



WILSON ELECTRONICS TEST REPORT

FOR THE

AMPLIFIER REPEATER, DBAMP8N

FCC PART 90

AND

FCC PART 15 SUBPART B SECTIONS 15.107 AND 15.109 CLASS B

COMPLIANCE

DATE OF ISSUE: FEBRUARY 25, 2002

PREPARED FOR:

Wilson Electronics
3301 East Deseret Drive
St. George, UT 84790

W.O. No.: 78395

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5473A Clouds Rest
Mariposa, CA 95338

Date of test: February 15-21, 2002

Report No.: FC02-027

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CKC Laboratories, Inc. has received Certificates of Accreditation from the following agencies:

A2LA (USA); BSMI (Taiwan); Nemko (Norway); and GOST (Russia).

CKC Laboratories, Inc has received test site Registration Acceptance from the following agencies:

FCC (USA); VCCI (Japan); and Industry Canada.

CKC Laboratories, Inc. has received Letters of Acceptance through an MRA for the following agencies:

ACA/NATA (Australia); SABS (South Africa); SWEDAC (Sweden); Radio Communications Agency (RA); HOKLAS (Hong Kong); Bakom (Swiss); BIPT (Belgium); Denmark Teledyretsen; RvA (Netherlands); SEE (Luxembourg) SITTEL (Bolivia); and UKAS (UK).

ADMINISTRATIVE INFORMATION

DATE OF TEST: February 15-21, 2002

DATE OF RECEIPT: February 15, 2002

PURPOSE OF TEST: To demonstrate the compliance of the Amplifier Repeater, DBAMP8N with the requirements for FCC Part 15 Subpart B Sections 15.107 and 15.109 Class B and FCC Part 90 devices.

TEST METHOD: ANSI C63.4 (1992), FCC Part 90 and TIA/EIA 603

FREQUENCY RANGE TESTED: 9 kHz – 10 GHz

MANUFACTURER: Wilson Electronics
3301 East Deseret Drive
St. George, UT 84790

REPRESENTATIVE: Jim Wilson

TEST LOCATION: CKC Laboratories, Inc.
5473A Clouds Rest
Mariposa, CA 95338

SUMMARY OF RESULTS

As received, the Wilson Electronics Amplifier Repeater, DBAMP8N was found to be fully compliant with the following standards and specifications:

United States

- FCC Part 90 Subpart I
 - TIA/EIA 603
- FCC Part 15 Subpart B Sections 15.107 & 15.109 Class B
 - ANSI C63.4 (1992) method

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

QUALITY ASSURANCE:



Dennis Ward, Quality Manager

TEST PERSONNEL:



Randy Clark, EMC Engineer



Chuck Kendall, EMC/Lab Manager

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The EUT tested by CKC Laboratories was representative of a production unit.

The EUT is a 50dB bi-directional amplifier repeater for NEXT TEL phone system. The system consists of a mobile unit and removable antennas. There are two ports: an antenna and a phone port. The phone port receives and amplifies signals in the frequency range of 806-821 MHz. The antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port re-transmits signals received from the opposite port.

EQUIPMENT UNDER TEST

Repeater Amplifier

Manuf: Wilson Electronics
Model: DPAMP8N
Serial: 0001
FCC ID: Pending

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Power Supply

Manuf: NA
Model: SCP57-122000
Serial: 0100
FCC ID: DoC

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

2.1033(c)(3) USER'S MANUAL

The necessary information is contained in a separate document.

2.1033 (c)(4) TYPE OF EMISSIONS

2.1033(c)(5) FREQUENCY RANGE

The EUT receives on 806-821 MHz and transmits on 851-866 MHz

2.1033(c)(6) OPERATING POWER

The highest operating power is 0.8556 Watts.

2.1033(c)(7) MAXIMUM POWER RATING

The maximum power allowed is 1.5 Watts.

2.1033(c)(8) DC VOLTAGES

The necessary information is contained in a separate document.

2.1033(c)(9) TUNE-UP PROCEDURE

The necessary information is contained in a separate document.

2.1033(c)(10) SCHEMATICS AND CIRCUITRY DESCRIPTION

The necessary information is contained in a separate document.

2.1033(c)(11) LABEL AND PLACEMENT

The necessary information is contained in a separate document.

2.1033(c)(12) SUBMITTAL PHOTOS

The necessary information is contained in a separate document.

2.1033(c)(13) MODULATION INFORMATION

The necessary information is contained in a separate document.

2.1033(c)(14)/2.1046/90.205 - RF POWER OUTPUT

Power Output and ERP Test Conditions: A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5 kHz FM, RBW=300Hz, VBW=3kHz.

<i>Equipment</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Asset #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Directional Coupler	Werlatone	C2630	3805	00713	4/16/01	4/16/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02

FCC 90.205 Power Output

Frequency (MHz)	Port	Power (dBm)
806.0	Antenna	30
813.5	Antenna	30
821.0	Antenna	30
851.0	Phone	10
858.5	Phone	10
866.0	Phone	10

Power output as measured through a power meter.
Amplifier input set such that the output is set to the maximum rated output.

FCC 90.205 ERP

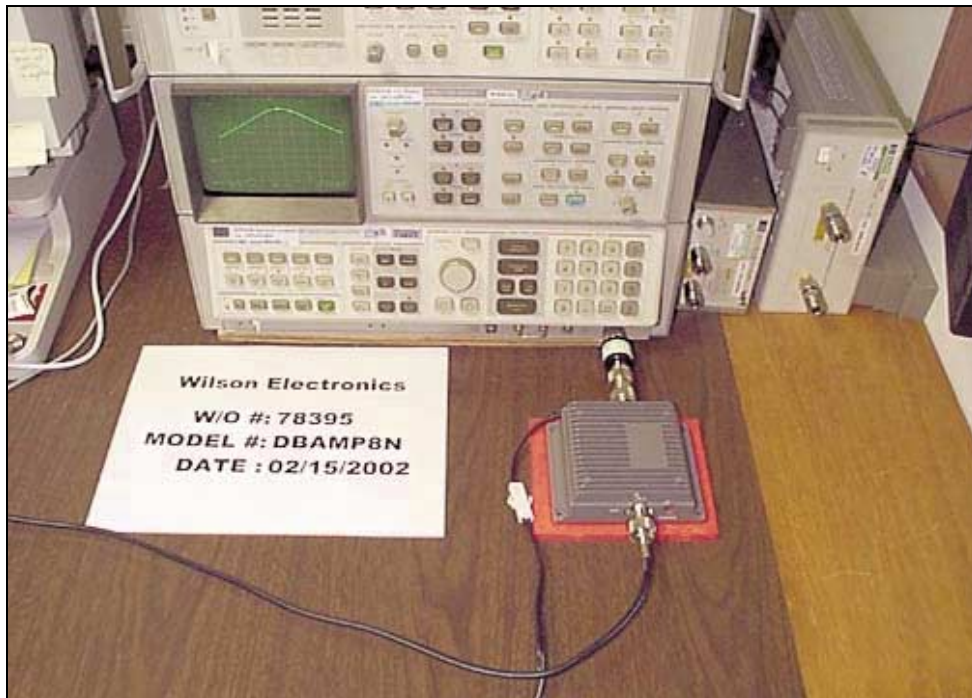
Frequency (MHz)	Port	ERP (Watts)	Polarity
806.0	Antenna	0.6490	V
806.0	Antenna	0.2199	H
813.5	Antenna	0.7985	V
813.5	Antenna	0.2525	H
821.0	Antenna	0.8556	V
821.0	Antenna	0.3179	H

Frequency (MHz)	Port	ERP (Watts)	Polarity
851.0	Phone	0.0032	V
851.0	Phone	0.0039	H
858.5	Phone	0.0036	V
858.5	Phone	0.0033	H
866.0	Phone	0.0038	V
866.0	Phone	0.0035	H

ERP calculated using the power formula $P = (E \cdot D)^2 / 30 \cdot G$
Where G is the gain of a 1/2 wave tunable dipole.



Antenna Direct Connect



Phone Direct Connect

Intermodulation Attenuation Test Conditions: A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5kHz FM. The unmodulated interfering test signal was set to a frequency 100kHz higher than the fundamental and the amplitude was set to the same as the measured output power. The EUT is connected to a directional coupler through a 10dB attenuator. The interfering test signal is connected the output side of the directional coupler. The reverse port of the directional coupler is terminated while the forward port is connected to the spectrum analyzer. Tested in accordance with TIA/EIA 603.

<i>Equipment</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Asset #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Generator, Signal	HP	8656A	2245A04338	00045	9/5/01	9/5/02
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Amplifier, RF	AR	10W1000	4532	00140	12/06/01	12/6/02
Directional Coupler	Werlatone	C2630	3805	00713	4/16/01	4/16/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**
 Specification: **Intermodulation Attenuation**
 Work Order #: **78395**
 Test Type: **Antenna Conducted Spurious Emissions**
 Equipment: **Repeater Amplifier**
 Manufacturer: Wilson Electronics
 Model: DBAMP8N
 S/N: 0001

Date: 2/19/02
 Time: 10:44:21

Sequence#: 14
 Tested By: Randal Clark

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

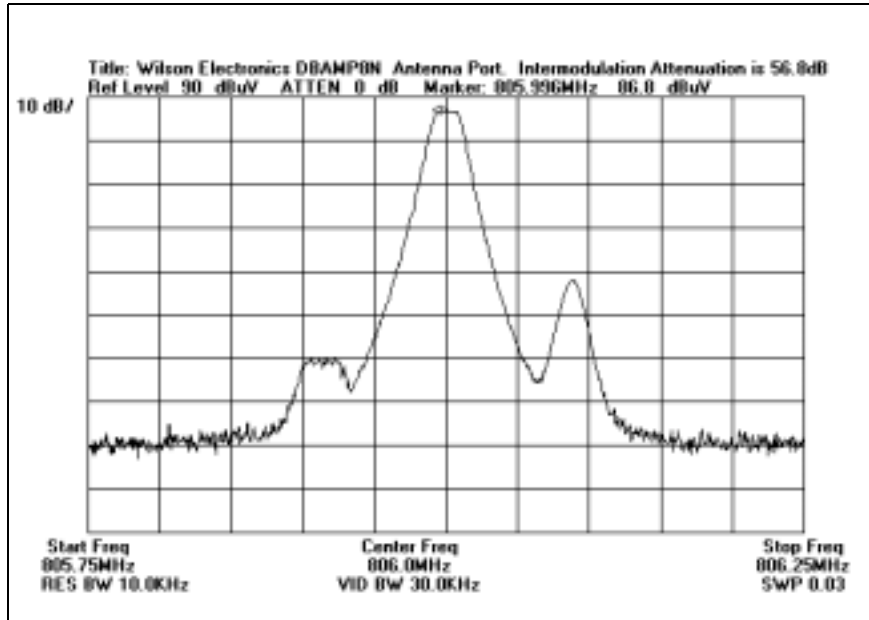
EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5kHz FM. The unmodulated interfering test signal was set to a frequency 100kHz higher than the fundamental and the amplitude was set to the same as the measured output power. The EUT is connected to a directional coupler through a 10dB attenuator. The interfering test signal is connected the output side of the directional coupler. The reverse port of the directional coupler is terminated while the forward port is connected to the spectrum analyzer. Frequency Range Investigated: Fundamental. Intermodulation Attenuation Test: TIA/EIA 603 Limit for Fixed Stations is minimum 40dB Test does not apply to portable or mobile stations.

Transducer Legend:

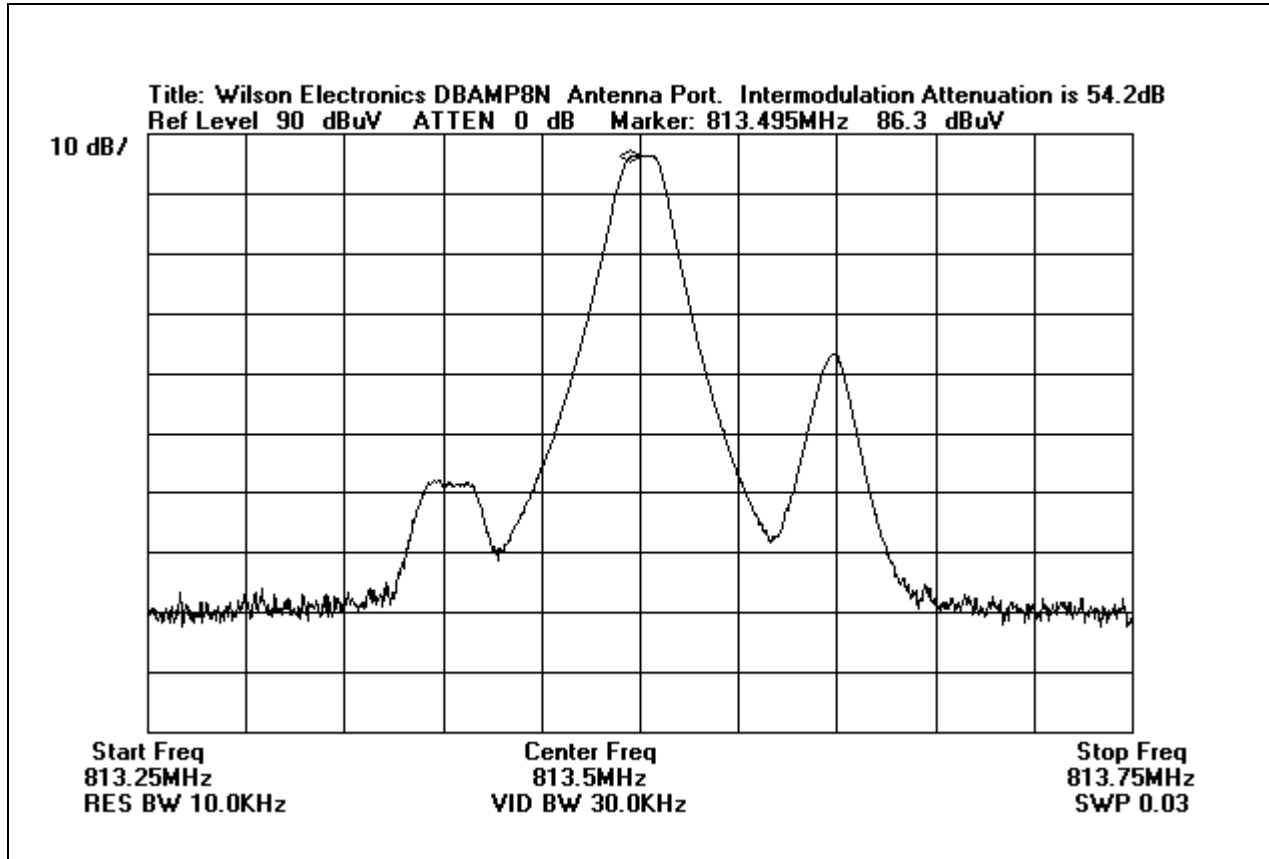
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Measurement Data:		Reading listed by margin.					Test Distance: None					
#	Freq MHz	Rdng dBμV	dB	dB	dB	dB	Dist Table	Corr dB	Spec dB	Margin dB	Polar Ant	
1	866.005M	60.0					+0.0	60.0	40.0	+20.0	Phone	
									60dB is the noise floor. Actual reading is greater.			
2	805.922M	56.8					+0.0	56.8	40.0	+16.8	Anten	
3	858.505M	56.5					+0.0	56.5	40.0	+16.5	Phone	
4	820.996M	55.6					+0.0	55.6	40.0	+15.6	Anten	
5	813.496M	54.2					+0.0	54.2	40.0	+14.2	Anten	
6	851.005M	50.2					+0.0	50.2	40.0	+10.2	Phone	

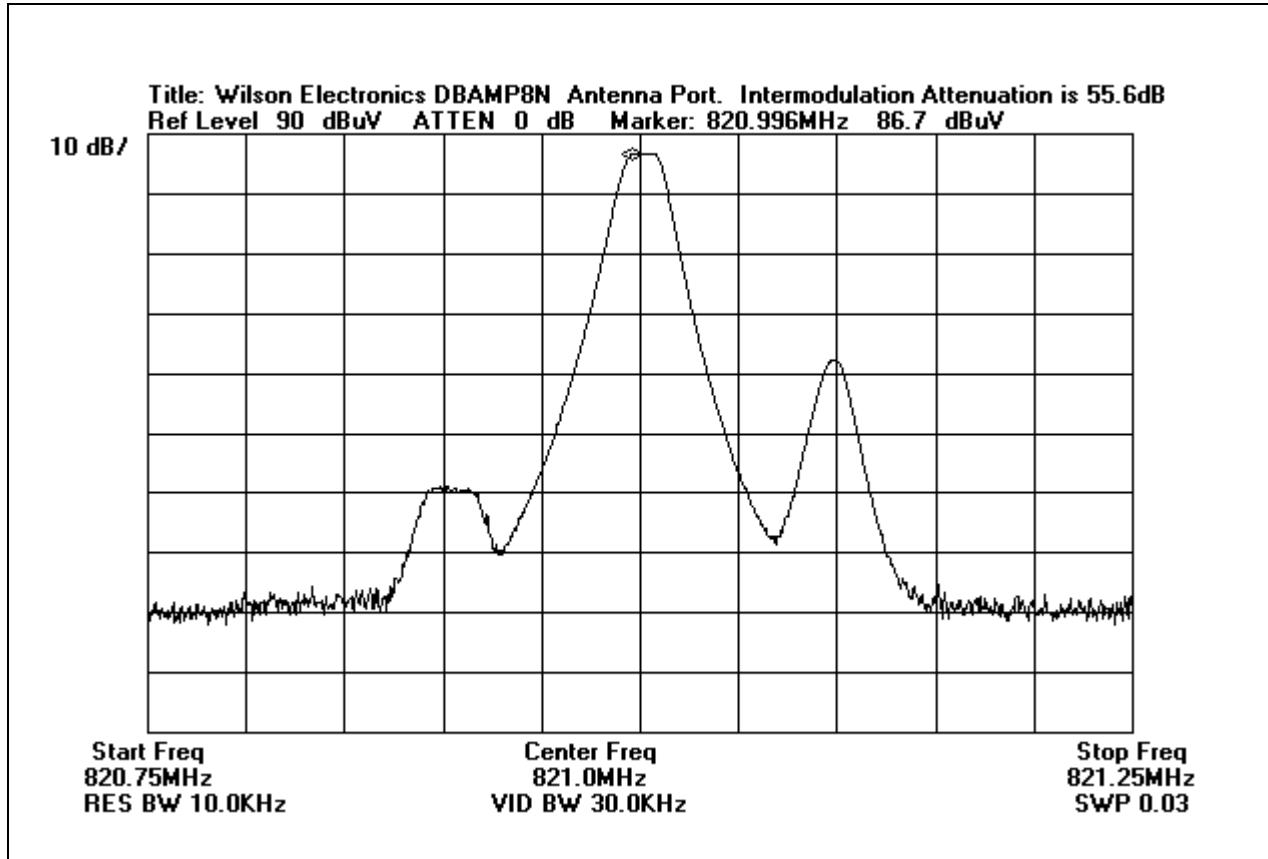
ANTENNA INTERMODULATION ATTENUATION - LOW



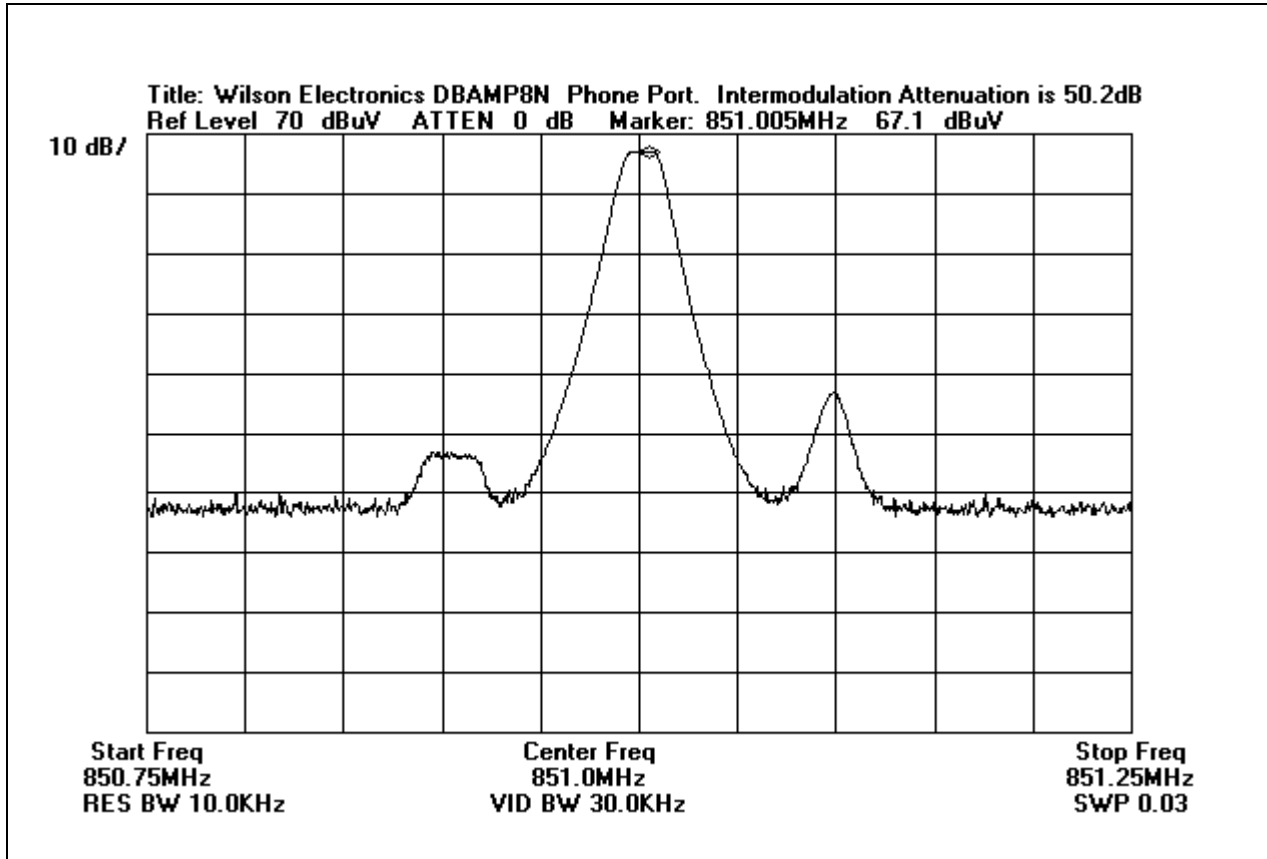
ANTENNA INTERMODULATION ATTENUATION - MIDDLE



