EXHIBIT S – Occupied Bandwidth

FCC ID# PURRFU7

NORTHWEST
EMC

EMISSIONS DATA SHEET

Rev BETA
01/30/01

EUT:	iDEN Radio			Work Order:	RAFN0007
Serial Number:	148			Date:	08/22/01
Customer:	RadioFrame Networks			Temperature:	23 degrees C
Attendees:	Dean Busch	Tested by:	Greg Kiemel	Humidity:	38% RH
Customer Ref. No.:	N/A	Power:	120 V, 60 Hz (host)	Job Site:	Customer

TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is 11.4 dBm

RESULTS — **AMPLITUDE**

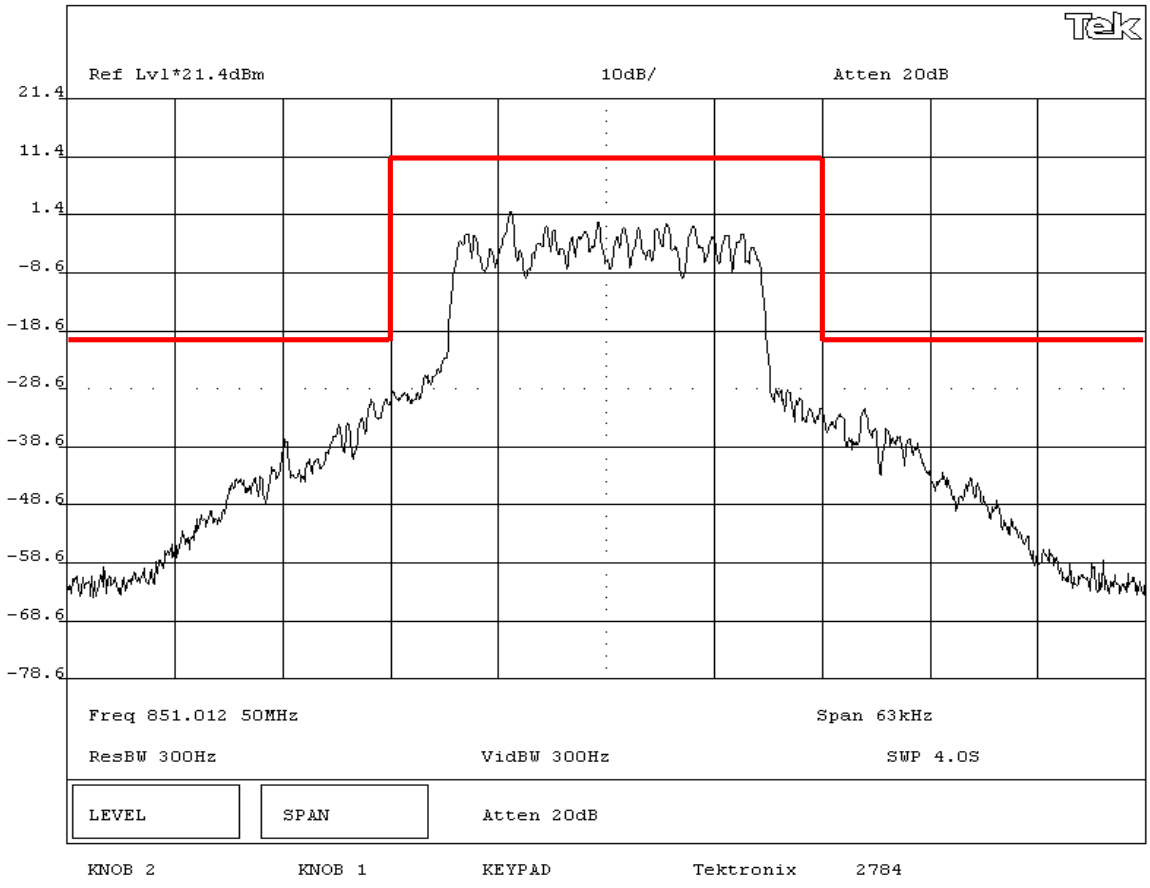
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Lowest Channel @ Highest Output Power



NORTHWEST
EMC

EMISSIONS DATA SHEET

Rev BETA
01/30/01

EUT:	iDEN Radio			Work Order:	RAFN0007
Serial Number:	148			Date:	08/22/01
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Attendees:	Dean Busch	Tested by:	Greg Kiemel	Humidity:	38% RH
Customer Ref. No.:	N/A	Power:	120 V, 60 Hz (host)	Job Site:	Customer

TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is 11.4 dBm

RESULTS — **AMPLITUDE**

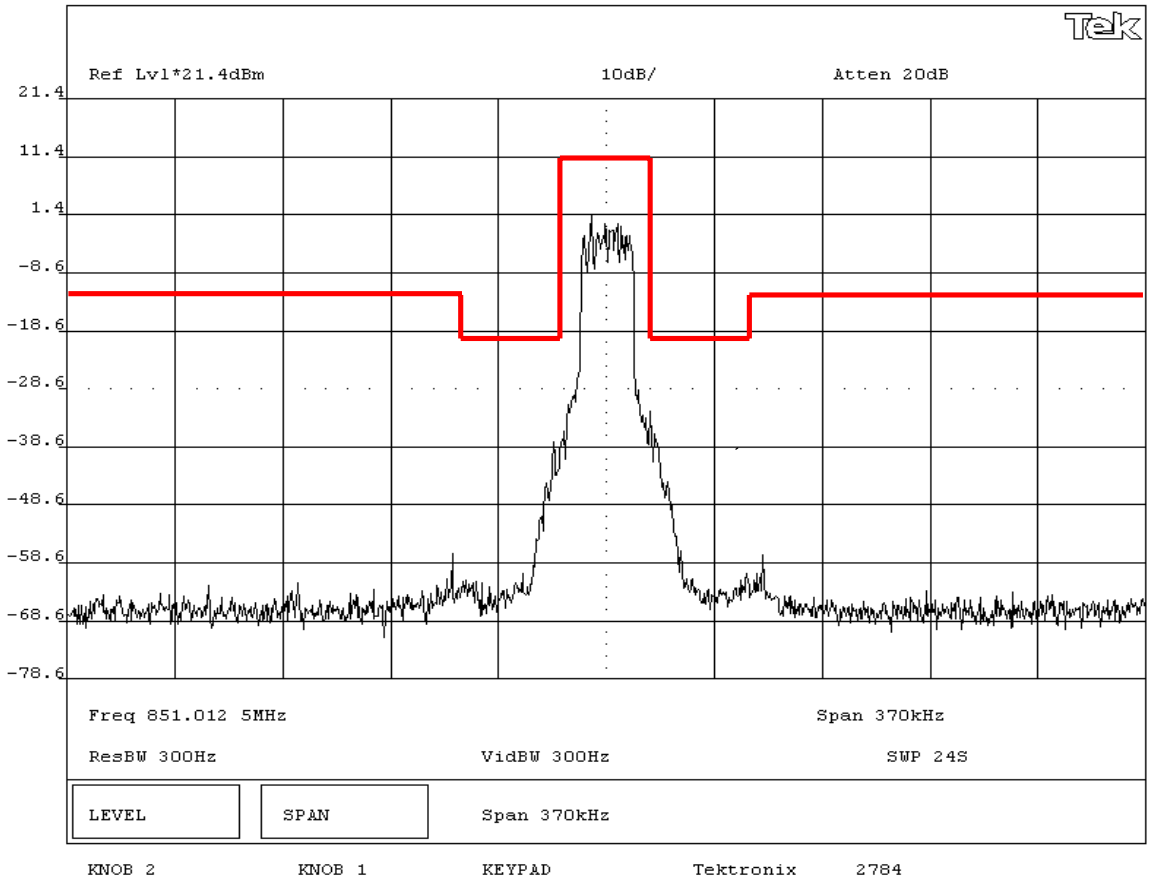
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Lowest Channel @ Highest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	iDEN Radio			Work Order:	RAFN0007
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Customer Ref. No.:	N/A	Power:	120 V, 60 Hz (host)	Job Site:	Customer

TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is 11.4 dBm

RESULTS AMPLITUDE

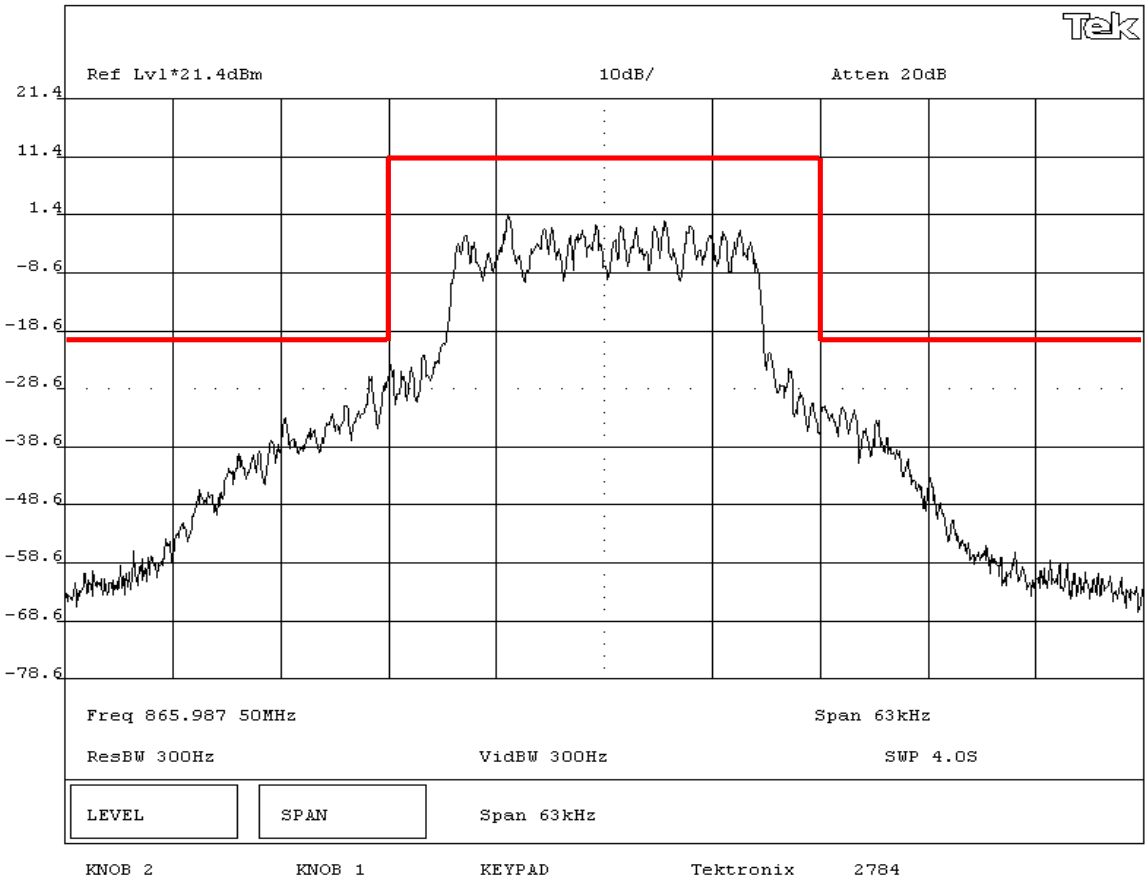
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Middle Channel @ Highest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

