

ENGINEERING EXHIBIT IN SUPPORT OF APPLICATION FOR LICENSE

Intermodulation Product Measurements

**Common Antennna Site
IDS Building, Minneapolis Minnesota**

KQRS-FM - 92.5 MHz.	KXXR-FM - 93.7 MHz.
KTCZ-FM - 97.1 MHz.	KTIS-FM - 98.5 MHz.
KSJN-FM - 99.5 MHz.	KTLK-FM - 100.3 MHz.
KDWB-FM - 101.3 MHz.	KEEY-FM - 102.1 MHz.
KZJK-FM - 104.1 MHz.	

June 26, 2008

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AFFIDAVIT

HENNEPIN COUNTY

STATE OF MINNESOTA

SS:

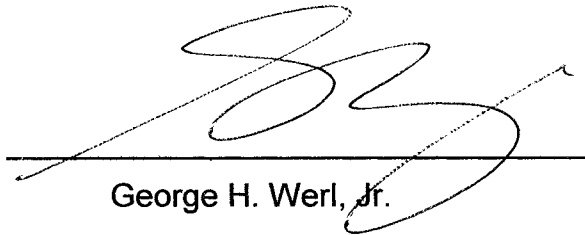
GEORGE H. WERL, JR., being duly sworn upon oath deposes and says:

That his qualifications are a matter of record with the Federal Communications Commission;

That he is President of Commsulting, Incorporated, a Minnesota corporation;

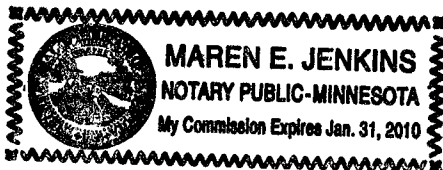
That Commsulting, Incorporated has been retained by to prepare this declaration and engineering statement;

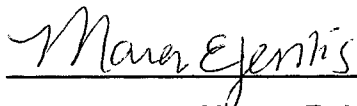
That he has either prepared or directly supervised the preparation of all technical information contained in this engineering statement and that the facts stated in this engineering statement are true of his knowledge, except as to such statements as are herein stated to be on information and belief, and to such statements he believes them to be true.


George H. Werl, Jr.

Subscribed and sworn to before me on

July 10, 2008





Notary Public

My Commission expires

1-31-2010

ENGINEERING EXHIBIT IN SUPPORT OF APPLICATION FOR LICENSE

Intermodulation Product Measurements

**Common Antenna Site
IDS Building, Minneapolis Minnesota**

KQRS-FM - 92.5 MHz.	KXXR-FM - 93.7 MHz.
KTCZ-FM - 97.1 MHz.	KTIS-FM - 98.5 MHz.
KSJN-FM - 99.5 MHz.	KTLK-FM - 100.3 MHz.
KDWB-FM - 101.3 MHz.	KEEY-FM - 102.1 MHz.
KZJK-FM - 104.1 MHz.	

NARRATIVE STATEMENT: This engineering statement and exhibits have been prepared by George H. Werl, Jr., President of Commsulting, Inc., on behalf of KQRS-FM, KXXR-FM, KTCZ-FM, KTIS-FM, KSJN-FM, KTLK-FM, KDWB-FM, KEEY-FM and KZJK-FM (herein referred to as "the IDS Stations"), in accordance with the Rules and Regulations of the Federal Communications Commission following the replacement of a master antenna located at the IDS Building in Minneapolis, Minnesota. These facilities constitute a common auxiliary transmission site for the stations specified, the main site for all of these stations being located at Shoreview, Minnesota.

ANTENNA SYSTEM DESCRIPTION: Nine FM stations utilize the master antenna located at the IDS Building in Minneapolis, Minnesota as a backup site. The new antenna installed at the site, an Electronics Research 12 bay AXIOM, replaces a 14 level Shively Labs Lindenblad design installed some 10 years ago. Only the antenna and the short feedline section above the roof level was replaced, the combiner system originally installed with the previous Shively antenna and all feedlines internal to the building remain unchanged. There was no change in the antenna center of radiation.

To provide isolation among the nine FM transmitters present at the combined facility, an RF combining system designed and built by Shively Labs is employed. This RF combining

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system is of the constant impedance type utilizing dual four cavity bandpass filters and four-port hybrids for each FM station input. The original design criteria for the combining system required that sufficient attenuation to spurious emissions be provided by the combiner without regard for whatever protection might be present in any particular installed transmitter. Performance of the combining system concerning attenuation of spurious emissions has therefore been excellent.

In addition to the nine FM stations being combined, a tenth FM station at 105.7 MHz. has recently been added to the site on another mast some 87 feet distant from the FM master antenna. This individual station employs a separate bandpass filter manufactured by Shively Labs. The FM facility using this separate antenna is being included with the FM facilities operating on the master antenna for purposes of the measurements described herein.

MEASUREMENT METHODOLOGY: Due to the large number of high power carriers present within the combined antenna system, the use of notch filters to reduce potential undesired overload problems within the measurement instrument (in this case a Tektronix 2712 spectrum analyzer) is not practical. Fortunately, the method for mathematical prediction of the probable spurious intermodulation products is well known. Where these products were predicted to lie within or adjacent to the FM band ($2 \times A - B$ mix) a tunable bandpass cavity was employed to attenuate all but the spurious frequency of interest. Where these products were predicted to lie well outside of the FM band ($A + B$ mixes) a Tektronix 2706 preselector was employed to attenuate the FM carriers. Including the individual 105.7 MHz. facility in the calculation of the potential products there are 66 distinct predicted intermodulation product frequencies within and/or adjacent to the FM band ($2 \times A - B$ mixes) and 38 distinct predicted intermodulation product frequencies well above the FM band ($A + B$ mixes).

