Exhibit 3

SECTION 2.983 (d)
Technical description of the equipment sufficiently complete to develop all the factors concerning compliance with the technical standards of the applicable rules part. The description shall include the following items:

SECTION 2.983 (d) (1)
Type or types of emission.

RESPONSE:
The **AS5CMP-22** is capable of amplifying transmissions involving the following types of emissions:
1M23G9W

SECTION 2.983 (d) (2)
Frequency Range.

RESPONSE: **869.00 - 894.00 MHz**

SECTION 2.983 (d) (3)
Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

RESPONSE:
The **AS5CMP-22** amplifier is capable of operating from 0.3 to 20.0 Watts at the amplifier output. The output power that is delivered to the J4 output connector of the cabinet in which the **AS5CMP-22** is mounted is reduced from this maximum value by filter insertion loss, RF transmission losses and margin for long term reliability. The power is also under continuous software control. When installed in a cabinet with applicable filters the long term average rated power at the J4 output connector is 4 Watts +2 /-4 dB. The short term peak power, due to channel activity fluctuations, is 7.0 Watts.

SECTION 2.983 (d) (4)
Maximum power rating as defined in the applicable part of the rules.

RESPONSE: The maximum average power output of the **AS5CMP-22** at the Cabinet Output J4 connector is 7.0 Watts.

Exhibit 3 *continued*

SECTION 2.983 (d) (5)
The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operation over the power range.

RESPONSE: The TPA nominally uses the following voltages and maximum currents :

+5 VDC @ 2.0 A max. (These are the Sum of BCS^ and BCR5 currents.)
-15 VDC @ 0.5 A max. (These are the Sum of BCS^ and BCR5 currents.)
+15 VDC @ 1.5 A max. (These are the Sum of BCS^ and BCR5 currents.)
+25 VDC @ 3.0 A max. (These are the Sum of BCS^ and BCR5 currents.)

Exhibit 9

SECTION 2.983 (d) (11)

A description of any circuits or devices employed for suppression of spurious radiation, for limiting modulation and for limiting power.

RESPONSE: The modulation control and power limiting functions are controlled by the **AS5CMP-12** (FCC equipment authorization June 7, 1995) which supplies the signals to be amplified. The BCR5 sub-unit of the TPA, the Low Power Linearizer RF Circuit Pack, suppresses intermodulation distortion and spectral regrowth. A description of the BCR5 circuits are included in Exhibit 5c. External to the TPA there are cavity type Transmit Filters which limit spurious and harmonic content. The performance characteristics of these filters are included in Figures 9a, 9b and 9c

Complete circuit diagrams.

RESPONSE:
The complete circuit diagrams for the Amplifier Linearizer (BCR5) are included with the documents for which confidential status has been requested and are included in Exhibit 5c.

COMPLETE CIRCUIT DIAGRAMS

Please see Exhibit 5c

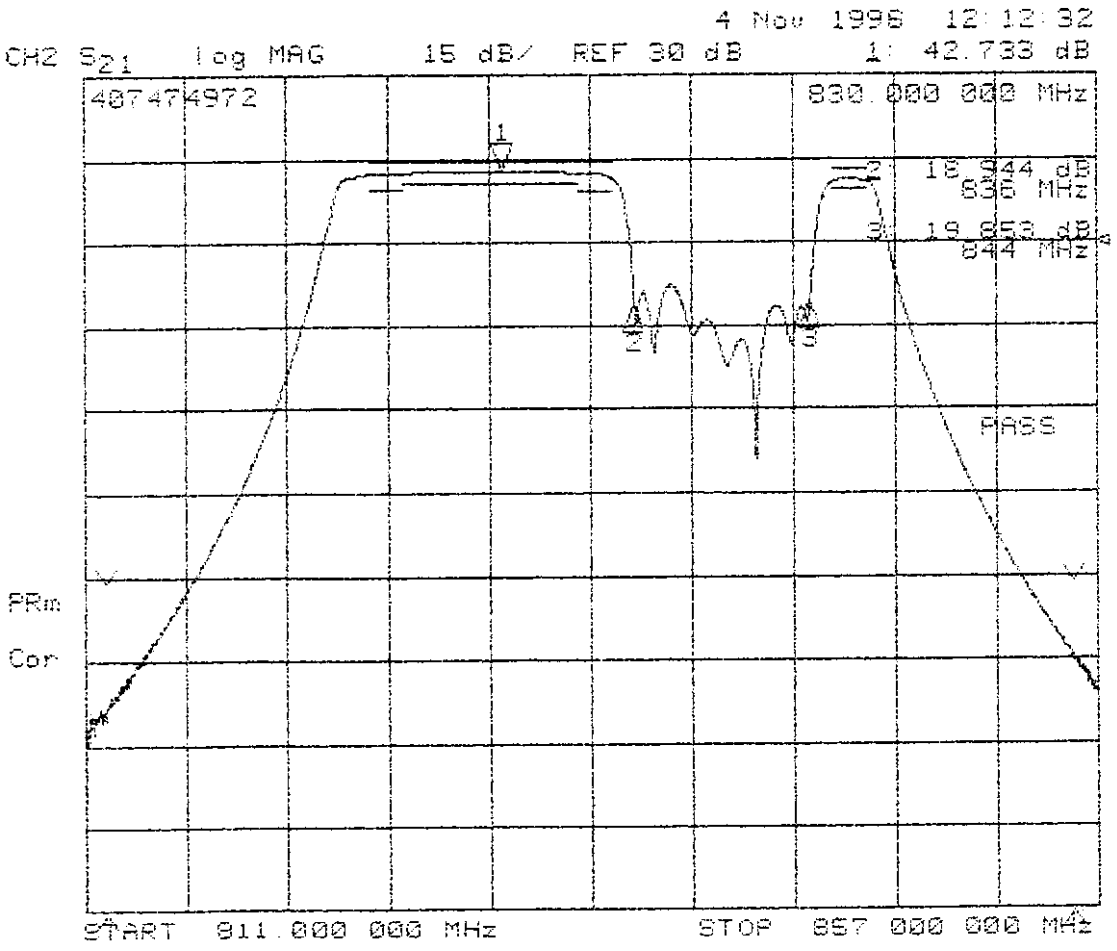
(LUCENT TECHNOLOGIES CONFIDENTIAL PROPRIETARY INFORMATION)

Exhibit 9 continued

Figure 9a A Band Duplex Filter

Name	Specification #	S/N	Date of Mfg
A Band Duplex Filter Panel	KS 24170,L2	SN 969K11008450	10/31/96
A Band Duplex Filter	BM109-795	SN 0404	9/17/96
A Band Tx Filter Panel	KS-24166,L3	SN 3571	

RF Performance



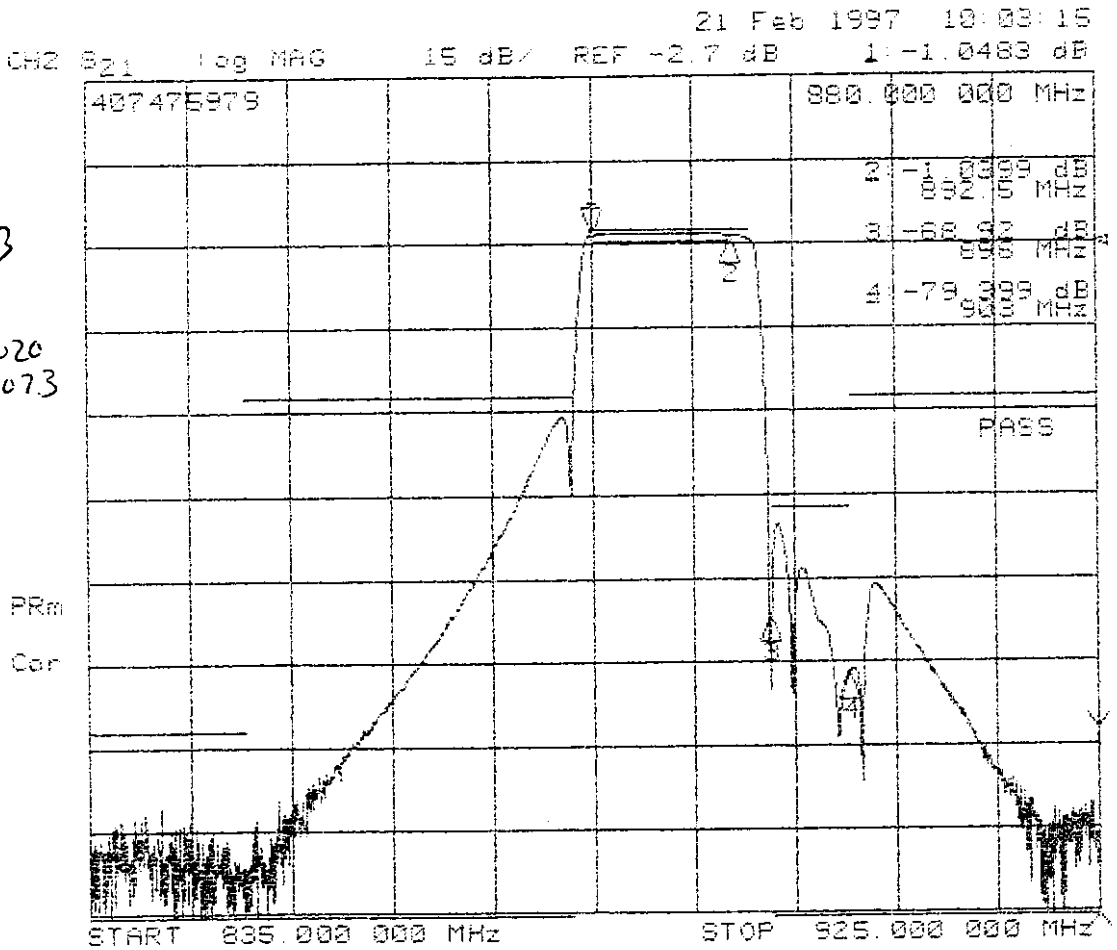
A Band Duplex

Exhibit 9 continued

Figure 9b B Band Duplex Filter

Name	Specification #	S/N	Date of Mfg.
B Band Duplex Filter Panel	KS 24170,L2	SN 1083	2/24/97
B Band Notch and Cascade	KS 24299,L1	SN CDK 174	2/97

RF Performance



B Band Notch & Cascade Filter Panel

Exhibit 10

SECTION 2.983 (d) (12)

For equipment employing digital modulation techniques, a detailed description of the modulation system to be use, including response characteristics of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

RESPONSE:
These functions are controlled by the **AS5CMP-12** (FCC equipment authorization June 7, 1995) which supplies the signals to be amplified.

Exhibit 11

SECTION 2.983 (e)

The data required by Section 2.985 through 2.997, inclusive, measured in accordance with the procedures set out in Section 2.999.

RESPONSE:

The following pages include the data required for the Type Acceptance authorization of the FCC ID: **AS5CMP-22**, measured in accordance with the procedures set out in Section 2.999 of the Rules.

Each required measurement and its corresponding exhibit number are:

Exhibit 12:	Section 2.985	RF Power Output
Exhibit 13:	Section 2.987	Modulation Characteristics
Exhibit 14:	Section 2.989	Occupied Bandwidth
Exhibit 15:	Section 2.991	Spurious Emissions at Antenna Terminals
Exhibit 16:	Section 2.993	Field Strength of Spurious Radiation

Exhibit 12

SECTION 2.985

MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT

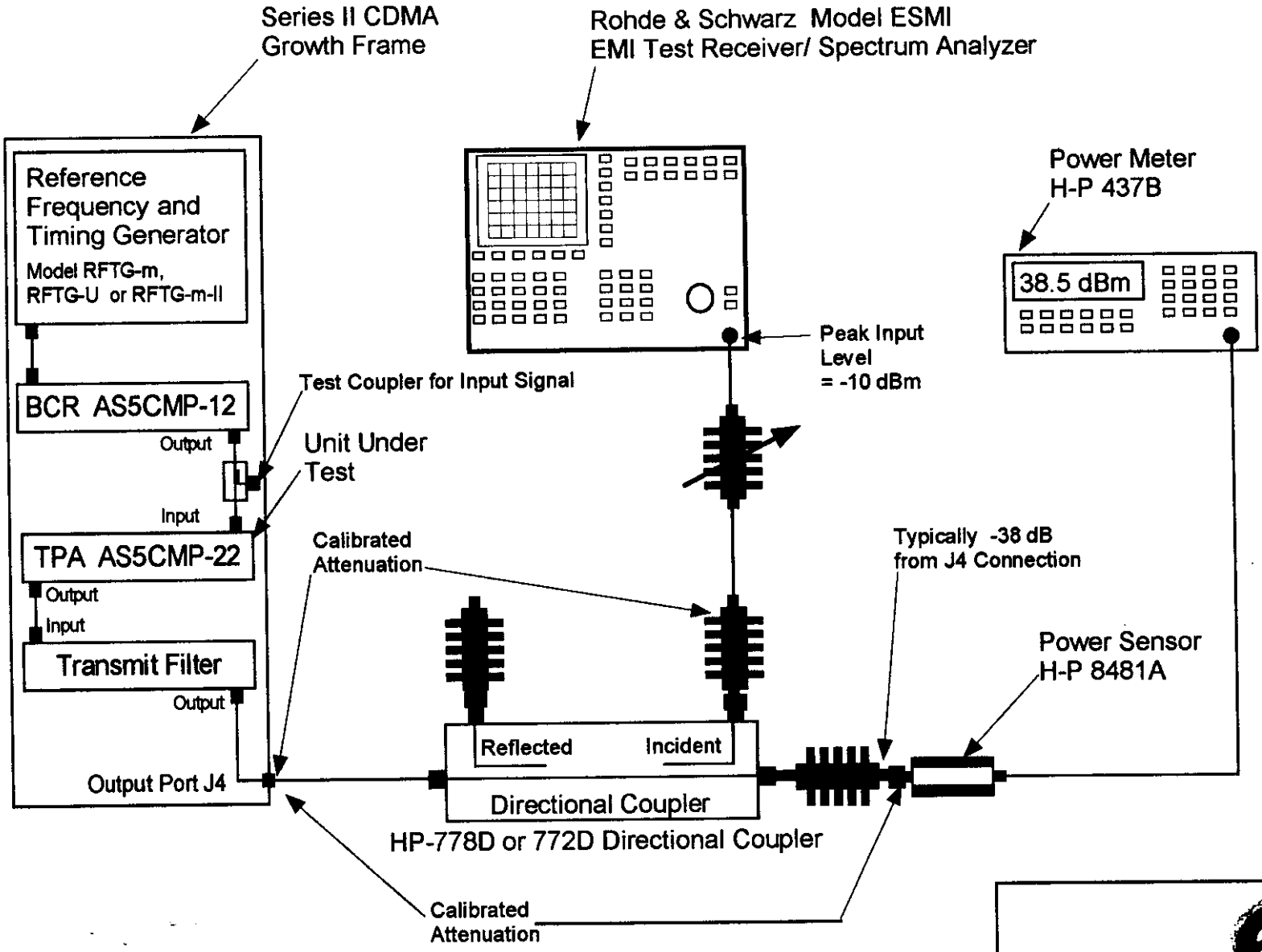
The test arrangements used to measure the radio frequency power output of the FCC ID: **AS5CMP-22** Transmit Power Amplifier is on the following page. Measurements were made respectively at each frequency where occupied Bandwidth measurements were performed. The use of the TPA is for a single CDMA carrier. This requires that the J4 power level be calibrated for the specific channel of use. The test configuration, Figure 12a, allowed the measurement of output power for each channel investigated for Occupied Bandwidth. These included the upper lower band edges and at the center channel for each Band.

The TPA system has a maximum power output at the antenna terminals of 7.0 Watts (38.5 dBm) +2 / -4 dB, it also has a minimum power output at the antenna terminals of 0.3 Watts (29.1 dBm +2 / -4 dB, across the Cellular band (869.00 - 894.00 MHz). The signal applied to the TPA is defined in Table 12.1. The power was reset to a minimum of 7.2 Watts at each measurement frequency to verify the spectral performance at that power level at each specific frequency of interest. The attenuation range was also verified. The specific Frequencies and channels and set power level was documented on each "Occupied Bandwidth" sheet.

Type	Number of Channels	Fraction of Power (Linear)	Fraction of Power (dB)	Comments
Pilot	1	0.2000	-7.0	Walsh 0
Sync	1	0.0471	-13.3	Walsh 32, always 1/8 rate
Paging	1	0.1882	-7.3	Walsh 1, full rate only
Traffic	6	0.09412 each	-10.3 each	Variable Walsh Assignments, full rate only

TABLE 12.1 Base Station Test Model, Nominal

Figure 12A. Test Configuration For RF Power Output



Cnd Spur Figure 12A
WSM 5/20/98

All components are calibrated over the frequency range of interest

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Exhibit 12

TEST SETUP FOR MEASUREMENT OF RADIO FREQUENCY POWER OUTPUT

EQUIPMENT :

RFTG:	**Reference Frequency and Timing Generator, 15 MHz**
BCR:	**Baseband Combiner and Radio**
TPA:	**Transmit Power Amplifier Unit (FCC ID: AS5CMP-22)**
Transmit Filter:	**Cellular Band Transmit Filter appropriate for the investigated Band**
Directional Coupler:	**HP 778D Dual Directional Coupler**
Power Meter:	**HP 437B with HP 8481A Power Head**
Plotter:	**HP Model 7470A Plotter**
Spectrum Analyzer:	**Rohde & Schwarz ESMI EMI Test Receiver**

Exhibit 12 FCC ID: AS5CMP-22

RESULTS:

The TPA was configured in the test setup shown in Figure 12A. When measured at the J4 output connection the TPA delivered 7.0 Watts +2 dB -0 at all cellular channels/ frequencies of operation. The Occupied Bandwidth measurements document the power level measured at each frequency of measurement. The TPA is a single CDMA channel amplifier and its maximum power level is verified at each cell site during installation of the CBR FCC ID: **AS5CMP-12**

Exhibit 13

SECTION 2.987

MEASUREMENT OF MODULATION CHARACTERISTICS

The modulation characteristics and accuracy of the TPA are a function of the input signal which is provided by the BCR (FCC ID: **AS5CMP-12**). The Authorization Grant by the FCC for the BCR is dated 6/7/95.

Exhibit 14

SECTION 2.989
MEASUREMENT OF OCCUPIED BANDWIDTH

The occupied bandwidth of the FCC ID: **AS5CMP-22** TPA was measured using a Rohde & Schwarz ESMI EMI Test Receiver and an HP Model 7470A Plotter. The RF power level was measured and adjusted via the test setup in Figure 14A. The RF output from the transmitter was reduced (to an amplitude usable by the spectrum analyzer) by using a calibrated attenuator. This attenuation was offset on the display and the signal adjusted to the -16.1 dBc level corresponding to the corrected RF power level for a 30 kHz resolution bandwidth. The power calibration was verified for a 1.25 MHz resolution bandwidth which corresponds to the top of the display.

