



# FPD Metrology Korea TC Chapter Meeting Summary and Minutes

March 26, 2021, 15:00 – 17:00 (KST)

SEMI Korea office, Seoul, Korea

Note: The meeting has been rescheduled from March 12, 2021 due to COVID-19 issue.

## TC Chapter Announcements

*Next TC Chapter Meeting*

August 6, 2021, 15:00 – 17:00 (KST)

SEMI Korea office, Seoul, Korea

## Table 1 Meeting Attendees

*Italics indicate virtual participants*

**Co-Chairs:** Jongho Chong (Samsung Display), Kyungjin Kang (LG Electronics)

**SEMI Staff:** Natalie Shim (SEMI Korea)

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
Samsung Display	Chong	Jongho	<i>LG Electronics (LGE)</i>	<i>Kang</i>	<i>Kyungjin</i>
Samsung Display	Kim	Su Young	<i>LG Electronics (LGE)</i>	<i>Lee</i>	<i>Myongyoung</i>
Samsung Display	Lee	Seungmin	<i>LG Display (LGD)</i>	<i>Kim</i>	<i>Jaehong</i>

## Table 2 Leadership Changes

None

## Table 3 Committee Structure Changes

None

## Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
6614C	New Standard, Test Method for Dimming Property for Flat Panel Displays	<b>Passed</b> as it is
6644B	New Standard, Test Method for Viewing Angle of Flat Panel Displays	<b>Passed</b> as it is
6659A	Revision to SEMI D75-0118, Test Method for Color Reproduction and Perceptual Contrast of Displays	<b>Passed</b> as it is
6701	New Standard: Test Method for Warm-up Properties of Display Picture Quality	<b>Failed</b> and returned to task force for re-work

#1 **Passed** ballots and line items will be submitted to the ISC Audit & Review Subcommittee for procedural review.

#2 **Failed** ballots and line items were returned to the originating task forces for re-work and re-balloting or abandoning.

## Table 5 Activities Approved by the GCS between meetings of the TC Chapter

None

**Table 6 Authorized Activities**

None

**Table 7 Authorized Ballots**

#	When	TF	Details
6614C	Cycle 1-2021	Perceptual Viewing Angle TF	New Standard: Test Method of Dimming Property for Flat Panel Display
6644B	Cycle 1-2021	Perceptual Image Quality TF	New Standard: Test Method for Viewing Angle of Flat Panel Displays
6659A	Cycle 1-2021	Perceptual Image Quality TF	Revision to SEMI D75-0118, Test Method for Color Reproduction and Perceptual Contrast of Displays

**Table 8 SNARF(s) Granted a One-Year Extension**

None

**Table 9 SNARF(s) Abolished**

None

**Table 10 Standard(s) to receive Inactive Status**

None

**Table 11 New Action Items**

Item #	Assigned to	Details
11262020-01	The Authors of each standard	To be decided if the standards need 5-year review by next meeting. - D64-0811 (Test Method of Measuring the Spatial Contrast Ratio of Flat Panel Display) - D61-1110 (Test Method of Perceptual Angle of OLED Displays)

**Table 12 Previous Meeting Action Items**

None



## 1 Welcome, Reminders, and Introductions

Jongho Chong (Samsung Display) called the meeting to order at 15:00 (KST). The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

**Attachment:** 01, Meeting Reminders.pdf

## 2 Review of Previous Meeting Minutes

The TC Chapter reviewed the minutes of the previous meeting.

<b>Motion:</b>	Approve the previous meeting minutes as written.
<b>By / 2<sup>nd</sup>:</b>	Kyungjin Kang (LGE) / Jaehong Kim (LGD)
<b>Discussion:</b>	None
<b>Vote:</b>	5-0, Motion carried

**Attachment:** 02, KR FPDM\_minutes\_Nov26\_2020.pdf

## 3 Liaison Reports

### 3.1 FPD Metrology Japan TC Chapter

Natalie Shim (SEMI Korea) reported for the FPD Metrology Japan TC Chapter. Of note:

#### 3.1.1 Meeting Information

- Last Meeting: May 31, 2019 at SEMI Japan, Tokyo, Japan.
- Next Meeting: July 9, 2021 at Japan Summer 2021 Meetings (Jointly held with FPD Materials & Components)

**Attachment:** 03, 202006\_JA\_FPD\_Met\_LiaisonReport\_v1.0.pdf

### 3.2 FPD Metrology Taiwan TC Chapter

Natalie Shim reported for the FPD Metrology Taiwan TC Chapter. Of note:

#### 3.2.1 Meeting Information

3.2.1.1 Last Meeting: February 5, 2021 at ITRI Office, Hsinchu, Taiwan.

3.2.1.2 Next Meeting: August 6, 2021 at ITRI Office, Hsinchu, Taiwan.

#### 3.2.2 Authorized Activity

3.2.2.1 SNARF XXXX, New Standard, Test Method of Binocular Image Fusion for Transparent Displays.

#### 3.2.3 Authorized Ballots for Cycle 3, 2021

3.2.3.1 6303, Reapproval of SEMI D57-0310, Definition of Measurement Index(VCT) for MURA in FPD Image Quality Inspection

3.2.3.2 6632, New Standard, Test Method of Flicker Nuisance for Wide Visual-Field Displays.