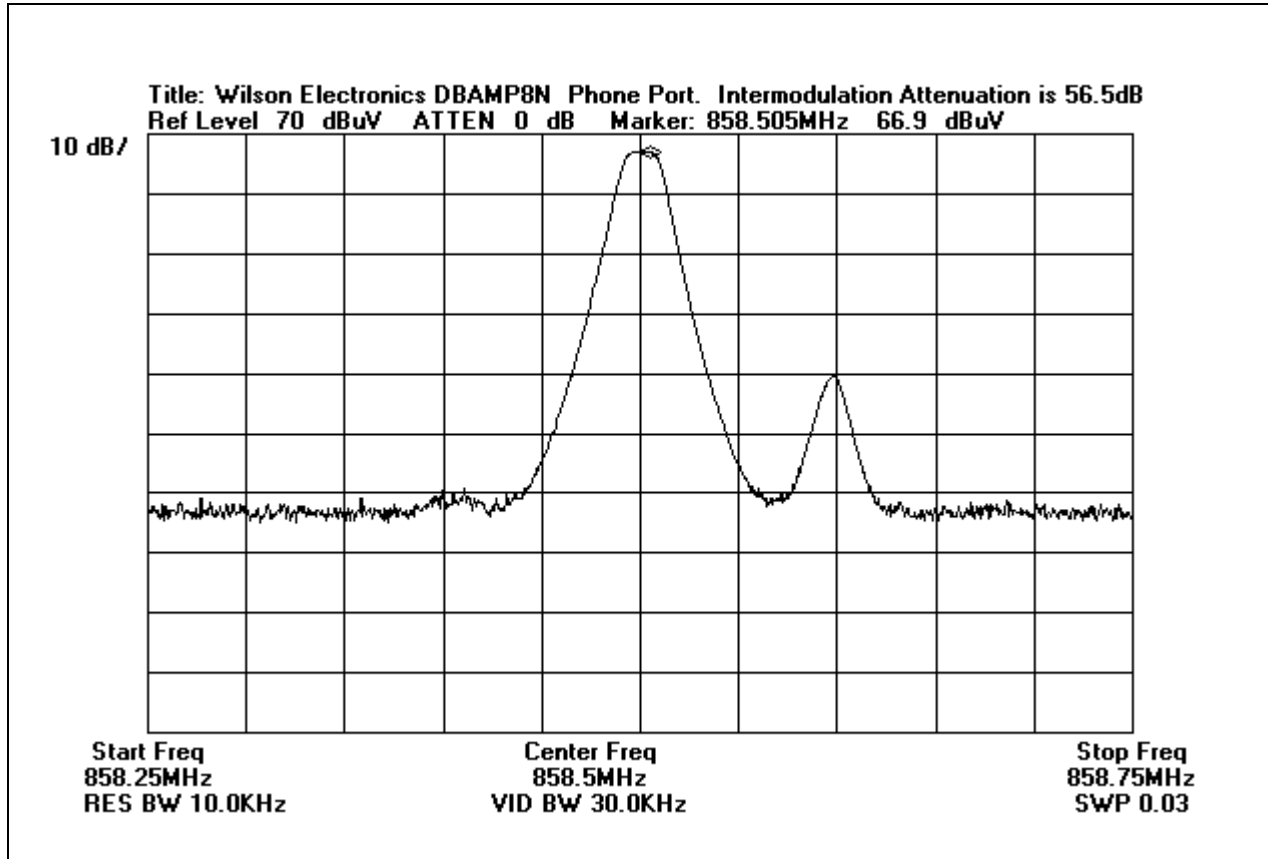
ANTENNA INTERMODULATION ATTENUATION - HIGH



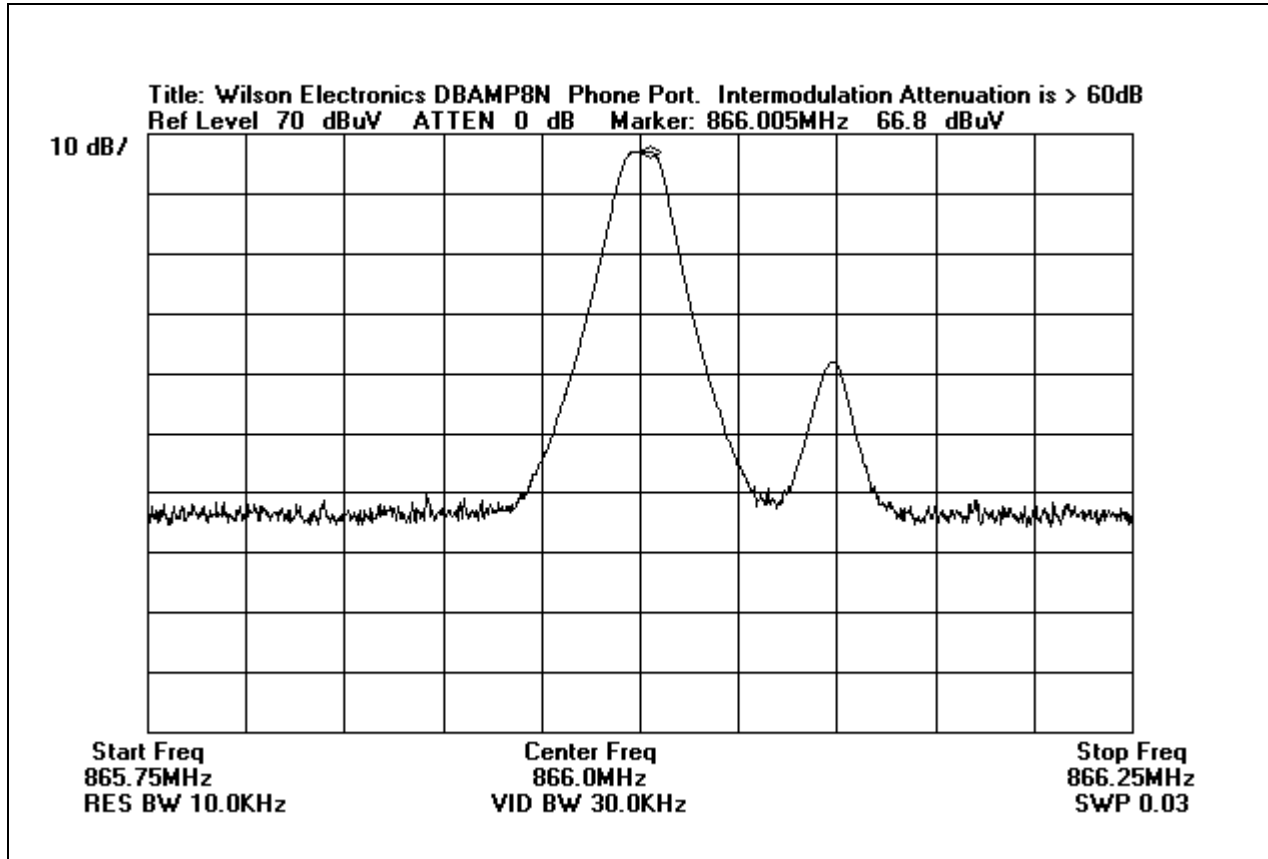
PHONE INTERMODULATION ATTENUATION - LOW

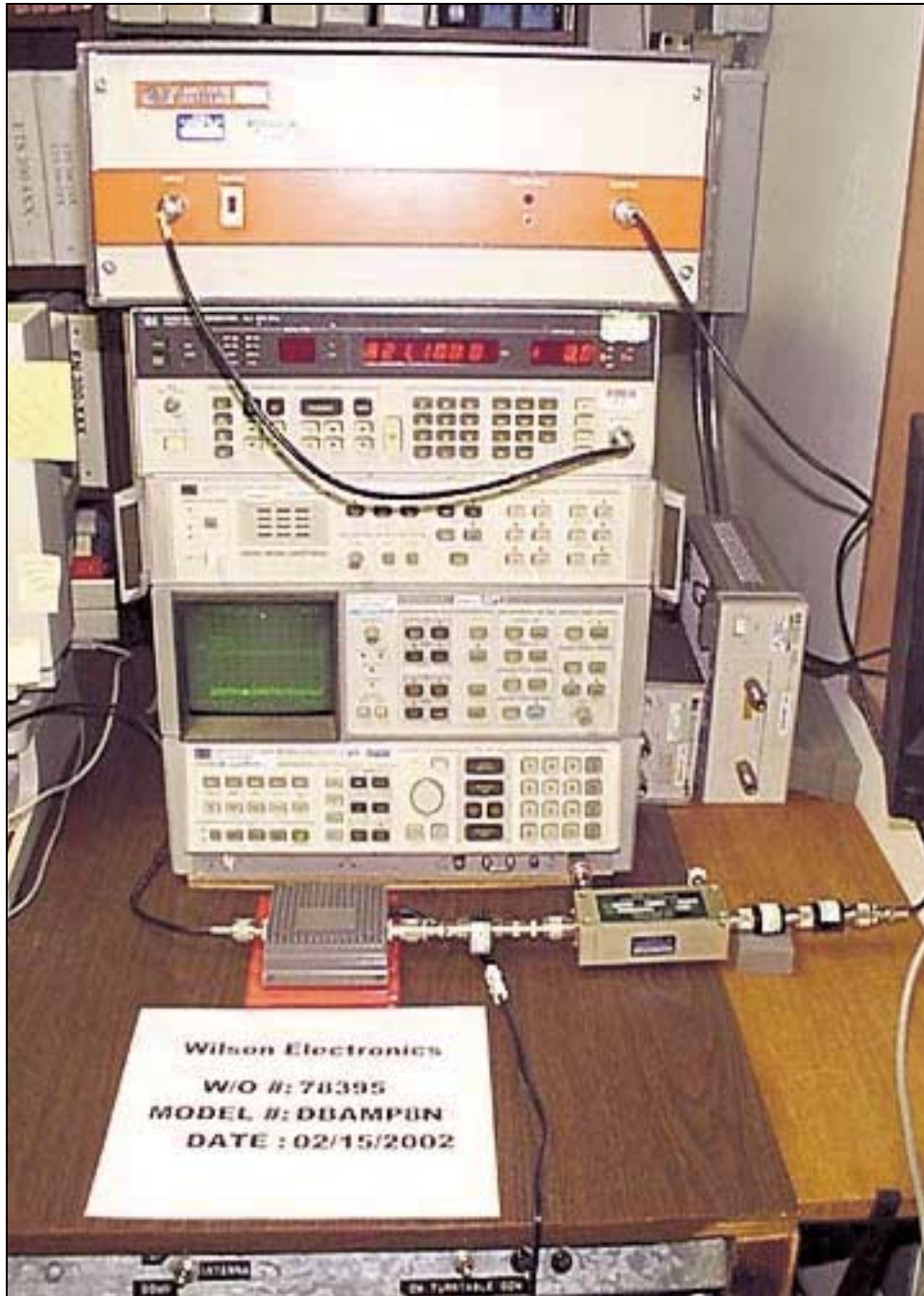


PHONE INTERMODULATION ATTENUATION - MIDDLE



PHONE INTERMODULATION ATTENUATION - HIGH





Intermodulation

Emissions Mask Test Conditions: A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5 kHz FM, RBW=1kHz, VBW=3kHz.

Equipment	Manufacturer	Model #	Serial #	Asset #	Cal Date	Cal Due
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Directional Coupler	Werlatone	C2630	3805	00713	04/16/01	4/16/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02

47 CFR 90.691

Calculation of Spurious Emissions Mask

Company: **Wilson Electronics**

Model Number: **DBAMP8N**

Prepared By: Randal Clark

Carrier Frequency (MHz):
 Peak Unmodulated Power Output: Watts
 Peak Unmodulated Power Output: dBW
 Note: Antena Port

Calculation of Attenuation Requirements:

90.691(a)(1)

On any frequency that is 12.5kHz removed from the center of the outer channel block up to 37.5kHz removed the lesser of 116 LOG (f/6.1), 50+10 LOG (P), or 80dB

Point	f (kHz)	116 LOG (f/6.1)	50+10LOG (P)	80 dBc
1	12.5	36.1	50.0	80
2	16.5	50.0	50.0	80

Point 2 is the point at which 116LOG(fd/11) is equal to the lesser of 50+10LOG (P) or 80
 If Point 2 is greater than 12.5kHz, 116 LOG (f/6.1) is the chosen attenuation requirement up to the intersection of 116 LOG (f/6.1) and the next lesser attenuation requirement.
 If Point 2 is less than 12.5kHz, the next attenuation requirement is chosen.
 The next lesser attenuation requirement in this region is:

Notes:

*Only the endpoints are calculated. The limit line is linearly interpolated between any two endpoints on a LOG - Linear scale.
 P is the peak unmodulated carrier output power in Watts.
 and f is the frequency removed from the center of the outer channel block in kHz.*

90.691(a)(2)

On any frequency removed from the center of the outer channel block by more than 37.5kHz the lesser attenuation of: 43+10 LOG (P), or 80dB

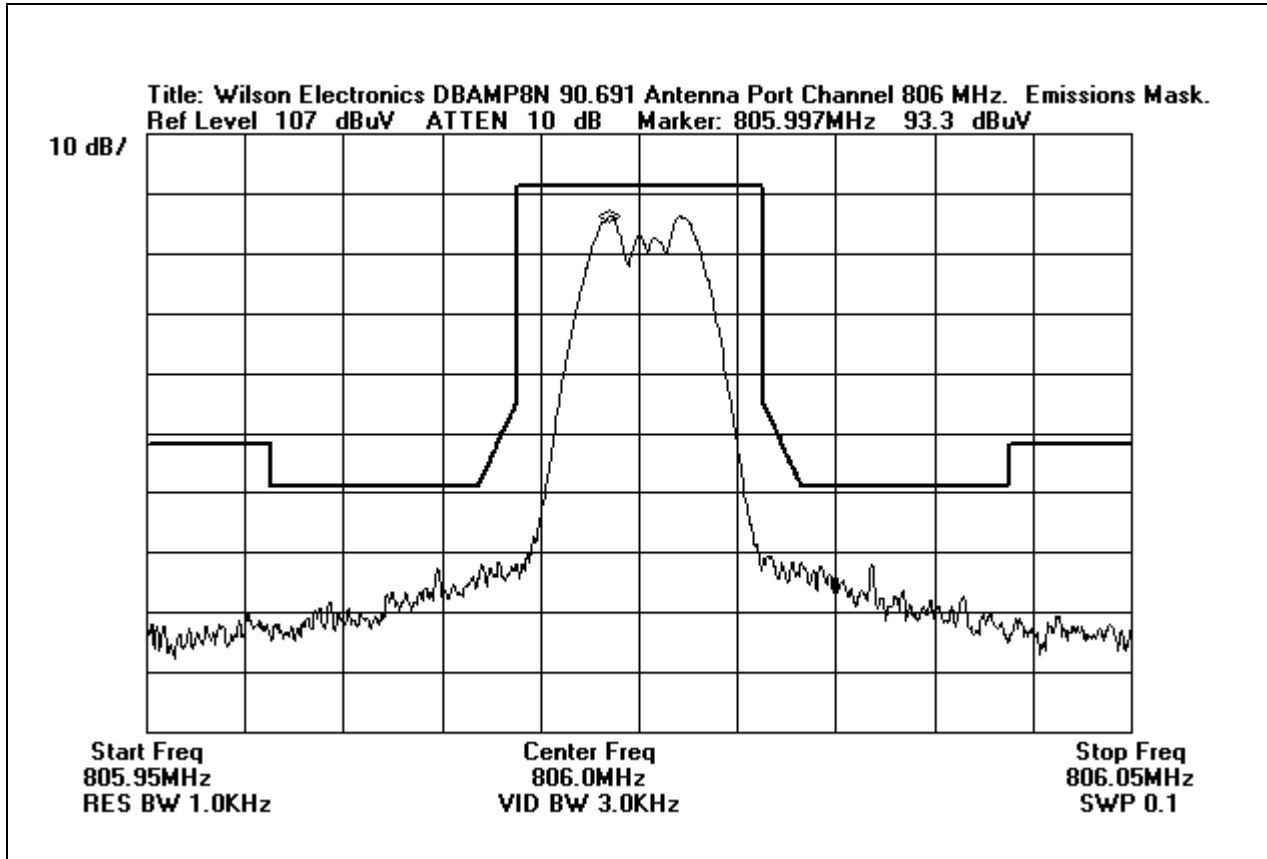
43+10 LOG (P) = dBc

The lesser attenuation requirement in this region is:

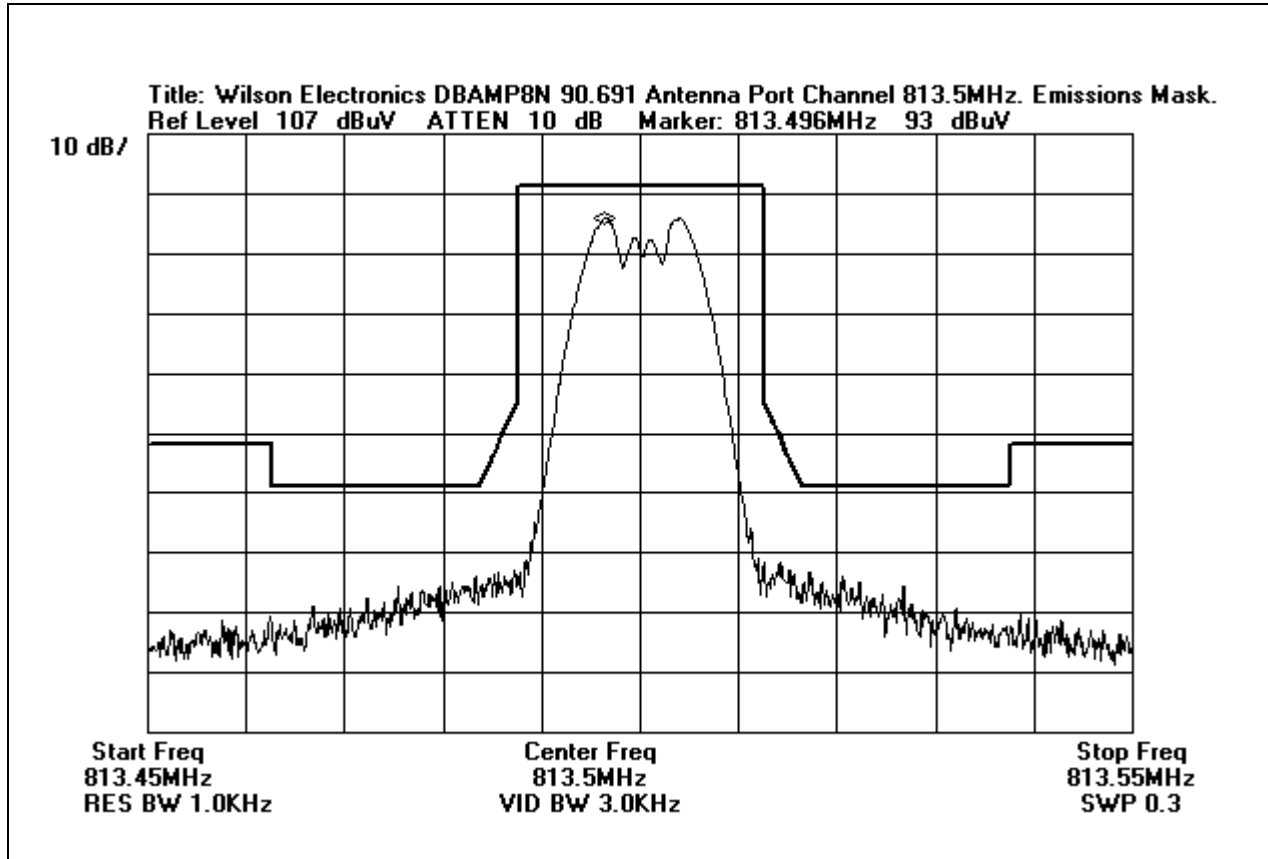
Calculation of actual emissions mask used

