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 Vot	ers	with Rejects	1
Voting Interest Accept(s)	30					

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

III. Rejects

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

<u></u>	alive i										
	Referenced Section/	*TF/TC Chapter to fill in, in	ncluding text in the ballot if ne	cessary.							
_	Paragraph	4.1.14, 7.1.3, 8.2, 9.7									
Negative		*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.									
ve	Negative Text	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.									
TF	input (optional)										
	Withdrawal	X No Negative withdrawa	ll made by Voter.	GO TO "Related" subsection							
	(check one)	Withdrawal document r MM/DD/YYYY.	eceived by Standards staff on	GO TO "Final" subsection → (A)							
	Motion and	★ 'Related' is mutually ag	reed upon. (Needs no motion.)	GO TO "Persuasive" subsection							
	Reason	Negative is not related. (Needs ≥2/3 votes to pass.)									
	(check one)	Reason	xxxx								
Related	Motion by/ 2 nd by	Name (Company)/Name (Company)									
ated	Discussion										
		XX Y -XX N ; Motion passed/failed.									
	Result of Vote (check one)	[Negative is not related	GO TO "Persuasive" subsection								
	(6.1.00.1.01.0)	2/3 ≤ [Negative is not re	elated.]	GO TO "Final" subsection → (B)							
		X Negative is related and persuasive. (Needs >1/3 votes to pass.)									
	Motion and Reason (check one)	Negative is related and	not persuasive. (Needs ≥2/3 vo	otes to pass.)							
Per	(0.000000000)	Reason	xxxx								
Persuasive	Motion by/ 2 nd by	Zhihao Wu (HC SEMITEK)/	Steven Li (AMEC)								
é	Discussion	None									
		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)	GO TO "Address by Technical Change Option" subsection							
•	•										

		nical Change Reconal section/parages. FROM: Section/FT.1.3 Make of area. Justification FROM: Section	persuas 2/3 ≤ [No and not 90% ≤ [I and not comme graph n pon/Para calculat (If nece pon/Para	graph 7.1.3 ions on the ratio of ph 7.1.3 tions on the ratio of essary) graph 8.2	one full sentence defect distributin f defect concent	subsect nifican are rec	GO TO "Final" subsection → (E) tion → (C) t Finding Option" subsection quired in "FROM" and "TO" to the total effective wafer area.			
Address by Technical Change	Technical Changes	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 are enclosed rectangle inside which the defects are densely located. Justification (If necessary) 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)								
Option	Motic	I <u>I</u> on	Neg	Negative is addressed by the technical change(s).						
on	Motic	on by/2 nd by	Zhih	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)						
		ussion	Nor	None						
		Result of Vote (check one)	21 Y	21 Y-0 N; Motion passed 2/3 ≤ [Negative is addressed by the technical change(s).] [Negative is not addressed by the technical [Negative is not addressed by the technical GO TO "Final" subsection						
		Motion	To i	change(s).] < 2/3 ncorporate the tech	nical change(s).		→ (E)			
	the	Motion by/2 nd by	-	ao Wu (HC SEMITE	3 ()	EC)				
	Incorporation of the Technical	Discussion		(1 1 1 m)	,	,				
	atior		21 Y	′ -0 N ; Motion passed						
	of al		X	90% ≤ [Agree to inc	orporate.]		GO TO "Final" subsection → (F)			

	Result o		[Disaç	gree to incorporate.]>10%	GO TO "Final" subsection → (E)						
z				e TC Chapter finds a Negative not per eting on the action". (<i>Regulations</i> ¶ 9.0							
Not Sig	Use of "Not		It is mutually agreed upon to term the Negative "not significant". GO TO "Final" subsecti → (D)								
Significant	significant finding option" (check one)		mutually a	greed upon to term the Negative	GO TO "Final" subsection → (C)						
🛱	,	Whe	Whether or not the Negative is "not significant" is decided by a vote.								
Finding	Motion	The Neg	The Negative is "not significant".								
ng Op	Motion by/ 2 nd by	Name (Company)/Name (Company)									
Option	Vote	XX.	Y-XX N; M	otion passed with simple majority	GO TO "Final" subsection → (D)						
	Vote	XX.	Y-XX N; M	otion failed with simple majority	GO TO "Final" subsection → (C)						
			(A)	Withdrawn (counted under h in dis	position)						
			(B)	Not related (counted under i in dis	position)						
	(check if		(C)	Related and not persuasive (signification)	ant)						
Final	applicable)		(D)	Not significant (counted under j in	disposition)						
<u> </u>			(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS						
		Χ	(F)	Addressed by technical change (counted under k disposition)							
	(check if applicable)	Con	nment gene	erated. See Section V-(ii) Comment # >	K .						

	Referenced		*TF/TC Chapter to fill in, including text in the ballot if necessary.							
Neg	Section/ Paragraph	4.1.	4.1.5							
Negative	Negative Text		iginal complete Negati pied.	ive text (e.g., issue, justification	, suggestion) should be					
	nogunio rom	4.1.	5. This should end as "e	etc", not "et al."						
TF	input (optional)									
	Withdrawal	Х	No Negative withdrawal made by Voter.		GO TO "Related" subsection					
	(check one)		Withdrawal document MM/DD/YYYY.	GO TO "Final" subsection → (A)						
	Motion and	X	'Related' is mutually ag	greed upon. (Needs no motion.)	GO TO "Persuasive" subsection					
Re	Reason		Negative is not related	. (Needs ≥2/3 votes to pass.)						
Related	ate (check one)		Reason	xxxx						
	Motion by/ 2 nd by	Nan	Name (Company)/Name (Company)							

	Di	scu	ssion									
				XX '	Y-XX N; Motion passed	/failed						
			of Vote		[Negative is not related	GO TO "Persuasive" subsection						
	,		,		2/3 ≤ [Negative is not re	elated	.]			GO TO "Final" subsection → (B)		
		-4!-			Negative is related and	tive is related and persuasive. (Needs >1/3 votes to pass.)						
		Rea	n and son k one)	х	Negative is related and	not p	ersuasive. (Needs	≥2/3	vot	es to pass.)		
			·		Reason	Edito	rial correction.					
Pe	М	otio 2 nd	n by/ by	Zhih	ao Wu (HC SEMITEK)/	Steve	en Li (AMEC)					
)Sue	Di	scu	ssion	Non	e							
Persuasive				21 Y	-0 N ; Motion passed		_					
Ve	Pos	eult.	of Vote		[Negative is related and persuasive.] > 1/3	d	Is a technical change recommended?		Y	GO TO "Address by Technical Change Option" subsection		
		Result of Vote (check one)			[Negative is related and persuasive.] < 2/3		(check one)		N	GO TO "Final" subsection → (E)		
					2/3 ≤ [Negative is relate and not persuasive.] <		GO TO "Final" s	ubsed	ctio	n → (C)		
				х	90% ≤ [Negative is rela and not persuasive.]	not persuasive.]			nt F	inding Option" subsection		
		inal			ecommendations graph number and at	least (one full sentence	are r	equ	ired in "FROM" and "TO"		
Addı			FROM:	Sect	ion/Paragraph							
ess b		1	TO: Sec	tion	/Paragraph							
у Тес	Technical				ation (If necessary)							
nnical	al Cha		FROM:	Sect	ion/Paragraph							
Address by Technical Change Option	Changes	2	TO: Sec	ction/Paragraph								
e Optio			Justific	ation (If necessary)								
	Moti	on			Negative is addres	sed by	y the technical cha	nge(s).			
	Moti	on k	y/2 nd by	,								
	Disc				None							

