



# FCC Test Report

## FCC Part 15.247 for DSSS systems

For the  
Hewlett Packard Company

Notebook PC

Model Number: HSTNN-W26C

FCC ID: QDS-BRCM1022-H

TEST REPORT #: HEWL4\_016\_07001\_15.247a\_REDSTORM\_5.7G  
DATE: 07/02/2007



FCC listed:  
A2LA  
accredited

IC recognized #  
3925A

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Board of Directors: Dr. Harald Ansorge, Dr. Klaus Matkey, Hans Peter May

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**TABLE OF CONTENTS**

**1 Assessment** \_\_\_\_\_ **3**

**Technical responsibility for area of testing:** \_\_\_\_\_ **3**

EMC & Radio \_\_\_\_\_ **3**

**This report is prepared by:** \_\_\_\_\_ **3**

EMC & Radio \_\_\_\_\_ **3**

**2 Administrative Data** \_\_\_\_\_ **4**

2.1 Identification of the Testing Laboratory \_\_\_\_\_ **4**

2.2 Identification of the Client \_\_\_\_\_ **4**

2.3 Identification of the Manufacturer \_\_\_\_\_ **4**

**3 Equipment under Test (EUT)** \_\_\_\_\_ **5**

3.1 Specification of the Equipment under Test \_\_\_\_\_ **5**

**4 Subject Of Investigation** \_\_\_\_\_ **6**

**5 Measurements** \_\_\_\_\_ **7**

5.1 **MAXIMUM PEAK OUTPUT POWER § 15.247 (RADIATED)** \_\_\_\_\_ **7**

5.1.1 LIMIT SUB CLAUSE § 15.247 (b) (1) (2) (3) (4) \_\_\_\_\_ **7**

5.1.2 EIRP a MODE: \_\_\_\_\_ **7**

5.2 **TRANSMITTER SPURIOUS EMISSIONS RADIATED § 15.247/15.205/15.209** \_\_\_\_\_ **14**

5.2.1 LIMITS \_\_\_\_\_ **14**

5.2.2 RESULTS (a) MODE \_\_\_\_\_ **15**

5.3 **AC POWER LINE CONDUCTED EMISSIONS § 15.107/207** \_\_\_\_\_ **27**

5.3.1 LIMITS \_\_\_\_\_ **27**

5.3.2 Results \_\_\_\_\_ **28**

**6 TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS** \_\_\_\_\_ **32**

6.1 **BLOCK DIAGRAMS** \_\_\_\_\_ **33**



**1 Assessment**

**The following is in compliance with the applicable criteria specified in FCC rules Part 15.247 of the Code of Federal Regulations.**

Company	Description	Model #
Hewlett Packard Company	Notebook PC	HSTNN-W26C

**Technical responsibility for area of testing:**

**Lothar Schmidt**  
**(Director Regulatory and**  
**Antenna Services)**

**2007-7-2 EMC & Radio**

Date	Section	Name	Signature
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**This report is prepared by:**

**Satya Radhakrishna**  
**(EMC Project Engineer)**

**2007-7-2 EMC & Radio**

Date	Section	Name	Signature
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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

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

### 2.2 Identification of the Client

Applicant's Name:	Hewlett Packard Company
Address Line 1:	20555 SH 249
Address Line 2:	MS 1208-10
City/ Zip Code	Houston, TX 77070
Country:	U.S.A
Contact Person:	Glenn Meyer
Phone No.:	281-514-9391
Fax:	281-518-0979
e-mail:	Glenn.meyer@hp.com

### 2.3 Identification of the Manufacturer

Manufacturer's Name:	Hewlett Packard Company
Manufacturer's Address:	20555 SH 249, MS 1208-10, Houston, TX 77070, U.S.A



### 3 Equipment under Test (EUT)

#### 3.1 Specification of the Equipment under Test

Product Type	Notebook PC
Marketing Name:	HP Compaq 2701p notebook PC
Model No:	HSTNN-W26C
HW Version:	1.0
SW Version :	N/A
Min/Nominal/Max Voltage:	18.5 V/19 V/ 19 V
Type(s) of Modulation:	OFDM
Antenna Type:	Stamped metal, 3.9dBi/2.4GHz; 5.6dBi/5GHz
Output Power:	19.8 dBm (0.0955) EIRP WLAN 802.11a



#### **4 Subject Of Investigation**

All testing was performed on the product referred to in Section 3 as EUT. EUT contains Broadcom BCM94321MC WLAN module, FCC ID: QDS-BRCM1022-H that supports the following mode and frequency bands:

2400-2483.4MHz: 802.11b, 802.11g, 802.11n (20MHz), 802.11n (40MHz)

5150-5350MHz: 802.11a, 802.11n(20MHz), 802.11n(40MHz)

5725-5850MHz: 802.11a, 802.11n(20MHz), 802.11n(40MHz)

The objective of the measurements done by Cetecom Inc. was to measure the performance of the EUT operating under 802.11a mode in the 5725-5850MHz range as specified by requirements listed in FCC rules Part 15.247 of Title 47 of the Code of Federal Regulations. The maximization of portable equipment is conducted in accordance with ANSI C63.4



**5 Measurements**

**5.1 MAXIMUM PEAK OUTPUT POWER § 15.247 (RADIATED)**

**5.1.1 LIMIT SUB CLAUSE § 15.247 (b) (1) (2) (3) (4)**

<b>Frequency range</b>	<b>RF power output</b>
<b>5725-5850 MHz</b>	<b>36dBm EIRP</b>

**\*limit is based upon antenna gain of less than or equal to 6dBi.**

**5.1.2 EIRP a MODE:**

<b>TEST CONDITIONS</b>			<b>MAXIMUM PEAK OUTPUT POWER (dBm)</b>		
<b>Frequency (MHz)</b>			<b>5745</b>	<b>5785</b>	<b>5825</b>
<b>Chain A</b>	<b>T<sub>nom</sub>(23)°C</b>	<b>V<sub>nom</sub> VDC</b>	<b>19.8</b>	<b>18.28</b>	<b>18.88</b>
<b>Chain B</b>	<b>T<sub>nom</sub>(23)°C</b>	<b>V<sub>nom</sub> VDC</b>	<b>17.77</b>	<b>16.46</b>	<b>16.75</b>
<b>Measurement uncertainty</b>			<b>±0.5dBm</b>		



**EIRP a Mode (5745) Chain A**

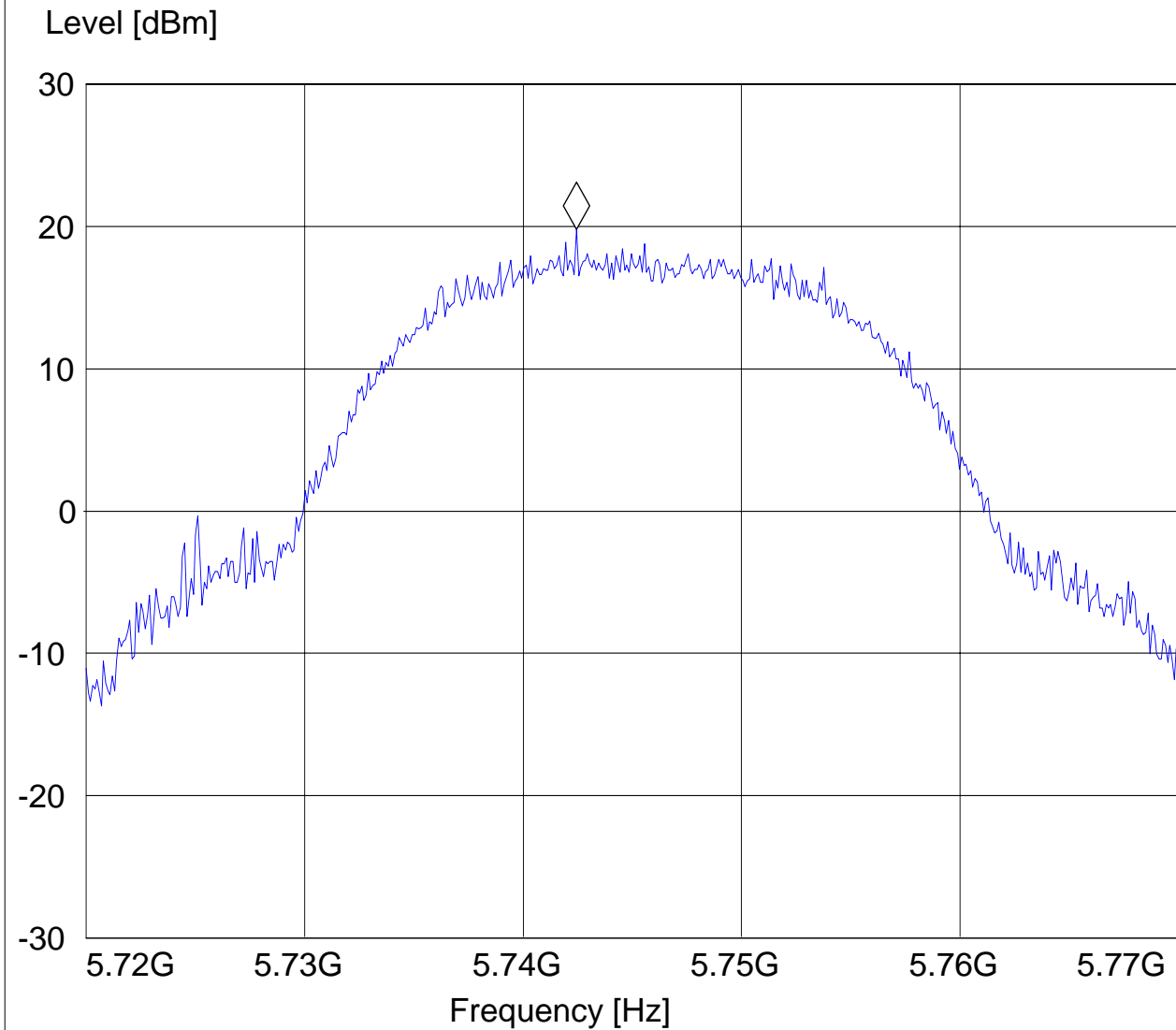
CETECOM Inc. 411 Dixon Landing Road, Milpitas CA 95035, USA

EUT: RedStorm  
Customer: HP Texas  
Test Mode: 802.11a, ch 149, chain a  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Power Supply: AC Adapter

