

FCC Type Acceptance Application

Submitted By: Pyramid Communications
15182 Triton Lane #102
Huntington Beach, CA 92649
William J. Carlin, President
FCC license: PG-18-12732

Prepared: December 16, 2003

Pyramid Model #: SVR-200

Transmitter Type: LRUSVR-200M

Test Site: 15182 Triton Lane #102
Huntington Beach, CA 92649

Timco Engineering Inc.
849 NW State Road 45
Newberry, FL 32669

Prepared in accordance with the requirements of
FCC Rules and Regulations Part 2, Subpart J,
Paragraphs 2.1033 and 2.1046 through 2.1057
and applicable Portions of parts 22 and 90.

List of Exhibits

FCC Paragraph	Description	Exhibit Letter
-----	Cover Sheet	
2.1033(a)	FCC Form 731	
-----	List of Exhibits	
----	Technical Description	A
----	Schematics	B
2.1033(c)(3)	Owner's Manual	C
2.1033(c)(2)	Identification Label	D
----	Photographs	E
2.1046-2.1057	Report of Measurements	F
2.1041	Measurement Procedures	G

LRUSVR-200M

Form References

1. Name of Applicant

Pyramid Communications
15182 Triton Lane #102
Huntington Beach, CA 92649 [Form 731 section 1]
Applicant is vendor

2. Identification of equipment

LRUSVR-200M [Form 731 Section 1]
UHF Transceiver [Form 731 (7) (a)]

3. Production Planned

Normal mass production, 500pcs/lot

4. Technical Description

(a) Types of emission

11K0F3E [Form 731 (10) (d)]
16K0F3E (806-824) (851-869) MHz only

(b) Frequency range

764-776 MHz [Form 731 (10) (a)]
794-806 MHz
806-824 MHz
850-870 MHz
896-901 MHz
935-940 MHz

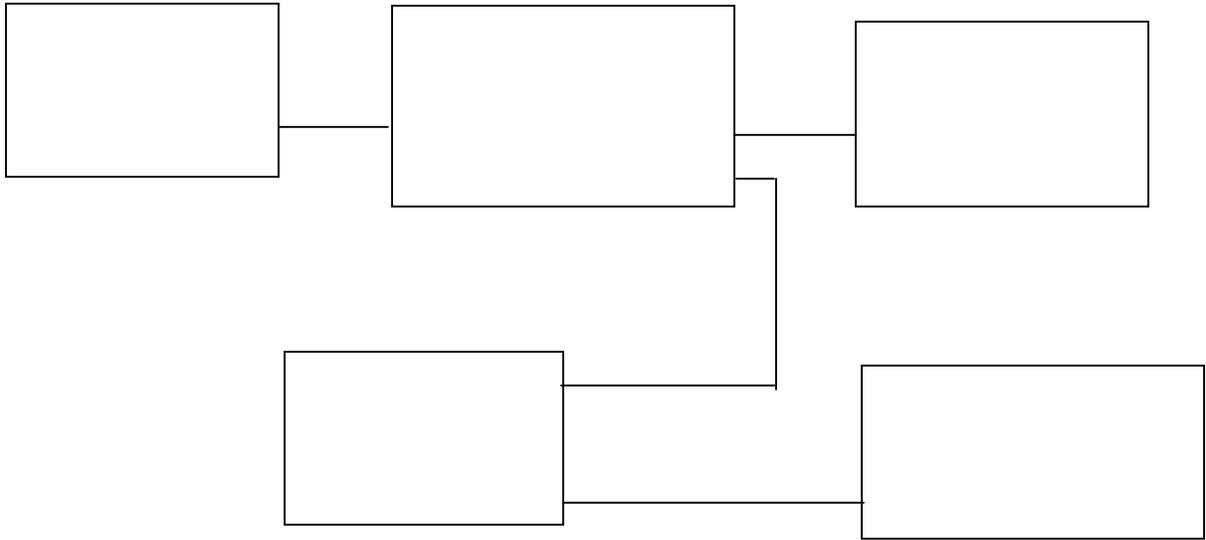
(c) Range of operation power

100mW –800mW continuously variable [Form
731(10)(b)]

(d) DC voltage and current to final RF amplifier

5.0 VDC @ 500mA

METHOD OF MEASURING:



RF Power Output/Frequency

Minimum Standard

Power: 800mW

Frequency Tolerance: ± 1.5 ppm maximum

Measurements

Power: 878 mW
Frequency: 770.100115 MHz
Error: +.15ppm

Power: 839 mW
Frequency: 800.100104 MHz
Error +.13ppm

Power: 861 mW
Frequency: 815.099836 MHz
Error -.20ppm

Power: 826 mW
Frequency: 860.099811 MHz
Error -.22ppm

Power: 878 mW
Frequency: 899.100107 MHz
Error +.12ppm

Power: 847 mW
Frequency: 938.100140 MHz
Error +.15ppm

To the best of my knowledge,
This data is accurate
Signed:



Exhibit F

Subpart 2.1047

Modulation Characteristics

Frequency response of the audio modulating circuits. The SVR-200 is designed to interface to a variety of mobile radios; the receiver audio that is available may or may not be de-emphasized. Therefore PC programming provides for flat audio response, or +6db/octave pre-emphasis; both responses were measured and plotted.

Frequency	Flat	+6 db/octave pre-emphasis
200	-8	-22
300	0	-11
400	+3	-7.5
500	+5	-6
1000	0	0
1500	-.25	+2.5
2000	-.5	+4.5
2500	-.75	+6
3000	-1.75	+6
3500	-5	+3
4000	-12	-1
4500	-20	-9
5000	-26	-15

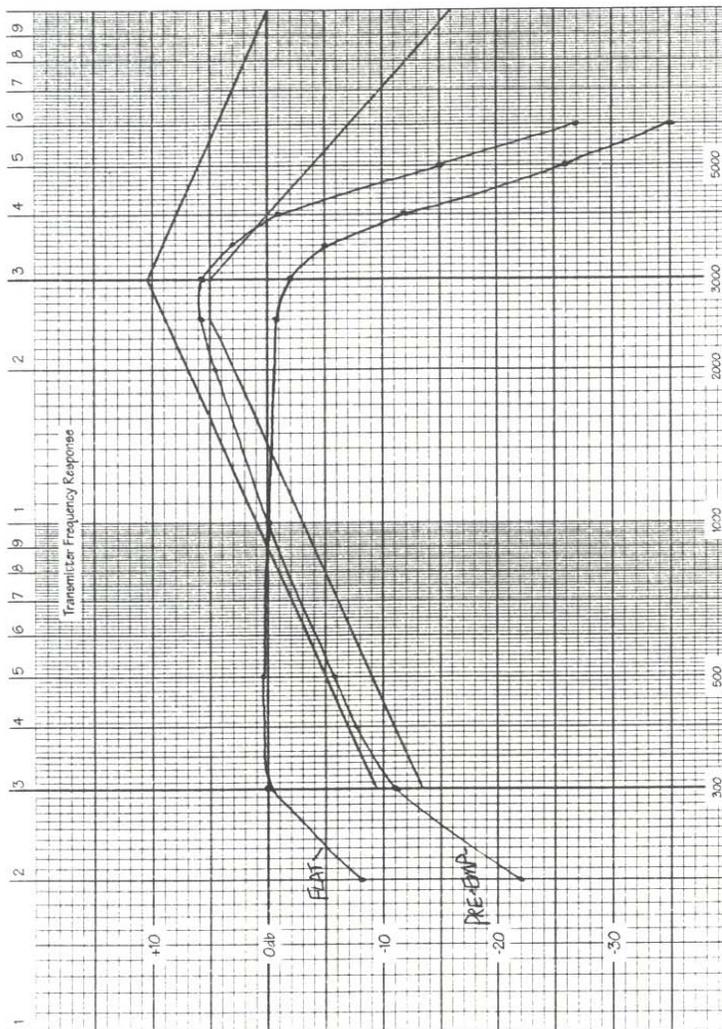
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Exhibit F
Subpart 2.1046