The frequencies and channels used are tabulated on the bottom of each plot. Input and output signals are plotted at each frequency/ channel. Plots are provided for Left Edge, Center and Right Edge of each cellular band. These frequencies were chosen to show the occupied bandwidth in the channels in each of the cellular bands in which this radio can be operated, in compliance with Section 22.902 (c) of the Commission code. There are no SAT or Wide band data signals associated with CDMA. The signal used to show the occupied bandwidth is defined in table 14.1. This is the signal recommended in IS-95 section 10. The power output level was adjusted to provide the documented power levels at the bottom of each chart..

Type	Number of Channels	Fraction of Power (Linear)	Fraction of Power (dB)	Comments
Pilot	1	0.2000	-7.0	Walsh 0
Sync	1	0.0471	-13.3	Walsh 32, always 1/8 rate
Paging	1	0.1882	-7.3	Walsh 1, full rate only
Traffic	6	0.09412 each	-10.3 each	Variable Walsh Assignments, full rate only

TABLE 14.1 Base Station Test Model, Nominal

Exhibit 14

The minimum standard presented in PN-3383 Section 4.5.1.3.1 was followed.

"Suppression Inside the Licensee's Frequency Block(s)"

For all frequencies within the base station transmit band of 869.00 to 894.00 MHz that are within the specific block(s) allocated to the operator's system, the total conducted spurious emissions in any 30kHz band greater than 750 kHz for the CDMA channel center frequency shall not exceed a level of -45 dBc....

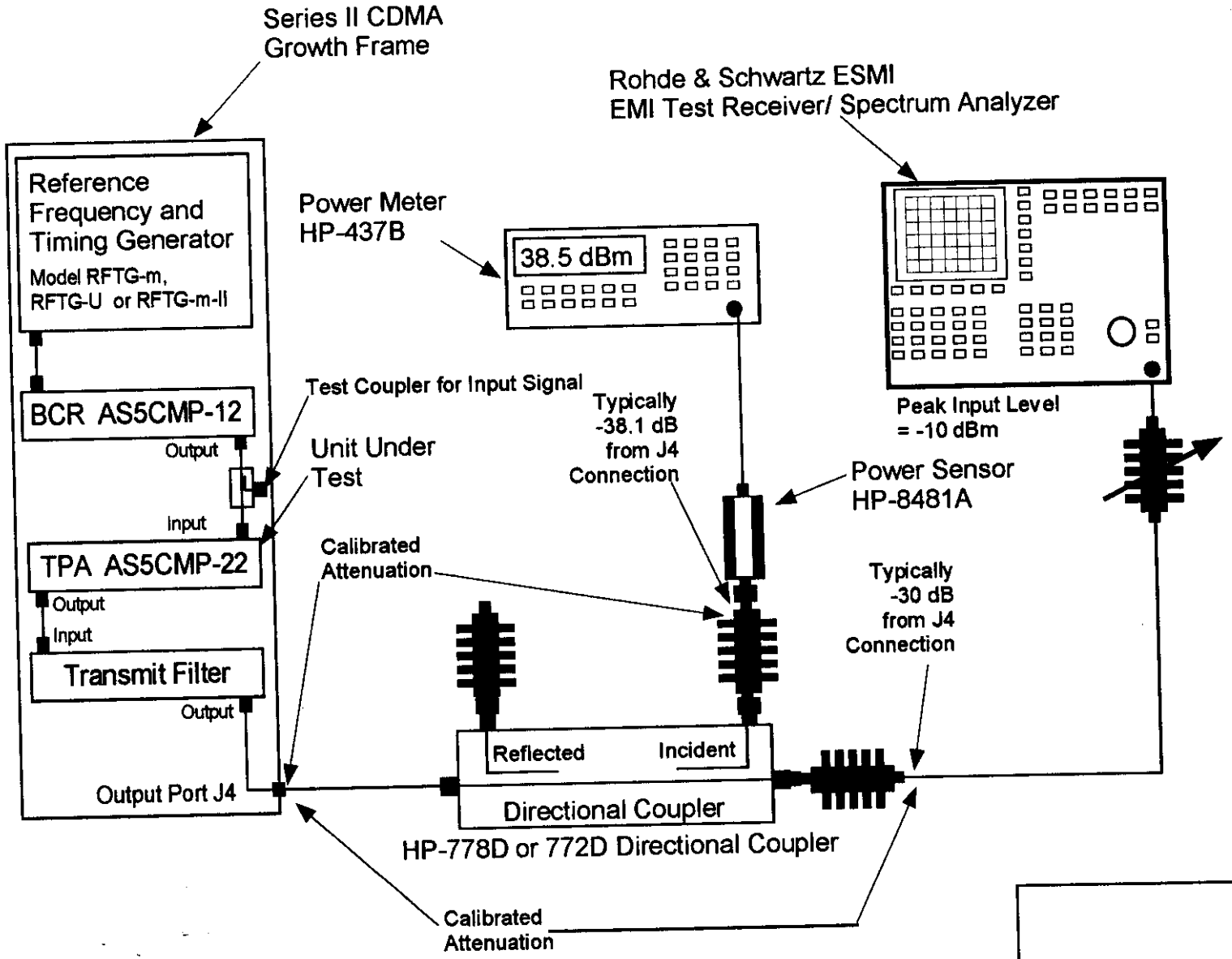
A Resolution Bandwidth of 30 kHz is based on our experience with Section 22.917 of The Code and lacking other guidance.

The spectrum analysis output plot shows the peak of the CDMA channel signal 16.1 dB below the zero line of the spectrum analyzer for the following reason: For the CDMA system there is no carrier without modulation. This relationship was used to provide the correct level for an unmodulated carrier vs. The modulated signal.

10log (Transmit Bandwidth / Resolution Bandwidth)

10log (1.23 MHz / 30 kHz) = 16.1 dB

Figure 14A. Test Configuration For Occupied Bandwidth



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Cnd Spur Figure 14A
WSM 5/20/98

Exhibit 14

TEST SETUP FOR MEASUREMENT OF OCCUPIED BANDWIDTH

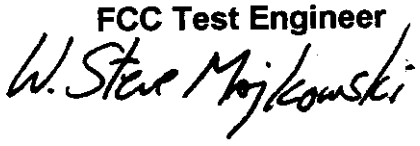
EQUIPMENT

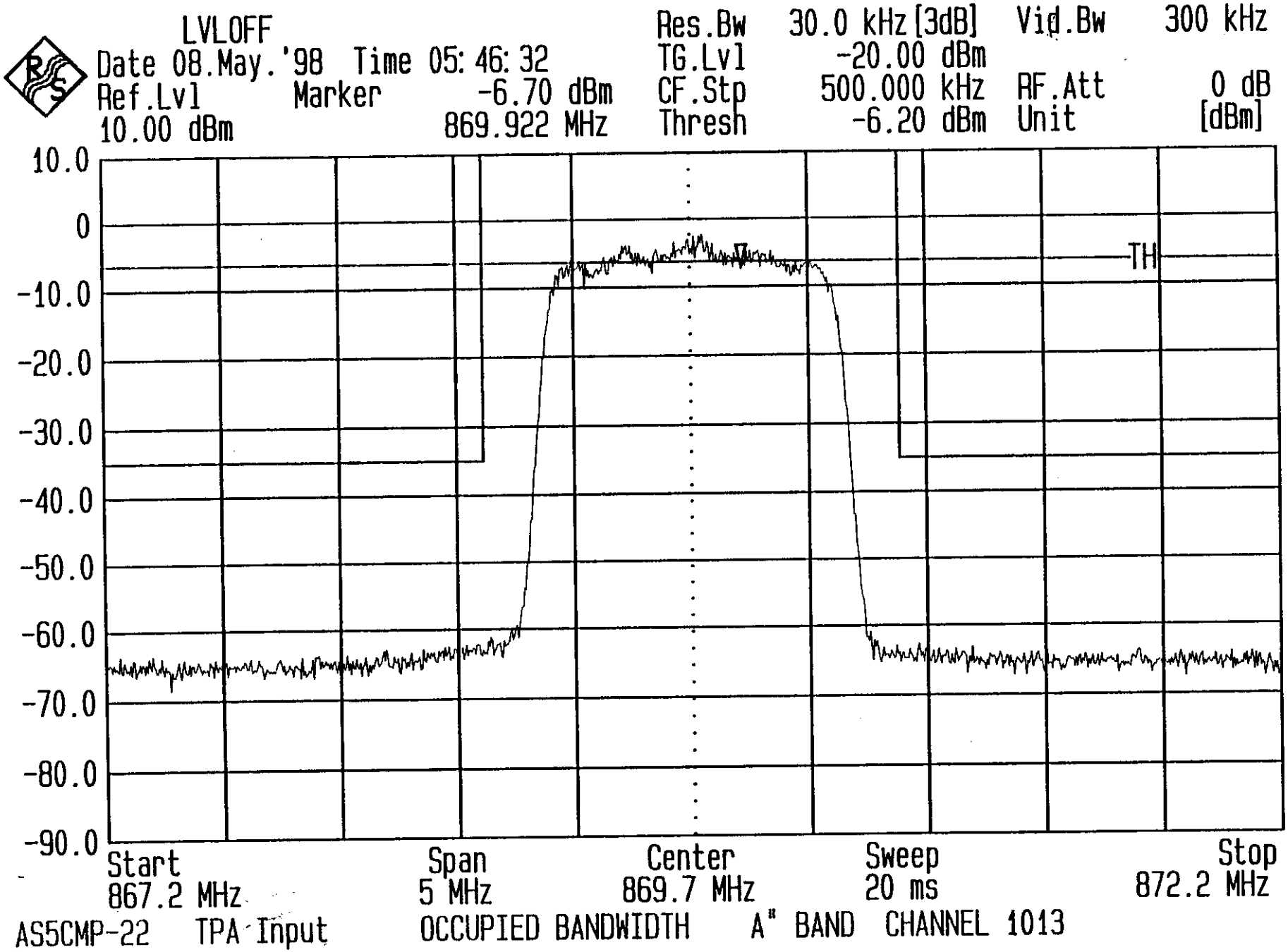
RFTG:	Reference Frequency and Timing Generator, 15 MHz
BCR:	Baseband Combiner and Radio
TPA:	Transmit Power Amplifier Unit (FCC ID: **AS5CMP-22**)
Transmit Filter:	Cellular Band Transmit Filter appropriate for the investigated Band
Directional Coupler:	HP 778D Dual Directional Coupler
Power Meter:	HP 437B with HP 8481A Power Head
Plotter:	HP Model 7470A Plotter
Spectrum Analyzer:	Rohde & Schwarz ESMI EMI Test Receiver

RESULTS: The following exhibits illustrate the spectrums investigated and document compliance.

