

Straubing, June 23, 2008

TEST - REPORT

No. 56109-080588-2 (Edition 1)

for

AC4424-9AJ

Transceiver Module

Applicant: AeroComm Inc.

Test Specifications: FCC Code of Federal Regulations,
CFR 47, Part 15,
Sections 15.107, 15.109, 15.205, 15.207,
15.215 and 15.247

Industry Canada Radio Standards
Specifications
RSS-Gen Issue 2, Sections 7.2.2, 7.2.3 and
RSS-210 Issue 7, Sections 2.2, A8
(Category I Equipment)

Note:

The test data of this report is related only to the individual item which has been tested. This report shall not be reproduced except in full extent without the written approval of the testing laboratory.

Table of Contents

1	Description of the Equipment Under Test (EUT)	4
2	Administrative Data	5
3	Identification of the Test Laboratory	6
4	Summary	7
5	Operation Mode and Configuration of EUT.....	8
6	Measurement Procedures.....	9
6.1	Conducted Output Power	9
6.2	Bandwidth Measurements	11
6.3	Conducted AC Powerline Emission	12
6.4	Radiated Emission Measurement 9 kHz to 30 MHz	14
6.5	Radiated Emission in Fully or Semi Anechoic Room.....	16
6.6	Radiated Emission at Open Field Test Site	18
7	Photographs Taken During Testing	19
8	Test Results for Transmitter	24
8.1	Occupied Bandwidth.....	26
8.2	Bandwidth of the Emission	34
8.3	Designation of Emissions	38
8.4	Restricted Bands of Operation	39
8.5	Channel Bandwidth	43
8.6	Hopping channel separation.....	44
8.7	Number of hopping frequencies used.....	48
8.8	Time occupancy on any channel	50
8.9	Maximum output power	54
8.10	Conducted Powerline Emission Measurement 150 kHz to 30 MHz.....	58
8.11	Conducted Emission Measurement 30 MHz to 25 GHz	59
8.12	Radiated Emission Measurement 9 kHz to 30 MHz	63
8.13	Radiated Emission Measurement 30 MHz to 25 GHz	64
8.14	RF exposure requirement.....	70
8.15	Exposure of Humans to RF Fields.....	71
9	Test Results for Receiver.....	73
9.1	Conducted Powerline Emission Measurement 150 kHz to 30 MHz.....	74
9.2	Radiated Emission Measurement 30 MHz to 12.5 GHz	75

10 Referenced Regulations 76

11 Revision History 77

12 Charts taken during testing 78

1 Description of the Equipment Under Test (EUT)

General data of EUT	
Type designation ¹ :	AC4424-9AJ
Parts ² :	
Serial number(s):	A: 005067558943 B: 005067558916
Manufacturer:	AeroComm Inc.
Type of equipment:	Transceiver Module
Version:	as received
FCC ID:	
Additional parts/accessories:	

Technical data of EUT	
Application frequency range:	2400.0 - 2483.5 MHz
Frequency range:	2406 - 2473 MHz
Operating frequency:	2406 MHz, 2444 MHz 2473 MHz
Type of modulation:	FSK
Pulse train:	---
Pulse width:	---
Number of RF-channels:	2 x 20
Channel spacing:	1.5 MHz
Designation of emissions ³ :	
Type of antenna:	Integrated
Size/length of antenna:	27 mm
Connection of antenna:	☐ detachable ☒ not detachable
Type of power supply:	DC supply
Specifications for power supply:	nominal voltage: 5.0 V minimum voltage: 4.9 V maximum voltage: 5.1 V

¹ Type designation of the system if EUT consists of more than one part.

² Type designations of the parts of the system, if applicable.

³ Also known as "Class of Emission".

2 Administrative Data

Application details	
Applicant (full address):	AeroComm Inc. 11160 Thompson Avenue Lenexa KS USA 66219
Contact person:	Mr. Daniel Waters
Contract identification:	Email of May 18, 2008
Receipt of EUT:	May 23, 2008
Date(s) of test:	June 2008
Note(s):	The applicant provided two test sample. One (A) with an external antenna connector used for conducted tests and one (B) with the normal antenna used for radiated emissions.

Report details	
Report number:	56109-080588-2
Edition:	1
Issue date:	June 23, 2008

3 Identification of the Test Laboratory

Details of the Test Laboratory	
Company name:	Senton GmbH EMI/EMC Test Center
Address:	Aeussere Fruehlingstrasse 45 D-94315 Straubing Germany
Laboratory accreditation:	DAR-Registration No. DAT-P-171/94-02
FCC test site registration number	90926
Industry Canada test site registration:	3050A-1
Contact person:	Mr. Johann Roidt Phone: (+49) (0)9421 5522-0 Fax: (+49) (0)9421 5522-99

4 Summary

Summary of test results

The tested sample complies with the requirements set forth in the

Code of Federal Regulations CFR 47, Part 15, Sections 15.107, 15.109, 15.205, 15.207, 15.215, 15.247 and 2.1093

of the Federal Communication Commission (FCC) and the

Radio Standards Specifications

RSS-Gen Issue 2, Sections 7.2.2, 7.2.3 and

RSS-210 Issue 7, Sections 2.2, 2.6 and A8 (Category I Equipment)

of Industry Canada (IC).

Personnel involved in this report

Laboratory Manager:



Mr. Johann Roidt

Responsible for testing:



Mr. Martin Steindl

Responsible for test report:

Mr. Martin Steindl

5 Operation Mode and Configuration of EUT

Operation Modes

The EUT is able to operate on a lower hopping set (2406 MHz to 2435 MHz) and on a upper hopping set (2444 MHz to 2473 MHz). The EUT was configured to transmit on lowest (2406 MHz), middle (2444 MHz) and highest (2473 MHz) frequency of the whole frequency range of the EUT.

Configuration of EUT

The EUT was configured as module on a test board controlled by a laptop PC over RS232-interface. The laptop PC was detached for most emission testings.

List of ports and cables

<i>Port</i>	<i>Description</i>	<i>Classification⁴</i>	<i>Cable type</i>	<i>Cable length</i>
1	Data Interface of the module	signal / control port	unshielded	direct contact
2	Temporary antenna connector	signal / control port	shielded	1 m
3	RS232 interface of test board	signal / control port	shielded	1.5 m
4	DC supply of test board	DC supply	unshielded	1.5 m
5	AC supply of AC/DC convertor	AC supply	unshielded	direct contact

List of devices connected to EUT

<i>Item</i>	<i>Description</i>	<i>Type Designation</i>	<i>Serial no. or ID</i>	<i>Manufacturer</i>

List of support devices

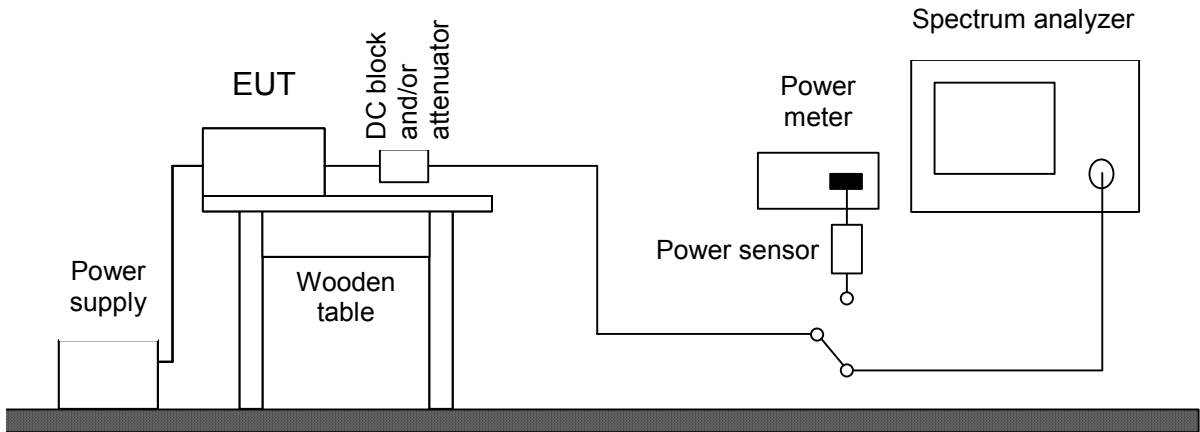
<i>Item</i>	<i>Description</i>	<i>Type Designation</i>	<i>Serial no. or ID</i>	<i>Manufacturer</i>
1	Test board	AeroComm serial interface board		AeroComm
2	Laptop PC	DELL dimension		DELL

⁴ Ports shall be classified as ac power, dc power or signal/control port

6 Measurement Procedures

6.1 Conducted Output Power

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 2, section 2.1046(a) IC RSS-Gen Issue 2, section 4.8
Guide:	CFR 47 Part 2, section 2.1046 / IC RSS-Gen Issue 2
Conducted output power is measured at the RF output terminals (e.g. antenna connector if antenna is detachable) when the transmitter is adjusted in accordance with the tune-up procedure, if applicable. The RF output terminals are connected to a spectrum analyzer and/or a power meter with appropriate sensor. If required, a resistive matching network equal to the impedance specified or employed for the antenna is used as well as dc block and appropriate attenuators (50 Ohms). The electrical characteristics of the radio frequency load attached to the output terminals shall be stated, if applicable. If a spectrum analyzer is used and no other settings are specified resolution bandwidth shall be selected according to the carrier frequency f_c and set to 10 kHz ($150\text{ kHz} \leq f_c < 30\text{ MHz}$), 100 kHz ($30\text{ MHz} \leq f_c < 1\text{ GHz}$) or 1 MHz ($f_c \geq 1\text{ GHz}$). The video bandwidth shall be at least three times greater than the resolution bandwidth. The settings used have to be indicated within the appropriate test record(s).	



Test instruments used:

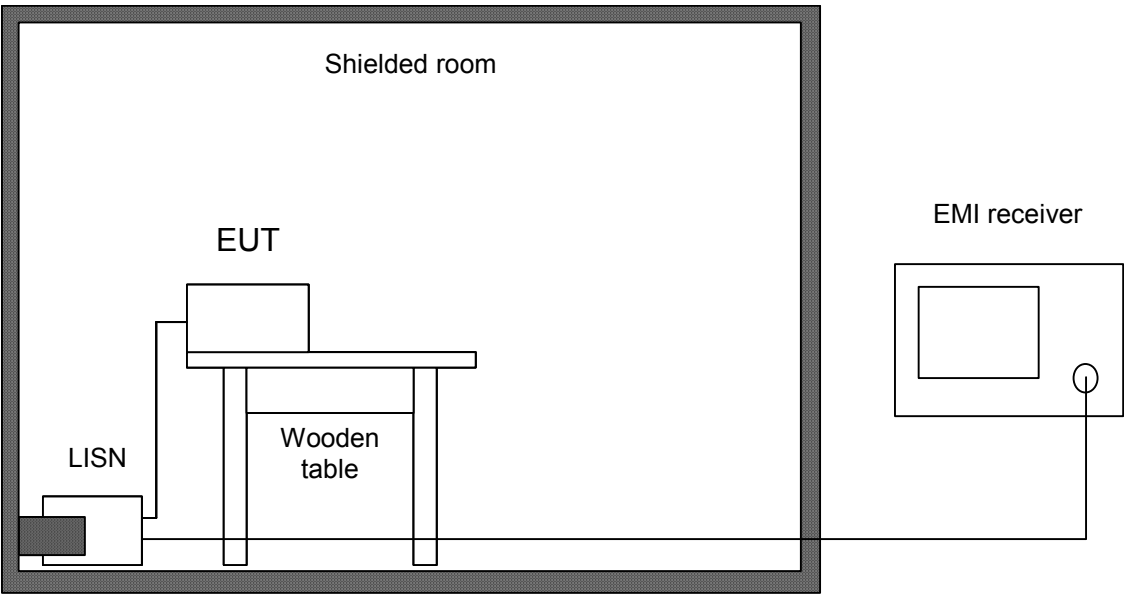
Used	Type	Model	Serial No. or ID	Manufacturer
☐	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
☒	EMI test receiver	ESPI7	836914/0002	Rohde & Schwarz
☐	EMI test receiver	ESMI	839379/013	Rohde & Schwarz
			839587/006	
☐	Power meter	NRVS	836856/015	Rohde & Schwarz
☐	Peak power sensor	NRV-Z31	8579604.03	Rohde & Schwarz
☐	Power sensor	NRV-Z52	837901/030	Rohde & Schwarz
☐	Power sensor	NRV-Z4	863828/015	Rohde & Schwarz
☐	DC-block	7006	A2798	Weinschel
☐	Attenuator	4776-10	9412	Narda
☐	Attenuator	4776-20	9503	Narda

6.2 Bandwidth Measurements

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 2, section 2.202(a) CFR 47 Part 15, section 15.215(c) IC RSS-Gen Issue 2, sections 4.6.1 and 4.6.2 IC RSS-210 Issue 7, section A1.1.3 ANSI C63.4, annex H.6
Guide:	ANSI C63.4 / IC RSS-Gen Issue 2, sections 4.6.1 and 4.6.2
Measurement setup:	☐ Conducted: See below ☒ Radiated: Radiated Emission in Fully or Semi Anechoic Room (6.5)
If antenna is detachable bandwidth measurements shall be performed at the antenna connector (conducted measurement) when the transmitter is adjusted in accordance with the tune-up procedure, if applicable. The RF output terminals are connected to a spectrum analyzer. If required, a resistive matching network equal to the impedance specified or employed for the antenna is used as well as dc block and appropriate attenuators (50 Ohms). The electrical characteristics of the radio frequency load attached to the output terminals shall be stated, if applicable. If radiated measurements are performed the same test setups and instruments are used as with radiated emission measurements for the appropriate frequency range. The analyzer settings are specified by the test description of the appropriate test record(s).	

6.3 Conducted AC Powerline Emission

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 15, sections 15.107 and 15.207 IC RSS-Gen Issue 2, section 7.2.2
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.	

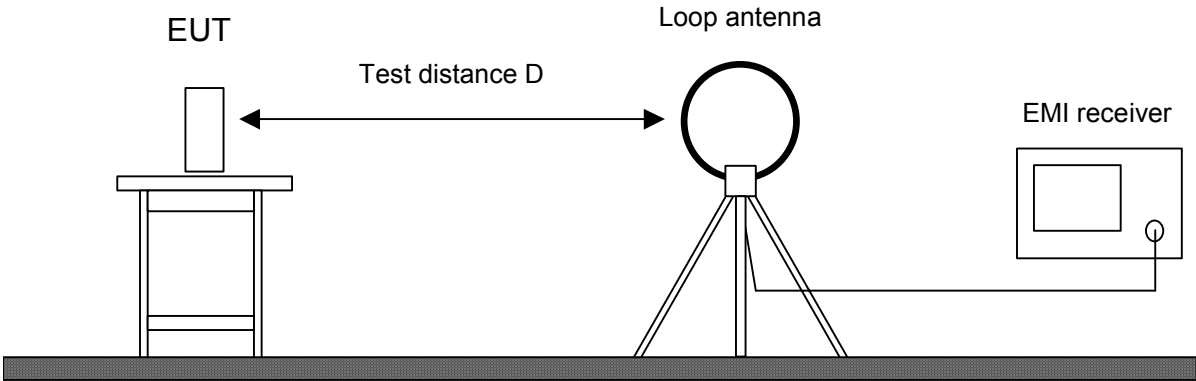


Test instruments used:

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

6.4 Radiated Emission Measurement 9 kHz to 30 MHz

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 15, sections 15.205(b) and 15.247 IC RSS-210 Issue 7, sections 2.2(b)(c), 2.6 and A8.5
Guide:	ANSI C63.4
Radiated emission in the frequency range 9 kHz to 30 MHz is measured using an active loop antenna. First the whole spectrum of emission caused by the equipment is recorded at a distance of 3 meters in a fully or semi anechoic room with the detector of the spectrum analyzer or EMI receiver set to peak. This configuration is also used for recording the spectrum of intentional radiators. 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. EUT is rotated all around to find the maximum levels of emissions. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions. If worst case emission of the EUT cannot be recorded with EUT in standard position and loop antenna in vertical polarization the EUT (or the radiating part of the EUT) is rotated by 90 degrees instead of changing the loop antenna to horizontal polarization. This procedure is selected to minimize the influence of the environment (e.g. effects caused by the floor especially with longer distances). Final measurement is performed at a test distance D of 30 meters using an open field test site. In case the regulation requires testing at other distances, the result is extrapolated by either making measurements at an additional distance D of 10 meters to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). In cases of very low emissions measurements are performed at shorter distances and results are extrapolated to the required distance. The provisions of CFR 47 Part 15 sections 15.31(d) and (f)(2) apply. According to CFR 47 Part 15 section 15.209(d) final measurement is performed with detector function set to quasi-peak except for the frequency bands 9 to 90 kHz and 110 to 490 kHz where, for non-pulsed operation, average detector is employed. If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.	

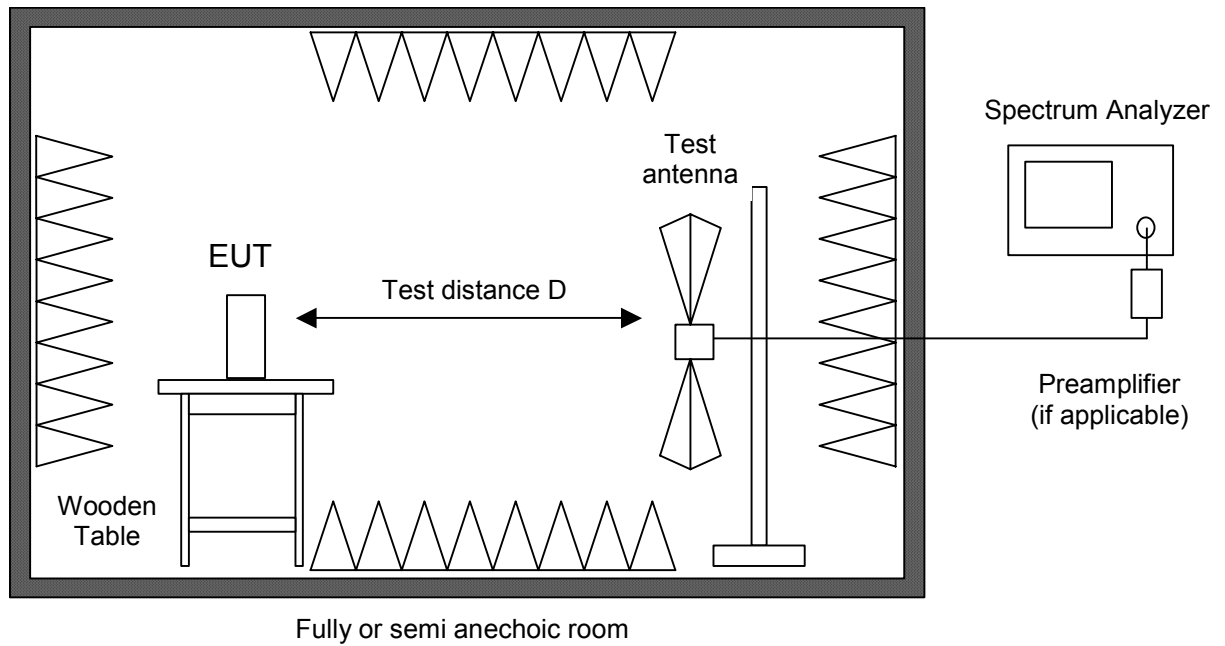


Test instruments used:

Used	Type	Model	Serial No. or ID	Manufacturer
☒	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
☐	EMI test receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
☒	Test receiver	ESHS 10	860043/016	Rohde & Schwarz
☐	Preamplifier	CPA9231A	3393	Schaffner
☒	Loop antenna	HFH2-Z2	882964/1	Rohde & Schwarz
☒	Fully anechoic room	No. 2	1452	Albatross Projects
☐	Semi-anechoic room	No. 3	1453	Siemens
☐	Open field test site	EG 1	1450	Senton

6.5 Radiated Emission in Fully or Semi Anechoic Room

Measurement Procedure:	
Rules and specifications:	CFR 47 Part 15, sections 15.109, 15.215(b) and 15.249 IC RSS-Gen Issue 2, sections 6(a), 7.2.3.2 IC RSS-210 Issue 7, section A2.9
Guide:	ANSI C63.4
Radiated emission in fully or semi anechoic room is measured in the frequency range from 30 MHz to the maximum frequency as specified in CFR 47 Part 15 section 15.33. Measurements are 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 as well as video bandwidth set to 100 kHz (below 1 GHz) or 1 MHz (above 1 GHz). Testing up to 1 GHz is performed with a linear polarized logarithmic periodic antenna combined with a 4:1 broadband dipole ("Trilog broadband antenna"). For testing above 1 GHz horn antennas are used. All tests below 18 GHz are performed at a test distance D of 3 meters. For higher frequencies the test distance is reduced (e.g. to 1 meter) due to the sensitivity of the measuring instrument(s) and the test results are calculated according to CFR 47 Part 15 section 15.31(f)(1) using an extrapolation factor of 20 dB/decade. If required, preamplifiers are used for the whole frequency range. Special care is taken to avoid overload, using appropriate attenuators and filters, if necessary. If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value. 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. During testing the EUT is rotated all around to find the maximum levels of emissions. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions. For final testing below 1 GHz an open field test-site is used and the plots recorded in the fully or semi anechoic room are indicated as prescans.	



Test instruments used:

Used	Type	Model	Serial No. or ID	Manufacturer
☒	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
☐	Spectrum analyzer	R 3271	05050023	Advantest
☒	EMI test receiver	ESMI	839379/013 839587/006	Rohde & Schwarz
☒	Preamplifier	CPA9231A	3393	Schaffner
☐	Preamplifier	R14601		Advantest
☐	Preamplifier 1-8 GHz	AFS3-00100800-32-LN	847743	Miteq
☐	Preamplifier 0.5-8 GHz	AMF-4D-005080-25-13P	860149	Miteq
☒	Preamplifier 8-18 GHz	ACO/180-3530	32641	CTT
☐	External Mixer	WM782A	845881/005	Tektronix
☐	Harmonic Mixer	FS-Z30	843389/007	Rohde & Schwarz
	Accessories			
☒	Trilog broadband antenna	VULB 9163	9163-188	Schwarzbeck
☒	Horn antenna	3115	9508-4553	EMCO
☐	Horn antenna	3160-03	9112-1003	EMCO
☐	Horn antenna	3160-04	9112-1001	EMCO
☒	Horn antenna	3160-05	9112-1001	EMCO
☒	Horn antenna	3160-06	9112-1001	EMCO
☒	Horn antenna	3160-07	9112-1008	EMCO
☒	Horn antenna	3160-08	9112-1002	EMCO
☒	Horn antenna	3160-09	9403-1025	EMCO
☐	Horn antenna	3160-10	399185	EMCO
☒	Fully anechoic room	No. 2	1452	Albatross Projects
☐	Semi-anechoic room	No. 3	1453	Siemens

6.6 Radiated Emission at Open Field Test Site

Measurement Procedure:

Rules and specifications: CFR 47 Part 15, sections 15.109, 15.215(b) and 15.249
 IC RSS-Gen Issue 2, sections 6(a), 7.2.3.2
 IC RSS-210 Issue 7, section A2.9

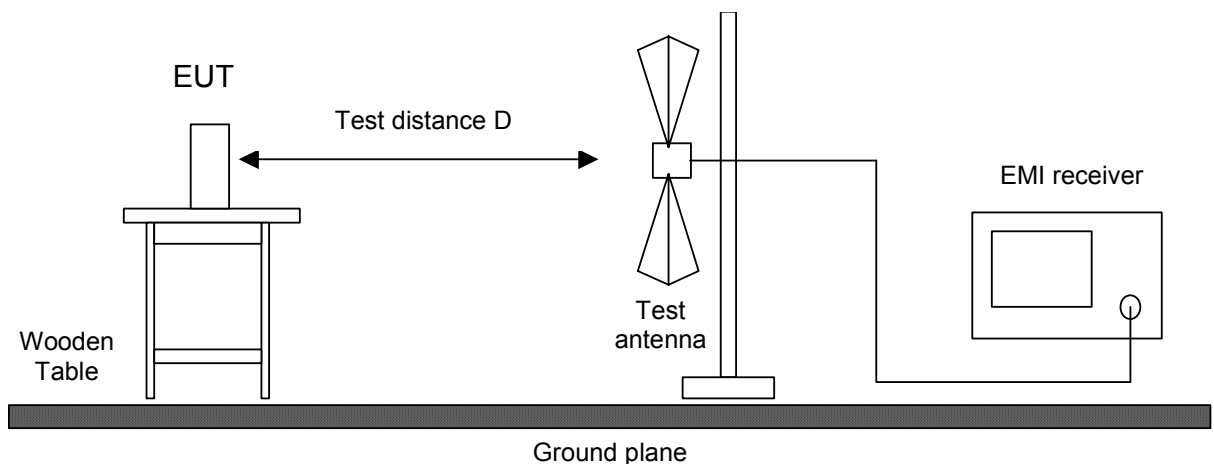
Guide: ANSI C63.4

Radiated emission at open field test site is measured in the frequency range 30 MHz to 1 GHz using a biconical antenna up to 300 MHz and a logarithmic periodic antenna above. The measurement bandwidth of the test receiver is set to 120 kHz with quasi-peak detector selected.

If the radiated emission limits are expressed in terms of the average value of the emission there also is a peak limit corresponding to 20 dB above the maximum permitted average limit. Additionally, if pulsed operation is employed, the average field strength is determined by averaging over one complete pulse train, including blanking intervals, as specified in CFR 47 Part 15 section 15.35(c). If the pulse train exceeds 0.1 second that 0.1 second interval during which the value of the emission is at its maximum is selected for calculation. The pulse train correction is added to the peak value of the emission to get the average value.

Hand-held or body-worn devices are tested in the position producing the highest emission relative to the limit as verified by prescans in the fully anechoic room. EUT is rotated all around and receiving antenna is raised and lowered within 1 meter to 4 meters to find the maximum levels of emission. Equipment and cables are placed and moved within the range of position likely to find their maximum emissions.

For measuring emissions of intentional radiators and receivers a test distance D of 3 meters is selected. Testing of unintentional radiators is performed at a distance of 10 meters. If limits specified for 3 meters shall be used for measurements performed at 10 meters distance the limits are calculated according to CFR 47 Part 15 section 15.31(d) and (f)(1) using an inverse linear-distance extrapolation factor of 20 dB/decade.



Test instruments used:

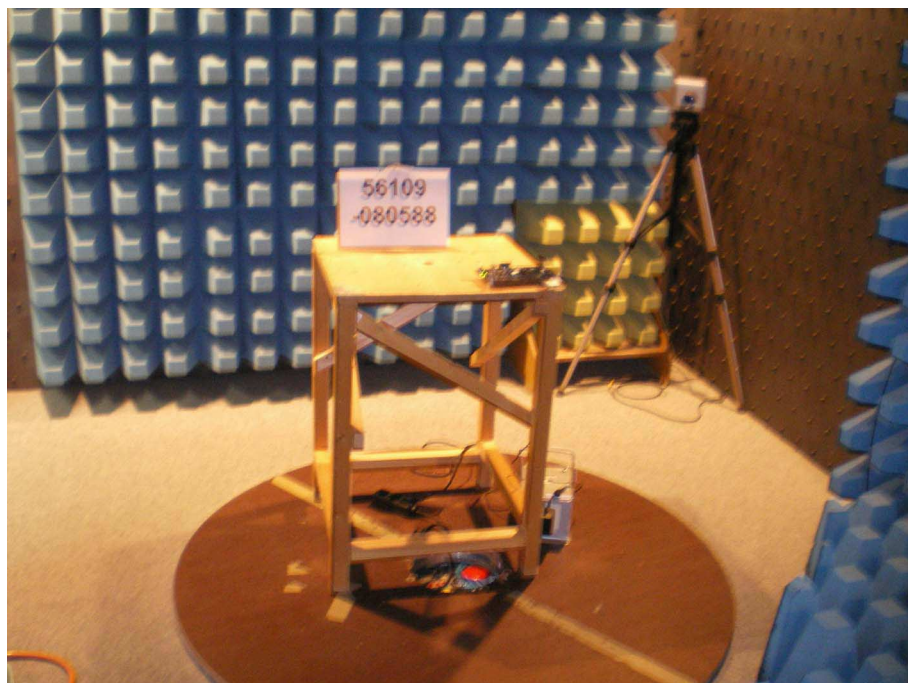
Used	Type	Model	Serial No. or ID	Manufacturer
☒	EMI receiver	ESVP	881120/024	Rohde & Schwarz
☒	Biconical antenna	EG 1 HK 116	842204/001	Rohde & Schwarz
☒	Log. per. antenna	EG 1 HL 223	841516/023	Rohde & Schwarz
☒	Open field test site	EG 1	1450	Senton

7 Photographs Taken During Testing

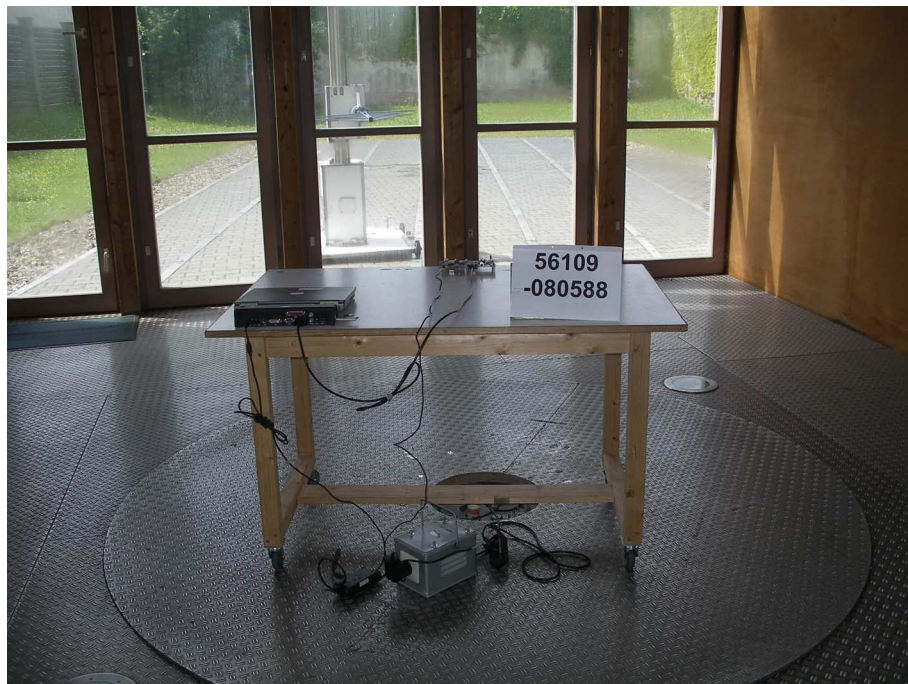
Test setup for conducted AC powerline emission measurement



**Test setup for radiated emission measurement
(fully anechoic room)**



**Test setup for radiated emission measurement
(open field test site)**



**Test setup for radiated emission measurement
(open field test site)
- continued -**



8 Test Results for Transmitter

FCC CFR 47 Parts 2 and 15			
Section(s)	Test	Page	Result
2.1046(a)	Conducted output power	---	Not applicable
2.202(a)	Occupied bandwidth	26	Recorded
15.204	Antenna requirement	---	Integrated Antenna
15.215(c)	Bandwidth of the emission	34	Test passed
2.201, 2.202	Class of emission	38	Calculated
15.35(c)	Pulse train measurement for pulsed operation	---	Not applicable
15.205(a)	Restricted bands of operation	39	Test passed
15.247(a)(1)(i)	Channel Bandwidth	43	Test passed
15.247(a)(1)	Hopping channel separation	44	Test passed
15.247(a)(1)(i)	Number of hopping frequencies used	48	Test passed
15.247(a)(1)(i)	Time occupancy on any channel	50	Test passed
15.247(b)(2)	Maximum peak output power	54	Test passed
15.207	Conducted AC powerline emission 150 kHz to 30 MHz	58	Test passed
15.247(d)	Conducted spurious emissions	59	Test passed
15.205(b) 15.247	Radiated emission 9 kHz to 30 MHz	63	Test passed
15.205(b) 15.215(b) 15.247(d)	Radiated emission 30 MHz to 25 GHz	64	Test passed
15.247(i) 2.1093	RF exposure requirement	70	Test passed

IC RSS-Gen Issue 2			
Section(s)	Test	Page	Result
4.8	Transmitter output power (conducted)	---	Not applicable
4.6.1	Occupied Bandwidth	26	Recorded
3.2(h), 8	Designation of emissions	38	Calculated
4.5	Pulsed operation	---	Not applicable
7.2.2	Transmitter AC power lines conducted emissions 150 kHz to 30 MHz	58	Test passed
5.5	Exposure of Humans to RF Fields	71	Exempted from SAR and RF evaluation

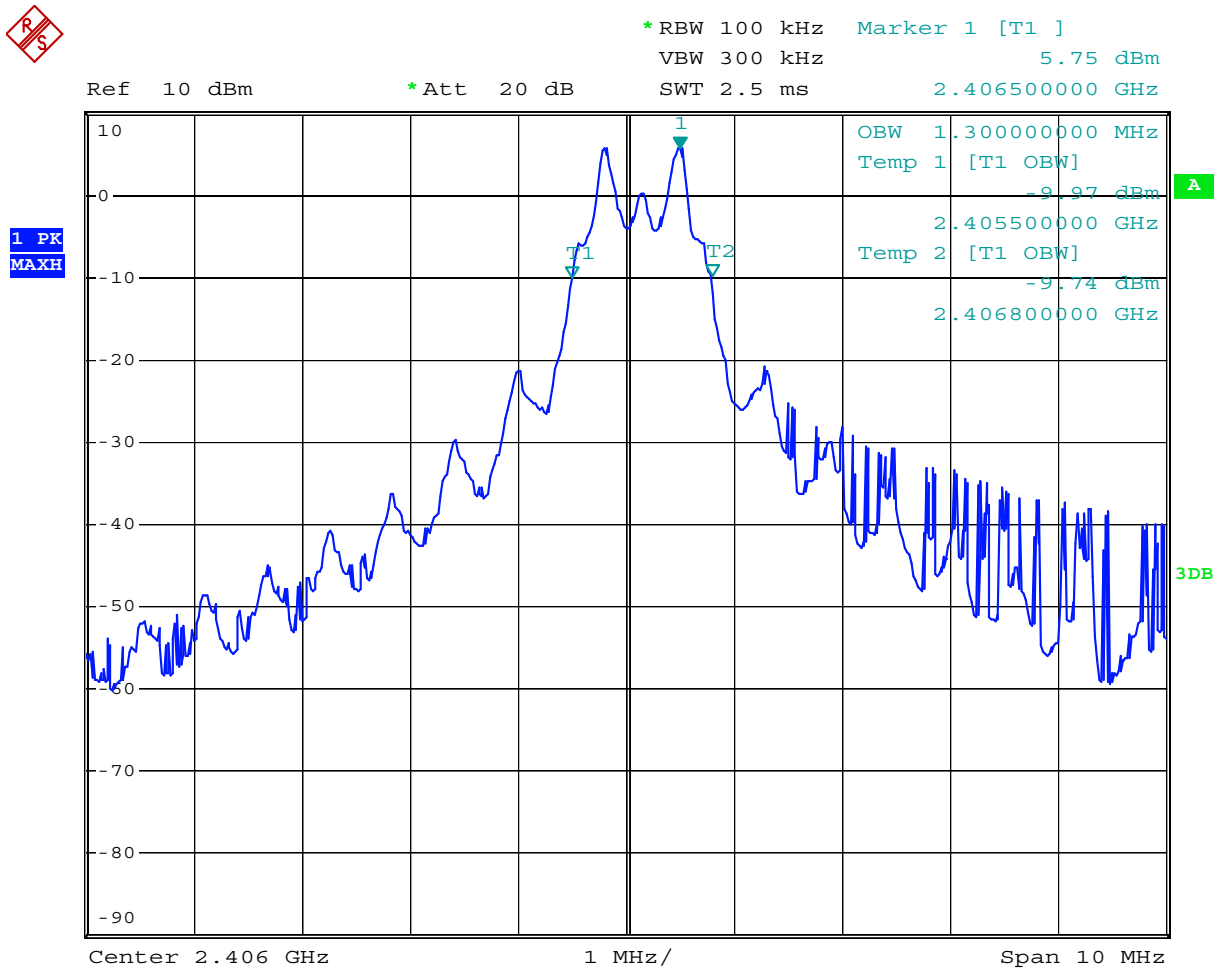
IC RSS-210 Issue 7			
Section(s)	Test	Page	Result
2.2(a)	Restricted bands and unwanted emission frequencies	39	Test passed
7.1.4	Antenna requirement	---	Integrated antenna
A8.1(c)	Channel bandwidth	43	Test passed
A8.1(b)	Hopping channel separation	44	Test passed
A8.1(c)	Number of hopping frequencies used	48	Test passed
A8.1(c)	Time occupancy on any channel	50	Test passed
A8.4(1)	Maximum output power	54	Test passed
2.2(b)(c) 2.6 A8.5	Unwanted emissions 9 kHz to 30 MHz	63	Test passed
2.2(b)(c) 2.6 A8.5	Unwanted emissions 30 MHz to 25 GHz	64	Test passed

8.1 Occupied Bandwidth

Rules and specifications:	CFR 47 Part 2, section 2.202(a) ANSI C63.4, annex H.6	
Guide:	ANSI C63.4	
Description:	The occupied bandwidth according to CFR 47 Part 2, section 2.202(a), is measured as the 99% emission bandwidth, i.e. below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5% of the total mean power radiated by a given emission. The occupied bandwidth according to ANSI C63.4, annex H.6; is measured as the frequency range defined by the points that are 26 dB down relative to the maximum level of the modulated carrier. The resolution bandwidth of the spectrum analyzer shall be set to a value greater than 5.0% of the allowed bandwidth. If no bandwidth specifications are given, the following guidelines are used:	
	Fundamental frequency	Minimum resolution bandwidth
	9 kHz to 30 MHz	1 kHz
	30 MHz to 1000 MHz	10 kHz
	1000 MHz to 40 GHz	100 kHz
	The video bandwidth shall be at least three times greater than the resolution bandwidth.	
Measurement procedure:	Bandwidth Measurements (6.2)	

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2

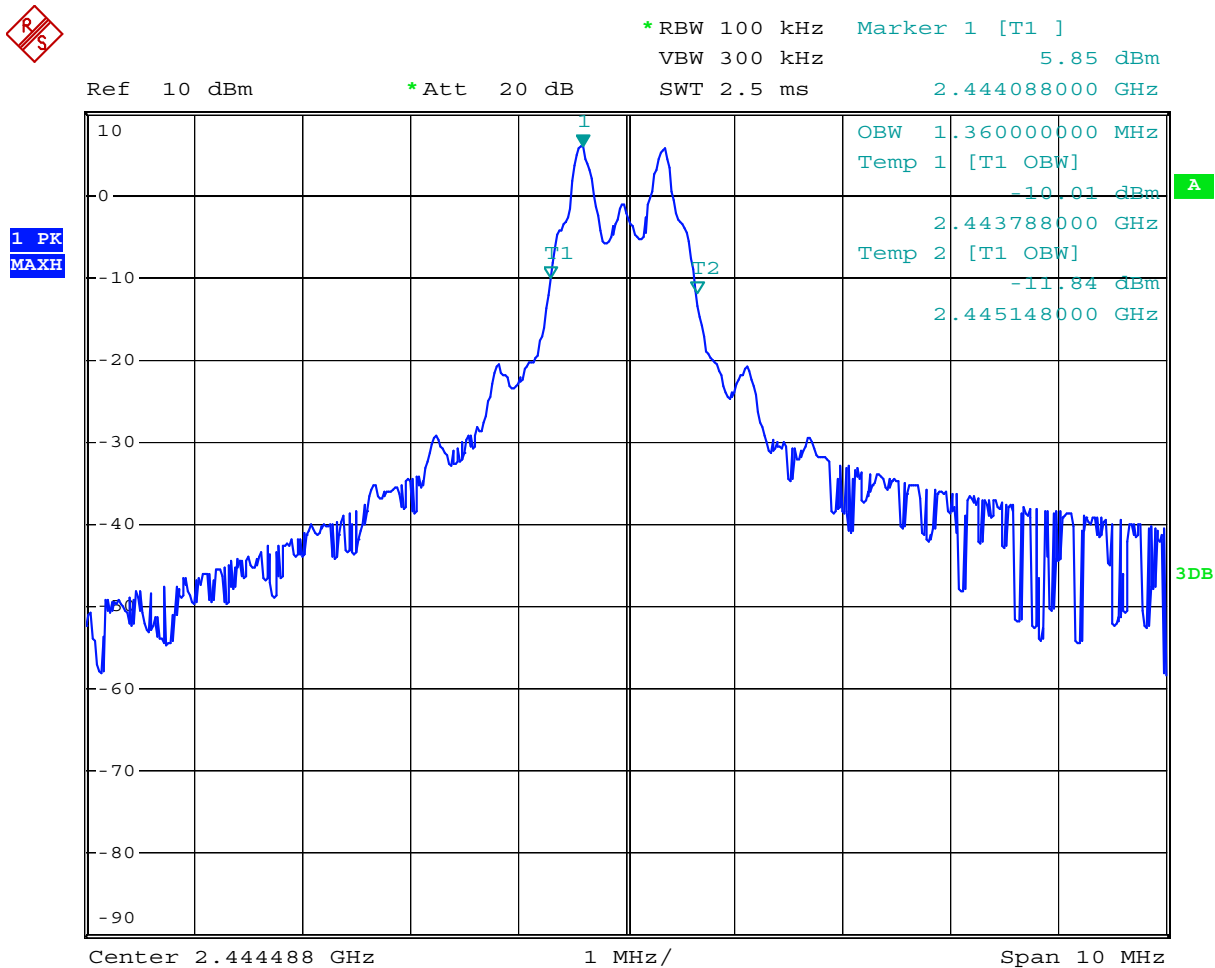
Occupied Bandwidth (99 %):



Date: 18.JUN.2008 11:22:43

Occupied Bandwidth (99 %):	1.30 MHz
----------------------------	----------

Occupied Bandwidth (99 %) - continued:



Date: 18.JUN.2008 09:54:53

Occupied Bandwidth (99 %):	1.36 MHz
----------------------------	----------

2.472615600 GHz

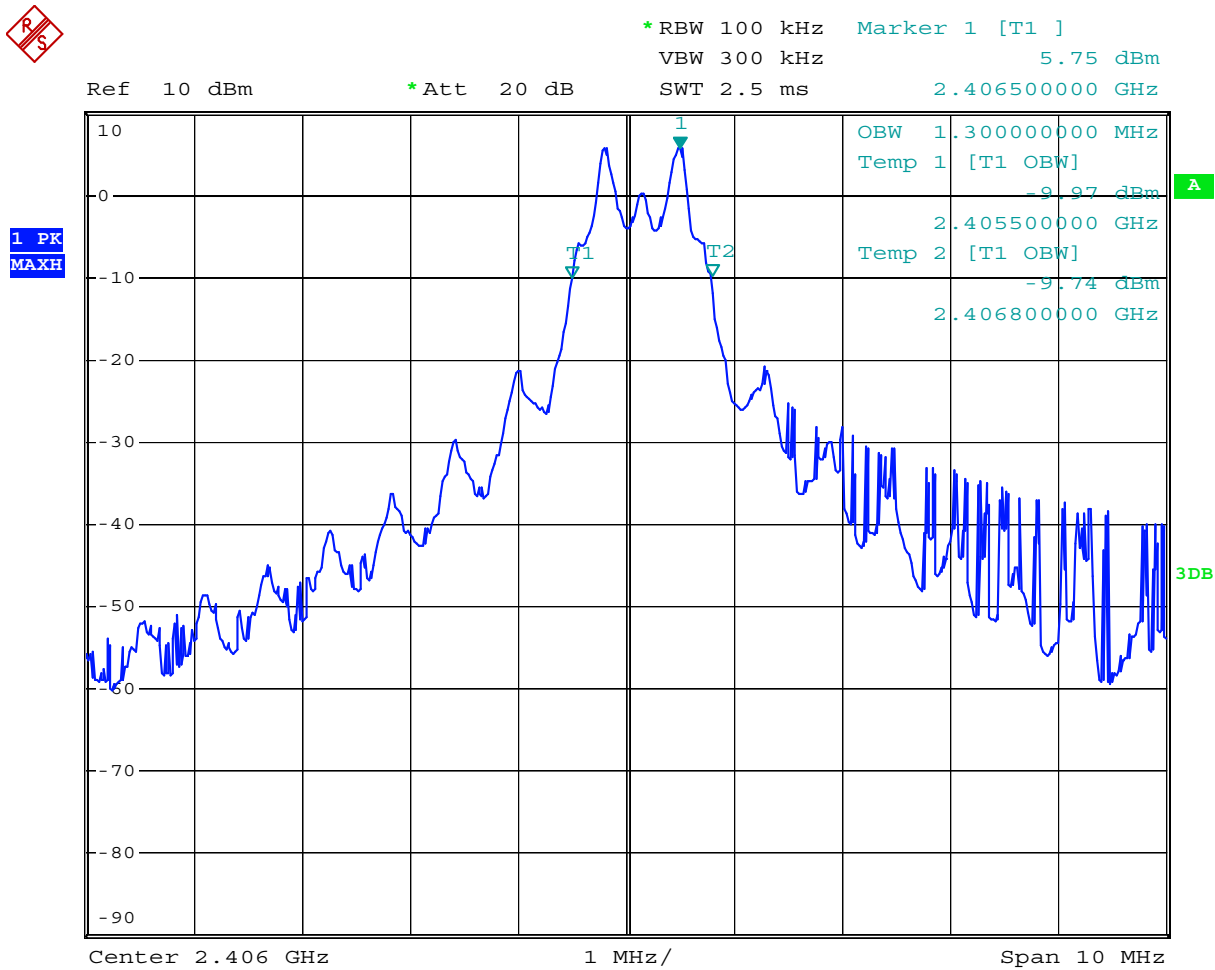
Occupied Bandwidth (99 %): **1.42 MHz**

Occupied Bandwidth (continued)

Rules and specifications:	IC RSS-Gen Issue 2, section 4.6.1
Guide:	IC RSS-Gen Issue 2, section 4.6.1
Description:	If not specified in the applicable RSS the occupied bandwidth is measured as the 99% emission bandwidth. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is also recorded. The span between the two recorded frequencies is the occupied bandwidth.
Measurement procedure:	Bandwidth Measurements (6.2)

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2

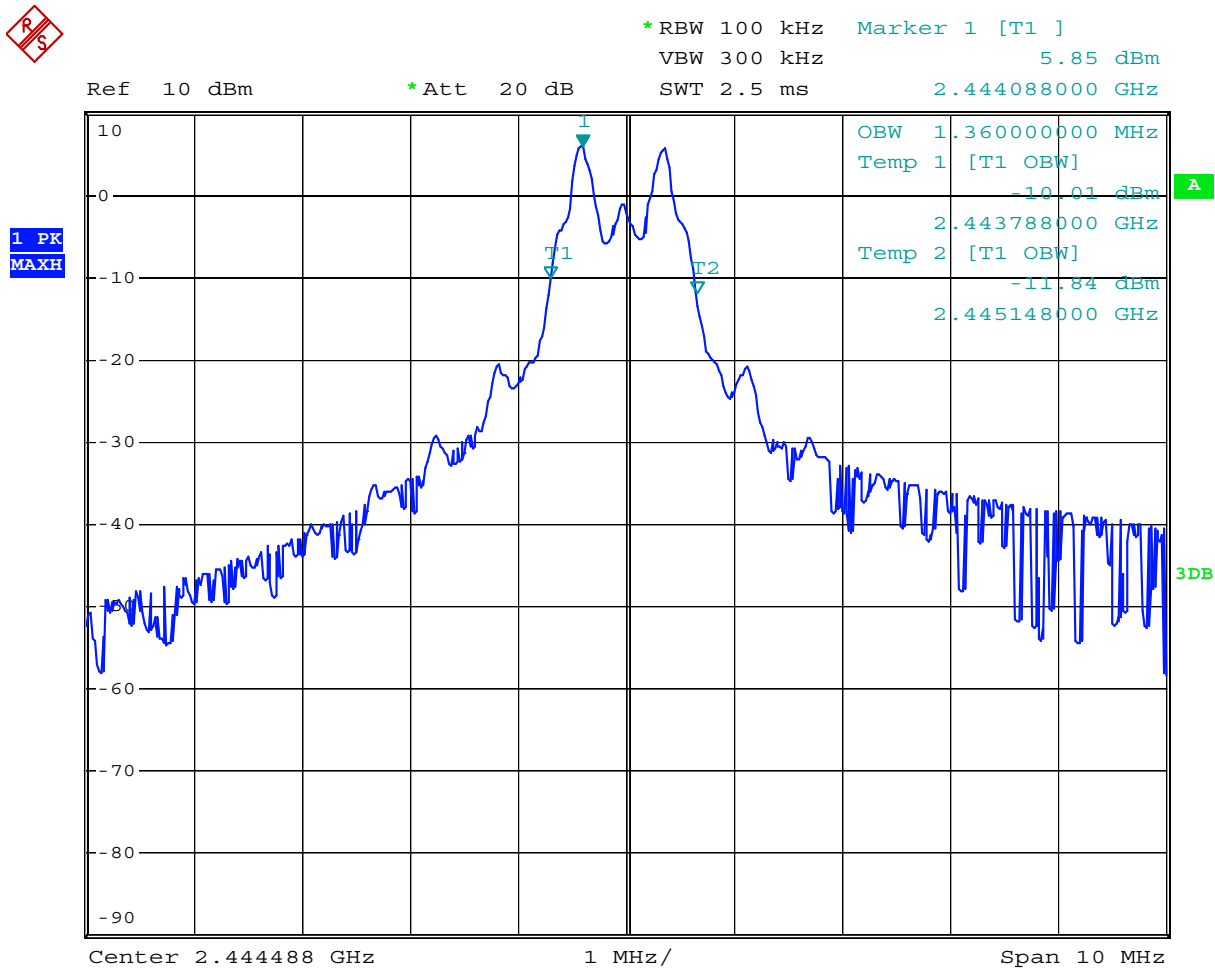
Occupied Bandwidth (99 %):



Date: 18.JUN.2008 11:22:43

Occupied Bandwidth (99 %):	1.30 MHz
----------------------------	----------

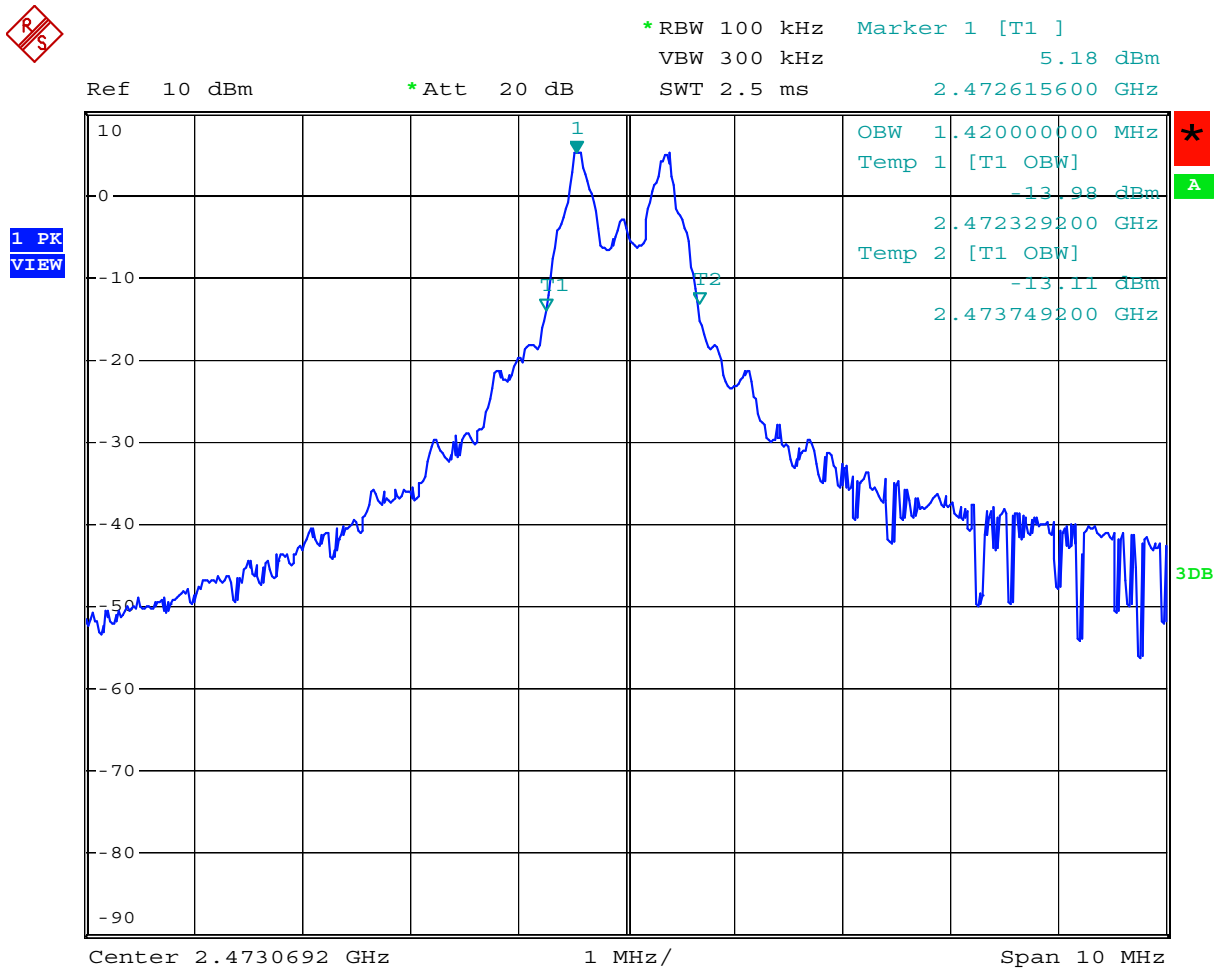
Occupied Bandwidth (99 %) - continued:



