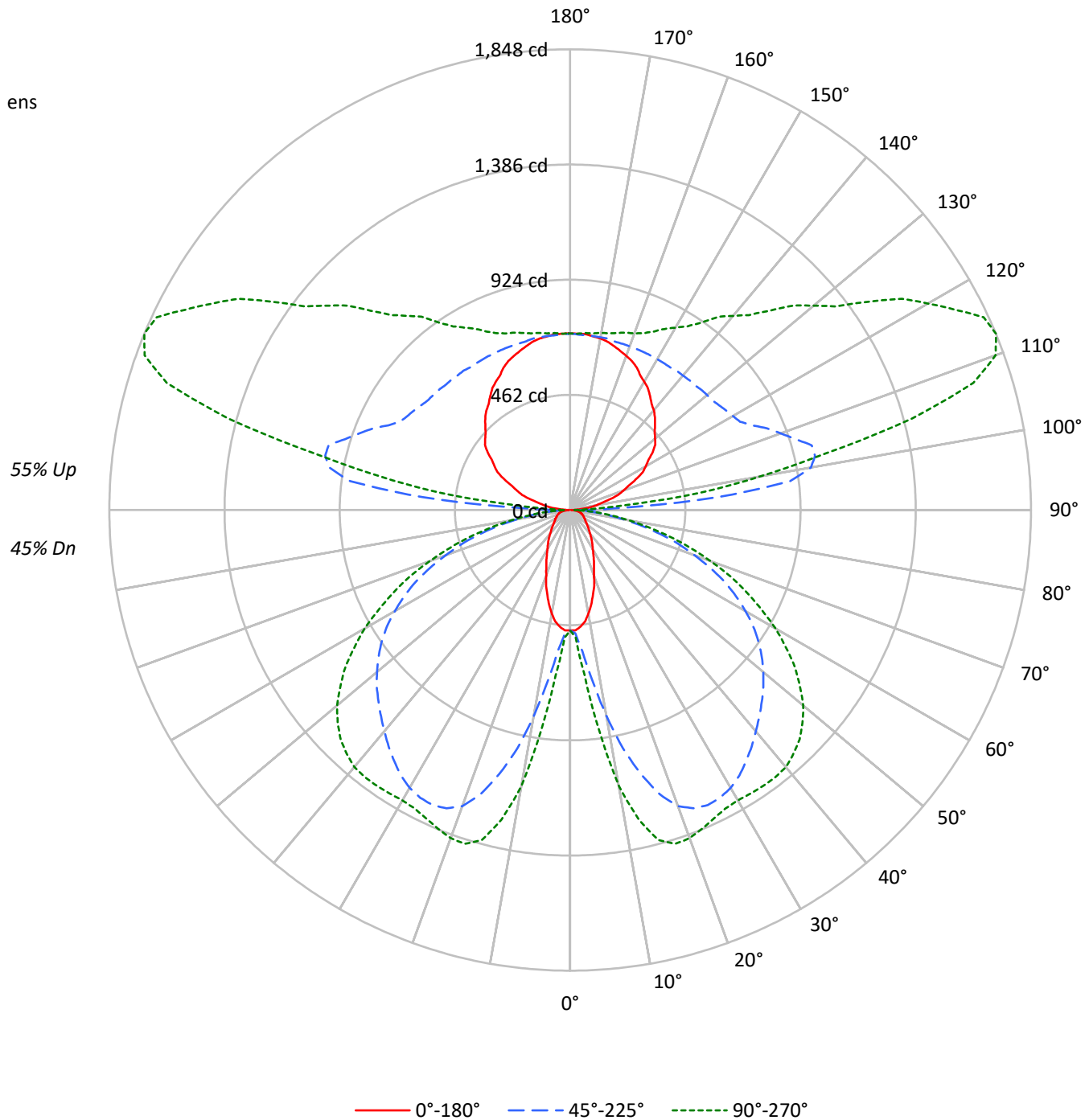
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8328.1 lumens
Efficiency: N/A
Efficacy: 110.7 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): 75.2
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

TEST NUMBER: P938160
CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P938160

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	44	42	37
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25	21
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21	18
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18	15
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14	12
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12	10
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4481	4481	4481
5°	4373	5175	6024
10°	3962	7538	9986
15°	3364	9842	12058
20°	2735	11397	12289
25°	2279	11918	12040
30°	1919	11984	12017
35°	1694	11775	12327
40°	1475	11507	12648
45°	1333	11308	12698
50°	1220	11126	12487
55°	1164	10865	11934
60°	1188	10374	11060
65°	1230	9633	9859
70°	1300	8385	8330
75°	1426	6819	6500
80°	1526	4713	4381
85°	1283	2485	2243

