C/ 00 SC 1.4.4 Dawe, Piers	P <b>229</b> Agilent	L 18	# 1	C/ 00 SC 49.2.8 Dawe, Piers	P <b>239</b> Agilent	L <b>50</b>	# 5
Comment Type <b>T</b> Need to mention 68.	Comment Status X			Comment Type <b>T</b> Need to mention 68.	Comment Status X Editorial: shouldn't have 'Clau	use' here.	
Suggested Remedy Change 'Clause 52' to	'Clause 52 or Clause 68'.			Suggested Remedy Change 'Clause 52.9	9' to '52.9 and 68.6'.		
Response	Response Status O			Response	Response Status O		
C/ 00 SC 2.8 Dawe, Piers	P <b>239</b> Agilent	L <b>50</b>	# 2	Cl 30 SC 5.1.1.2 Dawe, Piers	P <b>19</b> Agilent	L3	# 6
Comment Type <b>T</b> Need to mention 68. E	<i>Comment Status</i> <b>X</b> Editorial: shouldn't have 'Claus	se' here.		Comment Type E Please put the mater appear first) Each c	Comment Status X rial in the usual clause order (s	so at the moment	clause 30 would
Suggested Remedy Change 'Clause 52.9' t	to '52.9 and 68.6'.			Suggested Remedy Per comment	sause gets a new page and se		
Response	Response Status O			Response	Response Status 0		
C/ 00 SC 49.1.2 Dawe, Piers	Р <b>227</b> Agilent	L <b>35</b>	# 3	C/ 30B SC 2	P19	L13	# 7
Comment Type E Need to mention 68.	Comment Status X			Dawe, Piers <i>Comment Type</i> E	Agilent Comment Status X		
Suggested Remedy Change 'Clause 52' to	'Clause 52 and Clause 68'.			re editor's note - valu entry would follow SI should be in the sam	ue required. I suppose the obv R, not precede it. Then, the er ne order (makes it easier to rea	vious choice is 49 ntries in the other ad and maintain).	94. Then, the LRM ist (30.5.1.1.2?)
Response	Response Status 0			Suggested Remedy Ask David Law if the	above is true!		
C/ 00 SC 49.1.4.4 Dawe, Piers	P 229 Agilent	L18	# 4	Response	Response Status <b>O</b>		
Comment Type <b>T</b> Need to mention 68.	Comment Status X			C/ <b>30B</b> SC <b>2</b> Dawe, Piers	P <b>19</b> Agilent	L13	# 8
Suggested Remedy Change 'Clause 52' to	'Clause 52 or Clause 68'.			Comment Type E typo	Comment Status X		
Response	Response Status 0			Suggested Remedy LRM			
				Response	Response Status 0		

C/ 30B SC 2

C/ 44 SC 1.1	P <b>1</b> Agilent	L 31	# 9	Cl <b>44</b> Dawe Pie	SC 1.4	P <b>4</b> Agilent	L <b>3</b>	# 12	
Comment Type E Add '10GBASE-L 802.3am/D2.0, as	Comment Status X RM' to the list of Physical Layer er s for most of my comments agains	ntities. (page/line t 44-49)	number from	Comment family	<i>Type</i> <b>E</b> needs extending	Comment Status X			
Suggested Remedy Change 'CX4, and 52 for'.	d in Clause 52 for' to 'CX4, Claus	e 68 for 10GBAS	E-LRM, and in Clause	Add 1 Response	o Remeay OGBASE-LRM to	list of 10GBASE-R family of Response Status <b>0</b>	physical layer im	plementations.	
Response	Response Status O								
C/ 44 SC 1.3	P <b>2</b>	L <b>46</b>	# 10	<i>Cl</i> <b>44</b> Dawe, Pie	SC 1.4.4	P <b>19</b> Agilent	L 17	# 13	
Dawe, Piers	Agilent	-		<i>Comment</i> You n	<i>Type</i> <b>T</b> leed to add a little	Comment Status X e more to table 44-1.			
List in d) needs ex	xtending. (page/line number from	802.3am/D2.0)		Suggeste	d Remedy				
Suggested Remedy Change 'CX4, and 52 for'.	d in Clause 52 for' to 'CX4, Claus	e 68 for 10GBAS	E-LRM, and in Clause	Show colum Response	the whole table in as proposed.	n the draft, with underscores Add 'M's in new row, columns <i>Response Status</i> <b>O</b>	and strikeouts (if 49, 51 and 68.	any). Add row and	
Response	Response Status O								
				C/ 44	SC 3	P <b>5</b>	L <b>20</b>	# 14	
C/ 44 SC 1.4	P <b>4</b>	L14	# 11	Dawe, Pie	ers _	Agilent			
Dawe, Piers	Agilent			Comment	to refer to clause	Comment Status X			
Comment Type E	Comment Status X	isn't in a range o	f clauses	Suggester	d Remedy				
Suggested Remedy		isint in a range o		In tab	le 44-2, change 'S	See 52.2.' to 'See 52.2 and 6	8.2.'		
Change 'Specifica Clause 54 inclusiv Clause 52 through	ations of each physical layer devic ve.' to 'Specifications of these phy h Clause 54 and Clause 68.'	e are contained i sical layer device	n Clause 52 through s are contained in	Response	2	Response Status O			
Response	Response Status O			<i>Cl</i> <b>44</b> Dawe, Pie	SC 4	Р <b>6</b> Agilent	L <b>32</b>	# 15	
				<i>Comment</i> Need	<i>Type</i> <b>E</b> to refer to clause	Comment Status X 68.			
				Suggester Chan	d Remedy ge 'Clause 45 thro	ough Clause 54' to 'Clause 4	5 through Clause	54 and Clause 68'.	
				Response	-	Response Status <b>O</b>	-		