Frequency	dBm	dBm	Attenuation
Fundamental to 12.5kHz removed:	30.0	30.0	None
12.5kHz to 16.5	-6.1	-20.0	116 LOG (f/6.1)
16.5 to 37.5kHz	-20.0	-20.0	50+10 LOG (P)
more than 37.5kHz removed:	-13.0	-13.0	43+10 LOG (P)

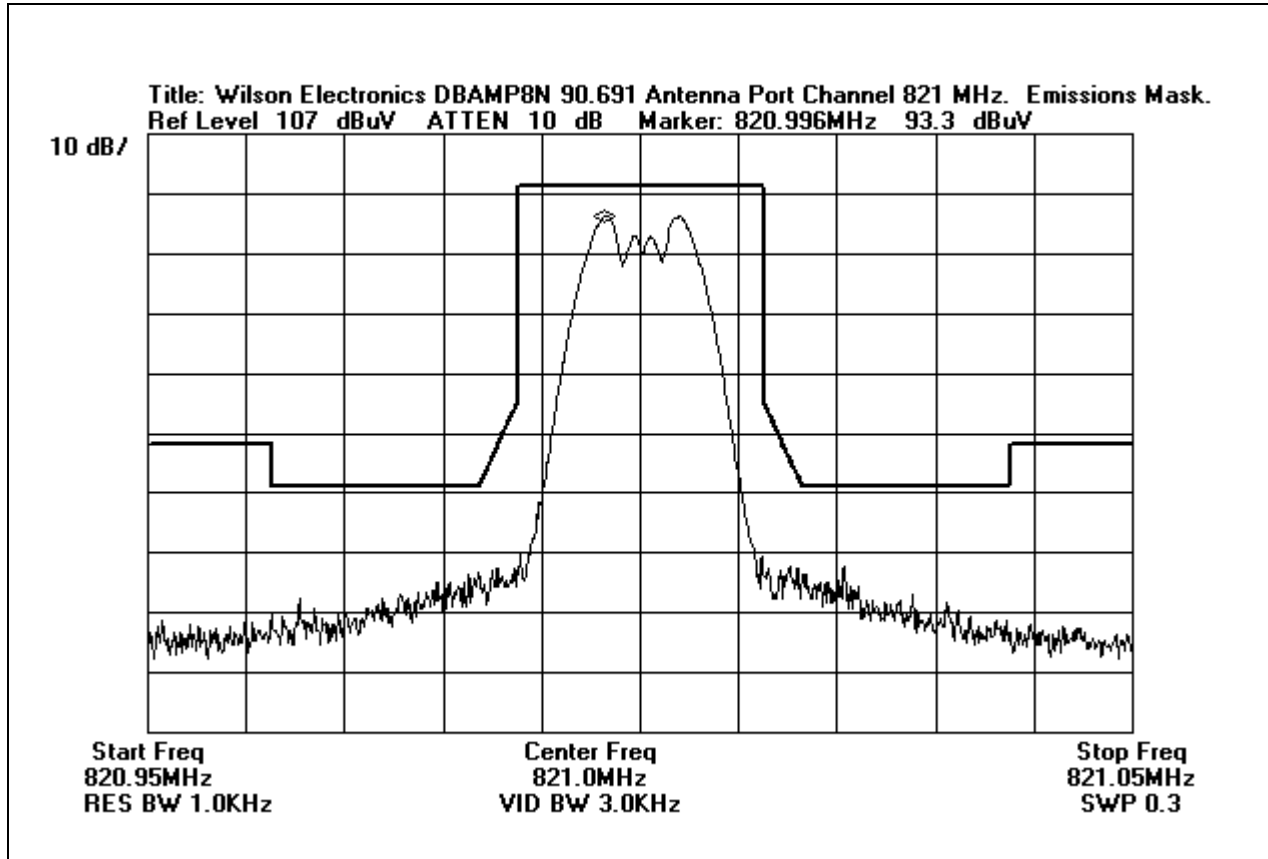
ANTENNA EMISSIONS MASK - LOW



ANTENNA EMISSIONS MASK - MIDDLE



ANTENNA EMISSIONS MASK - HIGH



47 CFR 90.691

Calculation of Spurious Emissions Mask

Company: **Wilson Electronics**

Model Number: **DBAMP8N**

Prepared By: Randal Clark

Carrier Frequency (MHz):	851.0 - 866.0
Peak Unmodulated Power Output:	0.0100 Watts
Peak Unmodulated Power Output:	-20.0000 dBW

Note: Phone Port

Calculation of Attenuation Requirements:

90.691(a)(1)

On any frequency that is 12.5kHz removed from the center of the outer channel block up to 37.5kHz removed the lesser of 116 LOG(f/6.1), 50+10 LOG(P), or 80dB

Point	f (kHz)	116 LOG(f/6.1)	50+10LOG(P)	80 dBc
1	12.5	36.1	30.0	80
2	11.1	30.0	30.0	80

Point 2 is the point at which 116LOG(fd/11) is equal to the lesser of 50+10LOG(P) or 80
 If Point 2 is greater than 12.5kHz, 116 LOG(f/6.1) is the chosen attenuation requirement up to the intersection of 116 LOG(f/6.1) and the next lesser attenuation requirement.
 If Point 2 is less than 12.5kHz, the next attenuation requirement is chosen.
 The next lesser attenuation requirement in this region is: $50+10\text{LOG}(P)$

Notes:

Only the endpoints are calculated. The limit line is linearly interpolated between any two endpoints on a LOG - Linear scale.

P is the peak unmodulated carrier output power in Watts.

and f is the frequency removed from the center of the outer channel block in kHz.

90.691(a)(2)

On any frequency removed from the center of the outer channel block by more than 37.5kHz the lesser attenuation of: 43+10 LOG (P), or 80dB

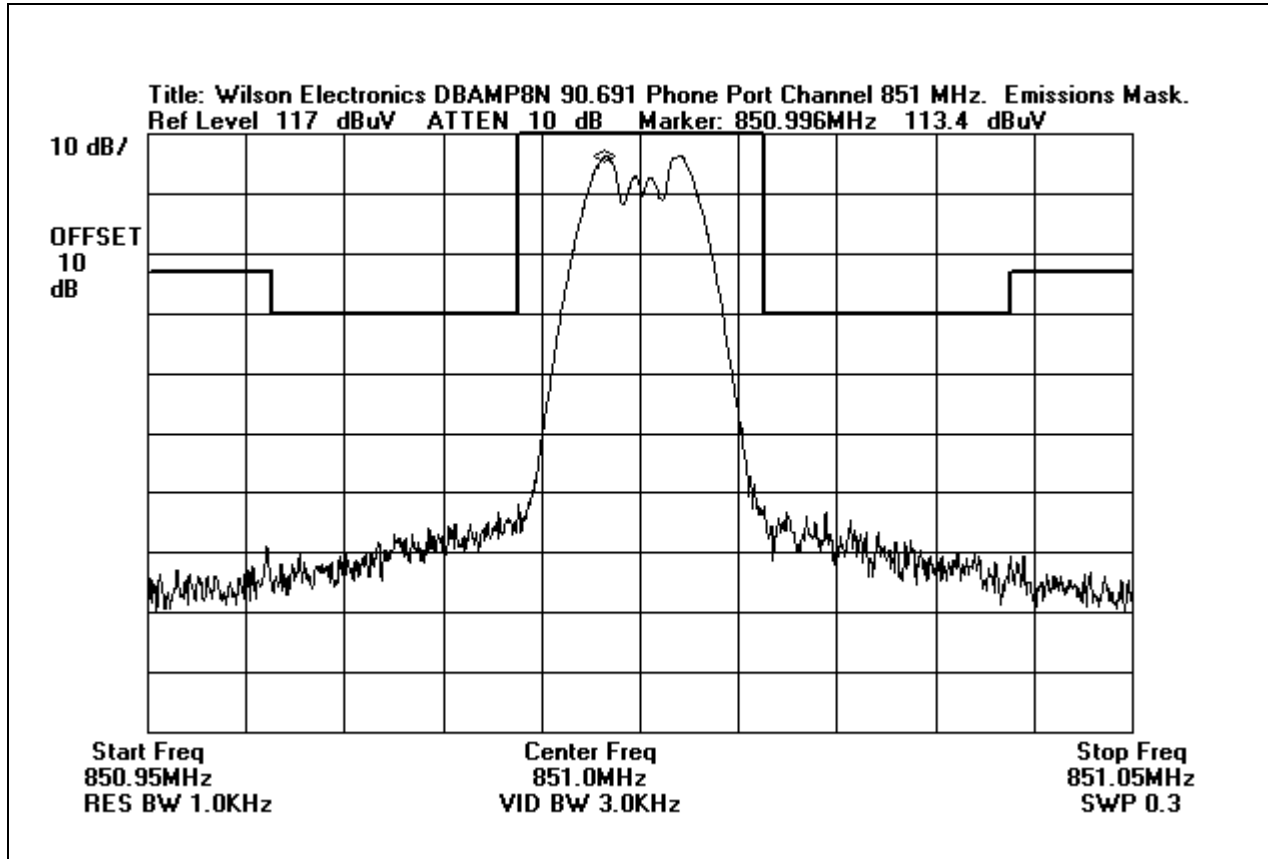
$$43+10 \text{ LOG}(P) = 23.0 \text{ dBc}$$

The lesser attenuation requirement in this region is: $43+10 \text{ LOG}(P)$

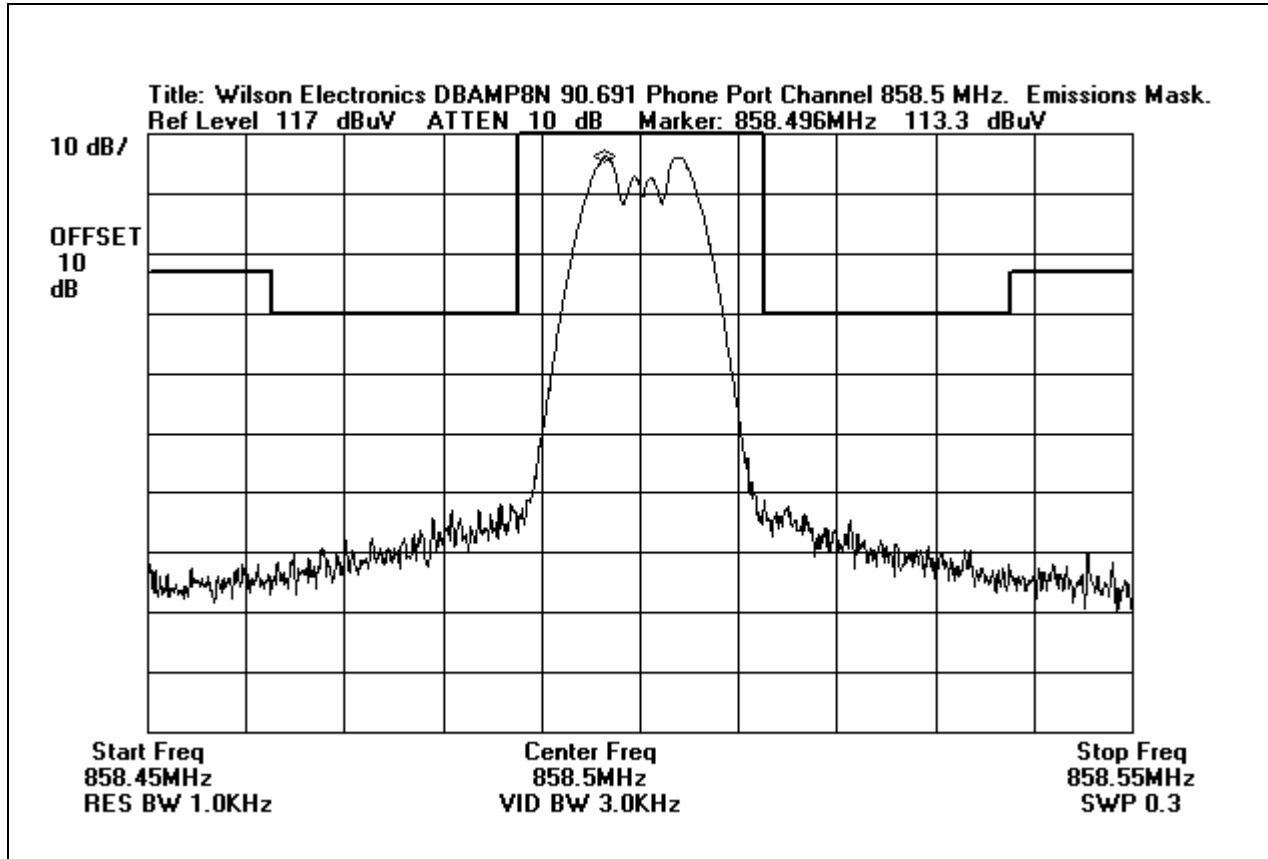
Calculation of actual emissions mask used

Frequency	dBm	dBm	Attenuation
Fundamental to 12.5kHz removed:	10.0	10.0	None
12.5kHz to 37.5	-20.0	-20.0	50+10LOG(P)
more than 37.5kHz removed:	-13.0	-13.0	43+10 LOG(P)

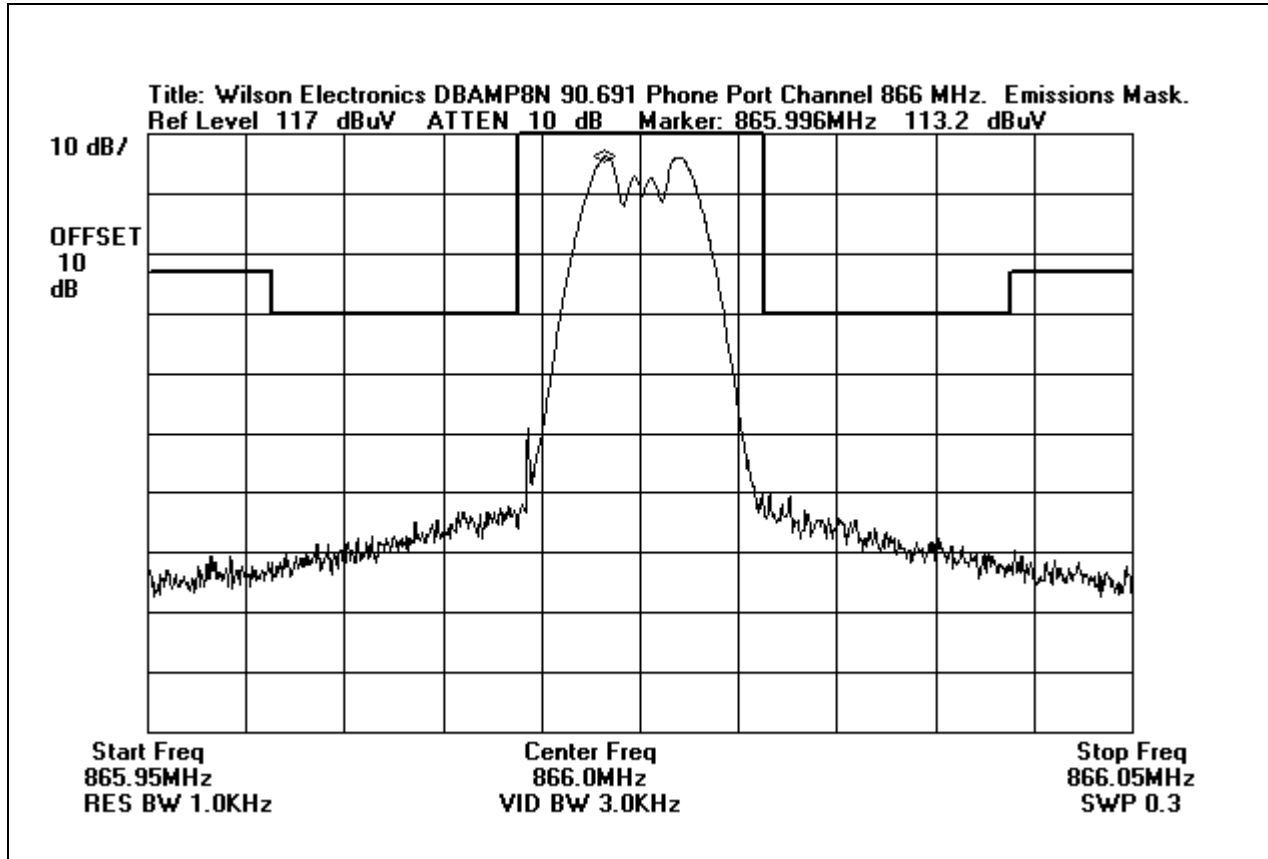
PHONE EMISSIONS MASK - LOW



PHONE EMISSIONS MASK - MIDDLE



PHONE EMISSIONS MASK - HIGH



2.1033(c)(14)/2.1047(a) - MODULATION CHARACTERISTICS - AUDIO FREQUENCY RESPONSE

Not applicable to this unit.

2.1033(c)(14)/2.1047(b) MODULATION CHARACTERISTICS – Modulation Limiting Response

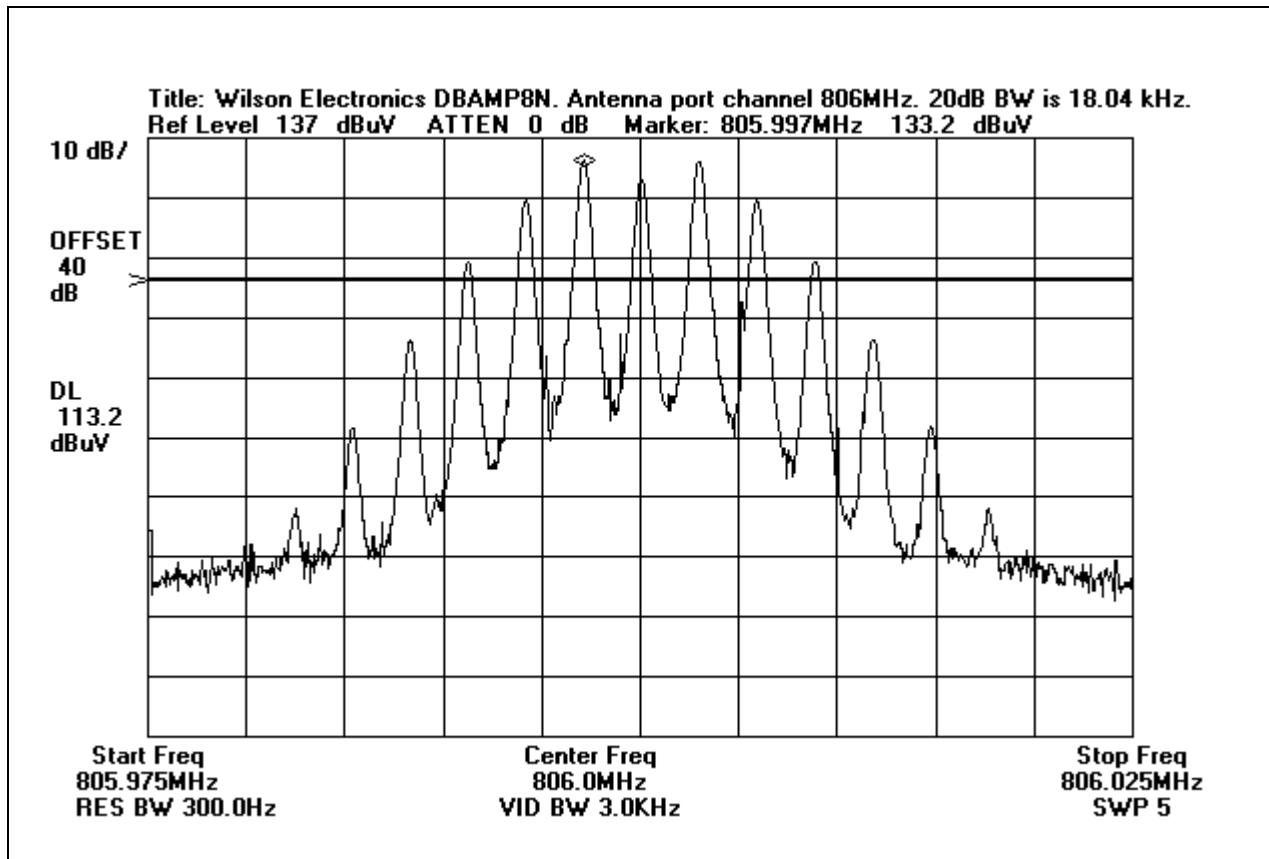
Not applicable to this unit.

