

Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **Korea**

Global Technical Committee: **FPD Metrology**

TC Chapter Cochairs: **Kyungjin Kang / LG Electronics, Jongho Jeong / KwangWoon University**

Standards Staff: **Natalie Shim**

	Scheduled in Background Statement	Actual
Date	03/12/2021	03/26/2021
Location	SEMI Korea, Seoul, Korea	SEMI Korea, Seoul, Korea
Reason for Change of Date and/or Location (if changed)	Force majeure caused by the COVID-19.	

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

I. Document Number and Title

Document Number	Document Title
6659A	Revision to SEMI D75-0118, Test Method for Color Reproduction and Perceptual Contrast of Displays

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	30	÷	47	=	63.8%	≥60%
Intercommittee Ballot	2					
Voting Interest Reject(s)	2		Total Voters with Rejects		2	
Voting Interest Accept(s)	28					

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Sony)

Voter Reject 1 (Voter: Satoshi Tomioka / Sony)

Negative 1

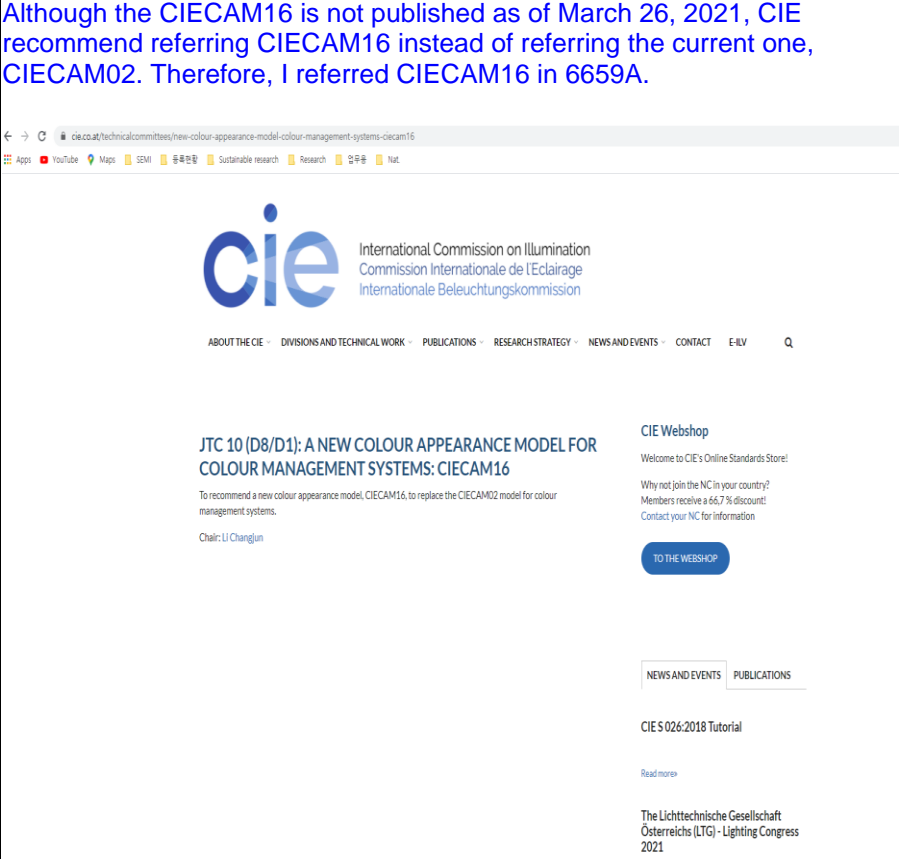
Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
	Negative Text	<p>*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</p> <p>Although D75 has been established as a measurement method based on CIECAM, the measurement method using a 2D-colorimeter and the stripe pattern are completely new methods and are inappropriate as a revision of D75.</p>		
TF input (optional)	<p>As the negative composed with two different topics, it should be separated based on the topic. Details are in below.</p> <p>Original)</p> <p>Although D75 has been established as a measurement method based on CIECAM, the measurement method using a 2D-colorimeter and the stripe pattern are completely new methods and are inappropriate as a revision of D75. Furthermore, CIECAM16 is an unpublished standard, so it cannot be referenced.</p> <p>To-Be)</p> <p>Negative 1</p> <p>Although D75 has been established as a measurement method based on CIECAM, the measurement method using a 2D-colorimeter and the stripe pattern are completely new methods and are inappropriate as a revision of D75.</p> <p>Negative 2</p> <p>CIECAM16 is an unpublished standard, so it cannot be referenced.</p> <p>In here, Negative 1 will be handled.</p>			
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"/>	XX Y-XX N; Motion passed/failed.		
	<input type="checkbox"/>	[Negative is not related.] < 2/3	GO TO "Persuasive" subsection	

