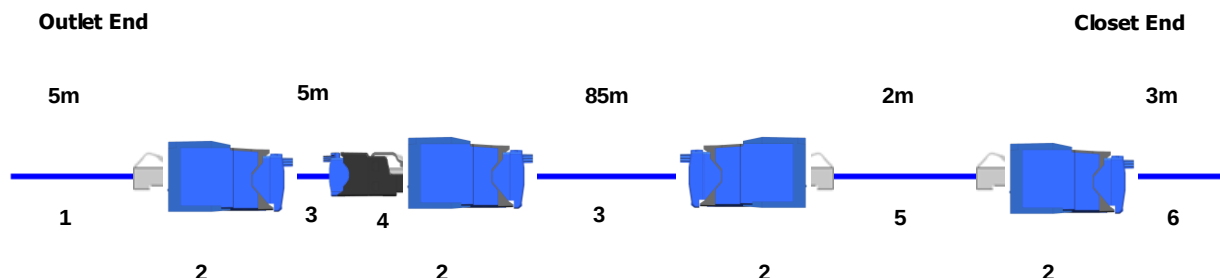


Channel Description

Pan-Net 100 Meter

Date of Tests: July 20, 2021

Reference ITS Report # 104748656CRT-001



Number	Description	Part Number
1	Equipment Cord	Panduit UTP6AX5M**
2	Outlet	Panduit CJ6X88TG**
3	Horizontal Cable	Panduit PU06X04**
4	Field Terminable Plug	Panduit FP6X88MTG
5	Cross-Connect	Panduit UTP6AX2M**
6	Equipment Cord	Panduit UTP6AX3M**

Equipment List

Description

Model

Hewlett Packard Automatic Test System

HP 46152A

Procedure & Measurements

Insertion Loss

The Insertion Loss of all four conductor pairs was measured in accordance with ASTM D4566-98, Paragraph 26. Losses due to reflection, radiation, etc. are assumed to be part of the insertion loss.

Near End Crosstalk (NEXT)

NEXT measurements were made between the six combinations of the four conductor pairs from both ends in accordance with ASTM D4566-98, Paragraph 24.

Far End Crosstalk (FEXT)

FEXT was measured on twelve permutations of four conductor pairs, from one end only, in accordance with ASTM D4566-98.

Return Loss (RL)

