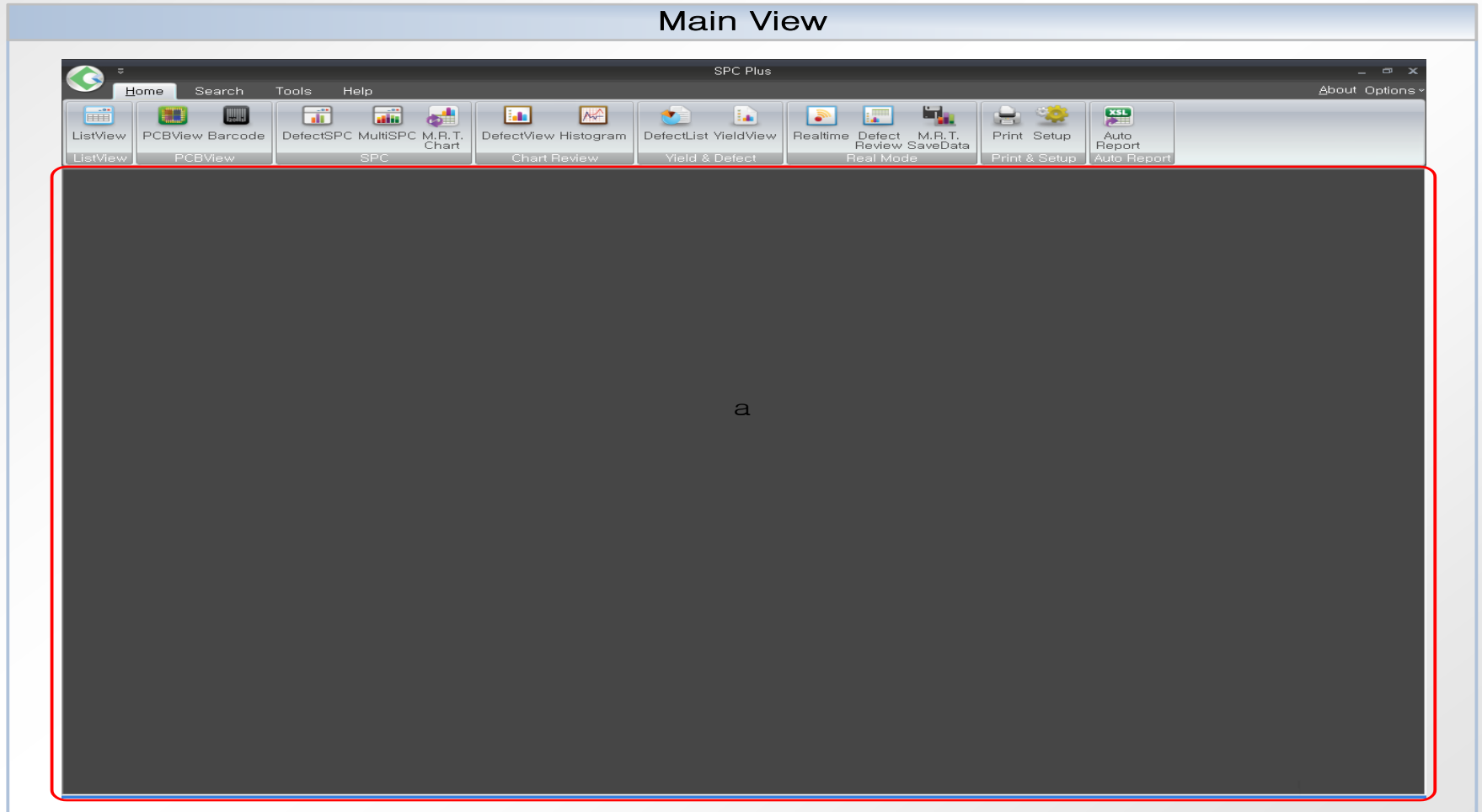
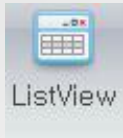


SPCPlus 主介面



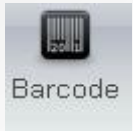
常用工具注釋



依照日期 顯示所有測試過pcb 測試結果
c:\KohYoung\ky-303\data\05*.mdb



根據在listview所選擇的pcb顯示測試結果的詳細資料(位置, 2D/3D圖, 測試規格...)



根據barcode所選擇的pcb顯示測試結果的詳細資料



根據在listview所選擇的pcb(至少兩個)顯示測試結果的直方圖(histogram) Cp...



根據在listview所選擇的pcb(至少兩個) 挑選最多六個零件 比較其顯示測試結果(Xbar-S圖)

常用工具注釋



根據在realtime setup挑選最多六個零件或組件(a group of components) 比較測試結果(Xbar-S圖)



根據在listview所選擇的pcb顯示測試FAIL的統計資料(前五大,前二十大....)



根據在listview所選擇的pcb顯示histogram



根據在listview所選擇的pcb顯示測試FAIL的統計資料(每種fail次數, 柏拉圖, PPM....)

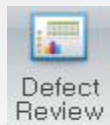


根據在listview所選擇的pcb顯示yield rate

常用工具注釋



即時顯示目前正在檢測的pcb的測試結果



顯示NG BUFFER裡的NG PCB資料



儲存資料給 M.R.T Char



使用



輸出當前畫面的儲存資料



SPCplus各項功能的設定

ListView

SPC Plus

Home Search Tools Help

About Options

ListView PCBView Barcode DefectSPC MultiSPC M.R.T. Chart DefectView Histogram DefectList YieldView Realtime Defect M.R.T. Review SaveData Print Setup Auto Report

SearchLine: Local Start Date: 2009-4-1 End Date: 2009-4-1 JobFilename: User Name: Lot: Barcode: MBSAT0100291302A5D30L1 Barcode Search View

Test Result: ☐ GOOD ☐ WARNING ☒ FAIL ☐ PASS

NO	LINE	IDNO	PCBNAME	DATE	StartTime	EndTime	USER	RESULT	JobFileName	Barcode	LOT	Squeegee	LogDB	Lane	LotCount	PA
1	Local	20	DA078L-07160-1-T0	2009-4-1	0:14:57	0:15:14	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302C5		Back		1	1	
2	Local	59	DA078L-07160-1-T0	2009-4-1	0:42:13	0:42:31	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302BCI		Front		1	1	
3	Local	84	DA078L-07160-1-T0	2009-4-1	1:03:01	1:03:19	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302B8		Back		1	1	
4	Local	99	DA078L-07160-1-T0	2009-4-1	1:10:59	1:11:16	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302BB		Front		1	1	
5	Local	101	DA078L-07160-1-T0	2009-4-1	1:12:31	1:12:48	AutoOperal	FAIL	D:\Wistron Demo Files\Job	111		Front		1	1	
6	Local	124	DA078L-07160-1-T0	2009-4-1	1:25:32	1:25:50	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302BE		Back		1	1	
7	Local	160	DA078L-07160-1-T0	2009-4-1	1:50:34	1:50:52	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302CD		Back		1	1	
8	Local	185	DA078L-07160-1-T0	2009-4-1	2:02:57	2:03:15	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302CC		Front		2	1	
9	Local	194	DA078L-07160-1-T0	2009-4-1	2:07:31	2:07:49	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302C9		Back		2	1	
10	Local	237	DA078L-07160-1-T0	2009-4-1	2:39:09	2:39:26	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302D0		Front		2	1	
11	Local	238	DA078L-07160-1-T0	2009-4-1	2:39:53	2:40:11	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302D0		Back		2	1	
12	Local	239	DA078L-07160-1-T0	2009-4-1	2:40:31	2:40:49	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302D0		Front		2	1	
13	Local	477	DA061L-08120-2-T0	2009-4-1	5:26:55	5:27:12	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBNAN07001914001F		Front		3	1	

Select Export List Export Result Export List Header Save Distribution Chart Screen Capture Repeatability

ListView (One)

Start Date : 2009-4-1
 End Date : 2009-4-1

JobFilename :
 User Name :

Lot :

☐ BarCode ☐ All Line
 MBSAT0100291302A5D30L1
 Barcode Search

View

Test Result : ☐ GOOD ☐ WARNING ☒ FAIL ☐ PASS

DATE	StartTime	EndTime	USER	RESULT	JobFileName	Barcode	LOT	Squeegee	LogDB	Lane	LotCount	PADTotalCnt	Warpir
2009-4-1	0:14:57	0:15:14	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302C5		Back		1	1	7960	
2009-4-1	0:42:13	0:42:31	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302BCI		Front		1	1	7960	
2009-4-1	1:03:01	1:03:19	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302B8		Back		1	1	7960	
2009-4-1	1:10:59	1:11:16	AutoOperal	FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302BB		Front		1	1	7960	
2009-4-1	1:12:31	1:12:48	AutoOperal	FAIL	D:\Wistron Demo Files\Job		111	Front		1	1	7960	

Squeegee : 印刷機印刷方向

PADTotalCnt : pcb的檢測pad總數

List View (Two)

470	DA078L-07160-1-TL	2009-4-1	5:07:37	5:07:55	AutoOperat	GOOD	D:\Wistron Demo Files\Job	MB5A1U1U0291302E23	Front	3	1	7960
471	DA078L-07160-1-TL	2009-4-1	5:08:04	5:08:22	AutoOperat	GOOD	D:\Wistron Demo Files\Job	MB5A1U1U0291302E30	Back	3	1	7960
472	DA061L-08120-2-TL	2009-4-1	5:26:55	5:27:12	AutoOperat	FAIL	D:\Wistron Demo Files\Job	MBNAN07001914001F	Front	3	1	8061
473	DA061L-08120-2-TL	2009-4-1	5:27:38	5:27:55	AutoOperat	GOOD	D:\Wistron Demo Files\Job	MBNAN07001914001E	Back	3	1	8061
474	DA061L-08120-2-TL	2009-4-1	5:28:05	5:28:22	AutoOperat	GOOD	D:\Wistron Demo Files\Job	MBNAN07001914001E	Front	3	1	8061

4

III



Select Export

List Export

Result Export

List Header Save

Distribution Chart

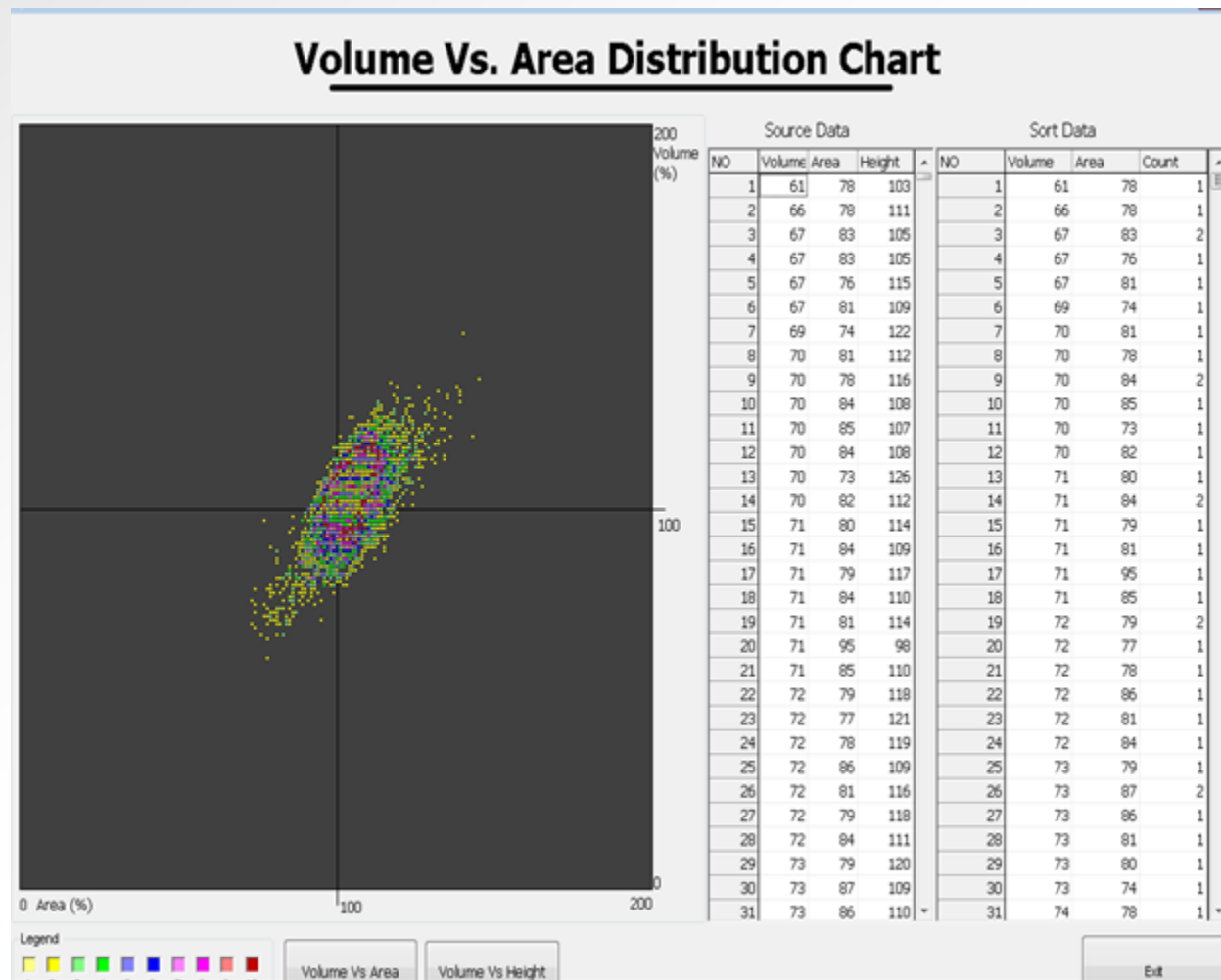
Screen Capture

Repeatability

Distribution Chart : 體積 vs 面積的分布圖, 體積 vs 高度的分布圖

Repeatability: 產生0度, 90度, 180度, 270度的3 σ

體積 vs 面積的分布圖



Repeatability (one)

SPC Plus

About O...

