

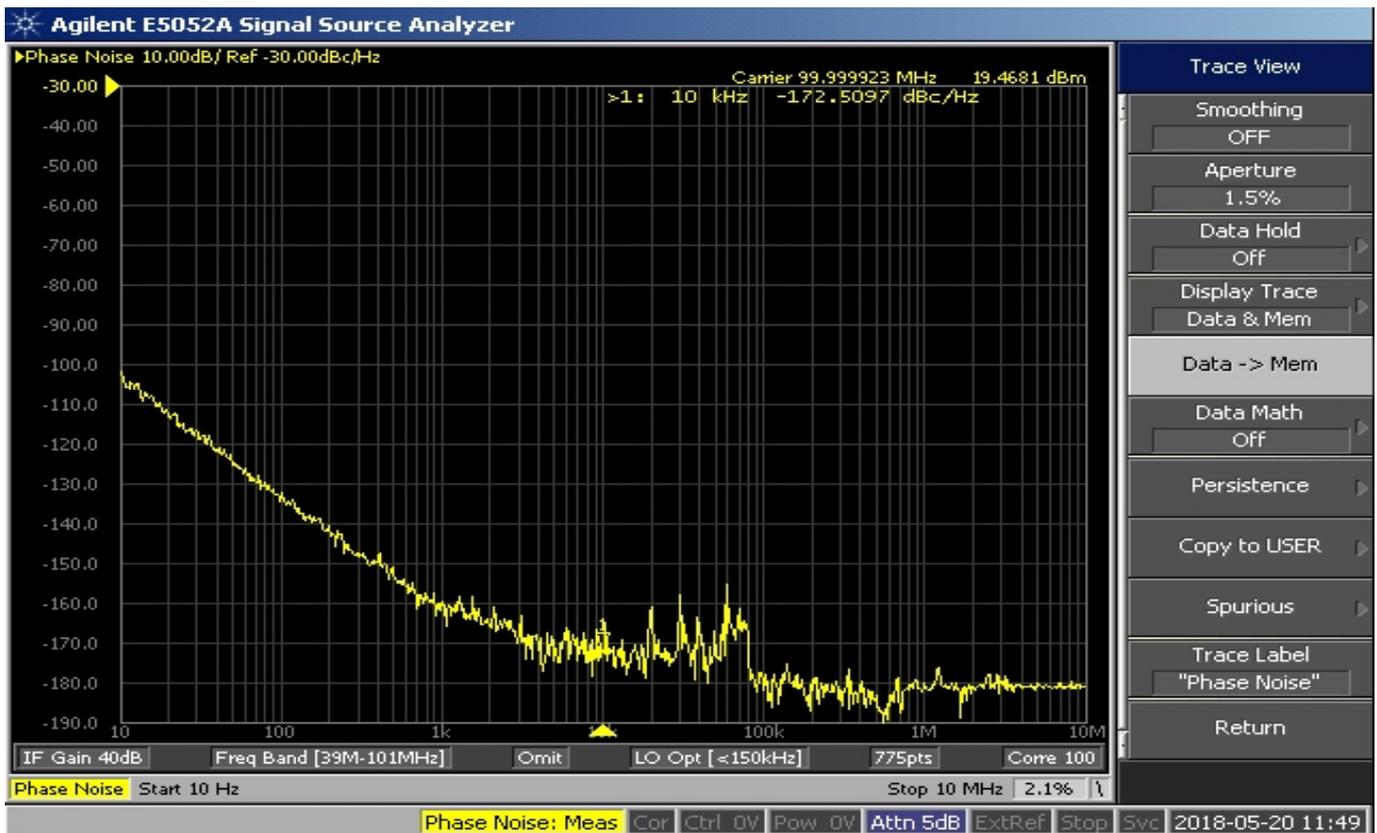


KFSM is a high performance synthesizer module which produces a number of output frequencies with low added phase noise from a 100 MHz OCXO (e.g. ELV-OCXO 100 ULN or its equivalent). It features workable power (>+8 dBm) and superb subharmonics filtering at all outputs. The module is intended for use in communications and test systems where the signal purity of the source is a primary concern. It comes in a low profile robust aluminum milled case providing good heat sink and operates over the frequency range of 0...+50°C