Dave, Piers     Aglent       Comment Type     E       Comment Type     E       Suggested Remedy       In table 44.4, add a row for 8802.3: 10GBASE-LRM. Take advice on the Is and Ns needed.       Response     Response Status       C/ 44     SC 5     P7       L21     # 17       Dave, Piers     Aglent       Comment Type     E       Dave, Piers     Aglent       Comment Type     E	C/ 44 SC 5	P <b>7</b>	L 21	# 16	C/ <b>45</b>	SC 2.1.7.5	P <b>23</b>	L <b>39</b>	# 20
Comment Type E       Comment Status X         Need another row for Table G5 of ISO/EC 11801: 1995, Annex G.         Suggested Remedy         In table 44-4, add a row for 8802-3: 10GBASE-LRM. Take advice on the Is and Ns needed.         Response       Response Status O         C1 44       SC 5       P7       L21       # IT         Dawe, Piers       Agilent       Comment Status X         When reterring to ISO/IEC 11801: 1995 or 2002?       Suggested Remedy       Change Tips Z. A? or 68.4.7 as appropriate.         Response       Response Status O       Change Tips Z. A? or 68.4.7 as appropriate.         Response       Response Status X         Other the 800 comment Status X       Need to mention 68.         Suggested Remedy       Change Tips Z. A? or 68.4.7 as appropriate.         Response       Response Status O         C1 44       SC 5       P7       L5       # IB         Dawe, Piers       Agilent       Comment Status X       Need to mention 68.         Suggested Remedy       Change Tips Z.4.7 to 'n 52.4.7 to 'n 105.4.7 as appropriate'.         Response       Response Status O       Comment Type T       Comment Type T         Comment Type E       Comment Status X       Need to mention 68.	Dawe, Piers	Agilent			Dawe, Pier	S	Agilent		
Suggested Remedy In table 444, add a row for 8802-3: 10GBASE-LRM. Take advice on the Is and Ns needed.       Suggested Remedy Change To Clause 52 to Clause 52 to Clause 68'.         Response       Response Status O         CI 44       SC 5       P7       L 21       H 17         Dawe, Piers       Aglient       Camment Type T       Comment Status X         When refering to ISO/IEC 11801: 1995 or 2002?       Suggested Remedy       Camment Type T       Comment Status X         Check with the 802.3am project.       Response Status O       Camment Type T       Comment Status X         Response       Response Status O       Camment Type T       Comment Status X         Need another entry for Table of 1 GSO/IEC 11801: 1995, Annex G. It looks like a standard format. Lable GS.       Need to mention 68.       Suggested Remedy         Cut 44       SC 5       P7       L 5       T 18       Dawe, Piers       Aglient         Comment Type E       Comment Status X       Need to mention 68.       Suggested Remedy       Camment Type T       Comment Status X         Need another entry for Table of 1 GSO/IEC 11801: 1995, Annex G. It looks like a standard format. Lable GS.       Aglient       Comment Type T       Comment Status X         Suggested Remedy       Cd 48 str 2 LT       P 2       L 7       # 22         Suggested Remedy       Cd 48 str 2 LT <th>Comment Type E Need another row for T</th> <th>Comment Status X Table G5 of ISO/IEC 11801: 1</th> <th>995, Annex G.</th> <th></th> <th>Comment T Need te</th> <th><i>Type</i> <b>T</b> o mention 68.</th> <th>Comment Status X</th> <th></th> <th></th>	Comment Type E Need another row for T	Comment Status X Table G5 of ISO/IEC 11801: 1	995, Annex G.		Comment T Need te	<i>Type</i> <b>T</b> o mention 68.	Comment Status X		
Response       Response Status       O       Response       Response <th< td=""><td>Suggested Remedy In table 44-4, add a row</td><td>w for 8802-3: 10GBASE-LRM.</td><td>Take advice</td><td>on the Is and Ns needed.</td><td>Suggested Chang</td><td><i>Remedy</i> e 'Clause 52' to</td><td>'Clause 52 or Clause 68'.</td><td></td><td></td></th<>	Suggested Remedy In table 44-4, add a row	w for 8802-3: 10GBASE-LRM.	Take advice	on the Is and Ns needed.	Suggested Chang	<i>Remedy</i> e 'Clause 52' to	'Clause 52 or Clause 68'.		
Cl 44       SC 5       P7       L 21       # 17         Dawe, Piers       Agilent         Comment Type E       Comment Status X         When referring to ISO/IEC 11801: 1995 or 2002?         Suggested Remedy         Check with the 802.3am project.         Response       Response Status O         Cl 44       SC 5       P7       L 5       # 18         Cl 44       SC 5       P7       L 5       # 18         Dawe, Piers       Agilent       Comment Status X       Need to mention 68.         Suggested Remedy       Change 'in 52.4.7 to 'in 52.4.7 or 68.4.7 as appropriate'.       Response Status O         Cl 44       SC 5       P7       L 5       # 18         Dawe, Piers       Agilent       Comment Status X       Need another entry for Table G 1 GISO/IEC 11801: 1995. Annex G. It looks like a standard fort for Table G 1 GISO/IEC 11801: 1995. Annex G. It looks like a standard fort for order matters - the new entry might go better at c) to match table G 6.       Problem with first sentence: another clause says it specifies multimode optical fiber for certain 10GBASE serial LAN PHY: Nere we don't change that: we specify for 10GBASE-LRM only.         Suggested Remedy       Change 'In sclause specifies the 10GBASE-LRM PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY:         Response       Response Status O         Cl 45	Response	Response Status 0			Response		Response Status O		
Comment Type       E       Comment Status X       Need to mention 68.         Suggested Remedy       Check with the 802.3am project.       Need to mention 68.         Response       Response Status       O         Ci 44       SC 5       P7       L 5       # 18         Dawe, Piers       Aglient       Comment Type       T       Comment Status X         Need another entry for Table G5 0.       Response Status       O       Ci 48       SC 1       P2       L 7       # 122         Dawe, Piers       Aglient       Comment Type       T       Comment Status X       Need another entry for Table G1 of 150/E101801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.       Need another entry for 10GBASE-LRM: h) Within the section Optical Link:       CSMAVCD 10GBASE-LRM: h) Comment Status X       Need to mention 68.         Suggested Remedy       Aglient       Comment Type	Cl 44 SC 5 Dawe, Piers	P <b>7</b> Agilent	L <b>21</b>	# 17	<i>Cl</i> <b>45</b> Dawe, Pier	SC <b>2.1.8</b> s	P <b>25</b> Agilent	L <b>4</b>	# 21
Suggested Remedy Check with the 802.3am project.       Suggested Remedy Chack with the 802.3am project.       Suggested Remedy Change in 52.4.7 to 'in 52.4.7 or 68.4.7 as appropriate'.         Response       Response Status       O         Cl 44       SC 5       P7       L 5       # 18         Dawe, Piers       Agilent       Comment Status X       Response Status O         Need another entry for Table G1 of ISO/TEC 11801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.       T       P2       L7       # 22         Suggested Remedy Add entry for Table G1 of ISO/TEC 11801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.       Suggested Remedy       Comment Type       Comment Type       Comment Status X         Suggested Remedy Add entry for 10GBASE-LRM: h) Within the section Optical Link:       CSMA/CD 10GBASE-LRM       CSMA/CD 10GBASE-LRM PMD and multimode fiber media for the 10GBASE serial LAN PHY.' to 'This clause specifies the 10GBASE-LRM PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM Serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM Serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM Serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM Serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE ser	Comment Type E When referring to ISO/	Comment Status X IEC 11801: 1995 or 2002?			Comment T Need to	<i>Type</i> <b>T</b> o mention 68.	Comment Status X		
Response       Response Status       O         Cl 44       SC 5       P7       L5       # 18         Dawe, Piers       Agilent       Cl 68       SC 1       P2       L7       # 12         Dawe, Piers       Agilent       Cl 68       SC 1       P2       L7       # 12         Dawe, Piers       Agilent       Comment Type       E       Comment Status X       Need another entry for Table G1 of ISO/IEC 11801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.       Suggested Remedy       Add entry for 10GBASE-LRM: h) Within the section Optical Link:       CSMA/CD 10GBASE-LRM       Comment Type T       Comment Type Table G1 of ISO/IEC 8802-3/PDAM 26       Suggested Remedy         Response       Response Status O       Cl 45       SC 2.1.7.4       P23       L26       # 19         Dawe, Piers       Agilent       Suggested Remedy       Comment Type T       Comment Status X       Need to mention 68.         Suggested Remedy       Suggested Remedy       Status O       Status O       Status O       Status O	Suggested Remedy Check with the 802.3a	m project.			Suggested Chang	<i>Remedy</i> e 'in 52.4.7' to 'i	n 52.4.7 or 68.4.7 as appropri	ate'.	
Cl 44       SC 5       P7       L 5       # 18         Dawe, Piers       Agilent         Comment Type       E       Comment Status X         Need another entry for Table G 1 ISO/IEC 11801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.       Suggested Remedy         Add entry for 10GBASE-LRM: h) Within the section Optical Link:       CSMA/CD 10GBASE-LRM PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.'         Response       Response Status O         Cl 45       SC 2.1.7.4       P23       L 26       # 19         Dawe, Piers       Agilent       Comment Status X         Need to mention 68.       Suggested Remedy         Suggested Remedy       Agilent         Comment Type       T       Comment Status X         Response       Response Status X       Response Status X         Need to mention 68.       Suggested Remedy	Response	Response Status O			Response		Response Status O		
Dawe, Piers     Agilent       Comment Type     E     Comment Status X       Need another entry for Table G1 of ISO/IEC 11801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.     Toomment Type     T     Comment Status X       Suggested Remedy     Add entry for 10GBASE-LRM: h) Within the section Optical Link:     CSMA/CD 10GBASE-LRM     Problem with first sentence: another clause says it specifies multimode optical fiber for certain 10GBASE-LRM PMD and multimode fiber media for the 10GBASE-JRM PMD and multimode fiber media for the 10GBASE-LRM PMD and multimode fiber media for the 10GBASE-LRM PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE serial PMS.' to "This clause specifies the PMD and multimode fiber media for the 10GBASE serial LAN PHY.' to "This clause specifies the PMD and multimode fiber media for the 10GB	C/ 44 SC 5	P <b>7</b>	L <b>5</b>	# 18	CI 68	SC 1	P2	L <b>7</b>	# 22
Comment Type       E       Comment Status X         Need another entry for Table G1 of ISO/IEC 11801: 1995, Annex G. It looks like a standard format. I don't know if the order matters - the new entry might go better at c) to match table G5.       Comment Type       T       Comment Status X         Suggested Remedy       Add entry for 10GBASE-LRM: h) Within the section Optical Link:       CSMA/CD 10GBASE-LRM       Suggested Remedy         Response       Response Status       O       Suggested Remedy         C/ 45       SC 2.1.7.4       P23       L 26       # 19         Dawe, Piers       Agilent       Comment Status X       Response Status X         Need to mention 68.       Suggested Remedy       Need to mention 68.	Dawe, Piers	Aglient			Dawe, Pler	S	Aglient		
Suggested Remedy       Add entry for 10GBASE-LRM: h) Within the section Optical Link: CSMA/CD 10GBASE-LRM ISO/IEC 8802-3/PDAM 26       CSMA/CD 10GBASE-LRM Section 2000 Control 1000 Control 1	Comment Type E Need another entry for standard format. I don match table G5.	Comment Status X Table G1 of ISO/IEC 11801: 't know if the order matters - th	1995, Annex G ne new entry m	6. It looks like a hight go better at c) to	Comment T Probler certain only.	<i>Type</i> <b>T</b> m with first sent 10GBASE seria	Comment Status X ence: another clause says it s al PHYs. Here we don't chang	pecifies multim ge that: we spec	ode optical fiber for cify for 10GBASE-LRM
Add entry for 10GBASE-LRM: h) Within the section Optical Link:       CSMA/CD 10GBASE-LRM secifies the 10GBASE-LRM PMD and multimode fiber media for the 10GBASE serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' to 'This clause specifies the PMD and multimode fiber media for the 10GBASE-LRM serial LAN PHY.' <i>Response Response Status</i> <b>O</b> <i>Cl</i> 45       SC 2.1.7.4 <i>P</i> 23 <i>L</i> 26 <b>#</b> 19         Dawe, Piers       Agilent <i>Response Status</i> <b>O</b> <i>Comment Type</i> <b>T</b> <i>Comment Status</i> <b>X</b> Need to mention 68. <i>Suggested Remedy L</i>	Suggested Remedy				Suggested	Remedy			
Response     Response Status     O       Cl 45     SC 2.1.7.4     P 23     L 26     # 19       Dawe, Piers     Agilent     Pawent Status     X       Comment Type     T     Comment Status     X       Need to mention 68.     Suggested Remedy     Suggested Remedy	Add entry for 10GBASI LRM ISO/IEC 8802-3/F	E-LRM: h) Within the section PDAM 26	Optical Link:	CSMA/CD 10GBASE-	Change 10GBA	e 'This clause s SE serial LAN I	pecifies the 10GBASE-LRM F PHY.' to 'This clause specifies	PMD and multim the PMD and r	ode fiber media for the multimode fiber media
Cl 45       SC 2.1.7.4       P 23       L 26       # 19         Dawe, Piers       Agilent       Comment Type       T       Comment Status X         Need to mention 68.       Suggested Remedy       Suggested Remedy	Response	Response Status <b>O</b>			Response	IUGBASE-LRIV	Response Status <b>O</b>		
Comment Type T Comment Status X Need to mention 68. Suggested Remedy	C/ 45 SC 2.1.7.4 Dawe, Piers	P <b>23</b> Agilent	L <b>26</b>	# 19					
Suggested Remedy	Comment Type <b>T</b> Need to mention 68.	Comment Status X							
Change 'in 52.4.8' to 'in 52.4.8 or 68.4.8 as appropriate'.	Suggested Remedy Change 'in 52.4.8' to 'ir	n 52.4.8 or 68.4.8 as appropria	ate'.						
Response Response Status O	Response	Response Status O							

SC 1

C/ 68 SC 1.4 Dawe, Piers	Р <b>3</b> Agilent	L <b>36</b>	# 23	C/ 68 SC Dawe, Piers	10.2.1	P 17 Agilent	L 18	# 26
Comment Type E Italics in figure 68-2 where the letters we meaning.	Comment Status X not needed. It looks like this for ere arranged vertically - I don't th	rmatting is left ov ink the italics ha	ver from figure 38-1 ve a well-understood	<i>Comment Type</i> The material should be co our plan to d	<b>E</b> in 68.10.2 pied in her o part of th	Comment Status X .1 (52.15.2.1) is a form to be the re not just referred to. I think the PICS by reference won't wo	filled in, not just this is a general ork.	stuff to be read, so it issue and means that
Suggested Remedy Change 'PMA' into r	non-italic text (twice).			Suggested Reme Replace '52.	<i>edy</i> 15.2.1 sha	II be used.' with the contents of	of 52.15.2.1.	
Response	Response Status O			Response		Response Status O		
C/ 68 SC 1.4 Dawe, Piers	Р <b>3</b> Agilent	L <b>36</b>	# 24	Cl 68 SC Dawe, Piers	10.2.1	P <b>17</b> Agilent	L <b>2</b>	# 27
Comment Type E It would be a service illustrated in fig. 68-2	Comment Status X e to the reader if the 'PMD servic 2.	ce interface' men	tioned in 68.4.2 were	Comment Type Title of PICS	E doesn't fo	Comment Status X llow title of clause. Same pro	blem in 68.10.1	and title of 68.10.3.
Suggested Remedy If desired, mark the PMD on each side,	two PMD service interfaces (by and labelling them)	adding dotted lir	es between PMA and	Change title Protocol Imp medium dep	of PICS to blementatic endent (PN	: on Conformance Statement (F /ID) sublayer type 10GBASE-	PICS) proforma f LRM (long wave	for Clause 68, physical elength, 64B/66B
Response	Response Status <b>O</b>			coding, multi Change 'IEE baseband m	mode fiber E Std 802. edium, typ	r)'. 3aq-200x, physical medium d e 10GBASE-LRM' to 'IEEE St	lependent (PMD d 802.3aq-200x	) sublayer and , physical medium
Cl 68 SC 10 Dawe, Piers Comment Type E	P17 Agilent Comment Status X	L 53	# 25	dependent (F multimode fit Change title sublayer type I would be ha	PMD) subla per)'. of 68.10.3 e 10GBAS appy if the	ayer type 10GBASE-LRM (lon to 'PICS proforma tables for p E-LRM (long wavelength, 64B section in brackets were left o	ng wavelength, 6 ohysical medium 3/66B coding, m out in any or all o	64B/66B coding, n dependent (PMD) ultimode fiber)'. of these three cases -
In the footnote 1, 'ar Suggested Remedy In the footnote 1, ch	nnex' should be 'subclause' per i ange 'annex' to 'subclause'	maintenance req	uest 1112.	but I don't kn <i>Response</i>	iow if it wo	uld be correct to do so. Response Status <b>O</b>		
Response	Response Status O							

