Unexplained notation of up and down: v ^ SuggestedRemedy Remove it. Just say "and" "or" or whatever you mean. Or, don't cram with-Tukey and without-Tukey into one equation; you can easily say if Tw is zero, Htw is 1, and if it's one, the equation (somewhat simpler) applies. Response Response Status C ACCEPT IN PRINCIPLE. C Resolve using response to comment #34. C CI 120F SC 120F.3.1 P 207 L 14 I 203 Wu, Mau-Lin MediaTek ERL value (bucket5) The referenced ad hoc presentations is here: https://www.ieee802.org/3/ck/public/adhoc/sept23_20/wu_3ck_adhoc_01a_092320.pt SuggestedRemedy Resolve using the value the response to comment #61. C/ 120F SC 120F.3.1 P 208 L 39 # [188] SuggestedRemedy C Active Sc 120F.3.1 P 208 L 39 # [188] Comment Type T Comment Status A ERL value (bucket5) C/ 120F SC 120F.3.1 P 208 L 39 # [188] Calvin, John Keysight Technologies Calvin, John Keysight Technologies	93A SC 93A.5.1	P 202	L 39	# 237	C/ 120F	SC 120F.3.1	P 208	L 14	# 82
Unexplained notation of up and down: v ^ SuggestedRemedy Remove it. Just say "and" "or" or whatever you mean. Or, don't cram with-Tukey and without-Tukey into one equation; you can easily say if Tw is zero, Htw is 1, and if it's one, the equation (somewhat simpler) applies. Response Response Status C ACCEPT IN PRINCIPLE. C Resolve using response to comment #34. C C1 120F SC 120F.3.1 P 207 L 14 I 203 Wu, Mau-Lin MediaTek [Editor's note: Addresses incomplete specification.] The referenced ad hoc presentations is here: NuggestedRemedy Resolve using the values. I had shared some information in wu_3ck_adhoc_01_0292320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Resolve using the value the response to comment #61. Cl 120F SC 120F.3.1 P 208 L 39 # 188 SuggestedRemedy SuggestedRemedy Calvin, John Keysight Technologies SuggestedRemedy Calvin, John Keysight Technologies Comment Type T Comment Status A E0 jitter (I If dor's note: Addresses incomplete specification.] The spec limit fore "condition from 0.019 UI to 0.025 UI Response Response Status C ACCEPT IN PRINCIPLE. [Editor's note: Addresses incomplete specification.]	we, Piers	Nvidia			Brown, Mat	t	Huawei		
SuggestedRemedy Remove it. Just say "and" "or" or whatever you mean. Or, don't cram with-Tukey and withou-Tukey into one equation; you can easily say if Tw is zero, Htw is 1, and if it's one, the equation (somewhat simpler) applies. Response Response Status C ACCEPT IN PRINCIPLE. C Resolve using response to comment #34. C CI 120F SC 120F.3.1 P 207 L 14 203 Wu, Mau-Lin MediaTek [Editor's note: Addresses incomplete specification.] The referenced ad hoc presentations is here: https://www.ieee802.org/3/ck/public/adhoc/sept23_20/wu_3ck_adhoc_01a_092320.pt SuggestedRemedy SuggestedRemedy Resolve using the value the response to comment #61. C/ 120F SC 120F.3.1 P 207 L 14 203 Wu, Mau-Lin MediaTek Resolve using the value the response to comment #61. C// 120F SC 120F.3.1 P 208 L 39 # 188. SuggestedRemedy Suggeste to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.ptf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. C// 120F SC 120F.3.1 P 208 L 39 # 188. Calvin, John Keysight Technologies Comment Type T Comment Status A E0 jitter (in	mment Type TR	Comment Status A		ERL tukey (bucket5)	Comment T	<i>уре</i> т	Comment Status A		ERL value (bucket5
SuggestedRemedy Remove it. Just say "and" "or" or whatever you mean. Or, don't cram with-Tukey and without-Tukey into one equation; you can easily say if Tw is zero, Htw is 1, and if it's one, the equation (somewhat simpler) applies. Response Response Status C ACCEPT IN PRINCIPLE. C Resolve using response to comment #34. C C1 120F SC 120F.3.1 P 207 L 14 # [203] Wu, Mau-Lin MediaTek [Editor's note: Addresses incomplete specification.] The referenced ad hoc presentations is here: https://www.ieee802.org/3/ck/public/adhoc/sept23_20/wu_3ck_adhoc_01a_092320.pf SuggestedRemedy SuggestedRemedy Resolve using the value the response to comment #61. C/ 120F SC 120F.3.1 P 207 L 14 # [203] Wu, Mau-Lin MediaTek Resolve using the value the response to comment #61. Resolve using the value the response to comment #61. C/ 120F SC 120F.3.1 P 208 L 39 # [188] SuggestedRemedy Suggest to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. C alvin, John Keysight Technologies Comment Type T Comment Status A EO jitter (0, iter (0, iter (0, iter (0, iter	•	up and down: v ^						erence transmitte	er is defined, then a
Remove it. Just say and for or whatevery our mean. Or, don't chain with Lukey and without. Tukey into one equation; you can easily say if Tw is zero, Htw is 1, and if it's one, the equation (somewhat simpler) applies. Replace TBD with 0. Response Response Status C ACCEPT IN PRINCIPLE. Comment #34. Cl 120F SC 120F.3.1 P 207 L 14 # 203 Wu, Mau-Lin MediaTek [Editor's note: Addresses incomplete specification.] The referenced ad hoc presentations is here: Suggest dRemedy Suggest to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Response Response Status A E0 jitter (I Response Response Status C ACCEPT IN PRINCIPLE. Comment Type T Comment Status A E0 jitter (I Suggest to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Response Response Status C Comment Type T Comment Type T Comment Status A E0 jitter (I Response Response Status C ACCEPT IN PRINCIPLE. Keysight Technologies Comment Type T Comment Status A E0 jitter (I) Iter is comment. Response Status C ACCEPT IN PRINCIPLE. SuggestedRemedy<									
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Comment Type T Comment Status A ERL value (bucket5) dERL is still TBD Cl 120F SC 120F.3.1 P 208 L 39 # 188 SuggestedRemedy Suggest to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Comment Type T Comment Status A EO jitter (l 200 inter (ı, Mau-Lin	MediaTek			Resolve	e using the valu	e the response to commen	t #61	
SuggestedRemedy Calvin, John Keysight Technologies Suggest to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Calvin, John Keysight Technologies Response Response Status C The spec limit for Even-Odd jitter is only 358 femtoseconds, which is too low to be accurately measured with current state of the art test equipment. Response Response Status C IEditor's note: Addresses incomplete specification.] Response Response Status C The referenced ad hoc presentations is here: Response Response Status C	mment Type T	Comment Status A		ERL value (bucket5)		Ū	•		
Suggest to set as some negative values. I had shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Comment Type T Comment Status A EO jitter (IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	dERL is still TBD						P 208	L 39	# 188
buggest to set as some negative values. Final shared some information in wu_3ck_adhoc_01_092320.pdf. I plan to prepare one contribution, wu_3ck_02_1120.pdf, for this comment. Response Response Status ACCEPT IN PRINCIPLE. [Editor's note: Addresses incomplete specification.] The referenced ad hoc presentations is here: The referenced ad hoc presentations is here:	ggestedRemedy				Calvin, Joh	n	Keysight Te	echnologies	
for this comment. accurately measured with current state of the art test equipment. Response Response Status C ACCEPT IN PRINCIPLE. Increase the spec limit from 0.019 UI to 0.025 UI [Editor's note: Addresses incomplete specification.] Response The referenced ad hoc presentations is here: Response					Comment T	<i>уре</i> т	Comment Status A		EO jitter (bucket5
ACCEPT IN PRINCIPLE. Increase the spec limit from 0.019 UI to 0.025 UI [Editor's note: Addresses incomplete specification.] The referenced ad hoc presentations is here: The referenced ad hoc presentations is here:		320.pdf. I plan to prepare or	ne contribution,	wu_3ck_02_1120.pdf,					is too low to be
[Editor's note: Addresses incomplete specification.] Response Response Status C The referenced ad hoc presentations is here: ACCEPT IN PRINCIPLE. C	sponse	Response Status C			SuggestedF	Remedy			
The referenced ad hoc presentations is here:	ACCEPT IN PRINCIPLE	Ξ.			Increas	e the spec limit	from 0.019 UI to 0.025 UI		
The referenced ad hoc presentations is here:	[Editor's note: Addresse	es incomplete specification.]			•		,		
https://www.ieee802.org/3/ck/public/adhoc/sept23_20/wu_3ck_adhoc_01a_092320.pdf Resolve using the response to comment #190.	The referenced ad hoc r	presentations is here:			ACCEI		. L .		
	https://www.ieee802.org	/3/ck/public/adhoc/sept23_2	20/wu_3ck_adh	oc_01a_092320.pdf	Resolve	e using the resp	onse to comment #190.		
Resolve using the value the response to comment #61. [Editor's note: CC: 120F, 120G, 162, 163]	Resolve using the value	the response to comment #	<i>#</i> 61.		[Editor's	s note: CC: 120	F, 120G, 162, 163]		

