

**FCC PART 15, SUBPART C  
TEST REPORT***for***TUNEBASE FM DIRECT****MODEL: F8Z441**

Prepared for

**BELKIN INTERNATIONAL, INC.  
501 W. WALNUT STREET  
COMPTON, CA 90220-5221**

Prepared by: \_\_\_\_\_

**JOSH HANSEN**

Approved by: \_\_\_\_\_

**JEFF KLINGER****COMPATIBLE ELECTRONICS INC.  
20621 Pascal Way  
LAKE FOREST, CA 92630  
(949) 587-0400**DATE: May 6<sup>th</sup> 2009

	REPORT BODY	APPENDICES					TOTAL
		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	
PAGES	17	2	2	2	6	17	<b>46</b>

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## GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product endorsement by NVLAP, NIST or any other agency of the U.S. Government.

Device Tested: TuneBase FM Direct  
Model: F8Z441  
S/N: N/A

Product Description: See Expository Statement

Modifications: The EUT was not modified.

Manufacturer: Belkin International, inc.  
501 W. Walnut Street  
Compton, CA 90220-5221

Test Date: May 5<sup>th</sup>, 2009

Test Specifications: CFR Title 47, Part 15 Subpart C, Sections 15.205, 15.209 and 15.239

Test Procedure: ANSI C63.4: 2003

Test Deviations: The test procedure was not deviated from during the testing.

## SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Radiated RF Emissions, 10 kHz – 1080 MHz	Complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, 15.239 (b), and 15.239 (c).
2	-20 dB Bandwidth of the Fundamental	Complies with the limits of CFR Title 47, Part 15, Subpart C, section 15.239 (a).

**1. PURPOSE**

This document is a qualification test report based on the Electromagnetic Interference (EMI) tests performed on the TuneBase FM Direct Model: F8Z441. The EMI measurements were performed according to the measurement procedure described in ANSI C63.4. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the specification limits defined by CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.239.



## 2. ADMINISTRATIVE DATA

### 2.1 Location of Testing

The EMI tests described herein were performed at the test facility of Compatible Electronics, 20621 Pascal Way, Lake Forest, California 92630.

### 2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

### 2.3 Cognizant Personnel

Belkin International, inc.

Daniel Wesey Compliance Engineer

Compatible Electronics, Inc.

Josh Hansen Test Engineer

Jeff Klinger Director of Engineering

### 2.4 Date Test Sample was Received

The test sample was received on May 4<sup>th</sup> 2009.

### 2.5 Disposition of the Test Sample

The sample has not yet been returned to Belkin International, inc. as of May 6<sup>th</sup> 2009.

### 2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

RF	Radio Frequency
CLA	Cigar Lighter Adaptor
EMI	Electromagnetic Interference
EUT	Equipment Under Test
P/N	Part Number
S/N	Serial Number
HP	Hewlett Packard
ITE	Information Technology Equipment
CML	Corrected Meter Limit
LISN	Line Impedance Stabilization Network

**3. APPLICABLE DOCUMENTS**

The following documents are referenced or used in the preparation of this EMI Test Report.

<b>SPEC</b>	<b>TITLE</b>
CFR Title 47, Part 15	FCC Rules – Radio frequency devices (including digital devices)
ANSI C63.4 2003	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

#### **4. DESCRIPTION OF TEST CONFIGURATION**

##### **4.1 Description Of Test Configuration - EMI**

Setup and operation of the equipment under test.

Specifics of the EUT and Peripherals Tested

The TuneBase FM Direct Model: F8Z441 (EUT) was investigated in two configurations. The first one was connected to an Apple iPod via its integral 30-Pin Dock Connector. 12v DC was supplied via the EUT's integral CLA (Cigar Lighter Adaptor), which was connected to a CLA socket receptacle, which in turn was connected to a 12v battery. The EUT was receiving audio from the iPod and transmitting the audio in the FM band, the iPod and the music being played was provided by the customer, the song was Linkin Park "Don't Stay". The EUT's transmit antenna (the flexible neck of the EUT) was soldered to the Radio PCB of the EUT, which is contained in the back of the CLA. Another iPod was being charged by the USB port on the EUT.

The Second configuration was the same except a 3.5mm Audio jack connector was connected to the bottom of the EUT to a pair of speakers for its direct connection mode of operation. In the direct connection mode the FM transmitter is turned off.

The low, middle, and high channels were investigated.

The final data was taken in the modes above. Please see Appendix E for the data sheets.



**4.1.1 Cable Construction and Termination**

Cable 1 USB cable 1 meter long with a USB connector at one end and a 30pin iPod dock connector at the other end.

Cable 2 Audio cable 1.5 meter long with a 3.5mm Audio jack at one end and hardwired to the speakers at the other.