2.1033(c)(14)/2.1049(i)/90.210/90.691- OCCUPIED BANDWIDTH

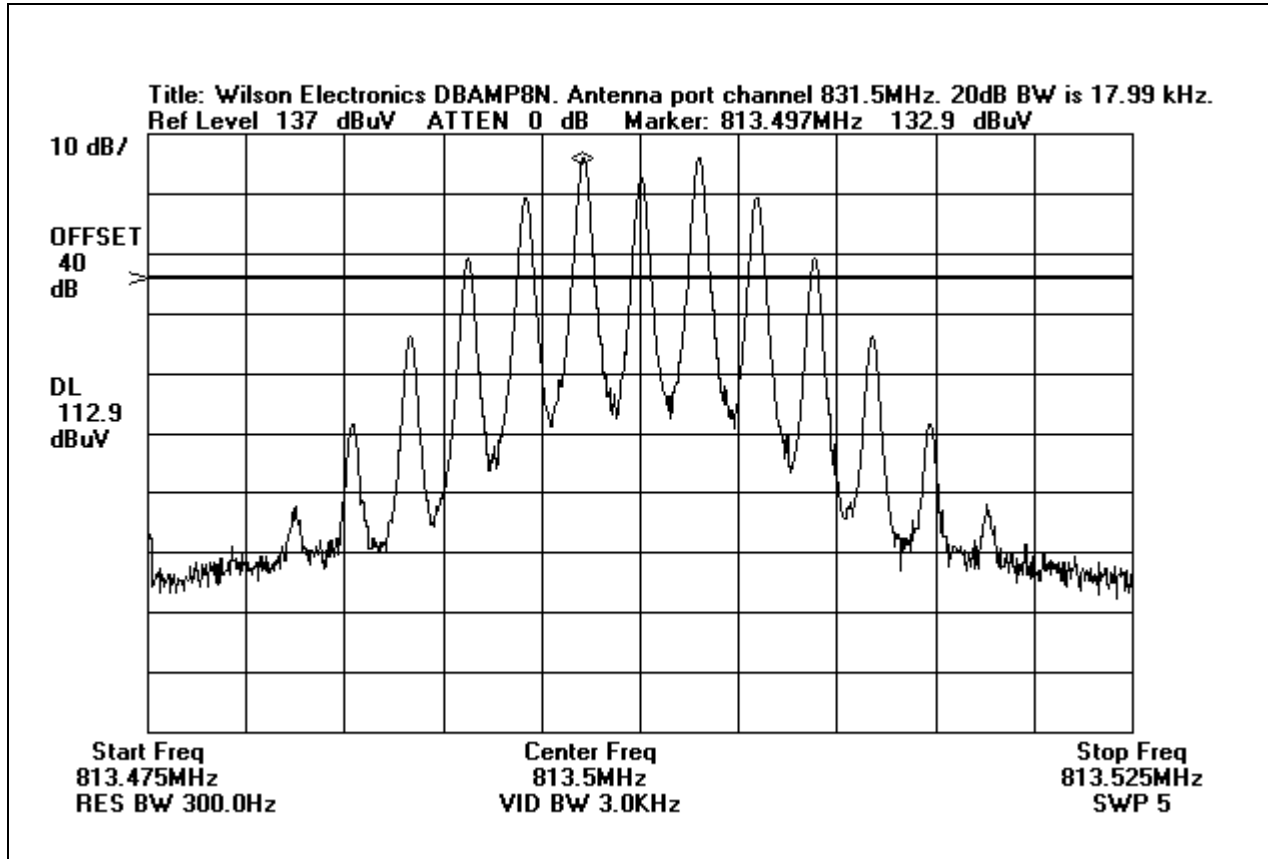
Test Conditions: A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5 kHz FM, RBW=300Hz, VBW=3kHz.

<i>Equipment</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Asset #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Directional Coupler	Werlatone	C2630	3805	00713	04/16/01	4/16/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02

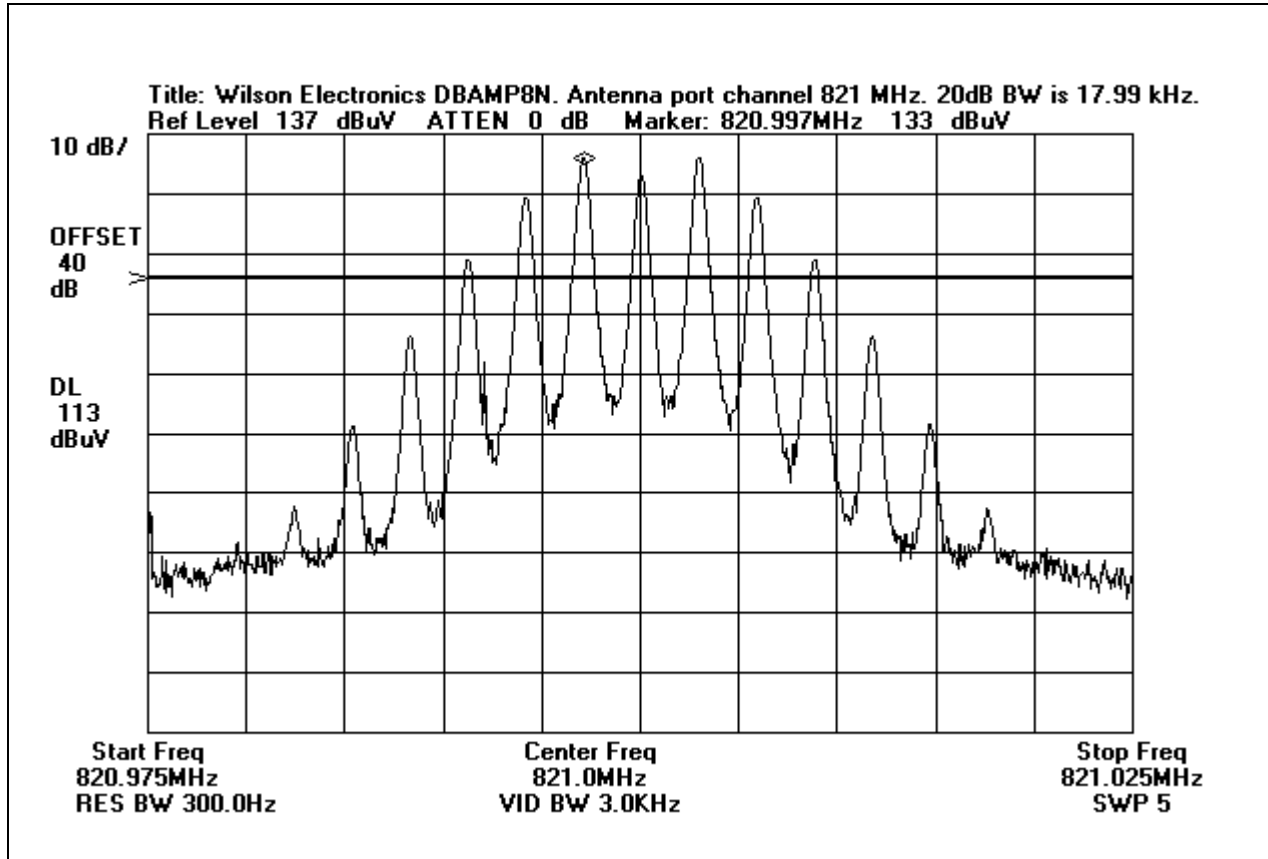
ANTENNA BANDWIDTH - LOW



ANTENNA BANDWIDTH - MIDDLE



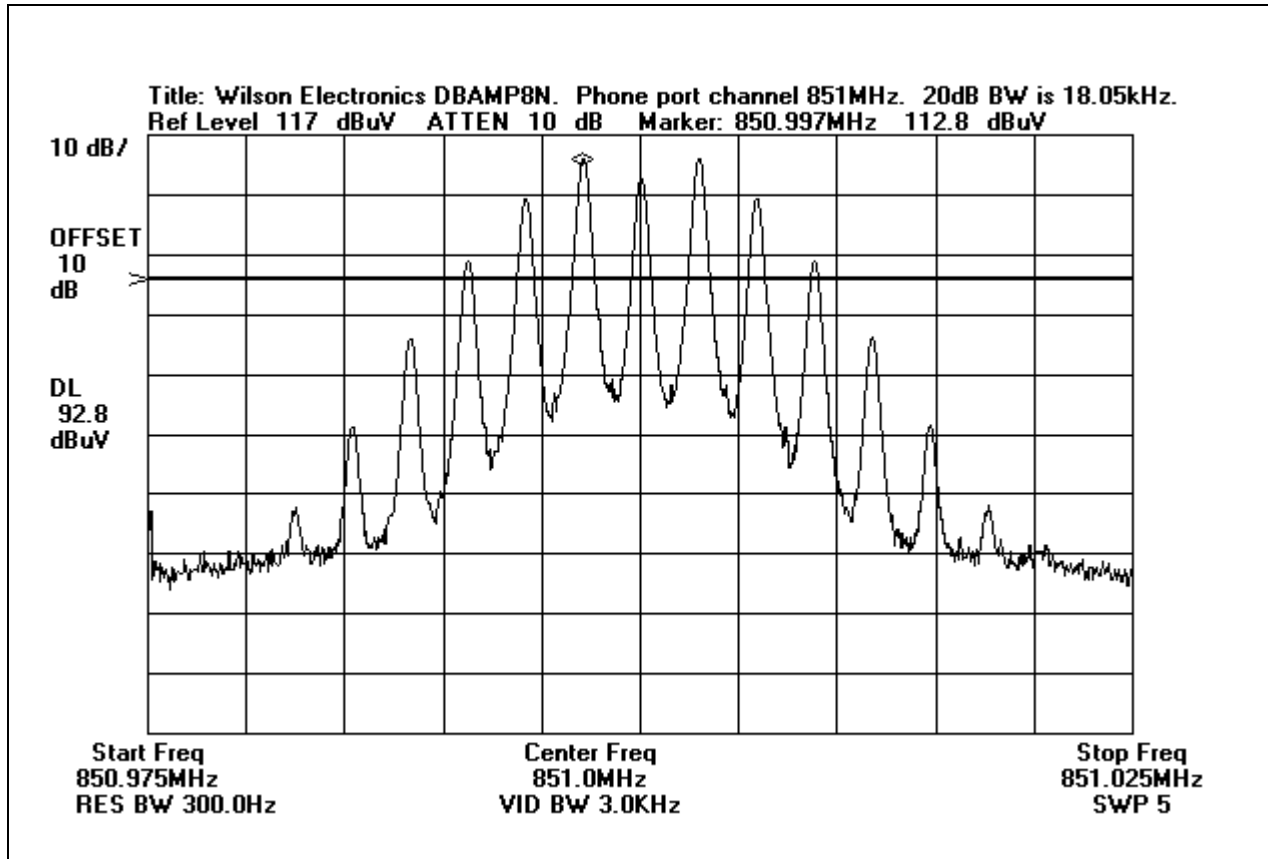
ANTENNA BANDWIDTH - HIGH



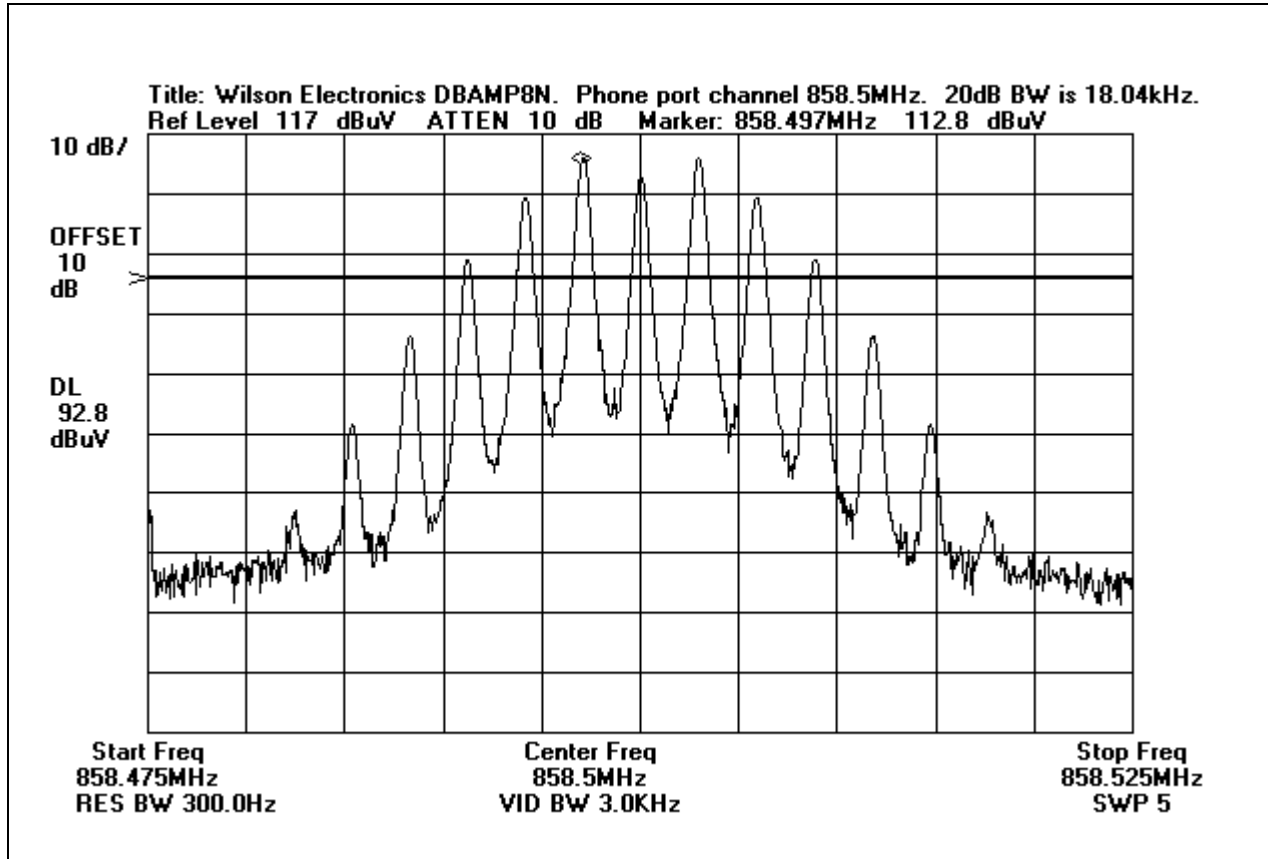


Antenna Direct Connect

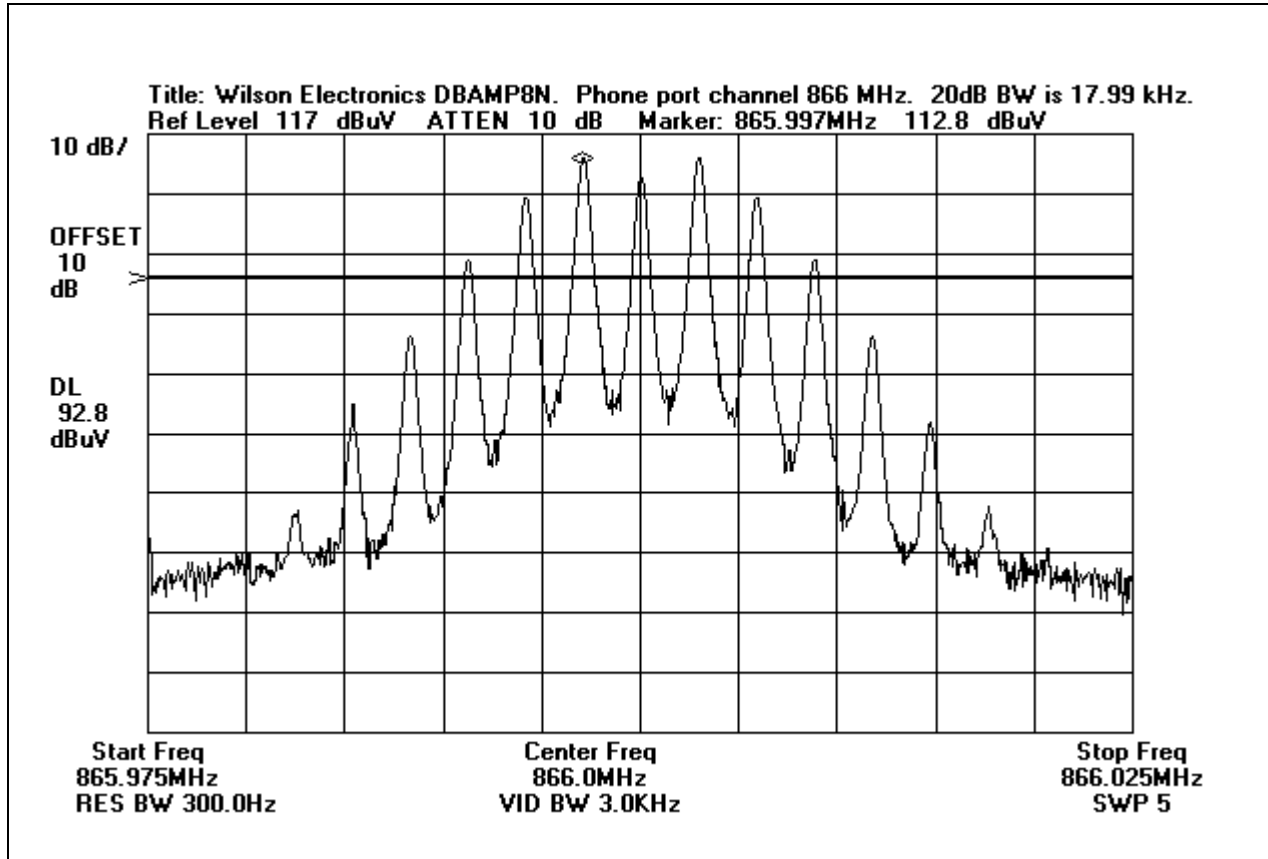
PHONE BANDWIDTH - LOW

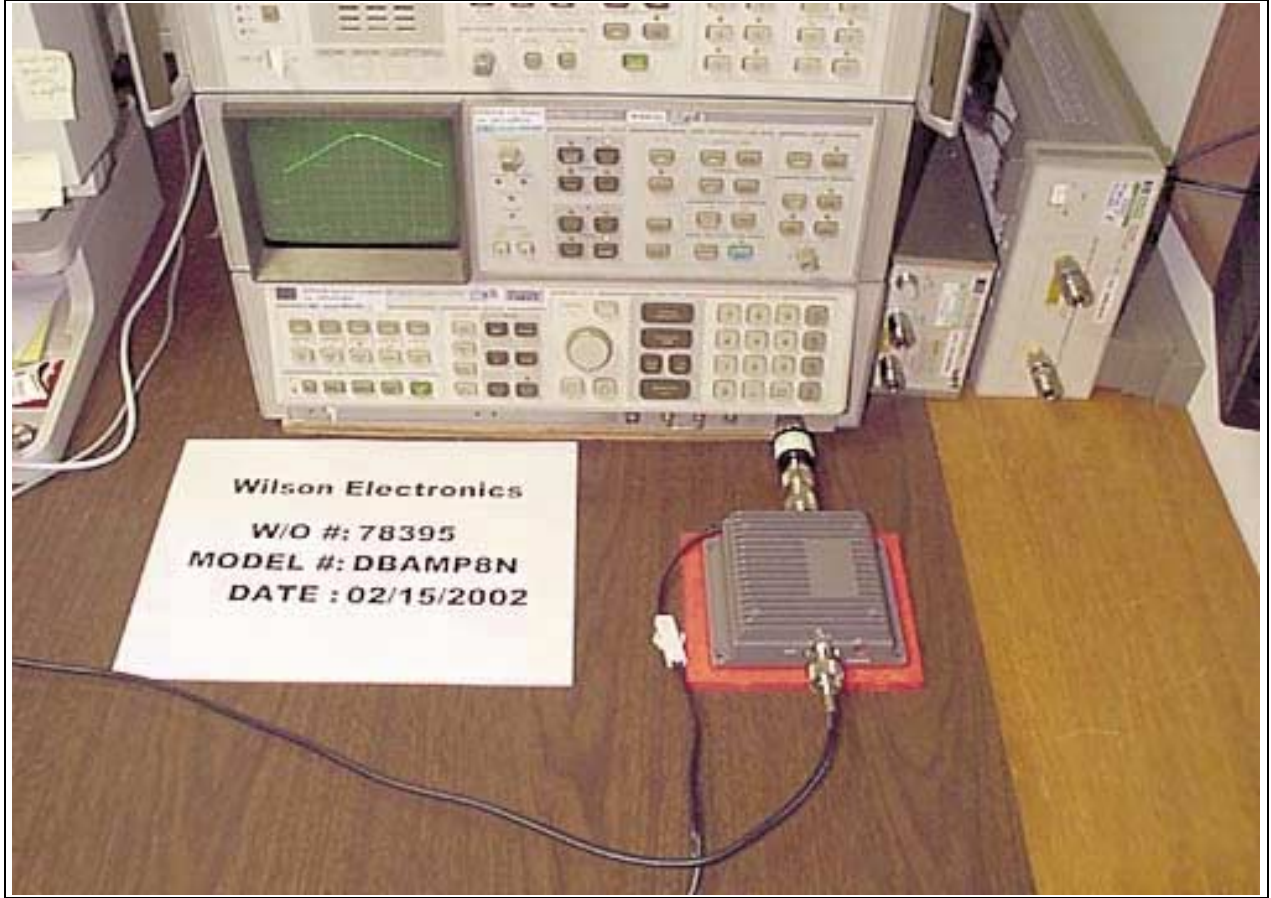


PHONE BANDWIDTH - MIDDLE



PHONE BANDWIDTH - HIGH





Phone Direct Connect

2.1033(c)(14)/2.1051/90.210(i)/90.691- SPURIOUS EMISSIONS AT ANTENNA TERMINAL

ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
EMISSIONS	9 kHz	150 kHz	200 Hz
EMISSIONS	150 kHz	30 MHz	9 kHz
EMISSIONS	30 MHz	1000 MHz	120 kHz
EMISSIONS	1000 MHz	10 GHz	1 MHz

Test Equipment used for antenna conducted measurements including OBW, and 90.691 emissions masks

<i>Equipment</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Asset #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Directional Coupler	Werlatone	C2630	3805	00713	04/16/01	4/16/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 4:12:16 PM

Equipment: **Repeater Amplifier**

Sequence#: 13

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 9 kHz - 1000 MHz. Antenna port channel 806MHz.

