SENTON

■ EMV-Prüfzentrum ■ EMI/EMC-Testcenter ■

Straubing, 21 February 2003

T E S T - R E P O R T

No. 56408-20818

for

AW-8H

Wireless microphone transmitter

Applicant:	SEKAKU Electron Industry Co. Ltd.
Purpose of testing:	To show compliance with FCC Code of Federal Regulations, Part 74 Subpart H, section 74.861

Table of Contents

1. Administrative Data

Test item (EUT)	
Type designation	AW-8H
Serial number(s):	001
Type of equipment:	Wireless microphone transmitter
Parts/accessories:	---
FCC-ID:	H38xxxxx
Technical data	
Frequency range	794 – 805 MHz
Operational frequency	794.300 MHz, 799.600 MHz, 804.300 MHz
Type of modulation	150KF3E
Pulse frequency	N/A
Pulse width	N/A
Antenna	Integrated
Power supply	9 V Battery
Applicant: (full address)	SEKAKU Electron Industry Co. Ltd. No. 1 Lane 17, Sec. 2, Han Shi West Road Taichung 401, Taiwan, R.O.C.
Contract identification:	---
Contact person:	Joan Wu
Manufacturer:	SEKAKU Electron Industry Co. Ltd.
Application details	
Receipt of EUT:	16 December 2003
Date of test:	21 February 2003
Note:	
Responsible for testing:	Johann Roidt
Responsible for test report:	Johann Roidt

2. Identification of Test Laboratory

DETAILS OF THE TEST LABORATORY	
COMPANY NAME:	Senton GmbH EMI/EMC Test Center
ADDRESS:	Aeussere Fruehlingsstrasse 45 D-94315 Straubing Germany
LABORATORY ACCREDITATION:	DAR-Registration No. TTI-P-G 062/94-40
FCC TEST SITE LISTING	
INDUSTRY CANADA TEST SITE REGISTRATION	
NAME FOR CONTACT PURPOSES:	Mr. Johann Roidt
TELEPHONE: (+49) (0)9421 5522-0	FAX: (+49) (0)9421 5522-99

PERSONNEL INVOLVED IN THIS TEST REPORT	
TECHNICAL DIRECTOR:	 Mr. Johann Roidt
RESPONSIBLE FOR TESTING:	Mr. Johann Roidt
RESPONSIBLE FOR TEST REPORT:	Mr. Johann Roidt

SUMMARY OF TEST RESULTS
The tested sample complies with the requirements set forth in the **Code of Regulations Part 15 Subpart H, Section § 74.861 of the Federal Communication Commission (FCC.**

3. Operation Mode of EUT

Transmitter operating continuously,
full tests were performed on lowest, middle and highest RF channel.

With battery supply 9.00 V DC

4. Configuration

Configuration of the EUT
Not applicable

Cables connected to the EUT
Not applicable

Peripheral devices connected to the EUT
Not applicable

5. Measuring Methods

5.1. Maximum Transmitter Power (§ 2.1046 (a), 74.861 (e))

5.1.1. Conducted Maximum Transmitter Power

Rules and Specifications:	Sections 2.1046 (a)
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.11
Test Conditions:	As indicated below

Measurement Procedure:
A spectrum analyzer / EMI test receiver is connected to the output of the transmitter power amplifier (conducted measurement) via dummy load while EUT was operating in transmit mode using the assigned frequency. The trace mode of the spectrum analyzer was set to max hold with: RBW = 100 kHz, VBW = 100 kHz, span = 1 MHz, sweep = 20 ms (auto mode)

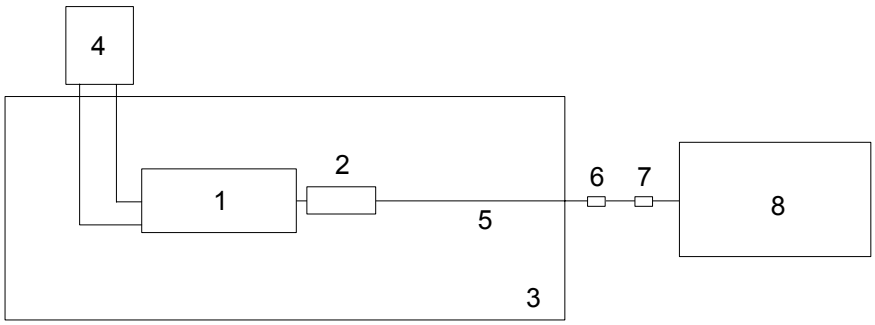


Figure 1: Measurement setup for testing on antenna connector

Test equipment used (see equipment list for details):
02, 18, 51, 69, 70, 71

5.1.2. Radiated Maximum Transmitter Power

Radiated Maximum Transmitter Power was measured with detector-function of the spectrum analyzer set to positive peak and trace mode max hold:
RBW = 100 kHz, VBW = 100 kHz, span = 1 MHz, sweep = 15 s

For measurement setup and procedure see section 6.2

5.2. Mean power of emissions 30 MHz – 8.2GHz (§ 74.861.e.6.iii)

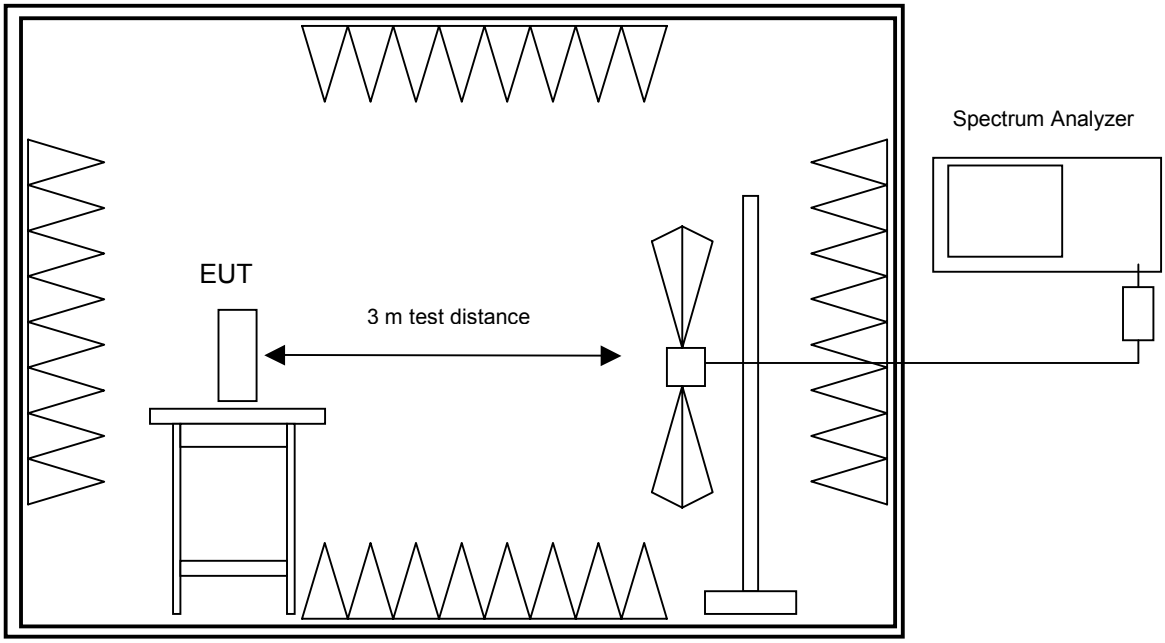
Rules and Specifications:	Sections 2.1053
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.11
Test Conditions:	As indicated below

Measurement Procedure:

Radiated emissions were measured over the frequency range from 30 MHz to 1 GHz. For final testing the detector-function of the spectrum analyzer was set to positive peak and trace mode max hold:
RBW = 3 kHz, VBW = 10 kHz, span = 20 kHz, sweep = 10 s

Measurements were made in both the horizontal and vertical planes of polarization.
Preliminary scans were taken in a semi-anechoic room using a spectrum analyzer with the detector function set to peak and resolution bandwidth set to 100 kHz. All tests were performed at a test-distance of 3 meters. Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing. For final testing an open-area test-site was used. During the tests the EUT was rotated all around and the receiving-antenna was raised and lowered from 1 meter to 4 meters to find the maximum levels of emissions. The cables and equipment were placed and moved within the range of position likely to find their maximum emissions.

Final testing was performed referring to substitution method as described in TIA/EIA-603, section 2.2.12 ("Radiated Spurious Emissions").



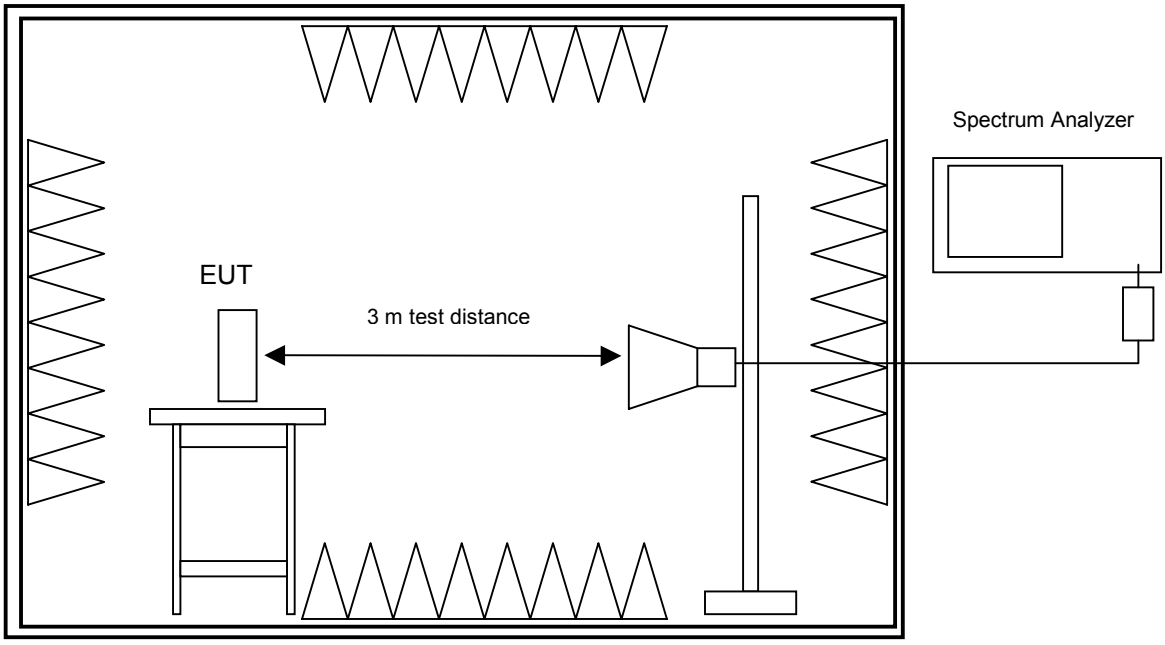
Fully anechoic chamber

Test equipment used (see equipment list for details):
01, 06, 12, 15, 38, 39, 40, 41, 55, 58, 61, 64, 66

5.3. Radiated Emission 1 GHz – 8.2 GHz (§ 74.861.e.6.iii)

Rules and Specifications:	Sections 2.1053
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.11
Test Conditions:	As indicated below

Measurement Procedure:
Radiated emissions are measured in the frequency range 1 GHz to 2.5 GHz. Resolution and video bandwidth of the spectrum analyzer are set to 1 MHz. Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing. Additional measurements are performed at critical frequencies with reduced span. EUT is rotated all around and receiving antenna is raised and lowered to find the maximum levels of emission. The cables and equipment are placed and moved within the range of position likely to find their maximum emissions. All tests are performed in a fully-anechoic chamber with a test-distance of 3 meters. If required preamplifiers are used for the whole frequency range. Special care is taken to avoid overload in transmit mode (using appropriate attenuators and filters if necessary).



Fully anechoic chamber

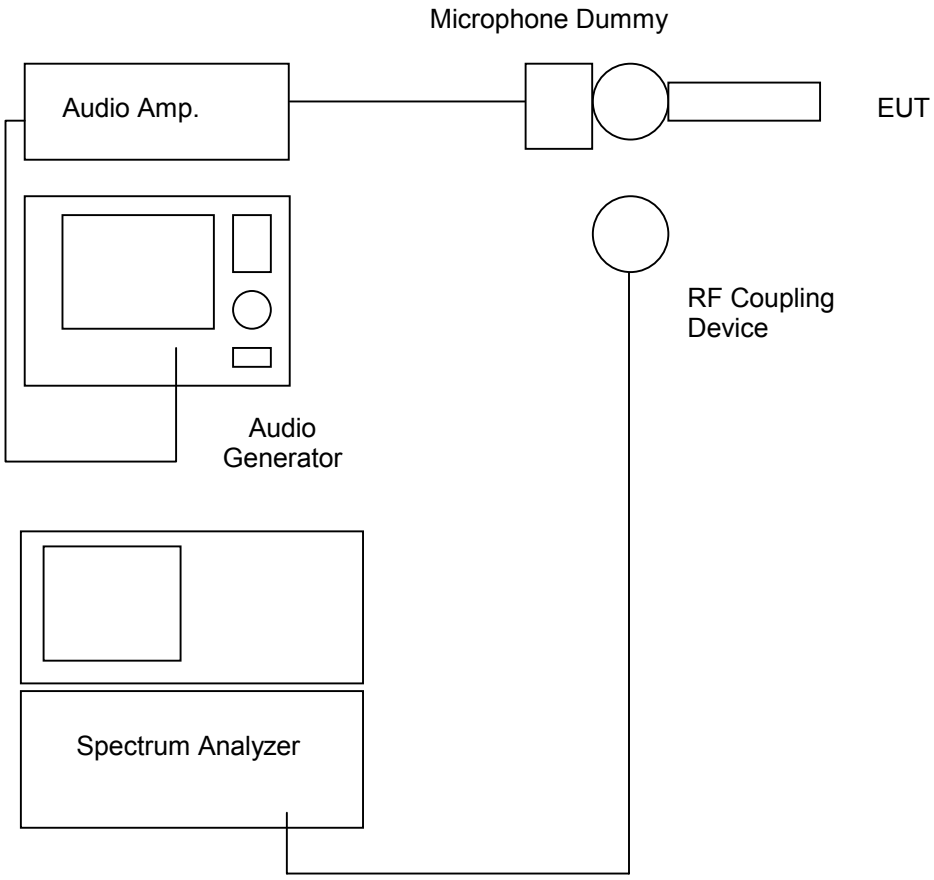
Test equipment used (see equipment list for details):
02, 13, 14, 16, ,42, 44, 45, 57, 64

5.4. Emission Masks (Occupied Bandwidth) § 2.1049 (c) (1)

Rules and Specifications:	Sections 2.1049 (c) (1),
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.11
Test Conditions:	As indicated below

Measurement Procedure:	1. The EUT and equipment were set up as shown below 2. The audio signal was adjusted for 16 dB above 50 % of nominal modulation at the frequency of maximum response. 3. The occupied bandwidth was measured with the Spectrum Analyzer set as shown on the test charts.

