

Straubing, 03 April 2007

TEST - REPORT

No. 56117-060865 (Edition 2)

for

**GEPVd-XX
GE Solar Electric System Meter
RF Transceiver**

Applicant: GE Energy (USA) LLC

Purpose of testing: To show compliance with

FCC Code of Federal Regulations,
Part 15 Subpart C, Section 15.247

Note:

The test data of this report relate 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.

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1. Administrative Data

Test item (EUT)	
Type designation	GEPVd-XX GE Solar Electric System Meter
Serial number(s):	Prototype
Type of equipment:	RF Transceiver
Parts/accessories:	---
FCC-ID:	
Technical data	
Frequency range	902 - 928 MHz
Operational frequencies	FHSS
Statement:	The power was set to the maximum possible
Type of modulation	FSK
Pulse frequency	N/A
Pulse width	N/A
Antenna	Integrated (Antenna Factor ANT-916-SP)
Power supply	4.5 V DC via type AA alkaline batteries
Applicant: (full address)	GE Energy (USA) LLC 231 Lake Drive Newark, DE 19702 - USA
Contract identification:	---
Contact person:	Gerald Curtin
Manufacturer:	Applicant
Application details	
Receipt of EUT:	07 December 2006
Date of test:	08 February 2007
Note:	---
Responsible for testing:	Johann Roidt
Responsible for test report:	Johann Roidt

2. Identification of Test Laboratory

DETAILS OF THE TEST LABORATORY	
COMPANY NAME:	Senton GmbH EMI/EMC Test Center
ADDRESS:	Aeussere Fruehlingsstrasse 45 D-94315 Straubing Germany
LABORATORY ACCREDITATION:	DAR-Registration No. DAT-P-171/94-02
FCC TEST SITE LISTING	90926
INDUSTRY CANADA TEST SITE REGISTRATION	IC 3050
NAME FOR CONTACT PURPOSES:	Mr. Johann Roidt
TELEPHONE: (+49) (0)9421 5522-0	FAX: (+49) (0)9421 5522-99

PERSONNEL INVOLVED IN THIS TEST REPORT	
LABORATORY MANAGER:	 <div style="text-align: center; margin-top: 10px;"> Mr. Johann Roidt </div>
RESPONSIBLE FOR TESTING:	Mr. Johann Roidt
RESPONSIBLE FOR TEST REPORT:	Mr. Johann Roidt

SUMMARY OF TEST RESULTS
<p>The tested sample complies with the requirements set forth in the Code of Regulations Part 15 Subpart C, Section 15.247 of the Federal Communication Commission (FCC).</p>

3. Operation Mode of EUT

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

Lowest channel: 902.20 MHz

Middle Channel: 915.37 MHz

Highest Channel: 927.45 MHz

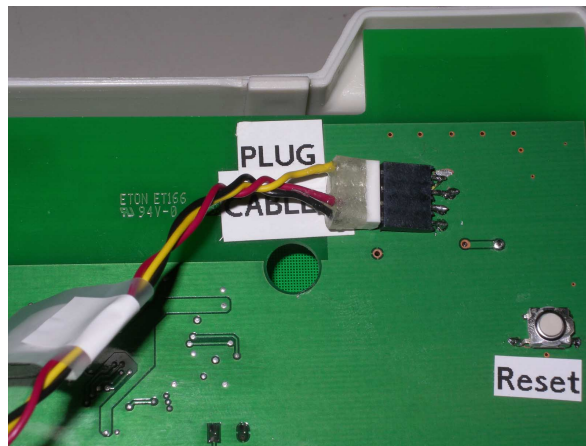
4. Configuration

Configuration of the EUT

A full test setup was supplied by the applicant

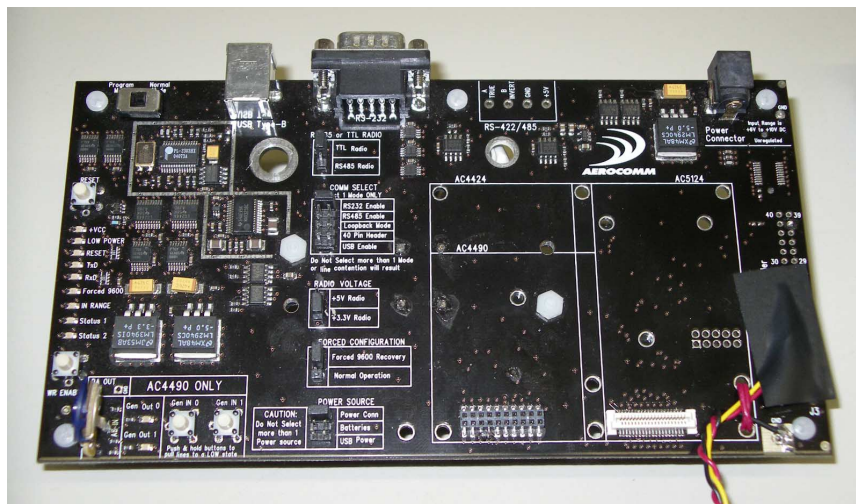
Cables connected to the EUT

A temporary 3-wire serial connection was used to send test mode commands to the transceiver module.



Ancillary Equipment

Aerocomm Serial Adapter Board = Used for issuing test mode commands to the transceiver module via a temporary serial interface on the transceiver. The serial adapter board will be disconnected during testing.



5. Measuring Methods

5.1. Maximum Transmitter Power

5.1.1. Conducted Maximum Transmitter Power

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

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

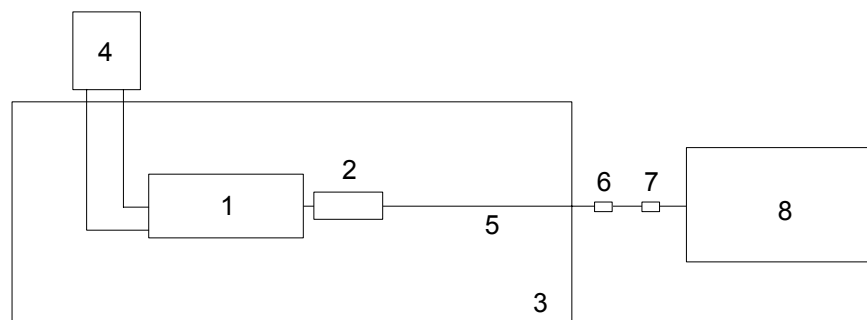


Figure 1: Measurement setup for testing on antenna connector

Test instruments used:

No.	Type	Model	Serial Number	Manufacturer
01	Spectrum Analyzer	FSP 30	100063	Rohde & Schwarz
08	Power Meter	NRVS	836856/015	Rohde & Schwarz
09	Power Sensor	NRV-Z52	837901/030	Rohde & Schwarz
18	Attenuator 20 dB	4776-20	9503	Narda
19	Attenuator 10 dB	4776-10	9412	Narda

5.1.2. Radiated Maximum Transmitter Power

Radiated Maximum Transmitter Power was measured with detector-function of the spectrum analyzer set to positive peak and trace mode max hold:

RBW = 100 kHz, VBW = 100 kHz, span = 1 MHz, sweep = 15 s

For measurement setup and procedure see section 5.2

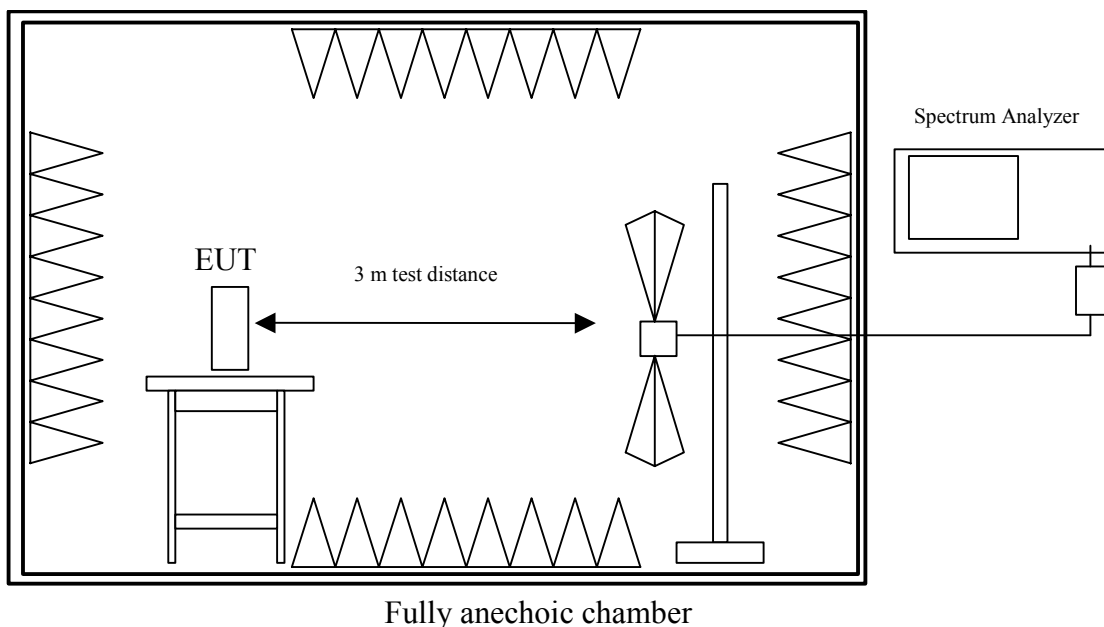
5.2. Radiated Emissions 30 MHz – 1 GHz

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

Measurement Procedure:

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

Measurements were made in both the horizontal and vertical planes of polarization in a fully anechoic room using a spectrum analyzer with the detector function set to peak and resolution bandwidth set to 100 kHz. All tests were performed at a test-distance of 3 meters. Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing



Test instruments used:

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

5.3. Radiated Emission > 1 GHz

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

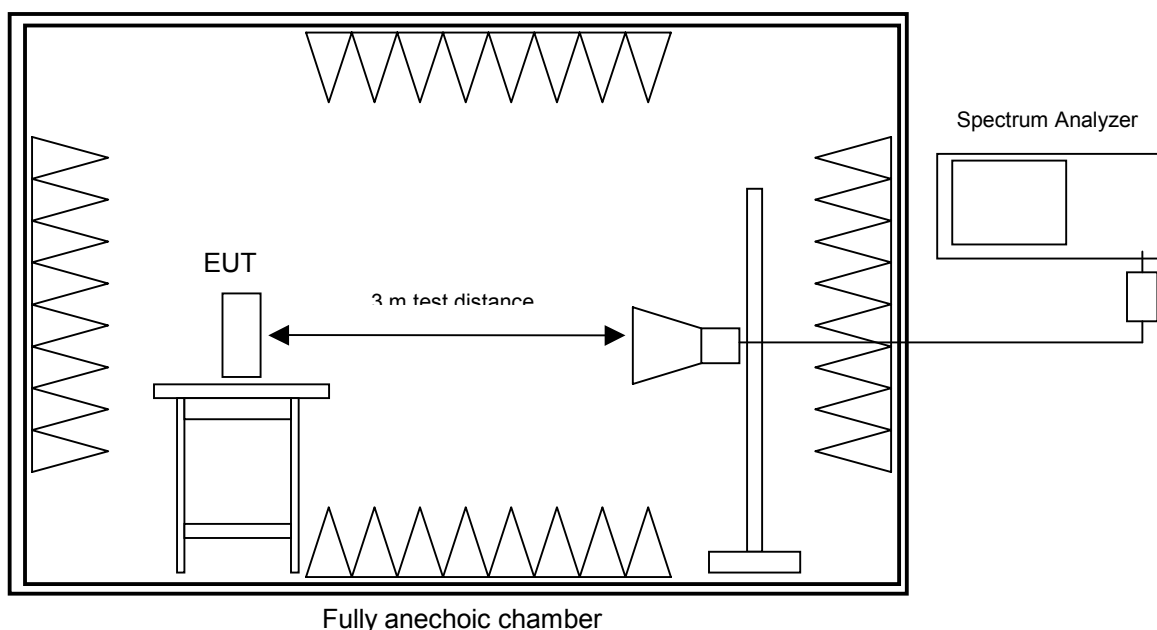
Measurement Procedure:

Radiated emissions are measured in the frequency range 1 GHz to 25 GHz. Resolution and video bandwidth of the spectrum analyzer are set to 1 MHz. Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing. Additional measurements are performed at critical frequencies with reduced span.

EUT is rotated all around and receiving antenna is raised and lowered to find the maximum levels of emission. The cables and equipment are placed and moved within the range of position likely to find their maximum emissions.

All tests are performed in a fully-anechoic chamber with a test-distance of 3 meters.

If required preamplifiers are used for the whole frequency range. Special care is taken to avoid overload in transmit mode (using appropriate attenuators and filters if necessary).



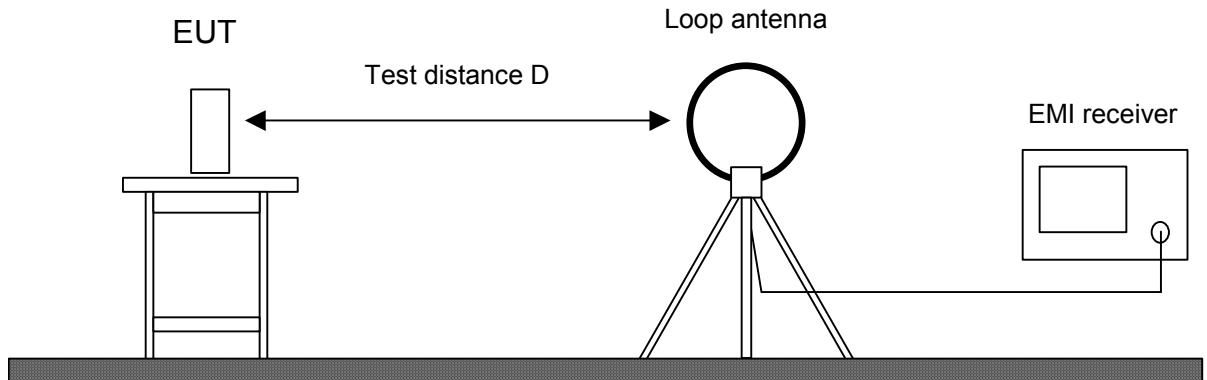
Test instruments used:

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

5.4. Radiated Emission Measurement 9 kHz to 30 MHz

Rules and Specifications:	CFR 47 Part 15, sections 15.205 and 15.209
Guide:	ANSI C63.4-2003

Measurement Procedure:
<p>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.</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>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.</p> <p>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.</p>

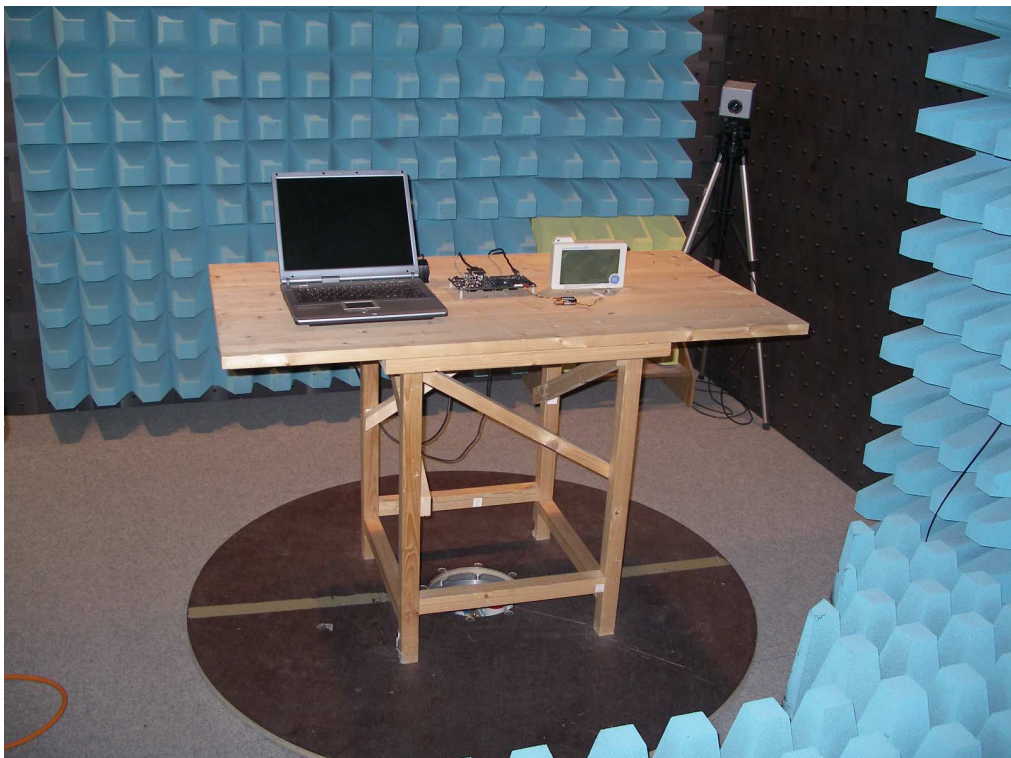
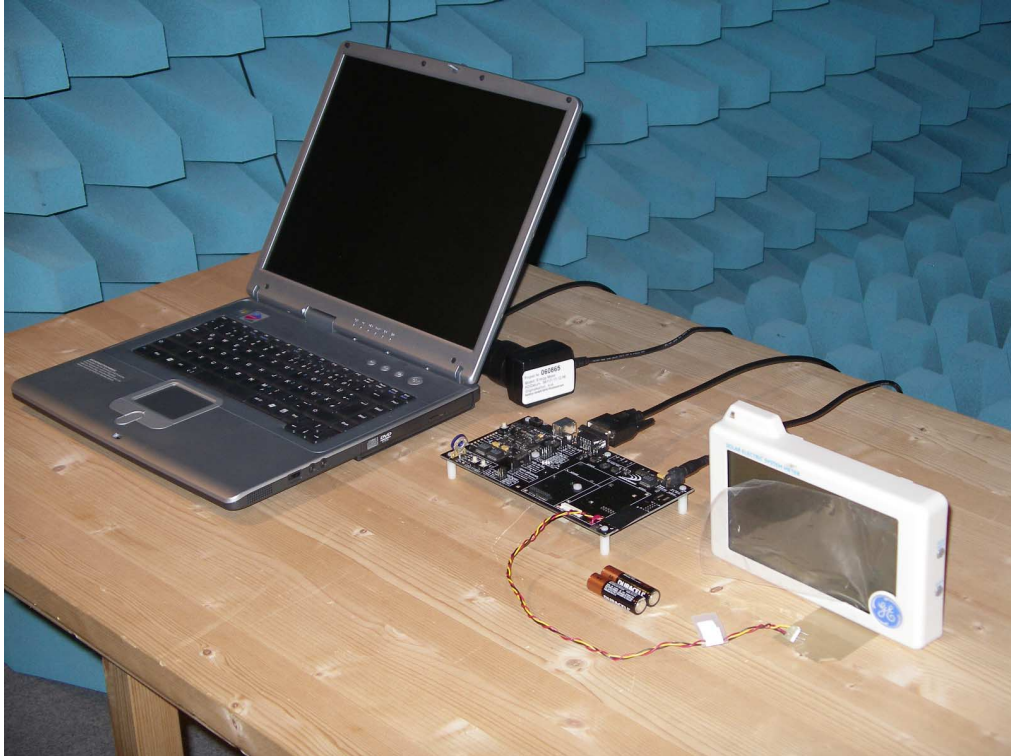


