Table of Contents

SECTION 1

RF POWER OUTPUT

2.985 (A) The RF Power measured at the output terminals:

AXATR-386-A2 20 -40 Watts

Method: The measurement was made per TIA/EIA-603 using the following equipment::

A 50 ohm load is attached to the output terminal through a directional coupler.. The power is measured on a HP437A power meter.

SECTION 2

MODULATION CHARACTERISTICS

Ref. Par. 2.987 (a, b, d) the frequency and amplitude response to audio inputs measured per TIA/EIA 603 are shown on the following sheet

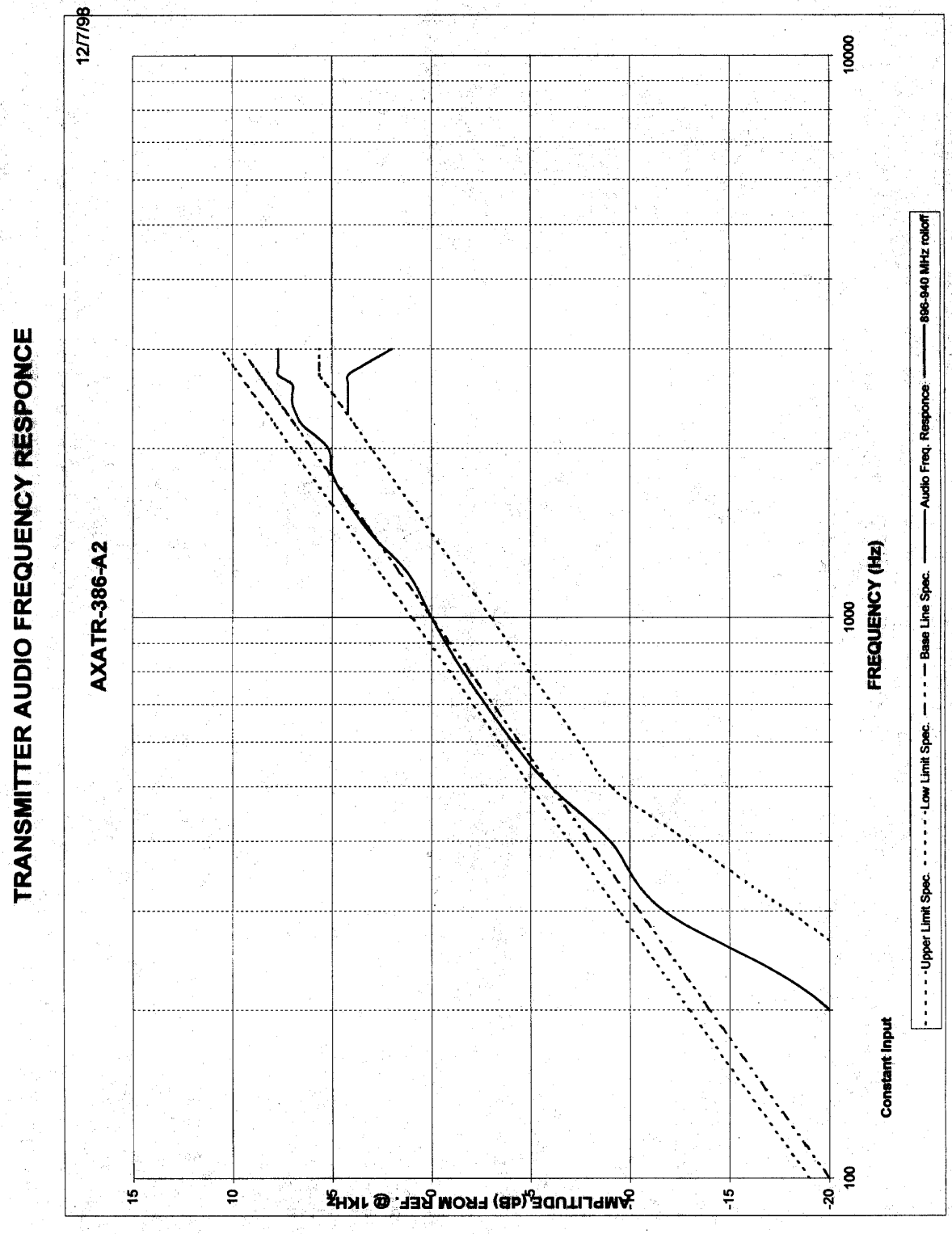
403-512 Mhz
Section 2B Audio Frequency Response(25 ,12.5kHz)

Section 2C Modulation Characteristics (25 ,12.5kHz)

Equipment used was:

Hewlett Packard Modulation Analyzer 8901B
Hewlett Packard Audio Signal Generator 8903B
Hewlett Packard Audio Analyzer 8903B

At those modulation frequencies at which the transmitter is not capable of producing 30% of system deviation, audio response is calculated from measurement of input voltage producing a lesser deviation.

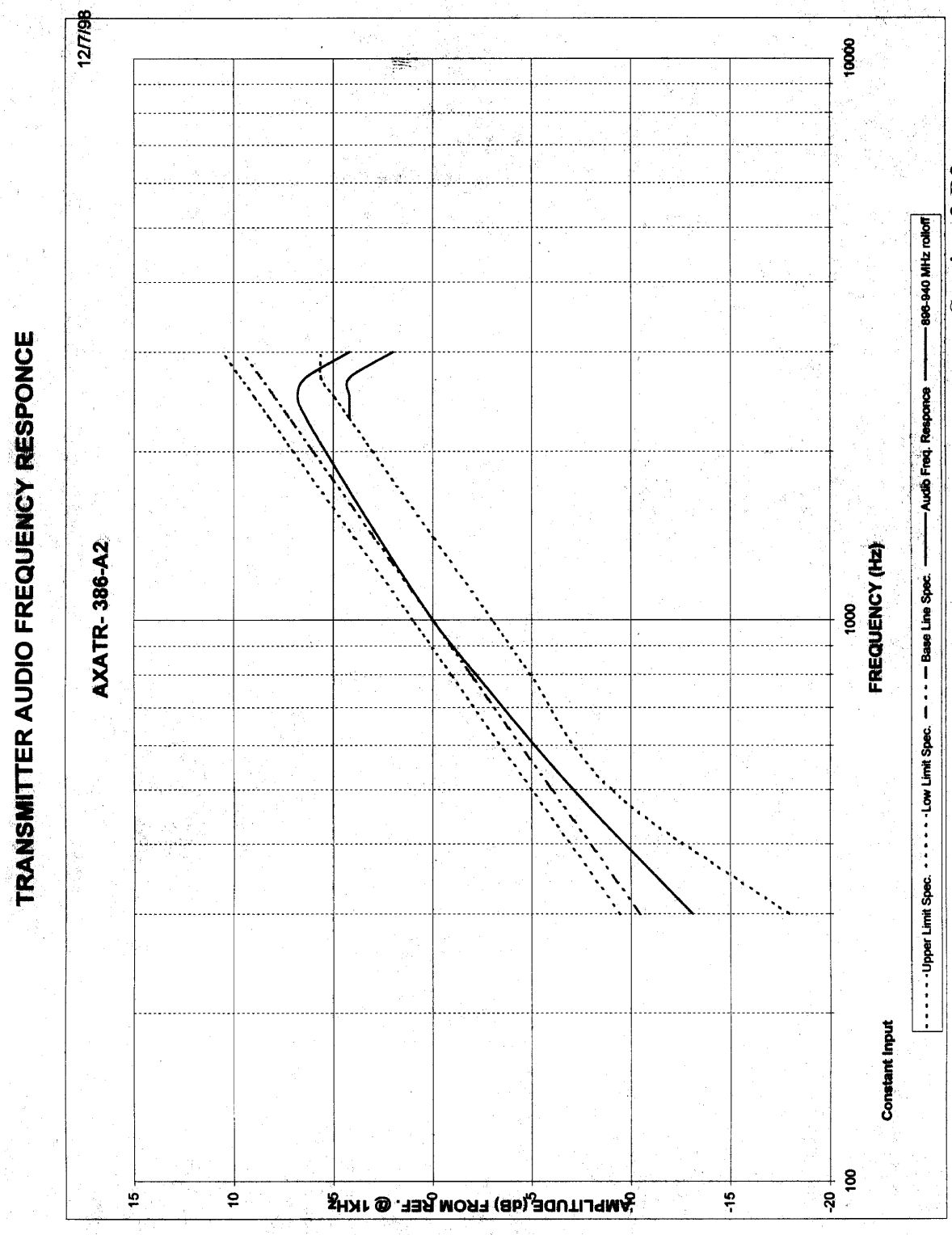

TRANSMITTER AUDIO FREQUENCY RESPONCE
12/7/98
AXATR-386-A2
AMPLITUDE (dB) FROM REF. @ 1KHz
15
10
5
0
-5
-10
-15
-20
100
1000
10000
FREQUENCY (Hz)
Constant Input
Upper Limit Spec.
Low Limit Spec.
Base Line Spec.
Audio Freq. Responce
806-940 MHz rolloff

Section 2 B1

AUDIO FREQUENCY RESPONCE

	A	B	C	D	E	F
1	**Audio Frequency Responce**					
2	AXATR-	386-A2	25 KHz CH SPC			
3						
4		Enter Data				
5	FREQ	AFR	UPPER SPEC	BASE LINE	LOWER SPEC	
6	100	-26.00	-19.00	-20.00	-37.00	
7	200	-20.00	-12.98	-13.98	-24.96	
8	300	-11.71	-9.46	-10.46	-17.92	
9	400	-9.00	-6.96	-7.96	-12.92	
10	500	-6.00	-5.02	-6.02	-9.02	
11	600	-4.10	-3.44	-4.44	-7.44	
12	800	-1.60	-0.94	-1.94	-4.94	
13	1000	0.00	1.00	0.00	-3.00	
14	1200	1.20	2.58	1.58	-1.42	
15	1400	3.00	3.92	2.92	-0.08	
16	1600	4.20	5.08	4.08	1.08	
17	1800	5.00	6.11	5.11	2.11	
18	2000	5.20	7.02	6.02	3.02	
19	2200	6.50	7.85	6.85	3.85	896-940 MHz rolloff
20	2300	6.80	8.23	7.23	4.23	4.20
21	2400	7.00	8.60	7.60	4.60	4.20
22	2500	7.00	8.96	7.96	4.96	4.20
23	2600	7.00	9.30	8.30	5.30	4.20
24	2700	7.70	9.63	8.63	5.63	4.20
25	2800	7.70	9.94	8.94	5.63	3.50
26	3000	7.70	10.54	9.54	5.63	2.00
27	3200		[redacted]			
28	3400					
29	3600					
30	3800					
31	4000					
32	4500					
33	5000					
34						
35	FORMULA AUDIO FREQ. RESPONCE					
36	20 LOG 10(DEV FREQ / DEV REF)					

AXATR-386-A2 **Section 2 B1 Data** 10/29/98


TRANSMITTER AUDIO FREQUENCY RESPONCE
12/7/98
AXATR- 386-A2
AMPLITUDE (dB) FROM REF. @ 1KHz
15
10
5
0
-5
-10
-15
-20
100
1000
10000
FREQUENCY (Hz)
Constant Input
Upper Limit Spec.
Low Limit Spec.
Base Line Spec.
Audio Freq. Response
896-940 MHz rolloff

Section 2 B2

AUDIO FREQUENCY RESPONCE

	A	B	C	D	E	F
1	**Audio Frequency Responce**					
2	**AXATR-**	**386-A2**	12.5 KHz CH SPC			
3						
4		**Enter Data**				
5	**FREQ**	**AFR**	**UPPER SPEC**	**BASE LINE**	**LOWER SPEC**	
6	300	-13.10	-9.46	-10.46	-17.92	
7	500	-7.10	-5.02	-6.02	-9.02	
8	800	-2.19	-0.94	-1.94	-4.94	
9	1000	0.00	1.00	0.00	-3.00	
10	1400	2.70	3.92	2.92	-0.08	
11	2000	5.40	7.02	6.02	3.02	
12	2300	6.40	8.23	7.23	4.23	4.20
13	2500	6.80	8.96	7.96	4.96	4.20
14	2700	6.40	9.63	8.63	5.63	4.20
15	3000	4.20	10.54	9.54	5.63	2.00
16	3200					
17	3600					
18	3800					
19	4000					
20	5000					
21						
22	FORMULA AUDIO FREQ. RESPONCE					
23	$20 \log_{10}\{DEV_{FREQ} / DEV_{REF}\}$					

