

ME2-XP DUAL RX TRANSVERTER MEASUREMENTS

Measured in HG5AZB laboratory.

Meas. Equipments: [R&S SMU200/A](#), [R&S FSIQ3](#), [Anritsu MS2661C](#), [MS2668C](#)

Front ends: PGA-103+ on both RX inputs.

IF mixers: CSYM-1815 (+17dBm level MCL)- [measurements](#)

Gain: **max.** 28dB (variable btn. 12 to 28dB on both RX)

LO: 116MHz +15dBm

IF amp: ASF240 or ASF250 (ASB) >40dB OIP3 – [measurements](#)

[RX OIP3 > +24dBm \(on both RX\)](#)

IP3: min. +4dBm

RX1 and RX2 noise figure measurement (typical on both RX)

Direct		NOISE & GAIN			CALIBRATED
RBW:	1 MHz	RF Atten.	0 dB	2nd Stage Corr.	On
Average:	1	Auto Ref Level	On	Image Rejection	...
Current Value					
RF:	28 MHz	ENR	6.4 dB	NF.	1.02 dB
LO:	...	Loss In	0 dB	Noise Temp.	77.18 K
IF:	...	Loss Out	0 dB	Gain	20.12 dB

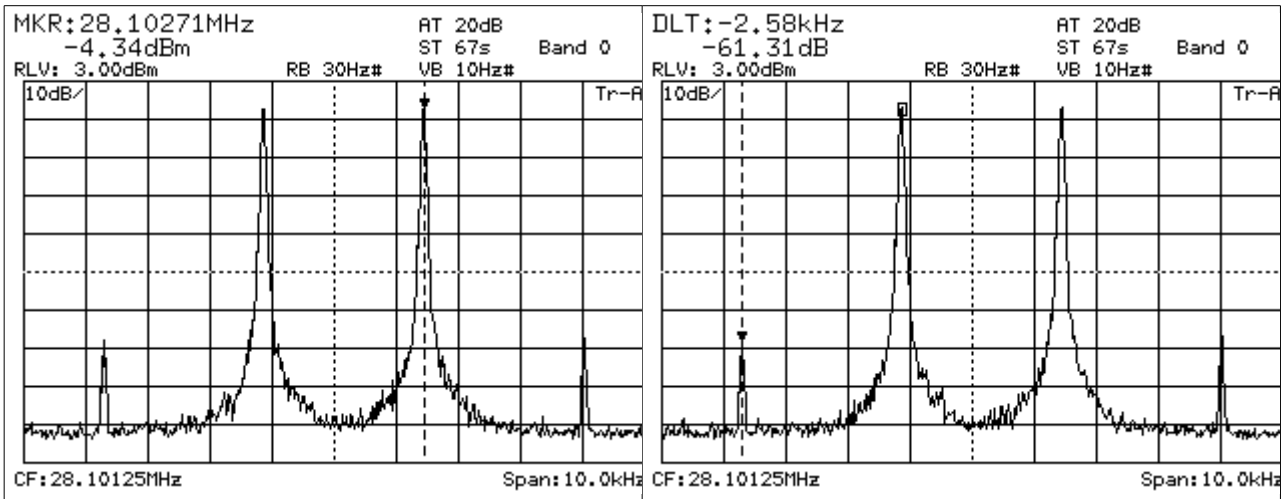
Frequency List Results			
RF	NF	Noise Temp	Gain
28.00 MHz	1.02 dB	77.18 K	20.12 dB
28.10 MHz	1.09 dB	82.31 K	19.99 dB
28.20 MHz	1.02 dB	76.44 K	20.16 dB
28.30 MHz	1.03 dB	77.58 K	19.95 dB
28.40 MHz	1.01 dB	75.82 K	20.17 dB
28.50 MHz	1.08 dB	81.77 K	19.85 dB
28.60 MHz	1.06 dB	80.15 K	19.98 dB
28.70 MHz	1.05 dB	79.51 K	20.02 dB
28.80 MHz	1.01 dB	76.03 K	19.81 dB
28.90 MHz	1.03 dB	77.22 K	19.74 dB
29.00 MHz	1.05 dB	79.19 K	20.00 dB
29.10 MHz	1.12 dB	85.62 K	19.66 dB
29.20 MHz	1.06 dB	80.31 K	20.04 dB
29.30 MHz	1.08 dB	82.19 K	19.67 dB

Running ...