C/ 120F SC 120F.3.1

C/ 120F SC 120F.3.1.3 P 210 L 43 # 1	C/ 120G SC 120G.3.1 P 226 L 17 # 240
Hidaka, Yasuo Credo Semiconductor	Dawe, Piers Nvidia
Comment Type T Comment Status A EO jit	Icket5) Comment Type TR Comment Status A ew/esmw (bucket
As Rob presented and we discussed at ad hoc on 9/16/2020, EOJ methodology 120D.3.1.8.2 does not correctly measure EOJ due to length of PRBS13Q and 4 bandwidth of clock recovery. To prevent CDR from tacking two cycles of test pattern, the best solution may b test pattern shorter than PRBS13Q.	limited in combination not separately. Eye width measurement works with or without a DFE in the reference receiver; examples in louchet_3ck_adhoc_01a_092320.pdf . If the VEC values in this draft and Annex 120E, and the ESMW in Annex 120E is right, ESMW should be between 0.22 and 0.3 UI.
SuggestedRemedy	SuggestedRemedy
Define PRBS9Q test pattern in clause 120.5.11.2, similar to PRBS13Q in 120.5.	Write down a range of candidate limits in the next draft, or a single limit if we have enough the uniformation to choose one.
using PRBS9 defined in Table 68-6.	Response Response Status C
Choose 12 edges in PRBS9Q test pattern, and add a table similar to Table 120	ACCEPT IN PRINCIPLE.
Add a sub clause how to measure EOJ using PRBS9Q, similar to 120D.3.1.8.2.	[Editor's note: Addresses incomplete specification.]
Response Response Status C ACCEPT IN PRINCIPLE.	Resolve this comment using the response to comment #41.
	C/ 120G SC 120G.3.1 P 226 L 17 # 89
Resolve using the response to comment #190.	Brown, Matt Huawei
[Editor's note: CC: 120F, 120G, 162, 163]	Comment Type T Comment Status A ew/esmw (bucket
C/ 120F SC 120F.4.3 P 217 L 44 # 8 Brown, Matt Huawei	In Table 120G-1, the reference for host output eye symmetry mask width (ESMW) value points to 120G.3.1.6. However, 120G.3.1.6 does not specify how to measure ESMW or what to do with it.
Comment Type T Comment Status R ERL val	Icket5) SuggestedRemedy
The ERL value is specified as TBD.	In 120G.3.1.6, add methodology for ESMW and explain the relevance.
SuggestedRemedy Replace TBD with an appropriate value.	Response Response Status C ACCEPT IN PRINCIPLE.
Response Response Status C REJECT.	[Editor's note: Addresses incomplete specification.]
[Editor's note: Addresses incomplete specification.]	Resolve this comment using the response to comment #41.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

changes proposed in this comment.

C/ 120G SC 120G.3.1

C/ 120G SC 120G.3.1	P 226	L 17	# 208	C/ 120G	SC 120G.3	1 P 226	L 17	# 209
Ran, Adee	Intel			Ran, Adee		Intel		
Comment Type T	Comment Status A		ew/esmw (bucket5)	Comment T	ype T	Comment Status A		ew/esmw (bucket5
ESMW is TBD.				The refe	erence for ES	WW is subclause 120G.3.1.6	which does not	address ESMW at all.
The importance of ESM	W is not clear and there has	s been no propo	osal for a value for this	Note: Ir	another com	ment, ESMW is proposed to	be removed.	
parameter.				SuggestedF	Remedy			
It is suggested to remov existing EH and VEC lin	e EMSW, at least until evide hits) and a robust	ence of the nee	d for it (in addition to the		V is not remo and in Table	ved, change the reference fro 120G–3.	om 120G.3.1.6 to	120G.5.2 in Table
measurement method a	re presented, and a value for	or limit is propos	sed.	Response		Response Status C		
SuggestedRemedy				ACCEP	T IN PRINCIP	PLE.		
Remove the EMSW row Table 120G–6, and Tab	from this table (120G-1), and e 120G-9.	nd also from Ta	ble 120G–3 (twice),	[Editor's	note: Addres	ses incomplete specification	.]	
Response	Response Status C			Resolve	e using the res	ponse to comment #41.		
ACCEPT IN PRINCIPLE				C/ 120G	SC 120G.3	1 P 226	L 23	# 90
[Editor's note: Addresse	s incomplete specification.]			Brown. Mat		Huawei	- 20	
Resolve using the respo	nse to comment #41.			Comment T	уре Т	Comment Status A value is TBD.		ERL value (bucket5
C/ 120G SC 120G.3.1	P 226	L 17	# 88	SuggestedF				
Brown, Matt	Huawei			••	-	appropriate value.		
Comment Type T	Comment Status A		ew/esmw (bucket5)	Response		Response Status C		
comment resolution reve	try mask width (ESMW) value ealed that an eye width mea elated methodology as defir	surement using	the currently defined		T IN PRINCIF	-		
SuggestedRemedy				[Editor's	note: Addres	ses incomplete specification	.]	
,	gy and provide a value or re	place with an a	ppropriate alternative	Resolve	e using the res	ponse to comment #114.		
Response	Response Status C							
ACCEPT IN PRINCIPLE	L							
[Editor's note: Addresse	s incomplete specification.]							
Resolve this comment u	sing the response to comm	ent #41.						
	5 1 1							

