
**Comment#74
IEEE P802.3cg/
D1.1
Rosemont, IL**

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Purpose

- Provide TCL and ELTCTL measurements and recommendations for Comment#146

CI 146	SC 146.7.1.4	P 115	L 50	# 74
Schicketanz, Dieter		Reutlingen University		
Comment Type	T	Comment Status	D	Link Segment
editors notes on page 115,118				
<i>SuggestedRemedy</i>				
Delete editors notes and replace Tables 146-5 and 146-6 with the values presented in Schicketanz_122017_10SPE_01_adhoc.pdf pages 7 and 8				
Proposed Response		Response Status	W	
PROPOSED ACCEPT IN PRINCIPLE.				
For committee review of cited presentation.				
http://www.ieee802.org/3/cg/public/adhoc/Schicketanz_122017_10SPE_01_adhoc.pdf				

Contributors

- **Michael Borgman, Ronald Norden – Panduit**
- **Arvind Patel – AEM**

Reference

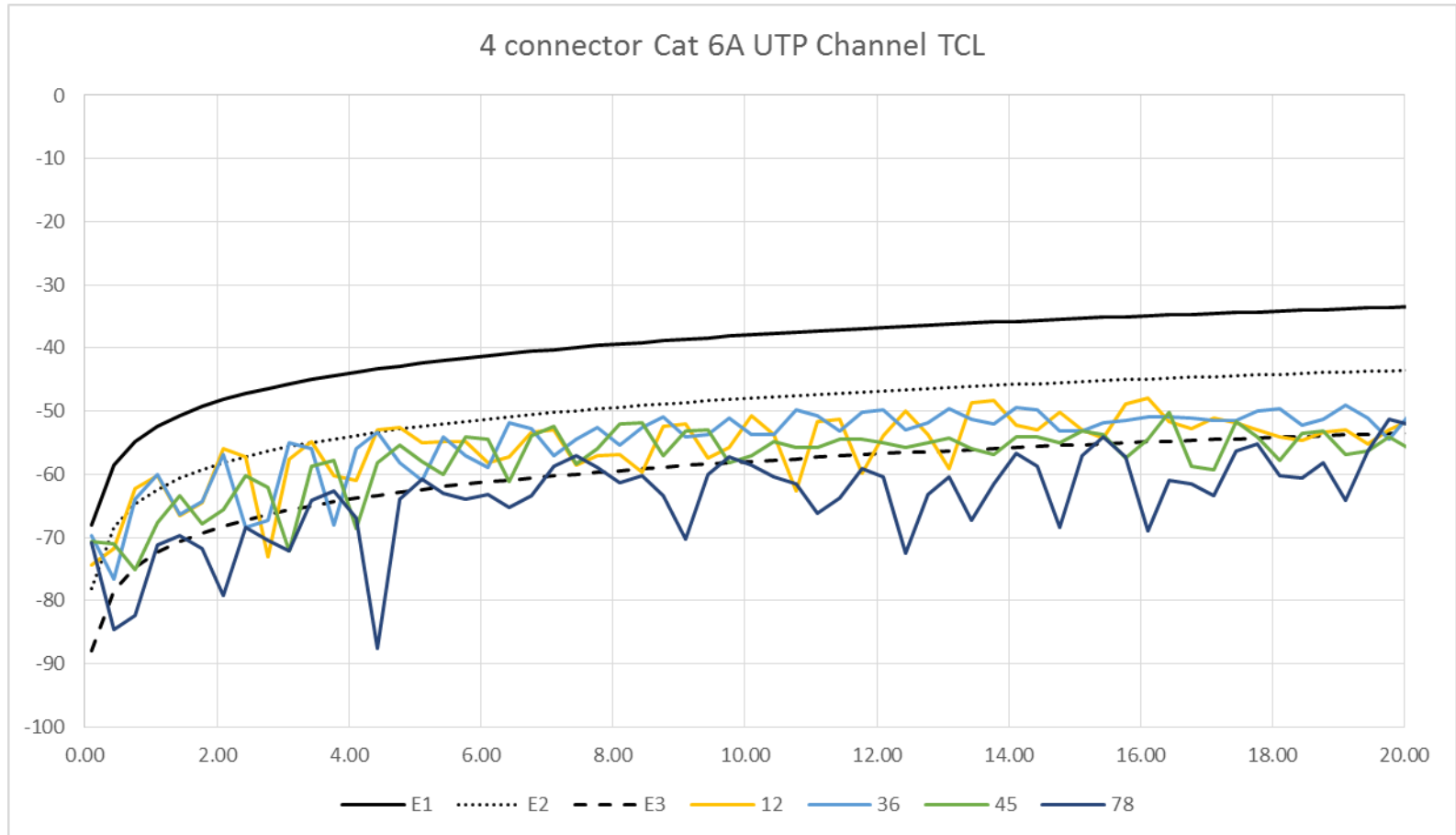
Electromagnetic classification 146.7.1.5

