C/ 83E SC 83E.3.1.2 P 174 L 42 # r02-1	C/ 00 SC 0 P 0 L 0 # [r02-2
RAN, ADEE Intel Corporation	I urner, Michelle
Comment Type T Comment Status A The change from draft 3.1 highlights the following definition:	Comment Type E Comment Status A Bucket
"The peak-to-peak differential voltage v_di is defined to be the difference between the single-ended output voltages, SLi minus SLi <n>."</n>	SuggestedRemedy
This definition implies that the SLi terms refer to scalar voltage values at the instant when the difference between the single-ended signals is at its peak. But the common-mode voltage specification includes an RMS value, which is calculated from the full common-	Response Response Status C ACCEPT. Thank you
of v cmi and SLi must be the signals in general rather than their values at a specific instant.	C/ 83A SC 83A.3.4.7 P 141 L 39 # r02-3
	Anslow, Peter Ciena Corporation
The similar prior text in 93.8.1.3 defines v_di as the differential output, without "peak-to-	Comment Type E Comment Status A Bucket
properties (peak-to-peak, AC RMS, DC value) have specified limits in table 83E-1.	The implementation of comments i-12 and i-64 against D3.0 changed the text in 83A.3.4.7, but this was shown as if it had changed the base text rather than being shown in underline and strikeout forts.
differential voltage v_di is defined to be the _maximum_ difference between the single-	
ended output voltages, SLi minus SLi <n>". But this seems unnecessarily verbose; we can assume readers know how to calculate the peak-to-peak of a differential signal.</n>	SuggestedRemedy Show the changes due to comments i-12 and i-64 against D3.0 in underline and strikeout fonts as changes to the base text.
The term "peak-to-peak" was added to this definition following comment #106 against D1.0 and the term "output" was removed following comment #4 against D1.2. To satisfy these comments, we could delete the word "output" from all parameter names in Table 83E-1	Response Response Status C ACCEPT.
(rows 2, 3, 4, 5, 6, 7, and 11), since the table's title states that it deals with output parameters. In addition, the parameter name in the 7th row should be changed from	C/ 83D SC 83D.3.1 P 160 L 32 # r02-4
"Differential peak-to-peak output voltage (max)" to "Differential voltage (max, peak-to-	Anslow, Peter Ciena Corporation
peak)" (based on row 6). This would also require changing multiple PICS items in 83E 5.4.1 accordingly. However, in view of the project state Lam rejuctant to suggest this	Comment Type E Comment Status A Bucket
group of changes.	Comments i-7 and i-88 against D3.0 corrected the jitter reference in Table 83D-1 from
SuggestedRemedy	92.8.3.9.2 (which was appropriate to an earlier version of P802.3bj, but does not exist in
Change the first sentence in 83E.3.1.2 from	the published version) to 92.8.3.8.2. However one instance of 92.8.3.9.2 in footnote b was not corrected.
"The peak-to-peak differential voltage v_di is defined to be the difference between the	SuggestedPeriode
single-ended output voltages, SLI minus SLI <n>."</n>	In Table 83D-1 footnote b) change the remaining instance of 92.8.3.9.2 to 92.8.3.8.2
"The differential output voltage v_di is defined to be the difference between the single-	
ended output voltages, SLi minus SLi <n>."</n>	Response Response Status C
(based on 93.8.1.3, with the modification from D3.1)	
Response Response Status C	This comment does not apply to the changes between IEEE P802.3bm/D3.2 and IEEE
ACCEPT.	P802.3bm/D3.1 or the unsatisfied negative comments from the initial ballot. Hence it is not within the scope of the recirculation ballot. However, the changes suggested are an improvement to the draft that would otherwise need to be made in maintenance. Make the changes as per the Suggested Remedy.

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 U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Comment ID r02-4

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C/ 83E	SC 83E.3.3.2.	1 <i>P</i> 183	L 48	# r02-5	C/ 83E	SC 83E.3.3.2	2.1 <i>P</i> 184	4 L 7	# r02-7
Anslow, Pete	er	Ciena Corpora	tion		Dawe, Pier	s J G	Mellano	ox Technologie	
Comment Ty In Tables	/pe E s 83E-6 and 83I	Comment Status A E-9, footnote c) refers to 92.8	.3.10.1 for the defin	<i>Bucket</i> ition of even-odd	Comment 7 Font to	<i>Type</i> E o small.	Comment Status	Ą	Bucket
jitter. Ho does not	owever, while th t exist in the put	is was appropriate to an earli lished version. The definitio	er version of P802. n of even-odd jitter	3bj, 92.8.3.10.1 is in 92.8.3.8.1	Suggested	Remedy	oint		
SuggestedR	emedy				Change	e a point to to p	om.		
In Table	s 83E-6 and 83I	E-9, footnote c) change 92.8.	3.10.1 to 92.8.3.8.1		Response		Response Status	C	
Response ACCEPT This con P802.3b within th	T. nment does not m/D3.1 or the u	Response Status C apply to the changes betwee nsatisfied negative comment	n IEEE P802.3bm/I s from the initial bal	D3.2 and IEEE lot. Hence it is not	ACCEF This co P802.3 within t improv Make t	PT. Interpret the second secon	t apply to the changes unsatisfied negative co recirculation ballot. Ho ift that would otherwise per the Suggested Ren	between IEEE P80 omments from the ir wever, the changes need to be made o nedy.	2.3bm/D3.2 and IEEE hitial ballot. Hence it is not s suggested are an during publication.
improve Make the	ment to the draf e changes as pe	t that would otherwise need t er the Suggested Remedy.	o be made in maint	enance.	<i>Cl</i> 83E Dawe, Pier	SC 83E.5.4.1 s J G	P 19 Melland	D L 24 ox Technologie	# [r02-8
Cl 01 Dawe, Piers	SC 1.3 J G	Р 22 Mellanox Tech	L 23 nologie	# <u>r02-6</u>	Comment T Font to	<i>Туре</i> Е o big "25.78125	Comment Status lane".	A	Bucket
Comment Ty This isn'	/pe E t the published r	Comment Status A name of IEC 61754-7-1.		Bucket	Suggested Change	<i>Remedy</i> e 10 point to 9 p	oint. Also check 83D.6	5.4.1.	
SuggestedR Change Type MF to Type MF Response	e <i>medy</i> PO connector fa PO connector fa τ	mily-Single fibre row. mily - One fibre row. <i>Response Status</i> C			Response ACCEF This cc P802.3 within t improv Make t	PT. Imment does no Ibm/D3.1 or the he scope of the ement to the dra he changes as p	Response Status t apply to the changes unsatisfied negative co recirculation ballot. Ho ift that would otherwise per the Suggested Rem	C between IEEE P80 omments from the ir wever, the changes need to be made o nedy.	2.3bm/D3.2 and IEEE hitial ballot. Hence it is not s suggested are an during publication.
/ COLI					C/ 83E	SC 83E.5.4.1	P 19	D L 50	# r02-9
					Dawe, Pier	s J G	Mellano	ox Technologie	
					Comment 7 PICS T mentio signals	<i>Type</i> E TH12 and TH13 s n of 95 mV or 80).	Comment Status say 95 mV and 80 mV) mV there (the only "s	A and reference 83E. hall" there relates to	3.1.6, but there is no counter-propagating
					Suggested	Remedy			
					This PI and Ta	CS and probably ble 83E-1 with the test of the second seco	y several others should he relevant limit are.	d refer to 83E.3.1, w	here the relevant shall
					Response		Response Status	C	
					ACCEF Change	PT IN PRINCIPL e TH11, TH12 a	E. nd TH13 to reference s	subclause 83E.3.1	
TYPE: TR/te COMMENT S	chnical requirec STATUS: D/disp ER: Comment IE	ER/editorial required GR/g patched A/accepted R/rejec	eneral required T/t	echnical E/editorial G/g STATUS: O/open W/wi	general ritten C/closed	U/unsatisfied Z	/withdrawn	Comment ID r02-9	Page 2 of 13 05/11/2014 21:56:41