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12698 cd/sqm



TEST NUMBER: P938160

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.5	0.8
10°-20°	276.9	3.3
20°-30°	484.3	5.8
30°-40°	623.4	7.5
40°-50°	696.3	8.4
50°-60°	666.9	8.0
60°-70°	528.5	6.3
70°-80°	310.8	3.7
80°-90°	89.1	1.1
90°-100°	345.1	4.1
100°-110°	907.3	10.9
110°-120°	940.8	11.3
120°-130°	754.6	9.1
130°-140°	592.1	7.1
140°-150°	454.5	5.5
150°-160°	327.3	3.9
160°-170°	200.3	2.4
170°-180°	67.7	0.8
0°-30°	823.6	9.9
0°-40°	1447.0	17.4
0°-60°	2810.3	33.7
0°-90°	3738.7	44.9
90°-120°	2193.1	26.3
90°-150°	3994.3	48.0
90°-180°	4589.0	55.1
0°-180°	8328.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	483	483	483	483	483	
5°	470	505	568	643	666	43
15°	352	651	1096	1329	1371	98
25°	225	738	1306	1363	1365	104
35°	152	705	1230	1300	1351	95
45°	104	562	1087	1245	1301	80
55°	74	357	922	1071	1101	68
65°	59	189	685	770	781	58
75°	44	116	376	413	415	46
85°	16	36	93	102	104	16
90°	5	13	36	18	18	5
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	



TEST NUMBER: P938160

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9	482.9
2.5°	482.9	482.9	486.0	487.6	490.7	492.3	495.4	498.5	507.8	509.3	512.4
5°	470.5	476.7	496.9	504.6	526.4	555.9	568.3	588.5	630.5	642.8	650.6
7.5°	451.9	465.8	515.6	527.9	582.3	659.9	692.6	736.1	802.8	835.4	861.8
10°	422.3	451.9	540.3	569.9	658.4	776.4	836.9	897.5	998.5	1043.5	1060.6
12.5°	389.7	437.9	566.8	607.1	734.5	906.9	979.8	1046.6	1161.5	1222.1	1231.4
15°	352.5	417.7	591.6	650.6	815.2	1015.5	1096.3	1178.6	1285.8	1329.2	1340.1
17.5°	319.9	402.2	614.9	677.1	877.3	1113.3	1195.7	1264.0	1350.9	1380.5	1388.2
20°	279.5	377.4	630.5	711.2	942.6	1184.8	1264.0	1316.8	1375.8	1394.4	1397.6
22.5°	250.0	350.9	639.7	723.6	986.1	1228.2	1295.1	1337.0	1377.4	1383.6	1385.1
25°	225.2	321.5	638.3	737.6	1023.3	1254.7	1306.0	1337.0	1360.3	1363.4	1363.4
27.5°	201.9	288.8	632.0	740.7	1051.2	1260.9	1301.3	1323.0	1333.9	1340.1	1340.1
30°	181.7	257.8	616.5	734.5	1063.7	1254.7	1287.3	1298.2	1309.0	1318.4	1323.0
32.5°	166.2	228.2	593.2	722.0	1065.3	1239.2	1262.5	1268.6	1284.2	1306.0	1313.7
35°	152.2	198.8	566.8	705.0	1055.9	1214.3	1229.8	1236.0	1267.1	1299.7	1310.6
37.5°	138.2	177.0	532.6	675.5	1042.0	1184.8	1195.7	1206.6	1254.7	1293.5	1306.0
40°	124.3	158.4	492.3	642.8	1020.2	1149.0	1158.4	1175.5	1239.2	1284.2	1296.6
42.5°	113.3	142.9	448.8	608.7	992.2	1108.8	1122.7	1147.6	1220.5	1268.6	1282.7
45°	104.1	127.4	402.2	562.1	956.5	1066.8	1087.0	1121.1	1198.8	1245.4	1257.8
47.5°	94.7	116.5	354.0	514.0	917.7	1024.9	1051.2	1090.1	1169.2	1214.3	1225.2
50°	87.0	105.6	305.9	462.7	875.8	979.8	1010.9	1051.2	1132.0	1173.9	1188.0
52.5°	80.8	96.3	260.9	411.5	827.7	933.2	969.0	1010.9	1087.0	1127.4	1136.7
55°	74.5	88.5	222.1	357.2	777.9	883.6	922.4	962.8	1037.3	1071.4	1077.6
57.5°	71.4	82.3	189.4	305.9	725.2	827.7	871.2	908.4	978.3	1004.7	1010.9
60°	66.8	77.6	164.6	262.5	667.7	774.9	812.2	849.4	908.4	930.2	934.8
62.5°	62.1	74.5	146.0	220.5	608.7	712.8	750.0	784.2	833.9	849.4	855.6
65°	59.0	71.4	132.0	189.4	548.1	647.5	684.8	714.3	754.7	770.2	773.3
67.5°	55.9	68.4	121.1	163.1	487.6	582.3	610.3	638.3	669.3	684.8	686.3
70°	51.2	65.2	111.8	144.4	425.4	507.8	531.1	560.5	585.4	593.2	597.9
72.5°	48.2	60.6	105.6	130.4	361.8	436.4	458.1	475.2	496.9	504.6	504.6
75°	43.5	54.3	99.4	116.5	296.6	357.2	375.8	392.9	409.9	413.1	408.4
77.5°	38.8	48.2	85.4	97.8	231.4	282.7	298.2	307.4	321.5	324.5	326.1
80°	32.6	41.9	66.8	76.1	167.7	208.0	219.0	226.7	239.2	239.2	242.3
82.5°	24.9	32.6	48.2	54.3	113.3	142.9	152.2	156.8	164.6	164.6	164.6
85°	15.5	20.2	31.0	35.7	68.4	87.0	93.1	94.7	100.9	102.5	102.5
87.5°	7.8	10.8	20.2	21.7	35.7	45.1	45.1	48.2	48.2	46.6	45.1
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