Defect M.R.T. Review SaveData
Real Mode

Print Setup
Print & Setup

Auto Report
Auto Report

☐ BarCode ☐ All Line
MBSAT0100291302A5D30L1 Barcode Search View

ASS

	LOT	Squeegee	LogDB	Lane	LotCount	PADTotalCr
302E0f	Front		3	1		
302E0f	Back		3	1		
302E0f	Front		3	1		
302E0f	Back		3	1		
302E0f	Front		3	1		
302E0f	Back		3	1		
302E0f	Front		3	1		
302E0f	Back		3	1		
302E0f	Front		3	1		
302E0f	Back		3	1		
302E2f	Front		3	1		

Check Repeatability

Degree	PCBID	Date	Time	Job	Barcode	LogDB
0	463	2009-4-1	5:01:15	D:\Wistron Demo Files\Job	MBSAT0100291302E273C	3
0	464	2009-4-1	5:01:44	D:\Wistron Demo Files\Job	MBSAT0100291302E263C	3
0	465	2009-4-1	5:02:14	D:\Wistron Demo Files\Job	MBSAT0100291302E253C	3
0	466	2009-4-1	5:02:44	D:\Wistron Demo Files\Job	MBSAT0100291302E243C	3
0	467	2009-4-1	5:03:14	D:\Wistron Demo Files\Job	MBSAT0100291302E233C	3
0	468	2009-4-1	5:03:43	D:\Wistron Demo Files\Job	MBSAT0100291302E213C	3
0	470	2009-4-1	5:05:39	D:\Wistron Demo Files\Job	MBSAT0100291302E1F3C	3
0	471	2009-4-1	5:06:06	D:\Wistron Demo Files\Job	MBSAT0100291302E1B3C	3
0	472	2009-4-1	5:06:33	D:\Wistron Demo Files\Job	MBSAT0100291302E1D3C	3
0	473	2009-4-1	5:07:00	D:\Wistron Demo Files\Job	MBSAT0100291302E403C	3

ADD Result item

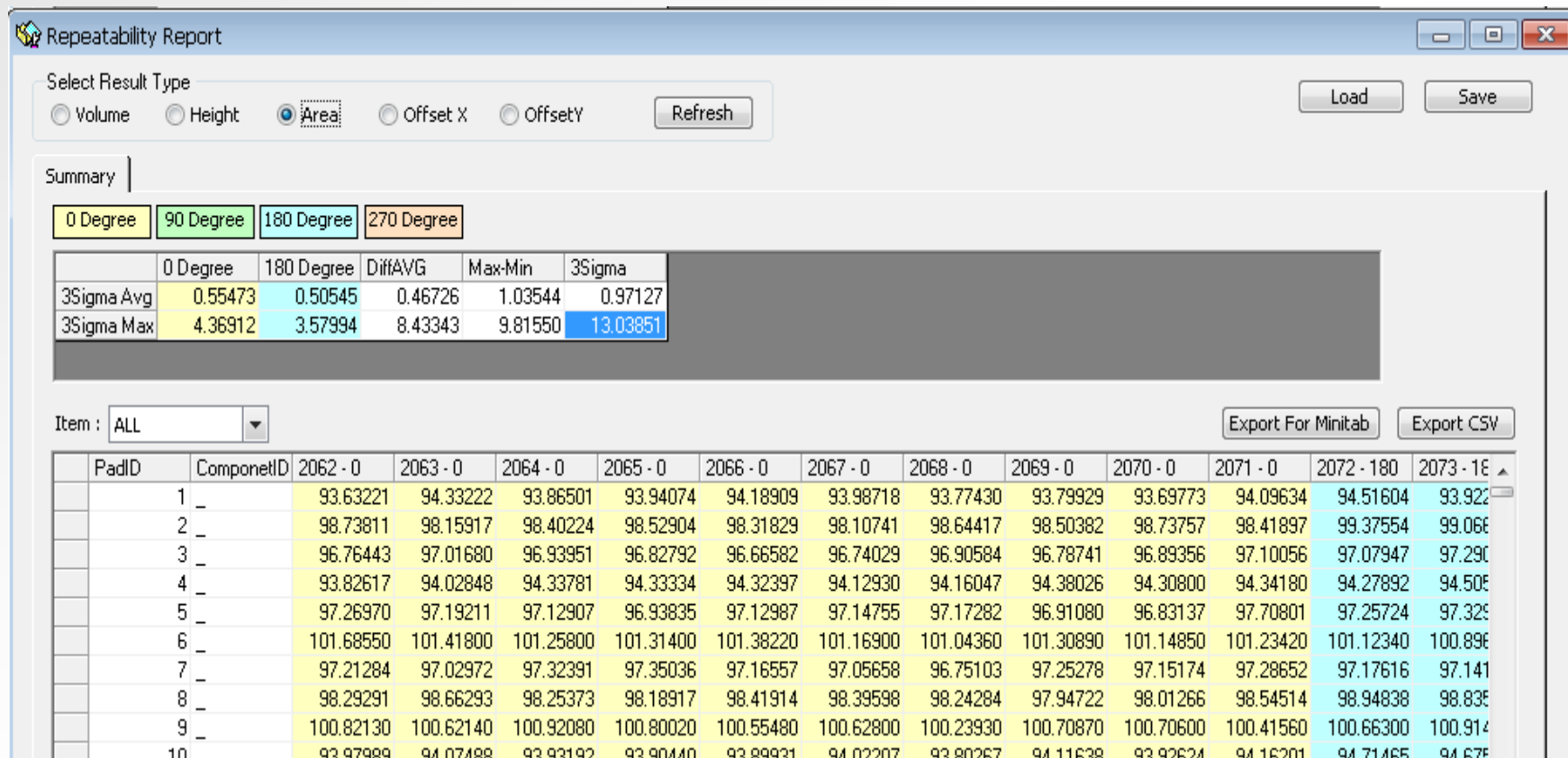
0 Degree 90 Degree 180 Degree 270 Degree

☐ ALL ☒ ALL PAD

Delete OK Cancel

459	DA078L-07160-1-T0	2009-4-1	5:00:57	5:01:15	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E273C	3	1	
460	DA078L-07160-1-T0	2009-4-1	5:01:27	5:01:44	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E263C	3	1	
461	DA078L-07160-1-T0	2009-4-1	5:01:57	5:02:14	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E253C	3	1	
462	DA078L-07160-1-T0	2009-4-1	5:02:26	5:02:44	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E243C	3	1	
463	DA078L-07160-1-T0	2009-4-1	5:02:56	5:03:14	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E233C	3	1	
464	DA078L-07160-1-T0	2009-4-1	5:03:26	5:03:43	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E213C	3	1	
465	DA078L-07160-1-T0	2009-4-1	5:05:21	5:05:39	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E1F3C	3	1	
466	DA078L-07160-1-T0	2009-4-1	5:05:48	5:06:06	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E1B3C	3	1	
467	DA078L-07160-1-T0	2009-4-1	5:06:16	5:06:33	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E1D3C	3	1	
468	DA078L-07160-1-T0	2009-4-1	5:06:43	5:07:00	AutoOperal	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302E403C	3	1	

Repeatability (Two)



PCBView

Home

Search

Tools

Help

ListView

PCBView

Barcode

DefectSPC

MultiSPC

M.R.T. Chart

DefectView

Histogram

DefectList

YieldView

Realtime

Defect Review

M.R.T. SaveData

Print

Setup

Auto Report

ListView

PCBView

SPC

Chart Review

Yield & Defect

Real Mode

Print & Setup

Auto Report

ALL

0/0

☒ Value Trend

Excessive

0/0

Insufficient

0/0

Position

0/0

Bridging

0/0

Shape

0/0

Height

0/0

Volume

0

~

400

Search

Pad ID

R9

Search

<-

>-

[0/0]

1

Step

Volume : Min(74%) Avg(105%) Max(150%)

<0%

200%

PCB Information

Inspection Machine : Local

PCB Name : DA061L-06120-2-T02

PCB IDNO : 8753

Inspection Time : 2009-04-07, 10:31:56 ~ 10:32:13

Result : GOOD

Barcode : MBG1001001913011FD30G1

LOT : 0 (0)

Trend

Legend

180 Over

140 ~ 155

125 ~ 140

110 ~ 125

95 ~ 110

80 ~ 95

65 ~ 80

50 ~ 65

35 ~ 50

20 Less

User Set

☒ Volume

☐ Area

☐ Height

☐ OffsetX

☐ OffsetY

Refresh

NO	3D-Image	RESULT	PadID	ComponentID	SPEC	VOLUME	HEIGHT	AREA	Offset X	Offset Y	RealVol	RealArea
4483	3D	GOOD	4570	C200_1	0	114.34	136.076	109.239	-3.184	49.774	43253260	3
4484	3D	GOOD	4571	X5_2	0	112.61	136.490	105.702	104.991	-43.264	1305877000	94
4485	3D	GOOD	4572	X5_1	0	115.08	141.876	105.443	131.294	-31.151	1334527000	94
4486	3D	GOOD	4573	R396_2	0	107.56	134.058	104.303	-1.057	-6.169	40686300	3
4487	3D	GOOD	4574	R396_1	0	107.96	133.655	105.010	-2.738	-5.991	40838890	3
4488	3D	GOOD	4575	R107_2	0	108.01	130.367	107.704	115.707	59.572	36794880	3

Pad Information

Pad ID : 4565

Component ID : R9_2 , Lib : PART57

Step : 2

Volume : 54.16 Area : 54.838

Height : 128.397(um)

Offset X : 139.961(um) Offset Y : -3.841(um)

Spec

Volume : True

Excess Warn/Err : 210/210

Insuff Warn/Err : 50/50

Offset : True

X Warn 0.36(55%)

X Error 0.357(55%)

Y Warn 0.28(50%)

Unit Display : Height(um) Offset(um) RealVol(um3) RealArea(um2)

Area

ROI

View

Select Export

List Export

Header Save

Pad Trends

<<

>>

Exit

☐ ALL **89/0** ☐ Value Trend

☐ Volume ~

☐ Pad ID

(2/2)

☐ Excessive **0/0**
☐ Insufficient **87/0**
☐ Position **0/0**
☐ Bridging **0/0**
☒ Shape **2/0**
☐ Height **0/0**

Step : FOV檢查步驟

☐ ALL **89/0** ☒ Value Trend

☒ Volume ~

☐ Position X

☐ Position Y

☐ Height

☐ Area

☐ Excessive **0/0**
☐ Insufficient **87/0**
☐ Position **0/0**
☐ Bridging **0/0**
☐ Shape **2/0**
☐ Height **0/0**

Search : 搜尋體積 面積 高度 位
移

☐ ALL **89/0** ☒ Value Trend Pin

☐ Volume ~

☒ Component ID

☐ Pad ID

☐ Component ID

☐ Excessive **0/0**
☐ Insufficient **87/0**
☐ Position **0/0**
☐ Bridging **0/0**
☐ Shape **2/0**
☐ Height **0/0**

Search : 搜尋零件, 角位(pin)要
輸入

PCB Information

Inspection Machine : Local

PCB Name : DA061L-08120-2-T02

PCB IDNO : 477

Inspection Time : 2009-04-01 , 05:26:55 ~ 05:27:12

Total Defect Pads : 89

Result : FAIL

Barcode : MBNAN07001914001F830A1

Pad Information

Pad ID : 2893

Component ID : R22_2 , Lib : PART47

Step : 42

Volume : 63.61 Area : 49.460

Height : 167.183(um)

Offset X : -175.249(um) Offset Y : -129.614(um)

Result : Shape Error

Spec

Volume : True

Excess Warn/Err : 180/180

Insuff Warn/Err : 60/60

Offset : True

X Warn 0.33(51%)

X Error .331(51%)

Y Warn 0.28(51%)



