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FCC PART 15.237
Auditory Assistance Device
Low Power Unlicensed Intentional Radiator
CLASS II PERMISSIVE CHANGE TEST REPORT

Applicant	Williams Sound Corporation
Address	10321 West 70th Street Eden Prairie, MN 55344 USA
FCC ID	CNMT35
IC Label	IC: 1360A-T35
Model Number	T35
Product Description	Auditory Assistance Device
Date Sample Received	October 10, 2007
Date Tested	October 17, 2007
Tested By	Nam Nguyen
Approved By	Mario de Aranzeta
Report Number	3325AUT7TestRepot.PDF
Test Results	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

**THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL
WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.**



Certificate # 0955-01

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ATTESTATION



Test Certificate #0955-01

This equipment has been tested in accordance with the standards identified in the referenced test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All Timco instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made by me or under my supervision, at TIMCO ENGINEERING, INC. located at 849 N.W. State Road 45, Newberry, Florida 32669 USA.

Authorized by: Mario de Aranzeta

Signature: <on file>

Function: Lab Supervisor / Engineer

Date: November 14, 2007

REPORT SUMMARY

Purpose of Report	To demonstrate the DUT in compliance with FCC CFR 47 Part 15.237 requirements for auditory assistance device.
Disclaimer	The test results relate only to the items tested.
Applicable Standards	FCC CFR 47, Pt 15.237, ANSI C63.4-2003
Related Report	Digital portion is in compliance with Pt15.109, Pt 15.107 requirements in 3325BUT67estReport.pdf

TEST ENVIRONMENT

Test Facility	Timco Engineering Inc 849 NW State Road 45 Newberry, FL 32669 USA
Laboratory Condition	Temperature: 26°C, Humidity: 50%

TEST SYSTEM SETUP

Certified System	The EUT was tested with the microphone and/or accessories provided by the applicant.
Modification to DUT	No modification was made to ensure the DUT in compliance with regulatory requirements
Test Exercise	The DUT was placed in continuous transmit mode of operation
Cable	N/A
Supporting Equipment	The device is a stand-alone device operated by installed manufacturer software specified in operation manual.

DUT DESCRIPTION

Manufacturer	Williams Sound Corporation		
DUT	Auditory Assistance Device		
FCC ID	FCC ID: CNMT35		
IC Label	IC: 1360A-T35		
Model Number	T35		
Serial Number	N/A		
Trade Name	Hearing Helper		
Operating Frequency	72.025 ~ 75.975 MHz		
No. of Channels	Selectable 17 channels, up and down push button		
Max. Output Power	N/A		
Modulation	Wideband FM		
Mic Connector	3.5 mm mono phone jack		
DUT Power Source	12VAC adaptor		
Test Item	<input type="checkbox"/> Prototype	<input checked="" type="checkbox"/> Pre-Production	<input type="checkbox"/> Production
Type of Equipment	<input type="checkbox"/> Fixed	<input type="checkbox"/> Mobile	<input checked="" type="checkbox"/> Portable

Antenna Connector	Unique Connector
Antenna Specification	<u>ANT 021</u> This is a short, spiral wound “Rubber Duck” type antenna. It has a toroidal, omni directional pattern with significant matching loss relative to the isotropic radiator. A picture is included which shows this antenna mounted in the top of the T35. This antenna is manufactured by Mobile-Advance Industrial CO., LTD. In Taipei, Taiwan.
Antenna Specification	<u>ANT 024</u> . This is an electrically short dipole antenna. The short elements and the loss in the match network decrease the radiated power a significant degree relative to an isotropic radiator. A manual and picture are included for this antenna. This antenna is connected to the back of the T35 with a coaxial connector with an “F” connector. This antenna is manufactured by Williams Sound Corp., Eden Prairie, MN.
Antenna Specification	<u>ANT 025</u> . This is the standard antenna for the T35. It is a collapsible whip antenna that mounts in the center of the top of the T35. A picture is provided. The Antenna Length is 28 inches when fully extended. This antenna is a monopole antenna, and has a near-classical dipole pattern, with a gain of about 2 dBi. A picture is provided, showing the antenna partially extended from the mounting point in the top of the T35. This antenna is provided by SMC Multimedia Products, from Hong Kong, China.
Antenna Specification	<u>ANT 005</u> . This is a coaxial dipole antenna. The shield is stripped away from the center conductor and folded back for the last 40 inches. A drawing is provided. When the last 80 inches are hung vertically, the antenna provides a near classical dipole pattern, with an gain of 0-2 dBi. This antenna is connected to the back of the T35 with a coaxial connector with an “F” connector. This antenna is manufactured by Lee Manufacturing in Fridley, MN.

EMC EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal/Char Date	Due Date
3/10-Meter OATS	TEI	N/A	N/A	Listed 3/27/07	3/26/10
3-Meter OATS	TEI	N/A	N/A	Listed 1/11/06	1/10/09
Antenna: Biconnical	Eaton	94455-1	1057	CAL 12/12/05	12/12/07
Antenna: Biconnical	Electro-Metrics	BIA-25	1171	CAL 4/29/07	4/29/09
Analyzer Blue Tower Quasi-Peak Adapter	HP	85650A	2811A01279	CAL 4/13/07	4/13/08
Analyzer Blue Tower RF Preselector	HP	85685A	2926A00983	CAL 9/5/07	9/5/09
Analyzer Blue Tower Spectrum Analyzer	HP	8568B	2928A04729 2848A18049	CAL 4/13/07	4/13/09
LISN	Electro-Metrics	ANS-25/2	2604	CAL 8/27/06	8/27/08
LISN	Electro-Metrics	EM-7820	2682	CAL 4/28/07	4/28/09
Antenna: Log-Periodic	Eaton	96005	1243	CAL 12/14/07	12/14/07

TEST PROCEDURES

Power Line Conducted Interference

The measurements were made in accordance with ANSI C63.4-2003 "Methods and Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz". The measurements were performed over the frequency range of 0.15 MHz to 30 MHz using a 50 Ω / 50uH Line Impedance Stabilization Network (LISN). The tests were performed in an RF shielded enclosure.

Radiation Interference

The test procedure used was ANSI C63.4-2003 using an Agilent spectrum analyzer with a pre-selector. In the frequency range 10 kHz to 30 MHz the RBW was 10 kHz and from 30-1000 MHz the RBW of the spectrum analyzer was 100 kHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The resolution bandwidth was 100 kHz and the video bandwidth was 300 kHz.

Modulation Characteristics

Audio Frequency Response - The audio frequency response was measured in accordance with ANSI/TIA 603: 2003. The audio signal was fed into a dummy microphone circuit and into the microphone connector. The input required to produce 30 percent modulation level was measured.

Audio input versus modulation

The audio input level needed for a particular percentage of modulation was measured in accordance with ANSI/TIA 603: 2003.

Occupied Bandwidth

The test procedure used was ANSI C63.4-2003.

Radiated Spurious Emissions Into Adjacent Restricted Band

An in band field strength measurement of the fundamental Emission using the RBW and detector function required by C63.4-2003 and FCC Rules. The procedure was repeated with an average detector and a plot made. The calculated field strength in the adjacent restricted band is presented in the following pages.

Formula Of Conversion Factors

The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dBuV) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB. The gain of the preselector was accounted for in the spectrum analyzer meter reading.

Example:

Freq (MHz)	Meter Reading	+ ACF	+CL	= FS
33	20 dBuV	+ 10.36 dB/m	+0.40 dB	=30.76 dBuV/m @ 3m

ANSI C63.4-2003 Measurement Procedures

The DUT was placed on a non-conducting table 80 cm above the ground plane with the DUT located in the center of the table. With the antenna vertical a preliminary scan was done at 1 meters distance, the DUT was moved to a 3.0-meter distance and the antenna height varied and also placed in a horizontal position. The frequency was scanned from 9.0 kHz to 1.0 GHz. When an emission was found, the table was rotated to produce the maximum signal strength. The DUT was measured in three (3) orthogonal planes as necessary.

ANTENNA REQUIREMENT

Rules Part No.: Pt 15.203

Requirements: The antenna must meet at least one of the following criteria:

- A. Antenna be permanently attached to the unit
- B. Antenna must use a unique type of connector to attach to the DUT
- C. Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit

Results: The antenna meets the criteria of this rule by virtue of having a unique connector.

RADIATION INTERFERENCE

Rules Part No.: Pt 15.237 (c), Pt 15.35

Requirements: Carrier frequency shall not exceeds 98.0 dBuV/m at 3m. Out-of-band emissions, other than emissions in the restricted band shall not exceed 63.5 dBuV/m at 3m.

