



SDT 500 UB ARK 6 Spectrum Measurements

CONTENTS

1.1 PURPOSE 3

1.2 INSTRUMENTS USED 4

1.3 MEASURE 8

1.3.1 SPECTRUM measurement..... 8

1.3.1.1 REFERENCE..... 8

1.3.1.2 SPECTRUM at channel 14 9

1.3.1.3 SPECTRUM at channel 25 10

1.3.1.4 SPECTRUM at channel 36 11

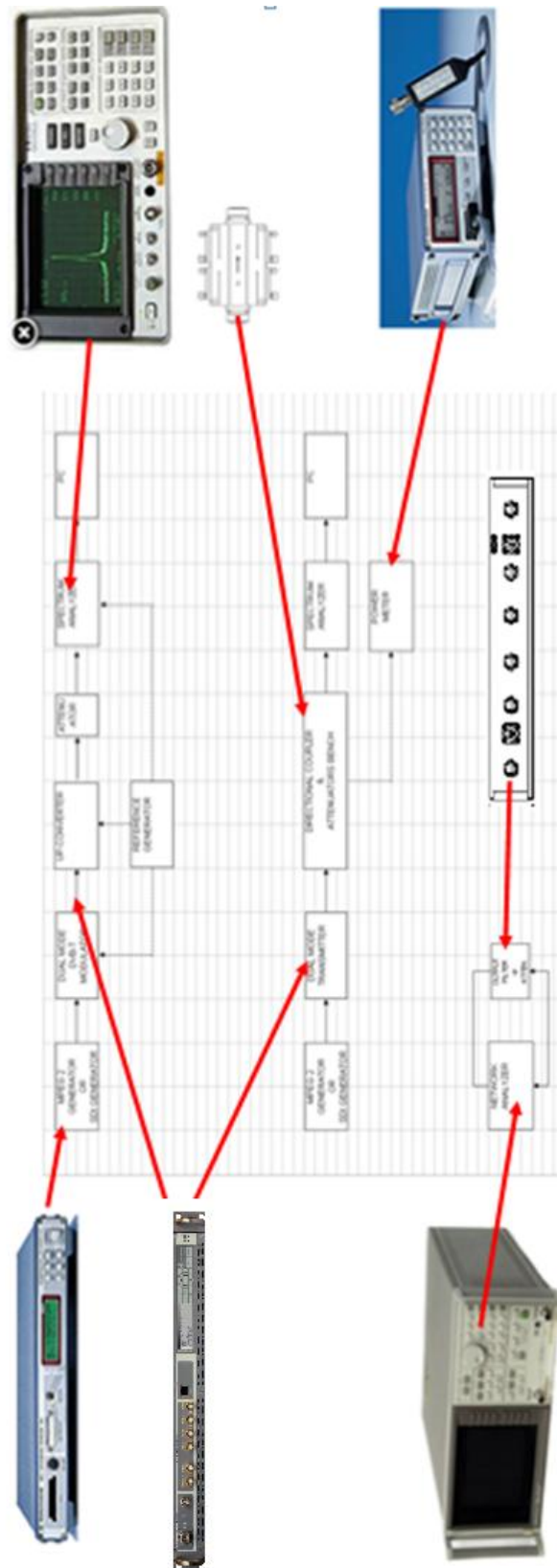
1.3.1.5 HARMONIC DETECTION 11

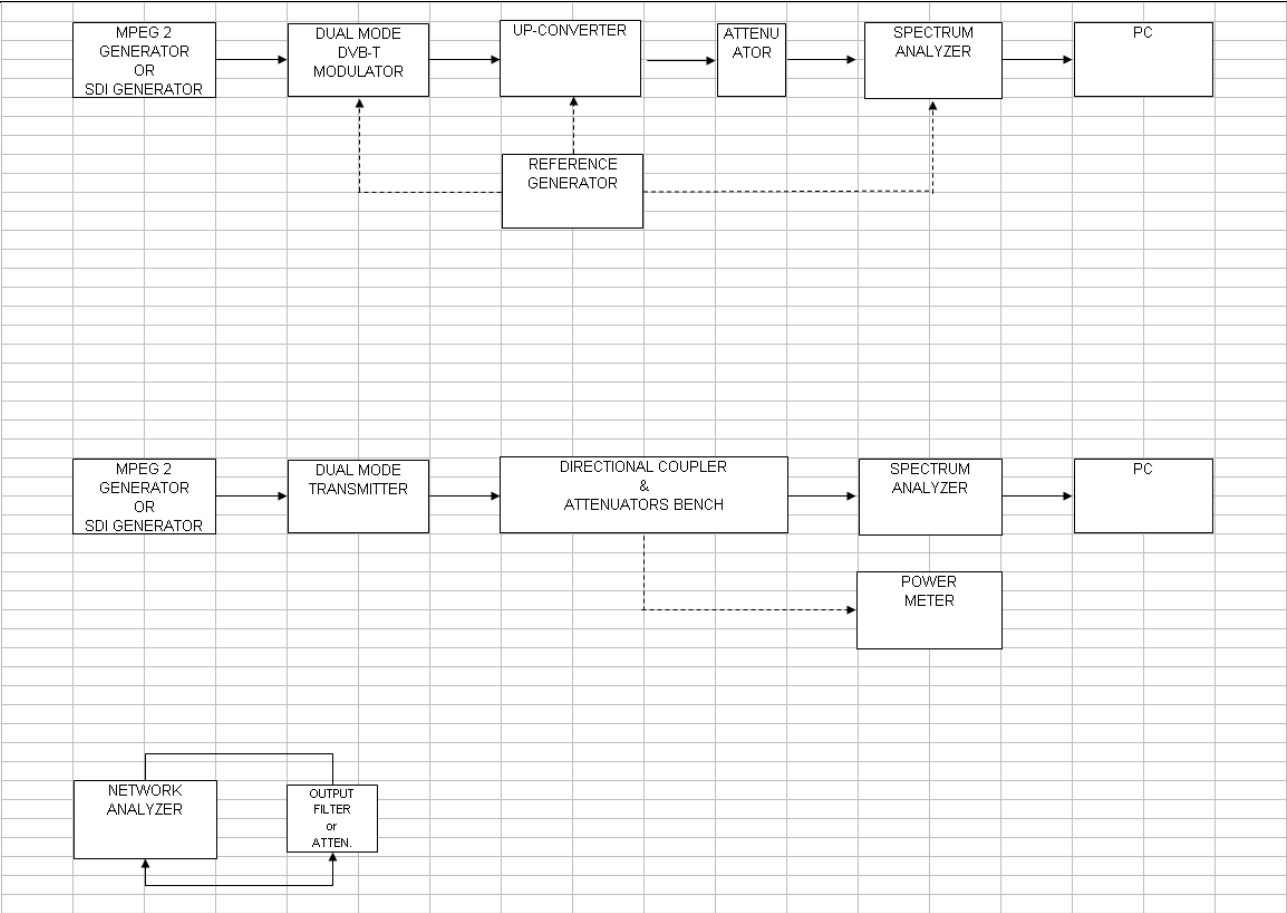
1.3.1 OCCUPIED BANDWIDTH..... 18

1.1 PURPOSE

The document purpose is to give the sufficient and necessary information TO MATCH THE 2.1057 OF THE FCC RULES:

