C/ 00 SC	Р	L	# 108	CI 00	SC General	P 14	L 28	# 51	
Lindsay, Tom	ClariPhy Con	nmunicati		Swanson,	Steven	Corning Incorp	orated		
Comment Type T	Comment Status A			Comment	Туре Е	Comment Status X			
Lindsay comments of	on D0.1 have been resolved or o	overtaken by ev	rents.	There	is an incosisten	cy in how material is included;	in some cases	, material is duplicated	
Suggested Remedy				in Cla	use 68 and in oth	hers a reference is made to tex	ct or Figures in	other clauses.	
Withdraw all unresol	lved Lindsay comments from the	e D0.1 ballot pr	ocess.	Suggestee	d Remedy				
Response ACCEPT.	Response Status C			Devel includ 14.	op consistent me e the figure for th	ethodology and implement. In t ne cabling model here rather th	his particular ca nan reference F	ase, I would rather Figure 38-7 or Figure 52-	
C/ 00 SC Dawe, Piers	P 1 Agilent	L1	# 69	Response WITH	DRAWN.	Response Status Z			
Comment Type E	Comment Status X			CI 30	SC 5.1.1.2	Р	L	# 76	
You don't need 'TM's	s in the page headers. I believe	e the guidance i	s, use TM for the	Dawe, Pie	rs	Agilent			
trademarked thing th project in progress v	ne first time it is mentioned, ther would be trademarked anyway -	n don't repeat it. you could enqu	I don't know if a lire.	Comment Type T Comment Status A aMAUType list needs another entry					
Suggested Remedy				Suggosto	d Pomodu				
Remove the unnece	essary 'TM's			Suggester Add e	ntry for 10GBAS	E-LRM after 10GBASE-LR			
Response	Response Status Z			Response		Response Status C			
WITHDRAWN.				ACCE	PT.				
C/ 00 SC 52.15.	2.3 P	L	# 89		00.0				
Dawe, Piers	Agilent			C/ 30B	SC 2	P	L	# 77	
Comment Type E	Comment Status X			Dawe, Pie	<u> </u>	Agiient			
If we are to be really description changed	r thorough, the PICS major capa I.	ability for 10GBA	ASE-LR should have its	Comment Type\	<i>Type</i> T /alue list needs a	Comment Status A another entry			
Suggested Remedy				Suggestee	d Remedy				
Change 'Device sup	ports longwave (1310 nm) oper	ation LAN PHY	' to 'Device supports	Add entry for 10GBASE-LRM after 10GBASE-LR.					
longwave (1310 nm)) operation LAN PHY over single	e-mode fiber'		Response		Response Status C			
Response WITHDRAWN.	Response Status Z			ACCE	PT.	-			
Change 'Device sup longwave (1310 nm) Response WITHDRAWN.	ports longwave (1310 nm) oper) operation LAN PHY over single <i>Response Status</i> Z	ation LAN PHY e-mode fiber'	' to 'Device supports	Add e Response ACCE	ntry for 10GBAS	E-LRM after 10GBASE-LR. Response Status C			



30B SC 2

Cl 44 Dawe, Pier	SC 1.4.4	P Agilent	L	# 67	C/ 68 SC 1 Dawe, Piers	Р 2 Agilent	L 28	# 84
Comment	Type T	Comment Status A			Comment Type F	Comment Status		
Need t	o extend table 44	I-1. Need to extend the foll	owing sentence	'The 10GBASE-R family	Fuzzy pictures, f	ilesize bloat.		
of phys	sical layer implem	nentations is composed of 1	IOGBASE-SR, 1	0GBASE-LR, and	Sugaested Remedy			
TUGBA	ASE-ER.				Replace with the	proper ones and/or adjust distille	r settings.	
Suggested	ditional row and	column to table 44-1 Chai	nae sentence to		Response	Response Status C		
10GBA	SE-LRM, 10GB	ASE-LR, and 10GBASE-ER		TOODAOL ON,	ACCEPT.			
Response		Response Status C				1 D16	1 11	# 00
ACCE	PT.				Dawe. Piers	Agilent	£ 11	# 00
C/ 45	SC 2.1.10	Р	L	# 92	Comment Type E	Comment Status A		
Dawe, Pier	S	Agilent			'can by found' sh	hould be:		
Comment	Туре Т	Comment Status X			Suggested Remedy			
Table 4 extend	45-11 10G PMA/I ing to advertise 1	PMD Extended Ability regis 0GBASE-LRM PMA/PMD	ter bit definition: ability.	s This table needs	can be found			
Suggested	Remedv				Response	Response Status C		
Extend	I the register set i	in table: 1.11.15:2 Reserv	ved 1.11.1 1	0GBASE-LRM ability	ACCEPT.			
Response	-	Response Status Z		-	CI 68 SC 10.	.3.6 P17	L 27	# 90
WITHE	DRAWN.				Dawe, Piers	Agilent		
	50 24 64	D	1	# 04	Comment Type E	Comment Status A		
Dawe. Pier	SC 2.1.0.1	Aailent	L	# 91	52.15.3.11 does	not agree with 68.7. And you can	combine 68.10.3	.6 and 68.10.3.7 as
Comment	- Type T	Comment Status X			you have combin			
Table 4	45-7 10G PMA/P	MD control 2 register bit de	finitions This tal	ble may need extending	Combine 68 10 3	3.6 and 68.10.3.7 Contents one t	able with just three	e items. I think
to cont	rol a 10GBASE-L	RM PMA/PMD type. As th	e 3 bits have be	en used up with 8 PMD	Posponso	Posnonso Status		
types,	one could define	bits 1.7.2:0 the same for LI	RM as they are	for LR, and set 1.7.3 to 1.	ACCEPT	Response Status		
Suggested	Remedy	ble per comment. Change	first contonce of	f toyt to ' uning hits ?				
throug	h 0.'	bie per comment. Change	linst semence c	i text tousing bits 5	C/ 68 SC 4.1	P3	L18	# 49
Response		Response Status Z			Swanson, Steven	Corning Inco	orporated	
WITHE	DRAWN.				Comment Type E Editorial	E Comment Status A		
					Suggested Remedy			
					Modify first sente	ence to read ""is standardized a	t test points TP2 a	and TP3 as shown in
					rigare ee Ei			
					Response	Response Status C		