Careful attention was given to the signal level presented to the input of the spectrum analyzer, both in the case of individual carriers and multiple carriers. As the maximum input power limit of the analyzer is specified at +20 dbm, for protection of the analyzer the total aggregate power for all carriers was limited to under +10 dbm. As measured by the HP Power Meter, the actual total aggregate power to the analyzer was +8 dbm. Attenuation pads were introduced as appropriate to limit the maximum signal level present at the input of the spectrum analyzer while extending the instrument measurement capability. In this manner, the normal 70 decibel on-screen dynamic range of the Tektronix 2712 spectrum analyzer was extended to over 100 decibels below the FM carriers. Block diagrams of the setups and details of the instruments used appear elsewhere in this report.

It is noted that the lowest four 2A - B predicted intermodulation products (79.3, 80.9, 81.7 and 82.9 MHz.) fell outside of the range of the Celwave tunable bandpass filter, thus the dynamic range of the analyzer could not be extended for these four measurement frequencies by the means described above. However, with the combination of appropriate attentator pads and running the analyzer with the operating carriers slightly off-screen, a noise floor of better than -80dbc could be observed at these frequencies with no evidence of intermodulation products.

It can be noted from the block diagrams that a Hewlett Packard signal generator was used in conjunction with a Narda directional coupler to inject a marker into the measurement system ahead of the tunable bandpass cavity. This was used as a tuning aid in setting the bandpass cavity precisely to the predicted spurious product frequency.

The tunable bandpass cavity was also measured with the spectrum analyzer and a Tektronix 2707 tracking generator. This was done to establish rejection characteristics of the passband as well as the insertion loss at the selected frequency. Plots of the tunable bandpass cavity performance are included herein as well.

CONCLUSIONS: In general, measurements made within and adjacent to the FM band with the tunable bandpass cavity exhibited a dynamic range (to the noise floor) of between -85 and -103 decibels as referenced to the FM carriers. The dynamic range was compromised somewhat as measurements were made within 400 KHz. of operating carriers, however in no case was any spurious identified in excess of -80 dbc (as per FCC Rules), and generally much better than -90 dbc. Where measurement within 400 KHz. of an operating carrier was rendered impossible due to the operating carrier, a brief cut of the particular operating carrier was employed as necessary to make the measurement.

Measurements made well above the FM band also included attenuation pads to protect the spectrum analyzer input from overload from the aggregate power level of the multiple carriers. Data are included to indicate FM carriers measured at the combiner output directional coupler port as well as 185 MHz. through 210 MHz. (A + B mixes and second harmonics). An analyzer scan was made with the preselector through 1300 MHz. Although carriers from other communications services at the IDS site were noted, no spurious identifiable to the FM stations were found. Measurement capability was better than -90 dbc.

These measurements were performed the evening of Thursday, June 26, 2008. All FM stations involved in these measurements were operating as licensed with normal analog

modulation. No spurious emissions in excess of FCC Rules could be found. The measurement capability (to the noise floor) was generally better than -95 dbc.

PREPARER'S CERTIFICATION: George H. Werl, Jr. holds a Bachelor of Science from The Pennsylvania State University as well as a Bachelor of Electrical Engineering from the University of Minnesota. He has had numerous matters before the Federal Communications Commission, his qualifications are a matter of record;

He supervised the construction and equipment installation of this combined antenna system at the IDS Building and has been associated with this site since FM facilities began broadcasting from this site in 1977. Over the years he has performed these types of spurious and intermodulation product measurements demonstrating FCC compliance many times at this site and other sites.

He is President of Commsulting, Incorporated, a Minnesota corporation; and he has either prepared or directly supervised the preparation of all technical information contained in this engineering statement. The facts stated in this engineering statement are true of his knowledge, except as to such statements as are herein stated to be on information and belief, and as to such statements he believes them to be true.

A handwritten signature in black ink, consisting of stylized, overlapping loops and curves, positioned above a solid horizontal line.

George H. Werl, Jr.
President, Commsulting, Inc.

ENGINEERING EXHIBIT A

IDS Building Master Antenna, Minneapolis, Minnesota

Antenna System Data:

The following FM facilities operate from the IDS master antenna.

KQRS -FM	92.5 MHz.
KXXR-FM	93.7 MHz.
KTCZ-FM	97.1 MHz.
KTIS-FM	98.5 MHz.
KSJN-FM	99.5 MHz.
KTLK-FM	100.3 MHz.
KDWB-FM	101.3 MHz.
KEEY-FM	102.1 MHz.
KZJK-FM	104.1 MHz.

The following FM facilities also operate from the IDS Building.