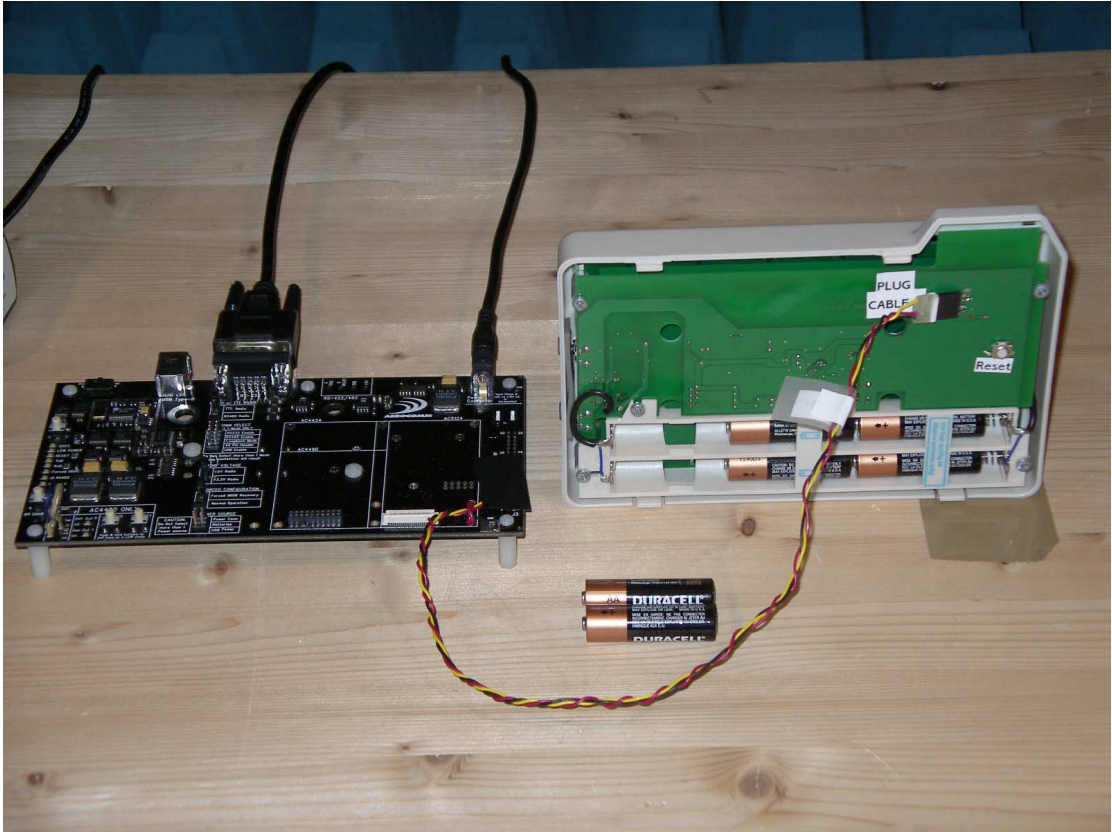
Test instruments used:

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

6. Photographs Taken During Testing

Test setup for radiated emission measurement 30 MHz – 10 GHz (fully anechoic room)





EUT with interface board connected during RF channel setting

7. List of Measurements

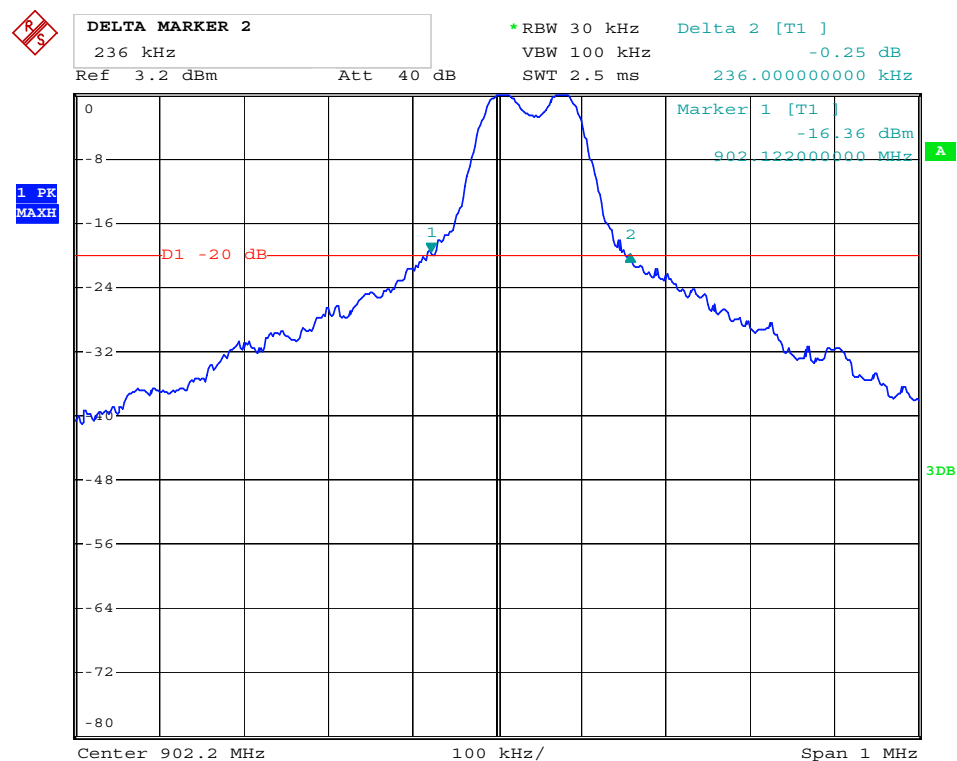
FCC Part 15 Subpart C			
Section(s):	Test	Page(s)	Result
	Transmitter:		
15.205	Restricted Bands	---	Pass
15.247 (a) (1)	Channel Bandwidth	17	Pass
15.247 (a) (1)	Hopping channel separation	19	Pass
15.247 (a) (1) (i)	Number of Hopping Frequencies used	21	Pass
15.247 (a) (1) (i)	Dwell Time of each frequency within a 10 Second Period of Time	22	Pass
15.247 (b) (2)	Maximum Peak Output Power	25	Pass
15.247 (d)	Spurious emissions - conducted	---	N/A
15.247 (d)	Spurious emissions - radiated	27	Pass
15.209			
15.205	Radiated emissions 9 kHz - 30 MHz	29	Pass
15-209			
15.247 (g)	Compliance with applicable requirements for FHSS	---	
15.247 (h)	Limitation on avoidance on hopping in occupied channel	---	
15.203	Antenna Requirement	30	
2.1093	RF Exposure Requirement	31	Pass
15.207	Conducted AC Powerline Emissions		Pass
	Receiver		
15.111	Spurious emissions on antenna port	---	N/A
15.109	Radiated Emissions	32	Pass

Channel Bandwidth

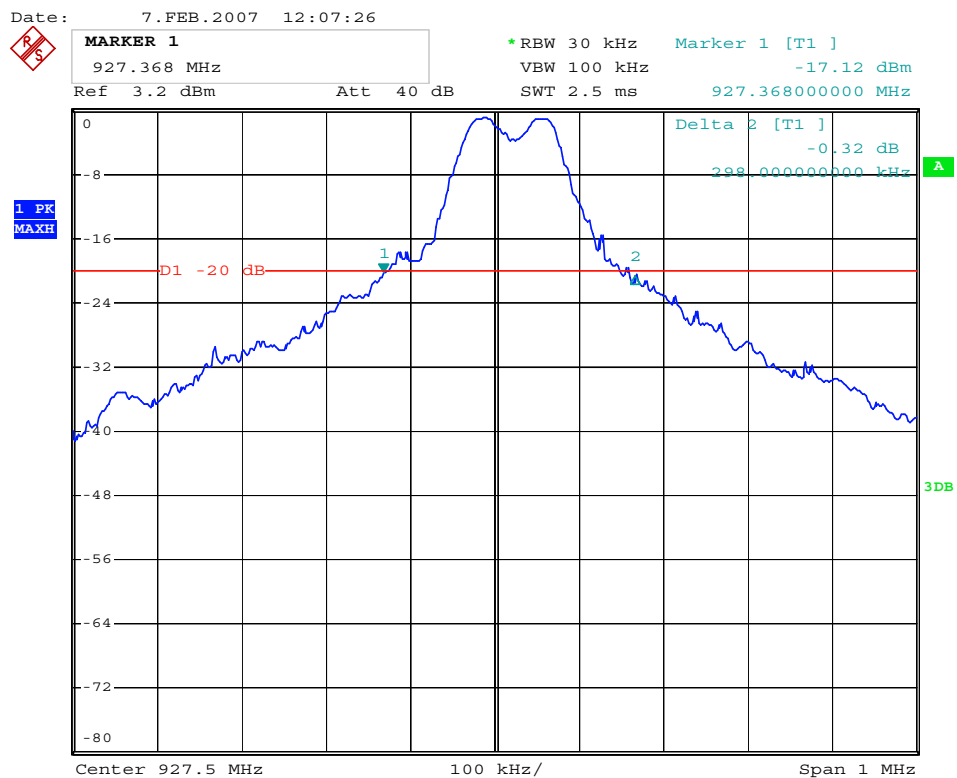
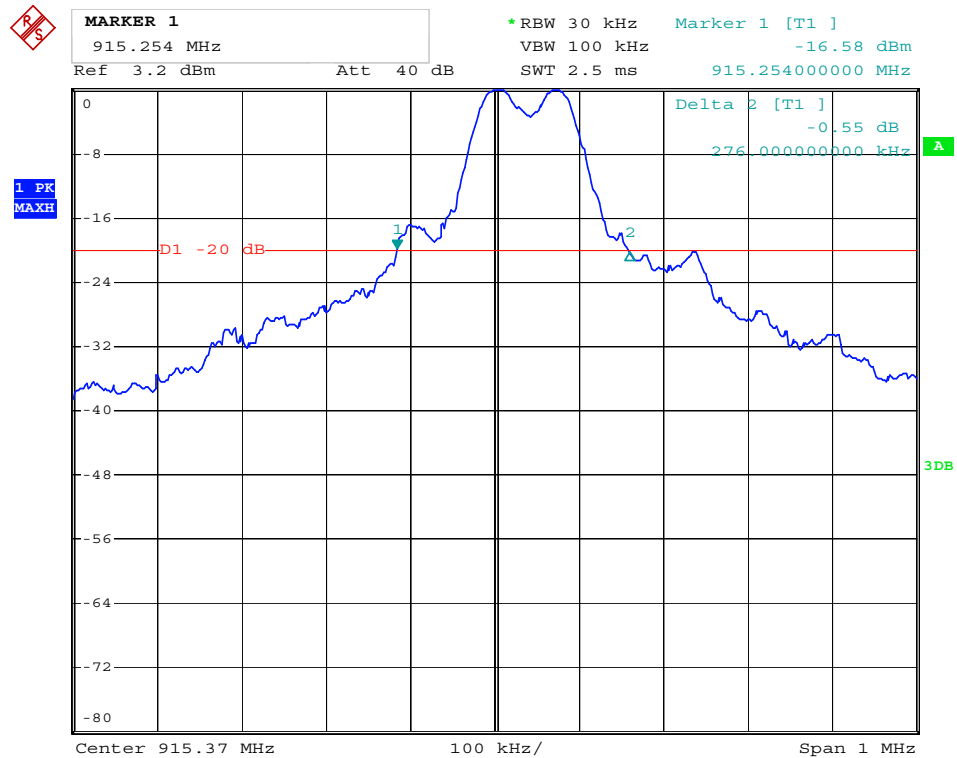
Rules and Specifications:	15.247 (a) (1) (i)
Guide:	ANSI C63.4-2003
Limit:	The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

Test Site:	Radio Lab.
Distance:	Conducted Measurement, measured on a temporary antenna connector
Date of Test:	07 February 2007

Frequency	Channel Bandwidth in kHz	Standard	Result
Low (902.20 MHz)	236	≤500 kHz	Pass
Middle 915,37 MHz	276	≤500 kHz	Pass
High 927.43 MHz	298	≤500 kHz	Pass



Date: 7.FEB.2007 12:04:51



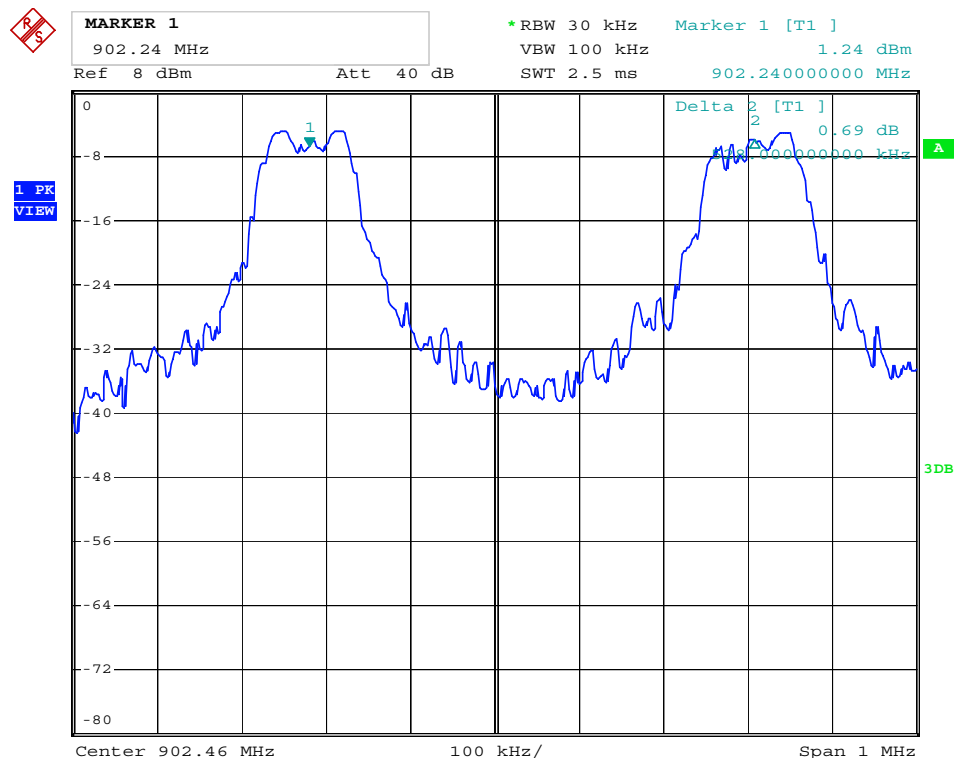
Date: 7.FEB.2007 12:09:38

Hopping Channel Separation

Rules and Specifications:	15.247 (a) (1)
Guide:	ANSI C63.4-2003
Limit:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth, whichever is greater.

Test Site:	Radio Lab.
Distance:	Conducted Measurement on a temporary antenna connector
Date of Test:	07 February 2007

Channel Frequency	Measured	Required	Result
902.2. MHz	528 kHz	>236.0	Pass
915.4 MHz	526 kHz	>276.0	Pass
927.5 MHz	530 kHz	>298.0	Pass



Date: 7.FEB.2007 12:36:13



DELTA MARKER 2

526 kHz

Ref 8 dBm

Att 40 dB

*RBW 30 kHz

VBW 100 kHz

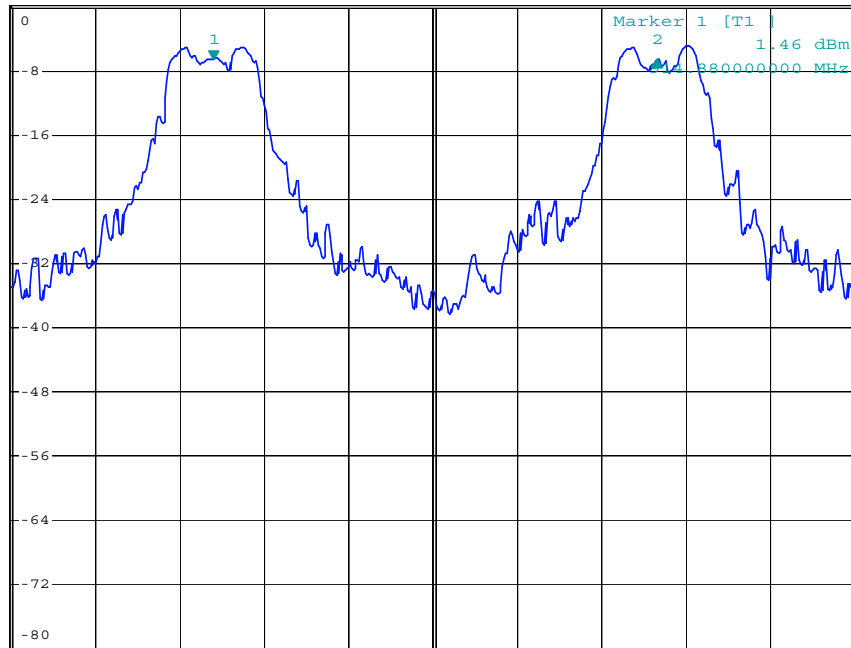
SWT 2.5 ms

Delta 2 [T1]