體積分布趨勢設定

☒ ALL 0/0 ☒ Value Trend

☐ Volume 0 ~ 400

☐ Pad ID R9

(0/0) 1

☐ Excessive 0/0

☐ Insufficient 0/0

☐ Position 0/0

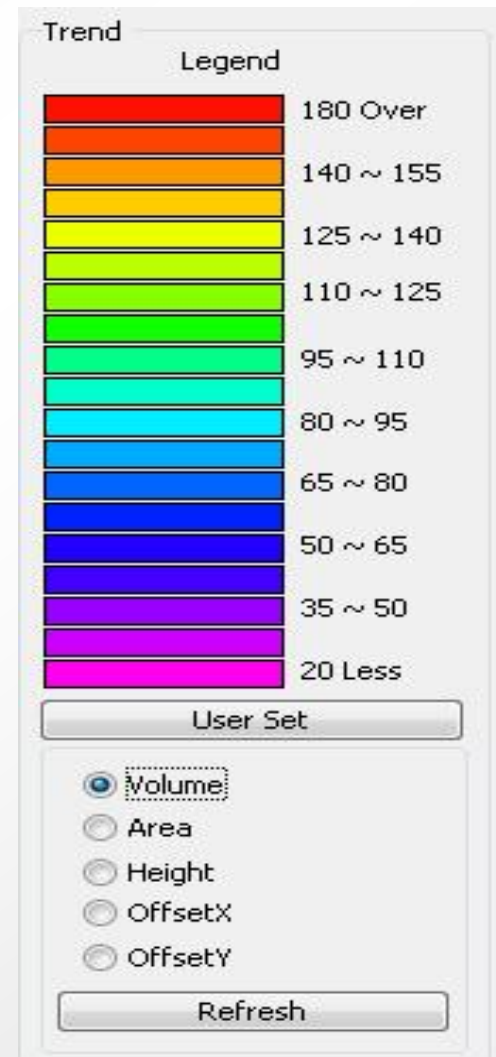
☐ Bridging 0/0

☐ Shape 0/0

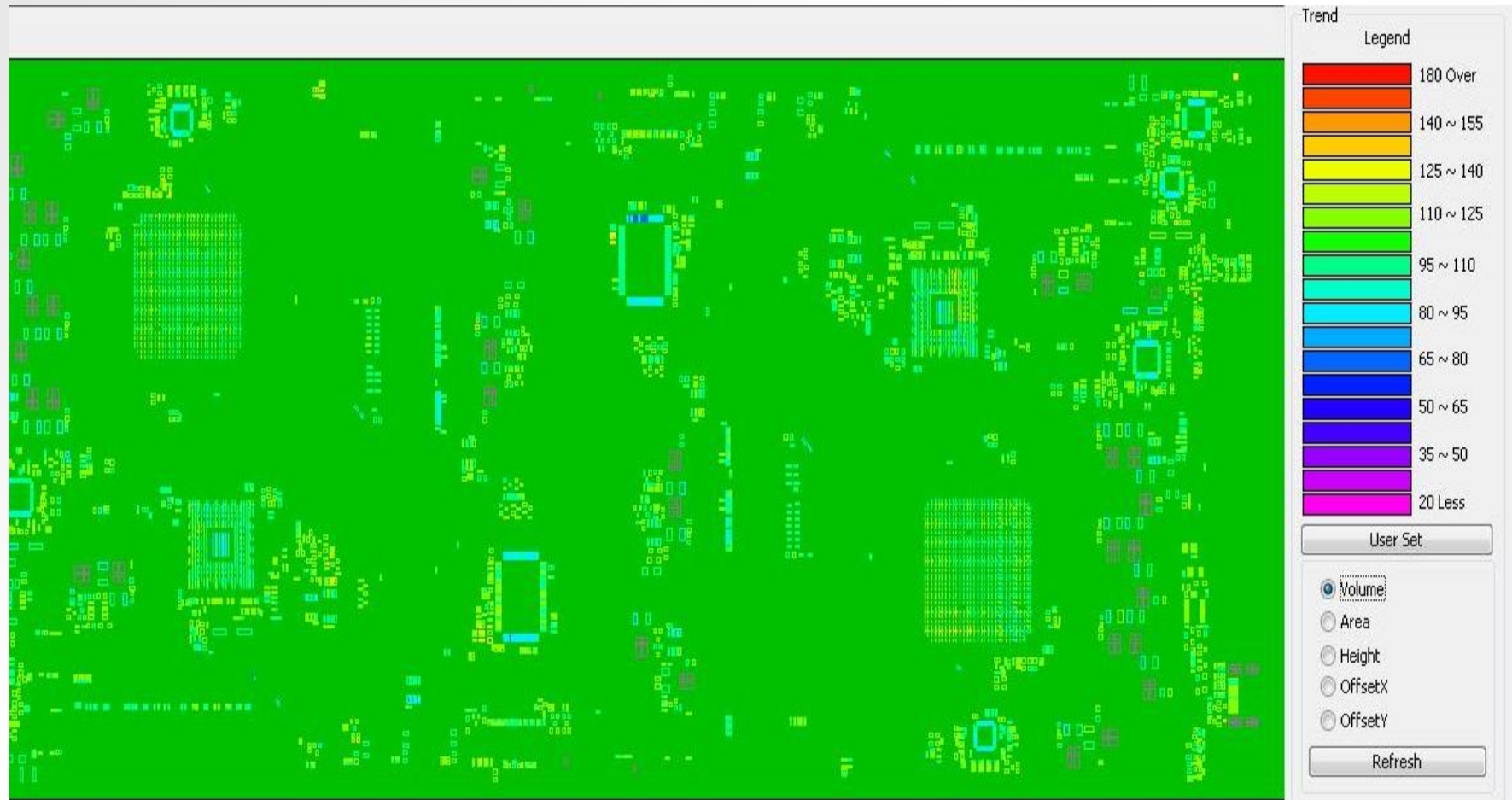
☐ Height 0/0

Value Trend : 檢查 體積 面積 高度 位移(X, Y)
在pcb上的分布情況 可以知道印刷狀況

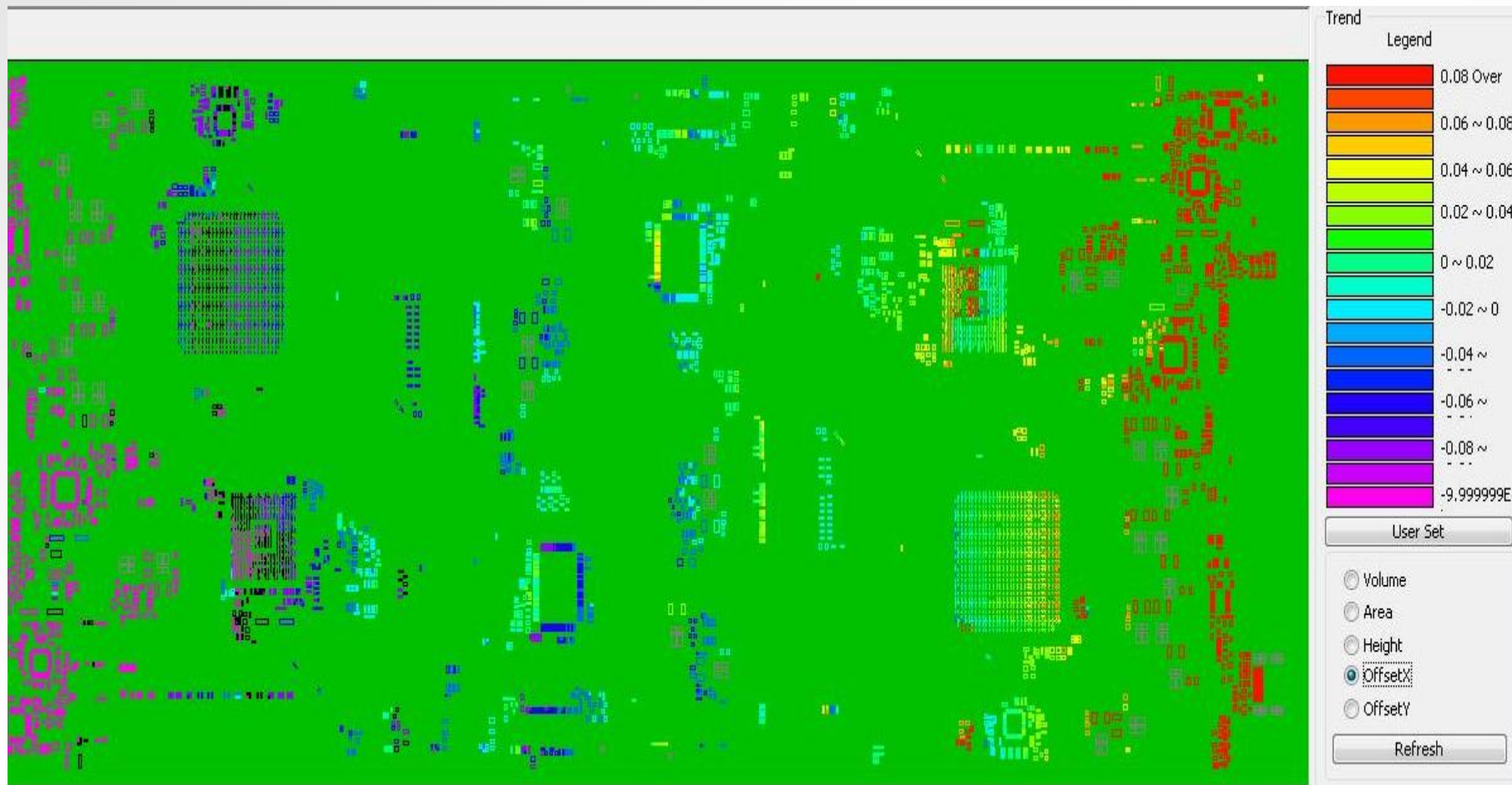
Refresh : 更改檢查項目 必須按一次refresh
(更新)



