



RAYSTAR

RAYSTAR Optronics, Inc.
曜凌光電股份有限公司

OLED Display Provider

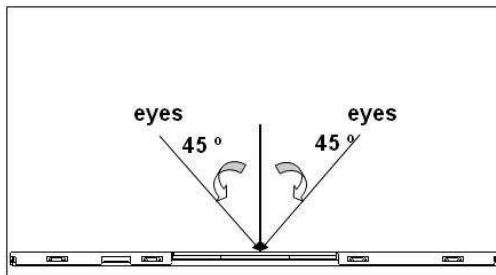
TFT LCM 檢驗規範

(TFT LCM Inspection Specification)

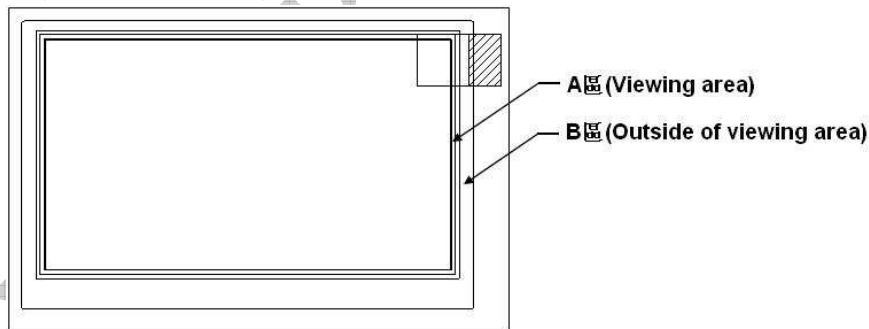
| MODLE NO : | | | |
|----------------------------|-------------------|-------------------------|--|
| RECORDS OF REVISION | | | DOC. FIRST ISSUE |
| VERSION | DATE | REVISED PAGE NO. | SUMMARY |
| 0 | 2013/04/23 | | First issue |
| A | 2013/09/24 | 5 | Correct the inspection standard of no 5 scratch contamination Line type 0.01mm <math>< W \leq 0.05\text{mm}</math> |
| B | 2018/09/10 | 6 | Mura through 5% transmission ND Filter and 50% gray to check. |
| C | 2019/7/30 | 7 | Distance from the edge of 0.5mm regardless of control |

檢驗規範(Inspection Specification)

1. 範圍(Scope)：適用於本公司 TFT-LCD 模塊(The document shall be applied to TFT-LCD Module)
2. 檢驗標準(Inspection Standard)：MIL-STD-105E 正常單次抽樣水平 II(MIL-STD-105E Table Normal Inspection Single Sampling Level II)
3. 缺陷水平(Defect Level)：主要缺陷 AQL：0.65;次要缺陷 AQL：2.5(Major Defect AQL:0.65;Minor Defect AQL:2.5)
4. 檢驗條件(Test conditions):
 - (1)溫度(Temperature)：15°C~25°C；溼度(Humidity)：55 ±15%
 - (2)外觀檢驗(Visual inspection)：光照強度：500 Lux 以上;檢查距離：20cm~30cm (Illumination：More than 500 Lux; Inspection Distance: 20cm~30cm)
 - (3)電性檢驗(Electrical inspection)：光照強度：100Lux~300Lux;檢查距離：20cm~30cm(Illumination：100Lux~300Lux; Inspection Distance: 20cm~30cm)
 - (4)目視角度(Visual angle)：檢查目視的角度是法線方法的 45 °(The test direction is base on about around 45° of Vertical line)



- (5)定義區域(Definition of area):



5. 象素定義 (Pixel Definition):