**SWEEP TABLE: "EIRP 802.11a\_149"**

Short Description: EIRP  
Unit: dBm Detector: MaxPeak RBW: 10MHZ VBW: 10MHz

Marker: 5.74244489 GHz 19.8 dBm







**EIRP a Mode (5785MHz) Chain A**

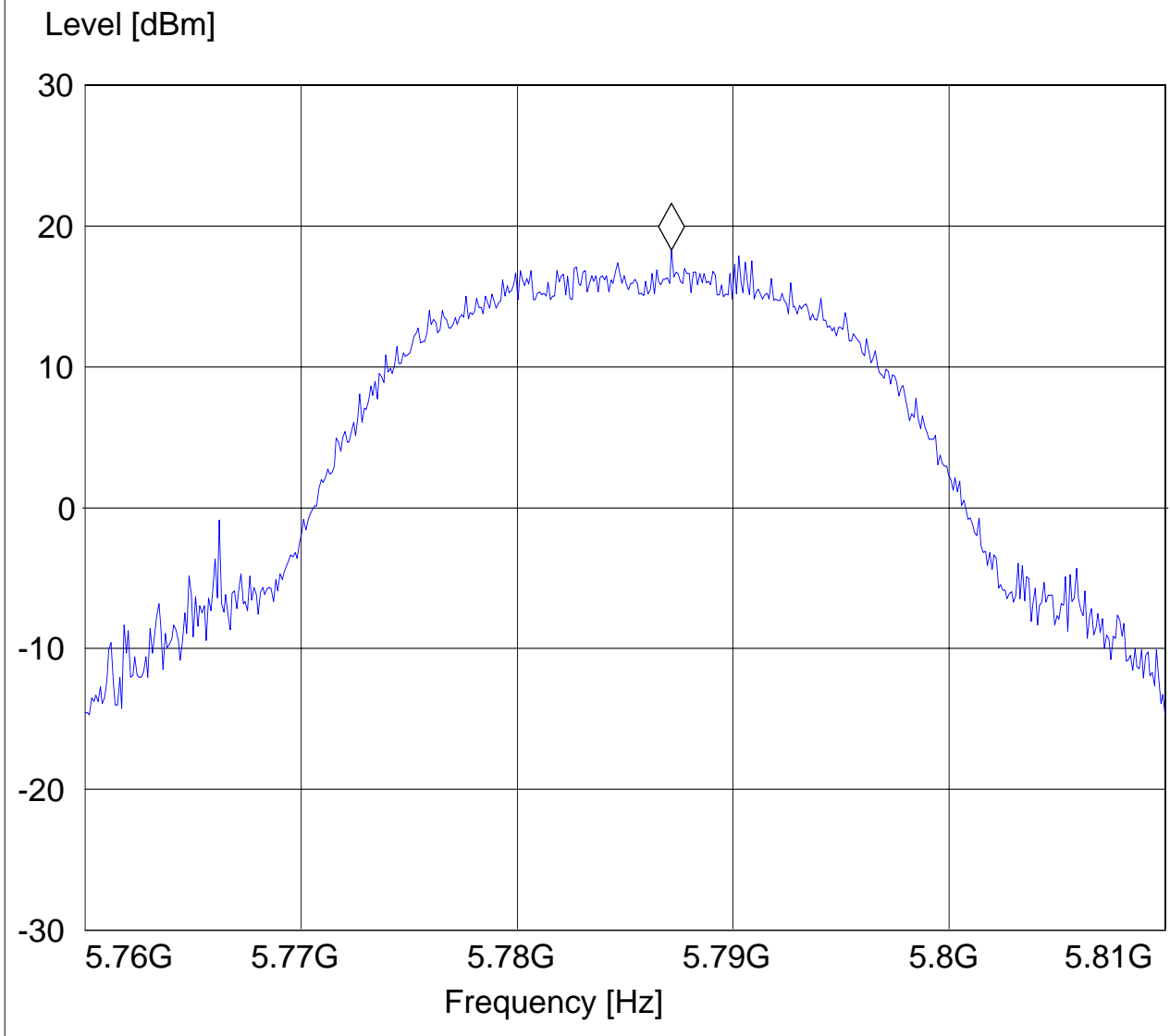
CETECOM Inc. 411 Dixon Landing Road, Milpitas CA 95035, USA

EUT: RedStorm  
Customer: HP Texas  
Test Mode: 802.11a, ch 157, chain a  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Power Supply: AC Adapter

**SWEEP TABLE: "EIRP 802.11a\_157"**

Short Description: EIRP  
Unit: dBm Detector: MaxPeak RBW: 10MHZ VBW: 10MHz

Marker: 5.787154309 GHz 18.28 dBm





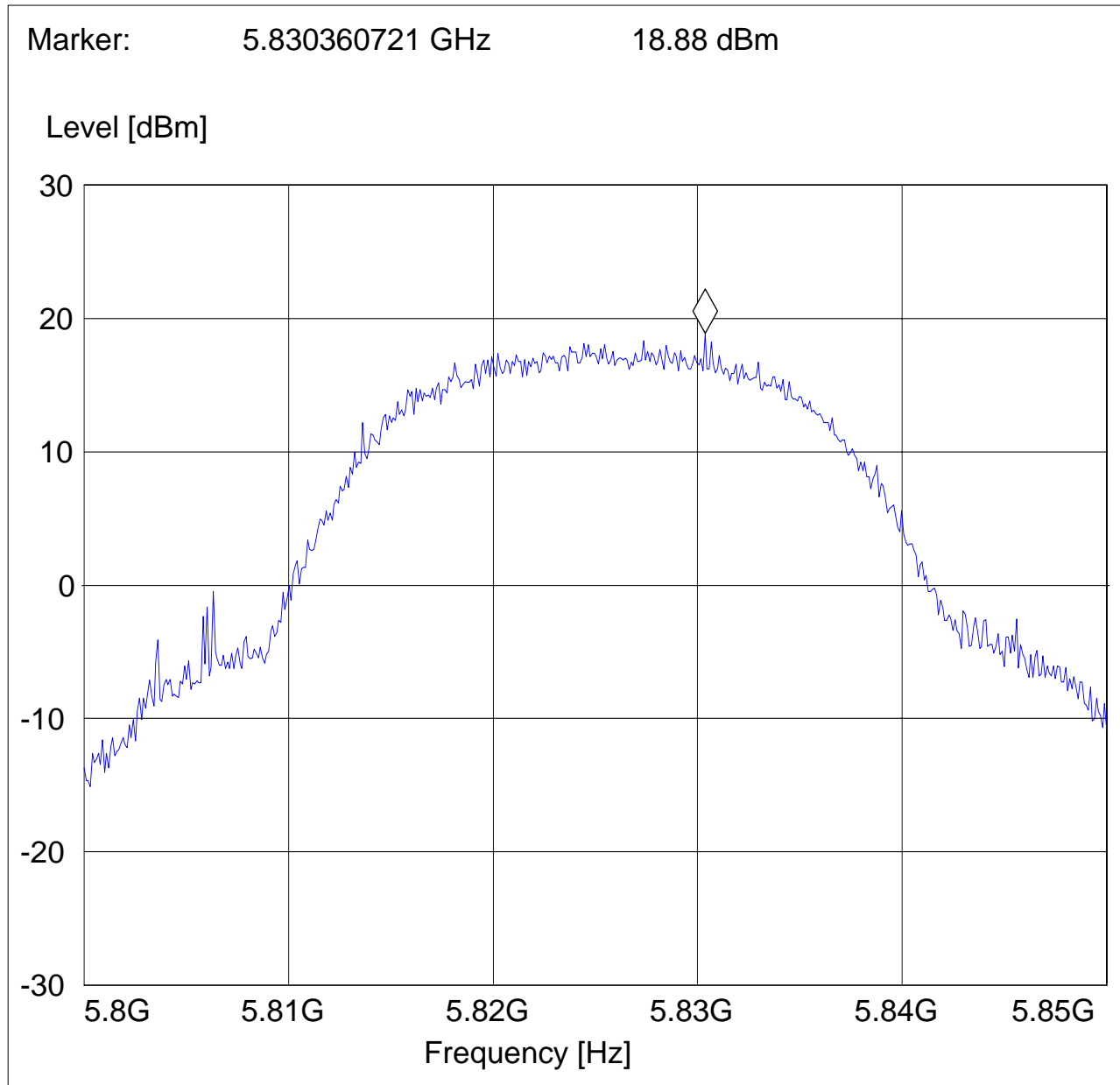
**EIRP a Mode (5825MHz) Chain A**

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

EUT: RedStorm  
Customer: HP Texas  
Test Mode: 802.11a, ch 165, chain a  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Power Supply: AC Adapter

**SWEEP TABLE: "EIRP 802.11a\_165"**

Short Description: EIRP  
Unit: dBm Detector: MaxPeak RBW: 10MHZ VBW:10MHZ





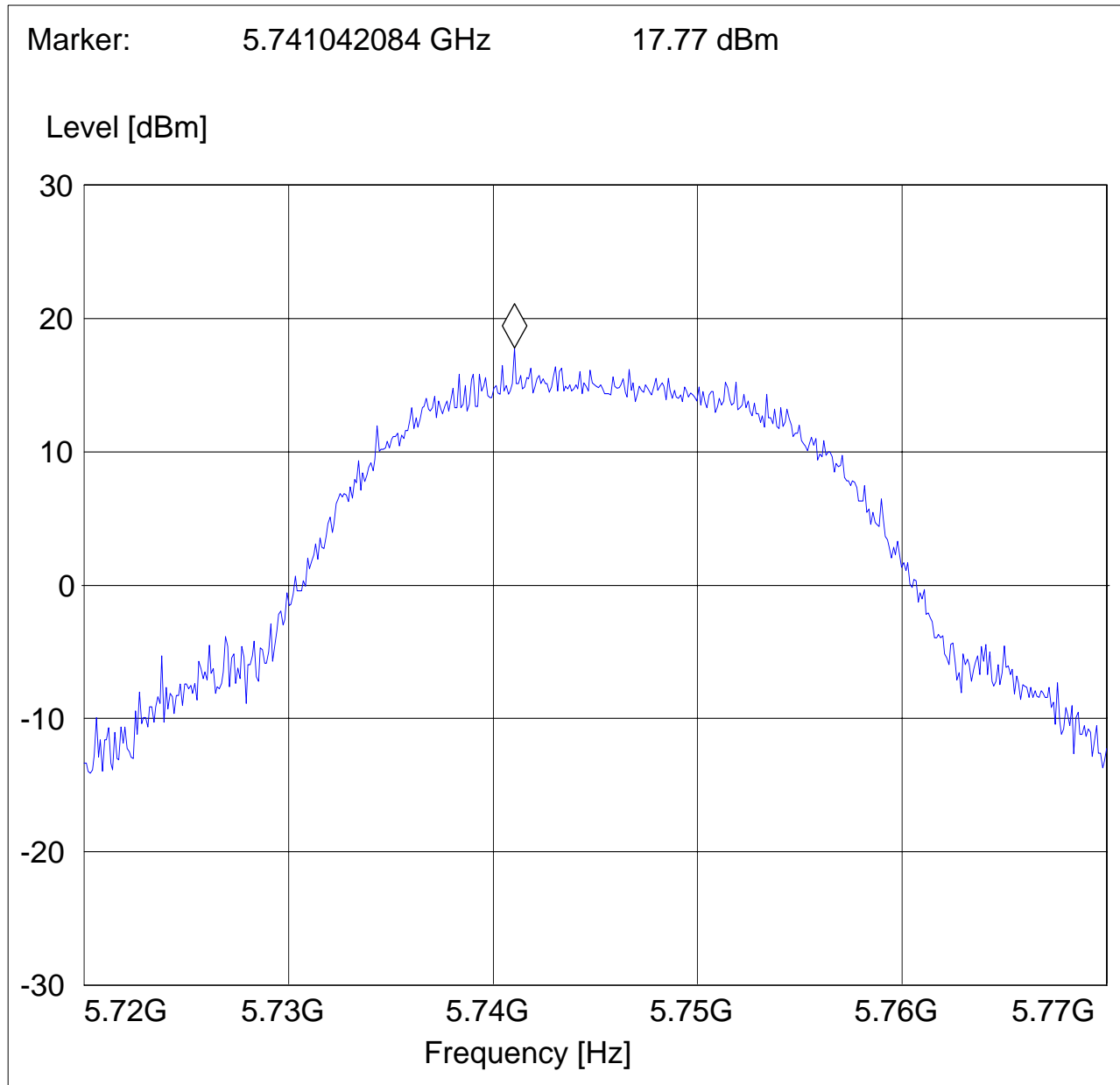
**EIRP a Mode (5745) Chain B**

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

EUT: RedStorm  
Customer: HP Texas  
Test Mode: 802.11a, ch 149, chain b  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Power Supply: AC Adapter

