

Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: **China**

Global Technical Committee: **Photovoltaic**

TC Chapter Cochairs: **Guangchun Zhang / CSI, Jun Liu / CESI**

Standards Staff: **Sophia Huang / SEMI China**

	Scheduled in Background Statement	Actual
Date	10/13/2017	10/13/2017
Location	Huang He Grand Hotel NO.666 Middle Renmin Road, Jiangyan,Taizhou,Jiangsu,China	Huang He Grand Hotel NO.666 Middle Renmin Road, Jiangyan,Taizhou,Jiangsu,China
Reason for Change of Date and/or Location (if changed)		

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

I. Document Number and Title

Document Number	Document Title
6070A	New Standard: Test Method for Cell Defects in Crystalline Silicon PV Modules by Electroluminescence (EL) Imaging

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* ¶ 9.7.1.1)

Voting Tally (with example values):

Voting Interest:	Returned Votes	Distribution	Return Rate
Letter Ballot	98	÷ 163	= 60.1% ?60%
Intercommittee Ballot	21		
Voting Interest Reject(s)	3	Total Voters with Rejects	3
Voting Interest Accept(s)	61		

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

III. Rejects

Voting Interest Reject 1 (Voting Interest Name: Ralf Siebert)
Voter Reject 1 (Voter: Ralf Siebert, Conergy GlobalSolutions GmbH)

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>In regards to Defects classification the Draft Document 6070A states: 'should be in accordance to the reference classification images database and make the conclusion of the sample EL type status.'</p> <p>Change request: Clear criteria regarding potential cell and module reliability issues related to the depicted peculiarities which become visible by EL are not yet defined but need to be defined.</p>	
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	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/ 2nd 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 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	<p>Our original proposal included both EL image classification and related technical judgment, after being discussed in a lot meetings past three years. The committee recommended to focus on the classification of EL images due to following three reasons:</p> <ol style="list-style-type: none"> 1. Influence on power or long reliability wasn't included because there weren't much experience on that yet. Maybe we can work together on this topic if you are interested in it, and put them into standard as an amendment in future 2. We think that technical judgment/criteria is kind of business matters between sellers and buyers which should not be wrote into standard. 3. Our standards focus on the production process of the guidance components, not in the study with the internal research theory and the relationship between the reliability of the relationship, so there is no professional analysis of the relationship between the two, IEC standard analysis of more detailed, you can refer to study. 			
Motion by/ 2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)					
Discussion	None					
Result of Vote (check one)	33 Y-0 N; Motion passed/failed.					
	<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			

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		XX Y-XX N; Motion passed/failed.				

	(check one)	<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/2nd 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 ¶ 9.6.4.4.2)				
	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	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.			

This table is needed for each Negative.

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)
0	Number of Negatives found not significant	(j)

0	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

Voting Interest Reject 2 (Voting Interest Name: Peter, Wagner)
Voter Reject 1 (Voter: Peter, Wagner Peter Wagner Consulting)

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. Section 1, Purpose, is still inadequate. It just states what the document does, but it does not tell the reader why such a standard would be needed, like in the background statement. This has to be changed.	
TF input (optional)			
Withdrawal (check one)	X	No Negative withdrawal made by Voter.	GO TO "Related" subsection
		Withdrawal document received by Standards staff on	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	The standard is formulated in order to provide users a specificity method to applying electroluminescence imaging of crystalline silicon photovoltaic modules and characterize EL image types.	
	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)	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	We accept his suggestion. More description in detail expression of document.	

Address by Technical Change Option	Motion by/ 2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)					
	Discussion	None					
	Result of Vote (check one)	33 Y-0 N; 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 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)			
		90% ≤ [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.						
	Technical Changes	1	FROM: Section/Paragraph 2.1 2.1 This standard applies to testing for defect of cells in crystalline silicon photovoltaic modules.				
TO: Section/Paragraph 2.1 2.1 This test method specifies requirements of testing instrument, testing environment, sample preparation, image processing, testing procedure to capture an EL image and classification of defects.							
Justification (If necessary) Changed to: This test method specifies requirements of testing instrument, testing environment, sample preparation, image processing, testing procedure to capture an EL image and classification of defects.							
2	FROM: Section/Paragraph XXX						
	TO: Section/Paragraph xxx						
	Justification (If necessary)						
Motion	Negative is addressed by the technical change(s).						
Motion by/2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)						
Discussion	None						
Result of Vote (check one)	33 Y-0 N; Motion passed						
	X	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection				
		[Negative is not addressed by the technical change(s).] < 2/3	GO TO "Final" subsection → (E)				
Incorporatio n of the	Motion	To incorporate the technical change(s).					
	Motion by/2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)					
	Discussion	None					
		33 Y-0 N; Motion passed					