Transmit Audio Response

Transmit Audio Response



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knowledge this data is

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Audio Low pass Filter Response

Frequency	Response
1000	0 db
2000	-.46
3000	-2.6
4000	-10.3
5000	-26.7
6000	-45.6
7000	-52.7
8000	-52.7
9000	-52.7
10000	-52.7
12000	-52.7
14000	-52.7
16000	-52.7
18000	-52.7
20000	-52.7

{Noise Floor}

To the best of my knowledge this
Data is accurate:
Signed:



**Modulation Characteristics
Limiter Response
2.5kHz Maximum Deviation
770.1 MHz**

Input Level	300 Hz	1.0 kHz	2.5 kHz
0 dB	.850	.850	.850
2	1.06	1.05	1.04
4	1.32	1.29	1.27
6	1.63	1.62	1.43
8	1.88	1.83	1.52
10	2.00	1.90	1.58
12	2.10	1.95	1.63
14	2.17	2.02	1.67
16	2.25	2.05	1.67
18	2.31	2.08	1.69
20	2.47	2.08	1.69
22	2.49	2.09	1.70
24	2.49	2.10	1.70
26	2.50	2.10	1.70
28	2.50	2.11	1.71
30	2.50	2.11	1.70

To the best of my knowledge this
Data is accurate:

Signed:



**Modulation Characteristics
Limiter Response
2.5kHz Maximum Deviation
800.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0 dB	.850	.850	.850
2	1.01	1.02	1.01
4	1.28	1.26	1.21
6	1.55	1.58	1.40
8	1.80	1.79	1.47
10	1.95	1.87	1.53
12	2.03	1.92	1.60
14	2.12	2.00	1.64
16	2.20	2.02	1.65
18	2.28	2.05	1.66
20	2.36	2.06	1.67
22	2.38	2.07	1.67
24	2.40	2.08	1.68
26	2.40	2.08	1.68
28	2.40	2.09	1.68
30	2.40	2.09	1.69

To the best of my knowledge this
Data is accurate:
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**Modulation Characteristics
Limiter Response
2.5kHz Maximum Deviation
815.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0 dB	.850	.850	.850
2	1.06	1.03	1.04
4	1.25	1.25	1.23
6	1.56	1.63	1.40
8	1.84	1.82	1.51
10	1.97	1.85	1.57
12	2.10	1.96	1.60
14	2.16	2.02	1.64
16	2.25	2.06	1.66
18	2.32	2.08	1.68
20	2.47	2.08	1.69
22	2.49	2.09	1.69
24	2.49	2.09	1.70
26	2.49	2.10	1.71
28	2.49	2.10	1.71
30	2.49	2.11	1.71

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Data is accurate:

Signed:



**Modulation Characteristics
Limiter Response
5kHz Maximum Deviation
815.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0dB	1.6	1.6	1.6
2	2.03	1.94	1.97
4	2.55	2.40	2.57
6	3.10	3.03	2.90
8	3.70	3.50	3.08
10	4.05	3.63	3.17
12	4.21	3.81	3.21
14	4.38	3.90	3.25
16	4.56	3.94	3.27
18	4.65	3.97	3.27
20	4.86	4.02	3.27
22	4.95	4.03	3.27
24	5.00	4.04	3.28
26	4.96	4.04	3.28
28	4.95	4.08	3.27
30	4.95	4.13	3.27

To the best of my knowledge this
Data is accurate:
Signed:



**Modulation Characteristics
Limiter Response
2.5kHz Maximum Deviation
860.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0 dB	.850	.850	.850
2	1.00	.980	1.05
4	1.32	1.20	1.25
6	1.56	1.61	1.45
8	1.83	1.82	1.52
10	1.95	1.89	1.57
12	2.05	1.93	1.63
14	2.12	2.00	1.66
16	2.26	2.03	1.68
18	2.31	2.07	1.68
20	2.46	2.08	1.69
22	2.46	2.08	1.69
24	2.47	2.09	1.70
26	2.48	2.10	1.70
28	2.49	2.10	1.70
30	2.49	2.10	1.70

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Data is accurate:
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**Modulation Characteristics
Limiter Response
5kHz Maximum Deviation
860.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0dB	1.6	1.6	1.6
2	2.00	1.96	1.95
4	2.5	2.47	2.54
6	3.12	3.09	2.85
8	3.69	3.51	3.02
10	4.00	3.67	3.15
12	4.21	3.81	3.20
14	4.37	3.88	3.23
16	4.51	3.94	3.25
18	4.64	3.98	3.26
20	4.83	4.01	3.27
22	4.95	4.00	3.27
24	4.97	4.01	3.26
26	4.93	4.03	3.26
28	4.91	4.08	3.27
30	4.91	4.13	3.27

To the best of my knowledge this
Data is accurate:
Signed:



**Modulation Characteristics
Limiter Response
2.5kHz Maximum Deviation
899.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0 dB	.850	.850	.850
2	1.03	1.03	1.04
4	1.35	1.29	1.24
6	1.60	1.65	1.45
8	1.83	1.85	1.56
10	2.00	1.95	1.60
12	2.08	1.96	1.63
14	2.18	2.01	1.66
16	2.26	2.05	1.67
18	2.30	2.07	1.68
20	2.47	2.08	1.69
22	2.48	2.08	1.69
24	2.48	2.10	1.70
26	2.48	2.10	1.70
28	2.48	2.10	1.70
30	2.48	2.10	1.70

To the best of my knowledge this
Data is accurate:
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**Modulation Characteristics
Limiter Response
2.5kHz Maximum Deviation
938.1 MHz**

Input Level	300 Hz	1.0kHz	2.5 kHz
0 dB	.850	.850	.850
2	1.03	1.03	1.04
4	1.30	1.27	1.25
6	1.59	1.61	1.42
8	1.85	1.80	1.50
10	1.98	1.88	1.56
12	2.08	1.94	1.62
14	2.15	2.00	1.66
16	2.24	2.03	1.67
18	2.30	2.07	1.68
20	2.47	2.08	1.69
22	2.48	2.08	1.69
24	2.48	2.10	1.70
26	2.48	2.10	1.70
28	2.48	2.10	1.70
30	2.48	2.10	1.70