C/ 120G SC 120G.3.1

CI 120G SC 120	G.3.1.3	P 227	L 46	# 143	C/ 120G	SC 12	20G.3.2	P 229	L 17	# 94
Ghiasi, Ali		Ghiasi Quant	um/Inphi		Brown, Mat	t		Huawei		
Comment Type T	R Comme	ent Status R		ERL parameter (bucket5)	Comment T	ype -	т	Comment Status A		ew/esmw (bucket5
receiver with just by Mr. Mellitz bu	4T DFE, at 50G	we have Rx of 0.1	19. Extensive	roblematic for C2M analysis was performed not an end-end link using	mask w	idth (ES	MW) poi	erence for module outponts to 120G.3.1.6. Howe to do with it.		r-end eye symmetry does not specify how to
COM https://www.ieee	302.org/3/ck/pub	lic/adhoc/jun10 20	0/mellitz 3ck	adhoc_01a_061020.pdf	Suggested	Remedy				
SuggestedRemedy	3				In 1200	i.3.1.6, a	add meth	odology for ESMW and	explain the releva	ance.
Recommend cha				s to -14.4 dB unless it e is not at the slicer.	Response ACCEF	T IN PR		Response Status C		
Response REJECT.	Respon	se Status C			[Editor's	s note: A	ddresses	s incomplete specificati	on.]	
-		Resolve	e this cor	mment u	sing the response to co	mment #41.				
The response to changes propose			at there was n	o consensus to make the	C/ 120G	SC 12	20G.3.2	P 229	L 17	# 93
C/ 120G SC 120	G.3.2	P 229	L 17	# 243	Brown, Mat	t		Huawei		
Dawe, Piers		Nvidia			Comment T	ype -	т	Comment Status A		ew/esmw (bucket
	R Comme	ent Status A		ew/esmw (bucket5)	Module	output n	near-end	and far-end eye symme	etry mask width (E	SMW) values are TBD.
We need ESMW limited in combir	limits because i ation not separa	n C2M, the effects tely. Eye width me	easurement w	and part-channel are		ently def		comment resolution rev erence receiver and rela		width measurement using as defined is not
		amples in louchet		1a_092320.pdf . ections but a more	Suggested	Remedy				
	r. If we stay with			V should be somewhere	Either f specific		ethodolog	y and provide a value o	or replace with an	appropriate alternative
SuggestedRemedy					Response			Response Status C		
Write down a rar information to ch		limits in the next d	raft, or a singl	e limit if we have enough	ACCEF	T IN PR	INCIPLE			
Response	Respon	se Status C			[Editor's	s note: A	ddresses	s incomplete specificati	on.]	
ACCEPT IN PRI	NCIPLE.				Resolve	e this cor	mment u	sing the response to co	mment #41.	
		lata ana ifiaatian 1								
[Editor's note: Ad	laresses incomp	lete specification.]								

C/ 120G SC 120G.3.2

C/ 120G	SC 120G.3.2	P 229	L 22	# 245
Dawe, Pier	S	Nvidia		
Comment T	<i>уре</i> т	Comment Status A		ew/esmw (bucket5)
limited DFE in Annex worse r	in combination the reference re 120E has FE E reflections but a	because in C2M, the ef not separately. Eye wid eceiver; examples in lou SMW 0.2 UI, no explicit more capable equalised ewhere in the range 0.1	th measurement w chet_3ck_adhoc_0 VEC limit, and EH r. If we stay with th	orks with or without a 1a_092320.pdf . 30 mV. Here we expect e two-settings method,
Suggestedl	Remedy	-		
Write d	-		ext draft, or a singl	e limit if we have enough
Response		Response Status C		
ACCEF	T IN PRINCIPL	E.		
[Editor'	e noto: Addroce	as incomplete specifica	tion 1	
Resolve		es incomplete specificates using the response to complete P 229		# 95
Resolve	e this comment SC 120G.3.2	using the response to c	omment #41.	# 95
Resolve C/ 120G Brown, Mat	e this comment SC 120G.3.2 tt	using the response to c	omment #41.	# 95 ERL value (bucket5)
Resolve Cl 120G Brown, Mat Comment T	e this comment SC 120G.3.2 tt <i>Type</i> T	using the response to c P 229 Huawei	omment #41.	
Resolve Cl 120G Brown, Mat Comment 7 The mo	e this comment SC 120G.3.2 It Type T Indule output ER	using the response to c P 229 Huawei Comment Status R	omment #41.	
Resolve Cl 120G Brown, Mat Comment 7 The mc Suggested	e this comment SC 120G.3.2 tt Type T odule output ER Remedy	using the response to c P 229 Huawei Comment Status R	omment #41.	
Cl 120G Brown, Mat Comment 7 The mo	e this comment SC 120G.3.2 It Type T odule output ER Remedy e TBD with an a	using the response to c P 229 Huawei Comment Status R L value is TBD.	omment #41.	
Resolve Cl 120G Brown, Mat Comment T The mo Suggestedl Replace Response REJEC	e this comment SC 120G.3.2 It Type T Doule output ER Remedy e TBD with an a	using the response to c P 229 Huawei <i>Comment Status</i> R L value is TBD.	omment #41.	

The response to closed comment #114 indicates that there was no consensus to make the changes proposed in this comment.

C/ 120G	SC 120G.3.2.1	P 229	L 51	# 182
Maki, Jeffery		Juniper Networks	6	
Comment Ty	pe T	Comment Status A		C2M modes

For host management of module equalization, it would be aligned with modern management interface specifications (e.g., CMIS with use of SFF-8024 Table 4-5 Host Electrical Interface Codes) to designate a nomenclature for the configuration that the module advertises it supports and the host selects. Since there are only two states to choose between, short and long, this is a very practical approach.

SuggestedRemedy

Add immediately after first occurrence of tx eq state the text, "also designated as 100GAUI-1-S or 100GAUI-1-L for 100GAUI-1 C2M, 200GAUI-2-S or 200GAUI-2-L for 200GAUI-2 C2M and 400GAUI-4-S or 400GAUI-4-L for 400GAUI-4 C2M." For the second occurrence of tx eq state, insert immediately after "tx eq state is 0" the text "or 100GAUI-1-S is selected for 100GAUI-1 C2M. or 200GAUI-2-S is selected for 200GAUI-2 C2M or 400GAUI-4-S is selected for 400GAUI-4 C2M." For the third occurrence of tx_eq_state, insert immediately after "tx eq state is 1" the text "or 100GAUI-1-L is selected for 100GAUI-1 C2M. or 200GAUI-2-L is selected for 200GAUI-2 C2M or 400GAUI-4-L is selected for 400GAUI-4 C2M." For the fourth occurrence of tx eq state, insert immediately after "tx eq state" the text "or the use of 100GAUI-1-S or 100GAUI-1-L for 100GAUI-1 C2M, 200GAUI-2-S or 200GAUI-2-L for 200GAUI-2 C2M and 400GAUI-4-S or 400GAUI-4-L for 400GAUI-4 C2M." Note this is very similar to BiDi optics that designate a base PMD name and an extended name for the "down" and "up" PMD. See for example Cluase 58.1 for 100BASE-BX10, where it is written "100BASE-BX10-D PMD at one end and a 100BASE-BX10-U PMD at the other." Here we use the extende AUI name to indicate choice of equalization, short or long.

esponse	Response Status	С	
ACCEPT IN PRINCIPLE			

The following presentation was reviewed by the task force: https://www.ieee802.org/3/ck/public/20_10/maki_3ck_01b_1020.pdf

Implement with editorial license the proposal in slide 9 of the referenced presentation.

120G SC 120G.3.2.2 <i>P</i> 230 <i>L</i> 6 # 183	C/ 120G SC 120G.3.3 P 231 L 43 # 99
ki, Jeffery Juniper Networks	Brown, Matt Huawei
mment Type T Comment Status A C2M modes	Comment Type T Comment Status A ERL value (bucket
For host management of module equalization, it would be aligned with modern management interface specifications (e.g., CMIS with use of SFF-8024 Table 4-5 Host	The host input ERL value is TBD.
Electrical Interface Codes) to designate a nomenclature for the configuration that the	SuggestedRemedy
module advertises it supports and the host selects. Since there are only two states to choose between, short and long, this is a very practical approach.	Replace TBD with an appropriate value.
ggestedRemedy	Response Response Status C
Insert immediately after "tx eq state set to 0" the text "or 100GAUI-1-S is selected for	ACCEPT IN PRINCIPLE.
100GAUI-1 C2M, or 200GAUI-2-S is selected for 200GAUI-2 C2M or 400GAUI-4-S is	[Editor's note: Addresses incomplete specification.]
selected for 400GAUI-4 C2M." Insert immediately after "tx_eq_state set to 1" the text "or 100GAUI-1-L is selected for 100GAUI-1 C2M, or 200GAUI-2-L is selected for 200GAUI-2	Resolve using the response to comment #114.
C2M or 400GAUI-4-L is selected for 400GAUI-4 C2M."	
sponse Response Status C	
ACCEPT IN PRINCIPLE.	Ran, Adee Intel
Resolve using the response to comment #182.	Comment Type T Comment Status A ew/esmw (bucket
120G SC 120G.3.2.3 <i>P</i> 231 <i>L</i> 16 # [145]	Eye width is only a parameter of host stressed input specification (Table 120G-6). There is no corresponding parameter in the module output signal.
	Similarly in module stressed input (Table 120G-9).
iasi, Ali Ghiasi Quantum/Inphi	Similarly in module stressed input (Table 1200-9).
mment TypeTRComment StatusRERL parameter (bucket5)Rx of 0.618 implies permitted reflection of -4.2 dB which can be problematic for C2M	Creating a special condition for the stress signal is burdensome for the test setup, and is not justified if there is no such specification for output signal.
receiver with just 4T DFE, at 50G we have Rx of 0.19. Extensive analysis was performed by Mr. Mellitz but C2M measurement points are at TP1a and TP4 not an end-end link using	SuggestedRemedy
COM	Delete the eye width rows in tables 120G-6 and 120G-9.
https://www.ieee802.org/3/ck/public/adhoc/jun10_20/mellitz_3ck_adhoc_01a_061020.pdf	Response Response Status C
ggestedRemedy	ACCEPT IN PRINCIPLE.
Recommend changing back to the original Rx=0.19 which equates to -14.4 dB unless it can be proven that -4.2 dB would work on a link where compliance is not at the slicer.	[Editor's note: Addresses incomplete specification.]
sponse Response Status C	
	Resolve this comment using the response to comment #41.

C/ 120G SC 120G.3.3.2

C/ 120G SC 120G.3.3.2 P 232 L 18 # 100	C/ 120G SC 120G.3.4 P 235 L 11 # 104
Brown, Matt Huawei	Brown, Matt Huawei
Comment Type T Comment Status A ew/esmw (but In Table 120G-6 for host input stressed signal the value for eye width is TBD.	cket5) Comment Type T Comment Status R ERL value (bucket: The module input ERL value is TBD.
SuggestedRemedy	SuggestedRemedy
Replace TBD with an appropriate value.	Replace TBD with an appropriate value.
Response Response Status C ACCEPT IN PRINCIPLE.	Response Response Status C REJECT.
[Editor's note: Addresses incomplete specification.]	[Editor's note: Addresses incomplete specification.]
Resolve this comment using the response to comment #41.	The response to closed comment #114 indicates that there was no consensus to make the changes proposed in this comment.
C/ 120G SC 120G.3.3.2 P 232 L 18 # 101	C/ 120G SC 120G.3.4.1 P 231 L 35 # 105
Comment Type T Comment Status A ew/esmw (but	
In Table 120G-6 for host input stressed signal there are specifications for both far-end symmetry mask width (ESMW) and eye width (EW). ESMW is not mentioned in the	In Table 120G-9 for module input stressed signal the value for eye width is TBD.
stressed input procedure nor does it seem relevant.	SuggestedRemedy
SuggestedRemedy	Replace TBD with an appropriate value.
Delete ESMW row in Table 120G-6.	Response Response Status C
Response Response Status C ACCEPT IN PRINCIPLE.	ACCEPT IN PRINCIPLE.
[Editor's note: Addresses incomplete specification.]	[Editor's note: Addresses incomplete specification.]
	Resolve this comment using the response to comment #41.
Resolve this comment using the response to comment #41.	

C/ 120G SC 120G.3.4.1

Brown, Matt				# 106	C/ 120G	SC 120G.5.2	P 241	L 14	# 210	
		Huawei			Ran, Adee		Intel			
Comment Typ	pe T	Comment Status A		ew/esmw (bucket5)	Comment T	<i>уре</i> т	Comment Status	N Contraction of the second seco	ew/esmw (bucket5)	
symmetry	y mask width (E	input stressed signal the SMW) and eye width (EV nor does it seem releva	V). ESMW is not r		the		input signal yrx(k) by a tap weights b(n) deterr			
SuggestedRe Delete ES	e <i>medy</i> SMW row in Tal	ble 120G-6.			differen	t eye shape. Al	though EH and VEC ar	e not affected, if EW		
Response ACCEPT	IN PRINCIPLE	Response Status C			retained they will depend on the DFE application, so it needs to be specified unambiguously.					
					Suggested	Remedy				
[Editor's r	note: Changed	subclause, page, and line	e number from 120	G.3.3.2, 232, and 18.]	If ESM\	W and EW spec	cifications are not remo	ved, Change the quo	ted statement to	
- The com	menter indicate	s incomplete specification d that the suggested rem	-	o Table 120G-9 rather	b(n) det	termined in the	input signal yrx(k) by a previous step to y2(k). occurring at t_s + UI/2".	The DFE output is a		
than Tabl	le 120G-6.				Response		Response Status	;		
Resolve f	this comment us	sing the response to com	ment #41.		ACCEP	T IN PRINCIPL	.Е.			
C/ 120G	SC 120G.3.4.1	.1 P 237	L 14	# 109	[Editor's	s note: Address	es incomplete specifica	ation.]		
Brown, Matt		Huawei			Deeelu					
Comment Typ	pe T	Comment Status A		TP4a criteria	Resolve		using the response to o	comment #41.		
than a ce	ertain value is no	essed eye high-loss case ot relevant because: (a) t	nere are two gain	parameters and (b) the	C/ 120G Brown. Mat	SC 120G.5.2 t	P 241 Huawei	L 23	# 102	
reference	e receiver includ	es a DFE. Regardless, tl	ne minimum ČTLE	setting value is TBD.	Comment T		Comment Status	L Contraction of the second seco	ew/esmw (bucket5)	
"This CTL	e the following te LE setting has to	o be greater than or equa			For each C2M interface, there is a specification for eye symmetry mask width (ESMW) an there is a pointer to 120G.5.2. However, 120G.5.2 does not specify a method for ESMW; specifies a method only EH, EW, and VEC. ESMW is discussed in 120E.4.2, but even there its not really clear what to do with it.					
	hat the restriction apply" on line 1	n that the CTLE setting I	has to be greater t	han or equal to TBD dB	Suggested	Remedy				
OR		0			Add me	thodology for E	SMW and explain the r	elevance.		
(b) provid	de an alternate r	elevant criteria.			Response		Response Status	2		
Response		Response Status C			ACCEF	T IN PRINCIPL	•			
ACCEPT	IN PRINCIPLE									
[Editor's r	note [.] Addresses	s incomplete specification			[Editor's	s note: Address	es incomplete specifica	ation.]		
- Replace t	the sentence wi			3."	Resolve	e this comment	using the response to o	comment #41.		

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 120G SC 120G.5.2 Page 8 of 16 11/18/2020 5:09:23 PM

C/ 120G	SC 120G.5	.2 <i>P</i> 241	L 27	# 257	C/ 120G	SC	120G.6.3	P 243	L 30	# 184
Dawe, Pier	S	Nvidia			Maki, Jeffe	ery		Juniper Netw	orks	
Comment T	ype TR	Comment Status A		ew/esmw (bucket5)	Comment	Туре	т	Comment Status A		C2M modes
		nal when it passes EH but fa			Major o	capabi	lity/option f	or the module is missing.		
		this does not require optimi (constraint not goal). We di			Suggested	Reme	dy			
		ould be a constraint too if it r		5				e. (1) with Item = EQ; Featur		
Suggested	Remedy							00GAUI-2-L) or (400GAUI-4- ment = See 120G.3.2.1; Sta		
Change			the sector sector is a first		Response	. ,		Response Status C	,	
the inte		o complies with the specifica	tion for eye heigh	it (min) as specified for	•	PT IN	PRINCIPLI	•		
where t		omplies with the specification	ns for eye height,	ESMW, and eye width if	Resolv	e usin	g the respo	onse to comment #182.		
	ble, as specifi	ed for the interface.			C/ 162	SC	162.9.3	P 146	L 27	# 3
Response		Response Status C			Mellitz, Ric	chard		Samtec		
ACCEP		LE.			Comment 7	Туре	TR	Comment Status A		ERL value (bucket5
Resolve	e this commer	nt using the response to com	ment #41.					en 7.3 dB and 18.8 for publ	ished channels	that representative of
C/ 120G	SC 120G.6	3 P 243	L 29	# 185	100G H		0			
Maki, Jeffe	ry	Juniper Net	tworks		Suggested		,	·		
Comment T	Туре т	Comment Status A		(bucket1p)		k∟ (mir	i) to 7.3 dE	in Table 16210		
Major c	apability/optio	n for the host is missing that	is already listed	for the module.	Response			Response Status C		
Suggested	Remedy				ACCER	PTIN	PRINCIPLI	Ξ.		
		Item = ADE-H; Feature = Acoment = See 120G.3.3; Statu			[Editor	's note	: Addresse	s incomplete specification.]		
Response		Response Status C			Resolv	e usin	g the respo	onse to comment #114.		
ACCEF	PT IN PRINCI	PLE.								
The cap	pability is spec	ified in 120G.3.3, but has no	ot yet been listed	in the PICS.						
A PICS	item for a sin	nilar requirements against the	e module input (s	ee 120G.3.4)						
	ent the sugge in the table in	sted remedy with editorial lic 120G.6.4.3.	ense, except inse	ert the new item ahead						
Also, m license		item ADE from 120G.6.3 to	120G.6.4.4. Impl	ement with editorial						

C/ 162 SC 162.9.3

C/ 162	SC 162.9.3	P 146	L 42	# 47	C/ 162	SC 162.9.3	P 146	L 48	# 186
Ran, Adee		Intel			Calvin, Joh	n	Keysight Te	chnologies	
omment T	Гуре Т	Comment Status A		PMD control	Comment 7	_{уре} т	Comment Status A		EO jitter (bucket5)
		Table 162-11 has a value of (alue at minimum state should			accura	ely measured wit	Odd jitter is only 358 femto h current state of the art te		s too low to be
value, t			be no nighter the	un 0.0.	Suggested				
Change	e should also be	e applied in 162.9.3.1.5.			Increas	e the spec limit fi	rom 0.019 UI to 0.025 UI		
	•	ble 163-5 (163.9.2) and to AL r lower-loss channels.	JI-C2C, Table 12	0F–1 (120F.3.1.1)	Response ACCEF	PT IN PRINCIPLE	Response Status C		
uggested	Remedy				Resolv	e using the respo	nse to comment #190.		
Change	e 0.54 to 0.5, in	all places listed in the comm	ent.		C/ 162	SC 162.9.3.1.2	2 <i>P</i> 149	L6	# 124
lesponse		Response Status C					Credo Semi		# 124
ACCEF	PT.				Hidaka, Ya Comment T		Credo Serni Comment Status A	conductor	vf
[Editor	s note: CC: 162	163 120F1				51	state voltgage vf in clause	136.0.3.1.2 μερε	
-		-	• • •		The line	ear fit pulse p(k) i	s calculated with Dp=3 in o	clause 136, where	eas it is calculated with
7 162	SC 162.9.3	P 146	L 48	# 48		n clause 162. It is	not clear which procedure	e is used to calcul	ate the linear fit pulse
Ran, Adee		Intel			p(k).	_ /			
Comment 7	Гуре Т	Comment Status A		EO jitter (bucket5)	Suggested		to configure of the sheft of a line of		a state and to a strength as
(CC) The ev	en-odd iitter limi	t of 0.019 UI (less than 360 f	s) was not met h	v several different	Nv=200		te voltage vf is defined in ?	136.9.3.1.2, and 1	s determined using
		ab environment. The same pa							
challen	ging channels.				to				
		ns difficult to meet and not too can be tolerated by existing r		teroperability. It seems			e vf is defined in 136.9.3.1 alculated by the procedure		ined using Nv=200 and
Ear raf	oronoo in multir	ble generations of NRZ PMDs	the allowed EO	Lie 0.025 Lills for C2M	Response		Response Status C		
		is not defined at all.	the allowed EO	J IS 0.035 01, 101 C2101	ACCEF	PT.			
	nling to KD T-	blo 162 E (162 0 0) and to 11	IL COC Table 40						
		ble 163-5 (163.9.2) and to AL		UF=1 (12UF.3.1.1)					
Suggestedl For par	-	dd jitter, pk-pk" change "valu	e" from 0.019 to	0.035 in all places					
	the comment.	ou jillei, pr-pr change valu	6 1011 0.019 10						
Response		Response Status C							
ACCEF	PT IN PRINCIPL	•							
Resolv	e using the resp	onse to comment #190.							
[Editor	s note: CC: 163	, 120F]							
YPE: TR/t	echnical require	ed ER/editorial required GR/	general required	T/technical E/editorial G/	general		C/ 1	62	Page 10 of 16
COMMENT	STATUS: D/dis	spatched A/accepted R/rejeriolause, page, line				Z/withdrawn		62.9.3.1.2	11/18/2020 5:09:2