Transducer Legend:

T1=DC S/N 3805

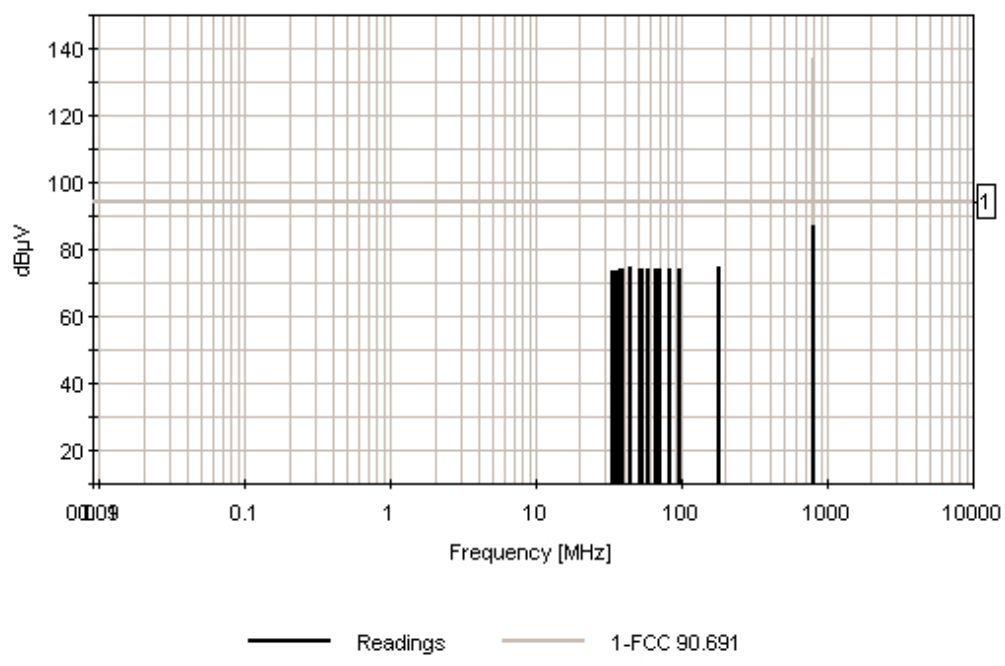
Measurement Data:

Reading listed by margin.

Test Distance: None

#	Freq MHz	Rdng dB μ V	T1 dB				Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	806.000M	97.4	+38.8				+0.0	136.2	137.0	-0.8	Anten
2	180.889M	34.4	+40.2				+0.0	74.6	94.0	-19.4	Anten
3	44.697M	33.7	+40.8				+0.0	74.5	94.0	-19.5	Anten
4	51.752M	33.6	+40.8				+0.0	74.4	94.0	-19.6	Anten
5	71.054M	33.6	+40.6				+0.0	74.2	94.0	-19.8	Anten
6	53.613M	33.4	+40.8				+0.0	74.2	94.0	-19.8	Anten
7	39.210M	33.3	+40.9				+0.0	74.2	94.0	-19.8	Anten
8	97.490M	33.7	+40.4				+0.0	74.1	94.0	-19.9	Anten
9	67.428M	33.4	+40.7				+0.0	74.1	94.0	-19.9	Anten
10	37.349M	33.1	+40.9				+0.0	74.0	94.0	-20.0	Anten
11	81.482M	33.4	+40.5				+0.0	73.9	94.0	-20.1	Anten
12	65.469M	33.2	+40.7				+0.0	73.9	94.0	-20.1	Anten
13	58.316M	33.2	+40.7				+0.0	73.9	94.0	-20.1	Anten
14	35.291M	32.9	+40.9				+0.0	73.8	94.0	-20.2	Anten
15	33.331M	32.9	+40.9				+0.0	73.8	94.0	-20.2	Anten

CKC Laboratories Date: 02/18/2002 Time: 4:12:16 PM W/O#: 78395
 FCC 90.691 Test Distance: None Sequence#: 13
 Wilson Electronics DBAMP8N Antenna port channel 813.5MHz antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 2:58:39 PM

Equipment: **Repeater Amplifier**

Sequence#: 8

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 1-10GHz. Antenna port channel 806MHz.

Transducer Legend:

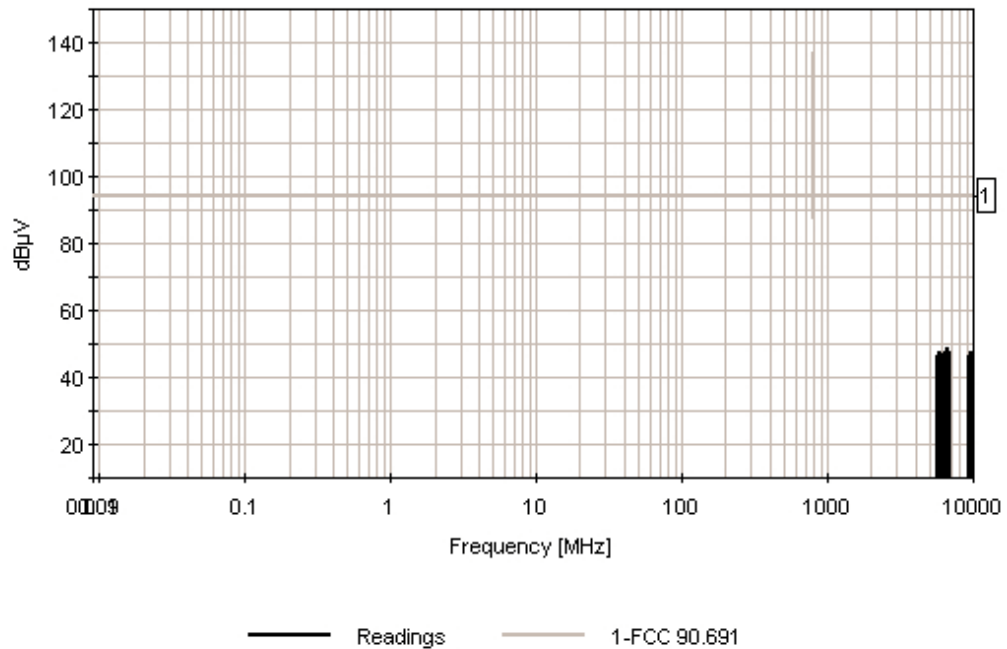
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	6766.818M	49.0					+0.0	49.0	94.0	-45.0	Anten
2	6640.785M	48.5					+0.0	48.5	94.0	-45.5	Anten
3	6712.125M	48.4					+0.0	48.4	94.0	-45.6	Anten
4	5837.020M	47.9					+0.0	47.9	94.0	-46.1	Anten
5	9604.630M	47.7					+0.0	47.7	94.0	-46.3	Anten
6	6925.918M	47.7					+0.0	47.7	94.0	-46.3	Anten
7	5798.972M	47.7					+0.0	47.7	94.0	-46.3	Anten
8	6383.960M	47.5					+0.0	47.5	94.0	-46.5	Anten
9	6426.764M	46.9					+0.0	46.9	94.0	-47.1	Anten

10	6072.442M	46.8	+0.0	46.8	94.0	-47.2	Anten
11	9643.021M	46.6	+0.0	46.6	94.0	-47.4	Anten
12	5770.436M	46.6	+0.0	46.6	94.0	-47.4	Anten
13	6112.868M	46.5	+0.0	46.5	94.0	-47.5	Anten
14	5634.890M	46.5	+0.0	46.5	94.0	-47.5	Anten
15	9353.350M	46.4	+0.0	46.4	94.0	-47.6	Anten

CKC Laboratories Date: 02/18/2002 Time: 2:58:39 PM WVO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 8
 Wilson Electronics DBAMP8N Antenna port channel 806MHz antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 3:54:37 PM

Equipment: **Repeater Amplifier**

Sequence#: 12

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 9 kHz - 1000 MHz. Antenna port channel 813.5MHz.

Transducer Legend:

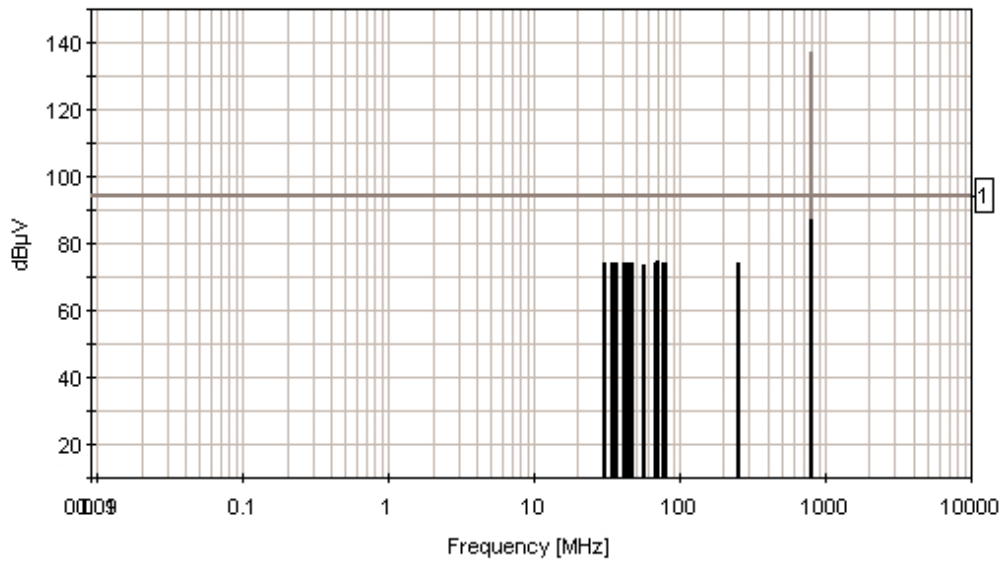
T1=DC S/N 3805

Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	T1 dB	dB			Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	813.500M	97.8	+38.8				+0.0	136.6	137.0	-0.4	Anten
2	71.739M	33.9	+40.6				+0.0	74.5	94.0	-19.5	Anten
3	45.971M	33.6	+40.8				+0.0	74.4	94.0	-19.6	Anten
4	47.342M	33.3	+40.8				+0.0	74.1	94.0	-19.9	Anten
5	70.270M	33.4	+40.6				+0.0	74.0	94.0	-20.0	Anten
6	44.795M	33.2	+40.8				+0.0	74.0	94.0	-20.0	Anten
7	36.761M	33.1	+40.9				+0.0	74.0	94.0	-20.0	Anten
8	34.703M	33.1	+40.9				+0.0	74.0	94.0	-20.0	Anten
9	255.218M	34.0	+39.9				+0.0	73.9	94.0	-20.1	Anten

10	81.224M	33.4	+40.5	+0.0	73.9	94.0	-20.1	Anten
11	67.526M	33.2	+40.7	+0.0	73.9	94.0	-20.1	Anten
12	30.196M	33.0	+40.9	+0.0	73.9	94.0	-20.1	Anten
13	78.696M	33.3	+40.6	+0.0	73.9	94.0	-20.1	Anten
14	41.954M	33.1	+40.8	+0.0	73.9	94.0	-20.1	Anten
15	57.336M	33.1	+40.7	+0.0	73.8	94.0	-20.2	Anten

CKC Laboratories Date: 02/18/2002 Time: 3:54:37 PM WVO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 12
 Wilson Electronics DBAMP8N Antenna port channel 813.5MHz antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 3:18:18 PM

Equipment: **Repeater Amplifier**

Sequence#: 9

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 1-10GHz. Antenna port channel 813.5MHz.

Transducer Legend:

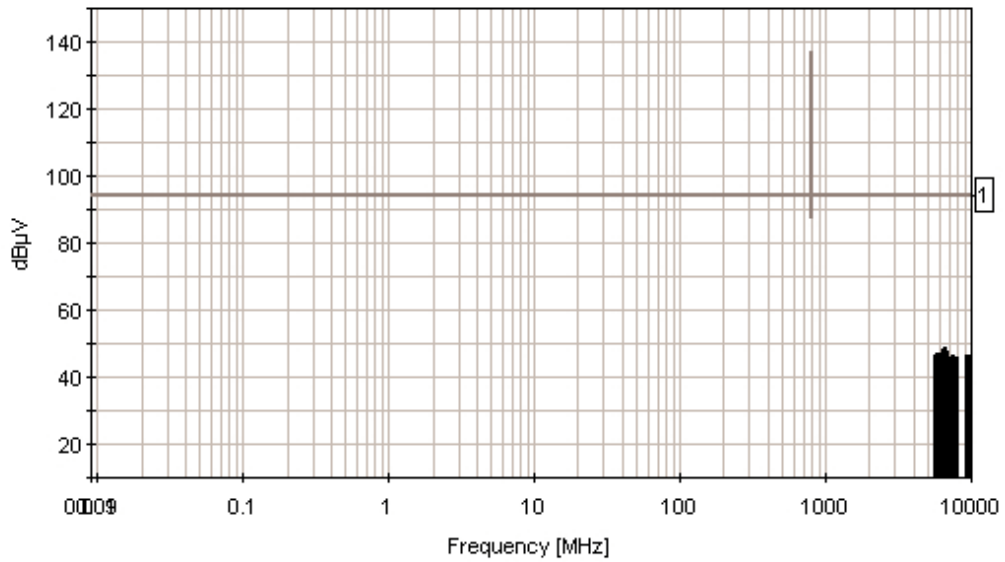
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB				Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	6700.234M	48.9					+0.0	48.9	94.0	-45.1	Anten
2	6762.063M	48.1					+0.0	48.1	94.0	-45.9	Anten
3	6426.764M	48.0					+0.0	48.0	94.0	-46.0	Anten
4	6930.245M	47.7					+0.0	47.7	94.0	-46.3	Anten
5	6967.736M	47.4					+0.0	47.4	94.0	-46.6	Anten
6	6160.428M	47.1					+0.0	47.1	94.0	-46.9	Anten
7	5879.824M	47.0					+0.0	47.0	94.0	-47.0	Anten
8	9262.610M	46.6					+0.0	46.6	94.0	-47.4	Anten
9	5661.048M	46.6					+0.0	46.6	94.0	-47.4	Anten
10	7570.492M	46.5					+0.0	46.5	94.0	-47.5	Anten

11	5934.518M	46.5	+0.0	46.5	94.0	-47.5	Anten
12	9925.710M	46.3	+0.0	46.3	94.0	-47.7	Anten
13	9356.840M	46.1	+0.0	46.1	94.0	-47.9	Anten
14	8069.424M	46.0	+0.0	46.0	94.0	-48.0	Anten
15	7305.165M	46.0	+0.0	46.0	94.0	-48.0	Anten

CKC Laboratories Date: 02/18/2002 Time: 3:18:18 PM WVO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 9
 Wilson Electronics DBAMP8N Antenna port channel 813.5MHz antenna conducted spurious emissions.



— Readings — 1-FCC 90.691

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 3:40:28 PM

Equipment: **Repeater Amplifier**

Sequence#: 11

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 9 kHz - 1000 MHz. Antenna port channel 821MHz.

Transducer Legend:

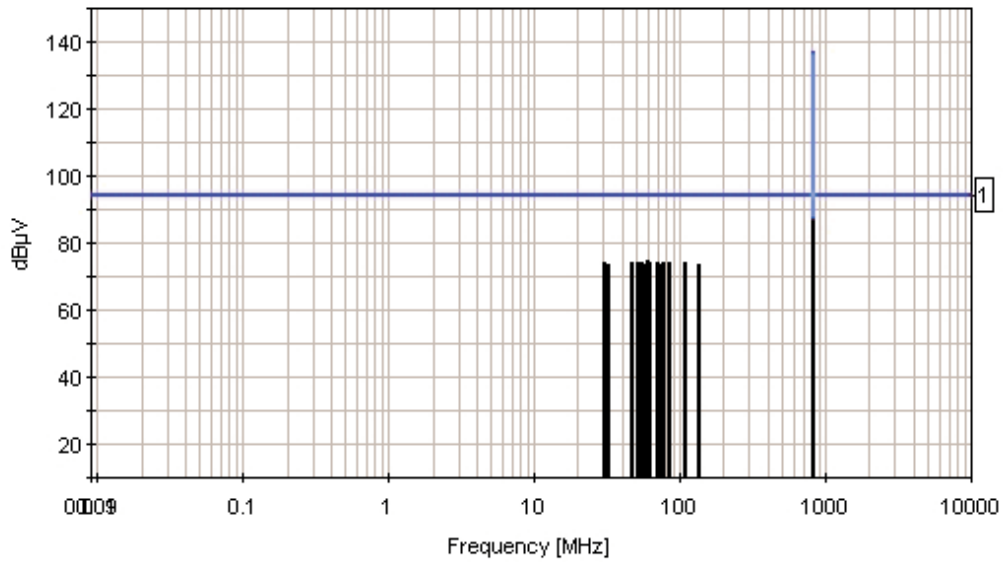
T1=DC S/N 3805

Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	T1 dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	821.000M	96.5	+38.8				+0.0	135.3	137.0	-1.7	Anten
2	59.688M	33.9	+40.7				+0.0	74.6	94.0	-19.4	Anten
3	86.130M	33.9	+40.5				+0.0	74.4	94.0	-19.6	Anten
4	76.834M	33.8	+40.6				+0.0	74.4	94.0	-19.6	Anten
5	70.858M	33.8	+40.6				+0.0	74.4	94.0	-19.6	Anten
6	54.691M	33.6	+40.8				+0.0	74.4	94.0	-19.6	Anten
7	109.109M	33.7	+40.4				+0.0	74.1	94.0	-19.9	Anten
8	30.441M	33.1	+40.9				+0.0	74.0	94.0	-20.0	Anten
9	62.725M	33.2	+40.7				+0.0	73.9	94.0	-20.1	Anten
10	51.262M	33.1	+40.8				+0.0	73.9	94.0	-20.1	Anten

11	46.657M	33.1	+40.8	+0.0	73.9	94.0	-20.1	Anten
12	135.446M	33.4	+40.4	+0.0	73.8	94.0	-20.2	Anten
13	74.581M	33.2	+40.6	+0.0	73.8	94.0	-20.2	Anten
14	56.063M	33.1	+40.7	+0.0	73.8	94.0	-20.2	Anten
15	32.841M	32.9	+40.9	+0.0	73.8	94.0	-20.2	Anten

CKC Laboratories Date: 02/18/2002 Time: 3:40:28 P W/O#: 78395
 FCC 90.691 Test Distance: None Sequence#: 11
 Wilson Electronics DBAMP8N Antenna port channel 821MHz antenna conducted spurious emissions.



— Readings — 1-FCC 90.691

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 3:25:05 PM

Equipment: **Repeater Amplifier**

Sequence#: 10

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 1-10GHz. Antenna port channel 821MHz.

Transducer Legend:

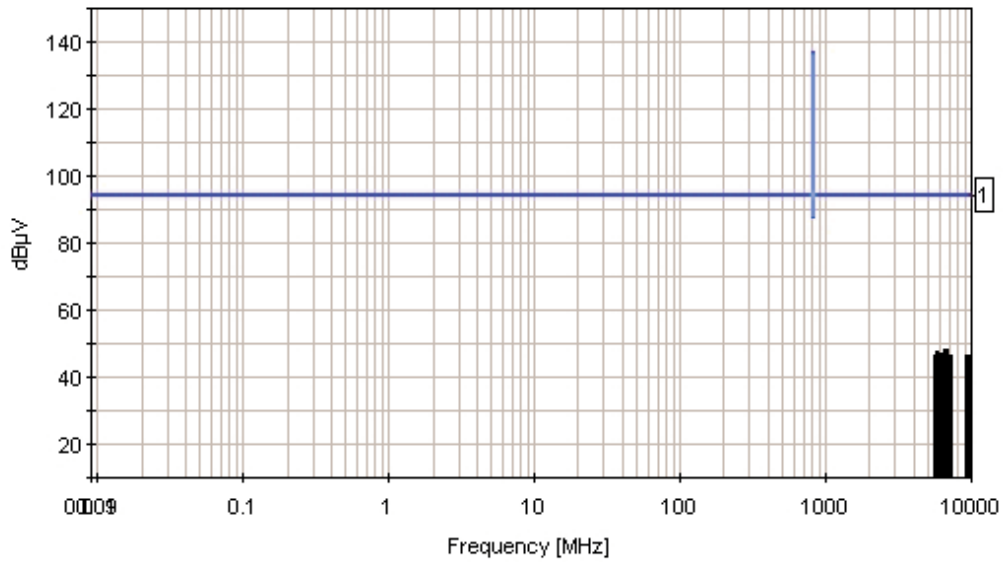
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	6925.918M	48.3					+0.0	48.3	94.0	-45.7	Anten
2	6683.588M	48.3					+0.0	48.3	94.0	-45.7	Anten
3	6976.389M	47.6					+0.0	47.6	94.0	-46.4	Anten
4	5808.484M	47.6					+0.0	47.6	94.0	-46.4	Anten
5	5848.910M	47.3					+0.0	47.3	94.0	-46.7	Anten
6	6469.568M	46.9					+0.0	46.9	94.0	-47.1	Anten
7	6374.448M	46.8					+0.0	46.8	94.0	-47.2	Anten
8	6093.844M	46.8					+0.0	46.8	94.0	-47.2	Anten
9	9726.780M	46.5					+0.0	46.5	94.0	-47.5	Anten
10	9269.590M	46.5					+0.0	46.5	94.0	-47.5	Anten

11	7129.240M	46.4	+0.0	46.4	94.0	-47.6	Anten
12	6840.840M	46.4	+0.0	46.4	94.0	-47.6	Anten
13	7261.904M	46.3	+0.0	46.3	94.0	-47.7	Anten
14	6872.564M	46.3	+0.0	46.3	94.0	-47.7	Anten
15	5655.103M	46.3	+0.0	46.3	94.0	-47.7	Anten

CKC Laboratories Date: 02/18/2002 Time: 3:25:05 PM WVO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 10
 Wilson Electronics DBAMP8N Antenna port channel 821MHz antenna conducted spurious emissions.



