



FPD Materials & Components Japan TC Chapter and FPD Metrology Japan TC Chapter

Join Meeting Summary and Minutes

Japan Standards Fall 2017 Meetings

Friday, September 15, 2017, 15:00-17:30

SEMI Japan office, Tokyo, Japan

TC Chapter Announcements

Next FPD Materials & Components Japan TC Chapter Meeting

Japan Standards Winter 2018 Meetings

Friday, January 26, 2018, 14:30-17:00

SEMI Japan office, Tokyo, Japan

Next FPD Metrology Japan TC Chapter Meeting

Japan Standards Spring 2018 Meetings

April 2018 (Date and Time to be decided)

SEMI Japan office, Tokyo, Japan

Table 1 Meeting Attendees

Italics indicate virtual participants

< **FPD Materials & Components** > **Co-Chairs:** Tadahiro Furukawa (Yamagata University) / Yoshi Shibahara (FUJIFILM)

< **FPD Metrology** > **Co-Chairs:** Ryoichi Watanabe (JapanDisplay) / Akira Kawaguchi (Otsuka Electronics)

SEMI Staff: Chie Yanagisawa

<i>Company</i>	<i>Last</i>	<i>First</i>	<i>Company</i>	<i>Last</i>	<i>First</i>
FUJIFILM	Ishizuka	Hiroshi	Sony	Tomioka	Satoshi
Japan Display	Watanabe	Ryoichi	Sumitomo Bakelite	Eguchi	Toshimasa
Nitto Denko	Tatsumi	Motoshige	Yamagata University	Furukawa	Tadahiro
Otsuka Electronics	Kawaguchi	Akira	SEMI Japan	Yanagisawa	Chie

Table 2 Leadership Changes

<i>WG/TF/SC/TC Name</i>	<i>Previous Leader</i>	<i>New Leader</i>
<i>< FPD Materials & Components ></i>		
None		
<i>< FPD Metrology ></i>		
D31 Revision Task Force	Keizo Ochi stepped down	Ryoichi Watanabe is newly appointed.

Table 3 Committee Structure Changes

<i>Previous WG/TF/SC Name</i>	<i>New WG/TF/SC Name or Status Change</i>
<i>< FPD Materials & Components ></i>	
None	
<i>< FPD Metrology ></i>	
None	

Table 4 Ballot Results

<i>Document #</i>	<i>Document Title</i>	<i>Committee Action</i>
<i>< FPD Materials & Components ></i>		
5977	New Standard: Test Method for Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices	Failed and returned to TF
<i>< FPD Metrology ></i>		
None		

#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

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
<i>< FPD Materials & Components ></i>			
None			
<i>< FPD Metrology ></i>			
None			

Table 6 Authorized Activities

Listing of all revised or new SNARF(s) approved by the Originating TC Chapter.

<i>#</i>	<i>Type</i>	<i>SC/TF/WG</i>	<i>Details</i>
<i>< FPD Materials & Components ></i>			
6102	Revised	FPD Color Filter TF	Line Item Revision to SEMI D22-1109, Test Method for the Determination of Color, Transmittance of FPD Color Filter Assemblies
6103	Revised	FPD Color Filter TF	Line Item Revision to SEMI D63-0811, Measurement Method for Depolarization Effect of FPD Color Filter with Title Change to: Test Method for Depolarization Effect of FPD Color Filter
6014	Revised	Polarizing Film TF	Revision to SEMI D60-0710: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Its Materials, with title change to: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Cover Plastics for Mobile Displays
<i>< FPD Metrology ></i>			
None			

#1 SNARFs and TFOFs are available for review on the SEMI Web site at:

<http://downloads.semi.org/web/wstdsba1.nsf/TFOFSNARF>

Table 7 Authorized Ballots

#	When	TF	Details
<i>< FPD Materials & Components ></i>			
6102	Cycle 8	FPD Color Filter TF	Line Item Revision to SEMI D22-1109, Test Method for the Determination of Color, Transmittance of FPD Color Filter Assemblies
6103A	Cycle 8	FPD Color Filter TF	Line Item Revision to SEMI D63-0811, Measurement Method for Depolarization Effect of FPD Color Filter with Title Change to: Test Method for Depolarization Effect of. FPD Color Filter
6014	Cycle 9	Polarizing Film TF	Revision to SEMI D60-0710: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Its Materials, with title change to: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Cover Plastics for Mobile Displays
6006	Cycle 8	Polarizing Film TF	New Standard: Test method for measurements of dimension of films for FPD – contour matching method
5977A	Cycle 8	Flexible Display Task Force	New Standard: Test Method for Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices
<i>< FPD Metrology ></i>			
None			