Very truly yours

W.Steve Majkowski
FCC Test Engineer

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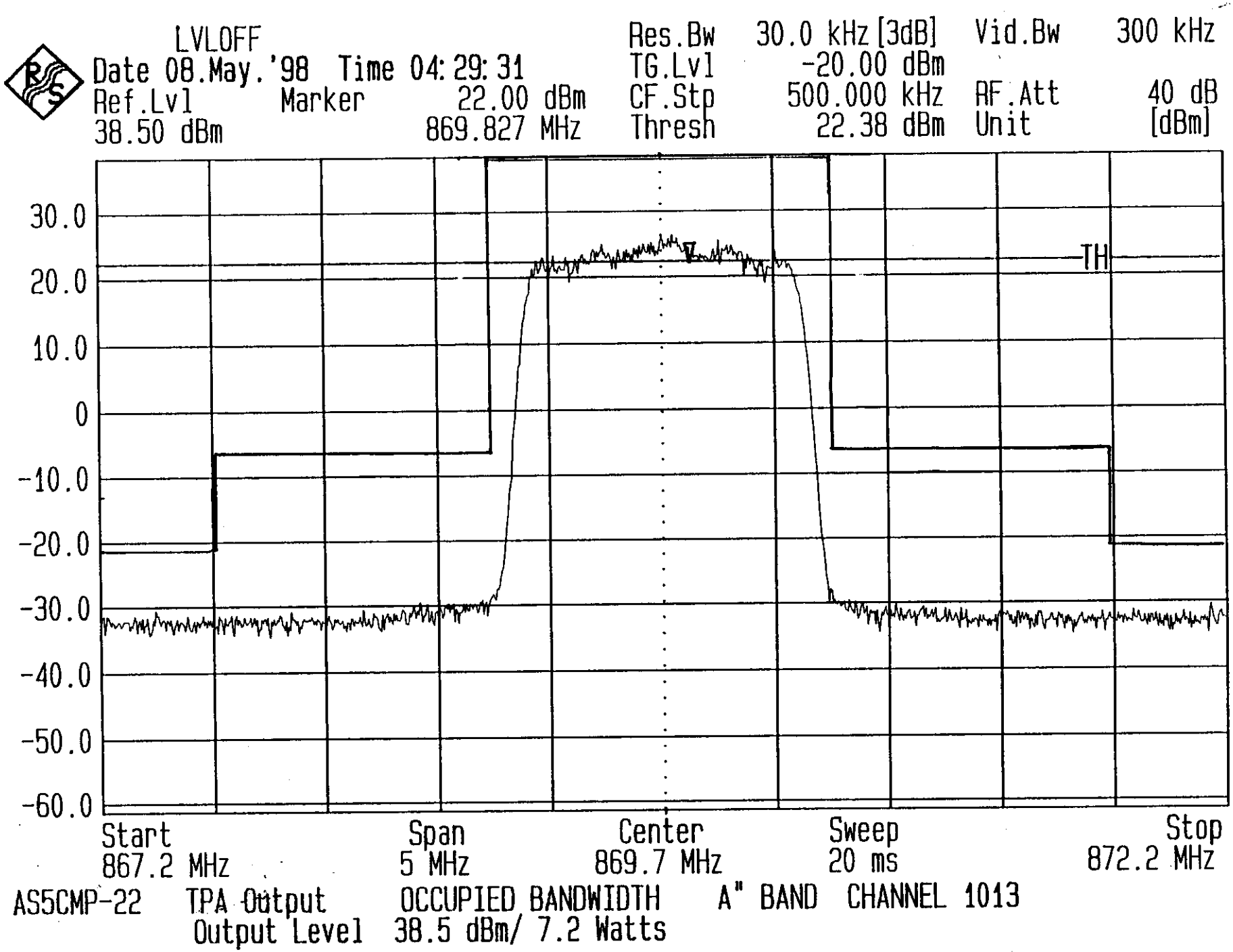
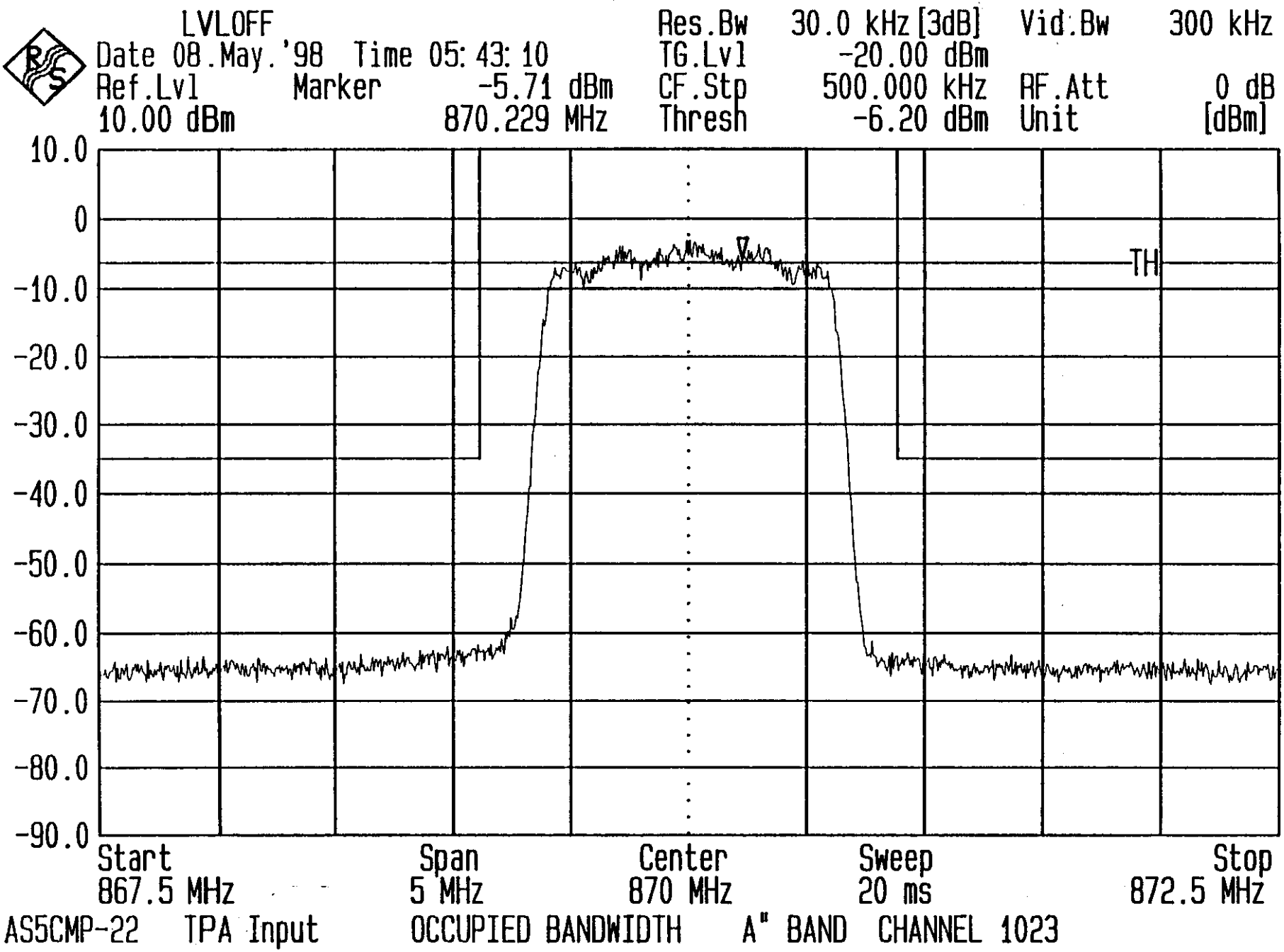
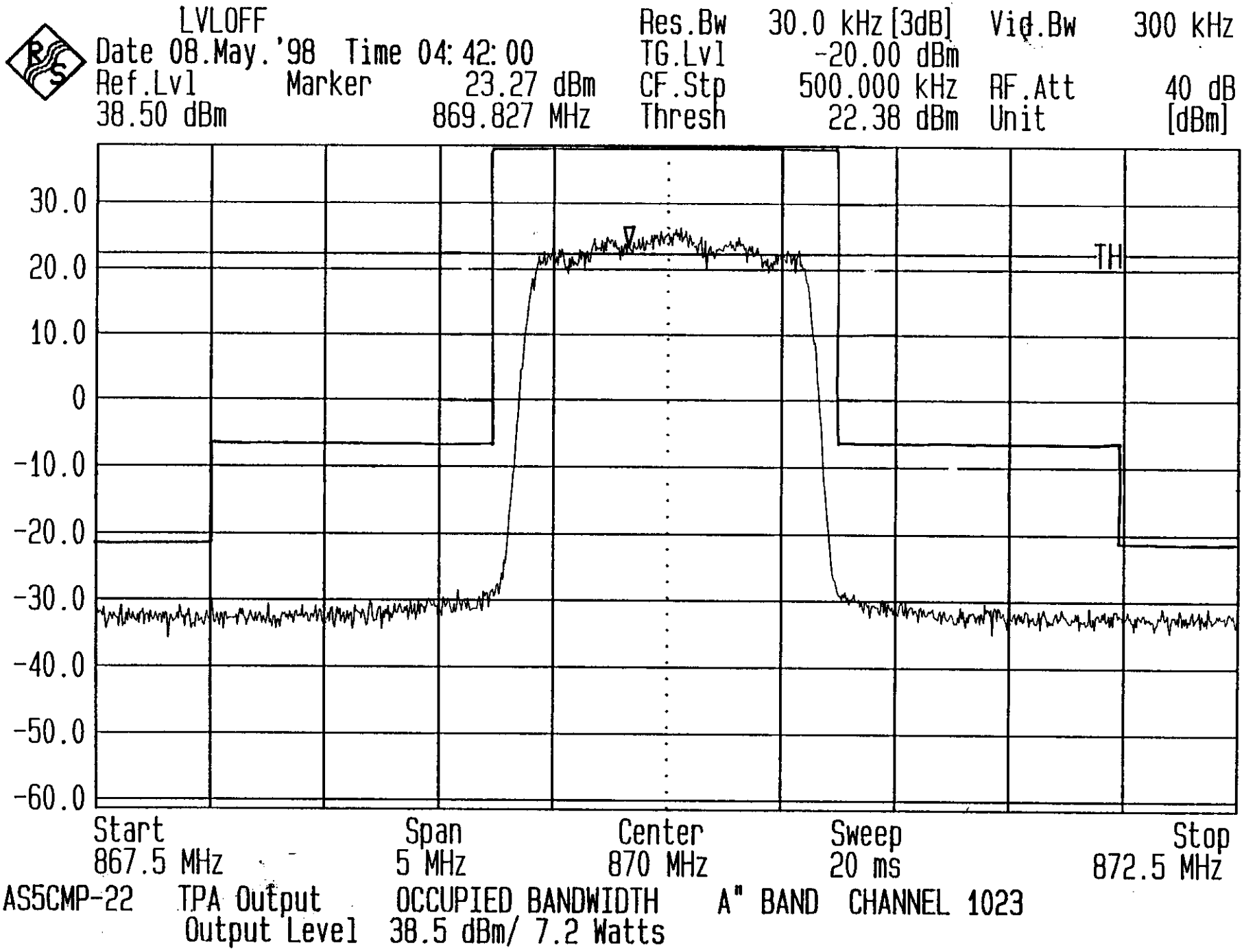
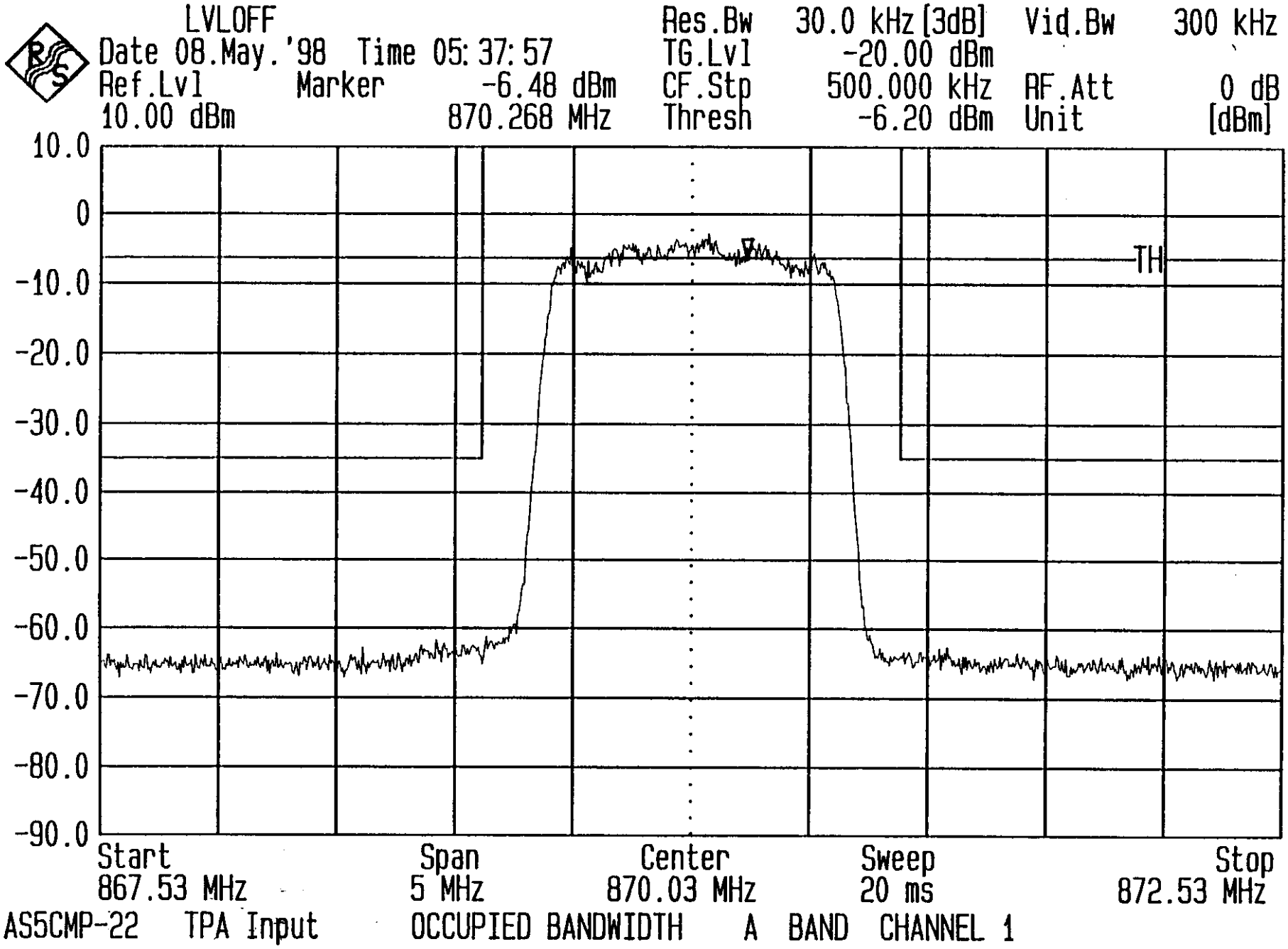
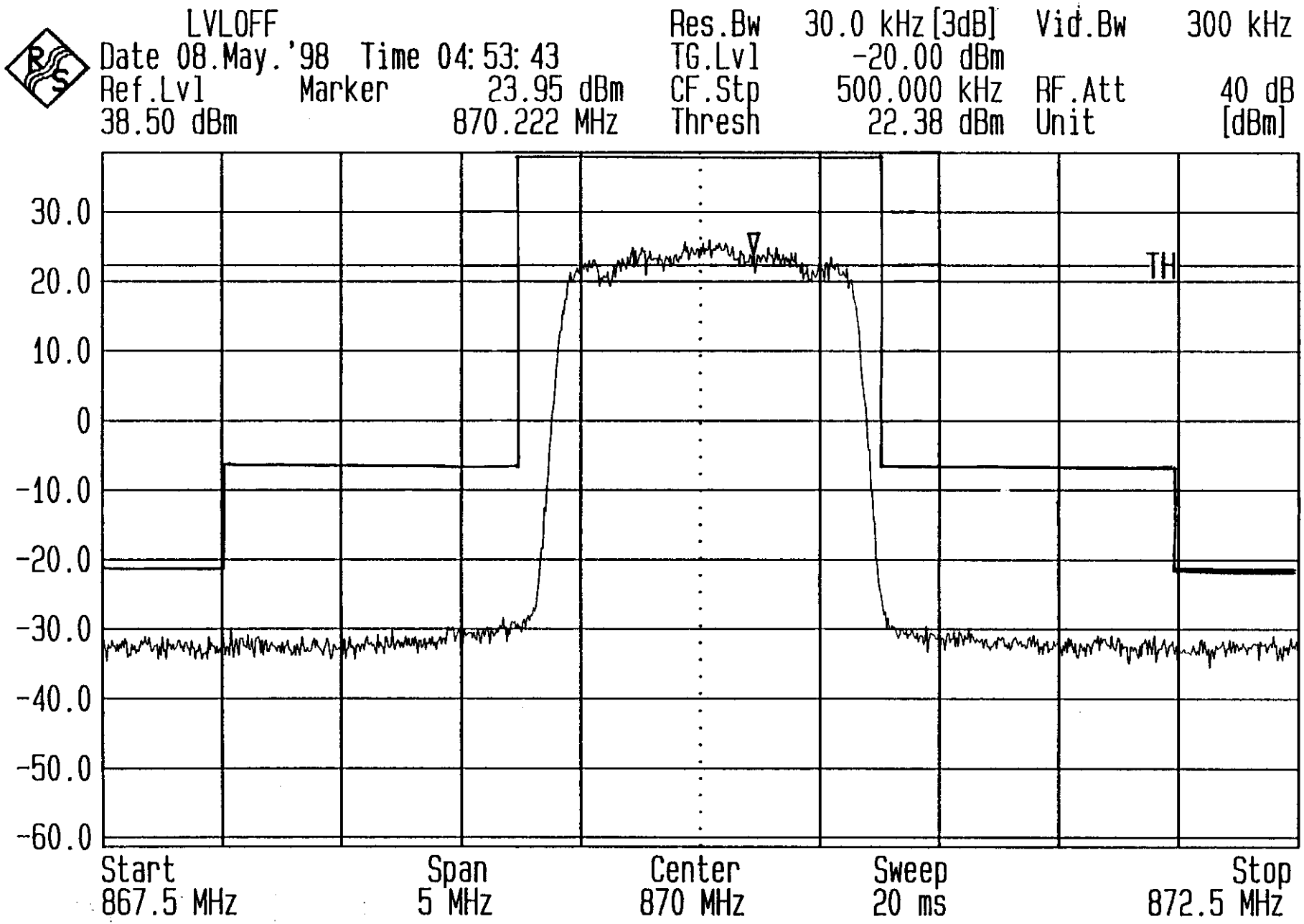
Date 08.May.'98 Time 05:46:32
Ref.Lvl
10.00 dBm
Marker
-6.70 dBm
869.922 MHz
Res.Bw 30.0 kHz [3dB]
TG.Lvl -20.00 dBm
CF.Stp 500.000 kHz
Thresh -6.20 dBm
Vid.Bw 300 kHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start
867.2 MHz
Span
5 MHz
Center
869.7 MHz
Sweep
20 ms
Stop
872.2 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH A" BAND CHANNEL 1013

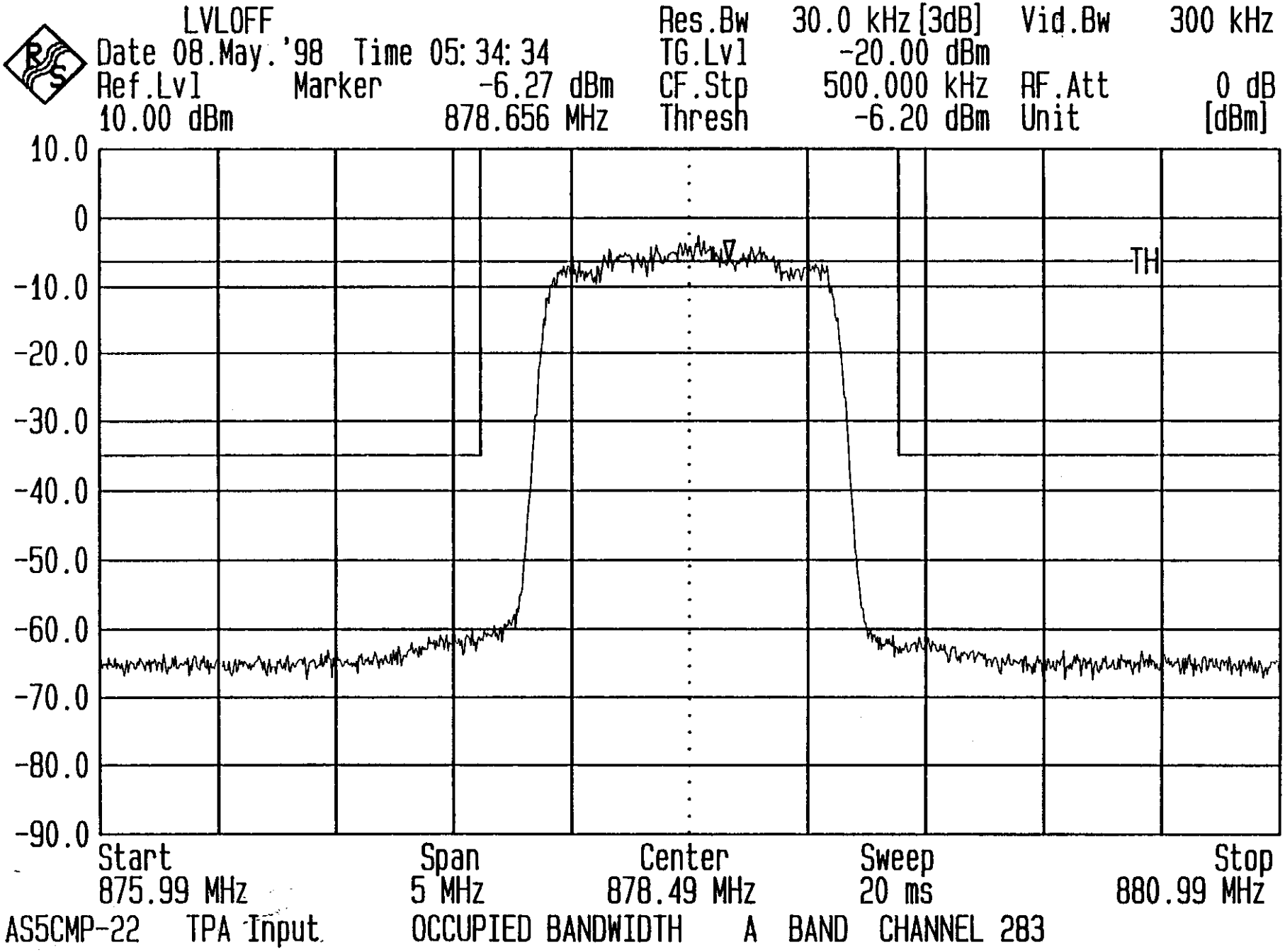

LVLOFF
Date 08.May.'98 Time 04:29:31
Ref.Lvl
38.50 dBm
Marker
22.00 dBm
869.827 MHz
Res.Bw 30.0 kHz [3dB]
TG.Lvl -20.00 dBm
CF.Stp 500.000 kHz
Thresh 22.38 dBm
Vid.Bw 300 kHz
RF.Att 40 dB
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start
867.2 MHz
Span
5 MHz
Center
869.7 MHz
Sweep
20 ms
Stop
872.2 MHz
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH A" BAND CHANNEL 1013
Output Level 38.5 dBm/ 7.2 Watts

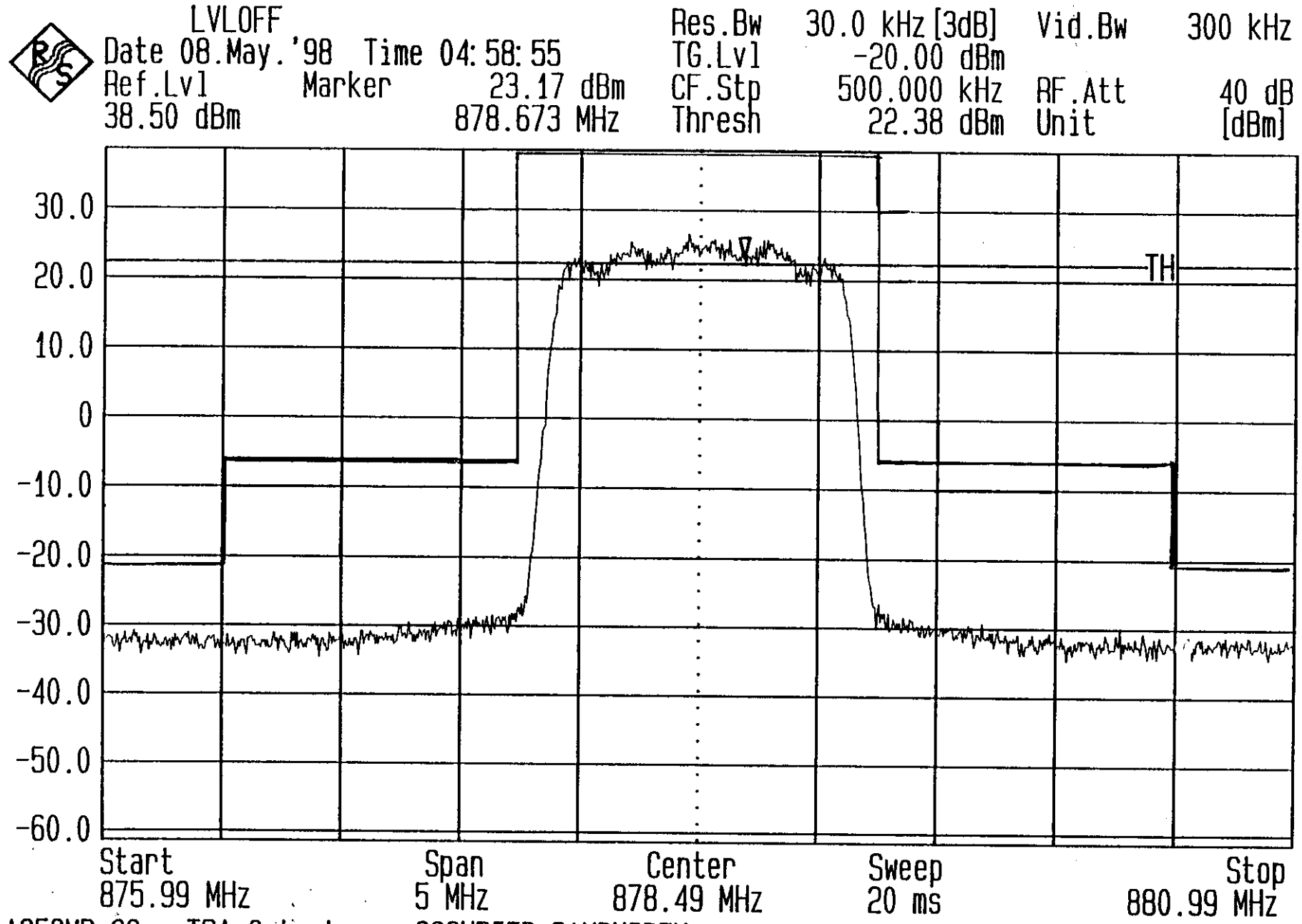

LVLOFF
Res.Bw 30.0 kHz [3dB]
Vid.Bw 300 kHz
Date 08.May.'98 Time 05:43:10
TG.Lvl -20.00 dBm
Ref.Lvl Marker -5.71 dBm
CF.Stp 500.000 kHz
RF.Att 0 dB
10.00 dBm 870.229 MHz
Thresh -6.20 dBm
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start 867.5 MHz
Span 5 MHz
Center 870 MHz
Sweep 20 ms
Stop 872.5 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH
A" BAND CHANNEL 1023