C/ 68 SC 10.2.2	P17	1 22	# 28	C/ 68	SC 10.3.4	P18	/ 17	# 31
Dawe, Piers	Agilent		" 10	Dawe, Pie	rs	Agilent		" 01
Comment Type E The material in 68.10	Comment Status X 0.2.2 (52.15.2.2) is a form to be	filled in, not just	stuff to be read, so it	<i>Comment</i> Per ar	<i>Type</i> <b>E</b> nother comment	Comment Status X		
should be copied in h which is the latest ve	nere not just referred to. Note the sign of clause 52 available.	that I'm referring	to 802.3am/D2.0,	Suggested	d Remedy	·		
Suggested Remedy				Boononoo	uns une in step.	Pooponoo Statua		
Replace '52.15.2.2 sl Std 802.3-200X, Clau medium, type 10GBA	hall be used.' with the contents use 52, Physical Medium Depe \SE-R and 10GBASE-W' to 'IE	of 52.15.2.2, and endent (PMD) sub EE Std 802.3aq-2	d then change 'IEEE player and baseband 200X, physical medium					
dependent (PMD) su multimode fiber)', and conform to IEEE Std	blayer type 10GBASE-LRM (lc d change 'does not conform to 802.3ag-200X'.	ng wavelength, 6 IEEE Std 802.3-2	4B/66B coding, 200X' to 'does not	<i>Cl</i> <b>68</b> Dawe, Pie	SC 10.3.4 rs	P <b>18</b> Agilent	L 19	# <u>32</u>
Response	Response Status <b>O</b>			<i>Comment</i> As the	<i>Type</i> <b>T</b> e editor's note sa	Comment Status X ays, this subclause needs cor	npleting.	
C/ 68 SC 10.2.3 Dawe, Piers	P <b>17</b> Agilent	L 31	# 29	Suggested Comp	d Remedy lete it! by refere	ence to the normative require	ments of 68.6.	
Comment Type E Tables should be in S	Comment Status X			Response		Response Status <b>O</b>		
Suggested Remedy				Cl 68	SC 10.3.4	P18 Agilent	L <b>21</b>	# 33
Reapply default form	at in PICS tables.			Commont	Turno <b>T</b>			
Response	Response Status O			Duplic	ate title, no con	tent.		
C/ 68 SC 10.3.1 Dawe, Piers	P17 Agilent	L 51	# 30	Suggested Chang subcla table 6	<i>d Remedy</i> ge title to 'Chara ause (table) by 58-2.	cteristics of the fiber optic cal reference to the normative re	oling and MDI'. C quirements of 68	Complete the .8, 68.9, and (I think)
The material in 68.10 not just stuff to be rea	0.3.1 and 68.10.3.2 (52.15.3.2 ad, so it should be copied in he	and 52.15.3.1) is ere not just referre	forms to be filled in, ed to.	Response		Response Status <b>O</b>		
Suggested Remedy				C/ 68	SC 2.1.10	P <b>27</b>	/ 50	# 34
Replace '52.15.3.1 sl be used.' with the co	hall be used.' with the contents ntents of 52.15.3.2.	of 52.15.3.1. Re	eplace '52.15.3.2 shall	Dawe, Pie	rs	Agilent		
Response	Response Status O			<i>Comment</i> Need	<i>Type</i> <b>T</b> to add a registe	Comment Status X r bit for 10GBASE-LRM PMA	/PMD type to tab	le 45-12 (bits 1.11.x)
				<i>Suggested</i> As ag	d Remedy reed with 802.3a	an and 802.3ap		
				Response		Response Status 0		

C/ 68 SC 2.1.6	P 20	L <b>47</b>	# 35	C/ 68	SC 5	P <b>5</b>	L <b>47</b>	# 39
Dawe, Piers	Agilent			Dawe, Pier	S	Agilent		
Comment Type T	Comment Status X			Comment	Туре Е	Comment Status X		
Need to add a register 1.7.x).	bit pattern for 10GBASE-LR	M PMA/PMD type	e to table 45-8 (bits	There's examp	s a special mu le.	Itiplication dot for use in places li	ke 'MHz.km'.	See Table 59-16 for an
Suggested Remedy				Suggested	Remedy			
As agreed with 802.3ar	n and 802.3ap			Chang	e the ordinary	stop in 'MHz.km' to the multiplica	ation dot. Add	the multiplication dot to
Response	Response Status O			the 'Lis (modifi end).	it of special sy ed from 802.3 While you are	mbols' table. Include the whole am) in its proper place in the dra there: add the multiplication cros	List of special ft (currently in is to the table	symbols' section tended to be at the too. Thanks!
C/ 68 SC 4.1	P3	L 36	# 36	Response		Response Status O		
Dawe, Piers	Agilent							
Comment Type E	Comment Status X			C/ 68	SC 5	P <b>5</b>	L <b>50</b>	# 40
Gratuitous capitals in fi	gure 68-2			Dawe, Pier	S	Agilent		
Suggested Remedy				Comment	Туре Т	Comment Status X		
Change 'Fiber Optic Ca 'Bulkheads' to 'bulkhea	abling (Channel)' to 'Fiber opt ds'; Change 'Patch Cord'	ic cabling (chanr to 'Patch cord'	nel); Change	One or are tur	both of the 50 ning out to be	0 um fiber types, when combined more challenging than expected	with indifferer For OM3, it's	nt connector tolerances, s not certain that we
Response	Response Status <b>O</b>			need the pro the pro degrad	ie whole 300 i ject and delay led by connect loss and mod	m, as another PMD is rated for 3 / the use of LRM on OM1, for OM tor offsets through the three mec al poise - these appear to be cor	00 m on OM3. 13. Note that I hanisms of im related	. We should not delay link performance is paired bandwidth,
C/ 68 SC 4.4	P <b>4</b>	L <b>40</b>	# 37	Suggested	Remedy			
Dawe, Piers	Agilent			For ear	ch 50 um fiber	r type, consider 300 m but with re	duced conner	ctor loss, and/or current
Comment Type E	Comment Status X			(1.5 dE	B) connector lo	oss but with reduced reach.		
typo				Response		Response Status 0		
Suggested Remedy Change 'implementatio	n' to 'implementations'.				~~~			
Response	Response Status 0			C/ 68	SC 5	P5 Dia Deer Netw	L 50	# 41
				Jaeger, Jor			1172	
	D	1.04		Comment the FO	lype I	Comment Status X	two rowo on	o for EOO/EOO and ano
Cl 68 SC 4.9 Dawe, Piers	P5 Agilent	L 31	# 38	for 400	/400 /400	500/500 row should be split into	two rows - on	e for 500/500 and one
Comment Type E	Comment Status X			Suggested change	Remedy the middle 50	Oum row to two rows as indicated	t below:	
Grammar				onarige				
Suggested Remedy	contribute to the PMA/PMD	eceive fault bit	1	50um 50um	500/500 0.5 400/400	6 to 300 2 TBD 2		
Response	Response Status <b>O</b>			Response		Response Status O		

CI 68 SC 5	P5	L <b>54</b>	# 42	C/ 68	SC 5.1	P6	L 23	# 45
Dawe, Piers	Agilent			Dawe, Pie	rs	Agilent		
Comment Type E	Comment Status X			Comment	Туре Т	Comment Status X		
Readability				The te	ntative extinct	tion ratio limit has been in place	for at least a wh	ole ballot cycle without
Suggested Remedy				attract	ing comment.	Let us just confirm it.		
Insert an 'an' giving '	and an allocation'.			Suggested	Remedy			
Response	Response Status 0			Chang	ge 'TBD [Edito	r's note: 3.5 suggested]' to '3.5'.		
				Response		Response Status <b>O</b>		
C/ 68 SC 5.1	P6	L13	# 43					
Lindsay, Tom	ClariPhy Con	nmunicati		C/ 68	SC 5.1	P6	L3	# 46
Comment Type T	Comment Status X			Dawe, Ple	rs	Aglient		
Table 68-3: In 802.3	ae, the extinction ratio for LR w	as increased from	n the 3 dB value used	Comment Tighte	<i>Type</i> <b>T</b>	Comment Status X		
LRM. as SR. will be	using MM fibers (and further, p	ossibly MM lasers ar	s), where	ngnie				
interferometric noise	should not be a concern. Al	so, LRM may be	nefit from eye shapes	Suggested	Remedy			
including overshoot a extinction ratio.	and other characteristics that m	light be better en	abled by a lower	for 68.	ge 'per measu .5.2.	rement techniques defined in 68.	.6.' to 'per defini	tions in 68.6. Similarly
Suggested Remedy				Response		Response Status 0		
1. Set the minimum	extinction ratio in the table to 3	dB, as in SR.	2. This would also					
affect Figure 68-3 or	page 7, as it would further ope	en the allowable of	design space along the		SC E 1	De	/ 21	# 47
upper left slope. It w	ould increase that portion by ~u	).6 dB.		Weiner Ni	30 <b>3.</b> 1	F 0 Phyworks	231	# 4/
Response	Response Status <b>O</b>				- <b>-</b>			
				Comment	Туре Т	Comment Status X		
C/ 68 SC 5.1	P <b>6</b>	L17	# 44	Transi	mitter noise sp	bec and OMA:noise ratio for the (	comprenensive	stressed receiver tests:
Dawe, Piers	Agilent			The la	tter is intende	d to mimic, in part, transmitter R using different units. This is rathe	IN present in a l	eal channel. They are
Comment Type T	Comment Status X			Suggester	l Romody			
Looking again at chr dispersion effects (p to budget for The p	omatic dispersion: a 4 nm RMS erhaps both deterministic and n roblem would arise with an extr	spectral width w node partition no reme wavelength	vould produce ise) that we don't want and a maximum	Repre	sent i) Transm ed receiver te	nitter noise in Table 68-3 and ii) ( sts in Table 68-4, using the same	OMA:noise ratio	for the comprehensive
spectral width; imple	menters can easily avoid this c	ombination at no	significant cost.	Response		Response Status O		
Suggested Remedy								
Impose a spec in the left columns of table calculations and pro	e form of a spectral width vs wa 59-4 and the solid-line limit in f posed limits to the meeting.	velength trade-of igure 59-3. I'll try	f in the style of the two / to bring some					
Response	Response Status 0							