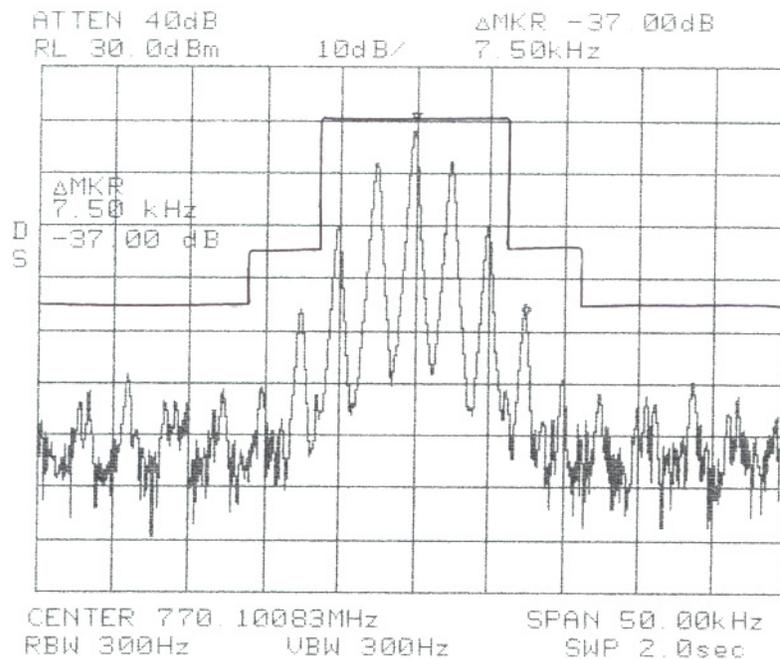
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Occupied Bandwidth
12.5 kHz Channel Spacing
770.1 MHz

Emission 11K0F3E

The SVR-200 transmits voice and single tone frequencies in the 300-3000 bandwidth; emissions are amplitude limited and band limited by high pass and low pass filters per the previous sections. The following plot was made with a 2.5 kHz tone at 16db above 50% level for 1kHz (per EIA-152C).

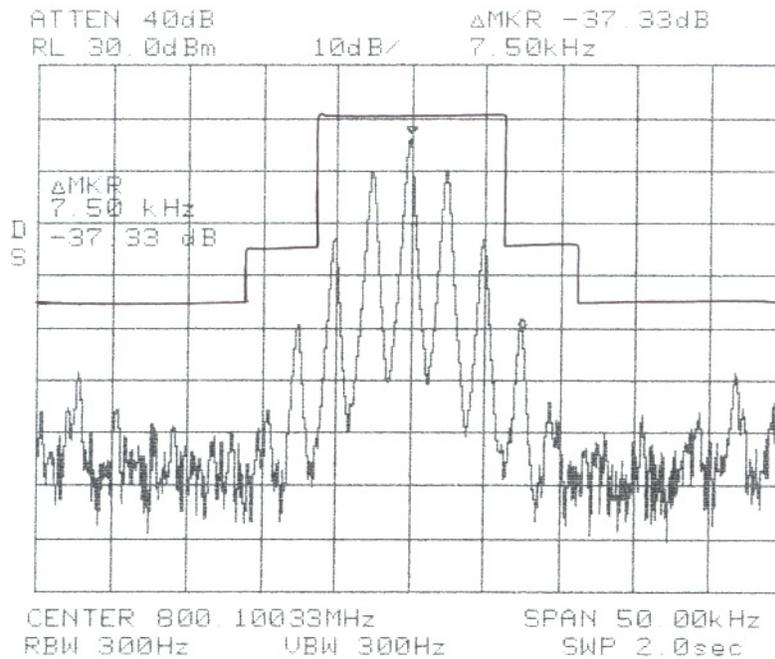


To the best of my knowledge this
Data is accurate:
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Occupied Bandwidth
12.5kHz Channel Spacing
800.1 MHz

Emission 11K0F3E

The SVR-200 transmits voice and single tone frequencies in the 300-3000 bandwidth; emissions are amplitude limited and band limited by high pass and low pass filters per the previous sections. The following plot was made with a 2.5 kHz tone at 16db above 50% level for 1kHz (per EIA-152C).

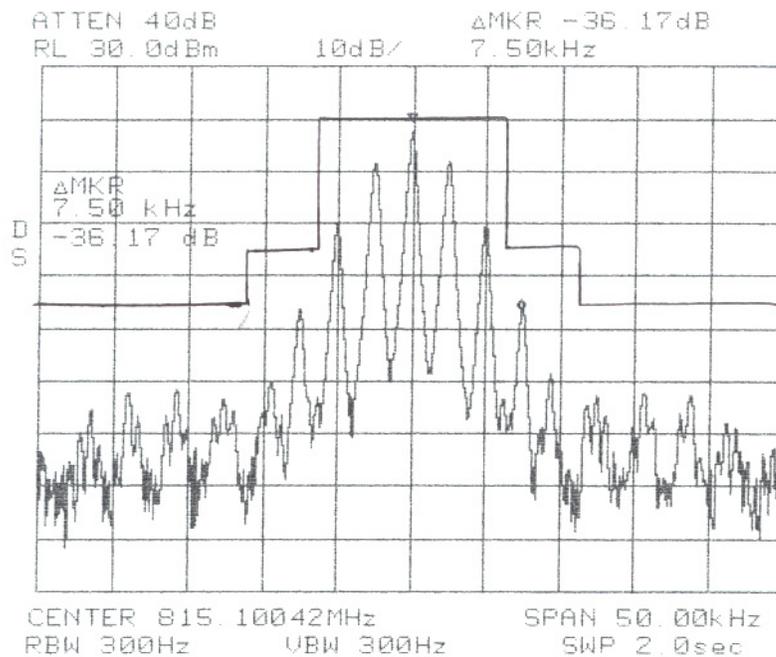


To the best of my knowledge this
Data is accurate:
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Occupied Bandwidth
12.5 kHz Channel Spacing
815.1 MHz

Emission 11K0F3E

The SVR-200 transmits voice and single tone frequencies in the 300-3000 bandwidth; emissions are amplitude limited and band limited by high pass and low pass filters per the previous sections. The following plot was made with a 2.5 kHz tone at 16db above 50% level for 1kHz (per EIA-152C).

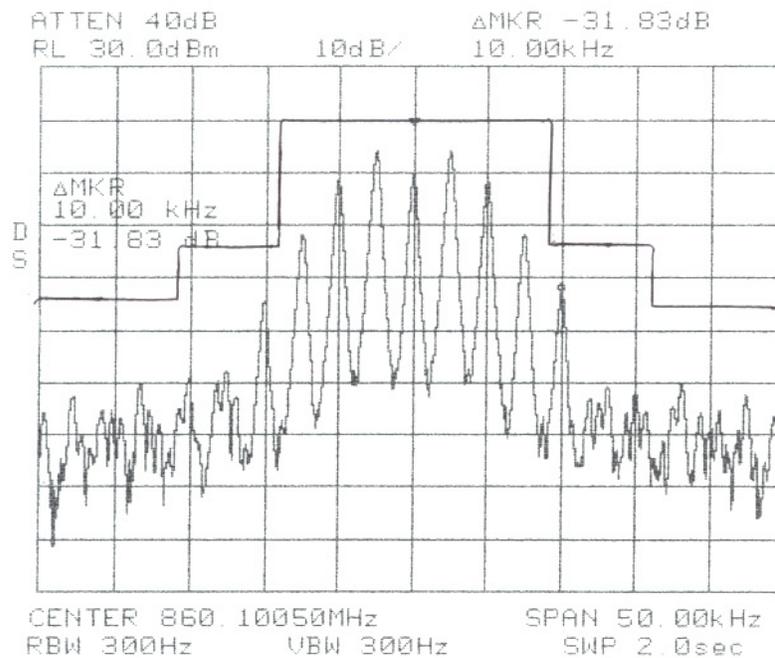


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Occupied Bandwidth
25kHz Channel Spacing
860.1 MHz

Emission 16K0F3E

The SVR-200 transmits voice and single tone frequencies in the 300-3000 bandwidth; emissions are amplitude limited and band limited by high pass and low pass filters per the previous sections. The following plot was made with a 2.5 kHz tone at 16db above 50% level for 1kHz (per EIA-152C).