		Result of V				2/3 ≤ [Ne change(s	egative is addressed by the technical s).]	GO TO "Incorporation of the Technical Change" subsection		
						[Negative change(s	e is not addressed by the technical s).] < 2/3	GO TO "Final" subsection → (E)		
	·	Motion			To incorporate the technical change(s).					
	ncor Tecl	Motion by/	2 nd k	ру						
	por nic	Discussion	1		Non	e				
	Incorporation of the Technical Change	Result o				90% ≤ [A	agree to incorporate.]	GO TO "Final" subsection → (F)		
	the ge	(check	(check one)			[Disagree	e to incorporate.]>10%	GO TO "Final" subsection → (E)		
7							C Chapter finds a Negative not pers g on the action". (<i>Regulations</i> ¶ 9.6			
lot Siç	Use	e of "Not	х		mutu nificar		ed upon to term the Negative "not	GO TO "Final" subsection → (D)		
Not Significant Finding Option	sig findi			mutu nifica		ed upon to term the Negative	GO TO "Final" subsection → (C)			
TI.	(-	,		Wh	ether	or not the	e Negative is "not significant" is decide	ed by a vote.		
ndi	Ŋ	Motion	The	Neg	gative is "not significant".					
ng Op		otion by/ 2 nd by	Nam	ne (C	Comp	any)/Nan	ne (Company)			
tion		Vote		XX	Y-XX	(N; Motio	n passed with simple majority	GO TO "Final" subsection → (D)		
		VOIC		XX	Y-XX	N; Motio	n failed with simple majority	GO TO "Final" subsection → (C)		
					(/	4)	Withdrawn (counted under h in disp	oosition)		
					(E	3)	Not related (counted under i in disp	,		
	(0	check if			((C)	Related and not persuasive (significa	nt)		
Final		plicable)	Х		([)	Not significant (counted under j in d	isposition)		
<u> </u>						≣)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS		
					(1	F)	Addressed by technical change (cou	nted under k disposition)		
		check if plicable)	X	Con	Comment generated. See Section V-(ii) Comment # 1.					

Neg	Section/	*TF/TC Chapter to fill in, including text in the ballot if necessary. 4.1.10
ative	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)	

	NACAL ALVANIA	Х	No Negative withdrawal	mad	e by Voter.			GO TO "Related" subsection	
	Withdrawal (check one)		Withdrawal document received by Standards staff on MM/DD/YYYY.					GO TO "Final" subsection → (A)	
	Mation and	X	'Related' is mutually agr	n.)	GO TO "Persuasive" subsection				
	Motion and Reason		Negative is not related.						
	(check one)		Reason	XXXX	(
Rel	Motion by/ 2 nd by	Nan	ne (Company)/Name (Co	mpar	ny)				
Related	Discussion								
		XX	Y-XX N; Motion passed/	failed					
	Result of Vote (check one)		[Negative is not related.] < 2/	3			GO TO "Persuasive" subsection	
	(enesit ene)		2/3 ≤ [Negative is not re	lated]			GO TO "Final" subsection → (B)	
	Motion and	X	Negative is related and	persu	asive. (Needs >1/	3 vo	tes t	to pass.)	
	Reason (check one)		Negative is related and	vot	es to pass.)				
			Reason XXXX						
 	Motion by/ 2 nd by	Zhih	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)						
ersi	Discussion	None							
Persuasive		<mark>21 </mark>	/ -0 N ; Motion passed						
Ve	Result of Vote	X	[Negative is related and persuasive.] > 1/3		Is a technical change recommended?	х	Y	GO TO "Address by Technical Change Option" subsection	
	(check one)		[Negative is related and persuasive.] < 2/3		(check one)		N	GO TO "Final" subsection → (E)	
			2/3 ≤ [Negative is relate and not persuasive.] < 9	90%	GO TO "Final" subsection → (C)				
	T 1 1 101		90% ≤ [Negative is relat and not persuasive.]	ed	GO TO "Not Sigr	nifica	ant F	Finding Option" subsection	
>	Technical Chang	je R	ecommendations						
Address by Technical Change Option	Original section/ fields.	para	agraph number and at l	east (one full sentence	are i	requ	ired in "FROM" and "TO"	
s by			ion/Paragraph 4.1.10						
Opt Opt	요		akage— <mark>loss or damage</mark>	of p	art of wafers				
/ Techni Option			/Paragraph 4.1.10 akage—the separation	of a v	vafer into two or	more	e pie	ces due to wafer breaking.	
ical	Justific		n (If necessary)				, J. O	and to make a straining.	

			FROM:	Secti	ion/l	Para	graph			
		2	TO: Sec	tion/	/Para	agra	ph			
			Justific	ation	ı (If	nece	essary)			
	Motio	n				Neg	ative is	addressed by the technical change(s).		
	Motio	n b	y/2 nd by	,		Zhih	ao Wu	(HC SEMITEK)/ Steven Li (AMEC)		
	Discu	ıssi	ion			Nor	ie			
						21 Y	′-0 N; N	lotion passed		
	Result of Vote (check one)				X	2/3 ≤ [I change	Negative is addressed by the technical e(s).]	GO TO "Incorporation of the Technical Change" subsection		
								ve is not addressed by the technical e(s).] < 2/3	GO TO "Final" subsection → (E)	
			tion			To i	ncorpor	rate the technical change(s).		
	ncor Tec		tion by/		у	Zhih	ao Wu	(HC SEMITEK)/ Steven Li (AMEC)		
	pora	Dis	cussior	1						
	ation al C					21 Y	′-0 N; N	lotion passed		
	Incorporation of th Technical Change	Result o				X	90% ≤ [Agree to incorporate.]		GO TO "Final" subsection → (F)	
	ne e		(check one)				[Disagr	ree to incorporate.]>10%	GO TO "Final" subsection → (E)	
								TC Chapter finds a Negative not persing on the action". (Regulations ¶ 9.6		
Not Sign	Use	e of	f "Not			s mutually agreed upon to term the Negative "not gnificant". GO TO "Final" subsection → (D)				
nificant Finding Option	findi	ng (icant option" (one)			It is mutually agreed upon to term the Negative "significant".			GO TO "Final" subsection → (C)	
# F	(011	00.	(0110)		Whe	ether	or not t	the Negative is "not significant" is decide	ed by a vote.	
ndi	N	Иot	ion	The	Neg	egative is "not significant".				
ng Op			n by/ by	Nam	ne (C	omp	any)/Na	ame (Company)		
tion		Vo	to		XX	Y-X>	(N; Mot	tion passed with simple majority	GO TO "Final" subsection → (D)	
		VO			XX	Y-X>	(N; Mot	tion failed with simple majority	GO TO "Final" subsection → (C)	
						(,	A)	Withdrawn (counted under h in disp	position)	
							В)	Not related (counted under i in disp	,	
Final			ck if				C)	Related and not persuasive (signification)	·	
<u>a</u>	ap	plic	able)			(D)	Not significant (counted under j in d	lisposition)	
							E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS	
				Χ		(F)	Addressed by technical change (cou	nted under k disposition)	

(check if applicable)	Comment generated. See Section V-(ii) Comment # X.
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	Referenced Section/	*TF/TC Chapter to fill in, i	ncluding text in the bal	lot if nec	essary.							
Neg	Paragraph	5.2.2										
Negative	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)											
	Withdrawal	X No Negative withdrawa	X No Negative withdrawal made by Voter.									
	(check one)	Withdrawal document MM/DD/YYYY.	received by Standards s	taff on	subsection GO TO "Final" subsection → (A)							
	Motion and	X 'Related' is mutually a	greed upon. (Needs no i	motion.)	GO TO "Persuasive" subsection							
	Reason	Negative is not related	Negative is not related. (Needs ≥2/3 votes to pass.)									
	(check one)	Reason	xxxx									
Rel	Motion by/ 2 nd by	Name (Company)/Name (C	Name (Company)/Name (Company)									
Related	Discussion											
	Result of Vote (check one)	XX Y-XX N; Motion passed/failed.										
		[Negative is not related		GO TO "Persuasive" subsection								
		2/3 ≤ [Negative is not r	2/3 ≤ [Negative is not related.]									
		X Negative is related and	X Negative is related and persuasive. (Needs >1/3 votes to pass.)									
	Motion and Reason (check one)	Negative is related and	d not persuasive. (Needs	s ≥2/3 vot	es to pass.)							
	(check one)	Reason	xxxx									
Persuasive	Motion by/ 2 nd by	Zhihao Wu (HC SEMITEK)	Steven Li (AMEC)									
suas	Discussion	None										
sive		21 Y-0 N; Motion passed	1									
	Result of Vote (check one)	X [Negative is related an persuasive.] > 1/3	change recommended?	X Y	GO TO "Address by Technical Change Option" subsection							
	(33333)	[Negative is related an persuasive.] < 2/3		N	GO TO "Final" subsection → (E)							
		2/3 ≤ [Negative is relat and not persuasive.] <		subsectio	on → (C)							

ı	I			000	/ ₋ < []	Negative is related							
						persuasive.]	GO TO "Not Significant	Finding Option" subsection					
	Tech	nic	al Chang	je Recor	mme	ndations							
	Origi fields		section/	paragra	ph n	umber and at least	one full sentence are req	uired in "FROM" and "TO"					
İ						graph Table 1 Title							
	Тес			1 Visual inspection acceptance criteria for GaN based LED wafers ection/Paragraph Table 1 Title									
		1	Table 1	Visual	Visual inspection acceptance criteria for GaN based LED wafers. Features of some								
				defects can refer to Figure 2. ation (If necessary)									
) hni		Justific	ication (ii necessary)									
▶	Technical Changes		FROM:	Section/Paragraph									
ddr	ang	anges 2	TO: 0	Continu/Dayawanh									
ess b	jes		10: Sec	: Section/Paragraph									
Address by Technical Change Option			Justific	Justification (If necessary)									
hnica	Motion Negative is addressed by the technical change(s).												
C	Moti	on I	oy/2 nd by	,	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)								
ang	Disc				Nor	пе							
e O					21 \	/ -0 N ; Motion passed	1						
ption		Re	sult of V	ote	X		ddressed by the technical	GO TO "Incorporation of the Technical Change"					
		(0	heck on	e)		. , , .		subsection GO TO "Final" subsection					
						change(s).] < 2/3	ressed by the technical	→ (E)					
	 . =		otion		To incorporate the technical change(s).								
	ncoi Tec	_	otion by/2		Zhił	nao Wu (HC SEMITE	K)/ Steven Li (AMEC)						
	7por hnic	Dis	scussion	1									
	atio	┢			<mark>21 \</mark>	Y -0 N ; Motion passed	I						
	ncorporation of the Technical Change		Result o	f Vote	X	90% ≤ [Agree to inc	orporate.]	GO TO "Final" subsection → (F)					
	the ge		(check	one)		[Disagree to incorpo	orate.]>10%	GO TO "Final" subsection → (E)					
Z							finds a Negative not persction". (<i>Regulations</i> ¶ 9.6	suasive by a vote equal to or					
			-			<u> </u>		00.70 (/5)					
gnifi	Us	e o	f "Not		: mut nifica		term the Negative "not	GO TO "Final" subsection → (D)					
Not Significant Finding Option	si find	gnii ing	ficant option"		mut Inifica	ually agreed upon to ant".	term the Negative	GO TO "Final" subsection → (C)					
indi	(check one)				nether or not the Negative is "not significant" is decided by a vote.								
l Bu		Mot	tion	The Neg	gative	e is "not significant".							

	Motion by/ 2 nd by	Nam	Name (Company)/Name (Company)								
	Vote		XX Y-XX N; Mo	otion passed with simple majority	GO TO "Final" subsection → (D)						
			XX Y-XX N; Mo	otion failed with simple majority	GO TO "Final" subsection → (C)						
			(A)	Withdrawn (counted under h in di	sposition)						
			(B)	Not related (counted under i in disposition)							
	(check if		(C)	Related and not persuasive (signific	ersuasive (significant)						
Final	applicable)		(D)	Not significant (counted under j in	Not significant (counted under j in disposition)						
<u>a</u>			(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS						
		X	(F)	Addressed by technical change (co	ounted under k disposition)						
	(check if applicable)		Comment gene	erated. See Section V-(ii) Comment #	X.						

Z	Referenced Section/ Paragraph	*TF/	<u> </u>	cluding text in the ballot if nec	essary.					
Negative	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	Х	No Negative withdrawa	I made by Voter.	GO TO "Related" subsection					
	(check one)		Withdrawal document r MM/DD/YYYY.	GO TO "Final" subsection → (A)						
	Motion and Reason (check one)	X	'Related' is mutually ag	GO TO "Persuasive" subsection						
			Negative is not related.	(Needs ≥2/3 votes to pass.)						
			Reason	xxxx						
Related	Motion by/ 2 nd by	Nam	Name (Company)/Name (Company)							
ated	Discussion									
		XX '	Y-XX N; Motion passed/	failed.						
	Result of Vote (check one)		[Negative is not related	.] < 2/3	GO TO "Persuasive" subsection					
	(eneck che)		2/3 ≤ [Negative is not re	elated.]	GO TO "Final" subsection → (B)					
Persuas ve	Motion and Reason	Х	Negative is related and	persuasive. (Needs >1/3 votes 1	to pass.)					
uasi	(check one)		Negative is related and	not persuasive. (Needs ≥2/3 vot	es to pass.)					

				Rea	ason		xxxx				
	Mc	otio	ı by/								
		2 nd		Zhihao \	Wu (F	IC SEMITEK)/	Stever	n Li (AMEC)			
	Dis	scus	sion	None							
				21 Y -0 I	N; Mo	tion passed			1		
	Result of Vote				e is related an ve.] > 1/3		Is a technical change recommended?	х	Y	GO TO "Address by Technical Change Option" subsection	
			one)			e is related an ve.] < 2/3	d not	(check one)		N	GO TO "Final" subsection → (E)
						egative is relat persuasive.] <		GO TO "Final" s	subse	ctio	n → (C)
					_	% ≤ [Negative is related I not persuasive.] GO TO "Not Significant Finding Option" su					
	Tech	nica	l Chang	je Recoi	mmer	ndations					
	Origi fields		section/	paragra	ıph nı	umber and at	least o	one full sentence	are r	equ	ired in "FROM" and "TO"
	Technical Changes	1	7.2.1 F microso FO: Sec 7.2.1 P	Pick up cope. tion/Par Pick up s	one ragra _l some	oh 7.2.1 wafers from	every	MOCVD batch w	vith a	sam	it under the metallographic npling rate of at least 5% and ohic microscope.
₂					ation (If necessary)						
Address by Te	al Chan		ROM:	Section/	/Para	graph					
	ges	2	ΓO: Sec	tion/Par	ragra	ph					
hni		-	Justific	ation (If	If necessary)						
<u>cal</u>			_	, , ,	Aton (ii necessary)						
) har	Motic	n			Neg	ative is addres	sed by	the technical cha	ange(s	5).	
nge (Motic	n b	y/2 nd by	,	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)						
chnical Change Option	Discu	ıssi	on		Non	е					
5					21 Y	-0 N; Motion	passed				
			ult of Vo		X	2/3 ≤ [Negati\ change(s).]	/e is ad	dressed by the te	echnica	al	GO TO "Incorporation of the Technical Change" subsection
		•		,		[Negative is n change(s).] <		essed by the tecl	nnical		GO TO "Final" subsection → (E)
		Mot	ion		To ii			nical change(s).			, /
	Incorporation of the	Mot	ion by/	2 nd by	Zhih	ao Wu (HC SE		()/ ()()	EC)		
1 1		Discussion						()/ Steven LI (AM	LO)		
	corporat	Dis	cussion	1			_ivii i Er	K)/ Steven LI (AIVI			

		Result o	f Vote	X	90% ≤ [A	Agree to incorporate.]	GO TO "Final" subsection → (F)					
		(check	one)		[Disagree	e to incorporate.]>10%	GO TO "Final" subsection → (E)					
z	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)											
ot Sig	Us	e of "Not		mut nifica		ed upon to term the Negative "not	GO TO "Final" subsection → (D)					
Not Significant Finding	significant finding option" (check one)			mut nifica		ed upon to term the Negative	GO TO "Final" subsection → (C)					
Ē	·		Wh	ethei	or not the	d by a vote.						
ndii	Motion The Negative is "not significant".											
		otion by/ 2 nd by	Name (0	Comp	oany)/Nan	ne (Company)						
Option		Vote		Y-X	⟨N ; Motio	on passed with simple majority	GO TO "Final" subsection → (D)					
				Y-X	⟨ N ; Motio	on failed with simple majority	GO TO "Final" subsection → (C)					
				(A)	Withdrawn (counted under h in disp	osition)					
				(B)	Not related (counted under i in dispo	position)					
	((check if		(C)	Related and not persuasive (significar	nt)					
Final	•	plicable)		(D)	Not significant (counted under j in di	sposition)					
<u>a</u>					E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS					
			X	(F)	Addressed by technical change (coun	ited under k disposition)					
	•	check if plicable)	Cor	nme	nt genera	ted. See Section V-(ii) Comment # X.						

	Referenced	*TF	*TF/TC Chapter to fill in, including text in the ballot if necessary.						
Z	Section/ Paragraph	7.2.6							
Negative	Negative Text		*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.						
e		a wa	afer from a MOCVD bato	missions, perhaps "If any black s ch, then all of the rest of the wafer nethod as the sampled wafer."					
TF	input (optional)								
	Withdrawal	X	No Negative withdrawa	I made by Voter.	GO TO "Related" subsection				
	(check one)		Withdrawal document r	eceived by Standards staff on	GO TO "Final" subsection → (A)				
R	Motion and	X	'Related' is mutually ag	reed upon. (Needs no motion.)	GO TO "Persuasive" subsection				
Related	Reason		Negative is not related. (Needs ≥2/3 votes to pass						
ed	(check one)		Reason	xxxx					

		otion 2 nd b		Nam	e (Company)/Name (Co	ompar	ny)			
	Dis	scuss	ion							
				XX Y	/-XX N ; Motion passed	/failed				
		Result of Vote (check one)			[Negative is not related	.] < 2/	GO TO "Persuasive" subsection			
	(check one)		,		2/3 ≤ [Negative is not re	elated		GO TO "Final" subsection → (B)		
					Negative is related and	tive is related and persuasive. (Needs >1/3 votes to pass.)				
	F	otion a Reasoneck c	n	х	Negative is related and	not p	ersuasive. (Needs	s ≥2/3 vot	es to pass.)	
	(0.00		,		Reason	Editorial correction.				
ا و		otion 2 nd b		Zhih	ao Wu (HC SEMITEK)/	Steve	en Li (AMEC)			
Persuasive	Dis	scuss	ion	None	Э					
uasi				21 Y	-0 N ; Motion passed		_			
ve		Result of Vote (check one)			persuasive.] < 2/3 2/3 ≤ [Negative is relate	gative is related and not suasive.] < 2/3 ≤ [Negative is related		N N subsectio	GO TO "Address by Technical Change Option" subsection GO TO "Final" subsection → (E)	
				_	and not persuasive.] < 90% ≤ [Negative is rela	o ≤ [Negative is related			Finding Option" subsection	
	Tech	nical	Chang		and not persuasive.]	not persuasive.]				
A	Origi fields		ection/	para	graph number and at	least (one full sentence	are requ	iired in "FROM" and "TO"	
ddre		FI	ROM:	Secti	on/Paragraph					
ss by		1 T	O: Sec	tion/	Paragraph					
Techr	Techn	Ji	ustifica	ation	(If necessary)					
nical CI	Technical Changes	FI	ROM:	Section/Paragraph						
Address by Technical Change Option	anges	2 T	O: Sec	tion/	Paragraph					
ption		Ju	ustifica	ation	(If necessary)					
	Motic	on .			Negative is addres	sed by	y the technical cha	ınge(s).		
	Motic	on by	/2 nd by	1						

	Disc	ussion			Non	ne				
	Result of Vote (check one)					change(s	e is not addressed by the technical	GO TO "Incorporation of the Technical Change" subsection GO TO "Final" subsection → (E)		
		Motion			To i		te the technical change(s).	· (=)		
	Te	Motion by/	2 nd k	эу						
	orpora chnica	Discussion	1							
	Incorporation of the Technical Change	Result of Vote (check one)				<u> </u>	gree to incorporate.] e to incorporate.]>10%	GO TO "Final" subsection → (F) GO TO "Final" subsection → (E)		
							C Chapter finds a Negative not pers g on the action". (<i>Regulations</i> ¶ 9.6	suasive by a vote equal to or		
Not Sig	Us	e of "Not	X		mutu nifica	, ,	ed upon to term the Negative "not	GO TO "Final" subsection → (D)		
Significant Finding Option	siq findi	significant ding option" check one)			mutu nifica		ed upon to term the Negative	GO TO "Final" subsection → (C)		
Ī	Ì	,		Wh	ether	or not the	e Negative is "not significant" is decide	ed by a vote.		
ndi	ı	Motion	The	e Negative is "not significant".						
ng Op		otion by/ 2 nd by	Nan	ne (C	Company)/Name (Company)					
tion		Vote		XX	Y-XX	(N; Motio	n passed with simple majority	GO TO "Final" subsection → (D)		
		vote		XX	Y-XX	(N ; Motio	n failed with simple majority	GO TO "Final" subsection → (C)		
					(4	A)	Withdrawn <mark>(counted under h in dis</mark> p	oosition)		
					(1	В)	Not related (counted under i in disp	osition)		
	•	check if			(C)	Related and not persuasive (significa	,		
Final	ар	plicable)	Х		(1	D)	Not significant <mark>(counted under j in d</mark>	isposition)		
<u>a</u>						E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS		
	,	ahaak !f			(F)	Addressed by technical change (cou	nted under k disposition)		
	(check if applicable)			Con	nmer	nt generat	red. See Section V-(ii) Comment # 2.			

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

		Tab	le 1. Please replace all r	efere	nces to pcs/cm2 wi	th de	efect	s/cm2.		
		Sc	ratch I think by diame	ter yo	u mean diameter o	of the	waf	er, correct?		
TF i	input (optional)									
	Withdrawal	X	No Negative withdrawa	ıl mad	e by Voter.			GO TO "Related" subsection		
	(check one)		Withdrawal document received by Standards staff on MM/DD/YYYY.					GO TO "Final" subsection → (A)		
	Motion and	X	'Related' is mutually ag	reed ι	upon. (<mark>Needs no n</mark>	notic	on.)	GO TO "Persuasive" subsection		
	Reason		Negative is not related.	(Nee	ds ≥2/3 votes to p	ass.	.)			
	(check one)		Reason							
Rel	Motion by/ 2 nd by	Nan	ne (Company)/Name (C	ompai	ny)					
Related	Discussion									
		XX '	Y-XX N; Motion passed	/failed						
	Result of Vote (check one)		[Negative is not related		GO TO "Persuasive" subsection					
			2/3 ≤ [Negative is not re		GO TO "Final" subsection → (B)					
	Motion and Reason (check one)	X	X Negative is related and persuasive. (Needs >1/3 votes to pass.)							
			Negative is related and	vot	tes to pass.)					
			Reason							
P	Motion by/ 2 nd by	Zhih	nao Wu (HC SEMITEK)/	Steve	en Li (AMEC)					
Persu	Discussion	Non	е							
uasive		<mark>21 </mark>	/ -0 N ; Motion passed							
Ve	Result of Vote	X	[Negative is related and persuasive.] > 1/3	d	Is a technical change recommended?	X	Y	GO TO "Address by Technical Change Option" subsection		
	(check one)		[Negative is related and persuasive.] < 2/3		(check one)		N	GO TO "Final" subsection → (E)		
			2/3 ≤ [Negative is relate and not persuasive.] <	GO TO "Final" s	ubse	ectio	n → (C)			
			90% ≤ [Negative is rela and not persuasive.]	ted	GO TO "Not Sign	nifica	ant F	Finding Option" subsection		
Address			e Recommendations paragraph number and at least one full sentence are required in "FROM" and "TO"							

	FROM: Section/Pa	ragraph Table 1
	Defect type	Acceptance specifications
	Hillock	1. Size < 300 μm, Area density≤2.5 pcs/cm ² .
	Particle	2. 300um < Size < 500 μm, Area density ≤ 0.5 pcs/cm ² .
		3. 500um < Size < 1 mm, Area density \(\) 20.1 \(\) pcs/cm ² .
		4. 1 mm < Size < 5 mm, Area density <0.05 pcs/cm ² .
		Total defect area should be no more than 10% quality area.
	Black spot	Area density≤2.5 <mark>pcs//</mark> cm ² .
	Breakage	The whole wafer area should not be damaged.
	Scratch	The total count of scratches should be no more than 0.1 pcs/cm ² , and the total length of scratbe 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 equence pcs/cm ² , the abnormal area should be less than 5% quality area.
	TO: Section/Parag	raph Table 1
_ ¹	Defect type	Acceptance specifications
<u>유</u>	Hillock	1. Size < 300 μm, Area density≤2.5 defects/cm².
nic	Particle	2. 300um < Size < 500 μm, Area density ≤ 0.5 defects/cm ² .
<u>=</u>		3. 500um < Size < 1 mm, Area density < 0.1 defects/cm ² .
ha		4. 1 mm < Size < 5 mm, Area density ≤0.05 defects/cm ² .
Technical Changes		Total defect area should be no more than 10% quality area.
ις	Black spot	Area density≤2.5 <mark>defects</mark> /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/cm ² , and the total length of 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 1 mm should be less than or equadefects/cm ² ., the abnormal area should be less than 5% quality area.
	Justification (If ne	
		ices to pcs/cm2 with defects/cm2.
	FROM: Section/Pa	ns diameter of the wafer.
	i Kom. occioni a	ragrapii
	TO: Section/Parag	raph
آ ا		
	Justification (If ne	cessary)
	Ī	

	Motion by/2 nd by			Zhil	nao Wu (F	HC SEMITEK)/ Steven Li (AMEC)			
	Discı	ussion		Nor	None				
				21	Y- 0 N ; Mo	tion passed			
	Result of Vote (check one)			X	2/3 ≤ [Ne change(s	egative is addressed by the technical s).]	GO TO "Incorporation of the Technical Change" subsection		
					[Negative change(s	e is not addressed by the technical s).] < 2/3	GO TO "Final" subsection → (E)		
		Motion		To i	incorpora	te the technical change(s).			
	nco	Motion by/	2 nd by	Zhił	nao Wu (F	IC SEMITEK)/ Steven Li (AMEC)			
	hnic	Discussion	n						
	atior			21 Y	Y-0 N ; Mo	tion passed			
	Incorporation of the Technical Change	Result o		X	90% ≤ [A	Agree to incorporate.]	GO TO "Final" subsection → (F)		
	e -	(check	one)		[Disagre	e to incorporate.]>10%	GO TO "Final" subsection → (E)		
z					only "if the TC Chapter finds a Negative not persuasive by a vote equal to or persons voting on the action". (<i>Regulations</i> ¶ 9.6.4.4.2)				
ot Sig	Us	e of "Not		is mut gnifica		ed upon to term the Negative "not	GO TO "Final" subsection → (D)		
Not Significant Finding Option	findi	gnificant ng option" neck one)		is mut ignifica		ed upon to term the Negative	GO TO "Final" subsection → (C)		
Ξ	\	,	W	Whether or not the Negative is "not significant" is decided by a vote.					
n <u>di</u>	I	Motion	The No	egative	gative is "not significant".				
g Op		otion by/ 2 nd by	Name	(Company)/Name (Company)					
tion		Voto	X	X Y-XX	X N; Motic	on passed with simple majority	GO TO "Final" subsection → (D)		
		Vote			X N; Motic	on failed with simple majority	GO TO "Final" subsection → (C)		
				((A)	Withdrawn (counted under h in disp	oosition)		
				((B)	Not related (counted under i in disp	osition)		
	(6	(check if applicable)		((C)	Related and not persuasive (significa	nt)		
Final	ар			((D)	Not significant <mark>(counted under j in d</mark>	isposition)		
<u>ಬ</u>					(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS		
		. 1 1. 16	Χ	((F)	Addressed by technical change (cou	nted under k disposition)		
	•	check if plicable)	C	omme	nt genera	ted. See Section V-(ii) Comment # X			

1109	ative o	
Negati	Section/	*TF/TC Chapter to fill in, including text in the ballot if necessary. 4.1.10
Ve	ΝΔαατίνα ι ΔΥτ	*Original complete Negative text (e.g., issue, justification, suggestion) should be copied.