Test Data: Sample Calculation: FS: dBuV/m = MR(dBuV) + ACFdB

Antenna: 021 Rubber Duck Antenna

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity V/H	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m	Margin dB
72.1	72.10	78.7	H	1.16	5.63	85.49	12.57
72.1	72.10	86.0	V	1.16	6.25	93.41	4.65
72.1	144.20	15.4	V	1.71	16.39	33.50	30.02
72.1	144.20	16.1	H	1.71	15.70	33.51	30.01
72.1	216.30	20.3	V	2.18	11.47	33.95	29.57
72.1	216.30	24.1	H	2.18	11.61	37.89	25.63
72.1	288.40	9.0	V	2.54	14.12	25.66	37.86
72.1	288.40	10.3	H	2.54	13.67	26.51	37.01
72.1	360.50	8.9	V	2.90	14.73	26.53	36.99
72.1	360.50	9.5	H	2.90	15.11	27.51	36.01
72.1	432.60	10.7	V	3.23	16.33	30.26	33.26
72.1	432.60	13.7	H	3.23	16.70	33.63	29.89
72.1	504.70	13.2	H	3.51	18.19	34.90	28.62
72.1	504.70	14.4	V	3.51	18.34	36.25	27.27
72.1	648.90	8.1	V	4.09	21.05	33.24	30.28
72.1	648.90	11.6	H	4.09	20.56	36.25	27.27

[Continued]

[Continued] Antenna: 021 Rubber Duck Antenna

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity V/H	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m	Margin dB
75.9	75.90	77.5	H	1.19	6.82	85.51	12.55
75.9	75.90	86.0	V	1.19	7.25	94.44	3.62
75.9	151.80	13.9	H	1.76	16.41	32.07	31.45
75.9	151.80	17.6	V	1.76	17.20	36.56	26.96
75.9	227.70	14.4	V	2.24	11.32	27.96	35.56
75.9	227.70	15.4	H	2.24	11.58	29.22	34.3
75.9	303.60	8.7	H	2.62	14.32	25.64	37.88
75.9	303.60	12.9	V	2.62	14.59	30.11	33.41
75.9	379.50	11.5	V	3.00	15.58	30.08	33.44
75.9	379.50	12.1	H	3.00	15.49	30.59	32.93
75.9	455.40	12.2	H	3.32	17.32	32.84	30.68
75.9	455.40	12.4	V	3.32	17.55	33.27	30.25
75.9	531.30	10.9	V	3.59	18.10	32.59	30.93
75.9	531.30	13.2	H	3.59	18.31	35.10	28.42

Antenna 024 – Short Dipole

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity V/H	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m	Margin dB
72.1	72.10	81.5	V	1.16	6.25	88.91	9.15
72.1	72.10	87.7	H	1.16	5.63	94.49	3.57
72.1	144.20	15.9	V	1.71	16.39	34.00	29.52
72.1	144.20	22.6	H	1.71	15.70	40.01	23.51
72.1	216.30	33.0	H	2.18	11.61	46.79	16.73
72.1	216.30	34.3	V	2.18	11.47	47.95	15.57
72.1	288.40	19.7	V	2.54	14.12	36.36	27.16
72.1	288.40	23.7	H	2.54	13.67	39.91	23.61
72.1	360.50	20.2	V	2.90	14.73	37.83	25.69
72.1	360.50	24.2	H	2.90	15.11	42.21	21.31
72.1	432.60	18.1	H	3.23	16.70	38.03	25.49
72.1	432.60	20.9	V	3.23	16.33	40.46	23.06
72.1	504.70	15.8	V	3.51	18.34	37.65	25.87
72.1	504.70	18.8	H	3.51	18.19	40.50	23.02
72.1	648.90	9.5	V	4.09	21.05	34.64	28.88
72.1	648.90	12.4	H	4.09	20.56	37.05	26.47
75.9	75.90	82.8	V	1.19	7.25	91.24	6.82
75.9	75.90	86.9	H	1.19	6.82	94.91	3.15
75.9	151.80	20.6	V	1.76	17.20	39.56	23.96
75.9	151.80	30.7	H	1.76	16.41	48.87	14.65
75.9	227.70	27.4	V	2.24	11.32	40.96	22.56
75.9	227.70	30.5	H	2.24	11.58	44.32	19.2
75.9	303.60	17.3	V	2.62	14.59	34.51	29.01
75.9	303.60	21.2	H	2.62	14.32	38.14	25.38
75.9	379.50	15.6	H	3.00	15.49	34.09	29.43
75.9	379.50	19.2	V	3.00	15.58	37.78	25.74
75.9	455.40	16.7	V	3.32	17.55	37.57	25.95
75.9	455.40	17.0	H	3.32	17.32	37.64	25.88
75.9	531.30	12.1	V	3.59	18.10	33.79	29.73
75.9	531.30	16.1	H	3.59	18.31	38.00	25.52
75.9	683.10	12.0	H	4.30	20.83	37.13	26.39
75.9	759.00	9.5	H	4.64	21.50	35.64	27.88

Antenna 025 – collapsible whip antenna

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity V/H	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m	Margin dB
72.1	72.10	88.8	H	1.16	5.63	95.59	2.47
72.1	72.10	89.5	V	1.16	6.25	96.91	1.15
72.1	144.20	22.3	H	1.71	15.70	39.71	23.81
72.1	144.20	33.1	V	1.71	16.39	51.20	12.32
72.1	216.30	32.4	H	2.18	11.61	46.19	17.33
72.1	216.30	37.0	V	2.18	11.47	50.65	12.87
72.1	288.40	11.8	H	2.54	13.67	28.01	35.51
72.1	288.40	16.4	V	2.54	14.12	33.06	30.46
72.1	360.50	12.5	H	2.90	15.11	30.51	33.01
72.1	360.50	17.3	V	2.90	14.73	34.93	28.59
72.1	360.50	17.3	V	2.90	14.73	34.93	28.59
72.1	432.60	17.7	H	3.23	16.70	37.63	25.89
72.1	432.60	23.9	V	3.23	16.33	43.46	20.06
72.1	504.70	14.2	H	3.51	18.19	35.90	27.62
72.1	504.70	15.1	V	3.51	18.34	36.95	26.57
72.1	648.90	9.1	V	4.09	21.05	34.24	29.28
72.1	648.90	11.5	H	4.09	20.56	36.15	27.37
75.9	75.90	88.5	H	1.19	6.82	96.51	1.55
75.9	75.90	89.4	V	1.19	7.25	97.84	0.22
75.9	151.80	9.6	H	1.76	16.41	27.77	35.75
75.9	151.80	19.4	V	1.76	17.20	38.36	25.16
75.9	227.70	32.9	H	2.24	11.58	46.72	16.8
75.9	227.70	37.3	V	2.24	11.32	50.86	12.66
75.9	303.60	14.7	H	2.62	14.32	31.64	31.88
75.9	303.60	15.5	V	2.62	14.59	32.71	30.81
75.9	379.50	9.3	H	3.00	15.49	27.79	35.73
75.9	379.50	16.9	V	3.00	15.58	35.48	28.04
75.9	455.40	8.5	H	3.32	17.32	29.14	34.38
75.9	455.40	10.7	V	3.32	17.55	31.57	31.95
75.9	531.30	7.4	V	3.59	18.10	29.09	34.43
75.9	531.30	7.8	H	3.59	18.31	29.70	33.82

Antenna 005 – Coaxial Dipole

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity V/H	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m	Margin dB
72.1	72.10	87.5	H	1.16	5.63	94.29	3.77
72.1	72.10	88.2	V	1.16	6.25	95.61	2.45
72.1	144.20	30.1	V	1.71	16.39	48.20	15.32
72.1	144.20	33.1	H	1.71	15.70	50.51	13.01
72.1	216.30	35.4	V	2.18	11.47	49.05	14.47
72.1	216.30	35.6	H	2.18	11.61	49.39	14.13
72.1	288.40	17.8	V	2.54	14.12	34.46	29.06
72.1	288.40	22.1	H	2.54	13.67	38.31	25.21
72.1	360.50	13.4	H	2.90	15.11	31.41	32.11
72.1	360.50	13.7	V	2.90	14.73	31.33	32.19
72.1	432.60	16.6	V	3.23	16.33	36.16	27.36
72.1	432.60	19.1	H	3.23	16.70	39.03	24.49
72.1	504.70	15.7	V	3.51	18.34	37.55	25.97
72.1	504.70	16.1	H	3.51	18.19	37.80	25.72
72.1	648.90	11.2	V	4.09	21.05	36.34	27.18
72.1	648.90	12.5	H	4.09	20.56	37.15	26.37