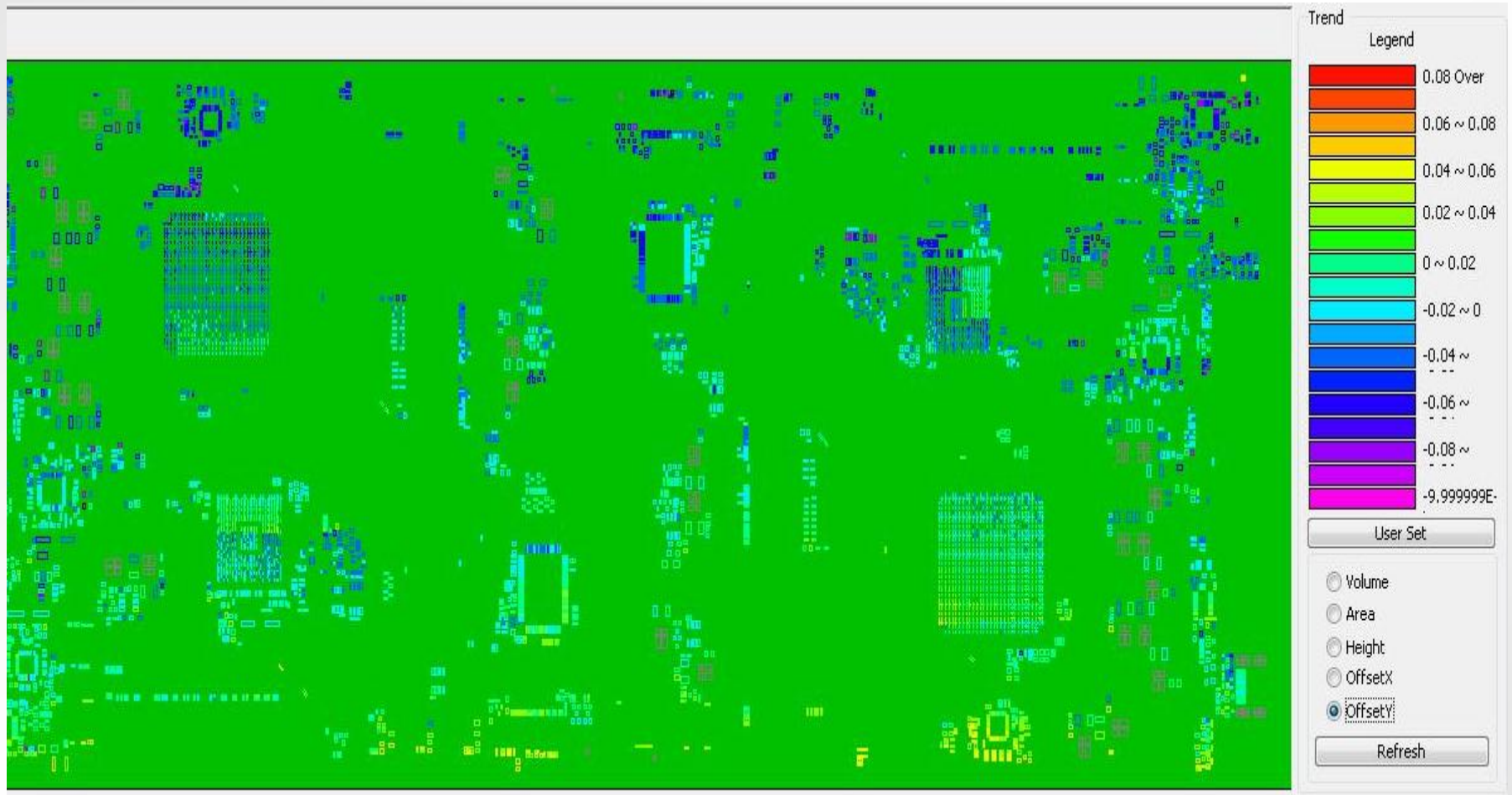
體積分布趨勢



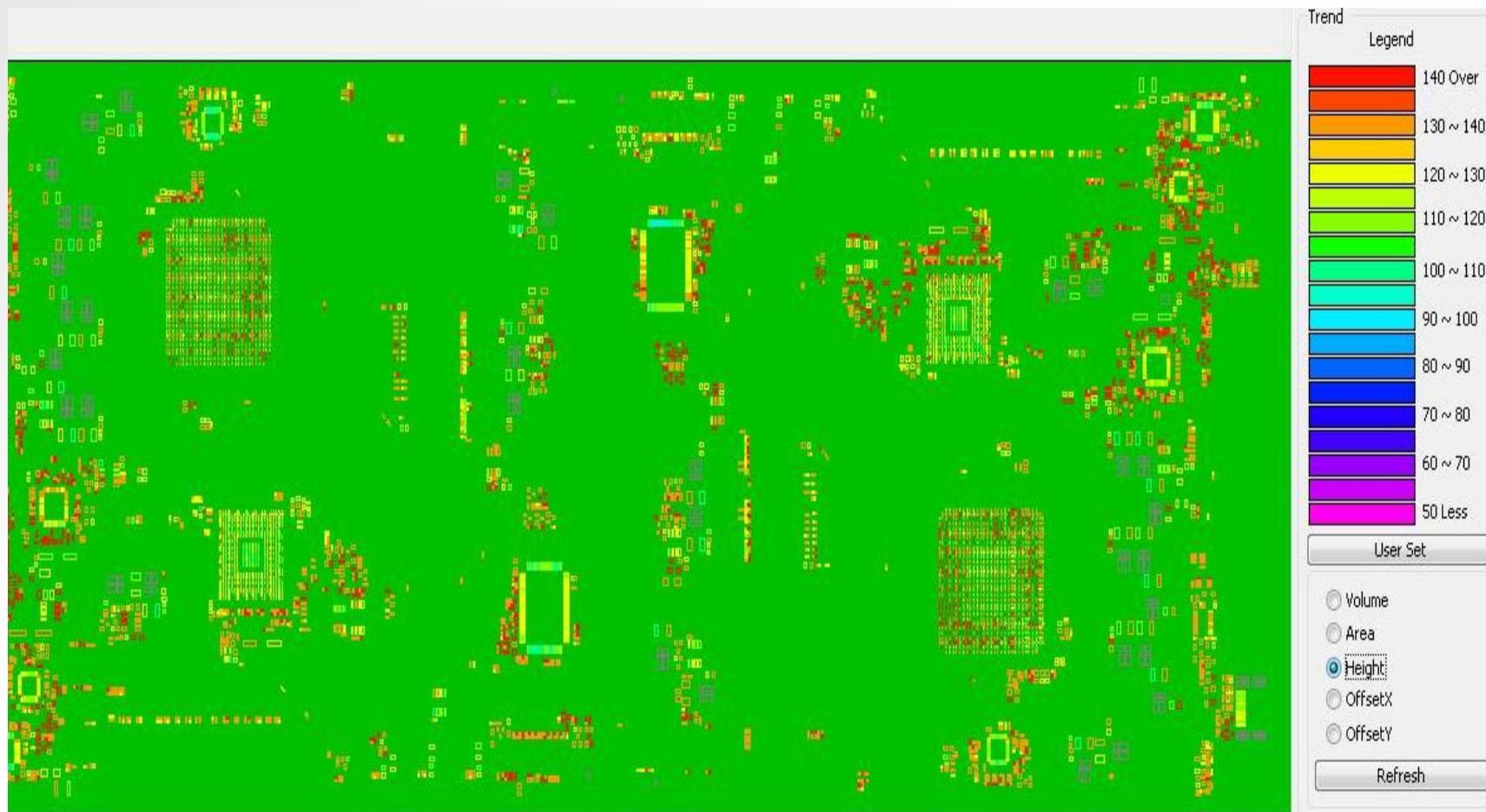
位移(X) 分布趨勢



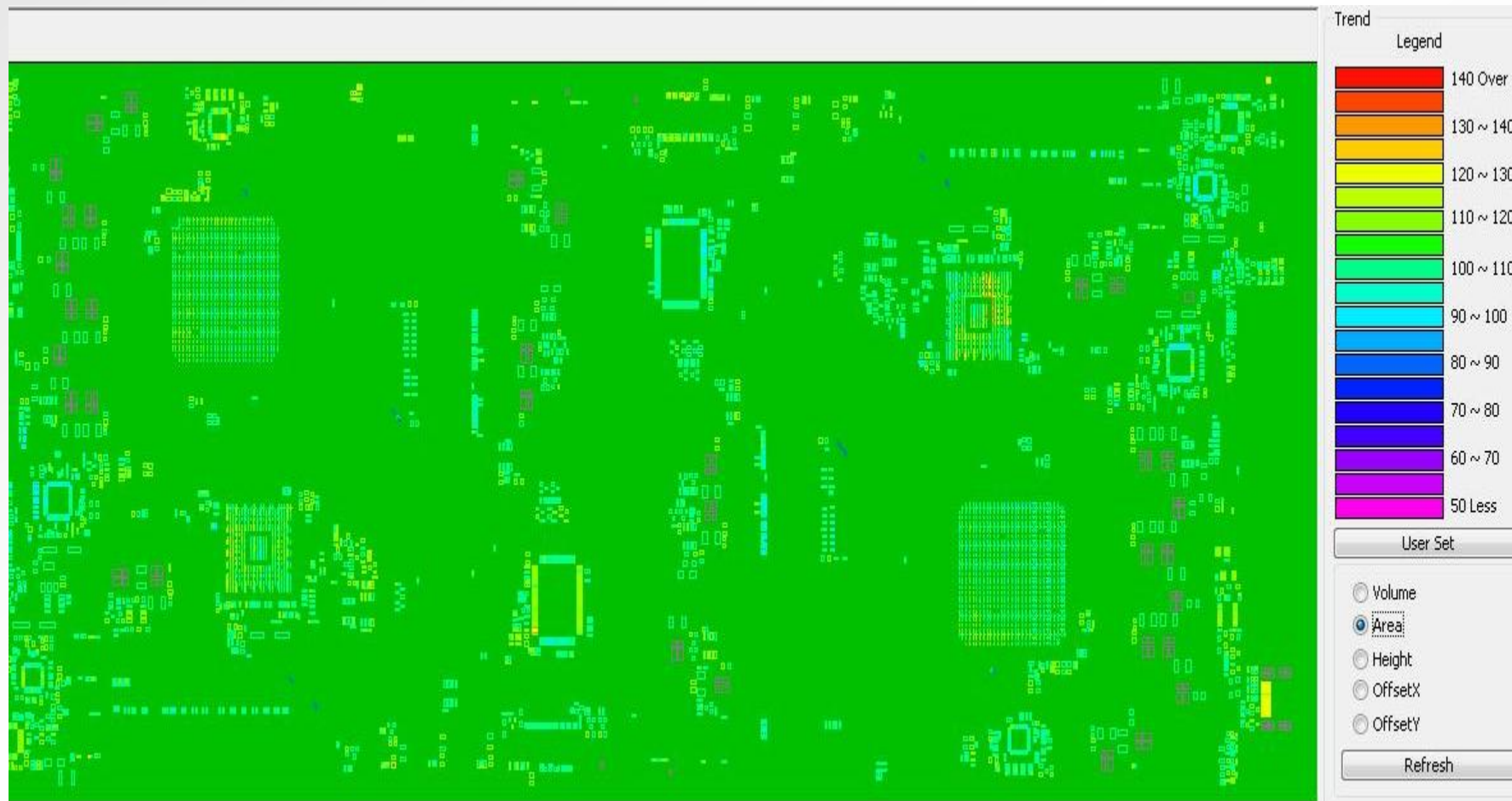
位移(Y) 分布趨勢



高度分布趨勢

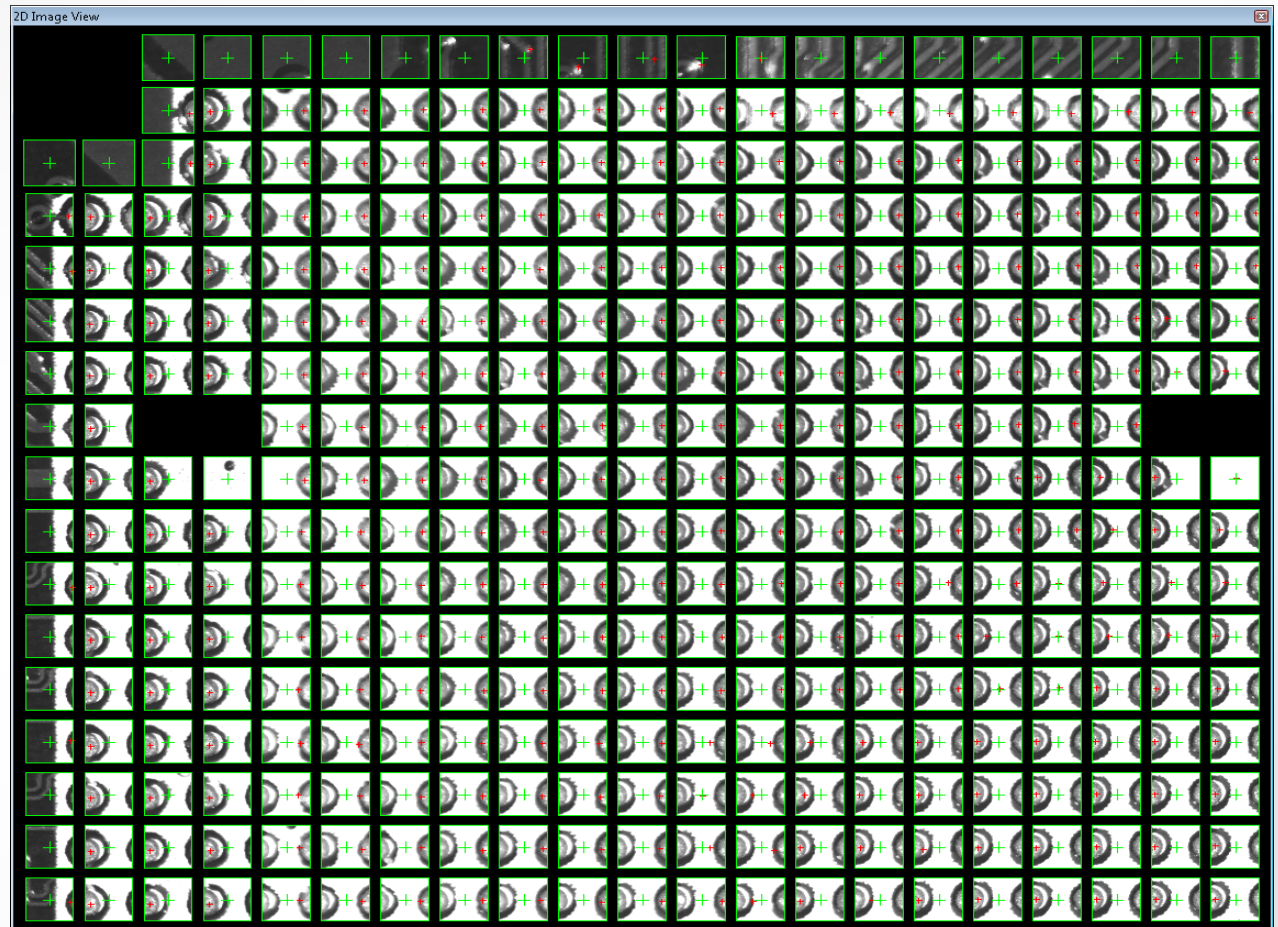
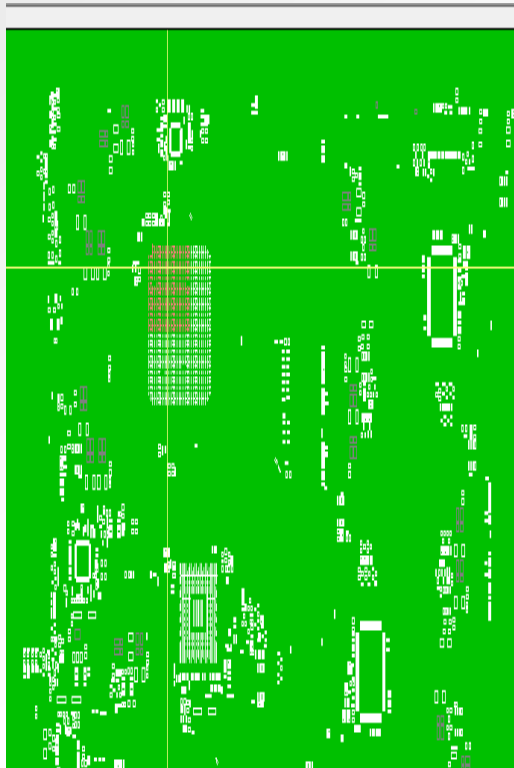