		Brea	akage - This is a little unclea	ar. Do you there shou	ıld be	e no	breakage in the wafer?		
TF i	input (optional)								
	Withdrawal		No Negative withdrawal m		GO TO "Related" subsection				
	(check one)		Withdrawal document rece MM/DD/YYYY.	eived by Standards st	aff o	n	GO TO "Final" subsection → (A)		
		X	'Related' is mutually agree	n.)	GO TO "Persuasive" subsection				
	Motion and Reason		Negative is not related. (N	Negative is not related. (Needs ≥2/3 votes to pass.)					
	(check one)		Reason XX	XX					
Rel	Motion by/ 2 nd by	Nan	ne (Company)/Name (Com	pany)					
Related	Discussion								
		XX '	Y-XX N; Motion passed/fail	ed.					
	Result of Vote (check one)		[Negative is not related.] <	GO TO "Persuasive" subsection					
	(check one)		2/3 ≤ [Negative is not relat	GO TO "Final" subsection → (B)					
		Х	X Negative is related and persuasive. (Needs >1/3 votes to pass.)						
	Motion and Reason (check one)		Negative is related and no	t persuasive. (Needs	≥2/3	vot	tes to pass.)		
	(onesk one)		Reason XX	XX					
P	Motion by/ 2 nd by	Zhih	ao Wu (HC SEMITEK)/ Ste	even Li (AMEC)					
Persu	Discussion	Non	е						
ıasive		21 Y	7-0 N ; Motion passed						
/е	Result of Vote	X	[Negative is related and persuasive.] > 1/3	Is a technical change recommended?	Х	Y	GO TO "Address by Technical Change Option" subsection		
	(check one)		[Negative is related and no persuasive.] < 2/3	(check one)		N	GO TO "Final" subsection → (E)		
			2/3 ≤ [Negative is related and not persuasive.] < 90%		ubse	ectio	on → (C)		
			90% ≤ [Negative is related and not persuasive.] GO TO "Not Significant Finding Option" subsection						
Addre			ecommendations Igraph number and at leas	st one full sentence	are I	requ	uired in "FROM" and "TO"		
Address by	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 break						eces due to wafer breaking.		

			Justific	atio	ı (If	nec	essary)				
			FROM:	M: Section/Paragraph							
		2	TO: Sec	tion	Para	agra	ph				
			Justific	atio	ı (If	nec	essary)				
	Motic	n				Neg	ative is	addressed by the technical change(s).			
	Motic	on k	y/2 nd by	,		Zhih	nao Wu (HC SEMITEK)/ Steven Li (AMEC)			
	Discu	ıss	ion			Nor	ne				
						21 Y	/-0 N ; M	otion passed			
	Result of Vo				X	2/3 ≤ [N change	Regative is addressed by the technical (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)		
			tion			To incorporate the technical change(s).					
	Motion by/2 nd				у	y Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)					
	pora hnica	Dis	scussion	1							
	ation					<mark>21 </mark>	/-0 N ; M	otion passed			
	Incorporation of the Technical Change		Result of Vote (check one)			X 90% ≤ [Agree to incorporate.]		Agree to incorporate.]	GO TO "Final" subsection → (F)		
	,							ee to incorporate.]>10%	GO TO "Final" subsection → (E)		
7								TC Chapter finds a Negative not pers ng on the action". (<i>Regulations</i> ¶ 9.6			
Not Sig	Us	e o	f "Not			mut ifica		eed upon to term the Negative "not	GO TO "Final" subsection → (D)		
Significant Finding Option	findi	ng	icant option" one)		It is mutually agreed upon to term the Negative "significant". GO TO "Final" subsectio → (C)						
ıt Fi	, -		,	Whether or not the Negative is "not significant" is decided by a vote.							
ndir	I	Mot	ion	The	Neg	egative is "not significant".					
ng Op	Motion by/ 2 nd by					omp	oany)/Na	me (Company)			
tion		Vo	ato.		XX	Y-X)	N; Moti	ion passed with simple majority	GO TO "Final" subsection → (D)		
		VC	ite		XX	Y-X>	⟨N ; Moti	ion failed with simple majority	GO TO "Final" subsection → (C)		
						(A)	Withdrawn (counted under h in disp	position)		
Final			ck if			(B)	Not related (counted under i in disp	,		
a	ар	plic	cable)				C)	Related and not persuasive (significa	· · · · · · · · · · · · · · · · · · ·		
						(D)	Not significant (counted under j in d	isposition)		

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

ative 9										
Referenced	*TF/TC Chapter to fill	in, includi	ng text in the bal	lot if ne	cessary.					
Section/ Paragraph	Figure 2									
Negative Text	*Original complete No copied.	egative tex	t (e.g., issue, jus	tificatio	n, suggestion) should be					
nogunvo roze	Figure 2. This figure is	not referred	d to anywhere in th	ne text.						
input (optional)										
Withdrawal	X No Negative with	drawal mad	e by Voter.		GO TO "Related" subsection					
(check one)	Withdrawal docum	nent receive	ed by Standards st	aff on	GO TO "Final" subsection → (A)					
Motion and	X 'Related' is mutua	ılly agreed ι	ıpon. (Needs no r	notion.	GO TO "Persuasive" subsection					
Reason	Negative is not re	lated. (Nee	ds ≥2/3 votes to p	oass.)						
(check one)	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 re	elated.] < 2/	GO TO "Persuasive" subsection							
	2/3 ≤ [Negative is	not related.	GO TO "Final" subsection → (B)							
	X Negative is related and persuasive. (Needs >1/3 votes to pass.)									
Reason	Negative is related	d and not p	not persuasive. (Needs ≥2/3 votes to pass.)							
(onesk one)	Reason	XXXX								
Motion by/ 2 nd by	Zhihao Wu (HC SEMIT	ΓΕΚ)/ Steve	n Li (AMEC)							
Discussion	None									
	21 Y-0 N; Motion pass	sed	_							
Result of Vote (check one)			Is a technical change recommended?	X	GO TO "Address by Technical Change Option" subsection					
			(check one)	N	GO TO "Final" subsection → (E)					
	Referenced Section/ Paragraph Negative Text Input (optional) Withdrawal (check one) Motion and Reason (check one) Motion by/ 2 nd by Discussion Result of Vote (check one) Motion and Reason (check one) Motion and Reason (check one)	Referenced Section/ Paragraph Negative Text *Original complete N copied.	Referenced Section/ Paragraph Negative Text Figure 2	Referenced Section/ Paragraph Negative Text Figure 2	Referenced Section/ Paragraph Figure 2					

	İ		I	0.10	∠ [k]						
						egative is related persuasive.] < 90%	GO TO "Final" subsection	on → (C)			
				90%	۱] ≥ ہٰ	Negative is related	GO TO "Not Significant	Finding Option" subsection			
$\vdash\vdash$	Tech	nic	al Chang			persuasive.]	•				
	Orig field	inal s.	section/	paragra _l	oh n	umber and at least	one full sentence are requ	uired in "FROM" and "TO"			
			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 TO: Section/Paragraph Table 1								
		1					criteria for GaN based L	ED wafers. Features of some			
	Гес		typical o	defects o	efects can refer to Figure 2.						
	Technical Changes		Justification (If necessary) Figure 2 was referred in Table 1								
	al C			Section/Paragraph							
Adc	han										
dres	ıges		TO: Sec	TO: Section/Paragraph							
s	"	2			J. 4	•					
) T			Justification (If necessary)								
echi											
าical	Moti	on	<u> </u>		Negative is addressed by the technical change(s).						
Ch	Moti	On h	by/2 nd by	1	_		K)/ Steven Li (AMEC)				
Address by Technical Change Option	Disc				Nor	•	in the content of the				
မူ					21 Y -0 N ; Motion passed						
tio						· ·	GO TO "Incorporation of the				
			sult of Veheck one		X	2/3 ≤ [Negative is a change(s).]	ddressed by the technical	Technical Change" subsection			
						[Negative is not add change(s).] < 2/3	ressed by the technical	GO TO "Final" subsection → (E)			
			otion		To incorporate the technical change(s).						
	nco Tec	Mo	otion by/2	2 nd by	Zhih	ao Wu (HC SEMITE	K)/ Steven Li (AMEC)				
	hnic	Dis	scussion								
	ratic cal (\vdash			21 Y	′-0 N ; Motion passed					
	Incorporation of the Technical Change		Result of			90% ≤ [Agree to inc		GO TO "Final" subsection → (F)			
	he Je	'	(check	one)		[Disagree to incorpo	orate.]>10%	GO TO "Final" subsection → (E)			
ΞZ					only "if the TC Chapter finds a Negative not persuasive by a vote equal to or persons voting on the action". (Regulations ¶ 9.6.4.4.2)						
ot Sig	114		f "Not		muti nifica		term the Negative "not	GO TO "Final" subsection → (D)			
Not Significant Finding Option	si find	gnif ing	nificant g option"			ually agreed upon to	term the Negative	GO TO "Final" subsection → (C)			
	(check one)						is "not significant" is decide	ed by a vote.			
				* * 1 1	J., 101	2. Hat the Hogalive					

	Motion	The Negative is "no	he Negative is "not significant".					
	Motion by/ 2 nd by	Name (Company)/N	Name (Company)					
	Vote	XX Y-XX N; M	XX Y-XX N; Motion passed with simple majority GO TO "F → (D)					
	VOLE	XX Y-XX N; M	otion failed with simple majority	GO TO "Final" subsection → (C)				
		(A)	Withdrawn (counted under h in d	lisposition)				
		(B)	Not related (counted under i in d	isposition)				
	(check if	(C)	Related and not persuasive (signif	icant)				
Final	applicable)	(D)	Not significant (counted under j in	n disposition)				
a		(E)	Related and persuasive and not addressed by technical change	DOCUMENT FAILS				
		X (F)	Addressed by technical change (c	ounted under k disposition)				
	(check if applicable)	Comment gen	erated. See Section V-(ii) Comment #	* X.				

Disposition of Voting Interest Reject 1

Check only when the Document has not been failed.

9	Original	num	ber (#) of Negatives	(g)				
0	Number	of N	egatives withdrawn		(h)			
0	Number	of N	egatives found not related		(i)			
2	Number	of N	egatives found not significant		(j)			
7			egatives addressed by technic t significant)	al change (Negative	(k)			
		Х	g - (h + i + j + k) = 0	Reject is Not Valid and is not included in the denominator of § VI. Approval Conditions Chemical Che				
	Final		g - (h + i +j + k) >0	Reject is included in the Approval Conditions Conditions Conditions	ne denominator of § VI. 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)

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

	Ref	feren	ced	*TF	/TC Chapter to fill in in	cluding	g text in the ballot a	is approp	oriate.			
	_	ectio										
	Pa	ragra	iph									
				*Original Comment text, if applicable, and problem statement, including justification								
	_ ا				suggestion, should b							
	"	Reaso	n	<u> </u>								
Han	dlo toc	hnio	ol ioou	ام نظر	entified above as a Neg	otivo						
Пап	uie tet	HIIIC	ai 155u	ie iue	entined above as a neg	jative.						
					'Related' is mutually ag	GO TO "Persuasive"						
						•	<u> </u>	Ť	subsection			
	I мо	tion	and		Negative is not related							
		Reaso	-					urrent TC	Chapter meeting as new			
	(ch	eck c	ne)		business. (Needs ≥2/3	votes	to pass.)					
	`											
	l				Reason XXXX							
	Mc	otion	by/									
<u>e</u>		2nd b		Nar	ne (Company)/Name (C	ompany	y)					
Related		a	 									
g	Dis	cuss	ion									
				XX	Y-XX N; Motion passed	/failed.						
	İ					GO TO "Persuasive"						
	Resu	ult of	Vote		[Negative is not related	1.] <2/3			subsection			
	(ch	(check one)			2/3 ≤ [Negative is not r	elatedì	and assigned to TF					
					2/3 ≤ [Negative is not			enda of	GO TO "Final"			
					current TC Chapter me			crida oi	subsection → (B)			
					Negative is related and	l persua	asive. (Needs >1/3 v	otes to p	ass.)			
	_{Ma}	tion	d									
		Reaso	-		Negative is related and	l not ne	rsuasive (Naads >2	/3 votes	to nass)			
		eck c			Thegative is related and	i not pe	isuasive. (Needs 22	75 Votes	to pass.)			
	(011	oon c	,,,,		Reason XXXX							
					Reason							
ס		4	1/									
ers		otion		Nar	me (Company)/Name (C							
ua		2 nd b			· · · · · · · · · · · · · · · · · · ·	•	.,,					
ersuasive	Dis	cuss	ion									
ê				XX	Y-XX N; Motion passed	/failed.						
					[Negative is related an	٦	la a ta abuda al		GO TO "Address by			
					[Negative is related and persuasive.] > 1/3	u	Is a technical change	Y	Technical Change			
			Vote				recommended?		Option" subsection			
	(ch	eck c	one)		[Negative is related and	d not	(check one)	N	GO TO "Final"			
					persuasive.] < 2/3		(Girook Giro)		subsection → (E)			
					2/3 ≤ [Negative is relate		GO TO "Final" su	bsection	→ (C)			
	<u> </u>		01		and not persuasive.] <	90%			- ()			
L	Tech	ınıcal	Chan	ge R	ecommendations							
B _	Origi	inal e	oction	Inar	agraph number and at	loaet o	no full contonco arc	roquiro	d in "EPOM" and "TO"			
₽ Q	fields		ection	pare	agrapii ilulliber allu at	least Oi	ne full Sentence are	require	TIII FROW AND TO			
ਰ ਵ	iliciu.	٥.										
ו אה עם	l											
ess		F	ROM:	Sec	tion/Paragraph XXX	Section/Paragraph XXX						
Address by	Те	F	ROM:	Sec	tion/Paragraph XXX							
ן פּ	Technic al	. L			tion/Paragraph XXX							

		ΙΓ	Justifi	catio	n (lf	ne	cessary)				
			FROM: Section/Paragraph XXX								
		2		TO: Section/Paragraph xxx							
			Justifi	catio	n (lf	ne	cessary)				
	Moti	on				Ne	egative is a	addressed by the technical change(s).			
	Moti	on b	y/2 nd b	у		Na	ame (Com	oany)/Name (Company)			
	Disc	ussi	on								
						X	Y-XX N;	Motion passed/failed.			
		Result of Vote (check one)			2/3 ≤ [Negative is addressed by the technical change(s).]			GO TO "Incorporation of the Technical Change" subsection			
	, , , , , ,						[Negative change(s	e is not addressed by the technical b).] < 2/3	GO TO "Final" subsection → (E)		
		Motion				To incorporate the technical change(s).					
	Inco	Мо	Motion by/2 nd by		Name (Company)/Name (Company)						
	orpora chnic	Dis	Discussion								
	atior al CI		Result of Vote (check one)			X	Y-XX N;	Motion passed/failed.			
	Incorporation of the Technical Change						90% ≤ [A	gree to incorporate.]	GO TO "Final" subsection → (F)		
	Ф						[Disagree	e to incorporate.] >10%	GO TO "Final" subsection → (E)		
							(B)	Not related			
	(-1-						(C)	Related and not persuasive			
Final	(cn	еск	one)			(E)		Related and persuasive and not addressed by technical change	DOCUMENT FAILS		
_	1.	la a -	1. 10				(F)	Addressed by technical change			
	•	(check if applicable)				mm	ent genera	ted. See Section V-(ii) Comment # X.			

V. Comments

V- (i) Voters' Comments Commenter 1 (Rafael Vargas-Bernal/ Instituto Tecnologico Superior de Irapuato) -**Comment 1**

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

	de no e						
	*NC		required in this step.				
		_	ddressed by Commenter #, Comment #				
	Χ	No further action was taken by the TC Chapter.					
		Refer to the	e TF for more consideration.				
		New Busine	ess				
		Editorial Ch	nange				
		Options	Case 1: No vote in this section:				
		for editorial	To be included and voted on as a group in § VI. Editorial Changes Other than Those Voted on in § V.				
		change (check	Case 2: Voted in this section:				
		one)	Original section number and at least one full sentence are required in "FROM" and "TO" fields.				
		FROM: Se	ction/Paragraph xxx				
Ed	1	TO: Section/Paragraph xxx					
itorial (Justification (If necessary)					
Editorial Changes		FROM: Section/Paragraph xxx					
S	2	TO: Section/Paragraph xxx					
		Justification (If necessary)					
M	Motion		To approve above editorial change(s)				
М	otior	by/2 nd by	Name (Company)/Name (Company)				
Di	iscus	ssion	xxxx				
V	ote		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

<u> </u>	chi (Orcated by Hamaning Negative) NO - 1							
	*TF/TC Chapter to fill in							
8	4.1.5. This should end as "etc", not "et al."							
Comment								

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

Comment (Created by Handling Negative) NC - 2

	Hone (Groated by Harianing Hogativo) NG 2									
		*TF	TC Chapte	er to	fill in					
500	,	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."								
Comment	Ī									
ĺ	`									
	ŀ									
ŀ	╅	The	TC Chapt	er a	greed to do one of the following actions.					
	ŀ	*No	motion is	req	uired in this step.					
	. [Already ad	ddre	ssed by Commenter #, Comment #					
ACHOD	• [No further	acti	on was taken by the TC Chapter.					
ľ			Refer to the TF for more consideration.							
			New busin	ness	s					
L		Χ	Editorial c	hang						
			Options for editorial		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.					
			change (check		Case 2: Voted in this section:					
			one)	Х	Original section number and at least one full sentence are required in "FROM" and "TO" fields.					
Folio	1		7.2.6 If a	any l st wa	on/Paragraph xxx black spot defects are detected from a wafer from a MOCVD batch, then afers from the same batch should be inspected by the same method as wafer.					
Follogial Change	: - 	1	7.2.6 If an all of the r		n/Paragraph xxx y black spot defects are detected from a wafer from a MOCVD batch, then est of the wafers from the same batch should be inspected by the same the sampled wafer.					
es					(If necessary) ction for clarification.					
	Motion			٦	To approve above editorial change(s)					
	Mc	otion	by/2 nd by	Z	Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)					
	Discussion			١	None					
ſ	Vote			2	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.

	Origin of	this editorial change		Commenter(s) / Comment(s) #					
	(Check one)			Other []					
1	FROM: S	FROM: Section/Paragraph XXX							
	TO: Secti	TO: Section/Paragraph XXX							
	Justificat	Justification: (If necessary)							
	Origin of	this editorial change		Commenter(s) / Comment(s) #					
	(Check one)			Other []					
2	FROM: S	FROM: Section/Paragraph XXX							
	TO: Section/Paragraph XXX								
	Justification: (If necessary)								
ľ	Motion	To approve the above editorial change(s).							
	otion by/ 2 nd by	Name (Company)/N	ame	(Company)					
Dis	scussion	XXXX							
	Vote	XX Y-XX N; Motion	pass	ed (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. ($Regulations \ \P$ 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.

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

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

VIII. Safety Check

Note: See Regulations § 15 for further information.

	x	T is	This is not a Safety Document , when all safety-related information is removed, the Document is still technically sound and complete. ($Regulations \ \P \ 8.7.1$)								
Motion	This is a Safety Document, when all safety-related information is removed, the Document technically sound and complete. (<i>Regulations</i> ¶ 8.7.2)										
ľ				ecklist ($Regulations$ ¶ 15.3) is complete and has been included with the Document the balloting process. ($Regulations$ ¶ 15.1.2)							
	Motion by/2 nd by			Zhihao Wu (HC SEMITEK)/ Steven Li (AMEC)							
	Discussion			None							
		1	/ote	21 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.

х	mate	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)							
	х		•	naterial patented technology or reproduction of ns 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.							
		use o	ted items is known and an LOA or copyright sented to the TC Chapter.						
	~		Ask ISC f	or special permission to publish.					
	Motion		Quit activ	ty.					
	Š		Wait for L	OA for patented technology or release of copyrighted	d items.				
	Mot	ion b	y/2 nd by						
	[Discus	ssion	None					

Vote	Y- N					
Final Action		Motion passed				
Final Action		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		This Document passed TC Chapter review as balloted and will be forwarded to the ISC A&R SC for procedural review.			
		This Document passed TC Chapter review with editorial changes and will be forwarded to the ISC A&R SC for procedural review.			
	x	This Document passed TC Chapter review with technical changes and with or without editorial changes and will be forwarded to the ISC A&R SC for procedural review. A Ratification Ballot will be issued to verify the technical changes.			
		This Document failed TC Chapter review and will be returned to the TF for rework.			
		This Document failed TC Chapter review and work will be discontinued.			
Motion by/ 2 nd by		•	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:

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