Date: 18.JUN.2008 09:54:53

Occupied Bandwidth (99 %):	1.36 MHz
----------------------------	----------

Occupied Bandwidth (99 %) - continued:



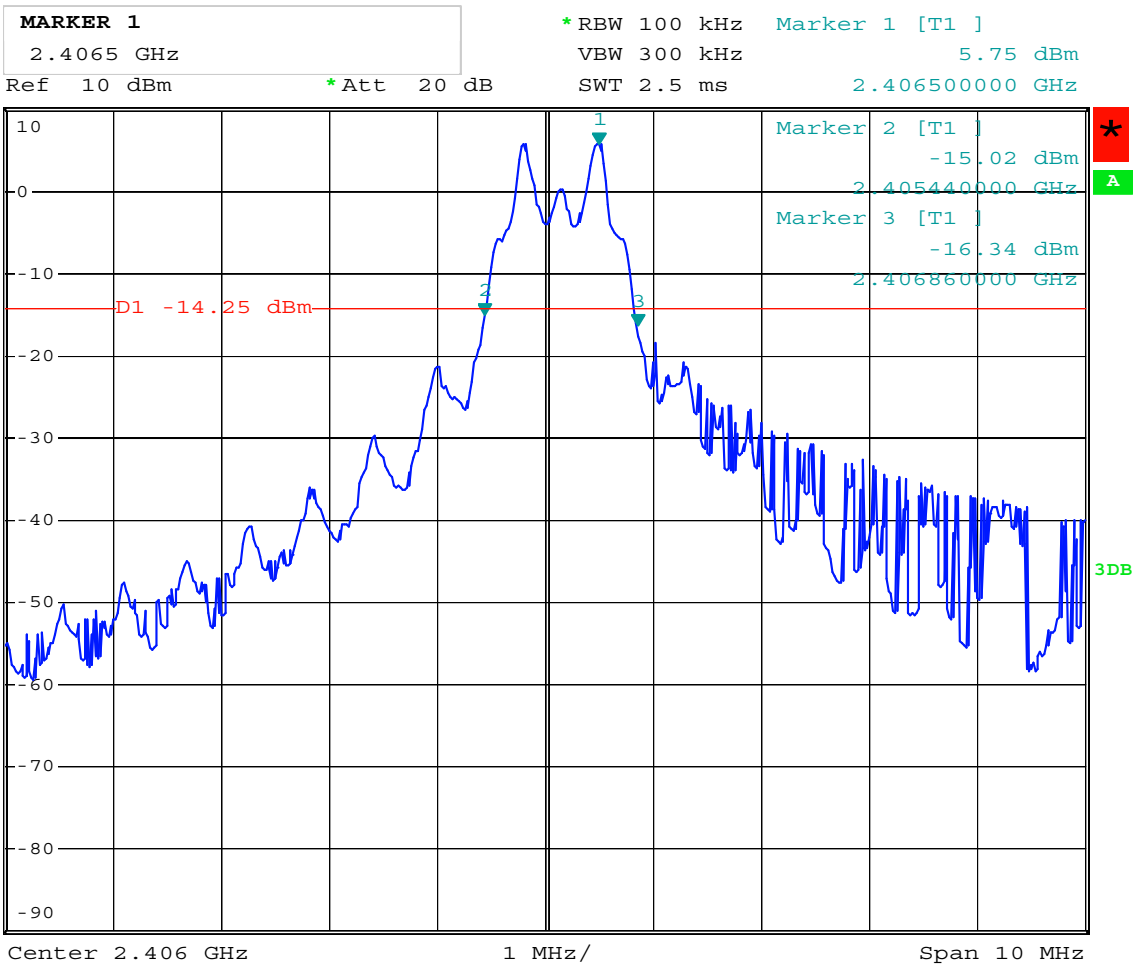
Date: 18.JUN.2008 11:20:21

Occupied Bandwidth (99 %):	1.42 MHz
----------------------------	----------

8.2 Bandwidth of the Emission

Rules and specifications:	CFR 47 Part 15, section 15.215(c)	
Guide:	ANSI C63.4	
Description:	The 20 dB bandwidth of the emission is measured as the frequency range defined by the points that are 20 dB down relative to the maximum level of the modulated carrier. For intentional radiators operating under the alternative provisions to the general emission limits the requirement to contain the 20 dB bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation. The resolution bandwidth of the spectrum analyzer shall be set to a value greater than 5.0% of the allowed bandwidth. If no bandwidth specifications are given, the following guidelines are used:	
	Fundamental frequency	Minimum resolution bandwidth
	9 kHz to 30 MHz	1 kHz
	30 MHz to 1000 MHz	10 kHz
	1000 MHz to 40 GHz	100 kHz
	The video bandwidth shall be at least three times greater than the resolution bandwidth.	
Measurement procedure:	Bandwidth Measurements (6.2)	

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2



Date: 18.JUN.2008 11:23:38

Permitted frequency band:	2400.0 - 2483.5 MHz	
20 dB bandwidth:	1.42 MHz	
Carrier frequency stability:	☐ specified	☒ not specified
Maximum frequency tolerances:		
Bandwidth of the emission:	within permitted frequency band ⁵ : ☒ yes ☐ no	

Test Result:	Test passed
--------------	-------------

⁵ If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

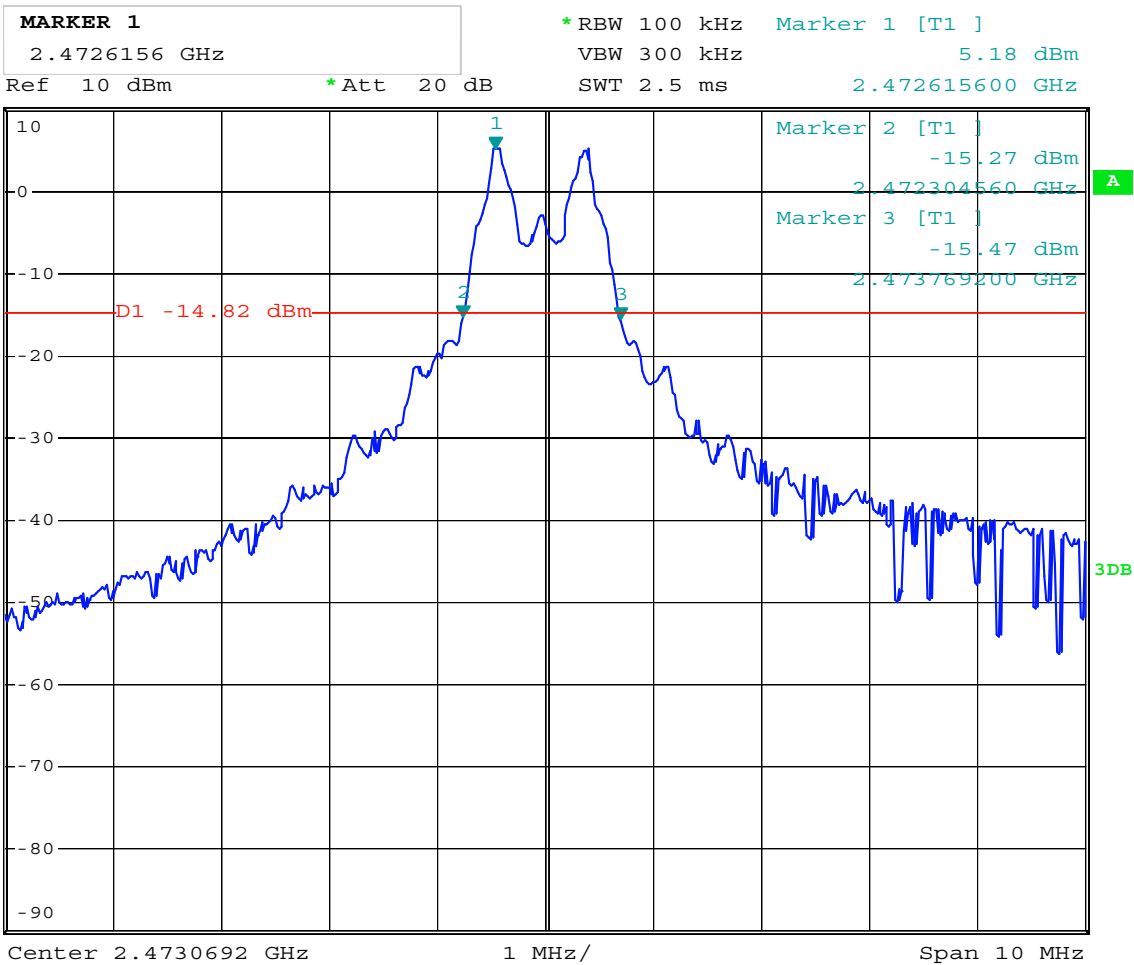


Date: 18.JUN.2008 09:56:22

Permitted frequency band:	2400.0 - 2483.5 MHz	
20 dB bandwidth:	1.46 MHz	
Carrier frequency stability:	☐ specified	☒ not specified
Maximum frequency tolerances:		
Bandwidth of the emission:	within permitted frequency band ⁶ :	
	☒ yes	☐ no

Test Result:	Test passed
--------------	-------------

⁶ If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.



Date: 18.JUN.2008 11:20:00

Permitted frequency band:	2400.0 - 2483.5 MHz	
20 dB bandwidth:	1.46 MHz	
Carrier frequency stability:	☐ specified	☒ not specified
Maximum frequency tolerances:		
Bandwidth of the emission:	within permitted frequency band ⁷ :	
	☒ yes ☐ no	

Test Result:	Test passed
--------------	-------------

⁷ If a frequency stability is not specified, it is recommended that the fundamental emission is kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

8.3 Designation of Emissions

Rules and specifications:	CFR 47 Part 2, sections 2.201 and 2.202 IC RSS-Gen Issue 2, sections 3.2(h) and 8
Guide:	ANSI C63.4 / TRC-43

Type of modulation:	Frequency Modulation
---------------------	----------------------

B_n = Necessary Bandwidth	$B_n = 2M + 2DK$
M = Modulation frequency	M = 300 kHz
D = Peak deviation	D = 450 kHz
K = Overall numerical factor	K = 1
Calculation:	$B_n = 2 \cdot (450 \text{ kHz}) + 2 \cdot (300 \text{ kHz}) \cdot 1 = 1500 \text{ kHz}$

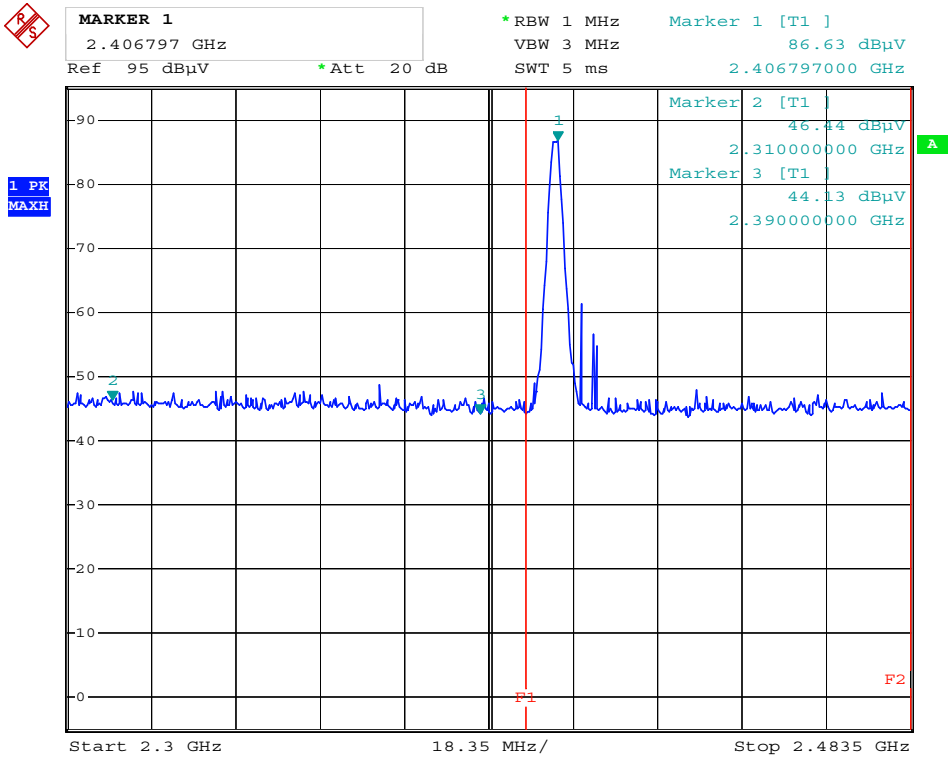
Designation of Emissions:	1M50F1D
---------------------------	----------------

8.4 Restricted Bands of Operation

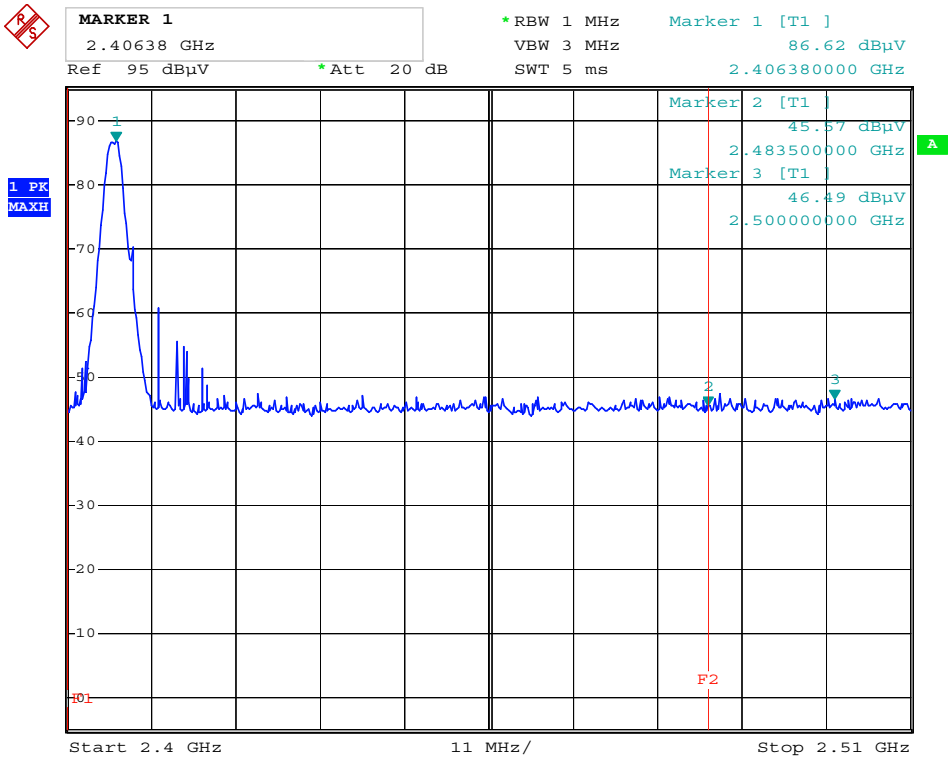
Rules and specifications:	CFR 47 Part 15, section 15.205(a) IC RSS-210 Issue 7, section 2.2(a)
Guide:	ANSI C63.4
Limit:	Only spurious emissions are permitted in any of the frequency bands listed in CFR 47 Part 15, section 15.205(a) or IC RSS-210 Issue 7, section 2.2(a).
Measurement procedure:	Radiated Emission in Fully or Semi Anechoic Room (6.5)

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2
Test distance:	3 meters

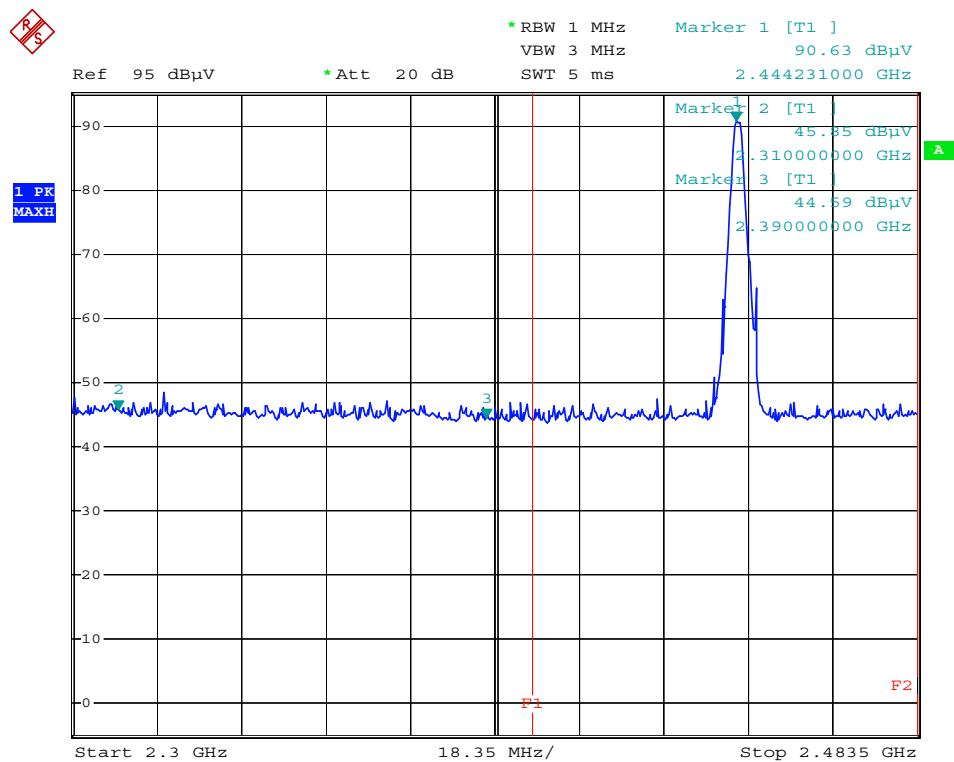
Test Result:	Test passed
--------------	-------------



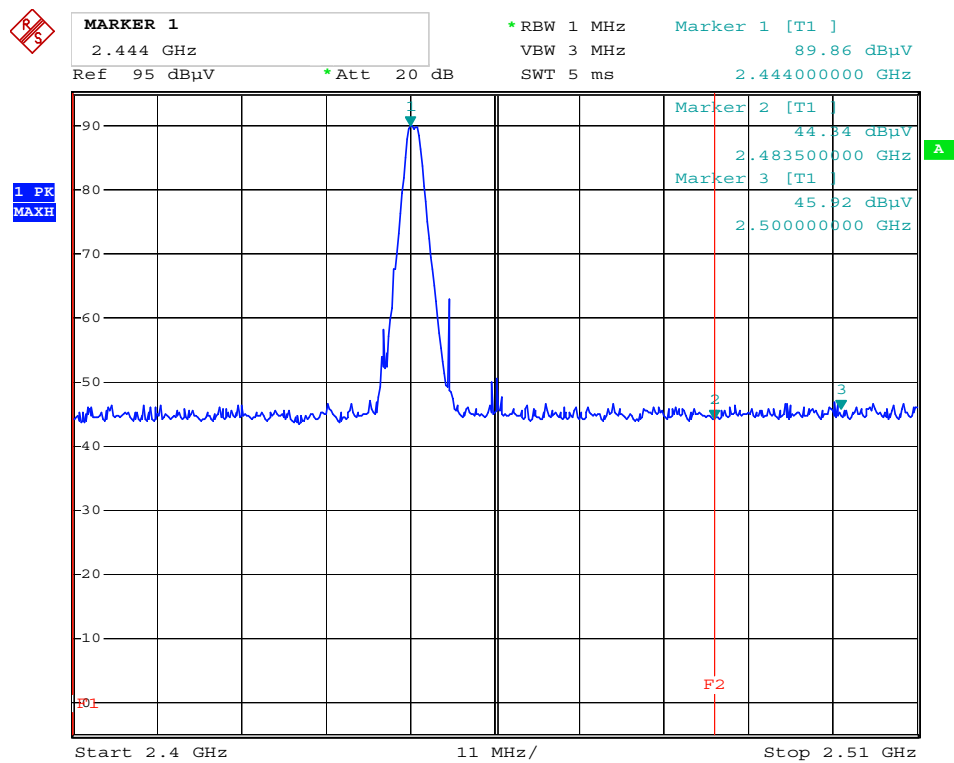
Date: 18.JUN.2008 15:49:55



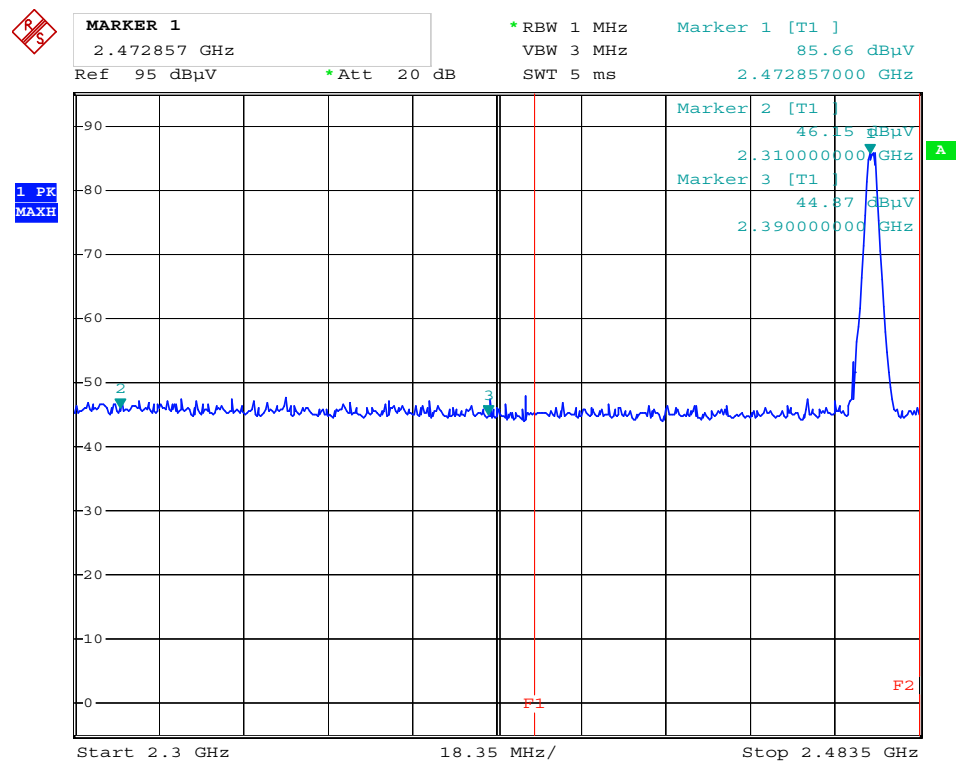
Date: 18.JUN.2008 15:50:48



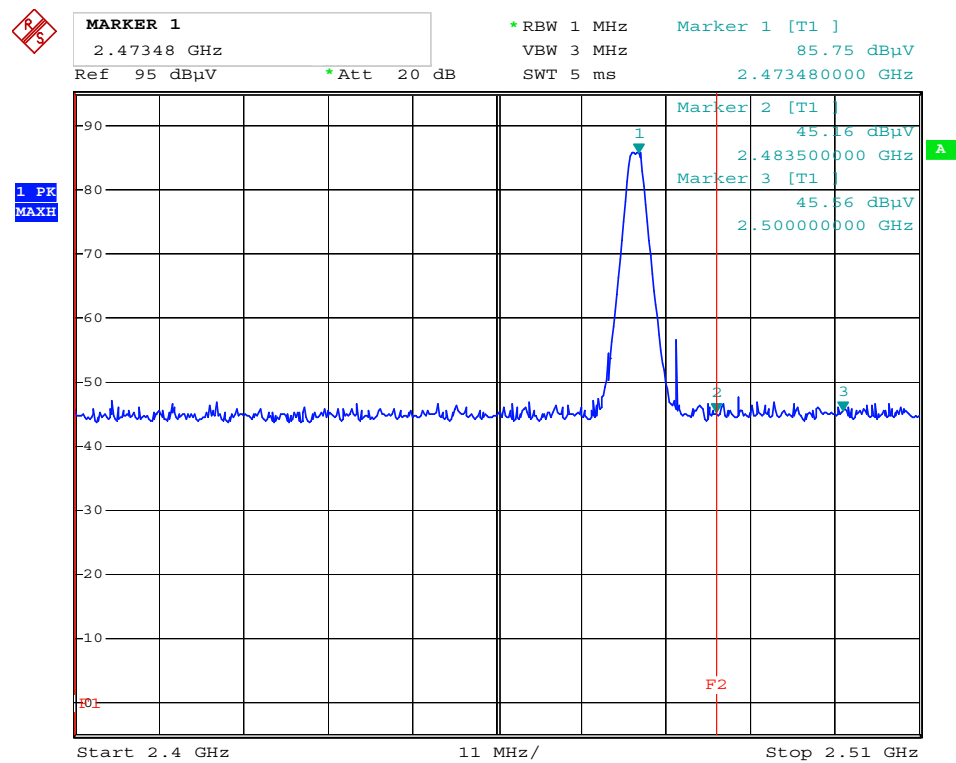
Date: 18.JUN.2008 15:47:41



Date: 18.JUN.2008 15:51:28



Date: 18.JUN.2008 15:48:22



Date: 18.JUN.2008 15:52:01

8.5 Channel Bandwidth

Rules and specifications:	CFR 47 Part 15, section 15.247(a)(1)(i) IC RSS-210 Issue 7, section A8.1(b)
Guide:	ANSI C63.4
Limit:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.
Measurement procedure:	Radiated Emission in Fully or Semi Anechoic Room (6.5)

Comment:	Please see 8.2 Bandwidth of the Emission for details.
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2
Test distance:	3 meters

Frequency (MHz)	Channel Bandwidth (kHz)	Limit (kHz)	Result
2406	1300	1500	Pass
2444	1360	1500	Pass
2473	1420	1500	Pass

Test Result:	Test passed
--------------	-------------

8.6 Hopping channel separation

Rules and specifications:	CFR 47 Part 15, section 15.247(a)(1) IC RSS-210 Issue 7, section A8.1(b)
Guide:	ANSI C63.4
Limit:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400 - 2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.
Measurement procedure:	Radiated Emission in Fully or Semi Anechoic Room (6.5)

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2
Test distance:	3 meters

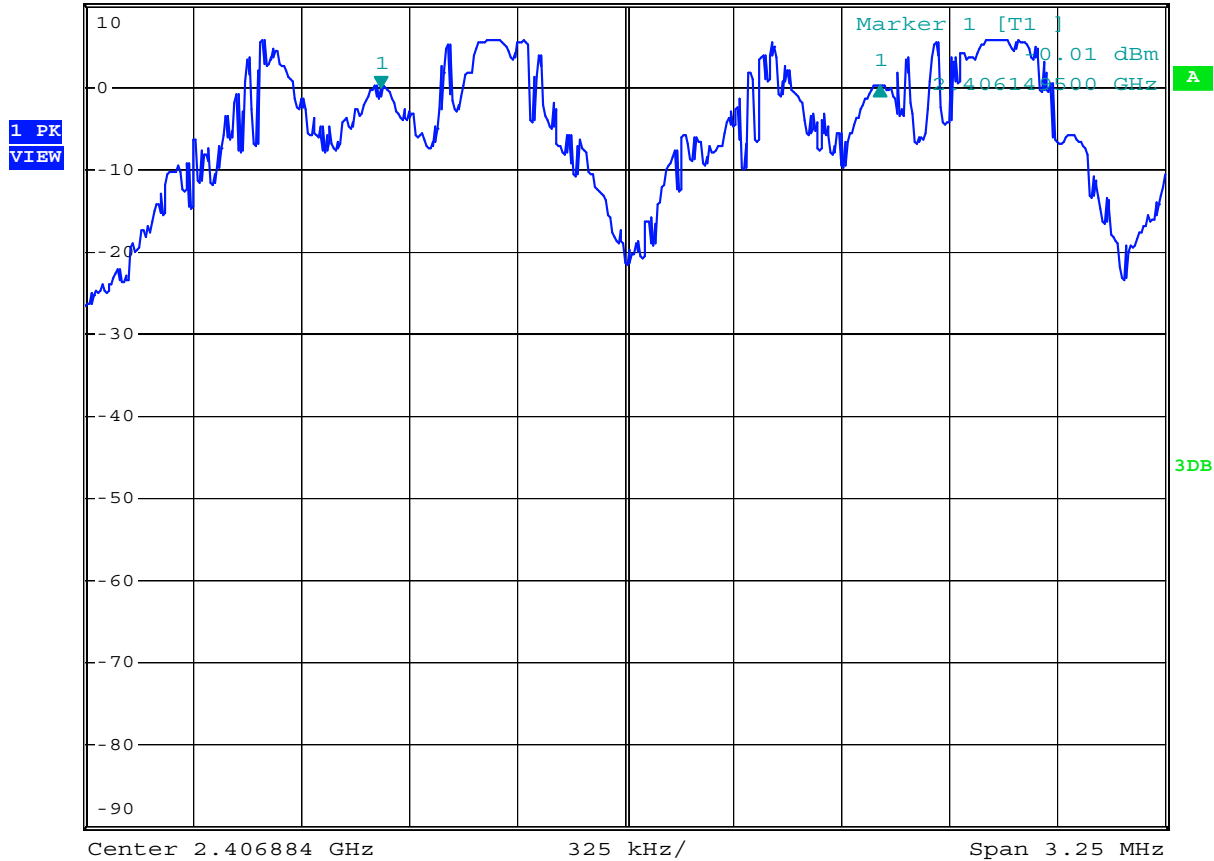
Frequency (MHz)	Channel separation (kHz)	Limit (kHz)	Result
2406	1501.50	1300	Pass
2444	1509.84	1360	Pass
2473	1507.76	1420	Pass

Test Result:	Test passed
--------------	-------------



DELTA MARKER 1
1.5015 MHz
Ref 10 dBm *Att 20 dB

*RBW 100 kHz Delta 1 [T1]
VBW 300 kHz 0.27 dB
SWT 2.5 ms 1.501500000 MHz

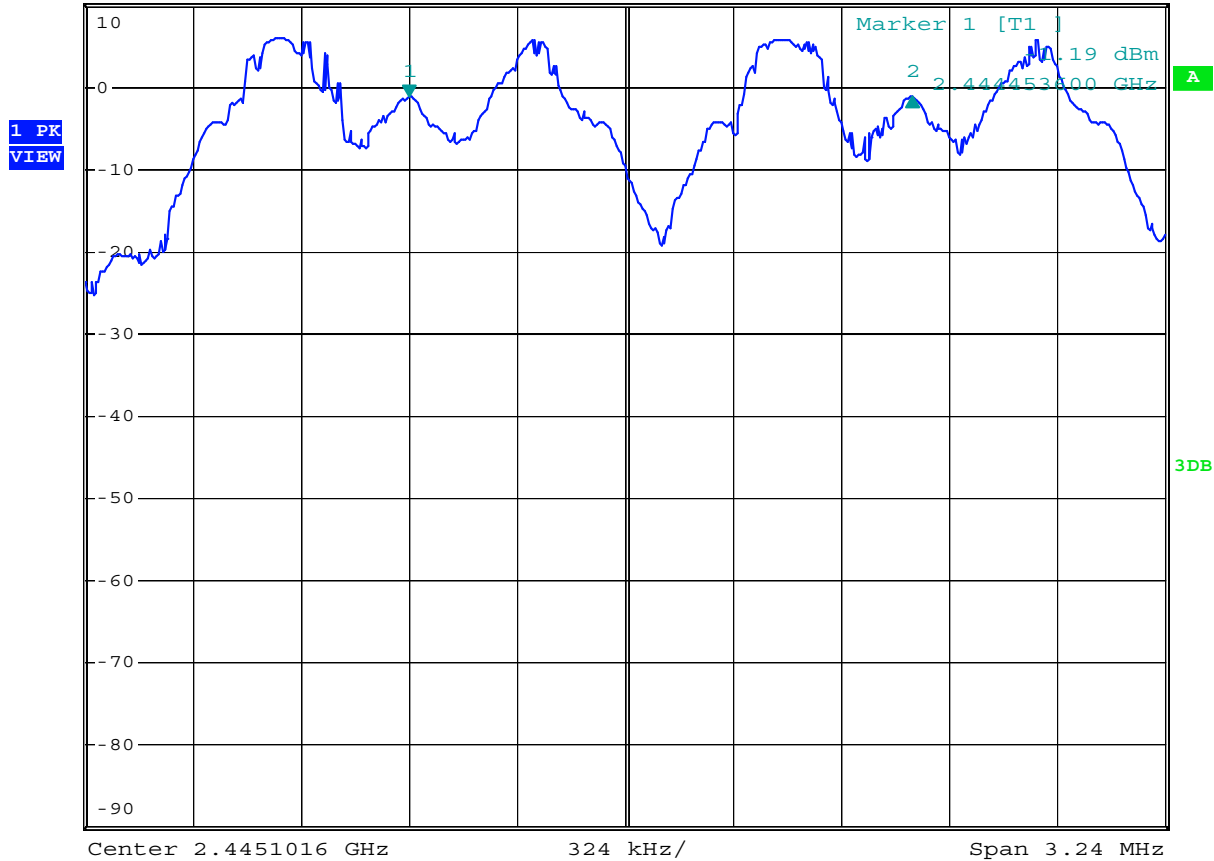


Date: 18.JUN.2008 11:27:56



DELTA MARKER 2
1.50984 MHz
Ref 10 dBm *Att 20 dB

*RBW 100 kHz Delta 2 [T1]
VBW 300 kHz -0.07 dB
SWT 2.5 ms 1.509840000 MHz

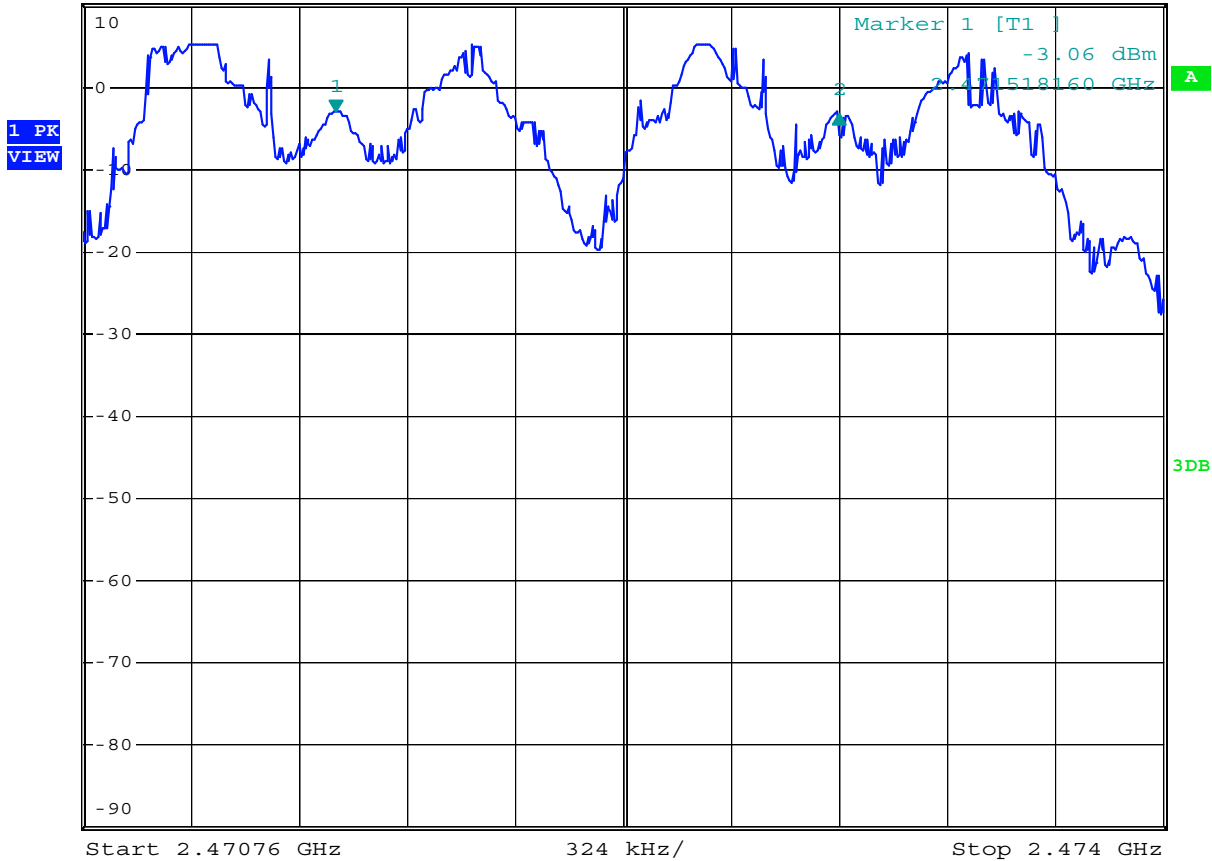


Date: 18.JUN.2008 11:14:20



DELTA MARKER 2
1.50776 MHz
Ref 10 dBm *Att 20 dB

*RBW 100 kHz Delta 2 [T1]
VBW 300 kHz -0.24 dB
SWT 2.5 ms 1.507760000 MHz



Date: 18.JUN.2008 11:08:35

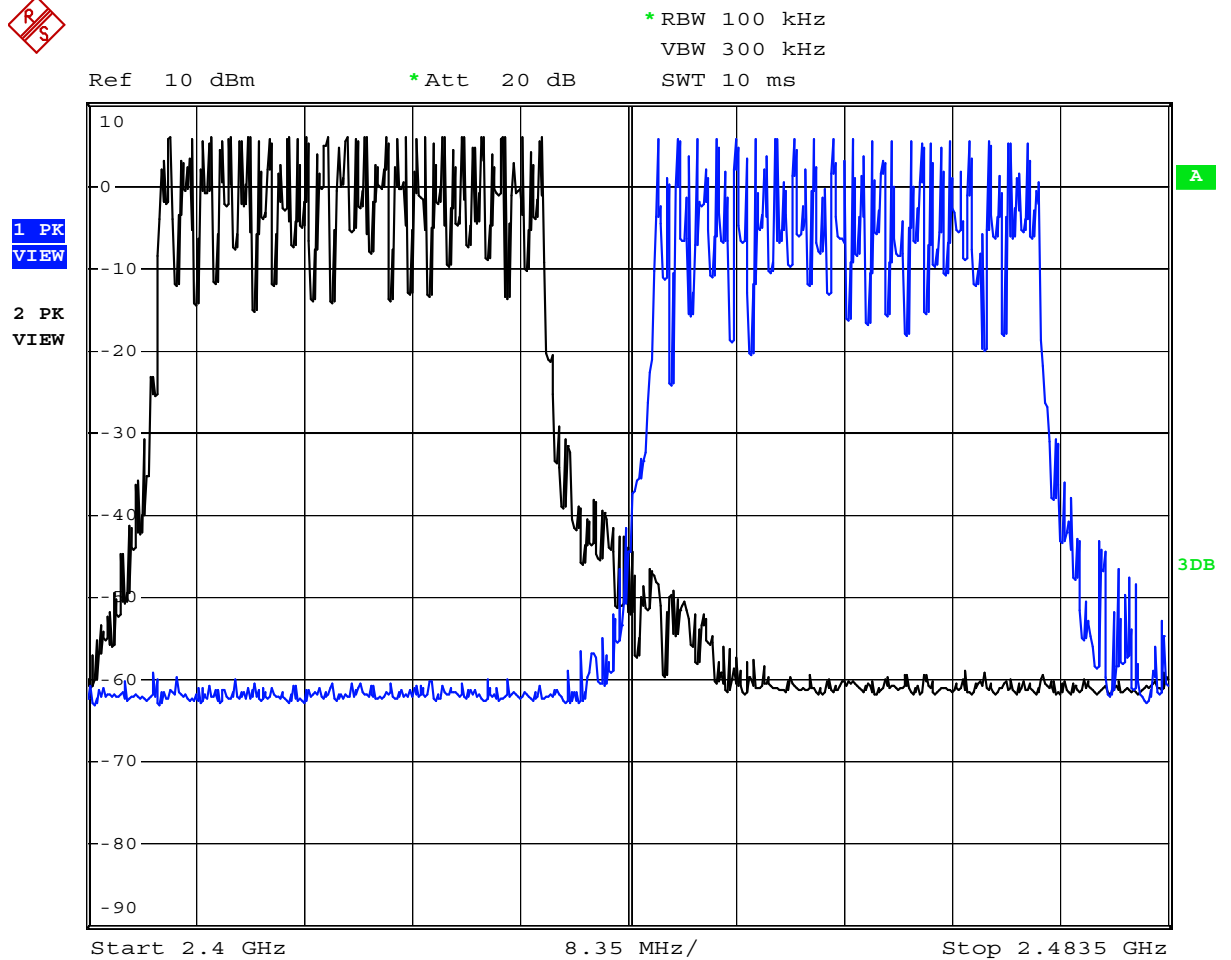
8.7 Number of hopping frequencies used

Rules and specifications:	CFR 47 Part 15, section 15.247(a)(1)(iii) IC RSS-210 Issue 7, section A8.1(d)
Guide:	ANSI C63.4
Limit:	Frequency hopping systems in the 2400 - 2483.5 MHz band shall use at least 15 channels.
Measurement procedure:	Radiated Emission in Fully or Semi Anechoic Room (6.5)

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2
Test distance:	3 meters

Frequencies	Limit	Result
20	15	Pass
20	15	Pass

Test Result:	Test passed
--------------	-------------



Date: 18.JUN.2008 09:50:35

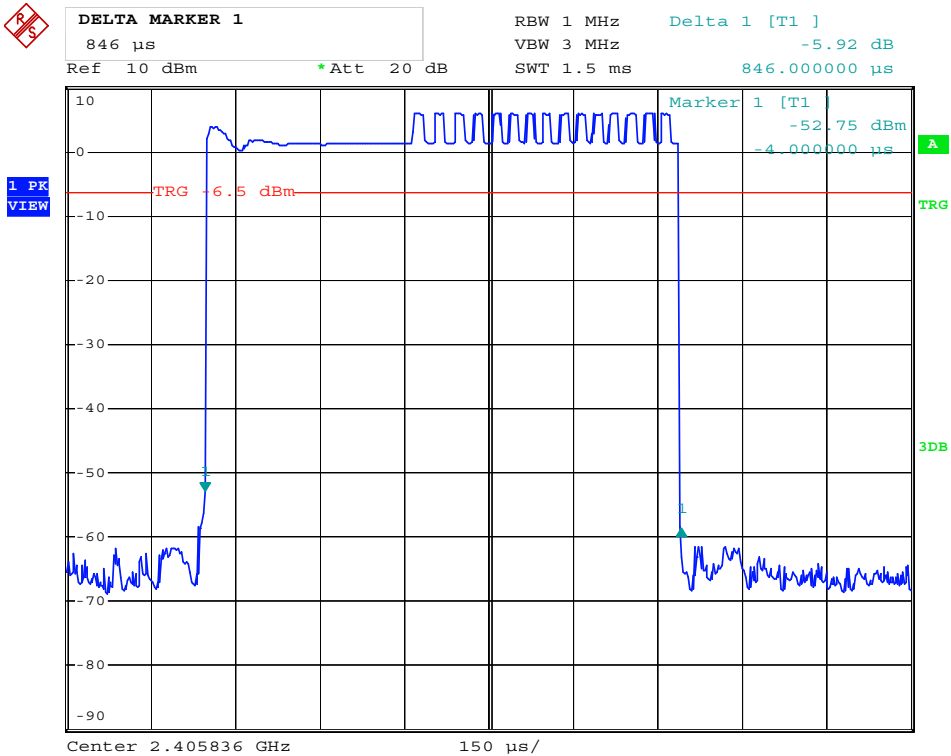
8.8 Time occupancy on any channel

Rules and specifications:	CFR 47 Part 15, section 15.247(a)(1)(iii) IC RSS-210 Issue 7, section A8.1(d)
Guide:	ANSI C63.4
Limit:	The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.
Measurement procedure:	Radiated Emission in Fully or Semi Anechoic Room (6.5)

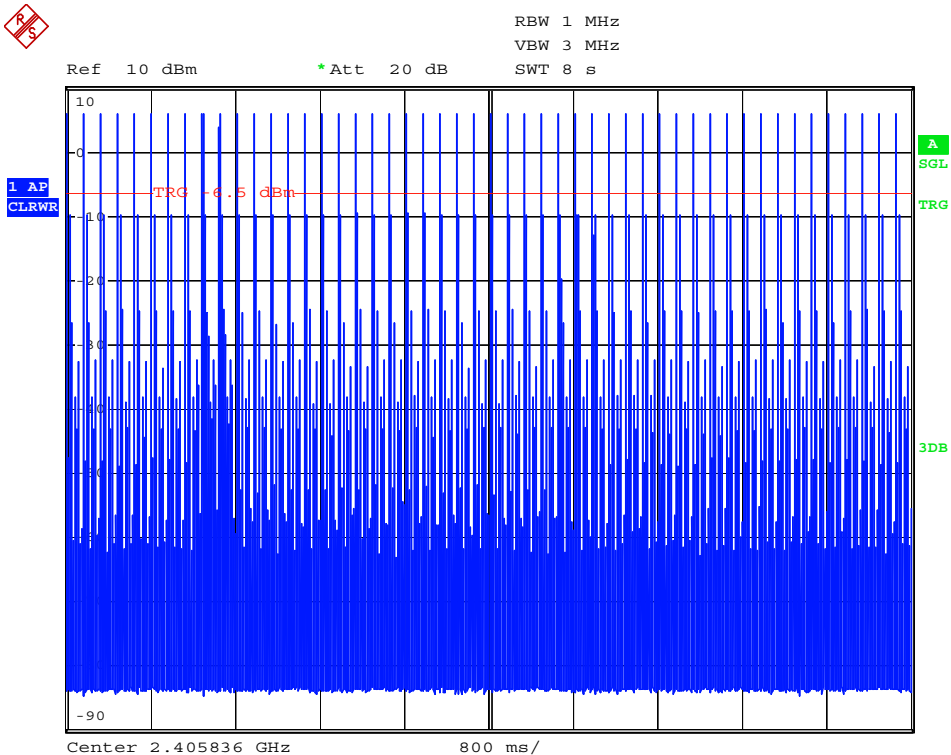
Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2
Test distance:	3 meters

Frequency (MHz)	Time occupancy (ms in a 8 s period)	Limit (ms in a 8 s period)	Result
2406	42.3	400	Pass
2444	43.2	400	Pass
2473	42.3	400	Pass

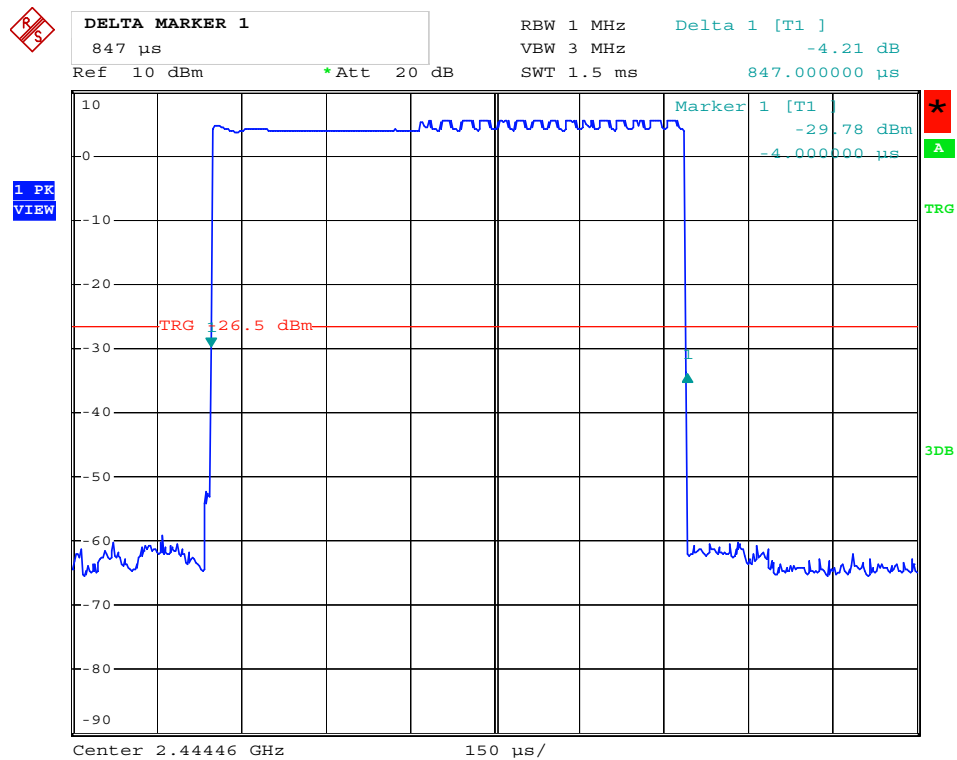
Test Result:	Test passed
--------------	-------------