LVLOFF
Res.Bw 30.0 kHz [3dB] Vid.Bw 300 kHz
Date 08.May.'98 Time 04:42:00
TG.Lvl -20.00 dBm
Ref.Lvl Marker 23.27 dBm CF.Stp 500.000 kHz RF.Att 40 dB
38.50 dBm 869.827 MHz Thresh 22.38 dBm Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start 867.5 MHz
Span 5 MHz
Center 870 MHz
Sweep 20 ms
Stop 872.5 MHz
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH A" BAND CHANNEL 1023
Output Level 38.5 dBm/ 7.2 Watts

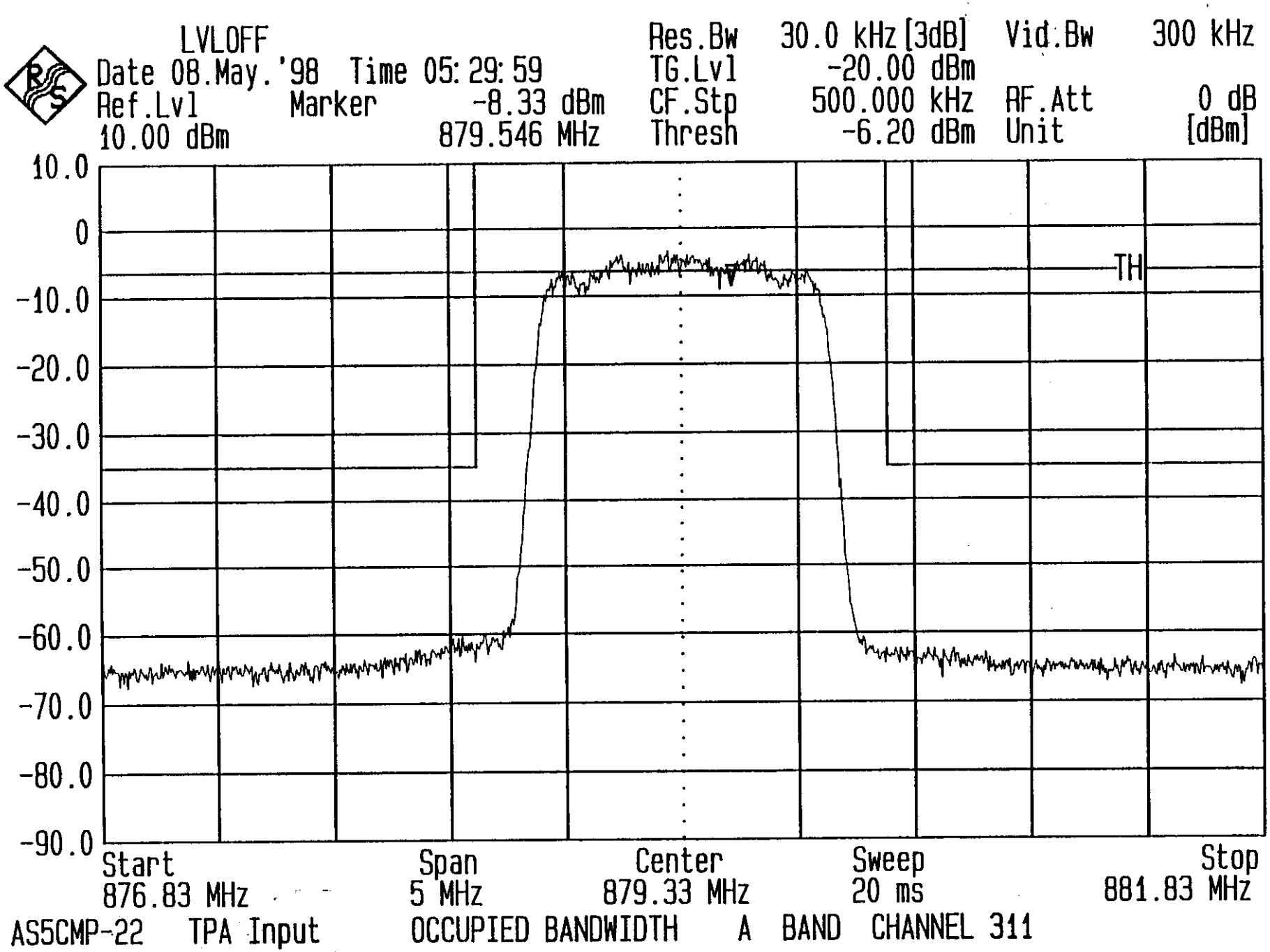

LVLOFF
Date 08.May.'98 Time 05:37:57
Ref.Lvl
10.00 dBm
Marker
-6.48 dBm
870.268 MHz
Res.Bw 30.0 kHz [3dB]
TG.Lvl -20.00 dBm
CF.Stp 500.000 kHz
Thresh -6.20 dBm
Vid.Bw 300 kHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start
867.53 MHz
Span
5 MHz
Center
870.03 MHz
Sweep
20 ms
Stop
872.53 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH A BAND CHANNEL 1

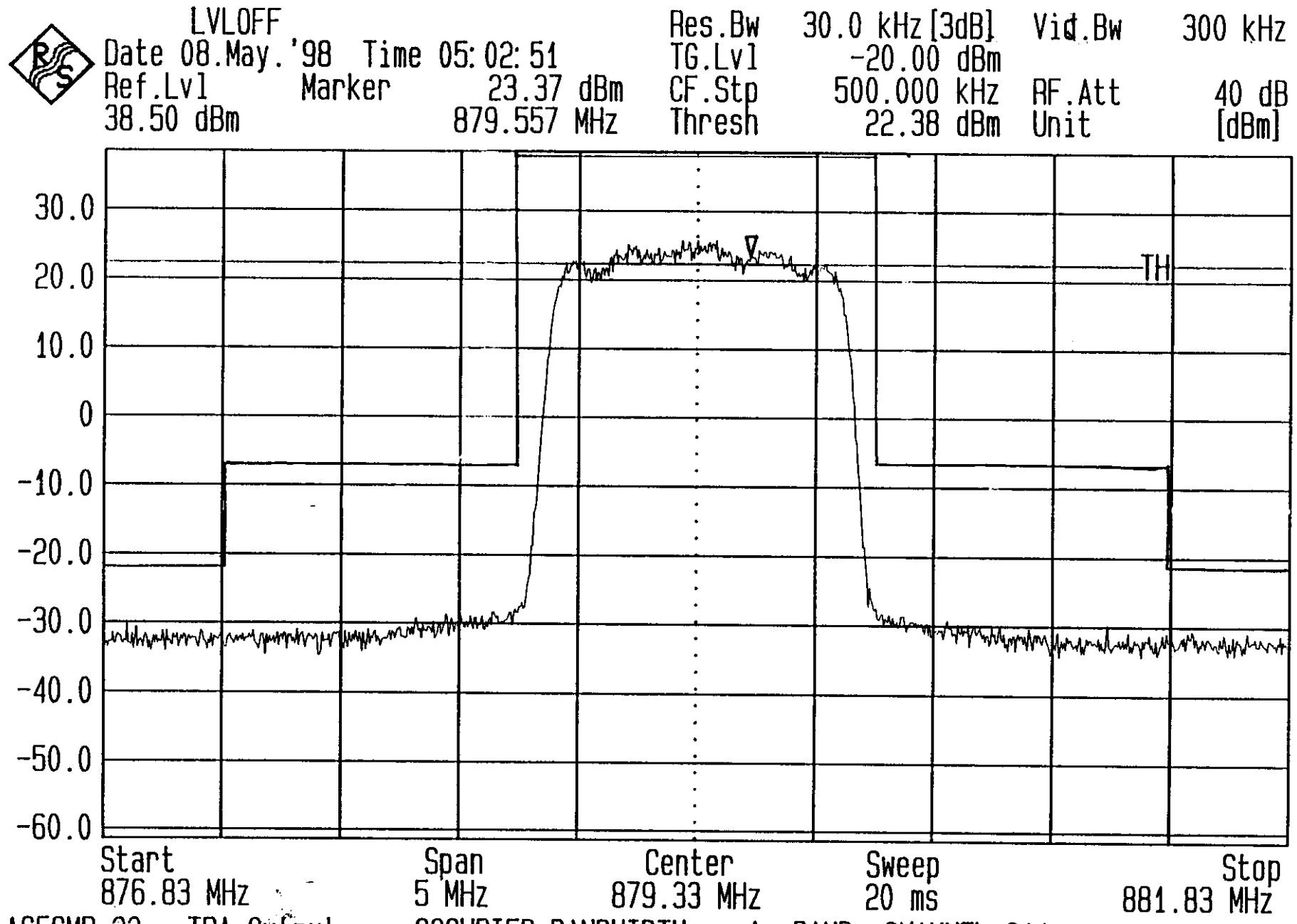

LVLOFF
Res.Bw 30.0 kHz [3dB]
Vid.Bw 300 kHz
Date 08.May.'98 Time 04:53:43
TG.Lvl -20.00 dBm
Ref.Lvl Marker 23.95 dBm
CF.Stp 500.000 kHz
RF.Att 40 dB
38.50 dBm 870.222 MHz
Thresh 22.38 dBm
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start 867.5 MHz
Span 5 MHz
Center 870 MHz
Sweep 20 ms
Stop 872.5 MHz
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH A BAND CHANNEL 1
Output Level 38.5 dBm/ 7.2 Watts


LVLOFF
Res.Bw 30.0 kHz [3dB] Vid.Bw 300 kHz
Date 08.May.'98 Time 05:34:34
TG.Lvl -20.00 dBm
Ref.Lvl Marker -6.27 dBm
CF.Stp 500.000 kHz RF.Att 0 dB
10.00 dBm 878.656 MHz
Thresh -6.20 dBm Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start 875.99 MHz
Span 5 MHz
Center 878.49 MHz
Sweep 20 ms
Stop 880.99 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH A BAND CHANNEL 283



AS5CMP-22 TPA Output OCCUPIED BANDWIDTH A BAND CHANNEL 283
Output Level 38.5 dBm/ 7.2 Watts