面積 分布趨勢



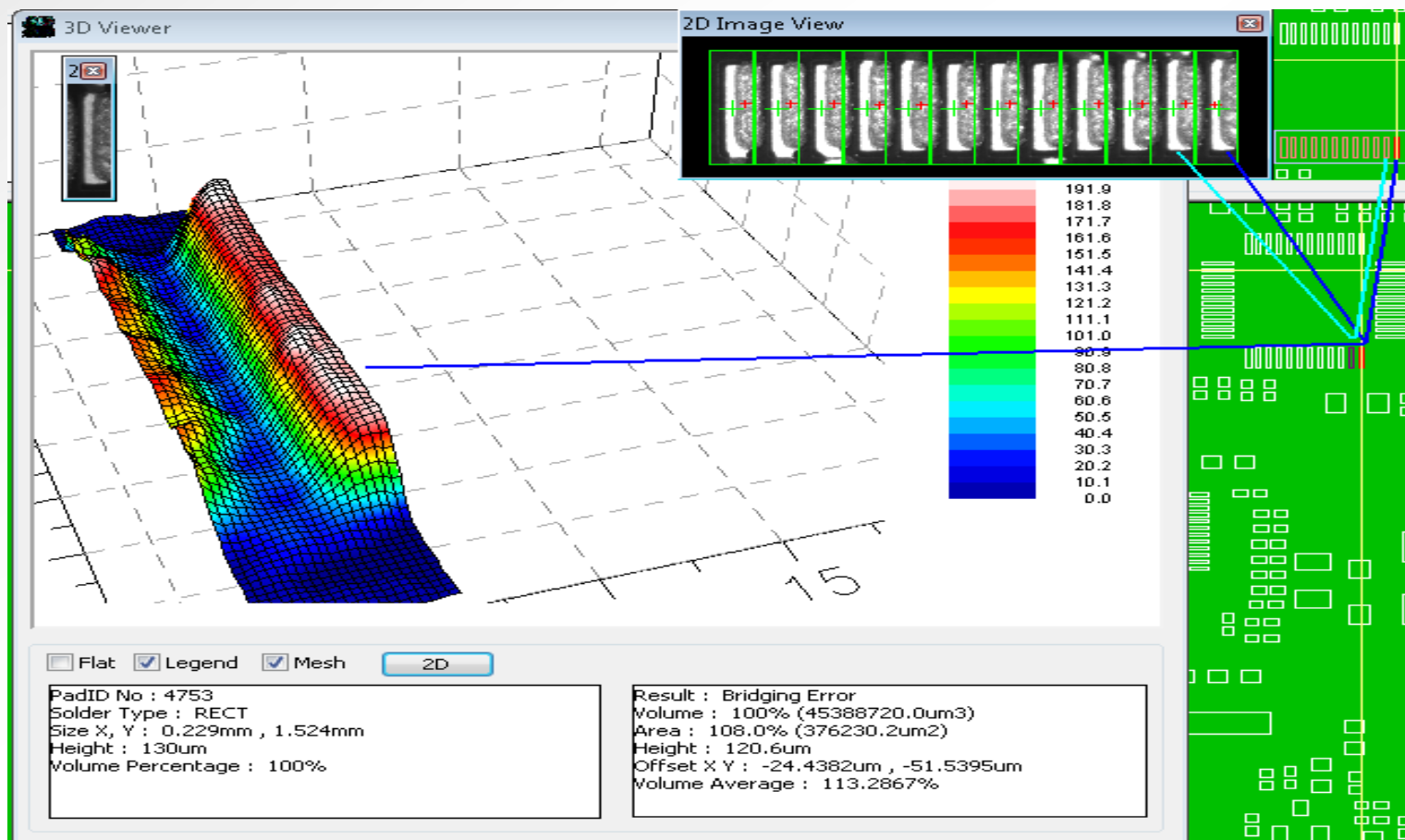
Area / ROI

Unit Display : Height(um) Offset(um) RealVol(um3) RealArea(um2) ☒ Area ☒ ROI

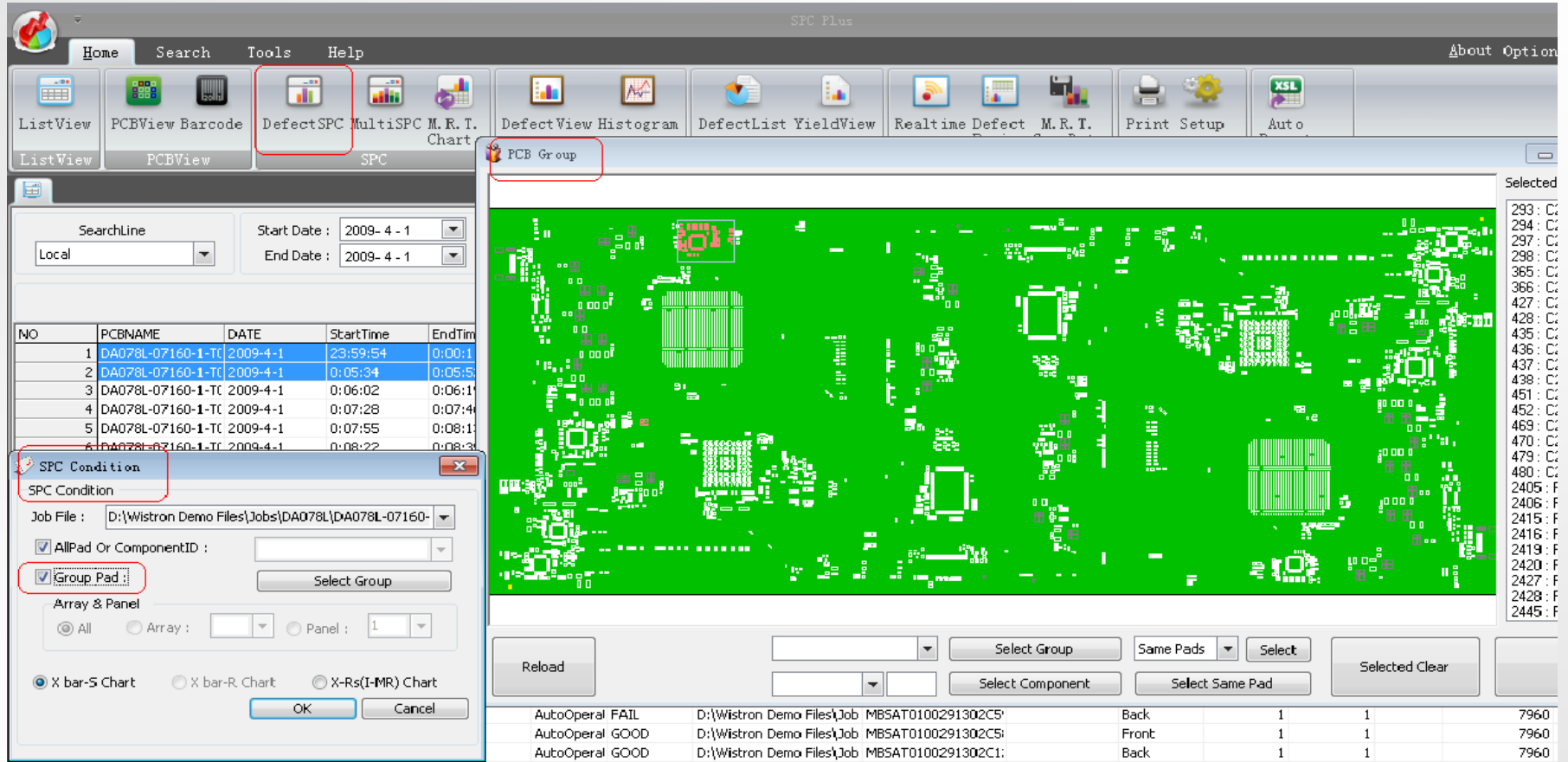


Area / ROI

Unit Display : Height(um) Offset(um) RealVol(um3) RealArea(um2) ☒ Area ☒ ROI View



Defect SPC setting



The screenshot shows the SPC Plus software interface. The main window displays a list of PCBs and their defect data. The 'DefectSPC' button is highlighted in the top toolbar. The 'SPC Condition' dialog box is open, showing the 'Group Pad' option selected. The 'PCB Group' dialog box is also open, showing a list of PCBs and their defect data.

SPC Condition Dialog:

- SearchLine: Local
- Start Date: 2009-4-1
- End Date: 2009-4-1
- Job File: D:\Wistron Demo Files\Jobs\DA078L\DA078L-07160-
- ☒ AllPad Or ComponentID
- ☒ Group Pad
- Array & Panel: All
- Chart Type: X bar-S Chart

PCB Group Dialog:

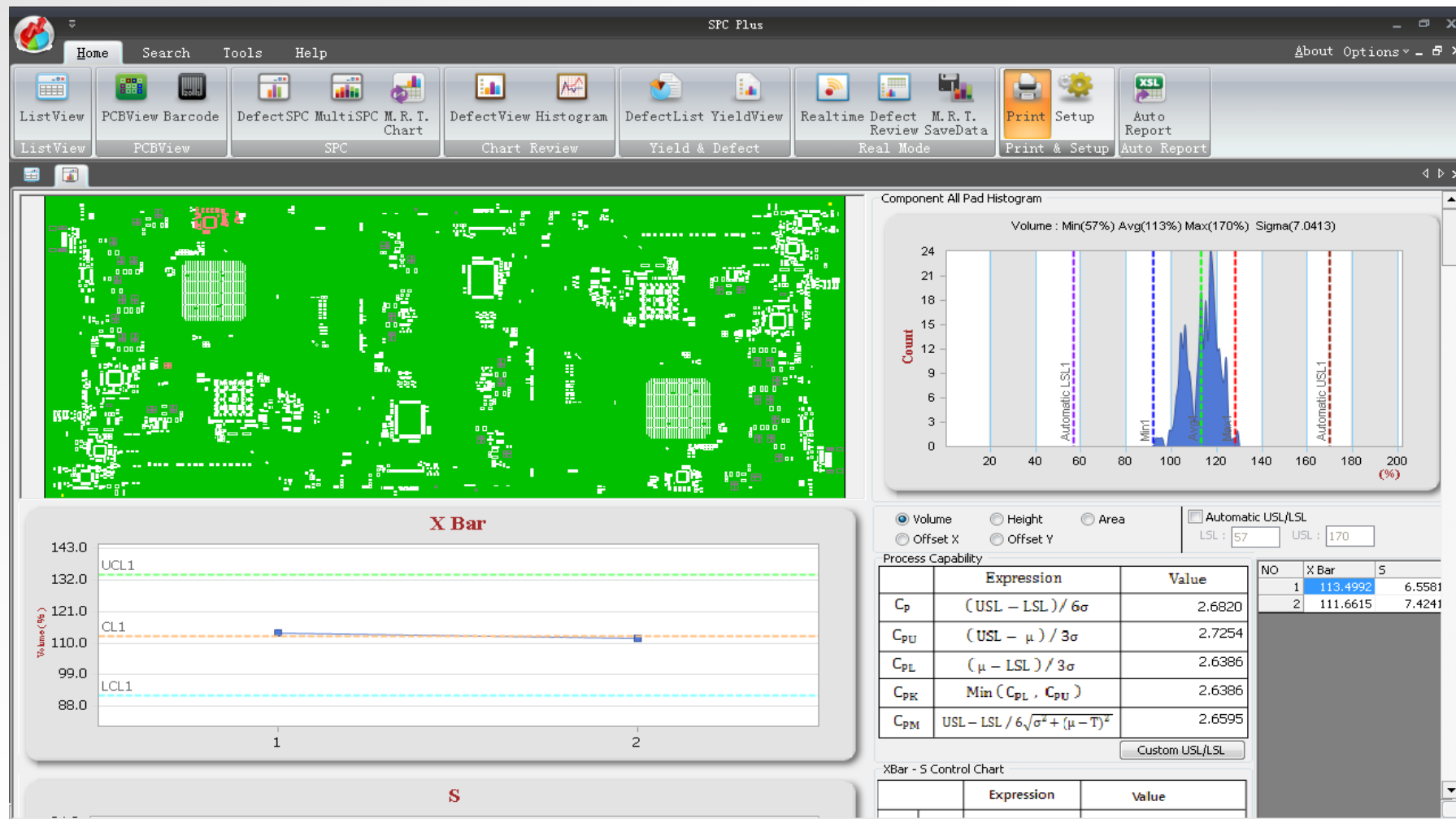
NO	PCBNAME	DATE	StartTime	EndTime
1	DA078L-07160-1-T0	2009-4-1	23:59:54	0:00:11
2	DA078L-07160-1-T0	2009-4-1	0:05:34	0:05:55
3	DA078L-07160-1-T0	2009-4-1	0:06:02	0:06:11
4	DA078L-07160-1-T0	2009-4-1	0:07:28	0:07:44
5	DA078L-07160-1-T0	2009-4-1	0:07:55	0:08:11
6	DA078L-07160-1-T0	2009-4-1	0:08:22	0:08:33

Main Window Table:

AutoOperal	Job	Component	Back	Front	Count	Time
FAIL	D:\Wistron Demo Files\Job	MBSAT0100291302C5	Back	1	1	7960
GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302C5	Front	1	1	7960
GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302C1	Back	1	1	7960

按一下 <DefectSPC> 出現SPC Condition 視窗，選擇<Group Pad:>
 按一下 <Select Group> 出現PCB Group 視窗

DefectSPC(Cp, Cpk)



Custom USL/LSL setup

Custom USL/LSL

Save

Cp / Cpk Cpm

☐ Customer Cp/Cpk

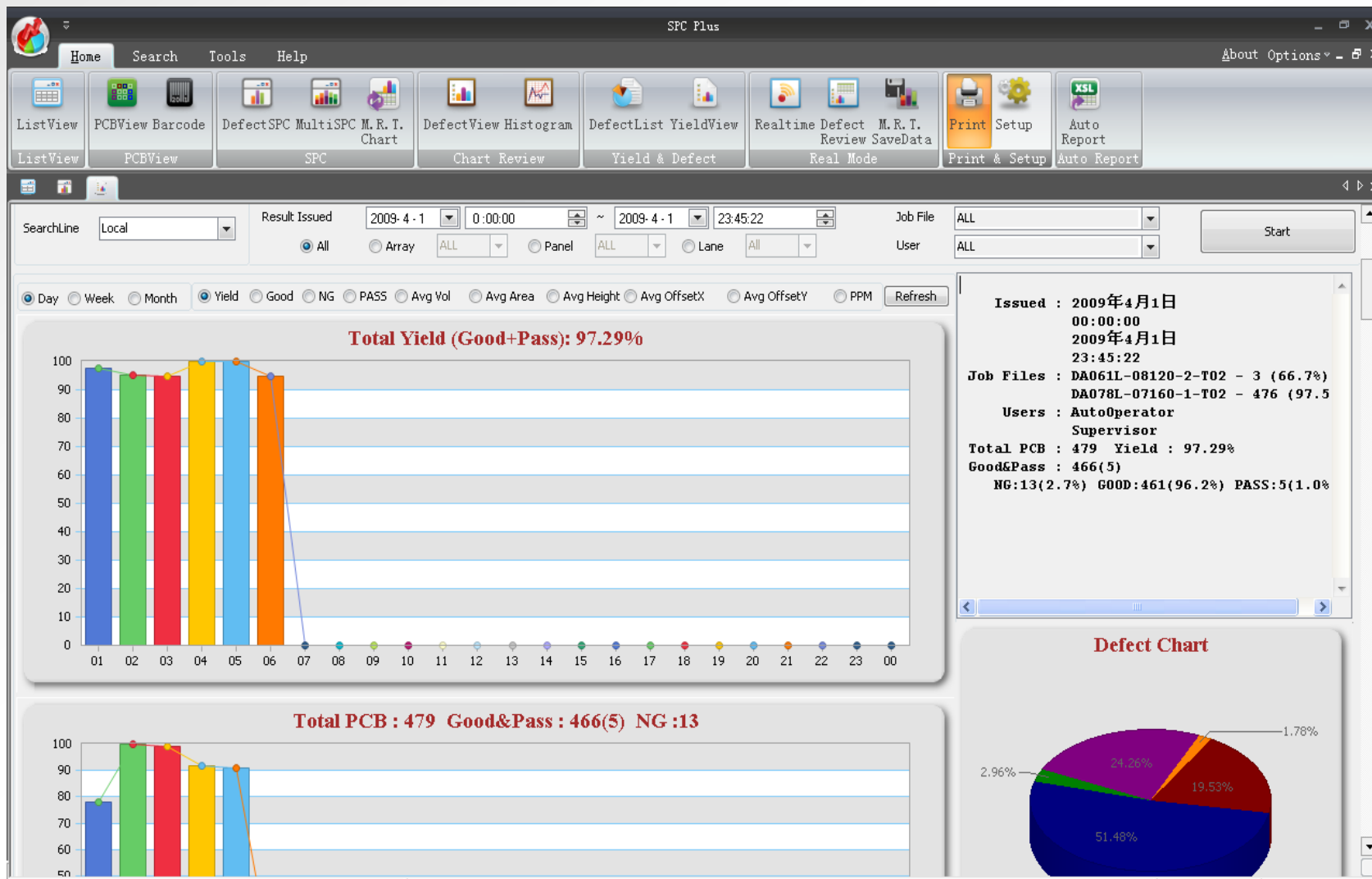
Target

Volume:	113.4992 %	X	1.3	=	147.5489	X	.7	=	79.44944
Height:	133.3991 um	X	1	=	133.3991	X	.8	=	106.7192
Area:	110.9609 %	X	1.5	=	166.4413	X	.5	=	55.48045
OffsetX:	-0.0578 um	*	1.5	=	-0.0867	*	.5	=	-0.0289
OffsetY:	-0.0044 um	*	1.5	=	-0.0066	*	.5	=	-0.0022