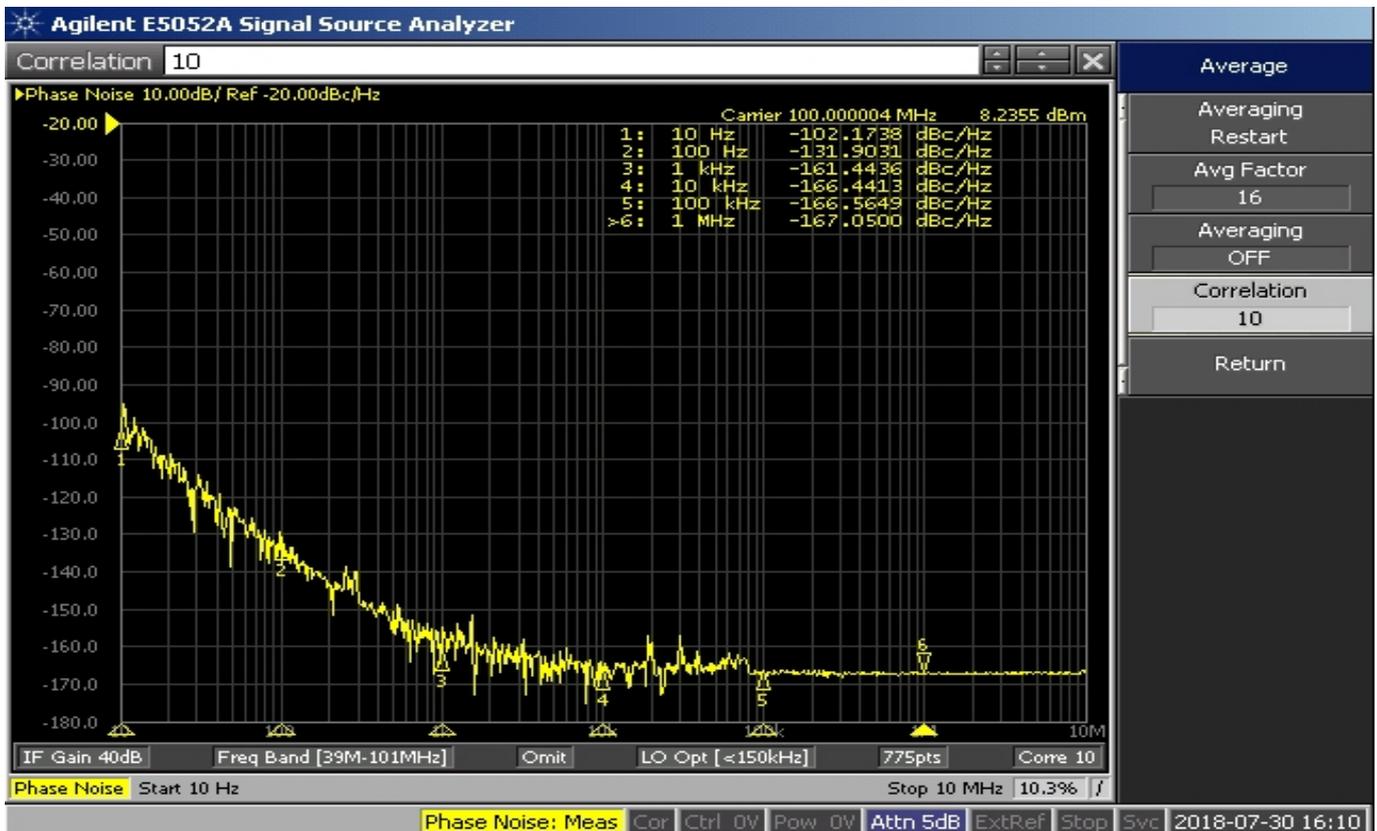
Parameter Description	Parameter Value	
Input Frequency	100 MHz (+12...+15 dBm)	
Output Frequencies	100 MHz (5 outputs), 300 MHz, 400 MHz, 800 MHz, 1000 MHz, 3200 MHz, 4000 MHz, 5000 MHz, 6400 MHz, 8000 MHz	
Phase Noise (100 MHz input from ELV-OCXO 100 ULN)		
Frequency and Power Level	100 Hz offset	10 kHz offset
100 MHz (+8 dBm, 4 outputs)	-130 dBc/Hz	-165 dBc/Hz
100 MHz (-10 dBm, 1 output)	-130 dBc/Hz	-155 dBc/Hz
300 MHz (+8 dBm)	-123 dBc/Hz	-155 dBc/Hz
400 MHz (+16 dBm)	-121 dBc/Hz	-154 dBc/Hz
800 MHz (+8 dBm)	-115 dBc/Hz	-148 dBc/Hz
1000 MHz (+10 dBm)	-113 dBc/Hz	-146 dBc/Hz
3200 MHz (+15 dBm)	-103 dBc/Hz	-138 dBc/Hz
4000 MHz (+16 dBm)	-100 dBc/Hz	-134 dBc/Hz
5000 MHz (+8 dBm)	-98 dBc/Hz	-133 dBc/Hz
6400 MHz (+9 dBm)	-96 dBc/Hz	-132 dBc/Hz
8000 MHz (+10 dBm)	-95 dBc/Hz	-129 dBc/Hz
Subharmonics	<-90 dBc at all outputs	
Power Supply Voltage (Volts)	+6.5 V and +12 V	
Current Consumption (mA)	2400 mA (from 6.5 V) 400 mA (from 12 V)	
Operating Temperature Range	0...+50°C	
Input / Output Connectors	SMA (f)	
Power Supply Connector	Molex-5031751000	
Case and Dimensions	Milled Aluminum Case 221 mm x 127 mm x 16.5 mm	