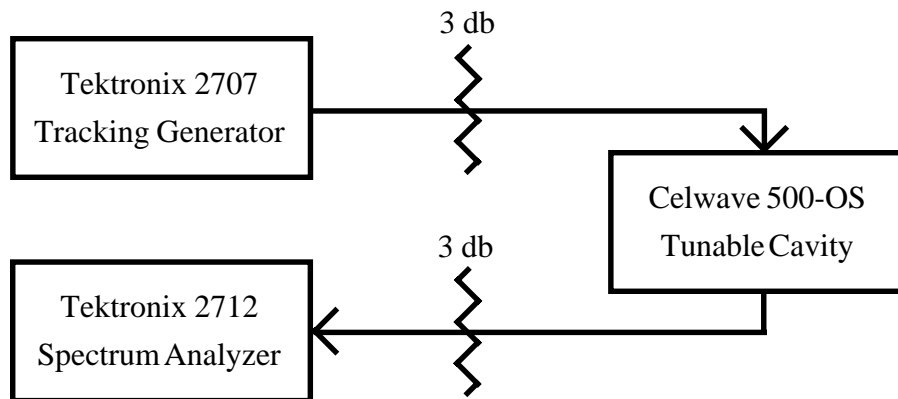
WGVZ-FM	105.7 MHz.
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ENGINEERING EXHIBIT B1

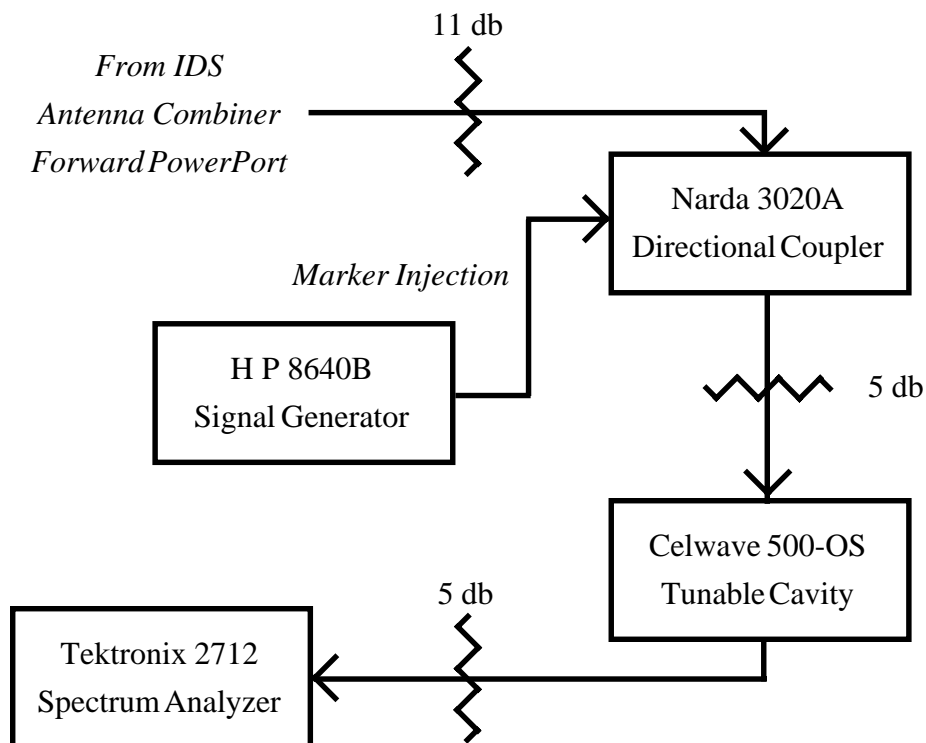
IDS Building Master Antenna, Minneapolis, Minnesota

Measurement Equipment Details:

Tuneable Bandpass Cavity Measurement:



Measurements with Tuneable Bandpass Cavity at Combiner Output Port:

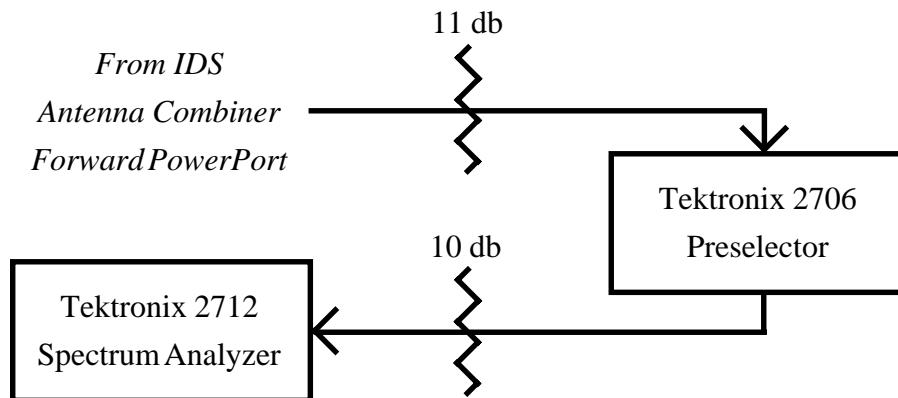


ENGINEERING EXHIBIT B2

IDS Building Master Antenna, Minneapolis, Minnesota

Measurement Equipment Details:

Measurements with Tektronix 2706 Preselector at Combiner Output Port:



ENGINEERING EXHIBIT B3

IDS Building Master Antenna, Minneapolis, Minnesota

Measurement Equipment Details:

Equipment Data:

Tektronix model 2712 Spectrum Analyzer, S/N B022803
Tektronix model 2707 Tracking Generator, S/N B010208
Tektronix model 2706 RF Preselector, S/N B010655
Hewlett Packard model 8640B Signal generator, S/N 1814A08347
Schlumberger model SM110C Frequency Counter, S/N 00256
Hewlett Packard model 435B RF Power Meter, S/N 2072A17593
Hewlett Packard model 8482A RF Power Meter Sensor, S/N 2652A19449
Celwave model 500-OS Tuneable Bandpass Cavity, S/N 34954 (see note 1)
Narda model 3020A Directional Coupler, S/N 32470
Attenuator Pads as needed, Bird Electronics and JFW Electronics

