

Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **Taiwan**

Global Technical Committee: **FPD Metrology**

TC Chapter Cochairs: **Dusk JC Wang/ITRI, Chia-Ming Liu/ITRI**

Standards Staff: **Cher Wu**

	Scheduled in Background Statement	Actual
Date	Aug/07/2020	Aug/07/2020
Location	ITRI, Taiwan	ITRI, Taiwan
Reason for Change of Date and/or Location (if changed)		

Note: See Regulations ¶ 9.5 Exceptions for allowable reason to change.

I. Document Number and Title

Document Number 5949C	Document Title New Standard: Test Method for Local and Overall Flicker of Flexible Displays of Flat Panel Displays
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II. Tally

Standards staff to fill in.

Voting Tally: **As-cast tally after close of voting period**

Note: A minimum of 60% of the Voting Interests that have TC Members within the global technical committee that issued the Letter Ballot must return Votes. (Regulations ¶ 9.6.2.1.1)

Voting Tally (with example values):

Voting Interest:	Returned Votes	Distribution	Return Rate	
Letter Ballot	29	÷ 46	= 63.0%	≥60%
Intercommittee Ballot	28			
Voting Interest Reject(s)	2	Total Voters with Rejects		2
Voting Interest Accept(s)	26			

Note: See Regulations § 3.2.1 for definition of Voting Interest.

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Otsuka)

Voter Reject 1 (Voter: Kawaguchi, Akira and Otsuka)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.				
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. It should state the significance of measuring overall flicker. Isn't it enough to measure only local flicker?				
TF input (optional)						
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection		
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)		
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	Motion by/ 2 nd by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
	<input type="checkbox"/>	[Negative is not related.] < 2/3		GO TO "Persuasive" subsection		
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)		
Persuasive	Motion and Reason (check one)	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason				
	Motion by/ 2 nd by	Pei-Li Sun (NTUST)/ Kerson Wang (i-boson)				
	Discussion					
	Result of Vote (check one)	8 Y-0 N; Motion passed				
	<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO "Final" subsection → (E)

		<input type="checkbox"/> $2/3 \leq$ [Negative is related and not persuasive.] $< 90\%$	GO TO "Final" subsection → (C)	
		<input type="checkbox"/> $90\% \leq$ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection	
Address by Technical Change Option	Technical Changes	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.		
		1	<p>FROM:</p> <p>1.3 Flicker has been widely used for evaluating display. Follow the calculated procedures in VESA standard, ..., and further transformed to flicker.</p> <p>TO:</p> <p>1.3 Flicker has been widely used for evaluating the display. Follow the calculation procedures in VESA standard, ..., and further transformed to flicker <u>value. However, the conventional method is applied to a flat display and its local area only. To flexible displays, the potential flicker phenomenon may present when the user operates the display in a flexible mode or a flat mode. Therefore, this document also addresses the test method for Overall Flicker of the flexible display.</u></p> <p>Justification (if necessary) The added descriptions were in Section 1.3 to state the significance of Overall Flicker</p>	
		2	<p>FROM:</p> <p>1.4 Flicker is divided into Local Flicker and Overall Flicker, both of them are investigated for the flexible display. The luminance meter with zoom lens is developed for Overall Flicker.</p> <p>TO:</p> <p>1.4 Flicker is divided into Local Flicker and Overall Flicker, both of them are investigated for the flexible display. <u>Overall Flicker is the new metric for evaluating the whole visual field of flickering on the flexible display, such as concave or convex, foldable, stretchable form etc. It makes up the deficiency of Local flicker.</u> The luminance meter with zoom lens is developed for Overall Flicker.</p> <p>Justification (if necessary) The added descriptions were in Section 1.4 to state the significance of Overall Flicker.</p>	
		Motion		Negative is addressed by the technical change(s).
		Motion by/2nd by		Pei-Li Sun (NTUST)/ Kerson Wang (i-boson)
		Discussion		
	Result of Vote (check one)		8 Y-0N; Motion passed	
		<input checked="" type="checkbox"/>	$2/3 \leq$ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] $< 2/3$	GO TO "Final" subsection → (E)
	Incorporation of the Technical Change	Motion		To incorporate the technical change(s).
Motion by/2nd by		Pei-Li Sun (NTUST)/ Kerson Wang (i-boson)		
Discussion				
Result of Vote (check one)		8 Y-0 N; Motion passed.		
	<input checked="" type="checkbox"/>	$90\% \leq$ [Agree to incorporate.]	GO TO "Final" subsection → (F)	
	<input type="checkbox"/>	[Disagree to incorporate.] $> 10\%$	GO TO "Final" subsection → (E)	