[Continued]

[Continued] Antenna 005 – Coaxial Dipole

Tuned Frequency MHz	Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity V/H	Coax Loss dB	Correction Factor dB/m	Field Strength dBuV/m	Margin dB
75.9	75.90	82.2	H	1.19	6.82	90.21	7.85
75.9	75.90	87.7	V	1.19	7.25	96.14	1.92
75.9	151.80	25.5	V	1.76	17.20	44.46	19.06
75.9	151.80	28.0	H	1.76	16.41	46.17	17.35
75.9	227.70	33.9	H	2.24	11.58	47.72	15.8
75.9	227.70	36.0	V	2.24	11.32	49.56	13.96
75.9	303.60	14.0	V	2.62	14.59	31.21	32.31
75.9	303.60	19.5	H	2.62	14.32	36.44	27.08
75.9	379.50	16.3	H	3.00	15.49	34.79	28.73
75.9	379.50	17.5	V	3.00	15.58	36.08	27.44
75.9	455.40	15.6	V	3.32	17.55	36.47	27.05
75.9	455.40	16.2	H	3.32	17.32	36.84	26.68
75.9	531.30	13.7	V	3.59	18.10	35.39	28.13
75.9	531.30	17.6	H	3.59	18.31	39.50	24.02
75.9	683.10	11.1	V	4.30	20.53	35.93	27.59
75.9	683.10	11.7	H	4.30	20.83	36.83	26.69
75.9	759.00	9.4	V	4.64	20.81	34.85	28.67
75.9	759.00	12.6	H	4.64	21.50	38.74	24.78

MODULATION CHARACTERISTICS

Rule Parts No.: Pt 2.1047 (a) & (b)

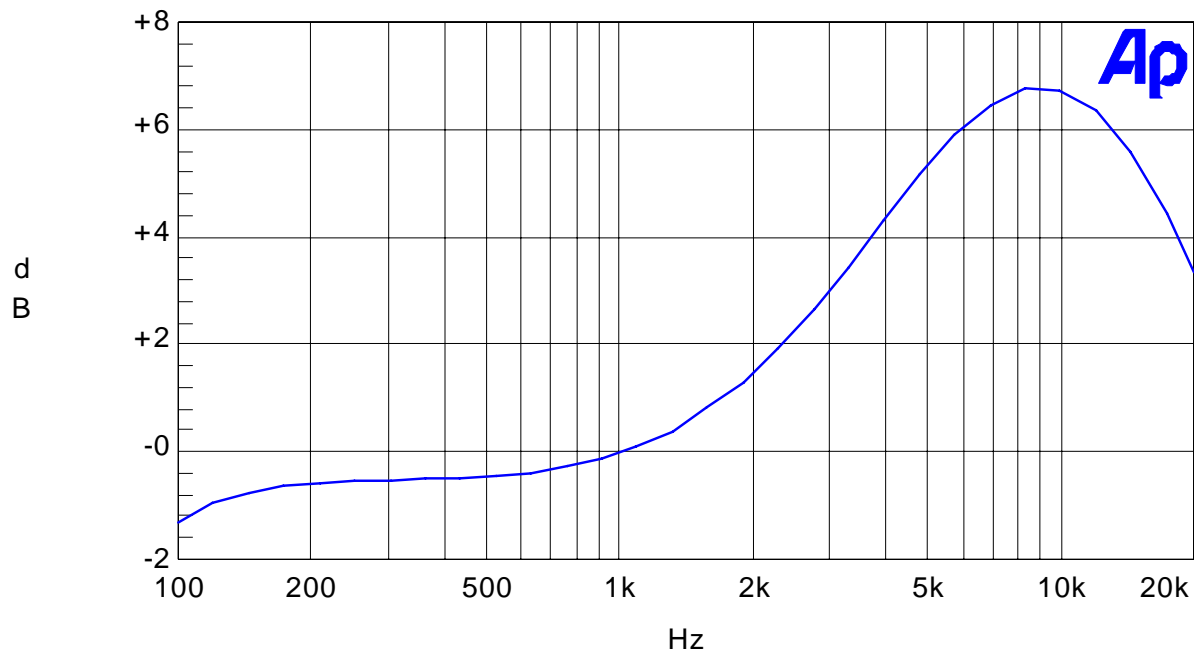
Requirements: A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 – 20,000Hz shall be submitted.

Audio input versus modulation cannot exceed 100%.

Test Data: The curve(s) is/are shown below.

Plot - Audio Frequency Response

Audio Frequency Response Plot

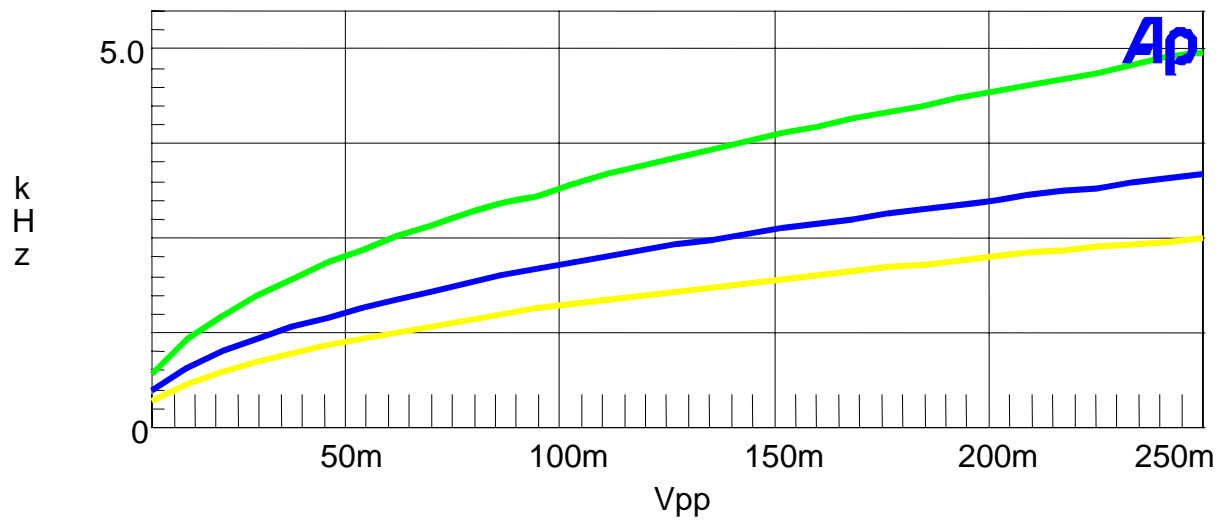


Color	Line Style	Thick	Data	Axis
Blue	Solid	1	Anlr.Level A!Normalize	Left

MaxFreq.at1

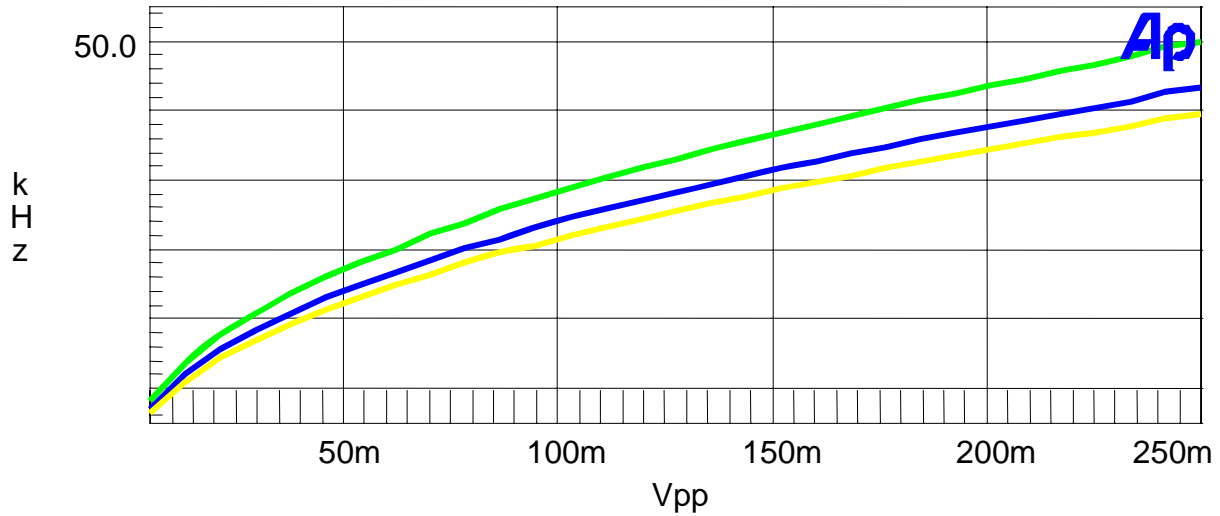
Plot – Audio input vs. Modulation

Modulation Limiting Plots: 2.5 KHz (Green), 1.0 KHz (Blue), and 300 Hz (Yellow)