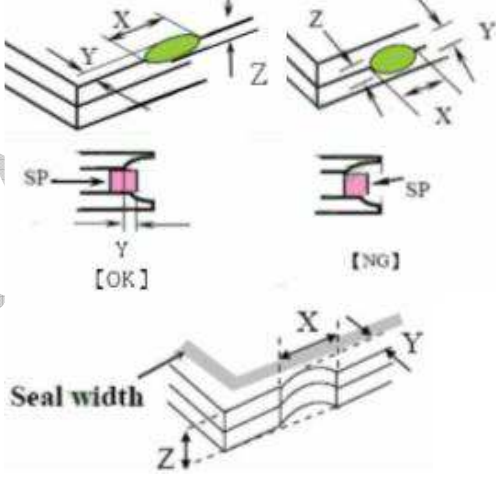
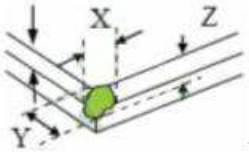
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|--|---------------------|
| R | G | B | R | G | B | R | G | B | | Dot Defect |
| R | G | B | R | G | B | R | G | B | | Adjacent Dot Defect |
| R | G | B | R | G | B | R | G | B | | Cluster |

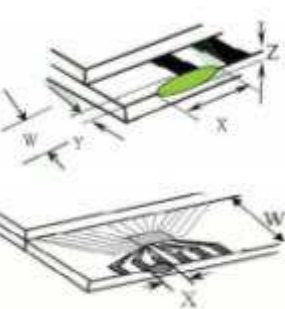
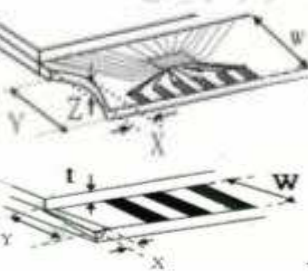
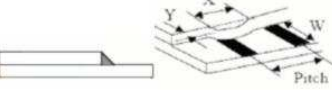
Note 1: If pixel or partial sub-pixel defects exceed 50% of the affected pixel or sub-pixel area, it shall be considered as 1 defect.

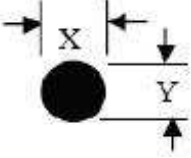
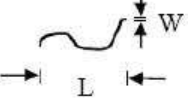
Note 2: There should be no distinct non-uniformity visible through 5% ND Filter within 2 sec inspection times.

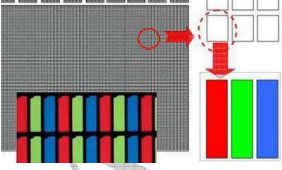
Note 3: Mura and bright dot inspected through 5% transmission ND Filter as following.

5. 檢驗標準(Inspection Standard) :

| 項次 (No) | 檢驗項目(Inspection item) | 檢驗標準(Inspection Standard) | 缺陷等級 (Defect Level) | | | | | | | | | |
|------------|--|---|------------------------|---|---|----------|---|-------------|----------|--|--------------------|-------------|
| 1 | PACKING &INDICATE | 1.1.不可有混入其他型號產品的現象(Mixde product types). 1.2.不可有產品漏工序的現象(The part number is inconsistent with work order of production). 1.3.不可有部件裝反方向的現象(Assembled in inverse direction). 1.4.不可有數量與實際要求不一致的現象(The quantity is inconsistent with work order of production). | 主缺 (Maj) | | | | | | | | | |
| 2 | 尺寸(Size) | 产品尺寸和结构必须符合结构图(Product size and structure must meet the structure diagram) | 主缺 (Maj) | | | | | | | | | |
| 3 | 玻璃裂纹(The crack of glass) | <p>符號(Symbols): X:破裂長度(Symbols) Y:破裂寬度(The width of crack). Z:破裂厚度(The thickness of crack). W:出電極區寬度(Terminal length) T:玻璃厚度(The thickness of glass). a:LCD 側面長度(LCD side length).</p> <p>3.1.一般玻璃破損(General glass chip): 3.1.1.玻璃表面或上、下玻璃組合縫隙之間破損(Chip on panel surface and crack between panels);</p>  <table border="1" data-bbox="529 1608 1276 1818"> <thead> <tr> <th>X</th> <th>Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>$\leq a$</td> <td>裂紋進入 VA 區(Crack can't enter viewing area)</td> <td>$\leq 1/2t$</td> </tr> <tr> <td>$\leq a$</td> <td>裂紋超過 SP 一半的寬度(Crack can't exceed the half of SP width)</td> <td>$1/2t < Z \leq 2t$</td> </tr> </tbody> </table> <p>3.1.2.邊角破損(Corner crack) :</p>  | X | Y | Z | $\leq a$ | 裂紋進入 VA 區(Crack can't enter viewing area) | $\leq 1/2t$ | $\leq a$ | 裂紋超過 SP 一半的寬度(Crack can't exceed the half of SP width) | $1/2t < Z \leq 2t$ | 次缺 (Min) |
| X | Y | Z | | | | | | | | | | |
| $\leq a$ | 裂紋進入 VA 區(Crack can't enter viewing area) | $\leq 1/2t$ | | | | | | | | | | |
| $\leq a$ | 裂紋超過 SP 一半的寬度(Crack can't exceed the half of SP width) | $1/2t < Z \leq 2t$ | | | | | | | | | | |