Not Significant Finding Option	This option can be used only “if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action”. (Regulations ¶ 9.6.1.4.5.2)		
	Use of “Not significant finding option” (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative “not significant”. GO TO “Final” subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative “significant”. GO TO “Final” subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is “not significant” is decided by a vote.
	Motion	The Negative is “not significant”.	
Motion by/ 2 nd by	Name (Company)/Name (Company)		
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO “Final” subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority GO TO “Final” subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
	<input checked="" type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

This table is needed for each Negative.

Negative 2

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. 6.1.2	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. To measure flicker accurately, the frequency characteristics of the detector should be stated.	
	TF input (optional)		
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO “Related” subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
		Reason	
	Motion by/ 2 nd by	Name (Company)/Name (Company)	
Discussion			

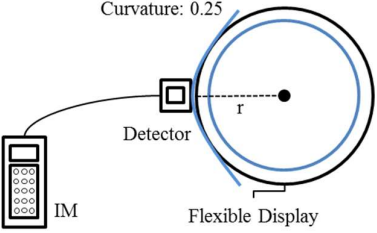
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection			
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)			
	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)				
	<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)					
		Reason	Section 7.1.4 has described the related details already.				
Persuasive	Motion by/ 2nd by	Telu Chen (Wisechip)/Mark KUO (Innolux)					
	Discussion						
	Result of Vote (check one)	8 Y-0 N; Motion passed.					
		<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO "Final" subsection → (E)
		<input checked="" type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection					
Address by Technical Change Option	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.						
	1	FROM: Section/Paragraph XXX					
		TO: Section/Paragraph xxx					
		Justification (if necessary)					
	2	FROM: Section/Paragraph XXX					
		TO: Section/Paragraph xxx					
		Justification (if necessary)					
	Motion	Negative is addressed by the technical change(s).					
	Motion by/2nd by	Name (Company)/Name (Company)					
	Discussion						
Result of Vote (check one)	XX Y-XX N; Motion passed/failed.						
	<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection				

		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)	
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).			
	Motion by/2 nd by	Name (Company)/Name (Company)			
	Discussion				
	Result of Vote (check one)	<input type="checkbox"/>	90% ≤ [Agree to incorporate.]		GO TO "Final" subsection → (F)
		<input type="checkbox"/>	[Disagree to incorporate.] > 10%		GO TO "Final" subsection → (E)
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.1.4.5.2)				
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".		GO TO "Final" subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".		GO TO "Final" subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.		
	Motion	The Negative is "not significant".			
Motion by/ 2 nd by	Name (Company)/Name (Company)				
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority		GO TO "Final" subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority		GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input checked="" type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)		
(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.			

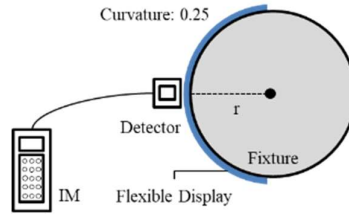
This table is needed for each Negative.

Negative 3

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Fig3 - Fig5		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. Isn't the position of the lead line in the figure wrong? Flexible Display, Measured Field etc.		
TF input (optional)				
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection

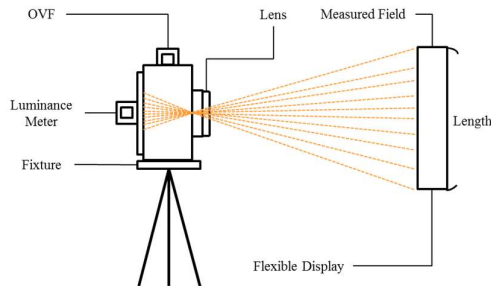
		Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)		
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/> 'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection		
		<input type="checkbox"/> Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason			
	Motion by/ 2 nd by				
	Discussion				
Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection		
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)		
Persuasive	Motion and Reason (check one)	<input checked="" type="checkbox"/> Negative is related and persuasive. (Needs >1/3 votes to pass.)			
		<input type="checkbox"/> Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason			
	Motion by/ 2 nd by	Pei Li Sun (Company)/Ken Yu Liu (AUO)			
	Discussion				
	Result of Vote (check one)	8 Y-0 N; Motion passed			
		<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/> Y
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/> N	GO TO "Final" subsection → (E)
<input type="checkbox"/>		2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Address by Technical Change Option	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.				
	1	FROM: Figure 3 - Curved Measurement of Local Flicker 			