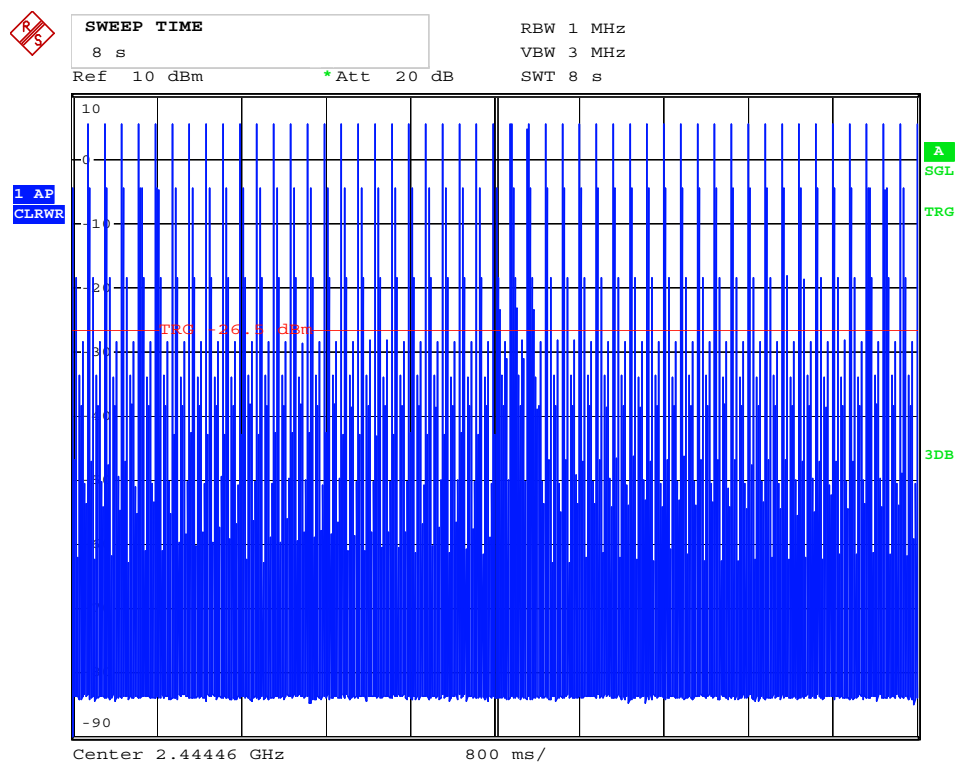
Date: 18.JUN.2008 11:33:55



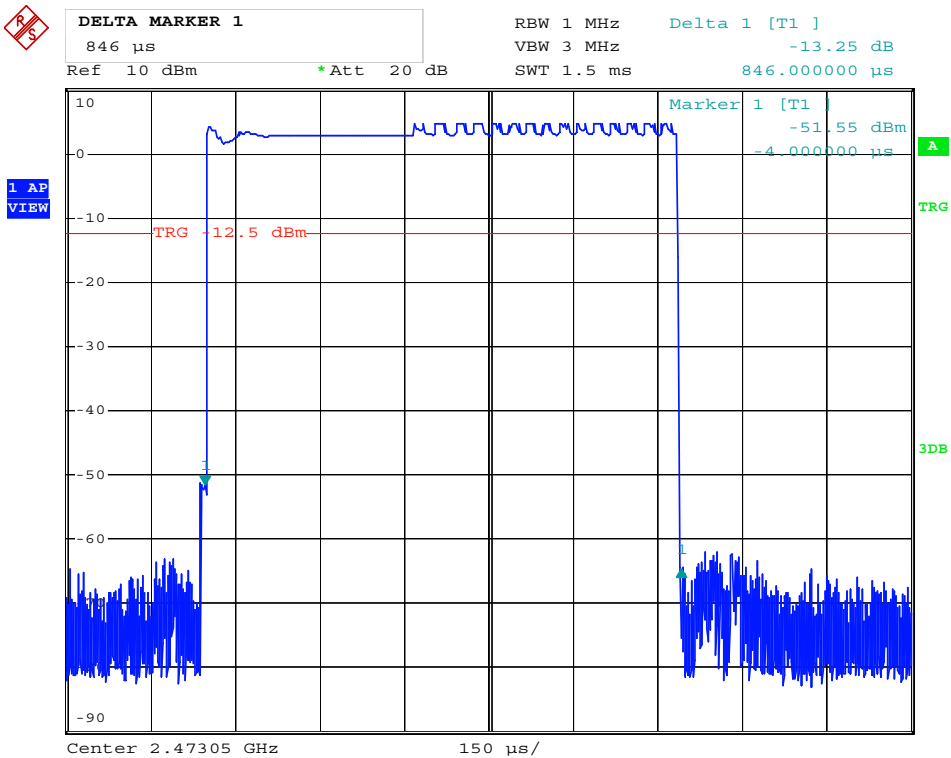
Date: 18.JUN.2008 11:34:24



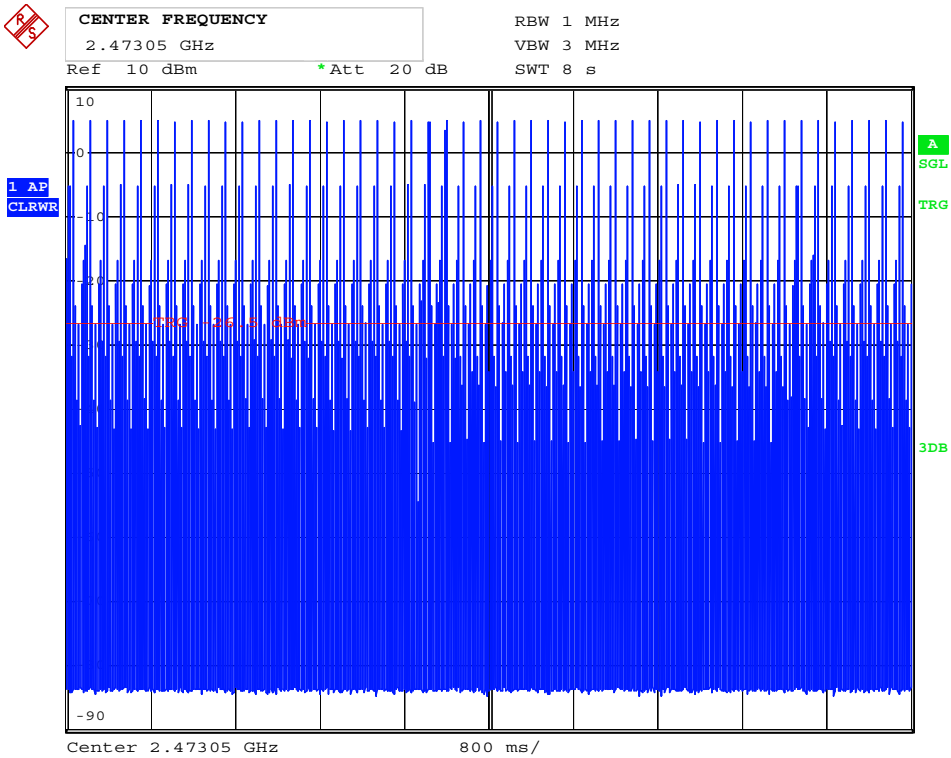
Date: 18.JUN.2008 10:02:35



Date: 18.JUN.2008 10:03:57



Date: 18.JUN.2008 10:09:55



Date: 18.JUN.2008 10:07:19

8.9 Maximum output power

Rules and specifications:	CFR 47 Part 15, section 15.247(b)(1) IC RSS-210 Issue 7, section A8.4(2)
Guide:	ANSI C63.4
Limit:	For frequency hopping systems operating in the 2400 - 2483.5 MHz band employing at least 75 non-overlapping channels the maximum peak conducted power is 1 W (30 dBm). For all other frequency hopping systems 0.125 W (21 dBm).
Measurement procedure:	Conducted Output Power (6.1)

Comment:	
Date of test:	June 18, 2008
Test site:	Fully anechoic room, cabin no. 2
Test distance:	3 meters

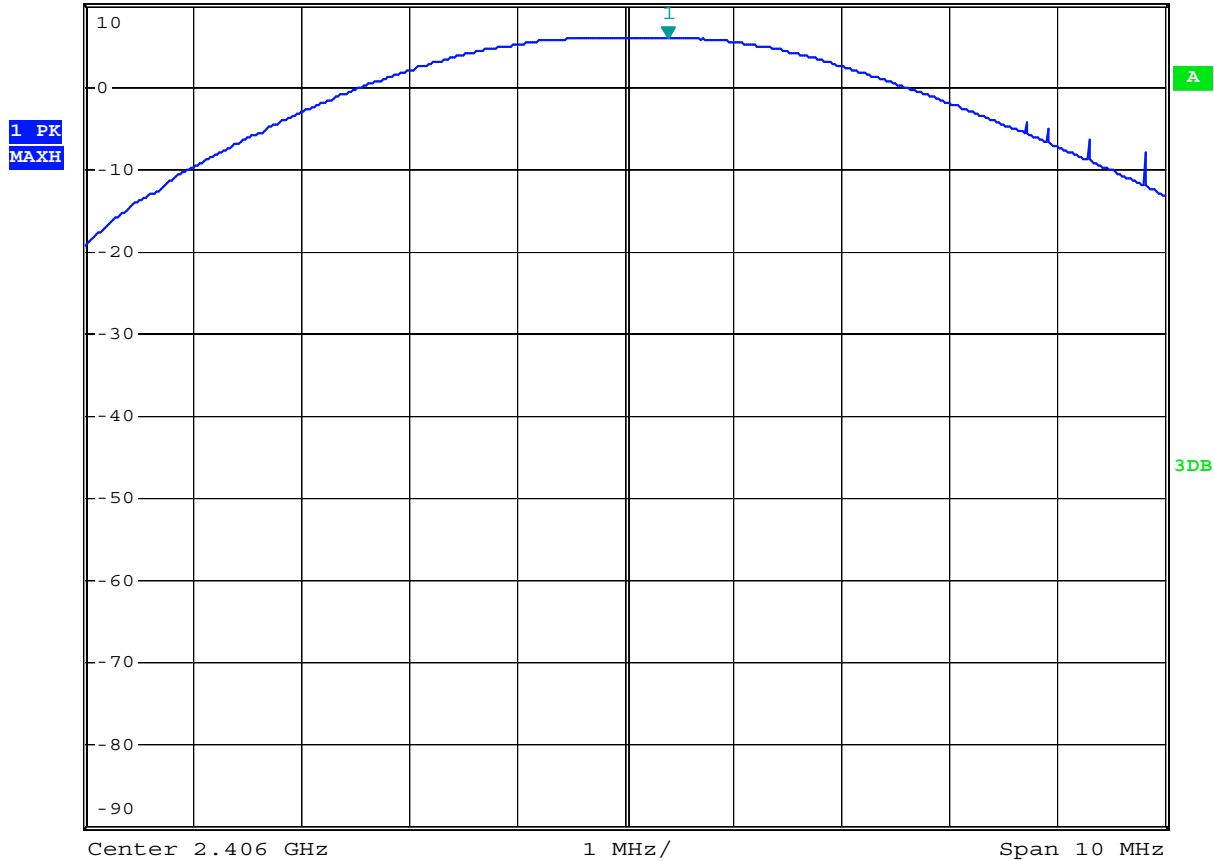
Frequency (MHz)	Output power (dBm)	Limit (dBm)	Result
2406	5.94	21.0	Pass
2444	6.09	21.0	Pass
2473	5.39	21.0	Pass

Test Result:	Test passed
--------------	-------------



MARKER 1
2.4064 GHz
Ref 10 dBm *Att 20 dB

*RBW 3 MHz Marker 1 [T1]
VBW 10 MHz 5.94 dBm
SWT 2.5 ms 2.406400000 GHz

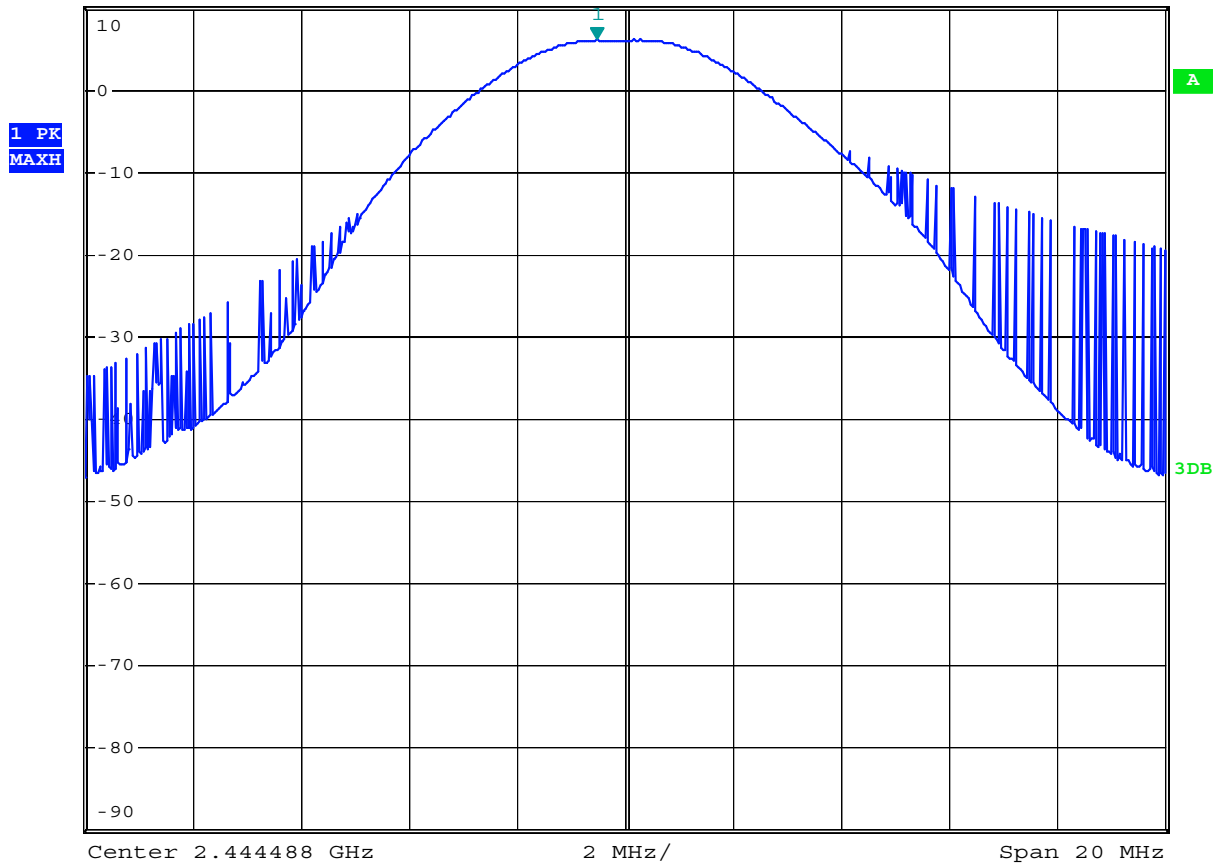


Date: 18.JUN.2008 11:22:01



MARKER 1
2.443968 GHz
Ref 10 dBm *Att 20 dB

*RBW 3 MHz Marker 1 [T1]
VBW 10 MHz 6.09 dBm
SWT 2.5 ms 2.443968000 GHz

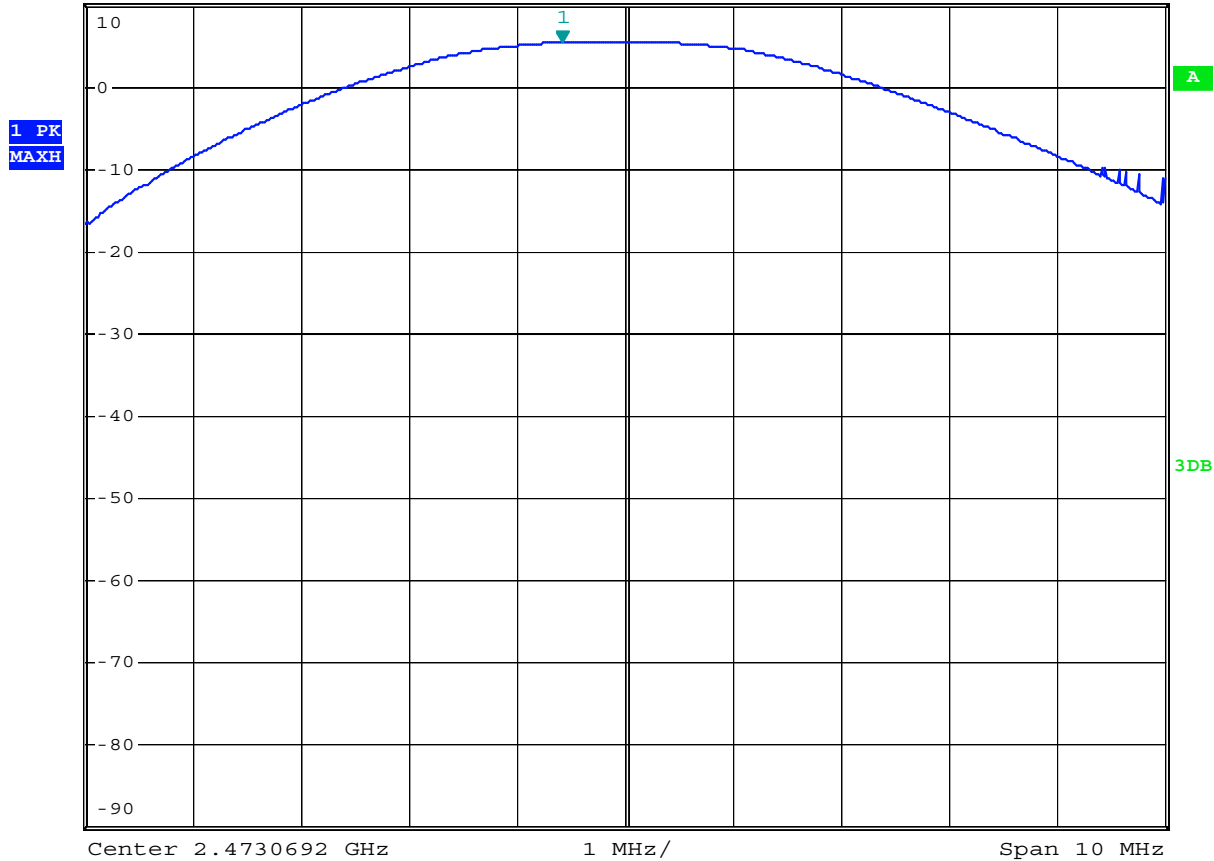


Date: 18.JUN.2008 09:57:25



MARKER 1
2.4724892 GHz
Ref 10 dBm *Att 20 dB

*RBW 3 MHz Marker 1 [T1]
VBW 10 MHz 5.39 dBm
SWT 2.5 ms 2.472489200 GHz



Date: 18.JUN.2008 11:21:15

8.10 Conducted Powerline Emission Measurement 150 kHz to 30 MHz

Rules and specifications:	CFR 47 Part 15, section 15.207 IC RSS-Gen Issue 2, section 7.2.2		
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 (6.3)		

Comment:	
Date of test:	June 20, 2008
Test site:	Shielded room, cabin no. 4

Test Result:	Test passed
--------------	-------------

Tested on:	L1
------------	----

All emissions show more than 20 dB margin to the limit

Tested on:	N
------------	---

All emissions show more than 20 dB margin to the limit

Sample calculation of final values:

$$\text{Final Value (dBµV)} = \text{Reading Value (dBµV)} + \text{Correction Factor (dB)}$$

8.11 Conducted Emission Measurement 30 MHz to 25 GHz

Rules and specifications:	CFR 47 Part 15, section 15.247 IC RSS-210 Issue 7, section A8.5
Guide:	ANSI C63.4
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).
Measurement procedures:	Conducted Output Power (6.1)

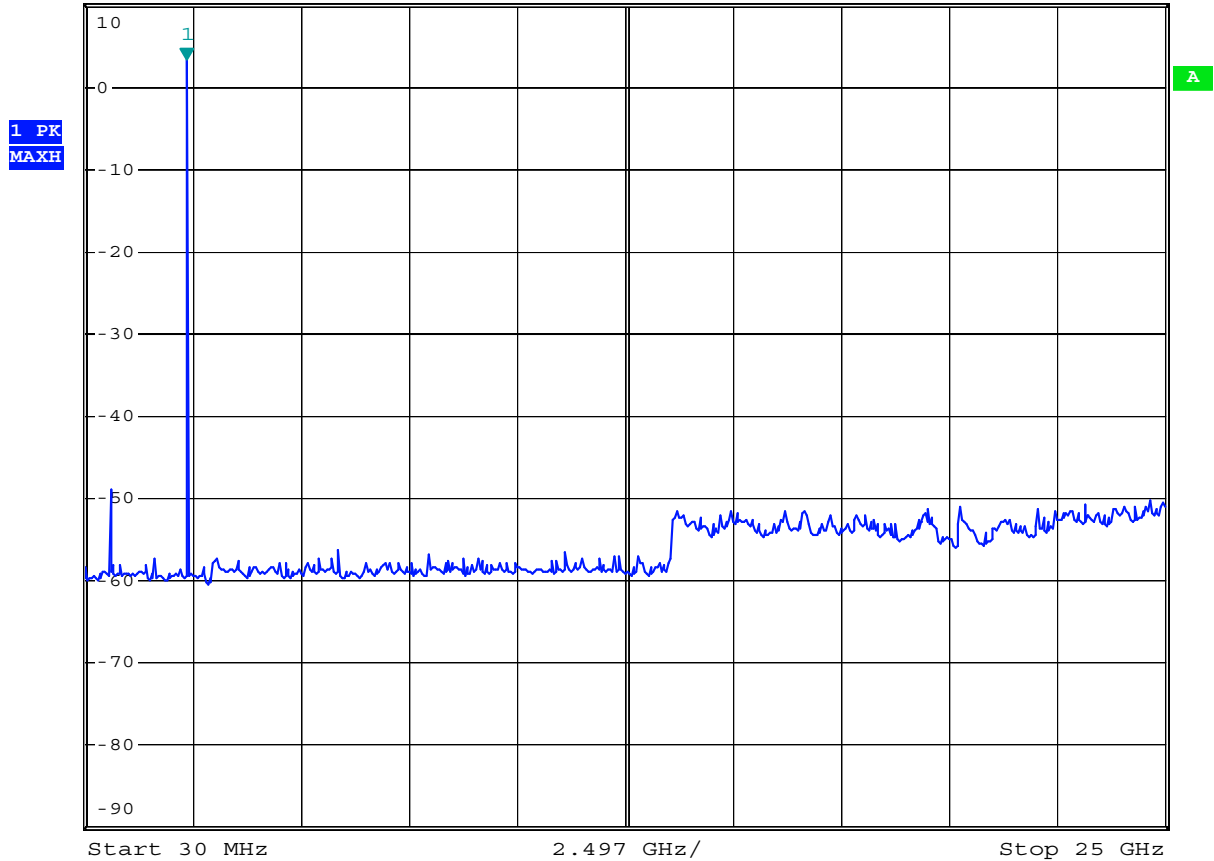
Comment:	
Modes:	Transmitting continuously with modulation on 2406 MHz, 2444 MHz and 2473 MHz
Date of test:	June 17, 2008
Test site:	Open field test site

Test Result:	Test passed
--------------	-------------



MARKER 1
2.37718 GHz
Ref 10 dBm *Att 20 dB

*RBW 100 kHz Marker 1 [T1]
VBW 300 kHz 3.28 dBm
SWT 2.5 s 2.377180000 GHz

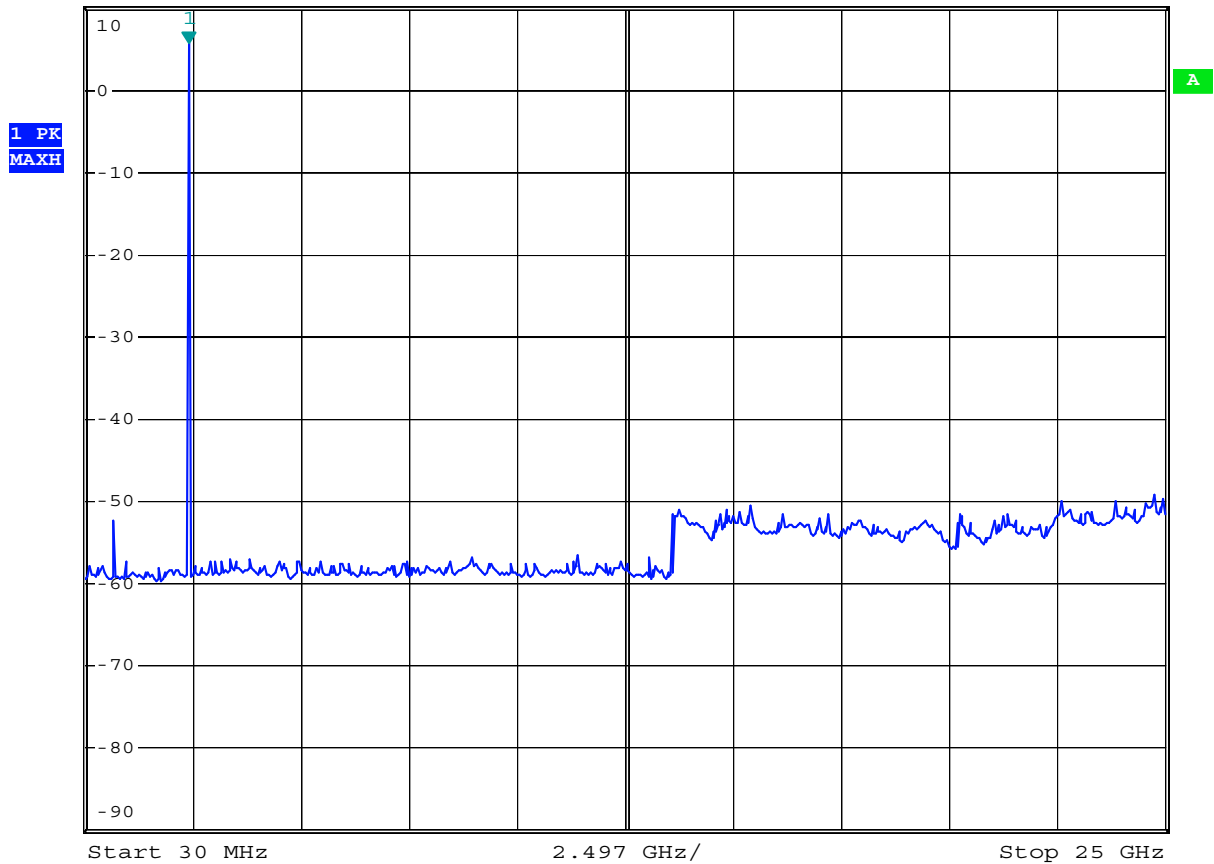


Date: 18.JUN.2008 15:36:04



MARKER 1
2.42712 GHz
Ref 10 dBm *Att 20 dB

*RBW 100 kHz Marker 1 [T1]
VBW 300 kHz 5.66 dBm
SWT 2.5 s 2.427120000 GHz



Date: 18.JUN.2008 15:35:14

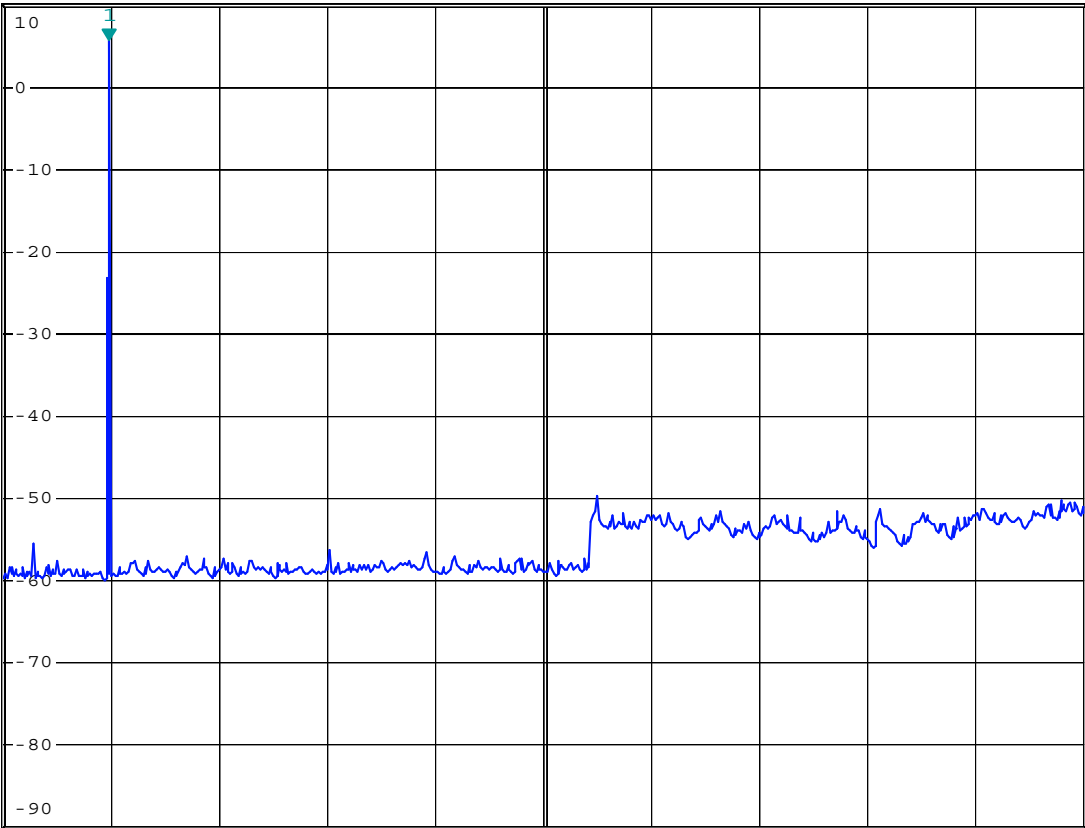


MARKER 1
2.47706 GHz

*RBW 100 kHz Marker 1 [T1]
VBW 300 kHz 5.63 dBm
SWT 2.5 s 2.477060000 GHz

Ref 10 dBm *Att 20 dB

1 PK
MAXH



Start 30 MHz 2.497 GHz/ Stop 25 GHz

Date: 18.JUN.2008 15:33:15

8.12 Radiated Emission Measurement 9 kHz to 30 MHz

Rules and specifications:	CFR 47 Part 15, sections 15.205, 15.209 and 15.247 IC RSS-210 Issue 7, sections 2.2, 2.6 and A8.5			
Guide:	ANSI C63.4			
Limit:	Frequency of Emission (MHz)	Field Strength ($\mu\text{V/m}$)	Field Strength ($\text{dB}\mu\text{V/m}$)	Measurement Distance d (meters)
	0.009 - 0.490	$2400/F(\text{kHz})$	$67.6 - 20 \cdot \log(F(\text{kHz}))$	300
	0.490 - 1.705	$24000/F(\text{kHz})$	$87.6 - 20 \cdot \log(F(\text{kHz}))$	30
	1.705 - 30.000	30	29.5	30
Additionally, the level of any unwanted emissions shall not exceed the level of the fundamental emission.				
Measurement procedure:	Radiated Emission Measurement 9 kHz to 30 MHz (6.4)			

Comment:	
Modes:	Transmitting continuously with modulation on 2406 MHz, 2444 MHz and 2473 MHz
Date of test:	June 17, 2008
Test site:	Open field test site

All emissions show more than 20 dB margin to the limit, no values recorded.

Test Result:	Test passed
--------------	-------------

8.13 Radiated Emission Measurement 30 MHz to 25 GHz

Rules and specifications:	CFR 47 Part 15, sections 15.215(b) and 15.247 IC RSS-210 Issue 7, section A8.5
Guide:	ANSI C63.4
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).
Measurement procedures:	Radiated Emission in Fully or Semi Anechoic Room (6.5) Radiated Emission at Open Field Test Site (6.6)

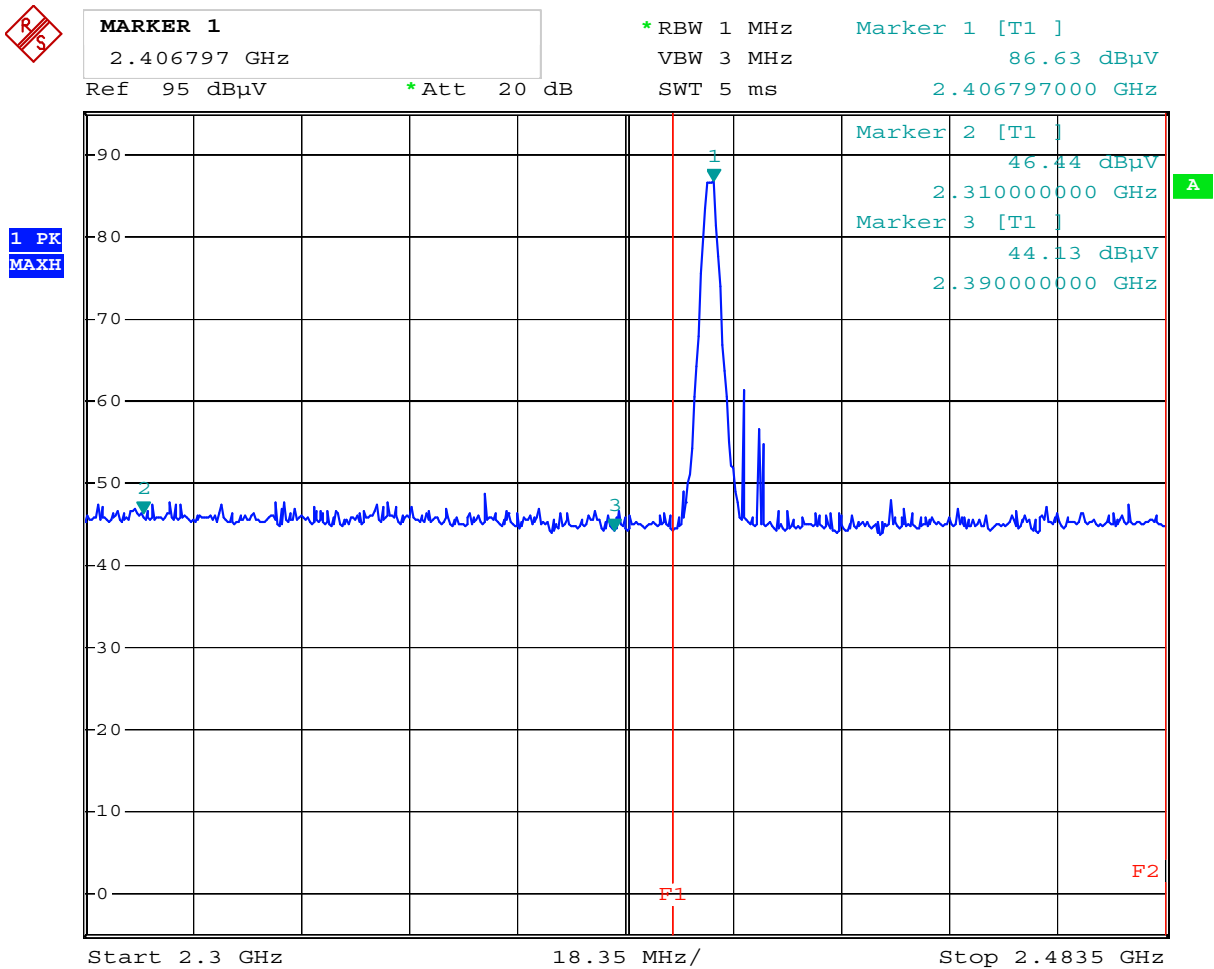
Test Result:	Test passed
--------------	-------------

Comment:	
Mode:	Transmitting continuously on 2406 MHz with modulation
Date of test:	June 11, 2008 - June 20, 2008
Test site:	Frequencies ≤ 1 GHz: Open field test site Frequencies > 1 GHz: Fully anechoic room, cabin no. 2
Test distance:	Frequencies ≤ 8.2 GHz: 3 meters Frequencies > 8.2 GHz: 1 meters

Frequency (MHz)	Antenna Polarization	Detector	Receiver Reading (dBμV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBμV/m)	Limit (dBμV/m)	Margin (dB)
331.810	horizontal	Quasi-Peak	20.6	16.8		37.4	46.0	8.6
433.195	horizontal	Quasi-Peak	17.3	18.9		36.2	59.7	23.5
451.630	horizontal	Quasi-Peak	17.9	19.6		37.5	59.7	22.2
470.060	horizontal	Quasi-Peak	16.7	19.7		36.4	59.7	23.3
506.930	horizontal	Quasi-Peak	17.5	20.6		38.1	59.7	21.6
2405.800	vertical	Peak	66.3	33.4		99.7		
4812.600	horizontal	Peak	12.8	34.3		47.0	54.0	7.0
5458.600	vertical	Peak	9.3	34.9		44.1	54.0	9.9

Sample calculation of final values:

$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$



Date: 18.JUN.2008 15:49:55

Comment:	
Mode:	Transmitting continuously on 2444 MHz with modulation
Date of test:	June 11, 2008 - June 20, 2008
Test site:	Frequencies ≤ 1 GHz: Open field test site Frequencies > 1 GHz: Fully anechoic room, cabin no. 2
Test distance:	Frequencies ≤ 8.2 GHz: 3 meters Frequencies > 8.2 GHz: 1 meters

Frequency (MHz)	Antenna Polarization	Detector	Receiver Reading (dBμV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBμV/m)	Limit (dBμV/m)	Margin (dB)
451.630	horizontal	Quasi-Peak	18.4	19.6		38.0	60.6	22.6
470.060	horizontal	Quasi-Peak	17.1	19.7		36.8	60.6	23.8
488.495	horizontal	Quasi-Peak	17.1	20.1		37.2	60.6	23.4
2444.000	vertical	Peak	67.1	33.5		100.6		
4888.600	horizontal	Peak	10.9	34.3		45.2	54.0	8.8

Sample calculation of final values:

$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$

Comment:	
Mode:	Transmitting continuously on 2473 MHz with modulation
Date of test:	June 11, 2008 - June 20, 2008
Test site:	Frequencies ≤ 1 GHz: Open field test site Frequencies > 1 GHz: Fully anechoic room, cabin no. 2
Test distance:	Frequencies ≤ 8.2 GHz: 3 meters Frequencies > 8.2 GHz: 1 meters

Frequency (MHz)	Antenna Polarization	Detector	Receiver Reading (dBμV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBμV/m)	Limit (dBμV/m)	Margin (dB)
451.624	horizontal	Quasi-Peak	17.2	19.6		36.8	59.9	23.1
470.060	horizontal	Quasi-Peak	16.8	19.7		36.5	59.9	23.4
506.930	horizontal	Quasi-Peak	17.1	20.6		37.7	59.9	22.2
543.797	horizontal	Quasi-Peak	16.1	21.0		37.1	59.9	22.8
2473.647	horizontal	Peak	66.4	33.6		99.9		
7419.800	vertical	Peak	9.5	39.2		48.7	54.0	5.3

Sample calculation of final values:

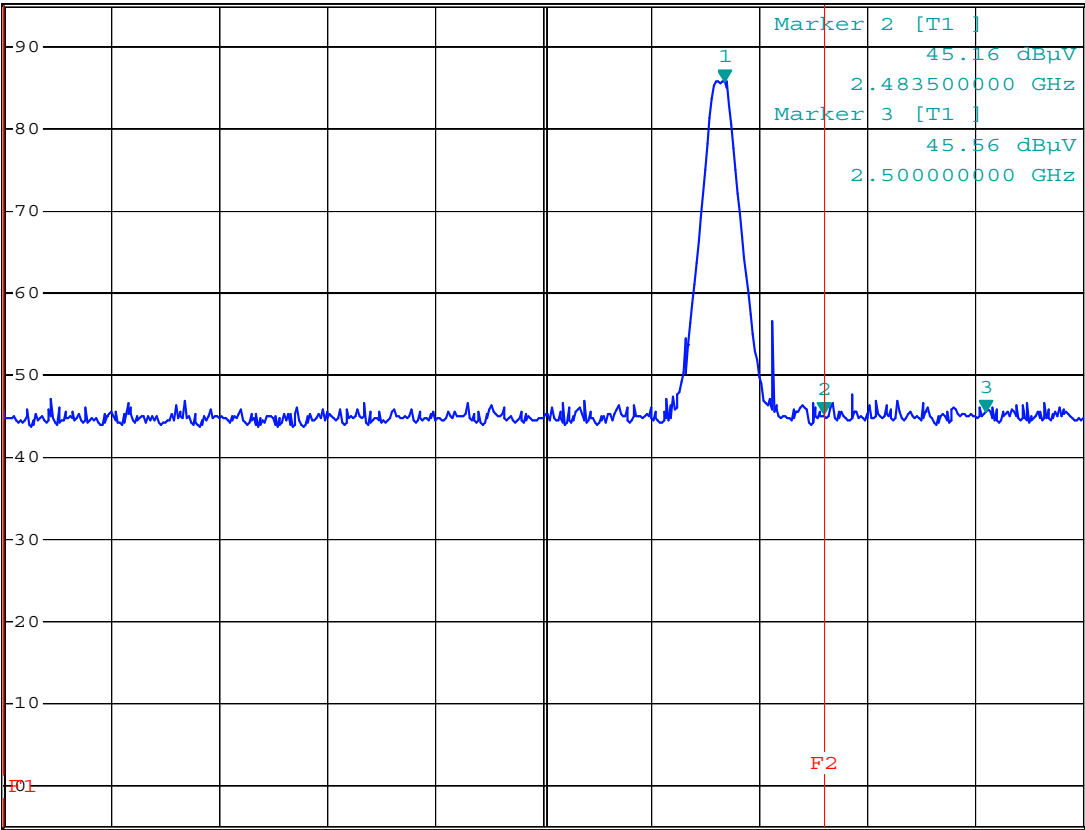
$$\text{Final Value (dB}\mu\text{V/m)} = \text{Reading Value (dB}\mu\text{V)} + \text{Correction Factor (dB/m)} + \text{Pulse Train Correction (dB)}$$



MARKER 1
2.47348 GHz
Ref 95 dBμV *Att 20 dB

*RBW 1 MHz Marker 1 [T1]
VBW 3 MHz 85.75 dBμV
SWT 5 ms 2.473480000 GHz

1 PK
MAXH



Start 2.4 GHz 11 MHz/ Stop 2.51 GHz

Date: 18.JUN.2008 15:52:01

8.14 RF exposure requirement

Rules and specifications:	CFR 47 Part 15, section 15.247(i) CFR 47 Part 1, sections 1.1307(b)(1)				
Guide:	OET Bulletin 65, Edition 97-01				
Limits:	Limits for general population / uncontrolled exposure				
	Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time (minutes)
	0.3 - 1.34	614	1.63	(100)*	30
	1.34 - 30	824 / f	2.19 / f	(180 / f ²)*	30
	30 - 300	27.5	0.073	0.2	30
	300 - 1500	---	---	f/1500	30
	1500 - 100000	---	---	1.0	30
	f = frequency in MHz * Plane-wave equivalent power density				

Spectral power density		Declared by applicant	Measured
Prediction ⁸ :	$S = P G / 4 \pi R^2$		
Where:	S = Power density P = Power input of 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:	P = 6.09 dBm = 4.06 mW		☒
Antenna gain:	G = 3.0 dBi = 2	☒	
Prediction distance:	R = 25 cm		
Power density at 20 cm:	S = 1.033 mW/cm²		

Test Result:	Test passed
--------------	-------------

⁸ MPE Prediction of MPE according to equation from page 19 of OET Bulletin 65, Ed. 97-01

8.15 Exposure of Humans to RF Fields

Rules and specifications:	IC RSS-Gen Issue 2, section 5.5
Guide:	IC RSS-102 Issue 2, section 2.5

Exposure of Humans to RF Fields	Applicable	Declared by applicant	Measured	Exemption
The antenna is				
☐ detachable				
The conducted output power (CP in watts) is measured at the antenna connector: $CP = \dots\dots\dots \text{ W}$ The effective isotropic radiated power (EIRP in watts) is calculated using ☐ the numerical antenna gain: $G = \dots\dots\dots$ $EIRP = G \cdot CP \Rightarrow EIRP = \dots\dots\dots \text{ W}$ ☐ the field strength⁹ in V/m: $FS = \dots\dots\dots \text{ V/m}$ $EIRP = \frac{(FS \cdot D)^2}{30} \Rightarrow EIRP = \dots\dots\dots \text{ W}$ with: Distance between the antennas in m: $D = \dots\dots\dots \text{ m}$		☐	☐	
☒ not detachable				
A field strength measurement is used to determine the effective isotropic radiated power (EIRP in watts) given by⁹: $EIRP = \frac{(FS \cdot D)^2}{30} \Rightarrow EIRP = 3.44 \cdot 10^{-3} \text{ W}$ with: Field strength in V/m: $FS = 100.6 \text{ dB}\mu\text{V/m}$ $= 107.15 \cdot 10^{-3} \text{ V/m}$ Distance between the two antennas in m: $D = 3.0 \text{ m}$			☒	☒
Selection of output power				
The output power TP is the higher of the conducted or effective isotropic radiated power (e.i.r.p.): $TP = 3.44 \cdot 10^{-3} \text{ W}$				

⁹ The conversion formula is valid only for properly matched antennas. In other cases the transmitter output power may have to be measured by a terminated measurement when applying the exemption clauses. If an open area test site is used for field strength measurement, the effect due to the metal ground reflecting plane should be subtracted from the maximum field strength value in order to reference it to free space, before calculating TP.

Page 72 of 78 Pages

9 Test Results for Receiver

FCC CFR 47 Part 15			
Section(s)	Test	Page	Result
15.107	Conducted AC powerline emission 150 kHz to 30 MHz	74	Test passed
15.109	Radiated emission 30 MHz to 12.5 GHz	75	Test passed
15.111(a)	Antenna power conduction emission of receivers 9 kHz to 12.5 GHz	---	Not applicable

IC RSS-Gen Issue 2			
Section(s)	Test	Page	Result
7.2.2	Transmitter AC power lines conducted emissions 150 kHz to 30 MHz	74	Test passed
6(a), 7.2.3.2	Receiver spurious emissions (radiated) 30 MHz to 12.5 GHz	75	Test passed
6(b), 7.2.3.1	Receiver spurious emissions (antenna conducted) 9 kHz to 12.5 GHz	---	Not applicable

9.1 Conducted Powerline Emission Measurement 150 kHz to 30 MHz

Rules and specifications:	CFR 47 Part 15, section 15.107 IC RSS-Gen Issue 2, section 7.2.2		
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 (6.3)		

Comment:	
Date of test:	June 20, 2008
Test site:	Shielded room, cabin no. 4

Test Result:	Test passed
--------------	-------------

Tested on:	L1
------------	----

All emissions show more than 20 dB margin to the limit

Tested on:	N
------------	---

All emissions show more than 20 dB margin to the limit

Sample calculation of final values:

$$\text{Final Value (dBµV)} = \text{Reading Value (dBµV)} + \text{Correction Factor (dB)}$$

9.2 Radiated Emission Measurement 30 MHz to 12.5 GHz

Rules and specifications:	CFR 47 Part 15, section 15.109 (Class B) IC RSS-Gen Issue 2, sections 6(a) and 7.2.3.2		
Guide:	ANSI C63.4 / CISPR 22		
Limit:	Frequency of Emission (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)
	30 - 88	100	40.0
	88 - 216	150	43.5
	216 - 960	200	46.0
	Above 960	500	54.0
Measurement procedures:	Radiated Emission in Fully or Semi Anechoic Room (6.5) Radiated Emission at Open Field Test Site (6.6)		

Comment:	June 11, 2008 - June 20, 2008 Frequencies ≤ 1 GHz: Open field test site Frequencies > 1 GHz: Fully anechoic room, cabin no. 2
Date of test:	
Test site:	
Test distance:	
	3 meters

Test Result:	Test passed
--------------	-------------

Frequency (MHz)	Antenna Polarization	Detector	Receiver Reading (dBµV)	Correction Factor (dB/m)	Final Value (dBµV/m)	Limit (dBµV/m)	Margin (dB)
331.760	horizontal	Quasi-Peak	19.1	16.8	35.9	46.0	10.1
368.677	horizontal	Quasi-Peak	16.6	17.9	34.5	46.0	11.5
433.190	horizontal	Quasi-Peak	17.6	18.9	36.5	46.0	9.5
451.630	horizontal	Quasi-Peak	16.9	19.6	36.5	46.0	9.5
470.060	horizontal	Quasi-Peak	15.4	19.7	35.1	46.0	10.9
488.495	horizontal	Quasi-Peak	16.7	20.1	36.8	46.0	9.2
506.930	horizontal	Quasi-Peak	16.3	20.6	36.9	46.0	9.1
543.790	horizontal	Quasi-Peak	10.0	21.0	31.0	46.0	15.0

Sample calculation of field final values:

$$\text{Final Value (dBµV/m)} = \text{Reading Value (dBµV)} + \text{Correction Factor (dB/m)}$$

10 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 1, 2007
☒	CFR 47 Part 15	Code of Federal Regulations Part 15 (Radio Frequency Devices) of the Federal Communication Commission (FCC)	September 20, 2007
☒	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)
☒	RSS-Gen	Radio Standards Specification RSS-Gen Issue 2 containing General Requirements and Information for the Certification of Radiocommunication Equipmment, published by Industry Canada	June 2007
☒	RSS-210	Radio Standards Specification RSS-210 Issue 7 for Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment, published by Industry Canada	June 2007
☐	RSS-310	Radio Standards Specification RSS-310 Issue 1 for Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category II Equipment, published by Industry Canada	September 2005
☒	RSS-102	Radio Standards Specification RSS-102 Issue 2: Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)	November 2005
☐	ICES-003	Interference-Causing Equipment Standard ICES-003 Issue 4 for Digital Apparatus, published by Industry Canada	February 7, 2004
☒	CISPR 22	Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment – Radio Disturbance Characteristics – Limits and Methods of Measurement"	1997
☐	CAN/CSA-CEI/IEC CISPR 22	Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment	2002
☒	TRC-43	Notes Regarding Designation of Emission (Including Necessary Bandwidth and Classification), Class of Station and Nature of Service, published by Industry Canada	October 9, 1982

11 Revision History

Revision History			
<i>Edition</i>	<i>Date</i>	<i>Issued by</i>	<i>Modifications</i>
1	June 23, 2008	Martin Steindl (cj)	First Edition

12 Charts taken during testing

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

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Shielded room, cabin no. 4

Tested on:
**Linecord AC110 V
Phase L1**

Date of test: **06/20/2008** Operator: **M. Steindl**

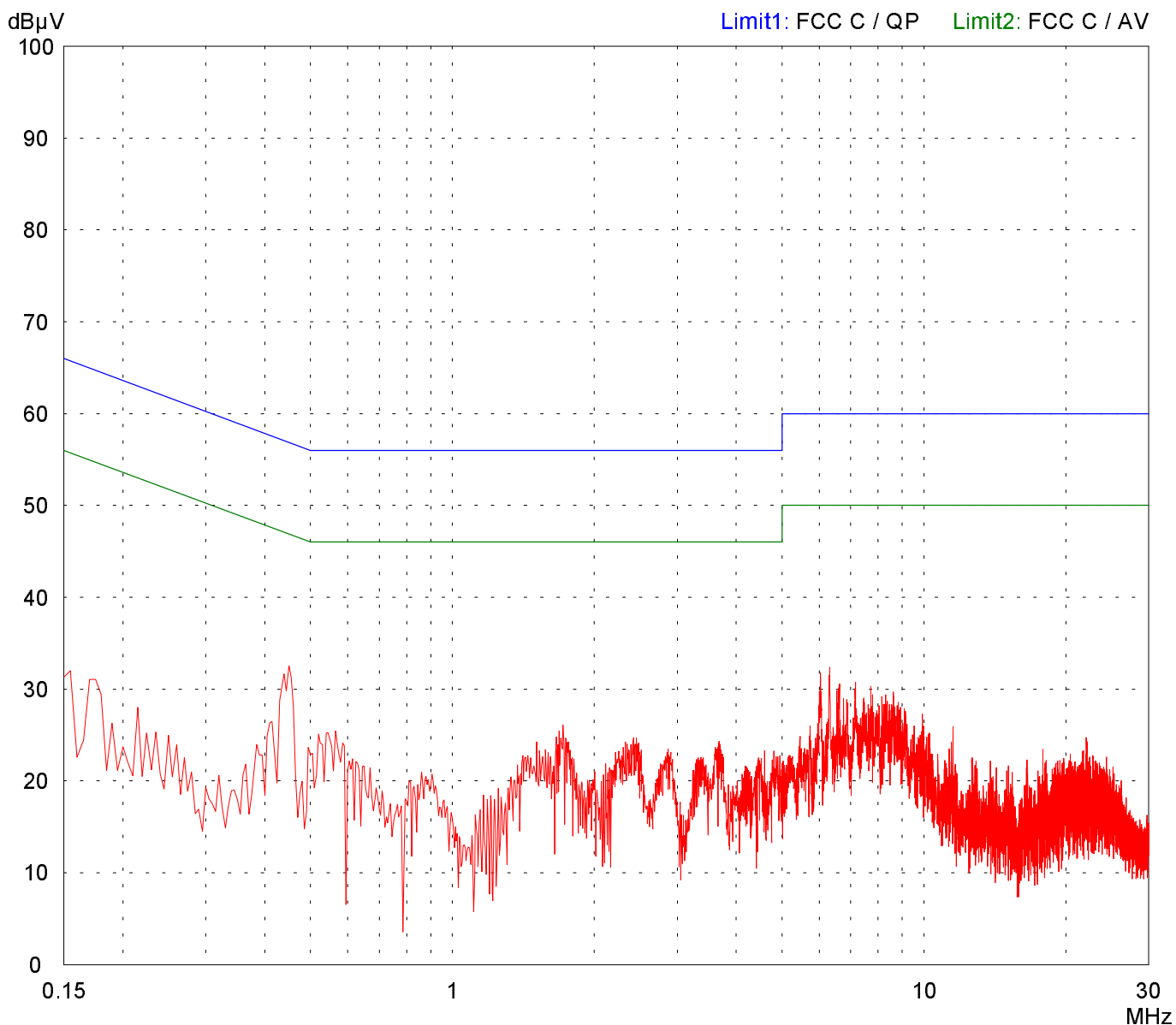
Test performed: **automatically** File name:

Mode:
- EUT on test board

- Transmitting continuously with modulation
- Frequency: 2444 MHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56109-080588

Page of Pages

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

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Shielded room, cabin no. 4

Tested on:
**Linecord AC110 V
Phase N**

Date of test: 06/20/2008 Operator:
M. Steindl

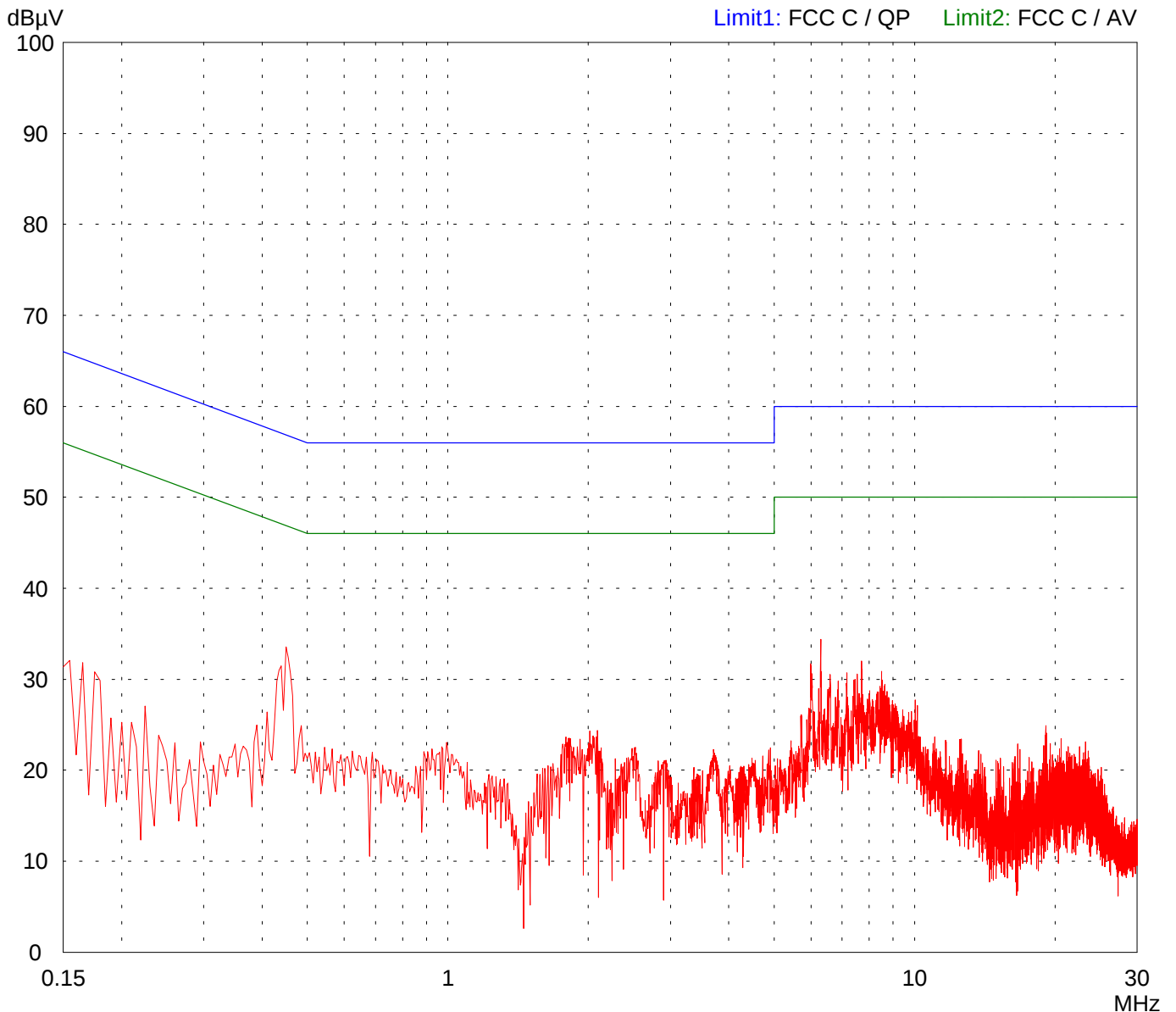
Test performed: automatically File name:

Mode:
- EUT on test board

- Transmitting continuously with modulation
- Frequency: 2444 MHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56109-080588

Radiated Emission Test 9 kHz - 30 MHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
by hand

File name:
default.emi

Comment:

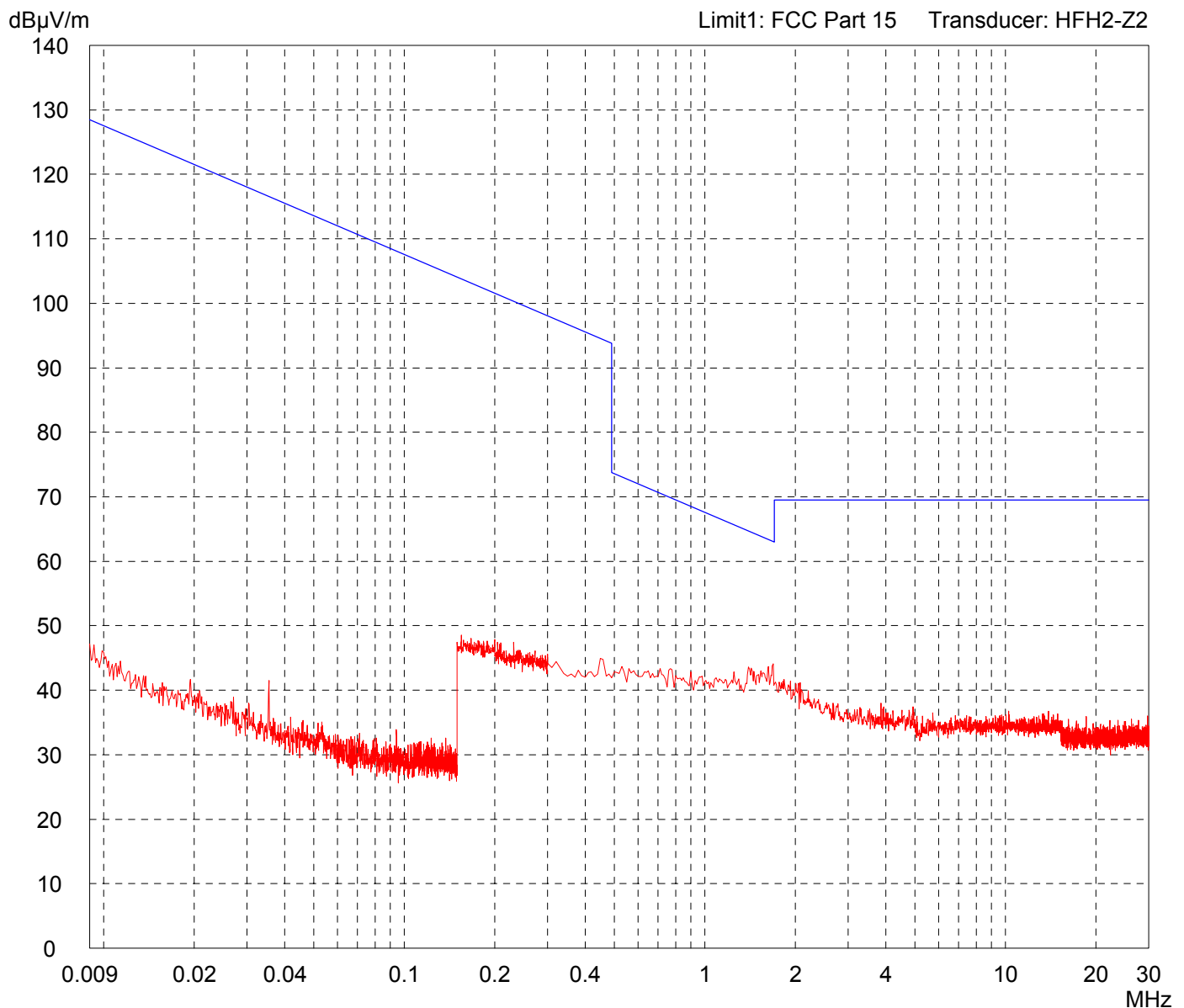
- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz

Detector:
Peak

List of values:

10 dB Margin

50 Subranges



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Horizontal Polarization**

Date of test:
06/11/2008

Operator:
M. Steindl

Test performed:
automatically

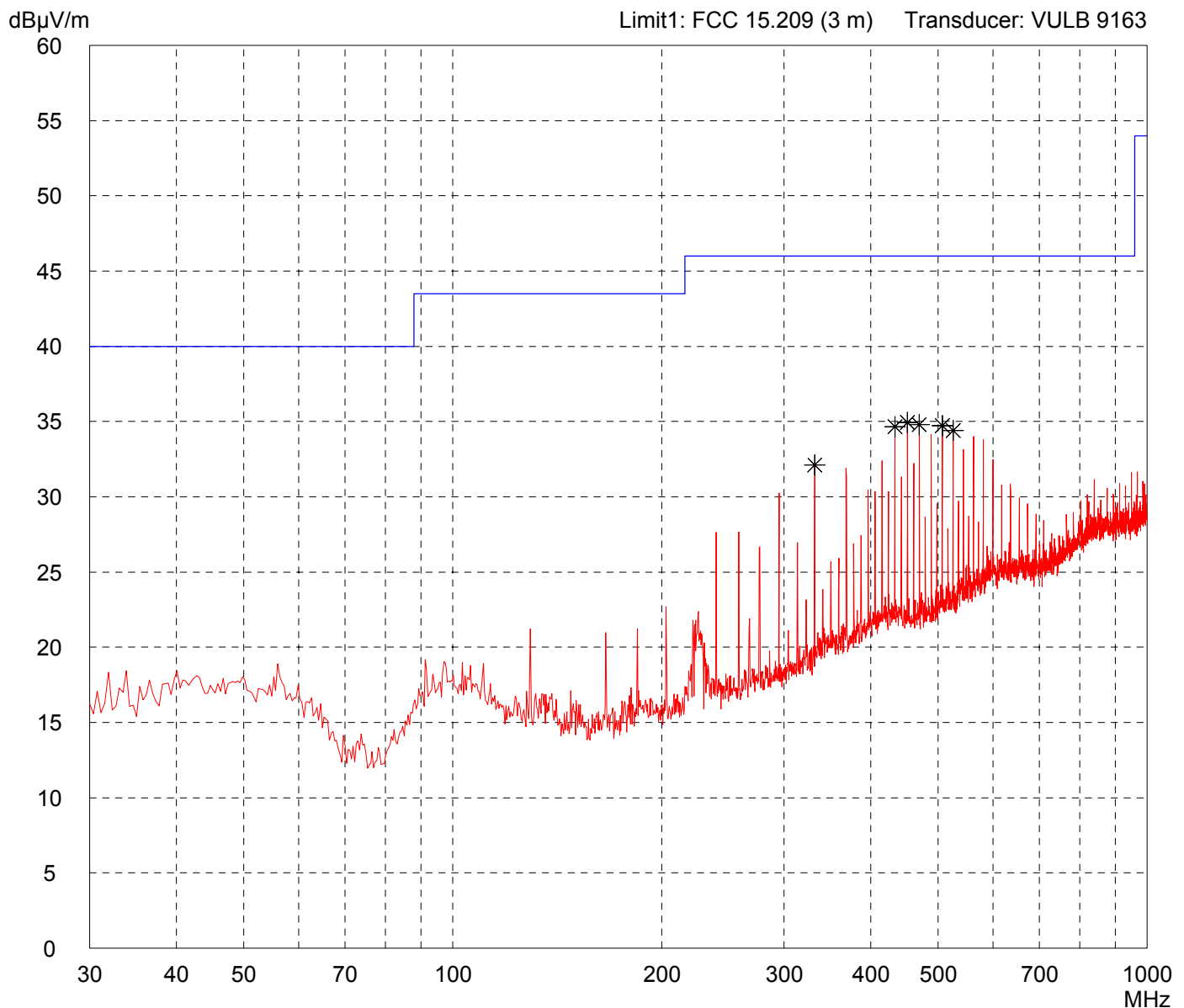
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz

Detector:
Peak

List of values:
Selected by hand



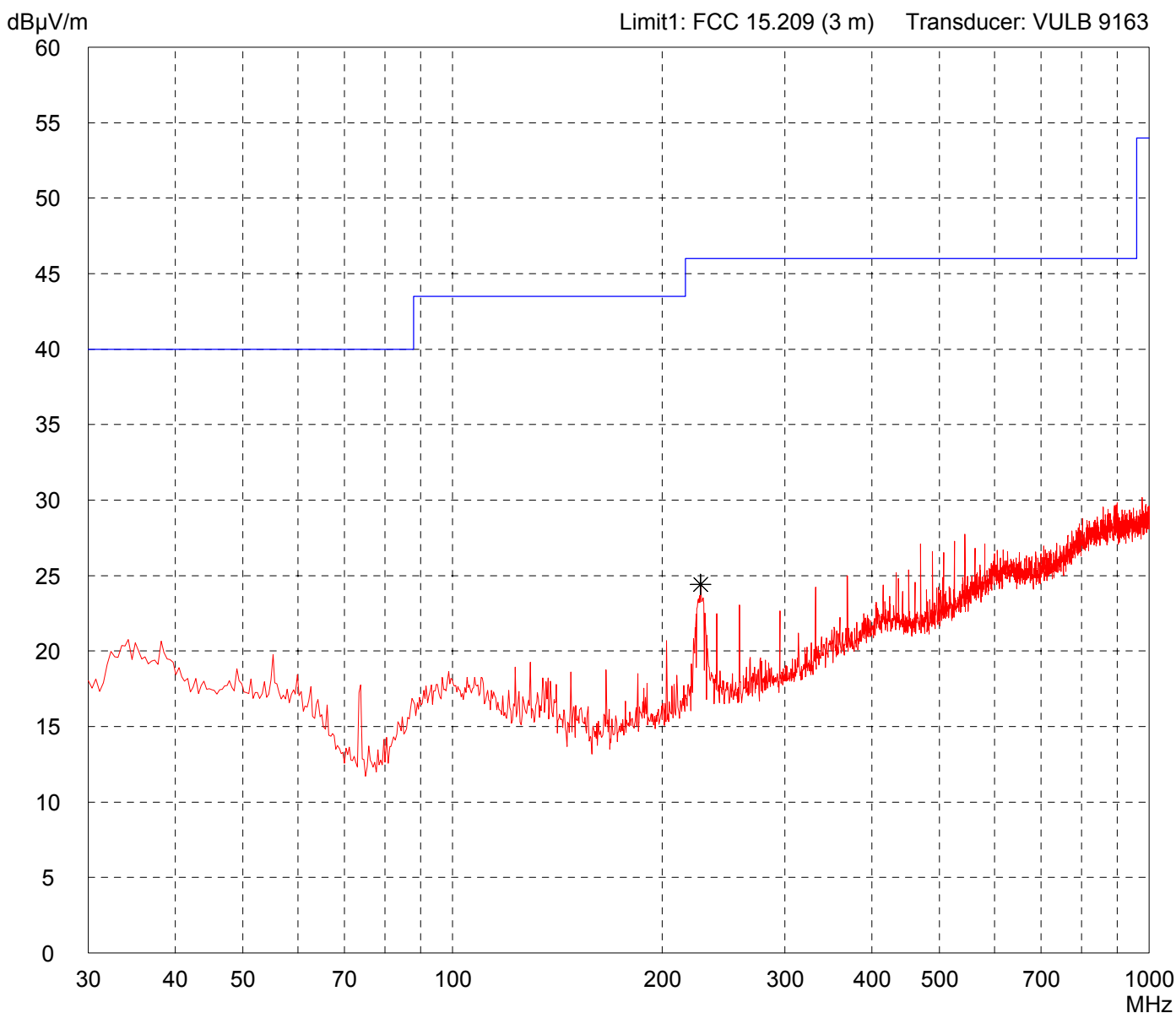
Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/11/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--



Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Horizontal Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

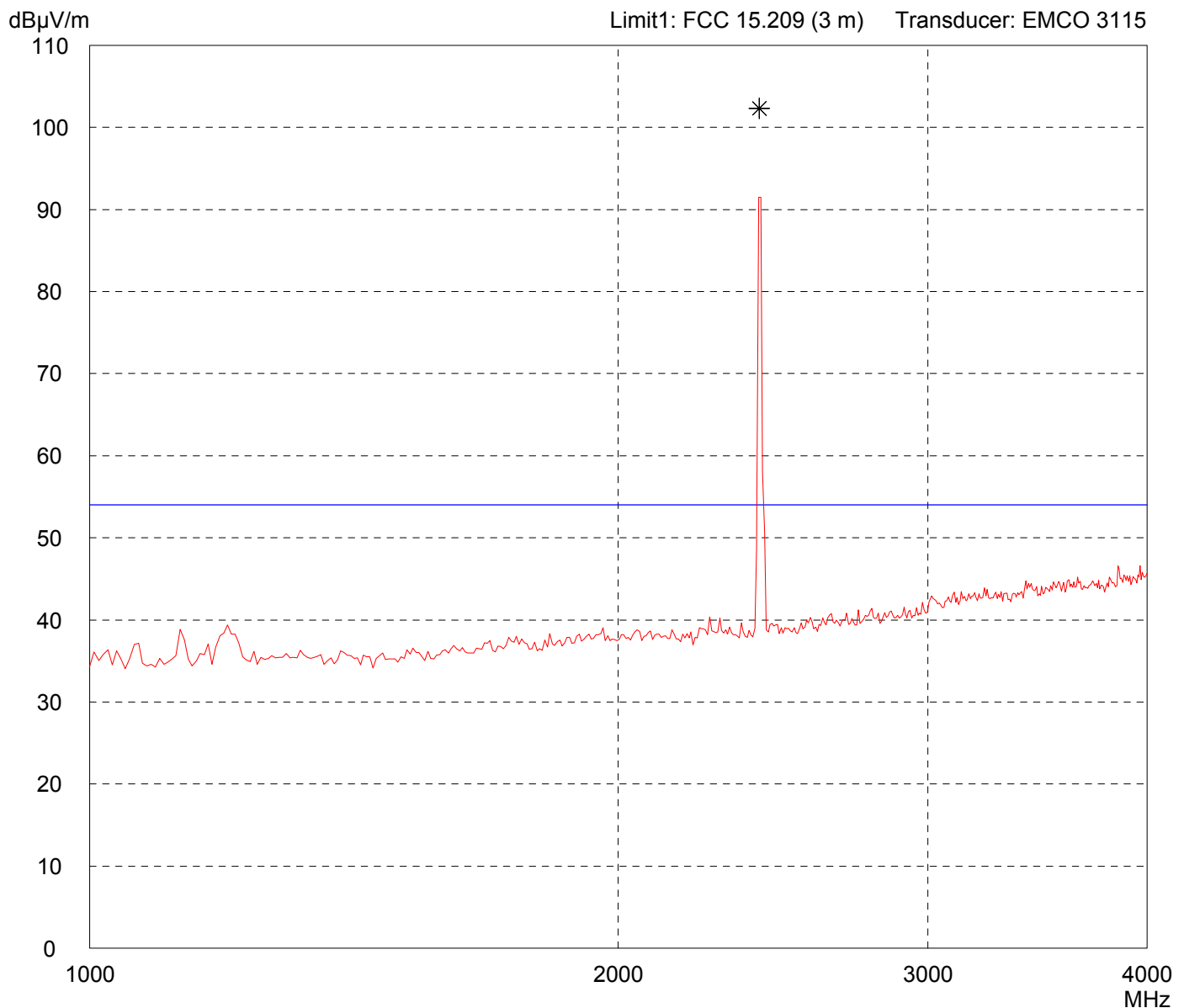
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz

Detector:
Peak

List of values:
Selected by hand



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Vertical Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

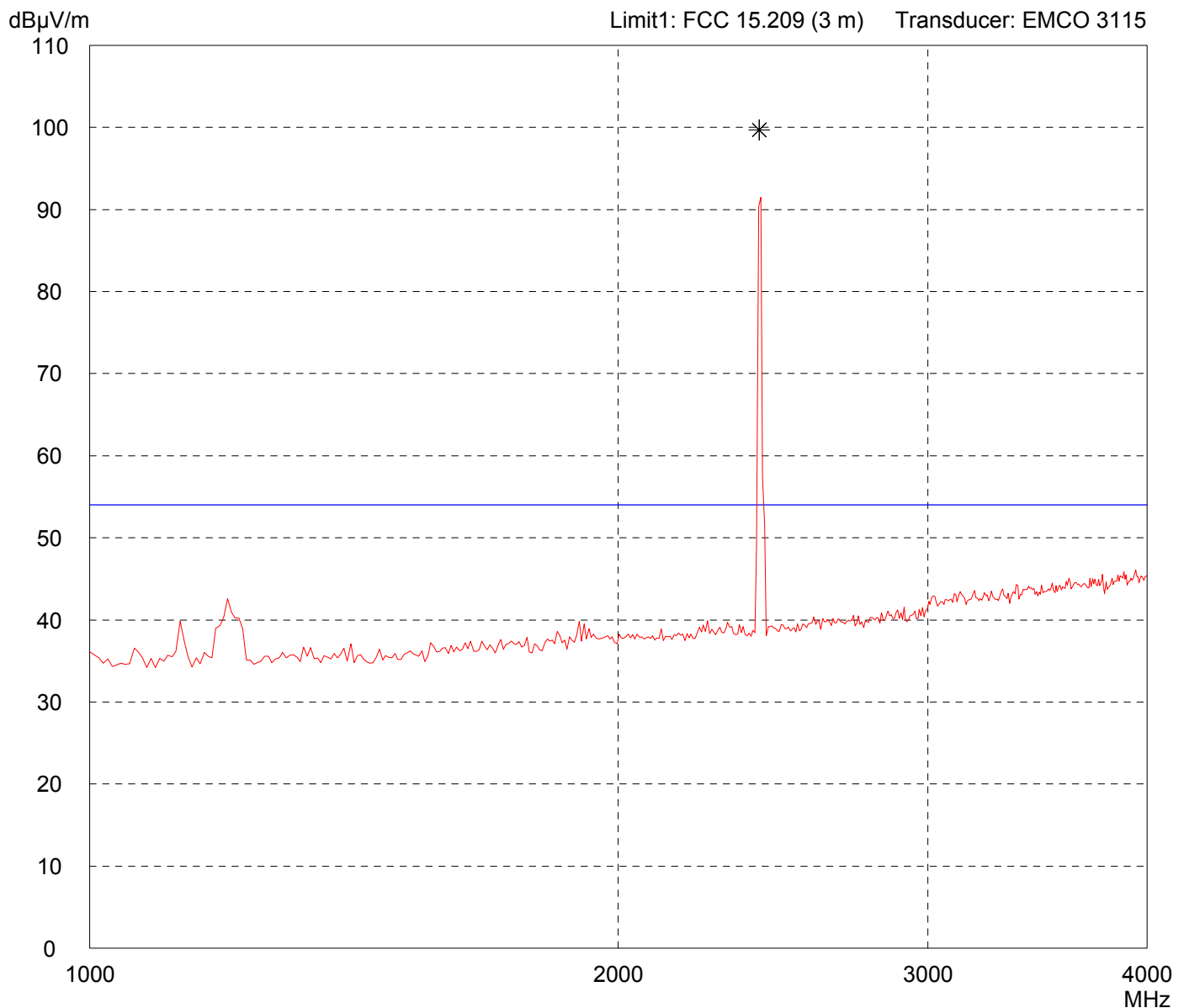
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz

Detector:
Peak

List of values:
Selected by hand



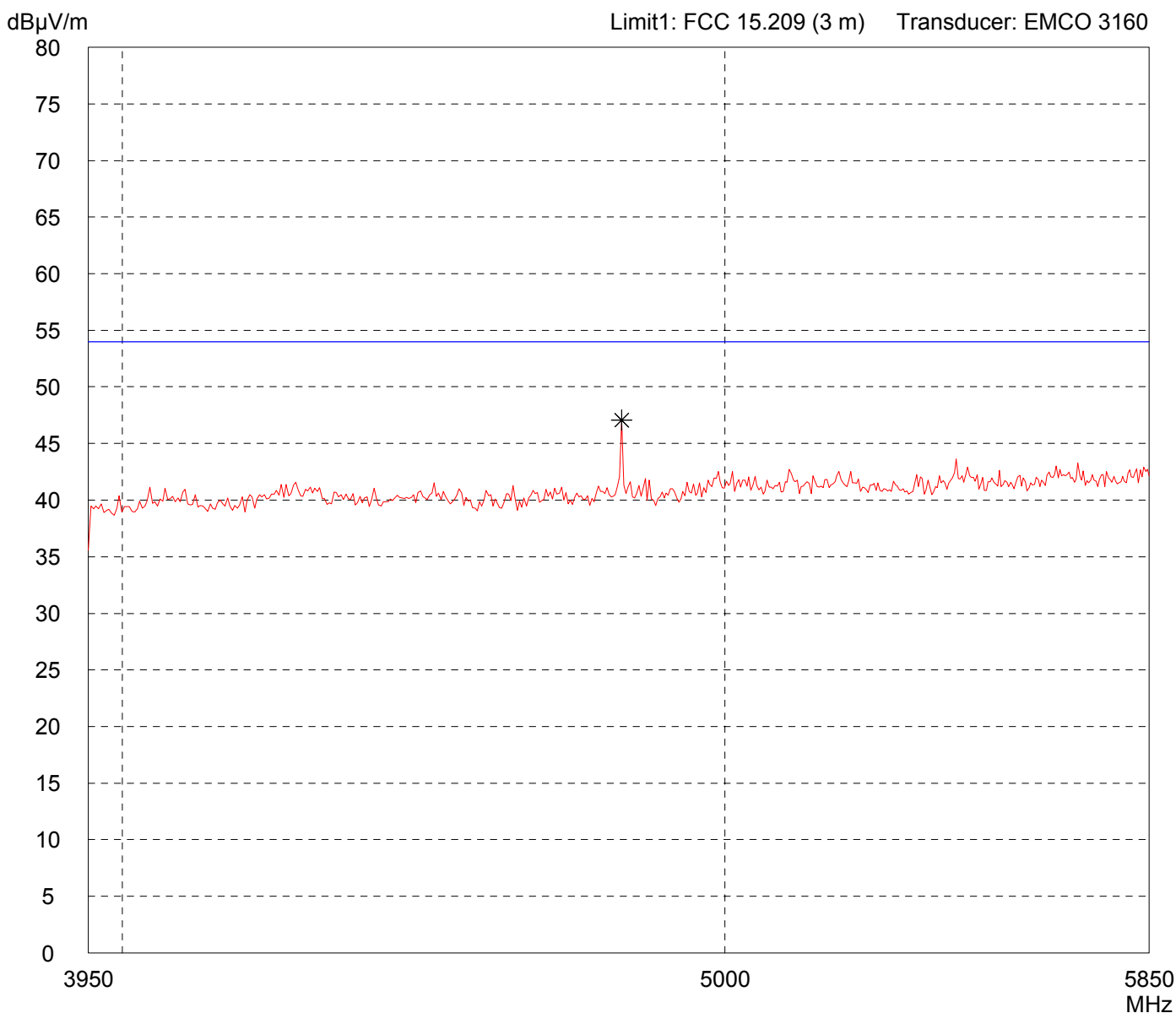
Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

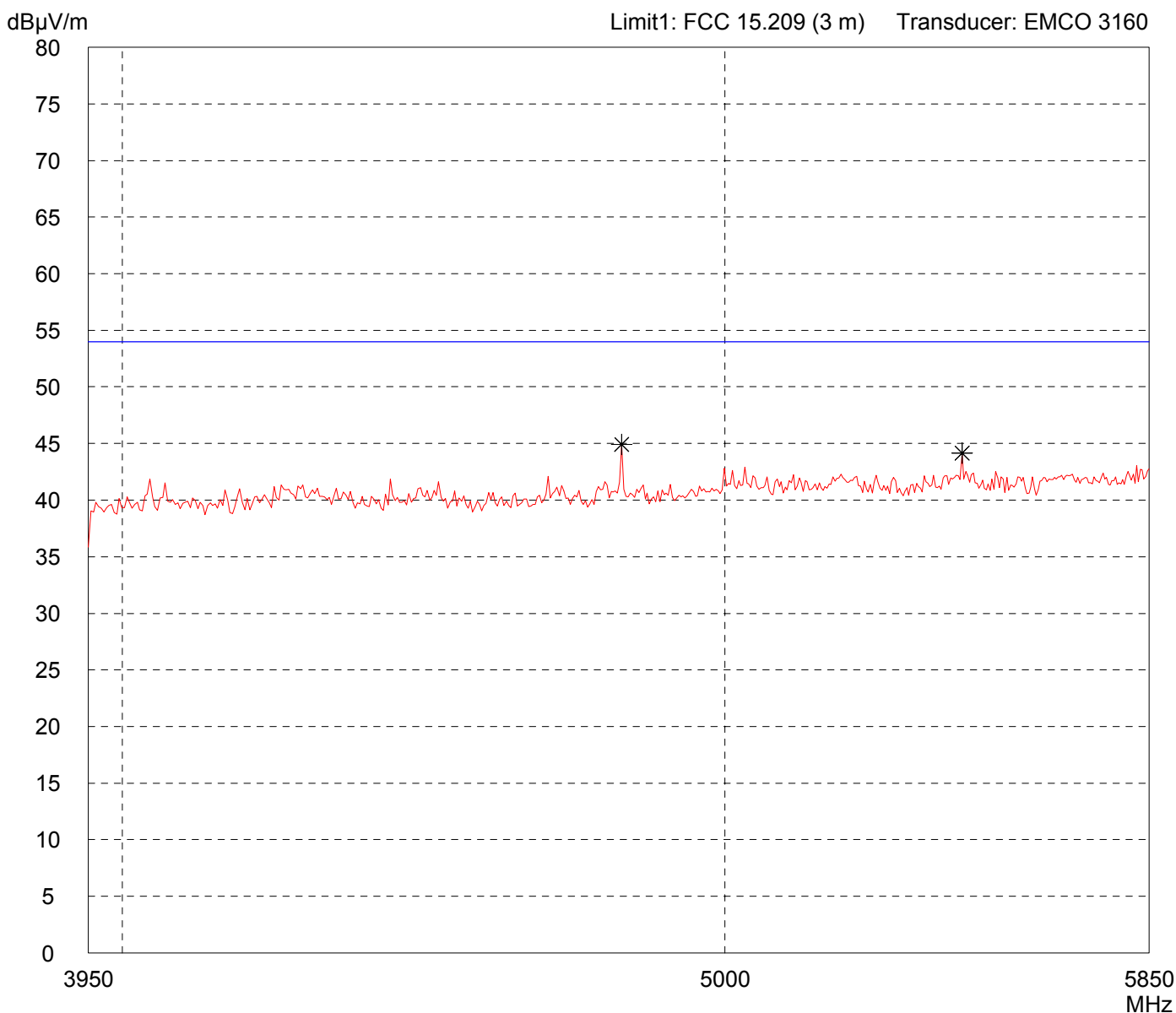


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

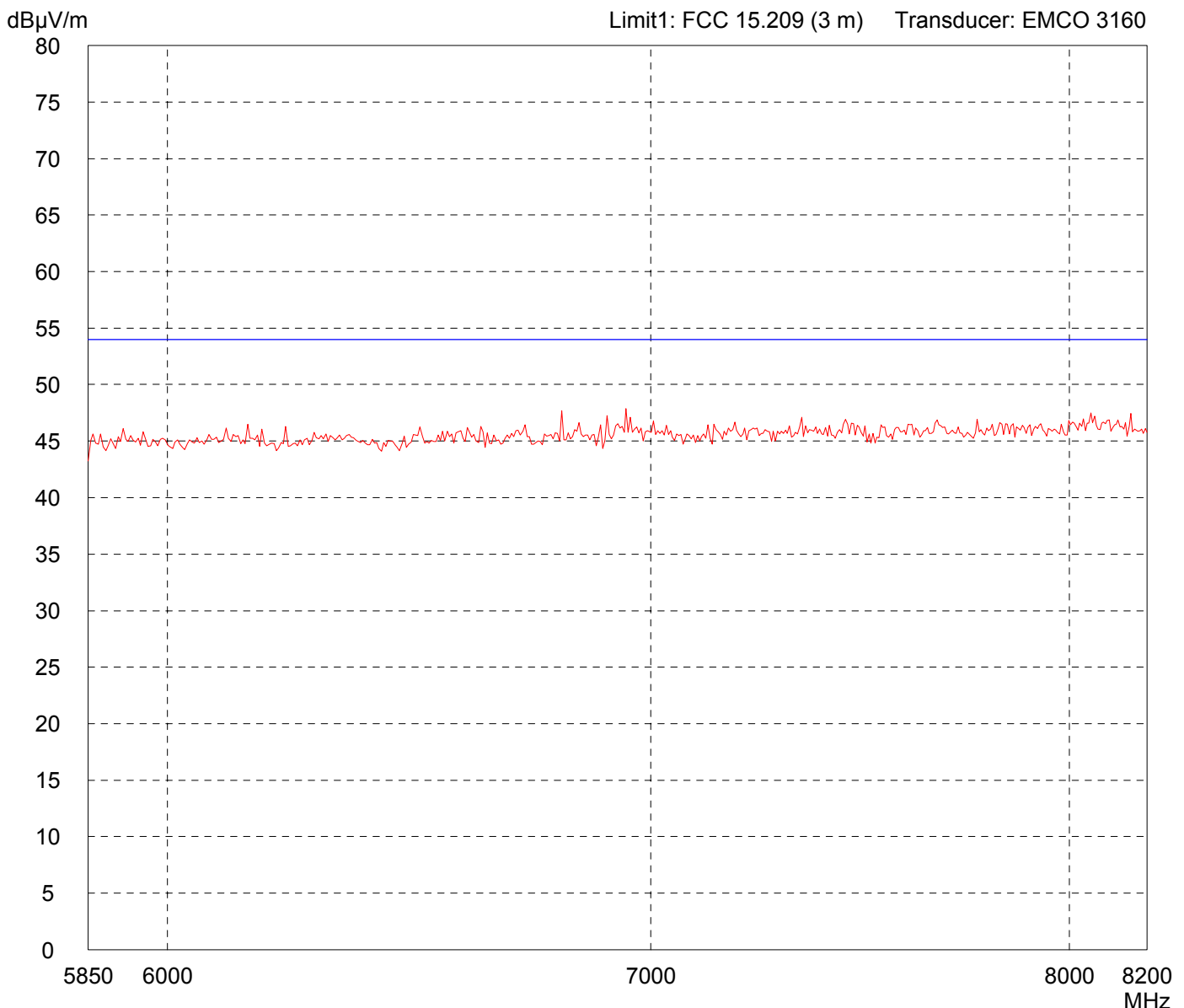


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

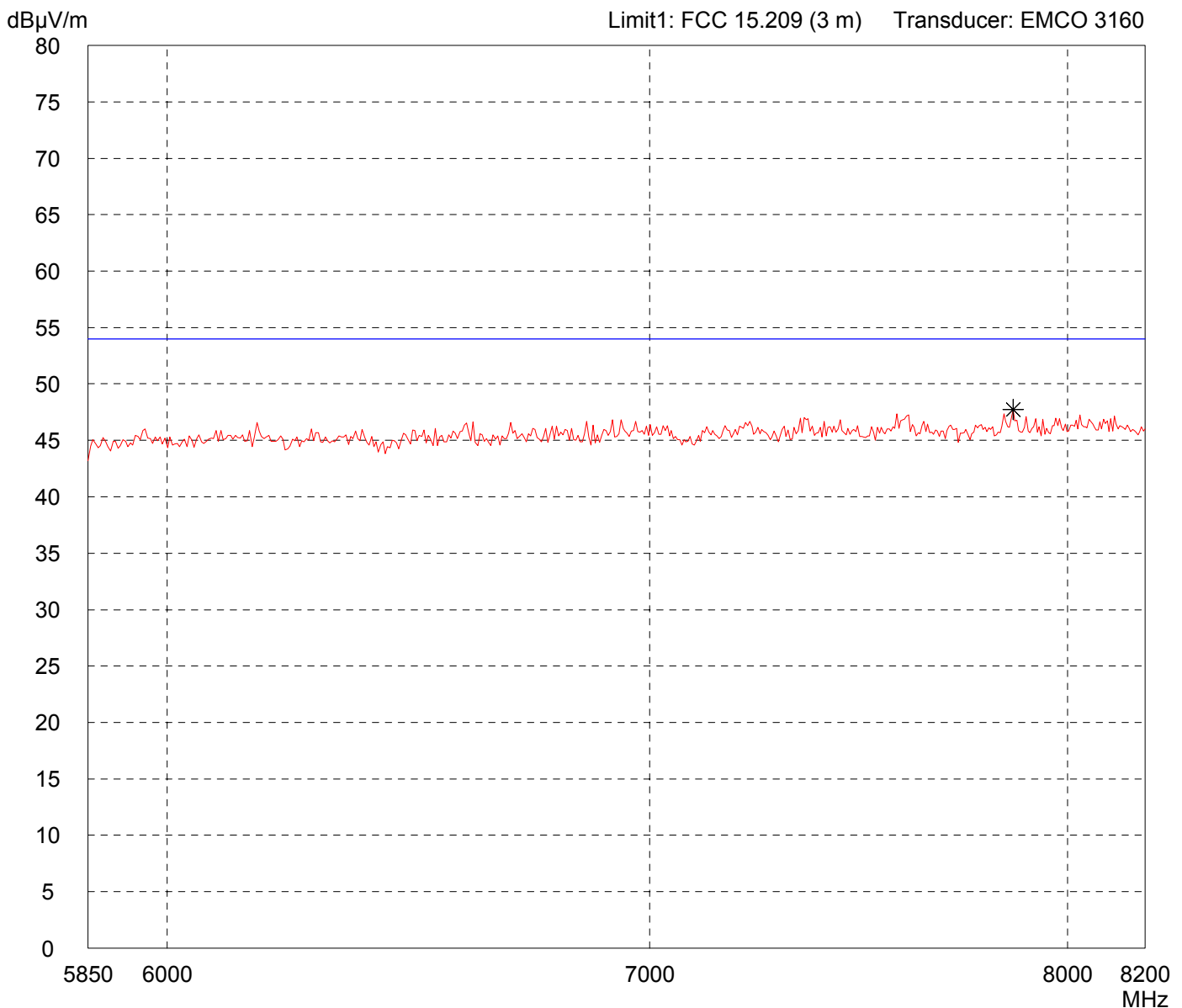


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

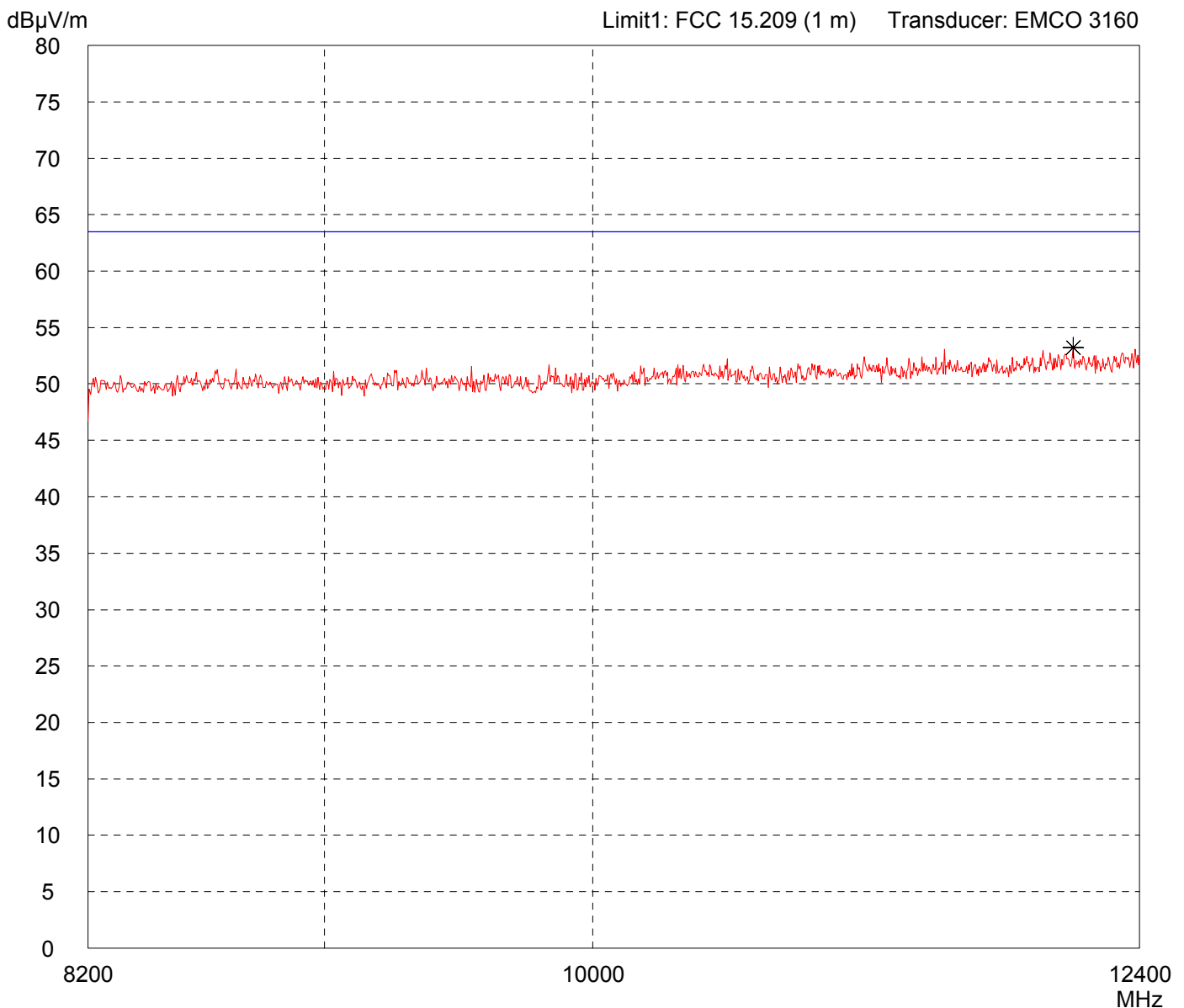


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

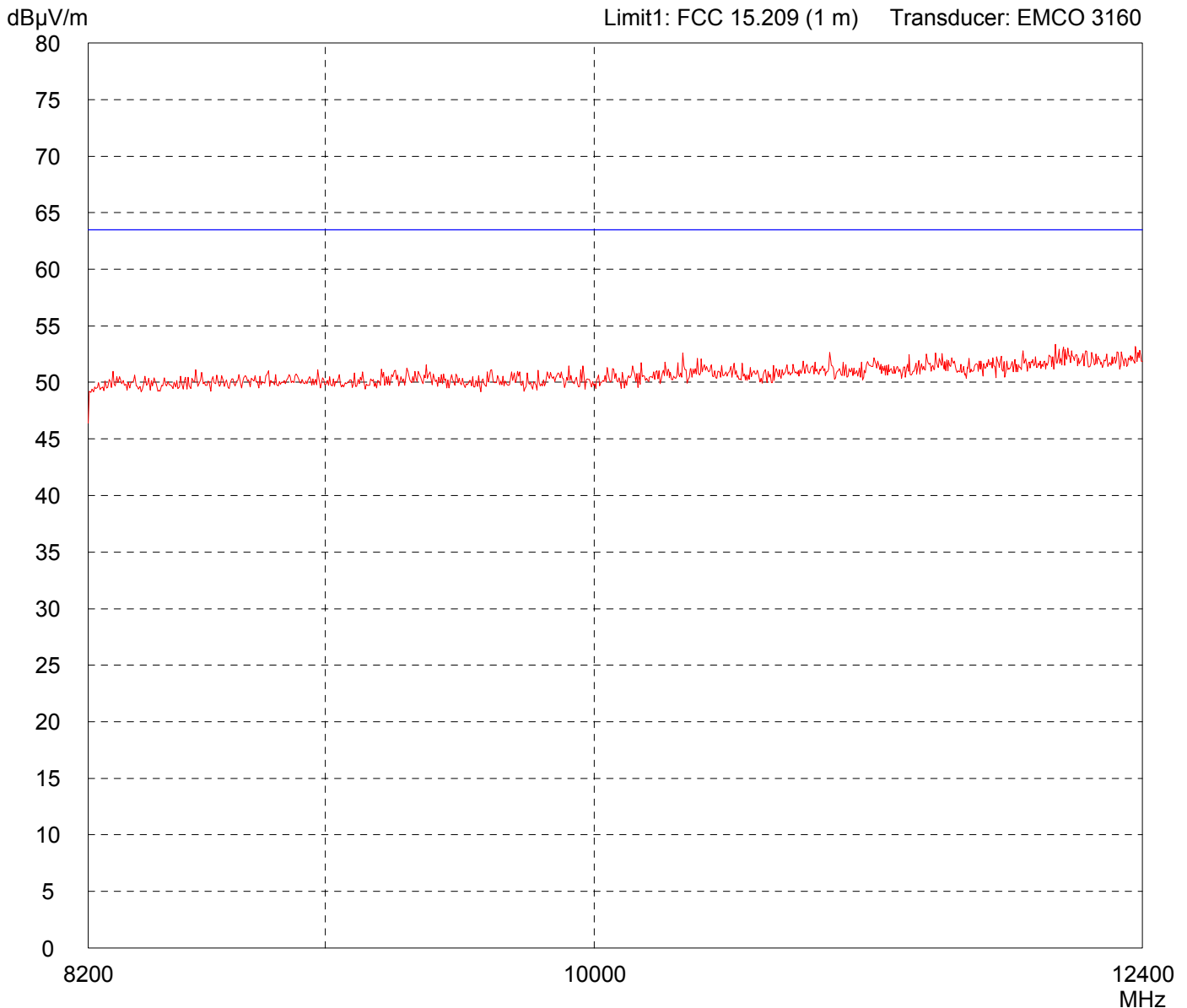


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: last.emi

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

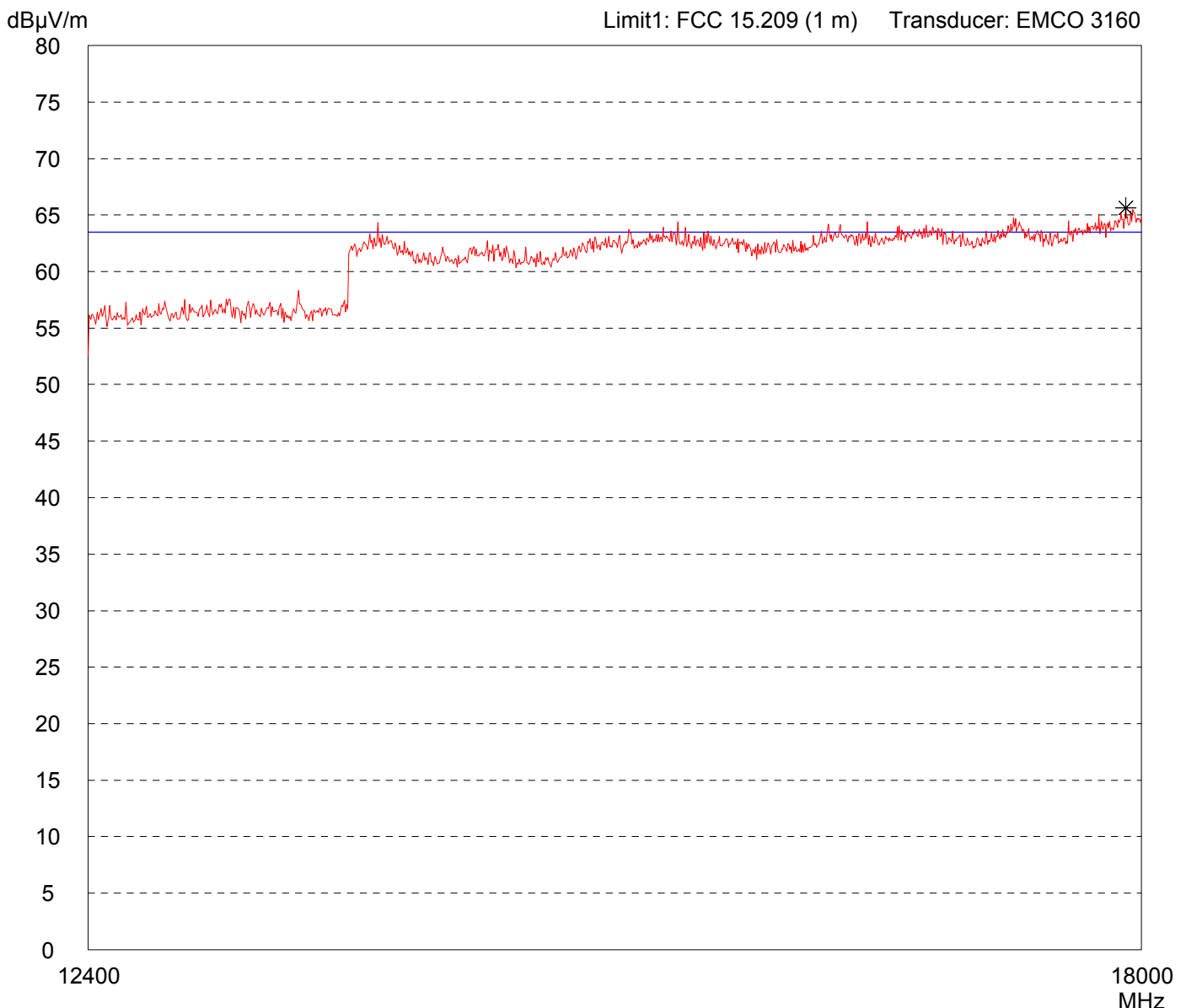


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

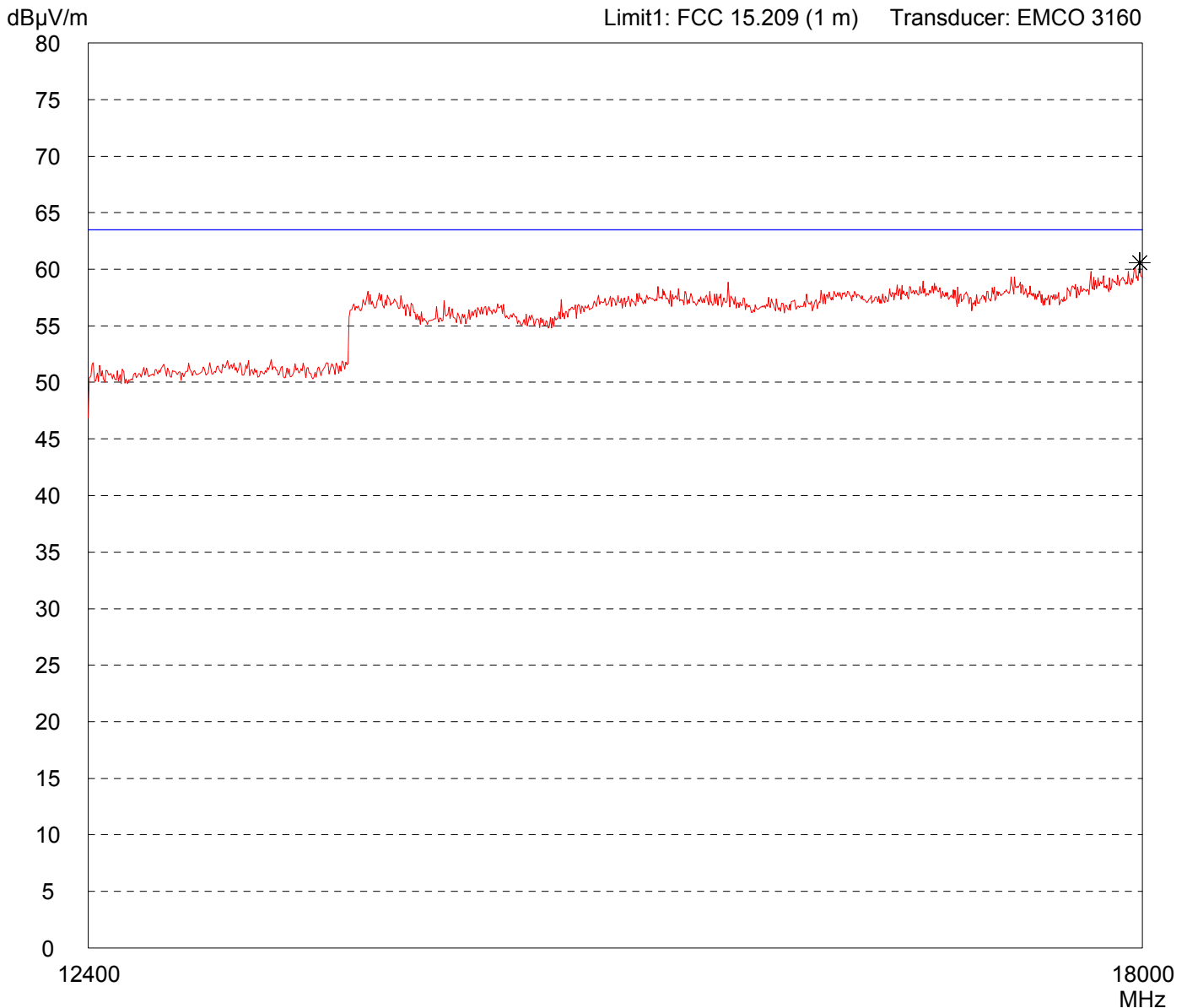


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

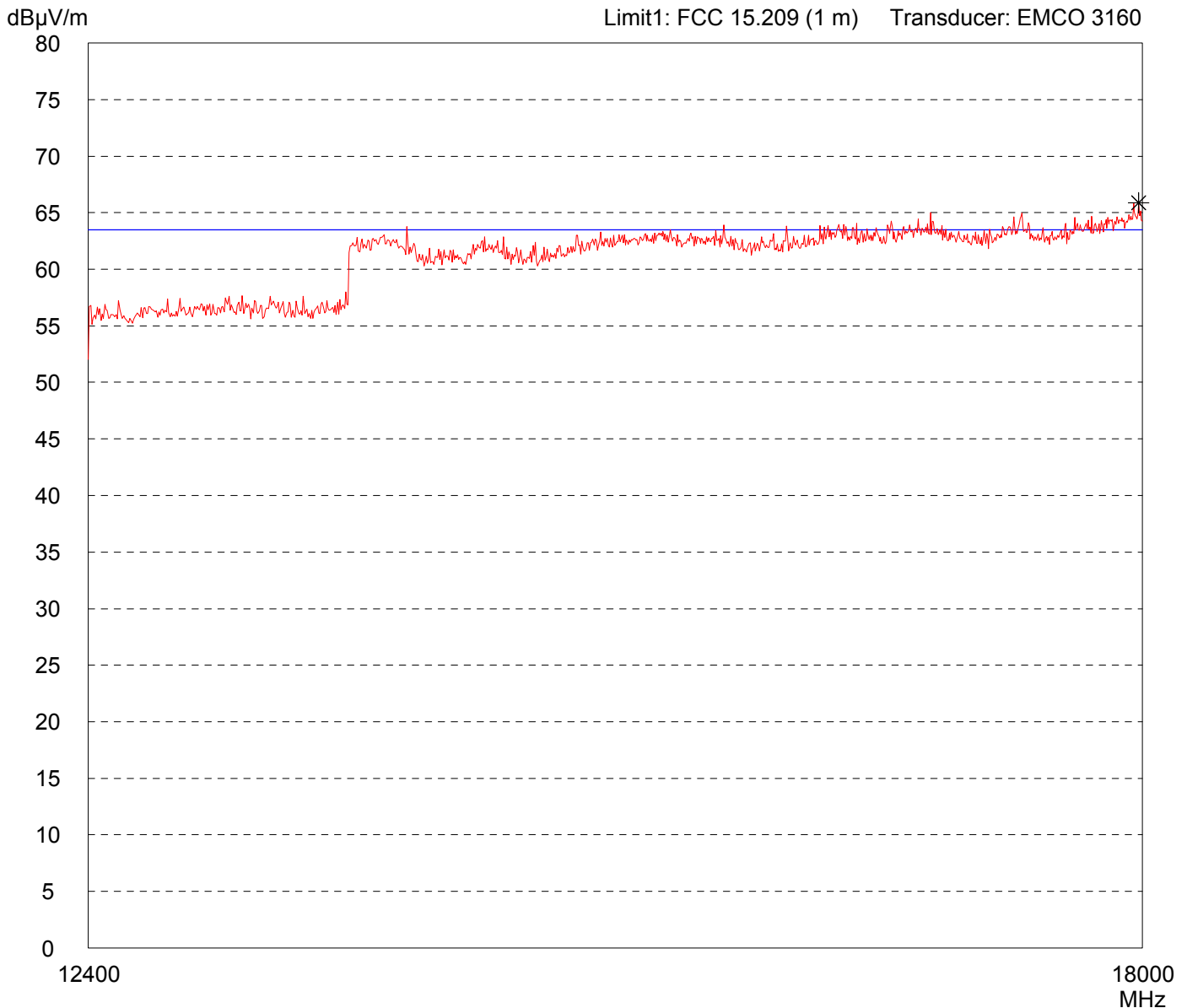


Result: Prescan - VBW = 100 kHz	Project file: 56109-80588
---	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

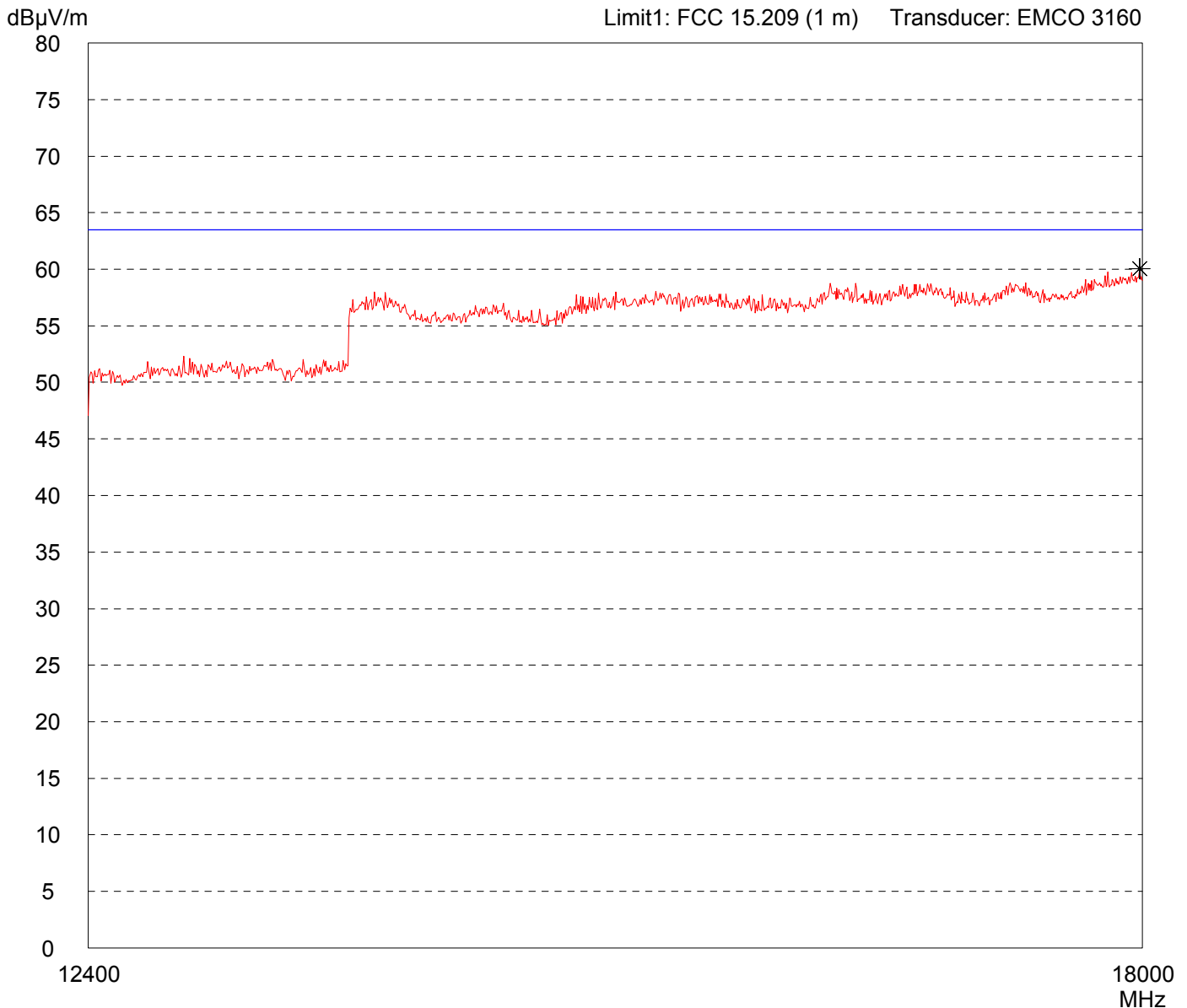


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2406 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--



Result: Prescan - VBW = 100 kHz	Project file: 56109-80588
---	-------------------------------------

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

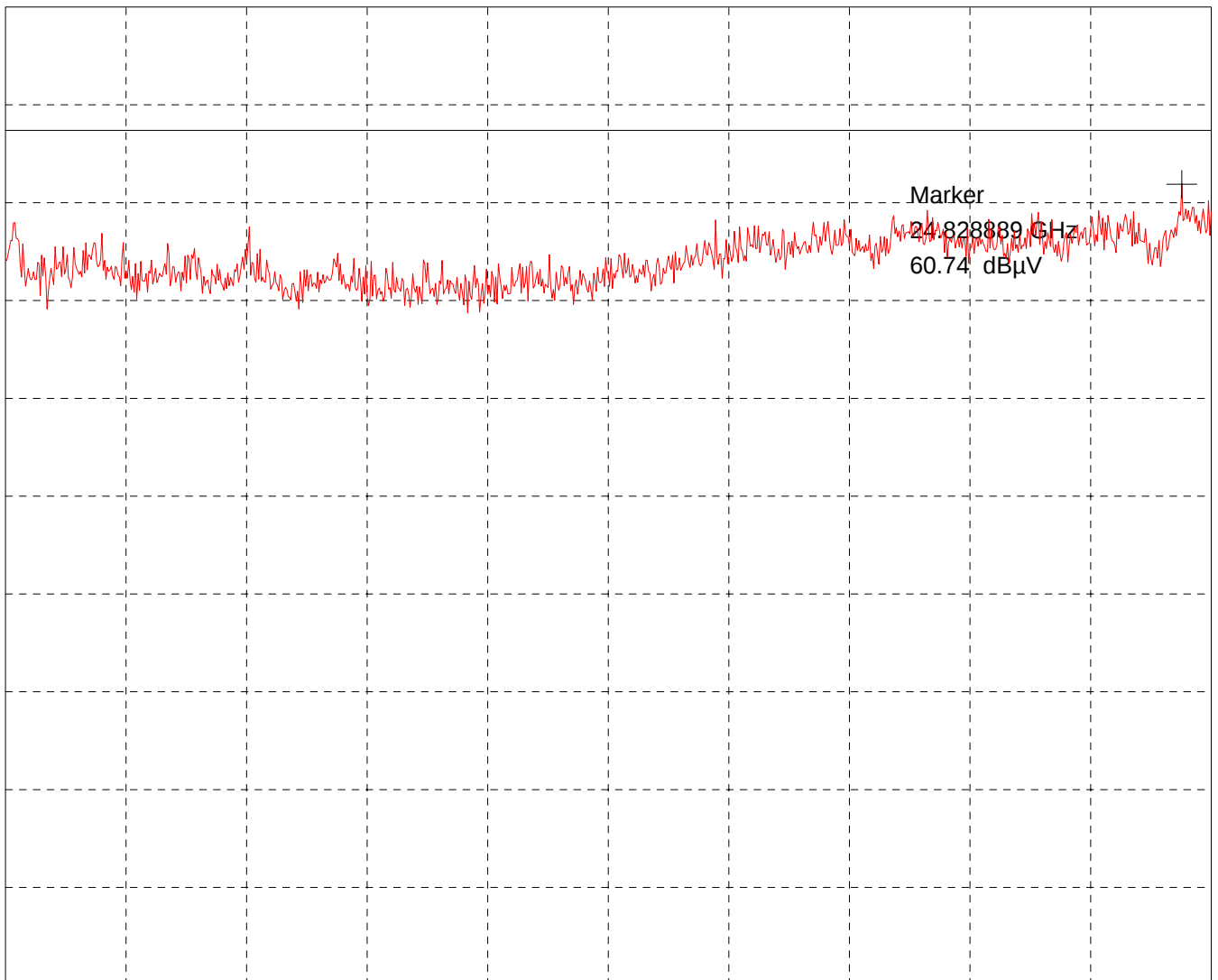
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz
- Polarisation: horizontal
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz
SWP 40 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

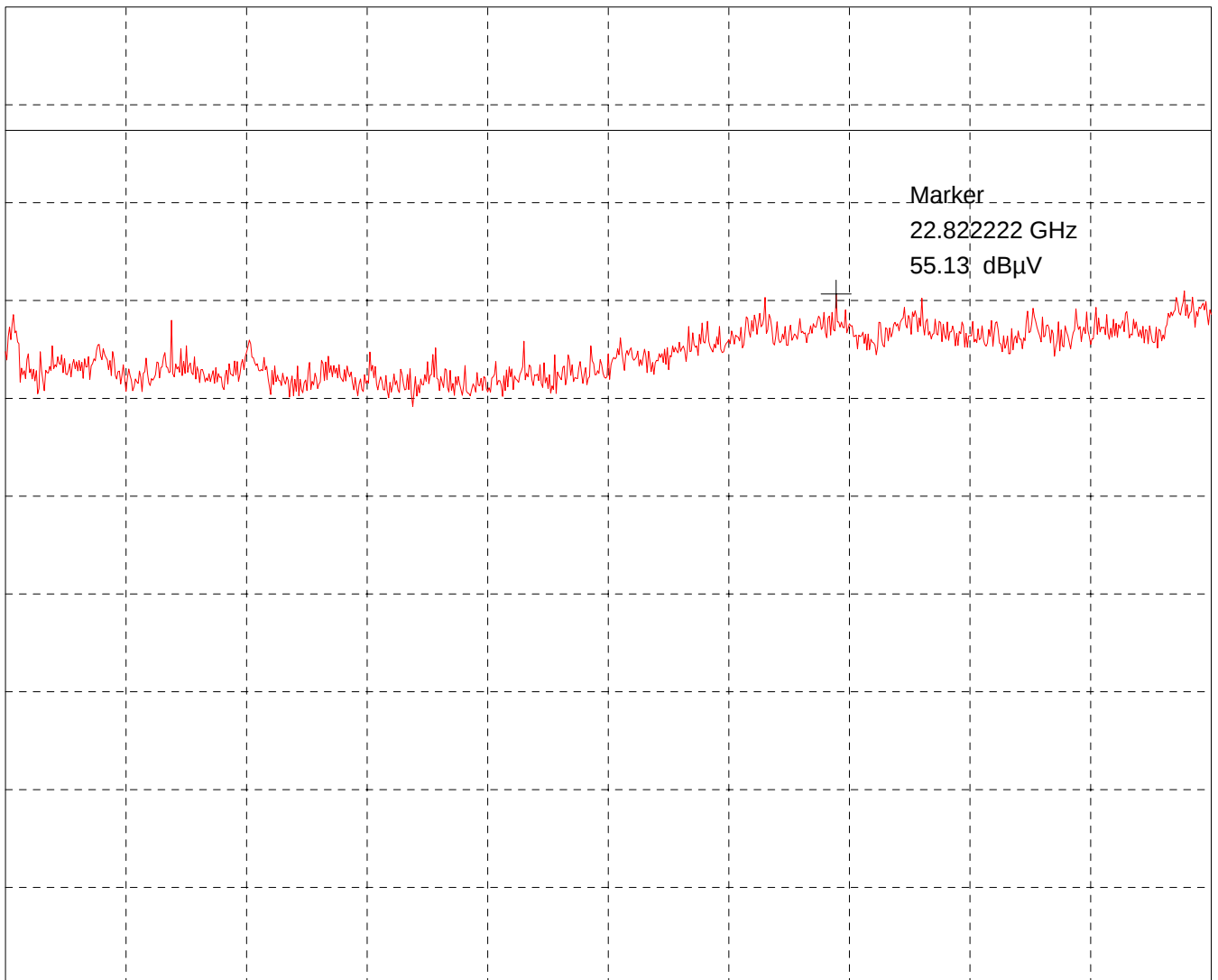
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz
- Polarisation: horizontal
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 100 kHz

Stop 25.000 GHz
SWP 220 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

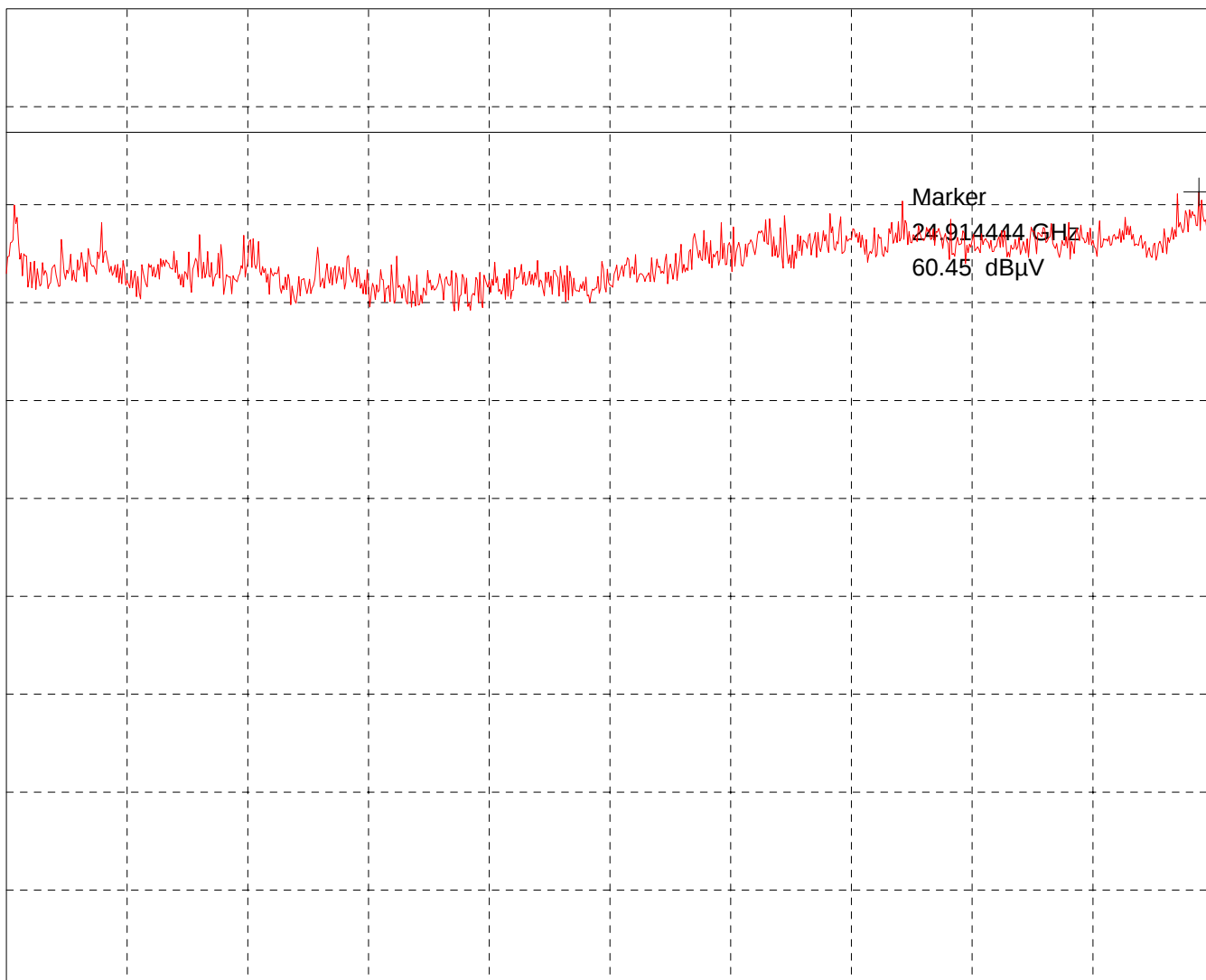
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz
- Polarisation: vertical
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz
SWP 40 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

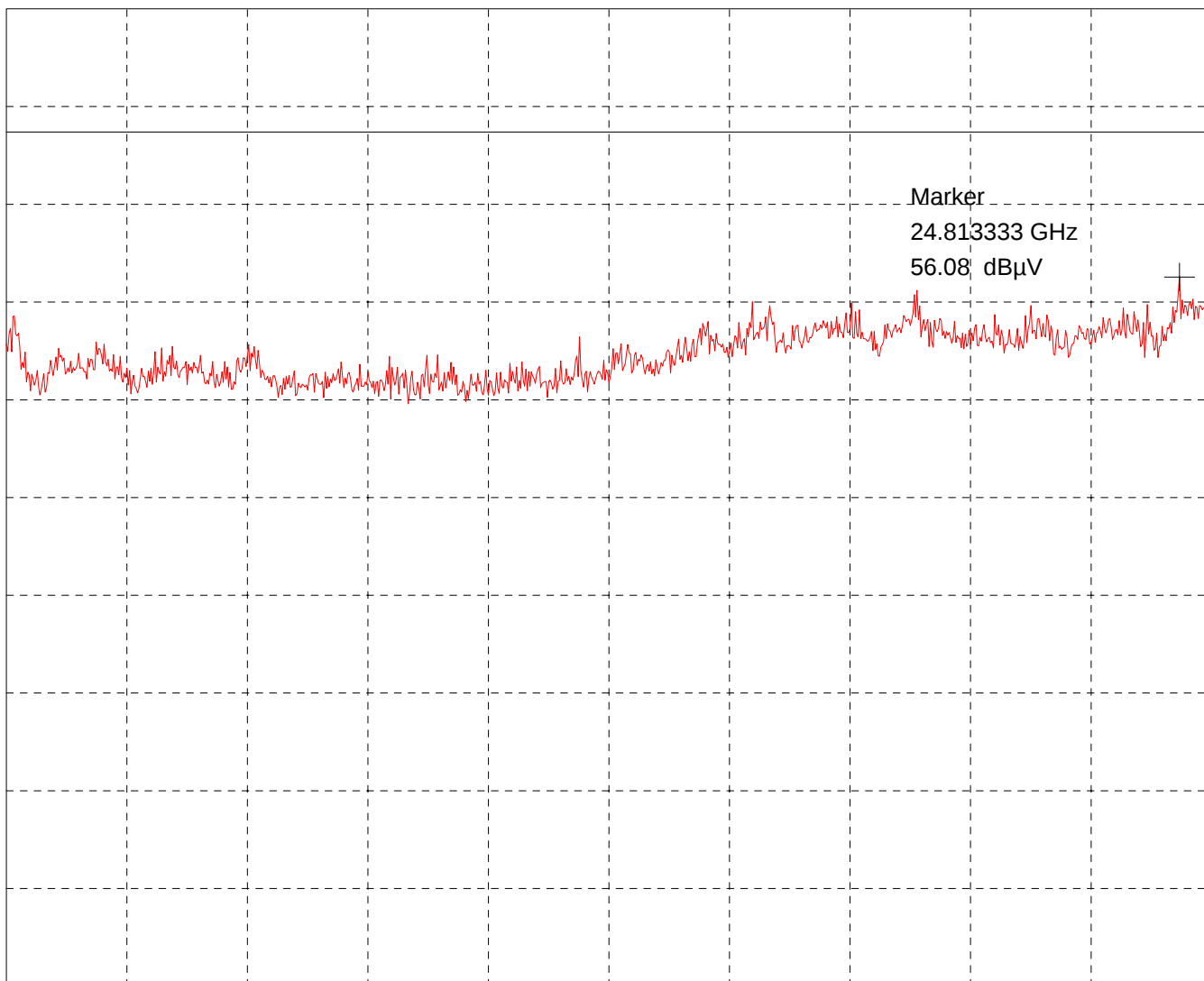
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2406 MHz
- Polarisation: vertical
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 100 kHz

Stop 25.000 GHz
SWP 220 ms

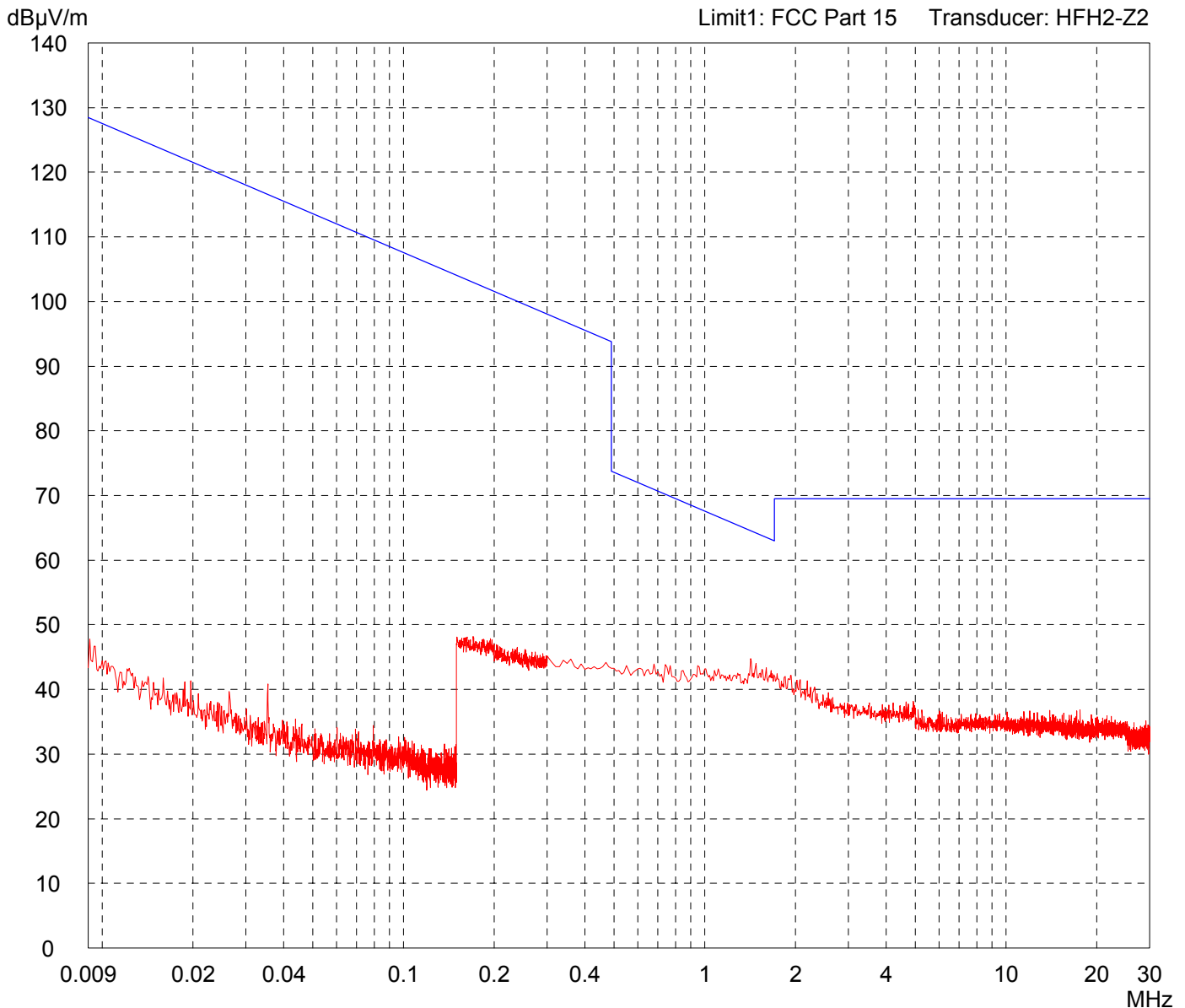
Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emission Test 9 kHz - 30 MHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ		Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B		
Applicant: AeroComm Inc.		
Test site: Fully anechoic room, cabin no. 2		
Tested on: Test distance 3 metres		
Date of test: 06/17/2008	Operator: M. Steindl	
Test performed: by hand	File name: default.emi	
Detector: Peak		List of values: 10 dB Margin 50 Subranges



Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres
Horizontal Polarization

Date of test:
06/11/2008

Operator:
M. Steindl

Test performed:
automatically

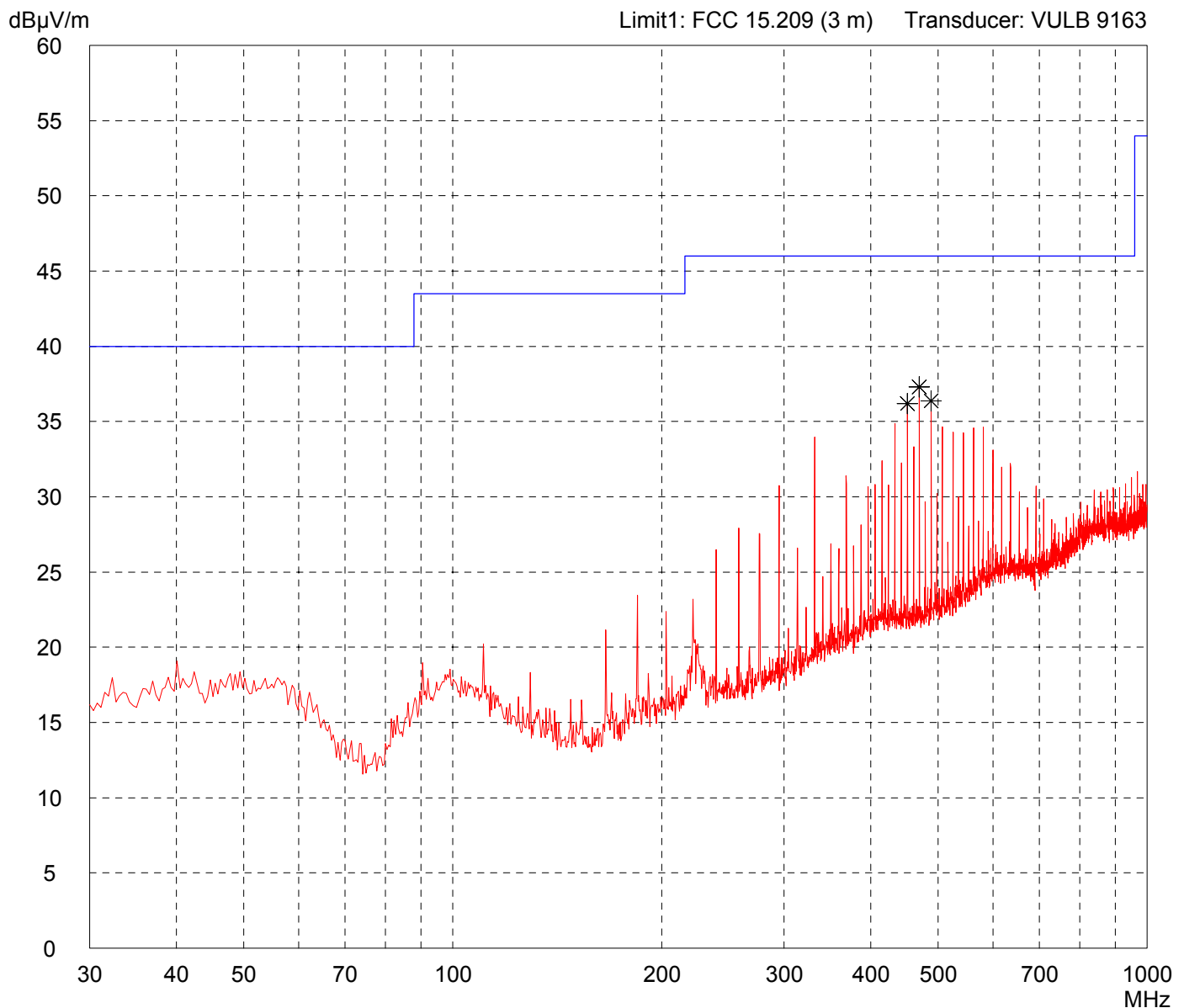
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz

Detector:
Peak

List of values:
Selected by hand



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Vertical Polarization**

Date of test:
06/11/2008

Operator:
M. Steindl

Test performed:
automatically

File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz

Detector:
Peak

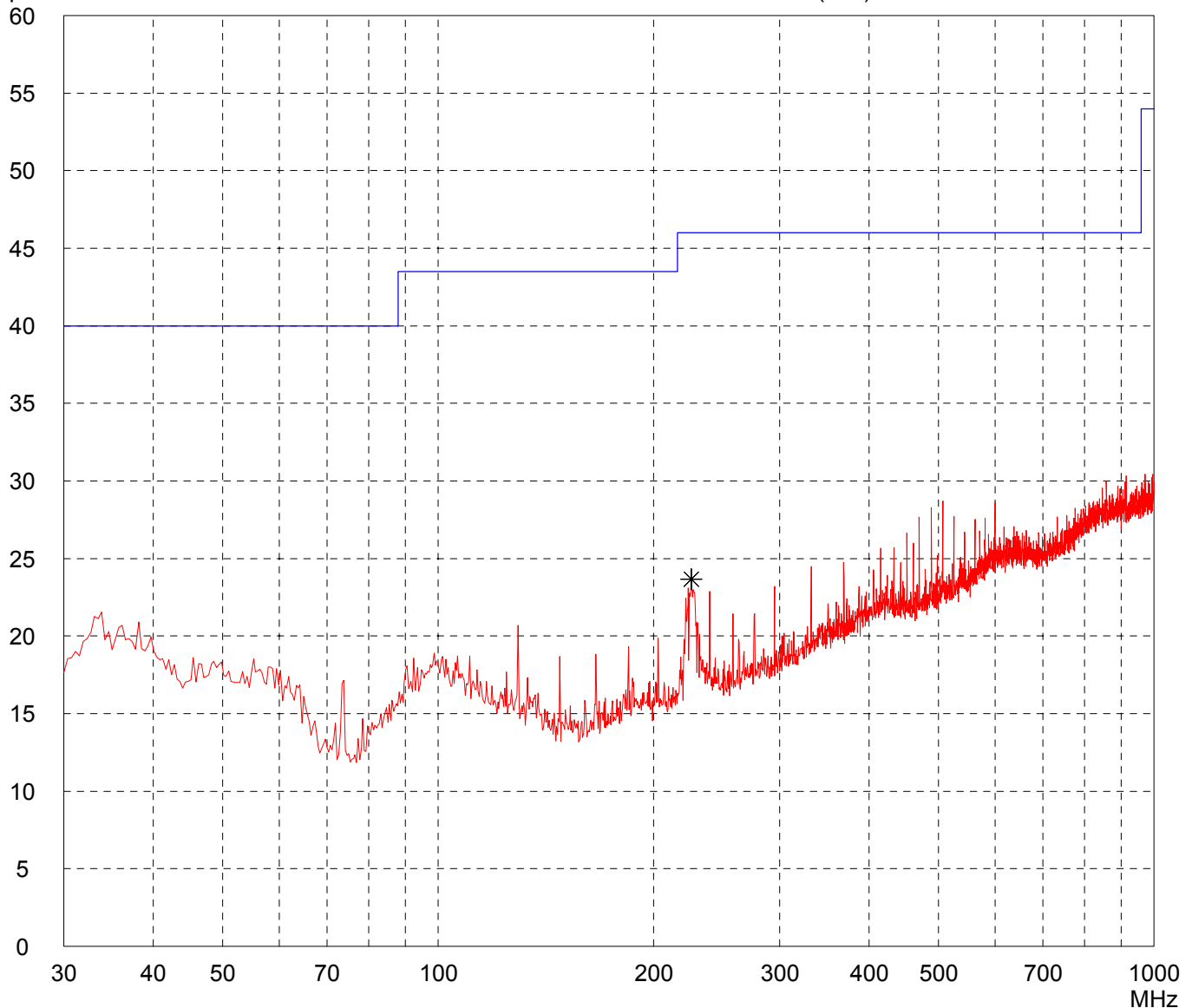
List of values:

Selected by hand

dBµV/m

Limit1: FCC 15.209 (3 m)

Transducer: VULB 9163



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Horizontal Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

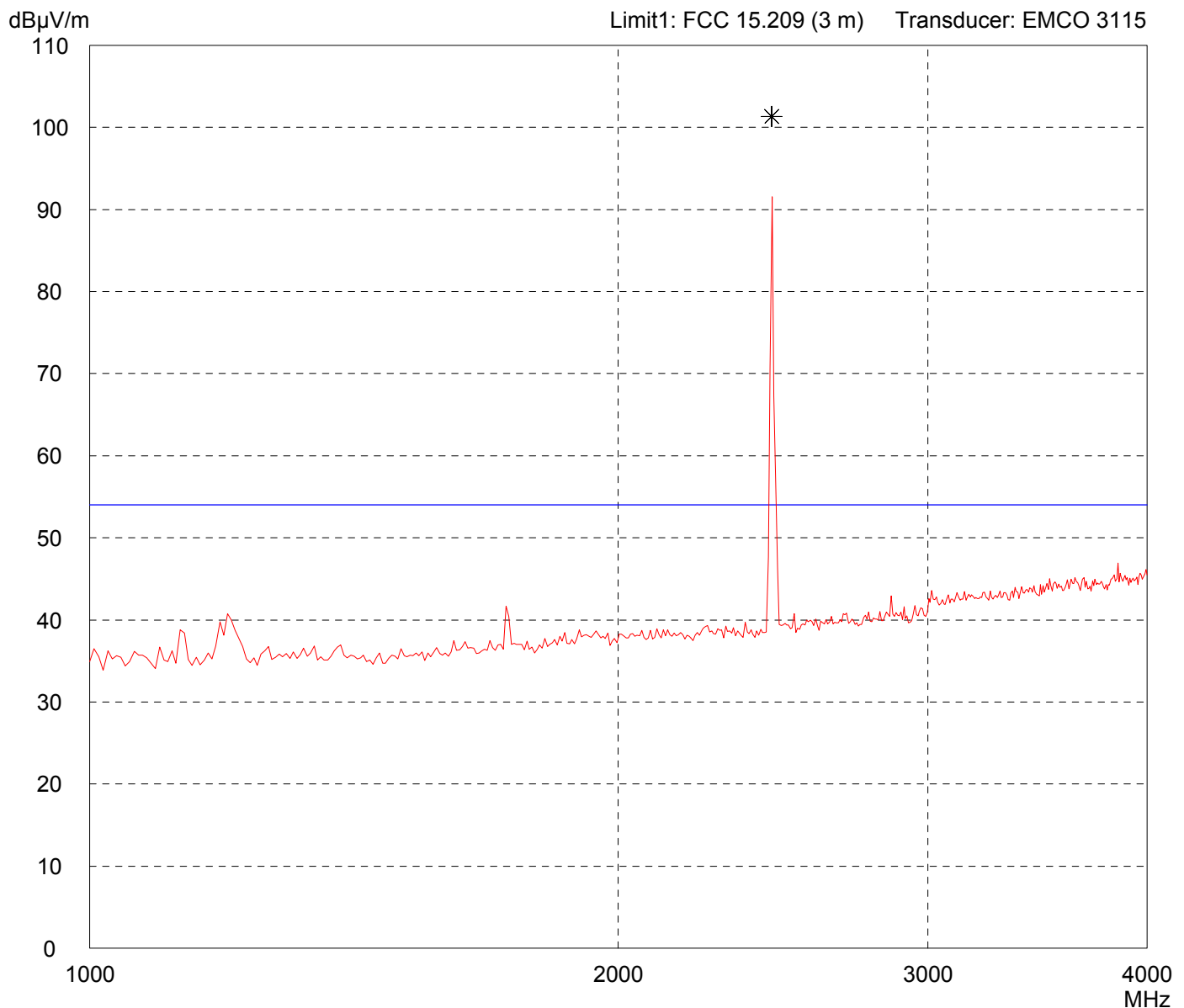
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz

Detector:
Peak

List of values:
Selected by hand



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Vertical Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

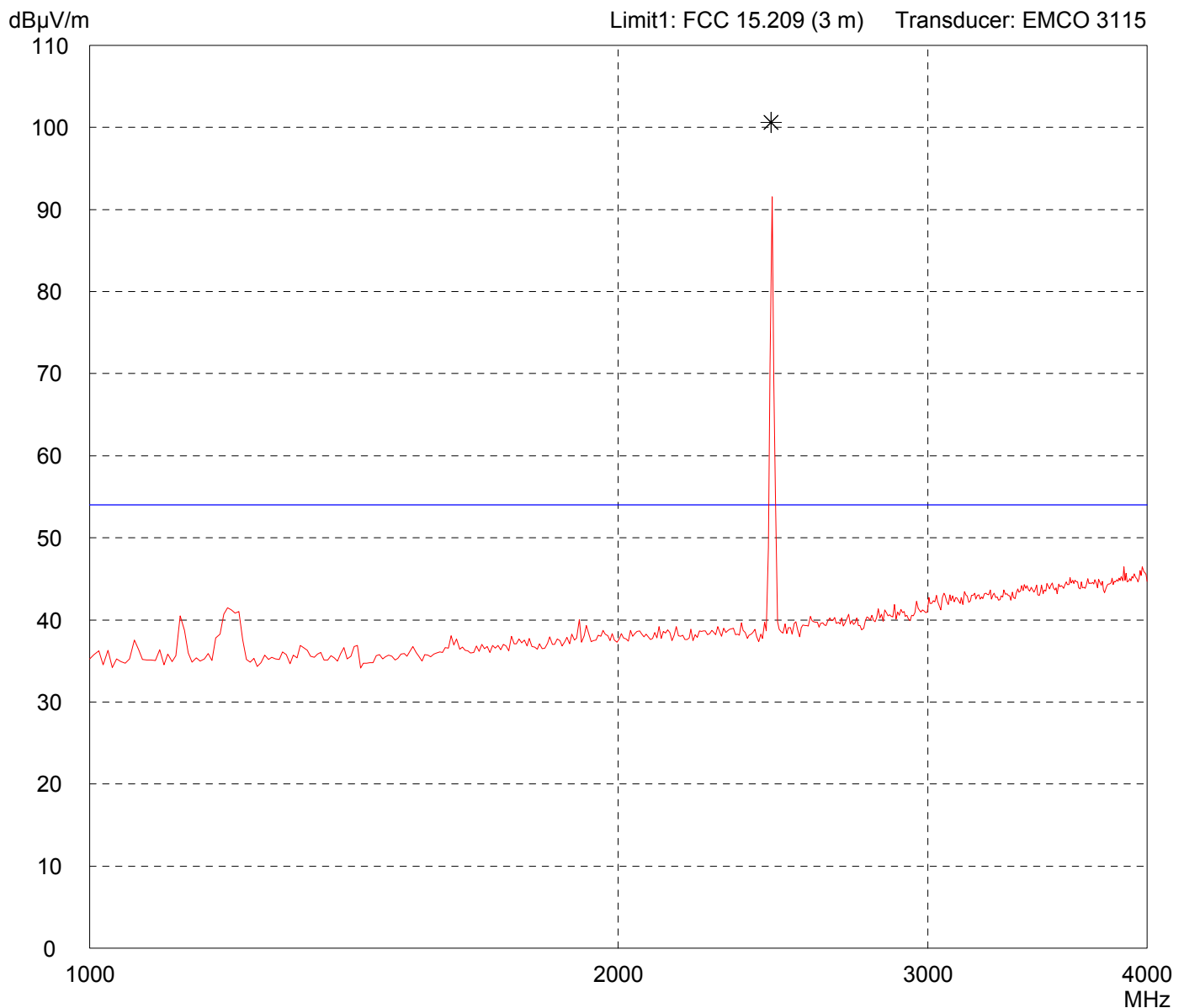
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz

Detector:
Peak

List of values:
Selected by hand



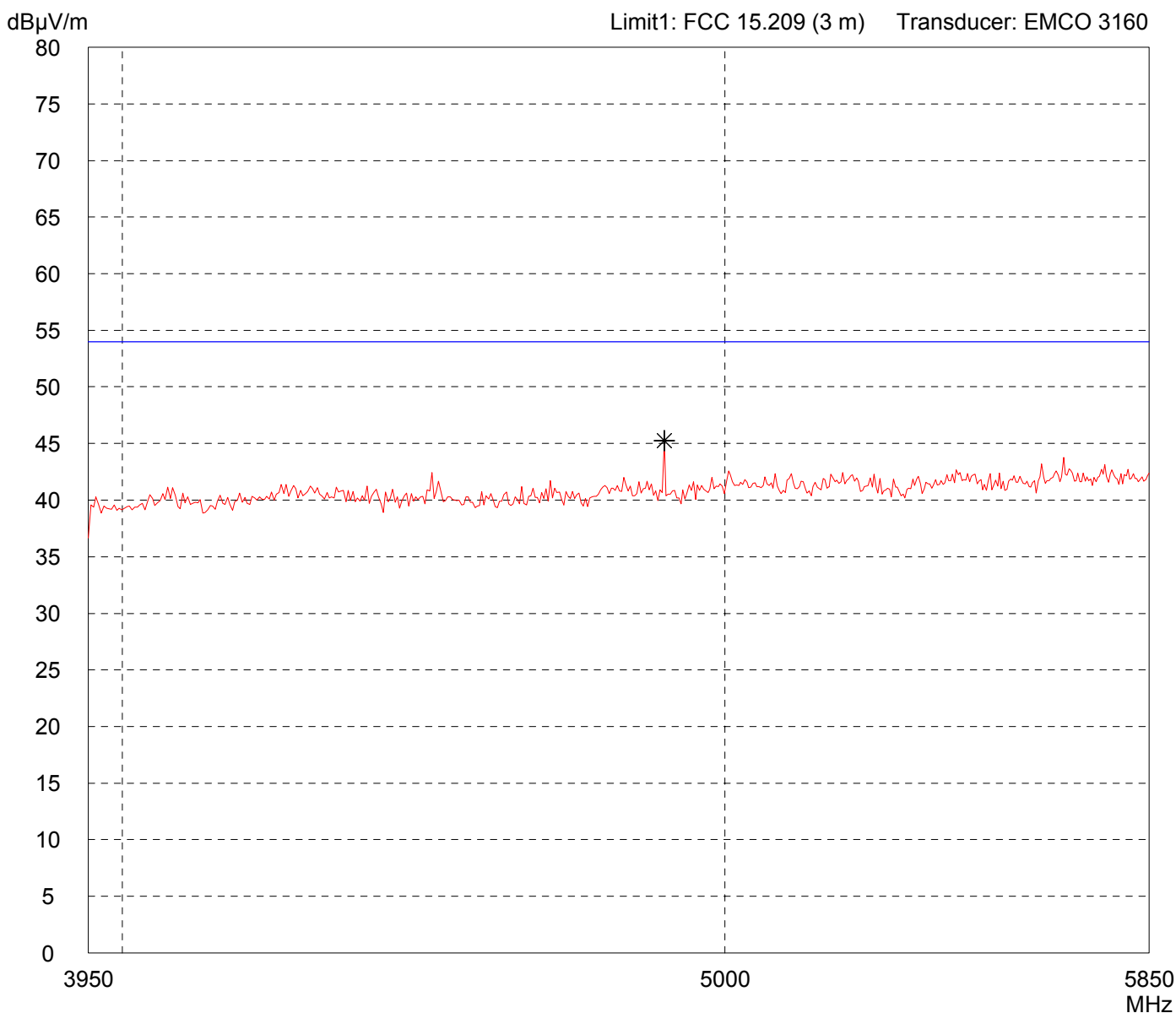
Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

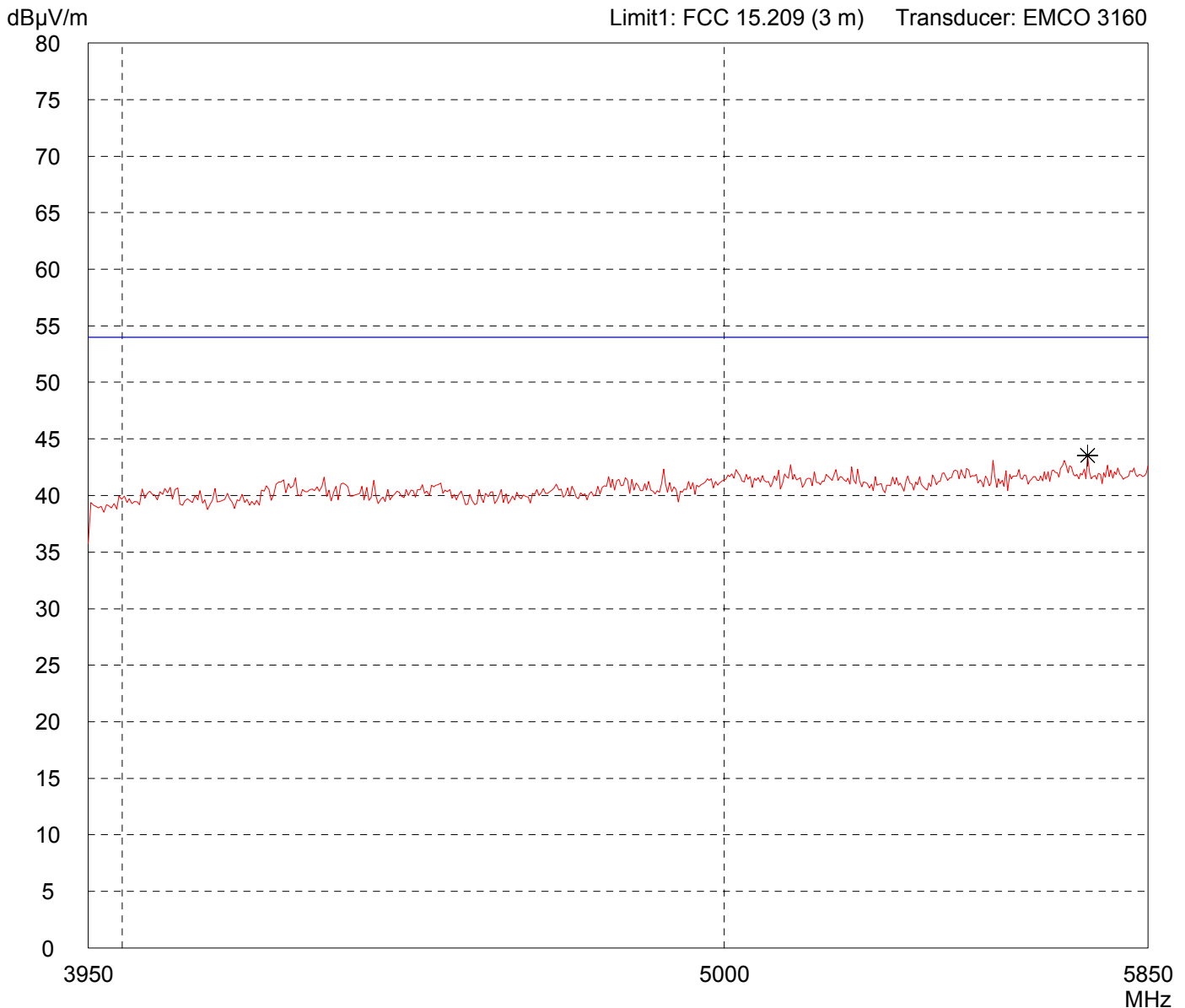


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

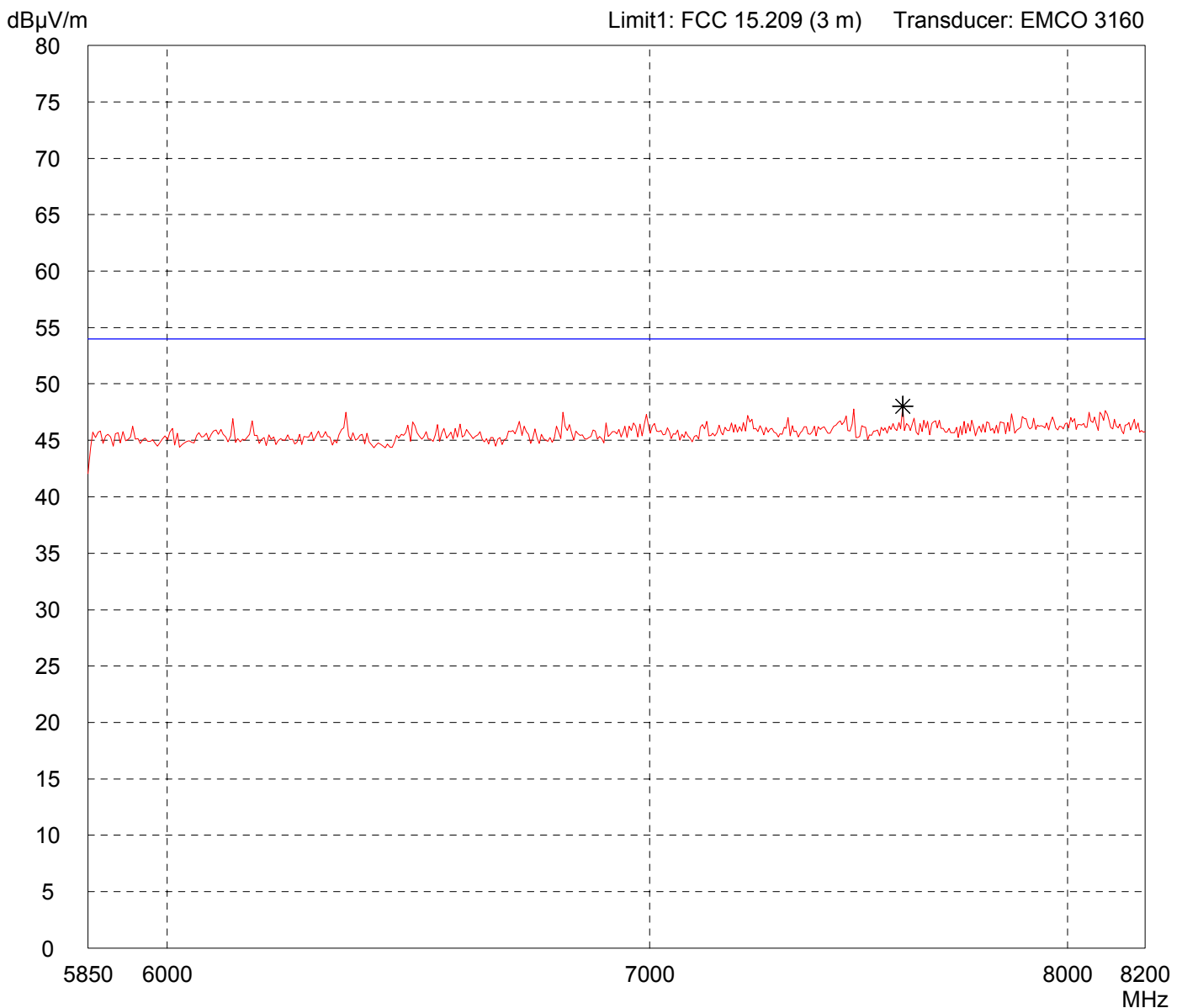


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

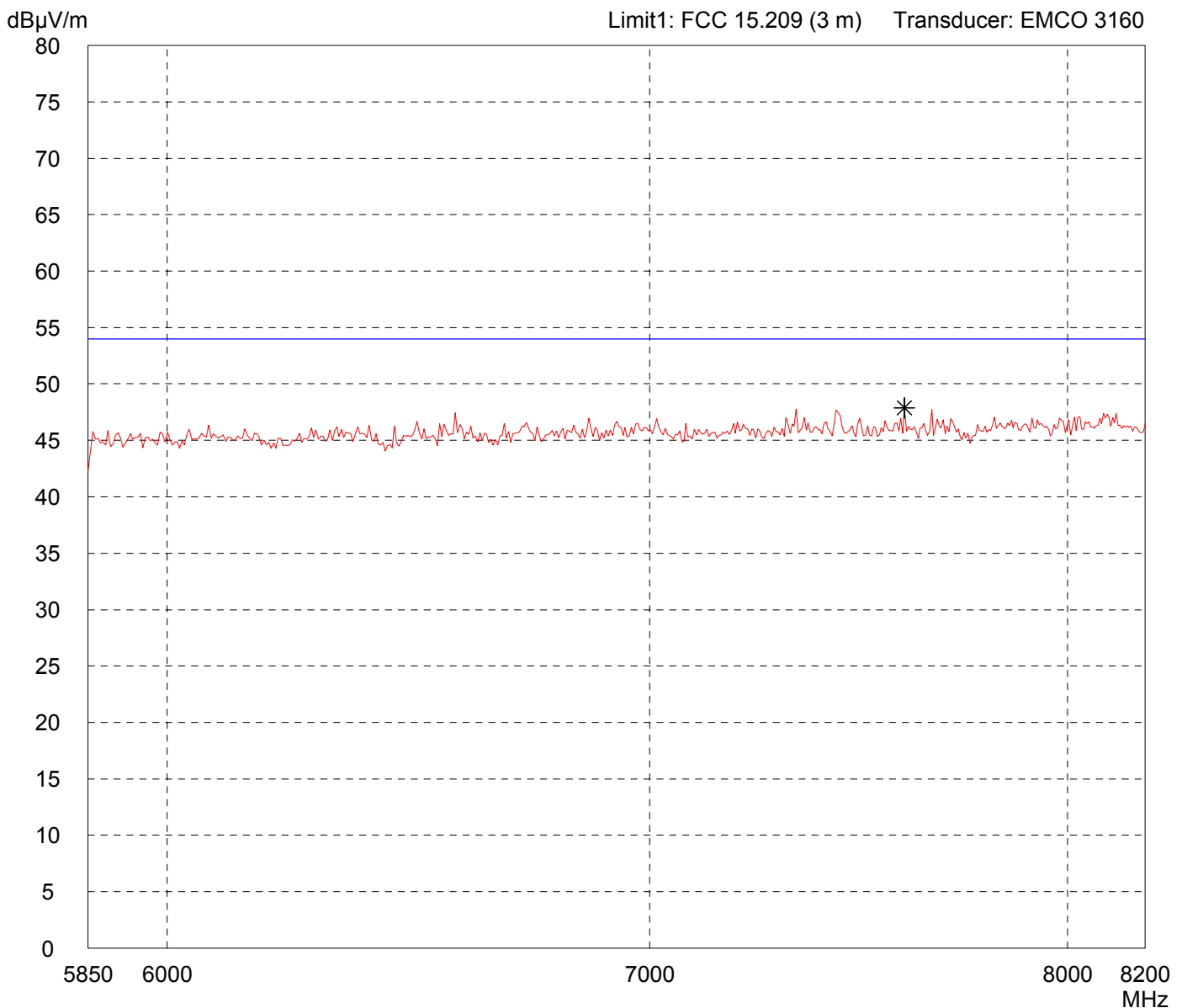


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

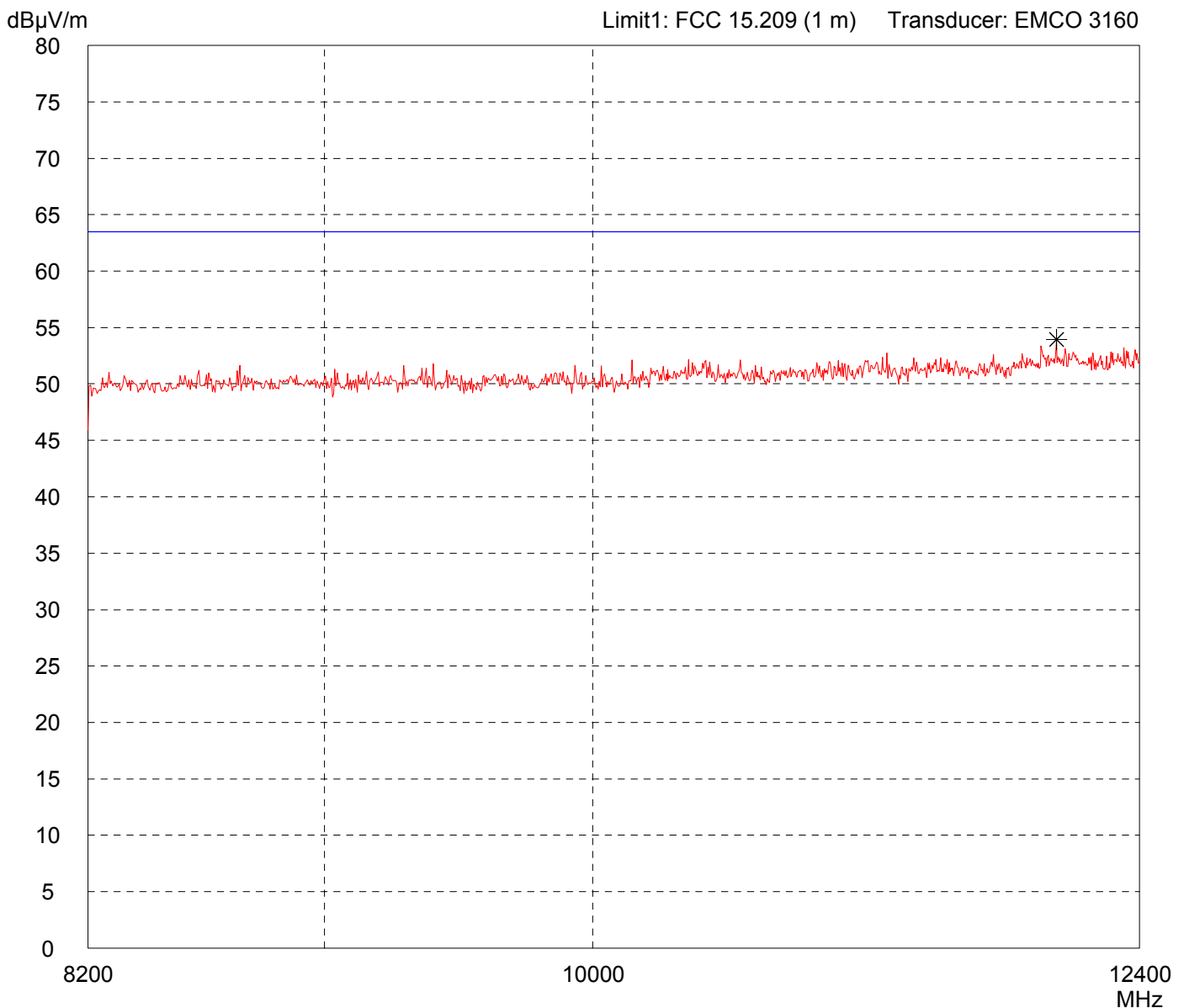


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

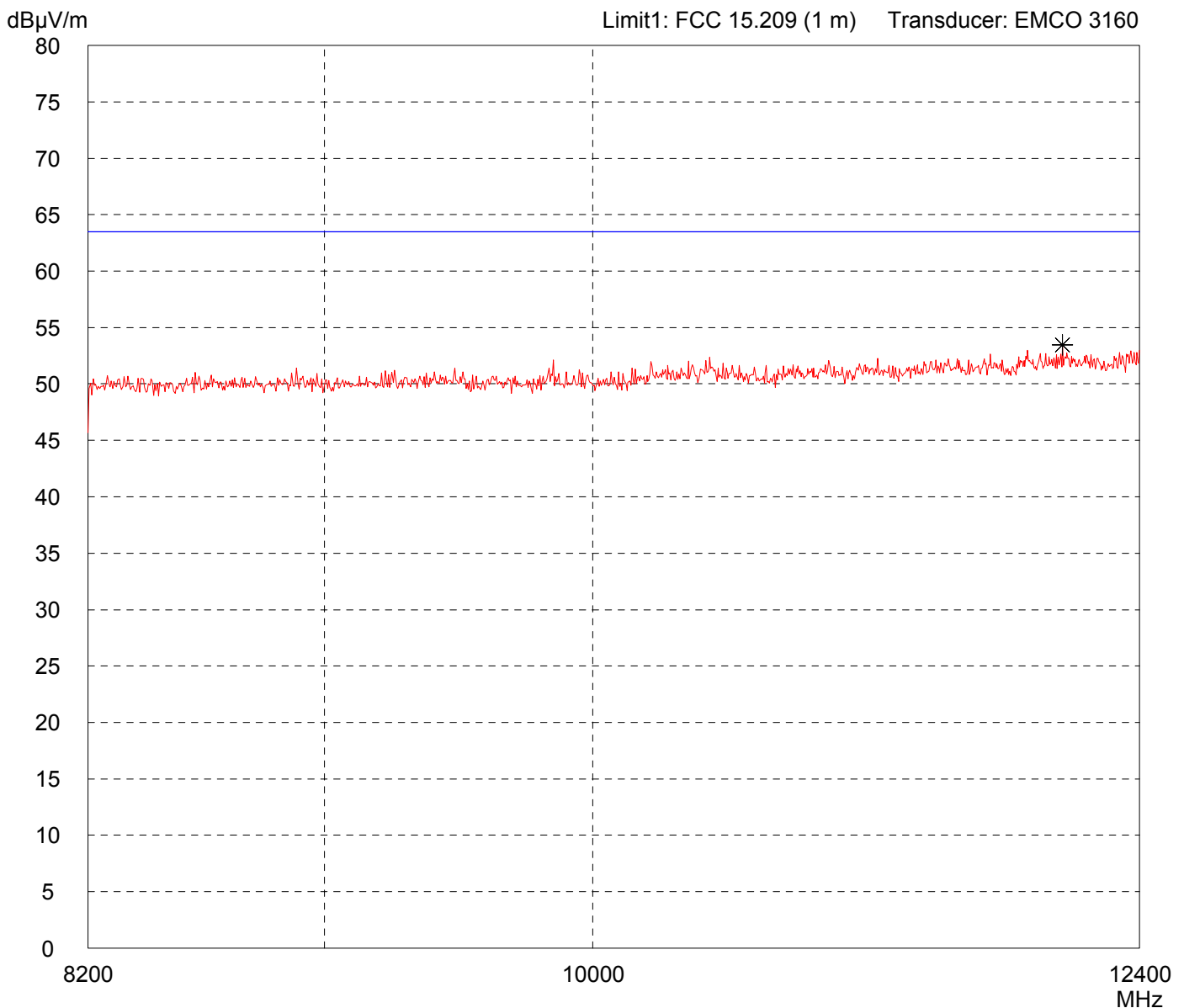


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

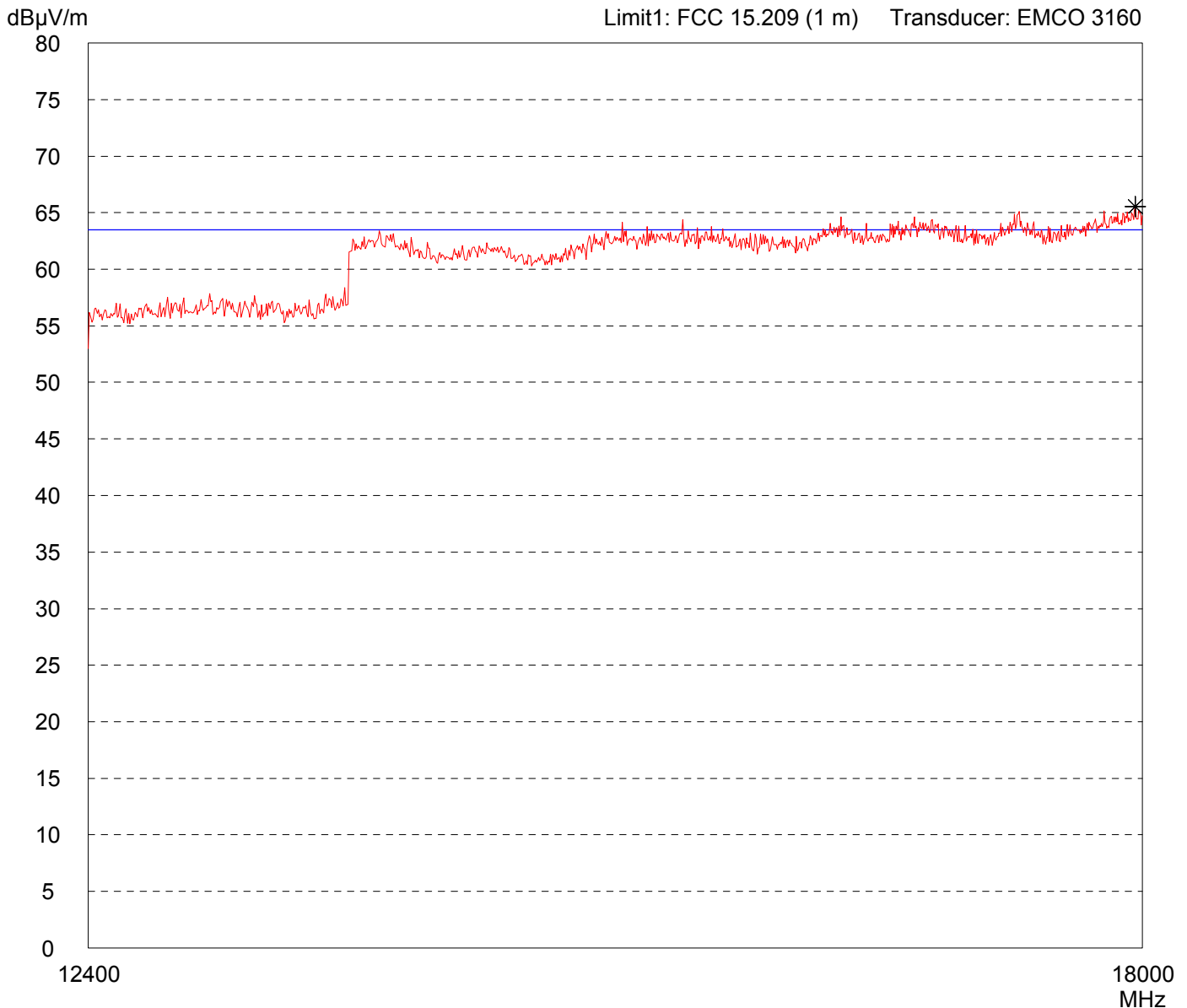


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

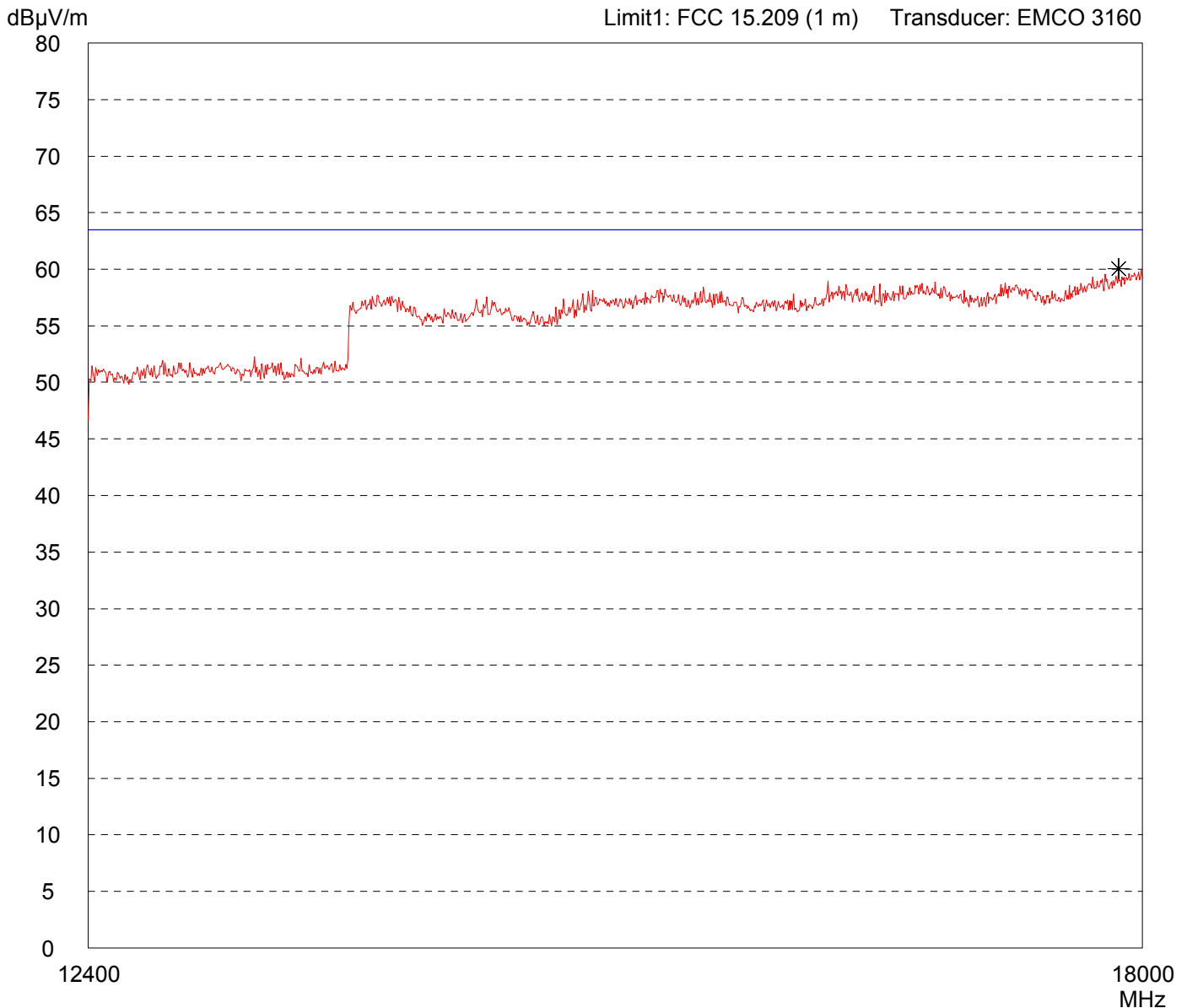


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

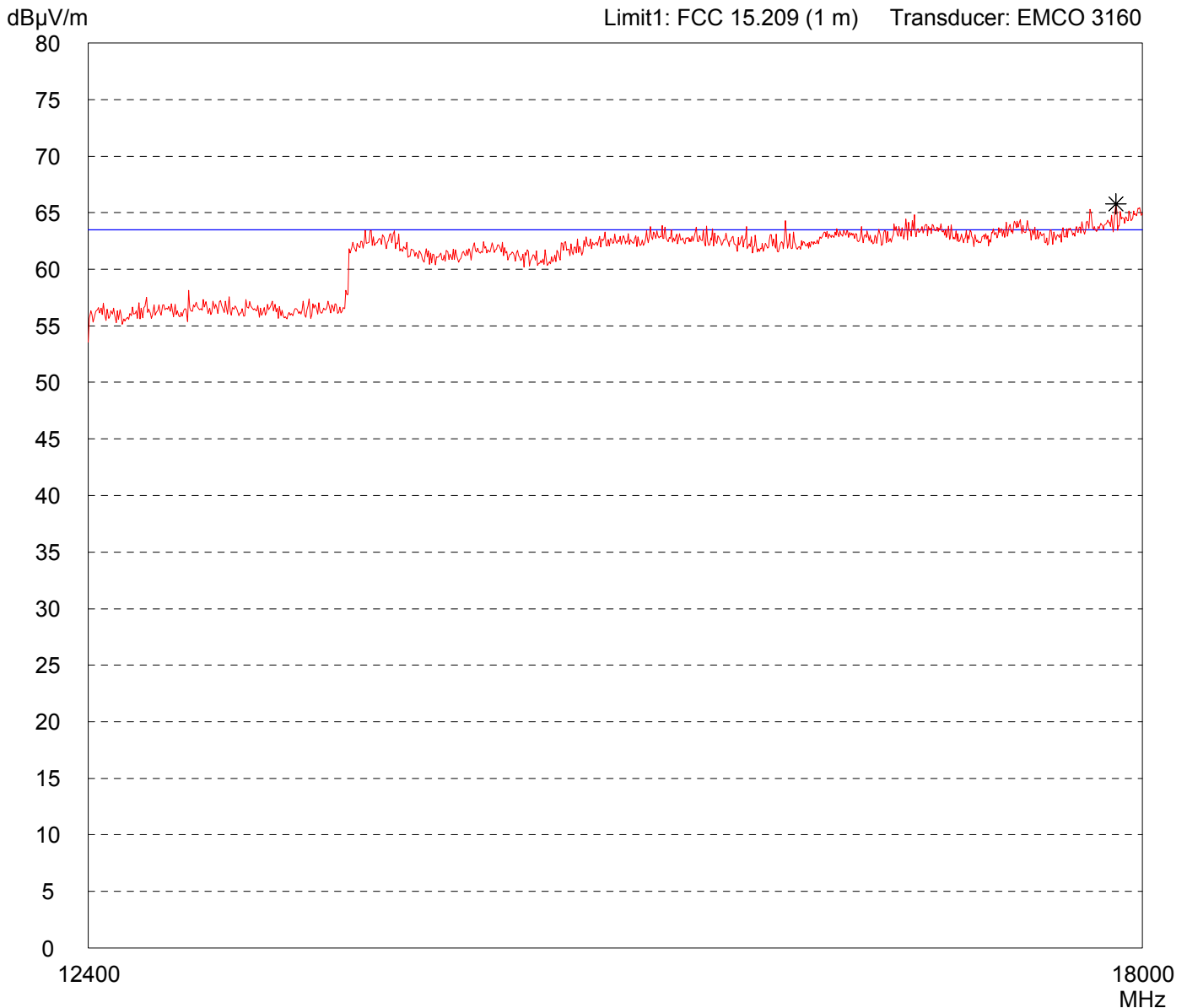


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

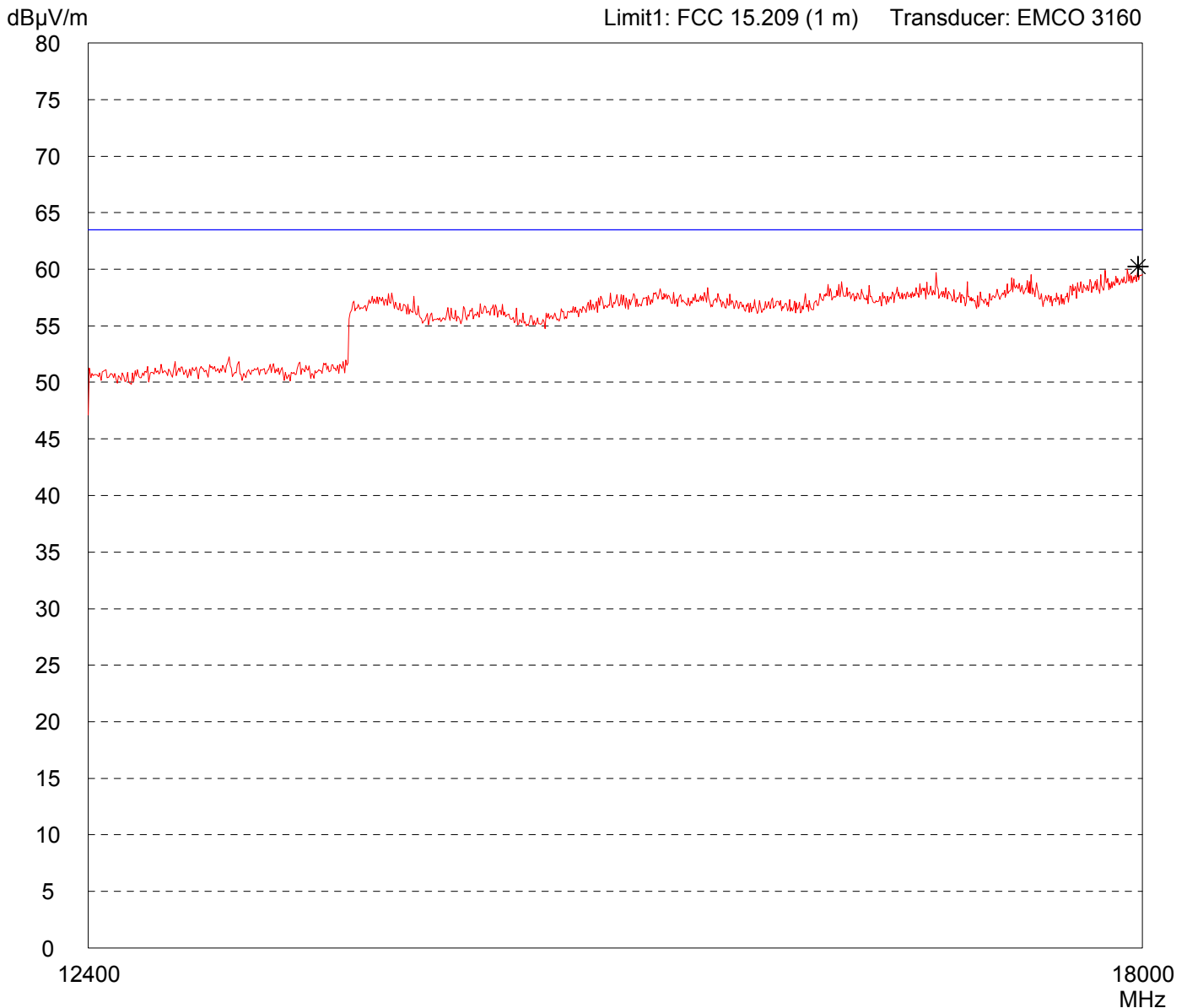


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--



Result: Prescan - VBW = 100 kHz	Project file: 56109-80588
---	-------------------------------------

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

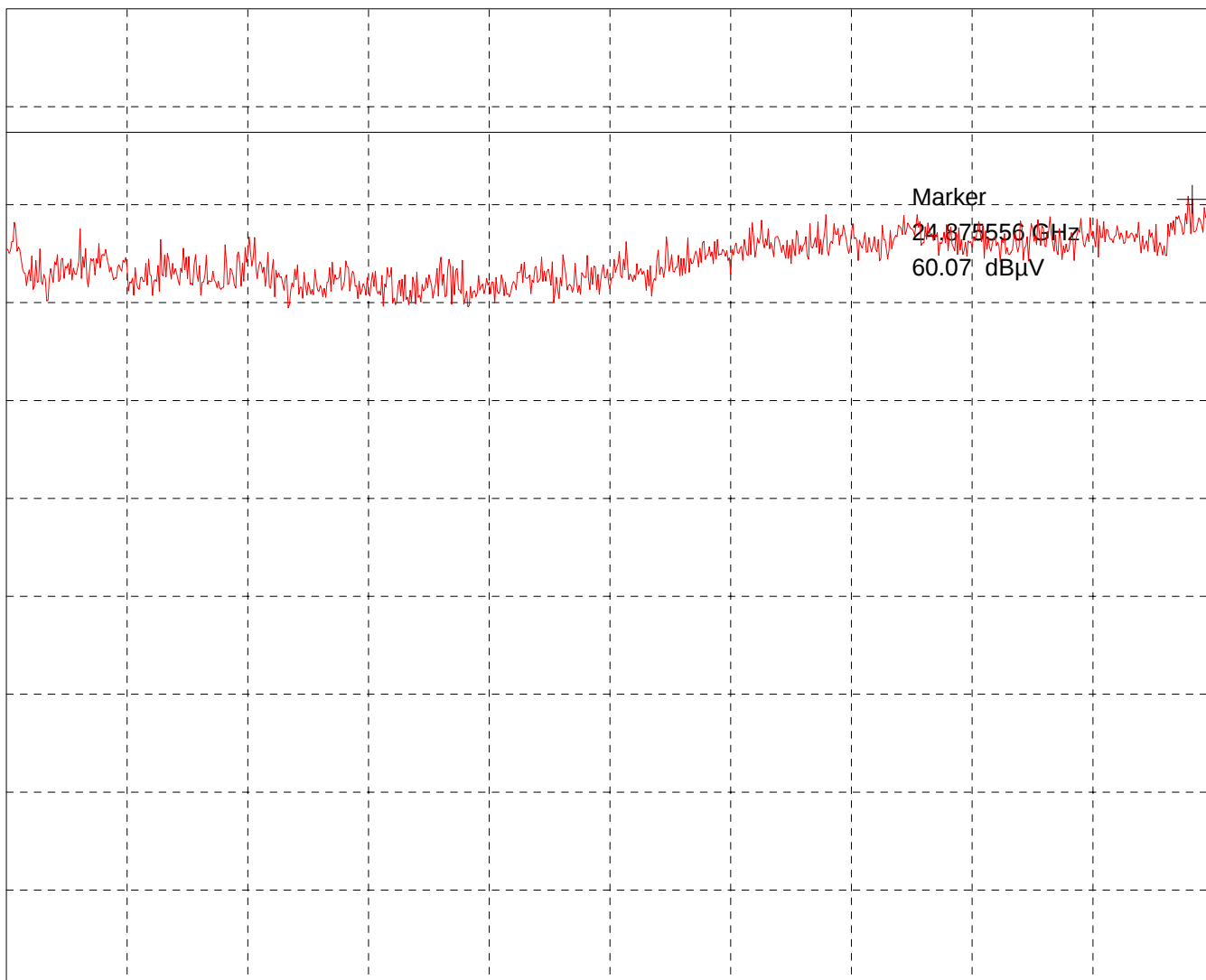
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz
- Polarisation: horizontal
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz
SWP 40 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

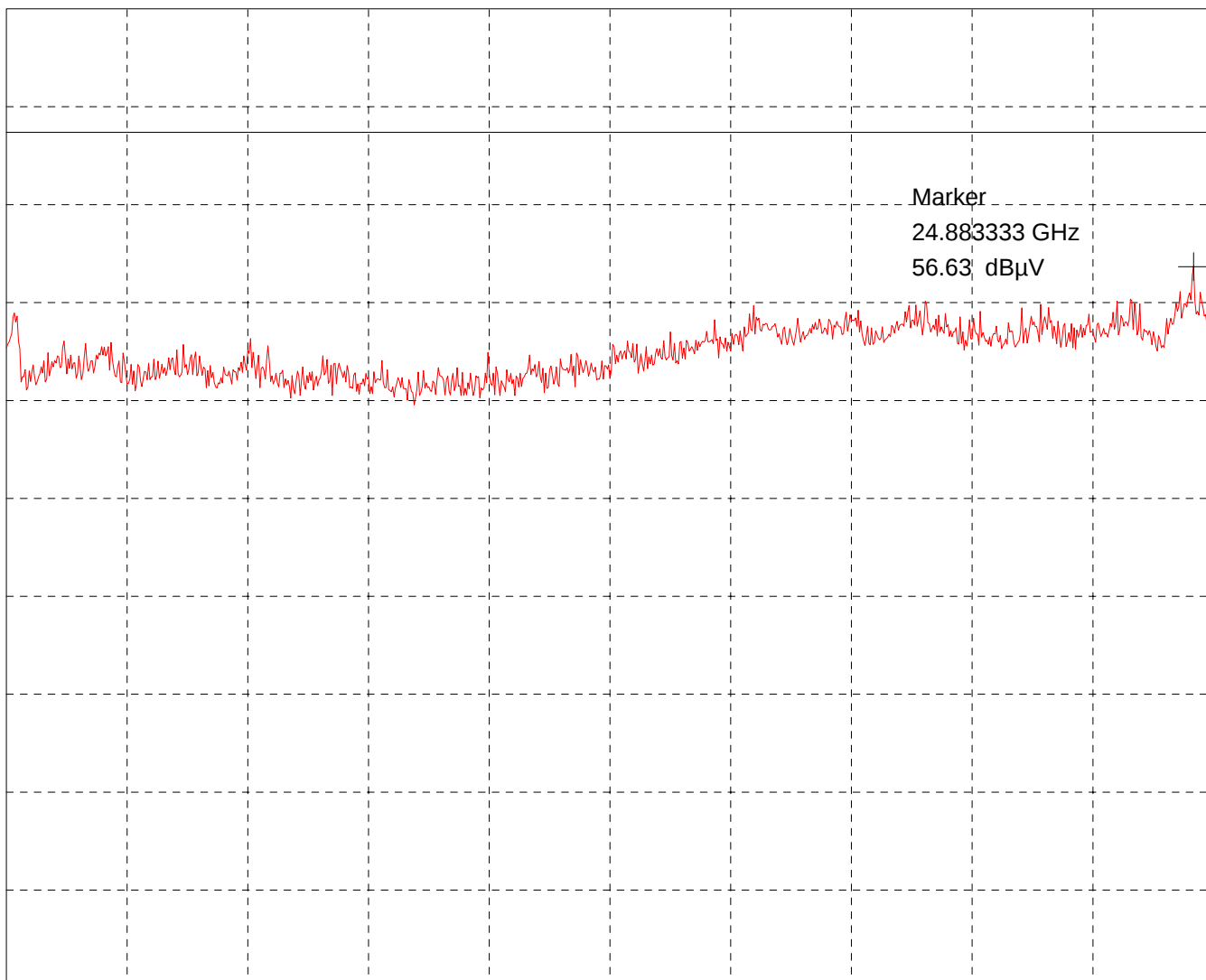
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz
- Polarisation: horizontal
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 100 kHz

Stop 25.000 GHz
SWP 220 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

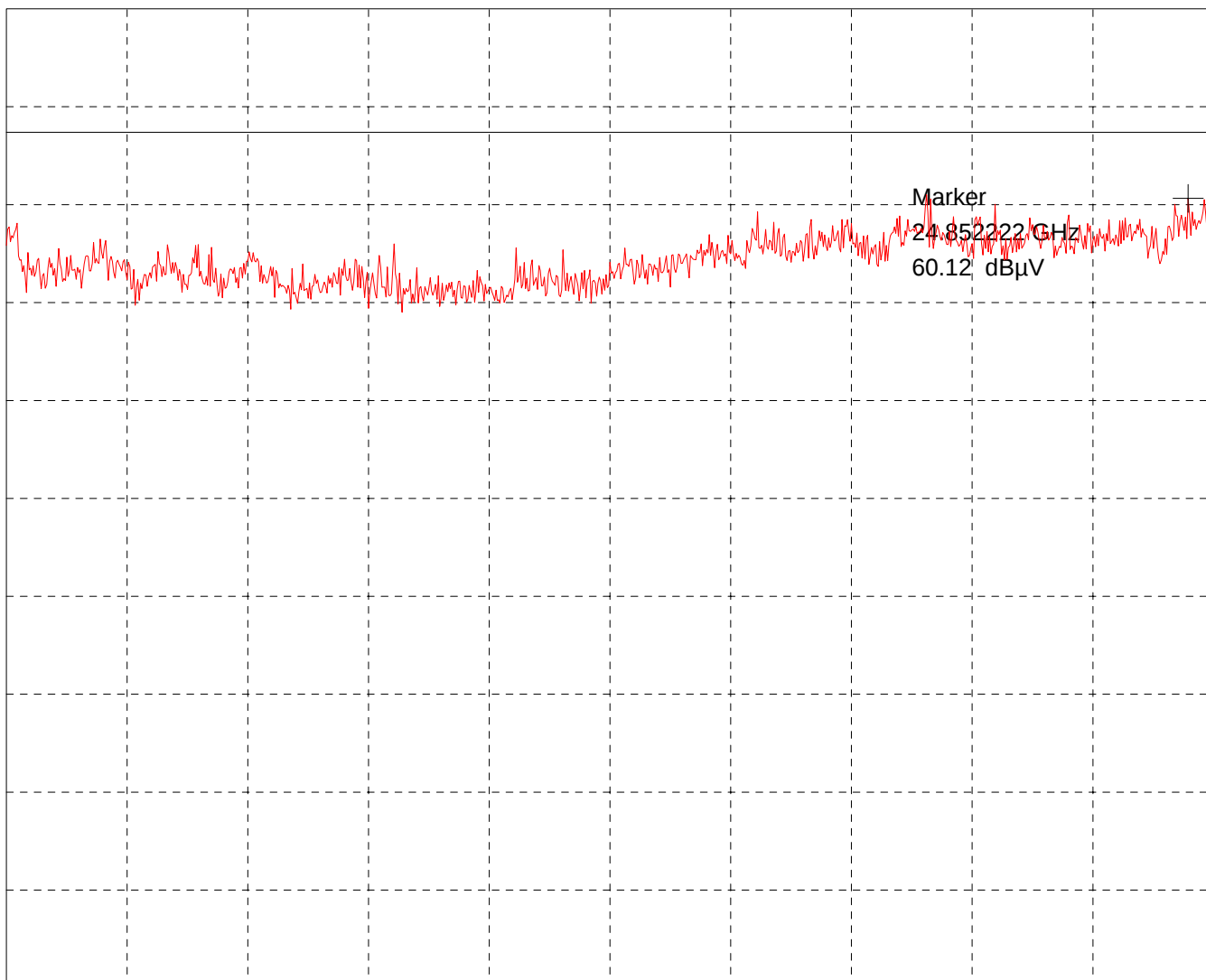
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz
- Polarisation: vertical
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz
SWP 40 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

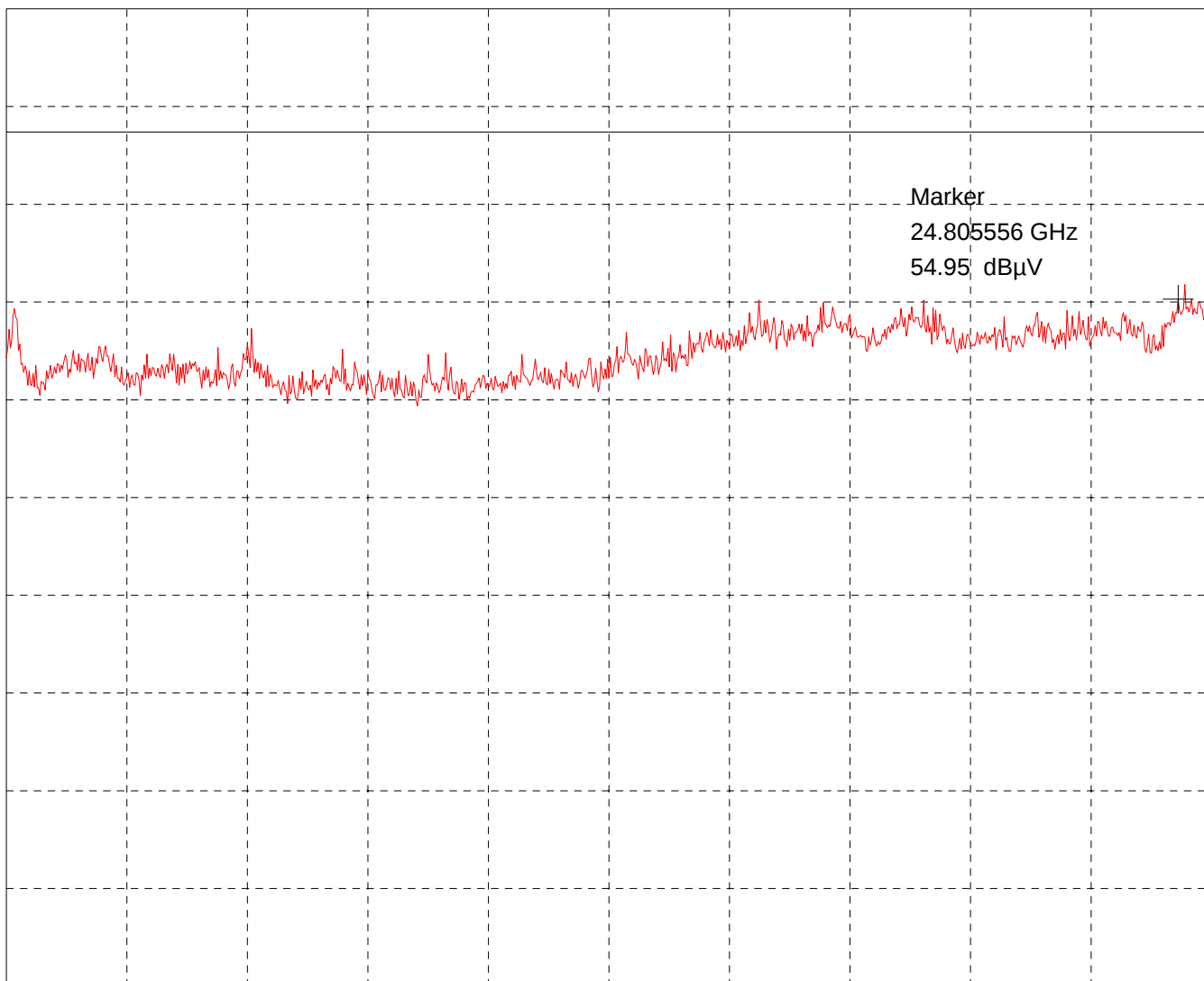
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2444 MHz
- Polarisation: vertical
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 100 kHz

Stop 25.000 GHz
SWP 220 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emission Test 9 kHz - 30 MHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
by hand

File name:
default.emi

Comment:

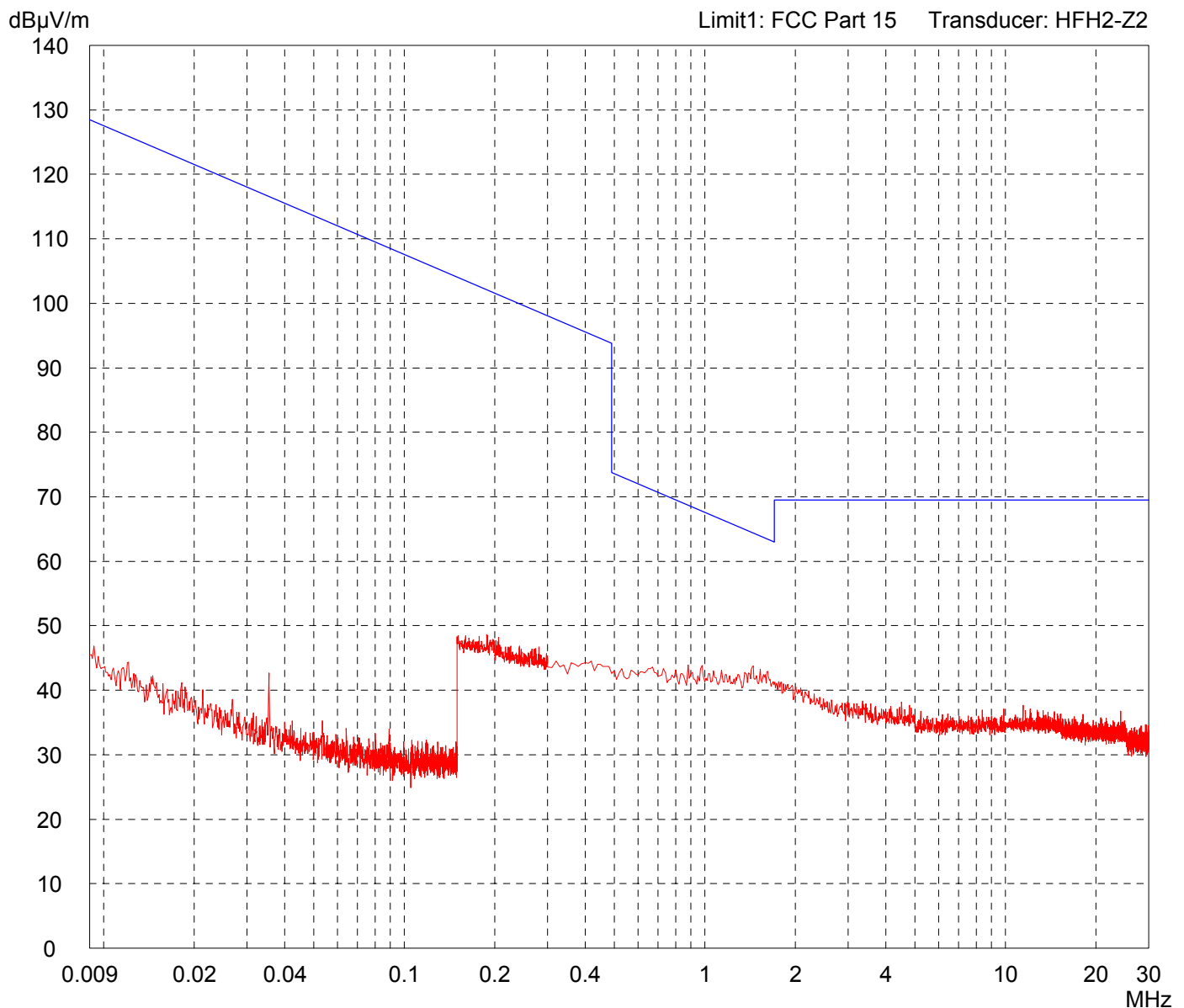
- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz

Detector:
Peak

List of values:

10 dB Margin

50 Subranges



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Horizontal Polarization**

Date of test:
06/11/2008

Operator:
M. Steindl

Test performed:
automatically

File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz

Detector:
Peak

List of values:

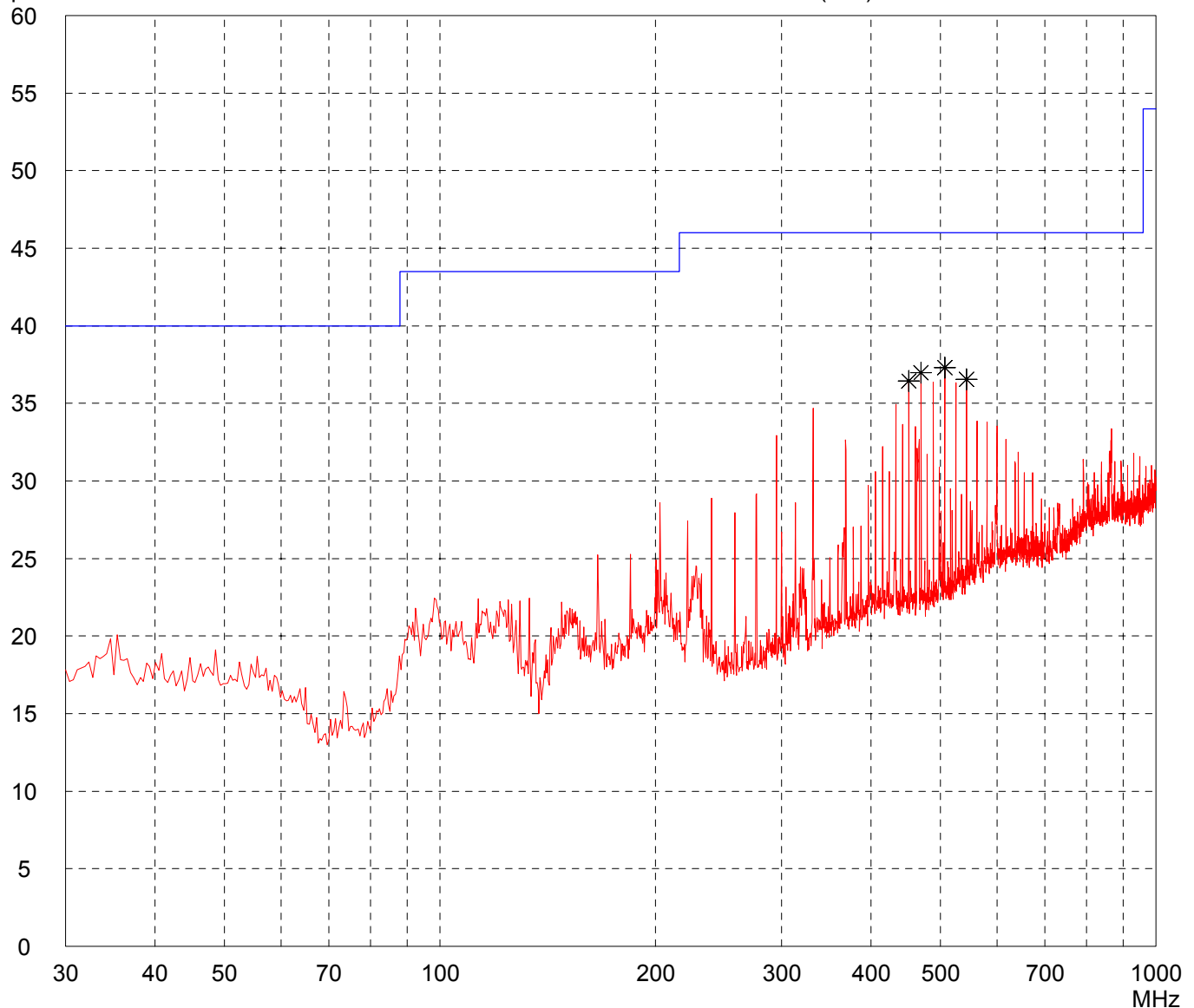
10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC 15.209 (3 m)

Transducer: VULB 9163



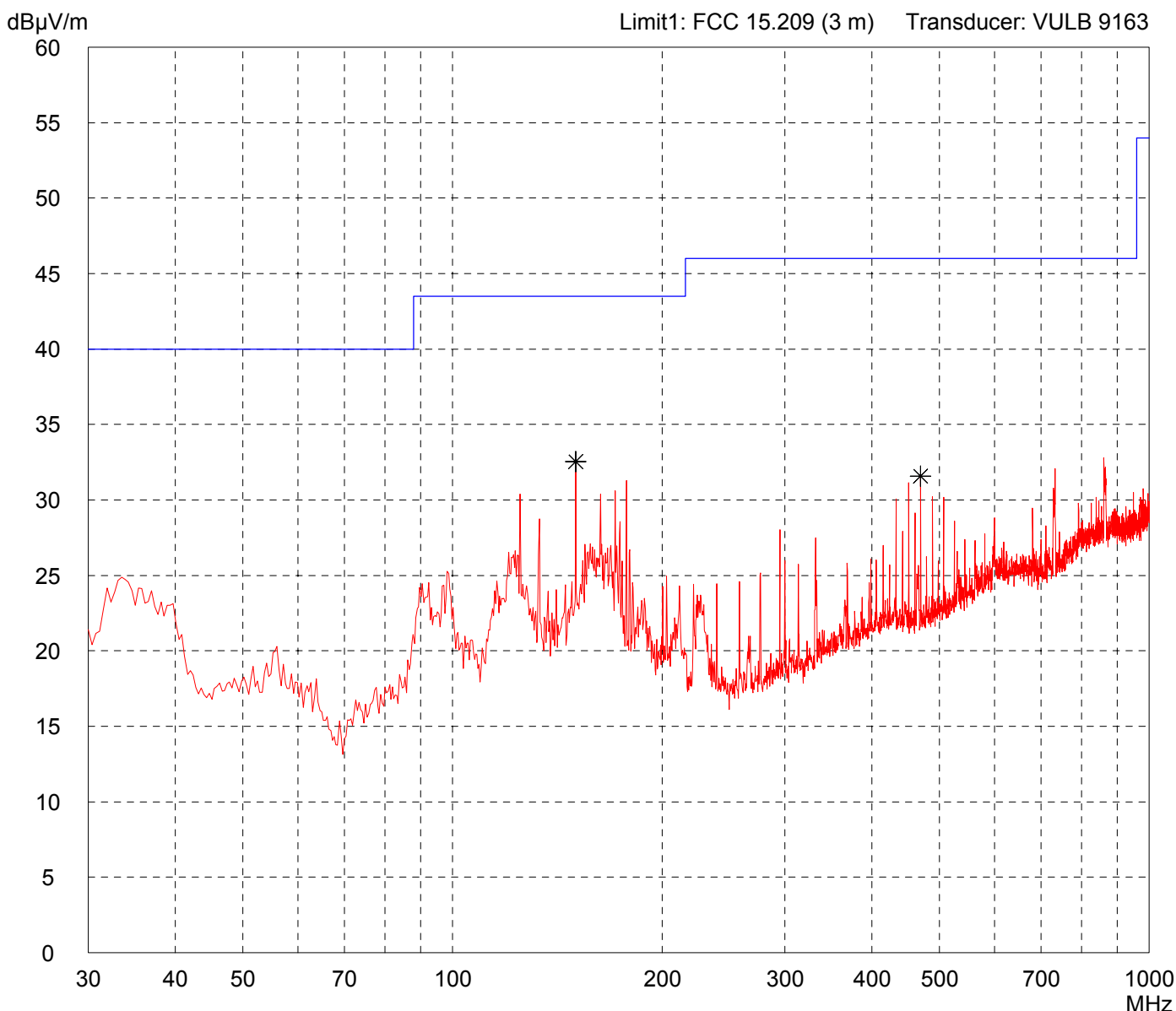
Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/11/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--



Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Horizontal Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

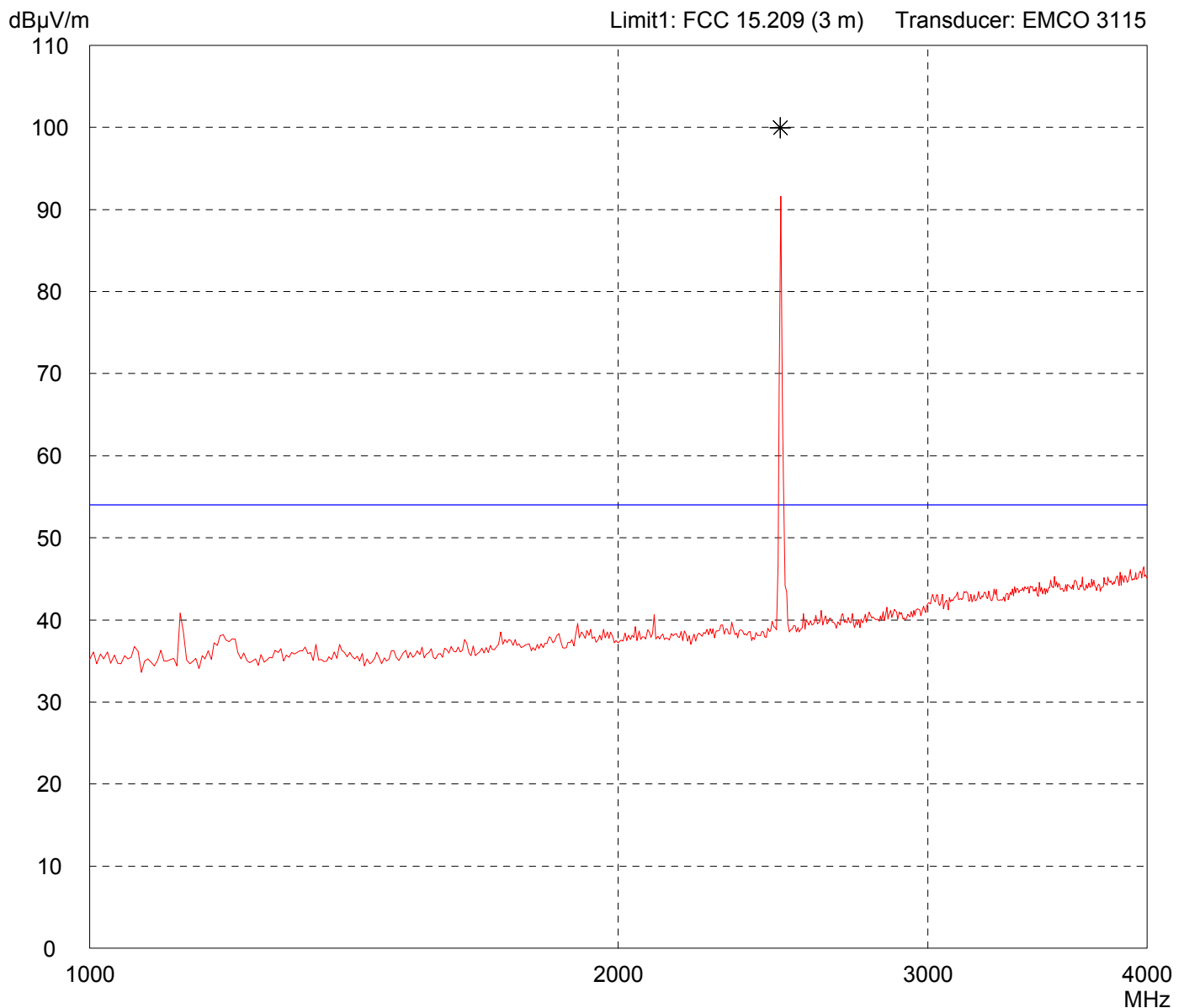
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz

Detector:
Peak

List of values:
Selected by hand



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 1 GHz - 4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Vertical Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

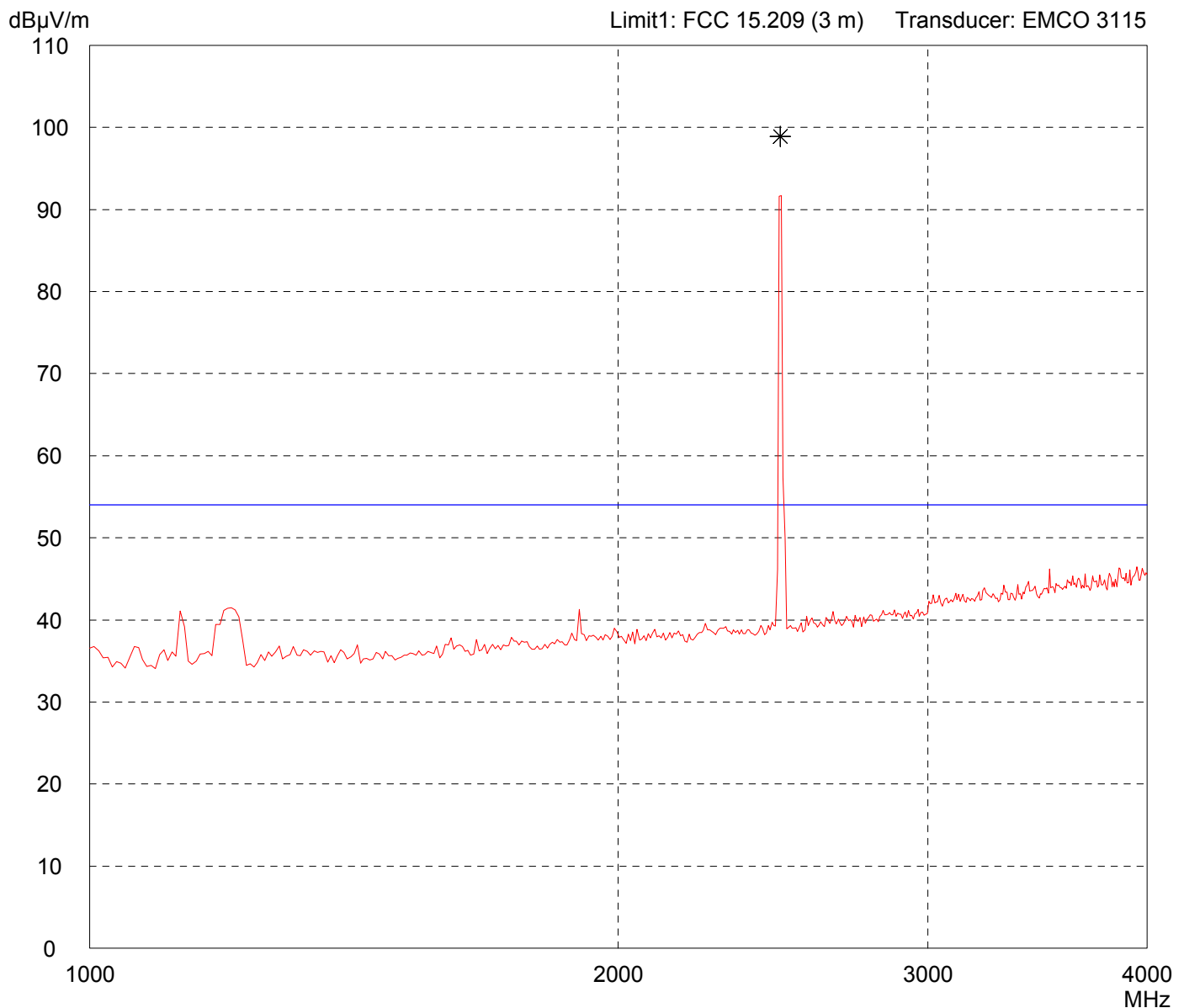
File name:
default.emi

Comment:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz

Detector:
Peak

List of values:
Selected by hand



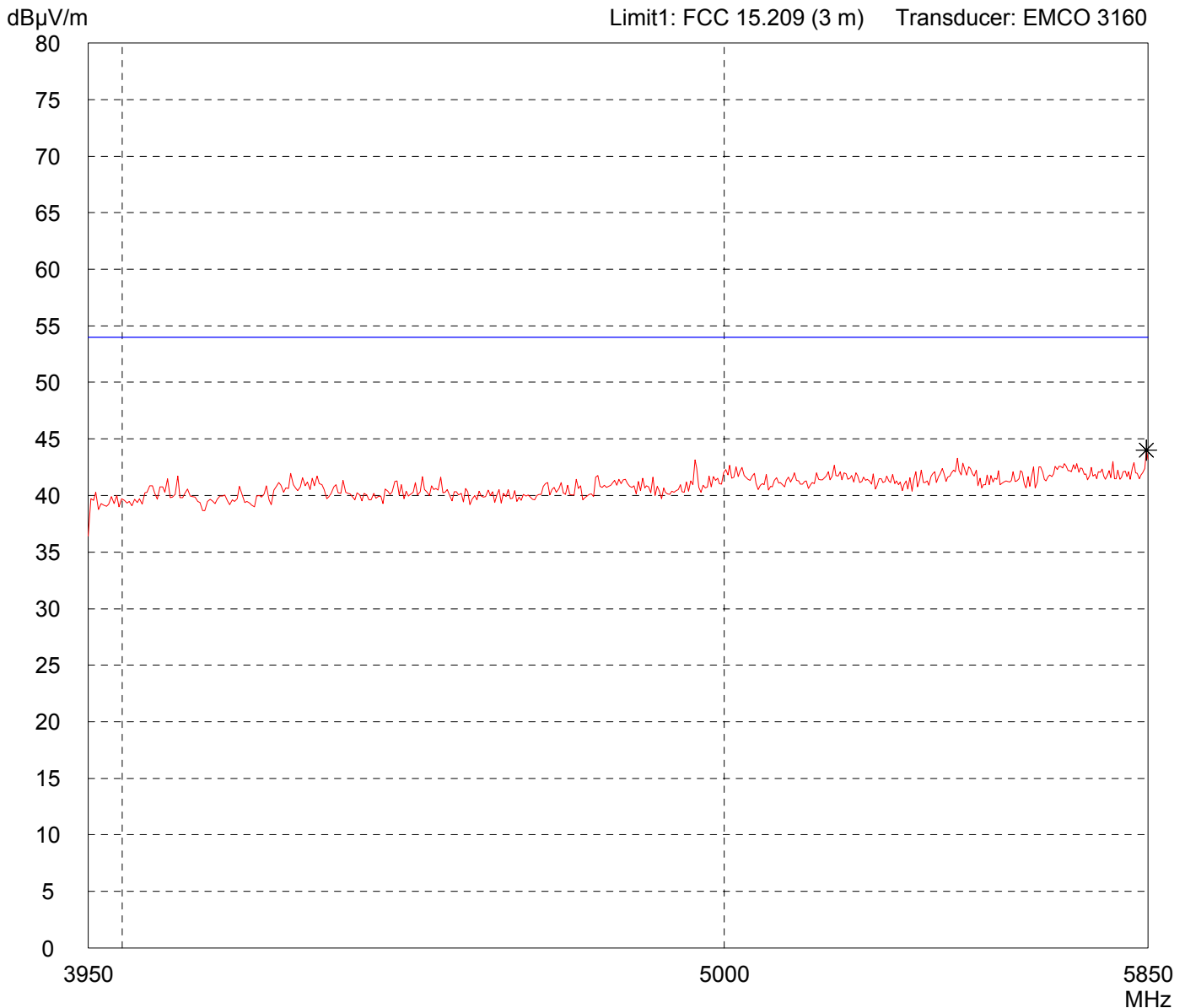
Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

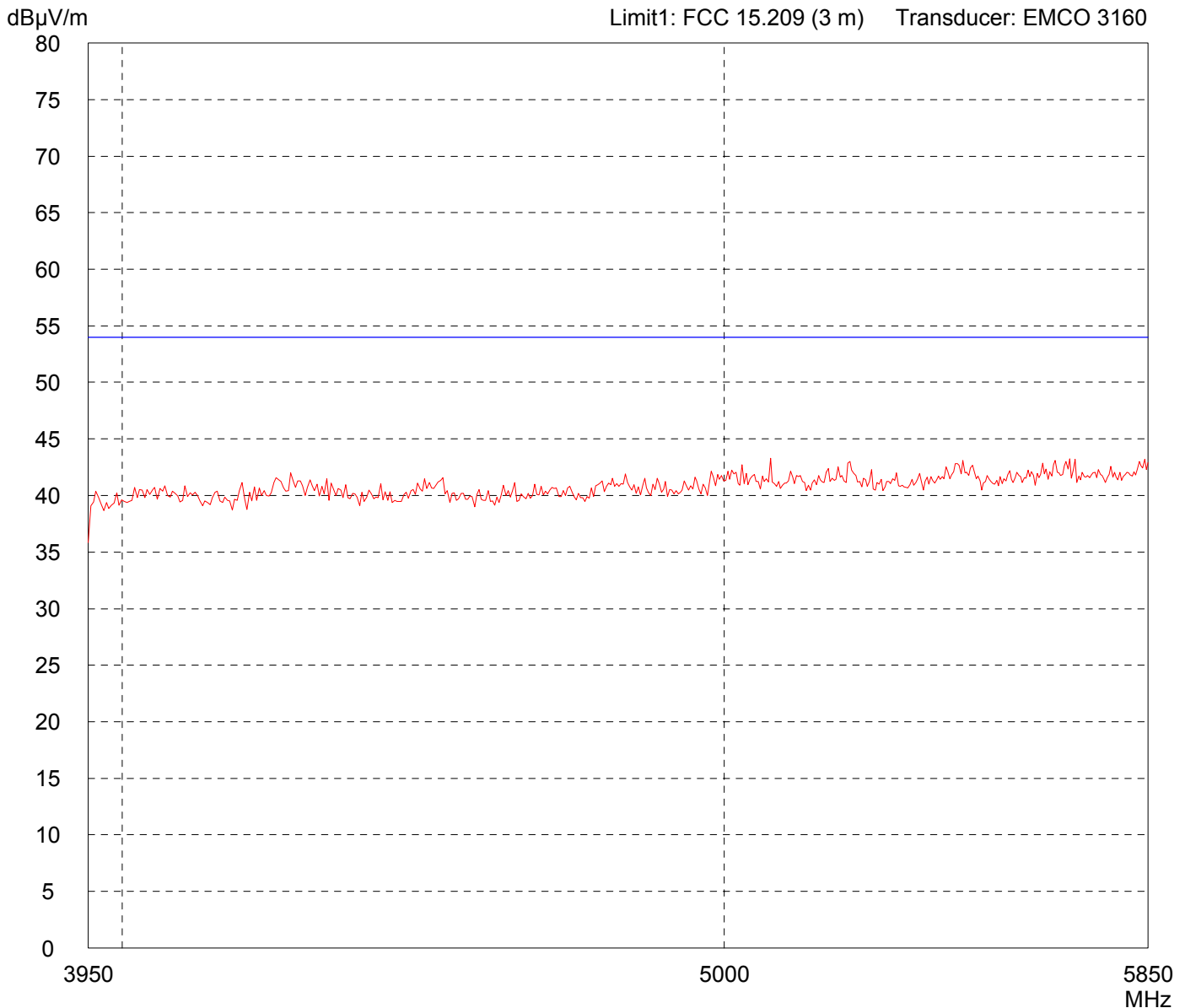


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 3.95 GHz - 5.85 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

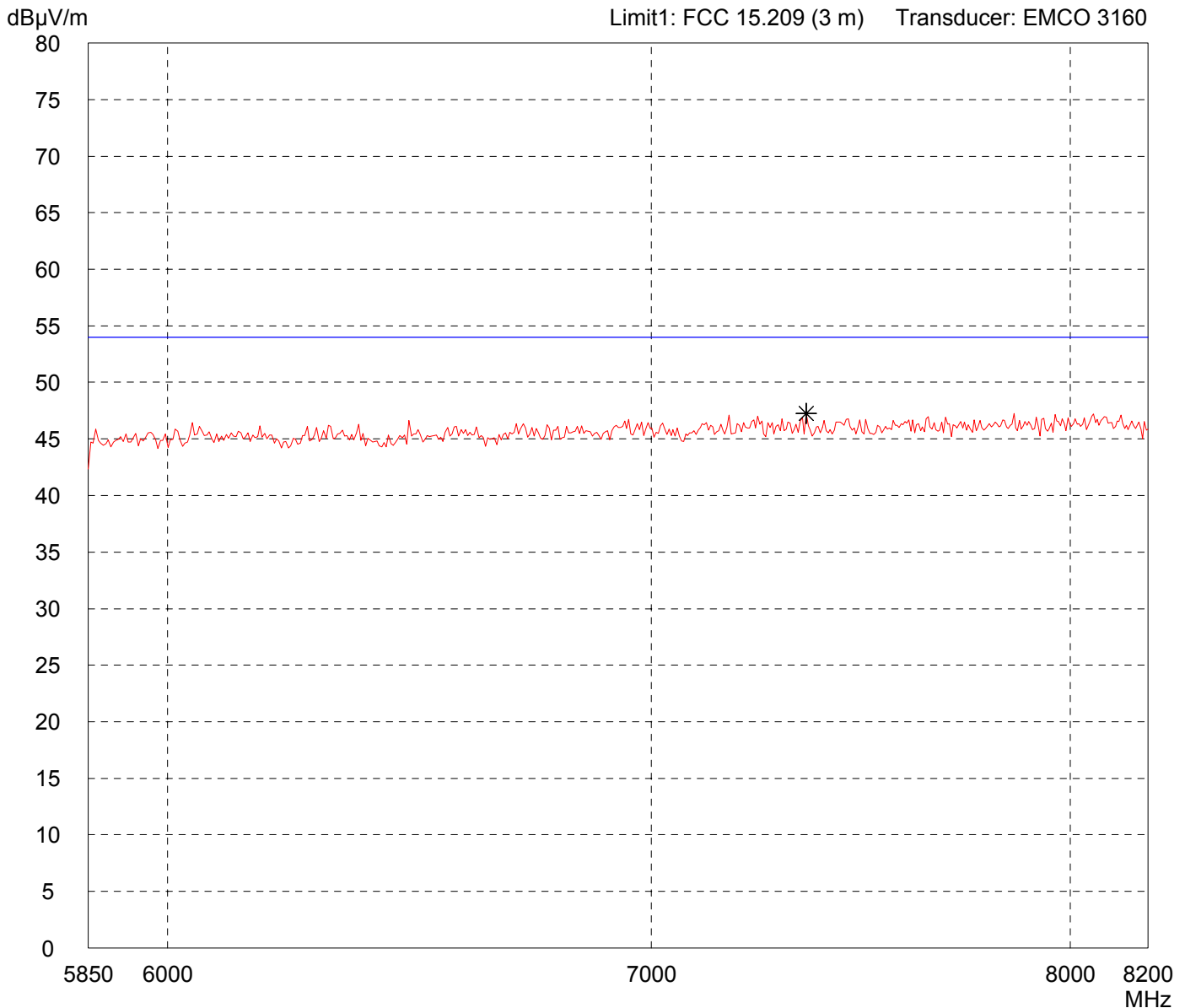


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

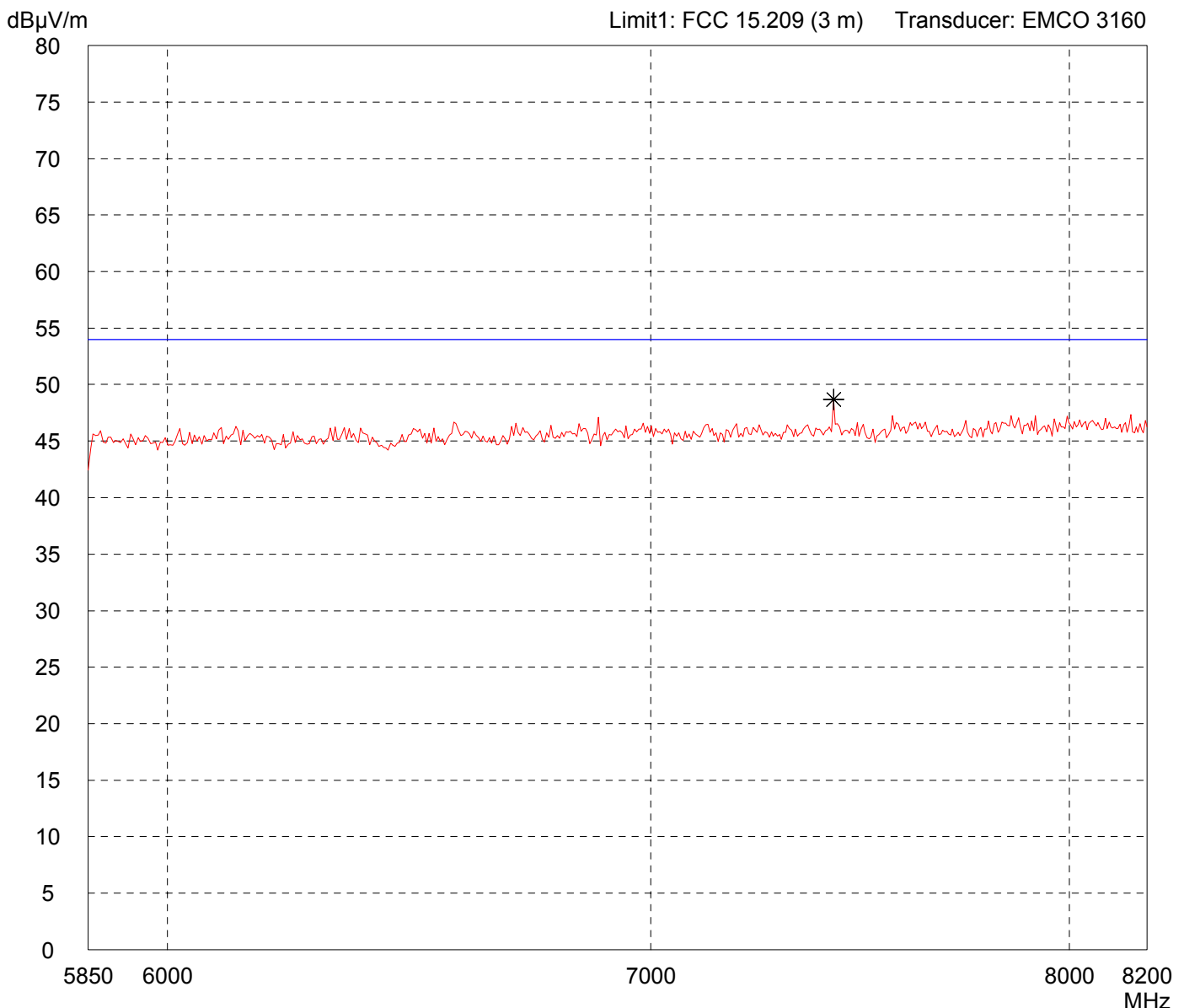


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

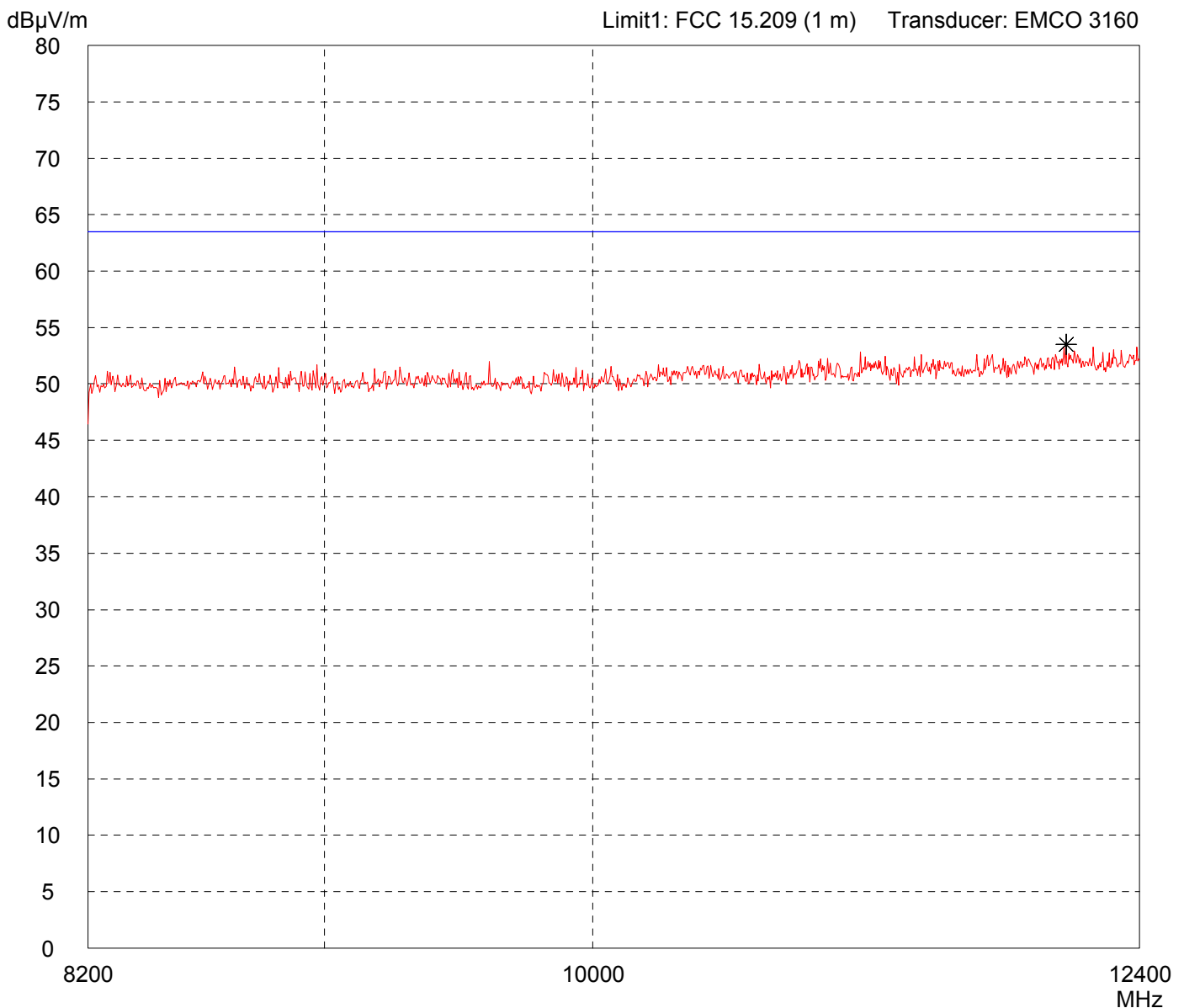


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

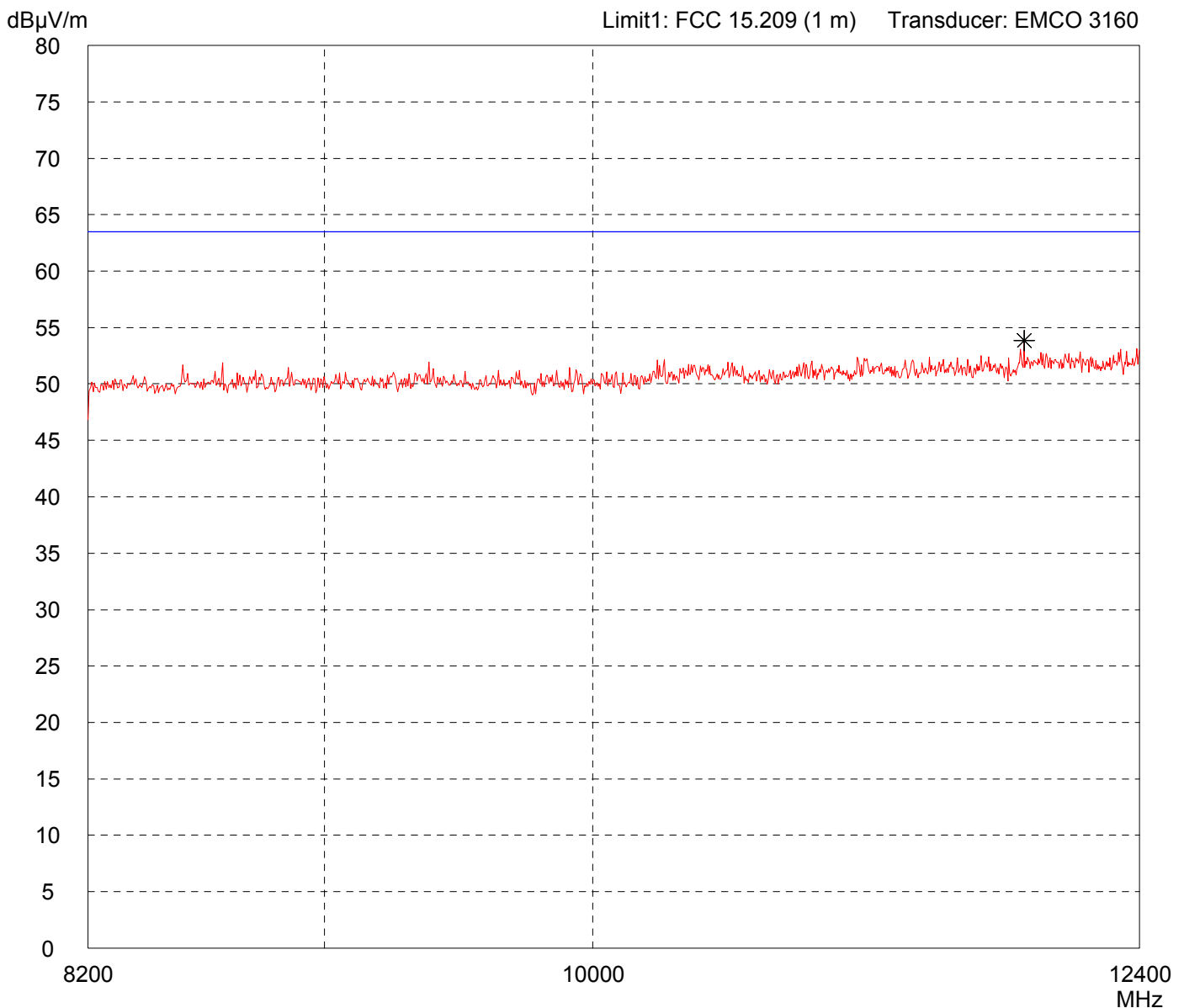


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

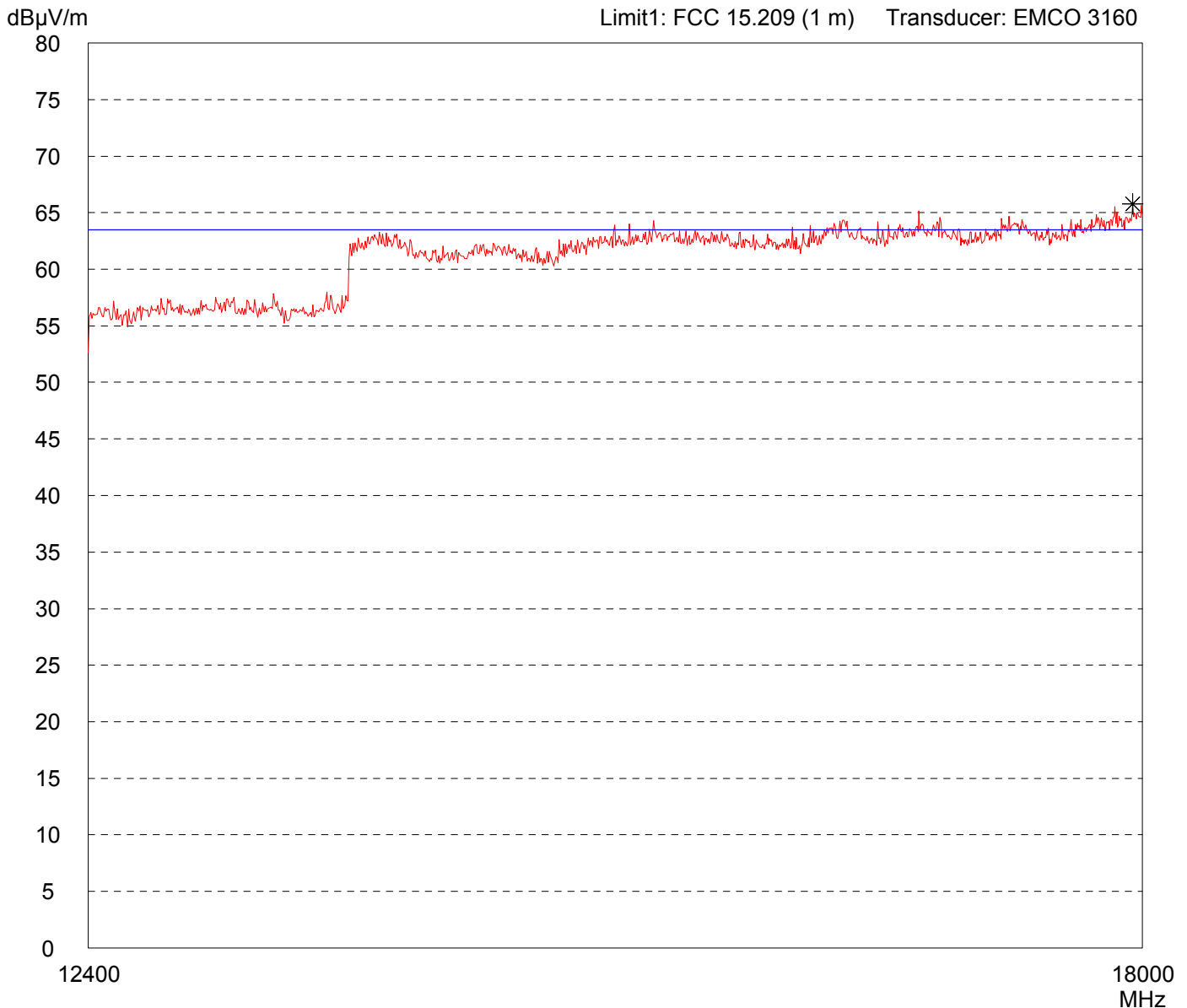


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

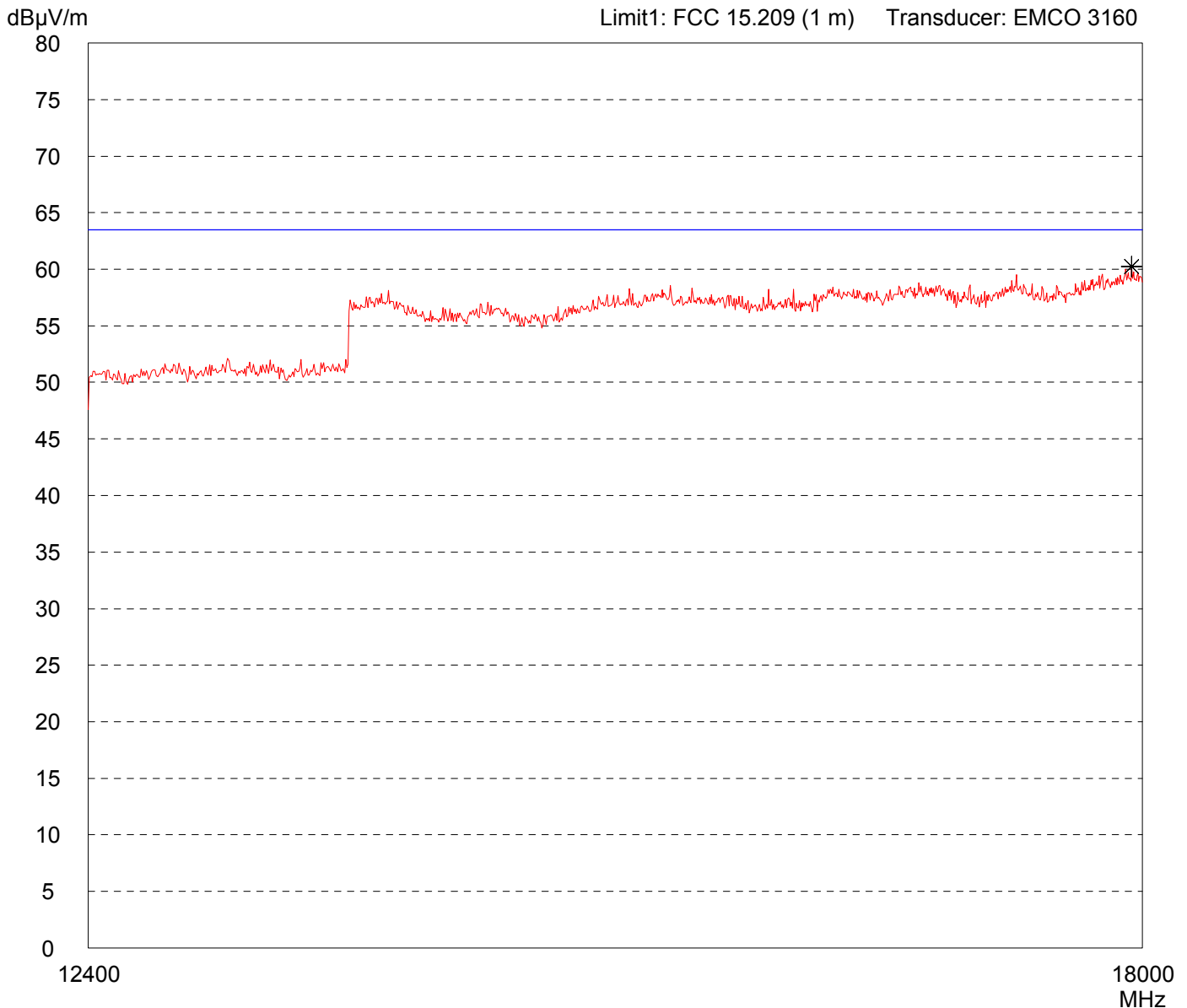


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

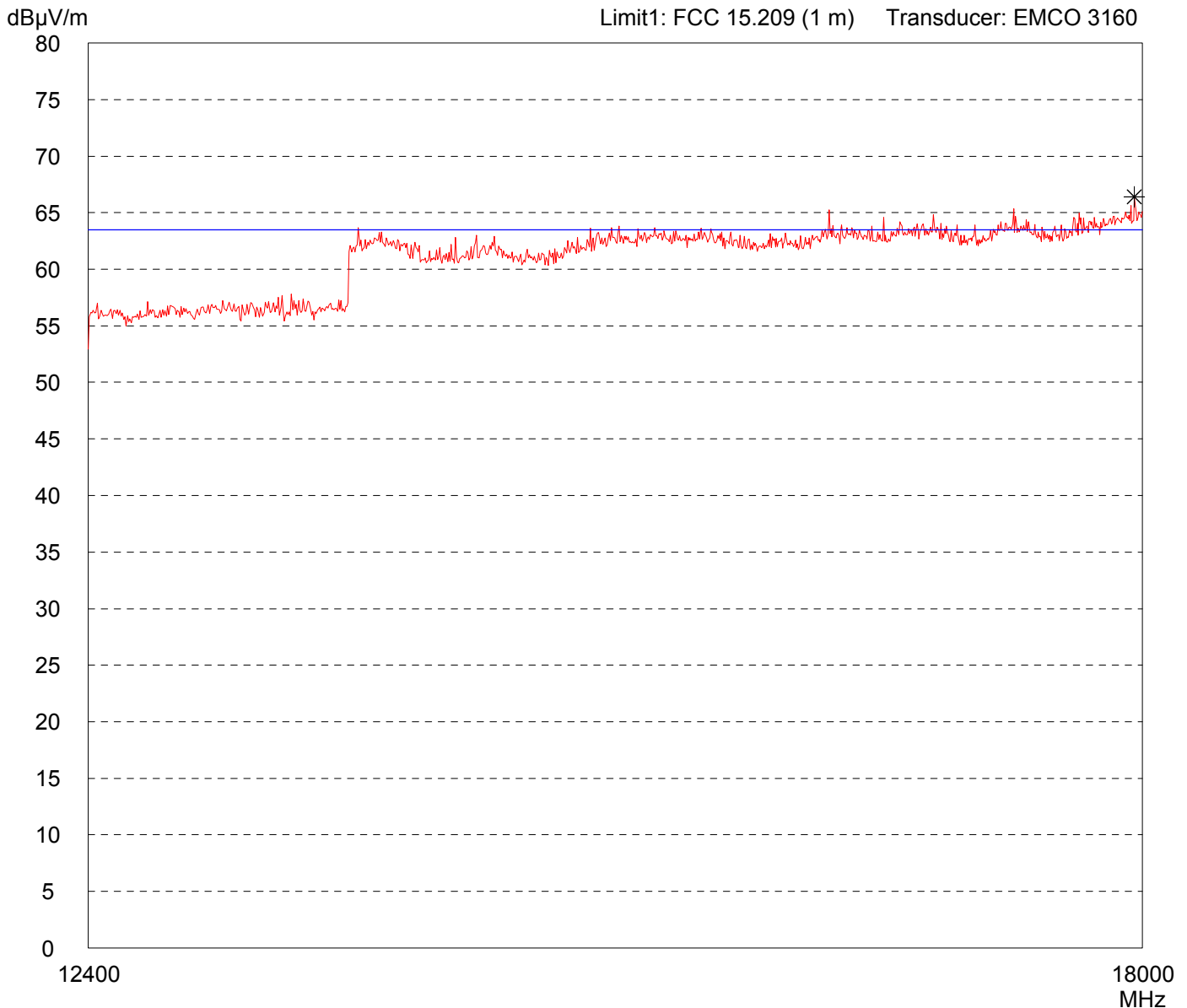


Result: Prescan - VBW = 100 kHz	Project file: 56109-80588
---	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

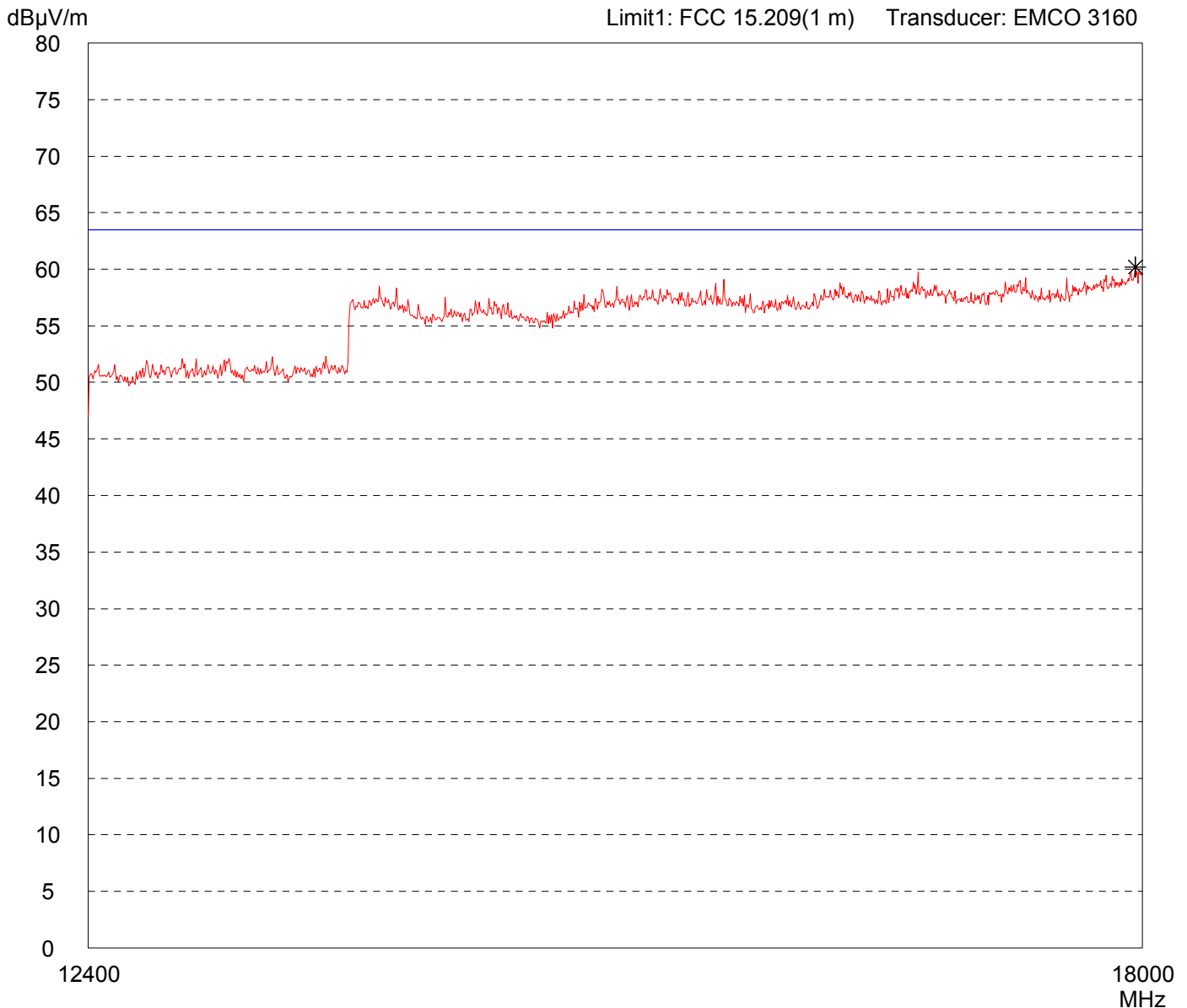


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 18 GHz acc. to FCC Part 15 Subpart C (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Transmitting continuously with modulation - Frequency: 2473 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--



Result: Prescan - VBW = 100 kHz	Project file: 56109-80588
---	-------------------------------------

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

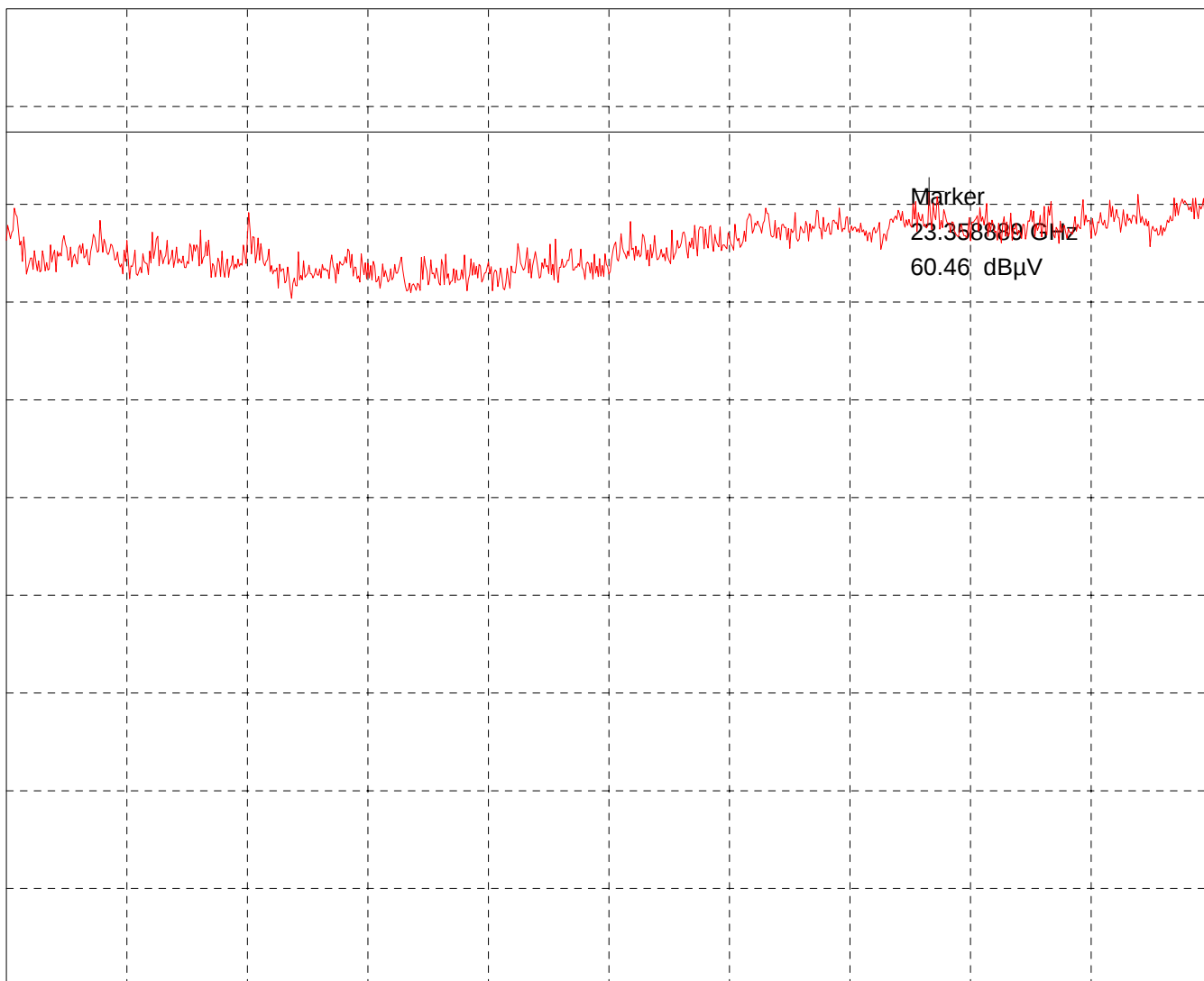
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz
- Polarisation: horizontal
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz
SWP 40 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

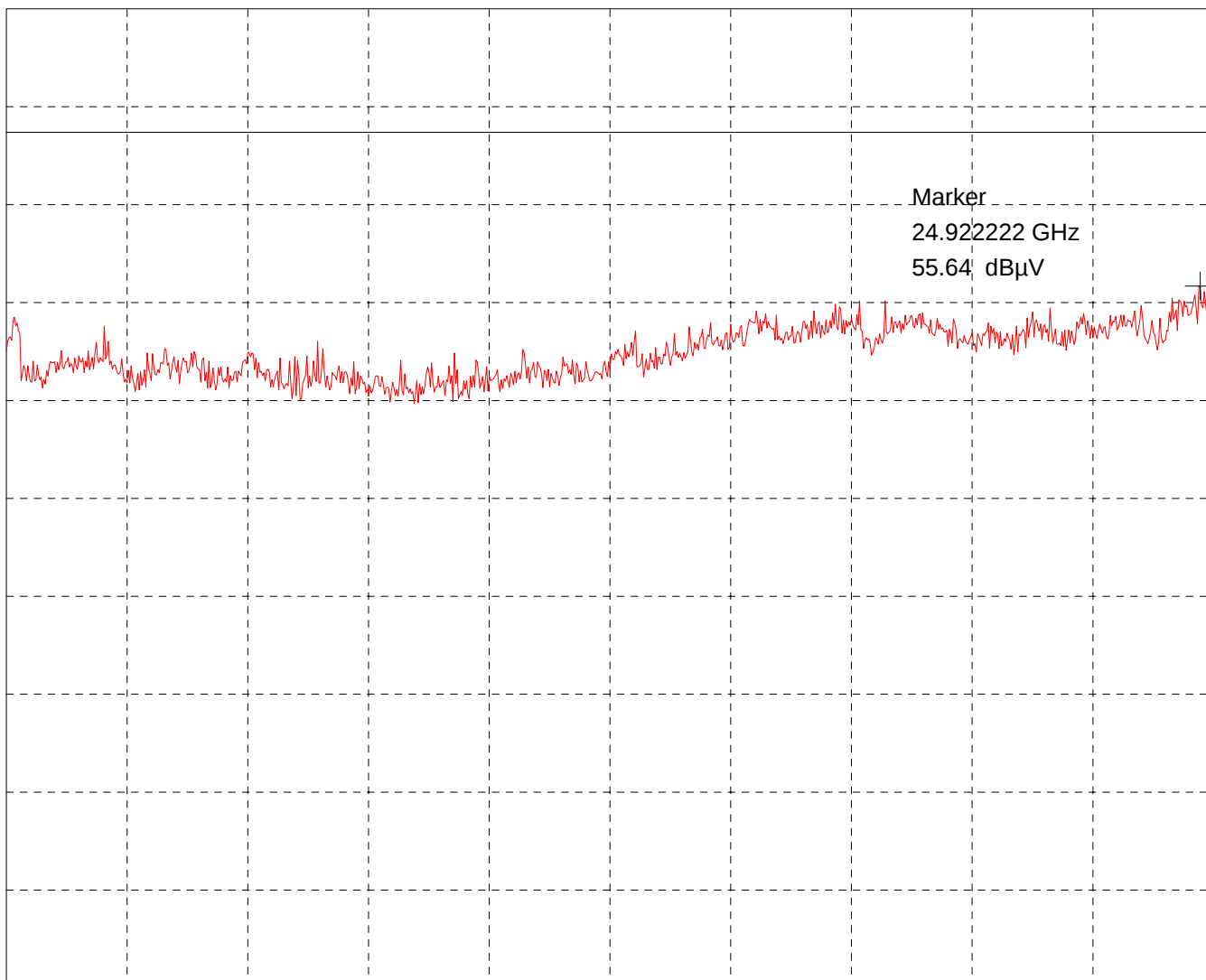
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz
- Polarisation: horizontal
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 100 kHz

Stop 25.000 GHz
SWP 220 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

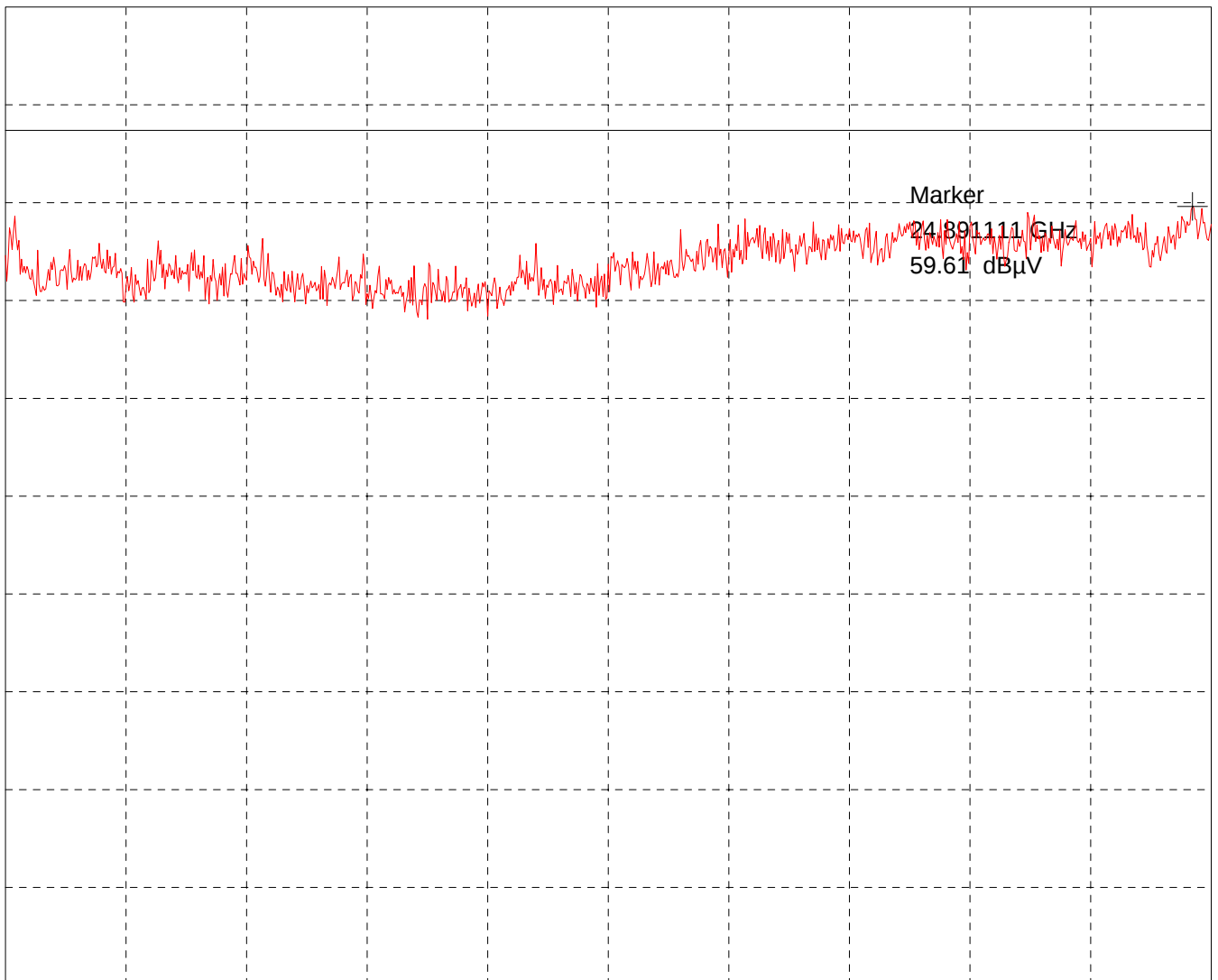
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz
- Polarisation: vertical
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 1 MHz

Stop 25.000 GHz
SWP 40 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

Radiated Emissions acc. to FCC Part 15 Subpart C

Model:
Ac4424-9AJ

Serial No.:
B

Applicant:
AeroComm Inc.

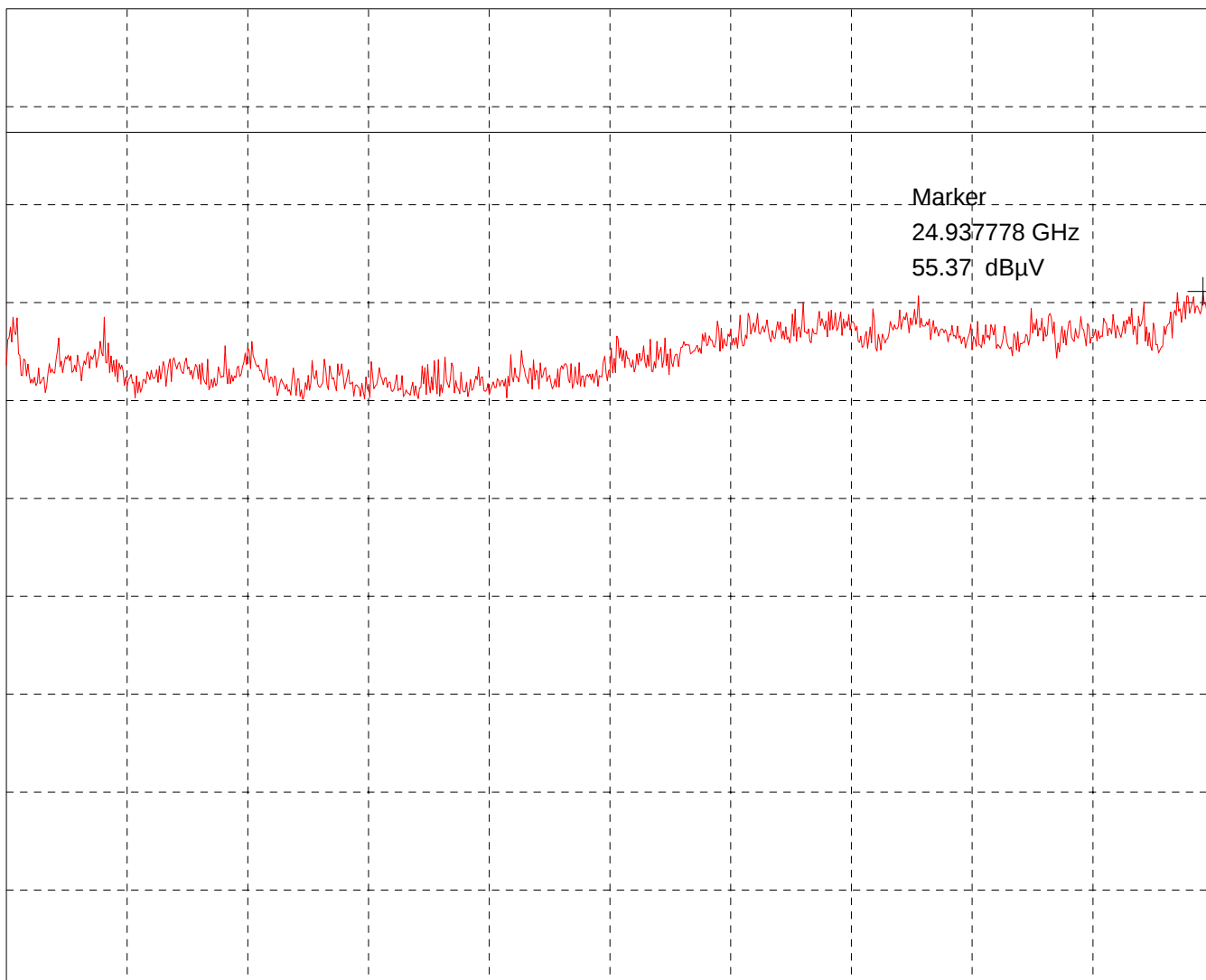
Mode:

- EUT on test board
- Transmitting continuously with modulation
- Frequency: 2473 MHz
- Polarisation: vertical
- Distance: 1 m

Ref.Level 69.8 dB μ V
5 dB/Div.

ATT 0 dB

Ref. Offset 42.8 dB



Start 18.000 GHz
RBW 1 MHz

VBW 100 kHz

Stop 25.000 GHz
SWP 220 ms

Tested by:
M. Steindl

Date:
06/20/2008

Project-No.:
56109-080588

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

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Shielded room, cabin no. 4

Tested on:
Linecord AC110 V
Phase L1

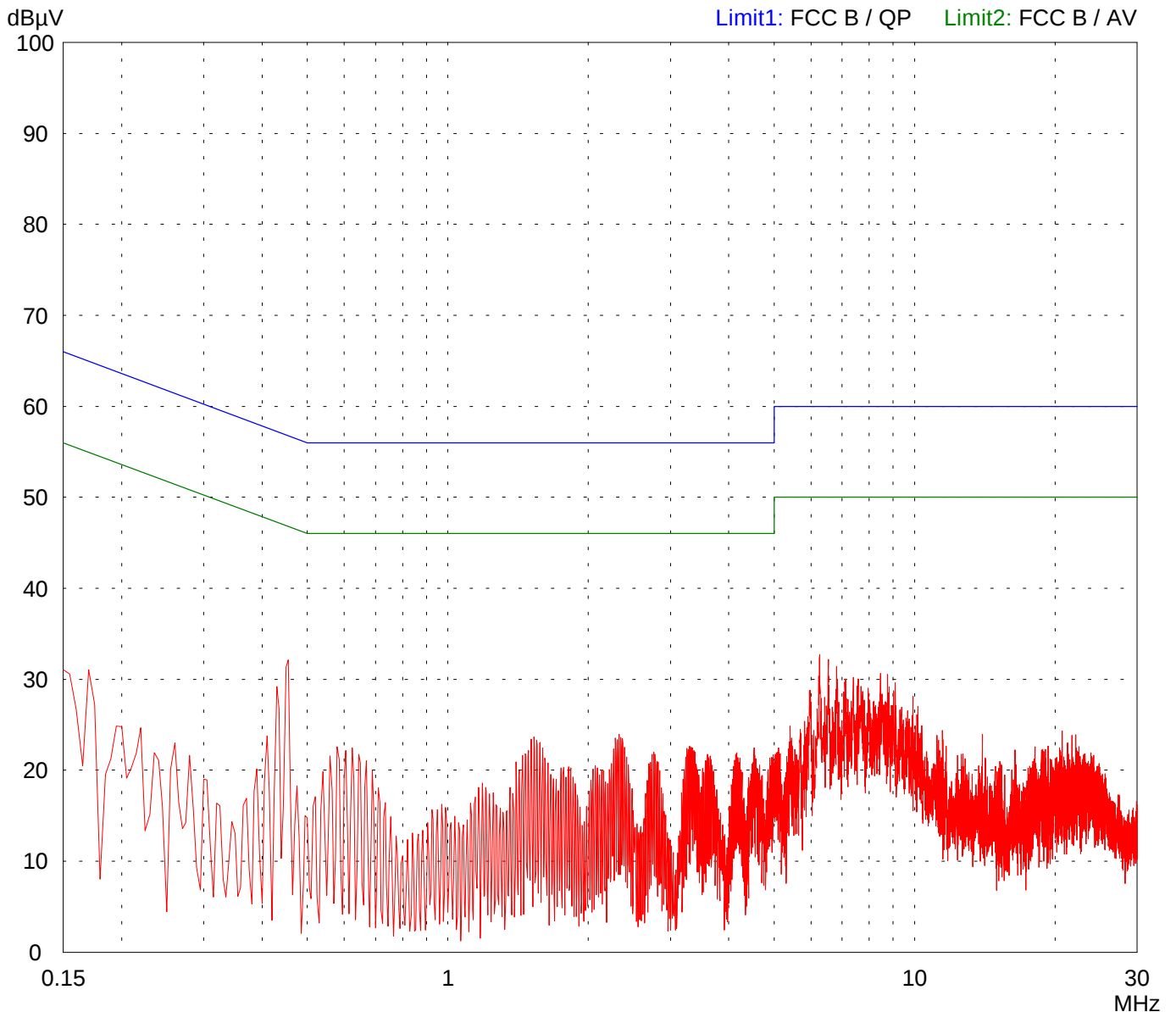
Date of test: 06/20/2008
Operator: M. Steindl

Test performed: automatically
File name:

Mode:
- EUT on test board
- Receiving mode
- Frequency: 2444 MHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56109-080588

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

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Shielded room, cabin no. 4

Tested on:
Linecord AC110 V
Phase N

Date of test: 06/20/2008
Operator: M. Steindl

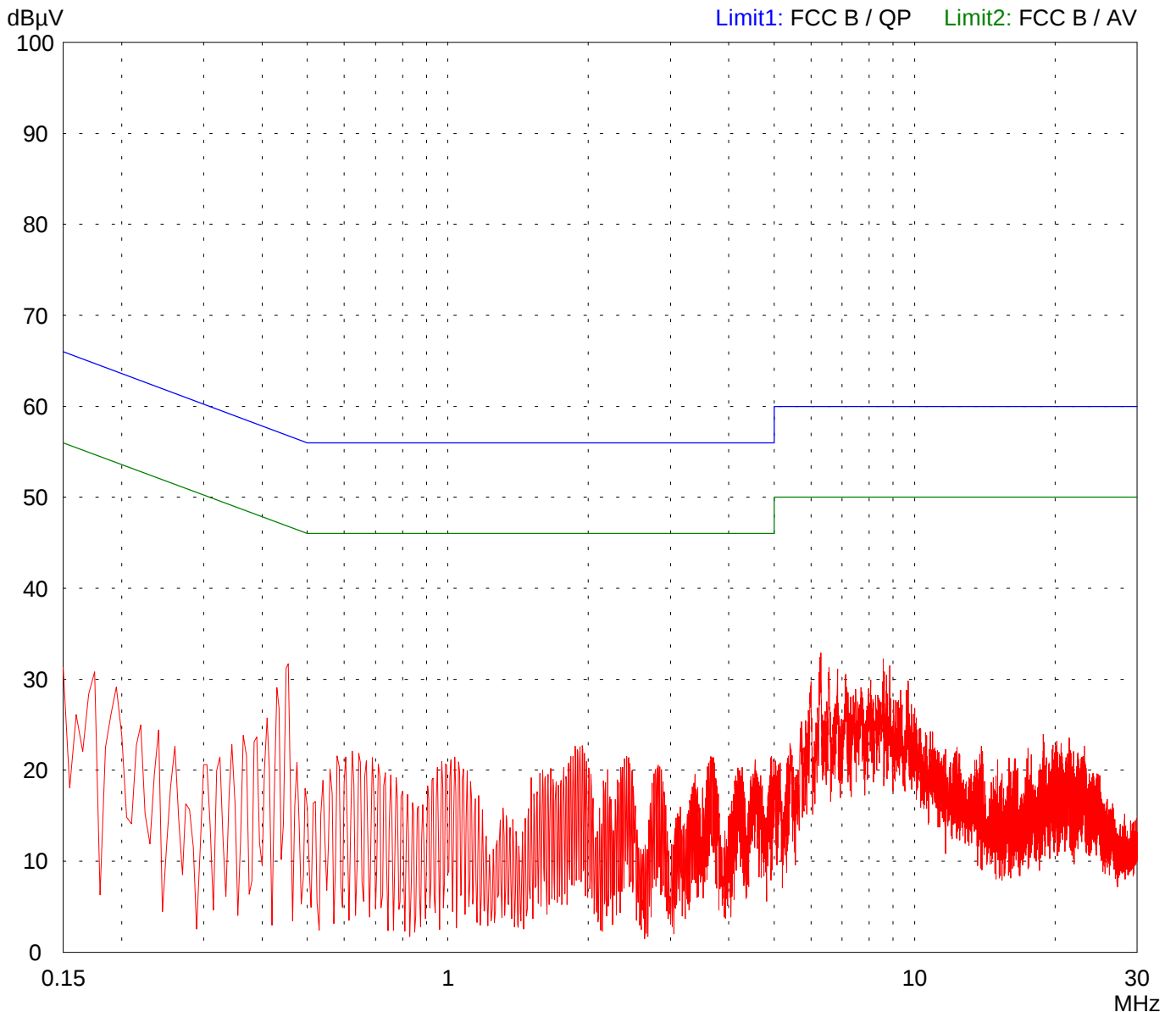
Test performed: automatically
File name:

Mode:
- EUT on test board

- Receiving mode
- Frequency: 2444 MHz

Detector:
Peak / Final Results: QP

Final results:
20 dB Margin 25 Subranges



Result:
Limit kept

Project file:
56109-080588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart B (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres
Horizontal Polarization

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

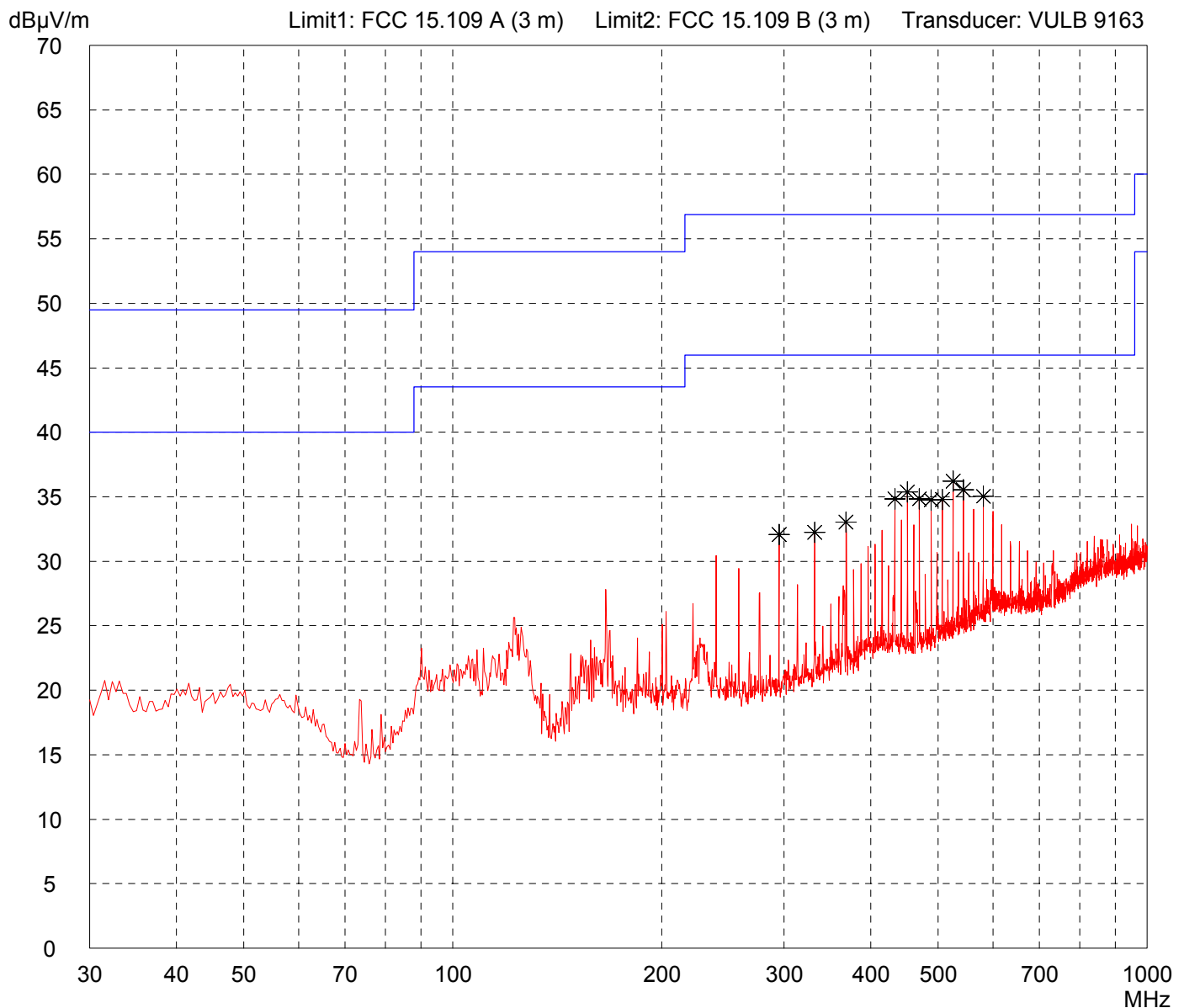
File name:
default.emi

Comment:

- EUT on test board
- Receiving mode
- Frequency: 2444 MHz

Detector:
Peak

List of values:
Selected by hand



Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 Subpart B (FAR)

Model:
AC4424-9AJ

Serial no.:
B

Applicant:
AeroComm Inc.

Test site:
Fully anechoic room, cabin no. 2

Tested on:
**Test distance 3 metres
Vertical Polarization**

Date of test:
06/17/2008

Operator:
M. Steindl

Test performed:
automatically

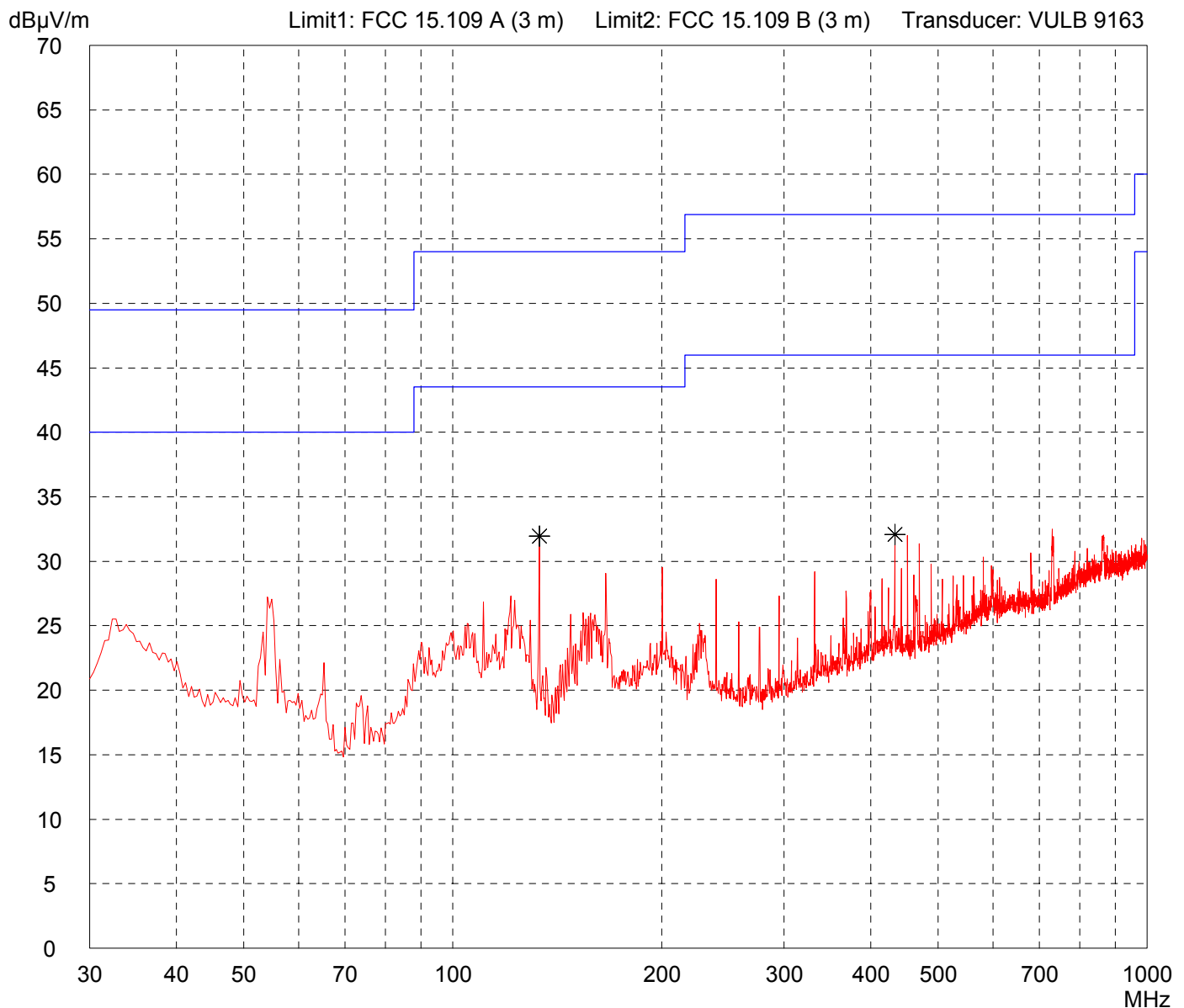
File name:
default.emi

Comment:

- EUT on test board
- Receiving mode
- Frequency: 2444 MHz

Detector:
Peak

List of values:
Selected by hand



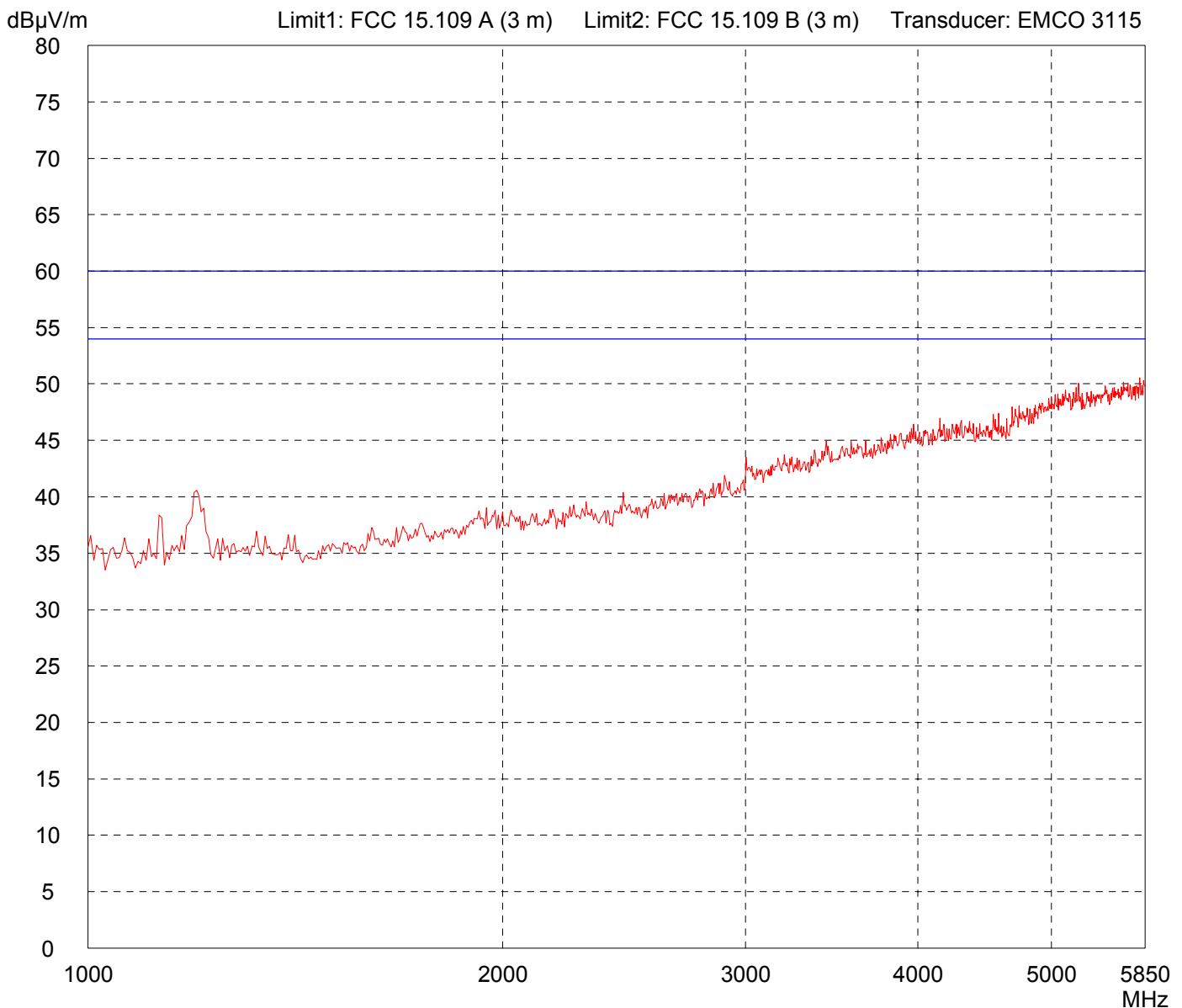
Result:
Prescan

Project file:
56109-80588

Radiated Emission Test 1 GHz - 5.85 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

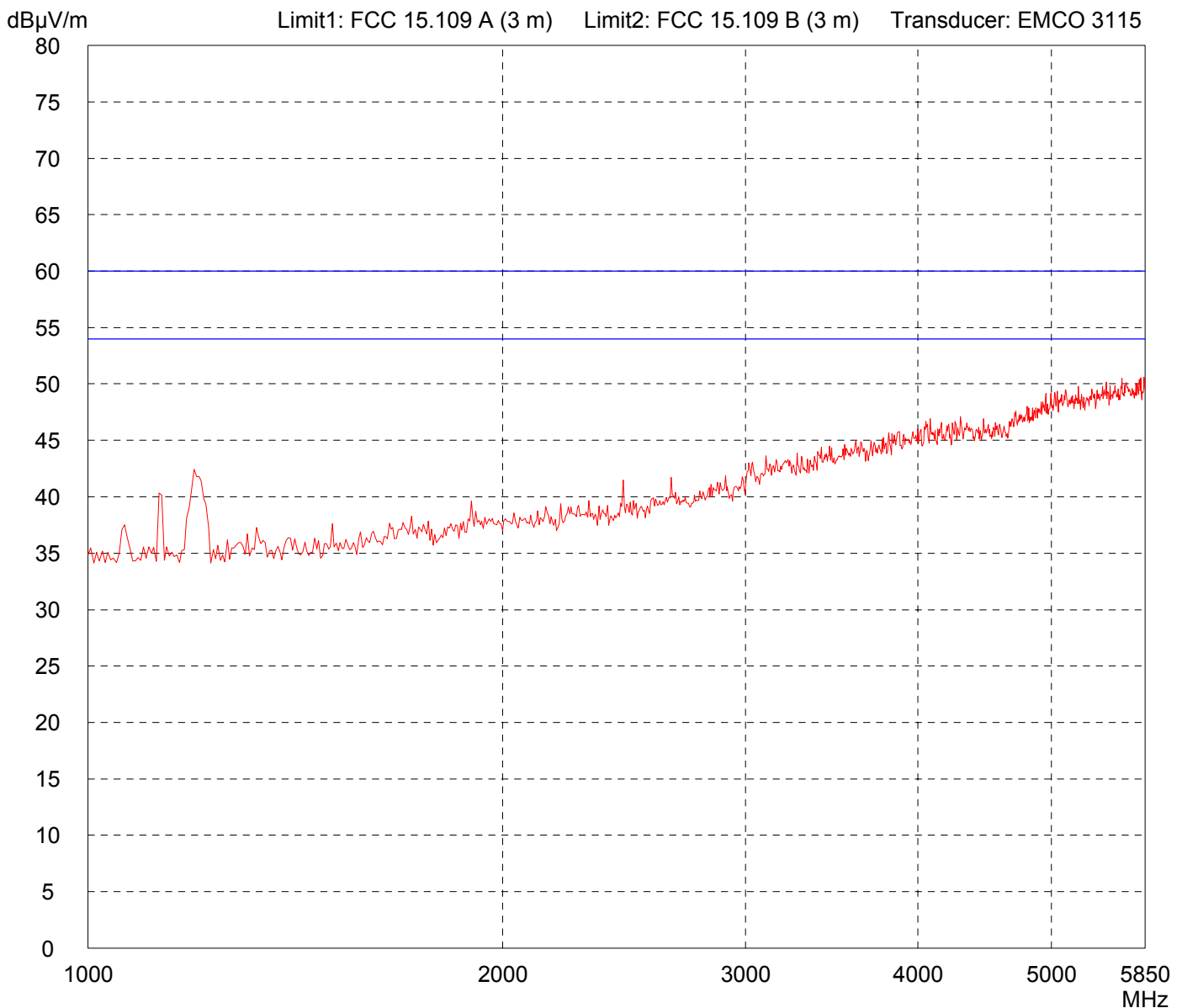


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 1 GHz - 5.85 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

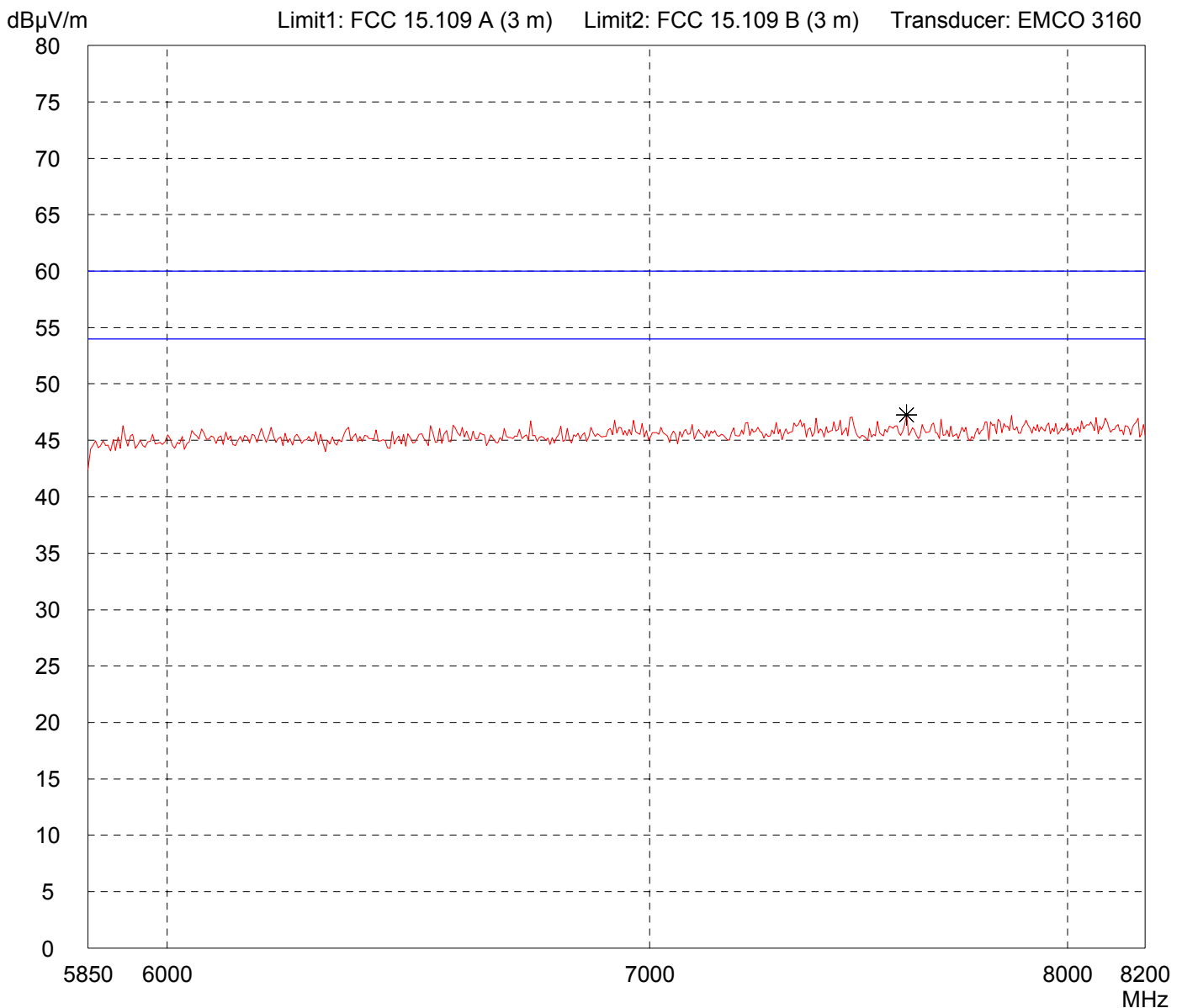


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

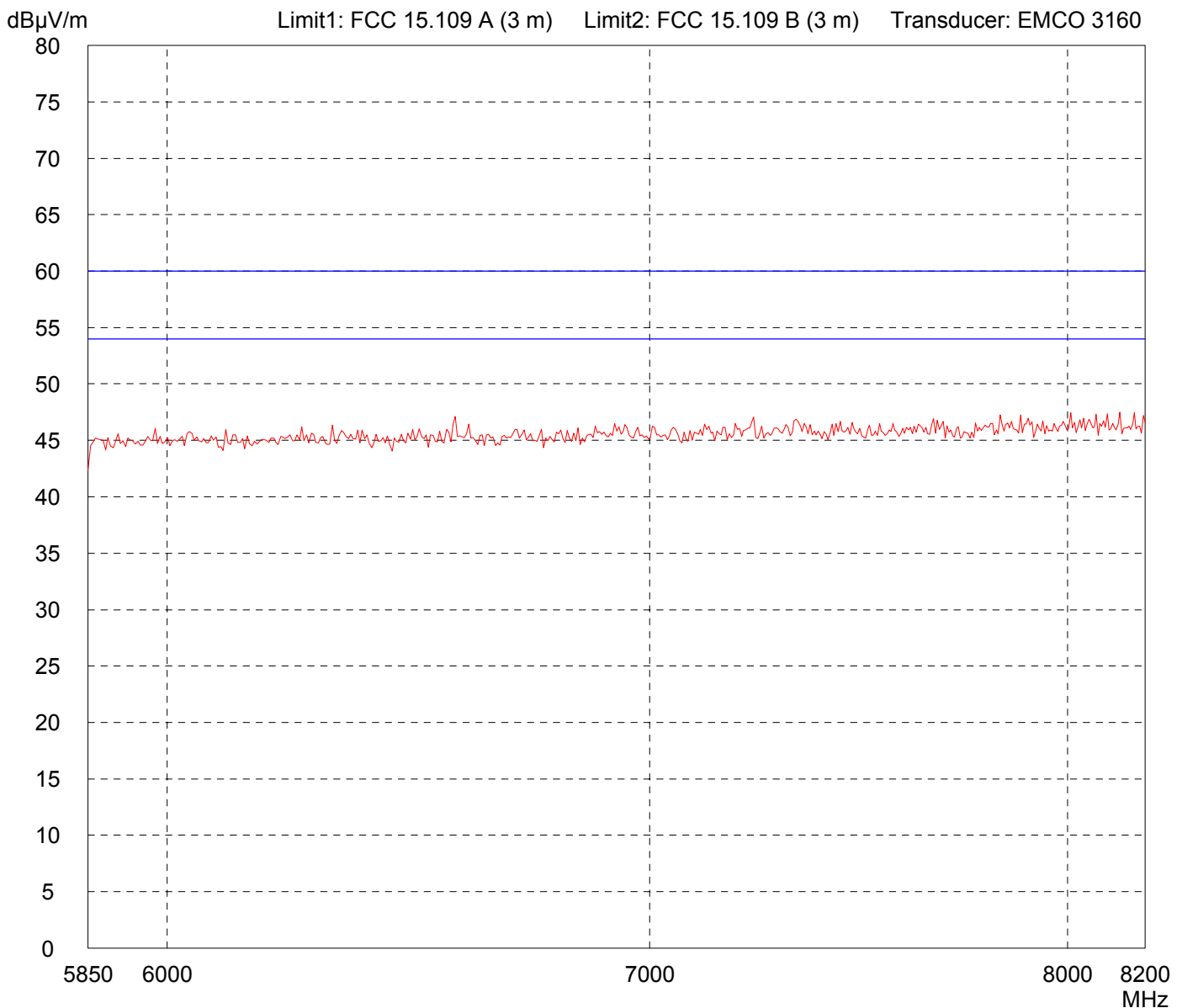


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 5.85 GHz - 8.2 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

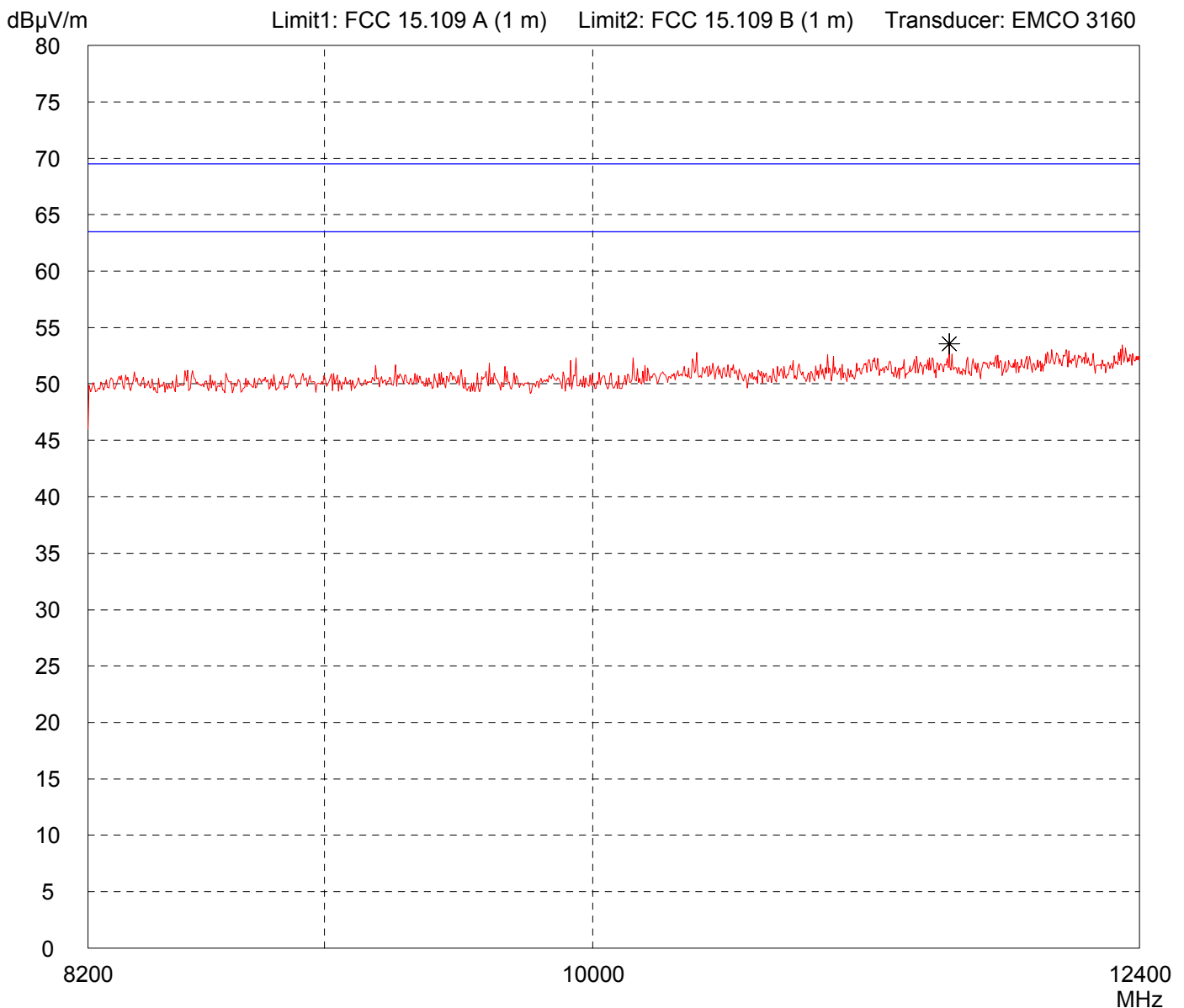


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

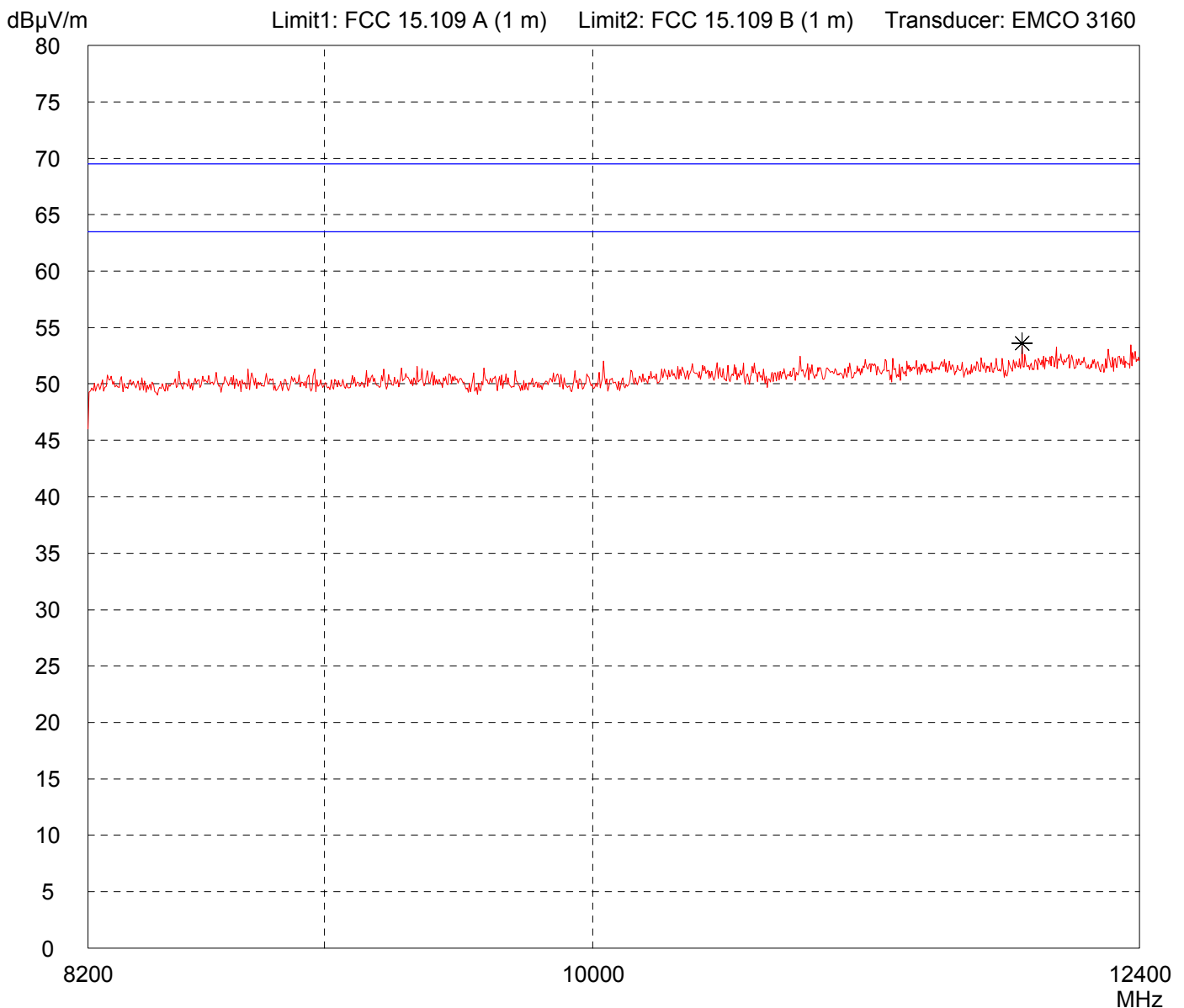


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 8.2 GHz - 12.4 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

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

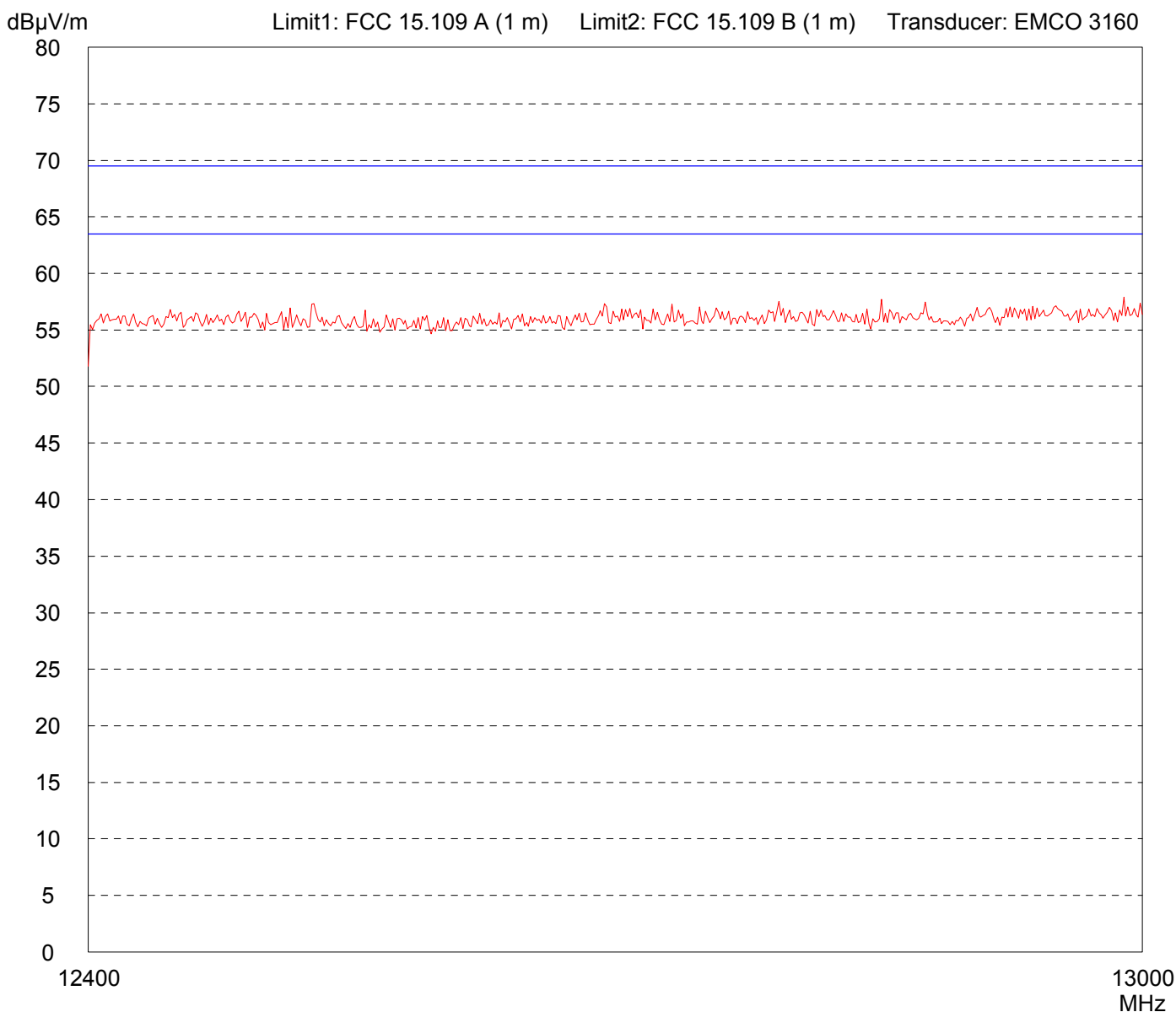


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 13 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Horizontal Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--

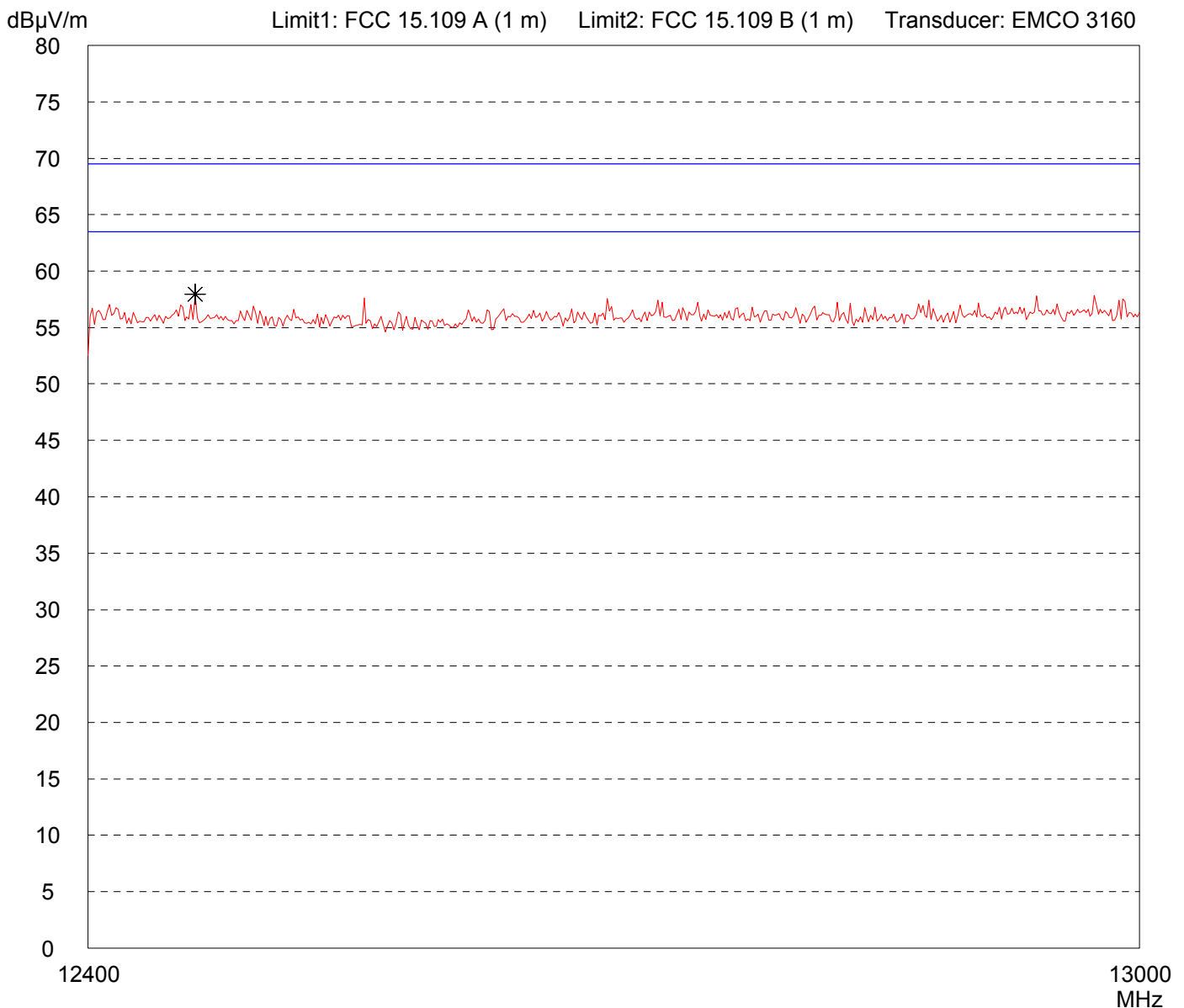


Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------

Radiated Emission Test 12.4 GHz - 13 GHz acc. to FCC Part 15 Subpart B (FAR)

Model: AC4424-9AJ	Comment: - EUT on test board - Receiving mode - Frequency: 2444 MHz
Serial no.: B	
Applicant: AeroComm Inc.	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 meter Vertical Polarization	
Date of test: 06/17/2008	Operator: M. Steindl
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
--------------------------	--



Result: Prescan	Project file: 56109-80588
---------------------------	-------------------------------------