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

#	TF	Title	Expiration Date
<i>< FPD Materials & Components ></i>			
None			
<i>< FPD Metrology ></i>			
None			

Table 9 SNARF(s) Abolished

#	TF	Title
<i>< FPD Materials & Components ></i>		
None		
<i>< FPD Metrology ></i>		
None		

Table 10 Standard(s) to receive Inactive Status

Standard Designation	Title
<i>< FPD Materials & Components ></i>	
None	
<i>< FPD Metrology ></i>	
None	

Table 11 New Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
<i>< FPD Materials & Components ></i>		
20170915-01	Chie Yanagisawa (SEMI Japan)	To ask Sumitomo Bakelite for LOA for #5977
<i>< FPD Metrology ></i>		
None		

Table 12 Previous Meeting Action Items

<i>Item #</i>	<i>Assigned to</i>	<i>Details</i>
<i>< FPD Materials & Components ></i>		
20170407-01	FPD Color Filter TF	To rework for the Document 6103 (Line Item Revision to SEMI D63-0811) -> CLOSED
20170407-02	SEMI Staff	To request GCS review of revision SNARF of <i>Doc.6104, SEMI D60-0710: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Its Materials</i> , with title change to: <i>Test Method of Surface Scratch Resistance for FPD Polarizing Film and Cover Plastics for Mobile Display</i> , after 2-weeks review by TC members. -> CLOSED
20170407-03	SEMI Staff	To submit Doc. 5977, <i>New Standard, Test Method of Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices</i> , for Cycle 5, 2017- > CLOSED
<i>< FPD Metrology ></i>		
20170407-01	SEMI Staff	To forward adjudication result of <i>Doc.6101, Line Item Revision of SEMI D31-0914, Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection</i> , with title change to: <i>Guide for Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection</i> , to the ISC A&R Subcommittee for procedural review -> CLOSED



1 Welcome, Reminders, and Introductions

Tadahiro Furukawa (Yamagata University), co-chair of FPD Materials & Components Japan TC Chapter called the meeting to order at 15:00. The meeting reminders on antitrust issues, intellectual property issues and holding meetings with international attendance were reviewed. Attendees introduced themselves.

Attachment: 01_Required_Elements_Reg_20150327_E+J

2 Review of Previous Meeting Minutes

The TC Chapter firstly reviewed the minutes of the previous meeting for FPD Materials & Components part.

Motion:	To approve the minutes of the previous meeting for FPD Materials & Components part with editorial changes
By / 2nd:	Ryoichi Watanabe (Japan Display) / Toshimasa Eguchi (Sumitomo Bakelite)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

Then, the TC Chapter reviewed the minutes of the previous meeting for FPD Metrology part.

Motion:	To approve the minutes of the previous meeting for FPD Metrology part with editorial changes
By / 2nd:	Motoshige Tatsumi (Nitto Denko) / Hiroshi Ishizuka (FUJIFILM)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

3 Liaison Reports

3.1 FPD Metrology Korea TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the FPD Metrology Korea TC Chapter as attached. Of note:

- Major Updates
 - Ballot #5633F: New Standard, Viewing Angle Characteristic Test Method passed with Technical Changes, Ratification ballot R5633F to be issued
 - Ballot #R5633F: New Standard, Viewing Angle Characteristic Test Method to be submitted for Cycle 7
- Task Force Updates
 - Perceptual Viewing Angle TF
 - R5634D (New Standard, Test Method for Color Reproduction and Perceptual Contrast of Displays) passed A&R.
 - Perceptual Image Quality TF
 - 5633F (New Standard, Test Method for Viewing Angle Characteristic) passed with Ratification ballot. The ballot issued on cycle 7.
 - Transparent Display TF
 - SNARF 6222 (New Standard, Test Method for Clarity Characteristic of Transparent Display) approved via GCS process.
 - The ballot also authorized for cycle 7 via GCS but it will be postponed as follow author's request.