	Result of Vote (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)
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 ¶ 9.6.4.4.2)			
	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/ 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
	<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.		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		Section 2: here it should be stated that the test method is for indoor testing only.		
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	<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	We accept his suggestion.it will more in line with standard requirements			
	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)	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	yes, we have change, note 2.1 to 1.2 The test specimens are solar cell modules. Monolithic module or singe cell , or some cells array in the module used for testing.			
	Motion by/ 2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
	Discussion	None				
		Result of Vote (check one)	33 Y-0 N; 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 ≤ [Negative is related and not persuasive.] < 90%	GO TO "Final" subsection → (C)		
			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 Section 2.1	2.1 This standard applies to testing for defect of cells in crystalline silicon photovoltaic modules.			
		TO: Section/Paragraph Section 2.1	2.1 This test method specifies requirements of testing instrument, testing environment, sample preparation, image processing, testing procedure to capture an EL image and classification of defects.			
	Justification (if necessary) yes, we have change to 2.1					
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	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
	Discussion	None	
	Result of Vote (check one)	<input checked="" type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]
		<input type="checkbox"/>	[Negative is not addressed by the technical change(s).] < 2/3
		GO TO "Incorporation of the Technical Change" subsection	
		GO TO "Final" subsection → (E)	
Incorporation of the Technical Change	Motion	To incorporate the technical change(s).	
	Motion by/2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
	Discussion	None	
	Result of Vote (check one)	<input checked="" type="checkbox"/>	90% ≤ [Agree to incorporate.]
<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". (<i>Regulations</i> ¶ 9.6.4.4.2)		
	Use of "Not significant finding option" (check one)	<input type="checkbox"/>	It is mutually agreed upon to term the Negative "not significant".
		<input type="checkbox"/>	It is mutually agreed upon to term the Negative "significant".
		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
	<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 3

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. 3.2: this is not clear, can the document used for outdoor testing or only as a bench mark?				
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	We accept his suggestion.it will more in line with standard requirements			
	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	yes, we have change the note 2.1 to 1.2 The test specimens are solar cell modules. Monolithic module or singe cell , or some cells array in the module used for testing.			
	Motion by/ 2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
	Discussion	None				
	Result of Vote (check one)	33 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"/>	<input type="checkbox"/>	GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	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 Change Recommendations		
	Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.		
	1	FROM: Section/Paragraph Section 2.1 2.1 This standard applies to testing for defect of cells in crystalline silicon photovoltaic modules.	
		TO: Section/Paragraph Section 2.1 2.1 This test method specifies requirements of testing instrument, testing environment, sample preparation, image processing, testing procedure to capture an EL image and classification of defects.	
		Justification (If necessary) Change to 2.3 This method is suitable for indoor or fixed single module testing, outdoor module array tests can also use it work as a reference Standard.	
	2	FROM: Section/Paragraph 3.2 3.2 This method is suitable for indoor or fixed single module testing, however outdoor module array tests can also use it work as a reference benchmark.	
		TO: Section/Paragraph 2.3 2.3 This method is suitable for indoor or fixed single module testing, outdoor module array tests can also use it work as a reference Standard.	
		Justification (If necessary) Change to 2.3 This method is suitable for indoor or fixed single module testing, outdoor module array tests can also use it work as a reference Standard.	
	Motion	Negative is addressed by the technical change(s).	
	Motion by/2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
Discussion	None		
Result of Vote (check one)	33 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/2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
	Discussion	None	
	Result of Vote (check one)	33 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	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 ¶ 9.6.4.4.2)		
		<input type="checkbox"/> It is mutually agreed upon to term the Negative “not significant”.	GO TO “Final” subsection → (D)

	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 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	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		Section 5, 5.2.1: this definition of EL is inadequate. EL is “light emitted by a pn-junction under forward or reverse bias”. The document then has to state somewhere, e.g. in section 6, that forward bias is used here.		
	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.)	
		<input type="checkbox"/>	Negative is not related. (Needs ≥2/3 votes to pass.)	
		Reason	We accept his suggestion.it will more in line with standard requirements	
	Motion by/ 2nd by	Name (Company)/Name (Company)		
	Discussion			
		XX Y-XX N; Motion passed/failed.		

	Result of Vote (check one)	<input type="checkbox"/>	[Negative is not related.] < 2/3				GO TO “Persuasive” subsection	
	Result of Vote (check one)	<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/ 2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)						
	Discussion	None						
	Result of Vote (check one)	33 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"/>	<input type="checkbox"/>	<input type="checkbox"/>	GO TO “Address by Technical Change Option” subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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	Technical Changes	FROM: Section/Paragraph 5.2.1					
			5.2.1 Electroluminescence — through a positive voltage at both ends of the electrode to generate electric field and minority injection, which lead to light emission.					
			TO: Section/Paragraph 5.2.1					
	2	Technical Changes	5.2.1 Electroluminescence — light emission of p n-junction caused by forward or reverse bias. In this standard, forward bias is used.					
			Justification (If necessary) Changed to: Electroluminescence — light emission of pn-junction caused by forward or reverse bias. In this standard, forward bias is used.					
FROM: Section/Paragraph XXX								
	Technical Changes	TO: Section/Paragraph xxx						
		Justification (If necessary)						
Motion		Negative is addressed by the technical change(s).						
Motion by/2nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)						
Discussion		None						
Result of Vote		33 Y-0 N; Motion passed						

	(check one)		<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/2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)			
		Discussion	None			
Result of Vote (check one)		33 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 ¶ 9.6.4.4.2)					
	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/ 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 5

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.

		In section 6 general description of the test method/procedure is required. The one paragraph in section 6 does not meet this requirement. Section 6 has to describe the test method in general terms but with more details. Currently it describes only the content of the draft document, but it does not describe the test method itself. The current paragraph 6.1 would fit better in section 1 with appropriate changes of the wording.				
	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.)			
		<input type="checkbox"/>	Reason			
	Motion by/ 2nd 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 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.)			
		<input type="checkbox"/>	Reason	We accept his suggestion. And update as his suggestion ,it will more in line with standard requirements		
	Motion by/ 2nd by	Name (Company)/Name (Company)				
	Discussion					
		Result of Vote (check one)	XX Y-XX N; Motion passed/failed.			
	<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 type="checkbox"/>	90% ≤ [Negative is related and not persuasive.]	GO TO "Not Significant Finding Option" subsection			
Address by	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					

Technical Changes	1	FROM: Section/Paragraph 6.1 6.1 This test method specifies requirements of testing instrument, testing environment, sample preparation, image processing and testing procedure to capture an EL image. Besides, the requirements of classification of defects and test report requirement are also mentioned.		
		TO: Section/Paragraph 6.1 6.1 Brief summary of the test method. When the PN junction is energized in the forward direction, the electrons recombine with the holes to release energy in the form of outgoing photons. The electroluminescence spectrum has a certain light intensity in the range of 700 ~ 1200 nm. Select the CCD imaging device can capture the image, broken part of the phenomenon of no electrons and holes. There is no energy release, the captured image of the defective part of the module will show a significant dark spot, to find the purpose of cell defects.		
		Justification (If necessary) Brief summary of the test method. When the PN junction is energized in the forward direction, the electrons recombine with the holes to release energy in the form of outgoing photons. The electroluminescence spectrum has a certain light intensity in the range of 700 ~ 1200 nm. Select the CCD imaging device can capture the image, broken part of the phenomenon of no electrons and holes. There is no energy release, the captured image of the defective part of the module will show a significant dark spot, to find the purpose of cell defects.		
2	FROM: Section/Paragraph XXX			
	TO: Section/Paragraph xxx			
	Justification (If necessary)			
Motion		Negative is addressed by the technical change(s).		
Motion by/2 nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)		
Discussion		None		
Result of Vote (check one)		33 Y-0 N; Motion passed		
		X	2/3 ≤ [Negative is addressed by the technical change(s).]	GO TO "Incorporation of the Technical Change" subsection
			[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		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
	Discussion		None	
	Result of Vote (check one)		33 Y-0 N; Motion passed	
X			90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)
			[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 ¶ 9.6.4.4.2)			
	Use of "Not significant finding option" (check one)		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	XX Y-XX N; Motion passed with simple majority	GO TO “Final” subsection → (D)		
XX Y-XX N; Motion failed with simple majority		GO TO “Final” subsection → (C)			
Final	(check if applicable)	(A)	Withdrawn (counted under h in disposition)		
		(B)	Not related (counted under i in disposition)		
		(C)	Related and not persuasive (significant)		
		(D)	Not significant (counted under j in disposition)		
		(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS	
		X	(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.		