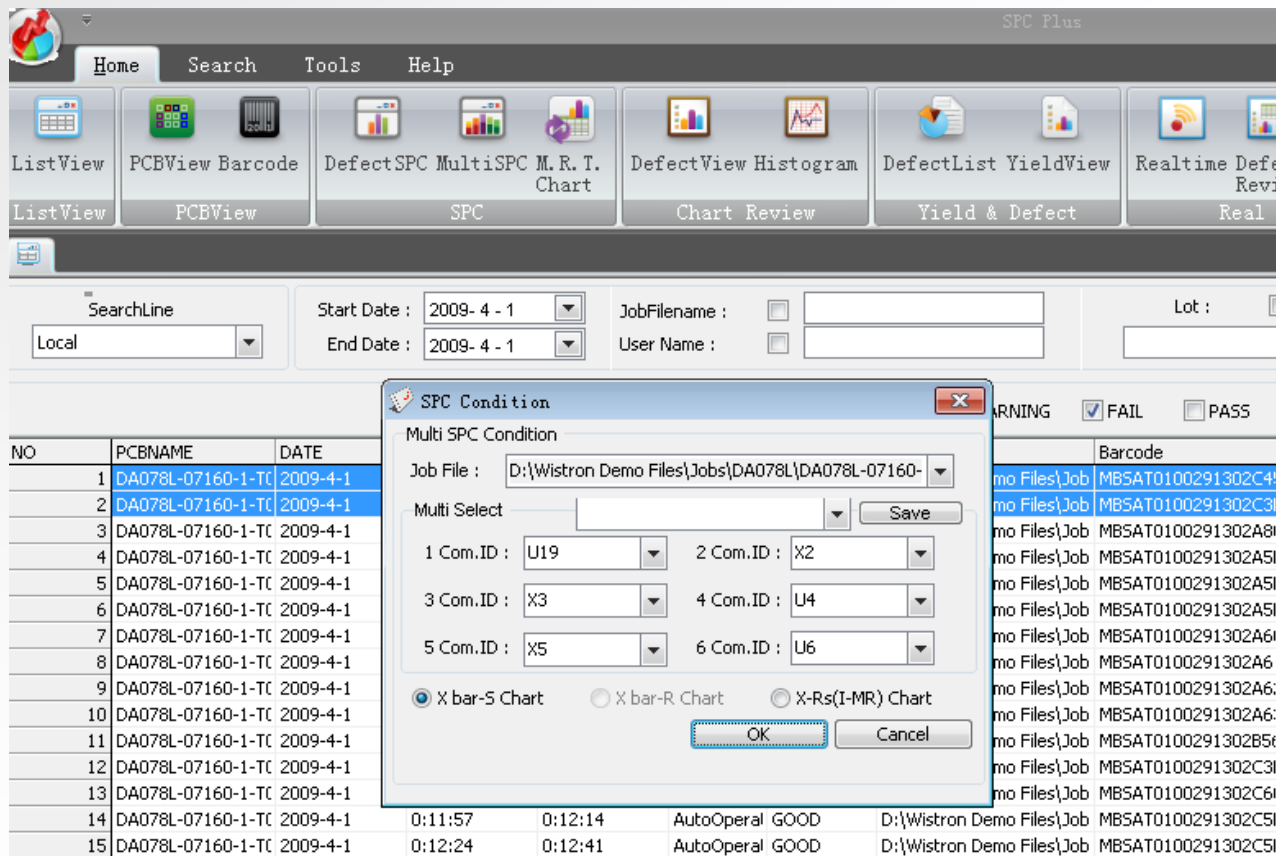
Customer Cpu/Cpl Sigma = 1

OK Cancel

YieldView



MultiSPC (One)



The screenshot shows the SPC Plus software interface. The main window has a menu bar (Home, Search, Tools, Help) and a toolbar with icons for ListView, PCBView Barcode, DefectSPC MultiSPC M. R. T. Chart, DefectView Histogram, DefectList YieldView, and Realtime Defect Review. Below the toolbar is a search area with a SearchLine and a dropdown menu. The main data area displays a table with columns NO, PCBNAME, and DATE. A dialog box titled "SPC Condition" is open, showing the "Multi SPC Condition" tab. The dialog box contains fields for Job File, Multi Select, and six Com.ID fields (1 Com.ID to 6 Com.ID). The "X bar-S Chart" radio button is selected. The "OK" button is highlighted.

NO	PCBNAME	DATE
1	DA078L-07160-1-TC	2009-4-1
2	DA078L-07160-1-TC	2009-4-1
3	DA078L-07160-1-TC	2009-4-1
4	DA078L-07160-1-TC	2009-4-1
5	DA078L-07160-1-TC	2009-4-1
6	DA078L-07160-1-TC	2009-4-1
7	DA078L-07160-1-TC	2009-4-1
8	DA078L-07160-1-TC	2009-4-1
9	DA078L-07160-1-TC	2009-4-1
10	DA078L-07160-1-TC	2009-4-1
11	DA078L-07160-1-TC	2009-4-1
12	DA078L-07160-1-TC	2009-4-1
13	DA078L-07160-1-TC	2009-4-1
14	DA078L-07160-1-TC	2009-4-1
15	DA078L-07160-1-TC	2009-4-1

按一下 <MultiSPC>
個零件

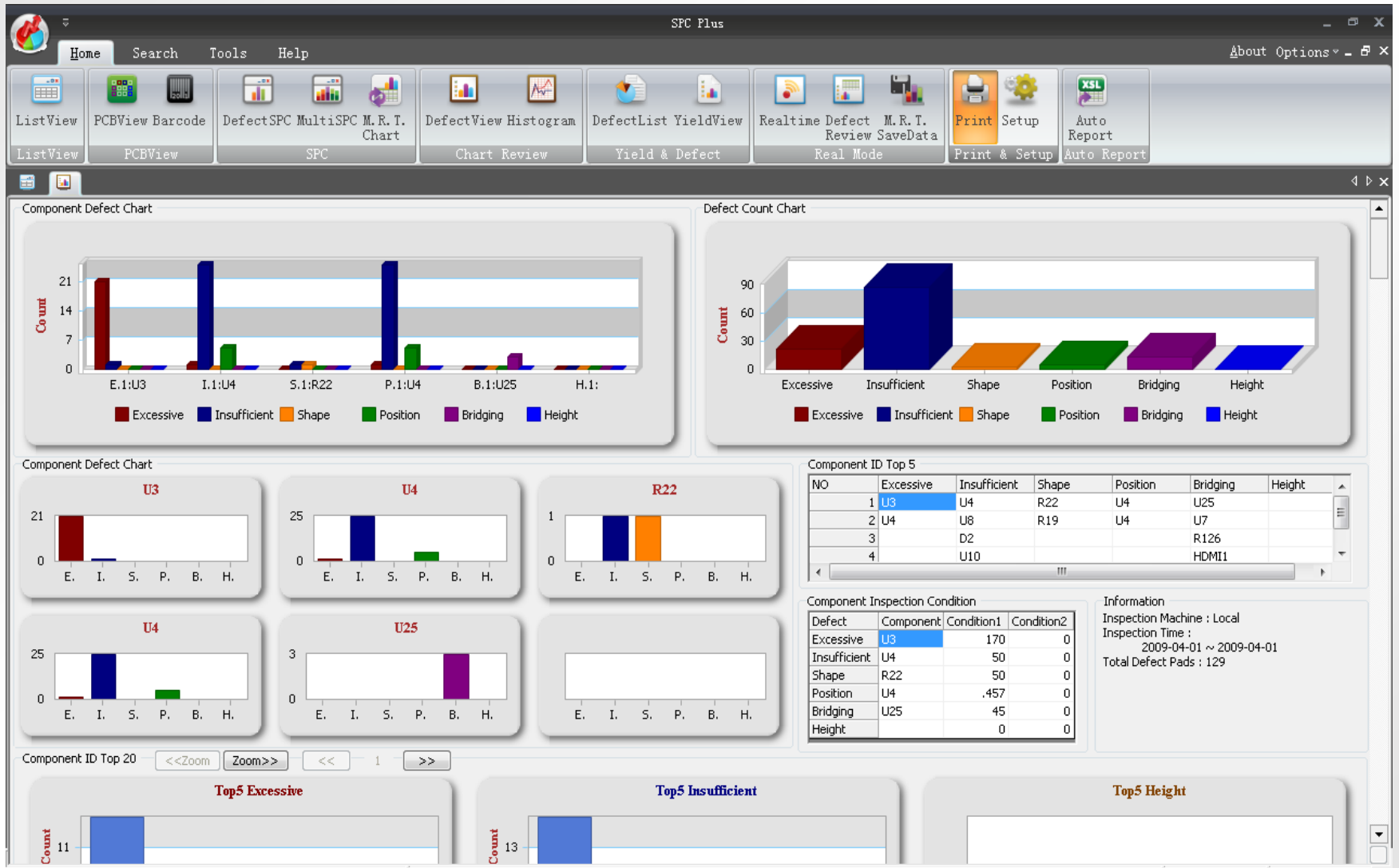


出現Multi SPC Condition 視窗，可以選擇最多六

MultiSPC (Two)



DefectView



Hisogram

SPC Plus

Home Search Tools Help

ListView PCBView Barcode DefectSPC MultiSPC M.R.T. Chart DefectView Histogram DefectList YieldView Realtime Defect M.R.T. Review SaveData Print Setup Auto Report
 ListView PCBView SPC Chart Review Yield & Defect Real Mode Print & Setup Auto Report

SearchLine: Local Start Date: 2009-4-1 End Date: 2009-4-1 JobFilename: User Name: Lot: BarCode All Line Barcode Search
 MBSAT0100291302A5D30L1

Test Result: ☒ GOOD ☐ WARNING ☒ FAIL ☐ PASS

NO	PCBNAME	DATE	StartTime	EndTime	USER	RESULT	JobFileName	Barcode	LOT	Squeegee	LogDB	Lane	LotCo
20	DA078L-07160-1-TC	2009-4-1	0:14:57	0:15:14	AutoOper					Back	1	1	
59	DA078L-07160-1-TC	2009-4-1	0:42:13	0:42:31	AutoOper					Front	1	1	
84	DA078L-07160-1-TC	2009-4-1	1:03:01	1:03:19	AutoOper					Back	1	1	
99	DA078L-07160-1-TC	2009-4-1	1:10:59	1:11:16	AutoOper					Front	1	1	
101	DA078L-07160-1-TC	2009-4-1	1:12:31	1:12:48	AutoOper					Front	1	1	
124	DA078L-07160-1-TC	2009-4-1	1:25:32	1:25:50	AutoOper					Back	1	1	
160	DA078L-07160-1-TC	2009-4-1	1:50:34	1:50:52	AutoOper					Back	1	1	
185	DA078L-07160-1-TC	2009-4-1	2:02:57	2:03:15	AutoOper					Front	2	1	
194	DA078L-07160-1-TC	2009-4-1	2:07:31	2:07:49	AutoOper					Back	2	1	
235	DA078L-07160-1-TC	2009-4-1	2:39:09	2:39:26	AutoOper					Front	2	1	
236	DA078L-07160-1-TC	2009-4-1	2:39:53	2:40:11	AutoOper					Back	2	1	
237	DA078L-07160-1-TC	2009-4-1	2:40:31	2:40:49	AutoOper					Front	2	1	
472	DA061L-08120-2-TC	2009-4-1	5:26:55	5:27:12	AutoOper					Front	3	1	
1	DA078L-07160-1-TC	2009-4-1	23:59:54	0:00:11	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302C4		Back	1	1	
2	DA078L-07160-1-TC	2009-4-1	0:05:34	0:05:52	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302C3		Back	1	1	
3	DA078L-07160-1-TC	2009-4-1	0:06:02	0:06:19	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302A8		Front	1	1	
4	DA078L-07160-1-TC	2009-4-1	0:07:28	0:07:46	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302A5		Back	1	1	
5	DA078L-07160-1-TC	2009-4-1	0:07:55	0:08:13	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302A5		Front	1	1	
6	DA078L-07160-1-TC	2009-4-1	0:08:22	0:08:39	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302A5		Back	1	1	
7	DA078L-07160-1-TC	2009-4-1	0:08:40	0:08:57	AutoOper	GOOD	D:\Wistron Demo Files\Job	MBSAT0100291302A5		Front	1	1	

Histogram Condition

Histogram Condition

Job File : D:\Wistron Demo Files\Jobs\DA078L\DA078L-07160-

☒ AllPad Or ComponentID :

☐ Group Pad :

☐ Using Array & Panel

OK Cancel

按一下 <Histogram> 出現Histogram Condition 視窗，選擇<Group Pad:>按一下 <Select Group>出現PCB Group 視窗

Group 1 & 2

SPC P

Home Search Tools Help

ListView PCBView Barcode DefectSPC MultiSPC M.R.T. Chart DefectView Histogram DefectList Yield

SearchLine: Local Start Date: 2009-4-1 End Date: 2009-4-1 JobFilename: User Name:

Test Result: ☒ GOOD ☐ WARNING

NO	PCBNAME	DATE	StartTime	EndTime	USER	RESULT	JobFileName
449	DA078L-07160-1-TC	2009-4-1	4:48:48	4:49:06	AutoOper	GOOD	D:\Wistron Demo Files
450	DA078L-07160-1-TC	2009-4-1	4:49:20	4:49:37	AutoOper	GOOD	D:\Wistron Demo Files
451	DA078L-07160-1-TC	2009-4-1	4:49:51	4:50:08	AutoOper	GOOD	D:\Wistron Demo Files
452	DA078L-07160-1-TC	2009-4-1	4:56:44	4:57:02	AutoOper	GOOD	D:\Wistron Demo Files
453	DA078L-07160-1-TC	2009-4-1	4:57:26	4:57:42	AutoOper	GOOD	D:\Wistron Demo Files
454	DA078L-07160-1-TC	2009-4-1			AutoOper	GOOD	D:\Wistron Demo Files
455	DA078L-07160-1-TC	2009-4-1			AutoOper	GOOD	D:\Wistron Demo Files
456	DA078L-07160-1-TC	2009-4-1			AutoOper	GOOD	D:\Wistron Demo Files
457	DA078L-07160-1-TC	2009-4-1			AutoOper	GOOD	D:\Wistron Demo Files
458	DA078L-07160-1-TC	2009-4-1			AutoOper	GOOD	D:\Wistron Demo Files
459	DA078L-07160-1-TC	2009-4-1	5:00:57	5:01:15	AutoOper	GOOD	D:\Wistron Demo Files
460	DA078L-07160-1-TC	2009-4-1	5:01:27	5:01:44	AutoOper	GOOD	D:\Wistron Demo Files
461	DA078L-07160-1-TC	2009-4-1	5:01:57	5:02:14	AutoOper	GOOD	D:\Wistron Demo Files
462	DA078L-07160-1-TC	2009-4-1	5:02:26	5:02:44	AutoOper	GOOD	D:\Wistron Demo Files
463	DA078L-07160-1-TC	2009-4-1	5:02:56	5:03:14	AutoOper	GOOD	D:\Wistron Demo Files
464	DA078L-07160-1-TC	2009-4-1	5:03:26	5:03:43	AutoOper	GOOD	D:\Wistron Demo Files

PCB View
Defect List
Delete Record
GroupList

Group List

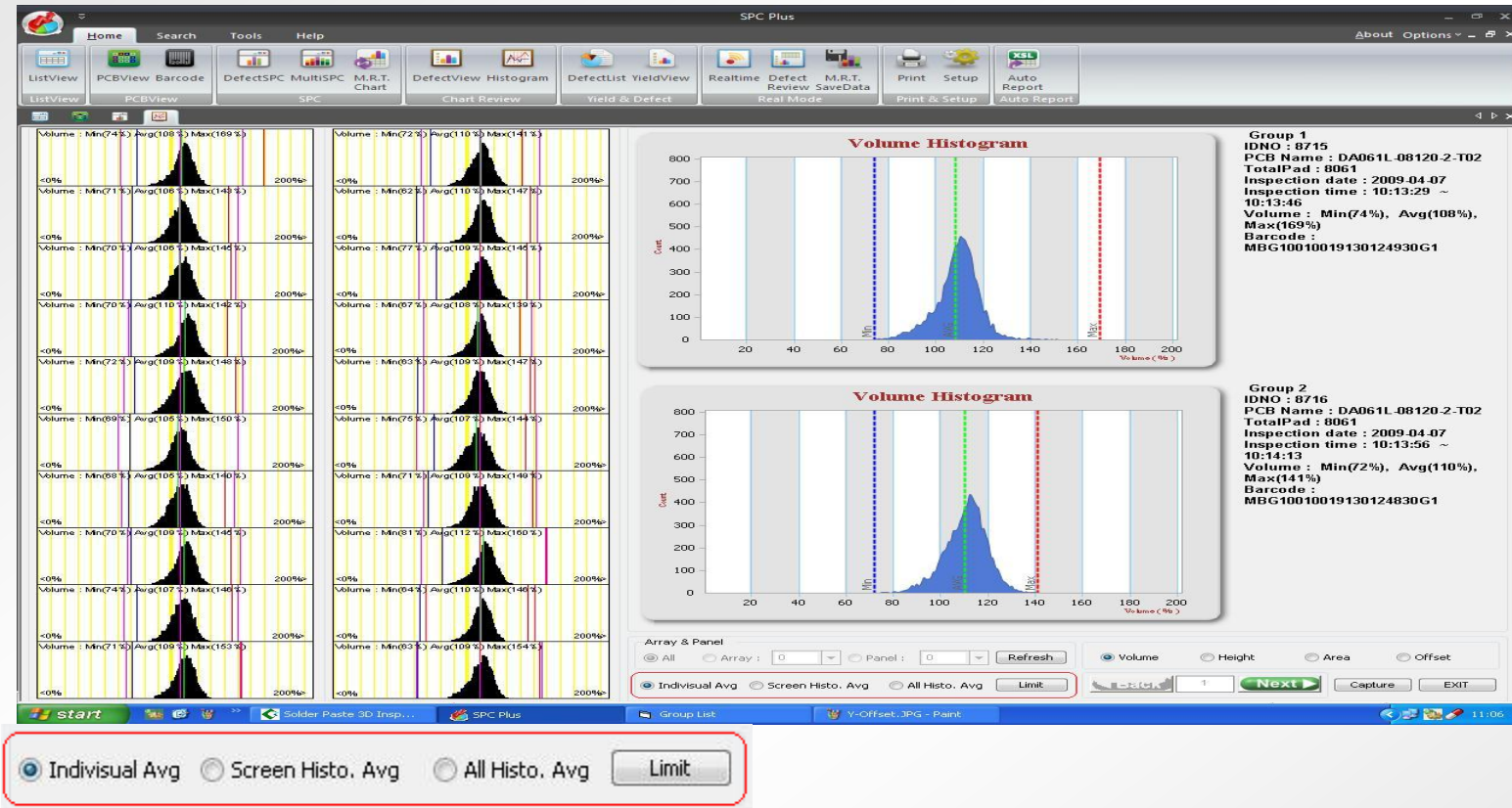
Group1 Selected List Count :9

NO	LINE	IDNO	PCBNAME	DATE	StartTime	EndTime	USER	RESULT	JobFileNar	Barcode	LOT	Squeegee	LogDb	Lane	LotC
1	Local	1	DA078L-07160-1-TC	2009-4-1	23:59:54	0:00:11	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
2	Local	2	DA078L-07160-1-TC	2009-4-1	0:05:34	0:05:52	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
3	Local	3	DA078L-07160-1-TC	2009-4-1	0:06:02	0:06:19	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
4	Local	4	DA078L-07160-1-TC	2009-4-1	0:07:28	0:07:46	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
5	Local	5	DA078L-07160-1-TC	2009-4-1	0:07:55	0:08:13	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
6	Local	6	DA078L-07160-1-TC	2009-4-1	0:08:22	0:08:39	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
7	Local	7	DA078L-07160-1-TC	2009-4-1	0:08:49	0:09:06	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
8	Local	8	DA078L-07160-1-TC	2009-4-1	0:09:16	0:09:33	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
9	Local	9	DA078L-07160-1-TC	2009-4-1	0:09:43	0:10:00	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1

Group2 Selected List Count :9

NO	LINE	IDNO	PCBNAME	DATE	StartTime	EndTime	USER	RESULT	JobFileNar	Barcode	LOT	Squeegee	LogDb	Lane	LotC
1	Local	10	DA078L-07160-1-TC	2009-4-1	0:10:09	0:10:27	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
2	Local	11	DA078L-07160-1-TC	2009-4-1	0:10:36	0:10:54	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
3	Local	12	DA078L-07160-1-TC	2009-4-1	0:11:03	0:11:20	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
4	Local	13	DA078L-07160-1-TC	2009-4-1	0:11:30	0:11:47	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
5	Local	14	DA078L-07160-1-TC	2009-4-1	0:11:57	0:12:14	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
6	Local	15	DA078L-07160-1-TC	2009-4-1	0:12:24	0:12:41	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
7	Local	16	DA078L-07160-1-TC	2009-4-1	0:12:51	0:13:09	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1
8	Local	17	DA078L-07160-1-TC	2009-4-1	0:13:18	0:13:36	AutoOper	GOOD	D:\Wistron MBSAT01C		Front			1	1
9	Local	18	DA078L-07160-1-TC	2009-4-1	0:13:52	0:14:10	AutoOper	GOOD	D:\Wistron MBSAT01C		Back			1	1

Histogram with two groups

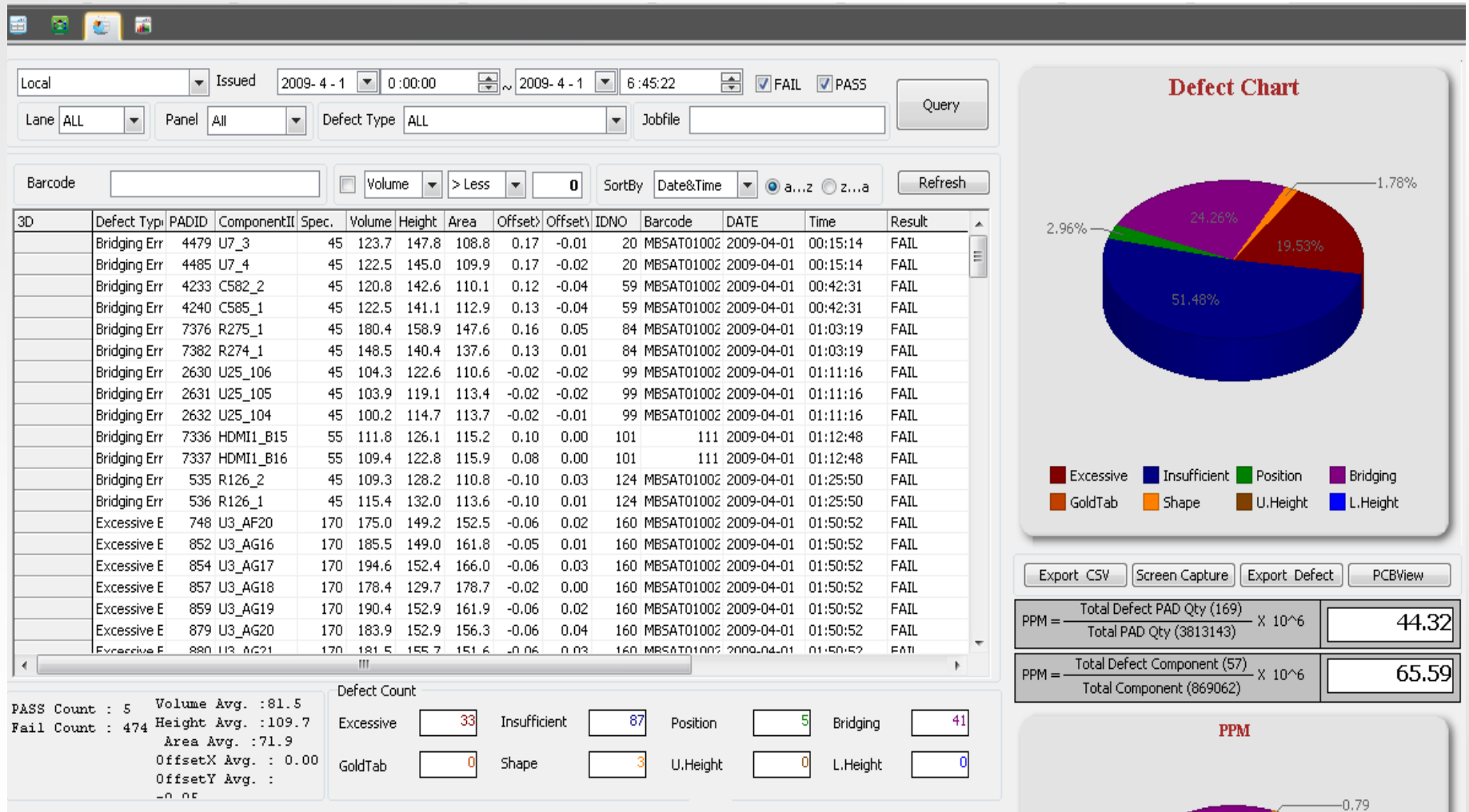


Individual Avg: 顯示每片pcb最小值, 平均值, 最大值.