SC 5.1

C/         68         SC 5.1         P 6         L 31         # 48           Weiner, Nick         Phyworks	C/         68         SC         5.1         P 6         L 34         # 50           Dawe, Piers         Agilent
Comment Type         T         Comment Status         X           1) Consistency within document may be improved by representing i) transmitter noise and ii) OMA:noise ratio for the comprehensive stressed receiver tests using the same units.	Comment Type <b>T</b> Comment Status <b>X</b> Experimental work indicates that with EDC, overshoot is not something to be specified against as in a traditional link. We can relax the mask outer limits; this will assist cost effectiveness.
<ol><li>The divide by 2 within in ""OMA/(2 x rms noise)"" is for consistency with the RINxOMA definition.</li></ol>	Suggested Remedy
Suggested Remedy	Change the Y3 limit from 0.4 to 0.75. Investigate to see if it can be further relaxed.
1) Change Table 68-2, RINxOMA entry to	Response Response Status <b>O</b>
Description: OMA:rms noise ratio Value: 50 (value correct?) Unitless.	C/ 68 SC 5.1 P 6 L 37 # 51 Dawe, Piers Agilent
2) Change Table 68-3 OMA:(2 x rms noise) ratio entry to:	Comment Type T Comment Status X
Description: OMA:rms noise ratio Value: 23	Coverage of a greater proportion of fibers can be obtained by a ""two launch"" strategy, so if best coverage at 300 m is our objective, this is what we should do. The costs can be kept to a minimum if the cheaper launch is allowed where appropriate. Note that we
Response Response Status <b>O</b>	believe that separate 'off-center' launch specifications for 50 um and 62 um will give better coverage than a compromise off-center launch (by whatever name or technology). Also that a center launch through single mode fiber will give better coverage than simply into
C/ 68 SC 5.1 P6 L 33 # 49	multimode fiber. In the suggested remedy, '220 m' may be tweaked as more information becomes available.
Aronson, Lew Finisar	Suggested Remedy
Comment Type       T       Comment Status       X         Table 68-3:       The present eye mask has positive and negative overshoot limits of 40%.         This limit is arbitrary and may in fact preclude useful waveforms.       The overshoot limits of 40%.         should be removed, unless evidence is provided of potential problems with unlimited overshoot, in which cas a larger value, perhaps 100% should be used.       Suggested Remedy         Eliminate the Y3 parameter from Table 68-3 and modify the diagram in Figure 68-4 to       Suggested Remedy	Require the module to emit in the center of the fiber, with a relaxed tolerance. Require the module to meet the transmit power window after a regular MMF patchcord, and after a regular SMF patchcord. Define one or two mode conditioning patchcord (MPCP) with more relaxed tolerances than the ones in clauses 38 and 59. (One if a common specification will work well enough for 62 and 50 um fiber, two if not). Allow clause 38/59 MPCPs to be used in this application. Allow regular MMF patchcords to be used: For OM1 up to 220 m

remove the Y3 and negative Y3 labels and lines and the shaded regions at the top and bottom diagram. In the event that an argument is made that there should be some limits, I would support any value higher than 75%

Response

Response Status 0

For OM2. For OM3.

Require MPCPs to be used in the first instance for OM1, 220 to 300 m. Allow the user to substitute a regular MMF patchcord (at the transmit end) for the links which are not satisfactory with the MCPC.

Response Status 0

Allow MPCP to be used for OM2.

Allow MPCP to be used for OM3 up to 220m.

Response



Transmitted optical launch specification for 62.5 um fiber Need to agree specification.

For 300 m links with typical connectors theory and experiment have shown that no single launch can reduce all PIE\_D values below 6 dBo. Theory has indicated that the occurrence of PIE\_D greater than about 5.5 dB0 should be less than 1%. However, experiments with the TIA 1996 Round Robin cables indicate that for any one launch PIE\_D greater than 5.5 dBo is common (3 or 4 out of 9 cables). The same is true for links with two connectors, each having 7 um lateral offset, at the tranmit end of the link. Also, for links with two 7 um connectors, at the transmit end of the link, no launch has any particular benefit compared to another launch. However, the probability of having two 7 um connectors at the transmit end of a link is very low - this does not seem to be a reasonable worst case for 10GBASE-LRM.

Typical 300 m, in service links, would not have two 7um connectors at the transmit end. Typical 300 m links with high PIE\_D for offset launch (SM offset or Vortex) can be converted to links with low PIE\_D if a center launch is used. Conversely, typical 300 m links with high PIE\_D for center launch can be converted to links with low PIE\_D if an offset launch (SM offset or Vortex) is used. The PIE\_D values of all the TIA 1996 round robin fibres can be converted to PIE\_D value less than 5.5 dB if a two-launch strategy is used. Also, it must be recognised that customers of 10GBASE-LRM are likely to do initial tests with these cables and with good connectors. The only way to ensure near 100% success rate is with two launches: a centre and an offset type launch.

Experiments have also shown that for OM1 cable an offset launch (SM or Vortex) is much more stable than a centre launch.

#### Suggested Remedy

Split row in two to allow for a default launch and an alternate launch. Remove text in current Description cell of table. Complete the two new rows as follows:

Description: Encircled flux for default launch Type: max & min Values: < 30% in 5um radius & > 86 in 23 um radius Unit: %

Description: Encircled flux for alternate launch Type: max & min Values: > 35 % in 5um radius & > 80 % in 10 um radius Unit: %

Response

Response Status O



Comment Type T Comment Status X

Table 68-3 Transmit charateristics

Table 68-3 contains TBDs on the launch conditions for OM1, OM2, OM3 The launch study group (task 2 and 4) will have preliminary launch recommendations for each of these fibres (note these may be revised following launch study group progress - a summary update will be provided at the Jan meeting)

#### Suggested Remedy

Insert into Launch section of Table 68-3-10GBASE-LRM transmit characteristics

Link type TP2 Encircled flux test criteria 1 Launch for OM1 < 30 % in 4.5 µm radius > 86 % in 24 µm radius note 1 2 Launch for OM2 < 30 % in 6 µm radius > 86 % in 18 µm radius note 2 3 Launch for OM3 > 30 % in 5 µm radius > 86 % in 11 µm radius note 3 4 'Universal launch' TBD for OM1, OM2, OM3

Footnote 1: For example 20+/-3 micron offset single-mode launch Footnote 2: For example 13+/-3 micron offset single-mode launch Footnote 3: For example single-mode centre launch



 TYPE: TR/technical required T/technical E/editorial
 COMMENT STATUS: D/dispatched A/accepted R/rejected
 SORT ORDER: Clause, Page, Line, Subclause
 Page 9 of 25

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

SC 5.1

C/ 68 SC 5.1	P6	L <b>40</b>	# 55	CI 68	SC 5.1	P6	L <b>40</b>	# 57
Aronson, Lew	Finisar			Aronson, L	_ew	Finisar		
Comment Type T	Comment Status X			Comment	Туре Т	Comment Status X		
Table 68-3: The curre fiber. These do not dis	nt table has two rows refering tinguish which subset of 50 u	g to launch specifi Im fiber they apply	cations for 50 um / to.	Table	68-3:			
Suggested Remedy				We sh	ould settle o	n a final minimum extinction range	atio of 3.5 dB. The	e present low value is
The description of the	two rows should refer to OM2	2 and OM3 as follo	DWS:	lt also	allows wave	forms with positive and negat	ive overshoot which	h may be beneficial.
ROW 15: Transmitted 500/500.	optical launch specification for	or 50 um fiber with	n OFL of 400/400 or	There DC co	is less argui Intent in the I	ment against lower values exc receive signal imposes a signi	ept that at some po ficant design const	oint having a very large traint on the receiver TIA
ROW 16: Transmitted	optical launch specification for	or 50 um fiber with	OFL of 1500/500	desigr	1.			
Response	Response Status 0			3.5 dE	3 remains a g	good compromise.		
				Suggested	d Remedy			
	De	1 40	# 50	Remo	ve editors no	ote from current value and use	3.5 dB for minimu	m extinciton ratio
Cunningham, David	Agilent	L 40	# 50	Response		Response Status O		
Comment Type T	Comment Status X							
Table 68-3 Transmitted optical lau Need to agree specific	unch specification for 50 um C ation.	DM2 fiber						
Experimentally, using to (SM or Vortex), typical radius of the light prop noise. For links with to less than 6 dBo indepe	the TIA 1996 round robin cab 300 links have PIE_D less th agating in the fiber must be s wo 7 um connectors, at the tr endent of the launch type.	les, for reasonabl nan 6 dBo. Howe mall enough to co ransmit end of the	e offset type launches ver, the maximum ontrol loss and modal link, PIE_D is always					
Suggested Remedy								
Remove text in current	t Description cell of table.							
Complete the row as for	ollows:							
Description: Encircled Type: max & min Values: < 30% in 6 un Unit: %	flux n radius & >86 in 18 um rad	ius						
Response	Response Status 0							

