SENTON

■ EMV-Prüfzentrum ■ EMI/EMC-Testcenter ■

Straubing, 03 April 2007

T E S T - R E P O R T

No. 50940-060539 (Edition 4)

for

SDS 1 TM

RF Transceiver Module

Applicant:	Schildknecht Industrieelektronik Systeme
Purpose of testing:	To show compliance with FCC Code of Federal Regulations, Part 15 Subpart C, Section 15.247

Table of Contents

1. Administrative Data

Test item (EUT)	
Type designation	SDS 1 TM
Serial number(s):	001
Type of equipment:	RF Transceiver Module
Parts/accessories:	---
FCC-ID:	UN4-DATAEAGLEX00X
Technical data	
Frequency range	2400 - 2483.5 MHz
Operational frequencies	DSSS
Statement:	The power was set to the maximum possible
Type of modulation	FSK
Pulse frequency	N/A
Pulse width	N/A
Antenna	N/A
Power supply	3.3 V DC
Applicant: (full address)	Schildknecht Industrieelektronik Systeme Einsteinstraße 10 D-74372 Sersheim
Contract identification:	---
Contact person:	Jaromir Srb, Srb Innovative Industrieelektronik GmbH
Manufacturer:	Applicant
Application details	
Receipt of EUT:	11 July 2006
Date of test:	11 July / 28 July 2006, 28 February 2007
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. DAT-P-171/94-02
FCC TEST SITE LISTING	90926
INDUSTRY CANADA TEST SITE REGISTRATION	IC 3050
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	
LABORATORY MANAGER:	 ..... 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 C, Section 15.247 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:

- Low channel: 2413 MHz
- Middle channel: 2440 MHz
- High channel: 2461 MHz

4. Configuration

Configuration of the EUT
A full test setup was supplied by the applicant. The EUT was controlled by test software on a notebook PC, connected via RS 232 interface.

Cables connected to the EUT
Not applicable

Peripheral devices connected to the EUT
Not applicable

5. Measuring Methods

5.1. Maximum Transmitter Power

5.1.1. Conducted Maximum Transmitter Power

Rules and Specifications:	Section 15.247 (b)
Guide:	ANSI C63.4:2003

Measurement Procedure:
A power meter with peak power sensor 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.

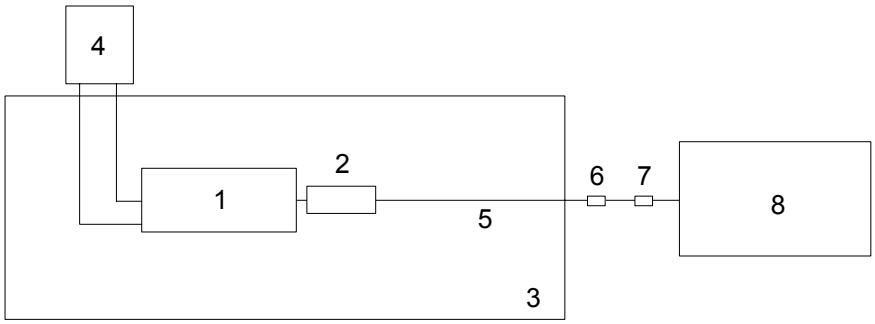


Figure 1: Measurement setup for testing on antenna connector

Test instruments used:

No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
08	Power Meter	NRVS	836856/015	Rohde & Schwarz
09	Peak Power Sensor	NRV-Z31	836299/012	Rohde & Schwarz
18	Attenuator 20 dB	4776-20	9503	Narda
19	Attenuator 10 dB	4776-10	9412	Narda

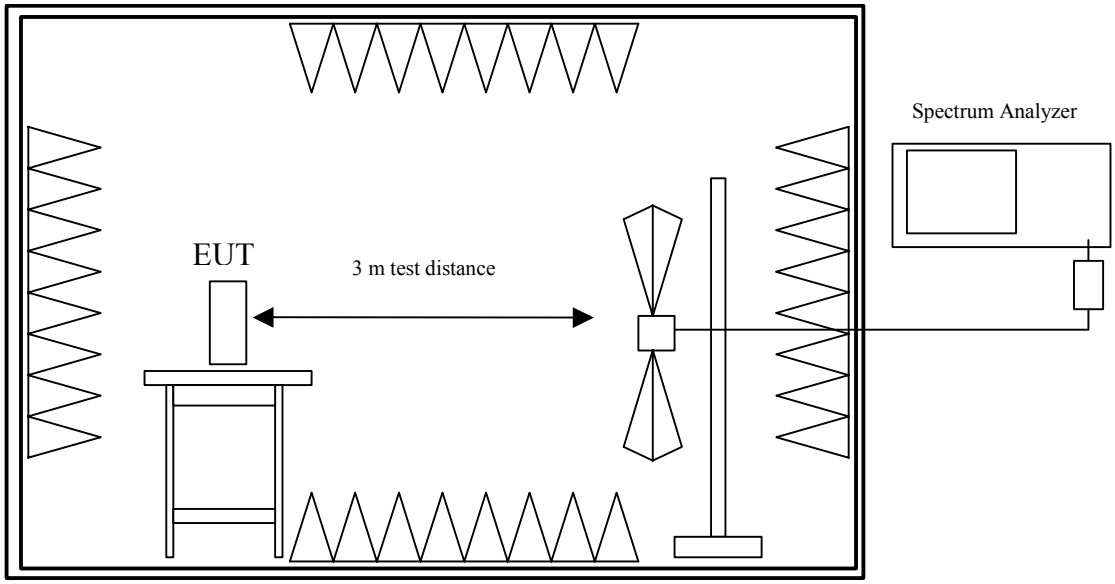
5.2. Radiated Emissions 30 MHz – 1 GHz

Rules and Specifications:	Section 15.247
Guide:	ANSI C63.4:2003

Measurement Procedure:

Radiated emissions are measured over the frequency range from 30 MHz to 1 GHz.

Measurements were made in both the horizontal and vertical planes of polarization in a fully 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



Fully anechoic chamber

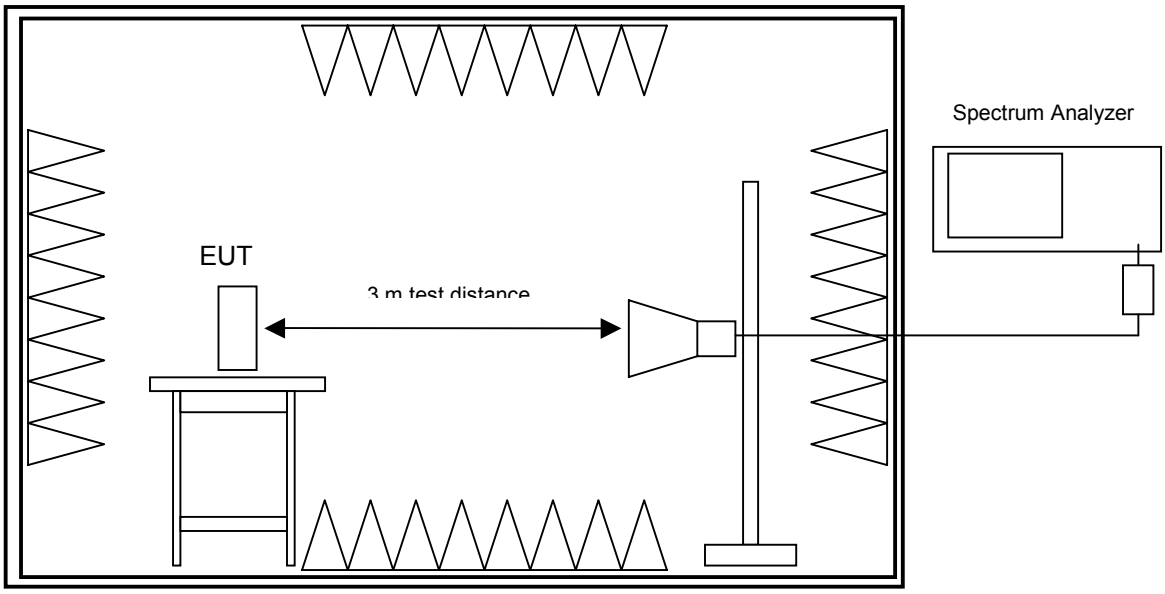
Test instruments used:

No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
113	Preamplifier	CPA9231A	3393	Schaffner
141	Trilog broadband antenna	VULB 9163	9163-188	Schwarzbeck
003	Fully anechoic room	No. 2	1452	Albatross Projects

5.3. Radiated Emission > 1 GHz

Rules and Specifications:	Section 15.247
Guide:	ANSI C63.4:2003

Measurement Procedure:
Radiated emissions are measured in the frequency range 1 GHz to 25 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 instruments used:

No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
143	Log. periodic antenna	3147	9112-1054	EMCO
145	Horn antenna	3115	9508-4553	EMCO
146	Horn antenna set	3160-03/-09	9112-1003	EMCO
114	Preamplifier 1-8 GHz	AFS3-00100800-32-LN	847743	Miteq
115	Preamplifier 8-18 GHz	ACO/180-3530	32641	CTT
003	Fully anechoic room	No. 2	1452	Albatross Projects

5.4. Conducted AC Powerline Emission

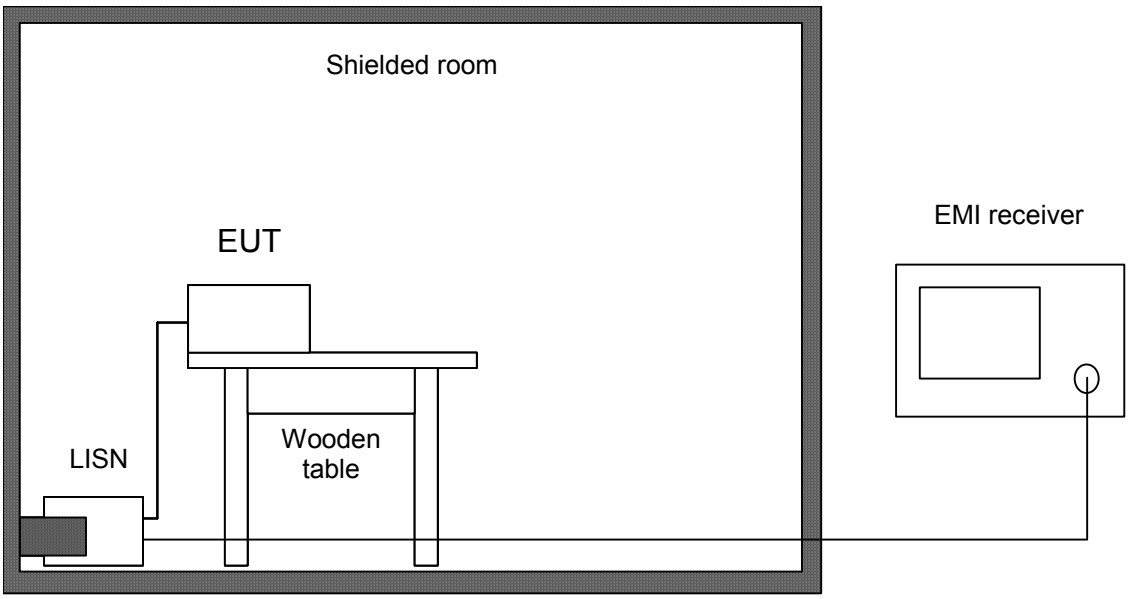
Rules and Specifications:	Section 15.247
Guide:	ANSI C63.4:2003

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 15, section 15.207
Guide:	ANSI C63.4 / CISPR 22

Conducted emission tests in the frequency range 150 kHz to 30 MHz are performed using Line Impedance Stabilization Networks (LISNs). To simplify testing with quasi-peak and average detector the following procedure is used:

First the whole spectrum of emission caused by the equipment under test (EUT) is recorded with detector set to peak using CISPR bandwidth of 10 kHz. After that all emission levels having less margin than 10 dB to or exceeding the average limit are retested with detector set to quasi-peak. If average limit is kept with quasi-peak levels no additional scan with average detector is necessary. In cases of emission levels between quasi-peak and average limit an additional scan with detector set to average is performed.

According to ANSI C63.4, section 13.1.3.1, testing of intentional radiators with detachable antenna shall be performed using a suitable dummy load connected to the antenna output terminals. Otherwise, the tests shall be made with the antenna connected and, if adjustable, fully extended. Testing with dummy load may be necessary to distinguish (unintentional) conducted emissions on the supply lines from (intentional) emissions radiated by the antenna and coupling directly to supply lines and/or LISN. Usage of dummy load has to be stated in the appropriate test record(s) and notes should be added to clarify the test setup.

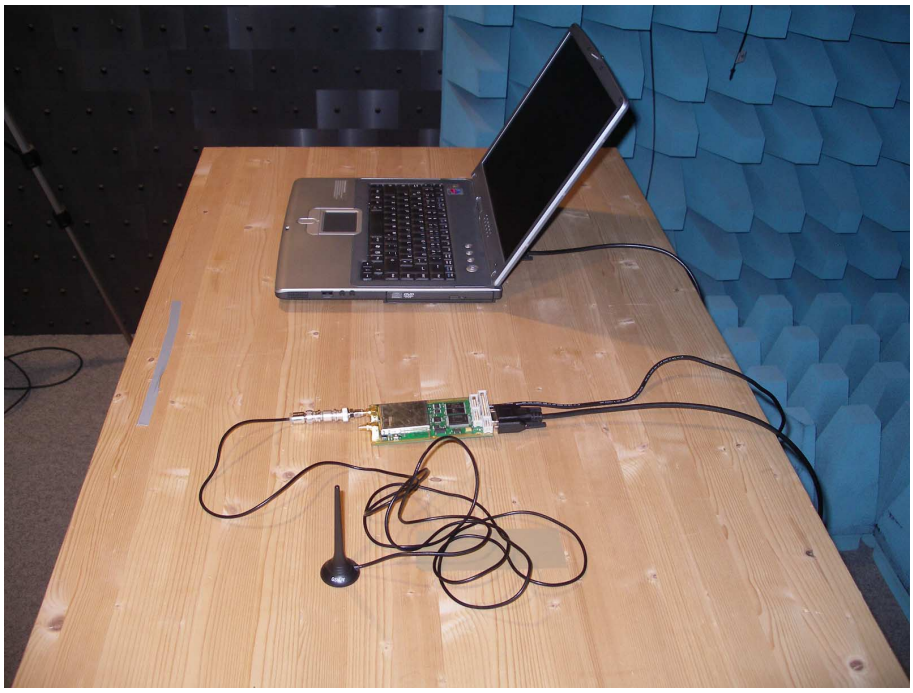


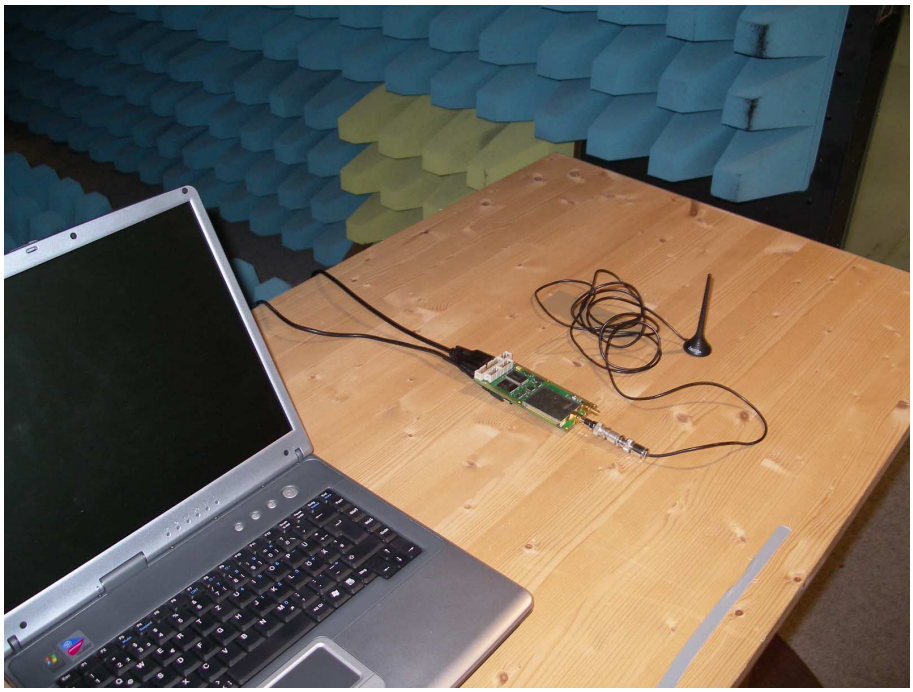
Test instruments used:

Used	Type	Model	Serial No. or ID	Manufacturer
☒	EMI receiver	ESHS 10	860043/016	Rohde & Schwarz
☒	LISN	ESH3-Z5	862770/021	Rohde & Schwarz
☐	LISN	ESH3-Z5	830952/025	Rohde & Schwarz
☐	Artificial mains network	ESH 2-Z5	842966/004	Rohde & Schwarz
☐	Shielded room	No. 1	1451	Albatross Projects
☒	Shielded room	No. 4	3FD-100 544	Euroshield

6. Photographs Taken During Testing

Test setup for radiated emission measurement 30 MHz – 25 GHz (fully anechoic room)





7. List of Measurements

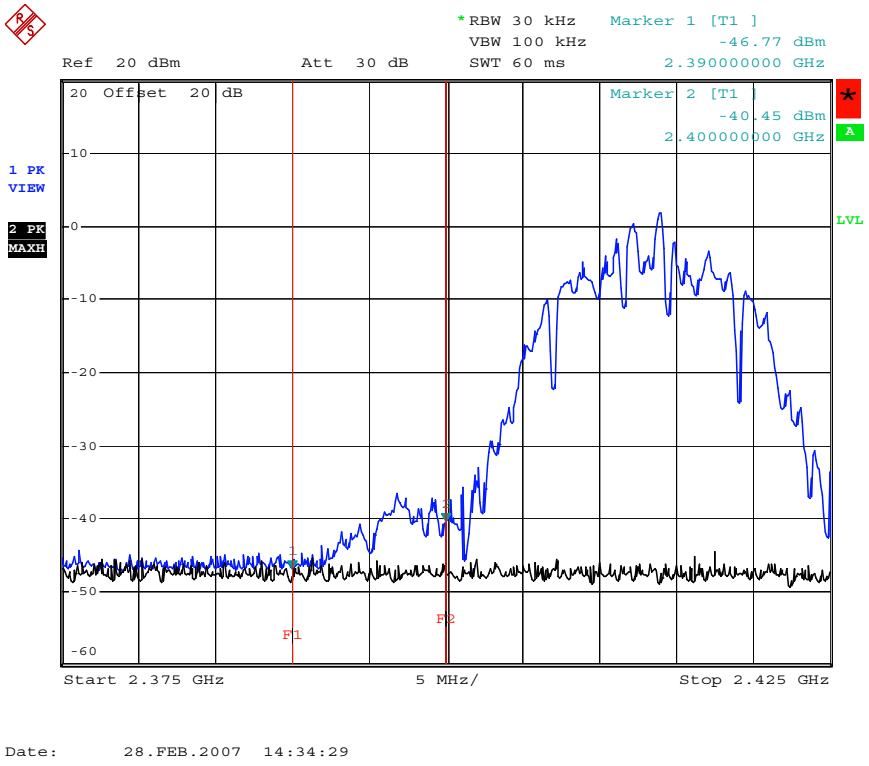
FCC Part 15 Subpart C			
Section(s):	**Test**	**Page(s)**	**Result**
	Transmitter:		
15.205	Restricted Bands	15	Pass
15.247 (a) (a2)	Channel Bandwidth	18	Pass
15.247 (b) (3)	Maximum Peak Output Power	20	Pass
15.247 (d)	Spurious Emissions - conducted	21	Pass
15.247 (d) **15.209**	Spurious Emissions - radiated	28	Pass
15.247 (e)	Power Spectral Density	29	Pass
15.203	Antenna Requirement	31	Pass
2.1093	RF Exposure Requirement	32	Pass
15.207	Conducted AC Powerline Emissions	33	Pass
	Receiver		
15.111	Spurious Emissions on Antenna Port	---	N/A
15.109	Radiated Emissions	35	Pass

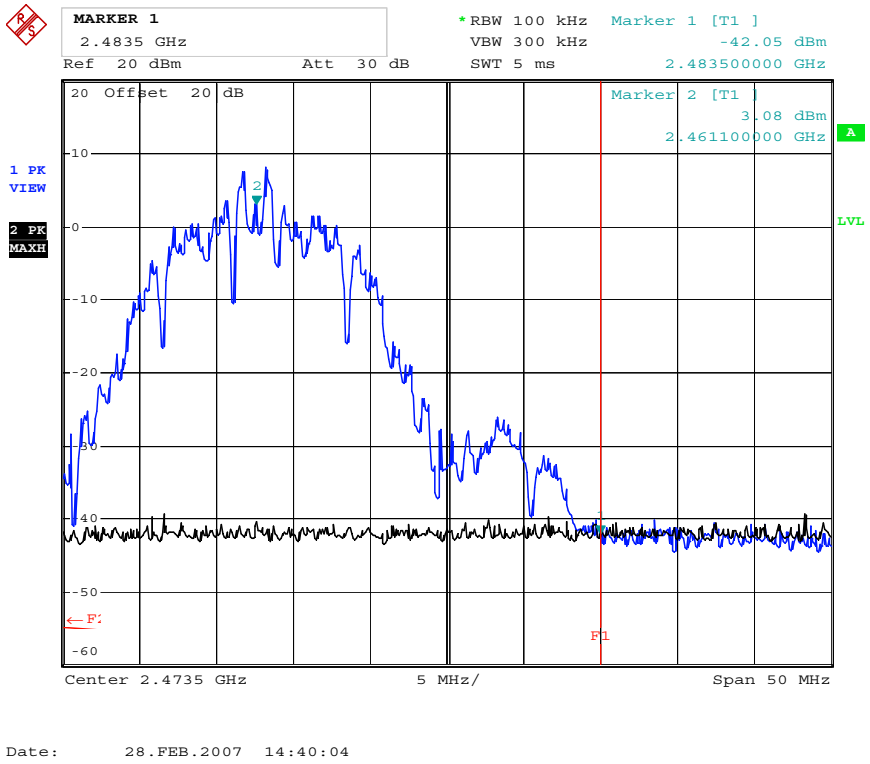
Restricted Band & Band Edge Compliance

Rules and Specifications:	15.205
Guide:	ANSI C63.4:2003
Requirement:	Except as shown in paragraph (d) of section 15.205, only spurious emissions are permitted in any of the frequency bands listed.

Test Site:	Radio Lab.
Distance:	Conducted & Radiated Measurement
Date of Test:	28 February 2007

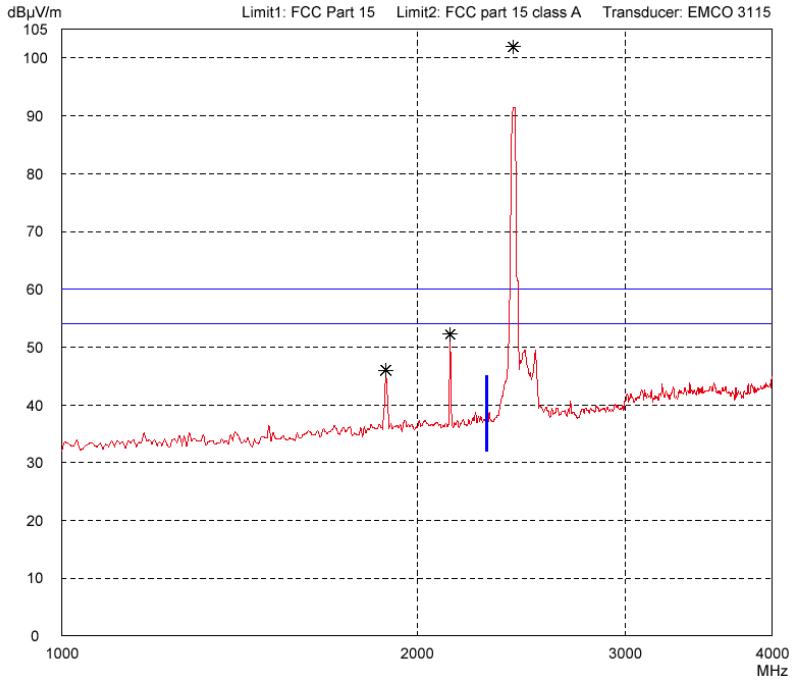
Restricted Band (MHz)	RF Channel	Result
2310 - 2390	Channel 1 (2413 MHz)	Pass
2483..5 - 2500	Channel 48 (2461 MHz)	Pass



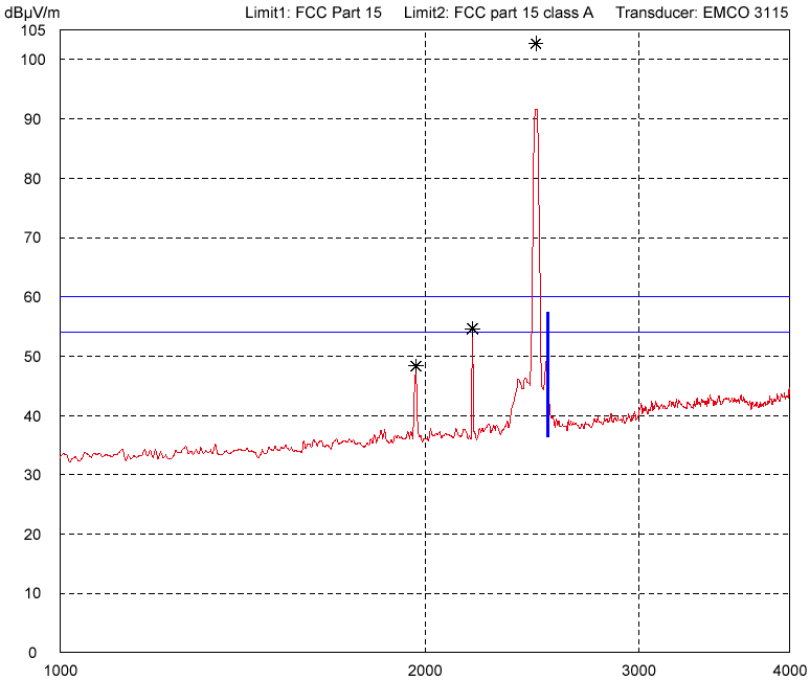


Test Site:	Open Area Test Site (< 1GHz), Fully anechoic room (>1 GHz)
Distance:	Radiated Measurement
Date of Test:	02 March 2007

Frequency (MHz)	Antenna Polarisation	Detector	Meter Reading (dBµV)	Antenna Correction (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2413.2	Vertical	Peak	68.51	33.41	101.92	---	---
2461.1	Vertical	Peak	69.00	33.55	102.55	---	---
2390.0	Vertical	Peak	5.5	33.75	39.25	54.00	14.75
2483.5	Vertical	Peak	15.9	33.80	49.70	54.00	4.3



Low channel, marker set to 2390 MHz



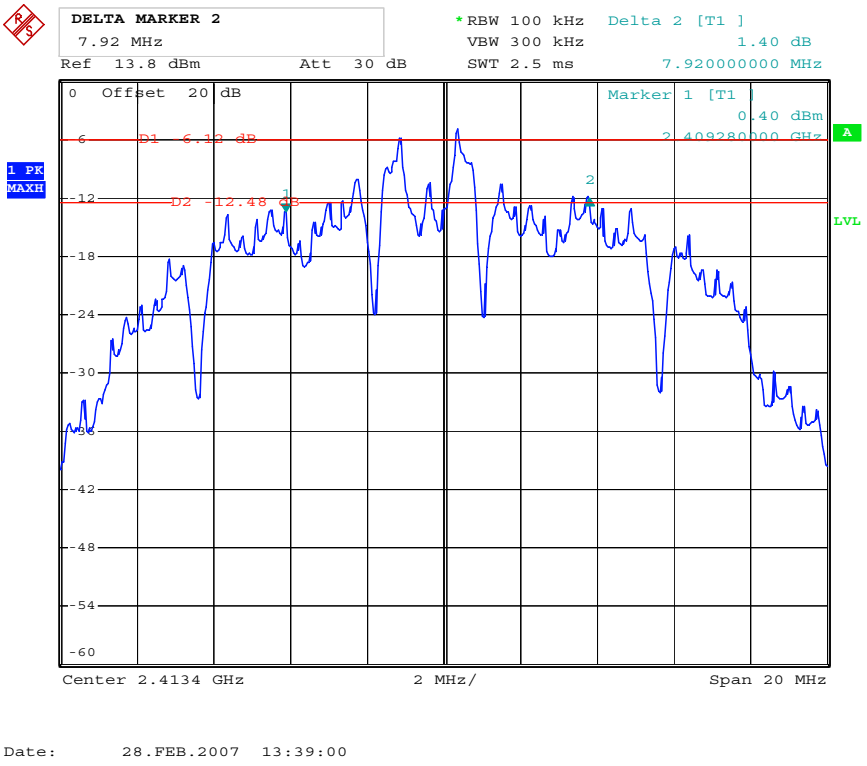
High channel, marker set to 2483.5 MHz

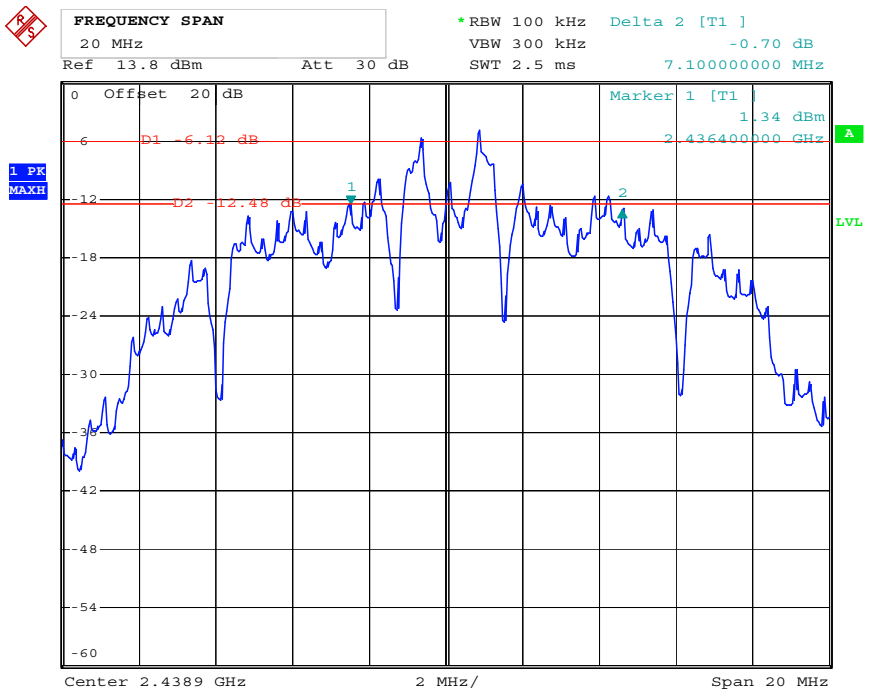
Channel Bandwidth

Rules and Specifications:	15.247 (a) (1) (i)
Guide:	ANSI C63.4:2003
Limit:	Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

Test Site:	Radio Lab.
Distance:	Conducted Measurement
Date of Test:	28 February 2007

Frequency	Channel Bandwidth in kHz	Standard	Result
Low (2413.2 MHz)	7920	>500 kHz	Pass
Middle (2439.1 MHz)	7100	>500 kHz	Pass
High (2461.5 MHz)	6880	>500 kHz	Pass





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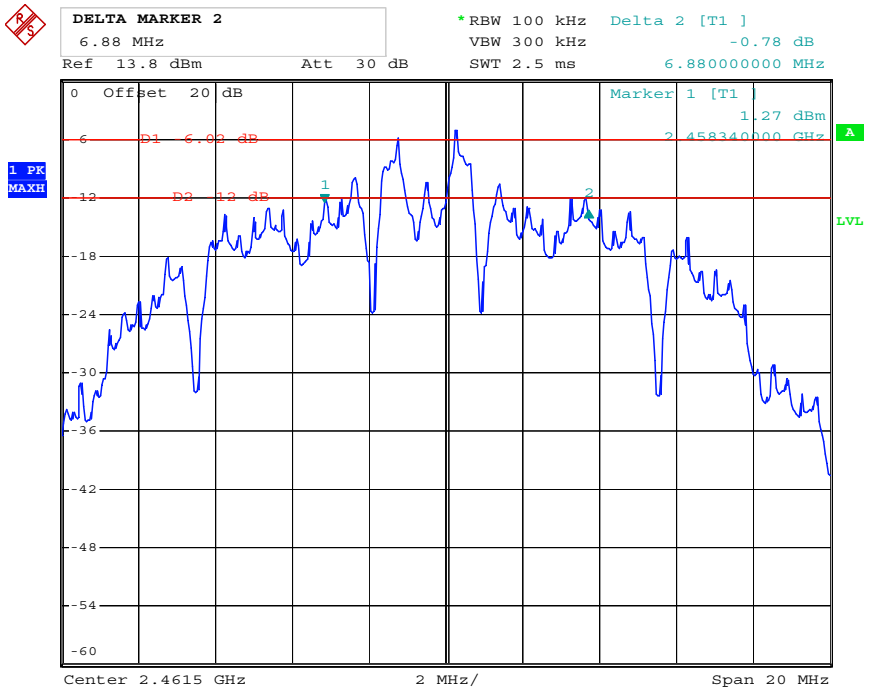

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Carrier Power Measurement

Rules and Specifications:	15.247 (b) (2)
Guide:	ANSI C63.4:2003
Limit:	For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

Test Site:	Radio Lab.
Distance:	Conducted Measurement
Date of Test:	28 February 2007

Frequency	Output Power in dBm	Output Power in W	Standard	Result
Low (2413.2 MHz)	17.83	0.0606	≤1.00W	Pass
Middle (2.439.1 MHz)	17.93	0.0620	≤1.00W	Pass
High (2461.0 MHz)	17.70	0.0588	≤1.00W	Pass

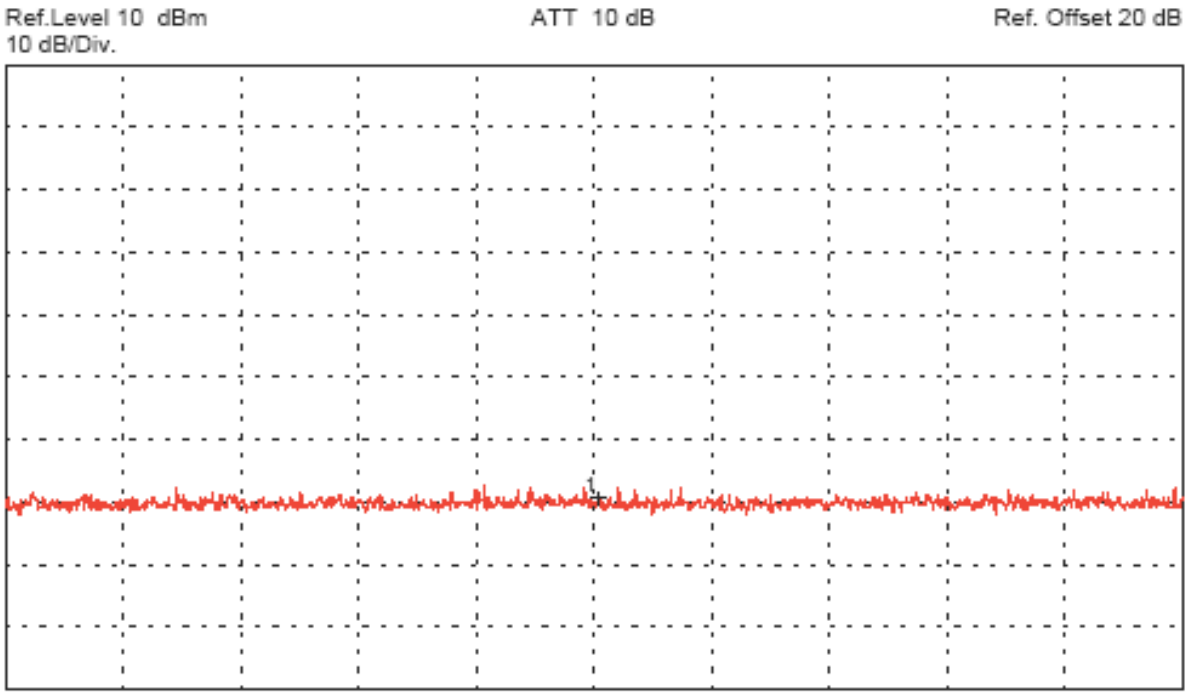
Spurious Emissions

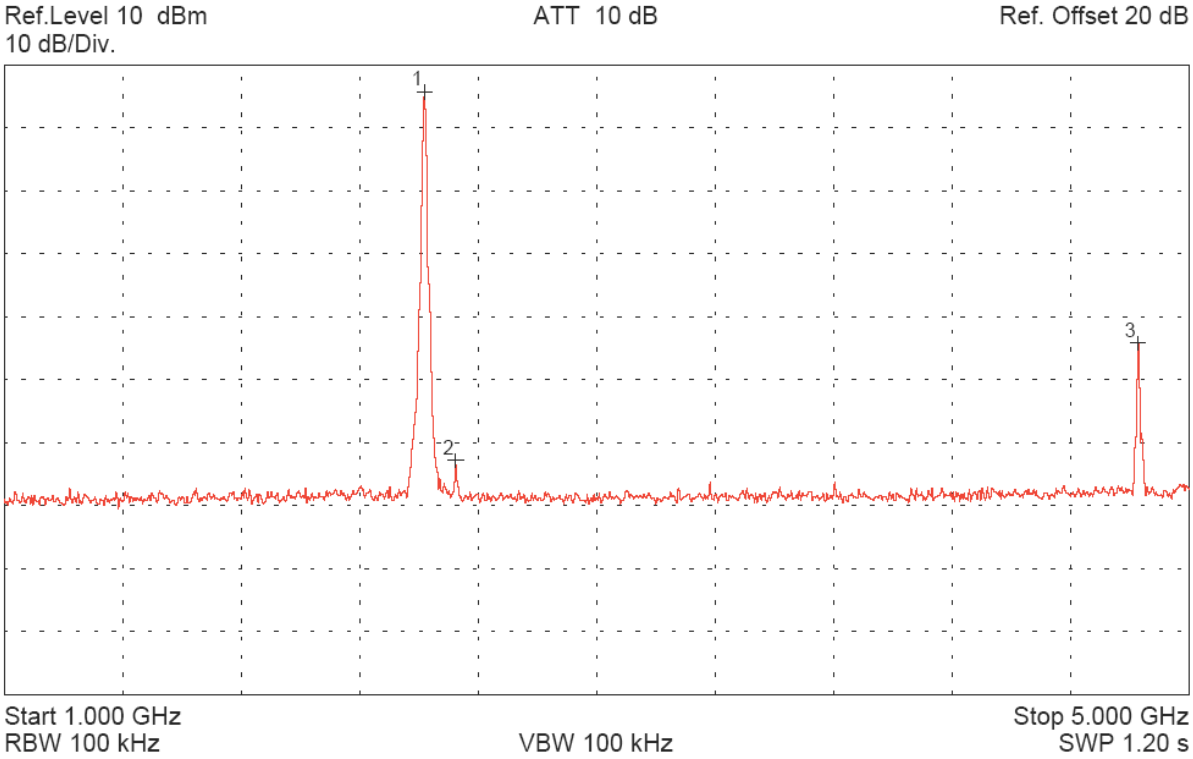
Rules and Specifications:	15.247 (c)
Guide:	ANSI C63.4:2003
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

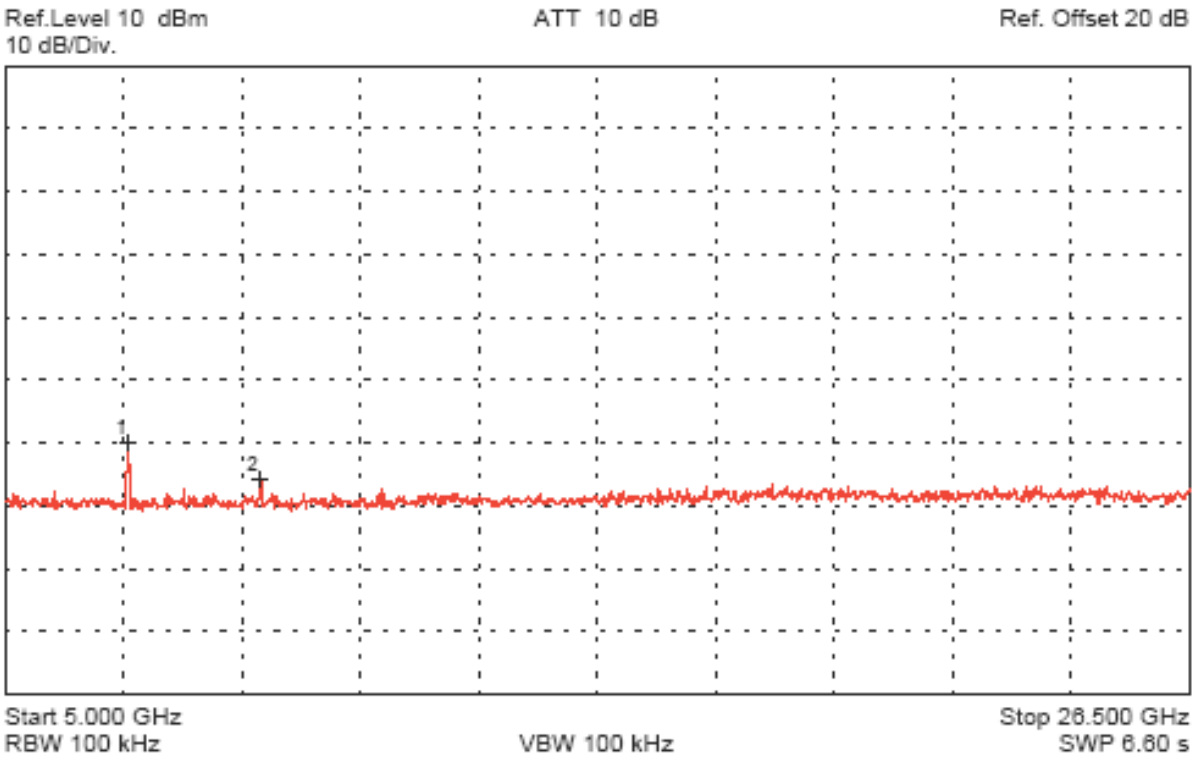
Test Site:	Radio Lab.
Distance:	Conducted Measurement
Date of Test:	11 July 2006

Frequency (MHz)	Measured Value (dBm)	Limit (dBm)	Margin (dB)	Result
2413.2	17.83	30		Fundamental
2439.1	17.93	30		Fundamental
2461.0	17.70	30		Fundamental
4880.0	-33.85	-4.83	29.02	Pass
7317.0	-33.82	-4.83	28.99	Pass
9753.0	-48.78	-4.83	43.95	Pass

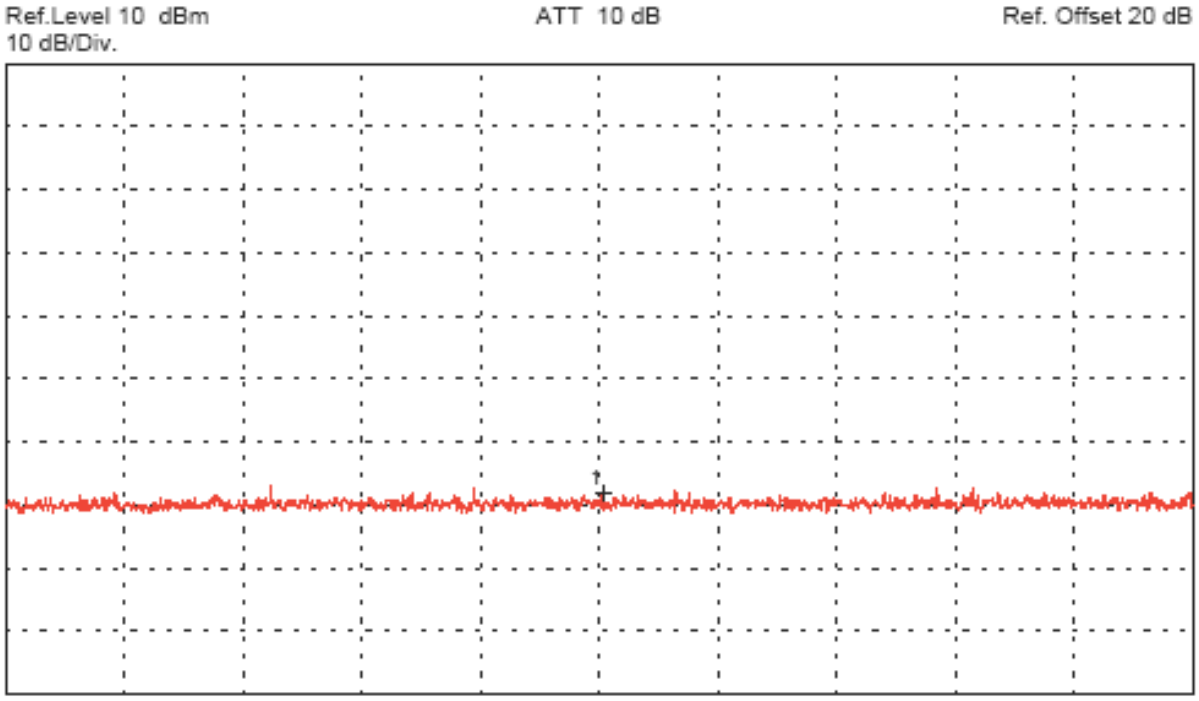
Conducted spurious emissions - low channel

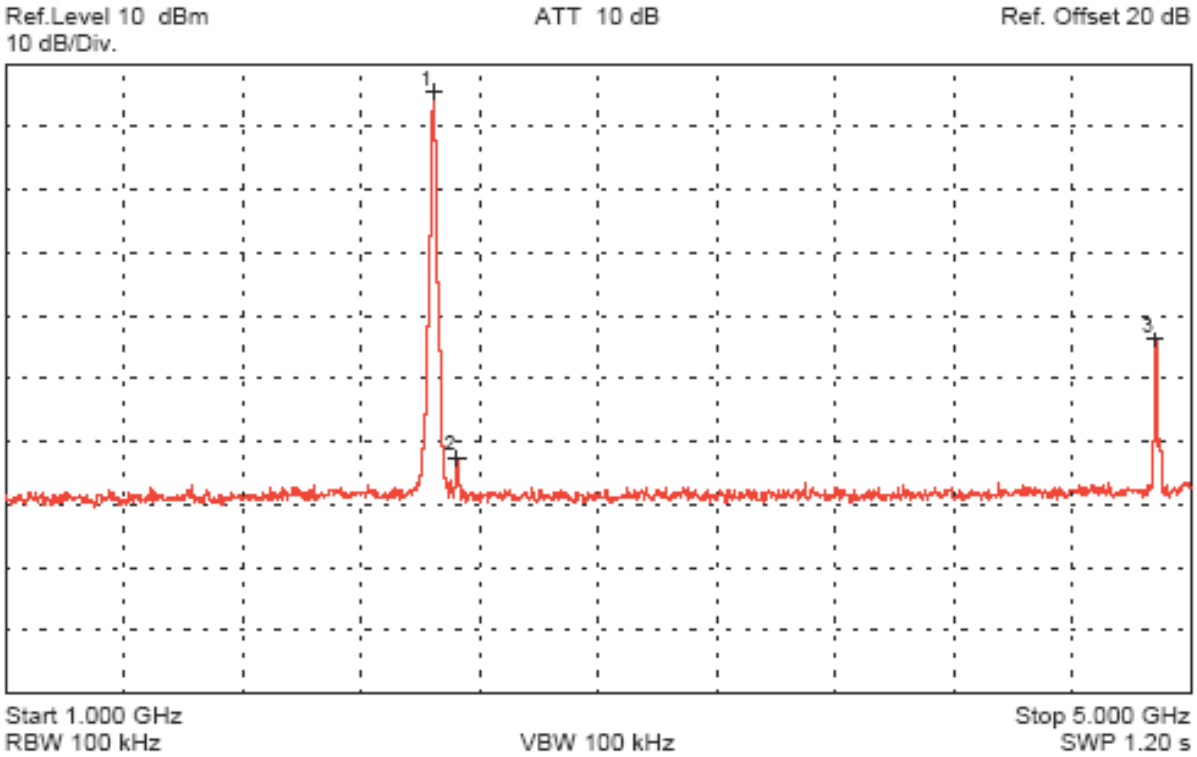


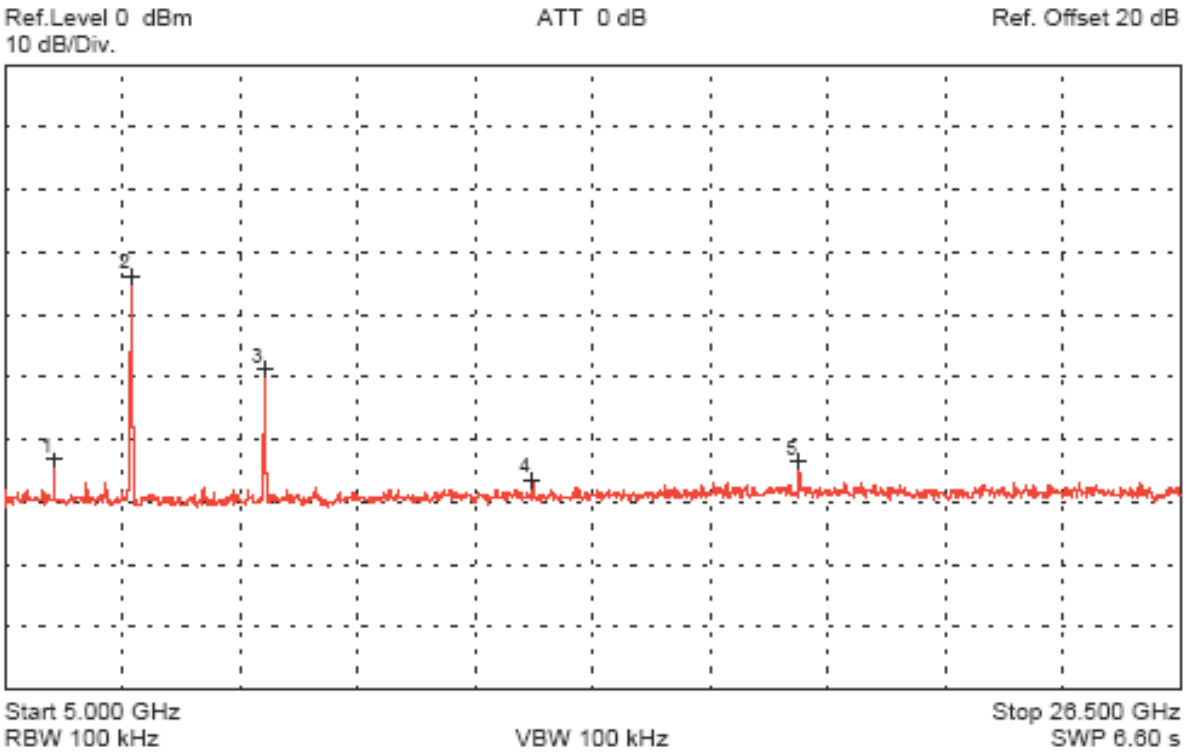



Ref.Level 10 dBm
10 dB/Div.
ATT 10 dB
Ref. Offset 20 dB
1
2
Start 5.000 GHz
RBW 100 kHz
VBW 100 kHz
Stop 26.500 GHz
SWP 6.60 s

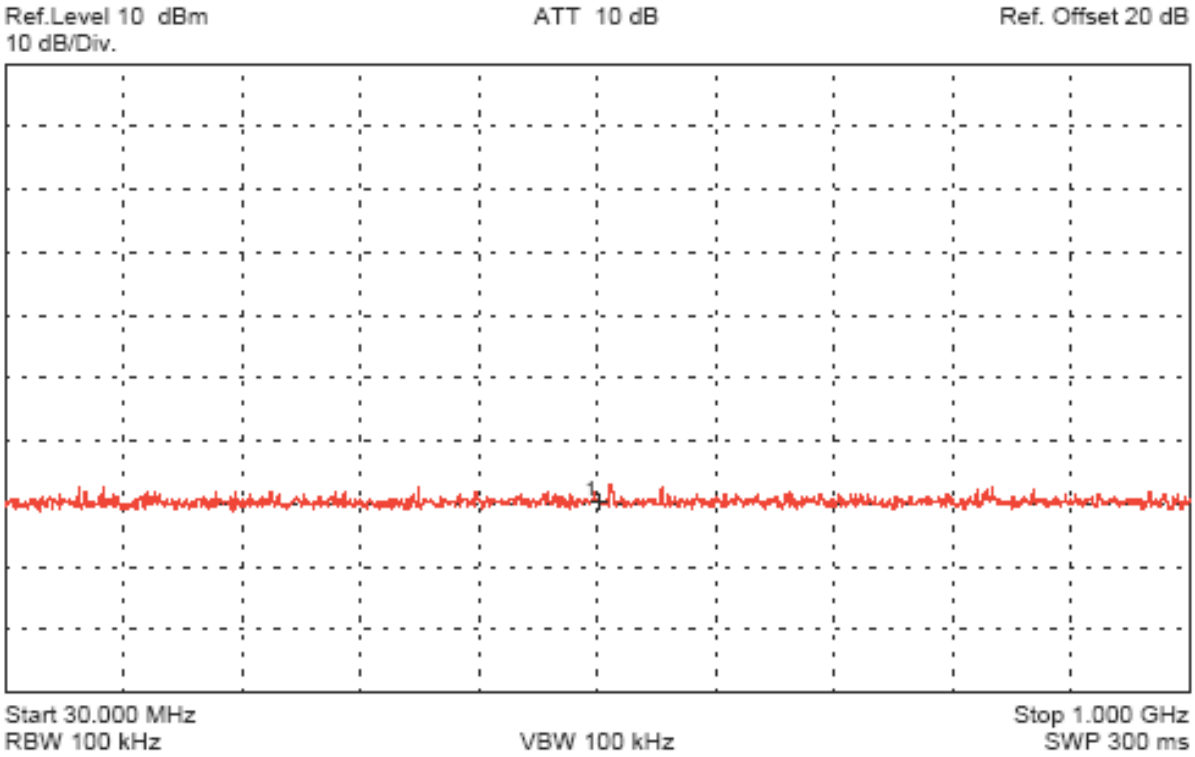
Conducted spurious emissions - middle channel

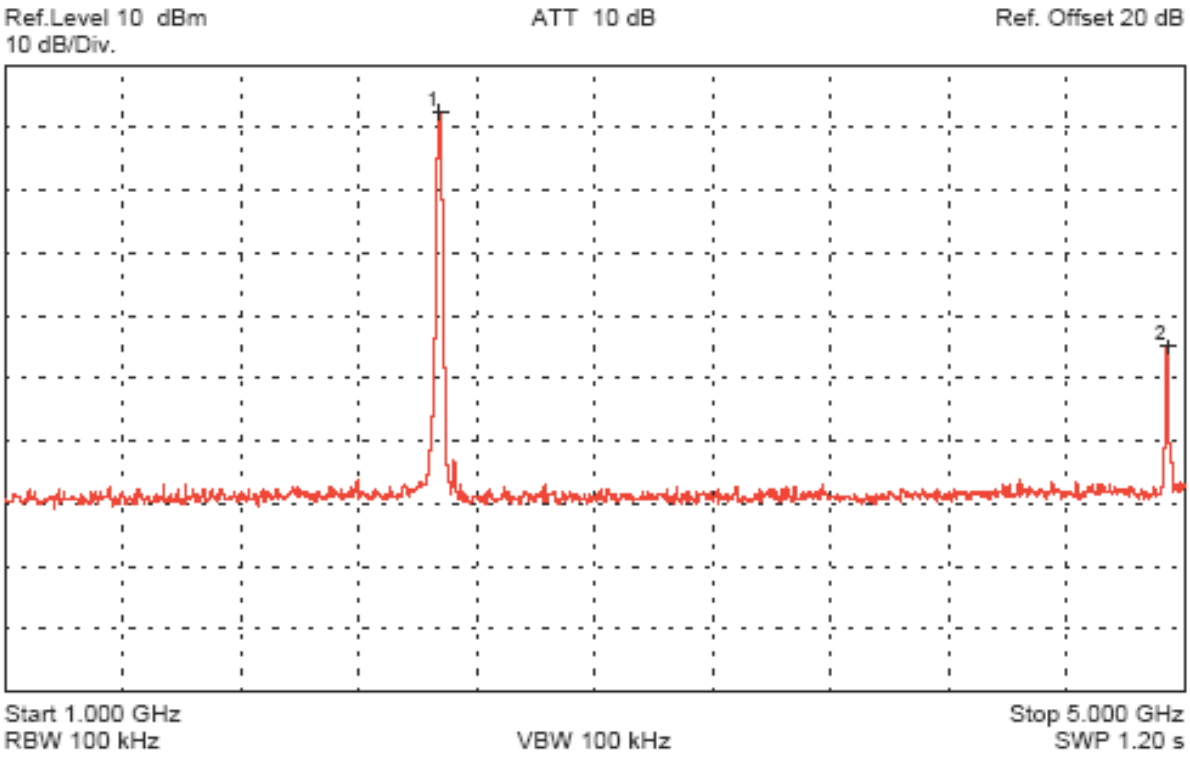


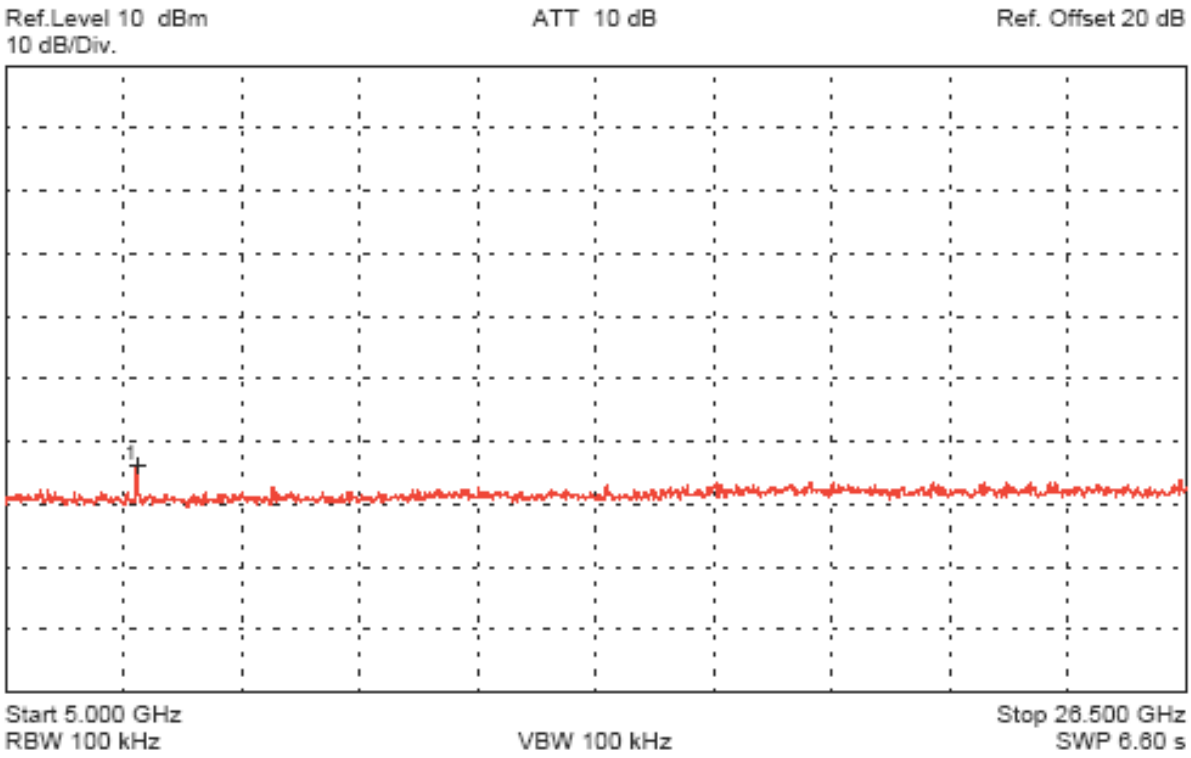



Ref.Level 0 dBm
10 dB/Div.
ATT 0 dB
Ref. Offset 20 dB
1
2
3
4
5
Start 5.000 GHz
RBW 100 kHz
VBW 100 kHz
Stop 26.500 GHz
SWP 6.60 s

Conducted spurious emissions - high channel






Ref.Level 10 dBm
10 dB/Div.
ATT 10 dB
Ref. Offset 20 dB
1
Start 5.000 GHz
RBW 100 kHz
VBW 100 kHz
Stop 26.500 GHz
SWP 6.60 s

Spurious Emissions

Rules and Specifications:	15.247 (c)
Guide:	ANSI C63.4:2003
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

Test Site:	Open Area Test Site (< 1GHz), Fully anechoic room (>1 GHz)
Distance:	Radiated Measurement
Date of Test:	28 July 2006

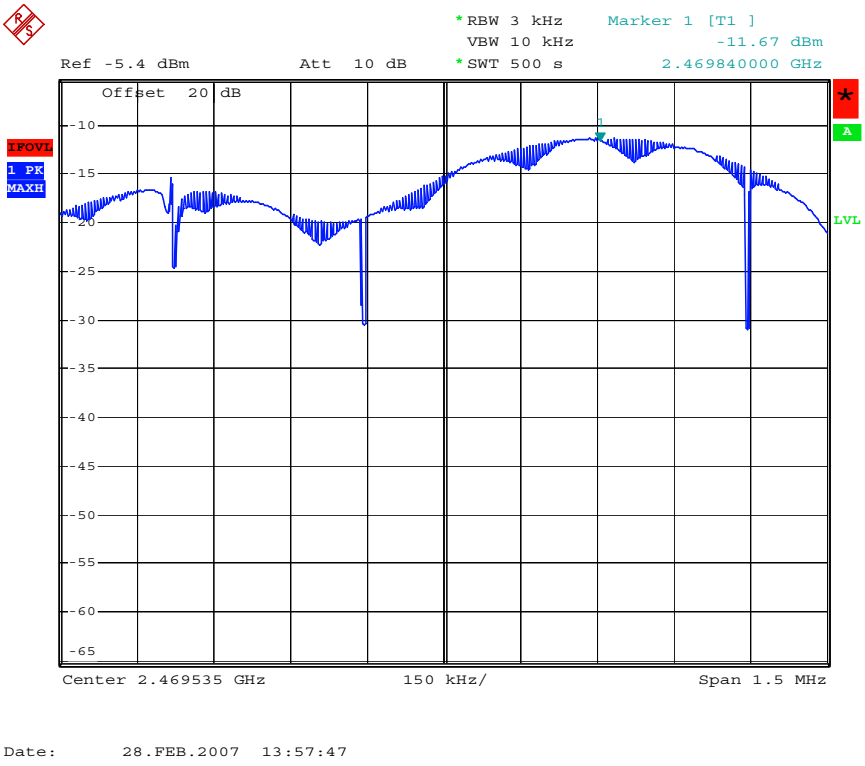
Frequency (MHz)	Antenna Polarisation	Meter Reading (dBµV)	Antenna Correction (dB)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2413.2	Vertical	68.51	33.41	101.92	---	---
2439.1	Vertical	68.63	33.48	102.11	---	---
2468.1	Vertical	69.10	33.55	102.65	---	---
2134.0	Vertical	18,51	32.64	51.16	54.0	2.84
2158.0	Vertical	18.75	32.71	51.46	54.0	2.54
2188.0	Vertical	20.74	32.80	53.54	54.0	0.46
4318.0	Vertical	11.64	33.81	45.54	54.0	8.46
8636.0	Vertical	1.43	43.45	44.88	54.0	9.12

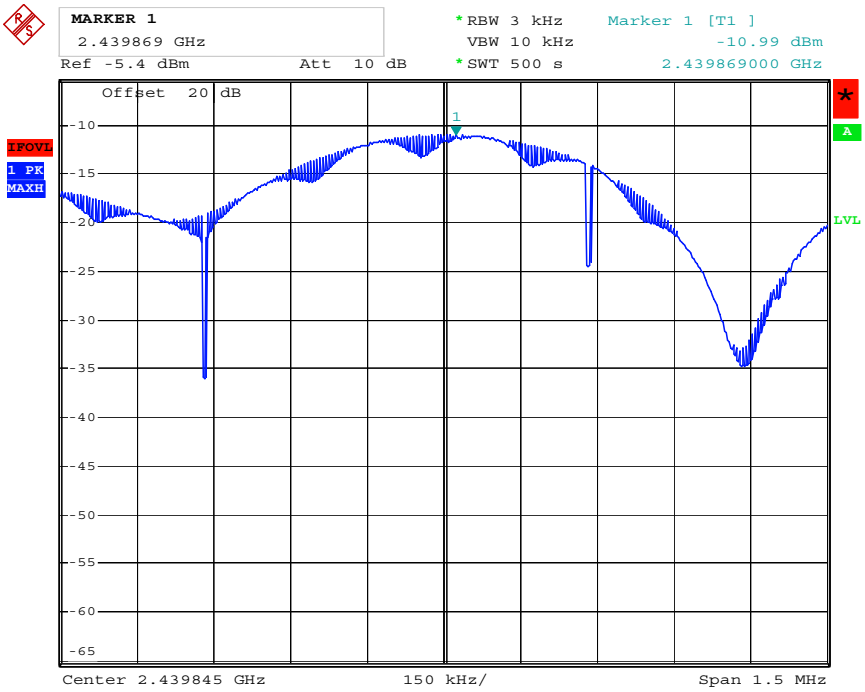
Power Spectral Density

Rules and Specifications:	15.247 (e)
Guide:	ANSI C63.4:2003
Limit:	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

Test Site:	Radio Lab.
Distance:	Conducted Measurement
Date of Test:	28 February 2007

Frequency	Power Spectral Density in dBm/3 kHz		Standard	Result
Low (2413.2 MHz)	-11.67		< 8	Pass
Middle (2439.1 MHz)	-10.99		< 8	Pass
High (2461.1 MHz)	-11.55		< 8	Pass





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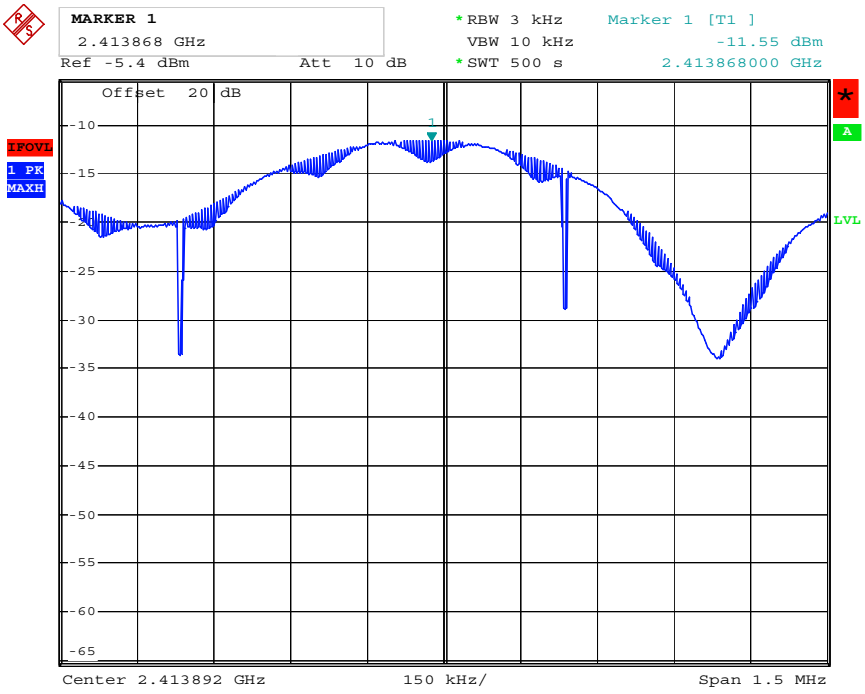

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Antenna connector requirement

Rules and Specifications:	15.203
Guide:	---
Limit:	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section.

Test Result	Pass (Reverse SMA antenna connectors)
	The UUT employs reverse SMA connectors.

RF Exposure

Rules and Specifications:	15.247 (b) (4)
Guide:	OET Bulletin 65, Edition 97-01
Limit:	According to §15.247(b)(4) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissive Exposure (MPE)
General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2	Averaging Time (minute)
1500 - 100 000 MHz	---	---	1.0 = 0.61 mw/cm2 @ 915 MHz	30

f = frequency in MHz

MPE Prediction of MPE according to equation from page 19 of OET Bulletin 65, Edition 97-01

$S = PG/4\pi R^2$

Where: S = power density
P = power input to antenna
G = power gain of the antenna relativ to an isotropic radiator
R = Distance to the center of radiation of the antenna

Maximum output power at antenna input terminal: **17.93 dBm = 0.062 W**
Prediction distance: **20 cm**
Antenna gain: **2.0 dBi = 1.58 (numerical gain)**

Power density at 20 cm: **0.019 mW/cm2**

Test Result:	**Pass**	

Conducted Powerline Emission Measurement 150 kHz to 30 MHz

Rules and specifications:	CFR 47 Part 15, section 15.207		
Guide:	ANSI C63.4 / CISPR 22		
Limit:	Frequency of Emission (MHz)	Conducted Limit (dBµV)	
		Quasi-peak	Average
	0.15 - 0.5	66 to 56	56 to 46
	0.5 - 5	56	46
	5 - 30	60	50
Measurement procedure:	Conducted AC Powerline Emission		

Comment:	
Date of test:	11 July 2006
Test site:	Shielded room, cabin no. 4

Test Result:	Test passed

Tested on:	Linecord (L1)

Frequency (MHz)	Detector	Reading Value (dBµV)	Correction Factor (dB)	Final Value (dBµV)	Limit (dBµV)	Margin (dB)
15.640	Quasi-Peak	44.0	0.0	44.0	60.0	16.0
17.645	Quasi-Peak	44.8	0.0	44.8	60.0	**15.2**
20.345	Quasi-Peak	42.8	0.0	42.8	60.0	17.2

Tested on:	Linecord (N)

Frequency (MHz)	Detector	Reading Value (dBµV)	Correction Factor (dB)	Final Value (dBµV)	Limit (dBµV)	Margin (dB)
0.350	Average	32.6	0.0	32.6	49.0	16.4
0.520	Average	27.4	0.0	27.4	46.0	18.6
10.270	Average	32.7	0.0	32.7	50.0	17.3
12.795	Average	41.0	0.0	41.0	50.0	9.0
12.800	Quasi-Peak	41.5	0.0	41.5	60.0	18.5
15.580	Average	47.8	0.0	47.8	50.0	2.2
15.670	Quasi-Peak	48.9	0.0	48.9	60.0	11.1
17.065	Quasi-Peak	49.9	0.0	49.9	60.0	10.1
17.320	Average	48.9	0.0	48.9	50.0	**1.1**
20.280	Average	45.8	0.0	45.8	50.0	4.2
20.455	Quasi-Peak	47.1	0.0	47.1	60.0	12.9
24.370	Average	34.3	0.0	34.3	50.0	15.7

Sample calculation of final values:

Final Value (dBµV) = Reading Value (dBµV) + Correction Factor (dB)

Spurious Radiation Measurement

Rules and Specifications:	15.109,
Guide:	ANSI C63.4:2003
Limit:	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated at least 50 dB below the level of the fundamental or to the general radiated emission limits below, whichever is the lesser attenuation

Frequency of Emission (MHz)	Field Strength (microvolts/meter)
30 - 88	100
88 - 216	150
216 - 960	200
Above 960	500

Tested Frequency:	RX Mode, middle RF Channel
Test Site:	Open Area Test Site (< 1 GHz), Fully anechoic chamber (> 1 GHz)
Distance:	3 Meter

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBµV)	Correction Factor (dB/m)	Field Strength (dBµV/m)	Limit (dBµV/m)	Margin (dB)
2158.000	Peak	Vertical	18.46	32.71	51.17	54.00	**2.8**
4318.000	Peak	Vertical	13.49	33.81	47.30	54.00	**6.7**
8636.000	Peak	Vertical	1.67	43.45	45.12	54.00	**8.9**

Sample calculation of erp values:

Field Strength (dBµV/m) = Analyzer Reading (dBµV) + Correction Factor (dB/m)

8. Referenced Regulations

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

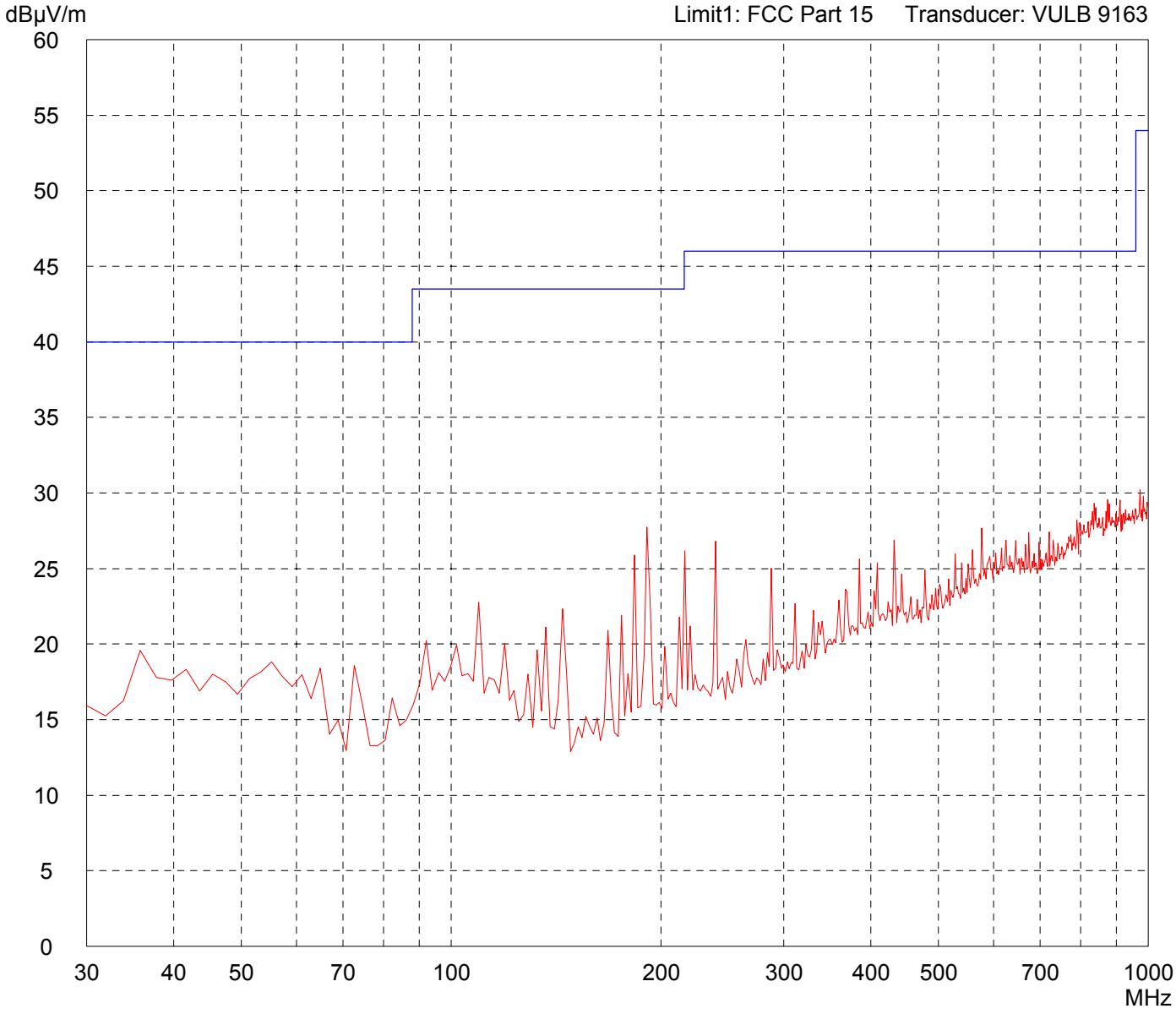
☒	CFR 47 Part 2	Code of Federal Regulations Part 2 (Frequency allocation and radio treaty matters; General rules and regulations) of the Federal Communication Commission (FCC)	October 10, 2004
☒	CFR 47 Part 15	Code of Federal Regulations Part 15 (Radio Frequency Devices) of the Federal Communication Commission (FCC)	September 19, 2005
☒	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 to 40 GHz	December 11, 2003 (published on January 30, 2004)

Charts taken during testing

Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - TX Mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/11/2006 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

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



Result: Prescan	Project file: 50940-60539

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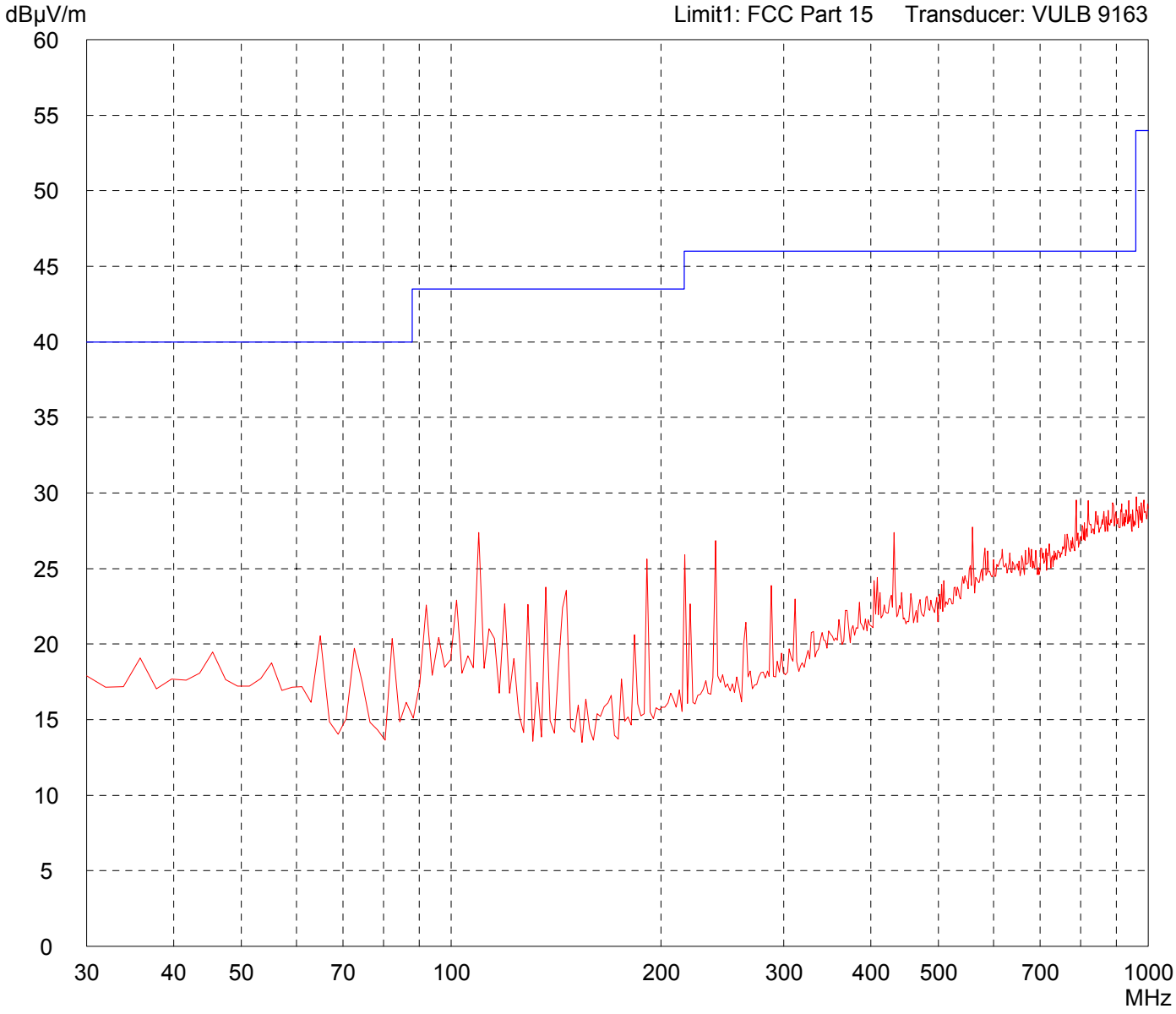
Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - TX Mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/11/2006 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

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



Result: Prescan	Project file: 50940-60539

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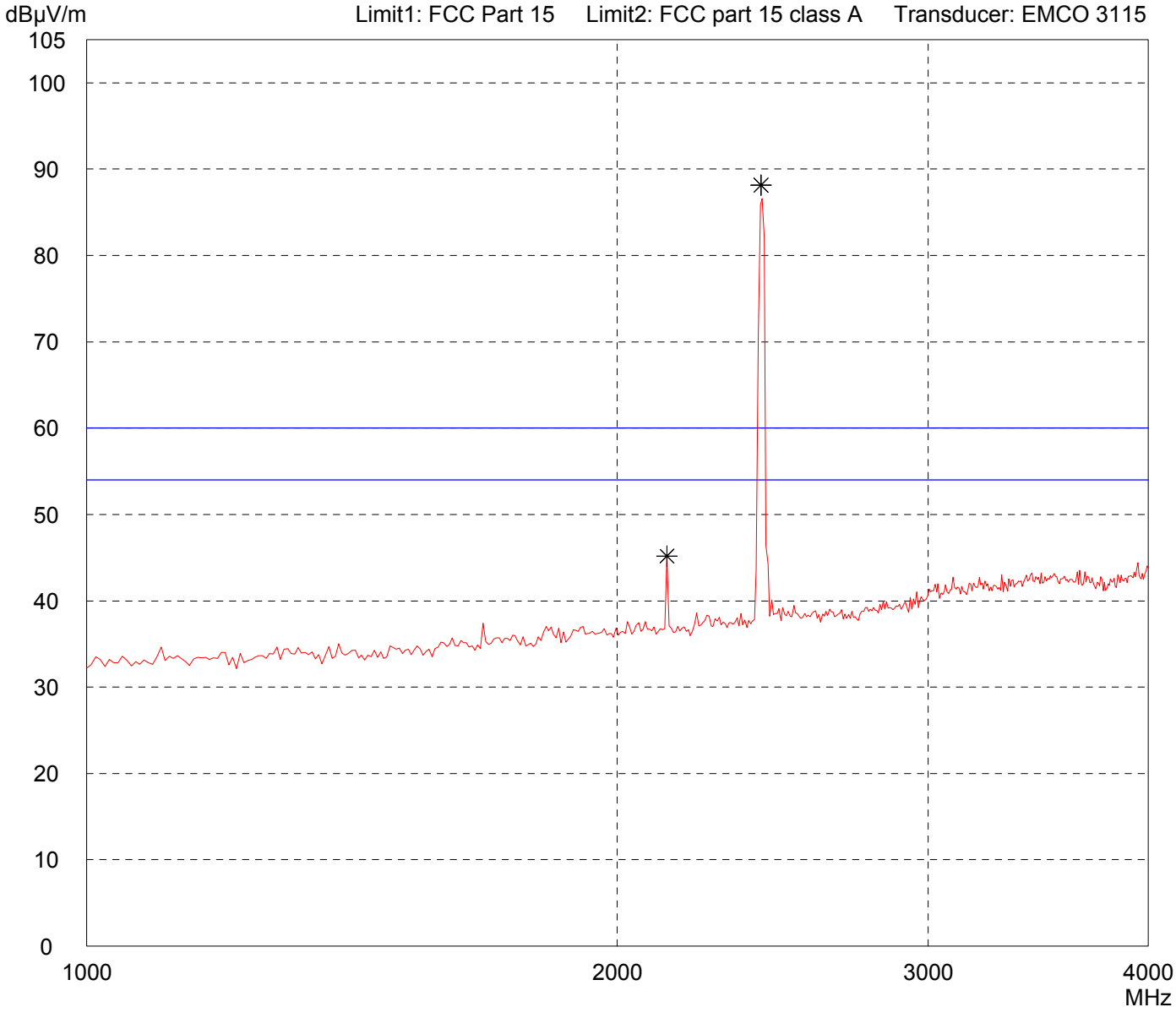
Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

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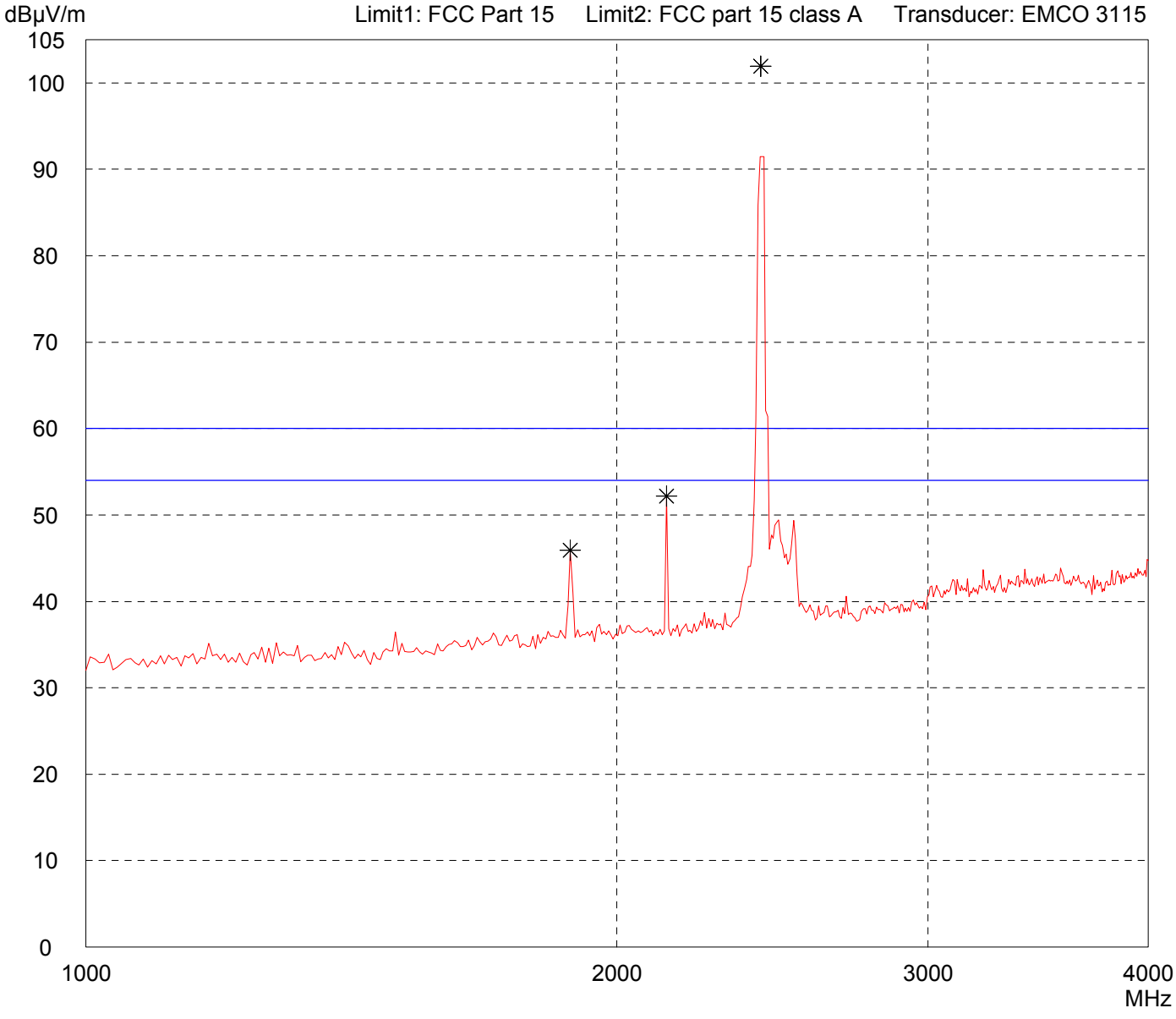
Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

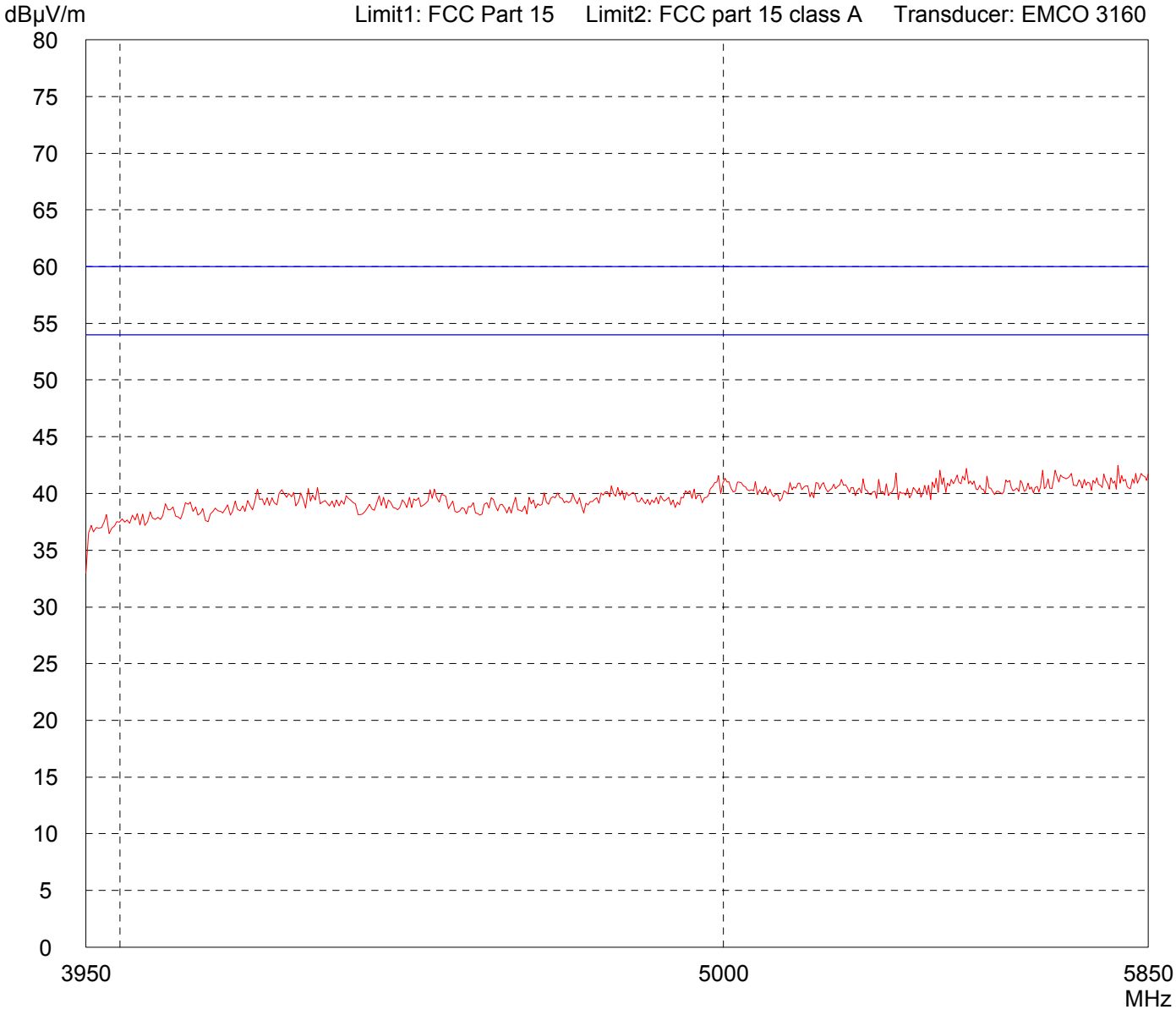


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Limit kept	Project file: 50940-60539

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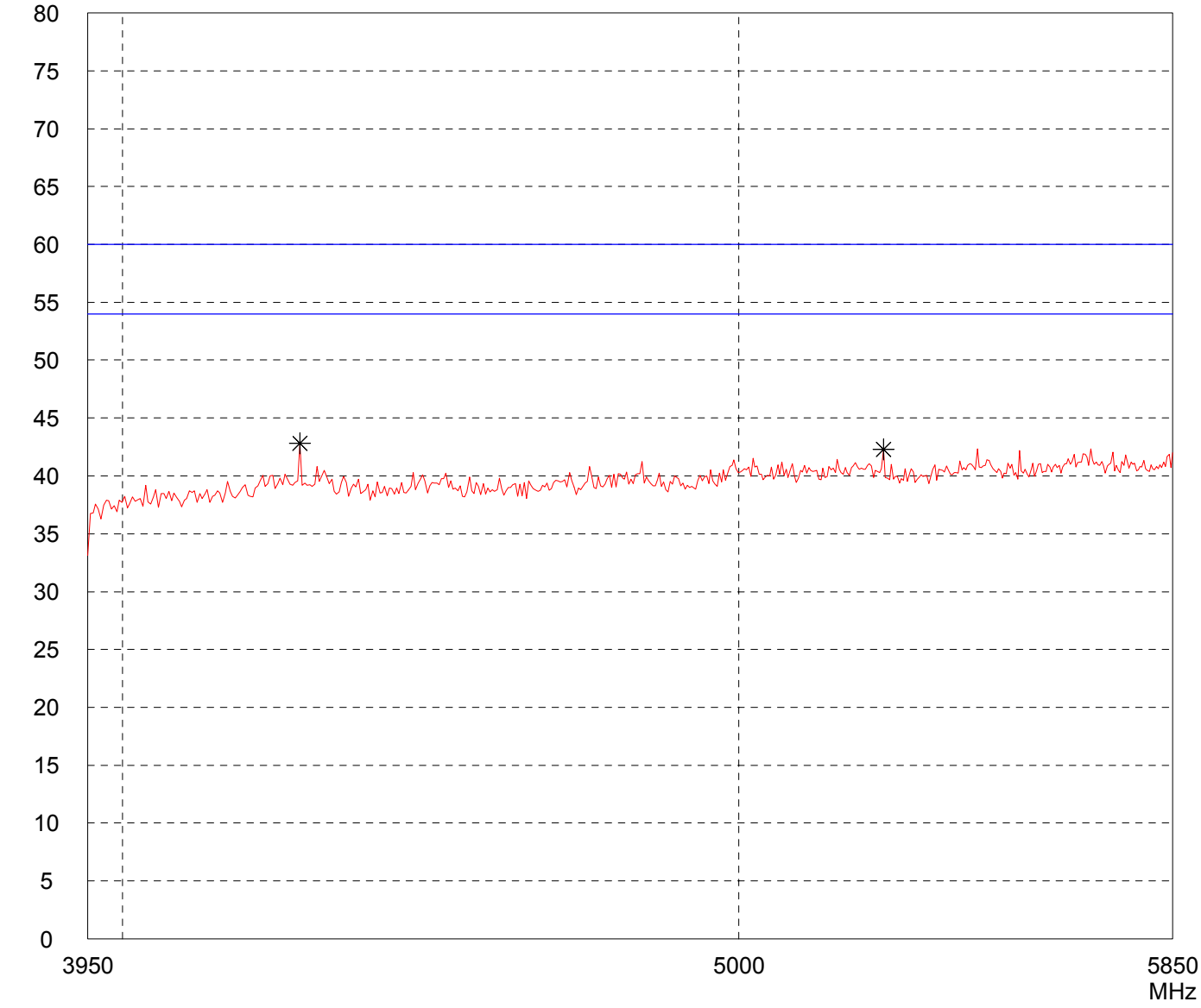
Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand

dBµV/m Limit1: FCC Part 15 Limit2: FCC part 15 class A Transducer: EMCO 3160



Result: Limit kept	Project file: 50940-60539

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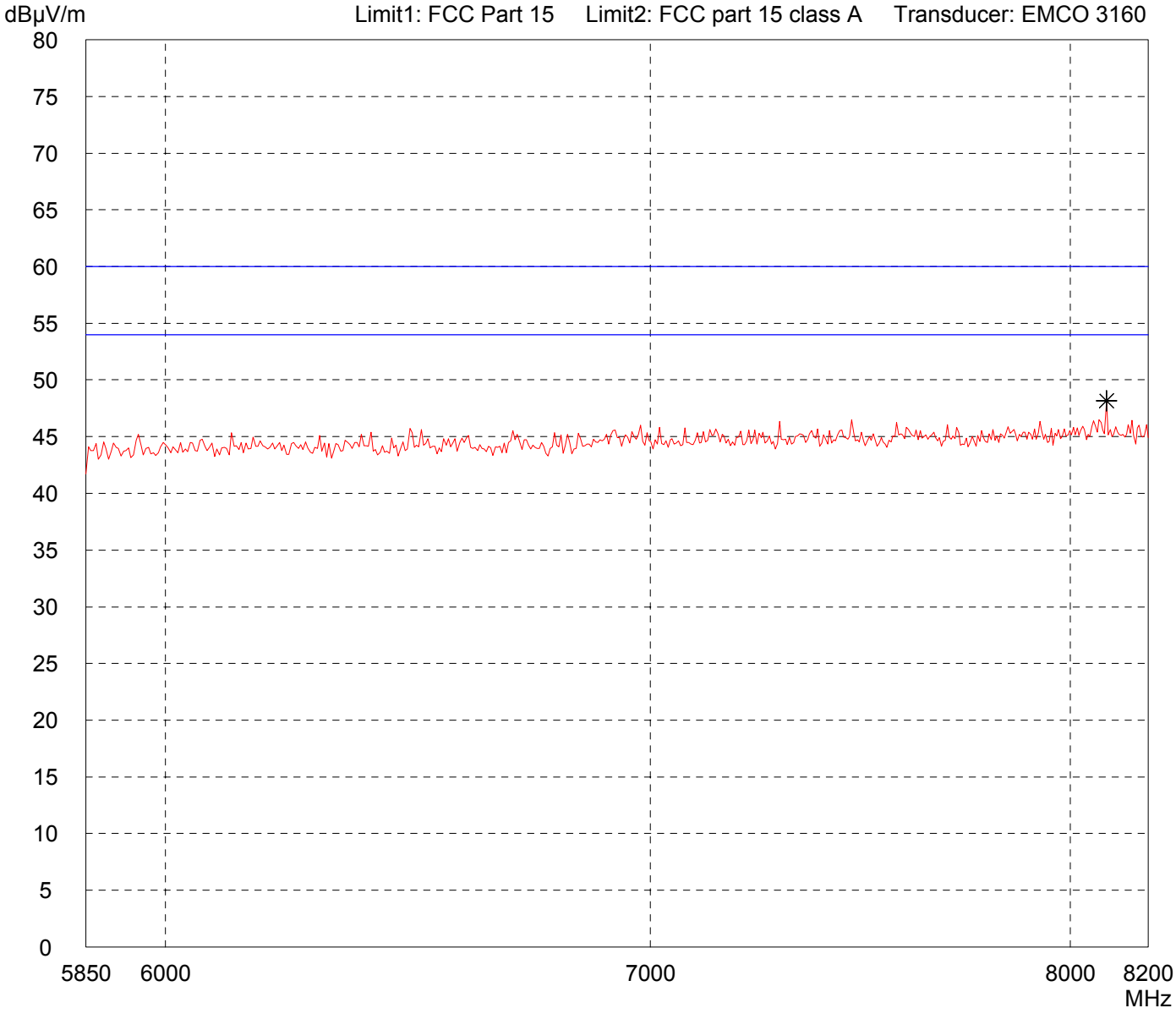
Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

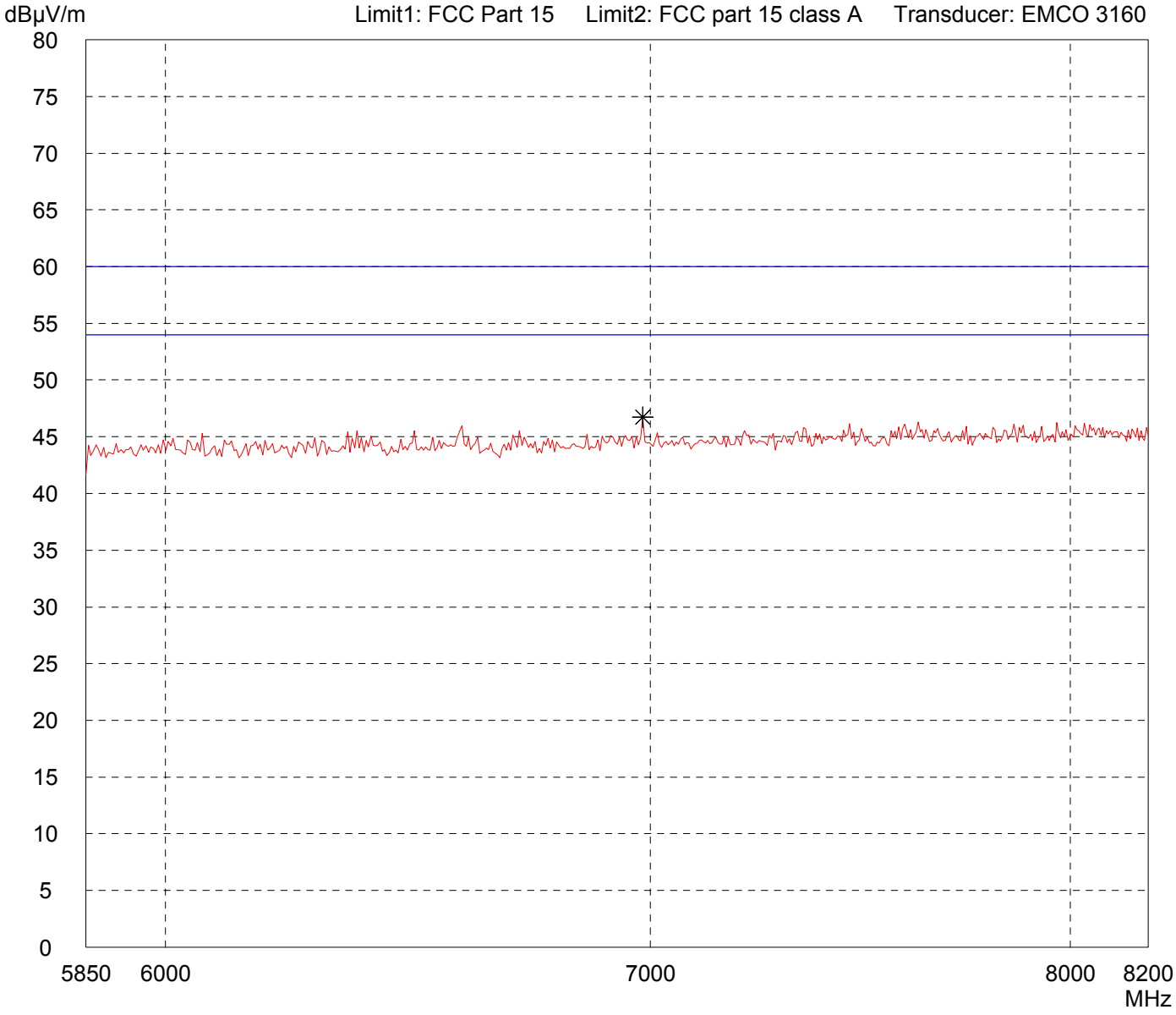
Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand

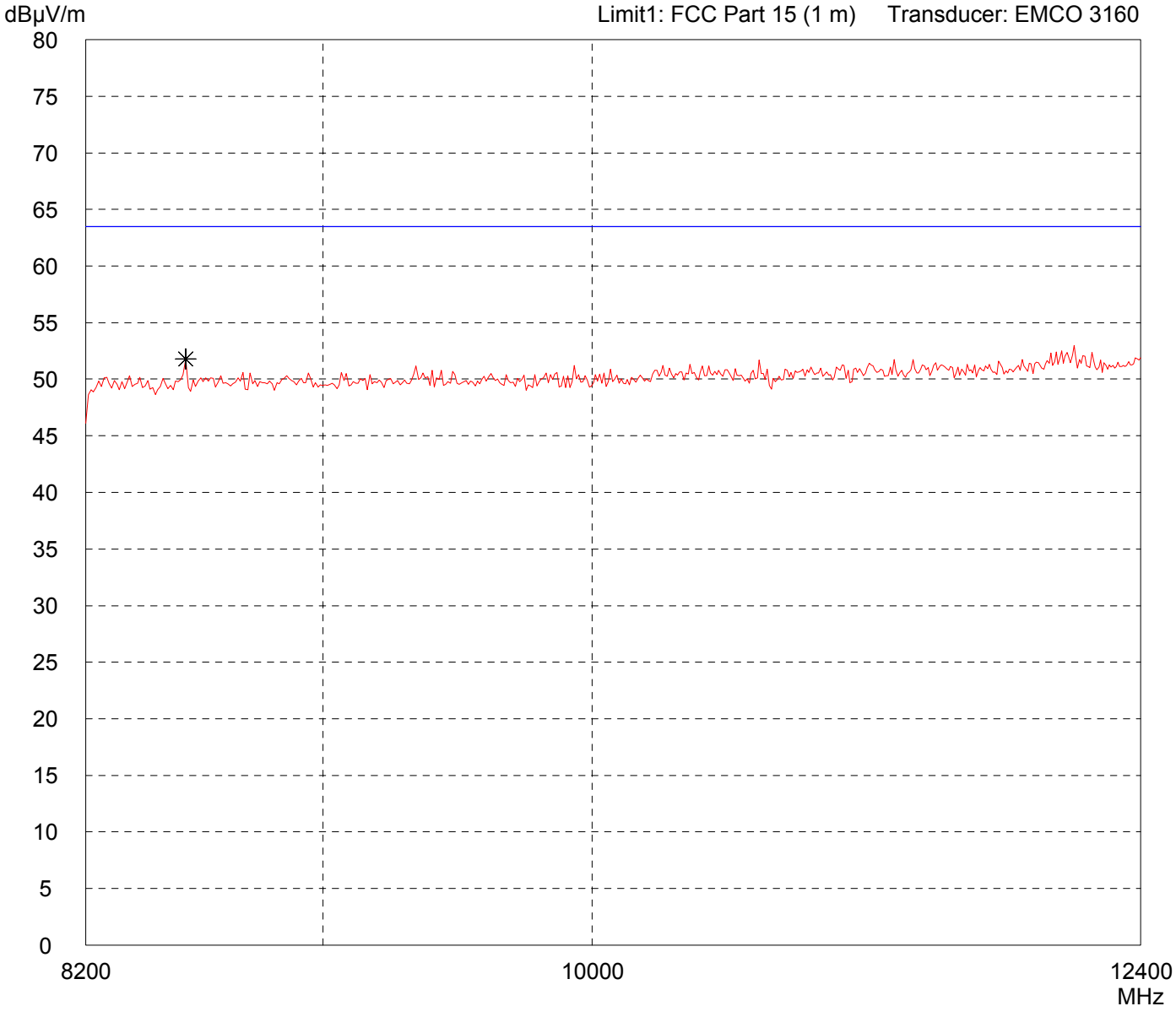


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

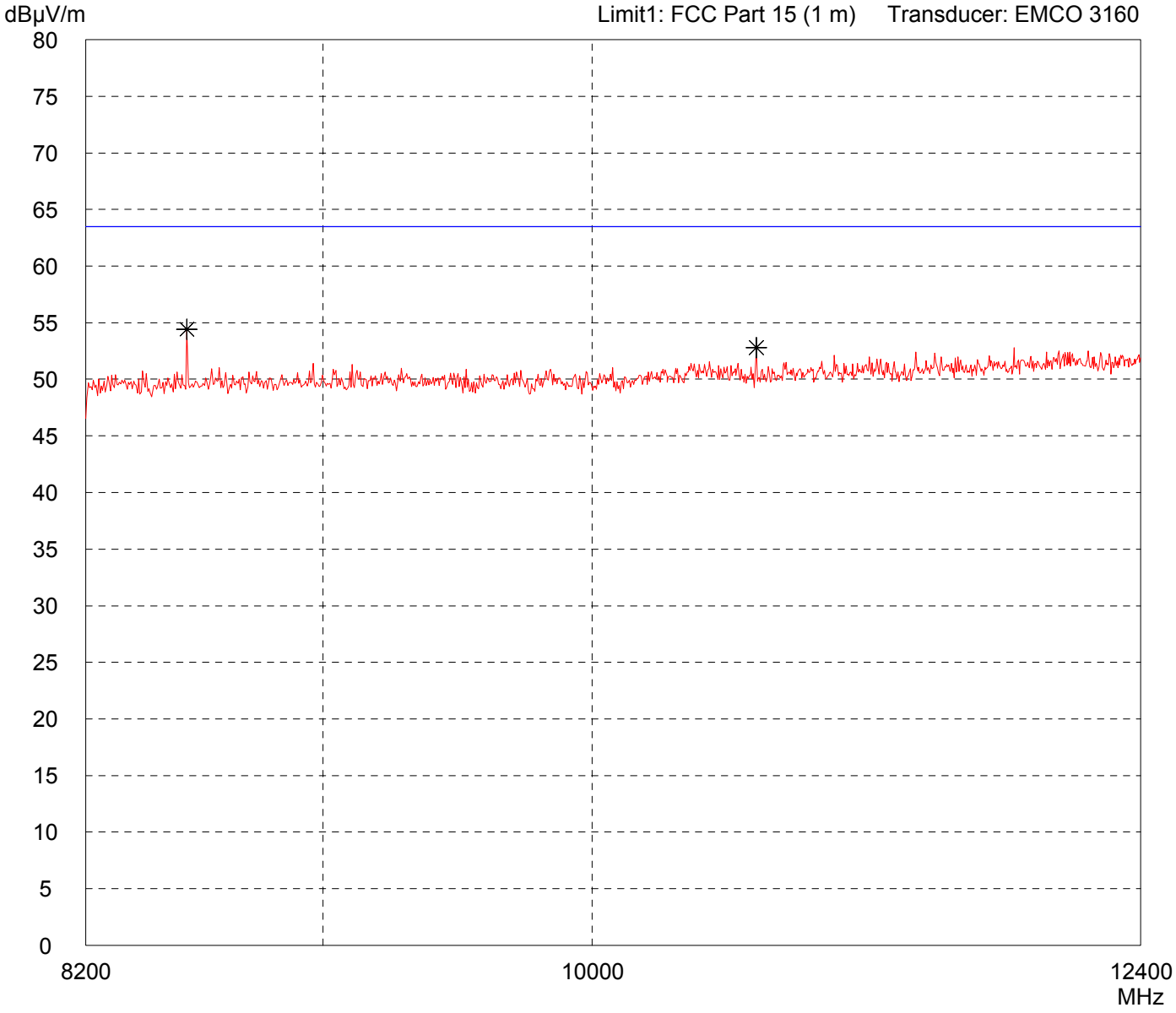


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

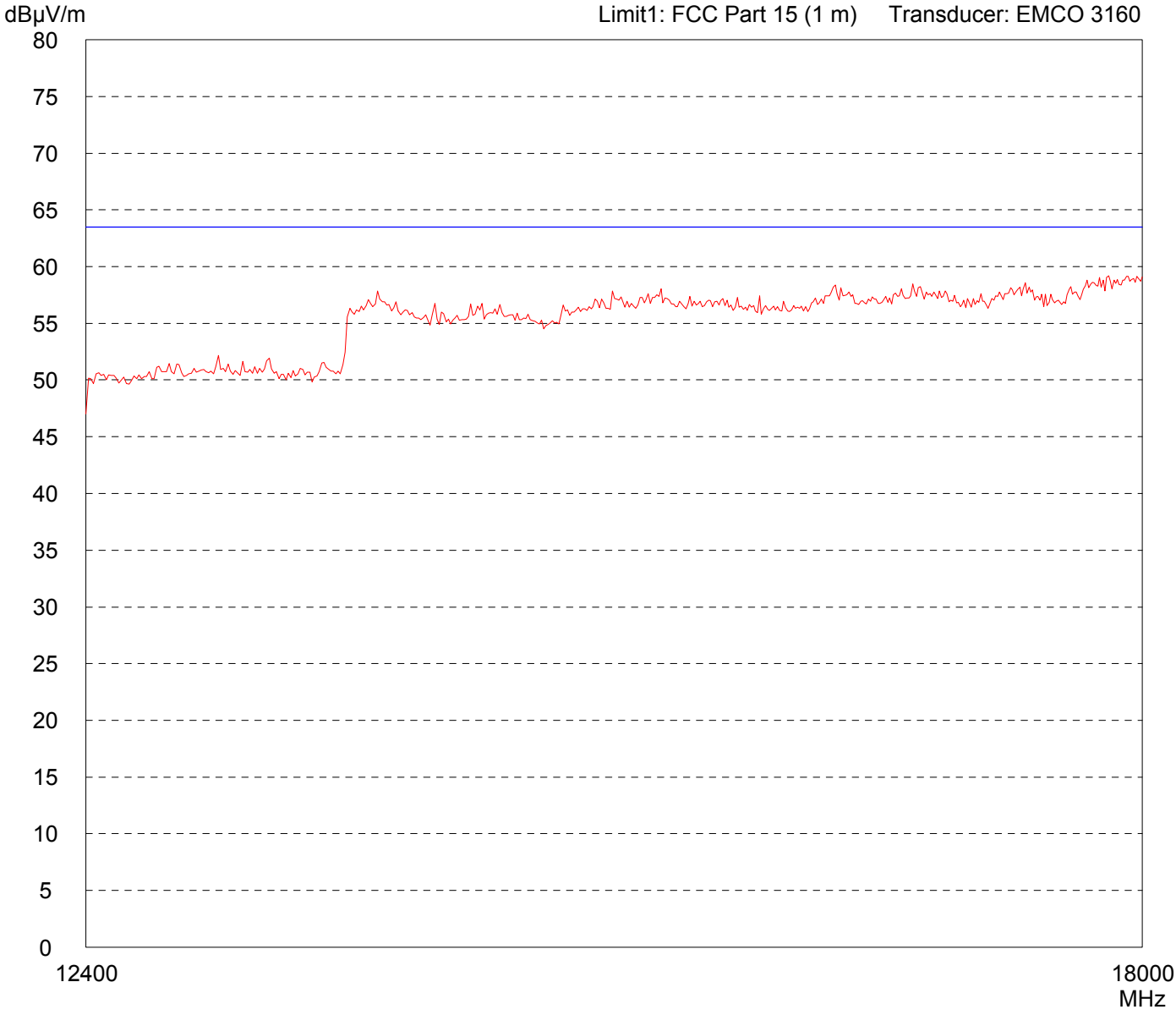


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 18 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

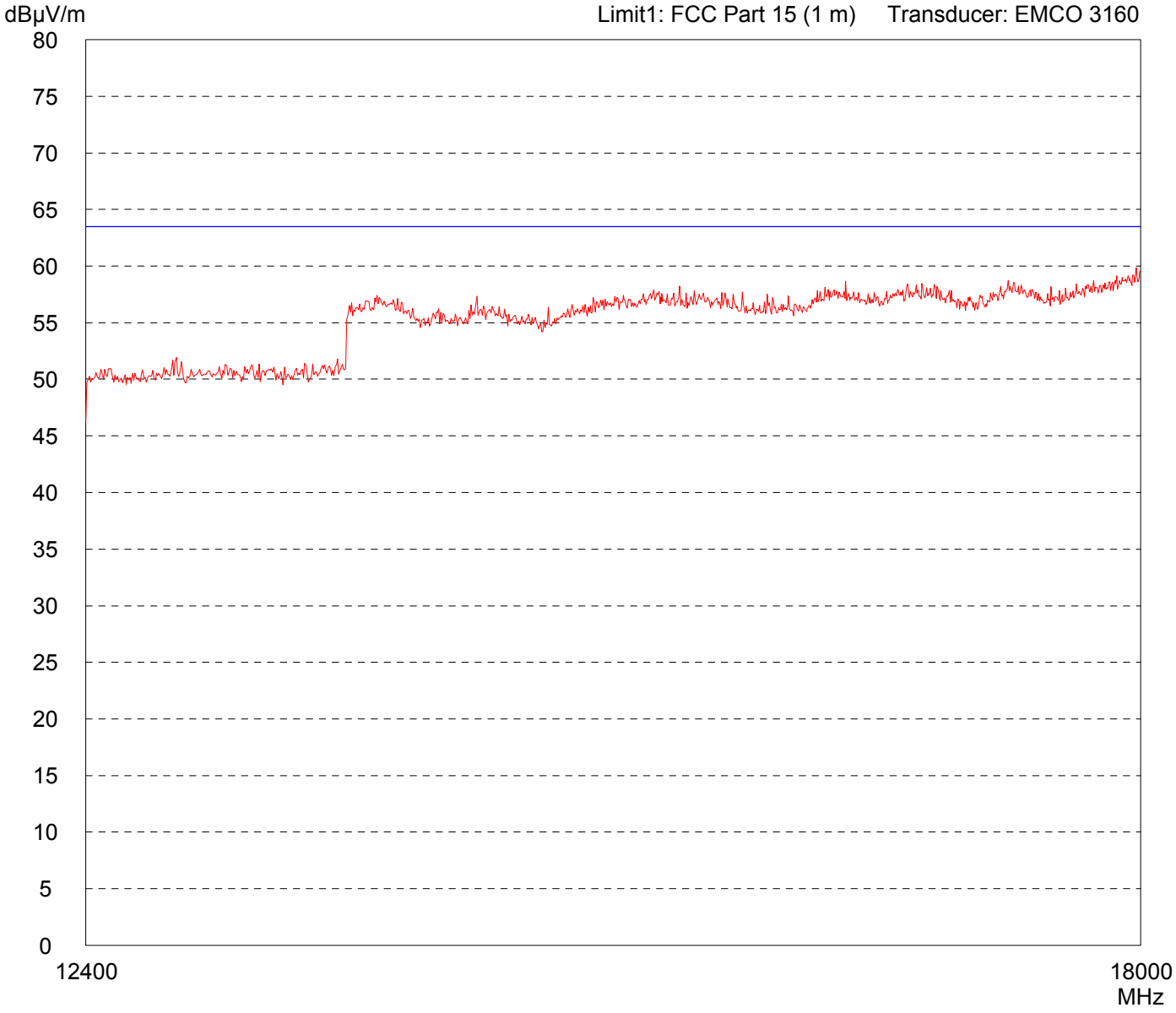


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 18 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Lowest Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

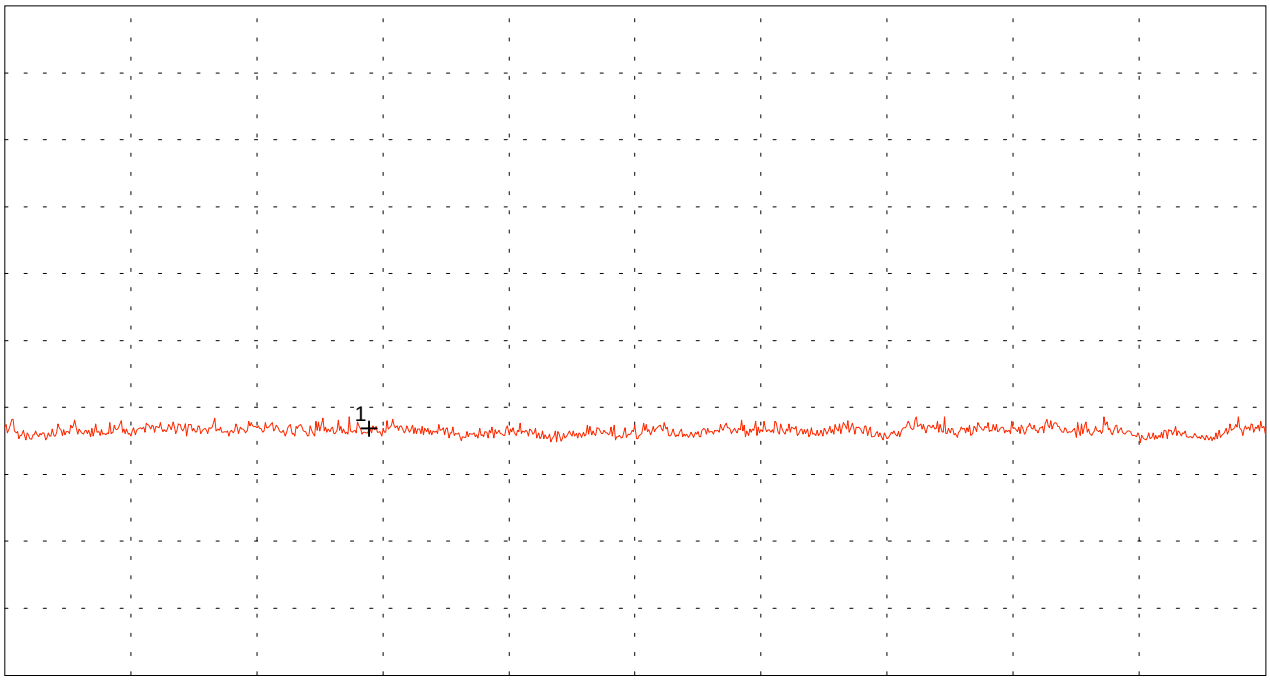


Result: Prescan	Project file: 50940-60539

Spurious emissions according to FCC Rules

Model: SDS 1 TM	Mode: - Radiated Mesurement - Horizontal Polarisation - TX Mode - Lowest Channel
Serial No.: Prototyp	
Applicant: Schildknecht	

Ref.Level 87 dBµV ATT 0 dB
10 dB/Div.



Start 18.000 GHz Stop 26.500 GHz
RBW 1 MHz VBW 1 MHz SWP 40 ms

Multi Marker List

No. 1 20.455556 GHz 23.83 dBµV

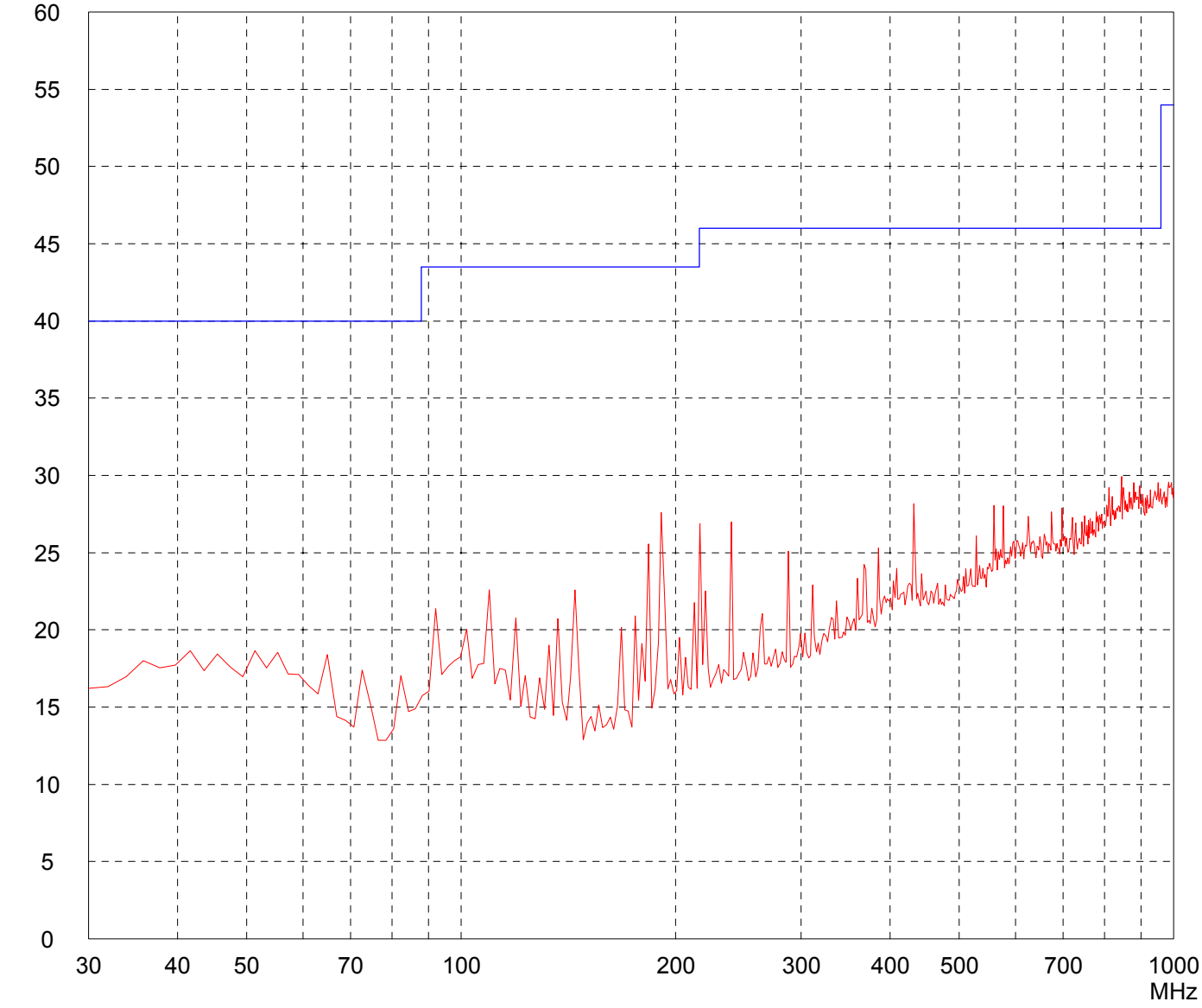
Tested by: Johann Roidt	Project-No.:
Date: 27 July 2006	

Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - TX Mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/11/2006 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

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

dBµV/m — Limit1: FCC Part 15 — Transducer: VULB 9163



Result: Prescan	Project file: 50940-60539

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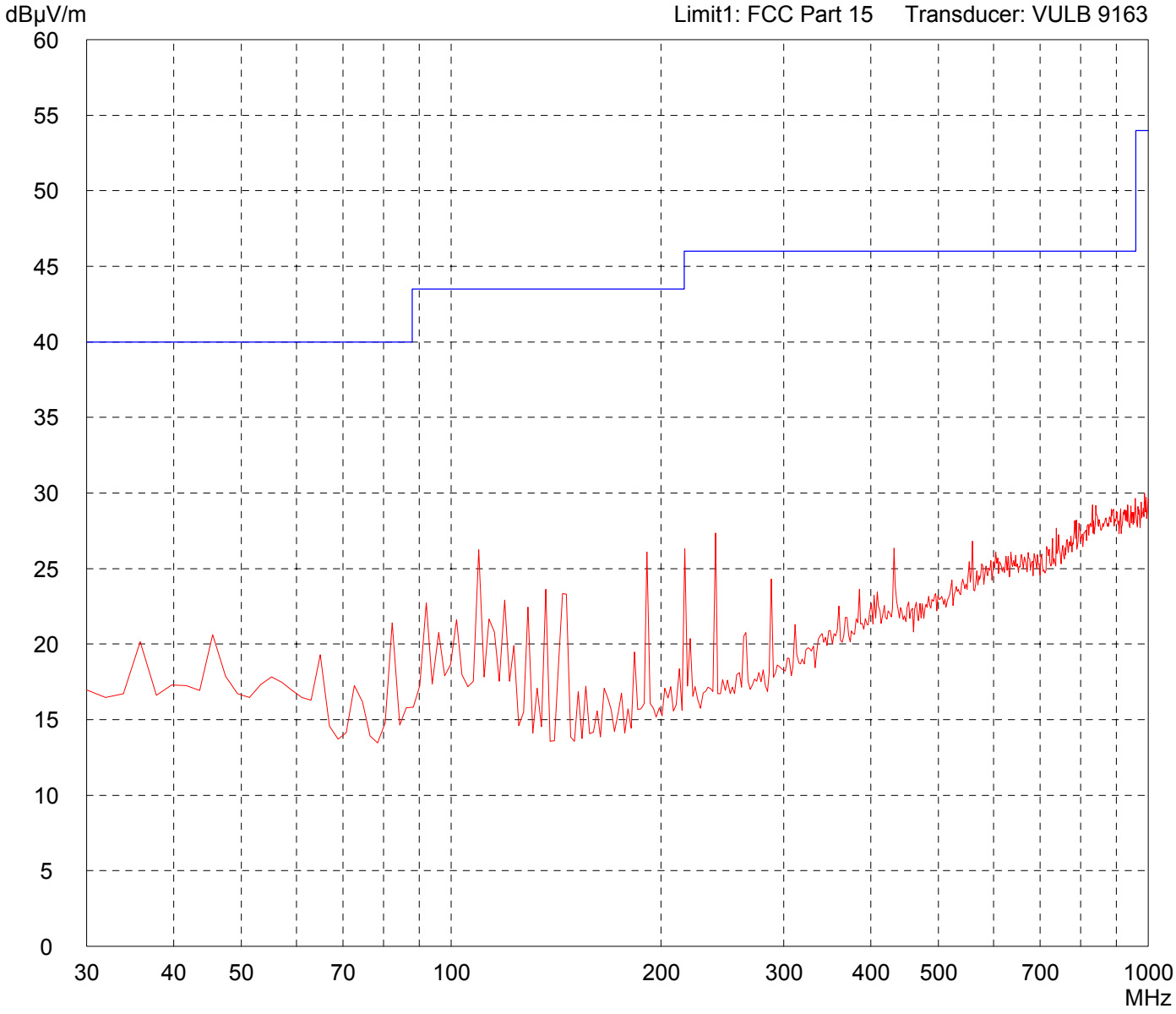
Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - TX Mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/11/2006 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

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



Result: Prescan	Project file: 50940-60539

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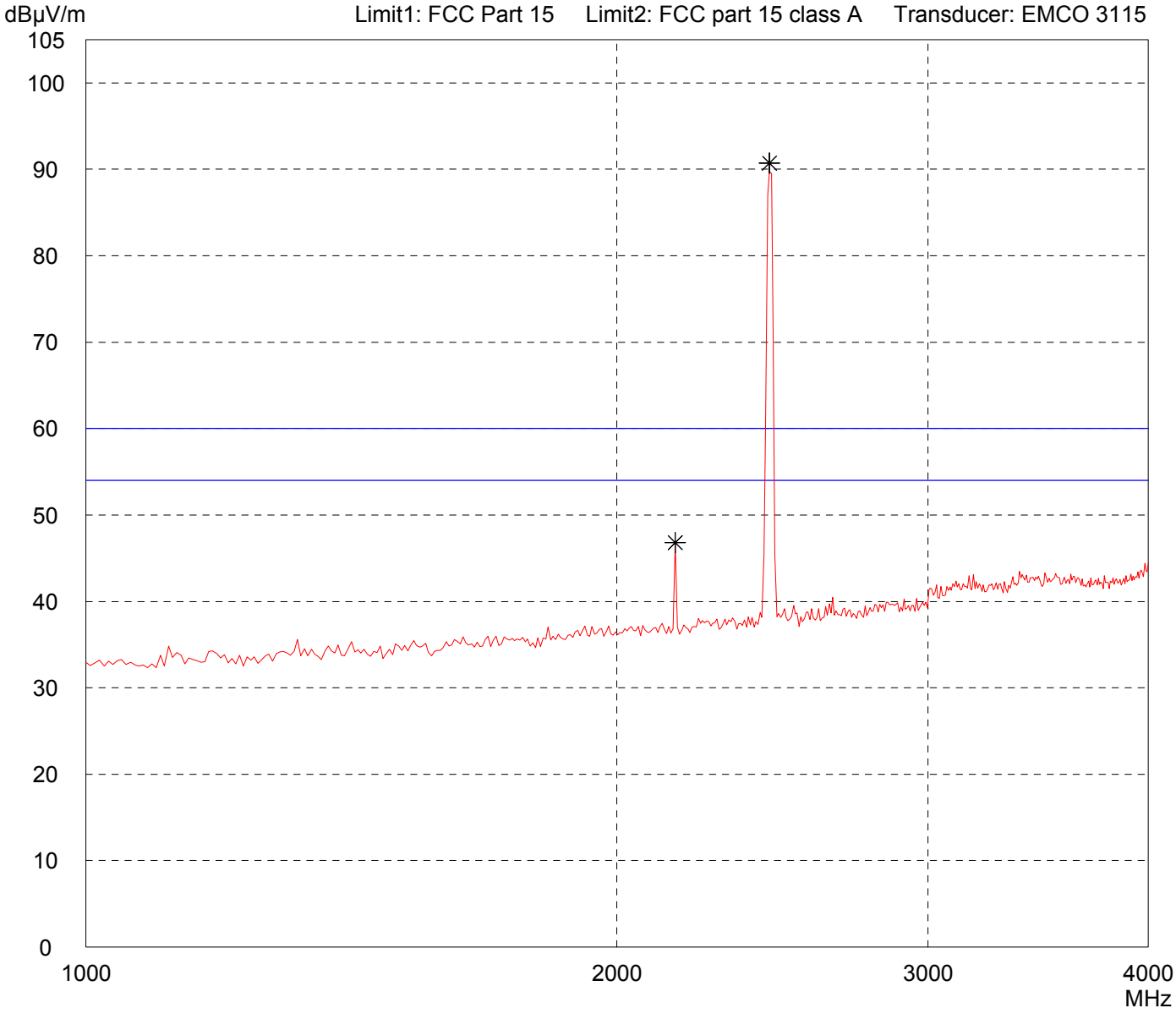
Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

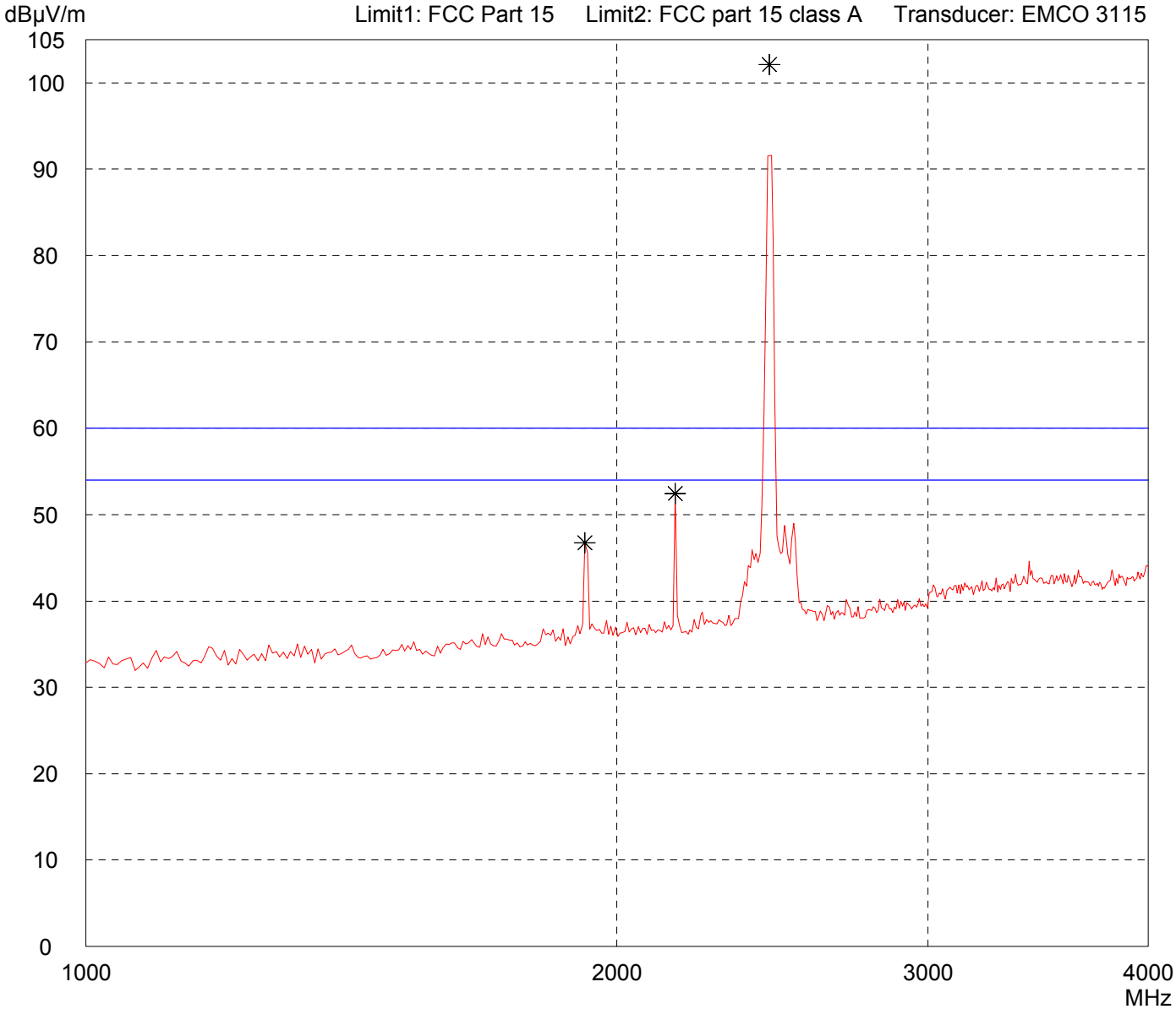


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

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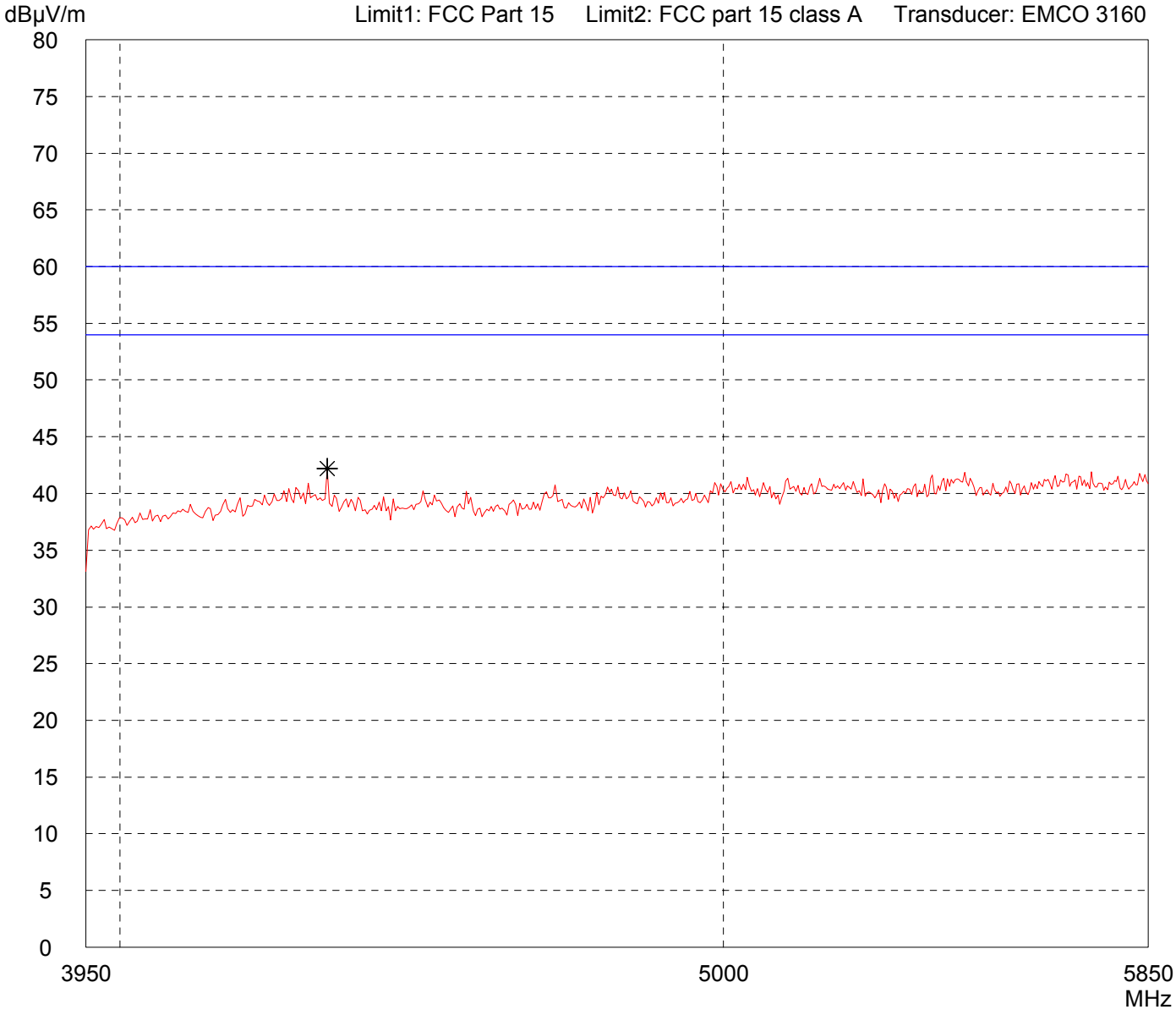
Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

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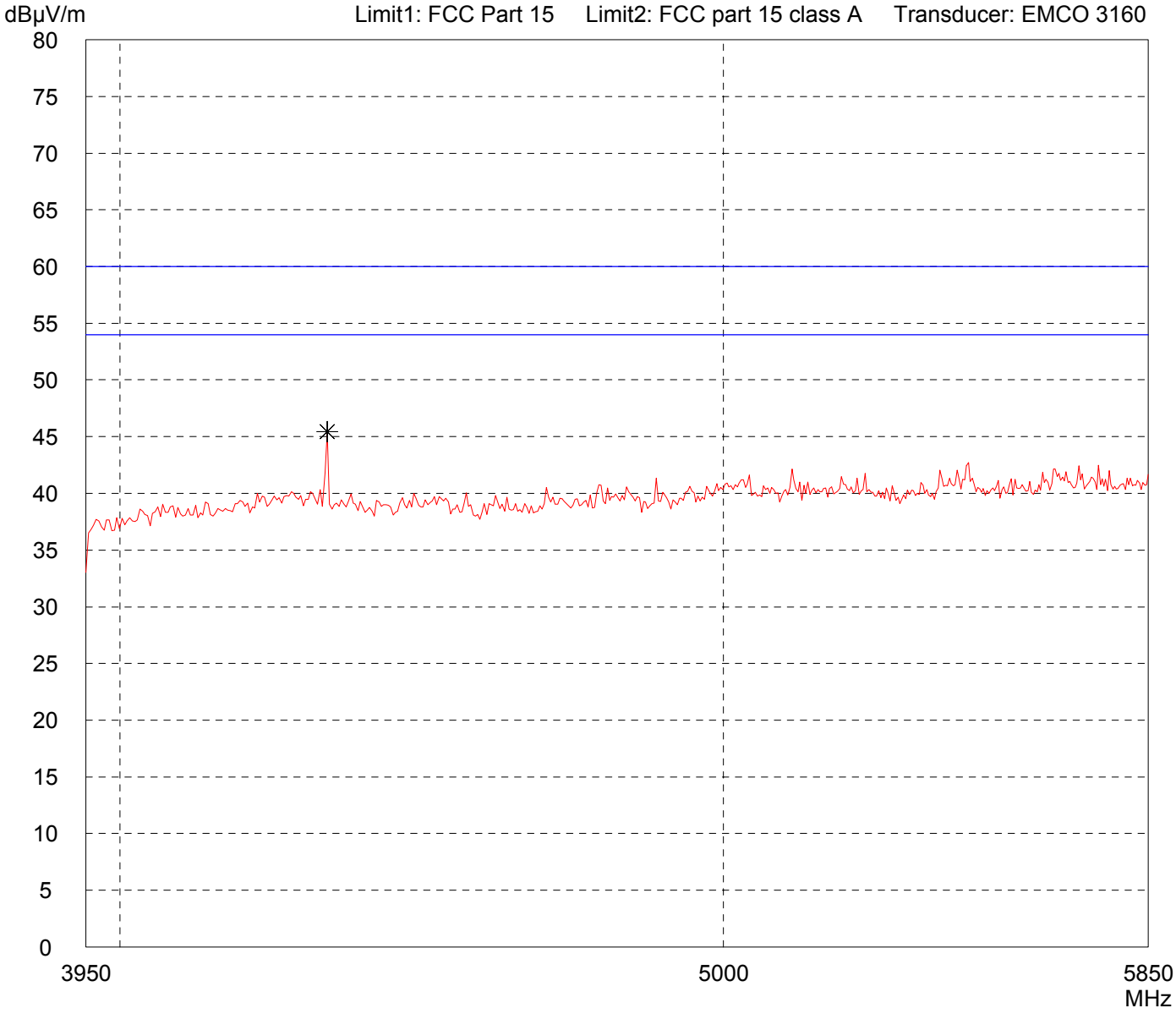
Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



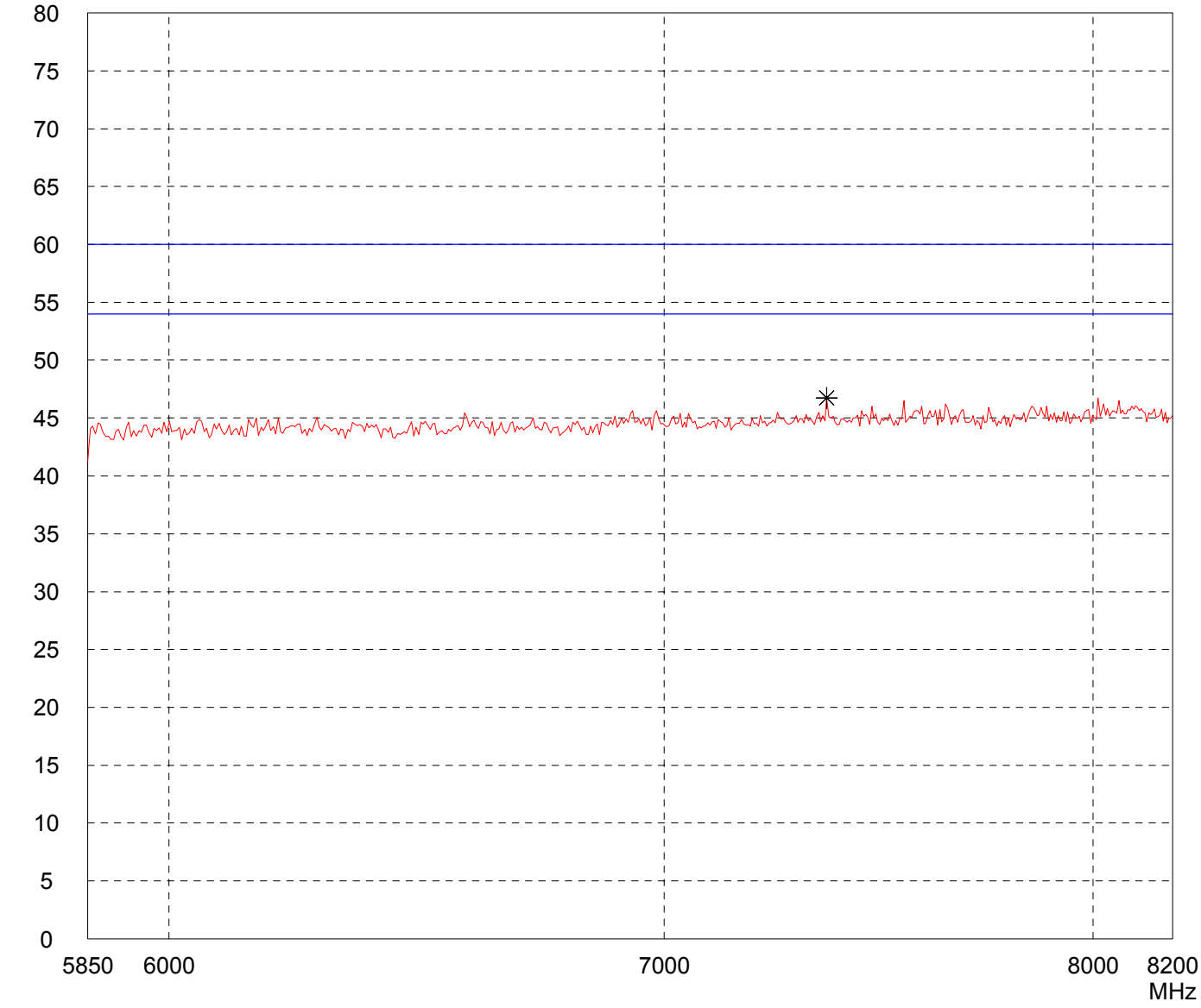
Result: Prescan	Project file: 50940-60539

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

dBµV/m Limit1: FCC Part 15 Limit2: FCC part 15 class A Transducer: EMCO 3160

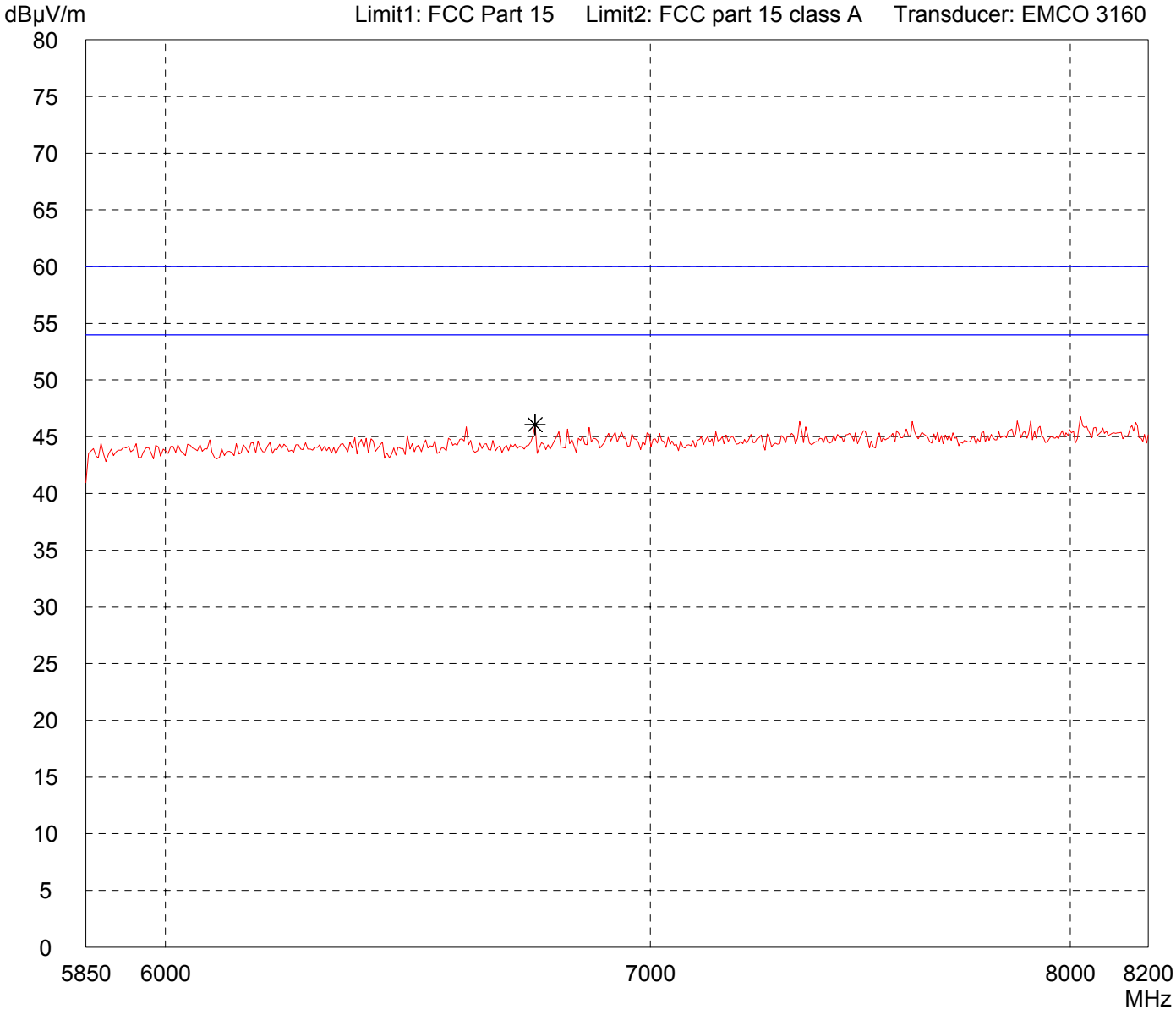


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

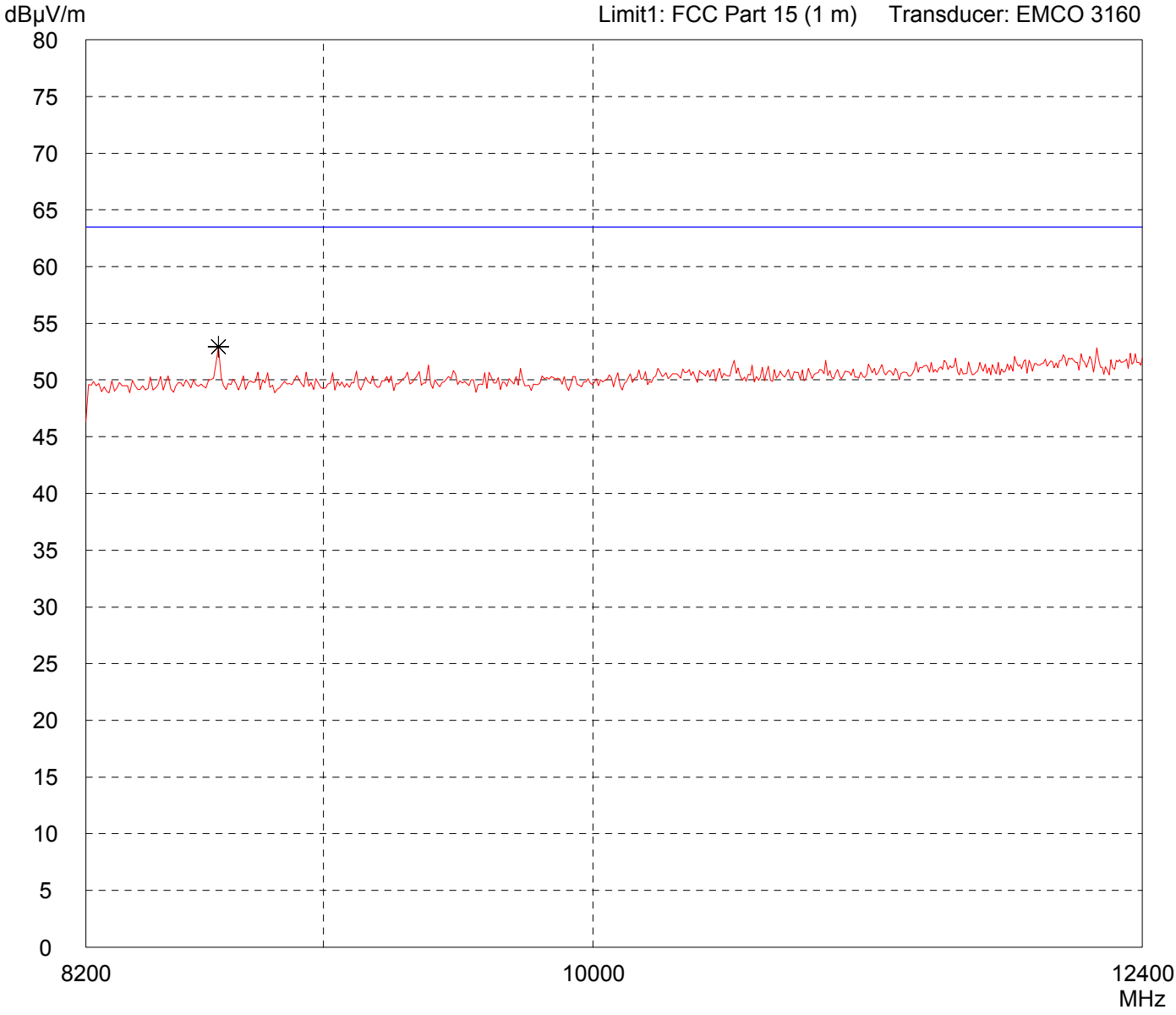


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



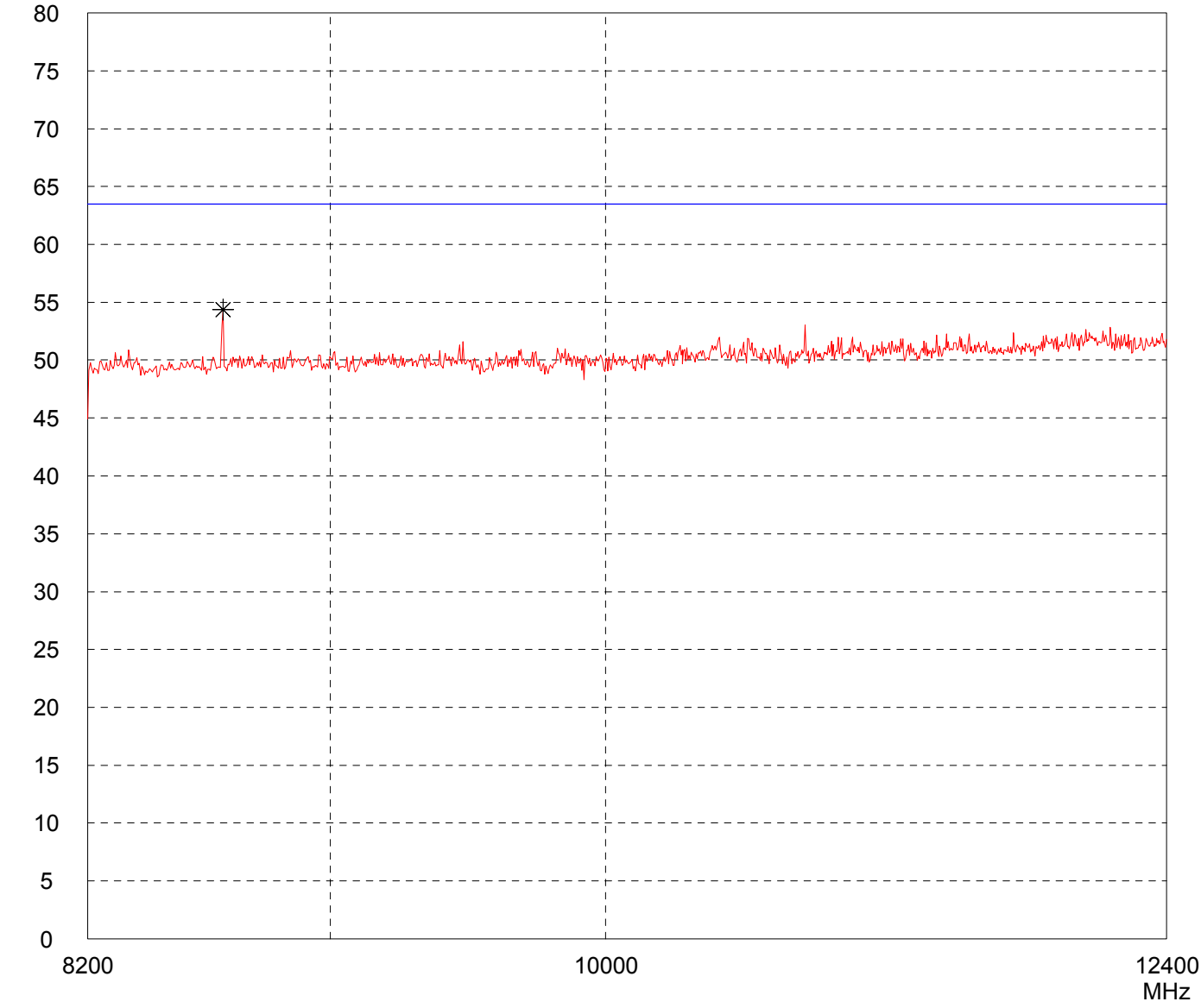
Result: Prescan	Project file: 50940-60539

Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

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

dBµV/m — Limit1: FCC Part 15 (1 m) — Transducer: EMCO 3160

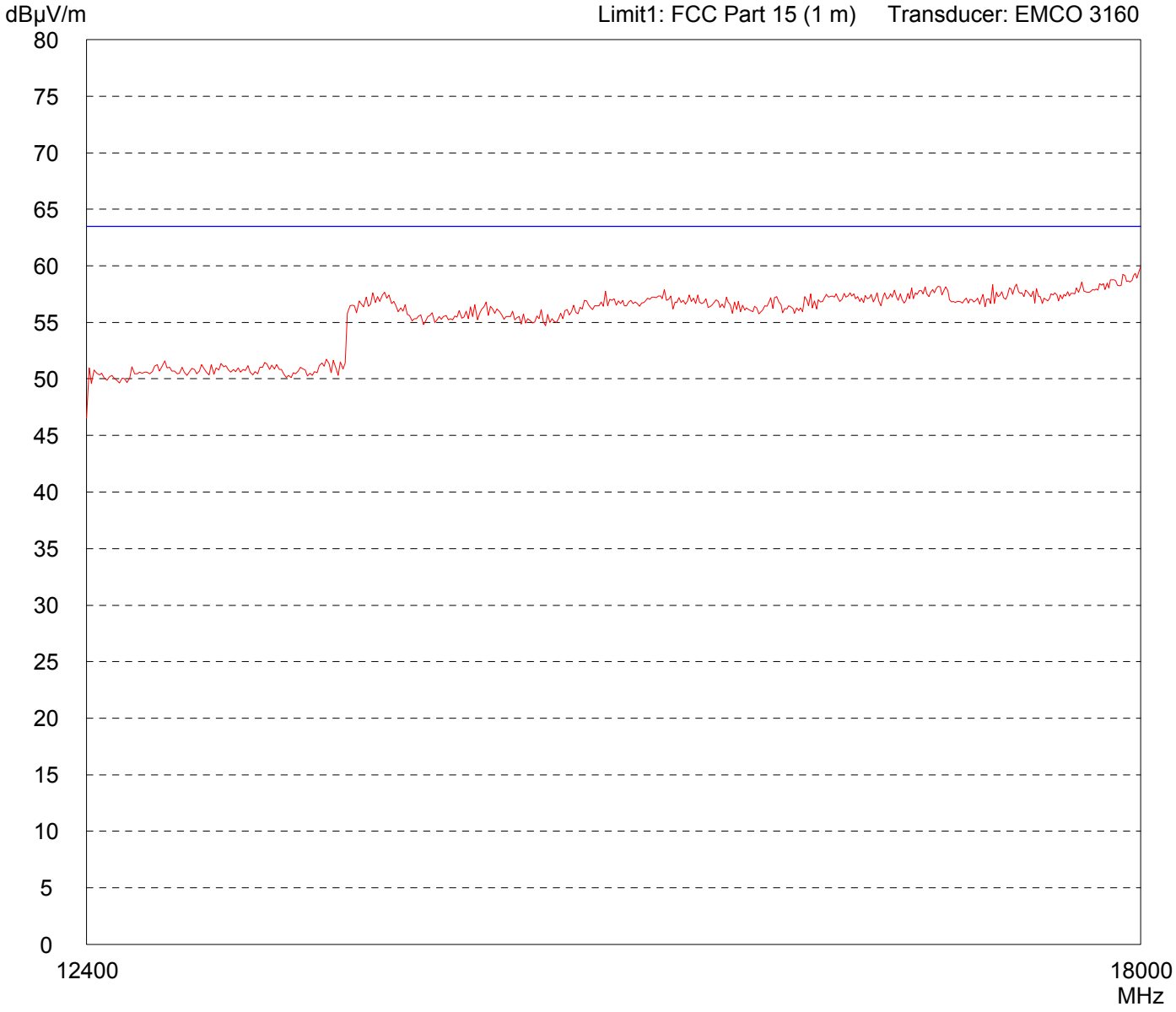


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 18 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

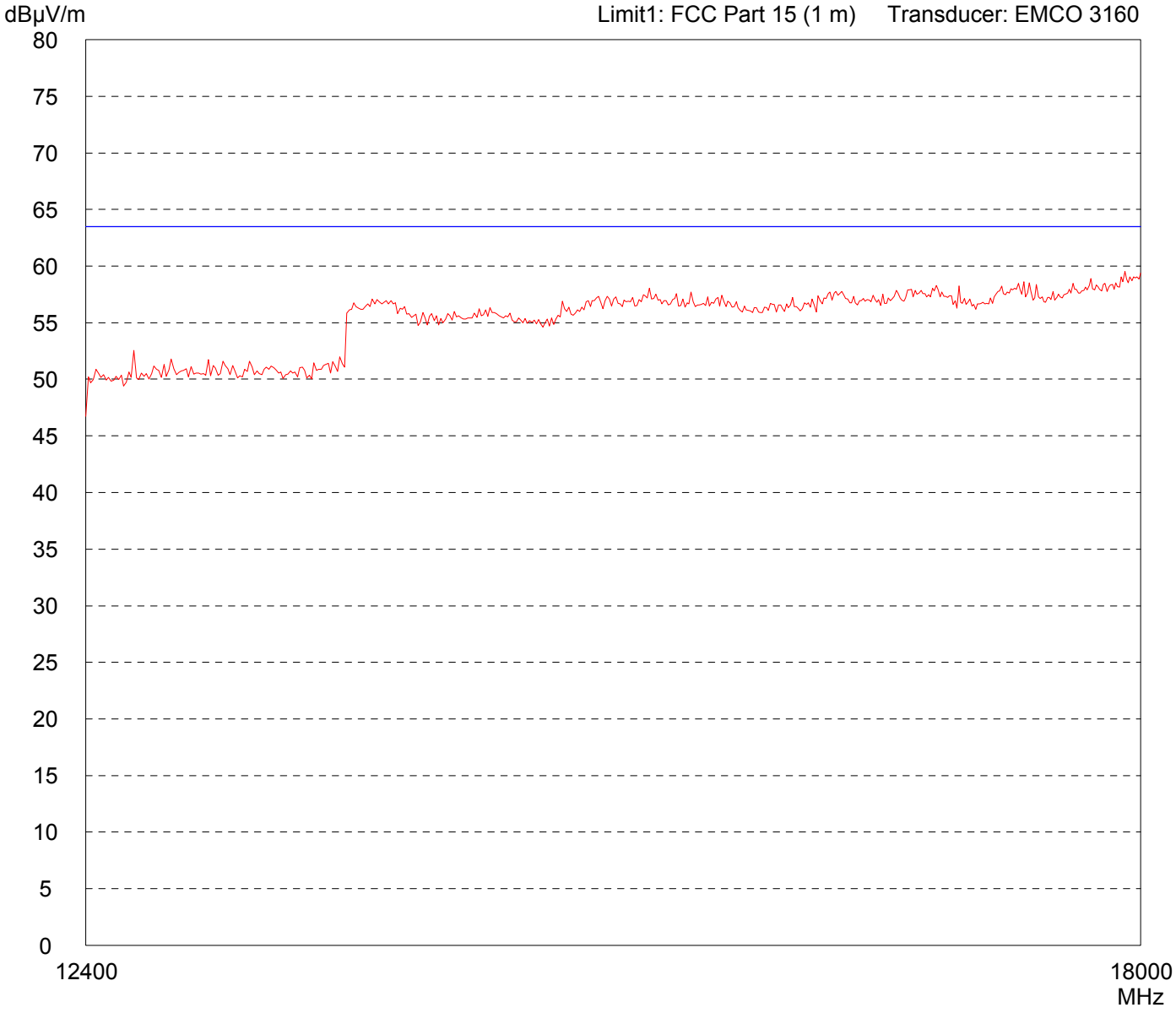


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 18 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Middle Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

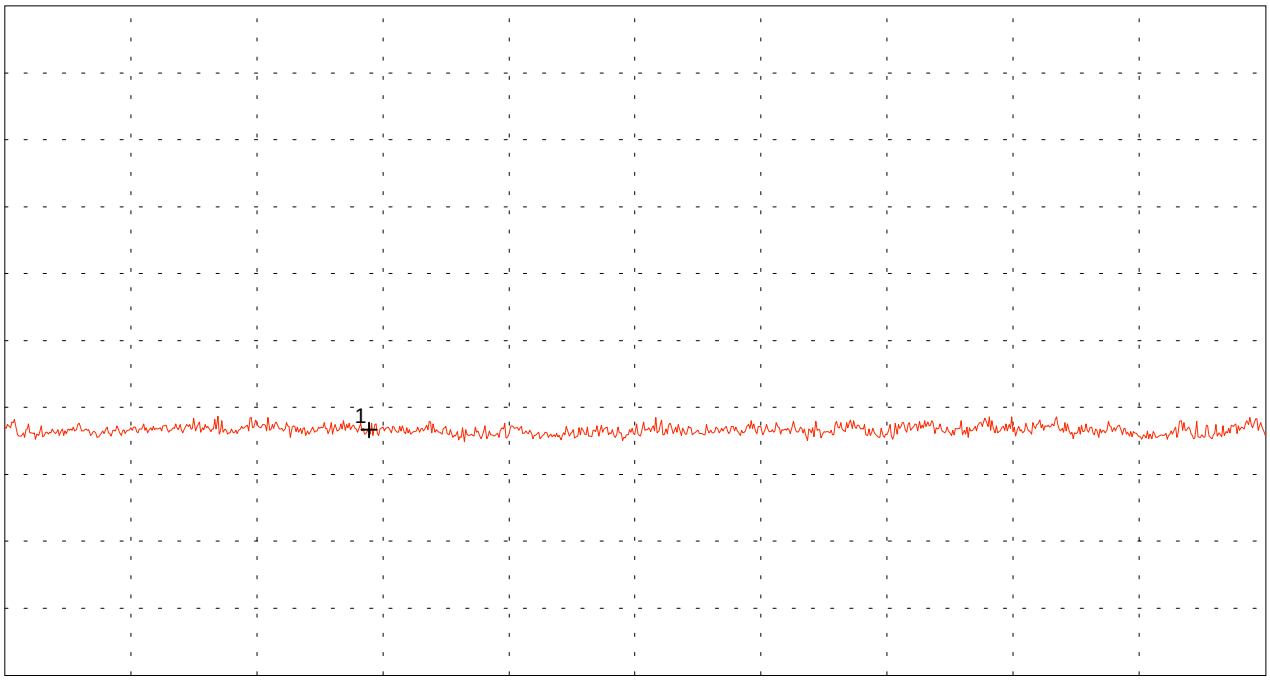


Result: Prescan	Project file: 50940-60539

Spurious emissions according to FCC Rules

Model: SDS 1 TM	Mode: - Radiated Mesurement - Horizontal Polarisation - TX Mode - Middle Channel
Serial No.: Prototyp	
Applicant: Schildknecht	

Ref.Level 87 dBµV ATT 0 dB
10 dB/Div.



Start 18.000 GHz Stop 26.500 GHz
RBW 1 MHz VBW 1 MHz SWP 40 ms

Multi Marker List

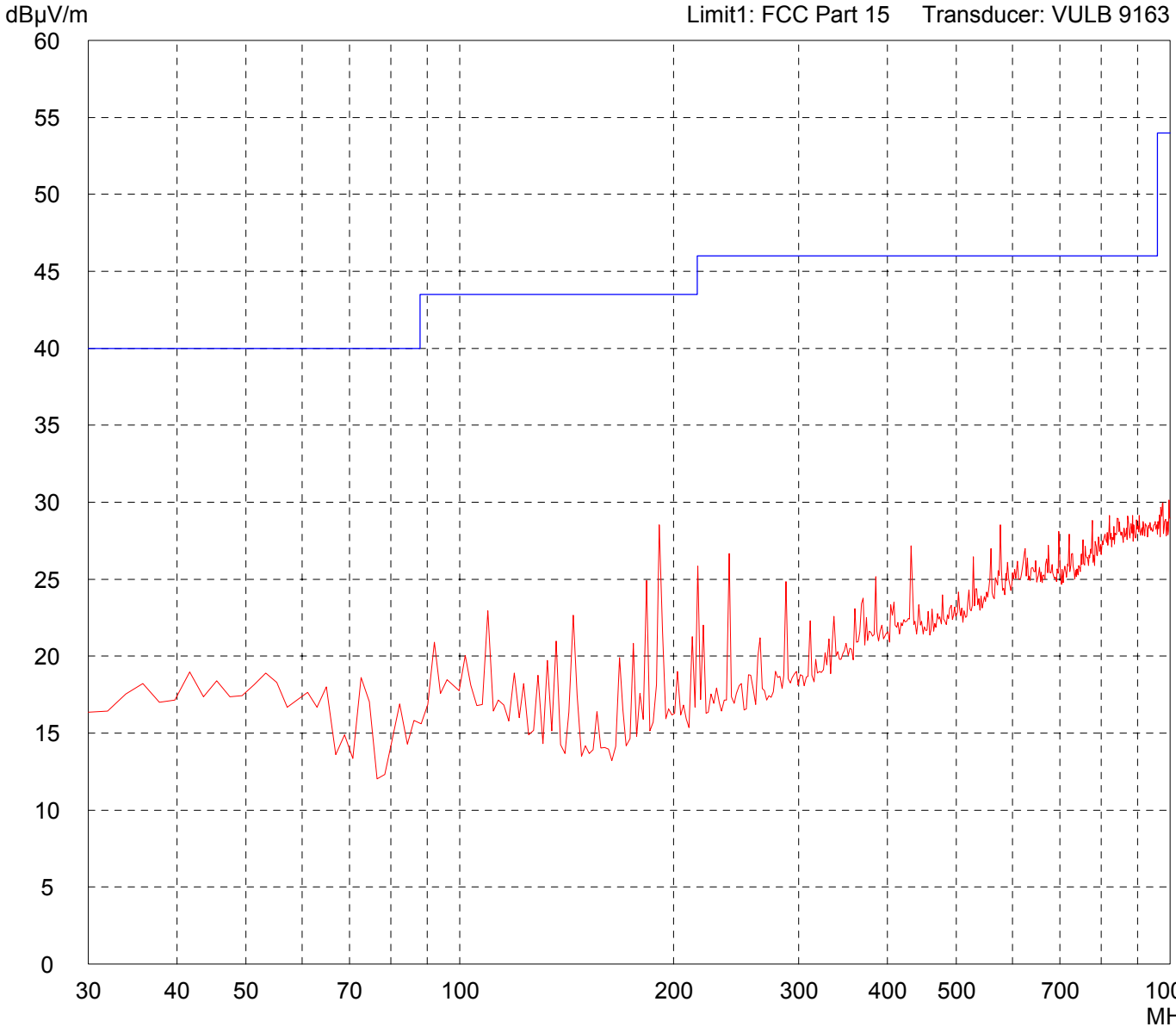
No. 1 20.455556 GHz 23.65 dBµV

Tested by: Johann Roidt	Project-No.:
Date: 27 July 2006	

Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - TX Mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/11/2006 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

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

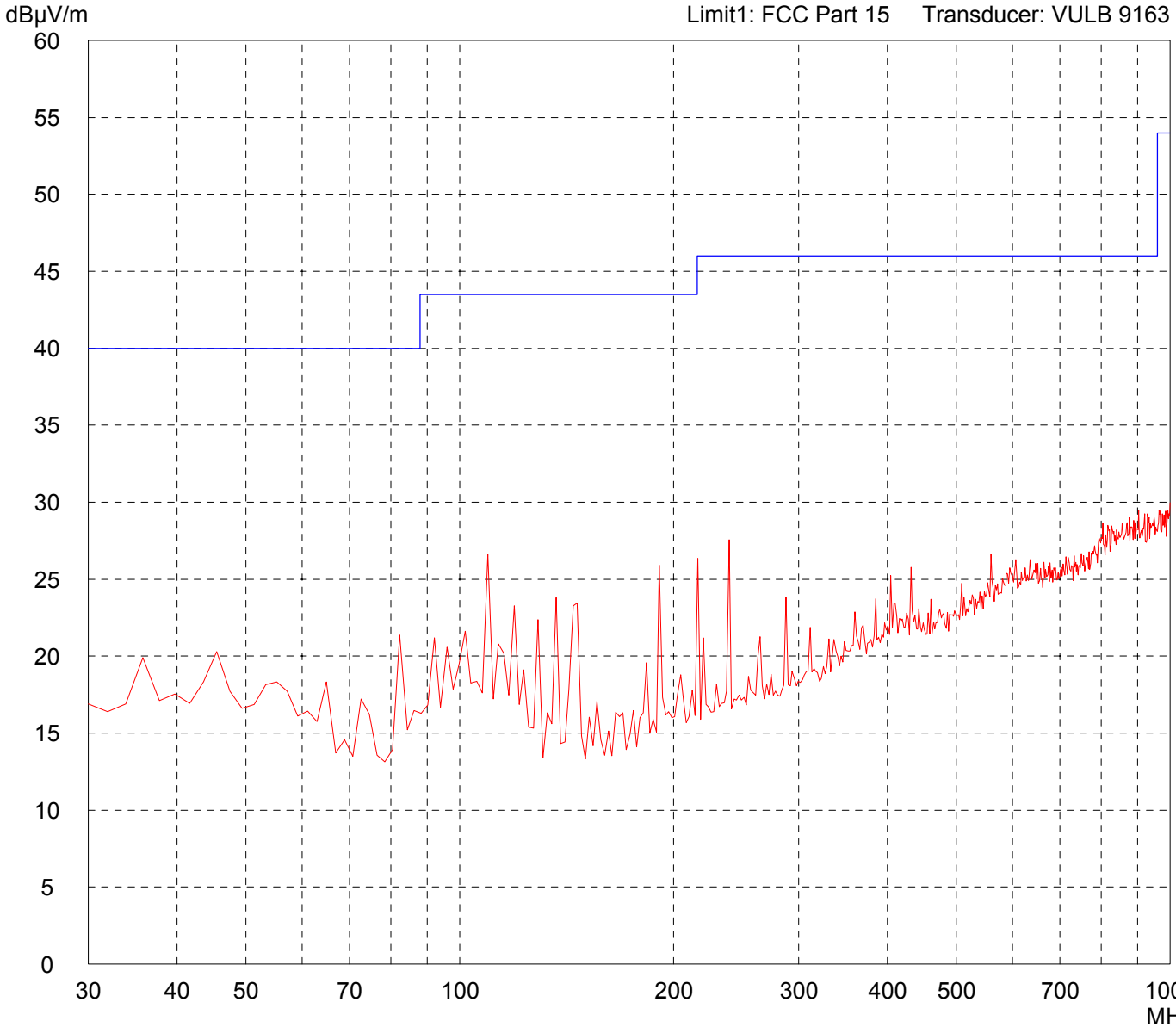


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - TX Mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/11/2006 / Operator: J. Roidt	
Test performed: automatically / File name: default.emi	

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



Result: Prescan	Project file: 50940-60539

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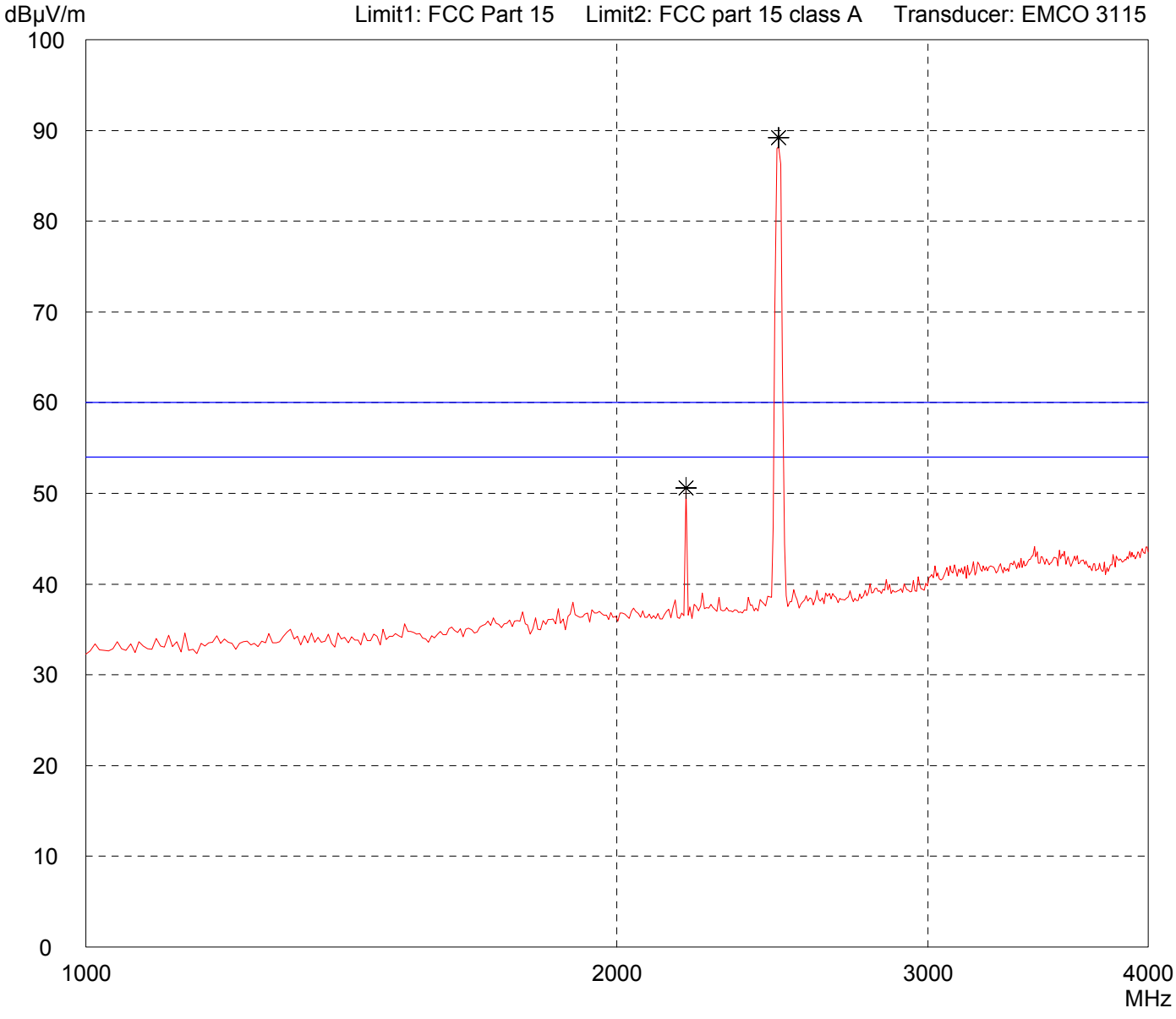
Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

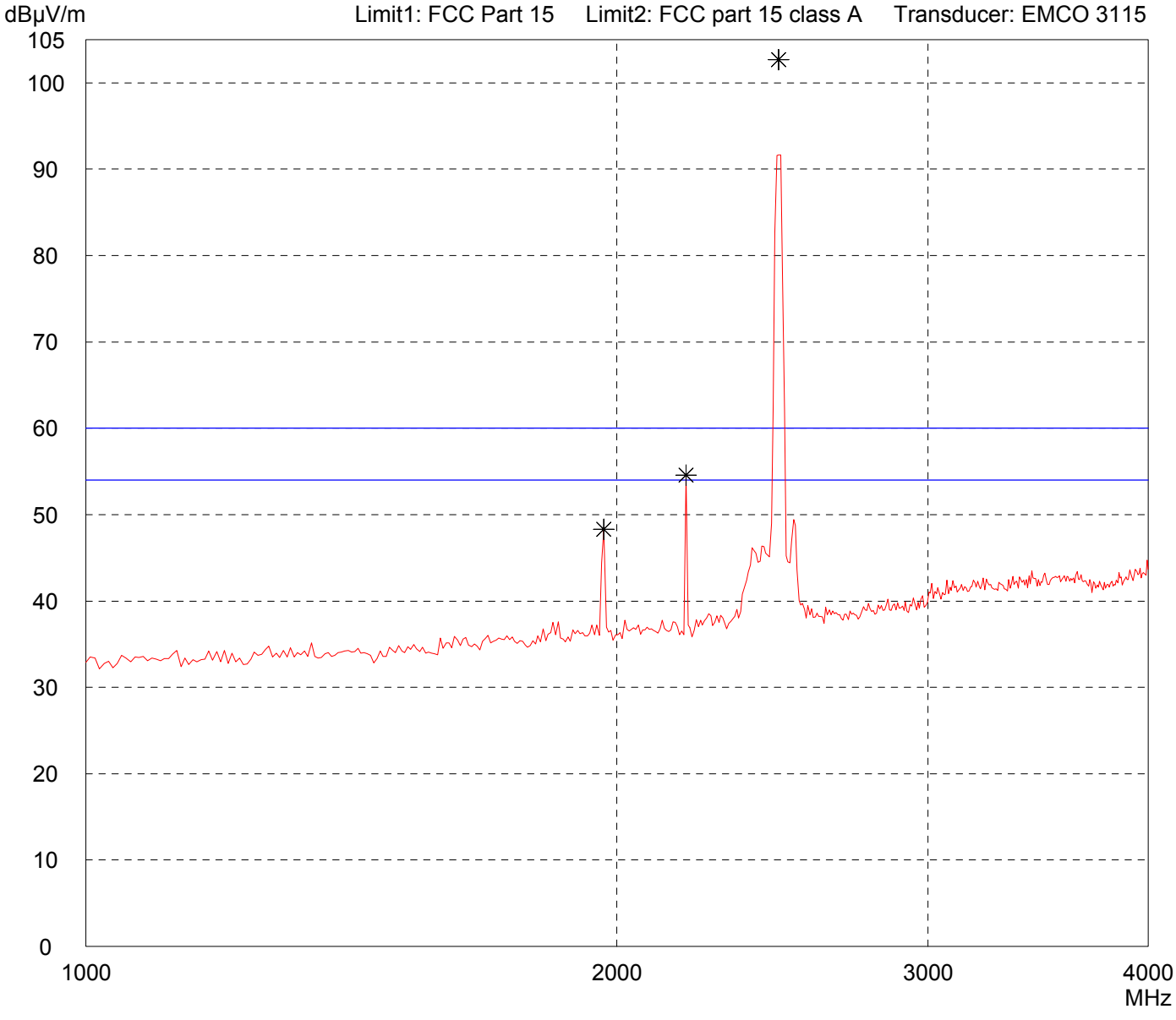
Detector: Peak	List of values: Selected by hand



Result: Limit kept - Carrier excluded	Project file: 50940-60539

Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

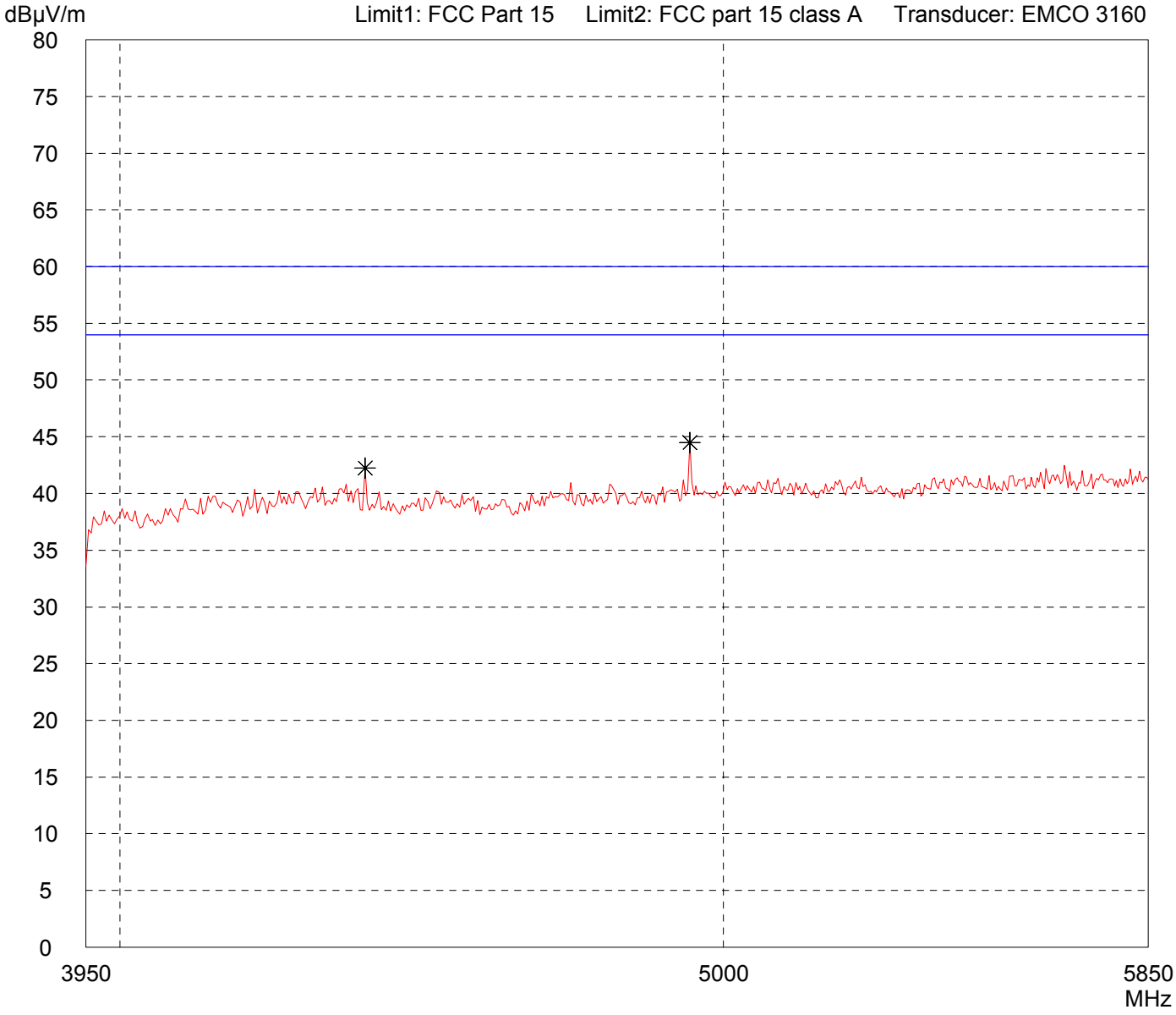
Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



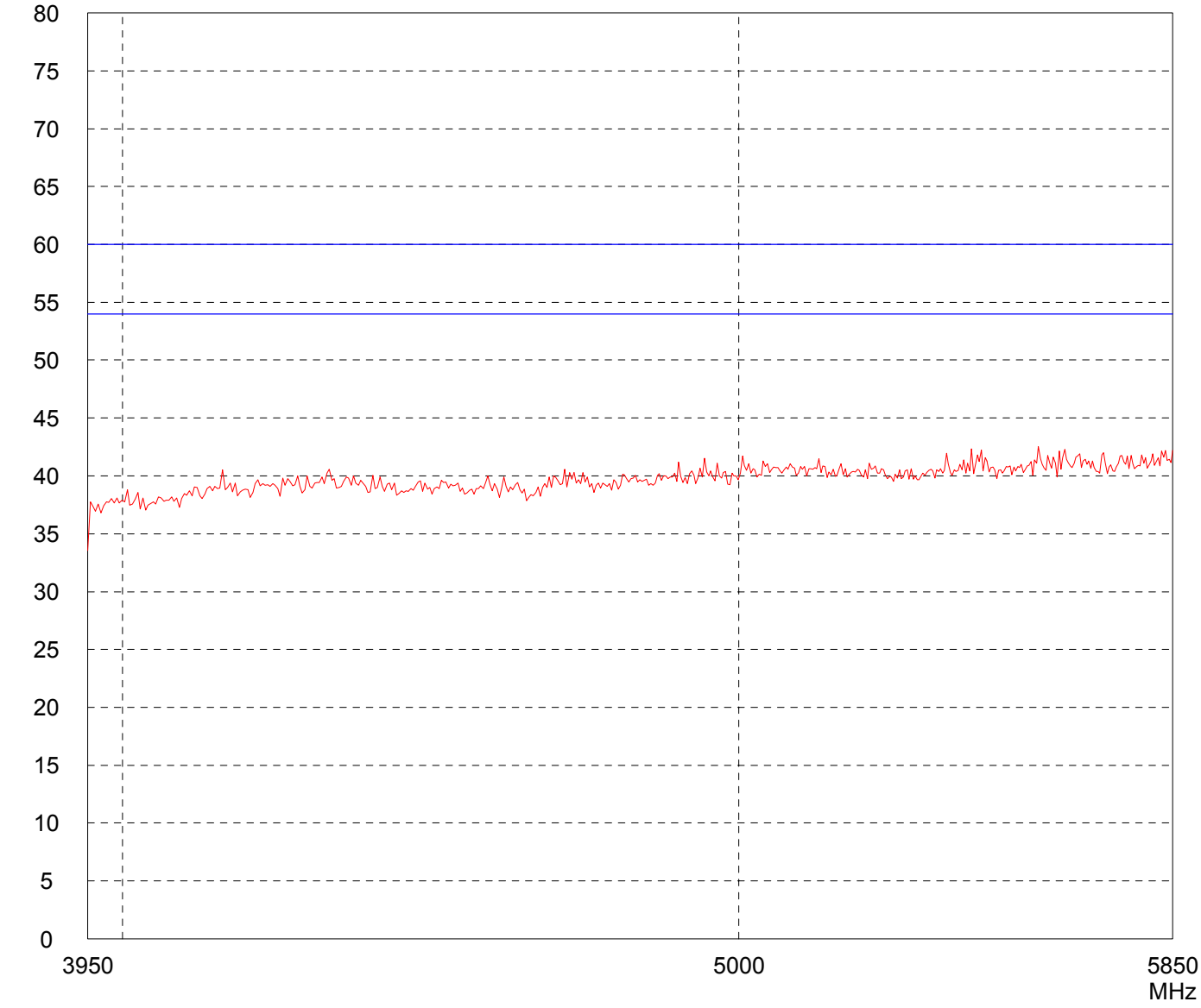
Result: Limit kept	Project file: 50940-60539

Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

dBµV/m Limit1: FCC Part 15 Limit2: FCC part 15 class A Transducer: EMCO 3160

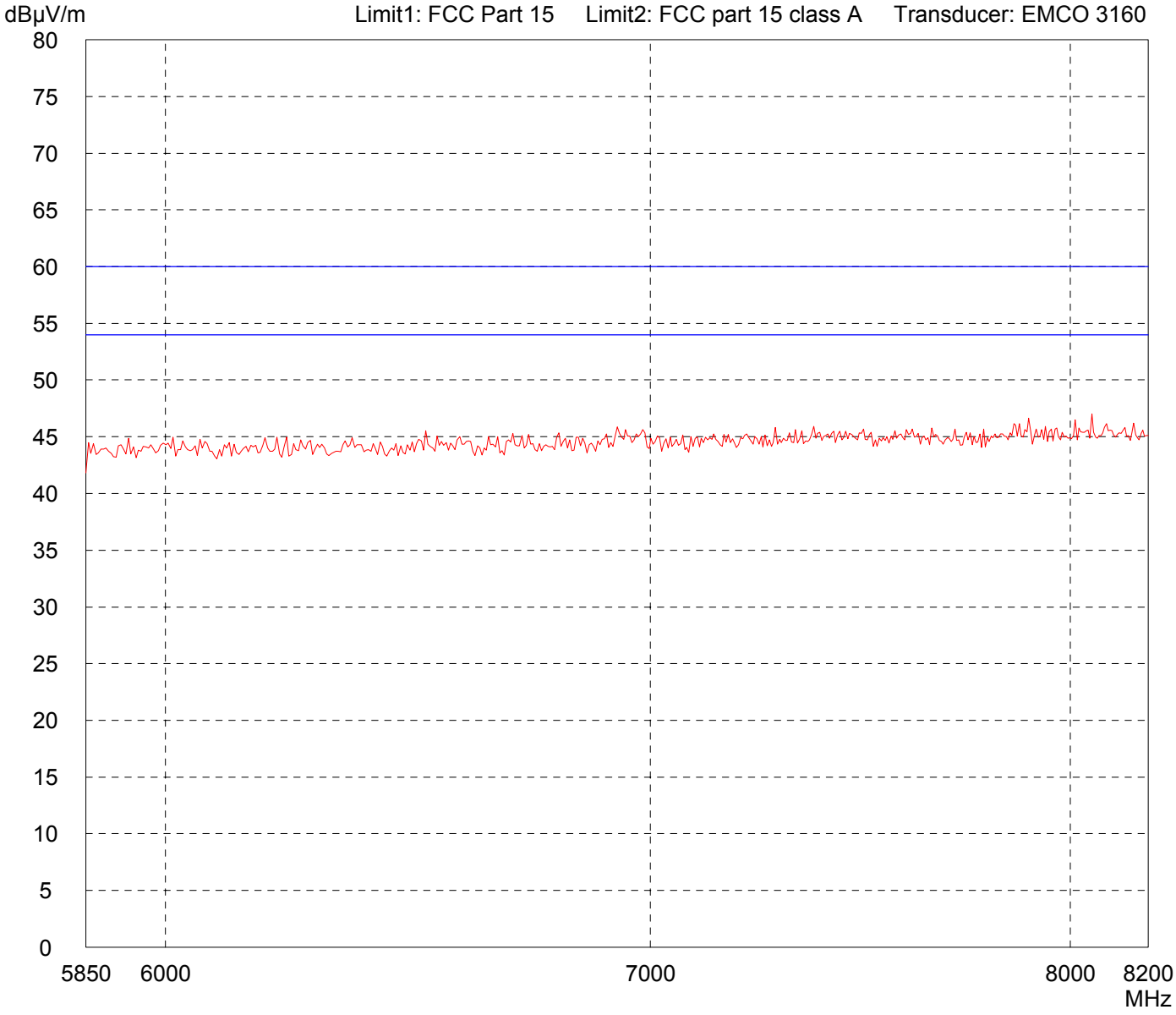


Result: Limit kept	Project file: 50940-60539

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

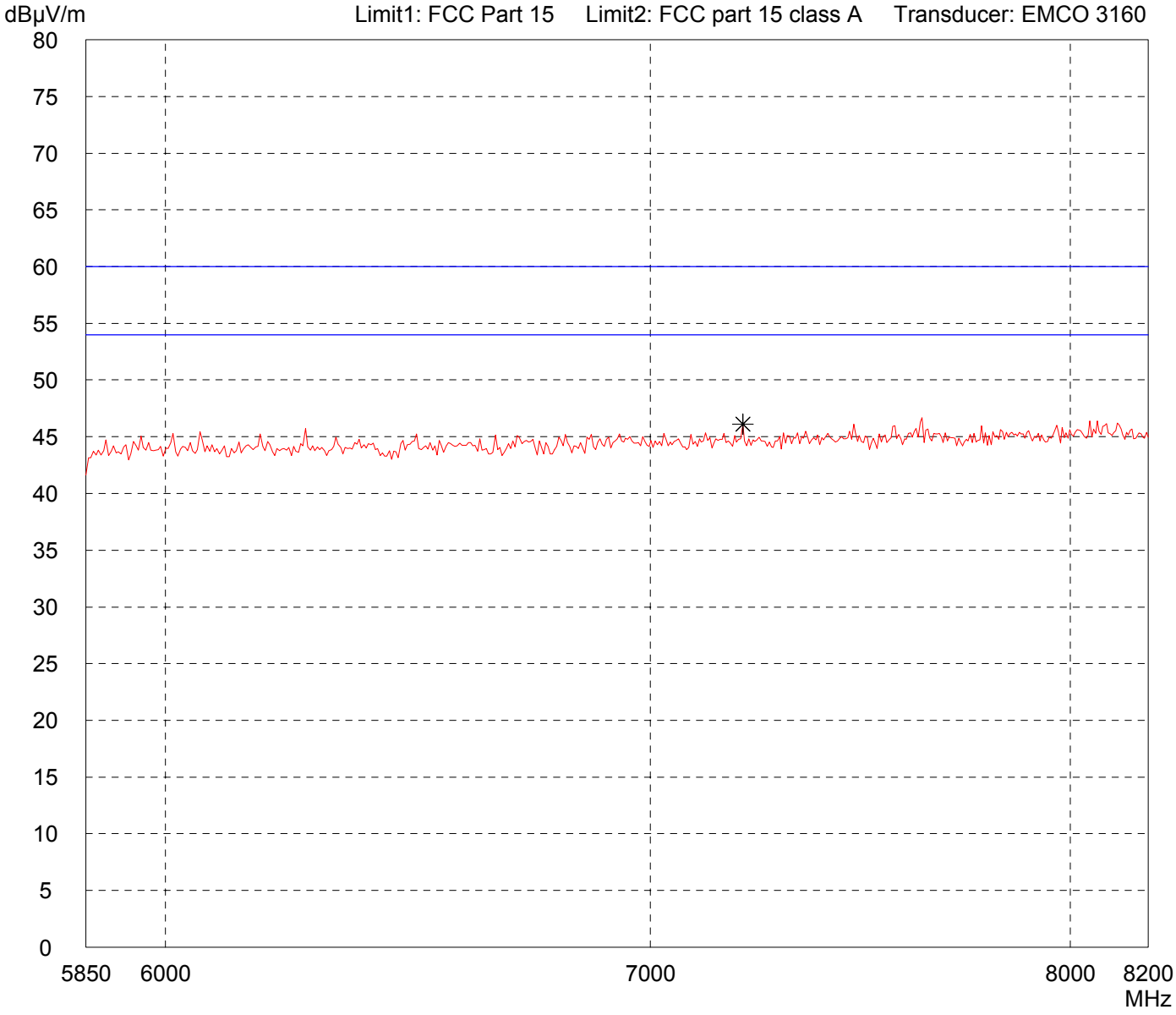


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

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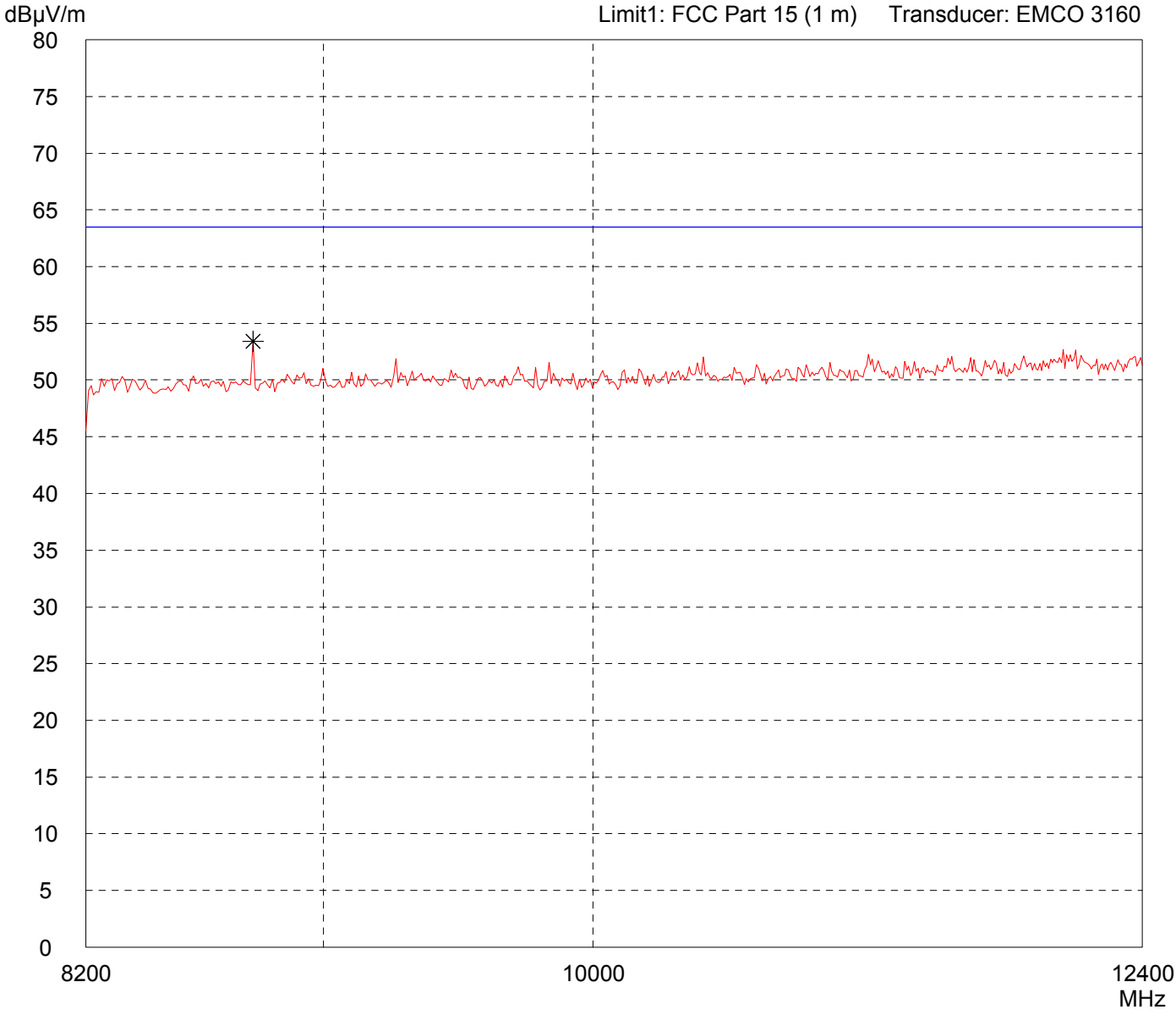
Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

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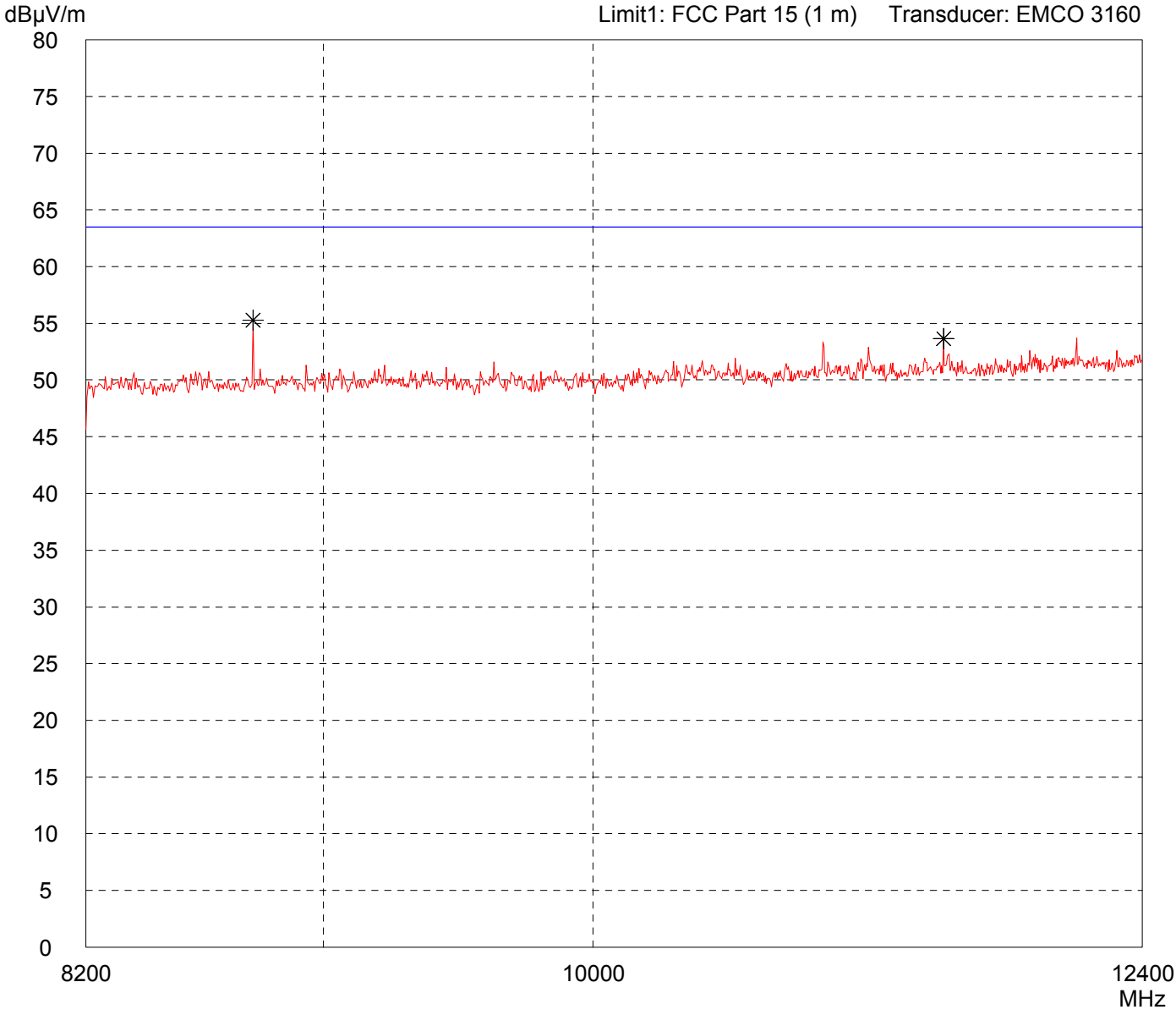
Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

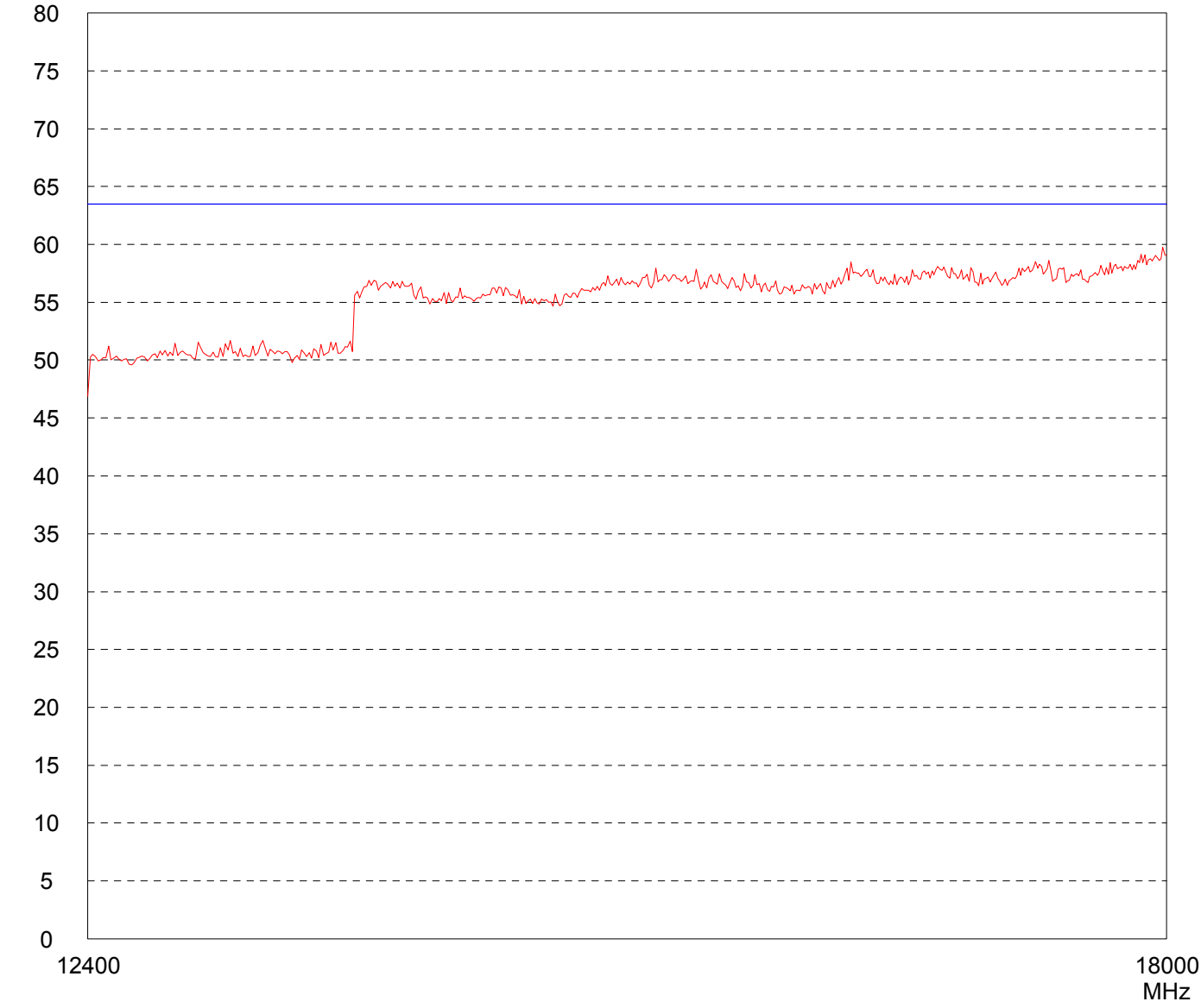
Radiated Emission Test 12.4 GHz - 18 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

dBµV/m

Limit1: FCC Part 15 (1 m) Transducer: EMCO 3160

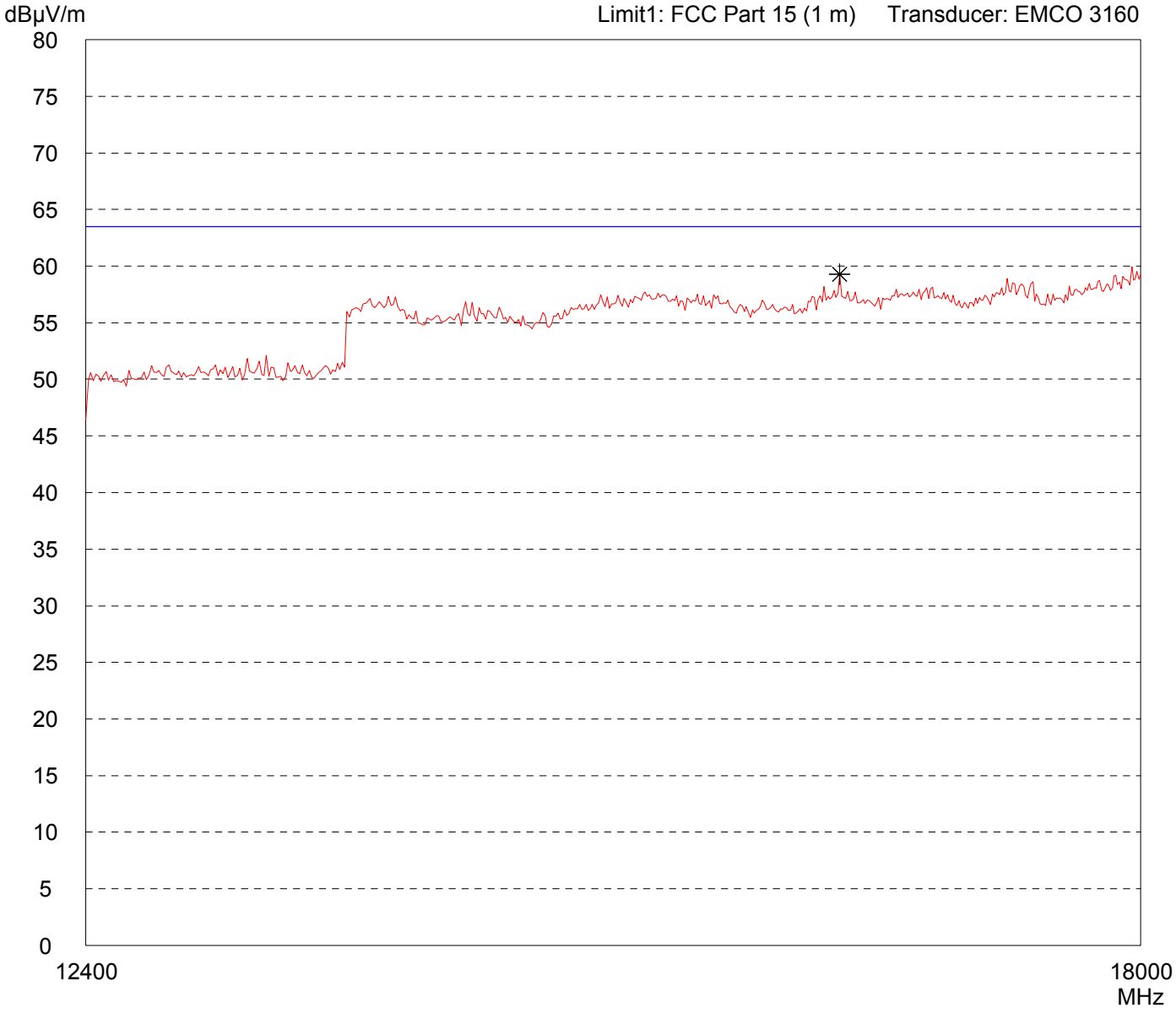


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 18 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - TX mode - Highest Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

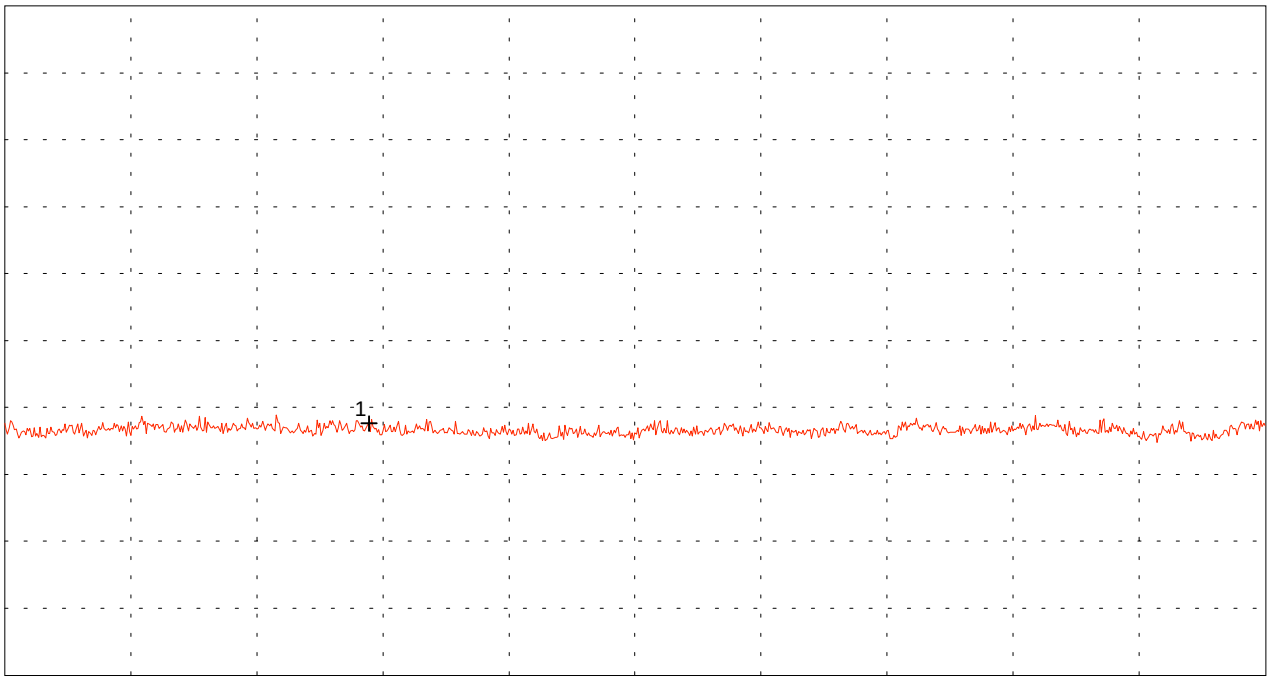


Result: Prescan	Project file: 50940-60539

Spurious emissions according to FCC Rules

Model: SDS 1 TM	Mode: - Radiated Mesurement - Horizontal Polarisation - TX Mode - Highest Channel
Serial No.: Prototyp	
Applicant: Schildknecht	

Ref.Level 87 dBµV ATT 0 dB
10 dB/Div.



Start 18.000 GHz Stop 26.500 GHz
RBW 1 MHz VBW 1 MHz SWP 40 ms

Multi Marker List

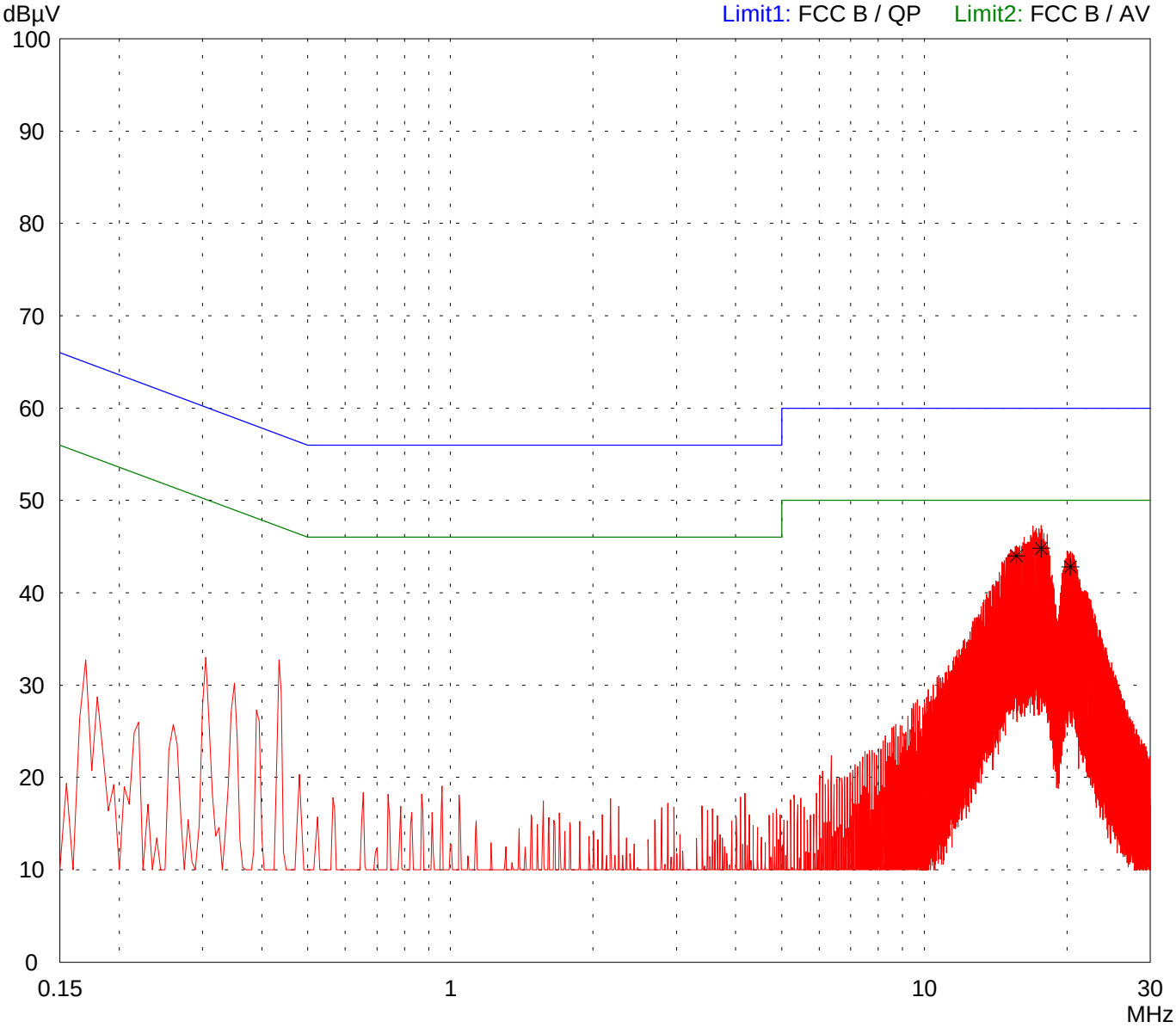
No. 1	20.455556 GHz	24.61 dBµV

Tested by: Johann Roidt	Project-No.:
Date: 27 July 2006	

Conducted Emission Test 150 kHz - 30 MHz
according to FCC Part 15 Subpart B Class B

Model: SDS 1 TM	Mode: AC power via SITOP 24 V Power Supply Measured on AC input of power supply
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Shielded room, cabin no. 4	
Tested on: Linecord	
Date of test: 07/11/2006 — Operator: J. Roidt	
Test performed: automatically — File name:	

Detector: Peak / Final Results: QP	Final results: 20 dB Margin — 25 Subranges

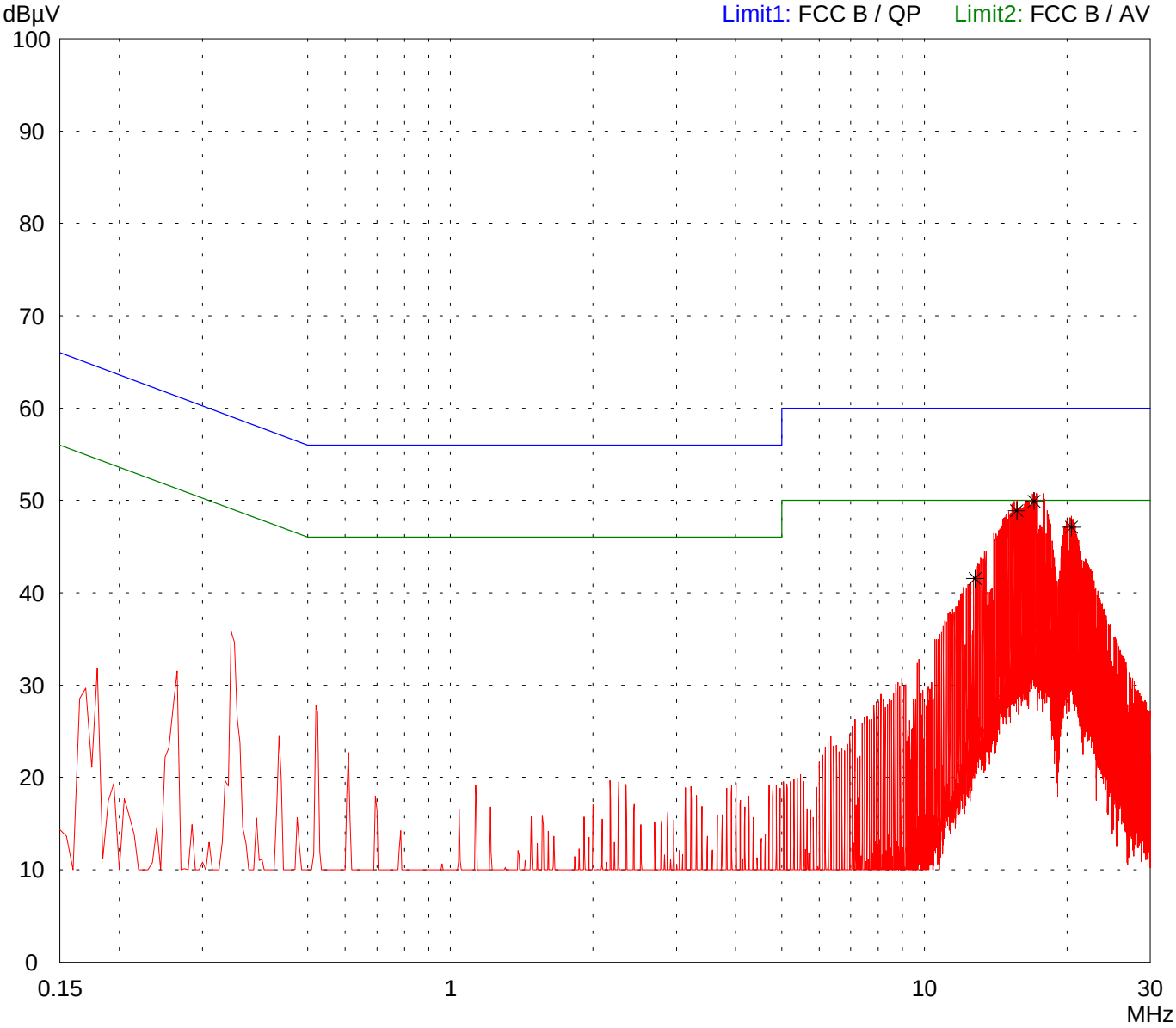


Result: Limit kept	Project file: 50940-060539-2 — Page of Pages

Conducted Emission Test 150 kHz - 30 MHz
according to FCC Part 15 Subpart B Class B

Model: SDS 1 TM	Mode: AC power via SITOP 24 V Power Supply Measured on AC input of power supply
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Shielded room, cabin no. 4	
Tested on: Linecord AC 115 V, N	
Date of test: 07/11/2006 — Operator: J. Roidt	
Test performed: automatically — File name:	

Detector: Peak / Final Results: QP	Final results: 20 dB Margin — 25 Subranges

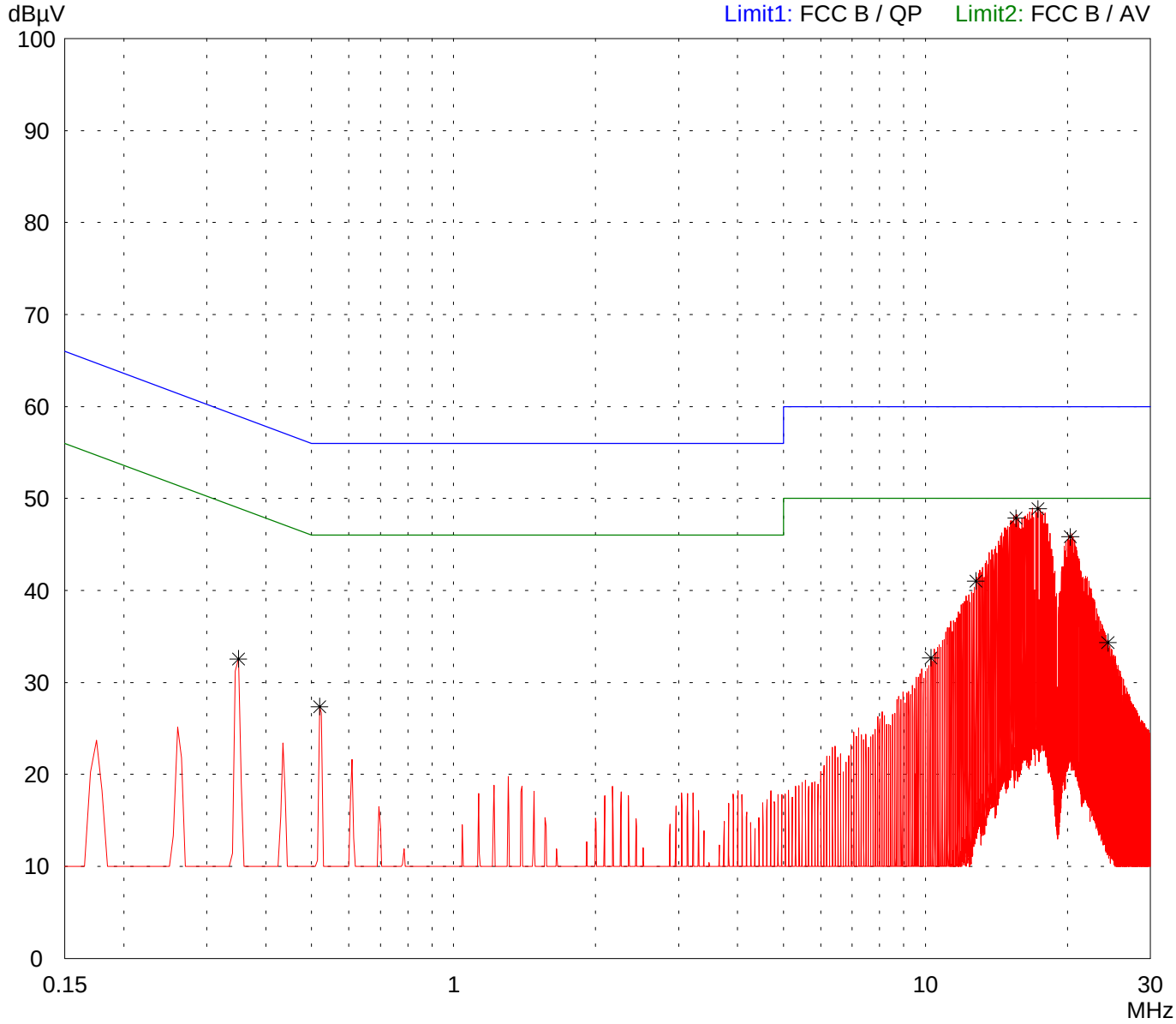


Result: Limit kept	Project file: 50940-060539-2 — Page of Pages

Conducted Emission Test 150 kHz - 30 MHz
according to FCC Part 15 Subpart B Class B

Model: SDS 1 TM	Mode: AC power via SITOP 24 V Power Supply Measured on AC input of power supply
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Shielded room, cabin no. 4	
Tested on: Linecord AC 115 V, N	
Date of test: 07/11/2006 — Operator: J. Roidt	
Test performed: automatically — File name:	

Detector: Average / Final Results: AV	Final results: 20 dB Margin — 25 Subranges

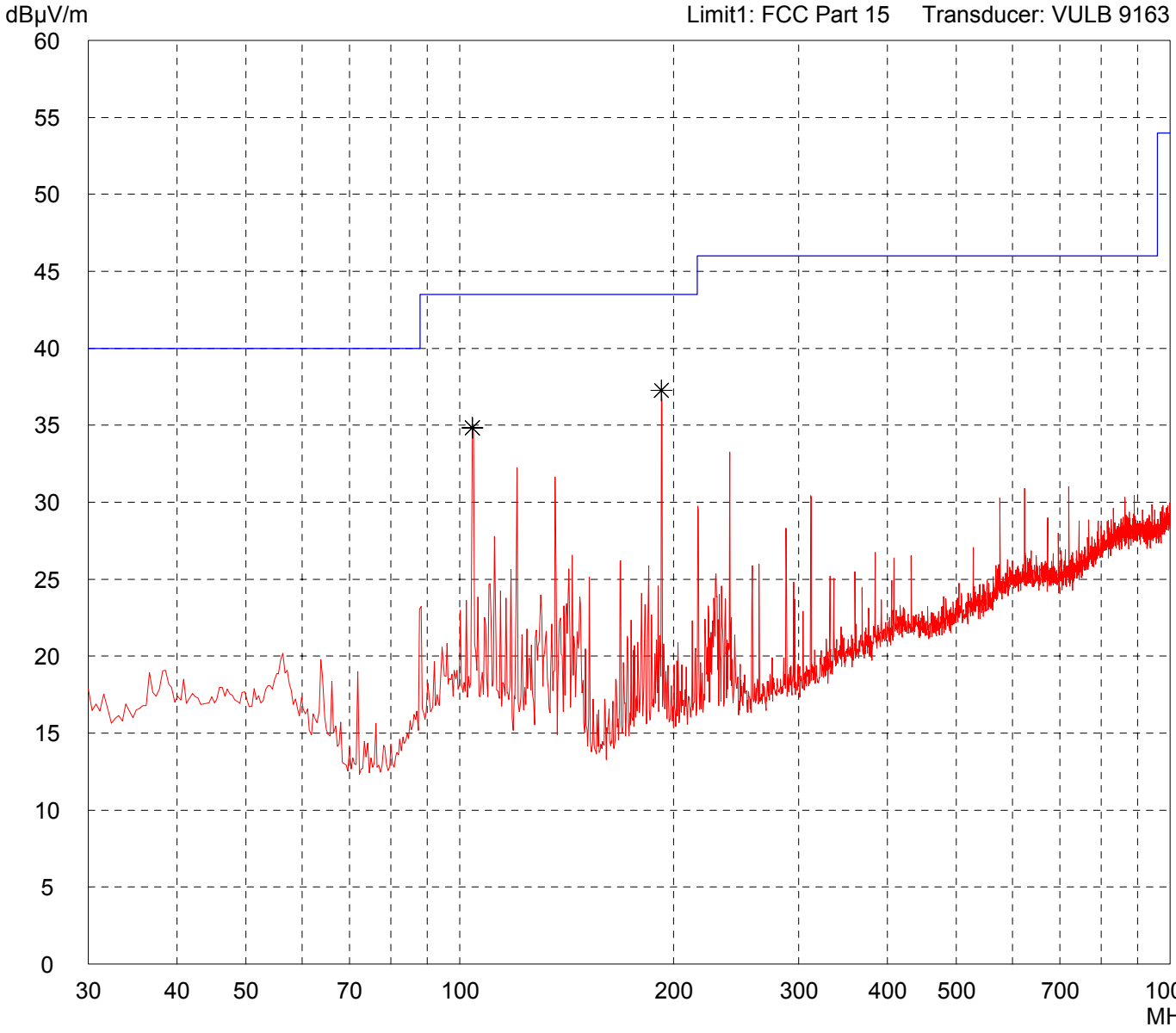


Result: Limit kept	Project file: 50940-060539-2 — Page of Pages

Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

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



Result: Prescan	Project file: 50940-60539

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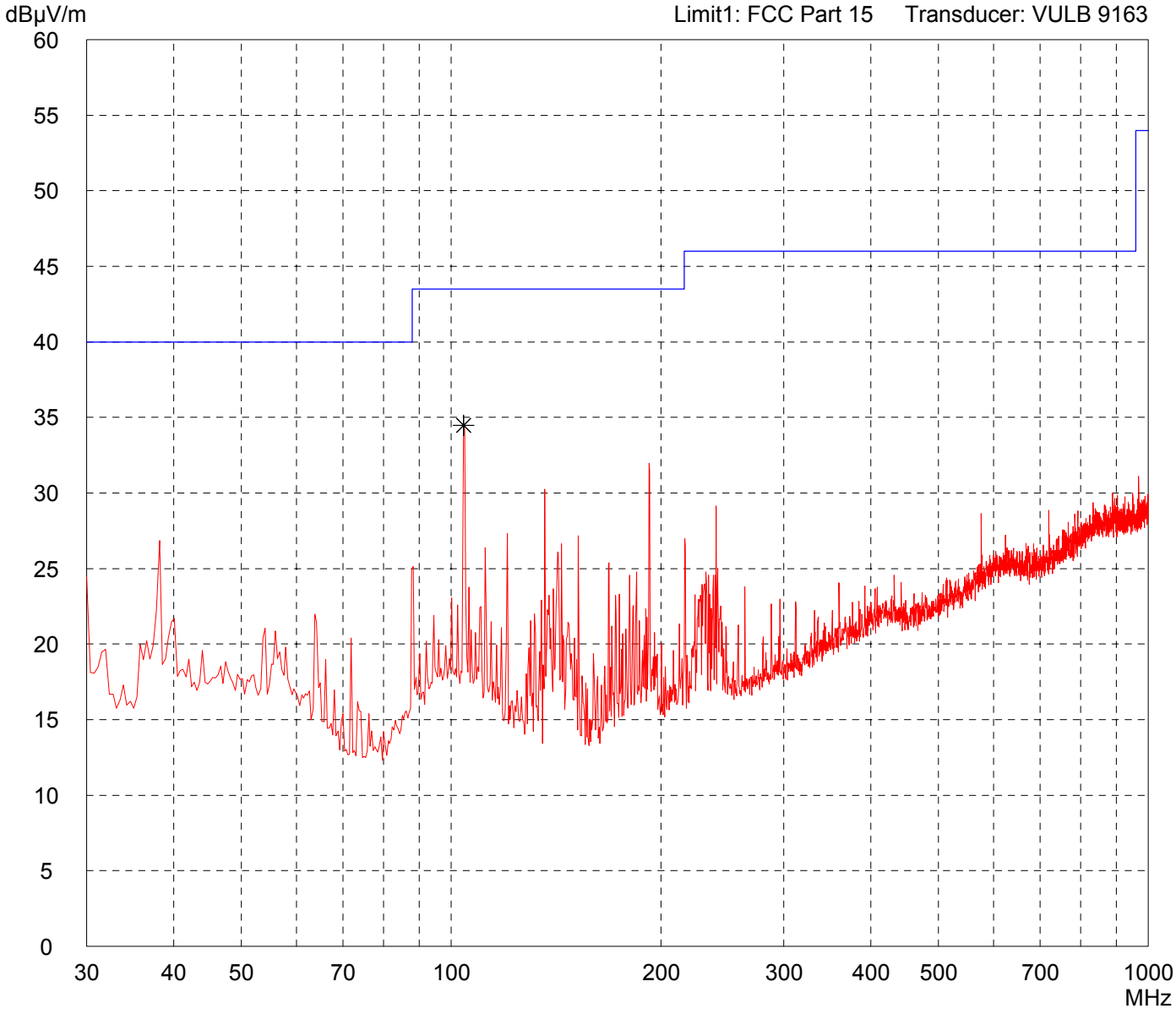
Radiated Emission Test 30 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

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



Result: Prescan	Project file: 50940-60539

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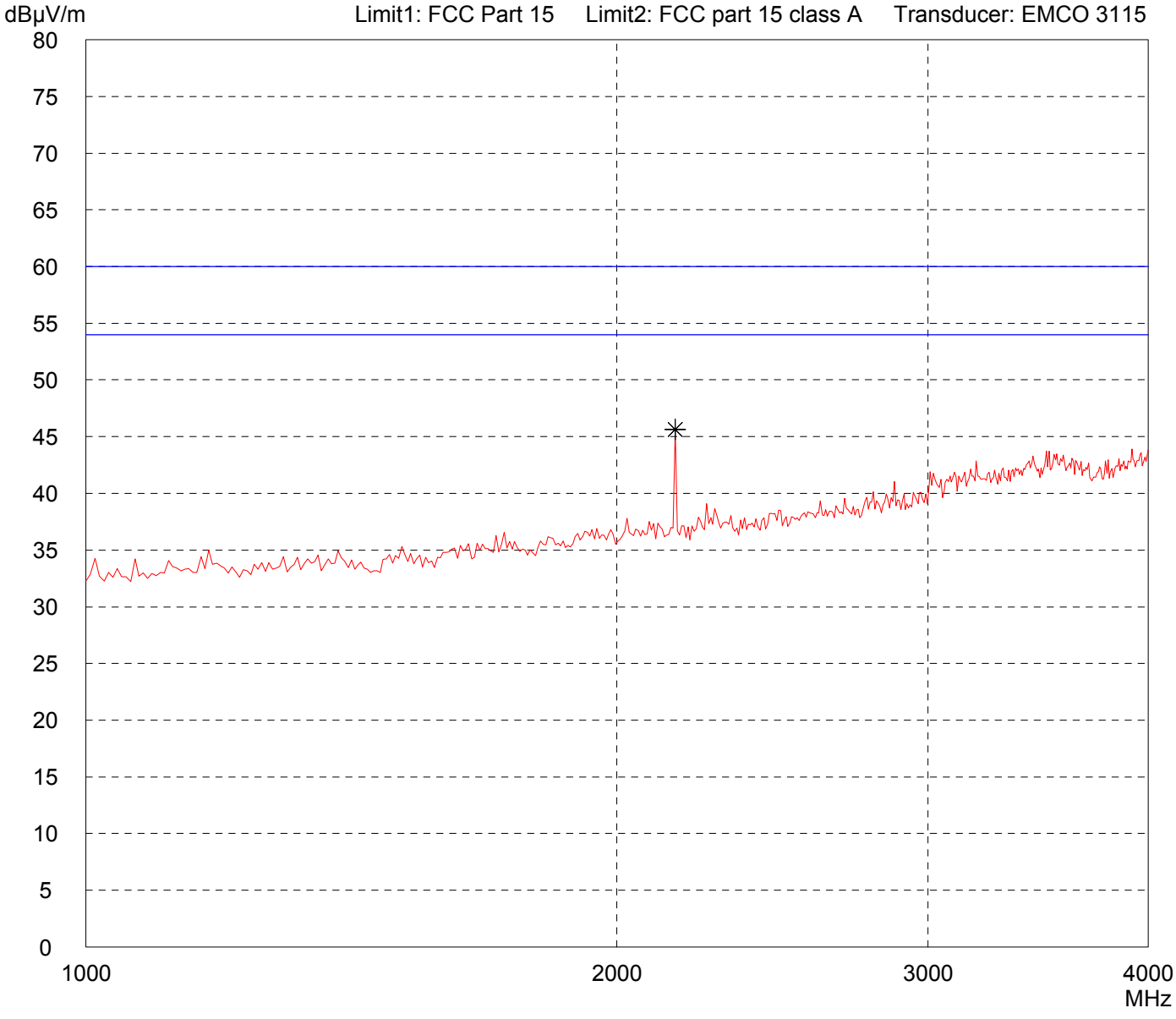
Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

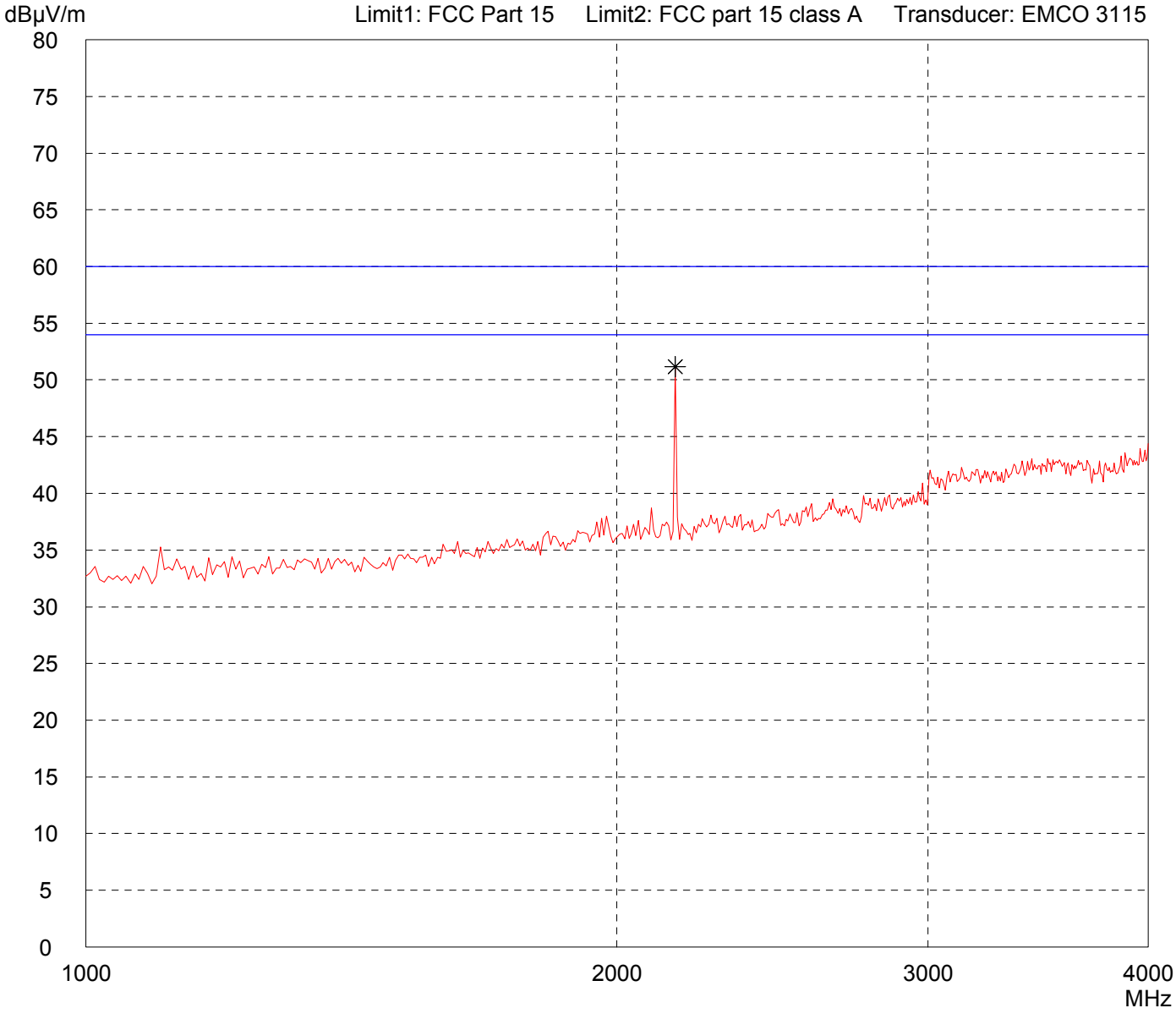


Result: Limit kept	Project file: 50940-60539

Radiated Emission Test 1 GHz - 4 GHz
acc. to FCC Part 15 (EMCO 3115)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Limit kept	Project file: 50940-60539

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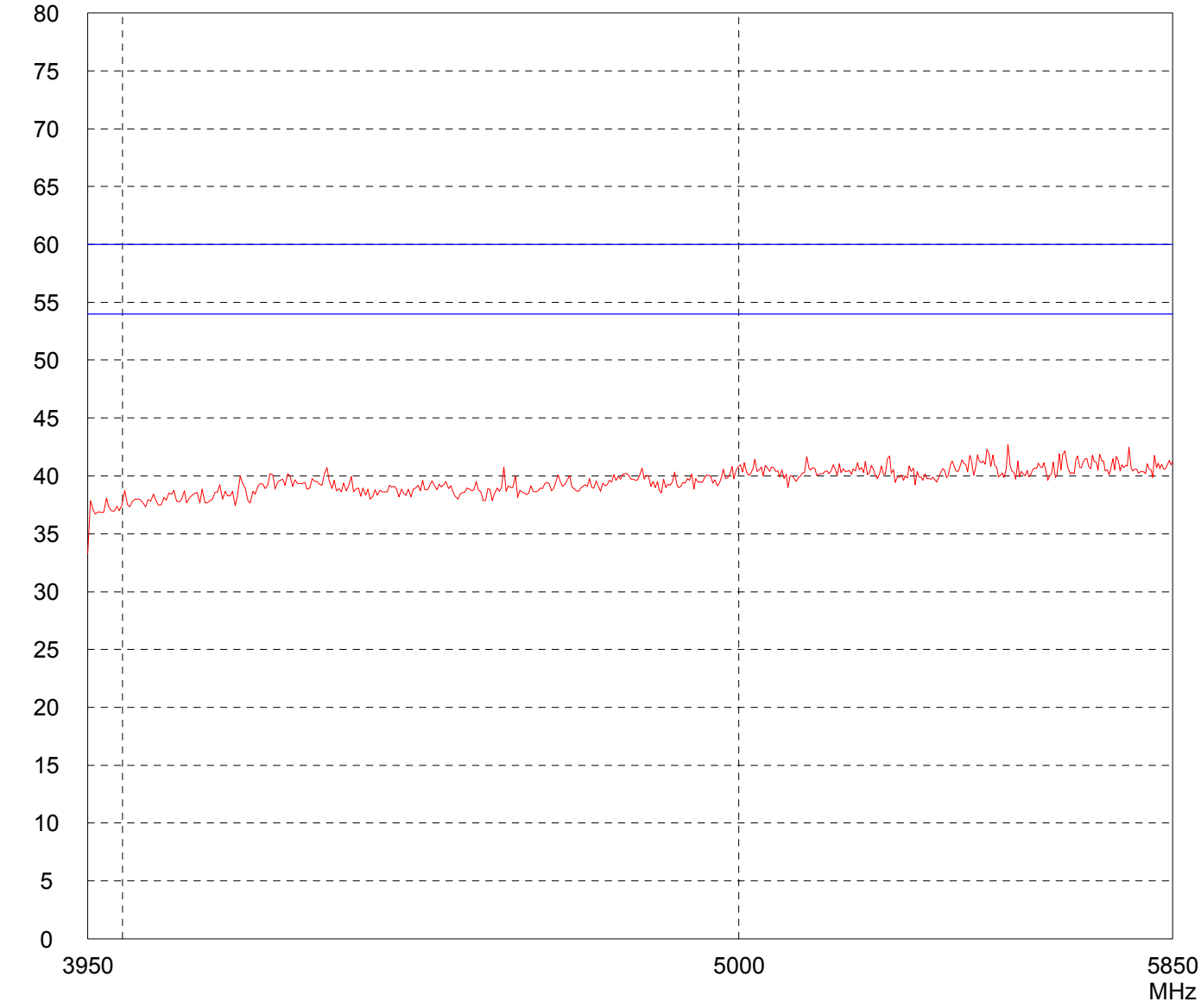
Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

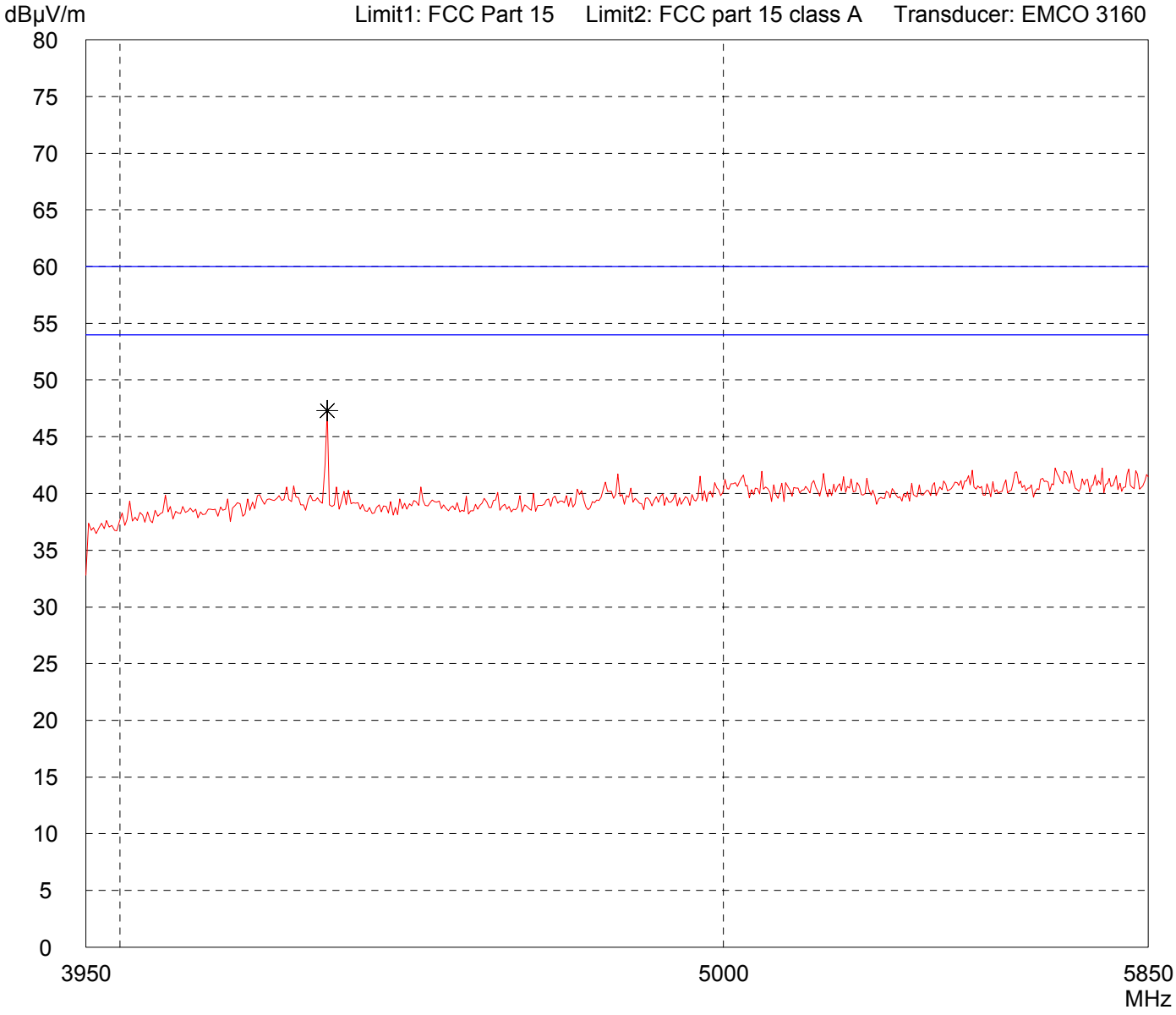
dBµV/m Limit1: FCC Part 15 Limit2: FCC part 15 class A Transducer: EMCO 3160



Result: Prescan	Project file: 50940-60539

Radiated Emission Test 3.95 GHz - 5.85 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	
Detector: Peak	List of values: Selected by hand



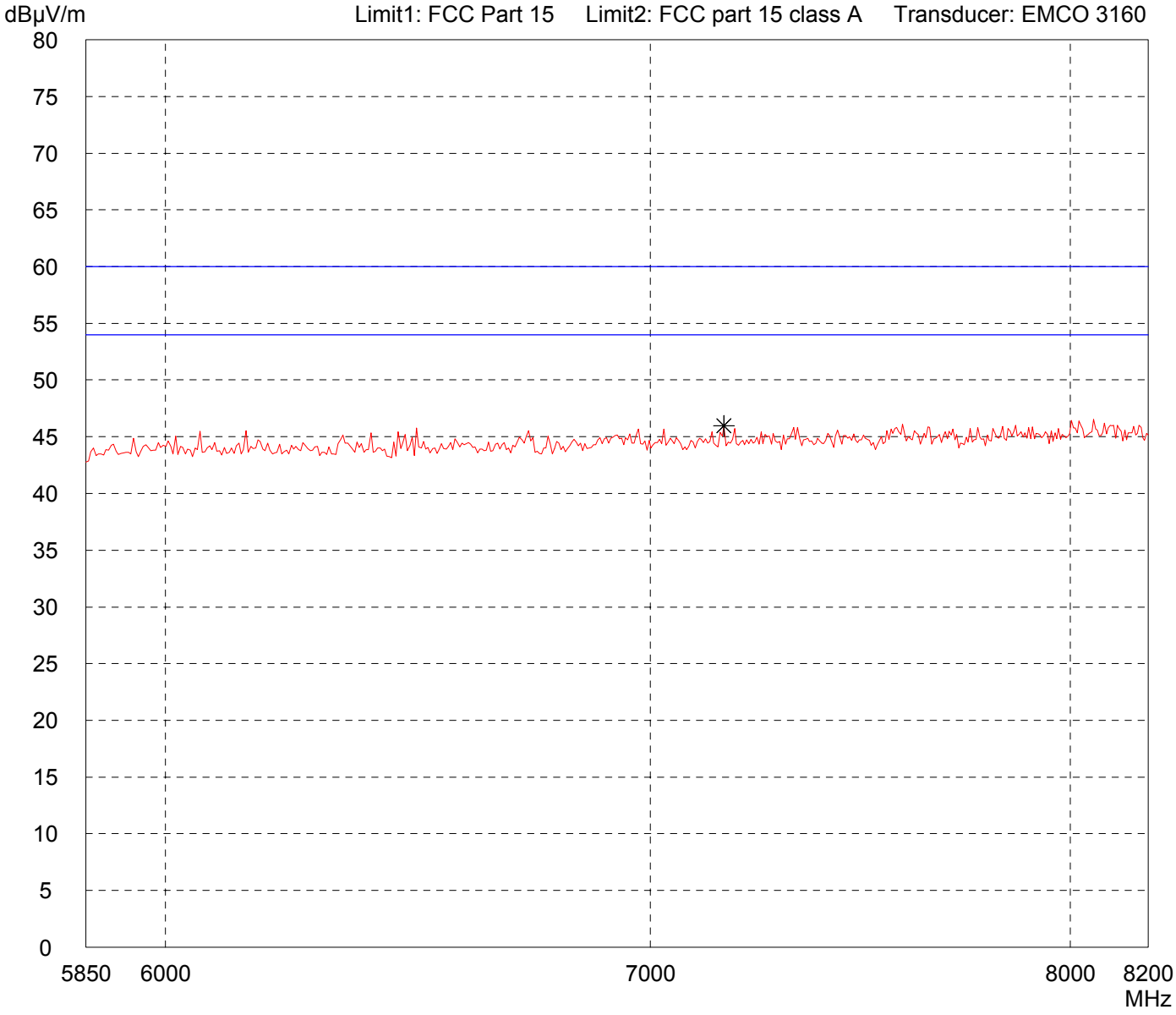
Result: Prescan	Project file: 50940-60539

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

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

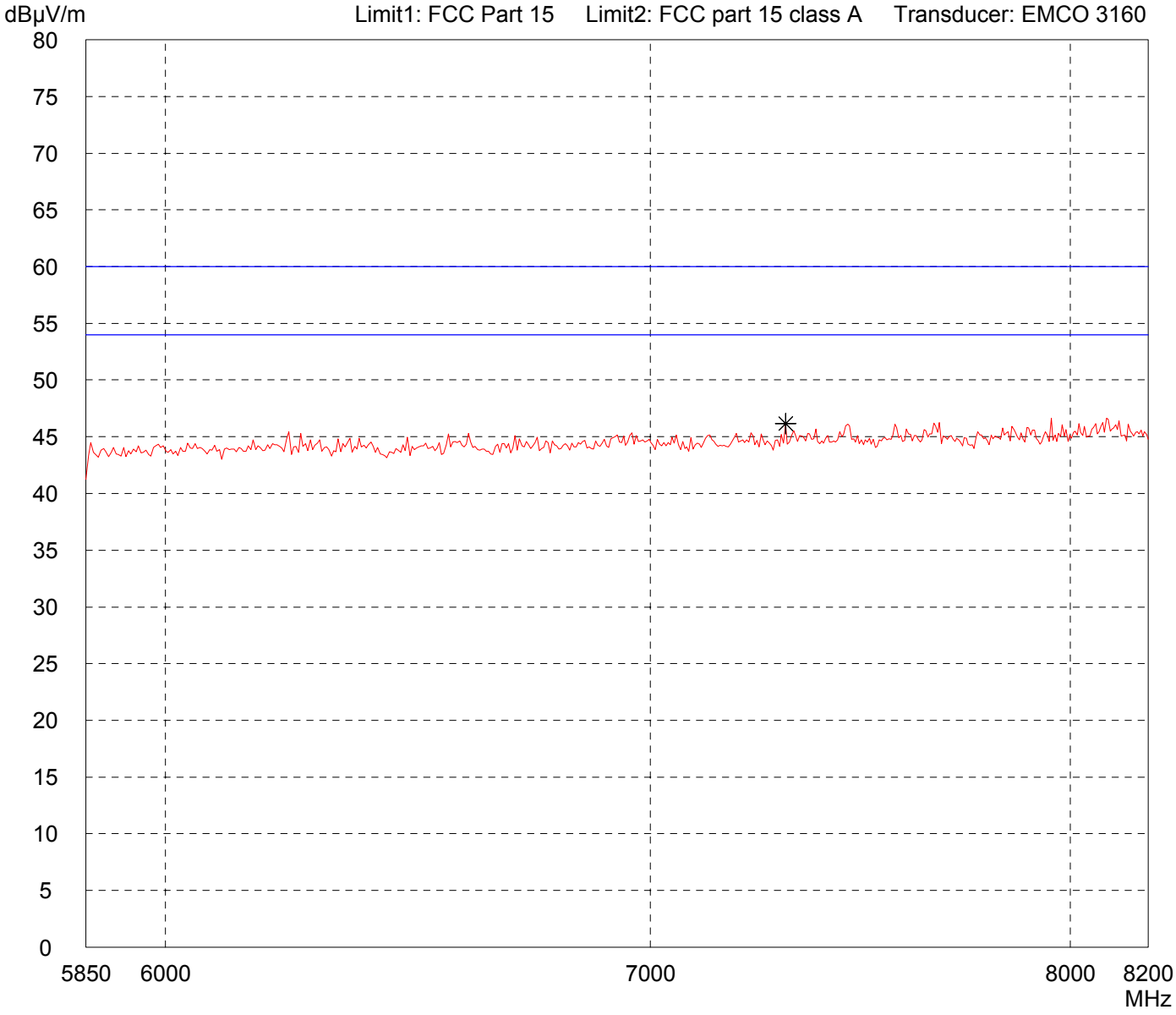


Result: Limit kept	Project file: 50940-60539

Radiated Emission Test 5.85 GHz - 8.2 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



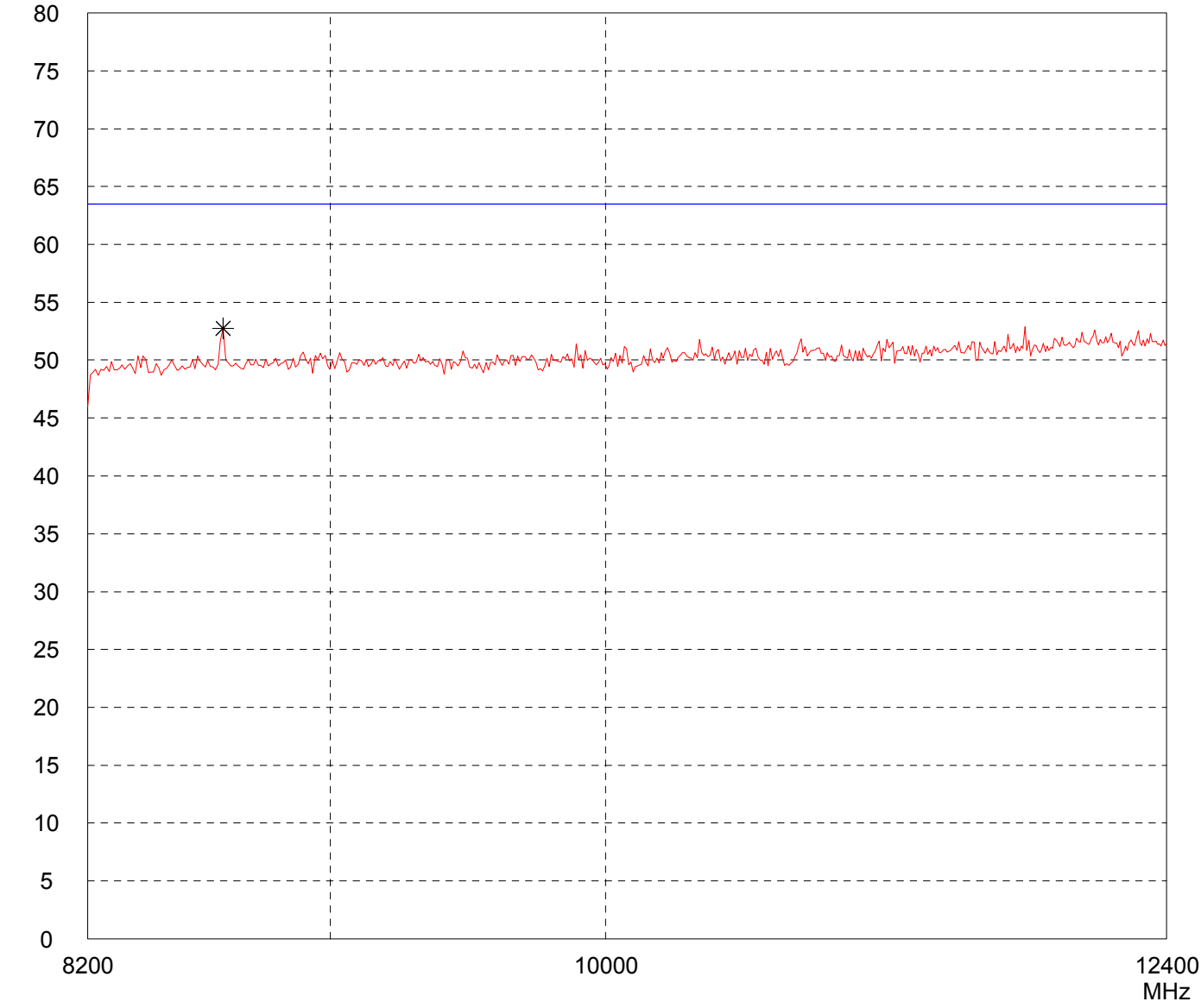
Result: Limit kept	Project file: 50940-60539

Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

dBµV/m — Limit1: FCC Part 15 (1 m) — Transducer: EMCO 3160

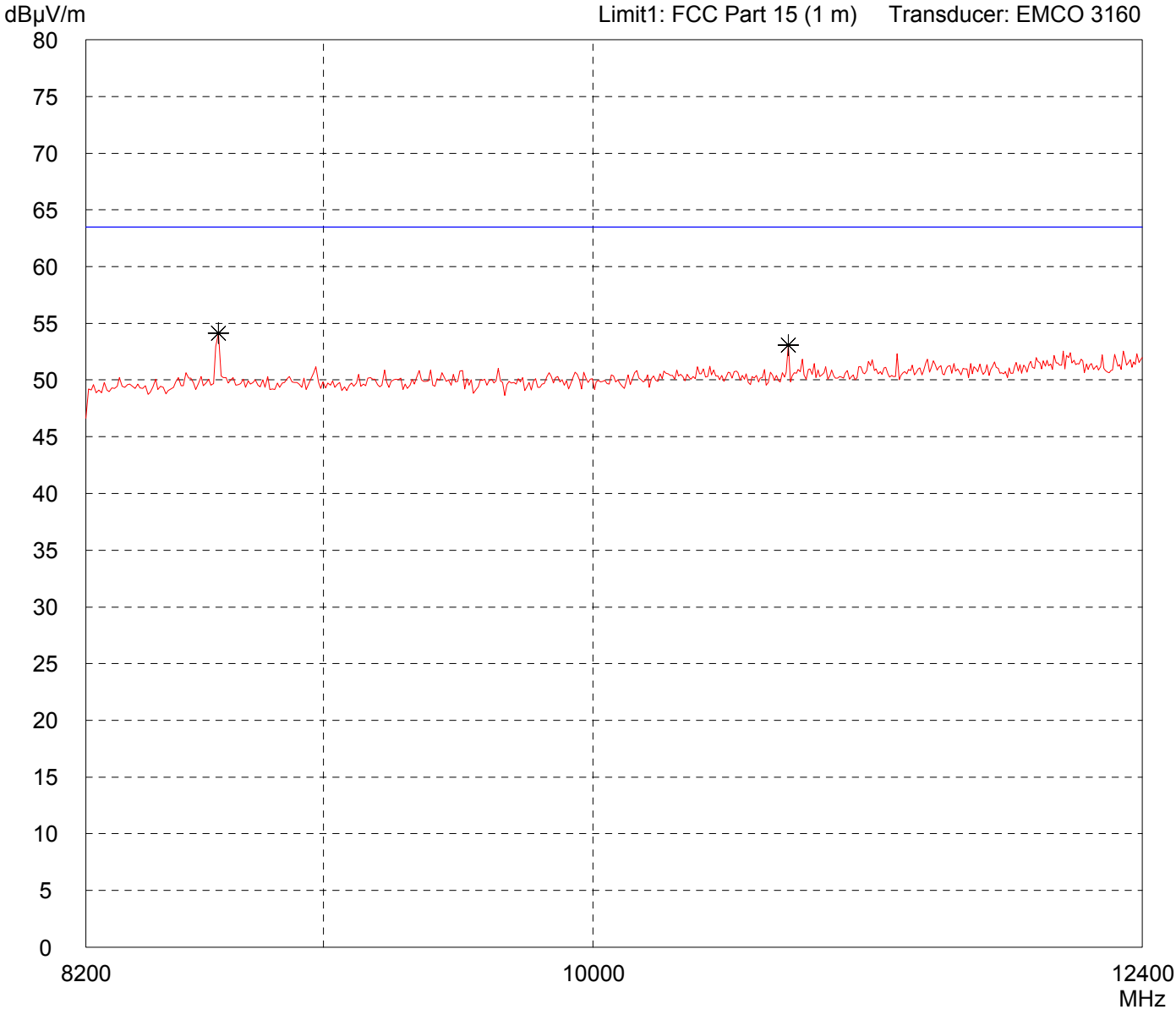


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 8.2 GHz - 12.4 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand

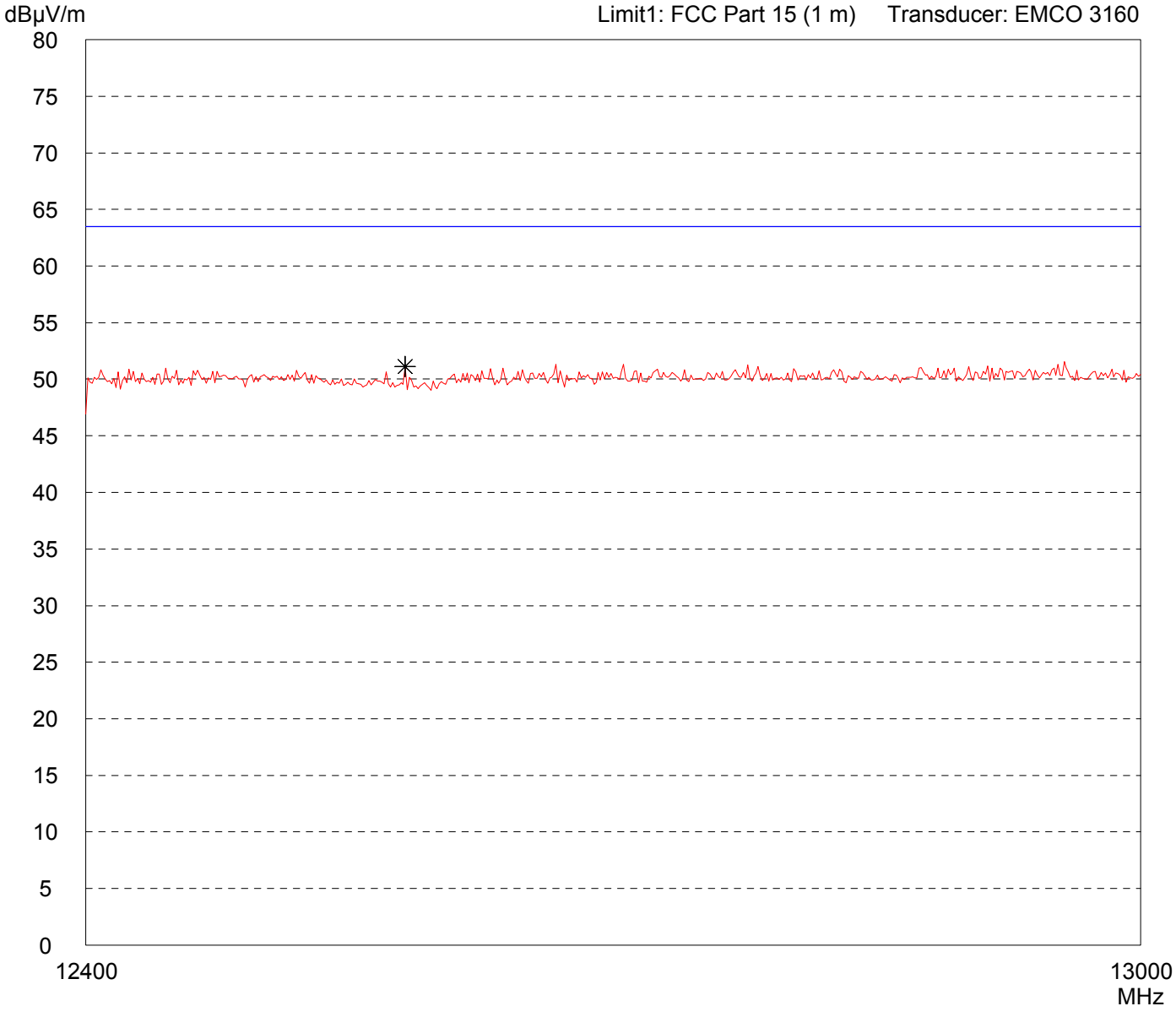


Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 13 GHz
acc. to FCC Part 15 (EMCO 3160)

Model: SDS 1 TM	Comment: - RX mode - Middle Channel - RBW = 1 MHz VBW = 100 kHz
Serial no.:	
Applicant: Schildknecht Industrieelektronik	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 07/28/2006 / Operator: M. Steindl	
Test performed: automatically / File name: default.emi	

Detector: Peak	List of values: Selected by hand



Result: Prescan	Project file: 50940-60539

Radiated Emission Test 12.4 GHz - 13 GHz
acc. to FCC Part 15 (EMCO 3160)

Model:
SDS 1 TM

Serial no.:

Applicant:
Schildknecht Industrieelektronik

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 1 meter
Vertical Polarization

Date of test: 07/28/2006

Operator: M. Steindl

Test performed: automatically

File name: default.emi

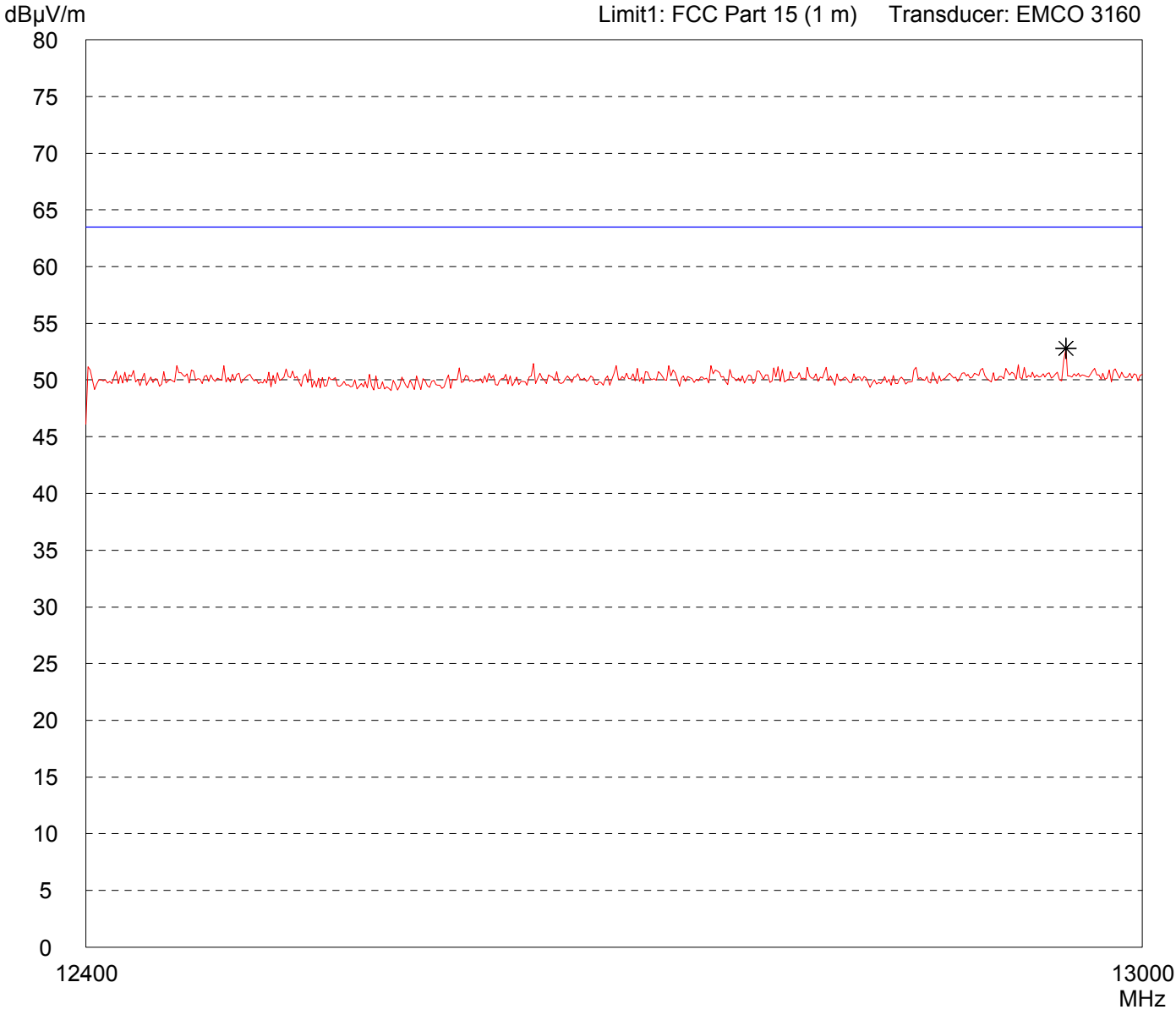
Comment:
- RX mode

- Middle Channel

- RBW = 1 MHz
  VBW = 100 kHz

Detector: Peak

List of values: Selected by hand



Result: Limit kept

Project file: 50940-60539