Notes:

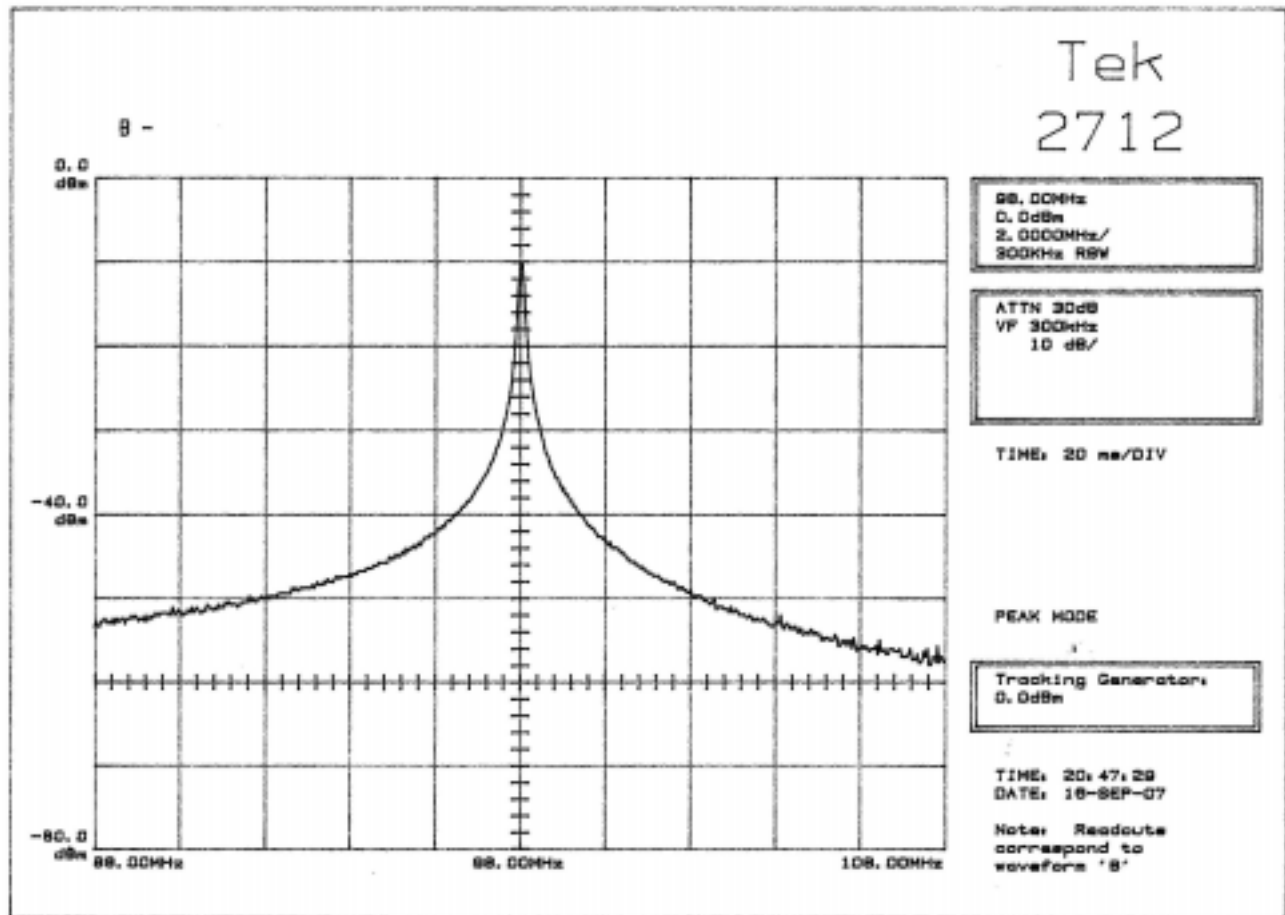
1) Celwave Tuneable Bandpass Cavity provided by James Stanley, KZJK.

ENGINEERING EXHIBIT C1

IDS Building Master Antenna, Minneapolis, Minnesota

Plot, Tunable Bandpass Cavity Characteristics:

Filter Performance, Swept Over 20 MHz.:

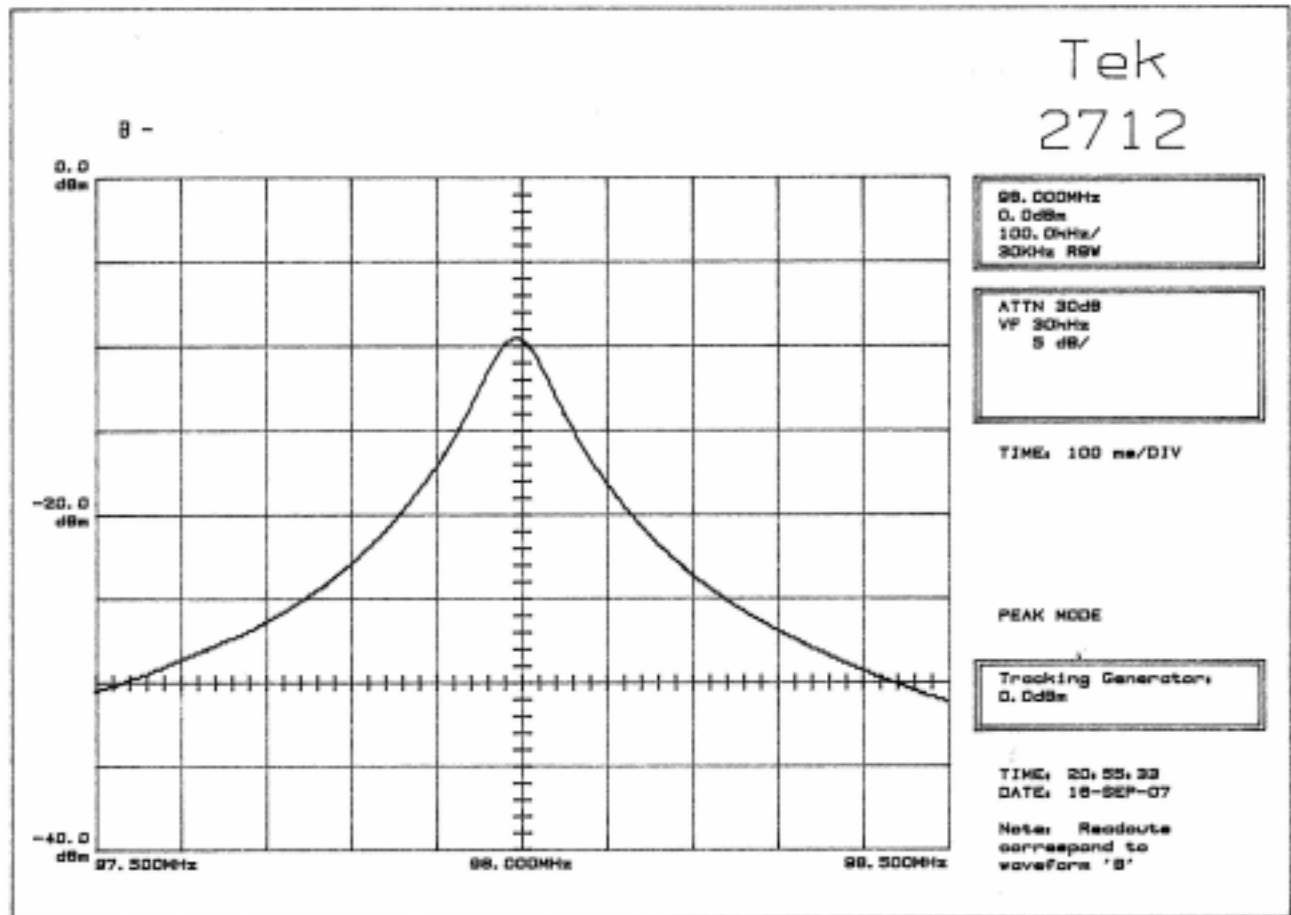


ENGINEERING EXHIBIT C2

IDS Building Master Antenna, Minneapolis, Minnesota

Plot, Tunable Bandpass Cavity Characteristics:

Filter Performance, Swept Over 1 MHz.:

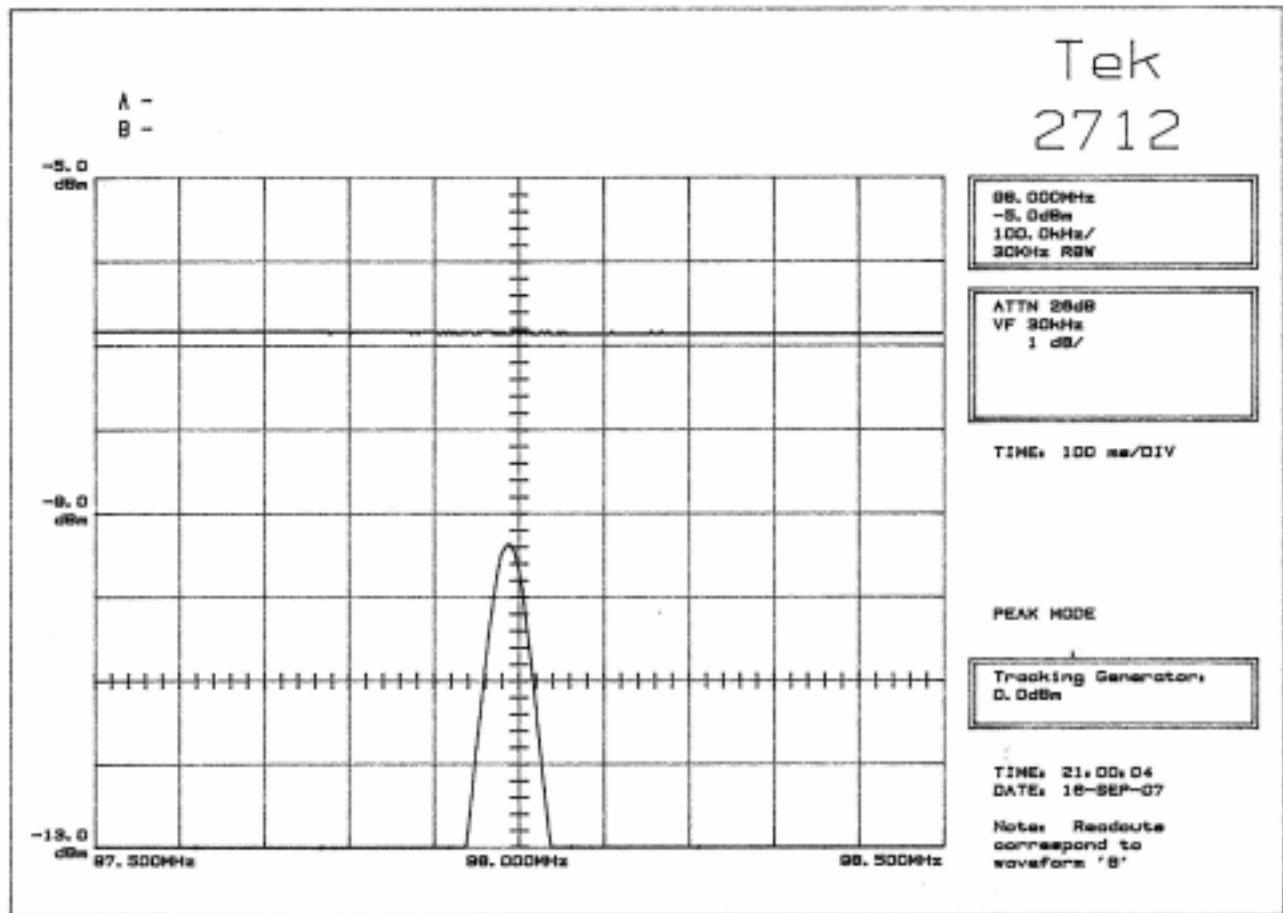


ENGINEERING EXHIBIT C3

IDS Building Master Antenna, Minneapolis, Minnesota

Plot, Tunable Bandpass Cavity Characteristics:

Filter Insertion Loss:



Note: Upper trace is output of tracking generator with attenuation pads only. Lower trace is with tunable bandpass cavity inserted between pads. Measured insertion loss is therefore 2.6 db.

A (MHz.)	B (MHz.)	2A - B mix (MHz.)	Measured Spurious (dbm)	Tunable Filter Cavity Loss (db)	Reference Carrier (dbm)	Calculated Spurious (dbc)
92.5	105.7	79.3	See Narrative			<-80
92.5	104.1	80.9	See Narrative			<-80
93.7	105.7	81.7	See Narrative			<-80
92.5	102.1	82.9	See Narrative			<-80
93.7	104.1	83.3	-107	-2.6	-2.4	-102.0
92.5	101.3	83.7	-107	-2.6	-3.0	-101.4
92.5	100.3	84.7	-107	-2.6	-3.0	-101.4
93.7	102.1	85.3	-107	-2.6	-2.4	-102.0
92.5	99.5	85.5	-107	-2.6	-3.0	-101.4
93.7	101.3	86.1	-107	-2.6	-2.4	-102.0
92.5	98.5	86.5	-106	-2.6	-3.0	-100.4
93.7	100.3	87.1	-106	-2.6	-2.4	-101.0
92.5	97.1	87.9	-106	-2.6	-3.0	-100.4
93.7	99.5	87.9	-106	-2.6	-2.4	-101.0
97.1	105.7	88.5	-105	-2.6	-2.0	-100.4
93.7	98.5	88.9	-106	-2.6	-2.4	-101.0
97.1	104.1	90.1	-105	-2.6	-2.0	-100.4
93.7	97.1	90.3	-105	-2.6	-2.4	-100.0
92.5	93.7	91.3	-105	-2.6	-3.0	-99.4
98.5	105.7	91.3	-105	-2.6	-1.7	-100.7
97.1	102.1	Note (1) 92.1	-97	-2.6	-2.0	-92.4
97.1	101.3	Note (1) 92.9	-98	-2.6	-2.0	-93.4
98.5	104.1	Note (1) 92.9	-98	-2.6	-1.7	-93.7
99.5	105.7	Note (2) 93.3	-92	-2.6	-3.4	-86.0
97.1	100.3	Note (3) 93.9	-105	-2.6	-2.0	-100.4
97.1	99.5	94.7	-104	-2.6	-2.0	-99.4
93.7	92.5	94.9	-104	-2.6	-2.4	-99.0
98.5	102.1	94.9	-104	-2.6	-1.7	-99.7
99.5	104.1	94.9	-104	-2.6	-3.4	-98.0
100.3	105.7	94.9	-104	-2.6	-2.4	-99.0
97.1	98.5	95.7	-104	-2.6	-2.0	-99.4
98.5	101.3	95.7	-104	-2.6	-1.7	-99.7
100.3	104.1	96.5	-103	-2.6	-2.4	-98.0
98.5	100.3	96.7	-103	-2.6	-1.7	-98.7
99.5	102.1	Note (4) 96.9	-105	-2.6	-3.4	-99.0
101.3	105.7	Note (4) 96.9	-105	-2.6	-1.0	-101.4
98.5	99.5	97.5	-103	-2.6	-1.7	-98.7
99.5	101.3	97.7	-104	-2.6	-3.4	-98.0
100.3	102.1	Note (5) 98.5	-105	-2.6	-2.4	-100.0
101.3	104.1	Note (5) 98.5	-105	-2.6	-1.0	-101.4
102.1	105.7	Note (5) 98.5	-105	-2.6	-1.7	-100.7
99.5	100.3	98.7	-105	-2.6	-3.4	-99.0
100.3	101.3	Note (6) 99.3	-91	-2.6	-2.4	-86.0
98.5	97.1	99.9	-102	-2.6	-1.7	-97.7
102.1	104.1	Note (7) 100.1	-92	-2.6	-1.7	-87.7
97.1	93.7	Note (7) 100.5	-91	-2.6	-2.0	-86.4
99.5	98.5	Note (7) 100.5	-91	-2.6	-3.4	-85.0
101.3	102.1	Note (7) 100.5	-91	-2.6	-1.0	-87.4

