#### **EXHIBIT G**

Paragraph 2.983(d)(9)

Tune Up Procedure



# **Retlif Testing Laboratories**

## Paragraph 2.983(d)(9) Tune Up Procedure:

- 1. Connect Marconi 2948 Test Box to RF Output Terminals.
- 2. Switch Transmitter on and check current is <50 mA.
- 3. Load frequency synthesizer with the band center frequency (794 MHz)
- 4. Check on output stage and adjust reference oscillator for output frequency of +/- 1.5 kHz.
- 5. Adjust output filter VC2 VC3 for maximum RF output +13 dBm +/- 1.5 dB.
- 6. Check RF Output at 782.0 to 806.0 MHz. +13 dBm 1.5 dB
- 7. Connect the AF signal to the Audio Input. Level -10 dBu 1kHz
- 8. Set digital gain control to minimum and adjust deviation control IC10 so as to show 12 kHz deviation on the modulation meter. Monitor the output to ensure a sinusoidal signal.
- 9. Increase the modulation frequency to 10 kHz. Ensure a sinusoidal signal.
- 10. Set user gain control to max and check maximum deviation < 25 kHz deviation.
- 11. Connect the spectrum analyzer to the RF output. Set the analyzer to reference level + 20 dBm and Full Span. Check all carrier harmonics are > -45 dB below carrier. If not readjust VC2-VC3.
- 12. End Tune Up.



**Retlif Testing Laboratories** 

### **EXHIBIT H**

Paragraph 2.983(e)

Test Data and Measurement Procedures



# **Retlif Testing Laboratories**

## **EXHIBIT H**

Paragraph 2.985(a)

Power Output



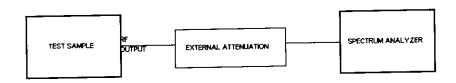
# **Retlif Testing Laboratories**

## POWER OUTPUT (Para. 2.985(a)

### A. Measurement Procedure:

The RF output of the test sample was connected through external attenuators to a spectrum analyzer using a 3MHz resolution bandwidth. The power output was measured for the unmodulated carrier frequency with the EUT being supplied with a low voltage, nominal voltage, and high voltage.

Setup of the test is shown below:



#### B. Test Results:

The results for the above test are shown of the following single data sheet.



**Retlif Testing Laboratories** 

# RETLIF TESTING LABORATORIES

BBM Electro 782 MHz to S4000MTX	onics	15% of Input Power)	Para 2.985  JOB No.:	R-7456-5								
BBM Electro 782 MHz to S4000MTX	onics			D 7456 5		•						
782 MHz to S4000MTX				LV-1400-0								
S4000MTX	OUG IVE IZ VVII CIES:	s FM Transmitter				· · · · ·						
	782 MHz to 806 MHz Wireless FM Transmitter											
	S4000MTX SERIAL No : FCC ID: F3S4KMTX											
FCC Part 74 Experimental Radio, Auxiliary. Special Broadcast and other Program Distributional Services.  PARAGRAPH: 74.861												
Transmitting a CW signal at center frequency as specified below												
T. Schneide												
RANSMIT	Percent of Rated V	INPUT VOLTAGE		Meter Reading	Converted Reading	Limit						
MHz	%	Volts DC		dBm	milliWatts	milli <b>Watt</b> s						
82.100					0.4	250						
	<u>85</u>	7.65		9.1	8.1	250						
_	100	9.00		10.3	10.7	250						
1	100					250						
V	115	10.65		11.3	13.5	250						
82.100												
94 100												
1	85	7.65		9.1	8.1	250						
		0.00		0.7	93	250						
	100	9.00		9,1	3.3							
V	115	10.65		10,1	10.2	250						
94.100												
					<u> </u>							
05.900	85	7.65		7.6	5.8	250						
				<u> </u>		250						
	100	9.00		7.9	6.2	250						
	115	10.65		8.3	6.8	250						
	113	10.03										
					<del>                                     </del>							
	<u> </u>	<del> </del>			+							
<del></del>		-										
				<u> </u>								
		<del> </del>			<del>                                     </del>							
<u> </u>	·	<del>   </del>										
		1										
		<del>   </del>										
		<del>   </del>		·								
					<u> </u>							
	RANSMIT EQUENCY  MHz  82.100  V  82.100  94.100  I V	RANSMIT Percent of Rated V  MHz %  82.100   85   100   115   82.100   85   100   115   85   100   115   85   100   115   85   100   115   85   100   115   85   100   115   85   100   115   85   100   115   85   100	Level adjustment set at maximum.	Level adjustment set at maximum   INPUT   CQUENCY   Rated V   Volts DC	Level adjustment set at maximum.  AANSMIT Percent of Rated V VOLTAGE Reading  MHz % Volts DC dBm  82.100	Level adjustment set at maximum   Lansamir   Lansamir						

DATA SHEET 1 OF 1

### **EXHIBIT H**

Paragraph 2.987

Modulation Characteristics



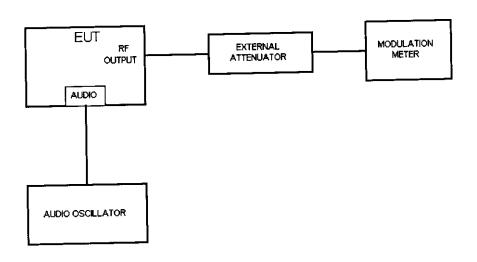
**Retlif Testing Laboratories** 

# **MODULATION CHARACTERISTICS (2.987)**

### A. Measurement Procedure:

An Audio Oscillator was coupled to the Audio Input of the transmitter under test. The RF Output at the antenna terminals was loosely coupled to a modulation meter as shown below. The Audio Input level was adjusted from -60dBm to +10dBm at each frequency listed herein. At each test frequency and level, the FM modulation was recorded.

Setup of the above test is shown below:



### C. Test Results:

The results for the above test are shown on the following single data sheet.



# **Retlif Testing Laboratories**

# RETLIF TESTING LABORATORIES

TABULAR DATA SHEET													
TEST METHOD:	MODUL AT	ION CHARACTER	RISTICS, Para 2.987										
	BBM Electi			JOB No	No.: R-7456-5								
CUSTOMER:		o 806 MHz Wireles	s FM Transmitter										
TEST SAMPLE:	782 MHz ti												
MODEL No.:	S4000MTX	<		SERIAL N	lo.: FCC ID: F	3S4KMTX							
			adio, Auxiliary, Specia	al Broadcast and o	ther Program Dis	tributional Services	- <del></del>						
TEST SPECIFICATION	N:				PARAGRA	APH: 74.861							
OPERATING MODE:	Transmittir	ng a CW signal at c	center frequency as s	pecified below									
TECHNICIAN:	T. SCHNE	IDER		DATE:	3/11/98								
NOTES:	<u> </u>	el adjustment set a	t maximum.										
AUDIO FREQUENCY	INPUT LEVEL	DEVIATION	DEVIATION LIMIT		AUDIO FREQUENCY	INPUT LEVEL	DEVIATION	DEVIATION LIMIT					
	dBm	KHz	KHz		Hz	₫₿m	KHz	KHz					
Hz		1.4	75.0		2500	-60	1.8	75.0					
40		2.0	,,,,		2500	-50	2.9						
40	<del>-50</del>	3.7			2500	-40	4.9	1					
40	-30	7.3			2500	-30	8.1						
40	-20	13.0	<del>                                     </del>		2500	- <u>20</u>	14.0 24.1						
40	10	22.8	<del>                                     </del>		2500 2500	-10 0	25.0	+ + -					
40	0	37.3	<del>                                     </del>		2500 2500	10	25.1						
40	10	45.2	+ - +		_ 2000								
400	60	1.6	+ - +		5000	-60	2.1						
100		2.5			5000	-50	3.5						
100 100	-50 -40	4.9			5000	-40	5.8	+					
100	-30	9.3			5000	-30	9.8	+					
100	-20_	16.4	<del>                                     </del>		5000	-20	17. <u>1</u> 24.6	<del></del>					
100_	-10	28.9	<del> </del>		5000 5000	-10 0	25.0	1_ †					
100_	0	35.2	<del>                                     </del>		5000	10	25.1						
100	10	35.2	<del> </del>		_0000	<u> </u>							
F00	en	1.6	+		10000	-60	2.5	<del>                                     </del>					
500	-60 -50	2.5			10000	-50	4.1	<del>                                     </del>					
500 500	-40	4.3			10000	-40	6.7	+					
500	-30	7.2			10000	-30	11.3	+					
500	-20	12,4			10000	-20	19.8 24.8	1					
500	-10	21.6	1		10000 10000	10 	25.0	+ +					
500	0	25.5	+		10000	10	25.0						
500	10	26.0	<del> </del>		_10000	<u> </u>							
		1.6	+ +		15000_	-60	2.5						
1000	-60 -50	2.5	1_ + -		15000	-50	4.0	+					
1 <u>000</u> 1 <u>000</u>	-50 -40	4.3			15000	-40	6.4						
1000	-30	7.2			15000	-30	10.9	<del></del>					
1000	-20	12.3	+		15000	-20 -10	19.0 24.7						
1000	-10	21.3	<del>-      </del>		15000 15000	-10 0	24.7	V					
1000	0	25.2	V 75.0		15000 15000	10	24.7	75.0					
1000	10	25.3	75.0	<u></u>	13000	<u> </u>							
	+	+	<del>                                     </del>				ļ						
	<del> </del>						<del> </del>						
	<del> </del>							<del></del>					
	<del></del> -	T			1								
	ļ				1			1					

DATA SHEET 1 OF 1

EXHIBIT H

Paragraph 2.989

Occupied Bandwidth



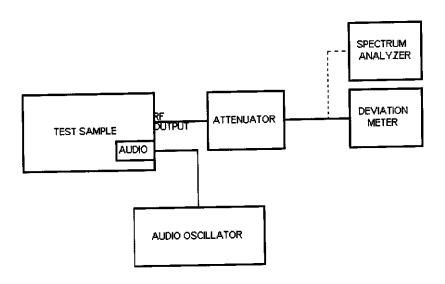
**Retlif Testing Laboratories** 

## OCCUPIED BANDWIDTH (PARA.2.989)

#### A. Measurement Procedure:

An audio signal was electrically coupled to the audio input terminals of the test sample. The RF output was monitored using a deviation meter. The audio input level was increased to produce 50% modulation. The RF output was then loosely coupled through external attenuators to a spectrum analyzer and the audio level was increased by 16 dB. The occupied bandwidth of the RF carrier, modulated at 50% plus 16 dB, was then measured. The above procedure was performed with the audio input frequencies of 2500 Hz and 15 kHz applied to the unit. The modulated signal must be within the template as specified by the applicable paragraph in Part 74. The above was performed at the low, mid and high frequencies.