TEST NUMBER: P938160

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

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



TEST NUMBER: P938160

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	482.9	482.9
2.5°	515.6	512.4
5°	663.0	666.2
7.5°	892.9	891.4
10°	1110.2	1124.3
12.5°	1268.6	1271.7
15°	1365.0	1371.1
17.5°	1402.2	1403.8
20°	1403.8	1400.7
22.5°	1386.6	1383.6
25°	1366.4	1365.0
27.5°	1347.8	1349.4
30°	1340.1	1344.8
32.5°	1340.1	1347.8
35°	1343.2	1350.9
37.5°	1341.7	1350.9
40°	1335.4	1346.3
42.5°	1318.4	1326.1
45°	1291.9	1301.3
47.5°	1257.8	1264.0
50°	1214.3	1220.5
52.5°	1160.0	1161.5
55°	1094.7	1101.0
57.5°	1024.9	1026.4
60°	947.2	951.9
62.5°	864.9	864.9
65°	777.9	781.1
67.5°	687.9	695.7
70°	596.3	597.9
72.5°	506.2	506.2
75°	413.1	414.6
77.5°	324.5	324.5
80°	240.7	242.3
82.5°	166.2	169.2
85°	104.1	104.1
87.5°	48.2	43.5
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



TEST NUMBER: P938160

CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

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



TEST NUMBER: P938160
 CATALOG NUMBER: SQ4-FB-125U-125D-93050-1D-UNV-STD-W-4-5000K

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	5.72	6.57	6.71	7.58	8.91	18.86	19.71	19.85	20.72	22.05
	3H	6.42	7.19	7.42	8.20	9.56	20.68	21.44	21.68	22.46	23.82
	4H	6.72	7.44	7.74	8.47	9.83	21.31	22.04	22.33	23.06	24.43
	6H	6.97	7.64	8.00	8.66	10.04	21.73	22.40	22.76	23.43	24.81
	8H	7.04	7.68	8.07	8.72	10.09	21.85	22.48	22.88	23.52	24.90
	12H	7.06	7.66	8.09	8.70	10.10	21.91	22.51	22.94	23.55	24.95
4H	2H	12.91	13.63	13.93	14.65	16.02	19.13	19.86	20.15	20.88	22.24
	3H	14.48	15.08	15.51	16.13	17.51	21.16	21.77	22.19	22.82	24.20
	4H	14.57	15.13	15.61	16.17	17.57	21.92	22.47	22.95	23.51	24.92
	6H	14.58	15.06	15.63	16.12	17.52	22.44	22.92	23.49	23.99	25.39
	8H	14.56	15.01	15.61	16.06	17.48	22.60	23.05	23.65	24.10	25.52
	12H	14.51	14.92	15.58	15.99	17.41	22.68	23.09	23.75	24.16	25.58
8H	4H	16.00	16.45	17.05	17.51	18.92	21.98	22.42	23.03	23.48	24.90
	6H	16.25	16.62	17.32	17.72	19.13	22.59	22.96	23.67	24.06	25.48
	8H	16.26	16.59	17.34	17.67	19.10	22.81	23.13	23.89	24.21	25.65
	12H	16.23	16.52	17.32	17.60	19.07	22.94	23.23	24.03	24.31	25.78
12H	4H	16.14	16.55	17.21	17.62	19.04	21.93	22.33	23.00	23.41	24.83
	6H	16.50	16.83	17.58	17.91	19.34	22.58	22.90	23.66	23.99	25.42
	8H	16.57	16.86	17.65	17.93	19.41	22.80	23.09	23.88	24.16	25.64