A (MHz.)	B (MHz.)	2A - B mix (MHz.)	Measured Spurious (dbm)	Tunable Filter Cavity Loss (db)	Reference Carrier (dbm)	Calculated Spurious (dbc)
100.3	99.5	Note (8) 101.1	-105	-2.6	-2.4	-100.0
97.1	92.5	101.7	-95	-2.6	-2.0	-90.4
99.5	97.1	Note (9) 101.9	-105	-2.6	-3.4	-99.0
100.3	98.5	Note (9) 102.1	-105	-2.6	-2.4	-100.0
101.3	100.3	Note (9) 102.3	-105	-2.6	-1.0	-101.4
104.1	105.7	Note (10) 102.5	-89	-2.6	-1.3	-85.1
102.1	101.3	102.9	-104	-2.6	-1.7	-99.7
101.3	99.5	103.1	-105	-2.6	-1.0	-101.4
98.5	93.7	103.3	-105	-2.6	-1.7	-100.7
100.3	97.1	103.5	-104	-2.6	-2.4	-99.0
102.1	100.3	103.9	-102	-2.6	-1.7	-97.7
101.3	98.5	Note (11) 104.1	-105	-2.6	-1.0	-101.4
98.5	92.5	104.5	-104	-2.6	-1.7	-99.7
102.1	99.5	104.7	-105	-2.6	-1.7	-100.7
99.5	93.7	105.3	-104	-2.6	-3.4	-98.0
101.3	97.1	105.5	-99	-2.6	-1.0	-95.4
102.1	98.5	105.7	-101	-2.6	-1.7	-96.7
104.1	102.1	106.1	-105	-2.6	-1.3	-101.1
99.5	92.5	106.5	-105	-2.6	-3.4	-99.0
100.3	93.7	106.9	-105	-2.6	-2.4	-100.0
104.1	101.3	106.9	-105	-2.6	-1.3	-101.1
102.1	97.1	107.1	-105	-2.6	-1.7	-100.7
104.1	100.3	107.9	-105	-2.6	-1.3	-101.1
100.3	92.5	108.1	-106	-2.6	-2.4	-101.0
104.1	99.5	108.7	-105	-2.6	-1.3	-101.1
101.3	93.7	108.9	-106	-2.6	-1.0	-102.4
104.1	98.5	109.7	-106	-2.6	-1.3	-102.1
101.3	92.5	110.1	-106	-2.6	-1.0	-102.4
102.1	93.7	110.5	-106	-2.6	-1.7	-101.7
104.1	97.1	111.1	-107	-2.6	-1.3	-103.1
102.1	92.5	111.7	-107	-2.6	-1.7	-102.7
104.1	93.7	114.5	-107	-2.6	-1.3	-103.1
104.1	92.5	115.7	-107	-2.6	-1.3	-103.1

Note (1): Measured with 92.5 operating.

Note (2): Measured with 93.7 operating.

Note (3): Measured during 93.7 carrier cut.

Note (4): Measured during 97.1 carrier cut.

Note (5): Measured during 98.5 carrier cut.

Note (6): Measured with 99.5 operating.

Note (7): Measured with 100.3 operating.

Note (8): Measured during 101.3 carrier cut.

Note (9): Measured during 102.1 carrier cut.

Note (10): Measured with 102.1 operating.

Note (11): Measured during 104.1 carrier cut.