To the best of my knowledge this
Data is accurate:
Signed:

William Aulin

Page: F17

LRUSVR-200M

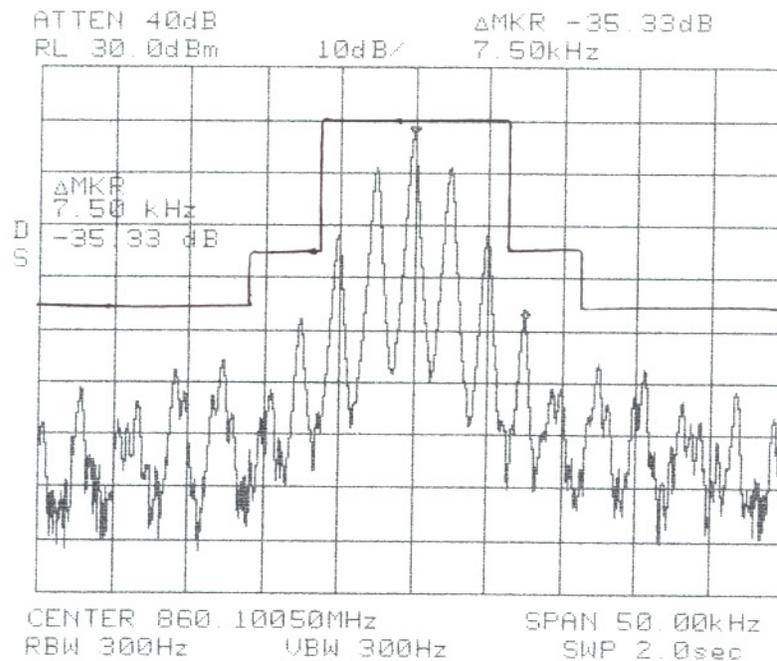
Exhibit F

Subpart 2.1049

Occupied Bandwidth
12.5 kHz Channel Spacing
860.1 MHz

Emission 11K0F3E

The SVR-200 transmits voice and single tone frequencies in the 300-3000 bandwidth; emissions are amplitude limited and band limited by high pass and low pass filters per the previous sections. The following plot was made with a 2.5 kHz tone at 16db above 50% level for 1kHz (per EIA-152C).



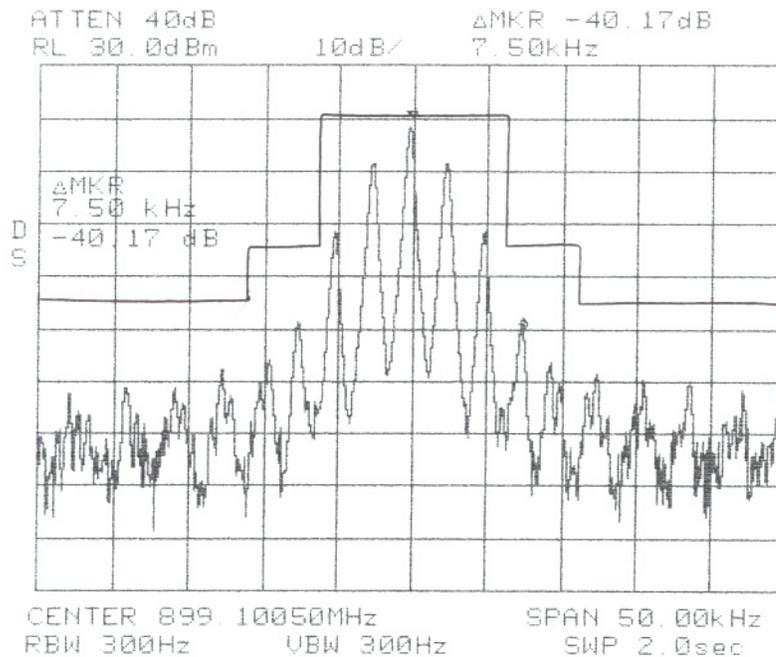
To the best of my knowledge this
Data is accurate:
Signed:

William Aulin

Occupied Bandwidth
12.5 kHz Channel Spacing
899.1 MHz

Emission 11K0F3E

The SVR-200 transmits voice and single tone frequencies in the 300-3000 bandwidth; emissions are amplitude limited and band limited by high pass and low pass filters per the previous sections. The following plot was made with a 2.5 kHz tone at 16db above 50% level for 1kHz (per EIA-152C).



To the best of my knowledge this
Data is accurate:
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Spurious emission at the antenna terminal 800 mW

Minimum Standard

-41dbc

Measurements

Power 800 mW

Frequency	Level
770.1	0 dB
1540.2	-44.84 dBc
800.1	0 dB
1600.2	-51.67 dBc
815.1	0 dB
1630.2	-49.84 dBc
860.1	0 dB
1720.2	-45 dBc
899.1	0 dB
1798.2	-54 dBc
938.1	0 dB
1876.2	-46.5 dBc

To the best of my knowledge this

Data is accurate:

Signed:



Exhibit F:

Subpart 2.1051

TF	EF	dB below carrier
764.01	764.01	0.0
	1528.02	36.9
	2292.03	54.4
	3056.04	58.2
	3820.05	59.7
	4584.06	62.5
	5348.07	70.2
	6112.08	90.4
	6876.09	88.9
	7640.10	88.6

TF	EF	dB below carrier
860.09	860.09	0.0
	1720.18	42.2
	2580.27	50.2
	3440.36	52.6
	4300.45	51.7
	5160.54	61.6
	6020.63	86.4
	6880.72	89.6
	7740.81	88.5
	8600.90	89.1

TF	EF	dB below carrier
941.1	941.1	0.0
	1882.2	34.8
	2823.3	43.0
	3764.4	56.4
	4705.5	74.6
	5646.6	67.9
	6587.7	92.7
	7528.8	82.4
	8469.9	89.0
	9411.0	85.0

All other spurious signals were at least 20dB below the FCC limit.
Frequency spectrum was investigated out to the 10th harmonic

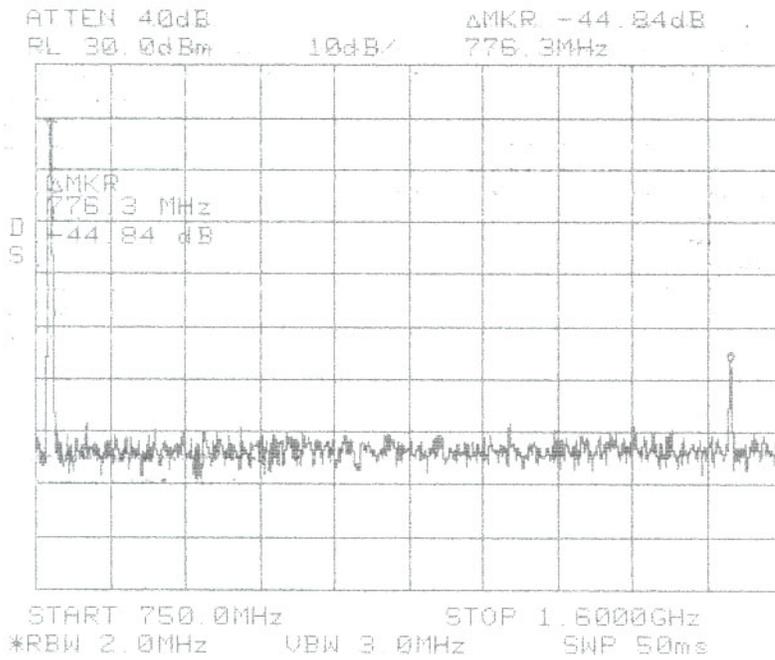
To the best of my knowledge this
Data is accurate:
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Exhibit F: Conducted Spurious 800mW