SC 5.1

Cribs       SC 5.1       P6       L43       # 58       Cribs       SC 5.1       P6       L51       # 60         Cunningham, David       Agilent       Dawe, Piers       Agilent       Dawe, Piers       Agilent         Comment Type       T       Comment Status X       Comment Status X       Comment Type       T       Comment Status X       We can be 'more normative' and I think, more proper, in note c.         Transmitted optical launch specification for 50 um OM3 fiber       Need to agree specification.       Suggested Remedy       Change 'Transmitter waveform and dispersion penalty measurement is described in	
Comment Type       T       Comment Status       X       Comment Type       T       Comment Status       X         Table 68-3       Transmitted optical launch specification for 50 um OM3 fiber       We can be 'more normative' and I think, more proper, in note c.         Need to agree specification.       Suggested Remedy       Change 'Transmitter waveform and dispersion penalty measurement is described in	
Change 'Transmitter waveform and dispersion penalty measurement is described in	
For typical 300 m links with good connectors, OM3 cable will generally have high PIE_D's for launches that put most of the light near 11 to 15 um radii. PIE_D generally decreases if the light is launched at radii greater than about 15 um. However, loss especially with connectors increases quickly if the light is launched at radii greater than 18 um. Modal	
noise is an issue if the light is launched at radii greater than about 18 um. Also, for offset type launches OM3 cable will typically produce impulse responses with a lot of precursor ISI. It is advantageous to equalizer implementation to avoid the combination of high PIE_D and high precursor ISI. For typical 300 m links with good connectors centre launch typically produces low PIE_D and post cursor ISI a combination that is advantageous to	
equalization.     Notes b and c are sentences which should end with .       Suggested Remedy     Suggested Remedy       Split the row in two to allow for a default launch and an alternate launch.     Add . to each.       Remove text in current Description cell of table.     Response     Response Status     0	
Complete the two new rows as follows:	
Description: Encircled flux for default launch       C/ 68 SC 5.2       P       L       # 62         Type: max & min       Lindsay, Tom       ClariPhy Communicati         Values: > 30 % in 5 um radius & > 80% in 10 um radius       Comment Type       T       Comment Status X	
Description: Encircled flux for alternate launch Type: max & min Volume: < 20% in 6 µm radius & > 86 in 18 µm radius	ther ə jitter
Unit: % Suggested Remedy 2 rows regarding sine jitter in Table 68-4 should have already been moved per the c	evious
Response Status O comment. Remove the frequency synthesizer from Figure 68-8. Remove item a line 36 on page 13.	) from
C/ 68SC 5.1P 6L 45# 59ResponseResponse StatusOAronson, LewFinisar	
Comment Type       E       Comment Status       X         Optical return loss tolerance is listed as a max value. In fact 12 dB is the min value of return loss the part should tolerate.       In fact 12 dB is the min value of tolerate.	
Suggested Remedy Change type column in return loss row to MIN.	
Response Response Status O	

CI 68	SC 5.2	P8	L 23	# 63	CI 68	SC 5.2	P8	L <b>26</b>	# 66
Weiner, Ni	ck	Phyworks			Aronson, L	ew	Finisar		
Comment	Туре Т	Comment Status X			Comment	Туре Т	Comment Status X		
At Nov compr	vember meeting v ehensive stresse	we selected ratio of 11.5 for C d tests. This was intended to	OMA: (2 x rms no corresponding t	bise) for to 0.9dB total penalty.	Table stress impair	68-4: Antic ed sensitivity ment, there sl	ipating that the model for d test will use a fixed time sp hould be a single row speci	lescribing the ISI impa acing between peaks ifving this value. Pres	airments of the common to each sent value is still TBD
My ow	n analysis (as pr	esented during conf. call before	ore November m	eeting) indicates that	Suggested	l Remedy		.,	
ratio si	nould actually be	12 and that the 11.5 corresp	onds to a penali	y of TaB.	Add a	row to Table	68-4 immediately before the	e current three ISI pa	rameters as
Chang	ie OMA: (2 x rms	noise) value to 12. Or OMA:	rms noise value	e to 24.	follows	s: ISI peak	spacing - TBD ps		
Response	,	Response Status <b>O</b>			Response		Response Status 0		
Response									
CI 68	SC 52	P8	/ 23	# 64	C/ 68	SC 5.2	P8 Finicer	L <b>27</b>	# 67
Aronson, L	.ew	Finisar	23	# 04		_ew <b>_</b>			
Comment	Type <b>T</b>	Comment Status X			Comment	1ype I 68-4:	Comment Status X		
Table stresse noise l	68-4: The line ed sensitivity test level without the l	which describes the required should have a footnote whic ISI impairment.	I noise level for t h explains that t	he comprehensive his is the required	Anticip definir	pating a 4 pea	k definition of the ISI paran nal and calibration, modify	neters, and in line wit the wording of the ISI	h another comment parameter rows to
Suggestea	l Remedy				Suggester	d Pomodu	- 74		
Add a no ISI	footonote to line impairment on th	23 which reads: The OMA test signal.	/(2x rms noise)	ratio is measured with	Modify	the description	ons of the 3 row to Table 6	8-4 defining the ISI pa	arameters as follows:
Response		Response Status 0			Descri Pre-cu Symm	iption Irsor ISI peak Ietrical ISI pea	Value heights {A1,A2,A3,A4} ak heights {A1 A2 A3 A4}	{TBD,TBD,TBD,TBD,TBI	D} 3D}
CI <b>68</b>	SC 5.2	P 8	L <b>25</b>	# 65	post-c	ursor ISI peak	c heights {A1,A2,A3,A4}	{TBD,TBD,TBD,TBD,TB	D}~~
Aronson, L	ew	Finisar			Response		Response Status 0	)	
Comment	Туре Т	Comment Status X							
Table sensiti other in the cla	68-4: The use vie test is optiona mplementation cl	of any Bessel Thompson filte al and in any case the bandiw haracteristics. This will be de the this line should be eliminated	er in the compre- width of the filter we escribed in the te	hensive stressed will be dependent on est description later in	<i>Cl</i> <b>68</b> Lindsay, T	SC <b>5.2</b> om	P <b>8</b> ClariPhy	L <b>33</b> Communicati	# 68
Suggesten	l Remedy				Comment	Type T	Comment Status X		
Elimina	ate the Row of Ta	able 68-4 presently labeled B	andwidth of Bes	sel-Thomson Filter	lable	68-4: Receive	er test conditions should no	t be toleranced.	
(line 2	5)				Suggested	l Remedy	ing 22 Ma dan't want a wa	or to think he are rea	uiro compliance et 10
Response		Response Status <b>O</b>			dBm, i	for example!	ine 33. We don't want a US	ei to triink ne can req	ure compliance at -10
					Response		Response Status O	)	

CI 68	SC 5.2	P8	L37	# 69	C/ 68	SC 5.2	P8	L <b>46</b>	# 72
Bhoja, Sude	еер	Big Bear Net	works		Dawe, Pie	rs	Agilent		
Comment 7 Table 6 Bandwi discuss D statis	<i>Type</i> <b>T</b> 8-4 Currently the dth of Bessel-Th tions on this item	Comment Status X ere is a TBD in the Simple s omson filter. Per the Nover , propose that we insert the poted fiber model	ressed receiver t nber & Decembe agreed 2GHz va	rest section for the r TP3 conference call lue based on the PIE-	Comment Notes Suggested Add	<i>Type</i> <b>E</b> b and e are se <i>d Remedy</i> to each.	Comment Status X ntences which should end with .		
Sugaested	Remedv				Response		Response Status 0		
Change 4 to ""2	e the TBD for the .0""	value of the bandwidth of th	ne Bessell Thom	oson-filter in Table 68-					
Response		Response Status O			<i>Cl</i> <b>68</b> Dawe, Pie	SC <b>5.2</b> rs	P <b>8</b> Agilent	L <b>47</b>	# 73
Cl 68 Lindsay, To Comment T	SC <b>5.2</b> m Type <b>T</b>	P 8 ClariPhy Con Comment Status X	L <b>38</b> nmunicati	# 70	Comment Unwar Suggested Remo	<i>Type</i> <b>E</b> nted . after 'Bes <i>d Remedy</i> ve them.	Comment Status X ssel-Thomson filter' (twice in table	68-4).	
Table 6	8-4: We should s	specify the signal characteri	stics, not the imp	lementation.	Response		Response Status 0		
Suggested Per the Rise an Note, p type (Be	Remedy previous comme id fall times, 20-8 er the previous c essel-Thomson)	ent, change this line to 30% 129 psec comment, the test descriptio and the background for the	n gets specific ab value.	oout the filter response	Cl <b>68</b> Lindsay, T Comment	SC <b>5.2</b> fom <i>Type</i> <b>E</b>	P8 ClariPhy Commu Comment Status X	L <b>47</b> unicati	# 74
Response		Response Status O			Table about	68-4: In applica creating too art	ation, the spectrum will not be flat, ificial of a requirement.	but quite va	ried. So let's not worry
Cl 68 Dawe Piers	SC 5.2	P <b>8</b> Agilent	L 46	# 71	Suggested Remo	d Remedy ve the note.			
Comment 7 We can	<i>Type</i> <b>T</b> The 'more norma	Comment Status X tive' and I think, more prope	er, in notes b and	e.	Response		Response Status <b>O</b>		
Suggested Change stresse Change sensitiv Response	Remedy e 'Comprehensiv d receiver sensit e 'Simple stresse ity is defined in 6	e stressed receiver test is d ivity is defined in 68.6.6.1' d receiver test is described 58.6.6.2' Response Status <b>0</b>	escribed in 68.6.6	5.1' to 'Comprehensive mple stressed receiver					

<u> </u>	00 5 0		/ 47			<b>D2</b>
C/ 68	SC 5.2	P8 Einisor	L41	# 75	C/68 SC 6	P <b>9</b> Agilopt
	<b></b>					
Comment Table specif furthe definit	68-4, editor's no ication parameter r suggest that w ion and almost of	ote in comment c. In the spi ers, we should eliminate the e e should make the 10 GHz po certainly still larger enough	rit of not assignin ditor's note in this int the 3 dB point	g tolerances to comment. I would which is a cleared	In this section we give meaning and explaining how to procedures as TI/	are really defining exactly wh precision to the spec limits g measure each parameter, bu A or IEC might. I suggest we
Suggestee	d Remedy				Suggested Remedy	
Chang which	ge footnote c to is otherwise fla	read: Bandwidth refers to the t	-3 dB point of the	noise spectrum,	Change the title fi and measuremen	om 'Optical measurement me t methods'.
Response		Response Status O			Response	Response Status O
C/ 68	SC 5.2	P8	L <b>47</b>	# 76	CI 68 SC 6	P 9
Dawe, Pie	rs	Agilent			Dawe, Piers	Agilent
Comment	Type E	Comment Status X			Comment Type T	Comment Status X
re 'No noise sensit	ise spectrum to loading is mean ivity) and the no	be flat up to this frequency [E t to be a secondary effect (sec ise flatness would be a tertian	ditor's note: Defin condary to the rec y effect. Yes it ma	ition of flat?]' The ceiver's own atters, but we can	We may have a p have nothing new clauses but from	roblem of document structure to say, so we don't have a su able 68-5 which is in a subcla
leave	it to the implem	enter to choose whether to ain	n for really flat or	use wider tolerances.	Suggested Remedy	
Suggestee Delete	<i>d Remedy</i> e the Editor's no	te.			Option 1: Modify ( optical parameter	58.6.1 to be something like 'T s' and alter the text to someth
Response	SC 52	Response Status 0	/ 48	# 77	unless specified of parameter definiti average optical p 52.9.3' and 'RMS	therwise. This table also references on a retro be found.' Options of and 'Definition of waveles are trained as the fine of the table for the provided of the table for ta
	JC <b>J.Z</b>	F <b>o</b> Acilent	L 40	# //	Descence	
Commont		Commont Status V			Response	Response Status U
l'm su	re other comme	nts will flesh out the stress tes	sting. This comm	ent is to remind us to	C/ 68 SC 6.1	P <b>9</b>
Suggester	d Remedy	e progreeo.			Dawe, Piers	Agilent
Remo	ve note d.				Comment Type <b>T</b>	Comment Status X
Response	•	Response Status O			Currented Demodel	
					Change 'and othe sentences copied	r (52.9.1.1)' to 'and other patt from 52.9.1.1: 'Patterns 1, 2,

CI <b>68</b>	SC 6	P <b>9</b>	L1	# 78
Dawe, Piers		Agilent		

exactly what we mean by each optical parameter, to bec limits given previously. We often do this by ameter, but we aren't writing formal measurement uggest we change the title to make this clearer.

rement methods' to 'Definitions of optical parameters

CI 68	SC 6	P <b>9</b>	L <b>1</b>	#	79	
Dawe, Pier	S	Agilent				

nt structure here. For some optical parameters, we have a subclause defining them. We refer to other in a subclause 68.6.1 headed 'Test patterns'.

ning like 'Test patterns and related subclauses for to something like 'Test patterns are as in Table 68-5 le also refers to the related subclauses where the Option 2: Introduce new subclauses 'Definition of 1.' n of wavelength and spectral width' with contents 'See efined as the standard deviation of the spectrum. See these new subclauses instead of the ones in 52.