## TYPICAL PERFORMANCE GRAPHS.

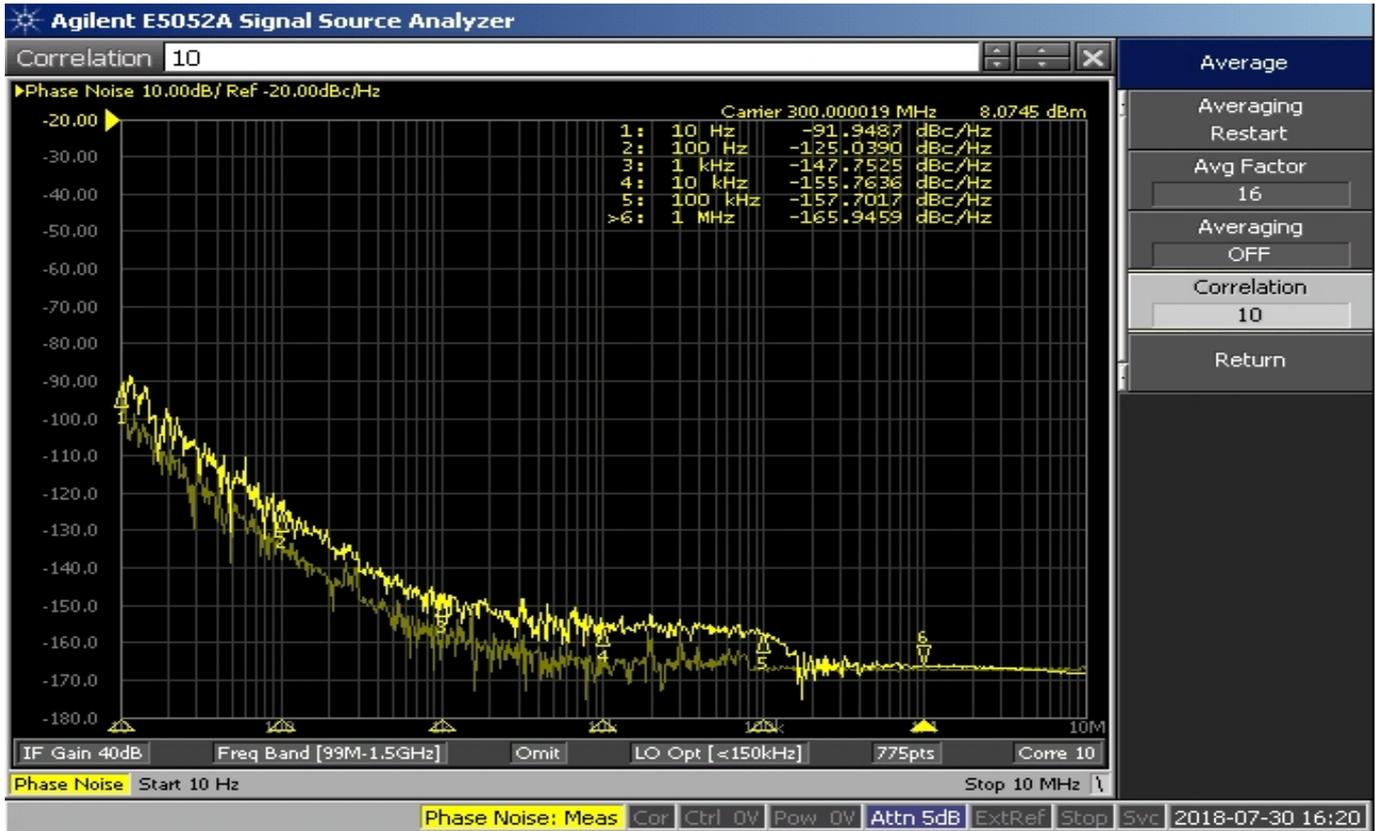
### ELV-OCXO 100 ULN INPUT (separate unit)



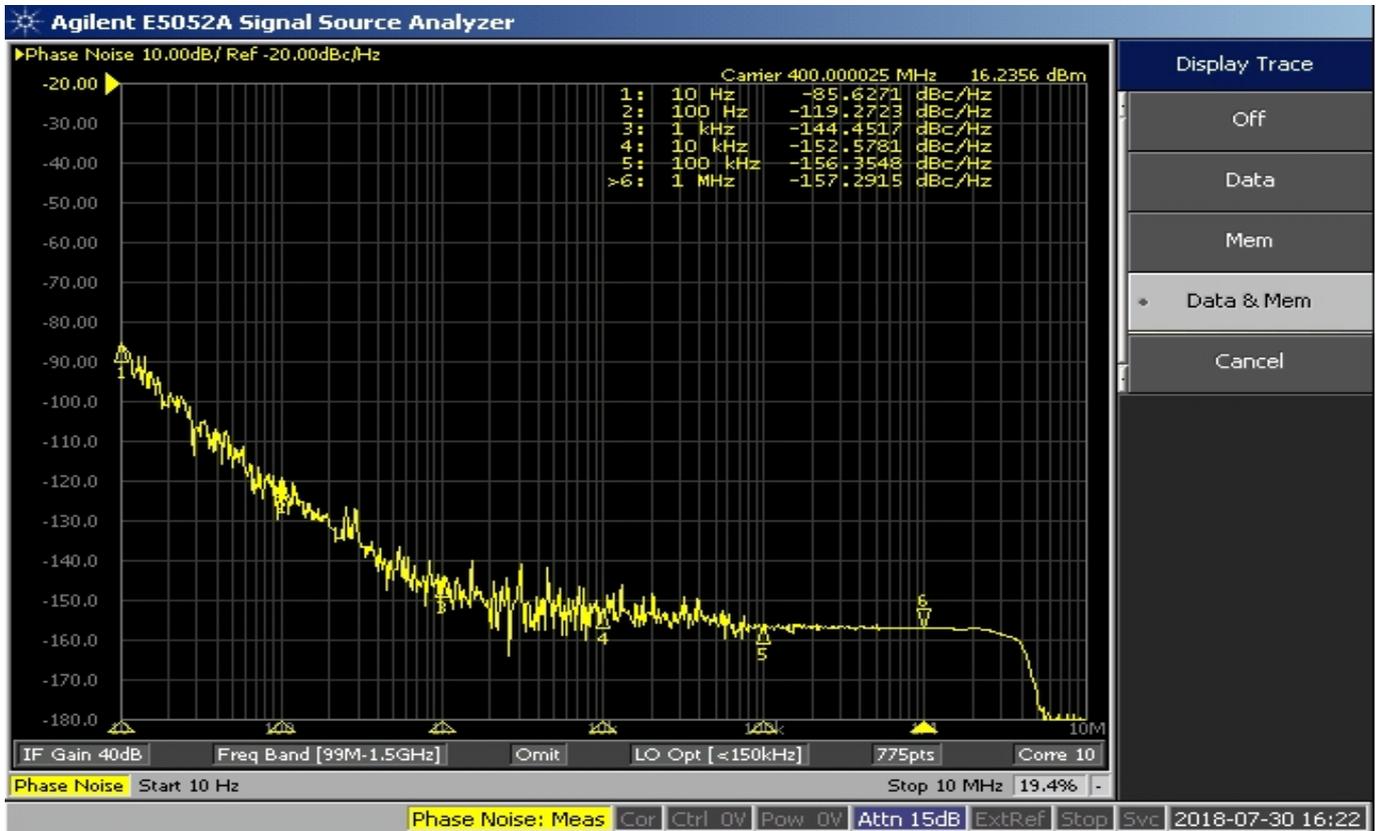
### KFSM 100 MHz OUTPUT (one of 4 equivalent outputs, worst case)