Subpart 2.1051

770.1 MHz

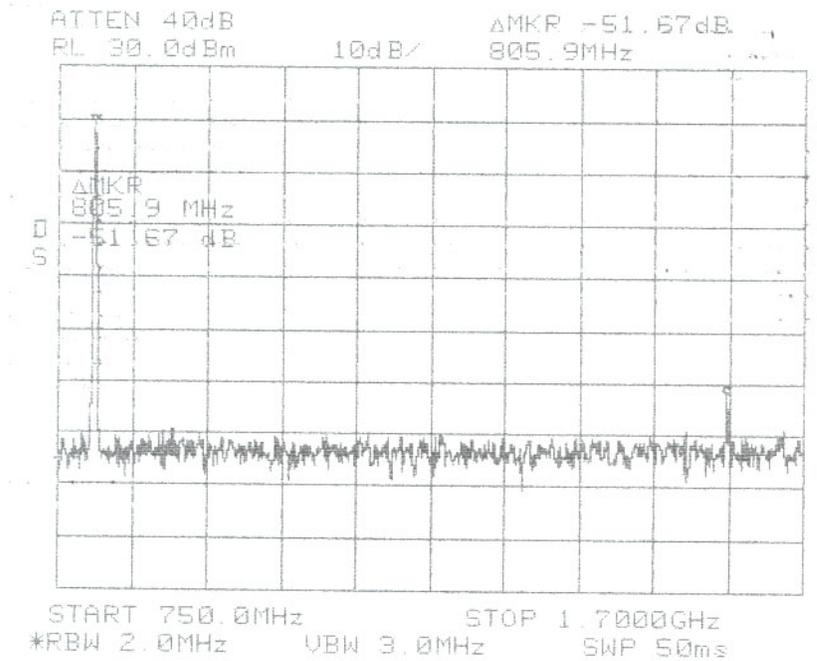


To the best of my knowledge this
Data is accurate:
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Exhibit F: Conducted Spurious 800mW

Subpart 2.1051

800.1 MHz



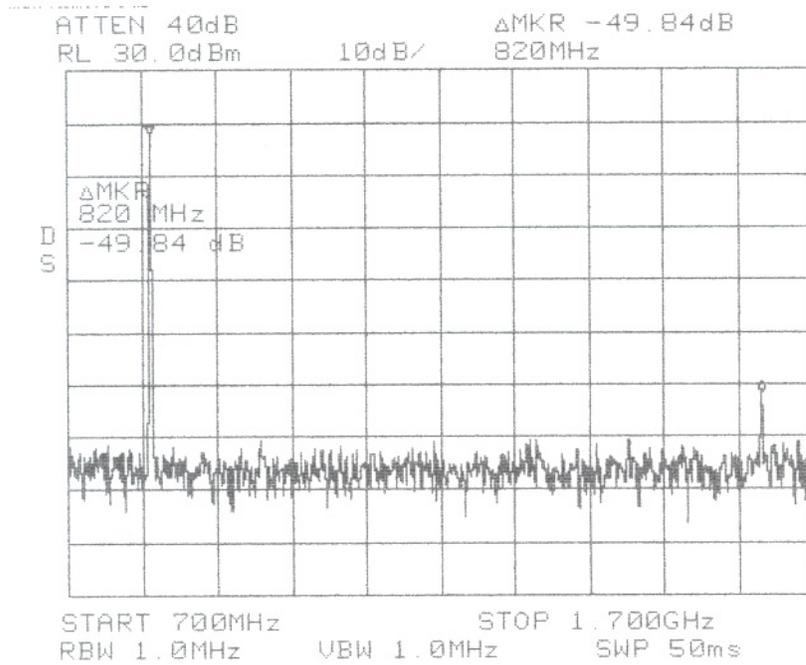
To the best of my knowledge this
Data is accurate:

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Exhibit F: Conducted Spurious 800mW

Subpart 2.1051

815.1 MHz

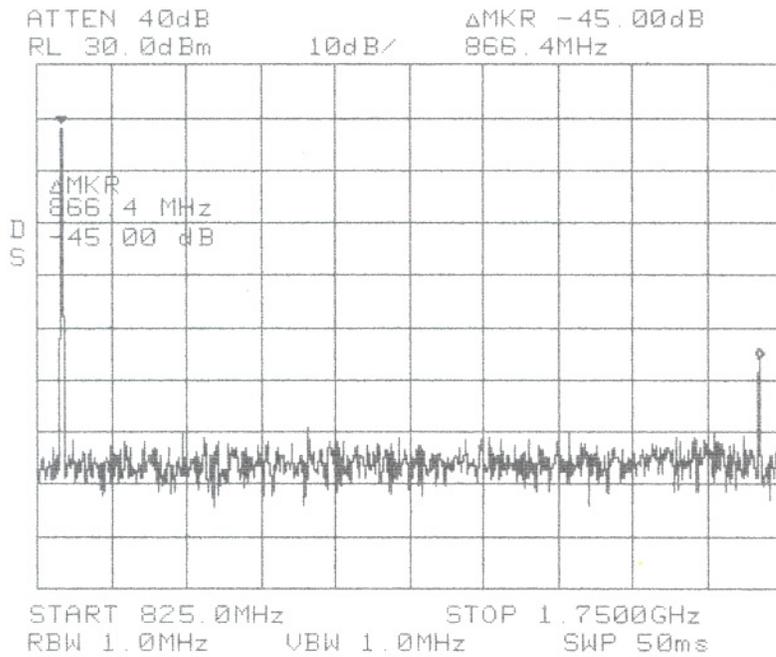


To the best of my knowledge this
Data is accurate:
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Exhibit F: Conducted Spurious 800mW