Unshielded channels: TCL and ELTCTL

	Frequency	E1	E2	E3
TCL	.1 to 20 MHz	53-15lg(f)	63-15lg(f)	73-15lg(f)
ELTCTL	.1 to 20 MHz	30-20lg(f)	40-20lg(f)	50-20lg(f)

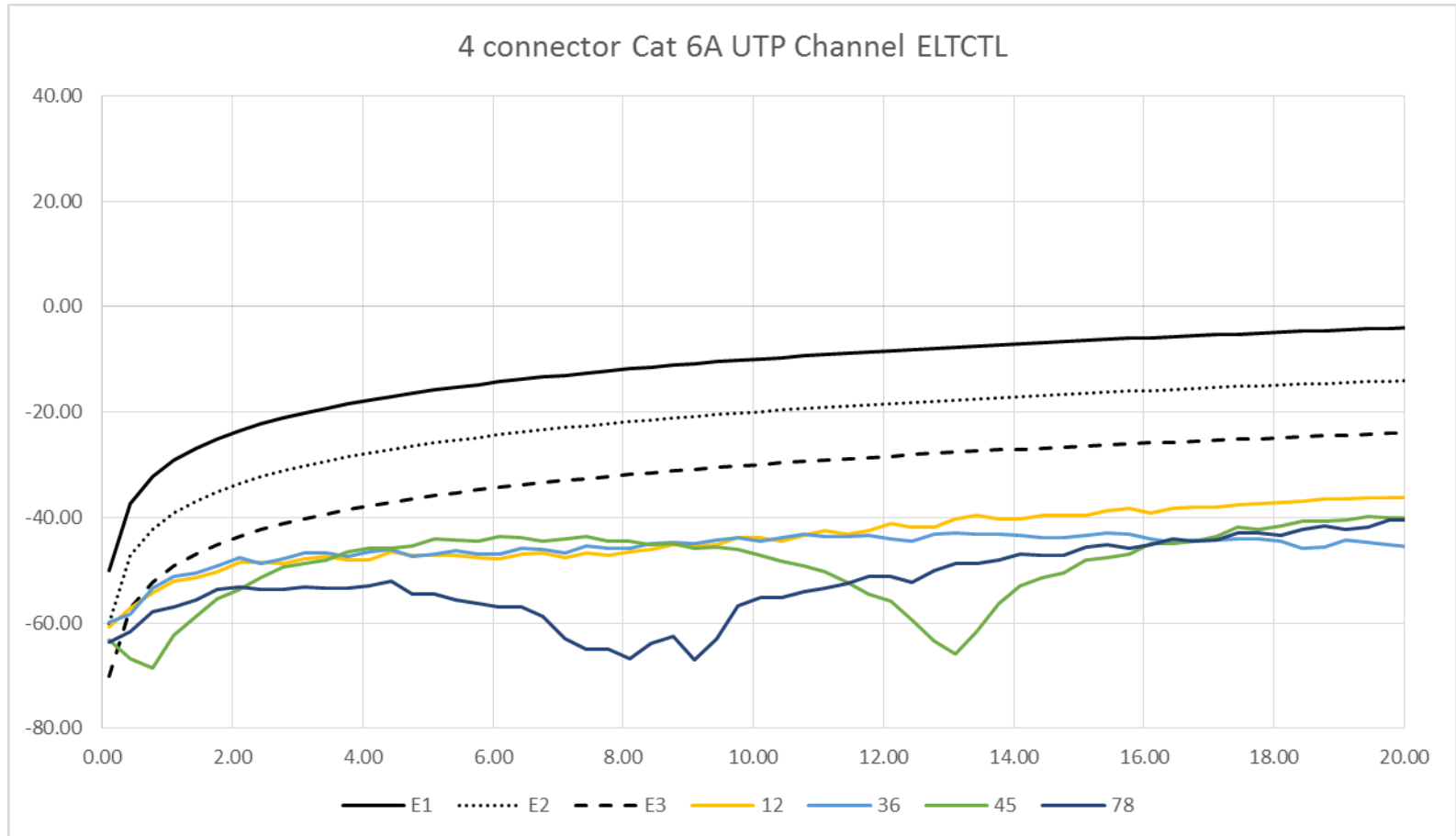
http://www.ieee802.org/3/cg/public/adhoc/Schicketanz_122017_10SPE_01_adhoc.pdf

