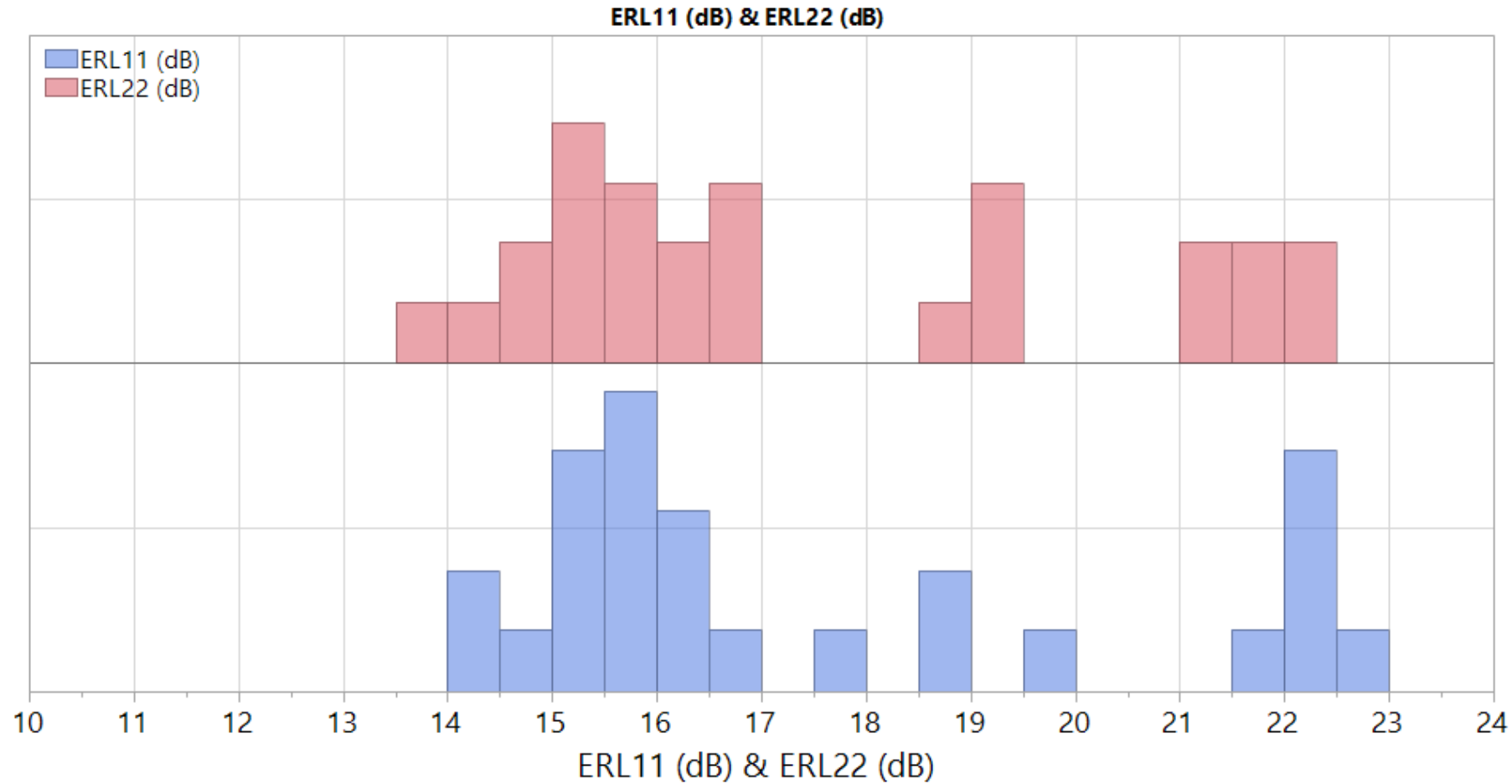# CR ERL$_{min}$ Proposal

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IEEE 802.3 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force Plenary Meeting
Waikoloa, HI, USA

ToC

❑ ERL cable assembly data

❑ ERL parameters

❑ Recommendation

Snapshot Data: ERL for posted CA Channels

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ERL parameters for Cable Assemblies (162.11.3)

parameter	Reference	Value	Units
Transition time associated with a pulse	T_r	0.01	Ns
Incremental available signal loss factor	β_x	2.4	Ghz
Permitted reflection from a transmission line external to the device under test	ρ_x	0.21	
Length of the reflection signal	N	3000	UI
Equalizer length associated with reflection signal	N_{bx}	12	UI

ERL of the channel at TP1 and at TP4 are computed using the procedure in 93A.5 with the values in the table above

Channel ERL at TP1 and at TP4 shall be greater than or equal to TBD.

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Data: ERL for posted Host Channels
IL < 11 dB (TP0-TP2)
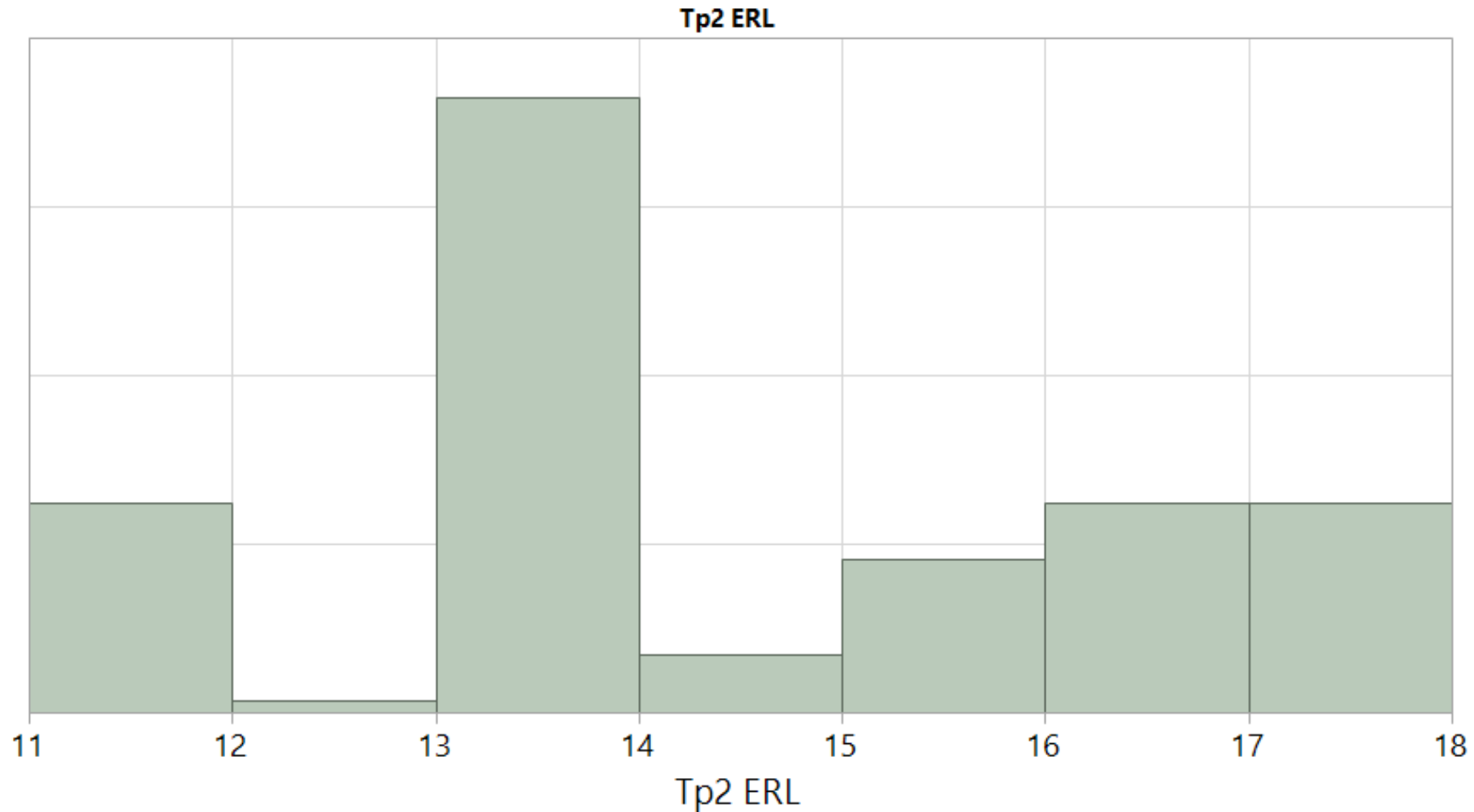
ERL parameters for CR Host (162.9.3.4 and 162.9.4.4)

parameter	Reference	Value	Units
Transition time associated with a pulse	T_r	0.01	Ns
Incremental available signal loss factor	β_x	2.4	Ghz
Permitted reflection from a transmission line external to the device under test	ρ_x	0.3	
Length of the reflection signal	N	1000	UI
Equalizer length associated with reflection signal	N_{bx}	12	UI

ERL of the channel at TP3 and at TP4 are computed using the procedure in 93A.5 with the values in the table above

Channel ERL at TP2 and at TP3 shall be greater than or equal to TBD.

Recommendations

❑ Use parameters in slide 4 for the Cable assembly ERL (162.11.3) baseline

❑ Specify ERL_{min} as TBD in the cable assembly ERL

- Until COM for CR is more stable and/or
- More data becomes available

❑ Use parameters in slide 6 for the CR Host ERL (162.9.3.4 and 162.9.4.4) baseline

❑ Specify ERL_{min} as TBD in the CR Host ERL

- Until COM for CR is more stable and/or
- More data becomes available

Thank You!