Attachment: 02_KR_FPDMet_liaison_Sept

3.2 FPD Metrology Taiwan TC Chapter

Chie Yanagisawa (SEMI Japan) reported for the FPD Metrology Taiwan TC Chapter as attached. Of note:

- Ballot Result
 - Doc 5948A “ New Standard: Guide for Mechanical Stress Test Methods in the Measurement of Gas Barrier Performance for Flexible Display Components and Devices under a Normal Usage Condition” for Cycle 5-17 voting
 - Failed and return to Flexible Display TF rework.
- Task Force Updates
 - Flexible Display TF
 - Doc 5949 New Standard: Test Method of Flicker Measurement for Flexible Displays will be issued in Cycle 8 or Cycle 9
 - Doc 5948A for Cycle 5-17 failed and rework
 - Transparent Display TF
 - Drafting Doc 6201 New Standard: Guide for Tone Reproduction Curves for Transparent Displays

Attachment: 03_Taiwan FPD Standard Committee Liaison Report August 2017

3.3 SEMI Staff Report

Chie Yanagisawa (SEMI Japan) gave the SEMI Staff Report as attached. Items are:

- SEMI Global 2017 Calendar of Events
- SEMICON Japan Overview
- Global Standards Meeting Schedule
- SEMICON Japan Standards Meetings
- 2017 Critical Dates for SEMI Standards Ballots
- A&R Ballot Review
- SEMI Standards Publications
- Global Technical Committee Charter & Scope Review
- ISC (International Standards Committee) Topics
- 3D Packaging and Integration Global Technical Committee
- JRSC Topics
- Standards Topics for SEMI Japan News letter
- Global Staff Assignment
- Staff Contact –Japan

Attachment: 04_SEMI Staff Report 20170906

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 FPD Materials & Components Japan TC Chapter

4.1.1 Document # 5977, New Standard: Test Method for Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices

Ballot #5977 failed and returned to the task force.

Attachment: 05_#5977_LetterBallotReviewSheet_for_ProceduralReview.docx

4.2 FPD Metrology Japan TC Chapter

None

5 Subcommittee and Task Force Reports

5.1 FPD Materials & Components Japan TC Chapter

5.1.1 Polarizing Film Task Force

Motoshige Tatsumi (Nitto Denko) reported for the Polarizing Film Task Force as follows.

- #6006: New Standard: Test method for measurements of dimension of films for FPD – contour matching method
 - Preparing for the ballot draft
 - To make a proposal for the ballot submission at the New Business section of this meeting later
- #6014: Revision to SEMI D60-0710: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Its Materials, with title change to: Test Method of Surface Scratch Resistance for FPD Polarizing Film and Cover Plastics for Mobile Displays
 - To make a proposal for Revision to SNARF #6014 at the New Business section of this meeting later
 - For TC Member Review for two weeks the draft Revision to SNARF was distributed from April 18, 2017 to May 2, 2017 and there was no feedback to it.

5.1.2 Flexible Display Task Force

Tadahiro Furukawa (Yamagata University) reported for the Flexible Display Task Force as follows.

- #5977: New Standard: Test Method for Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices
 - Ballot #5977 was submitted for Cycle 5 and one reject vote and one accept with comment vote were received.
 - Ballot results were reviewed at the Ballot Review section of this meeting above and it failed.
 - To make a proposal for Ballot #5977A submission for Cycle 8 at the New Business section of this meeting later.

5.1.3 FPD Color Filter Task Force

Tadahiro Furukawa (Yamagata University) reported for the FPD Color Filter Task Force as follows.

- #6102: Line Item Revision to SEMI D22-1109, Test Method for the Determination of Color, Transmittance of FPD Color Filter Assemblies



- To make a proposal for revision to SNARF #6102 at the Old Business section of this meeting later.
- To make a proposal for Ballot #6102 submission for Cycle 8
- #6103: Line Item Revision to SEMI D63-0811, “Measurement Method for Depolarization Effect of FPD Color Filter” with Title Change to “Test Method for Depolarization Effect of. FPD Color Filter”
 - To make a proposal for revision to SNARF #6103 at the Old Business section of this meeting later.
 - To make a proposal for Ballot #6103A submission for Cycle 8

5.1.4 FPD Mask Task Force

There was no attendee of this task force and no report was made.