TCL measurements



Source: Michael Borgman, Panduit

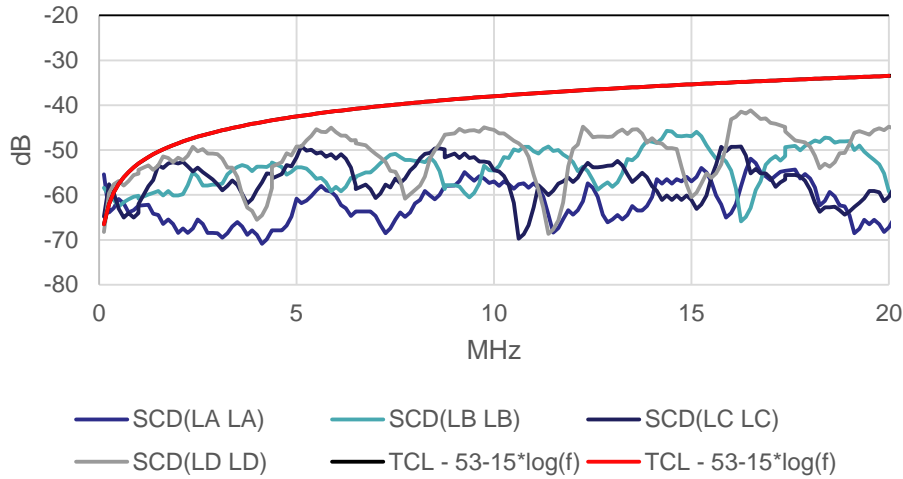
ELTCTL measurements



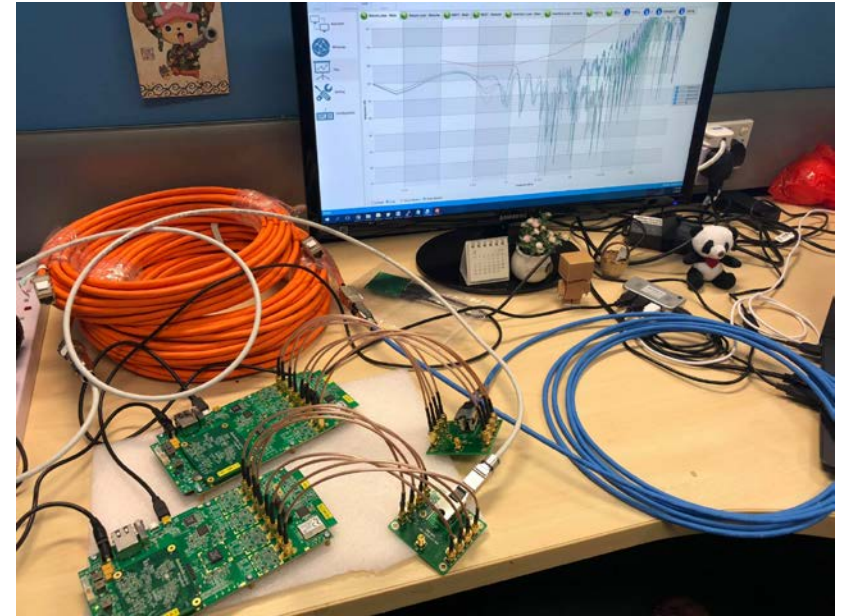
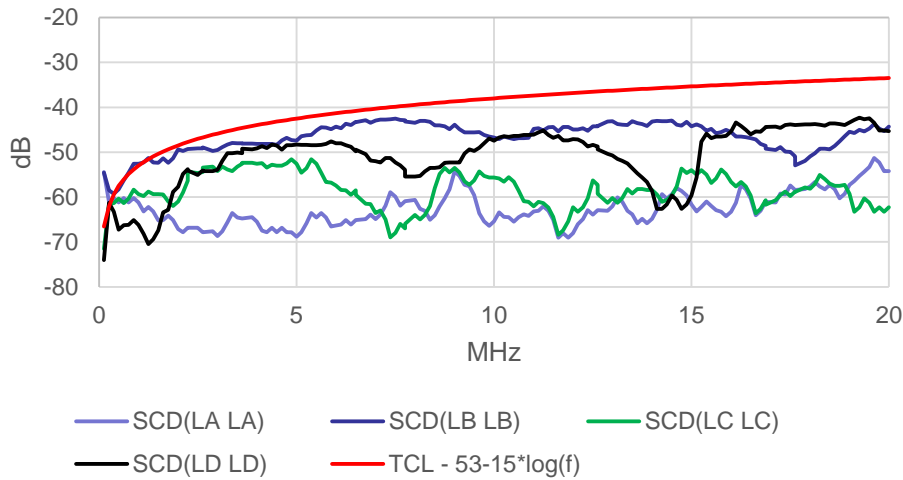
Source: Michael Borgman, Panduit