**Attachment:** 04, FPD-M Taiwan Liaison report\_20210205.pdf

### 3.3 SEMI Staff Report

Natalie Shim gave the SEMI Staff Report. Of note:

#### 3.3.1 SEMI Global Calendar of Events

- SEMICON Southeast Asia on August 23-27, 2021 at Penang, Malaysia
- SEMICON Taiwan on September 8 to 10, 2021 at Taipei, Taiwan
- SEMICON West on Dec 7-9, 2021 at San Francisco, CA

#### 3.3.2 Critical Dates for SEMI Standards Ballots in 2021

- Cycle 4: April 28 to May 28 (Submission deadline: April 14)
- Cycle 5: June 1 to July 1 (Submission deadline: May 18)
- Cycle 6: August 17 to September 16 (Submission deadline: August 3)
- Cycle 7: September 15 to October 15 (Submission deadline: September 1)
- Cycle 8: October 22 to November 22 (Submission deadline: October 8)
- Cycle 9: November 30 to December 30 (Submission deadline: November 16)

#### 3.3.3 SEMI Standards Publications

3.3.3.1 Total SEMI Standards in portfolio: 1,030 (Including 274 inactive standards)

3.3.3.2 New Standards: SEMI E181-0321, Specification for Panel FOUP for Panel Level Packaging

#### 3.3.4 Five-Year Review

- SEMI D64-0811, Test Method for Measuring the Spatial Contrast Ratio of Flat Panel Display
- SEMI D61-1101, Test Method of Perceptual Angle for OLED Displays

**Attachment:** 05, Staff Report March.pdf

## 4 Ballot Review

NOTE 1: TC Chapter adjudication on ballots reviewed is detailed in the Audits & Review (A&R) Subcommittee Forms for procedural review. The A&R forms are available as attachments to these minutes. The attachment number for each balloted document is provided under each ballot review section below.

4.1 Below three ballots are all passed as balloted and forwarded to A&R Subcommittee for procedural review.

- Document 6614C: New Standard, Test Method for Dimming Property for Flat Panel Displays
- Document 6644B: New Standard, Test Method for Viewing Angle of Flat Panel Displays
- Document 6659A: Revision to SEMI D75-0118, Test Method for Color Reproduction and Perceptual Contrast of Displays

4.2 Document 6701: New Standard, Test Method for Warm-up Properties of Display Picture Quality

4.2.1 Ballot Adjudication of 6701

<b>Motion:</b>	The negative from Larry Hartsough in below is related and persuasive. 6701 is failed and returns to TF for rework.  <i>Negative 1— Reference</i> <i>CIE 1976 is referenced in the text but is not listed in the Referenced Standards section. On the other hand CIE 1931 is listed as a referenced standard but I could not find a reference to it in the text.</i>
<b>By / 2<sup>nd</sup>:</b>	Myongyoung Lee (LGE) / Jaehong Kim (LGD)
<b>Discussion:</b>	None
<b>Vote:</b>	5-0, Motion carried

#### 4.2.2 Ballot Approval for 6701A

<b>Motion:</b>	To authorize 6701A for the Cycle 4-2021
<b>By / 2<sup>nd</sup>:</b>	Myongyoung Lee (LGE) / Jaehong Kim (LGD)
<b>Discussion:</b>	None
<b>Vote:</b>	5-0, Motion carried

**Attachment:** 06, 6614C\_Procedure Review.pdf

**Attachment:** 07, 6644B\_Procedure Review.pdf

**Attachment:** 08, 6659A\_Procedure Review.pdf

**Attachment:** 09, 6701\_Tally and feedback.pdf

## 5 Subcommittee and Task Force Reports

### 5.1 *Perceptual Image Quality Task Force*

Jongho Chong (Gwangwoon University) and Jaehong Kim (LGD) updated the development status of the documents, 6659A and 6614C respectfully. No written report submitted.

### 5.2 *Perceptual Viewing Angle task force*

Kyungjin Kang (LGE) updated the development status of document 6644B. No written report submitted.

### 5.3 *Picture Quality Evaluation task force*

Myongyoung Lee (LGE) updated the development status of document 6701. No written report submitted.

## 6 Old Business

None

## 7 New Business

### 7.1 *5-Year Review*

Natalie Shim addressed that there are 3 standards for 5-year review as below.

- D71-0614 (Test Method of PDP Tone and Color Reproduction)
- SEMI D64-0811, Test Method for Measuring the Spatial Contrast Ratio of Flat Panel Display
- SEMI D61-1110, Test Method of Perceptual Angle for OLED Displays

7.1.1 Kyungjin Kang confirmed that D71 needs to be modified.



7.1.2 Other authors of D64 and D61 will review them and let SEMI knows their decision by the next meeting.

**Action Item:** 03262020-01, The authors of D64 and D61 review the standards and decide if they need revision, reapproval, or withdraw by the next meeting.

### 8 Next Meeting and Adjournment

The next meeting is scheduled for Friday, August 6, 2021 at SEMI Korea office in Seoul. See <http://www.semi.org/standards-events> for the current list of events.

Adjournment: 17:00.

Respectfully submitted by:

Natalie Shim

Manager, Standards

SEMI Korea

Phone: 82.2.531.7808

Email: [eshim@semi.org](mailto:eshim@semi.org)

Minutes tentatively approved by:

Jongho Chong (Gwangwoon University), Co-chair	
Kyungjin Kang (LGE), Co-chair	

**Table 13 Index of Available Attachments#1**

<i>Title</i>	<i>Title</i>
01, Meeting reminder.pdf	06, A&R_6614C_Passed.pdf
02, KR FPD_M_minutes_20201126.pdf	07, A&R_6644B_Passed.pdf
03, 202006_JA_FPD_Met_LiaisonReport_v1.0.pdf	08, A&R_6659A_Passed.pdf
04, FPD-M Taiwan Liaison report.pdf	09, 6701_Tally and feedback.pdf
05, Staff Report_March 2021.pdf	

#1 Due to file size and delivery issues, attachments must be downloaded separately. A .zip file containing all attachments for these minutes is available at [www.semi.org](http://www.semi.org). For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.