C/ 95 SC 95.7.1 P114 L 34 # r02-1	C/ 95 SC 95.7.1 P114 L 41 # r02-11
Dawe, Piers J G Mellanox Technologie	Dawe, Piers J G Mellanox Technologie
Comment Type TR Comment Status A	Comment Type TR Comment Status A
Consequential changes following adjustment of TDEC and SEC: OMA-TDEC min, C min, mean power min (Tx and Rx), budget, allocation for penalties, SRS OMA. Any	MA TDEC of 4.9 is much more than any previous VECP or TDP (3.5 and 3.9) and near a "cliff" nore? (uncontrolled jitter tails cause error floor approaching FEC's correction ability). Unless we can control MPN better than now, this is dangerous, and it's not percessary, the reference
SuggestedRemedy See presentation.	worst case transmitter delivers a TDEC of 4.4 dB and practical transmitters are better than that. D3.0 comment 46 and D3.1 comment 71 recommended 4.3 dB.
Response Response Status C	SuggestedRemedy
ACCEPT IN PRINCIPLE. See response to comment r02-37	Change the TDEC limit in Table 95-6 (transmitter) from 4.9 dB to 4.3 dB or lower (see work of MMF ad hoc and/or presentation at this meeting). See other comments for SEC and for consequential changes.
[Editor's note added after comment resolution completed.	Response Response Status C
ACCEPT IN PRINCIPLE.	ACCEPT IN PRINCIPLE. See response to comment r02-37
In Table 95-6 change: TDEC, each lane (max) from 4.9 dB to 4.3 dB OMA, each lane (min) from -7 dBm to -6.4 dBm Launch power in OMA minus TDEC (min) from -7.9 dBm to -7.3 dBm Average launch power, each lane (min) from -9 dBm to -8.4	[Editor's note added after comment resolution completed. The response to Comment r02-37 was: ACCEPT IN PRINCIPLE.
In Table 95-7 change: Average receive power, each lane (min) from -10.9 dBm to -10.3 Stressed receiver sensitivity (OMA), each lane (max) from -5.6 dBm to -5.2 SEC, lane under test from 4.9 dB to 4.3 dB Also change "Stressed eye J4 Jitter, lane under test" to "Stressed eye J4 Jitter, lane test (max)" with editorial license.	In Table 95-6 change: TDEC, each lane (max) from 4.9 dB to 4.3 dB OMA, each lane (min) from -7 dBm to -6.4 dBm Launch power in OMA minus TDEC (min) from -7.9 dBm to -7.3 dBm Average launch power, each lane (min) from -9 dBm to -8.4 under In Table 95-7 change: Average receive power, each lane (min) from -10.9 dBm to -10.3 Stressed receiver sensitivity (OMA), each lane (max) from -5.6 dBm to -5.2
http://www.ieee802.org/3/bm/public/nov14/dawe_01a_1114_optx.pdf with editorial license.	SEC, lane under test from 4.9 dB to 4.3 dB Also change "Stressed eye J4 Jitter, lane under test" to "Stressed eye J4 Jitter, lane under test (max)" with editorial license.
See also comments 10, 11, 12, 13, 14, 18, 19, 36.]	Make the changes shown on page 3 of http://www.ieee802.org/3/bm/public/nov14/dawe_01a_1114_optx.pdf with editorial license.
	See also comments 10, 11, 12, 13, 14, 18, 19, 36.]

C/ 95 SC 95.7.2 Dawe, Piers J G	P 115 Mellanox Tec	L 24 chnologie	# r02-12	C/ 95 Dawe, Pier	SC 95.7.2 rs J G	P 115 Mellanox Tec	L 28 hnologie	# r02-13
Cl 95 SC 95.7.2 Dawe, Piers J G Comment Type TR Con TDEC and the stressed eye in stressed receiver testing does maximum OMA. It should be: Launch power in OMA minus 7.9+4.9-1.9 = -4.9 dBm. It wo SuggestedRemedy Change stressed receiver ser Response Response Response to comment r02 [Editor's note added after com The response to Comment r02 ACCEPT IN PRINCIPLE. See response to Comment r02 [Editor's note added after com The response to Comment r02 ACCEPT IN PRINCIPLE. In Table 95-6 change: TDEC, each lane (max) from -7 Launch power in OMA minus Average launch power, each In Table 95-7 change: Average receive power, each Stressed receiver sensitivity (SEC, lane under test from 4.9 Also change "Stressed evende"	P 115 Mellanox Tec mment Status A ow includes all transm is not have to be set low TDEC (min) + max TE build remain at -4.9 for asitivity (OMA), each la conse Status C 2-37 ment resolution comp 2-37 was: 4.9 dB to 4.3 dB dBm to -6.4 dBm TDEC (min) from -7.9 ane (min) from -9 dBr lane (min) from -10.9 OMA), each lane (max dB to 4.3 dB Litter lane under tes	<i>L</i> 24 chnologie nitter and path per wer than the mini DEC - Channel ins a different max T ane (max) from -5 oleted. dBm to -7.3 dBm n to -8.4 dBm to -10.3 x) from -5.6 dBm	 # r02-12 nalties so the OMA for mum received OMA at sertion loss, or - DEC. 6 dBm to -4.9 dBm. 1 to -5.2 to -5.2 	C/ 95 Dawe, Pier Comment D3.1 h less th the tra 4.3 dB the SE dB. Suggested Chang of MM for cor Response ACCE See re [Editor The re ACCE In Tab TDEC OMA, Launci Averag	SC 95.7.2 rs J G Type TR C ad VECP=4.2 dB, D3 an VECP, so the strensmitter TDEC limit a . Simulations show th C of the reference wo Remedy e the SEC condition i F ad hoc and/or prese isequential changes. Re PT IN PRINCIPLE. sponse to comment r 's note added after co sponse to Comment r PT IN PRINCIPLE. le 95-6 change: each lane (max) from a power in OMA minu ge launch power, eac le 95-7 change: the receive power, eac	<i>P</i> 115 Mellanox Tec comment Status A 2.2 has SEC=4.9 dB. For ssed eye is much more lso. D3.0 comment 46 a hat the TDEC of the refe porst transmitter and char in Table 95-7 (receiver) f entation at this meeting). <i>esponse Status</i> C 02-37 comment resolution comp 02-37 was: in 4.9 dB to 4.3 dB -7 dBm to -6.4 dBm s TDEC (min) from -7.9 in lane (min) from -9 dBm	<i>L</i> 28 hnologie r stressed eyes stressful than i and D3.1 comm rence worst tra nel, which is w from 4.9 dB to a . See other con leted. dBm to -7.3 dE n to -8.4	# r02-13
Also change "Stressed eye J ² test (max)" with editorial licen: Make the changes shown on http://www.ieee802.org/3/bm/ with editorial license. See also comments 10, 11, 12	I Jitter, lane under tes se. page 3 of public/nov14/dawe_01 2, 13, 14, 18, 19, 36.]	t" to "Stressed ey	e J4 Jitter, lane under	Averag Stress SEC, I Also c test (m Make http://v with ed See al	ge receive power, eac ed receiver sensitivity ane under test from 4 hange "Stressed eye hax)" with editorial lice the changes shown or www.ieee802.org/3/bn ditorial license. so comments 10, 11,	th lane (min) from -10.9 ((OMA), each lane (max .9 dB to 4.3 dB J4 Jitter, lane under test inse. n page 3 of n/public/nov14/dawe_01 12, 13, 14, 18, 19, 36.]	dBm to -10.3 () from -5.6 dBr (" to "Stressed a_1114_optx.p	m to -5.2 eye J4 Jitter, lane under odf

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 U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

Cl 95	SC 95.7.2	P 115 Mellanov Ter	L 31	# r02-14	C/ 95	SC	95.8.5.2	Λ	P 118	L 53	# <u>r02-16</u>
Comment		Comment Status A	Sinologie		Commo		тр	Comment St		linologie	
J4 is s chann	still a little higher t el. Also, it is diffi	han expected from the refer cult to get an agreed reprod	ence worst case ucible measurem	transmitter and worst nent of a large J4,	To ç timir	uard being offset	tter againsi s.	t unreasonably h	nigh jitter, it m	ay be helpful	to increase the histogram
espec	ially for the eye si	hape from a stressed eye ge	enerator.		Suggest	edReme	edy				
Suggester	dRemedy				Con	sider ch	anging "cei	ntered at 0.4 UI	and 0.6 UI" to	o "centered at	0.38 UI and 0.62 UI",
Consid	der reducing J4 s	lightly, from 0.53 UI to 0.51	UI.		with 4 to	appropr match.	iate chang	e to the TDEC II	mit and SEC	condition. If a	lesired, revise Figure 95-
Response		Response Status C			Respon	e.		Response Sta	atus C		
ACCE See re	PT IN PRINCIPL	E. ent r02-37			REJ	ECT. commei	nter has no	ot established that	at using histo	gram windows	s centered at 0.4 UI and
[Edito	r's note added aft	er comment resolution comp	oleted.		0.6	JI allows	s unreason	ably high jitter of	r that the pro	posed change	is an improvement.
ACCE	esponse to Comm	ient r02-37 was: E.			C/ 95	SC	95.8.5.2		P 119	L 4	# r02-17
					Dawe, P	iers J G		Ν	Aellanox Tec	hnologie	
In Tab	ble 95-6 change:	from 4.9 dB to 4.3 dB			Comme	nt Type	Е	Comment St	atus A	-	Bucket
OMA, Launc	each lane (min) f h power in OMA	rom -7 dBm to -6.4 dBm minus TDEC (min) from -7.9	dBm to -7.3 dBr	n	It loo 'hist	oks like l ogram w	D3.1 comm vindow".	nent 7 wasn't imp	plemented: fc	r consistency	use the phrase
Avera	ge launch power,	each lane (min) from -9 dBr	m to -8.4		Suggest	- edReme	dv				
In Tab	ble 95-7 change:				Cha	nge "out	er boundai	ry of the histogra	am" to "outer	boundary of th	ne histogram window".
Avera	ge receive power	, each lane (min) from -10.9	dBm to -10.3		Respon	e		Response Sta	atus C		0
Stress SEC, I Also c test (n	sed receiver sensi lane under test fro change "Stressed nax)" with editoria	itivity (OMA), each lane (ma om 4.9 dB to 4.3 dB eye J4 Jitter, lane under tes I license.	x) from -5.6 dBm it" to "Stressed e	to -5.2 ye J4 Jitter, lane under	ACC	EPT.					
Make http://v with e	the changes show www.ieee802.org/ ditorial license.	vn on page 3 of /3/bm/public/nov14/dawe_0	1a_1114_optx.pc	lf							
See al	lso comments 10,	, 11, 12, 13, 14, 18, 19, 36.]									
<i>CI</i> 95 Dawe, Pie	SC 95.8.1.1 rs J G	P 117 Mellanox Teo	L 28 chnologie	# r02-15							
Comment Justifie	<i>Type</i> E cation	Comment Status A		Buck	et						
Suggested Parag	dRemedy raph should be fu	Ily justified like the others.									
Response ACCE	PT.	Response Status C									

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 U/unsatisfied Z/withdrawn SORT ORDER: Comment ID

C/ 95	SC 95.8.5.2	P 1 20	L 19	# r02-18		C/ 95	SC 95.8.5.2	ŀ	[⊳] 120	L 27	# r02-19
Dawe, Pier	s J G	Mellanox Tec	hnologie			Dawe, Pie	rs J G	nnologie			
Comment	Type TR	Comment Status A				Comment	Type TR	Comment Stat	us A		
The ca one tha correct	lculation of TDEC an can be relied c ly.	C predicts more difference b on in reality, meaning that th	etween a good tr e TDEC-OMA tra	ansmitter and a bad ade-off won't work	I	lt wou consis numbe	ld be nice to hav tently more or le er.	ve TDEC predicting ess, so that the TDE	the penalty EC and SEC	after the wors c specifications	t channel, not s have the same
Suggested	Remedy					Suggested	lRemedy				
Chang R = (1-	e equations 95-3 M1)sqrt(N^2+S^2	and 95-4 and some associa 2-M2^2) where M1 and M2,	ated text to: defined in Equati	ion (95-4) and Equat	tion	lf so, t offsets	hey should both s), and another t	be between 3.9 an weak to equations	nd 4.3 dB (fo 95-3 and 95	or the present l 5-4 may be nee	nistogram timing eded.
(95-5), channe	account for mode	e partition noise and modal	noise that could	be added by the opti	ical	Response		Response Statu	ıs C		
 M1 =0.	15 (95-4)					ACCE See re	PT IN PRINCIP	LE. nent r02-37			
M2 = 0 In 95.8 and M2	.01 Pave (95-5) .8.2, change "the 2 in Equation (95-	value of M in Equation (95- 3) are set to zero".	3) is set to zero"	to "the values of M1	I	[Editor The re	's note added at sponse to Com	fter comment resolument r02-37 was:	ution compl	eted.	
Response		Response Status C				ACCE		LE.			
ACCEI See re	PT IN PRINCIPLE	E. ent r02-37				In Tab TDEC OMA.	le 95-6 change: , each lane (max each lane (min)	x) from 4.9 dB to 4. from -7 dBm to -6.	3 dB 4 dBm		
[Editor The res ACCE	s note added afte sponse to Commo PT IN PRINCIPLE	er comment resolution comp ent r02-37 was: E.		Launc Avera	h power in OMÁ ge launch power	minus TDEC (min) r, each lane (min) fr) from -7.9 c rom -9 dBm	dBm to -7.3 dB to -8.4	m		
In Tabl TDEC, OMA, e Launch Averag	e 95-6 change: each lane (max) each lane (min) fr power in OMA n e launch power,	from 4.9 dB to 4.3 dB om -7 dBm to -6.4 dBm ninus TDEC (min) from -7.9 each lane (min) from -9 dBr	dBm to -7.3 dBn n to -8.4	n		In Tab Avera Stress SEC, Also c test (n	le 95-7 change: ge receive powe ed receiver sens ane under test f hange "Stressec nax)" with editori	r, each lane (min) f sitivity (OMA), each rom 4.9 dB to 4.3 d d eye J4 Jitter, lane al license.	from -10.9 c n lane (max) IB n under test"	IBm to -10.3) from -5.6 dBn ' to "Stressed e	n to -5.2 eye J4 Jitter, lane under
In Tabl Averag Stresse	e 95-7 change: le receive power, ed receiver sensit	each lane (min) from -10.9 tivity (OMA), each lane (max	dBm to -10.3 ‹) from -5.6 dBm	to -5.2		Make http://v with e	the changes sho www.ieee802.org ditorial license.	own on page 3 of g/3/bm/public/nov1/	4/dawe_01a	a_1114_optx.p	df
Also ch test (m	ange "Stressed e ax)" with editorial	eye J4 Jitter, lane under tes l license.	t" to "Stressed ey	/e J4 Jitter, lane und	ler	See a	so comments 10	0, 11, 12, 13, 14, 18	8, 19, 36.]		
Make t http://w with ec	he changes show ww.ieee802.org/ iitorial license.	/n on page 3 of 3/bm/public/nov14/dawe_01	a_1114_optx.pd	f							
See als	so comments 10,	11, 12, 13, 14, 18, 19, 36.]									

C/ 95	SC	95.8.8		P 121 Mollapox To	L 18	# r02-20	C/ 95	SC	95.8.8.1	P 1: Mollar	21	L 27	# r02-21
Common		-	Common		chilologie	Ducket	Commont	15 J G	-	Commont Status		noiogie	
We of are s confiction com opticonstress	didn't cor supposed ormance pliance s al test si sed rece	E nplete D3.1 d to use the test signal ignal 1 gnal 1 eiver conforr	comment t same nam 2 mance sign	82. We still use e every time:	e 10 names for th	e same thing, and we	We di The d once, Suggestee Chang	dn't cor raft use and (in dReme ge all to	E mplete D3. es "stresse Table 85- dy o "stressed	1 comment 82 (scrub d receiver conforman 7) "stressed receiver receiver test". Scrub	the SRS ce test" - sensitivit	S section for o 4 times, "rece ty test" once. S section for o	consistent terminology). eiver conformance test" consistent terminology.
stres stres conf stres test inpu	sed lece sed eye ormance sed rece signal 1 t signal 7	conformanc signal 1 eiver conforr	mance test ce signal mance inpu	it signal 1			Response REJE This c P802. within	CT. ommer 3bm/D the sc	nt does not 3.1 or the u ope of the i	Response Status apply to the changes unsatisfied negative of recirculation ballot.	C s betwee comments	n IEEE P802 s from the init	.3bm/D3.2 and IEEE tial ballot. Hence it is not
Suggeste Chai	edRemed nge them	dy all to the section for	same thing,	e.g. "stressed	receiver test sign	al" or "stressful signal".	The te by cla	ext of cl use 86	lause 95 fo).	llows a similar descri	ptive forr	mat as clause	e 52 (which is referenced
Respons ACC Edito as p whe outp In se clea conf In se "stre "stre In se	EPT IN I EPT IN I pors note; possible for re it migh ut signal. action 95. sction 95. ssed eye ssed rec action 95.	PRINCIPLE as a guideli or the test it: the helpful 	Response Response ine, 'stresse tself, and 'si I to different 53, page 12 stressed rec '. 17, page 12 nce signal" t rmance tes 28, page 12	ed receiver con ignal' for the tes tiate between e 21 and in sectio ceiver conforma 23 (D3p2 clean to: t signal" 21 change "corr	formance test' wa st signal, with ado .g. a receiver inpl n 95.8.8.2, line 2 ance signal' to 'st version), change upliance" to "confo	as used as consistently led descriptive text ut signal vs a receiver 3, page 123 (D3p2 tressed receiver :	Cl 95 Dawe, Pie Comment We in appro appea others but it's Suggestee Insert Chan GHz." filter of Response REJE The p	SC rs J G <i>Type</i> serted ximatel red that the tred that the tred that the tred that the tred that the talking d <i>Reme</i> a para age "The to "Fo f appro- f appro- CT.	95.8.8.1 T "The fourth ly 19 GHz" at it did not, eve. Also, g about a d dy graph breat e fourth-ord r stress cor oximately 1 d change c	P 12 Mellar Comment Status n-order Bessel-Thoms in the hope that this , other changes were this sentence follows lifferent Bessel-Thom k. der Bessel-Thomson f nditioning, a 3 dB bar 9 GHz is suitable." Response Status doesn't improve the d	21 nox Tech R son filter would av needed. immedia son filter ilter has idwidth for C raft.	<i>L</i> 31 nologie has a 3 dB ba roid worse-tha This bandw ately after one r, not the filter a 3 dB bandw or the fourth-o	# r02-22 andwidth of an-Gaussian jitter tails. It idth is suitable but so are a about "suitable test set" in the test set. width of approximately 19 order Bessel-Thomson