C/ 162 SC	162.9.3.1.4	P 149	L 43	# 50	C/ 162	SC 162.9.3.3	<i>P</i> 150	L 40	# 52
Ran, Adee		Intel			Ran, Adee		Intel		
Comment Type	E Com	ment Status A		TX coefficients	Comment Ty	pe T	Comment Status A		EO jitter (bucket5
"When coef_s need for this p		, or 1," - the list inclu	des all possible v	values, so there is no	The met	hod in 120D.3.	.1.8.2 is very specific about u	using PRBS13Q.	
SuggestedRemed							ts of even-odd jitter with PRE arger values compared with		
Delete the qu	oted phrase.				0.		tak an athr a biab far an an	- ((+ /(1-/0))) + 1	and the first state of the first
Response ACCEPT IN F	,	onse Status C			a measu	rement artifac	inherently a high frequency t. The considerations mentio f measurements at this signa	ned in NOTE 1 o	
Implement th	o suggested rom	edy with editorial lice	220		Ū.		Ũ	0	
· · ·		•	1156.		If a device can be tested with a shorter pattern which enables calculation of even-odd jitter the measurement can be made more accurate; such results should be acceptable.				
C/ 162 SC	162.9.3.3	P 150	L 39	# 189					
Calvin, John		Keysight Tec	hnologies		The com	iment also app	blies to 120F.3.1.3.		
Comment Type	T Com	ment Status A		EO jitter (bucket5)	SuggestedR	emedy			
https://groupe 620.pdf it has based on the	r.ieee.org/groups/ been shown that	the EOJ measurement the and baud rate. Thi	oc/sept16_20/cal ent is susceptible	vin_3ck_adhoc_01_091 e to a systematic error ed by allowing the	The patt	ern used for E	ption in 162.9.3.3: ven-odd jitter measurement i udes the 12 possible transitio		
SuggestedRemed	ly								
measurement	t method specified	e 39 to read Even-o d in 120D.3.1.8.2. wit	h the exception	hat EOJ may be	In 120F. 162.9.3.		the cross-reference for EOJ	measurement fro	om 120D.3.1.8.2 to
measured wit slope of 20 dE		y unit (CRU) with a c	orner frequency	of <= 4 MHz and a	Response		Response Status C		
Response	Respo	onse Status C			ACCEPT	IN PRINCIPL	.E.		
ACCEPT IN F	PRINCIPLE.				Resolve	using the resp	oonse to comment #190.		
	g the response to								

C/ 162 SC 162.9.3.3

C/ 162	SC 162.9.3.4	P 151	L 12	# 217	C/ 162	SC 162.9.3.4	P 151	L 16	# 157		
Dawe, Pie	rs	Nvidia			Dudek, Mił	e	Marvell.				
Comment	Туре Т	Comment Status A		ERL tfx (bucket5)	Comment	Type E	Comment Status A		ERL tfx (bucket5)		
Both the parameter description and the note are incorrect: "Twice the propagation delay associated with the test fixture", "The specified Tfx value represents twice the transmission line delay which sufficiently mitigates the test point and transmission line return loss." And the terminology doesn't match: propagation delay, transmission line delay - are they						The wording in the footnote doesn't properly describe what is being mitigated. In particular what is "the test point and transmission line". A test point doesn't have a return loss.					
						Remedy					
	me thing or what?	int match. propagation de		The delay - are they			ently mitigates the test point				
SuggestedRemedy							pates the effect of reflections o on the footnote to table 16				
Tfx is windowing time that is larger than twice the delay associated with the test point							Response Status C	2 e. page .e			
		vice the delay from the tes	t point connecto	r to the other end of the	Response ACCEI	PT IN PRINCIPL	•				
test fixture's transmission line. Also Tfx needs to appear in 93A.5, which is where the explanation should go, not here. Make similar changes in each ERL section in the draft.					Resolve using the response to comment #176.						
Response		Response Status C			C/ 162	SC 162.9.4	P 151	L 44	# 4		
ACCE	PT IN PRINCIPLE.				Mellitz, Ric	hard	Samtec				
Renan	ne the Tfx paramete	er to "Time-gated propaga	tion delay".		Comment	Type TR	Comment Status A		ERL value (bucket5)		
		Tfx to Table 93A-4 and m		lanation of Tfx	The ERL range is between 7.3 dB and 18.8 for published channel that representative of 100G Host designs.						
recogr	izing variation betw	een clauses that invoke tl	ne method.		Suggested	Remedy					
Given	IEEE Standards St	yle manual, convert footno	ote to informative	e note.	Set ERL (min) to 7.3 dB in Table 16213						
delay	which sufficiently m	"the specified Tfx value re itigates the test point and	transmission line	e return loss" to "The	Response ACCEI	PT IN PRINCIPL	Response Status C E.				
reflecti	ons from the test c	ents a propagation delay on the second se			Resolv	e using the resp	onse to comment #114.				
approp	riate given 93A des	scription."			C/ 162	SC 162.9.4.3	P 152	L 32	# 131		
Implen	nent across clauses	s with editorial license.			Ghiasi, Ali		Ghiasi Quar	ntum/Inphi			
Fditor	's note: CC: 162_1	53 120E 120G 93A1			Comment	Type TR	Comment Status D		RITT		
[Editor's note: CC: 162, 163, 120F, 120G, 93A]					Given t loss ca		cable the loss is controlled	to 1 dB, we shou	ld do the same for high		
					Suggested	Remedy					
						Increase the cable assembly test case min loss from 17.75 to 18.75 dB					
					Proposed I	Response	Response Status Z				
					REJEC	:Т.					
					This co	mment was WI	THDRAWN by the commen	ter.			
							.,				

C/ 162 SC 162.9.4.3

C/ 162 SC 162.11	P 156	L 37	# 110	C/ 162	SC 162.11.2	P 157	L 26	# 221
Champion, Bruce	TE Connectivi	ity		Dawe,	Piers	Nvidia		
Comment Type T Cable Assembly ERL li	Comment Status R sted as TBD in Table 162-16		ERL value (buc	,	ent Type TR s minimum loss cu	Comment Status A	high frequencie	CA IL (bucket5) es
SuggestedRemedy				Sugges	stedRemedy			
TBD to be changed to 7	7.4 dB. See presentation			Ch	ange the limit (Eq 1	62-10) so it becomes flatter	at high frequer	ncies
Response	Response Status C			Respor	ise	Response Status C		
REJECT.				AC	CEPT IN PRINCIP	LE.		
[Editor's note: Addresse	es incomplete specification.]			Re	solve using the res	onse to comment #173.		
The response to closed changes proposed in the	comment #114 indicates that	at there was no	consensus to make				L 9	# 113
				Kocsis		Amphenol		
C/ 162 SC 162.11.2 Haser, Alex	P 157 Molex	L 10	# 174		ent Type TR ERL parameter N	Comment Status A is "3500"		ERL parameter (bucket5
Comment Type TR	Comment Status A		CA IL (buc	ket5) Sugges	stedRemedy			
	ncy cable loss can't vary wildl	y if the cable w	orks at higher	Ch	ange to "5100", see	e background/consensus pre	sentation	
freuqencies; no need to	o over-spec			Respor	ise	Response Status C		
SuggestedRemedy						. –		
Replace TBD with 0.05	GHz			AC	CEPT IN PRINCIP	LE.		
Replace TBD with 0.05	Response Status C			Th	e following presenta	LE. ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_).pdf
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL	Response Status C E.			The	e following presenta bs://www.ieee802.c	ations was reviewed by the ta).pdf
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse	Response Status C E. es incomplete specification.]			The	e following presenta bs://www.ieee802.c solve using the res	ations was reviewed by the ta org/3/ck/public/20_10/kocsis_ ponse to comment #114.).pdf # [<u>175</u>
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse	Response Status C E.			Th http Re	e following presenta bs://www.ieee802.o solve using the res SC 162.11.3	ations was reviewed by the ta org/3/ck/public/20_10/kocsis_ ponse to comment #114.	_3ck_01a_1020	
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp	Response Status C E. es incomplete specification.]	L 10	# [17	Thu http C/ 162 Haser,	e following presenta bs://www.ieee802.o solve using the res SC 162.11.3	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158	_3ck_01a_1020	
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp C/ 162 SC 162.11.2 DiMinico, Christopher	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi			Thi http C/ 162 Haser, Comme Se	e following presenta bs://www.ieee802.c solve using the res SC 162.11.3 Alex ent Type T	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. <i>P</i> 158 Molex	3ck_01a_1020	# 175 ERL parameter (bucket5)
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp Cl 162 SC 162.11.2 DiMinico, Christopher Comment Type TR	Response Status C E. es incomplete specification.] onse to comment #173. P157		# [<u>17</u> CA IL (buc	The http C/ 162 Haser, Comme Se bet	e following presenta bs://www.ieee802.c solve using the res SC 162.11.3 Alex ent Type T titing a single vlaue	ations was reviewed by the ta org/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex Comment Status R	3ck_01a_1020	# 175 ERL parameter (bucket5)
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp Cl 162 SC 162.11.2 DiMinico, Christopher Comment Type TR Replace TBD	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi			The http Cl 162 Haser, Comme Se Sket5) Sugges	e following presenta os://www.ieee802.o solve using the res SC 162.11.3 Alex ent Type T titing a single vlaue ween test fixtures stedRemedy	ations was reviewed by the ta org/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex Comment Status R	3ck_01a_1020	# 175 ERL parameter (bucket5)
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp Cl 162 SC 162.11.2 DiMinico, Christopher Comment Type TR Replace TBD SuggestedRemedy	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi Comment Status A			The http Cl 162 Haser, Comme Se Sket5) Sugges	e following presenta bs://www.ieee802.c solve using the res SC 162.11.3 Alex ent Type T tting a single vlaue ween test fixtures stedRemedy ecify a range for fix	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex Comment Status R for fixture delay is not flexible	3ck_01a_1020	# 175 ERL parameter (bucket5)
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp C/ 162 SC 162.11.2 DiMinico, Christopher Comment Type TR Replace TBD SuggestedRemedy Replace TBD with 0.05	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi Comment Status A			Thu http C/ 162 Haser, Comme Se Sket5) Sugges Sp Resport	e following presenta bs://www.ieee802.c solve using the res SC 162.11.3 Alex ent Type T tting a single vlaue ween test fixtures stedRemedy ecify a range for fix	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex <i>Comment Status</i> R for fixture delay is not flexible ture delay (e.g., 2ns +/- 10%	3ck_01a_1020	# 175 ERL parameter (bucket5)
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp C/ 162 SC 162.11.2 DiMinico, Christopher Comment Type TR Replace TBD SuggestedRemedy Replace TBD with 0.05	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi Comment Status A			The http C/ 162 Haser, Commo Se bet Sugges Sp Respor RES The	e following presenta bs://www.ieee802.co solve using the res SC 162.11.3 Alex ent Type T tting a single vlaue ween test fixtures stedRemedy ecify a range for fix nse JECT. e response to close	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex Comment Status R for fixture delay is not flexible ture delay (e.g., 2ns +/- 10% Response Status C ed comment #114 indicates the	3ck_01a_1020 <i>L</i> 12 e enough to ac	# <u>175</u> ERL parameter (bucket5 count for variation
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp C/ 162 SC 162.11.2 DiMinico, Christopher Comment Type TR Replace TBD SuggestedRemedy Replace TBD with 0.05 Response ACCEPT IN PRINCIPL	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi Comment Status A			The http C/ 162 Haser, Commo Se bet Sugges Sp Respor RES The	e following presenta bs://www.ieee802.co solve using the res SC 162.11.3 Alex ent Type T tting a single vlaue ween test fixtures stedRemedy ecify a range for fix nse JECT.	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex Comment Status R for fixture delay is not flexible ture delay (e.g., 2ns +/- 10% Response Status C ed comment #114 indicates the	3ck_01a_1020 <i>L</i> 12 e enough to ac	# <u>175</u> ERL parameter (bucket5 count for variation
Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse Resolve using the resp Cl 162 SC 162.11.2 DiMinico, Christopher Comment Type TR Replace TBD SuggestedRemedy Replace TBD with 0.05 Response ACCEPT IN PRINCIPL [Editor's note: Addresse	Response Status C E. es incomplete specification.] onse to comment #173. P 157 MC Communi Comment Status A Response Status C E.			The http C/ 162 Haser, Commo Se bet Sugges Sp Respor RES The	e following presenta bs://www.ieee802.co solve using the res SC 162.11.3 Alex ent Type T tting a single vlaue ween test fixtures stedRemedy ecify a range for fix nse JECT. e response to close	ations was reviewed by the ta rg/3/ck/public/20_10/kocsis_ ponse to comment #114. P 158 Molex Comment Status R for fixture delay is not flexible ture delay (e.g., 2ns +/- 10% Response Status C ed comment #114 indicates the	3ck_01a_1020 <i>L</i> 12 e enough to ac	# <u>175</u> ERL parameter (bucket5 count for variation

C/ 162 SC 162.1									
00 102	1.3 <i>P</i> 158	L 15	# 176	C/ 162B S	C 162B.1.3	.2	P 256	L 46	# 22
Haser, Alex	Molex			DiMinico, Chris	topher		MC Communi	ications	
Comment Type ER	Comment Status A		ERL tfx (bucket5)	Comment Type	TR	Commer	t Status R		MTF R
	ure delay is misleading. The spec			Modify Equ	ation (162B	–6) DRL(f) >	40 GHz to align	n with achievable	e MTF return loss
	e delay. Only the coax is being r	emoved from the	e fixture.	SuggestedRem	nedy				
SuggestedRemedy	· "The encoified Tfy value signific	antly mitigatas t	he test point and	See suppo	rting presen	tation dimini	co_3ck_1020.pdf	f	
	: "The specified Tfx value signfic eturn loss by removing the coax of			Response		Response	Status C		
measurement." or	something along those lines			REJECT.					
Response	Response Status C			The followi	na presenta	tion was revi	ewed by the task	force:	
ACCEPT IN PRINC	CIPLE.						20_10/diminico_		.pdf
Resolve using the	esponse to comment #217.			The respor	ise to closed	d comment #	178 changes the	e differential retu	Irn loss specification
C 162B SC 162B	.1.3.1 P 255	L 35	# 21	from norma	ative to infor	mative.	0		·
DiMinico, Christopher	MC Commun			The RL ma	sk proposed	d on slide 12	of diminico_03a	relaxes RL at fr	equencies greater than
Comment Type TR	Comment Status A		MTF IL	40 GHz.					
51	62B–3) ILMTFMAX > 40 GHz to	align with achie	vable MTF insertion loss	There is no	consensus	to make the	proposed chang	je.	
uggestedRemedy				C/ 162B S	C 162B.1.3	6	P 260	L 48	# 20
See supporting pre	sentation diminico_3ck_1020.pd	f		DiMinico, Chris		.0	MC Communi		# 20
Response	Response Status C			Comment Type	•	Commer	t Status A	ications	MTF XTAL
						Common	Clarad A		
ACCEPT IN PRINC	JFLE.			Replace TE	30				
		ewed:		•					
Slides 8 to 11 of th	e following presentation was revi 2.org/3/ck/public/20_10/diminico		.pdf	SuggestedRem		mV			
Slides 8 to 11 of th https://www.ieee80	e following presentation was revi	_3ck_03a_1020		SuggestedRem	nedy		e Status C		
Slides 8 to 11 of th https://www.ieee80	e following presentation was revi 2.org/3/ck/public/20_10/diminico	_3ck_03a_1020		SuggestedRem Replace TE	nedy		e Status C		
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz.	e following presentation was revi 2.org/3/ck/public/20_10/diminico	_3ck_03a_1020	at frequencies greater	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico_ TFMAX specifications proposed o	_3ck_03a_1020	at frequencies greater minico_03a.	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response	Status C		
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM C/ 162B SC 162B	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico_ TFMAX specifications proposed o	_3ck_03a_1020 _03a relaxes IL a on slide 11 of dir	at frequencies greater	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM C/ 162B SC 162B Dawe, Piers	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico TFMAX specifications proposed 1.3.1 P 256	_3ck_03a_1020 _03a relaxes IL a on slide 11 of dir	at frequencies greater minico_03a.	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM C/ 162B SC 162B Dawe, Piers Comment Type E	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico TFMAX specifications proposed 1.3.1 P 256 Nvidia Comment Status A red test fixtures insertion loss, sh	_3ck_03a_1020 _03a relaxes IL a on slide 11 of dir <i>L</i> 12	at frequencies greater minico_03a. # 269 MTF IL	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM C/ 162B SC 162B Dawe, Piers Comment Type E Figure 162B-3, Ma not the reference II	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico TFMAX specifications proposed 1.3.1 P 256 Nvidia Comment Status A red test fixtures insertion loss, sh	_3ck_03a_1020 _03a relaxes IL a on slide 11 of dir <i>L</i> 12	at frequencies greater minico_03a. # 269 MTF IL	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM of 162B SC 162B Dawe, Piers comment Type E Figure 162B-3, Ma not the reference II ouggestedRemedy	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico TFMAX specifications proposed 1.3.1 P 256 Nvidia Comment Status A red test fixtures insertion loss, sh	_3ck_03a_1020 _03a relaxes IL a on slide 11 of dir 	at frequencies greater minico_03a. # 269 <i>MTF IL</i> um and minimum IL but	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			
Slides 8 to 11 of th https://www.ieee80 The MAX IL mask than 40 GHz. Implement the ILM C/ 162B SC 162B Dawe, Piers Comment Type E Figure 162B-3, Ma not the reference II SuggestedRemedy	e following presentation was revi 2.org/3/ck/public/20_10/diminico proposed on slide 11 of diminico TFMAX specifications proposed o 1.1.3.1 P 256 Nvidia Comment Status A red test fixtures insertion loss, sh	_3ck_03a_1020 _03a relaxes IL a on slide 11 of dir 	at frequencies greater minico_03a. # 269 <i>MTF IL</i> um and minimum IL but	SuggestedRem Replace TE Response ACCEPT.	nedy BD with 1.6 i	Response			

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed Z/withdrawn SORT ORDER: Clause, Subclause, page, line

C/ 162B SC 162B.1.3.6 Page 14 of 16 11/18/2020 5:09:23 PM

C/ 163	SC 163.9.2	P 176	L 44	# 202	C/ 163	SC 163.9.2.3	<i>P</i> 179	L 39	# 31		
Nu, Mau	-Lin	MediaTek			Healey, Ad	lam	Broadcom Ir	nc.			
Commen	t Type T	Comment Status A		ERL value (bucket5)	Comment	Туре Т	Comment Status D		ERL tfx		
dERL	is still TBD						ould be 0 for TP0v-based E		n the test fixture is to be		
Suggeste	edRemedy						embedded (and not time-do	main gated).			
Suggest to set as some negative values. I had shared some information in						SuggestedRemedy					
	ck_adhoc_01_09 is comment.	2320.pdf. I plan to prepare or	e contribution,	wu_3ck_02_1120.pdf,			sentence "The value of Tfx is " A similar change would al				
Response	е	Response Status C			Proposed	Response	Response Status Z				
ACCI	EPT IN PRINCIPI	_E.			REJE	CT.					
		presentation is here: rg/3/ck/public/adhoc/sept23_2	20/wu_3ck_adh	loc_01a_092320.pdf	This c	omment was WI	THDRAWN by the commen	ter.			
	01	tion was reviewed by the task rg/3/ck/public/20_10/wu_3ck_									
Reso	lve using the valu	e in the response to commen	t #61.								
C/ 163	SC 163.9.2	P 177	L 16	# 187							
Calvin, Jo	ohn	Keysight Tech	nnologies								
Comment	t Type T	Comment Status A		EO jitter (bucket5)							
		n-Odd jitter is only 358 femtos vith current state of the art tes		is too low to be							
Suggeste	dRemedy										
Incre	ase the spec limit	from 0.019 UI to 0.025 UI									
Response	9	Response Status C									
ACCI	EPT IN PRINCIPI	_E.									
Reso	lved using the res	sponse to comment #190.									
1,000	it ou doining the rot										

C/ 163 SC 163.9.2.3

C/ 163 SC 163.9.3.1 P 180 L 33 # 67	C/ 163 SC 163.10.3 P 186 L 41 # 10
Ran, Adee Intel	Mellitz, Richard Samtec
Comment Type T Comment Status A ERL value	Comment Type TR Comment Status A ERL value (buckets
The method of Annex 163A can be used for receiver ERL just like it is for transmitter ERL, that is, specify difference from a reference value.	The ERL range is between 9.7 dB and 23.5 dB for published channel that representative of 100G KR designs.
In the case of the receiver, there may be a tradeoff between optimizing for ERL and	SuggestedRemedy
optimizing for BER. The receiver should be allowed more design freedom. Therefore the	change the TBD in in line 41 to 9.7 dB
minimum dERL should be lower than for the receiver.	Response Response Status C
A minimum dERL of -5 dB may be acceptable. Alternatively, dERL can be made	ACCEPT IN PRINCIPLE.
informative (recommendation).	[Editor's note: Addresses incomplete specification.]
Also applies to 120F.3.2.1.	Resolve using the response to comment #114.
SuggestedRemedy	
Change receiver ERL sublcause (163.9.3.1) to match 163.9.2.3.	C/ 163 SC 163.13.4.3 P 192 L 8 # 12
In Table 163-9, change ERL (min) to dERL(Min) with value -5 dB.	Mellitz, RichardSamtecComment TypeTRComment StatusDERL wordin
Change subclause 120F.3.2.1 to match 163.9.3.1 (apply the change above).	We are not specifying ERL directly
In Table 120F-4, change ERL (min) to dERL(Min) with value -5 dB.	SuggestedRemedy Change TC2 to DERL at TP0v
Consider changing Rx dERL from a normative specification (shall) to a recommendation (should).	Proposed Response Response Status Z
Response Response Status C	REJECT.
ACCEPT IN PRINCIPLE.	This comment was WITHDRAWN by the commenter.
Closed comment #40 aligned the RX test fixture with the TX test fixture and the replaced ERL with dERL.	
Use the value provided in the response to comment #61 (-3 dB).	
There was no consensus to make a change to the normative nature of RX dERL.	

[Editor's note: CC: 163, 120F]

C/ 163 SC 163.13.4.3