**SWEEP TABLE: "EIRP 802.11a\_149"**

Short Description: EIRP  
Unit: dBm Detector: MaxPeak RBW: 10MHZ VBW:10MHz





**EIRP a Mode (5785MHz) Chain B**

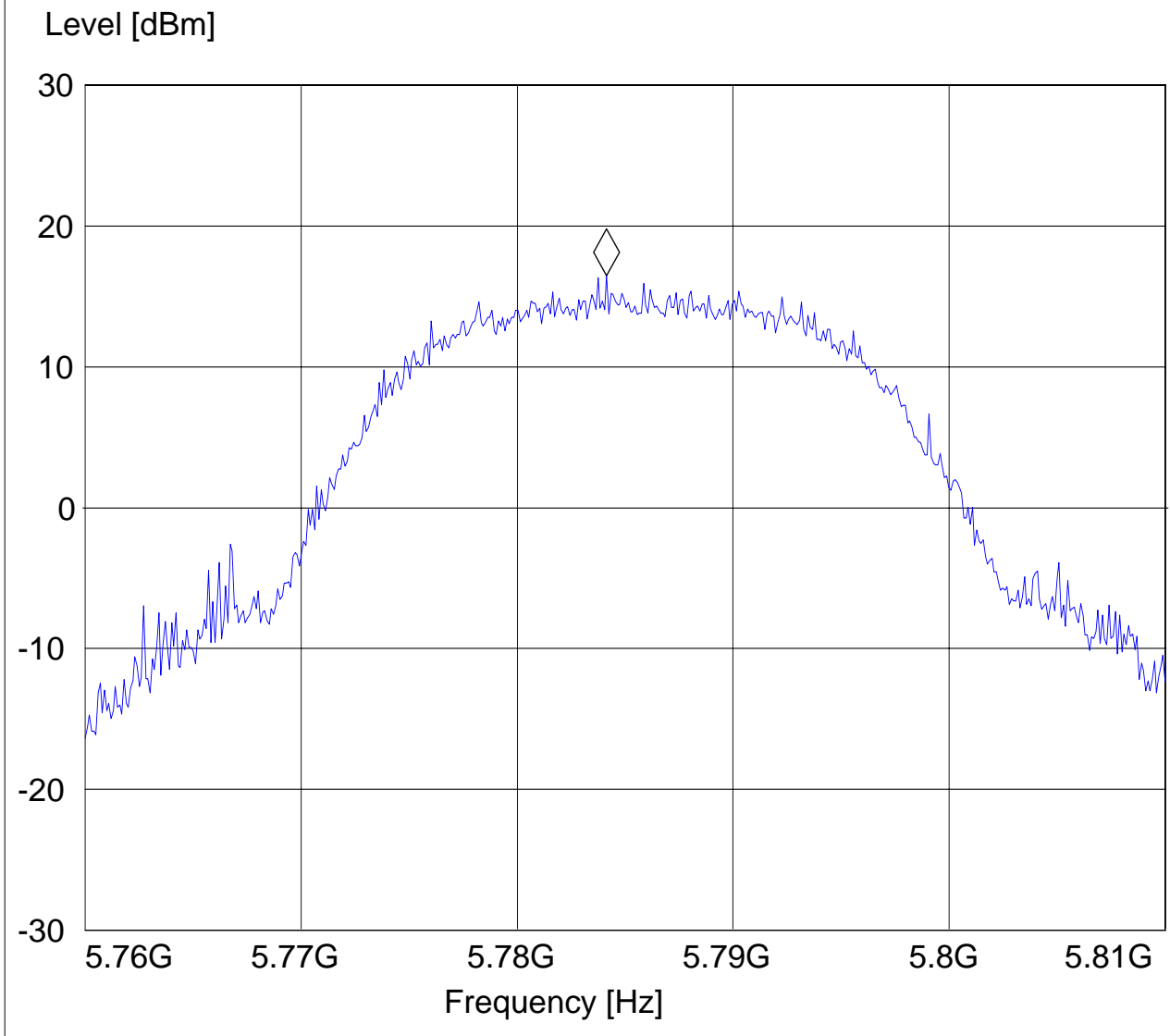
CETECOM Inc. 411 Dixon Landing Road, Milpitas CA 95035, USA

EUT: RedStorm  
Customer: HP Texas  
Test Mode: 802.11a, ch 157, chain b  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Power Supply: AC Adapter

**SWEEP TABLE: "EIRP 802.11a\_157"**

Short Description: EIRP  
Unit: dBm Detector: MaxPeak RBW: 10MHZ VBW:10MHz

Marker: 5.784148297 GHz 16.46 dBm





**EIRP a Mode (5825MHz) Chain B**

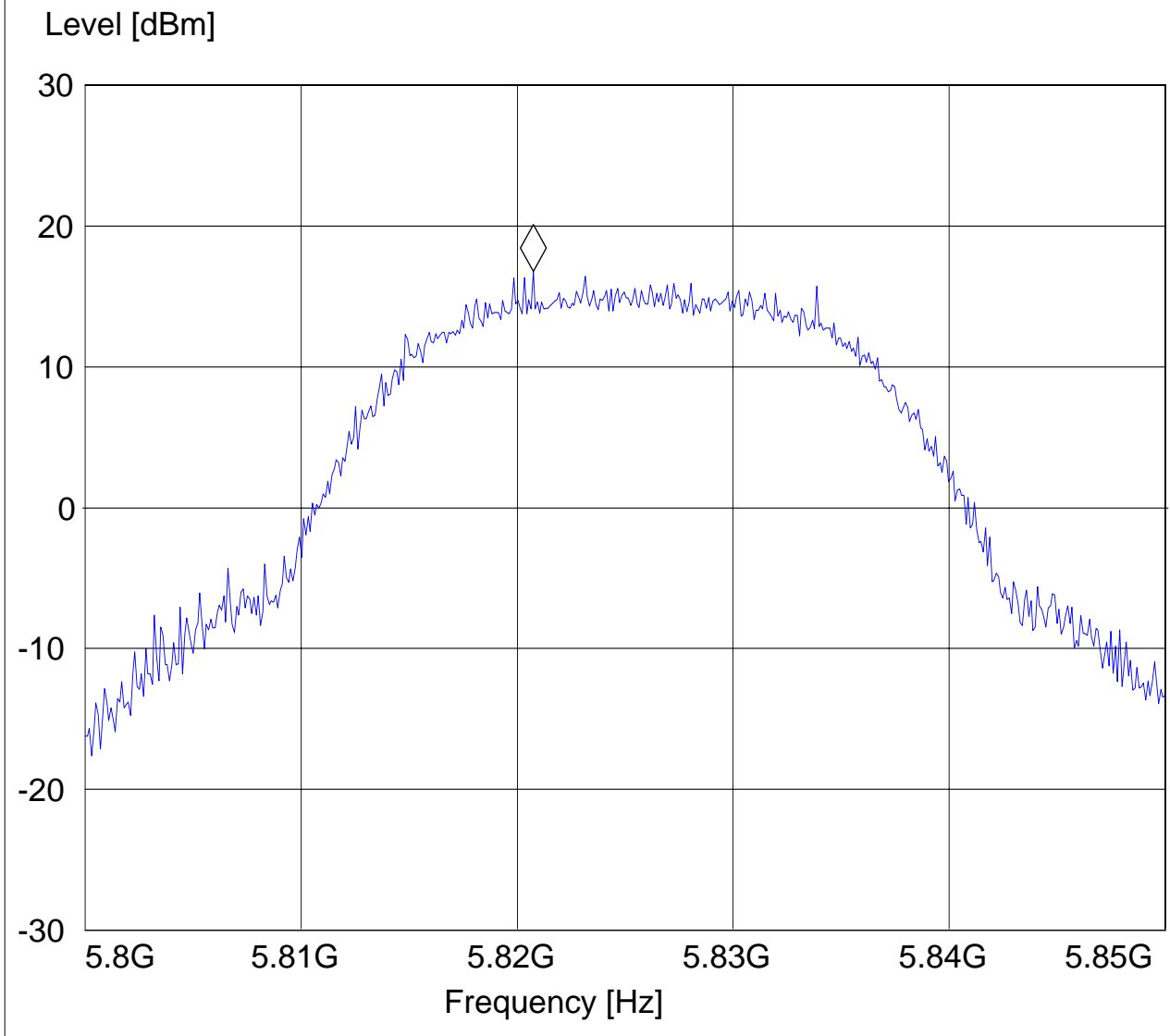
CETECOM Inc. 411 Dixon Landing Road, Milpitas CA 95035, USA

EUT: RedStorm  
Customer: HP Texas  
Test Mode: 802.11a, ch 165, chain b  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Power Supply: AC Adapter

**SWEEP TABLE: "EIRP 802.11a\_165"**

Short Description: EIRP  
Unit: dBm Detector: MaxPeak RBW: 10MHZ VBW:10MHz

Marker: 5.820741483 GHz 16.75 dBm





**5.2 TRANSMITTER SPURIOUS EMISSIONS RADIATED § 15.247/15.205/15.209**

**5.2.1 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
<sup>1</sup> 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	( <sup>2</sup> )
13.36 - 13.41			

\*PEAK LIMIT= 74dBuV/m

\*AVG. LIMIT= 54dBuV/m

**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



5.2.2 RESULTS (a) MODE

30MHz – 1GHz Chain A

Antenna: vertical

Note: This plot is valid for low, mid, high channels as well as for polarizations (worst-case plot) Note: Peak reading vs. Quasi-peak limit

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

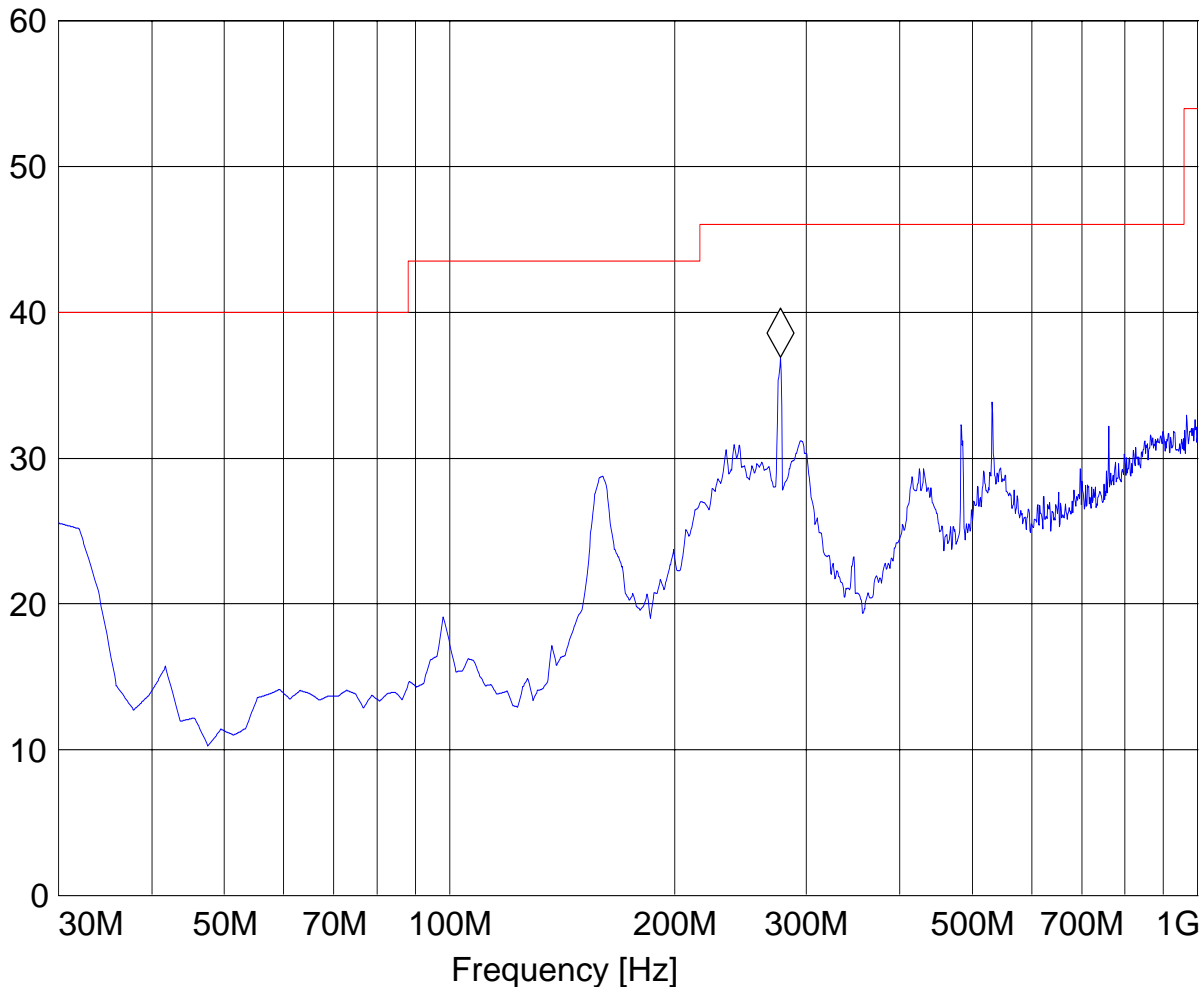
EUT: Redstorm
Customer: HP Texas
Test Mode: 802.11a, 20MHz, ch 157, chain a
ANT Orientation: V
EUT Orientation: H
Test Engineer: Ed
Power Supply: AC Adapter

SWEEP TABLE: "FCC15.247\_30M-1G\_Ver"

Table with 6 columns: Start Frequency, Stop Frequency, Detector, Meas. Time, IF Bandw., Transducer. Row 1: 30.0 MHz, 1.0 GHz, MaxPeak, Coupled, 100 kHz, 3141-#1186\_Vert

Marker: 276.873747 MHz 36.93 dBuV/m

Level [dBuV/m]





**1-18GHz (5745MHz) Chain A**

Note: The peaks above the limit line is the carrier freq. Note: Peak Reading vs. Average limit  
 CETECOM Inc., 411 Dixon Landing Road; Milpitas, CA 95035

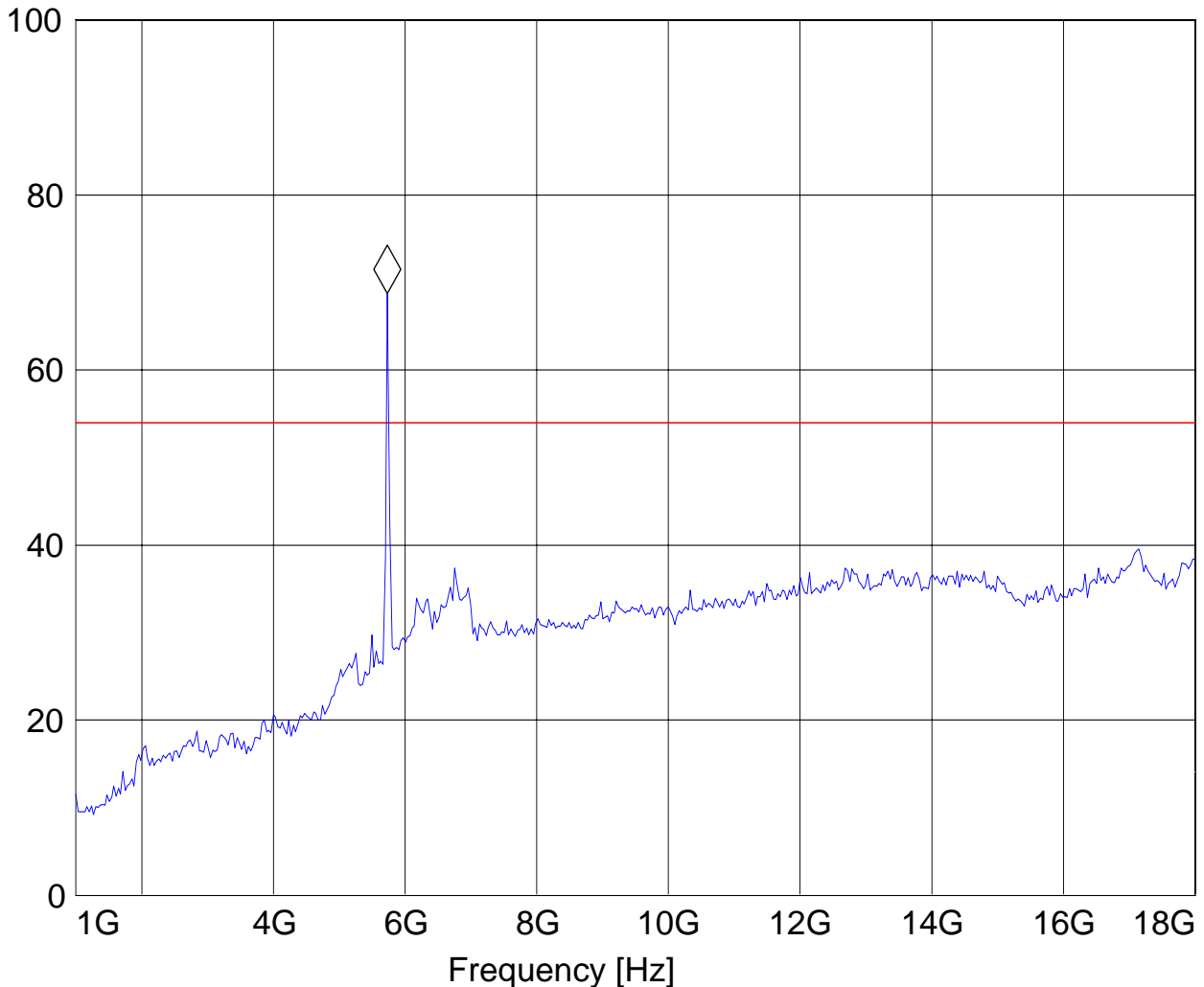
EUT / Description: RedStorm  
 Manufacturer: HP Texas  
 Test mode: 802.11a, ch 149, chain a  
 ANT Orientation: H  
 EUT Orientation: H  
 Test Engineer: Satya Radhakrishna  
 Voltage: AC Adapter  
 Comments: Marker placed on transmit signal

**SWEEP TABLE: "FCC 15.407 1-18G"**

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

Marker: 5.735470942 GHz 68.77 dBµV/m

Level [dBµV/m]







**1-18GHz (5785MHz) Chain A**

**Note:** The peaks above the limit line is the carrier freq. **Note:** Peak Reading vs. Average limit  
**CETECOM Inc., 411 Dixon Landing Road; Milpitas, CA 95035**

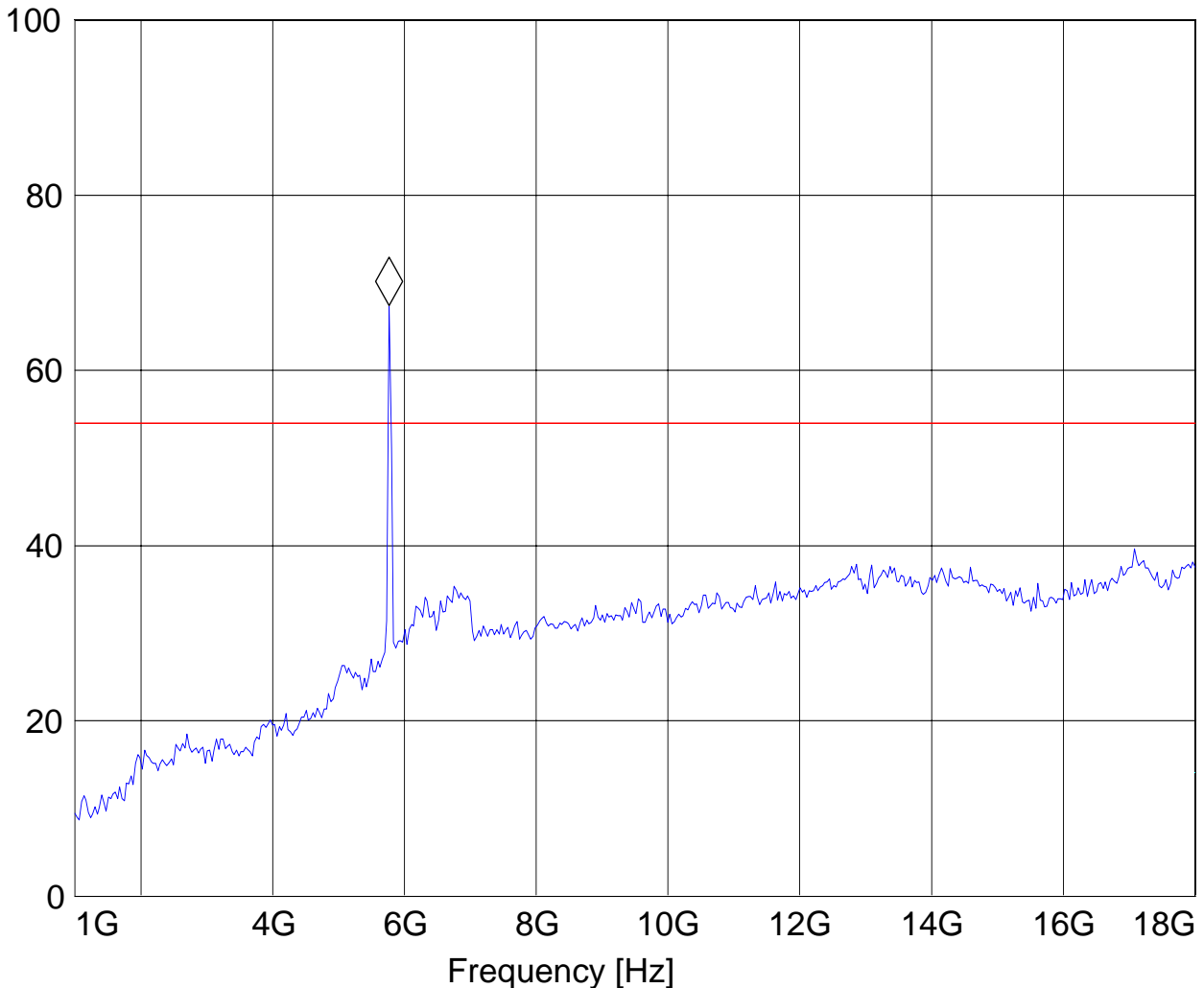
EUT / Description: RedStorm  
 Manufacturer: HP Texas  
 Test mode: 802.11a, ch 157, chain a  
 ANT Orientation: H  
 EUT Orientation: H  
 Test Engineer: Satya Radhakrishna  
 Voltage: AC Adapter  
 Comments: Marker placed on transmit signal

**SWEEP TABLE: "FCC 15.407 1-18G"**

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

Marker: 5.769539078 GHz 67.39 dBµV/m

Level [dBµV/m]





**1-18GHz (5825MHz) Chain A**

**Note:** The peaks above the limit line is the carrier freq. **Note:** Peak Reading vs. Average limit  
*CETECOM Inc., 411 Dixon Landing Road; Milpitas, CA 95035*

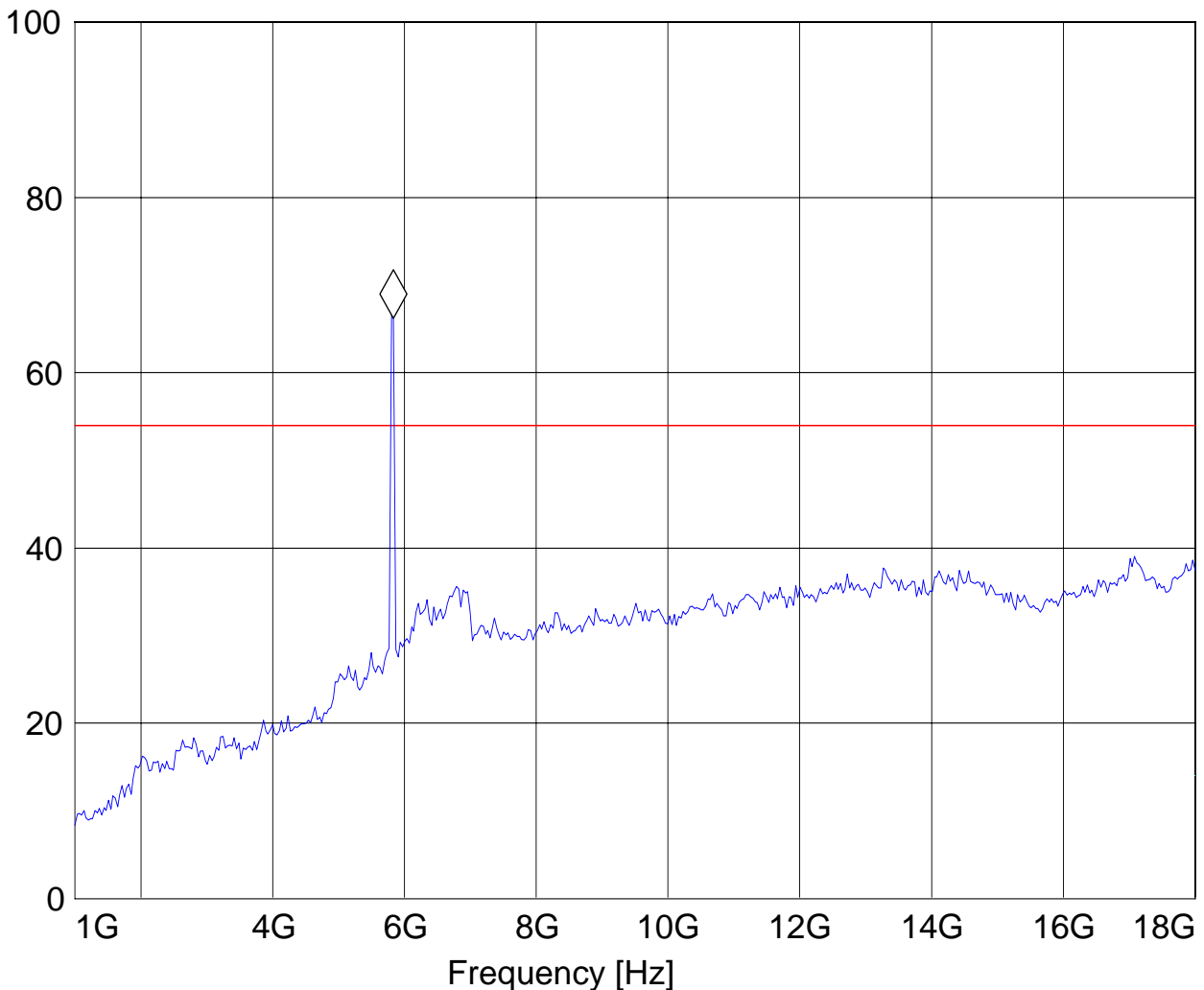
EUT / Description: RedStorm  
Manufacturer: HP Texas  
Test mode: 802.11a, ch 165, chain a  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Voltage: AC Adapter  
Comments: Marker placed on transmit signal

**SWEEP TABLE: "FCC 15.407 1-18G"**

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

Marker: 5.837675351 GHz 66.26 dBµV/m

Level [dBµV/m]





**18-26.5GHz (5745MHz) Chain A**

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

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

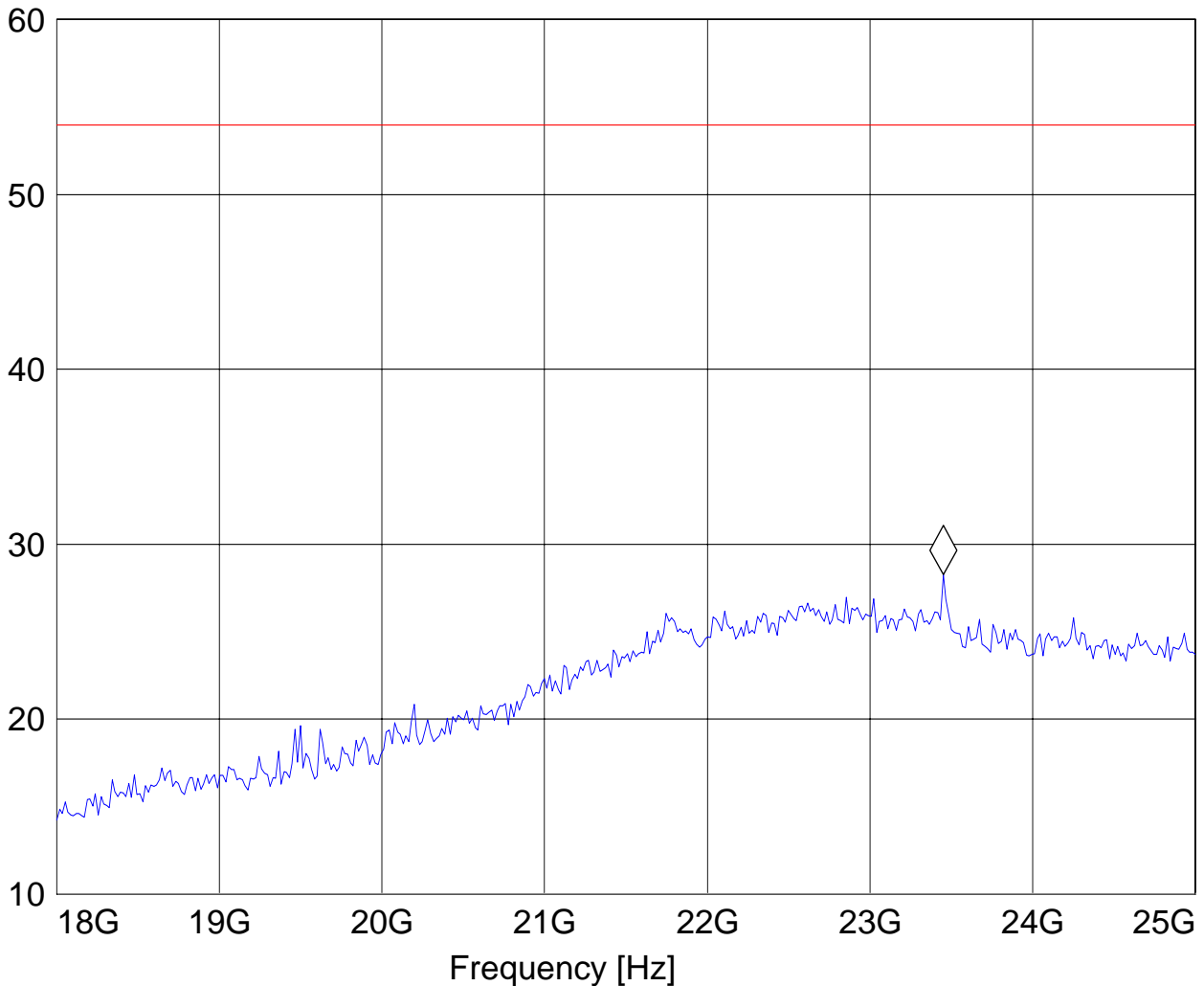
EUT: Redstorm  
Customer: HP Texas  
Test Mode: 802.11a, 20MHz, ch 149, chain a  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Ed  
Power Supply: AC Adapter

**SWEEP TABLE: "FCC15.247\_18-26.5G"**

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	3160 Horn 18-26.5G

Marker: 23.450901804 GHz 28.29 dBμV/m

Level [dBμV/m]





**26-40GHz Chain A**

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

CETECOM Inc., 411 Dixon Landing Road; Milpitas, CA 95035

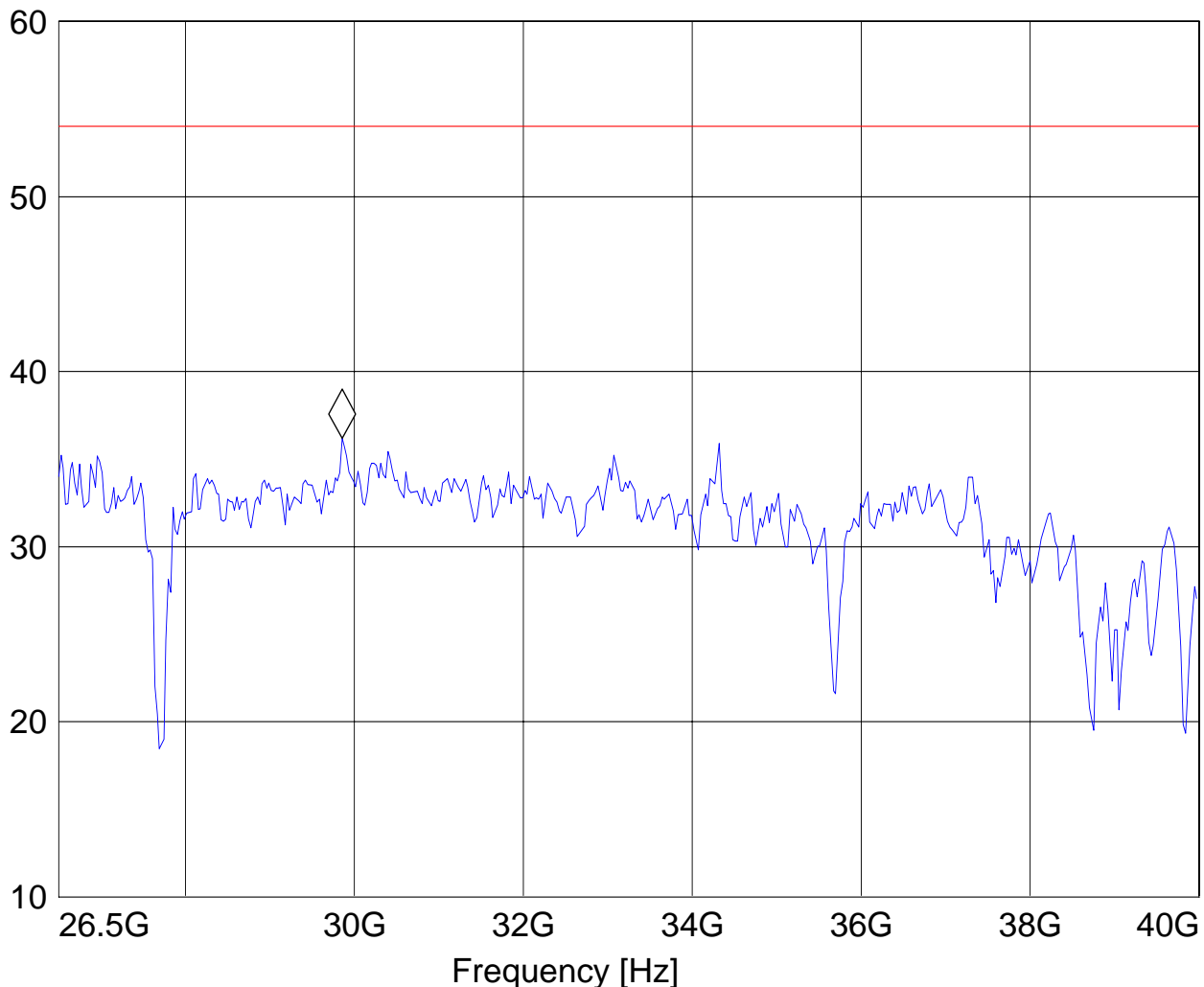
EUT / Description: RedStorm  
 Manufacturer: HP Texas  
 Test mode: 802.11a, ch 157, 20MHz BW, chain a  
 ANT Orientation: H  
 EUT Orientation: H  
 Test Engineer: Ed  
 Voltage: AC Adapter

**SWEEP TABLE: "FCC15.247\_26.5-40G"**

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	3160 Horn 18-26.5G

Marker: 29.854709419 GHz 36.21 dBμV/m

Level [dBμV/m]





30MHz – 1GHz Chain B

Antenna: vertical

Note: This plot is valid for low, mid, high channels as well as for polarizations (worst-case plot). Note: Peak reading vs. Quasi-peak limit

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

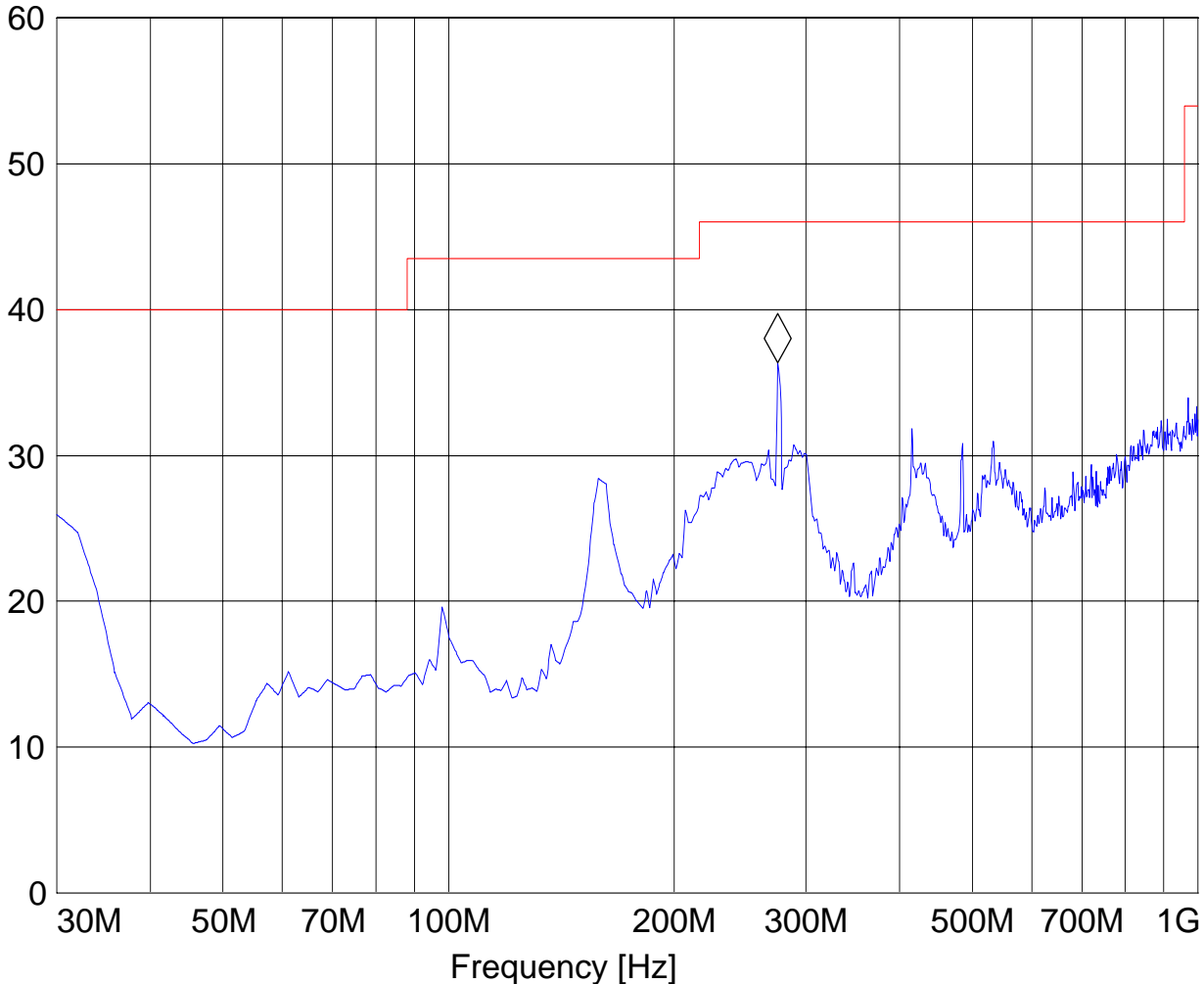
EUT: Redstorm
Customer: HP Texas
Test Mode: 802.11a, 20MHz, ch 157, chain b
ANT Orientation: V
EUT Orientation: H
Test Engineer: Ed
Power Supply: AC Adapter

SWEEP TABLE: "FCC15.247\_30M-1G\_Ver"

Table with 6 columns: Start Frequency, Stop Frequency, Detector, Meas. Time, IF Bandw., Transducer. Row 1: 30.0 MHz, 1.0 GHz, MaxPeak, Coupled, 100 kHz, 3141-#1186\_Vert

Marker: 274.92986 MHz 36.36 dBuV/m

Level [dBuV/m]





**1-18GHz (5745MHz) Chain B**

**Note: The peaks above the limit line is the carrier freq.** **Note: Peak Reading vs. Average limit**  
**CETECOM Inc., 411 Dixon Landing Road; Milpitas, CA 95035**

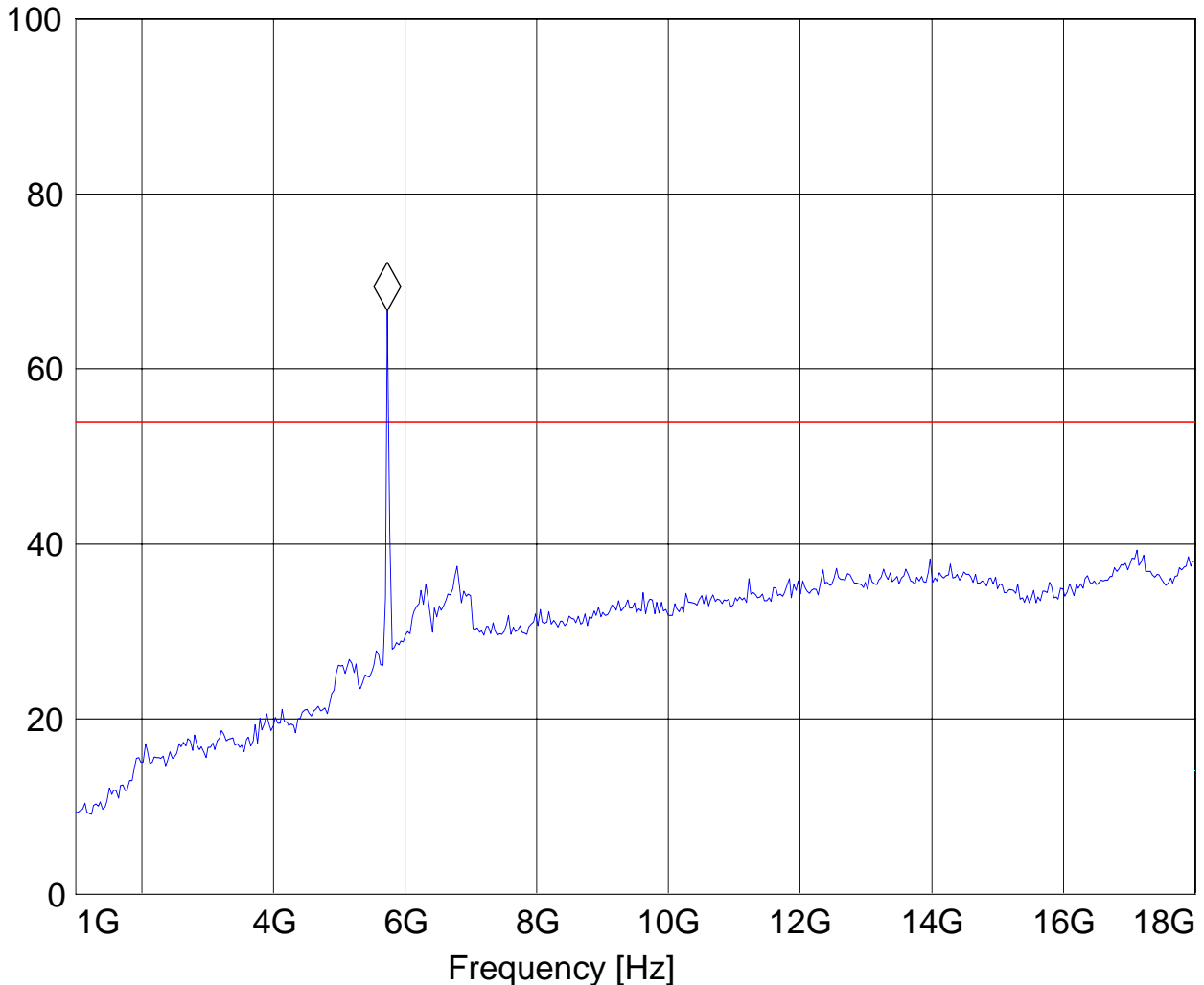
EUT / Description: RedStorm  
Manufacturer: HP Texas  
Test mode: 802.11a, ch 149, chain b  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Voltage: AC Adapter  
Comments: Marker placed on transmit signal

**SWEEP TABLE: "FCC 15.407 1-18G"**

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

Marker: 5.735470942 GHz 66.66 dBµV/m

Level [dBµV/m]





1-18GHz (5785MHz) Chain B

Note: The peaks above the limit line is the carrier freq. Note: Peak Reading vs. Average limit
CETECOM Inc., 411 Dixon Landing Road; Milpitas, CA 95035

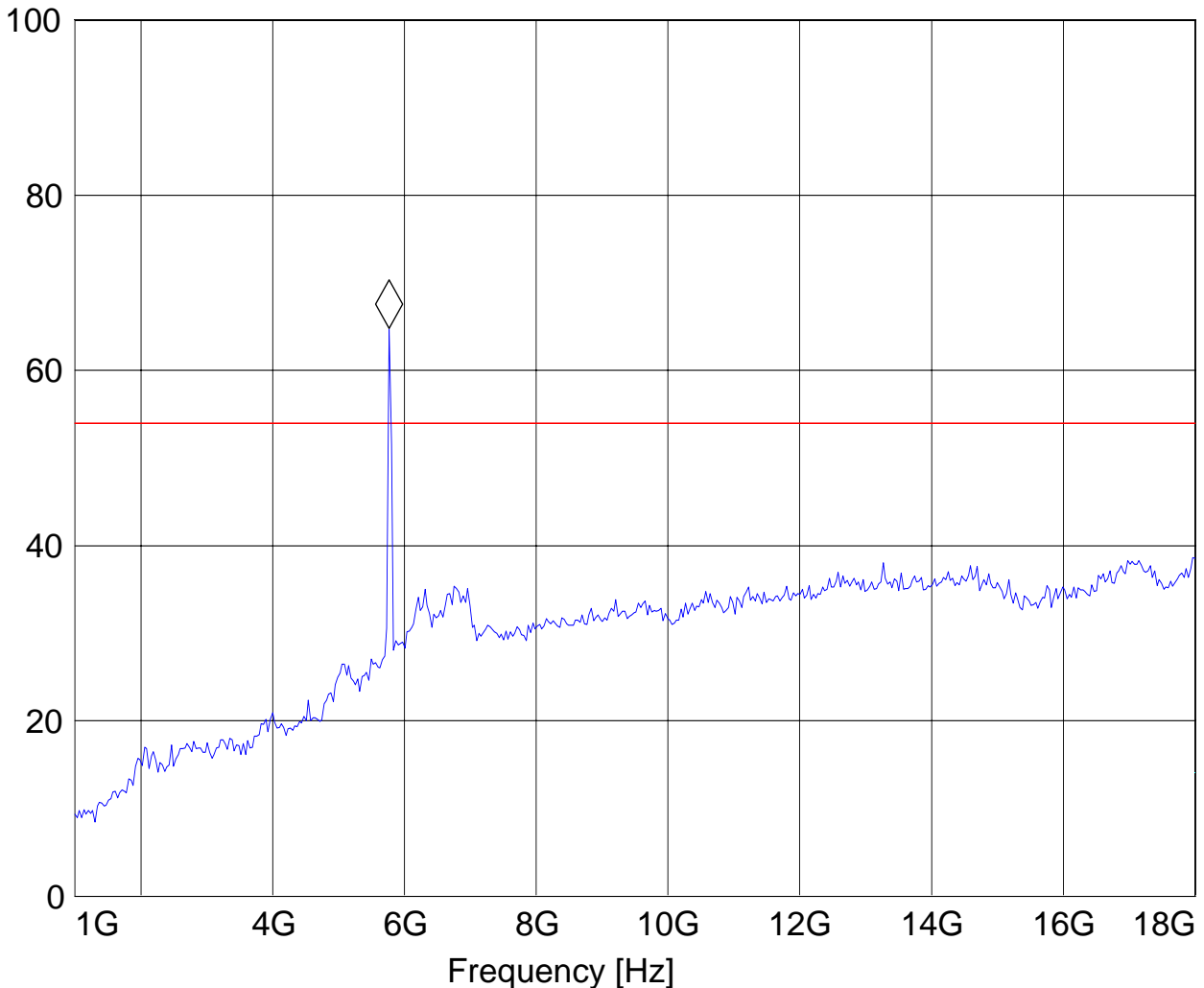
EUT / Description: RedStorm
Manufacturer: HP Texas
Test mode: 802.11a, ch 157, chain b
ANT Orientation: H
EUT Orientation: H
Test Engineer: Satya Radhakrishna
Voltage: AC Adapter
Comments: Marker placed on transmit signal

SWEEP TABLE: "FCC 15.407 1-18G"

Table with 6 columns: Start Frequency, Stop Frequency, Detector, Meas. Time, IF Bandw., Transducer. Row 1: 1.0 GHz, 18.0 GHz, MaxPeak, Coupled, 1 MHz, #326horn\_AF\_horz

Marker: 5.769539078 GHz 64.77 dBµV/m

Level [dBµV/m]





**1-18GHz (5825MHz) Chain B**

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

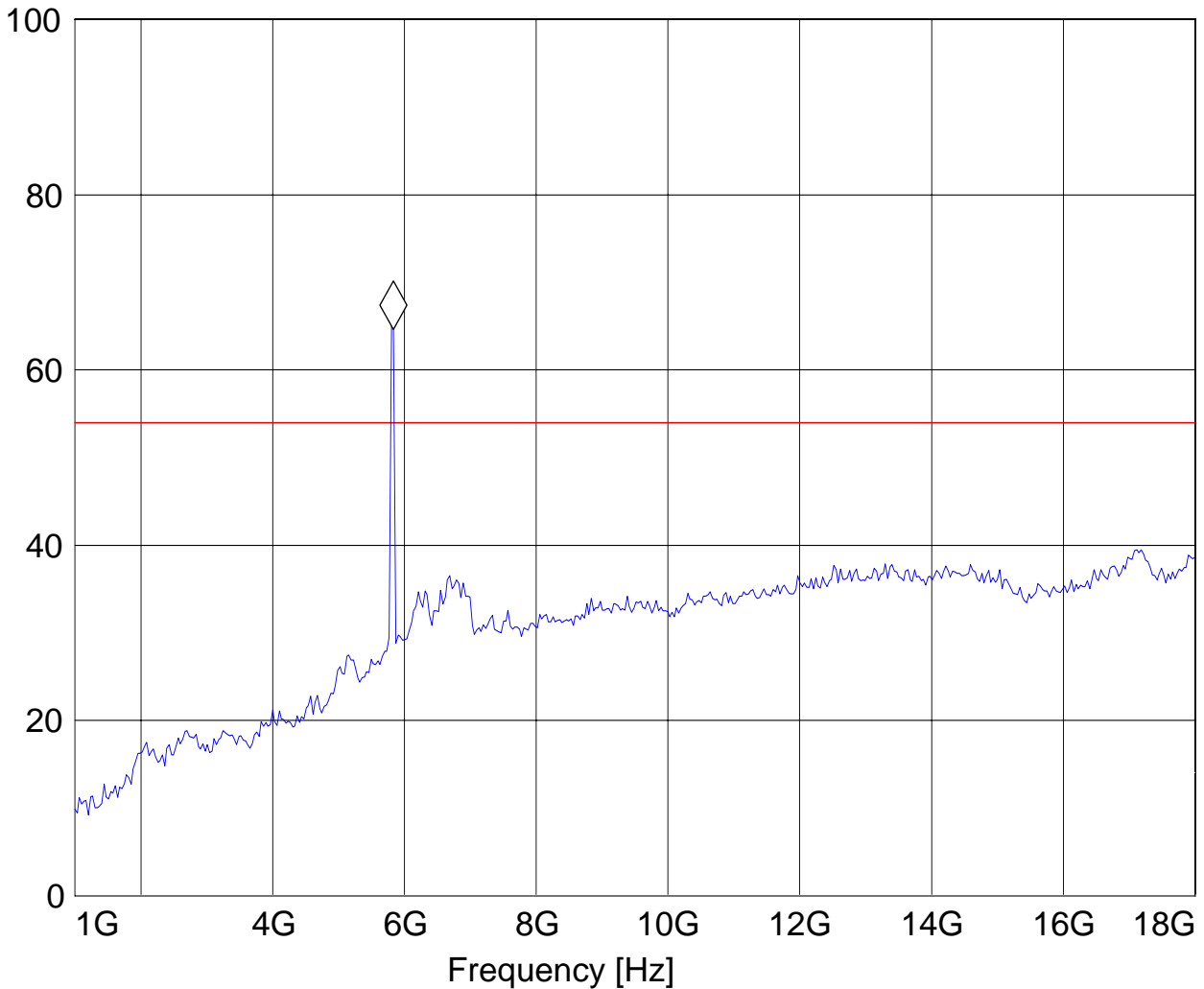
EUT / Description: RedStorm  
Manufacturer: HP Texas  
Test mode: 802.11a, ch 165, chain b  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Satya Radhakrishna  
Voltage: AC Adapter  
Comments: Marker placed on transmit signal

**SWEEP TABLE: "FCC 15.407 1-18G"**

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

Marker: 5.837675351 GHz 64.59 dBμV/m

Level [dBμV/m]







**18-26.5GHz (5745MHz) Chain B**

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

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

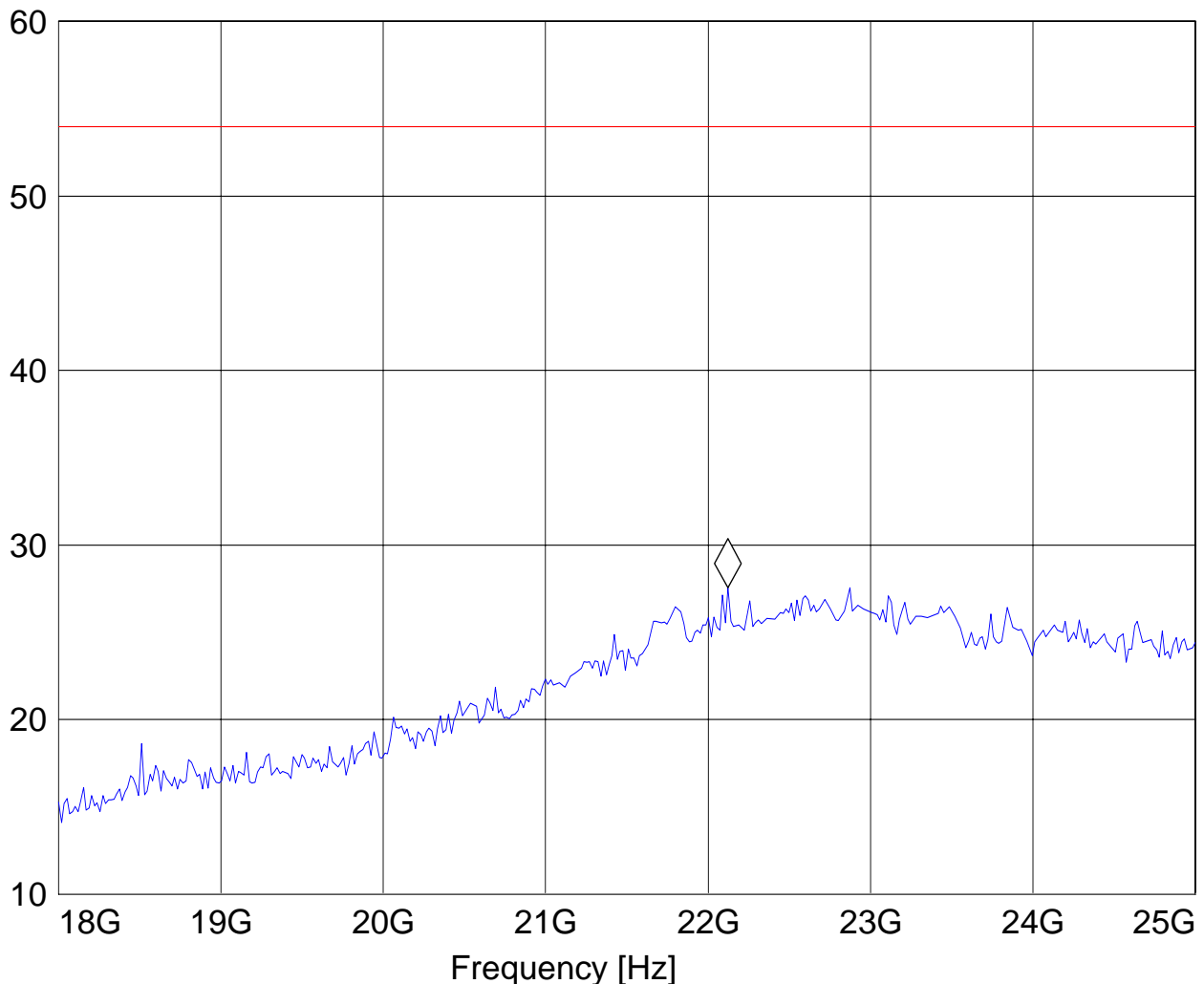
EUT: Redstorm  
 Customer: HP Texas  
 Test Mode: 802.11a, 20MHz, ch 157, chain b  
 ANT Orientation: H  
 EUT Orientation: H  
 Test Engineer: Ed  
 Power Supply: AC Adapter

**SWEEP TABLE: "FCC15.247\_18-26.5G"**

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
18.0 GHz	26.5 GHz	MaxPeak	Coupled	1 MHz	3160 Horn 18-26.5G

Marker: 22.122244489 GHz 27.57 dBµV/m

Level [dBµV/m]





**26-40GHz Chain B**

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

CETECOM Inc., 411 Dixon Landing Road, Milpitas CA 95035, USA

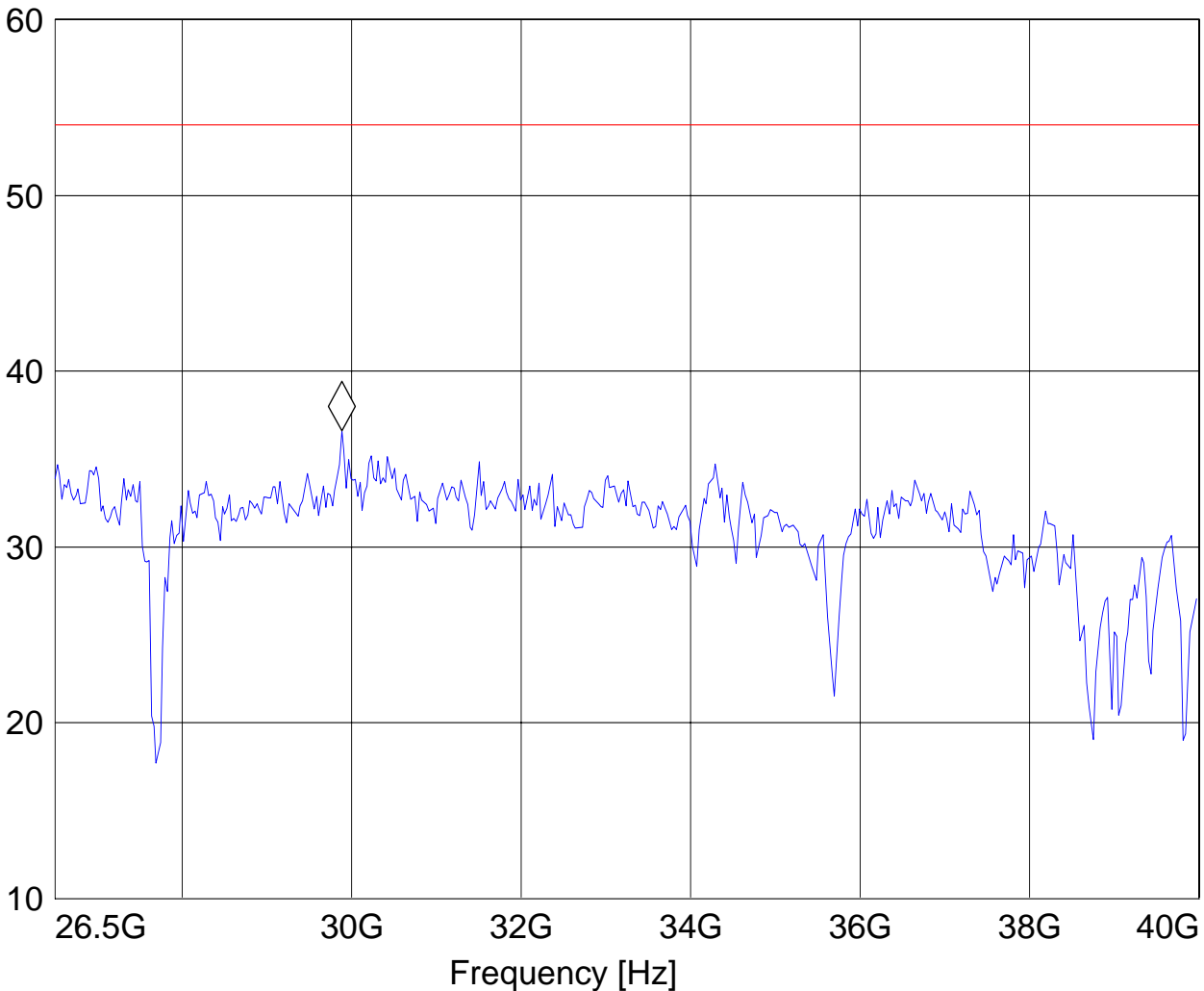
EUT / Description: RedStorm  
Manufacturer: HP Texas  
Test mode: 802.11a, ch 157, 20MHz BW, chain b  
ANT Orientation: H  
EUT Orientation: H  
Test Engineer: Ed  
Voltage: AC Adapter

**SWEEP TABLE: "FCC15.247\_26.5-40G"**

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
26.5 GHz	40.0 GHz	MaxPeak	Coupled	1 MHz	3160 Horn 26.5-40G

Marker: 29.881763527 GHz 36.61 dBμV/m

Level [dBμV/m]





**5.3 AC POWER LINE CONDUCTED EMISSIONS § 15.107/207**

**5.3.1 LIMITS**

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

**Limit**

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

\* Decreases with logarithm of the frequency

**ANALYZER SETTINGS: RBW = 10KHz**

**VBW = 10KHz**



5.3.2 Results

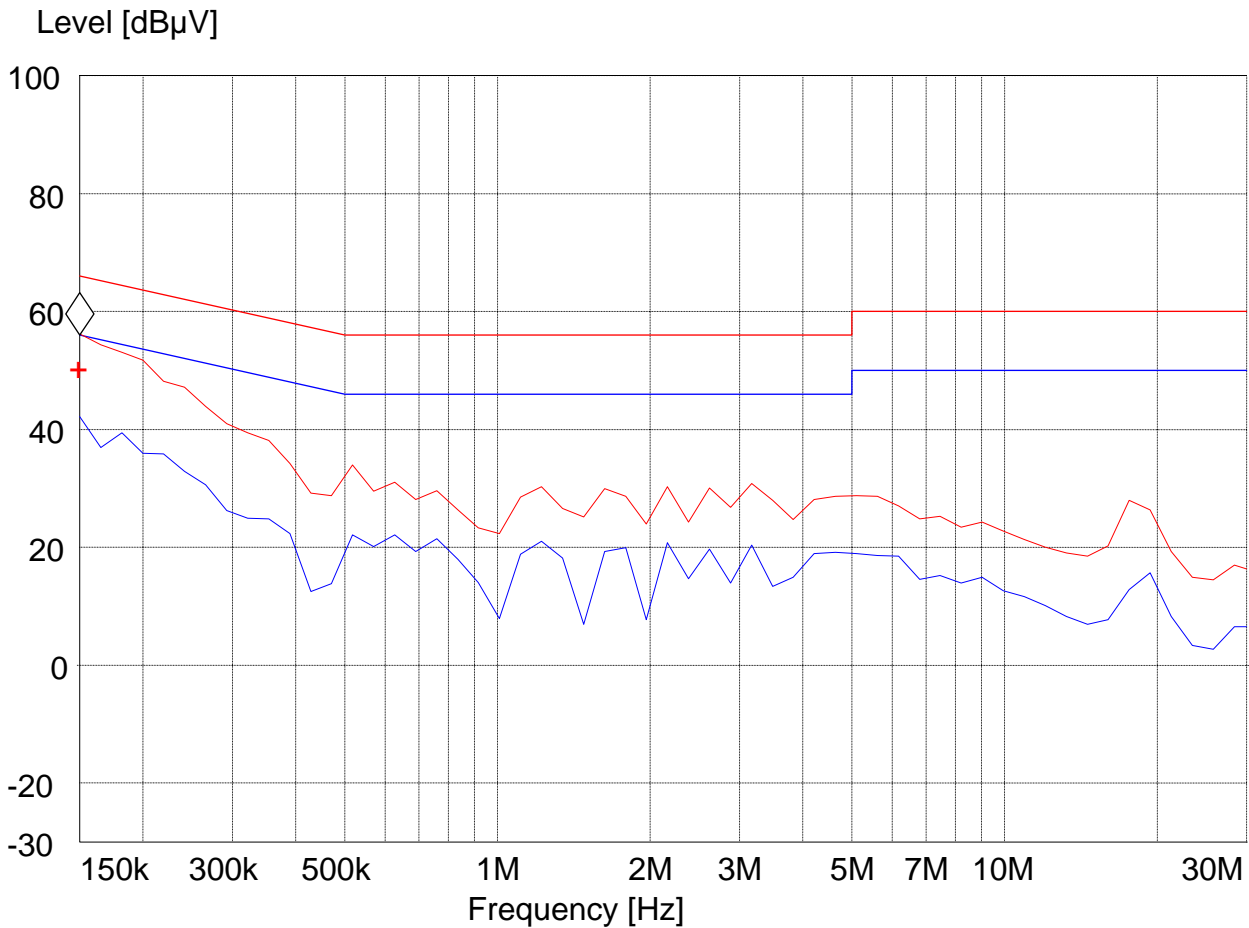
Line:

EUT: Redstorm  
 Manufacturer: HP  
 Operating Condition: WLAN  
 Test Engineer: Peter Mu  
 ANT Orientation: H  
 EUT Orientation: H  
 Voltage: AC Adapter

**SWEEP TABLE: "55022 cond"**

Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
150.0 kHz	30.0 MHz	MaxPeak	Coupled	10 kHz	None

Marker: 150 kHz 56 dBµV



- + MES 55022 V AV QPk
- MES 55022 cond MaxPk
- MES 55022 cond Avg
- LIM EN 55022 V QP Voltage QP Limit
- LIM EN 55022 V AV Voltage AV Limit



**MEASUREMENT RESULT: "55022 V AV QPk"**

6/29/2007 9:02AM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.150000	50.90	0.0	66	15.1	---	---

**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



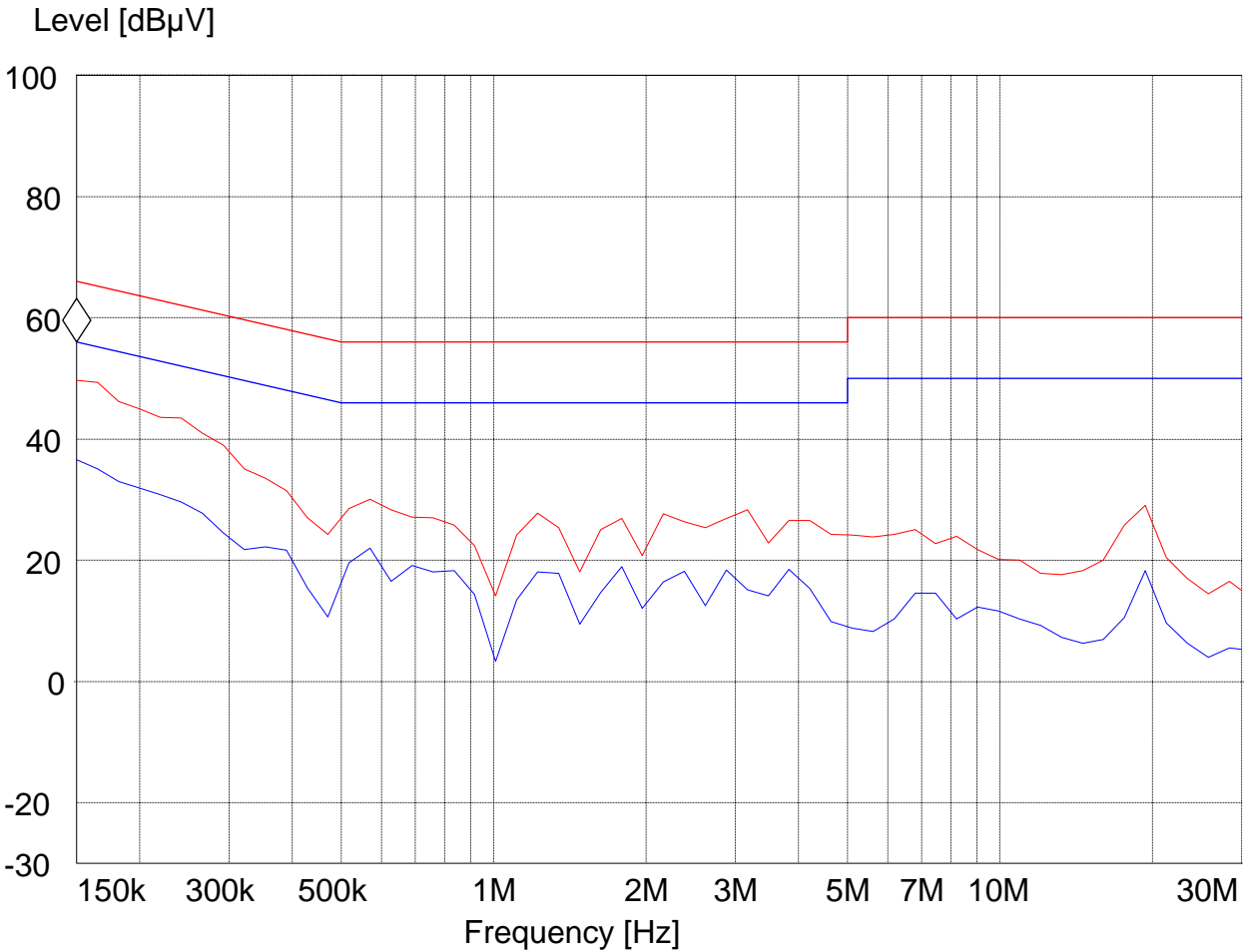
Neutral:

EUT: Redstorm
Manufacturer: HP
Operating Condition: WLAN
Test Engineer: Peter Mu
ANT Orientation: H
EUT Orientation: H
Voltage: AC Adapter

SWEEP TABLE: "55022 cond"

Table with 6 columns: Start Frequency, Stop Frequency, Detector, Meas. Time, IF Bandw., Transducer. Row 1: 150.0 kHz, 30.0 MHz, MaxPeak, Coupled, 10 kHz, None.

Marker: 150 kHz 56 dBuV



- MES 55022 cond MaxPk
MES 55022 cond Avg
LIM EN 55022 V QP Voltage QP Limit
LIM EN 55022 V AV Voltage AV Limit



**LIMIT LINE: "EN 55022 V AV"**

Short Description:		Voltage AV Limit
4/27/1998 2:24PM		
Frequency	Level	
	MHz	dBuV
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	dBuV
0.150000	66.00	
0.500000	56.00	
5.000000	56.00	
5.000000	60.00	
30.000000	60.00	



**6 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 2008	1 year
02	Spectrum Analyzer	FSEM 30	Rohde & Schwarz	100017	August 2008	1 year
03	Signal Generator	SMY02	Rohde & Schwarz	836878/011	May 2008	1 year
04	Power-Meter	NRVD	Rohde & Schwarz	0857.8008.02	May 2008	1 year
05	Biconilog Antenna	3141	EMCO	0005-1186	June 2008	1 year
06	Horn Antenna (1-18GHz)	SAS-200/571	AH Systems	325	June 2008	1 year
07	Horn Antenna (18-26.5GHz)	3160-09	EMCO	1240	June 2008	1 year
08	Power Splitter	11667B	Hewlett Packard	645348	n/a	n/a
09	Climatic Chamber	VT4004	Voltsch	G1115	May 2008	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	JS4-00102600	Miteq	00616	May 2008	1 year
13	Power Sensor	URV5-Z2	Rohde & Schwarz	DE30807	May 2008	1 year
14	Digital Radio Comm. Tester	CMD-55	Rohde & Schwarz	847958/008	May 2008	1 year
15	Universal Radio Comm. Tester	CMU 200	Rohde & Schwarz	832221/06	May 2008	1 year
16	LISN	ESH3-Z5	Rohde & Schwarz	836679/003	May 2008	1 year
17	Loop Antenna	6512	EMCO	00049838	July 2008	2 years



### 6.1 BLOCK DIAGRAMS

#### Radiated Testing

##### ANECHOIC CHAMBER