1.2 INSTRUMENTS USED





DEVICE UNDER TEST



NETWORK ANALYSER



MPEG GENERATOR



SPECTRUM ANALYSER



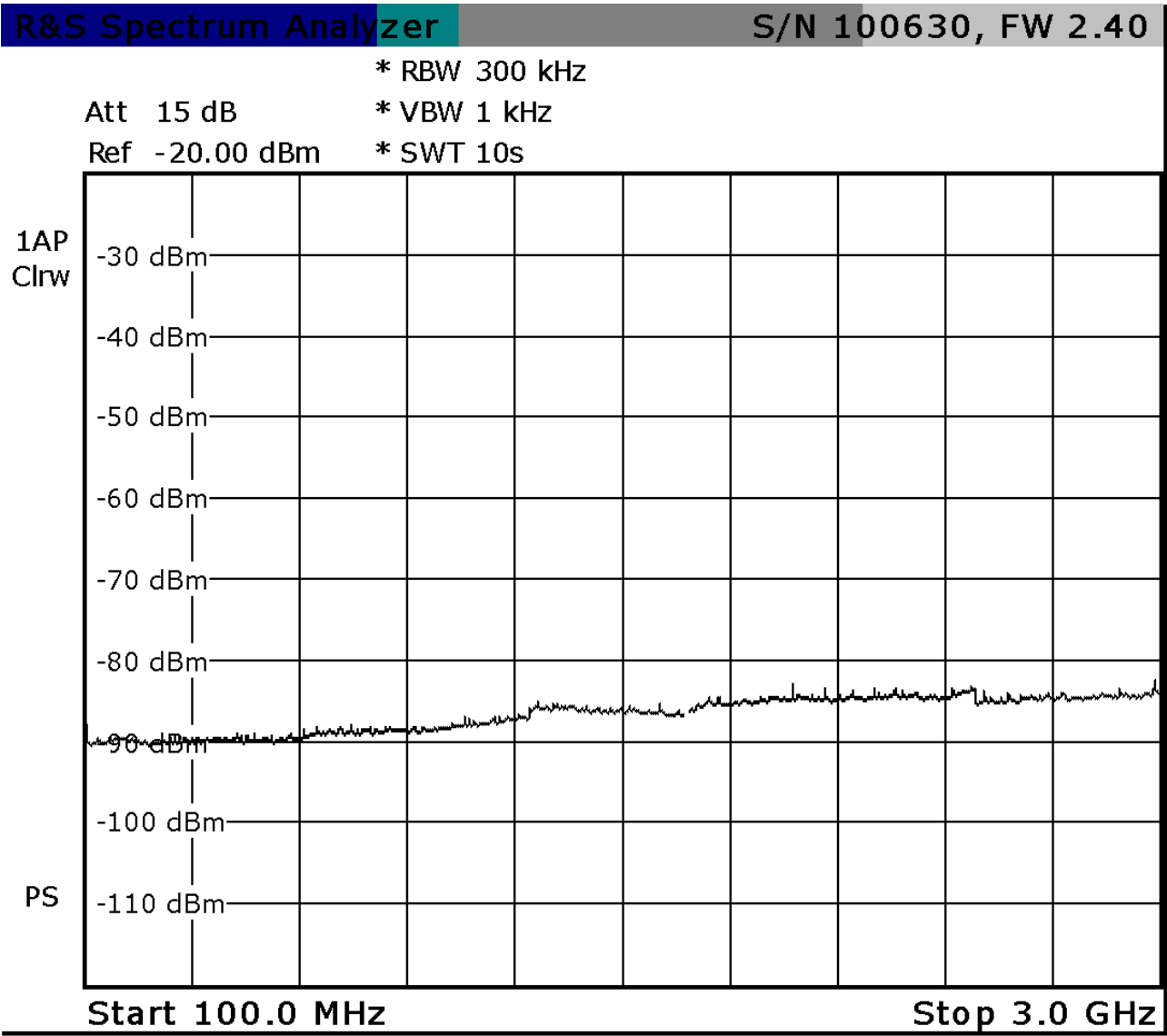
POWER METER R&S®NRVS power meter

1.3 MEASURE

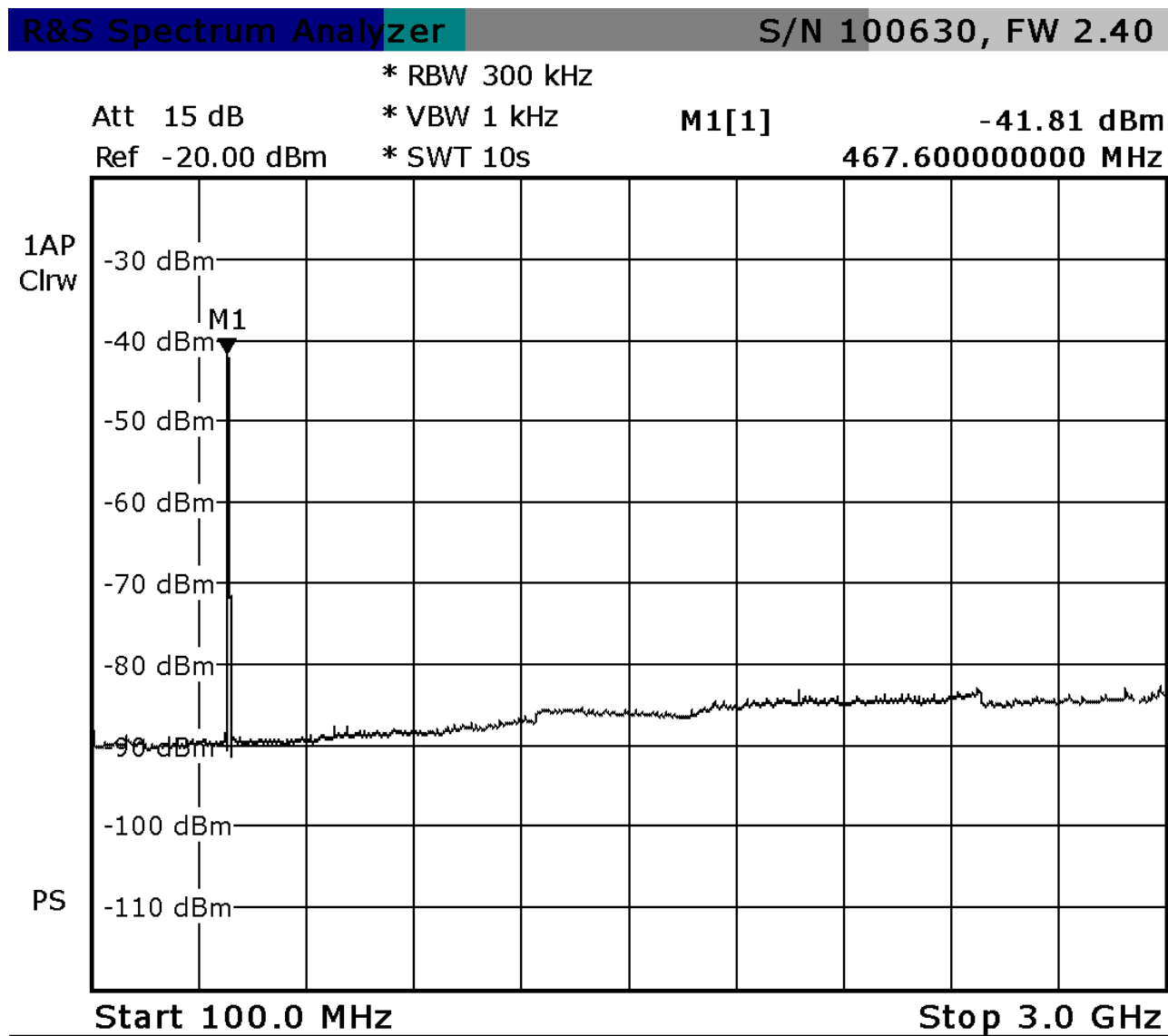
1.3.1 SPECTRUM measurement

This chapter shows the maximum power measurement details.