LVLOFF
Date 08.May.'98 Time 05:29:59
Ref.Lvl
10.00 dBm
Marker
-8.33 dBm
879.546 MHz
Res.Bw 30.0 kHz [3dB]
TG.Lvl -20.00 dBm
CF.Stp 500.000 kHz
Thresh -6.20 dBm
Vid.Bw 300 kHz
RF.Att 0 dB
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start
876.83 MHz
Span
5 MHz
Center
879.33 MHz
Sweep
20 ms
Stop
881.83 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH A BAND CHANNEL 311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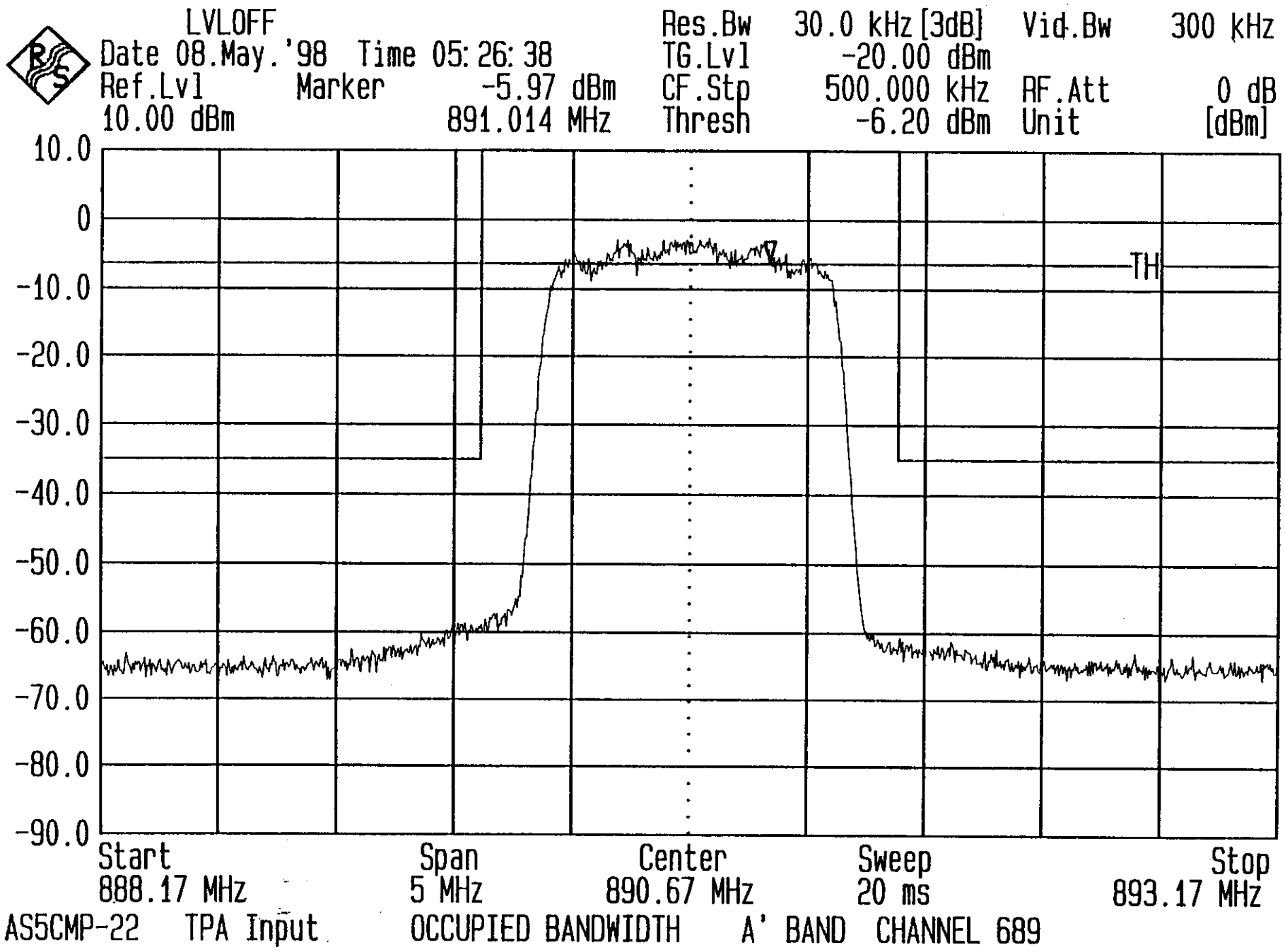
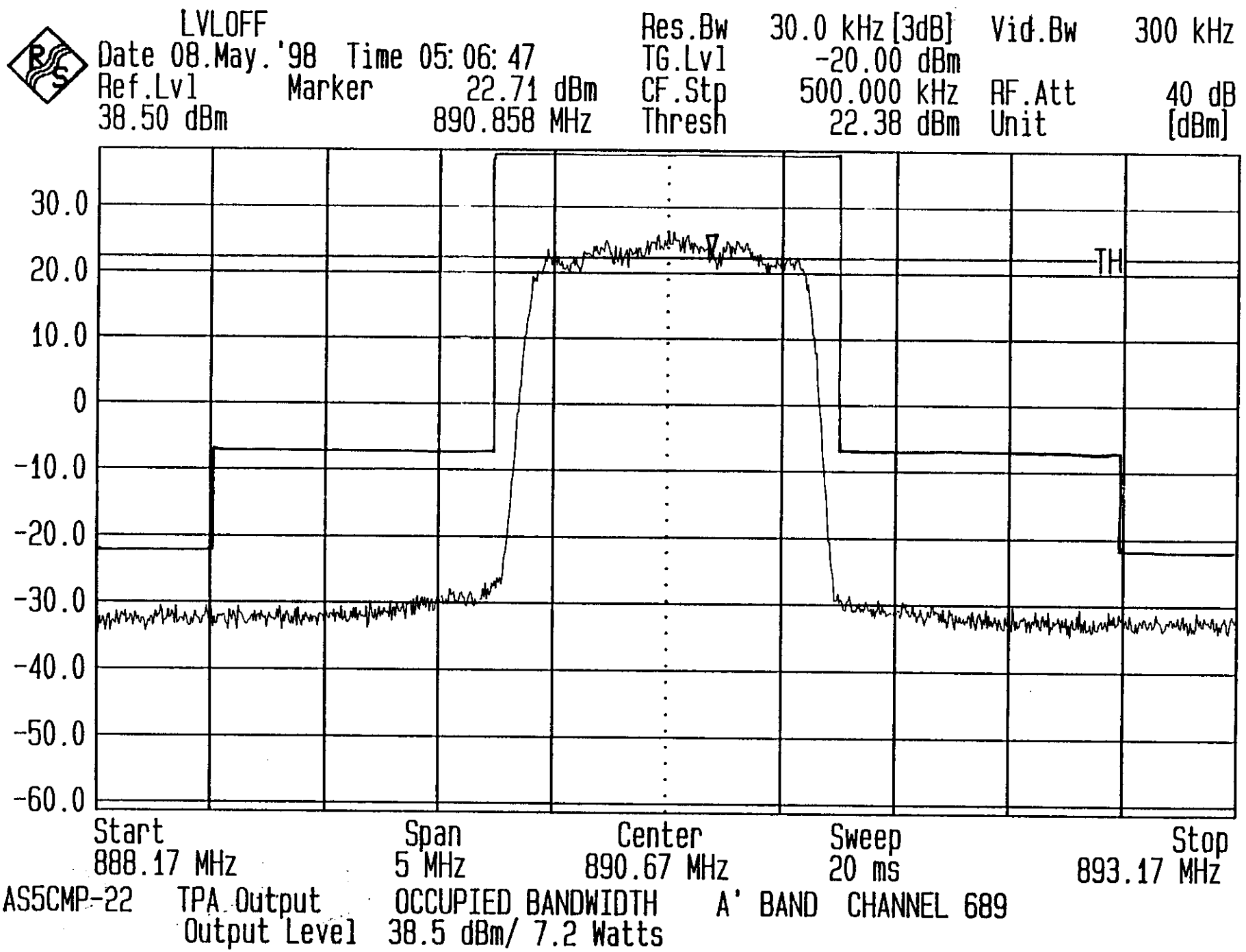
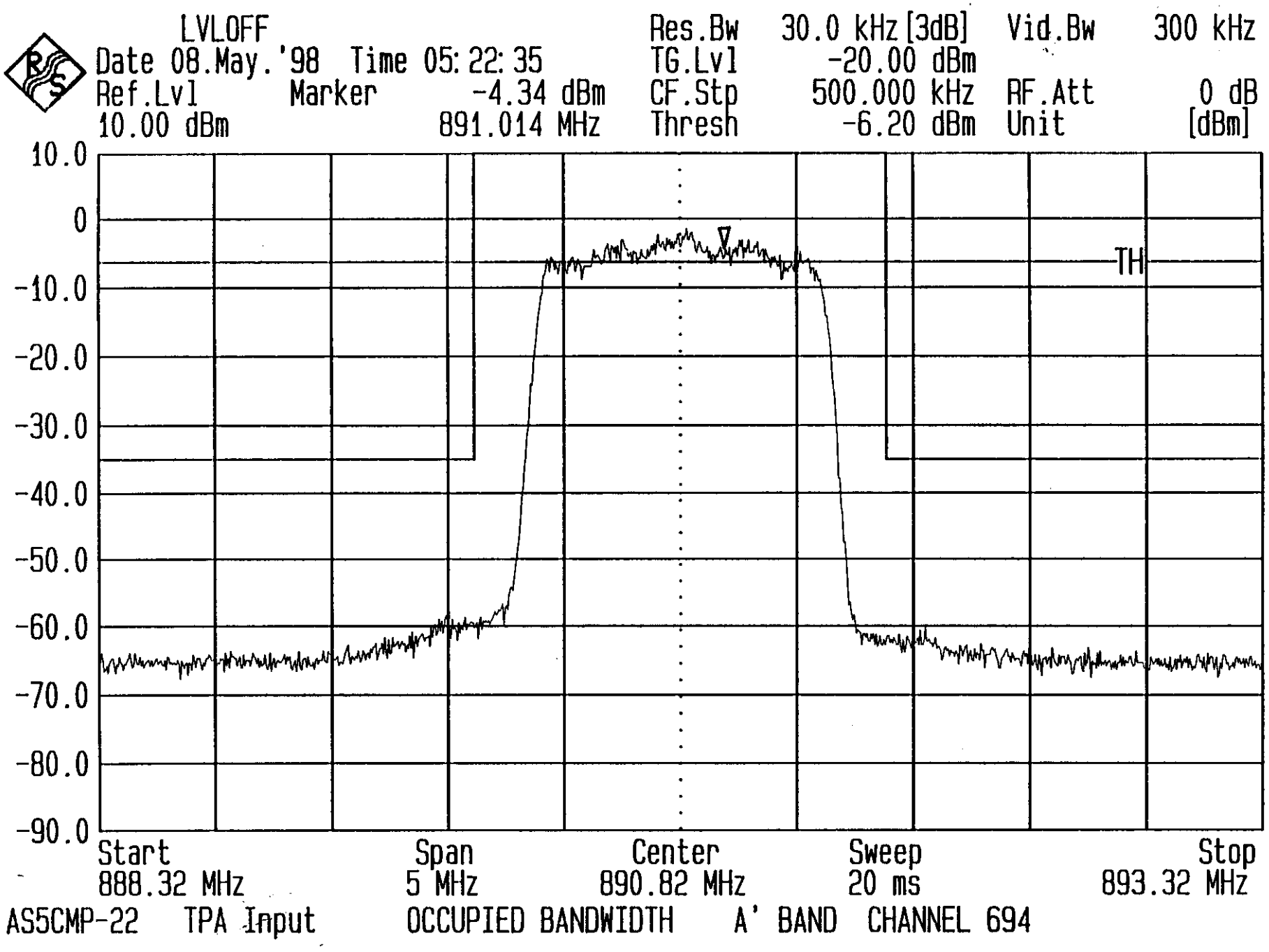
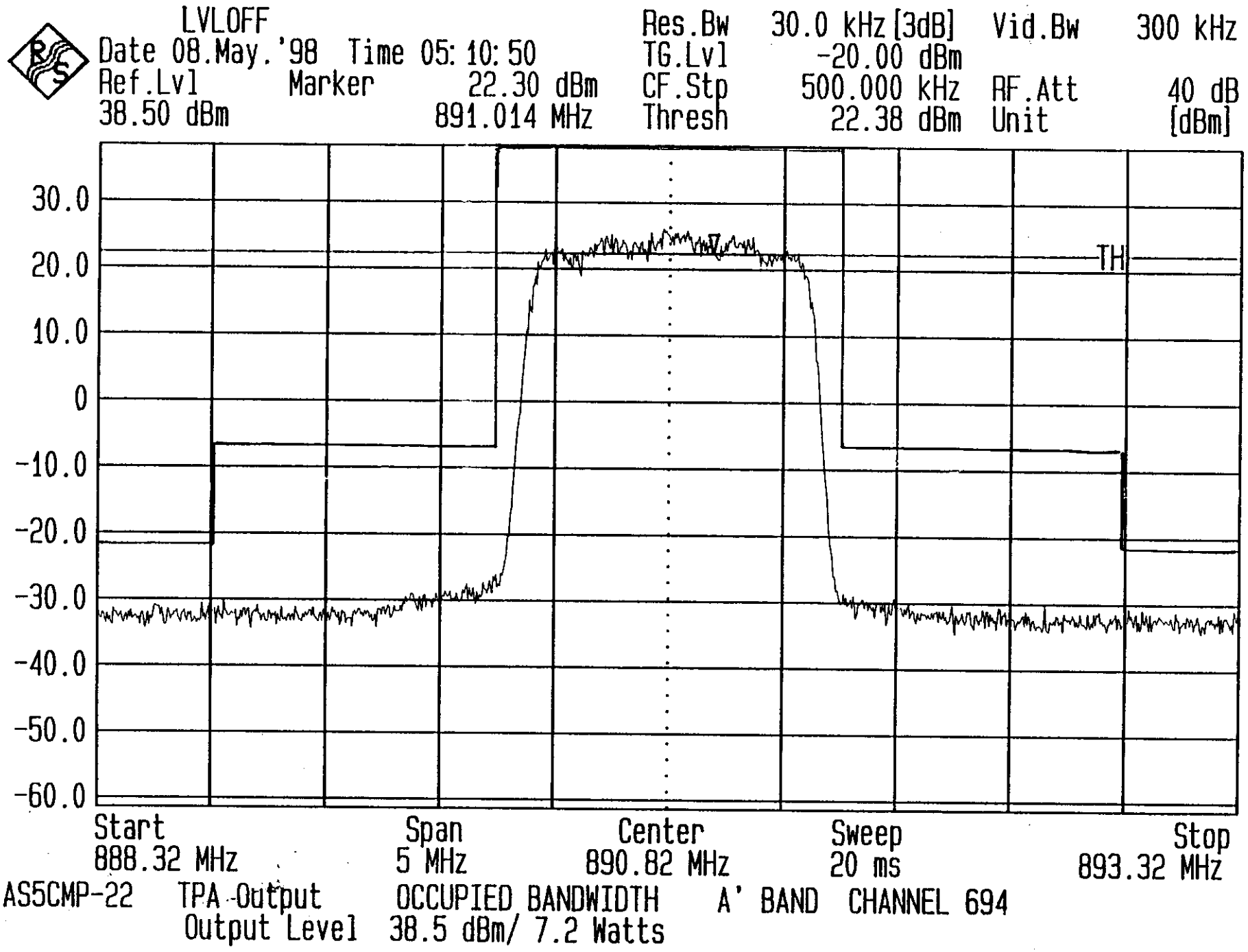
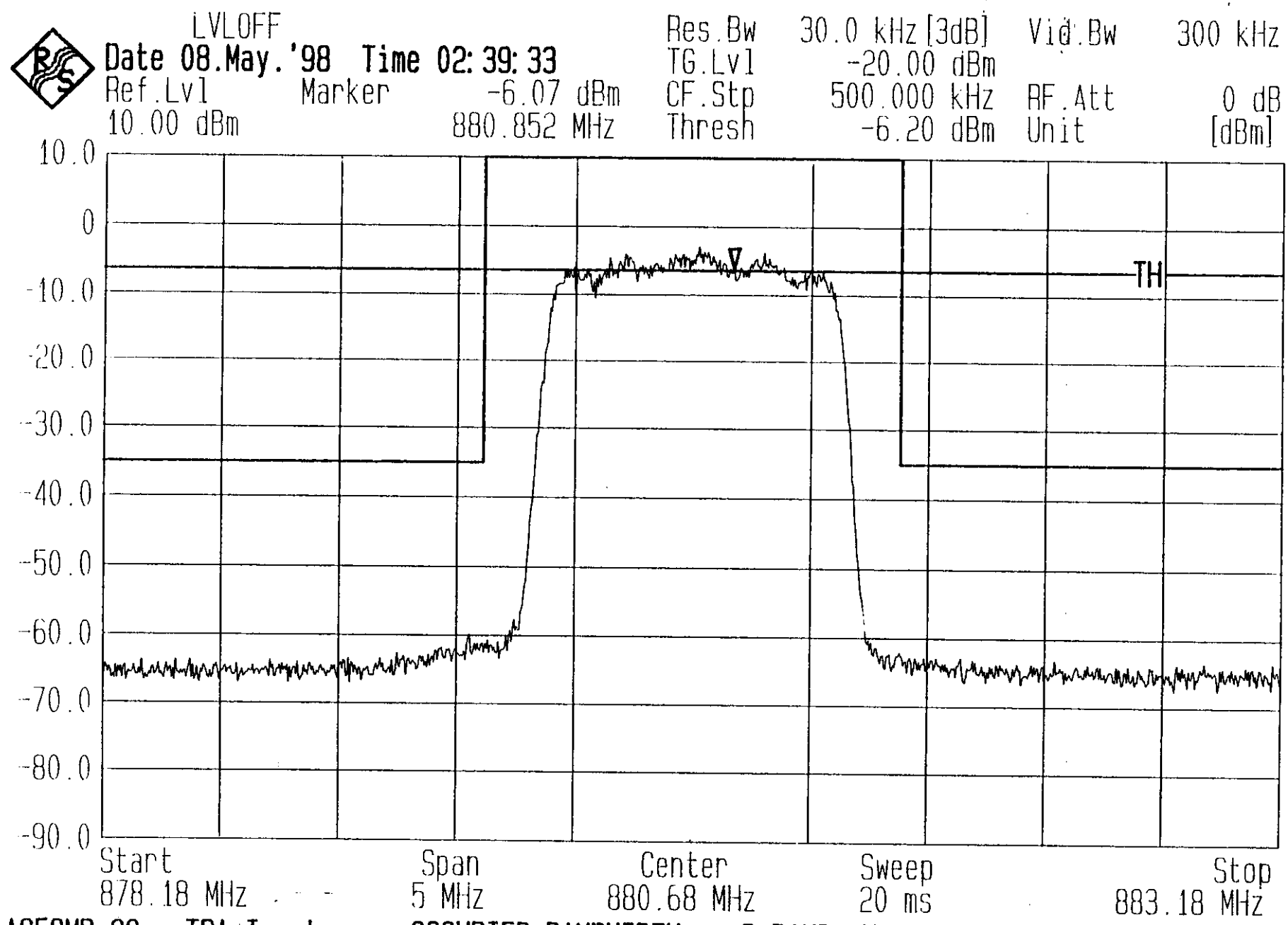
Res.Bw 30.0 kHz [3dB]
Vid.Bw 300 kHz
Date 08.May.'98 Time 05:02:51
TG.Lvl -20.00 dBm
Ref.Lvl Marker 23.37 dBm
CF.Stp 500.000 kHz
RF.Att 40 dB
38.50 dBm 879.557 MHz
Thresh 22.38 dBm
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start 876.83 MHz
Span 5 MHz
Center 879.33 MHz
Sweep 20 ms
Stop 881.83 MHz
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH A BAND CHANNEL 311
Output Level 38.5 dBm/ 7.2 Watts


LVLOFF
Res.Bw 30.0 kHz [3dB] Vid.Bw 300 kHz
Date 08.May.'98 Time 05:26:38
TG.Lvl -20.00 dBm
Ref.Lvl Marker -5.97 dBm
CF.Stp 500.000 kHz RF.Att 0 dB
10.00 dBm 891.014 MHz
Thresh -6.20 dBm Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start
888.17 MHz
Span
5 MHz
Center
890.67 MHz
Sweep
20 ms
Stop
893.17 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH A' BAND CHANNEL 689

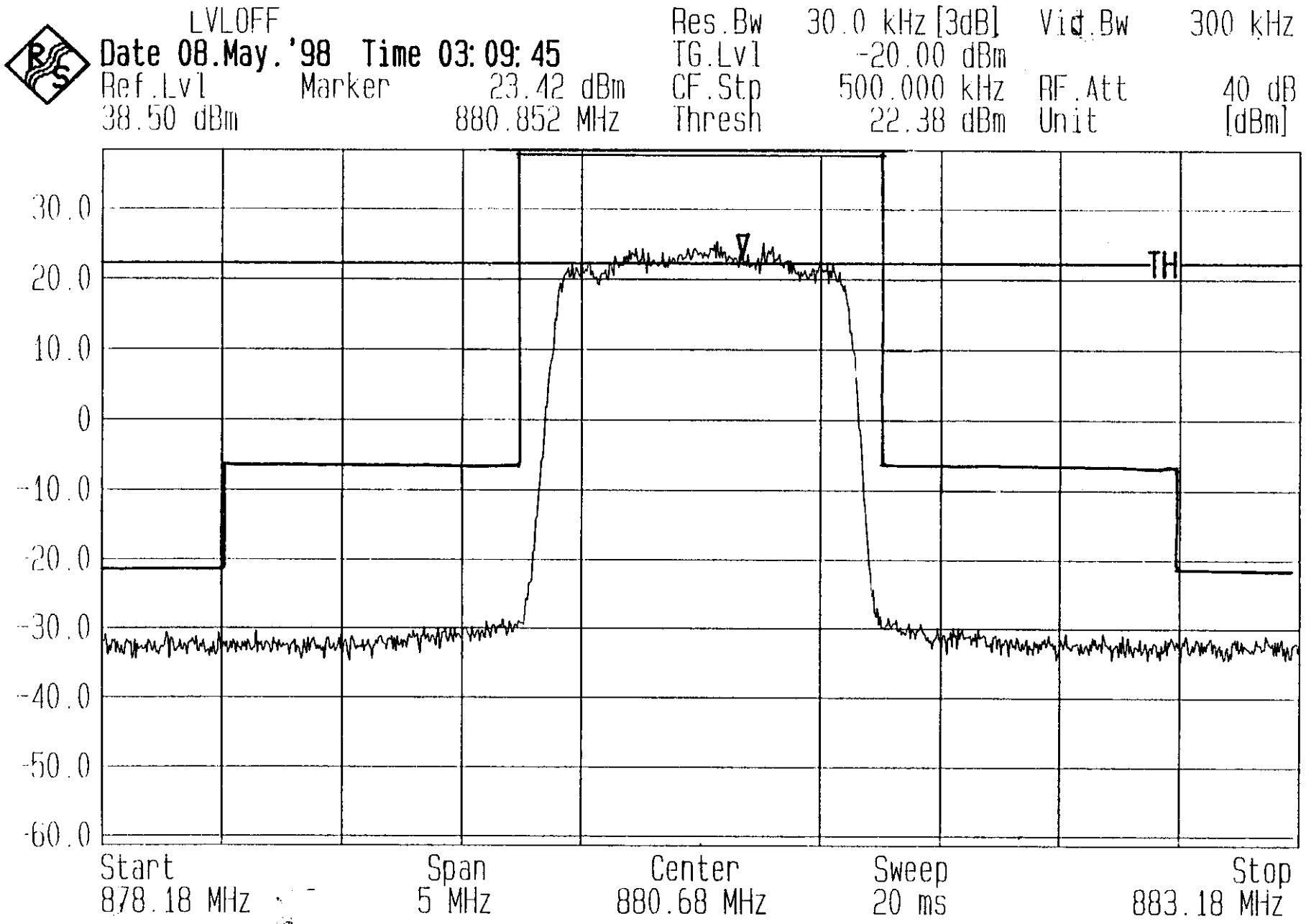

LVLOFF
Date 08.May.'98 Time 05:06:47
Ref.Lvl
38.50 dBm
Marker
22.71 dBm
890.858 MHz
Res.Bw 30.0 kHz [3dB]
TG.Lvl -20.00 dBm
CF.Stp 500.000 kHz
Thresh 22.38 dBm
Vid.Bw 300 kHz
RF.Att 40 dB
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start
888.17 MHz
Span
5 MHz
Center
890.67 MHz
Sweep
20 ms
Stop
893.17 MHz
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH A' BAND CHANNEL 689
Output Level 38.5 dBm/ 7.2 Watts


LVLOFF
Res.Bw 30.0 kHz [3dB]
Vid.Bw 300 kHz
Date 08.May.'98 Time 05:22:35
TG.Lvl -20.00 dBm
Ref.Lvl Marker -4.34 dBm
CF.Stp 500.000 kHz
RF.Att 0 dB
10.00 dBm 891.014 MHz
Thresh -6.20 dBm
Unit [dBm]
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
TH
Start
888.32 MHz
Span
5 MHz
Center
890.82 MHz
Sweep
20 ms
Stop
893.32 MHz
AS5CMP-22 TPA Input
OCCUPIED BANDWIDTH A' BAND CHANNEL 694


LVLOFF
Date 08.May.'98 Time 05:10:50
Ref.Lvl
38.50 dBm
Marker
22.30 dBm
891.014 MHz
Res.Bw 30.0 kHz [3dB]
TG.Lvl -20.00 dBm
CF.Stp 500.000 kHz
Thresh 22.38 dBm
Vid.Bw 300 kHz
RF.Att 40 dB
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start 888.32 MHz
Span 5 MHz
Center 890.82 MHz
Sweep 20 ms
Stop 893.32 MHz
AS5CMP-22 TPA-Output OCCUPIED BANDWIDTH A' BAND CHANNEL 694
Output Level 38.5 dBm/ 7.2 Watts