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Customer Ref. No.:	N/A	Power:	120 V, 60 Hz (host)	Job Site:	Customer

TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is 11.4 dBm

RESULTS AMPLITUDE

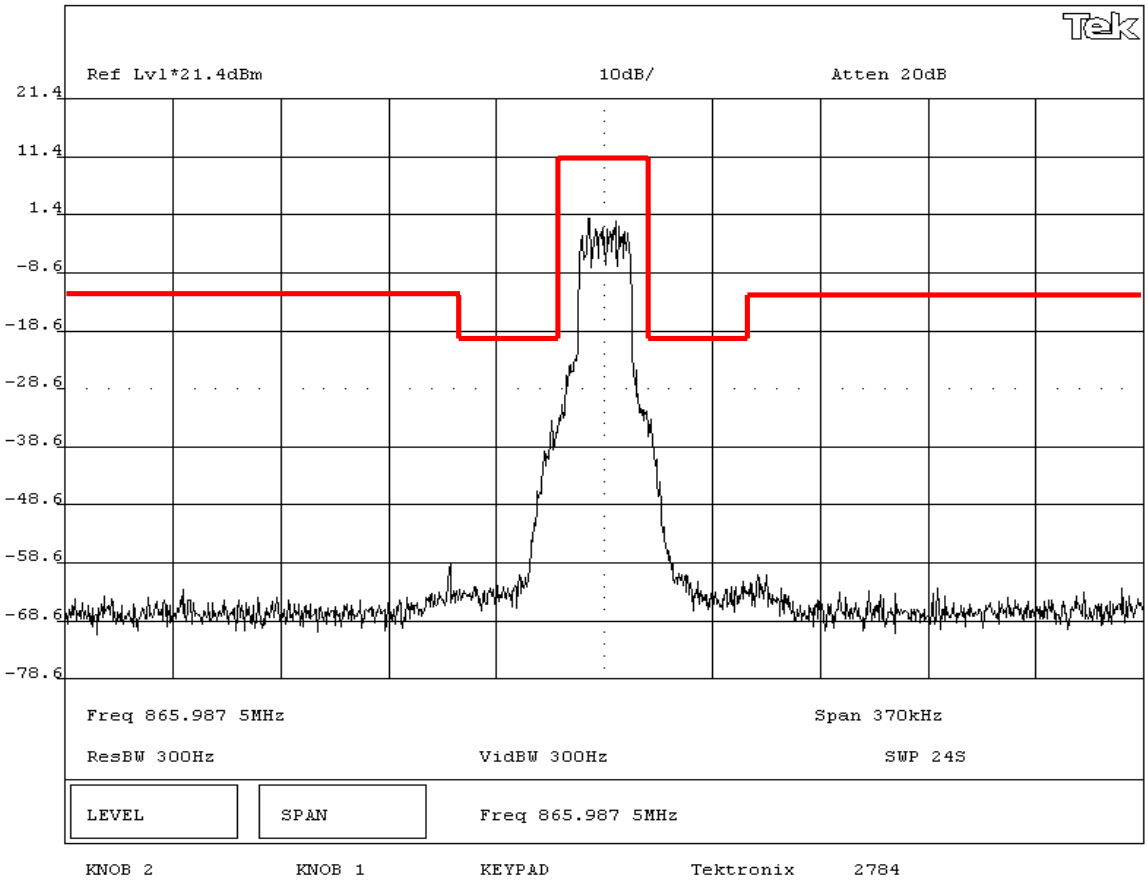
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Middle Channel @ Highest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

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Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