			2/3 ≤ [Negative is not related.]			GO TO “Final” subsection → (B)		
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)					
		X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)					
			Reason	<p>As recorded in the SNARF, The SNARF draft went through SNARF Submission and Approval Process indicated in Reg. 8.2.1 and PM 3.4. - No feedback submitted.</p> <p>http://downloads.semi.org/web/wstsdbsal.nsf/b8865fa87d9e7b57882579fb005c3cd7/5430a4c663cf38fb882585970030f9e01OpenDocument</p> <p>Also, I have tried to get further consensus for this activity by sharing ballot draft as below. – No feedback submitted.</p> <p>For this reason, I think your negative comment on the measurement concept is not persuasive.</p>				
				<p>From: Natalie Shim <eshim@semi.org> Sent: Wednesday, May 20, 2020 5:58 PM To: 川口 晃 (Akira Kawaguchi) <kawaguchi@otsukaie.jp>; MikeYao@itri.org.tw <MikeYao@itri.org.tw>; jiamingliu@itri.org.tw <jiamingliu@itri.org.tw>; ryoichi.watanabe.mi@j-display.com <ryoichi.watanabe.mi@j-display.com> Cc: jongho.chong@samsung.com <jongho.chong@samsung.com>; Chie Yanagisawa <cyana@isawa@semi.org>; Cher Wu <cherwu@semi.org> Subject: [SEM] Ballot Draft Review Request</p> <p>Dear Chairs of FPD Metrology TC Chapters,</p> <p>I hope everything goes well with you.</p> <p>Recently, I've got a ballot draft for D75 revision as attached. The author, jongho Chong/Samsung Display, plans to submit SNARF and request cycle 6 ballot authorization at the June 12 meeting.</p> <p>To improve the quality of the draft, he would like to get your feedback before he submits the ballot. So, please kindly share the draft with your members and let us have your feedback by 6/8 (KST).</p> <p>Thank you for your kind support in advance.</p> <p>Best regards, Natalie Shim</p>				
		Motion by/ 2 nd by	Jongho Jeong (KwangWoon University) / SeungMin Lee (Samsung Display)					
		Discussion	None					
		Result of Vote (check one)	6 Y- 0 N; Motion passed.					
				[Negative is related and persuasive.] > 1/3	Is a technical change recommended? (check one)		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 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
		X	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection				
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)	X	It is mutually agreed upon to term the Negative “not significant”.			GO TO “Final” subsection → (D)	
			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 type="checkbox"/>	(C) Related and not persuasive (significant)
		<input checked="" 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 type="checkbox"/>	Comment generated. See Section V-(ii) Comment # X.

Negative 2

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. CIECAM16 is an unpublished standard, so it cannot be referenced.	
	TF input (optional)	<p>As the negative composed with two different topics, it should be separated based on the topic. Details are in below.</p> <p>Original)</p> <p>Although D75 has been established as a measurement method based on CIECAM, the measurement method using a 2D-colorimeter and the stripe pattern are completely new methods and are inappropriate as a revision of D75. Furthermore, CIECAM16 is an unpublished standard, so it cannot be referenced.</p> <p>To-Be)</p> <p>Negative 1 Although D75 has been established as a measurement method based on CIECAM, the measurement method using a 2D-colorimeter and the stripe pattern are completely new methods and are inappropriate as a revision of D75.</p> <p>Negative 2 CIECAM16 is an unpublished standard, so it cannot be referenced.</p> <p>In here, Negative 2 will be handled.</p>	
	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)	X	'Related' is mutually agreed upon. (Needs no motion.)	GO TO "Persuasive" subsection
			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.			
		[Negative is not related.] < 2/3		GO TO "Persuasive" subsection
		2/3 ≤ [Negative is not related.]		GO TO "Final" subsection → (B)
Persuasive		Negative is related and persuasive. (Needs >1/3 votes to pass.)		
	X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason	<p>Although the CIECAM16 is not published as of March 26, 2021, CIE recommend referring CIECAM16 instead of referring the current one, CIECAM02. Therefore, I referred CIECAM16 in 6659A.</p>  <p>For your reference, the document is completed a circulation for its publication as of March 13, 2021 and waiting for the publication. According to an initial schedule, it will be published in April, 2021.</p> <p>As 6659A needs A&R process, I believe that I can provide the CIECAM16 publication information before SEMI publish this revision.</p>	

	Motion by/ 2nd by	Jongho Jeong (KwangWoon University) / SeungMin Lee (Samsung Display)		
	Discussion	None		
	Result of Vote (check one)	6 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"/>	[Negative is related and not persuasive.] < 2/3	<input type="checkbox"/>
		<input type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection	
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 checked="" 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 checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input 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.

2	Original number (#) of Negatives	(g)
0	Number of Negatives withdrawn	(h)
0	Number of Negatives found not related	(i)
2	Number of Negatives found not significant	(j)

0	Number of Negatives addressed by technical change (Negative becomes not significant)		(k)
Final	X	$g - (h + i + j + k) = 0$	Reject is Not Valid and is not included in the denominator of § VI. <i>Approval Conditions Check</i>
		$g - (h + i + j + k) > 0$	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*)

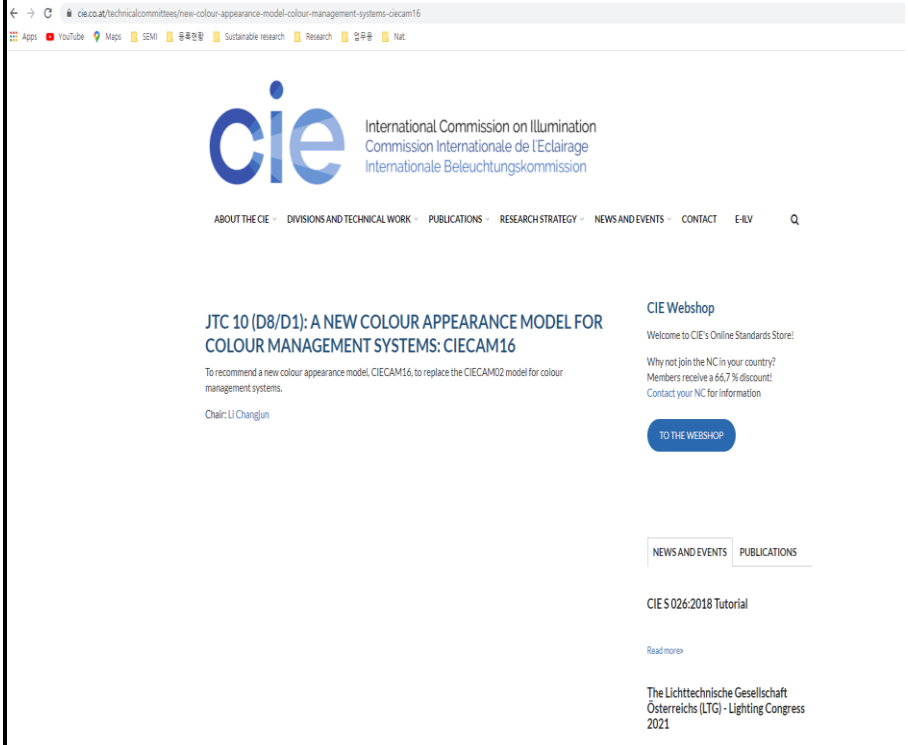
Voting Interest Reject 2 (Voting Interest Name: JAD)

Voter Reject 1 (Voter: Ryoichi Watanabe / JAD)

Negative 1

Negative	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.	
		Reference	
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.	
		Currently, "4.1 CIE XXX" cannot be referenced.	
TF input (optional)			
Withdrawal (check one)	X	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)	X	'Related' is mutually agreed upon. (Needs no motion.) GO TO "Persuasive" subsection
			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.		
		[Negative is not related.] < 2/3	GO TO "Persuasive" subsection
		2/3 ≤ [Negative is not related.]	GO TO "Final" subsection → (B)
Persuasive	Motion and Reason (check one)		Negative is related and persuasive. (Needs >1/3 votes to pass.)
		X	Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)

Although the CIECAM16 is not published as of March 26, 2021, CIE recommend referring CIECAM16 instead of referring the current one, CIECAM02. Therefore, I referred CIECAM16 in 6659A.



Reason

For your reference, the document is completed a circulation for its publication as of March 13, 2021 and waiting for the publication. According to an initial schedule, it will be published in April, 2021.

As 6659A needs A&R process, I believe that I can provide the CIECAM16 publication information before SEMI publish this revision.

Motion by/
2nd by

Jongho Jeong (KwangWoon University) / SeungMin Lee (Samsung Display)

Discussion

None

		6 Y- 0 N; 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 type="checkbox"/>	2/3 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
	<input checked="" type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			

Not Significant

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)

<input checked="" type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".	GO TO "Final" subsection → (D)
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	Use of “Not significant finding option” (check one)	<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 checked="" type="checkbox"/>	(D)	Not significant (counted under j in disposition)
		<input type="checkbox"/>	(E)	Related and persuasive and not addressed by technical change
	<input 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.

1	Original number (#) of Negatives	(g)	
0	Number of Negatives withdrawn	(h)	
0	Number of Negatives found not related	(i)	
1	Number of Negatives found not significant	(j)	
0	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)

IV. Other Technical Issues

None

V. Comments

V- (i) Voters' Comments

Commenter 1 (Jae Hong Kim / LG Display) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Add examples to describe in detail how to measure and analyze the image pattern.	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input type="checkbox"/>	Editorial Change

Commenter 2 (Myong Young Lee / LG Electronics) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Need to describe the measuring procedure using the imaging LMD device in detail. Target images, measuring time, calculation method, etc.	
Action	The TC Chapter agreed to do one of the following actions.	
	*No motion is required in this step.	
	<input type="checkbox"/>	Already addressed by Commenter #, Comment #
	<input checked="" type="checkbox"/>	No further action was taken by the TC Chapter.
	<input type="checkbox"/>	Refer to the TF for more consideration.
	<input type="checkbox"/>	New Business
	<input type="checkbox"/>	Editorial Change

V-(ii) Comments Created by Handling Negative

None

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

None

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	=	28	/	28	=	100.0%		≥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		Jongho Jeong (KwangWoon University) / SeungMin Lee (Samsung Display)
Discussion		None
Vote		6 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

X. Action for This Document

Motion	X	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.
		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/ 2nd by		Jongho Jeong (KwangWoon University) / SeungMin Lee (Samsung Display)
Discussion		None
Vote		6 Y- 0 N
Final Action		X Motion passed

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.