Color	Line Style	Thick	Data	Axis
Green	Solid	3	Anlr.Level A	Left
Blue	Solid	3	Anlr.Level A	Left
Yellow	Solid	3	Anlr.Level A	Left

Modulation Limiting Plots:
2.5 KHz (Green), 1.0 KHz (Blue), and 300 Hz (Yellow)



Color	Line Style	Thick	Data	Axis
Green	Solid	3	Anlr.Level A	Left
Blue	Solid	3	Anlr.Level A	Left
Yellow	Solid	3	Anlr.Level A	Left

OCCUPIED BANDWIDTH

Rules Part No.: FCC Part 15.237 (b)

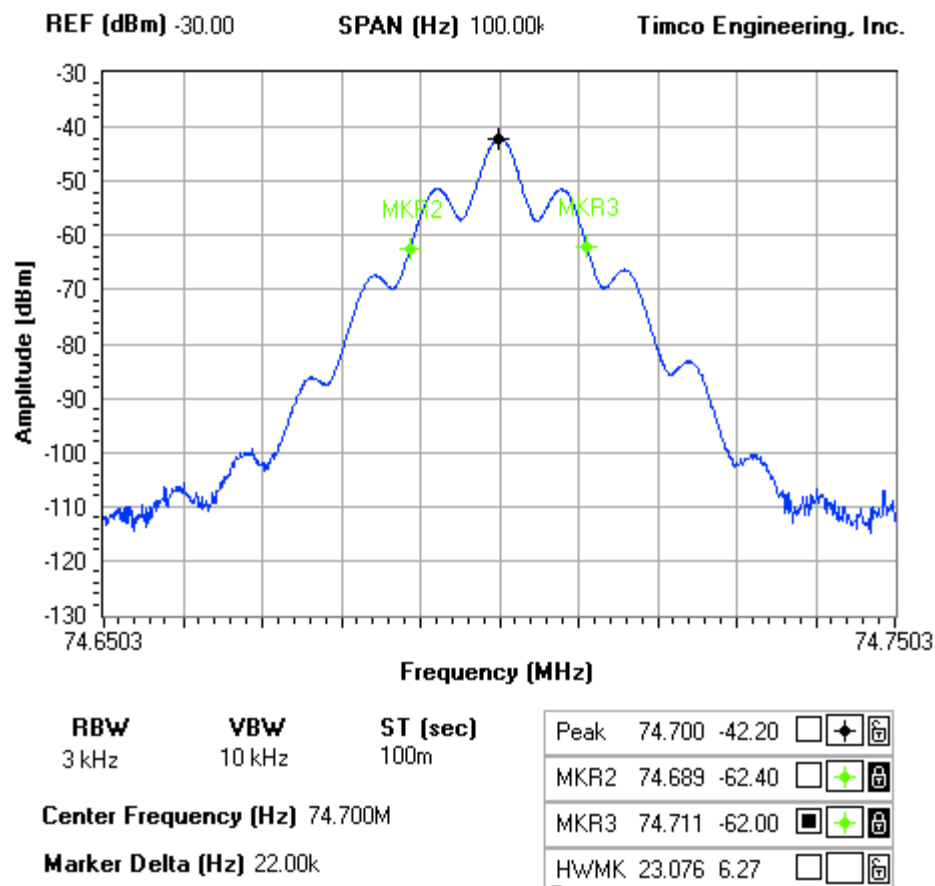
Requirements: Emissions from the intentional radiator shall be confined within a band 200 kHz wide centered on the operating frequency. The 200 kHz band shall lie wholly within the above specified frequency ranges.

Test Data:

NARROW BAND:

NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
20 dB OCCUPIED BANDWIDTH PLOT - MARKER DELTA = 22.0 KHz

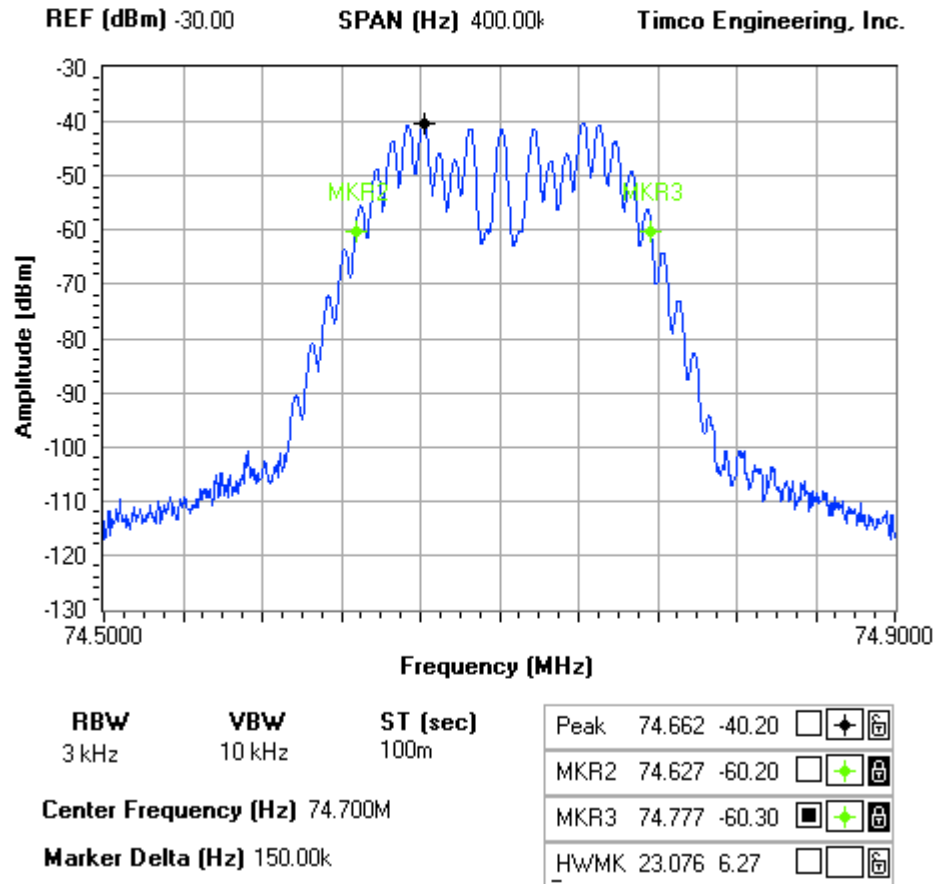


The 20dB bandwidth is 22 kHz.

WIDE BAND:

NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
20 dB OCCUPIED BANDWIDTH PLOT - MARKER DELTA = 150.0 KHz



The 20 dB bandwidth was found to be at 150 kHz.

RADIATED SPURIOUS EMISSIONS INTO ADJACENT RESTRICTED BAND

Rule Parts No.: Pt 15.237 (b) and (c), Pt 15.205

Requirements: The emissions that fall in the restricted bands must be less than or equal to the limits shown in Part 15.209 and described in Part 15.35 (b). For the frequencies shown in the table below, the emissions in the restricted bands must be equal to or less than 100 uV/m (40 dBuV/m). The Emissions outside the restricted band must be 63.5dBuV/m or below.