1.3.1.1 REFERENCE

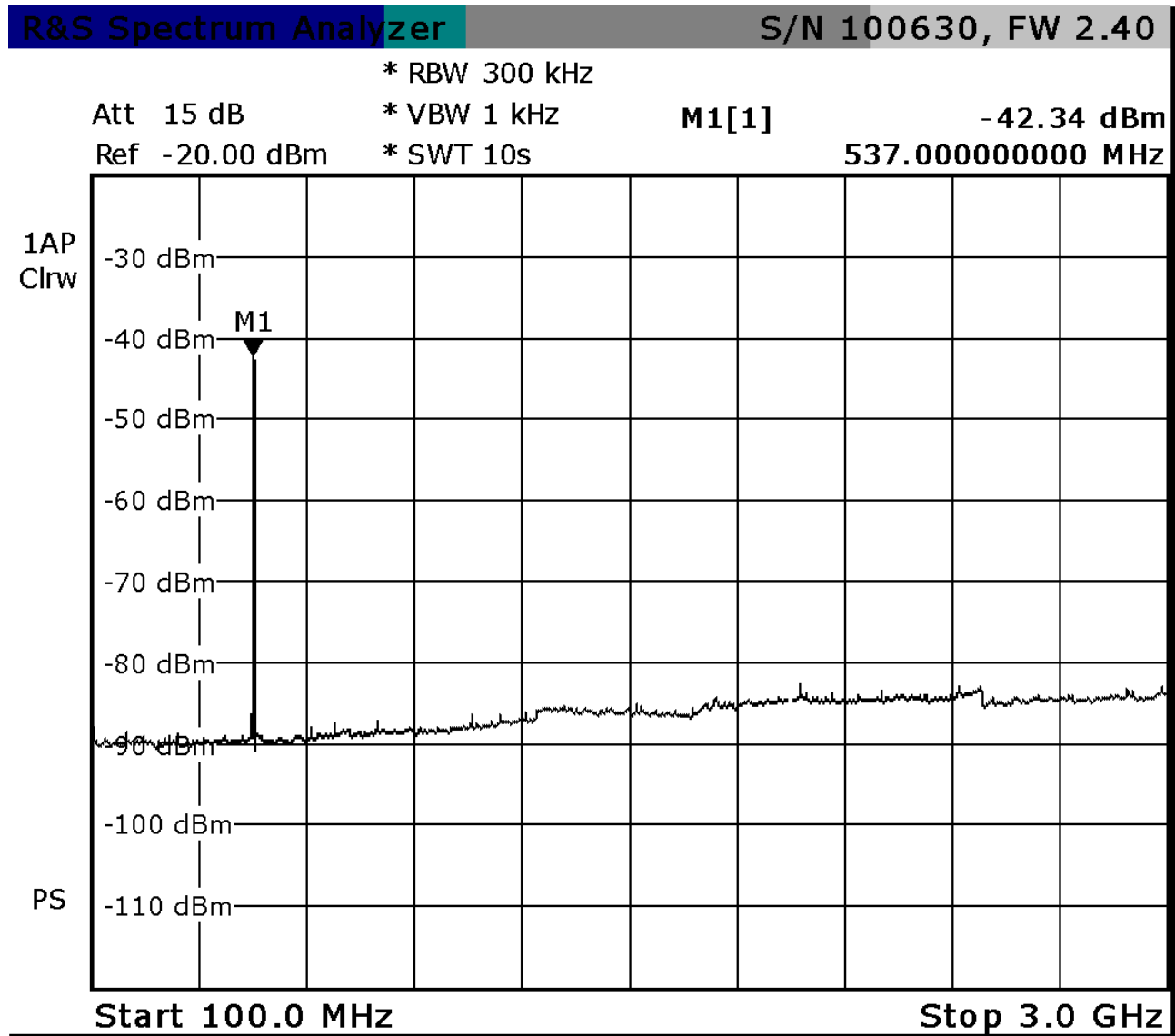


1.3.1.2 SPECTRUM at channel 14



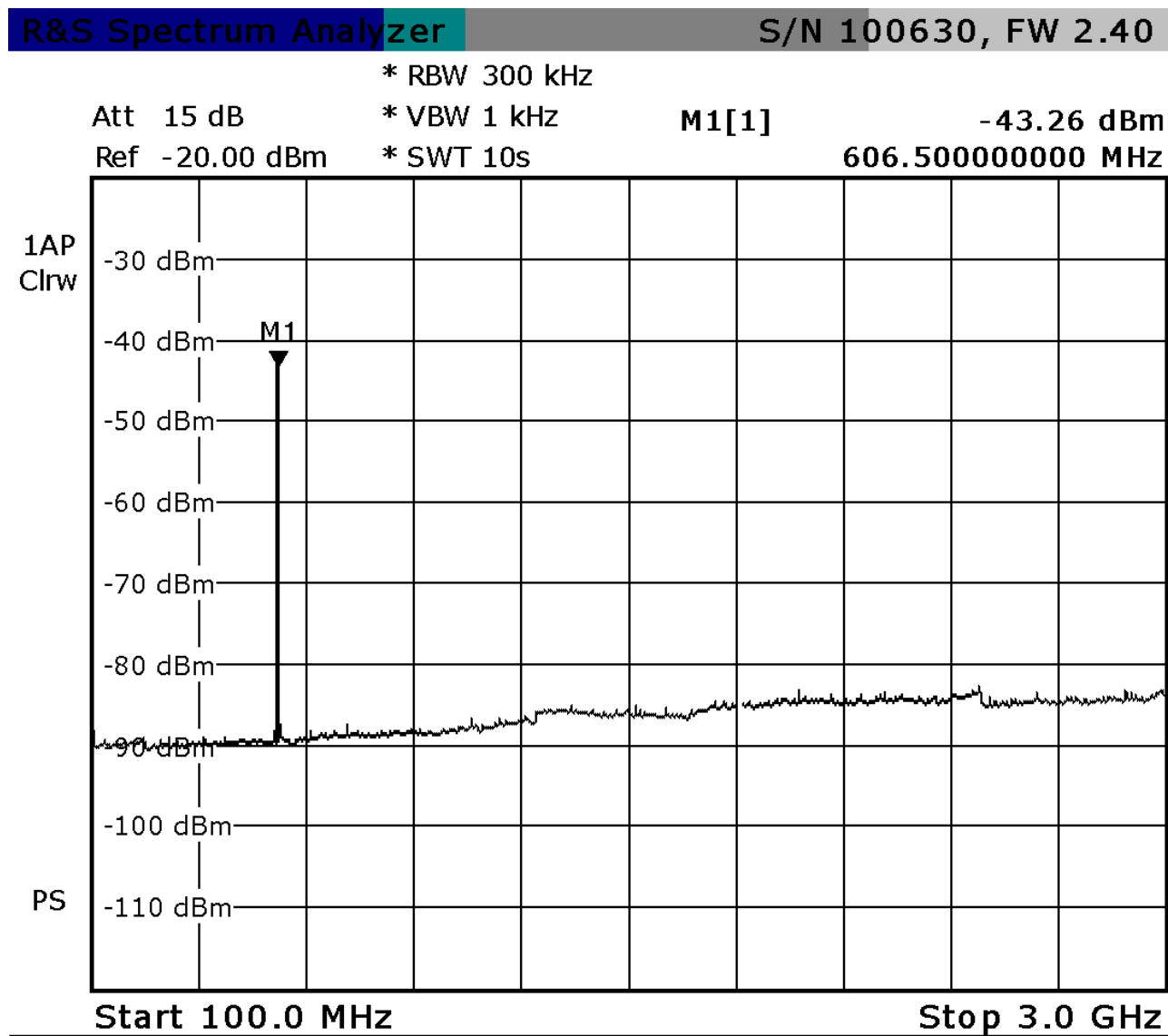
No spurious have been detected

1.3.1.3 SPECTRUM at channel 25