Test Setup

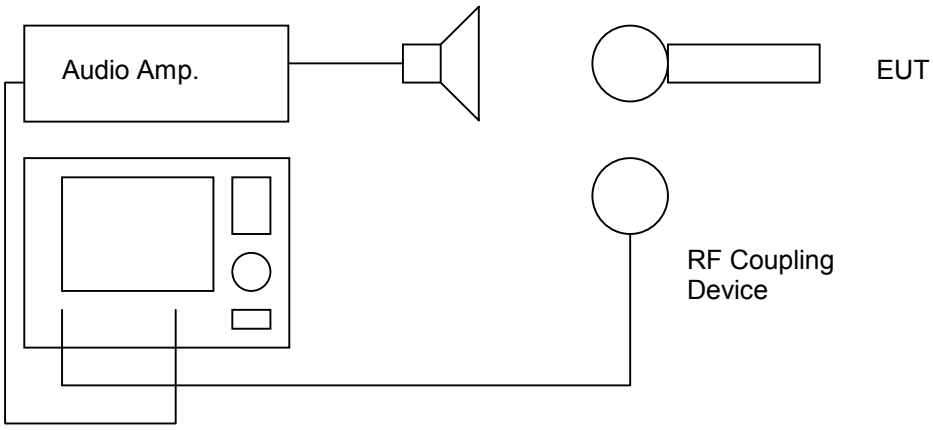


5.5. Audio Frequency Response, 2.1047 (a)

Rules and Specifications:	Sections 2.1047 (b),
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.3
Test Conditions:	As indicated below

Measurement Procedure:	4. The audio signal was coupled to the microphone via a calibrated loudspeker. 5. The audio signal was adjusted for 20 % nominal modulation at 1 kHz. this was taken as 0 dB reference. 6. With input levels held constant, the audiosignal was varied from 100 Hz to 30 kHz 7. The response was measured and recorded with a CMS 54 Radiocommunication Tester

Test Setup

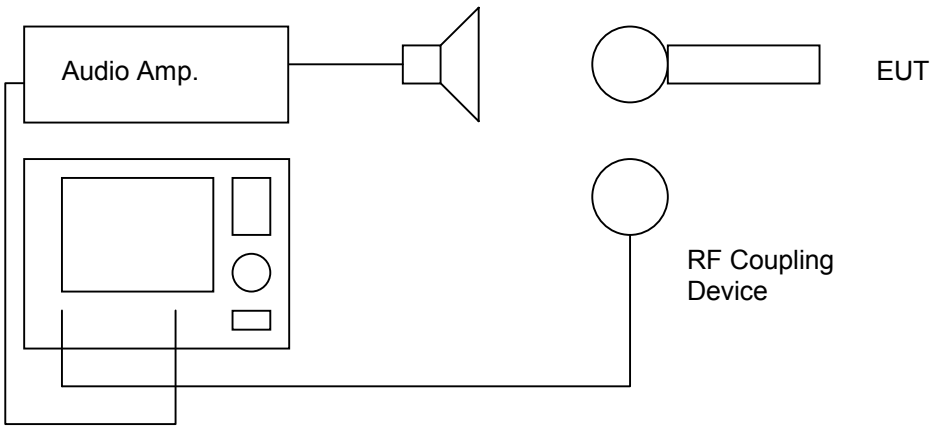


5.6. Modulation Limiting, § 2.1047 (b)

Rules and Specifications:	Sections 2.1047 (b),
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.3
Test Conditions:	As indicated below

Measurement Procedure:	8. The audio signal was coupled to the microphone via a calibrated loudspeker. 9. The modulation response was measured for three frequencies including the frequency with maximum response found during "Audio Frequency Response Test". 10. The input level was varied from 30 % modulation to 20 dB higher than the saturation point. The resulting deviation was measured with a CMS 54 Radiocommunication Tester. 11. Measurements were performed for positive and negative deviation.

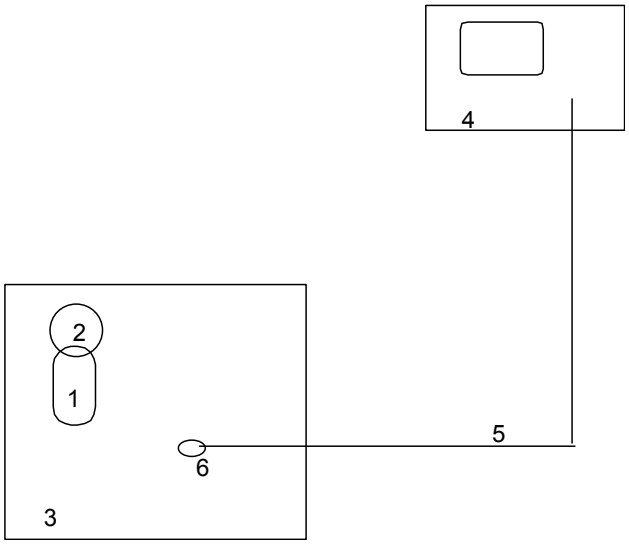
Test Setup



5.7. Frequency Stability (Temperature Variation), § 2.1055 (a) (1)

Rules and Specifications:	Sections 2.1055 (a) (1), 74.861 (e) (4)
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.2
Test Conditions:	As indicated below

Measurement Procedure:	12. The EUT and test equipment were set up as shown below 13. With all power removed, the temperatuere was decreased to –30 °C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute. 14. With power OFF, the temperature was raised in 10 °C steps. The sample was permitted to stabilize at each step for at least half of an hour. Power was applied and the maximum frequency change was noted within one minute. 15. The temperature test were performed for worst case conditions.



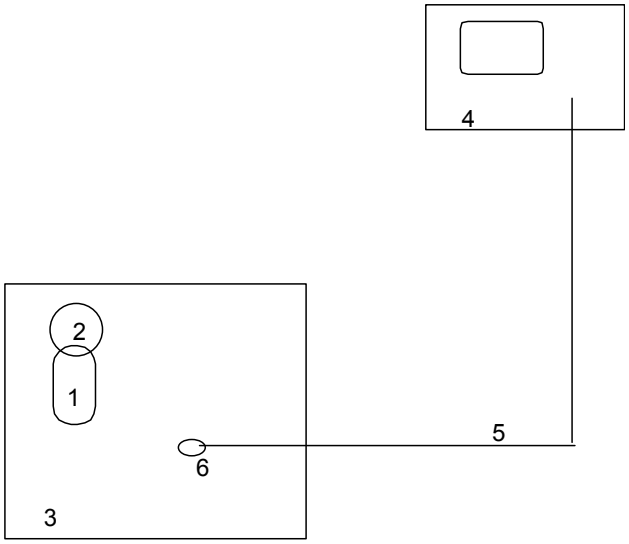
1 Base unit (EUT)
2 RF-antenna (EUT)
3 Temperature test chamber
4 Spectrum analyzer
5 RF cable
6 Test probe

Test equipment used (see equipment list for details):
02, 54, 55

5.8. Frequency Stability (Voltage Variation), § 2.1055 (b) (1)

Rules and Specifications:	Sections 2.1055 (b) (1), 74.861 (e) (4)
Guide:	ANSI/TIA/EIA-603-1992, Paragraph 2.2.2
Test Conditions:	As indicated below

Measurement Procedure:	16. The EUT and test equipment were set up as shown below 17. The temperature was set to 20 °C 18. The supply voltage was varied from 85% to 115% of the nominal voltage measuured at the input of the EUT. 19. The variation in frequency was measured for worst case conditions.



1 Base unit (EUT)
2 RF-antenna (EUT)
3 Temperature test chamber
4 Spectrum analyzer
5 RF cable
6 Test probe

Test equipment used (see equipment list for details):
02, 54, 55

6. Equipment List

To facilitate reference to test equipment used for related tests, each item of test equipment and ancillaries such as cables are identified (numbered) by the Test Laboratory.

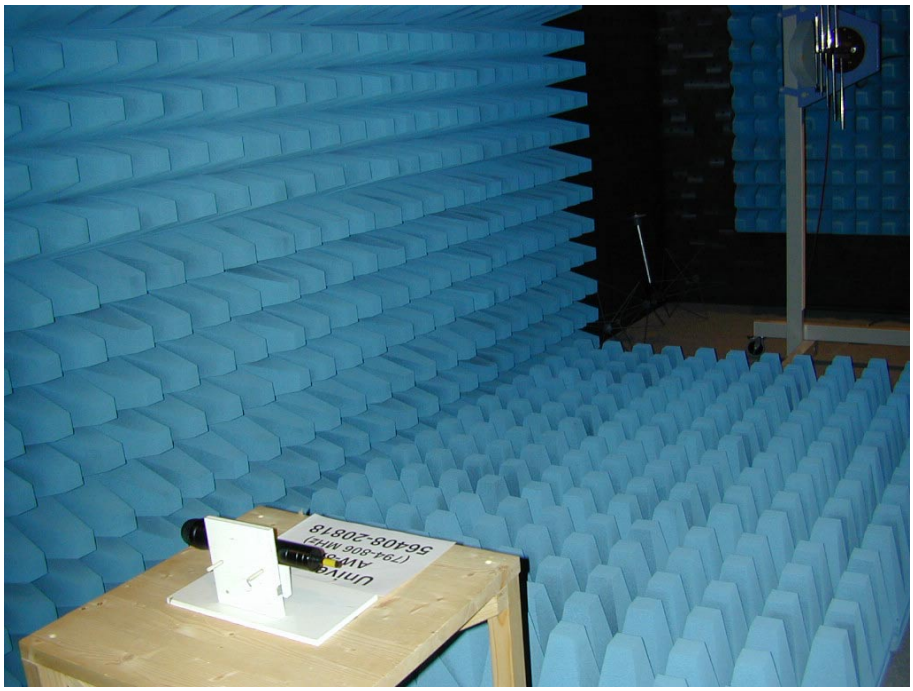
No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	R 3271	05050023	Advantest
02	EMI Test Receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
03	Test Receiver	ESH 3	880112/032	Rohde & Schwarz
04	Test Receiver	ESHS 10	860043/016	Rohde & Schwarz
05	Test Receiver	ESV	881414/009	Rohde & Schwarz
06	Test Receiver	ESVP	881120/024	Rohde & Schwarz
07	Audio Analyzer	UPA	862954	Rohde & Schwarz
08	Power Meter	NRVS	836856/015	Rohde & Schwarz
09	Power Sensor	NRV-Z52	837901/030	Rohde & Schwarz
10	Power Sensor	NRV-Z4	863828/015	Rohde & Schwarz
11	Preamplifier	ESV-Z3	860907/004	Rohde & Schwarz
12	Preamplifier	R14601		Advantest
13	Preamplifier	ACX/080-3030	32640	CTT
14	Preamplifier	ACO/180-3530	32641	CTT
15	Signal Generator	SMS	872166/039	Rohde & Schwarz
16	Signal Generator	HP 8673 D	2930A00966	Hewlett Packard
17	Waveform Generator	HP 33120 A	US34005375	Hewlett Packard
18	Attenuator 20 dB	4776-20	9503	Narda
19	Attenuator 10 dB	4776-10	9412	Narda
20	Pulse Limiter	ESH 3-Z2	1144	Rohde & Schwarz
21	Pulse Limiter	11947 A	3107A00566	Hewlett Packard
22	V-Network	ESH 3-Z5	862770/018	Rohde & Schwarz
23	V-Network	ESH 3-Z5	894785/005	Rohde & Schwarz
24	V-Network	ESH 3-Z5	830952/025	Rohde & Schwarz
25	V-Network	ESH 3-Z6	830722/010	Rohde & Schwarz
26	V-Network	NSLK 8127	8127152	Schwarzbeck
27	V-Network	NNLA 8119	8119148	Schwarzbeck
28	V-Network	SE 01	01	Senton
29	T-Network	ESH 3-Z4	890602/011	Rohde & Schwarz
30	T-Network	ESH 3-Z4	890602/012	Rohde & Schwarz
31	High Impedance Probe	TK 9416	01	Schwarzbeck
32	High Impedance Probe	TK 9416	02	Schwarzbeck
33	Current Probe	ESH 2-Z1	863366/18	Rohde & Schwarz
34	Current Probe	ESV-Z1	862553/3	Rohde & Schwarz

No.	Type	Model	Serial Number	Manufacturer
35	Absorbing Clamp	MDS 21	80911	Lüthi
36	Absorbing Clamp	MDS 21	79690	Lüthi
37	Loop Antenna	HFH2-Z2	882964/1	Rohde & Schwarz
38	Biconical Antenna	HK 116	842204/001	Rohde & Schwarz
39	Biconical Antenna	HK 116	836239/02	Rohde & Schwarz
40	Log. Periodic Antenna	HL 223	841516/023	Rohde & Schwarz
41	Log. Periodic Antenna	HL 223	834408/12	Rohde & Schwarz
42	Horn Antenna	3115	9508-4553	Emco
43	Horn Antenna	3160-03	9112-1003	Emco
44	Horn Antenna	3160-04	9112-1001	Emco
45	Horn Antenna	3160-05	9112-1001	Emco
46	Horn Antenna	3160-06	9112-1001	Emco
47	Horn Antenna	3160-07	9112-1008	Emco
48	Horn Antenna	3160-08	9112-1002	Emco
49	Horn Antenna	3160-09	9403-1025	Emco
50	Digital multimeter	199	463386	Keithley
51	DC Power Supply	NGSM 32/10	203	Rohde & Schwarz
52	DC Power Supply	NGB	2455	Rohde & Schwarz
53	DC Power Supply	NGA	386	Rohde & Schwarz
54	Temperature Test Chamber	HT4010	07065550	Heraeus
55	Cable	RG214	1309	Senton
56	Cable	200CM_001	1357	Rosenberger
57	Cable	150CM_001	1479	Rosenberger
58	Cable Set EG1	RG214	1189 - 1191	Senton
59	Cable Set Cabine 1	RG214		Senton
60	Cable Set Cabine 2	RG214		Senton
61	Cable Set Cabine 3	RG214		Senton
62	Shielded Room	No. 1	1451	Senton
63	Shielded Room	No. 2	1452	Senton
64	Semi-anechoic Chamber	No. 3	1453	Siemens
65	Shielded Room	No. 4	1454	Euroshield
66	Open Area Test Site	EG 1		Senton
67	Test fixture			Senton

7. Photographs Taken During Testing

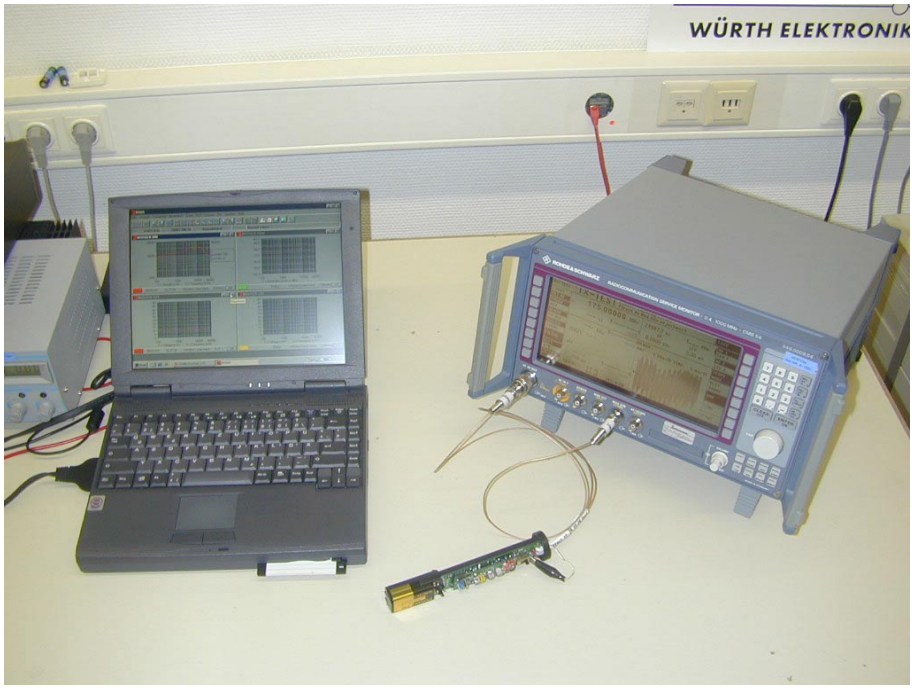
Photos No. 7.1 - 7.2

Test setup for radiated emission measurement 30 MHz – 8 GHz (fully anechoic room)



Photos No. 7.3 - 7.4

Test setup for audio frequency response measurement



8. List of Measurements

FCC Part 15 Subpart H			
Section(s):	**Test**	**Page(s)**	**Result**
	Transmit mode (TX):		
§ 74.861.e.1	Measured unmodulated carrier power		Passed
§ 74.861.e.5	Operating bandwidth		Passed
§ 74.861.e.6	Mean power of emissions 30 MHz - 1 GHz		Passed
§ 74.861.e.6	Mean power of emissions 1 GHz - 2.5 GHz		Passed
§ 74.861.e.4	Frequency tolerance		Passed

Carrier Power Measurement

Rules and Specifications:	2.1046 (a), 74.861 (e) (1)
Guide:	ANSI/TIA/EIA-603-1992, § 2.2.1

Test Site:	Open Field Test Site / Semianechoic Chamber
Distance:	3 Meter
Date of Test:	21 February 2003

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBm)	Correction Factor (dB)	Mean Power (dBm)	Limit (dBm)	Margin (dB)
794.300	AV	Vertical	-38.16	35.74	-2.42	17.0	**19.42**
799.600	AV	Vertical	-38	35.7	-2.3	17.0	**19.3**
804.300	AV	Vertical	-38	35.8	-2.2	17.0	**19.2**

***** = No emissions above noise floor detected**

Sample calculation of erp values:

Mean Power (dBm) = Analyzer Reading (dBm) + Correction Factor (dB)

Test equipment used (see equipment list for details):
02, 13, 14, 16, 38, 40 ,42, 57, 64, 67

Spurious Radiation Measurement 30 MHz – 8GHz

Rules and Specifications:	2.1053 (a), 74.861 (e) (6) (iii)
Guide:	ANSI/TIA/EIA-603-1992, § 2.2.12
Limit:	74.861 (e) (6) (iii)

Tested Frequency:	794.300 MHz
Test Site:	Fully anechoic chamber
Distance:	3 Meter

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBm)	Correction Factor (dB)	Mean Power (dBm)	Limit (dBm)	Margin (dB)
25-8200	AV	Hor/Ver	***				

***** = No emissions above noise floor detected**

Sample calculation of erp values:

Mean Power (dBm) = Analyzer Reading (dBm) + Correction Factor (dB)

Test equipment used (see equipment list for details):
02, 13, 14, 16, 38, 40 ,42, 57, 64, 67

Spurious Radiation Measurement 30 MHz – 1GHz

Rules and Specifications:	2.1053 (a), 74.861 (e) (6) (iii)
Guide:	ANSI/TIA/EIA-603-1992, § 2.2.12
Limit:	74.861 (e) (6) (iii)

Tested Frequency:	799.600 MHz
Test Site:	Fully anechoic chamber
Distance:	3 Meter

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBm)	Correction Factor (dB)	Mean Power (dBm)	Limit (dBm)	Margin (dB)
25-8200	AV	Hor/Ver	***				

***** = No emissions above noise floor detected**

Sample calculation of erp values:

Mean Power (dBm) = Analyzer Reading (dBm) + Correction Factor (dB)

Test equipment used (see equipment list for details):
02, 13, 14, 16, 38, 40 ,42, 57, 64, 67

Spurious Radiation Measurement 30 MHz – 8GHz

Rules and Specifications:	2.1053 (a), 74.861 (e) (6) (iii)
Guide:	ANSI/TIA/EIA-603-1992, § 2.2.12
Limit:	74.861 (e) (6) (iii)

Tested Frequency:	804.300 MHz
Test Site:	Fully anechoic chamber
Distance:	3 Meter

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBm)	Correction Factor (dB)	Mean Power (dBm)	Limit (dBm)	Margin (dB)
25-8200	AV	Hor/Ver	***				

***** = No emissions above noise floor detected**

Sample calculation of erp values:

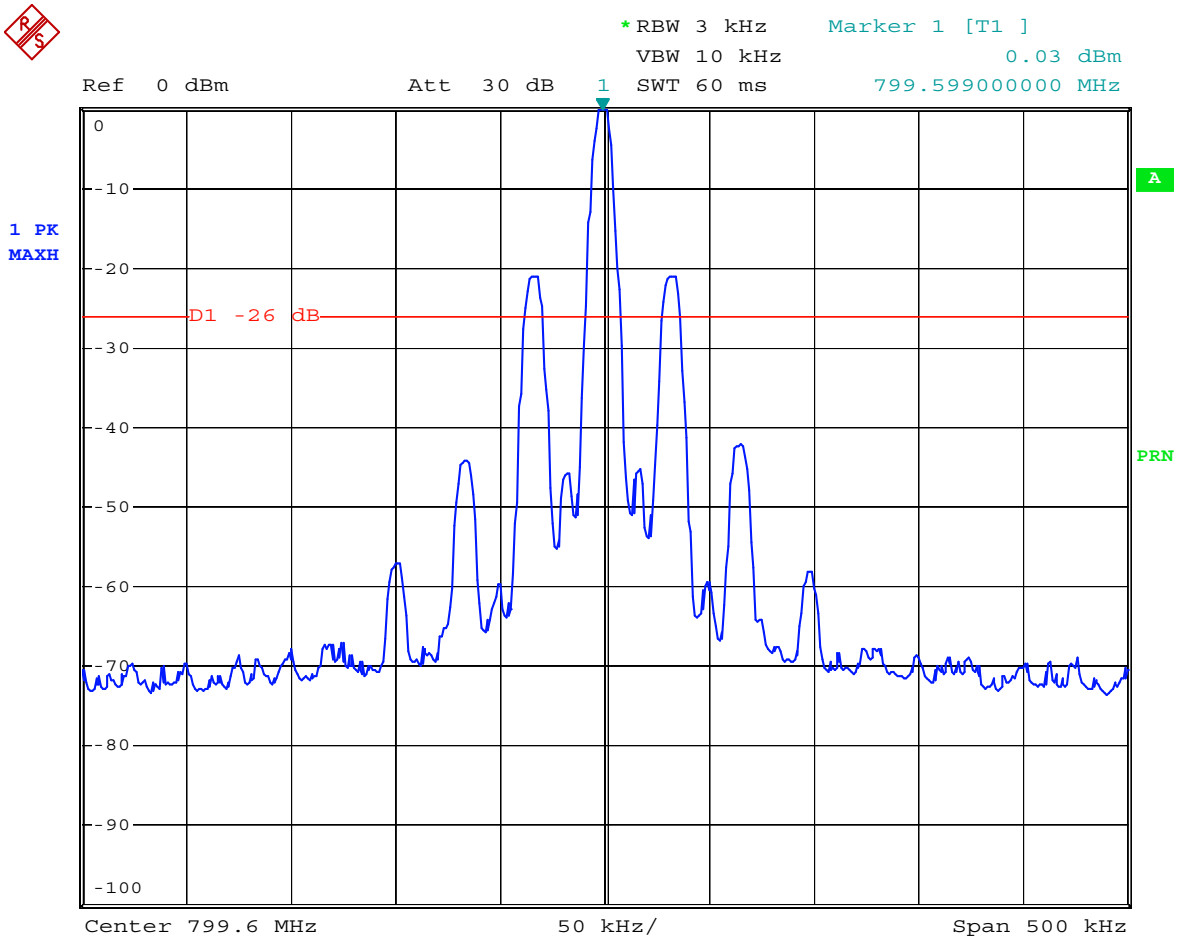
Mean Power (dBm) = Analyzer Reading (dBm) + Correction Factor (dB)

Test equipment used (see equipment list for details):
02, 13, 14, 16, 38, 40 ,42, 57, 64, 67

Measurement of Emission Masks (Occupied Bandwidth

Rules and Specifications:	Sections 2.1049 (c) (1) and 74.861
Limits and Requirements:	ANSI TIA/EIA-603-1992
Nominal Frequency of EUT:	799.600 MHz

Test Procedure:	According to TIA/EIA.603-1992, § 2.2.11



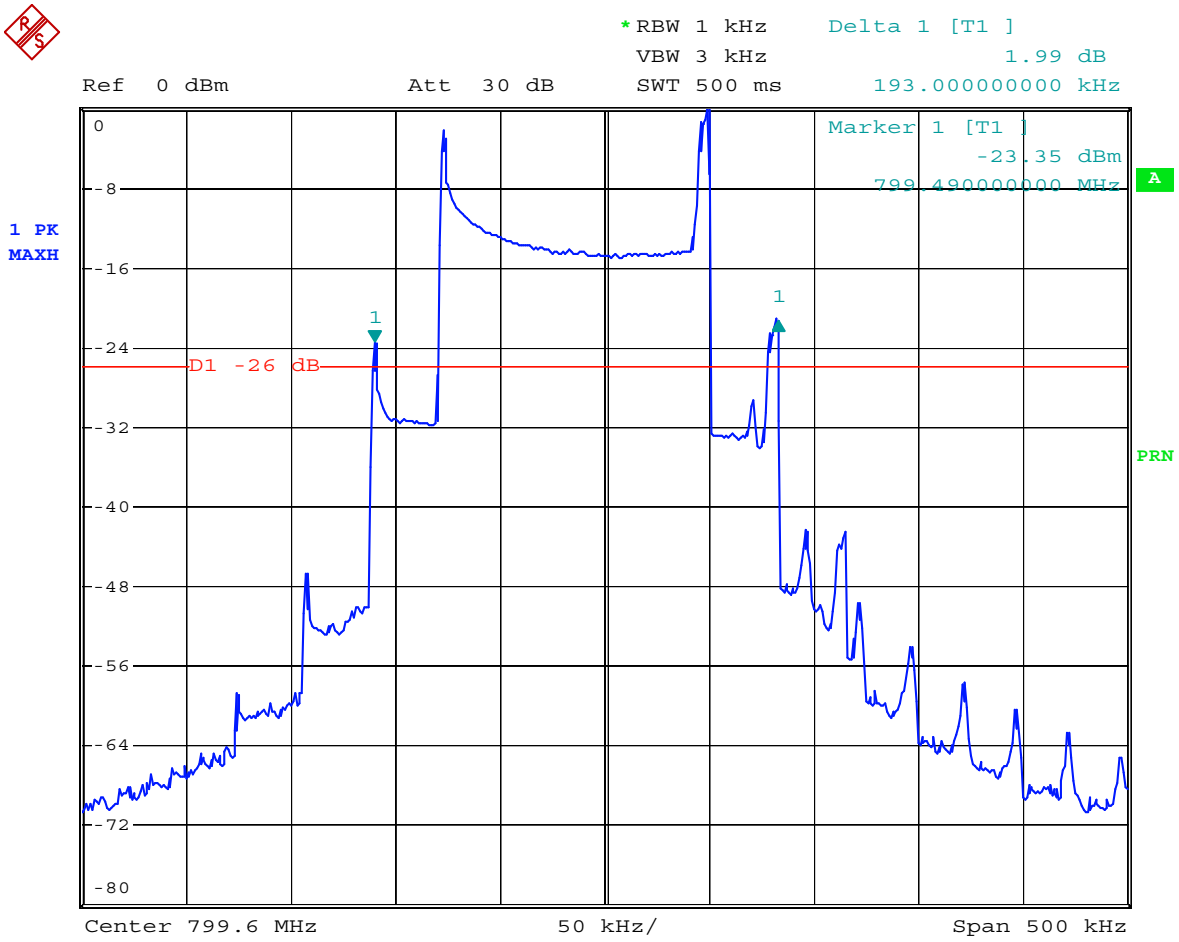
Comment A: UN20818 Occupied Bandwidth, no modulation
Date: 22.FEB.2003 12:51:18

Test Results:	Attached

Measurement of Emission Masks (Occupied Bandwidth

Rules and Specifications:	Sections 2.1049 (c) (1) and 74.861
Limits and Requirements:	ANSI TIA/EIA-603-1992
Nominal Frequency of EUT:	799.600 MHz

Test Procedure:	According to TIA/EIA.603-1992, § 2.2.11



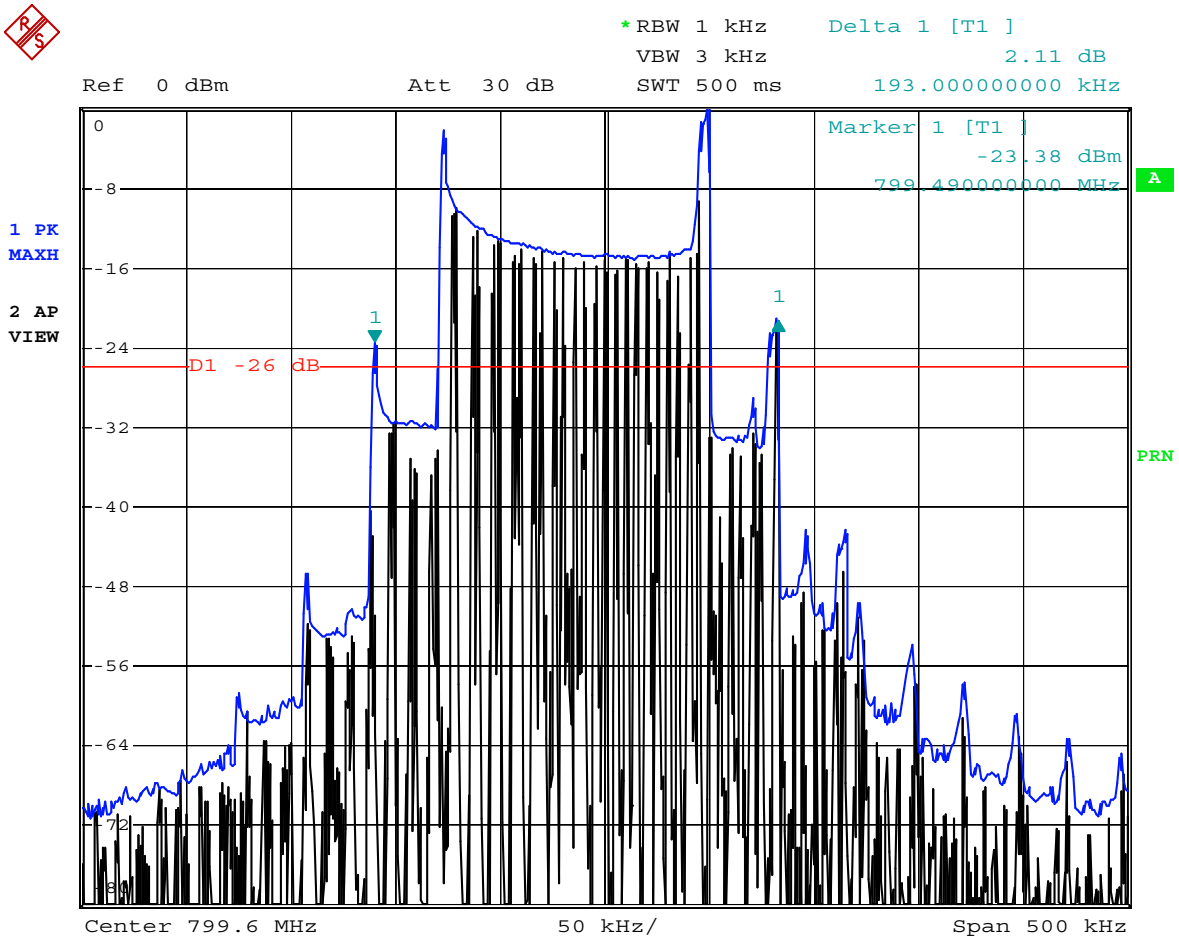
Comment A: UN20818 Occupied Bandwidth, 100 Hz modulation
Date: 22.FEB.2003 12:55:49

Test Results:	Attached

Measurement of Emission Masks (Occupied Bandwidth

Rules and Specifications:	Sections 2.1049 (c) (1) and 74.861
Limits and Requirements:	ANSI TIA/EIA-603-1992
Nominal Frequency of EUT:	799.600 MHz

Test Procedure:	According to TIA/EIA.603-1992, § 2.2.11



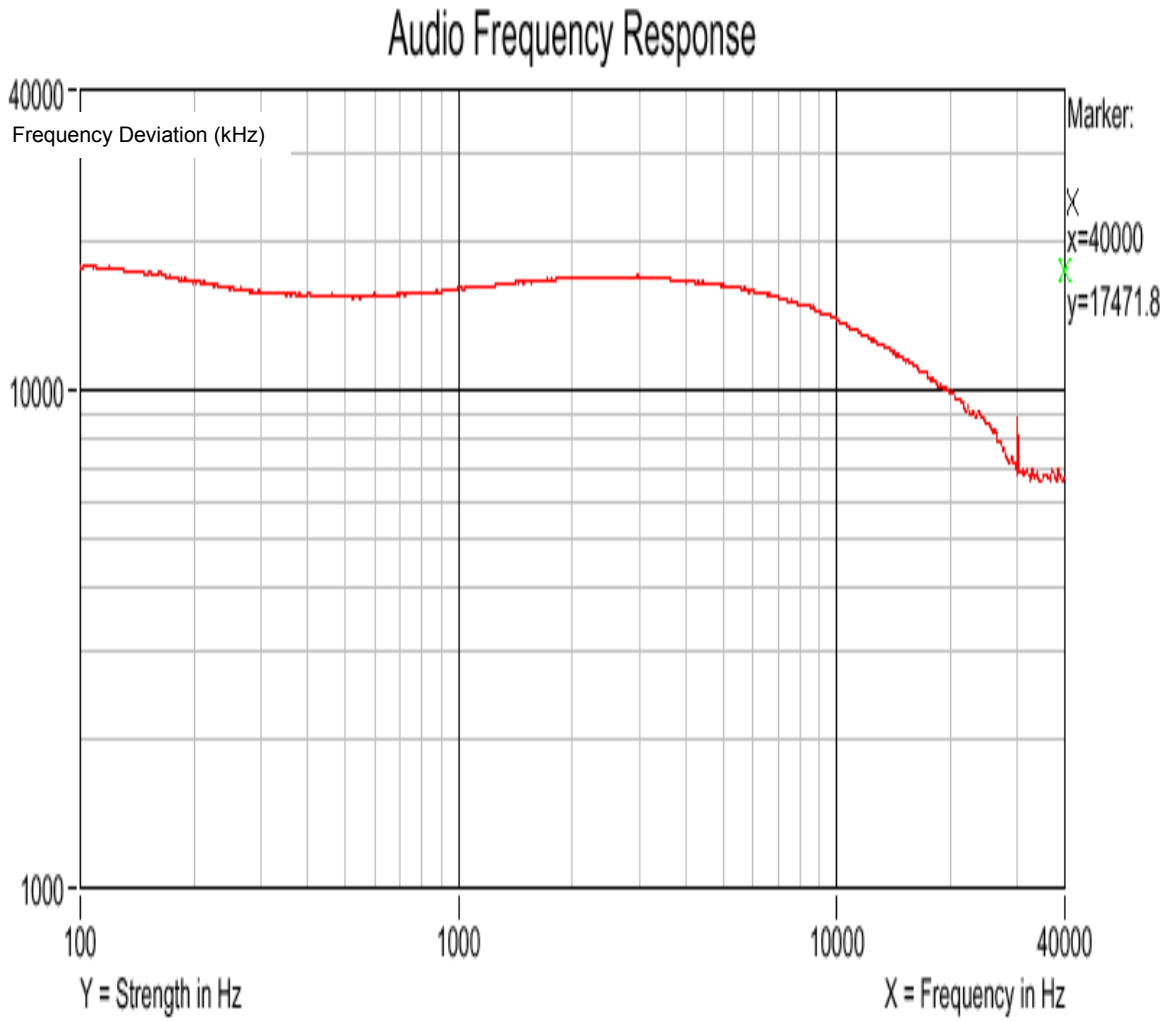
Comment A: UN20818 Occupied Bandwidth, 3 kHz modulation
Date: 22.FEB.2003 12:58:08

Test Results:	Attached

Measurement of Audio Frequency Response

Rules and Specifications:	Sections 2.1047 (a) and 74.861
Limits and Requirements:	ANSI TIA/EIA-603-1992
Nominal Frequency of EUT:	799.600 MHz

Test Procedure:	According to TIA/EIA.603-1992, § 2.2.6
	Note: The audio signal was coupled to the microphone inputof the transmitter via an audio isolation transformer

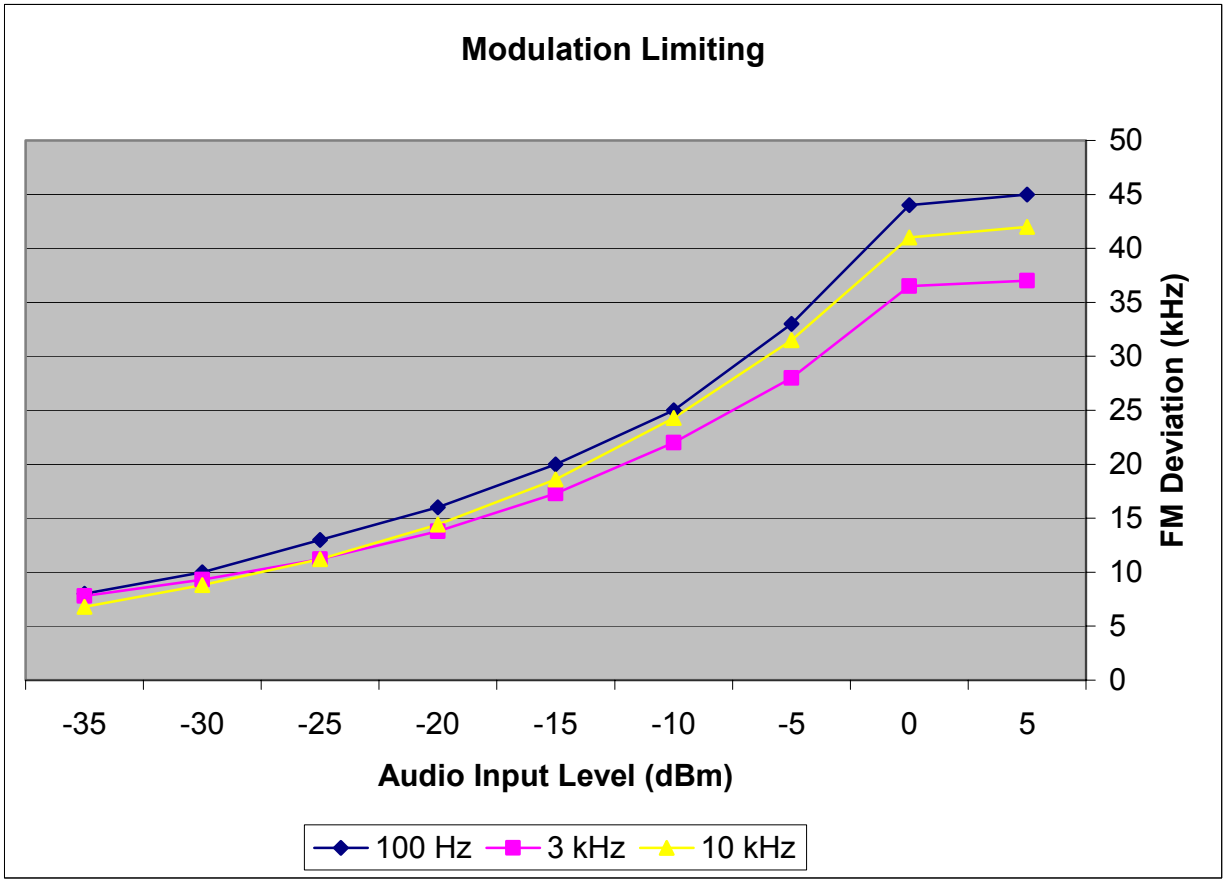


Test Results:	See graph above

Measurement of Modulation Limiting

Rules and Specifications:	Sections 2.1047 (b) and 74.861
Limits and Requirements:	ANSI TIA/EIA-603-1992
Nominal Frequency of EUT:	799,600 MHz

Test Procedure:	According to TIA/EIA.603-1992, § 2.2.3
	Note: The audio signal was coupled to the microphone input of the transmitter via a direct connection



Test Results:	Pass	

Type of Emission

Rules and Specifications:	Sections 2.1047 and 74.861
Limits and Requirements:	ANSI TIA/EIA-603-1992
Nominal Frequency of EUT:	799,600 MHz

	Bn = 2M + 2DK
	M =10 kHz
	D =40 kHz
	K =1
	Bn = 2(10 kHz) + 2(40 kHz) = 20 + 80 = 100 kHz

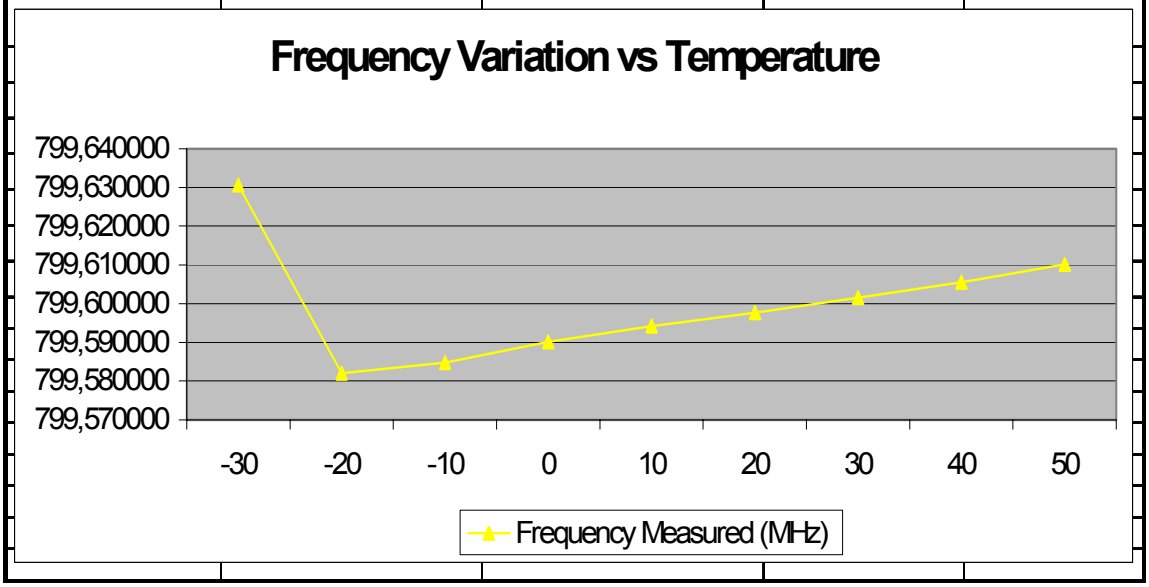
Type of Emission = 100KF3E

Measurement of Frequency Stability vs Temperature

Rules and Specifications:	Section 74.861 (e) (4), 2.1055
Limits and Requirements:	The frequency tolerance of the transmitter shall be 0.005 %
Nominal Frequency of EUT:	799.600 MHz

Temperature Variation Table

Temperature (°C)	Nominal Frequency (MHz)	Frequency Measured (MHz)	Frequency Tolerance (ppm)	Limit (ppm)
-30	799,600000	799,630592	38,26	50
-20	799,600000	799,582102	-22,38	50
-10	799,600000	799,584734	-19,09	50
0	799,600000	799,590086	-12,40	50
10	799,600000	799,594206	-7,25	50
20	799,600000	799,597716	-2,86	50
30	799,600000	799,601592	1,99	50
40	799,600000	799,605506	6,89	50
50	799,600000	799,610154	12,70	50

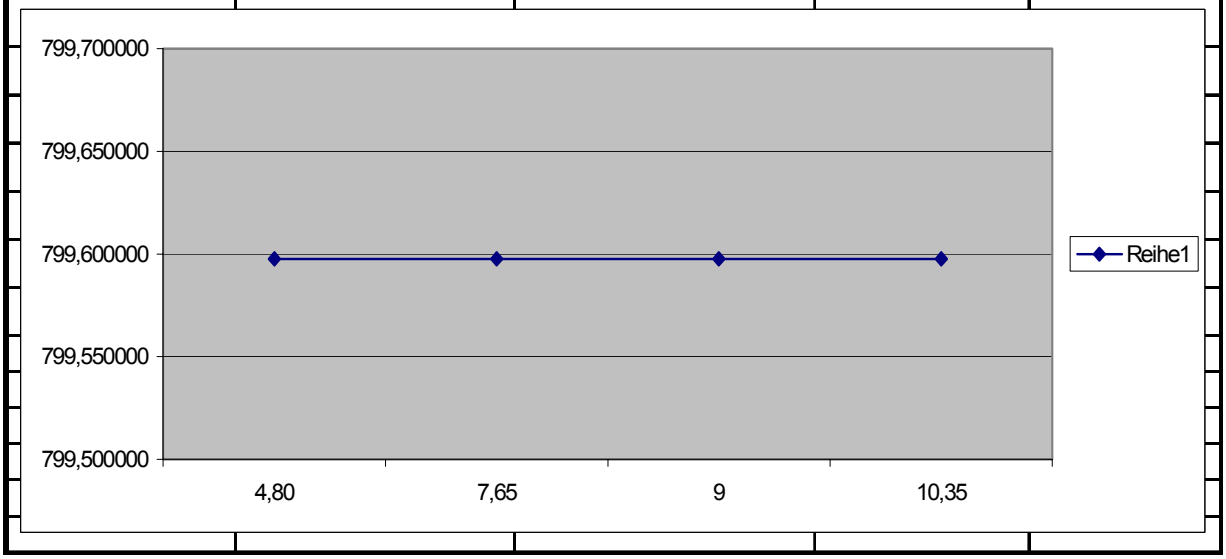


Measurement of Frequency Stability vs Supply Voltage

Rules and Specifications:	Sections 74.861 (e) (4), 2.1055 (d)
Limits and Requirements:	The frequency tolerance of the transmitter shall be 0.005 %
Nominal Frequency of EUT:	799.600 MHz
Battery end-point:	4.80 V

Voltage Variation Table

Supply Voltage (V)	Nominal Frequency (MHz)	Frequency Measured (MHz)	Frequency Tolerance (ppm)	Limit (ppm)
4,80	799,600000	799,597716	-2,86	50
7,65	799,600000	799,597716	-2,86	50
9	799,600000	799,597716	-2,86	50
10,35	799,600000	799,597716	-2,86	50



8. Referenced Regulations

All tests were performed with reference to the following regulations and standards:

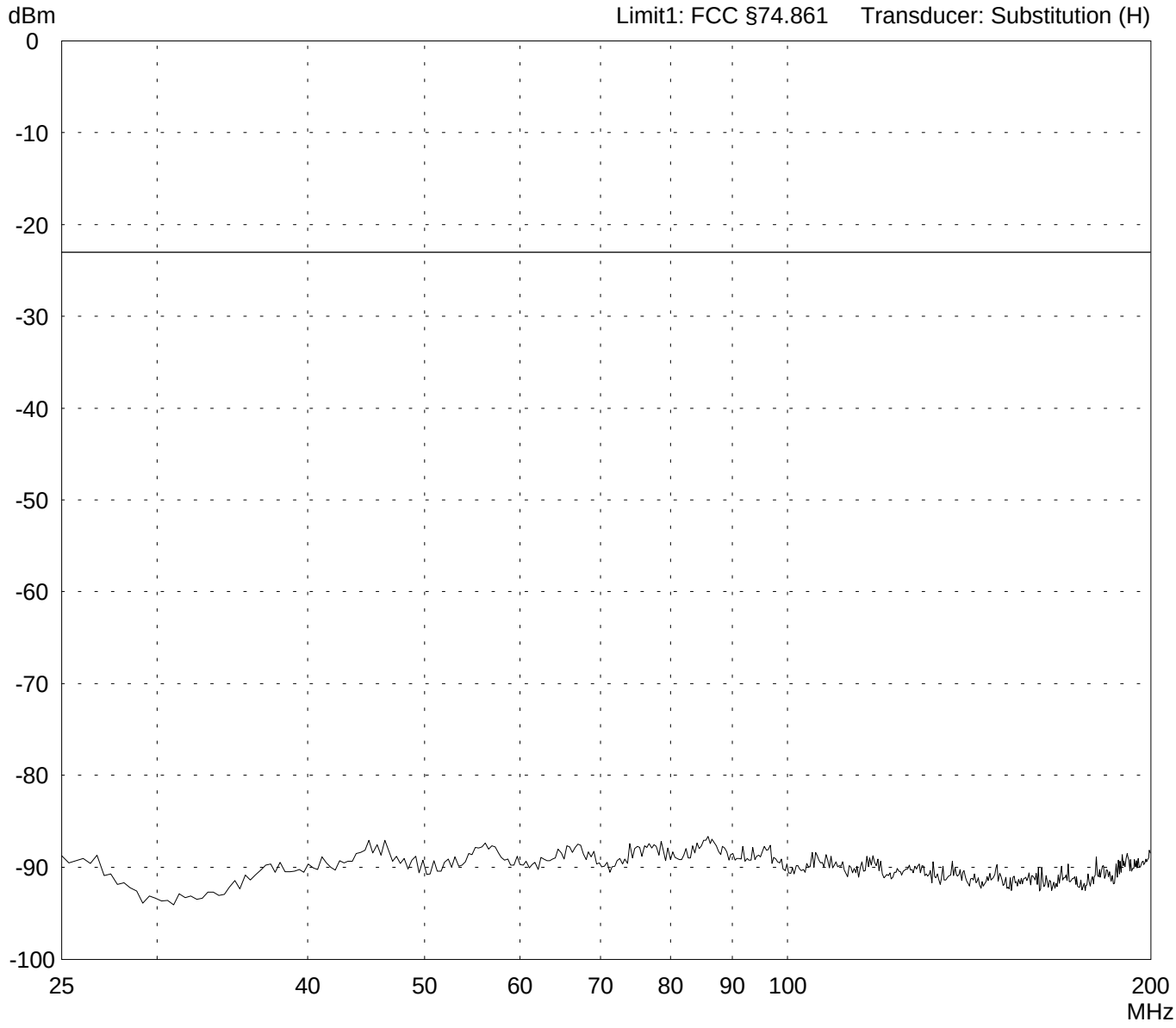
☒	FCC Part 2	Code of Federal Regulations Part 2 Frequency allocationand radio treaty matters; General rules and regulations	October 01, 1999
☐	FCC Part 15 Subpart A	Code of Regulations Part 15 (Radio Frequency Devices), Subpart A (General) of the Federal Communication Commission (FCC)	October 20, 1997
☐	FCC Part 15 Subpart B	Code of Regulations Part 15 (Radio Frequency Devices), Subpart B (Unintentional Radiators) of the Federal Communication Commission (FCC)	October 20, 1997
☐	FCC Part 15 Subpart C	Code of Regulations Part 15 (Radio Frequency Devices), Subpart C (Intentional Radiators) of the Federal Communication Commission (FCC)	October 20, 1997
☒	FCC Part 74 Subpart H	Code of Regulations Part 15 (Radio Frequency Devices), Subpart H (Low Power Auxiliary Stations) of the Federal Communication Commission (FCC)	October 20, 1997
☒	ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz - 40 GHz	October, 1992
☐	RSS-210	Radio Standards Specification RSS-210 Issue 2 for Low Power Licence-Exempt Radiocommuniction Devices of Industry Canada	February 24, 1996

10. Charts taken during testing

Radiated Power Test 25 MHz - 200 MHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

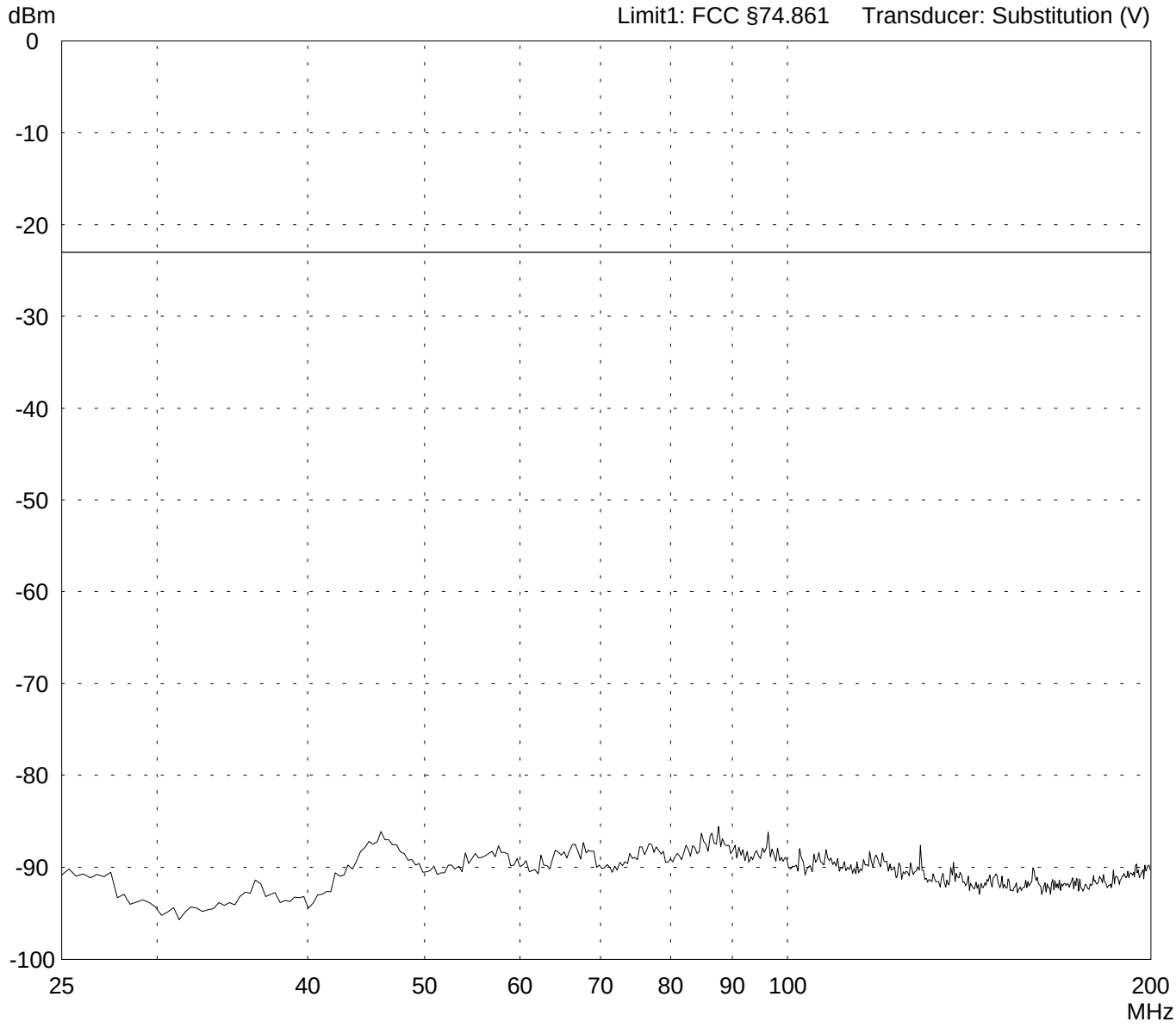


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 25 MHz - 200 MHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Vertical Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

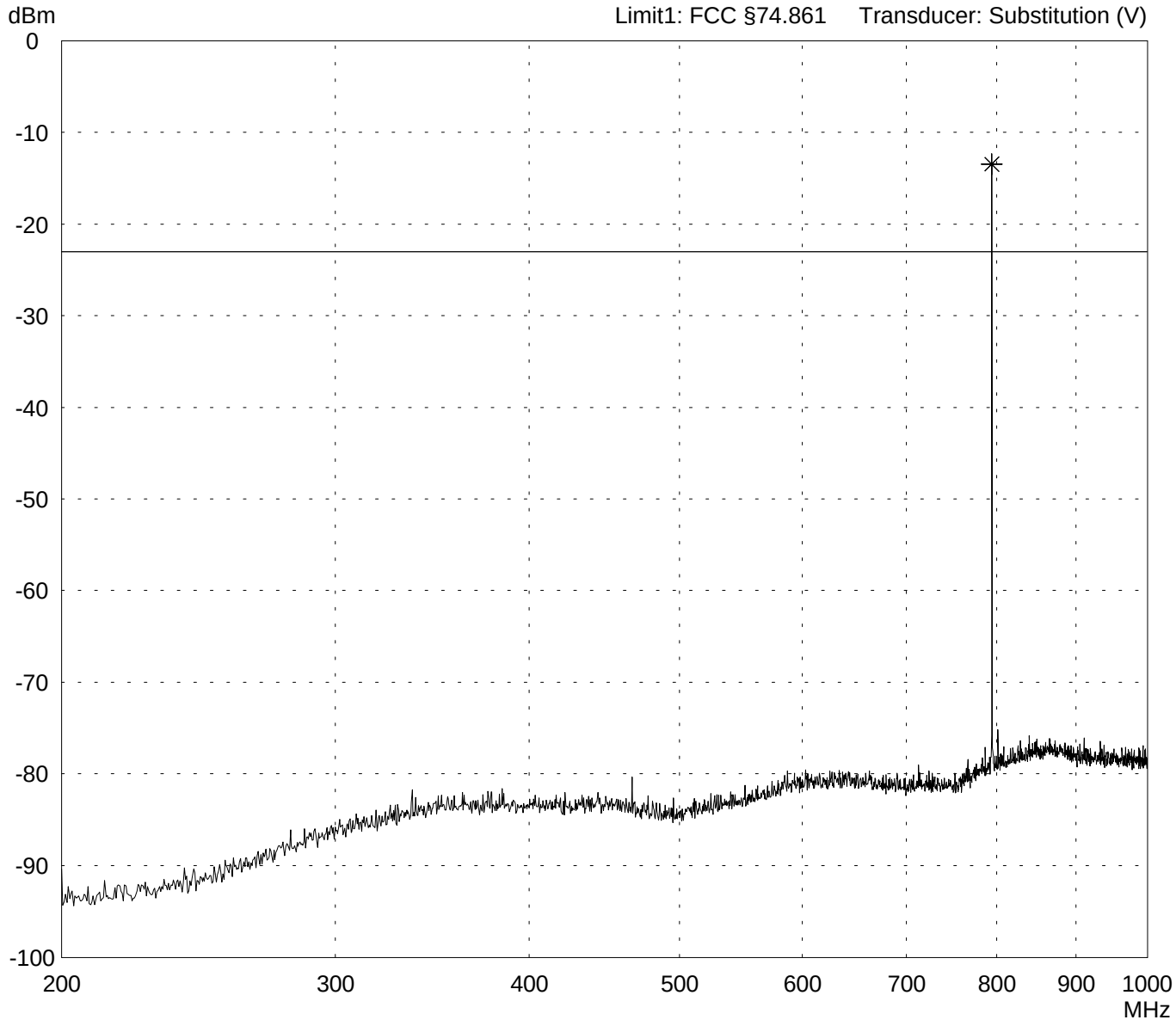


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 200 MHz - 1 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 794.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Vertical Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

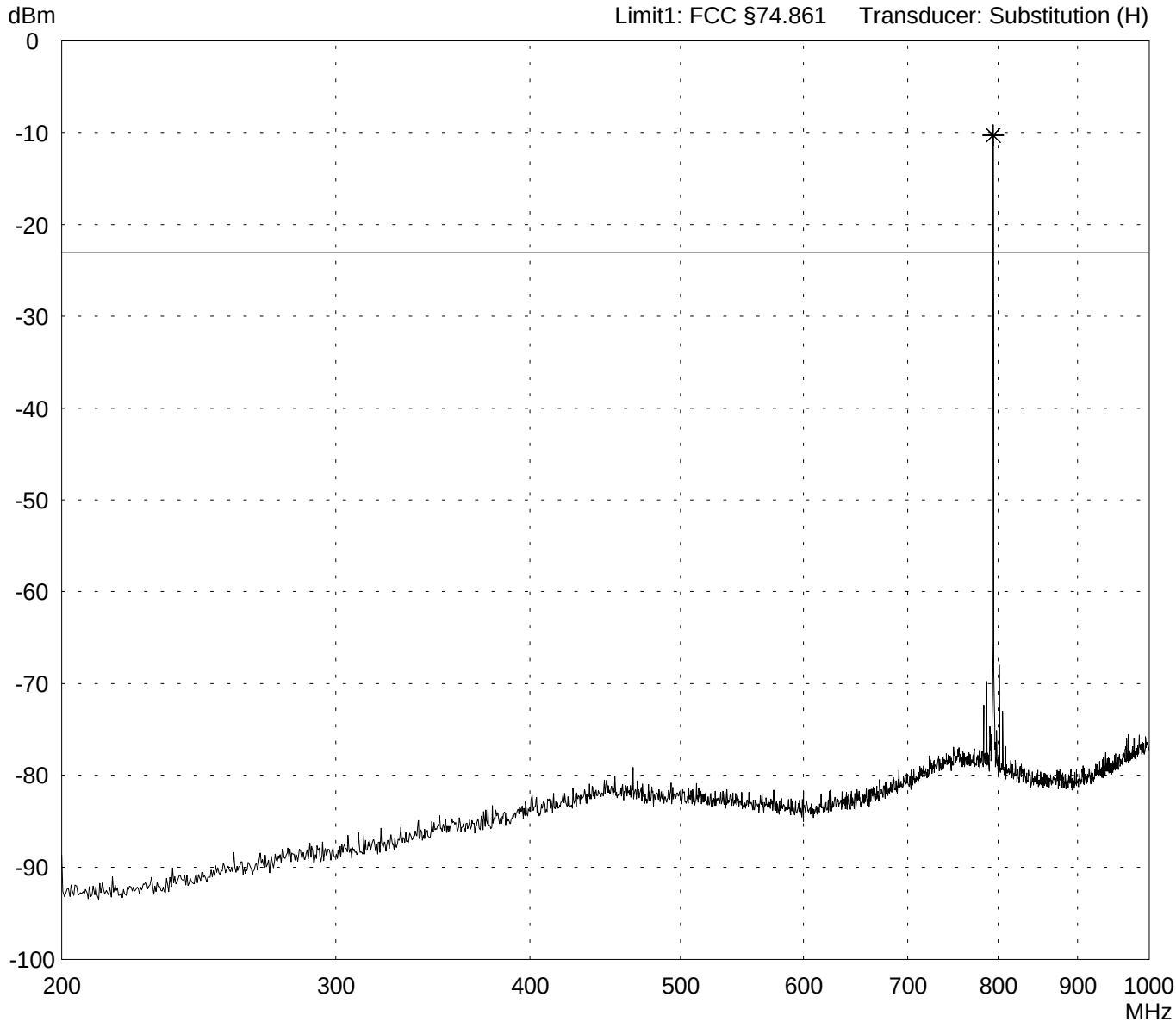


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 200 MHz - 1 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 794.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

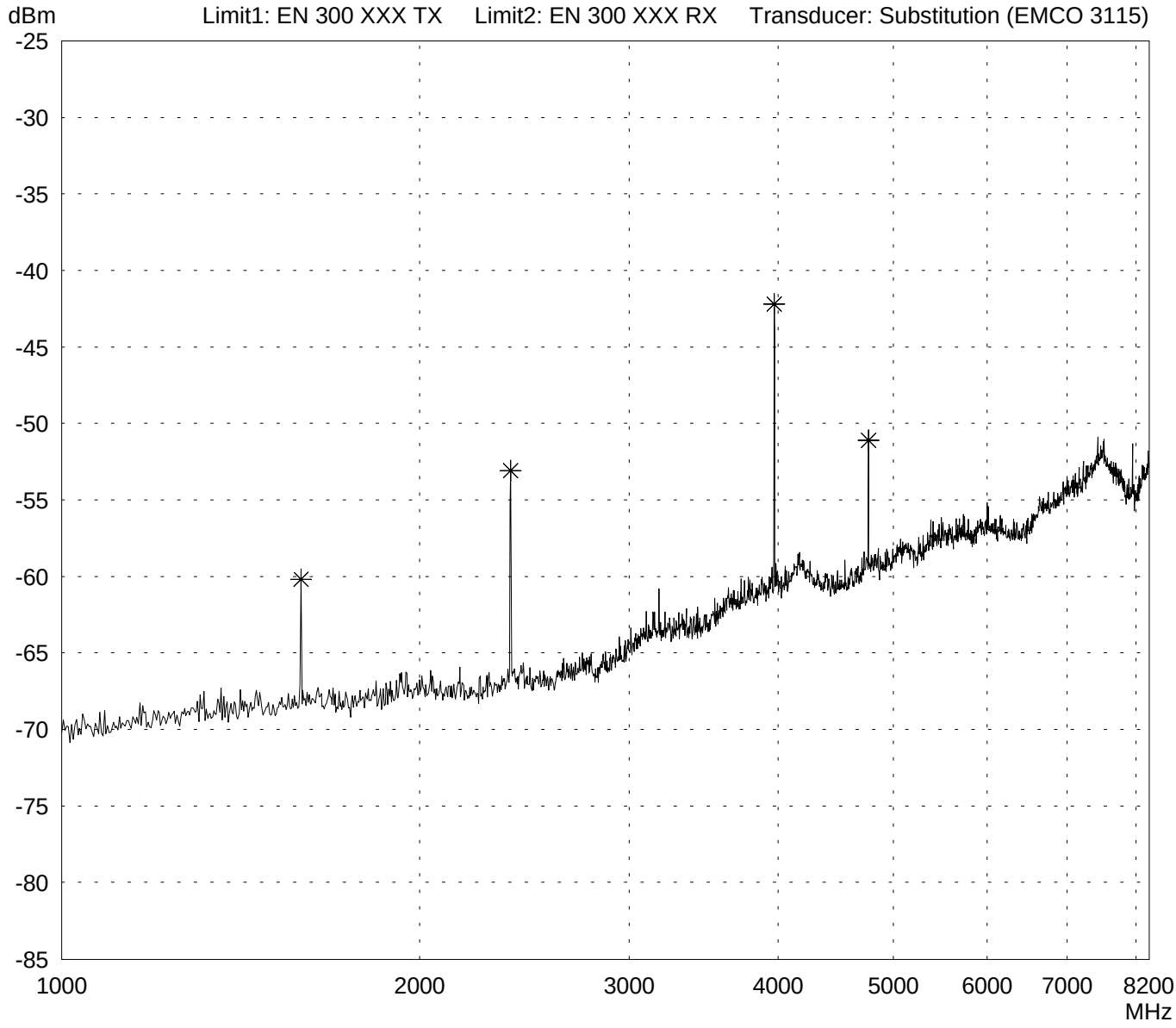
Detector: Peak	List of values: 10 dB Margin / 50 Subranges



Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 1 GHz - 8.2 GHz
acc. to FCC Part 74 Subpart H

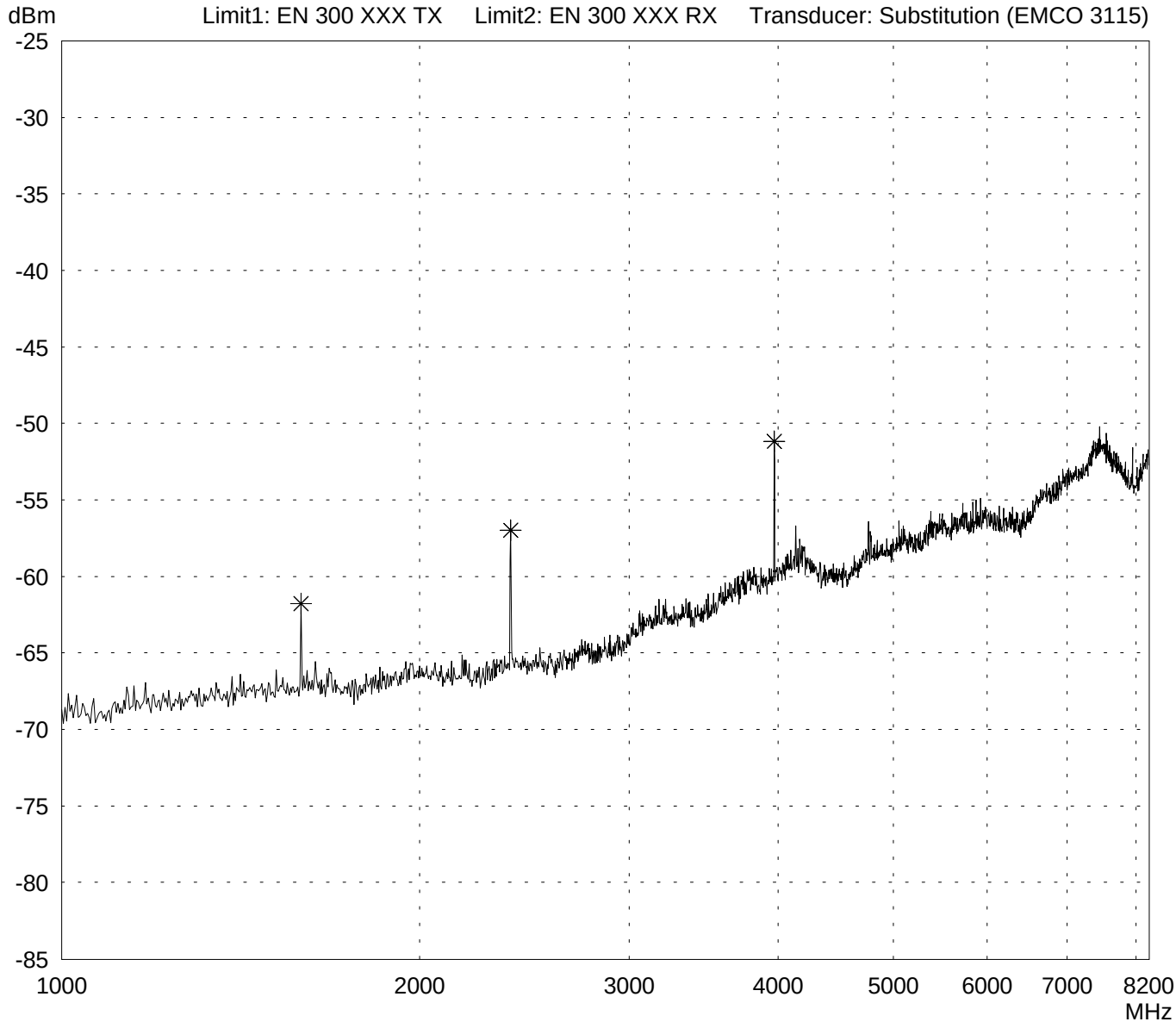
Model: AW-8H	Comment: - Without modulation TX frequency 794.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 1 GHz - 8.2 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - no modulation - TX frequency 794.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/23/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand

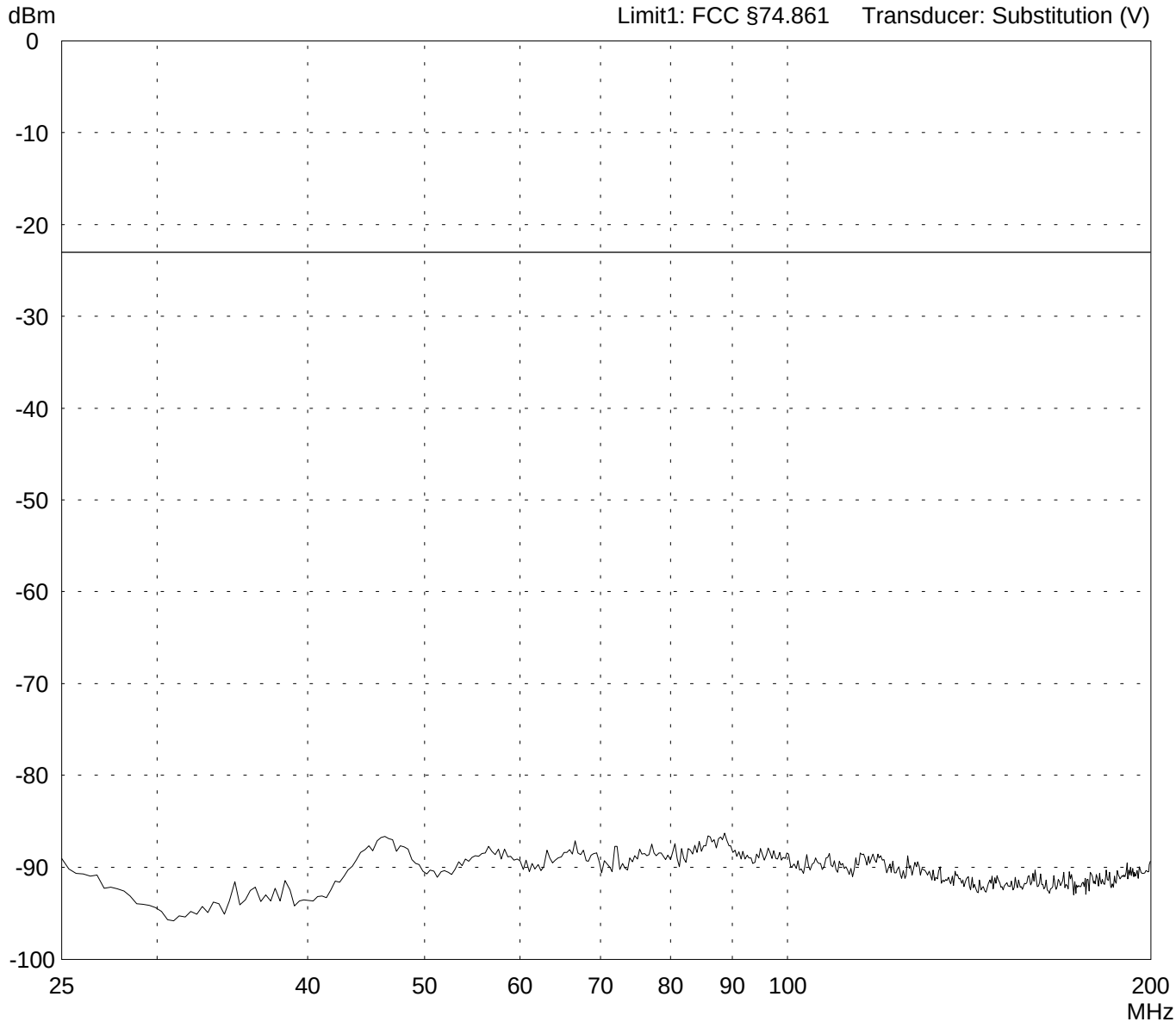


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 25 MHz - 200 MHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 799.600 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Vertical Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

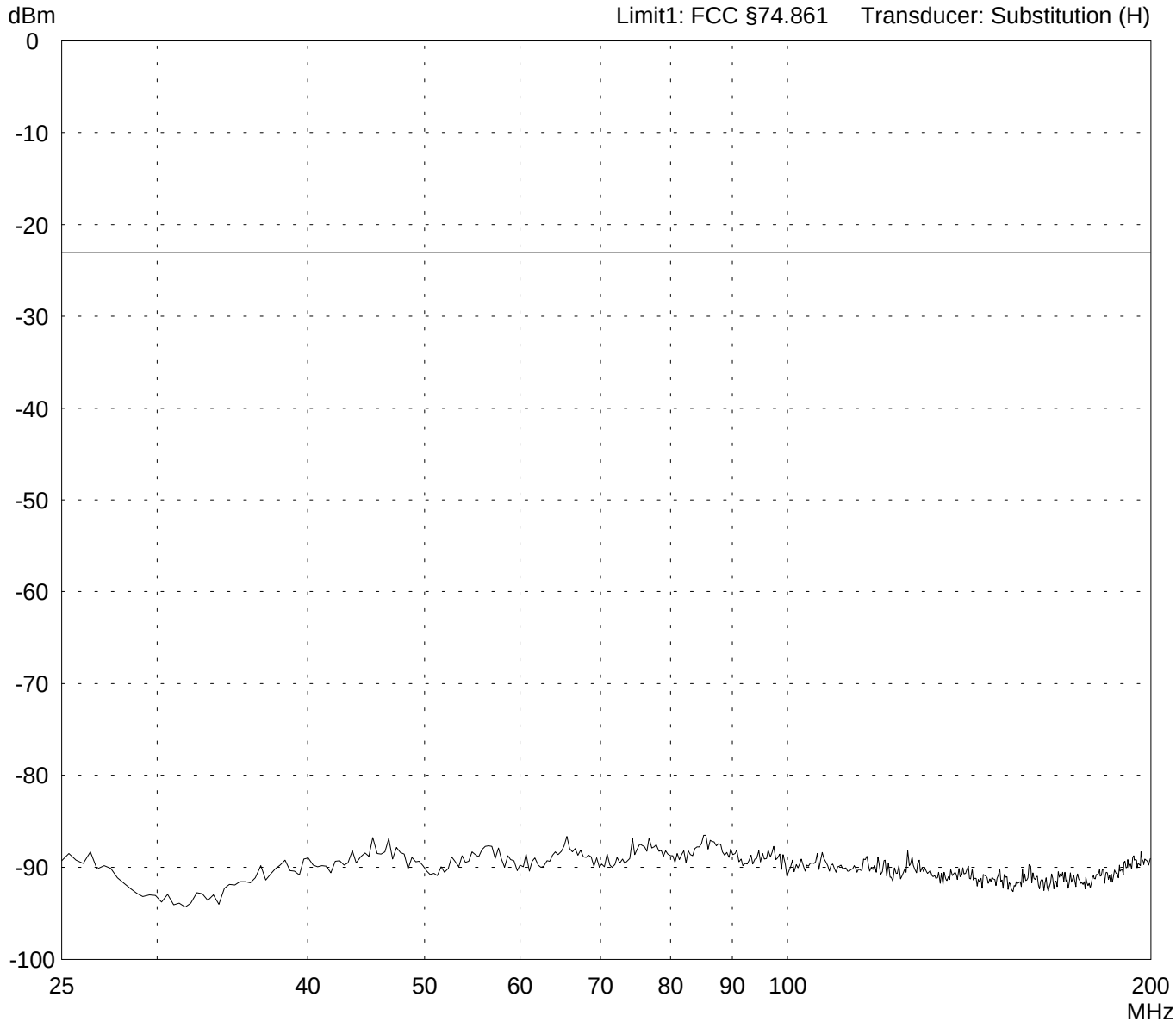


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 25 MHz - 200 MHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 799.600 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

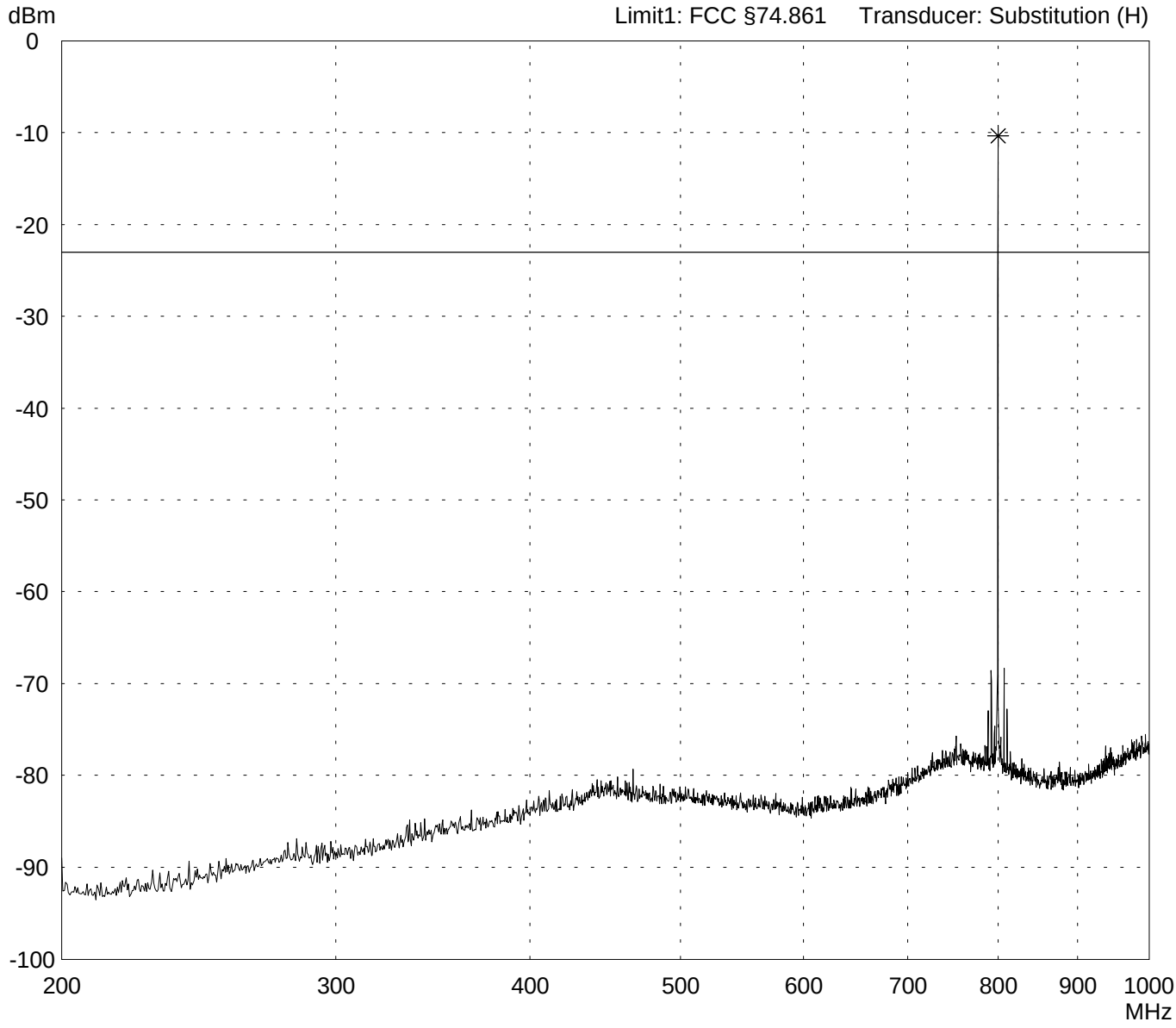


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 200 MHz - 1 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 799.600 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges



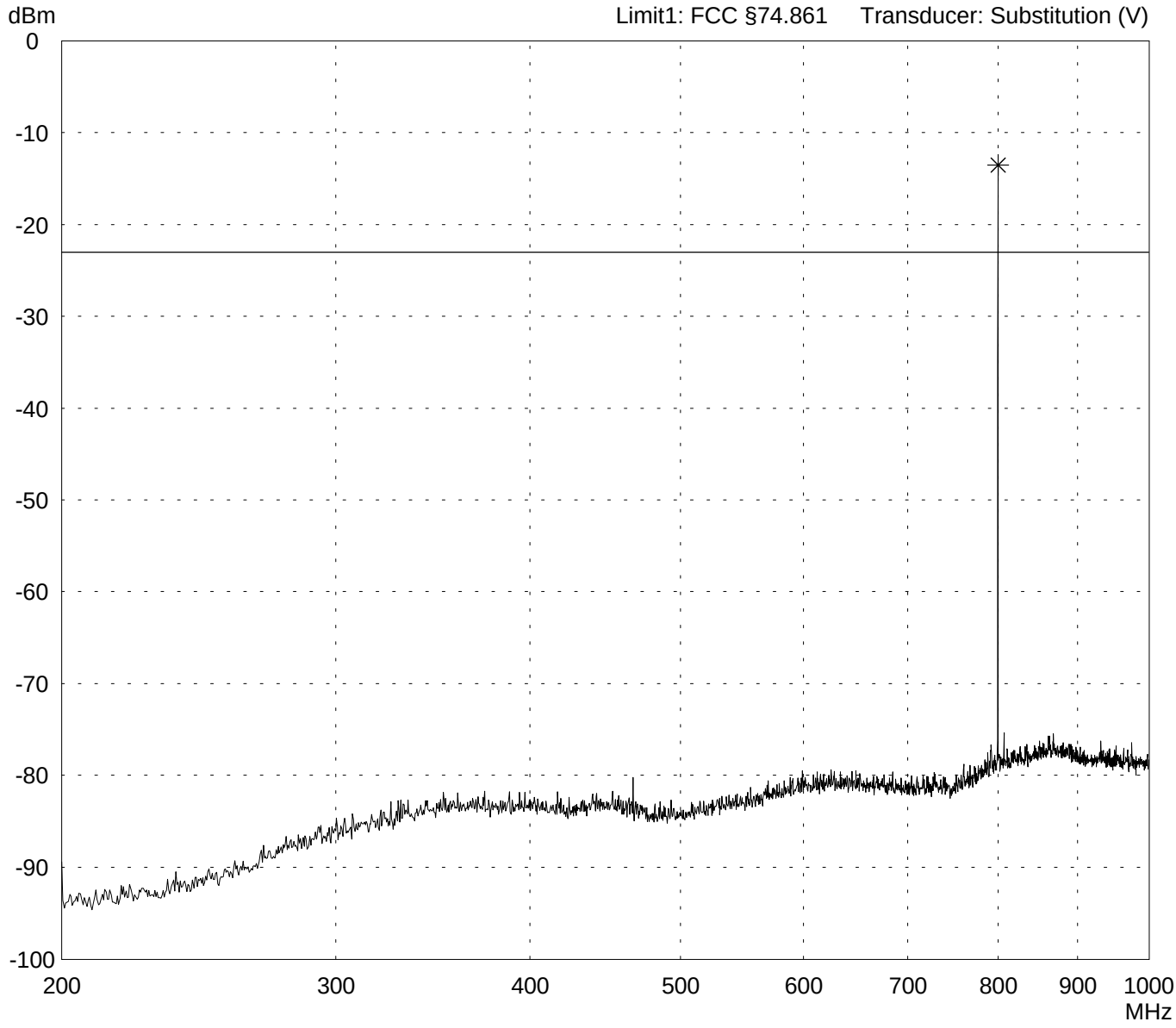
Result: Limit kept	Project file: 56408-20818 Page of Pages

Senton GmbH / Aeussere Fruehlingstrasse 45 / D-94315 Straubing / Germany / Tel. +49 (0)9421 5522-0 / Fax +49 (0)9421 5522-99

Radiated Power Test 200 MHz - 1 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 799.600 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Vertical Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

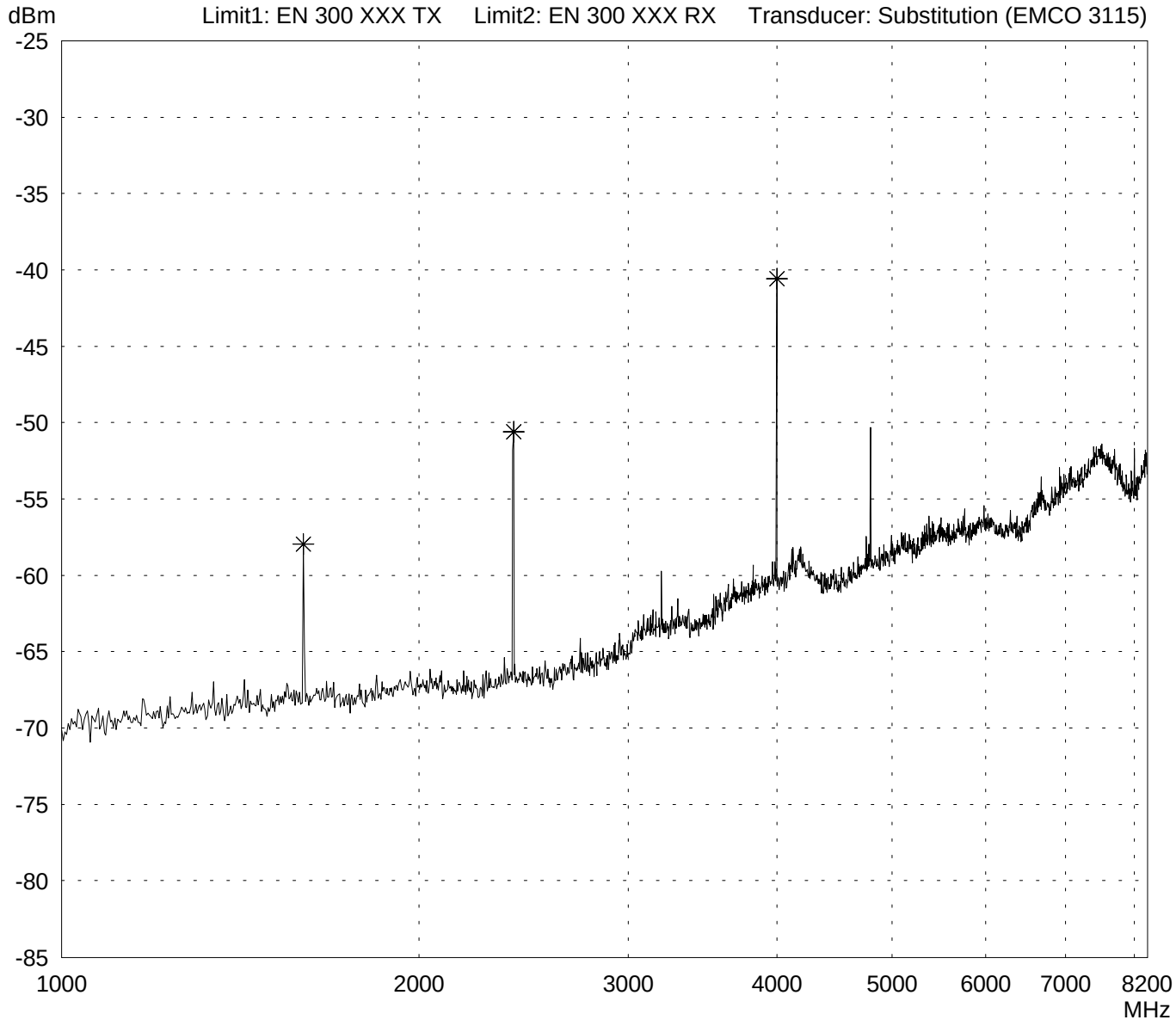


Result: Limit kept	Project file: 56408-20818 Page of Pages

Senton GmbH / Aeussere Fruehlingstrasse 45 / D-94315 Straubing / Germany / Tel. +49 (0)9421 5522-0 / Fax +49 (0)9421 5522-99

Radiated Power Test 1 GHz - 8.2 GHz
acc. to FCC Part 74 Subpart H

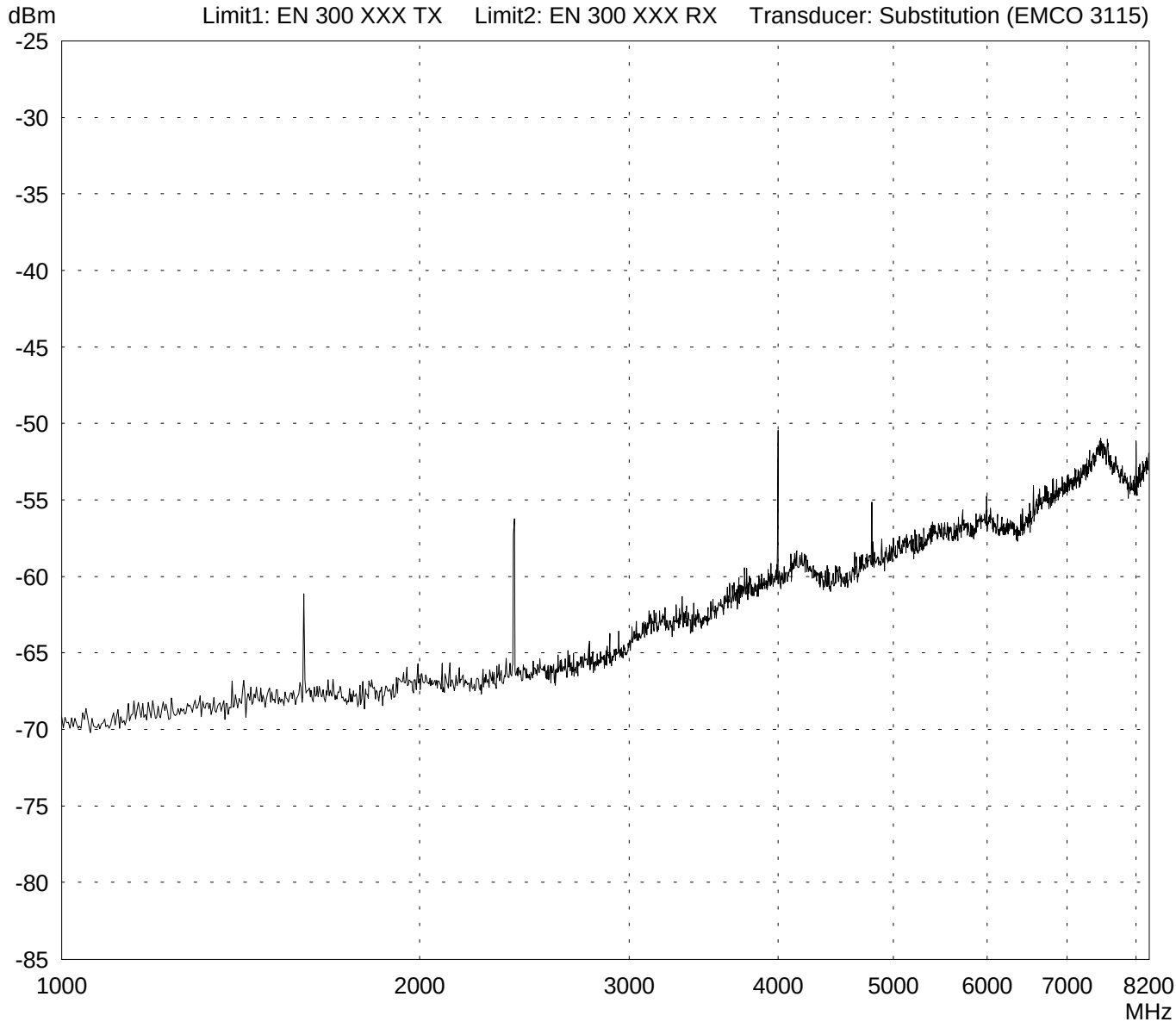
Model: AW-8H	Comment: - no modulation - TX frequency 794.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/23/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 1 GHz - 8.2 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - no modulation - TX frequency 794.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/23/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand

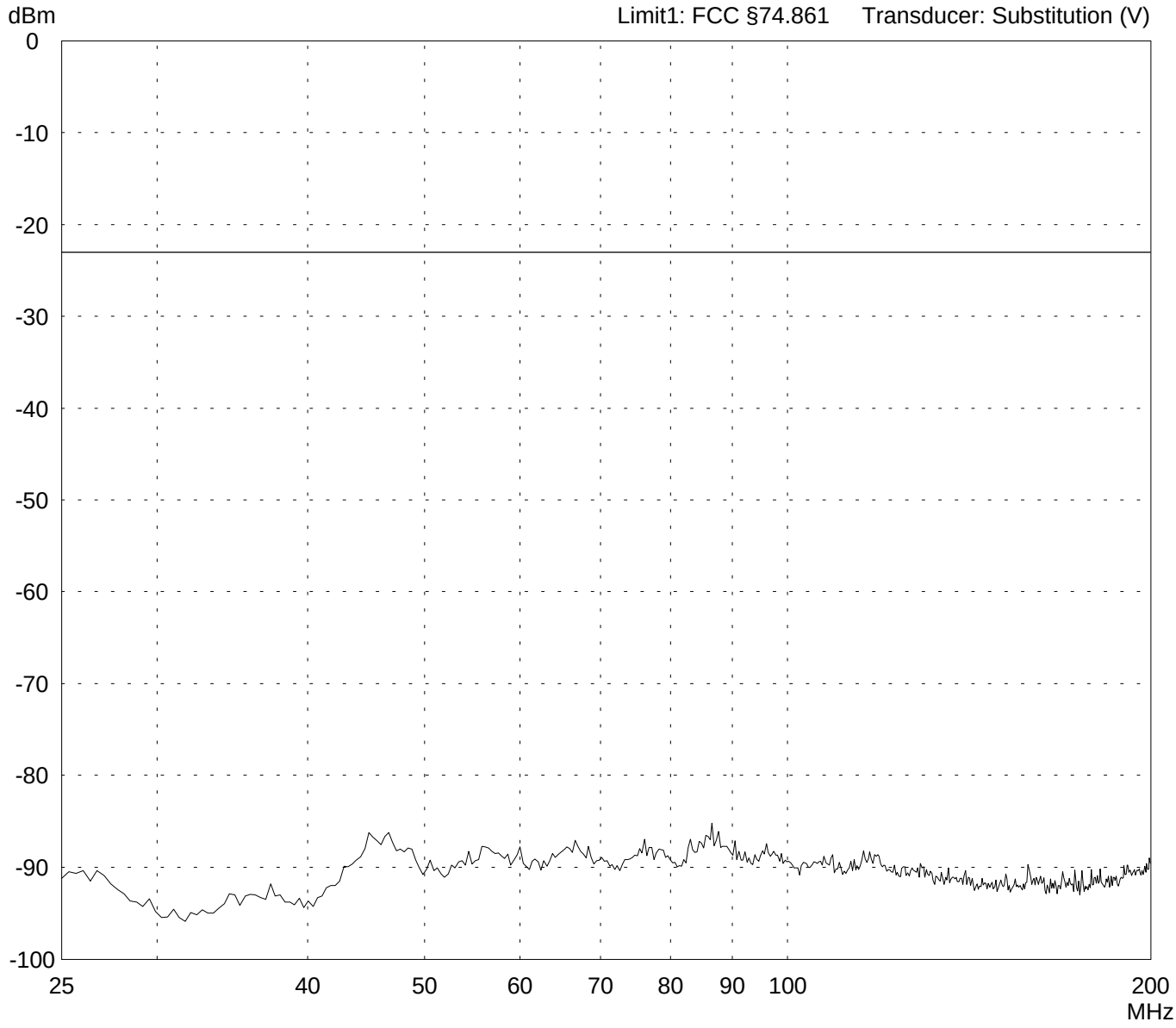


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 25 MHz - 200 MHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Vertical Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

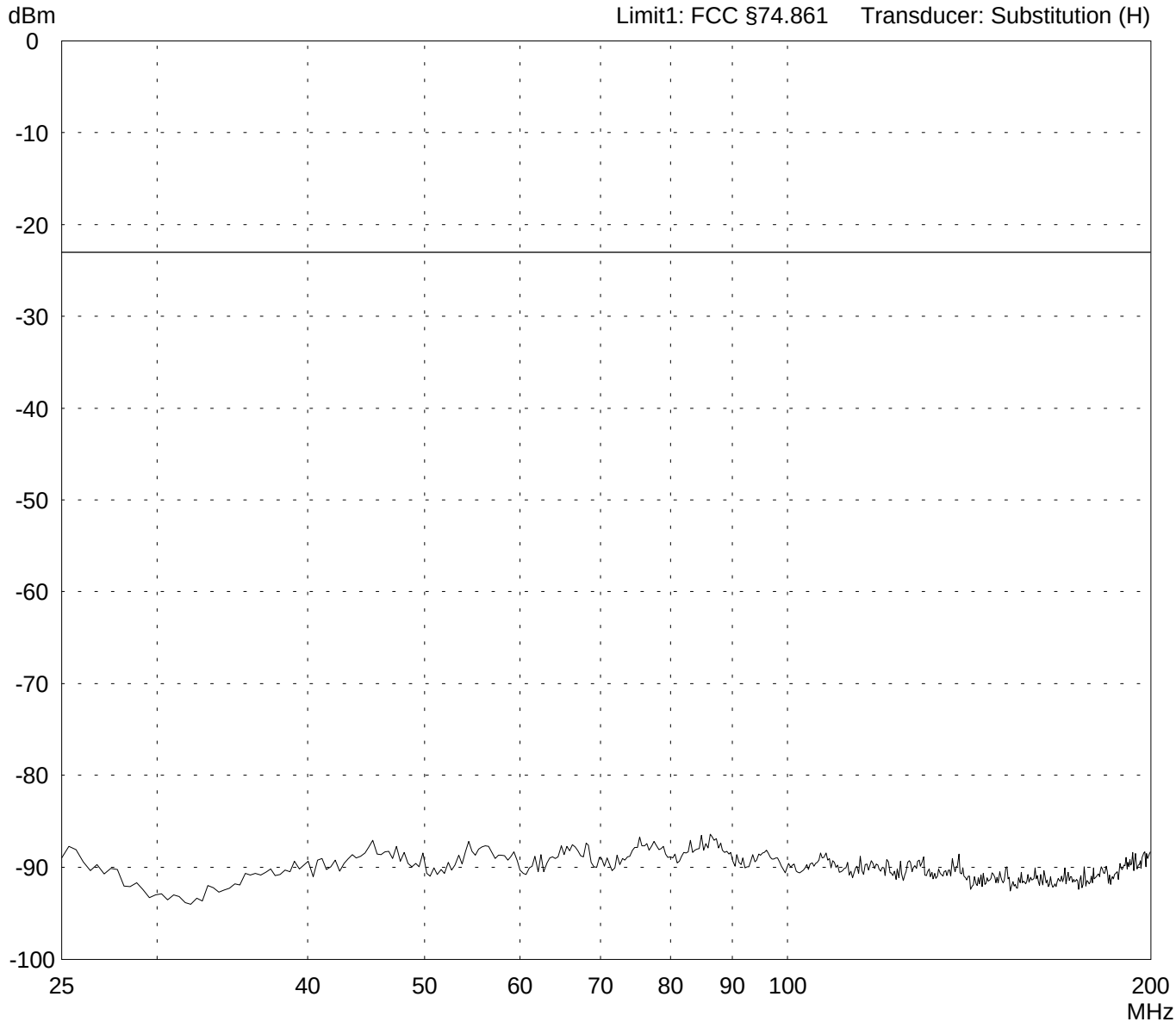


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 25 MHz - 200 MHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

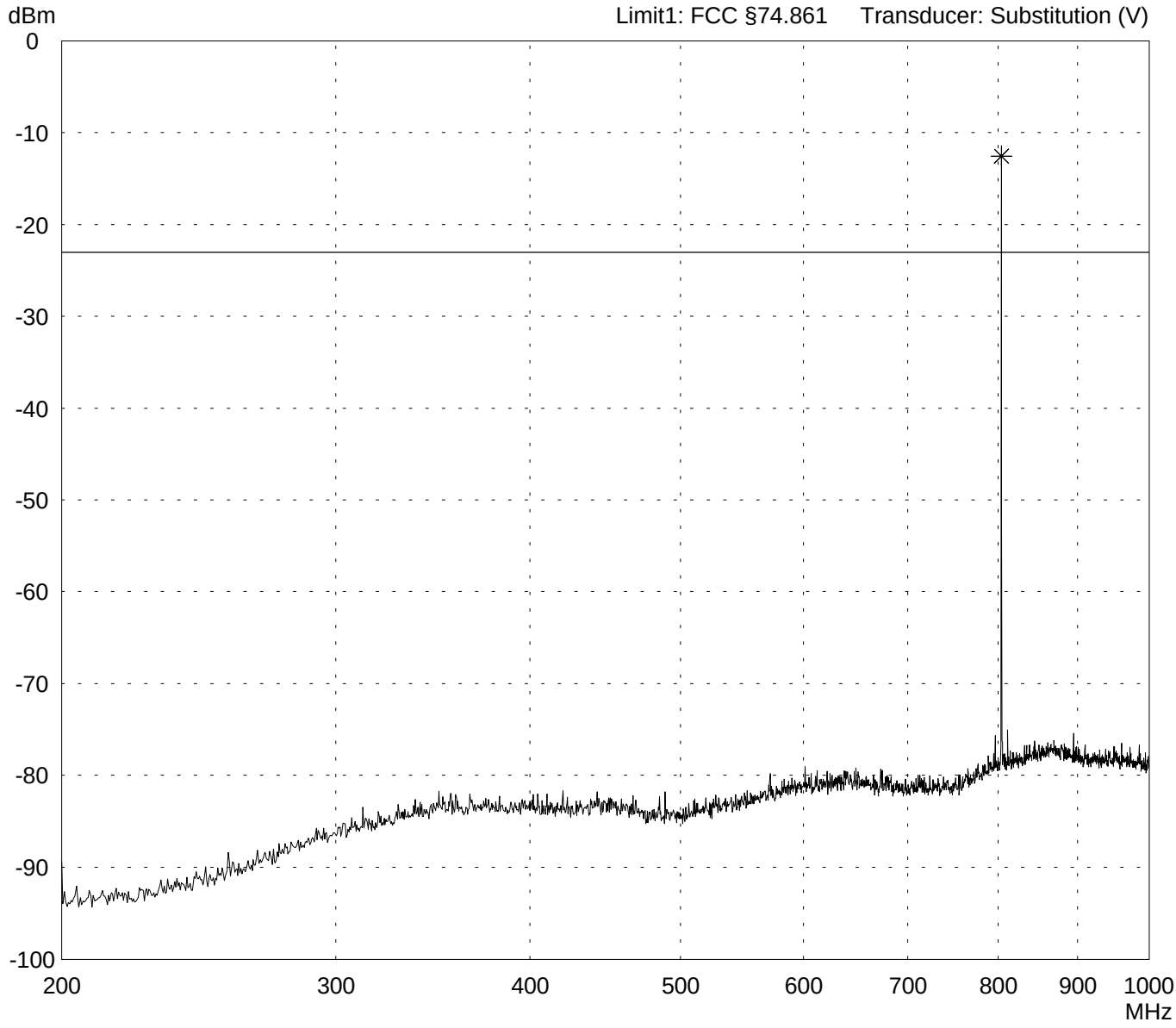


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 200 MHz - 1 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Vertical Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: 10 dB Margin / 50 Subranges

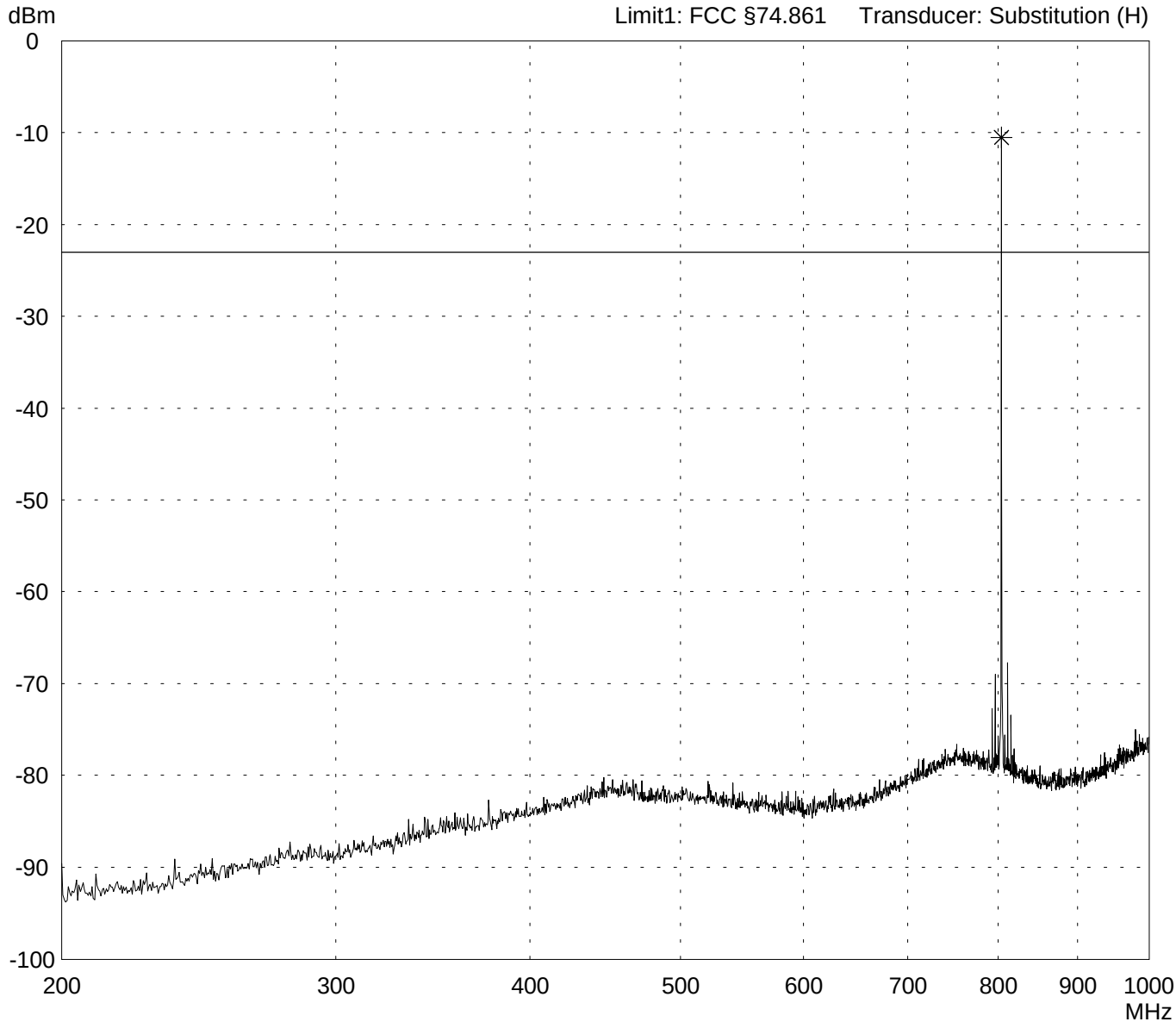


Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 200 MHz - 1 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - Without modulation TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 3 meters Horizontal Polarization	
Date of test: 02/22/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

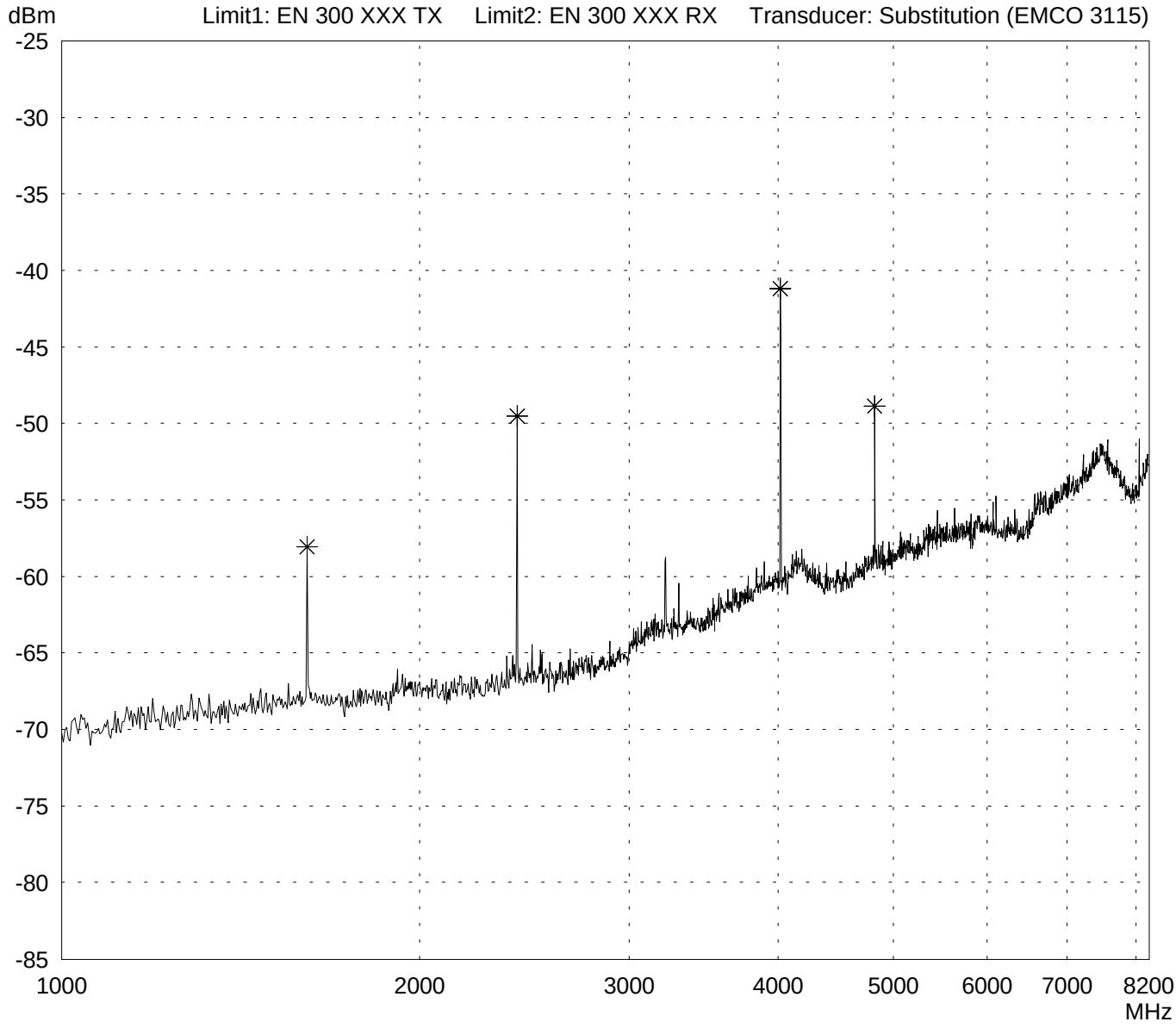
Detector: Peak	List of values: 10 dB Margin / 50 Subranges



Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 1 GHz - 8.2 GHz
acc. to FCC Part 74 Subpart H

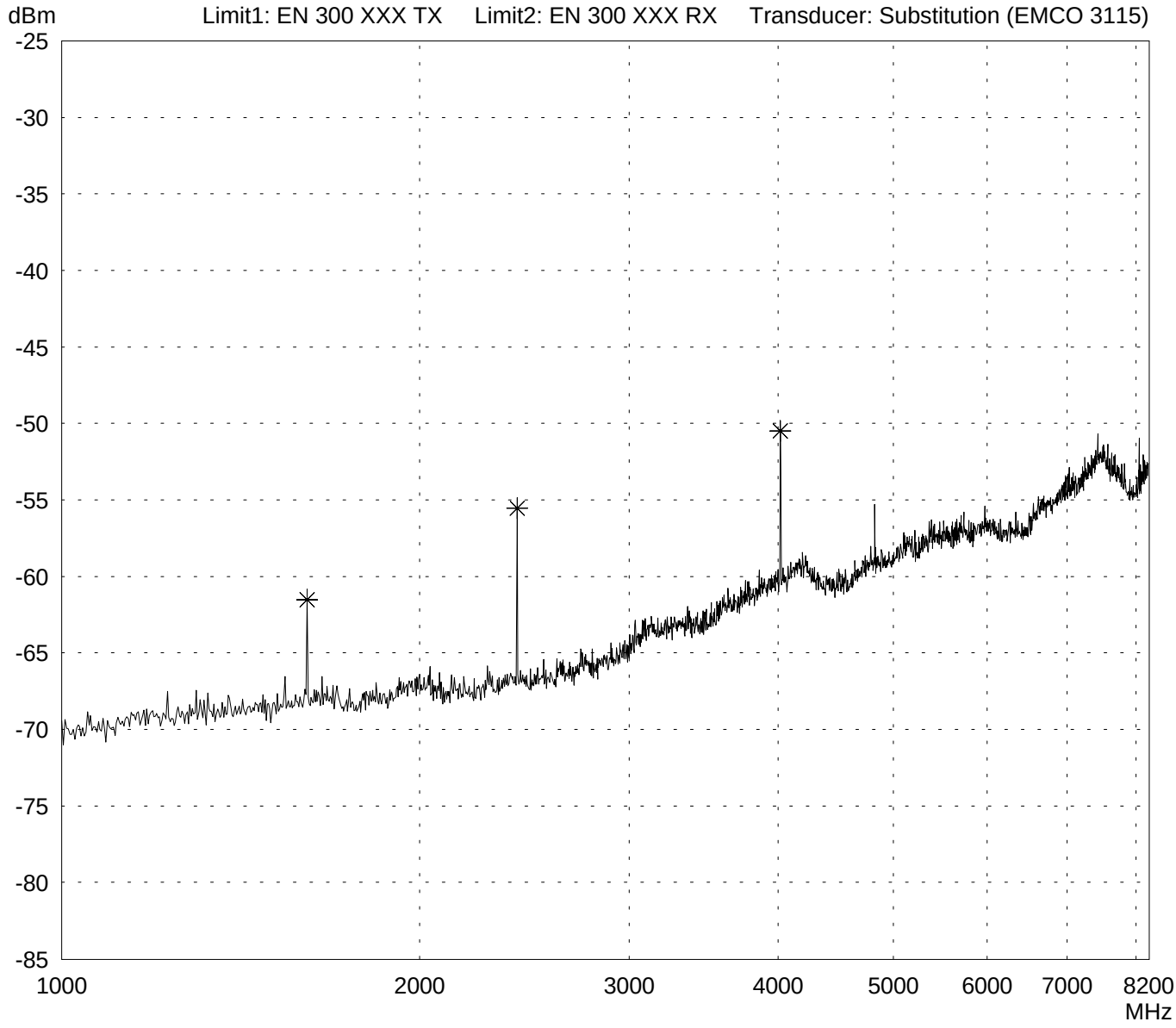
Model: AW-8H	Comment: - no modulation - TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/23/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



Result: Limit kept	Project file: 56408-20818 Page of Pages

Radiated Power Test 1 GHz - 8.2 GHz
acc. to FCC Part 74 Subpart H

Model: AW-8H	Comment: - no modulation - TX frequency 804.300 MHz
Serial no.: Sample 3	
Applicant: SEKAKU Elektron Industry Co. Ltd.	
Test site: Fully anechoic room	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/23/2003 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



Result: Limit kept	Project file: 56408-20818 Page of Pages