C/ 68 SC 4.3	P3	L 54	# 68	C/ 68 SC 4.4	P4	L 22	# 110
Comment Type E	Comment Status A			Comment Type T	Comment Status X		
Redundant words pres	sumably copied from 68.4.2.	Compare 52.4.3		Following Piers's obs that FAIL OMA can b	ervation, last time, that FAIL 0 e 10dB smaller than OK OMA	DMA need not be	e so small, I suggest
Suggested Remedy In 68.4.3, delete 'to the 68.4.2, don't delete the	e MDI according to the optical e same words.)	specifications ir	this clause.' (In	Suggested Remedy Change Receive Cor	nditions entry, for FAIL to ""Inp	ut optical power	in OMA < Receiver
Response ACCEPT.	Response Status C			power in OMA (min) i Response WITHDRAWN	n Table 68-4 - 10dB"" Response Status Z		
C/ 68 SC 4.3 Swanson, Steven	P3 Corning Incor	L 54 porated	# 50	C/ 68 SC 4.4	P4	L 32	# 54
Comment Type E Editorial; redundant te	Comment Status A			Comment Type E	Comment Status X	iporateu	
Suggested Remedy Delete ""to the MDI	according to the optical specif	ications in this o	clause.""	Suggested Remedy Replace "" must ""	with "" shall ""		
Response ACCEPT.	Response Status C			Response WITHDRAWN.	Response Status Z		
C/ 68 SC 4.4 Dawe, Piers	Р 4 Agilent	L 10	# 72	C/ 68 SC 4.4	P 4	L 37	# 55
Comment Type E Missing full stop	Comment Status A			Comment Type E	Comment Status X	iporated	
Suggested Remedy 45.2.1.9.5.				Editorial Suggested Remedy			
Response ACCEPT.	Response Status C			Modify sentence to re implementations that signal.""	ead: ""amplitude of the modu respond to the average optica	al power of the opti al power of the m	cal signal and odulated optical
C/ 68 SC 4.4 Swanson, Steven	P4 Corning Incor	L13	# 52	Response WITHDRAWN.	Response Status Z		
Comment Type E Incorrect reference.	Comment Status X			C/ 68 SC 4.4 Dawe, Piers	P 4 Agilent	L 6	# 73
Suggested Remedy Replace ""10GBASE	E-R"" with ""10GBASE-LRN	Л""		Comment Type E Gratuitous capitals.	Comment Status X We should follow the style guid	de, not just prece	edent.
Response WITHDRAWN.	Response Status Z	Response Status Z		Suggested Remedy 'Signal Detect' should	be 'signal detect' (more than	once).	
				<i>Response</i> Withdrawn	Response Status W		

 TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause
 Page 3 of 12

 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
 C/ 68 SC 4.4

C/ 68	SC 4.4	P 4	L 7	# 70	C/ 68	SC 5	P 5	L 42	# 93		
Dawe, Pier	S	Agilent			Jaeger, Jo	hn	Big Bear Net	vorks			
Comment	Туре Е	Comment Status A			Comment	Туре Т	Comment Status A				
If PMD	_SIGNAL.indic	cate is a function with SIGNAL_	_DETECT its su	bject, then would there	The operation	perating range ately satisfy the	specified for the installed base e market requirements. Based	of 62.5um multi	mode fiber does not		
Suggested Remov	Remedy ve space in 'PM	ID_SIGNAL.indicate (SIGNAL	DETECT)'.		prese 108 fil	nted within the per sets, we cal	Task Force and the recentador n improve the industry accepta	otion of the FDD nce of the PMD	l-grade Monte Carlo & by specifying a longer		
Response		Response Status C			Sugaested	l Remedv					
ACCEI	PT.				Chang	ge the 62.5um of	operating range to: '0.5 to 300'				
C/ 68	SC 4.4	P 4	L8	# 71	Response		Response Status C				
Dawe, Pier	s	Agilent			ACCE	PT. First row o	perating range: 0.5 m to 300m				
Comment ⁻ Overdo	<i>Type</i> T ose of shalls. C	Comment Status A Compare 52.4.4.			Second row operating range: TBD Third row, second column: 1500/500 and remove editor's note Second row, first fiber: 400/400						
Suggested Chang	<i>Remedy</i> e to 'PMD_SIG	NAL.indicate is intended to be	an indicator'.		Propo Secor	sed : John Jae ided: Abhijit Sh	ger anbhag				
Response ACCEI	Response Response Status C ACCEPT.				Task I For: 5 Again: Abstai	Force 0 st: 0 m: 8					
					802.3 For: 2 Again: Abstai	voters: 5 st: 0 n: 4					
					C/ 68	SC 5.1	P6	L11	# 74		
					Dawe, Pie	rs	Agilent				
					Comment	Туре Т	Comment Status A				
					An RMS spectral width of 5 nm is much wider than any healthy laser emits, and could hypothetically give rise to a MPN penalty of ~0.2 to 0.3 dB at 220 m. We can eliminate the great majority of this at no cost.						
					Suggested	l Remedy					
					Chang	ge to 4 nm. Co	uld go to e.g. 3.2 nm for neglig	ble cost.			
					Response ACCE	PT. Change to	Response Status C 4 nm				

	SC 5.1	P6	L15	# 75	C/ 68 SC 5.1
Dawe, Pier	S	Agilent			Lindsay, Tom
Comment T	Туре Т	Comment Status A			Comment Type
Sugges is trans	sted OMA minir smit power toler	num of -4.5 dB still seems app ancing, which for typical to low	propriate. The m v extinction ratio	ain consideration here s is determined by the	Stressed eye ON All other stresse
cost eff relates	fectiveness. Ho to the study of	pwever, the way of measuring TP2 waveform quality parameters	signal strength o eter.	can be improved. This	Suggested Remedy Change to -6.6 c
Suggested	Remedy				Response
Insert r informa	new row for low ative, value -4.5	er limit of metric of useful sign dBm. Remove editor's note.	al strength. Mak	the OMA minimum	ACCEPT. Chang
Response		Response Status C			C/ 68 SC 5.1
ACCEF	PT. Make the O	MA minimum normative value	-4.5 dBm. Rem	ove editor's note.	Lindsay, Iom
C/ 68	SC 5.1	P6	/ 35	# 78	Comment Type 1
Dawe, Pier	s	Agilent			frequency. Com
Comment T	Туре Т	Comment Status A			MHZ may push i
The cu as mor	rrently propose e is learnt abou	d requirements for a good opt it the fibres. Almost any restri	cal launch have cted launch seer	become less optimum ns to have merit; an	Use 60 MHz.
overfille the cor especia	ed launch still s nnectors degrac ally for 50 um.	eems a bad choice; an extrem le the definition. And specifica	iely well defined ally, we should c	launch is pointless as onsider center launch,	Response WITHDRAWN.
Suggested	Remedy				CI 68 SC 5 1
Consid	ler a definition of	of partial filling. Is numerical a	perture any good	d for this?	Lindsav. Tom
Response		Response Status C			Comment Type
ACCEF 68.6.4. Figure	PT. Remove EF 2 referring to E 68-5.	information from Table 68-3 a F to "The optical launch meas	& change first se urement" & rer	ntence of Section nove EF references in	SJ amplitude is not DDJ. In look up 0.3 UI pk-pk
Duplica	ate row in Table	e 68-3 for 50um. One row for c	enter launch. Th	e other for study.	some DJ and R. such that SJ with
Chang	e title of 68.6.4.	2 to "Measurement of optical I	aunches"		Suggested Remedy
e nang					
For: 32	2				Use 0.1 UI pk-pl value is for SJ a

RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause

	SC 5.	1	P8	L 15	# 97
Lindsay, T	om		ClariPhy Co	ommunicati	
Comment Stress All oth	<i>Type</i> ed eye O er stresse	T Comm MA should reflected are built into the	nent Status A t min Tx OMA, pa ne test signal.	assive losses, and	Consequent penal
Suggested Chang	l Remedy je to -6.6	, dBm.			
Response ACCE	PT. Char	<i>Respol</i> nge to -6.5 dBm.	nse Status C		
CI 68	SC 5.	1	P 8	L18	# 98
Lindoov T	om		ClariPhy Co	ommunicati	
Comment	Type	T Comm	nent Status X	Simulation	
Comment SJ free freque MHz n	<i>Type</i> quency is ncy. Com nay push	T Comm not defined. 802 mon CDRs may limits of some tes	anent Status X .3ae used a max use 4 MHz, but I st equipment, so	frequency of 10x c expect others may a compromise is p	of actual CDR corne be up to 8 MHz. 8 roposed.
Comment SJ free freque MHz n Suggested Use 60	<i>Type</i> quency is ncy. Com nay push <i>I Remed</i> y) MHz.	T Comn not defined. 802 imon CDRs may limits of some test	anent Status X .3ae used a max use 4 MHz, but I st equipment, so	frequency of 10x c expect others may a compromise is p	of actual CDR corne be up to 8 MHz. 8 roposed.
Comment SJ freq freque MHz n Suggested Use 60 Response WITHI	Type quency is ncy. Com nay push I Remedy D MHz. DRAWN.	T Comn not defined. 802 mon CDRs may limits of some test , Respon	nent Status X .3ae used a max use 4 MHz, but I st equipment, so nse Status Z	frequency of 10x c expect others may a compromise is p	of actual CDR corne be up to 8 MHz. 8 roposed.
Comment SJ freque MHz n Suggested Use 60 Response WITHI CI 68	Type quency is ncy. Com nay push I Remedy D MHz. DRAWN. SC 5.	T Comn not defined. 802 mon CDRs may limits of some tes <i>Respon</i>	nent Status X .3ae used a max use 4 MHz, but I st equipment, so nse Status Z P8	frequency of 10x c expect others may a compromise is p	of actual CDR corne be up to 8 MHz. 8 roposed. # 99

SJ amplitude is not specified. I believe its purpose is to emulate uncorrelated clock jitter, not DDJ. In looking at some 10G electrical specs (XFP and CEI), it seems that non-DDJ of up 0.3 UI pk-pk can be a typical limit. Assuming a crest factor of approx 9 (mixture of some DJ and RJ), then the rms value is 0.033 UI rms. The crest factor for SJ is 2.828, such that SJ with an equivalent amount of rms jitter would be approx 0.1 pk-pk.

Use 0.1 UI pk-pk. Other clock jitter in the test system should be minimized. The 0.1 UI value is for SJ and should not be compensated (reduced) due the presence of other jitter.

Response Status Z

CI 68	SC	5.1		P 8	L 24	# 100	CI 68	SC	5.2	P	6	L 23	# 114
Lindsay,	Tom		(ClariPhy Comm	unicati		Weiner, N	lick		Phyw	orks		
Commen	t Type	т	Comment S	tatus A			Comment	Туре	т	Comment Status	Х		
Altho suital not a elsew	ugh the ble meth ctually r vhere fo	RIN and M nod that sho neasure no r this test, s	IN values are s ould be adopted ise spectral de so a simple ove	ubject to chang d into the docun nsity. Flatness i erall rms noise n	e, the TP3 group nent. A RIN meth s assumed there neasurement is s	has determined a nod typically does and is specified sufficient.	Static param indica meas	stress neter. \ ate that ureme	ed receive /alue TBD -22dBe n nt bandwie	ed test in Table 68-4. D. Expressions and cu ioise power: OMA pow dth to be 7.5GHz, the	Noise de rves pre ver is ap Noise d	ensity: OMA ratio sented by Lew, T propriate. Assumi ensity: OMA ratio	specified as om and myself ng appropriate value should be -
Suggeste	d Reme	edy					1210E	⊃/ΠΖ. d Dom	odu				
Use r trans define noise level	Use rms noise value (based on 0.9 dB) = OMA/24.2. For a calibration method, I propose transmitting a square wave with the ISI turned off. Measure the OMA with the method defined in clause 52. With the Bessel Thomson 7.5 GHz filter in place, measure the rms noise with a narrow (0.01 UI wide) histogram on the logic one level, and adjust the noise level until the desired rms value is obtained. At least 1000 hits should be counted in the histogram. It is allowed to compensate for noise in the measurement system (O/E, scope, etc.)						Suggested Remedy Noise power: OMA ratio value to be -121dB/Hz. Add footnote to specify calibration usin o/e converter, 7.5GHz BT filter and expression Noise power: OMA ratio = 20.log(noise power/modulation power.filter bandwidth). Also that this ratio applies when the ISI generator is set to the identity transfer function.						ify calibration using tio = 20.log(noise when the ISI
etc.).	gram. It	Is allowed	to compensate	for noise in the	measurement s	/stem (U/E, scope,	Response) או א ס רו	/NI	Response Status	z		
Response	е		Response St	atus C									
ACCI (ratio	EPT. Ta)	ible 68-4 No	oise in stressed	d receiver test. l	Jse OMA/(2xrms	noise). Value 11.5	<i>Cl</i> 68 Weiner, N	SC lick	5.3	P9 Phyw) vorks	L 10	# 115
For a the m meas noise the h Each stress	of the transformed to the calibration of the the calibration of the transformed to the tr	tion method lefined in cl rms noise ntil the desi n. The nois wo measur nal calibratio	the effect that a d, use a square lause 52. With with a 1UI wide ired rms value i e in the measu ement methods on.	wave with the I the Bessel Thor histogram on t is obtained. At I rement system s is applicable to	SI turned off. Me nson 7.5 GHz fil he logic one leve east 1000 hits st should be compe o both RIN meas	ITS easure the OMA with ter in place, I, and adjust the iould be counted in ensated for. urement and	Comment Table Suggested Accep Response WITH	68-5 in d Remo ot the s DRAW	E ncludes er edy uggestion /N.	ditor's notes in the firs	t two rov notes in Z	ws, proposing new	v wording. s of Table 68-5.
C/ 68	SC	5.1		P8	L 32	# 109	C/ 68 Lindsay, T	SC Fom	5.3	Pg Claril) Phy Con	L 11 nmunicati	# 101
Comment Inforr	i om <i>t Type</i> nation fe	T or specs ar	Comment Sa	tatus A	unicati 2 0904 are miss	ing	<i>Comment</i> I agre	<i>Type</i> e with	E editor's sו	Comment Status uggestions.	х		
Suggeste See s	ed Reme separate	edy e document	[lindsay_1_11	04]: TP2 specs	and method for I	D0.2 comments.doc.	Suggestee Accep of the	d Rem ot edito same	<i>edy</i> r's recom table.	mendation. This reme	dy is als	o recommended t	for his note in line f
Response ACCI Propo Seco For: ^ Agair Absta	e EPT. Mo osed: To nded: Ji 17 nst: 5 ain: 13	odified remo om Lindsay im McVey	Response St edy.	atus C			Response WITH) IDRAW	/N.	Response Status	Z		