TCL measurements

TCL - 2m-30m-5m

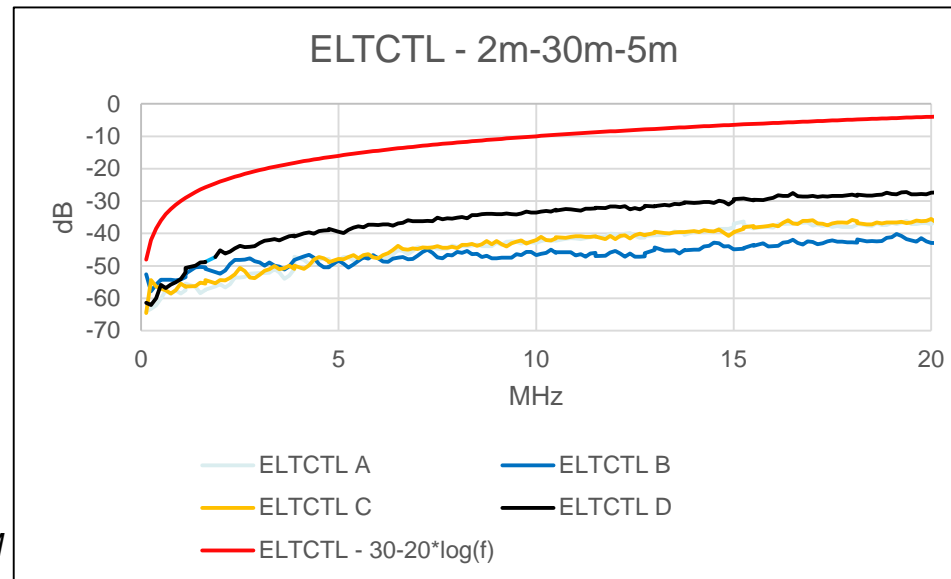
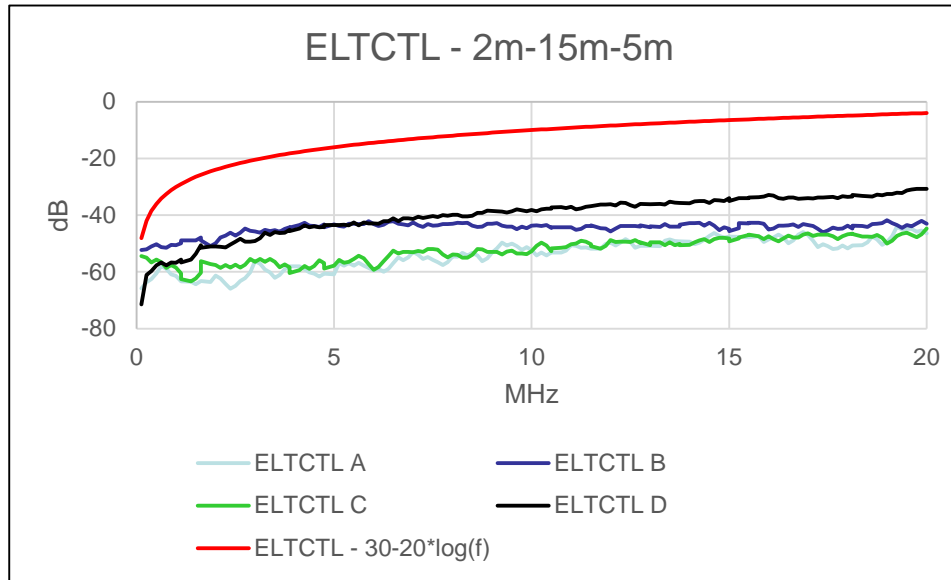


TCL-2m-15m-5m



Source: Arvind Patel, AEM

ELTCTL measurements



Source: Arvind Patel, AEM

Recommendation

- Provide TCL and ELTCTL measurements and recommendations for Clause 146

	Frequency (MHz)	E1(TBD)	E2(TBD)
TCL	$.1 \leq f \leq 20$	53-15log(f) (TBD)	60-15log(f) (TBD)
ELTCTL	$.1 \leq f \leq 20$	30-20log(f) (TBD)	40--20log(f) (TBD)

Table 146-5—Differential to common mode conversion

	Frequency	E ₁	E ₂	E ₃
TCL	$TBD \leq f \leq TBD$	TBD	TBD	TBD
TCTL	$TBD \leq f \leq TBD$	TBD	TBD	TBD