A (MHz.)	B (MHz.)	A + B mix (MHz.)	Measured Spurious (dbm)	Preselector (TEK 2706) Loss (db)	Reference Carrier (dbm)	Calculated Spurious (dbc)
92.5	92.5	185	-94	-0.2	-2.7	-91.1
92.5	93.7	186.2	-94	-0.2	-2.7	-91.1
93.7	92.5	186.2	-94	-0.2	-2.0	-91.8
93.7	93.7	187.4	-94	-0.2	-2.0	-91.8
92.5	97.1	189.6	-94	-0.2	-2.7	-91.1
97.1	92.5	189.6	-94	-0.2	-2.0	-91.8
93.7	97.1	190.8	-94	-0.2	-2.0	-91.8
97.1	93.7	190.8	-94	-0.2	-2.0	-91.8
92.5	98.5	191	-94	-0.2	-2.7	-91.1
98.5	92.5	191	-94	-0.2	-1.7	-92.1
92.5	99.5	192	-94	-0.2	-2.7	-91.1
99.5	92.5	192	-94	-0.2	-3.0	-90.8
93.7	98.5	192.2	-94	-0.2	-2.0	-91.8
98.5	93.7	192.2	-94	-0.2	-1.7	-92.1
92.5	100.3	192.8	-94	-0.2	-2.7	-91.1
100.3	92.5	192.8	-94	-0.2	-2.0	-91.8
93.7	99.5	193.2	-94	-0.2	-2.0	-91.8
99.5	93.7	193.2	-94	-0.2	-3.0	-90.8
92.5	101.3	193.8	-94	-0.2	-2.7	-91.1
101.3	92.5	193.8	-94	-0.2	-1.0	-92.8
93.7	100.3	194	-94	-0.2	-2.0	-91.8
100.3	93.7	194	-94	-0.2	-2.0	-91.8
97.1	97.1	194.2	-94	-0.2	-2.0	-91.8
92.5	102.1	194.6	-94	-0.2	-2.7	-91.1
102.1	92.5	194.6	-94	-0.2	-1.3	-92.5
93.7	101.3	195	-94	-0.2	-2.0	-91.8
101.3	93.7	195	-94	-0.2	-1.0	-92.8
97.1	98.5	195.6	-94	-0.2	-2.0	-91.8
98.5	97.1	195.6	-94	-0.2	-1.7	-92.1
93.7	102.1	195.8	-94	-0.2	-2.0	-91.8
102.1	93.7	195.8	-94	-0.2	-1.3	-92.5
92.5	104.1	196.6	-94	-0.2	-2.7	-91.1
97.1	99.5	196.6	-94	-0.2	-2.0	-91.8
99.5	97.1	196.6	-94	-0.2	-3.0	-90.8
104.1	92.5	196.6	-94	-0.2	-1.3	-92.5
98.5	98.5	197	-94	-0.2	-1.7	-92.1
97.1	100.3	197.4	-94	-0.2	-2.0	-91.8
100.3	97.1	197.4	-94	-0.2	-2.0	-91.8
93.7	104.1	197.8	-94	-0.2	-2.0	-91.8
104.1	93.7	197.8	-94	-0.2	-1.3	-92.5
98.5	99.5	198	-94	-0.2	-1.7	-92.1
99.5	98.5	198	-94	-0.2	-3.0	-90.8
92.5	105.7	198.2	-94	-0.2	-2.7	-91.1
97.1	101.3	198.4	-94	-0.2	-2.0	-91.8
101.3	97.1	198.4	-94	-0.2	-1.0	-92.8
98.5	100.3	198.8	-94	-0.2	-1.7	-92.1
100.3	98.5	198.8	-94	-0.2	-2.0	-91.8
99.5	99.5	199	-94	-0.2	-3.0	-90.8

A (MHz.)	B (MHz.)	A + B mix (MHz.)	Measured Spurious (dbm)	Preselector (TEK 2706) Loss (db)	Reference Carrier (dbm)	Calculated Spurious (dbc)
97.1	102.1	199.2	-94	-0.2	-2.0	-91.8
102.1	97.1	199.2	-94	-0.2	-1.3	-92.5
93.7	105.7	199.4	-94	-0.2	-2.0	-91.8
105.7	93.7	199.4	-94	-0.2	-1.3	-92.5
98.5	101.3	199.8	-94	-0.2	-1.7	-92.1
99.5	100.3	199.8	-94	-0.2	-3.0	-90.8
100.3	99.5	199.8	-94	-0.2	-2.0	-91.8
101.3	98.5	199.8	-94	-0.2	-1.0	-92.8
98.5	102.1	200.6	-94	-0.2	-1.7	-92.1
100.3	100.3	200.6	-94	-0.2	-2.0	-91.8
102.1	98.5	200.6	-94	-0.2	-1.3	-92.5
99.5	101.3	200.8	-94	-0.2	-3.0	-90.8
101.3	99.5	200.8	-94	-0.2	-1.0	-92.8
97.1	104.1	201.2	-94	-0.2	-2.0	-91.8
104.1	97.1	201.2	-94	-0.2	-1.3	-92.5
99.5	102.1	201.6	-94	-0.2	-3.0	-90.8
100.3	101.3	201.6	-94	-0.2	-2.0	-91.8
101.3	100.3	201.6	-94	-0.2	-1.0	-92.8
102.1	99.5	201.6	-94	-0.2	-1.3	-92.5
100.3	102.1	202.4	-94	-0.2	-2.0	-91.8
102.1	100.3	202.4	-94	-0.2	-1.3	-92.5
98.5	104.1	202.6	-94	-0.2	-1.7	-92.1
101.3	101.3	202.6	-94	-0.2	-1.0	-92.8
104.1	98.5	202.6	-94	-0.2	-1.3	-92.5
97.1	105.7	202.8	-94	-0.2	-2.0	-91.8
101.3	102.1	203.4	-94	-0.2	-1.0	-92.8
102.1	101.3	203.4	-94	-0.2	-1.3	-92.5
99.5	104.1	203.6	-94	-0.2	-3.0	-90.8
104.1	99.5	203.6	-94	-0.2	-1.3	-92.5
98.5	105.7	204.2	-94	-0.2	-1.7	-92.1
102.1	102.1	204.2	-94	-0.2	-1.3	-92.5
100.3	104.1	204.4	-94	-0.2	-2.0	-91.8
104.1	100.3	204.4	-94	-0.2	-1.3	-92.5
99.5	105.7	205.2	-94	-0.2	-3.0	-90.8
101.3	104.1	205.4	-94	-0.2	-1.0	-92.8
104.1	101.3	205.4	-94	-0.2	-1.3	-92.5
100.3	105.7	206	-94	-0.2	-2.0	-91.8
102.1	104.1	206.2	-94	-0.2	-1.3	-92.5
104.1	102.1	206.2	-94	-0.2	-1.3	-92.5
101.3	105.7	207	-94	-0.2	-1.0	-92.8
102.1	105.7	207.8	-94	-0.2	-1.3	-92.5
104.1	104.1	208.2	-94	-0.2	-1.3	-92.5
104.1	105.7	209.8	-94	-0.2	-1.3	-92.5

Note: Measurements in **boldface** type are second harmonics. Noise floor at -94 dbm.