Record of Letter Ballot Review by TC Chapter for Procedural Review

Region/Locale: China
Global Technical Committee: HB-LED
TC Chapter Cochairs: Yong Ji/GHTOT, Weizhi Cai/SANAN
Standards Staff: Sophia Huang

	Scheduled in Background Statement	Actual
Date	12/28/2017	12/28/2017
Location	SEMI China Office Room803, Building 2, 1158 Zhangdong Road, Pudong Shanghai, China	SEMI China Office Room803, Building 2, 1158 Zhangdong Road, Pudong Shanghai, 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
R5776A	**New Standard: Test Method for Detecting Surface Defects of GaN based LED Epitaxial Wafer Used for Manufacturing HB-LED**

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 Vote		Distributio		Return Rate	
Letter Ballot	38	÷	62	=	61.3%	≥60%
Intercommittee Ballot	29					
Voting Interest Reject(s)	1		**Total Voters with Rejects**		1	
Voting Interest Accept(s)	30					

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

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III. Rejects

Voting Interest Reject 1 (Voting Interest Name: InnovationforX)
Voter Reject 1 (Voter: Andrew Kim)
Negative 1

<table>
<tr>
<td rowspan="4">Negative</td>
<td rowspan="2">Referenced Section/ Paragraph</td>
<td colspan="3">*TF/TC Chapter to fill in, including text in the ballot if necessary.</td>
</tr>
<tr>
<td colspan="3">4.1.14, 7.1.3, 8.2, 9.7</td>
</tr>
<tr>
<td rowspan="2">Negative Text</td>
<td colspan="3">*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</td>
</tr>
<tr>
<td colspan="3">You define "Defect concentrated area" in 4.1.14, refer to "defect distributing area" in 7.1.3, refer to "defect area" in 8.2., and refer to "affected area ratios" in 9.7. Please make this consistent throughout the document. Also, please clearly define how this area is calculated - it is relatively clear how to find a defect, but it's not clear how much area should be noted as defective when you find one or more defects.</td>
</tr>
<tr>
<td colspan="2">TF input (optional)</td>
<td colspan="3"></td>
</tr>
<tr>
<td rowspan="2"></td>
<td rowspan="2">Withdrawal (check one)</td>
<td>X</td>
<td>No Negative withdrawal made by Voter.</td>
<td>GO TO "Related" subsection</td>
</tr>
<tr>
<td></td>
<td>Withdrawal document received by Standards staff on MM/DD/YYYY.</td>
<td>GO TO "Final" subsection → (A)</td>
</tr>
<tr>
<td rowspan="9">Related</td>
<td rowspan="3">Motion and Reason (check one)</td>
<td>X̶</td>
<td>'Related' is mutually agreed upon. (Needs no motion.)</td>
<td>GO TO "Persuasive" subsection</td>
</tr>
<tr>
<td></td>
<td colspan="2">Negative is not related. (Needs ≥2/3 votes to pass.)</td>
</tr>
<tr>
<td style="background:black"></td>
<td>Reason</td>
<td>XXXX</td>
</tr>
<tr>
<td>Motion by/ 2ⁿᵈ by</td>
<td colspan="3">Name (Company)/Name (Company)</td>
</tr>
<tr>
<td>Discussion</td>
<td colspan="3"></td>
</tr>
<tr>
<td rowspan="3">Result of Vote (check one)</td>
<td colspan="3">XX Y-XX N; Motion passed/failed.</td>
</tr>
<tr>
<td></td>
<td>[Negative is not related.] < 2/3</td>
<td>GO TO "Persuasive" subsection</td>
</tr>
<tr>
<td></td>
<td>2/3 ≤ [Negative is not related.]</td>
<td>GO TO "Final" subsection → (B)</td>
</tr>
<tr>
<td rowspan="9">Persuasive</td>
<td rowspan="3">Motion and Reason (check one)</td>
<td>X</td>
<td colspan="2">Negative is related and persuasive. (Needs >1/3 votes to pass.)</td>
</tr>
<tr>
<td></td>
<td colspan="2">Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)</td>
</tr>
<tr>
<td style="background:black"></td>
<td>Reason</td>
<td>XXXX</td>
</tr>
<tr>
<td>Motion by/ 2ⁿᵈ by</td>
<td colspan="3">Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)</td>
</tr>
<tr>
<td>Discussion</td>
<td colspan="3">None</td>
</tr>
<tr>
<td rowspan="2">Result of Vote (check one)</td>
<td colspan="3">21 Y-0 N; Motion passed</td>
</tr>
<tr>
<td>X</td>
<td>[Negative is related and persuasive.] > 1/3</td>
<td>Is a technical change recommended? (check one) | X | Y | GO TO "Address by Technical Change Option" subsection</td>
</tr>
</table>

			[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.

Address by Technical Change Option	**Technical Changes**	**1** — **FROM: Section/Paragraph 7.1.3** 7.1.3 Make calculations on the ratio of defect distributing area to the total effective wafer area. **TO: Section/Paragraph 7.1.3** 7.1.3 Make calculations on the ratio of defect concentrated area to the total effective wafer area. **Justification (If necessary)**
		2 — **FROM: Section/Paragraph 8.2** 8.2 Calculate the defect area and its ratio to the quality area **TO: Section/Paragraph 8.2** 8.2 Calculate the defect concentrated area and its ratio to the quality area. 8.2.1 The defect concentrated area can be estimated by calculating the minimum area of an enclosed rectangle inside which the defects are densely located. **Justification (If necessary)**
		3 — **FROM: Section/Paragraph 9.7** 9.7 Types, numbers, sizes, and affected area ratios of defects **TO: Section/Paragraph** 9.7 Types, numbers, sizes, and ratios of defect concentrated area to the quality area. **Justification (If necessary)**

Motion	Negative is addressed by the technical change(s).
Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)
Discussion	**None**

Result of Vote (check one)	21 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	**Motion**	To incorporate the technical change(s).	
	Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)	
	Discussion		
		21 Y-0 N; Motion passed	
		X 90% ≤ [Agree to incorporate.]	GO TO "Final" subsection → (F)

	Result of Vote (check one)		[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 2

Negative	**Referenced Section/ Paragraph**	*TF/TC Chapter to fill in, including text in the ballot if necessary.*		
		4.1.5		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.*		
		4.1.5. This should end as "etc", not "et al."		
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)**	X̶	'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/ 2nd by	Name (Company)/Name (Company)		

Persuasive	**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)**	
	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	Editorial correction.			
	Motion by/ 2nd by		Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)				
	Discussion		None				
	Result of Vote (check one)		21 **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**			

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**	
		TO: Section/Paragraph	
		Justification (If necessary)	
	2	**FROM: Section/Paragraph**	
		TO: Section/Paragraph	
		Justification (If necessary)	

Motion	Negative is addressed by the technical change(s).
Motion by/2nd by	
Discussion	None

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	Result of Vote **(check one)**	☐	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/2nd by			
	Discussion	**None**		
	Result of Vote **(check one)**	☐	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)**	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	☐	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)	
		x	**(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)	x	Comment generated. **See Section V-(ii) Comment # 1**.		

Negative 3

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.**
		4.1.10
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**
		4.1.10. This isn't a super clear definition of breakage, please present a clearer definition of breakage.
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)**	X̶	'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/ 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	XXXX			
	Motion by/ 2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)					
	Discussion	None					
	Result of Vote (check one)	21 **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.

Technical Changes	1	**FROM: Section/Paragraph 4.1.10** 4.1.10 Breakage—loss or damage of part of wafers
		TO: Section/Paragraph 4.1.10 4.1.10 Breakage—the separation of a wafer into two or more pieces due to wafer breaking.
		Justification (If necessary)

	2	**FROM: Section/Paragraph**		
		TO: Section/Paragraph		
		Justification (If necessary)		

Motion	Negative is addressed by the technical change(s).	
Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)	
Discussion	None	

Result of Vote (check one)	21 **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/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)		
Discussion			
Result of Vote (check one)	21 **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 4

Negative	**Referenced Section/ Paragraph**	*TF/TC Chapter to fill in, including text in the ballot if necessary.		
		5.2.2		
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.		
		5.2.2. There is no "Table I", there is a "Table 1".		

TF input (optional)			

Related	**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)**
	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/ 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	XXXX		
	Motion by/ 2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)				
	Discussion	None				
	Result of Vote (check one)	21 **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 Changes**		**Technical Change Recommendations** **Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.**	
		1	**FROM: Section/Paragraph Table 1 Title** Table 1 Visual inspection acceptance criteria for GaN based LED wafers	
			TO: Section/Paragraph Table 1 Title Table 1 Visual inspection acceptance criteria for GaN based LED wafers. Features of some typical defects can refer to Figure 2.	
			Justification (If necessary)	
		2	**FROM: Section/Paragraph**	
			TO: Section/Paragraph	
			Justification (If necessary)	
	Motion		Negative is addressed by the technical change(s).	
	Motion by/2nd by		Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)	
	Discussion		**None**	
	Result of Vote (check one)		21 **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/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)	
		Discussion		
		Result of Vote (check one)	21 **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 5

Negative	**Referenced Section/ Paragraph**		***TF/TC Chapter to fill in, including text in the ballot if necessary.***		
			7.2.1		
	Negative Text		***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.***		
			7.2.1. This will mean that the sampling rate will vary by the MOCVD batch size, i.e. number of wafers per run. It would make more statistical sense to specify a sampling rate (%) with a minimum of one wafer.		
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)**	X̶	'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/ 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.)**		

A&R Ballot Report Template Revision 1.11

		Reason	XXXX				
Motion by/ 2nd by		Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)					
Discussion		None					
Result of Vote (check one)		21 **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.

Technical Changes	1	**FROM: Section/Paragraph 7.2.1** 7.2.1 Pick up one wafer from every MOCVD batch and put it under the metallographic microscope.
		TO: Section/Paragraph 7.2.1 7.2.1 Pick up some wafers from every MOCVD batch with a sampling rate of at least 5% and with a minimum of one wafer, and put them under the metallographic microscope.
		Justification (If necessary)
	2	**FROM: Section/Paragraph**
		TO: Section/Paragraph
		Justification (If necessary)

Motion	Negative is addressed by the technical change(s).		
Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)		
Discussion	None		
Result of Vote (check one)	21 **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	**Motion**	To incorporate the technical change(s).
	Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)
	Discussion	
		21 **Y**-0 **N**; Motion passed

A&R Ballot Report Template Revision 1.11

	Result of Vote (check one)	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

Negative	**Referenced Section/ Paragraph**	*TF/TC Chapter to fill in, including text in the ballot if necessary.**
		7.2.6
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**
		7.2.6. Grammar has some omissions, perhaps "If any black spot defects are detected from a wafer from a MOCVD batch, then all of the rest of the wafers from the same batch should be inspected by the same method as the sampled wafer."
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/ 2nd by	Name (Company)/Name (Company)					
Persuasive	**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)**	
	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		Editorial correction.		
	Motion by/ 2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)					
	Discussion	None					
	Result of Vote **(check one)**	21 **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**			

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**	
		TO: Section/Paragraph	
		Justification (If necessary)	
	2	**FROM: Section/Paragraph**	
		TO: Section/Paragraph	
		Justification (If necessary)	

Motion	Negative is addressed by the technical change(s).
Motion by/2nd by	

	Discussion	**None**		
	Result of Vote (check one)	☐	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/2nd by			
	Discussion			
	Result of Vote (check one)	☐	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)	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	☐	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)	
		x	**(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)	x	Comment generated. **See Section V-(ii) Comment # 2.**		

Negative 7

Negative	**Referenced Section/ Paragraph**	***TF/TC Chapter to fill in, including text in the ballot if necessary.**
		Table 1
	Negative Text	***Original complete Negative text (e.g., issue, justification, suggestion) should be copied.**

		Table 1. Please replace all references to pcs/cm2 with defects/cm2. Scratch I think by diameter you mean diameter of the wafer, correct?			
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)**	X̶	'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/ 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	XXXX	
	Motion by/ 2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)			
	Discussion	None			
	Result of Vote (check one)	21 **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.**				

A&R Ballot Report Template Revision 1.11

Technical Changes	**1**	**FROM: Section/Paragraph Table 1**	

FROM: Section/Paragraph Table 1

Defect type	Acceptance specifications
Hillock	1. Size＜300 μm, Area density≤2.5 pcs/cm².
Particle	2. 300um＜Size＜500 μm, Area density≤0.5 pcs/cm².
	3. 500um＜Size＜1 mm, Area density≤0.1 pcs/cm².
	4. 1 mm＜Size＜5 mm, Area density ≤0.05 pcs/cm². Total defect area should be no more than 10% quality area.
Black spot	Area density≤2.5pcs//cm².
Breakage	The whole wafer area should not be damaged.
Scratch	The total count of scratches should be no more than 0.1 pcs/cm², and the total length of scratches be less than or equal to 0.3 cm per inch diameter.
Crack	Crack in the quality area should not be allowed.
Haze	Haze in the quality area should not be allowed.
Contamination	Contamination area should be less than or equal to 5% quality area.
PSS shot fail	PSS shot fail in the quality area should not be allowed.
PSS pattern missing	PSS pattern missing in quality area should not be allowed.
Other defects	The total number of the other appearance defects more than 1mm should be less than or equal to (pcs/cm²., the abnormal area should be less than 5% quality area.

TO: Section/Paragraph Table 1

Defect type	Acceptance specifications
Hillock	1. Size＜300 μm, Area density≤2.5 defects/cm².
Particle	2. 300um＜Size＜500 μm, Area density≤0.5 defects/cm².
	3. 500um＜Size＜1 mm, Area density≤0.1 defects/cm².
	4. 1 mm＜Size＜5 mm, Area density ≤0.05 defects/cm². Total defect area should be no more than 10% quality area.
Black spot	Area density≤2.5 defects/cm².
Breakage	No breakage should be present in the whole wafer area.
Scratch	The total count of scratches should be no more than 0.1 defects/cm², and the total length of scratch should be less than or equal to 0.3 cm per inch diameter of wafer.
Crack	Crack in the quality area should not be allowed.
Haze	Haze in the quality area should not be allowed.
Contamination	Contamination area should be less than or equal to 5% quality area.
PSS shot fail	PSS shot fail in the quality area should not be allowed.
PSS pattern missing	PSS pattern missing in quality area should not be allowed.
Other defects	The total number of the other appearance defects more than 1mm should be less than or equal to (defects/cm²., the abnormal area should be less than 5% quality area.

Justification (If necessary)
Replace all references to pcs/cm2 with defects/cm2.
By diameter it means diameter of the wafer.

	2	**FROM: Section/Paragraph**	
		TO: Section/Paragraph	
		Justification (If necessary)	

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

A&R Ballot Report Template Revision 1.11

	Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)		
	Discussion	None		
	Result of Vote (check one)	21 **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/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)		
	Discussion			
	Result of Vote (check one)	21 **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 8

Negative	**Referenced Section/ Paragraph**	*TF/TC Chapter to fill in, including text in the ballot if necessary.
		4.1.10
	Negative Text	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.

		Breakage - This is a little unclear. Do you there should be no breakage in the wafer?		
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)**	X̶	'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/ 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	XXXX
	Motion by/ 2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)		
	Discussion	None		
	Result of Vote (check one)	21 **Y**-0 **N**; Motion passed		

Result of Vote (check one)	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	**Technical Change Recommendations** Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.		
	Technical	1	**FROM: Section/Paragraph 4.1.10** 4.1.10 Breakage—loss or damage of part of wafers
			TO: Section/Paragraph 4.1.10 4.1.10 Breakage—the separation of a wafer into two or more pieces due to wafer breaking.

A&R Ballot Report Template Revision 1.11

		Justification (If necessary)				
	2	**FROM: Section/Paragraph**				
		TO: Section/Paragraph				
		Justification (If necessary)				
	Motion	Negative is addressed by the technical change(s).				
	Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)				
	Discussion	**None**				
	Result of Vote (check one)	21 **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/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)					
Discussion						
Result of Vote (check one)	21 **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)**

A&R Ballot Report Template Revision 1.11

		(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

<table>
<tr><td rowspan="4">Negative</td><td rowspan="2">Referenced Section/ Paragraph</td><td colspan="4">*TF/TC Chapter to fill in, including text in the ballot if necessary.</td></tr>
<tr><td colspan="4">Figure 2</td></tr>
<tr><td rowspan="2">Negative Text</td><td colspan="4">*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.</td></tr>
<tr><td colspan="4">Figure 2. This figure is not referred to anywhere in the text.</td></tr>
<tr><td colspan="2">TF input (optional)</td><td colspan="4"></td></tr>
<tr><td rowspan="8">Related</td><td rowspan="2">Withdrawal (check one)</td><td>X</td><td colspan="2">No Negative withdrawal made by Voter.</td><td>GO TO "Related" subsection</td></tr>
<tr><td></td><td colspan="2">Withdrawal document received by Standards staff on MM/DD/YYYY.</td><td>GO TO "Final" subsection → (A)</td></tr>
<tr><td rowspan="3">Motion and Reason (check one)</td><td>X̶</td><td colspan="2">'Related' is mutually agreed upon. (Needs no motion.)</td><td>GO TO "Persuasive" subsection</td></tr>
<tr><td></td><td colspan="2">Negative is not related. (Needs ≥2/3 votes to pass.)</td><td></td></tr>
<tr><td>■</td><td>Reason</td><td>XXXX</td><td></td></tr>
<tr><td>Motion by/ 2nd by</td><td colspan="4">Name (Company)/Name (Company)</td></tr>
<tr><td>Discussion</td><td colspan="4"></td></tr>
<tr><td rowspan="3">Result of Vote (check one)</td><td colspan="4">XX Y-XX N; Motion passed/failed.</td></tr>
<tr><td></td><td colspan="2">[Negative is not related.] < 2/3</td><td>GO TO "Persuasive" subsection</td></tr>
<tr><td></td><td colspan="2">2/3 ≤ [Negative is not related.]</td><td>GO TO "Final" subsection → (B)</td></tr>
<tr><td rowspan="8">Persuasive</td><td rowspan="3">Motion and Reason (check one)</td><td>X</td><td colspan="2">Negative is related and persuasive. (Needs >1/3 votes to pass.)</td><td></td></tr>
<tr><td></td><td colspan="2">Negative is related and not persuasive. (Needs ≥2/3 votes to pass.)</td><td></td></tr>
<tr><td>■</td><td>Reason</td><td>XXXX</td><td></td></tr>
<tr><td>Motion by/ 2nd by</td><td colspan="4">Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)</td></tr>
<tr><td>Discussion</td><td colspan="4">None</td></tr>
<tr><td rowspan="3">Result of Vote (check one)</td><td colspan="4">21 Y-0 N; Motion passed</td></tr>
</table>

Note: the final "Result of Vote" sub-table is laid out as follows:

		Is a technical change recommended? **(check one)**		
X	[Negative is related and persuasive.] > 1/3		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**

<table>
<tr><td rowspan="13" style="writing-mode:vertical">Address by Technical Change Option</td><td colspan="4">**Technical Change Recommendations**

Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.</td></tr>
<tr><td rowspan="3" style="writing-mode:vertical">Technical Changes</td><td rowspan="3">1</td><td colspan="2">**FROM: Section/Paragraph Table 1**
None (Figure 2. This figure is not referred to anywhere in the text.)
Table 1 Visual inspection acceptance criteria for GaN based LED wafers</td></tr>
<tr><td colspan="2">**TO: Section/Paragraph Table 1**
Table 1 Visual inspection acceptance criteria for GaN based LED wafers. Features of some typical defects can refer to Figure 2.</td></tr>
<tr><td colspan="2">**Justification (If necessary)**
Figure 2 was referred in Table 1</td></tr>
<tr><td rowspan="3">2</td><td colspan="2">**FROM: Section/Paragraph**</td></tr>
<tr><td colspan="2">**TO: Section/Paragraph**</td></tr>
<tr><td colspan="2">**Justification (If necessary)**</td></tr>
</table>

Motion	Negative is addressed by the technical change(s).	
Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)	
Discussion	**None**	

Result of Vote **(check one)**	21 **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)**

<table>
<tr><td rowspan="6" style="writing-mode:vertical">Incorporation of the Technical Change</td><td>**Motion**</td><td colspan="3">To incorporate the technical change(s).</td></tr>
<tr><td>**Motion by/2nd by**</td><td colspan="3">Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)</td></tr>
<tr><td>**Discussion**</td><td colspan="3"></td></tr>
<tr><td rowspan="3">**Result of Vote**
(check one)</td><td colspan="3">21 **Y**-0 **N**; Motion passed</td></tr>
<tr><td>X</td><td>90% ≤ [Agree to incorporate.]</td><td>**GO TO "Final" subsection → (F)**</td></tr>
<tr><td></td><td>[Disagree to incorporate.]>10%</td><td>**GO TO "Final" subsection → (E)**</td></tr>
</table>

<table>
<tr><td rowspan="4" style="writing-mode:vertical">Not Significant Finding Option</td><td colspan="3">**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)**</td></tr>
<tr><td rowspan="3">**Use of "Not significant finding option"**
(check one)</td><td>It is mutually agreed upon to term the Negative "not significant".</td><td>**GO TO "Final" subsection → (D)**</td></tr>
<tr><td>It is mutually agreed upon to term the Negative "significant".</td><td>**GO TO "Final" subsection → (C)**</td></tr>
<tr><td>Whether or not the Negative is "not significant" is decided by a vote.</td><td></td></tr>
</table>

	Motion	The Negative is "not significant".		
Final	**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)**
	(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.	

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

9	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)**	
7	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. *Approval Conditions Check***	
			g - (h + i +j + k) >0	**Reject is included in the denominator of § VI. *Approval Conditions Check***	
			Reject without a Negative	**Not Valid**	

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* ¶ 9.6.4.4.2)

IV. Other Technical Issues

Note: TC Chapter may choose to address a technical issue that is not part of a Negative received on a Letter Ballot (i.e., a Comment or a reason not addressed by a Vote response) by handling it as a Negative and finding it related and technically persuasive. The TC Chapter may then fail the Document or address such technical issue by using the procedure defined in *Regulations* § 9.6.4.3 to make a technical change to the Document. (*Regulations* ¶ 9.6.2.4.5)

Technical	**Origin**	***TF/TC Chapter to choose** Comment # (Voter: Name and company) / A reason not addressed by a Vote response

	Referenced Section/ Paragraph	*TF/TC Chapter to fill in including text in the ballot as appropriate.				
	Reason	*Original Comment text, if applicable, and problem statement, including justification and suggestion, should be copied.				
	Handle technical issue identified above as a Negative.					
Related	Motion and Reason (check one)	☐	'Related' is mutually agreed upon. (Needs no motion.)		GO TO "Persuasive" subsection	
		☐	Negative is not related and assigned to TF. (Needs ≥2/3 votes to pass.)			
		☐	Negative is not related and placed on agenda of current TC Chapter meeting as new business. (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 not related.] <2/3		GO TO "Persuasive" subsection	
		☐	2/3 ≤ [Negative is not related] and assigned to TF.		GO TO "Final" subsection → (B)	
		☐	2/3 ≤ [Negative is not related] and placed on agenda of current TC Chapter meeting as new business.			
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)		
Address by Technical Change	Technical Change Recommendations Original section/paragraph number and at least one full sentence are required in "FROM" and "TO" fields.					
	Technical	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.		
		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/2nd by	Name (Company)/Name (Company)	
	Discussion		
	Result of Vote (check one)	XX **Y**-XX **N**; Motion passed/failed.	
		90% ≤ [Agree to incorporate.]	**GO TO "Final" subsection → (F)**
		[Disagree to incorporate.] >10%	**GO TO "Final" subsection → (E)**

Final	**(check one)**		**(B)**	Not related
			(C)	Related and not persuasive
			(E)	Related and persuasive and not addressed by technical change
			(F)	Addressed by technical change
	(check if applicable)		Comment generated. See Section V-(ii) Comment # X.	

Note: Row (E) is followed by **DOCUMENT FAILS**.

V. Comments

V- (i) Voters' Comments

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

Comment	***TF/TC Chapter to fill in section/paragraph #, if necessary.**
	Spaces ' ' must be deleted or added in different phrases.
	The TC Chapter agreed to do one of the following actions.

	*No motion is required in this step.			
		Already addressed by Commenter #, Comment #		
	X	No further action was taken by the TC Chapter.		
		Refer to the TF for more consideration.		
		New Business		
		Editorial Change		

		Options for editorial change (check one)		Case 1: No vote in this section:
				To be included and voted on as a group in § VI. *Editorial Changes Other than Those Voted on in § V.*
				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)
	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.

This table is needed for each Comment.

V-(ii) Comments Created by Handling Negative

Comment (Created by Handling Negative) NC – 1

Comment	*TF/TC Chapter to fill in
	4.1.5. This should end as "etc", not "et al."

		The TC Chapter agreed to do one of the following actions.		
Action		*No motion is required in this step.		
			Already addressed by Commenter #, Comment #	
			No further action was taken by the TC Chapter.	
			Refer to the TF for more consideration.	
			New business	
	x		Editorial change	
		Options for editorial change **(check one)**		Case 1: No vote in this section:
				To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
			x	Case 2: Voted in this section:
				Original section number and at least one full sentence are required in "FROM" and "TO" fields.
Editorial Changes	1	**FROM: Section/Paragraph 4.1.5** 4.1.5 Black spot— a dot like defect that appears dark at the wafer surface in visual inspection due to presence of pit, pinhole, embedded particle et al.		
		TO: Section/Paragraph 4.1.5 4.1.5 Black spot— a dot like defect that appears dark at the wafer surface in visual inspection due to presence of pit, pinhole, embedded particle etc.		
		Justification (If necessary) Editorial correction		
Motion		To approve above editorial change(s)		
Motion by/2nd by		Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)		
Discussion		None		
Vote		21 **Y**-0 **N**; Motion passed		

Comment (Created by Handling Negative) NC – 2

<table>
<tr><td rowspan="6">Comment</td><td colspan="4">*TF/TC Chapter to fill in</td></tr>
<tr><td colspan="4">7.2.6. Grammar has some omissions, perhaps "If any black spot defects are detected from a wafer from a MOCVD batch, then all of the rest of the wafers from the same batch should be inspected by the same method as the sampled wafer."</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4"></td></tr>
</table>

<table>
<tr><td rowspan="6">Action</td><td colspan="3">The TC Chapter agreed to do one of the following actions.</td></tr>
<tr><td colspan="3">*No motion is required in this step.</td></tr>
<tr><td></td><td colspan="2">Already addressed by Commenter #, Comment #</td></tr>
<tr><td></td><td colspan="2">No further action was taken by the TC Chapter.</td></tr>
<tr><td></td><td colspan="2">Refer to the TF for more consideration.</td></tr>
<tr><td></td><td colspan="2">New business</td></tr>
<tr><td>x</td><td colspan="2">Editorial change</td></tr>
</table>

Options for editorial change (check one)		Case 1: No vote in this section:
		To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.
	x	Case 2: Voted in this section:
		Original section number and at least one full sentence are required in "FROM" and "TO" fields.

<table>
<tr><td rowspan="3">Editorial Changes</td><td rowspan="3">1</td><td>FROM: Section/Paragraph xxx
7.2.6 If any black spot defects are detected from a wafer from a MOCVD batch, then <mark>all the rest wafers</mark> from the same batch should be inspected by the same method as the sampled wafer.</td></tr>
<tr><td>TO: Section/Paragraph xxx
7.2.6 If any black spot defects are detected from a wafer from a MOCVD batch, then <mark>all of the rest of the wafers</mark> from the same batch should be inspected by the same method as the sampled wafer.</td></tr>
<tr><td>Justification (If necessary)
Editorial correction for clarification.</td></tr>
</table>

Motion	To approve above editorial change(s)
Motion by/2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)
Discussion	None
Vote	21 **Y**-0 **N**; Motion passed

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

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

1	Origin of this editorial change **(Check one)**		Commenter(s) / Comment(s) #	
			Other [ ]	
	FROM: Section/Paragraph XXX			
	TO: Section/Paragraph XXX			
	Justification: (If necessary)			
2	Origin of this editorial change **(Check one)**		Commenter(s) / Comment(s) #	
			Other [ ]	
	FROM: Section/Paragraph XXX			
	TO: Section/Paragraph XXX			
	Justification: (If necessary)			
Motion	To approve the above editorial change(s).			
Motion by/ 2nd by	Name (Company)/Name (Company)			
Discussion	XXXX			
Vote	XX **Y**-XX **N**; Motion passed (or failed)			

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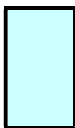
APPROVAL CONDITION 2: At least 90% of the sum of valid Voting Interest Accept and Voting Interest Reject Votes must be Accept. (*Regulations* ¶ 9.7.1.3)

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

		Accepts		**(Accepts + Valid Rejects)**			
Approval Rate	=	30	/	30	=	100.0%	≥90%

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

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

A&R Ballot Report Template Revision 1.11

	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.

<table>
<tr><td rowspan="3">Motion</td><td>X</td><td colspan="2">This is not a Safety Document, when all safety-related information is removed, the Document is still technically sound and complete. (<i>Regulations</i> ¶ 8.7.1)</td></tr>
<tr><td></td><td colspan="2">This is a Safety Document, when all safety-related information is removed, the Document is not technically sound and complete. (<i>Regulations</i> ¶ 8.7.2)</td></tr>
<tr><td>■</td><td></td><td>Safety Checklist (<i>Regulations</i> ¶ 15.3) is complete and has been included with the Document throughout the balloting process. (<i>Regulations</i> ¶ 15.1.2)</td></tr>
<tr><td colspan="2">Motion by/2nd by</td><td colspan="2">Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)</td></tr>
<tr><td colspan="2">Discussion</td><td colspan="2">None</td></tr>
<tr><td colspan="2">Vote</td><td colspan="2">21 Y-0 N; Motion passed</td></tr>
</table>

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.

<table>
<tr><td>x</td><td colspan="3">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</i> ¶ 8.8.1)</td></tr>
<tr><td rowspan="7"></td><td>x</td><td>No potentially material patented technology or reproduction of copyrighted items is known.</td><td>GO TO SECTION X.</td></tr>
<tr><td></td><td>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.</td><td>GO TO SECTION X.</td></tr>
<tr><td></td><td colspan="2">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.</td></tr>
<tr><td rowspan="3">Motion</td><td></td><td colspan="2">Ask ISC for special permission to publish.</td></tr>
<tr><td></td><td colspan="2">Quit activity.</td></tr>
<tr><td></td><td colspan="2">Wait for LOA for patented technology or release of copyrighted items.</td></tr>
<tr><td colspan="2">Motion by/2nd by</td><td colspan="2"></td></tr>
<tr><td></td><td colspan="2">Discussion</td><td>None</td></tr>
</table>

	Vote	Y- N	
	Final Action		Motion passed
			Motion failed

X. Action for This Document

Motion			This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.
			This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.
		x	This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.
			This Document failed TC Chapter review and will be returned to the TF for rework.
			This Document failed TC Chapter review and work will be discontinued.

Motion by/ 2nd by	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)
Discussion	None
Vote	21 Y-0 N
Final Action	X Motion passed
	Motion failed

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

A&R		**Approved for publication**
		Approved pending acceptance of the Ratification Ballot
		Not approved
	Reason:	