-0.05 dB

526.000000000 kHz

1 PK
VIEW



Center 915.14 MHz

100 kHz/

Span 1 MHz

Date: 7.FEB.2007 12:38:54



DELTA MARKER 2

530 kHz

Ref 8 dBm

Att 40 dB

*RBW 30 kHz

VBW 100 kHz

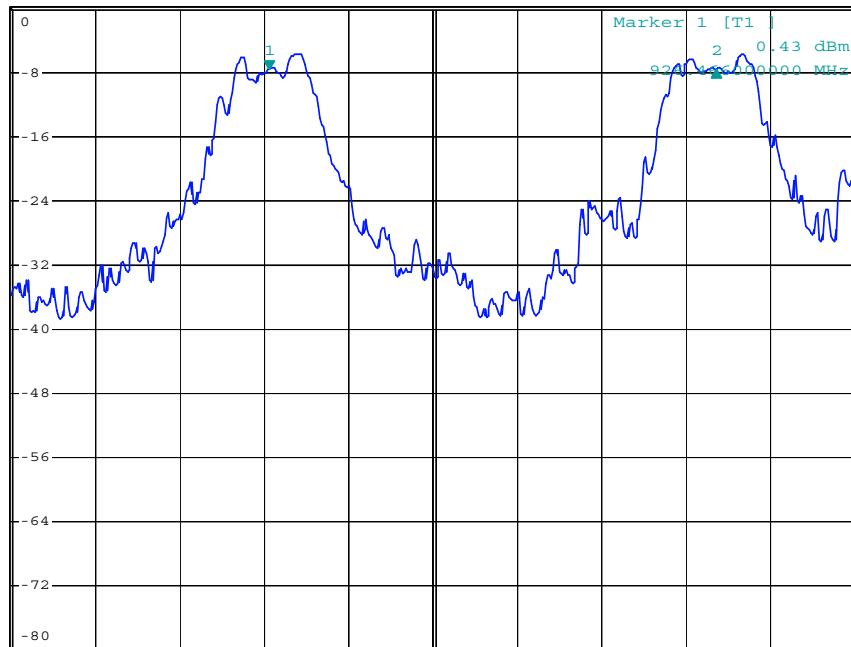
SWT 2.5 ms

Delta 2 [T1]

-0.06 dB

530.000000000 kHz

1 PK
VIEW



Center 926.66 MHz

100 kHz/

Span 1 MHz

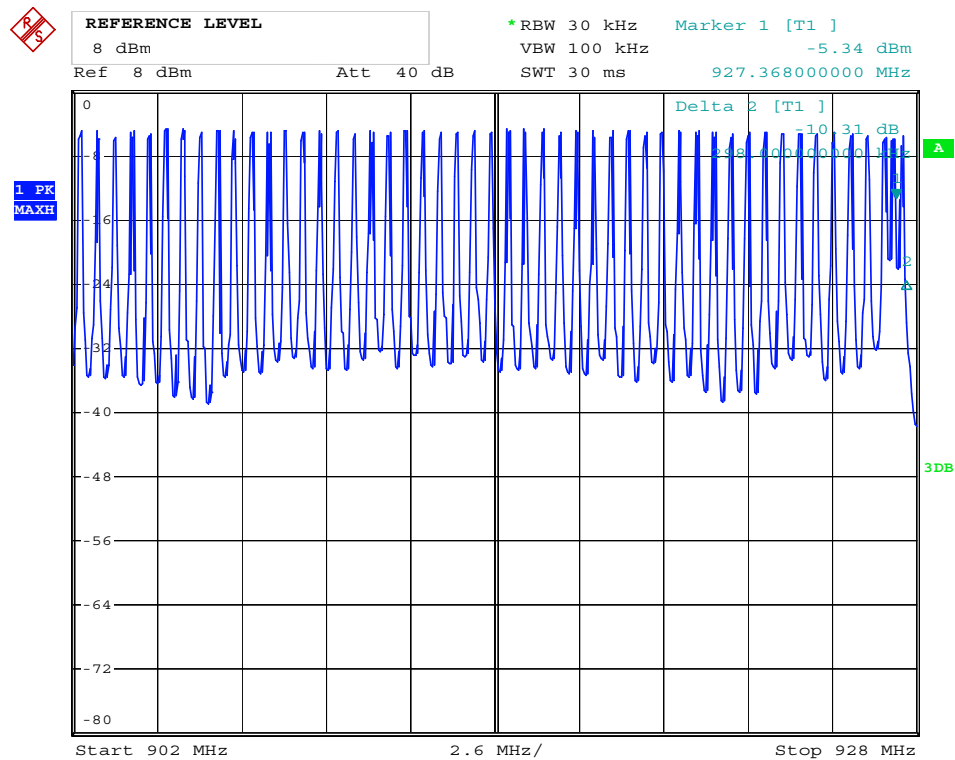
Date: 7.FEB.2007 12:40:34

Number of Hopping Frequencies used

Rules and Specifications:	15.247 (a) (1) (i)
Guide:	ANSI C63.4-2003
Limit:	If the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies

Test Site:	Radio Lab.
Distance:	Conducted Measurement
Date of Test:	07 February 2007

Number of Hopping Frequencies	Measured	Required	Result
Low Channel Set	50	50	Pass



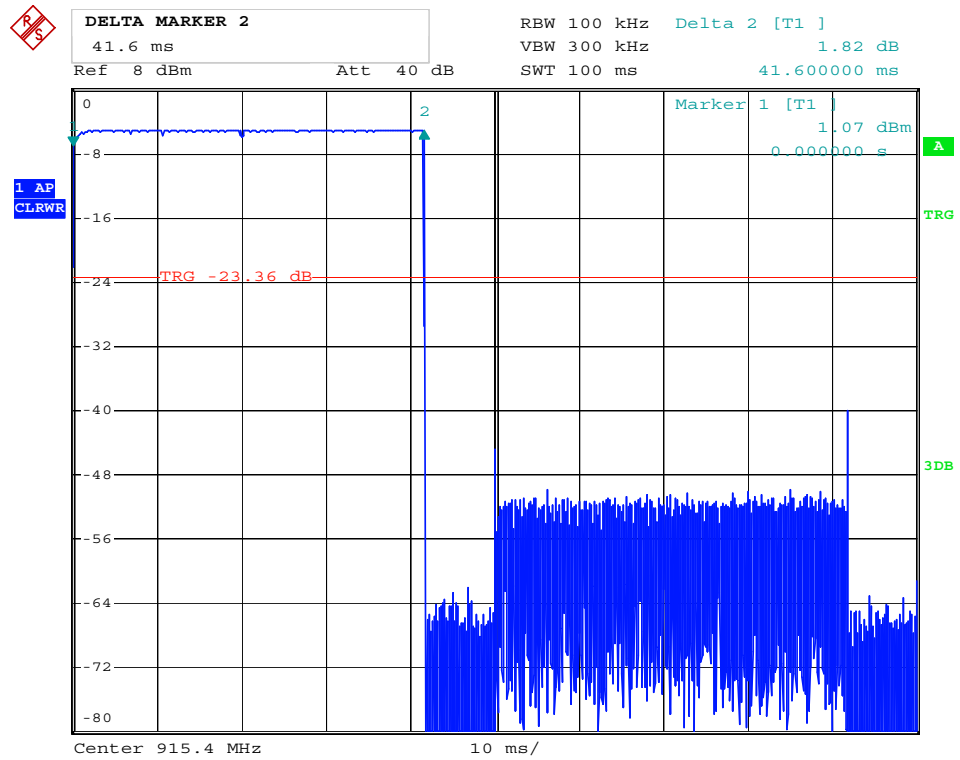
Date: 7.FEB.2007 12:16:47

Time Occupancy on any Channel

Rules and Specifications:	15.247 (a) (1) (i)
Guide:	ANSI C63.4-2003
Limit:	If the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period. If the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period.

Test Site:	Radio Lab.
Distance:	Conducted Measurement on a temporary antenna connector
Date of Test:	07 February 2007

Time occupancy	Measured	Required	Result
	376.2 ms within a 20 seconds period	< 0.4 seconds within a 20 second period	Pass



Date: 7.FEB.2007 12:28:43



RBW 100 kHz Delta 2 [T1]
 VBW 300 kHz -0.06 dB
 SWT 20 s 41.600000 ms

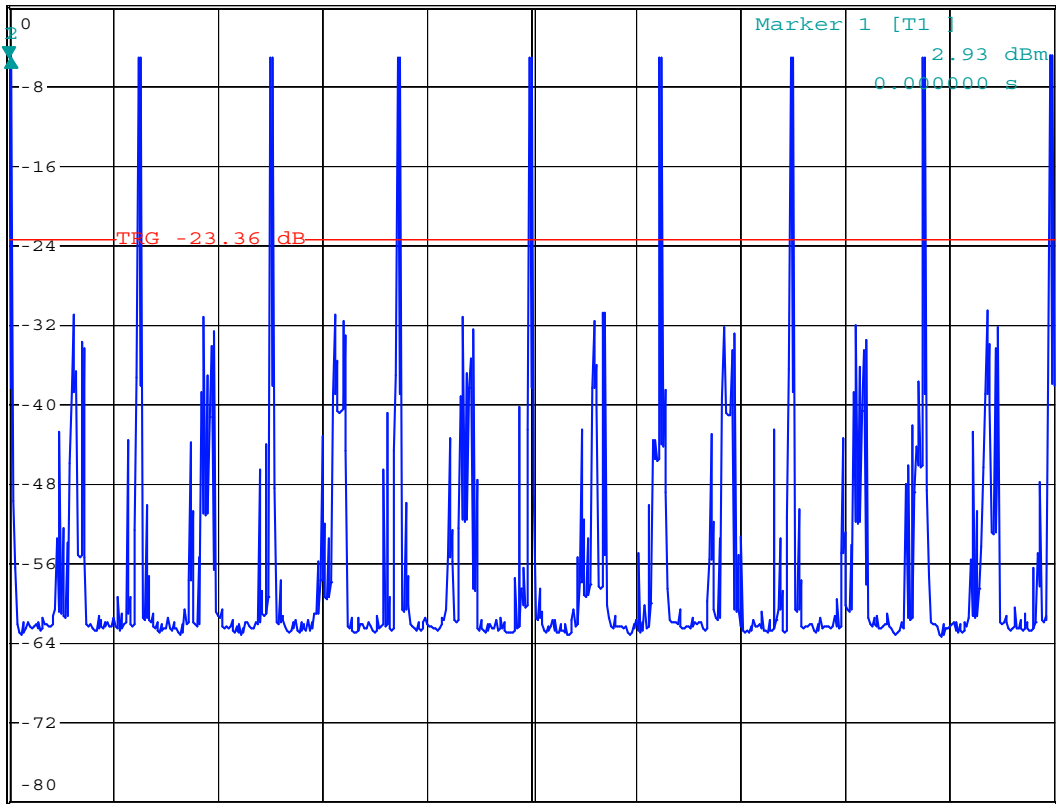
Ref 8 dBm

Att 40 dB

SWT 20 s

41.600000 ms

1 PK
VIEW



Center 915.4 MHz

2 s/

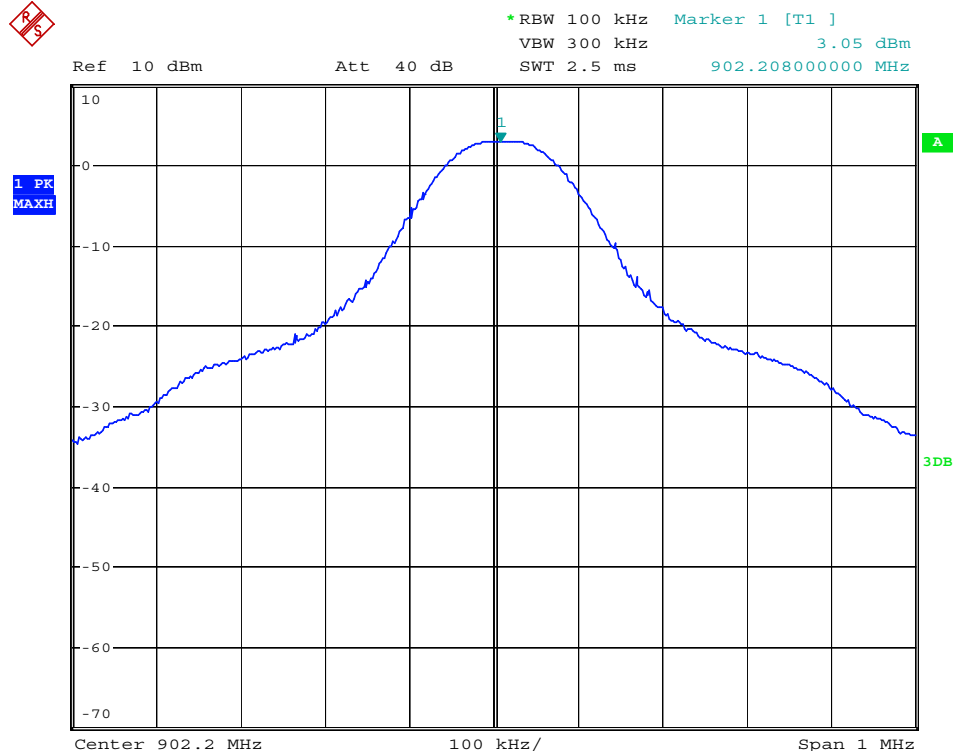
Date: 7.FEB.2007 12:30:47

Carrier Power Measurement

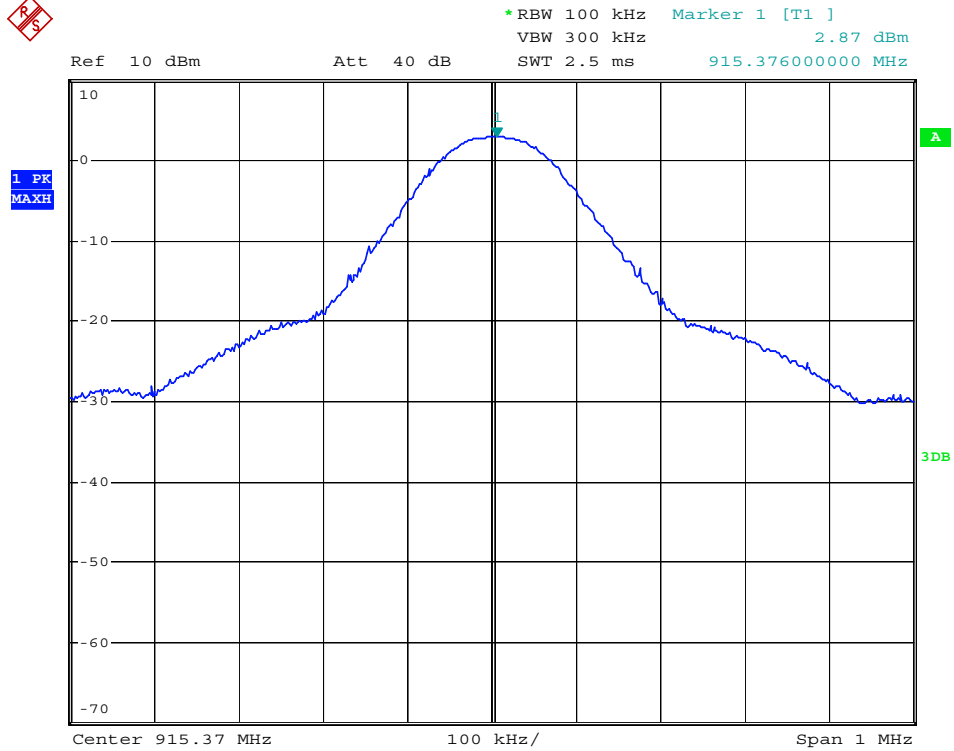
Rules and Specifications:	15.247 (b) (2)
Guide:	ANSI C63.4-2003
Limit:	1 watt for systems employing at least 50 hopping channels and 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels

Test Site:	Radio Lab.
Distance:	Conducted Measurement
Date of Test:	07 February 2007

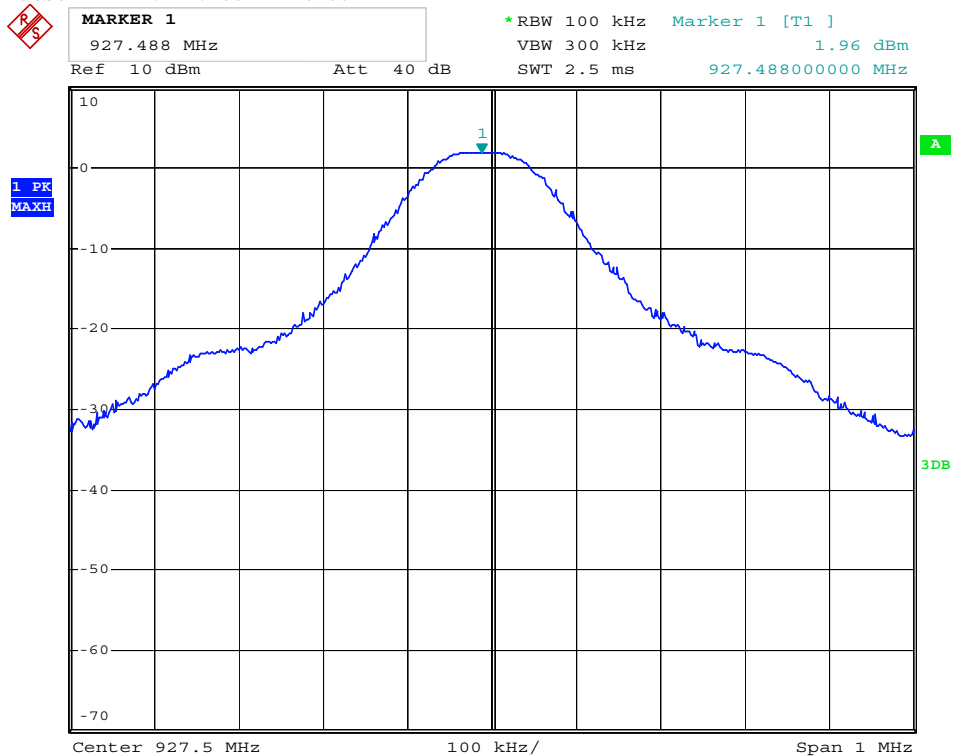
Frequency	Output Power in dBm	Output Power in W	Standard	Result
Low (902.2 MHz)	3.05	0.0021	$\leq 0.25W$	Pass
Middle 915,4 MHz	2.87	0.0019	$\leq 1 W$	Pass
High 927.5 MHz	1.96	0.0015	$\leq 0.25W$	Pass



Date: 7.FEB.2007 11:24:19



Date: 7.FEB.2007 11:26:21



Date: 7.FEB.2007 11:27:33

Spurious Emissions - Radiated

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

Test Site:	Open Area Test Site (< 1GHz), Fully anechoic room (>1 GHz)
Distance:	Radiated Measurement
Date of Test:	08 February 2007

Test Results:	Pass
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Tested on:	Lowest Channel
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Frequency (MHz)	Antenna Polarisation	Detector	Receiver Reading (dBµV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBµV/m)	Limit (dBµV/m)	Margin (dB)
902.20	Vertical	Q.P.	55.44	44.19	0	99.63	Carrier	---
158.040	Horizontal	Q.P.	15.55	20.27	0	35.82	43.5	7.68
214.300	Horizontal	Q.P.	10.24	22.83	0	33.07	43.5	10.43
3604.00	Vertical	Peak	10.82	38.09	0	48.91	54.0	5.09
4514.00	Vertical	Peak	13.02	39.74	0	52.76	54.0	1.24
5410.00	Vertical	Peak	8.46	42.44	0	50.90	54.0	3.10
7230.00	Horizontal	Peak	4.22	45.99	0	45.49	54.0	8.51

Test Results:	Pass
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Tested on:	Middle Channel
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Frequency (MHz)	Antenna Polarisation	Detector	Receiver Reading (dBµV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBµV/m)	Limit (dBµV/m)	Margin (dB)
915.416	Vertical	Q.P.	54.44	44.31	0	98.75	Carrier	---
158.040	Horizontal	Q.P.	15.02	20.27	0	35.29	43.5	8.21
165.800	Horizontal	Q.P.	20.38	20.54	0	40.93	43.5	2.57
4584.00	Vertical	Peak	11.25	40.03	0	51.28	54.0	2.72
5494.00	Vertical	Peak	8.78	42.58	0	51.36	54.0	2.64

Test Results:	Pass
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Tested on:	Highest Channel
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Frequency (MHz)	Antenna Polarisation	Detector	Receiver Reading (dBµV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBµV/m)	Limit (dBµV/m)	Margin (dB)
927.532	Vertical	Q.P.	54.44	44.41	0	98.85	Carrier	---
158.040	Horizontal	Q.P.	15.47	20.27	0	35.74	43.5	7.76
165.800	Horizontal	Q.P.	17.72	20.54	0	38.27	43.5	5.23
3716.00	Vertical	Peak	6.55	38.45	0	45.00	54.0	9.00
5564.00	Vertical	Peak	9.31	42.68	0	51.99	54.0	2.01

Test Results:	Pass
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Radiated Emission Measurement 9 kHz to 30 MHz

Rules and Specifications:	CFR 47 Part 15, sections 15.205 and 15.209			
Guide:	ANSI C63.4-2003			
Limit:	Frequency of Emission (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance d (meters)
	0.009 - 0.490	2400/F(kHz)	67.6 - 20 · log(F(kHz))	300
	0.490 - 1.705	24000/F(kHz)	87.6 - 20 · log(F(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.			

Test Result	Pass (No emissions below 30 MHz found)
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Antenna connector requirement

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



RF Exposure

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

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

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
30 - 1500	---	---	$\frac{f}{1500} = 0.61 \text{ mW/cm}^2 @ 915 \text{ MHz}$	30

f = frequency in MHz

The maximum measured power output is 2.1 mW, the maximum antenna gain is 2 dBi which is far below the low threshold defined as (60/f GHz) mW for d < 2.5 cm in the TCB exclusion list.

Test Result:	Pass	
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Spurious Radiation Measurement

Rules and Specifications:	15.109,	
Guide:	ANSI C63.4-2003	
Limit:	Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated at least 50 dB below the level of the fundamental or to the general radiated emission limits below, whichever is the lesser attenuation	
	Frequency of Emission (MHz)	Field Strength (microvolts/meter)
	30 - 88	100
	88 - 216	150
	216 - 960	200
	Above 960	500

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

Tested on:	Middle Channel
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Frequency (MHz)	Antenna Polarisation	Detector	Receiver Reading (dBμV)	Correction Factor (dB/m)	Pulse Train Correction (dB)	Final Value (dBμV/m)	Limit (dBμV/m)	Margin (dB)
99.84	Horizontal	Q.P.	19.73	14.69	0	34.42	43.50	9.08
167.740	Horizontal	Q.P.	29.20	10.61	0	39.80	43.50	3.70
200.720	Horizontal	Q.P.	21.70	12.37	0	34.07	43.50	9.43
218.180	Horizontal	Q.P.	23.14	12.95	0	36.37	46.00	9.63
299.600	Horizontal	Q.P.	21.35	15.02	0	36.37	46.00	9.63

Test Results:	Pass
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Sample calculation of erp values:

$$\text{Field Strength (dBμV/m)} = \text{Analyzer Reading (dBμV)} + \text{Correction Factor (dB/m)}$$

8. Referenced Regulations

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

<input checked="" type="checkbox"/>	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, 2006
<input checked="" type="checkbox"/>	CFR 47 Part 15	Code of Federal Regulations Part 15 (Radio Frequency Devices) of the Federal Communication Commission (FCC)	August 14, 2006
<input checked="" type="checkbox"/>	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)
<input type="checkbox"/>	RSS-Gen	Radio Standards Specification RSS-Gen Issue 1 containing General Requirements and Information for the Certification of Radiocommunication Equipmment, published by Industry Canada	September 2005
<input type="checkbox"/>	RSS-210	Radio Standards Specification RSS-210 Issue 6 for Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment, published by Industry Canada	September 2005
<input type="checkbox"/>	RSS-102	Radio Standards Specification RSS-102 Issue 2: Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)	November 2005
<input type="checkbox"/>	ICES-003	Interference-Causing Equipment Standard ICES-003 Issue 4 for Digital Apparatus, published by Industry Canada	February 7, 2004
<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	CAN/CSA-CEI/IEC CISPR 22	Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment	2002
<input type="checkbox"/>	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

9. Revision History

Edition	Date	Issued by	Note
1	07 February 2007	J. Roidt	First edition
2	03 April 2007	C. Jäger	<p>Edition 2: Modifications referring FCC requirements:</p> <p>1) Page "Time of occupancy" Information in "Limit" changed</p> <p>2) Page "Carrier Power Measurement" Information in "Limit" changed Output Power in W: values changed</p> <p>3) Additional testing "Radiated emissions 9 kHz to 30 MHz" included</p> <p>4) Page "Referenced Regulations changed to latest issue date</p>

10. Charts taken during testing

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

Model:
GE Solar Electric System Meter

Serial no.:
Prototype

Applicant:
GE Energy

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres
Horizontal Polarization

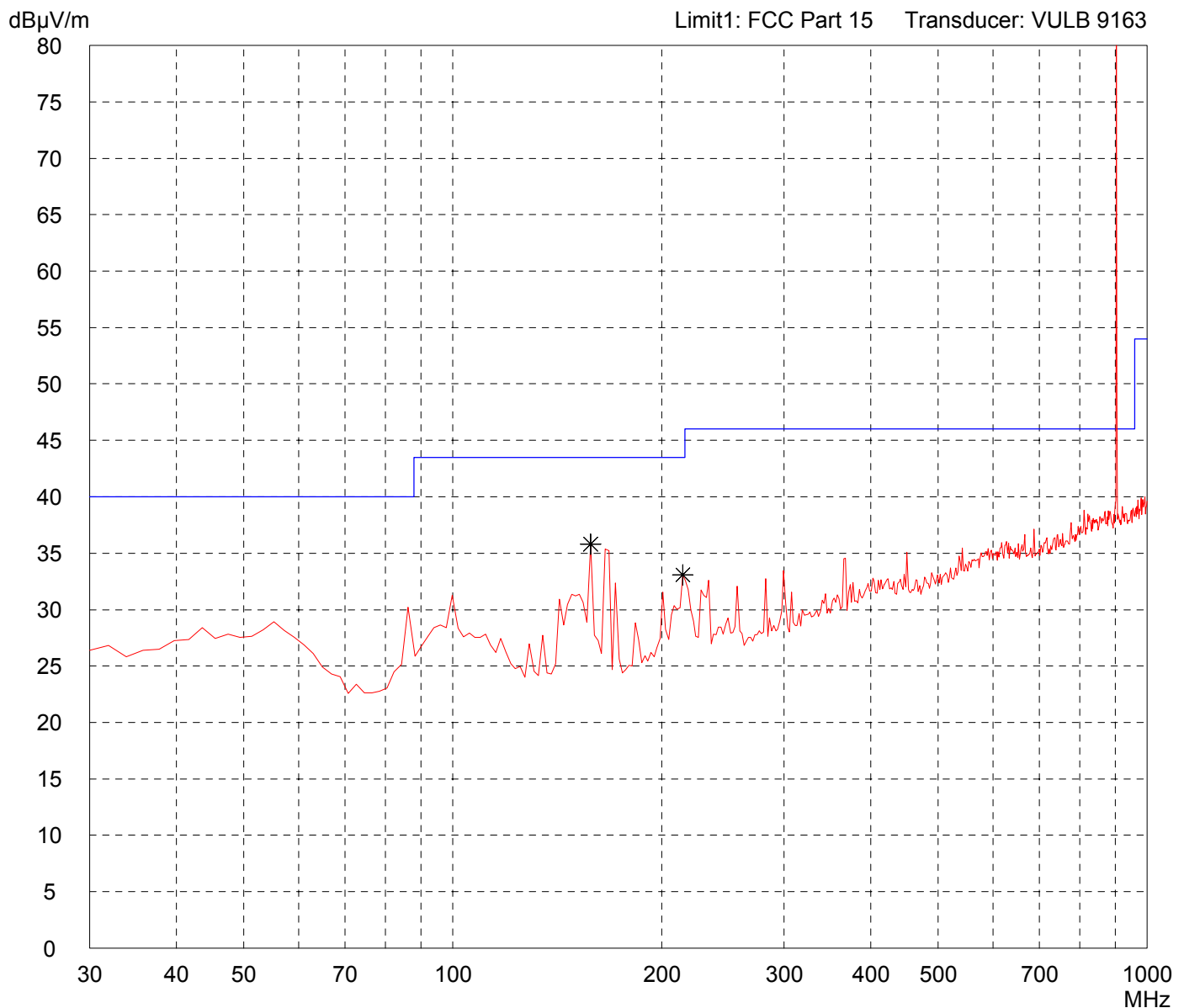
Date of test: 02/06/2007
Operator: J. Roidt

Test performed: automatically
File name: default.emi

Comment:
- TX CW at Low Channel

Detector:
Peak

List of values:
Selected by hand



Result:
Prescan

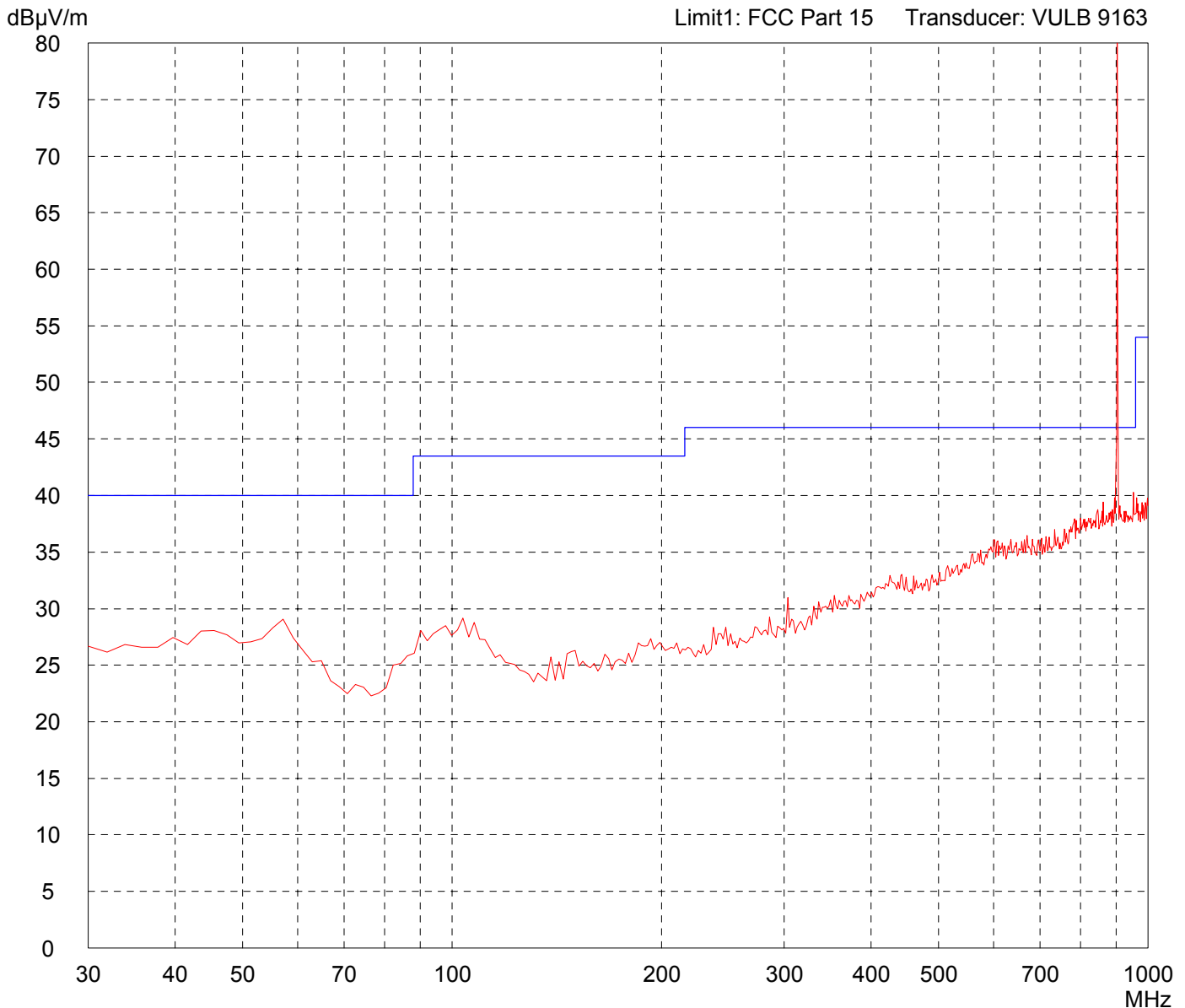
Project file:
56117-60865

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

Model: GE Solar Electric System Meter	Comment: - TX CW at Low Channel
Serial no.: Prototype	
Applicant: GE Energy	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 02/06/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

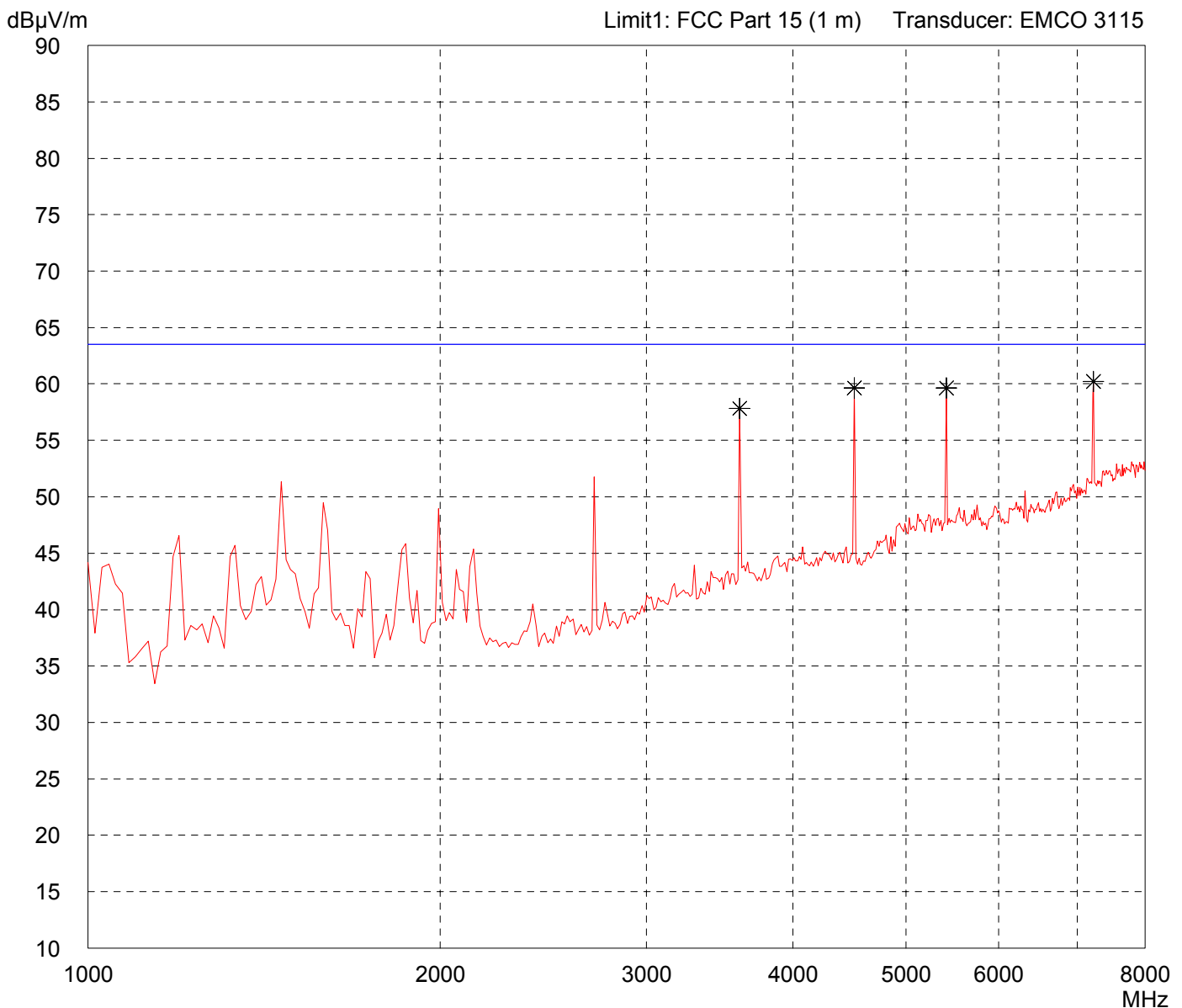


Result: Prescan	Project file: 56117-60865
Page of Pages	

Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Low Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

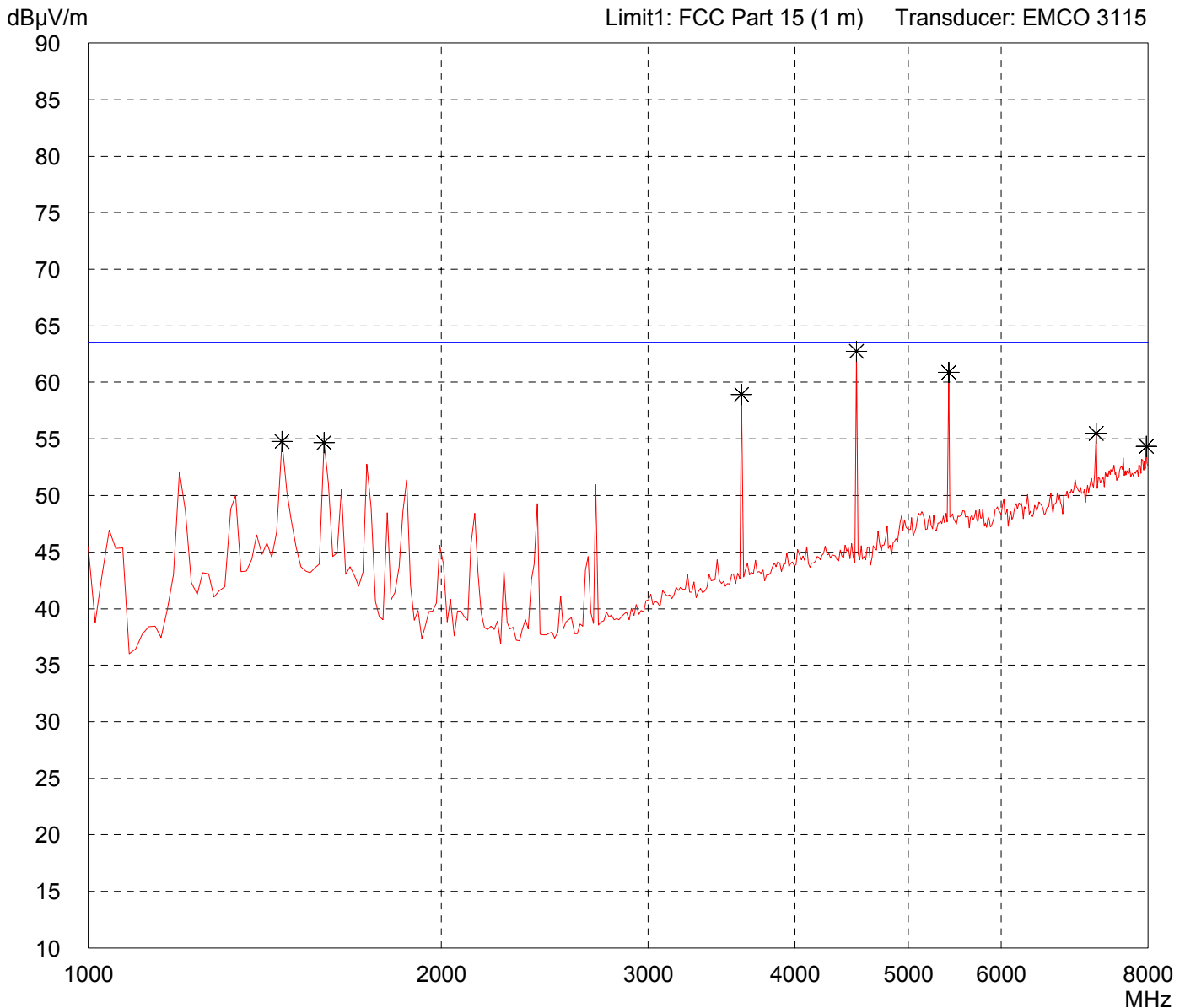


Result: Limit kept	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Low Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

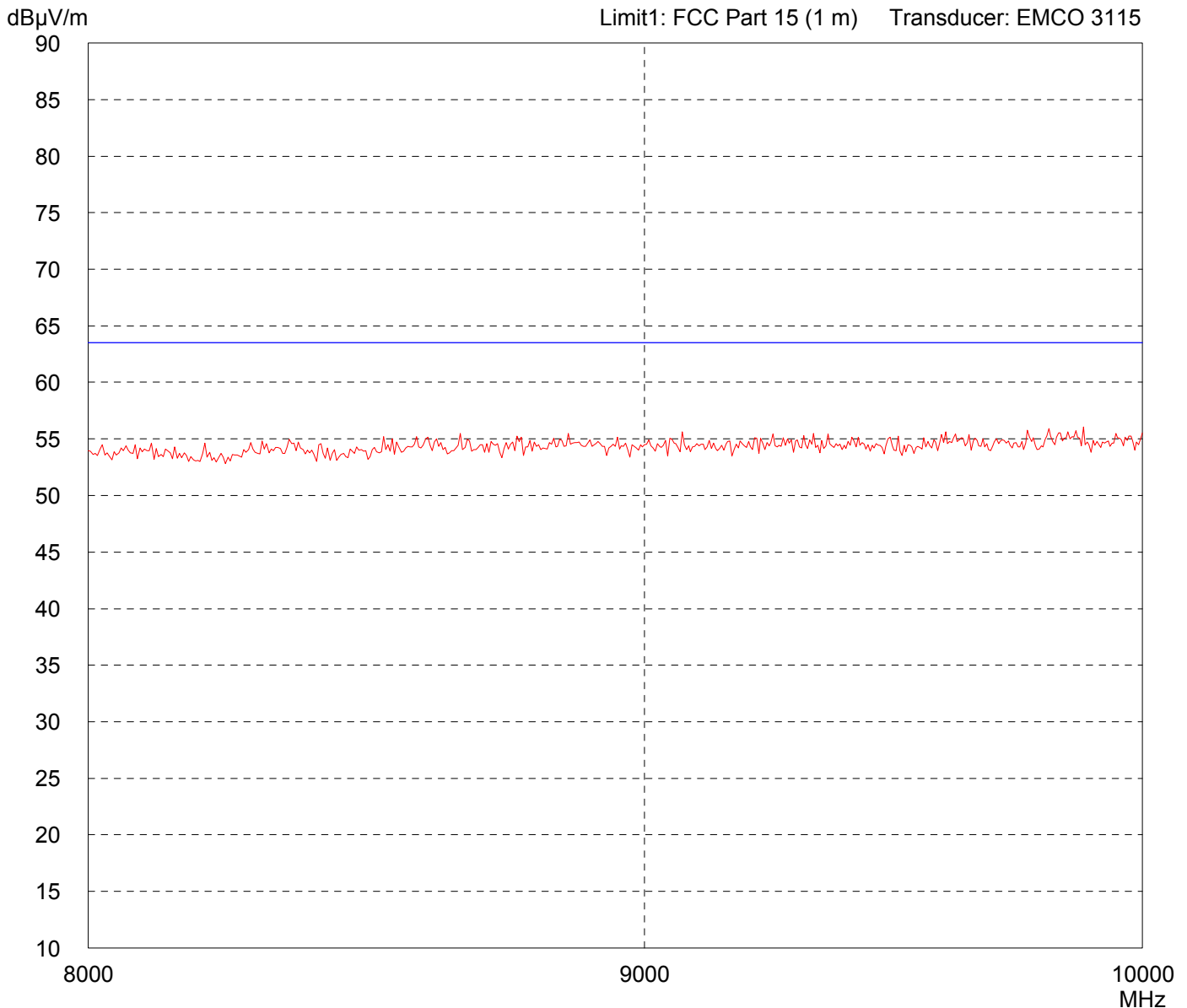


Result: Limit kept	Project file: 56117-60865
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Radiated Emission Test 8 GHz - 10 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Low Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

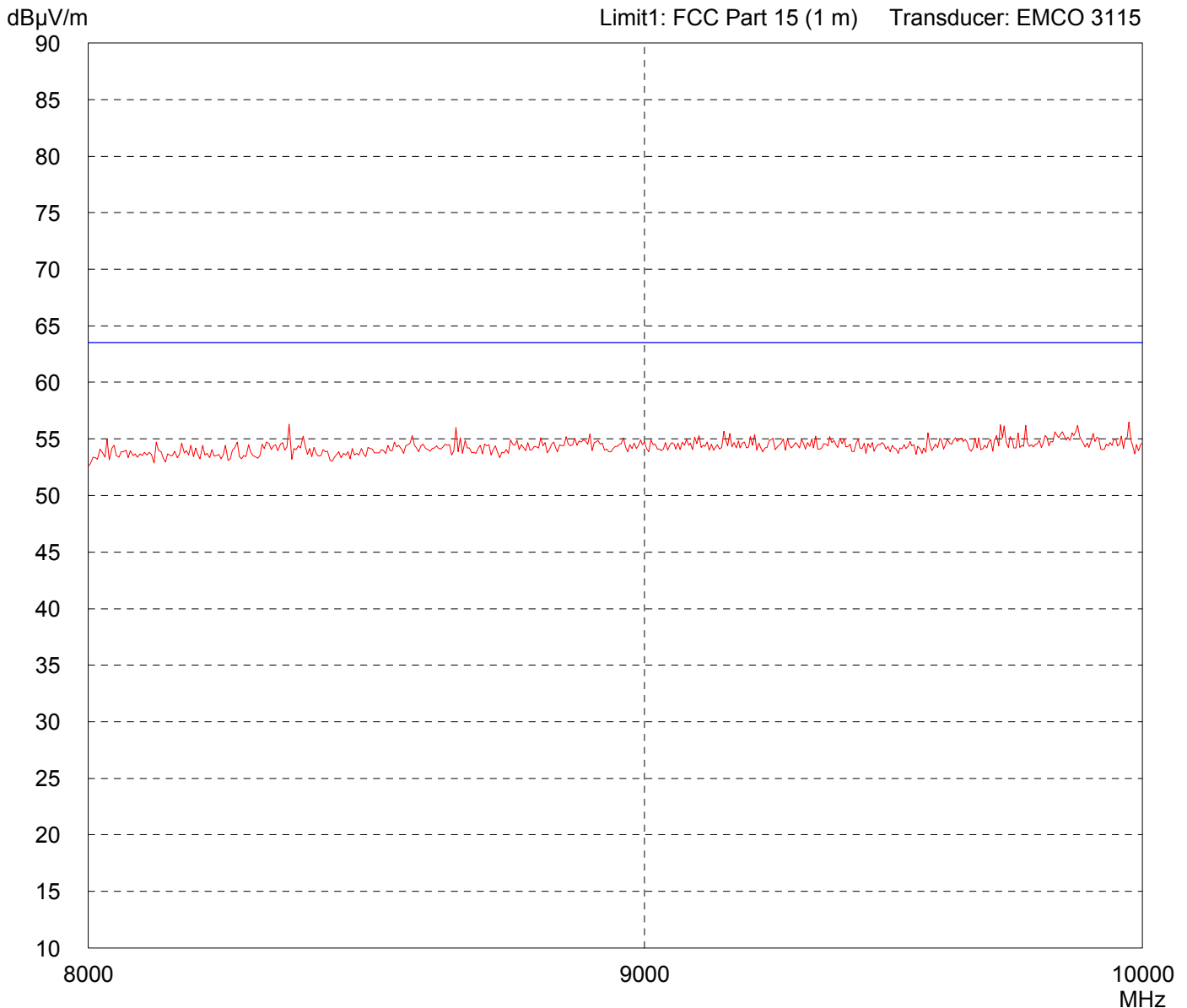


Result: Limit kept	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 8 GHz - 10 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Low Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

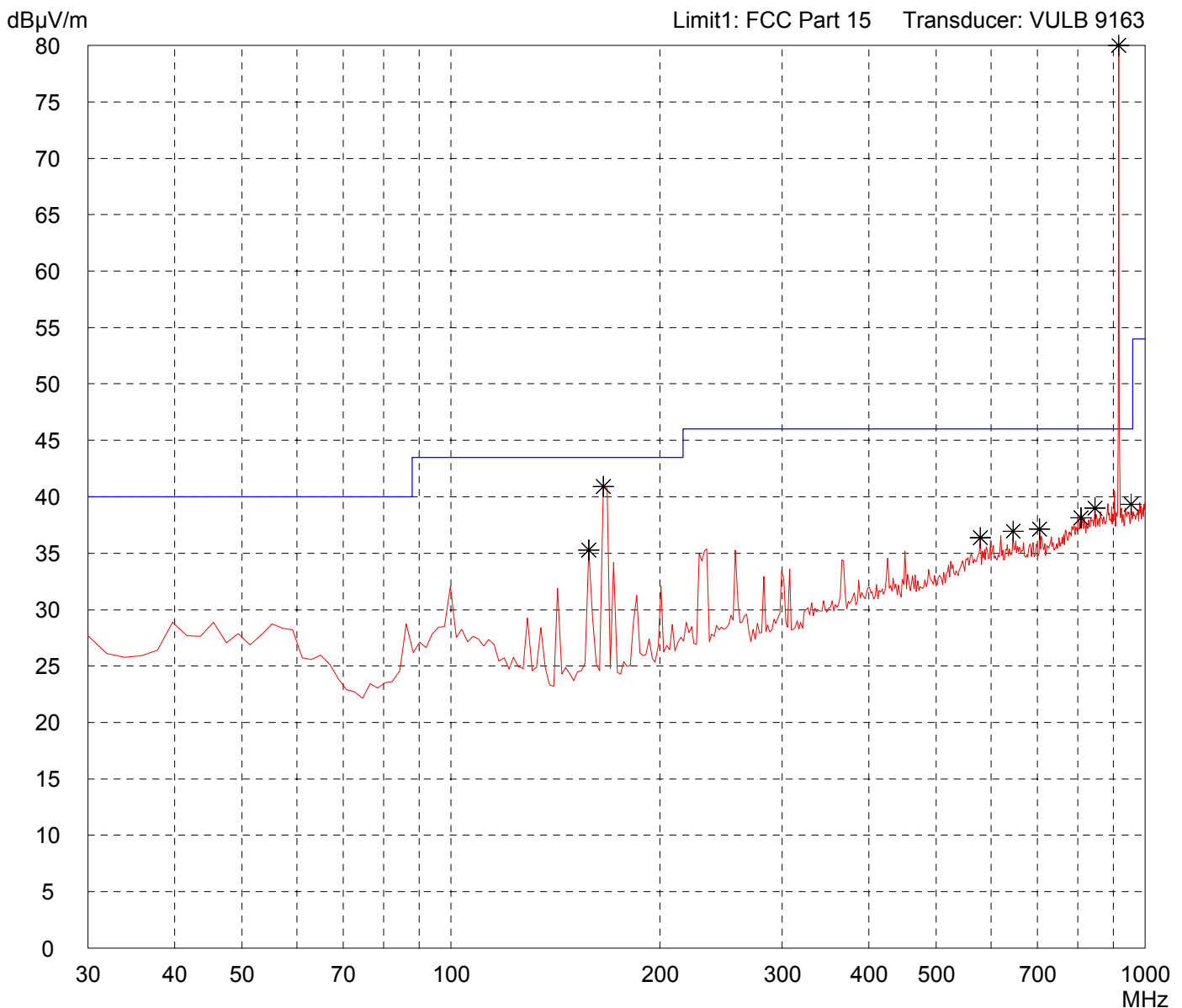


Result: Limit kept	Project file: 56117-60865
	Page of Pages

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

Model: GE Solar Electric System Meter	Comment: - TX CW at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 02/06/2007	
Operator: J. Roidt	
Test performed: automatically	
File name: default.emi	

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



Result: Prescan	Project file: 56117-60865
	Page of Pages

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

Model:
GE Solar Electric System Meter

Serial no.:
Prototype

Applicant:
GE Energy

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres
Vertical Polarization

Date of test:
02/06/2007

Operator:
J. Roidt

Test performed:
automatically

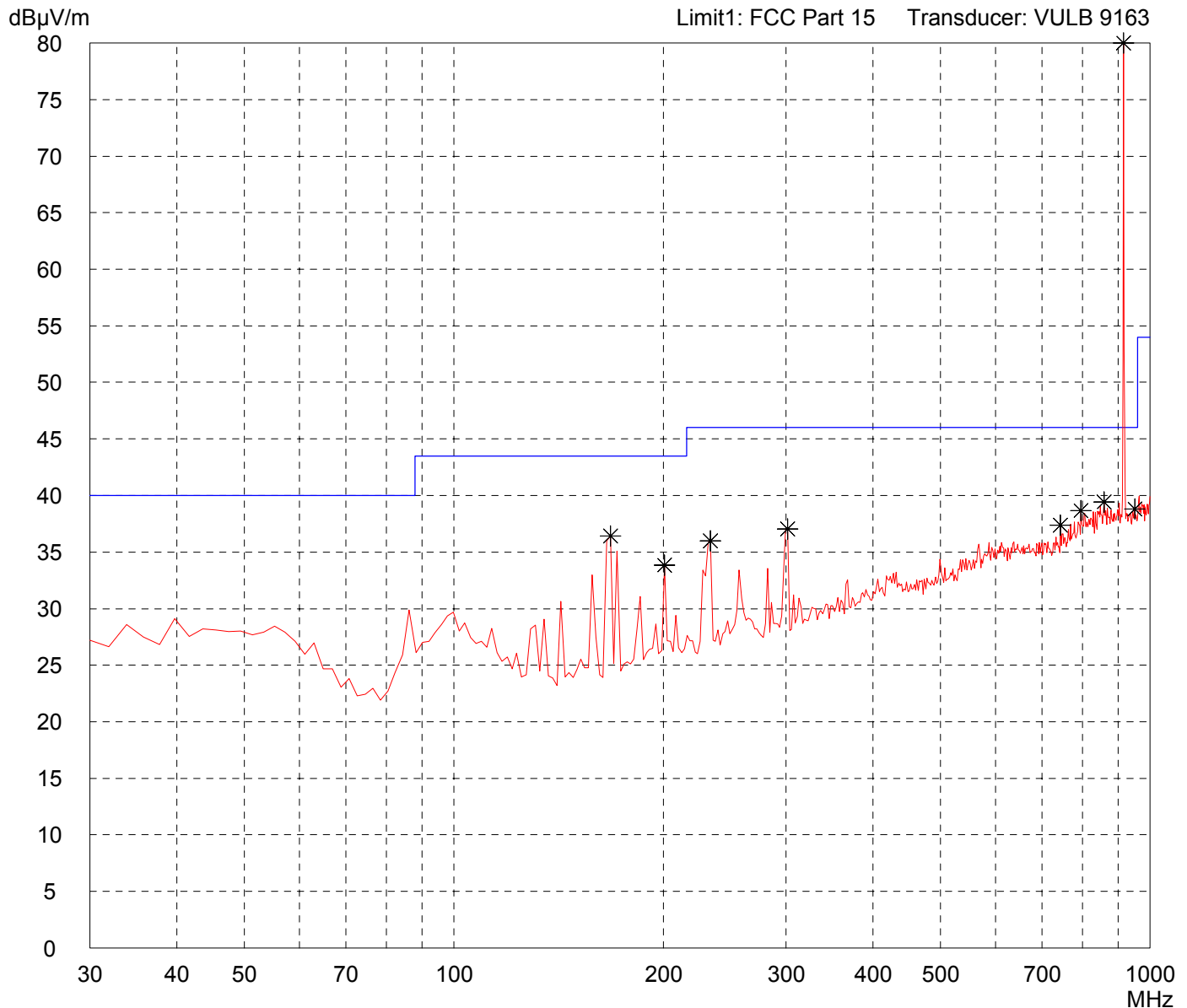
File name:
default.emi

Comment:
- TX CW at Middle Channel

Detector:
Peak

List of values:
10 dB Margin

50 Subranges



Result:
Prescan

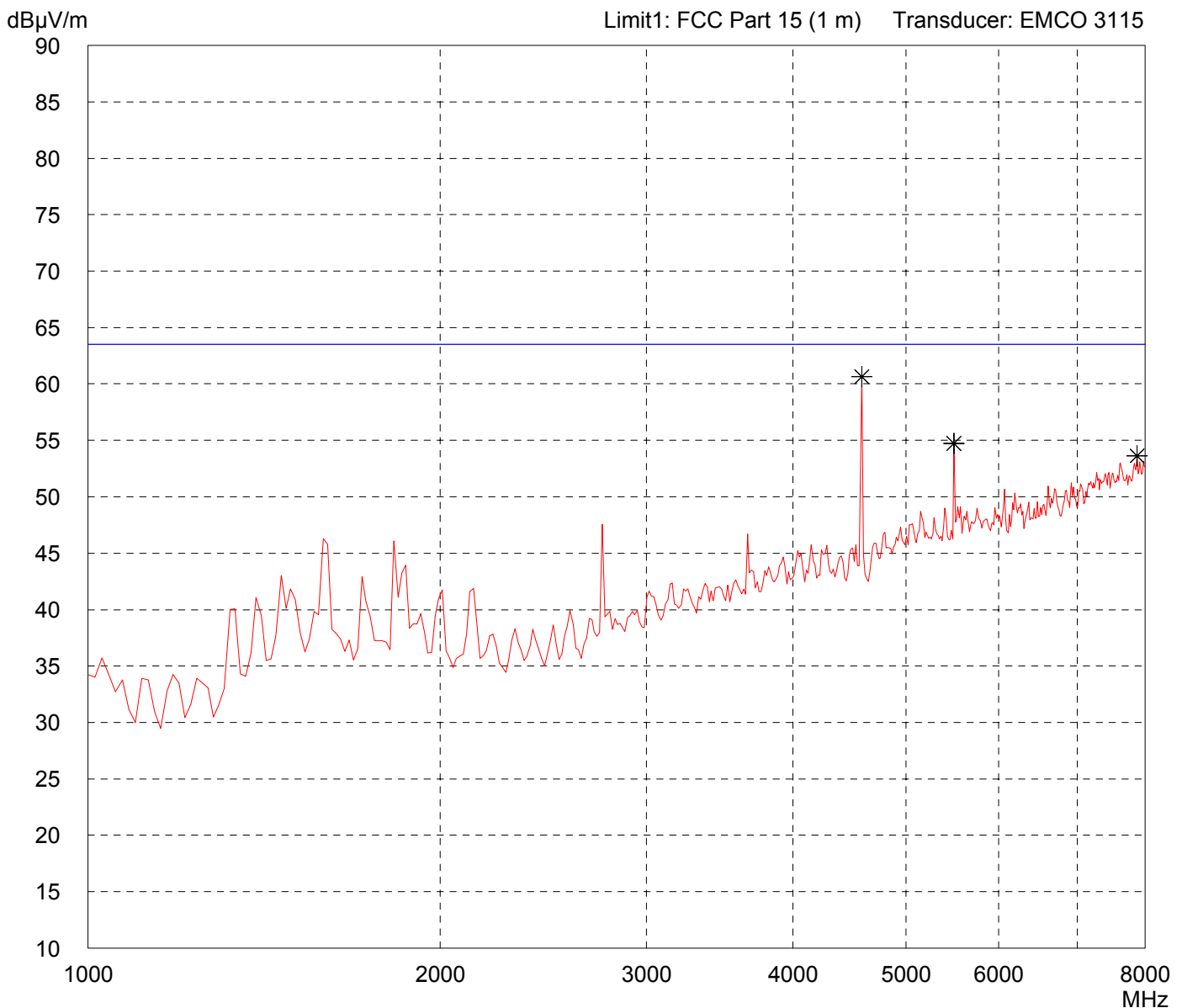
Project file:
56117-60865

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Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Mid Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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



Result: Limit kept	Project file: 56117-60865
	Page of Pages

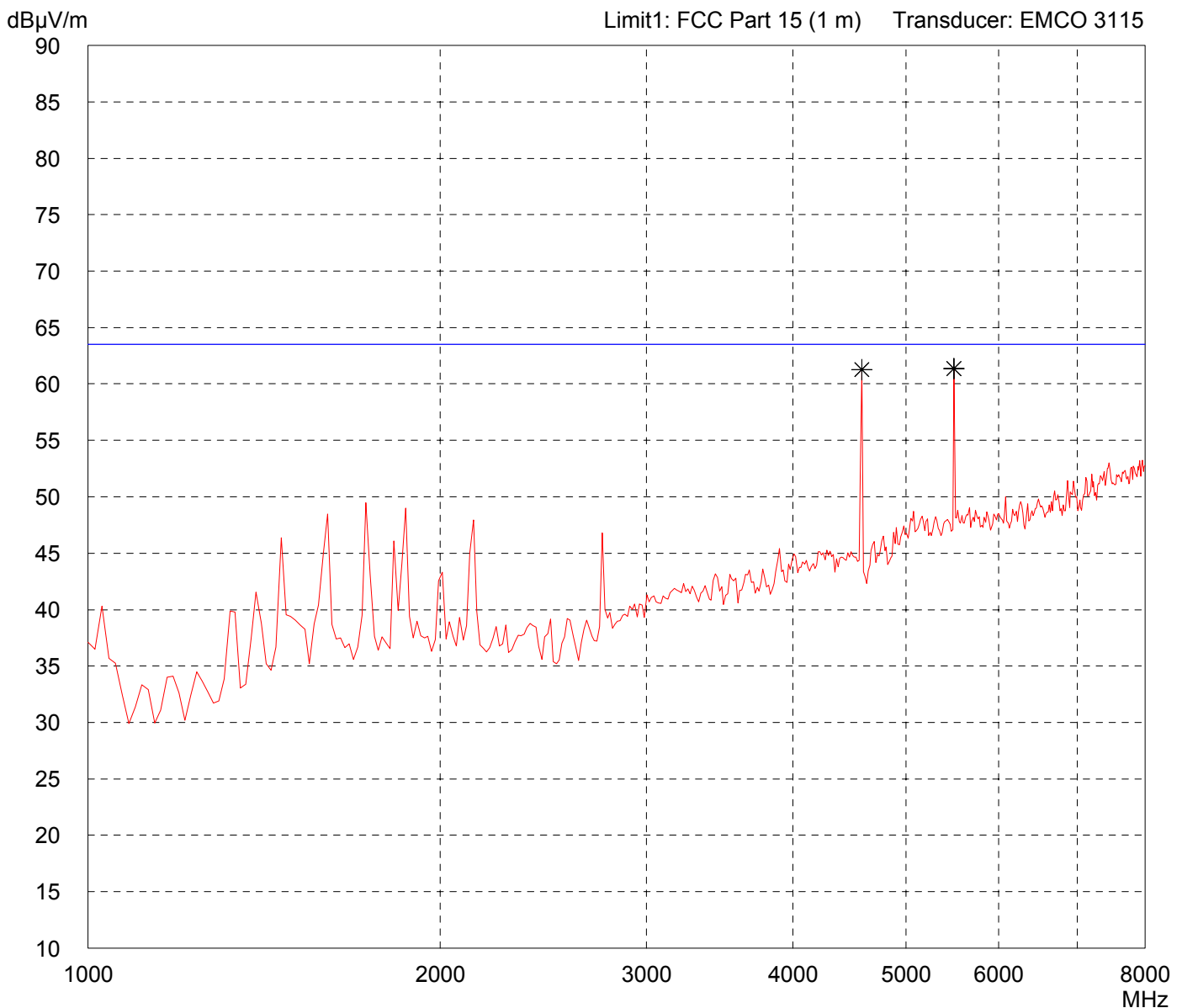
Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	Operator: J. Roidt
Test performed: automatically	File name: default.emi

Comment:
- TX at Mid Channel

Detector: Peak

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



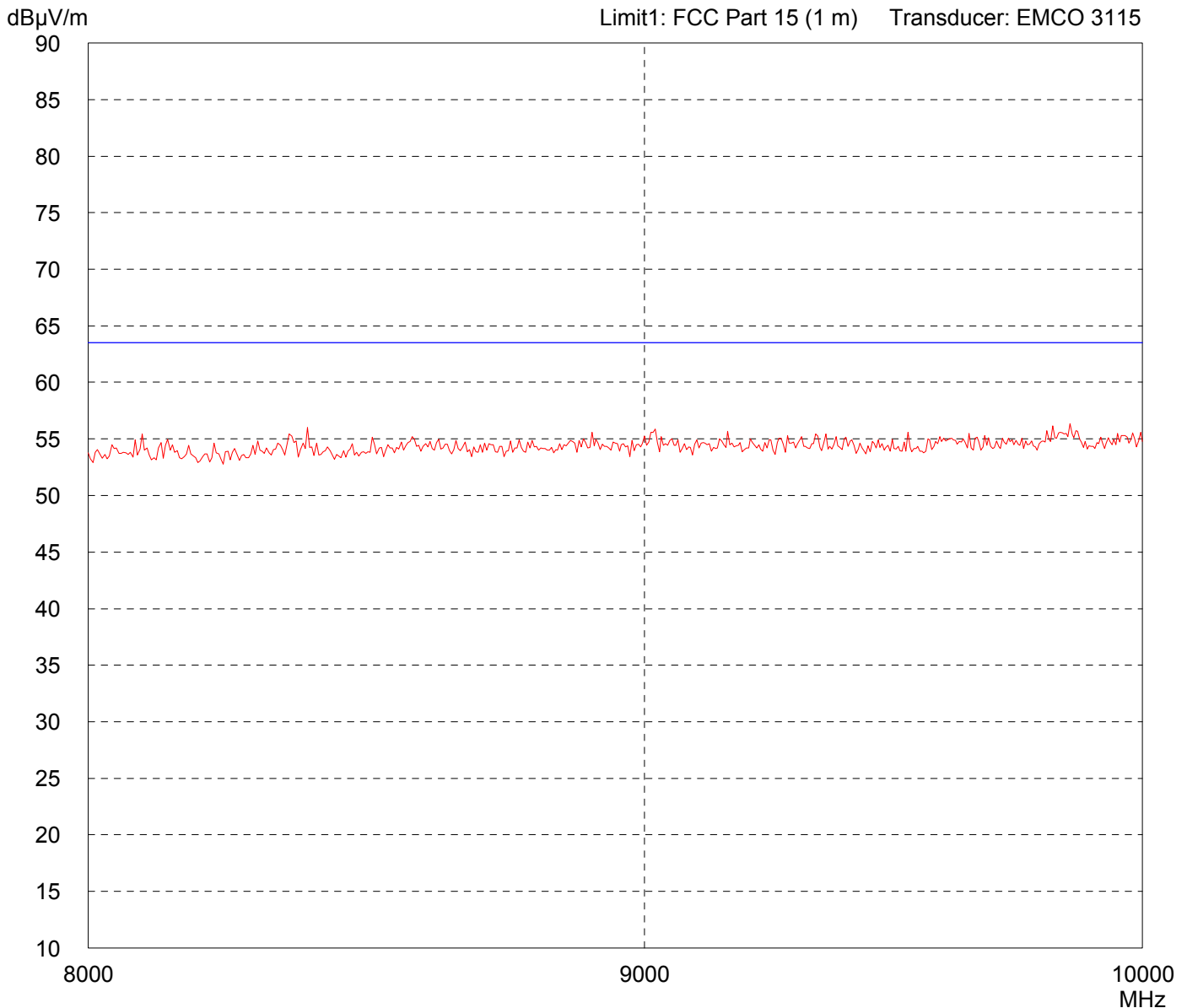
Result: Limit kept

Project file: 56117-60865	Page of Pages
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Radiated Emission Test 8 GHz - 10 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	Operator: J. Roidt
Test performed: automatically	File name: default.emi

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

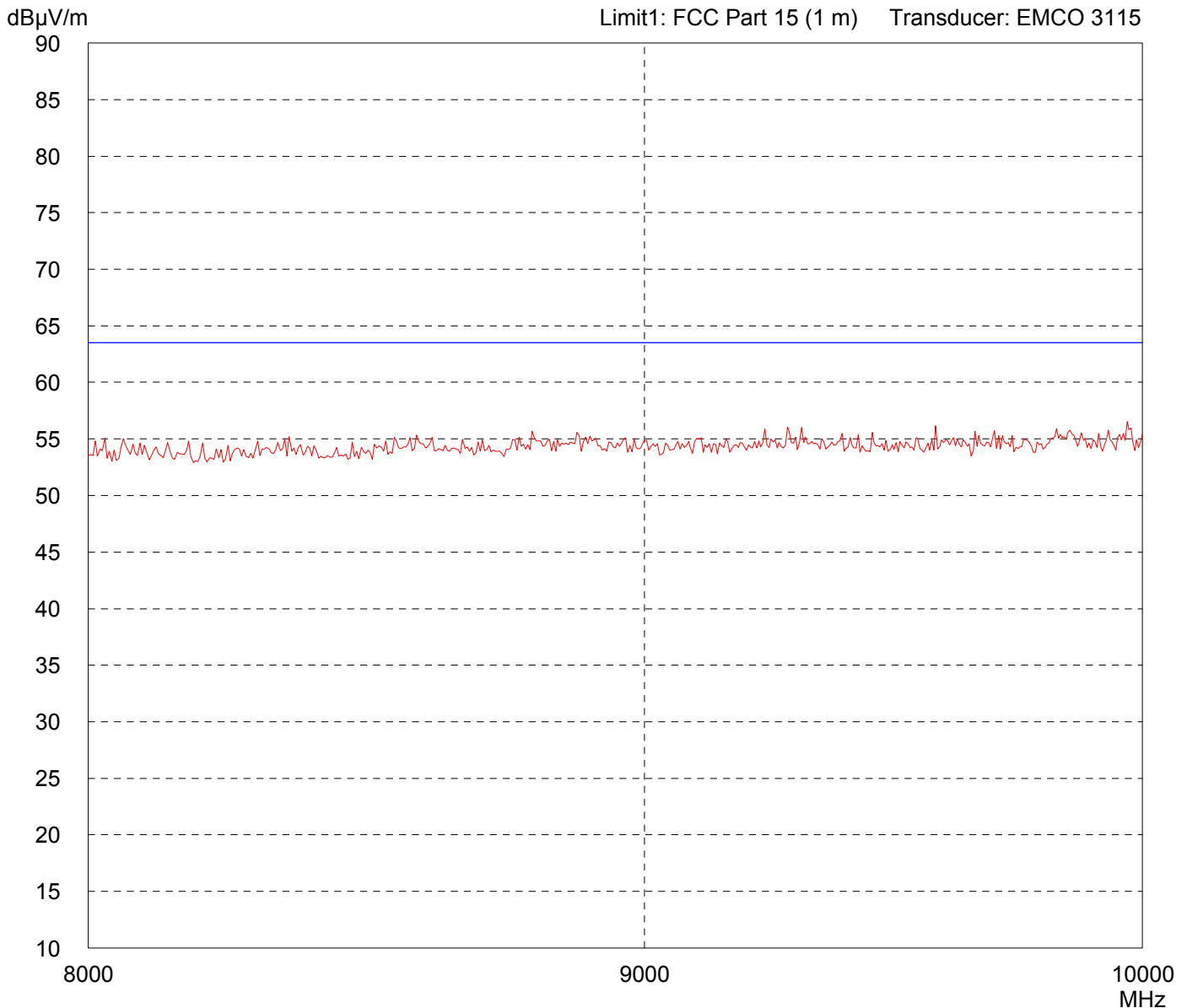


Result: Limit kept	Project file: 56117-60865
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Radiated Emission Test 8 GHz - 10 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/07/2007	Operator: J. Roidt
Test performed: automatically	File name: default.emi

Detector: Peak	List of values: Selected by hand
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Result: Limit kept	Project file: 56117-60865
	Page of Pages

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

Model:
GE Solar Electric System Meter

Serial no.:
Prototype

Applicant:
GE Energy

Test site:
Fully anechoic room, cabin no. 2

Tested on:
Test distance 3 metres
Horizontal Polarization

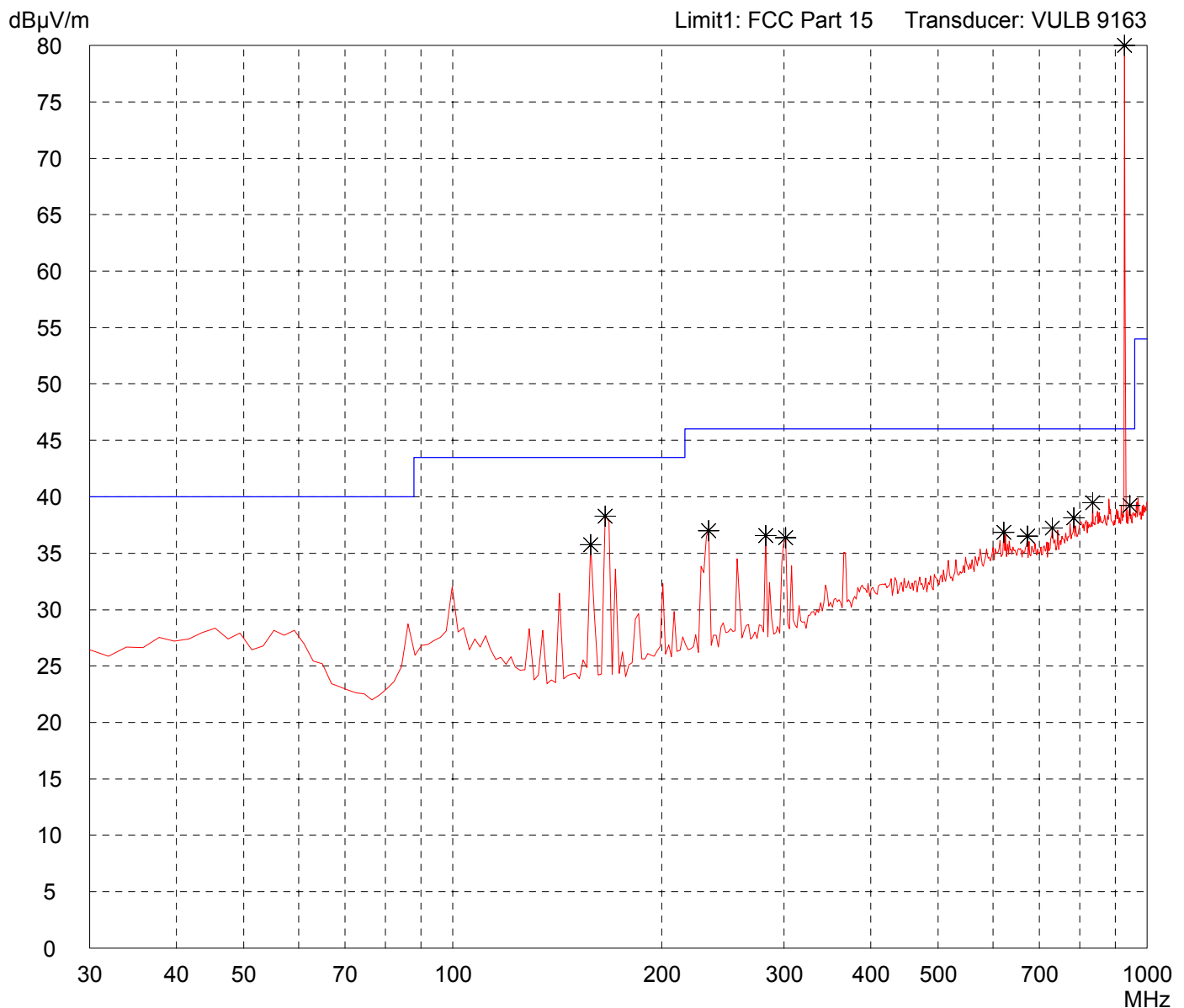
Date of test: 02/06/2007
Operator: J. Roidt

Test performed: automatically
File name: default.emi

Comment:
- TX CW at Highest Channel

Detector:
Peak

List of values:
10 dB Margin 50 Subranges



Result:
Prescan

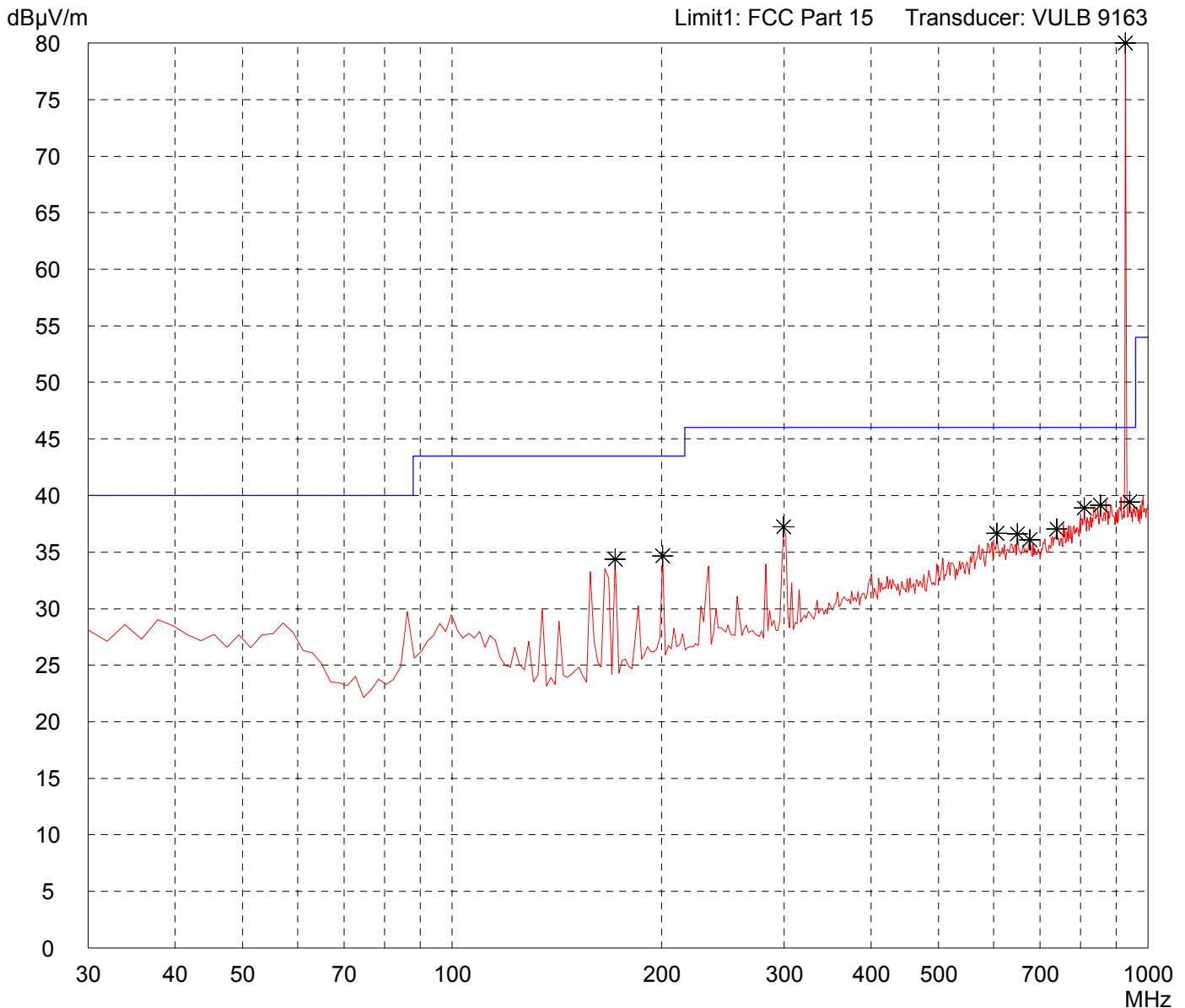
Project file:
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Radiated Emission Test 30 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX CW at Highest Channel
Serial no.: Prototype	
Applicant: GE Energy	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 02/06/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

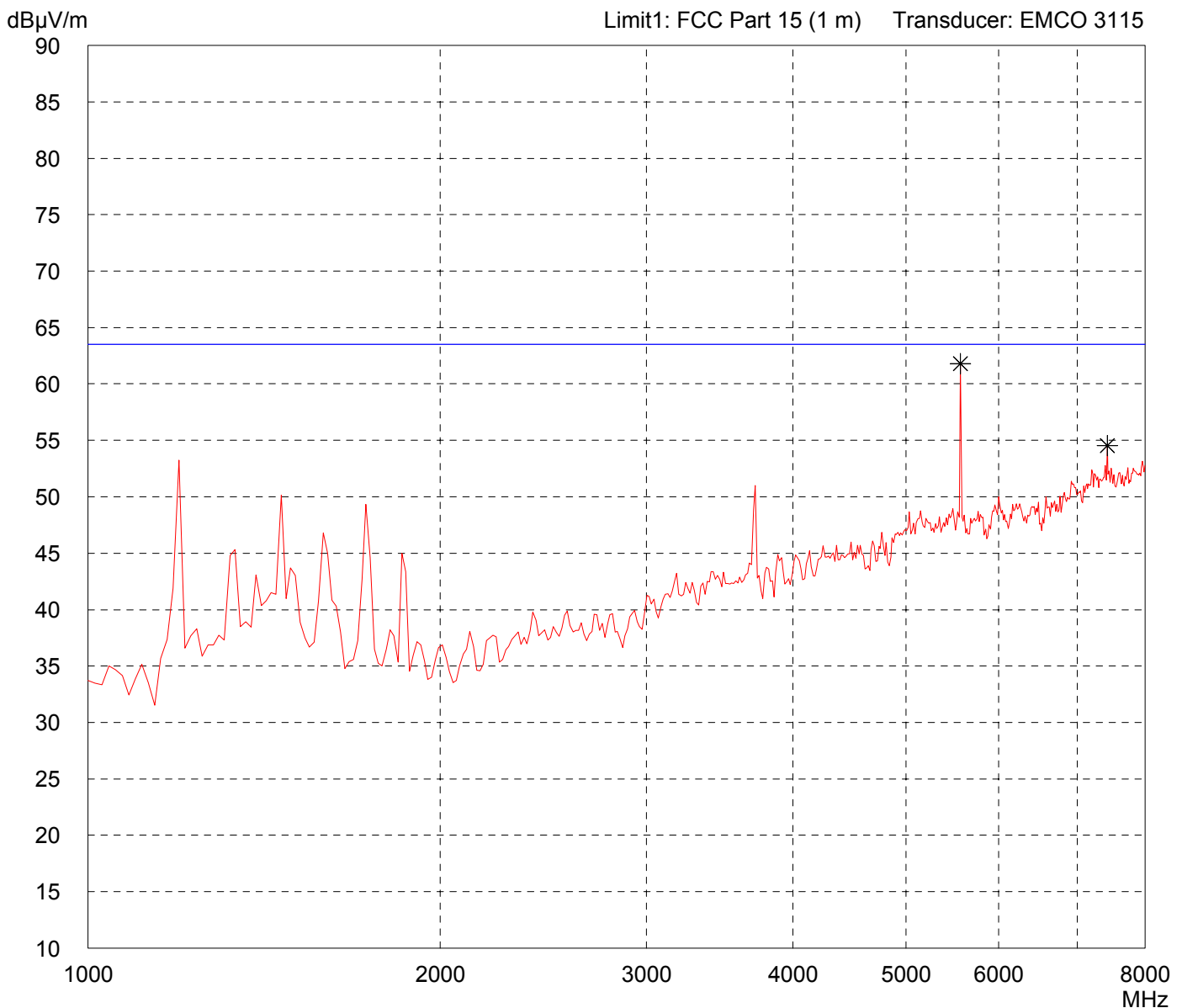
Detector: Peak	List of values: 10 dB Margin
	50 Subranges



Result: Prescan	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at High Channel	
Serial no.: Prototype		
Applicant: GE Energy LLC		
Test site: Fully anechoic room, cabin no. 2		
Tested on: Test distance 1 metre Horizontal Polarization		
Date of test: 02/07/2007		
Operator: J. Roidt		
File name: default.emi		
Detector: Peak	List of values: 10 dB Margin	
	50 Subranges	

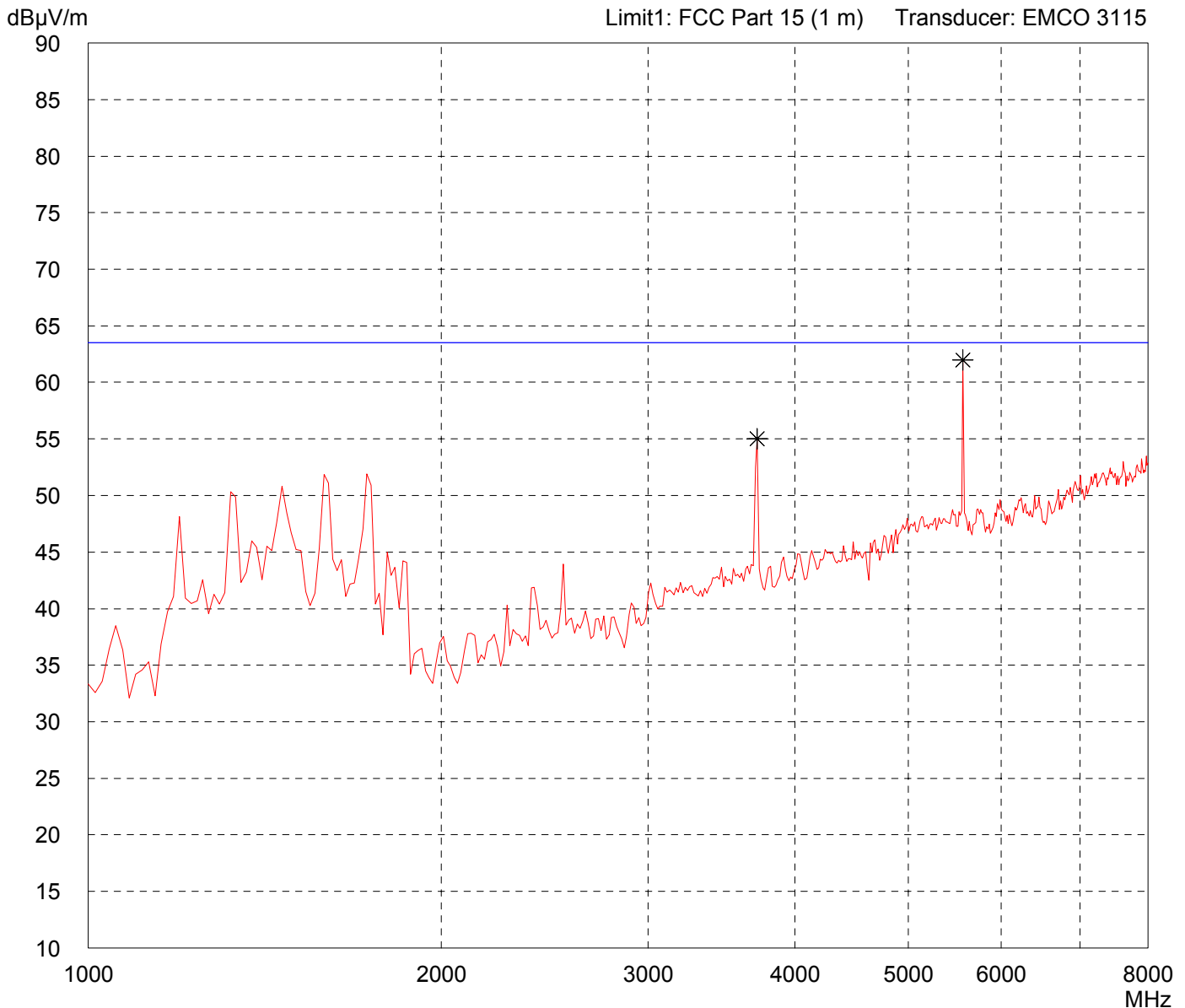


Result: Limit kept	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at High Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	Operator: J. Roidt
Test performed: automatically	File name: default.emi

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

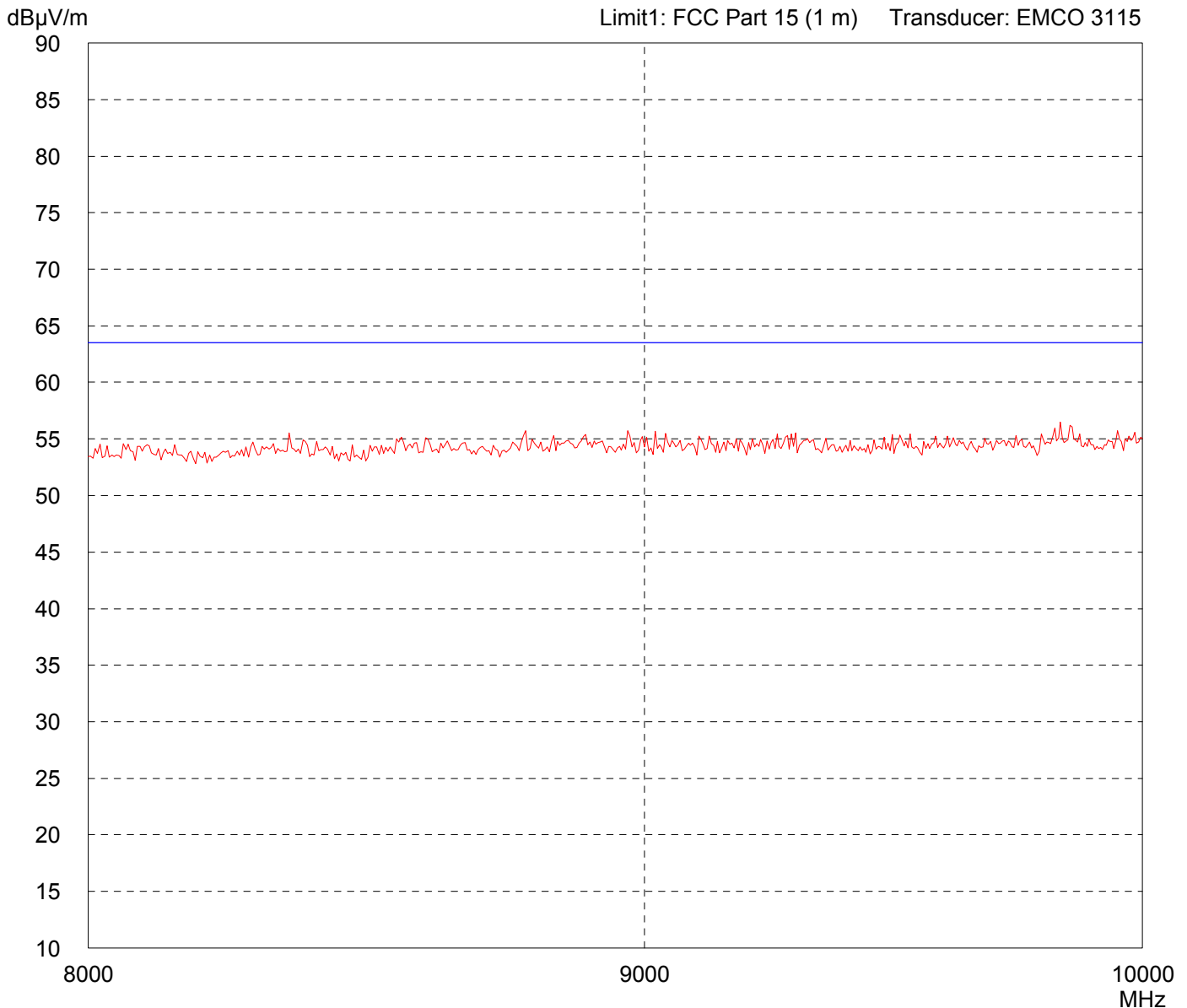


Result: Limit kept	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 8 GHz - 10 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at High Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

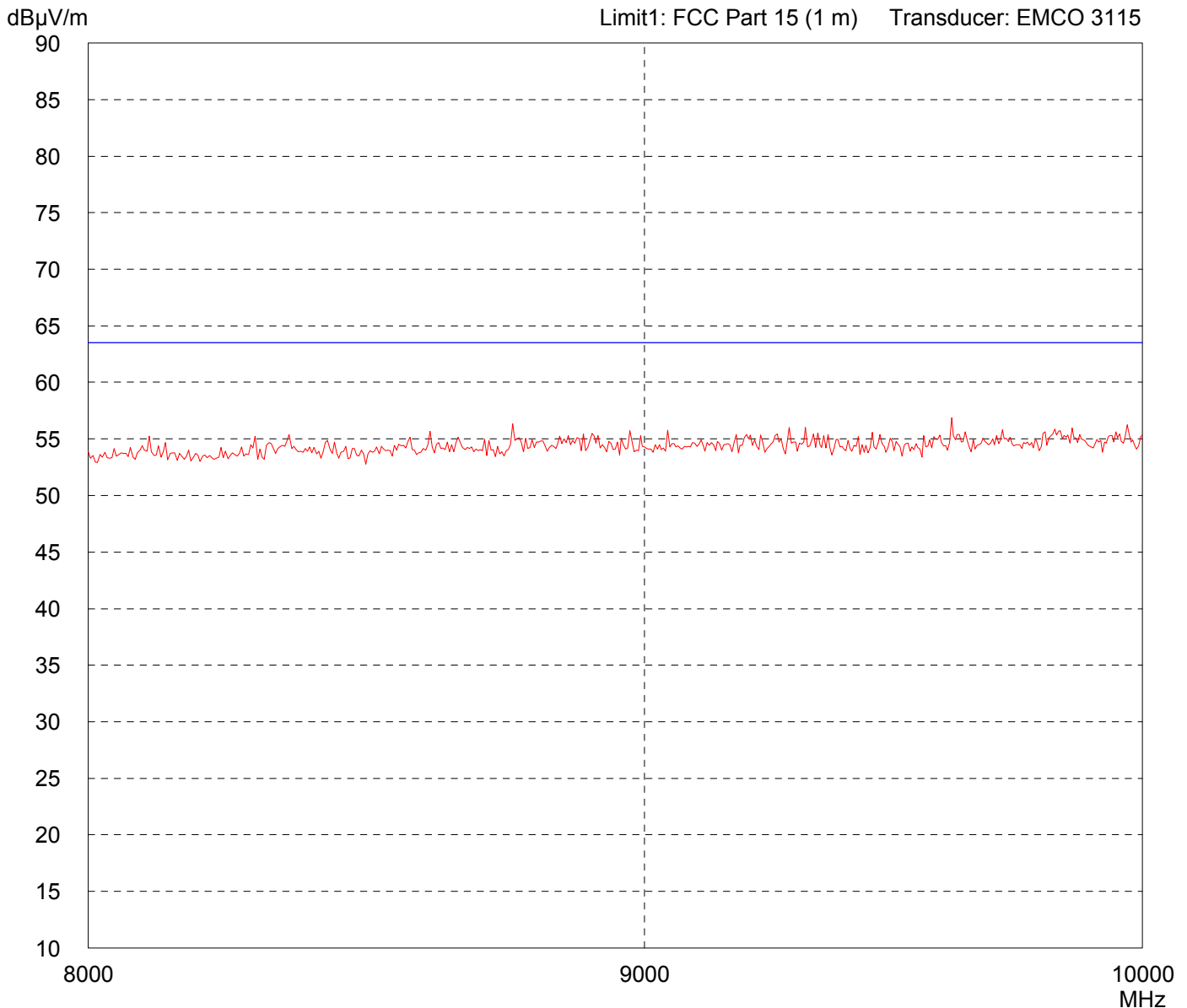


Result: Limit kept	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 8 GHz - 10 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - TX at High Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

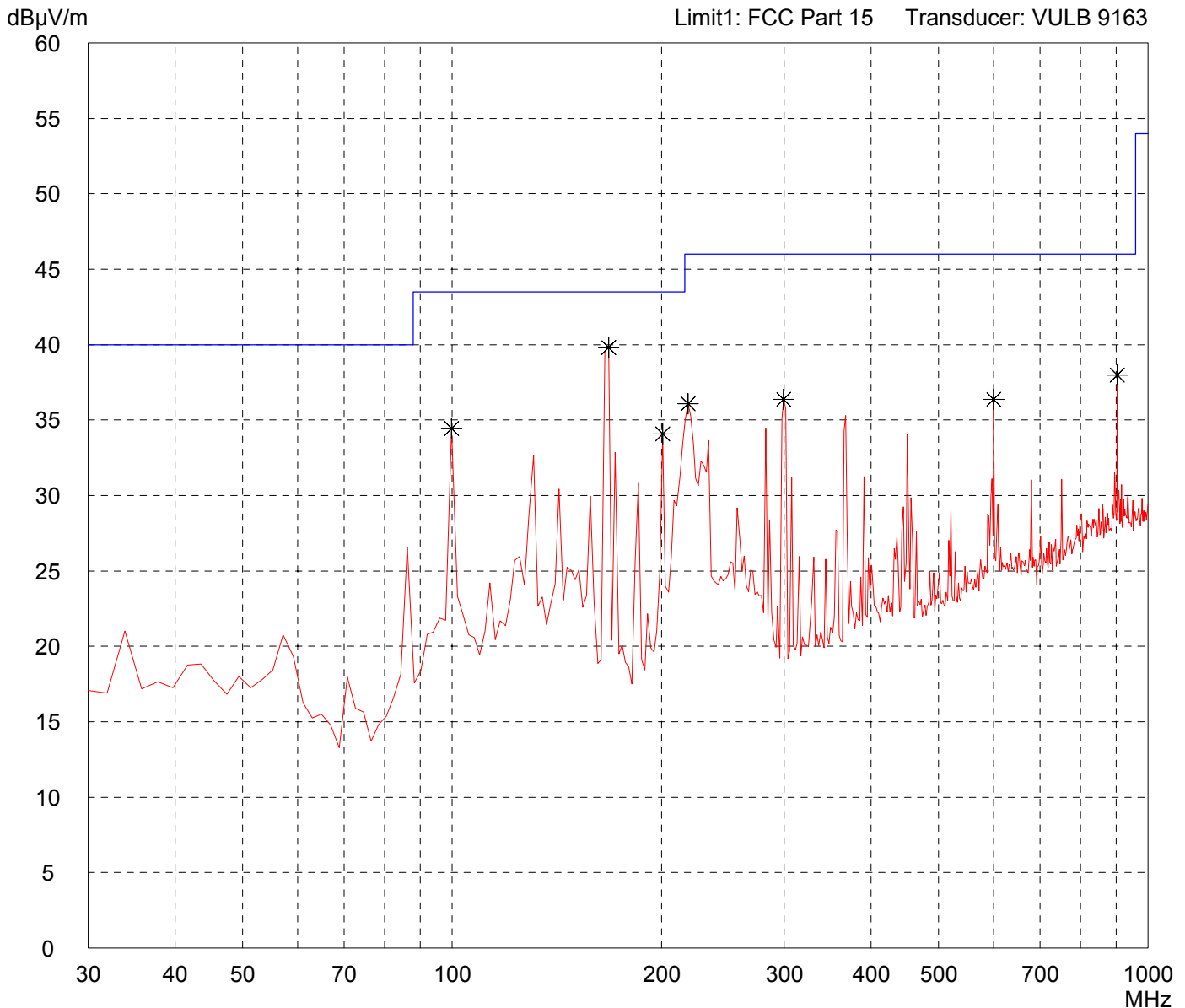


Result: Limit kept	Project file: 56117-60865
	Page of Pages

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

Model: GE Solar Electric System Meter	Comment: - RX at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	
File name: default.emi	

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

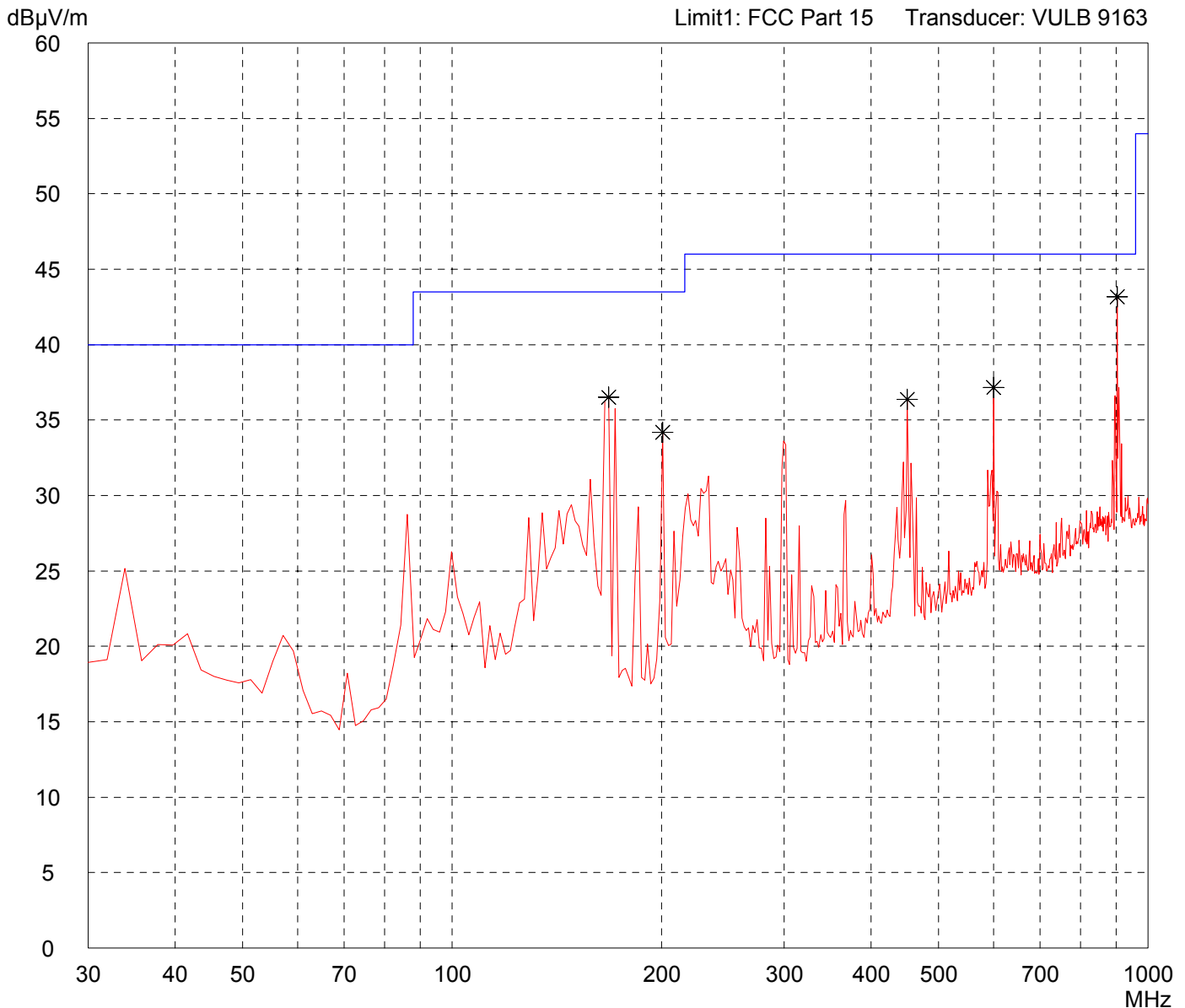


Result: Prescan	Project file: 56117-60865
	Page of Pages

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

Model: GE Solar Electric System Meter	Comment: - RX at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 02/07/2007	
Operator: J. Roidt	
Test performed: automatically	File name: default.emi

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

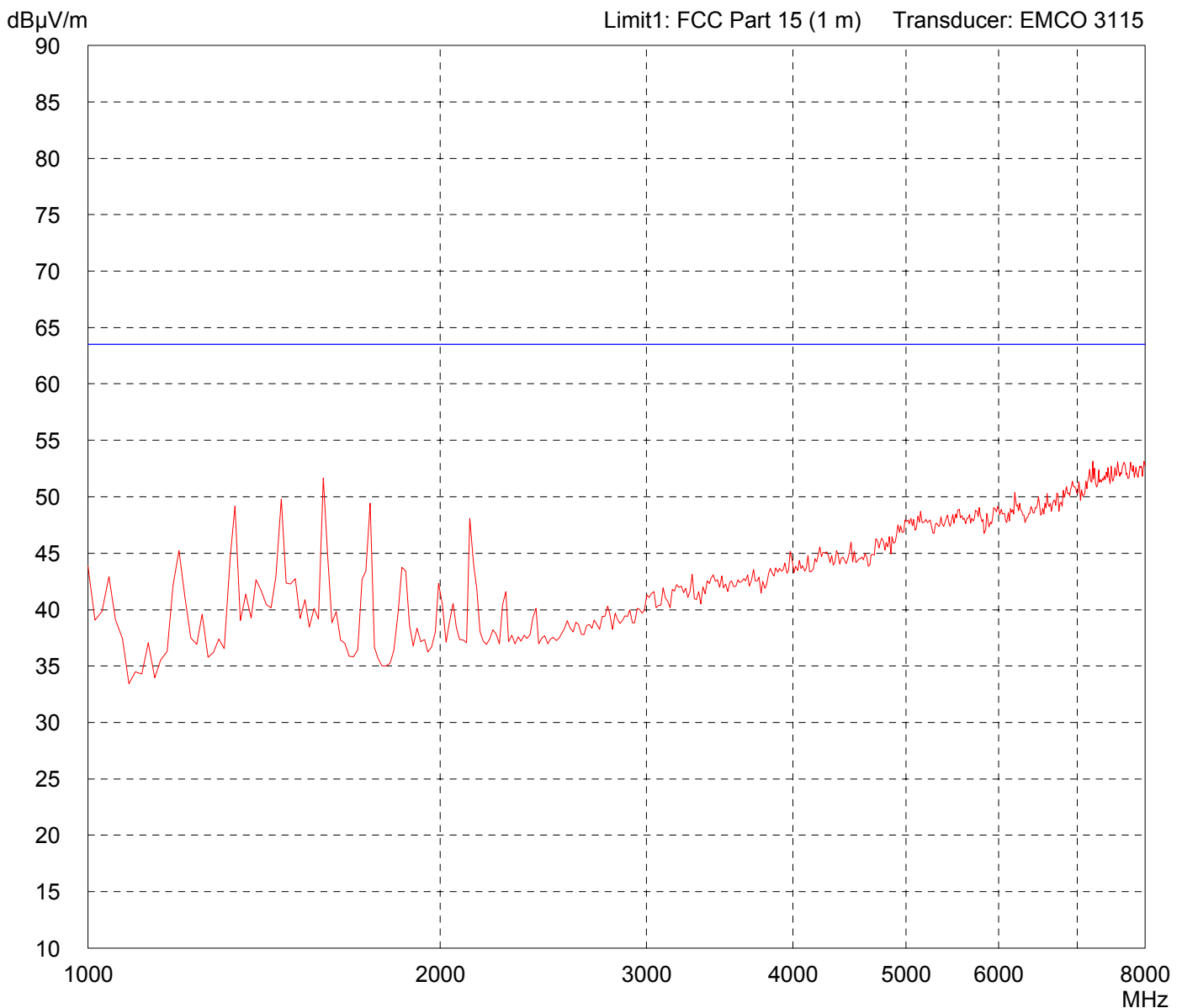


Result: Prescan	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - RX at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Horizontal Polarization	
Date of test: 02/07/2007	Operator: J. Roidt
Test performed: automatically	File name: default.emi

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

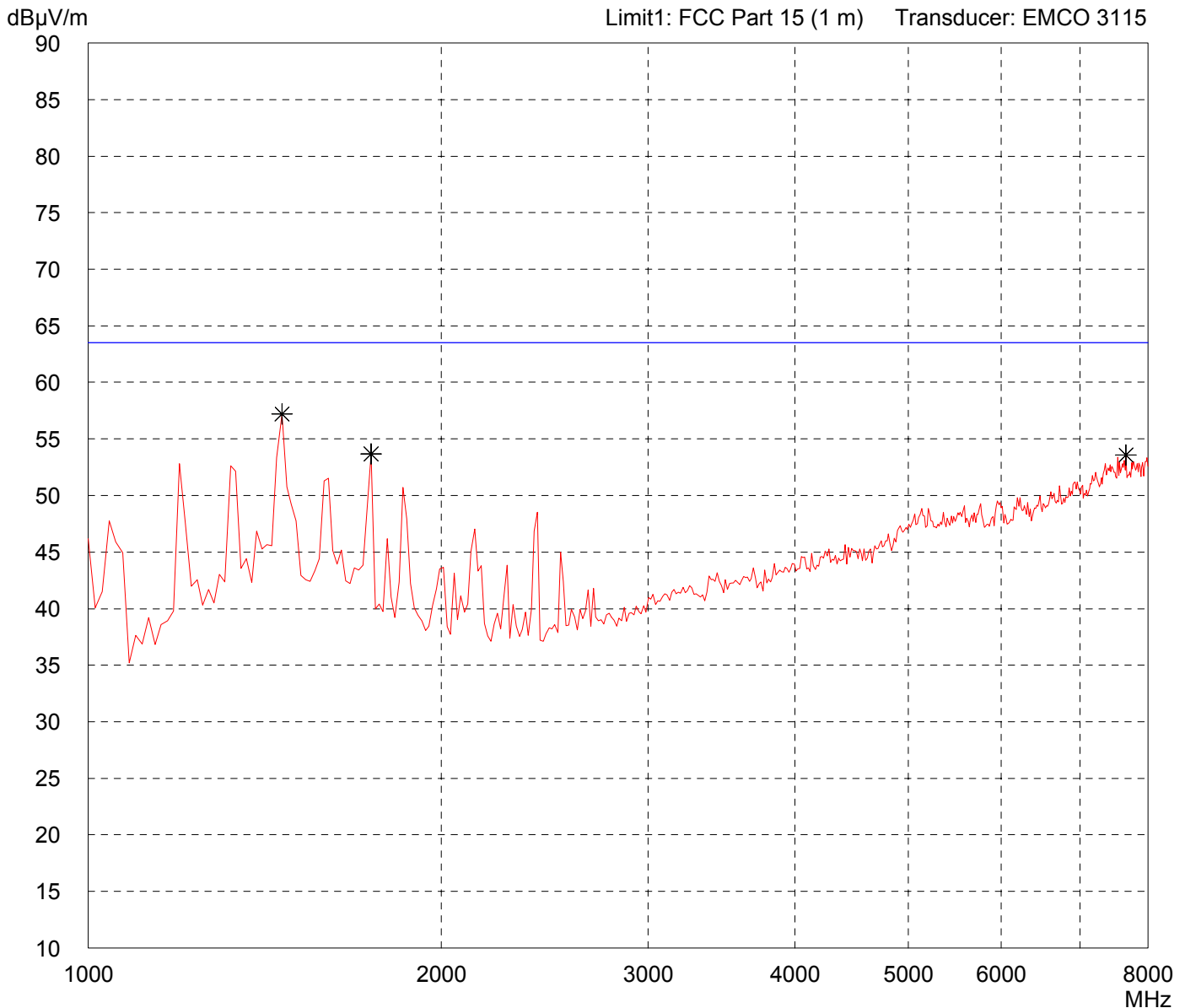


Result: Limit kept	Project file: 56117-60865
	Page of Pages

Radiated Emission Test 1 GHz - 8 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: GE Solar Electric System Meter	Comment: - RX at Middle Channel
Serial no.: Prototype	
Applicant: GE Energy LLC	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 1 metre Vertical Polarization	
Date of test: 02/07/2007	Operator: J. Roidt
Test performed: automatically	File name: default.emi

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



Result: Limit kept	Project file: 56117-60865
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