5.2 FPD Metrology Japan TC Chapter

5.2.1 D31 Revision Task Force

Ryoichi Watanabe (Japan Display) reported for the D31 Revision Task Force as follows.

- Ballot #6101: Line Item Revision of SEMI D31-0914, Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection, with title change to: Guide for Definition of Measurement Index (DSEMU) for Luminance Mura in FPD Image Quality Inspection
 - Passed at Audit & Review procedure in May 2017
- The TF leader, Keizo Ochi (Konica Minolta), stepped down due to his retirement.

Motion:	To appoint Ryoichi Watanabe (Japan Display) as a leader of D31 Revision TF
By / 2nd:	Tadahiro Furukawa (Yamagata University) / Akira Kawaguchi (Otsuka Electronics)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

6 Old Business

6.1 FPD Materials & Components Japan TC Chapter

6.1.1 #6102: Line Item Revision to SEMI D22-1109, Test Method for the Determination of Color, Transmittance of FPD Color Filter Assemblies

Ryoichi Watanabe (Japan Display) addressed the committee on this topic and the committee reviewed the proposed revised SNARF #6102.

Motion:	To approve the revised SNARF #6102
By / 2nd:	Ryoichi Watanabe (Japan Display) / Toshimasa Eguchi (Sumitomo Bakelite)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

Attachment: 06_6102_Revision_SNARF_D22-Revision_20170915

Hiroshi Ishizuka (FUJIFILM) made a proposal as follows.

Motion:	To approve Ballot #6102 submission for Cycle 8.
By / 2nd:	Hiroshi Ishizuka (FUJIFILM) / Satoshi Tomioka (Sony)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.



6.1.2 #6103: Line Item Revision to SEMI D63-0811, “Measurement Method for Depolarization Effect of FPD Color Filter” with Title Change to “Test Method for Depolarization Effect of. FPD Color Filter”

Ryoichi Watanabe (Japan Display) addressed the committee on this topic and the committee reviewed the proposed revised SNARF #6103.

Motion:	To approve the revised SNARF #6103
By / 2nd:	Ryoichi Watanabe (Japan Display) / Akira Kawaguchi (Otsuka Electronics)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

Attachment: 07_6103_Revision_SNARF_D63-Revision_20170915

Ryoichi Watanabe (Japan Display) made a proposal as follows.

Motion:	To approve Ballot #6103A submission for Cycle 8.
By / 2nd:	Ryoichi Watanabe (Japan Display) / Toshimasa Eguchi (Sumitomo Bakelite)
Discussion:	None
Vote:	5 in favor and 0 opposed. Motion passed.

6.2 FPD Metrology Japan TC Chapter

None.

7 New Business

7.1 FPD Materials & Components Japan TC Chapter

7.1.1 #6014: Revision to SEMI D60-0710: “Test Method of Surface Scratch Resistance for FPD Polarizing Film and Its Materials”, with title change to “Test Method of Surface Scratch Resistance for FPD Polarizing Film and Cover Plastics for Mobile Displays”

Motoshige Tatsumi (Nitto Denko) addressed the committee on this topic. Firstly, he made a proposal for Revision to SNARF #6014 and the committee reviewed the draft of it.

Motion:	To approve the revised SNARF #6014
By / 2nd:	Motoshige Tatsumi (Nitto Denko) / Hiroshi Ishizuka (FUJIFILM)
Discussion:	None
Vote:	5 in favor and 0 opposed. Motion passed.

Attachment: 08_6014_Revision_SNARF_D60-Revision_20170915r2

Next, he made a proposal as follows.

Motion:	To approve Ballot #6014 submission for Cycle 9
By / 2nd:	Motoshige Tatsumi (Nitto Denko) / Hiroshi Ishizuka (FUJIFILM)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

7.1.2 #6006: New Standard: Test method for measurements of dimension of films for FPD – contour matching method

Motoshige Tatsumi (Nitto Denko) addressed the committee on this topic and he made a proposal as follows.

Motion:	To approve Ballot #6006 submission for Cycle 8
By / 2nd:	Motoshige Tatsumi (Nitto Denko) / Hiroshi Ishizuka (FUJIFILM)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

7.1.3 #5977A: New Standard: Test Method for Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices

Toshimasa Eguchi (Sumitomo Bakelite) addressed the committee on this topic and he made a proposal as follows.

