C/FM SC FM	P 8	L 14	# 1	C/ 156 SC 156.7.1	P 98	L 27	# 4
Dawe, Piers	Nvidia			Dawe, Piers	Nvidia		
Comment Type E	Comment Status X			Comment Type T	Comment Status X		
Clauses					e *mask* - we limit the parame e description entry here should		
SuggestedRemedy clauses				SuggestedRemedy			
Proposed Response	Response Status O			"Laser frequency nois In 156.9.5, add a new	and the title of 156.9.5, chang e". first sentence: The laser freq defined in this subclause.		
C/00 SC 0	P 14	L 51	# 2	Proposed Response	Response Status O		
Dawe, Piers	Nvidia			, ,			
Comment Type E EEE	Comment Status X			C/ 156 SC 156.7.1	P 98	L 38	# 5
				Dawe, Piers	Nvidia		
				Comment Type TR	Comment Status X		
SuggestedRemedy IEEE Proposed Response	Response Status O				Comment Status X ude imbalance (mean)" with a	spec of 1 dB and	d no tolerance. That is
IEEE	Response Status O			This says "I-Q amplitu		spec of 1 dB and	d no tolerance. That is
IEEE Proposed Response	P 37	L 41	# 3	This says "I-Q amplitu impossible to meet. <i>SuggestedRemedy</i> Change "I-Q amplitud 400ZR and similar to	ude imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat	in I-Q amplitude i tion" just above.	mbalance (max)" as in In 156.9.13?, change '
IEEE Proposed Response	P 37 Nvidia	L 41	# 3	This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to ' Q amplitude imbalance	ude imbalance (mean)" with a e imbalance (mean)" to "Mea	in I-Q amplitude i tion" just above.	mbalance (max)" as in In 156.9.13?, change '
IEEE Proposed Response I 116 SC 116.2.4 Dawe, Piers Comment Type T	P 37 Nvidia Comment Status X			This says "I-Q amplitu impossible to meet. <i>SuggestedRemedy</i> Change "I-Q amplitud 400ZR and similar to	ude imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat	in I-Q amplitude i tion" just above.	mbalance (max)" as in In 156.9.13?, change '
IEEE Proposed Response 116 SC 116.2.4 Dawe, Piers Comment Type T The PMA provides a n	P 37 Nvidia <i>Comment Status</i> X nedium-independent means fi			This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to ' Q amplitude imbalance	ude imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat be (mean)" to "Mean I-Q ampl	in I-Q amplitude i tion" just above.	mbalance (max)" as in In 156.9.13?, change
IEEE roposed Response 116 SC 116.2.4 Dawe, Piers comment Type T The PMA provides a n range of physical med	P 37 Nvidia Comment Status X			This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to ' Q amplitude imbalance	ude imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat be (mean)" to "Mean I-Q ampl	in I-Q amplitude i tion" just above.	mbalance (max)" as in In 156.9.13?, change '
IEEE roposed Response 116 SC 116.2.4 Dawe, Piers comment Type T The PMA provides a n range of physical med	P 37 Nvidia <i>Comment Status</i> X nedium-independent means fi			This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to Q amplitude imbalanc Proposed Response	ude imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat ce (mean)" to "Mean I-Q ampl <i>Response Status</i> O	in I-Q amplitude i tion" just above. itude imbalance"	mbalance (max)" as in In 156.9.13?, change ' , twice.
IEEE Proposed Response Cl 116 SC 116.2.4 Dawe, Piers Comment Type T The PMA provides a n range of physical med SuggestedRemedy Change: The PMA provides a n	P 37 Nvidia <i>Comment Status</i> X nedium-independent means fr ia - not for this ZR PMA nedium-independent means fr	or the PCS to su	pport the use of a	This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to Q amplitude imbalance Proposed Response	ude imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat ce (mean)" to "Mean I-Q ampl <i>Response Status</i> O <i>P</i> 98	in I-Q amplitude i tion" just above. itude imbalance"	mbalance (max)" as in In 156.9.13?, change ' , twice.
IEEE Proposed Response Cl 116 SC 116.2.4 Dawe, Piers Comment Type T The PMA provides a n range of physical med SuggestedRemedy Change: The PMA provides a n range of physical med	P 37 Nvidia <i>Comment Status</i> X nedium-independent means fr ia - not for this ZR PMA nedium-independent means fr	or the PCS to su	pport the use of a	This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to " Q amplitude imbalance Proposed Response C/ 156 SC 156.8 Dawe, Piers Comment Type T	ide imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat e (mean)" to "Mean I-Q ampl <i>Response Status</i> O <i>P</i> 98 Nvidia <i>Comment Status</i> X ret too many: see D2.5 comm	n I-Q amplitude i tion" just above. itude imbalance" <i>L</i> 35	mbalance (max)" as in In 156.9.13?, change , twice. # 6
IEEE roposed Response 1 116 SC 116.2.4 bawe, Piers comment Type T The PMA provides a n range of physical med uggestedRemedy Change: The PMA provides a n range of physical med For 200GBASE-R and to For 200GBASE-R and	<i>P</i> 37 Nvidia <i>Comment Status</i> X nedium-independent means fr ia - not for this ZR PMA nedium-independent means fr ia. 400GBASE-R, the PMAs	or the PCS to su or the PCS to su vides a medium-i	pport the use of a pport the use of a ndependent means for	This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to " Q amplitude imbalance Proposed Response C/ 156 SC 156.8 Dawe, Piers Comment Type T Still one square brack	ide imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat e (mean)" to "Mean I-Q ampl <i>Response Status</i> O <i>P</i> 98 Nvidia <i>Comment Status</i> X ret too many: see D2.5 comm	n I-Q amplitude i tion" just above. itude imbalance" <i>L</i> 35	mbalance (max)" as in In 156.9.13?, change , twice. # 6
IEEE Proposed Response Cl 116 SC 116.2.4 Dawe, Piers Comment Type T The PMA provides a n range of physical med SuggestedRemedy Change: The PMA provides a n range of physical med For 200GBASE-R and to For 200GBASE-R and	P 37 Nvidia Comment Status X nedium-independent means fr ia - not for this ZR PMA nedium-independent means fr ia. 400GBASE-R, the PMAs	or the PCS to su or the PCS to su vides a medium-i	pport the use of a pport the use of a ndependent means for	This says "I-Q amplitu impossible to meet. SuggestedRemedy Change "I-Q amplitud 400ZR and similar to Q amplitude imbalanc Proposed Response Cl 156 SC 156.8 Dawe, Piers Comment Type T Still one square brack maniloff_3cw_01_230	ide imbalance (mean)" with a e imbalance (mean)" to "Mea "Mean I-Q offset per polarizat ce (mean)" to "Mean I-Q ampl <i>Response Status</i> O <i>P</i> 98 Nvidia <i>Comment Status</i> X ret too many: see D2.5 comm 1925	n I-Q amplitude i tion" just above. itude imbalance" <i>L</i> 35	mbalance (max)" as ir In 156.9.13?, change , twice. # <u>6</u>