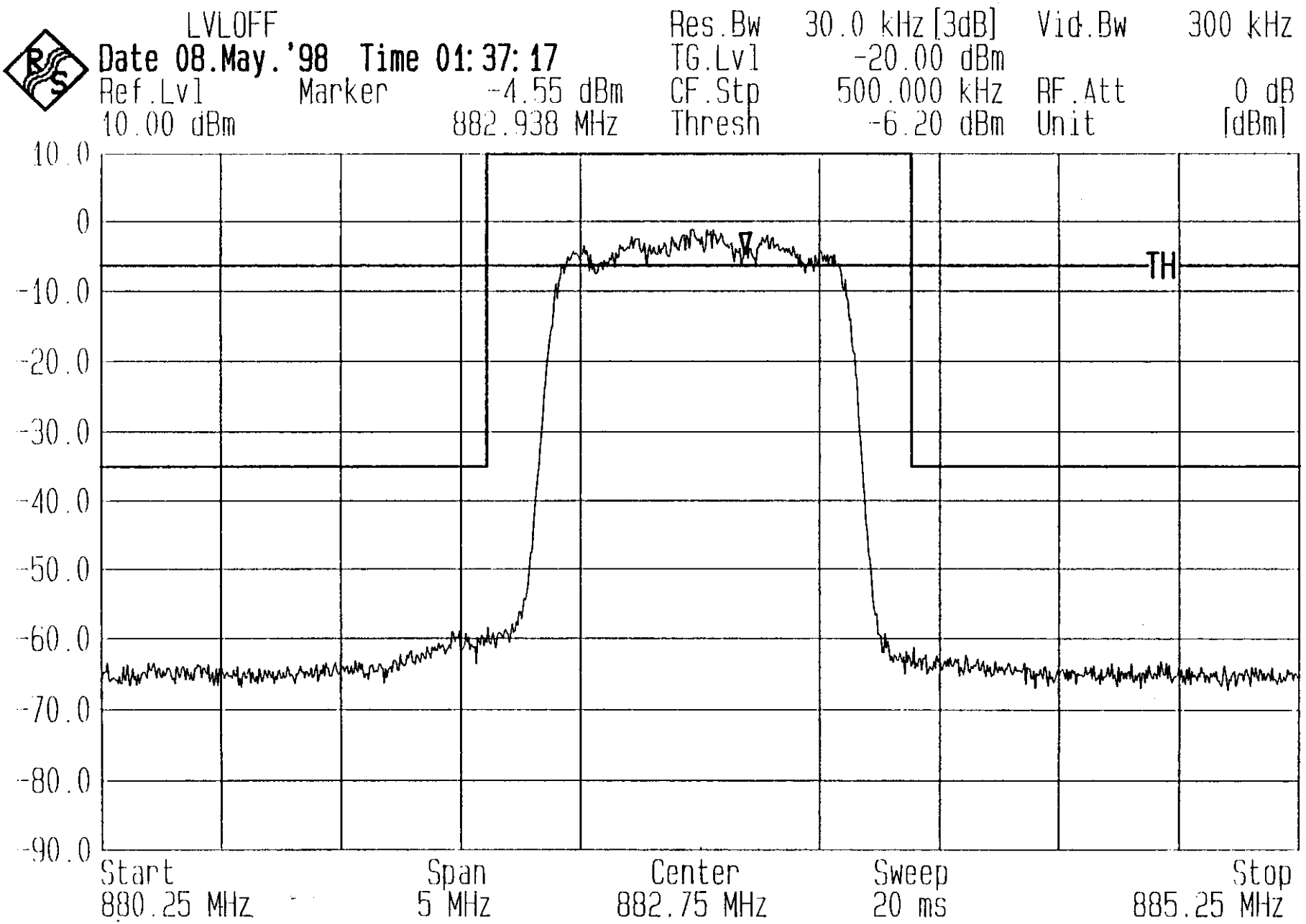


AS5CMP-22 TPA Input OCCUPIED BANDWIDTH B BAND CHANNEL 356

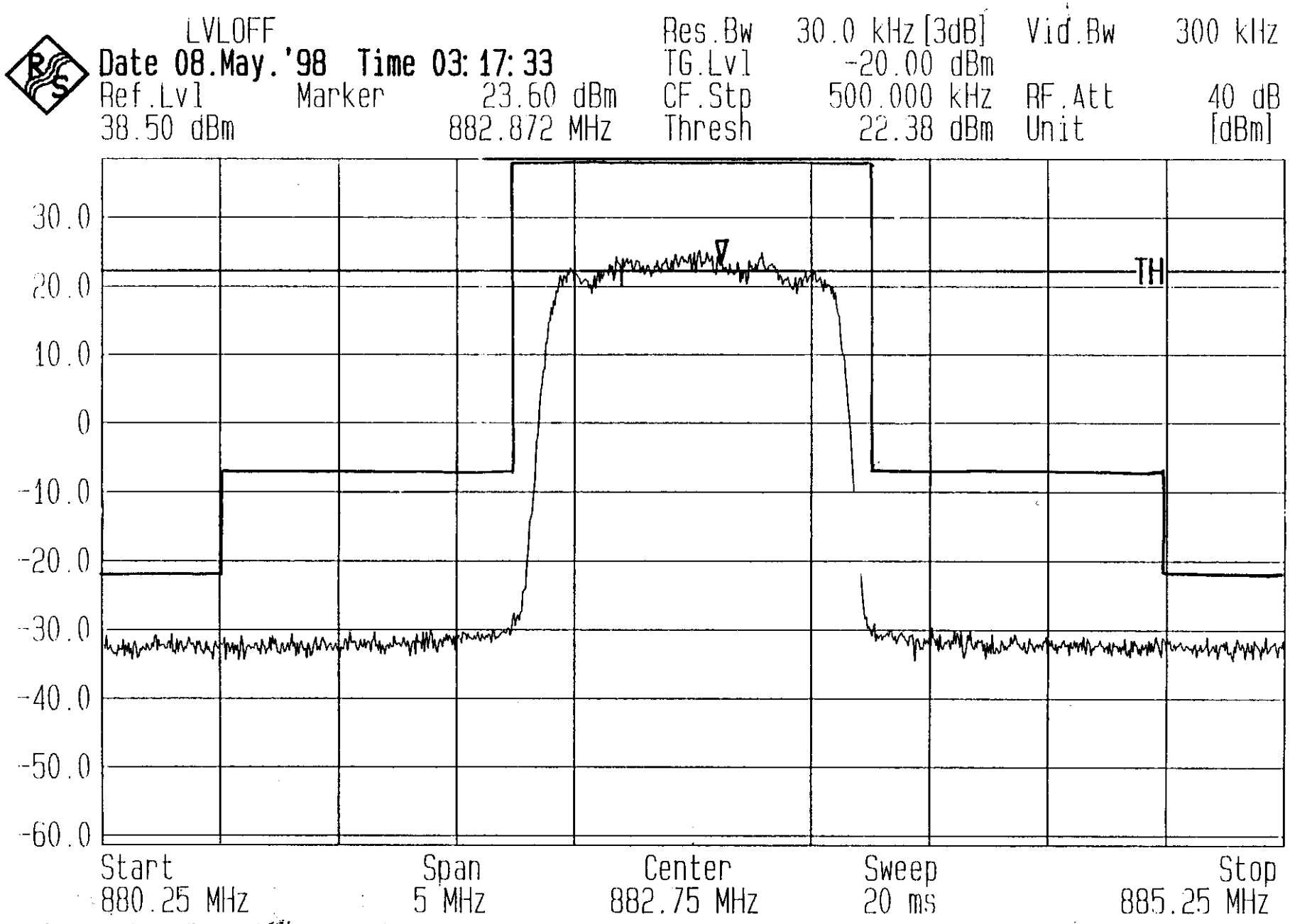


AS5CMP-22 TPA Output OCCUPIED BANDWIDTH B BAND CHANNEL 356

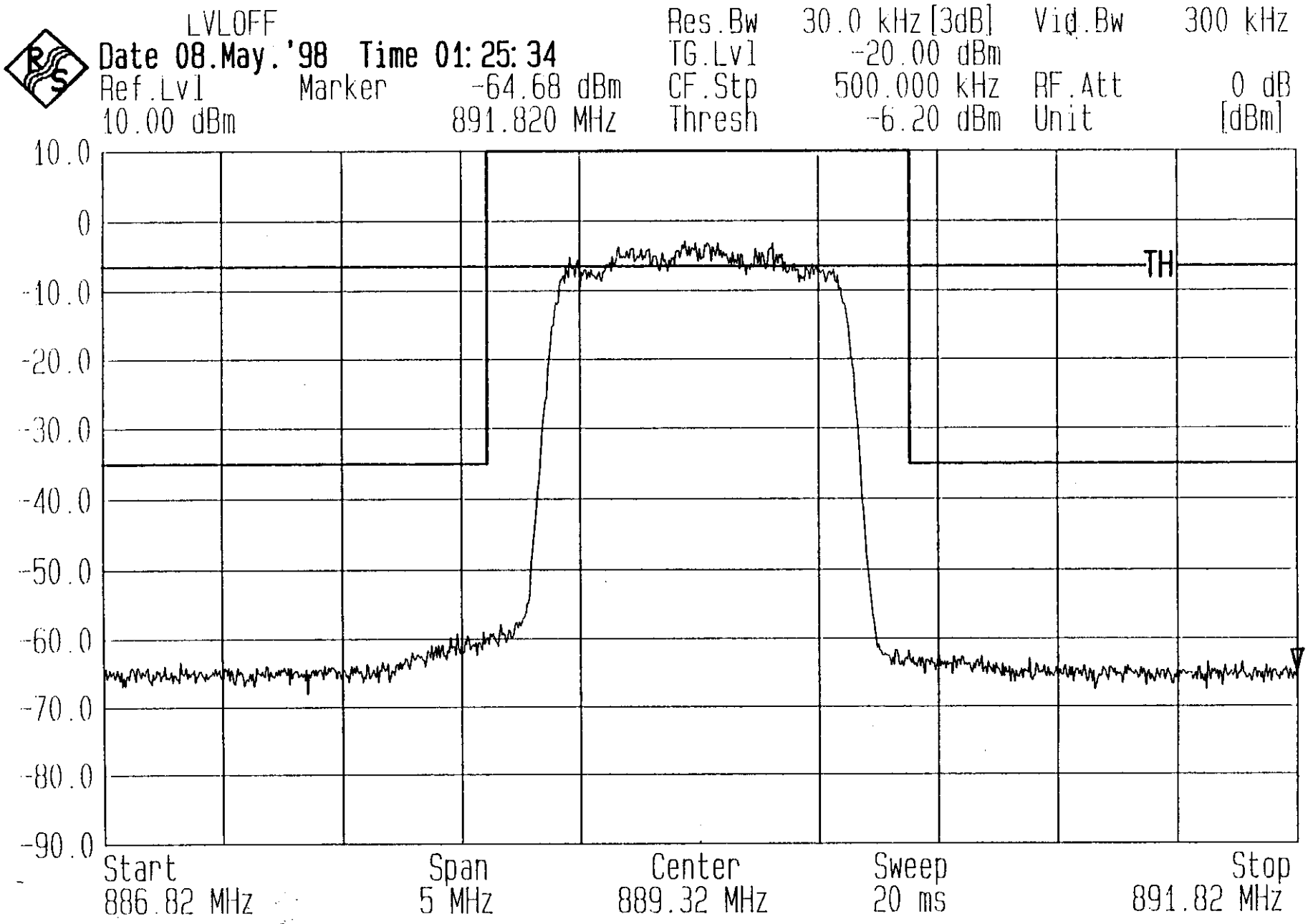
Output Level 38.5 dBm/ 7.2 Watts



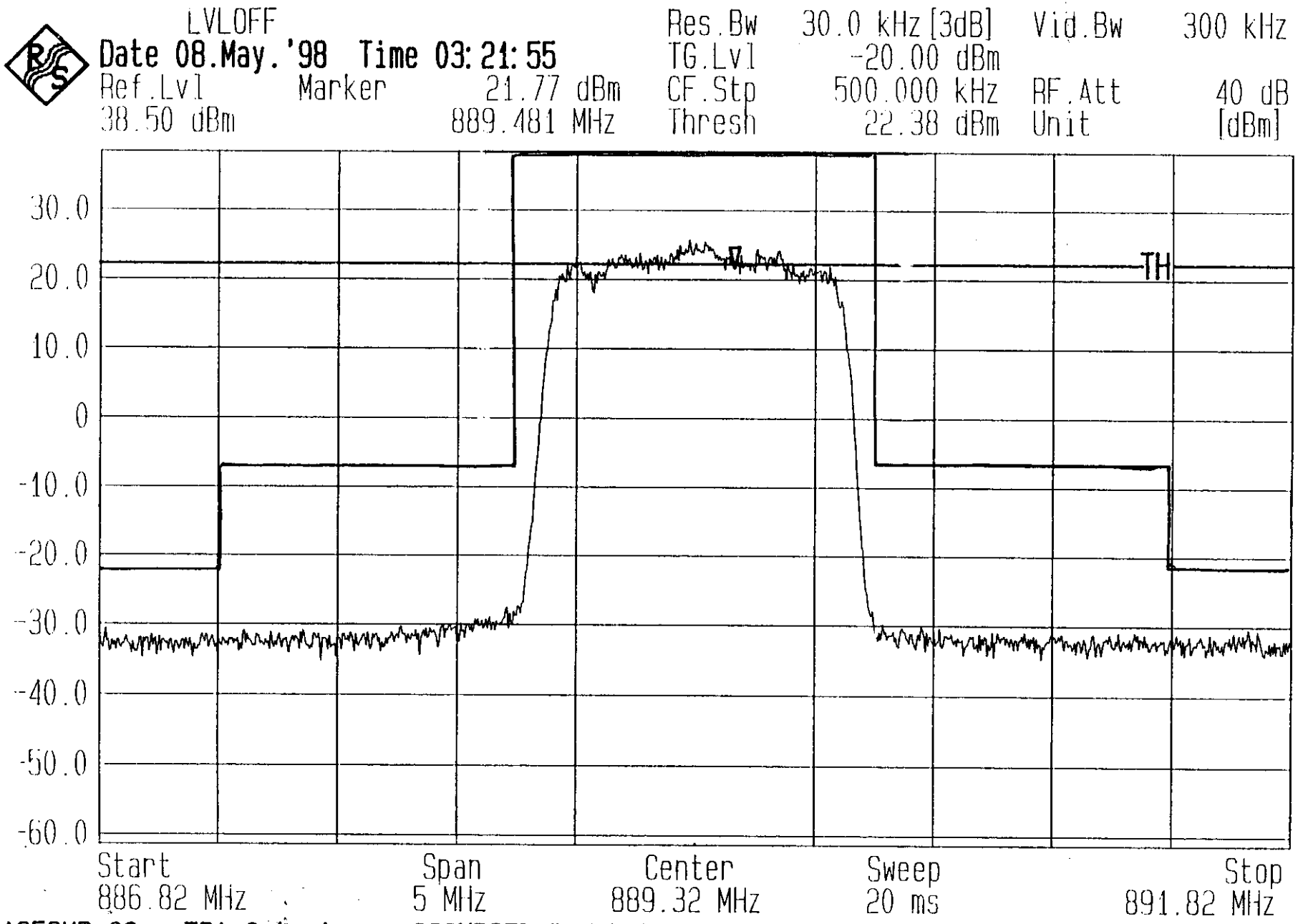
AS5CMP-22 TPA Input OCCUPIED BANDWIDTH B BAND CHANNEL 425



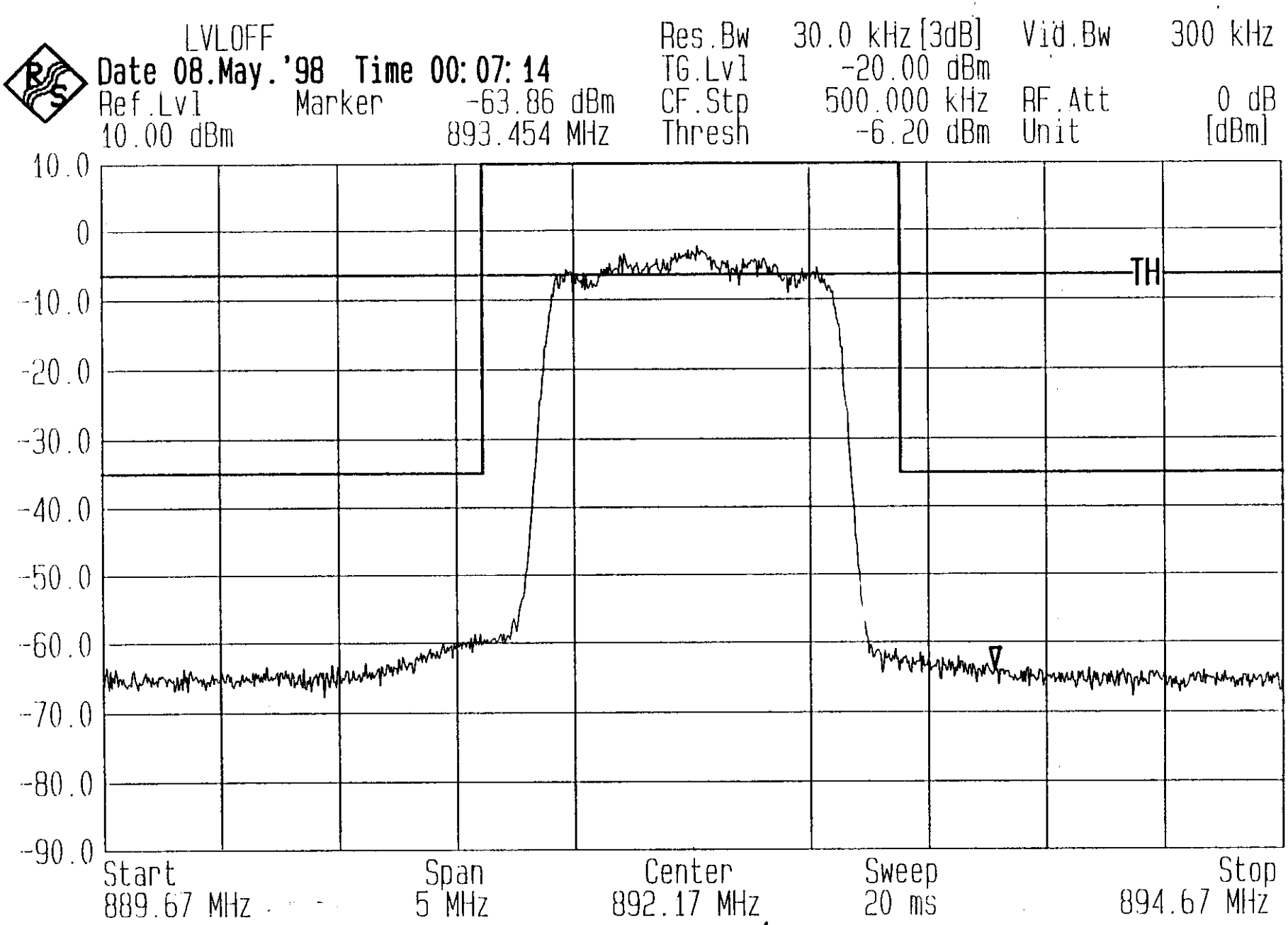
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH B BAND CHANNEL 425
Output Level 38.5 dBm/ 7.2 Watts