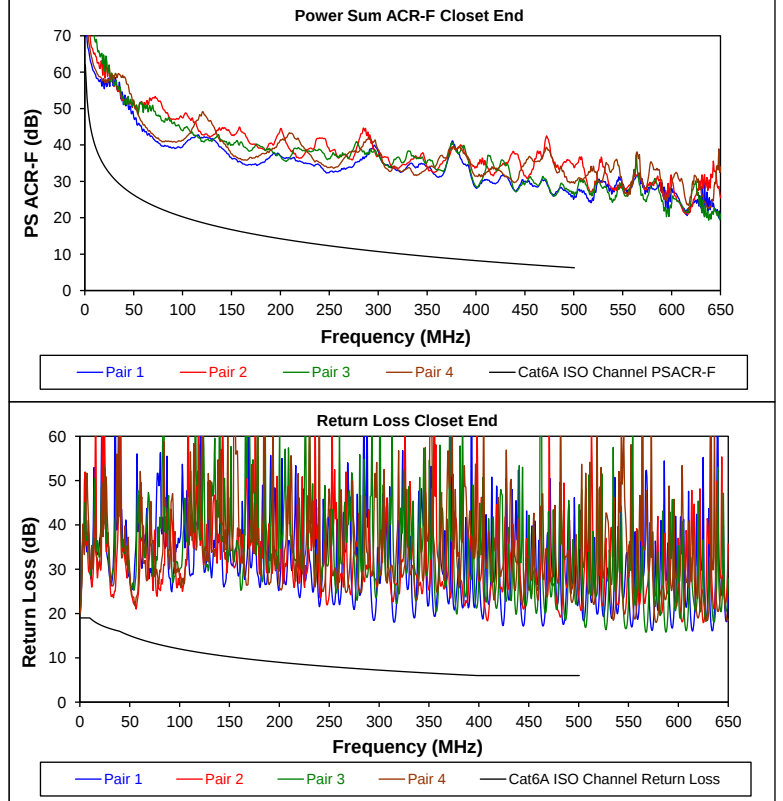
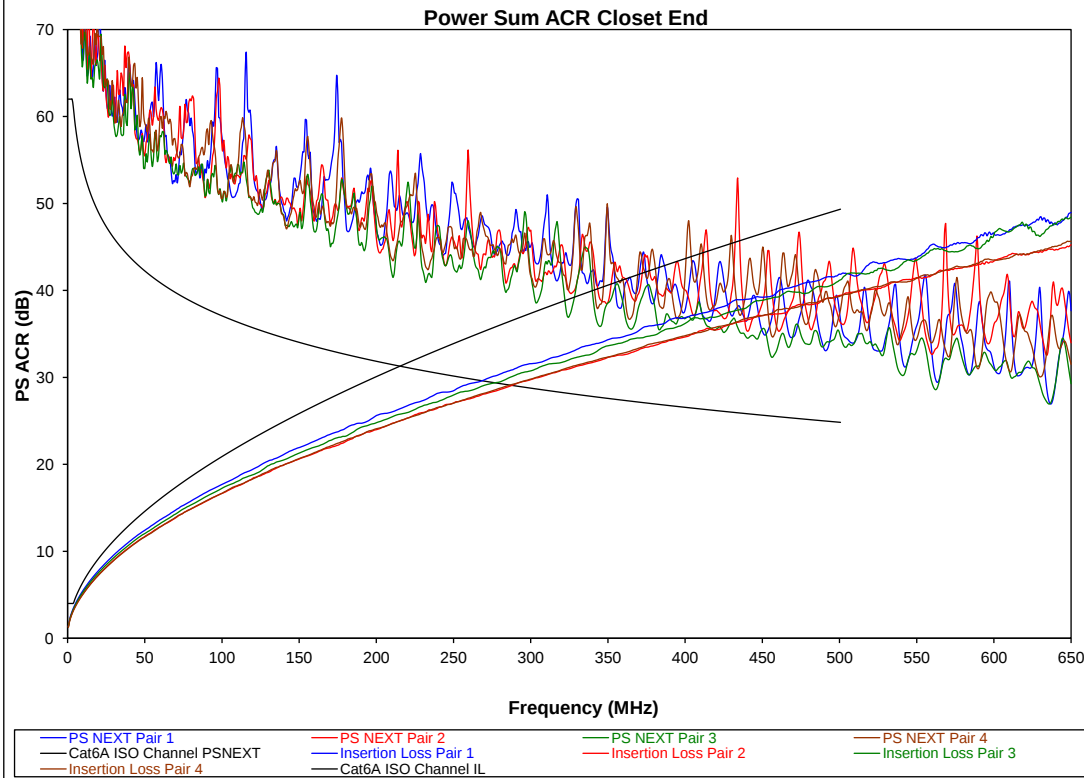
Return Loss measurements were made on all four pairs, from both ends, in accordance with ASTM D4566-98, Paragraph 45.

Conclusions

Worst case channel performance exceeded all ISO/IEC 11801, Edition 2, Amendment 1 and 2, Class EA performance requir