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

C/ 156 SC 156.8

C/ 156 SC 156.8	P 102	L 7	# 7	CI 156 SC 156.9.	1 <i>P</i> 104	L 24	# 10
Dawe, Piers	Nvidia			Dawe, Piers	Nvidia		
<i>Comment Type</i> E Inconsistent and unus	Comment Status X sual way of presenting units				Comment Status X nis table footnote should be in 1 (56.9.4), not here under an inde		.9.30 (and possibly
SuggestedRemedy Change header row to Frequency offset (GH Delete "GHz from boo	z) Isolation (dB)			SuggestedRemedy	Ensure the information is give Response Status O		56.9.30.
roposed Response	Response Status O						
				C/ 156 SC 156.9.	4 <i>P</i> 104	L 40	# <u>1</u> 1
156 SC 156.8	P 102	L 34	# 8	Dawe, Piers	Nvidia		
awe, Piers	Nvidia			Comment Type TR	Comment Status X		
omment Type ER Figure is a bitmap - co uggestedRemedy	Comment Status X ompare Fig 156-7				nalized transmit spectrum shall 1280-1-3. As far as I know, IE		
,	e proper way, document the m WG_tools/editorial/	1ethod in		SuggestedRemedy Rewrite the definitio meant by "normalize	n to align with the terminology i	n IEC 61280-1-3	or define what is
Proposed Response	Response Status O			Proposed Response	Response Status O		
7 156 SC 156.8 Dawe, Piers	P 102 Nvidia	L 40	# 9	C/ 156 SC 156.9.	4 <i>P</i> 105	L 21	# 12
omment Type E	Comment Status X			Dawe, Piers	Nvidia		
There's a standard wa	ay to indicate which side of a li	ne one should be	e, set up years ago.	<i>Comment Type</i> E Upper Mask, Lower	<i>Comment Status</i> X Mask, Compliant Region		
	Monte equation constrainte"	In Figure 156-7,	change "Compliant	SuggestedRemedy	maak Maata aquation constrai		
SuggestedRemedy In Figure 156-6, add " region" to "Meets equ		-		Upper mask, Lower	mask, Meets equation constrai	nts	

C/ 156 SC 156.9.4

156 SC 156.9.5	P 105	L 48	# 13	C/ 156 SC 156.9.9	P 107	L 19	# 17
Dawe, Piers	Nvidia			Dawe, Piers	Nvidia		
	Comment Status X still undefined - this has been a		a long time.	Comment Type T Comn limits	nent Status X		
uggestedRemedy See previous comme	, it cannot be a power spectra	r density.		SuggestedRemedy limit (it's a single max)			
Proposed Response	Response Status O			Proposed Response Respon	nse Status O		
7 156 SC 156.9.6	P 106	L 54	# 14	C/ 156 SC 156.9.10	P 107	L 26	# 18
)awe, Piers	Nvidia	204	" <u> </u>	Dawe, Piers	Nvidia		
<i>comment Type</i> T limits	Comment Status X			Comment Type T Comn limits	nent Status X		
uggestedRemedy				SuggestedRemedy			
limit (max, it's unsign	ed)			limit (it's a single max). Same ir			
proposed Response	, Response Status O			Proposed Response Respon	nse Status O		
/ 156 SC 156.9.7	P 107	L 4	# 15	C/ 156 SC 156.9.10	P 107	L 28	# 19
Jawe, Piers	Nvidia	L 7	# []]	Dawe, Piers	Nvidia		
<i>comment Type</i> T limits	Comment Status X			Base of log should be a subscri	nent Status X ot. Same in 156.9.1	1.	
uggestedRemedy	N			SuggestedRemedy			
limit (max, it's unsign				Proposed Response Respon	nse Status O		
roposed Response	Response Status O						
:/ 156 SC 156.9.8	P 107	L 9	# 16				
Dawe, Piers	Nvidia						
<i>comment Type</i> T limits	Comment Status X						
uggestedRemedy							
limit (max, it's unsign	ed)						
Proposed Response	Response Status O						

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

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C/ 156 SC 156.9.10 P 107 L 28 # 20	C/ 156 SC 156.9.13 P 107 L 43 # 25
Dawe, Piers Nvidia	Dawe, Piers Nvidia
Comment TypeTRComment StatusXImean and Qmean are not defined. Same issue in 156.9.11. Note 156.10.2.5 I-Q offset compensation, so these could be obtained from the EVM method, as 400ZR says.	Comment Type TR Comment Status X "The I-Q phase error magnitude (max) is the *largest* phase difference of the in-phase component I and quadrature component Q of the signal" [not -90 degrees!]
SuggestedRemedy Define Imean and Qmean and Psignal, e.g. in the EVM section, and cross-reference from	SuggestedRemedy Define "largest phase difference".
here. Proposed Response	Proposed Response Response Status O
C/ 156 SC 156.9.10 P 107 L 28 # 21	C/ 156 SC 156.9.13 P 107 L 43 # 30
Dawe, Piers Nvidia	Dawe, Piers Nvidia
Comment Type T Comment Status X	Comment Type TR Comment Status X "phase difference measured relative to *local oscillator*" - seems wrong.
Measurement interval would be the distance in time between measurement windows. 400ZR says "averaging period"	SuggestedRemedy
SuggestedRemedy Change "measurement interval" to "measurement window for averaging".	Delete "measured relative to local oscillator" Proposed Response Response Status O
Proposed Response Response Status O	
	C/ 156 SC 156.9.13 P 107 L 44 # 23
C/ 156 SC 156.9.12 P 107 L 39 # 22	Dawe, Piers Nvidia
Dawe, Piers Nvidia	Comment Type T Comment Status X
Comment Type T Comment Status X	limits
limits	SuggestedRemedy limit (it's a single max)
SuggestedRemedy limit (it's a single max)	Proposed Response Response Status O
Proposed Response Response Status O	
	C/ 156 SC 156.9.14 P 107 L 49 # 26
	Dawe, Piers Nvidia
	Comment Type TR Comment Status X The I-Q quadrature skew is the *maximum* relative skew
	SuggestedRemedy Define "maximum skew"

COMMENT STATUS: D/dispatched A/accepted R/rejected RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn SC 156.9.14 12/1/2023 8:09:28 AM SORT ORDER: Clause, Subclause, page, line

Nvidia Comment Status	a		
Comment Status			
		w": tautology	ι.
nange "relative skew" t	to "timing offs	set"	
Response Status	0		
P 1	07	L 50	# 24
Nvidia	а		
Comment Status	X		
)			
Response Status	0		
P 1	07	L 50	# 28
Nvidia	a		
Comment Status	x		
)			
Response Status	0		
2.1 <i>P</i> 1	12	L 3	# 29
Nvidia	а		
Comment Status	X		
Response Status	0		
	Ange "relative skew" (Response Status P 1 Nvidi Comment Status Response Status P 1 Nvidi Comment Status Response Status Response Status Comment Status	aange "relative skew" to "timing offs Response Status O P 107 Nvidia Comment Status X Response Status O P 107 Nvidia Comment Status X Response Status O	P 107 L 50 Nvidia Comment Status Response Status O P 107 L 50 Nvidia Comment Status Comment Status X Response Status O Response Status O Response Status O Response Status O Nvidia Comment Status Comment Status X

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

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IEEE P802.3cw D2.6 400 Gb/s over DWDM systems 6th Working Group recirculation ballot comments