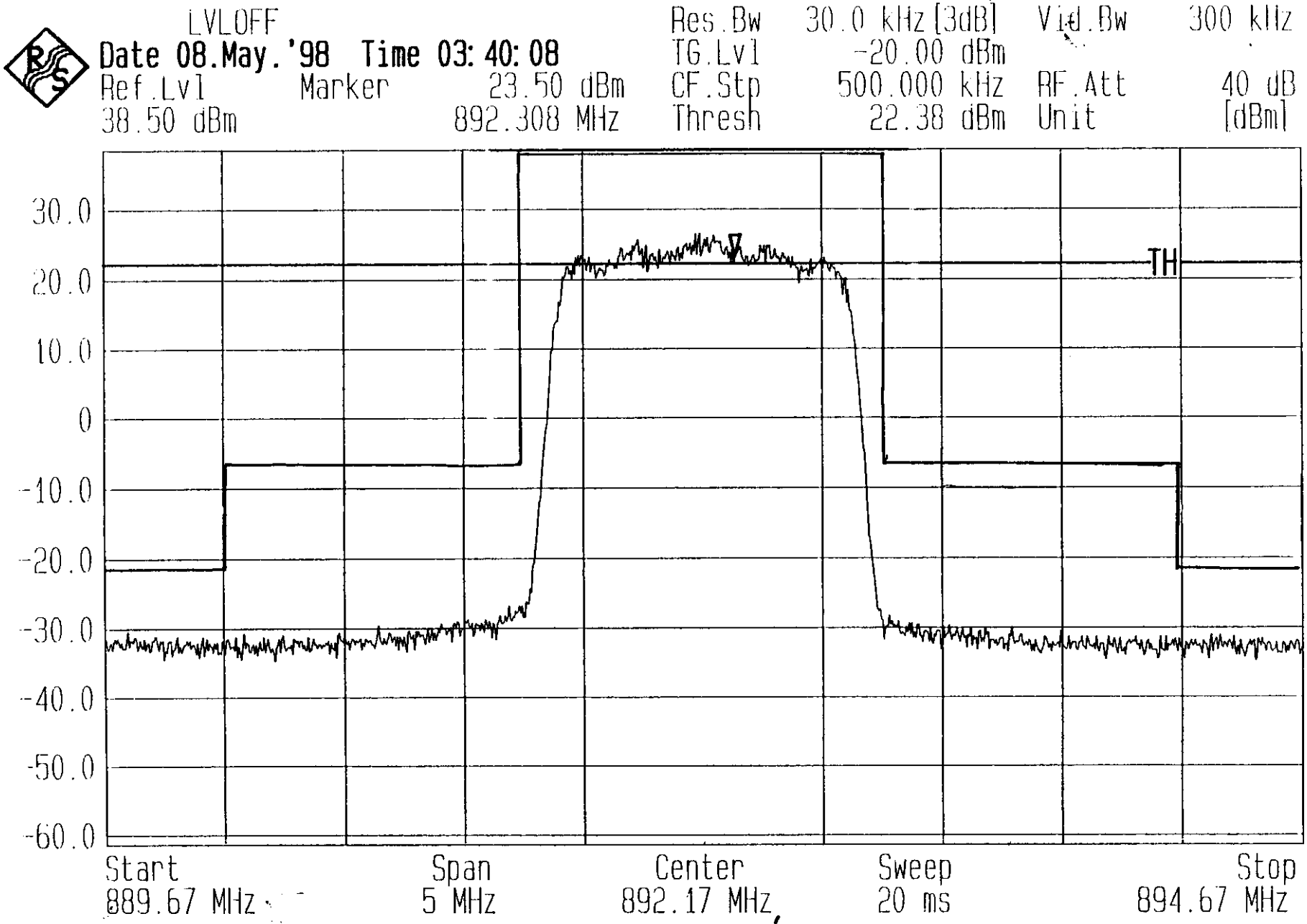
AS5CMP-22 TPA Input OCCUPIED BANDWIDTH B BAND CHANNEL 644



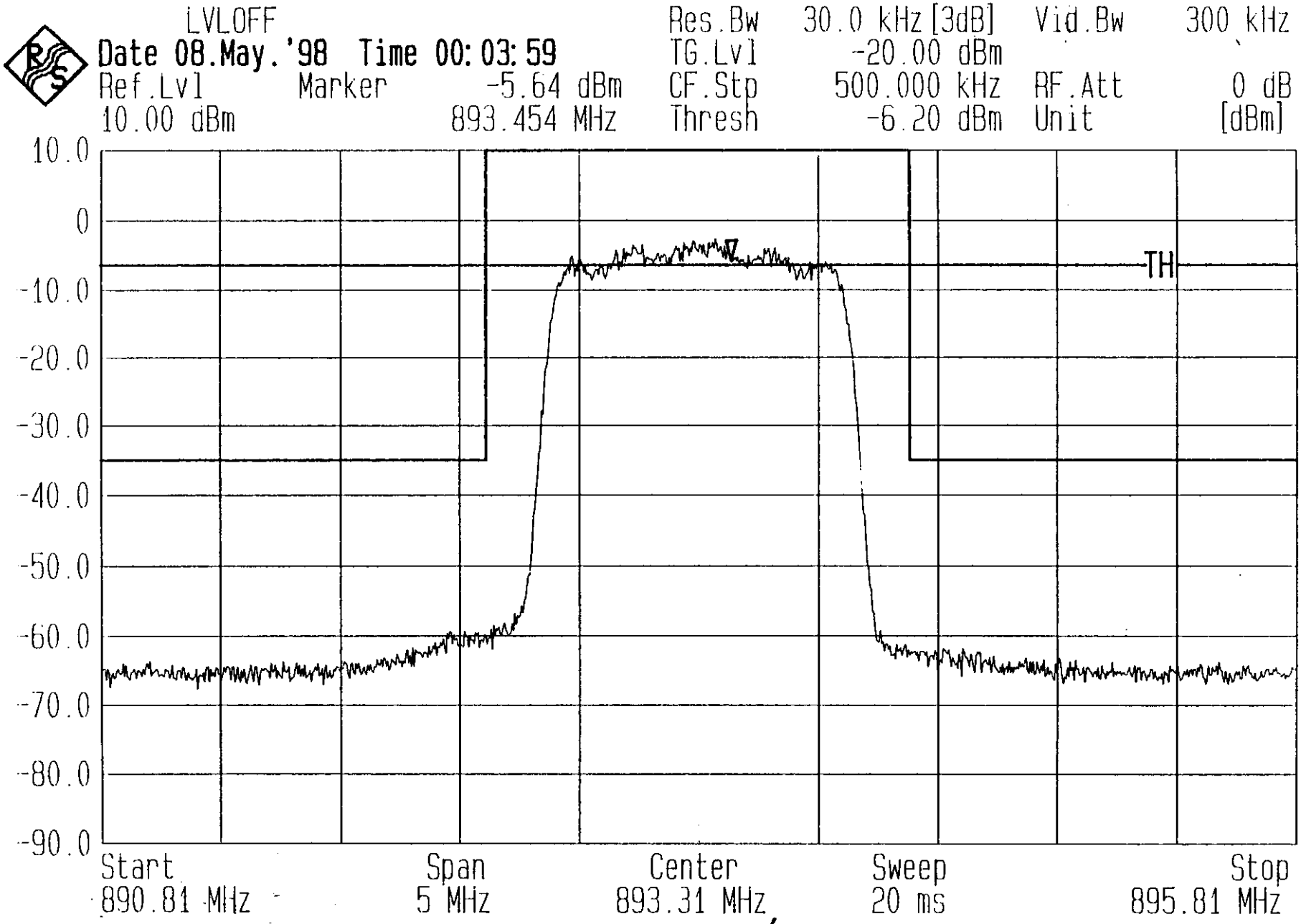
AS5CMP-22 TPA-Output OCCUPIED BANDWIDTH B BAND CHANNEL 644
Output Level 38.5 dBm/ 7.2 Watts



AS5CMP-22 TPA Input OCCUPIED BANDWIDTH B' BAND CHANNEL 739



AS5CMP-22 TPA Output OCCUPIED BANDWIDTH B BAND CHANNEL 739
Output Level 38.5 dBm/ 7.2 Watts



AS5CMP-22 TPA Input OCCUPIED BANDWIDTH B´BAND CHANNEL 777

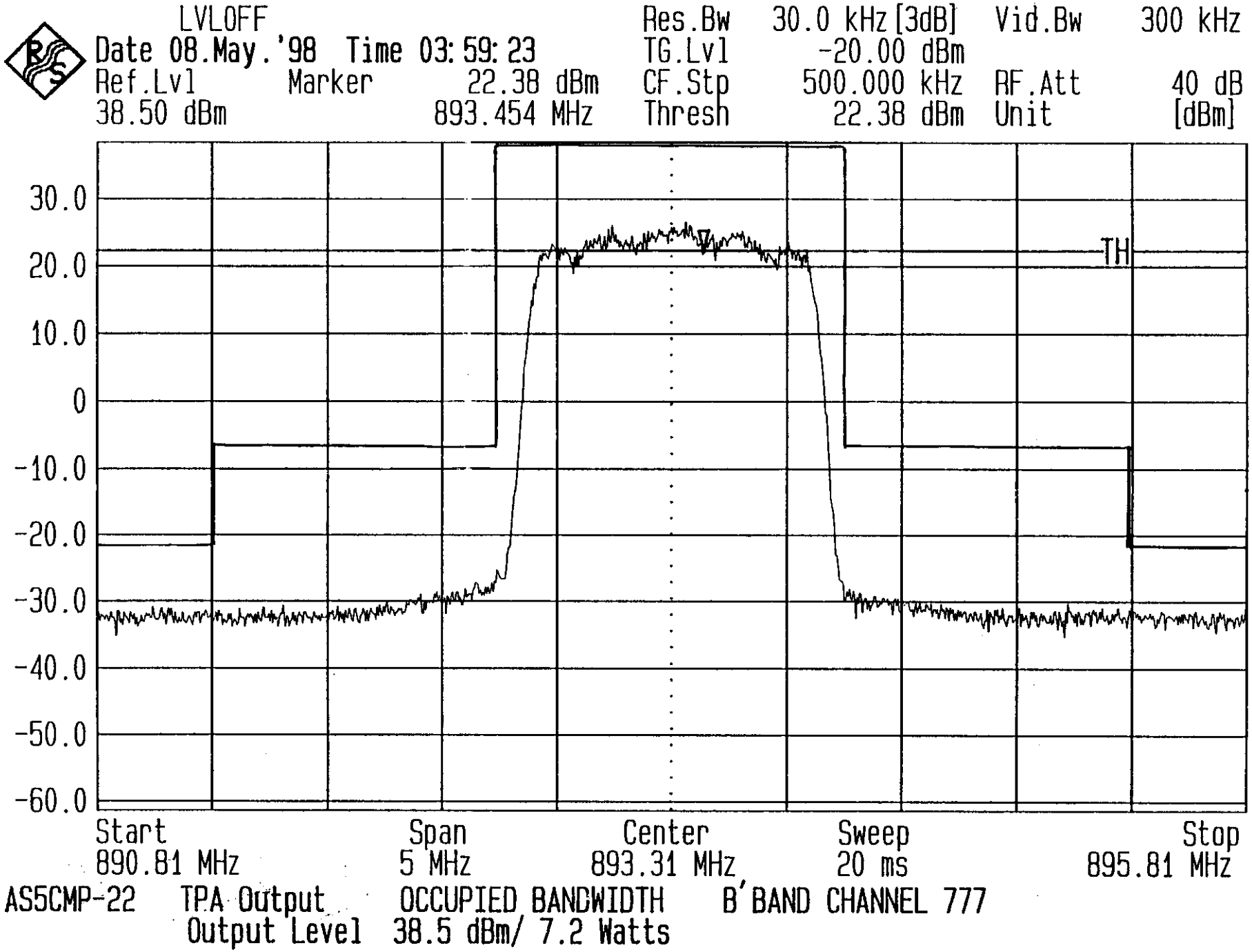

LVLOFF
Res.Bw 30.0 kHz [3dB]
Vid.Bw 300 kHz
Date 08.May.'98 Time 03:59:23
TG.Lvl -20.00 dBm
Ref.Lvl Marker 22.38 dBm
CF.Stp 500.000 kHz
RF.Att 40 dB
38.50 dBm 893.454 MHz
Thresh 22.38 dBm
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start 890.81 MHz
Span 5 MHz
Center 893.31 MHz
Sweep 20 ms
Stop 895.81 MHz
AS5CMP-22 TPA Output OCCUPIED BANDWIDTH B'BAND CHANNEL 777
Output Level 38.5 dBm/ 7.2 Watts

Exhibit 15:

Section 2.991

Spurious Emissions at Antenna Terminals

Spurious Emissions at the antenna terminals were investigated over the frequency range of 10 MHz to the 10th harmonic of the carrier frequency. The test setup was as described in figure 15A. Measurements were made using a Rohde & Schwarz ESMI EMI Test Receiver and an HP Model 7470A Plotter. The RF output from the transmitter was reduced (to an amplitude usable by the spectrum analyzer) by using a calibrated attenuator. The RF power level was continuously monitored via the test setup in Figure 15A. The required emission limitation specified in Section 22.907 of the Code was applied to these tests. The applied signal met the recommended characteristics per IS-95 section 10 as defined below.

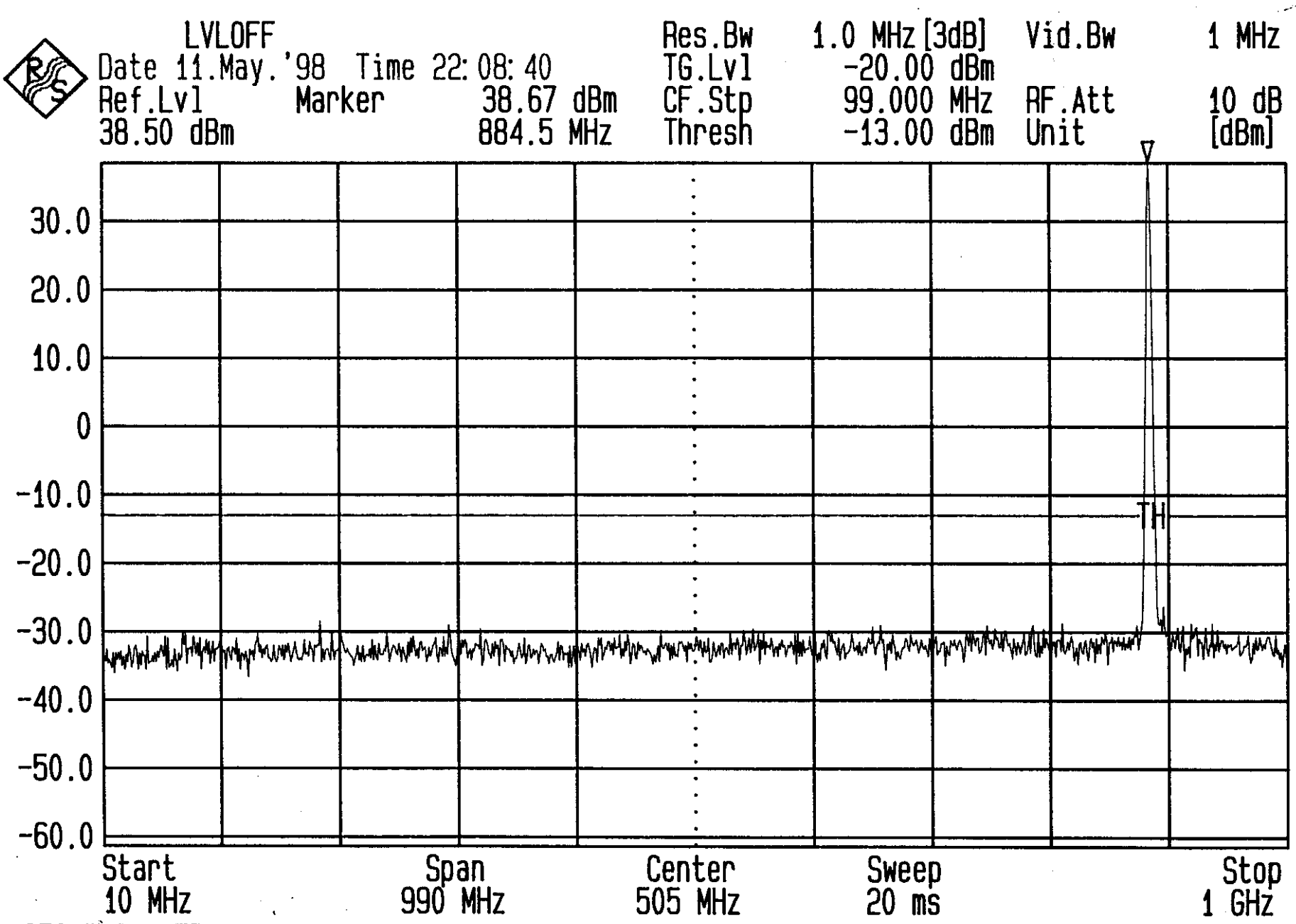
Based upon the criterion given in Section 22.907 of the Code the required emission limitation is equal to -51.5 dBc or -13 dBm.

Type	Number of Channels	Fraction of Power (Linear)	Fraction of Power (dB)	Comments
Pilot	1	0.2000	-7.0	Walsh 0
Sync	1	0.0471	-13.3	Walsh 32, always 1/8 rate
Paging	1	0.1882	-7.3	Walsh 1, full rate only
Traffic	6	0.09412 each	-10.3 each	Variable Walsh Assignments, full rate only

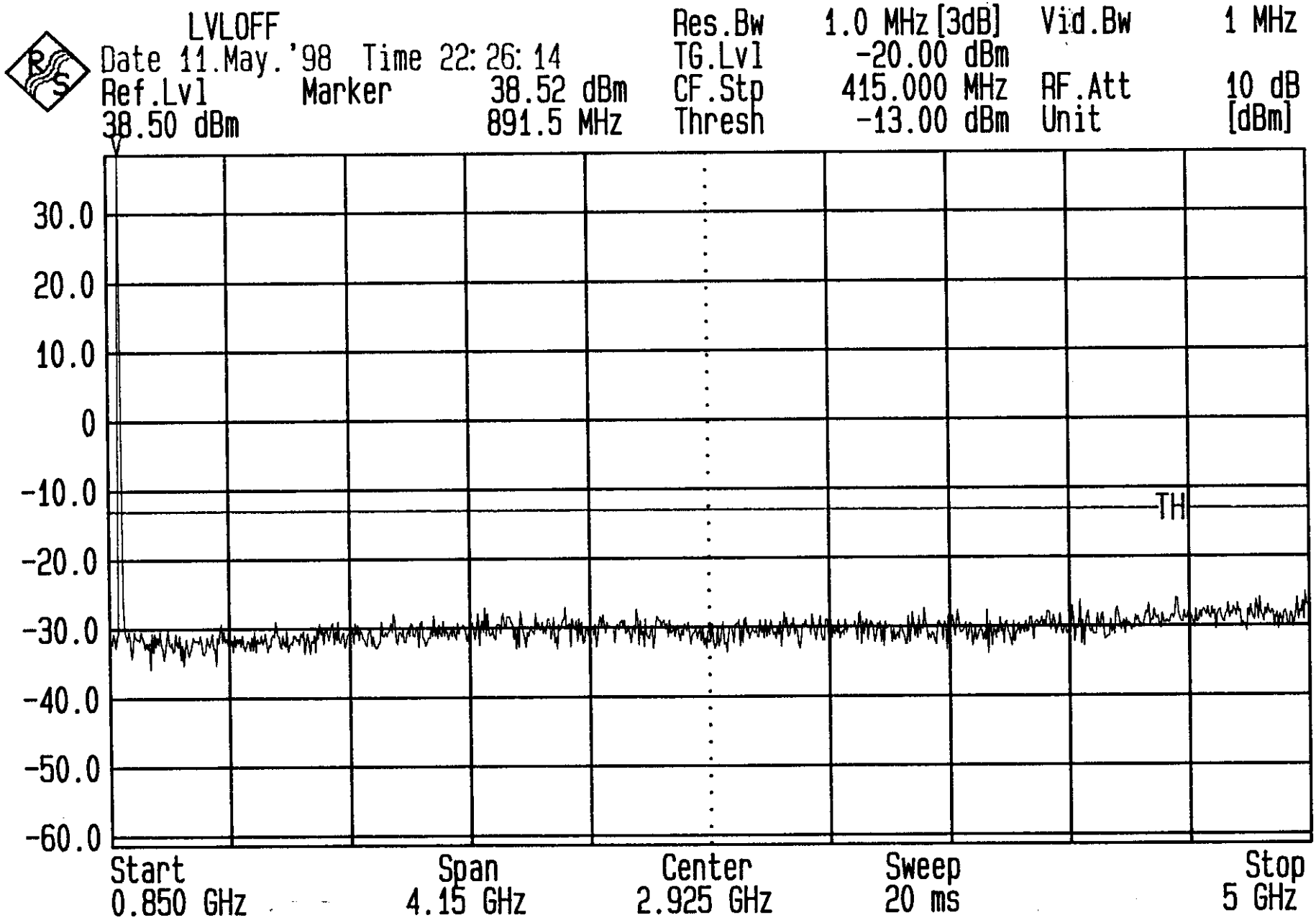
TABLE 15.1 Base Station Test Model, Nominal

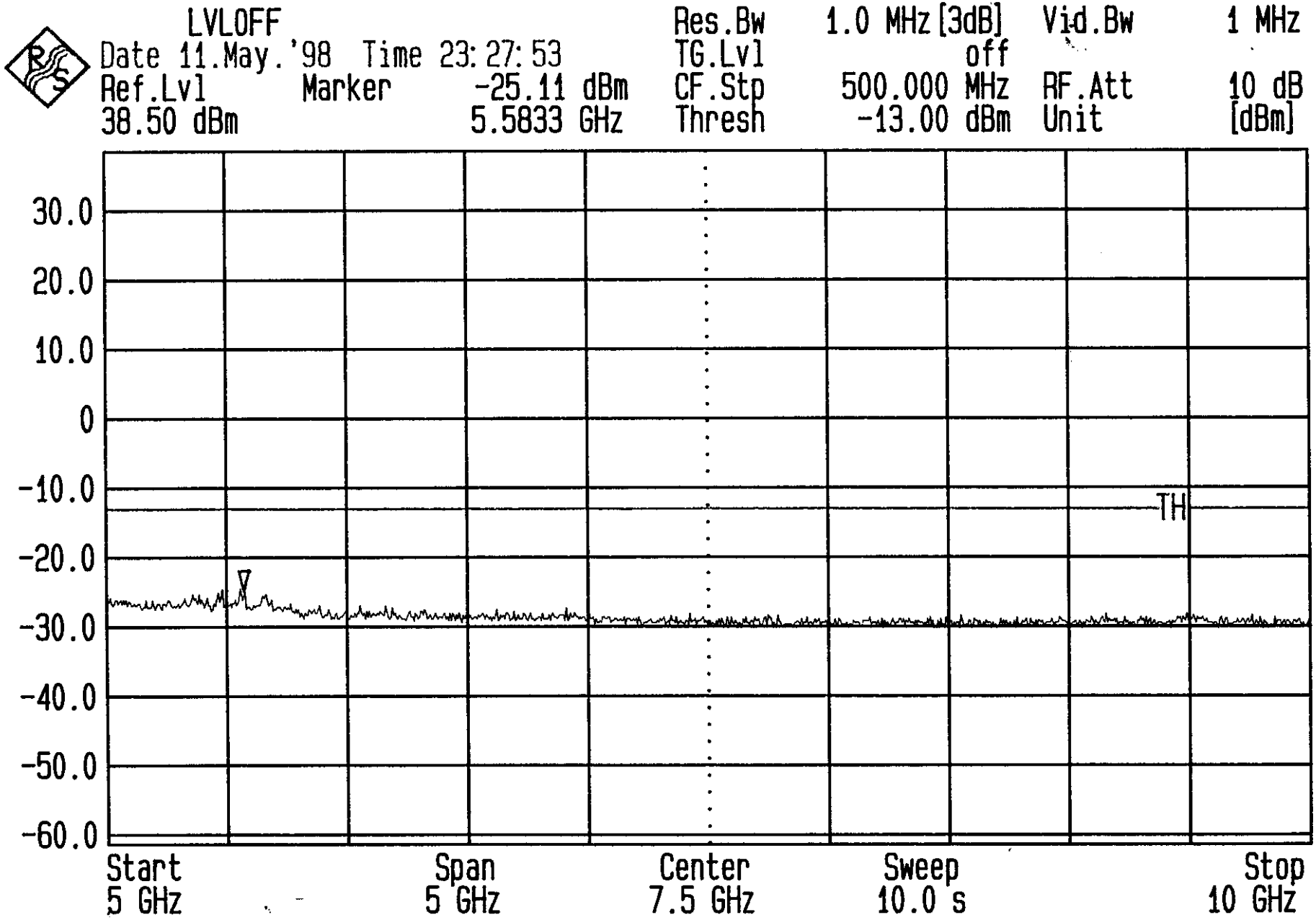
Results:

The attached spectral plots document that there are no emissions above the applicable limit.

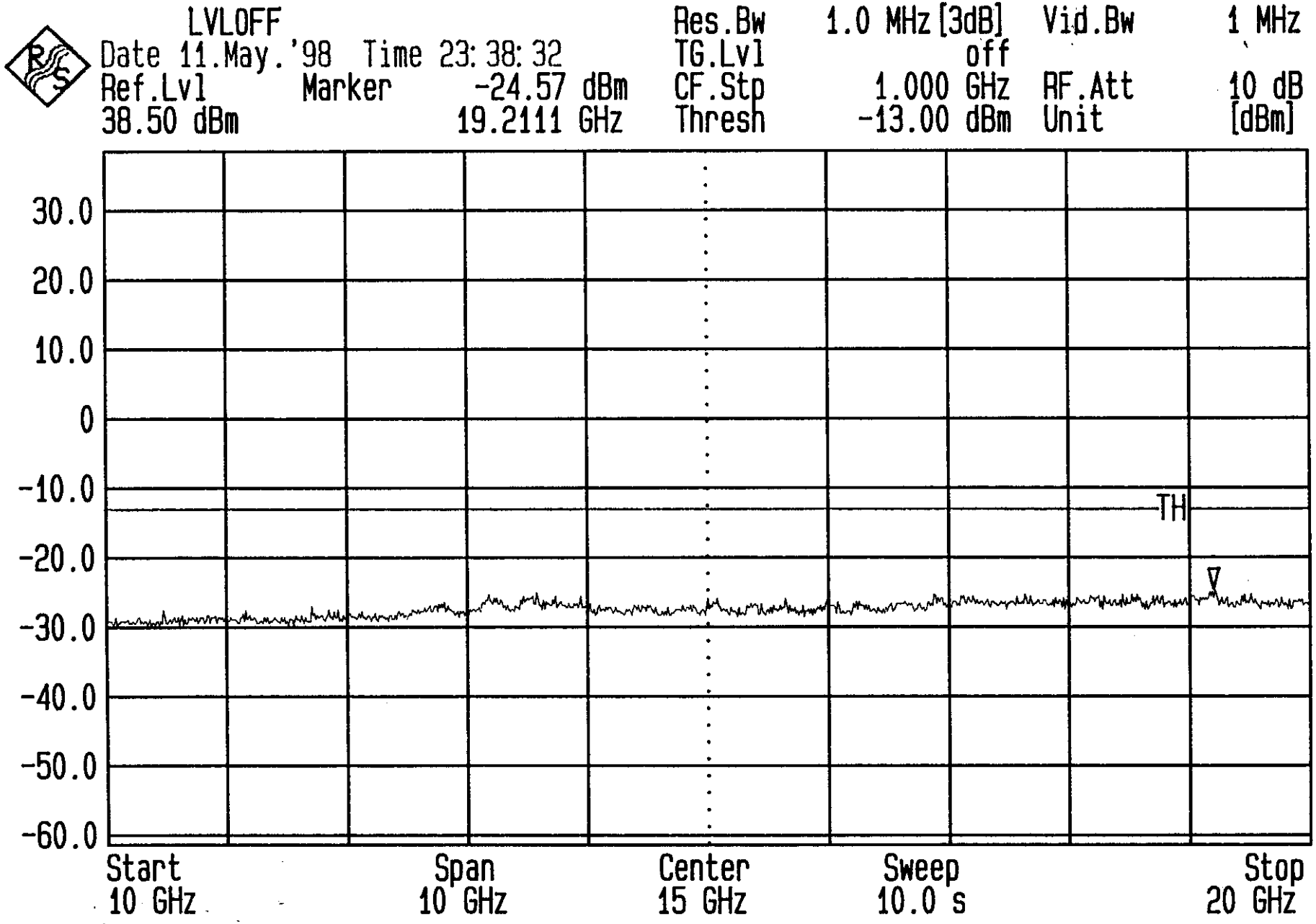


AS5CMP-22 TPA Conducted Spurious Channel 384
Output Power 38.5 dBm / 7.2 Watts


LVLOFF
Res.Bw 1.0 MHz [3dB]
Vid.Bw 1 MHz
Date 11.May.'98 Time 22:26:14
TG.Lvl -20.00 dBm
Ref.Lvl Marker 38.52 dBm
CF.Stp 415.000 MHz
RF.Att 10 dB
38.50 dBm 891.5 MHz
Thresh -13.00 dBm
Unit [dBm]
30.0
20.0
10.0
0
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
TH
Start 0.850 GHz
Span 4.15 GHz
Center 2.925 GHz
Sweep 20 ms
Stop 5 GHz
AS5CMP-22 TPA Conducted Spurious Channel 384
Output Power 38.5 dBm / 7.2 Watts



AS5CMP-22 TPA Conducted Spurious Channel 384
Output Power 38.5 dBm / 7.2 Watts



AS5CMP-22 TPA Conducted Spurious Channel 384
Output Power 38.5 dBm / 7.2 Watts

Exhibit 16

SECTION 2.993
FIELD STRENGTH OF SPURIOUS RADIATION

Field strength measurements of radiated spurious emissions were made at a ten meter test site (open field) maintained by Lucent Technologies Bell Laboratories Department JC41AICOO in Whippany, New Jersey. A complete description and full measurement data for the site have been placed on file with the Commission.

The BCR was assembled with an TPA and all other associated equipment in a Series II CDMA expansion cabinet and Antenna Interface Frame. The spectrum from 10 MHz to the tenth harmonic of the carrier was searched for spurious radiation. Measurements were made using both horizontally and vertically polarized antennas. All emissions more than 20 dB below the specification limit were considered not reportable (Section 2.997).

The calculated emission levels were found by:

Pmeas (dBm) + Cable Loss (dB) + Antenna Factor (dB) + 107 (conv. factor)
= Field Strength (dBmicroV/m)

Section 22.907 contains the requirements for the levels of spurious radiation as a function of the level of the unmodulated carrier. The reference level for the unmodulated carrier is calculated as the field produced by an ideal dipole excited by the transmitter output power according to the following relation taken from Reference Data for Radio Engineers, page 676, 4th edition, IT&T Corp.

$$E = [(49.2P)\exp(1/2)] / R$$

$$20 \log (E * 10\exp(6)) - (43 + 10 \log P) = 73.9 \text{ dB microV/meter}$$

E = Field Intensity in Volts/ meter
P = Transmitted Power in watts = 16 W
R = Distance in meters = 10 m

RESULTS:

For this particular test, the field strength of any spurious radiation is required to be less than 73.9 dB microV/meter. Reportable measurements are equal to or greater than 53.9 dB microV/meter. Over the spectrum investigated, 15 MHz to tenth harmonic of the carrier, no reportable spurious emissions were detected. This demonstrates that the Transmit Power Amplifier (TPA), the subject of this application, complies with Sections 2.993, 22.907 and 2.997 of the Rules.

Exhibit 17

SECTION 2.995

MEASUREMENT OF FREQUENCY STABILITY

RESPONSE:
The frequency stabilization and accuracy of the CDMA signal amplified by the TPA is a function of the input signal which is provided by the BCR (FCC ID: **AS5CMP-12**). The Reference Frequency Timing Generator (RFTG-m) is the GPS locked signal source used for frequency lock by the BCR and was previously reported for FCC ID: **AS5CMP-12**. The Reference Frequency Timing Generator (RFTG-m) is being replaced in all Lucent CDMA equipment by either the RFTG-mII or the RFTG-U. The RFTG-mII is an RFTG-m unit whose output amplifier is adjusted to provide an additional +6dB increase in amplitude of the output timing signal. The signal level is then reduced via a signal coupler to provide the same signal level for distribution throughout the equipment. This was done to provide this signal to a greater number of co-located equipment. The RFTG-U is a new design which uses the same Rubidium reference oscillator as the RFTG-m. Both devices meet the frequency stability requirements necessary for **AUTOPLEX ®** system compliance with FCC Rules for frequency stability. These devices are compliant with FCC Part 15 rules when powered and installed in Lucent Technologies cabinets.

The following data shows frequency stability tests for the RFTG-U.

10 MHz Frequency and Power Variations Over Temperature (Locked to GPS)

REF 0 (Primary)

Temperature (deg. C)	Max. Freq Deviation (Parts per Billion)
0	0.54
10	0.11
20	0.10
30	0.07
40	0.09
50	0.13
60	0.56
65	2.14
Spec	50.00
Result	**Pass**

REF 0 (Primary)

Temperature (deg. C)	Power (dBm)	
	Maximum	Minimum
0	23.40	23.39
10	23.44	23.44
20	23.45	23.45
30	23.42	23.41
40	23.35	23.35
50	23.29	23.28
60	23.20	23.20
65	23.17	23.17
Spec	25.00	21.00
Result	**Pass**	**Pass**

REF 2 (Secondary)

Temperature (deg. C)	Max. Freq Deviation (Parts per Billion)
0	0.40
10	0.05
20	0.04
30	0.13
40	0.05
50	0.05
60	0.02
65	0.03
Spec	50.00
Result	**Pass**

REF 1 (Secondary)

Temperature (deg. C)	Power (dBm)	
	Maximum	Minimum
0	23.40	23.39
10	23.45	23.44
20	23.48	23.47
30	23.46	23.46
40	23.41	23.40
50	23.35	23.34
60	23.27	23.26
65	23.24	23.24
Spec	25.00	21.00
Result	**Pass**	**Pass**

Note: All tabulated results are computed from 10 measurements taken at the corresponding voltage.

10 MHz Frequency and Power Variations Over Temperature (Not Locked to GPS)

REF 0 (Primary)

Temperature (deg. C)	Max. Freq Deviation (Parts per Billion)
0	0.23
10	0.33
20	0.34
30	0.35
40	0.48
50	0.55
60	0.66
65	2.44
Spec	50.00
Result	**Pass**

REF 0 (Primary)

Temperature (deg. C)	Power (dBm)	
	Maximum	Minimum
0	23.16	23.15
10	23.16	23.16
20	23.16	23.15
30	23.13	23.12
40	23.07	23.06
50	22.99	22.98
60	22.92	22.90
65	23.18	23.18
Spec	25.00	21.00
Result	**Pass**	**Pass**

REF 2 (Secondary)

Temperature (deg. C)	Max. Freq Deviation (Parts per Billion)
0	0.26
10	0.39
20	0.39
30	0.63
40	0.55
50	0.63
60	0.72
65	2.60
Spec	50.00
Result	**Pass**

REF 1 (Secondary)

Temperature (deg. C)	Power (dBm)	
	Maximum	Minimum
0	23.15	23.12
10	23.17	23.17
20	23.19	23.18
30	23.16	23.16
40	23.11	23.10
50	23.03	23.02
60	22.96	22.95
65	23.26	23.25
Spec	25.00	21.00
Result	**Pass**	**Pass**

Note: All tabulated results are computed from 10 measurements taken at the corresponding voltage.

10 MHz Frequency and Power Variations Over Voltage (@ 25 deg. C & Not Locked to GPS)

REF 0 (Primary)

Voltage (VDC)	Max. Freq Deviation (Parts per Billion)
19	1.01
20	0.97
21	0.88
22	0.86
23	0.83
24	0.84
25	0.84
26	0.81
27	0.81
28	0.81
29	0.80
30	0.80
31	0.83
32	0.85
Spec	50.00
Result	**Pass**

REF 0 (Primary)

Voltage (VDC)	Power (dBm)	
	Maximum	Minimum
19	23.42	23.41
20	23.42	23.41
21	23.42	23.42
22	23.42	23.42
23	23.42	23.42
24	23.42	23.42
25	23.42	23.42
26	23.42	23.42
27	23.42	23.42
28	23.42	23.42
29	23.42	23.42
30	23.42	23.42
31	23.42	23.42
32	23.42	23.42
Spec	25.00	21.00
Result	**Pass**	**Pass**

REF 1 (Secondary)

Voltage (VDC)	Max. Freq Deviation (Parts per Billion)
19	0.80
20	0.75
21	0.95
22	0.87
23	0.90
24	0.92
25	0.89
26	0.88
27	0.88
28	0.84
29	0.86
30	0.87
31	0.87
32	0.93
Spec	50.00
Result	**Pass**

REF 1 (Secondary)

Voltage (VDC)	Power (dBm)	
	Maximum	Minimum
19	23.44	23.43
20	23.42	23.43
21	23.42	23.43
22	23.42	23.43
23	23.42	23.43
24	23.42	23.44
25	23.42	23.44
26	23.42	23.44
27	23.42	23.44
28	23.42	23.44
29	23.42	23.44
30	23.42	23.44
31	23.42	23.44
32	23.44	23.44
Spec	25.00	21.00
Result	**Pass**	**Pass**

Note: All tabulated results are computed from 10 measurements taken at the corresponding voltage.

Exhibit 19

SECTION 2.983 (g)

Photographs (8"xlO") of the equipment of sufficient clarity to reveal equipment construction and layout, including meters, if any, and labels for controls and meters and sufficient views of the internal construction to define component placement and chassis assembly. Insofar as these requirements are met by photographs or drawings contained in the instruction manuals supplied with the type acceptance request, additional photographs are necessary only to complete the required showing.

RESPONSE:

The following photographs show the construction and layout of the TPA.