Pan-Net 100 Meter Four Connector Performance With Panduit PUO6X04***

	Frequency (MHz)	Insertion Loss (dB)	Class EA ISO Channel Insertion Loss Specification (dB)	Margin (dB)	Return Loss (dB)	Class EA ISO Channel Return Loss Specification (dB)	Margin (dB)	P-P NEXT (dB)	Class EA ISO Channel P-P NEXT Specification (dB)	Margin (dB)	P-P ACR-F (ELFEXT) (dB)	Class EA ISO Channel P-P ACR-F Specification (dB)	Margin (dB)	Power Sum NEXT (dB)	Class EA ISO Channel PS NEXT Specification (dB)	Margin (dB)	Power Sum ACR-F (PSELFEXT) (dB)	Class EA ISO Channel PSACR-F Specification (dB)	Margin (dB)	Power Sum ACR (dB)	Class EA ISO Channel PS ACR Specification (dB)	Margin (dB)
1	2.2	4.0	1.8	23.0	19.0	4.0	86.1	65.0	21.1	78.4	60.9	17.5	82.8	62.0	20.8	76.6	57.9	18.7	72.0	57.0	15.0	
4	3.5	4.0	0.6	35.1	19.0	16.1	76.9	63.5	13.4	69.0	51.8	17.3	75.4	61.0	14.4	67.1	48.8	18.3	72.0	57.0	15.0	
8	4.9	5.7	0.9	34.1	19.0	15.1	76.1	58.3	17.7	63.3	45.4	17.9	73.2	55.8	17.5	62.0	42.4	19.6	68.4	50.0	18.3	
10	5.3	6.3	1.0	29.2	19.0	10.2	69.4	57.0	12.5	61.8	43.8	18.0	65.8	54.4	11.4	60.4	40.8	19.6	60.4	48.1	12.3	
16	6.9	8.2	1.2	33.8	18.0	15.8	67.6	53.3	14.3	59.0	39.2	19.8	64.5	50.6	13.9	57.4	36.2	21.2	57.6	42.5	15.1	
20	7.8	9.2	1.4	31.7	17.5	14.2	69.6	51.6	17.9	58.0	37.2	20.8	65.6	49.0	16.6	57.2	34.2	22.9	57.8	39.8	18.0	
25	8.7	10.2	1.5	45.0	17.0	28.0	65.9	50.1	15.9	58.8	35.3	23.5	62.4	47.4	15.0	58.2	32.3	25.8	53.7	37.2	16.5	
31.25	9.7	11.3	1.7	25.8	16.6	9.2	60.1	48.6	11.5	58.6	33.6	25.1	58.4	45.9	12.5	56.4	30.6	25.9	48.7	34.5	14.2	
62.5	13.9	16.3	2.5	30.2	14.1	16.1	60.5	43.4	17.1	45.0	27.4	17.7	58.2	40.6	17.6	43.6	24.4	19.2	44.3	24.3	20.0	
100	17.7	20.8	3.2	26.4	12.0	14.4	51.4	40.0	11.4	41.6	23.3	18.3	50.6	37.1	13.5	39.3	20.3	19.0	32.9	16.3	16.6	
200	25.5	30.0	4.5	25.2	9.0	16.1	50.0	34.8	15.2	38.6	17.3	21.3	47.1	31.9	15.2	37.1	14.3	22.8	21.6	1.8	19.7	
250	28.4	33.9	5.4	23.7	8.0	15.7	45.9	33.1	12.8	34.3	15.3	19.0	42.9	30.2	12.7	32.4	12.3	20.1	14.4	-3.7	18.1	
300	31.6	37.3	5.7	28.0	7.2	20.8	45.0	31.8	13.2	39.6	13.7	25.9	42.3	28.8	13.5	36.8	10.7	26.1	10.7	-8.5	19.2	
400	36.9	43.7	6.8	27.3	6.0	21.3	39.7	29.6	10.1	30.3	11.2	19.1	36.8	26.6	10.2	28.5	8.2	20.3	-0.1	-17.1	17.0	
500	41.9	49.3	7.4	23.1	6.0	17.1	38.7	27.9	10.8	27.9	9.3	18.6	35.2	24.8	10.4	25.9	6.3	19.7	-6.7	-24.5	17.8	



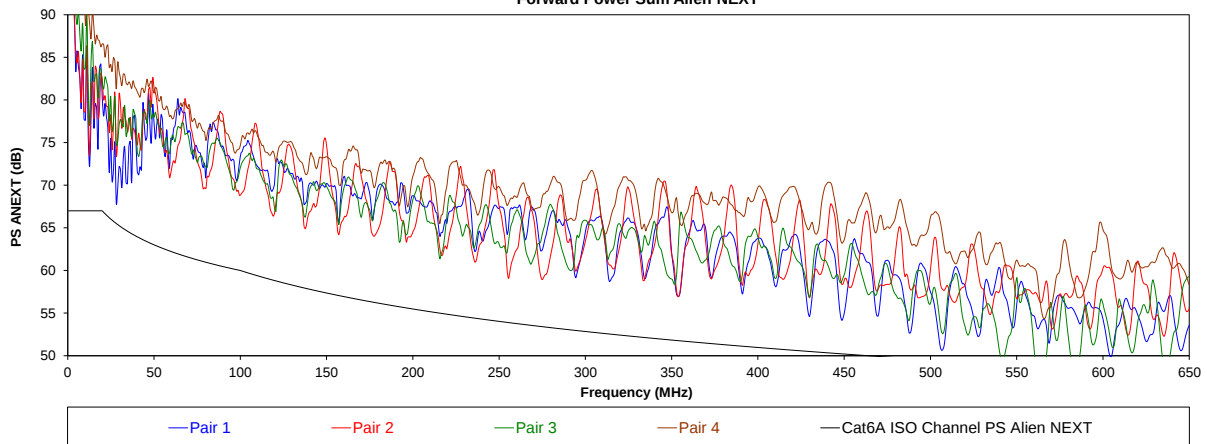
This is a Panduit report and all calculations and graphs were done by Panduit from data supplied by Intertek ETL SEMKO on 3 tests performed on the specific channel specified in report # 104748656CRT-001.

* The table values shown indicate the worst pair performance at the closest measured data points relative to the specified frequency, from one tested channel.