PGA103 1296.BMP

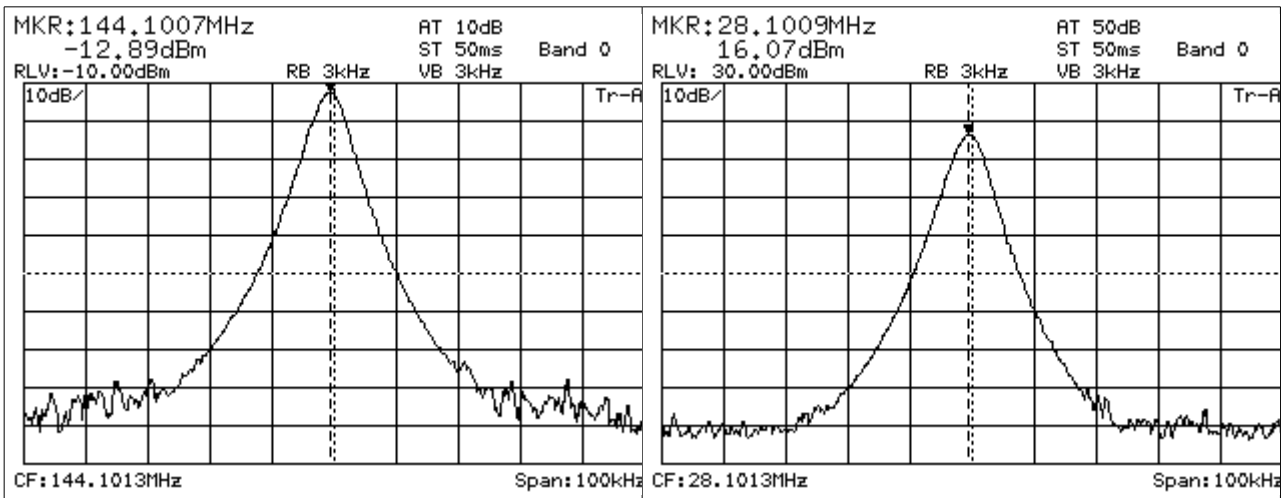
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RX OIP3/20KHz (typical on both RX)