Use rms noise value (based on 0.9 dB) = OMA/24.2. For a calibration method, I propose transmitting a square wave with the ISI turned off. Measure the OMA with the method defined in clause 52. With the Bessel Thomson 7.5 GHz filter in place, measure the rms noise with a narrow (0.01 UI wide) histogram on the logic one level, and adjust the noise level until the desired rms value is obtained. At least 1000 hits should be counted in the histogram.	Noise power: OMA ratio value to be -121dB/Hz. Add footnote to specify calibration using o/e converter, 7.5GHz BT filter and expression Noise power: OMA ratio = 20.log(noise power/modulation power.filter bandwidth). Also that this ratio applies when the ISI generator is set to the identity transfer function.						
etc.).	Response	Response Status Z					
Response Response Status C	WITHDRAWN.						
ACCEPT. Table 68-4 Noise in stressed receiver test. Use OMA/(2xrms noise). Value 11.5 (ratio)	C/ 68 SC 5.3 Weiner, Nick	P 9 L10 Phyworks	# 115				
Add note to 68.6.4.3 to the effect that alternative measurement method is For a calibration method, use a square wave with the ISI turned off. Measure the OMA with the method defined in clause 52. With the Bessel Thomson 7.5 GHz filter in place.	<i>Comment Type</i> E Table 68-5 includes e	Comment Status X ditor's notes in the first two rows, proposi	ing new wording.				
measure the rms noise with a 1UI wide histogram on the logic one level, and adjust the noise level until the desired rms value is obtained. At least 1000 hits should be counted in the bistogram. The poise in the measurement system should be compensated for	Suggested Remedy Accept the suggestion	ns made in the editors notes in the first tw	vo rows of Table 68-5.				
Each of the two measurement methods is applicable to both RIN measurement and stressed signal calibration	Response WITHDRAWN.	Response Status Z					
C/ 68 SC 5.1 P 8 L 32 # 109 Lindsay, Tom ClariPhy Communicati	C/ 68 SC 5.3 Lindsay, Tom	P 9 L 11 ClariPhy Communicati	# 101				
Comment Type T Comment Status A Information for specs and method related to lindsay 02 0904 are missing.	Comment Type E I agree with editor's s	Comment Status X uggestions.					
Suggested Remedy See separate document [lindsay_1_1104]: TP2 specs and method for D0.2 comments.doc.	Suggested Remedy Accept editor's recom of the same table.	mendation. This remedy is also recomm	ended for his note in line 13				
Response Response Status C ACCEPT. Modified remedy. Proposed: Tom Lindsay Proposed: Tom Lindsay Seconded: Jim McVey For: 17 Against: 5 Abstain: 13	Response WITHDRAWN.	Response Status Z					
TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepte RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn	ed R/rejected SORT ORDE	R: Clause, Page, Line, Subclause	Page 6 of 12 C/ 68 SC 5.3				



111

79

112

C/ 68	SC 6.2	P 7	L19	# 86
Dawe, Piers	;	Agilent		

Comment Type T Comment Status X

re need for OMA measurement method: I think we can agree that it would be less confusing to keep the same definition of OMA across all 10G optical Ethernet, although EFM deliberately has a different definition. This does not mean that what 10G calls OMA is something we want to measure at all! At present, I believe it is likely be used as part of a stressed receiver calibration. If we are really concerned, it might be useful for measuring a strong transmitter (to avoid overload situations), although there's still the problem that a transmitter in mission mode emits a different pattern to that required by the method of 52.9.5. I don't believe this OMA is helpful for specifying a lower power transmitter and it is not appropriate for an optical signal in service (wrong pattern).

Suggested Remedy

Insert at the beginning of the subclause: 'For the purposes of this clause, optical modulation amplitude (OMA) is defined as in 52.9.5.

Response	Response Status	Z	

WITHDRAWN.

CI 68	SC 6.2	P 7	L 21	#	113
Weiner, Nick		Phyworks			

Comment Type E Comment Status A

For clarity, separate ""reletionship between OMA and ER"" from OMA and ER measurement methods.

Suggested Remedy

Create new sub-clause ""Relationship between OMA and Extinction Ratio"" to follow ""OMA and Extinction measurements"" sub-clause. Sub-cluase to conatin current 68.6.2, content (other than the editor's note).

Response Response Status C

ACCEPT.

C/ 68	SC 6.2	P 7	L 47	#	85
Dawe, Piers		Agilent			

Comment Type T Comment Status A

Figure 68-3 should be referred to where it first applies. It illustrates the transmitter specification as well as the relationship between OMA, average power and extinction ratio. There's also the little inconsistency (not a bug, problem or inaccuracy) that by using different patterns for defining OMA and extinction ratio (and assuming that average power is pattern independent), the diagram is not quite true. This point is made in 58.7.6, which we refer to.

Suggested Remedy

Move the figure, and copy and modify (*** shows the modifications) its calling sentence 'Figure 68-3 illustrates the region of transmitter compliance and also the ***approximate*** relationship between OMA, average power and extinction ratio,' into 68.5.1 Transmitter optical specifications. In this subclause, refer to the figure again 'Figure 68-3 illustrates the ***approximate*** relationship between OMA, average power and extinction ratio.'



CI 68	SC 6.3	P 9	L 29	#	82
Dawe, Piers		Agilent			

Comment Type т Comment Status X

For extinction ratio specification and measurement procedure, I strongly believe that, whatever we decide for signal strength measurement, we should use the 'realistic pattern' approach taken in existing 10G optical Ethernet, Ethernet in the First Mile, and all SONET. This method can be implemented with a transmitter in mission mode, is familiar, and gives a measure that is more relevant of the usable signal than the alternative 'square wave' method. I would say 'just refer to 52.9.4' but various improvements and clarifications were spotted during EFM's development, hence the text proposed in comment D0.1#45. The sentence about test receiver frequency response might be modified by choice of TP2 waveform specification. But I propose we include it for now and review in a future meeting.

Response Status Z

Suggested Remedy

Implement comment D0.1#45.

Response

WITHDRAWN.

-										
CI 68	SC 6.3	P 9	L 29	# 106	C/ 68	SC	6.5	P11	L	# 107
Lindsay, T	om	ClariPhy Con	nmunicati		Lindsay, T	Tom		ClariPhy Comr	nunicati	
Comment We ne	<i>Type</i> T ed a definition a	<i>Comment Status</i> X and measurement method for	extinction ratio (ER). ER is not a critical	<i>Comment</i> Need	<i>Type</i> a low fre	T equency	Comment Status X jitter test.		
param	eter for LRM, so	I am not going to drive one r	method over ano	ther.	Suggester	d Romo	dv ,			
Suggested Option 52, to calibra	d Remedy n1 - use the low determine P0 ar ation, the square	frequency square wave defini ad P1. Otherwise, follow the n wave pattern will be defined	tion used for OM nethod given in c as 10 ones and	A per 802.3ae, clause lause 52. For TP3 10 zeros, repetitive.	Propo but re 68.6.5	ose 5 UI move G 5.1 (mod	at 40 kH aussian lified by a	Iz sine jitter test condition.Use of noise and ISI generator. Keep another comment) to specify re	current Stress all else as is. quirements at	ed eye generator figure Use words for subclause pout BER, etc.
Optior	n2 - use the met	nod given in clause 58.			Response			Response Status Z		
Response		Response Status Z			WITH	DRAWN	Ν.			
WITH	DRAWN.				C/ 68	SC	6.5	P11	L 43	# 102
C/ 68	SC 6.4.1	P 9	L 38	# 83	Lindsay, T	om		ClariPhy Comr	nunicati	
Dawe, Pie	rs	Agilent			Comment	Туре	Е	Comment Status X		
Comment	Туре Т	Comment Status A			If we sthe id	stay with ea bette	n sine jitte r.	er, then this may be okay, but e	even then, pha	ase modulation conveys
Even i are co	if we can't decide Insidering	e yet if we do/do not like eye s	specifications, le	us build out what we	Suggeste	d Reme	dy			
Suggested	d Remedy				Chang this in	ge from the doc	frequenc cument (s	cy modulation to phase modula such as in paragraph 68.6.5.1).	tion. Also sea	rch for other instances of
Delete insert	e 'Test procedure text per D0.1#22	e TBD. 52.9.7 and 58.7.8 have 2-24.	e been suggeste	d as references' and	Response)		Response Status Z		
Response		Response Status C			WITH	DRAWN	۱.			
ACCE Accep	PT. Delete three t eye mask para	e editor's note in 68.6.4.1 . Ac metes in editor's notes in Tal	cept Figure 68-4 ble 68-3.	, without editor's note.	<i>CI</i> 68 Lindsay, T	SC Tom	6.5.1	P 12 ClariPhy Comr	L 31 nunicati	# 103
C/ 68	SC 6.4.2	P10	L 22	# 59	Comment	Type	т	Comment Status A		
Swanson,	Steven	Corning Incor	rporated		The w	vords are	- e true, bi	ut the purpose of the test is not	to determine	the actual sensitivity, but
Comment	Type TR	Comment Status X			rather	r to assu	ire that th	ne Rx meets BER under the str	essed condition	ons.
Launc	h specifications	unclear.			Suggeste	d Reme	dy			
Suggested	d Remedy				Rewo comb	rd parag	graph to b f the Sta	""A BER of better than 1E-12 s atic stressed receiver sensitivity	hall be achiev OMA specifie	ed under the ed in Table 68-4, with
spefic	ations suggests	that center launch is not inclu	ided.		each	of the IS	5I""			
Response WITH	DRAWN.	Response Status Z			Response ACCE	e PT.		Response Status C		