Status O P**9** L19 # 80 Agilent Status X en't mentioned patterns 1, 2 or 3. other patterns 1, 2 and 3 (52.9.1.1)', then insert these tterns 1, 2, and 3 are defined in Table 52-21. Pattern 3

is optional.' Or, the two extra sentences could be a footnote to table 68-5.

Response Response Status 0

TYPE: TR/technical required T/technical E/editorial COMMENT STATUS: D/dispatched A/accepted R/rejected SORT ORDER: Clause, Page, Line, Subclause Page 14 of 25 RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn C/ 68 SC 6.1 10

C/ 68	SC 6.1	P 9	L <b>24</b>	# 81	CI 68 S	C 6.1	P 9	L <b>24</b>	# 83
Dawe, Piers		Agilent			Aronson, Lew		Finisar	L 24 # <u>B3</u> h penalty test requires at least a hding that it may be necessary to de provided for the penaty calcul h is also specified by ITU-T V.52 + 1	
Comment Ty I'm afrai think it n listed in polynom equipme style), by would by not sure Suggested F Add foot polynom there is 'A balan	ype <b>T</b> Id we may hav natters. 48.2. Figure 48–5, , hial in a SONE ent produce !() y default - and e OK to add a if people wan Remedy thote to table 6 hial X^7 + X^6 a run of sever icced pattern wi	Comment Status X e to define exactly what we me 4.2 mentions a PRBS based o which are $X^7 + X^3 + 1$ or $X^7$ T/SDH scrambler (e.g. as in G $X^7 + X^6 + 1$ ) (i.e. containing I most or all can invert the patt in extra bit to balance the patter it to do this. 68-5 '2^7-1 PRBS': 'A suitable + 1. In its commonly used for a zeroes in its length of 127 bit ith one additional bit is also ac	ean by '2^7-1 PF n one of the 7th 7 + $X^6$ + 1. This .707). I belie a run of 7 zeroe ern on request. rn up and make pattern may be m, the pattern is s.' If thought fit, ceptable.'	RBS', although I don't order polynomials e latter is the eve most or all test is, which is O.150 Further, I think it it 128 bits long. But generated by the inverted such that add another sentence	Comment Type Table 68-5 PRBS9 tes specify a s If so, I sugg Suggested Rer Table 68-5 1 or 2^9 - 1 would also 1 or 2^9 - 1 Response	<b>T</b> Present tri tri pattern. I pecific PRE gest below medy line 24: Pa I PRBS wit except: I PRBS as	Comment Status X ransmitter waveform dispersion Furthermore, it is my understar 3S9 to go with the MATLAB co- the x^9+x^5 + 1 function which attern column h generating function x^9+x^5 defined in ITU-T V.52 <i>Response Status</i> <b>O</b>	n penalty test req nding that it may de provided for t n is also specified + 1	uires at least a be necessary to he penaty calculation. d by ITU-T V.52
Cl 68	SC 6.1	Response Status O	L <b>24</b>	# 82	CI 68 S Aronson Lew	C 6.1	P <b>9</b> Finisar	L 32	# 84
Dawe, Piers		Agilent			Commont Type	. <b>т</b>	Commont Status V		
Comment Ty Font size	ype <b>E</b> e of '1 or 2^7-	Comment Status X			Table 68-5 editor's not	: The suggite	ested subclause reference is p	erfectly adequate	e. Suggest we remove
Suggested F Restore	R <i>emedy</i> to default (9 p	point)			Suggested Rer Table 68-5	nedy line 32: Re	eplace TBD and editor's note in	related subclau	se column with 52.9.2
Response		Response Status 0			Response		Response Status O		
					C/ 68 S	C 6.1	P <b>9</b>	L <b>32</b>	# 85
					Dawe, Piers		Agilent		

Comment Type T Comment Status X

As we don't have anything special to say about wavelength and spectral width, referring to 52.9.2 as the editor suggests should be OK.

Suggested Remedy

Change 'TBD [Editor's note: 52.9.2?]' to '52.9.2'.

Response Response Status **O** 

C/ 68 S	C 6.1	P9	L <b>6</b>	# 86	C/ 68	SC 6.2	P9	L <b>48</b>	# 90
Dawe, Piers		Agilent			Dawe, Piers	3	Agilent		
Comment Type	E	Comment Status X			Comment 7	<i>уре</i> <b>т</b>	Comment Status X		
Having add	led 'as', it mal	kes sense to remove the bra	ackets round '52	.9.1.2'.	re edito	r's note: there	e isn't much to note here apart f	from the right pa	attern. I don't think we
Suggested Ren	nedy	(			wavefo	rm being mea	asured.	grit choice may	depend on the
Remove the	em. Insert a	comma after 52.9.1.2			Suggested	Remedy			
Response		Response Status O			Replac with pa normat	e note with th tterns 1, 2 or ve definition	ese sentences modified from 5. 3 using histograms as suggeste for OMA is as given in 52.9.5.'	2.9.9.2: 'OMA c ed in Figure 52-	an be approximated -11. However, the
Cl 68 So Aronson, Lew	C 6.1	Р <b>9</b> Finisar	L 6	# 87	Response		Response Status <b>O</b>		
Comment Type	Е	Comment Status X							
The presen	nt first paragra	aph of 68.6.1, while taken di	rectly from Claus	se 52 is poorly worded.	C/ 68	SC 6.3	P 9	L <b>54</b>	# 91
Sugaested Ren	nedv		-		Dawe, Piers	6	Agilent		
Replace firs operation. 52.9.1.1 an used in eac	st paragraph Five test patt d 52.9.1.2, au ch measurem	of 68.6.1 with: Compliand erns are used: A square wa nd the PRBS9 pattern. Tab ent unless otherwise specifi	ce is to be achiev we and patterns le 68-5 defines the ed.	ved in normal 1,2 and 3 defined in ne test patterns to be	Comment 7 It's wor OMA. Suggested	<i>ype</i> <b>T</b> th pointing ou <i>Remedy</i>	Comment Status X It (again) here that extinction ra	tio is defined wi	th a different pattern to
Response		Response Status <b>O</b>			Add se Table 6	ntence: 'Note 8-5).'	that extinction ratio is defined w	vith a different p	pattern to OMA (see
CI 68 SI	0.62	Pa	/ 13	# 00	Response		Response Status 0		
Dawe, Piers	0.2	Agilent	245	# 00					
Comment Type	т	Comment Status X							
This title co the abbrevi	uld be more ation.	accurate, as the text is firstly	y a definition. Al	so, we should spell out					
Suggested Ren	nedy								
Change 'Ol	MA measurer	ment' to 'Optical modulation	amplitude (OMA	)'					
Response		Response Status O							
C/ 68 S	C 6.2	P <b>9</b>	L <b>45</b>	# 89					
Dawe, Piers		Agilent							
Comment Type Grammar: t	E too many 'for'	Comment Status X s.							
Suggested Ren Change the	<i>nedy</i> e second one	to 'of'.							
Response		Response Status O							

SC 6.3

CI 68	SC 6.4	P 10	L1	#	92
Aronson, Lev	N	Finisar			

Comment Type T Comment Status X

There are several problems with this subclause.

1) It is probably unnecessarily confusing to lump in the noise calibration of the comprehensive stressed test signal with the RINOMA of the transmitter. The stressed test calibration is better defined in the description of that test (and is included in the proposed new wording for that section I provide in another comment). Further comments below assume we have done this separation

2) For the alternative test description, still need to reference the diagram (or provide a new diagram) showing the implementation of the back reflection condition.

3) Description b) needs more description of the fact that you are measuring this on a scope with reference receiver.

4) Given that the spec we are measuring to is defined in dB/Hz in Table 68-3, we need to have an equation relating the ratio of the rms noise measured and the OMA to the Table 68-3 specification (-128 dB/Hz)

#### Suggested Remedy

New Subclause wording (with elimination of current editor's notes):

68.6.4 Relative intensity noise optical modulation amplitude (RINxOMA) measurement.

Table 68-3 specifies the transmitter's RINxOMA. Conformance shall be determined according to the procedure defined in 58.7.7, or alternately according to the following procedure.

a) Use a test setup as in Figure 58-4 substituting a reference receiver with 7.5 GHz Bessel-Thomson filter and oscilloscope for the optical to electrical converter and other elements which follow.

b) Use a square wave to measure OMA, according to the method of 52.9.5.

c) Using the same square wave, measure the rms noise with a 1 UI wide histogram with at least 1000 points in the center region of the logic ONE portion of the square wave. The measurement should be compensated noise in the measurement system.

d) The required ratio of OMA to rms noise measured is given by:

OMA/(2\*rms noise) = 1/SQRT(10^((RIN+10\*LOG(NBW))/10))

where RIN is the specification in Table 68-3 and NBW is 7.5 GHz

Response Response Status **O** 

Cl 68	SC 6.4	P 10	L <b>1</b>	# 93
Lindsay.	Tom	ClariPhy Com	municati	

Comment Type **T** Comment Status **X** 

Per the Editor's notes, this clause needs some work ...

#### Suggested Remedy

1. Eliminate the first note. I don't think we should use clause 58's method for calibration of the TP3 tester (Lew has procedure in his TP3 clause/comment for doing this), and I am aware of another comment Lew is preparing to provide more guidance on the method given here for RIN\_OMA.

2. Given TP2 waveform options being considered, I am concerned that the method given by 58.7.7 will introduce a lot of variability into the result of RIN\_OMA. Therefore, in the first paragraph, eliminate the 2nd sentence, and -preferably- reword the rest to ""... shall be determing according to the following procedure.""