TO: Figure 3 - Curved Measurement of Local Flicker



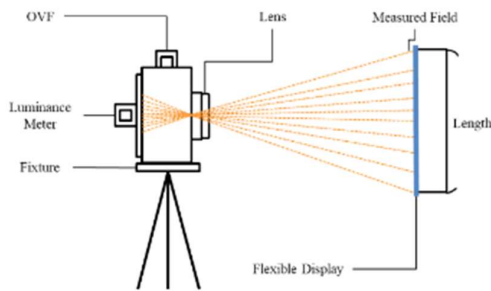
Justification (if necessary)
Clarification

FROM: Figure 4 - Flat Measurement of Overall Flicker



2

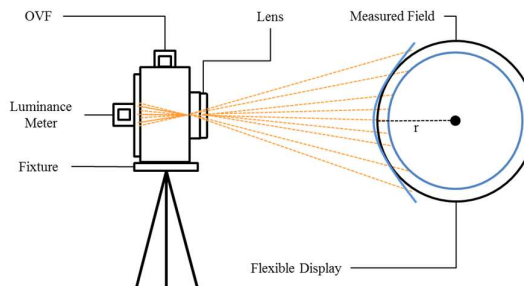
TO: Figure 4 - Flat Measurement of Overall Flicker



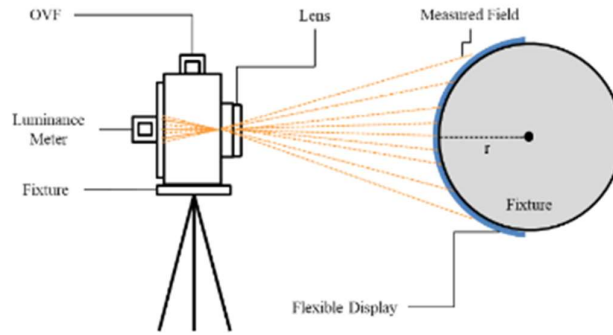
Justification (if necessary)
Clarification

3

FROM: Figure 5 - Curved Measurement of Overall Flicker



TO: Figure 5 - Curved Measurement of Overall Flicker



**Justification (if necessary)
Clarification**

Motion		Negative is addressed by the technical change(s).	
Motion by/2nd by		Pei Li Sun (Company)/Ken Yu Liu (AUO)	
Discussion			
Result of Vote (check one)		8 Y-0 N; Motion passed.	
		<input checked="" type="checkbox"/> $2/3 \leq$ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/> [Negative is not addressed by the technical change(s).] $< 2/3$	GO TO "Final" subsection → (E)
Incorporation of the Technical Change	Motion		To incorporate the technical change(s).
	Motion by/2nd by		Pei Li Sun (Company)/Ken Yu Liu (AUO)
	Discussion		
	Result of Vote (check one)		8 Y-0 N; Motion passed.
		<input checked="" type="checkbox"/> $90\% \leq$ [Agree to incorporate.]	GO TO "Final" subsection → (F)
		<input type="checkbox"/> [Disagree to incorporate.] $> 10\%$	GO TO "Final" subsection → (E)
Not Significant Finding Option	Use of "Not significant finding option" (check one)		
	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".	GO TO "Final" subsection → (C)
	<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	Motion		The Negative is "not significant".
Motion by/2nd by		Name (Company)/Name (Company)	
Vote		<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
		<input type="checkbox"/> XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)

Final	(check if applicable)	<input type="checkbox"/>	(A)	Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B)	Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C)	Related and not persuasive (significant)	
		<input type="checkbox"/>	(D)	Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		<input checked="" type="checkbox"/>	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

Negative 4

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.			
	Negative Text	Table2 *Original complete Negative text (e.g., issue, justification, suggestion) should be copied. The measured value should be described as an example.			
TF input (optional)					
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.		GO TO "Related" subsection	
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.		GO TO "Final" subsection → (A)	
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)		
		Reason	XXXX		
	Motion by/ 2 nd by	Name (Company)/Name (Company)			
	Discussion				
Result of Vote (check one)	<input type="checkbox"/>	XX Y-XX N; Motion passed/failed.			
	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection		
	<input type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)		
Persuasive	Motion and Reason (check one)	<input checked="" type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)		
		<input type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason			
	Motion by/ 2 nd by	Mark Kuo (Innolux)/ Pei-Li Sun (NTUST)			
	Discussion				
	8 Y-0 N; Motion passed.				