MHz	MHz	MHz	GHz
0.090 – 0.110	16.42 – 16.423	399.9 – 410	4.5 – 5.15
¹ 0.495 – 0.505	16.69475 – 16.69525	608 – 614	5.35 – 5.46
2.1735 – 2.1905	16.80425 – 16.80475	960 – 1240	7.25 – 7.75
4.125 – 4.128	25.5 – 25.67	1300 – 1427	8.025 – 8.5
4.17725 – 4.17775	37.5 – 38.25	1435 – 1626.5	9.0 – 9.2
4.20725 – 4.20775	73 – 74.6	1645.5 – 1646.5	9.3 – 9.5
6.215 – 6.218	74.8 – 75.2	1660 – 1710	10.6 – 12.7
6.26775 – 6.26825	108 – 121.94	1718.8 – 1722.2	13.25 – 13.4
6.31175 – 6.31225	123 – 138	2200 – 2300	14.47 – 14.5
8.291 – 8.294	149.9 – 150.05	2310 – 2390	15.35 – 16.2
8.362 – 8.366	156.52475 – 156.52525	2483.5 – 2500	17.7 – 21.4
8.37625 – 8.38675	156.7 – 156.9	2655 – 2900	22.01 – 23.12
8.41425 – 8.41475	162.0125 – 167.17	3260 – 3267	23.6 – 24.0
12.29 – 12.293	167.75 – 173.2	3332 – 3339	31.2 – 31.8
12.51975 – 15.52025	240 – 285	3345.8 – 3358	36.43 – 36.5
12.57675 – 12.57725	322 – 335.4	3600 – 4400	(2)
13.36 – 13.41			

¹ Until February 1, 1999, this restricted band shall be 0.490 – 0.510 MHz

² Above 38.6

Test Data: The plot is presented in the following pages. Data was collected in the following table. The EUT was fed with a 11.5 kHz signal (audio frequency response) at the microphone input.

The following plots show that the 200 kHz bandwidth for each fundamental frequency lies wholly within the allowed frequency ranges of operation.

The marker(s) on each plot indicate a bandedge frequency.

Narrow band:

Fundamental Frequency (MHz)	Field Strength Level of Fund. (dBuV/m)	Freq of Max. Band-edges Emission (MHz)	Delta Marker (dB) *	Cal. Max. Out of Band Emission Level (dBuV/m) **	Limit (dBuV/m)	Margin (dB)
72.025	94.39	72.000	45.6	48.79	63.5	14.71
72.975	94.24	73.000	66.8	27.44	40	12.56
74.625	94.48	74.600	67.2	27.28	40	12.72
74.775	94.92	74.800	65.7	29.22	40	10.78
75.225	94.15	75.199	65.3	28.85	40	11.15
75.975	94.26	76.001	46.7	47.56	63.5	15.94

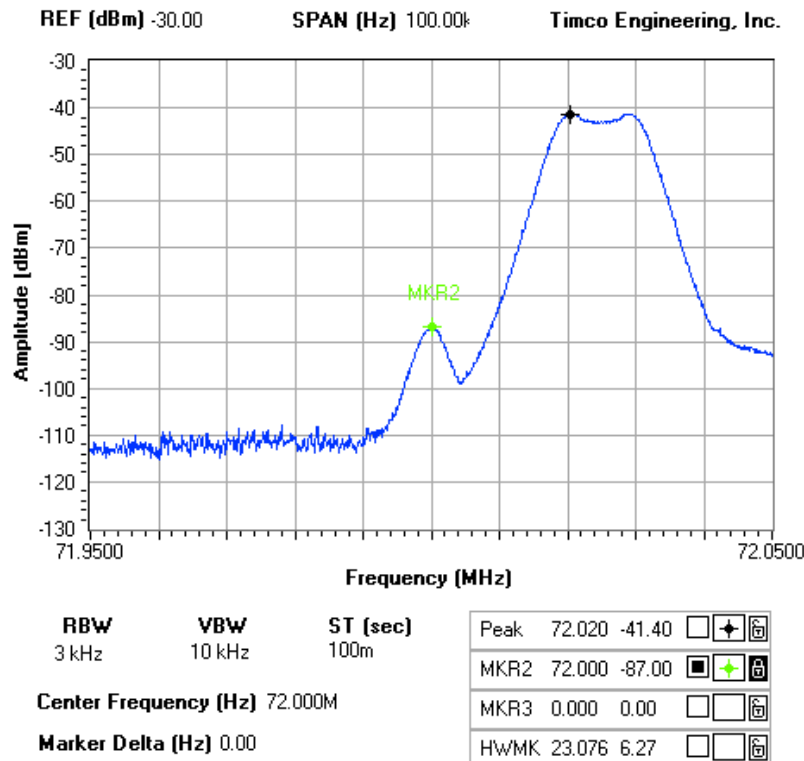
* According to step 2 of Marker-Delta Method DA 00-705 (following plots included).

** According to step 3 of Marker-Delta Method:

Calculated Emission Level = Field Strength Level - Delta Marker Level

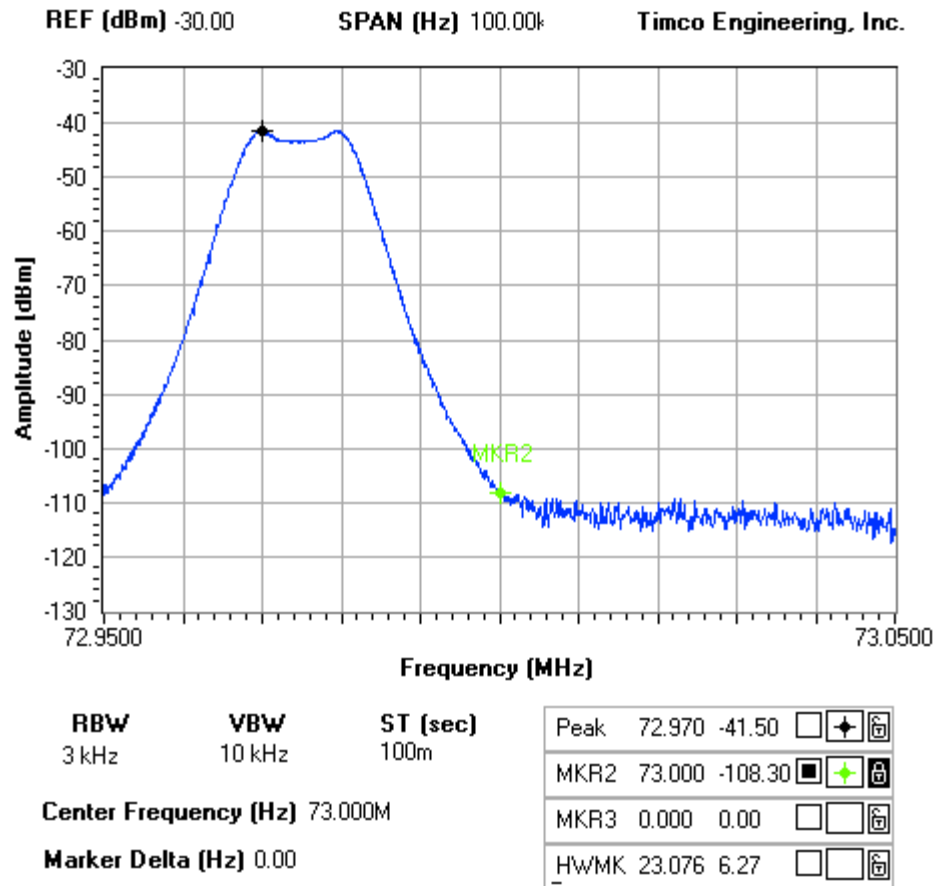
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 72.025 MHz