As a less preferred option, add ""... or alternatively, to the procedure defined in clause 58.7.7.""

3. IF we must retain a link to 58.7.7, then replace the 2nd editor's note with ""The method given by clause 58.7.7 may produce different results for RIN\_OMA then the method given here. This is because the method of clause 58.7.7 does not measure OMA by the definitions of this standard, which requires a low frequency square wave pattern. If a square wave pattern is used, the the methods of clause 58.7.7 should provide correct results".

4. I have a test setup figure that may help. See ""Tom Lindsay Figure 2.doc"".

5. After all this, move this test into the Transmitter measurements section, clause 68.6.5, probably as 68.6.5.3.

Response Response Status **O** 

10

C/ 68 SC 6.4	P10	L 11	# 94	C/ 68 SC 6.4	P10	L15	# 97
Dawe, Piers	Agilent			Dawe, Piers	Agilent		
Comment Type T	Comment Status X			Comment Type T	Comment Status X		
re 'Measure the rms no with at least 1000 point back reflection. On the We could point out that	bise using a 1 UI wide histog ts, on the logic ONE level.' e other hand, the stricture for t the user needs enough poi	ram [Editor's note We need to inc at least 1000 po nts (hits?) to achi	e: need more detail?], clude the use of the ints is too much detail. eve the accuracy he	We can add an eq Suggested Remedy Add the following	uation to round off the procedure (using the proper x-like multiply si	Are my factors gn instead of *):	of 20, 2, 10 correct?
needs - but that's so ob is required.	ovious we don't need to say	it, and we don't ye	et know what accuracy	c) Calculate RINx RINxOMA = 20*log	OMA by use of the equation: g10( 2 * rms noise / OMA ) - 10*lc	g10(BW) [dB/Hz	z] (68-n)
Suggested Remedy Delete '[Editor's note: r repeat with different se found.'	need more detail?], with at le ttings of the polarization rota	ast 1000 points, ' ator until an upper	. Add 'If appropriate, limit of rms noise is	Where: RINxOMA = Relat with x dB reflection OMA and rms nois BW = Noise bandy oscilloscope - high	ive Intensity Noise referred to opt n, se are measured in the same line width of the measuring system (Hi n pass bandwidth due to DC block	ical modulation a ar optical units e. z), i.e. low pass b ing capacitor if a	mplitude measured g. mW, and bandwidth of ny. In this case, 7.5
Response				x10^9 Hz			
C/ 68 SC 6.4	P <b>10</b>	L 11	# 95	Response	Response Status <b>O</b>		
		nmunicati		C/ 68 SC 6.4	P 10	L <b>20</b>	# 98
Comment Type I	Comment Status X			Dawe, Piers	Agilent		
	S HOLE			Comment Type T	Comment Status X		
Suggested Remedy I think the only detail th applied over as wide of negligible slope or othe	at may be missing is: ""The f a region as possible where er vertical variations relative	measurement his the deterministic to the noise being	stogram should be waveform has g measured.""	Editor's note '58.7 is not correct. 58. and 59.9.1)', and v (Actually, it would are defining OMA,	.7 uses (random) data, or PRBS, 7.7.3 says ' using the pattern sp we have already told our readers v be better to use a PRBS, but ther , it would be just SNRx.)	vs. square patter becified for the PM which pattern to u n it wouldn't be R	n for alternative test.]' MD type (e.g. in 58.7.1 use in table 68-5. INxOMA the way we
This can also replace/e	eliminate the requirement of	the 1 UI histograr	n.	Suggested Remedy	· · · ·		
Fix the grammar in line	13. Replace ""to"" with ""sh	ould be"".		Delete the note.			
Response	Response Status O			Response	Response Status O		
C/ 68 SC 6.4	P10	L13	# 96				
Dawe, Piers	Agilent						
Comment Type E Change 'and to compe	Comment Status X nsated for' to						
Suggested Remedy and to be compensated	d for						
Response	Response Status <b>O</b>						

C/ 68 SC 6.4 Weiner, Nick	P <b>10</b> Phyworks	L <b>4</b>	# 99	<i>Cl</i> 68 Dawe, Piers	SC <b>6.4</b> s	P <b>10</b> Agilent	L <b>5</b>	# 101
Comment Type <b>T</b> 1) Draft 1.0 gives two the measured parame	Comment Status X signal to noise measurement r ter.	nethods. These	e can not both define	Comment 7 Bad ph Suggested	<i>Type</i> <b>T</b> rase 'Conform <i>Remedv</i>	Comment Status X ance shall be determined', too	similar to 'shall	be tested'.
<ul> <li>2) Situation made un- parameters for transm</li> <li>Suggested Remedy</li> <li>1) Change title to ""ON</li> </ul>	necessarily complicated by de hitter and receiver test condition MA:rms noise ratio measureme	fining different an. ent""	signal to noise ratio	After 'th 'Confor 58.7.7, parame followir	ne transmitter's mance shall b or alternativel eters may be m ng procedure.'	s RINxOMA.' insert 'RINxOMA i e determined, in each case, ac y according to the following pro heasured according to 58.7.7, c	s defined by E cording to the p cedure:' to 'In e r alternatively	quation 58-9.'. Change procedure defined in each case, the according to the
2) Select simple defini (mean of the two stan	ition - e.g. Ratio of difference b dard deviations);	etween (mean	1 and 0 levels) and	Response		Response Status <b>O</b>		
<ol> <li>Bescribe one norma</li> <li>Include informative</li> </ol>	ative test procedure.			C/ <b>68</b> Dawe, Piers	SC <b>6.4</b> s	P <b>10</b> Agilent	L <b>6</b>	# 102
See file: "weiner 68.6. Response	4 proposals Jan 05.pdf" for two Response Status <b>O</b>	o examples.		Comment 7 Need to RINxOI oscillos	<i>Type</i> <b>T</b> o explain wher MA procedure. scope in place	Comment Status X back reflection is or isn't used We may also like to add a figure of the O/E converter and every	, when we refe ure like 58-4 bu thing to its righ	r to the existing ut showing an t.
Cl 68 SC 6.4 Dawe, Piers Comment Type E	P <b>10</b> Agilent <i>Comment Status</i> <b>X</b>	L <b>4</b>	# 100	Suggested After 'a reflectio stresse helpful	Remedy ccording to the on is used (see d receiver test to include note	e following procedure.', add 'Fo Figure 58-4). For calibration ( a back reflection is not used.' cs. Add new figure per commo	r measurement of the signal in Delete the ec ent.	t of RINxOMA, a back the comprehensive litor's note 'Would be
The links 'Table 68–3' Suggested Remedy Check, fix if broken.	and 'Table 68–4' didn't work fo	or me.		Response		Response Status <b>O</b>		
Response	Response Status 0							

SC 6.4

C/68 SC 6.5	P12	L 41	# 103	C/ 68	SC 6.5.2	P11	L <b>43</b>	# 104
Indsay, Iom	ClariPhy Commu	inicati		Dawe, Pier	rs 	Agilent		
omment Type <b>T</b> Com The TP2 study team has develouggested Remedy 1. Specification (for Table 68-3) Uncorrelated jitter (rms) max 2. Method (insert after subclaus Title: 68.6.5.4. Uncorrelated jit The optical jitter measurement The DUT shall repetitively trans waveform and dispersion pena with the frequency response of	oped a TP2 jitter spec. 0 0 0 0 0 0 0 0 0 0 0 0 0	correlated nois red by clause 6 be acquired by ison filter as pe	e and jitter. 88.6.5.2, Transmitter a signal analyzer er clause 68.6.5.1,	Comment re 'The disper- be bet conce Suggested Insert the de multim follows Response	<i>Type</i> <b>T</b> e transmitter v sion.' The pe ter to say som ot. And a 'ma <i>I Remedy</i> new first sentu terministic dis lode fibers an s.' Delete the	Comment Status X vaveform and dispersion per nalty can't control, although hething like this right at the ster shall' will save us work ences 'Transmitter wavefor persion penalty due to a part d receiver. It shall be defin sentence mentioned in the Response Status O	enalty is intended to on the spec limit is inter- beginning of the para when writing out the m and dispersion per articular transmitter will be d by a waveform ar comment.	control deterministic ended to. Also it would agraph, to introduce the e PICS. nalty is a measure of vith standard emulated halysis method as
Transmitter optical waveform, a clause 68.6.5.1. The signal ana bit in the repetitive pattern. The displayed occurrence of a rising The DUT must be fully operatic A horizontal histogram with hei jitter. It should be placed appro At least 1000 hits are required equipment noise and jitter is re doesn't contribute more than 30 Refer to Figure ZZ (new per th	and with trigger timing ba alyzer shall provide a me e measurement is perfor g edge. onal in both transmit and ght of ~0.01 OMA on the ximately at the average in the histogram. Compet commended as long as 0% of the specification li e previous comment) in	receive direction receive direction rising edge is amplitude value ensation for me the measureme mit.	ecovery, again as per riggering on a single inter bit of the first ons during this test. used to measure e of the square wave. asurement ent equipment	Aronson, L Comment To the descrij addres 1) a 2/ than 2 2) Allo frame	<i>Type</i> <b>T</b> extent that the ption of this se ssed. *9 test pattern *7 w 7 samples   on a common	Finisar <i>Comment Status</i> <b>X</b> the following points are not a ection, there are several points as described in the comm per UI. Appears to work ar a scope (Agilent 86100A/B)	addressed in an expension in the current work of the current work of the current for Table 68-5 should allows a PRBS9 to	cted complete new ding which should be ould be used rather
esponse Resp	onse Status O			Suggested In pres Chang Chang interva	<i>I Remedy</i> sent text: le 2^7 - 1 PRE le ""at least al""	3S to 2^9-1 PRBS 8 samples per unit interval	"" to ""at least 7 s	amples per unit
				Response		Response Status C		