Negative 6

	Referenced Section/ Paragraph	*TF/TC Chapter to fill in, including text in the ballot if necessary.	
Negative	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.	
		<p>Section 7: the requirements for the apparatus described in this section are still much too general:</p> <p>a. 7.1.1 is too general, it still does not require a specified pass band. It only says “can be achieved”.</p> <p>b. Similarly, 7.1.2 does not specify the EL band of the module.</p> <p>c. 7.1.4 needs to require a dark room. In section 3 it is stated that the test method is suitable to testing in a dark environment.</p> <p>d. 7.1.6 is much too general. It needs to specify the parameters for image processing in much more detail, otherwise the results of different image processing software will not be comparable.</p> <p>e. 7.2: what is the “structure” of an EL inspection equipment? Is the set-up of the equipment meant?</p> <p>f. 7.2.3: is it really necessary to distinguish “single lens” and “multi-lenses”? The important features are spatial resolution, pass band and homogeneity of the imaging over the module area. In fact, a requirement for the homogeneity of the imaging is missing in the document.</p> <p>g. 7.1.3: the optical axis has to be normal to the test surface. Using “should” is not sufficient. In fact the angle has to be specified with a tolerance, e.g. such as “90° +/- 0.5°”.</p> <p>h. 7.3.15 and 7.3.16: it is not sufficient to “suggest” that the parameters are presented. It has to be required that these parameters are reported.</p>	
	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	We accept his suggestion. And update as his suggestion ,it will more in line with standard requirements			
	Motion by/ 2nd 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/ 2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
	Discussion	None				
	Result of Vote (check one)	33 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"/>	<input type="checkbox"/>	GO TO "Address by Technical Change Option" subsection
<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	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 Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					

Technical Changes	1	<p>FROM: Section/Paragraph 7.1.1, 7.1.2,7.1.4, 7.3.12</p> <p>7.1.1 Imaging lens — EL imaging lens must avoid absorption of the spectral band of electroluminescence by PV module. For high-quality images, the 850nm~950nm pass through band of imaging lens and the elimination of stray light can be achieved using filters or coating.</p> <p>7.1.2 Imaging detectors — Detectors must respond to the electroluminescent band of the PV module.</p> <p>7.1.4 Dark room — Provide a suitable environment for the EL inspection equipment; a dark room may be used to eliminate any stray light. Dark room imaging studio may be the box structure of the device itself, blackout curtains or an external dark environment.</p> <p>7.3.12 Imaging angle — The optical axis of the imaging camera should be normal to the test surface of the PV module.</p>
		<p>TO: Section/Paragraph 7.1.1, 7.1.2,7.1.4, 7.3.12</p> <p>7.1.1 Imaging lens —EL imaging lens must avoid absorption of the spectral band of electroluminescence by PV module. For high-quality images, light with wavelength less than 850nm would better be cut off by using filters or coating.</p> <p>7.1.2 Imaging detectors — Detectors must respond to the electroluminescent band of the PV module.</p> <p>7.1.4 Dark room — Provide a suitable environment for the EL inspection equipment; a dark room may be used to eliminate any stray light. Dark room imaging studio may be the box structure of the device itself, blackout curtains or an external dark environment.</p> <p>7.3.12 Imaging angle —The optical axis of the imaging camera must be normal to the test surface of the PV module within 90° ±1°.Scanning mechanism — For an EL defects detection system with scanning structure, the movements of imaging lens and PV module must not disturb EL imaging.</p> <p>Justification (If necessary)</p> <p>a. 7.1.1 Imaging lens — EL imaging lens must avoid absorption of the spectral band of electroluminescence by PV module. For high-quality images, light with wavelength less than 850nm should be cut off by using filters or coating.</p> <p>b. 7.1.2 Imaging detectors — Detectors must respond to light with wavelength no less than 850nm.</p> <p>c. 7.1.3 Dark room — Provide a suitable environment for the EL inspection equipment; a dark room may be used to eliminate any stray light if necessary. Dark room imaging studio may be the box structure of the device itself, blackout curtains or an external dark environment.</p> <p>d. not accepted. It is just general requirement for image processing software.</p> <p>e. 7.2“structure” should be deleted.</p> <p>f. no necessary. 7.2.1,7.2.2, 7.2.3 should be deleted.</p> <p>g. 7.3.12 Imaging angle—The optical axis of the imaging camera must be normal to the test surface of the PV module within 90° +/-1°</p> <p>h. 7.3.15 Image information — For comparison of EL images, information of component serial numbers, testing conditions such as, forward current values, exposure time and other notes are required.</p> <p>i. 7.3.16 Image orientation — For easier comparison, the orientation of EL images is required to be consistent with human observation and the location of junction box is also required.</p>
	2	<p>FROM: Section/Paragraph XXX</p> <p>TO: Section/Paragraph xxx</p> <p>Justification (If necessary)</p>
Motion		Negative is addressed by the technical change(s).
Motion by/2nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)
Discussion		None

	Result of Vote (check one)	<input checked="" type="checkbox"/>	33 Y-0 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	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)		
Discussion		None			
Result of Vote (check one)		<input checked="" type="checkbox"/>	33 Y-0 N; Motion passed		
	<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 ¶ 9.6.4.4.2)				
	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.		

Negative 7

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.

		Section 9: A statement is missing saying what the test specimens are. The test specimens are solar cell modules. In addition, in 9.2., the surface “should” not be clean etc., but is has to be clean etc.				
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	X	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection		
		Negative is not related. (Needs ≥2/3 votes to pass.)				
		Reason				
	Motion by/ 2nd 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	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	Because each computer define label, Test results only need to include the key information can be, as a standard, not necessarily set a good template, the requirements of unity.			
	Motion by/ 2nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)			
	Discussion		None			
	Result of Vote (check one)	33 Y-0 N; 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 ≤ [Negative is related and not persuasive.] < 90%	GO TO “Final” subsection → (C)			
		90% ≤ [Negative is related and not persuasive.]	GO TO “Not Significant Finding Option” subsection			
Address by	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in “FROM” and “TO” fields.					

Technical Changes	1	<p>FROM: Section/Paragraph Section 9 9.1 The appearance of a test sample should be checked and recorded in accordance with the IEC 61215-2, § 4.1 indoor test. 9.2 The test surface of a sample should be clean, no obvious scratches and foreign bodies, etc.</p> <p>TO: Section/Paragraph Section 9 9.1 The test specimens are solar cell modules. Monolithic module or single cell , or some cells array in the module used for testing. 9.2 The appearance of a test sample would better be checked and recorded in accordance with the IEC 61215-2, § 4.1 indoor test. 9.3 The test surface of a sample would better be clean, no obvious scratches and foreign bodies, etc.</p> <p>Justification (If necessary) The test specimens are solar cell modules. Monolithic module or single cell , or some cells array in the module used for testing.</p>	
	2	<p>FROM: Section/Paragraph XXX</p> <p>TO: Section/Paragraph xxx</p> <p>Justification (If necessary)</p>	
	Motion		Negative is addressed by the technical change(s).
Motion by/2nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
Discussion		None	
Result of Vote (check one)		33 Y- 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		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)
	Discussion		None
	Result of Vote (check one)		33 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 ¶ 9.6.4.4.2)		
	Use of "Not significant finding option" (check one)		<input type="checkbox"/> It is mutually agreed upon to term the Negative "not significant".
			<input type="checkbox"/> It is mutually agreed upon to term the Negative "significant".
		<input type="checkbox"/> Whether or not the Negative is "not significant" is decided by a vote.	GO TO "Final" subsection → (D)
		<input type="checkbox"/> Whether or not the Negative is "not significant" is decided by a vote.	GO TO "Final" subsection → (C)

	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 8

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.		
		<p>Section 10:</p> <p>a. Again there are many requirements that are not strictly required. The term “should” is used too often. This would qualify the document only as a guide, but not as a test method.</p> <p>b. In addition, this section should not describe requirements for outdoor testing. The authors should make up their mind whether they want a test method for indoor testing only or for outdoor testing as well. In the latter case then the requirements for environment and apparatus as well as for the procedure have to be described separately for indoor and outdoor testing.</p> <p>c. Paragraph 10.2 does not belong into this section. It belongs in a specification document.</p>		
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.)	
		<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)	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 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.)				
		<input type="checkbox"/>	Reason	Not accept, At present, the method of EL operation does not have any clear steps and environmental requirements as in other chemical testing methods. For indoor testing and outdoor testing, there are still a variety of different practices in practice and are in line with the use of Able to make a preliminary comparison of major deficiencies, Most manufacturers in China have started to prove that it is very practical.			
	Motion by/ 2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)					
	Discussion	None					
		Result of Vote (check one)	33 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"/>	<input type="checkbox"/>	GO TO "Address by Technical Change Option" subsection
	<input type="checkbox"/>		[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	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			
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: Section/Paragraph 10.1				
			10.1 Because of the high sensitivity of EL detection equipment, the test environment should meet the following requirements:				
TO: Section/Paragraph 10.1							
Technical Changes	1	10.1 Because of the high sensitivity of EL detection equipment, the test environment would better meet the following requirements:					
		Justification (if necessary)					
		"should "change to "would better";					
Technical Changes	2	FROM: Section/Paragraph table 10					
		TO: Section/Paragraph None table 10					

	Justification (if necessary) delete table 10.3, because scope 2.3 has including;			
	FROM: Section/Paragraph 10.2			
	TO: Section/Paragraph 8.4			
	Justification (if necessary) Related to packaging and shipping requirements,10.2 move to 8.4;			
Motion	Negative is addressed by the technical change(s).			
Motion by/2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)			
Discussion	None			
Result of Vote (check one)	33 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/2nd by	Name (Company)/Name (Company)		
	Discussion			
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.		
<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 ¶ 9.6.4.4.2)			
	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/ 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)	

		(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
	X	(F)	Addressed by technical change (counted under k disposition)	
(check if applicable)		Comment generated. See Section V-(ii) Comment # X.		

Negative 9

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. A precision and bias statement is missing.			
TF input (optional)					
Withdrawal (check one)		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.)		
			Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)		
		Reason	We accept his suggestion. And update as his suggestion ,it will make standard more professional and rigorous requirements.		
	Motion by/ 2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)			
	Discussion	None			
		33 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"/>	<input type="checkbox"/>	GO TO "Address by Technical Change Option" subsection	
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input checked="" type="checkbox"/>	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	1	FROM: Section/Paragraph None				
			TO: Section/Paragraph Add NOTE 2				
			NOTE 2: The uncertainty could be reduced by applying more test in different position. Frequencies where MTF is between 2% and 5% (0.02 to 0.05). Justification (if necessary) Add NOTE 2: The uncertainty could be reduced by applying more test in different position. The resolution measurement of distinguishable lp/mm corresponds roughly to spatial frequencies where MTF is between 2% and 5% (0.02 to 0.05).				
	2	FROM: Section/Paragraph XXX					
		TO: Section/Paragraph xxx					
		Justification (if necessary)					
Motion		Negative is addressed by the technical change(s).					
Motion by/2 nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)					
Discussion		None					
Result of Vote (check one)		33 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/2 nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
	Discussion		None				
	Result of Vote (check one)		33 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”. (<i>Regulations ¶ 9.6.4.4.2</i>)		
	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.

Negative 10

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. Paragraph 15.1.7 again is too general. Why not requiring a standardized table which could be machine read and processed by a computer?	
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	Not accept, because each computer define label, Test results only need to include the key information can be, as a standard, not necessarily set a good template, the requirements of unity.	

	Motion by/ 2nd 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 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.)			
		<input type="checkbox"/>	Reason			
	Motion by/ 2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
	Discussion	None				
	Result of Vote (check one)	33 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 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			
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)		<input checked="" type="checkbox"/> 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 checked="" type="checkbox"/> 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 ¶ 9.6.4.4.2)		
	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/ 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 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.	

Negative 11

Negati ve	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.				
		There are a lot of other shortcomings in the document, but due to time limitations I had to stop. In general, the document in its current shape would qualify only as a guide for testing modules not as a test method and I'd recommend to modify it for a guide in a first step. Later, with more experience, then it might be converted to a real test method.				
	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)	⊗	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)			
		Reason	Some accept, At present, the method of EL operation does not have any clear steps and environmental requirements as in other chemical testing methods. For indoor testing and outdoor testing, there are still a variety of different practices in practice and are in line with the use of Able to make a preliminary comparison of major deficiencies, Most manufacturers in China have started to prove that it is very practical.			
	Motion by/ 2nd 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.)			
			Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)			
		Reason	XXXX			
	Motion by/ 2nd by	Name (Company)/Name (Company)				
	Discussion					
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.				
			[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)			
	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/2nd 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 ¶ 9.6.4.4.2)			
		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/ 2nd by		Name (Company)/Name (Company)	
Vote		<input type="checkbox"/> XX Y-XX N; Motion passed with simple majority	GO TO "Final" subsection → (D)		

			XX Y-XX N; Motion failed with simple majority	GO TO "Final" subsection → (C)
Final	(check if applicable)	(A)	Withdrawn (counted under h in disposition)	
		(B)	Not related (counted under i in disposition)	
		(C)	Related and not persuasive (significant)	
		(D)	Not significant (counted under j in disposition)	
		(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS
		(F)	Addressed by technical change (counted under k disposition)	
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.	

This table is needed for each Negative.

Disposition of Voting Interest Reject 2

Check only when the Document has not been failed.

11	Original number (#) of Negatives	(g)	
0	Number of Negatives withdrawn	(h)	
0	Number of Negatives found not related	(i)	
#	Number of Negatives found not significant	(j)	
#	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. Approval Conditions Check
	X	$g - (h + i + j + k) > 0$	Reject is included in the denominator of § VI. Approval Conditions Check
		Reject without a Negative	Not Valid

Voting Interest Reject 3 (Voting Interest Name: George, Kelly)

Voter Reject 1 (Voter: George Kelly, BPS)

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. There is a potential conflict between this standard and IEC 60904 13, which is presently at DTS stage in TC82.		
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)	✗	‘Related’ is mutually agreed upon. (Needs no motion.)		GO TO “Persuasive” subsection	
			Negative is not related. (Needs ≥2/3 votes to pass.)			
			Reason			
	Motion by/ 2nd 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)	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	<p>We also understand that the EL standards specified by IEC are systematically discussed at present. And we are also looking forward to the development and release of the standard. As the IEC standard is still in development process, we hope that our work can provide some useful advice for the upcoming IEC standard and to promote the photovoltaic industry. Here we also want to explain some differences between these two standards.</p> <p>1. Our standard is mainly for the EL testing equipment used by PV module manufacturing enterprises. So a more detailed description of the device's resolution index grading requirements and calibration testing methods are mentioned.</p> <ul style="list-style-type: none"> - Class A (1 lp / mm wire pairs) complies with some new equipment with multi-camera and multi-graph mosaic structure. - Class B (0.5 lp / mm line pairs) complies with most single-camera and high-pixel equipment. - Class C (0.25 lp / mm wire pairs) complies with some older equipment performance specifications. <p>An appendix that uses a resolution test board is provided for calibration.</p> <p>2. More detailed specifications involved the DC power supply current settings, image orientation and other requirements are given to facilitate the EL image reproduction.</p> <p>3. A detailed classification is given according to the accumulation of a large number of enterprise image classification databases for more convenient communication and the future of automatic identification technology.</p> <p>This standard was submitted to the SEMI conference in September 2014. During these years, it has been discussed and tested by several PV module companies and testing organizations. It has undergone several rounds of revision and voting to form the current version. At present, some of the content of this standard has been applied in the PV industry in china.</p> <p>We wish you will understand the differences between our work and the undergoing IEC standard. And we are fully support the work of IEC standards.</p>		
	Motion by/ 2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
	Discussion	None				
	33 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"/>	<input type="checkbox"/>	GO TO "Address by Technical Change Option" subsection
	<input type="checkbox"/>	[Negative is related and not persuasive.] < 2/3		<input type="checkbox"/>	<input type="checkbox"/>	N
	<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			
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	1	<p>FROM: Section/Paragraph Title New Standard: Test Method for Cell Defects in Crystalline Silicon PV Modules by Electroluminescence (EL) Imaging</p> <p>TO: Section/Paragraph Title New Standard: Test Method for Identifying Cell Defects in Crystalline Silicon PV Modules by Electroluminescence (EL) Imaging</p> <p>Justification (if necessary) 发件人: George Kelly [mailto:solarexpert13@gmail.com] 发送时间: 2017 年 7 月 15 日 5:21 收件人: Yan_Ping TS/QC(闫萍) <ping.yan@trinasolar.com>; 近藤道雄 <michio.kondo@aist.go.jp> 抄送: Sample, Tony <tony.sample@ec.europa.eu>; Ji, Liang <liang.ji@ul.com>; Bengt Jaeckel <bengt.jaeckel@ul.com>; Hacke, Peter <Peter.Hacke@nrel.gov> 主题: Re: 答复: reject draft 6070A comments Hi again Pearl, I think a better title would be "Characterization of cell defects in crystalline silicon PV modules by electroluminescence (EL) imaging during manufacturing process". Kondo-san, do you agree? I would like to change my vote and recommend this title. Please advise, George</p>			
		2	<p>FROM: Section/Paragraph XXX</p> <p>TO: Section/Paragraph xxx</p> <p>Justification (if necessary)</p>			
Motion		Negative is addressed by the technical change(s).				
Motion by/2 nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)				
Discussion		None				
Result of Vote (check one)		33 Y-0 N; Motion passed				GO TO "Incorporation of the Technical Change" subsection
<input checked="" type="checkbox"/>	2/3 ≤ [Negative is addressed by the technical change(s).]					

		[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	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
	Discussion	None	
	Result of Vote (check one)	33 Y-0 N; Motion passed	
X		90% ≤ [Agree to incorporate.]	GO TO “Final” subsection → (F)
		[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 ¶ 9.6.4.4.2)		
	Use of “Not significant finding option” (check one)		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/ 2 nd by	Name (Company)/Name (Company)	
	Vote		XX Y-XX N; Motion passed with simple majority
		XX Y-XX N; Motion failed with simple majority	GO TO “Final” subsection → (C)
Final	(check if applicable)	(A)	Withdrawn (counted under h in disposition)
		(B)	Not related (counted under i in disposition)
		(C)	Related and not persuasive (significant)
		(D)	Not significant (counted under j in disposition)
		(E)	Related and persuasive and not addressed by technical change DOCUMENT FAILS
	X	(F)	Addressed by technical change (counted under k disposition)
(check if applicable)		Comment generated. See Section V-(ii) Comment # X.	

This table is needed for each Negative.
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)
0	Number of Negatives found not significant	(j)
1	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

IV. Other Technical Issues

None

V. Comments

V- (i) Voters' Comments

Commenter 1 (Vargas Bernal, Rafael / Instituto Tecnológico Superior de Irapuato) - Comment 1

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.		
	AcceptComments, 290498 Vargas Bernal, Rafael, AFF ITSdI, There are typing errors, spaces must be ' ' added in several places.		
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. <i>Editorial Changes Other than Those Voted on in § V.</i>
		X	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	
		TO: Section/Paragraph xxx	
		Justification (if necessary) We have check all document each place and update the whole papers.	
	2	FROM: Section/Paragraph xxx	

	TO: Section/Paragraph xxx
	Justification (If necessary)
Motion	To approve above editorial change(s)
Motion by/2 nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)
Discussion	None
Vote	33 Y-0 N; Motion passed

This table is needed for each Comment.

Commenter 2 (Chunhong Wang) - Comment 2

Comment	*TF/TC Chapter to fill in section/paragraph #, if necessary.	
	Accept Comments, 336709 Wang, Chunhong AFF_Chunhong Wang Suggestion: Module ID reader shall be included.	
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"/>	Editorial Change
	Options for editorial change (check one)	<input type="checkbox"/> 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.
		<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.
	1	FROM: Section/Paragraph xxx
		TO: Section/Paragraph 15.1.4
Justification (If necessary)		
2	FROM: Section/Paragraph xxx	
	TO: Section/Paragraph xxx	
	Justification (If necessary)	

Motion	To approve above editorial change(s)
Motion by/2nd by	Name (Company)/Name (Company)
Discussion	XXXX
Vote	XX Y-XX N; Motion passed/failed.

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* ¶ 9.7.1.2)

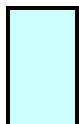
APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.7.1.3)

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

		Accepts		(Accepts + Valid Rejects)					
Approval Rate	=	61	/	63	=	96.8%		≥90%	

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

Note: See *Regulations* § 9.7.2 for further information.



Globally Approved (No Ratification Ballot needed):
The Letter Ballot meets the Letter Ballot approval conditions for the global technical committee.

X

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	X	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>)
		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>)
		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/2nd by		Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)
Discussion		None
Vote		33 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. This IP check applies to the entire Standard or Safety Guideline. See Regulations § 16 for further information.

	The TC Chapter meeting chair asked those participating, if they were aware of any potentially material patented technology or copyrighted items* in the Standard or Guideline. (<i>Regulations ¶ 8.8.1</i>)	
	x	No potentially material patented technology or reproduction of copyrighted items is known. GO TO SECTION X.
		Potentially material patented technology or reproduction of copyrighted items is known, but a Letter of Assurance (LOA) or copyright release letter for such items has been obtained or presented to the TC Chapter. GO TO SECTION X.
		Potentially material patented technology or reproduction of copyrighted items is known and use of such materials is technically justified by the TC Chapter, but an LOA or copyright release letter for some of the item(s) has NOT been obtained or presented to the TC Chapter.
Motion		Ask ISC for special permission to publish.
		Quit activity.
		Wait for LOA for patented technology or release of copyrighted items.
Motion by/2nd by		Name (Company)/Name (Company)
Discussion		XXXX
Vote		XX Y-XX N
Final Action		Motion passed
		Motion failed

* Note: Such potentially material patented technology or copyrighted items might have become known since the Standard or Safety Guideline was last reviewed, or might become relevant due to this Letter Ballot.

X. Action for This Document

Motion	<input type="checkbox"/>	This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
	<input type="checkbox"/>	This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
	<input checked="" type="checkbox"/>	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.
	<input type="checkbox"/>	This Document failed TC Chapter review and will be returned to the TF for rework.
	<input type="checkbox"/>	This Document failed TC Chapter review and work will be discontinued.
Motion by/ 2nd by	Ping Yan (Trina) / Tongrong Zhao (LINYANG PV)	
Discussion	None	
Vote	33 Y-0 N	
Final Action	<input checked="" type="checkbox"/>	Motion passed
	<input type="checkbox"/>	Motion failed

Standards staff to record the result of the A&R procedural review here:

A&R	<input type="checkbox"/>	Approved for publication
	<input type="checkbox"/>	Approved pending acceptance of the Ratification Ballot
	<input type="checkbox"/>	Not approved
	Reason:	