The information contained in this literature is based on our experience to date and is believed to be reliable. It is intended as a guide for use by persons having technical skill at their own discretion and risk. We do not guarantee favorable results or assume any liability in connection with its use.

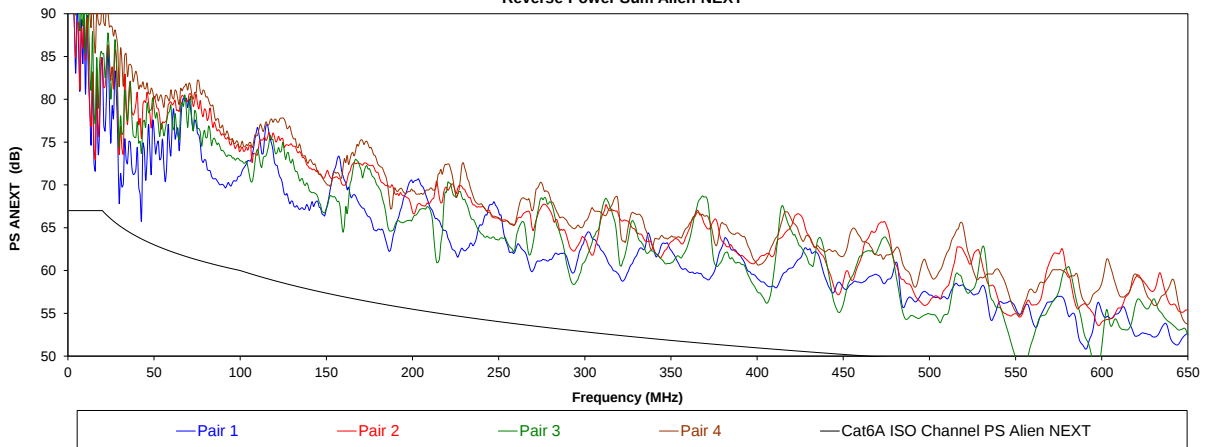
Pan-Net 100 Meter Four Connector 6 around 1 Performance With Panduit PUO6X04**

Forward Power Sum Alien NEXT



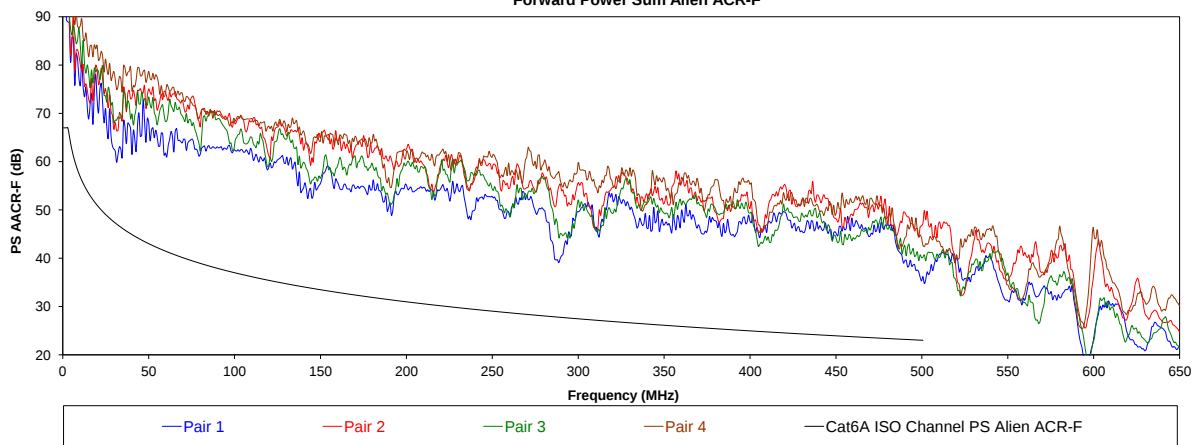
PAIR 1		PAIR 2		PAIR 3		PAIR 4	
MARGIN	FREQ	MARGIN	FREQ	MARGIN	FREQ	MARGIN	FREQ
2.42	29	5.15	354	4.46	488	10.50	216

Reverse Power Sum Alien NEXT



PAIR 1		PAIR 2		PAIR 3		PAIR 4	
MARGIN	FREQ	MARGIN	FREQ	MARGIN	FREQ	MARGIN	FREQ
2.20	44	6.15	17	4.60	488	8.43	492

Forward Power Sum Alien ACR-F



PAIR 1		PAIR 2		PAIR 3		PAIR 4	
MARGIN	FREQ	MARGIN	FREQ	MARGIN	FREQ	MARGIN	FREQ
11.29	290	18.30	5	16.44	499	18.61	488