Setup of the test is shown below:

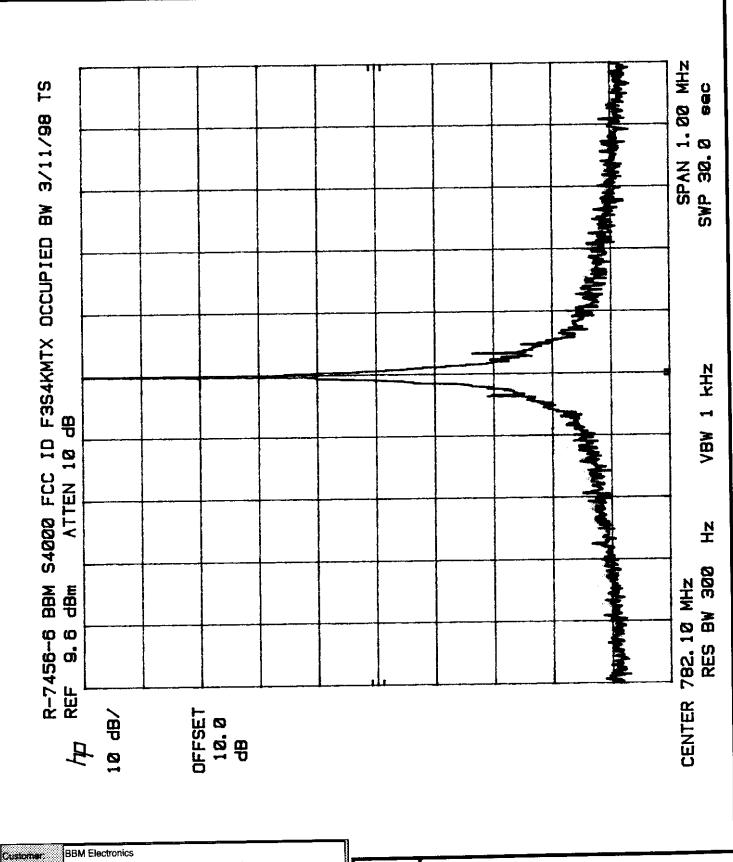


#### B. Test Results:

The results for the above test are shown on the following six (6) sheets.



## **Retlif Testing Laboratories**



Customer: BBM Elec Test Sample: 782 MHz

Model No:

Test Method:

782 MHz to 806 MHz Wireless FM Transmitter S4000MTX FCC ID: F3S4KMTX

Occupied Bandwidth, Paragraph 2.989 Center Frequency= 782.1 MHz

Audio Input = 2500 Hz at 50% Modulation plus 16 dB

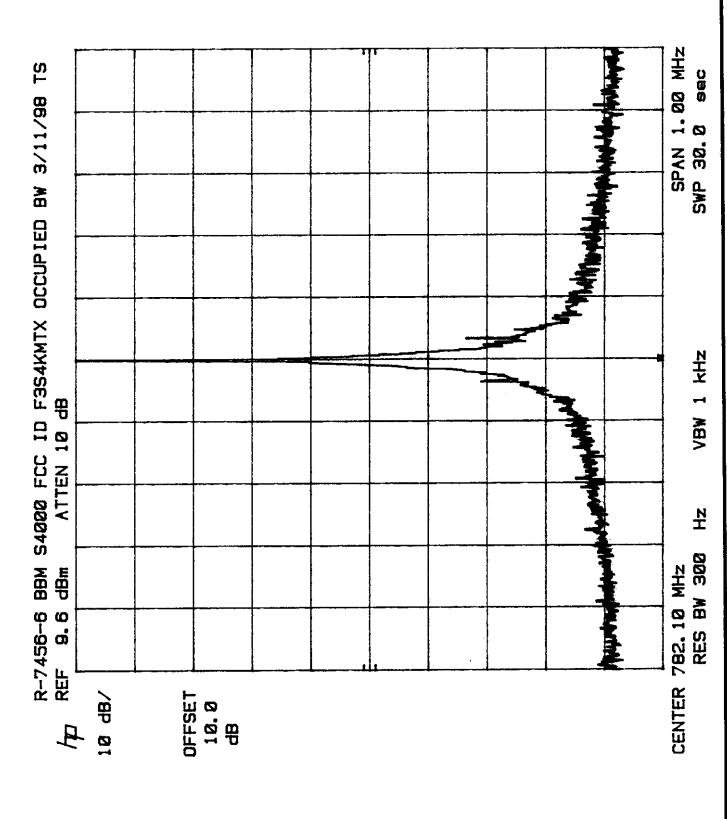
Clate: March 11,1998

Tech: T. Schneider

Sheet 1 of



**Retlif Testing Laboratories** 

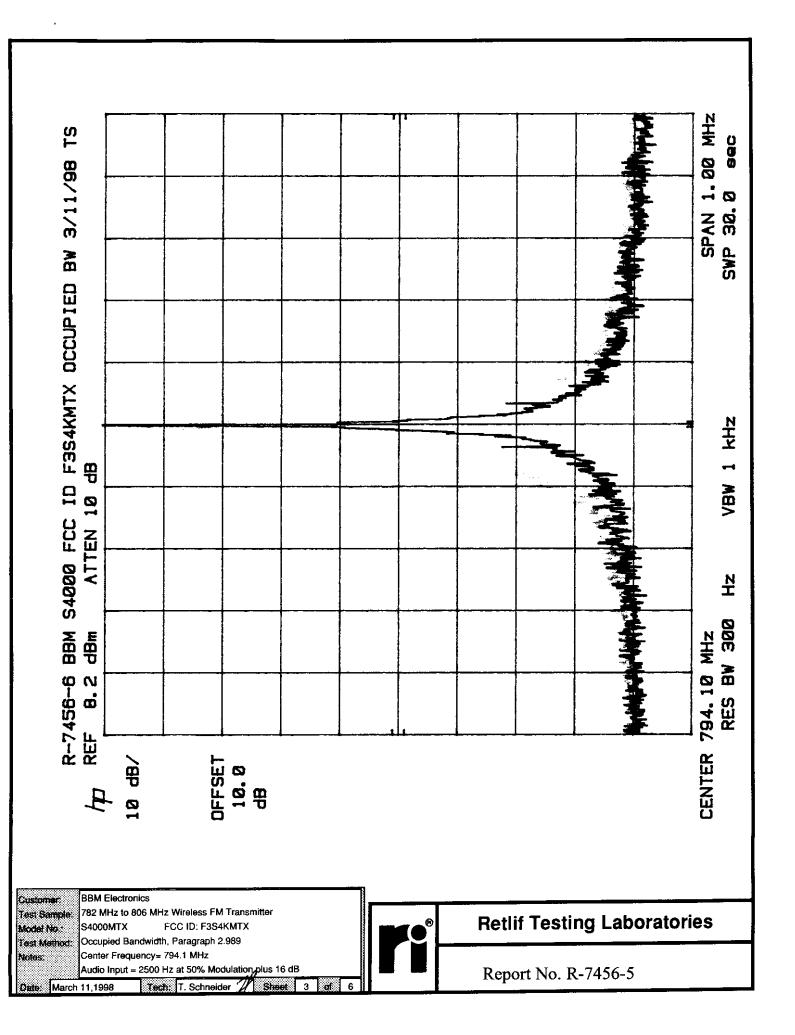


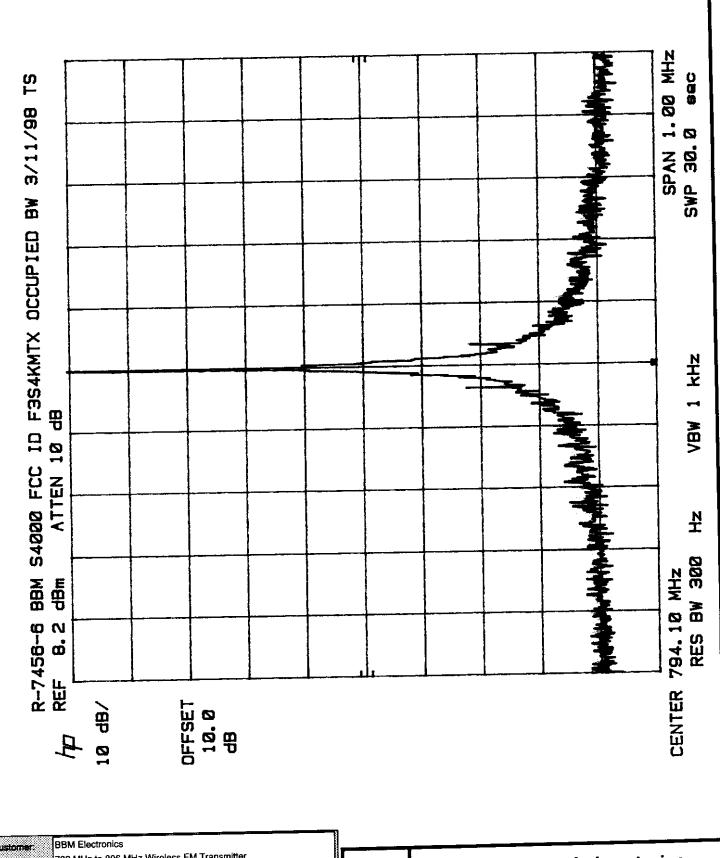
Customer:
Test Sample:
Maddel No:
Test Method:
S4000MTX FCC ID: F3S4KMTX
Occupied Bandwidth, Paragraph 2.989
Center Frequency= 782.1 MHz
Audio Input = 15000 Hz at 50% Modulation plus 16 dB

Oate: March 11,1998 Tests: T. Schneider Sheet 2 of



**Retlif Testing Laboratories** 





Customer Test Sample: Model No : Test Method:

782 MHz to 806 MHz Wireless FM Transmitter

S4000MTX FCC ID: F3S4KMTX Occupied Bandwidth, Paragraph 2.989

Center Frequency= 794.1 MHz Audio Input = 15000 Hz at 50% Modulation plus 16 dB

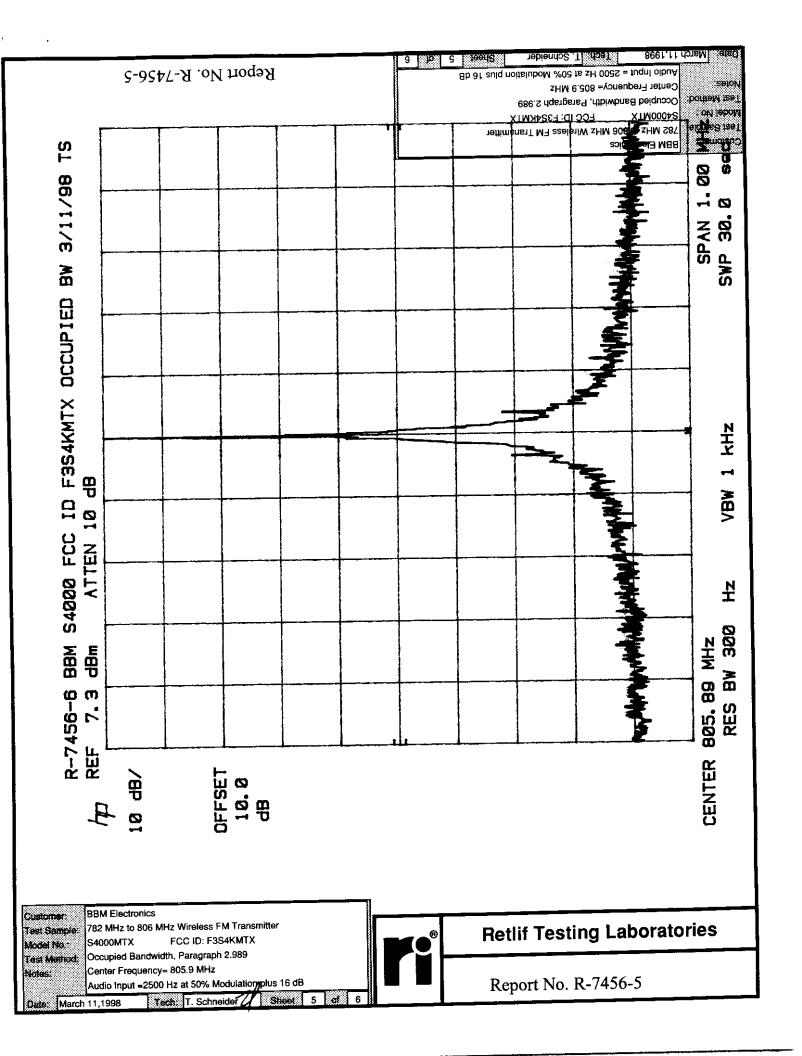
Date: March 11,1998

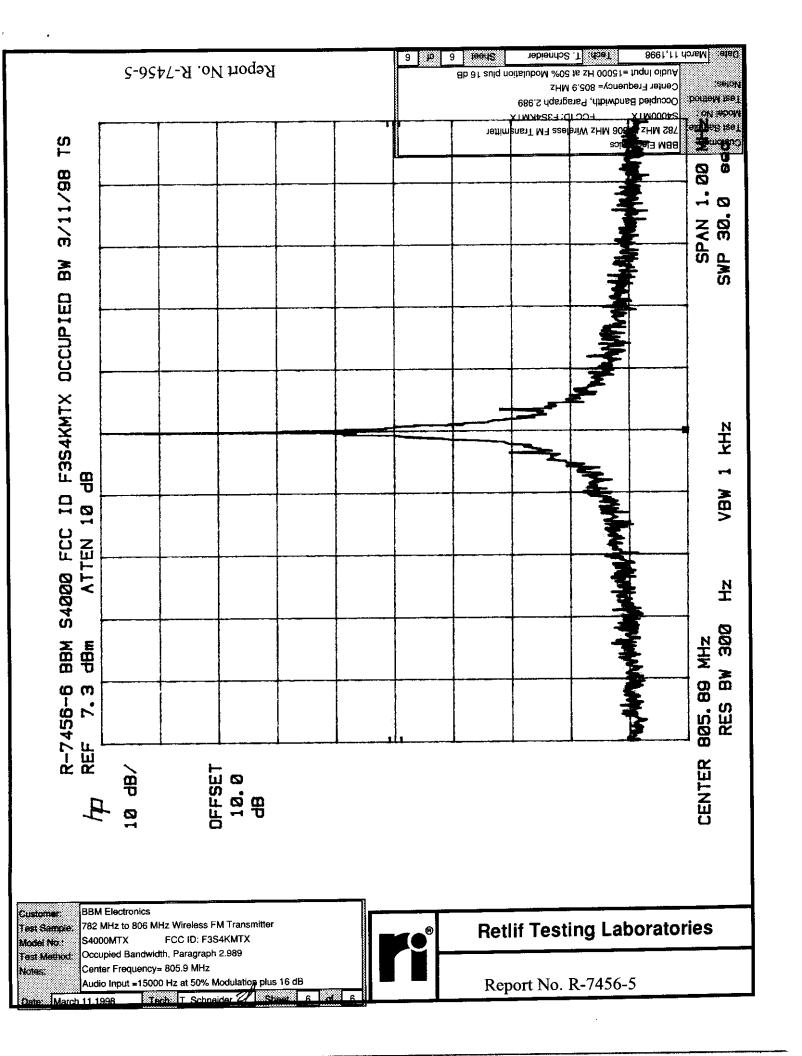
Tech: T. Schneider 2

Sheet 4 of



**Retlif Testing Laboratories** 





### **EXHIBIT** H

Paragraph 2.991

Antenna Conducted Emissions



# **Retlif Testing Laboratories**

## **ANTENNA CONDUCTED EMISSIONS (PARA.2.991)**

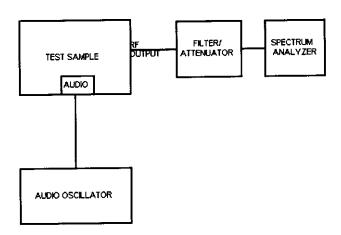
#### A. Measurement Procedure:

The RF output of the test sample was coupled to a spectrum analyzer. The test sample was then modulated as stated in the occupied bandwidth test. The frequency range was scanned from the lowest frequency generated by the test sample to its tenth harmonic. The limits for the spurious emissions are calculated utilizing the measured output power and the following equation:

Limit = Level of Fundamental -  $(43 + 10 \log P_T)$ 

The above was performed at the low, mid and high frequencies.

Setup of the test is shown below:

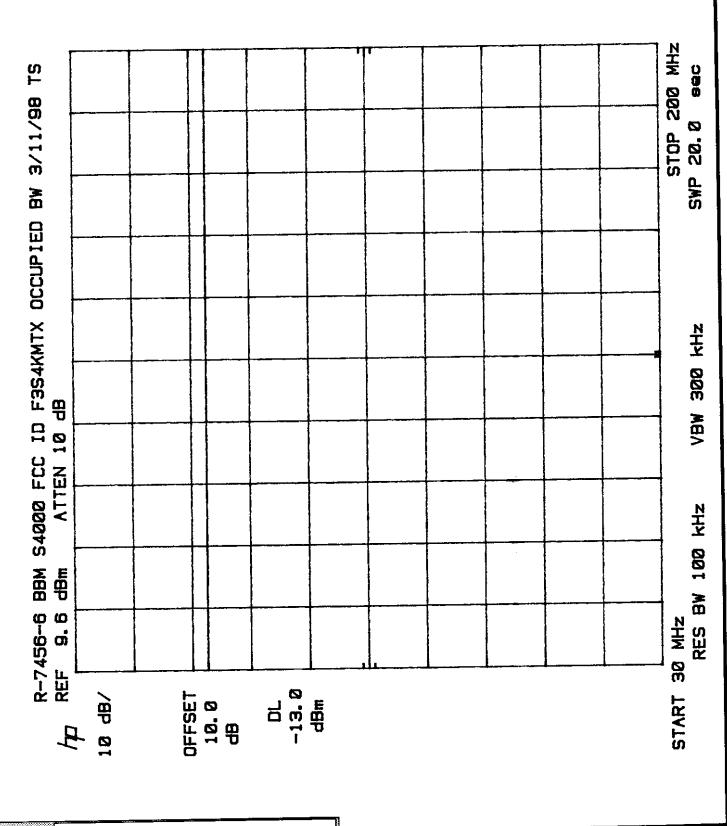


#### B. Test Results:

The results for the above test are shown on the following (18) data sheets.



**Retlif Testing Laboratories** 



Customer:

Test Method:

BBM Electronics

Test Sample. Model No

782 MHz to 806 MHz Wireless FM Transmitter

S4000MTX

FCC ID: F3S4KMTX Antenna Conducted Emissions, Paragraph 2.991

Center Frequency= 782.1 MHz

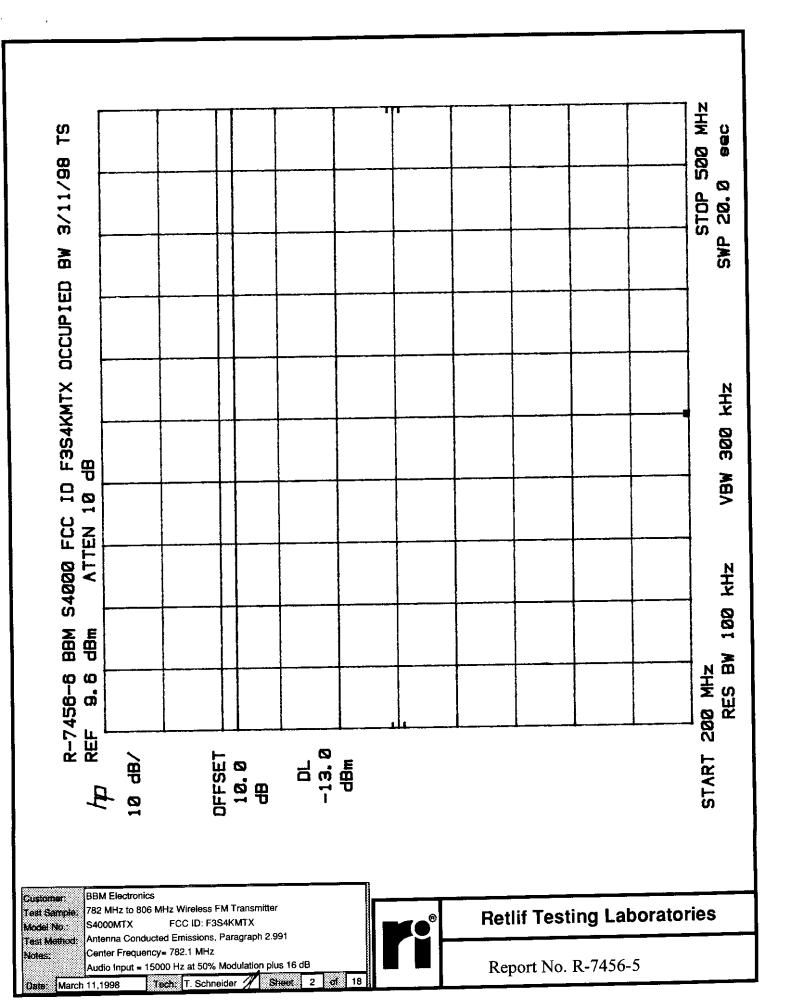
Audio Input = 15000 Hz at 50% Modulation plus 16 dB