Motion:	To approve Ballot #5977A submission for Cycle 8
By / 2nd:	Toshimasa Eguchi (Sumitomo Bakelite) / Ryoichi Watanabe (Japan Display)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

7.1.4 Assessment of Possible Relevance of Patented Technology to #5977: New Standard: Test Method for Water Vapor Barrier Property for Plastic Films with High Barrier for Electronic Devices

Chie Yanagisawa (SEMI Japan) reported that Letter of Intent (LOI) was received when the SNARF #5977 was approved. The details of LOI are as follows:

- A. Submitter : SUMITOMO BAKELITE CO., LTD
- B. Patent/Application/Docket Number: JP3958235
- C. Date signed: September 1, 2015
- D. Submitter's Intent
 - 1. The Submitter may own, control, or have the ability to license Patent Claims that might be or become Material Patent Claims. With respect to such Material Patent Claims, the Submitter's licensing position is as follows (must check a, b, c, or d and any applicable subordinate boxes):
 - b. The Submitter intends to grant a license under reasonable rates to an unrestricted number of applicants on a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair discrimination.
- E. Scope of Intent
 - 1. When checked, this Letter of Intent only applies to the Patent Claims identified below that are or become Material Patent Claims. (If no Patent Claim is identified below, then this Letter of Intent applies to all Material Patent Claims supported by the disclosure in the patent or patent applications listed below.)
 - Number: JP3958235

Per 16.3.2 of SEMI Standards Regulations, the TC Chapter made an assessment of Possible Relevance of Patented Technology to Documents Under Development as follows.

Firstly, the TC Chapter examined if the IP is Potentially Material Patented Technology.

Motion:	To find JP3958235 is PMPT(Potentially Material Patented Technology)
By / 2nd:	Tadahiro Furukawa (Yamagata University) / Hiroshi Ishizuka (FUJIFILM)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.



Next, the TC Chapter determined if the use of the PMPT is justified.

Motion:	To determine on technical grounds that the use of the potentially material patented technology is justified
By / 2nd:	Tadahiro Furukawa (Yamagata University) / Akira Kawaguchi (Otsuka Electronics)
Discussion:	None
Vote:	6 in favor and 0 opposed. Motion passed.

The TC Chapter directed Chie Yanagisawa, the responsible Standards staff, to ask the patent holder for LOA.

Action Item: 20170915-01, to Chie Yanagisawa (SEMI Japan) to ask Sumitomo Bakelite for LOA for #5977

7.2 FPD Metrology Japan TC Chapter

None

8 Next Meeting and Adjournment

The next meeting is scheduled as follows. See <http://www.semi.org/standards-events> for the current list of events.

FPD Materials & Components Japan TC Chapter

Date: Friday, January 26, 2018

Time 14:30-17:00

Venue: SEMI Japan office, Tokyo

FPD Metrology Japan TC Chapter

April, 2018

Date and Time to be decided

Venue: SEMI Japan office, Tokyo



Respectfully submitted by:

Chie Yanagisawa

Manager

SEMI Japan

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Minutes tentatively approved by:

Ryoichi Watanabe (JapanDisplay), <FPD Metrology> Co-chair	November 5, 2017
Akira Kawaguchi (Otsuka Electronics), <FPD Metrology> Co-chair	November 6, 2017
Tadahiro Furukawa (Yamagata University), <FPD Materials & Components> Co-chair	November 5, 2017
Yoshi Shibahara (FUJIFILM), <FPD Materials & Components> Co-chair	November 6, 2017

Table 13 Index of Available Attachments#1

<i>Title</i>	<i>Title</i>
01_Required_Elements_Reg_20150327_E+J	05_#5977_LetterBallotReviewSheet_for_ProceduralReview.docx
02_KR_FPDMet_liaison_Sept	06_6102_Revision_SNARF_D22-Revision_20170915
03_Taiwan FPD Standard Committee Liaison Report August 2017	07_6103_Revision_SNARF_D63-Revision_20170915
04_SEMI Staff Report 20170906	08_6014_Revision_SNARF_D60-Revision_20170915r2

#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. For additional information or to obtain individual attachments, please contact [SEMI Staff Name] at the contact information above.