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RESULTS AMPLITUDE

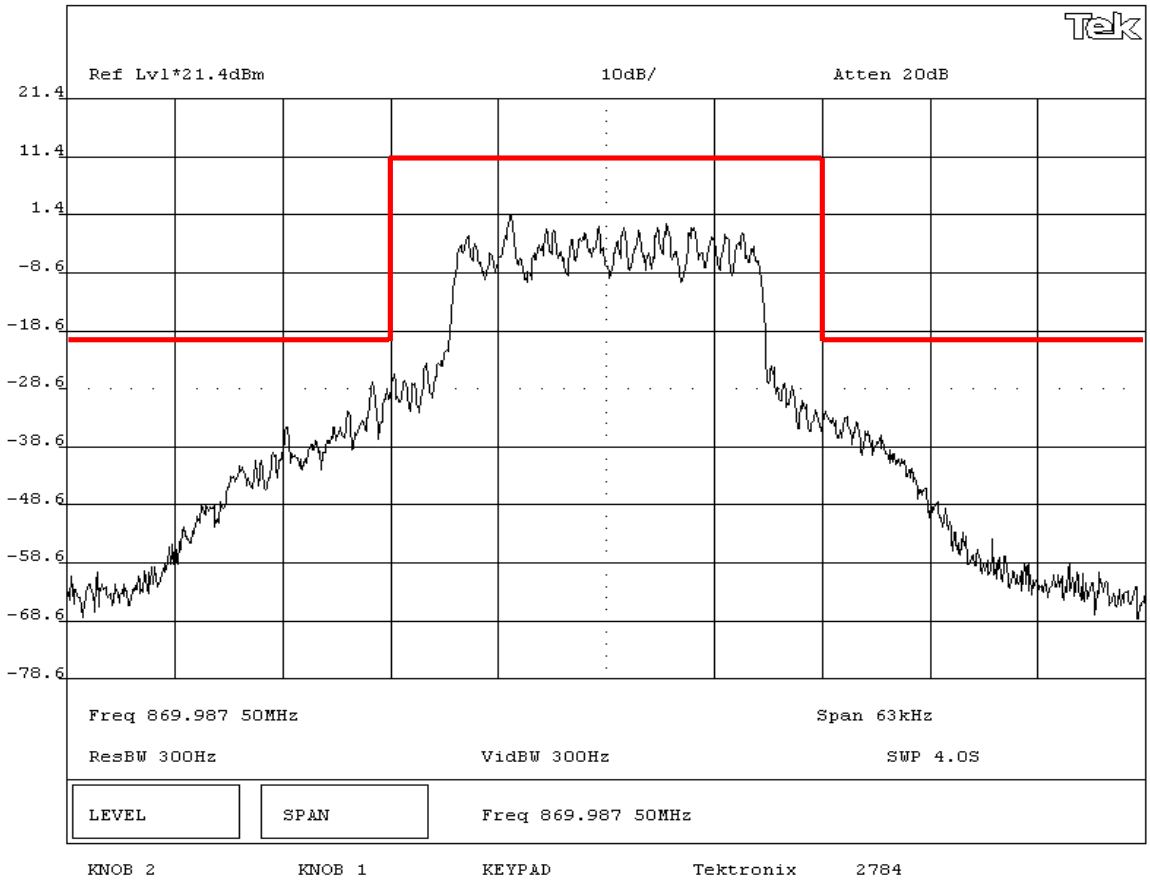
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Highest Channel @ Highest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

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TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

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RESULTS — **AMPLITUDE**

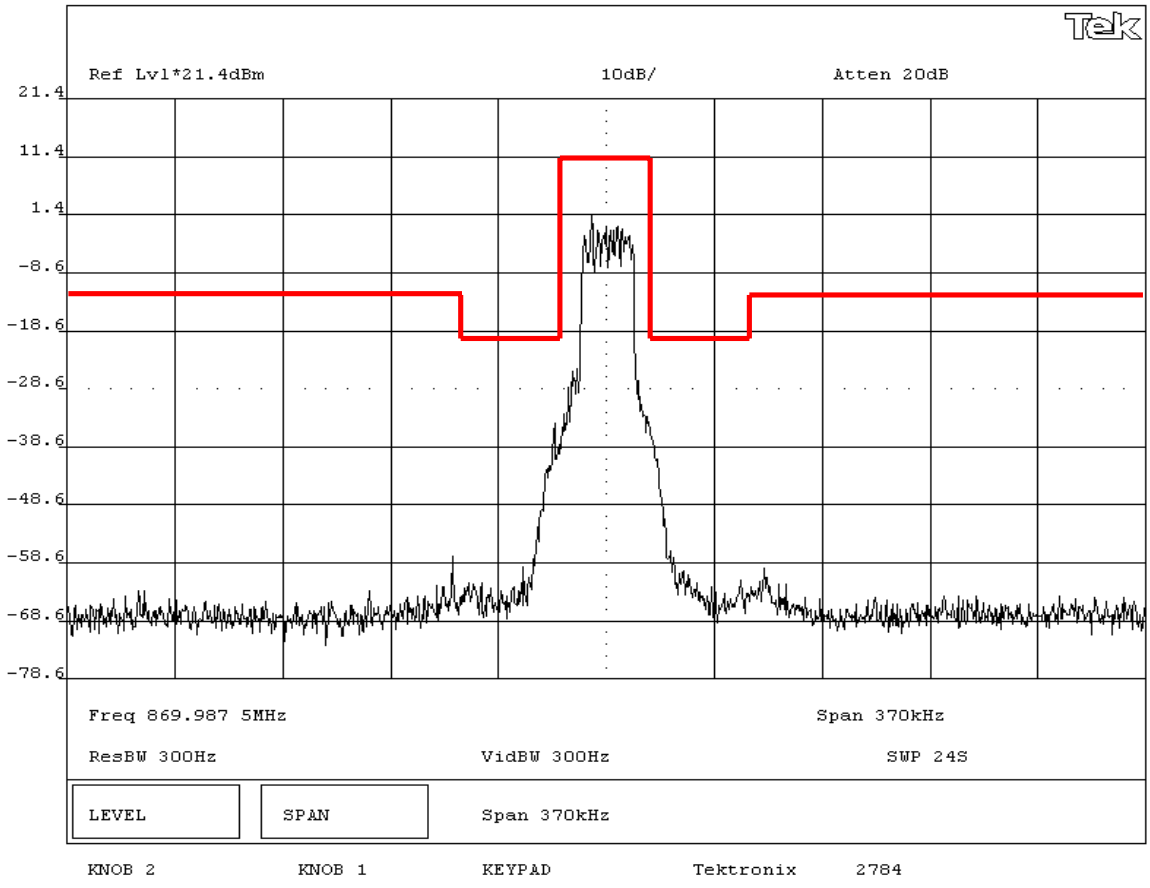
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Highest Channel @ Highest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

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TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is -24.6 dBm

RESULTS AMPLITUDE

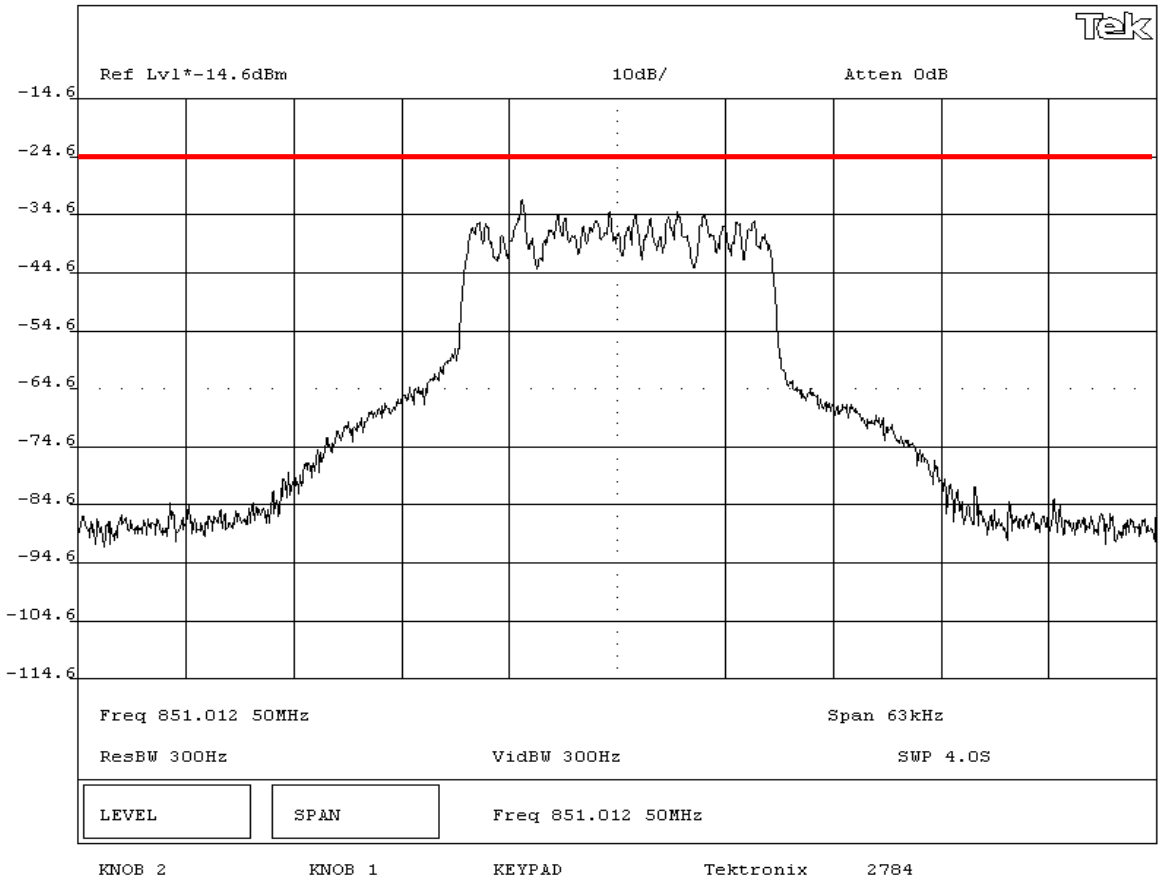
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Lowest Channel @ Lowest Output Power



NORTHWEST
EMC

EMISSIONS DATA SHEET

Rev BETA
01/30/01

EUT:	iDEN Radio			Work Order:	RAFN0007
Serial Number:	148			Date:	08/22/01
Customer:	RadioFrame Networks			Temperature:	23 degrees C
Attendees:	Dean Busch	Tested by:	Greg Kiemel	Humidity:	38% RH
Customer Ref. No.:	N/A	Power:	120 V, 60 Hz (host)	Job Site:	Customer

TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is -24.6 dBm

RESULTS — **AMPLITUDE**

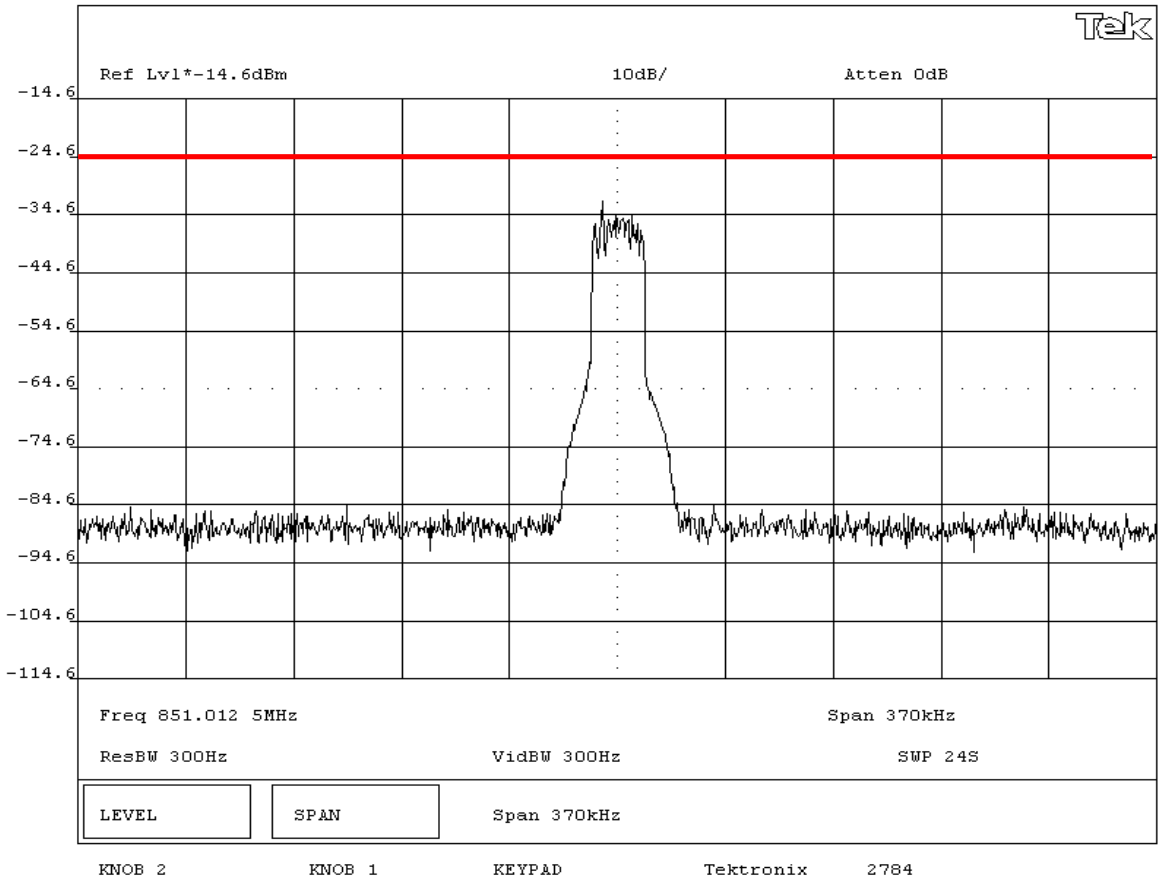
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Lowest Channel @ Lowest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

Rev BETA 01/30/01

EUT:	iDEN Radio			Work Order:	RAFN0007
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Customer:	RadioFrame Networks			Temperature:	23 degrees C
Attendees:	Dean Busch	Tested by:	Greg Kiemel	Humidity:	38% RH
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TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is -24.6 dBm

RESULTS AMPLITUDE

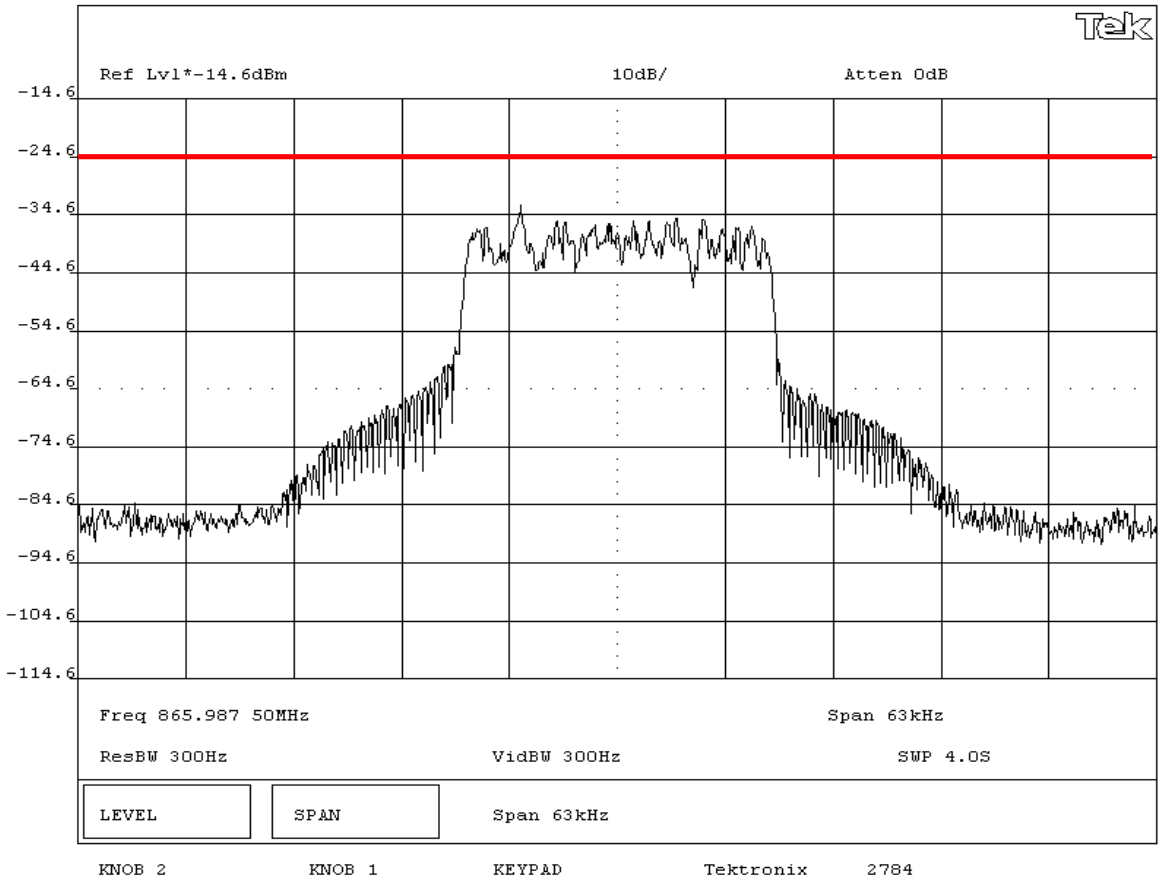
Pass

SIGNATURE

Tested By: A.J. U.K-P

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Middle Channel @ Lowest Output Power



NORTHWEST EMC

EMISSIONS DATA SHEET

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Serial Number:	148			Date:	08/22/01
Customer:	RadioFrame Networks			Temperature:	23 degrees C
Attendees:	Dean Busch	Tested by:	Greg Kiemel	Humidity:	38% RH
Customer Ref. No.:	N/A	Power:	120 V, 60 Hz (host)	Job Site:	Customer

TEST SPECIFICATIONS

Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is -24.6 dBm

RESULTS AMPLITUDE

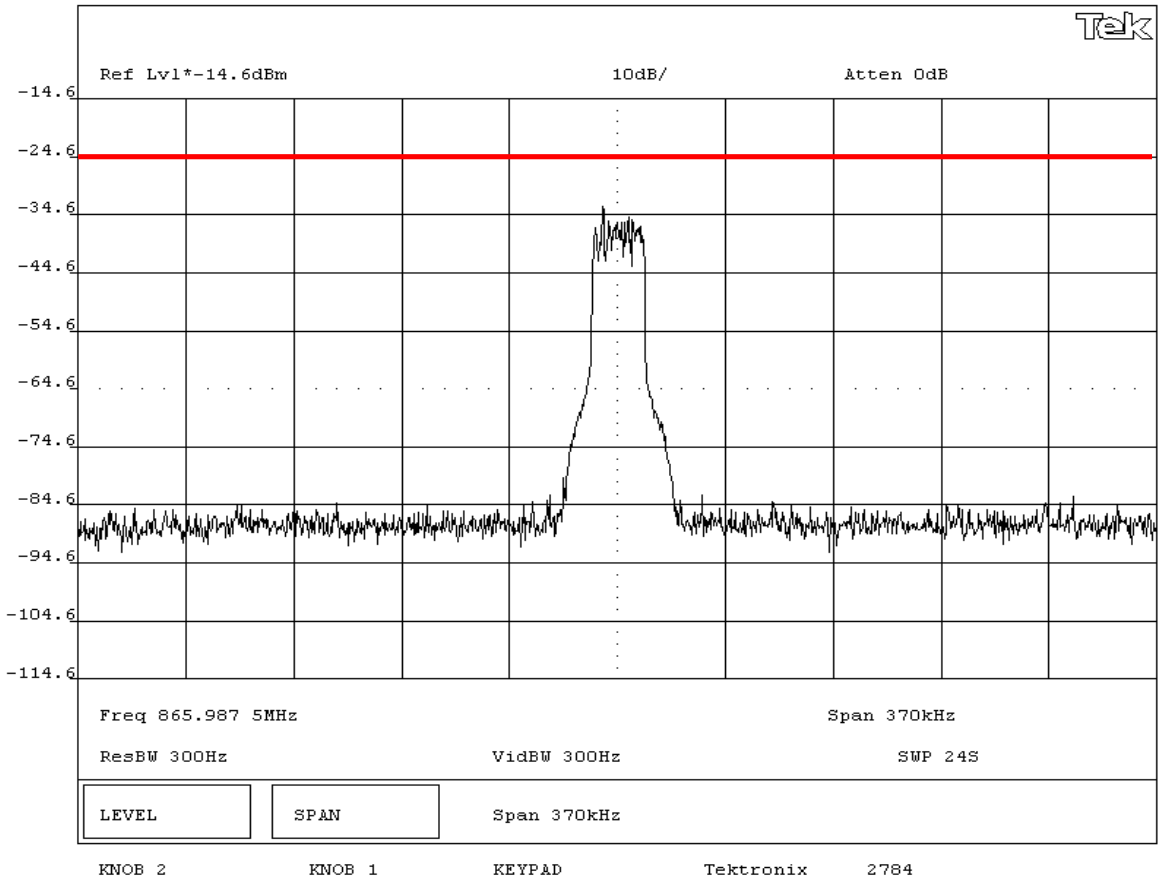
Pass

SIGNATURE

Tested By: _____

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Middle Channel @ Lowest Output Power



NORTHWEST EMC

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Specification:	47 CFR 90.691	Year:	Most Current	Method:	TIA / EIA - 603	Year:	Most Current

SAMPLE CALCULATIONS

COMMENTS

EUT OPERATING MODES

Modulated by 16 QAM.

DEVIATIONS FROM TEST STANDARD

None

REQUIREMENTS

Maximum level of any spurious emission must be attenauted below the specified emission mask. 0 dB reference is -24.6 dBm

RESULTS — **AMPLITUDE**

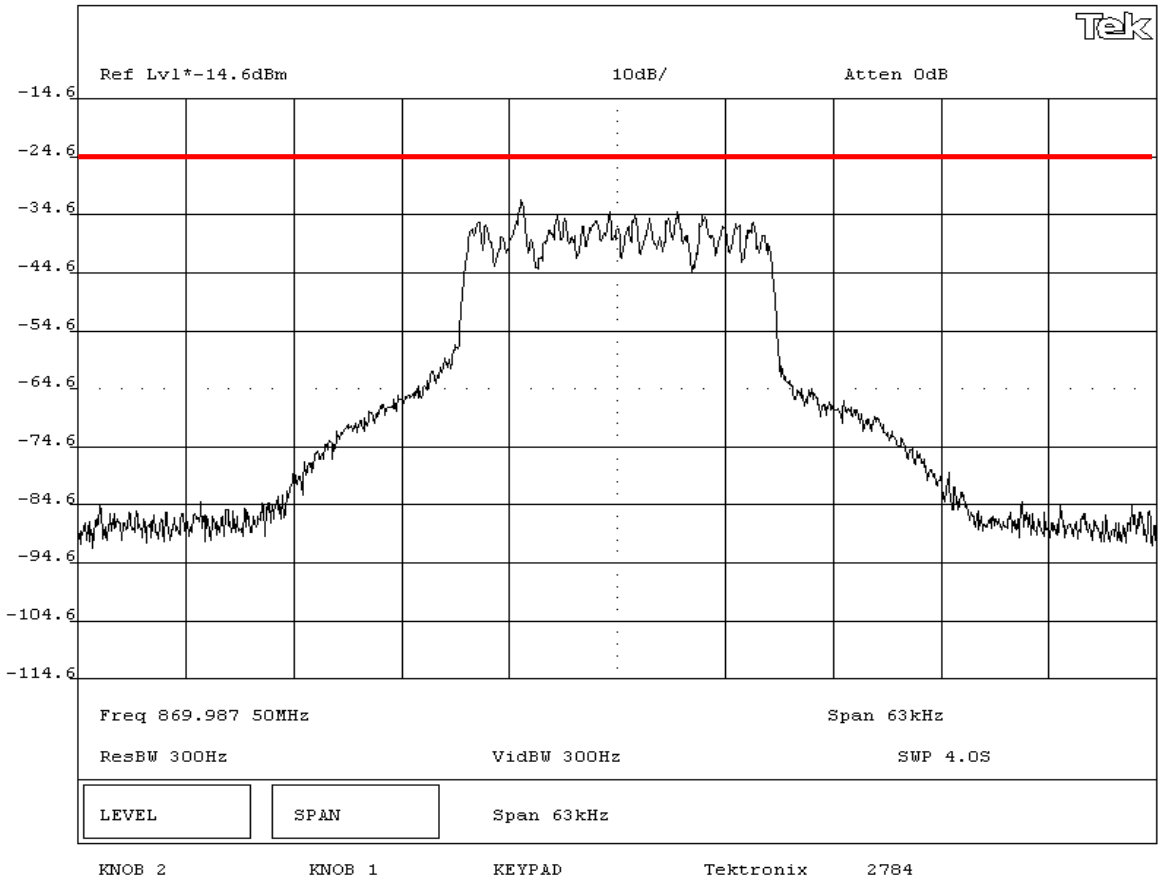
Pass

SIGNATURE

Tested By: A. J. Kiemel

DESCRIPTION OF TEST

Emission Mask for EA-based Systems: Highest Channel @ Highest Output Power



NORTHWEST EMC

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Serial Number:	148			Date:	08/22/01
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