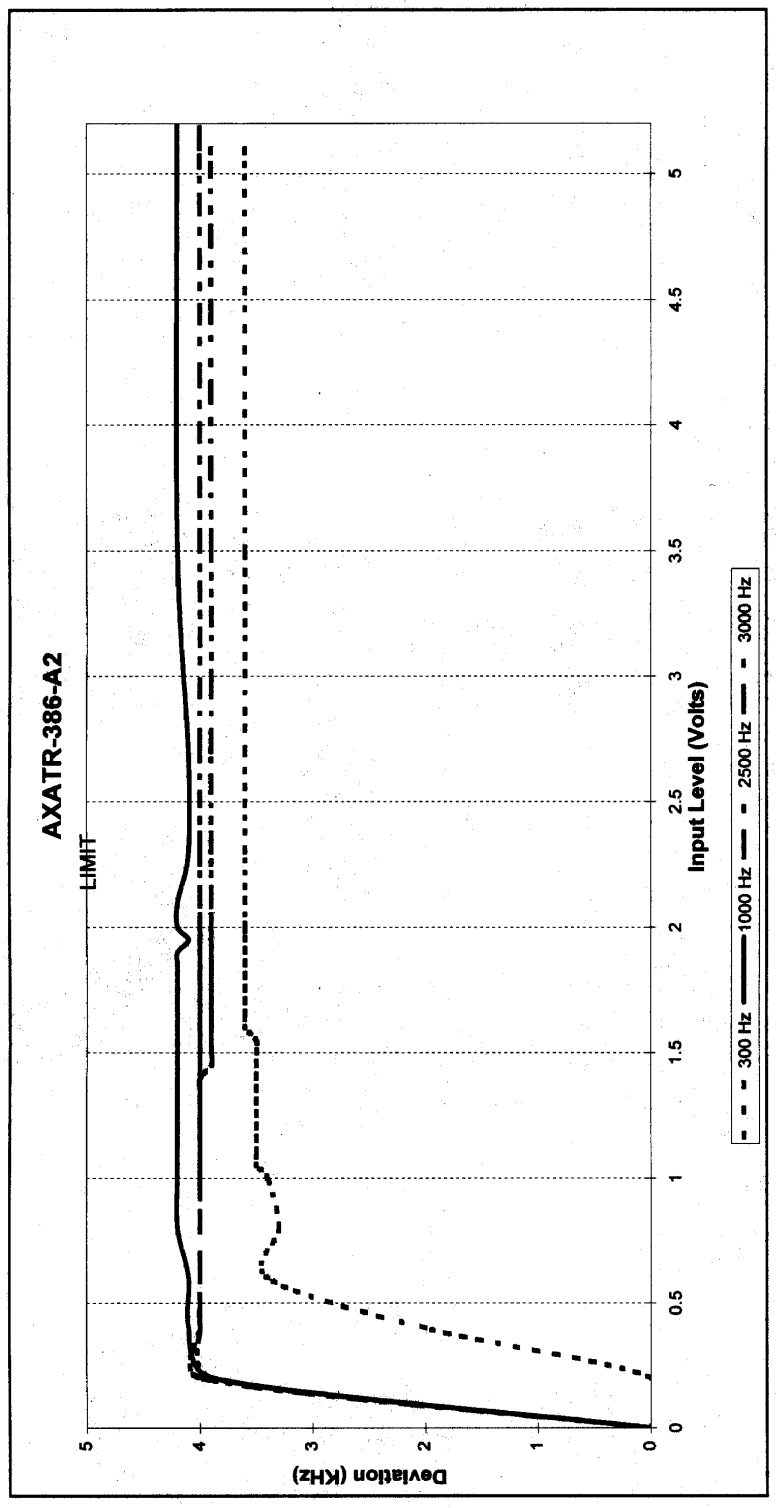
Section 2 B2 Data

AXATR-386-A2

10/29/98

Modulation Limiting

12/7/98



Section 2 C1

Modulation Limiting
Curve Data

10/29/98

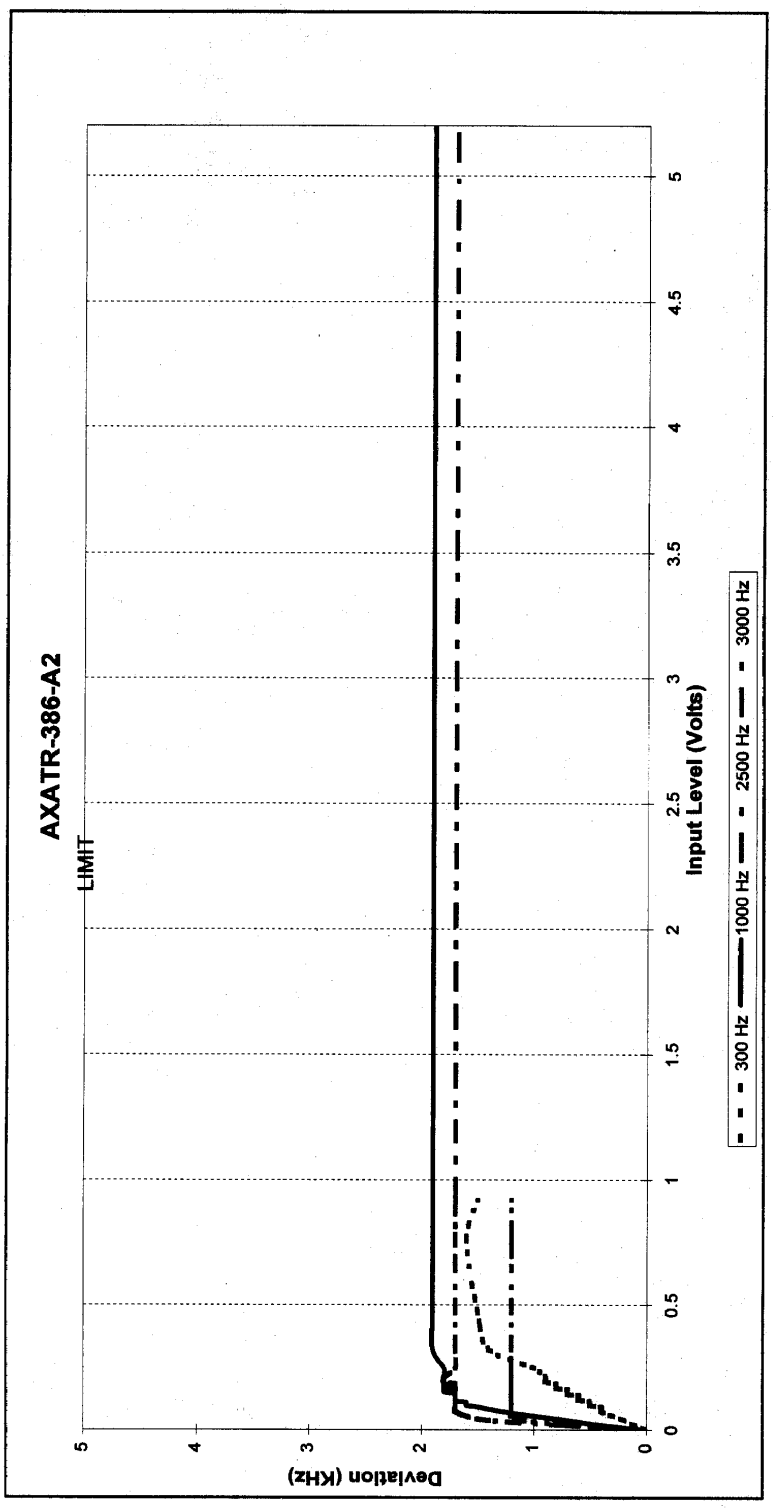
	A	B	C	D	E	F	G	H
1	Modulation Limiting Curves							
2	AXATR-	386-A2	25 KHz CH SPC					
3								
4	300 Hz		1000Hz		2500 Hz		3000Hz	
5	LEVEL	DEV	LEVEL	DEV	LEVEL	DEV	LEVEL	DEV
6	0	0	0	0	0	0	0	0
7	0.2	0	0.2	3.9	0.2	4	0.2	3.9
8	0.4	2	0.4	4.1	0.4	4	0.4	4
9	0.6	3.4	0.6	4.1	0.6	4	0.6	4
10	0.8	3.3	0.8	4.2	0.8	4	0.8	4
11	1	3.4	1	4.2	1	4	1	4
12	1.05	3.5	1.05	4.2	1.05	4	1.05	4
13	1.1	3.5	1.1	4.2	1.1	4	1.1	4
14	1.15	3.5	1.15	4.2	1.15	4	1.15	4
15	1.2	3.5	1.2	4.2	1.2	4	1.2	4
16	1.25	3.5	1.25	4.2	1.25	4	1.25	4
17	1.3	3.5	1.3	4.2	1.3	4	1.3	4
18	1.35	3.5	1.35	4.2	1.35	4	1.35	4
19	1.4	3.5	1.4	4.2	1.4	4	1.4	4
20	1.45	3.5	1.45	4.2	1.45	4	1.45	3.9
21	1.5	3.5	1.5	4.2	1.5	4	1.5	3.9
22	1.55	3.5	1.55	4.2	1.55	4	1.55	3.9
23	1.6	3.6	1.6	4.2	1.6	4	1.6	3.9
24	1.65	3.6	1.65	4.2	1.65	4	1.65	3.9
25	1.7	3.6	1.7	4.2	1.7	4	1.7	3.9
26	1.75	3.6	1.75	4.2	1.75	4	1.75	3.9
27	1.8	3.6	1.8	4.2	1.8	4	1.8	3.9
28	1.85	3.6	1.85	4.2	1.85	4	1.85	3.9
29	1.9	3.6	1.9	4.2	1.9	4	1.9	3.9
30	1.95	3.6	1.95	4.1	1.95	4	1.95	3.9
31	2	3.6	2	4.2	2	4	2	3.9
32	2.1	3.6	2.1	4.2	2.1	4	2.1	3.9
33	2.3	3.6	2.3	4.1	2.3	4	2.3	3.9
34	2.7	3.6	2.7	4.1	2.7	4	2.7	3.9
35	3.5	3.6	3.5	4.2	3.5	4	3.5	3.9
36	5.1	3.6	5.1	4.2	5.1	4	5.1	3.9
37	5.1	3.6	5.1	4.2	5.1	4	5.1	3.9
38	5.1	3.6	5.1	4.2	5.1	4	5.1	3.9
39	5.1	3.6	5.1	4.2	5.1	4	5.1	3.9
40								
41								
42								
43								

AXATR-386-A2

Section 2 C1 Data

12/7/98

Modulation Limiting



Section 2 C2

Modulation Limiting
Curve Data

10/29/98

	A	B	C	D	E	F	G	H
1	Modulation Limiting Curves							
2	AXATR-386-A2		12.5 KHz CH SPC					
3								
4	300 Hz		1000Hz		2500 Hz		3000Hz	
5	LEVEL	DEV	LEVEL	DEV	LEVEL	DEV	LEVEL	DEV
6	0	0	0	0	0	0	0	0
7	0.0184	0.1	0.0184	0.4	0.0184	0.7	0.0184	0.6
8	0.0367	0.2	0.0367	0.7	0.0367	1.4	0.0367	1.1
9	0.0551	0.3	0.0551	1	0.0551	1.6	0.0551	1.2
10	0.0734	0.4	0.0734	1.3	0.0734	1.7	0.0734	1.2
11	0.0918	0.4	0.0918	1.5	0.0918	1.7	0.0918	1.2
12	0.0964	0.5	0.0964	1.6	0.0964	1.7	0.0964	1.2
13	0.101	0.5	0.101	1.6	0.101	1.7	0.101	1.2
14	0.1056	0.5	0.1056	1.6	0.1056	1.7	0.1056	1.2
15	0.1102	0.5	0.1102	1.6	0.1102	1.7	0.1102	1.2
16	0.1148	0.5	0.1148	1.7	0.1148	1.7	0.1148	1.2
17	0.1193	0.6	0.1193	1.7	0.1193	1.7	0.1193	1.2
18	0.1239	0.6	0.1239	1.7	0.1239	1.7	0.1239	1.2
19	0.1285	0.6	0.1285	1.7	0.1285	1.7	0.1285	1.2
20	0.1331	0.6	0.1331	1.7	0.1331	1.7	0.1331	1.2
21	0.1377	0.6	0.1377	1.7	0.1377	1.7	0.1377	1.2
22	0.1423	0.7	0.1423	1.7	0.1423	1.7	0.1423	1.2
23	0.1469	0.7	0.1469	1.7	0.1469	1.7	0.1469	1.2
24	0.1515	0.7	0.1515	1.8	0.1515	1.7	0.1515	1.2
25	0.1561	0.7	0.1561	1.8	0.1561	1.7	0.1561	1.2
26	0.1607	0.7	0.1607	1.8	0.1607	1.7	0.1607	1.2
27	0.1652	0.8	0.1652	1.8	0.1652	1.7	0.1652	1.2
28	0.1698	0.8	0.1698	1.8	0.1698	1.8	0.1698	1.2
29	0.1744	0.8	0.1744	1.8	0.1744	1.7	0.1744	1.2
30	0.179	0.8	0.179	1.8	0.179	1.8	0.179	1.2
31	0.1836	0.8	0.1836	1.8	0.1836	1.7	0.1836	1.2
32	0.1928	0.9	0.1928	1.8	0.1928	1.8	0.1928	1.2
33	0.2111	0.9	0.2111	1.8	0.2111	1.8	0.2111	1.2
34	0.2479	1	0.2479	1.8	0.2479	1.7	0.2479	1.2
35	0.3213	1.4	0.3213	1.9	0.3213	1.7	0.3213	1.2
36	0.4682	1.5	0.4682	1.9	0.4682	1.7	0.4682	1.2
37	0.7619	1.6	0.7619	1.9	0.7619	1.7	0.7619	1.2
38	0.918	1.5	0.918	1.9	0.918	1.7	0.918	1.2
39	0.918	1.5	0.918	1.9	0.918	1.7	0.918	1.2
40								
41								
42								
43								

Section 2 C2 Data

SECTION 3

OCCUPIED BANDWIDTH

Per 2.989 (c, 1) the measurements were made per TIA/EIA 603.