— Readings — 1-FCC 90.691



Antenna Direct Connect

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 1:22:25 PM

Equipment: **Repeater Amplifier**

Sequence#: 2

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 9kHz to 1000MHz. Phone port channel 851MHz.

Transducer Legend:

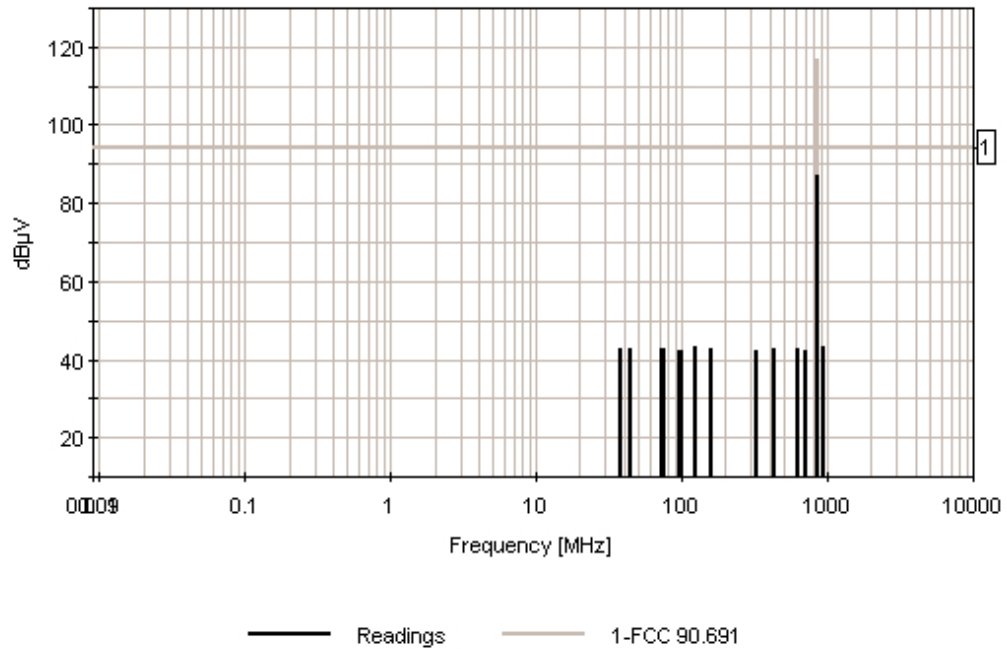
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	851.000M	102.3					+0.0	102.3	117.0	-14.7	Phone
2	865.360M	48.4					+0.0	48.4	94.0	-45.6	Phone
3	122.204M	43.4					+0.0	43.4	94.0	-50.6	Phone
4	937.432M	43.1					+0.0	43.1	94.0	-50.9	Phone
5	156.736M	42.9					+0.0	42.9	94.0	-51.1	Phone
6	76.102M	42.8					+0.0	42.8	94.0	-51.2	Phone
7	619.840M	42.7					+0.0	42.7	94.0	-51.3	Phone
8	426.592M	42.7					+0.0	42.7	94.0	-51.3	Phone
9	72.008M	42.7					+0.0	42.7	94.0	-51.3	Phone
10	44.596M	42.6					+0.0	42.6	94.0	-51.4	Phone

11	38.366M	42.6	+0.0	42.6	94.0	-51.4	Phone
12	713.296M	42.5	+0.0	42.5	94.0	-51.5	Phone
13	320.464M	42.5	+0.0	42.5	94.0	-51.5	Phone
14	99.420M	42.4	+0.0	42.4	94.0	-51.6	Phone
15	96.572M	42.4	+0.0	42.4	94.0	-51.6	Phone

CKC Laboratories Date: 02/18/2002 Time: 1:22:25 PM WFO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 2
 Wilson Electronics DBAMP8N antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 2:24:19 PM

Equipment: **Repeater Amplifier**

Sequence#: 7

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 1-10GHz. Phone port channel 851MHz.

Transducer Legend:

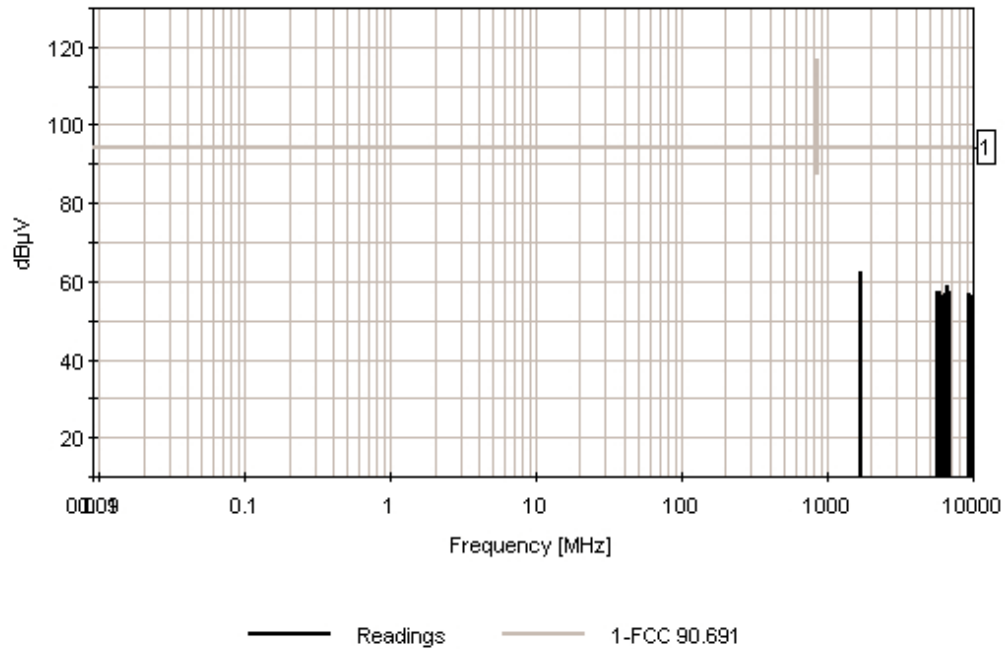
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB				Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	1702.749M	62.2					+0.0	62.2	94.0	-31.8	Phone
2	6740.661M	58.9					+0.0	58.9	94.0	-35.1	Phone
3	6721.637M	58.4					+0.0	58.4	94.0	-35.6	Phone
4	6655.052M	58.4					+0.0	58.4	94.0	-35.6	Phone
5	6898.521M	57.6					+0.0	57.6	94.0	-36.4	Phone
6	5815.618M	57.5					+0.0	57.5	94.0	-36.5	Phone
7	5794.216M	57.3					+0.0	57.3	94.0	-36.7	Phone
8	6426.764M	57.0					+0.0	57.0	94.0	-37.0	Phone
9	5879.824M	57.0					+0.0	57.0	94.0	-37.0	Phone
10	5910.738M	56.9					+0.0	56.9	94.0	-37.1	Phone

11	6388.716M	56.8	+0.0	56.8	94.0	-37.2	Phone
12	9311.470M	56.7	+0.0	56.7	94.0	-37.3	Phone
13	6112.868M	56.5	+0.0	56.5	94.0	-37.5	Phone
14	9663.960M	56.4	+0.0	56.4	94.0	-37.6	Phone
15	5707.419M	56.3	+0.0	56.3	94.0	-37.7	Phone

CKC Laboratories Date: 02/18/2002 Time: 2:24:19 PM WO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 7
 Wilson Electronics DBAMP8N Phone port channel 851MHz antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 1:42:36 PM

Equipment: **Repeater Amplifier**

Sequence#: 3

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 9kHz to 1000MHz. Phone port channel 858.5MHz.

Transducer Legend:

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Measurement Data:

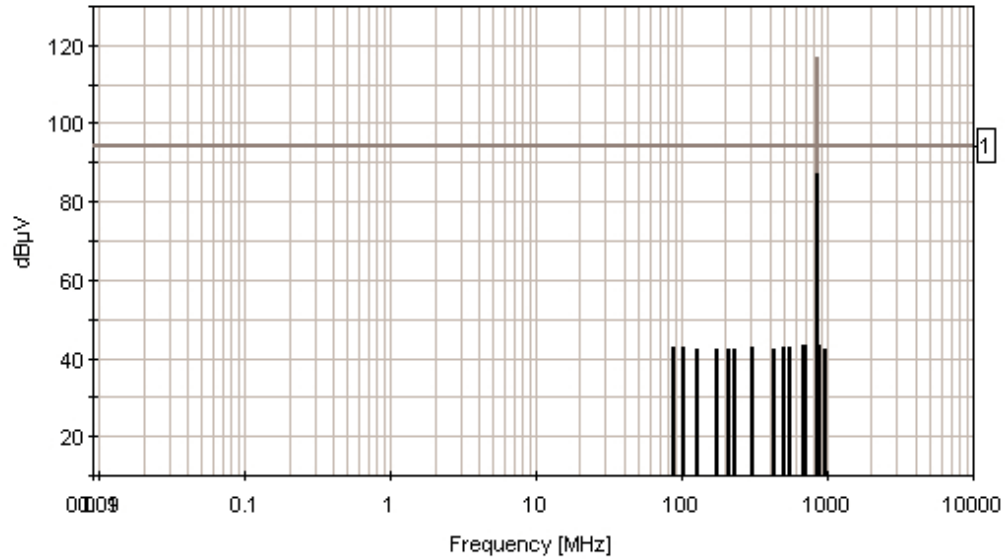
Reading listed by margin.

Test Distance: None

#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	858.500M	102.3					+0.0	102.3	117.0	-14.7	Phone
2	703.291M	43.2					+0.0	43.2	94.0	-50.8	Phone
3	683.390M	43.2					+0.0	43.2	94.0	-50.8	Phone
4	892.353M	43.1					+0.0	43.1	94.0	-50.9	Phone
5	302.310M	42.7					+0.0	42.7	94.0	-51.3	Phone
6	103.513M	42.7					+0.0	42.7	94.0	-51.3	Phone
7	86.947M	42.7					+0.0	42.7	94.0	-51.3	Phone
8	548.605M	42.6					+0.0	42.6	94.0	-51.4	Phone
9	499.036M	42.6					+0.0	42.6	94.0	-51.4	Phone
10	971.053M	42.5					+0.0	42.5	94.0	-51.5	Phone

11	174.956M	42.5	+0.0	42.5	94.0	-51.5	Phone
12	232.938M	42.4	+0.0	42.4	94.0	-51.6	Phone
13	213.266M	42.4	+0.0	42.4	94.0	-51.6	Phone
14	127.328M	42.4	+0.0	42.4	94.0	-51.6	Phone
15	434.841M	42.3	+0.0	42.3	94.0	-51.7	Phone

CKC Laboratories Date: 02/18/2002 Time: 1:42:36 PM WO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 3
 Wilson Electronics DBAMP8N Phone port channel 858.5MHz antenna conducted spurious emissions.



— Readings — 1-FCC 90.691

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 2:17:36 PM

Equipment: **Repeater Amplifier**

Sequence#: 6

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 1-10GHz. Phone port channel 858.5MHz.

Transducer Legend:

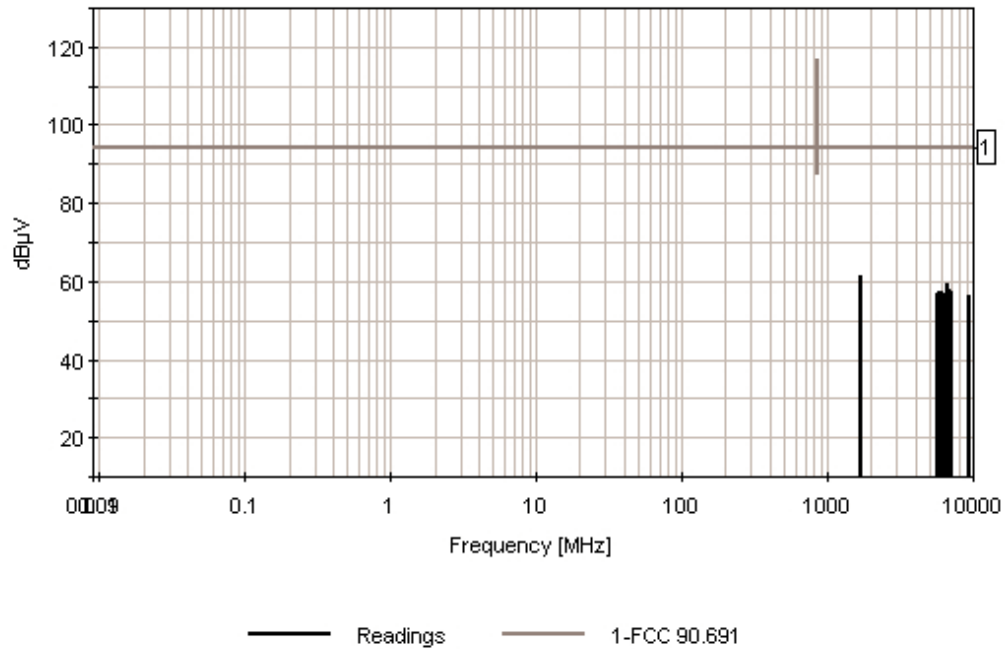
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	dB				Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	1717.653M	61.6					+0.0	61.6	94.0	-32.4	Phone
2	6681.210M	59.4					+0.0	59.4	94.0	-34.6	Phone
3	6655.052M	58.9					+0.0	58.9	94.0	-35.1	Phone
4	6714.502M	58.8					+0.0	58.8	94.0	-35.2	Phone
5	6938.896M	57.9					+0.0	57.9	94.0	-36.1	Phone
6	6096.222M	57.6					+0.0	57.6	94.0	-36.4	Phone
7	5822.752M	57.6					+0.0	57.6	94.0	-36.4	Phone
8	5846.532M	57.3					+0.0	57.3	94.0	-36.7	Phone
9	7005.229M	57.2					+0.0	57.2	94.0	-36.8	Phone
10	6455.300M	56.9					+0.0	56.9	94.0	-37.1	Phone

11	6405.362M	56.9	+0.0	56.9	94.0	-37.1	Phone
12	5774.003M	56.8	+0.0	56.8	94.0	-37.2	Phone
13	6162.806M	56.7	+0.0	56.7	94.0	-37.3	Phone
14	5625.378M	56.7	+0.0	56.7	94.0	-37.3	Phone
15	9269.590M	56.6	+0.0	56.6	94.0	-37.4	Phone

CKC Laboratories Date: 02/18/2002 Time: 2:17:36 PM WVO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 6
 Wilson Electronics DBAMP8N Phone port channel 858.5MHz antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 2:00:17 PM

Equipment: **Repeater Amplifier**

Sequence#: 4

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 9kHz to 1000MHz. Phone port channel 866.0MHz.

Transducer Legend:

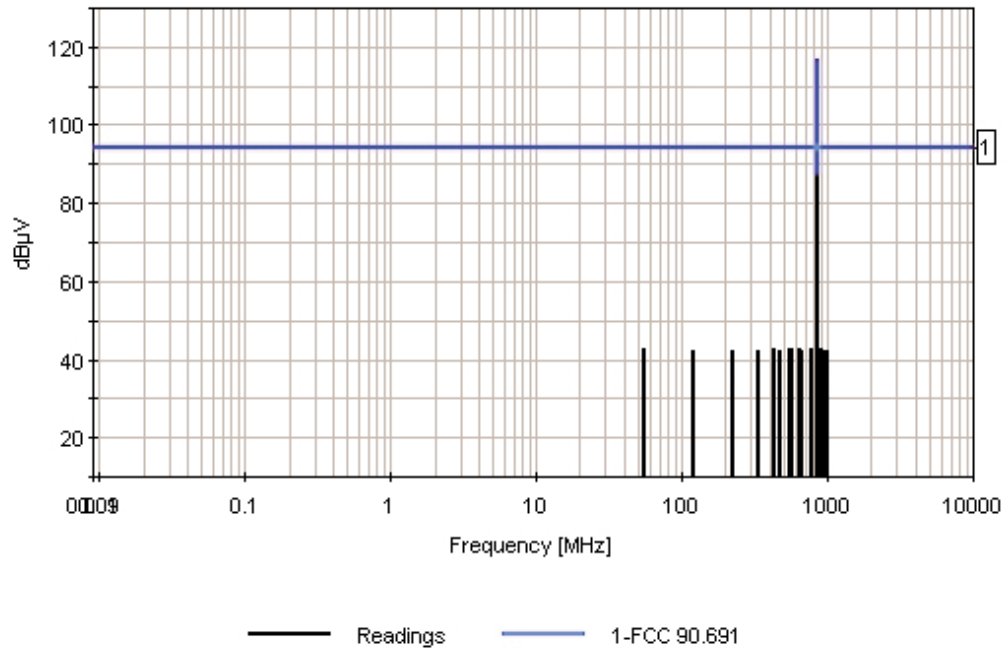
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Measurement Data: Reading listed by margin. Test Distance: None

#	Freq MHz	Rdng dB μ V	Reading listed by margin.				Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
			dB	dB	dB	dB					
1	866.000M	102.3					+0.0	102.3	117.0	-14.7	Phone
2	554.032M	42.9					+0.0	42.9	94.0	-51.1	Phone
3	432.771M	42.9					+0.0	42.9	94.0	-51.1	Phone
4	54.850M	42.9					+0.0	42.9	94.0	-51.1	Phone
5	923.109M	42.8					+0.0	42.8	94.0	-51.2	Phone
6	768.422M	42.8					+0.0	42.8	94.0	-51.2	Phone
7	640.874M	42.6					+0.0	42.6	94.0	-51.4	Phone
8	577.552M	42.6					+0.0	42.6	94.0	-51.4	Phone
9	971.053M	42.5					+0.0	42.5	94.0	-51.5	Phone
10	658.966M	42.5					+0.0	42.5	94.0	-51.5	Phone

11	222.584M	42.4	+0.0	42.4	94.0	-51.6	Phone
12	121.115M	42.4	+0.0	42.4	94.0	-51.6	Phone
13	987.336M	42.3	+0.0	42.3	94.0	-51.7	Phone
14	469.010M	42.3	+0.0	42.3	94.0	-51.7	Phone
15	332.337M	42.3	+0.0	42.3	94.0	-51.7	Phone

CKC Laboratories Date: 02/18/2002 Time: 2:00:17 PM WO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 4
 Wilson Electronics DBAMP8N Phone port channel 866MHz antenna conducted spurious emissions.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/18/02

Test Type: **Antenna Conducted Spurious Emissions**

Time: 2:08:57 PM

Equipment: **Repeater Amplifier**

Sequence#: 5

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. Frequency Range Investigated: 1-10GHz. Phone port channel 866.0MHz.

Transducer Legend:

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Measurement Data:

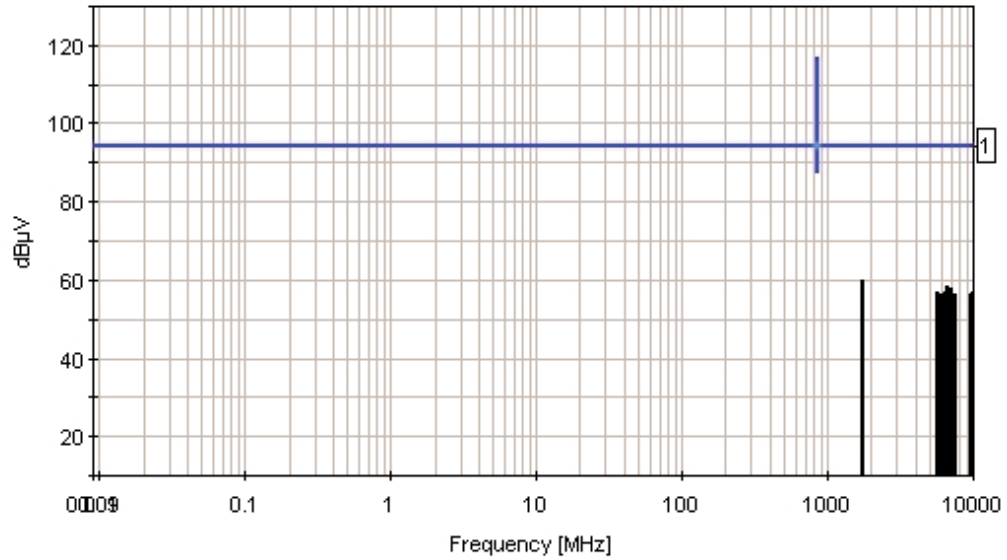
Reading listed by margin.

Test Distance: None

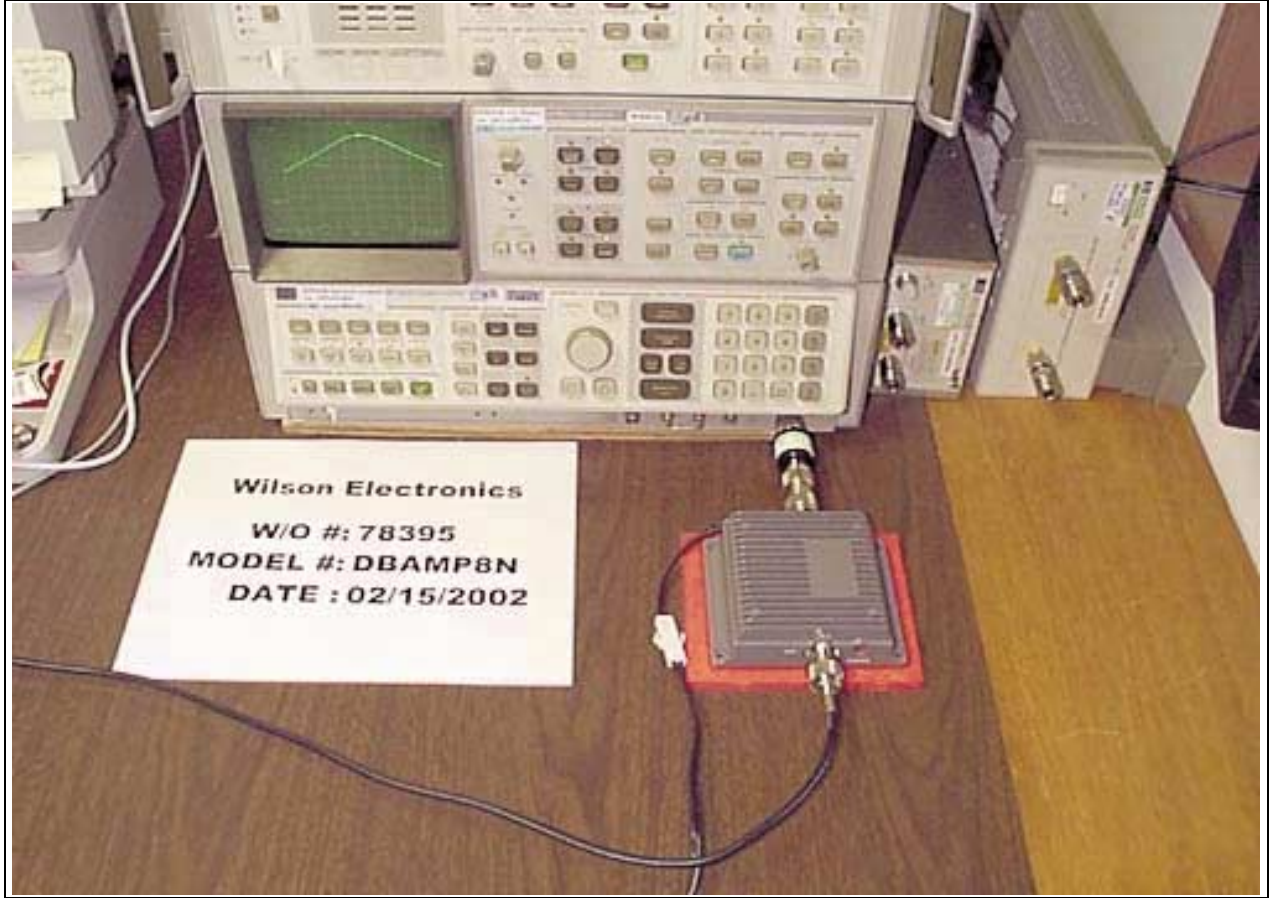
#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	1732.867M	59.9					+0.0	59.9	94.0	-34.1	Phone
2	6752.550M	58.6					+0.0	58.6	94.0	-35.4	Phone
3	6688.344M	58.6					+0.0	58.6	94.0	-35.4	Phone
4	7010.997M	57.7					+0.0	57.7	94.0	-36.3	Phone
5	6915.824M	57.7					+0.0	57.7	94.0	-36.3	Phone
6	6404.173M	57.0					+0.0	57.0	94.0	-37.0	Phone
7	9929.200M	56.9					+0.0	56.9	94.0	-37.1	Phone
8	5789.460M	56.8					+0.0	56.8	94.0	-37.2	Phone
9	6369.692M	56.7					+0.0	56.7	94.0	-37.3	Phone
10	9643.021M	56.6					+0.0	56.6	94.0	-37.4	Phone

11	7233.064M	56.4	+0.0	56.4	94.0	-37.6	Phone
12	6100.978M	56.4	+0.0	56.4	94.0	-37.6	Phone
13	7518.580M	56.3	+0.0	56.3	94.0	-37.7	Phone
14	6338.778M	56.3	+0.0	56.3	94.0	-37.7	Phone
15	5979.700M	56.3	+0.0	56.3	94.0	-37.7	Phone

CKC Laboratories Date: 02/18/2002 Time: 2:08:57 PM WO#: 78395
 FCC 90.691 Test Distance: None Sequence#: 5
 Wilson Electronics DBAMP6N Phone port channel 866MHz antenna conducted spurious emissions.



— Readings — 1-FCC 90.691



Phone Direct Connect

2.1033(c)(14)/2.1053/90.210(i)/90.691 - FIELD STRENGTH OF SPURIOUS RADIATION

ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	10 GHz	1 MHz

<i>Equipment</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Asset #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
3/10m & LISN Cable	Andrews	Hardline	N/A	N/A	11/19/01	11/19/02
Antenna, Bicon	A&H	SAS-200/542	156	00225	12/06/01	12/6/02
Antenna, Log	A&H	SAS-200/510	154	01330	05/07/01	5/7/02
Antenna, Loop	EMCO	6502	1074	00226	5/31/2001	5/31/02
Preamp	HP	8447D	1937A02604	00099	03/29/01	3/29/02
Preamp	HP	8449B	3008A00301	02010	10/19/01	10/19/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Antenna, Horn	EMCO	3115	4085	00656	02/28/01	2/28/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02
Cable #4 (50')	Andrew	FSJ1-50A	N/A	N/A	4/16/01	4/16/02
Cable #7 (25')	Andrew	FSJ1-50A	N/A	N/A	4/16/01	4/16/02
Cable #8 (6')	Andrew	FSJ1-50A	N/A	N/A	4/16/01	4/16/02

FCC 90.210(i) / 90.691 Radiated Spurious Emissions.

Frequency (MHz) Port ERP (Watts) Polarity

No radiated spurious emissions detected within 20dB of the limit for either Antenna or Phone port with their associated antennae.

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**
 Specification: **FCC 90.691**
 Work Order #: **78395** Date: 2/20/02
 Test Type: **Maximized Emissions** Time: 14:26:17
 Equipment: **Repeater Amplifier** Sequence#: 19
 Manufacturer: Wilson Electronics Tested By: Randal Clark
 Model: DBAMP8N
 S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5kHz FM. Frequency Range Investigated: 30MHz-10GHz. Antenna Port.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn 1-18 Mariposa
T3=Cable GHz #4	T4=Cable GHz #7
T5=Cable GHz #8	

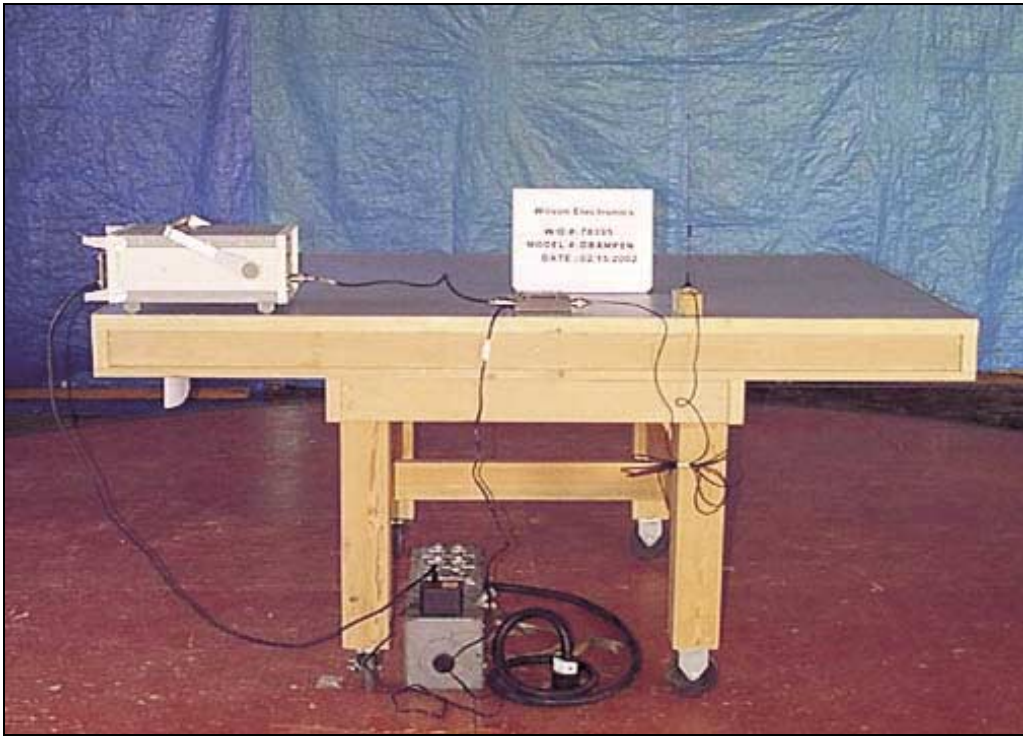
Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBμV	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
1	2417.900M	58.7	-32.5 +0.7	+28.6	+5.2	+2.7	+0.0	63.4	94.0	-30.6	Vert
2	3223.890M	51.6	-31.8 +1.3	+30.8	+5.3	+3.4	+0.0	60.6	94.0	-33.4	Horiz
3	3283.960M	48.0	-31.9 +1.4	+31.3	+5.4	+3.5	+0.0	57.7	94.0	-36.3	Horiz
4	2418.020M	52.6	-32.5 +0.7	+28.6	+5.2	+2.7	+0.0	57.3	94.0	-36.7	Vert
5	3223.900M	47.6	-31.8 +1.3	+30.8	+5.3	+3.4	+0.0	56.6	94.0	-37.4	Vert
6	3284.020M	44.7	-31.9 +1.4	+31.3	+5.4	+3.5	+0.0	54.4	94.0	-39.6	Vert
7	2418.240M	47.2	-32.5 +0.7	+28.6	+5.2	+2.7	+0.0	51.9	94.0	-42.1	Horiz
8	3254.020M	42.5	-31.9 +1.3	+31.0	+5.4	+3.5	+0.0	51.8	94.0	-42.2	Horiz

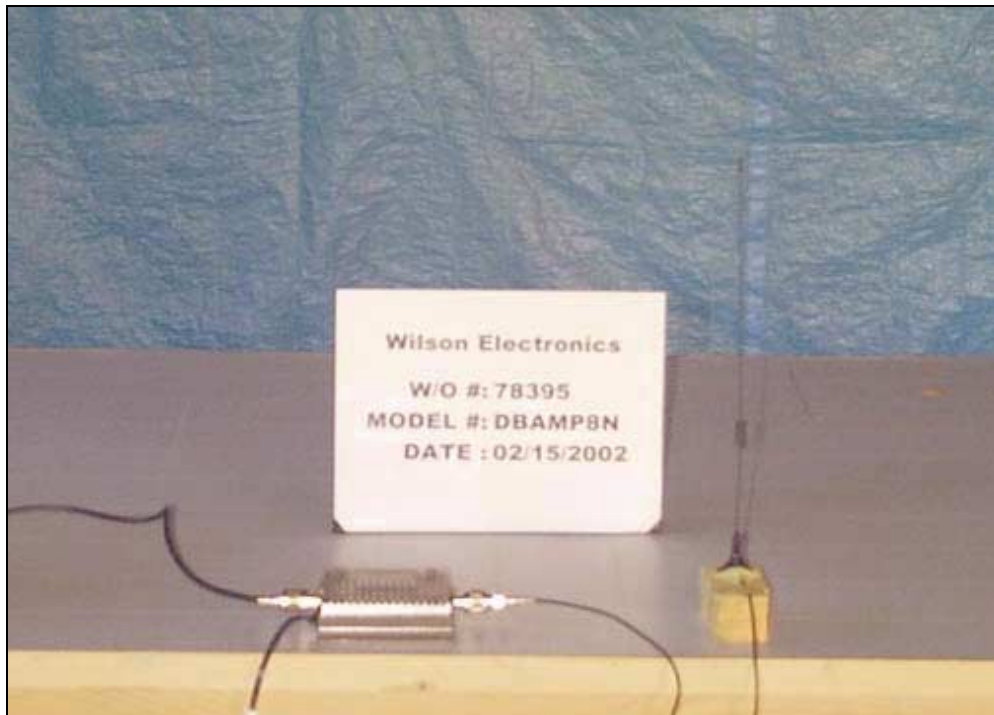
9	3254.040M	40.5	-31.9 +1.3	+31.0	+5.4	+3.5	+0.0	49.8	94.0	-44.2	Vert
10	2440.560M	44.5	-32.4 +0.7	+28.6	+5.2	+2.7	+0.0	49.3	94.0	-44.7	Horiz
11	1612.170M	51.8	-35.2 +0.4	+25.4	+4.0	+2.0	+0.0	48.4	94.0	-45.6	Horiz
12	1642.240M	49.9	-35.1 +0.4	+25.5	+4.0	+2.0	+0.0	46.7	94.0	-47.3	Horiz
13	1612.100M	49.7	-35.2 +0.4	+25.4	+4.0	+2.0	+0.0	46.3	94.0	-47.7	Vert
14	1627.040M	49.1	-35.1 +0.4	+25.5	+4.0	+2.0	+0.0	45.9	94.0	-48.1	Horiz
15	1626.960M	45.7	-35.1 +0.4	+25.5	+4.0	+2.0	+0.0	42.5	94.0	-51.5	Vert
16	1642.000M	44.6	-35.1 +0.4	+25.5	+4.0	+2.0	+0.0	41.4	94.0	-52.6	Vert



Antenna Field Strength - Front View



Antenna Field Strength - Back View



Antenna Field Strength - Back Close-up View

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 90.691**

Work Order #: **78395**

Date: 2/20/02

Test Type: **Maximized Emissions**

Time: 13:21:58

Equipment: **Repeater Amplifier**

Sequence#: 18

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. A signal generator is set to supply a modulated signal that simulates actual signals used. The amplitude of the signal generator is set such that the output of the transmitter is at its rated maximum for the port being tested. The test modulation is set for 5kHz FM. Frequency Range Investigated: 30MHz-10GHz. Phone Port.

Transducer Legend:

T1=Amp - S/N 301	T2=Horn 1-18 Mariposa
T3=Cable GHz #4	T4=Cable GHz #7
T5=Cable GHz #8	

Measurement Data:

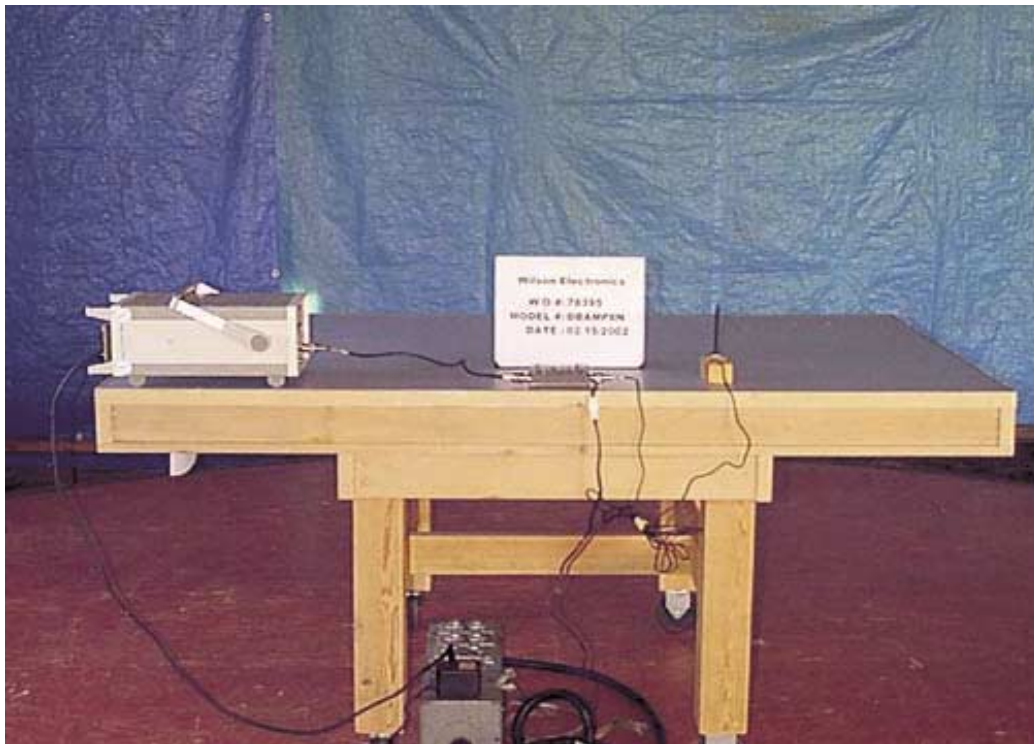
Reading listed by margin.

Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	T1 T5 dB	T2 dB	T3 dB	T4 dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant
1	1701.900M	58.4	-35.0 +0.4	+25.7	+4.1	+2.0	+0.0	55.6	94.0	-38.4	Horiz
2	1716.950M	57.9	-35.0 +0.4	+26.0	+4.1	+2.0	+0.0	55.4	94.0	-38.6	Horiz
3	1717.080M	57.2	-35.0 +0.4	+26.0	+4.1	+2.0	+0.0	54.7	94.0	-39.3	Vert
4	1731.930M	56.6	-35.0 +0.4	+26.4	+4.1	+2.0	+0.0	54.5	94.0	-39.5	Vert
5	1701.990M	57.1	-35.0 +0.4	+25.7	+4.1	+2.0	+0.0	54.3	94.0	-39.7	Vert
6	1731.980M	54.5	-35.0 +0.4	+26.4	+4.1	+2.0	+0.0	52.4	94.0	-41.6	Horiz



Phone Field Strength - Front View



Phone Field Strength - Back View



Phone Radiated Emissions - Back Close-up View

2.1033(c)(14)/2.1055/90.213- FREQUENCY STABILITY

This testing is not required because there are no clock oscillators.

15.107 – AC CONDUCTED EMISSIONS – RECEIVER/DIGITAL

ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	450 kHz	30 MHz	9 kHz

Equipment	Manufacturer	Model #	Serial #	Asset #	Cal Date	Cal Due
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
3/10m & LISN Cable	Andrews	Hardline	N/A	N/A	11/19/01	11/19/02
LISN Set	Solar	8028-50-TS-24-BNC	814493, 474	02056	5/22/01	5/22/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 15.107 Class B**

Work Order #: **78395**

Date: 2/19/02

Test Type: **Conducted Emissions**

Time: 15:00:04

Equipment: **Repeater Amplifier**

Sequence#: 15

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. EUT is in receive mode and both ports have antenna attached. EUT is powered by 120VAC 60Hz. Frequency Range Investigated: 450kHz - 30MHz.