Subpart 2.1051

860.1 MHz

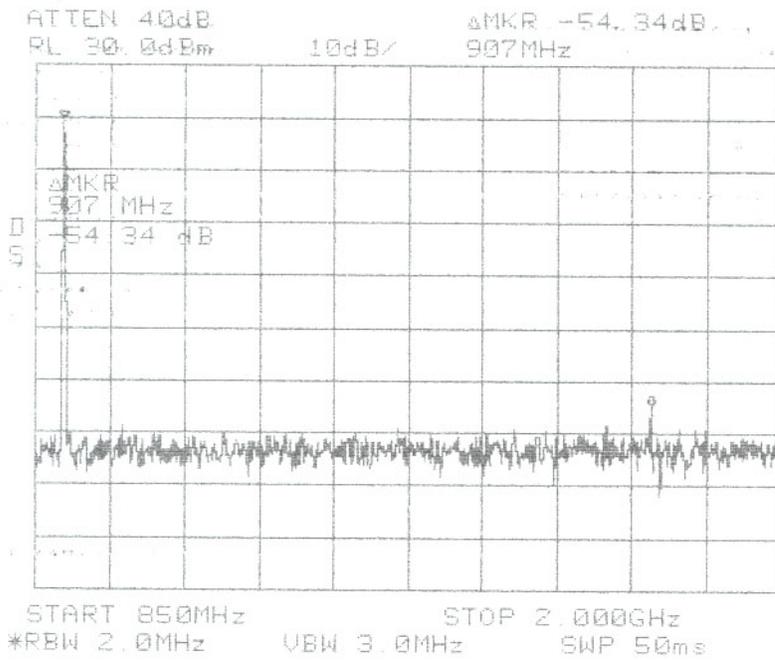


To the best of my knowledge this
Data is accurate:
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Exhibit F: Conducted Spurious 800mW

Subpart 2.1051

899.1 MHz

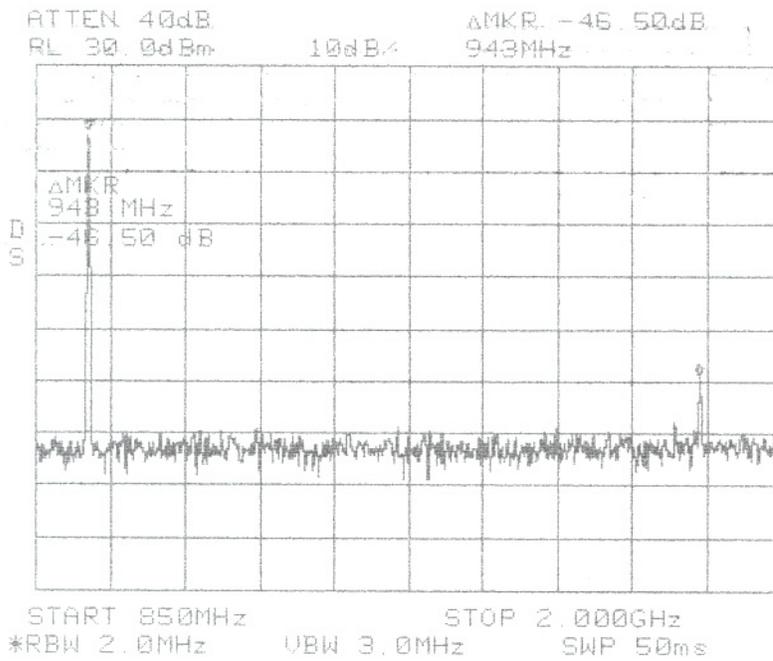


To the best of my knowledge this
Data is accurate:
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Exhibit F: Conducted Spurious 800mW

Subpart 2.1051

938.1 MHz



To the best of my knowledge this
Data is accurate:
Signed:

2.1053

Field strength of spurious emissions:

NAME OF TEST:

RADIATED SPURIOUS EMISSIONS (700 MHz)

REQUIREMENTS:

Emissions must be $43 + 10\log(P_o)$ dB below the mean power output of the transmitter.

$$43 + 10\log(.800) = 42.60 \text{ dB}$$

TEST DATA:

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
764.01	H	0.00
1528.02	H	51.06
2292.03	H	59.93
3056.04	V	42.94
3820.05	V	74.08
4584.06	V	57.00
5348.07	V	72.47
6112.08	V	75.59
6876.09	V	76.21
7640.10	V	78.19

Exhibit F

Subpart 2.1053

2.1053 Field strength of spurious emissions:

NAME OF TEST: RADIATED SPURIOUS EMISSIONS (800 MHz)

REQUIREMENTS: Emissions must be $43 + 10\log(P_o)$ dB below the mean power output of the transmitter.

$$43 + 10\log(.800) = 42.60 \text{ dB}$$

TEST DATA:

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
60.10	H	0
1720.20	V	57.582
2580.30	V	61.206
3440.40	V	54.408
4300.50	V	73.23
5160.60	V	65.743
6020.70	V	77.94
6880.80	V	80.596
7740.90	V	84.224
8601.00	V	84.812

Exhibit F

Subpart 2.1053

2.1053 Field strength of spurious emissions:

NAME OF TEST: RADIATED SPURIOUS EMISSIONS (900 MHz)

REQUIREMENTS: Emissions must be $43 + 10\log(P_o)$ dB below the mean power output of the transmitter.

$$43 + 10\log(.800) = 42.90 \text{ dB}$$

TEST DATA:

Emission Frequency MHz	Ant. Polarity	dB Below Carrier (dBc)
41.10	H	0
1882.20	V	43.984
2823.30	V	61.978
3764.40	V	66.374
4705.50	V	68.459
5646.60	V	67.002
6587.70	V	79.842
7528.80	V	80.974
8469.90	V	86.686
9411.00	V	83.808

Exhibit F

Subpart 2.1055

Minimum Standard

± 1.5 ppm (± 1155 Hz)

(a) Frequency stability over Temperature

770.1 MHz

Temp (°C)	Frequency	Error
-30	770.101079	+1.4 ppm
-20	770.100920	+1.2 ppm
-10	770.100615	+0.8 ppm
0	770.100230	+0.3 ppm
+10	770.100077	+0.1 ppm
+20	770.100034	+0.05 ppm
+30	770.099841	-0.2 ppm
+40	770.099772	-0.3 ppm
+50	770.100071	+0.1 ppm
+60	770.100776	+1.0 ppm

To the best of my knowledge this
Data is accurate:

Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

 ± 1.5 ppm (± 1200 Hz)

(a) Frequency stability over Temperature

800.1 MHz

Temp (°C)	Frequency	Error
-30	800.101045	+1.3 ppm
-20	800.100810	+1.0 ppm
-10	800.100564	+0.7 ppm
0	800.100323	+0.4 ppm
+10	800.100087	+0.1 ppm
+20	800.100015	+0 ppm
+30	800.099755	-0.3 ppm
+40	800.099837	-0.2 ppm
+50	800.100037	+0.05 ppm
+60	800.100570	+0.7 ppm

To the best of my knowledge this

Data is accurate:

Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

 ± 1.5 ppm (± 1225 Hz)

(a) Frequency stability over Temperature

815.1 MHz

Temp (°C)	Frequency	Error
-30	815.101015	+1.25 ppm
-20	815.100893	+1.1 ppm
-10	815.100491	+0.6 ppm
0	815.100320	+0.4 ppm
+10	815.100165	+0.2 ppm
+20	815.100084	+0.1 ppm
+30	815.099840	-0.2 ppm
+40	815.099678	-0.4 ppm
+50	815.099918	-0.1 ppm
+60	815.100411	+0.5 ppm

To the best of my knowledge this

Data is accurate:

Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

 ± 1.5 ppm (± 1290 Hz)

(a) Frequency stability over Temperature

860.1 MHz

Temp (°C)	Frequency	Error
-30	860.101116	+1.3 ppm
-20	860.100950	+1.1 ppm
-10	860.100612	+0.7 ppm
0	860.100262	+0.3 ppm
+10	860.100090	+0.1 ppm
+20	860.100025	+0 ppm
+30	860.099824	-0.2 ppm
+40	860.099918	-0.1 ppm
+50	860.100085	+0.1 ppm
+60	860.100690	+0.8 ppm

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Data is accurate:

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Exhibit F

Subpart 2.1055

Minimum Standard

 ± 1.5 ppm (± 1350 Hz)

(a) Frequency stability over Temperature

899.1 MHz

Temp (°C)	Frequency	Error
-30	899.100903	+1.0 ppm
-20	899.100541	+0.6 ppm
-10	899.100183	+0.2 ppm
0	899.099820	-0.2 ppm
+10	899.099647	-0.4 ppm
+20	899.099463	-0.6 ppm
+30	899.099188	-0.9 ppm
+40	899.099548	-0.5 ppm
+50	899.100093	+0.1 ppm
+60	899.100535	+0.6 ppm

To the best of my knowledge this

Data is accurate:

Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

 ± 1.5 ppm (± 1410 Hz)

(a) Frequency stability over Temperature

938.1 MHz

Temp (°C)	Frequency	Error
-30	938.100754	+ .8 ppm
-20	938.100472	+ .5 ppm
-10	938.100048	+ .05 ppm
0	938.099520	- .5 ppm
+10	938.099349	- .7 ppm
+20	938.099053	- 1.0 ppm
+30	938.098885	- 1.2 ppm
+40	938.099435	- .6 ppm
+50	938.100101	+ .1 ppm
+60	938.100285	+ .3 ppm

To the best of my knowledge this

Data is accurate:

Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

± 1.5 ppm

(b) Frequency stability with variation in primary supply voltage

Voltage	% standard	Frequency	%Error
11.56	-15%	771.100115	+.15PPM
12.24	-10%	771.100115	+.15PPM
12.92	-5%	771.100115	+.15PPM
13.6	0	771.100115	+.15PPM
14.28	+5%	771.100115	+.15PPM
14.96	+10%	771.100115	+.15PPM
15.64	+15%	771.100115	+.15PPM

To the best of my knowledge this

Data is accurate:

Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

± 1.5 ppm

(c) Frequency stability with variation in primary supply voltage

Voltage	% standard	Frequency	%Error
11.56	-15%	800.100104	+ .13ppm
12.24	-10%	800.100104	+ .13ppm
12.92	-5%	800.100104	+ .13ppm
13.6	0	800.100104	+ .13ppm
14.28	+5%	800.100104	+ .13ppm
14.96	+10%	800.100104	+ .13ppm
15.64	+15%	800.100104	+ .13ppm

To the best of my knowledge this
Data is accurate:
Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

± 1.5 ppm

(d) Frequency stability with variation in primary supply voltage

Voltage	% standard	Frequency	%Error
11.56	-15%	815.099836	-.20ppm
12.24	-10%	815.099836	-.20ppm
12.92	-5%	815.099836	-.20ppm
13.6	0	815.099836	-.20ppm
14.28	+5%	815.099836	-.20ppm
14.96	+10%	815.099836	-.20ppm
15.64	+15%	815.099836	-.20ppm

To the best of my knowledge this
Data is accurate:
Signed:



Minimum Standard

± 1.5 ppm

(e) Frequency stability with variation in primary supply voltage

Voltage	% standard	Frequency	%Error
11.56	-15%	860.099811	-.22ppm
12.24	-10%	860.099811	-.22ppm
12.92	-5%	860.099811	-.22ppm
13.6	0	860.099811	-.22ppm
14.28	+5%	860.099811	-.22ppm
14.96	+10%	860.099811	-.22ppm
15.64	+15%	860.099811	-.22ppm

To the best of my knowledge this

Data is accurate:

Signed:



Minimum Standard

± 1.5 ppm

(f) Frequency stability with variation in primary supply voltage

Voltage	% standard	Frequency	%Error
11.56	-15%	899.100107	+.12ppm
12.24	-10%	899.100107	+.12ppm
12.92	-5%	899.100107	+.12ppm
13.60	0	899.100107	+.12ppm
14.28	+5%	899.100107	+.12ppm
14.96	+10%	899.100107	+.12ppm
15.64	+15%	899.100107	+.12ppm

To the best of my knowledge this
Data is accurate:
Signed:



Exhibit F

Subpart 2.1055

Minimum Standard

± 1.5 ppm

(g) Frequency stability with variation in primary supply voltage

Voltage	% standard	Frequency	%Error
11.56	-15%	938.10014	+.15ppm
12.24	-10%	938.10014	+.15ppm
12.92	-5%	938.10014	+.15ppm
13.6	0	938.10014	+.15ppm
14.28	+5%	938.10014	+.15ppm
14.96	+10%	938.10014	+.15ppm
15.64	+15%	938.10014	+.15ppm

To the best of my knowledge this
Data is accurate:
Signed:



Exhibit F

RECEIVER MEASUREMENTS:

2nW -57 dBm

Receiver conducted Spurious at antenna port:

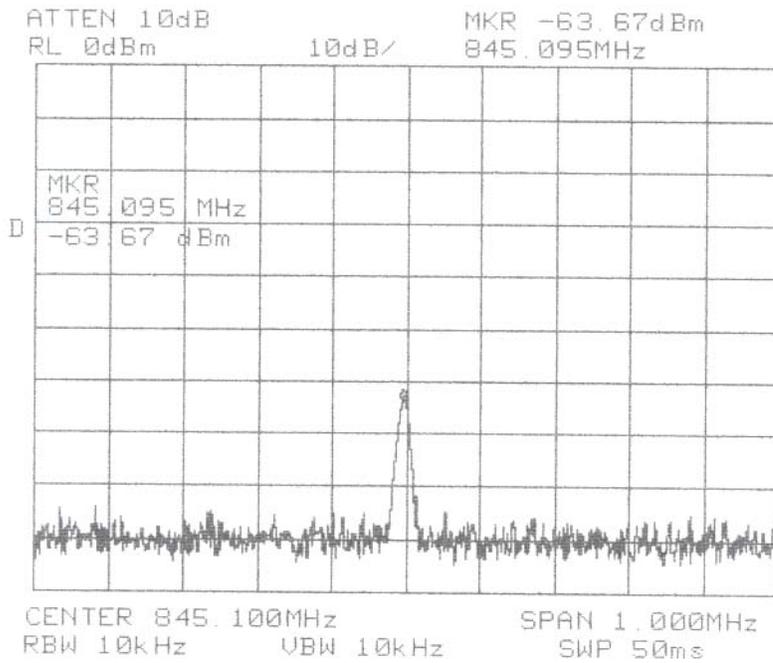
770.1 MHz	.54nW	-62.67 dBm
800.1 MHz	.429nW	-63.67 dBm
815.1 MHz	.736nW	-61.33 dBm
860.1 MHz	.54nW	-62.67 dBm
899.1 MHz	.707nW	-61.5 dBm
938.1 MHz	.4nW	-64 dBm

To the best of my knowledge this
Data is accurate:
Signed:



Exhibit F: Receiver conducted spurious

800.1 MHz +45MHz High Side Injection

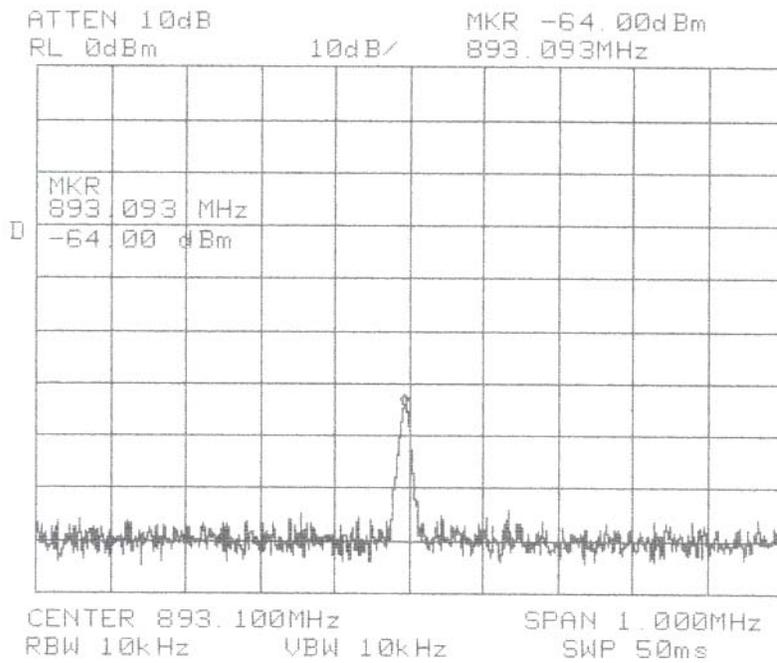


To the best of my knowledge this
Data is accurate:

Signed:

Exhibit F: Receiver conducted spurious

938.1 MHz -45 MHz Low Side Injection



To the best of my knowledge this
Data is accurate:
Signed:

Transient Frequency Behavior

Minimum Standard	16K0F3E	11K0F3E
T1 5mS	±25 kHz	±12.5 kHz
T2 20mS	±12.5 kHz	±6.25kHz
T3 5 mS	±25 kHz	±12.5kHz

Transient Frequency Response

T1 5 mS	+10 kHz
T2 20 mS	within FCC limits per Part 90.213
T3 1.8 mS	within ±12.5 kHz

To the best of my knowledge this
Data is accurate:
Signed:



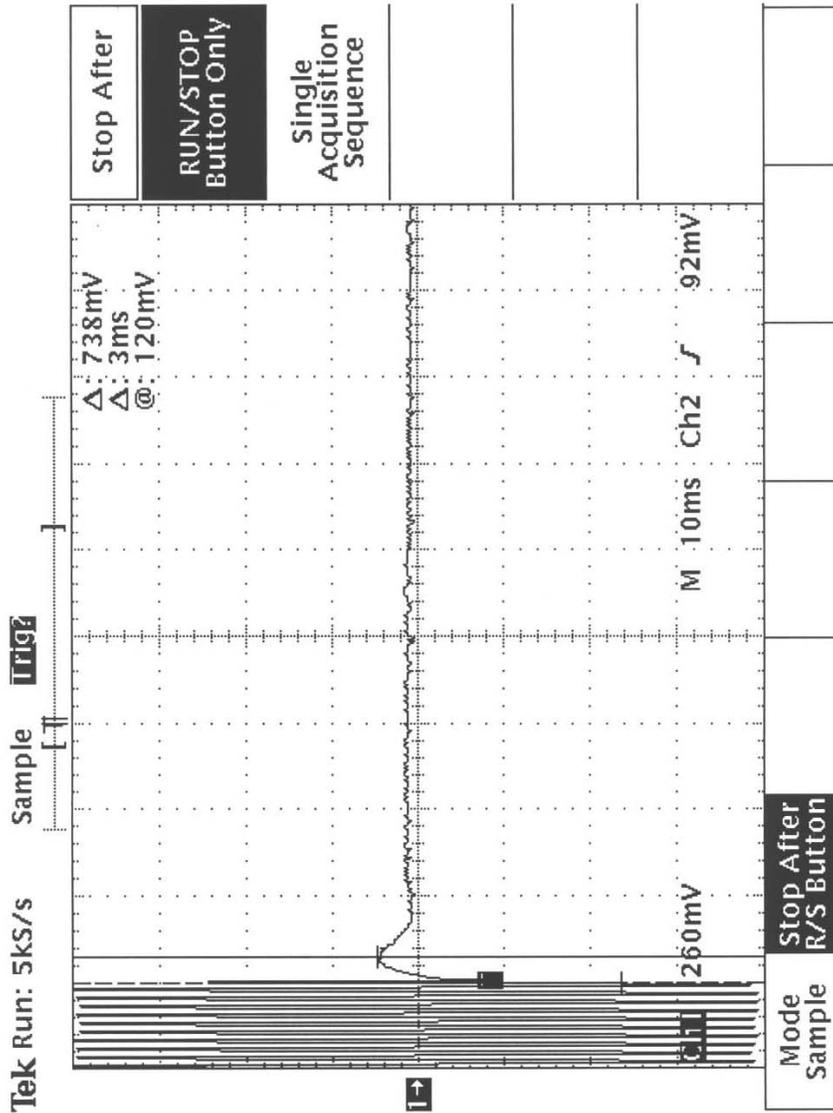


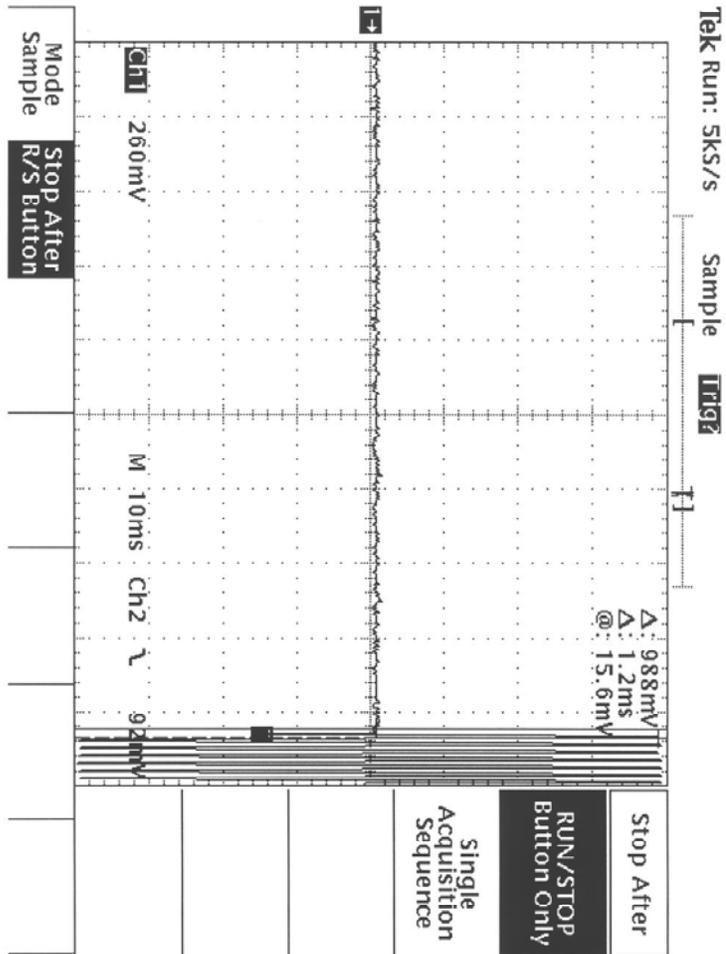
Exhibit F

Subpart
90.214

**Transient
Frequency
Behavior**

To the best of my knowledge this
Data is accurate:
Signed:

Transient Frequency Behavior



To the best of my knowledge this
Data is accurate:
Signed: