Test Report

FCC Part 15.407
Industry Canada RSS210

UNII Devices

Model #: PCG-4Q3L

SONY Corporation
1-7-1 Konan, Minato-ku,
Tokyo, 108-0075
Japan

FCC ID: AK8PCG4Q3L
IC ID: 409B-PCG4Q3L

TEST REPORT #: EMC_SONYE_025_08001_15.407_PCG4Q3L
DATE: 2008-7-30

ilac-MRA A2LA ACCREDITED Certificate # 2135.01

Bluetooth

Bluetooth Qualification Test Facility (BQTF)

CTIA Authorized Test Lab
LAB CODE 20020328-00

FCC listed: A2LA accredited

IC recognized # 3462B

***CETECOM* Inc.**
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CETECOM Inc. is a Delaware Corporation with Corporation number: 2113686
Board of Directors: Dr. Harald Ansorge, Dr. Klaus Matkey, Hans Peter May

TABLE OF CONTENTS

1 Assessment

The following is in compliance with the applicable criteria specified in FCC rules Part 15.407 of the Code of Federal Regulations.

Company	Description	Model #
SONY Corporation	**Notebook PC**	**PCG-4Q3L**

This report is reviewed by:

2008-7-30	**EMC & Radio**	**Lothar Schmidt (Director Regulatory and Antenna Services)**	Lothar Schmidt I am approving this document
Date	**Section**	**Name**	**Signature**

This report is prepared by:

2008-7-30	**EMC & Radio**	**Peter Mu (EMC Project Engineer)**	 Peter Mu I am the author of this document
Date	**Section**	**Name**	**Signature**

The test results of this test report relate exclusively to the test item specified in Identification of the Equipment under Test. The CETECOM Inc. USA does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the CETECOM Inc USA.

2 Administrative Data

2.1 Identification of the Testing Laboratory Issuing the EMC Test Report

Company Name:	**CETECOM Inc.**
Department:	**EMC**
Address:	**411 Dixon Landing Road Milpitas, CA 95035 U.S.A.**
Telephone:	**+1 (408) 586 6200**
Fax:	**+1 (408) 586 6299**
Responsible Test Lab Manager:	**Lothar Schmidt**
Responsible Project Leader:	**Peter Mu**
Date of test:	**2008-7-21 to 2008-7-29**

2.2 Identification of the Client

APPLICANT	
Applicant (Company Name)	**SONY Corporation**
Street Address	**1-7-1 Konan, Minato-ku,**
City/Zip Code	**Tokyo, 108-0075**
Country	**Japan**
Contact Person	**Michio Kobayashi**
Telephone	**+81-263-72-5696**
Fax	**+81-263-72-9755**
e-mail	**Michio.Kobayashi@jp.sony.com**

2.3 Identification of the Manufacturer

MANUFACTURER (If different from Applicant)	
Applicant (Firm Name):	**Sony EMCS Corporation**
Contact Person:	**Michio Kobayashi**
Telephone:	**+81-263-72-5696**
Fax:	**+81-263-72-9755**
Address Line 1:	**5432 Toyoshima,**
City:	**Azumino-shi, Nagano**
Postal Code/ Country:	**399-8282, Japan**
e-mail:	**Michio.Kobayashi@jp.sony.com**

3 Equipment under Test (EUT)

3.1 Specification of the Equipment under Test

EUT	
Marketing Name of EUT (if not same as Model No.):	**VAIO-VGN TT**
Description:	**Notebook PC**
Model No:	**PCG-4Q3L**
FCC ID:	**AK8PCG4Q3L**
IC ID:	**409B-PCG4Q3L**

Frequency Range:	**5150-5250MHz, 5250-5350MHz, 5470-5725MHz**
Type(s) of Modulation:	**OFDM**
Antenna Type:	**Inverted F antenna** **Peak Gain 5150-5725MHz: 0.57dBi.**
Max Output Power:	Sub-band 1: 5150-5250MHz 802.11a mode: EIRP: 21.77dBm, (150mW). Conducted: 16.6dBm (45mW) 802.11n HT20 mode: EIRP: 21.05dBm, (127mW). Conducted: 15.3dBm (34mW) 802.11n HT40 mode: EIRP: 16.35dBm, (43.2mW). Conducted: 16.0dBm (40mW) Sub-band 2: 5250-5350MHz 802.11a mode: EIRP: 20.24dBm, (106mW). Conducted: 16.2dBm (42mW) 802.11n HT20 mode: EIRP: 17.89dBm, (61.5mW). Conducted: 14.2dBm (26mW) 802.11n HT40 mode: EIRP: 15.22dBm, (33.3mW). Conducted: 15.9dBm (38mW) Sub-band 1: 5470-5725MHz 802.11a mode: EIRP: 22.76dBm, (189mW). Conducted: 18.5dBm (71mW) 802.11n HT20 mode: EIRP: 21.76dBm, (150mW). Conducted: 15.6dBm (36mW) 802.11n HT40 mode: EIRP: 16.43dBm, (29.0mW). Conducted: 16.0dBm (40mW)

3.2 Identification of the Equipment under Test (EUT)

EUT #	TYPE	MANF.	MODEL	SERIAL #
1	EUT	SONY Corporation	PCG-4Q3L	5865C0A7

3.3 Identification of Accessory equipment

AE #	TYPE	MANF.	MODEL	SERIAL #
1	AC/DC ADAPTER	SONY Corporation	VGP-AC16V13	148015421 0110574

4 Subject Of Investigation

All testing was performed on the product referred to in Section 3 as EUT. EUT operates in the band 5150-5250MHz, 5250-5350MHz, and 5470-5725MHz in 802.11a, 802.11n 20MHz (HT20) and 802.11n 40MHz (HT40) mode. The EUT has one transmit and two receive antennae.

The objective of the measurements done by Cetecom Inc. was to measure the performance of the EUT operating under all operating modes as specified by requirements listed in FCC rules Part 15.407 of Title 47 of the Code of Federal Regulations. The maximization of portable equipment is conducted in accordance with ANSI C63.4

5 Radiated Measurements

5.1 Maximum Peak Output Power § 15.407 (Radiated)

5.1.1 FCC Limits:

Conducted Output Power is defined as the following (reduced if directional gain > 6dBi):

Sub-band 1: 5150-5250MHz: 15.407(a)(1): 50mW or 4dBm + 10log(B),
Sub-band 2: 5250-5350MHz: 15.407(a)(2): 250mW or 11dBm + 10log(B)
Sub-band 3: 5470-5725MHz: 15.407(a)(2): 250mW or 11dBm + 10log(B)

B is the 26–dB emission bandwidth in MHz.

Directional gain is 0.57dBi < 6dBi so EIRP limit = Conducted Limit + 6dBm.

802.11a Mode

Channel Frequency	Conducted Output Power Limit (dBm)			EIRP Limit (dBm)
	Stated	Calculated	Applicable	
5180	17.0	17.46	17.0	23.0
5220	17.0	19.48	17.0	23.0
5240	17.0	19.74	17.0	23.0
5260	24.0	26.68	24.0	30.0
5300	24.0	26.38	24.0	30.0
5320	24.0	24.46	24.0	30.0
5500	24.0	26.54	24.0	30.0
5600	24.0	27.10	24.0	30.0
5700	24.0	25.74	24.0	30.0

802.11n HT20 Mode

Channel Frequency	Conducted Output Power Limit (dBm)			EIRP Limit (dBm)
	Stated	Calculated	Applicable	
5180	17.0	18.08	17.0	23.0
5220	17.0	20.50	17.0	23.0
5240	17.0	20.52	17.0	23.0
5260	24.0	27.11	24.0	30.0
5300	24.0	27.14	24.0	30.0
5320	24.0	25.83	24.0	30.0
5500	24.0	27.51	24.0	30.0

5600	24.0	27.50	24.0	30.0
5700	24.0	27.42	24.0	30.0

802.11n HT40 Mode

Channel Frequency	Conducted Output Power Limit (dBm)			EIRP Limit (dBm)
	Stated	Calculated	Applicable	
5190	17.0	20.07	17.0	23.0
5230	17.0	22.96	17.0	23.0
5270	24.0	30.15	24.0	30.0
5310	24.0	27.10	24.0	30.0
5510	24.0	27.11	24.0	30.0
5590	24.0	27.88	24.0	30.0
5690	24.0	28.54	24.0	30.0

5.1.2 **IC Limits**

Sub-band 1: 5150-5250MHz: RSS-210 A9.2(1): 200 mW or 10 + 10 log(B)
Sub-band 2: 5250-5350MHz: RSS-210 A9.2(2): 1W or 17dBm + 10log(B)
Sub-band 3: 5470-5725MHz: RSS-210 A9.2(2): 1W or 17dBm + 10log(B)

B is the 99% emission bandwidth in MHz

802.11a Mode

Channel Frequency	EIRP Limit (mW)		
	Stated	Calculated	Applicable
5180	200.00	170.00	170.00
5220	200.00	171.00	171.00
5240	200.00	171.00	171.00
5260	1000.00	857.03	857.03
5300	1000.00	857.03	857.03
5320	1000.00	857.03	857.03
5500	1000.00	857.03	857.03
5600	1000.00	882.09	882.09
5700	1000.00	857.03	857.03

802.11n HT20 Mode

Channel Frequency	EIRP Limit (mW)		
	Stated	Calculated	Applicable
5180	200.00	181.00	181.00
5220	200.00	181.00	181.00
5240	200.00	182.00	182.00
5260	1000.00	907.15	907.15
5300	1000.00	907.15	907.15
5320	1000.00	912.16	912.16
5500	1000.00	912.16	912.16
5600	1000.00	917.17	917.17
5700	1000.00	912.16	912.16

802.11n HT40 Mode

Channel Frequency	EIRP Limit (mW)		
	Stated	Calculated	Applicable
5190	200.00	363.00	200.00
5230	200.00	366.00	200.00
5270	1000.00	1834.35	1000.00
5310	1000.00	1819.31	1000.00
5510	1000.00	1824.32	1000.00
5590	1000.00	1809.29	1000.00
5690	1000.00	1824.32	1000.00

5.1.3 **Measurement Results**

EIRP 802.11a MODE:

TEST CONDITIONS T_{nom}(23)°C, V_{nom}VDC	Channel Frequency	EIRP (dBm)	EIRP (mW)	FCC Margin (dBm)	IC Margin (mW)
Sub-band 1: 5150-5250MHz	5180	21.77	150.31	1.23	19.69
	5220	17.56	57.02	5.44	113.98
	5240	19.89	97.50	3.11	73.50
Sub-band 2: 5250-5350MHz	5260	18.55	71.61	11.45	785.42
	5300	20.24	105.68	9.76	751.35
	5320	18.23	66.53	11.77	790.50
Sub-band 3: 5470-5725MHz	5500	18.48	70.47	11.52	786.56
	5600	22.76	188.80	7.24	693.29
	5700	17.17	52.12	12.83	804.91

EIRP 802.11n HT20 MODE:

TEST CONDITIONS T_{nom}(23)°C, V_{nom}VDC	Channel Frequency	EIRP (dBm)	EIRP (mW)	FCC Margin (dBm)	IC Margin (mW)
Sub-band 1: 5150-5250MHz	5180	21.05	127.35	1.95	53.65
	5220	16.95	49.55	6.05	131.45
	5240	19.08	80.91	3.92	101.09
Sub-band 2: 5250-5350MHz	5260	16.53	44.98	13.47	862.17
	5300	17.89	61.52	12.11	845.63
	5320	16.47	44.36	13.53	867.80
Sub-band 3: 5470-5725MHz	5500	17.63	57.94	12.37	854.22
	5600	21.76	149.97	8.24	767.20
	5700	15.39	34.59	14.61	877.57

EIRP 802.11n HT40 MODE:

TEST CONDITIONS T_{nom}(23)°C, V_{nom}VDC	Channel Frequency	EIRP (dBm)	EIRP (mW)	FCC Margin (dBm)	IC Margin (mW)
Sub-band 1: 5150-5250MHz	5190	16.35	43.15	6.65	156.85
	5230	14.92	31.05	8.08	168.95
Sub-band 2: 5250-5350MHz	5270	15.22	33.27	14.78	966.73
	5310	15.13	32.58	14.87	967.42
Sub-band 3: 5470-5725MHz	5510	16.43	43.95	13.57	956.05
	5590	14.62	28.97	15.38	971.03

5.2 Measurement Plots

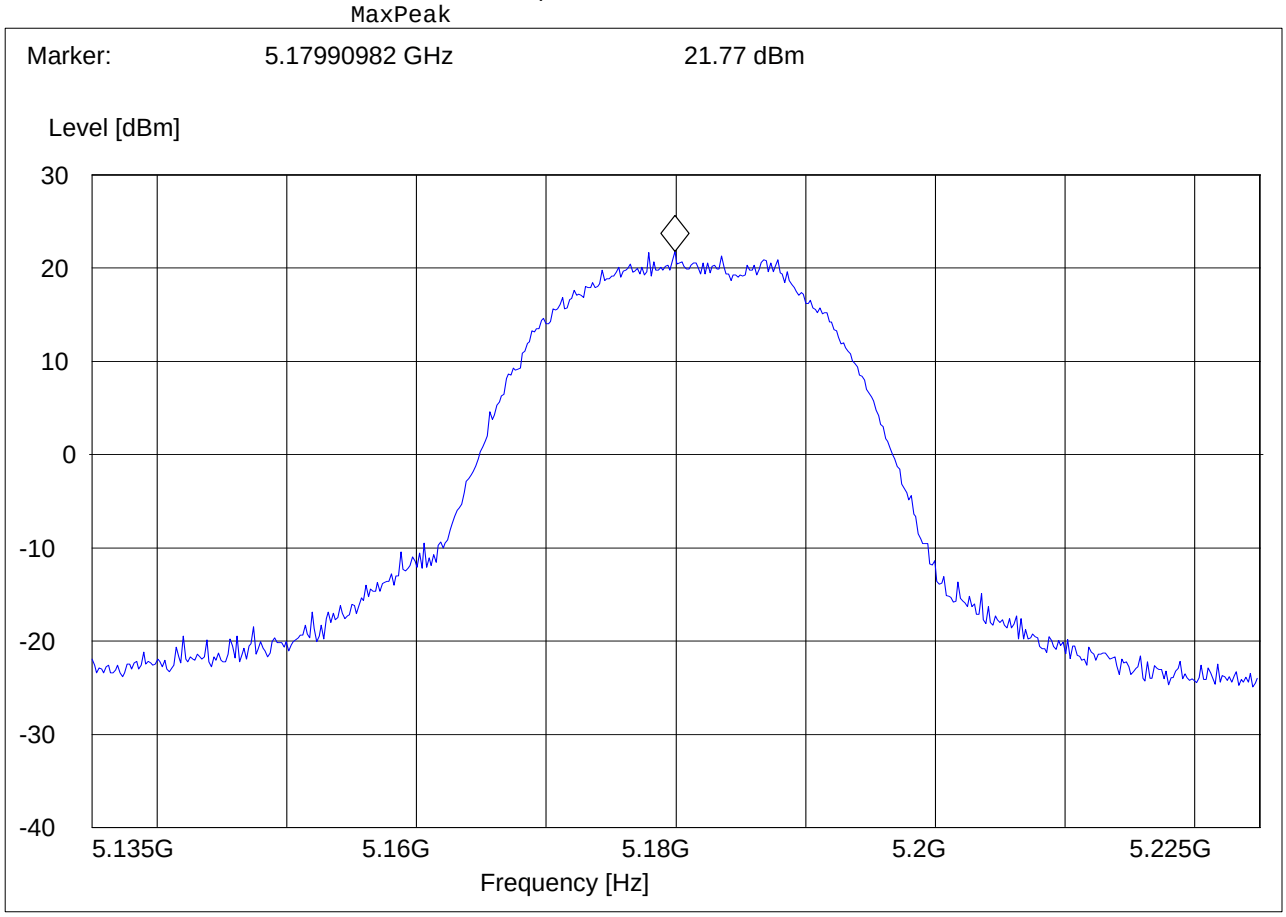
5.2.1 802.11a mode

EIRP 5180 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5180MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 36"

Short Description:		EIRP channel-5180 MHz			
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.1 GHz	5.2 GHz	MaxPeak MaxPeak	Coupled	10 MHz	DUMMY-DBM

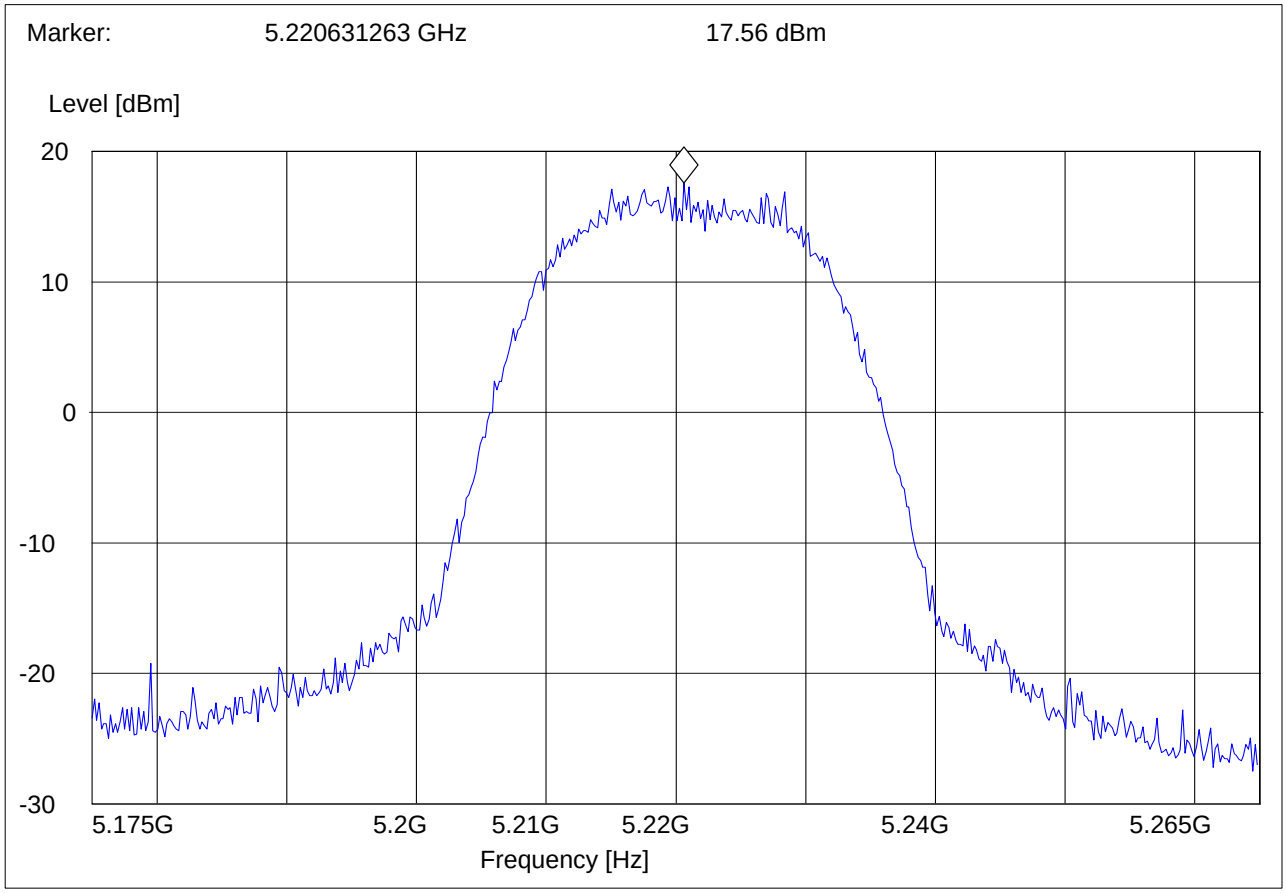


EIRP 5220 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5220MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 44"

```
  Short Description:              EIRP channel-5180 MHz
  Start       Stop        Detector  Meas.      IF         Transducer
  Frequency   Frequency             Time       Bandw.
  5.2 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
                          MaxPeak
```

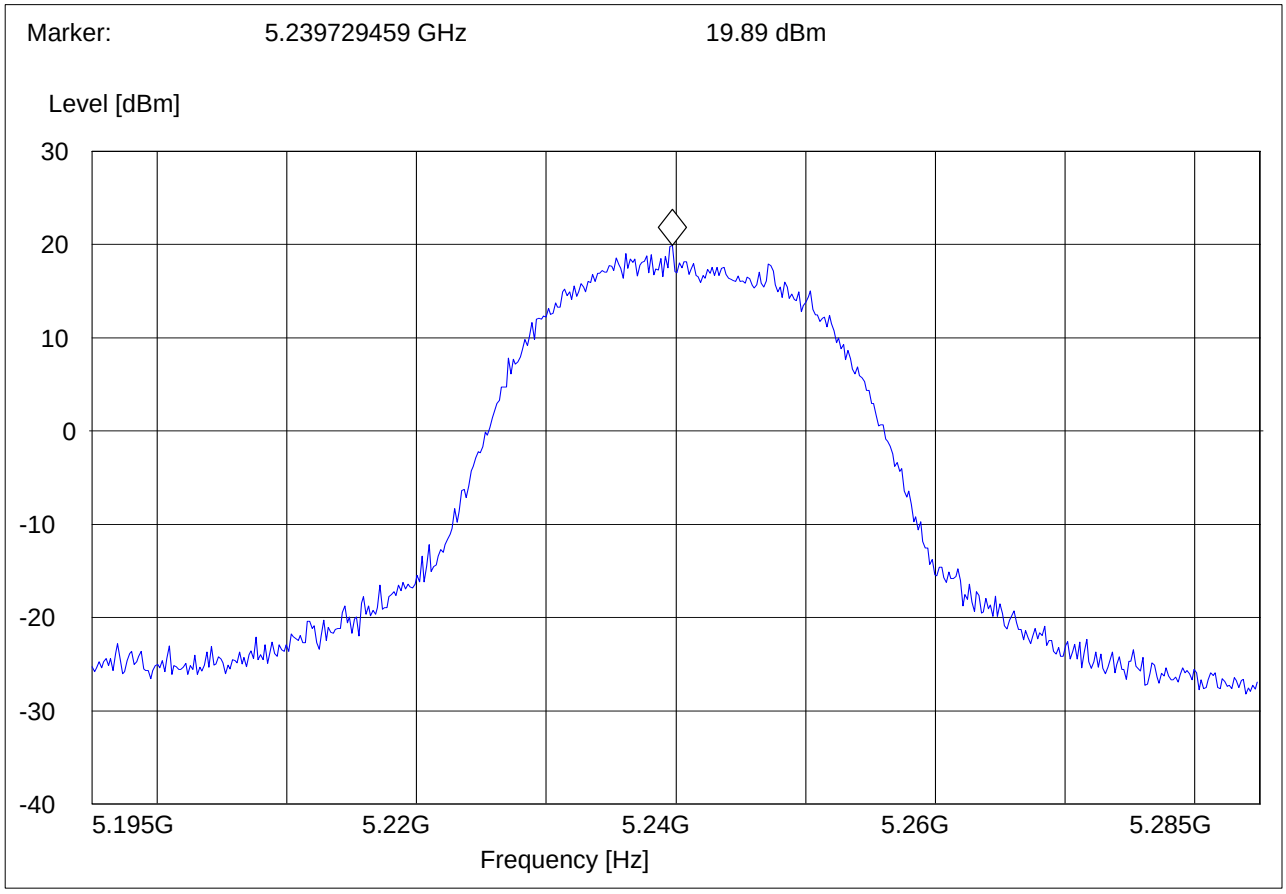


EIRP 5240 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5240MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 48"

```
Short Description:              EIRP channel-5180 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.2 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
                        MaxPeak
```

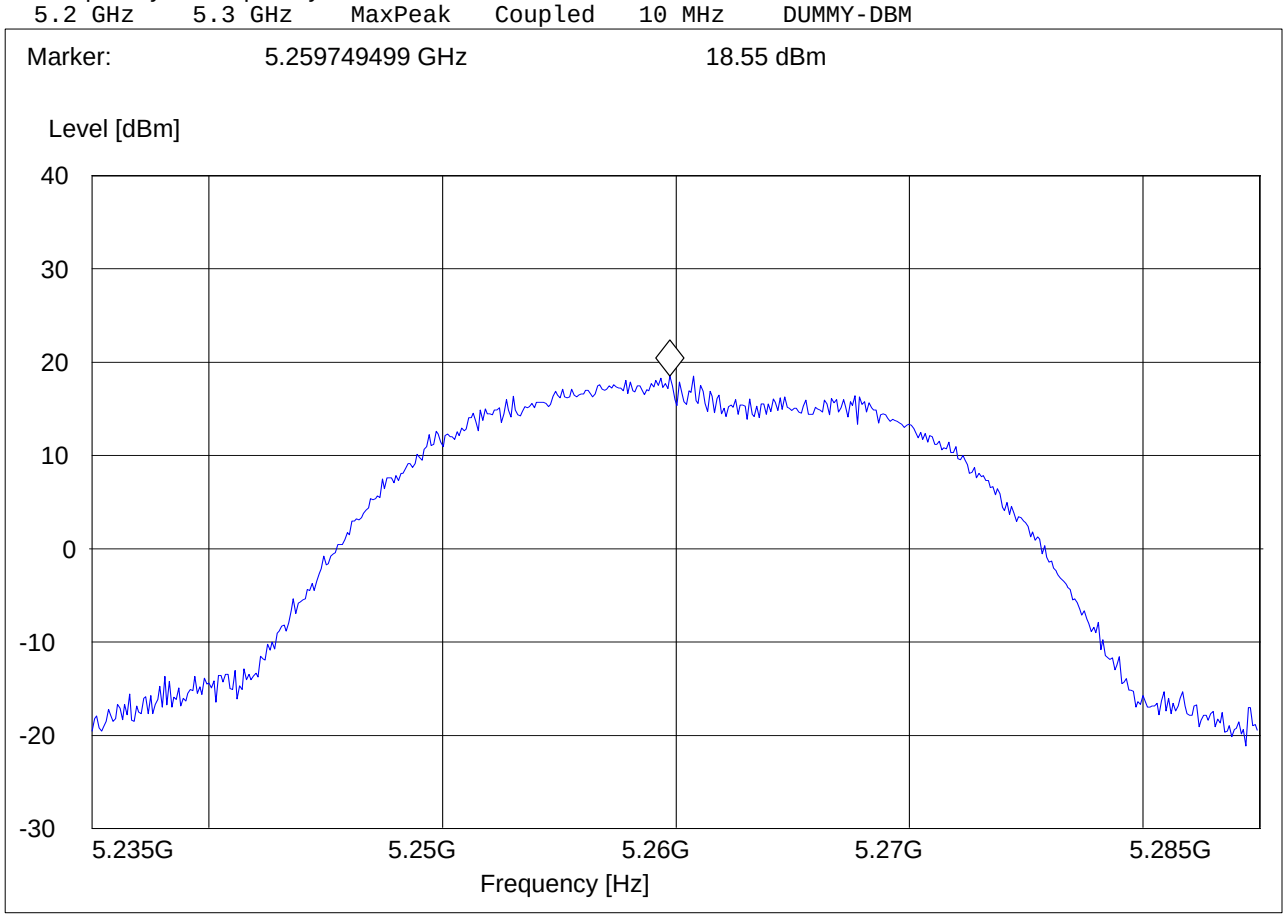


EIRP 5260 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5260MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 52"

```
Short Description:              EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.2 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

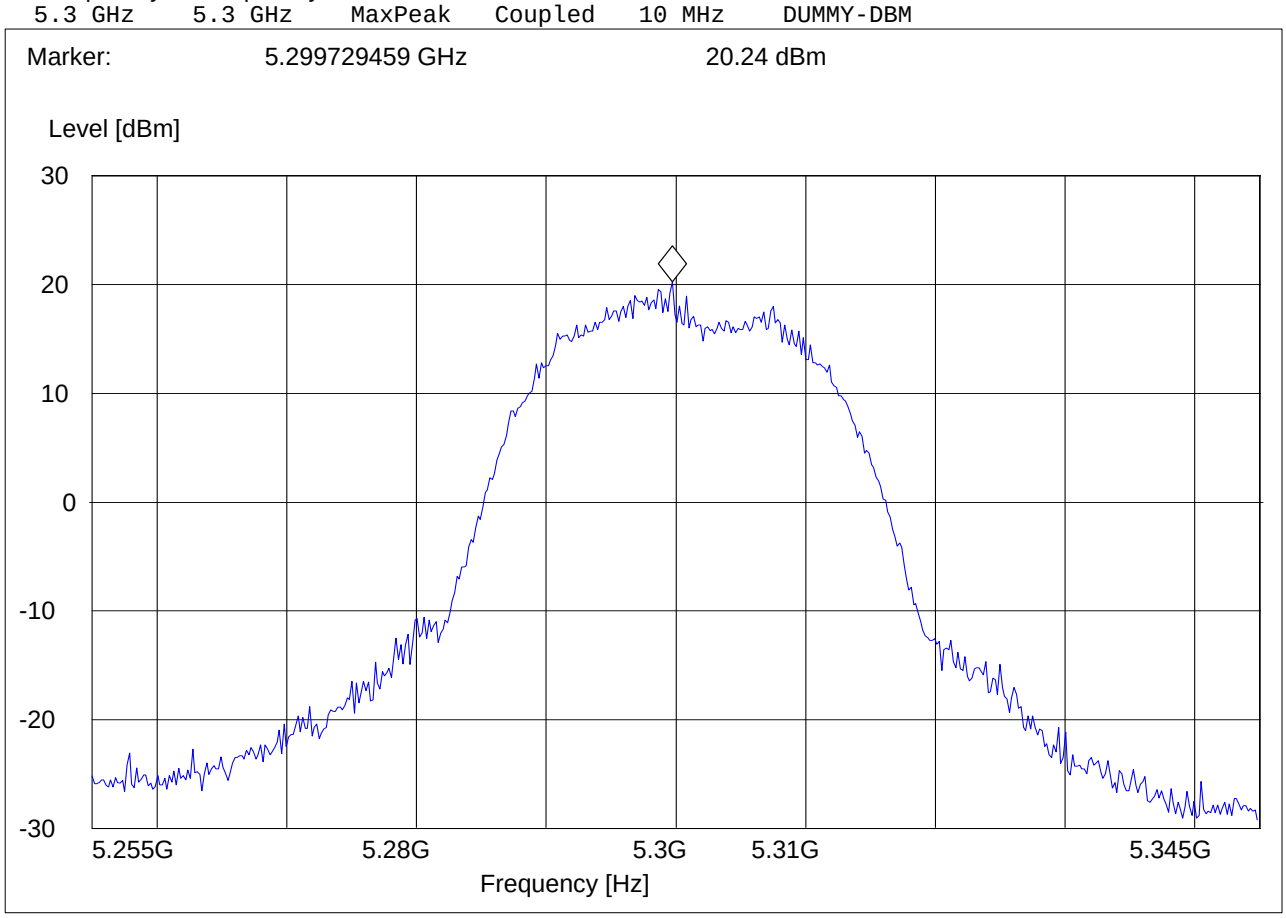


EIRP 5300 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5300MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 60"

```
Short Description:                EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.3 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

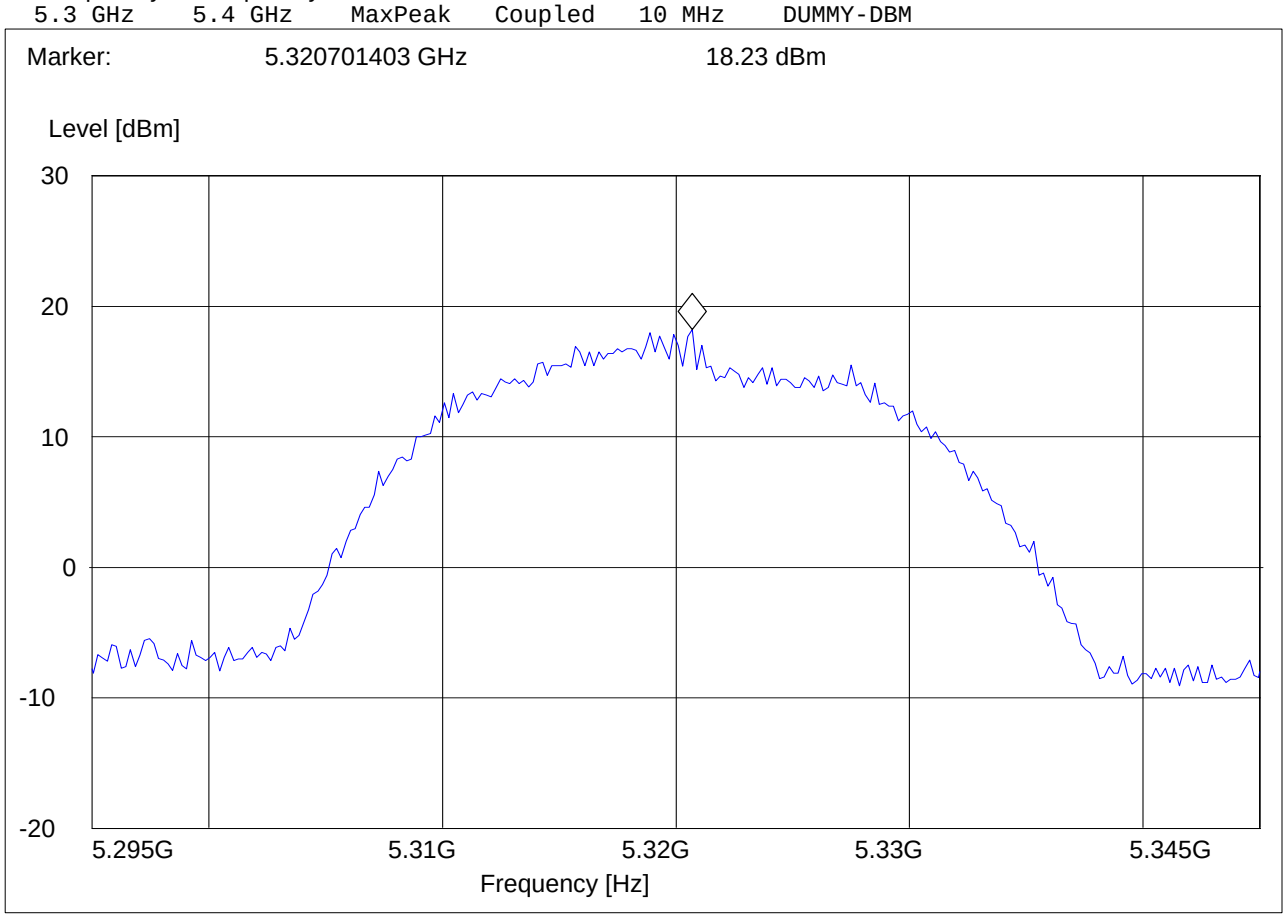


EIRP 5320 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 64"

```
Short Description:                EIRP  channel-5320 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.3 GHz     5.4 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

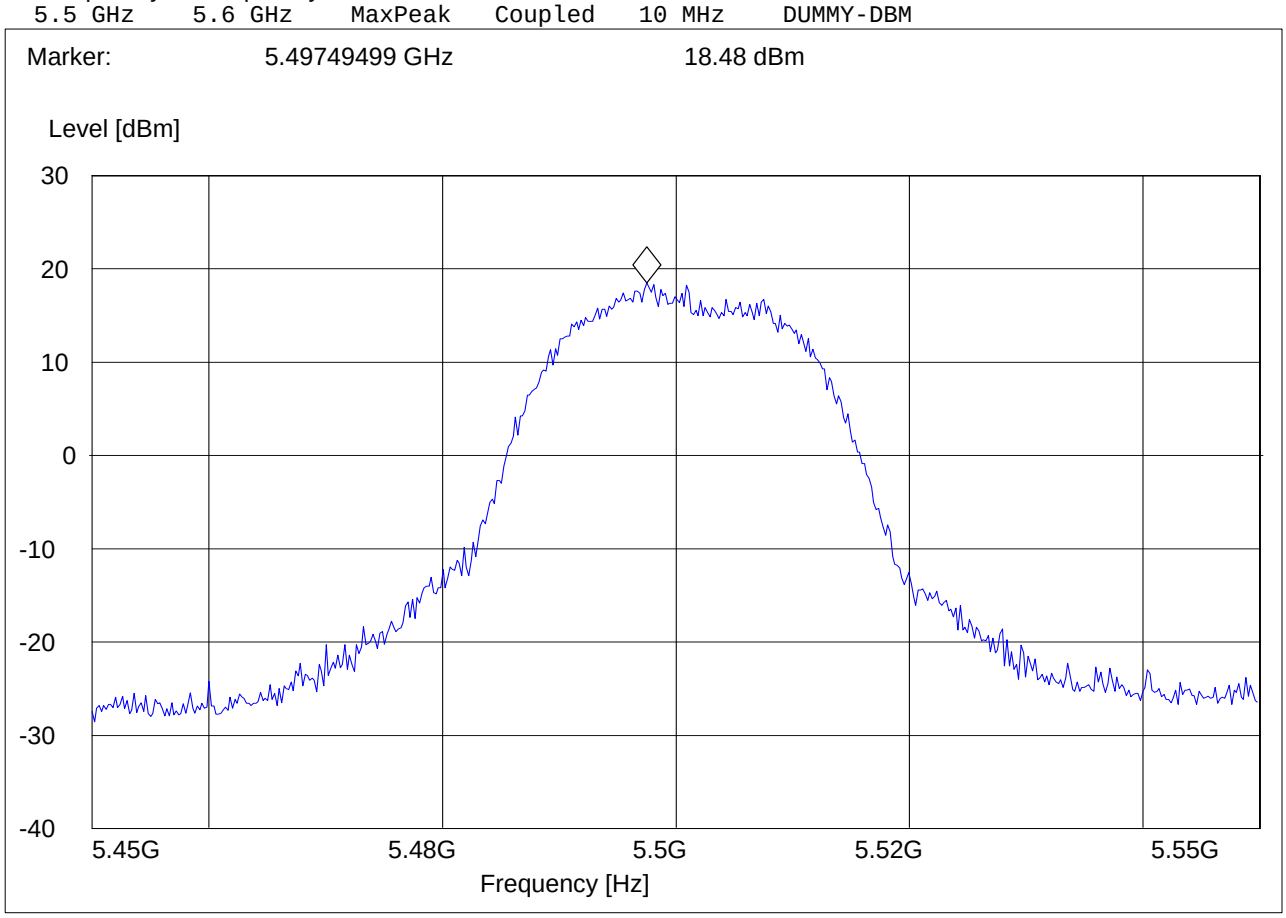


EIRP 5500 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5500MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a_100"

```
Short Description:                EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.5 GHz     5.6 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

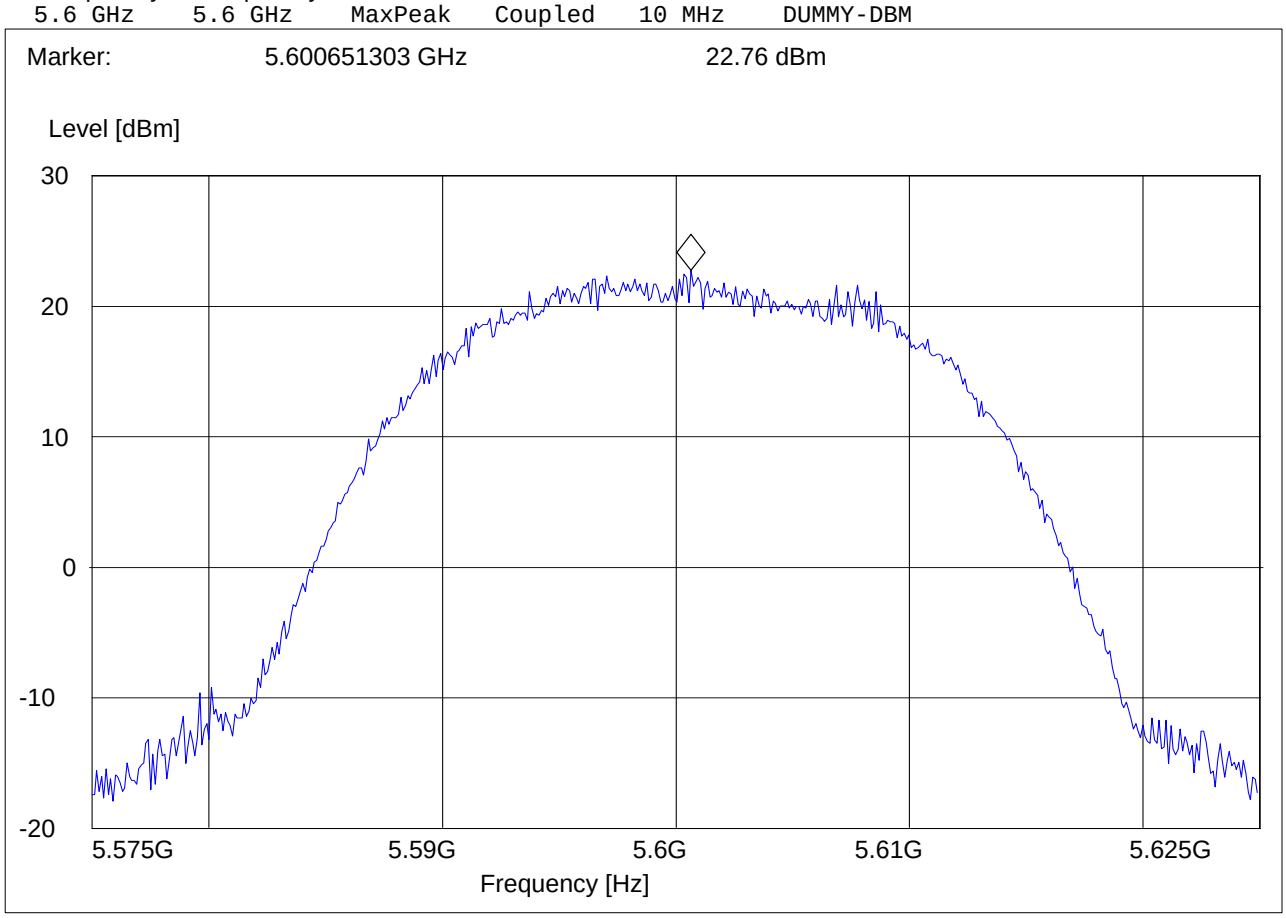


EIRP 5600 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5600MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a_120"

```
Short Description:              EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.6 GHz     5.6 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

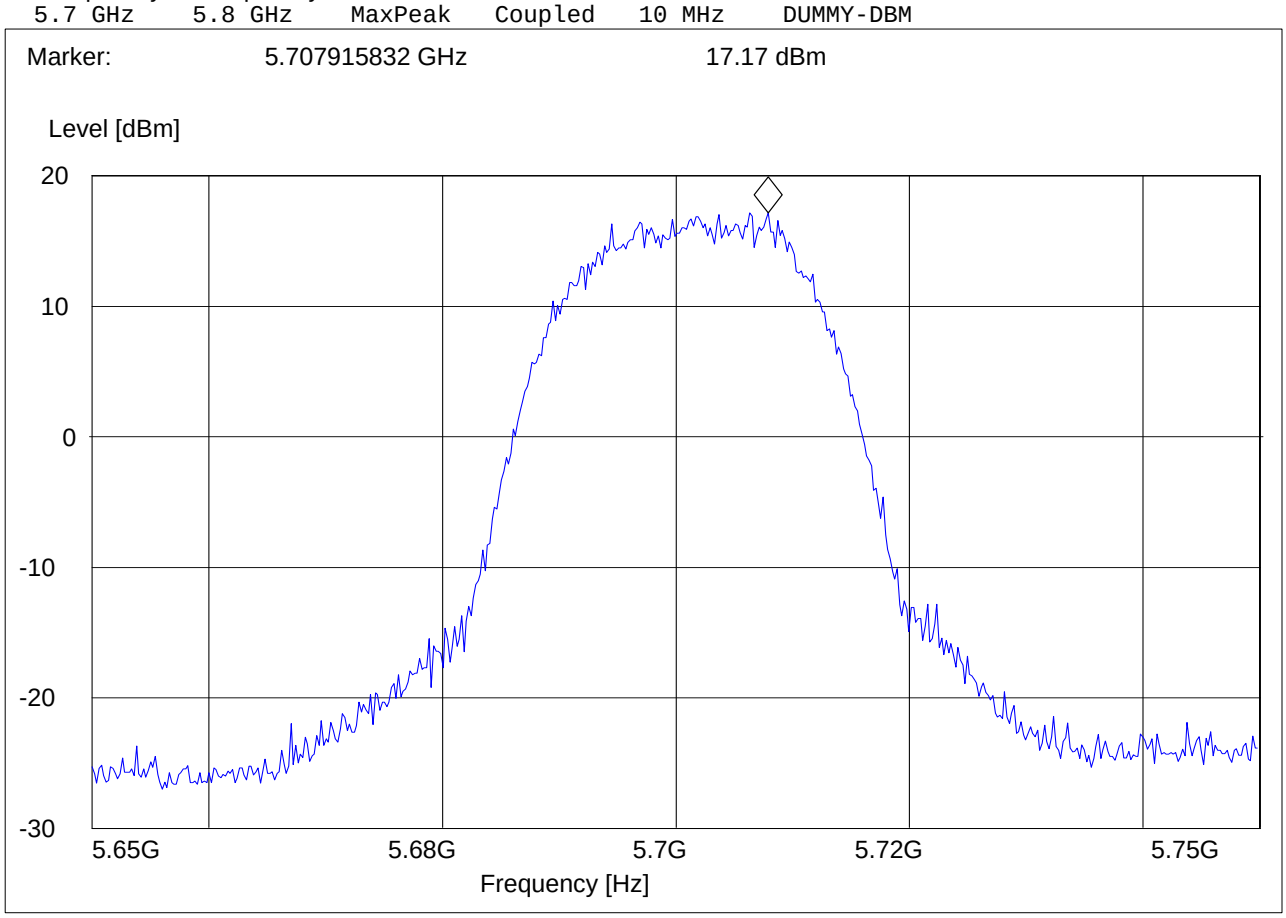


EIRP 5700 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5700MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a_140"

```
Short Description:              EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.7 GHz     5.8 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```



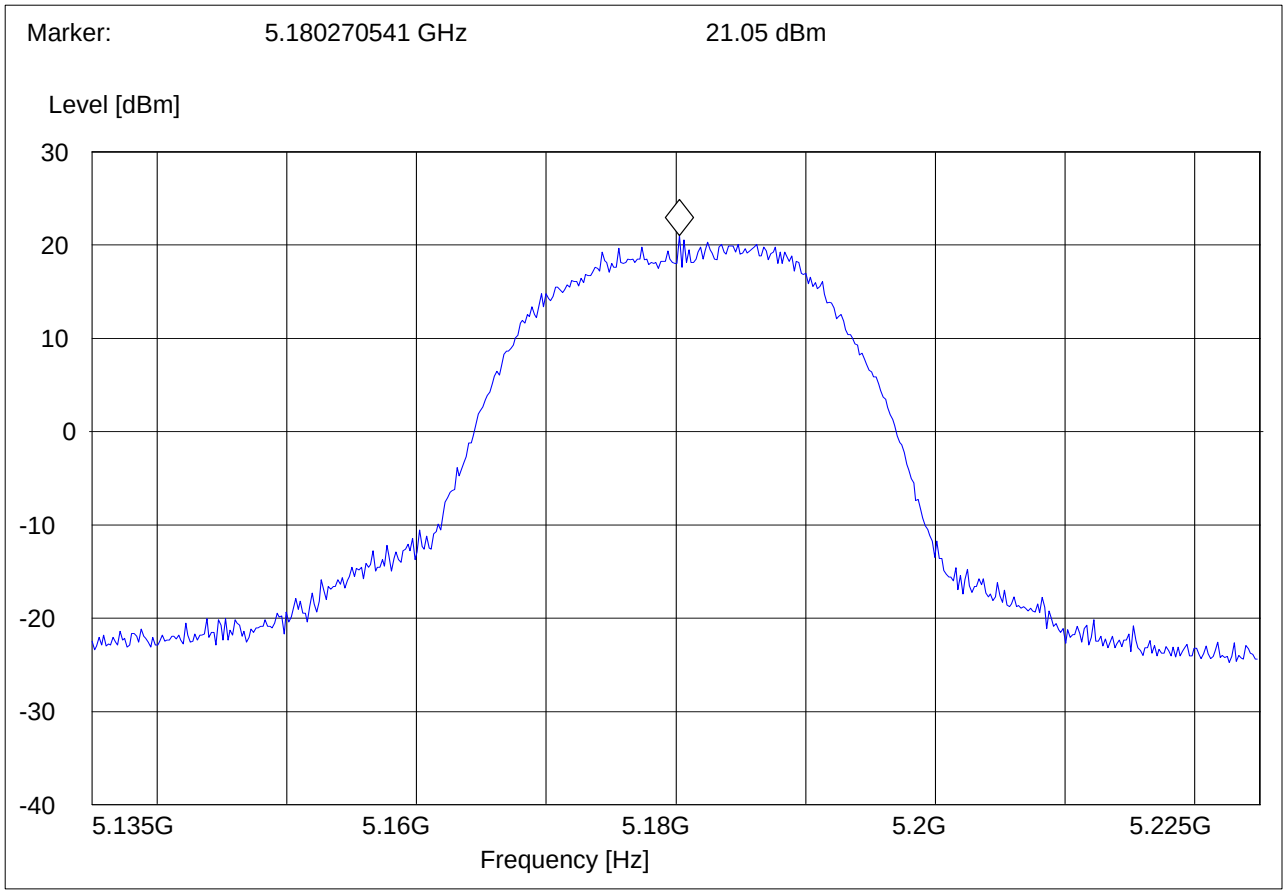
5.2.2 **802.11n HT20 mode**

EIRP 5180 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5180MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 36"

```
Short Description:            EIRP channel-5180 MHz
Start      Stop       Detector  Meas.     IF        Transducer
Frequency  Frequency            Time      Bandw.
5.1 GHz    5.2 GHz    MaxPeak   Coupled   10 MHz    DUMMY-DBM
                      MaxPeak
```



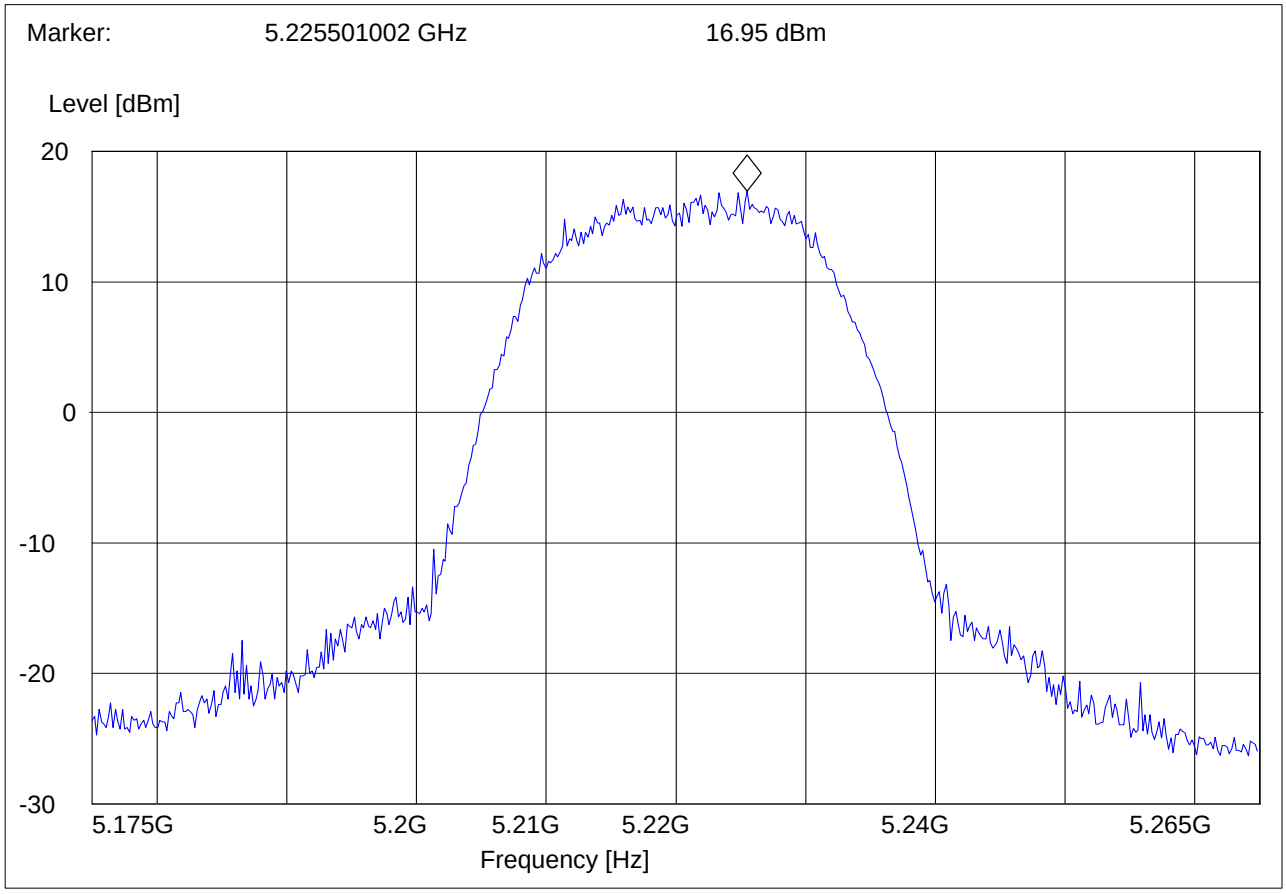
EIRP 5220 MHz

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5220MHz;
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: TT@189°

SWEEP TABLE: "EIRP 802.11a 44"

Short Description: EIRP channel-5180 MHz

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.3 GHz	MaxPeak MaxPeak	Coupled	10 MHz	DUMMY-DBM

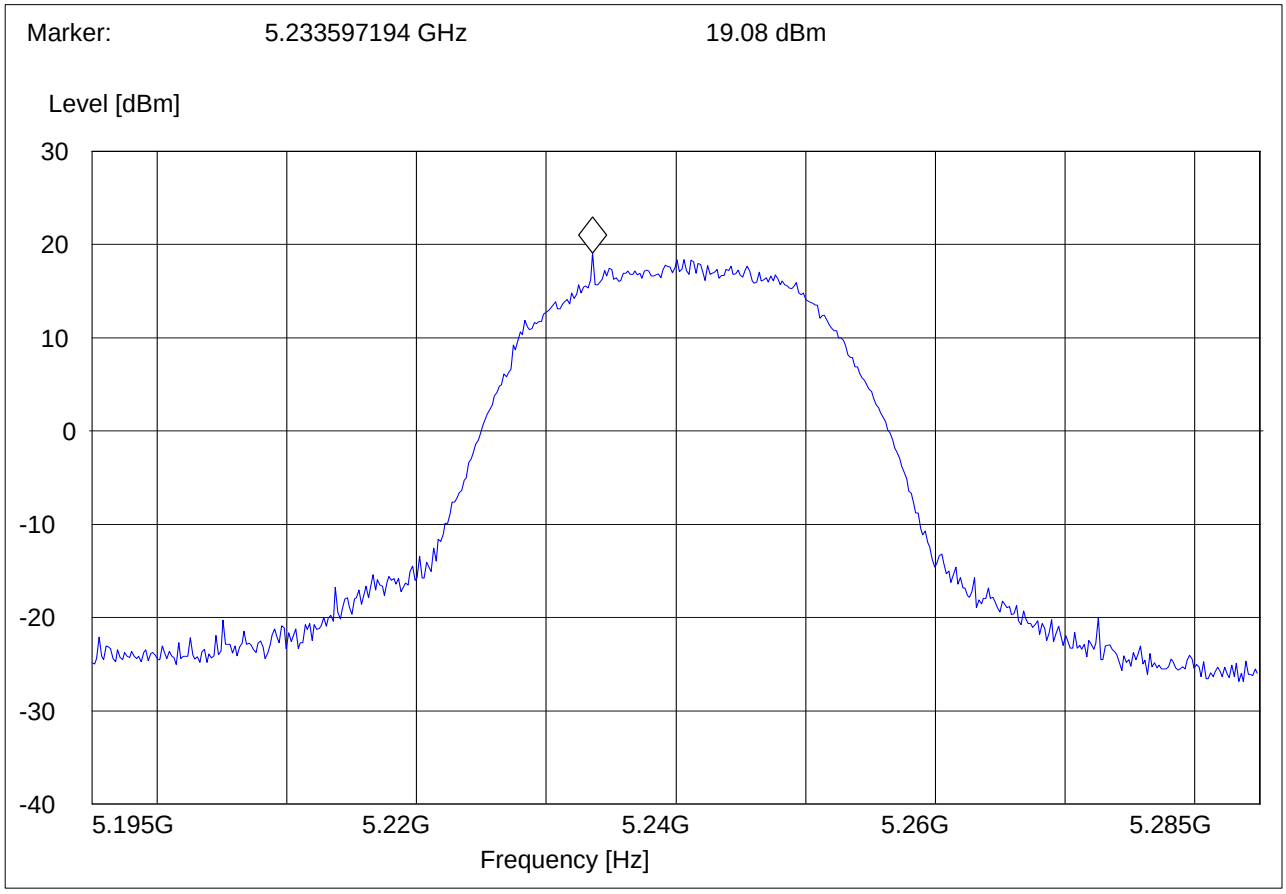


EIRP 5240 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5240MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 48"

```
  Short Description:              EIRP channel-5180 MHz
  Start       Stop        Detector  Meas.      IF         Transducer
  Frequency   Frequency             Time       Bandw.
  5.2 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
                          MaxPeak
```

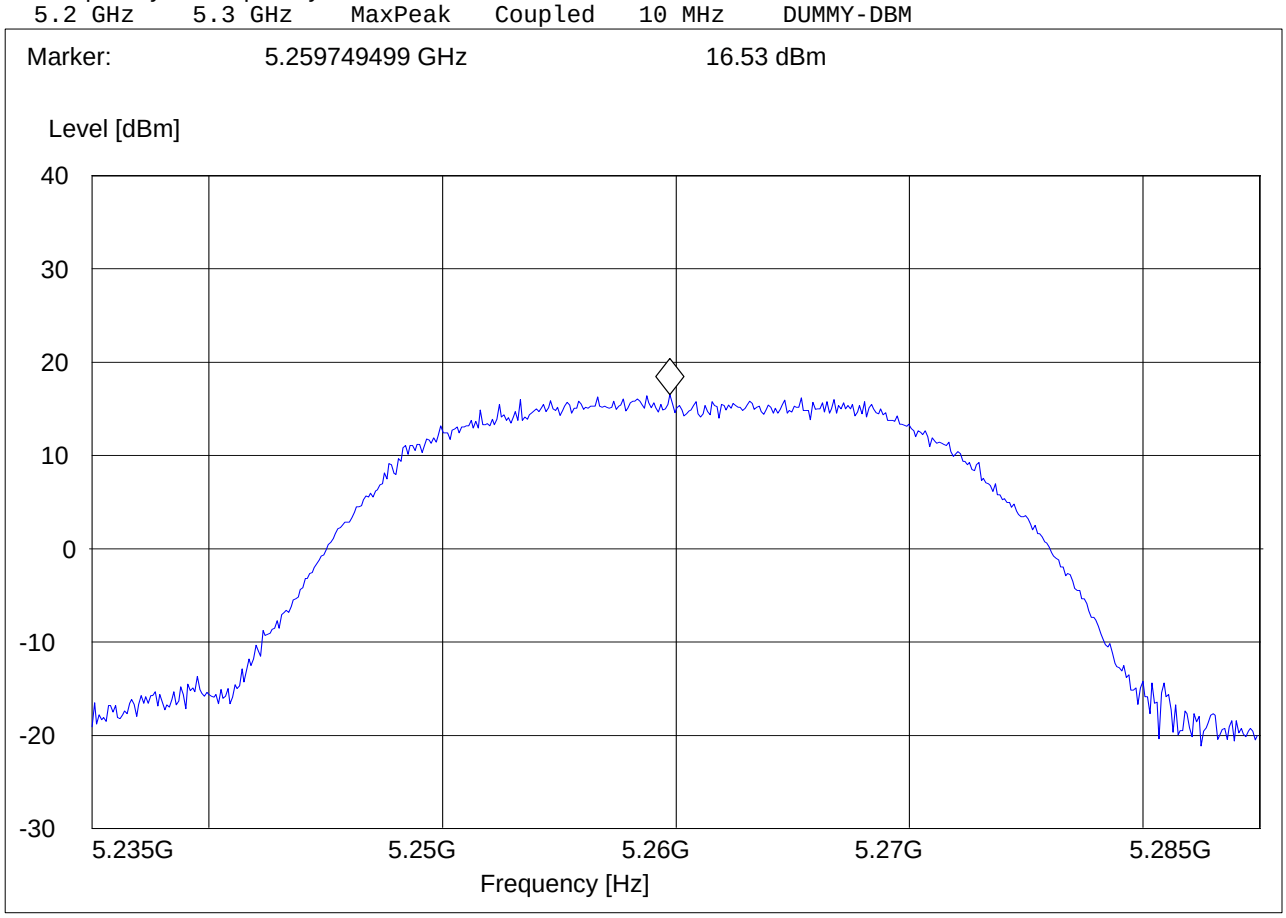


EIRP 5260 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5260MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 52"

```
Short Description:              EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.2 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

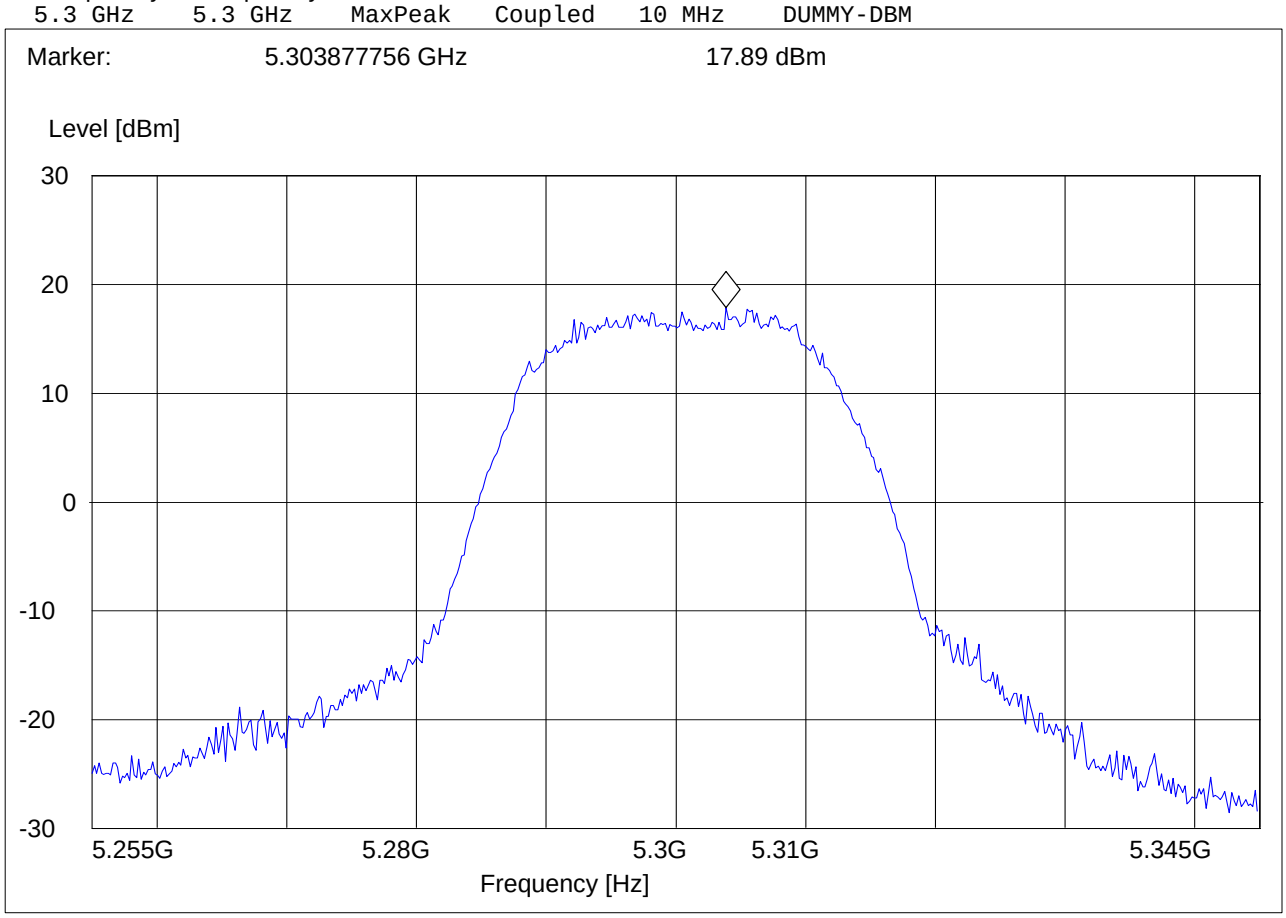


EIRP 5300 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5300MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 60"

```
Short Description:                EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.3 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

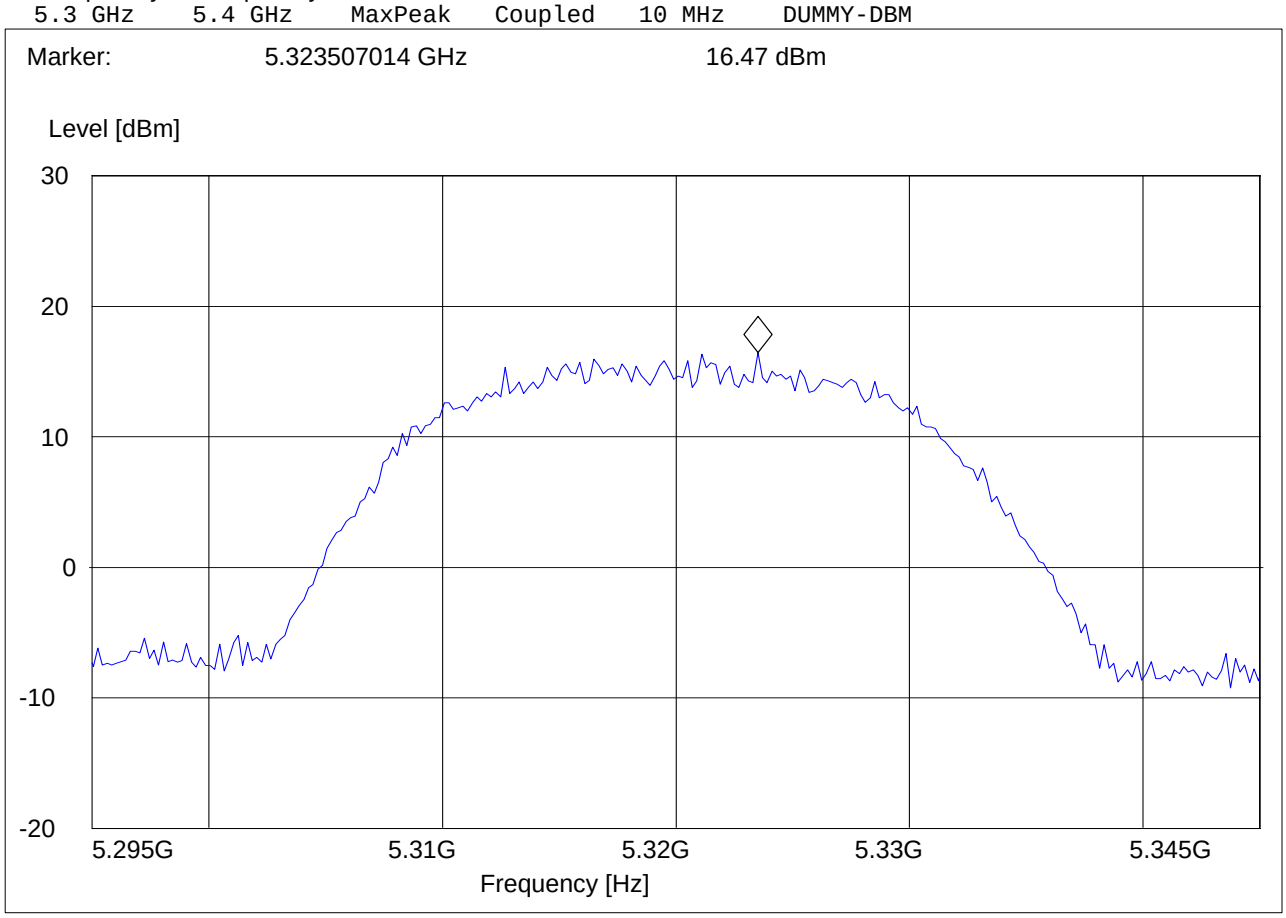


EIRP 5320 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5320MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a 64"

```
Short Description:              EIRP  channel-5320 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.3 GHz     5.4 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

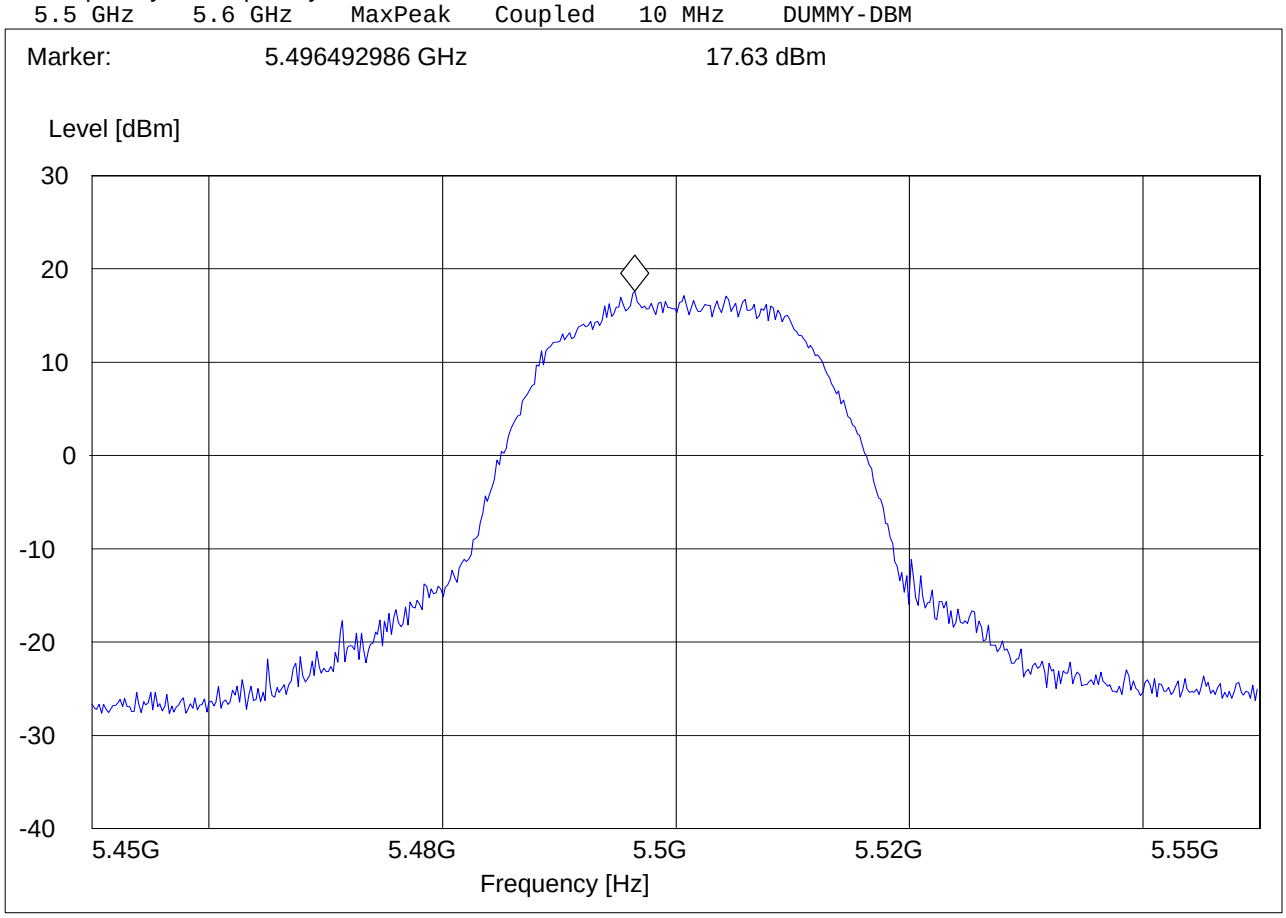


EIRP 5500 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5500MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a_100"

```
Short Description:                EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.5 GHz     5.6 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

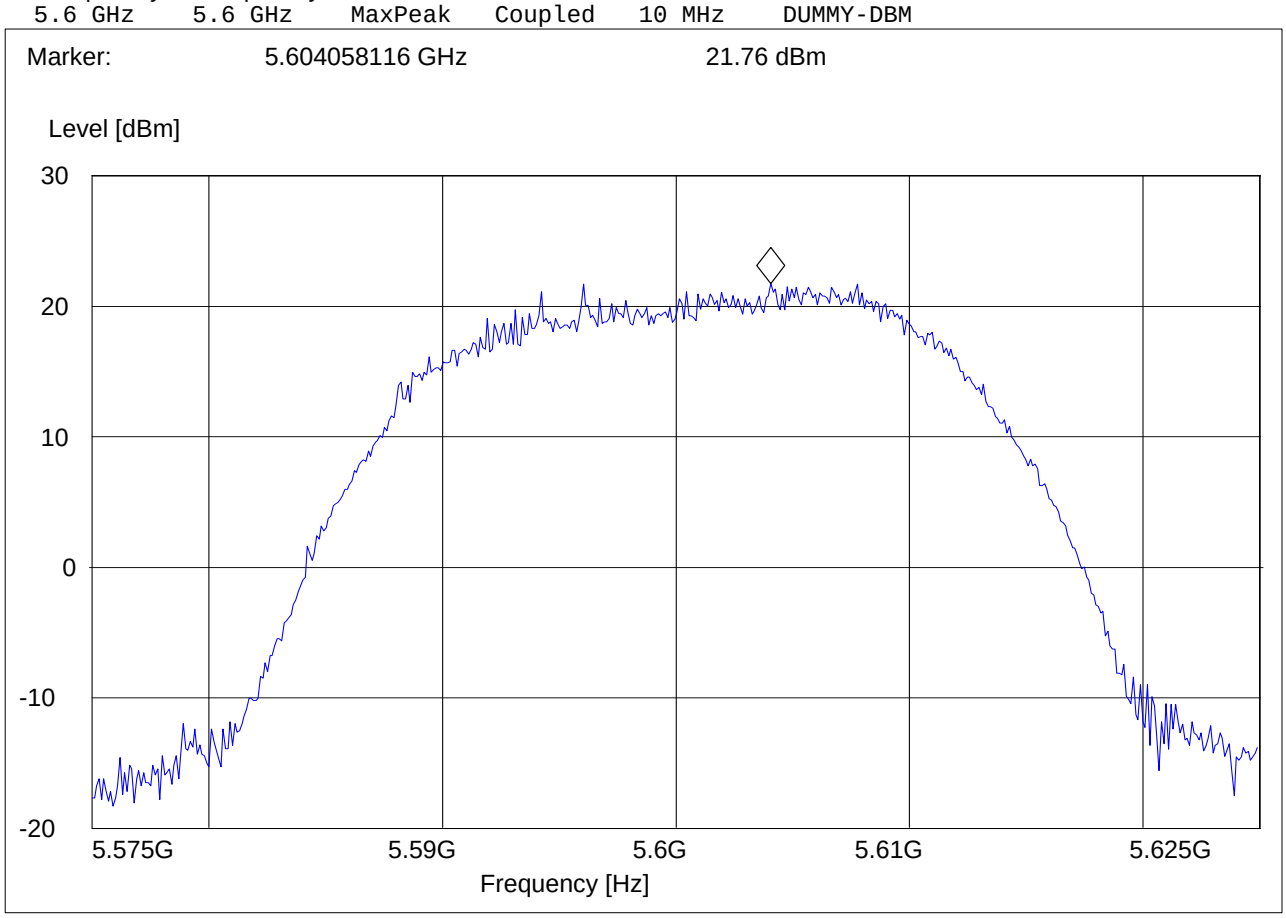


EIRP 5600 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5600MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a_120"

```
Short Description:              EIRP  channel-5260 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.6 GHz     5.6 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```

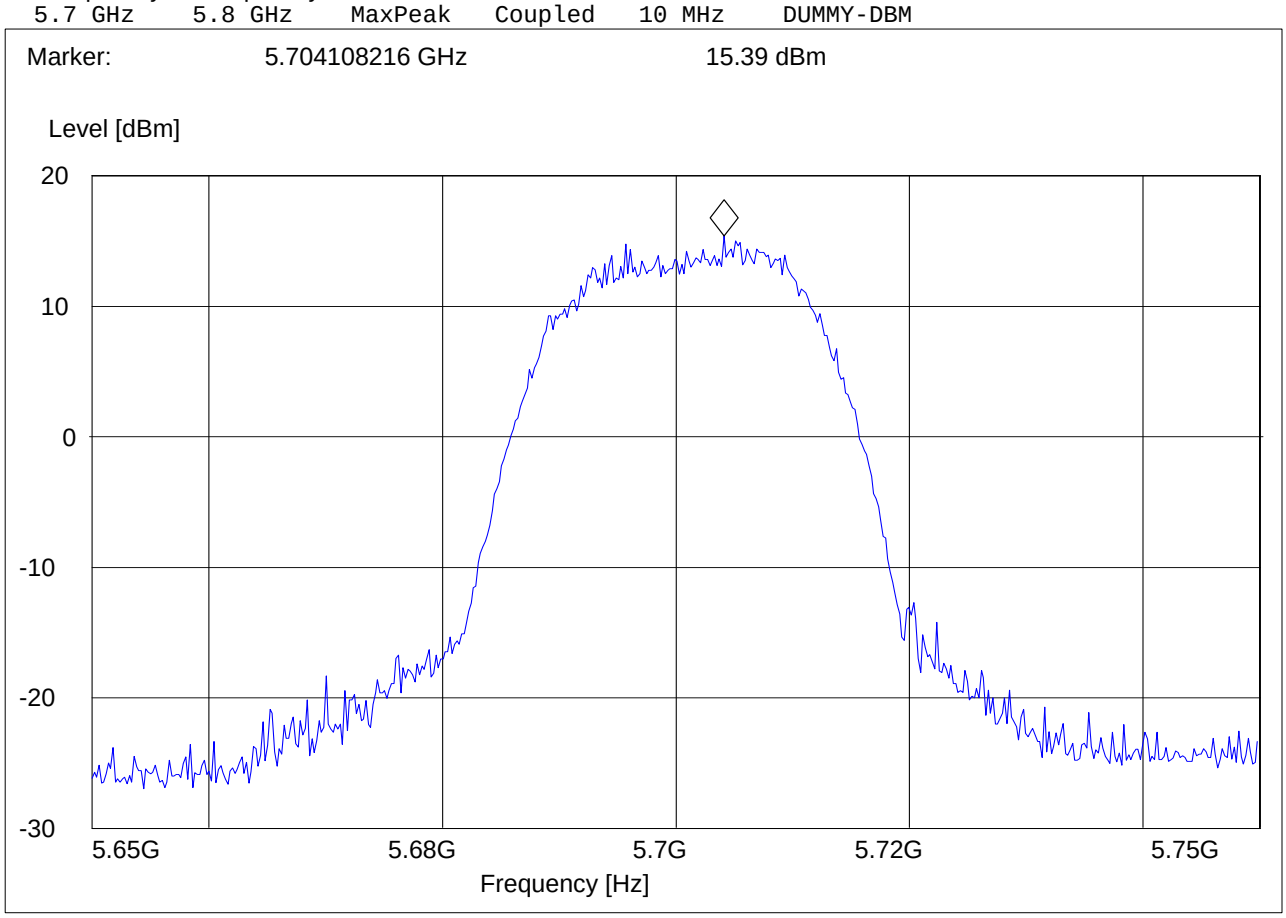


EIRP 5700 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5700MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11a_140"

```
  Short Description:              EIRP  channel-5260 MHz
  Start       Stop        Detector  Meas.      IF         Transducer
  Frequency   Frequency             Time       Bandw.
  5.7 GHz     5.8 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
```



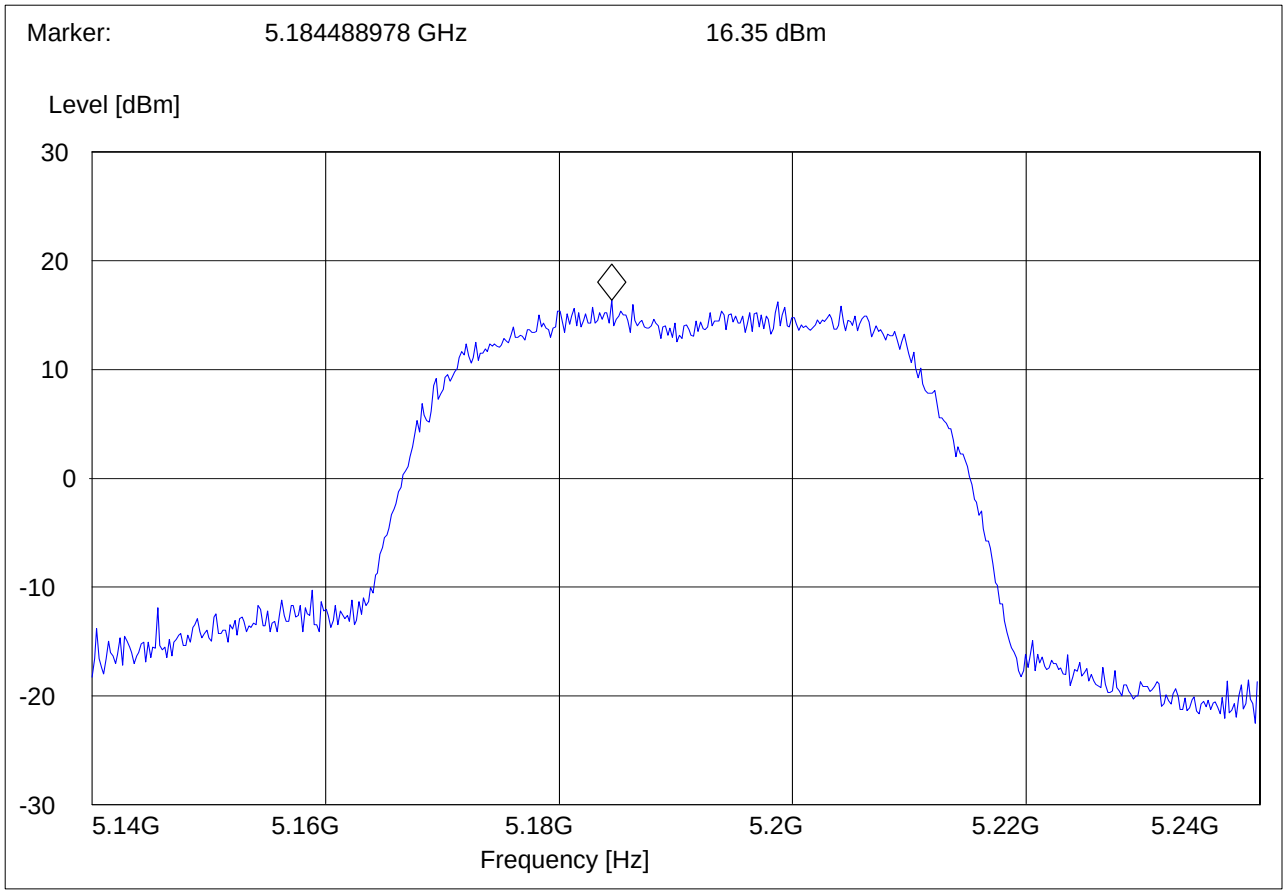
5.2.3 **802.11n HT40 mode**

EIRP 5190 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5190MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11n 38"

```
Short Description:              EIRP channel-5180 MHz
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency             Time       Bandw.
5.1 GHz     5.2 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
                        MaxPeak
```

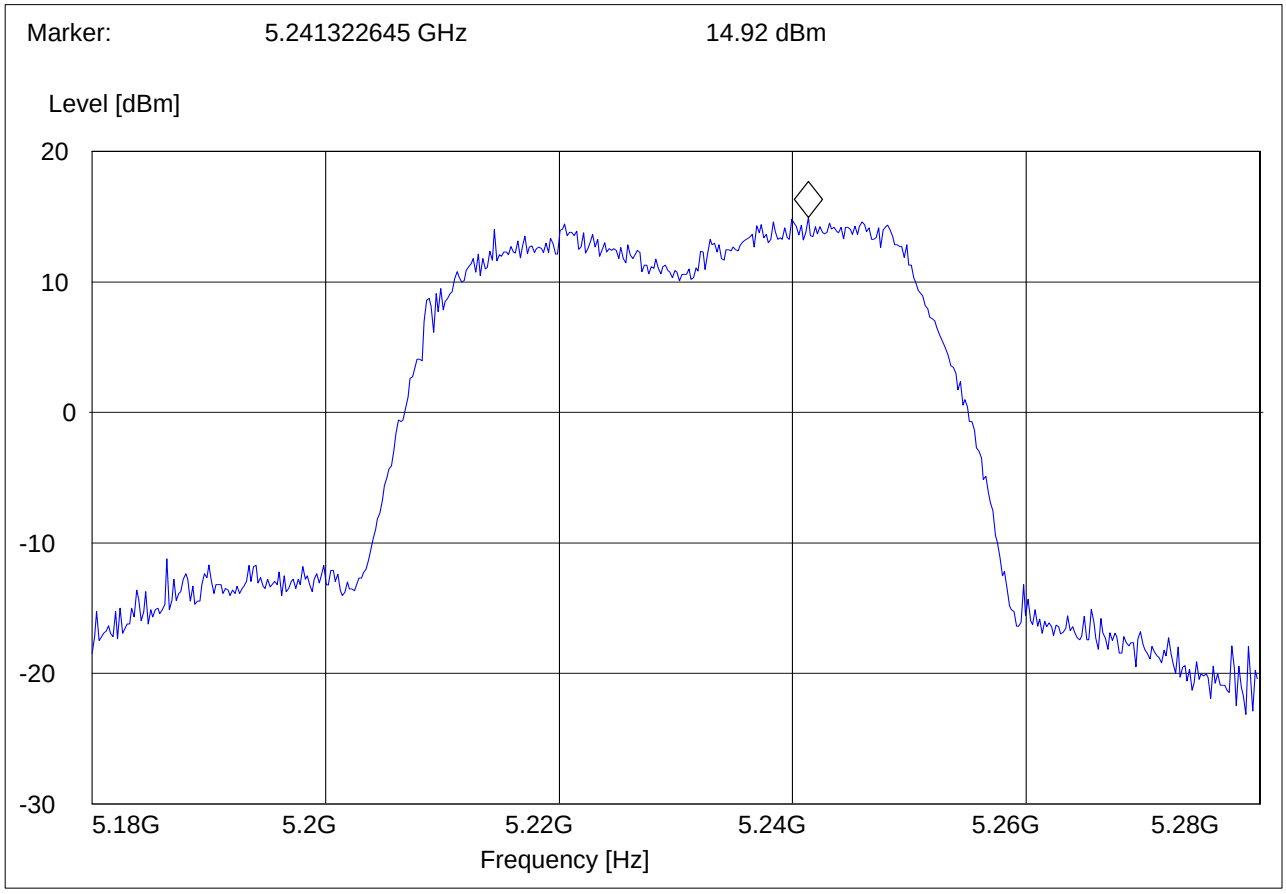


EIRP 5230 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5230MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11n 46"

```
  Short Description:              EIRP channel-5180 MHz
  Start       Stop        Detector  Meas.      IF         Transducer
  Frequency   Frequency             Time       Bandw.
  5.2 GHz     5.3 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
                          MaxPeak
```



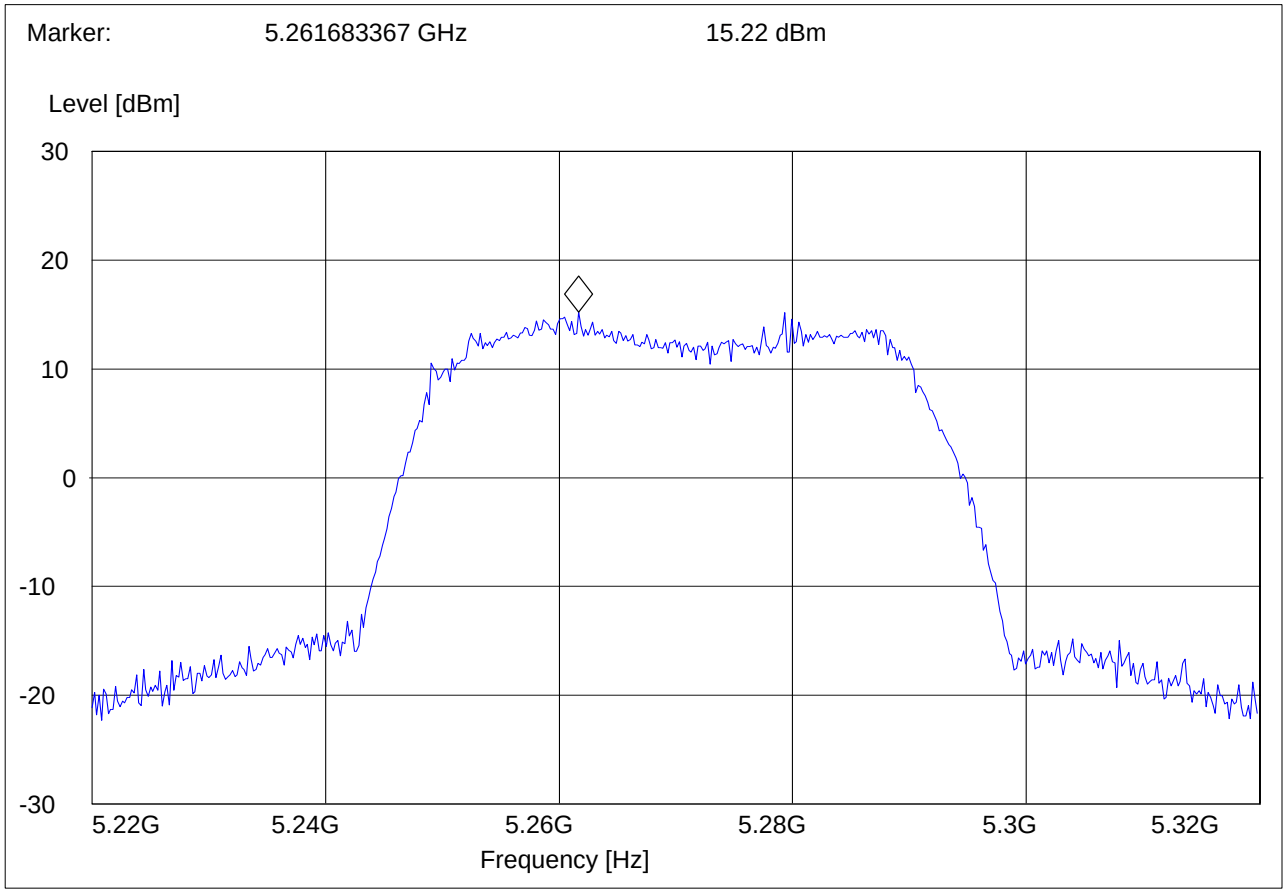
EIRP 5270 MHz

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5270MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: TT@189°

SWEEP TABLE: "EIRP 802.11n 54"

Short Description: EIRP channel-5180 MHz

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.3 GHz	MaxPeak MaxPeak	Coupled	10 MHz	DUMMY-DBM



EIRP 5310 MHz

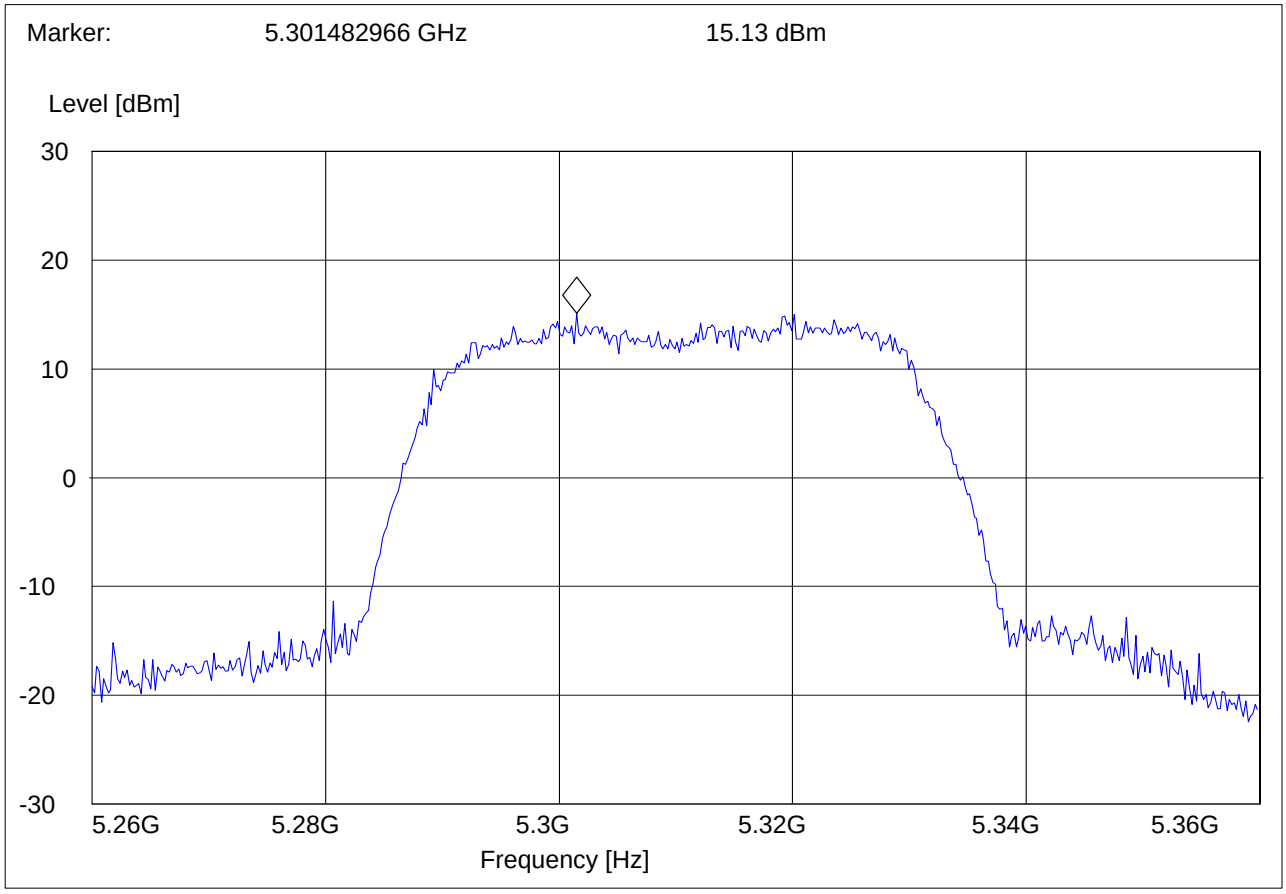
CETECOM Inc.

411 Dixon Landing Road; Milpitas, CA 95035

```
EUT / Description: Laptop
Manufacturer:      Sony
Operation Mode:    802.11n40  5310MHz
ANT Orientation: : H
EUT Orientation::  H
Test Engineer:     SAM
Voltage:           AC
Comments::
```

SWEEP TABLE: "EIRP 802.11n 62"

```
  Short Description:            EIRP channel-5180 MHz
  Start      Stop       Detector  Meas.     IF        Transducer
  Frequency  Frequency            Time      Bandw.
  5.3 GHz    5.4 GHz    MaxPeak   Coupled   10 MHz    DUMMY-DBM
                        MaxPeak
```

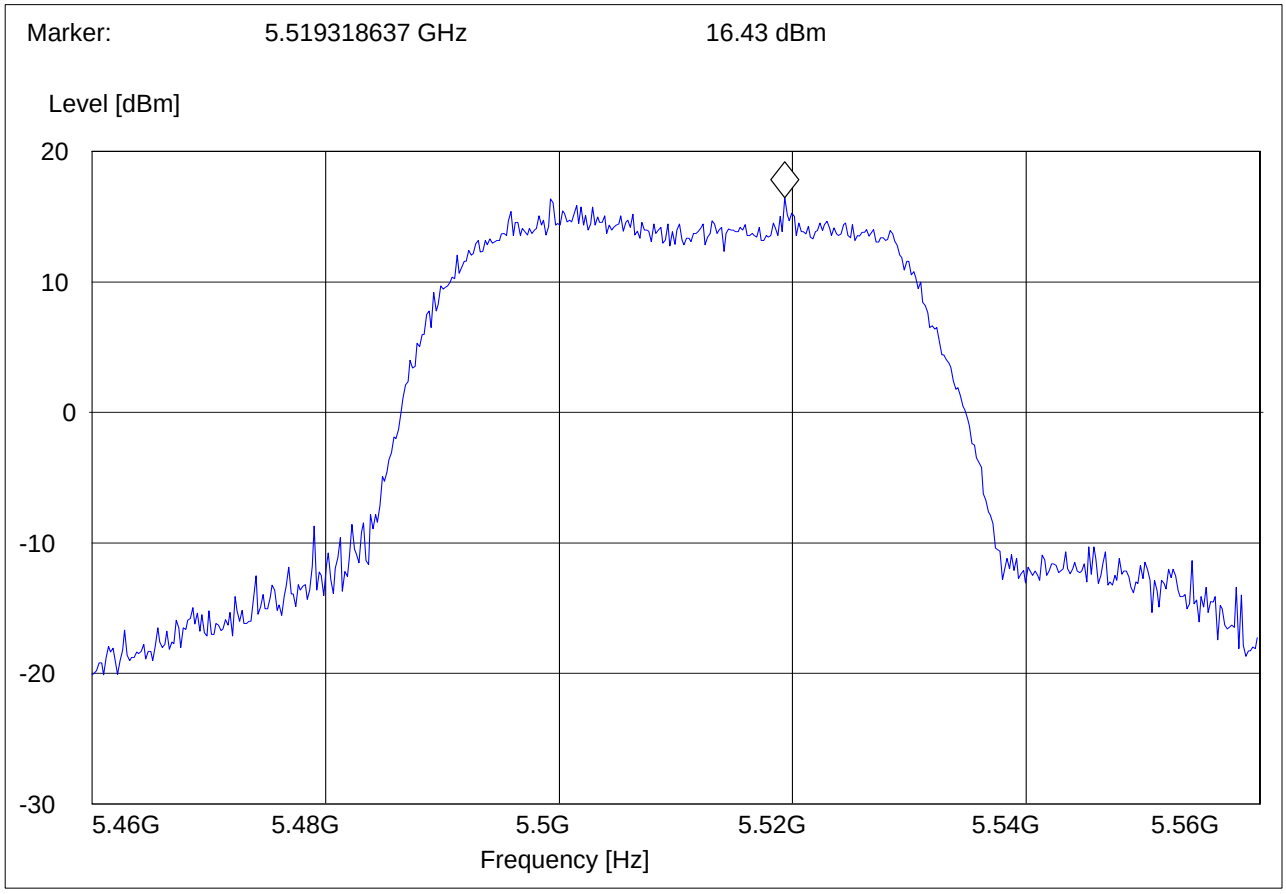


EIRP 5510 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5510MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11n 102"

```
  Short Description:              EIRP channel-5180 MHz
  Start       Stop        Detector  Meas.      IF         Transducer
  Frequency   Frequency             Time       Bandw.
  5.5 GHz     5.6 GHz     MaxPeak   Coupled    10 MHz     DUMMY-DBM
                          MaxPeak
```

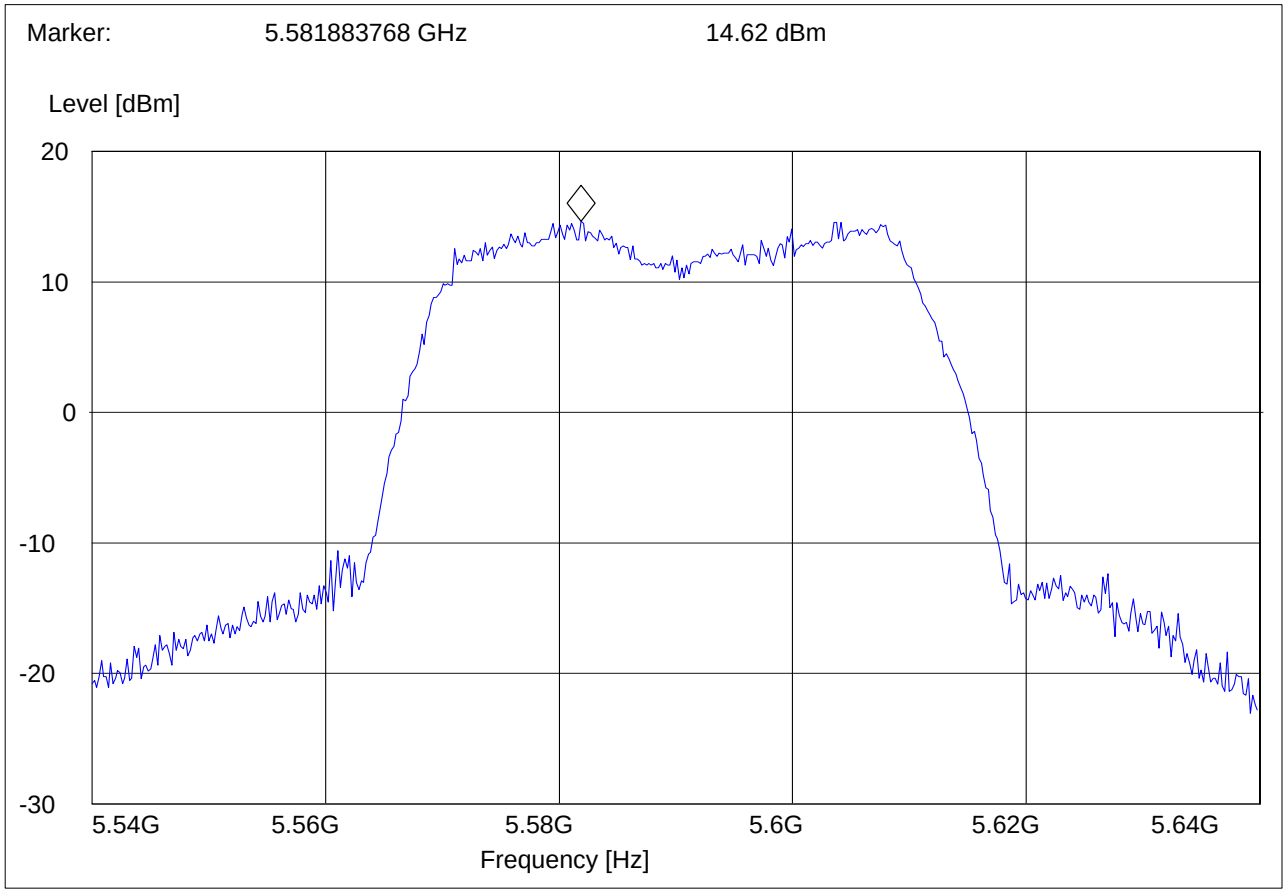


EIRP 5590 MHz

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5590MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "EIRP 802.11n 118"

```
  Short Description:              EIRP channel-5180 MHz
  Start      Stop       Detector  Meas.     IF         Transducer
  Frequency  Frequency             Time      Bandw.
  5.5 GHz    5.6 GHz    MaxPeak   Coupled   10 MHz     DUMMY-DBM
                        MaxPeak
```



5.3 Restricted Band Edge Compliance §15.407(b)/15.205

5.3.1 Limits

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

***PEAK LIMIT= 74dBuV/m**
***AVG. LIMIT= 54dBuV/m**

Test conducted in radiated mode with all three antenna ports transmitting.

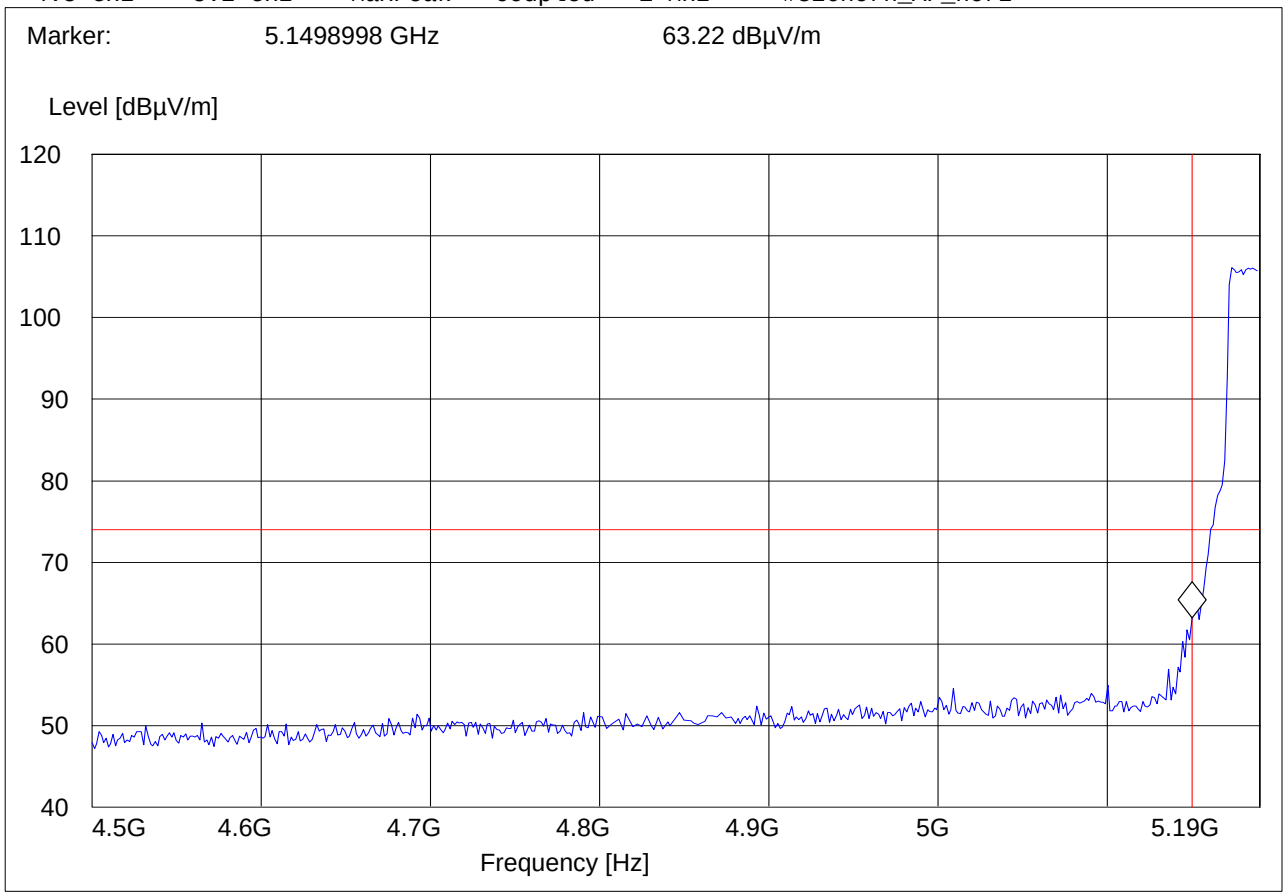
5.3.2 **Sub-band 1, 802.11a MODE**

Lower band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5180MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
4.5 GHz	5.2 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

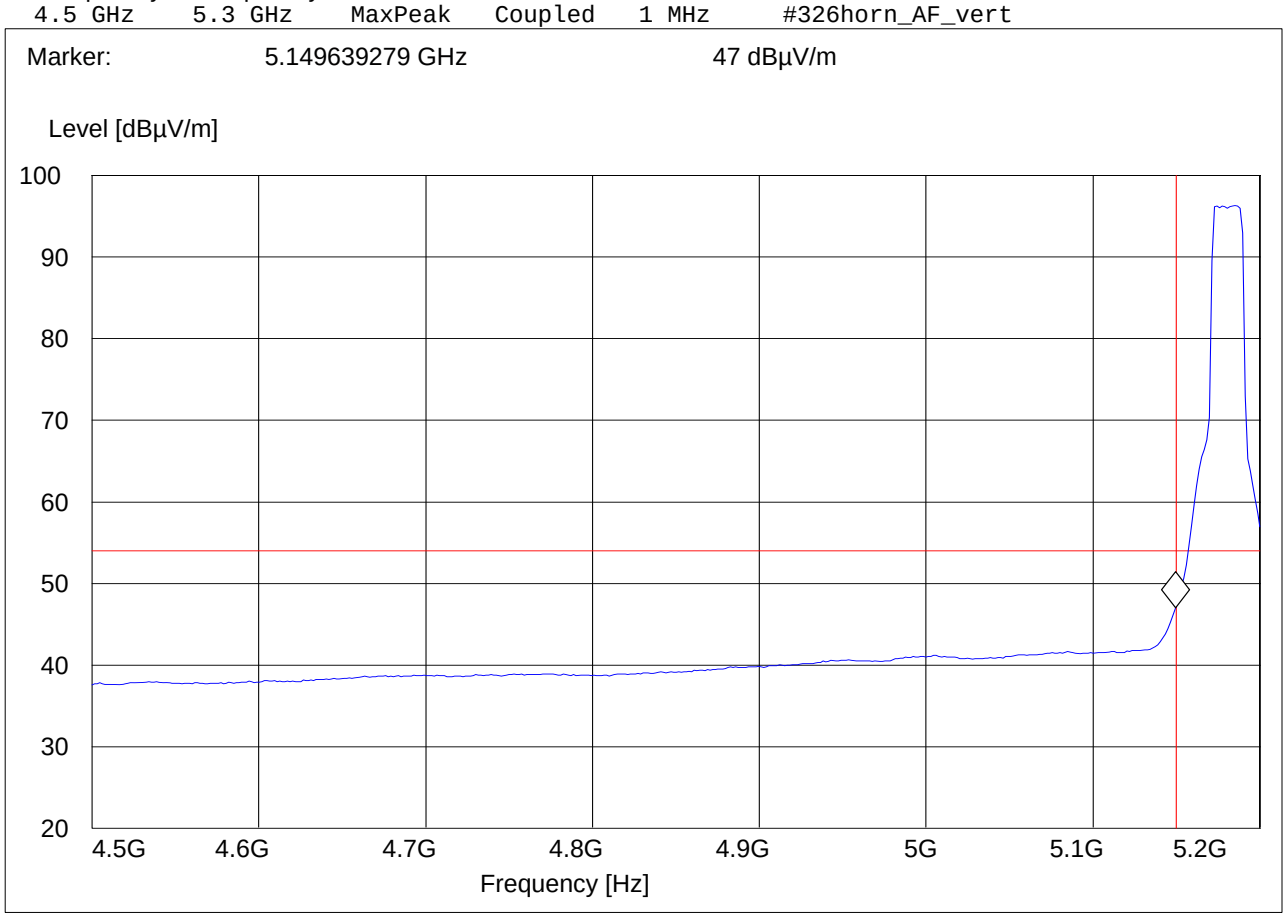


Lower band edge AVERAGE

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5180MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
4.5 GHz	5.3 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert



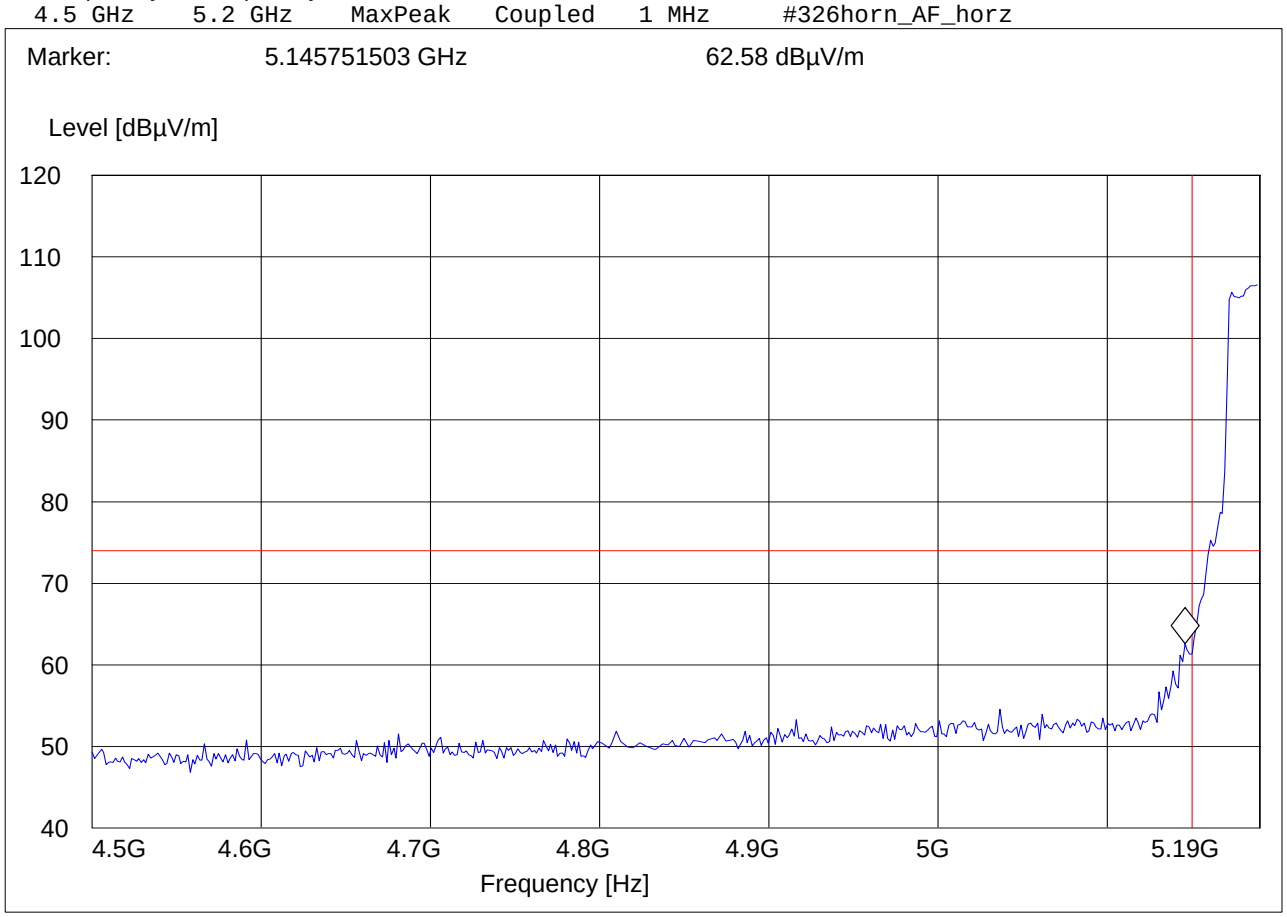
5.3.3 **Sub-band 1, 802.11n HT20 MODE**

Lower band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5180MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
4.5 GHz	5.2 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

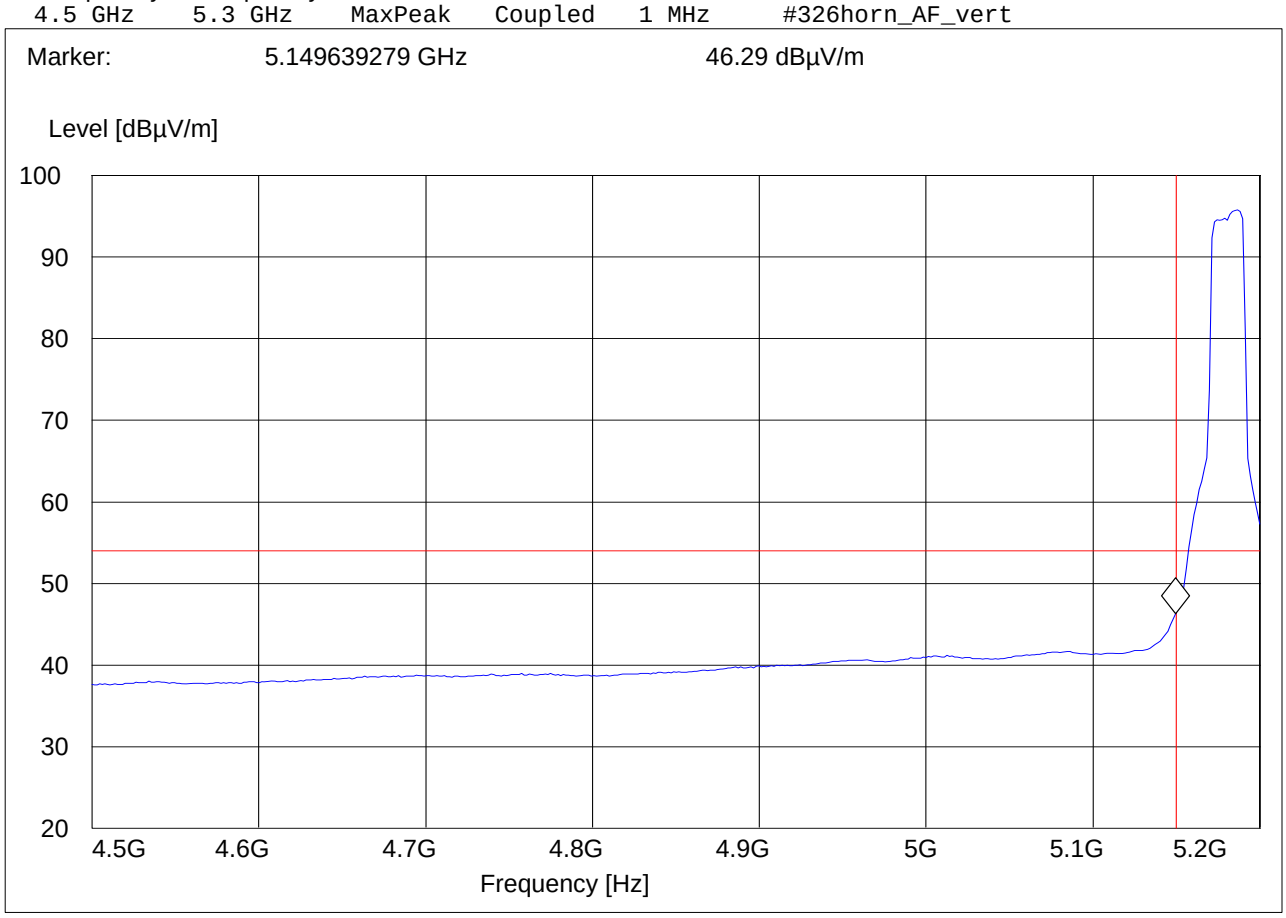


Lower band edge AVG

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5180MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
4.5 GHz	5.3 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert



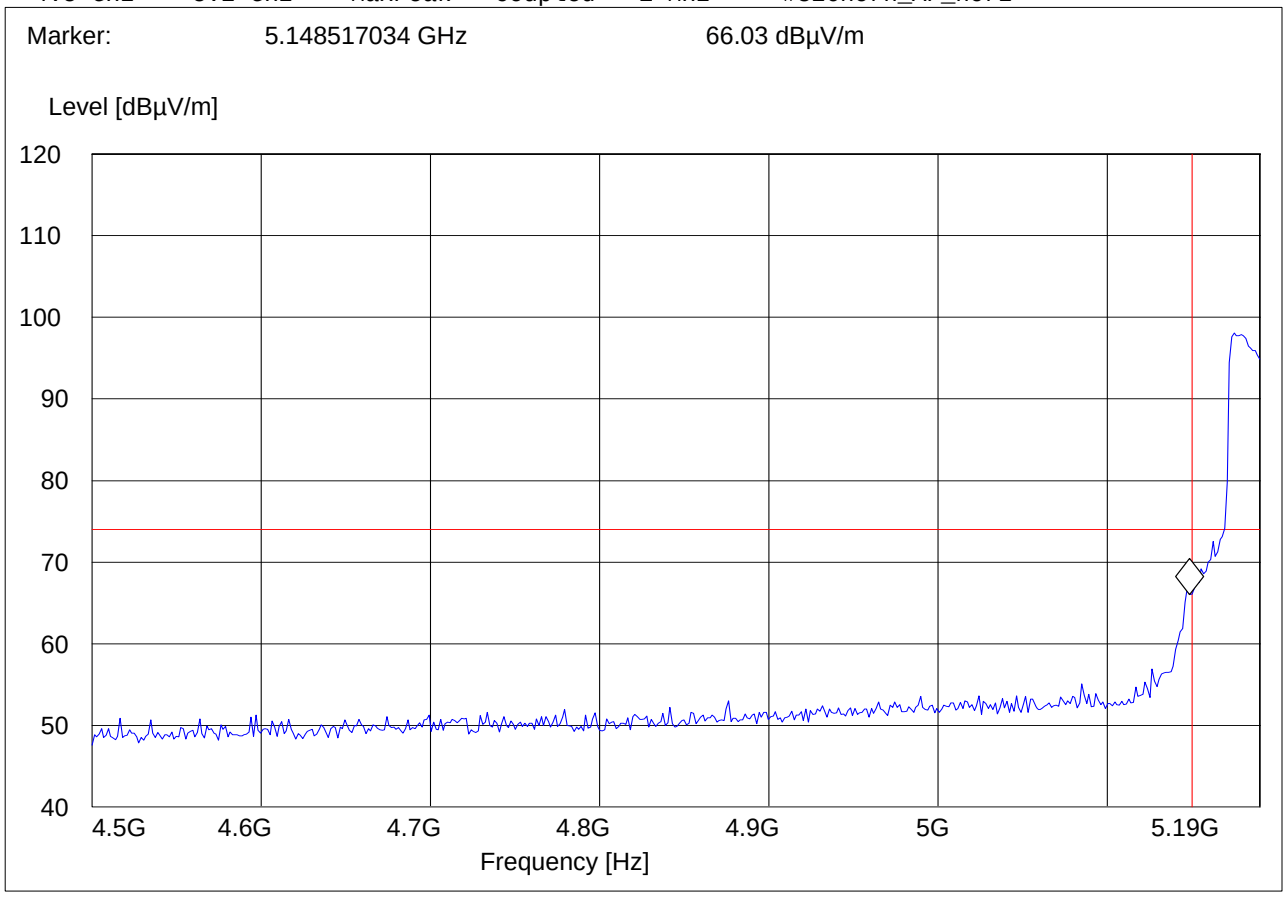
5.3.4 **Sub-band 1. 802.11n HT40 MODE**

5190MHz, Lower band edge PEAK

```
EUT:              LAPTOP
Customer::        SONY
Test Mode:        802.11N40; 5190MHZ
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    PETER
Voltage:          AC
Comments:         10dBm
```

SWEEP TABLE: "FCC15.407 A_LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
4.5 GHz	5.2 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

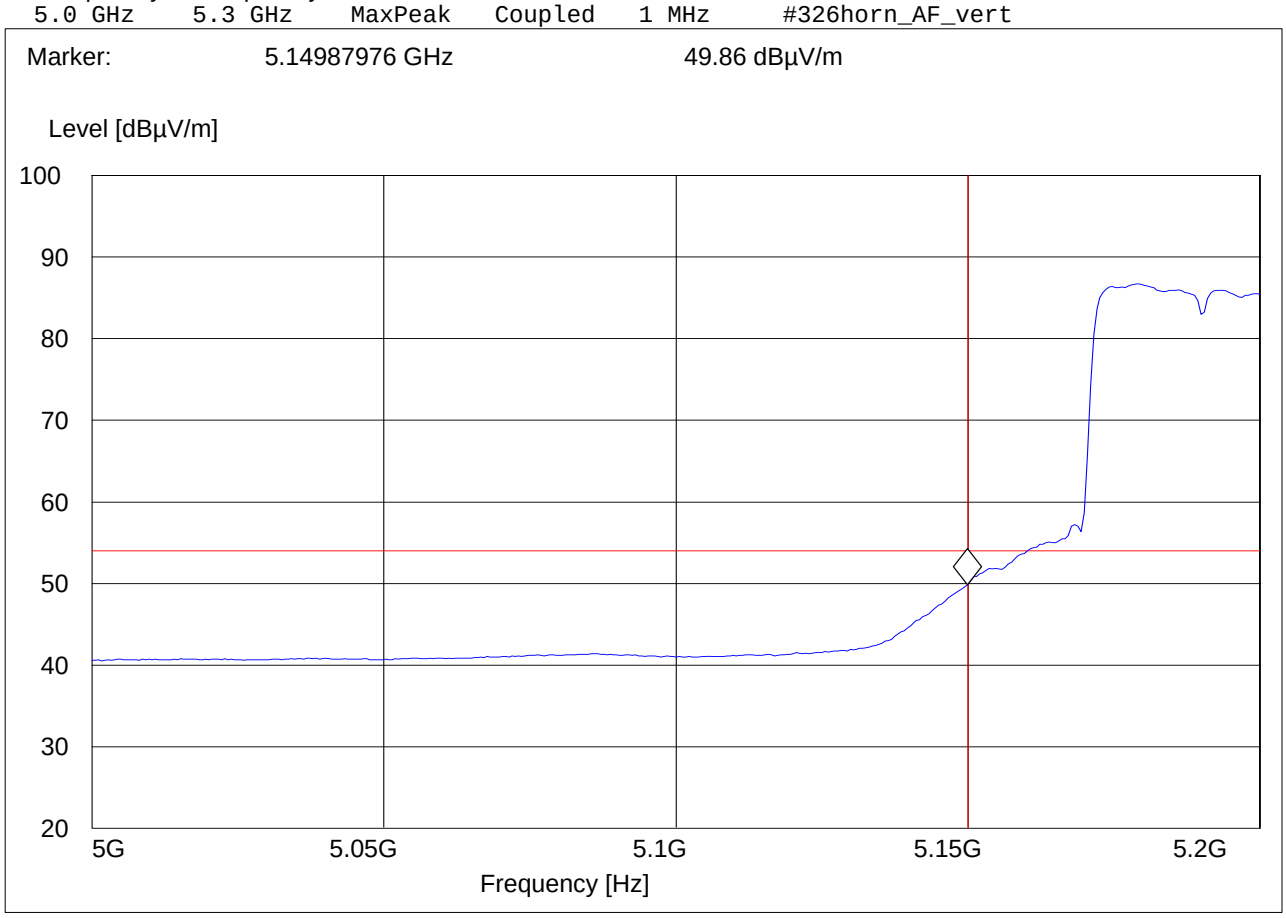


5190MHz, Lower band edge AVG

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5190MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    MARC
Voltage:          AC ADAPTER
Comments:         10dbm
```

SWEEP TABLE: "FCC15.407 A_LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.0 GHz	5.3 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_vert



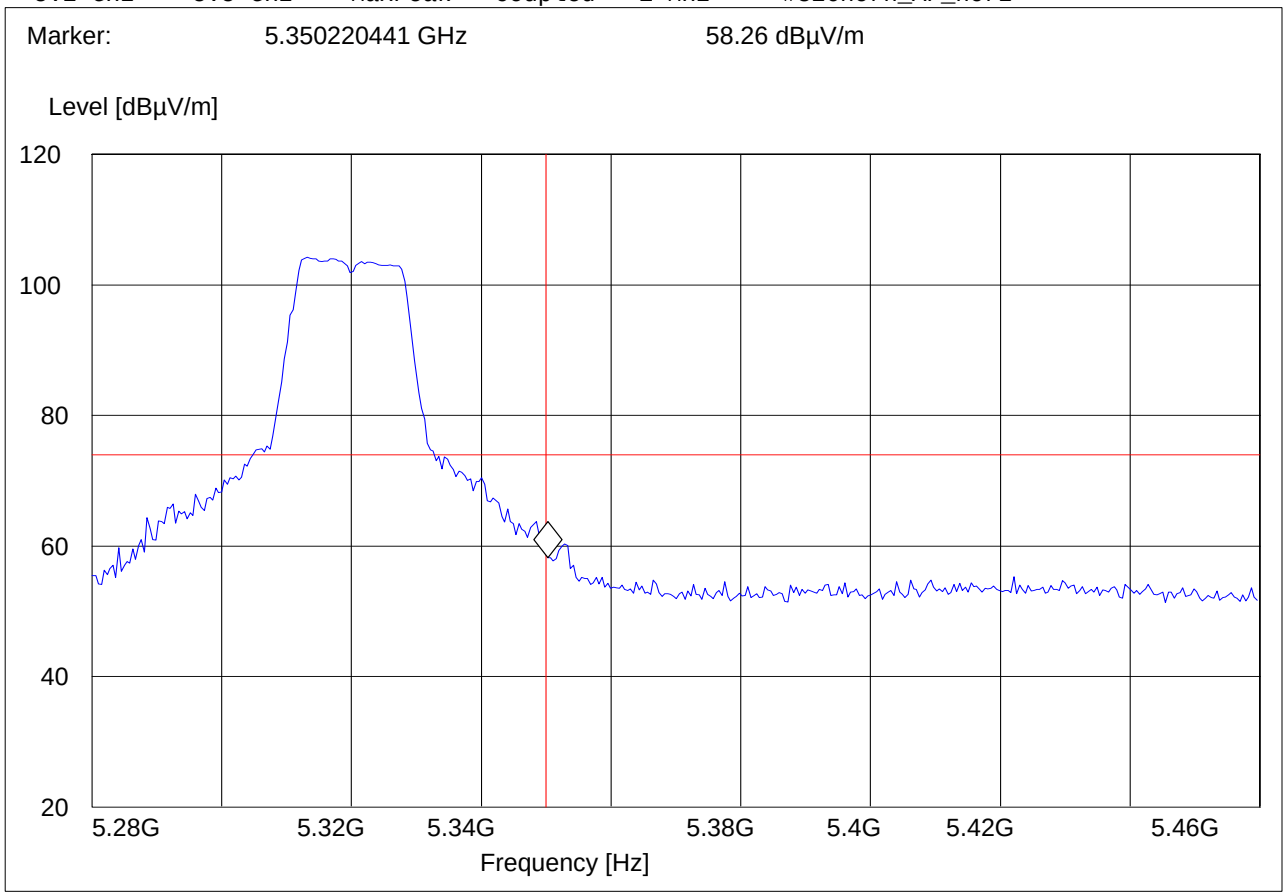
5.3.5 **Sub-band 2. 802.11a MODE**

Higher band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_HBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

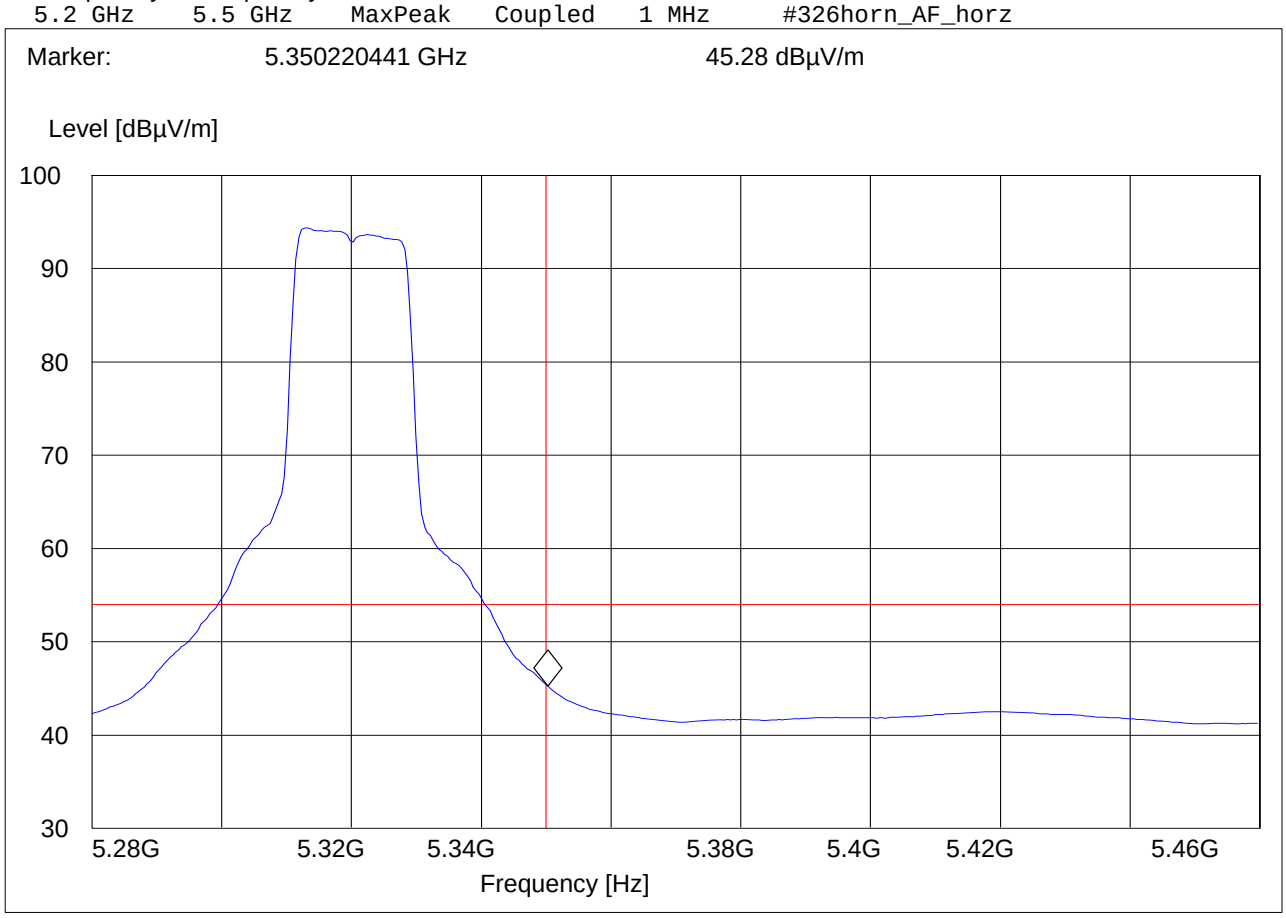


Higher band edge Average

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_HBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz



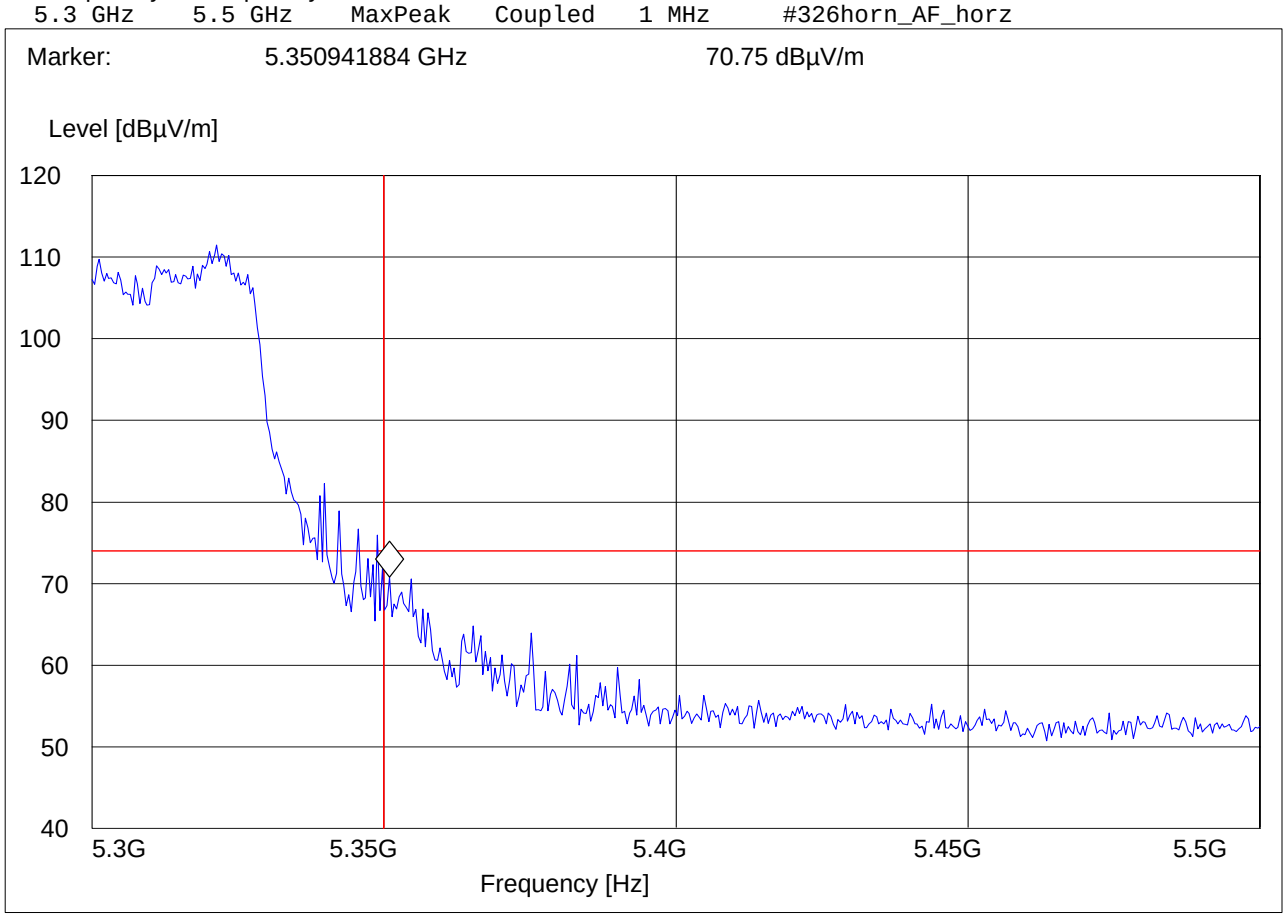
5.3.6 **Sub-band 2. 802.11n HT20 MODE**

Higher band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5320MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 B_HBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.3 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

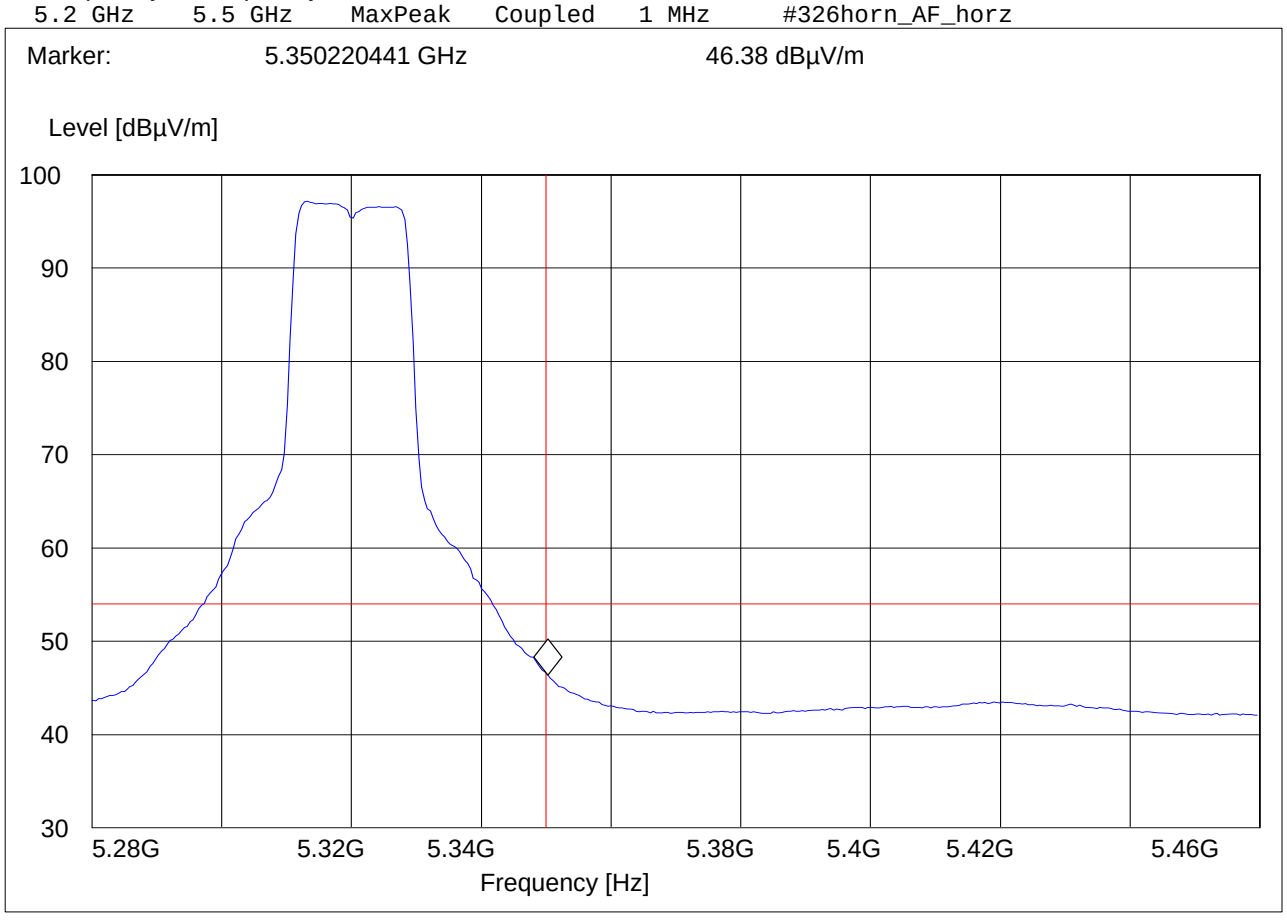


Higher band edge AVERAGE

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5320MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_HBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz



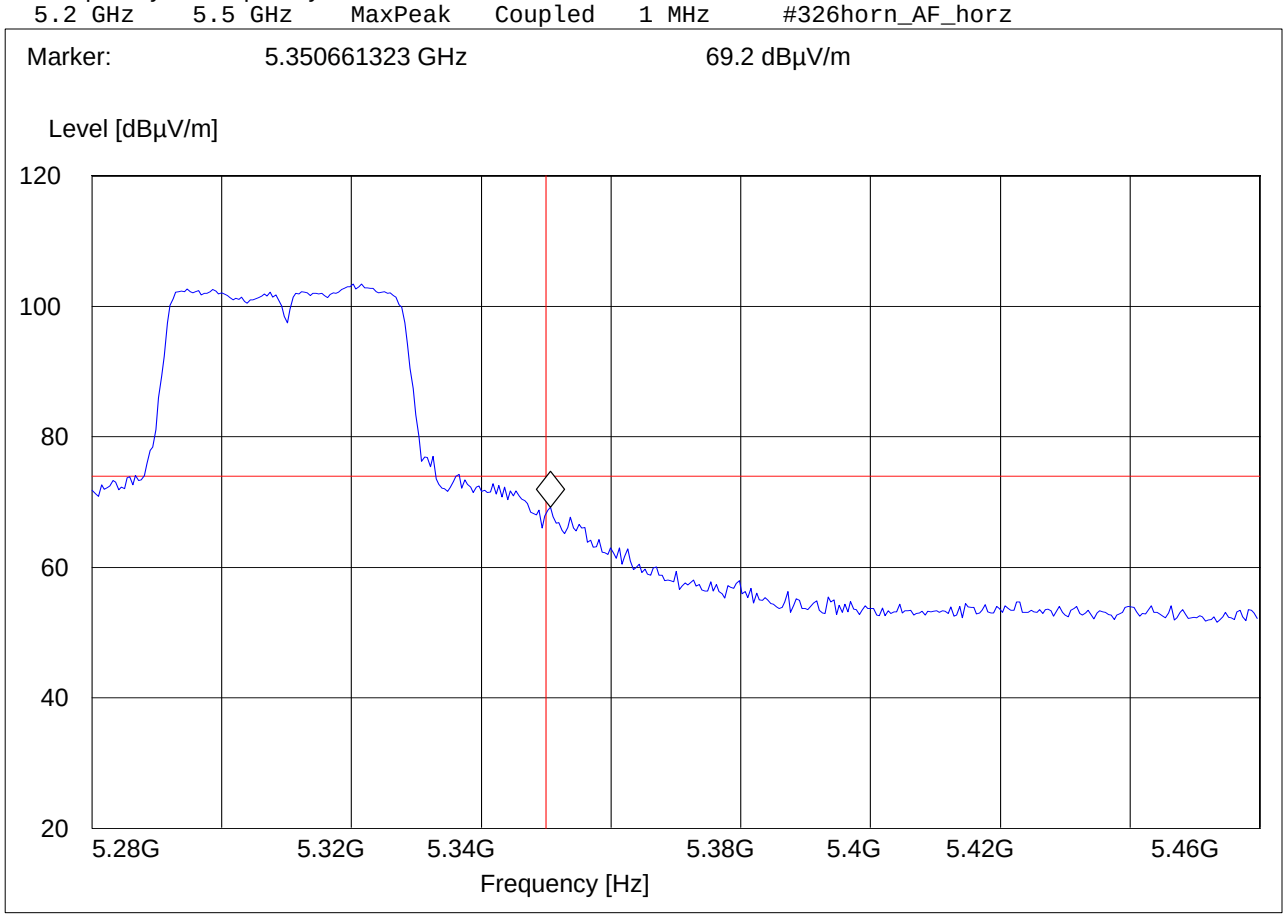
5.3.7 **Sub-band 2. 802.11n HT40 MODE**

Higher band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5310MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_HBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

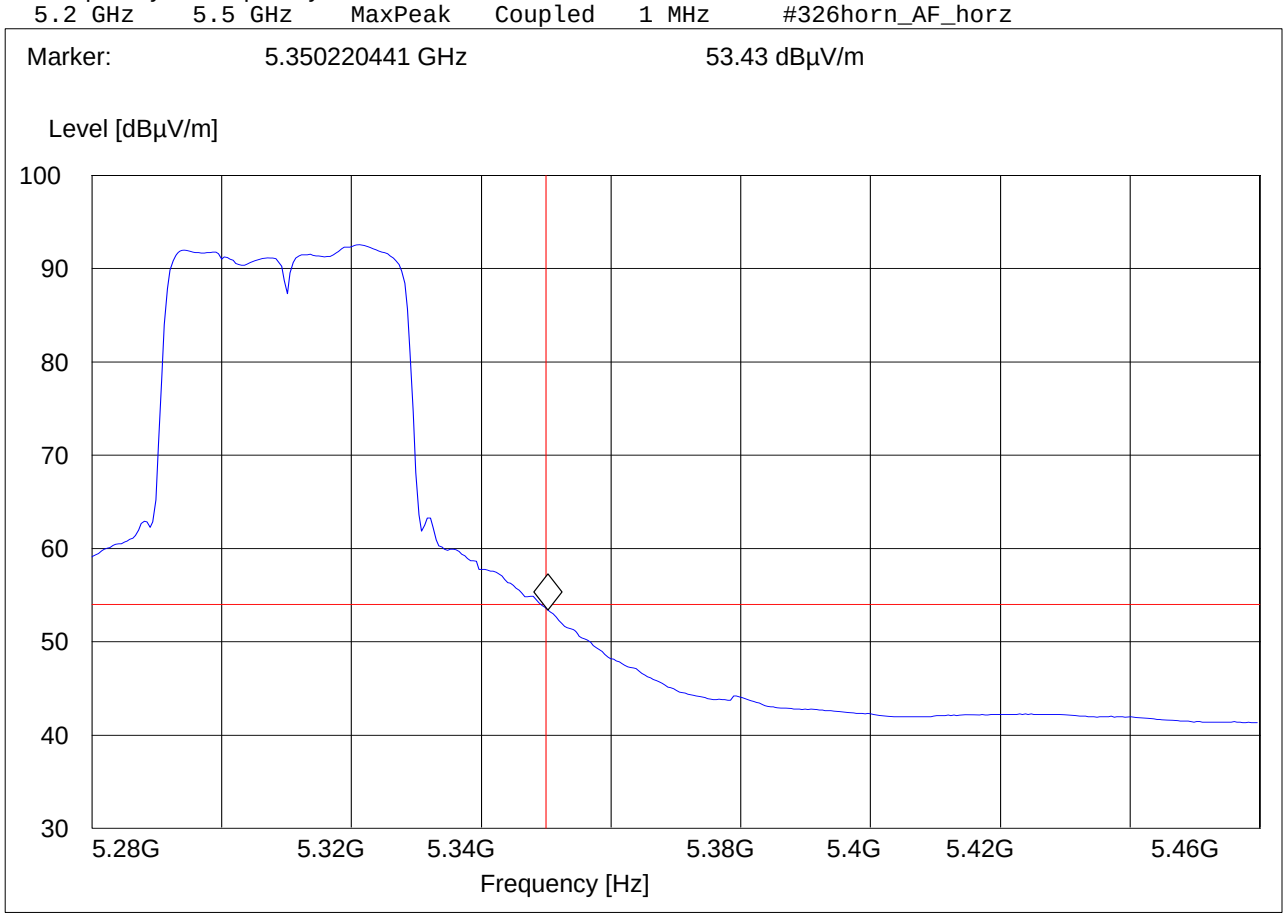


Higher band edge AVERAGE

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5310MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 A_HBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.2 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz



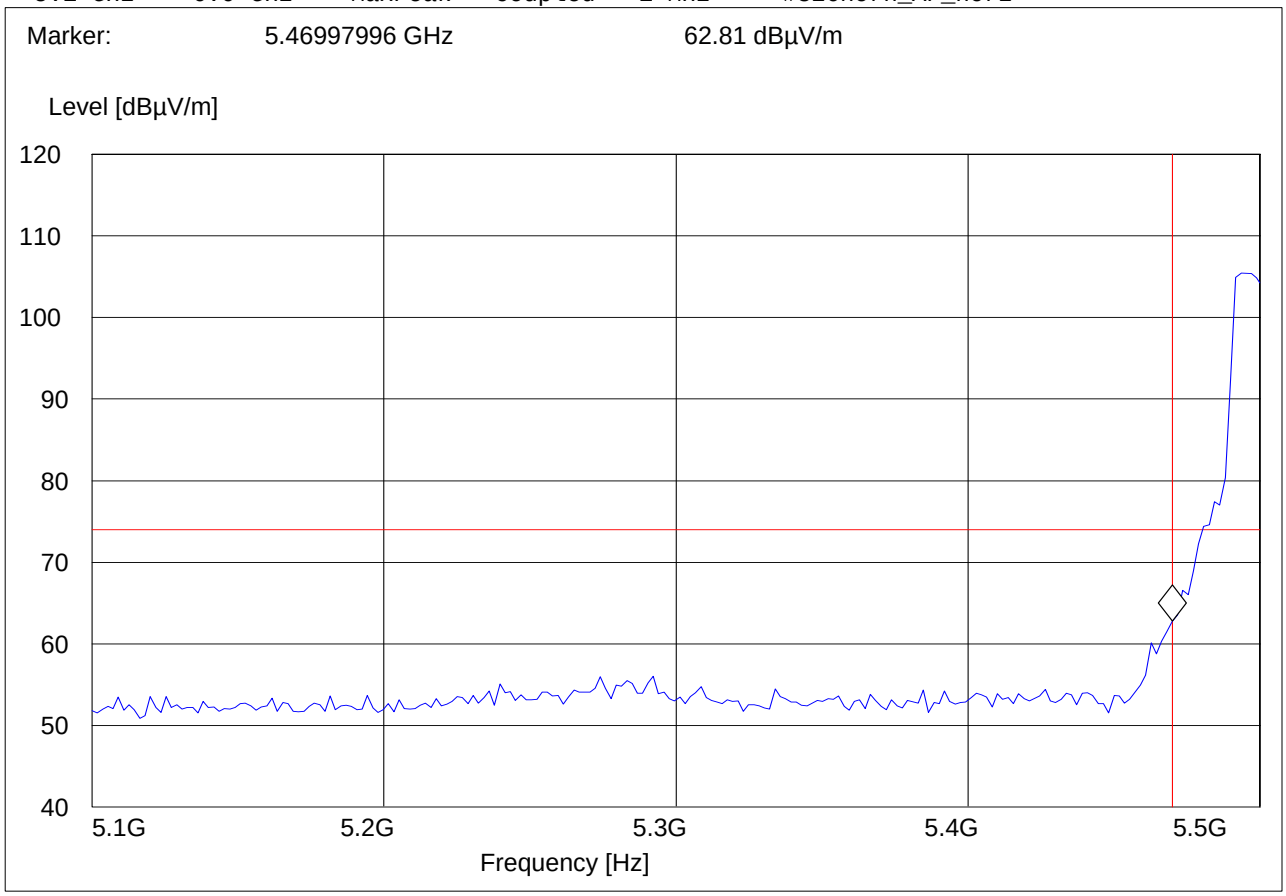
5.3.8 **Sub-band 3. 802.11a MODE**

Lower band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5500MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 C_LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.1 GHz	6.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

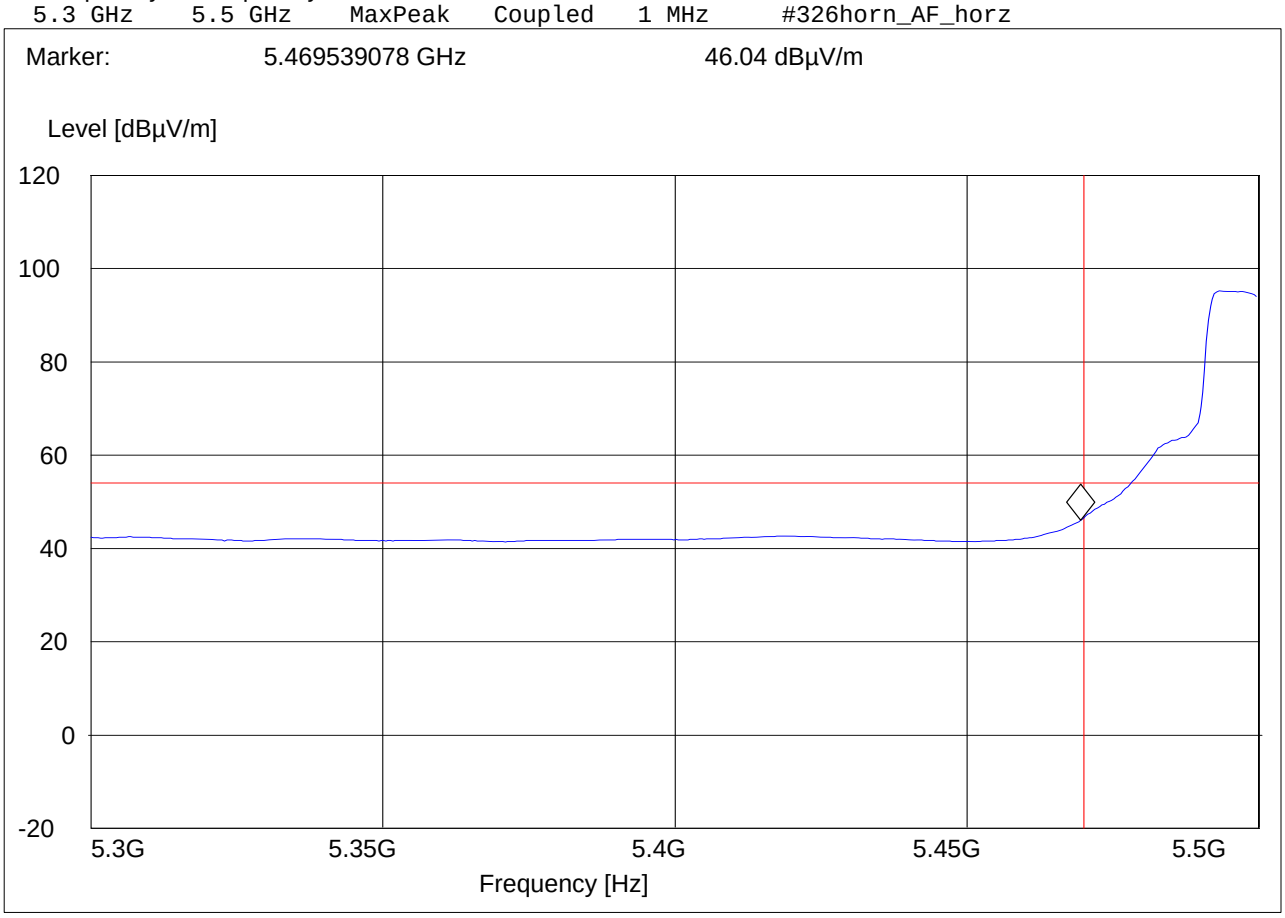


Lower band edge AVERAGE

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; 5500MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 C_LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.3 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz



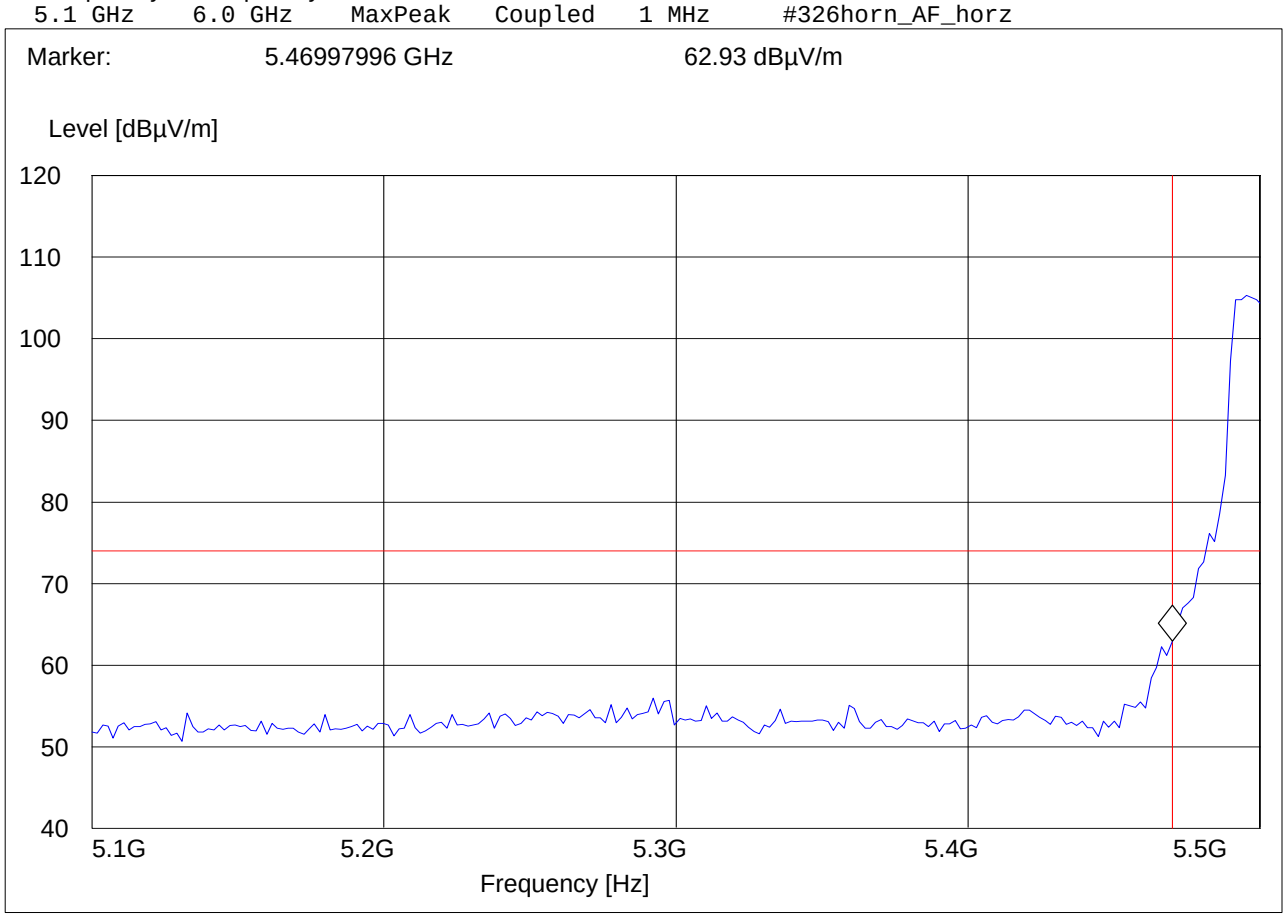
5.3.9 **Sub-band 3. 802.11n HT20 MODE**

Lower band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5500MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 C_LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.1 GHz	6.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

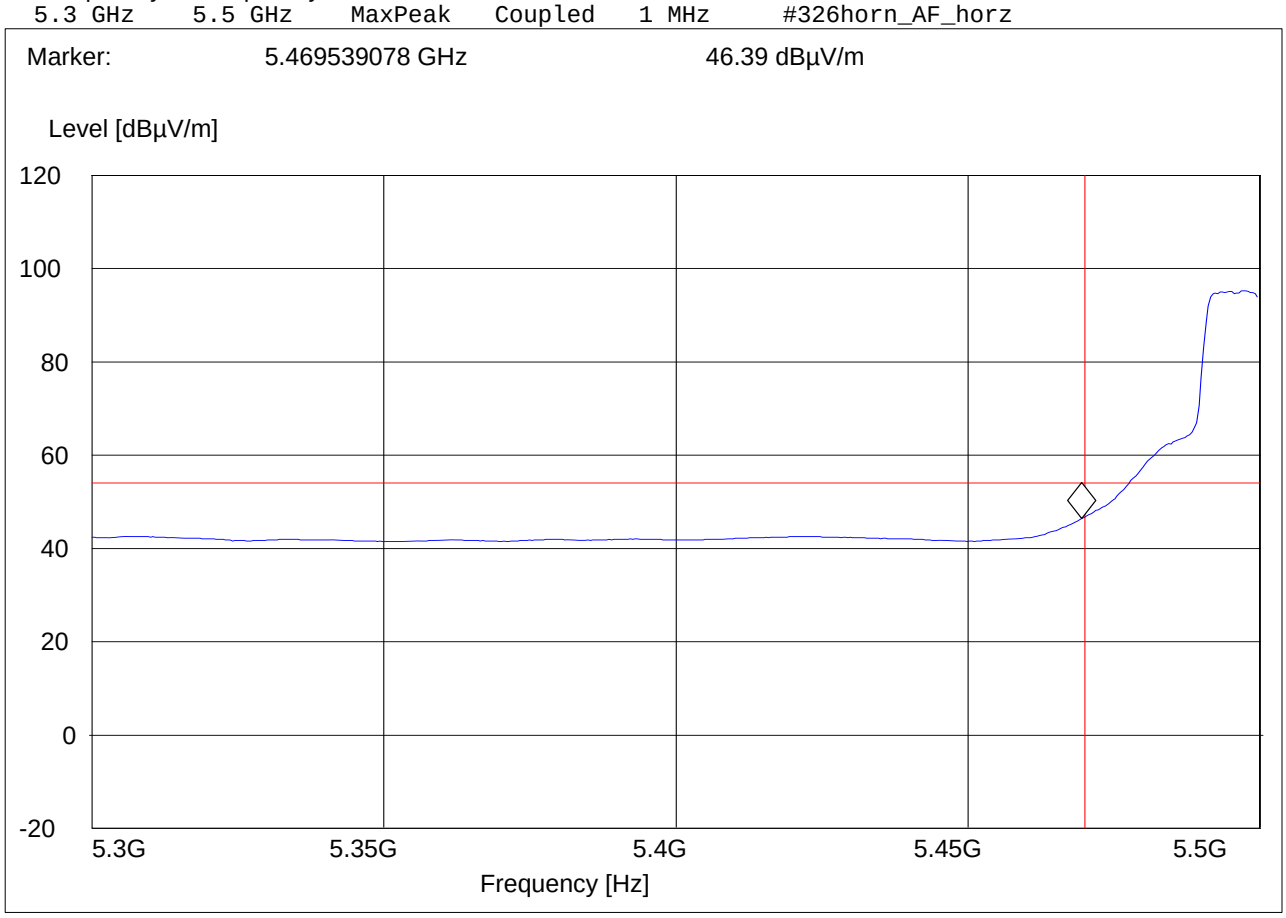


Lower band edge AVERAGE

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5500MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 C_LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.3 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz



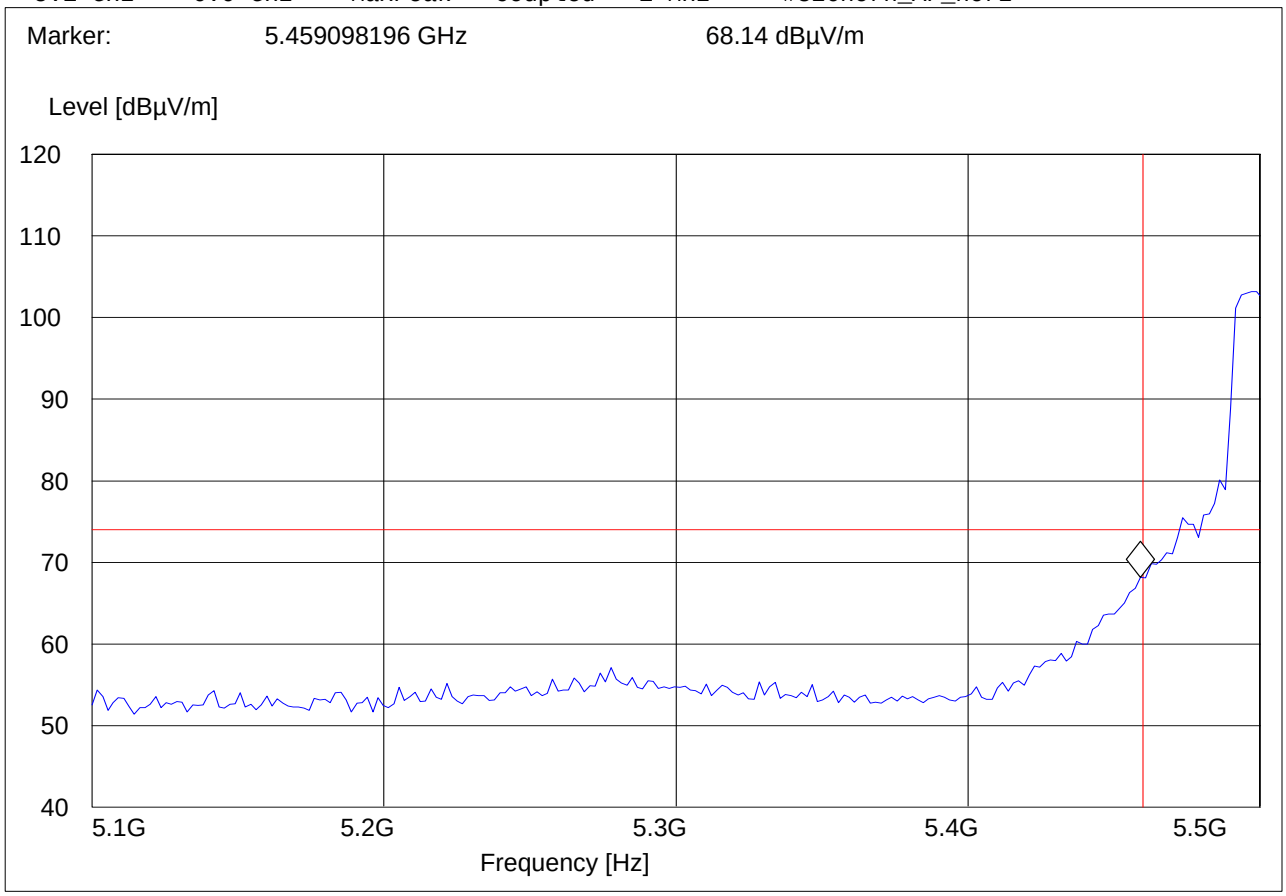
5.3.10 Sub-band 3. 802.11n HT40 MODE

Lower band edge PEAK

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5510MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 C_LBE_PK"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.1 GHz	6.0 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz

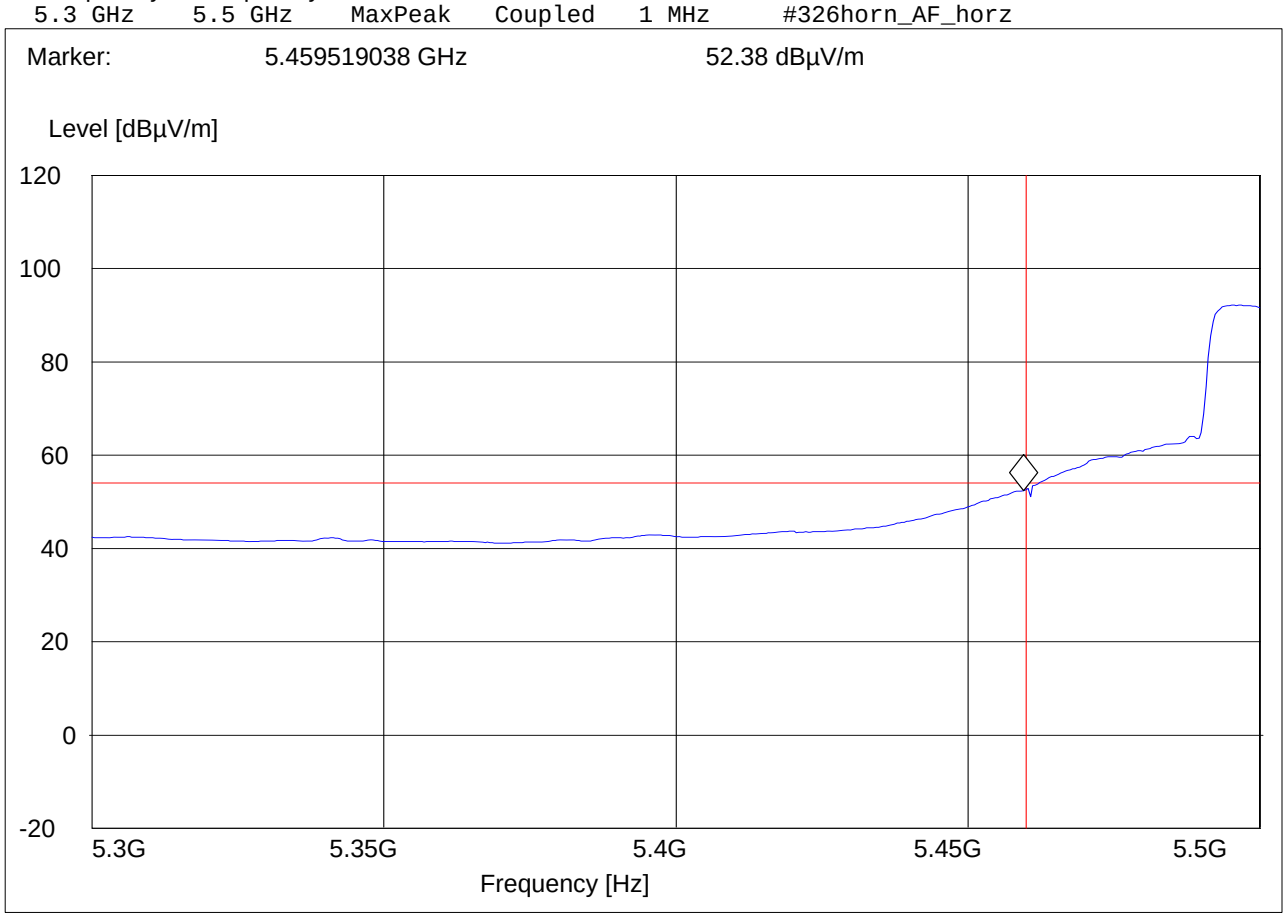


Lower band edge AVERAGE

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5510MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.407 C_LBE_AVG"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
5.3 GHz	5.5 GHz	MaxPeak	Coupled	1 MHz	#326horn_AF_horz



5.4 Transmiter Spurious Emission § 15.407(b)/15.205/15.209

5.4.1 Limits

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

***PEAK LIMIT= 74dBuV/m for spurious in restricted bands**
***AVG. LIMIT= 54dBuV/m for spurious in restricted bands**

NOTE:
1. The radiated emissions were done with different settings, using the relevant pre-amplifiers for the relevant frequency ranges. This is the reason that the graphs show different noise levels. In the range between 3 and 25 GHz very short cable connections to the antenna was used to minimize the noise level.

2. All measurements are done in peak mode using an average limit, unless specified with the plots.

Results for the radiated measurements below 30MHz according § 15.33

Frequency	Measured values	Remarks
9KHz – 30MHz	No emissions found, caused by the EUT	This is valid for all the tested channels

5.4.2 Sub-band 1 802.11a MODE

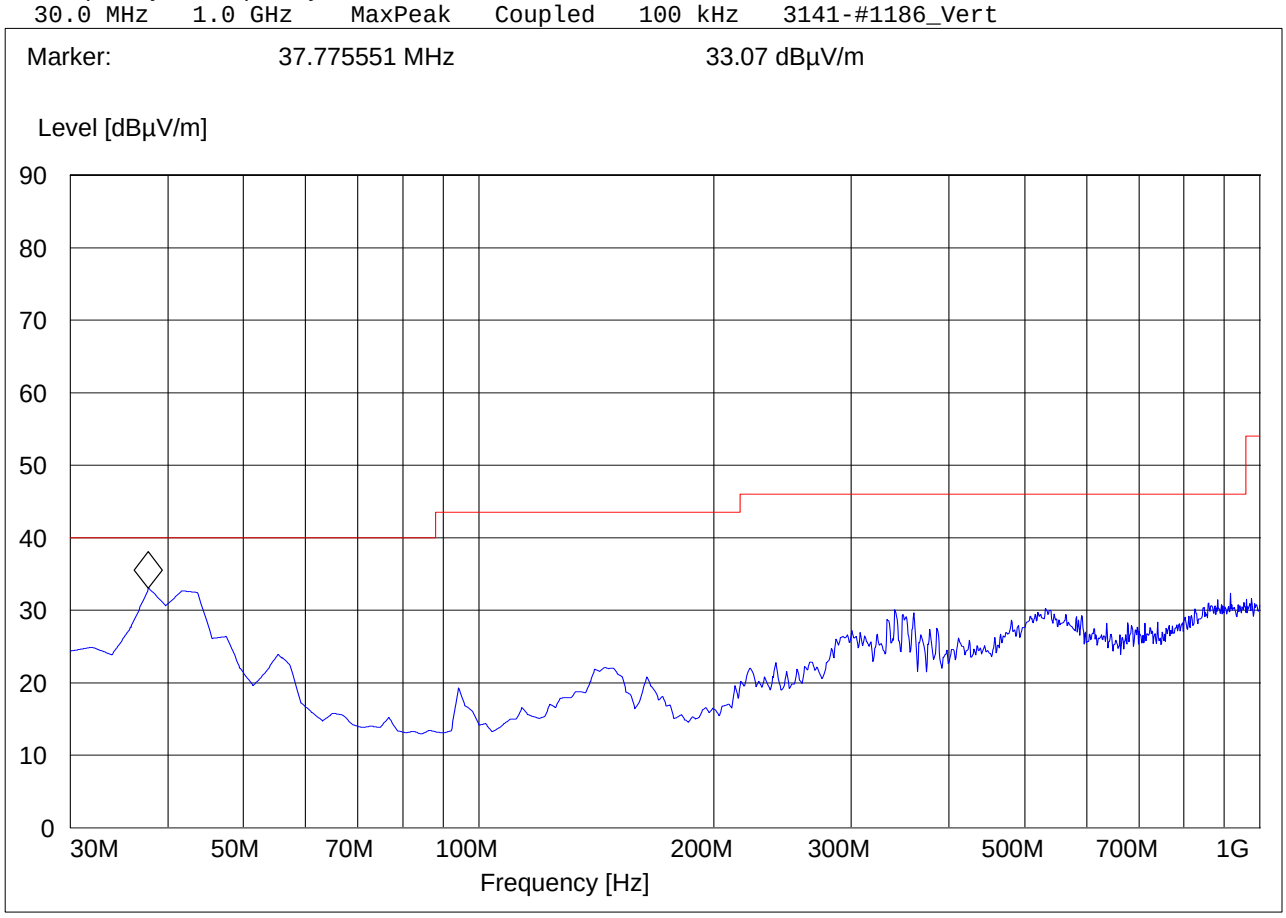
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5220MHz;
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



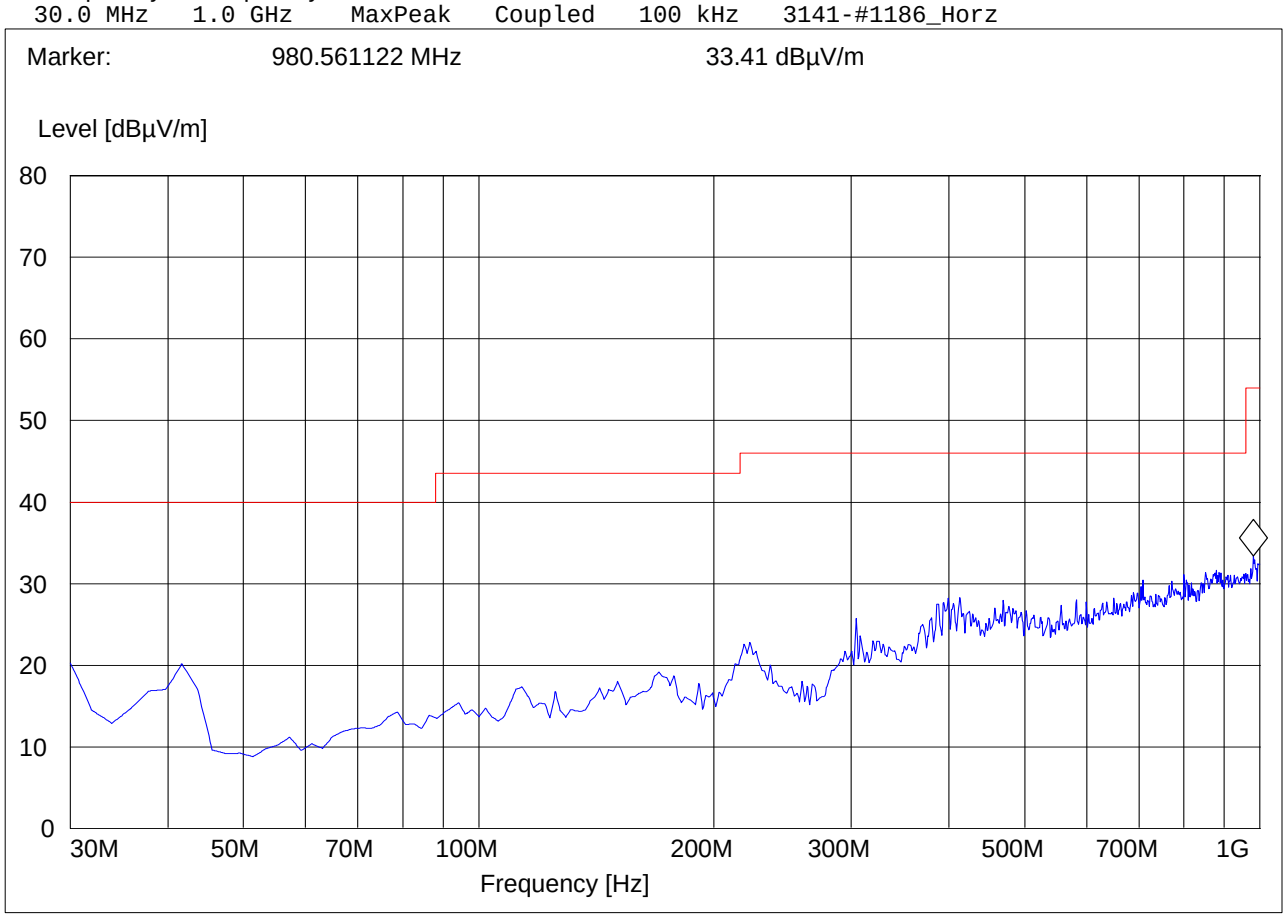
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5220MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



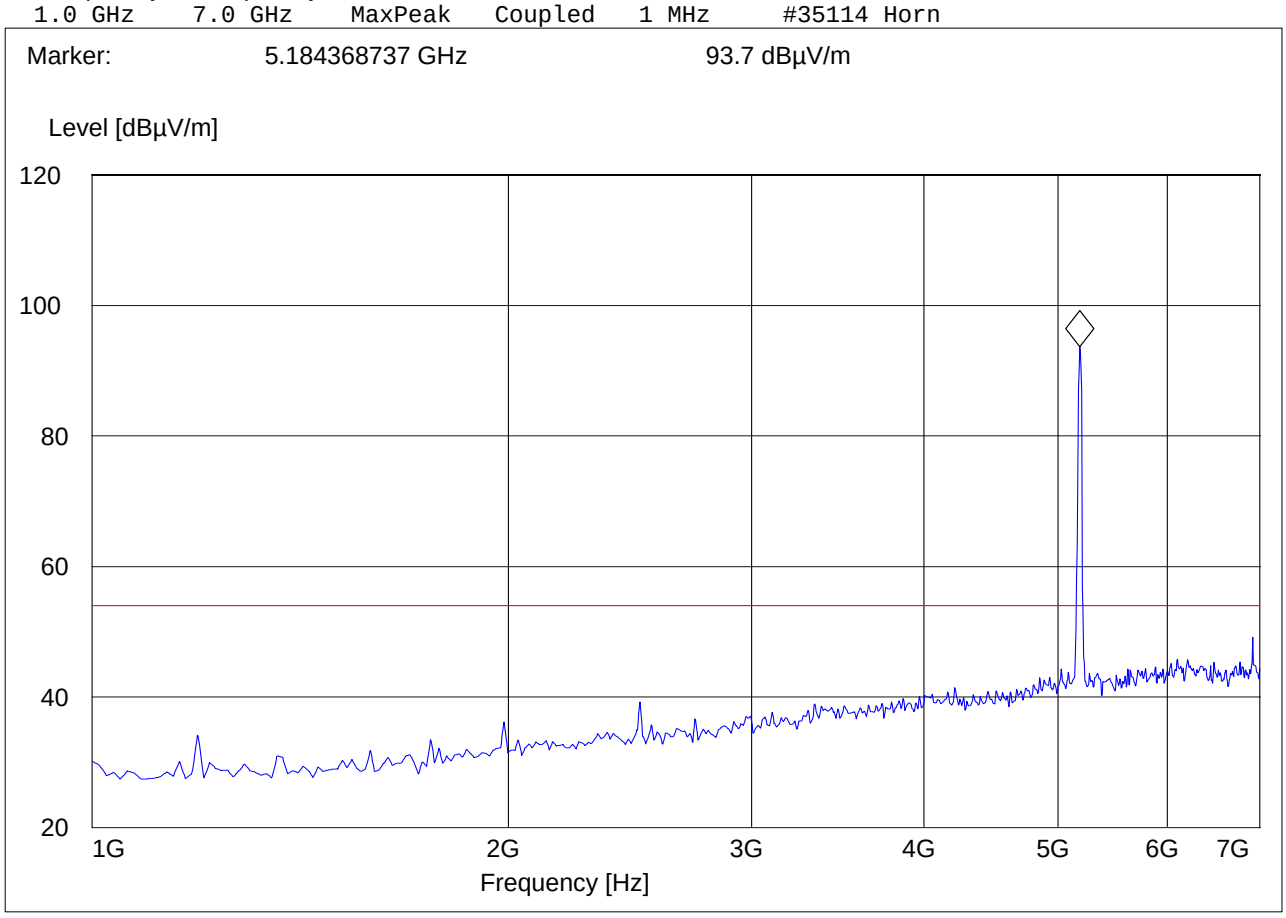
1-7GHz (5180MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5180MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



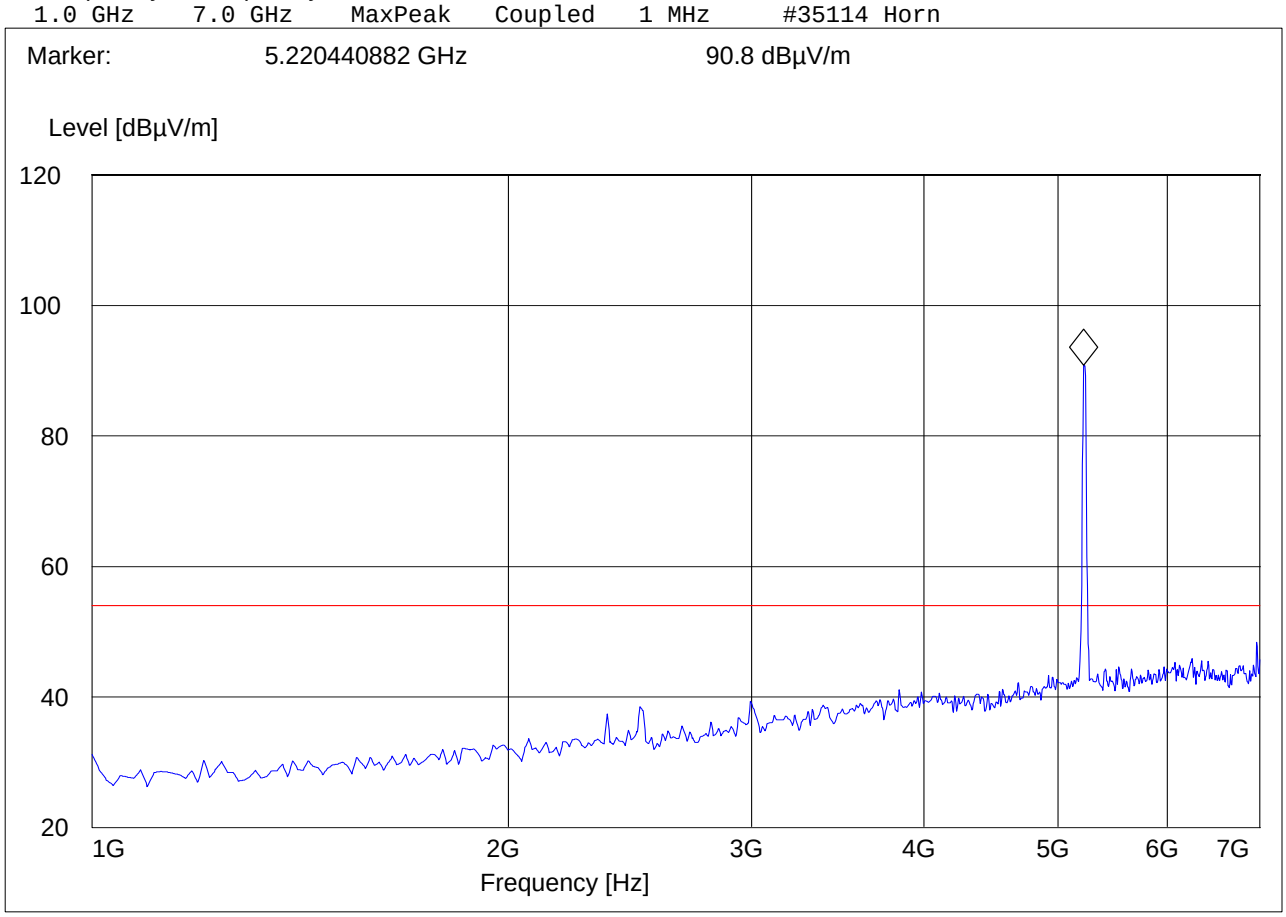
1-7GHz (5220MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5220MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



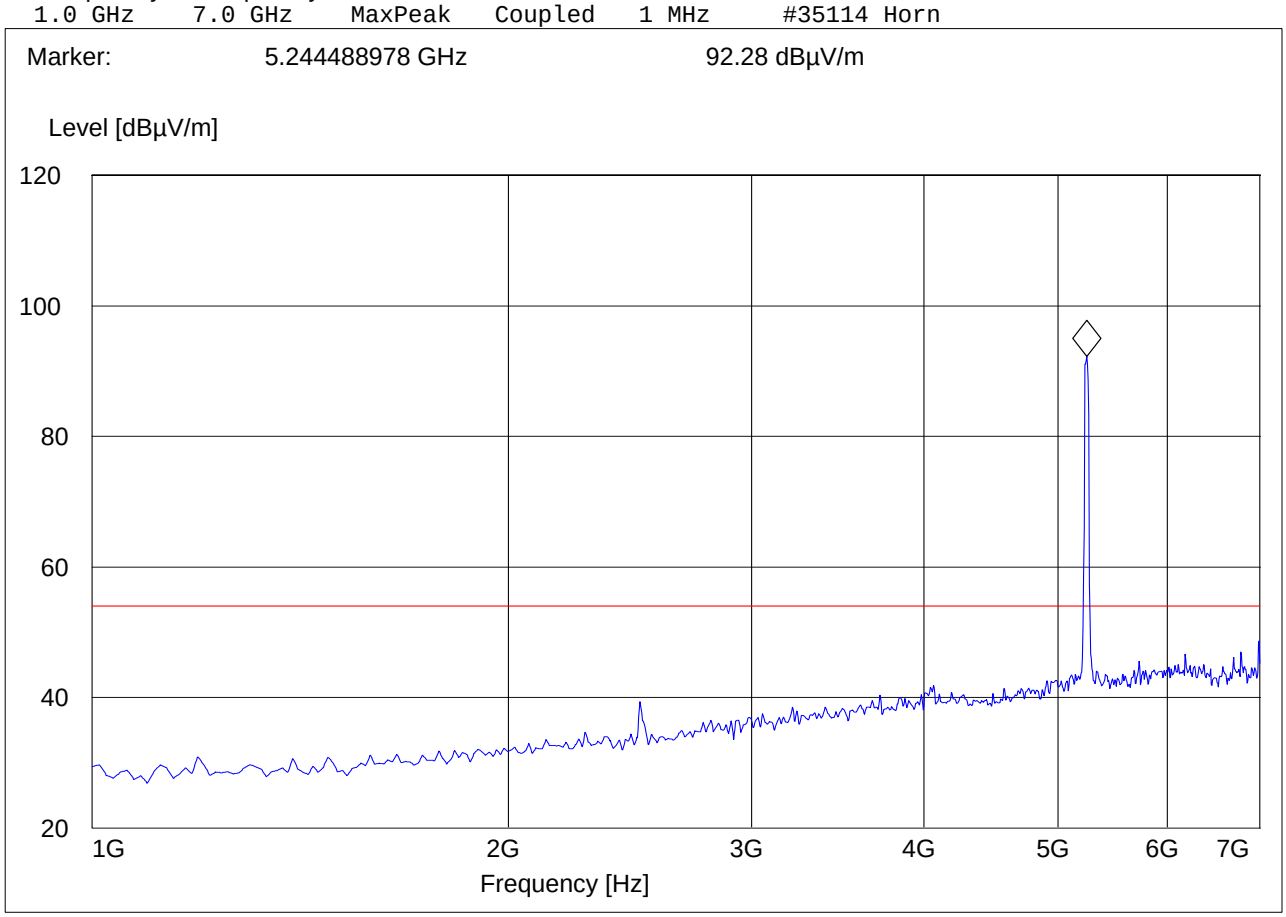
1-7GHz (5240MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5240MHz;
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



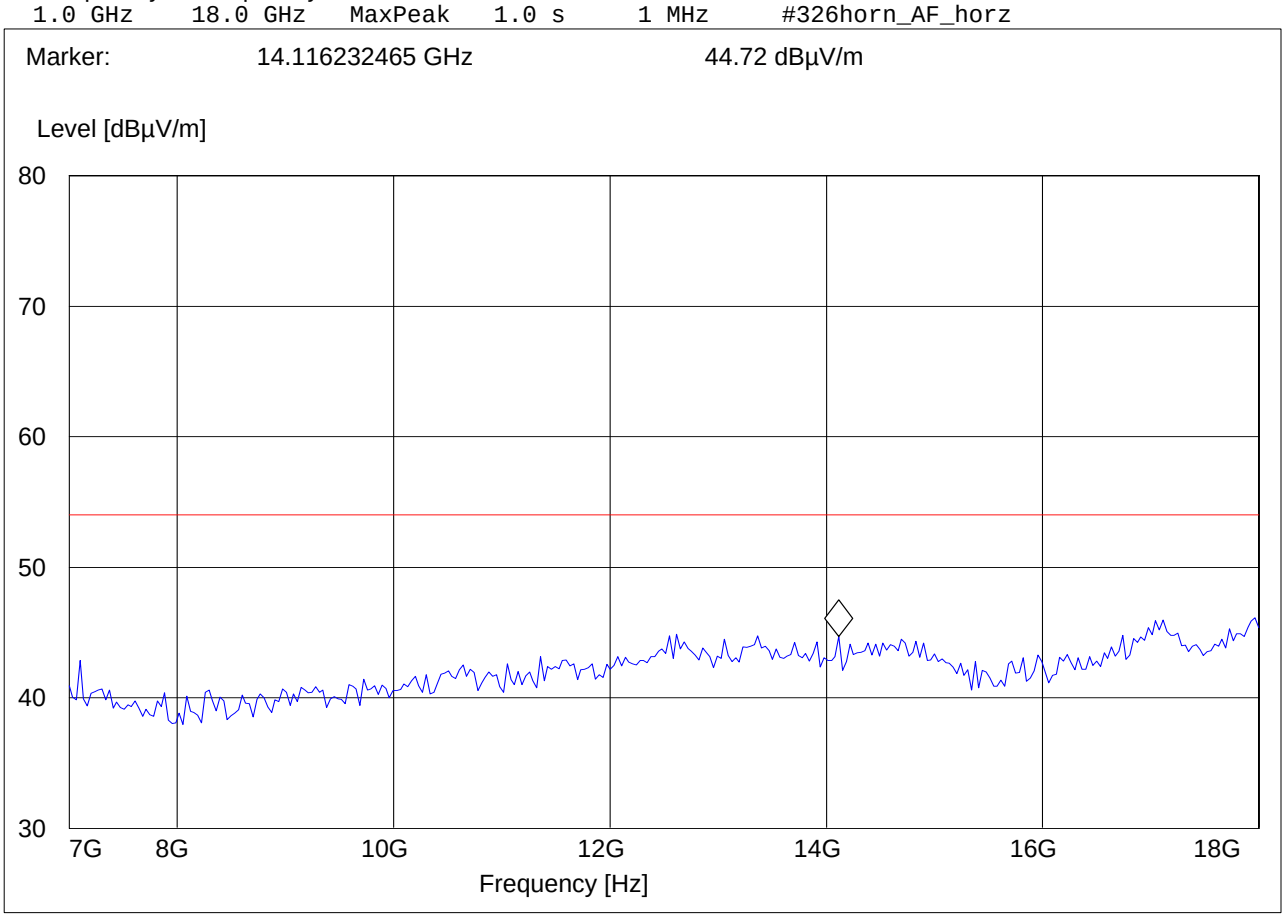
7-18GHz (5180MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5180MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2 GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



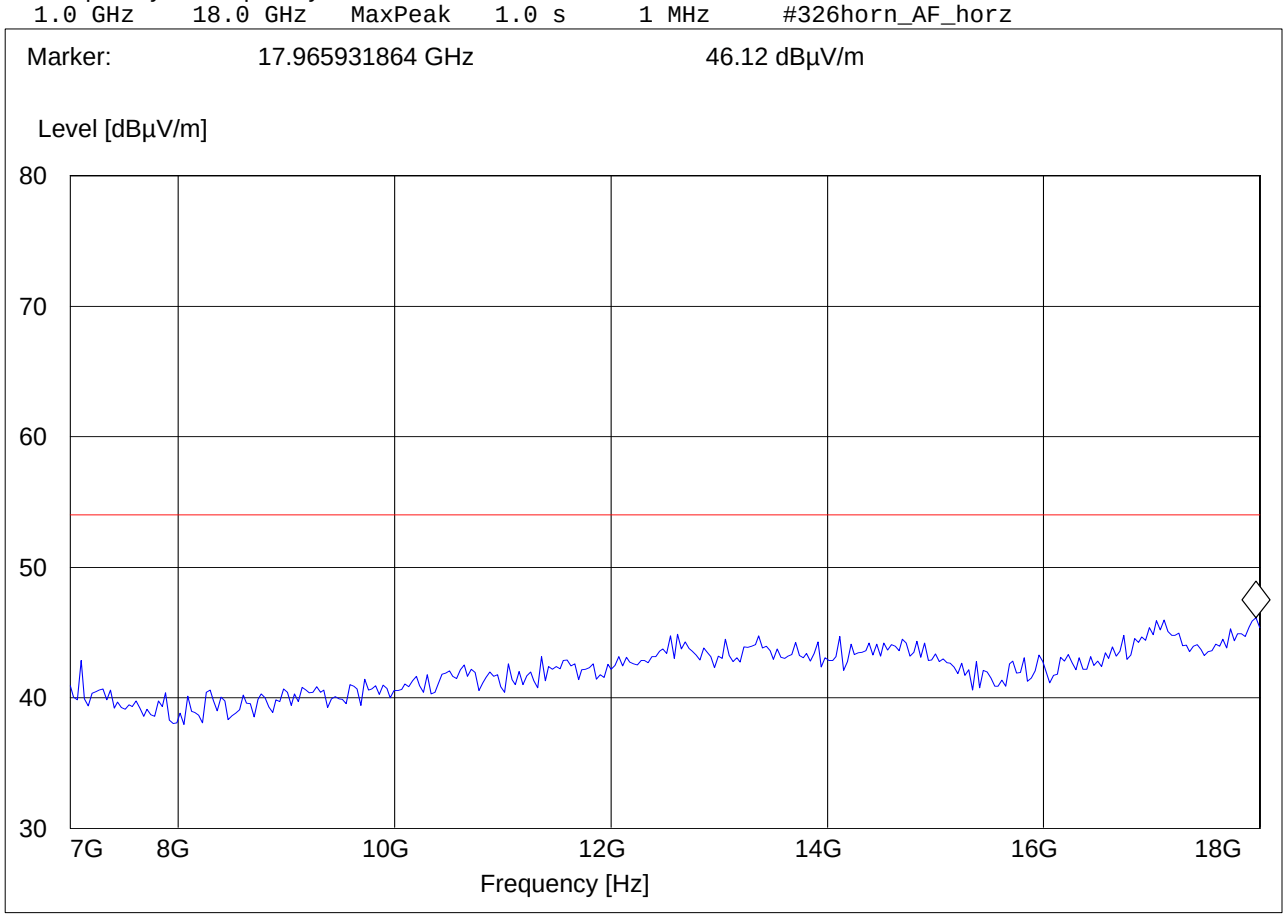
7-18GHz (5220MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5220MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



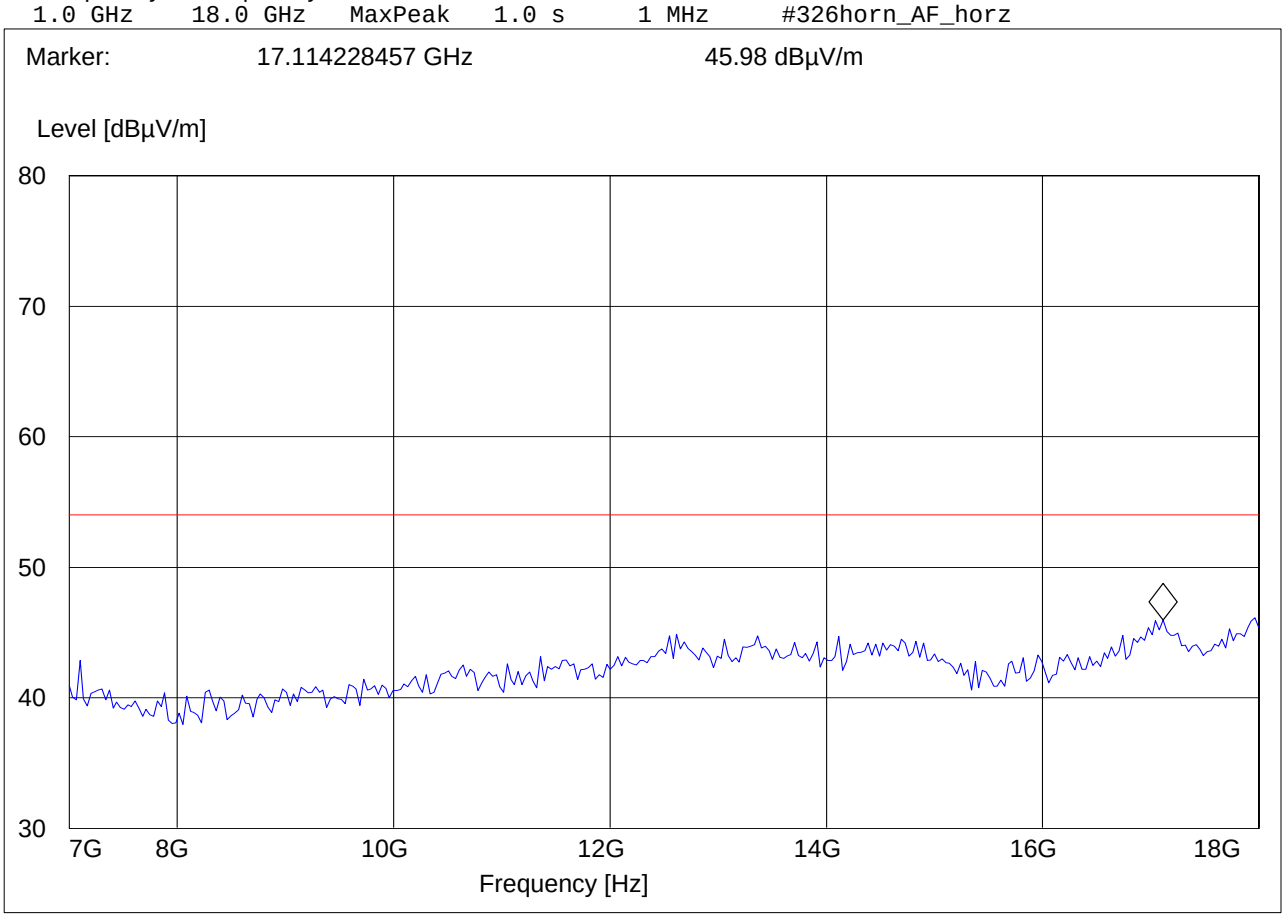
7-18GHz (5240MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5240MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2 GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



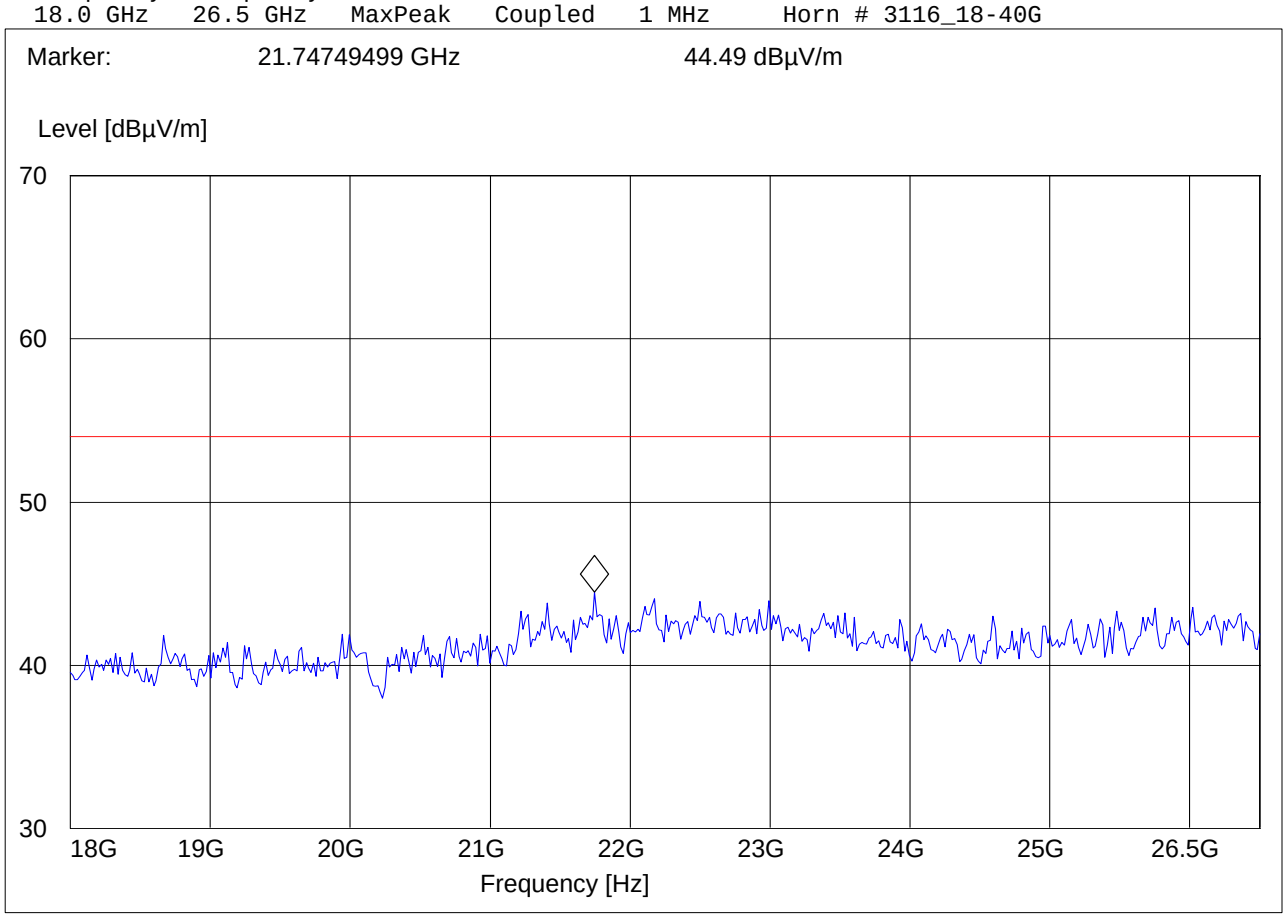
18-26.5GHz (5180MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5180MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



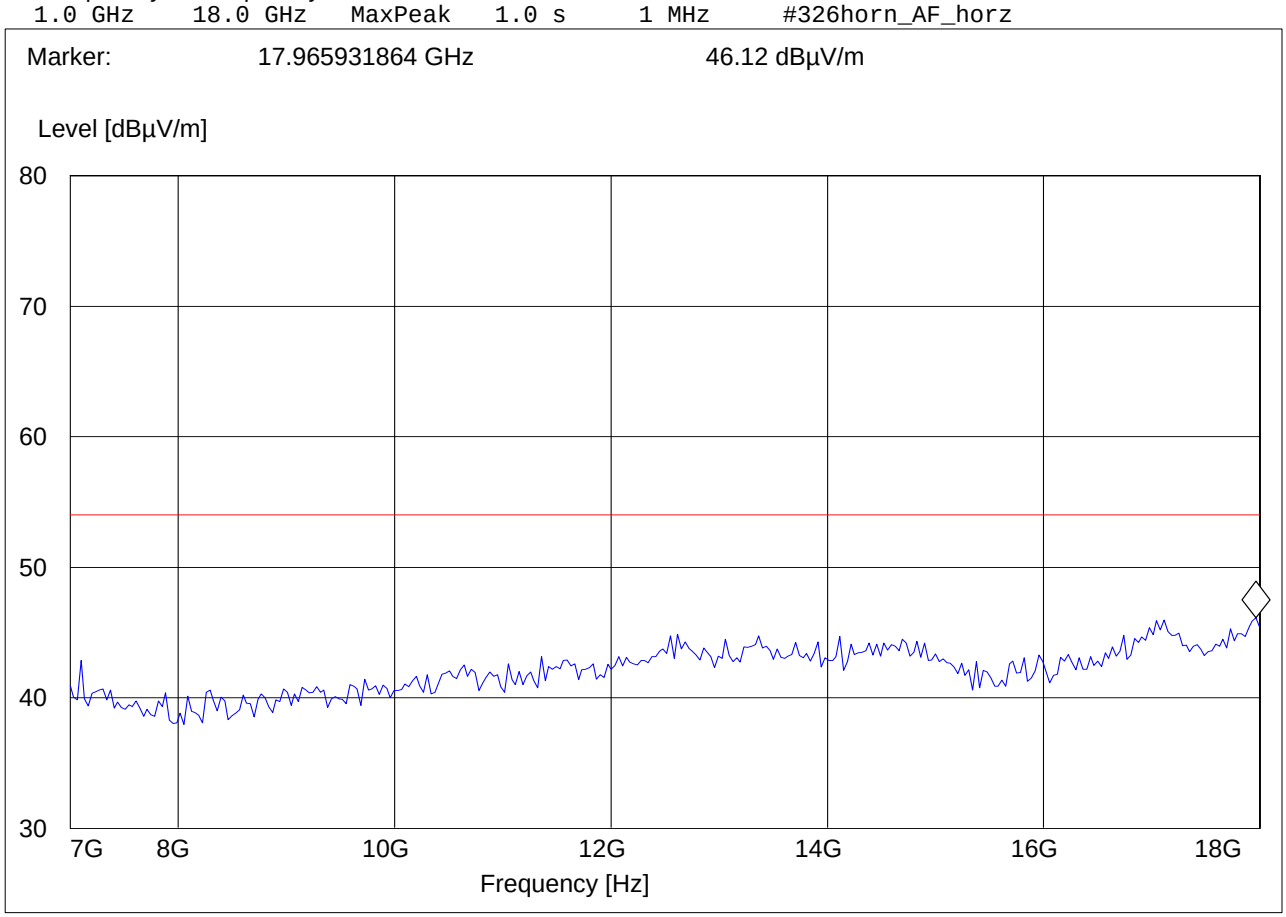
18-26.5GHz (5220MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5220MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



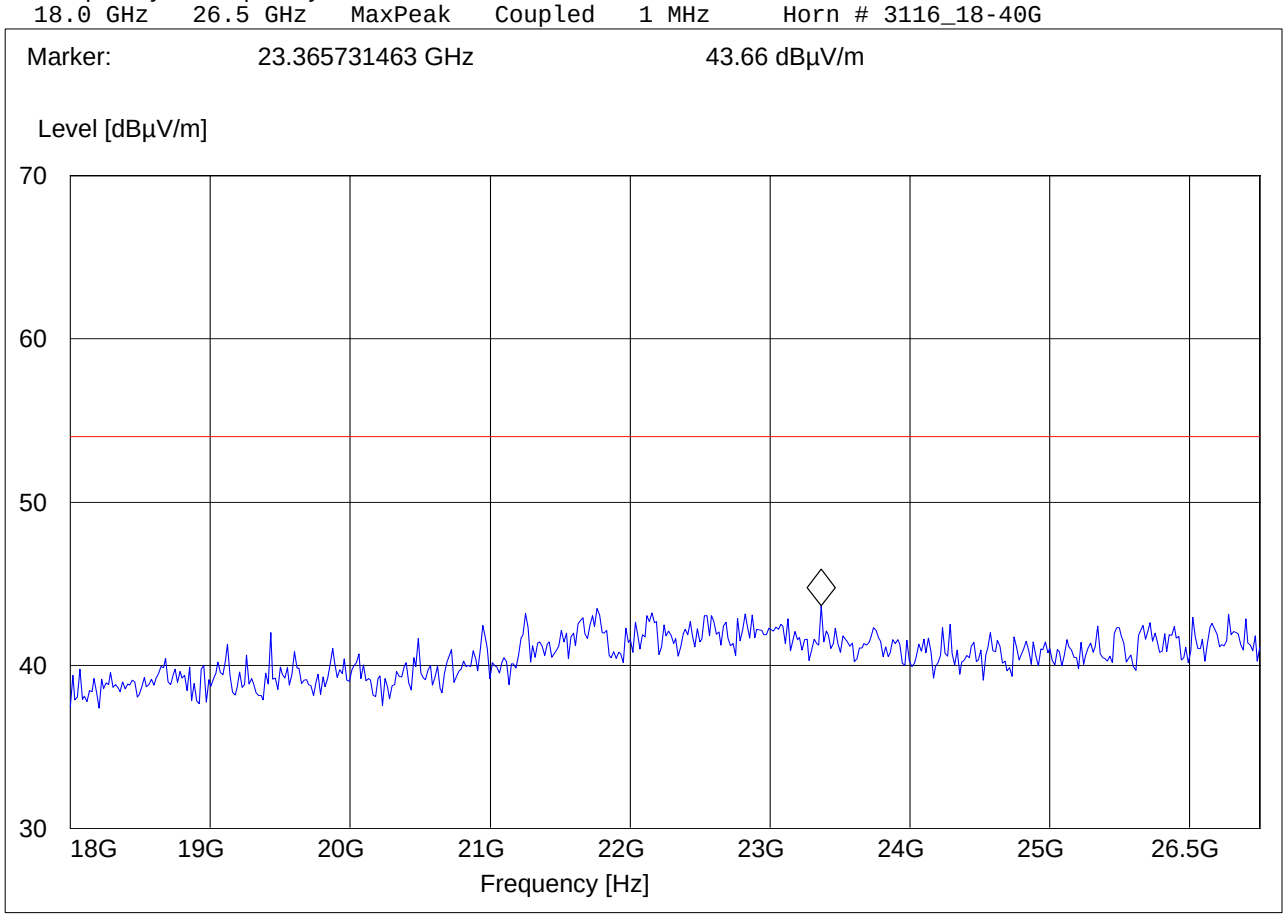
18-26.5GHz (5240MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5240MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



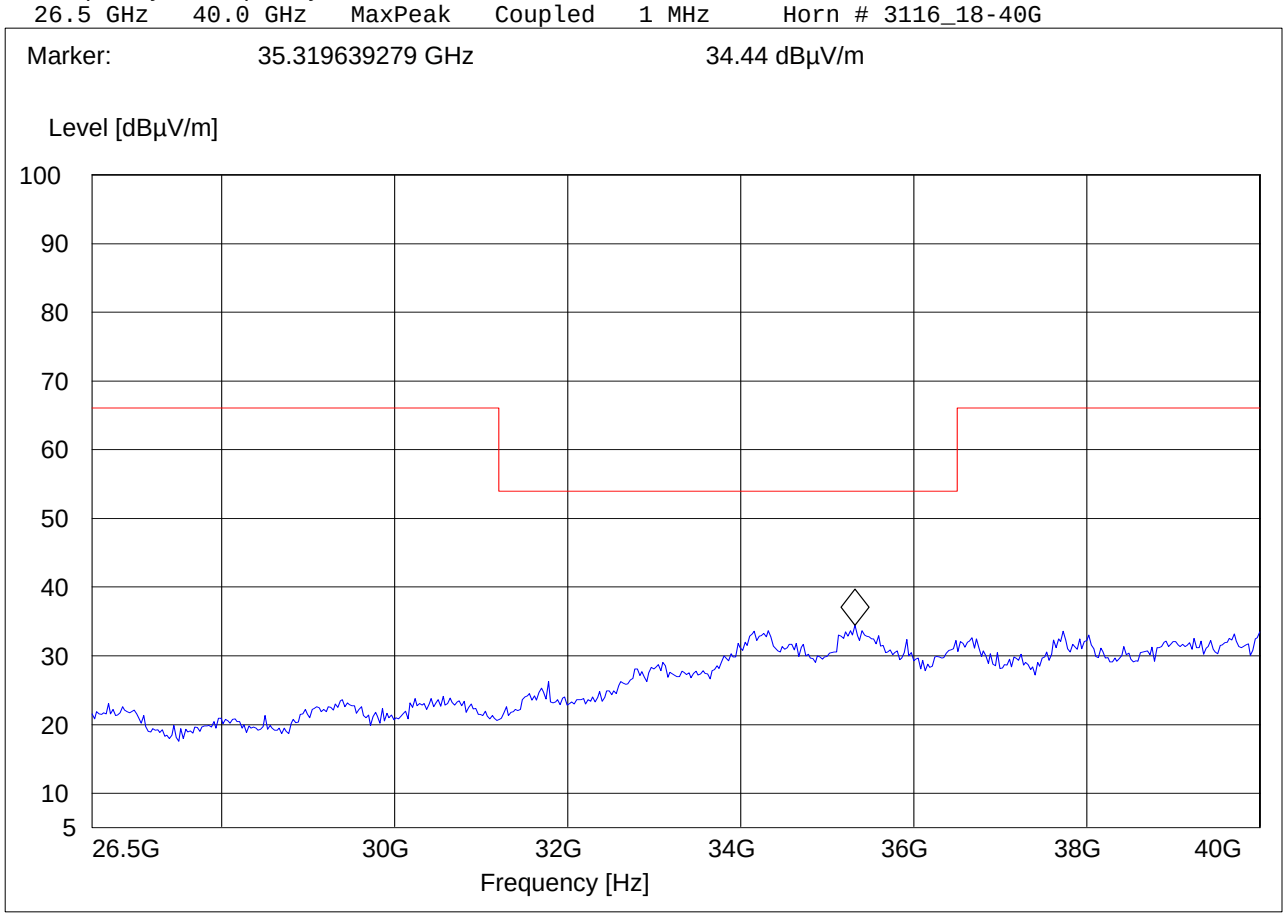
26.5-40GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5220MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.3 **Sub-band 1 802.11n HT20 MODE**

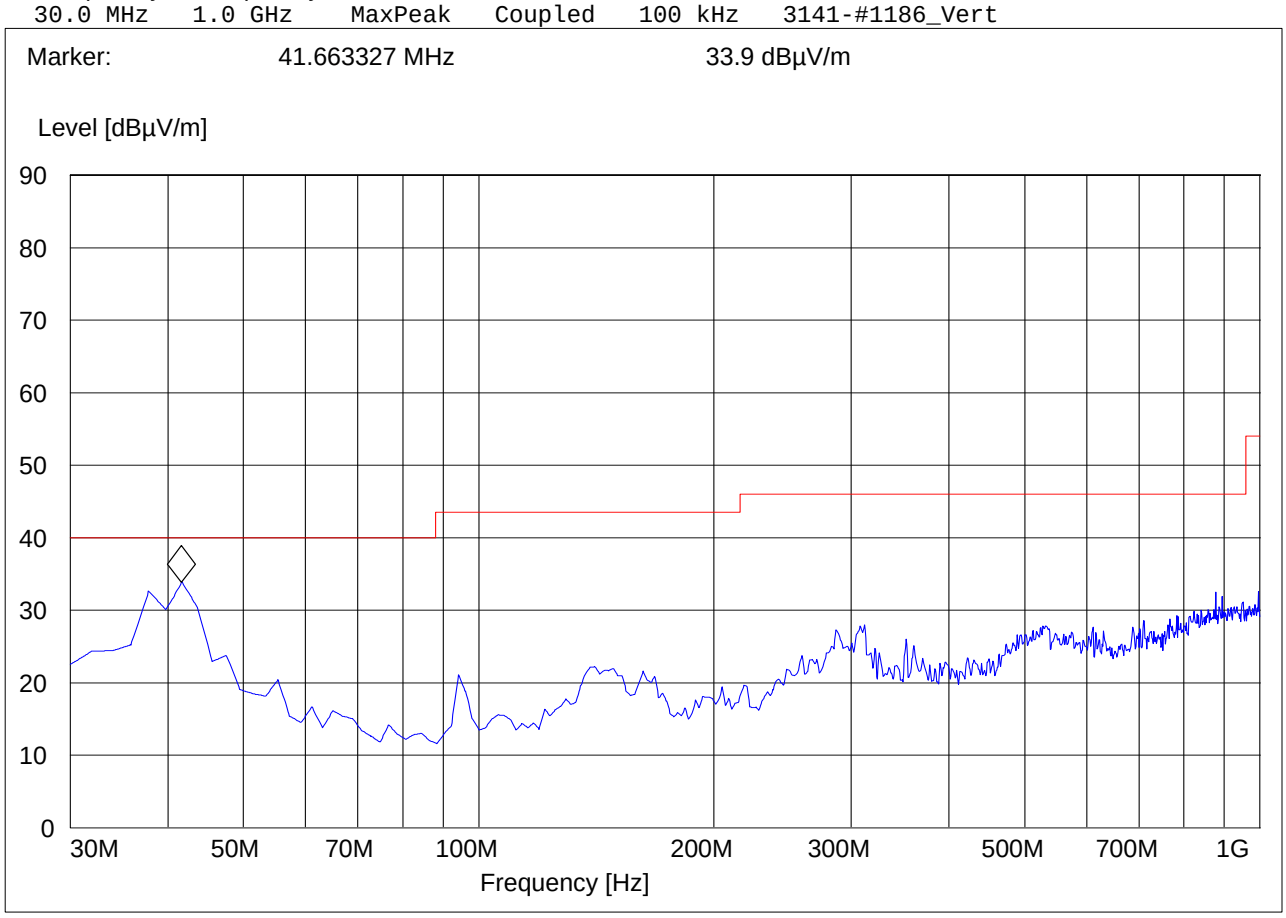
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5220MHz
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



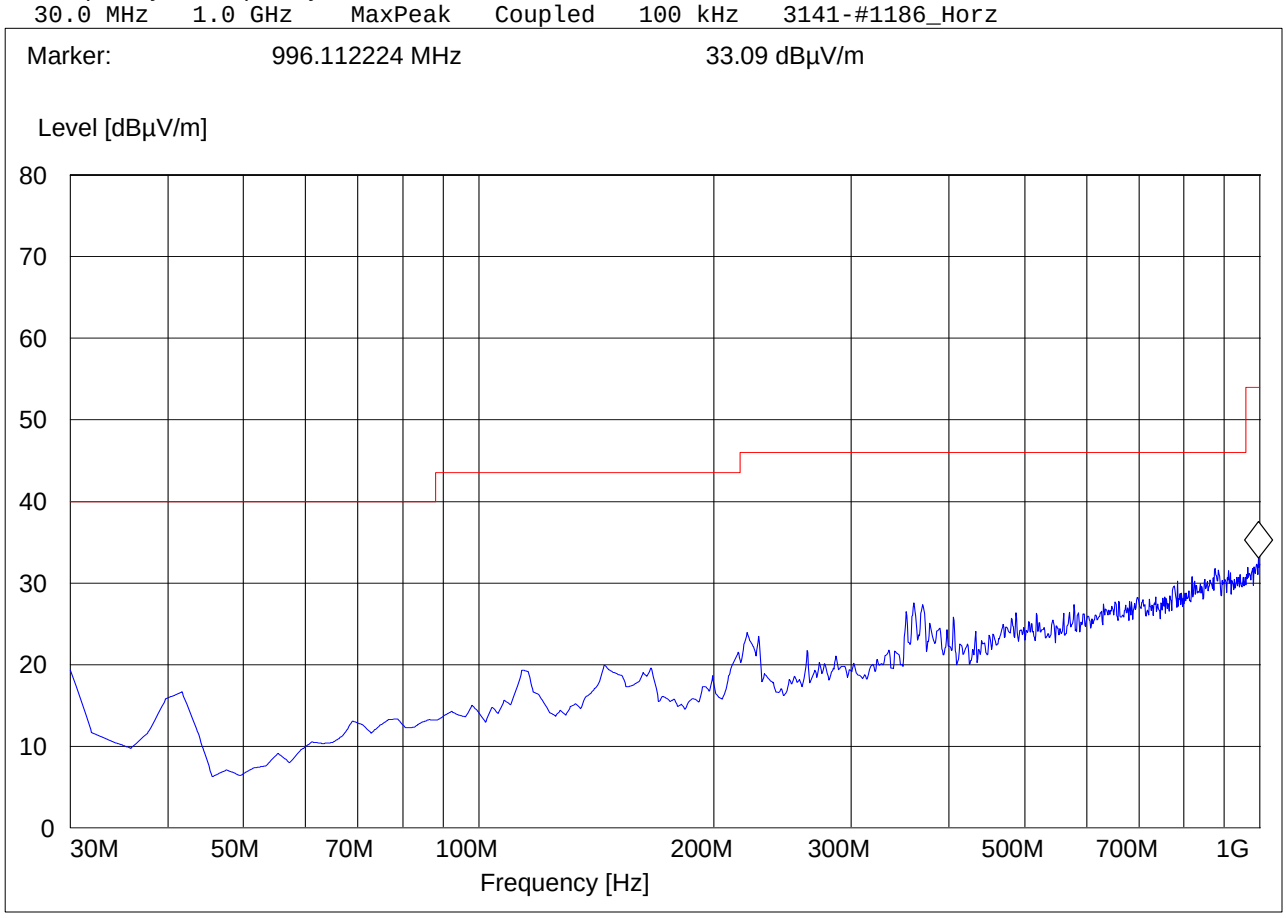
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5220MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



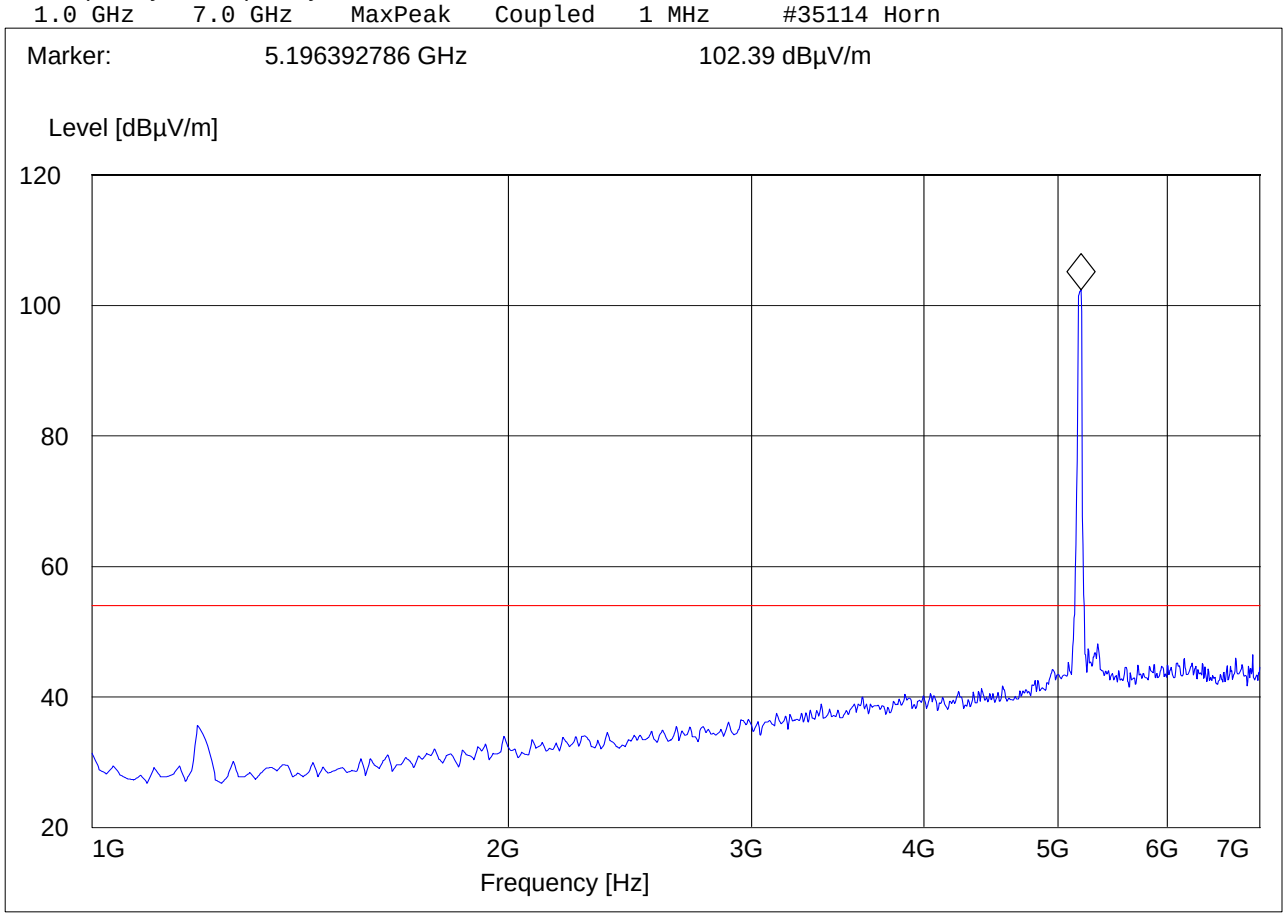
1-7GHz (5180MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5180MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



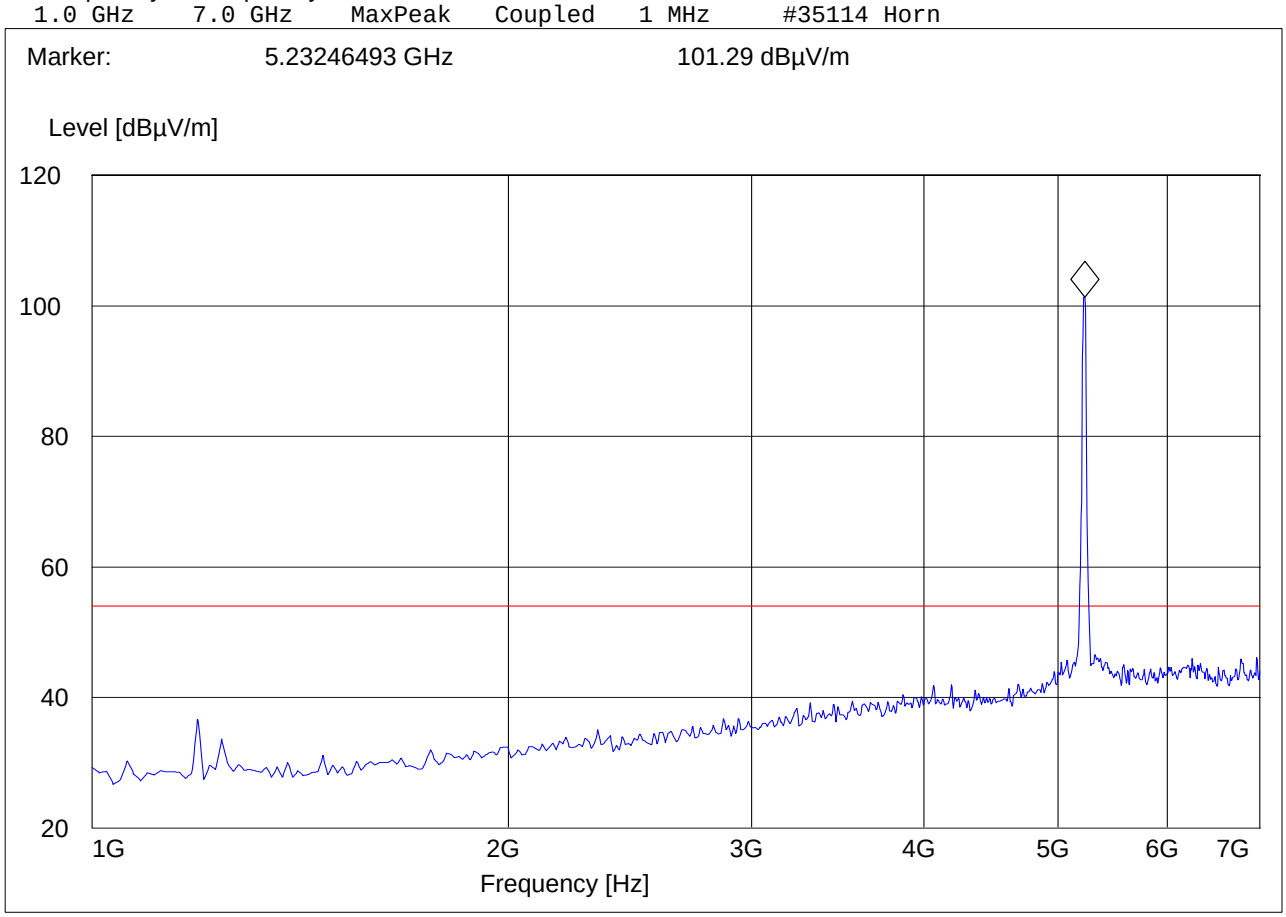
1-7GHz (5220MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5220MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



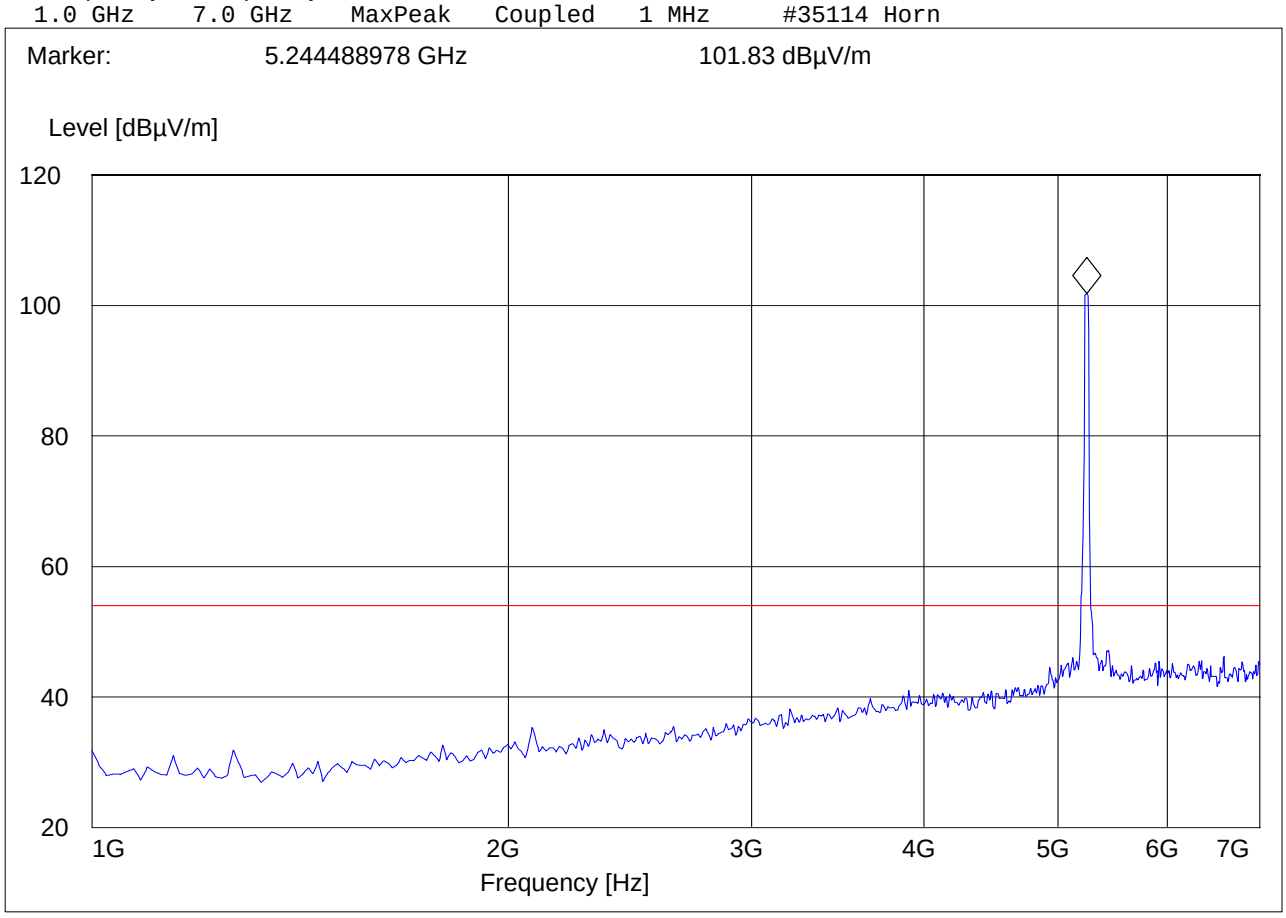
1-7GHz (5240MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5240MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



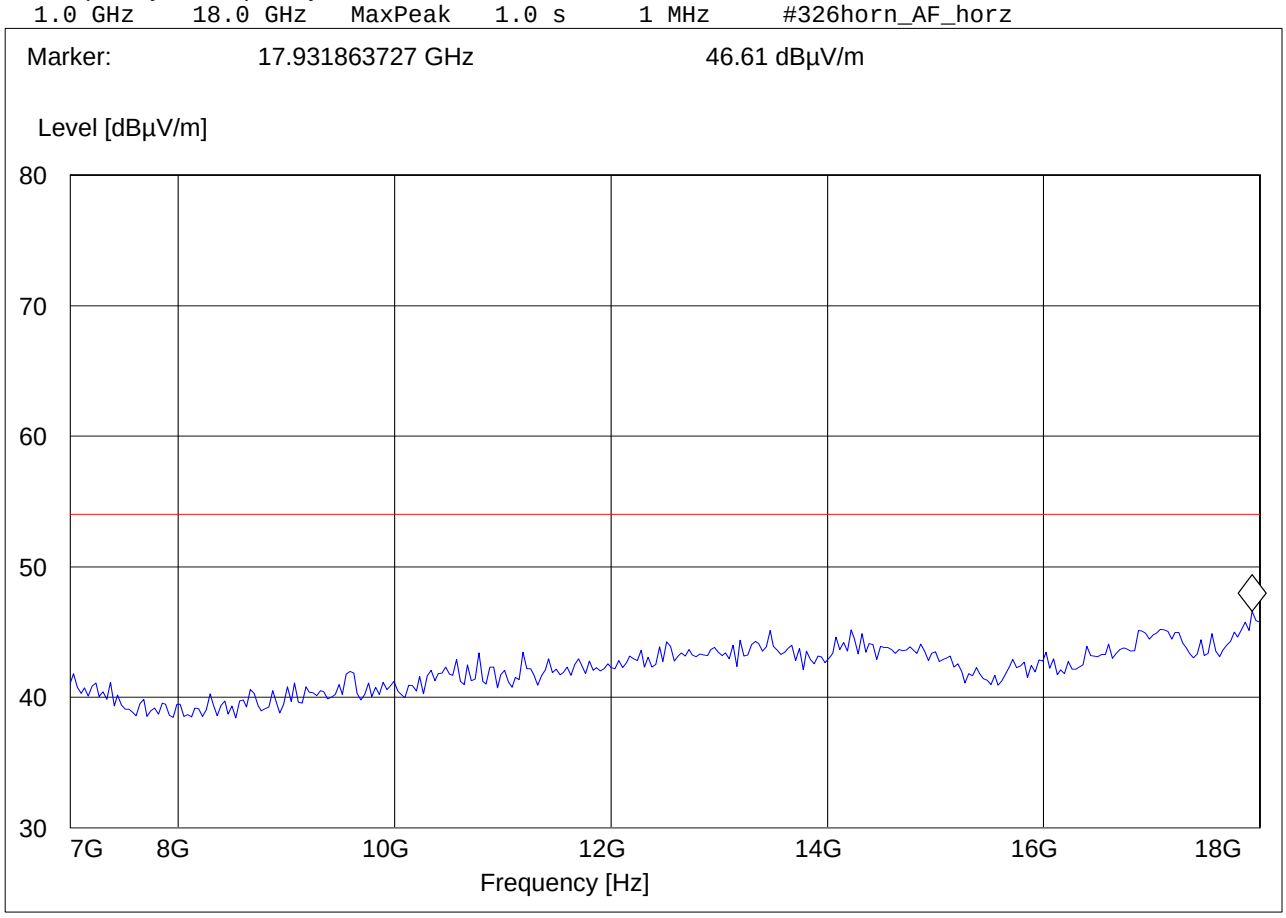
7-18GHz (5180MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5180MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



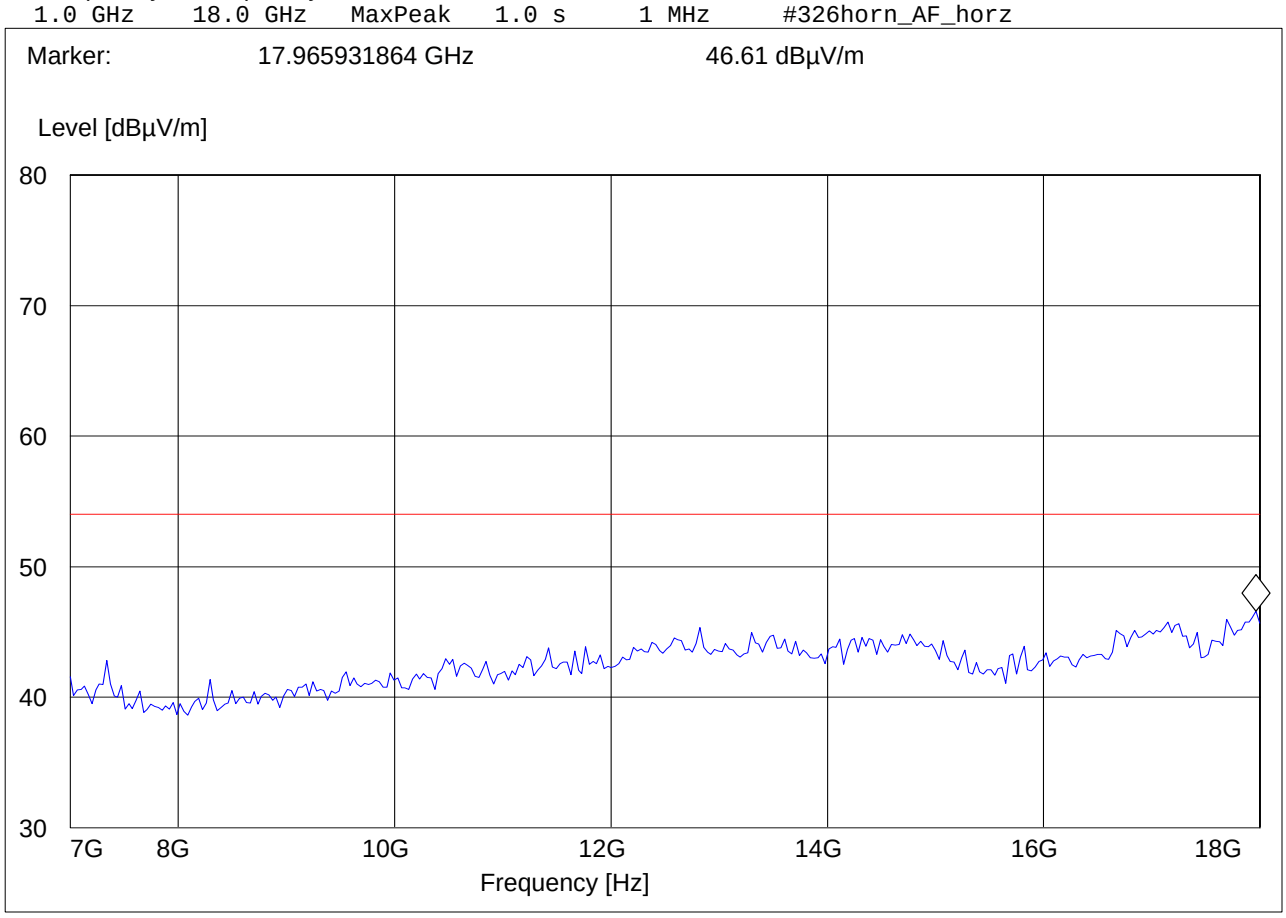
7-18GHz (5220MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5220MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



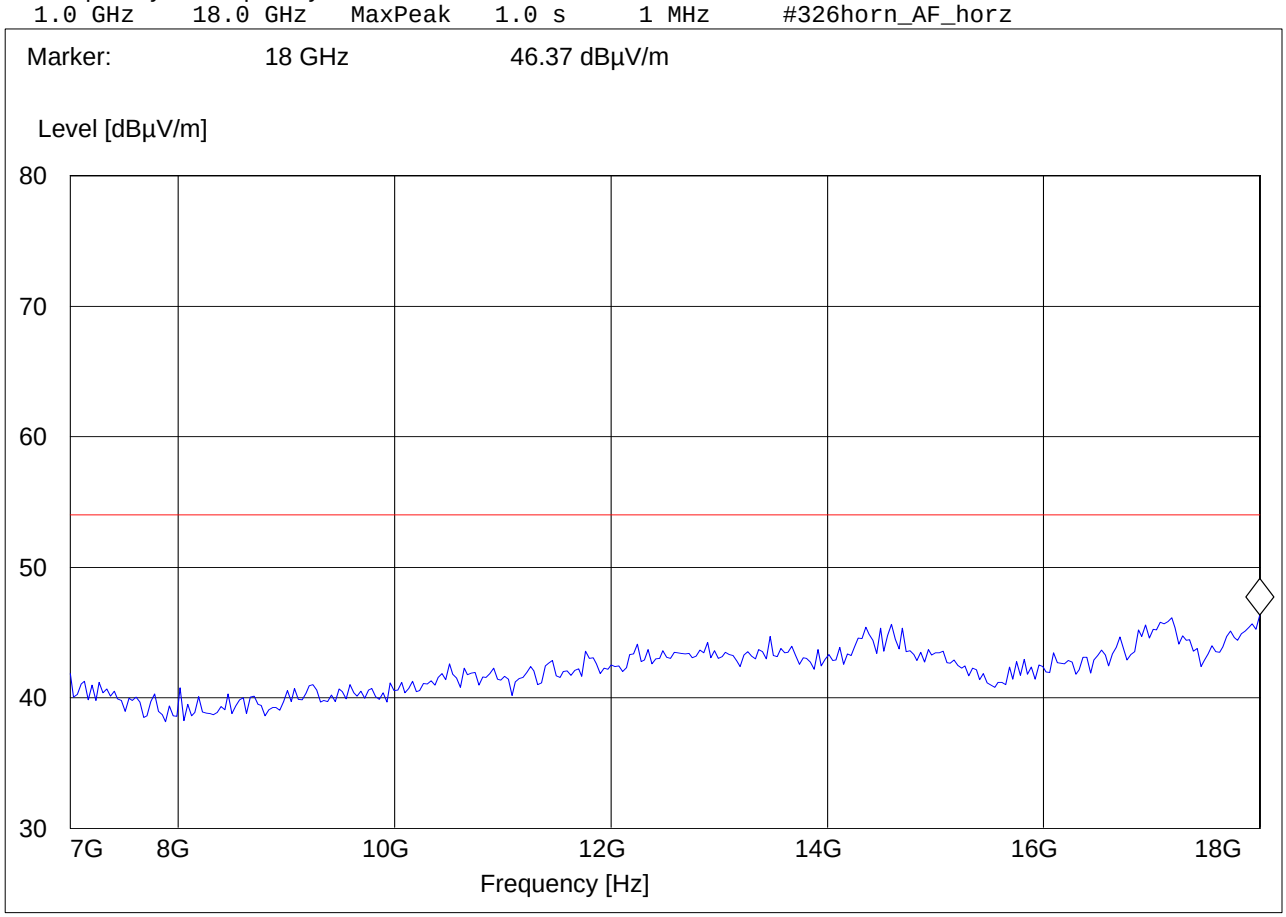
7-18GHz (5240MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5240MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



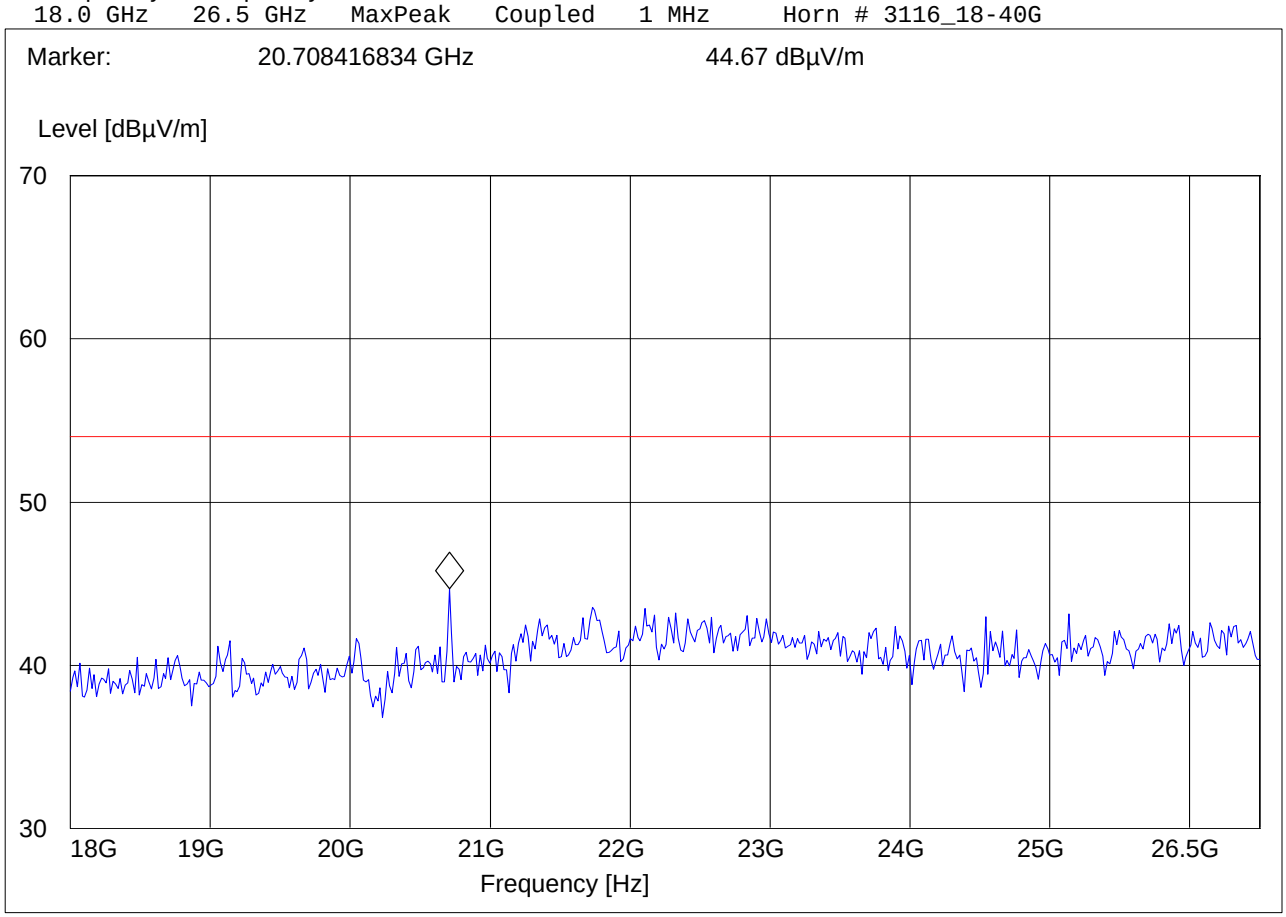
18-26.5GHz (5180MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5180MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



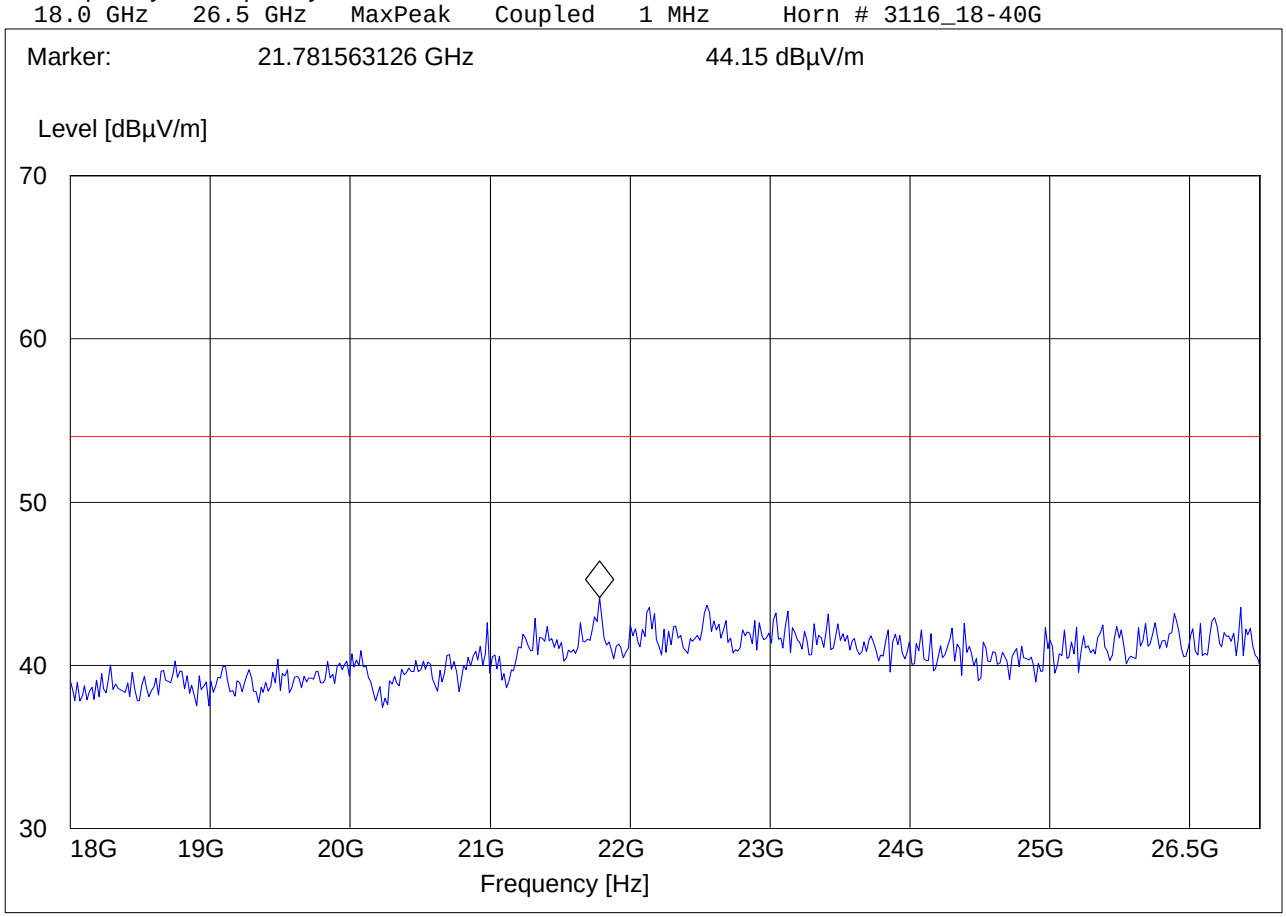
18-26.5GHz (5220MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5220MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



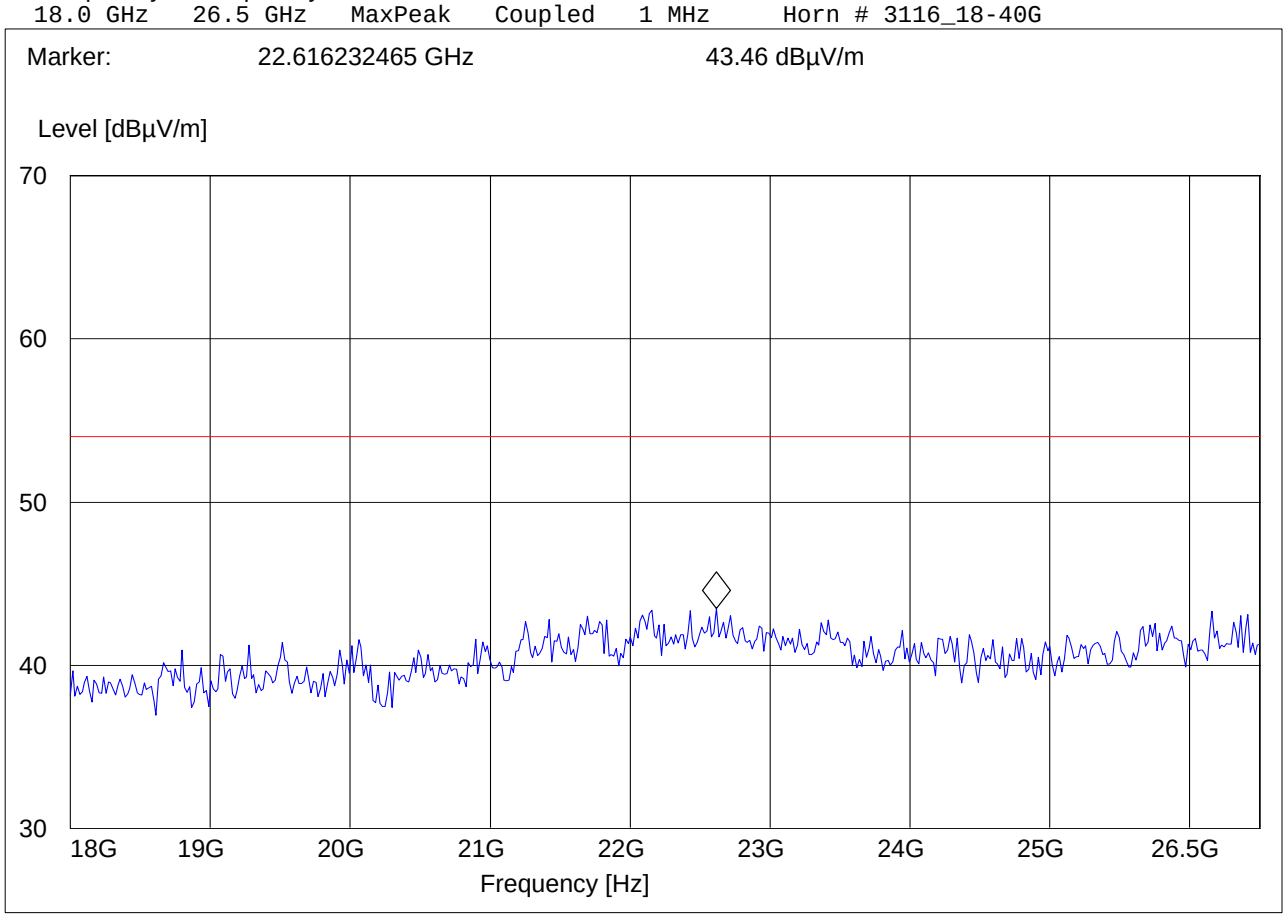
18-26.5GHz (5240MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5240MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



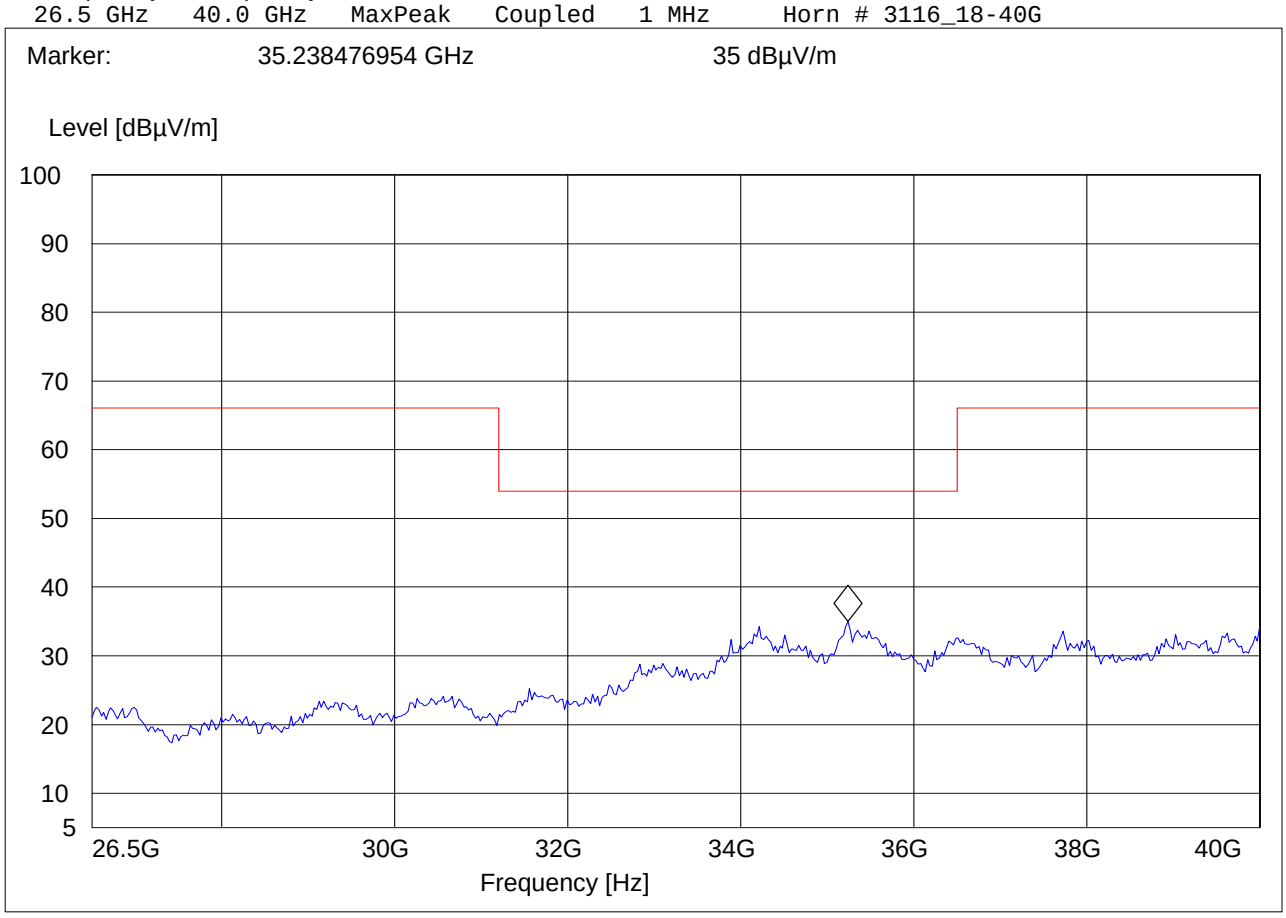
26.5-40GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5220MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.4 Sub-band 1 802.11n HT40 MODE

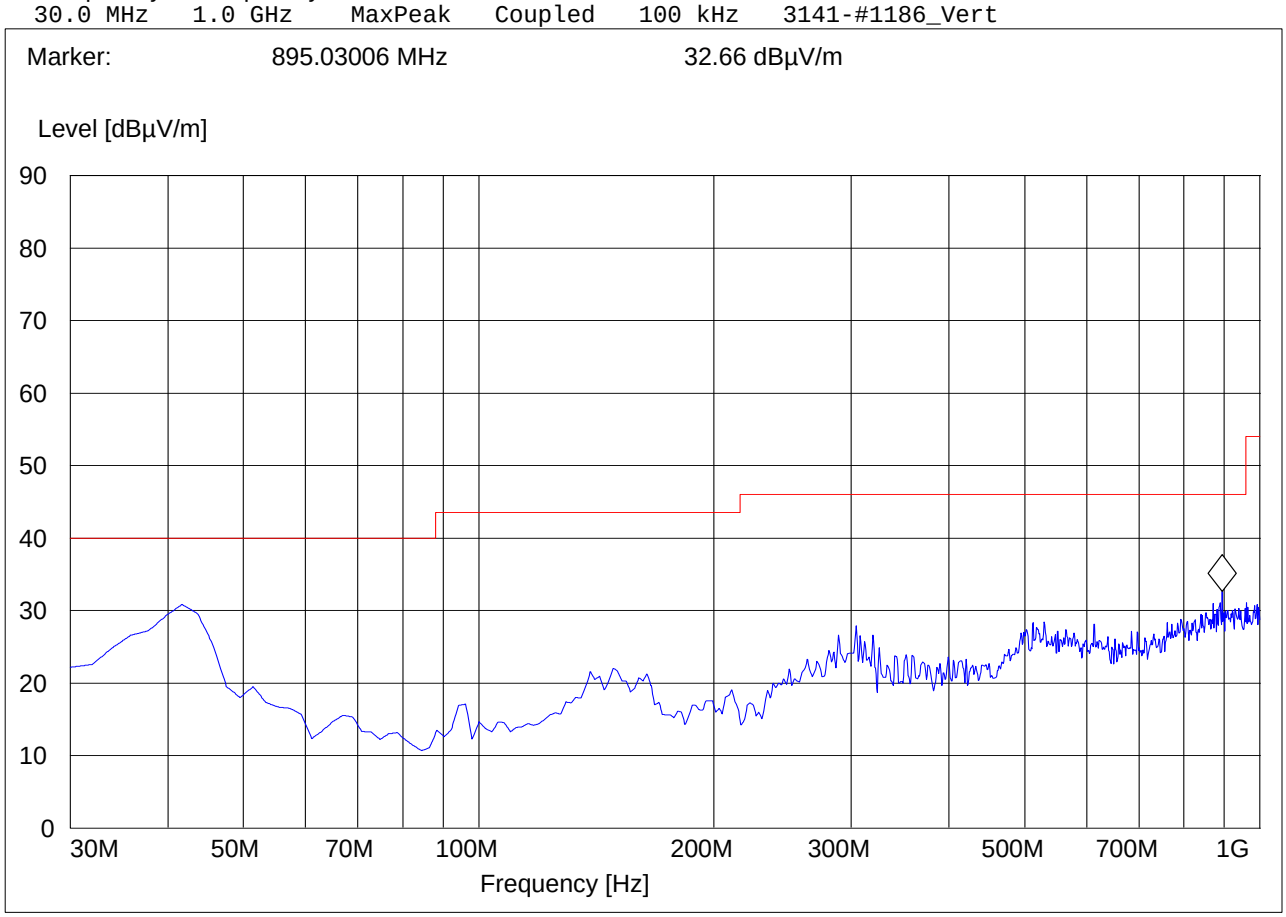
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5190MHz
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



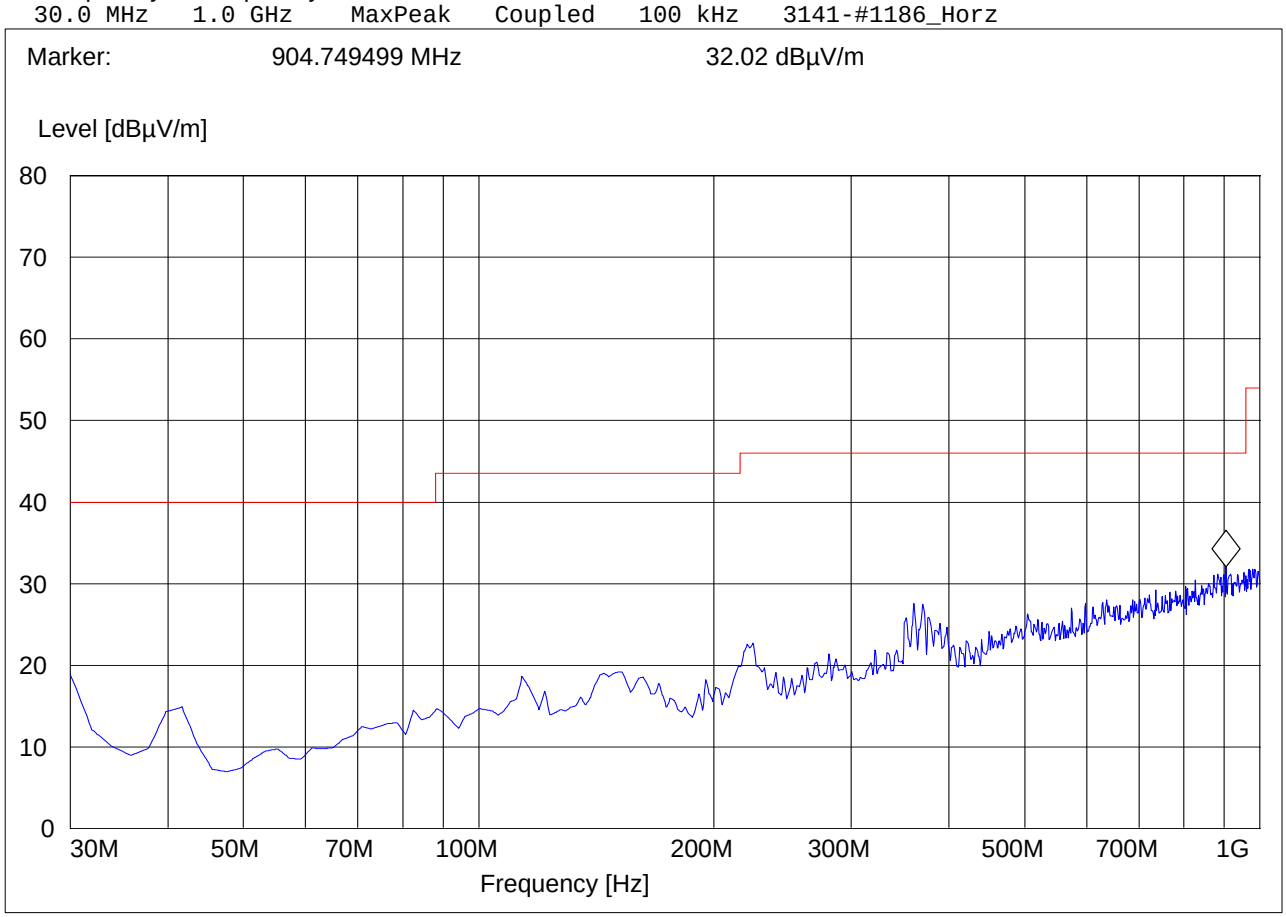
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5190MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



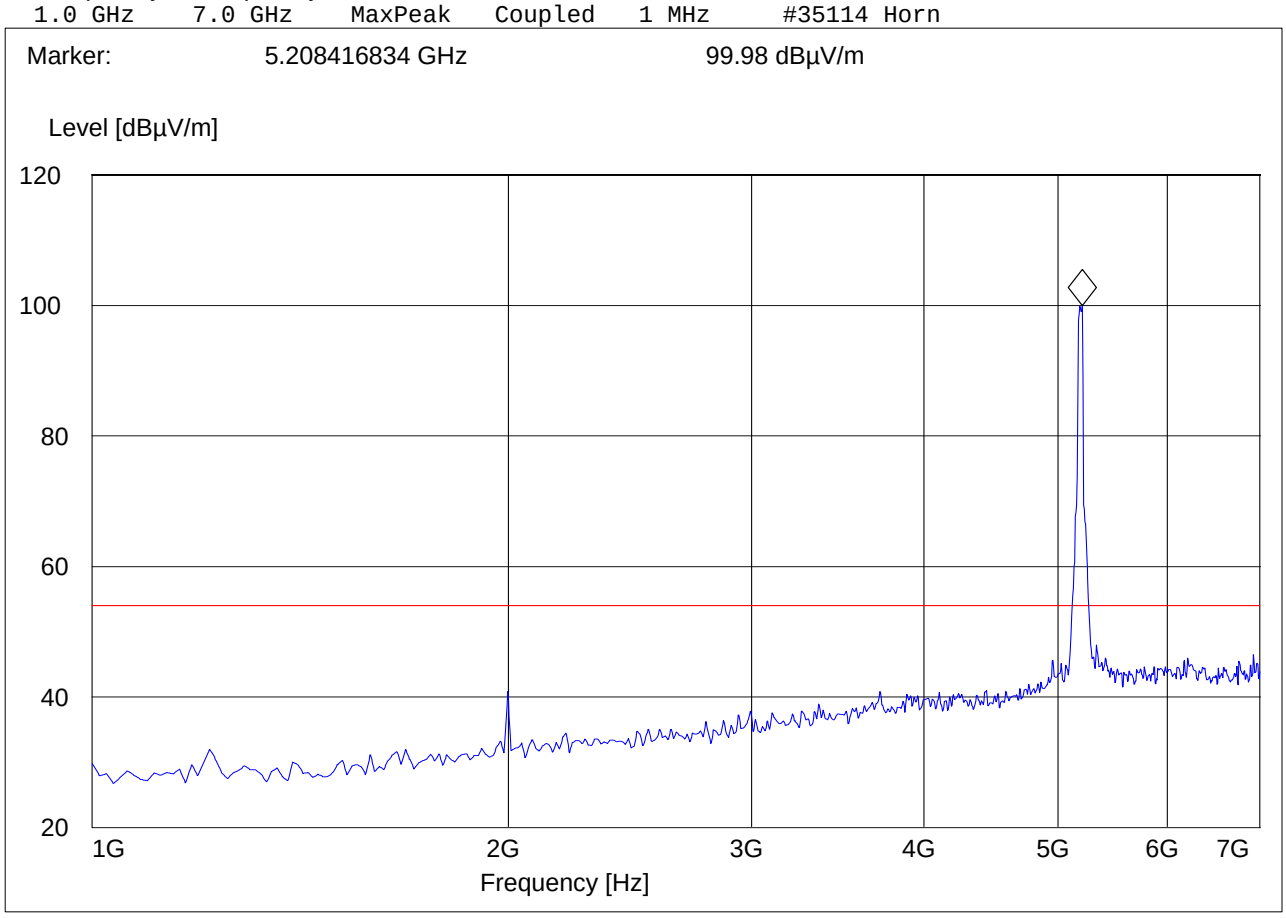
1-7GHz (5190MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5190MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



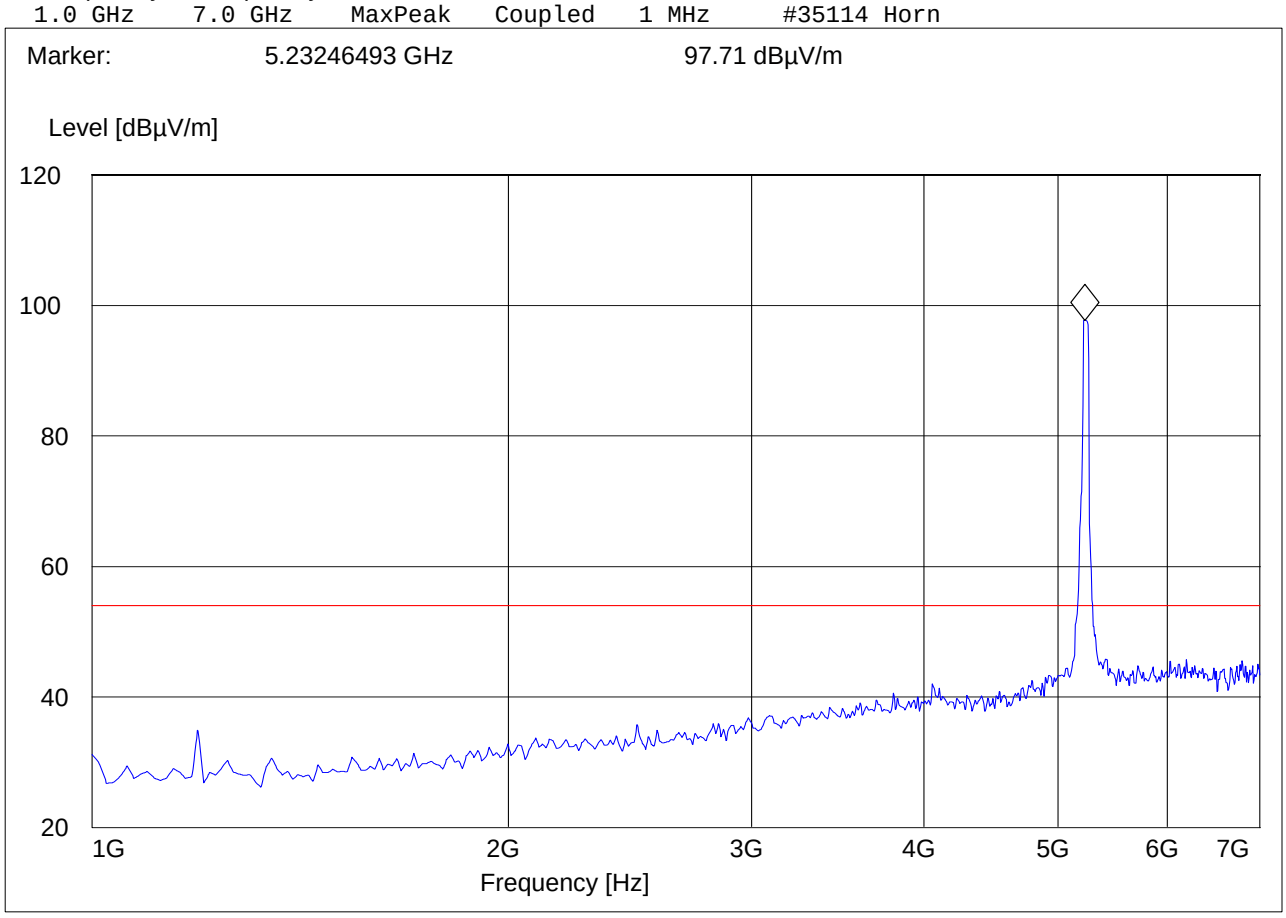
1-7GHz (5230MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5230MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



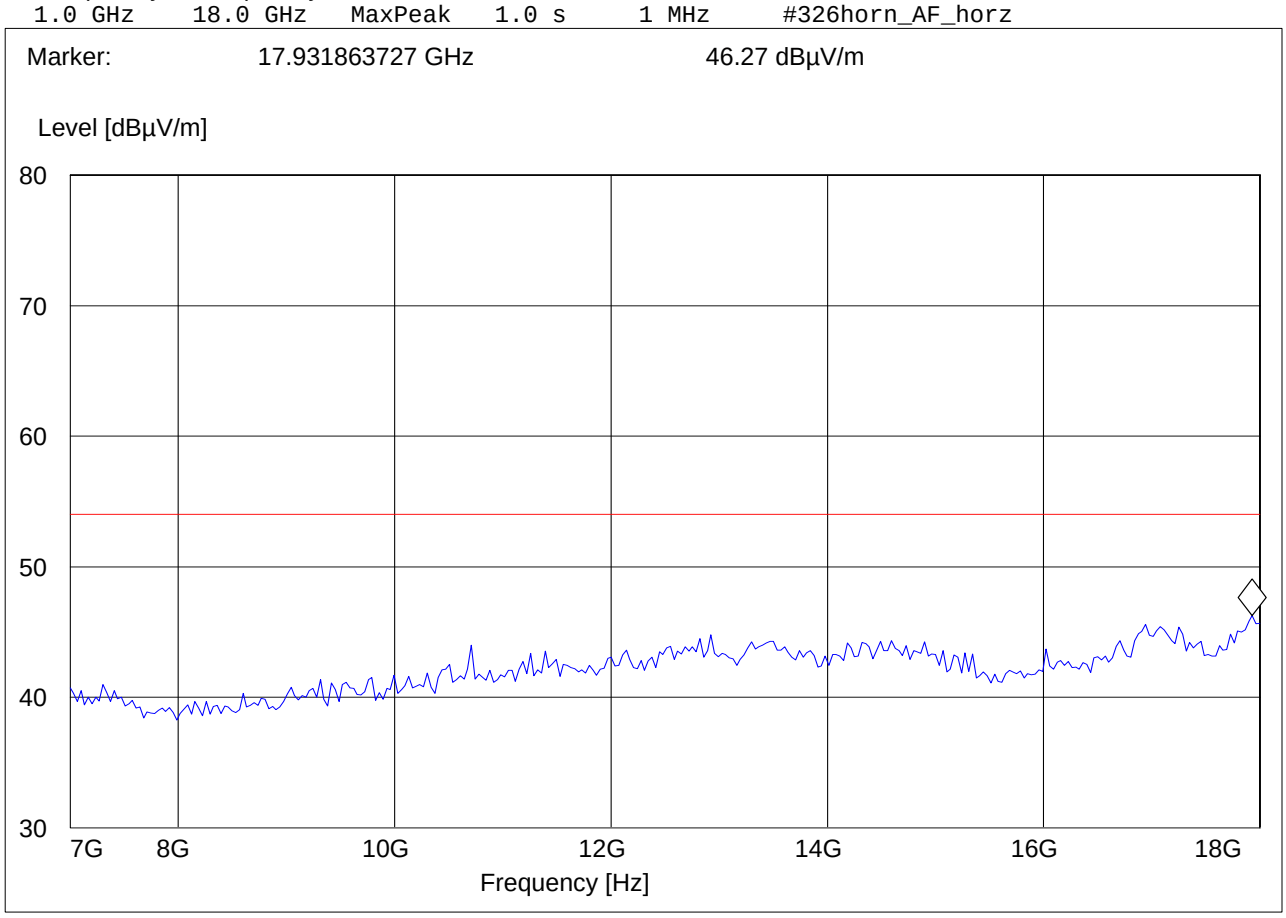
7-18GHz (5190MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5190MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



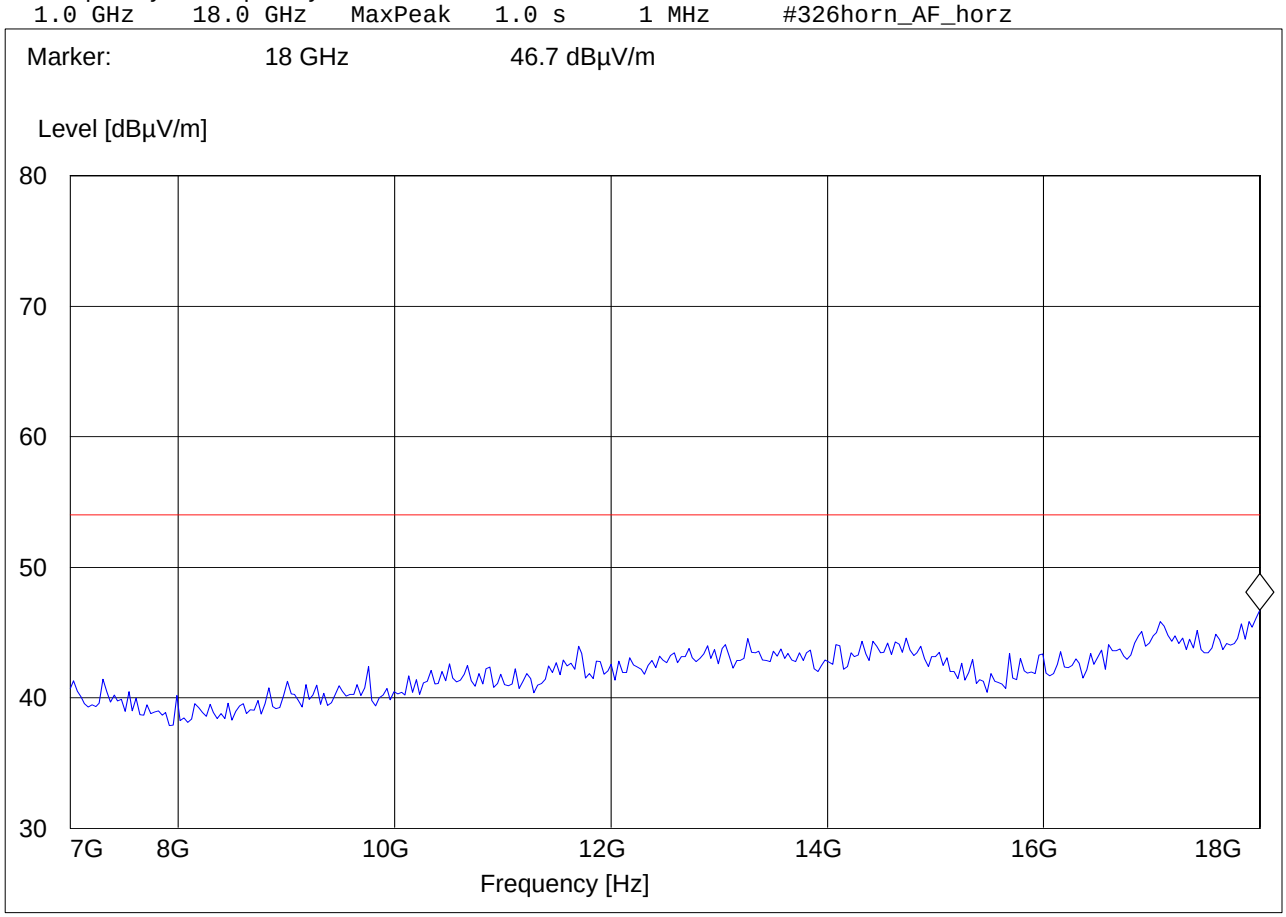
7-18GHz (5230MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5230MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



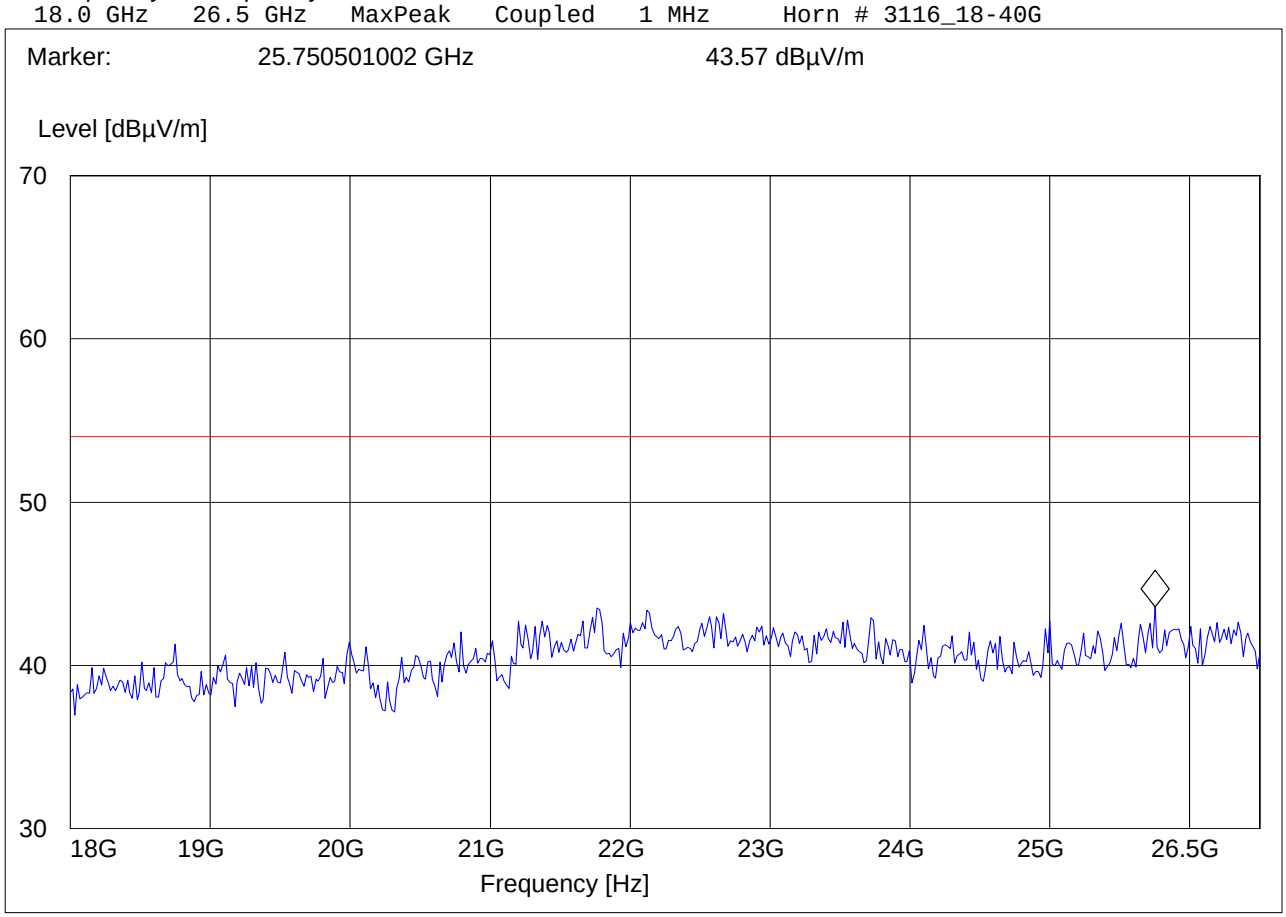
18-26.5GHz (5190MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5190MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



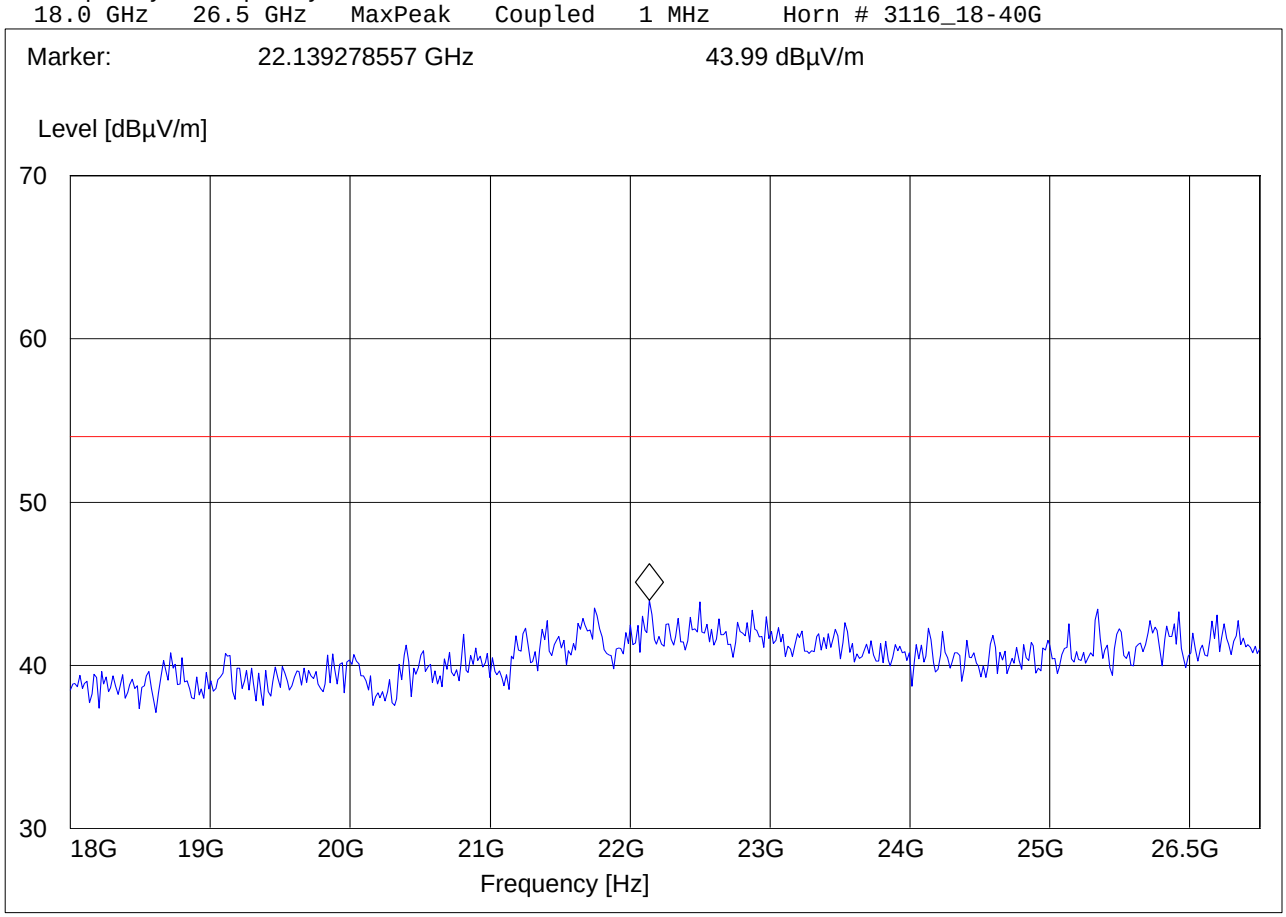
18-26.5GHz (5230MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5230MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



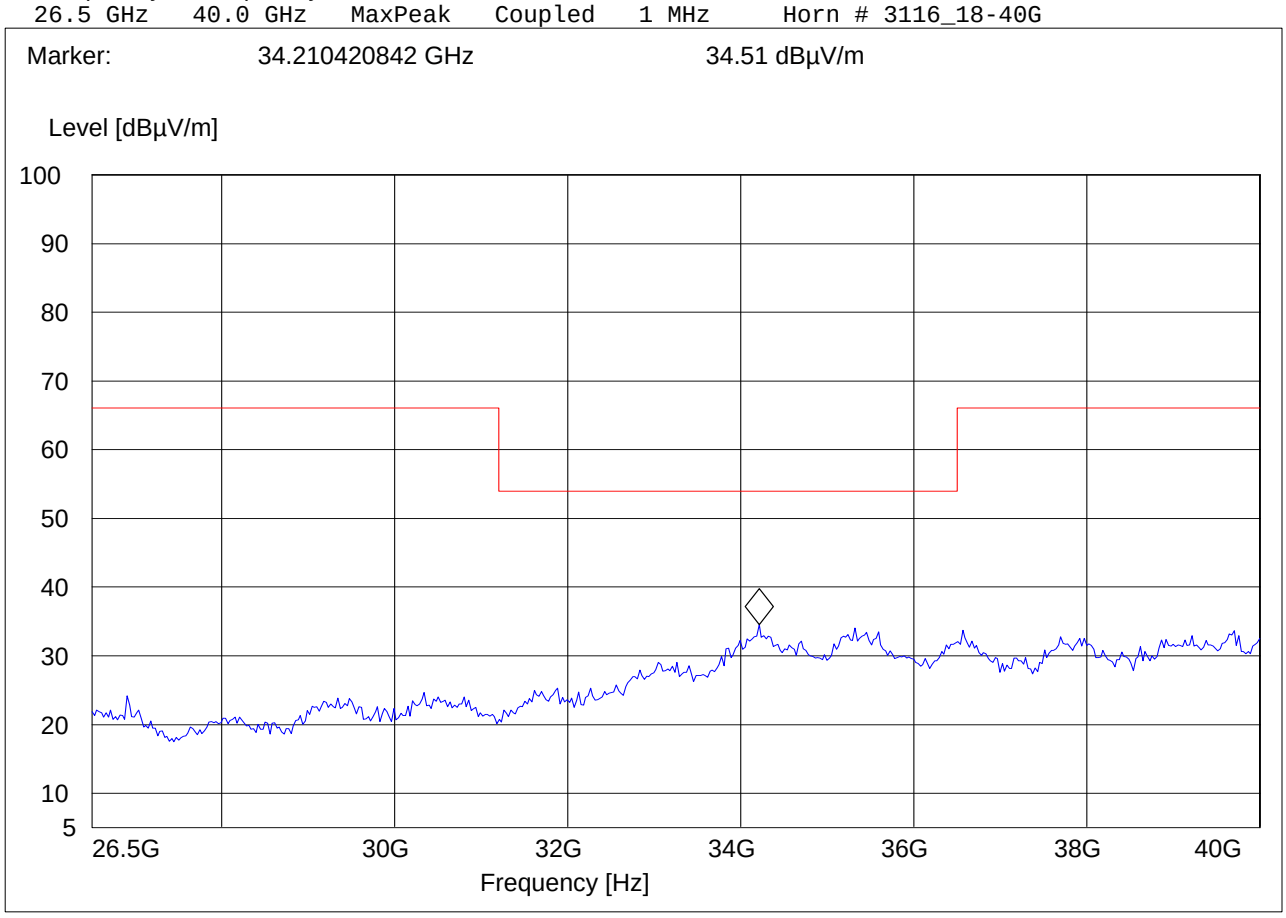
26.5-40GHz

Note: This plot is valid for low, and high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5190MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.5 **Sub-band 2 802.11a MODE**

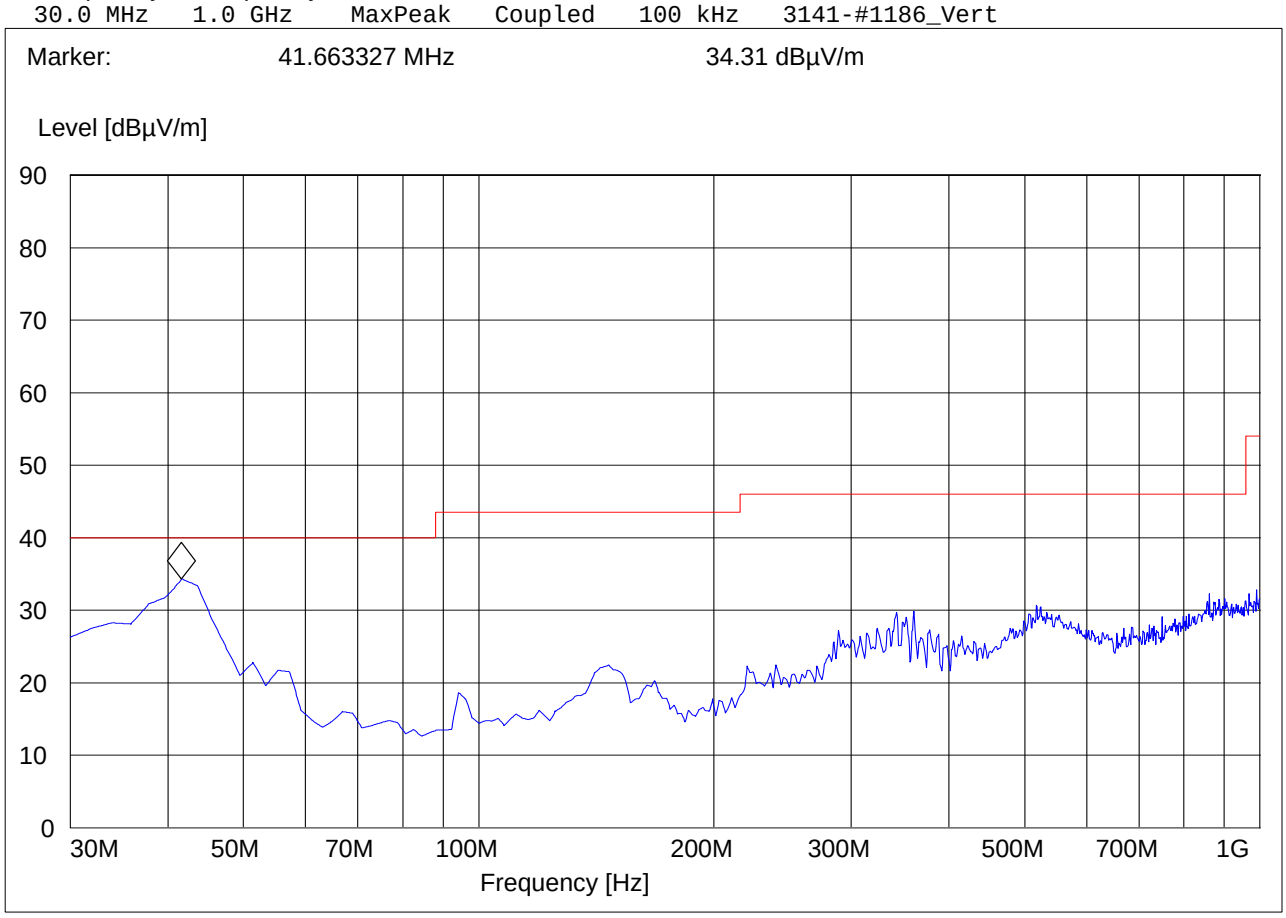
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5300MHz;
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



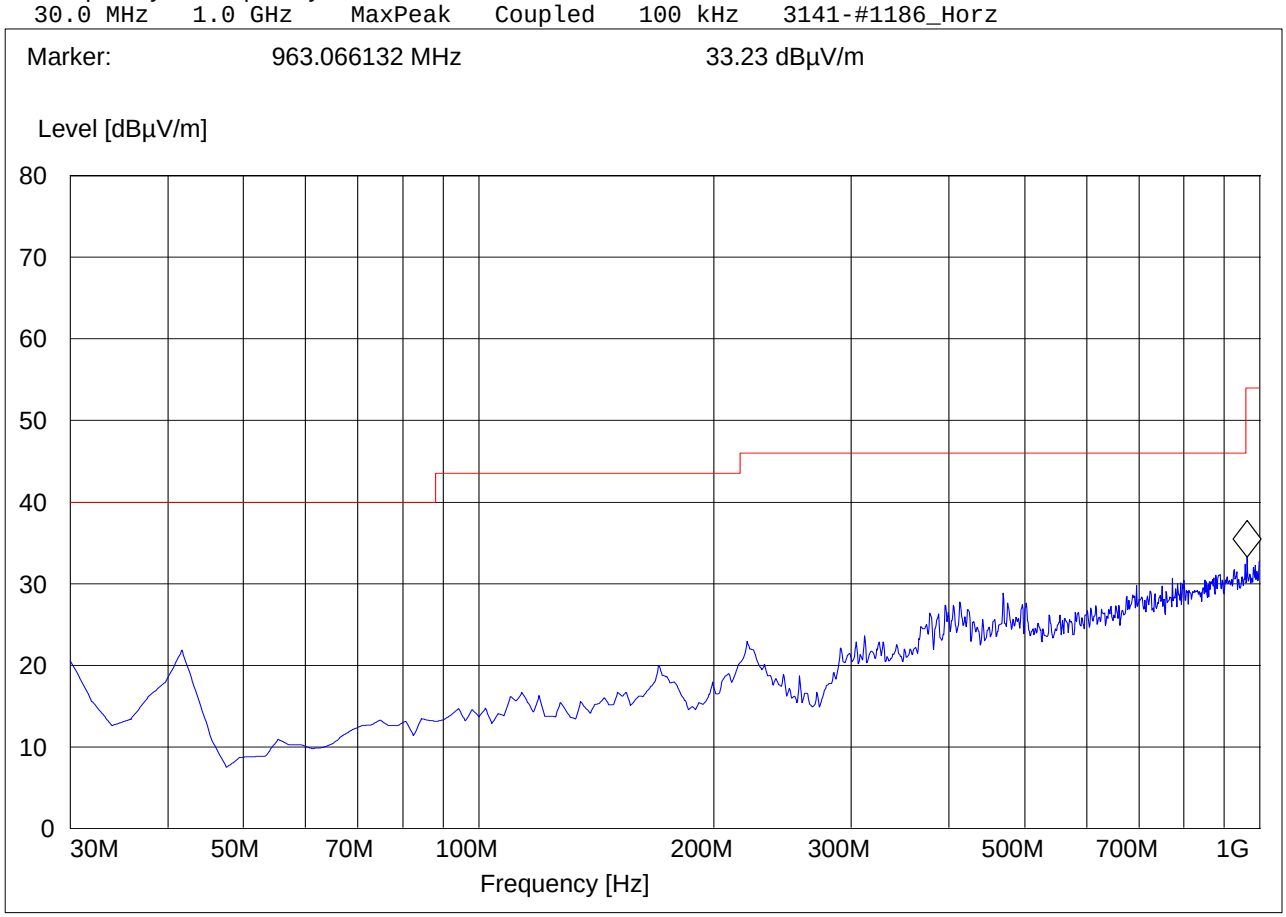
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5300MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



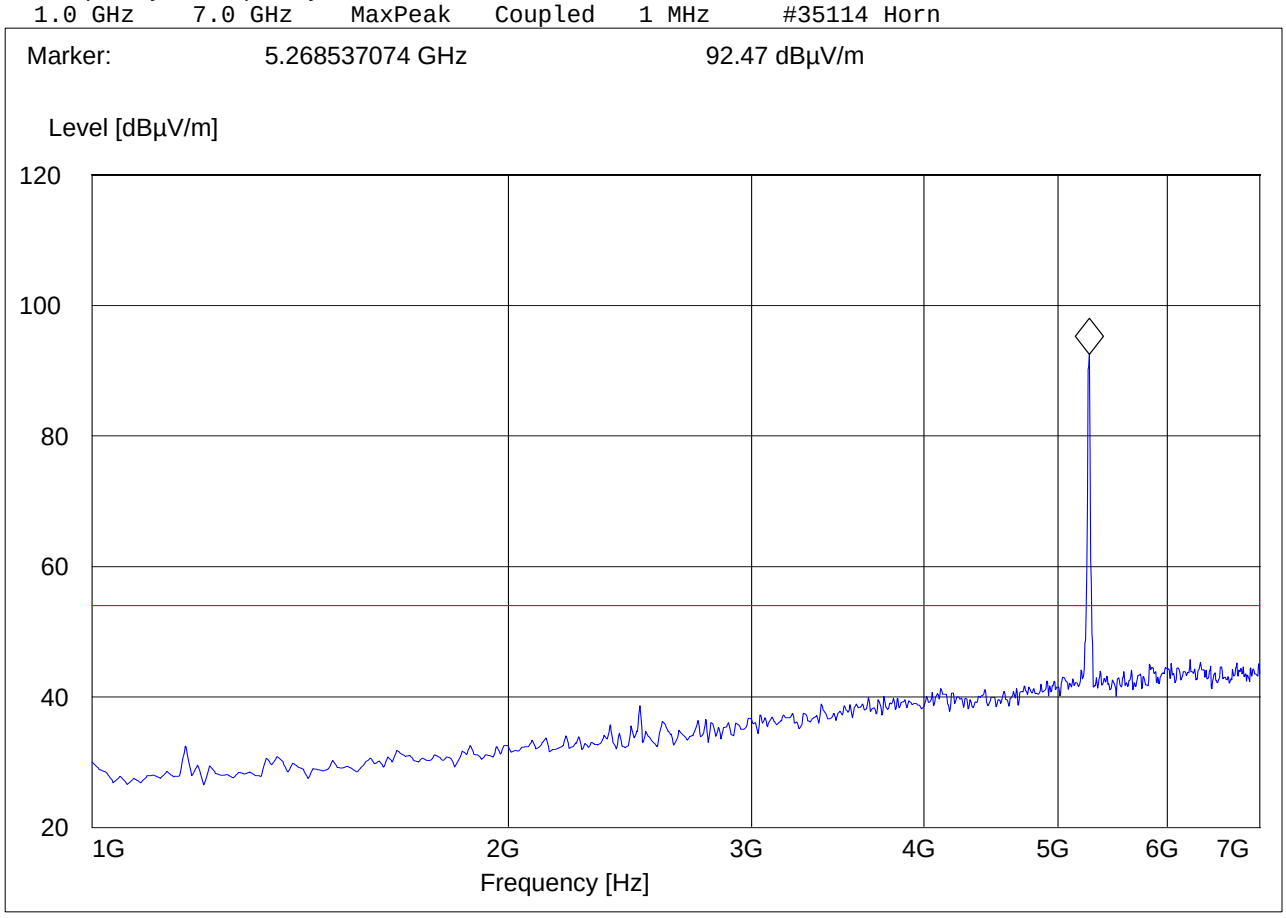
1-7GHz (5260MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5260MHz;
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



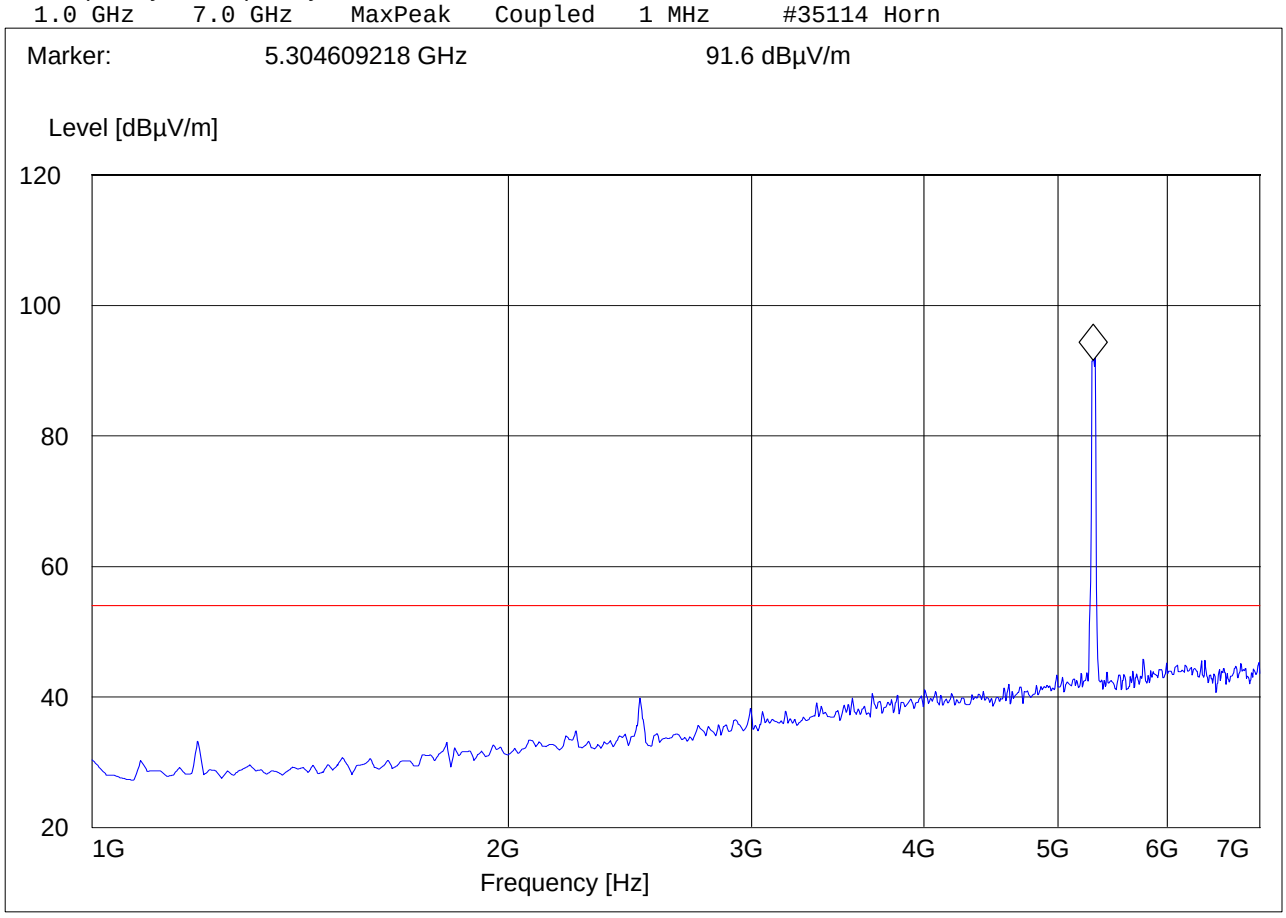
1-7GHz (5300MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5300MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



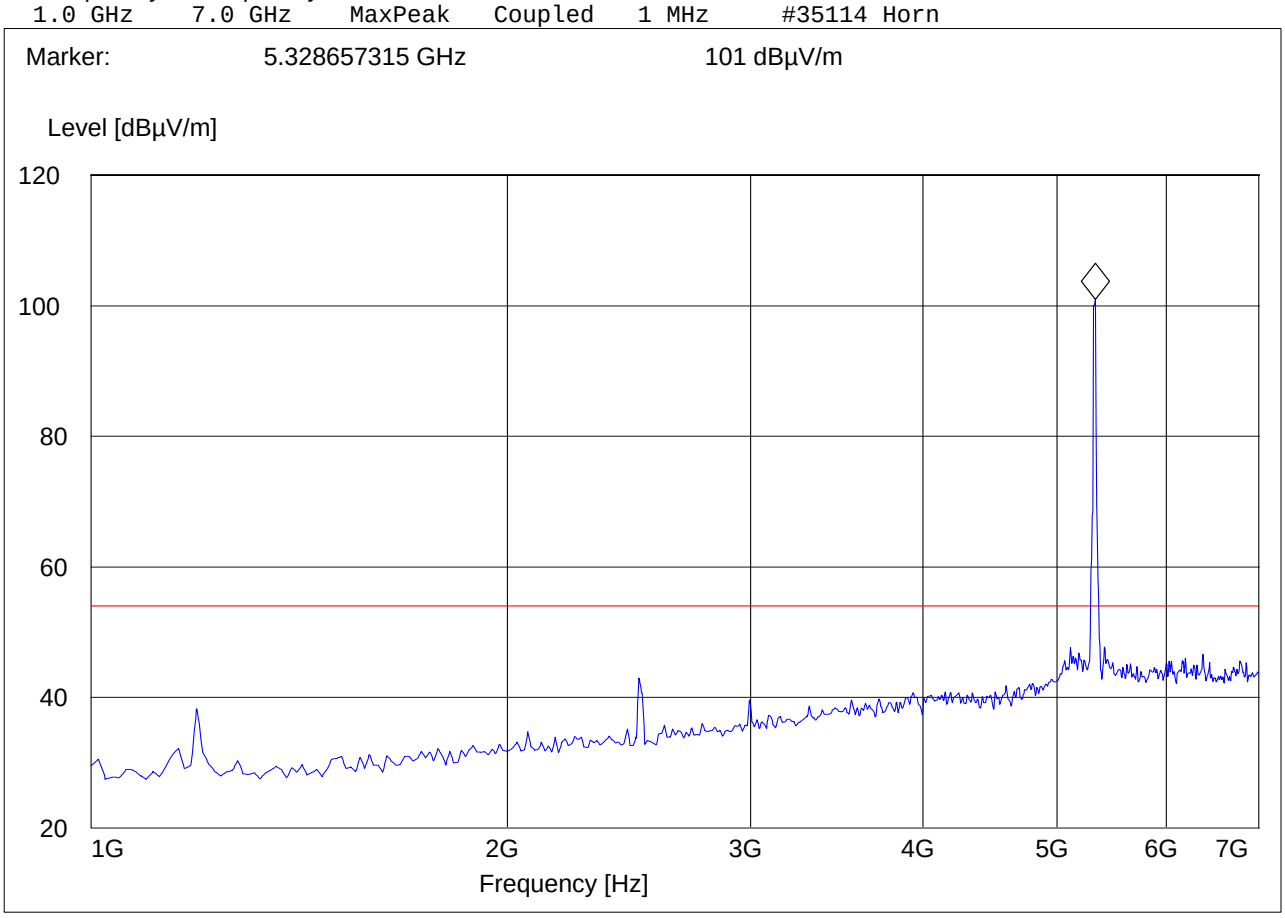
1-7GHz (5320MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



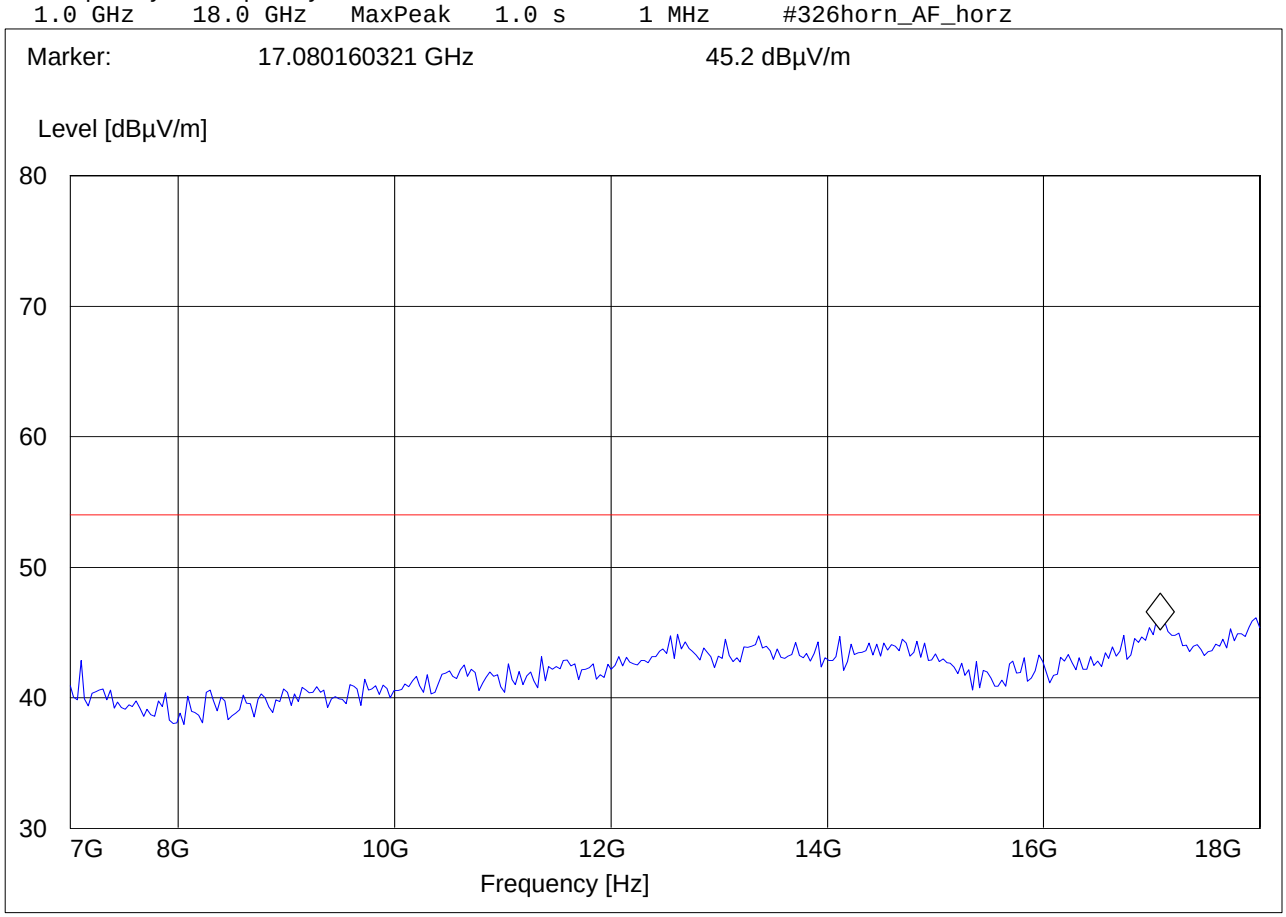
7-18GHz (5260MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5260MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



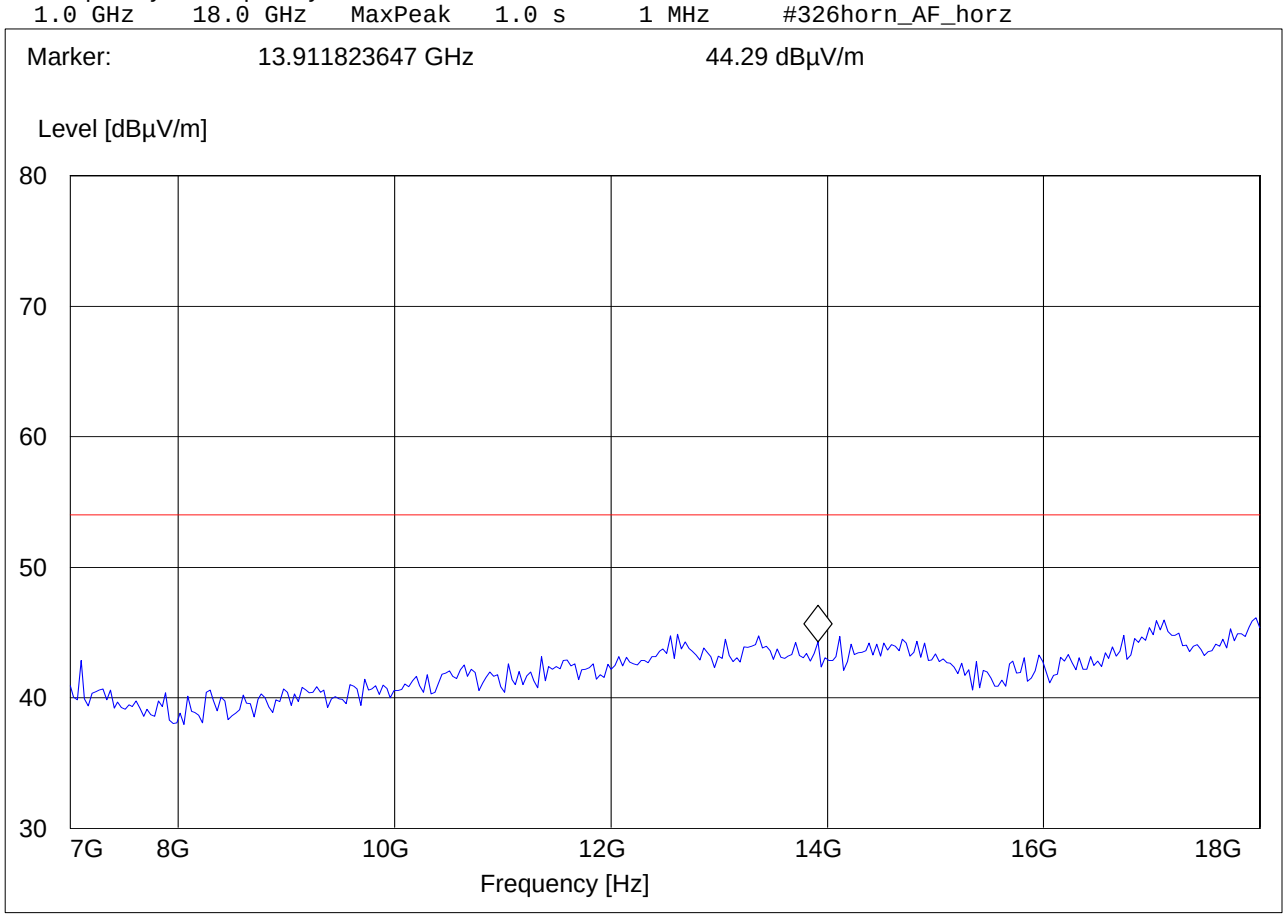
7-18GHz (5300MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5300MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



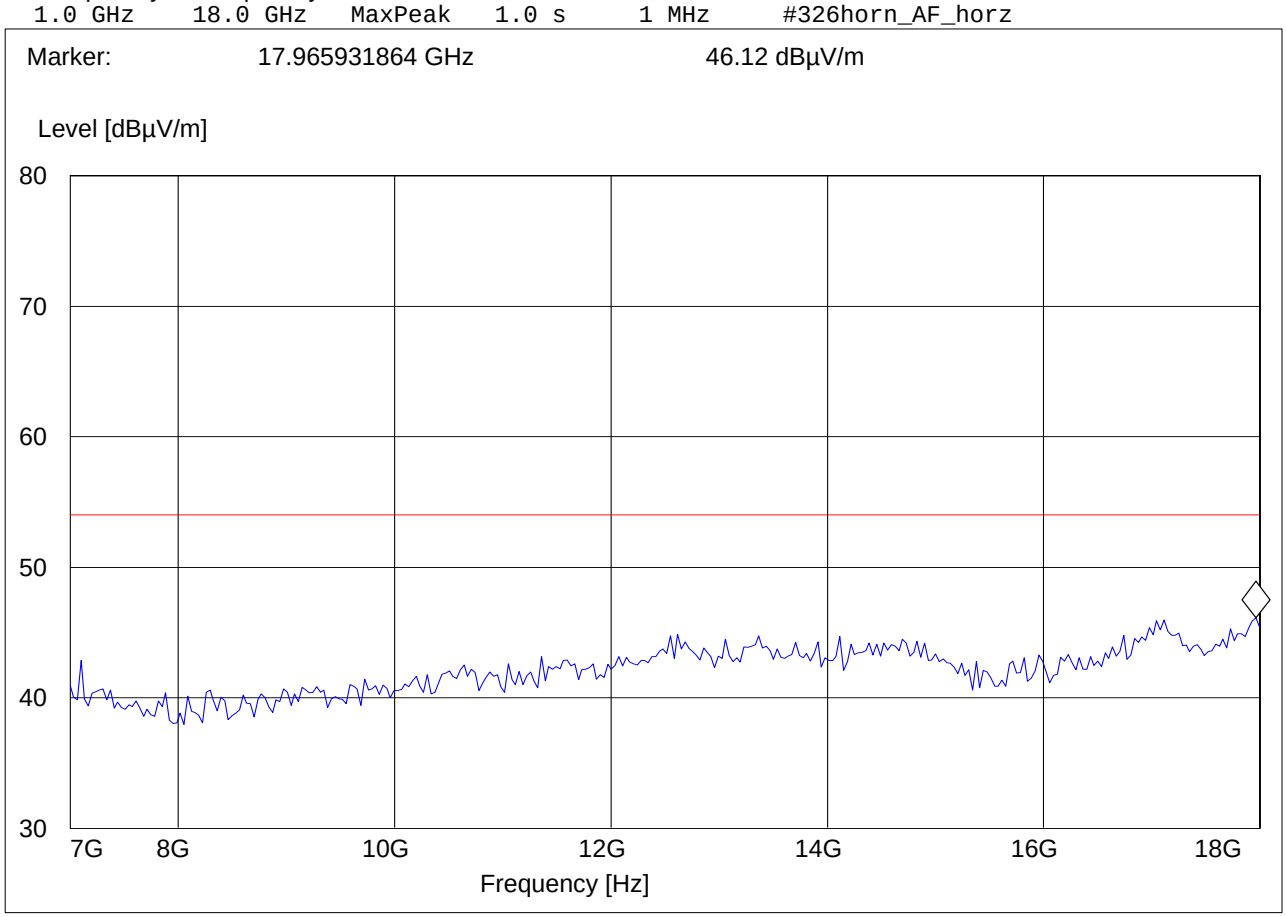
7-18GHz (5320MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5320MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



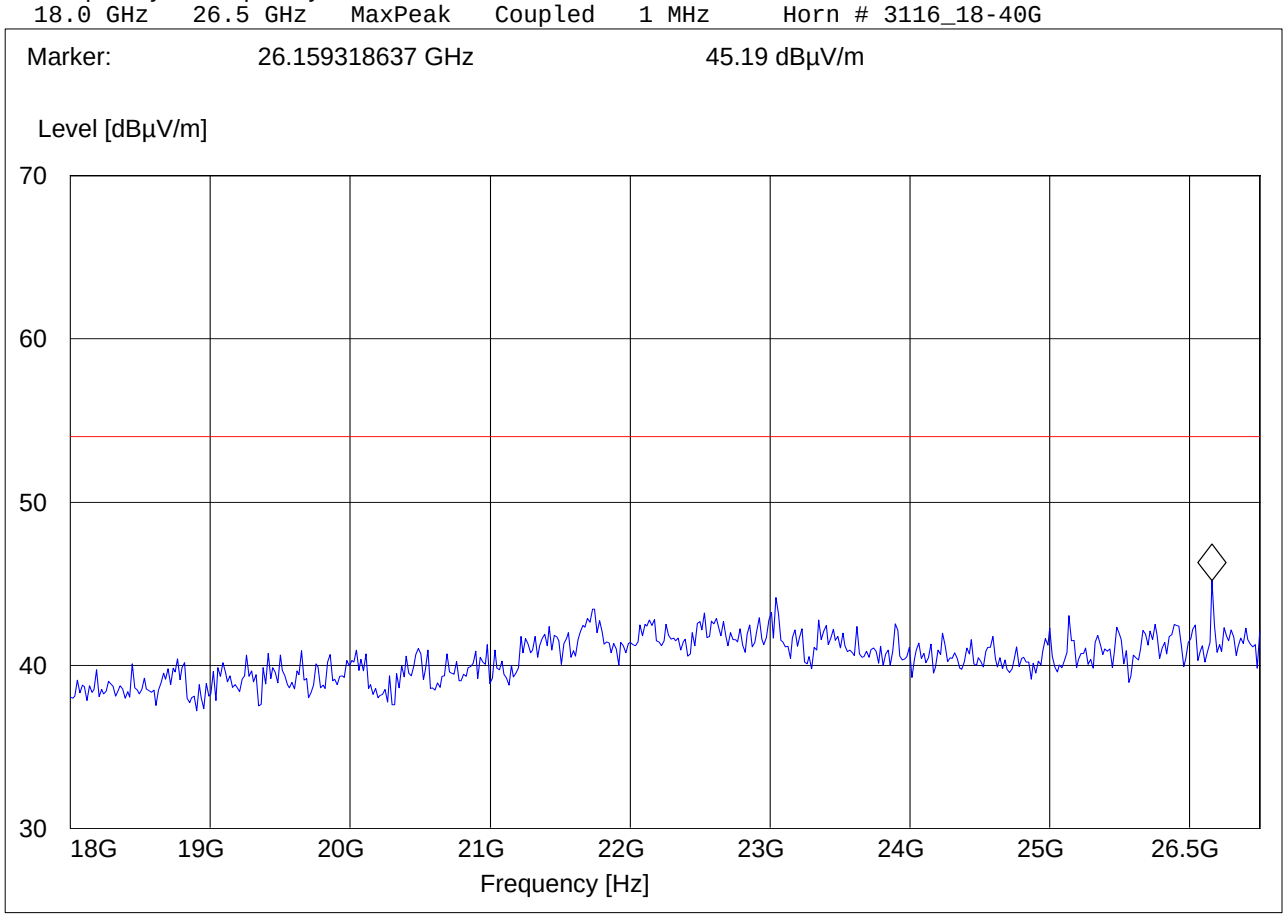
18-26.5GHz (5260MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5260MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



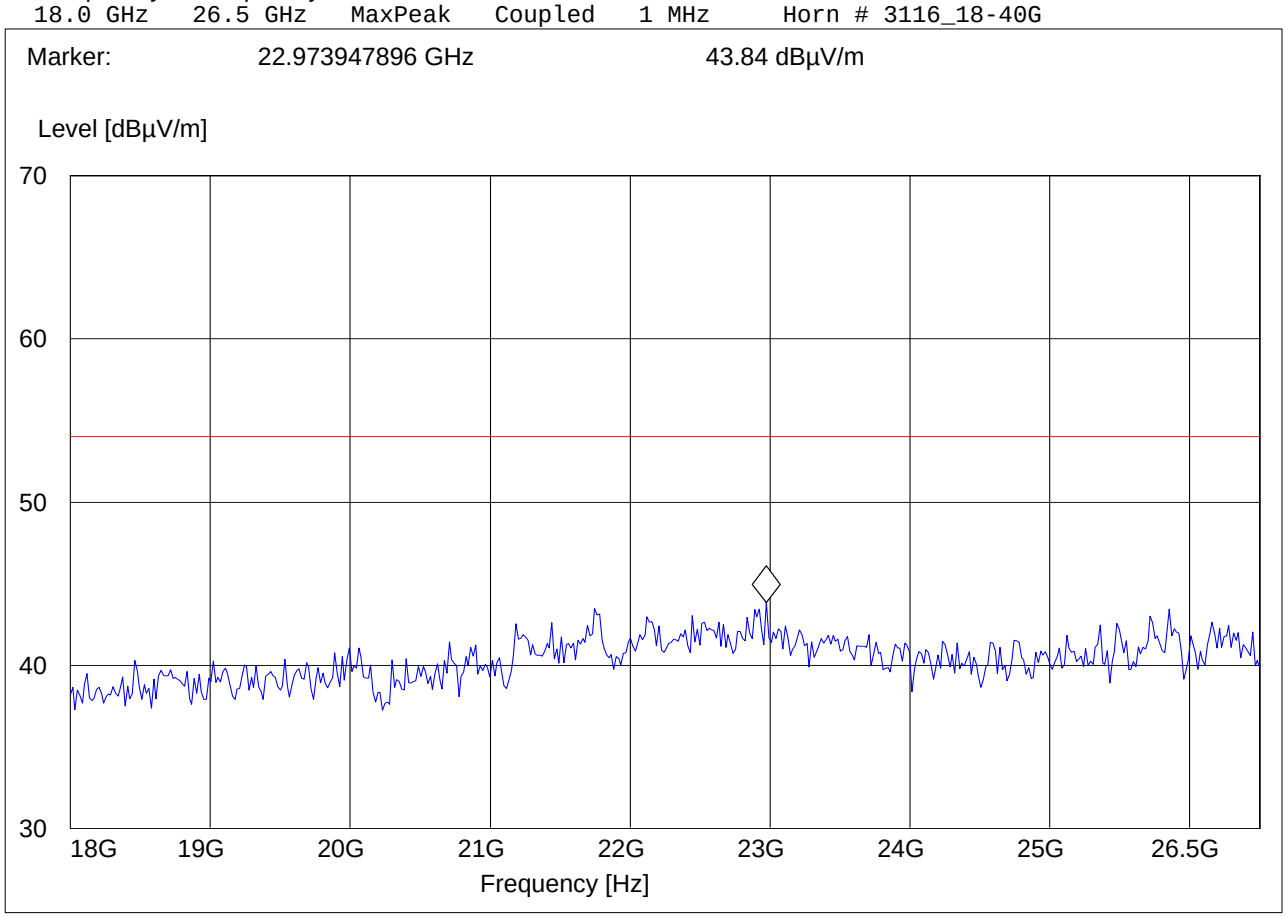
18-26.5GHz (5300MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5300MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



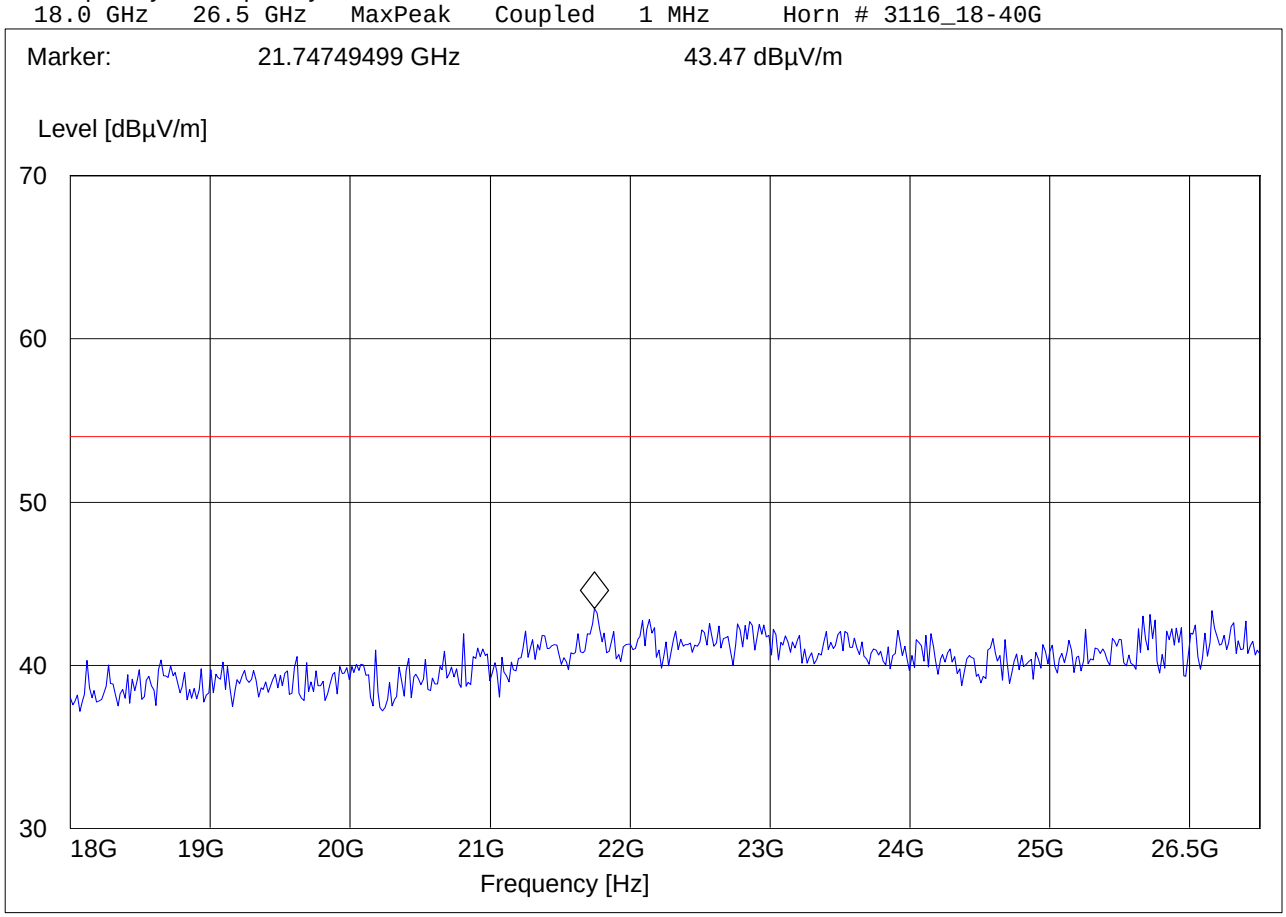
18-26.5GHz (5320MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



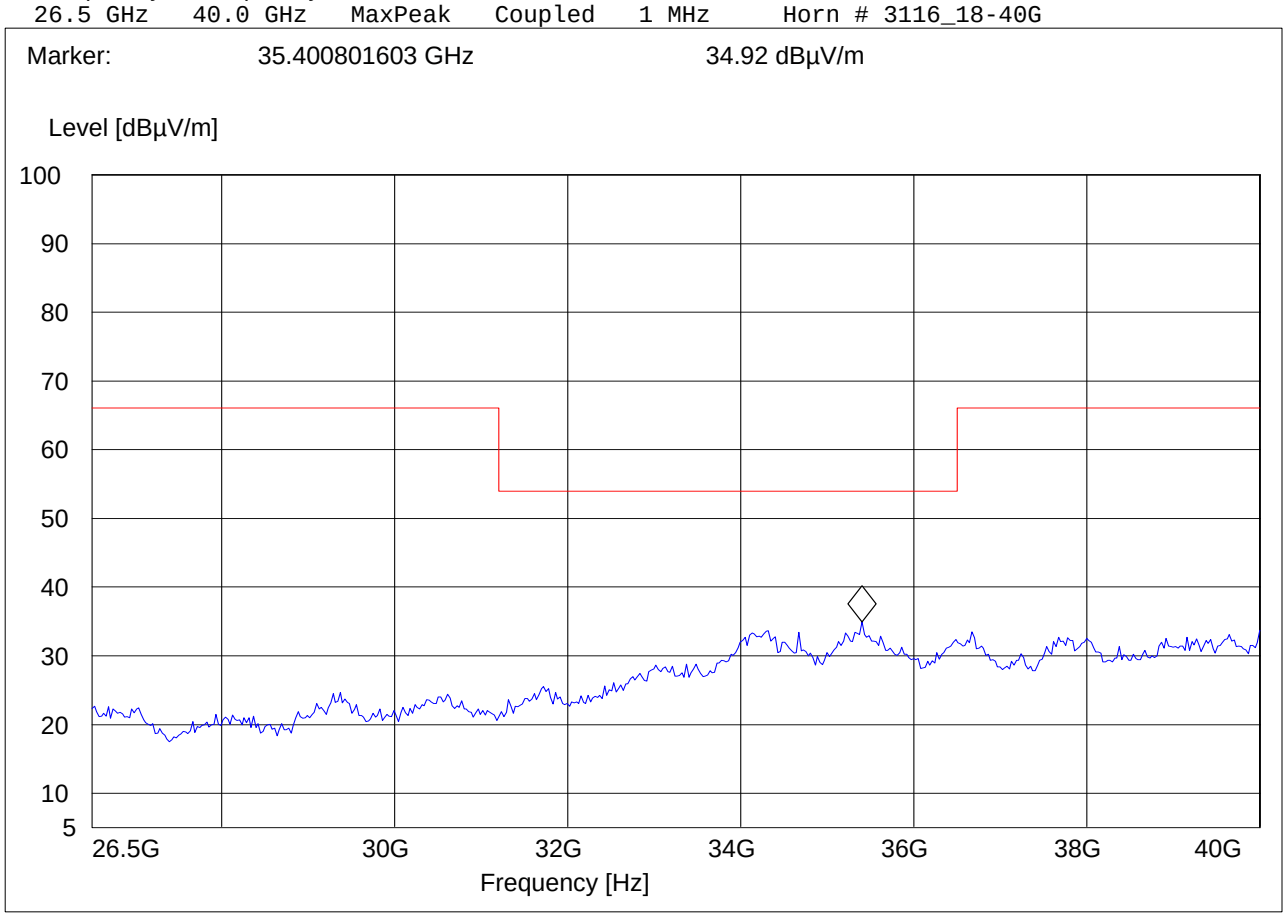
26.5-40GHz

Note: This plot is valid for low, mid, and high channels (worst-case plot).
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5300MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.6 **Sub-band 2 802.11n HT20 MODE**

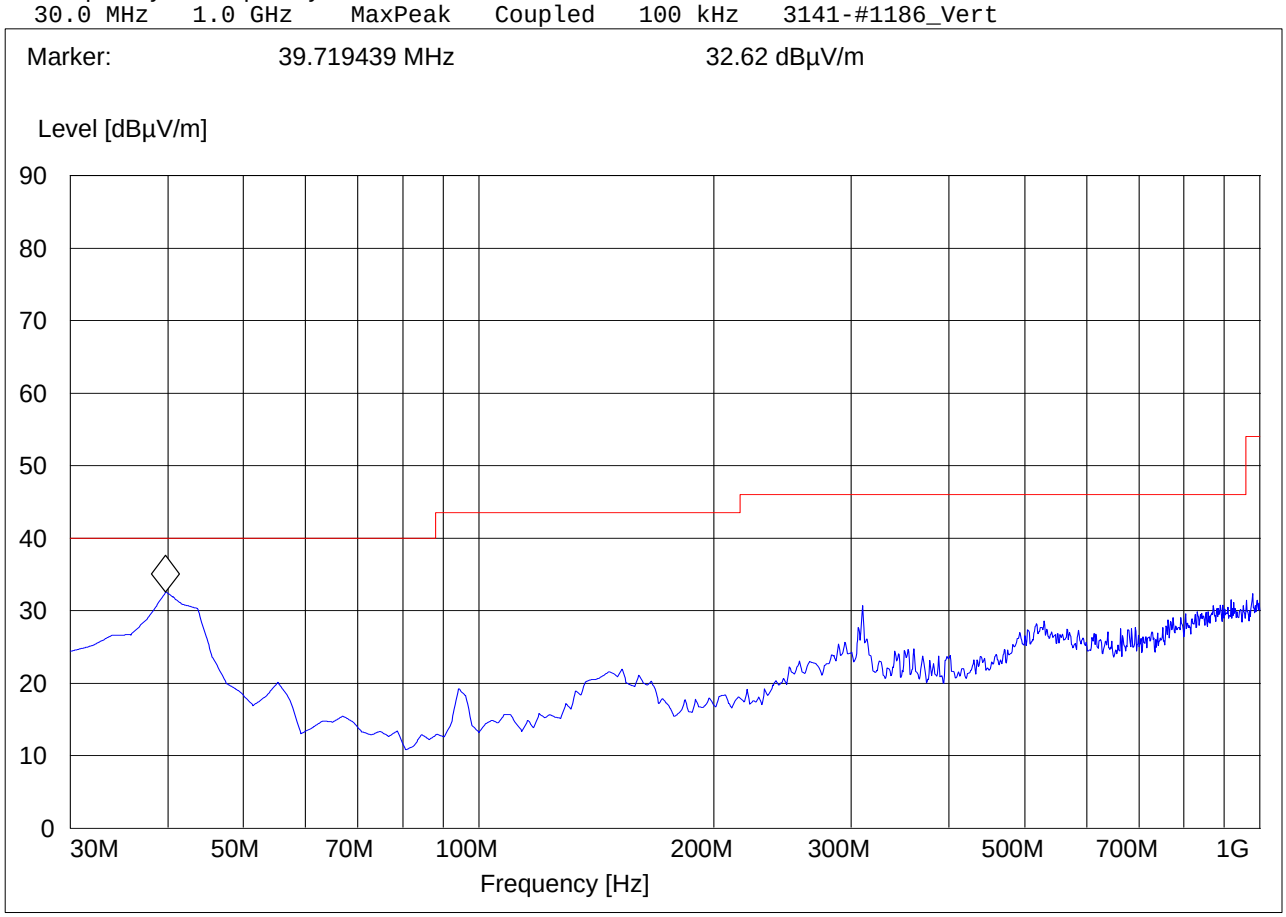
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5300MHz
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



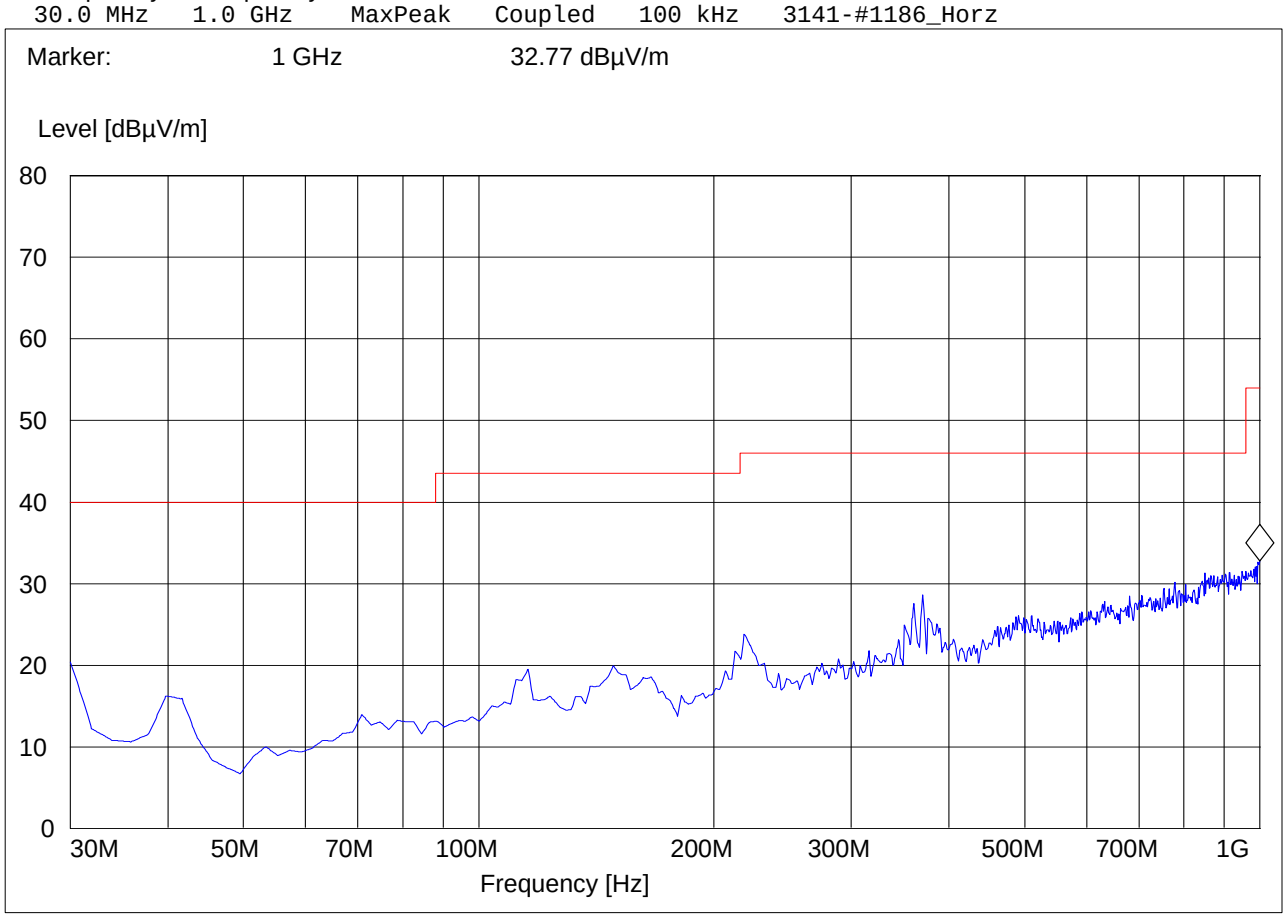
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5300MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



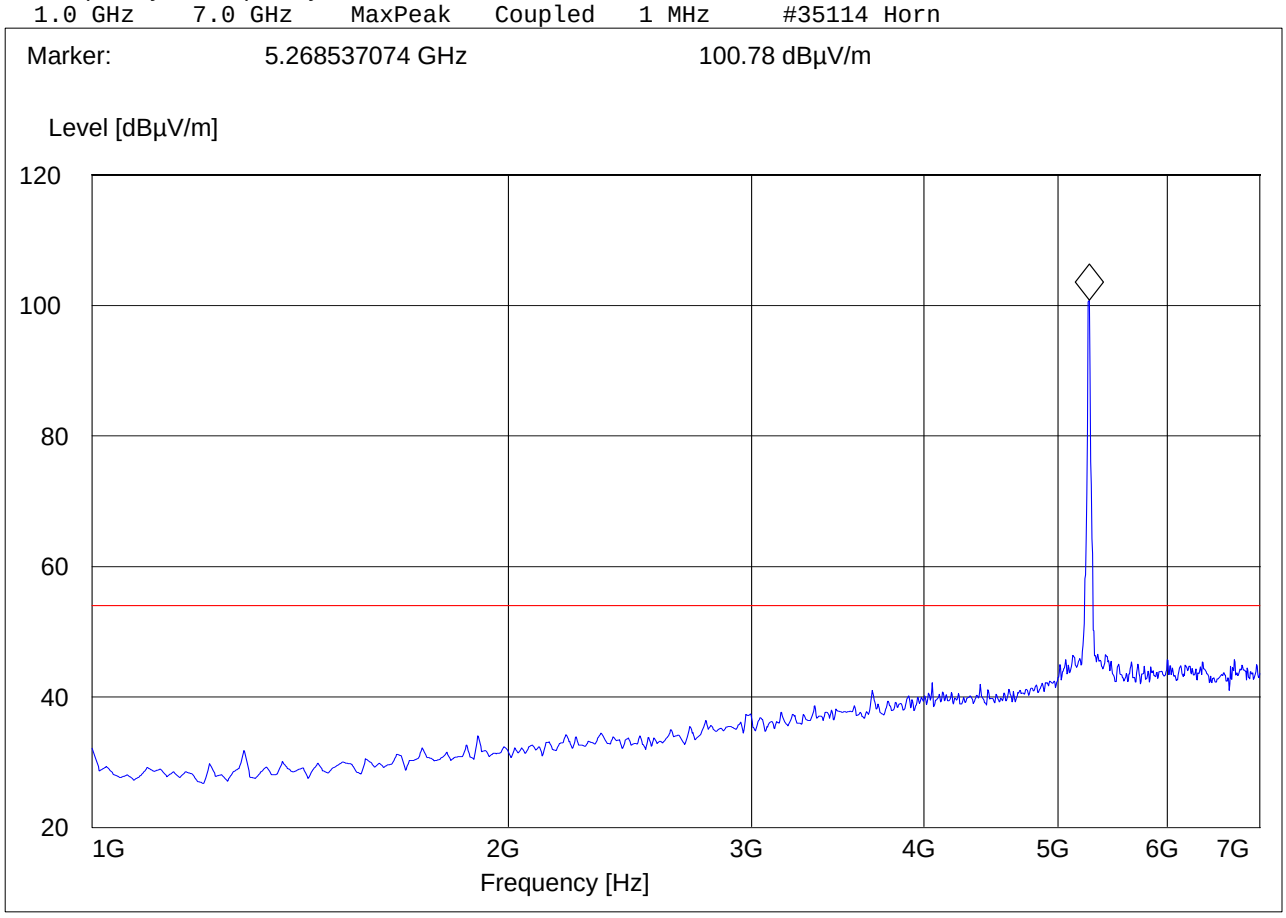
1-7GHz (5260MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5260MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



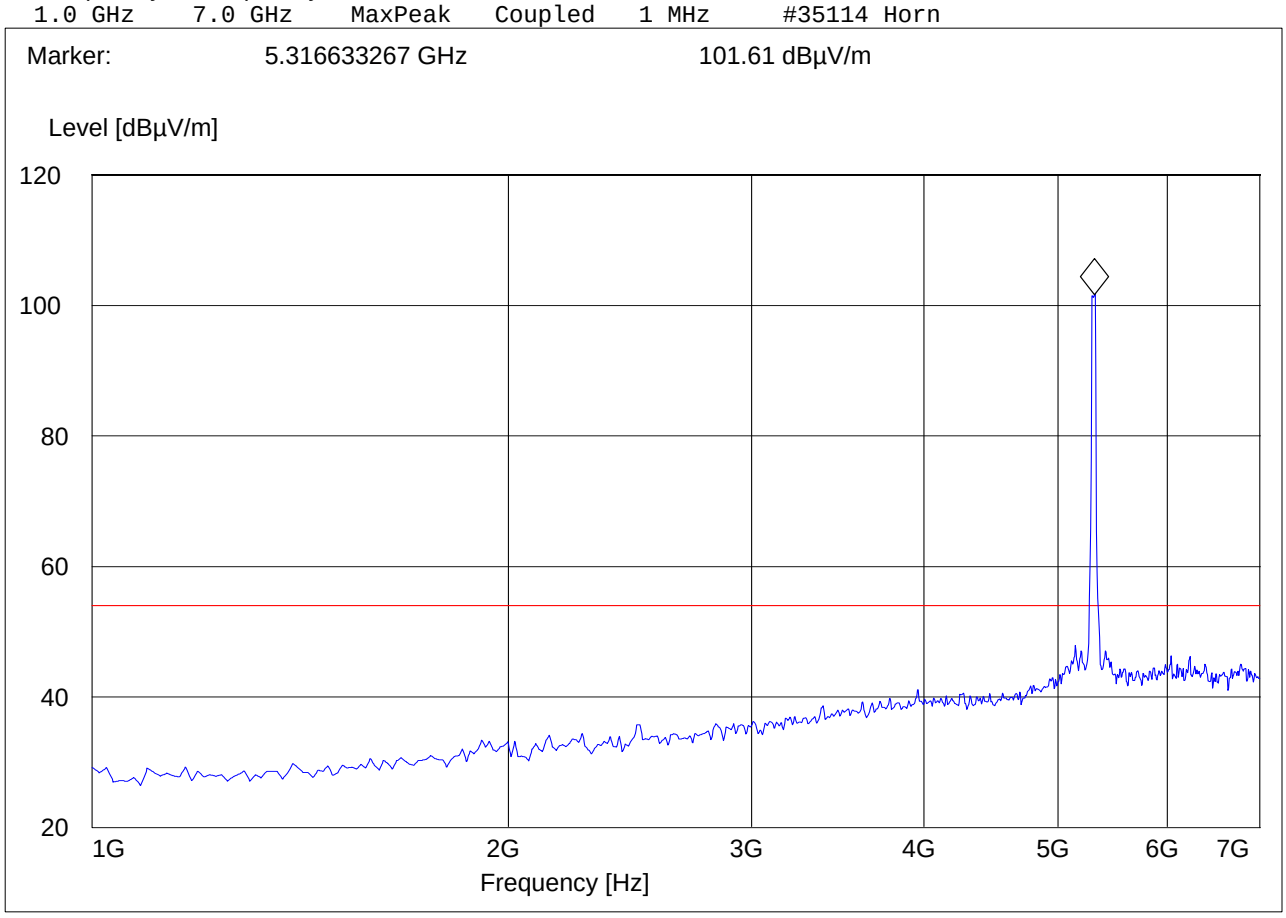
1-7GHz (5300MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5300MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



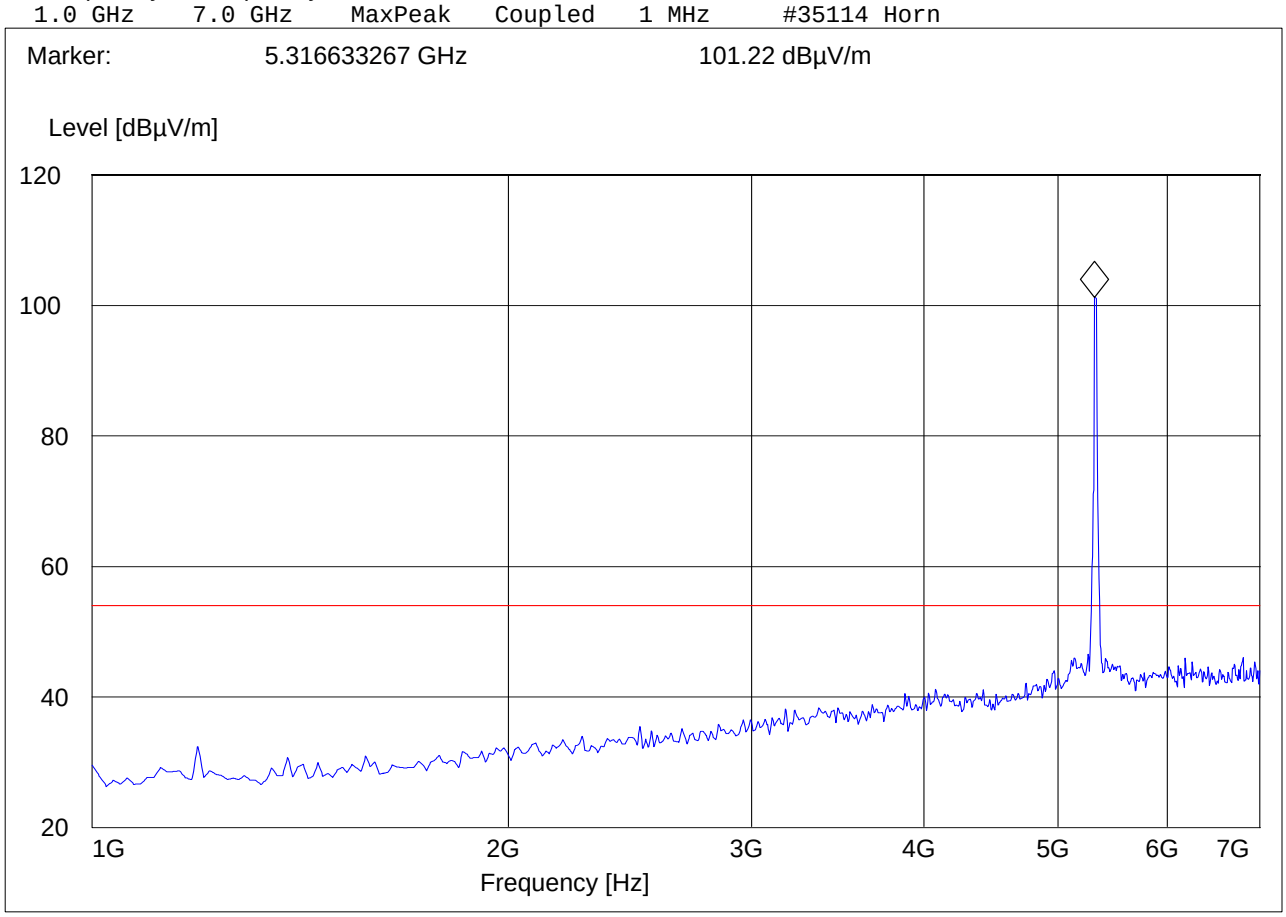
1-7GHz (5320MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



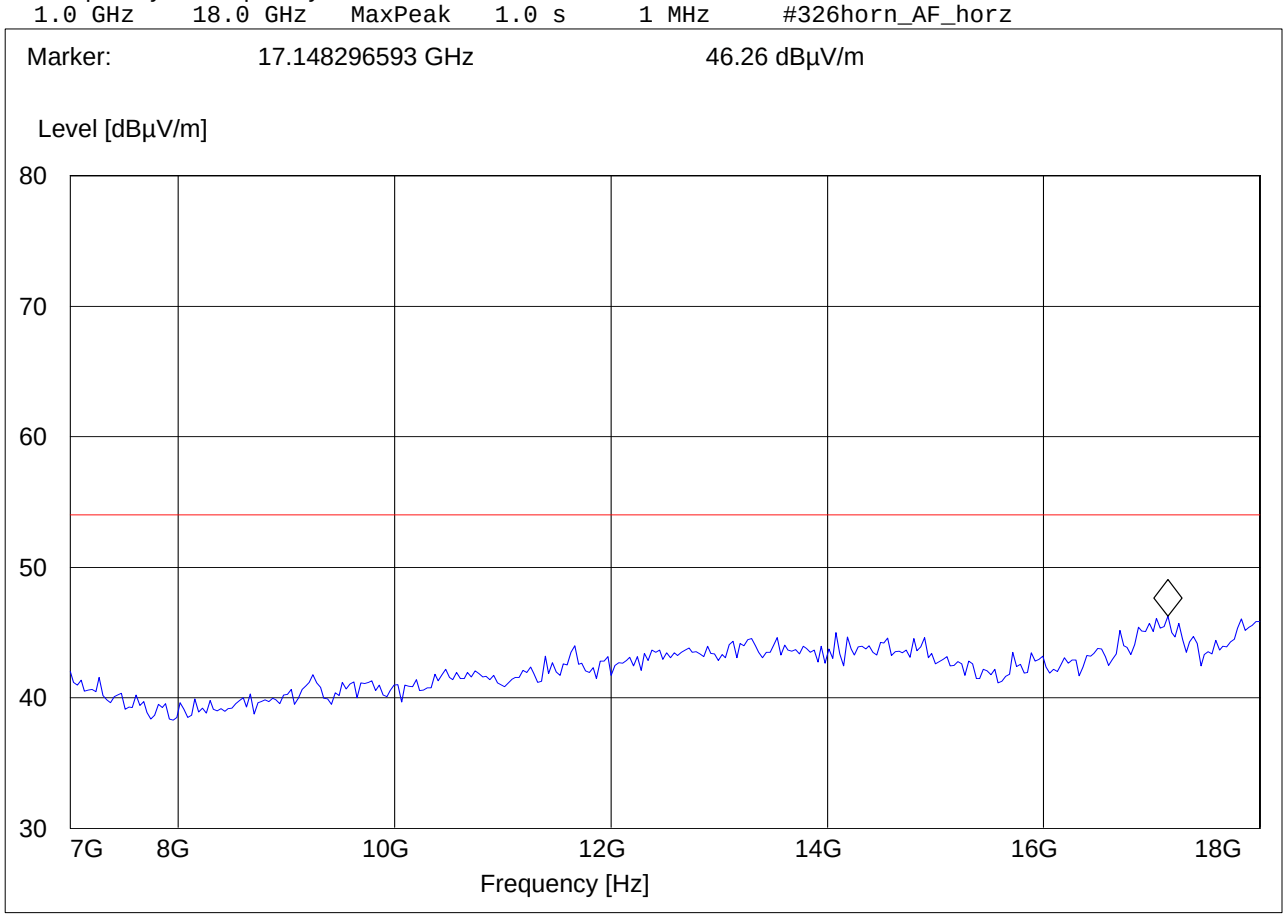
7-18GHz (5260MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5260MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



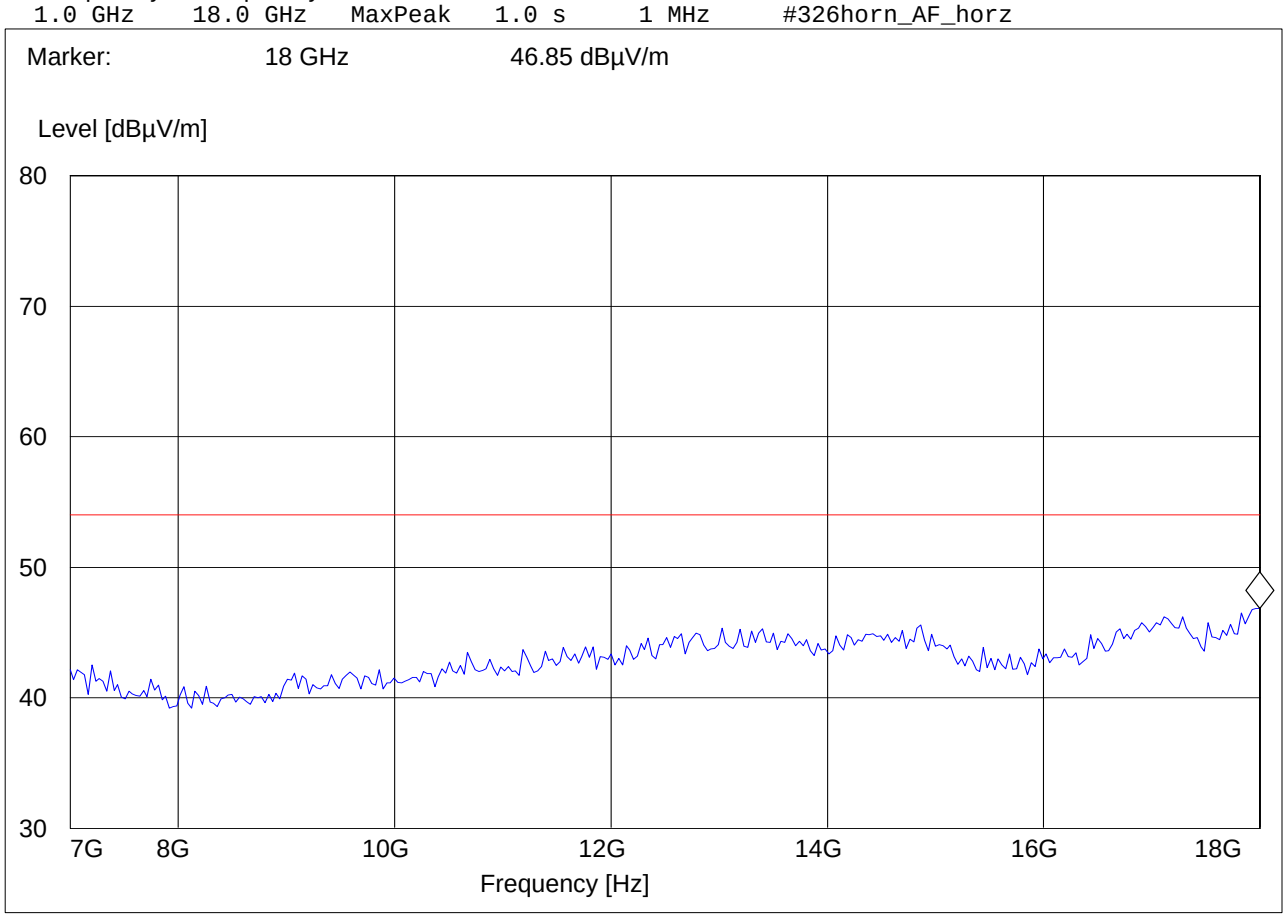
7-18GHz (5300MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5300MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



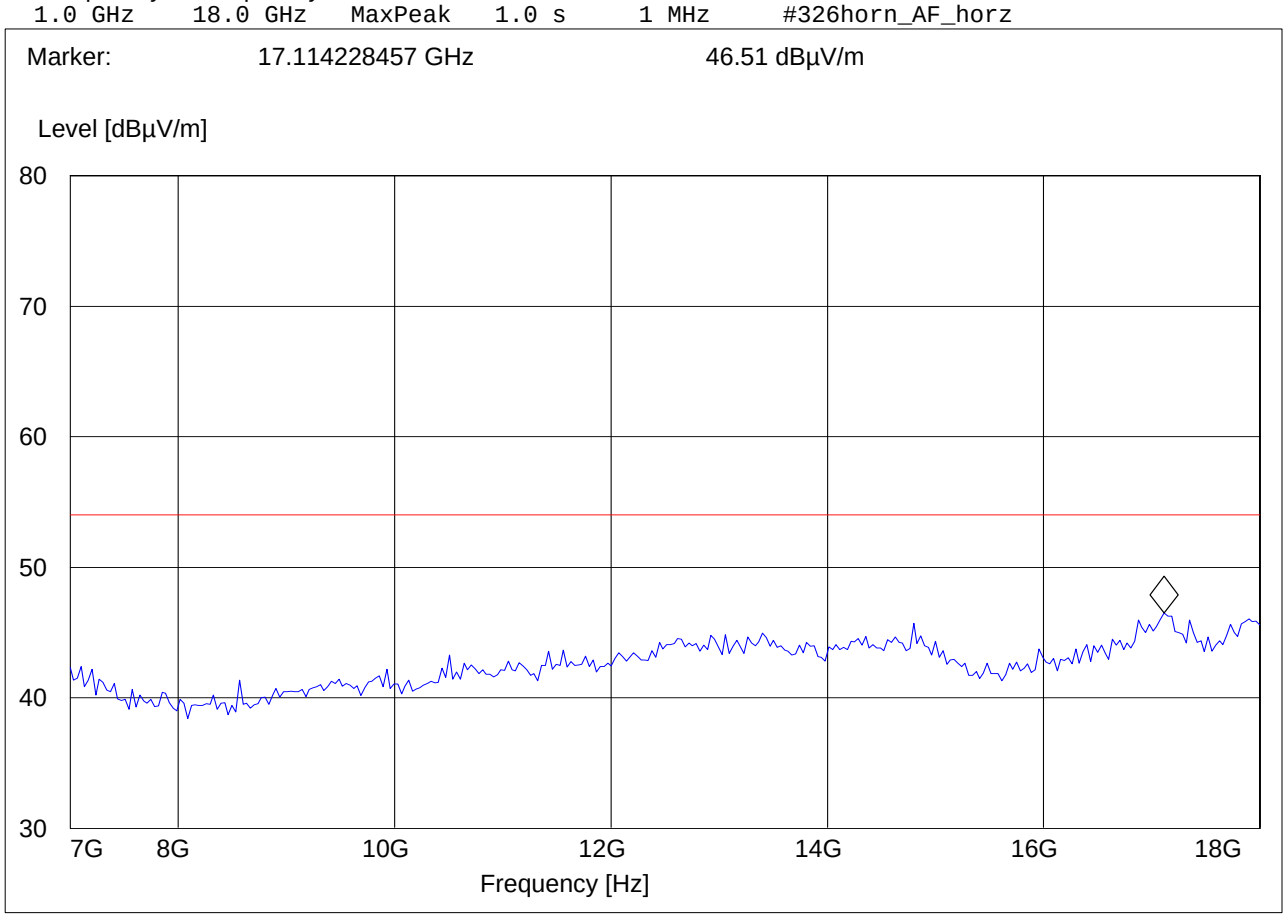
7-18GHz (5320MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5320MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



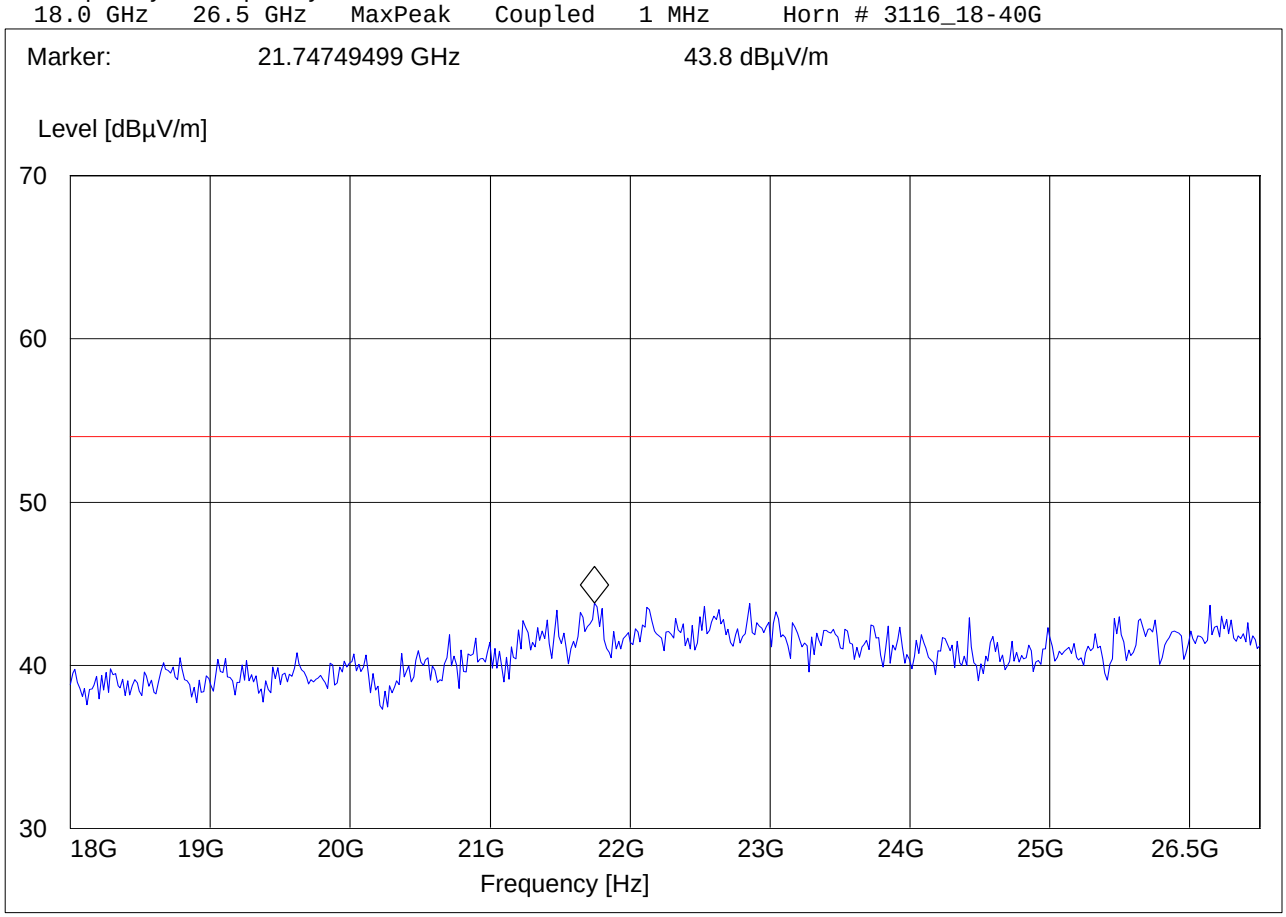
18-26.5GHz (5260MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5260MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



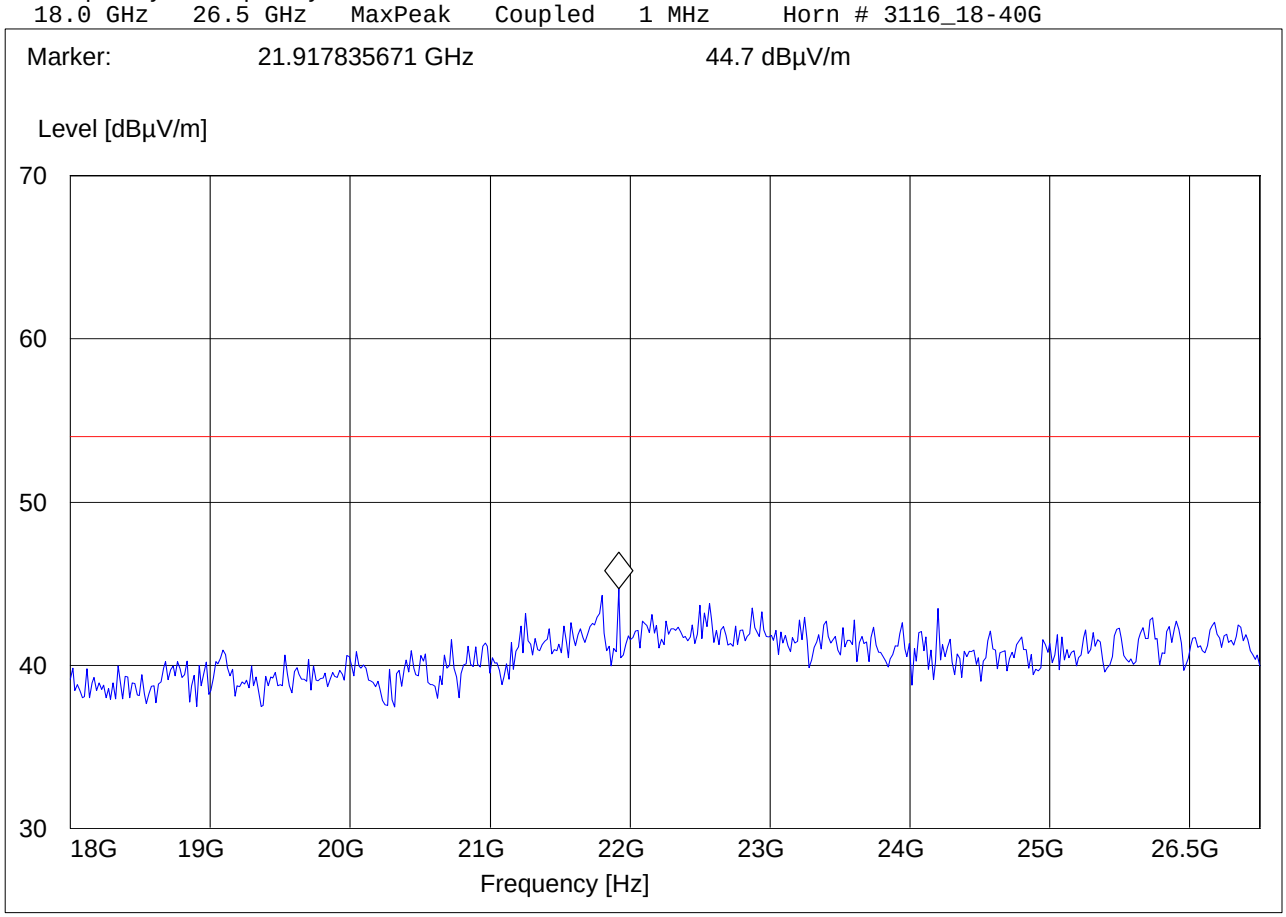
18-26.5GHz (5300MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5300MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



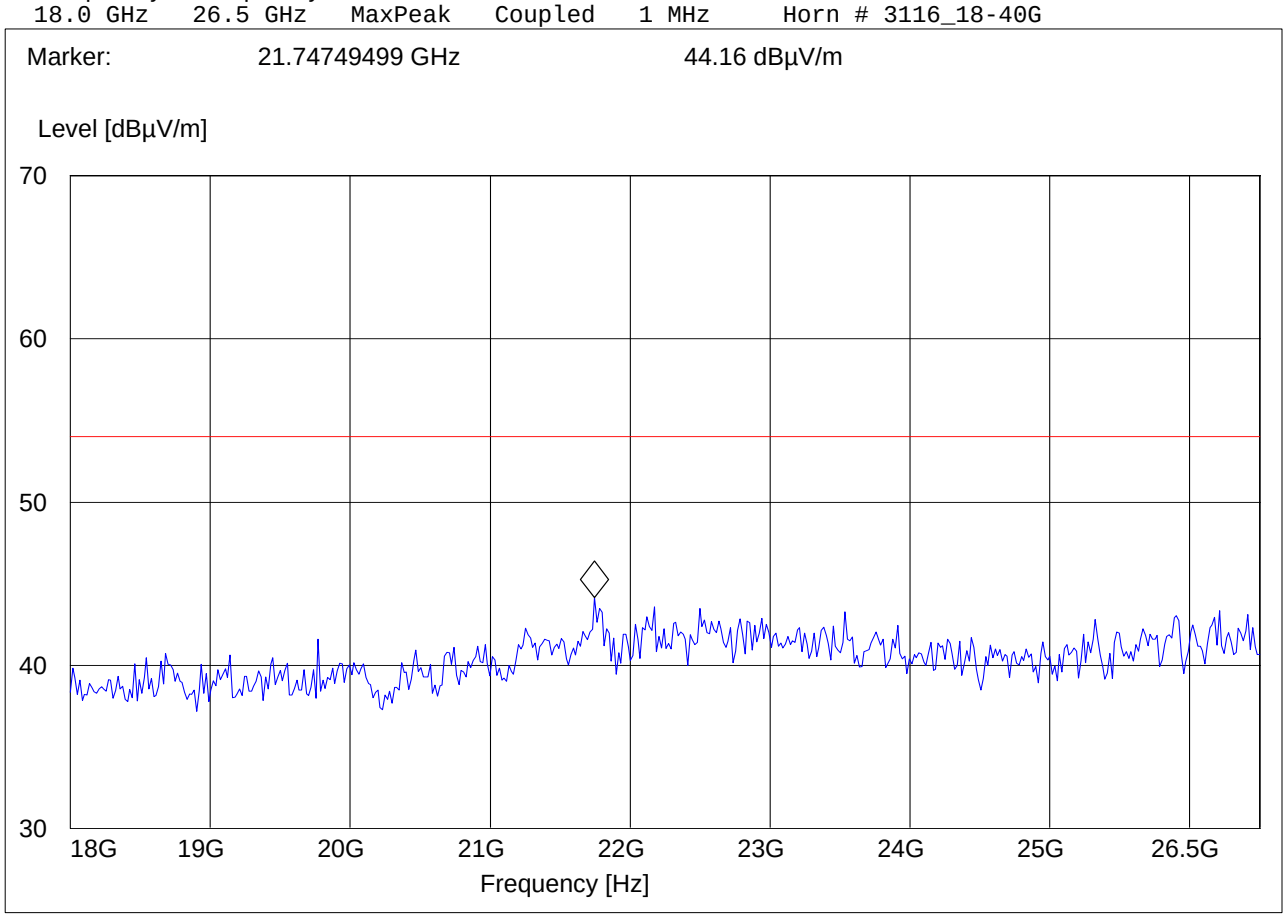
18-26.5GHz (5320MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5320MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



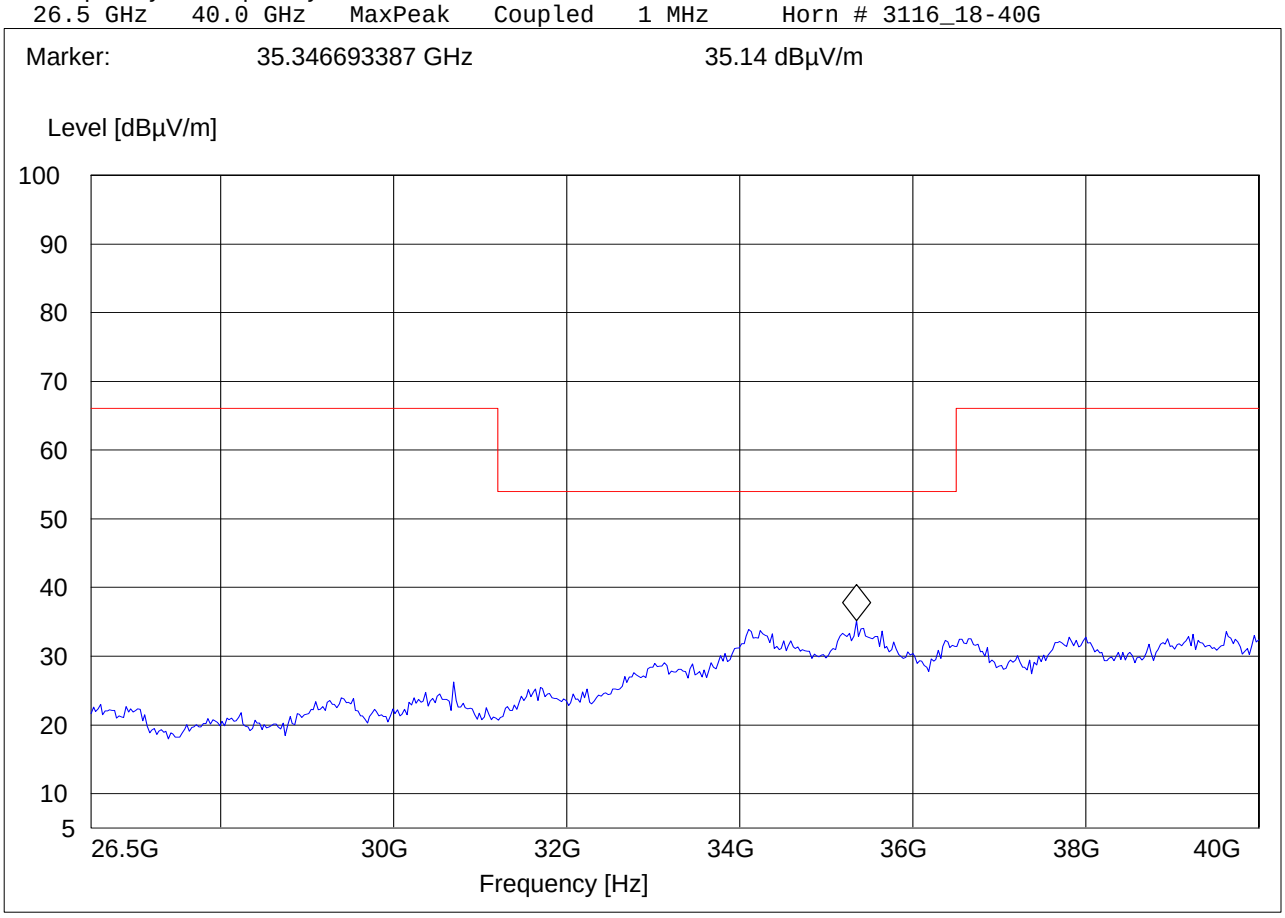
26.5-40GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5300MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.7 **Sub-band 2 802.11n HT40 MODE**

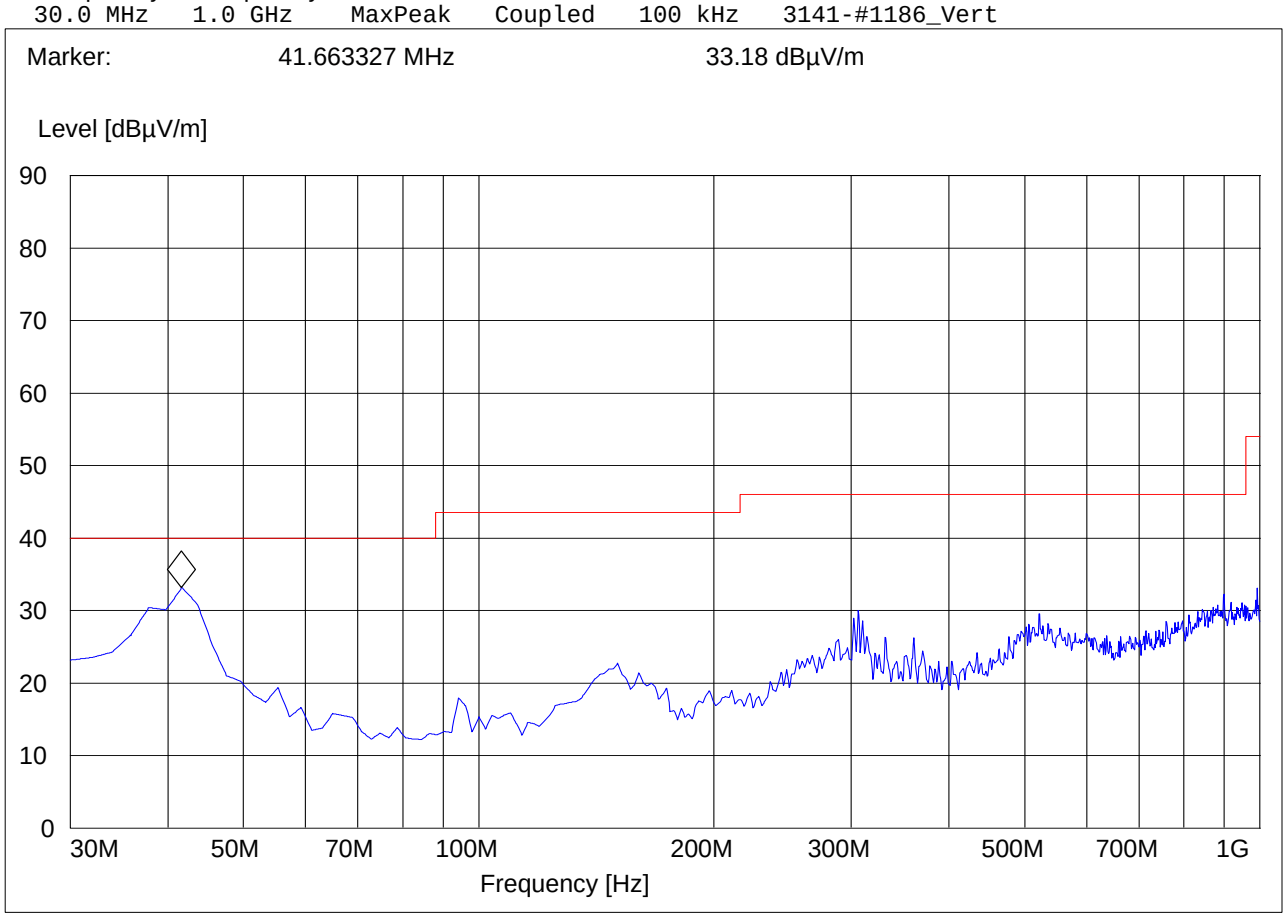
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5270MHz
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



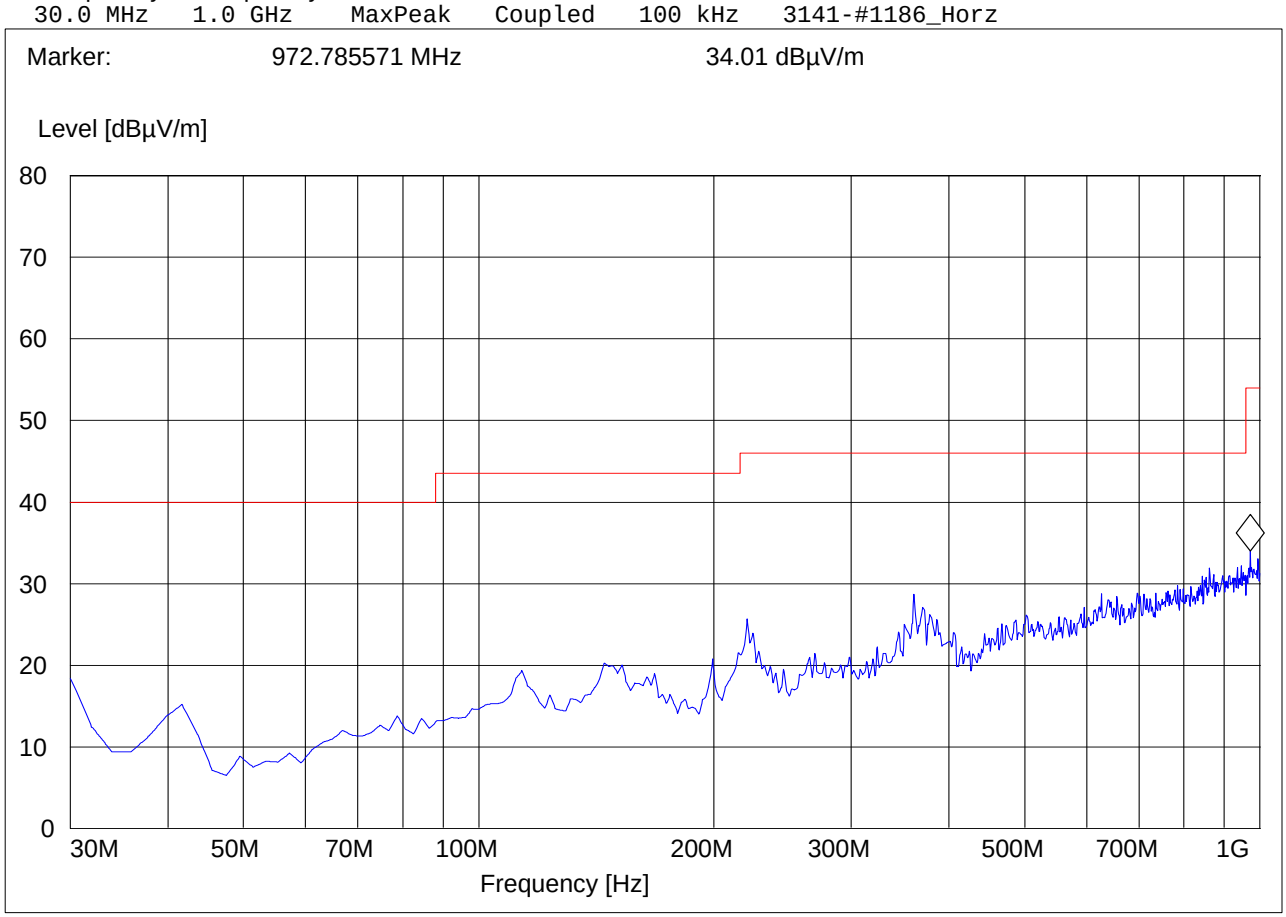
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5270MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



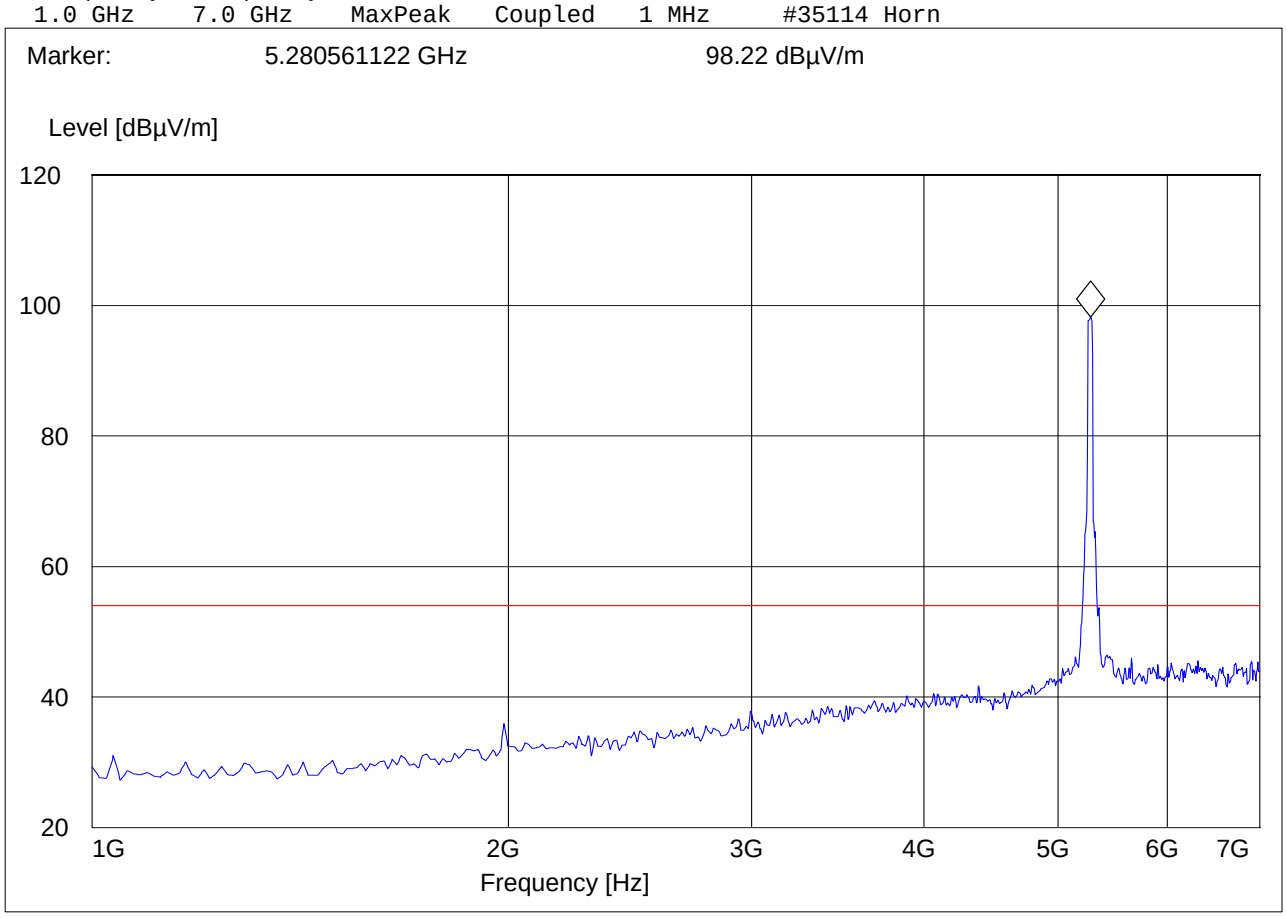
1-7GHz (5270MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5270MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



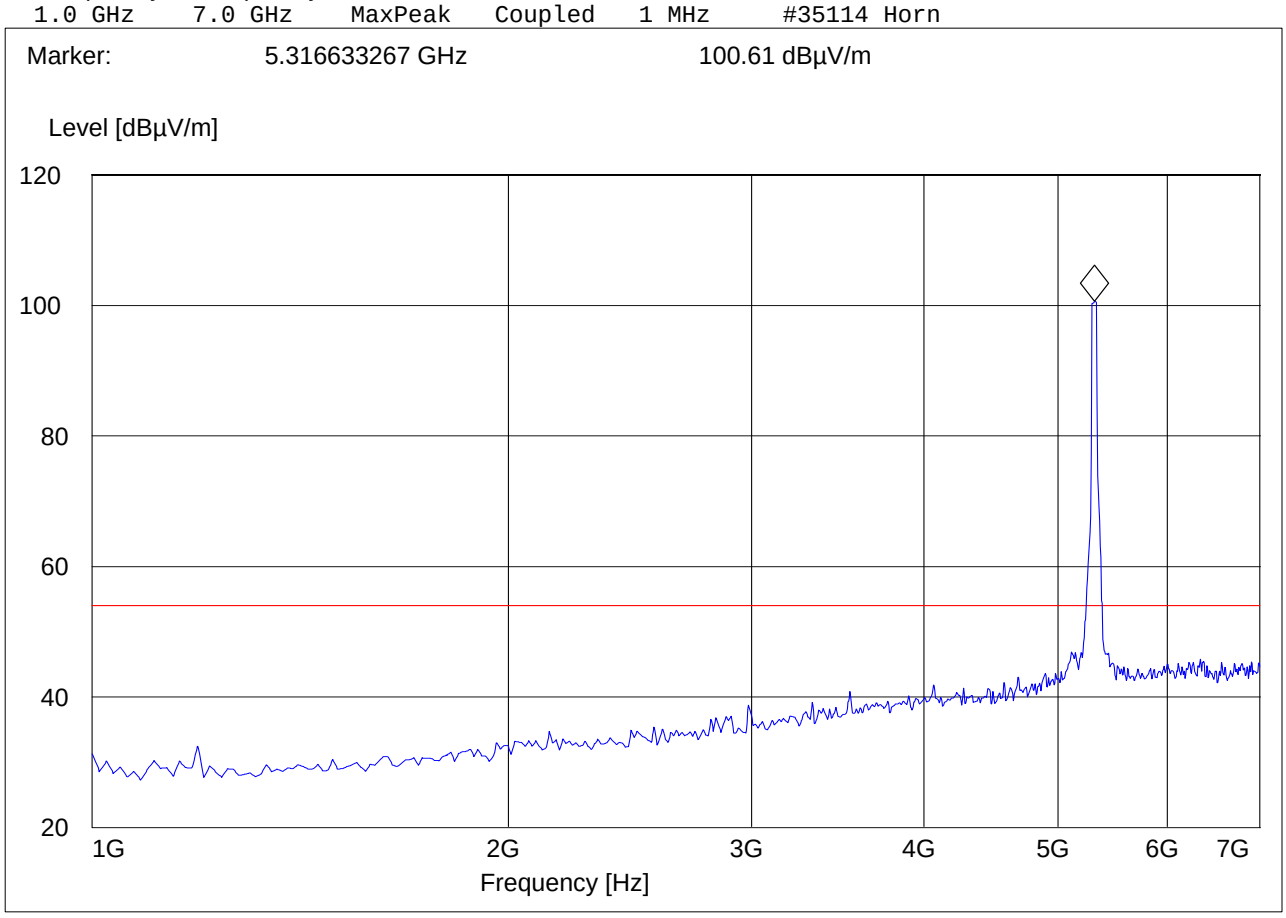
1-7GHz (5310MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5310MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



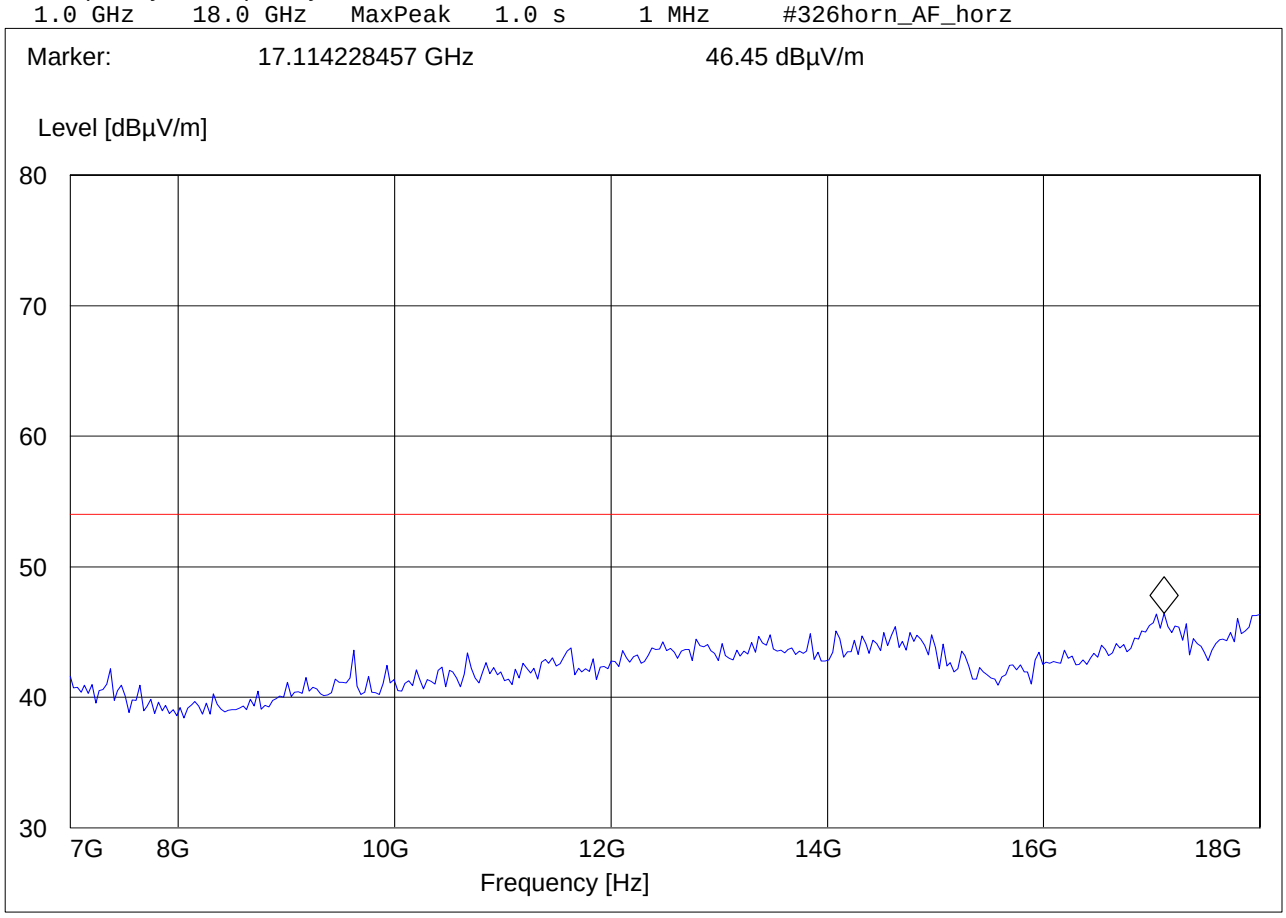
7-18GHz (5270MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5270MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



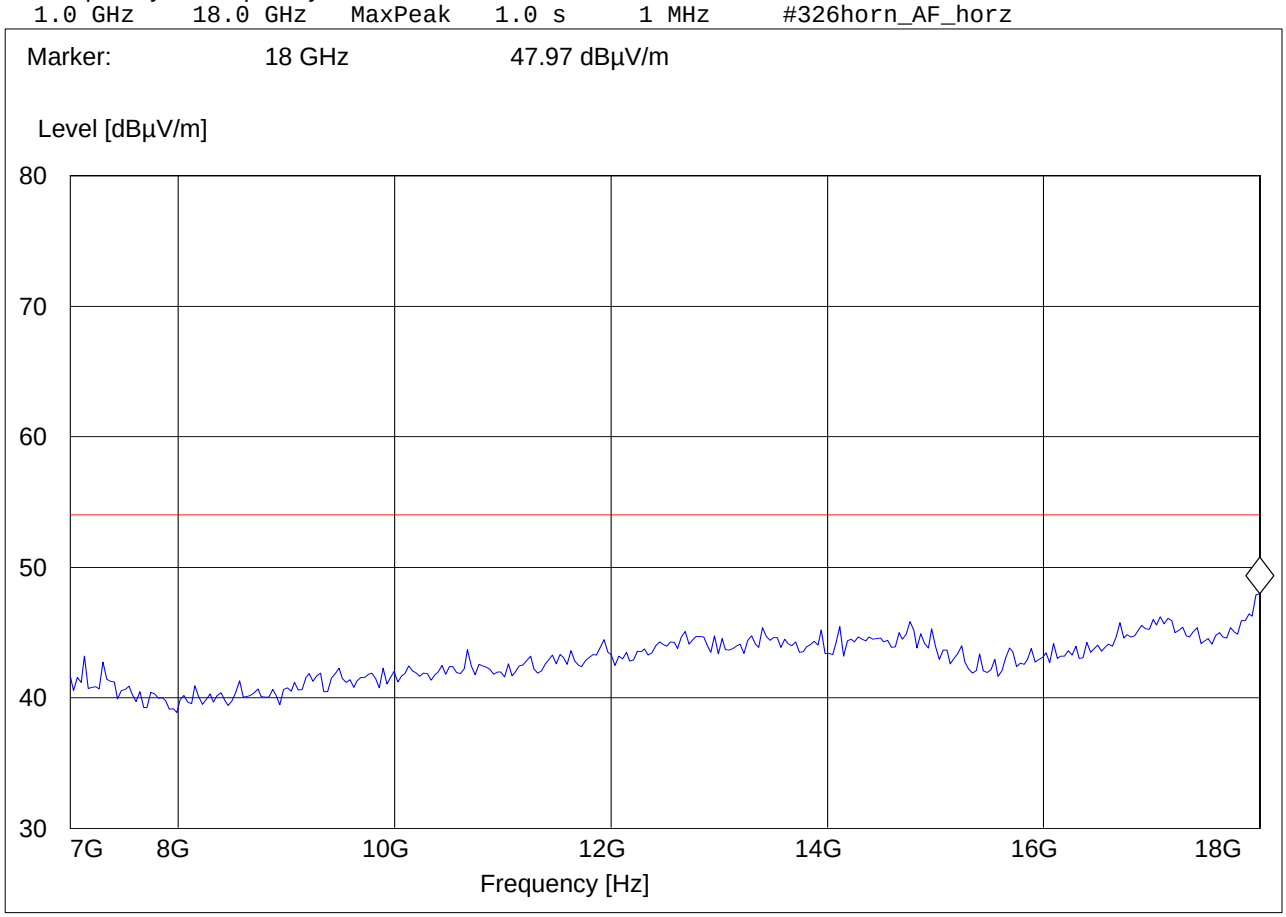
7-18GHz (5310MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5310MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



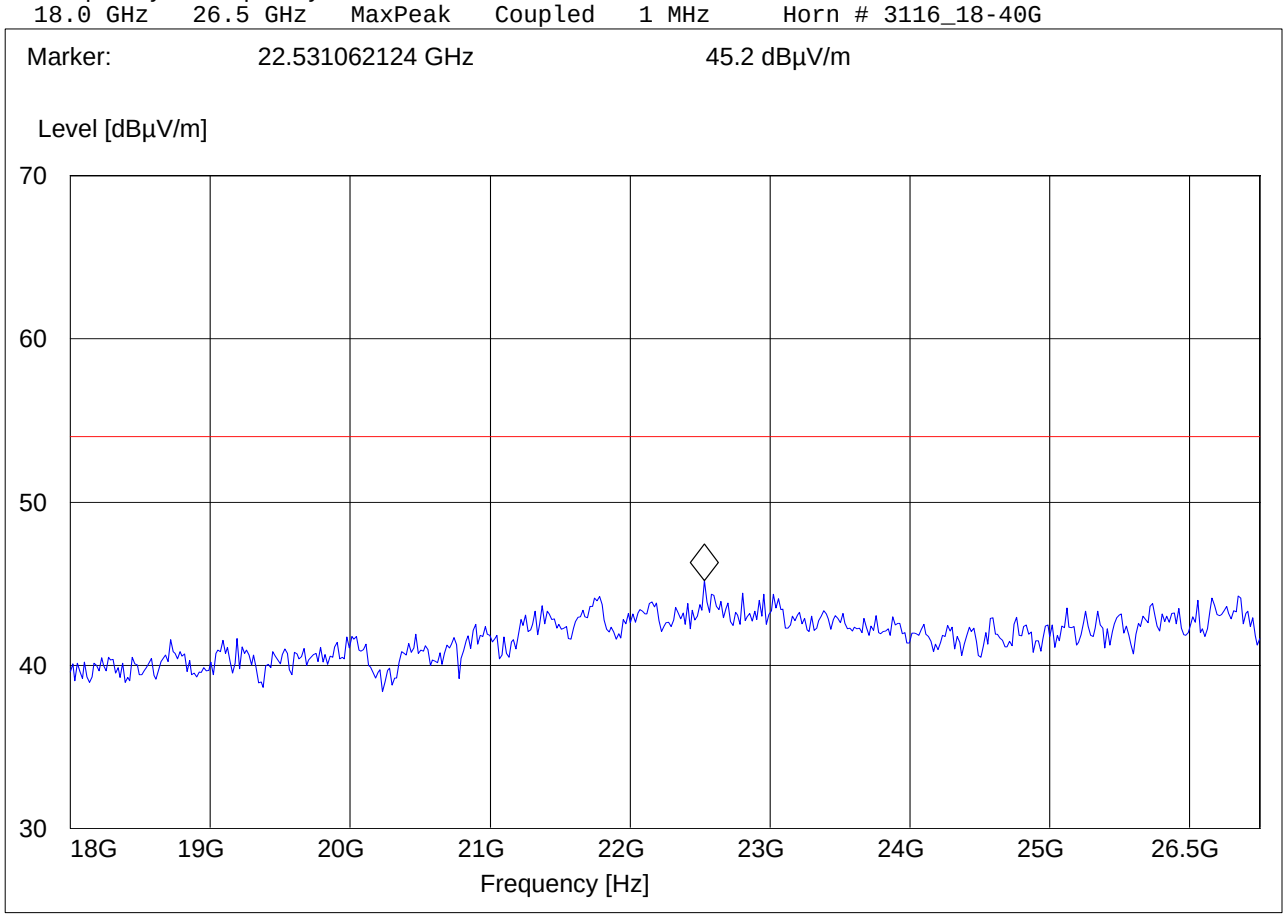
18-26.5GHz (5270MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5270MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G

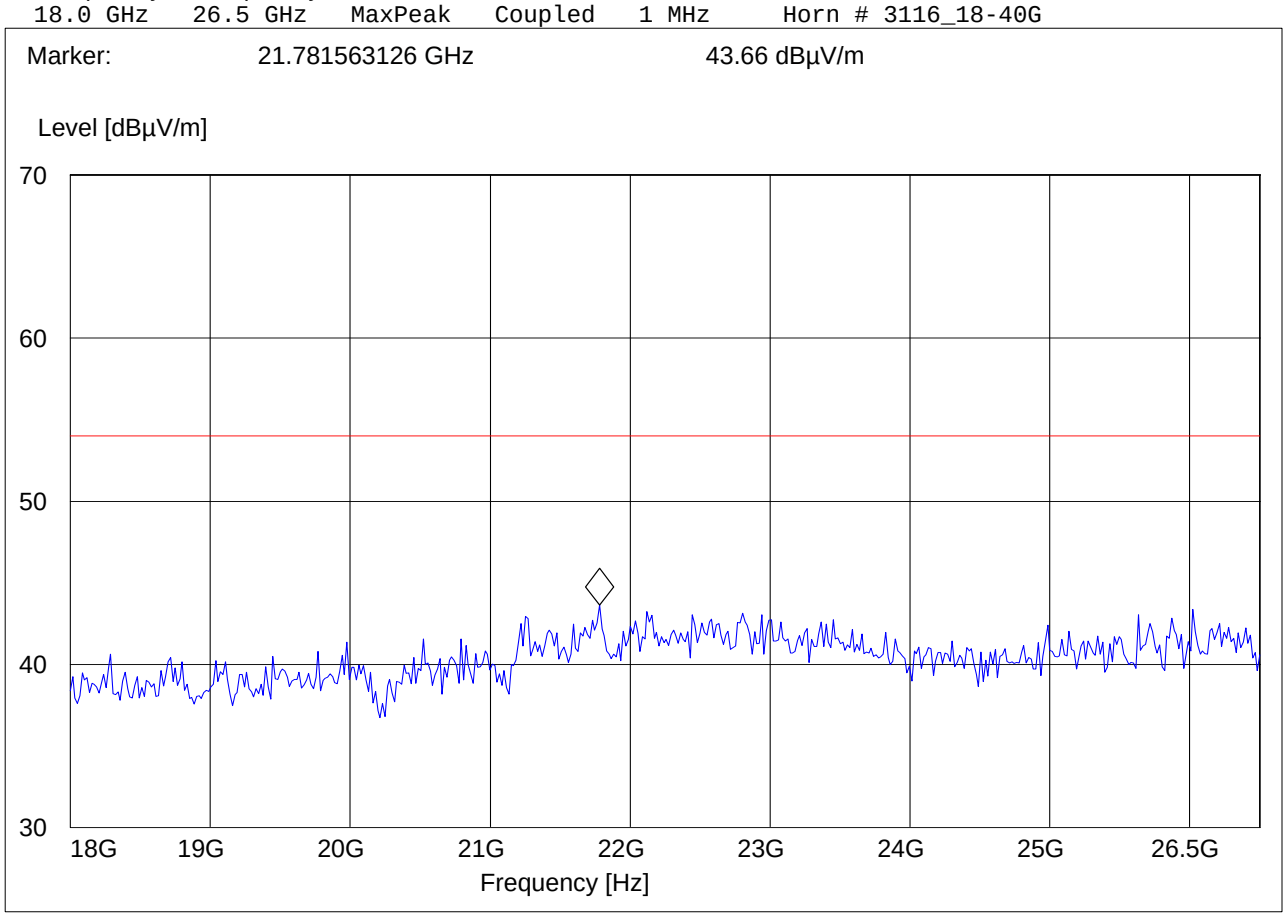


18-26.5GHz (5310MHz) **Note: Peak Reading vs. Average limit**

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5310MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



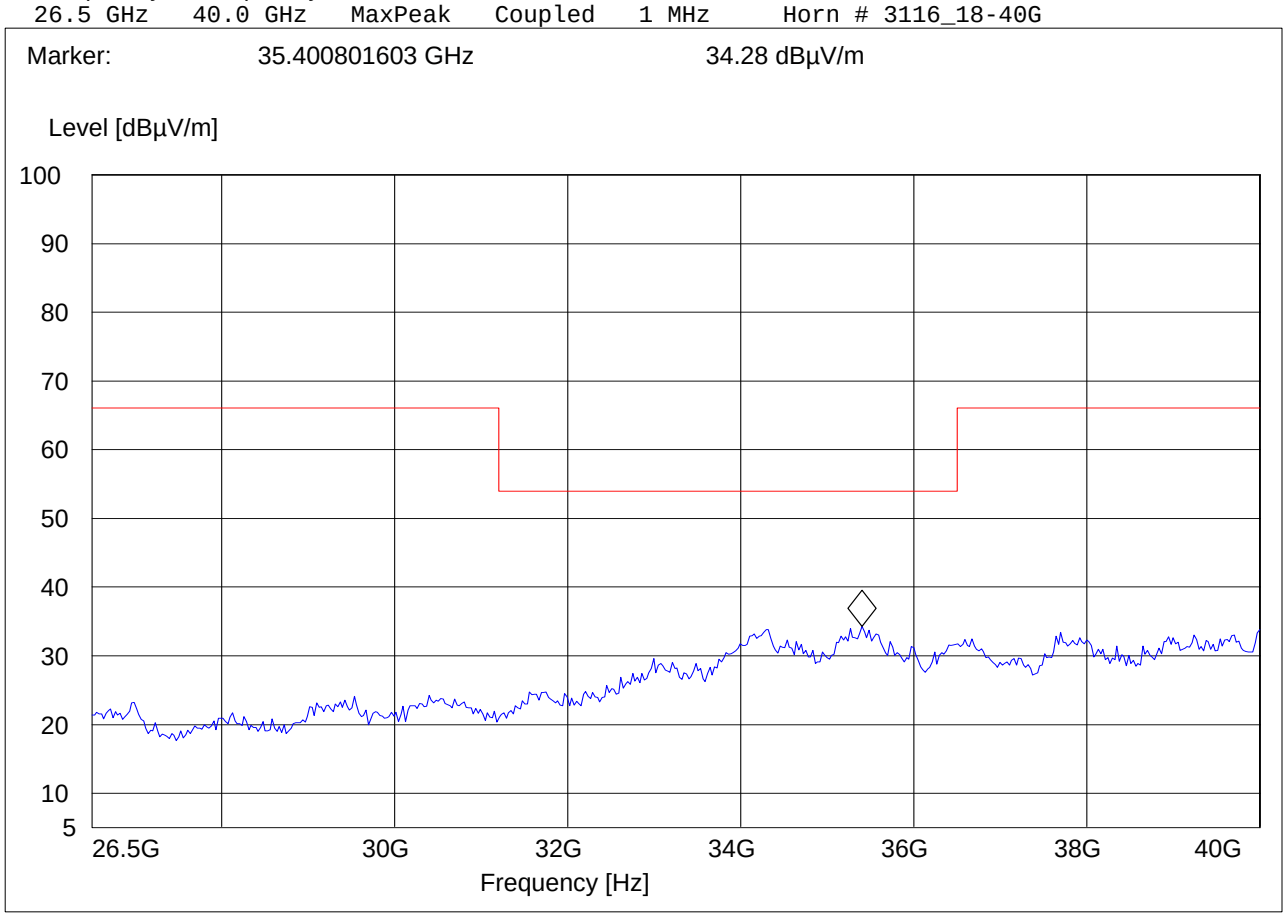
26.5-40GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5270MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.8 Sub-band 3 802.11a MODE

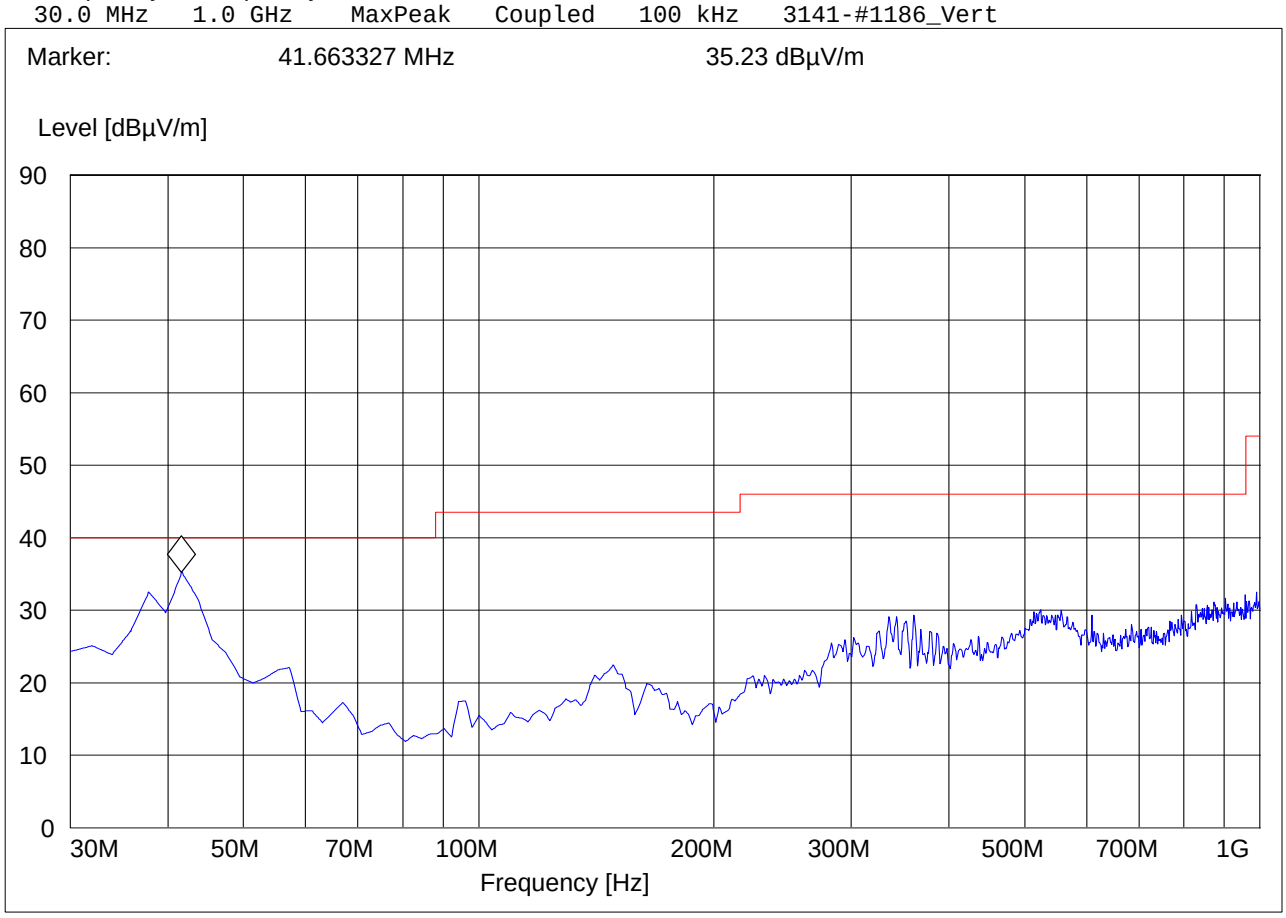
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5500MHz;
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



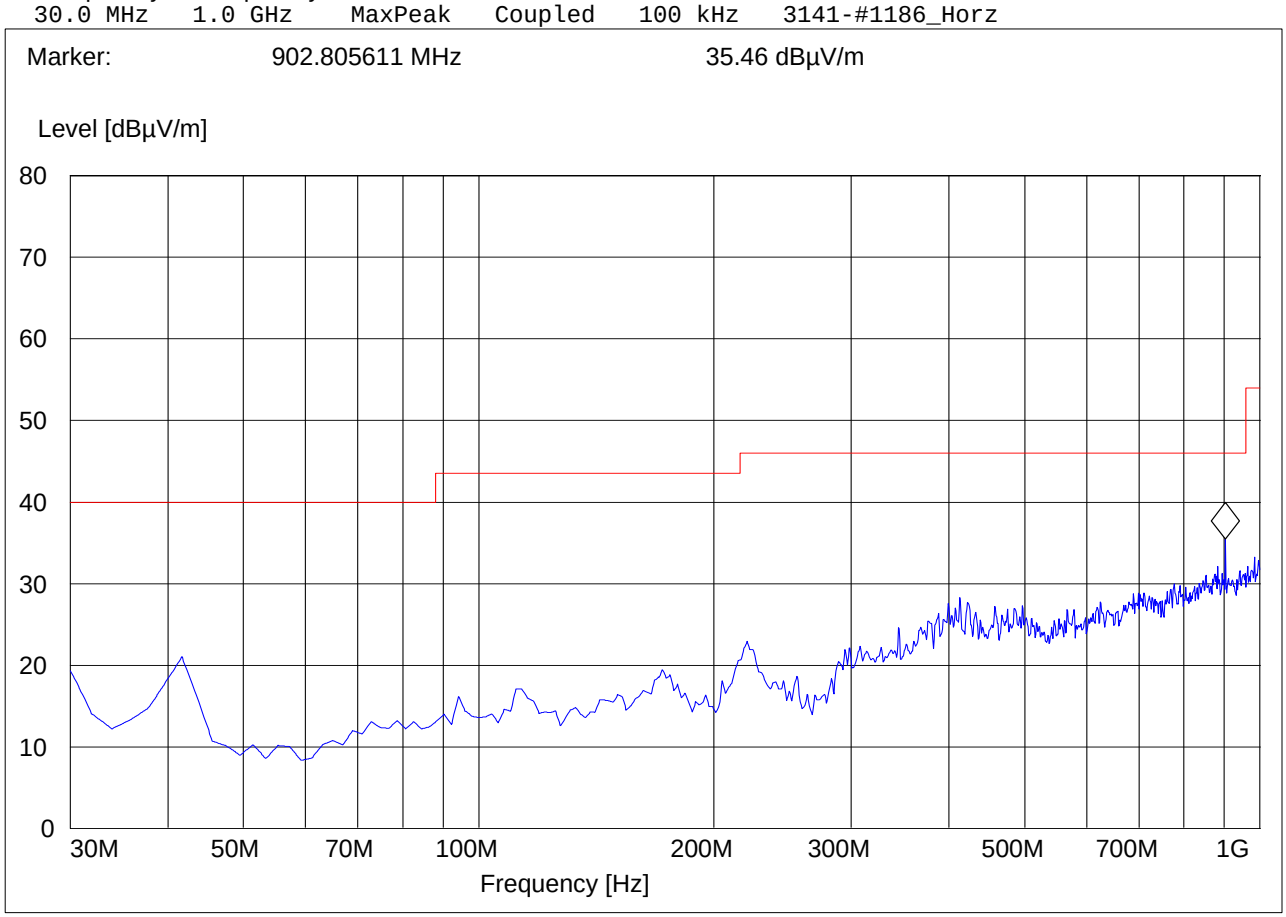
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5500MHz;
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



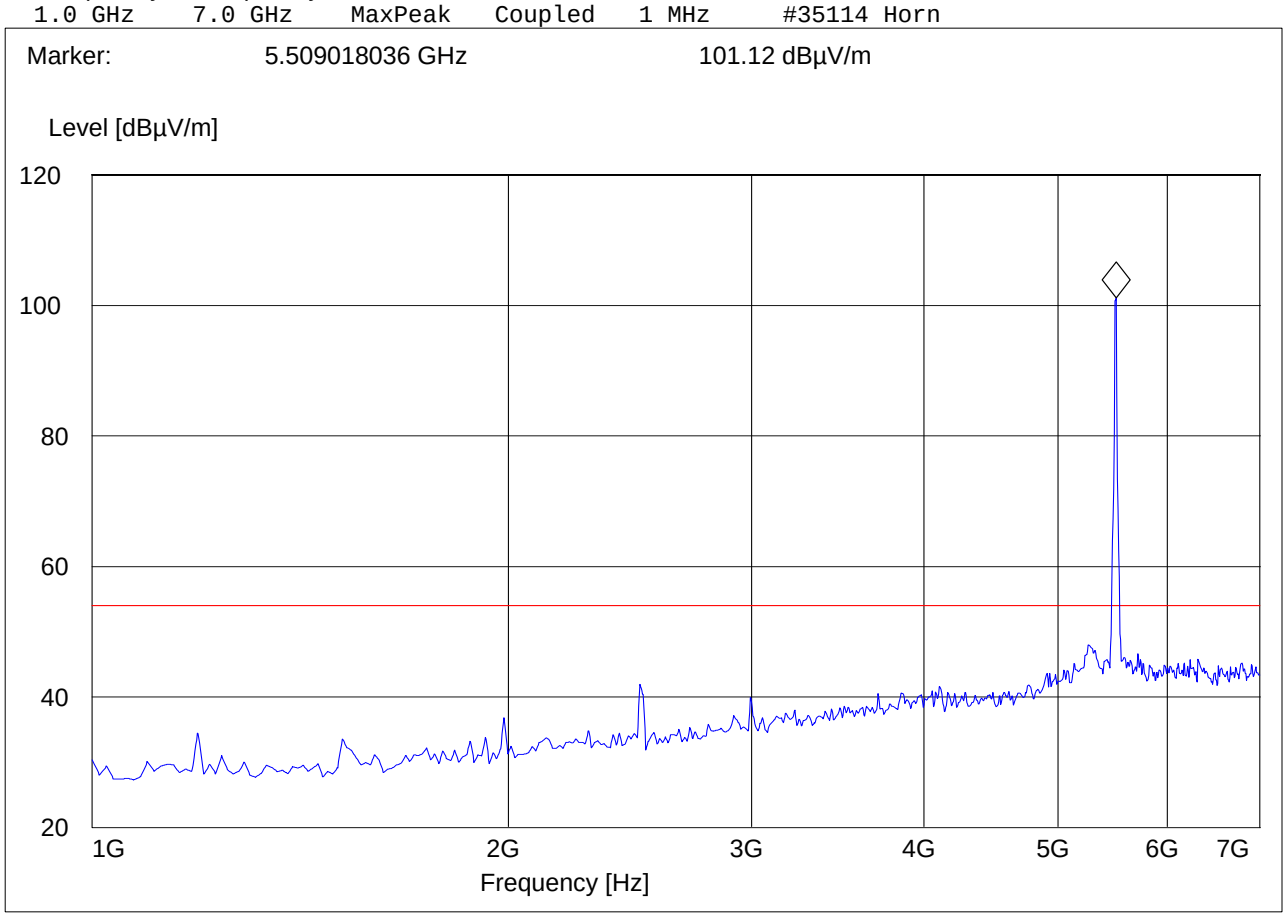
1-7GHz (5500MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5500MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



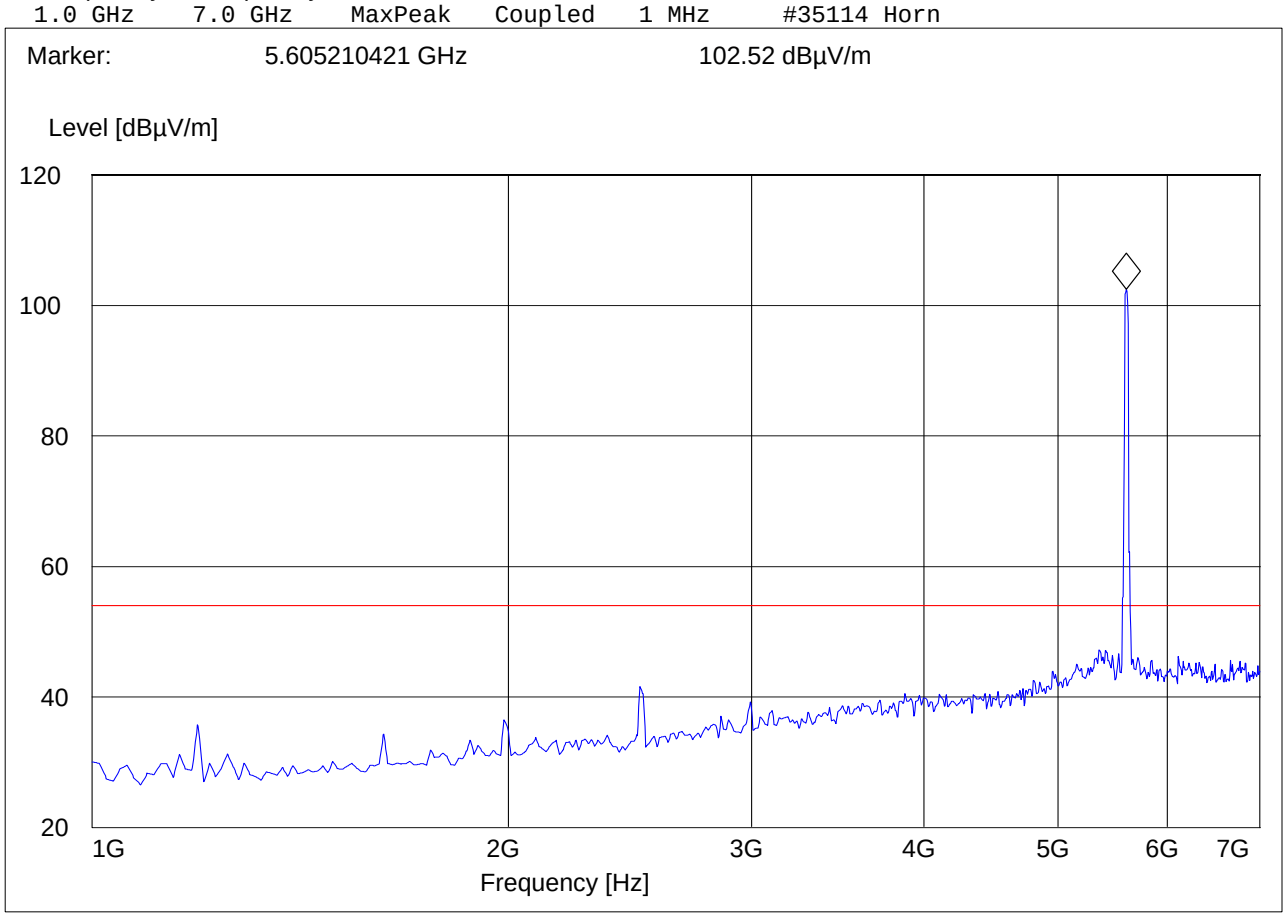
1-7GHz (5600MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5600MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



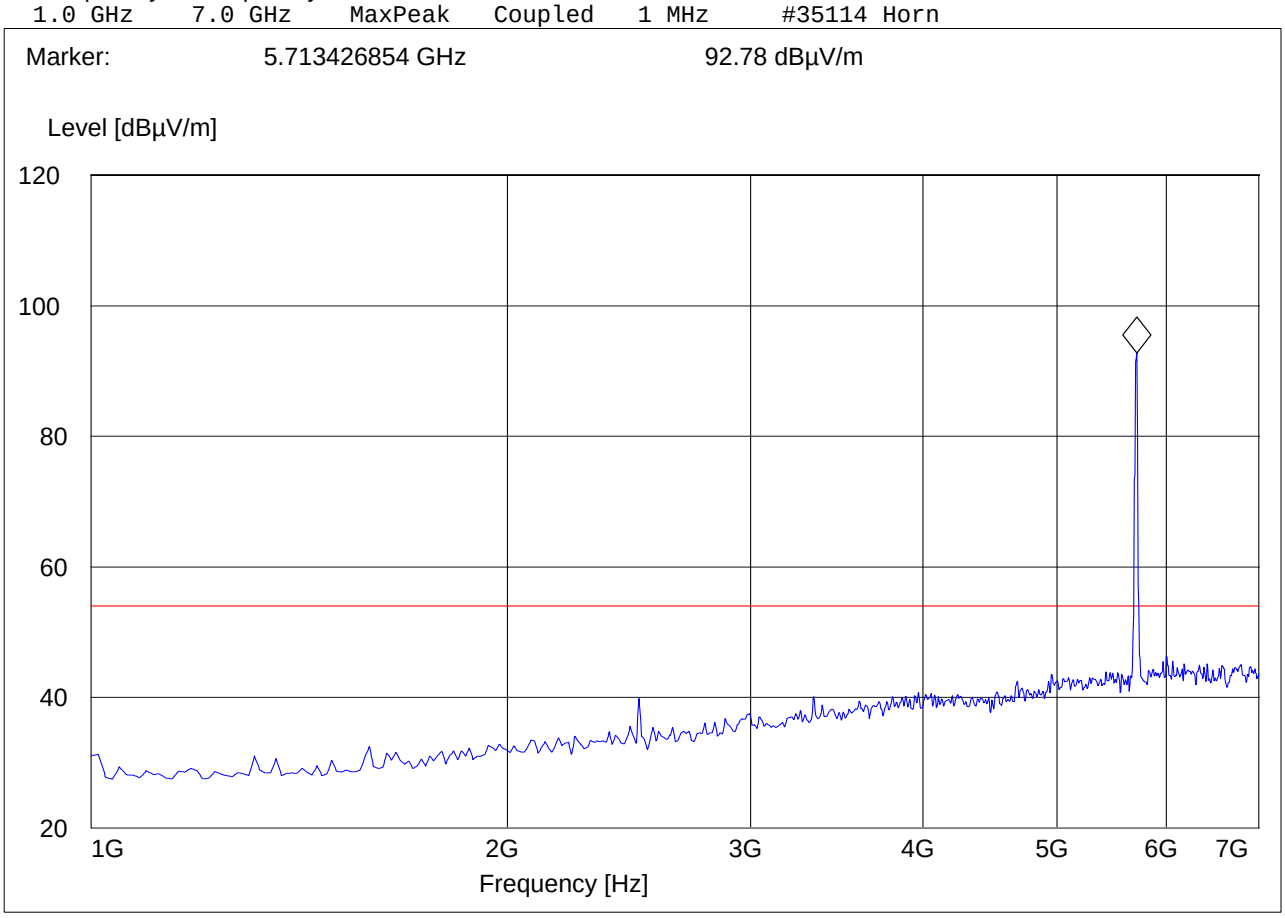
1-7GHz (5700MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5700MHz;
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



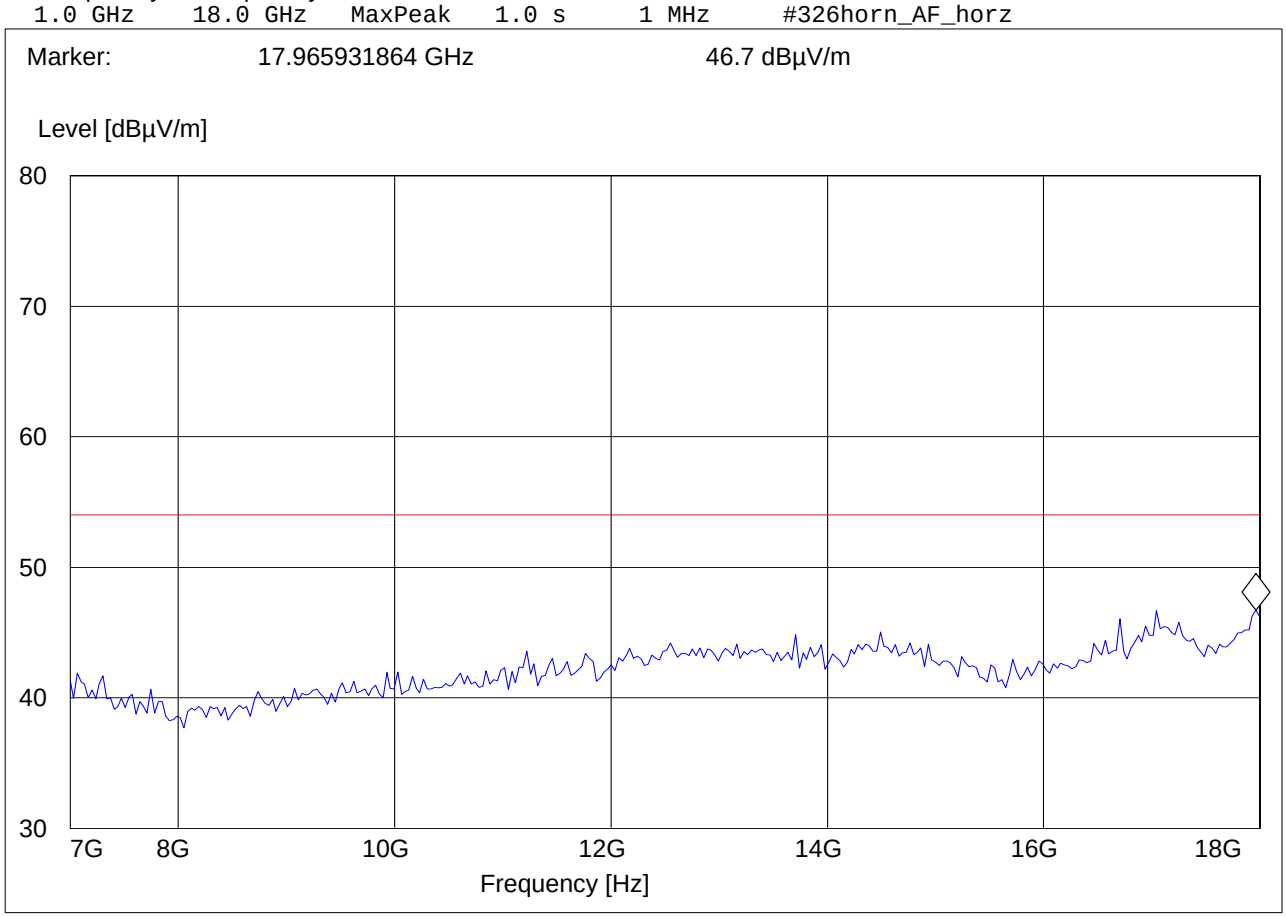
7-18GHz (5500MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5500MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



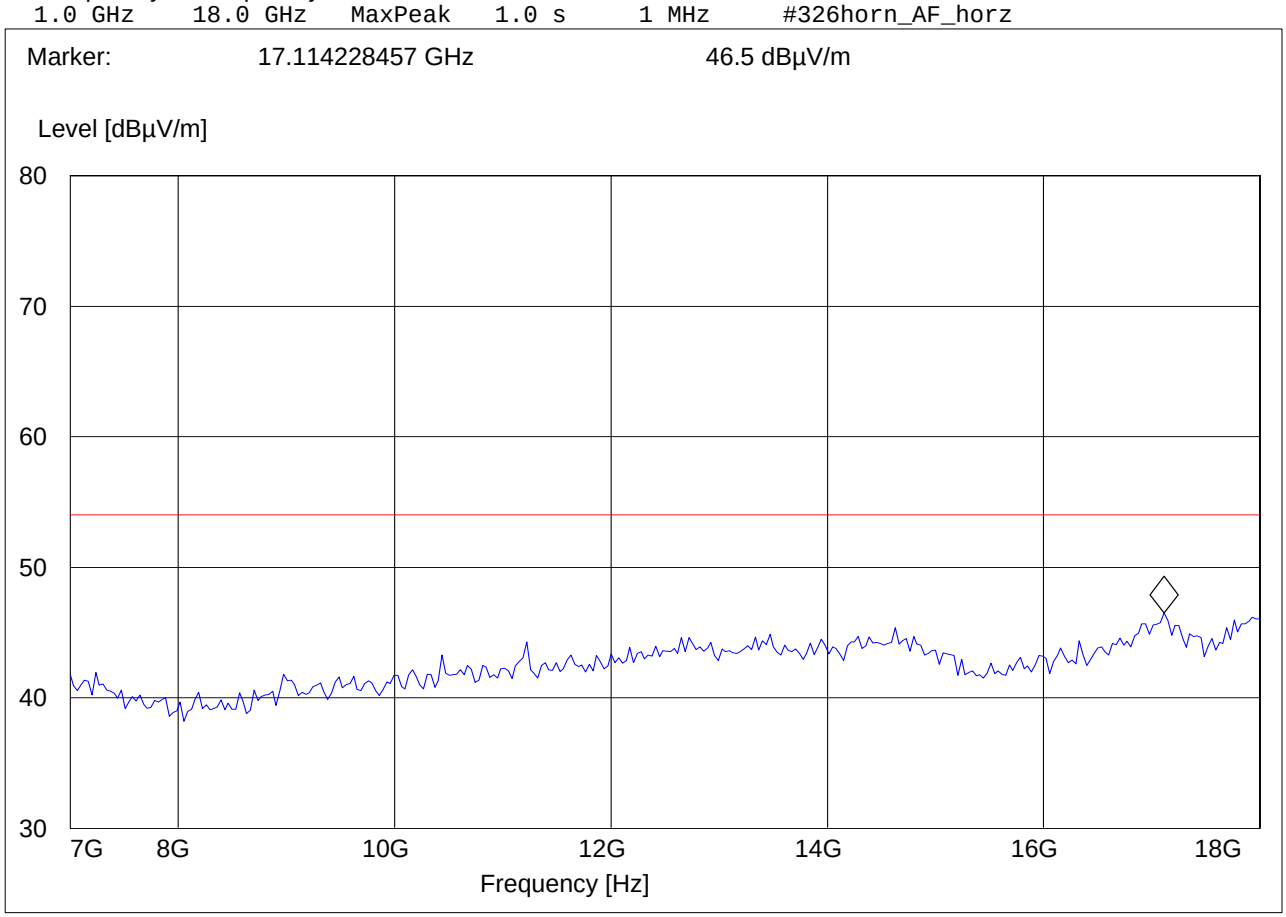
7-18GHz (5600MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5600MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2 GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



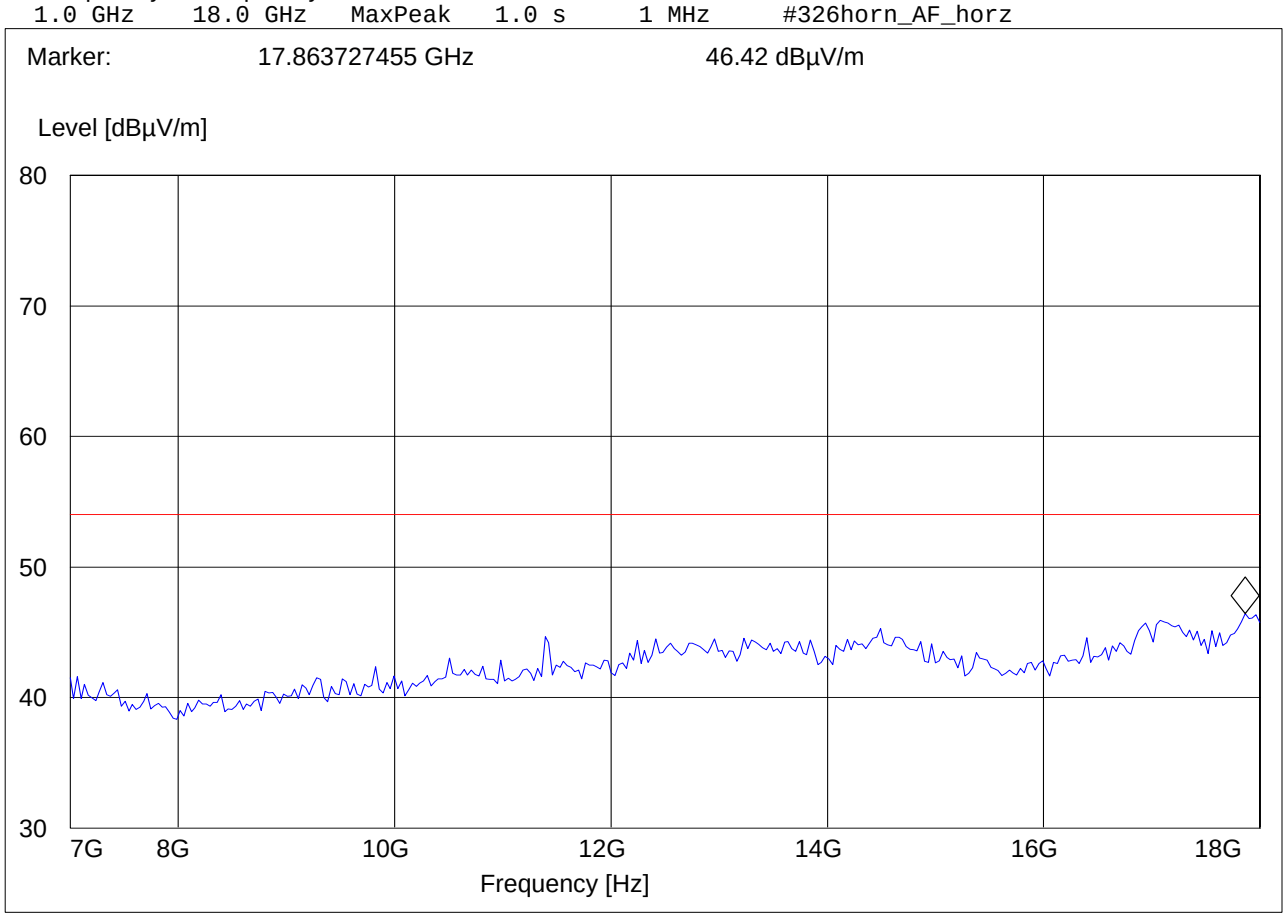
7-18GHz (5700MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5700MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



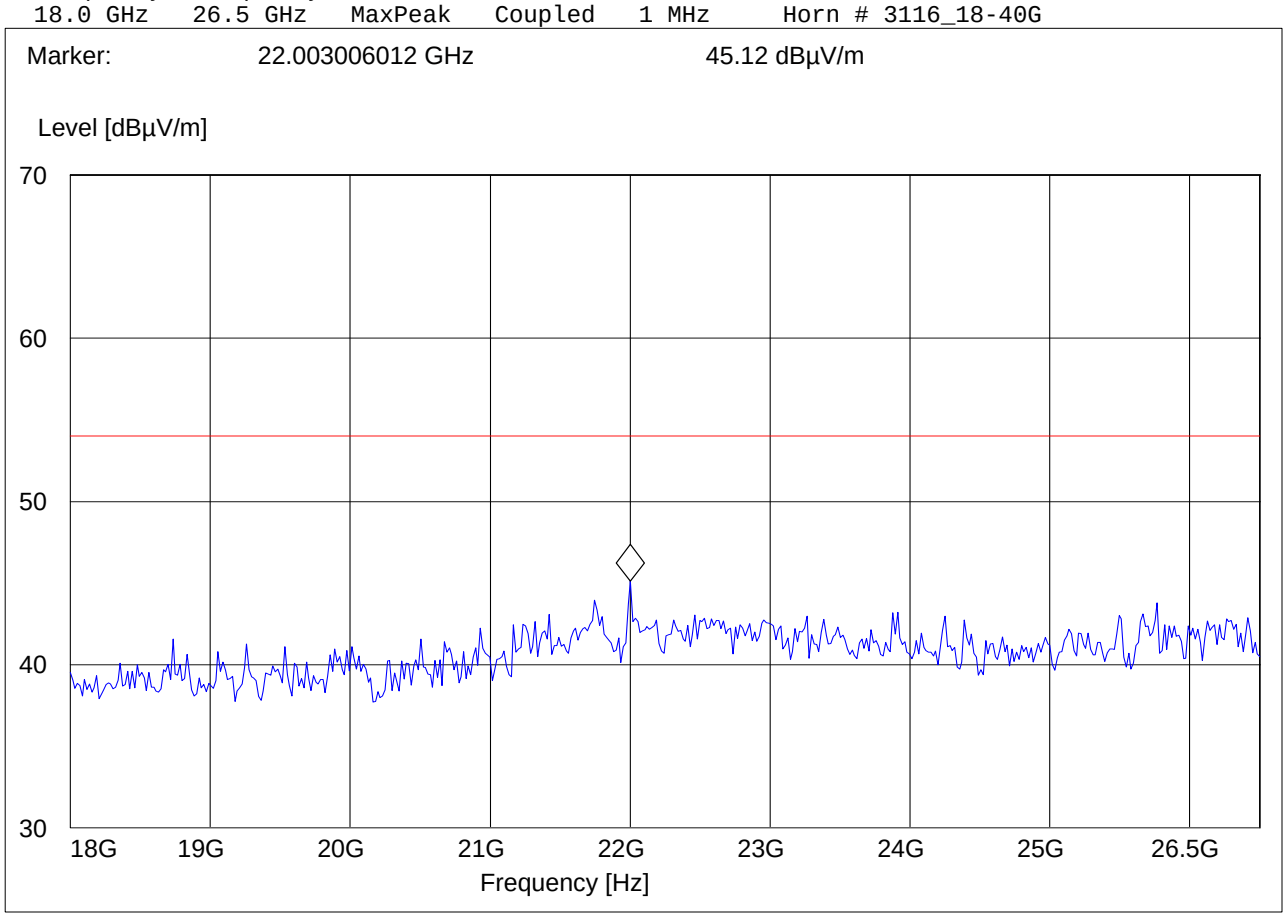
18-26.5GHz (5500MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5500MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



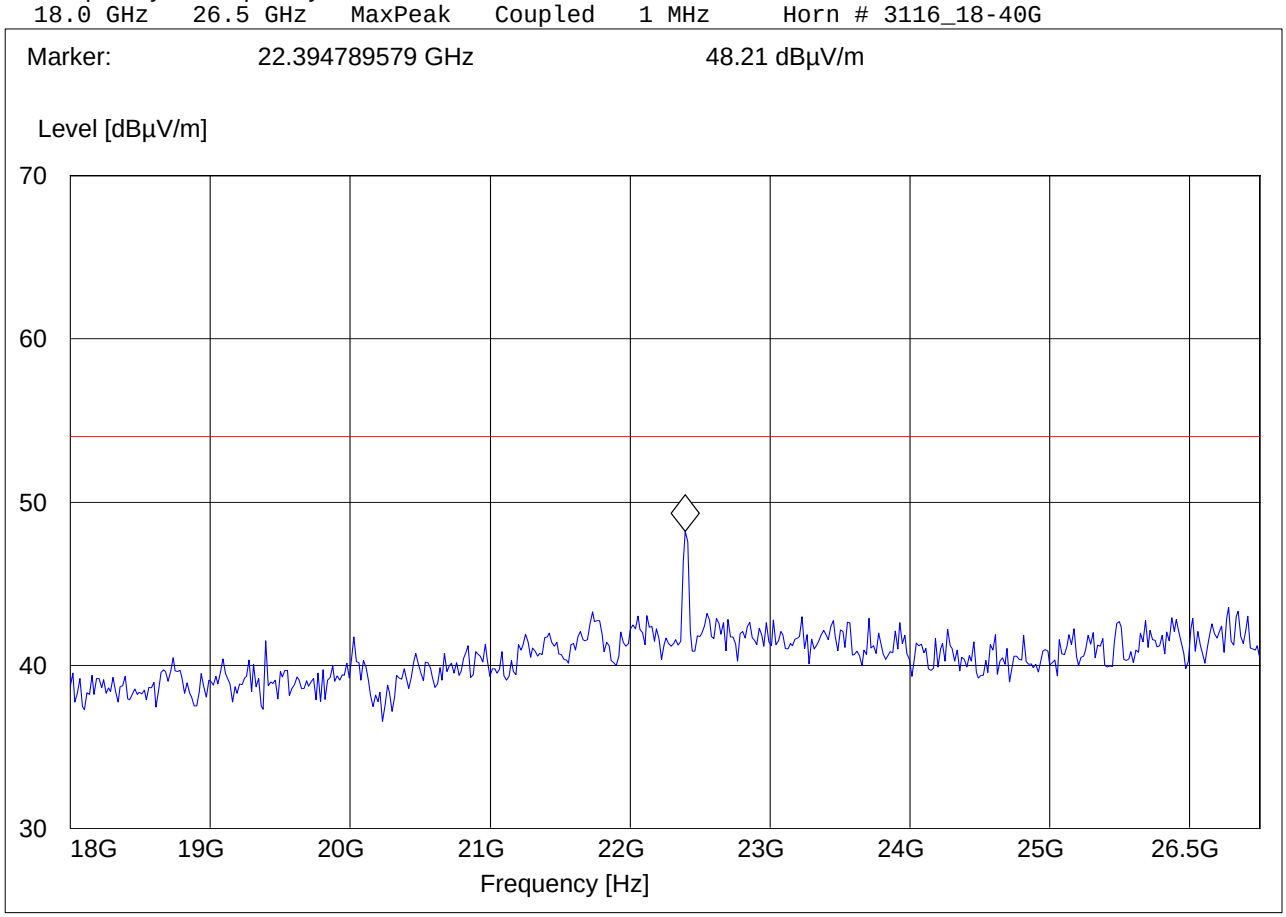
18-26.5GHz (5600MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5600MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



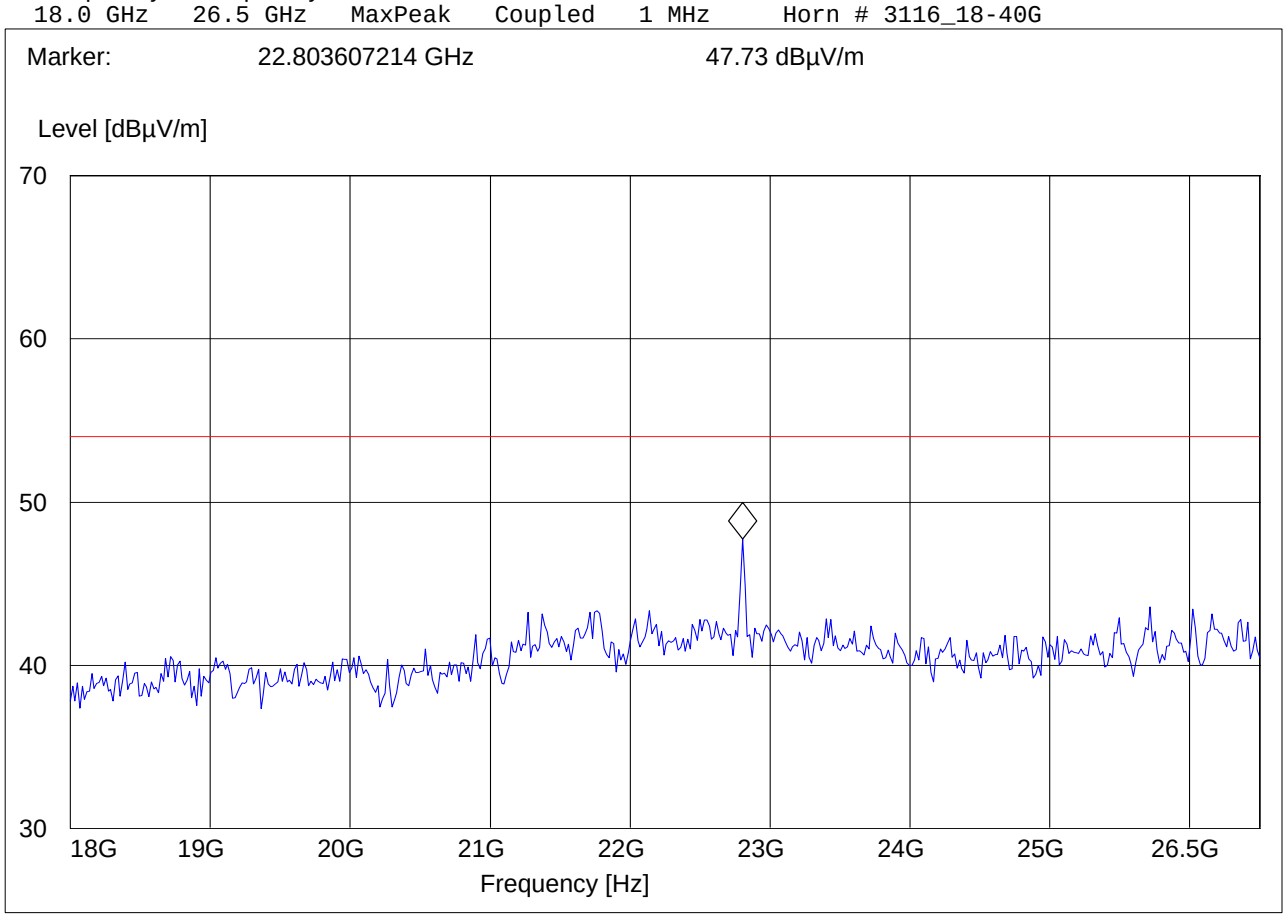
18-26.5GHz (5700MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a 5700MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



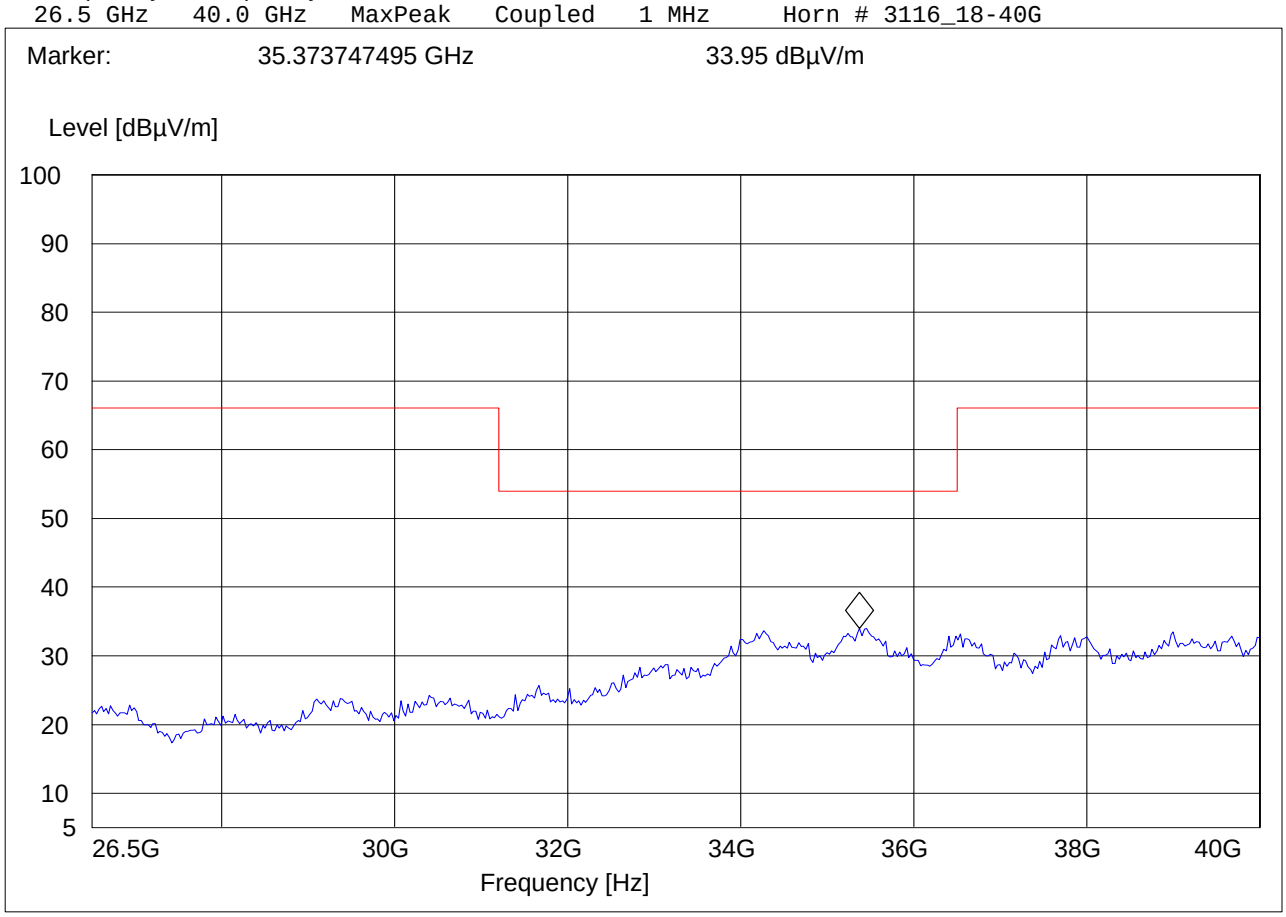
26.5-40GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a 5600MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.9 **Sub-band 3 802.11n HT20 MODE**

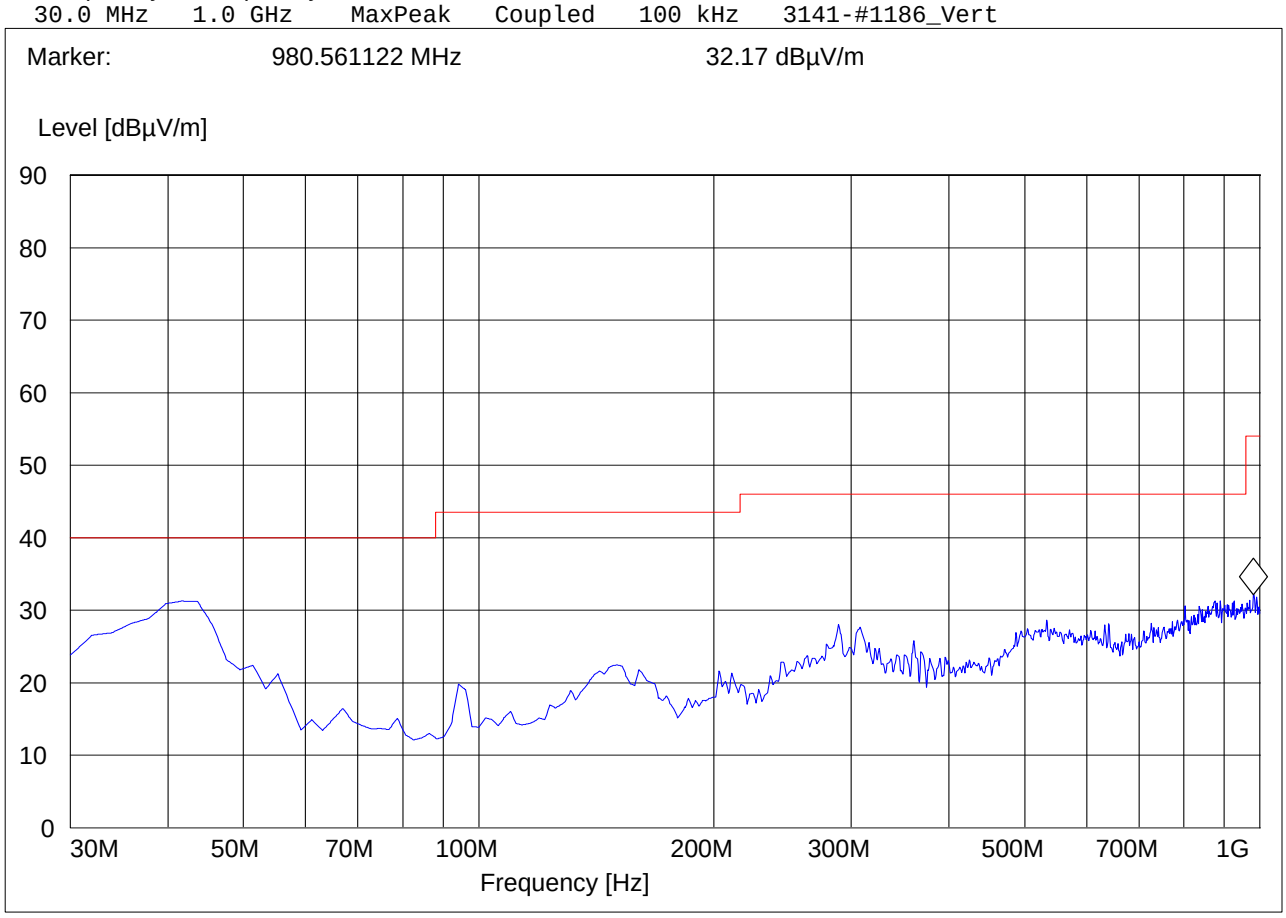
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5600MHz
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



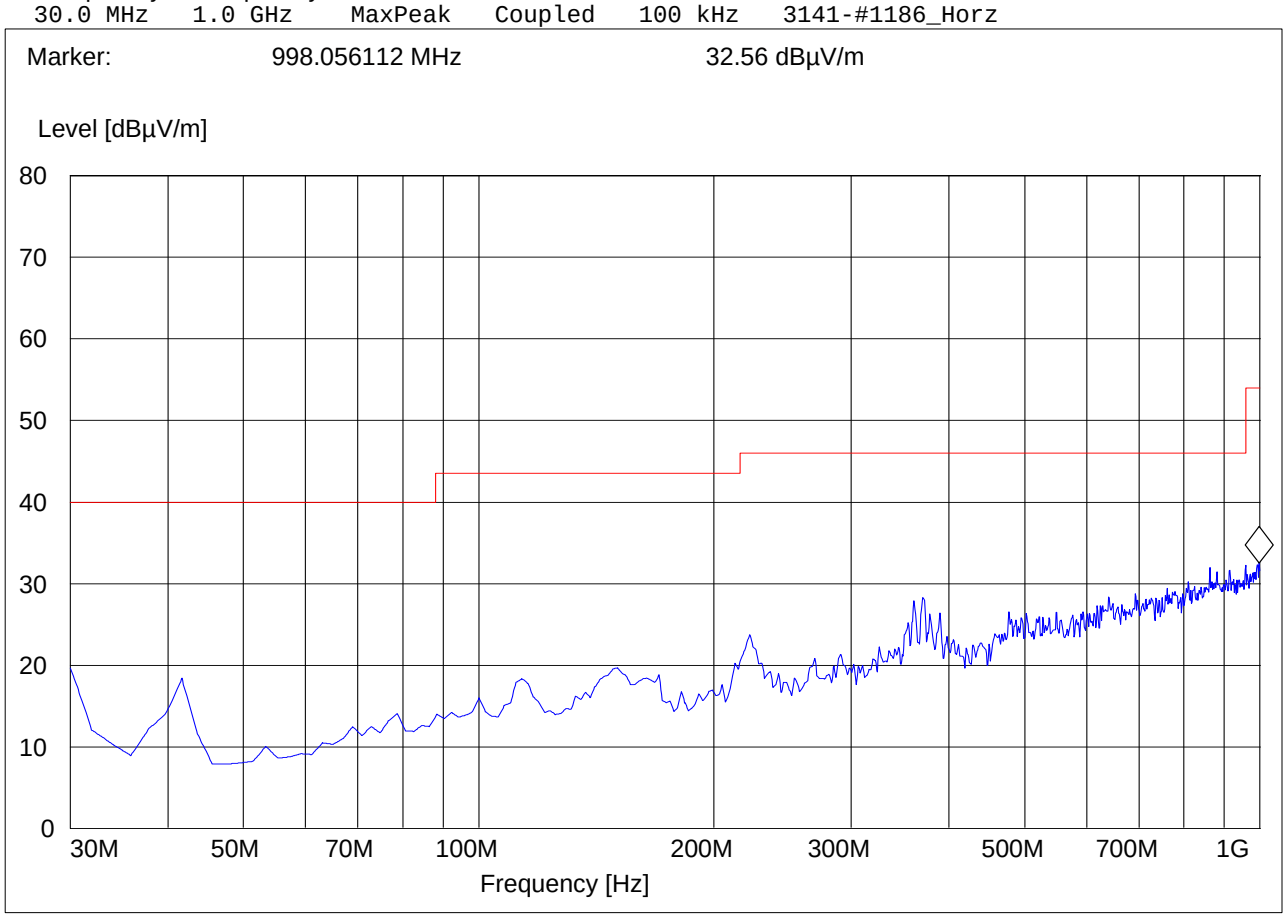
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5600MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



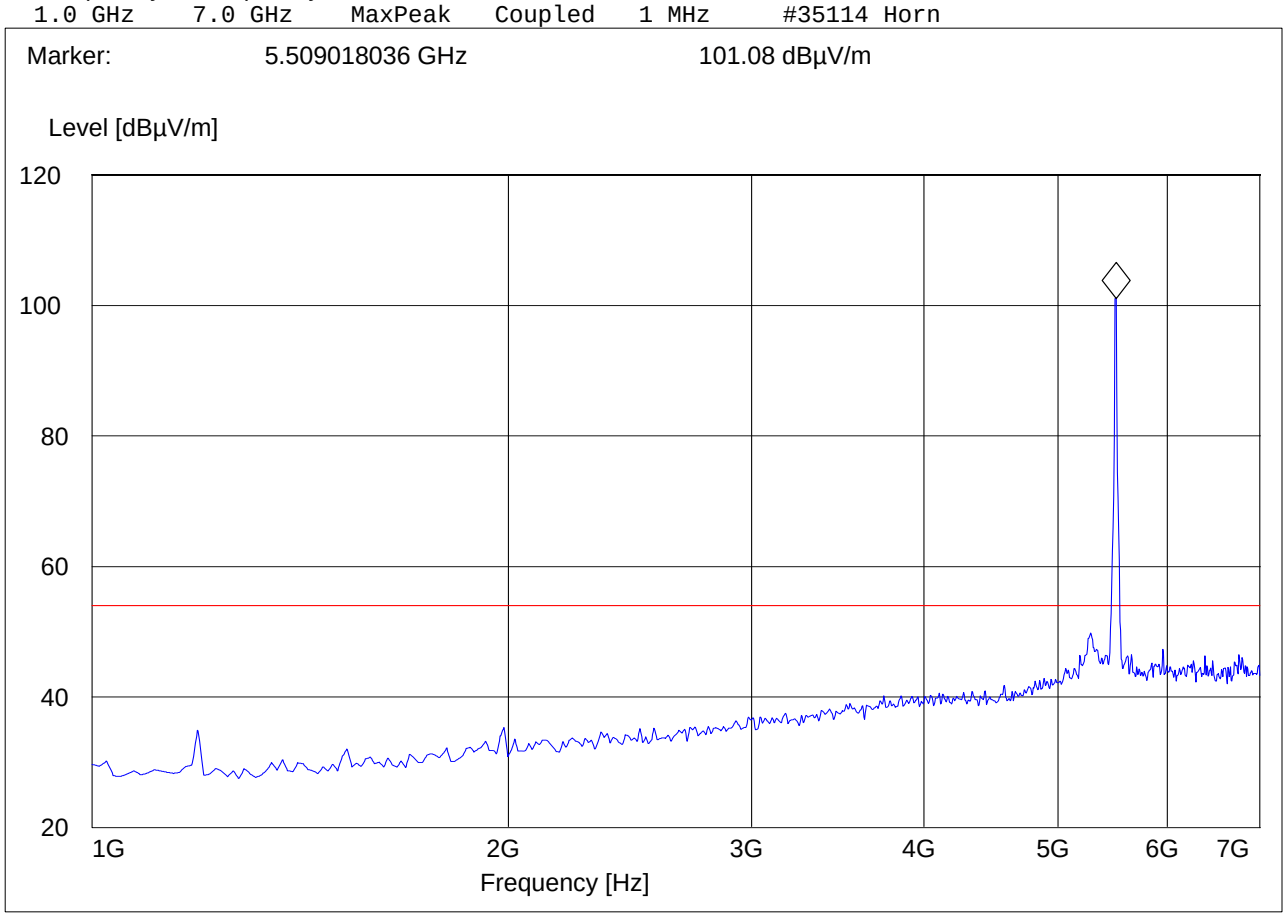
1-7GHz (5500MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5500MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



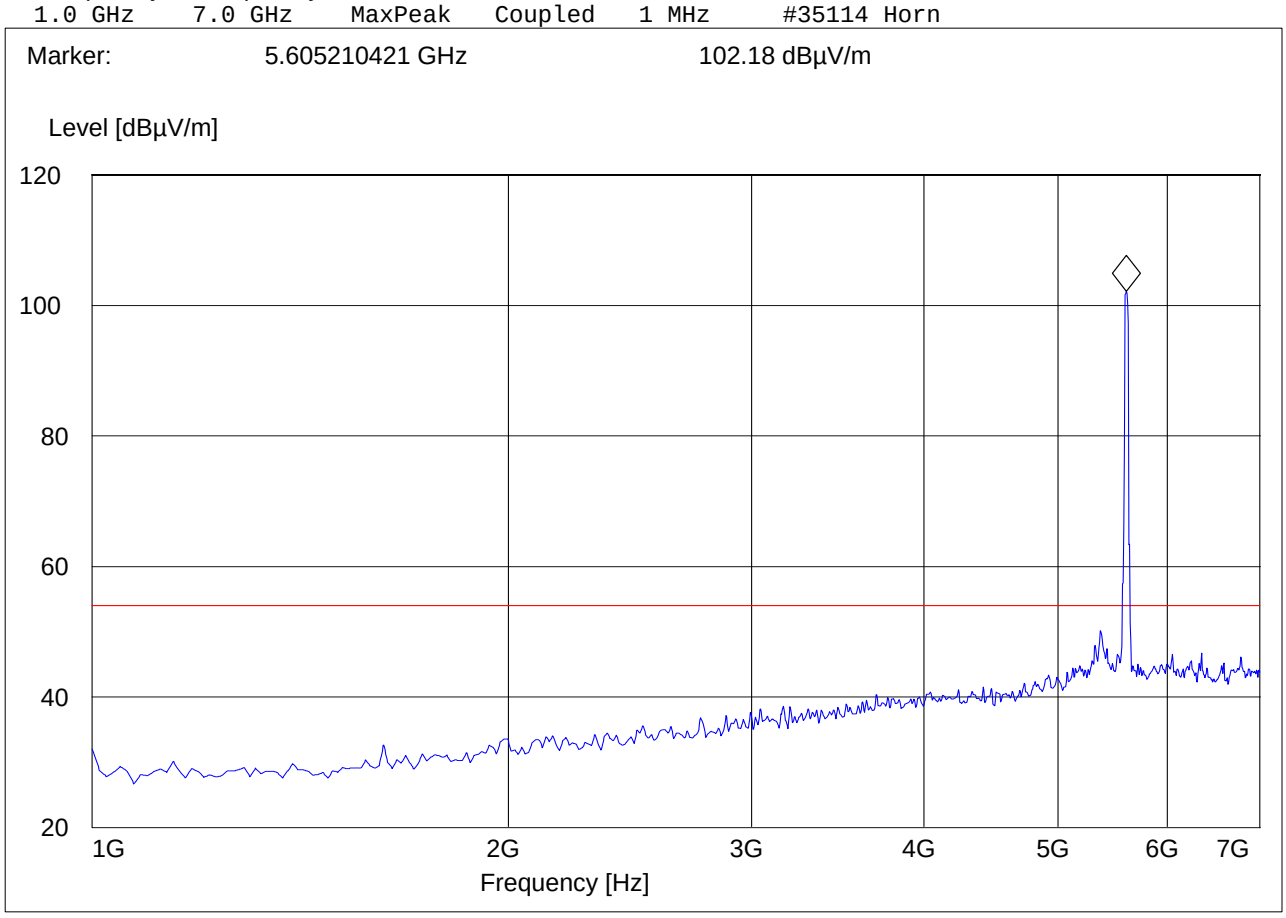
1-7GHz (5600MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5600MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



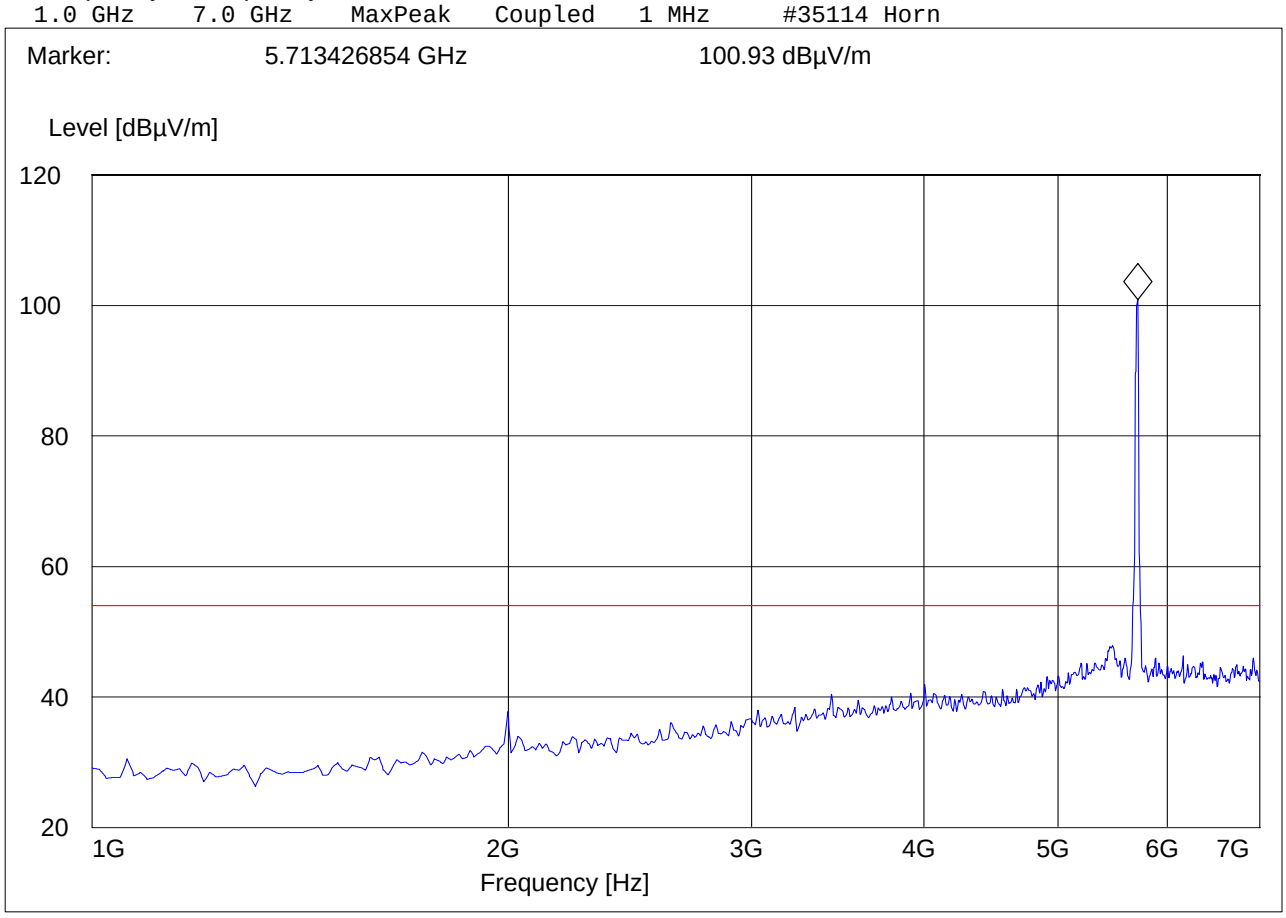
1-7GHz (5700MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5700MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



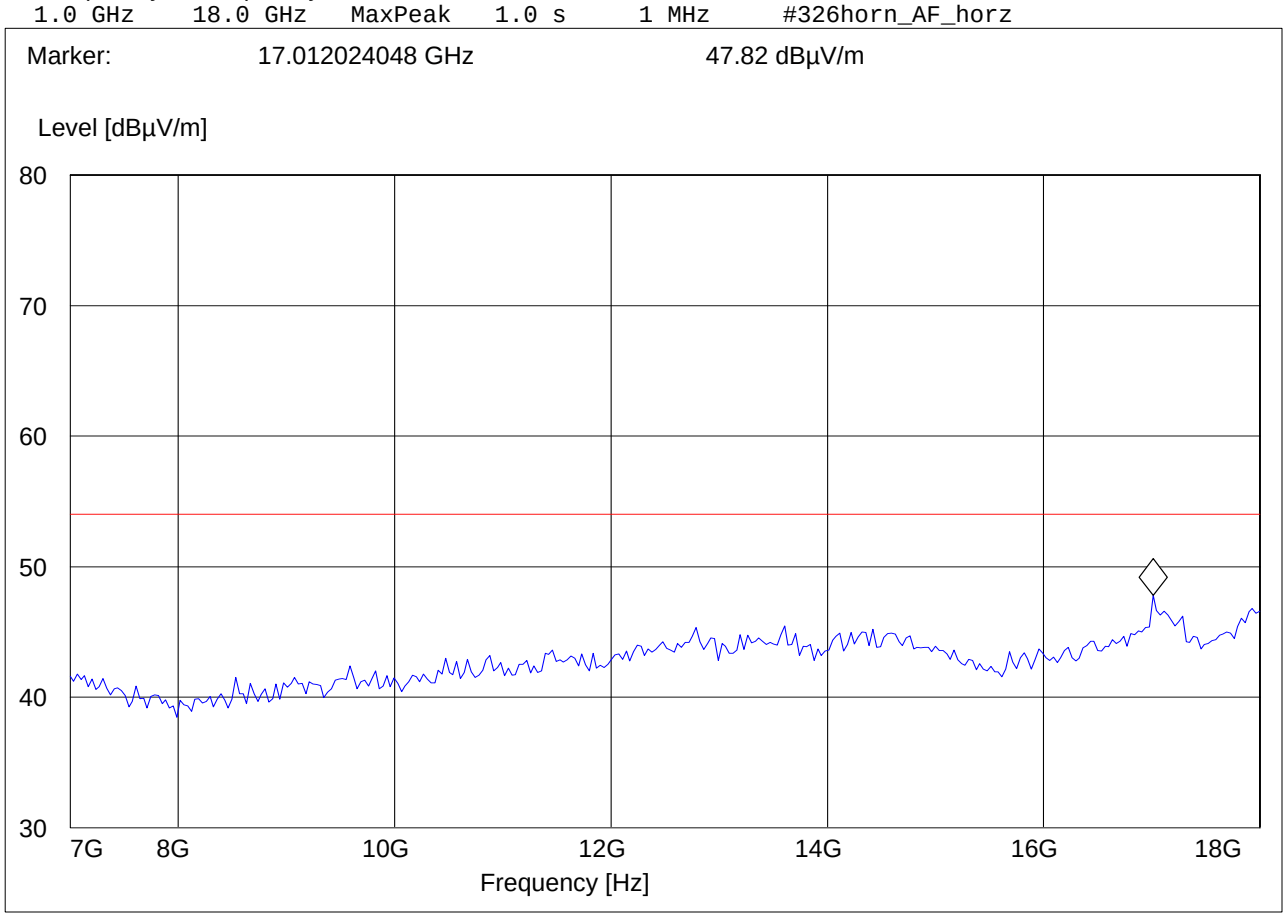
7-18GHz (5500MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5500MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



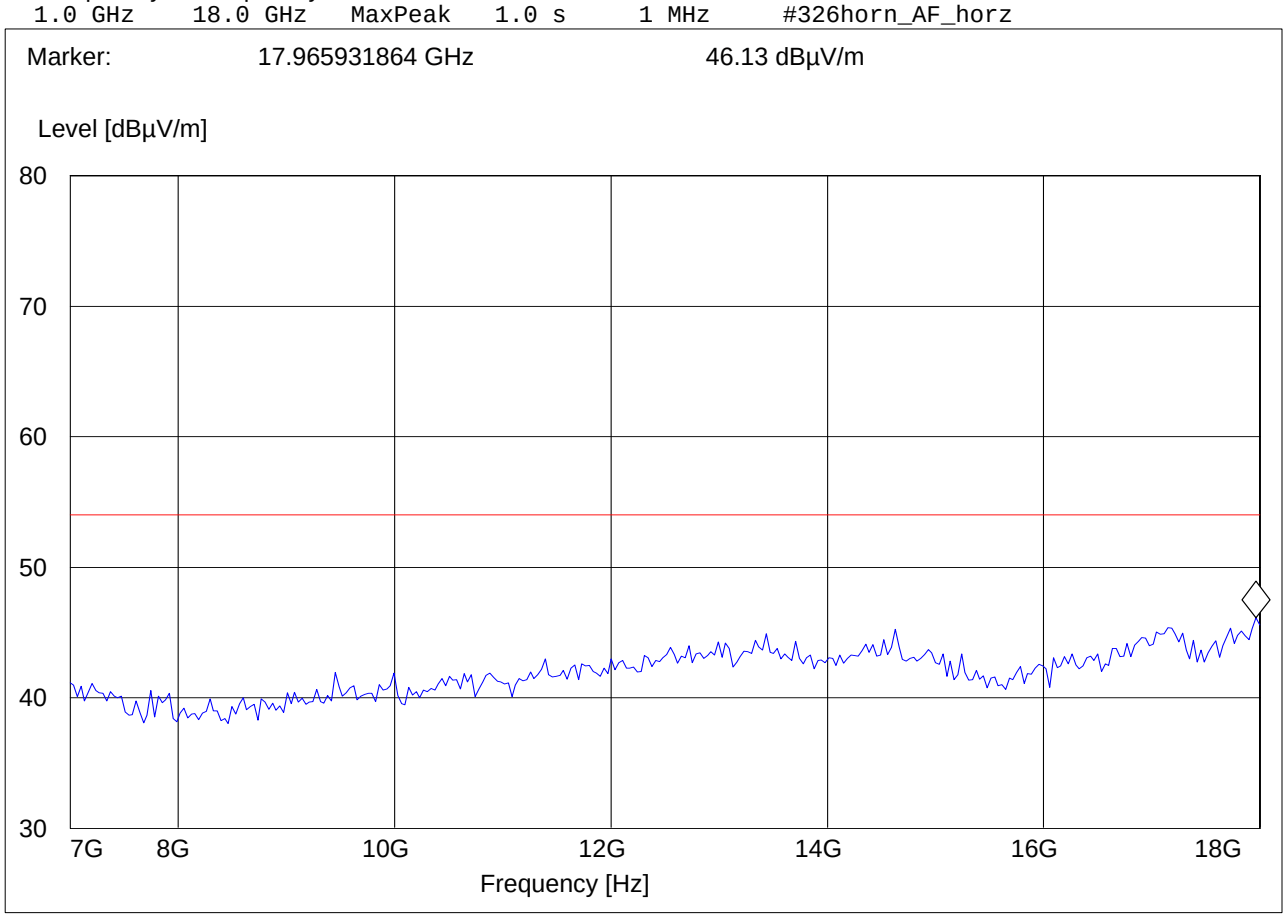
7-18GHz (5600MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5600MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



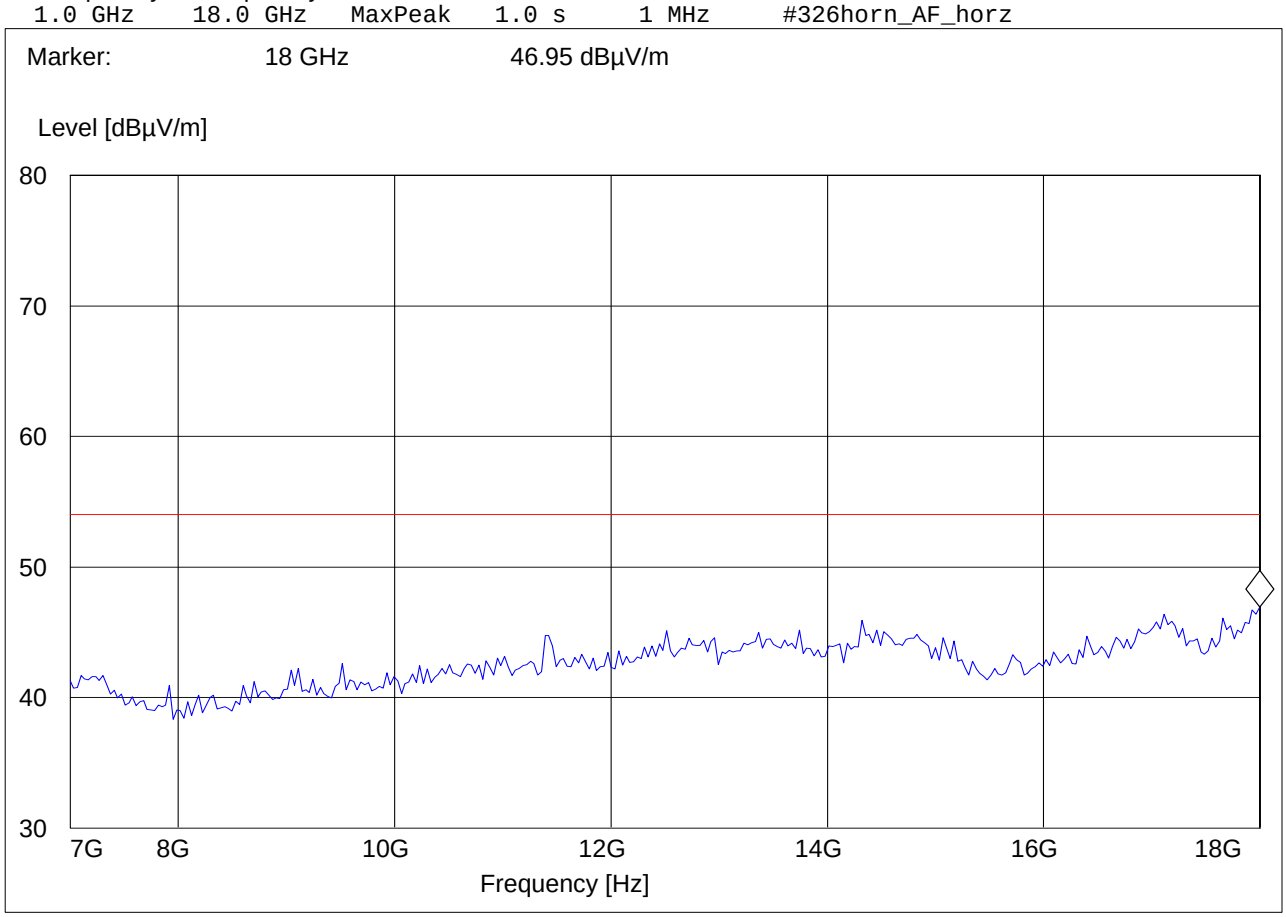
7-18GHz (5700MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5700MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



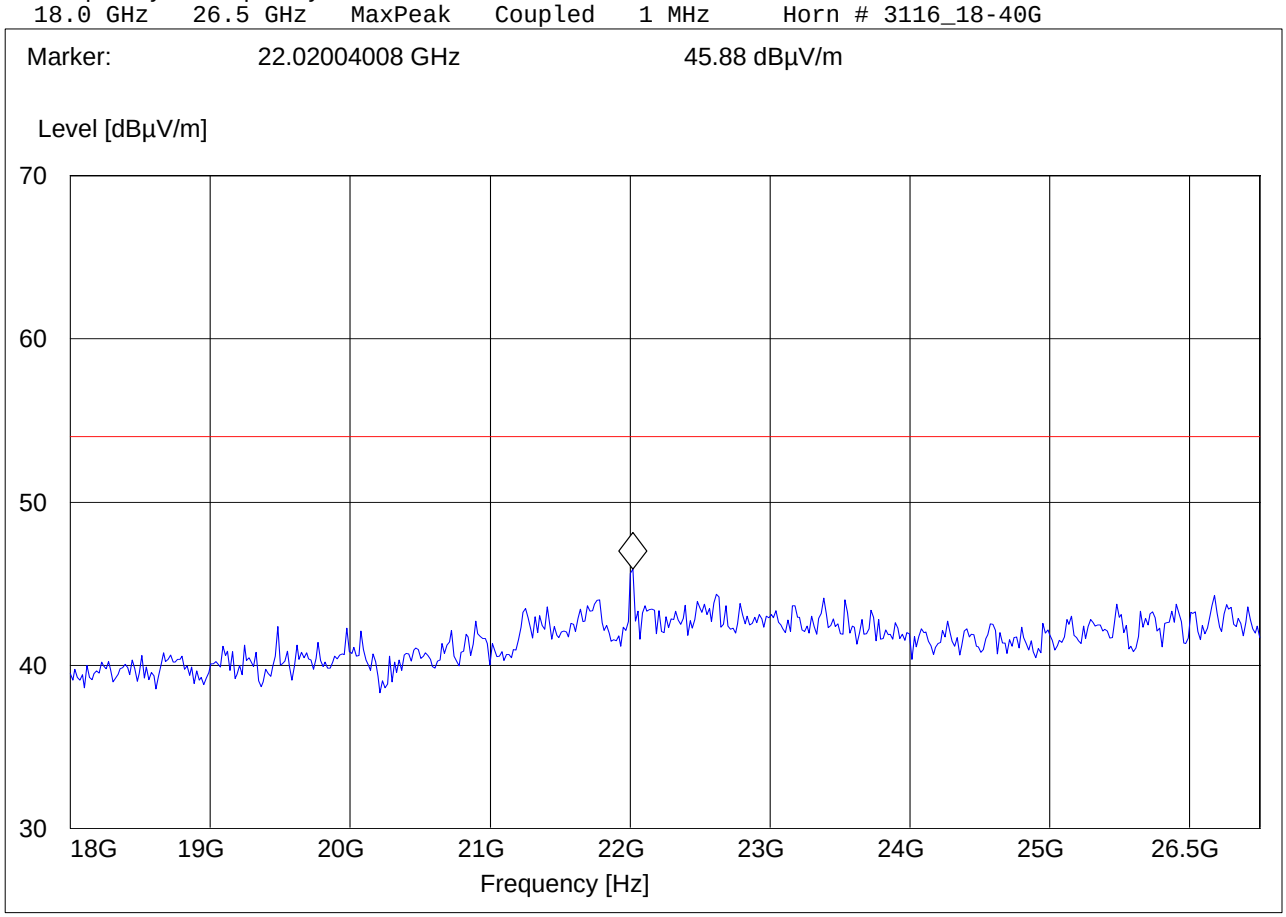
18-26.5GHz (5500MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5500MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



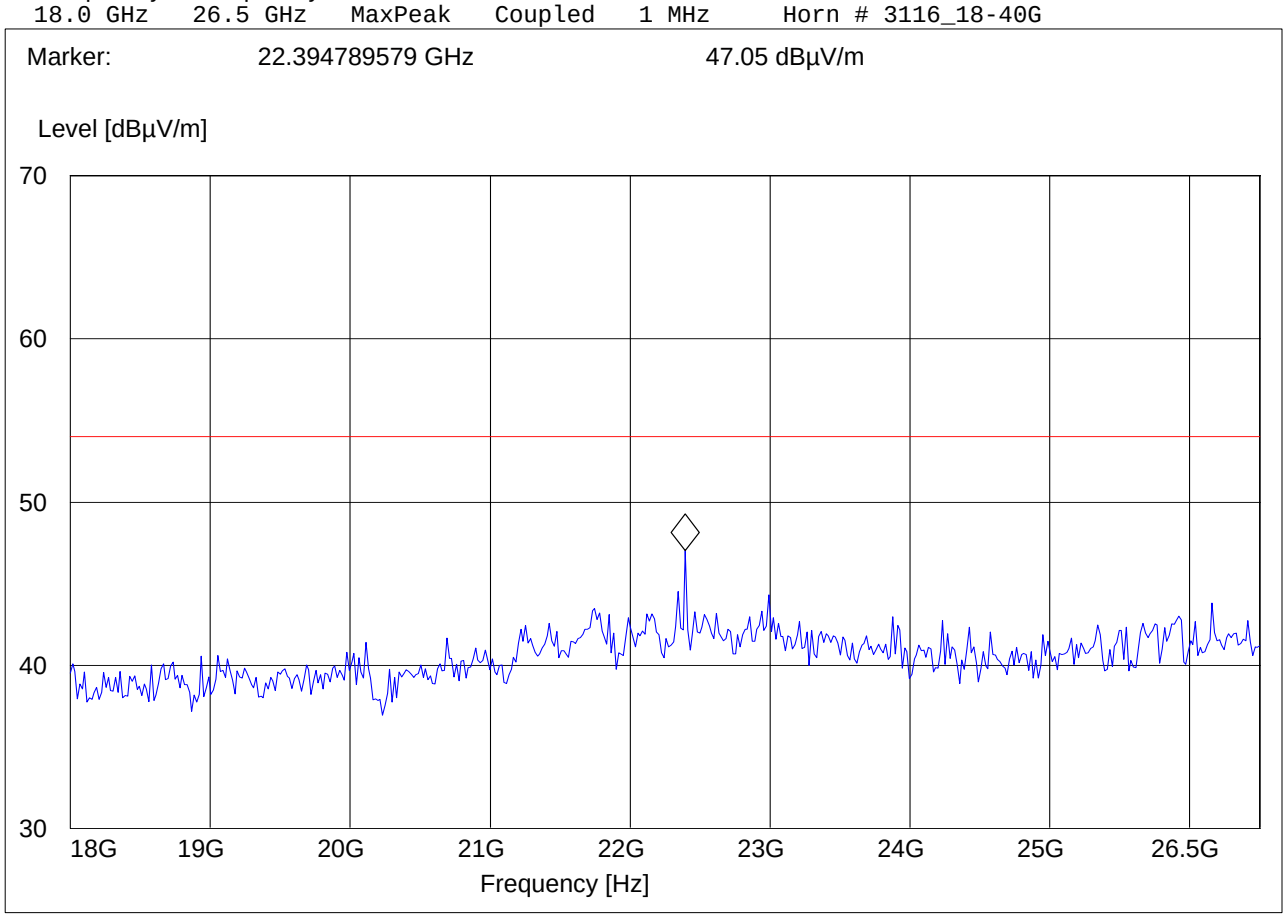
18-26.5GHz (5600MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5600MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



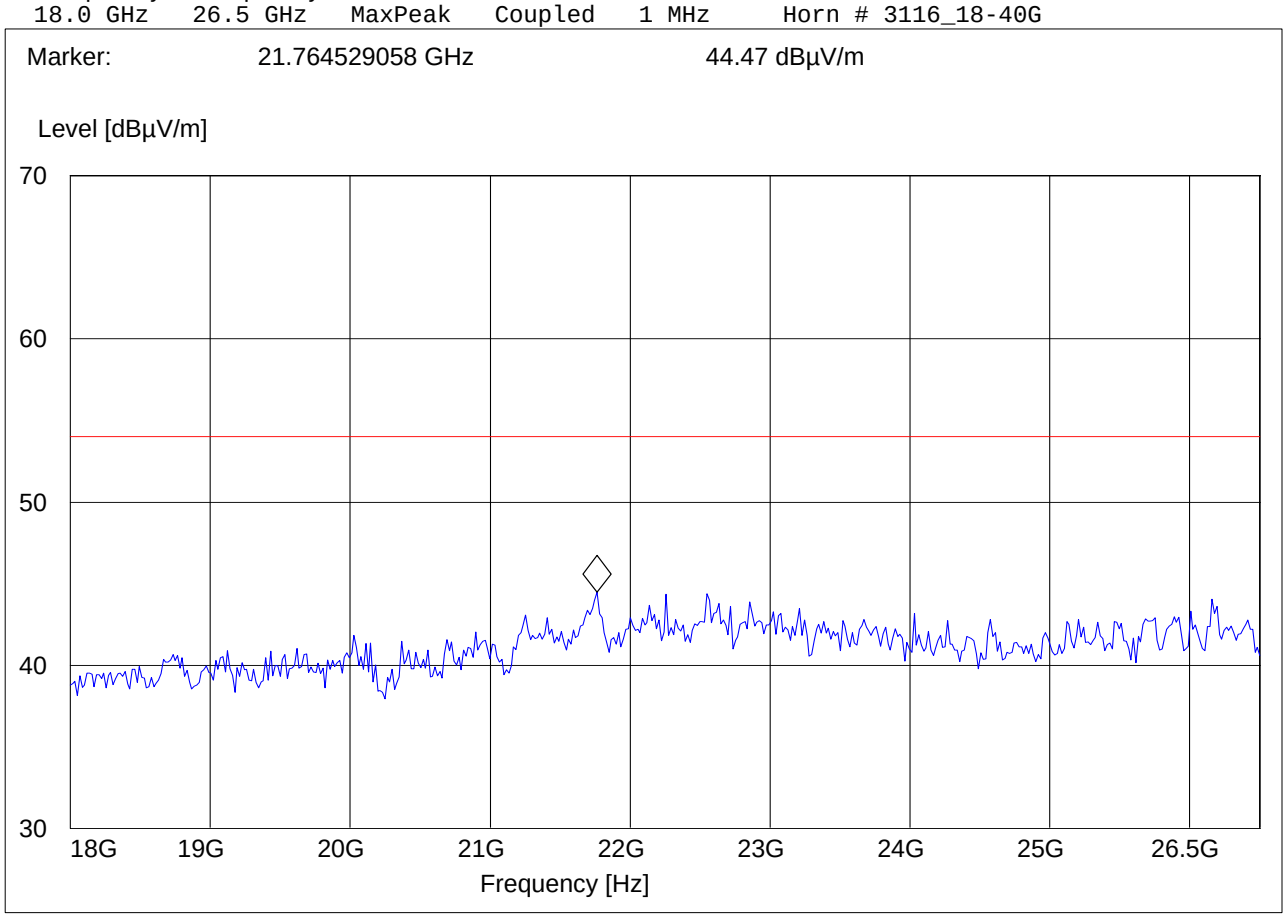
18-26.5GHz (5700MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5700MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



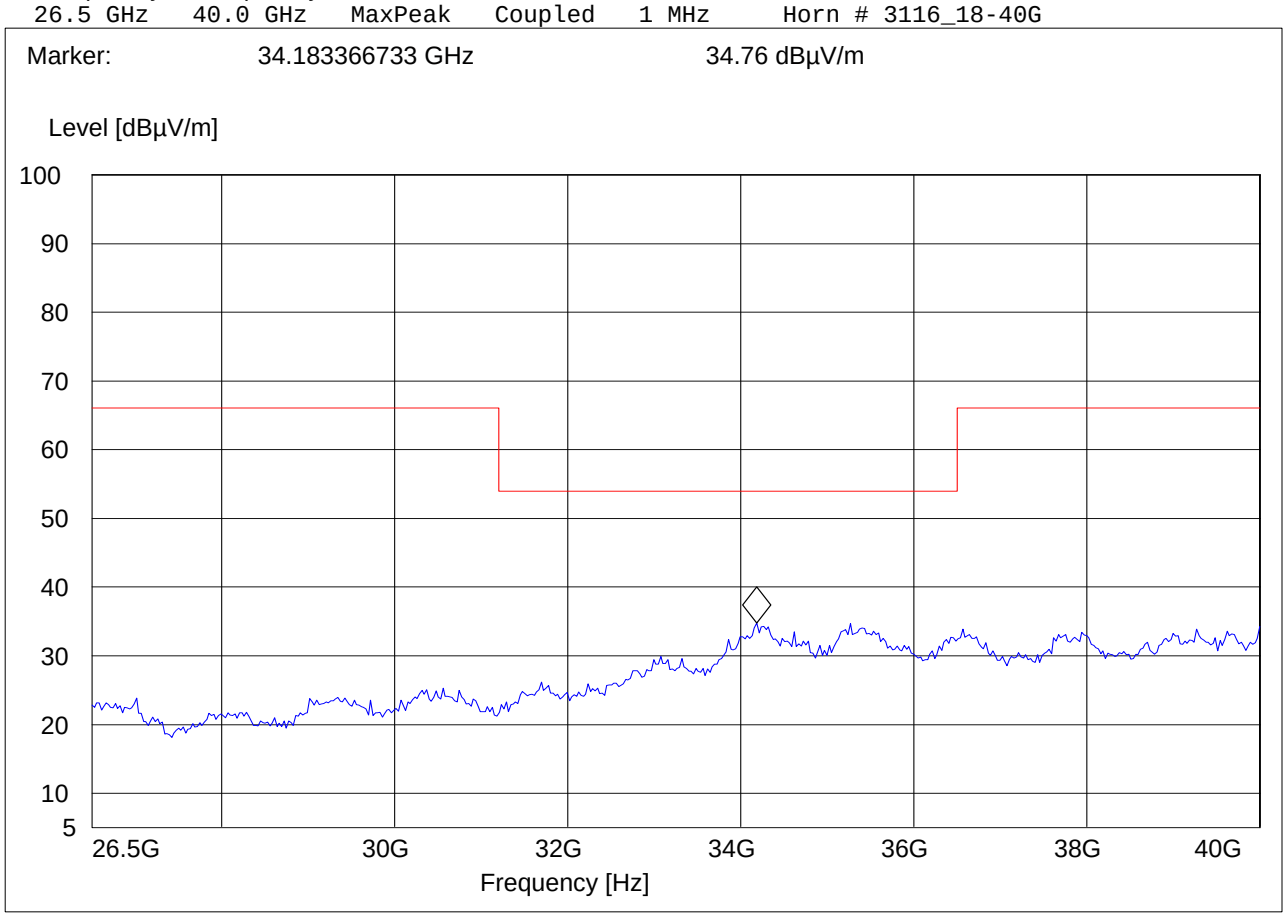
26.5-40GHz

Note: This plot is valid for low, mid, high channels (worst-case plot)
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; 5600MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.4.10 **Sub-band 3 802.11n HT40 MODE**

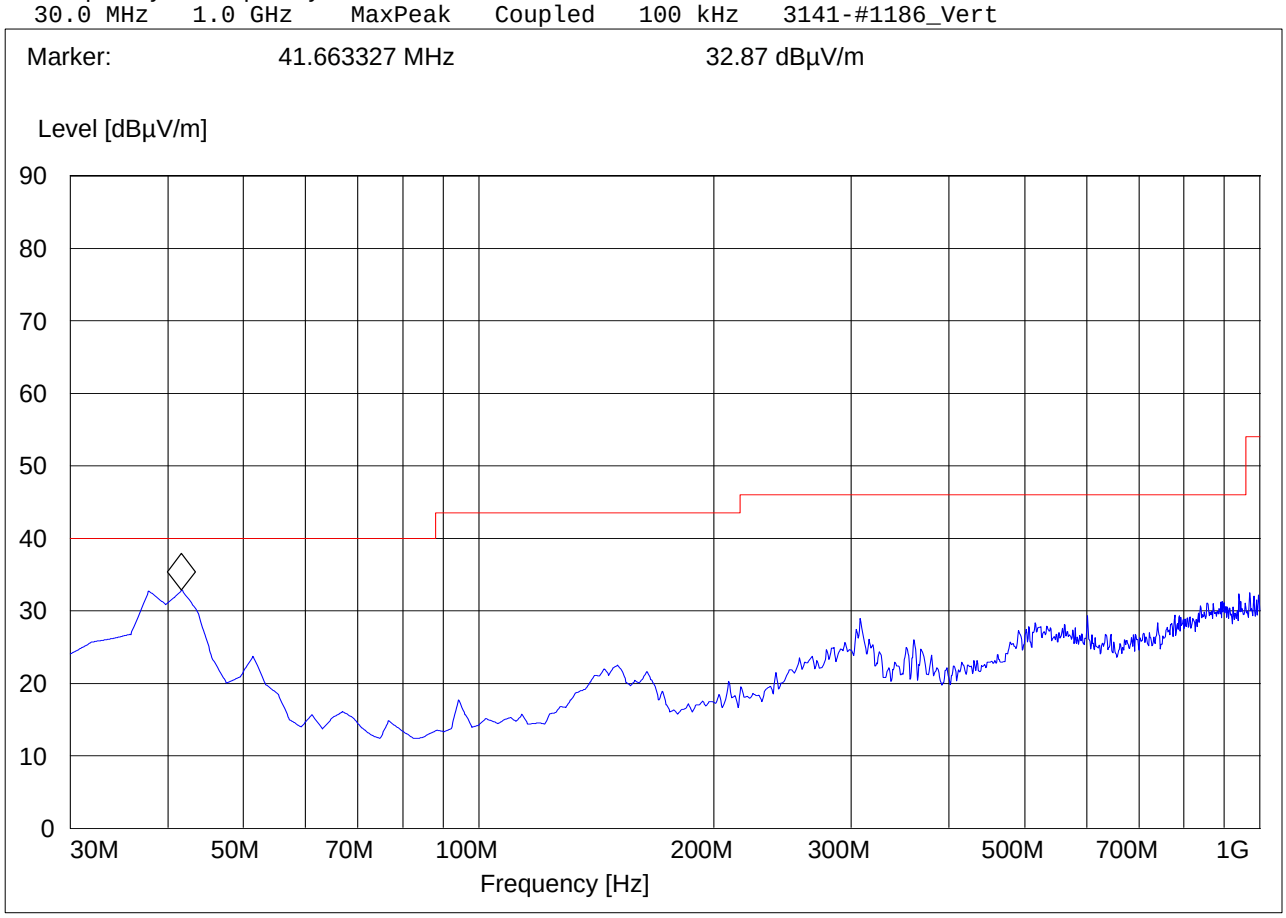
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5590MHz
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



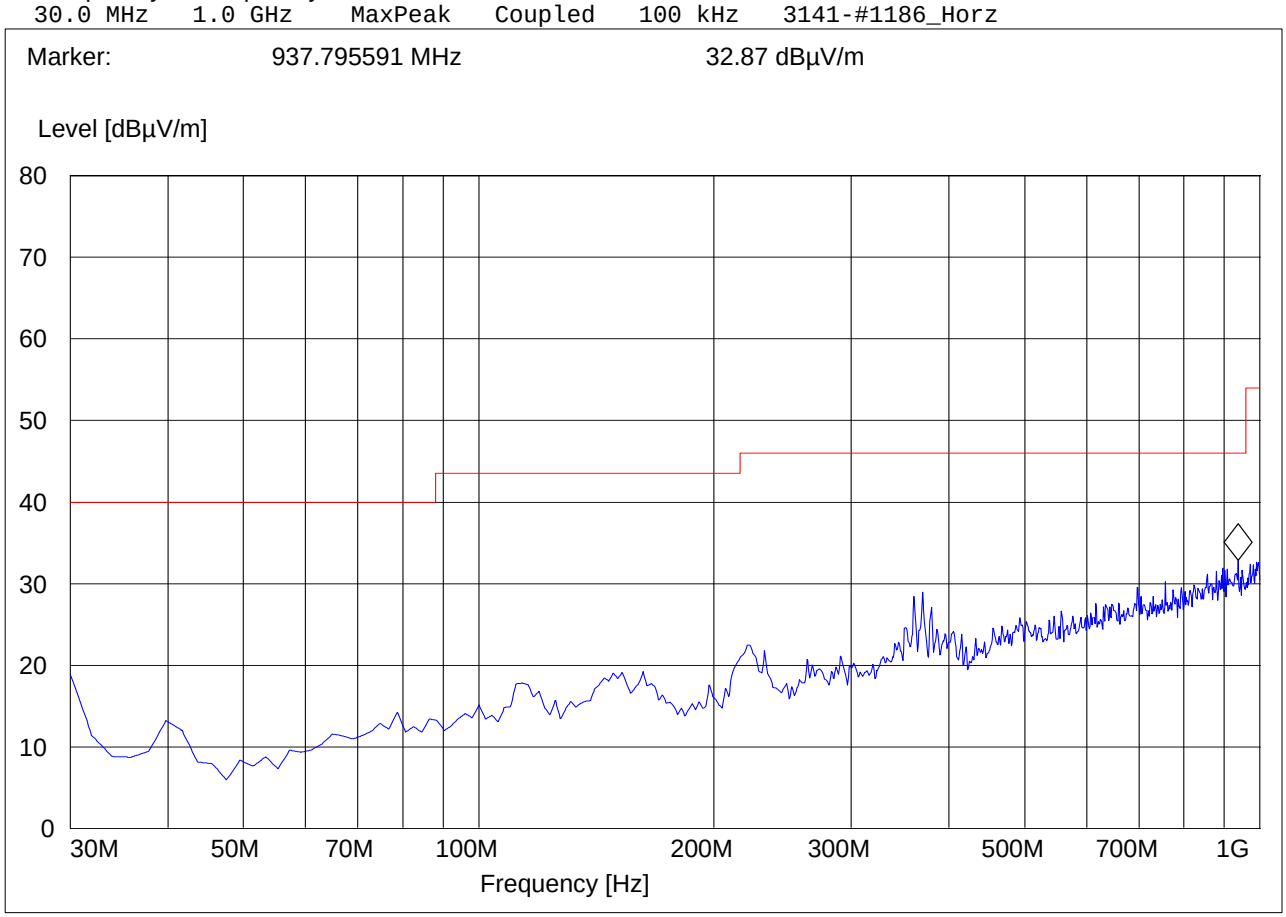
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5590MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



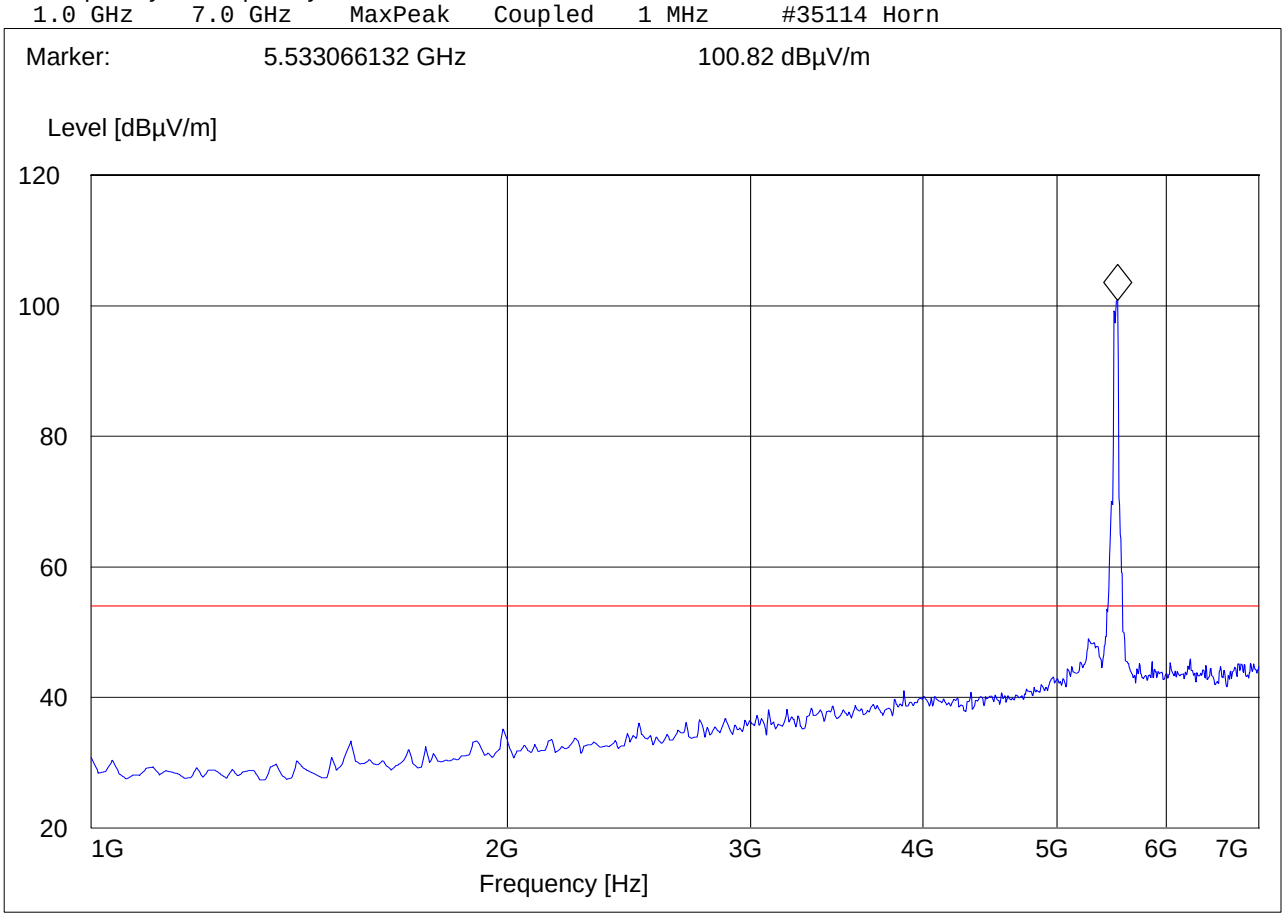
1-7GHz (5510MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5510MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



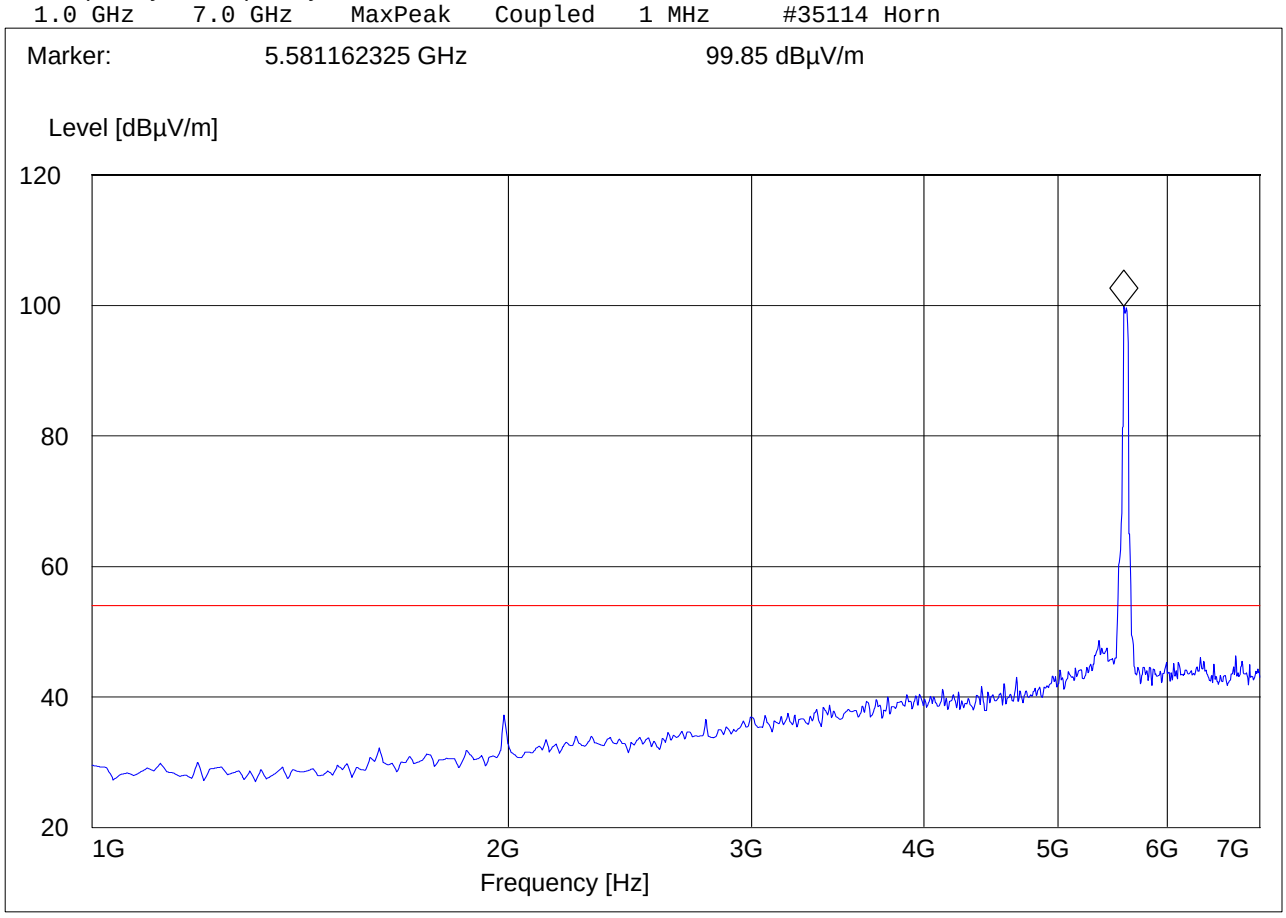
1-7GHz (5590MHz)

Note: The peak above the limit line is the carrier freq.
Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5590MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



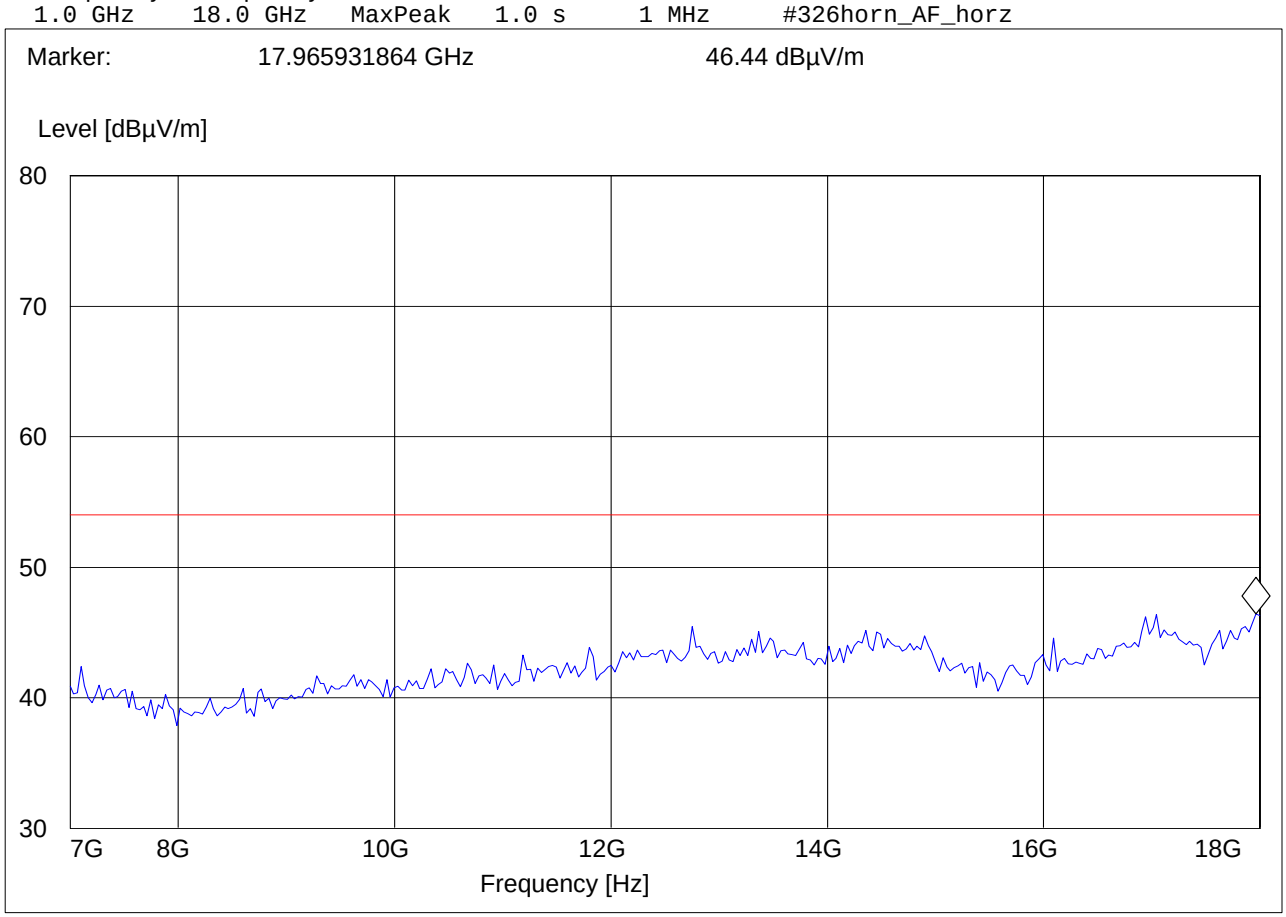
7-18GHz (5510MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5510MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: 6.2GHz HPF

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



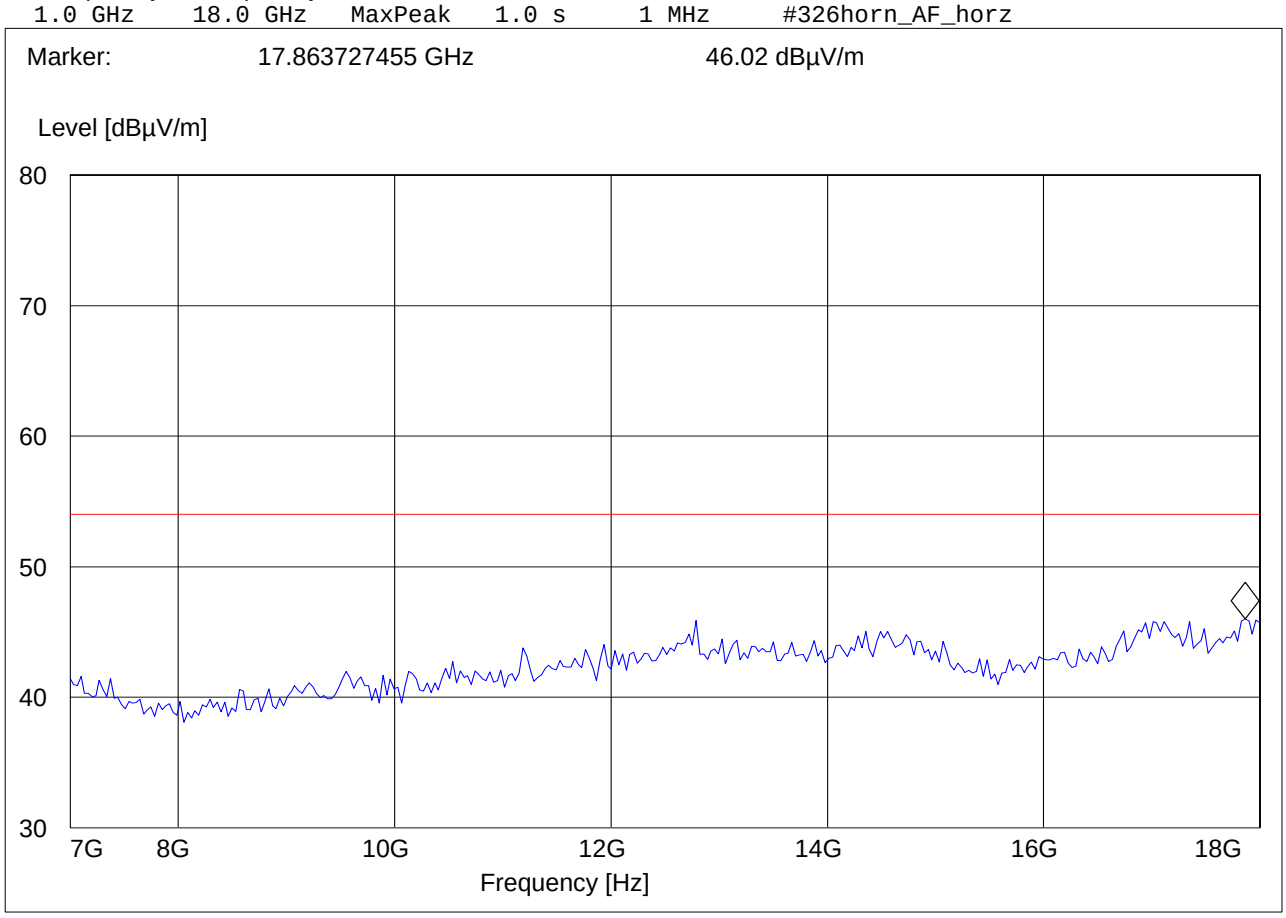
7-18GHz (5590MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5590MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         6.2GHz HPF
```

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



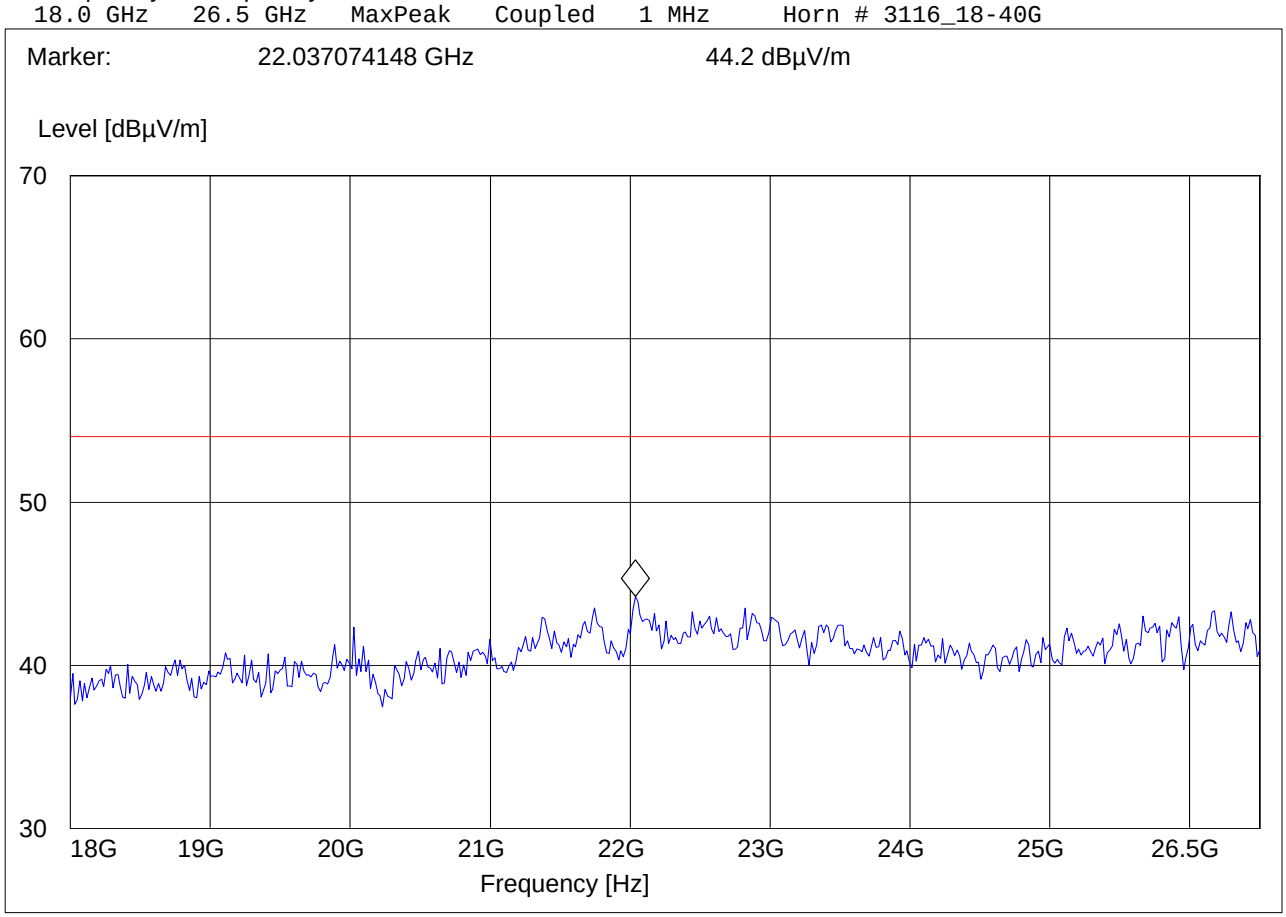
18-26.5GHz (5510MHz)

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5510MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



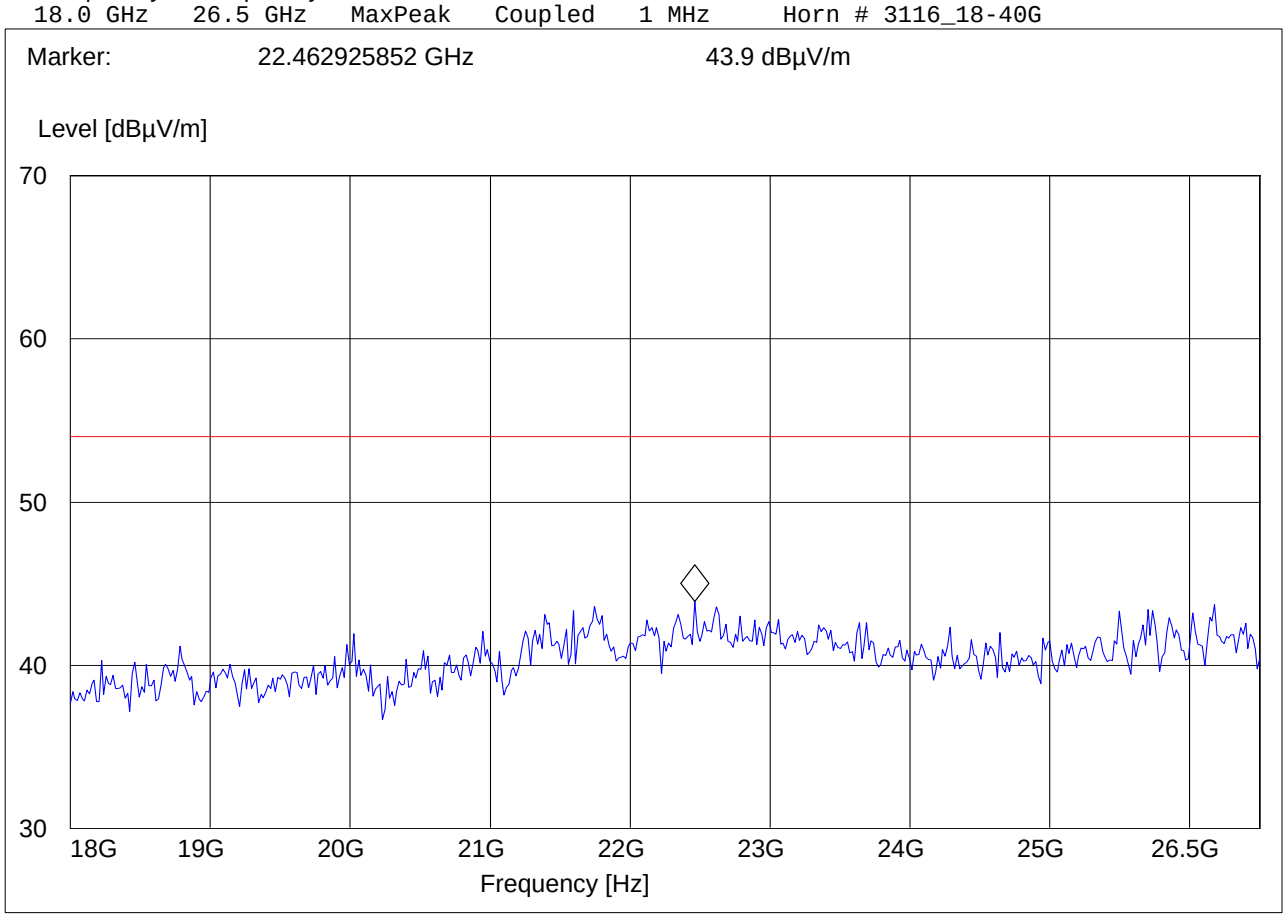
18-26.5GHz (5590MHz)

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; 5590MHz
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 18-26.5G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



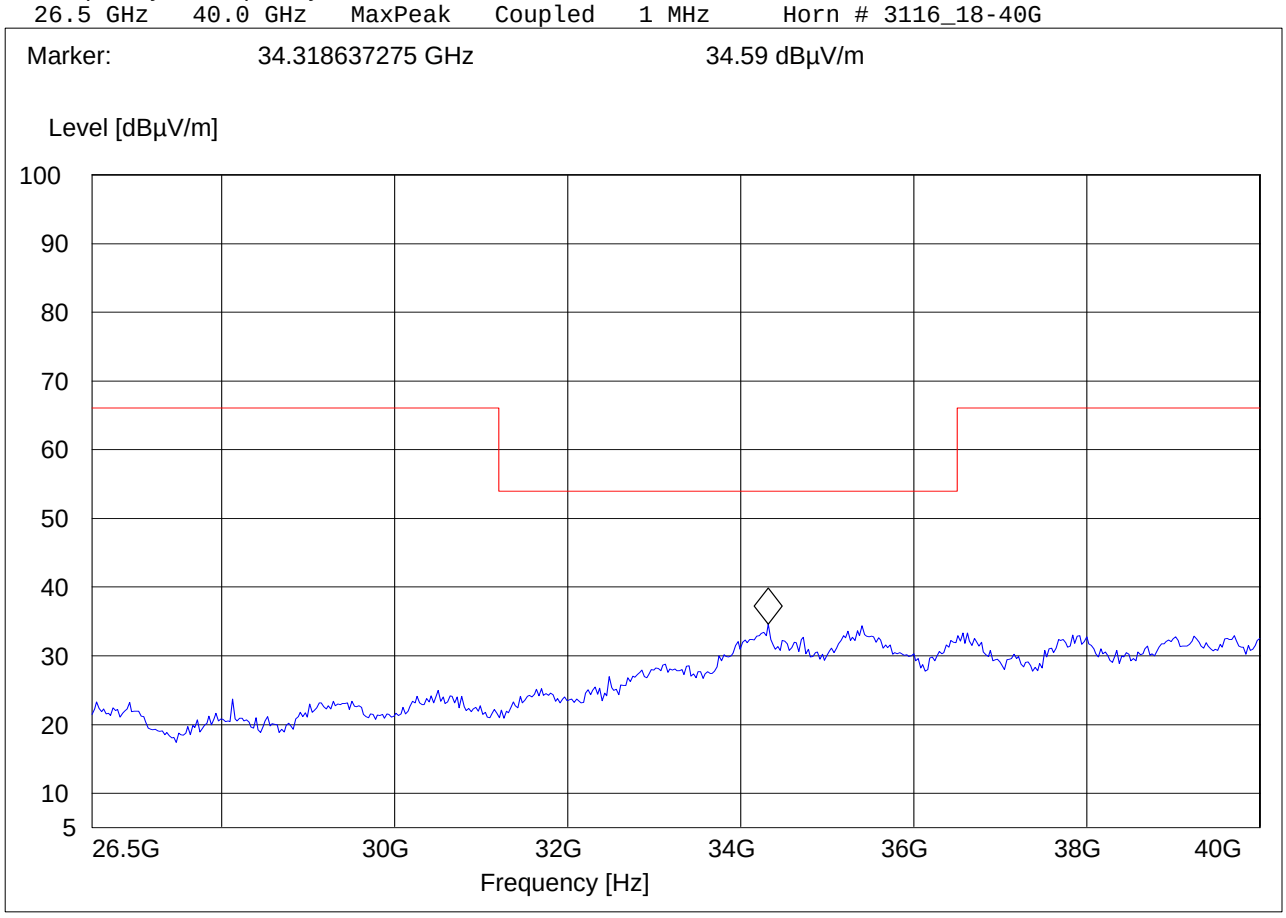
26.5-40GHz

Note: This plot is valid for low and high channels (worst-case plot)
Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; 5590MHz
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 26.5-40G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	Horn # 3116_18-40G



5.5 Receiver Spurious Emission § 15.209/RSS210

5.5.1 **Limits**

Frequency (MHz)	Field strength (µV/m)	Measurement distance (m)
0.009 - 0.490	**2400/F (kHz)**	**300**
0.490 - 1.705	**24000/F (kHz)**	**30**
1.705 - 30.0	**30**	**30**
30 - 88	**100**	**3**
88 - 216	**150**	**3**
216 - 960	**200**	**3**
above 960	**500**	**3**

NOTE:
1. The radiated emissions were done with different settings, using the relevant pre-amplifiers for the relevant frequency ranges. This is the reason that the graphs show different noise levels. In the range between 3 and 25 GHz very short cable connections to the antenna was used to minimize the noise level.

2. All measurements are done in peak mode using an average limit unless specified with the plots.

3. There are no measurable emissions above 18GHz in Rx mode.

5.5.2 802.11a MODE

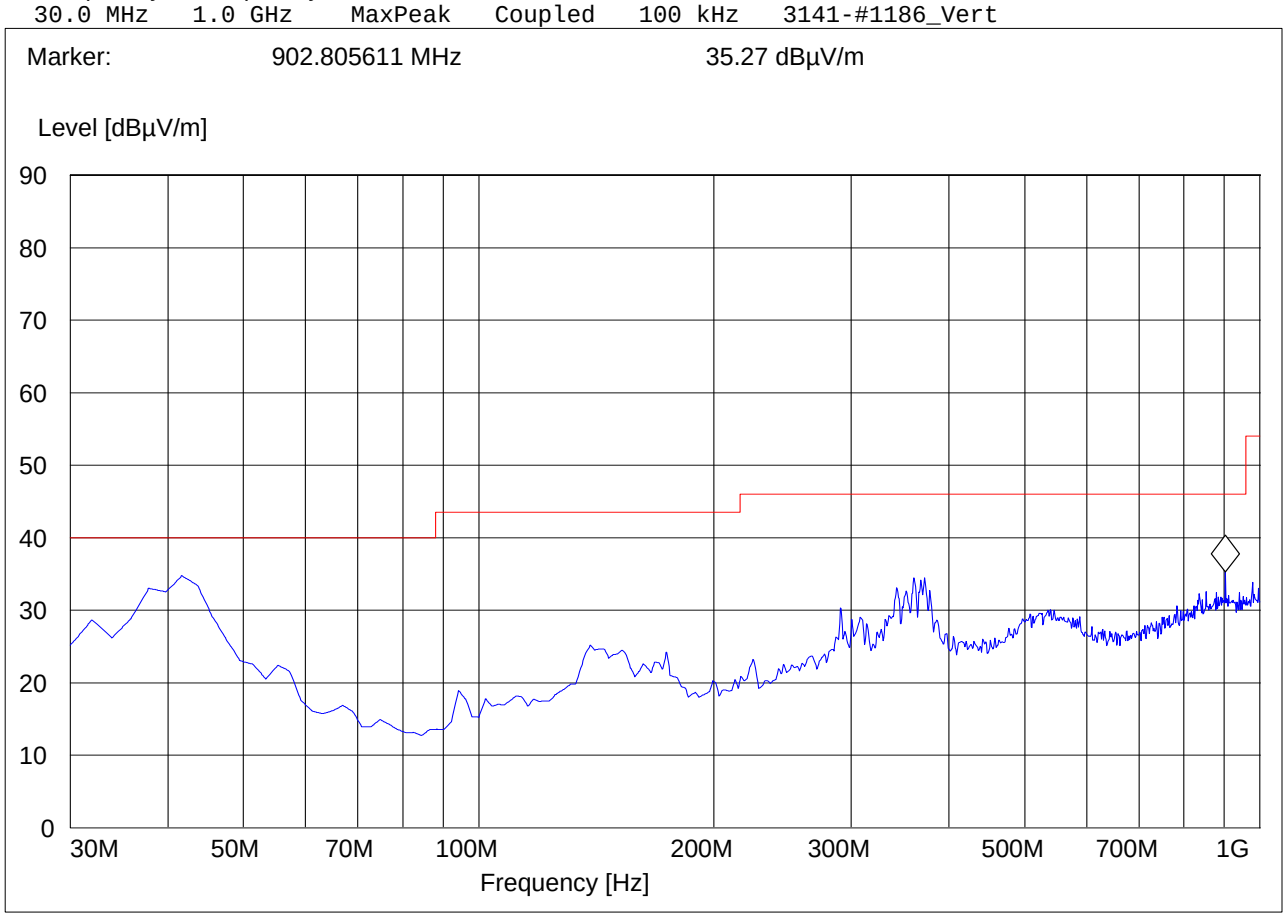
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; IDLE
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



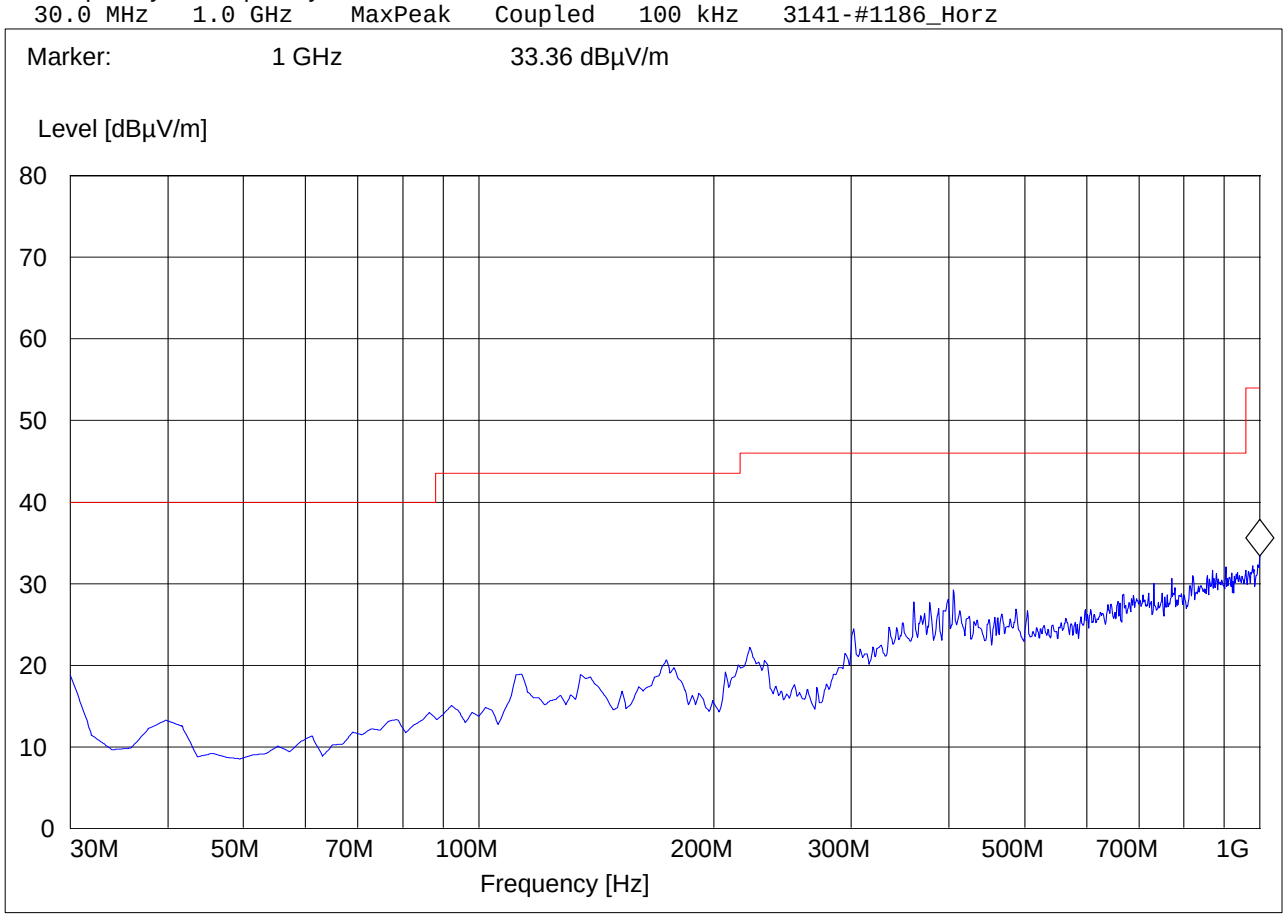
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; IDLE
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



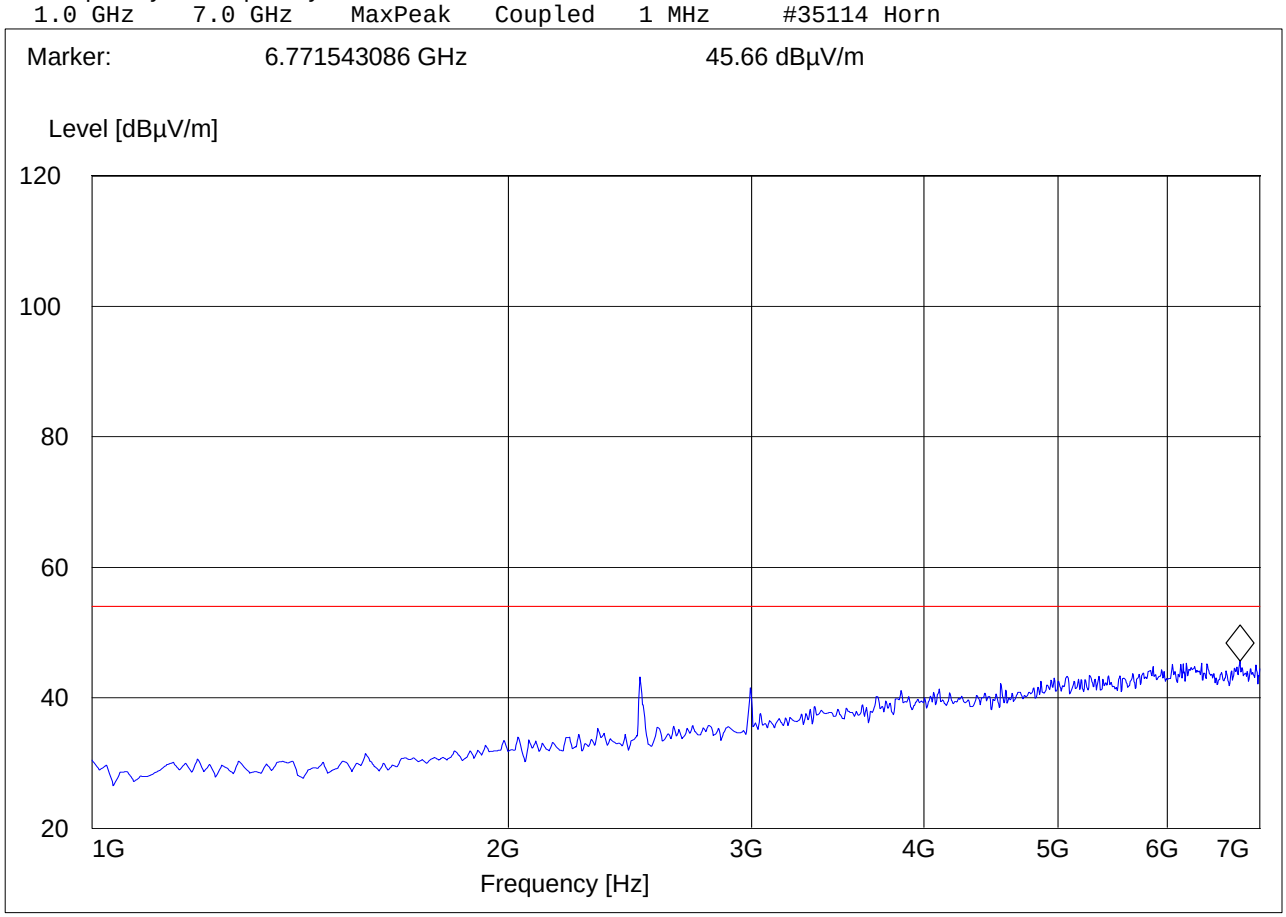
1-7GHz

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11a; IDLE
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



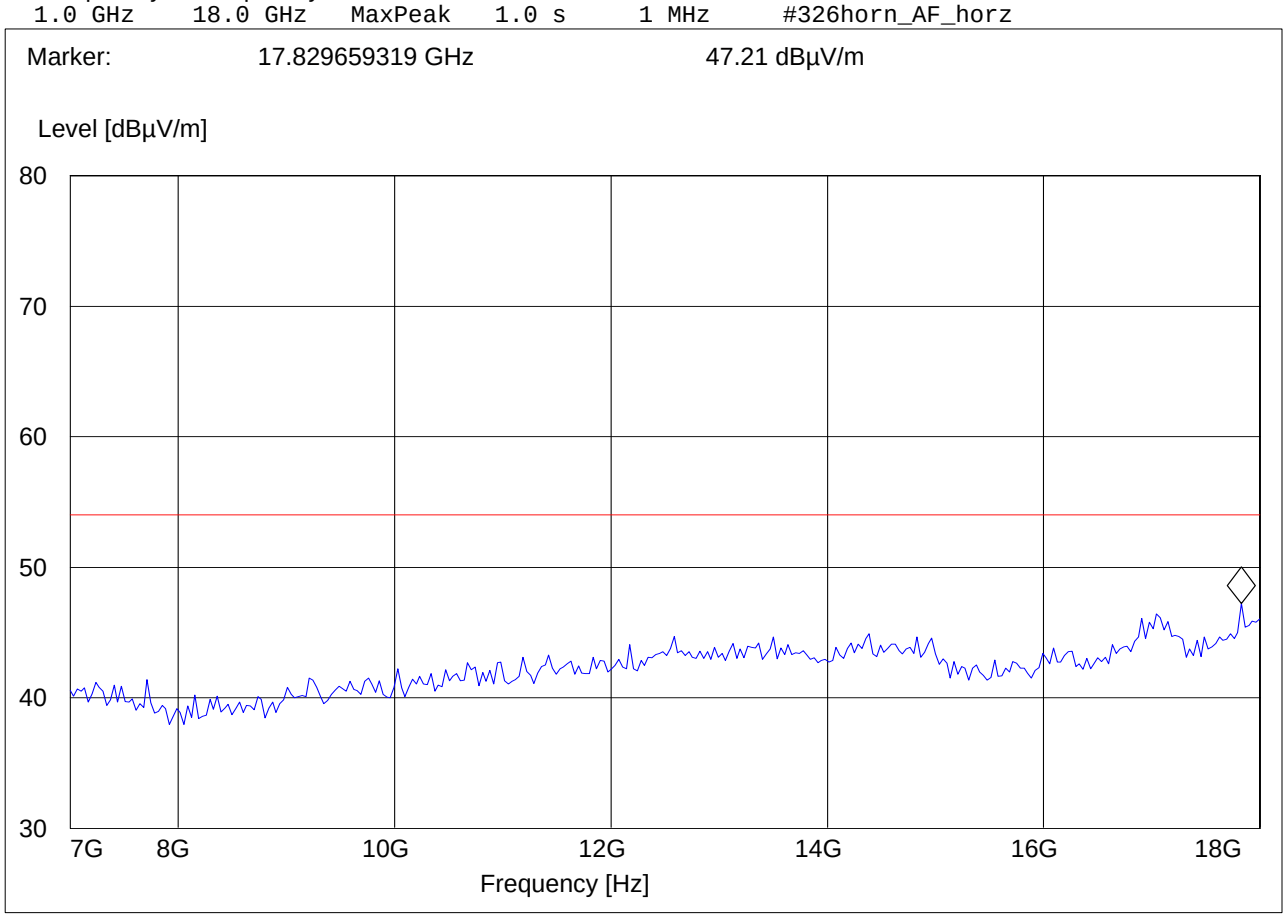
7-18GHz

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11a; IDLE
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments:

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



5.5.3 802.11n HT20 MODE

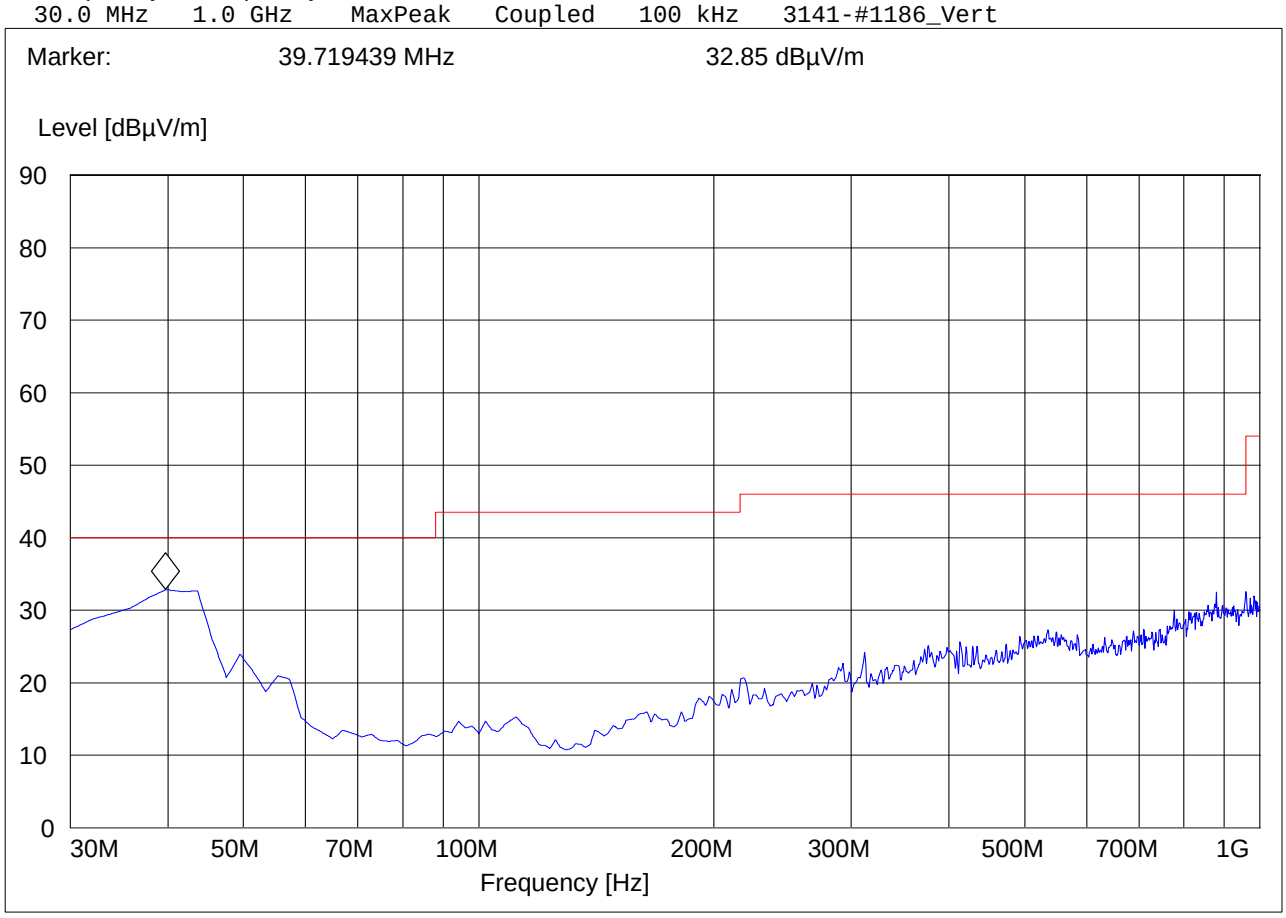
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; IDLE
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



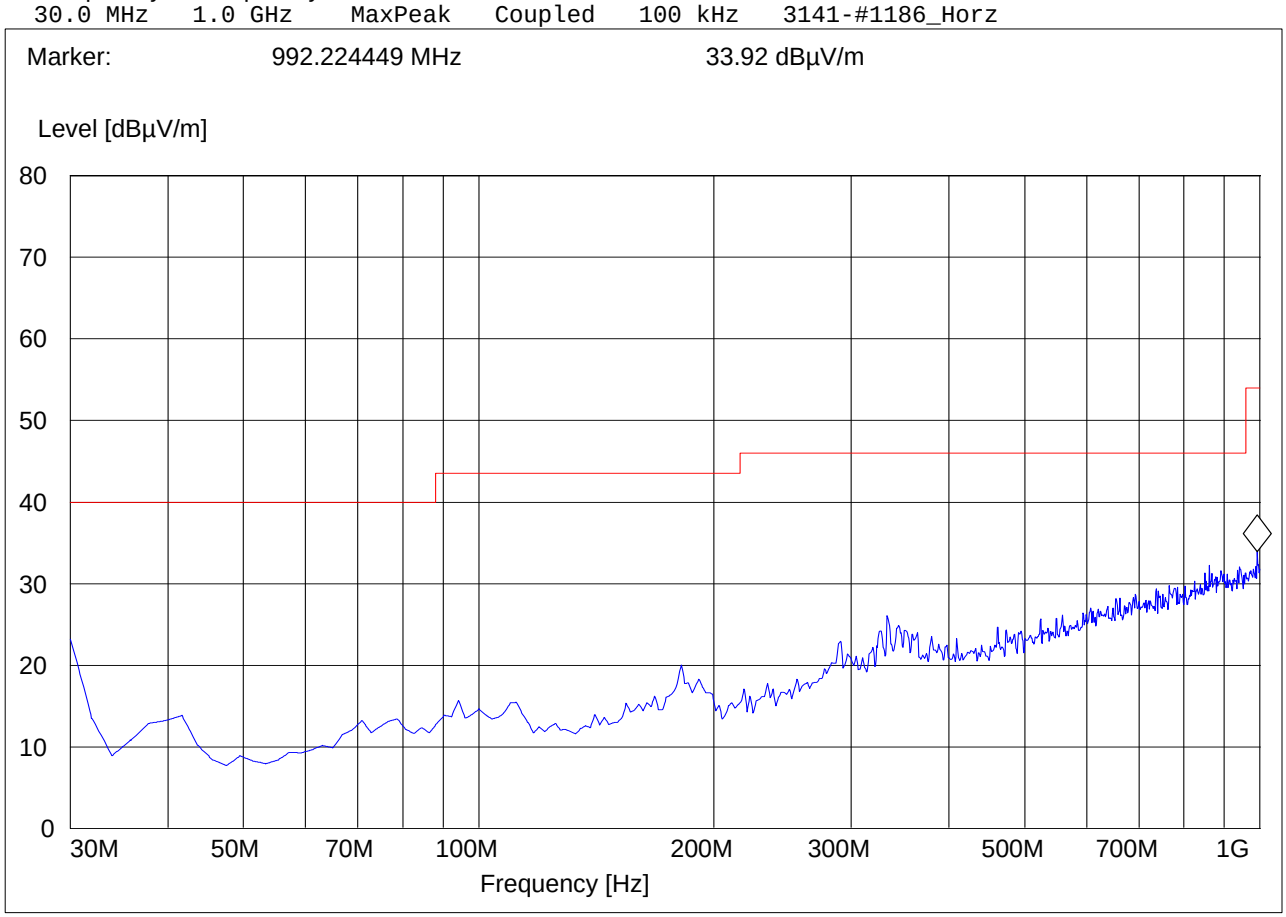
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n20; IDLE
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



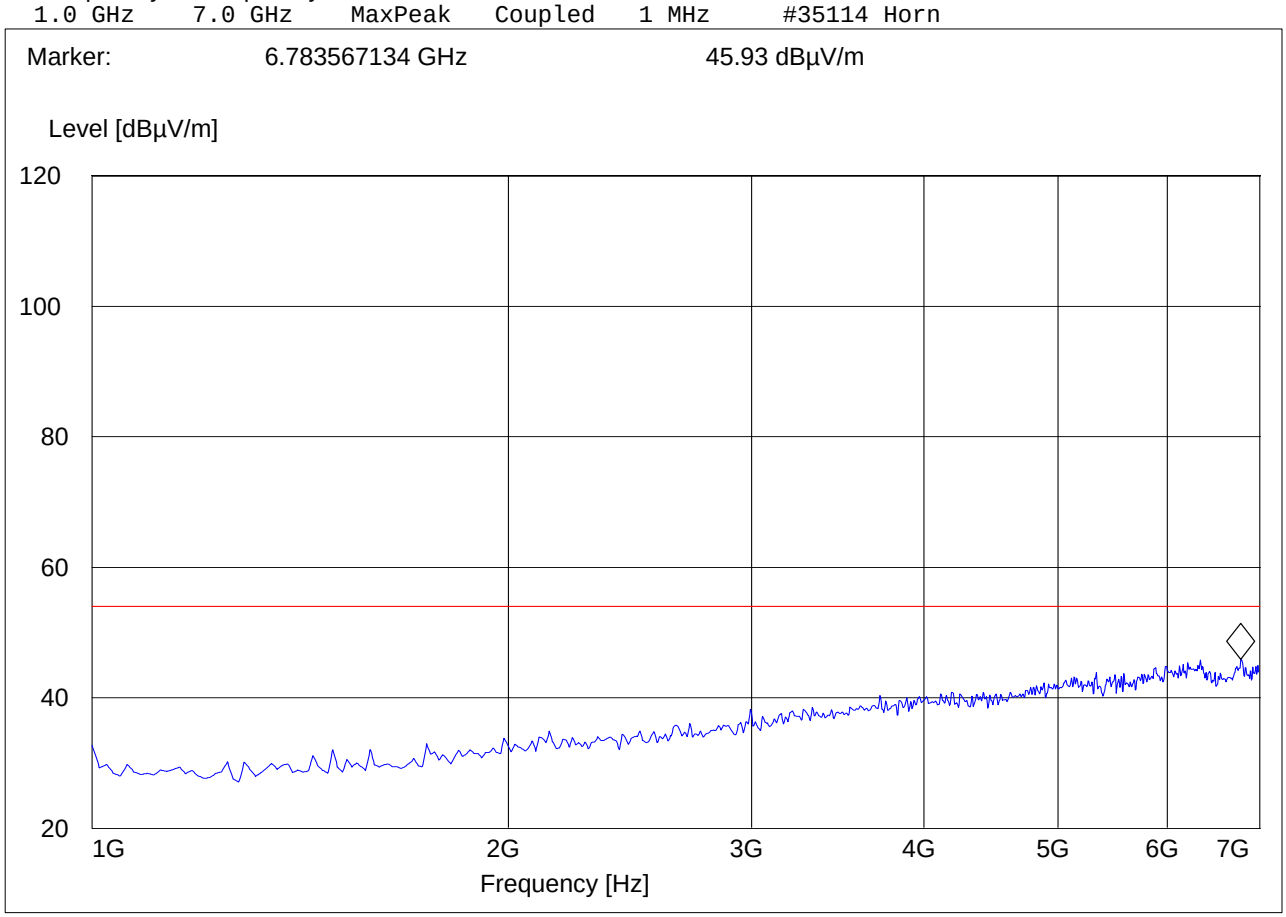
1-7GHz

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; IDLE
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: TT@189°

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



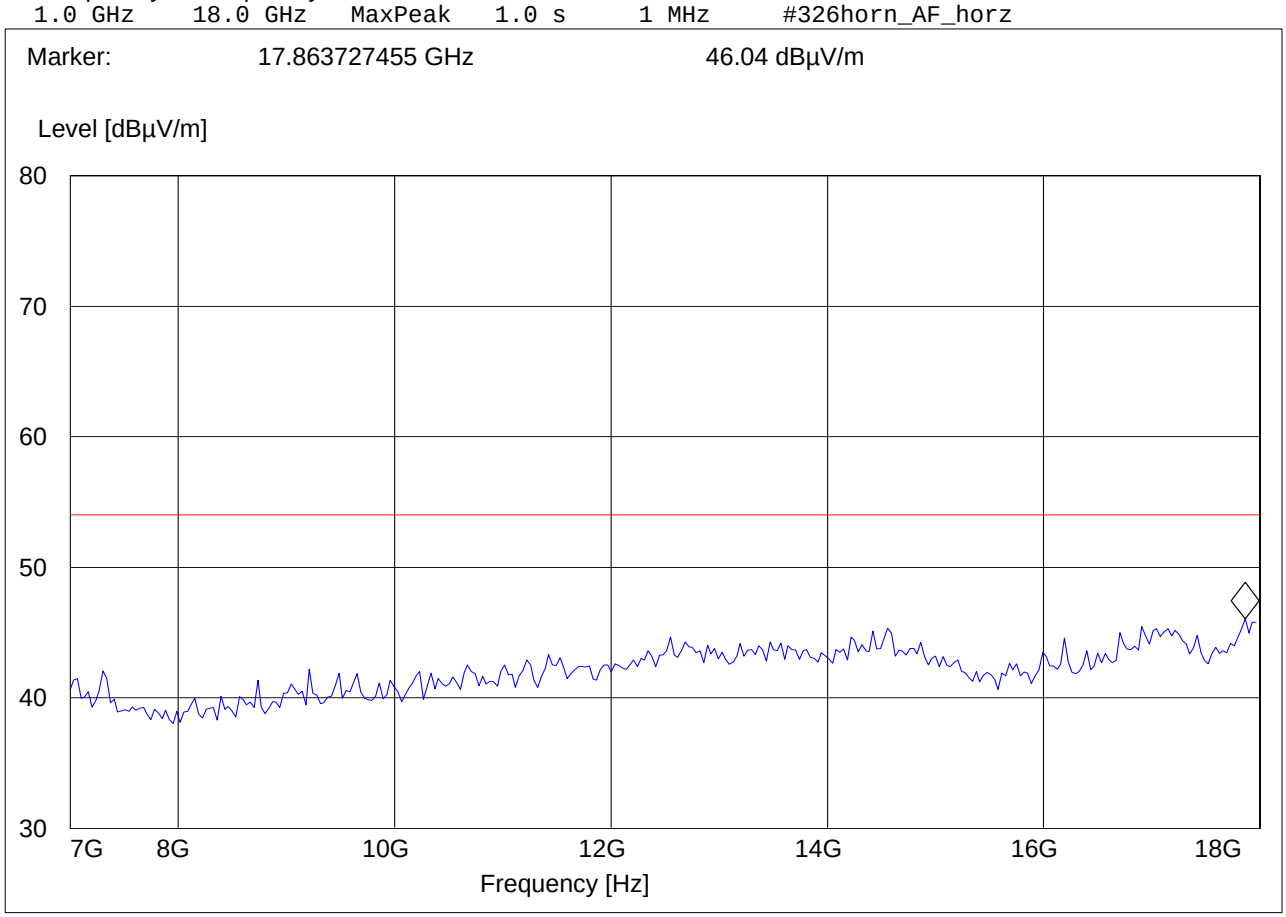
7-18GHz

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n20; 5220MHz; IDLE
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: TT@189°

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



5.5.4 802.11n HT40 MODE

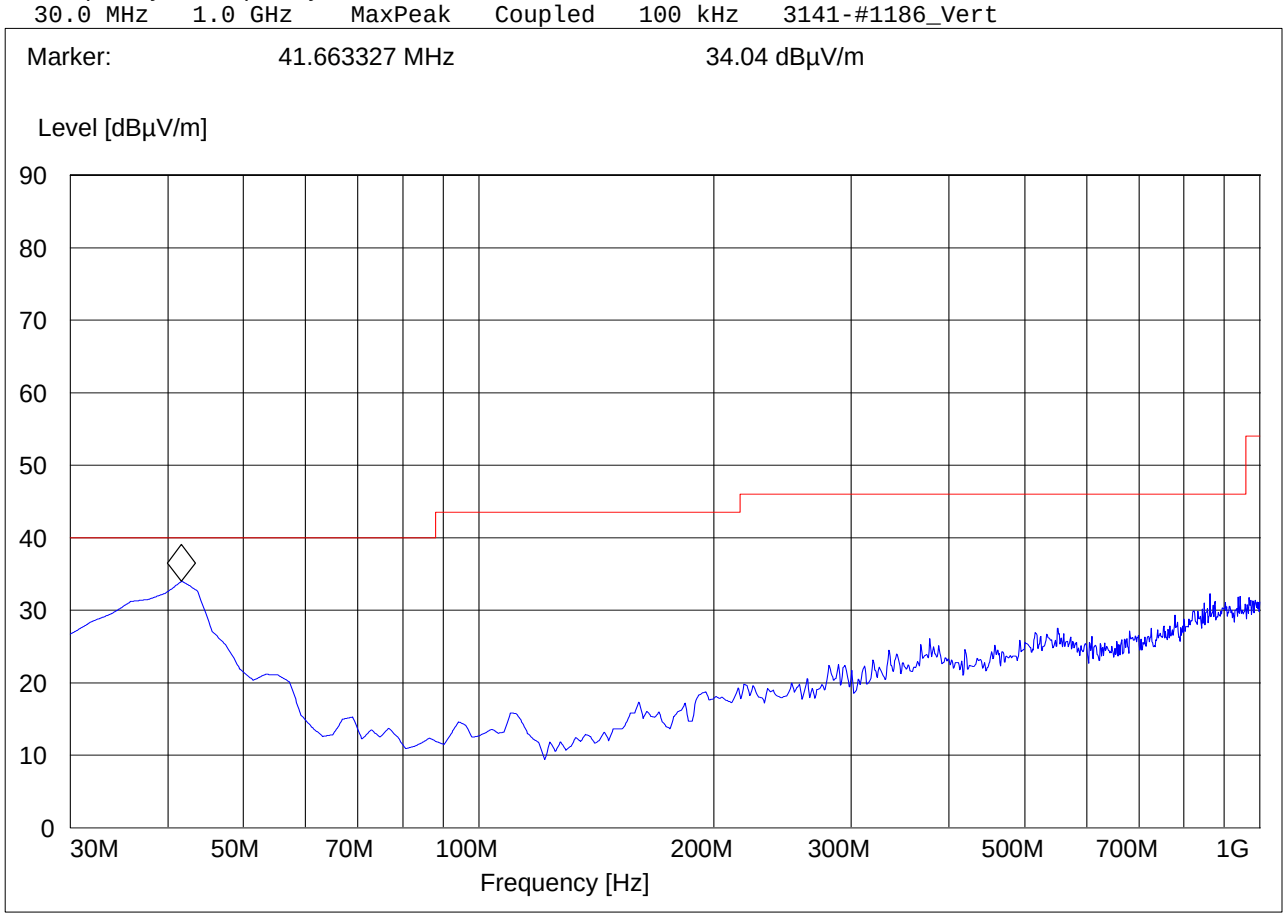
30MHz – 1GHz, Antenna: Vertical

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; IDLE
ANT Orientation:  V
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.247_30M-1G_Ver"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Vert



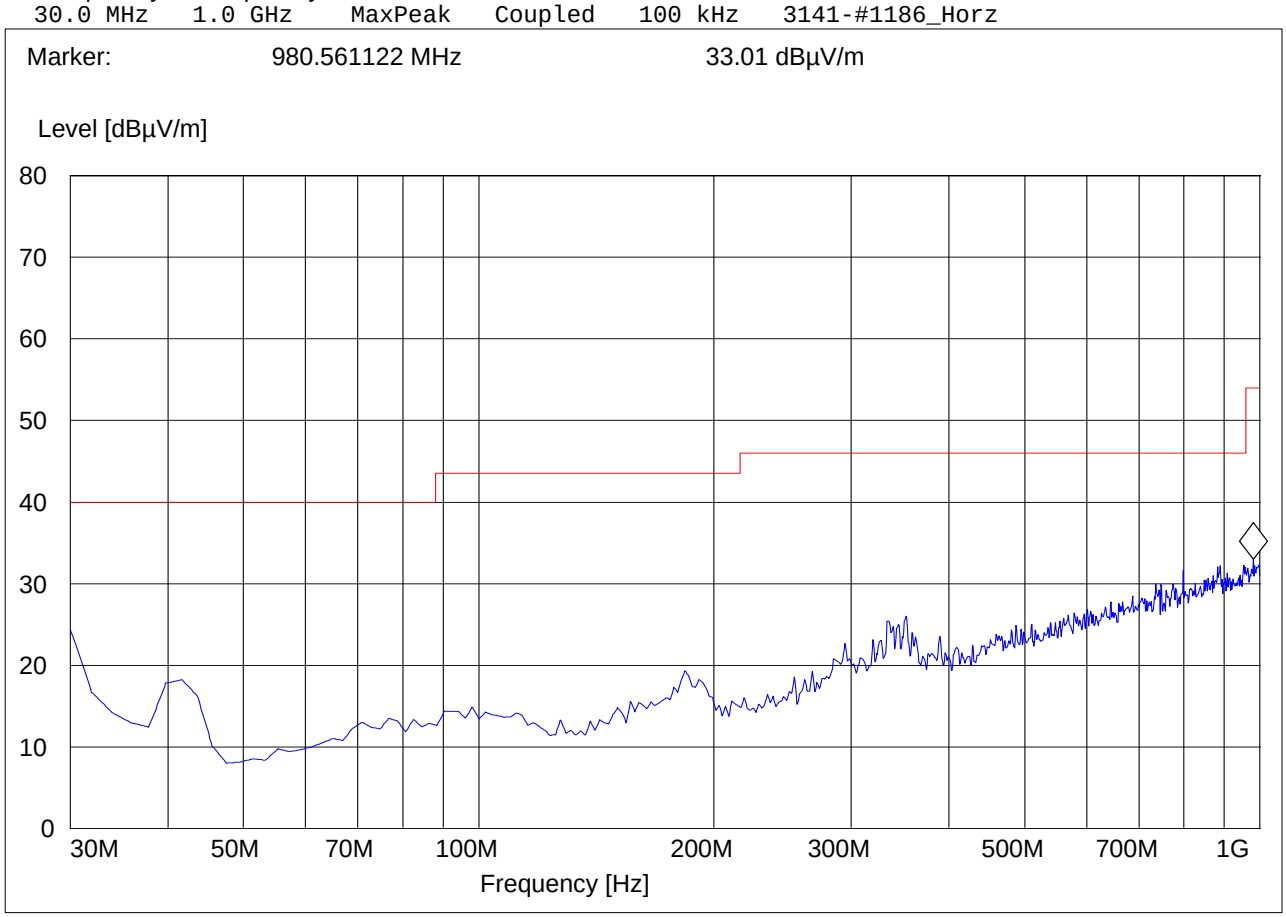
30MHz – 1GHz, Antenna: Horizontal

Note: This plot is valid for low, mid, high channels (worst-case plot).

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; IDLE
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC15.247_30M-1G_Hor"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	100 kHz	3141-#1186_Horz



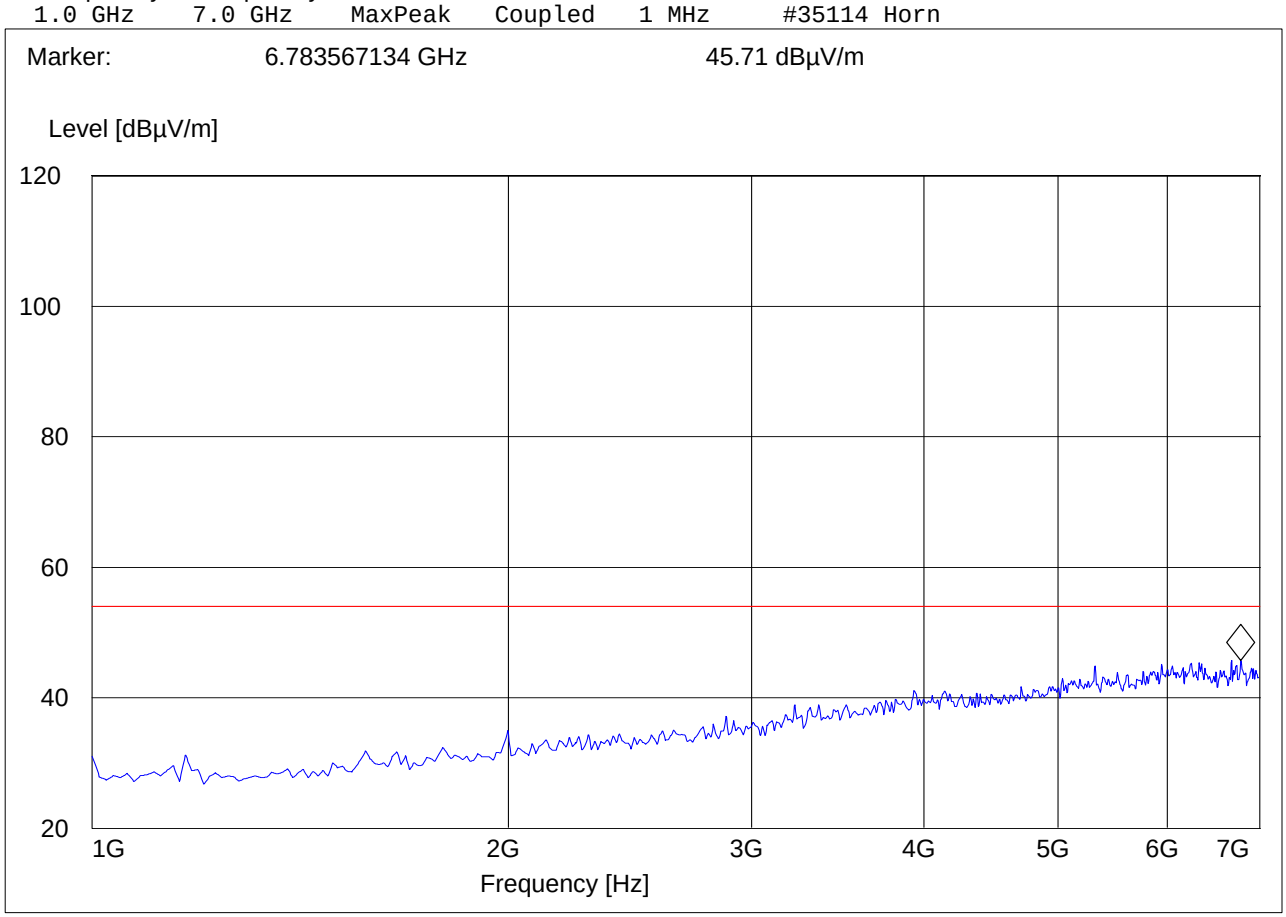
1-7GHz

Note: Peak Reading vs. Average limit

```
EUT:              Laptop
Customer::        Sony
Test Mode:        802.11n40; IDLE
ANT Orientation:  H
EUT Orientation:  H
Test Engineer:    SAM
Voltage:          AC
Comments:         TT@189°
```

SWEEP TABLE: "FCC 15.407 1-7G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	7.0 GHz	MaxPeak	Coupled	1 MHz	#35114 Horn



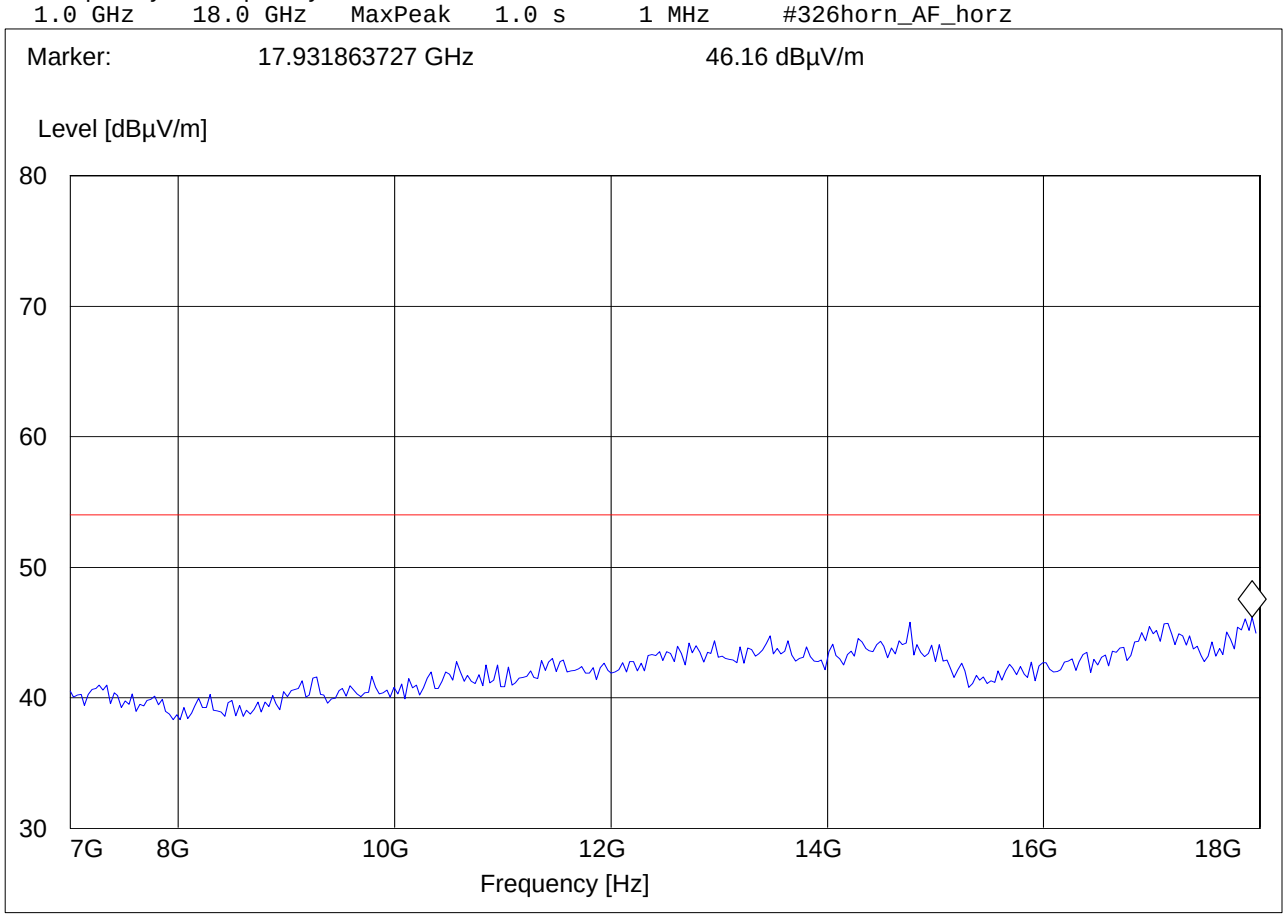
7-18GHz

Note: Peak Reading vs. Average limit

EUT: Laptop
Customer:: Sony
Test Mode: 802.11n40; IDLE
ANT Orientation: H
EUT Orientation: H
Test Engineer: SAM
Voltage: AC
Comments: TT@189°

SWEEP TABLE: "FCC 15.407 7-18G"

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak	1.0 s	1 MHz	#326horn_AF_horz



6 Conducted Measurements

6.1 26dB bandwidth and 99% bandwidth.

6.1.1 Limit

None. Measurement procedure per FCC Public Notice DA02-2138.

6.1.2 Test Results

Test Not conducted. The EUT integrates an FCC approved module. All conducted measurements are referenced from the original report for the module.

6.2 Conducted Power Measurement

6.2.1 FCC Limits:

Conducted Output Power is defined as the following (reduced if directional gain > 6dBi):

Sub-band 1: 5150-5250MHz: 15.407(a)(1): 50mW or 4dBm + 10log(B),
Sub-band 2: 5250-5350MHz: 15.407(a)(2): 250mW or 11dBm + 10log(B)
Sub-band 3: 5470-5725MHz: 15.407(a)(2): 250mW or 11dBm + 10log(B)

B is the 26–dB emission bandwidth in MHz.

6.2.2 IC Limits

Sub-band 1: 5150-5250MHz: Not defined.
Sub-band 2: 5250-5350MHz: RSS-210 A9.2(2): 250mW or 11dBm + 10log(B)
Sub-band 3: 5470-5725MHz: RSS-210 A9.2(2): 250mW or 11dBm + 10log(B)

B is the 99% emission bandwidth in MHz

6.2.3 Measurement Results

Test Not conducted. The EUT integrates an FCC approved module. All conducted measurements are referenced from the original report for the module.

6.3 Power Spectral Density

6.3.1 FCC Limit

Sub-band 1: 5150-5250MHz 15.407(a) (1): 4dBm in any 1–MHz band
Sub-band 2: 5250-5350MHz 15.407(a) (2): 11dBm in any 1–MHz band
Sub-band 3: 5470-5725MHz 15.407(a) (2): 11dBm in any 1–MHz band

6.3.2 IC Limit

Sub-band 1: 5150-5250MHz RSS-210 A9.2(1): 10dBm in any 1–MHz band
Sub-band 2: 5250-5350MHz RSS-210 A9.2(2): 11dBm in any 1–MHz band
Sub-band 3: 5470-5725MHz RSS-210 A9.2(2): 11dBm in any 1–MHz band

6.3.3 Results

Test Not conducted. The EUT integrates an FCC approved module. All conducted measurements are referenced from the original report for the module.

6.4 Peak Excursion

6.4.1 Limit

FCC15.407 (A)(6): The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

6.4.2 Results

Test Not conducted. The EUT integrates an FCC approved module. All conducted measurements are referenced from the original report for the module.

6.5 Conducted Spurious Emission

6.5.1 Limit

As specified in 15.407 (b)(1)(2)(3)(4) and RSS-210 (A9.3)(1)(2)(3)(4).

6.5.2 Results:

Test Not conducted. The EUT integrates an FCC approved module. All conducted measurements are referenced from the original report for the module.

6.6 AC Power Line Conducted Emissions § 15.107/207

6.6.1 **LIMITS**

Technical specification: 15.107 / 15.207 (Revised as of August 20, 2002)

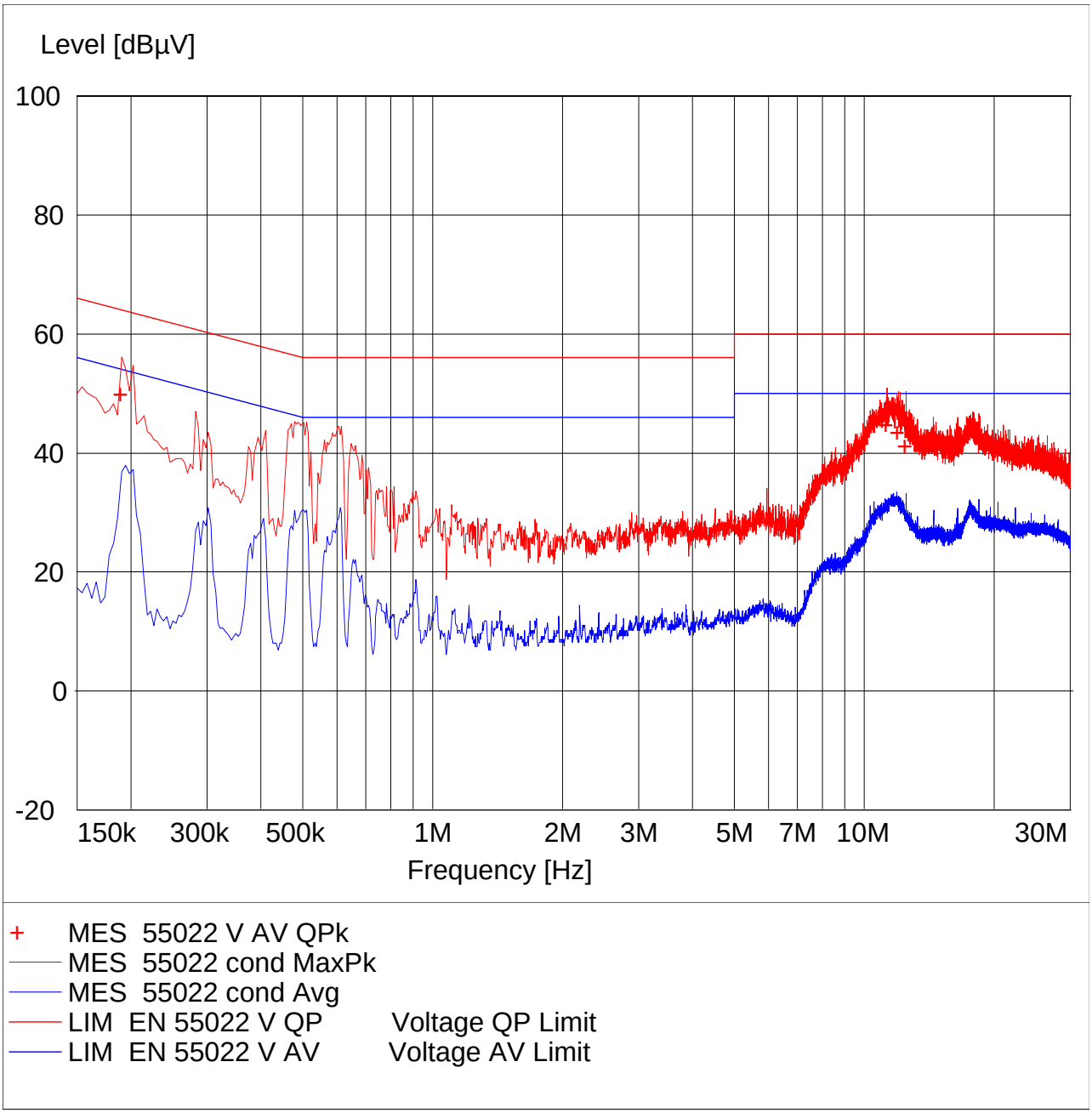
§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-Peak	Average
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50
* Decreases with logarithm of the frequency		

ANALYZER SETTINGS: RBW = 10KHz VBW = 10KHz

6.6.2 **RESULTS Sub-band 1 802.11n HT20 Line:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         802.11n; 20 MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:32AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.190000	49.80	0.1	64	14.2	1	---	OFF
11.278000	44.80	0.6	60	15.2	1	---	OFF
11.986000	43.40	0.7	60	16.6	1	---	OFF
12.506000	41.10	0.7	60	18.9	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit

4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

LIMIT LINE: "EN 55022 V QP"

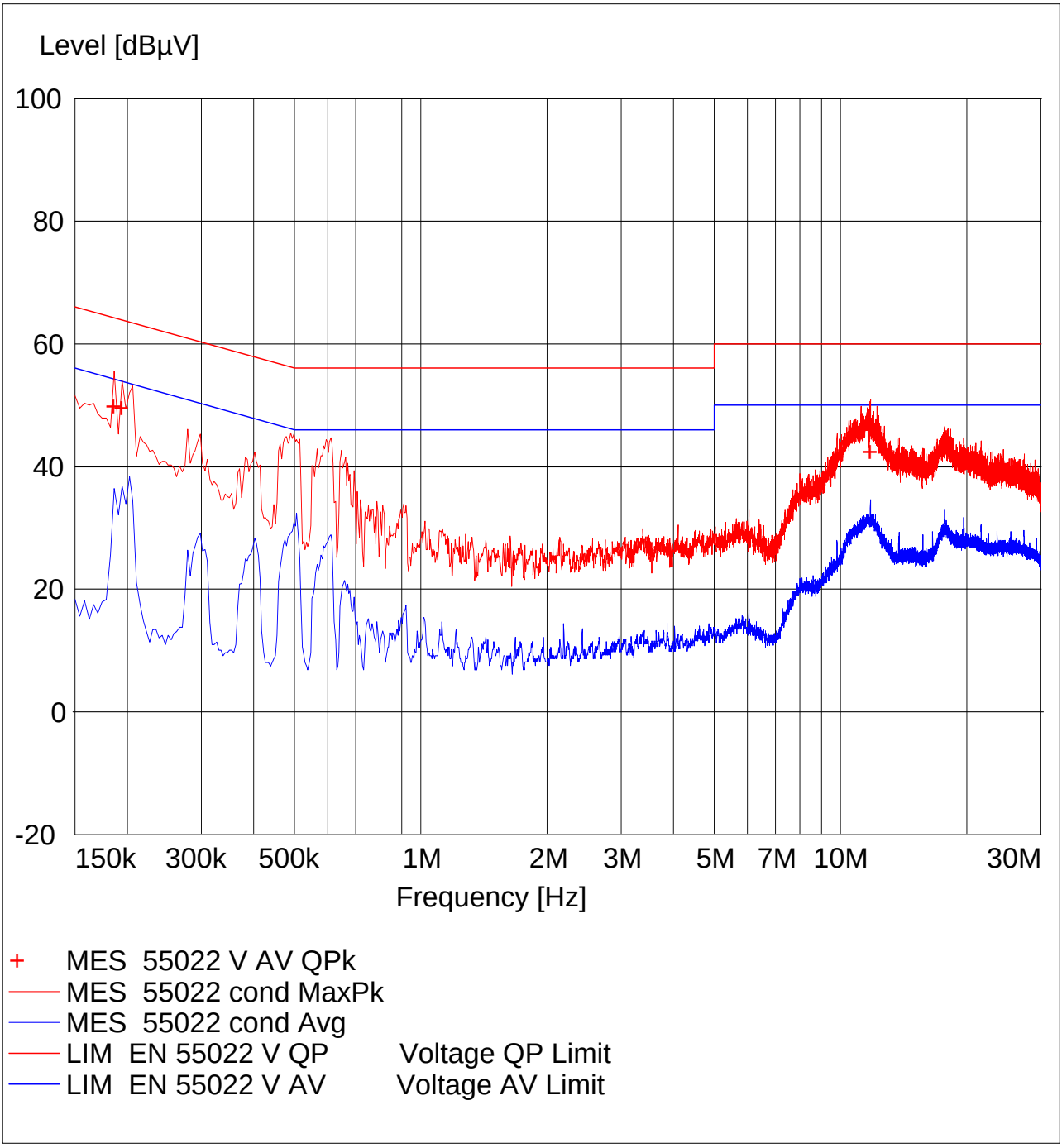
Short Description: Voltage QP Limit

4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.3 **RESULTS Sub-band 1 802.11n HT20 Neutral:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         802.11n; 20MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Neutral
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:26AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.186000	49.80	0.1	64	14.4	1	---	OFF
0.194000	49.50	0.1	64	14.4	1	---	OFF
11.778000	42.40	0.7	60	17.6	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

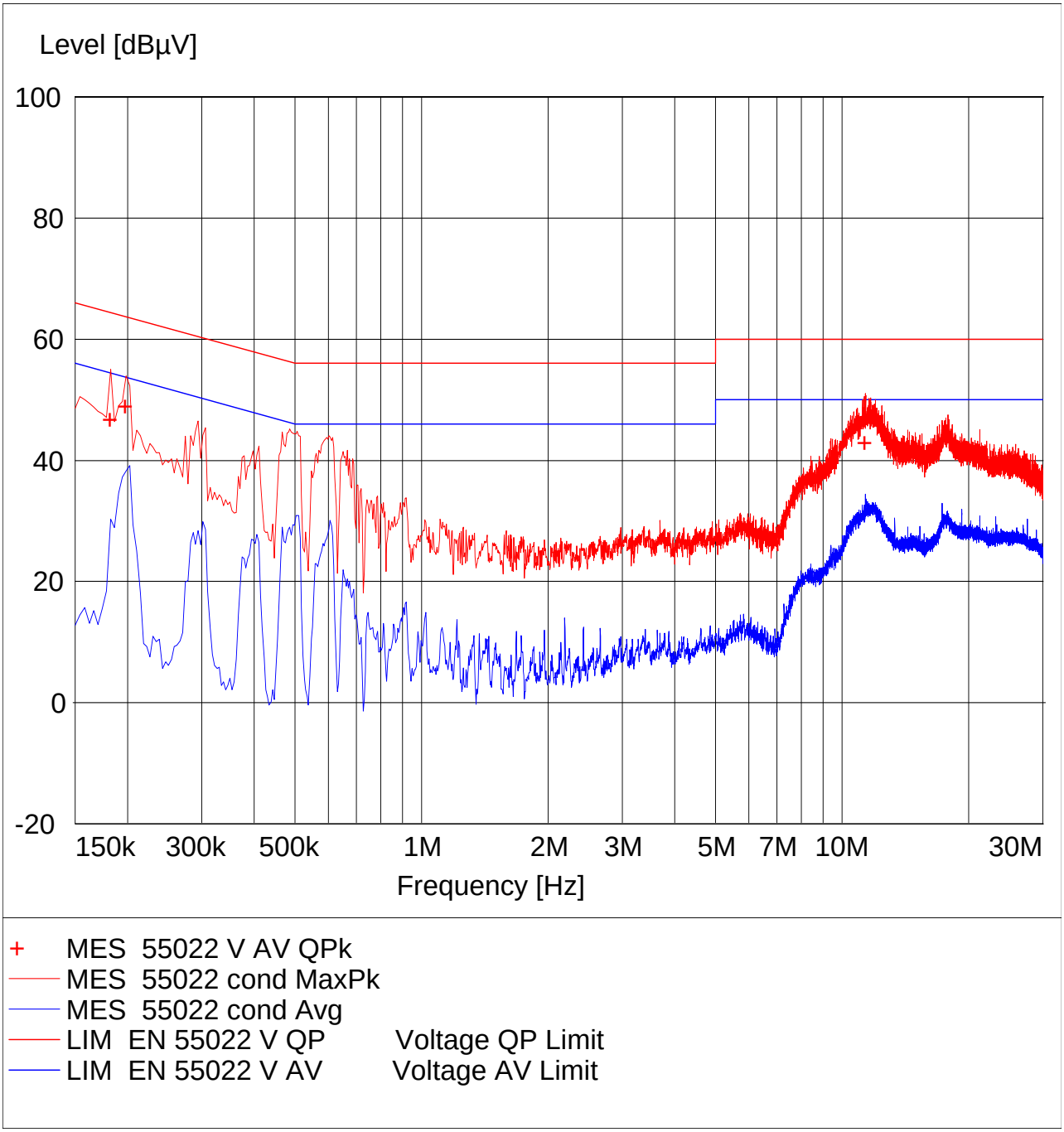
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.4 **RESULTS Sub-band 1 802.11n HT40 Line:**

```
EUT:              Laptop
Manufacturer:     Sony
Test Mode:        802.11n; 40MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::   Chris
Power Supply: :   AC Adapter
Comments:  :      Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:37AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.182000	46.80	0.1	64	17.6	1	---	OFF
0.198000	49.00	0.1	64	14.6	1	---	OFF
11.362000	42.90	0.6	60	17.1	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit

4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

LIMIT LINE: "EN 55022 V QP"

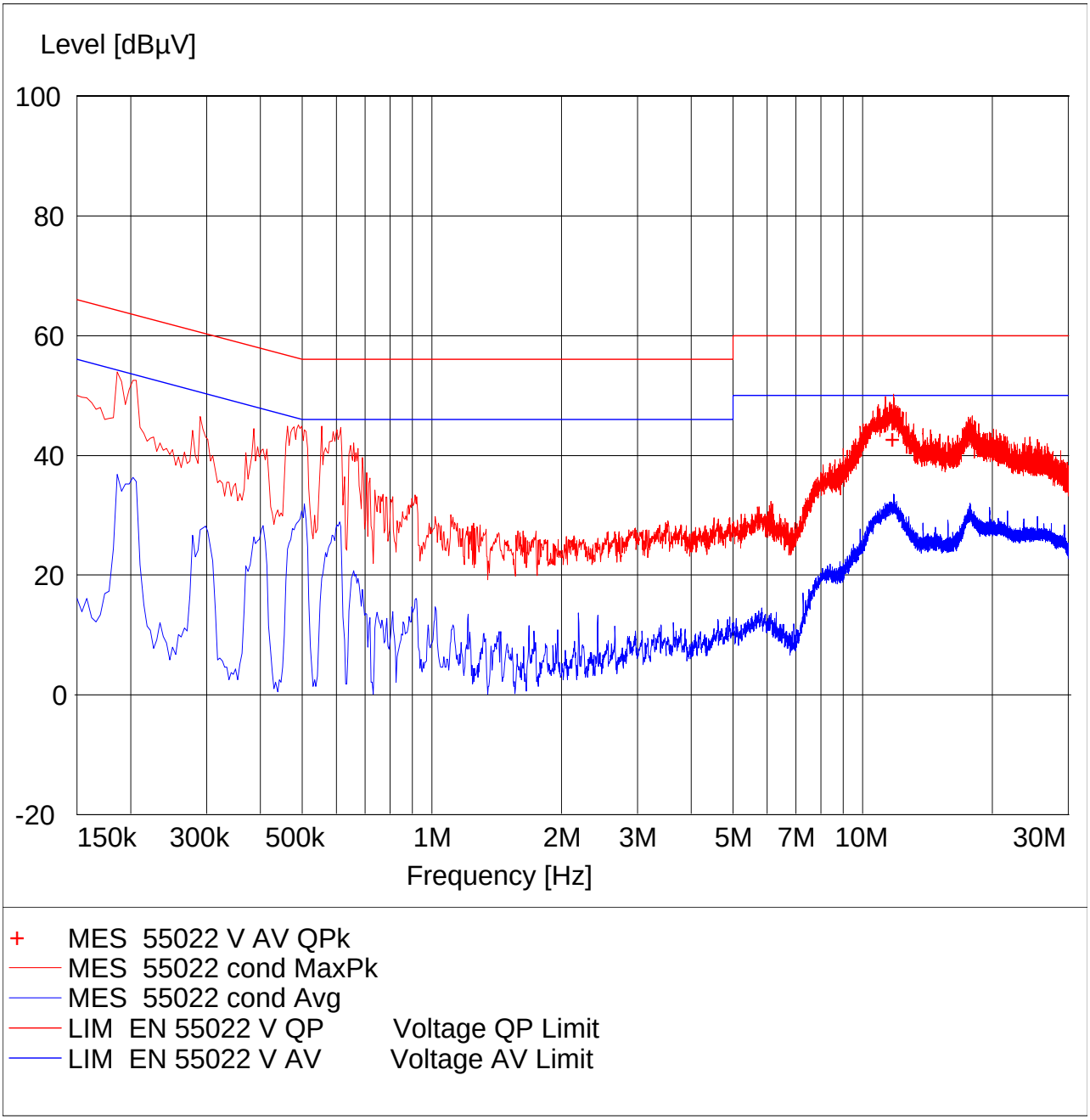
Short Description: Voltage QP Limit

4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.5 **RESULTS Sub-band 1 802.11n HT40 Neutral:**

```
EUT:              Laptop
Manufacturer:     Sony
Test Mode:        802.11n; 40MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::   Chris
Power Supply: :   AC Adapter
Comments:  :      Neutral
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:41AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
11.794000	42.70	0.7	60	17.3	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

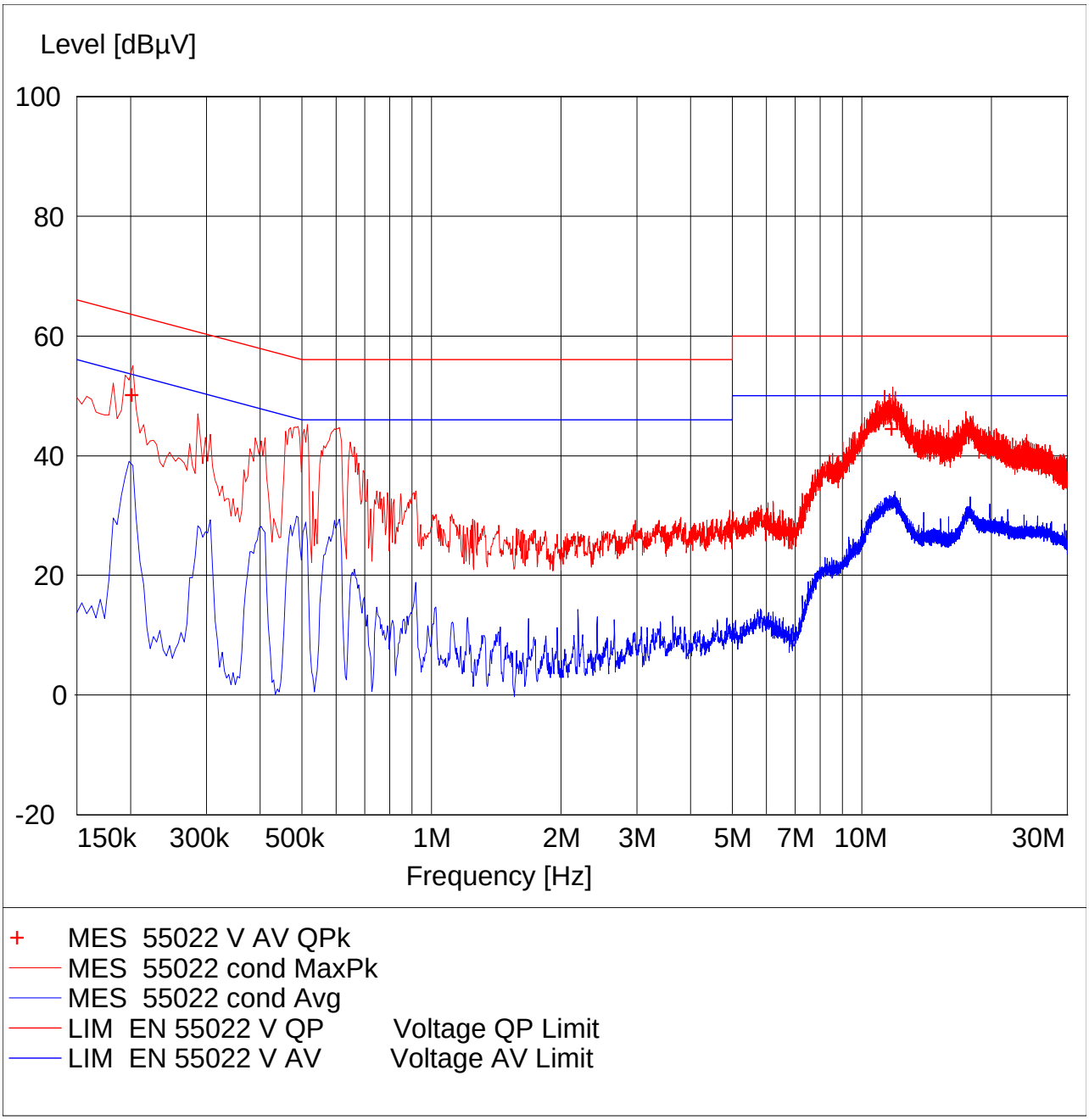
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.6 **RESULTS Sub-band 2 802.11n HT20 Line:**

```
EUT:              Laptop
Manufacturer:     Sony
Test Mode:        802.11n; 20MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::   Chris
Power Supply: :   AC Adapter
Comments:  :      Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:54AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.202000	50.10	0.1	64	13.4	1	---	OFF
11.790000	44.50	0.7	60	15.5	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

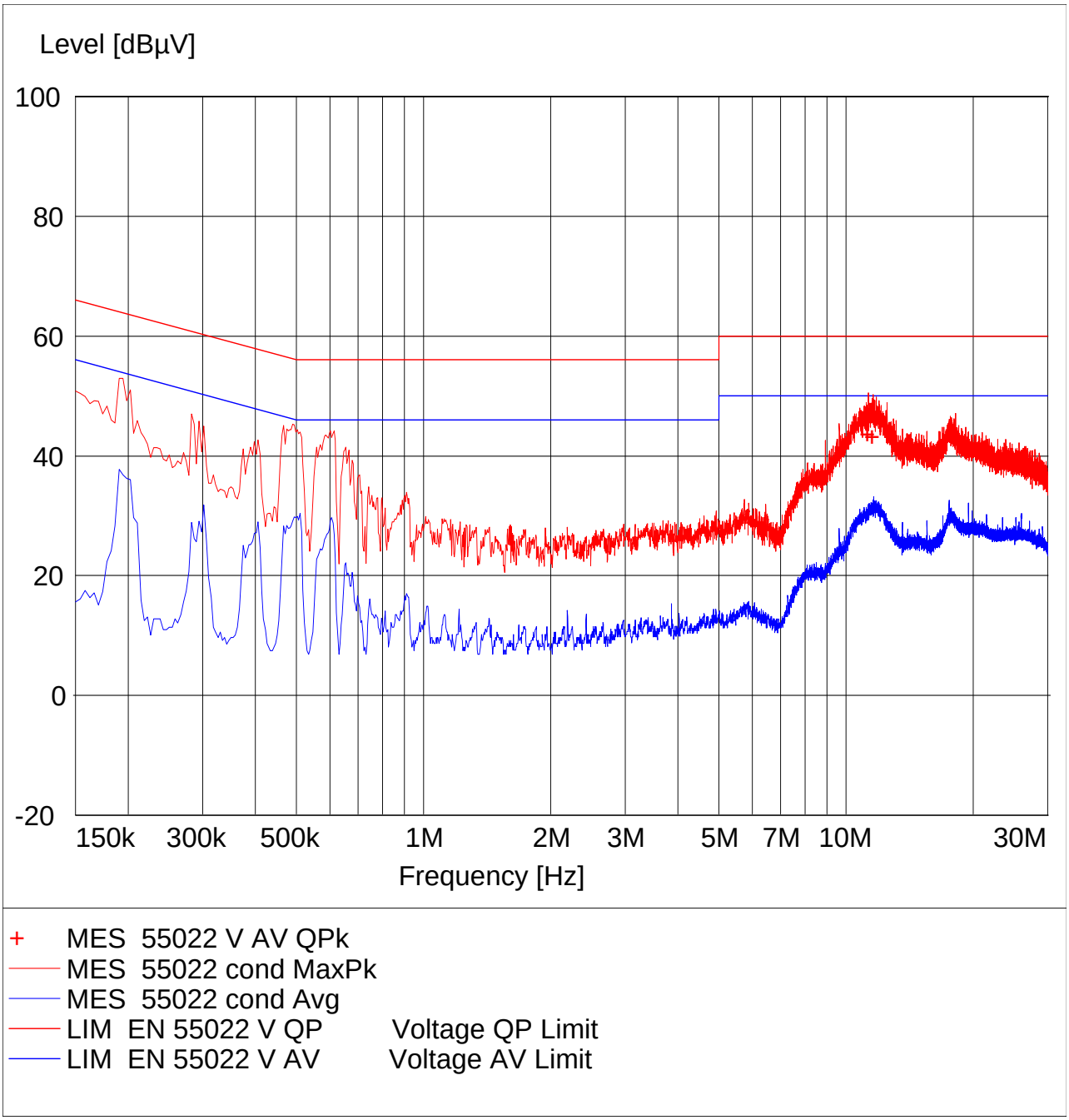
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.7 **RESULTS Sub-band 2 802.11n HT20 Neutral:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         802.11n; 20MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Neutral
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:49AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
11.278000	43.70	0.6	60	16.3	1	---	OFF
11.578000	43.20	0.6	60	16.8	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit

4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

LIMIT LINE: "EN 55022 V QP"

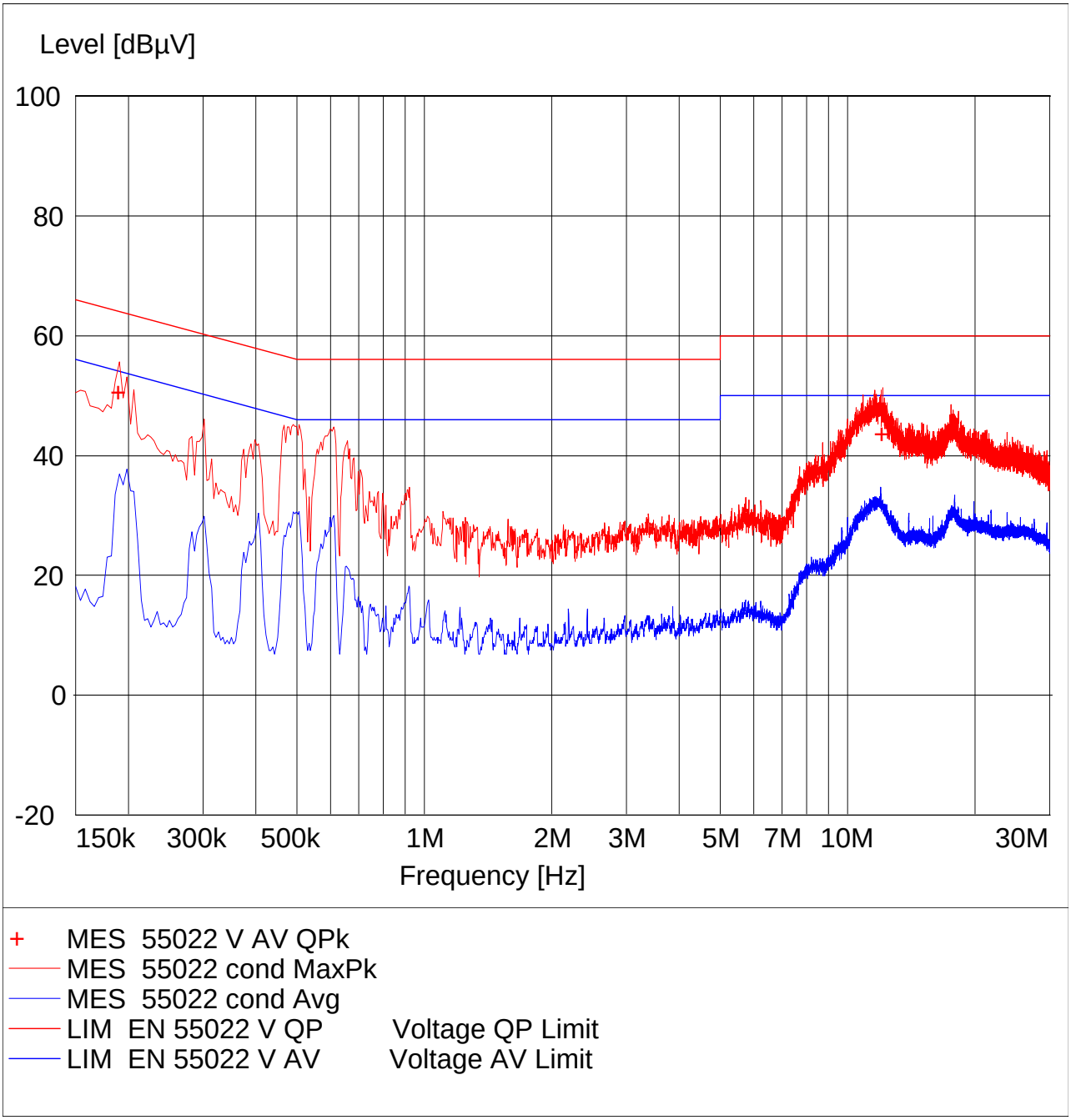
Short Description: Voltage QP Limit

4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.8 **RESULTS Sub-band 2 802.11n HT40 Line:**

```
EUT:              Laptop
Manufacturer:     Sony
Test Mode:        802.11n; 40MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::   Chris
Power Supply: :   AC Adapter
Comments:  :      Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:59AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.190000	50.60	0.1	64	13.4	1	---	OFF
12.102000	43.70	0.7	60	16.3	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

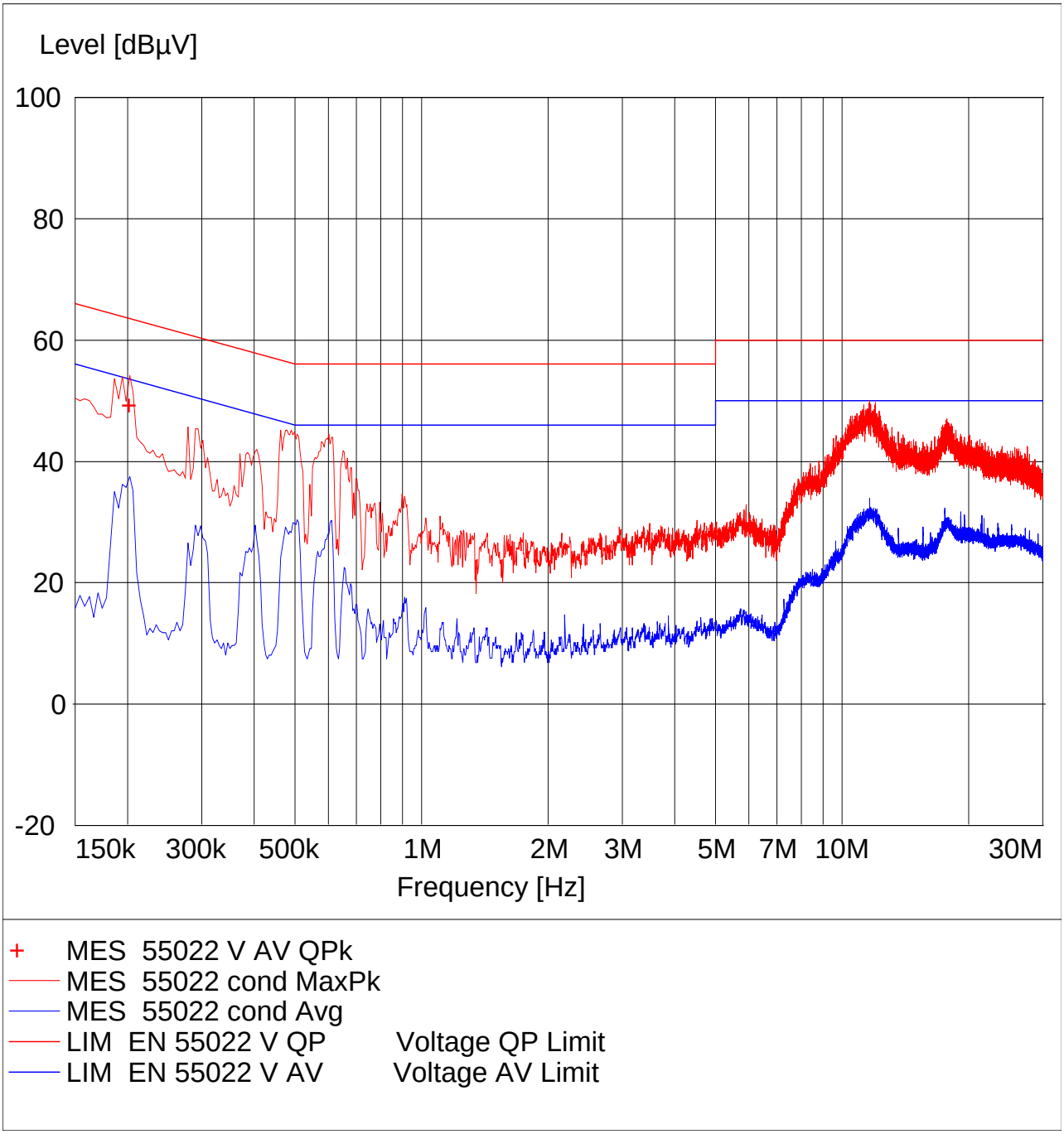
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.9 **RESULTS Sub-band 2 802.11n HT40 Neutral:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         802.11n; 40MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Neutral
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 1:03AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.202000	49.30	0.1	64	14.2	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit

4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

LIMIT LINE: "EN 55022 V QP"

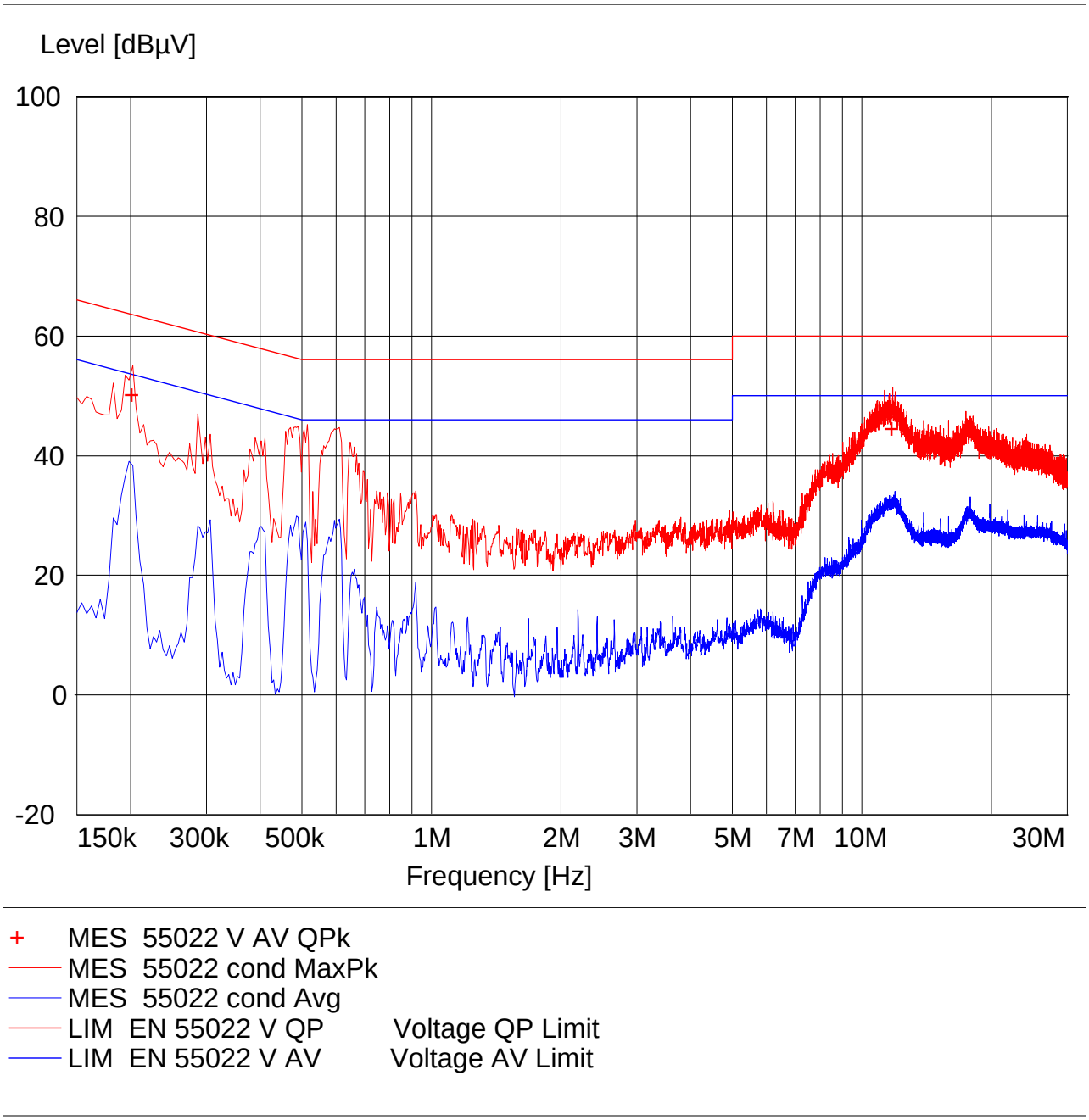
Short Description: Voltage QP Limit

4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.10 **RESULTS Sub-band 3 802.11n HT20 Line:**

```
EUT:              Laptop
Manufacturer:     Sony
Test Mode:        802.11n; 20MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::   Chris
Power Supply: :   AC Adapter
Comments:  :      Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:54AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.202000	50.10	0.1	64	13.4	1	---	OFF
11.790000	44.50	0.7	60	15.5	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

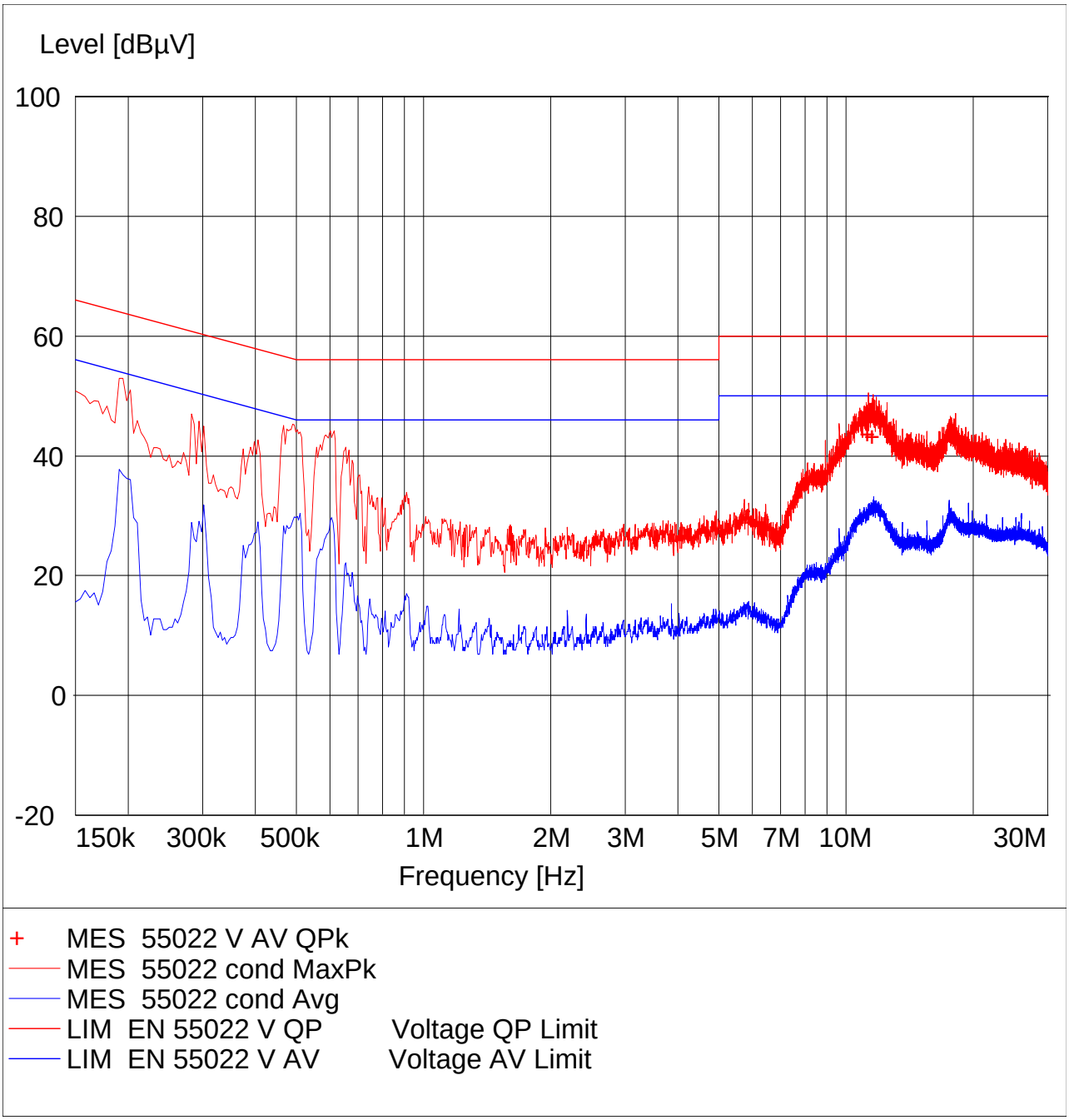
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.11 **RESULTS Sub-band 3 802.11n HT20 Neutral:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         802.11n; 20MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Neutral
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:49AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
11.278000	43.70	0.6	60	16.3	1	---	OFF
11.578000	43.20	0.6	60	16.8	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit

4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

LIMIT LINE: "EN 55022 V QP"

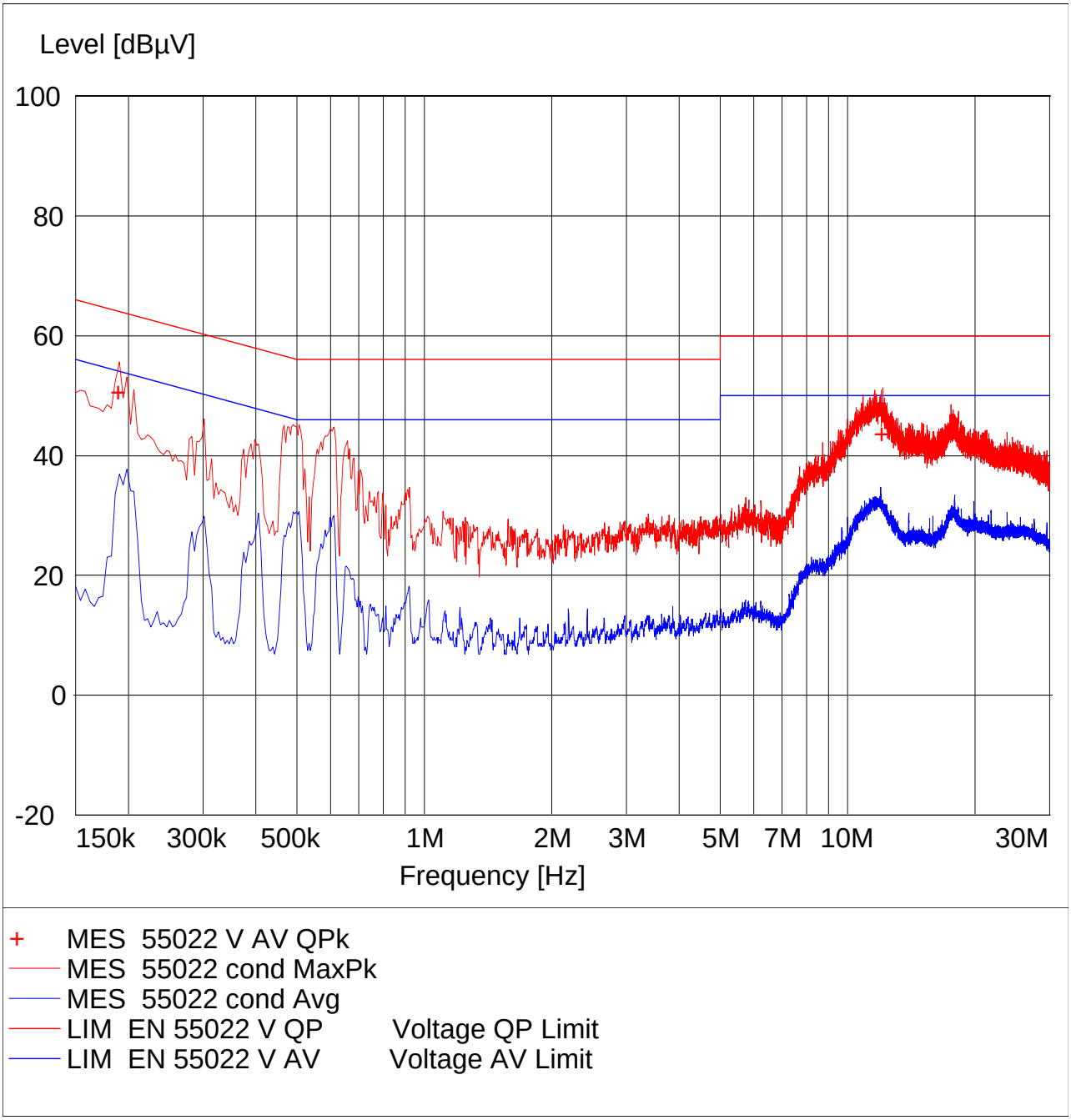
Short Description: Voltage QP Limit

4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.12 **RESULTS Sub-band 3 802.11n HT40 Line:**

```
EUT:              Laptop
Manufacturer:     Sony
Test Mode:        802.11n; 40MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::   Chris
Power Supply: :   AC Adapter
Comments:  :      Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 12:59AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.190000	50.60	0.1	64	13.4	1	---	OFF
12.102000	43.70	0.7	60	16.3	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

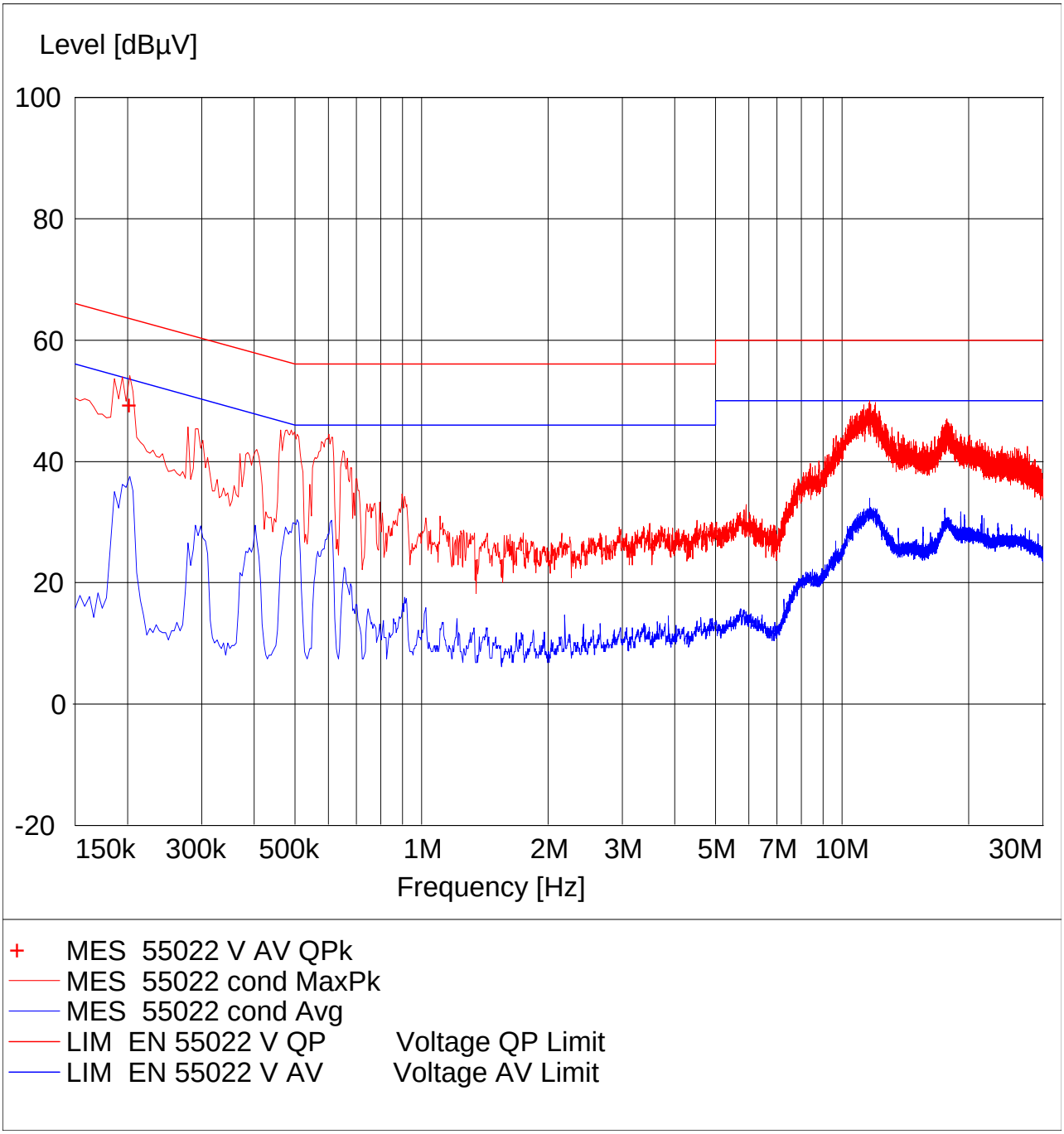
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.13 **RESULTS Sub-band 3 802.11n HT40 Neutral:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         802.11n; 40MHz
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Neutral
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 1:03AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.202000	49.30	0.1	64	14.2	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit

4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

LIMIT LINE: "EN 55022 V QP"

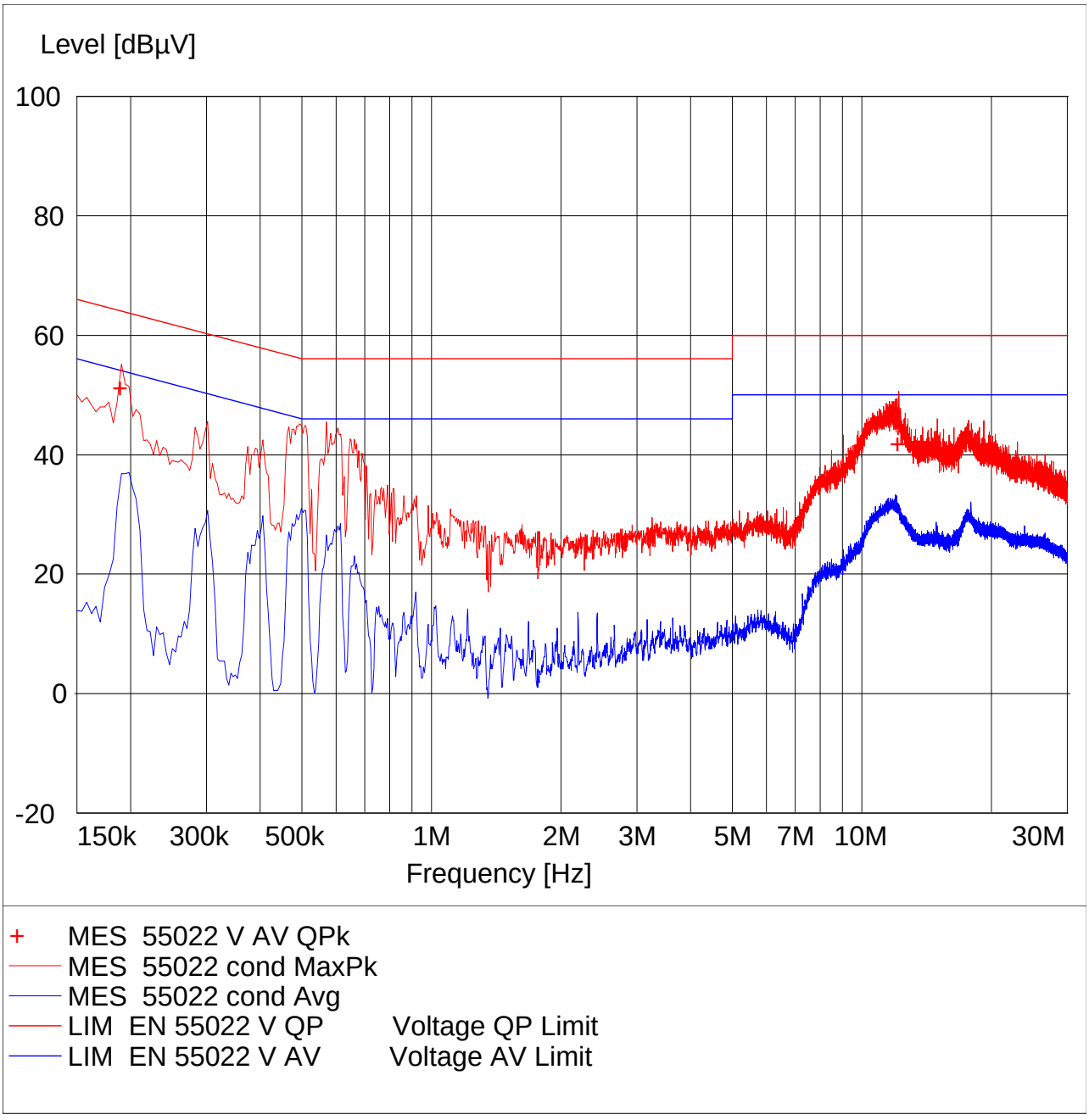
Short Description: Voltage QP Limit

4/27/1998 2:24PM

Frequency MHz	Level dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.14 **RESULTS Receiver mode Line:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         Rx
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Line
```



MEASUREMENT RESULT: "55022 V AV QPk"

7/25/2008 1:13AM

Frequency	Level	Transd	Limit	Margin	Line	PE	AUX STATE
MHz	dBµV	dB	dBµV	dB			
0.190000	51.20	0.1	64	12.8	1	---	OFF
12.190000	41.80	0.7	60	18.2	1	---	OFF

LIMIT LINE: "EN 55022 V AV"

Short Description: Voltage AV Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	56.00
0.500000	46.00
5.000000	46.00
5.000000	50.00
30.000000	50.00

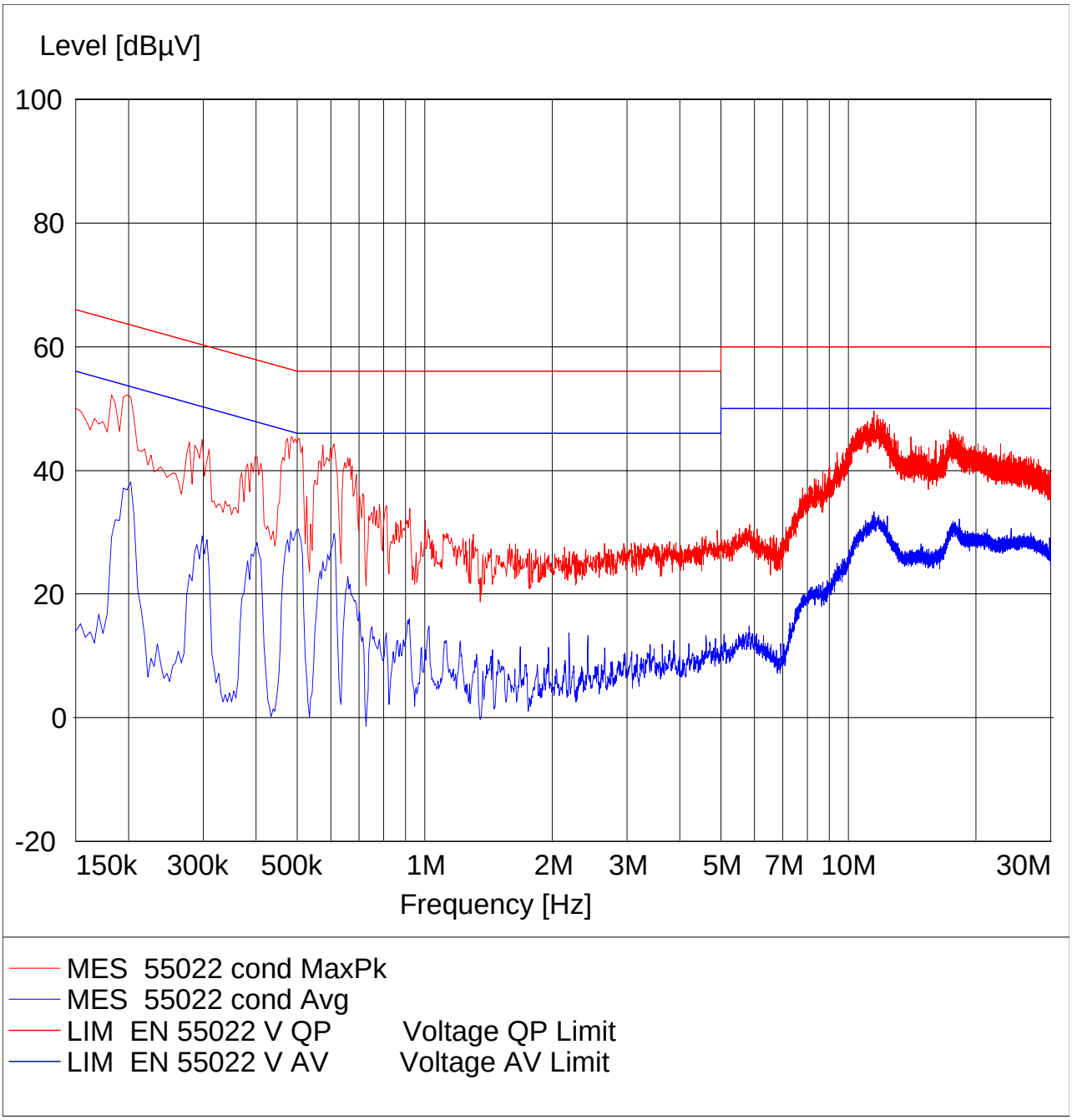
LIMIT LINE: "EN 55022 V QP"

Short Description: Voltage QP Limit
4/27/1998 2:24PM

Frequency	Level
MHz	dBµV
0.150000	66.00
0.500000	56.00
5.000000	56.00
5.000000	60.00
30.000000	60.00

6.6.15 **RESULTS Receiver mode Neutral:**

```
EUT:               Laptop
Manufacturer:      Sony
Test Mode:         Rx
ANT Orientation:: LISN
EUT Orientation:: H
Test Engineer::    Chris
Power Supply: :    AC Adapter
Comments:  :       Neutral
```



LIMIT LINE: "EN 55022 V AV"

```
  Short Description:            Voltage AV Limit
4/27/1998  2:24PM
   Frequency    Level
         MHz     dBµV

    0.150000    56.00
    0.500000    46.00
    5.000000    46.00
    5.000000    50.00
   30.000000    50.00
```

LIMIT LINE: "EN 55022 V QP"

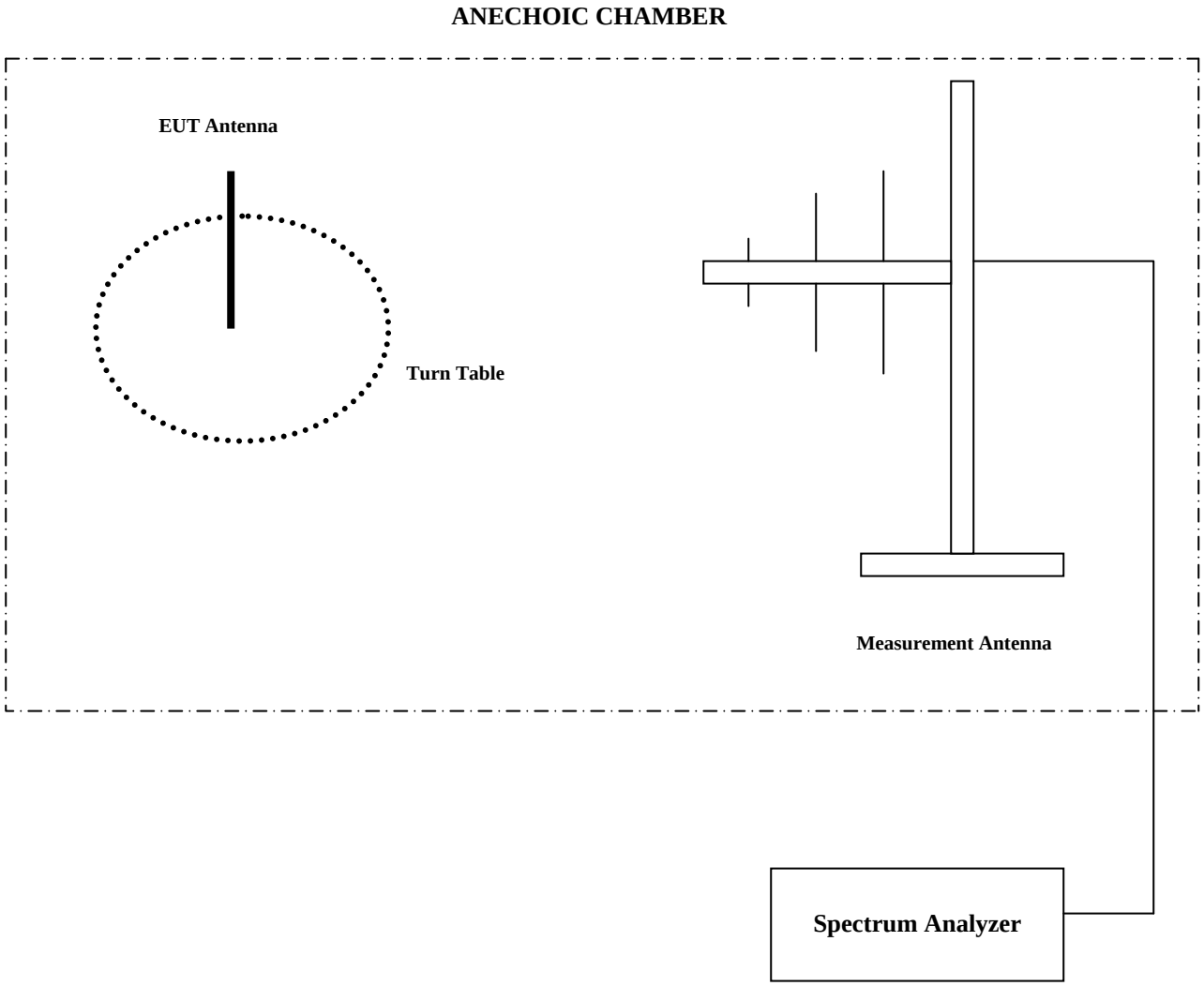
```
  Short Description:            Voltage QP Limit
4/27/1998  2:24PM
   Frequency    Level
         MHz     dBµV

    0.150000    66.00
    0.500000    56.00
    5.000000    56.00
    5.000000    60.00
   30.000000    60.00
```

7 TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

No	Instrument/Ancillary	Type	Manufacturer	Serial No.	Cal Due	Interval
01	Spectrum Analyzer	ESIB 40	Rohde & Schwarz	100107	May 2009	1 year
02	Spectrum Analyzer	FSEM 30	Rohde & Schwarz	100017	August 2009	1 year
03	Signal Generator	SMY02	Rohde & Schwarz	836878/011	May 2009	1 year
04	Power-Meter	NRVD	Rohde & Schwarz	0857.8008.02	May 2009	1 year
05	Biconilog Antenna	3141	EMCO	0005-1186	June 2009	1 year
06	Horn Antenna (1-18GHz)	SAS-200/571	AH Systems	325	June 2009	1 year
07	Horn Antenna (18-26.5GHz)	3160-09	EMCO	1240	June 2009	1 year
08	Power Splitter	11667B	Hewlett Packard	645348	n/a	n/a
09	Climatic Chamber	VT4004	Voltsch	G1115	May 2009	1 year
10	High Pass Filter	5HC2700	Trilithic Inc.	9926013	n/a	n/a
11	High Pass Filter	4HC1600	Trilithic Inc.	9922307	n/a	n/a
12	Pre-Amplifier	JS4-001isap00	Miteq	00616	May 2009	1 year
13	Power Sensor	URV5-Z2	Rohde & Schwarz	DE30807	May 2009	1 year
14	Digital Radio Comm. Tester	CMD-55	Rohde & Schwarz	847958/008	May 2009	1 year
15	Universal Radio Comm. Tester	CMU 200	Rohde & Schwarz	832221/06	May 2009	1 year
16	LISN	ESH3-Z5	Rohde & Schwarz	836679/003	May 2009	1 year
17	Loop Antenna	6512	EMCO	00049838	July 2009	2 years

8 BLOCK DIAGRAMS

Radiated Testing



9 Revision History

2008-7-30: First Issue