| 項次 (No) | 檢驗項目 (Inspection item) | 檢驗標準 (Inspection Standard) | 缺陷等級 (Defect Level) | | | | | | | | | | |
|--|------------------------------|---|---|--------------------|------------|-------------|--|-------------|-------------|---|--------------------|-------------|-------------|
| 3 | 玻璃裂紋 (The crack of glass) | <table border="1"> <tr> <td data-bbox="528 232 635 271">X</td> <td data-bbox="635 232 1102 271">Y</td> <td data-bbox="1102 232 1270 271">Z</td> </tr> <tr> <td data-bbox="528 271 635 353">$\leq 1/5a$</td> <td data-bbox="635 271 1102 353">裂紋進入 VA 區 (Crack can't enter viewing area)</td> <td data-bbox="1102 271 1270 353">$\leq 1/2t$</td> </tr> <tr> <td data-bbox="528 353 635 436">$\leq 1/5a$</td> <td data-bbox="635 353 1102 436">裂紋超過 SP 一半的寬度 (Crack can't exceed the half of SP width)</td> <td data-bbox="1102 353 1270 436">$1/2t < Z \leq 2t$</td> </tr> </table> | X | Y | Z | $\leq 1/5a$ | 裂紋進入 VA 區 (Crack can't enter viewing area) | $\leq 1/2t$ | $\leq 1/5a$ | 裂紋超過 SP 一半的寬度 (Crack can't exceed the half of SP width) | $1/2t < Z \leq 2t$ | 次缺 (Min) | |
| | | X | Y | Z | | | | | | | | | |
| | | $\leq 1/5a$ | 裂紋進入 VA 區 (Crack can't enter viewing area) | $\leq 1/2t$ | | | | | | | | | |
| | | $\leq 1/5a$ | 裂紋超過 SP 一半的寬度 (Crack can't exceed the half of SP width) | $1/2t < Z \leq 2t$ | | | | | | | | | |
| <p>3.2. 出電极端破損 (Protrusion over terminal): 3.2.1. 电极垫上破損 (Chip on electrode pad):</p>  <table border="1"> <tr> <td data-bbox="528 891 794 936">位置 (Position)</td> <td data-bbox="794 891 963 936">X</td> <td data-bbox="963 891 1102 936">Y</td> <td data-bbox="1102 891 1270 936">Z</td> </tr> <tr> <td data-bbox="528 936 794 981">正面 (Front)</td> <td data-bbox="794 936 963 981">$\leq a$</td> <td data-bbox="963 936 1102 981">$\leq 1/2W$</td> <td data-bbox="1102 936 1270 981">$\leq t$</td> </tr> <tr> <td data-bbox="528 981 794 