Result of Vote (check one)	<input checked="" type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input checked="" type="checkbox"/>	Y	GO TO “Address by Technical Change Option” subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO “Final” subsection → (E)
	<input type="checkbox"/>	$2/3 \leq$ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
	<input type="checkbox"/>	$90\% \leq$ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			

Technical Change Recommendations
Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.

Address by Technical Change Option	Technical Changes	FROM: Table 2 - An Example of Resultant Report (0~60 Hz)				
		Measured Condition		Frequency (Hz, 0~60 Hz)	Magnitude (dB, 0~60 Hz)	Curvature (m)
		Local Flicker	Flat			
			Curved			
		Overall Flicker	Flat			
			Curved			

Address by Technical Change Option	Technical Changes	TO: Table 2 - An Example of Resultant Report (0~60 Hz)				
		Measured Condition		Frequency (Hz, 0~60 Hz)	Magnitude (dB, 0~60 Hz)	Curvature (m)
		Local Flicker	Flat	59.81	-84.03	0
			Curved	59.81	-86.80	0.25
		Overall Flicker	Flat	59.81	-90.88	0
			Curved	59.81	-85.37	0.25

**Justification (if necessary)
Clarification**

Motion Negative is addressed by the technical change(s).

Motion by/2nd by [Mark Kuo \(Innolux\)/ Pei-Li Sun \(NTUST\)](#)

Discussion

Result of Vote [8 Y-0 N; Motion passed.](#)

Result of Vote (check one)	<input checked="" type="checkbox"/>	$2/3 \leq$ [Negative is addressed by the technical change(s).]	GO TO “Incorporation of the Technical Change” subsection
	<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO “Final” subsection → (E)

Incorporation of the Technical Change	Motion	To incorporate the technical change(s).		
	Motion by/2 nd by	Mark Kuo (Innolux)/ Pei-Li Sun (NTUST)		
	Discussion			
	Result of Vote (check one)	8 Y-0 N; Motion passed.		
Not Significant Finding Option	Use of "Not significant finding option" (check one)	<input checked="" type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)
		<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.	
	Motion	The Negative is "not significant".		
	Motion by/ 2 nd by	Name (Company)/Name (Company)		
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)	
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)	
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)	
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)	
		<input type="checkbox"/>	(C) Related and not persuasive (significant)	
		<input type="checkbox"/>	(D) Not significant (counted under j in disposition)	
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	<input checked="" type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)		
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.		

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

4	Original number (#) of Negatives	(g)
#	Number of Negatives withdrawn	(h)
#	Number of Negatives found not related	(i)
#	Number of Negatives found not significant	(j)
3	Number of Negatives addressed by technical change (Negative becomes not significant)	(k)
Final	<input type="checkbox"/>	$g - (h + i + j + k) = 0$ Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Check

	<input checked="" type="checkbox"/>	$g - (h + i + j + k) > 0$	Reject is included in the denominator of § VI. Approval Conditions Check
	<input type="checkbox"/>	Reject without a Negative	Not Valid

This table is needed for each Voting Interest Reject.

Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. (Regulations ¶ 9.4.3.3)

Note: A Negative addressed by a technical change is automatically considered to be not significant. (Regulations ¶ 9.6.1.4.5.2)

Voting Interest Reject 2 (Voting Interest Name: JAD)

Voter Reject 1 (Voter: Watanabe, Ryoichi and JAD)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. Section 4.1 VESA Standard	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied. JEITA and IEEE standards are not VESA Standards.	
	TF input (optional)		
Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter.	GO TO "Related" subsection
	<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY.	GO TO "Final" subsection → (A)
Related	Motion and Reason (check one)	<input type="checkbox"/>	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
		Reason	XXXX
	Motion by/ 2 nd by	Name (Company)/Name (Company)	
	Discussion		
Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
	<input checked="" type="checkbox"/>	2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)	<input type="checkbox"/>	Negative is related and persuasive. (Needs >1/3 votes to pass.)
		<input checked="" type="checkbox"/>	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)
		Reason	Editorial correction. Oversight, section 4.1, the ballot refers VESA, JEITA and IEEE standards.
	Motion by/ 2 nd by	Telu Chen(Wisechip)/Mark Kuo (Innolux)	
Discussion			