C/ 68 SC 6.5.2 P12 L 35 # 104	C/ 68 SC 6.5.2	P8 L32	# 94					
Lindsay, Tom ClariPhy Communicati	King, Jonathan	Big Bear Networks						
Comment Type T Comment Status X	Comment Type T Comment	Status X						
What have we decided to do with this clause?	able 68-4 needs to specify the rate impulse response bounds for the dyr	of variation of the impulse resp namic ISI test.	onse, as well as the					
Abandon this subclause uploss it is deemed essential	Suggested Remedy							
	Add line to table Frequency of variati	on of dynamic ISI TBD	. Hz					
WITHDRAWN.	Response Response	Status Z						
C/ 68 SC 6.5.2 P12 L 38 # 95		D12 / 25	# 60					
King, Jonathan Big Bear Networks	Swanson. Steven	Corning Incorporated	# 00					
Comment Type T Comment Status X Description of dynamic test should specify the rate of variation of the impulse response	Comment Type E Comment	Status X						
Suggested Remedy	Suggested Demody							
Amend second sentence to: Static ISI is applied, and then dynamically changing ISI is applied at a rate and magnitude as specified in Table 68-4, and with reference to the impulse response of Figure 68-7.	Suggested Remedy Suggest defining the limits on a ""li appears on Page 11, line 48.	near electrical/optical converter	r"" The same text					
Response Response Status Z WITHDRAWN.	Response Response WITHDRAWN.	Status Z						
C/ 68 SC 6.5.2 P8 L15 # 116	C/ 68 SC 6.5.3	P13 L26	# 61					
Weiner, Nick Phyworks	Swanson, Steven	Corning Incorporated						
Comment Type T Comment Status A	Comment Type E Comment	Status X						
Table 68-4. The stressed receiver sensitivity test is annotated with an editor's notes to indicate that it has not been adopted for inclusion. The static stressed receiver test has	Clarification needed.							
now received considerable attention and should be adopted.	Suggested Remedy	irmonto quab os riss timos litt	ar and DIN should be					
Suggested Remedy	negligible."" We need to define negligi	gible.						
Remove editor's note from Static received sensitivity test in Table 68-4 and also from 68.6.5. New editor's note in in 68.6.5.2 to indicate that the dynamic penalty test has not been adopted.	Response Response WITHDRAWN.	Status Z						
Response Response Status C	C/ 68 SC 7	P14 L1	# 117					
ACCEPT.	Weiner, Nick	Phyworks						
	Comment Type E Comment Clarity may be improved by slight re-	Status A wording and new subclause						
	Suggested Remedy							
	Accept suggestions made in editor's	notes on lines 1 and 6 of page	14.					
	Response Response	Status C						

SC 7

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C/ 68 SC 7.1	P14 Corning Incor	L 12	# 62	Cl 68 Dawe Piel	SC 8	P 14 Agilent	L 47	# 87
	Commant Statua	polated		Commont	Turno T	Agiicht		
Editorial.	Comment Status A			Comment	<i>Type</i>	can't be 'TBD' if we are intend	dina to work on e	xisting cabling!
Suggested Remedy				Suggested	Remedy			
Delete ""Instalation	"" at end of text.			Replac	ce 'TBD' with th	ne real info or a reference there	eto. Is this best o	quoted in ps/nm or
Response	Response Status C			ps/nm/	/km?			
ACCEPT.				Response		Response Status C		
C/ 68 SC 8	P14	L31	# 118	AUCE	PT. Copy, or re	erer, to subclause of 52.		
Weiner, Nick	Phyworks	-•••		CI 68	SC 9.1	P 15	L 1	# 65
Comment Type E	Comment Status X			Swanson,	Steven	Corning Inco	rporated	
Table 68-6 and Table avoid the duplication	e 68-5 both include the fiber los by accepting suggestion made	s and connector in editor's note.	loss values. May	Comment Incorre	<i>Type</i> E ect title.	Comment Status X		
Suggested Remedy				Suggested	l Remedy			
Accept the suggestio	n made in the editor's note on p	bage 14, line 31		Chang	e title to read:	""68.9.1 Optical fiber cable""		
Response WITHDRAWN.	Response Status Z			Response WITHI	DRAWN.	Response Status Z		
	544	1.04				D.4.5	1.0	" [
CI 68 SC 8	P14 Corning Incor	L 31	# 63	CI 68 Swanson	SC 9.1 Steven	P15	L 3	# 66
	Commont Statua	polated		Commont		Commont Status V	ipolated	
Editorial				Incorre	ect reference.			
Suggested Remedy				Suggested	l Remedy			
Modify first sentence	to read: ""The channel insertion	n loss is given ir	Table 68-6.""	Rewor	d to read: ""the	e fiber optic cable shall meet th	e requirements o	of IEC 60794-2-11,""
Response WITHDRAWN.	Response Status Z			Response WITHI	DRAWN.	Response Status Z		
CI 68 SC 8	P14	L 45	# 105	CI 68	SC New	P 9	L 28	# 58
Lindsay, Tom	ClariPhy Com	municati		Swanson,	Steven	Corning Inco	rporated	
Comment Type T Not sure what is happ	Comment Status A pening to this table, but if conner	ector losses rem	ain, the value should	Comment No jitte	<i>Type</i> T er specification:	Comment Status X s are noted.		
follow other instances	S.			Suggested	l Remedy			
Suggested Remedy				Add jit	ter specification	ns for 10GBASE-LRM.		
Deenenee	Deepener Status			Response		Response Status Z		
ACCEPT.	Response Status C			WITH	DRAWN.			

-					-					
Cl 68 Swanson,	SC Table 68-1 Steven	P 4 Corning Incor	L 22 porated	# 53	C/ 68 Swanson, S	SC Table 68 Steven	-6	P14 Corning Incor	L 45 rporated	# 64
Comment Table	<i>Type</i> T suggestions.	Comment Status X			Comment Wrong	<i>Type</i> TR connector inser	Comme	nt Status A		
Suggester ""Inpu dBm"" OMA optica Response	d Remedy It optical power in (" ""Compliant 10GE (min) in Table 68-4 al power in OMA >F COMPLAN()	DMA <-30 dBm"" should rea BASE-R input signal with op "" should read ""Compliant Receiver sensitivity (max) in <i>Response Status</i> Z	ad ""Input_optica tical power in O 10GBASE-LRM OMA in Table 6	I_power in OMA <-30 MA >Receiver power in input signal with 8-4""	Suggested Conne is not a Response ACCEI	Remedy ctor insertion los accepted, we sho PT.	ss should rea ould add cha <i>Respons</i>	ad 1.5 dB. If the e annel insertion los e Status C	editor's comment ss to this table.	t to refer to Table 68-5
C/ 68	SC Table 68-2	P5	L 37	# 56						
Comment EDC i 1300r	<i>Type</i> T is intended to supp nm on 62.5um fiber	Comment Status X ort the installed base of FD	DI grade fiber; F	DDI is specified at						
Suggester Delete bandv Repla	<i>d Remedy</i> e multimode fiber t width column to rea ace ""160/500 and 2	ype column.Delete last two Id: ""Minimum overfilled mo 200/500"" with ""500""	rows. Delete foc dal bandwidth at	ntnote. Modify t 1300 nm (MHz.km)""						
Response WITH) Idrawn.	Response Status Z								
CI 68 Swanson,	SC Table 68-5 Steven	6 P 9 Corning Incol	L 6 porated	# 57						
Comment Title a	<i>Type</i> T and content needs	Comment Status A revised.								
Suggestee Chang follow lossA	d Remedy ge title to read: ""T ing parameters as llocation for penalti	able 68-5 - 10GBASE-LRM row entries: Power budget es	link power budg Operating distar	et"" Include the ace Channel insertion						
Response ACCE Add c	e EPT. Delete Table (channel insertion lo	Response Status C 68-5 and 68.5.3. ss column to 68-2. Values v	vill be: 2dB; TBE); 2dB.						
Footn alloca	ote: Channel inser ation of 1.5dB for co	tion loss includes cable atte onnectors.	nuation at mam	ixum link length and						