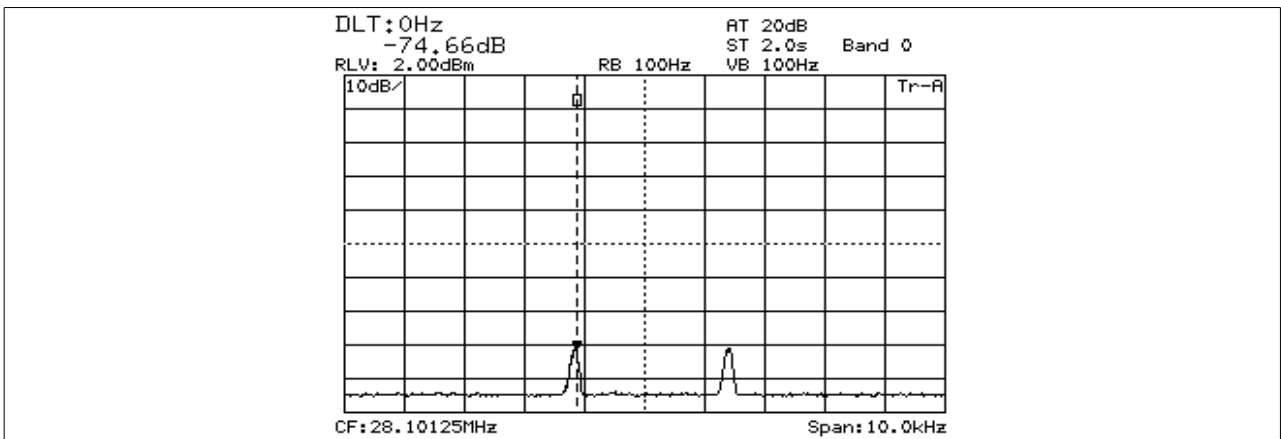


OIP3= 24.5dBm

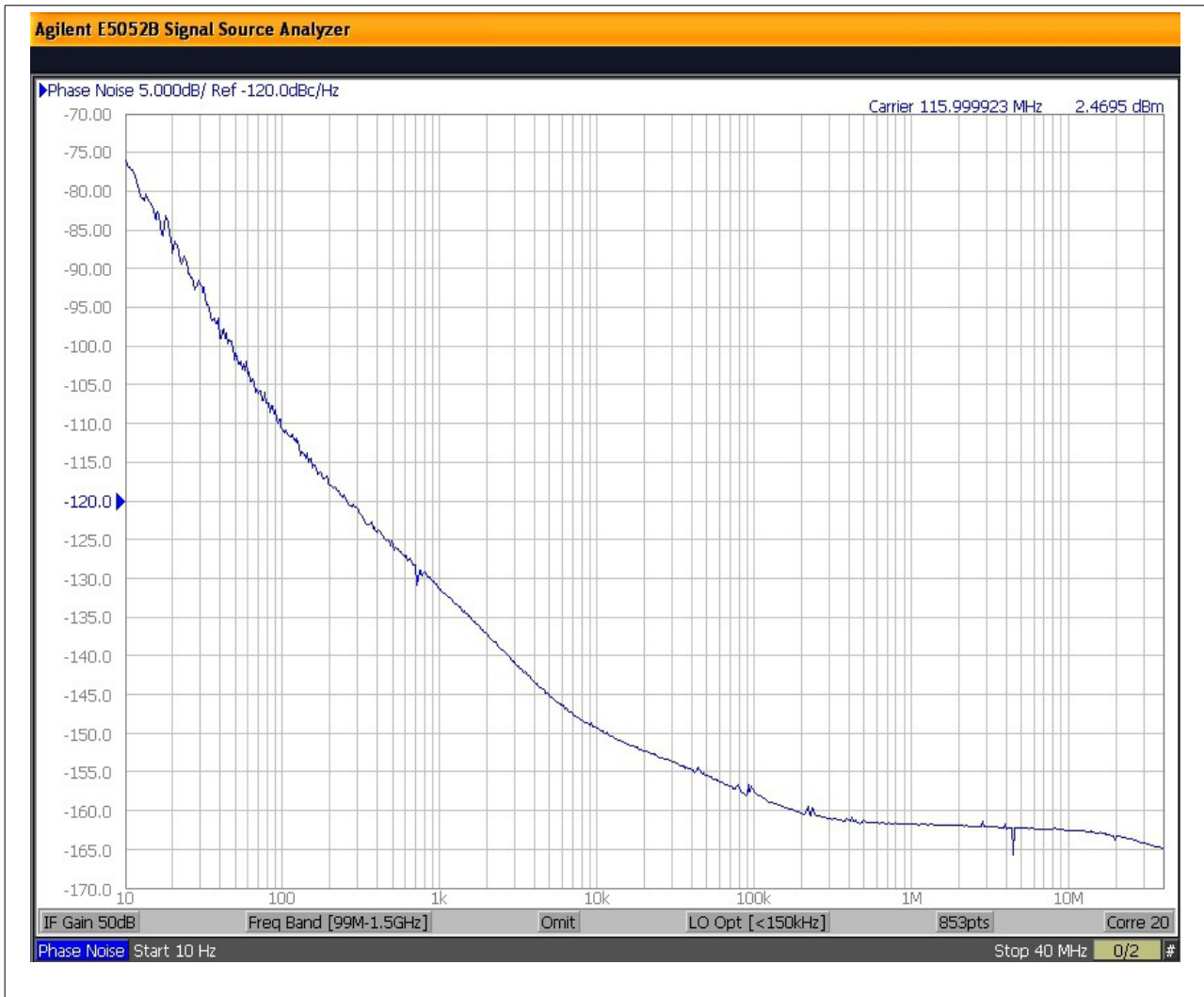
RX 1dB compression point(typical on both RX)