455 **Mhz**

SECTION 3 B1, B2. C1, C2 (25 kHz, 50 & 150 kHz spans, Voice)

SECTION 3 D1, 3D2, (25 kHz, 50 & 150 kHz spans, Data)

SECTION 3 B2, B3. C2, C3 (12.5 kHz, (50 & 150 kHz spans, Voice)

SECTION 3 D2,. D3, (12.5kHz, 50 & 150 kHz spans, Data)

SECTION 3

OCCUPIED BANDWIDTH

(FOR 25 kHz CHANNELIZATION)

Method of Measurement Per 2.989 (c,1) Data on Occupied Bandwidth is presented in the form of a spectrum analyzer plot which illustrates the transmitter sidebands. A plot is taken of the carrier sideband modulated with a 2500 Hz tone at a level 16 dB greater than that required to produce 50 percent modulation. (The spectrum analyzer grid indicates the reference level of the carrier unmodulated in all exhibits.)

SECTION 3B,C Telephony

Bn = 2M + 2DK where

M = 3000 Hz
D = 4000 Hz
K= 1(assumed)

Bn = 14000 Hz
Therefore, Emission Designator = 14K0F3E

SECTION 3D Data, Digital Voice

Bn = 2(B/2) + 2DK where

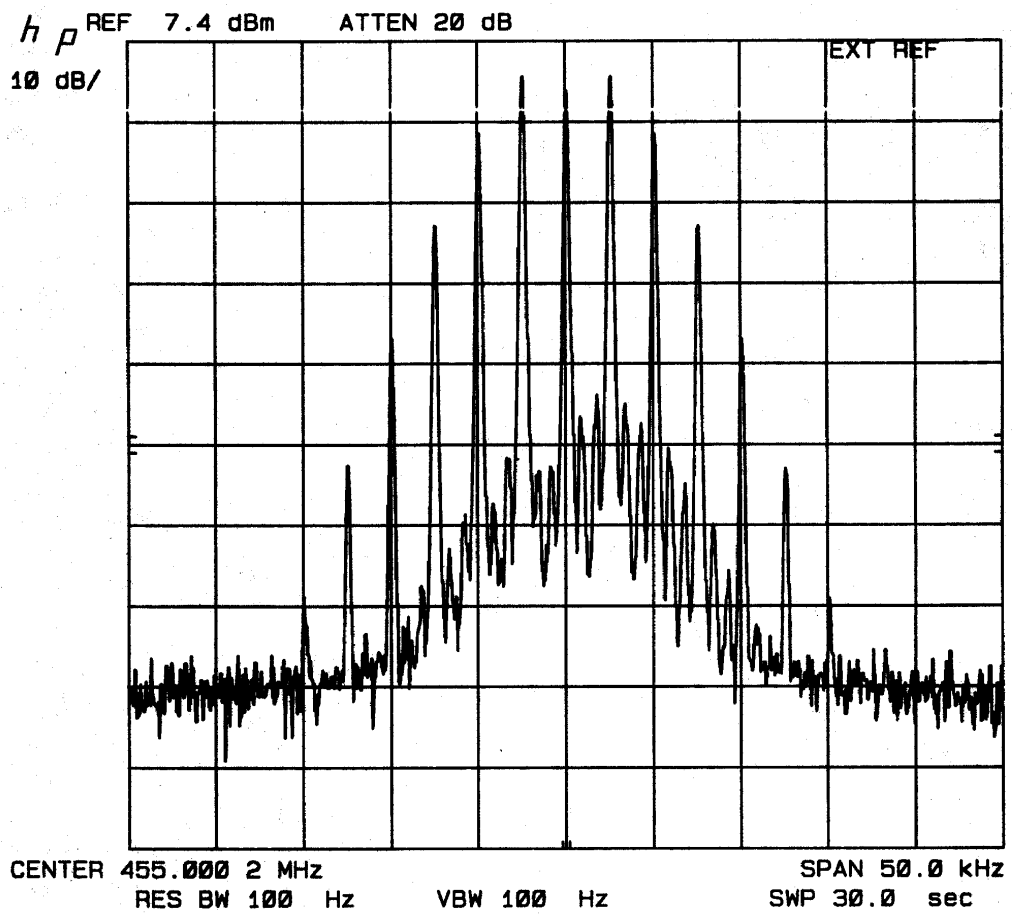
B = 9600 Hz
D = 3000 Hz
K=1(assumed)

Bn=15600
Therefore, Emission Designators are,
15K6F1D
15K6F1E

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

OCCUPIED BANDWIDTH

Modulation Sideband Spectrum



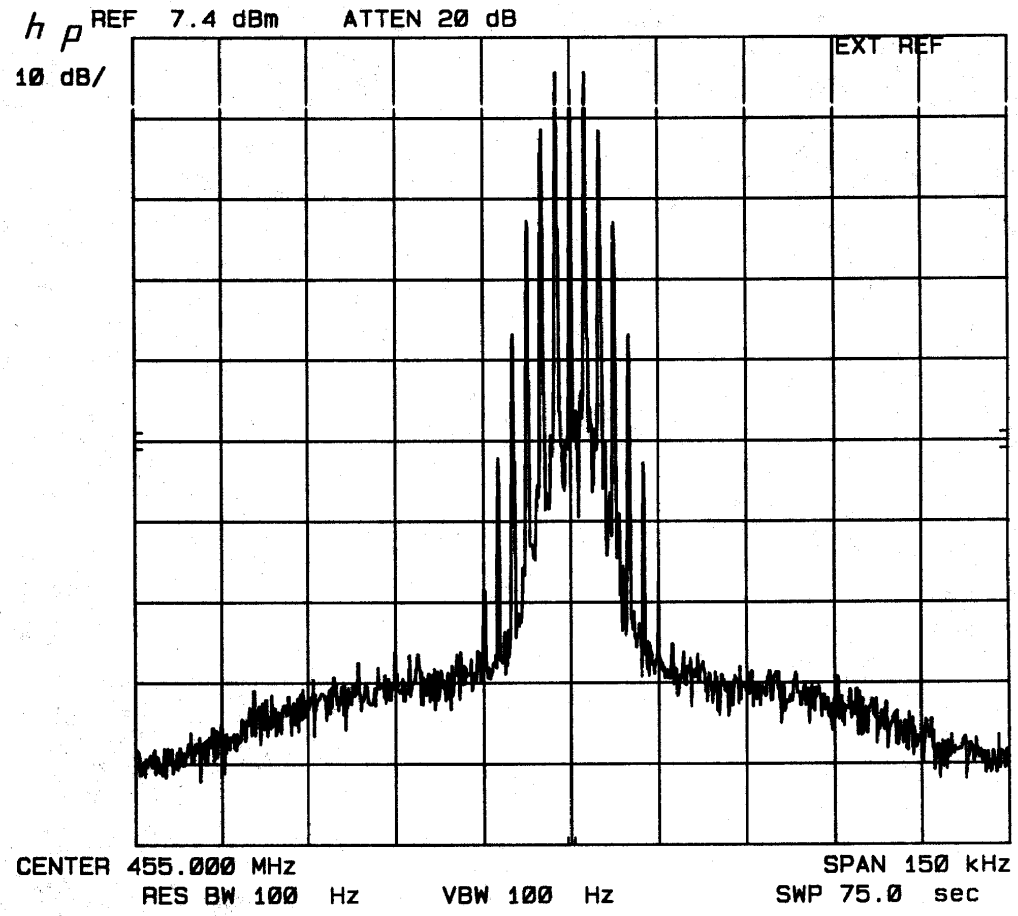
Referenced to the Unmodulated Carrier
Modulated with 2500 Hz
Analyzer: Vertical = 10 dB/Div.

Section 3 B1

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

OCCUPIED BANDWIDTH

Modulation Sideband Spectrum



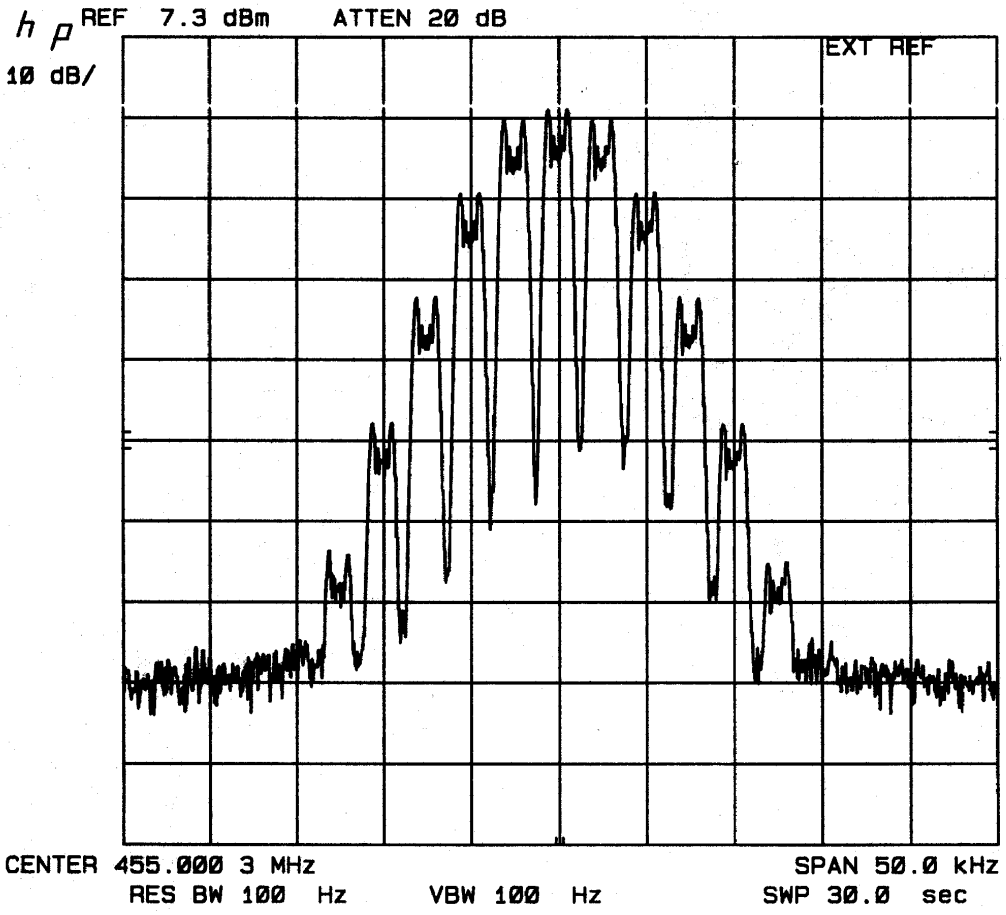
Referenced to the Unmodulated Carrier
Modulated with 2500 Hz
Analyzer: Vertical = 10 dB/Div.

Secton 3 B2

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

OCCUPIED BANDWIDTH

Modulation Sideband Spectrum



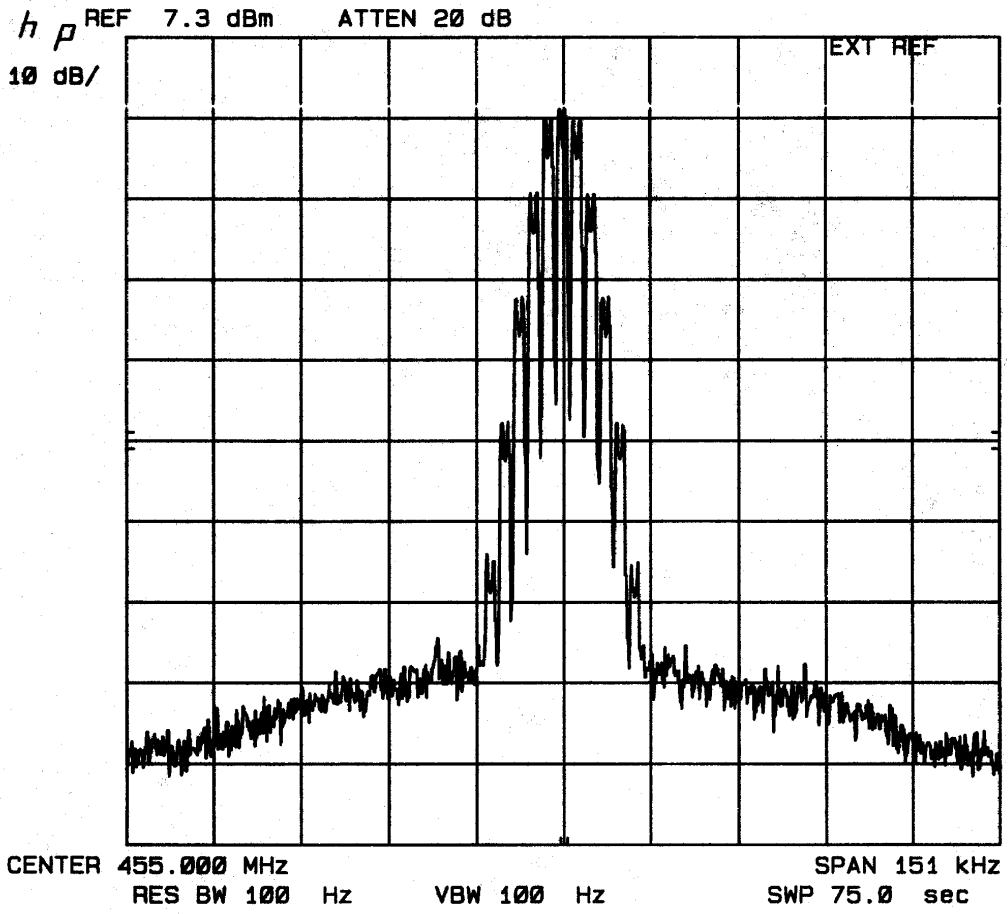
Referenced to the Unmodulated Carrier
Modulated with 2500 Hz + 150 BPS
Analyzer: Vertical = 10 dB/Div.