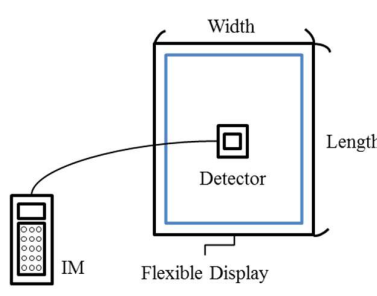
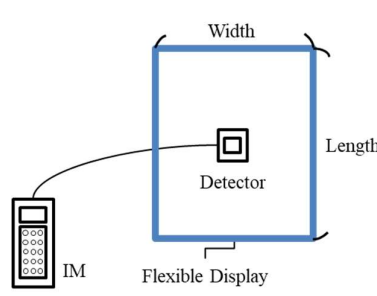
	8 Y- 0N; Motion passed.						
	Result of Vote (check one)	<input type="checkbox"/>	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	<input type="checkbox"/>	Y	GO TO "Address by Technical Change Option" subsection
		<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	N	GO TO "Final" subsection → (E)
		<input checked="" type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
	<input type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection				
Address by Technical Change Option	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.						
	Technical Changes 1	FROM:					
		TO:					
		Justification (if necessary) Clarification					
	Motion		Negative is addressed by the technical change(s).				
	Motion by/2 nd by		Name (Company)/Name (Company)				
	Discussion						
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.					
		<input type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection			
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)			
	Incorporation of the Technical Change	Motion		To incorporate the technical change(s).			
		Motion by/2 nd by		Name (Company)/Name (Company)			
Discussion							
Result of Vote (check one)		XX Y-XX N; Motion passed/failed.					
	<input type="checkbox"/>	90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)				
	<input type="checkbox"/>	[Disagree to incorporate.] > 10%	GO TO "Final" subsection → (E)				
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.1.4.5.2)						
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".			GO TO "Final" subsection → (D)	
<input type="checkbox"/>		It is mutually agreed upon to term the Negative "significant".			GO TO "Final" subsection → (C)		

		Whether or not the Negative is “not significant” is decided by a vote.	
	Motion	The Negative is “not significant”.	
	Motion by/ 2nd by	Name (Company)/Name (Company)	
	Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority GO TO “Final” subsection → (D)
		<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority GO TO “Final” subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input checked="" type="checkbox"/>	(C) Related and not persuasive (significant)
		<input type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
		<input type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)
	(check if applicable)	<input checked="" type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.

This table is needed for each Negative.

Negative 2

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary. The blue lines in Fig. 2, Fig. 3 and Fig. 5 shall be explained.	
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.	
TF input (optional)		Figure 3 and 5 are addressed. Refer to Reject 1 of negative 3.	
	Withdrawal (check one)	<input checked="" type="checkbox"/>	No Negative withdrawal made by Voter. GO TO “Related” subsection
		<input type="checkbox"/>	Withdrawal document received by Standards staff on MM/DD/YYYY. GO TO “Final” subsection → (A)
Related	Motion and Reason (check one)	<input checked="" type="checkbox"/>	‘Related’ is mutually agreed upon. (Needs no motion.) GO TO “Persuasive” subsection
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)
		Reason	XXXX
	Motion by/ 2nd by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3 GO TO “Persuasive” subsection
		<input type="checkbox"/>	2/3 ≤ [Negative is not related.] GO TO “Final” subsection → (B)

Persuasive	Motion and Reason (check one)	x	Negative is related and persuasive. (Needs >1/3 votes to pass.)				
			Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)				
			Reason				
	Motion by/ 2 nd by	Telu Chen(Wisechip)/Mark Kuo (Innolux)					
	Discussion						
	Result of Vote (check one)	8 Y- 0N; Motion passed.					
		x	[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)	x	Y	GO TO "Address by Technical Change Option" subsection
			[Negative is related and not persuasive.] < 2/3			N	GO TO "Final" subsection → (E)
			$2/3 \leq$ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
			$90\% \leq$ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Address by Technical Change Option	Technical Changes	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
		FROM: Figure 2 - Flat Measurement of Local Flicker 					
		TO: Figure 2 - Flat Measurement of Local Flicker 					
		Justification (if necessary) Clarification					
Motion		Negative is addressed by the technical change(s).					

	Motion by/2 nd by	Telu Chen(Wisechip)/Mark Kuo (Innolux)	
	Discussion		
	Result of Vote (check one)	8 Y-0 N; Motion passed	
		<input checked="" type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).] GO TO "Incorporation of the Technical Change" subsection
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3 GO TO "Final" subsection → (E)
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2 nd by	Telu Chen(Wisechip)/Mark Kuo (Innolux)	
	Discussion		
	Result of Vote (check one)	8 Y-0 N; Motion passed.	
<input checked="" type="checkbox"/>		90% ≤ [Agree to incorporate.] GO TO "Final" subsection → (F)	
<input type="checkbox"/>		[Disagree to incorporate.] > 10% GO TO "Final" subsection → (E)	
Not Significant Finding Option	This option can be used only "if the TC Chapter finds a Negative not persuasive by a vote equal to or greater than 90% of the persons voting on the action". (Regulations ¶ 9.6.1.4.5.2)		
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsection → (D)
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsection → (C)
		<input type="checkbox"/>	Whether or not the Negative is "not significant" is decided by a vote.
	Motion	The Negative is "not significant".	
	Motion by/2 nd by	Name (Company)/Name (Company)	
Vote	<input type="checkbox"/>	XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)
	<input type="checkbox"/>	XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)	<input type="checkbox"/>	(A) Withdrawn (counted under h in disposition)
		<input type="checkbox"/>	(B) Not related (counted under i in disposition)
		<input type="checkbox"/>	(C) Related and not persuasive (significant)
		<input type="checkbox"/>	(D) Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E) Related and persuasive and not addressed by technical change DOCUMENT FAILS
	<input checked="" type="checkbox"/>	(F) Addressed by technical change (counted under k disposition)	
(check if applicable)	<input type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.	

Disposition of Voting Interest Reject 2

Check only when the Document has not been failed.

2	Original number (#) of Negatives	(g)	
	Number of Negatives withdrawn	(h)	
#	Number of Negatives found not related	(i)	
#	Number of Negatives found not significant	(j)	
1	Number of Negatives addressed by technical change (Negative becomes not significant)	(k)	
Final		$g - (h + i + j + k) = 0$	Reject is Not Valid and is not included in the denominator of § VI. <i>Approval Conditions Check</i>
	x	$g - (h + i + j + k) > 0$	Reject is included in the denominator of § VI. <i>Approval Conditions Check</i>
		Reject without a Negative	Not Valid

This table is needed for each Voting Interest Reject.

Note: If all of the Negatives included with a Reject Vote are withdrawn, determined to be not related, or determined to be not significant, the Reject Vote is not valid. (*Regulations* ¶ 9.4.3.3)

Note: A Negative addressed by a technical change is automatically considered to be not significant. (*Regulations* ¶ 9.6.1.4.5.2)

IV. Other Technical Issues

Note: TC Chapter may choose to address a technical issue that is not part of a Negative received on a Letter Ballot (i.e., a Comment or a reason not addressed by a Vote response) by handling it as a Negative and finding it related and technically persuasive. The TC Chapter may then fail the Document or address such technical issue by using the procedure defined in *Regulations* § 9.6.1.4.3 to make a technical change to the Document. (*Regulations* ¶ 9.6.1.4.2.5)

None

V. Comments

V- (i) Voters' Comments

None

V-(ii) Comments Created by Handling Negative

Comment (Created by Handling Negative) NC – 1

Comm	*TF/TC Chapter to fill in	
	7.1.4	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
		No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
	New business	

	x	Editorial change	
	Options for editorial change (check one)		Case 1: No vote in this section: To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
		x	Case 2: Voted in this section: Original section number and at least one full sentence are required in "FROM" and "TO" fields.
	1	FROM: Section/Paragraph xxx 7.1.4 Set AD converter parameters that include sample rate and numbers of sample. Sample rate is advised to set more than 240 Hz, and numbers of sample shall be enough to capture completed waveform period.	
		TO: Section/Paragraph xxx 7.1.4 Set AD converter parameters that include the sampling rate and numbers of sample. The recommended sampling rate is more than 240 Hz, and numbers of sample shall be enough to capture completed waveform period.	
		Justification (If necessary) Clarification	
Motion		To approve above editorial change(s)	
Motion by/2nd by		Telu Chen(Wisechip)/Mark Kuo (Innolux)	
Discussion		XXXX	
Vote		8 Y- 0N; Motion passed.	

Comment (Created by Handling Negative) NC – 2

Comment	*TF/TC Chapter to fill in	
	Section 4.1 VESA Standard JEITA and IEEE standards are not VESA Standards.	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
		Already addressed by Commenter #, Comment #
		No further action was taken by the TC Chapter.
		Refer to the TF for more consideration.
		New business
	x	Editorial change
		Case 1: No vote in this section:

	Options for editorial change (check one)	<input type="checkbox"/>	To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
		<input checked="" type="checkbox"/>	Case 2: Voted in this section: Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	FROM: Section/Paragraph xxx <i>4.1 VESA Standards</i> 4.1.1 VESA Version 2.0: Flat Panel Display Measurements Standard. 4.1.2 <i>JEITA Standards</i> 4.2.1 JEITA ED-2522: Measuring methods for Matrix Liquid Crystal Display modules. 4.2.2 IEEE PAR1789 Update: LED Lighting Flicker and Potential Health Concerns	
		TO: Section/Paragraph xxx <i>4.1 VESA Standards</i> 4.1.1 VESA Version 2.0: Flat Panel Display Measurements Standard. 4.1.2 <u>4.2</u> <i>JEITA Standards</i> 4.2.1 JEITA ED-2522: Measuring methods for Matrix Liquid Crystal Display modules. <u>4.3 IEEE Standards</u> 4.3.1 IEEE PAR1789 Update: LED Lighting Flicker and Potential Health Concerns	
		Justification (if necessary) JEITA Standards header should be placed prior to JEITA Standard. IEEE Standards header should be added prior to IEEE Standard.	
Motion		To approve above editorial change(s)	
Motion by/2nd by		Telu Chen(Wisechip)/Mark Kuo (Innolux)	
Discussion		XXXX	
Vote		8 Y- 0N; Motion passed.	

VI. Editorial Changes Other than Those Voted on in § V

Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.

None other than list in section V-(ii), above.

VII. Approval Conditions Check

VII. - (i). Approval Rate

APPROVAL CONDITION 1: All Negatives have been discussed and were withdrawn, found not related, found not persuasive, or addressed by a technical change. (*Regulations ¶ 9.6.2.1.2*)

APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations ¶ 9.6.2.1.3*)

Note: If both approval conditions are not satisfied, the Document fails.

		Accepts		(Accepts + Valid Rejects)					
Approval Rate	=	26	/	28	=	92.9%		≥90%	

VII. – (ii) Approval Level (check one)

Note: See *Regulations § 9.6.2* for further information.

Globally Approved (No Ratification Ballot needed):

The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.

Need a Ratification Ballot:

The Letter Ballot meets the Letter Ballot approval conditions for the TC Chapter and a Ratification Ballot will be issued to validate technical changes.

VIII. Safety Check

Note: See *Regulations § 15* for further information.

Motion	<input checked="" type="checkbox"/>	This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (<i>Regulations ¶ 8.7.1</i>)
	<input type="checkbox"/>	This is a Safety Document, when all safety-related information is removed, the Document is not technically sound and complete. (<i>Regulations ¶ 8.7.2</i>)
	<input type="checkbox"/>	Safety Checklist (<i>Regulations ¶ 15.3</i>) is complete and has been included with the Document throughout the balloting process. (<i>Regulations ¶ 15.1.2</i>)
	Motion by/2 nd by	Pei-Li Sun (NTUST)/Charles Wen (ITRI)
	Discussion	XXXX
	Vote	8 Y-0 N; Motion passed

IX. Intellectual Property (IP) Check

Note: This Letter Ballot may cover all or part of a Standard or Safety Guideline. Regardless of the coverage, this IP check applies to the entire Standard or Safety Guideline*. See Regulations § 16 for further information.

X	The TC Chapter meeting chair asked those participating, if they were aware of any patented technology that might be relevant (see <i>Regulations</i> ¶ 16.3.1.1) to the Standard or Safety Guideline; or, any copyrighted items or trademarks that are used/reproduced (see <i>Regulations</i> ¶ 16.4.1.2) in the Standard or Safety Guideline. (Also see, <i>Regulations</i> § 8.8)			
x	The question is NOT answered in affirmative (No potentially material patented technology or use/reproduction of copyrighted items/trademarks is known.)	GO TO SECTION X.		
	The question is answered in affirmative	Is any of the known IPs a patented technology?	Yes, at least one of them is a patented technology	GO TO IX (a) "Patented Technology" subsection
			No	GO TO IX (b) "Copyright items" subsection

IX(a) Patented Technologies subsection

IX(a1) Total numbers of Patented Technologies to be dealt with

# Fill number	(l) Known Patented Technology that might be relevant to the Standard/Safety Guideline	# Fill number	(m) Number of patented technologies first became known to the TC Chapter on or after the day of the issuance of this Letter Ballot	Postpone assessment of such patented technologies to be performed at the next scheduled TC Chapter meeting.
		# Fill number	(n) Number of patented technologies first became known to the TC Chapter before the day of the issuance of this Letter Ballot	GO TO IX (a2)

IX(a2) Assessment of disclosed patented technologies

Disclosed patented technology #1 (<i>Brief description, e.g., patent title and number</i>):		Date of Assessment (If different from the date of Letter Ballot adjudication) MM/DD/YYYY		
Is disclosed patented technology #1 found to be "might be material" to the Standard/Safety Guideline?	YES (It is a PMPT)	Is the use of this PMPT technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(a3)
			NO	The Document is failed and returned to the TF
	NO	No further action is needed for patented technology #1		

This table is needed for each disclosed patented technology.

IX(a3) LOA status check of PMPT of which inclusion assessed to be justified

LOA Status of PMPT #1					
Has an LOA for this patented technology been received from every owner ?		YES	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b)		
		NO	MOTION	Ask ISC for special permission to publish.	
				Quit activity.	The Document is failed and returned to the TF
				Wait for LOA	PROCEED to check NEXT one, or if this is the last one, GO TO IX(b1)
			Motion by/ 2 nd by	Name (Company)/Name (Company)	
			Discussion	XXXX	
			Vote	XX Y-XX N; Motion passed (or failed)	

This table is needed for each PMPT of which inclusion assessed to be justified.

IX(b1) Total numbers of copyrighted items to be dealt with

# Fill number	(o) Known copyrighted items that are used or reproduced to the Standard/Safety Guideline	o > 0	There is at least one known copy righted items that might be relevant to the Standard/Safety Guideline	GO TO IX (b2)
		o = 0	There is no disclosed copyrighted item	GO TO IX (c)

IX(b2) Assessment of disclosed copyrighted items

Disclosed copyrighted item #1 (Brief description of its use in the Document):					
Is disclosed copyrighted item #1 used or reproduced in the Standard/Safety Guideline?		YES	Is the use/reproduction of this copyrighted item technically justified?	YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(b3)
				NO	The Document is failed and returned to the TF
		NO	No further action is needed for copyrighted item #1		

This table is needed for each disclosed copyrighted item.

IX(b3) Copyright release status check of copyrighted item of which inclusion assessed to be justified

Copyright release Status of copyrighted item #1				
Has the copyright release been received from its owner ?.		YES	PROCEED to assess NEXT one, or if this is the last one, GO TO IX(c)	
		NO	≅	Ask ISC for special permission to publish.

			Quit activity.	The Document is failed and returned to the TF
			Wait for copyright release letter	PROCEED to check NEXT one, or if this is the last one, GO TO IX(c)
	Motion by/ 2 nd by		Name (Company)/Name (Company)	
	Discussion		XXXX	
	Vote		XX Y-XX N; Motion passed (or failed)	

This table is needed for each copyrighted item of which use/reproduction assessed to be justified.

IX(c) Assessment of disclosed (identified) trademark

Is there any trademark in the Standard/Safety Guideline?		YES	Is every instance of trademark use technically justified?	YES	GO TO IX(d)
				NO	The Document is failed and returned to the TF
		NO	GO TO IX(d)		

IX(d) IP check completion condition check

The co-chair checks if any Patented Technologies first become known to the TC Chapter on or after the day of the issuance of this Letter Ballot? i.e., m>0 in IX(a1)		YES	Sections IX(a2) and IX(a3) shall be completed and recorded for such patented technologies at next scheduled meeting of the TC Chapter. Until then, the TC Chapter shall NOT go to X (making motion to pass/fail this Document) (see Regulations ¶ 16.4.1.2) Until then this Letter Ballot Review is on hold.
		NO	GO TO X

X. Action for This Document

Motion		This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
		This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	x	This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
		This Document failed TC Chapter review and will be returned to the TF for rework.
		This Document failed TC Chapter review and work will be discontinued.
Motion by/ 2 nd by		Ken Yu Liu (AUO)/ Mark Kuo (Innolux)
Discussion		None
Vote		8 Y-0 N
Final Action	X	Motion passed
		Motion failed

Note: If the use of PMPT or copyrighted item is justified by the TC Chapter, LOA or release form must be received before publication can proceed.