		F 11 A silest	L 48	# 106	C/ 68	SC 6.5.2	P	12 Dhu Carra	L 33	# 109
	S	Aglient			Lindsay, I c	om _	Clari	Phy Com	municati	
Comment 7	Туре Т	Comment Status X			Comment T	Туре Т	Comment Status	<b>X</b>		
when n	nguage is too im nost users would	prefer to buy a ready-made	one.	ur-own oscilloscope	Repres MATLA	Sentation of algo	used to describe the	algorithm	. Peri	the previous comment,
Suggested	Remedy				Suggested	Remedy				
Change filtered	e 'O/E converter output is connec	and through a 4th-order, 7.5 cted to an oscilloscope and a	GHz Bessel-The also to a trigger re	omson filter. The ecovery circuit. The rigger for the	After co after th	ompletion of rev e informative m	view and consensus naterial provided by the	by the TP: ne previou	2 study team, ii is comment.	nsert the MATLAB code
oscillos order, 7 wavefo	scope so that the 7.5 GHz Bessel- orm can be captu	waveform can be captured Thomson response and a su red and stored.' Change fig	and stored.' to 'o iitable trigger fun ure 68-5 to matcl	scilloscope with a 4th- ction so that the h.	Response		Response Status	0		
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CI <b>68</b> Dawe, Pier:	SC <b>6.5.2</b> s	P <b>11</b> Agilent	L 51	# 107	Repres agreed	entation of algo that the details	prithm is missing from required for signal p	n the TWE	OP test. The for the TWDP	TP2 study team has test will be described
Comment 7	Туре Т	Comment Status X			with M/	ATLAB code. B	ut, in addition, the tea erstanding by a casu	am has re al read	viewed an info	rmative description that
Specify	/ing 16 averages	is too implementation speci	fic. I assume we	e are using averaging to	botsoppu2	Remedy	crotalianing by a baba	arread.		
reduce	the measureme	nt noise in the captured wav	eform, but we do	n't know how much	Suggested	Keineuy				
				offecte the colouleted		make more se	nse to create an Ann	ex for this	2 I have modifi	ied Norm Swenson's
penalty	If so we could	give a target SNR for guida	e know how noise nce.	e affects the calculated	Does it work w	t make more se ith an annex in	nse to create an Ann mind. Wherever is	ex for this best, ins	? I have modified are the information of the inf	ied Norm Swenson's tive description attached
penalty Suggested	<ul> <li>? If so we could</li> <li><i>Remedy</i></li> </ul>	give a target SNR for guida	e know how noise nce.	e affects the calculated	Does it work w to thes	th an annex in e comments. The time of TWDP a	nse to create an Ann mind. Wherever is ne document name s	ex for this best, ins ent with n	? I have modified are the information of the inf	ied Norm Swenson's tive description attached s ""Informative
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Aronson, I Comment While wordir compl should Suggested remov Response C/ 68 King, Jona Comment Figure 62.5/1 Suggested chang	Type major w ng should liant offsi d not not d Remea ve the wo s SC ( athan Type e 68.7 co 25 d Remea je label c	T vork rema ld be chai set launch t be limite dy ord offset 6.5.3 E ontains ill dy on one of	Comment Status X ins to be done on this section nged: Currently it is stated to a standard 50 um and 62.5 un ad to only offset launches if from this line. Response Status <b>O</b> P13 Big Bear Netw Comment Status X ustrations of two 50/125 fibres if the fibre reel pictures to say 6	, one minor po hat: ""For a po patchcords a <i>L</i> 1 orks , presumably o 52.5/125	int in the current ort with a multimode- re specified"" This # 114	connec patch c The sig jitter tol specifie Althoug use pha on the c implem <i>Response</i>	ted to a ord. [Eo nal imp erance d in Ta h desc ase or f clock so enter to	n optica ditor's nc test. Thible 68-4 ribed in t requenciource that assure	attenuator, and te: Further note are specified i OMA for this t A BER of bette his document a modulation fo t generates the the correct valu <i>Response S</i>	d to the ro on the M n Table 6 est shoul er than 10 s frequer inducing data, or les are ac tatus <b>O</b>	eceiver und MCP to go ir 68-4 as the 6 Id be set to 0-12 shall b ncy modulat g sinusoidal on the data chieved at th	ler test via a n here] conditions ( Received p e achieved tion, an act jitter. The a stream its he output c	a mode cond of the low fre oower in OM/ ual test syste modulation n elf. It is up to f the tester.	ditioning equency A as em may nay occur o the

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

C/ 68	SC 6.6	P12	L <b>50</b>	# 116	C/ 68	SC 6.6.1	P13	L 26	# 118		
Aronson, L	Lew	Finisar			Aronson, L	_ew	Finisar				
Comment	Type E	Comment Status X			Comment	Туре Т	Comment Status X				
As par also e and si respec clarity	rt of a proposed n liminating the sing imple receiver tes ctively. This all	new section for the compresh- gle paragraph clause 68.6.6 v ts, and include the relavant v ows us to reduce the number	ensive stressed which refers to b vording in each s of subclauses c	receiver test, propose oth the comprehensive ections ne level which helps	The pr missin metho the pro	resent clause 68. Ig a great deal of d and test metho esent Figure 68-6	6.6.1 describing the compreh required material describing d. Additionally, there are a n 3.	ensive stressed the signal chara umber of mistak	l sensitivity test is teristics, calibration tes and omissions in		
Suggested Remedy						The referenced document in the remedy replaced this entire clause.					
Eliminate subclause 68.6.6 and paragraph of text. Change present subclause 68.6.6.1 number to 68.6.6 and present 68.6.6.2 to 68.6.7.						Note that the document presumes, as is the current state of consensus, that there is no sinusoidal jitter impairment. It also presumes a 4 peak fixed dT representation (but not pormative implementation) of the ISI impairment.					
Response	)	Response Status <b>O</b>			Suggester	l Remedv					
					Replace present subclause 68.6.6.1 with the text provided in seperate document:						
Cl 68 Dawe, Pie	SC 6.6	P12 Agilent	L <b>54</b>	# 117	ReceiverSensitivityClauses-SuggestedChangetoD1.0_1-07-05.pdf						
Comment	Type <b>T</b>	Comment Status X			submitted to the -LRM reflector on 1/7/05.						
68.6.6	6.1 and 68.6.6.2 d	efine as well as describe (an	d there's a typo i	n this sentence).	Response		Response Status 0				
Suggested Remedy Change '68.6.6.1 and 68.6.6.2 describe the test corresponding tests.' to '68.6.6.1 and 68.6.6.2 define the relevant parameters and describe the corresponding tests.'					C/ 68	SC 6.6.1	P13	L <b>27</b>	# 119		
Response	•	Response Status <b>O</b>	·	0	Dawe, Pie	rs	Agilent				
					Comment	Туре Т	Comment Status X				
					We need to state how to verify low frequency jitter tolerance. In the truncated the applied jitter at 1.5 UI which I think is a step point for tolerance mask. I may have too much jitter in the 4-10 MHz range jitter could be halved and 133 kHz changed to 67 kHz.				<ul> <li>proposal below I have an SDH/SONET jitter</li> <li>if so, the amount of</li> </ul>		
					Suggested	l Remedy					
					l belie like 52 sign):	ve the easiest wa 2-19 but simpler (	ay would be to use the clock ji .LE. means the less than or e	tter method in f equals sign, x m	gure 68-8. Add a table leans multiplication		
					Table Frequ f < 13 133 kł f > 10	68-n - Sinusoida ency Range 3 kHz N, Hz < f .LE. 10 MH MHz 0	l jitter Sinusoidal Jitter (UI pk to pl A Iz 2 x 10^5/f	<)			
					Response		Response Status O				

C/ 68 SC 6.6.2 Dawe, Piers	P <b>14</b> Agilent	L <b>24</b>	# 120	C/ 68 SC 6.6.2 Lindsay, Tom	P <b>14</b> ClariPhy C	L <b>33</b> Communicati	# 122		
Comment Type <b>T</b> This subclause defin	Comment Status X es parameters as well as descr	ibing a test		Comment Type <b>T</b> The informative ser	Comment Status X	tion of the filter and	the final test condition.		
Suggested Remedy Delete the word 'test (informative)' Response	' in the title, giving 'Simple stres Response Status <b>O</b>	sed receiver ser	sitivity and overload	Per the next comment, I decided to focus on the signal characteristics, not the implementation. Suggested Remedy 1. Remove ""rise/fall times,"" from line 33.					
C/ 68 SC 6.6.2 Dawe, Piers	P <b>14</b> Agilent	L 33	# 121	2. Replace the first sentence of the last paragraph of this subclause with its own paragraphs: ""The rise and fall times of the test signal shall meet the requirements given in Table 68-4 and have the approximate time-properties of a 4th Bessel-Thomson filter. The value for the rise and fall times is based on a simplified channel model baving a 2 GHz					
Comment Type T rise/fall time is not in	Comment Status X tended to be negligible!			Bessel-Thomson fil response with a ste	Iter and driven by a simplified presponse of 47.1 psec, 20-4	source model havin 80%, rise and fall tir	ig a Gaussian impulse nes.		
Suggested Remedy Delete 'rise/fall times	s, '. Insert comma after 'RIN'.			The rise and fall time values are to be measured and calibrated with a 7.5 GHz Bessel- Thomson filter and with the 10 bit pattern used for OMA calibration for the comprehensive stress test. Other implementations may be used provided that the resulting signal in the optical domain meets the requirements at TP3.					
Response	Response Status <b>O</b>								
				Response	Response Status O				
				C/ 68 SC 7.1 Dawe, Piers	P <b>14</b> Agilent	L 47	# 123		
				Comment Type E	Comment Status X				

Response

unwanted comma Suggested Remedy

Remove the comma after 'specifications'.

Response Status **O** 

CI 68 SC 7.3	P15	L 22	# 124	C/ 68	SC 9.2	P16	L9	# 128		
Dawe, Piers	Agilent			Dawe, Piers		Agilent				
Comment Type E Comment Status X typo				Comment TypeTComment StatusXTable 68-6 needs entries for zero dispersion wavelength (with footnote).						
Suggested Remedy change 'specification'	to 'specifications'.			Suggested Remedy Copy from table 59-16 (table 52-25 has the same limits for zero dispersion wavelength).						
Response	Response Status O			Response		Response Status <b>O</b>				
C/ 68 SC 8 Dawe, Piers	P <b>15</b> Agilent	L <b>35</b>	# 1 <u>25</u>	<i>Cl</i> <b>99</b> Dawe, Pier	SC	P <b>2</b> Agilent	L 1	# 129		
Comment Type <b>T</b> Comment Status <b>X</b> Completing the sentence at the editor's note: 52, 58 and 59 have very similar wording, which we can re-use.					Comment Type E Comment Status X Now we have material for more than one clause, we need a contents list					
Suggested Remedy	Add the table of contents.									
Delete the note and co characteristics of the o bandwidth, meet the s	Response		Response Status 0							
Response	Response Status O									
C/ 68 SC 8	P15	L 36	# 126							
Dawe, Piers	Agilent									
Comment Type T I believe that ANSI/TI/	Comment Status X A/EIA-526-14A method A-1 ap	olies to single-m	ode fibre.							
Suggested Remedy Delete ', and ANSI/TIA	A/EIA-526-14A/method A-1'.									
Response	Response Status O									
C/ 68 SC 9.1 Dawe, Piers	P <b>16</b> Agilent	L <b>3</b>	# 127							
Comment Type E Table could take less	Comment Status X space.									
Suggested Remedy Make it full width using	g 'shrink to fit'.									
Response	Response Status 0									

SC