

Straubing, Juli 12, 2001

TEST-REPORT

No. 56308-10178

for

DHP

Inductive Reader for Animal Identification

Applicant: AGRIDENT BV

Purpose of testing: To show compliance with

FCC Code of Federal Regulations,
Part 15 Subpart C, Section 15.209

Industry Canada Radio Standards
Specification RSS-210 Issue 4,
Section 6.1 (Category I Equipment)

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.

Table of Contents

1.	Administrative Data	3
2.	Identification of Test Laboratory.....	4
3.	Summary of Test Results	5
4.	Operation Mode of EUT	6
5.	Configuration of EUT and Peripheral Devices	7
6.	Measuring Methods.....	8
6.1.	Conducted Emission 0.45 MHz - 30 MHz (§15.107) / RSS- 210 Section 7.4)	8
6.2.	Radiated Emission 30 MHz - 1 GHz (FCC §15.109 / RSS- 210 Section 7.3)	11
6.3.	Radiated Emission 1 GHz - 4.5 GHz (FCC §15.109 / RSS- 210 Sections 7.3)	13
7.	Equipment List.....	15
8.	Photographs Taken During Testing	17
9.	List of Measurements.....	23
9.1.	List of Measurements According To FCC Part 15 Subpart B 24	
9.2.	List of Measurements According To Industry Canada RSS- 210 25	
10.	Referenced Regulations	26
11.	Test Results.....	27

1. Administrative Data

Equipment Under Test (EUT): DHP
Serial number(s): 0001
Type of equipment: Inductive Reader for Animal Identification
Parts/accessories:
FCC-ID: QG2DHP

Applicant:
(full address) AGRIDENT BV
Telnasingel 3
NL-2411 PW Bodegraven

Contract identification: ---
Contact person: Mr. Helmut Ruppert
Manufacturer: AGRIDENT BV

Receipt of EUT: March 09, 2001
Date of test: April 2001
Note: ---

Responsible for testing: Johann Roidt
Responsible for test report: Johann Roidt

2. Identification of Test Laboratory

Test Laboratory: Senton GmbH EMI/EMC Test Center
(full address): Aeussere Fruehlingstrasse 45
D-94315 Straubing
Germany

Contact person:	Mr. Johann Roidt		
Communication:	Telephone	(+49) 0 94 21 / 55 22-0	
	Fax	(+49) 0 94 21 / 55 22-99	
	eMail:	Office@senton.de	

FCC registration number: 90926
Industry Canada file number: IC 3050

3. Summary of Test Results

The tested sample complies with the requirements set forth in the

**FCC Part 15 Subpart C, section 15.209
of the Federal Communication Commission (FCC).**

and the

**Radio Standards Specification RSS-210 Issue 4, Section 6.1 for Low Power
Licence-Exempt Radiocommunication Devices (all frequency bands).**



Johann Roidt
Technical Manager

4. Operation Mode of EUT

Not applicable

5. Configuration of EUT and Peripheral Devices

Configuration of cables of EUT

Not applicable

Configuration of peripheral devices connected to EUT

All tests were performed with the Receiver module installed in a garage door opener unit.

6. Measuring Methods

6.1. Conducted Emission 0.45 MHz - 30 MHz (§15.107) / RSS-210 Section 7.4)

Conducted emissions were measured in the frequency range 0.45 MHz to 30 MHz. The bandwidth of the EMI-Receiver was set to 9 kHz and the detector-function was set to CISPR quasi-peak.

The test setup was made in accordance with ANSI C63.4-1992.

Measurements were performed on phase and neutral lines of the power-cords of the tested system. Preliminary scans were taken with the detector-function of the EMI-receiver set to peak to determine the conducted EMI-profile of the EUT. At the final test the cables and equipment were placed and moved within the range of positions likely to find their maximum emissions.

See figure 1 for the measurement setup.

Test equipment used (see equipment list for details):

04, 22, 23, 60, 63

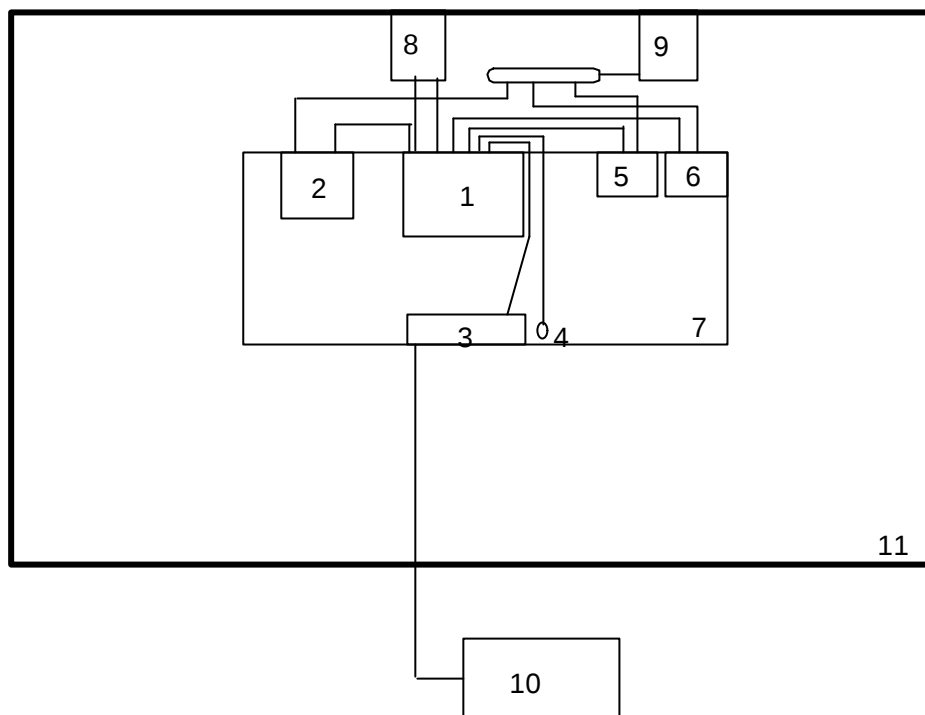


Figure 1: Example of measurement setup for conducted emission test

- | | | | |
|----------|------------------|-----------|-------------------------------|
| 1 | EUT | 8 | LISN for EUT |
| 2 | Monitor | 9 | LISN for peripheral device(s) |
| 3 | Keyboard | 10 | Test receiver |
| 4 | Mouse | 11 | Shielded room |
| 5 | Parallel Printer | | |
| 6 | Serial Printer | | |
| 7 | Wooden table | | |

**6.2. Field strength of in-band emissions and unwanted emissions
< 30 MHz, sections 15.209 (a) and 15.209 (b)**

Radiated emissions in the frequency range 9 kHz – 30 MHz will be measured initially at a distance of 3 meters. A prescan at 3 meter distance will be performed in a shielded room with the detector of the spectrum analyzer or EMI Receiver set to peak. Final measurement is then performed at 30 meter distance. In case the regulation requires testing at other distances, the result will be extrapolated. The extrapolation factor will be determined by making a second measurement at 10 meter distance. The provisions of 15.31 (d) apply.

According to section 15.209 (d) final measurement is performed with the detector set to Quasi Peak except for the frequency bands 9 – 90 kHz and 110 – 490 kHz where average detector is employed.

6.3. Radiated Emission 30 MHz - 1 GHz (FCC §15.209 / RSS-210 Section 7.3)

Radiated emissions are measured over the frequency range from 30 MHz to 1 GHz. The bandwidth of the EMI-receiver is set to 120 kHz and the detector-function is set to CISPR quasi-peak.

The test setup is made in accordance with ANSI C63.4-1992.

Measurements are made in both the horizontal and vertical planes of polarization.

Preliminary scans are taken in a semi-anechoic room using a spectrum analyzer with the detector function set to peak. 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.

All tests are performed at a test-distance of 3 meters.

For final testing an open-area test-site is used. During the tests the EUT is rotated all around and the receiving-antenna is raised and lowered from 1 meter to 4 meters to find the maximum levels of emissions. The cables and equipment is placed and moved within the range of position likely to find their maximum emissions.

See figure 2 for the measurement setup.

Test equipment used (see equipment list for details):

01, 02, 05, 12, 38, 39, 40, 41, 58, 61, 64, 66

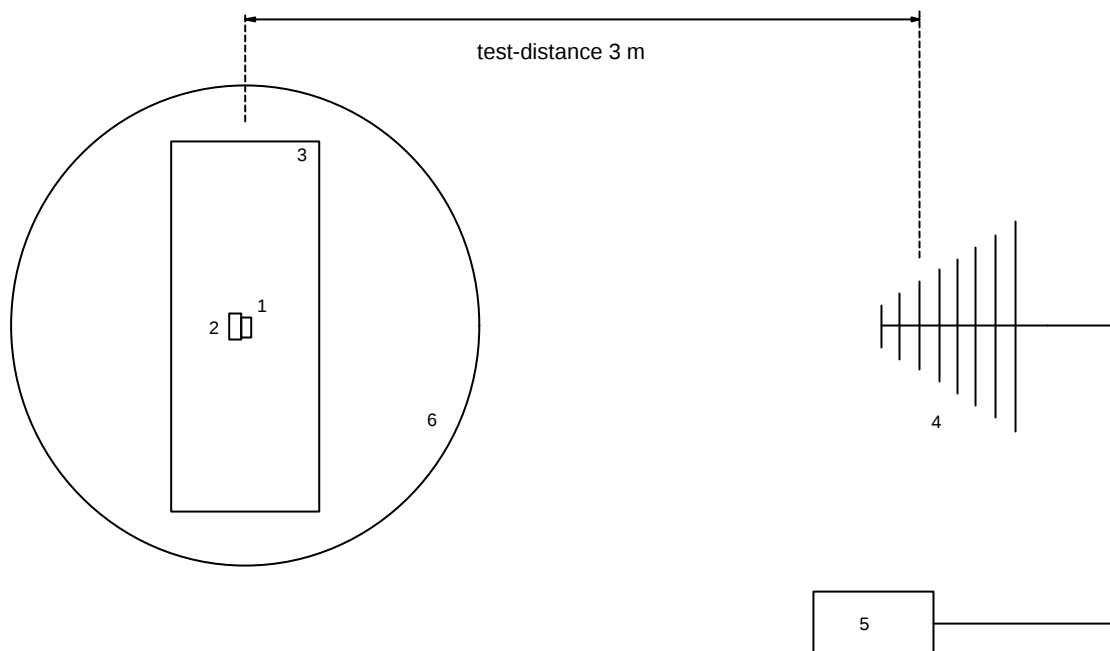


Figure 2: Measurement setup for radiated emission test below 1 GHz

- | | | | |
|---|--------------------------------|---|---------------------|
| 1 | Transmitter (EUT) | 4 | Measurement antenna |
| 2 | Wooden pedestal (if necessary) | 5 | Test receiver |
| 3 | Wooden table | 6 | Turn table |

6.4. Radiated Emission 1 GHz - 4.5 GHz (FCC §15.209 / RSS-210 Sections 7.3)

Radiated emissions are measured in the frequency range 1 GHz to 4.5 GHz. Resolution and video bandwidth of the spectrum analyzer are set to 1 MHz.

Hand-held or body-worn devices are rotated through three orthogonal axes to determine which attitude and configuration produces the highest emission relative to the limit and therefore shall be used for final testing.

Additional measurements are performed at critical frequencies with reduced span.

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

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

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

See figure 3 for the measurement setup.

Test equipment used (see equipment list for details):

02, 13, 14, 16, ,42, 44, 45, 57, 64

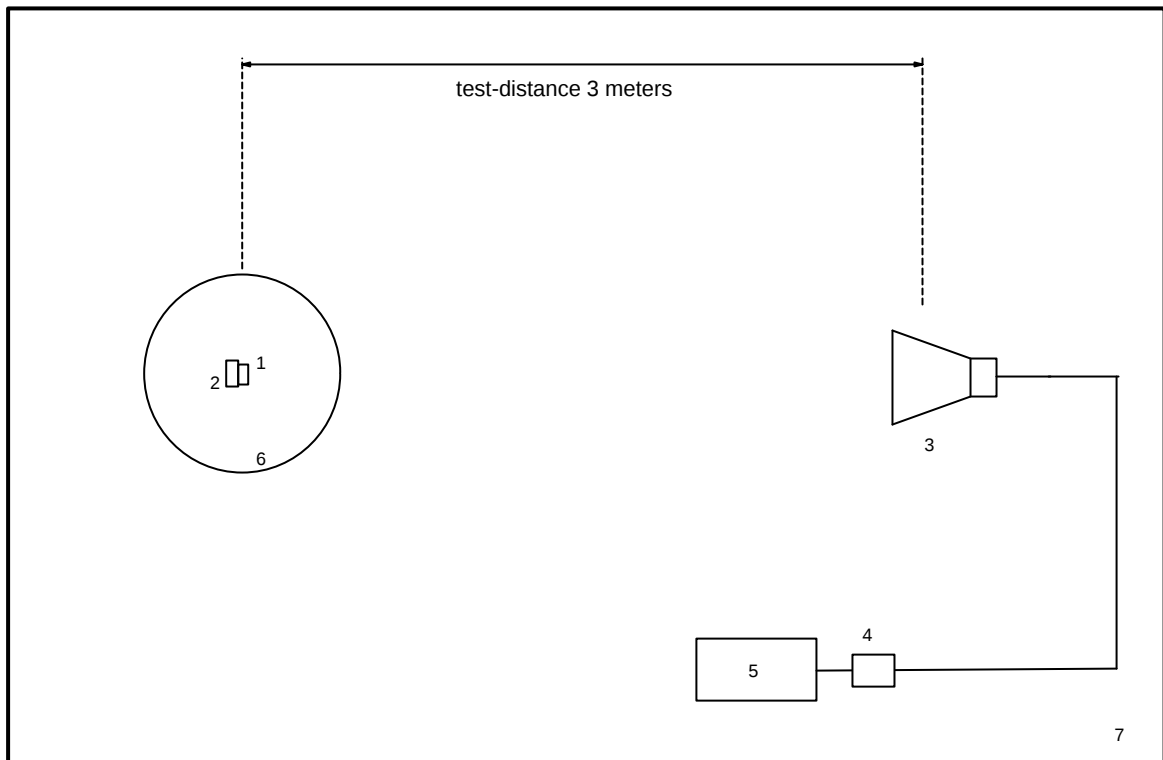


Figure 3: Measurement setup for radiated emission test above 1 GHz

- | | | | |
|---|--------------------------------|---|------------------------------|
| 1 | Transmitter (EUT) | 3 | Measurement antenna |
| 2 | Wooden pedestal (if necessary) | 4 | Preamplifier (if applicable) |
| | | 5 | Spectrum analyzer |
| | | 6 | Turn table |
| | | 7 | Semi anechoic room |

7. Equipment List

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

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

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

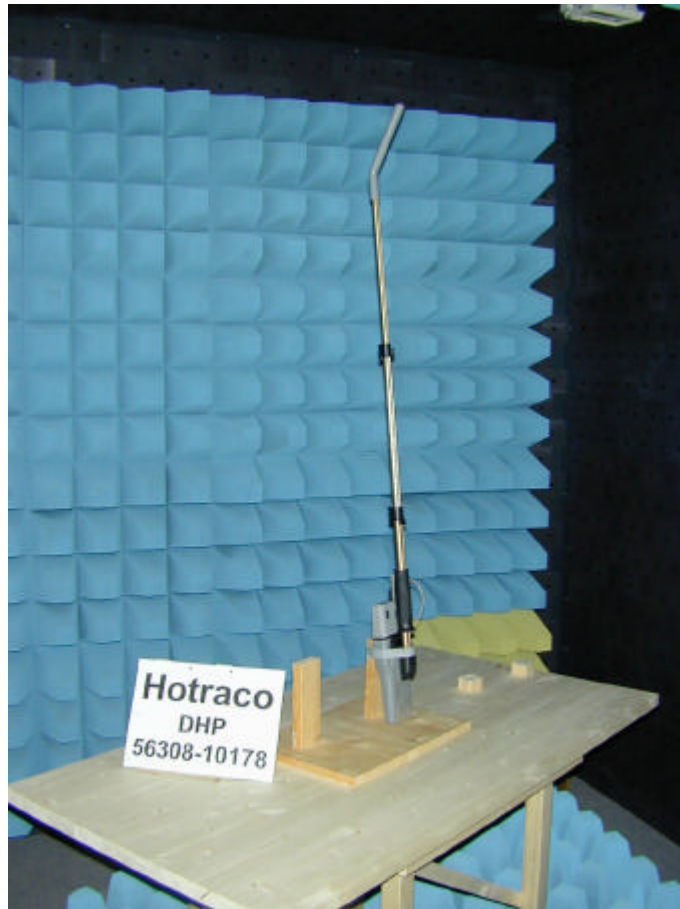
8. Photographs Taken During Testing

Photos No. 8.1 - 8.2

Test setup for radiated emission pre-test 30 MHz - 1 GHz
(semi anechoic room)









Photos No. 8.3 - 8.4

Test setup for radiated emission final test 30 MHz - 1 GHz
(open area test site)



9. List of Measurements

9.1. List of Measurements According To FCC Part 15 Subpart B

FCC Part 15 Subpart B			
Section(s):	Test	Page(s)	Result
§15.207	Conducted emission test 450 kHz - 30 MHz	---	Not Applicable
§15.209	Radiated emission test 9 kHz - 30 MHz	---	Not Applicable (acc. to §15.33)
§15.209	Radiated emission test 30 MHz – 1.0 GHz	29-34	Passed
§15.111	Antenna power conducted emissions 9 kHz - 4.5 GHz	---	Not Applicable

9.2. List of Measurements According To Industry Canada RSS-210

Industry Canada RSS-210 Issue 4			
Section(s):	Test	Page(s)	Result
7.4	Conducted emission test 450 kHz - 30 MHz	---	Not Applicable
7.3	Radiated emission test 30 MHz - 2 GHz	29-34	Passed
7.2	Antenna power conducted emissions 9 kHz - 4.5 GHz	---	Not Applicable

10. Referenced Regulations

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

☒	FCC Part 15 Subpart A	Code of Regulations Part 15 (Radio Frequency Devices), Subpart A (General) of the Federal Communication Commission (FCC)	October 20, 1997
☒	FCC Part 15 Subpart B	Code of Regulations Part 15 (Radio Frequency Devices), Subpart B (Unintentional Radiators) of the Federal Communication Commission (FCC)	October 20, 1997
☒	FCC Part 15 Subpart C	Code of Regulations Part 15 (Radio Frequency Devices), Subpart C (Intentional Radiators) of the Federal Communication Commission (FCC)	October 20, 1997
☒	ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz - 40 GHz	October, 1992
☒	RSS-210	Radio Standards Specification RSS-210 Issue 4 for Low Power Licence-Exempt Radiocommunication Devices (all frequency bands)	December 2000

11. Test Results

**Field Strength of Emissions according to FCC Rules,
Part 15, Subpart C, Section 15.209 (a)
Frequency Band < 30 MHz**

Model: DHP with internal antenna
Type: Inductive Reader
Serial No. ---
Applicant: AGRIDENT BV
Test Site: Shielded Room No. 2
Distance: 30 Meter
Date of Test: 16 January 2002

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit dBμV/m	Margin dB
0.134	Peak	Ver	33.6	20	53.6	65.06	11.46
0.268	Peak	Ver	***				
0.536	Peak	Ver	***				
0.670	Peak	Ver	***				

*** = No emissions above noise floor detected

Note: A distance correction from 30 meter to 300 meter of 40 dB (Roll-off = 2) was assumed.

Sample calculation of field strength values:

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

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

**Field Strength of Emissions according to FCC Rules,
Part 15, Subpart C, Section 15.209 (a)
Frequency Band < 30 MHz**

Model: DHP with external antenna
Type: Inductive Reader
Serial No. ---
Applicant: AGRIDENT BV
Test Site: Shielded Room No. 2
Distance: 30 Meter
Date of Test: 16 January 2002

Frequency (MHz)	Detector	Antenna Polarization	Analyzer Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit dBμV/m	Margin dB
0.134	Peak	Ver	30.7	20	50.6	65.06	14.46
0.268	Peak	Ver	***				
0.536	Peak	Ver	***				
0.670	Peak	Ver	***				

*** = No emissions above noise floor detected

Note: A distance correction from 30 meter to 300 meter of 40 dB (Roll-off = 2) was assumed.

Sample calculation of field strength values:

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

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

**Field Strength of Emissions according to FCC Rules,
Part 15, Subpart C, Section 15.209
Frequency Band > 30 MHz**

Model: DHP with internal antenna
Type: Inductive Reader
Serial No. ---
Applicant: AGRIDENT BV
Test Site: Open Field Test Site
Distance: 3 Meter
Date of Test: 16 January 2002

Frequency (MHz)	Detector	Antenna Pol.	Analyzer Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
165,88	Q.P.	Vertical	12,5	16,9	29,4	43,5	14,1
179,27	Q.P.	Vertical	10,7	17,8	28,5	43,5	15,0
193,53	Q.P.	Vertical	13	18,7	31,7	43,5	11,8

*** = No emissions above noise floor detected

Sample calculation of field strength values:

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

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

**Field Strength of Emissions according to FCC Rules,
Part 15, Subpart C, Section 15.209
Frequency Band > 30 MHz**

Model: DHP with external antenna
Type: Inductive Reader
Serial No. ---
Applicant: AGRIDENT BV
Test Site: Open Field Test Site
Distance: 3 Meter
Date of Test: 16 January 2002

Frequency (MHz)	Detector	Antenna Pol.	Analyzer Reading (dBμV)	Correction Factor (dB)	Field Strength (dBμV/m)	Limit (dBμV/m)	Margin (dB)
124,99	Q.P.	Horizontal	12,9	14,9	27,8	43,5	15,7
126,86	Q.P.	Horizontal	13,2	15	28,2	43,5	15,3
165,86	Q.P.	Horizontal	19,6	16,9	36,5	43,5	7,0
193,53	Q.P.	Horizontal	19,7	18,7	38,4	43,5	5,1
206,47	Q.P.	Horizontal	13,6	19,2	32,8	43,5	10,7
208,04	Q.P.	Horizontal	13,6	19,2	32,8	43,5	10,7
221,17	Q.P.	Horizontal	15,8	19,7	35,5	46	10,5

*** = No emissions above noise floor detected

Sample calculation of field strength values:

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

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

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with internal antenna

- horizontal position on table

Detector:

Peak / Final Results: QP

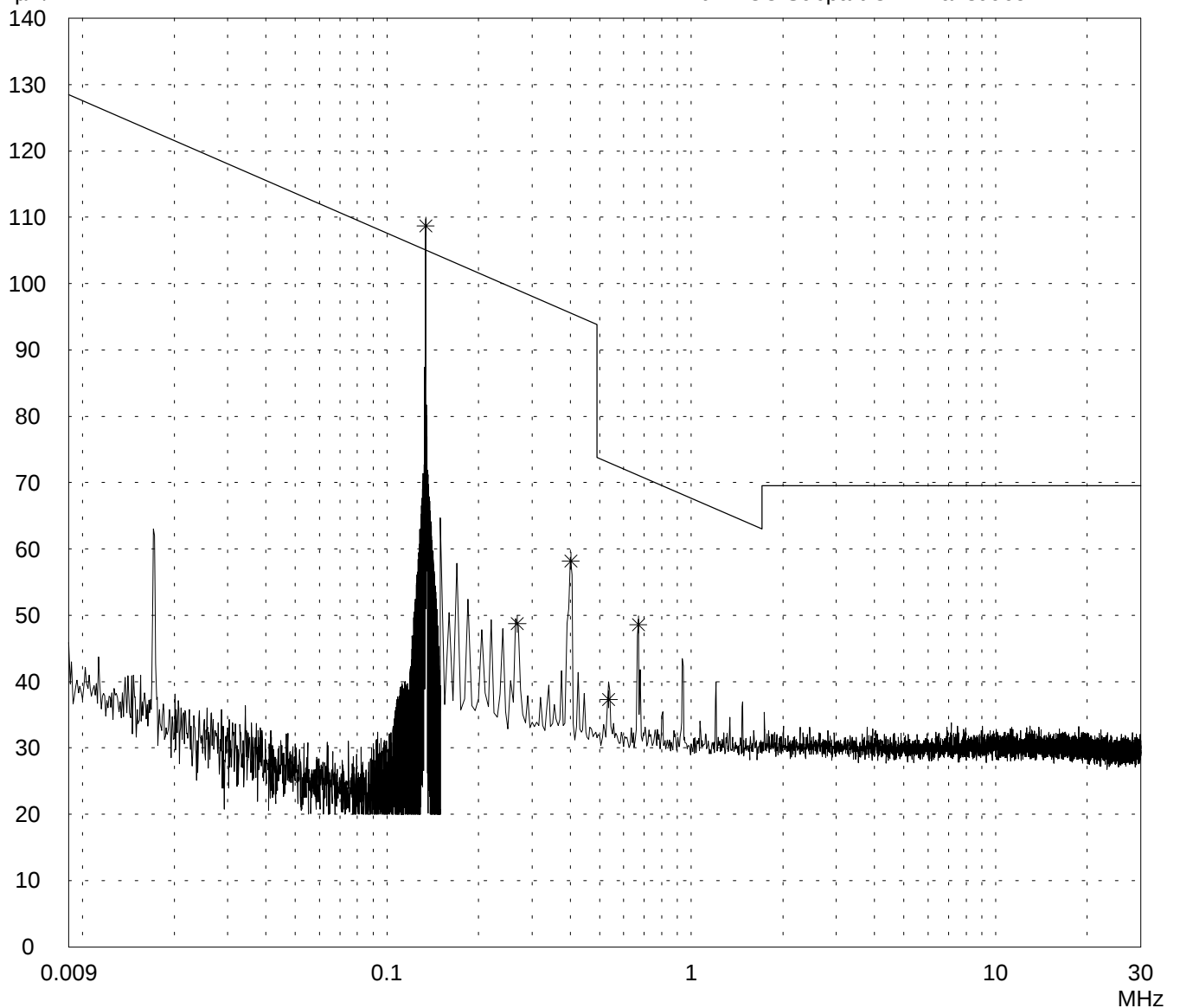
Final results:

Selected by hand

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-1

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with internal antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002	
Test performed: automatically	File name:

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
0.134	88.7	20.0	108.7	105.1	*
0.268	28.7	20.0	48.7	99.0	
0.402	38.2	20.0	58.2	95.5	
0.536	17.3	20.0	37.3	73.0	
0.670	28.6	20.0	48.6	71.1	

Result: Prescan	Project file: 56308-10178-1	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with external antenna

- horizontal position on table

Detector:

Peak / Final Results: QP

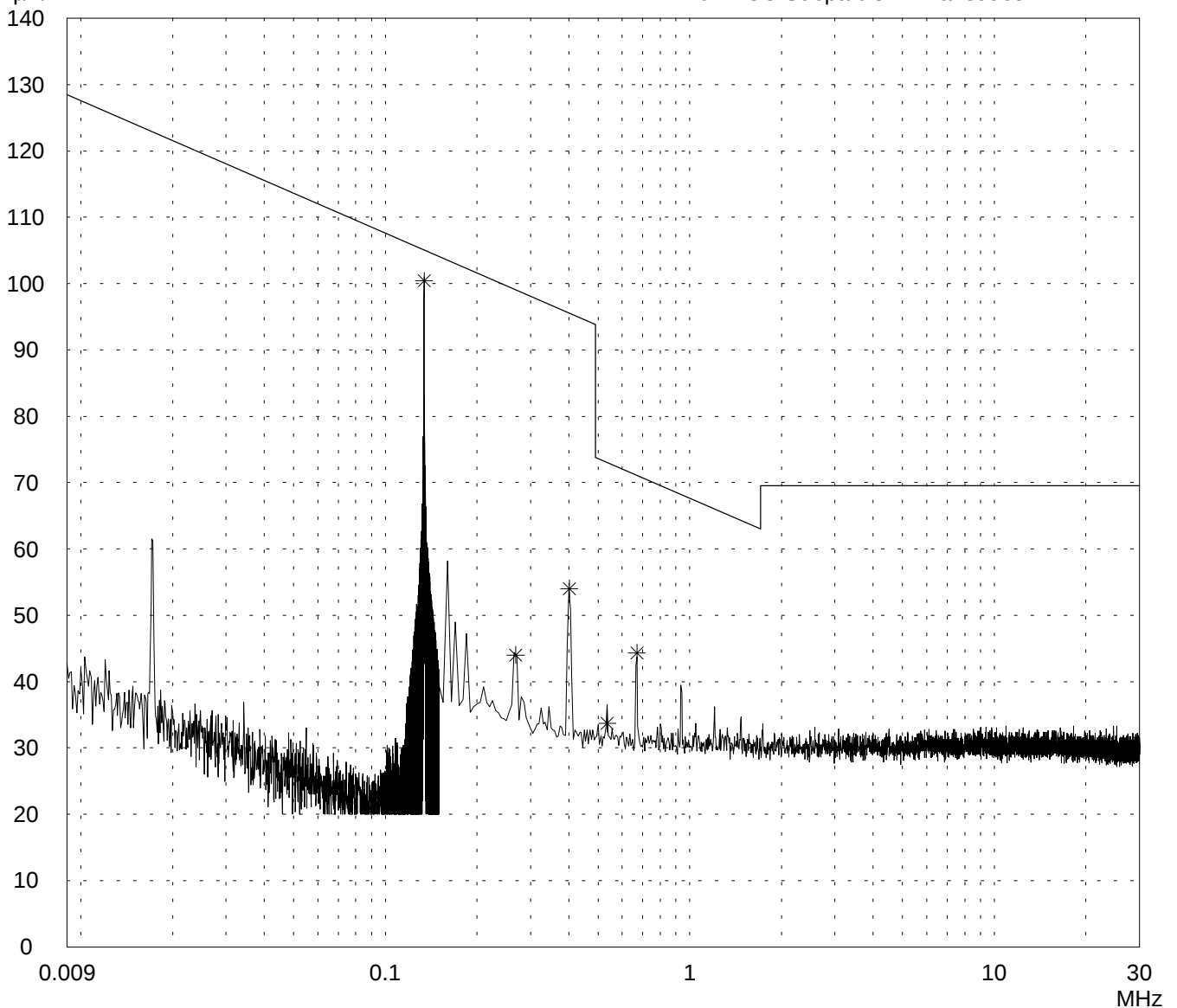
Final results:

Selected by hand

dB μ V/m

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-2

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with external antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002	
Test performed: automatically	File name:

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
0.134	80.4	20.0	100.4	105.1	
0.268	24.0	20.0	44.0	99.0	
0.402	34.0	20.0	54.0	95.5	
0.536	13.7	20.0	33.7	73.0	
0.670	24.3	20.0	44.3	71.1	

Result: Prescan	Project file: 56308-10178-2	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with internal antenna

- vertical position on table

Detector:

Peak / Final Results: QP

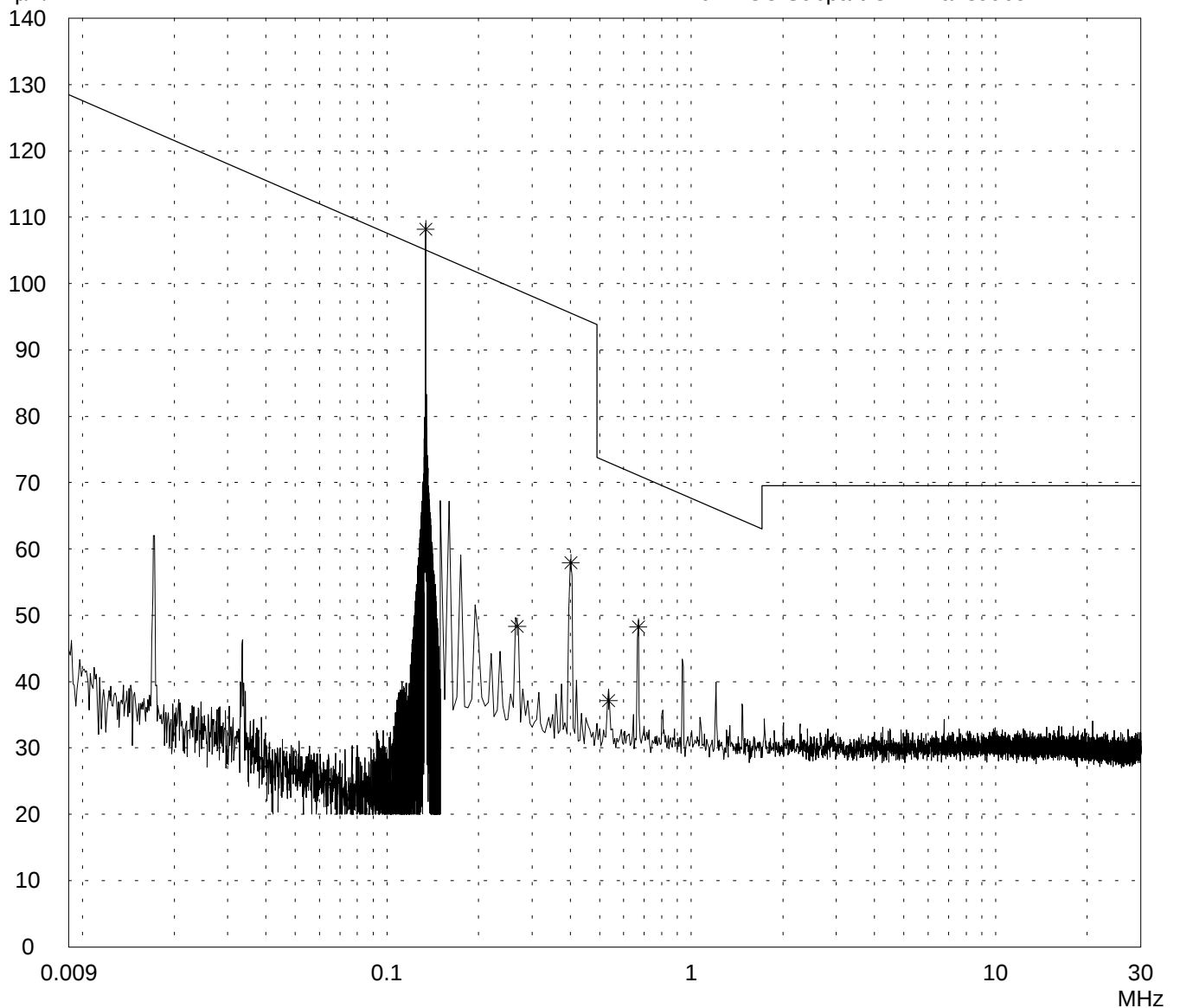
Final results:

Selected by hand

dB μ V/m

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-1

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with internal antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002	
Test performed: automatically	File name:

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
0.134	88.2	20.0	108.2	105.1	*
0.268	28.3	20.0	48.3	99.0	
0.402	37.9	20.0	57.9	95.5	
0.536	17.1	20.0	37.1	73.0	
0.670	28.2	20.0	48.2	71.1	

Result: Prescan	Project file: 56308-10178-1	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Messung der Funkstörfeldstärke 9 kHz - 30 MHz nach FCC Part 15 Subpart C

Modell:
DHP

Geräte-Nr.:
120053

Auftraggeber:
Hotraco Micro ID B.V.

Meßplatz:
Geschirmter Meßraum, Kabine 1

Meßbezug:
Meßentfernung 3 Meter

Prüfdatum:
16.01.2002

Prüfer:
A. Stübinger

Durchführung:
automatisch

Dateiname:

Betriebsart:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- vertical position on table

Detektor:

Spitzenwert / Nachmessung: QP

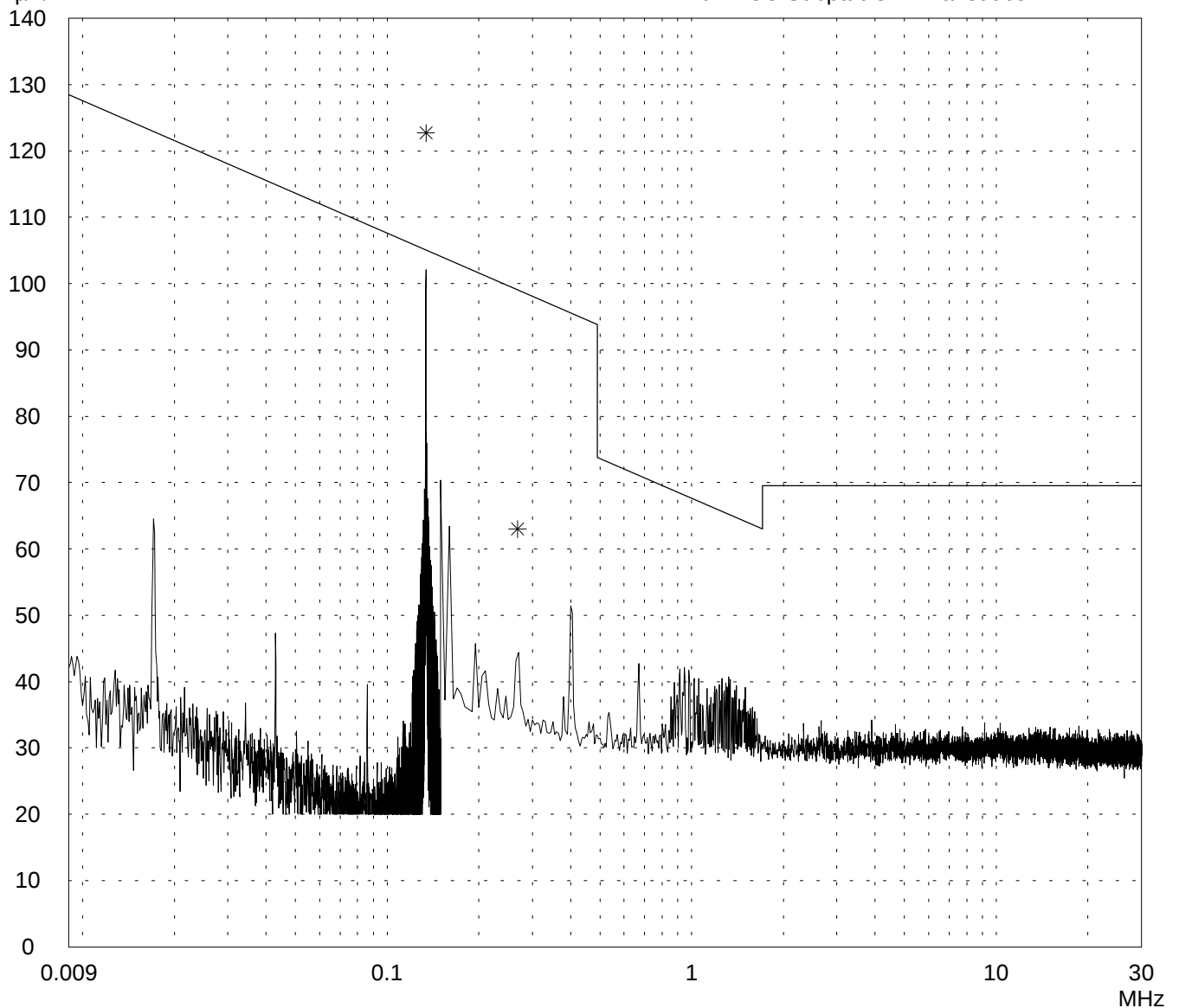
Nachmessung:

Manuell

dB μ V/m

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Beurteilung:

Vormessung

Projekt-Nr.:

56308-10178-1

Seite

von

Seiten

Messung der Funkstörfeldstärke 9 kHz - 30 MHz nach FCC Part 15 Subpart C

Modell: DHP	Betriebsart: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - vertical position on table
Geräte-Nr.: 120053	
Auftraggeber: Hotraco Micro ID B.V.	
Meßplatz: Geschirmter Meßraum, Kabine 1	
Meßbezug: Meßentfernung 3 Meter	
Prüfdatum: 16.01.2002	Prüfer: A. Stübinger
Durchführung: automatisch	Dateiname:
Detektor: Spitzenwert / Nachmessung: QP	Nachmessung: Manuell

<i>Frequenz MHz</i>	<i>Ablesewert dBµV</i>	<i>Korrekturfaktor dB</i>	<i>Meßwert dBµV/m</i>	<i>Grenzwert dBµV/m</i>	<i>Grenzwert überschritten</i>
0.134	102.7	20.0	122.7	105.1	*
0.268	43.0	20.0	63.0	99.0	

Beurteilung: Vormessung	Projekt-Nr.: 56308-10178-1	Seite	von	Seiten
----------------------------	-------------------------------	-------	-----	--------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with internal antenna

- standing on table

Detector:

Peak / Final Results: QP

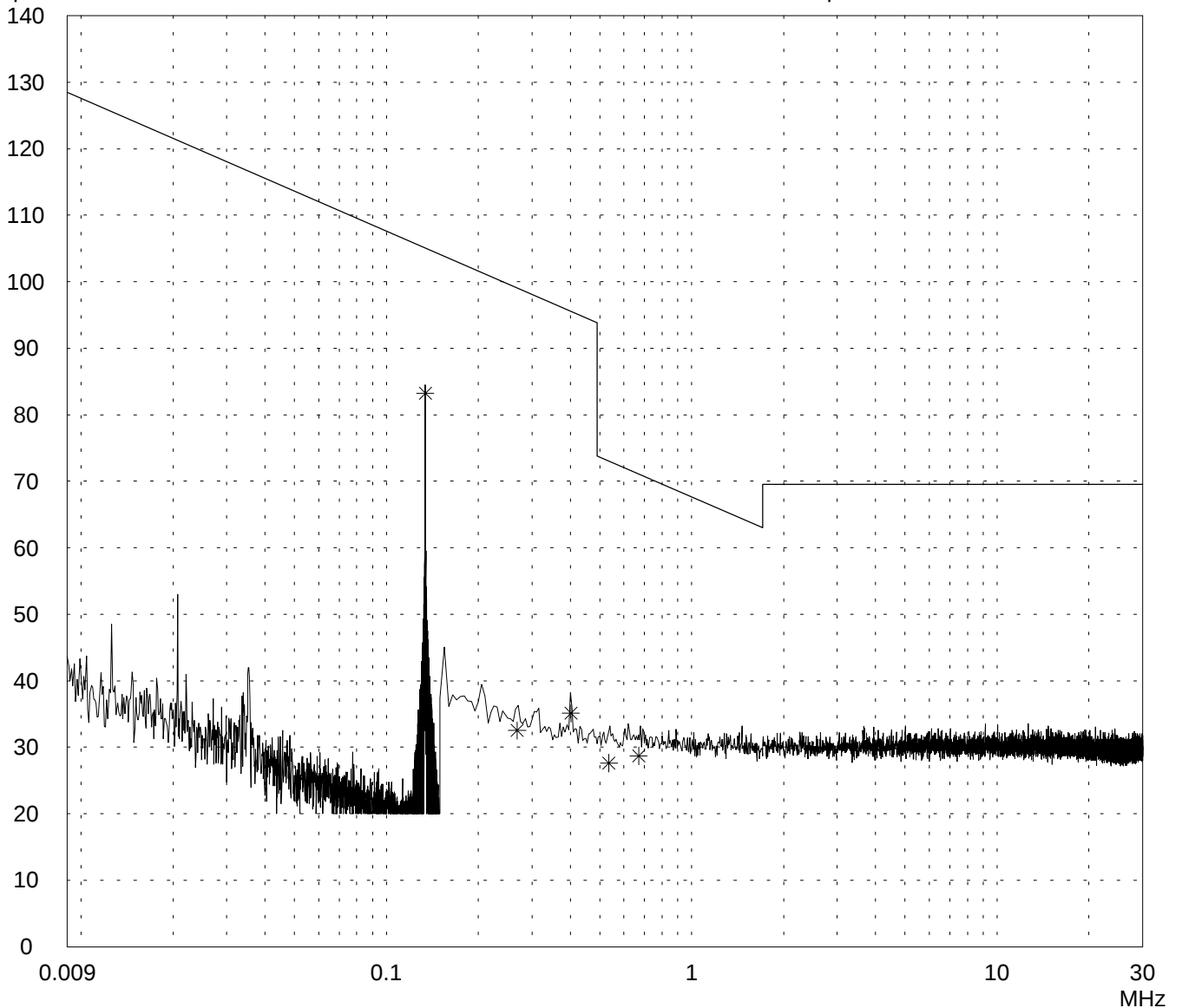
Final results:

Selected by hand

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-1

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with internal antenna - standing on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002	
Test performed: automatically	File name:

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

[illegible]

Result: Prescan	Project file: 56308-10178-1	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with external antenna

- standing 45° on table (top of antenna hor)

Detector:

Peak / Final Results: QP

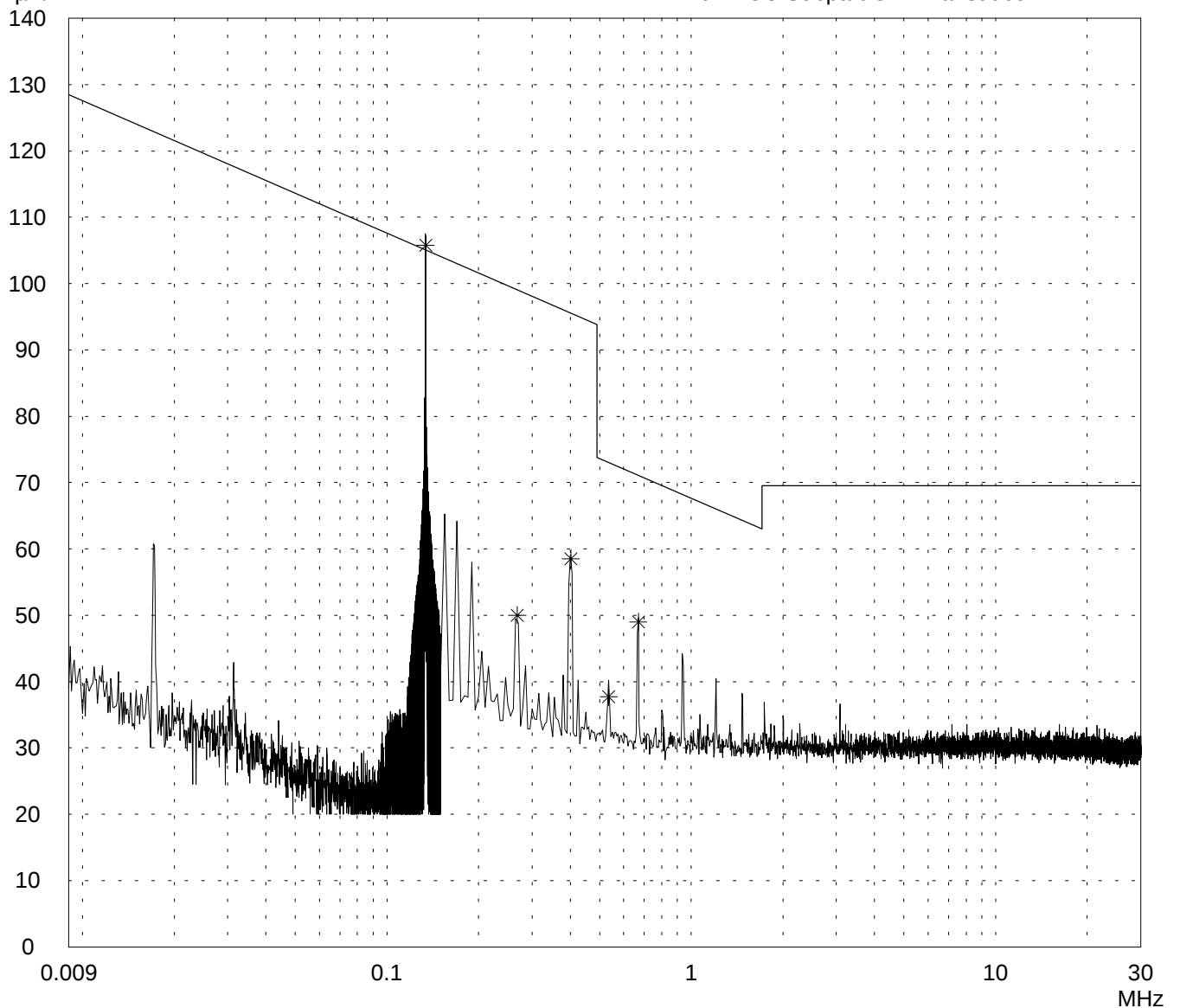
Final results:

Selected by hand

dB μ V/m

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-2

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with external antenna - standing 45° on table (top of antenna hor)
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002 Operator: A. Stübinger	
Test performed: automatically File name:	

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
0.134	85.8	20.0	105.8	105.1	*
0.268	30.0	20.0	50.0	99.0	
0.402	38.5	20.0	58.5	95.5	
0.536	17.7	20.0	37.7	73.0	
0.670	29.0	20.0	49.0	71.1	

Result: Prescan	Project file: 56308-10178-2	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with external antenna

- standing on table

Detector:

Peak / Final Results: QP

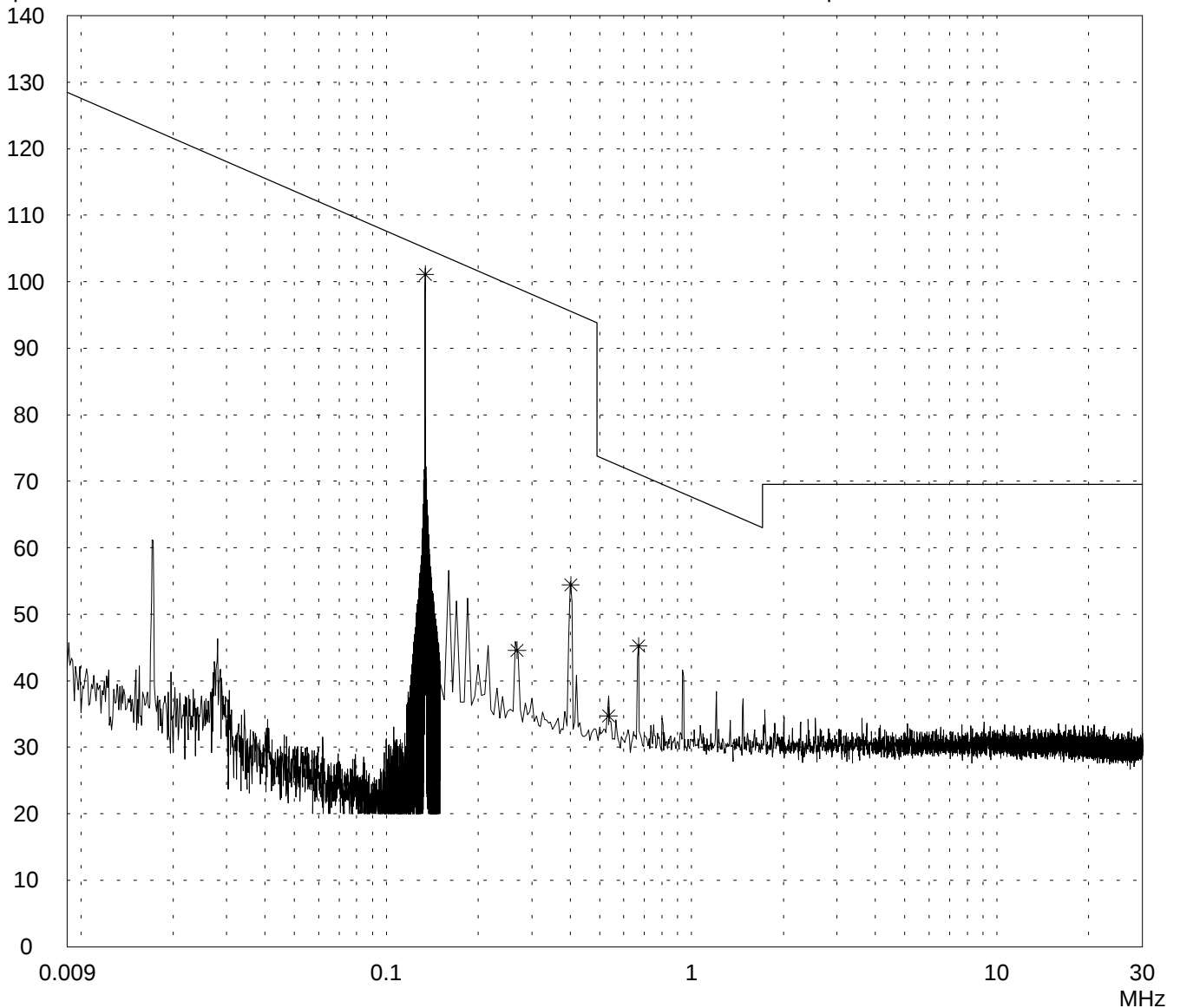
Final results:

Selected by hand

dB μ V/m

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-2

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with external antenna - standing on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002	
Test performed: automatically	File name:

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

[illegible]

Result: Prescan	Project file: 56308-10178-2	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/22/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- tested with PSION Workabout

- tested with external antenna

- vertical position on table

Detector:

Peak / Final Results: QP

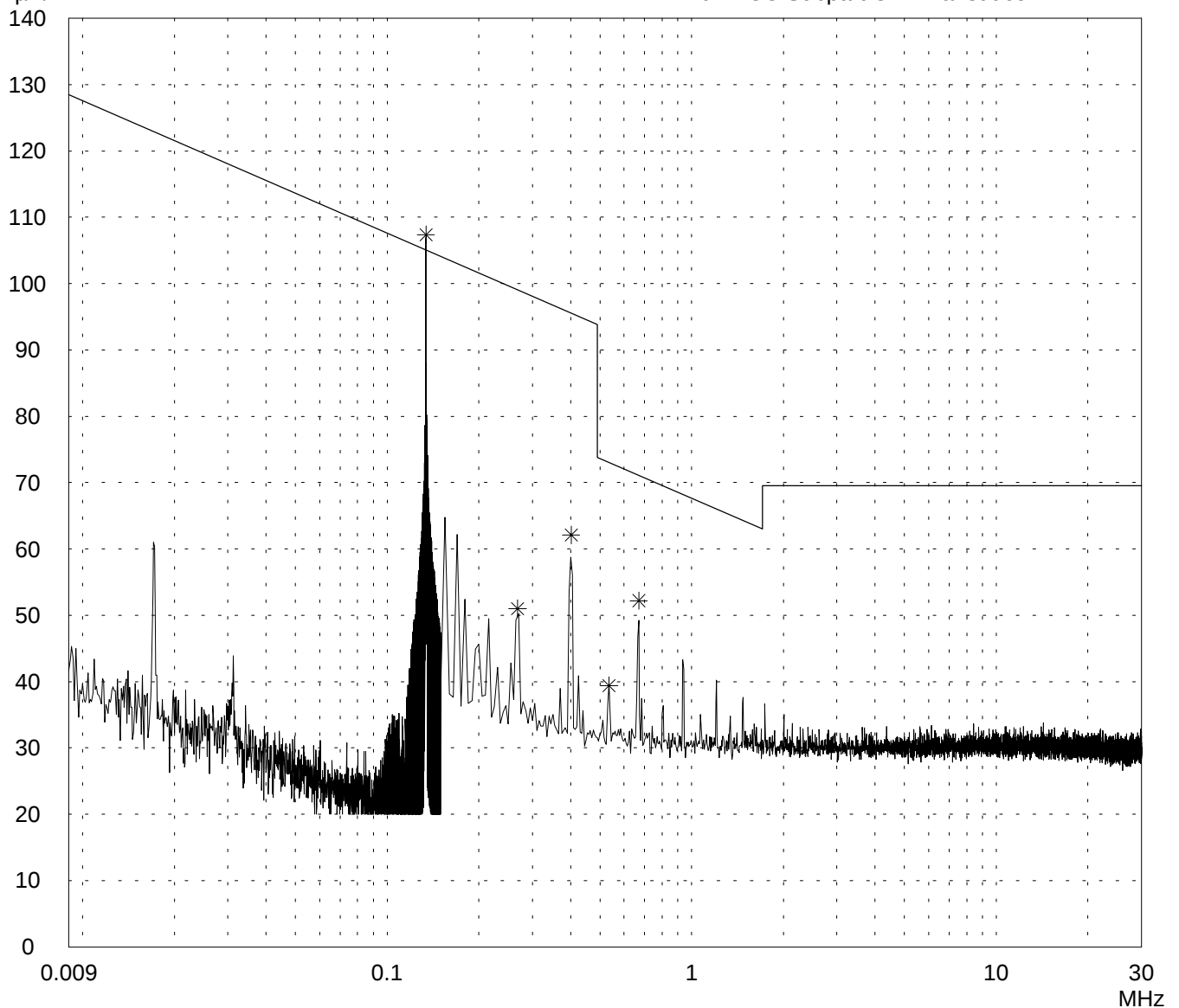
Final results:

Selected by hand

$\text{dB}\mu\text{V/m}$

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-2

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - tested with PSION Workabout - tested with external antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/22/2002 Operator: A. Stübinger	
Test performed: automatically File name:	

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

[illegible]

Result: Prescan	Project file: 56308-10178-2	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model:
DHP

Serial no.:
120053

Applicant:
Hotraco Micro ID B.V.

Test site:
Shielded room, cabin no. 1

Tested on:
Test distance 3 metres

Date of test:
01/16/2002

Operator:
A. Stübinger

Test performed:
automatically

File name:

Mode:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- horizontal position on table

Detector:

Peak / Final Results: QP

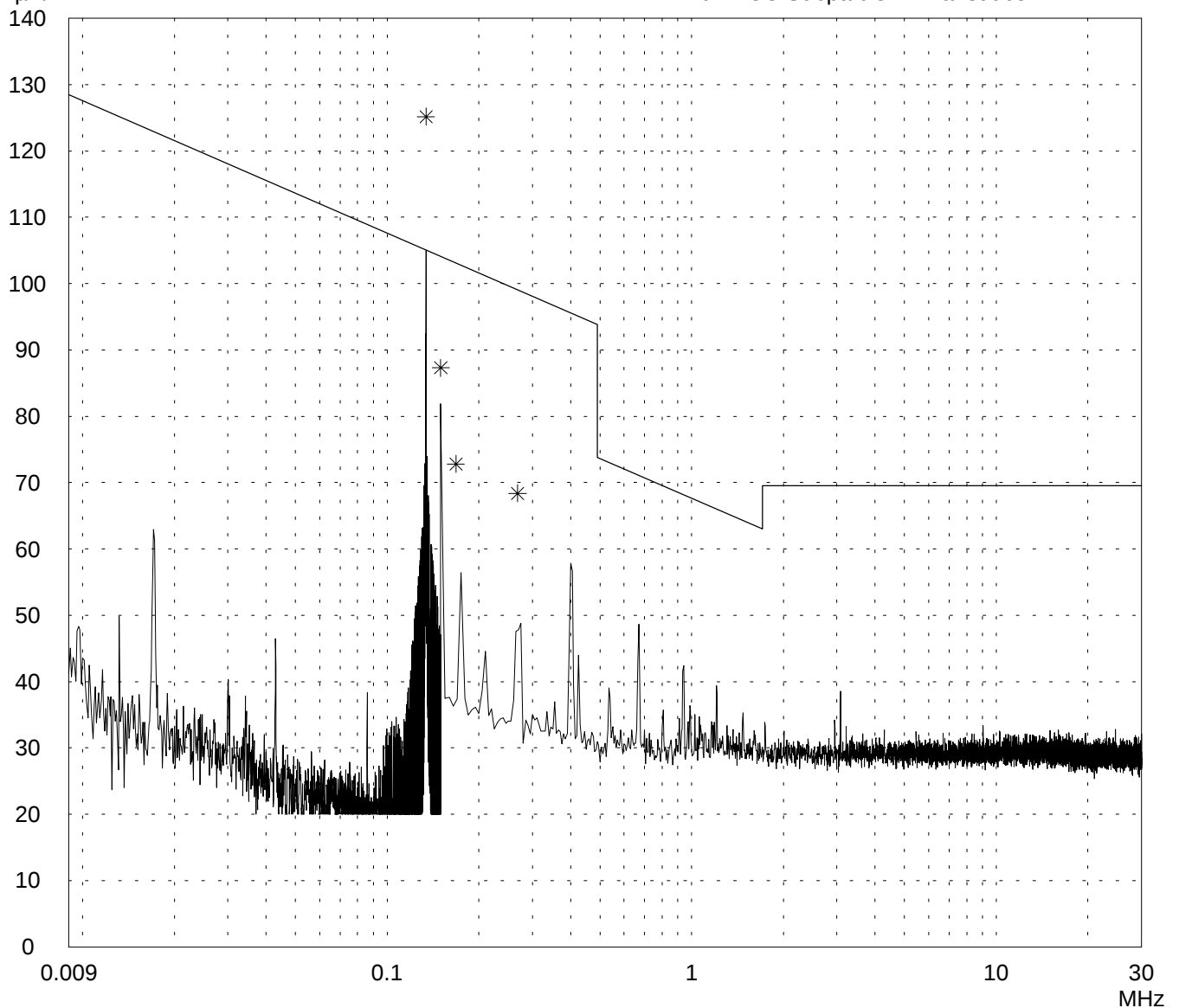
Final results:

Selected by hand

dB μ V/m

Limit1: FCC Subpart C

Transducer: HFH2-Z2



Result:
Prescan

Project file:
56308-10178-1

Page of Pages

Radiated Emission Test 9 kHz - 30 MHz according to FCC Part 15 Subpart C

Model: DHP	Mode: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B.V.	
Test site: Shielded room, cabin no. 1	
Tested on: Test distance 3 metres	
Date of test: 01/16/2002 Operator: A. Stübinger	
Test performed: automatically File name:	

Detector: Peak / Final Results: QP	Final results: Selected by hand
---------------------------------------	------------------------------------

<i>Frequency MHz</i>	<i>Reading dBμV</i>	<i>Correction factor dB</i>	<i>Value dBμV/m</i>	<i>Limit dBμV/m</i>	<i>Limit exceeded</i>
0.134	105.2	20.0	125.2	105.1	*
0.150	67.3	20.0	87.3	104.1	
0.168	52.8	20.0	72.8	103.1	
0.268	48.4	20.0	68.4	99.0	

Result: Prescan	Project file: 56308-10178-1	Page	of	Pages
--------------------	--------------------------------	------	----	-------

Restricted bands (radiated emission) acc. to FCC Part 15 Subpart C

Model:
DHP

Serial No.:
120053

Applicant:
Hotraco Micro ID B.V.

Mode:

- tested with PSION Workabout
- tested with internal antenna
- vertical position on table
- without tag

Test site: Shielded room, cabin no. 3

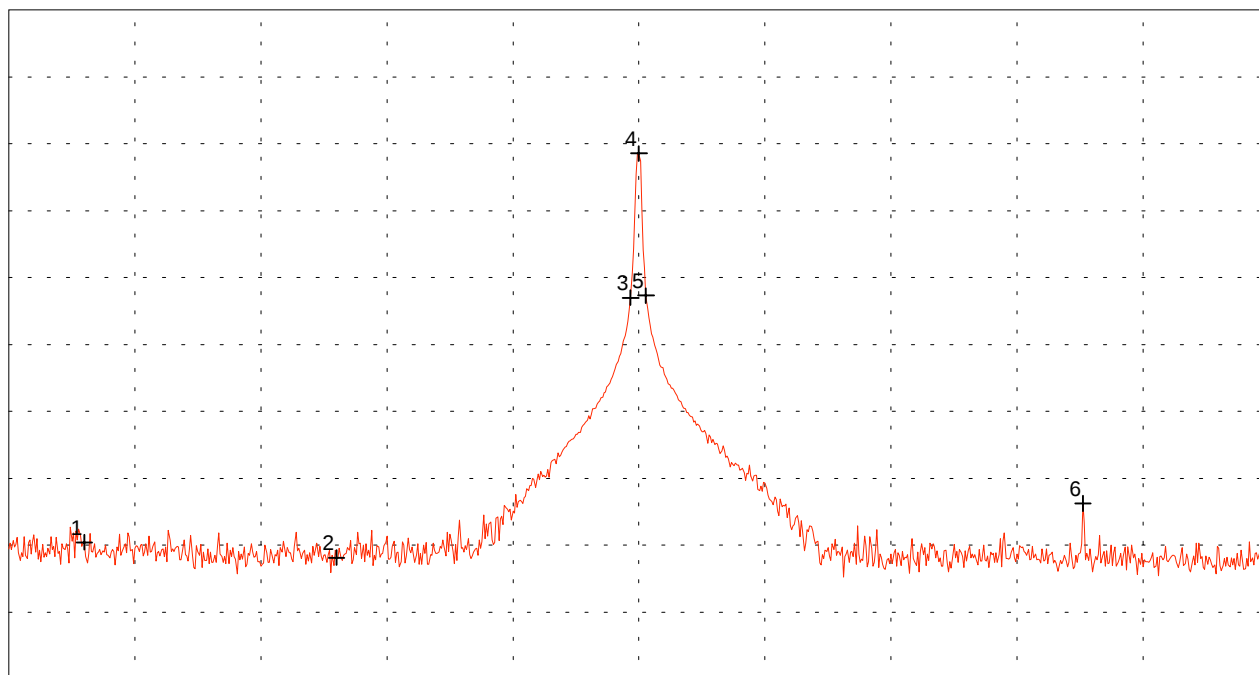
Test distance: 3 meters

Limit at 110 kHz for 3 meter distance:
105.1 dB μ V/m

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 45 dB

Ref. Offset 20 dB



Start 84.000 kHz
RBW 205 Hz

VBW 300 Hz

Stop 184.000 kHz
SWP 100 s

Multi Marker List

No. 1	90.000 kHz	50.43 dB μ V/m
No. 2	110.000 kHz	48.14 dB μ V/m
No. 3	133.333 kHz	86.99 dB μ V/m
No. 4	134.000 kHz	108.53 dB μ V/m
No. 5	134.556 kHz	87.30 dB μ V/m
No. 6	169.222 kHz	56.22 dB μ V/m

Tested by:
Rainer Heller

Date:
02/06/2002

Project-No.:
56308-10178-2

Page of pages

Restricted bands (radiated emission) acc. to FCC Part 15 Subpart C

Model:
DHP

Serial No.:
120053

Applicant:
Hotraco Micro ID B.V.

Mode:

- tested with PSION Workabout
- tested with external antenna
- vertical position on table
- without tag

Test site: Shielded room, cabin no. 3

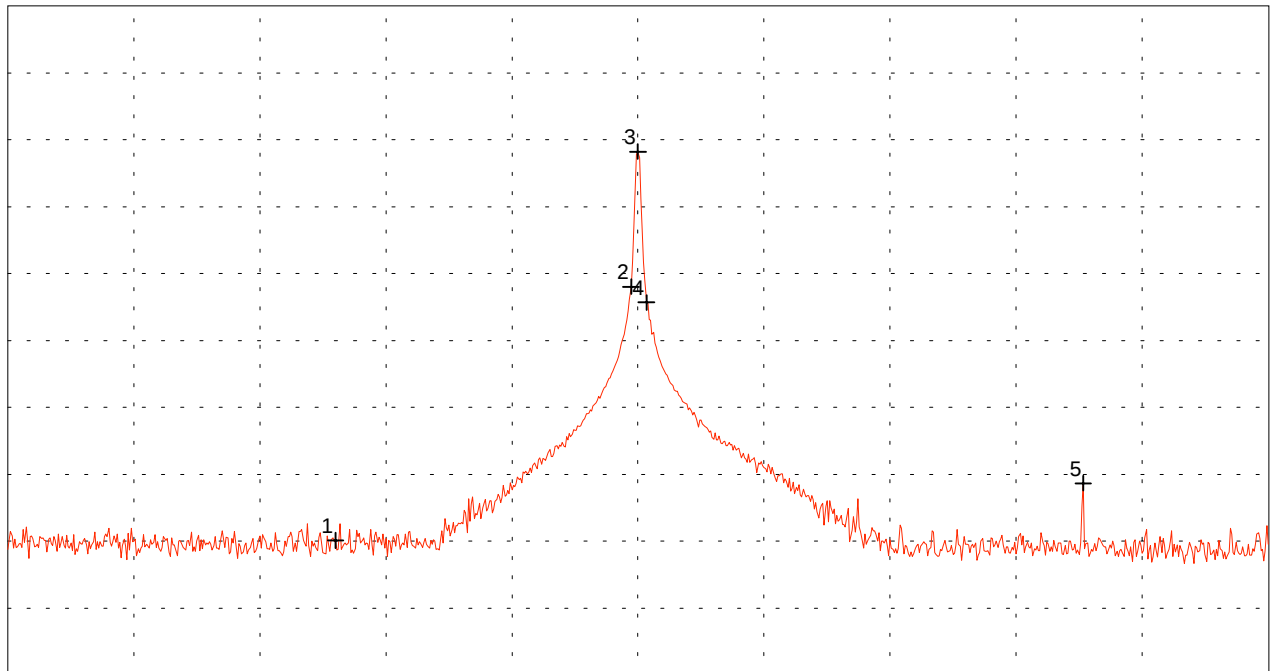
Test distance: 3 meters

Limit at 110 kHz for 3 meter distance:
105.1 dB μ V/m

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 45 dB

Ref. Offset 20 dB



Start 84.000 kHz
RBW 205 Hz

VBW 300 Hz

Stop 184.000 kHz
SWP 100 s

Multi Marker List

No. 1	110.000 kHz	50.12 dB μ V/m
No. 2	133.444 kHz	88.03 dB μ V/m
No. 3	134.000 kHz	108.22 dB μ V/m
No. 4	134.667 kHz	85.70 dB μ V/m
No. 5	169.333 kHz	58.68 dB μ V/m

Tested by:
Rainer Heller

Date:
02/06/2002

Project-No.:
56308-10178-2

Page of pages

Restricted bands (radiated emission) acc. to FCC Part 15 Subpart C

Model:
DHP

Serial No.:
120053

Applicant:
Hotraco Micro ID B.V.

Mode:

- tested with PSION Workabout
- tested with internal antenna
- vertical position on table
- with tag

Test site: Shielded room, cabin no. 3

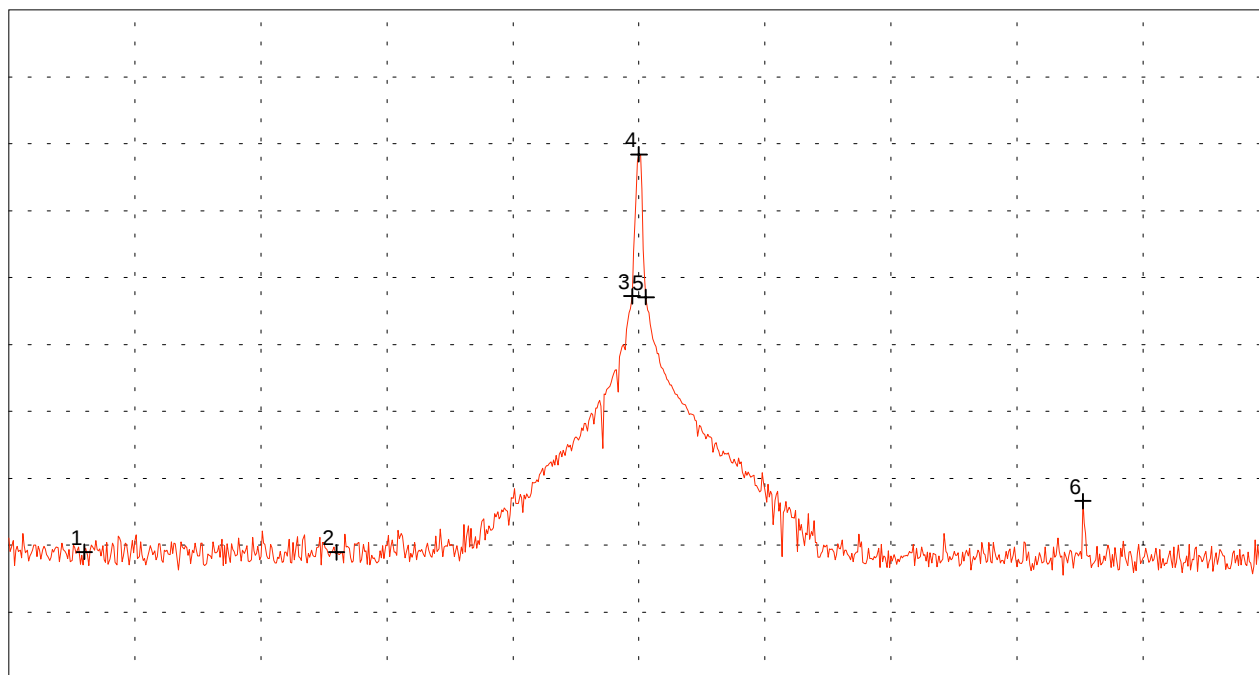
Test distance: 3 meters

Limit at 110 kHz for 3 meter distance:
105.1 dB μ V/m

Ref.Level 130 dB μ V/m
10 dB/Div.

ATT 45 dB

Ref. Offset 20 dB



Start 84.000 kHz
RBW 205 Hz

VBW 300 Hz

Stop 184.000 kHz
SWP 100 s

Multi Marker List

No. 1	90.000 kHz	48.98 dB μ V/m
No. 2	110.000 kHz	48.95 dB μ V/m
No. 3	133.444 kHz	87.20 dB μ V/m
No. 4	134.000 kHz	108.43 dB μ V/m
No. 5	134.556 kHz	87.09 dB μ V/m
No. 6	169.222 kHz	56.60 dB μ V/m

Tested by:
Rainer Heller

Date:
02/06/2002

Project-No.:
56308-10178-2

Page of pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

[illegible]

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- horizontal position on table

Detector:

Peak

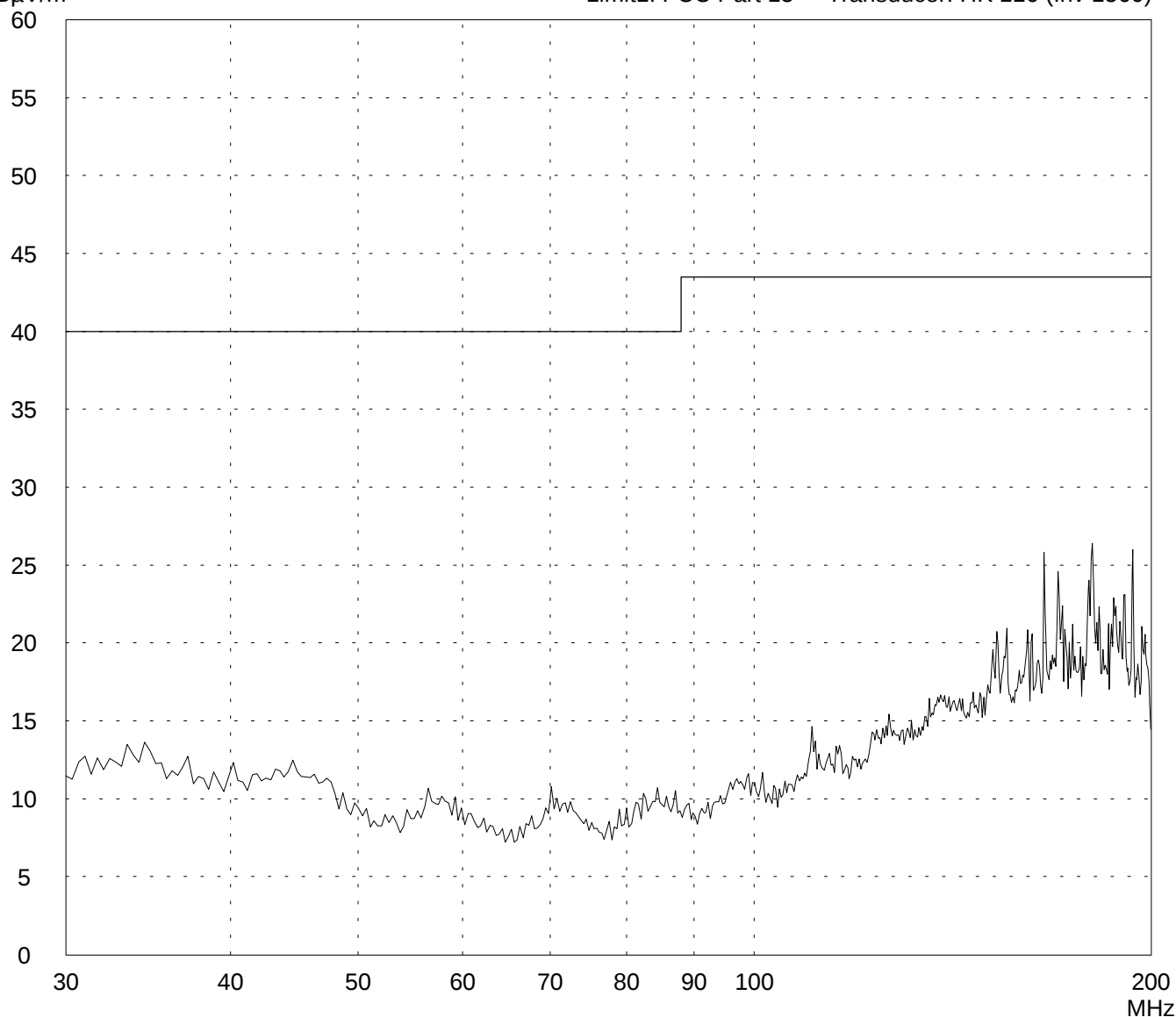
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-1

Page

of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- horizontal position on table

Detector:

Peak

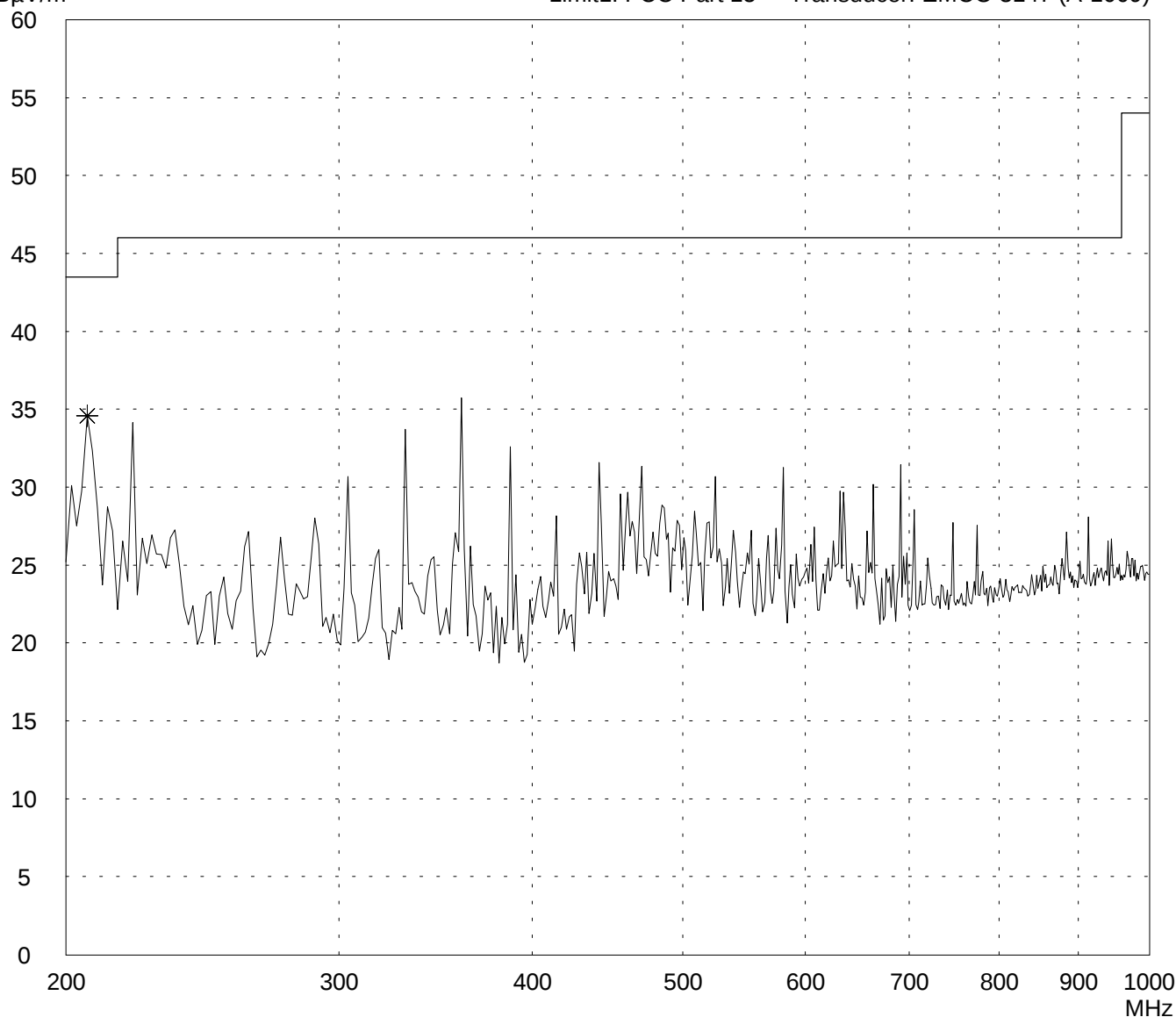
List of values:

10 dB Margin

50 Subranges

dB μ V/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)
--

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

Frequency [MHz]	Reading [dBμV]	Correction factor [dB]	Value [dBμV/m]	Limit [dBμV/m]	Limit exceeded
206.400000	21.07	13.51	34.58	43.50	

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- horizontal position on table

Detector:

Peak

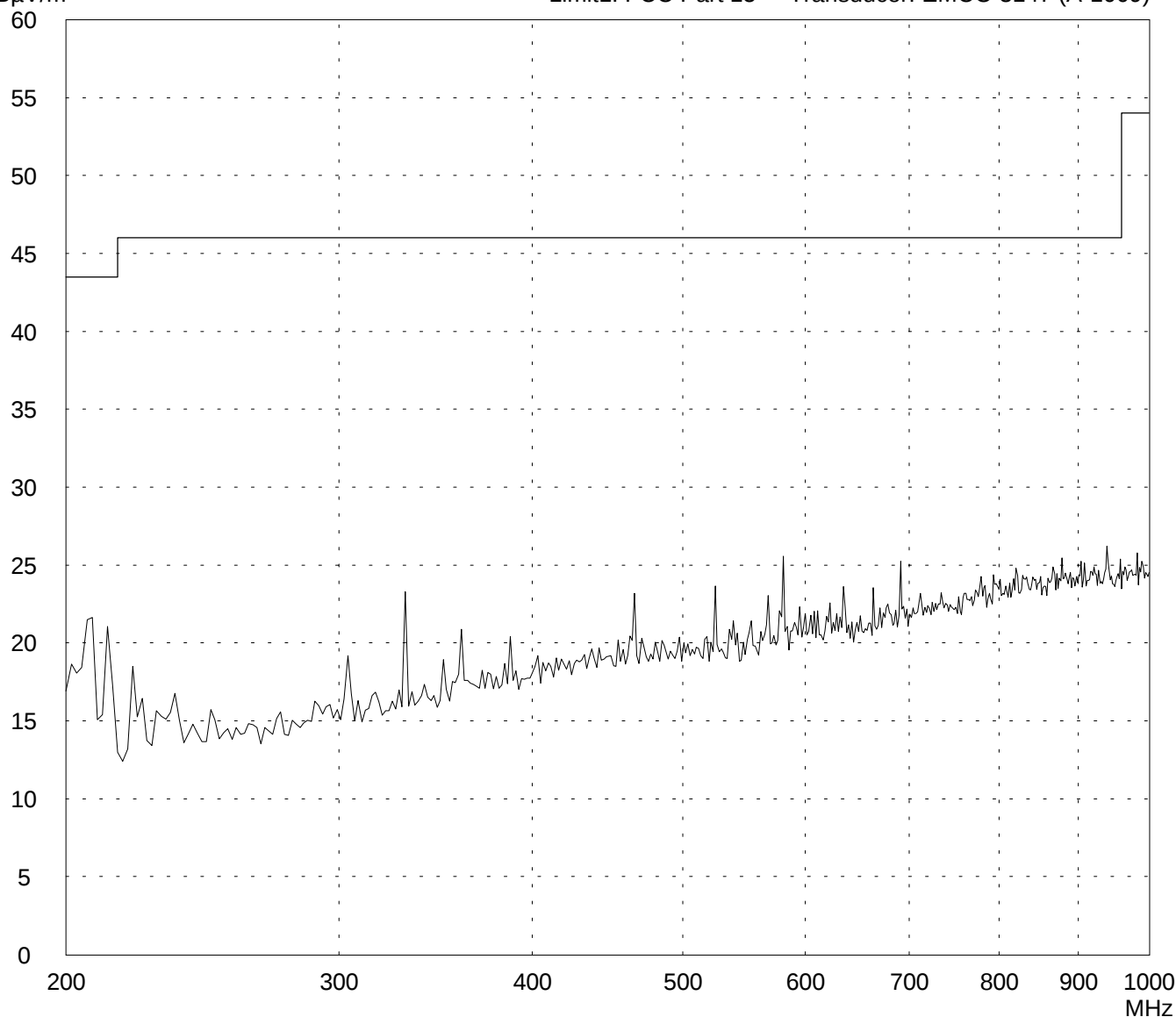
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-1

Page

of

Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- standing on table

Detector:

Peak

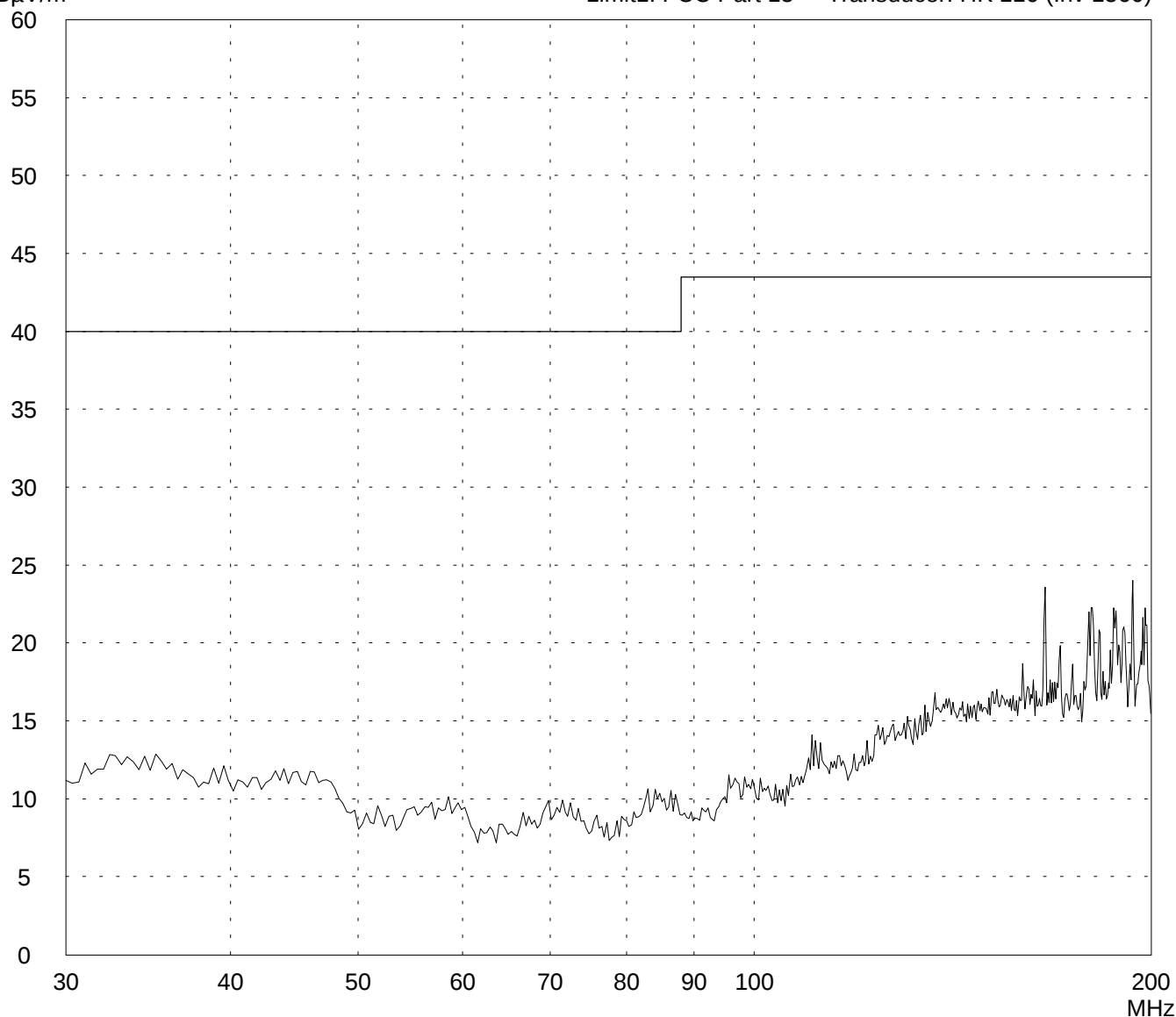
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- standing on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBμV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBμV/m]</i>	<i>Limit [dBμV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-1

Page

of

Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- standing on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - standing on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

<i>Frequency [MHz]</i>	<i>Reading [dBμV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBμV/m]</i>	<i>Limit [dBμV/m]</i>	<i>Limit exceeded</i>
166.000000	22.85	16.68	39.53	43.50	
179.600000	20.48	15.54	36.02	43.50	
191.160000	20.97	15.05	36.02	43.50	
193.880000	23.71	14.94	38.65	43.50	

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- standing on table

Detector:

Peak

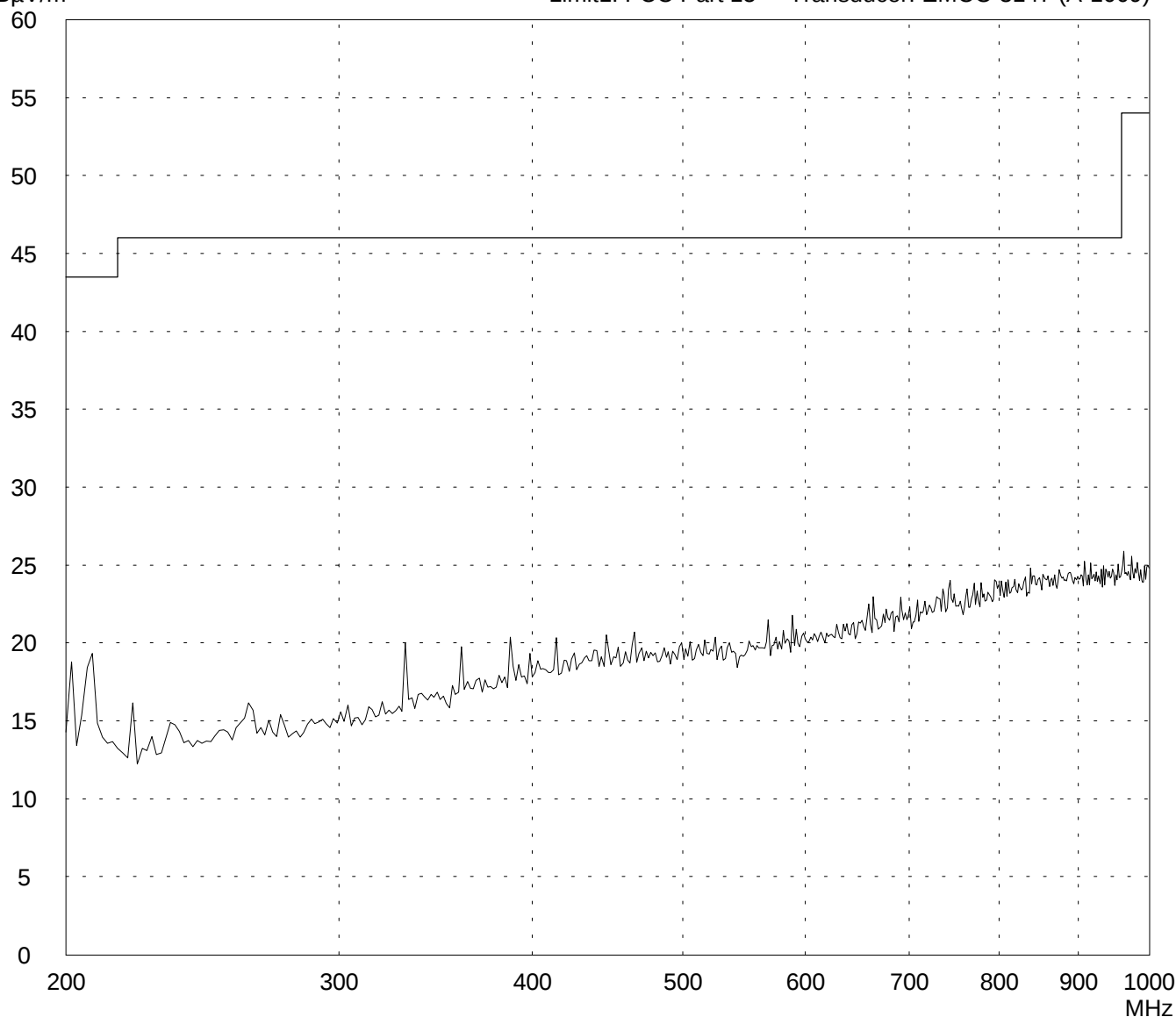
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

Test distance 3 metres
Horizontal Polarization

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- standing on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-1

Page

of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- standing on table

Detector:

Peak

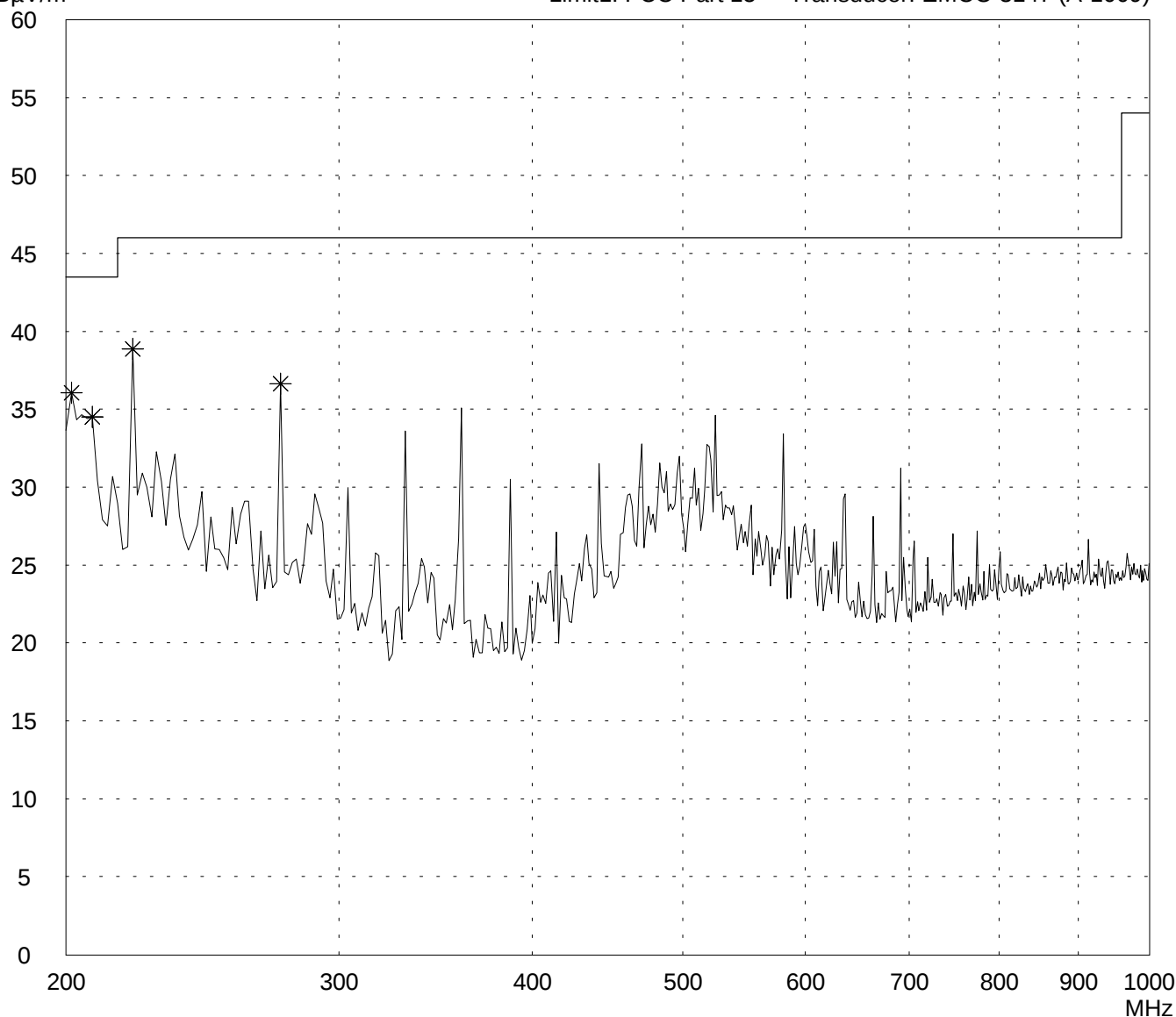
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - standing on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

[illegible]

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- vertical position on table

Detector:

Peak

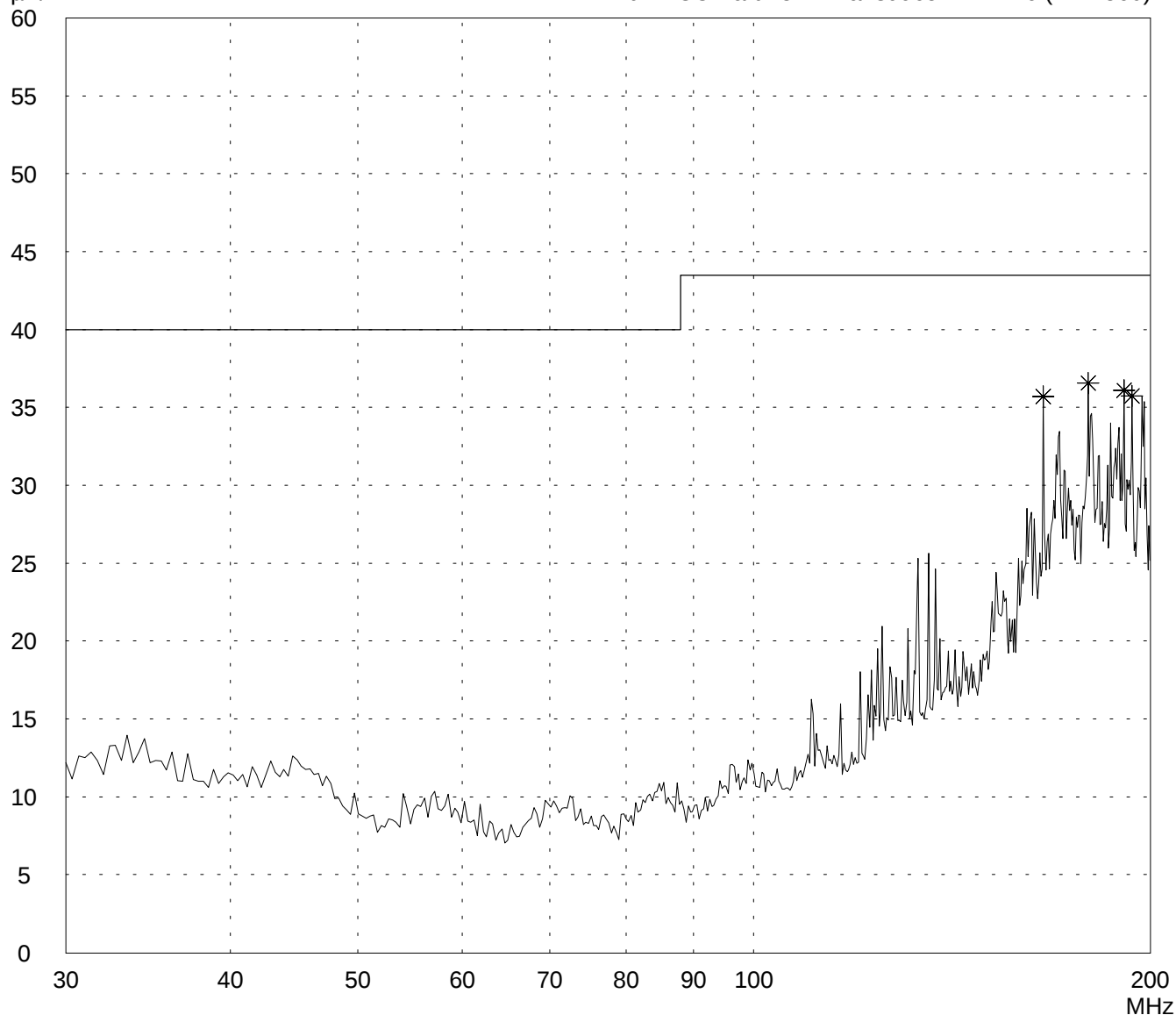
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

[illegible]

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- vertical position on table

Detector:

Peak

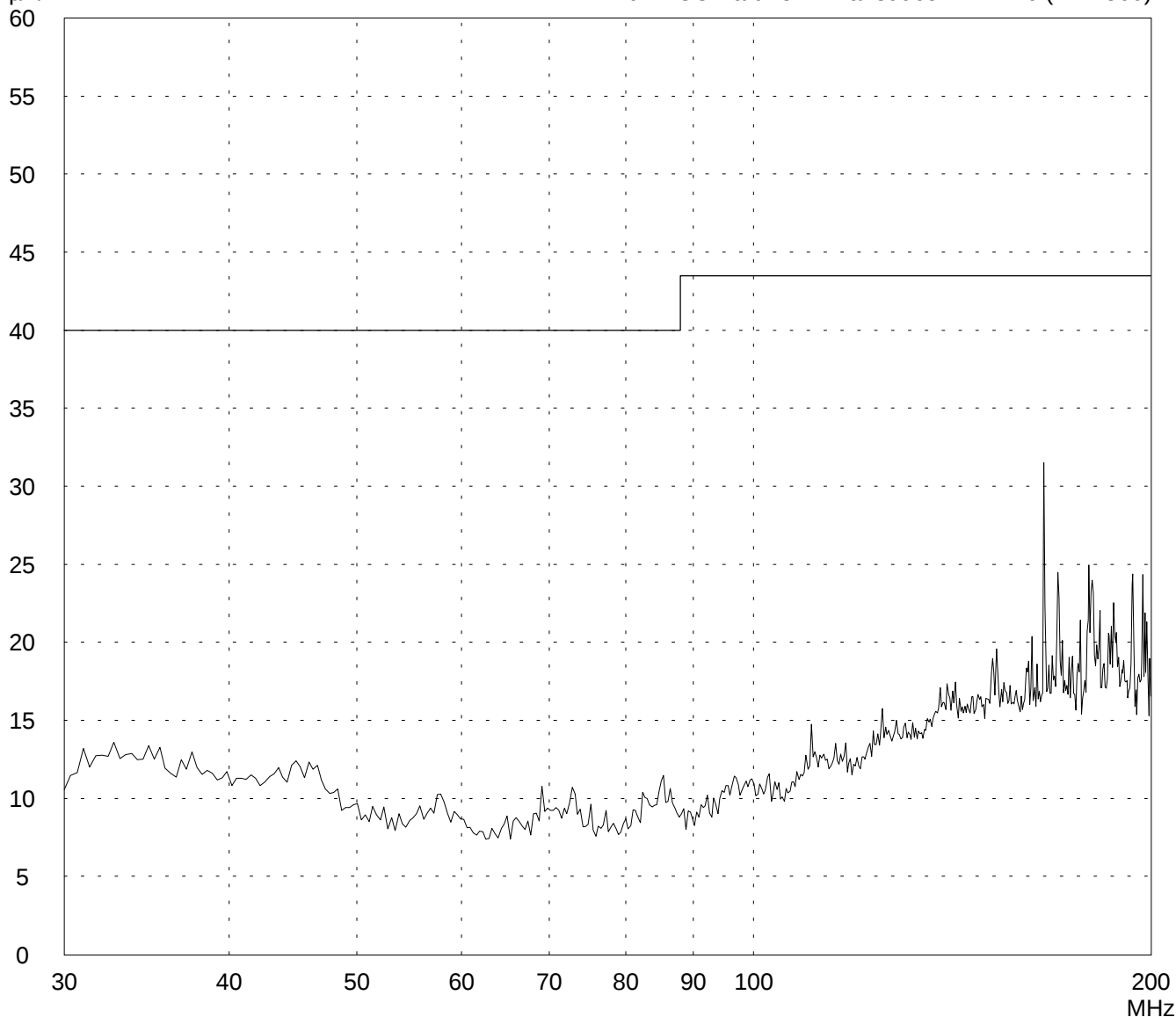
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- vertical position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-1

Page

of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- vertical position on table

Detector:

Peak

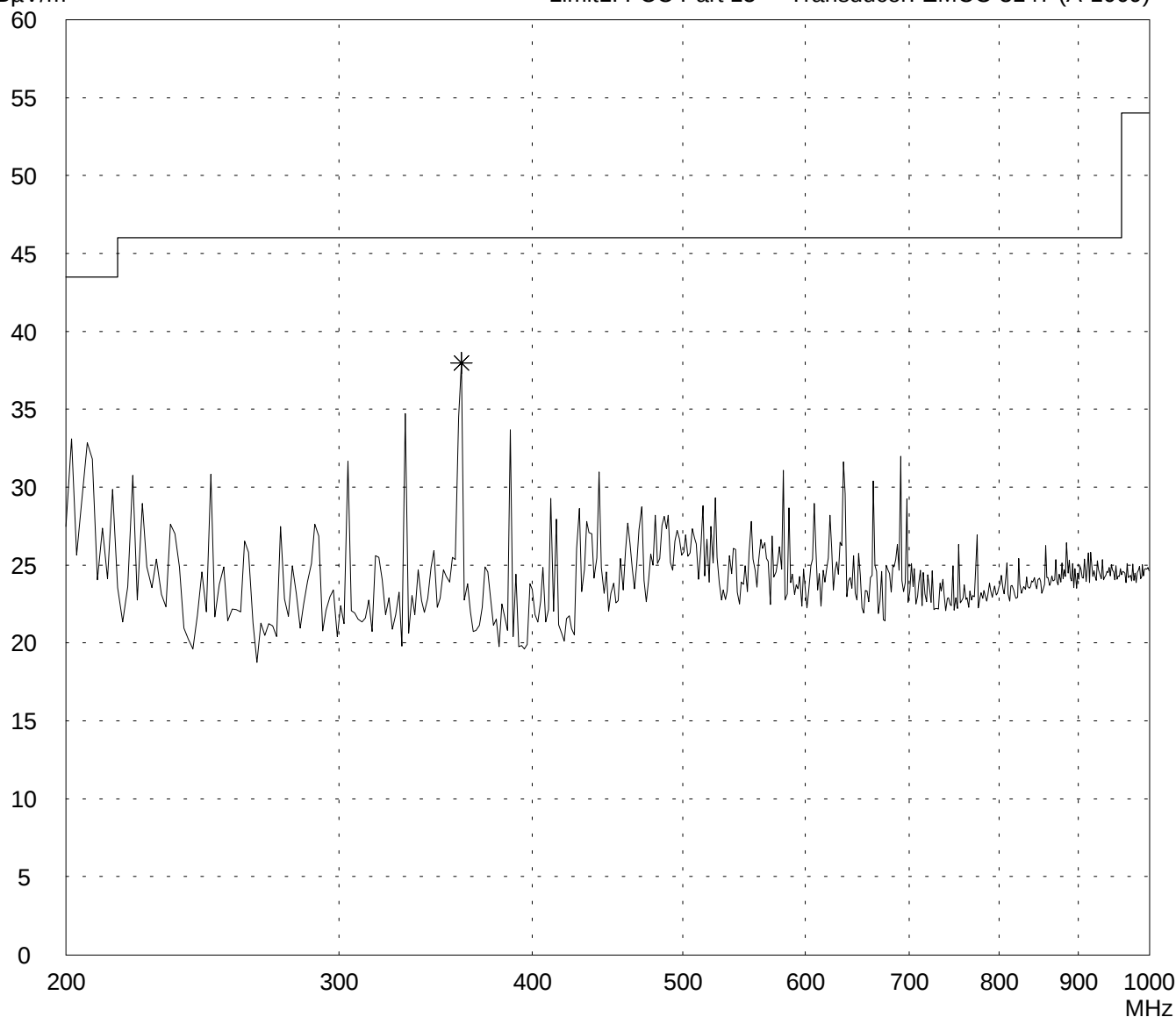
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

Frequency [MHz]	Reading [dBμV]	Correction factor [dB]	Value [dBμV/m]	Limit [dBμV/m]	Limit exceeded
360.000000	20.39	17.57	37.97	46.00	

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with internal antenna
- vertical position on table

Detector:

Peak

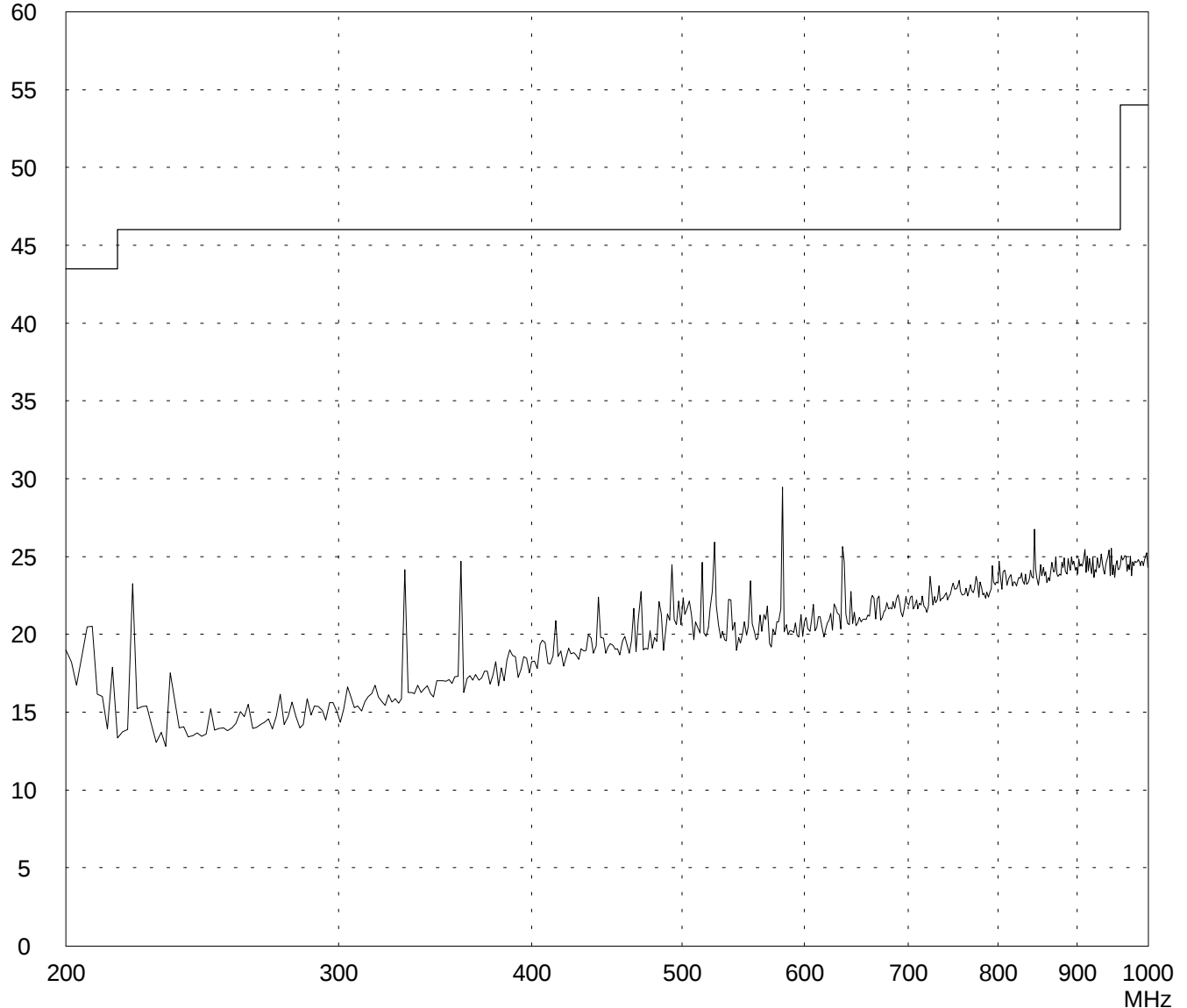
List of values:

10 dB Margin

50 Subranges

dBµV/m
60

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-1

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)
--

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with internal antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

<i>Frequency [MHz]</i>	<i>Reading [dBμV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBμV/m]</i>	<i>Limit [dBμV/m]</i>	<i>Limit exceeded</i>
no results					

Result: Limit kept	Project file: 56308-10178-1	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

[illegible]

Result: Limit kept	Project file: 56308-10178-2	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

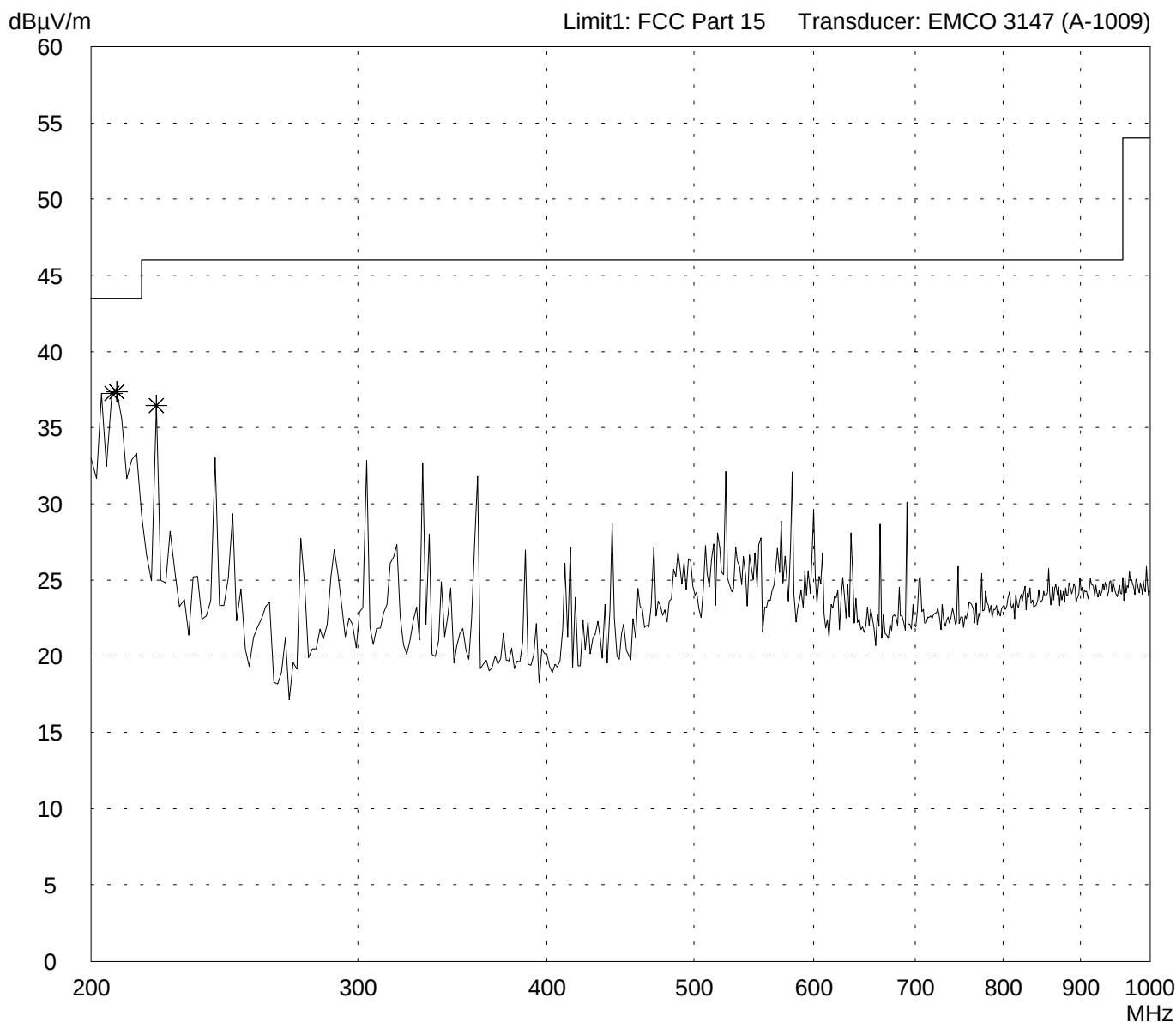
of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002	Operator: A. Stübinger
Test performed: automatically	File name: default.emi

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



Result: Limit kept	Project file: 56308-10178-2
------------------------------	---------------------------------------

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - horizontal position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

[illegible]

Result: Limit kept	Project file: 56308-10178-2	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- horizontal position on table

Detector:

Peak

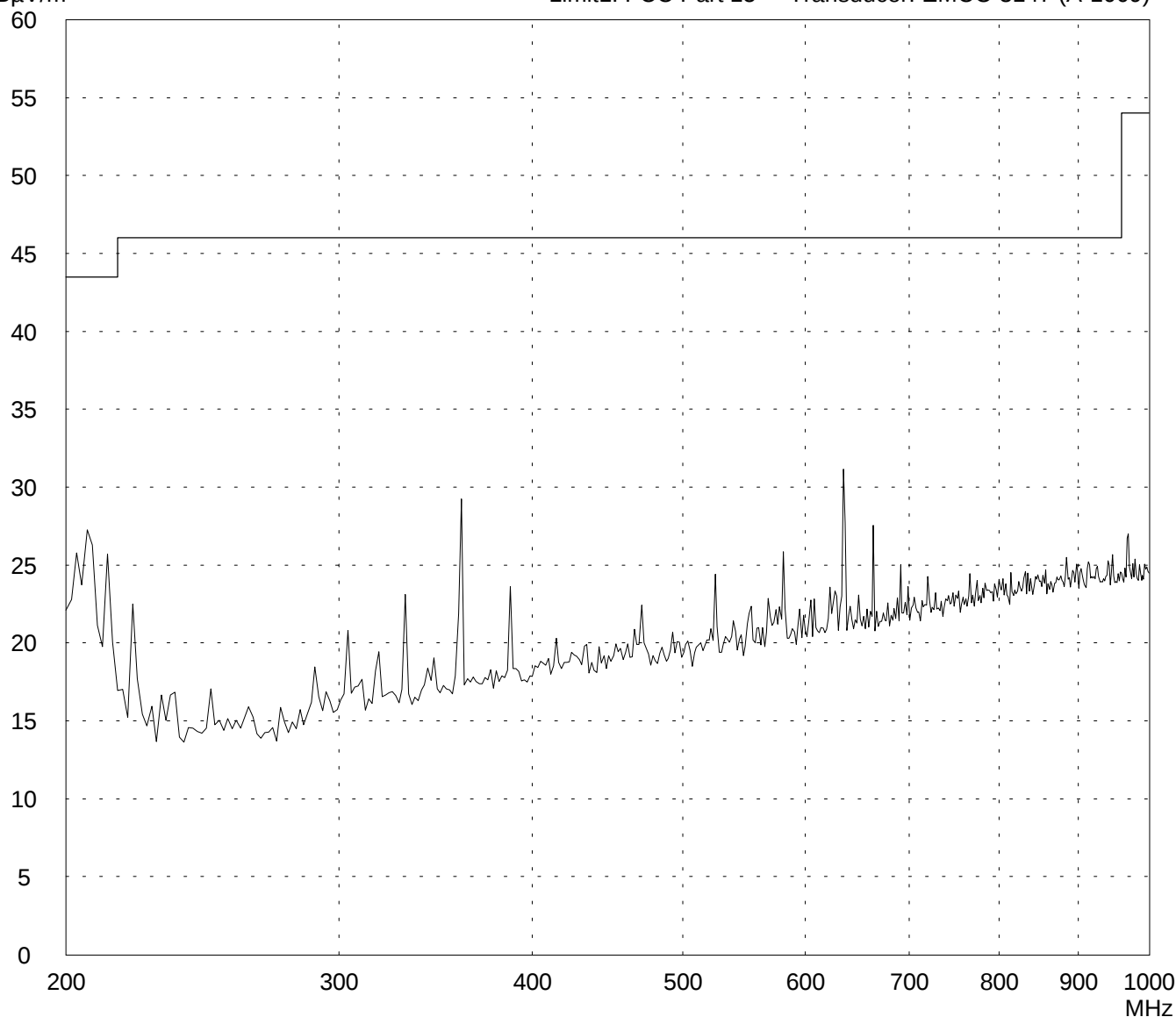
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

Test distance 3 metres
Vertical Polarization

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- horizontal position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBμV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBμV/m]</i>	<i>Limit [dBμV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

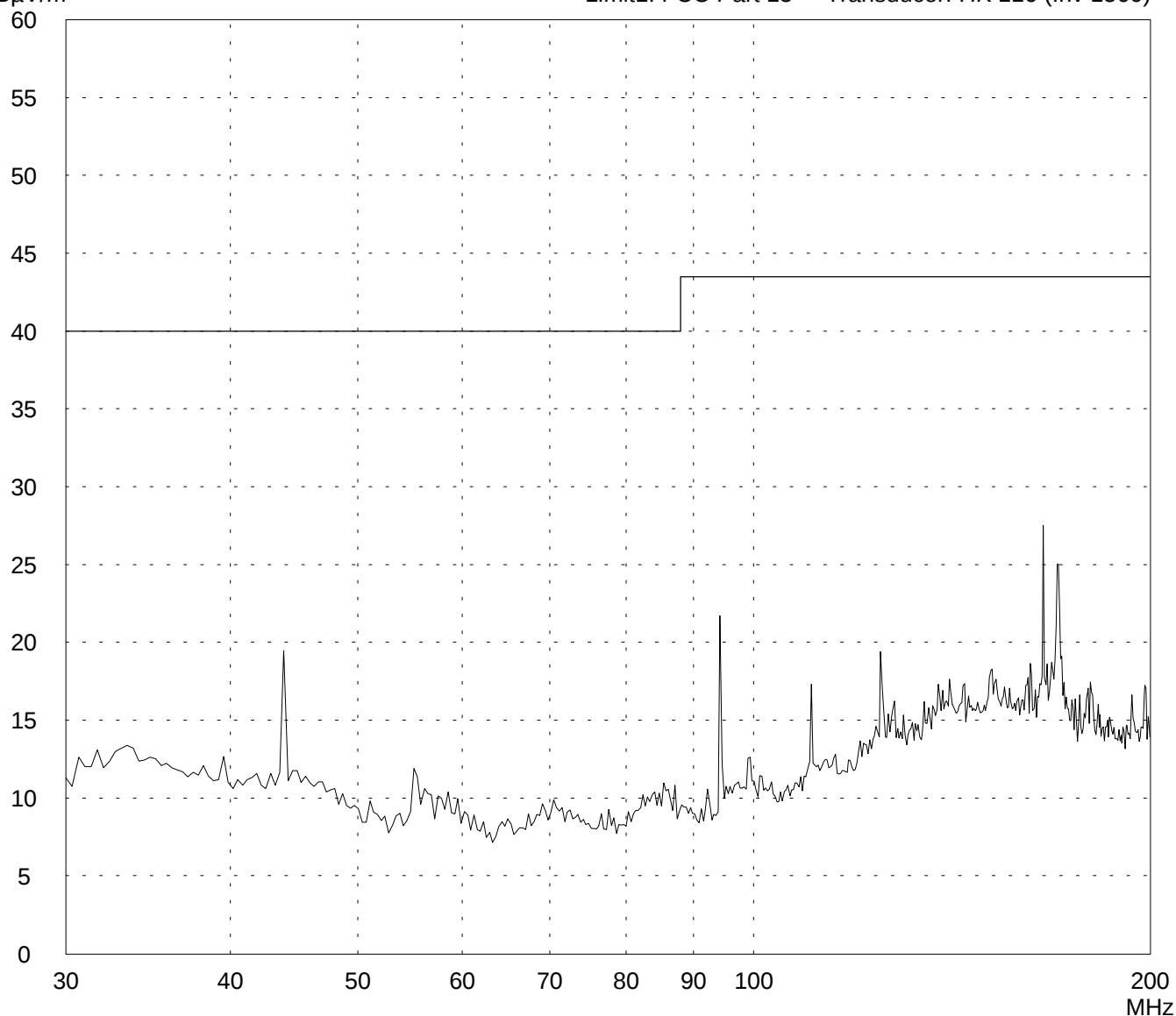
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

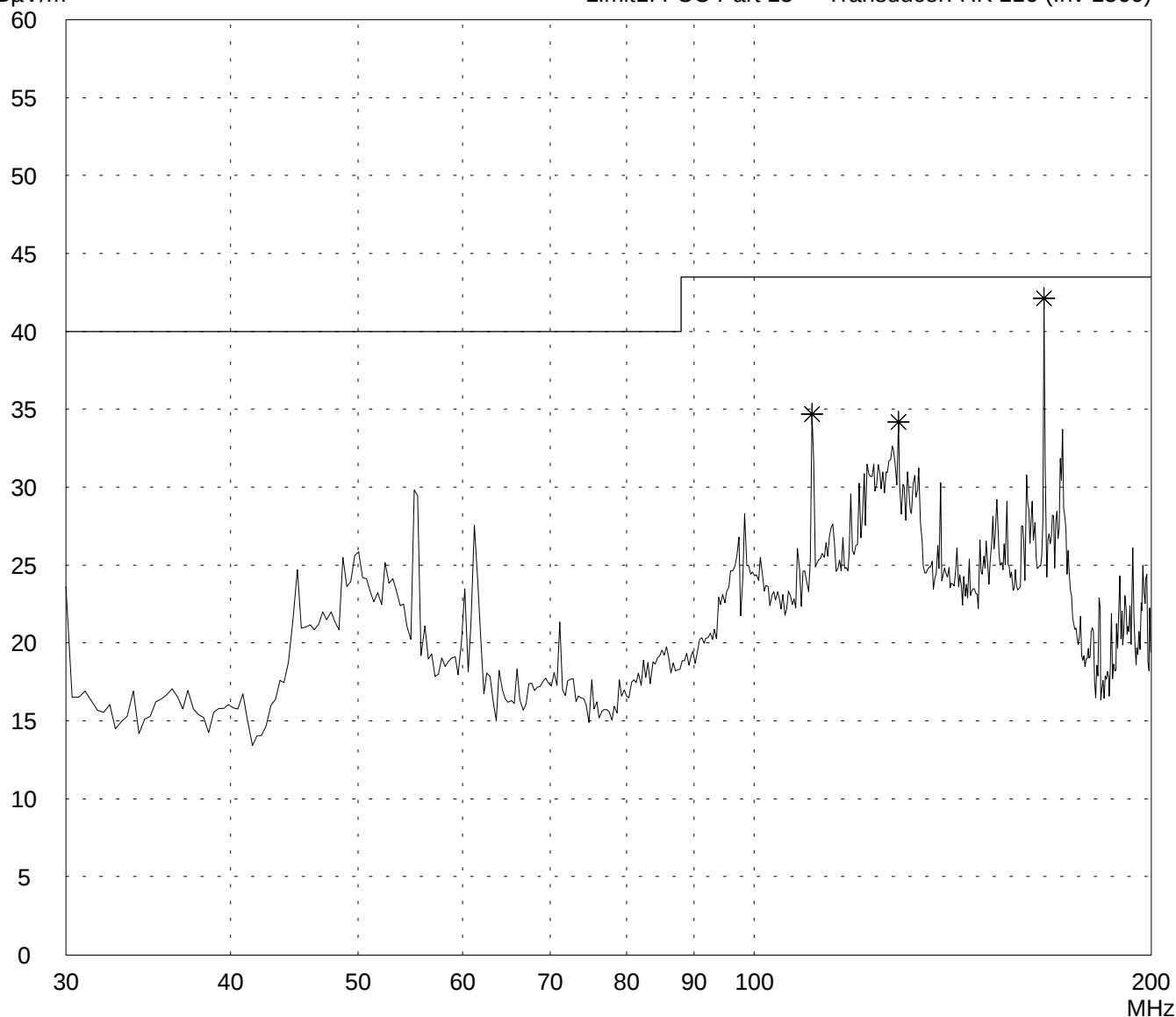
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - standing on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Vertical Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

<i>Frequency [MHz]</i>	<i>Reading [dBμV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBμV/m]</i>	<i>Limit [dBμV/m]</i>	<i>Limit exceeded</i>
110.580000	21.83	12.87	34.70	43.50	
128.600000	18.89	15.28	34.18	43.50	
166.000000	25.44	16.68	42.12	43.50	

Result: Limit kept	Project file: 56308-10178-2	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

List of values:

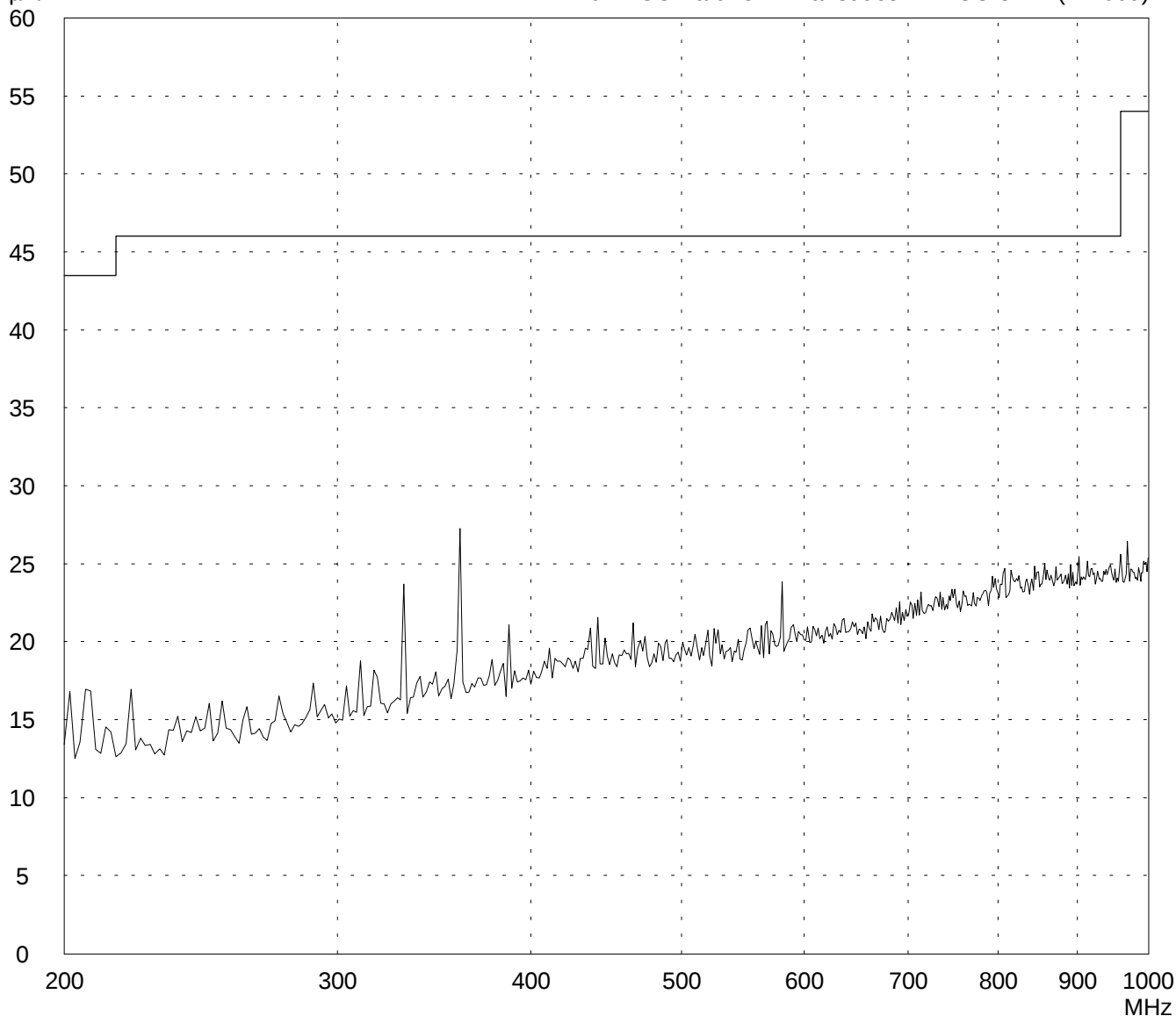
10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15

Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

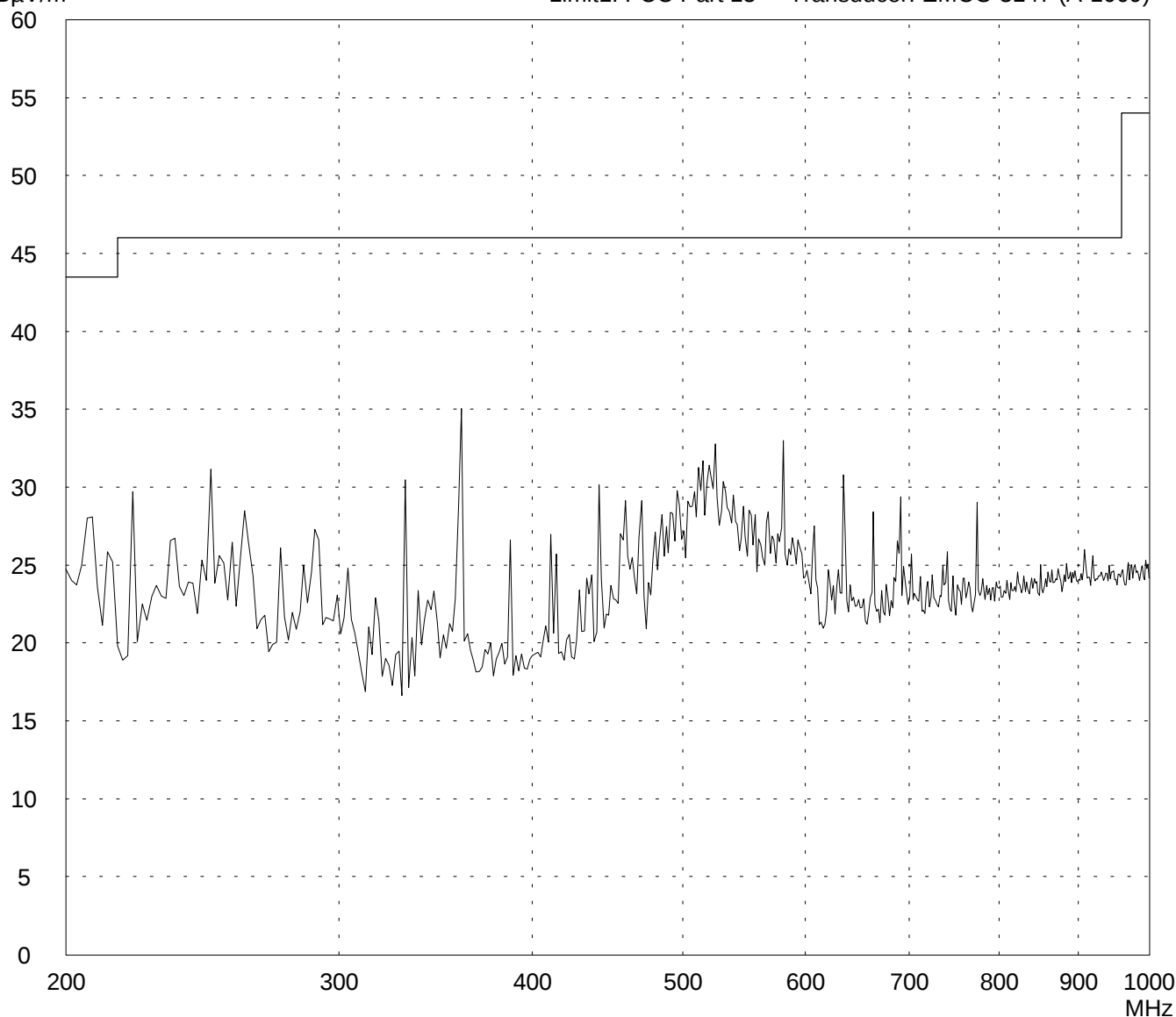
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

Test distance 3 metres
Vertical Polarization

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- standing on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- vertical position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002 Operator: A. Stübinger	
Test performed: automatically File name: default.emi	

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

<i>Frequency [MHz]</i>	<i>Reading [dBμV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBμV/m]</i>	<i>Limit [dBμV/m]</i>	<i>Limit exceeded</i>
180.620000	18.53	15.47	34.01	43.50	

Result: Limit kept	Project file: 56308-10178-2	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- vertical position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: HK 116 (Inv 1560)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 30 MHz - 200 MHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- vertical position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Horizontal Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- vertical position on table

Detector:

Peak

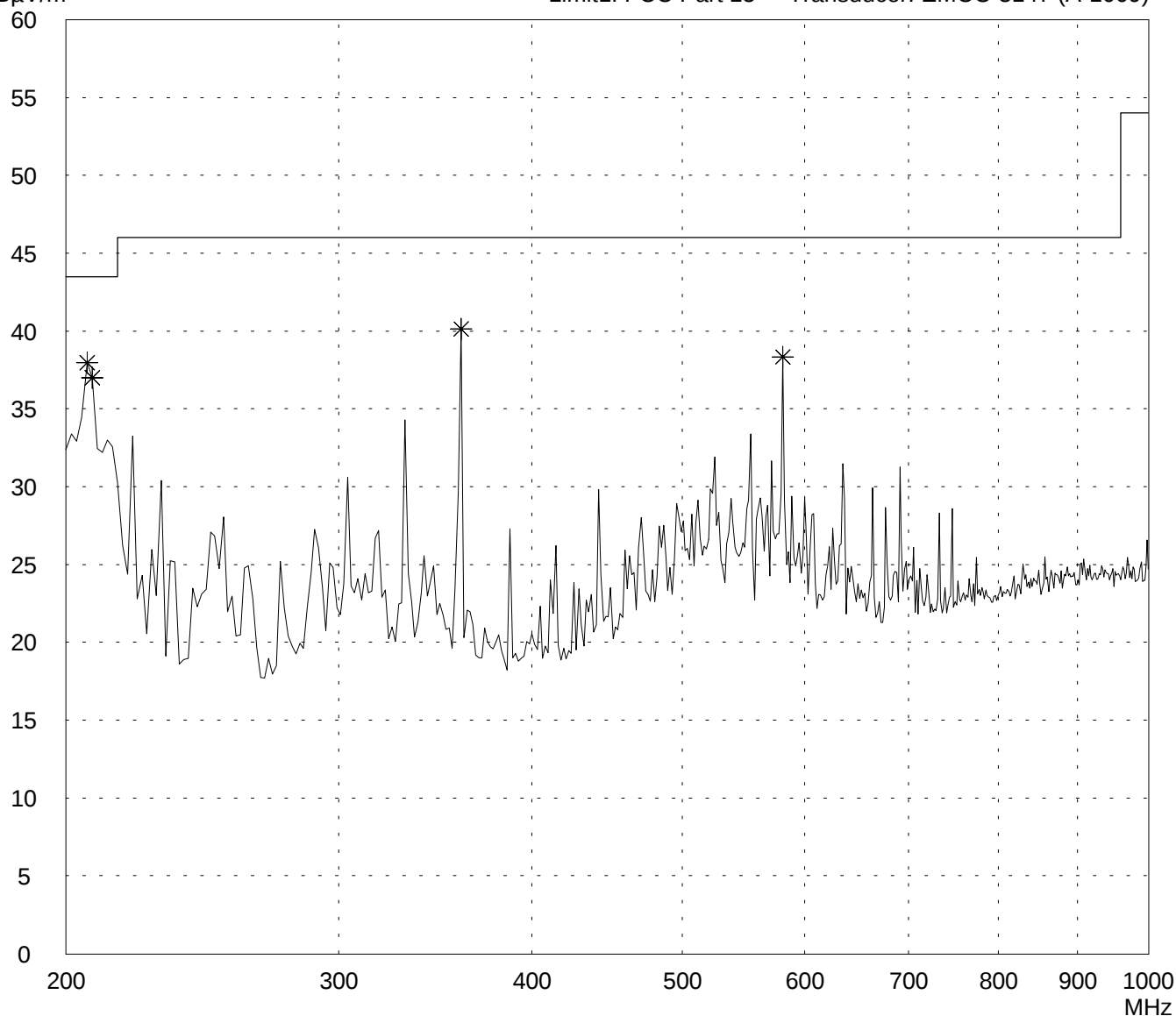
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz
acc. to FCC Part 15 (Fully Anechoic Chamber)

Model: DHP	Comment: - FCC-test-setup with DHP 112 - tested with PSION Workabout - tested with external antenna - vertical position on table
Serial no.: 120053	
Applicant: Hotraco Micro ID B:V:	
Test site: Fully anechoic room, cabin no. 2	
Tested on: Test distance 3 metres Horizontal Polarization	
Date of test: 01/10/2002	
Test performed: automatically	File name: default.emi

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

[illegible]

Result: Limit kept	Project file: 56308-10178-2	Page	of	Pages
-----------------------	--------------------------------	------	----	-------

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

**Test distance 3 metres
Vertical Polarization**

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- vertical position on table

Detector:

Peak

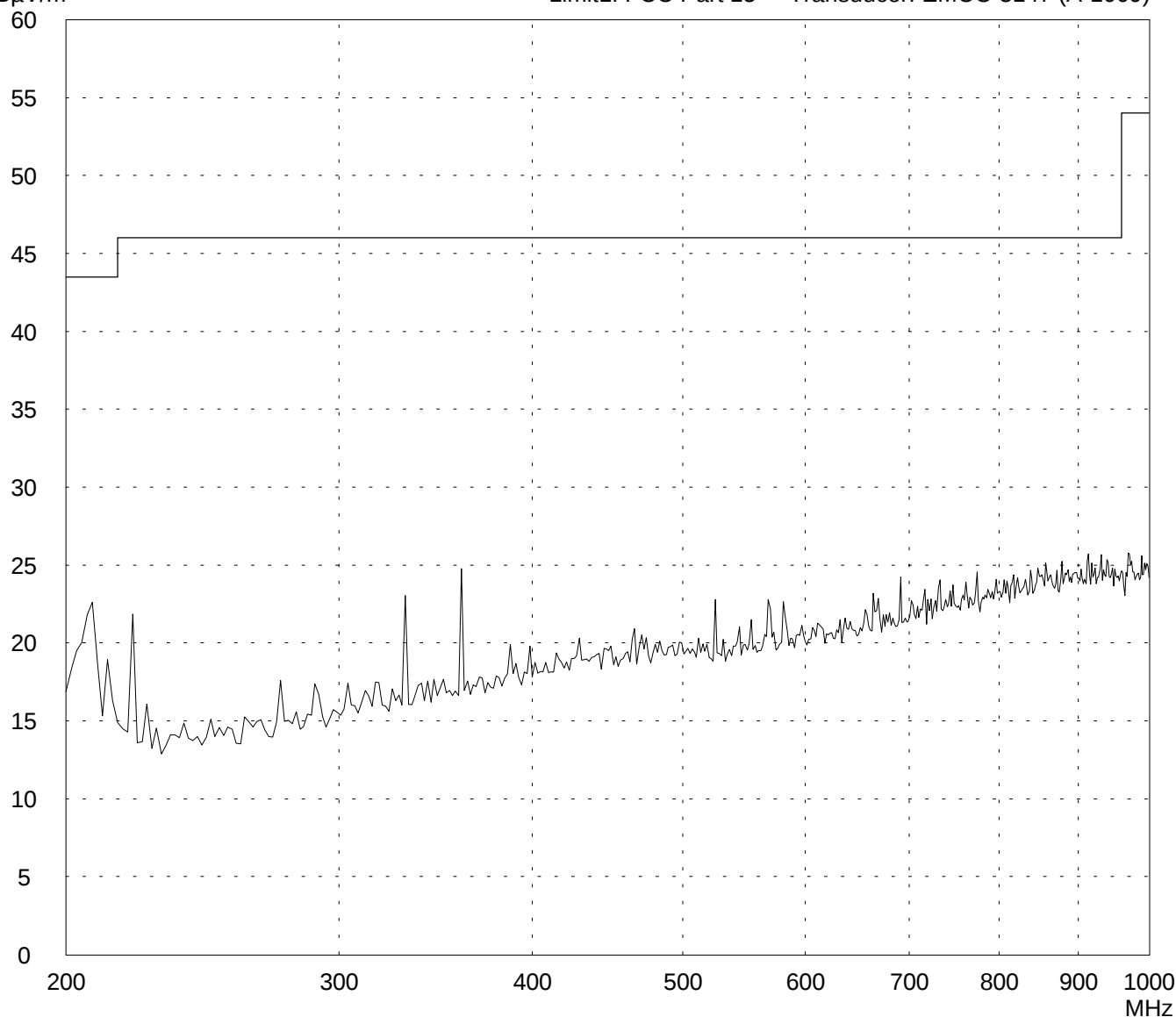
List of values:

10 dB Margin

50 Subranges

dBµV/m

Limit1: FCC Part 15 Transducer: EMCO 3147 (A-1009)



Result:

Limit kept

Project file:

56308-10178-2

Page of Pages

Radiated Emission Test 200 MHz - 1 GHz acc. to FCC Part 15 (Fully Anechoic Chamber)

Model:

DHP

Serial no.:

120053

Applicant:

Hotraco Micro ID B:V:

Test site:

Fully anechoic room, cabin no. 2

Tested on:

Test distance 3 metres
Vertical Polarization

Date of test:

01/10/2002

Operator:

A. Stübinger

Test performed:

automatically

File name:

default.emi

Comment:

- FCC-test-setup with DHP 112
- tested with PSION Workabout
- tested with external antenna
- vertical position on table

Detector:

Peak

List of values:

10 dB Margin

50 Subranges

<i>Frequency [MHz]</i>	<i>Reading [dBµV]</i>	<i>Correction factor [dB]</i>	<i>Value [dBµV/m]</i>	<i>Limit [dBµV/m]</i>	<i>Limit exceeded</i>
no results					

Result:

Limit kept

Project file:

56308-10178-2

Page

of

Pages