Attenuation btn. RX1in and RX2in(& vica-versa)



TCXO phase noise (AXTAL 0.5ppm, 116MHz)

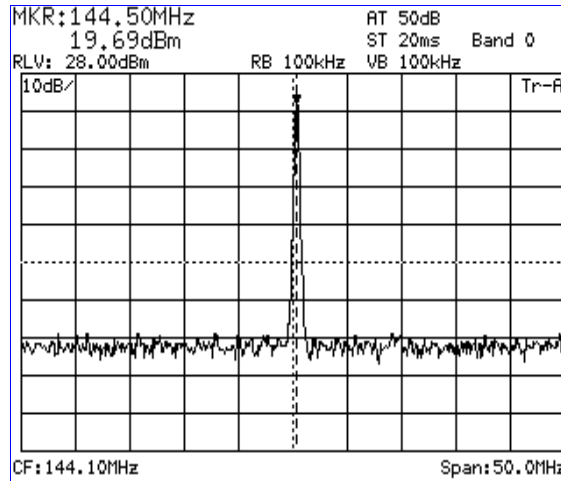


AXTAL factory TCXO 116MHz [Inspection Report](#) (pdf)

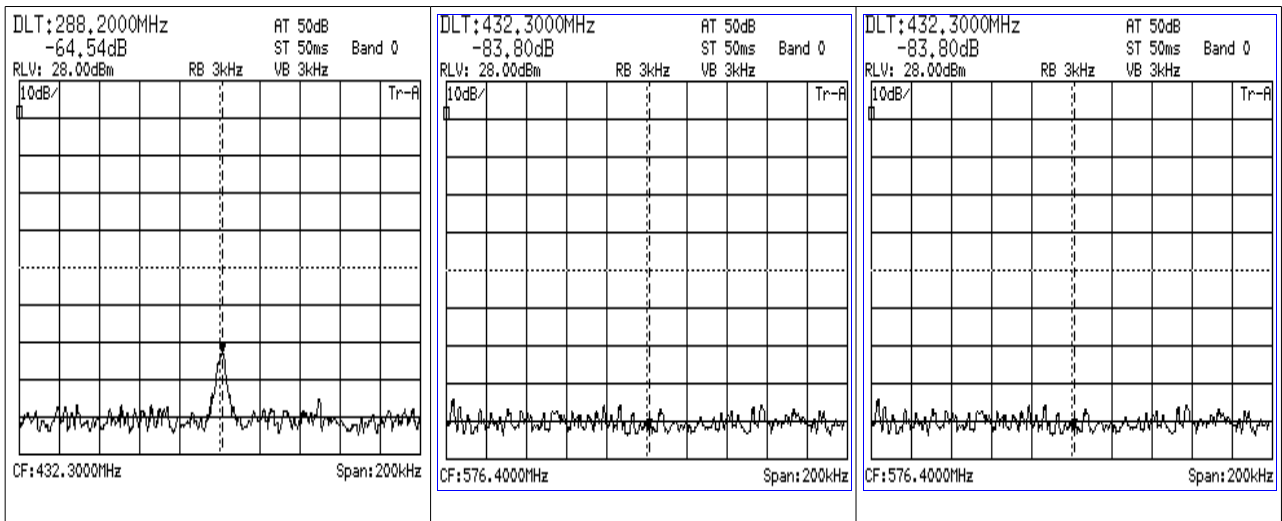
AXTAL factory TCXO 130MHz [Inspection report](#) (pdf)

TX Measurements

TX output signal (Transverter unit)



TX Harmonics measurements



TX IM3 Measurements