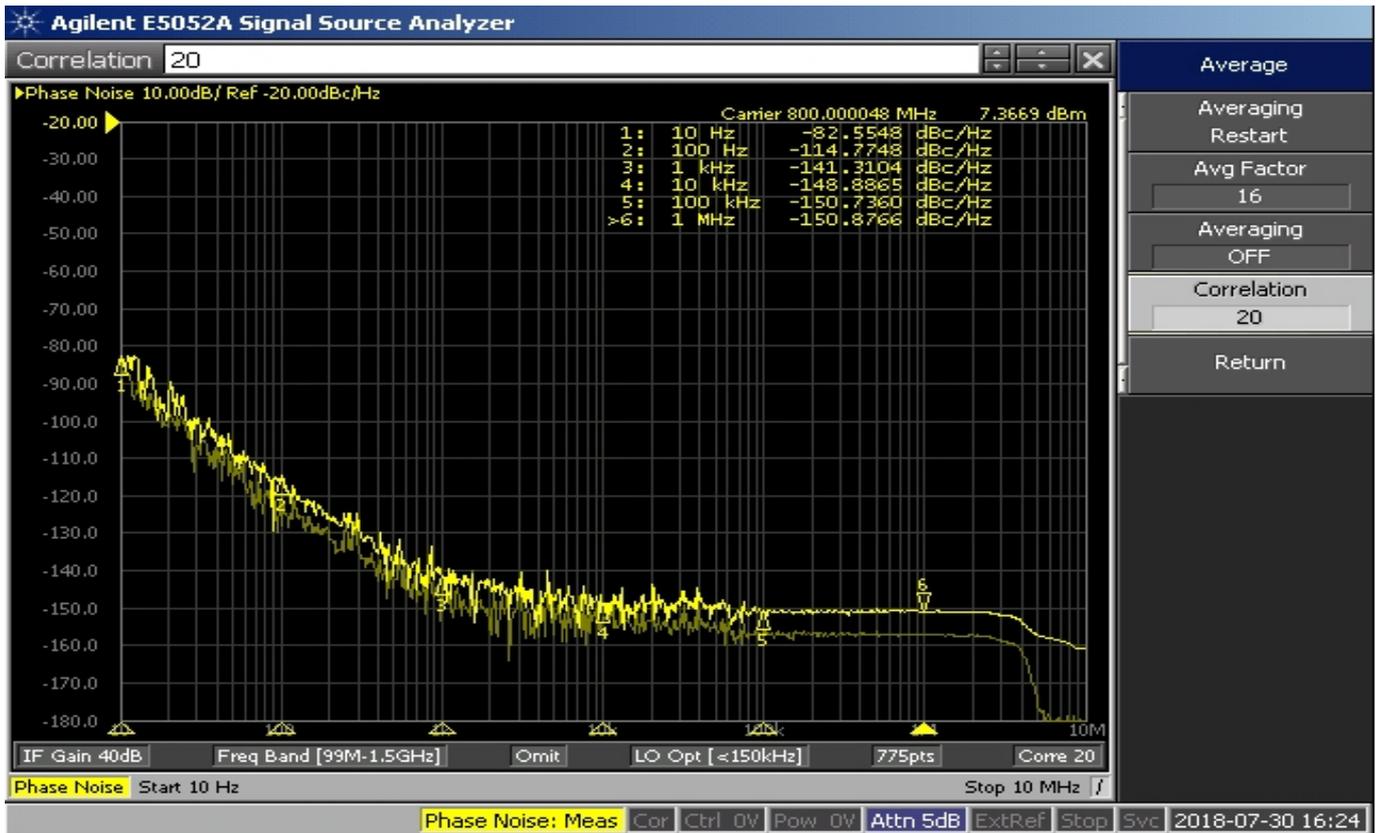
## KFSM 300 MHz OUTPUT



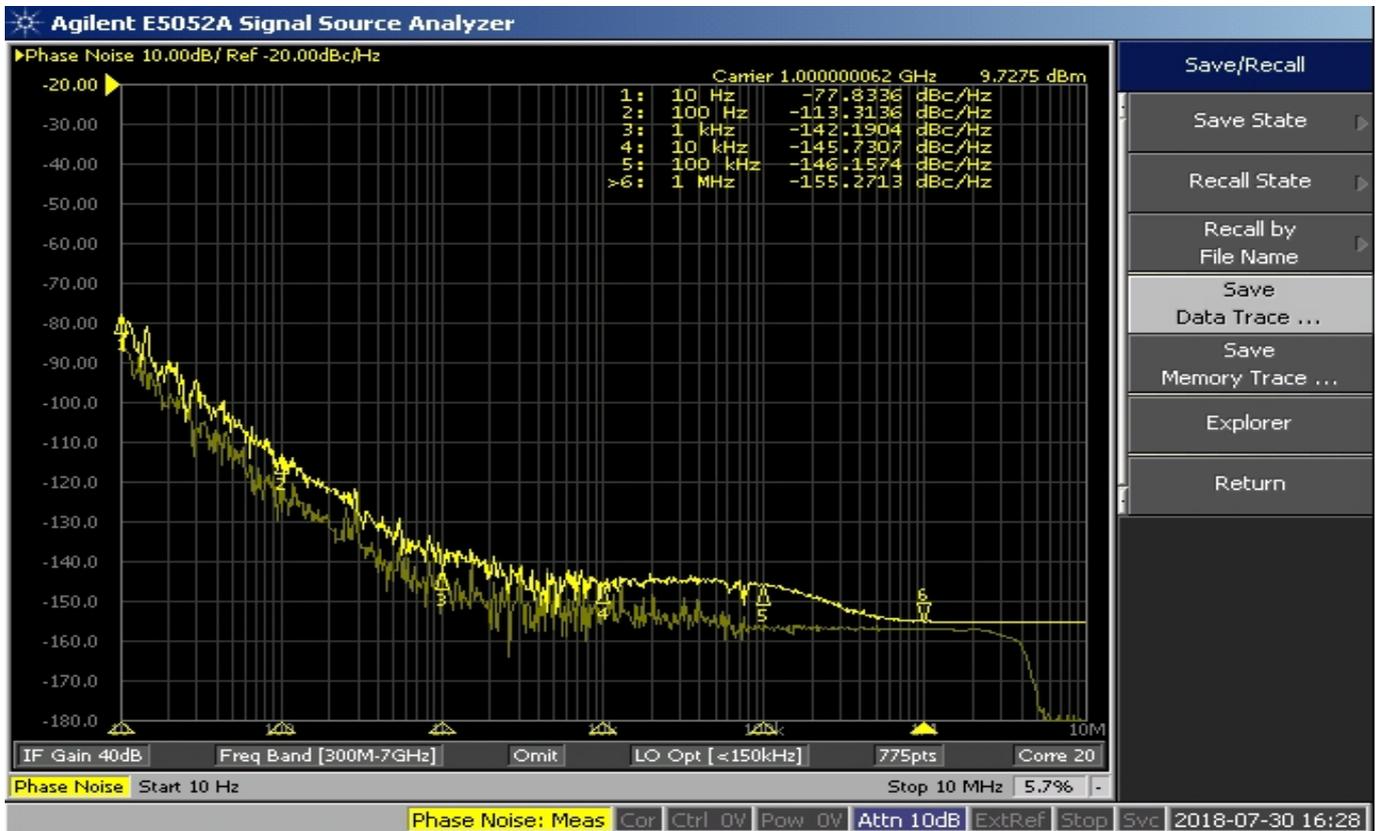
## KFSM 400 MHz OUTPUT



## KFSM 800 MHz OUTPUT



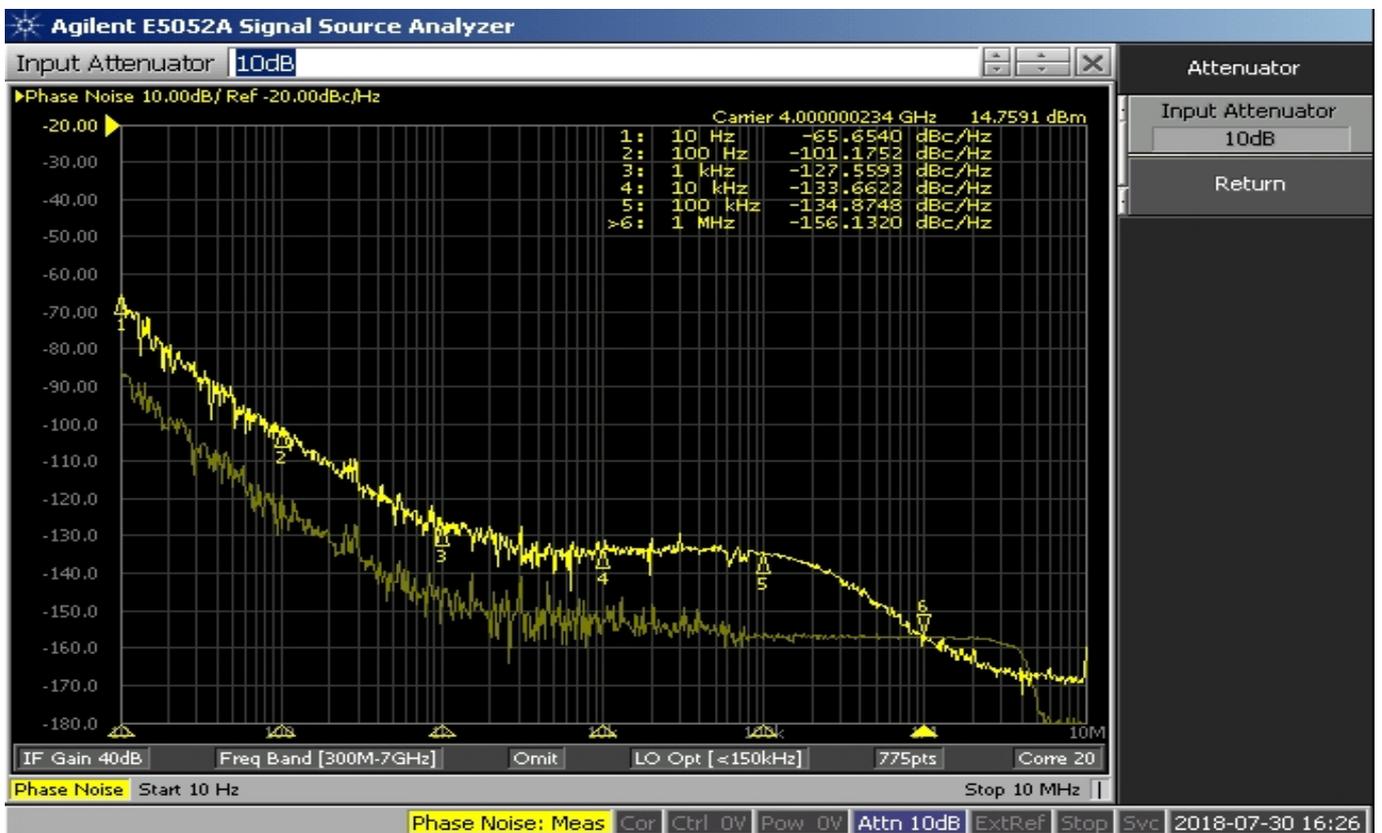
## KFSM 1000 MHz OUTPUT



## KFSM 3200 MHz OUTPUT



## KFSM 4000 MHz OUTPUT



## KFSM 5000 MHz OUTPUT



## KFSM 6400 MHz OUTPUT



# KFSM 8000 MHz OUTPUT