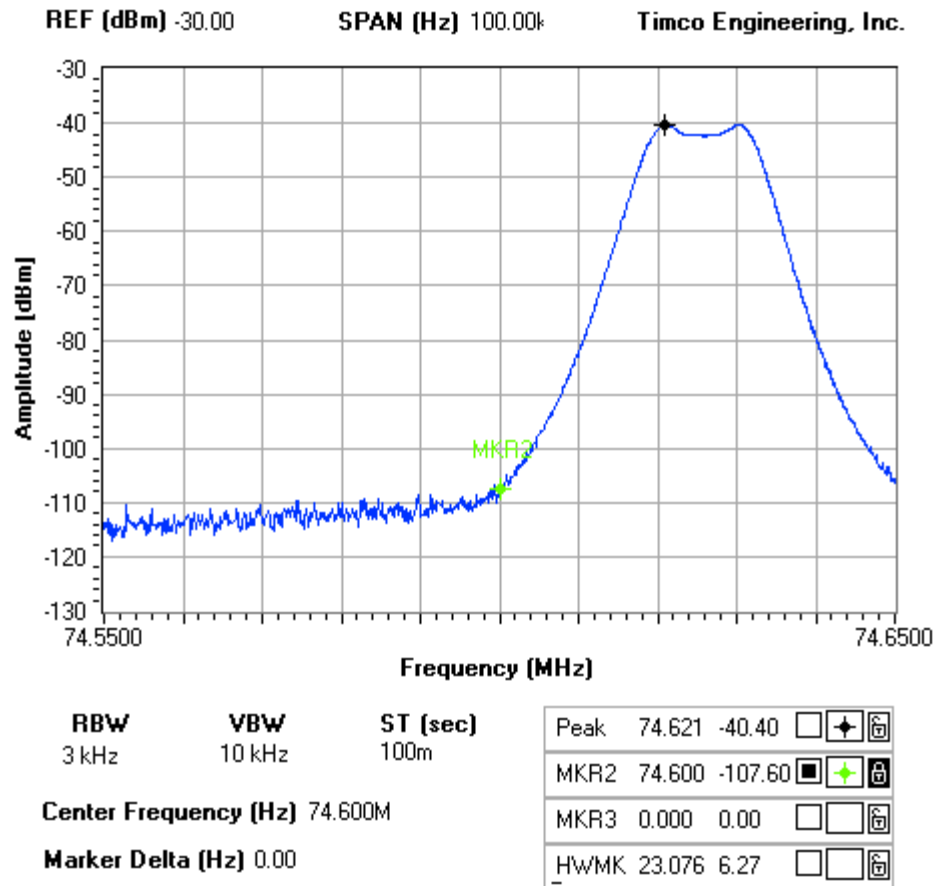
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 72.975 MHz



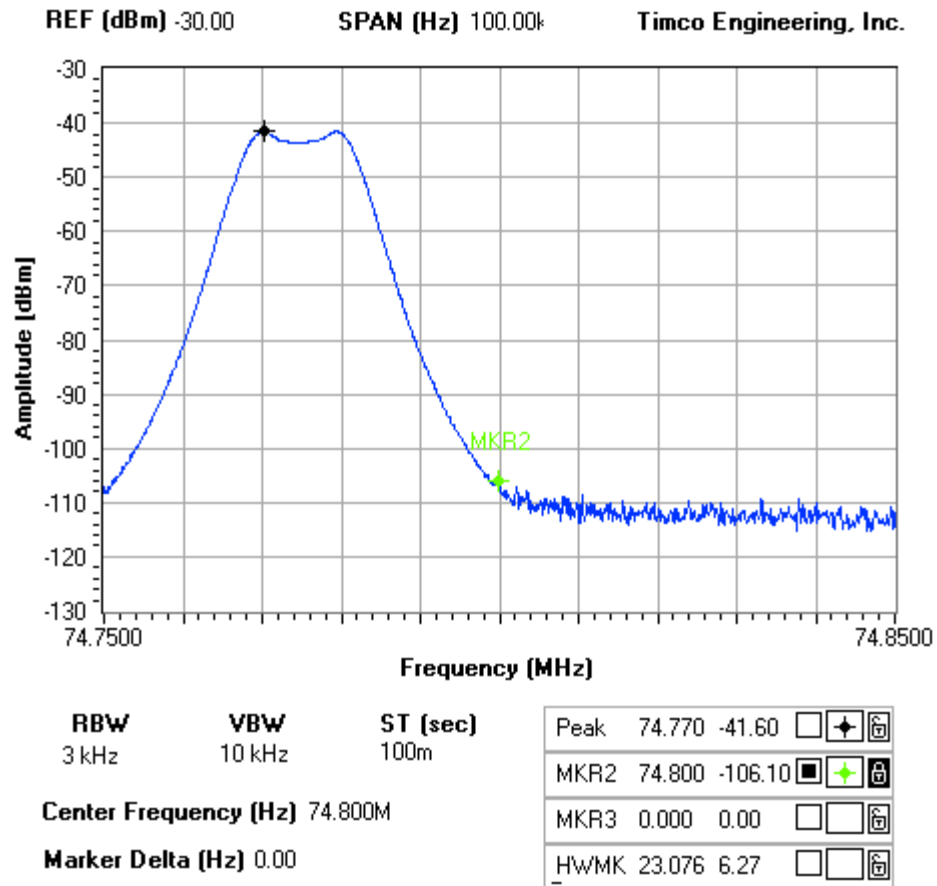
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 74.625 MHz



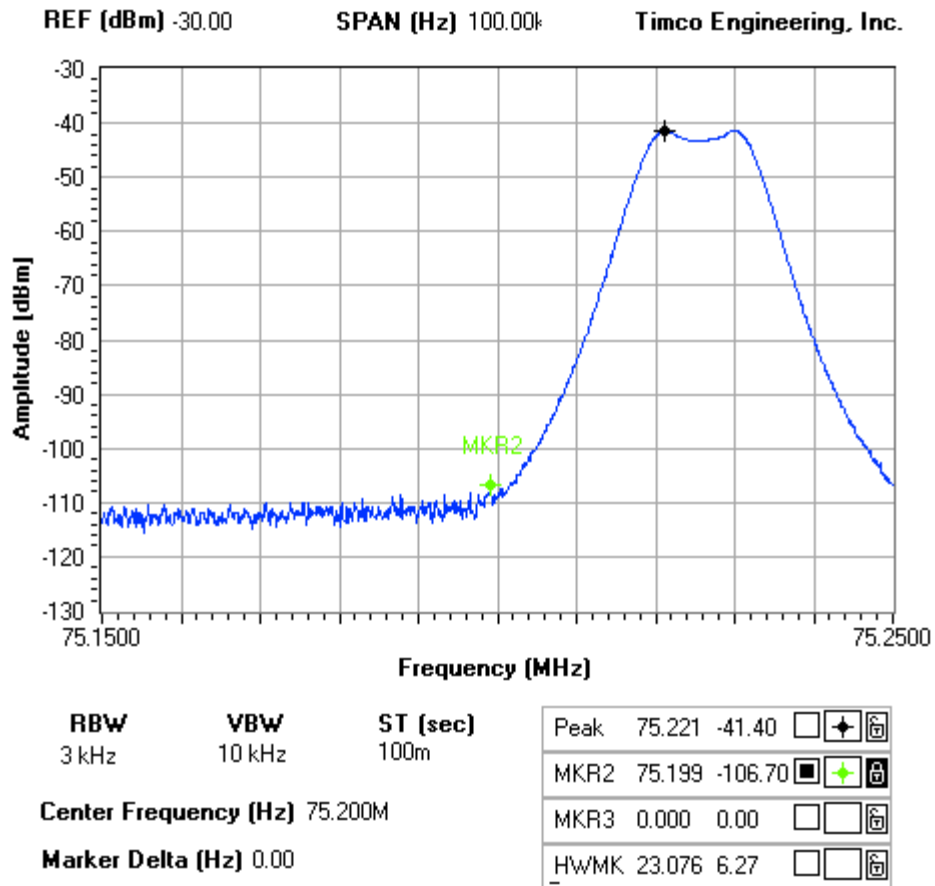
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 74.775 MHz



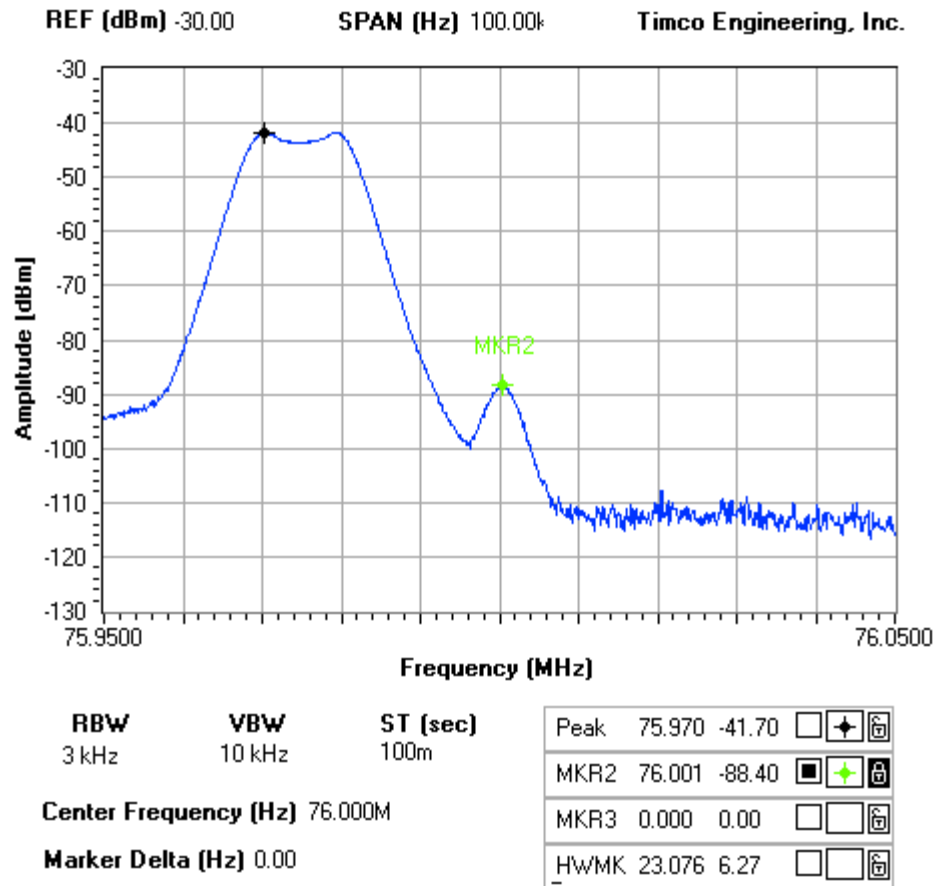
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 75.225 MHz



NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 75.975 MHz



Wide band:

Fundamental Frequency (MHz)	Field Strength Level of Fund. (dBuV/m)	Freq of Max. Band-edges Emission (MHz)	Delta Marker (dB) *	Cal. Max. Out of Band Emission Level (dBuV/m) **	Limit (dBuV/m)	Margin (dB)
72.100	95.61	72.001	52.3	43.31	63.5	20.19
72.900	97.42	73.003	61.2	36.22	40	3.78
74.700	97.00	74.600	61.8	35.2	40	4.80
74.700	97.00	74.801	61	36	40	4.00
75.300	96.27	75.200	62	34.27	40	5.73
75.900	96.14	76.003	54.3	41.84	63.5	21.66

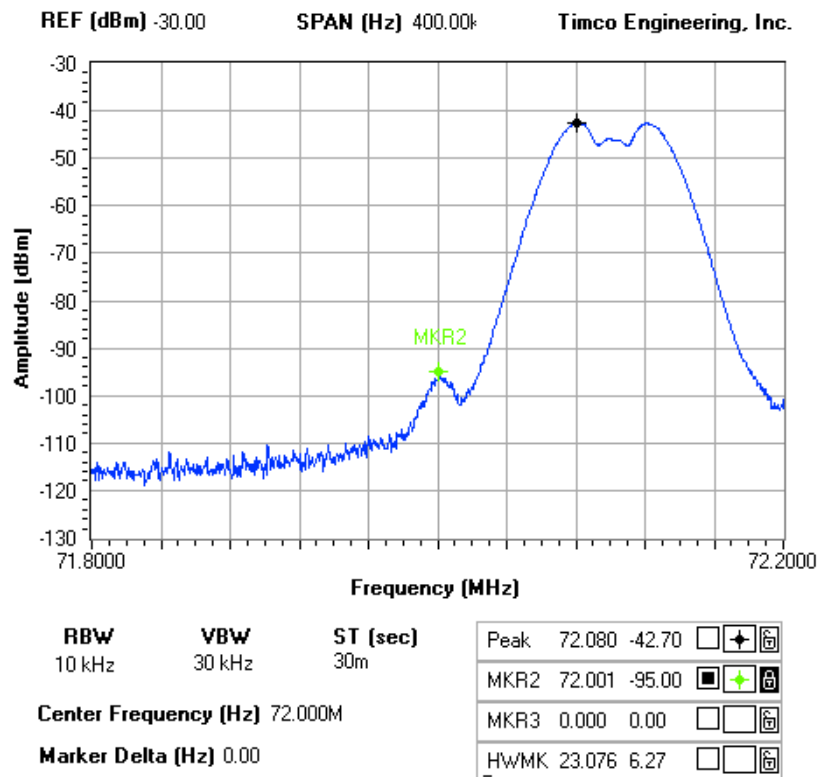
* According to step 2 of Marker-Delta Method DA 00-705 (following plots included).

** According to step 3 of Marker-Delta Method:

Calculated Emission Level = Field Strength Level - Delta Marker Level

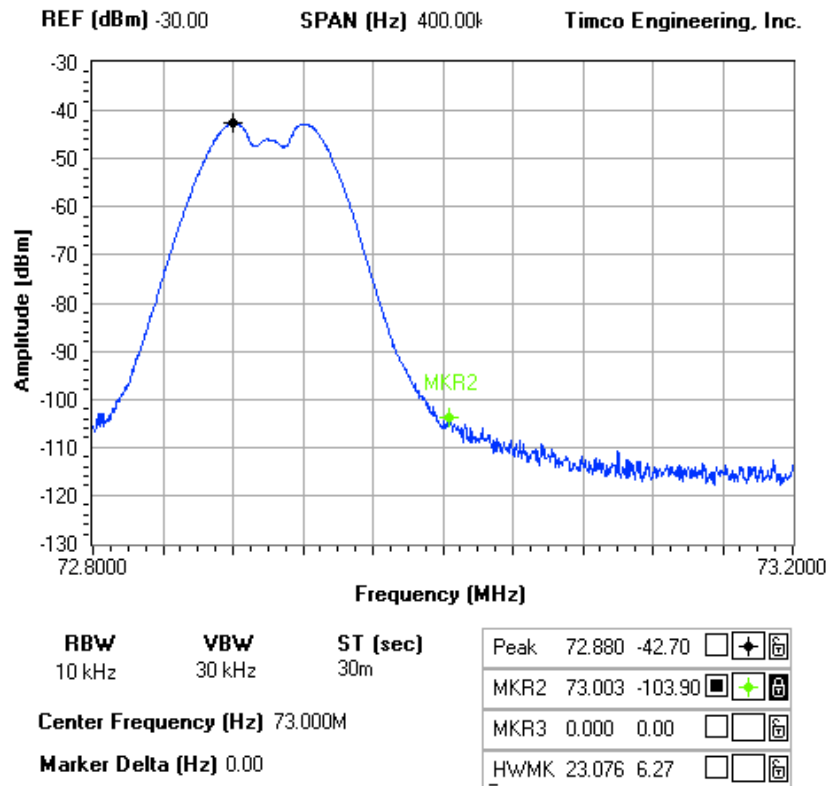
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 72.100 MHz



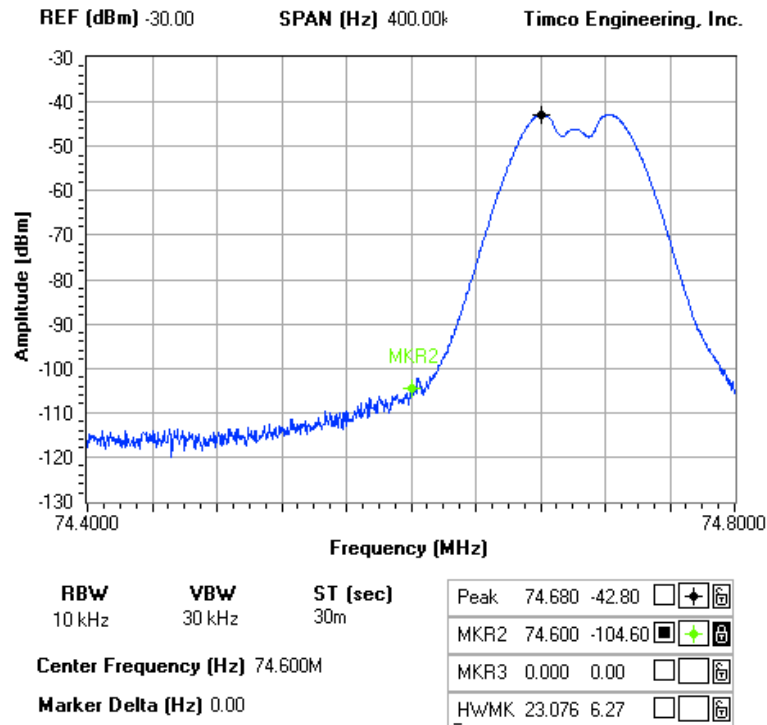
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 72.900 MHz



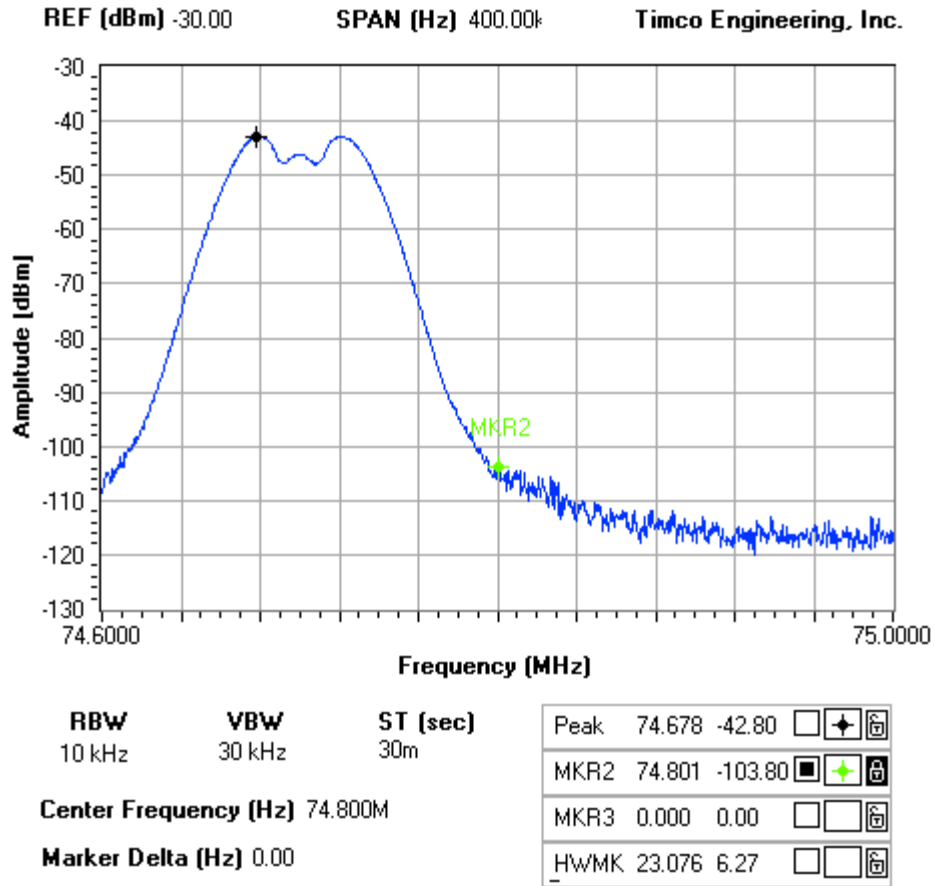
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 74.700 MHz



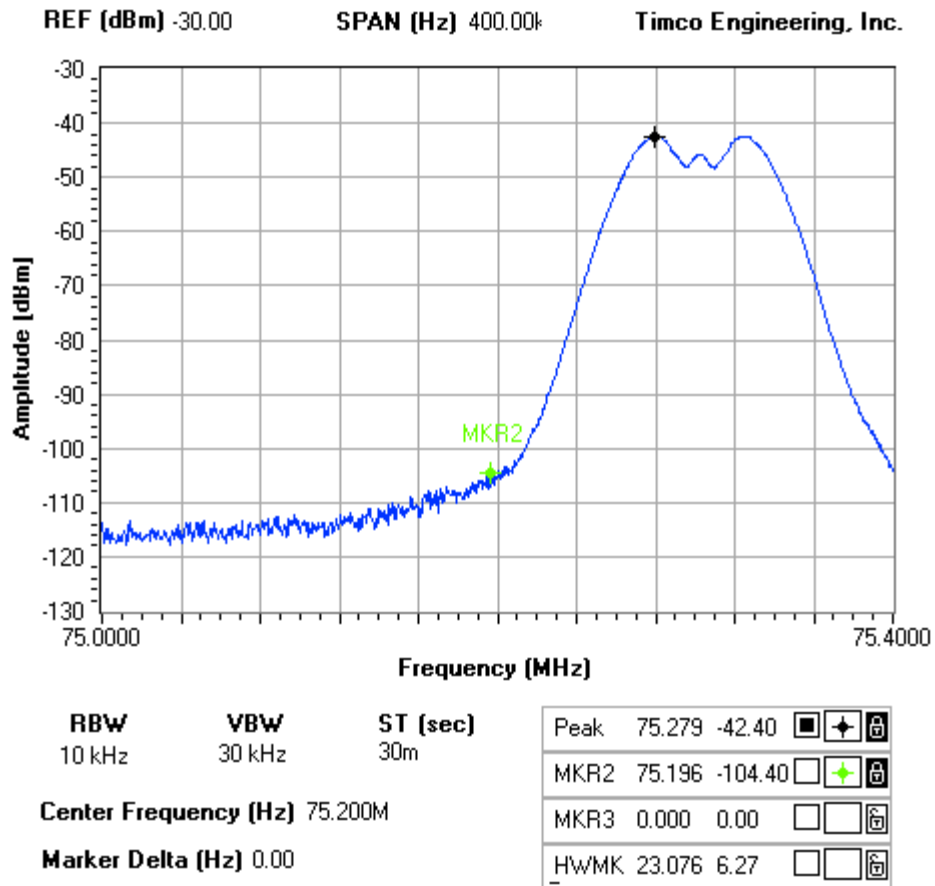
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 74.700 MHz



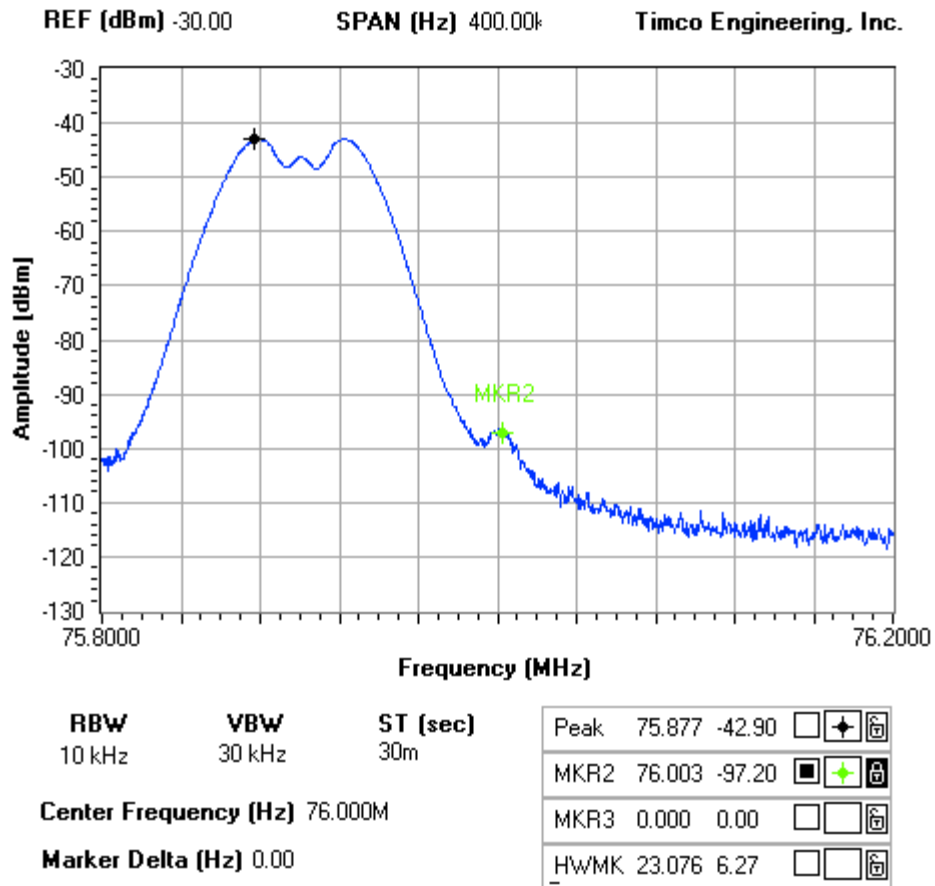
NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 75.3 MHz



NOTES:

WILLIAMS SOUND CORPORATION - FCC ID: CNMT35
 ADJACENT RESTRICTED BAND PLOT - TUNED FREQUENCY 75.900 MHz



POWER LINE CONDUCTED INTERFERENCE

Rules Part No.: Part 15.207 Class B

Requirements:

Frequency (MHz)	Quasi Peak Limits (dBuV)	Average Limits (dBuV)
0.15 – 0.5	66 – 56 *	56 – 46 *
0.5 – 5.0	56	46
5.0 – 30	60	50
* Decrease with logarithm of frequency		

Test Data: N/A because the DUT is battery operated exclusively