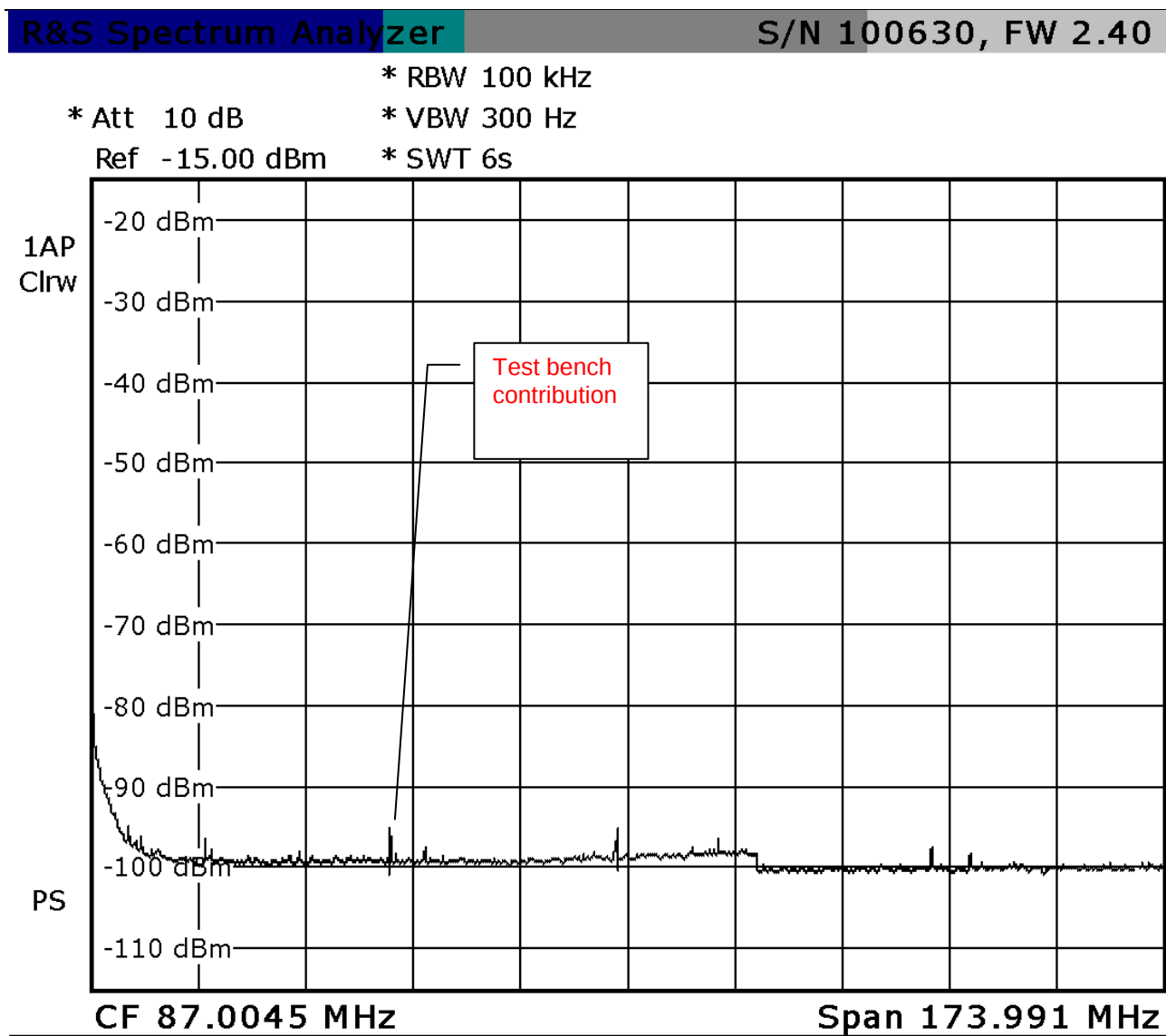
No spurious have been detected

1.3.1.4 SPECTRUM at channel 36



No spurious have been detected

1.3.1.5 HARMONIC DETECTION



TRANSMITTER BRAND :
MODEL:

SCREEN SERVICE
SDT 500 UB ARK 6

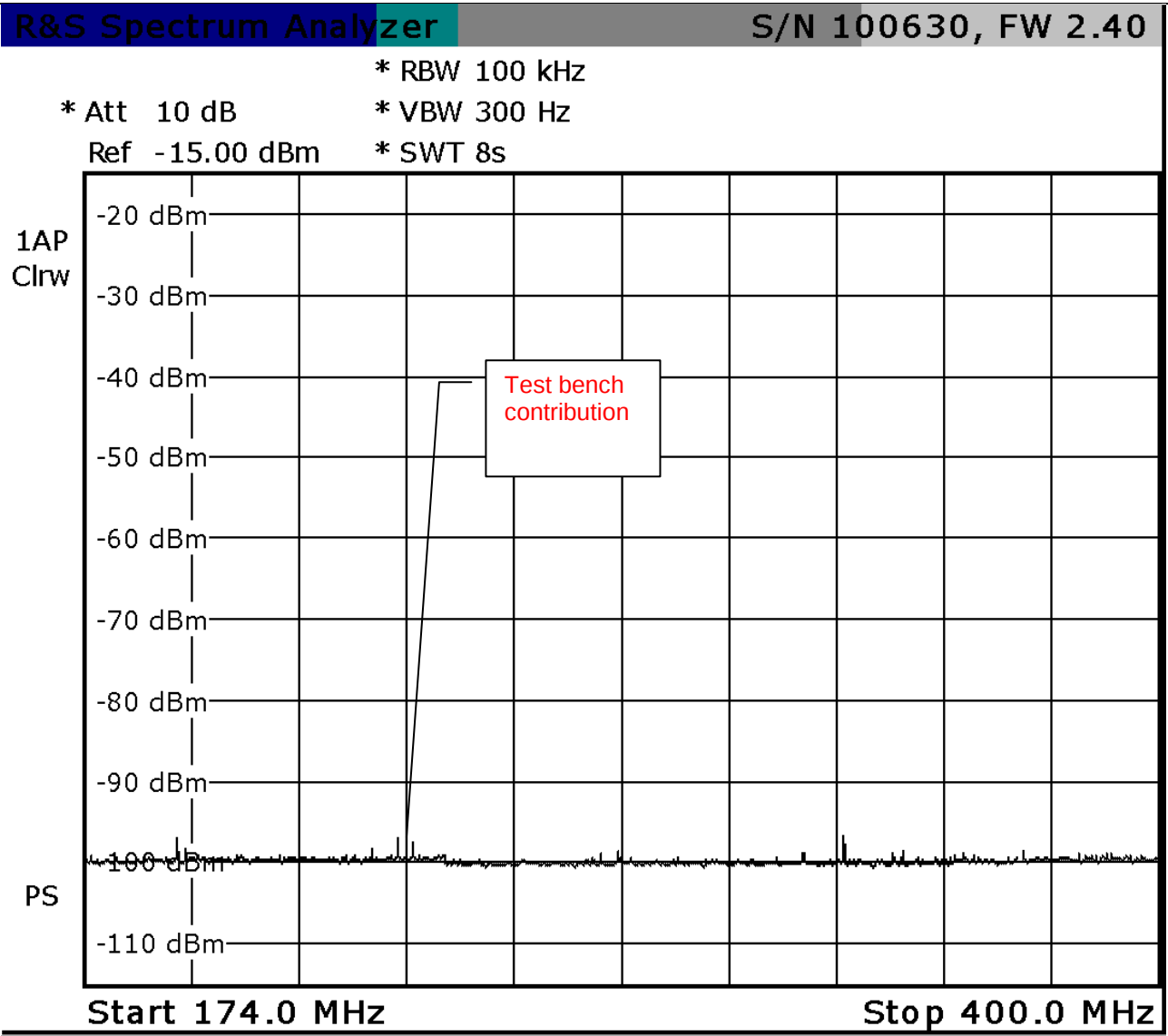
OUTPUT POWER MEASURE:

DIGITAL 20.1 W rms

SPURIOUS EMISSION

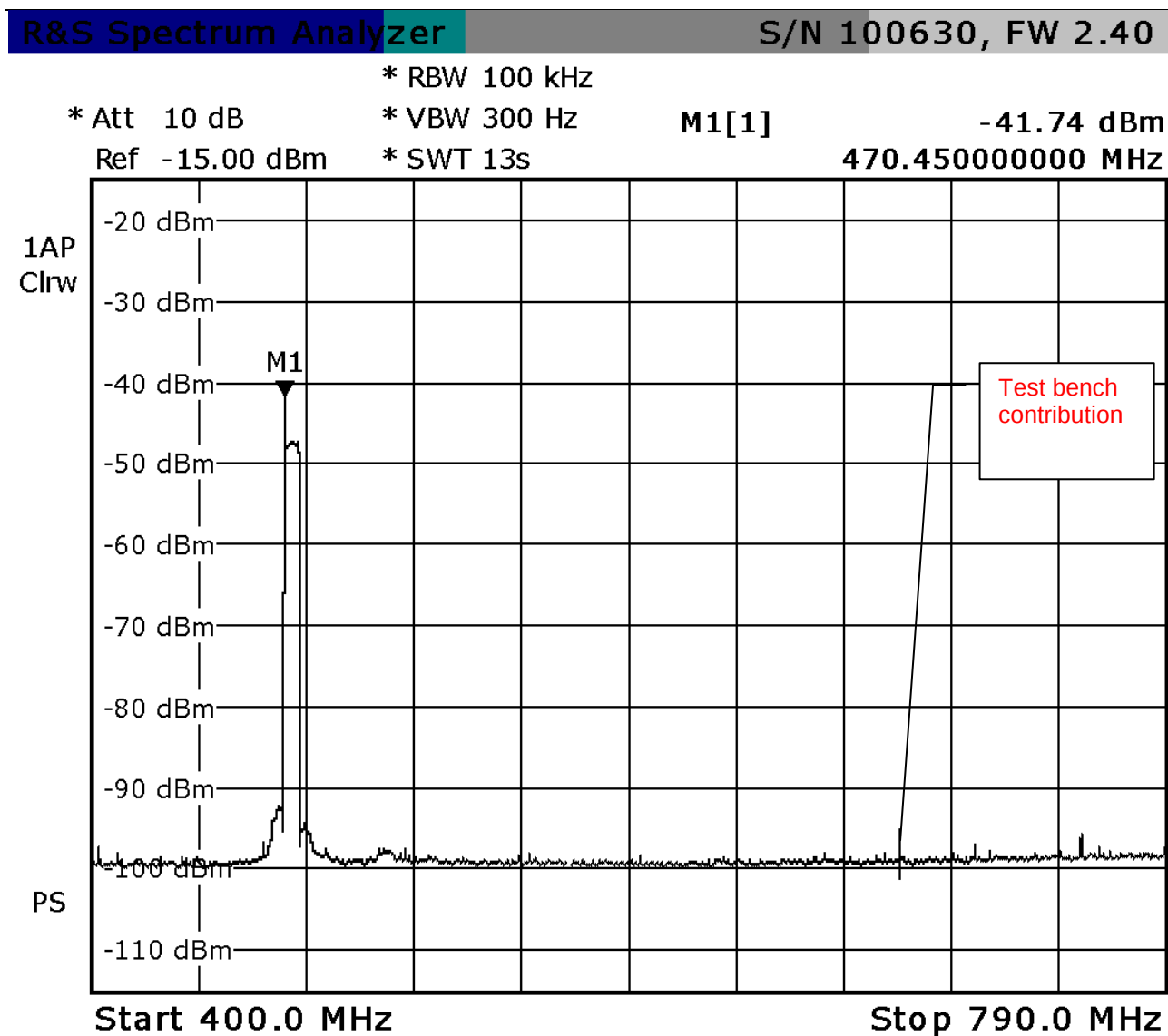
MEASURE / LIMIT [dBm]:

N.D. / -36



TRANSMITTER BRAND :	SCREEN SERVICE
MODEL:	SDT 500 UB ARK 6

OUTPUT POWER MEASURE:	DIGITAL 20.1 W rms
SPURIOUS EMISSION MEASURE / LIMIT [dBm]:	N.D. / -66



TRANSMITTER BRAND :
MODEL:

SCREEN SERVICE
SDT 500 UB ARK 6

OUTPUT POWER MEASURE:

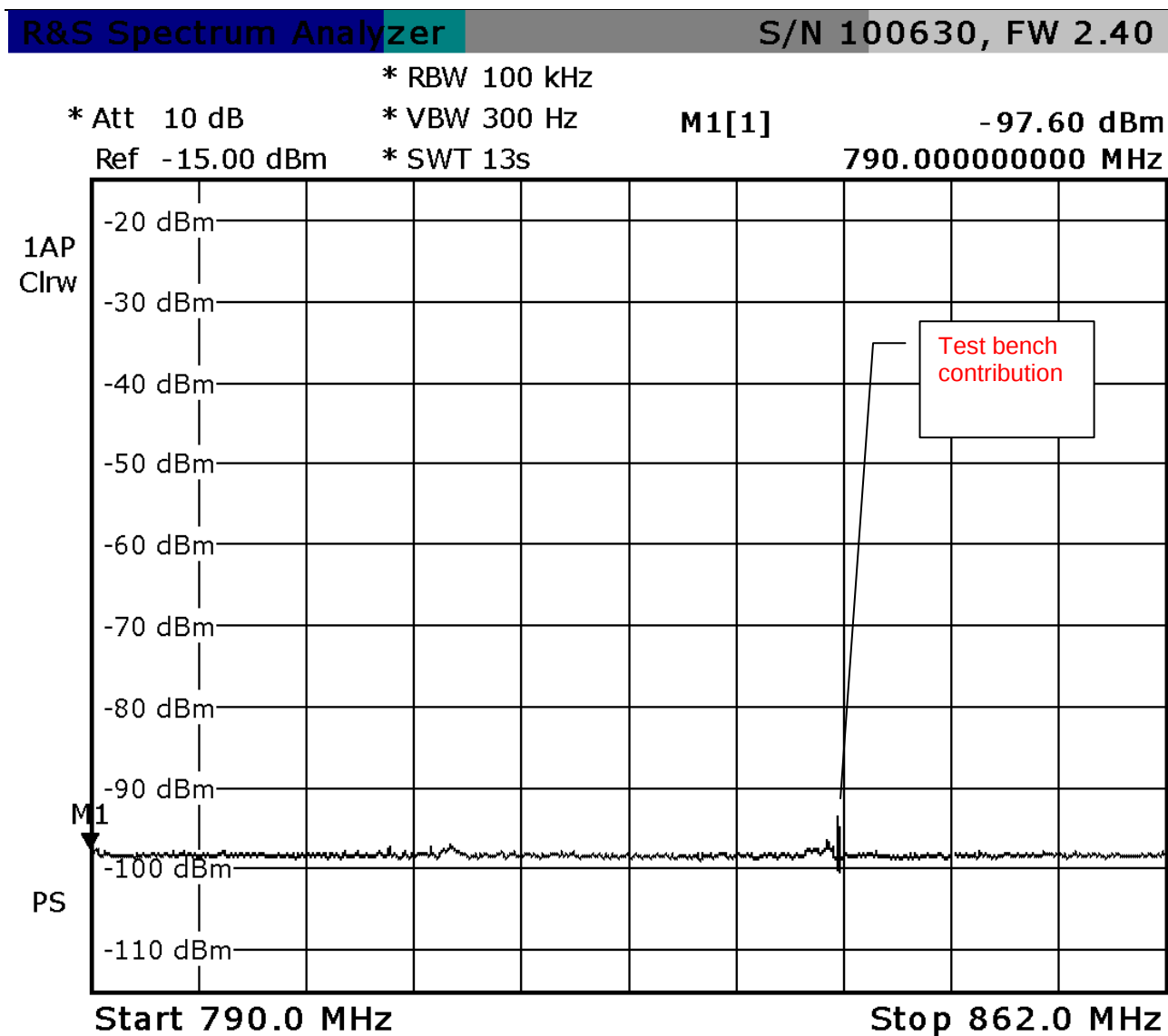
DIGITAL 20.1 W rms

SPURIOUS EMISSION

MEASURE / LIMIT [dBm]:

N.D. / -36

The REFERENCE LEVEL 0 dBm correspond to the equipment output power nominal level.



TRANSMITTER BRAND :
 MODEL:

SCREEN SERVICE
 SDT 500 UB ARK 6

OUTPUT POWER MEASURE:

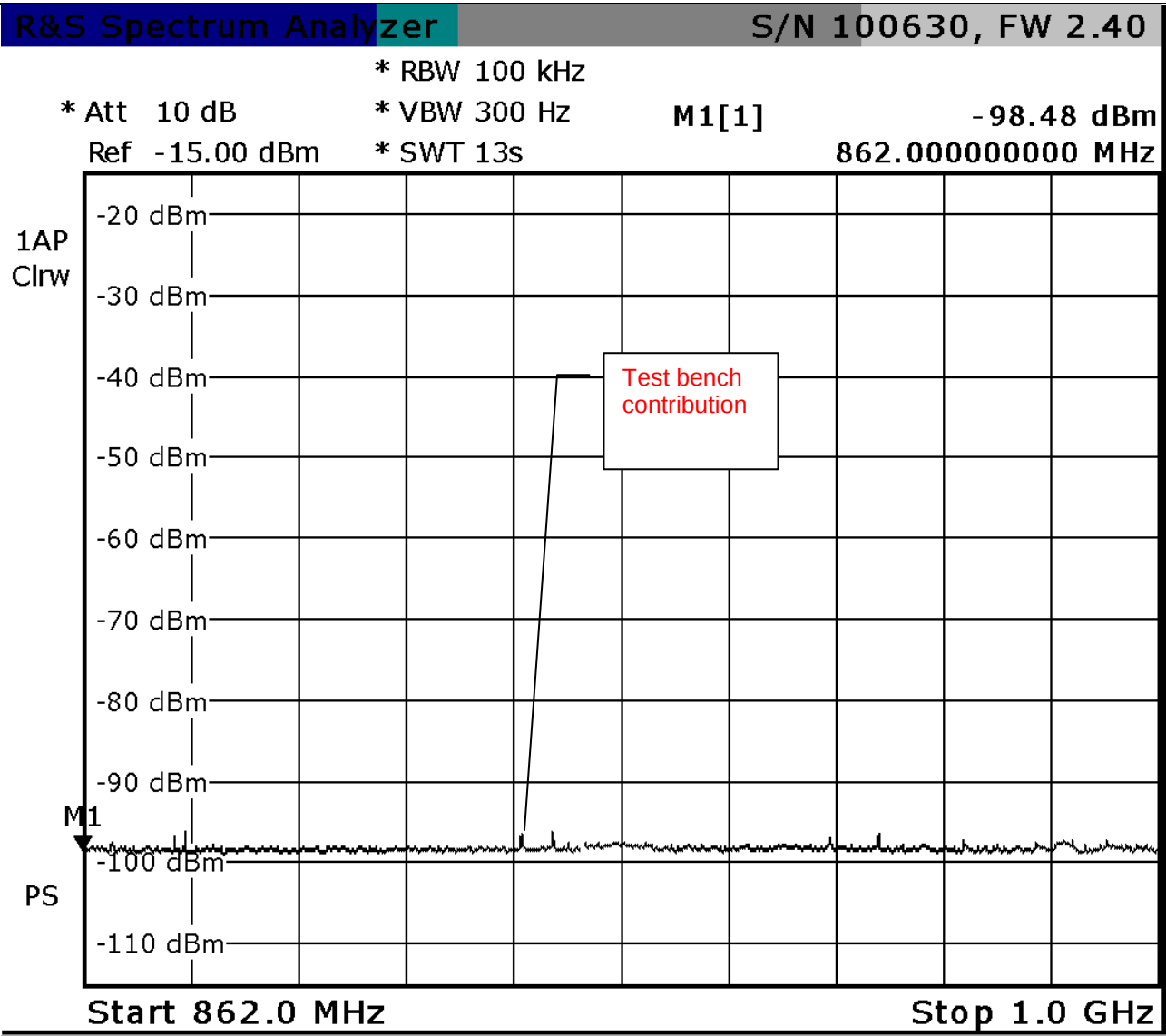
DIGITAL 20.1 W rms

SPURIOUS EMISSION

MEASURE / LIMIT [dBm]:

N.D. / -60

The REFERENCE LEVEL -20 dBm has been used to have the necessary reading dynamic

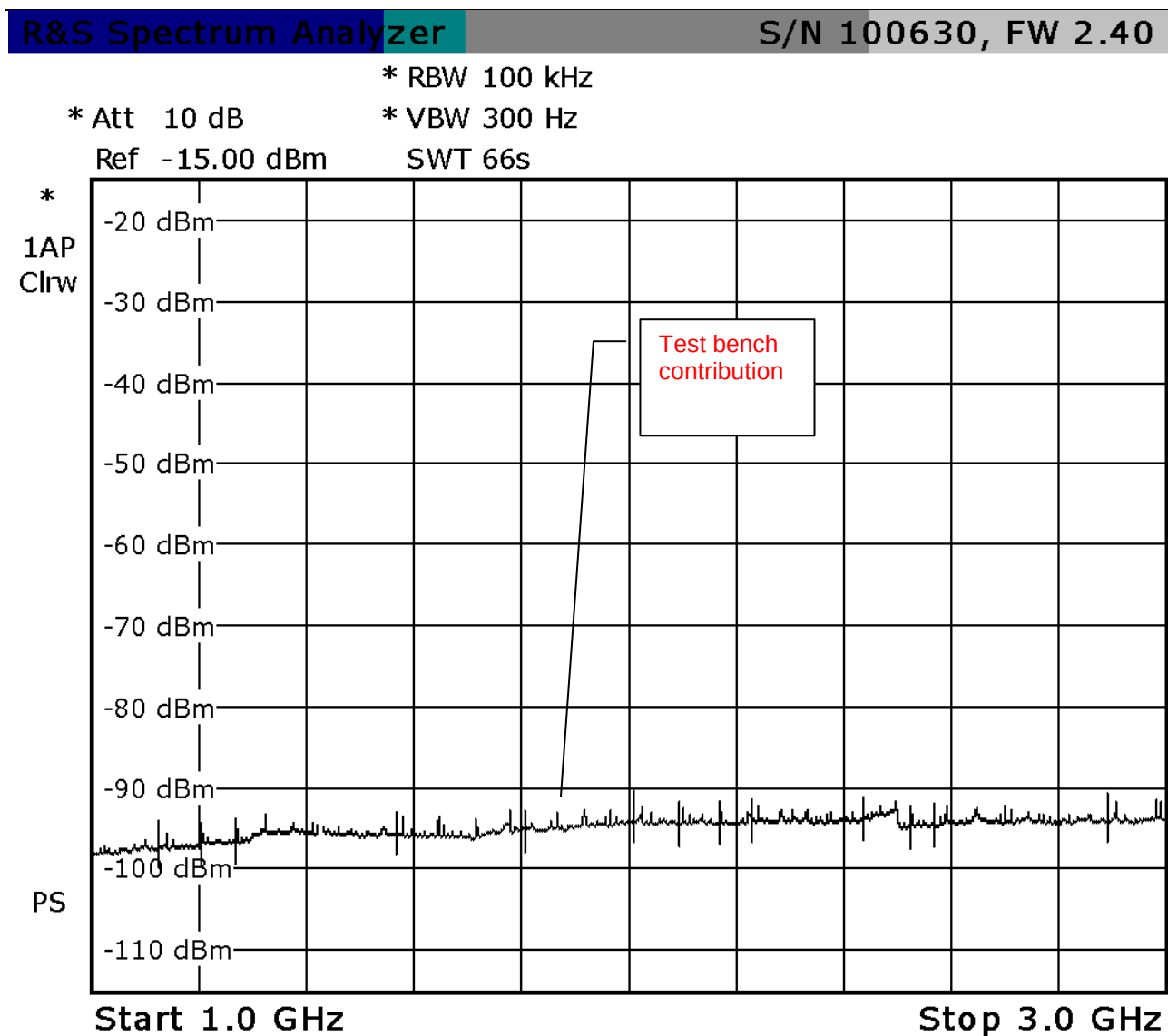


TRANSMITTER BRAND :	SCREEN SERVICE
MODEL:	SDT 500 UB ARK 6

OUTPUT POWER MEASURE: DIGITAL 20.1 W rms

SPURIOUS EMISSION
MEASURE / LIMIT [dBm]: N.D. / -36

The REFERENCE LEVEL 0 dBm corrispond to the equipment output power nominal level.