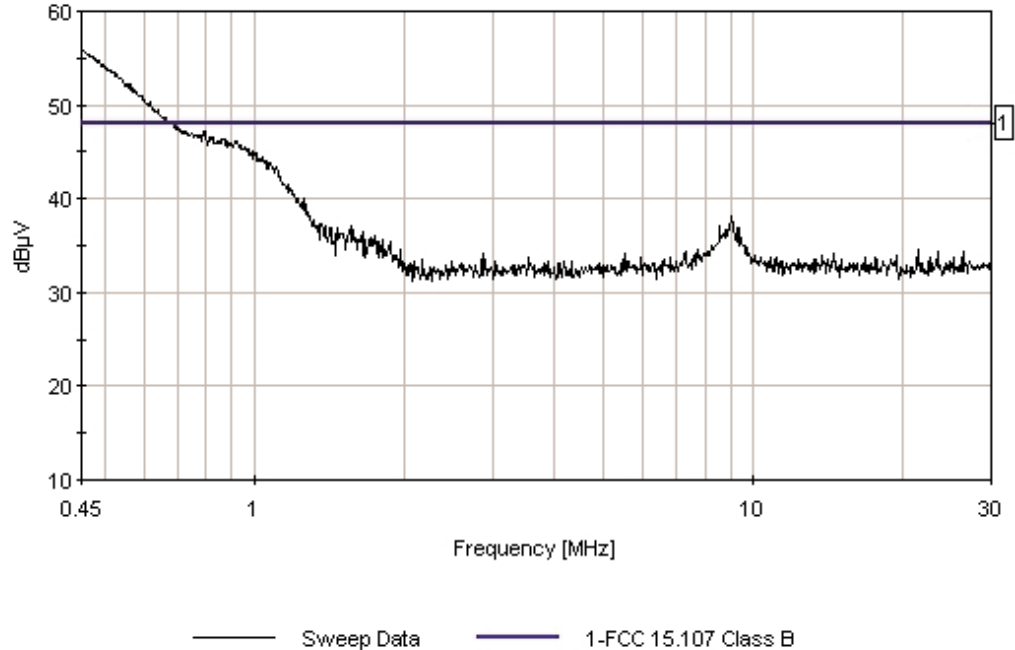
Transducer Legend:

T1=Cable & Cap (Bench)	T2=LISN Insertion Loss s/n474
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Measurement Data:		Reading listed by margin.					Test Lead: Black				
#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	dB	dB	Dist Table	Corr dB μ V	Spec dB μ V	Margin dB	Polar Ant
1	451.820k	47.3	+0.1	+0.4			+0.0	47.8	48.0	-0.2	Black
	QP										
^	452.507k	55.3	+0.1	+0.4			+0.0	55.8	48.0	+7.8	Black
3	460.880k	47.2	+0.1	+0.4			+0.0	47.7	48.0	-0.3	Black
	QP										
^	460.840k	52.7	+0.1	+0.4			+0.0	53.2	48.0	+5.2	Black
5	999.956k	44.5	+0.1	+0.3			+0.0	44.9	48.0	-3.1	Black
6	569.991k	43.7	+0.1	+0.4			+0.0	44.2	48.0	-3.8	Black
	QP										
^	572.027k	51.3	+0.1	+0.4			+0.0	51.8	48.0	+3.8	Black
8	1.079M	43.4	+0.1	+0.3			+0.0	43.8	48.0	-4.2	Black
9	1.063M	43.4	+0.1	+0.3			+0.0	43.8	48.0	-4.2	Black
10	1.105M	43.0	+0.1	+0.3			+0.0	43.4	48.0	-4.6	Black
11	1.172M	41.2	+0.1	+0.3			+0.0	41.6	48.0	-6.4	Black
12	1.257M	39.7	+0.1	+0.3			+0.0	40.1	48.0	-7.9	Black
13	1.246M	39.3	+0.1	+0.3			+0.0	39.7	48.0	-8.3	Black
14	786.540k	38.7	+0.0	+0.4			+0.0	39.1	48.0	-8.9	Black
	QP										
^	789.335k	46.7	+0.0	+0.4			+0.0	47.1	48.0	-0.9	Black
^	782.648k	46.3	+0.0	+0.4			+0.0	46.7	48.0	-1.3	Black
17	818.340k	38.2	+0.0	+0.4			+0.0	38.6	48.0	-9.4	Black
	QP										
^	818.588k	46.2	+0.0	+0.4			+0.0	46.6	48.0	-1.4	Black
19	826.680k	38.0	+0.0	+0.4			+0.0	38.4	48.0	-9.6	Black
	QP										
^	827.782k	46.1	+0.0	+0.4			+0.0	46.5	48.0	-1.5	Black
21	872.520k	37.8	+0.0	+0.4			+0.0	38.2	48.0	-9.8	Black
	QP										

22	910.580k	37.5	+0.1	+0.4	+0.0	38.0	48.0	-10.0	Black
	QP								
^	911.362k	45.7	+0.1	+0.4	+0.0	46.2	48.0	-1.8	Black
24	903.220k	37.5	+0.1	+0.4	+0.0	38.0	48.0	-10.0	Black
	QP								
25	884.290k	37.6	+0.0	+0.4	+0.0	38.0	48.0	-10.0	Black
	QP								
^	881.273k	45.7	+0.0	+0.4	+0.0	46.1	48.0	-1.9	Black
^	887.959k	45.6	+0.0	+0.4	+0.0	46.0	48.0	-2.0	Black
28	978.200k	36.6	+0.1	+0.3	+0.0	37.0	48.0	-11.0	Black
	QP								
^	978.226k	44.8	+0.1	+0.3	+0.0	45.2	48.0	-2.8	Black
30	1.007M	36.4	+0.1	+0.3	+0.0	36.8	48.0	-11.2	Black
	QP								

CKC Laboratories Date: 02/19/2002 Time: 11:42:12 AM WO#: 78395
 FCC 15.107 Class B Test Lead: Black Sequence#: 15
 Wilson Electronics DBAMP8N powered by 120VAC 60Hz.



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**

Specification: **FCC 15.107 Class B**

Work Order #: **78395**

Date: 2/19/02

Test Type: **Conducted Emissions**

Time: 15:39:08

Equipment: **Repeater Amplifier**

Sequence#: 16

Manufacturer: Wilson Electronics

Tested By: Randal Clark

Model: DBAMP8N

S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. EUT is in receive mode and both ports have antenna attached. EUT is powered by 120VAC 60Hz. Frequency Range Investigated: 450kHz - 30MHz.

Transducer Legend:

T1=Cable & Cap (Bench)	T2=LISN Insertion Loss s/n493
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Measurement Data:

Reading listed by margin.

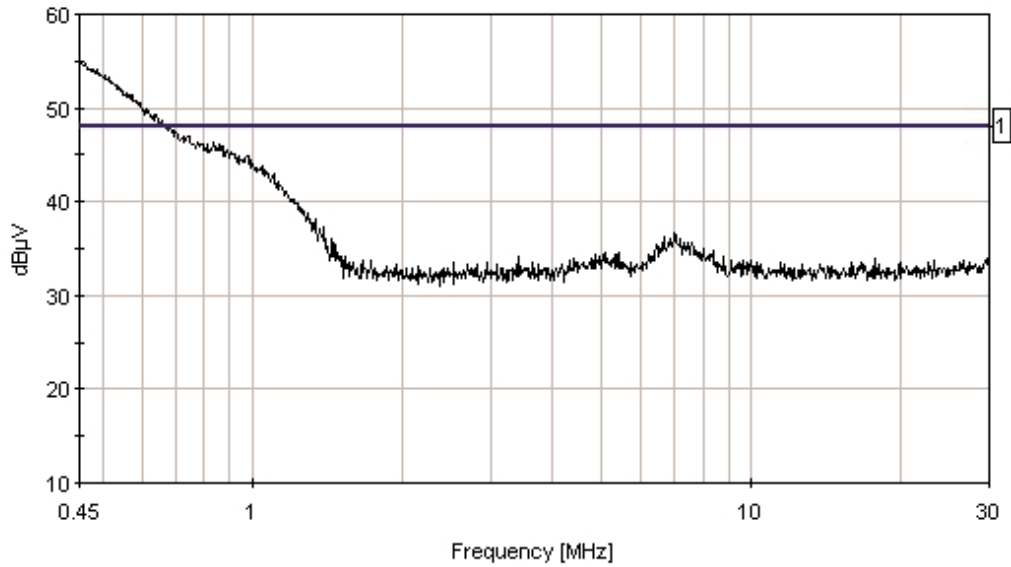
Test Lead: White

#	Freq MHz	Rdng dB μ V	T1 dB	T2 dB	Dist dB	Corr dB	Spec dB μ V	Margin dB	Polar Ant
1	453.100k	47.1	+0.1	+0.6	+0.0	47.8	48.0	-0.2	White
	QP								
^	452.507k	54.0	+0.1	+0.6	+0.0	54.7	48.0	+6.7	White
3	548.900k	44.8	+0.1	+0.5	+0.0	45.4	48.0	-2.6	White
	QP								
^	551.132k	51.2	+0.1	+0.5	+0.0	51.8	48.0	+3.8	White
5	573.870k	44.0	+0.1	+0.5	+0.0	44.6	48.0	-3.4	White
	QP								
^	573.698k	50.8	+0.1	+0.5	+0.0	51.4	48.0	+3.4	White
7	1.043M	43.5	+0.1	+0.3	+0.0	43.9	48.0	-4.1	White
8	596.400k	43.1	+0.1	+0.5	+0.0	43.7	48.0	-4.3	White
	QP								
9	1.055M	43.0	+0.1	+0.3	+0.0	43.4	48.0	-4.6	White
10	641.200k	41.6	+0.1	+0.5	+0.0	42.2	48.0	-5.8	White
	QP								
^	641.398k	48.7	+0.1	+0.5	+0.0	49.3	48.0	+1.3	White

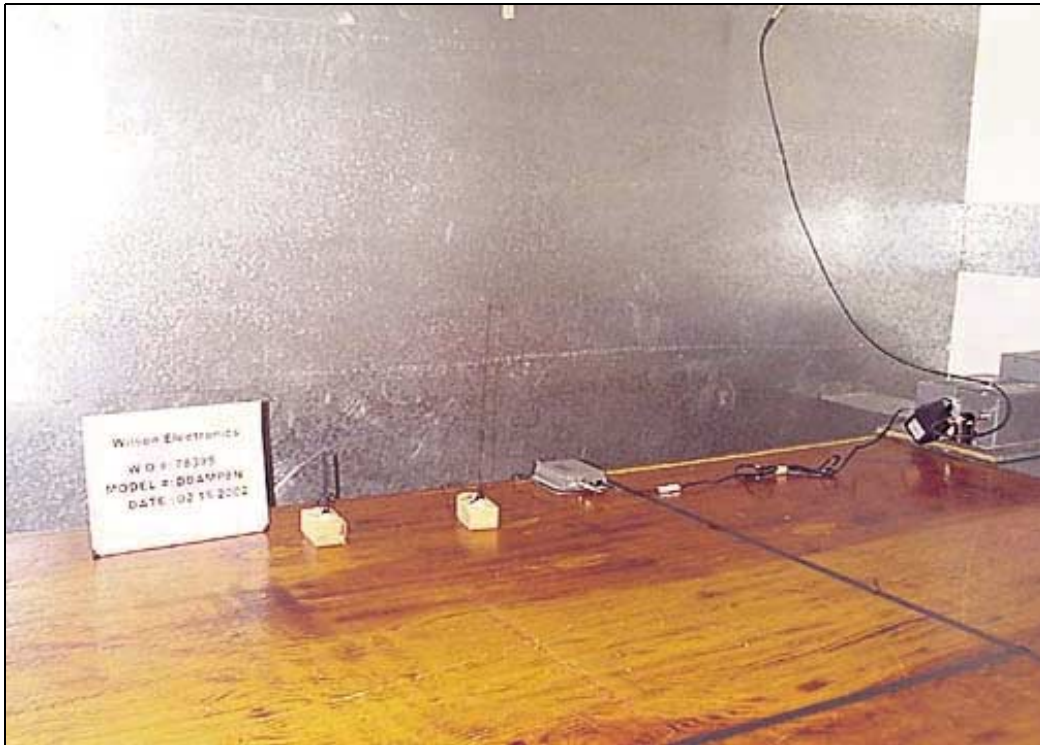
12	702.170k	40.0	+0.0	+0.5	+0.0	40.5	48.0	-7.5	White
	QP								
^	702.412k	46.8	+0.0	+0.5	+0.0	47.3	48.0	-0.7	White
14	744.600k	39.3	+0.0	+0.5	+0.0	39.8	48.0	-8.2	White
	QP								
^	745.873k	46.5	+0.0	+0.5	+0.0	47.0	48.0	-1.0	White
16	745.830k	39.2	+0.0	+0.5	+0.0	39.7	48.0	-8.3	White
	QP								
17	783.700k	38.7	+0.0	+0.5	+0.0	39.2	48.0	-8.8	White
	QP								
18	812.700k	38.5	+0.0	+0.5	+0.0	39.0	48.0	-9.0	White
	QP								
^	812.737k	45.6	+0.0	+0.5	+0.0	46.1	48.0	-1.9	White
20	859.600k	38.1	+0.0	+0.5	+0.0	38.6	48.0	-9.4	White
	QP								
^	859.542k	45.7	+0.0	+0.5	+0.0	46.2	48.0	-1.8	White
22	838.200k	38.1	+0.0	+0.5	+0.0	38.6	48.0	-9.4	White
	QP								
^	837.811k	45.8	+0.0	+0.5	+0.0	46.3	48.0	-1.7	White
24	872.900k	37.8	+0.0	+0.5	+0.0	38.3	48.0	-9.7	White
	QP								
^	872.915k	45.4	+0.0	+0.5	+0.0	45.9	48.0	-2.1	White
26	882.700k	37.8	+0.0	+0.5	+0.0	38.3	48.0	-9.7	White
	QP								
^	881.273k	44.8	+0.0	+0.5	+0.0	45.3	48.0	-2.7	White
28	906.700k	37.6	+0.1	+0.5	+0.0	38.2	48.0	-9.8	White
	QP								
^	904.675k	44.6	+0.1	+0.5	+0.0	45.2	48.0	-2.8	White
30	891.300k	37.6	+0.0	+0.5	+0.0	38.1	48.0	-9.9	White
	QP								
^	891.302k	44.9	+0.0	+0.5	+0.0	45.4	48.0	-2.6	White
32	926.000k	37.5	+0.1	+0.4	+0.0	38.0	48.0	-10.0	White
	QP								
33	935.860k	37.4	+0.1	+0.4	+0.0	37.9	48.0	-10.1	White
	QP								
34	941.450k	37.2	+0.1	+0.4	+0.0	37.7	48.0	-10.3	White
	QP								
^	941.450k	44.4	+0.1	+0.4	+0.0	44.9	48.0	-3.1	White

36	979.900k	36.7	+0.1	+0.3	+0.0	37.1	48.0	-10.9	White
QP									
^	979.897k	44.5	+0.1	+0.3	+0.0	44.9	48.0	-3.1	White
38	993.300k	36.6	+0.1	+0.3	+0.0	37.0	48.0	-11.0	White
QP									
^	993.270k	44.0	+0.1	+0.3	+0.0	44.4	48.0	-3.6	White

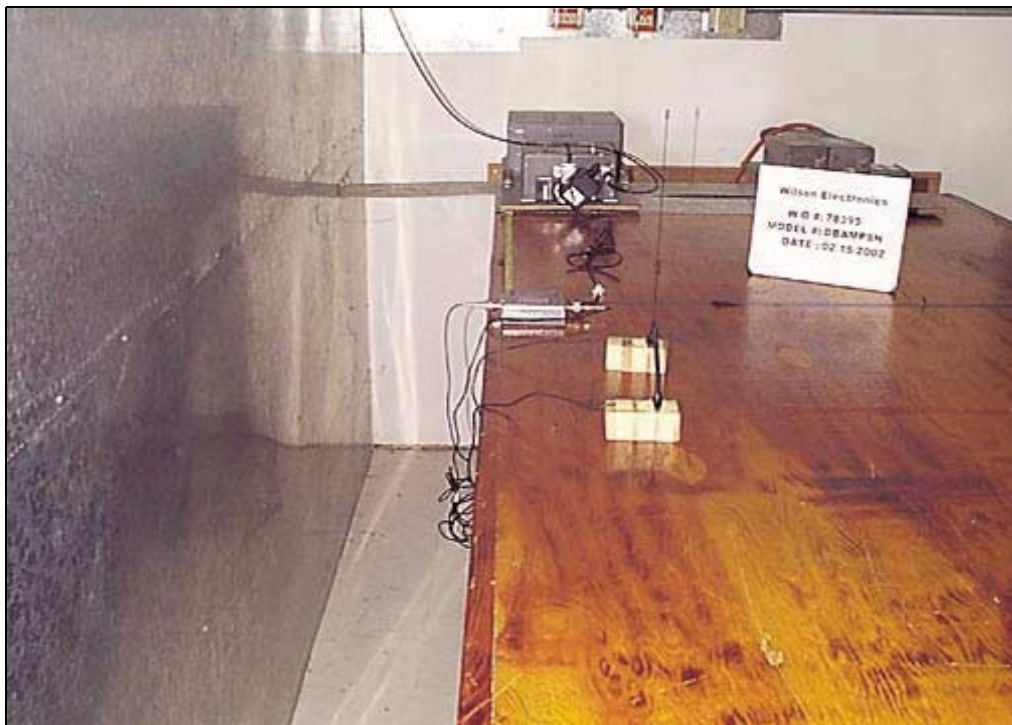
CKC Laboratories Date: 02/19/2002 Time: 3:10:33 PM WO#: 78395
 FCC 15.107 Class B Test Lead: White Sequence#: 16
 Wilson Electronics DBAMP8N powered by 120VAC 60Hz.



— Sweep Data — 1-FCC 15.107 Class B



Mains Conducted Emissions - Front View - 15.107



Mains Conducted Emissions - Side View - 15.107

15.109 – RADIATED EMISSIONS – RECEIVER/DIGITAL

ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	10 GHz	1 MHz

<i>Equipment</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Asset #</i>	<i>Cal Date</i>	<i>Cal Due</i>
Generator, Signal,	Marconi	2022D	119259/016	01870	9/5/01	9/5/02
3/10m & LISN Cable	Andrews	Hardline	N/A	N/A	11/19/01	11/19/02
Antenna, Bicon	A&H	SAS-200/542	156	00225	12/06/01	12/6/02
Antenna, Log	A&H	SAS-200/510	154	01330	05/07/01	5/7/02
Antenna, Loop	EMCO	6502	1074	00226	5/31/2001	5/31/02
Preamp	HP	8447D	1937A02604	00099	03/29/01	3/29/02
Preamp	HP	8449B	3008A00301	02010	10/19/01	10/19/02
QP Adapter	HP	85650A	2811A01267	00478	1/30/02	1/30/03
S/A Display	HP	8566B	2403A08241	00489	1/30/02	1/30/03
Spectrum Analyzer	HP	8566B	2209A01404	00490	1/30/02	1/30/03
Antenna, Horn	EMCO	3115	4085	00656	02/28/01	2/28/02
Power Meter (standard)	HP	435B	2702A16632	00613	8/10/01	8/10/02
Power Sensor	HP	7560	1551A01004	02036	7/27/01	7/27/02
Cable #4 (50')	Andrew	FSJ1-50A	N/A	N/A	4/16/01	4/16/02
Cable #7 (25')	Andrew	FSJ1-50A	N/A	N/A	4/16/01	4/16/02
Cable #8 (6')	Andrew	FSJ1-50A	N/A	N/A	4/16/01	4/16/02

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa CA, 95338 • 800-500-4EMC (4362)

Customer: **Wilson Electronics**
 Specification: **15.109 CLASS B**
 Work Order #: **78395** Date: 2/20/02
 Test Type: **Maximized Emissions** Time: 14:44:56
 Equipment: **Repeater Amplifier** Sequence#: 20
 Manufacturer: Wilson Electronics Tested By: Randal Clark
 Model: DBAMP8N
 S/N: 0001

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Repeater Amplifier*	Wilson Electronics	DBAMP8N	0001

Support Devices:

Function	Manufacturer	Model #	S/N
Power Supply		SCP57-122000	0100

Test Conditions / Notes:

EUT is a bi-directional repeater amplifier. Phone port receives and amplifies signals in the frequency range of 806-821 MHz. Antenna port receives and amplifies signals in the frequency range of 851-866 MHz. Each port retransmits signals received from the opposite port. EUT is in receive mode and both ports have antenna attached. Frequency Range Investigated: 30MHz-10GHz Antenna and Phone Ports. No EUT emissions found.

Transducer Legend:

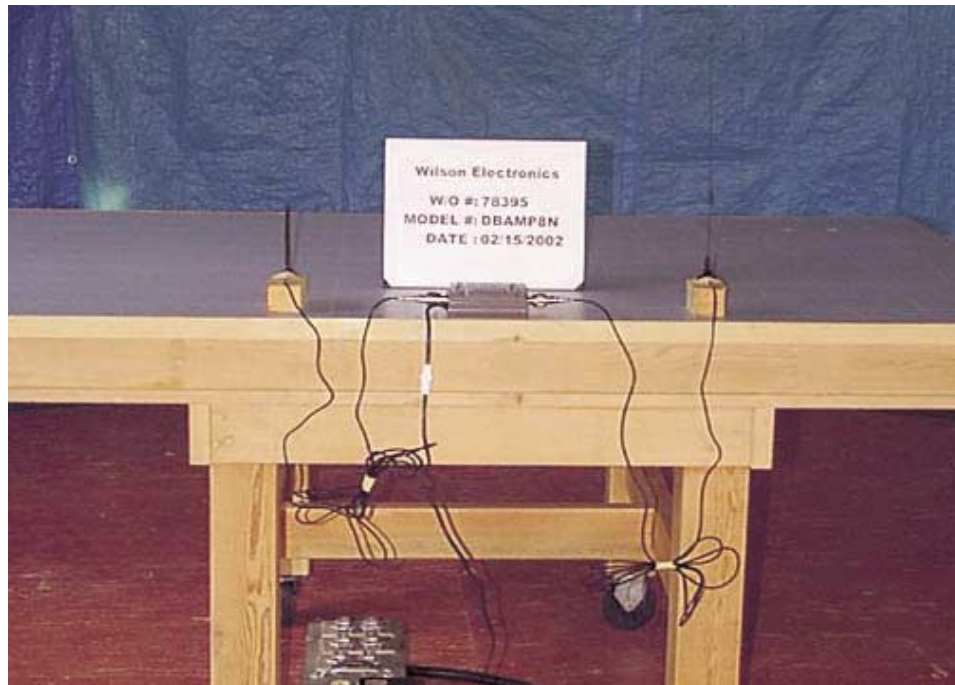
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Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dB μ V	dB	dB	dB	dB	Dist Table	Corr dB μ V/m	Spec dB μ V/m	Margin dB	Polar Ant



Radiated Emissions - Front View - 15.109



Radiated Emissions - Back View - 15.109