1025">背面 (Back)</td> <td data-bbox="794 981 963 1025">$\leq a$</td> <td data-bbox="963 981 1102 1025">$\leq W$</td> <td data-bbox="1102 981 1270 1025">$\leq 1/2t$</td> </tr> </table> | 位置 (Position) | X | Y | Z | 正面 (Front) | $\leq a$ | $\leq 1/2W$ | $\leq t$ | 背面 (Back) | $\leq a$ | $\leq W$ | $\leq 1/2t$ | 次缺 (Min) |
| 位置 (Position) | X | Y | Z | | | | | | | | | | |
| 正面 (Front) | $\leq a$ | $\leq 1/2W$ | $\leq t$ | | | | | | | | | | |
| 背面 (Back) | $\leq a$ | $\leq W$ | $\leq 1/2t$ | | | | | | | | | | |
| <p>3.2.2. 出電极端非電極破損 (Non-conductive portion):</p>  <table border="1"> <tr> <td data-bbox="528 1384 794 1429">X</td> <td data-bbox="794 1384 1102 1429">Y</td> <td data-bbox="1102 1384 1270 1429">Z</td> </tr> <tr> <td data-bbox="528 1429 794 1473">$\leq 1/3a$</td> <td data-bbox="794 1429 1102 1473">$\leq W$</td> <td data-bbox="1102 1429 1270 1473">$\leq t$</td> </tr> </table> | X | Y | Z | $\leq 1/3a$ | $\leq W$ | $\leq t$ | 次缺 (Min) | | | | | | |
| X | Y | Z | | | | | | | | | | | |
| $\leq 1/3a$ | $\leq W$ | $\leq t$ | | | | | | | | | | | |
| <p>備註 (Note): 如果破碎部分觸及 ITO 電極則不可超過 ITO 電極寬度的 1/3，且必須進行通電測試，不可影響顯示效果 (If the chipped area touches the ITO terminal, over 2/3 of the ITO must remain and be inspected according to electrode terminal specifications).</p> | 次缺 (Min) | | | | | | | | | | | | |
| <p>3.2.3. 玻璃破損 (Glass remain):</p>  <table border="1"> <tr> <td data-bbox="528 1944 794 1989">X</td> <td data-bbox="794 1944 1102 1989">Y</td> <td data-bbox="1102 1944 1270 1989">Z</td> </tr> <tr> <td data-bbox="528 1989 794 2033">$\leq a$</td> <td data-bbox="794 1989 1102 2033">$\leq 1/3W$</td> <td data-bbox="1102 1989 1270 2033">$\leq t$</td> </tr> </table> | | X | Y | Z | $\leq a$ | $\leq 1/3W$ | $\leq t$ | 次缺 (Min) | | | | | |
| X | | Y | Z | | | | | | | | | | |
| $\leq a$ | | $\leq 1/3W$ | $\leq t$ | | | | | | | | | | |

| 項次 (No) | 檢驗項目(Inspection item) | 檢驗標準(Inspection Standard) | 缺陷等級 (Defect Level) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|---|----------------------------|----------------------------|----------------------------|----------------------------|----------------------|-------------------------|--------------------------------------|------------------------|---------------------------------------|--------------|--|---------------------|------------------------------------|---------------------|------------------|------------------------|----------------|------------------------|---------------------------------------|--------------|---------------------------------------|---------------------|------------|--------------------|------------------|-------------------------|-------------|--------------|---------------------------------------|--|------------|--------------------|--|------------|-------------|
| 4 | 黑點、白點異物 (Black or white dot)Round type  | 4.1 Round type(Non-display or display): <table border="1" data-bbox="528 248 1278 752"> <thead> <tr> <th>尺寸 (Size)</th> <th colspan="2">判定標準(Judging standard)</th> <th>允收數量 (Acceptance(Q'ty))</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1.44" ~4.9"</td> <td colspan="2">$D \leq 0.1 \text{ mm}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$0.10\text{mm} < D \leq 0.4\text{mm}$</td> <td></td> <td>$N \leq 3$</td> </tr> <tr> <td>$D > 0.4\text{mm}$</td> <td></td> <td>$N \leq 0$</td> </tr> <tr> <td rowspan="3">5.0" ~7.0"</td> <td colspan="2">$D \leq 0.25\text{mm}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$0.25\text{mm} < D \leq 0.5\text{mm}$</td> <td></td> <td>$N \leq 4$</td> </tr> <tr> <td>$D > 0.5\text{mm}$</td> <td></td> <td>$N \leq 0$</td> </tr> <tr> <td rowspan="3">7.1" ~12.0"</td> <td colspan="2">$D \leq 0.3 \text{ mm}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$0.30\text{mm} < D \leq 0.5\text{mm}$</td> <td></td> <td>$N \leq 5$</td> </tr> <tr> <td>$D > 0.5\text{mm}$</td> <td></td> <td>$N \leq 0$</td> </tr> </tbody> </table> | 尺寸 (Size) | 判定標準(Judging standard) | | 允收數量 (Acceptance(Q'ty)) | 1.44" ~4.9" | $D \leq 0.1 \text{ mm}$ | | 忽略不計(Ignore) | $0.10\text{mm} < D \leq 0.4\text{mm}$ | | $N \leq 3$ | $D > 0.4\text{mm}$ | | $N \leq 0$ | 5.0" ~7.0" | $D \leq 0.25\text{mm}$ | | 忽略不計(Ignore) | $0.25\text{mm} < D \leq 0.5\text{mm}$ | | $N \leq 4$ | $D > 0.5\text{mm}$ | | $N \leq 0$ | 7.1" ~12.0" | $D \leq 0.3 \text{ mm}$ | | 忽略不計(Ignore) | $0.30\text{mm} < D \leq 0.5\text{mm}$ | | $N \leq 5$ | $D > 0.5\text{mm}$ | | $N \leq 0$ | 次缺 (Min) |
| 尺寸 (Size) | 判定標準(Judging standard) | | 允收數量 (Acceptance(Q'ty)) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.44" ~4.9" | $D \leq 0.1 \text{ mm}$ | | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.10\text{mm} < D \leq 0.4\text{mm}$ | | $N \leq 3$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $D > 0.4\text{mm}$ | | $N \leq 0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0" ~7.0" | $D \leq 0.25\text{mm}$ | | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.25\text{mm} < D \leq 0.5\text{mm}$ | | $N \leq 4$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $D > 0.5\text{mm}$ | | $N \leq 0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.1" ~12.0" | $D \leq 0.3 \text{ mm}$ | | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.30\text{mm} < D \leq 0.5\text{mm}$ | | $N \leq 5$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $D > 0.5\text{mm}$ | | $N \leq 0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 刮痕、線狀異物 (scratch、 contamination) Line type  | 5.1 Line type(Non-display or display): <table border="1" data-bbox="528 835 1278 1440"> <thead> <tr> <th rowspan="2">尺寸 (Size)</th> <th colspan="2">判定標準(Judging standard)</th> <th rowspan="2">允收數量 (Acceptance(Q'ty))</th> </tr> <tr> <th>W</th> <th>L</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1.44" ~7.0"</td> <td>$W \leq 0.01\text{mm}$</td> <td>—</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$0.01\text{mm} < W \leq 0.05\text{mm}$</td> <td>$L \leq 5\text{mm}$</td> <td>$N \leq 4$</td> </tr> <tr> <td>$W > 0.05\text{mm}$</td> <td>$L > 5\text{mm}$</td> <td>$N \leq 0$</td> </tr> <tr> <td rowspan="3">7.1" ~12.0"</td> <td>$W \leq 0.07\text{mm}$</td> <td>—</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$0.07\text{mm} < W \leq 0.1\text{mm}$</td> <td>$L \leq 5\text{mm}$</td> <td>$N \leq 5$</td> </tr> <tr> <td>$W > 0.1\text{mm}$</td> <td>$L > 5\text{mm}$</td> <td>$N \leq 0$</td> </tr> </tbody> </table> | 尺寸 (Size) | 判定標準(Judging standard) | | 允收數量 (Acceptance(Q'ty)) | W | L | 1.44" ~7.0" | $W \leq 0.01\text{mm}$ | — | 忽略不計(Ignore) | $0.01\text{mm} < W \leq 0.05\text{mm}$ | $L \leq 5\text{mm}$ | $N \leq 4$ | $W > 0.05\text{mm}$ | $L > 5\text{mm}$ | $N \leq 0$ | 7.1" ~12.0" | $W \leq 0.07\text{mm}$ | — | 忽略不計(Ignore) | $0.07\text{mm} < W \leq 0.1\text{mm}$ | $L \leq 5\text{mm}$ | $N \leq 5$ | $W > 0.1\text{mm}$ | $L > 5\text{mm}$ | $N \leq 0$ | 次缺 (Min) | | | | | | | | |
| 尺寸 (Size) | 判定標準(Judging standard) | | | 允收數量 (Acceptance(Q'ty)) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | W | L | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.44" ~7.0" | $W \leq 0.01\text{mm}$ | — | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.01\text{mm} < W \leq 0.05\text{mm}$ | $L \leq 5\text{mm}$ | $N \leq 4$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $W > 0.05\text{mm}$ | $L > 5\text{mm}$ | $N \leq 0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.1" ~12.0" | $W \leq 0.07\text{mm}$ | — | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.07\text{mm} < W \leq 0.1\text{mm}$ | $L \leq 5\text{mm}$ | $N \leq 5$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $W > 0.1\text{mm}$ | $L > 5\text{mm}$ | $N \leq 0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | POL 氣泡(Polarizer Bubble) | <table border="1" data-bbox="528 1503 1278 2029"> <thead> <tr> <th>視區(area)</th> <th>判定標準(Judging standard)</th> <th>允收數量 (Acceptance(Q'ty))</th> </tr> </thead> <tbody> <tr> <td rowspan="4">A 區(Viewing area)</td> <td>$D < 0.2 \text{ mm}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$0.2\text{mm} < D \leq 0.3\text{mm}$</td> <td>$N \leq 3$</td> </tr> <tr> <td>$0.3\text{mm} < D \leq 0.5\text{mm}$</td> <td>$N \leq 1$</td> </tr> <tr> <td>$0.5\text{mm} < D$</td> <td>$N \leq 0$</td> </tr> <tr> <td>B 區(Outside of viewing area)</td> <td>—</td> <td>忽略不計(Ignore)</td> </tr> </tbody> </table> | 視區(area) | 判定標準(Judging standard) | 允收數量 (Acceptance(Q'ty)) | A 區(Viewing area) | $D < 0.2 \text{ mm}$ | 忽略不計(Ignore) | $0.2\text{mm} < D \leq 0.3\text{mm}$ | $N \leq 3$ | $0.3\text{mm} < D \leq 0.5\text{mm}$ | $N \leq 1$ | $0.5\text{mm} < D$ | $N \leq 0$ | B 區(Outside of viewing area) | — | 忽略不計(Ignore) | 次缺 (Min) | | | | | | | | | | | | | | | | | | | |
| 視區(area) | 判定標準(Judging standard) | 允收數量 (Acceptance(Q'ty)) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A 區(Viewing area) | $D < 0.2 \text{ mm}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.2\text{mm} < D \leq 0.3\text{mm}$ | $N \leq 3$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.3\text{mm} < D \leq 0.5\text{mm}$ | $N \leq 1$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | $0.5\text{mm} < D$ | $N \leq 0$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B 區(Outside of viewing area) | — | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 項次 (No) | 檢驗項目(Inspection item) | 檢驗標準(Inspection Standard) | 缺陷等級 (Defect Level) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|---|------------------------|------|---------------------------|----------------------|----------------|---------------|----------------------------|--------------|--|------------|-------------|----------------------------|--------------|--|------------|-------|--|--|------------|---------------|---------------|----------------------------|--------------|--|------------|-------------|----------------------------|--------------|--|------------|-------|--|--|------------|----------------|---------------|----------------------------|--------------|--|------------|-------------|----------------------------|--------------|--|------------|-------|--|--|------------|-------------|
| 7 | POL 折痕&分層(The folding and peeled offin polarizer) | 偏光片不可有折痕和分層（脫膠）的現象(The folding and peeled offin polarizer are not acceptable). 距離邊緣 0.5mm 不管控(Distance from the edge of 0.5mm regardless of control) | 次缺 (Min) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 輝度及均勻性、色度 (Brightness and uniformity、Chroma) | 應符合規範或圖紙要求規格(Shall be in accordance with the drawings and specification requirements specifications). | 主缺 (Maj) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | MURA | (5% ND Filter) Gray scale 灰階 50% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 電性測試 (Electrical Testing) | 1.顯示缺畫(Missing line character and icon). 2.無功能與無顯示(No function or no display). 3.顯示故障(Display malfunction). 4.LCD 視角缺陷(LCD viewing angle defect). 5.消耗電流超出規格(Current consumption exceeds product specifications). | 主缺 (Maj) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 亮點、暗點(Bright dot、Dark dot)On-display Pixel: 3 dot in 1 pixel  | <table border="1"> <thead> <tr> <th>尺寸 (Size)</th> <th>Item</th> <th>判定標準(Judging Standard)</th> <th>允收數量 (Acceptance)</th> </tr> </thead> <tbody> <tr> <td rowspan="4">1.44" ~4.9"</td> <td rowspan="2">Bright dot</td> <td>$D \leq 1/2 \text{ Pixel}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$</td> <td>$N \leq 1$</td> </tr> <tr> <td rowspan="2">Dark dot</td> <td>$D \leq 1/2 \text{ Pixel}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$</td> <td>$N \leq 2$</td> </tr> <tr> <td colspan="3">Total</td> <td>$N \leq 2$</td> </tr> <tr> <td rowspan="4">5.0" ~7.0"</td> <td rowspan="2">Bright dot</td> <td>$D \leq 1/2 \text{ Pixel}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$</td> <td>$N \leq 2$</td> </tr> <tr> <td rowspan="2">Dark dot</td> <td>$D \leq 1/2 \text{ Pixel}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$</td> <td>$N \leq 3$</td> </tr> <tr> <td colspan="3">Total</td> <td>$N \leq 4$</td> </tr> <tr> <td rowspan="4">7.1" ~12.0"</td> <td rowspan="2">Bright dot</td> <td>$D \leq 1/2 \text{ Pixel}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$</td> <td>$N \leq 3$</td> </tr> <tr> <td rowspan="2">Dark dot</td> <td>$D \leq 1/2 \text{ Pixel}$</td> <td>忽略不計(Ignore)</td> </tr> <tr> <td>$1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$</td> <td>$N \leq 4$</td> </tr> <tr> <td colspan="3">Total</td> <td>$N \leq 6$</td> </tr> </tbody> </table> | 尺寸 (Size) | Item | 判定標準(Judging Standard) | 允收數量 (Acceptance) | 1.44" ~4.9" | Bright dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 1$ | Dark dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 2$ | Total | | | $N \leq 2$ | 5.0" ~7.0" | Bright dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 2$ | Dark dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 3$ | Total | | | $N \leq 4$ | 7.1" ~12.0" | Bright dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 3$ | Dark dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 4$ | Total | | | $N \leq 6$ | 次缺 (Min) |
| 尺寸 (Size) | Item | 判定標準(Judging Standard) | 允收數量 (Acceptance) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.44" ~4.9" | Bright dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 1$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dark dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | | $N \leq 2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.0" ~7.0" | Bright dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 2$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dark dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 3$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | | $N \leq 4$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7.1" ~12.0" | Bright dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 3$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Dark dot | $D \leq 1/2 \text{ Pixel}$ | 忽略不計(Ignore) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | $1/2 \text{ Pixel} < D \leq 1 \text{ Pixel}$ | $N \leq 4$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total | | | $N \leq 6$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |