C/ FM	SC FM	P12	L 20	# I-1		C/ FM	SC FM	P 12	L 22	# 1-3	
Lewis, Jor	ı	Dell EMC				Lewis, Jon		Dell EMC			
Comment IEEE	<i>Type</i> E Std 802.3ch has	Comment Status A s been published.			bucket	Comment T Amenc	<i>Type</i> E Iment number	Comment Status A			bucket
Suggestee Chang	<i>dRemedy</i> ge "IEEE Std 80)2.3ch™-20xx" to "IEEE Std 80)2.3ch™-2020"			Suggested Add "A	Remedy mendment 8	" where "" is an em-dash			
Response ACCE	PT.	Response Status C				Response ACCE	PT IN PRINCI	Response Status C			
C/ FM	SC FM	P 12	L 38	# I <u>-2</u>		IEEE S	Std 802.3ch™.	-2020 has been assigned Ame	ndment 8.		
Lewis, Jor	ı	Dell EMC				Chang	ing the beginr	ing of the description of IEEE S	Std 802.3ch™-2020		
Comment	<i>Type</i> E Std 802 3cr is c	Comment Status A	the publication (order hut is missing	bucket	from: "This a	imendment in	cludes changes to"			
from t	he list of amme	ndments.			9	to: "Amon	dmont 8 Thi	s amondmont includos chango	s to "		
Suggestee	dRemedy					Amen			5 10		
Add "I	EEE Std 802.30	cr™-20xx	3 2018 and ad	de Annox I This		C/ FM	SC FM	P 12	L 28	# <u>1-4</u>	
amen	dment	dues changes to ILLE Stu 602	.5-2016 and add	us Annex J. This		Lewis, Jon		Dell EMC			
replac "Inform	es references to	o the IEC 60950 series of stan	dards (including	IEC 60950-1		Comment	<i>l ype</i> E	Comment Status A			bucket
equipi	ment—Safety—	99 Part 1: General requirements") with appropriat	te references to the	EC	Currented		is missing			
62368 "Audio	} /video_informa	tion and communication techn		t" series and make		Suggested Add "A	mendment 9	" where "" is an em-dash			
appro	priate		ology equipment		5	Boononoo					
chang	es to the standa	ard corresponding to the new r	eferences."			ACCE	PT IN PRINCI	PLE.			
IEEE	Std 802.3crTM-	20xx Amendment 10 This a	mendment inclu	ides changes to IE	EE	IEEE S	Std 802.3ca™.	-2020 has been assigned Amer	ndment 9.		
Std 80)2.3-2018 and a	adds Annex J. This amendmen	t replaces refere	ences to the IEC 60	0950	Chang	ina the beainr	ing of the description of IEEE S	Std 802 3ca™-2020		
equipi	ment—Safety—	Part 1: General requirements") with appropriat	te references to the	EC	from:					
62368	8 "Audio/video, i	nformation and communication	technology equ	uipment" series and	d	"This a to	imendment in	cludes changes to"			
amen	dment includes	changes to IEEE Std 802.3-20	18 and adds Ar	nnex J. This amend	Iment	"Amen	dment 9—Thi	s amendment includes change	s to"		
replac	es references to	o the IEC 60950 series of stan	dards (including	IEC 60950-1							
appro	priate reference	es to the IEC 62368 "Audio/vide	eo, information a	and communication	n						
techno	ology equipmen	t" series and makes appropria	te changes to th	ne standard							
Response	sponding to the	Response Status									
ACCF		PLE.									
Resol	ve using the res	sponse to comment I-16									

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/ 00 SC 0 P12 L20 # 1-5 C/ FMSC FM P1 L30 # 1-8 Maguire, Valerie The Siemon Company Grow, Robert **RMG** Consulting Comment Type E Comment Status A bucket Comment Type E Comment Status A bucket 802.3ch has published. IEEE Std 802.3ch-2020 is now published. P802.3cr has been assigned amendment number 10. SuggestedRemedv SuggestedRemedy Replace, "802.3ch-20xx" with, "802.3cq-2020" and insert "Amendment 8-" before "This Change "IEEE Std 802.3ch-20xx" to "IEEE Std 802.3ch-2020". Add "IEEE Std 802.3cramendment..." on line 22 20xx" to the end of the list and appropriately move the "and". Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Resolve using the response to comment i-3 SC FM P3/ 5 C/ FM # 1-9 C/ 00 SC 0 P12 1 28 # 1-6 Grow. Robert **RMG** Consulting Maguire, Valerie The Siemon Company Comment Type E Comment Status A bucket Comment Type E Comment Status A bucket Per the 802.3 list of terms, "Energy-Efficient Ethernet" should be hyphenated. Missing some template text. SuggestedRemedy SuggestedRemedy "Energy-Efficient Ethernet". Also fix on p. 63, lines 38 and 47. Insert "Amendment 9-" before "This amendment...". Response Response Status C Response Response Status C ACCEPT. ACCEPT. C/ FM SC FM P1 / 31 # I-10 C/ FM SC FM P1 L10 # 1-7 Grow, Robert **RMG** Consulting Grow, Robert RMG Consulting Comment Status A Comment Type E bucket Comment Type E Comment Status A bucket PHY is not the acronym for Physical Layer, it is the acronym for Physical Layer Device. I think Mr. Law has assigned this project an amendment number. SuggestedRemedy SuggestedRemedy Delete "(PHY)". Amendment 11 Response Response Status C Response Response Status C ACCEPT ACCEPT IN PRINCIPLE. This project has been assigned Amendment 11. Change: "Draft Standard for Ethernet Amendment:" to: "Draft Standard for Ethernet Amendment 11:"

IEEE P802.3cu D3.0 100 Gb/s per wavelength on SMF Initial Sponsor ballot comments

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/ FM SC FM P3L1 # I-11 C/ FMSC FM P12 L26 # I-14 **RMG** Consulting Grow, Robert **RMG** Consulting Grow, Robert Comment Type E Comment Status A bucket Comment Type E Comment Status R bucket PHY is not the acronym for Physical Layer, it is the acronym for Physical Layer Device. Until published, the reference year should be incomplete. SugaestedRemedv SugaestedRemedv Delete "(PHY)". Change "2020" to "20xx". Response Response Response Status C Response Status C ACCEPT. REJECT. Based on the email below from David Law, "IEEE Std 802.3ca" has been published, and SC FM P12 C/ FM L20 # I-12 therefore the correct reference is "IEEE Std 802.3ca-2020". RMG Consulting Grow, Robert Comment Type E Comment Status A bucket -----Original Message-----From: Law, David <dlaw@HPE.COM> This amendment is no published. Sent: Thursday, June 25, 2020 8:14 AM To: STDS-802-3-EDITORS@LISTSERV.IEEE.ORG SuggestedRemedy Subject: [802.3 EDITORS] IEEE 802.3 amendment order Change "IEEE Std 802.3ch-20xx" to "IEEE Std 802.3ch-2020". Response Response Status C Dear all. ACCEPT. I wanted to let you all know that I've update the amendment order in the document <https://docs.google.com/spreadsheets/d/1mcLQWGYugZJB4W6H7jGEH-fbgpc-C/ FM SC FM P12 L22 # I-13 ifl4ia3DhOPvJsY/edit#gid=0> based on current project status as shown below. This is based on conditional approval for IEEE P802.3cu to proceed to Standards Association Grow. Robert **RMG** Consulting ballot, IEEE P802.3cp, IEEE P802.3ct and IEEE P802.3cv entering initial Working Group Comment Type E Comment Status A bucket ballot, and my estimate of where these and other projects are. This amendment has a number Best regards, SuggestedRemedy David Insert "Amendment 8 --" Response ____ Response Status C ACCEPT. Amendment 8: IEEE Std 802.3ch-2020 Approved Amendment 9: IEEE Std 802.3ca-2020 Approved Amendment 10: IEEE Std 802.3cr-20xx Draft D3.0 Amendment 11: IEEE Std 802.3cu-20xx Draft D2.2 Amendment 12: IEEE Std 802.3cp-20xx Draft D2.0 Amendment 13: IEEE Std 802.3ct-20xx Draft D2.0 Amendment 14: IEEE Std 802.3cv-20xx Draft D2.0 Amendment 15: IEEE Std 802.3cs-20xx Draft D1.0 Amendment 16: IEEE Std 802.3ck-20xx Draft D1 2 Amendment 17: IEEE Std 802.3cw-20xx

IEEE P802.3cu D3.0 100 Gb/s per wavelength on SMF Initial Sponsor ballot comments

SORT ORDER: Comment ID

C/ FM	SC	FM	P 12	L 28	# I <u>-</u> 15	C/ 140	SC 1	140.8.1	P 52	L 38	# <u>I-</u> 17
Grow, Rol	pert		RMG Consulting]		Grow, Rob	ert		RMG Consul	ting	
<i>Comment</i> This a	<i>Type</i> amendr	E nent has a r	Comment Status A number.		bucket	<i>Comment</i> This s	<i>Type</i> ubclause	T e has no	Comment Status A text.?		bucket (updated 0922)
Suggestee Insert	<i>dRemed</i> "Amen	<i>dy</i> dment 9"				Suggested Delete	<i>Remed</i> the hea	y ading.?			
Response ACCE	e EPT.		Response Status C			Response ACCE	PT IN P	RINCIPL	Response Status C E.		
C/ FM	SC	FM	P 12	L 37	# I-16	Delete	the hea	ading.			
Grow, Rol	pert		RMG Consulting]		C/ 140	SC 1	140.6	P 40	L16	# 1-22
Comment	Туре	Е	Comment Status A		bucket	Dudek, Mi	chael		Marvell		
Becau	use this	draft refere	ences Annex J2 (151.9.1), IEE	E Std 802.3ci	needs to precede this	Comment	Туре	TR	Comment Status A		Interop
assigi	ned Am	endment 10).	nex. And, i o		In 140 chann	.10a.1 tl el loss.	here are This sho	requirements for interoperation	ion for the outp	out power as well as the
Suggeste	dRemed	ay A artin 200	w Amondmont 10 This on	andmont inclu	daa ahangaa ta IEEE	Suggested	Remedy	y			
Std 8	02.3-20 of star	18 and add	s Annex J. This amendment ro uding IEC 60950-1 "Informatic	eplaces refere on technology	ences to the IEC 60950	Chang	je "chan requirer	nel requi ments.	rements" to "Channel and 10	00GBASE-FR1	transmitter average
equip	ment-	Safety—Pa	rt 1: General requirements") w	/ith appropriat	e references to the IEC	Response			Response Status C		
62368 make	3 "Audic s annro	/video, info priate chan	rmation and communication to ges to the standard correspor	echnology equ ding to the ne	upment" series and	ACCE	PT IN P	RINCIPL	E.		
amen replac "Infor appro techn	dment i ces refe mation f priate re ology e	ncludes cha rences to the echnology eferences to quipment" so	anges to IEEE Std 802.3-2018 ne IEC 60950 series of standa equipment—Safety—Part 1: (o the IEC 62368 "Audio/video, series and makes appropriate w references	B and adds Ar rds (including General requir information a changes to th	nex J. This amendment IEC 60950-1 ements") with ind communication e standard	Chang "The 1 chann The 10	je from: 00GBAS el requir 00GBAS	SE-FR1 I rements o SE-LR1 P	PMD interoperates with the defined in 140.10a.1 are met MD interoperates with the 1	100GBASE-DF 00GBASE-DR	PMD provided that the
Response))	g to the not	Response Status C			chann	el requir	ements o	defined in 140.10a.2 are met		
ACCE	EPT.					The 10 chann	00GBAS el requir	E-LR1 P rements o	MD interoperates with the 10 defined in 140.10a.3 are met	00GBASE-FR1 "	PMD provided that the
						to:					
						"The 1 chann	00GBAS el and p	SE-FR1 I ower gui	PMD interoperates with the f delines in 140.10a.1 are met	100GBASE-DF	R PMD provided that the
						The 10 chann	00GBAS el guidel	E-LR1 P lines in 1	MD interoperates with the 1040.10a.2 are met.	00GBASE-DR	PMD provided that the
						The 10 chann	00GBAS el guidel	E-LR1 P lines in 1	MD interoperates with the 1 40.10a.3 are met."	00GBASE-FR1	PMD provided that the
	/toobs:		ED/aditorial required CD/r-	noral require	L Theophysical Floditarial C	annaral			0		Dage 4 of 07

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 1-22

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C/ 140	SC 140.6.1	P 42	L 32	# <u>I-23</u>	C/ 140	SC 140.6.2	P 44	L18	# <u>1-25</u>
Dudek, M	ichael	Marvell			Dudek, Mic	nael	Marvell		
Comment	Туре Е	Comment Status A		bucket (updated 0924)	Comment 7	<i>уре</i> Т	Comment Status R		bucket
It doe	s not say at what	point the figure and text sho	uld be inserted		There is	s an erroneou	s footnote reference "e" on the	receiver sensit	tivity row. (These aren't
Suggeste	dRemedy				test cor	nditions).			
Add "	at the end of sect	tion 140.6.1"			Suggested	Remedy			
Response	9	Response Status C			Delete	the footnote re	eference		
ACCE	EPT IN PRINCIPI	.Е.			Response REJEC	т.	Response Status C		
Imple	ment the sugges	ted remedy with editorial licer	ise.		lt's not	an "e" but a "c	" with a strikethrough.		
There impro	e are several insta ved. Review all e	ances in Clause 140 where th diting instructions in Clause	e editing instru 140 and update	ctions could be e if necessary with	C/ 140	SC 140.6.3	P 46	L 32	# 1-26
editor	ial license.				Dudek, Mic	hael	Marvell		
C/ 140	SC 140.6.2	P 43	L 32	# I-24	Comment 7	ype E	Comment Status A	uld be inserted	bucket (updated 0924)
Dudek, M	ichael	Marvell			Currented	Demostry at Wite	at point the lighte and text sho		•
Comment It doe	<i>Type</i> E s not say at what	Comment Status A point the figure and text sho	uld be inserted	bucket (updated 0924)	Add "at	the end of se	ction 140.6.3"		
Suggeste	dRemedy				Response		Response Status C		
Add "	at the end of sect	tion 140.6.2"			ACCEF	T IN PRINCIP	PLE.		
Response ACCE	e PT IN PRINCIPI	Response Status C E.			Implem	ent the sugge	sted remedy with editorial licer	nse.	
Imple	ment the sugges	ted remedy with editorial licer	ıse.		There a improve editoria	re several ins ed. Review all I license.	tances in Clause 140 where th editing instructions in Clause	e editing instru 140 and update	ctions could be if necessary with
There impro editor	e are several insta ved. Review all e ial license.	ances in Clause 140 where the diting instructions in Clause	e editing instru 140 and update	ctions could be if necessary with					

C/ 140	SC	140.7.5a	P 50	L 7	# I <u>-</u> 27	C/ 140	SC	140.7.10		P 52	L 23	# <u>-</u> 28
Dudek, Mic	chael		Marvell			Dudek, Mic	hael		Μ	arvell		
Comment There	<i>Type</i> is only	T one lane fo	Comment Status A		bucket (updated 0922)	Comment The RI	<i>Type</i> Nx doe	T es not have	<i>Comment Sta</i> to meet the red	<i>itus</i> A juirements	for all of the Phy	<i>measurement method</i> ys just the one being
Suggested Delete	IRemed of ea	<i>ly</i> ch lane"				tested. <i>Suggested</i> Chang	<i>Remed</i> e "for 1	ly 00GBASE	E-DR,			
Response ACCE	PT IN I	PRINCIPLE	Response Status C			100GE Response	ASE-F	R1, and 10	00GBASE-LR1.' Response Sta	' to "for the <i>tus</i> C	e PHY under test	."
In addi 140 7	ition to	140.7.5a, t	he comment and suggeste	ed remedy also	apply to 140.7.5b and	ACCE	PT IN F	PRINCIPLE	, Е.			
In 140.7	.7.5a:					Delete "for 10	the foll 0GBAS	lowing text SE-DR,100	t from the 2nd ite)GBASE-FR1, a	em in the li nd 100GB/	ist: ASE-LR1."	
- Chan limits .	ige the " to "	start of the FECQ shall	second sentence from "T be within the limits"	he TECQ of ea	ch lane shall be within the	C/ 140	SC	140.7.10		P 52	L 35	# 1-29
- Chan …" to '	ige the "TECQ	start of the is measure	third sentence from "The	IECQ of each	lane shall be measured	Dudek, Mic	hael Tvpe	TR	M Comment Sta	arvell htus A		measurement method
In 140 Chang "The tr Table to: "The tr 140–6 140–1	.7.5b: le the fi ransmit 140–6 140–10 ransmit if mea 0"	rst paragra ter over/und if measured " ter over/und sured using	ph from: der-shoot percentage of ea l using a test pattern spec der-shoot percentage shal a test pattern specified fo	ach lane shall l ified for transm I be within the l or transmitter o	be within the limits given in itter over/under-shoot in limits given in Table ver/under-shoot in Table	The ov more t Suggested Add ar over/ur Response ACCE	ershoo han this <i>Remed</i> additio ndersho PT IN F	t/undersho s would ov dy onal bullet. oot does n PRINCIPLE	oot for the FR1/L /er-stress it. . "For 100GBAS ot exceed the va <i>Response Sta</i> E.	R1 transm E-FR1 an Ilue specif <i>tus</i> C	nitters is limited. d 100GBASE-LF ied in table 140-6	Testing a receiver with R1 the transmitter 6 for the PHY under test".
In 140 Chang	.7.5c: e the f	rst paragra	ph from:			See re	sponse	e to I-81. added afte	er the comment	was closer	d-	
"The tr 140–6 Table	ansmit if mea 140–10	ter peak-to- sured using)"	peak power of each lane a test pattern specified fo	shall be within or transmitter p	the limits given in Table eak-to-peak power in	For ref	erence	, the respo	onse to commen	t i-81 is co	pied here:	
to: "The tr	ansmit	ter peak-to	-peak power shall be withi	n the limits give	en in Table 140–6 if	ACCE	PT IN F	PRINCIPLE	E.			
measu	ired us	ing a test p	attern specified for transm	itter peak-to-pe	eak power in lable	Implen https:// order c	nent the www.ie of the la	e changes eee802.org ast two exc	captured in slid g/3/cu/public/Sep ceptions, with ed	e 9 of ot20/lewis_ itorial licen	_3cu_01a_09152 ise.	0.pdf, swapping the
						See co]	mment	t I-90 for e	quivalent chang	es to 151.8	8.13.	
TYPE: TR/ COMMEN	(technic T STAT	cal required	ER/editorial required GF atched A/accepted R/rej	R/general requi ected RESP	red T/technical E/editorial G ONSE STATUS: O/open W/v	′general /ritten C/closed	U/uns	satisfied Z	/withdrawn	Comr	ment ID 1-29	Page 6 of 27 10/6/2020 1:31

C/ 151	SC 151.7.3	P 75	L 21	# <u>1-</u> 30	C/ 151	SC 1	151.11.2.1	P88	L 29	# <u>1-</u> 32
Dudek, M	ichael	Marvell			Dudek, Mi	chael		Marvell		
Comment	Туре Е	Comment Status A		bucket	Comment	Туре	т	Comment Status A		channel characteristics
Footn them.	otes "a" and "b"	only differ by the name of the	Phy. It would be	better to combine	There be go	is 1.3dE od to poi	3 additiona int out that	l insertion loss allowed in t this can be used for additi	he LR4-6 budo onal connectio	get (table 151-9). It would on loss.
Suggeste	dRemedy				Suggestee	dRemed	'y			
Make chanr and fi	a single footnote nel insertion loss ber attenuation o	e referenced from the paramet is calculated using the maxim f 0.5 dB/km plus an allocatior	ter column. Foo num distance spe n for connection a	tnote to say "The cified in Table 151-6 and splice loss given in	Insert inserti 3.3dB	an extra on can a ."	a sentence also be allo	after the example sentenc ocated to connection loss n	e. Sentence esulting in a to	to say. "The additional tal connection loss of
151.1	1.2.1"				Response			Response Status C		
Response ACCE	, EPT.	Response Status C			ACCE	PT IN P	RINCIPLE			
C/ 151	SC 151.8.5	P 79	L 40	# <u>I-31</u>	Add a alloca	new foc ted to fit	otnote to Ta	able 151-9 to indicate that to ctors or splices, as capture	the additional i	insertion loss can be
Dudek, M	ichael	Marvell			https:/ of rep	/www.ie lacing th	ee802.org/ e referenc	/3/cu/public/Sept20/nicholl_ e to "Table 151-13" with "1	_3cu_02_0929 51.11". and w	20.pdf, with the exception it he exception
Comment	Туре Т	Comment Status R		measurement method					· ,	
The b receiv	andwidth is not e /er for that PHY.	equivalen to any reference rec	eiver. It is the s	pecific reference	C/ 151 Dudek, Mi	SC 1 chael	151.13.4.2	P 93 Marvell	L15	# <u>I-33</u>
Suggeste	dRemedy				Comment	Туре	Е	Comment Status A		PICs (updated 0922)
Chan	ge "equivalent to	a reference receiver" to "equi	ivalent to that of	he reference receiver"	The va	alue/con	nment is w	rong.		
Response	9	Response Status C			Suggested	dRemed	'y			
REJE	CT.				Chang	ge "local	fault" to "t	ransmit fault"		
The te	ext is consistent	with other PMD subclauses, e	e.g., 122.8.5.		Response ACCE	PT IN P	RINCIPLE	Response Status C		
The c projec	oncept of "refere t could improve	nce receiver" is not clear from the wording across multiple P	n this text. A futu MD clauses.	re maintenance	Chang "Sets to: "Sets	ge the va PMD_tra PMD_tra	alue/comm ansmit_fau ansmit_fau	ent for PICS item M6 from It to one if a local fault is d It to one if a local fault is d	etected" etected on an	y transmit lane"

C/ 151	SC 151.13.4.2	P 93	L 18	# 1-34	C/ 151	SC 151.12	P 89	L 34	# <u>1-</u> 36
Dudek, M	ichael	Marvell			Lewis, Dav	vid	Lument	um Inc.	
Comment	Туре Е	Comment Status A		PICs (updated 0922)	Comment	Туре Т	Comment Status	A	interop
The v	alue/comment is w	rong.			Intero to adv	peration betwee ise those who m	n PMDs is not a require	ment. This informa e between different	tion should be informative PMDs.
Suggeste	dRemedy	anaiva fault"			Suggested	dRemedy			
- Chan	ge local fault to r	eceive fault			In the	heading for 151	.12 change "Requireme	nts for interoperatio	on." to "Guidelines for
Response ACCE) EPT IN PRINCIPLE	Response Status C			interop	peration (information	ative).".		
					Remo	ve the word "rec	quirements" from Table	151-16 title.	
Chan "Sets	ge the value/comm PMD_receive_faul	ent for PICS item M7 from: t to one if a local fault is de	tected"		Response ACCE		Response Status (LE.		
"Sets	PMD receive faul	t to one if a local fault is de	tected on any r	eceive lane"					
C/ 140	SC 140.10a	P56	L 45	# <u>1-</u> 35	Chang "Requ	ge the title of 15 irements for inte	1.12 from: eroperation between 400)GBASE-LR4-6 and	400GBASE-FR4"
Lewis, Da	vid	Lumentum In	c.		"Guide	elines for interop	peration between 400GB	ASE-LR4-6 and 40	0GBASE-FR4"
Comment	<i>Type</i> T	Comment Status A	This information	interop	Remo	ve the word "rec	quirements" from the titl	e of Table 151-16.	
to adv	vise those who mig	ht want to interoperate betv	veen different F	MDs.	CI 140	SC 140 7 5	D10	1 42	# 1.27
Suggeste	dRemedy					3C 140.7.3	F 43		# 1-37
In the	headings for 140.7	10a, 140.10a.1, 140.10a.2 a	and 140.10a.3 o	hange "Requirements	Commont			um mc.	manurament method
for int	eroperation." to "In	formative guidance for inter	roperation.". Cl	nange the captions for	Comment	are no referenc	e channels for TDECO f	esting of 100GBAS	F-FR1 or 100GBASE-LR1
insert	ion loss ranges".				at the	linked locations	(121.8.5.2).		
Response	9	Response Status C			Suggested	dRemedy			
ACCE	EPT IN PRINCIPLE				Chang	ge text from ".me	easured using the metho	ods specified in 121	.8.5.1, 121.8.5.2, and
Chan	no the title of 140 1	0.2 from:			121.8.	.5.3" to ".meas	ured using the methods	specified in 121.8.	5.1, 121.8.5.2 for
"Requ	irements for intero	peration between 100GBAS	SE-DR, 100GB	ASE-FR1 and	100GI	BASE-FR1 and	100GBASE-LR1 transm	itters are tested usi	ng optical channels that
100G	BASE-LR1"				meet t	the requirements	s in Table 140-10a. Inse	ert the new Table 1	40-10a in the same format
"Guid	elines for interoper	ation between 100GBASE-	DR, 100GBASE	E-FR1 and 100GBASE-	400GE	BASE-LR4-6 rep	placed by 100GBASE-LF	R1. Change the co	efficient values for
LR1"					minim footno	um and maximu tes with editoria	um dispersion of 100GB al license.	ASE-LR1 from 0.13	8 to 0.23. Change
Remo	ove the word "requi	rements" from the titles of	Table 140-15 a	nd Table 140-16.	Response		Response Status 0	2	
					ACCE	PT IN PRINCIP	PLE.	-	
					Impler https:/ license	ment the change //www.ieee802.c e.	es captured in slides 3 a org/3/cu/public/Sept20/le	nd 4 of wis_3cu_01a_0915	520.pdf, with editorial

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

IEEE P802.3cu D3.0 100 Gb/s per wavelength on SMF Initial Sponsor ballot comments C/ 151 SC 151.3.2 P65 L36 C/ 140 SC 140.9 P54 L23 # 1-38 # 1-41 Lewis, David Lumentum Inc. Lewis, David Lumentum Inc. Comment Type Е Comment Status A bucket (updated 0924) Comment Type E Comment Status A bucket (updated 0924) The use of the word must is deprecated and cannot be used when stating mandatory The use of the word must is deprecated and cannot be used when stating mandatory requirements, must is used only to describe unavoidable situations. requirements, must is used only to describe unavoidable situations. SuggestedRemedy SuggestedRemedy change "must be kept within limits" to "shall be kept within limits". In footnote c, change "system must tolerate" to "system shall tolerate" Response Response Response Status C Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. Change "must be kept within limits" to "are kept within limits" In footnote c, change "system must tolerate" to "system is required to tolerate" C/ 151 SC 151.10 P87 L42 # 1-39 C/ 151 SC 151.1 P63 L40 # 1-42 Lewis. David Lumentum Inc. Lewis. David Lumentum Inc. Comment Type E Comment Status A bucket (updated 0928) Comment Type E Comment Status A bucket (updated 0924) The use of the word must is deprecated and cannot be used when stating mandatory The use of the word must is deprecated and cannot be used when stating mandatory requirements, must is used only to describe unavoidable situations. requirements, must is used only to describe unavoidable situations. SugaestedRemedv SugaestedRemedv In footnote c. change must to shall. In footnote a, change must to shall. Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT IN PRINCIPLE. In footnote c, change "must" to "is required to". In footnote a, change "must behave" to "behaves". C/ 151 SC 151.5.4 L30 # I-40 C/ 140 SC 140.1 P37 L34 P68 # 1-43 Lewis, David Lumentum Inc. Lewis, David Lumentum Inc. Comment Status R Comment Status A Comment Type Е bucket (updated 0924) Comment Type Е bucket (updated 0924) The use of the word must is deprecated and cannot be used when stating mandatory The use of the word must is deprecated and cannot be used when stating mandatory requirements, must is used only to describe unavoidable situations. requirements, must is used only to describe unavoidable situations. SuggestedRemedy SuggestedRemedy change "implementations must " to "implementations should" In footnote a, change must to shall. Response Response Response Status C Response Status C ACCEPT IN PRINCIPLE. REJECT. The sentence uses "must" properly to describe an unavoidable consequence which is In footnote a, change "must behave" to "behaves". actually design guidance (it actually begins, "as an unavoidable consequence... implementations must...")

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/ 140	SC 140.6.1	P 42	L 28	# <u>I-44</u>	C/ 140	SC 14	40.7.5	P 49	L 3 7	# <u>1-</u> 47
Lewis, Da	vid	Lumentum Inc			Maki, Jeffe	ery		Juniper N	letworks, Inc.	
Comment	Туре Е	Comment Status A		bucket (updated 0924)	Comment	Туре	TR	Comment Status A		measurement method
The u requir	ise of the word m rements, must is	ust is deprecated and cannot used only to describe unavoid	be used whe able situatior	n stating mandatory s.	No sul includi	oclause a ng a tabl	ppears e provid	or external-subclause ac ing "Transmitter complia	dition appears for ince channel spe	or "Channel requirements" cifications" for 100GBASE-
Suggeste	<i>dRemedy</i> tnote b. change r	nust to shall.			FR1 a Suggested	nd 100Gi IRemedy	BASE-L	R1.		
Response ACCE	e EPT IN PRINCIPL	Response Status C E.			Add su table p 100GE	ubclause providing BASE-LR	or inser "Transn 1.	t external-subclause add nitter compliance channe	lition for "Channe el specifications"	I requirements" including a for 100GBASE-FR1 and
Chan	ge footnote b to:				Response ACCE	PT IN PR		Response Status C		
"For 1 where extinc Imple	100GBASE-DR1, TDECQ < 1.4 dl tion ratio of < 5 d ment with editoria	the requirement on the OMAc B for an extinction ratio of >= 9 B. " al license (recognizing the fact	outer (min) ap 5 dB or where t that this cha	plies even in the cases TDECQ < 1.1 dB for an nge is modifying existing	See re [Editor	esponse t 's note a	o I-37 dded aft	er the comment was close	sed:	
						lerenee, i	ine reop		oopled here.	
C/ 151	SC 151.9.4	P 86	L 22	# 1-45	ACCE	PT IN PF	RINCIPL	E.		
Lewis, Da Comment The u will is	ivid <i>Type</i> E ise of will is depre only used in state	Lumentum Inc Comment Status A ecated and cannot be used wh ements of fact	en stating m	<i>bucket (updated 0924)</i> andatory requirements,	Impler https:// license]	nent the o /www.iee e.	changes e802.or	captured in slides 3 and g/3/cu/public/Sept20/lew	d 4 of is_3cu_01a_091	520.pdf, with editorial
Suggeste	dRemedy	a "aro mot"			C/ 140	SC 14	40.6.2	P 45	L15	# 1-48
Deenener					Zhang, Bo		_	Inphi Cor	poration	
ACCE	, EPT.	Response Status C			Comment Y axis	<i>Type</i> is listed a	E as OMA	Comment Status A _outer (dBm) whereas th	ne Figure and the	Rx specifications e sub-section is on Rx
C/ 151	SC 151.4	P 66	L 51	# 1-46	Suggostos	vity /Domodu				
Lewis, Da	vid	Lumentum Inc			Suggested	est change	o tho V	avis to Receiver Sensitiv	vity	
Comment	Type E	Comment Status A		bucket (updated 0924)	ouggo	or onling			ity.	
The u will is	ise of will is depre	ecated and cannot be used wh ements of fact	ien stating m	andatory requirements,	This p Response	roposed	change	also applies to page 51 (Response Status C	(Fig 140-5), and	page 74 (Fig 151-4).
Suggeste	dRemedy				ACCE	PT IN PF		E.		
chang typica	ge "these test poin ally accessible"	nts will not typically be access	ible" to "thes	e test points are not	The ac	ctual para	meter c	n the y-axis is listed in T	able 140-7 as "F	Receiver sensitivity
Response	,	Response Status C			(OMAG	outer) (ma	ax). So	it is sensitivity measure	a in OMA abm,	not in average power dBm.
ACCE	EPT.				Chang 5 and	je axis titl Fig 151-4	e to: Re I, with e	ceiver sensitivity(OMAou ditorial license.	uter) (max) (dBm) in Figure 140-2b, Fig 140-
TYPE: TR	R/technical require	ed ER/editorial required GR/g spatched A/accepted R/reject	general requir	ed T/technical E/editorial G/g ONSE STATUS: O/open W/wri	eneral itten C/closec	l U/unsa	tisfied Z	Co Z/withdrawn	omment ID 1-48	Page 10 of 27 10/6/2020 1:31:1

10/6/2020 1:31:10 PM

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/ 140	SC 140.7.5	P 49	L 44	# I-49		CI 78	SC 78.7.4	P 24	L 7	# I-51
Zhang, Bo	0	Inphi Corpora	ation			Ran, Adee		Intel		
Comment	Туре Т	Comment Status R			bucket	Comment	Туре Е	Comment Status R	ng	g instruction (updated 0922)
This p	paragraph ended	with and incomplete phrase,	with the followir	ng exceptions:'		Accord	ding to the style r	manual (18.2.2):		
Suggestee Sugge sectio	dRemedy est complete the on 140.7.5 Transn	exception if any or remove th nitter and dispersion eye clo	nis phrase at the sure for PAM4 (1	end of this paragr DECQ).	aph in	"Chang deletic and	ge shall be used ns) and undersc	when text or tables are b ore (for insertions) should	eing modified; the state of the	erefore, strikethrough (for
Response	;	Response Status C		,		"Insert	shall be used to	add new text, equations	tables, or figures	s in the standard".
REJE	CT.					Here a	n existing table i	s being modified, not a n	ew one inserted.	
This d The e	draft is amending	Clause 140. on p49, line 39 is changing t	he first paragrap	h of 140.7.5.		Also ir 25 80. 26 80	n the following pla 1.4 14 4 42	aces, page/subclause/Lin	e:	
When	using the "chang ed text is identife	ge" editing instruction, delete d by underlining and unchan	d text is identife ged text is left as	d with strikethroug s is. Text that is no	h, t	32 116 33 116	5.1.3 18 5.4 38			
being	changed is not ty	pically imported from the Ci	ause being amm	ended.		Chang	e the instruction	to "change" and underlin	e the new text A	pply in all listed places
The list theref	st of exceptions for there is no ne	ollowing the first paragraph o eed to import them from Clau	of 140.7.5 are no ise 140.	t being changed, a	and	Response		Response Status C		ppiy in an includ placed.
C/ 30	SC 30.5.1.1.	2 <i>P</i> 19	L12	# 1-50		NEJE(51.			
Ran, Adee	Э	Intel				For ta	bles, bringing in	the entire table and using	a "Change" edit	ing instruction is definitely
Comment	Туре Е	Comment Status R		editing ins	truction	(espec	consistent with the consis	e letter of the style manu	al, but is not the	best practice for many
Accor	ding to the style i	manual (18.2.2):		-						
"Chan deletio and "Inser	nge shall be used ons) and undersc t shall be used to	when text or tables are bein ore (for insertions) should be add new text, equations, ta	g modified; there indicated" bles, or figures ir	fore, strikethrough n the standard".	n (for	the st using a been u	yle used in Table an "Insert" editing ised by many pre	78-1, Table 80-1, Table 9 restruction and stating versions of the second stating version of the second statement of the sec	80-5, Table 116- vhere the new rov Iments.	2, and Table 116-6 of ws should be inserted has
Here a	an existing subcla	ause is being modified, not a	new one inserte	ed.						
Suggestee	dRemedy									
Chang	ge the instruction	s to "change" (3 times) and	underline the new	v text.						
Response REJE	e CT.	Response Status C								
The u publis	se of the "Insert" hed amendments	editing instruction in this se s, e.g. 802.3cd, 802.3cm and	ction is consiste I 802.3cn.	nt with previously						
After ı appro existir	reviewing the IEE priate editing ins ng text being mod	E style manual (18.2.2), "Ins truction in this circumstance lified.	ert" still appears , as new text is b	to be the most being added rather	than					
	/technical require	ed FR/editorial required GR	aeneral require	1 T/technical E/e	ditorial G/dene	aral		Co	mment ID 1-51	Page 11 of 27

 TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
 Comment ID I-51
 Page 11 of 27

 COMMENT STATUS: D/dispatched A/accepted R/rejected
 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 10/6/2020 1:31

 SORT ORDER: Comment ID
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10/6/2020 1:31:10 PM

C/ 140	SC 140.1	P 38	L 1	# <u>1-52</u>	C/ 140	SC 140.6.2	P 43	L 38	# <u>1-54</u>
Ran, Adee		Intel			Ran, Adee		Intel		
Comment T Accord	Type E ing to the style	<i>Comment Status</i> R manual (18.2.2):		Editing instruction	Comment T Where	<i>Type</i> E are the new fi	Comment Status A gure and text inserted?		bucket (updated 0924)
"Chang deletion and	ge shall be used ns) and underso	when text or tables are being ore (for insertions) should be	g modified; the indicated"	refore, strikethrough (for	In the r Suggested	next page, Tab R <i>emedy</i>	ble 140-7 is changed but the	re is no corespo	nding editorial instruction.
Insert	shall be used to	add new text, equations, tar	oles, or figures	In the standard".	text. A	d "insert" inst	ruction for the figure.		
Here a applied	figure is being ı l to a figure).	repalced and its title is chang	ed (the "chang	e" instruction can't be	Response ACCE		Response Status C		
Suggested Change in the f	<i>Remedy</i> e the instruction igure.	to "replace" the figure and "o	change" the title	e. Remove the underlines	Implen	ent the sugge	ested remedy with editorial lie	cense.	
Response REJEC	ст.	Response Status C			There a improv editoria	are several ins ed. Review all Il license.	stances in Clause 140 where editing instructions in Claus	the editing instr e 140 and upda	uctions could be te if necessary with
In this existing	subclause the e g figure, and not	editing instruction is making n replacing the figure with a co	ninor changes ompletely new	to the text within an figure.	<i>Cl</i> 140 Ran, Adee	SC 140.6.3	P 46	L 43	# 1-55
An edit approp	ing instruction c riate in this case	f "change" rather than "repla e, and helps the reader identi	ce" would appe fy what has ch	ear to be more anged in the figure (and	Comment T Where	<i>ype</i> E are the new fi	Comment Status A gures and text inserted?		bucket (updated 0924)
This ap	oproach is also o	consistent with previous prac	lice.		Suggested Add to	R <i>emedy</i> the instruction	n "after Table 140-8" or wher	ever it is intende	ed.
C/ 140	SC 140.6.1	P 42	L 32	# I-53	Add the	e numbers of t	he new figures, 140-2c and	140-2d.	
Ran, Adee		Intel			Response		Response Status C		
Comment 7 Where	<i>Type</i> E are the new tab	Comment Status A ble and text inserted?		bucket (updated 0924)	ACCE	PT IN PRINCIE	PLE.		
Suaaested	Remedv				Implen	ent the sugge	ested remedy with editorial lie	cense.	
Add to	the instruction "	after Table 140-6" or wherev	er it is intended	I.	There	are several ins	stances in Clause 140 where	the editing instr	uctions could be
Response ACCEF	PT IN PRINCIPL	Response Status C E.			improv editoria	ed. Review all Il license.	editing instructions in Claus	e 140 and upda	te if necessary with
Add to	the instruction "	after Table 140-6", with edite	orial license.						
There a improv editoria	are several insta ed. Review all e al license.	ances in Clause 140 where th diting instructions in Clause	e editing instru 140 and update	ctions could be a if necessary with					

C/ 140	SC 140.7.9	P 51	L 26	# <u>1-</u> 56	C/ 151	SC 151.5.4	P 68	L10	# <u>1-</u> 57
Ran, Adee		Intel			Huber, Tho	omas	Nokia		
Comment	Туре Е	Comment Status A		bucket (updated 0924)	Comment	Type E	Comment Status R	Sigr	nal Detect (updated 0922)
Is Figu Suggested If no c	ire 140-5 a new <i>IRemedy</i> hange, separate	figure, a replacement, or no o the editorial instruction to tw	change to existin o changes, befor	g figure 140-5? re and after the figure.	The pa paragr the info above	aragraph above ⁻ aphs below the t prmation in the t the table.	Table 151-4 and the final par table) are both providing add able. It would be better to co	agraph of clause itional informatic mbine these intc	e 151.5.4 (two on on how to interpret o a single paragraph,
Response		Response Status C			Suggested	Remedy			
ACCE Impler	PT IN PRINCIPL	.E. ted remedy with editorial lice	nse.		Chang of the 151.5.4	e the paragraph last paragraph a 4.	above Table 151-4 to read a s the third sentence), and de	as shown below lete the last para	(inserting the contents agraph in clause
There improv editori	are several insta red. Review all e al license.	ances in Clause 140 where the	e editing instruc 140 and update i	tions could be f necessary with	SIGNA lanes. of the : in Tabl Variou includi implen amplitt modula power modula 400GE standa <i>Response</i> REJEC	L_DETECT sha The value SIGNAL_DETEC le 151-4. s implementation gude of the ation of the optic of the ated optical sign ASE-R signal is rd imposes no r	all be a global indicator of the CT parameter shall be general ns of the Signal Detect function generate the SIGNAL_DETEC cal signal and implementation al. The PMD receiver is not re being received. This esponse time requirements of <i>Response Status</i> C	presence of opt ated according to ion are permitted CT parameter va as that respond t required to verify on the generation	tical signals on all four o the conditions defined d by this standard, alues in response to the to the average optical o whether a compliant n of the
					This is It is no draft_a	consistent with t clear that the s and making it in	what has been done in previ suggested remedy represents isolation to similar text in oth	ous PMD clauses a improvement	es. to the clarity of the cause confusion
					C/ FM	SC FM	P 12	/ 20	# 1-58
					Trowbridge	Stephen	Nokia	220	# 1-50
					Comment P802.3	<i>Type</i> E Sch has been pu	Comment Status A		bucket
					<i>Suggested</i> Chang	<i>Remedy</i> e IEEE Std 802.	3chTM-20xx to IEEE Std 802	2.3chTM-2020	
					Response ACCE	PT.	Response Status C		

C/ 140	SC 140.6.3	P 46	L 46	# <u>1-</u> 59	C/ 140	SC 140.6.2	P 44	L 9	# <u>I-</u> 61
Stassar, F	eter	Huawei Techr	nologies Co. Ltd		Sommers	Scott	Molex Incorp	oorated	
Comment	Type E	Comment Status R	pow	er budget [updated 0924)	Comment	Туре Т	Comment Status R		Rx specifications
The c under Table	larification of Figu stand the relation 140-8. Also app	ures 140-2c and 140-2d are ir iship between these figures a lies to new Clause 151, subcl	nsufficient to ma nd the illustrativ lause 151.7.3.	ke the reader e power budget in	In Tab "1300 tempe	ole 140-7; chang to 1320". Reas erature operation	e the contents for "Wavelen on: To enable uncooled DFE	gth (range)" from 3 laser applicatio	n "1304.5 to 1317.5" to n for industrial
Suggestee	dRemedy				Suggeste	dRemedy			
The c subm	larification needs itted to the releva	to be expanded. A presentat int comment resolution meeting	ion with specific ng(s).	text proposals will be	1300 ·	to 1320			
Response		Response Status C			Response	ст	Response Status C		
REJE	CT.	,			REJE	CT.			
This c	omment was WI	THDRAWN by the commente	er.		Resol	ve using the res	ponse to comment i-60.		
C/ 140	SC 140 6 1	P 41	/ 32	# 1-60	[Edito	or's note: For ref	erence, the response to com	iment i-60 is cop	ied here:
Sommers	Scott	Molex Incorpo	orated	" 100	REJE	CT.			
Comment	Type T	Comment Status R	, alou	Tx specifications	The T	aak Faraa ravia	und		
In Tat "1300 tempe	ble 140-6; change to 1320". Reaso erature operation.	e the contents for "Wavelengt n: To enable uncooled DFB la	h (range)" from aser application	"1304.5 to 1317.5" to for industrial	https://	//www.ieee802.o	rg/3/cu/public/Sept20/chuan rg/3/cu/public/Sept20/welch_	g_3cu_01_0922 _3cu_01b_09222	20.pdf and 20.pdf.
Suggeste	dRemedy				A stra	w poll was taker): ing the "Wayolongth (range)	" for 100CBASE	EP1 and 100CRASE
1300	to 1320				LR1 fi	om "1304.5 to 1	317.5" to "1300 to 1320" ?	IOI TOUGBASE	
Response	•	Response Status C			Yes: 6	3			
, REJE	CT.				No: 2 Absta	/ in: 11			
The T https:/ https:/	ask Force review //www.ieee802.or //www.ieee802.or	/ed ·g/3/cu/public/Sept20/chuang ·g/3/cu/public/Sept20/welch_3	_3cu_01_09222 3cu_01b_09222	0.pdf and).pdf.	There]	is no consensus	s to make the proposed char	nge.	
A stra Do yo LR1 fi Yes: (No: 2 Absta	w poll was taken u support changi om "1304.5 to 13 5 7 in: 11	: ng the "Wavelength (range)" ⁻ 317.5" to "1300 to 1320" ?	for 100GBASE-	FR1 and 100GBASE-					
There	is no consensus	to make the proposed chang	le.						

Cl 140 SC 140.9 P54 L21 # 62 Sommers, Scott Molex Incorporated Cl 140 SC 140.6.1 P41 L37 # 63 Comment Type T Comment Status R channel characteristics Mellanox Technologies In the note b for Table 140-11, change note b," b Over the wavelength range 1304.5 to 1317.5 to 1300-1320. Reason: To enable uncooled DFB laser application for industrial temperature operation. Reasons: To enable uncooled DFB laser application for industrial temperature operation. Cl 140 SC 140.6.1 P41 L37 # 63 SuggestedRemedy: 1300 to 1320 Response Status C Response Status C Response Status C Response Status C SuggestedRemedy Response Response to comment i-60. [Editor's note: For reference, the response to comment i-60 is copied here: Suggested remedy Change 100GBASE-FR1 are application for industrial to the value for average launch power (min) for 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6."						-						
Sommers, Scott Molex Incorporated Dawe, Piers J G Mellanox Technologies Comment Type T Comment Status R channel characteristics Comment Type TR Comment Status R specifications (updated 092s) In the note b for Table 140-11, change note b," b Over the wavelength range 1304.5 to 1317.5 to 1300-1320. Reason: To enable uncooled DFB laser application for industrial temperature operation. TR Comment Status R specifications (updated 092s) SuggestedRemedy 1300 to 1320 Response Status C Comment Status R specifications (updated 092s) Response Response Status C SuggestedRemedy So the 100GBASE-FR1 are expected to be interoperable (whether this standard says so or not). So the 100GBASE-FR1 transmitter must not be weaker than the 100GBASE-DR one. It's not worth making a special case for 0.2 dB that most transmitters can't use anyway, without super-high extinction ratio. Response Response Status C SuggestedRemedy Change 100GBASE-DR. As a consequence, change average receive power (min) from -3.1 to -2.9, same as for 100GBASE-DR. As a consequence, change average receive power (min) from -7.1 to -6.9 dBm. In 140.10a.1, delete rand the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." Response Response to comment i-60. Response Response Status	C/ 140	SC 140.9	P 54	L 21	# <u>I-62</u>	C/ 140	SC ·	140.6.1		P 41	L 37	# <u>1-</u> 63
Comment Type T Comment Status R channel characteristics In the note b for Table 140-11, change note b," b Over the wavelength range 1304.5 to 1300-1320. Reason: To enable uncooled DFB laser application for industrial temperature operation. TR Comment Type TR Comment Status R specifications (updated 092: 100GBASE-FR1 are expected to be interoperable (whether this standard says so or not). So the 100GBASE-FR1 transmitter must not be weaker than the 100GBASE-DR one. It's not worth making a special case for 0.2 dB that most transmitters can't use anyway, without super-high extinction ratio. SuggestedRemedy 1300 to 1320 SuggestedRemedy <	Sommers,	Scott	Molex Incorp	orated		Dawe, Pie	rs J G		М	ellanox Tech	nologies	
In the note b for Table 140-11, change note b," b Over the wavelength range 1304.5 to 1317.5 to 1300-1320. Reason: To enable uncooled DFB laser application for industrial temperature operation. SuggestedRemedy 1300 to 1320 Response Response Status C Response Response to comment i-60. [Editor's note: For reference, the response to comment i-60 is copied here: [Editor's note: For reference, the response to comment i-60 is copied here: [Editor's note: For reference, the response to comment i-60 is copied here: [Editor's note: For reference, the response to comment i-60 is copied here: [Editor's note: For reference, the response to comment i-60 is copied here: Response I and 100GBASE-FR1 are expected to be interoperable (whether this standard says so or not). So the 100GBASE-FR1 transmitter must not be weaker than the 100GBASE-DR one. It's not worth making a special case for 0.2 dB that most transmitters can't use anyway, without super-high extinction ratio. SuggestedRemedy Change 100GBASE-FR1 average launch power (min) from -3.1 to -2.9, same as for 100GBASE-DR. As a consequence, change average receive power (min) from -7.1 to -6.9 dBm. In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." Response Response Status U REJECT.	Comment '	Туре Т	Comment Status R		channel characteristics	Comment	Туре	TR	Comment Sta	tus R	spec	cifications (updated 0929)
SuggestedRemedy 1300 to 1320 SuggestedRemedy Response Response Status C REJECT. Change 100GBASE-FR1 average launch power (min) from -3.1 to -2.9, same as for 100GBASE-DR. As a consequence, change average receive power (min) from -7.1 to -6.9 dBm. In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." Response Response to comment i-60 is copied here: Response Response Response Status U REJECT. Response to comment i-60. Response to comment i-60.	In the i 1317.5 tempe	note b for Table 5 to 1300-1320. rature operation	140-11, change note b," b O Reason: To enable uncooled	ver the wavele d DFB laser ap	ngth range 1304.5 to plication for industrial	100GE standa 100GE cap't i	BASE-D ard says BASE-D	R and 10 so or no R one. It	00GBASE-FR1 ar ot). So the 100GE t's not worth maki	e expected t BASE-FR1 tr ing a special	o be interopera ansmitter must l case for 0.2 dł	ble (whether this not be weaker than the 3 that most transmitters
1300 to 1320 Suggesterventedy Response Response Status C REJECT. Change 100GBASE-FR1 average launch power (min) from -3.1 to -2.9, same as for 100GBASE-DR. As a consequence, change average receive power (min) from -7.1 to -6.9 dBm. Resolve using the response to comment i-60. In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." Response Response Status U REJECT. Response to comment i-60 is copied here: Response Response Status U	Suggested	Remedy				Suggester	Domod	way, wiin h <i>i</i>	out super-night ex		-	
Response Response Status C Change 100GBASE-FR1 average launch power (min) from -3.1 to -2.9, same as for 100GBASE-DR. As a consequence, change average receive power (min) from -7.1 to -6.9 dBm. REJECT. Resolve using the response to comment i-60. In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." Resolve using the response to comment i-60 is copied here: Response Response Status U REJECT. REJECT. REJECT. Response Status U	1300 to	o 1320				Suggester	IRemeu	у				
REJECT. dBm. Resolve using the response to comment i-60. In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." [Editor's note: For reference, the response to comment i-60 is copied here: <i>Response Response Status</i> U REJECT. REJECT. REJECT. Response Status U	Response		Response Status C			Chang	ge 100G	BASE-FF	R1 average launc	h power (mii	n) from -3.1 to -	2.9, same as for
Resolve using the response to comment i-60. In 140.10a.1, delete "and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6." [Editor's note: For reference, the response to comment i-60 is copied here: Response Response Status U REJECT. Response Status U	REJEC	CT.				dBm.	JAGE-D	N. AS a	consequence, ch	ange averag	e receive powe	a (mm) nom -7.1 to -0.9
[Editor's note: For reference, the response to comment i-60 is copied here: Response Response Status U	Resolv	ve using the resp	oonse to comment i-60.			In 140 equal	.10a.1, to the va	delete "a alue for a	nd the 100GBAS	E-FR1 transi wer (min) fo	mitter average p r 100GBASE-D	power is greater than or R in Table 140-6."
REJECT.	[Edito	r's note: For refe	erence the response to com	ment i-60 is co	nied here	Response			Response Sta	tus U		
	[Earlo					REJE	CT.					
REJECT.	REJEC	CT.										
A straw poll was taken on the 29th September 2020 IEEE P802.3cu interim meeting:						A stra	w poll w	as taken	on the 29th Sept	ember 2020	IEEE P802.3ct	u interim meeting:
The Task Force reviewed	The Ta	ask Force review	ved			-						
https://www.ieee802.org/3/cu/public/Sept20/chuang_3cu_01_092220.pdf and Straw poll #1:	https://	/www.ieee802.or	rg/3/cu/public/Sept20/chuang	g_3cu_01_092	220.pdf and	Straw	poll #1:					
https://www.ieee802.org/3/cu/public/Sept20/welch_3cu_01b_092220.pdf. Do you support changing the average launch power (min) from -3.1 dBm to -2.9 dBm for 100GBASE-FR1.	https://	/www.ieee802.o	rg/3/cu/public/Sept20/welch_	3cu_01b_0922	20.pdf.	Do you 100GE	u suppo BASE-FI	rt changii R1.	ng the average la	unch power	(min) from -3.1	dBm to -2.9 dBm for
A straw poll was taken: Y:9, N:9, Abstain: 11	A strav	w poll was taken	:			Y:9, N	l:9, Abst	tain: 11				
Do you support changing the "Wavelength (range)" for 100GBASE-FR1 and 100GBASE-	Do γοι	u support changi	ing the "Wavelength (range)"	for 100GBASI	E-FR1 and 100GBASE-							
LR1 from "1304.5 to 1317.5" to "1300 to 1320"? There is no consensus to make the proposed change.	LR1 fro	om "1304.5 to 13	317.5" to "1300 to 1320"?			There	is no co	onsensus	to make the prop	osed chang	e.	
Yes: 6	Yes: 6	i										
No: 27	No: 27											
Abstain: 11	Abstair	n: 11										
There is no consensus to make the proposed change.	There	is no consensus	to make the proposed chan	qe.								

]

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/ 140	SC	140.6.1	P 41	L51	# 1-64	C/ 140	SC 1	40.6.1	P 42	L 7	# 1-65
Dawe, Pie	ers J G		Mellanox Tec	hnologies		Dawe, Pie	s J G		Mellanox T	echnologies	
Comment Type TR Comment Status R specifications (updated 0929) The receiver must be protected from over-emphasised very bad signals as in all other optical PAM4 clauses, 400ZR and 100GBASE-ZR. Over/under-shoot and peak-to-peak power don't exclude all of these (but if you believe they do, the K limit won't hurt you). SuggestedRemedy Limit TDECQ - 10log10(Ceq) and TECQ - 10log10(Ceq) for 100GBASE-FR1 and 100GBASE-LR1 to 3.4 dB.						Comment Type TR Comment Status R specifications (updated 092: 100GBASE-DR and 100GBASE-FR1 are interoperable. So the 100GBASE-FR1 transmitter must not transmit a worse signal than the 100GBASE-DR one. SuggestedRemedy Limit TECQ - 10log10(Ceq) for 100GBASE-FR1 to 3.4 dB. Response Response Status U					
100GBASE-LR1 to 3.4 dB. As there's now no need to generate such bad signals for Rx stress test or test the receiver against them, in Table 140-7 Conditions of stressed receiver sensitivity test, add limits for SECQ - 10log10(Ceq) (max) of 3.4 dB. Remove the inserted wording in 140.7.5 and 5th item in list in 140.7.10. Similarly for 400GBASE-FR4 400GBASE-LR4-6.						REJECT. The comment is proposing a value for a parameter that is not currently in Draft D3.0, for 100GBASE-FR1.					t currently in Draft D3.0, for
Response RE.IE	e CT		Response Status U			The IE review	EE P802 and wor	2.3cu Tas king grou	sk Force reviewed this pa up ballot, and reached co	rameter prev nsensus to n	iously during both task force ot include it.
The c 100G The II force	comment BASE-F EEE P8(review a	t is propos R1, 100GI 02.3cu Tas and working	ing values for parameters fo BASE-LR1, 400GBASE-FR4 sk Force reviewed these par g group ballot, and reached	or that are not c 4 and 400GBAS rameters previo consensus to r	urrently in Draft D3.0, for SE-LR4-6. usly during both task iot include them.	While have b There	the comr een the i is no cor	ment doe intention nsensus	es not request the addition of the commenter. to make the proposed cha	n of this para ange.	meter into the draft, that may
While may h	the con have bee	nment doe en the inter	es not request the addition on the second structure of the commenter.	f these parame	eters into the draft, that						

There is no consensus to make the proposed change.

-				· · · · · · · · · · · · · · · · · · ·	-							
C/ 140	SC 140.6.1	P 42	L 8	# I-66	C/ 140	SC 140.6.1		P 42	L14	# <u>1-</u> 67		
Dawe, Pie	rs J G	Mellanox Teo	hnologies		Dawe, Pier	s J G	1	Mellanox Tec	chnologies			
Comment	Type TR	Comment Status R	spec	ifications (updated 0929)	Comment	Type TR	Comment S	tatus R	spec	ifications (updated 0929)		
l can s expec disper than c rejects back-f	see that TDECQ t that the minimur rsion after a long I one with high pena s mediocre but ac to-back, which is s	- TECQ (max) limits sort-of n penalty is at zero dispersi ink. Also, I would prefer a t alty at each dispersion - at le coeptable transmitters simply silly.	of dispersion pen on, it doesn't tell ansmitter with lo ast it's good sor because they a	alty, but as we can't us the sensitivity to w back-to-back penalty newhere. This spec re good when used	I he transmitter transition time (max) is probably ineffective: only the most exceptional signals could pass this and fail TDECQ. But an effective spec usefully protects the receiver against ultra-slow signals that are hard to receive. SuggestedRemedy Change 17 ps to 16 ps for for 100GBASE-FR1 and 100GBASE-LR1.							
Suggested	dRemedy				Similar	ly for 400GBASE	E-FR4 400GBA	SE-LR4-0.				
Delete Simila	e the " TDECQ - 1 Inly for 400GBASE	TECQ (max)" row. E-FR4 400GBASE-LR4-6.			Response REJEC	CT.	Response St	atus U				
Response REJE	CT.	Response Status C		The co ineffec	mment states th tive".	nat a transmitter	transition tin	ne (max) value of	17ps is "probably			
The contract the tas	omment is propos sk force.	ing to remove a parameter	based on consensus of	The comment is proposing to change the transmitter transition time (max) value from 17p to 16ps, but there is insufficient evidence that this value is any more effective than the current value.								
P802.	3cu Task Force Ir	ask forece was captured in nterim Meeting, Jan 20th, 20	en at the IEEE itzerland	There	is no consensus	to make the pro	posed chan	ge.				
for Str	(https://www.ieee802.org/3/cu/public/Jan20/minutes_3cu_0120_approved.pdf). The results for Straw poll #4 are included below:					SC 140.6.1		P 42	L17	# I-68		
Straw	noll #4:				Dawe, Pier	s J G	1	Mellanox Tec	chnologies			
I woul LR1 a cole_(Yes: 2	d support adding nd 400GBASE-FF 01b_0120, along v 20	a TDECQ-TECQ specificat R4 and with the values prop with the additional changes	on for 100GBA osed in slides 24 proposed in slide	SE-FR1,100GBASE- 4 and 27 of 20 of cole_01b_0120.	Comment TypeTComment StatusRspecifications (updated 092)The transmitter peak-to-peak power (max) limits are 0.8 and 0.5 dB above the max OMAlimits. As these PMDs may be used back-to-back with zero loss, this impacts receiver design.							
NO. 2					Suggested	Remedy						
There	is no consensus	to make the proposed chan	ge.		Consid	er reducing thes	se, particularly fo	or 100GBASI	E-LR1, by a coup	le of tenths of a dB.		
					Response REJEC	CT.	Response St	atus C				
					The co but the	mment is propos re is insufficient	sing to reduce th evidence that th	ne transmitte nis value is b	er peak-to-peak p etter than the cu	ower (max) by 0.2dB, rrent value.		
					There	is no consensus	to make the pro	posed chan	ge.			

C/ 140	SC 140.6.1	P 42	L 25	# <u>1-</u> 69	C/ 140	SC 140.6.3	P 46	L 34	# <u>I-</u> 71
Dawe, Pie	rs J G	Mellanox Tec	hnologies		Dawe, Pie	ers J G	Mellanox	Technologies	
Comment	Туре Т	Comment Status R		Tx specifications	Comment	Туре Т	Comment Status A		power budget
This n signal the sty grandf was ne	ote "Average laur strength" dates b /le manual: not al athered in. Depe o need to say it a	nch power (min) is informativ ack to when OMA was new lowed to mix informative and ending on the exact values, in nyway.	ve and not the p and unfamiliar. I normative in a t may be technic	rincipal indicator of Part of it is contrary to table, although it's cally wrong, and there	Words a The 140-5 dB/kn b The	smithing for clarit channel insertio for 100GBASE-I plus an allocatio channel insertio	y and accuracy: change: n loss is calculated using DR and 100GBASE-FR1 on for connection and spli n loss is calculated using	the maximum dia and cabled optica ce loss given in the maximum dia	stance specified in Table al fiber attenuation of 0.5 140.10.2.1. stance specified in Table
Suggested	lRemedy				alloca	tion for connection	on and splice loss given in	ווא 140.10.2.1.	1504.5 min plus an
Chang streng	je to just "Average th". in Table 151 7 (T	e launch power (min) is not t	the principal ind	icator of signal	Suggeste	dRemedy			
Same		x).			a The	channel insertio	n losses for 100GBASE-E	OR and 100GBAS	SE-FR1 are calculated
REJE	CT.	Response Status C			using of 0.5	the maximum dis dB/km plus an a	stances specified in Table llocation for connection a	e 140-5 and cable nd splice loss giv	d optical fiber attenuation /en in 140.10.2.1.
There inform	is no consensus ative to normative	to change "Average launch e.	power, each lan	e (min)" from	specif alloca	tion for connection	5 and fiber attenuation of on and splice loss given ir	0.43 dB/km at 1 140.10.2.1.	304.5 nm plus an
C/ 140	SC 140.6.1	P 43	L 21	# I-70	Response)	Response Status C		
Dawe, Pie	rs J G	Mellanox Tec	hnologies		ACCE	PT.			
Comment	Туре Т	Comment Status R	spe	cifications (updated 0929)	C/ 140	SC 140.7.5a	P50	L8	# 1-72
l wond 100GE	ler if putting the k 3ASE-FR1 where	nee at 1.4 dB is a bit high, th the dispersion penalty migh	hese days? Thi It be small.	s applies more to	Dawe, Pie	ers J G	Mellanox	Technologies	
Suggested	IRemedy				Comment	Type TR	Comment Status A		bucket
Consid Averad	der moving the kr	nee to 1.2 dB by reducing the (min) for 100GBASE-LR1 co	e minimum OMA ould be reduced	A. If wished, the in step.	Never words	write "shall be n	ieasured" in 802.3; it's no	it a test spec. Us	e the standard form of
Response		Response Status C			Suggestee	dRemedy			
, REJE	CT.				The T	ECQ of each lan	e shall be within the limits	s given in Table 1	40-6 for 100GBASE-FR1
The co over N	omment is propos which this applies	ing a change to the OMA o	uter (min) and t	ne range of TDECQ	and 100G excep 140-1 Simila	BASE-LR1 if mean t that the test fib 0. arty in 151 8 6	asured measured using the ris not used. The test pa	ne methods spec attern specified fo	ified for TDECQ in 140.7.5, or TECQ is given in Table
The co	omment does not	provide sufficient evidence	to support the c	hange.	Response	, , , , , , , , , , , , , , , , , , ,	Response Status II		
There	is no consensus	to make the proposed chan	ge.		ACCE	EPT IN PRINCIPI	.E.		
					In 140 - In th).7.5a: e last sentence c	hange "shall be measure	d" to "if measure	d"
					In 151 - In th	I.8.6: e last sentence o	hange "shall be measure	d" to "if measure	d"

Comment ID 1-72

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C/ 140	SC 140.7.5b	P 50	L10	# <u>I-</u> 73	C/ 140	SC 140.7.5b	P 50	L 20	# <u>1-</u> 75	
Dawe, Pie	ers J G	Mellanox Tec	hnologies		Dawe, Pie	rs J G	Mellanox Tecl	hnologies		
Comment Misle	<i>t Type</i> T ading name: "Tran	Comment Status A smitter over/under-shoot"		parameter definitions	Comment Type T Comment Status A ter definitions (updated 092) Wordsmithing: change: Transmitter overshoot is defined as the maximum power from the transmitter (Pmax) relative to the level 3 power and the transmitter OMAouter according to: Description					
Suggeste Chan	edRemedy ige to "Signal over/ in 151	/under-shoot" or "Relative ov	ver/under-shoo	t" or "Over/under-shoot".						
Response	o .	Pooponoo Statua			Suggested	Remedy				
					to:	averabaat is dof	inad as the maximum newer	(Dmax) of a ai	and choice the lovel 2	
Chan	ige "Transmitter ov	⊢. /er/under-shoot" to "Over/un	der-shoot" thro	ughout the draft, with	power Simila	and relative to th rly for undershoo	e signal's OMAouter accordi t. Same in 151.8.9 if it rema	ing to: ins.	gnal above the level 5	
editor	rial license.				Response		Response Status C			
C/ 140	SC 140.7.5b	P 50	L 13	# 1-74	ACCE	PT IN PRINCIPL	E.			
Dawe, Pie	ers J G	Mellanox Tec	hnologies		Comm	oent i₋73 changes	"Transmitter over/under-sh	oot" to "Over/u	inder-shoot" throughout	
Comment	t Type T	Comment Status A	-	measurement method	the dra	aft.			nder-shoot throughout	
perce	entage				0	4:07		O and in stand	and a second second in	
Suaaeste	dRemedv				140 7	5b so no change	s the equivalent text in 151.8.	.9 and instead i	references the text in	
Delet overs Simil	te: we don't say TD shoot" makes the p arly in 151 8 9 if it	ECQ decibellage. The % is oint another way.	s in the table.	Calling it "relative	In 140	.7.5b:				
Response ACCI	e EPT IN PRINCIPLI	Response Status C E.			Chang "Trans relativ	ge from: smitter overshoot e to the level 3 po	is defined as the maximum p ower and the transmitter OM/	power from the Aouter accordiı	e transmitter (Pmax) ng to:"	
Delet	e the word "percer	ntage" from the first sentenc	e of 140.7.5b a	and 151.8.9.	"Overs to the	shoot is defined a OMAouter accore	is the maximum power (Pma ding to:"	x) above the le	vel 3 power and relative	
					And c "Trans relativ to: "Unde to the	hange from: mitter undershoo e to the level 0 po rshoot is defined OMAouter accord	ot is defined as the minimum ower and the transmitter OM/ as the minimum power (Pmi ding to:"	power from the Aouter accordii in) below the le	e transmitter (Pmin) ng to:" evel 0 power and relative	

C/ 140	SC 140.7.5b	P50	L31	# 1-76	C/ 140	SC 140.7.5	P50	L45	# 1-77		
Dawe. Pie	rs J G	Mellanox Tec	hnologies		Dawe. Pier	rs J G	Mellanox Tecl	hnologies			
Comment A 1% a tradi	<i>Type</i> T hit ratio is very la: tional mask hit ra	Comment Status R x, much different to the spectio.	<i>mei:</i> SER. This isn'	nt method (updated 0922) t the same situation as	Comment Type T Comment Status A ter definitions (updated 0922) Misleading name: "Transmitter peak-to-peak power"						
Suggested Deterr	<i>IRemedy</i> nine what correla	tes to receiver performance	. If appropriate,	change to 1e-3, with	SuggestedRemedy Change to "Signal peak-to-peak power" or "Peak-to-peak power" (or see another comment). Also in 151.						
particular build standard). Use explicit scope noise loading to get consistent results with strong and weak signals. Same in 151.8.9 if it remains.						Response Response Status C ACCEPT IN PRINCIPLE.					
Response		Response Status C			Resolv	e using the res	ponse to comment i-93.				
REJE	CT.	,			[Edito	r's note: For ref	erence, the response to comn	nent i-93 is copi	ied here:		
The comment does not provide sufficient data to indicate that the current specification is broken or technically incomplete.				In 151 Chang "Trans TDEC withou to: "Trans test (s In 140 Chang "Trans	.8.10: je the 1st senter imitter peak-to-jong Q test (see 151 t the reference imitter peak-to-jong ee 151.8.6), bu .7.5c: je the 1st senter imitter peak-to-jong imitter peak-to-jong imitt	ence of the 2nd paragraph from beak power is measured using .8.5) and the waveform captur equalizer being applied in eac beak power is measured using t without the reference equaliz ence of the 2nd paragraph from beak power is measured using	n: 9 the waveforms ed for the TECC h case." 9 the waveform o er being applied n: 9 the waveforms	captured for the Q test (see 151.8.6), but captured for the TECQ d."			
					TDEC but wit to: "Trans test (s	Q test (see 140 hout the referen mitter peak-to-j ee 140.7.5a), b	.7.5) and the waveform captur nce equalizer being applied in beak power is measured using ut without the reference equali	ed for the TECC each case." I the waveforms izer being applie	Q test (see 140.7.5a), s captured for the TECQ ed in each case."		

-						-					
C/ 140	SC	140.7.5c	P 50	L 50	# 1-78	C/ 140	SC	140.7.5c	P 50	L 52	# <u>I-</u> 79
Dawe, Pie	ers J G		Mellanox Teo	chnologies		Dawe, Pier	s J G		Mellanox Tech	nologies	
Comment	Туре	т	Comment Status A		measurement method	Comment	Туре	TR	Comment Status A	ter	definitions (updated 0929)
For 10 shoot 100Gl	00GBAS limit me BASE-F	SE-LR1, the eans that li R1, the los	e combination of the loss ir miting peak-to-peak power ss might be only 0.6 dB.	a long channe at TP3 may be	el and the over/under- e unnecessary. For	The po examp chrom	ositive a le is a atic dis	and negative directly mod persion can	e peaks of an optical signal dulated laser, but other trans n make this worse. An optica	can be very di smitters are no al receiver cop	fferent. An obvious ot symmetric also, and es with positive and o avtromos: the positive
Suggestee	dRemed	dy				and ne	gative	peaks musi	t be limited separately.		rextremes, the positive
Consi	der not	requiring o	ompliance to peak-to-peak	power for 1000	GBASE-LR1 at TP3. For	Suaaestea	0 Remed	' dv			
subtra	acting 0. for 100	.5 dB. It m)GBASE-L	ay be easier to create separate at TP2 and at TP3.	arate entries an	d limits for peak-to-peak	Chang	e "Trar ion", de	nsmitter pea efined as m	ak-to-peak power" which is F ax(Pmax-Paverage, Pavera	²max - Pmin to ıge-Pmin). Tak	o "Transmitter power e 3 dB off the limits in
Response	,		Response Status C			Table	140-6.	· · ·			
ACCE	EPT IN F	PRINCIPLE	Ξ.			Or, de Make s	rine "ef similar	tective peak	K-to-peak power" as [2^max] Clause 151.	Pmax-Paverag	ge, Paverage-Pmin).
Resol	ve usin	g the respo	onse to comment i-93.			Response			Response Status C		
[Edito	or's note	e: For refer	ence, the response to com	ment i-93 is co	pied here:	AUOL					
-	0.40					A strav	v poll v	vas taken or	n the 6th October 2020 P80	2.3cu Task Fo	rce interim meeting.
In 151 Chano	1.8.10: ne the '	1st senten	ce of the 2nd paragraph fro	m [.]		Straw	Poll #1				
"Trans TDEC withou	smitter p Q test (ut the re	peak-to-pe (see 151.8. eference ec	ak power is measured usin .5) and the waveform captu jualizer being applied in ea	g the waveform red for the TEC ch case."	ns captured for the CQ test (see 151.8.6), but	l suppo peak to Y:10, I	ort inde o peak N:9, Ab	ependent lim limit ostain:7	nits of Pmax-Pavg and Pavg	ȝ-Pmin as a rep	placement of the current
to: "Trans test (s	smitter p see 151	peak-to-pe .8.6), but w	ak power is measured usin <i>i</i> thout the reference equali	g the waveform zer being applie	a captured for the TECQ ed."	Implen editoria	nent th al licen	e first optior se.	n in the suggested remedy f	or both clause	s 140 and 151, with
In 140 Chang "Trans TDEC but wi to: "Trans test (s	0.7.5c: ge the smitter p Q test (ithout th smitter p see 140	1st senten peak-to-pe (see 140.7. e referenc peak-to-pe .7.5a), but	ce of the 2nd paragraph fro ak power is measured usin 5) and the waveform captu e equalizer being applied ir ak power is measured usin without the reference equa	m: g the waveform red for the TEC each case." g the waveform lizer being appl	ns captured for the CQ test (see 140.7.5a), ns captured for the TECQ lied in each case."						
]											

C/ 140	SC ·	140.7.9	P 51	L15	# 1-80	C/ 140	SC	140.10.1	P 55	L 20	# 1-82
Dawe, Pie	rs J G		Mellanox Tec	hnologies		Dawe, Pie	rs J G		Mellanox To	echnologies	
Comment Here, 7 it's	<i>Type</i> the pen FECQ.	TR alty in the Rule says	Comment Status A signal for RS testing is calle use the same name for the	d SECQ, while same thing, ev	measurement method in 140.6.3 and p52 line rery time.	Comment Tidy u	<i>Type</i> p	E	Comment Status A	-	misc (updated 0922)
Suggestee	dRemed	<i>y</i>				Make	the tabl	<i>iy</i> le full width	n. Also Table 151-14.		
Option Chang closur Define transr TP3 (Adjus	ns are: ge to SE e (quate e ECQ "e nitted sig SECQ). t 151 for	CQ to alig ernary)"; or eye closur gnal at TP consisten	n with base document. Con e (quaternary)" for general u 2 (TECQ), dispersed signal cy.	nsider repurpos ise including w at TP3 (TDEC	sing SECQ to "signal eye hen it's not necessarily of Q), or stressed signal at	Response ACCE Increa single	PT IN F se the v line.	PRINCIPLI width of Ta	Response Status C 	-14, such that fo	ootnote "a" resides on a
Response			Response Status U			C/ 151	SC	151.5.4	P 68	L 22	# I-83
ACCE	PT IN P	RINCIPLE				Dawe, Pie	rs J G		Mellanox To	echnologies	
100Gl consis scope	BASE-D stency w	R receiver ith the rec	sensitivity is defined based ent change made to 100GB	on SECQ and ASE-FR1 and	changing it to TECQ for 100GBASE-LR1 is out of	Comment There 400GI	<i>Type</i> is no av BASE-L	T verage rec R4-6. The	Comment Status A seive power, each lane (m are's one for each.	n) in Table 151-8	<i>bucket</i> 3 for 400GBASE-FR4 and
The th 100Gl	iree new BASE-LI	/ paragrap R1.	hs added at the end of 140.	7.9 only apply	to 100GBASE-FR1 and	<i>Suggested</i> Either "and"	dRemed delete to "or" a	<i>ly</i> "for 400GI and modify	BASE-FR4 and 400GBAS 7 Table 140-4.	E-LR4-6" (as Tat	ble 140-4) or change
To im https:/ licens	prove th //www.ie e.	e clarity of ee802.org	the draft implement the change of the draft implement the change of the	anges capturec cu_01a_09152	l in slides 6 and 7 of 0.pdf, with editorial	Response ACCE	PT IN F	PRINCIPL	Response Status C <u>=</u> .		
C/ 140	SC [,]	140.7.10	P 52	L 35	# I-81	In lab	ole 151-	4 delete tr	e text "for 400GBASE-FR	4 and 400GBAS	E-LR4-6"
Dawe, Pie	rs J G		Mellanox Tec	hnologies		This c	hange r	makes the	draft consistent with what	was done previo	ously in Table 140-4 and
Comment	Туре	т	Comment Status A		measurement method	Table	139-4.				
Do we over/u	e need to inder-sh	o say that t oot and pe	the stressed receiver confor eak-to-peak power (if application	mance test sig able)?	nal obeys the rules for						
Suggestee	Remed	y .									
Add a Also ii	nother it n 151.8.	em to the 13.2.	list saying so.								
Response			Response Status C								
ACCE	PT IN F	RINCIPLE	Ξ.								
Implei https:/ order See c	ment the //www.ie of the la omment	e changes ee802.org st two exc : I-90 for e	captured in slide 9 of /3/cu/public/Sept20/lewis_3 eptions, with editorial licens quivalent changes to 151.8.	cu_01a_09152 e. 13.	0.pdf, swapping the						

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 1-83

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IEEE P802.3cu D3.0 100 Gb/s per wavelength on SMF Initial Sponsor ballot commer

C/ 151	SC 151.7.1	P 71	L 23	# 1-84	C/ 151	SC 151.	8.5	P 79	L 36	# 1-86
Dawe, Pie	ers J G	Mellanox Tecl	nnologies		Dawe, Pie	rs J G		Mellanox Tech	nologies	
Comment	туре т	Comment Status A	Ū	Tx specifications	Comment	Туре Т		Comment Status A	0	measurement method
The d rows	lifference in launcl above limit it to 3.	h power between any two lar 9 or 4.1 dB.	es is limited to	4 dB here, while the	Too much duplication of established TDECQ method. Also, contradictory: says specified in 121.8.5.1, 121.8.5.2, and 121.8.5.3 then repeats it all below.					tradictory: says specified in
Suggeste	dRemedy				Suggestee	dRemedy				
Delet	e the row or tighte	n the limit e.g to 3 dB. Adjus	at the receive ta	able in step.	Remove the duplicate material.					
Response	e	Response Status C			Response	1		Response Status C		
ACCE	EPT IN PRINCIPL	E.			ACCE	PT IN PRIN	ICIPLE	Ξ.		
For 4 (OMA each	00GBASE-FR4 th touter) (max)" in T lane".	e "Difference in launch powe able 151-7 exceeds what ma	er between any ximum allowal	/ two lanes ble range of "(OMAouter),	Implei https:/ licens	ment the cha //www.ieee8 e.	anges 02.org	captured in slide 14 of J/3/cu/public/Sept20/lewis_3c	u_01a_0918	520.pdf, with editorial
The ta	ask force reviewed	d and discussed the presenta	ation		C/ 151	SC 151.	8.9	P 82	L 26	# I-87
https:	//www.ieee802.org	20.pdf.	Dawe, Pie	rs J G		Mellanox Tech	nologies			
Make	the following cha	nges:			<i>Comment</i> Too m	<i>Type</i> T nuch duplica	tion of	<i>Comment Status</i> A f over/under-shoot method.		measurement method
- Tabl (OMA - Tabl 1.5dE	le 151-7. Change Nouter) (max)" for le 151-8. Change Bm to 1.4dBm.	the "Difference in launch pov 400GBASE-FR4 from 4dB to the "OMAouter of each aggre	ver between ar 3.9dB essor lane" for	ny two lanes 400GBASE-FR4 from	Suggested Delete	dRemedy from line 3	1 and	say it is analogous to 140.7.8	ōb.	
C/ 151	SC 151 8 4	P79	/ 11	# 1.85	Response			Response Status C =		
		Mellanov Tecl		# 1 -00	AUUL					
Comment Apart	<i>Type</i> T from the first two	Comment Status A sentences, this is identical to	o 122.8.4.	measurement method	Implei https:/ licens	ment the cha //www.ieee8 e.	anges 02.org	captured in slide 3 of g/3/cu/public/Sept20/lewis_3c	u_01_09222	20.pdf, with editorial
Suggeste Remo	<i>dRemedy</i> ove all but the first	two sentences; refer to 122.	8.4.							
Response ACCE	e EPT IN PRINCIPL	Response Status C E.								
Imple https:	ment the changes //www.ieee802.org	captured in slide 13 of g/3/cu/public/Sept20/lewis_3	cu_01a_09152	0.pdf, with editorial						

license.

CL 151	SC 151 8 9	P82	/ 26	# 1.99	C/ 151	SC 151 8 10	n <i>P</i> s		# 1.80		
			bhologioo	# 1-00	Dowo Dio	ro 1.C	Molla		<i>π</i> 1-09		
Dawe, Fi			annoiogies								
Commen	t Type ER C	Comment Status A		misc	Comment	Туре Т	Comment Status	3 A	measurement method		
Put the sa	ne subclauses in 151.8 ame order as in the Tx	the same order as in 1- and Rx tables. But, be	40.7 (following D cause we now ha	2.1 comment 65) and ave several specs	The combination of the loss in a long channel and the over/under-shoot limit means that the peak-to-peak power at TP3 has to be at least ~0.6 dB or ~1.8 dB less than at TP2.						
drour	them all together			Jojecis, it's time to	Suggestee	dRemedy					
group	anon an together.				For 400GBASE-FR4, adjust the measured result by the adding the loss of the test channel						
Suggeste	dRemedy				and su	ubtracting 0.5 dl	B.		-		
In the	e Tx tables (140-6 and	151-7):			For 40	00GBASE-LR4,	adjust the measured	result by the adding	g the loss of the test channel		
TDE	CQ				and su	ubtracting 1.5 dl	В.				
TDEC	CQ - 10log10(Ceq)				It may	be easier to cre	eate separate entries	and limits for peak-	to-peak power at TP2 and at		
		ino			TP3.						
Trans	mitter over/under-sho	nn 5 ht			Response		Response Status	; C			
Trans	mitter peak-to-peak po	ower			ACCE	PT IN PRINCIP	LE.				
Trans	smitter transition time										
Avera	age launch power of Ol	FF transmitter *OR* Ext	inction ratio		Resol	ve using the res	ponse to comment i-9	93.			
In the	Definition of optical pa	arameters and measure	ment methods, e	e.g.:							
151.8	8.5 Transmitter and dis	persion eye closure for	PAM4 (TDECQ)		[Edito	or's note: For ref	ference, the response	to comment i-93 is	copied here:		
151.8	3.6 Transmitter eye close	sure for PAM4 (TECQ)				0.40					
151.8	8.7 Transmitter over/un	der-shoot			In 151	.8.10:	anaa of the Ord narag	ranh fram.			
151.8	3.8 Transmitter peak-to	-peak power			Unang "Trans	ge the ist sente	nce of the zhu parag	red using the wavet	forms captured for the		
151.8	3.9 Transmitter transition	on time			TDEC	O test (see 151	8 5) and the wavefor	m captured for the	TECO test (see 151.8.6) but		
151.0	. TO EXINCTION TALLO				withou	it the reference	equalizer being applie	ed in each case "			
Response	e Re	esponse Status C			to:		edamizer senig abbii				
ACCI	EPT IN PRINCIPLE.				"Trans	smitter peak-to-p	peak power is measu	red using the wavef	orm captured for the TECQ		
					test (s	ee 151.8.6), bu	t without the reference	e equalizer being a	pplied."		
Chan	ge the order in Table 1	51-7 to match that in Ta	able 140-6, and	update the order in							
Table	e 151-11 and subclaus	e 151.8 to match the or	der in Table 151	 With editorial license. 	In 140	0.7.5C:					
					Chang	ge the 1st sente	ence of the 2nd parag	raph from:	forma conturad for the		
					irans	ыпшег реак-ю-	peak power is measur	red using the waver	orms captured for the		

TDECQ test (see 140.7.5) and the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case."

to:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case."

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IEEE P802.3cu D3.0 100 Gb/s per wavelength on SMF Initial Sponsor ballot comments C/ 151 SC 151.8.13 P83 L43 # 1-90 C/ 00 SC 0 P0 L # 1-92 Dawe, Piers J G Nicholl, Gary Cisco Systems, Inc. Mellanox Technologies Comment Type Т Comment Status A measurement method Comment Type E Comment Status A bucket Too much duplication of stressed receiver sensitivity method. Figure wastes the reader's Implement new FM template (Version 4.3) time - is it identical to Figure 122-8. if not what ddiffers? SugaestedRemedv SuggestedRemedy Implement new FM template (Version 4.3), based the email from Pete Anslow to the Define 151's SRS by reference to 121 and 122, in the style of 140.7.10. 802.3 EDITORS reflector on 7/6/2020 Response Response Status C Response Response Status C ACCEPT IN PRINCIPLE. ACCEPT. Implement the changes captured in slide 16 of https://www.ieee802.org/3/cu/public/Sept20/lewis 3cu 01 091520.pdf swapping the order of the last two exceptions, with editorial license. C/ 140 P46 # I-91 SC 140.6.3 L21 II-VI Cole, Christopher R Comment Type E Comment Status A power budget The inclusion of a section reference in Table 140-8 for "Maximum discrete reflectance" for 100GBASE-FR1 and 100GBASE-LR1 is cumbersome to use and inconsistent with changes that the 802.3cu working group made in 802.3cu D2.2 to remove similar references in other tables. Also in Table 140-14 in section 140.10.2.2 (page 56), having the units along side the values within the table, rather than as a separate "units column", is inconsistent with practice throughout the rest of the document. Similar comments against Table 151-9 (page 75) and Table 151-15 (page 89) in Clause 151. This topic was discussed during the 802.3cu ad-hoc conference call on 14 August 2020, in conjuction with presentation https://www.ieee802.org/3/cu/public/cu adhoc/cu archive/cole 3cu adhoc 081420 v2.pdf. SuggestedRemedy Implement the proposed changes to Table 140-8, Table 140-14, Table 151-9 and Table 151-15, and associated footnotes, as captured in https://www.ieee802.org/3/cu/public/cu adhoc/cu archive/cole 3cu adhoc 081420 v2.pdf. Response Response Status C ACCEPT IN PRINCIPLE. The presentation http://www.ieee802.org/3/cu/public/cu adhoc/cu archive/cole 3cu adhoc 081420 v2.pdf was reviewed during the August 14th ad hoc call. Implement the suggested remedy with editorial license. TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general Comment ID 1-92 Page 25 of 27

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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/ 151	SC 151.8.1	0 P83	L10	# 1 <u>-</u> 93
Rodes, Ro	berto	II-VI		
Comment	Туре Т	Comment Status A	imei	nt method (updated 0922

There is no reason to spec Transmitter peak-to-peak over fiber. Peak-to-peak power over fiber will always be lower than back to back. It creates confusion for people using the specs.

SuggestedRemedy

Replace text:

Transmitter peak-to-peak power is measured using the waveforms captured for the TDECQ test (see 151.8.5) and the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied in each case.

With:

Transmitter peak-to-peak power is measured using the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied in each case.

Response Status C

Response

ACCEPT IN PRINCIPLE.

In 151.8.10:

Change the 1st sentence of the 2nd paragraph from:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TDECQ test (see 151.8.5) and the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied in each case."

to:

"Transmitter peak-to-peak power is measured using the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied."

In 140.7.5c:

Change the 1st sentence of the 2nd paragraph from:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TDECQ test (see 140.7.5) and the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case."

to:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case."

C/ 140	SC 140.7.5c	P 50	L 49	# <u>I-</u> 94
Rodes, Ro	oberto	II-VI		
Comment	Τνρε Τ	Comment Status A	emen	t method (updated 0922)

nment Type **T** Comment Status **A** ment method (updated 0922) There is no reason to spec Transmitter peak-to-peak over fiber. Peak-to-peak power over

fiber will always be lower than back to back. It creates confusion for people using the specs.

SuggestedRemedy

Replace text:

Transmitter peak-to-peak power is measured using the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case.

With:

Transmitter peak-to-peak power is measured using the waveforms captured for the TDECQ test (see 140.7.5) and the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case.

Response Response Status C

ACCEPT IN PRINCIPLE.

Resolve using the response to comment i-93.

[Editor's note: For reference, the response to comment i-93 is copied here:

In 151.8.10:

Change the 1st sentence of the 2nd paragraph from:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TDECQ test (see 151.8.5) and the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied in each case."

to:

"Transmitter peak-to-peak power is measured using the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied."

In 140.7.5c:

Change the 1st sentence of the 2nd paragraph from:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TDECQ test (see 140.7.5) and the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case."

to:

"Transmitter peak-to-peak power is measured using the waveforms captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in each case."

]

Rodes, Roberto II-VI Comment Type T Comment Status A Tx specifications FR4 and LR4-6 spec on 'Average launch power, each lane (max)' constrains effective Tx OMA range. This is an unnecessary constrain since receivers overload is mainly affected by max OMA, not AOP. Even FR1 and LR1 spec, with the same Rx technology and no Rx demux loss, have higher maximum AOP spec. This flexibility in AOP will be especially important to achieve uncooled operation. We recommend increasing spec 'Average launch power, each lane (max)' to 0.7 dB higher than spec 'Outer Optical Modulation Amplitude (OMAouter), each lane (max)' to 0.7 dB higher than spec 'Outer Optical Modulation Amplitude (OMAouter), each lane (max)' to 0.7 dB higher than spec 'Outer Optical Modulation Amplitude (OMAouter), each lane (max)' to 0.7 dB higher than spec 'Outer Optical Modulation Amplitude (OMAouter), each lane (max)' SuggestedRemedy C Change spec on 'Average launch power, each lane (max)' to 4.4dB for FR4 and 5.1dB for LR4-6 Same changes to Average receive power, each lane (max). Response Response Status C ACCEPT IN PRINCIPLE. In Table 151-7: • Change "Average launch power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. • Drange "Average launch power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. In Table 151-8: • Change "Average receive power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and t	C/ 151	SC 151.7.1	P71	L15	# 1 <u>-</u> 95
Comment Type T Comment Status A Tx specifications FR4 and LR4-6 spec on 'Average launch power, each lane (max)' constrains effective Tx OMA range. This is an unnecessary constrain since receivers overload is mainly affected by max OMA, not AOP. Even FR1 and LR1 spec, with the same Rx technology and no Rx demux loss, have higher maximum AOP spec. This flexibility in AOP will be especially important to achieve uncooled operation. We recommend increasing spec 'Average launch power, each lane (max)' to 0.7 dB higher than spec 'Outer Optical Modulation Amplitude (OMAouter), each lane (max)' With this change, the effective maximum OMA per lane is maintained for extinction ratios of 4dB and higher. SuggestedRemedy Change spec on 'Average launch power, each lane (max)' to 4.4dB for FR4 and 5.1dB for LR4-6 Same changes to Average receive power, each lane (max). Response Response Status Change "Average launch power, each lane (max). Response Response Status C ACCEPT IN PRINCIPLE. In Table 151-7: - Change "Average launch power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. In Table 151-7: - Change "Total average launch power (max)" to 10.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. In Table 151-8: - Change "Average receive power, each lane (max)"	Rodes, Roberto		II-VI		
FR4 and LR4-6 spec on 'Average launch power, each lane (max)' constrains effective Tx OMA range. This is an unnecessary constrain since receivers overload is mainly affected by max OMA, not AOP. Even FR1 and LR1 spec, with the same Rx technology and no Rx demux loss, have higher maximum AOP spec. This fitexibility in AOP will be especially important to achieve uncooled operation. We recommend increasing spec 'Average launch power, each lane (max)' to 0.7 dB higher than spec 'Outer Optical Modulation Amplitude (OMAouter), each lane (max)' With this change, the effective maximum OMA per lane is maintained for extinction ratios of 4dB and higher. <i>SuggestedRemedy</i> Change spec on 'Average launch power, each lane (max)' to 4.4dB for FR4 and 5.1dB for LR4-6 Same changes to Average receive power, each lane (max). <i>Response</i> <i>Response Status</i> C ACCEPT IN PRINCIPLE. In Table 151-7: - Change "Average launch power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. - Change "Total average launch power (max)" to 10.4dBm for 400GBASE-FR4 and to 11.1dBm for 400GBASE-LR4-6. In Table 151-8: - Change "Average receive power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6.	Comment	Туре Т	Comment Status A		Tx specifications
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ACCEPT IN PRINCIPLE. In Table 151-7: - Change "Average launch power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. - Change "Total average launch power (max)" to 10.4dBm for 400GBASE-FR4 and to 11.1dBm for 400GBASE-LR4-6. In Table 151-8: - Change "Average receive power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. - Change "Damage threshold, each lane" to 5.4dBm for 400GBASE-FR4 and to 6.1dBm for 400GBASE-LR4-6.	Response		Response Status C		
In Table 151-7: - Change "Average launch power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. - Change "Total average launch power (max)" to 10.4dBm for 400GBASE-FR4 and to 11.1dBm for 400GBASE-LR4-6. In Table 151-8: - Change "Average receive power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. - Change "Damage threshold, each lane" to 5.4dBm for 400GBASE-FR4 and to 6.1dBm for 400GBASE-LR4-6.	ACCE	PT IN PRINCIPLE			
In Table 151-8: - Change "Average receive power, each lane (max)" to 4.4dBm for 400GBASE-FR4 and to 5.1dBm for 400GBASE-LR4-6. - Change "Damage threshold, each lane" to 5.4dBm for 400GBASE-FR4 and to 6.1dBm for 400GBASE-LR4-6.	In Tab - Char 5.1dBi - Char 11.1dI	le 151-7: nge "Average laund m for 400GBASE-l nge "Total average 8m for 400GBASE	ch power, each lane (max)" _R4-6. launch power (max)" to 10. -LR4-6.	to 4.4dBm for 4 4dBm for 400G	00GBASE-FR4 and to BASE-FR4 and to
- Change "Damage threshold, each lane" to 5.4dBm for 400GBASE-FR4 and to 6.1dBm for 400GBASE-LR4-6.	In Tab - Char 5 1dB	le 151-8: ige "Average recei m for 400GBASE-I	ve power, each lane (max)" R4-6	to 4.4dBm for 4	400GBASE-FR4 and to
	- Char 400GE	age "Damage thres BASE-LR4-6.	shold, each lane" to 5.4dBm	for 400GBASE	-FR4 and to 6.1dBm for