TRANSMITTER BRAND :
MODEL:

SCREEN SERVICE
SDT 500 UB ARK 6

OUTPUT POWER MEASURE:

DIGITAL 20.1 W rms

SPURIOUS EMISSION

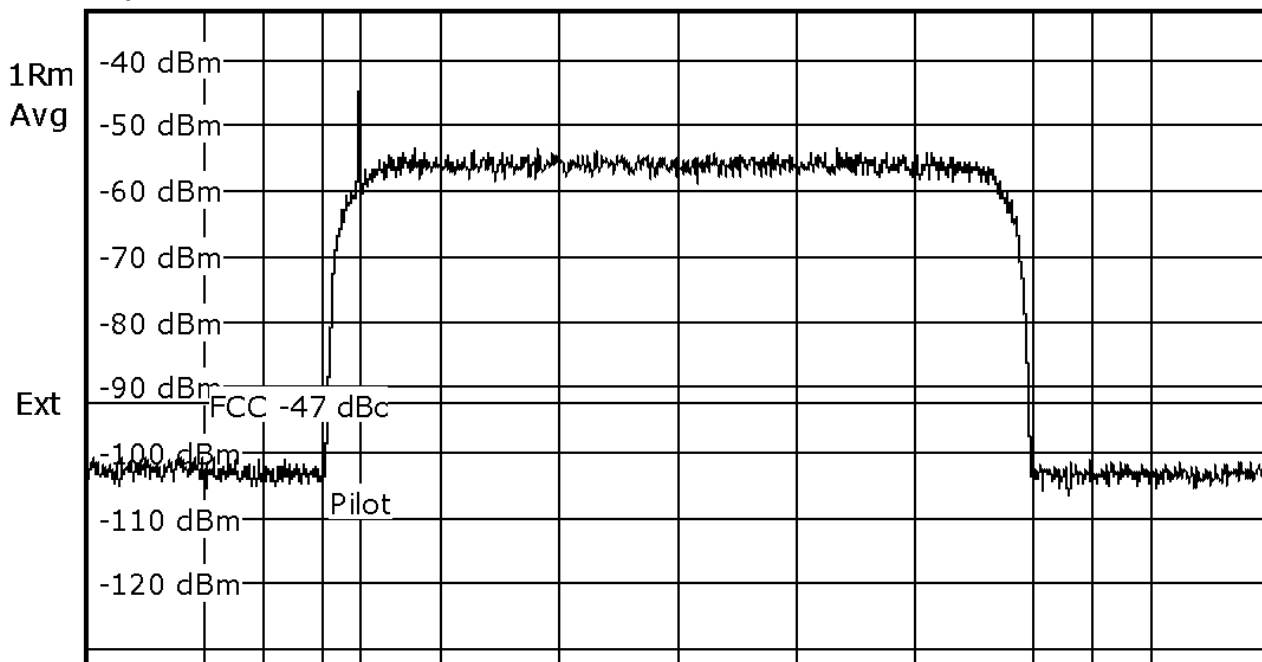
MEASURE / LIMIT [dBm]:

N.D. / -30

The REFERENCE LEVEL 0 dBm correspond to the equipment output power nominal level.

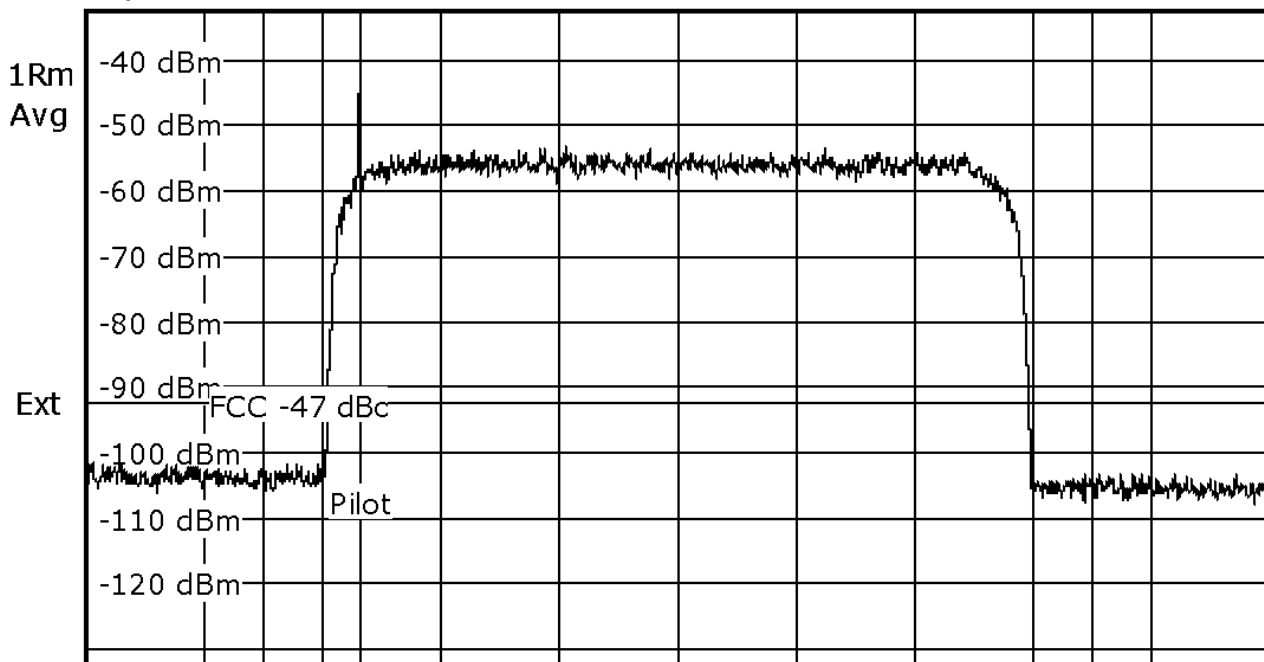
1.3.1 OCCUPIED BANDWIDTH

THE PICTURES BELOW GIVES THE EVIDENCE OF HE SPECTUM OCCUPANCY AS PER 2.1049 FCC REQUIREMENTS

R&S ETL Digital Spectrum **S/N 100688, FW 2.40**
Ch: 14 UHF4/5 RF 473.000000 MHz ATSC/ATSC Mobile DTV (RF Lay
*** RBW 10 kHz**
*** Att 0 dB**
VBW 100 kHz
ExpLvl -32.50 dBm
SWT 100ms

Start 468.0 MHz
Stop 478.0 MHz

pS	Shoulder Attenuation (FCC 500kHz)		Result	Unit
	Lower		57.8	dB
	Upper		58.0	dB

Lvl -28.7dBm

R&S ETL Digital Spectrum **S/N 100688, FW 2.40**
Ch: 25 UHF4/5 RF 539.000000 MHz ATSC/ATSC Mobile DTV (RF Laye
*** RBW 10 kHz**
*** Att 0 dB**
VBW 100 kHz
ExpLvl -32.50 dBm
SWT 100ms

Start 534.0 MHz
Stop 544.0 MHz

pS	Shoulder Attenuation (FCC 500kHz)		Result		Unit	
	Lower		58.4		dB	
	Upper		59.9		dB	

Lvl -28.7dBm