Dawe, Piers Comment T "the app Also, th "The low respons closure while 95	s J G <i>ype</i> T propriate level" or is says: w-pass filter, whe se that results in .	Mellanox Tec Comment Status A stressed eye closure (SEC n combined with the E/O co	chnologie C): means what?		Dawe, Pie <i>Comment</i> Other	ers J G <i>Type</i> require	T	Comment Si	Mellanox Tec tatus A	hnologie	
Comment T "the app Also, th "The low respons closure while 95	ype T propriate level" or is says: w-pass filter, whe	Comment Status A stressed eye closure (SEC	C): means what?		Comment Other	<i>Type</i> require	T	Comment Si	tatus A		
"the app Also, th "The low respons closure while 95	propriate level" or is says: w-pass filter, whe	stressed eye closure (SEC	C): means what?		Other	require	monto for				
while 95		the appropriate level of stre	onverter, should ssed eye	have a frequency	the ca Suggestee Chan	dReme	erre Pattern dy attern 3 is i	at least 31 UI d 3 is used with a	lelay are now a common clo	(D3.1 comment ock". This is the	55) qualified e.g. "For odd one out.
"With si ***and t created	5.8.8.2 says: nusoidal amplitu the Gaussian noi by the selection	de interferer 1, sinusoidal a se generator*** turned off, a of the appropriate bandwid	mplitude interferent at least 2.5 dB of th for the low-pas	er 2, sinusoidal jitter, SEC should be ss filter."	least 3 any of to "If F test, ti lane."	31 UI de ther lan Pattern here is	elay betwe ne." 3 is used * at least 31	with a common UI delay betwe	1 patterns *ge n clock* for the een the PRBS	e transmit *or* r 31 patterns on	eceive lanes not under one lane and any other
SuggestedF	Remedy				Response	9		Response St	atus C		
Change the E/O stressed the Gau Response	e to "The low-pas converter, shoul d eye closure (SI ussian noise are a	s filter, when combined with d have a frequency respon- EC) given in 95.8.8.2 before added." <i>Response Status</i> C	n se that results in e the sinusoidal to	at least the level of erms (see below) and	ACCE Chang "If Pat delay "If Pat	EPT IN ge: ttern 3 i betwee ttern 3 i	PRINCIPLI is used for en the PRB is used with	the transmit an S31 patterns g	id receive land enerated on cock for the tra	es not under tes one lane and an nsmit or receive	it, there is at least 31 UI y other lane." to: lanes not under test.
ACCEP See res	T IN PRINCIPLE	nt r02-32			there	is at lea	ast 31 UI de	elay between th	ne PRBS31 p	atterns on one l	ane and any other lane."
000100					C/ 95	SC	95.8.8.2		P 123	L 3	# r02-25
[Editor's The res	s note added afte ponse to Comme	r comment resolution comp ent r02-32 was:	oleted.		Dawe, Pie	ers J G		I	Mellanox Tec	hnologie	
ACCEP	T IN PRINCIPLE				Comment	Туре	E	Comment Si	tatus A		Bucke
"The lov	». w-pass filter, whe	n combined with the E/O co	onverter, should	have a frequency	the Pl	MD rece	eiver of the	e lane under tes	st		
respons	se that results in	the appropriate level of stre	ssed eye closure	e (SEC) before the	Suggestee	dReme	dy				
to: "The lov	w-pass filter, whe	n combined with the E/O co	onverter, should	have a frequency	the lai or, in each l	ne unde line with lane of	er test of th h text at the the PMD re	e PMD receive e bottom of the eceiver	er page,		
respons Gaussia	se that results in a	ne level of stressed eye clo e added, as described in 9	5.8.8.2."]	re the sinusoidal and	Response	;		Response St	atus C		
			1		ACCE Chang to "ea	EPT IN ge "the ich lane	PRINCIPLI PMD rece of the PM	E. viver of the lane D receiver"	e under test"		

CI 95	SC	95.8.8.2		P 123	L 14	# r02-26	C/ 95	SC	95.8.8.2	P 123	L 26	# r02-27
Dawe, Pie	rs J G			Mellanox Tec	hnologie		Dawe, Pie	ers J G		Mellanox Tec	hnologie	
Comment	Туре	TR	Comme	nt Status A			Comment	Туре	Е	Comment Status A		Bucket
There randor approa alterna equiva	is inter m jitter ach me atives a alent.	est in creat generation ets the SE re equivale	ting a confo instead of C and jitter ent or not, a	ormance test sigr random noise. T numbers is acce and we will proba	nal without the lim The draft seems t ptable, but we do bly never know th	niter, and in using o say that any on't yet know if these hat ANY alternative is	This E "It wo Figure Chang sinuso to	D3.1 coi uld be e 95-5. ge pidal int	mment 88 a easier to fol terferers, sin	appears not to have been fu low if these things were liste nusoidal jitter, and Gaussiar	Ily acted on: ad in the same on n noise generated	order as they appear in
Suggested Find o stress (BT4?	dRemee out. If the ed eye lossy	αy ney are equ generator Γline?). If	uivalent, ex without a li we can, sta	plicitly allow then miter is acceptab ate more fully wha	n. If not, warn ag le, state what filte at is needed for e	ainst them. If a er profile is acceptable equivalence (it may be	sinuso Two ir Also t cleare	bidal jitt Instance he term er by re-	er, sinusoic es." hinology cou -ordering.	dal interferers, and Gaussiar uld be more consistent, and	n noise generato the text can be	or simplified and made
to do v	with pul	se shrinka able"	ge). Chang	ge "any approach	is acceptable	" to "other approaches	Suggestee	dReme	dy			
Response ACCE The ca There http://v Chang " Ho freque " Ho used."	PT IN I ommen was no www.ie ge: gwever a owever a owever a	PRINCIPLE ter has not support to ee802.org/ any approa of the SEC alternative	Response E. t demonstra o change th 3/bm/public ach that mo and jitter co test setups	e Status C ated a deficiency e stressed eye g c/nov14/dawe_05 dulates or create omponents is acc that generate ec	in the draft. enerator as desc 5_1114_optx.pdf. s the appropriate ceptable." to: quivalent stress c	ribed in e levels and conditions may be	In step With t to With t In step With s and th to With s and th Or be With t 2, and appro should Delete	p 2, cha he sinu p 3, cha sinusoic he Gaus tter, cor he sinu d the Ga ximatel d be cre e the se	ange isoidal inter soidal jitter, ange dal amplitud ssian noise dal jitter, sin ssian noise mbine so th isoidal jitter, aussian nois y the minim eated by the entence in s	ferers, sinusoidal jitter, and , sinusoidal interferers, and le interferer 1, sinusoidal an generator ausoidal amplitude interferer generator at step 2 becomes: , sinusoidal amplitude interf se generator turned off, set hum specified in Table 95-6. e selection of the appropriat tep 3 beginning "With sinus	Gaussian noise Gaussian noise plitude interfere 1, sinusoidal ar erer 1, sinusoidal ar the extinction ra At this stage, a e bandwidth for oidal amolitude	generator generator turned off er 2, sinusoidal jitter, mplitude interferer 2, al amplitude interferer atio of the E/O to at least 2.5 dB of SEC the low-pass filter.
							Response ACCE In ste "With to "With In ste "With and th to "With and th	EPT IN I p 2, cha the sinu p 3, cha sinusoi ne Gaus sinusoi ne Gaus	PRINCIPLE ange usoidal inte usoidal jitte ange idal amplitu ssian noise dal jitter, sin ssian noise	Response Status C rferers, sinusoidal jitter, and r, sinusoidal interferers, and de interferer 1, sinusoidal ar generator" nusoidal amplitude interfere generator"	Gaussian noise I Gaussian noise mplitude interfer r 1, sinusoidal a	e generator" e generator turned off" rer 2, sinusoidal jitter, amplitude interferer 2,

Cl 95 SC 95.8.2 P123 L32 # [02:20] Dave, Piers J G Melanox Technologie Melanox Technologie Dave, Piers J G Melanox Technologie Comment Type T Comment Status A Comment Type Tit to the sinusoidal interferers and plot de the SL is right, the results will wary (by about 0.05/sqrt(2) UP) from 10 MHz to 10 LB, so this isn't good advice. Comment Type Tit Comment Status A The death says that the instantaneous bit shrinkage introduced by sinusoidal amplitude interferer 1. shrubcide a more of the other. Suggested/Remady Change 'within the 10 MHz to 10 Lines LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in table 95-11." to "between 50 MHz and 10 times LB as defined in table 95-11." to "between 50 MHz and 10 times LB as defined in table 95-11." to "between 50 MHz and 10 times LB as defined in the sinusoidal amplitude interferers no. Cl 95 SC 95.8.8.2 P123 L 37 # [02:20] Comment Type E Comment Status A Response Response is a comment 102-35 Suggested/Remady Melanox Technologie Comment Type E Comment Type I Comment Type I Carges thid duplicate sentence saying The sinusoidal amplitude interferers no. Sc 95.8.8.2		
Dawe, Piers J G Mellanox Technologie Comment Type T Comment Status A This says "When calibrating the conformance signal, the sinusoidal jitter frequency should be within the 10 MHz to 10 times LB as defined in Table 95-11." If one is calibrating for SC, Q2 and A, and the amplitude of the 511." TR Comment Type TR Comment Transatanaeous bit shrinkage introduced by sinusoidal amplitude interferer 1 should be no more than 0.1 UI. but there is no such advice for instantaneous bit shrinkage introduced by sinusoidal amplitude interferer 2, or the combination, and its not clear to me that one is more critical than the other. SuggestedRemedy Change "within the 10 MHz to 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." to "between 50 MHz and 20 MEZ a	C/ 95 SC 95.8.8.2 P 123 L 32 # r02-28	C/ 95 SC 95.8.8.2 P 123 L 40 # r02-30
Comment Type T Comment Status A This says "When calibrating the conformance signal, the sinusoidal jitter frequency should be within the 10 MHz to 10 Inters LB as defined in Table 95-11." If one is calibrating for SEC, J2 and J4, and the amplitude of the SJ is right, the results will vary (by about 0.05/sqt[2]. UP) from 10 MHz to 10 to Its, bas as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." Corporent Type E Comment Status A Response Kalus C ACCEPT IN PRINCIPLE. Suggested Remedy: Sea is an arready said this ensinusoidal amplitude interferers 1, sinusoidal amplitude interfe	Dawe, Piers J G Mellanox Technologie	Dawe, Piers J G Mellanox Technologie
The says "When calibrating the conformance signal, the sinusoidal jitter frequency should be within the 10 MHz to 10 times LB as defined in Table 95-11.* It one is calibrating for 0.05/sqrt(2) U1?) from 10 MHz to 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 10 times LB as defined in Table 95-11.* to "between 50 MHz and 20	Comment Type T Comment Status A	Comment Type TR Comment Status A
SuggestedRemedy Change "within the 10 MHz to 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." Change to "The instantaneous bit shrinkage introduced by either sinusoidal amplitude interferers found be no more than 0.1 UL". Check that 0.1 is compatible with the SEC and jitter numbers. If there is a problem, consider allowing more SJ. CCEPT. Ci 95 SC 95.8.8.2 P 123 L 37 # (02-29) Dawe, Piers J G Mellanox Technologie Comment Type E Comment Status A Repetition 58.8.1 has aready said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal interferers, the sinusoidal interferers, the sinusoidal interferers, the sinusoidal amplitude interferer 2, sinusoidal amplitude interferer 2, sinusoidal amplitude interferer 2, sinusoidal amplitude interferer 2, sinusoidal amplitude interferers, the sinusoidal interferers, the sinusoidal amplitude interferers, the sinusoidal amplitude interferer 2, sinusoidal amplitude interferers, the sinusoidal amplitude interferers, the sinusoidal interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal amplitude interferer 1 should be taken to avoid harmonic	This says "When calibrating the conformance signal, the sinusoidal jitter frequency should be within the 10 MHz to 10 times LB as defined in Table 95-11." If one is calibrating for SEC, J2 and J4, and the amplitude of the SJ is right, the results will vary (by about 0.05/sqrt(2) UI?) from 10 MHz to 10 x LB, so this isn't good advice.	The draft says that the instantaneous bit shrinkage introduced by sinusoidal amplitude interferer 1 should be no more than 0.1 UI, but there is no such advice for instantaneous bit shrinkage introduced by sinusoidal amplitude interferer 2, or the combination, and it's not clear to me that one is more critical than the other.
Change "within the 10 MHz to 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11." Response Response Status C ACCEPT. C1 95 SC 95.8.8.2 P 123 L 37 # [r02-29] Dawe, Piers J G Mellanox Technologie Comment Type E Comment Status A Repetition: 95.8.8.1 has already said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal interferers, the sinusoidal interferers, the sinusoidal jitter, the signaling rate, and the pattern repetition rate.", with: P 123 L 49 # [r02-31] "Sinusoidal amplitude interferer 2, sinusoidal jitter, and the Gaussian noise are added." Comment Type E Comment Status A Mellanox Technologie C1 95 SC 95.8.8.2 P 123 L 49 # [r02-31] Dave, Piers J G Mellanox Technologie "Sinusoidal amplitude interferer 2, sinusoidal jitter, and the Gaussian noise are added." C 95 SC 95.8.8.2 P 123 L 49 # [r02-31] Cl 95 SC 95.8.8.2 P 123 L 49 # [r02-31] Dave, Piers J G Mellanox Technologie "Sinusoidal amplitude interferer 3, sinusoidal jitter, the signaling rate, and the pattern repetition rate.", with: Comment Type E Comment Type E Comment Status A Buc Detere The sinusoidal inte	SuggestedRemedy	SuggestedRemedy
Response Response Status C ACCEPT. C1 95 SC 95.8.8.2 P 123 L 37 # 102-29 Dawe, Piers J G Mellanox Technologie Comment Type E Comment Status A Repetition: 58.8.8.1 bas already said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. SuggestedRemedy Repetition: 58.8.8.1 Among Technologie [Editor's note added after comment r02-35 was: ACCEPT IN PRINCIPLE. See response to Comment r02-35 was: ACCEPT. SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal interferers may be set at any frequency between the sinusoidal interferer 2, sinusoidal jitter, the signaling rate, and the pattern repetition rate." P 123 L 49 # 102-31 C/ 95 SC 95.8.8.2 P 123 L 49 # 102-31 Dawe, Piers J G Mellanox Technologie Comment Type E Comment Type E Comment Status A Buc "Sinusoidal amplitude interferer 1, sinusoidal amplitude interferer 2, sinusoidal jitter, and the gattern repetition rate." C 95 SC 95.8.8.2 P 123 L 49 # 102-31 Dawe, Piers J G Comment Type E Comment Type E Comment Type E Comment Type E <td< td=""><td>Change "within the 10 MHz to 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11."</td><td>Change to "The instantaneous bit shrinkage introduced by either sinusoidal amplitude interferer should be no more than 0.1 UI.". Check that 0.1 is compatible with the SEC an itter numbers. If there is a problem consider allowing more S.</td></td<>	Change "within the 10 MHz to 10 times LB as defined in Table 95-11." to "between 50 MHz and 10 times LB as defined in Table 95-11."	Change to "The instantaneous bit shrinkage introduced by either sinusoidal amplitude interferer should be no more than 0.1 UI.". Check that 0.1 is compatible with the SEC an itter numbers. If there is a problem consider allowing more S.
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Cl 95 SC 95.8.8.2 P 123 L 37 # [102-29] Dawe, Piers J G Mellanox Technologie See response to comment 702-35 Comment Type E Comment Status A Repetition: 95.8.8.1 has already said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. See response to comment 702-35 SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal interferer 2, sinusoidal jitter, and the Gaussian noise are added." P 123 L 49 # [02-31] Response Response Status C Mellanox Technologie Comment Type E Comment Status A Response Response Status C Mellanox Technologie Mellanox Technologie Cl 95 SC 95.8.8.2 P 123 L 49 # [02-31] Dave, Piers J G Mellanox Technologie Comment Type E Comment Type E Comment Type E Comment Status A Buc Response Response Status C A CECEPT IN PRINCIPLE. Delete "The sinusoidal amplitude interferers, the signaling rate, and the pattern repetition rate." Two paragraphs above, the recipe says that "Any remaining SEC must be created with a	ACCEPT.	
Dawe, Piers J G Mellanox Technologie Comment Type E Comment Status A Repetition: 95.8.1 has already said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. SuggestedRemedy See also comment T02-35 was: SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal amplitude interferer 2, sinusoidal jitter, the signaling rate, and the pattern repetition rate.", with: Image: Comment Status P 123 L 49 # [102-31] Comment Type E Comment Status A Buck Response Response Status C Mellanox Technologie Comment Type E Comment Status A Delete "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships betw	CI 95 SC 95.8.8.2 P 123 L 37 # r02-29	See response to comment r02-35
Comment Type E Comment Status A Repetition: 95.8.1 has already said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. The response to Comment 102-35 was: ACCEPT. SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal interferer 2, sinusoidal jitter, the signaling rate, and the pattern repetition rate." The response to Comment 102-35 was: ACCEPT. See also comment 30 with Suggested Remedy: Delete the sentence, "The instantaneous bit shrinkage introduced by sinusoidal amplitude interferers, the sinusoidal jitter, the signaling rate, and the pattern repetition rate." P 123 L 49 # [r02-31] C/ 95 SC 95.8.8.2 P 123 L 49 # [r02-31] Dawe, Piers J G Mellanox Technologie Buc Response Response Status C ACCEPT IN PRINCIPLE. Delete "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal jitter, the signaling rate, and the pattern repetition rate." Comment Type E Comment Status A Buc Wellanox Technologie SuggestedRemedy Est sources for the other lanes are	Dawe, Piers J G Mellanox Technologie	[Editor's note added after comment resolution completed.
any including bottom for the binusoidal interference, the sinusoidal interference, with: Cl 95 SC 95.8.8.2 P 123 L 49 # r02-31 harmonic relationships between the sinusoidal amplitude interference, with: "Sinusoidal amplitude interference, sinusoidal jitter, and the Gaussian noise are added." Cl 95 SC 95.8.8.2 P 123 L 49 # r02-31 Response Response Status C C ACCEPT IN PRINCIPLE. Delete "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal jitter, the signaling rate, and the pattern repetition rate." Cl 95 SC 95.8.8.2 P 123 L 49 # r02-31 Two paragraphs above, the recipe says that "Any remaining SEC must be created with a Cl 95 SC 95.8.8.2 P 123 L 49 # r02-31	Repetition: 95.8.8.1 has already said this sentence, and entry 3 in this list is longer than desirable. But, the recipe doesn't say to turn the sinusoidal interferers on. SuggestedRemedy Replace this duplicate sentence saying "The sinusoidal amplitude interferers may be set at any frequency between 100 MHz and 2 GHz, although care should be taken to avoid	ACCEPT. See also comment 30 with Suggested Remedy: Delete the sentence, "The instantaneous bit shrinkage introduced by sinusoidal amplitud interferer 1 should be no more than 0.1 UI."]
rate, and the pattern repetition rate.", with: "Sinusoidal amplitude interferer 1, sinusoidal amplitude interferer 2, sinusoidal jitter, and the Gaussian noise are added." Response Response Status C ACCEPT IN PRINCIPLE. Delete "The sinusoidal amplitude interferers may be set at any frequency between the sinusoidal interferers, the sinusoidal jitter, the signaling rate, and the pattern repetition rate." Two paragraphs above, the recipe says that "Any remaining SEC must be created with a	harmonic relationships between the sinusoidal interferers, the sinusoidal jitter, the signaling	C/ 95 SC 95.8.8.2 P 123 L 49 # r02-31
Sinusoidal amplitude interferer 1, sinusoidal amplitude interferer 2, sinusoidal jitter, and the Gaussian noise are added." Comment Type E Comment Status A Buc Response Response Status C Est sources for the other lanes is set SuggestedRemedy test sources for the other lanes are set SuggestedRemedy test sources for the other lanes are set SuggestedRemedy test sources for the other lanes are set Response Status C C MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal interferers, the sinusoidal jitter, the signaling rate, and the pattern repetition rate." Response Response Status C C C Two paragraphs above, the recipe says that "Any remaining SEC must be created with a C ACCEPT. C	rate, and the pattern repetition rate.", with:	Dawe, Piers J G Mellanox Technologie
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MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal interferers, the sinusoidal jitter, the signaling rate, and the pattern repetition rate." Two paragraphs above, the recipe says that "Any remaining SEC must be created with a Two paragraphs above, the recipe says that "Any remaining SEC must be created with a	Delete "The sinusoidal amplitude interferers may be set at any frequency between 100	test sources for the other lanes are set
Two paragraphs above, the recipe says that "Any remaining SEC must be created with a	MHz and 2 GHz, although care should be taken to avoid harmonic relationships between the sinusoidal interferers, the sinusoidal jitter, the signaling rate, and the pattern repetition rate."	Response Response Status C ACCEPT.
combination of sinusoidal jitter, sinusoidal interference, and Gaussian noise."	Two paragraphs above, the recipe says that "Any remaining SEC must be created with a combination of sinusoidal jitter, sinusoidal interference, and Gaussian noise."	

C/ 95 SC 95.8.8.1 P 121 L 33 # [r02-32] Petrilla, John Avago Technologies Avago Technologies P	C/ 95 SC 95.8.8.2 P 123 L 7 # [r02-33] Petrilla, John Avago Technologies Avago Technologies P 123 L 7 P 123 L 7
Comment Type E Comment Status A	Comment Type TR Comment Status D
The comment, "should have a frequency response that results in the appropriate level of stressed eye closure (SEC) before the sinusoidal terms are added." is not helpful and m very well be frustrating to the reader since the "appropriate level of stress" has not yet been defined. The frustration can be removed by deleting the sentence or by adding a reference to the subclause that provides guidance to the "appropriate level of stress"	If This sentence defines SEC with M set to zero resulting in a higher level of stress required to reach the SEC value. The constituents of M are noise due to partial mode coupling (Pmn) and mode partition noise (Pmpn). Since Pmn and Pmpn are captured in the stressed receiver sensitivity value (= Min OMA at max TDEC - (insertion loss + Pmpn + Pmn + Prin + Pcross/2)), including Pmn and Pmpn in the SEC stress is double counting these penalties.
Delete the sentence, "The low-pass filter, when combined with the E/O converter, should	SuggestedRemedy
have a frequency response that results in the appropriate level of stressed eye closure (SEC) before the sinusoidal terms are added." or change it to "The low-pass filter, when combined with the E/O converter, should have a frequency response that results in the level of stressed eye closure (SEC) before the sinusoidal terms are added per the instructions in 95.8.8.2."	Change, " except that the combination of the O/E and the oscilloscope used to measure the waveform has a fourth-order Bessel-Thomson filter response with a bandwidth of 19.34 GHz, and the value of M in Equation (95-3) is set to zero." to " except that the combination of the O/E and the oscilloscope used to measure the waveform has a fourth-order Bessel-Thomson filter response with a bandwidth of 19.34
Response Response Status C	GHz."
ACCEPT IN PRINCIPLE.	Proposed Response Response Status Z
Change:	REJECT.
"The low-pass filter, when combined with the E/O converter, should have a frequency response that results in the appropriate level of stressed eye closure (SEC) before the sinusoidal terms are added." to:	This comment was WITHDRAWN by the commenter.
"The low proof filter when combined with the $\Gamma(0)$ converter, chould have a frequency	

"The low-pass filter, when combined with the E/O converter, should have a frequency response that results in the level of stressed eye closure (SEC) before the sinusoidal and Gaussian noise terms are added, as described in 95.8.8.2."

CL 05	SC 05 9 9 2	D 1 12	1 20	# 102.24		50	05 7 2	DAAE	1.26	# 102.26
Petrilla. John	30 33.0.0.2	Avago Techn	ologies	# 102-34	Petrilla. Jo	nn se s	JJ.1.2	F 115 Avado Tec	hnologies	# 102-30
Comment Tv	vpe T	Comment Status A		Bucket	Comment	Tvpe	TR	Comment Status A		
To be ali should b selection	igned with the la be included in the of the appropri	ast sentence of 95.8.8.1 and e statement, " at least 2.5 ate bandwidth for the low-pa	avoid confusion dB of SEC shou ass filter."	h, the E/O converter ald be created by the	The st values eye m this is	ressed in Tabl ask in T possible	receiver s le 95-7 to able 95-7 e. Values	setup instructions in 95.8.8 be met "simultaneously w 7". Unfortunately, results h s for J2 and J4 appear mos	and 95.8.8.2 c hile also passing have not yet been at suspect	all for SEC, J2 & J4 the stressed receiver presented to show that
Change	"at least 2.5 d	B of SEC should be created	l by the selectio	n of the appropriate	Suggested	Remed	'y			
bandwid selectior converte	th for the low-pan of the appropri	ass filter." to " at least 2.5 of ate bandwidth for the low-pa	dB of SEC shou ass filter combin	Id be created by the ed with the E/O	Chang inform contrib	e the va ation av utions.	alues in T vailable at	Table 95-7 for J2, J9 and it t the time. See petrilla_01.	f, needed, SEC to _1114_optx and o	align with the best other relevant
Response		Response Status C			Response			Response Status C		
ACCEPT Change bandwid	IN PRINCIPLE "at least 2.5 d th for the low-pa	E. B of SEC should be created ass filter."	l by the selectio	n of the appropriate	ACCE See re	PT IN F sponse	RINCIPL to comm	.E. nent r02-37		
to ". at leas for the co	at 2.5 dB of SEC ombination of th	should be created by the se le low-pass filter and E/O co	election of the a nverter."	ppropriate bandwidth	[Editor The re ACCE	s note sponse PT IN F	added aft to Comn RINCIPL	ter comment resolution cor nent r02-37 was: .E.	npleted.	
In 95.8.8 "The low the E/O	3.1, change /-pass filter, whe converter, " to "	en combined with The combination of the low-j	bass filter and E	/O converter"	In Tab TDEC OMA, Launc	e 95-6 each la each la	change: ane (max ne (min) f r in OMA) from 4.9 dB to 4.3 dB from -7 dBm to -6.4 dBm minus TDEC (min) from -7	9 dBm to -7.3 dF	Im
CI 95	SC 95.8.8.2	P 123	L 39	# r02-35	Avera	je launo	ch power,	, each lane (min) from -9 d	Bm to -8.4	
Petrilla, John Comment Ty Since the signal) a measura SuggestedR	n <i>tpe</i> TR e test patterns for ire not expected able. <i>emedy</i> pe sentence "TI	Avago Techno Comment Status A or stressed receiver sensitiv to permit pattern lock, insta	ologies ity (3, 5 or valid ntaneous bit sh	100GBASE-SR4 rinkage does not seem	In Tab Averag Stress SEC, I Also c test (m Make	e 95-7 je recei ed rece ane und nange " ax)" wi be cha	change: ve power iver sens der test fr Stressed th editoria	r, each lane (min) from -10 itivity (OMA), each lane (m om 4.9 dB to 4.3 dB eye J4 Jitter, lane under to al license.	.9 dBm to -10.3 aax) from -5.6 dBr est" to "Stressed	n to -5.2 eye J4 Jitter, lane under
interfere	r 1 should be no	more than 0.1 UI."	ge introduced b	y sinusoidal amplitude	http://v	/ww.iee	e802.org	y/3/bm/public/nov14/dawe_	01a_1114_optx.p	df
Response		Response Status C			with ea	litorial I	icense.			
ACCEPT See also	F. comment 30				See al	so com	ments 10	9, 11, 12, 13, 14, 18, 19, 36	j.]	

CI 95 Petrilla, Joh	SC 95.7.1 n	А	P 114 vago Techr	L 41 ologies	# r02-37	<i>Cl</i> 83E Petrilla, Jo	SC 83E.3 .	4.1.1	P 186 Avago Techr	L 31 nologies	# r02-38	
Comment Type TR Comment Status A The max limit for TDEC and the tradeoff between TDEC, min OMA and operating margin would benefit from more data. SuggestedRemedy							Comment Type TR Comment Status D A high loss module stressed input case is defined that adds an additional 3.55 dB of channel loss at 12.89 GHz to account for losses within the host transmitter package. The additional 3.55 dB is higher than needed. A more realistic combination of expected signal attributes of the pattern generator and package insertion loss should be used. SuggestedRemedy Change the value 13.8 dB in , " frequency dependent attenuation is added such that the loss at 12.89 GHz from the output of the pattern generator to TP1a is 13.8 dB. The 13.8 dB loss represents" to 11.7 dB. See petrilla .02 1114 optx for details.					
Reconsider values for max TDEC and min OMA based on best information at the time. See petrilla_01_1114_optx and other relevant contributions. Response Response Status C ACCEPT IN PRINCIPLE.												
In Table 95-6 change: TDEC, each lane (max) from 4.9 dB to 4.3 dB OMA, each lane (min) from -7 dBm to -6.4 dBm Launch power in OMA minus TDEC (min) from -7.9 dBm to -7.3 dBm Average launch power, each lane (min) from -9 dBm to -8.4						Proposed REJEC This co	Proposed Response Response Status Z REJECT. This comment was WITHDRAWN by the commenter.					
In Table Average Stresse SEC, la Also ch test (ma	e 95-7 change: e receive power d receiver sens ne under test fr ange "Stressed ax)" with editoria	r, each lane (min) itivity (OMA), eac om 4.9 dB to 4.3 eye J4 Jitter, lar al license.) from -10.9 ch lane (ma: dB ne under tes	dBm to -10.3 k) from -5.6 dBm t" to "Stressed ey	to -5.2 ve J4 Jitter, lane under							
Make th http://w with edi	ne changes sho ww.ieee802.org torial license.	wn on page 3 of J/3/bm/public/nov	14/dawe_01	la_1114_optx.pd	f							
See als	o comments 10), 11, 12, 13, 14,	18, 19, 36.									