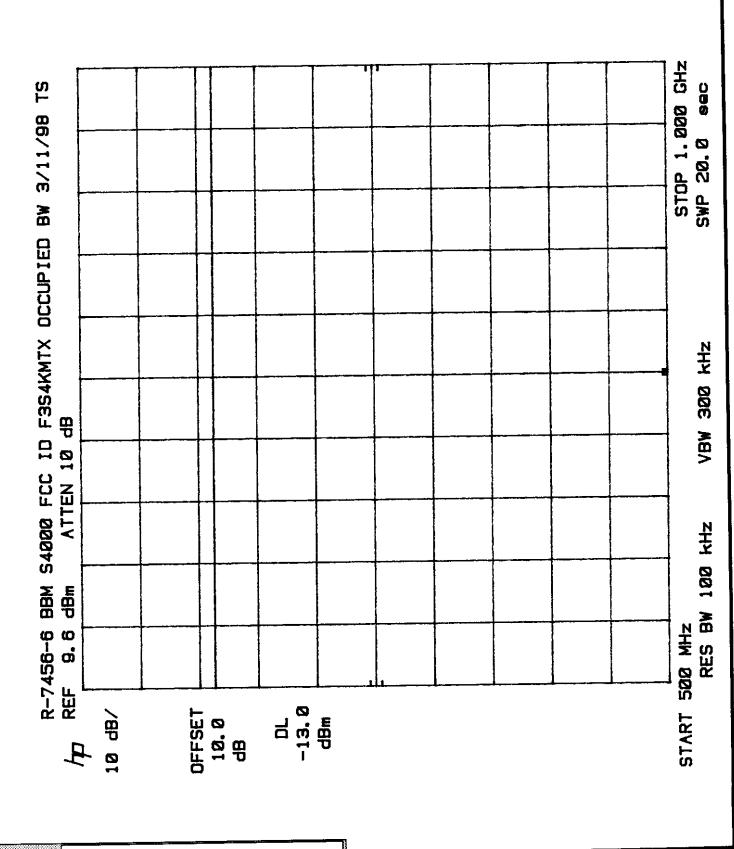
Date: March 11,1998

Tech: T. Schneider 4 Sheet



**Retlif Testing Laboratories** 





Customer Test Sample. Model No : Test Method:

Date: March 11,1998

Notes:

BBM Electronics

782 MHz to 806 MHz Wireless FM Transmitter \$4000MTX FCC ID: F3S4KMTX

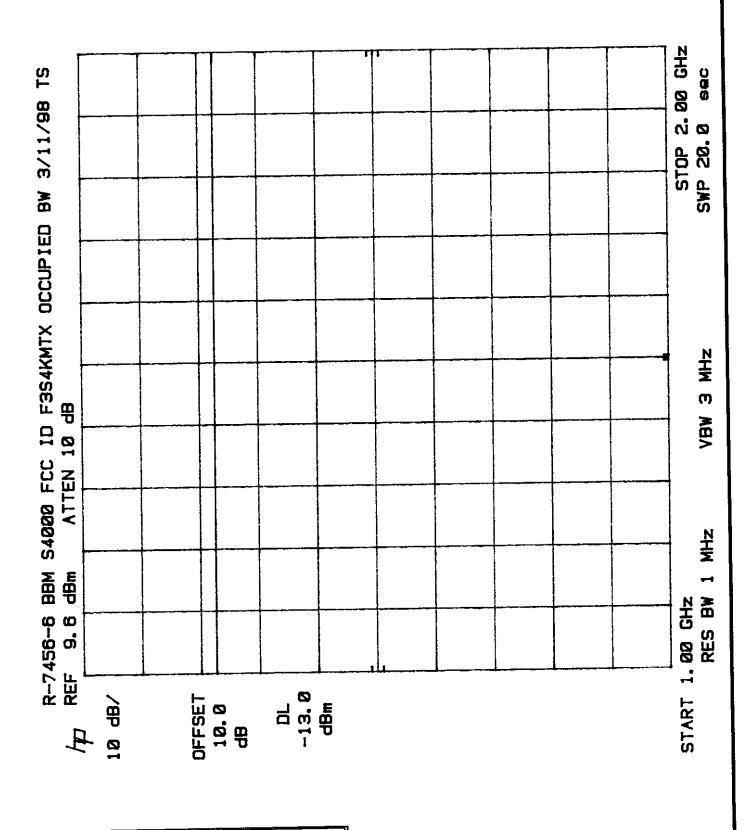
Antenna Conducted Emissions, Paragraph 2.991

Center Frequency≖ 782.1 MHz

Audio Input = 15000 Hz at 50% Modulation plus 16 dB Tech: T. Schneider

7 Sheet 3 of

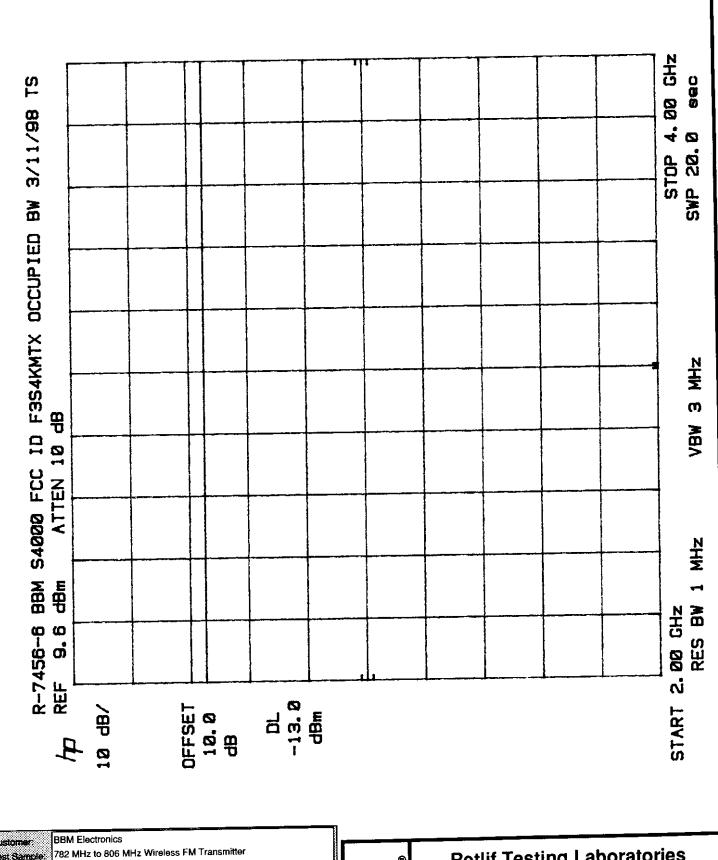
**Retlif Testing Laboratories** 



Customer: BBM Electronics
Test Sample: 782 MHz to 806 MHz Wireless FM Transmitter
S4000MTX FCC ID: F3S4KMTX
Test Method: Occupied Bandwidth, Paragraph 2.989
Center Frequency= 782.1 MHz
Audio Input =15000 Hz at 50% Modulation plus 16 dB
Date: March 11,1998 Tech: T. Schneider Steet



**Retlif Testing Laboratories** 



Customer

Test Sample: Model No Test Method:

S4000MTX

FCC ID: F3S4KMTX Antenna Conducted Emissions, Paragraph 2.991

Center Frequency= 782.1 MHz

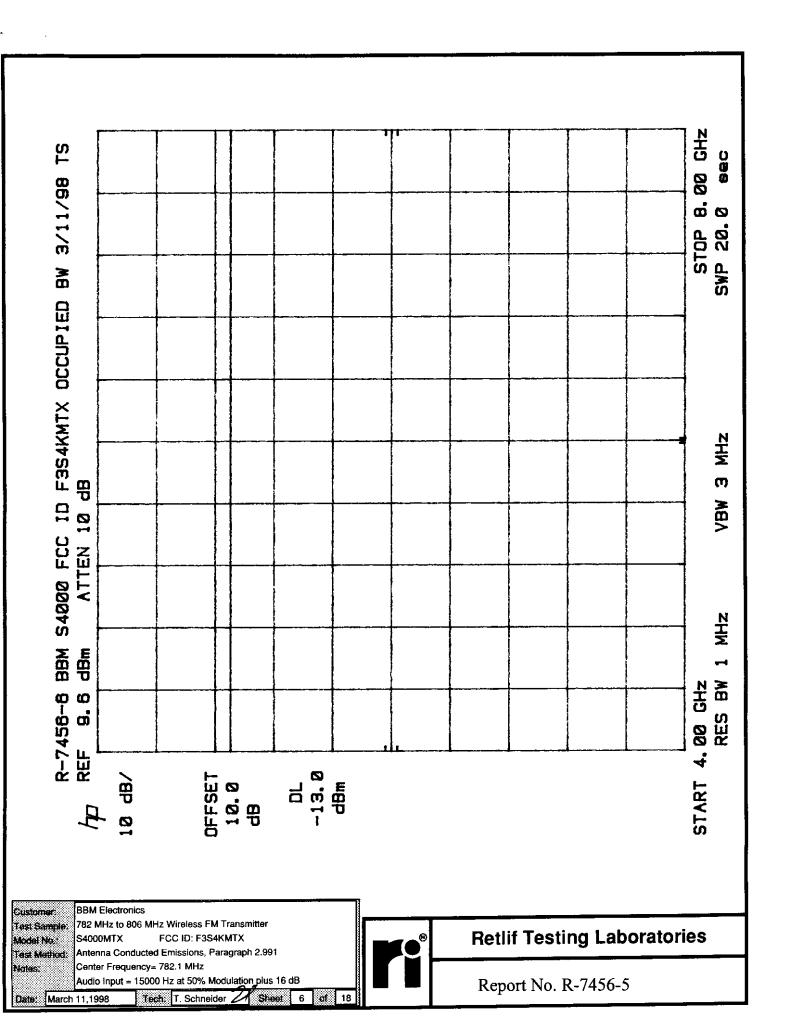
Audio Input = 15000 Hz at 50% Modulation plus 16 dB

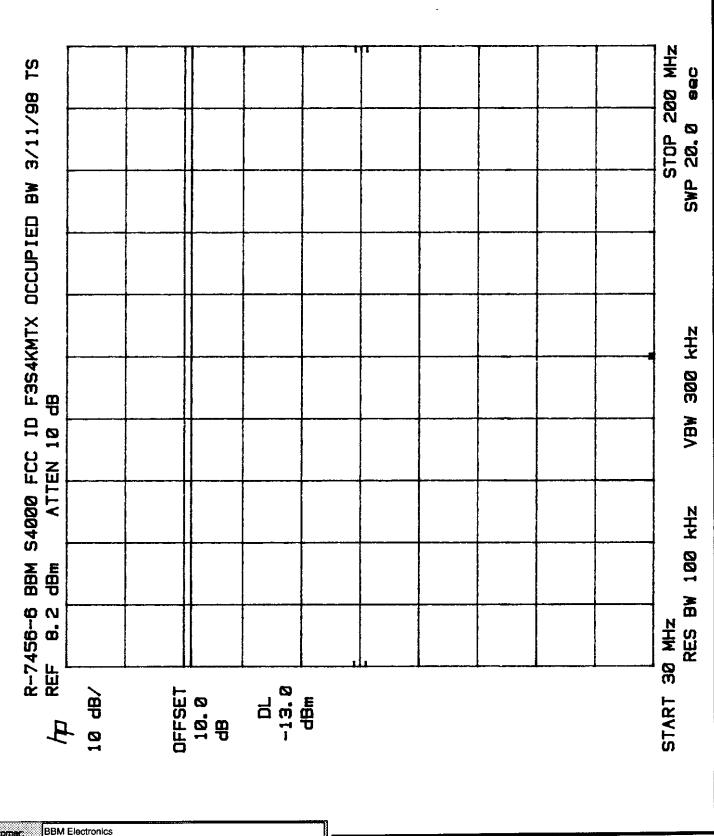
Date: March 11,1998

Tech: T. Schneider Sheet 5 of 18



**Retlif Testing Laboratories** 





Test Sample: Model No.:

Test Method:

Notes:

782 MHz to 806 MHz Wireless FM Transmitter

FCC ID: F3S4KMTX

Antenna Conducted Emissions, Paragraph 2.991

Center Frequency= 794.1 MHz

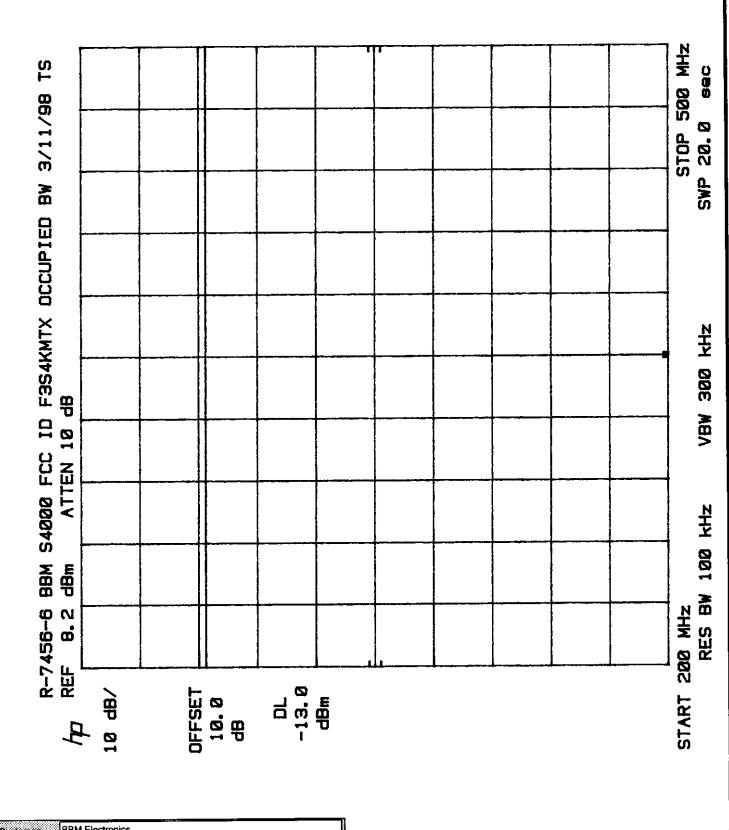
Audio Input = 15000 Hz at 50% Modulation plus 16 dB

Date: March 11,1998

Tech: T. Schneider 7 Sheet 7 of



**Retlif Testing Laboratories** 



Customar: BBM Electronics

782 MHz to 806 MHz Wireless FM Transmitter

84000MTX FCC ID: F3S4KMTX

84000MTX FCC ID: F3S4KMTX

Antenna Conducted Emissions, Paragraph 2.991

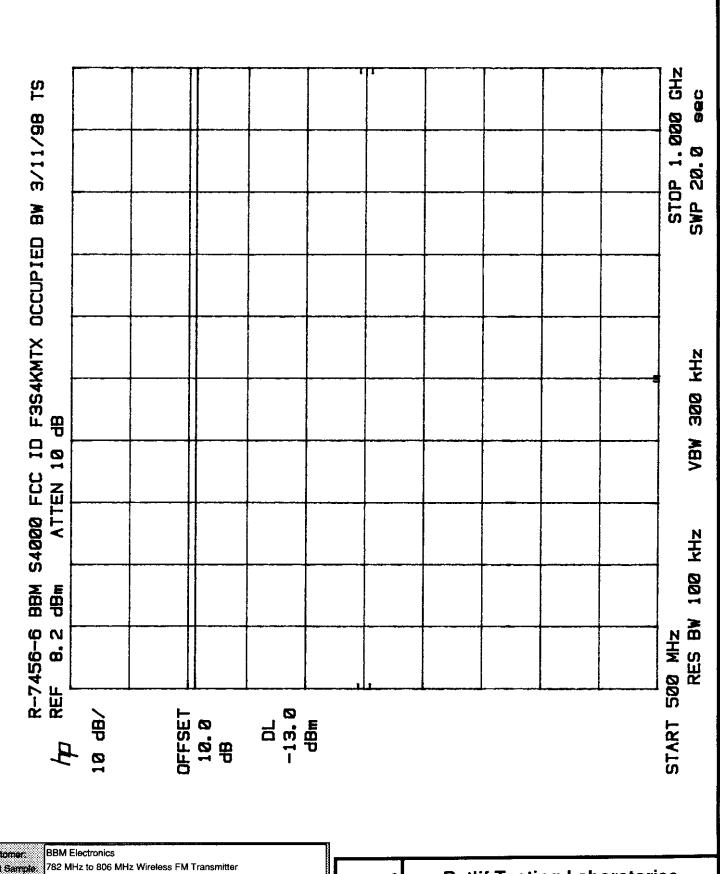
Center Frequency= 794.1 MHz

Audio Input = 15000 Hz at 50% Modulation, plus 16 dB

Date: March 11,1998 Tech: T. Schneider Sheet 8 of 18



## **Retlif Testing Laboratories**



Customer: Test Sample

Date: March 11,1998

Model No 1

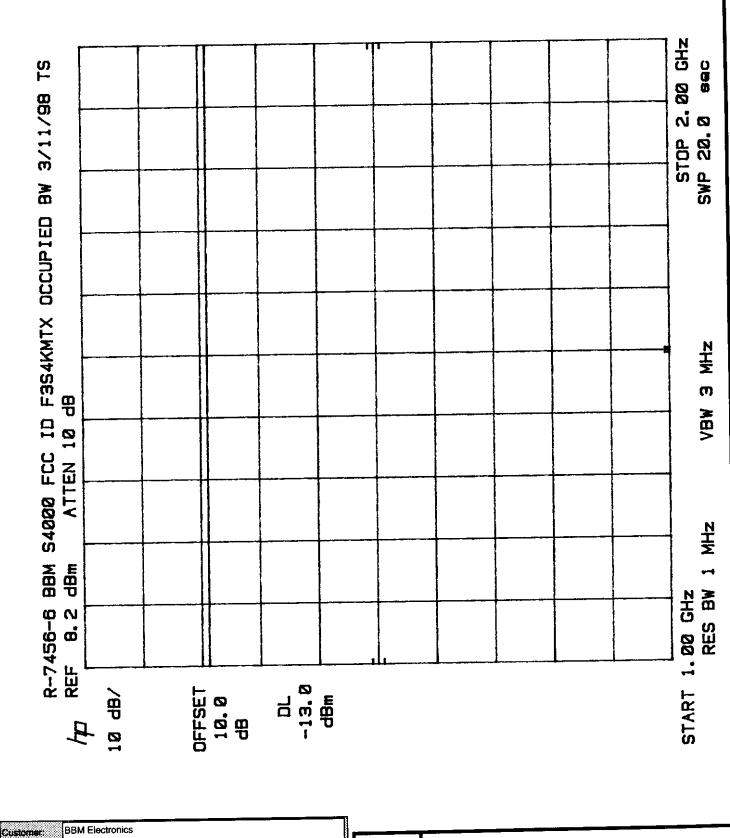
S4000MTX FCC ID: F3S4KMTX

Antenna Conducted Emissions, Paragraph 2.991

Center Frequency= 794.1 MHz

Audio Input = 15000 Hz at 50% Modulation,plus 16 dB Tech: T. Schneider

**Retlif Testing Laboratories** 



Customer:
Test Sample:
Model No:
Test Method:

Notes:

782 MHz to 806 MHz Wireless FM Transmitter

S4000MTX

FCC ID: F3S4KMTX

Antenna Conducted Emissions, Paragraph 2.991 Center Frequency= 794.1 MHz

Audio Input = 15000 Hz at 50% Modulation plus 16 dB

Date: March 11,1998

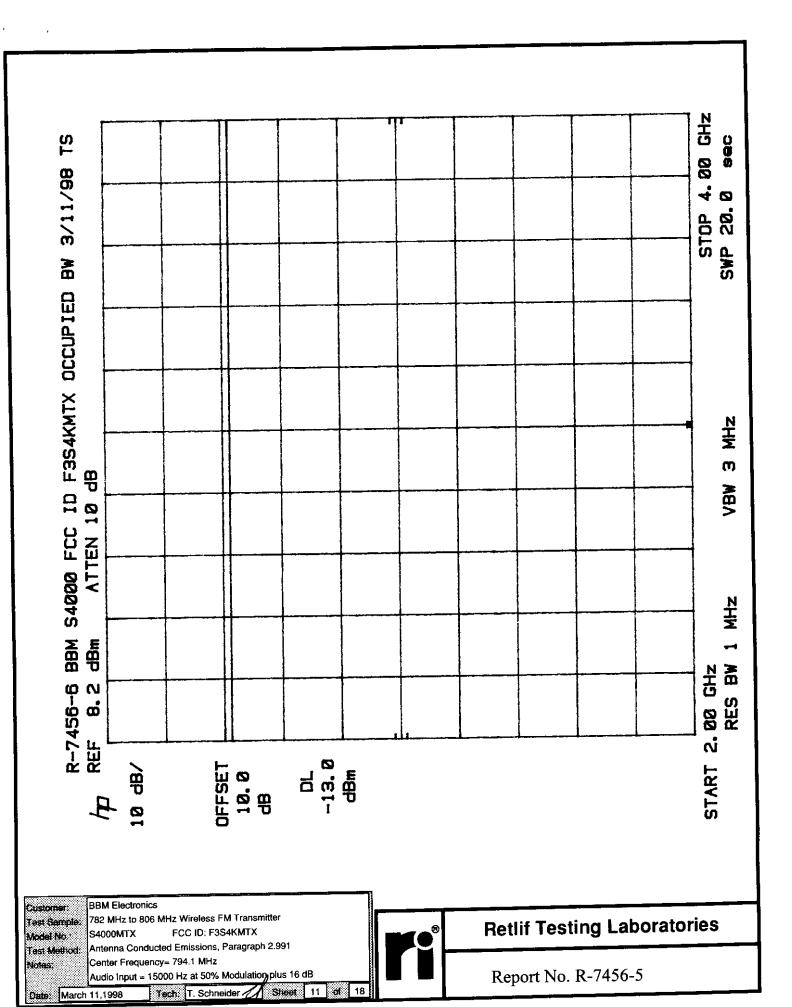
Tech: T. Schneider

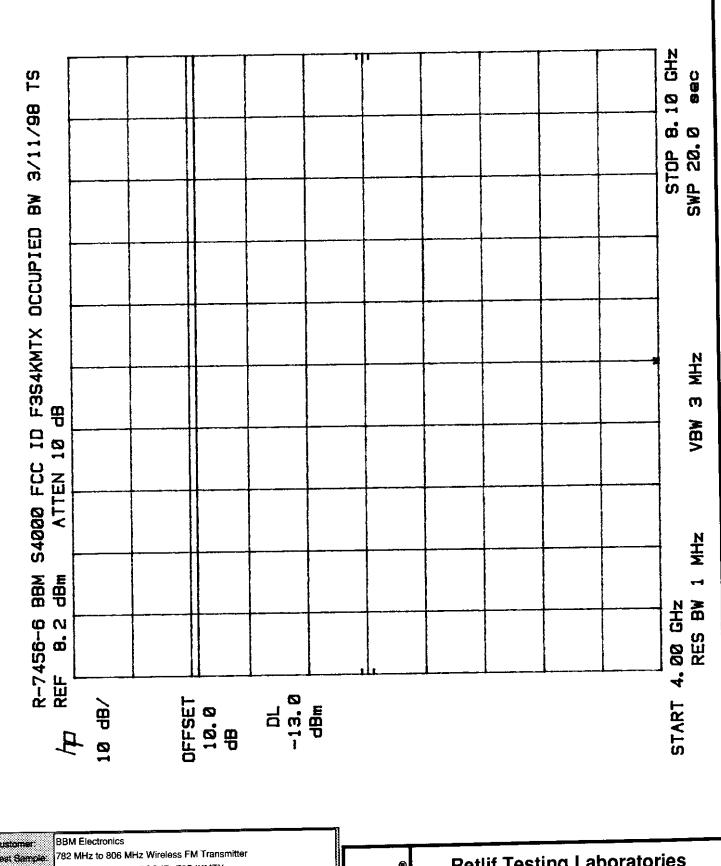
ider 2/

Sheet 10 of 18



**Retlif Testing Laboratories** 

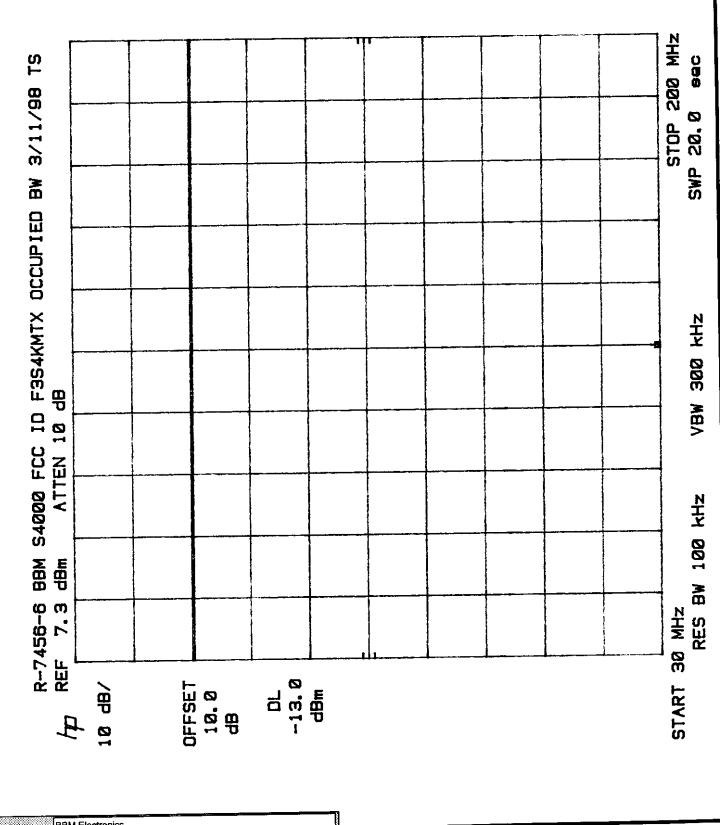




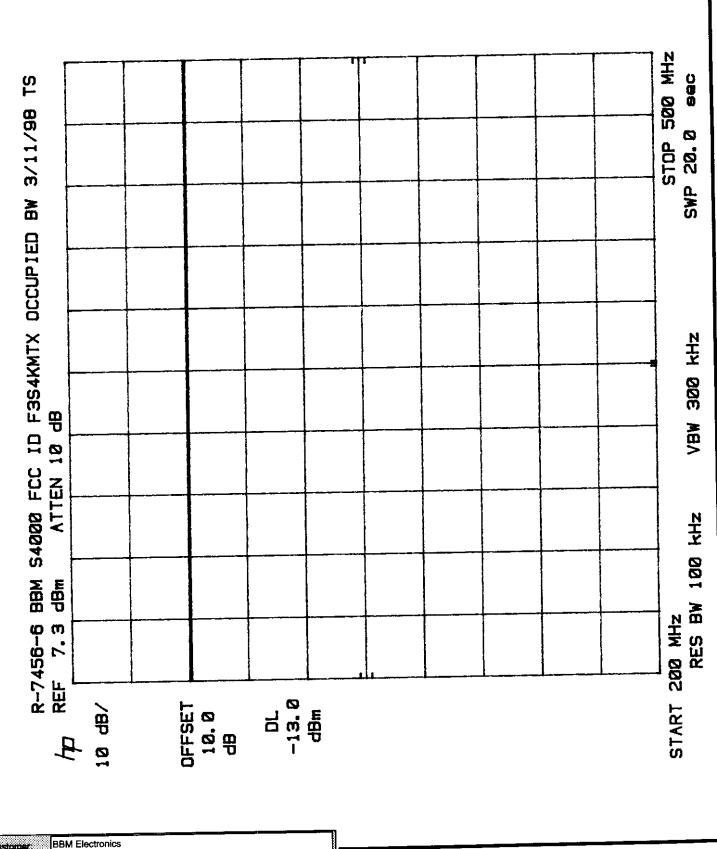
Customer Test Sample: S4000MTX FCC ID: F3S4KMTX Model No.: Antenna Conducted Emissions, Paragraph 2.991 Test Method: Center Frequency= 794.1 MHz Notes: Audio Input = 15000 Hz at 50% Modulation plus 16 dB Tech: T. Schneider Z Sheet 12 of Date: March 11,1998



**Retlif Testing Laboratories** 



# **Retlif Testing Laboratories**



Customer:

782 MHz to 806 MHz Wireless FM Transmitter Test Sample: FCC ID: F3S4KMTX Model No S4000MTX Antenna Conducted Emissions, Paragraph 2.991 Test Method:

Center Frequency= 805.9 MHz

Audio Input = 15000 Hz at 50% Modulation plus 16 dB

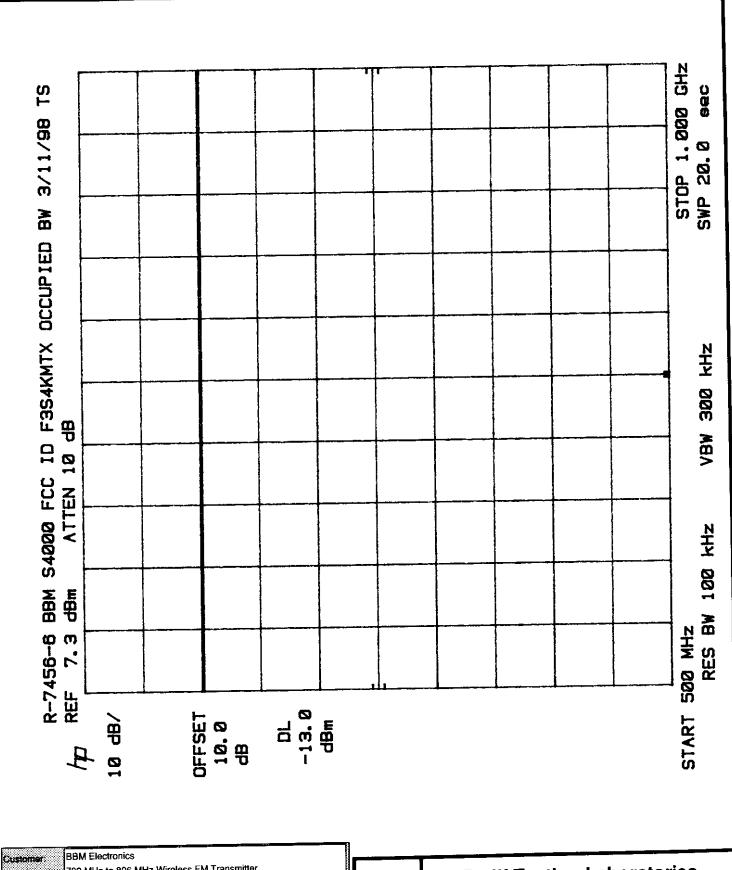
Date: March 11,1998

Tech: T. Schneider

Sheet 14 of 18



**Retlif Testing Laboratories** 



Test Sample: Model No.: Test Method: Notes: 782 MHz to 806 MHz Wireless FM Transmitter S4000MTX FCC ID: F3S4KMTX Antenna Conducted Emissions, Paragraph 2.991

Center Frequency≖ 805.9 MHz

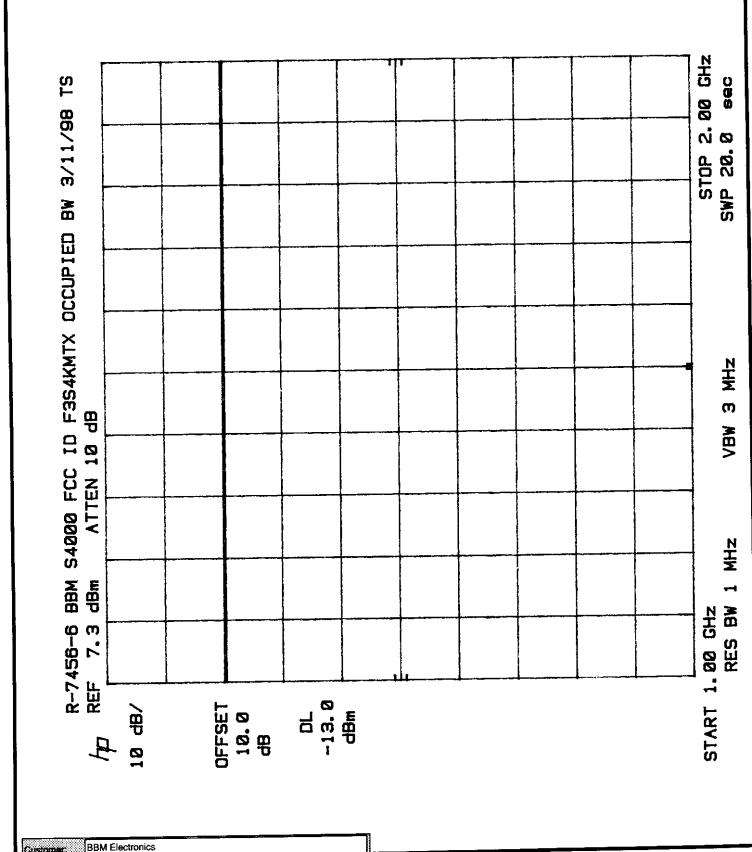
Audio Input = 15000 Hz at 50% Modulation plus 16 dB

Date: March 11,1998 Tech: T. Schneide

Tech: T. Schneider Sheet 15 at 18



**Retlif Testing Laboratories** 



Customer:

Test Sample: Model No : Test Method: 782 MHz to 806 MHz Wireless FM Transmitter FCC ID: F3S4KMTX

S4000MTX

Antenna Conducted Emissions, Paragraph 2.991

Center Frequency= 805.9 MHz

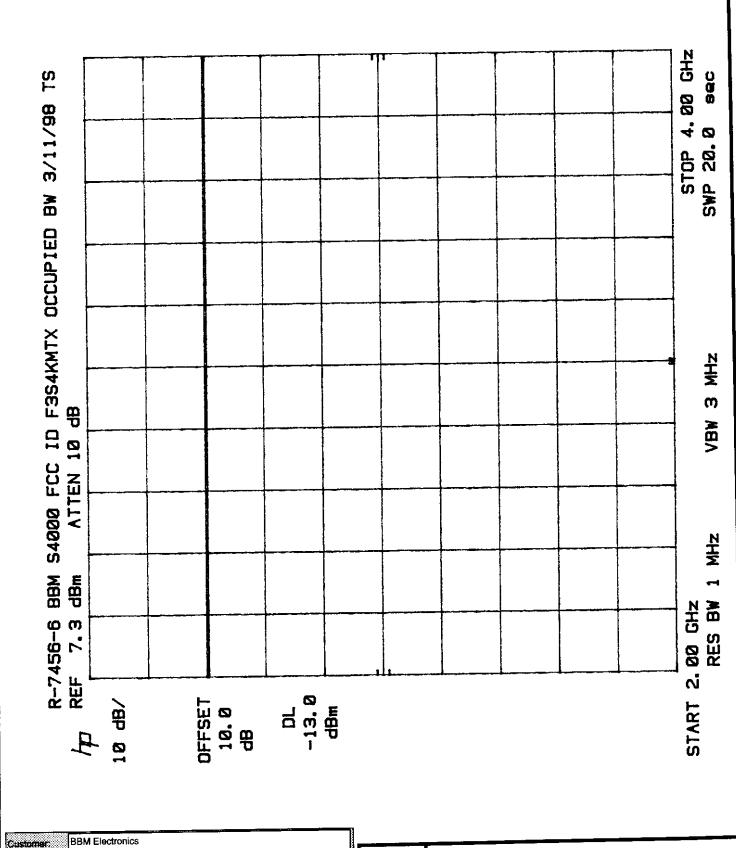
Audio Input = 15000 Hz at 50% Modulation plus 16 dB

Oate: March 11,1998

Tech: T. Schneider 4 Sheet 16 of 18



**Retlif Testing Laboratories** 



Test Sample: Model No Test Method: **BBM Electronics** 

782 MHz to 806 MHz Wireless FM Transmitter FCC ID: F3S4KMTX S4000MTX

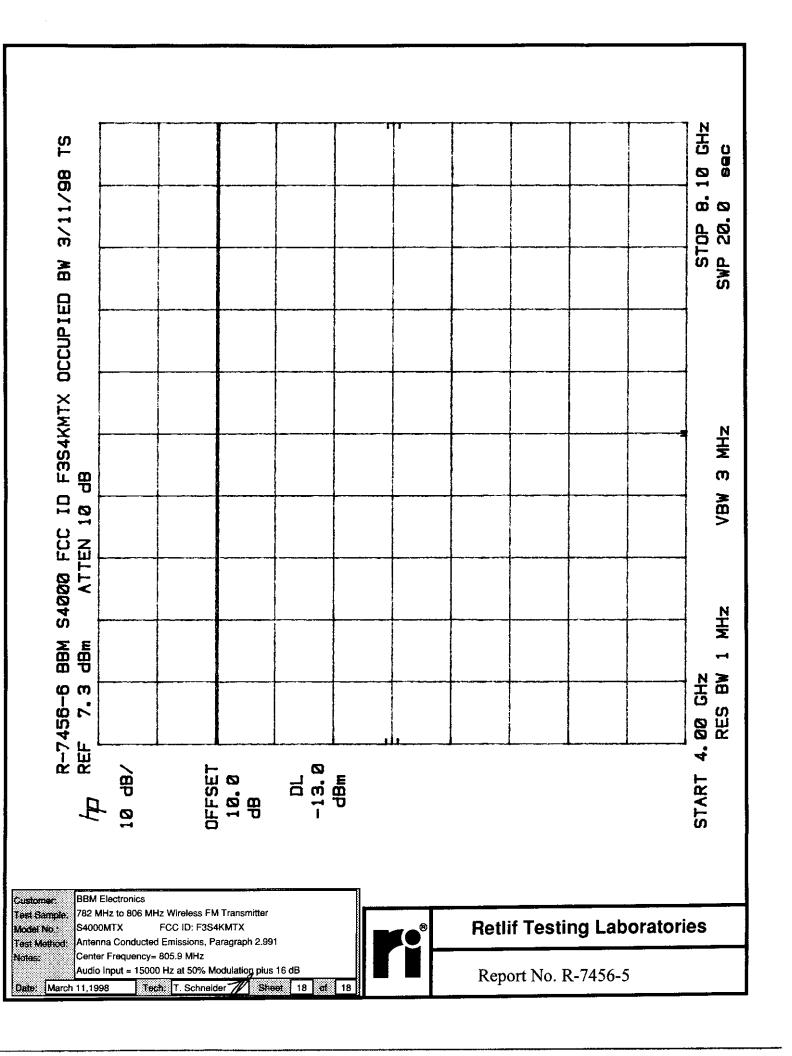
Antenna Conducted Emissions, Paragraph 2.991

Center Frequency= 805.9 MHz Audio Input = 15000 Hz at 50% Modulatiop plus 16 dB

Tech: T. Schneider // Sheet 17 of Date: March 11,1998



**Retlif Testing Laboratories** 



#### **EXHIBIT H**

Para. 2.993

Field Strength of Spurious Radiation



**Retlif Testing Laboratories** 

#### FIELD STRENGTH OF SPURIOUS RADIATION (PARA 2.993)

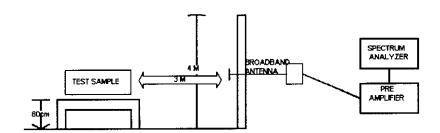
#### A. Measurement Procedure:

The test sample was then placed on an 80cm high wooden test stand which was located three meters from the test antenna on an FCC listed test site. The frequency range scanned was from the lowest frequency generated by the test sample to its tenth harmonic. In order to maximize the level of each emission observed from the test sample, the broadband antenna was tuned to the frequency of each emission and the test sample was rotated 360 degrees. To further maximize the each emission observed, the test antenna was both horizontally and vertically polarized, and then was raised and lowered from one to four meters from the ground plane. The limits for all of the spurious emissions was calculated utilizing the measured output power and the following equation:

Limit 
$$\langle dB\mu V/M \rangle = 20 \log \left[ \{ (49.2 \text{ x P}_T)^{\frac{1}{4}} / 3 \} \text{ x } 10^6 \right] - (43 + 10 \log P_T)$$

The above procedure was performed at the lower, middle and upper frequencies of the device's range.

#### Setup of the test is shown below:



#### B. Test Results:

The results for the above test are shown on the following three (3) data sheets.



### **Retlif Testing Laboratories**

#### RETLIF TESTING LABORATORIES TABULAR DATA SHEET SPURIOUS EMISSIONS, PARAGRAPH 2.993 TEST METHOD: R-7456-5 JOB No.: BBM Electronic Group Limited CUSTOMER: FCC ID: F3S4KMTX 794 Mhz - 806 Mhz UHF FM Transmitter TEST SAMPLE: SERIAL No.: N/A S4000MTX MODEL No.: FCC PART 74: Low Power Auxiliary Stations TEST PARAGRAPH: 74.861 SPECIFICATION: CONTINUOUSLY TRANSMITTING A CW SIGNAL AT CENTER FREQUENCY **OPERATING** MODE: 3/12/98 DATE: Dennis Cortes 4 TECHNICIAN: LIMIT =(49.2 X OUTPUT POWER) (43 + 10log Center Frequency= 794.10 Mhz Distance= 3 Meters NOTES: OUTPUT POWER) LIMIT CONVERTED CORRECTED Correction METER Turntable TEST Antenna READING READING READING Factor FREQUENCY Position Position uV/m uV/m dBuV/m dΒ dBuV Degrees (H/V) - Height MHz 16596 1428.9 63.1 -4.1 67.2 V-1.4 270 1588.20 16596 67.6 2398.8 -0.4 68,0 V-1.3 180 2382,30 2018.4 1659<u>6</u> 66.1 62.5 3.6 203 3176.40 V-1.4 16596 2541.0 8.7 68.1 59.4 135 3970.50 V-1.5 16596 5821.0 66.5 8.8 180 V-1.4 4764.60 16596 8810.5 78.9 18.9 180 60.0 V-1.5 5558.7<u>0</u> 16596 3020.0 19.7 69.6 49.9 180 V-1.4 6352.80 The frequency range was scanned from 30 MHz to 8.1 GHz. All emissions not recorded were more than 10dB below the specified limit. Emissions observed from the EUT do not exceed the specified limit. R-7456-5

DATA SHEET 1 OF 3

#### RETLIF TESTING LABORATORIES TABULAR DATA SHEET SPURIOUS EMISSIONS, PARAGRAPH 2.993 TEST METHOD: R-7456-5 JOB No.: **BBM Electronic Group Limited** CUSTOMER: FCC ID: F3S4KMTX 794 Mhz - 806 Mhz UHF FM Transmitter TEST SAMPLE: SERIAL No.: N/A MODEL No.: S4000MTX FCC PART 74: Low Power Auxiliary Stations TEST PARAGRAPH: 74.861 SPECIFICATION: CONTINUOUSLY TRANSMITTING A CW SIGNAL AT CENTER FREQUENCY **OPERATING** MODE: 3/12/98 DATE: Dennis Cortes TECHNICIAN: LIMIT =(49.2 X OUTPUT POWER) (43 + 10log Distance= 3 Meters NOTES: Center Frequency= 782.10 Mhz OUTPUT POWER) LIMIT CONVERTED Correction CORRECTED METER Tumtable TEST Antenna READING READING Factor READING FREQUENCY Position Position uV/m uV/m dBuV/m Degrees dBuV dB (H/V) - Height MHz 16596 1566.8 63.9 -4.4 68.3 270 V-2.0 1564.2 16596 2818.4 69.0 69.6 -0.6 V-1.1 180 2346,30 16596 3845.9 71.7 3.6 V-1.2 180 68.1 3128.40 16596 6918.3 76,8 8.3 68.5 V-1.7 135 3910.50 16596 11091.7 80.9 72.2 8.7 180 4692,60 V-1.3 16596 8511.4 78.6 60.0 18.6 180 5474.70 V-1.5 16596 6760.8 76.6 19.8 56.8 180 V-1.0 6256.80 The frequency range was scanned from 30 MHz to 8.1 GHz. All emissions not recorded were more than 10dB below the specified limit. Emissions observed from the EUT do not

exceed the specified limit.

#### RETLIF TESTING LABORATORIES TABULAR DATA SHEET SPURIOUS EMISSIONS, PARAGRAPH 2.993 TEST METHOD: JOB No.: R-7456-5 **BBM Electronic Group Limited** CUSTOMER: FCC ID: F3S4KMTX 794 Mhz - 806 Mhz UHF FM Transmitter **TEST** SAMPLE: SERIAL No.: N/A MODEL No .: S4000MTX FCC PART 74: Low Power Auxiliary Stations TEST PARAGRAPH: 74.861 SPECIFICATION: CONTINUOUSLY TRANSMITTING A CW SIGNAL AT CENTER FREQUENCY **OPERATING** MODE: 3/12/98 DATE TECHNICIAN: Dennis Cortes LIMIT =(49.2 X OUTPUT POWER)-(43 + 10log Distance= 3 Meters Center Frequency= 805.90 Mhz NOTES: OUTPUT POWER) LIMIT CONVERTED CORRECTED METER Correction Turntable TEST Antenna READING Factor READING READING Position Position **FREQUENCY** uV/m uV/m dBuV/m dBuV dB Degrees MHz (H/V) - Height 16596 1148.2 61.2 65.3 -4.1 270 V-1.5 1611.80 16596 1333.5 0.3 62.5 62.2 180 V-1.3 2417.70 16596 1273.5 3.9 62.1 58.2 113 V-1.3 3223.60 16596 3427.7 9.0 70.7 61.7 090 4029.50 V-1.9 16596 6095.4 <u>75.7</u> 66.8 8.9 180 V-1.3 4835.40 16596 <u>81.9</u> 12445.1 19.2 61.7 V-1.3 180 5641.30 16596 1883.6 65.5 19.6 45.9 V-1.3 180 6447.20 The frequency range was scanned from 30 MHz to 8.1 GHz. All emissions not recorded were more than 10dB below the specified limit. Emissions observed from the EUT do not exceed the specified limit.

DATA SHEET 3 OF 3

R-7456-5

### **EXHIBIT H**

Para. 2.995

Frequency Stability



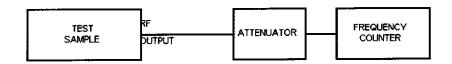
**Retlif Testing Laboratories** 

#### FREQUENCY STABILITY MEASUREMENTS (PARA 2.995)

#### A. Measurement Procedure (Frequency vs. Voltage):

The RF output of the test sample was coupled to a frequency counter through external attenuation. Using a Variable power supply and voltmeter, the input voltage was varied. Measurements were taken with the device being supplied with 85, 100, and 115 percent of its rated input voltage and set to transmit the unmodulated carrier frequency.

Setup of the test is shown below:



#### B. Test Results:

The results for the above test are shown on the following single data sheet.



### **Retlif Testing Laboratories**

## RETLIF TESTING LABORATORIES

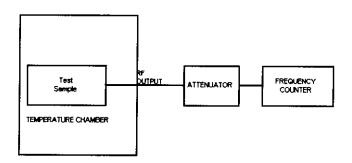
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FREQUENCY STABILITY (85% TO 115% OF INPUT POWER ) Para 2.985							
ввм в	BBM Electronics JOB No.: R-7456-5						
782 M	782 MHz to 806 MHz Wireless FM Transmitter						
S4000	S4000MTX SERIAL No: FCC ID: F3S4KMTX						
MODEL No.: S4000MTX  TEST SPECIFICATION:  FCC Part 74 Experimental Radio, Auxiliary, Special Broadcast and other Program Distributional Services. PARAGRAPH: 74.861 (e) (4)					) (4)		
	Transmitting a CW signal at center frequency of 794.1 MHz						
MODE:  TECHNICIAN: T. Schneider DATE: 3/09/98							
		imum.	<del></del>				
		INPUT	LOWER LIMIT	METER READING	UPPER LIMIT		
			MHz	MHz	MHz		
PRITZ							
794.100			794.06295		794.139705	<del></del>	<del> </del>
	85	7.65		794.09954			
	100	9.00		794.09954	<u> </u>		
-	115	10.65	1 1	794.09954			
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V	End Point	6.70		794.0553		<del>-</del>	
794,100	)		794.00293				
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	1	ı	1	1	L	1	
	Trans T. Sc. Level  TRANSMIT FREQUENC  794,100	BBM Electronics  782 MHz to 806 MHz Wirele  S4000MTX  FCC Part 74 Experimental F  Transmitting a CW signal at  T. Schneider  Level adjustment set at max  TRANSMIT Percent of Rated V  MHz %  794.100  85  100  115	BBM Electronics  782 MHz to 806 MHz Wireless FM Transmitter  S4000MTX  FCC Part 74 Experimental Radio, Auxiliary, Sp  Transmitting a CW signal at center frequency of the company of the c	BBM Electronics JOB No.  782 MHz to 806 MHz Wireless FM Transmitter  S4000MTX SERIAL  FCC Part 74 Experimental Radio, Auxiliary, Special Broadcast and Transmitting a CW signal at center frequency of 794.1 MHz  T. Schneider DATE:  Level adjustment set at maximum.  TRANSMIT Percent of Rated V Volta DC MHz  MHz % Volta DC MHz  794.100 794.06295    100 9.00	BBM Electronics	FREQUENCY STABILITY ( 85% TO 115% OF INPUT POWER ) Para 2.985	FREQUENCY STABILITY (85% TO 115% OF INPUT POWER) Para 2.985

#### FREQUENCY STABILITY MEASUREMENTS (PARA 2.995)

#### A. Measurement Procedure (Frequency vs. Temperature)

The RF output of the test sample was coupled to a frequency counter through external attenuators. With the counter connected, the test sample was activated and placed into a temperature chamber. The temperature was then programmed to start at -30 degrees Celsius and reach +50 degrees Celsius in 10 degrees increments. Each increment was held for 30 minutes in order to let the test sample stabilize at that temperature.

Setup of the test is shown below:



#### B. Test Results:

The results for the above test are shown of the following single data sheet.



**Retlif Testing Laboratories** 

# RETLIF TESTING LABORATORIES

				AR DATA S				<del></del>	
TEST METHOD:	FREQUENC	Y STABILITY (-	30 DEGREES TO	EGREES TO +50 DEGREES ) Para 2.985					
CUSTOMER:	BBM Electronics			JOB No.: R-7456-5					
TEST SAMPLE:	MPLE:								
MODEL No.:	S4000MTX			SERIAL No.: FCC ID: F3S4KMTX					
TEST SPECIFICATION:	FCC Part 7	4 Experimental Ra	idio, Auxiliary. Spe	Special Broadcast and other Program Distributional Services.  PARAGRAPH: 74.861 (e) (4)					
OPERATING MODE:	Transmitting	g a CW signal at co	enter frequency of						
TECHNICIAN:	N. Accardi								
NOTES:	Level adjustment set at maximum.								
<b>I</b>	RANSMIT EQUENCY		TEMPERATURE	LOWER LIMIT	METER READING	UPPER LIMIT			
	MHz		DEGREES C	MHz	MHz	MHz			
					704 00700	704 420705	<u> </u>	<u></u>	
7	94.100		-30 -20	794.06295	794.08793 794.09434	794.13 <u>9705</u>			
			-20 -10		794.09434 794.09686				
	1 -		0		794.09859	i.			
·- ·			10		794.09939				
			_20		794.09952	<u> </u>			
			30		794.09947			<u> </u>	
	V		40	V 794.06295	794.09960 794.10054	794. <u>139</u> 705	<u> </u>		
	94.100		50	794.00293	7 34.10034	704.100700			
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DATA SHEET 1 OF 1

TEST EQUIPMENT LIST **Retlif Testing Laboratories** Test Report Number No. R-7456-5 FCC ID: F3S4KMTX

## **Equipment List**

EN	Type	Manufacturer	Frequency Range	Model No.	Serial No.	Cal Date	Due Date
067	Open Area Test Site	Retlif	3 Meter	RNY	001	8/30/97	8/30/99
128C	Double Ridge Guide	Eaton Corporation	1 GHz - 18 GHz	96001	2385	10/6/97	10/6/98
	Broadband Pre-Amplifier	Electro-Metrics	10 kHz - 1 GHz, 26dB	BPA-1000	174	6/20/97	6/20/98
133	Spectrum Analyzer	Hewlett Packard	100 Hz - 40 GHz	8566B	2637A03491	3/2/98	9/2/98
141	Graphics Plotter	Hewlett Packard	N/A	7470A	2517A07605	3/4/98	3/4/99
141A	Ouasi-Peak Adaptor	Hewlett Packard	100 Hz - 1 GHz	85650A	2521A00862	3/3/98	9/3/98
141B	,	Texscan	0 - 1.0 GHz	FP-50 - 6 dB	5785	6/20/97	6/20/98
206B	6.0 dB Attenuator	Narda	DC - 11 GHz	768-10	67	6/19/97	6/19/98
333	Attenuator	Hewlett Packard	10 Hz - 10 MHz	654A	0951A02574	4/26/97	4/26/98
488	HP Test Oscillator	Electro-Mechanics	26 MHz - 1100 MHz	3143	9602-1234	9/30/97	9/30/98
523	Biconilog		20 14112 - 1100 14112	DV-1827-2	71046	5/9/97	5/9/98
534	DC Power Supply	Lambda	1.0 GHz - 26.5 GHz	8449B	3008A00829	8/12/97	8/12/98
543	Preamplifier	Hewlett Packard	1.0 Onz - 20.3 Onz	04472	*		



## Retlif Testing Laboratories