Section 3 C1

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

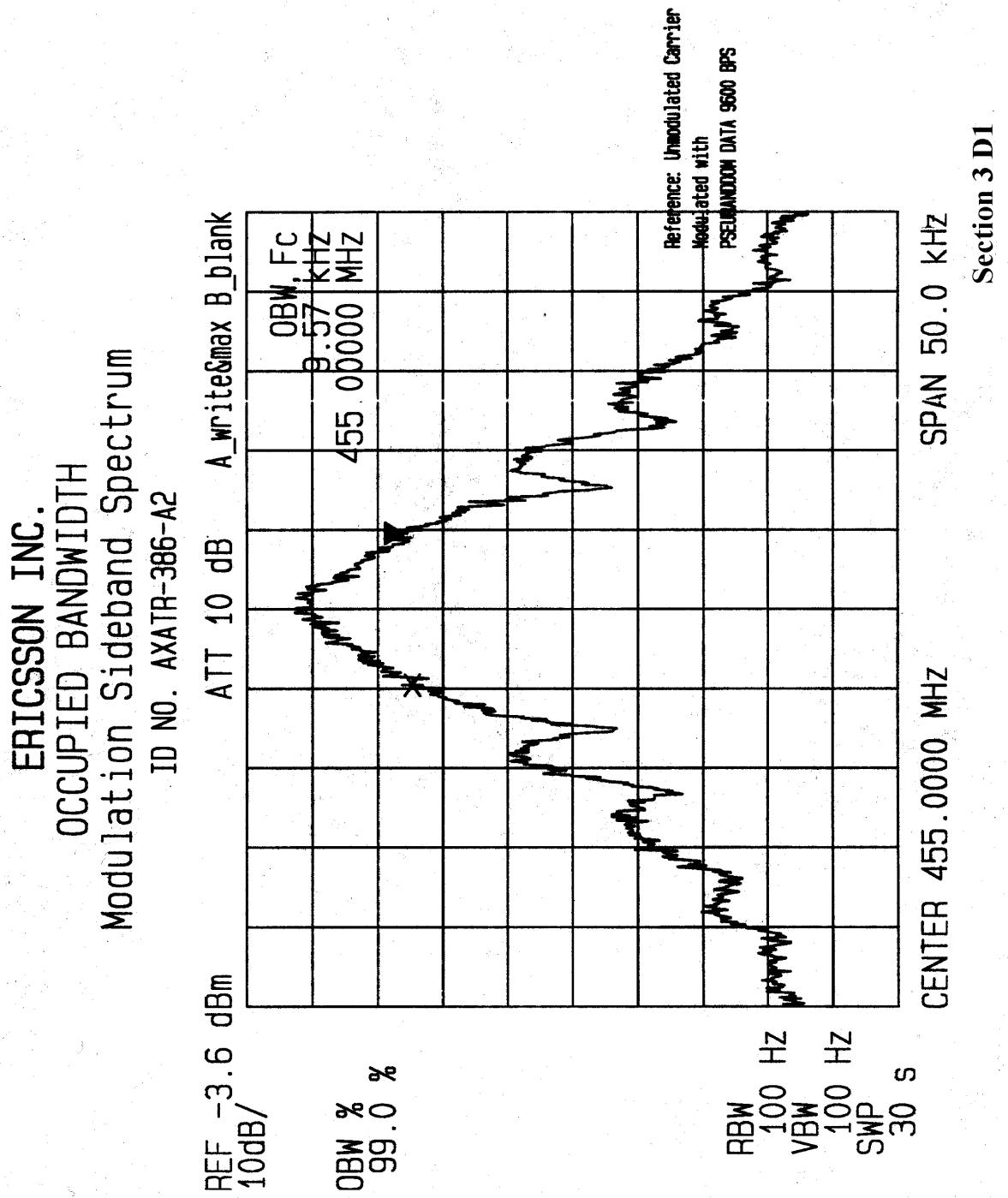
OCCUPIED BANDWIDTH

Modulation Sideband Spectrum

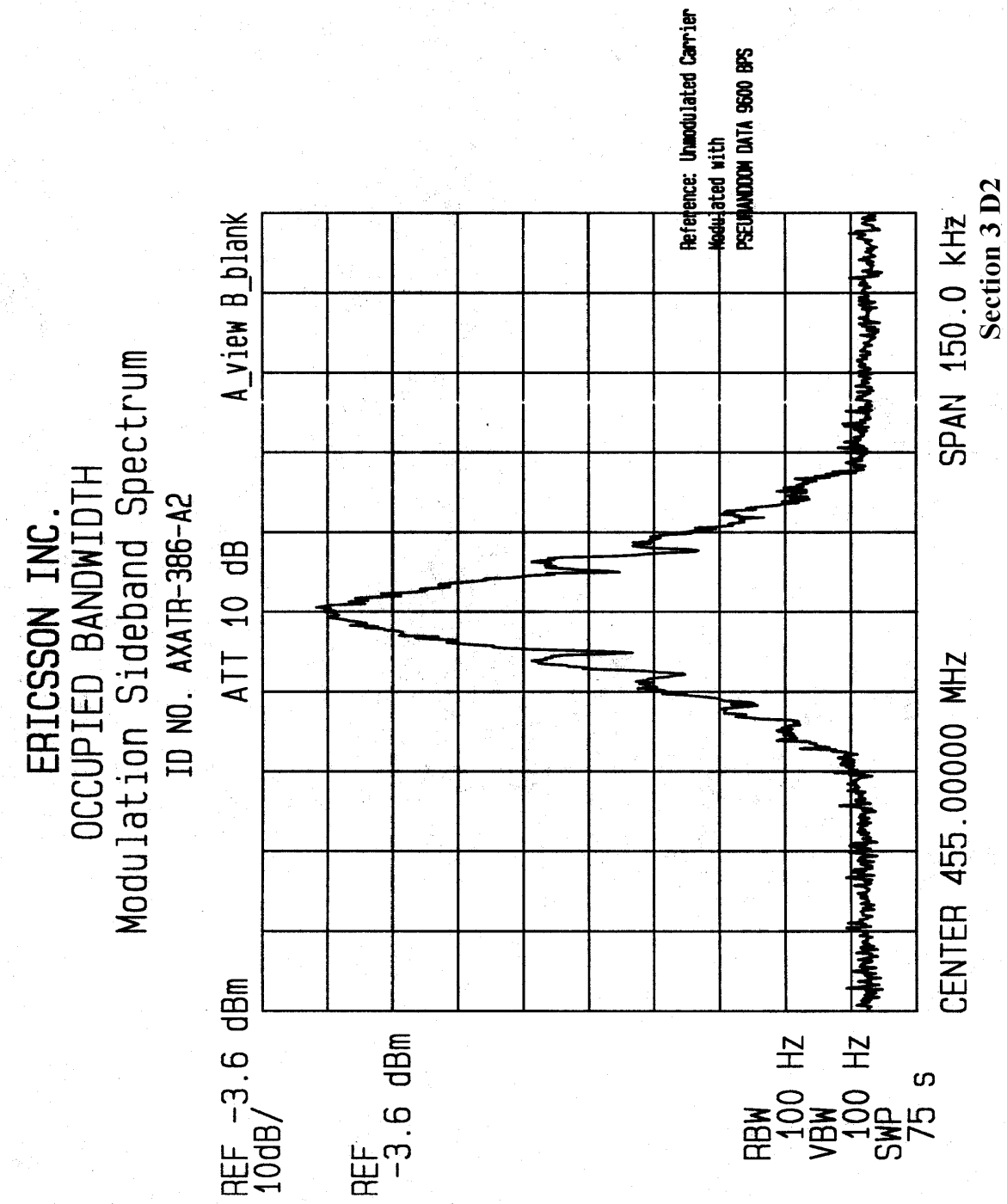


Referenced to the Unmodulated Carrier
Modulated with 2500 Hz + 150 BPS
Analyzer: Vertical = 10 dB/Div.

Section 3 C2


ERICSSON INC.
OCCUPIED BANDWIDTH
Modulation Sideband Spectrum
ID NO. AXATR-386-A2
REF -3.6 dBm
10dB/
ATT 10 dB
A_write&max B_blank
OBW,Fc
9.57 kHz
455.00000 MHz
OBW %
99.0 %
Reference: Unmodulated Carrier
Modulated with
PSEUDRANDOM DATA 9600 BPS
RBW
100 Hz
VBW
100 Hz
SWP
30 s
CENTER 455.0000 MHz
SPAN 50.0 kHz

Section 3 D1


ERICSSON INC.
OCCUPIED BANDWIDTH
Modulation Sideband Spectrum
ID NO. AXATR-386-A2
REF -3.6 dBm
10dB/
ATT 10 dB
A_view B_blank
REF
-3.6 dBm
Reference: Unmodulated Carrier
Modulated with
PSEUDRANDOM DATA 9600 BPS
RBW
100 Hz
VBW
100 Hz
SWP
75 s
CENTER 455.00000 MHz
SPAN 150.0 kHz

Section 3 D2

SECTION 3

OCCUPIED BANDWIDTH

(FOR 12.5 kHz CHANNELIZATION)

Method of Measurement Per Data on Occupied Bandwidth is presented in the form of a spectrum analyzer plot which illustrates the transmitter sidebands. A plot is taken of the carrier sideband modulated with a 2500 Hz tone at a level 16 dB greater than that required to produce 50 percent modulation. (The spectrum analyzer grid indicates the reference level of the carrier unmodulated in all exhibits.)

Section B,C Voice

Bn = 2M+2DK where

M = 3000 Hz
D = 1700Hz
K = 1 (assumed)

Bn = 9400Hz

Therefore, Emission Designator = 9K4F3E

Section D Data

Bn = 2(B/2) + 2DK where

B = 9600bps
D = 1800 bps
K=1 (assumed

Bn= 13200Hz

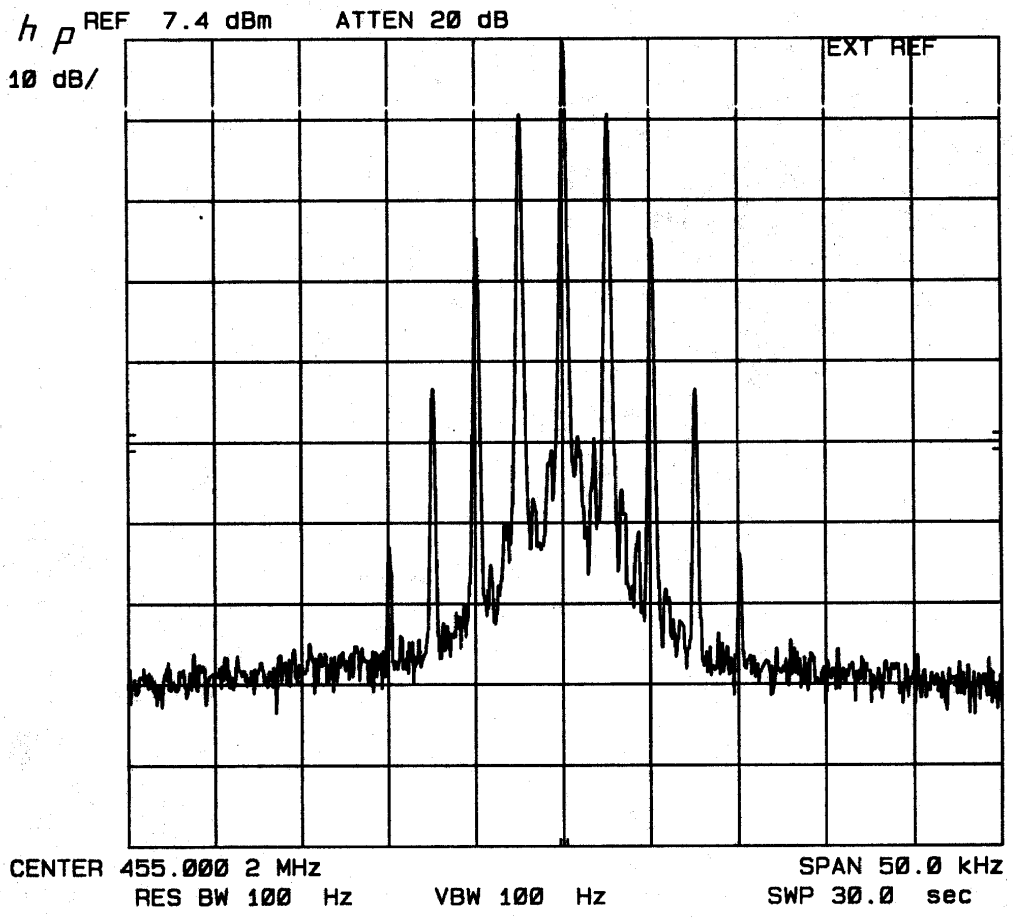
Using Carson's rule the above calcuation exceeds the 11.25 kHz limit per 90.209, this necessitated the need for an empirical measurement. The measurement for 99% power level was take with a Advantest 3271A Spectrum Analyzer with the results of. 6.57 kHz as the measure of necessary bandwidth at 99% of the power level. This measurement proves that due to the highly filtered nature of the the signal in question that the necessary bandwidth required is much less than calculated with Carson's rule. Ericsson request that 6.57 kHz be used as the necessary bandwidth.with the Emission Designator 6K6F1D (For Data be used) and 6K6F1E (For Digital Voice).

Therefore, Emission Designator =6K6F1D (For Data) and 6K6F1E (For Voice).

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

OCCUPIED BANDWIDTH

Modulation Sideband Spectrum



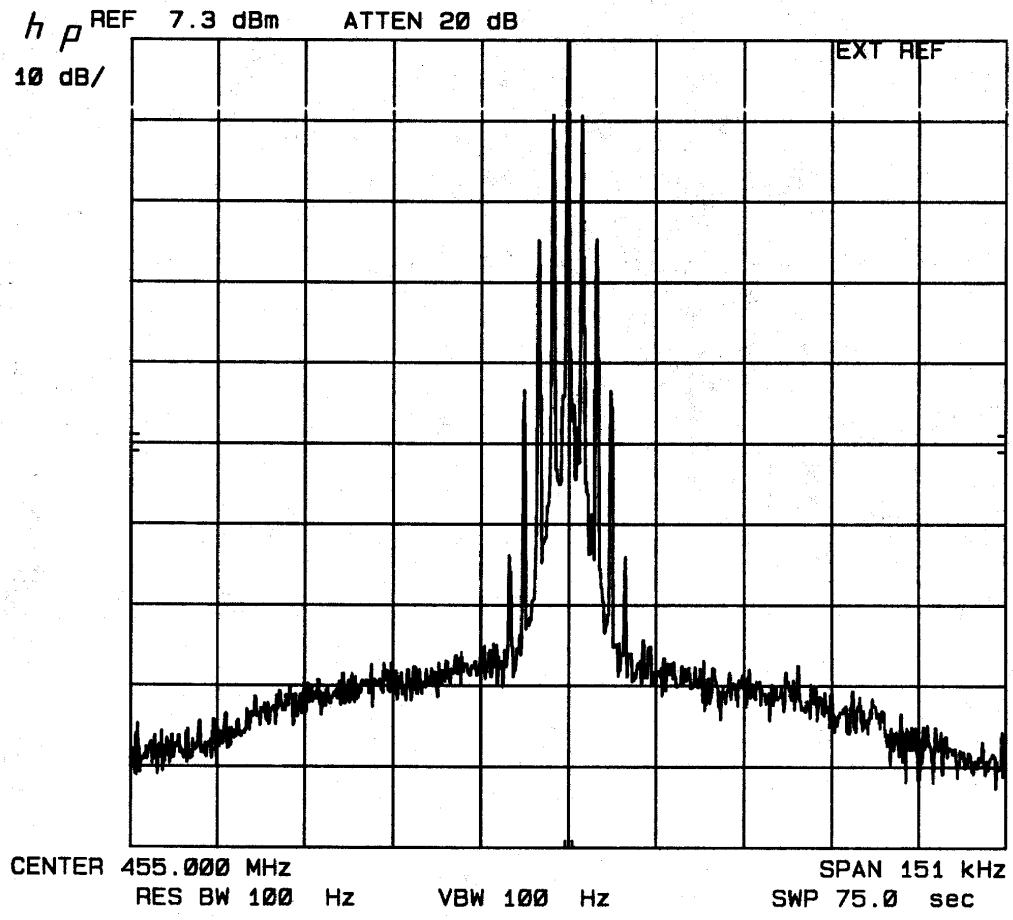
Referenced to the Unmodulated Carrier
Modulated with 2500 Hz
Analyzer: Vertical = 10 dB/Div.

Section 3 B3

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

OCCUPIED BANDWIDTH

Modulation Sideband Spectrum



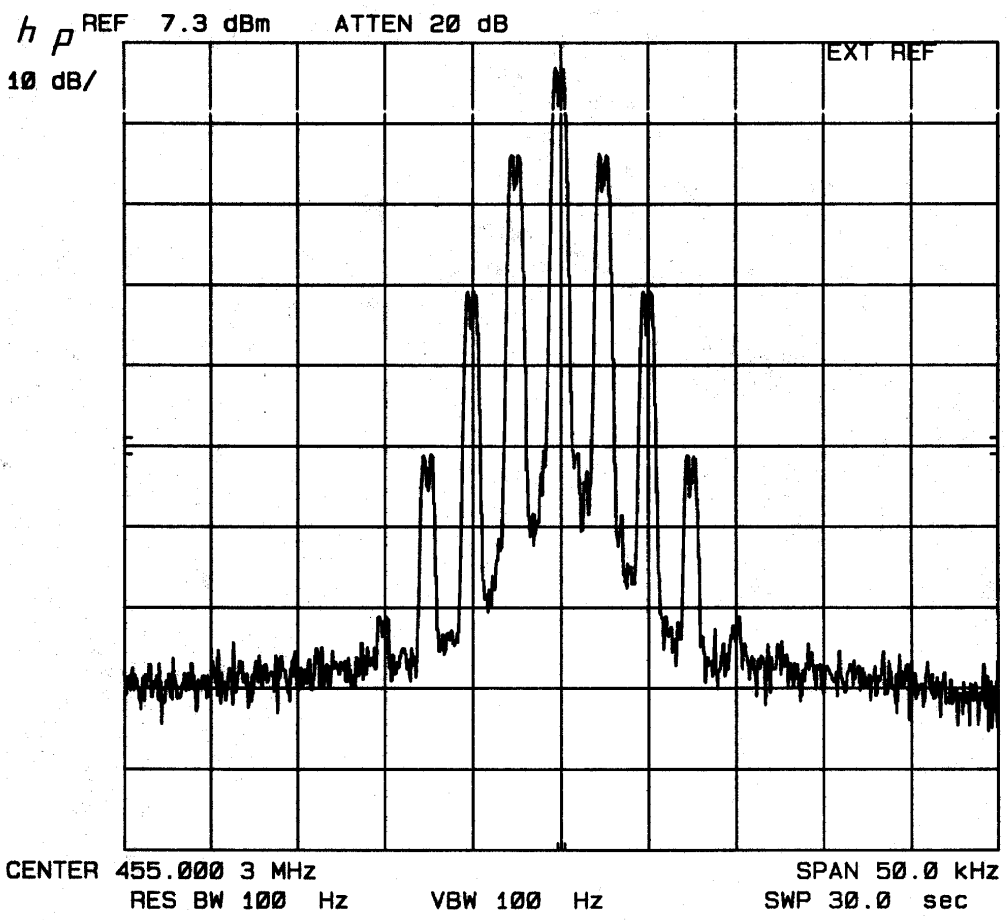
Referenced to the Unmodulated Carrier
Modulated with 2500 Hz
Analyzer: Vertical = 10 dB/Div.

Section 3 B4

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

OCCUPIED BANDWIDTH

Modulation Sideband Spectrum



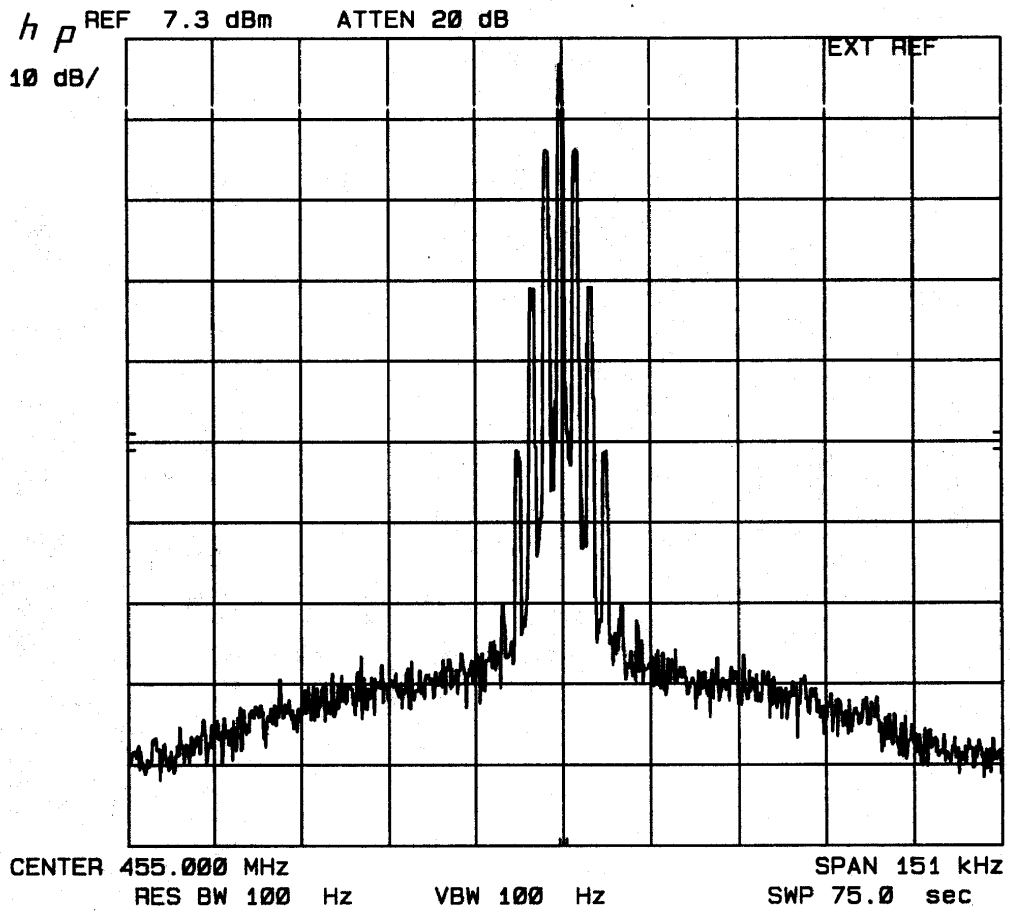
Referenced to the Unmodulated Carrier
Modulated with 2500 Hz + 150 BPS
Analyzer: Vertical = 10 dB/Div.

Section 3 C3

APPLICANT: Ericsson Inc. ID NO. AXATR-386-A2

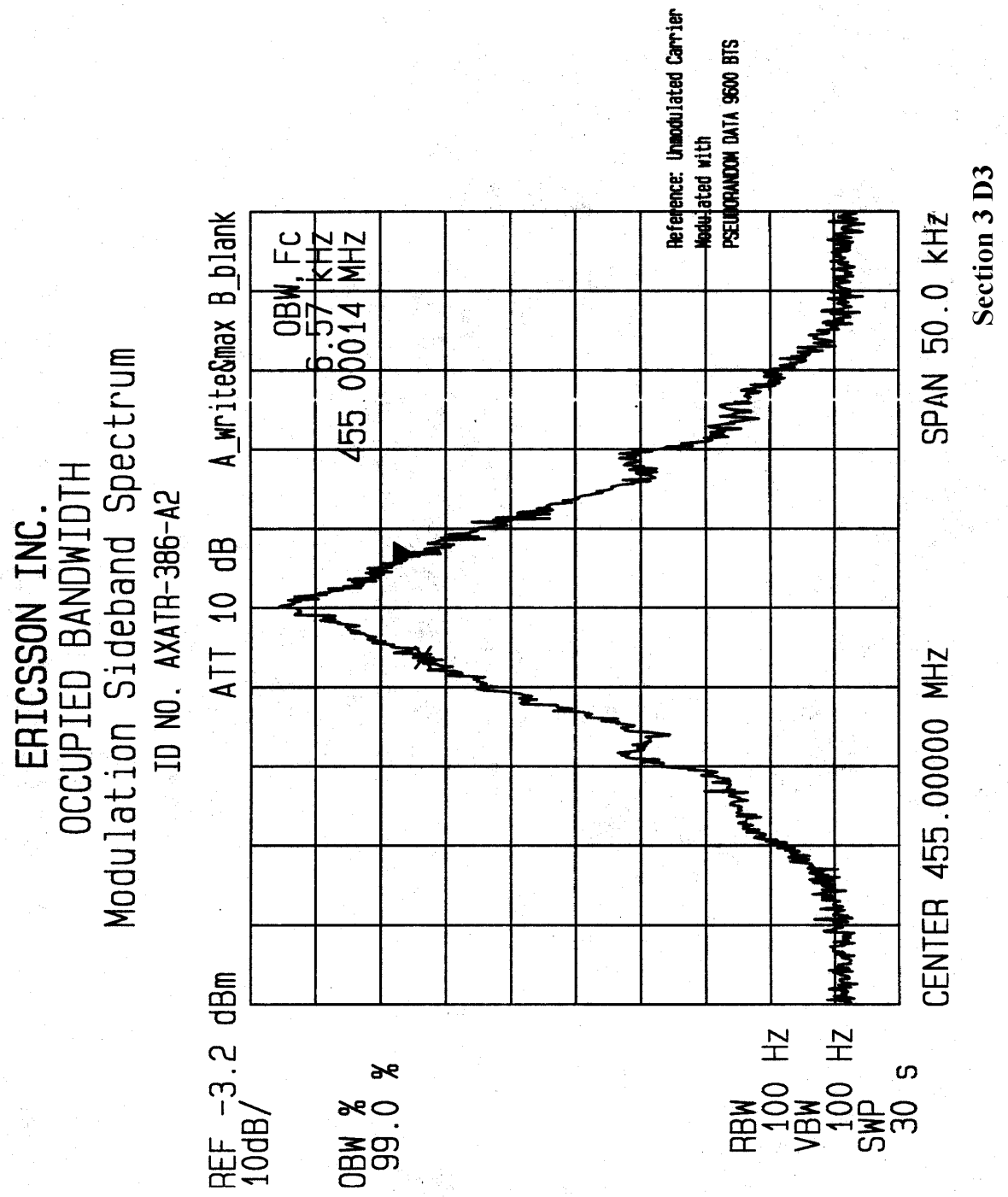
OCCUPIED BANDWIDTH

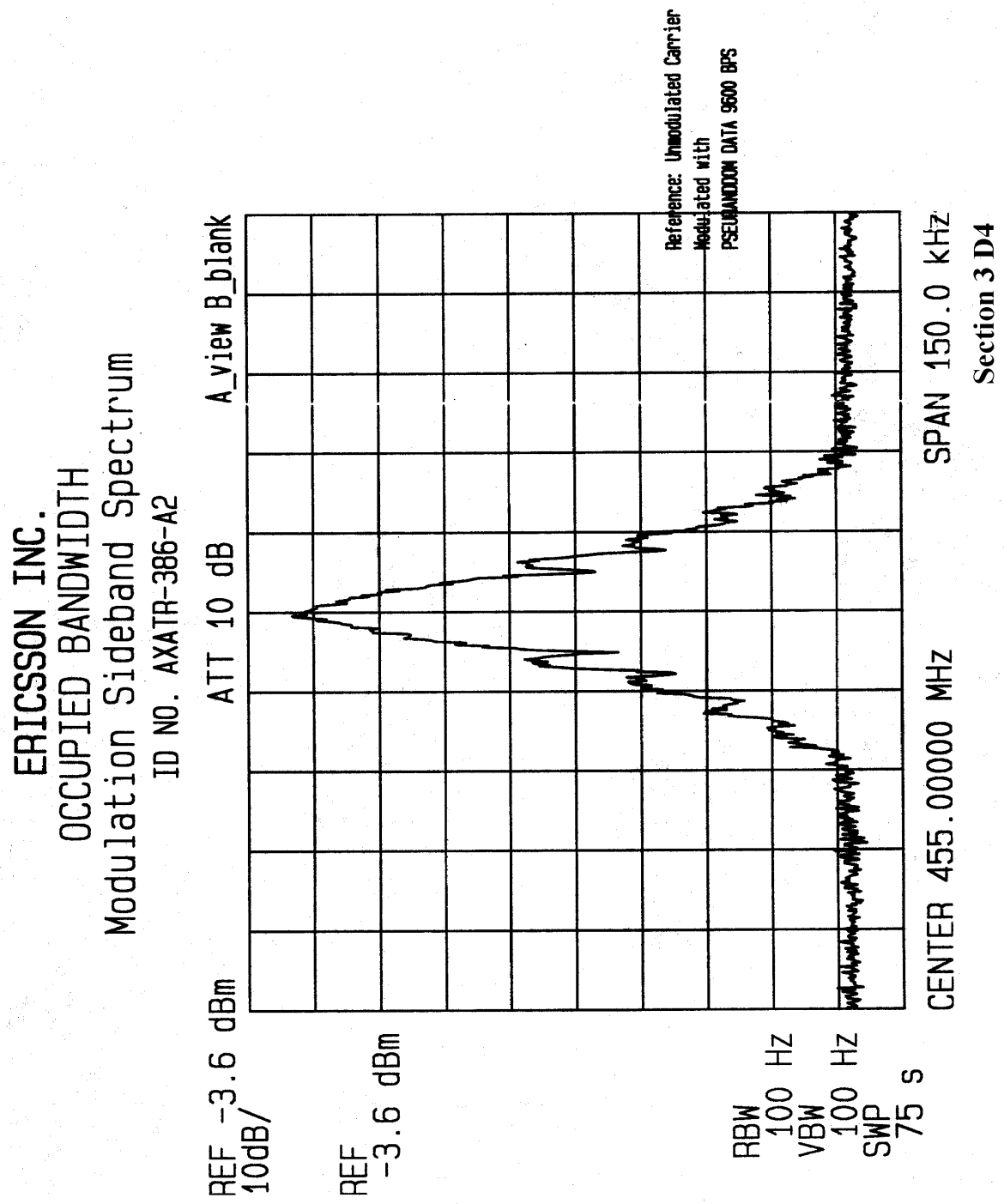
Modulation Sideband Spectrum



Referenced to the Unmodulated Carrier
Modulated with 2500 Hz + 150 BPS
Analyzer: Vertical = 10 dB/Div.

Section 3 C4


ERICSSON INC.
OCCUPIED BANDWIDTH
Modulation Sideband Spectrum
ID NO. AXATR-386-A2
REF -3.2 dBm
10dB/
ATT 10 dB
A_write&max B_blank
OBW Fc
6.57 kHz
455.00014 MHz
OBW %
99.0 %
Reference: Unmodulated Carrier
Modulated with
PSEUDORANDOM DATA 9600 BTS
RBW
100 Hz
VBW
100 Hz
SWP
30 s
CENTER 455.00000 MHz
SPAN 50.0 kHz
Section 3 D3


ERICSSON INC.
OCCUPIED BANDWIDTH
Modulation Sideband Spectrum
ID NO. AXATR-386-A2
REF -3.6 dBm
10dB/
ATT 10 dB
A_view B_blank
REF
-3.6 dBm
Reference: Unmodulated Carrier
Modulated with
PSEUDANOISE DATA 9600 BPS
RBW
100 Hz
VBW
100 Hz
SWP
75 s
CENTER 455.00000 MHz
SPAN 150.0 kHz

Section 3 D4

SECTION 4

SPURIOUS EMISSIONS

Reference 2.991 spurious emissions at the antenna terminals when properly loaded with an appropriate artificial antenna were measured per TIA\EIA 603.

Results are as shown in the following Sections

Tx Radiated Emissions		
Sections	Frequency Mhz	Power in Watts
M1	440.0375	20
M2	440.0375	40
N1	469.9725	20
N2	469.9725	40

Equipment used was:

Hewlett Placard Spectrum Analyzer 140T Display, 8554-B-RF, 8552B-IF.

Reference 2.993 field strength of spurious radiation was measured on our three meter range. The site and equipment are described in the site description and attenuation measurements for the Ericsson Inc. three meter radiation site #2 filed with the FCC in Columbia, Maryland, in November of 1990. The measurement procedure is per TIA/EIA 603, but done on a three meter test site. Results are shown on the following exhibits

Tx Conducted Emissions		
Sections	Frequency Mhz	Power in Watts
B1	440.0375	20
B2	440.0375	40
C1	469.9725	20
C2	469.9725	40

*SAME AS FOR 25 OR 12.5 kHz modes.

TRANSMITTER RADIATED

AXATR-386-A2 S/N ET2UMH02E October 26, 1998

Carrier Power = 40.000 Watts at 440.037500 MHz Date 10/26/98
Device ID: AXATR-386-A2 S/N ET2UMH02E

Frequency MHz	Antenna Polarization	Measured dBm	EDRP dBm
880.075200		-80.7	-51.4
1320.112700		-79.1	-44.4
1760.151100		-74.0	-36.8
2200.188800		-64.5	-24.7
2640.130100		-74.5	-32.3
3080.252000		-83.8	-38.2
3520.302500		-87.8	-41.5
3960.340500		-90.8	-43.7
4400.378400		-96.3	-47.3

Section 4 M2

Carrier Power = 20.000 Watts at 440.037500 MHz Date 11/14/98
Device ID: Master III - Czech (403-430 MHz)

Frequency MHz	Antenna Polarization	Measured dBm	EDRP dBm
880.076600		-73.5	-44.2
1320.113800		-75.5	-40.8
1760.151700		-80.2	-43.0
2200.189500		-66.2	-26.3
2640.227800		-84.3	-42.1
3080.265000		-78.7	-33.2
3520.302700		-82.8	-36.4
3960.341100		-95.3	-48.2
4400.378300		-98.9	-49.9

Section 4 M1

TRANSMITTER RADIATED

AXATR-386-A2 S/N ET2UMH02E October 26, 1998

Carrier Power = 40.000 Watts at 469.962500 MHz Date 10/26/98
Device ID: AXATR-386-A2 S/N ET2UMH02E

Frequency MHz	Antenna Polarization	Measured dBm	EDRP dBm
939.926000		-77.1	-47.3
1409.828100		-76.6	-41.7
1879.815500		-68.0	-30.0
2349.674900		-68.6	-28.2
2819.773600		-86.2	-42.4
3289.740300		-86.0	-40.1
3759.702800		-78.7	-32.0
4229.665300		-102.2	-54.0

Section 4 N2

Carrier Power = 20.000 Watts at 469.962500 MHz Date 11/14/98
Device ID: Master III - Czech (403-430 MHz)

Frequency MHz	Antenna Polarization	Measured dBm	EDRP dBm
939.927200		-76.9	-47.1
1409.887500		-79.6	-44.7
1879.852100		-81.9	-43.9
2349.814600		-84.7	-44.3
3289.739600		-93.0	-47.1
3759.703100		-86.4	-39.7
4699.629600		-100.8	-49.5
5169.590200		-105.0	-50.7

Section 4 N1

----------End of Report----------

Transmitter Conducted
KME - S/N ET2UMH01E

AXATR-386-A2 ***Section 5*** **November 13, 1998**

Frequency = 440.0375MHz					
20 W	**B1 - LOW POWER**		**40 W**	**B2 - HIGH POWER**	
Freq. Mhz	Level	Actual / dBm	Freq. Mhz	Level	Actual / dBm
880.0750	-72.70	-39.93	880.0750	-68.20	-35.4
1320.1125	-87.50	-54.00	1320.1125	-78.80	-43.9
1760.1500	NONE	NONE	1760.1500	NONE	NONE
2200.1875	NONE	NONE	2200.1875	NONE	NONE
3080.2625	-80.0	-45.8	3080.2625	-86.00	-52.0
3520.3000	-89.80	-51.90	3520.3000	-87.60	-87.6
3960.3375	NONE	NONE	3960.3375	NONE	NONE
4400.3750	NONE	NONE	4400.3750	NONE	NONE

Frequency = 469.9625 MHz					
20 W	**C1 - LOW POWER**		**40 W**	**C2 - LOW POWER**	
Freq. Mhz	Level	Actual / dBm	Freq. Mhz	Level	Actual / dBm
939.9250	-72.90	-39.00	939.9250	-68.00	-34.4
1409.9875	-89.00	-48.00	1409.9875	-82.60	-41.2
1879.8500	NONE	NONE	1879.8500	NONE	NONE
2349.8125	-99.00	-56.10	2349.8125	-98.90	-56.0
2819.7750	-93.70	-58.10	2819.7750	-91.30	-55.7
3289.7375	-101.00	-56.60	3289.7375	NONE	NONE
3759.7000	-100.00	-55.10	3759.7000	-97.30	-52.4
4229.6625	NONE	NONE	4229.6625	NONE	NONE
4699.6250	NONE	NONE	4699.6250	NONE	NONE

SECTION 5

FREQUENCY STABILITY

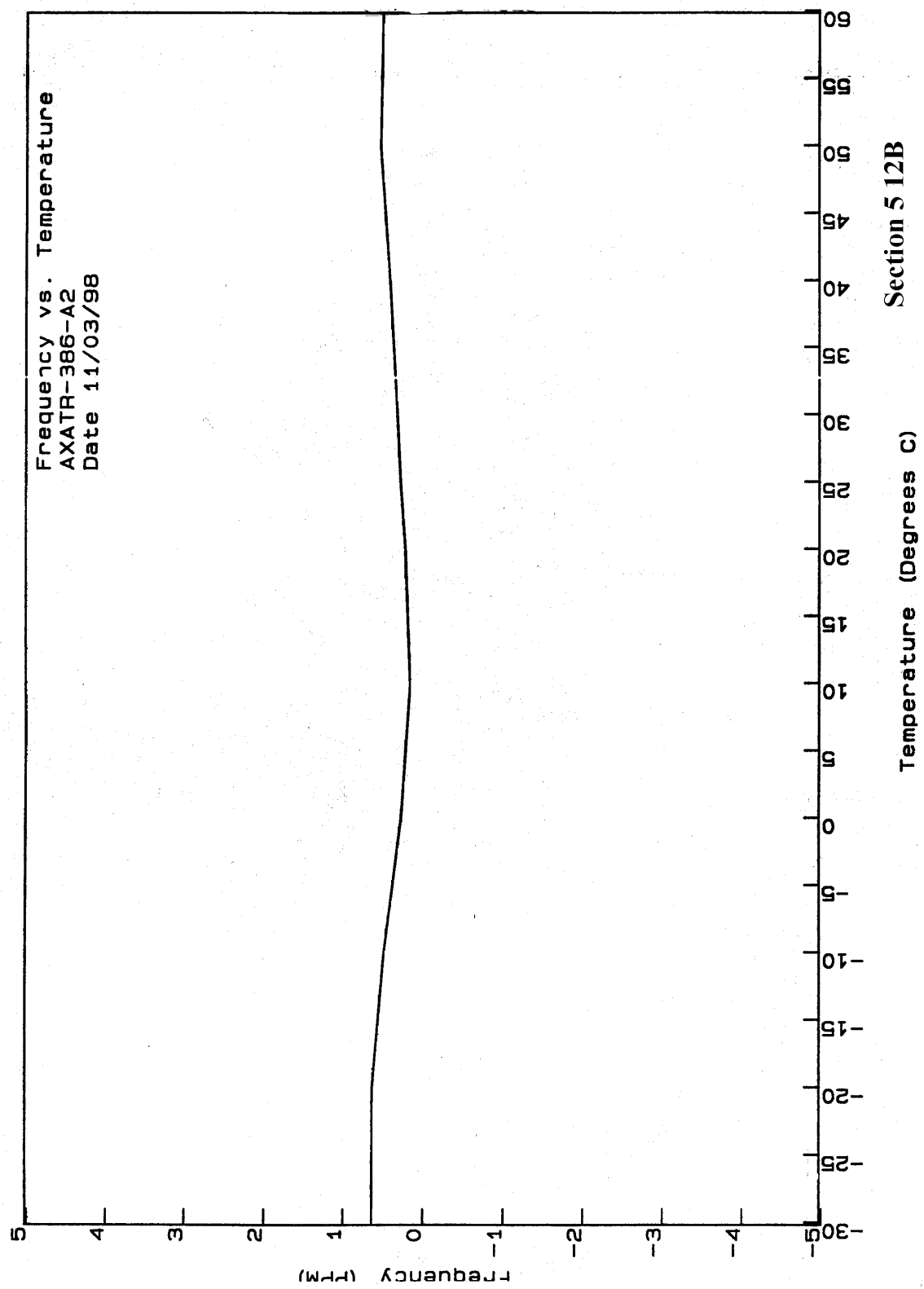
Par. 2.995 (a,1) (b) (d, 1) variation of output frequency as a result of either temperature or voltage variation is reported in the graphs on the following sheets: (The battery is rated from 6 to 9 volts.)

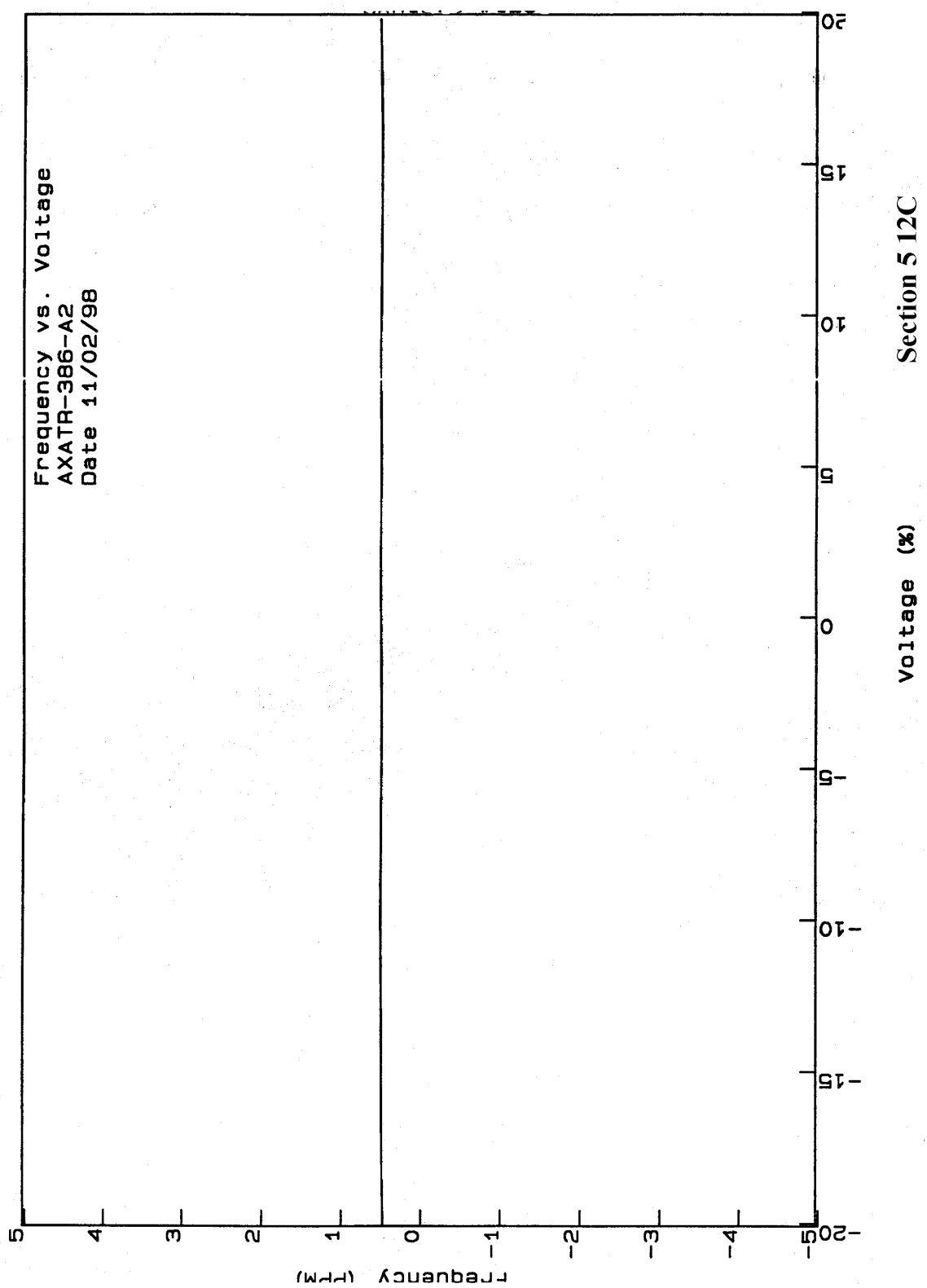
Section 5B Carrier Frequency Vs Temperature

Section 5C Carrier Frequency Vs. Voltage

The Equipment used is:

Hewlett Packard QUARTZ Thermometer Model 2804A
Takeda Counter TR5823AK
Takeda Digital Multimeter TR6878
Tabai Temperature chamber PL-2G


Frequency vs. Temperature
AXATR-386-A2
Date 11/03/98
Frequency (PPM)
5
4
3
2
1
0
-1
-2
-3
-4
-5
60
55
50
45
40
35
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
Temperature (Degrees C)
Section 5 12B


Frequency vs. Voltage
AXATR-386-A2
Date 11/02/98
Frequency (PPM)
5
4
3
2
1
0
-1
-2
-3
-4
-5
20
15
10
5
0
-5
-10
-15
-20
Voltage (%)
Section 5 12C

INDENTIFICATION NAMEPLATE

SECTION 7

TRANSIENT FREQSUENCY BEHAVIOR

PER PT 90.214 USING EIA/TIA 603, THE FOLLOWING MEASUREMENTS WERE MADE:

SECTION	FREQUENCY	BANDWIDTH
7A	486.9875	12.5 kHz
7B	486.9875	12.5 kHz

The Measurements taken are representative of the entire frequency band.

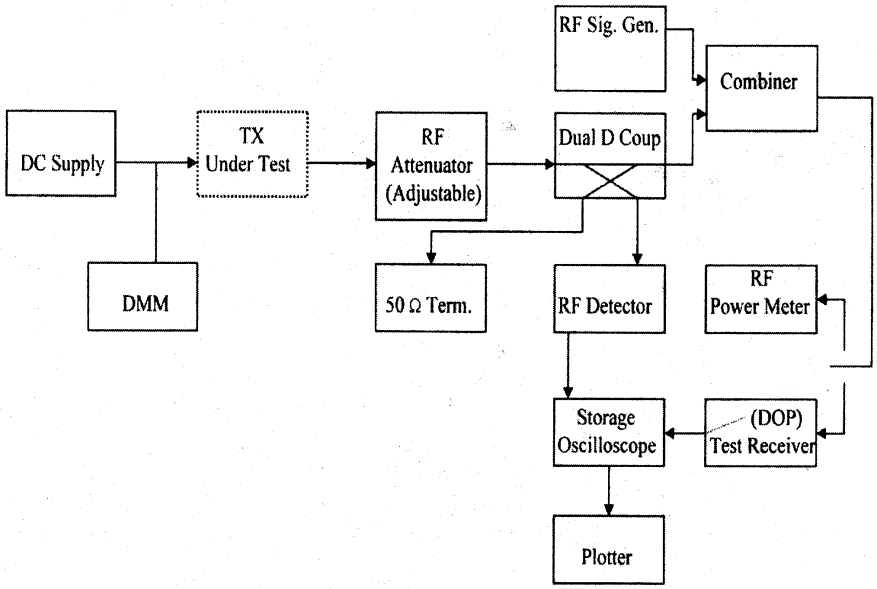
Table 1: List of Equipment

HP 778D DUAL DIRECTIONAL COUPLER	HP432A RF DETECTOR
TEKTRONIX 2232 OSCILLOSCOPE	HP8657A SIGNAL GENERATOR
HP 8901A MODULATION ANALYZER	HP436A POWER METER
HP 8482A POWER SENSOR	6261 DC POWER SUPPLY
KEITHLY 179 TRMS DIGITAL MULTIMETER	TEKTRONIX HC100 PLOTTER
NARDA ATTENUATORS	MINICIRCUITS 15542 ZFRSC-2050

SECTION 7

TRANSIENT FREQUENCY BEHAVIOR

Transient Frequency Behavior Measurement Per TIA/EIA 603.



1. Equipment is connected as illustrated above.
2. Connect the test receiver's Demodulator Output Port (DOP) to the vertical input chan nel of the storage Oscilloscope. Connect the output of the RF detector the external trigger of the oscilloscope. Connect the output of the RF combiner the RF power meter.
3. Set the test receiver to measure FM deviation with the audio bandwidth set at =50 Hz to =15,000 Hz and tune the RF frequency to the transmitter assigned frequency.
4. Turn on the TUT (Transmitter Under Test). Adjust the RF attenuator to provide an input level of 20 dBm which is 10 dB below the maximum allowed input power to the test receiver. (TIA/EIA 603 first sets the level to 40 dB below the maximum allowed input level of the test receiver, then increases the level by 30 dB to 10 dB below the maximum allowed input level. The maximum input level of our test receiver is 30 dBm.) Turn off the TUT.
5. Set the signal generator to the assigned TX frequency and modulate it with a 1 kHz tone at +/- d, deviation equal to the Channel Spacing (i.e. 25,12.5, or 6.25 kHz) and set its power to -30 dBm (50 dB below the level of the TUT).
6. Disconnect the RF power meter and connect the output of the RF combiner network to the input of the test receiver.

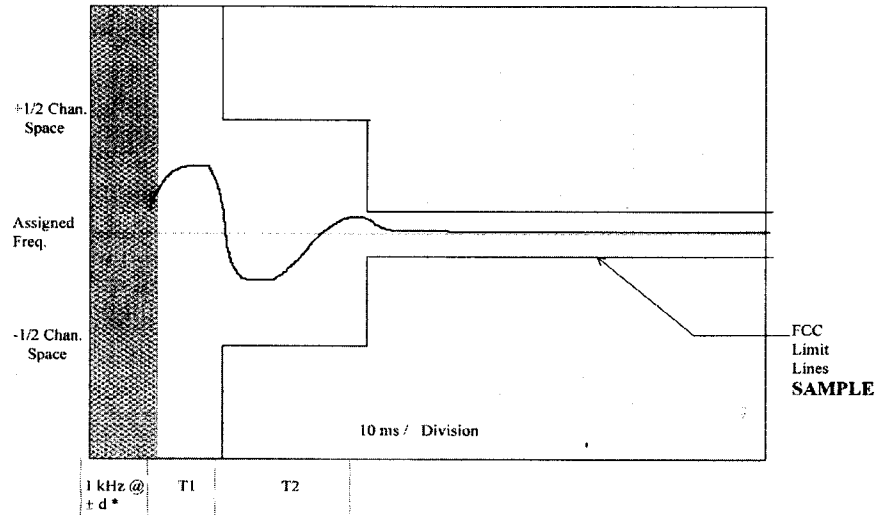
SECTION 7

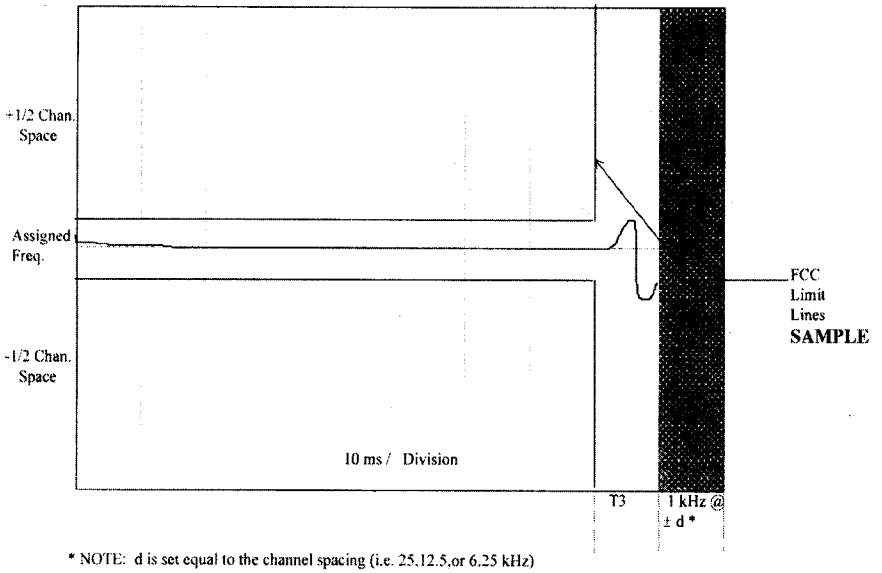
TRANSIENT FREQUENCY BEHAVIOR

7. Set the horizontal sweep rate on the storage oscilloscope to 10 milliseconds per division and adjust the display to continuously view the 1000 Hz tone from the DOP. Adjust the vertical amplitude control of the oscilloscope to display the 1000 Hz at +/-4 divisions vertically centered on the display.
8. Adjust the oscilloscope so it will trigger on an increasing magnitude from the RF peak detector at 1 division from the left side of the display, when the transmitter is turned on. Set the controls to store the display.
9. Turn on the TUT and observe the stored display. The output at the DOP, due to the change in ratio of power between the signal generator input power and the transmitter output power will, because of the capture effect of the test receiver, produce a change in display: For the first part of the sweep it will show the 1 kHz test signal. Then once the receiver's demodulator has been captured by the transmitter power, the display will show the frequency difference from the assigned frequency to the actual transmitter frequency versus time. The instant when the 1 kHz test signal is completely suppressed (including any capture time due to phasing) is considered to be "t on".
10. To test the transient frequency during the period of "t 3", the transmitter shall be switched on.
11. Adjust the oscilloscope so it will trigger on a decreasing magnitude from the RF peak detector at 1 division from the right side of the display, when the transmitter is turned off. Set the controls to store the display.
12. The transmitter shall be switched off.
13. Observe the display. The trace should remain with in the allowed divisions during the period "t 3", according to the specifications in 90.213,90.214.

SECTION 7

TRANSIENT FREQUENCY BEHAVIOR





* NOTE: d is set equal to the channel spacing (i.e. 25,12.5,or 6.25 kHz)

ERICSSON		Internal Information TEST REPORT		1 (8)
Uppgjord (även faktaansvarig om annan) - *Prepared (also subject responsible if other)* EUS/LT/V/ Carlin Willis		DOCUMENT No. EUS/LT/V/AXATR-386-A2		
Dokansv/Godk - *Doc respons/Approved* EUS/LT/V/ John Bavely	Kontr - *Checked*	Datum – *Date*	Rev A	File N:\...\Tx_Freq_Behav.doc

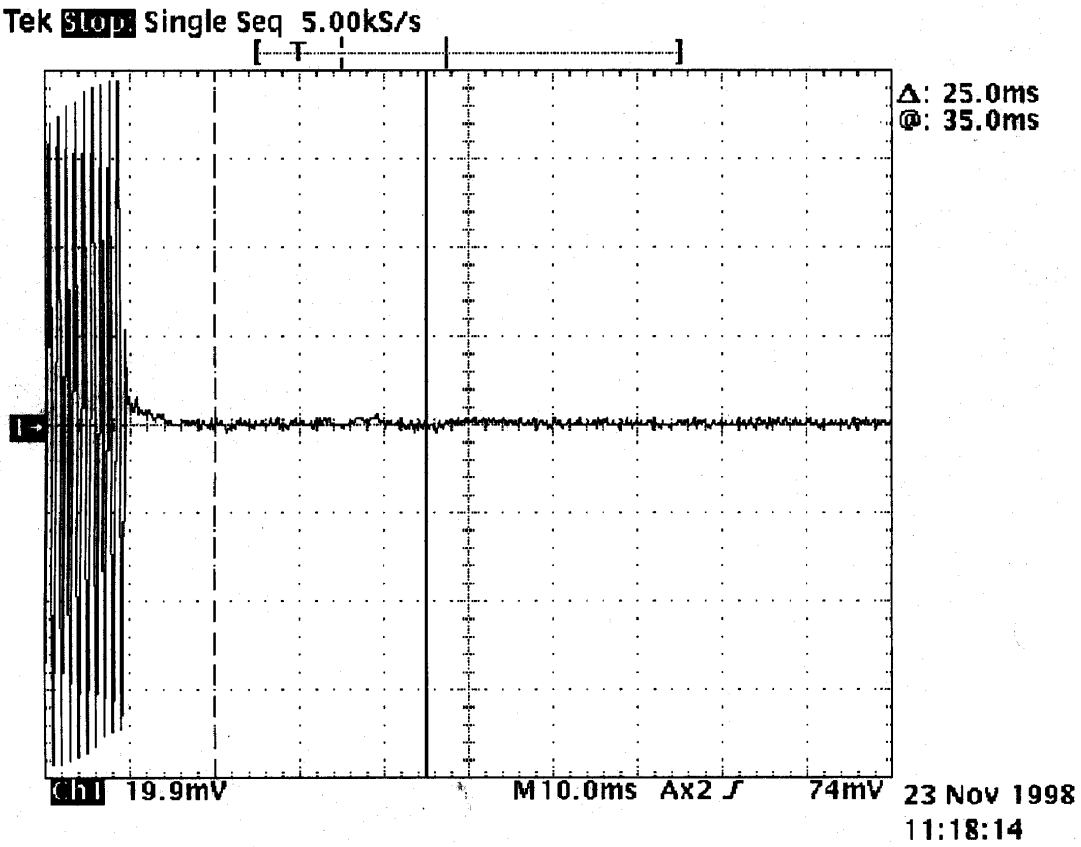
Transient Frequency Behavior of the Transmitter (Section 2.2.19) SEE THE FOLLOWING EIGHT PLOTS
Section # 15
Normal, Exhibit Letter B1

Plot No. One; Switch-on behavior of channel number __2__ of the transmitter.

Transmitter output Power = __40__ Watts.

Fo = 455.000 MHz.

Remarks: Frequency error: f= 12.5 / 20 / 25 KHz /˙div.



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Dokansv/Godk - *Doc respons/Approved* EUS/LT/V/ John Bavely	Kontr - *Checked*	Datum – *Date*	Rev A	File N:\...\Tx_Freq_Behav.doc

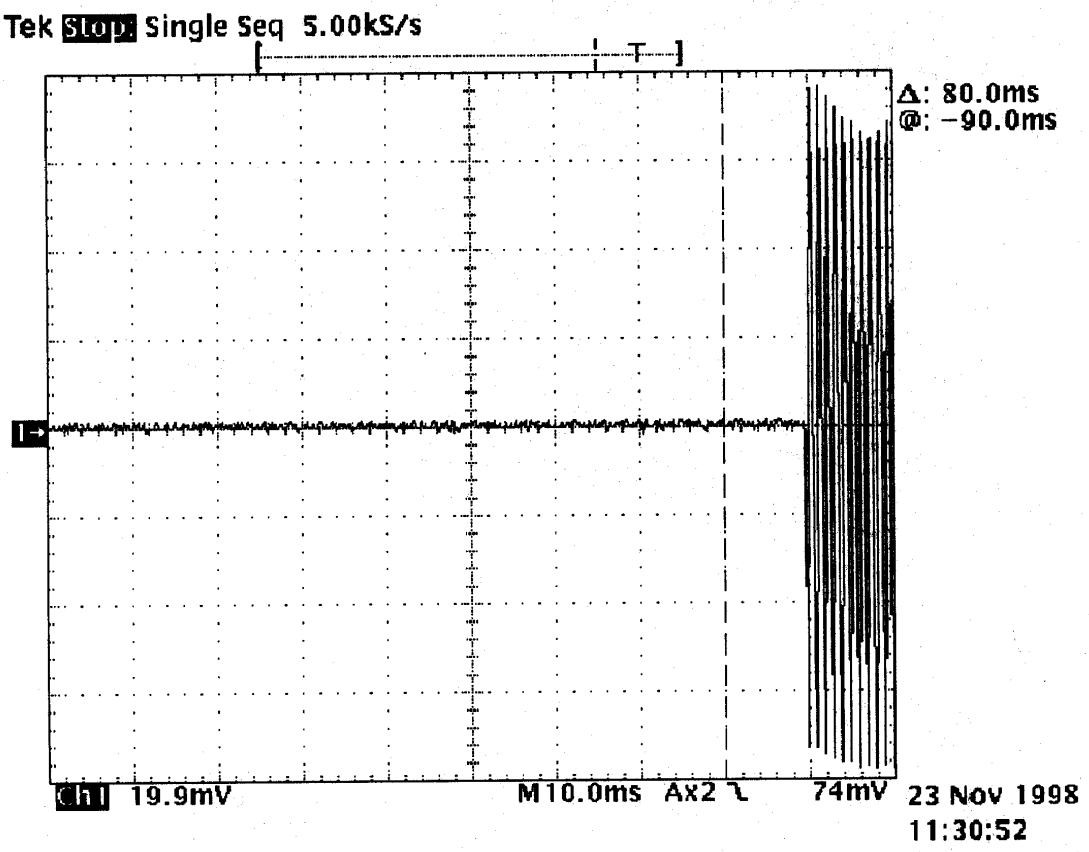
Transient Frequency Behavior of the Transmitter (Section 2.2.19)
Section # 15
Normal, Exhibit Letter B3

Plot No. Three; Switch-off behavior of channel number __2__ of the transmitter

Transmitter output Power = __40__ Watts.

Fo = 455.000 MHz.

Remarks: Frequency error: f= 12.5 / 20 / 25 KHz / div.



ERICSSON		Internal Information TEST REPORT		5 (8)
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Dokansv/Godk - *Doc respons/Approved* EUS/LT/V/ John Bavely	Kontr - *Checked*	Datum – *Date*	Rev A	File N:\...\Tx_Freq_Behav.doc

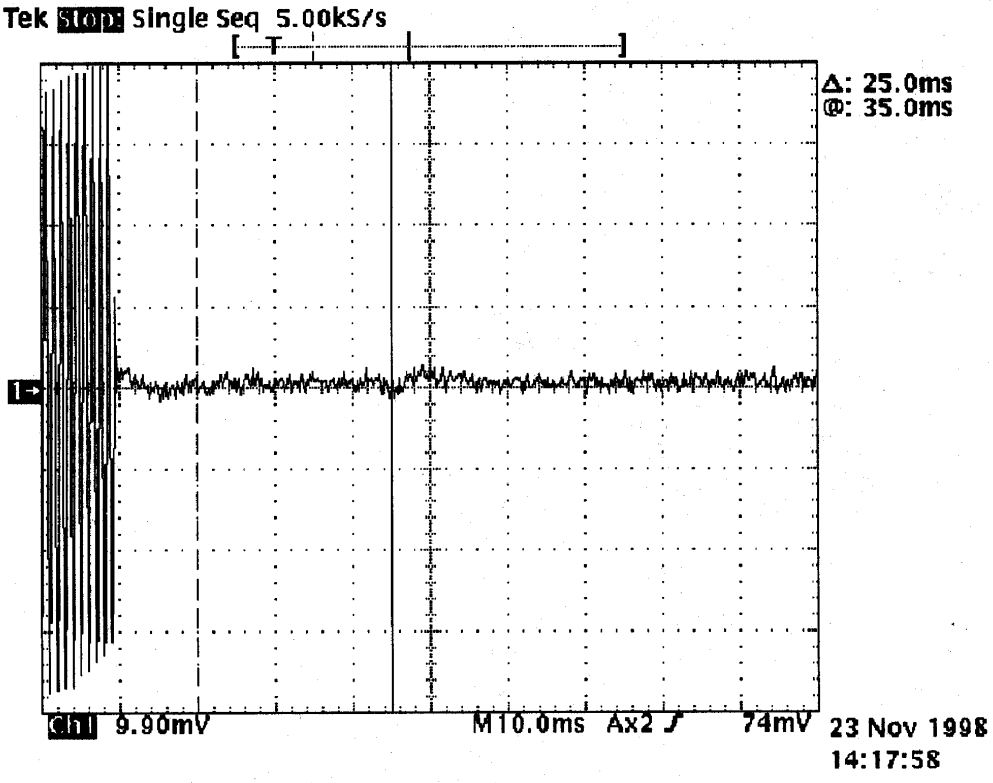
Transient Frequency Behavior of the Transmitter (Section 2.2.19)
Section # 15
Normal, Exhibit Letter C1

Plot No. Five; Switch-on behavior of channel number __2__ of the transmitter.

Transmitter output Power = __40__ Watts.

Fo = 455.000 MHz.

Remarks: Frequency error: f= 12.5 / 20 / 25 KHz/div.



ERICSSON		Internal Information TEST REPORT		7 (8)
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Dokansv/Godk - *Doc respons/Approved* EUS/LT/V/ John Bavely	Kontr - *Checked*	Datum – *Date*	Rev A	File N:\...\Tx_Freq_Behav.doc

Transient Frequency Behavior of the Transmitter (Section 2.2.19)
Section # 15
Normal, Exhibit Letter C3

Plot No. Seven; Switch-off behavior of channel number __2__ of the transmitter.

Transmitter output Power = __40__ Watts

Fo = 455.000 MHz.

Remarks: Frequency error: f= 12.5 / 20 / 25 KHz / div.