Screen Histo. Avg: 以螢幕上出現的pcb顯示每片pcb最小值, 平均值, 最大值

All Histo. Avg: 顯示所有選擇的pcb最小值, 平均值, 最大值

DefectSPC



SPC Setup(basic)

Setup

Basic Setup | RealTime Setup | Alarming Setup

Result Export Type ☒ With Header Print

☒ Text ☐ Excel(CSV) ☐ Side Print

UnExport Item

- Size X
- Size Y
- PAD Type
- Volume(um3)
- Area(um2)
- PinNumber
- Pad verification
- PCB ID
- Job
- Time
- Shape
- LANE

Export Item

- PAD ID
- Component ID
- Volume(%)
- Height(um)
- OffsetX(um)
- OffsetY(um)
- Area(%)
- Result
- Barcode

Sort by: PAD ID

☒ Ascend ☐ Descend

Export Type

☒ All ☐ Group

☐ Offset * 1000

Defect View

☐ Use Defect ☐ Use GoldTab ☐ S-PCBView

RealTime Mode

☐ RealTime 3D ☒ RealTime Chart

☐ RealTime (Dual Lane) ☐ RealTime Multi

Special Language

☐ French

Defect Limit

☐ Use Defect Limit : 100 %

Export & Screen Unit

☒ um & mm ☐ mil & inch

YieldView

GOOD = ☒ Good+Pass ☐ Good Only

Yield View Count

☐ by Count ☒ by Percentage

Screen Capture Folder

C:\KohYoung

Change Folder

USL/LSL Formula

☒ Default ☐ //x +- 5*Sigma(overall)

USL/LSL Offset

☒ Offset Calculation with "x"

☐ Offset Calculation with "+"

UCL/LCL Formula

☒ Montgomery ☐ $\bar{\bar{x}} \pm 2.58\sigma(\bar{s})$

Bad Mark

☐ Bad Mark View

☐ GOOD ☒ FAIL

Ok Cancel Apply

SPC Setup(Alarming)

Setup

Basic Setup RealTime Setup **Alarming Setup**

Define Tests

Test	Argument	Definition
1:	0	One point more than K sigmas from center line
2:	0	K points in a row on same side of center line
3:	0	K points in a row, all increasing or all decreasing
4:	0	K points in a row, alternation up and down
5:	0	K out of K+1 points more than 2 sigmas from center line [same side]
6:	0	K out of K+1 points more than 1 sigma from center line [same side]
7:	0	K points in a row within 1 sigma of center line [either side]
8:	0	K points in a row more than 1 sigma from center line [either side]

Tests

Tests For Special Causes [default definitions]

☒ Perform all eight tests

☐ Choose specific tests to perform

- ☐ One point more than 3 sigmas from center line
- ☐ Nine points in a row on same side of center line
- ☐ Six points in a row, all increasing or all decreasing
- ☐ Fourteen points in a row, alternating up and down
- ☐ Two out of three points more than 2 sigmas from center line [same side]
- ☐ Four out of five points more than 1 sigma from center line [same side]
- ☐ Fifteen points in a row within 1 sigma of center line [either side]
- ☐ Eight points in a row more than 1 sigma from center line [either side]

Ok Cancel Apply

SPC Setup(basic)

BView Barcode DefectSPC MultiSPC M.R.T. Chart DefectView Histogram DefectList YieldView Realtime

PCBView SPC Chart Review Yield & Defect

Value Trend

0 ~ 400 Search

Search

(0/2) 1 Step

Excessive 0/0

Insufficient 0/0

Position 0/0

Bridging 2/0

Shape 0/0

Height 0/0

<0%

Read All Data

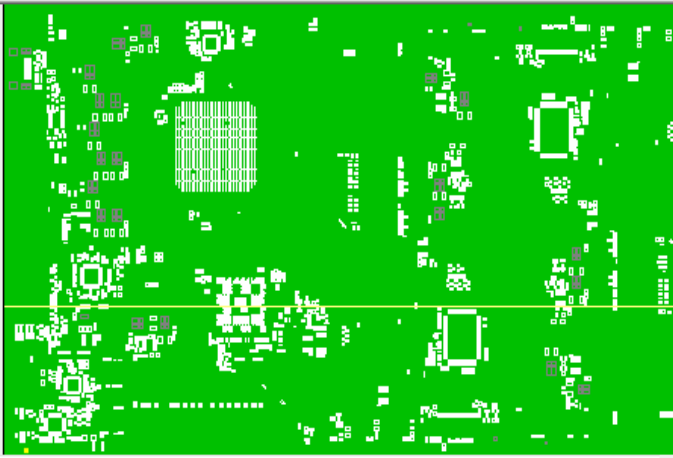


Image	RESULT	PadID	ComponentID	SPEC	VOLUME	HEIGHT	AREA	Offset X	Offset Y	RealVol	RealArea
	Bridging Error	4479	U7_3	45	123.74	147.841	108.807	172.647	-14.935	74748820	5056
	Bridging Error	4485	U7_4	45	122.53	144.956	109.889	170.051	-18.726	74019060	5106

Basic Setup

RealTime Setup

Alarming Setup

Result Export Type ☒ With Header Print

☒ Text ☐ Excel(CSV) ☐ Side Print

UnExport Item

Size X

Size Y

PAD Type

Volume(um3)

Area(um2)

PinNumber

Pad verification

PCB ID

Job

Time

Shape

LANE

Export Item

PAD ID

Component ID

Volume(%)

Height(um)

OffsetX(um)

OffsetY(um)

Area(%)

Result

Barcode

Sort by PAD ID

☒ Ascend ☐ Descend

Export Type

☒ All ☐ Group

☐ Offset * 1000

Defect View

☒ Use Defect ☐ Use GoldTab ☐ S-PCBView

RealTime Mode

☐ RealTime 3D ☒ RealTime Chart

☐ RealTime (Dual Lane) ☐ RealTime Multi

Special Language

☐ French

Defect Limit

☐ Use Defect Limit : 100 %

Export & Screen Unit

☒ um & mm ☐ mil & inch

YieldView

GOOD = ☒ Good+Pass ☐ Good Only

Yield View Count

☐ by Count ☒ by Percentage

Screen Capture Folder

C:\KohYoung

Change Folder

USL/LSL Formula

☒ Default ☐ //x +- 5*Sigma(overall)

USL/LSL Offset

☒ Offset Calculation with "x"

☐ Offset Calculation with "+"

UCL/LCL Formula

☒ Montgomery ☐ /s ± 2.58σ(/s)

☐ /s ± 2.58σ(/s)

Bad Mark

☐ Bad Mark View

☐ GOOD ☒ FAIL

Ok Cancel Apply

SPC Setup(RealTime)

Sample Count: pcb 數量

Setup

Basic Setup **RealTime Setup** Alarming Setup

RealTime XBar- MR Sampling
 Sample Count :

Component Set

SetGroup 1

SetGroup 2

SetGroup 3

SetGroup 4

SetGroup 5

SetGroup 6

Sampling Interval
☐ Minute ☒ Seconds

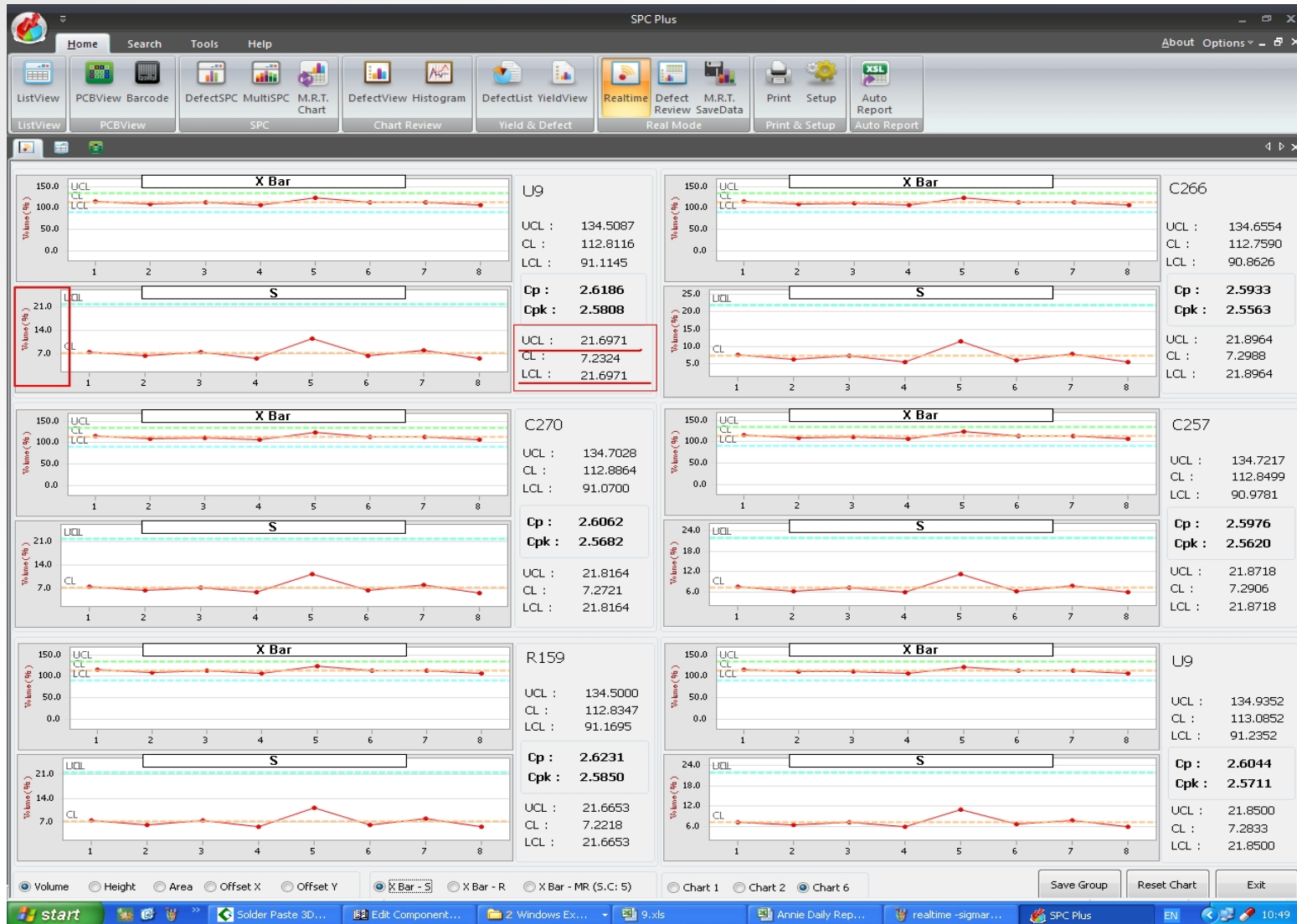
☐ RealTimeAlarming ☐ MRTChart Alarming
☐ Use XBar Alarm ☐ Display USL/LSL
☐ Use S Alarm Alarm Message
☐ Use R Alarm ☒ SPC Plus
☐ Use MR Alarm ☐ KY-3030

☐ Use Defect Realtime
☐ 1 Day ☒ Select Hour
 From hour To Now Date Time
☐ PCB Fail ☒ Time interval
 minute

☒ Use RealTime MRT Chart
 Refresh interval :

Chart Name
☐ Basic ☒ Group ☐ Component

RealTime



M.R.T. Save Data



SPC Plus

Home Search Tools Help

ListView PCBView Barcode DefectSPC MultiSPC M. R. T. Chart DefectView Histogram DefectList YieldView Realtime Defect Review M. R. T. SaveData Print Setup

SearchLine: Local Start Date: 2009-4-1 End Date: 2009-4-30 JobFilename: User Name: Lot: BarCode All

NO	LINE	IDNO	PCBNAME	DATE	StartTim	Barcode	LOT	Sc
455	Local	455	DA078L-07160-1-TC	2009-4-1	4:49:51	MBSAT0100291302E0f		Fr
456	Local	456	DA078L-07160-1-TC	2009-4-1	4:56:44	MBSAT0100291302E0f		Be
457	Local	457	DA078L-07160-1-TC	2009-4-1	4:57:25	MBSAT0100291302E0f		Fr
458	Local	458	DA078L-07160-1-TC	2009-4-1	4:58:26	MBSAT0100291302E0f		Be
459	Local	459	DA078L-07160-1-TC	2009-4-1	4:58:56	MBSAT0100291302E0f		Fr
460	Local	460	DA078L-07160-1-TC	2009-4-1	4:59:26	MBSAT0100291302E0f		Be
461	Local	461	DA078L-07160-1-TC	2009-4-1	4:59:57	MBSAT0100291302E0f		Fr
462	Local	462	DA078L-07160-1-TC	2009-4-1	5:00:28	MBSAT0100291302E2f		Be
463	Local	463	DA078L-07160-1-TC	2009-4-1	5:00:57	MBSAT0100291302E2f		Fr
464	Local	464	DA078L-07160-1-TC	2009-4-1	5:01:27	MBSAT0100291302E2f		Be
465	Local	465	DA078L-07160-1-TC	2009-4-1	5:01:57	MBSAT0100291302E2f		Fr
466	Local	466	DA078L-07160-1-TC	2009-4-1	5:02:26	MBSAT0100291302E2f		Be
467	Local	467	DA078L-07160-1-TC	2009-4-1	5:02:56	MBSAT0100291302E2f		Fr
468	Local	468	DA078L-07160-1-TC	2009-4-1	5:03:26	MBSAT0100291302E2f		Be
469	Local	469	DA078L-07160-1-TC	2009-4-1	5:03:57	MBSAT0100291302E2f		Fr
470	Local	470	DA078L-07160-1-TC	2009-4-1	5:05:21	MBSAT0100291302E1f		Be
471	Local	471	DA078L-07160-1-TC	2009-4-1	5:05:48	MBSAT0100291302E1f		Fr
472	Local	472	DA078L-07160-1-TC	2009-4-1	5:06:16	MBSAT0100291302E1f		Be
473	Local	473	DA078L-07160-1-TC	2009-4-1	5:06:43	MBSAT0100291302E4f		Fr
474	Local	474	DA078L-07160-1-TC	2009-4-1	5:07:10	MBSAT0100291302E3f		Be
475	Local	475	DA078L-07160-1-TC	2009-4-1	5:07:37	MBSAT0100291302E2f		Fr

Select File
C:\KohYoung\data\MRT

c:\

Documents and Settings
Intel
KohYoung
data
2008
12
Shape
MRT
debug
DVQueue
GUIBackup
Job
ky-3030

New Folder New File Ok Cancel

MRT(Multi RealTime) setup

Multi Realtime Customer UCL/LCL

X Bar		S		X Bar		R		X Bar		MR	
UCL :	130	12	%	UCL :	0	0	%	UCL :	0	0	%
CL :	30	8	%	CL :	0	0	%	CL :	0	0	%
LCL :	70	4	%	LCL :	0	0	%	LCL :	0	0	%
USL :	0	0	%	USL :	0	0	%	USL :	0	0	%
LSL :	0	0	%	LSL :	0	0	%	LSL :	0	0	%
Sigma				Sigma				Sigma			
UCL :	3	3		UCL :	3	3		UCL :	3	3	
LCL :	3	3		LCL :	3	3		LCL :	3	3	

☐ System Value
 ☐ Customer Value
 ☒ Sigma Value

☒ Volume
 ☐ Height
 ☐ Area
 ☐ Offset X
 ☐ Offset Y

☐ Chart No.1
 ☐ Chart No.2
 ☐ Chart No.3
 ☐ Chart No.4
 ☐ Chart No.5
 ☐ Chart No.6
 ☒ All Chart

☐ Fixed CL

System Value:

以全部的測試值來計算標準差(σ), Max., Min. UCL/CL/LCL

Custom Value:

以全部的測試值來計算標準差(σ), 但是用戶定義 Max., Min., UCL/CL/LCL

System Value:

以全部的測試值來計算標準差(σ), 但是用 3σ , 來計算 Max., Min. UCL/CL/LCL

MRT Chart

Sampling: pcb 數量