**5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT****5.1 EUT and Accessory List**

<b>EQUIPMENT</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIALNUMBER</b>	<b>FCC ID</b>
TUNEBASE FM DIRECT (EUT)	BELKIN INTERNATIONAL, INC.	F8Z441	N/A	<b>K7SF8Z441</b>
iPod	Apple	A1136	JQ542XTQSZ9	N/A
iPod	Apple	A1236	7N742NBPYOP	N/A
Speakers	N/A	N/A	N/A	N/A
12v Battery	N/A	N/A	N/A	N/A

**5.2 EMI Test Equipment**

<b>EQUIPMENT TYPE</b>	<b>MANUFACTURER</b>	<b>MODEL NUMBER</b>	<b>SERIAL NUMBER</b>	<b>CALIBRATION DATE</b>	<b>CALIBRATION DUE DATE</b>
<b>GENERAL TEST EQUIPMENT USED FOR ALL RF EMISSIONS TESTS</b>					
Computer	Compatible Electronics	N/A	N/A	N/A	N/A
EMI Receiver	Rohde & Schwarz	ESIB40	100172	Jan. 7, 2009	Jan. 7, 2011
Monitor	ICS Advent	N/A	N/A	N/A	N/A
<b>RF RADIATED EMISSIONS TEST EQUIPMENT</b>					
CombyLog Antenna	Com-Power	AC-220	001	Sept. 3, 2008	Sept. 3, 2009
Loop Antenna	Com-Power	AL-130	17085	Aug. 1, 2008	Aug. 1, 2010
Antenna Mast	Sunol Sciences Corporation	TWR 95-4	020808-3	N/A	N/A
Turntable	Sunol Sciences Corporation	FM 2001	N/A	N/A	N/A
Mast and Turntable Controller	Sunol Sciences Corporation	SC104V	020808-1	N/A	N/A

**6. TEST SITE DESCRIPTION****6.1 Test Facility Description**

Please refer to section 2.1 and 7.1 of this report for EMI test location.

**6.2 EUT Mounting, Bonding and Grounding**

The EUT, iPod, and Cigar Lighter receptacle were mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

The EUT was placed in the center, and on the back edge of the table, in accordance with ANSI C63.4:2003. The test site receive antenna distance was measured from the closest periphery of the EUT setup. Each accessory was placed 10 cm to either side of the EUT. The battery was placed on the ground, using an 80 cm length of wire to connect to a cigar lighter receptacle, which was mounted on the table.

The EUT and accessories were investigated for worst case placement; the above yielded the worst case configuration.

The EUT was not grounded.

## 7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

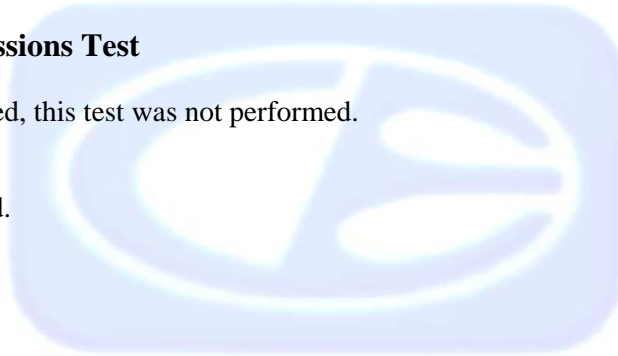
### 7.1 RF Emissions

#### 7.1.1 Conducted Emissions Test

EUT is DC powered, this test was not performed.

**Test Results:**

Test not performed.



### 7.1.2 Radiated Emissions (Spurious and Harmonics) Test

The receiver was used as a measuring meter along with the quasi-peak adapter. The receiver was used in the peak detect mode with the "Max Hold" feature activated. In this mode, the receiver records the highest measured reading over all the sweeps.

The frequencies above 1 GHz and the fundamental for the low, middle, and high channels were investigated with the built in average detector.

The measurement bandwidths and transducers used for the radiated emissions (Spurious) tests were:

<b>FREQUENCY RANGE</b>	<b>EFFECTIVE MEASUREMENT BANDWIDTH</b>	<b>TRANSDUCER</b>
9 kHz to 150 kHz	200 Hz	Active Loop Antenna
150 kHz to 30 MHz	9 kHz	Active Loop Antenna
30 MHz to 1 GHz	120 kHz	CombiLog Antenna
1 GHz to 1.08 GHz	1 MHz	CombiLog Antenna

The Semi-Anechoic test site of Compatible Electronics, Inc, Lab P, was used for radiated emission testing. This test site is set up according to ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Final data was collected in the worst case (highest emission) configuration of the EUT (Y Axis – Channel 98.1MHz). At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gun sight method was used when measuring with the horn antenna in order to ensure accurate results. The loop antenna was also rotated in the horizontal and vertical axis in order to ensure accurate results.

### 7.1.3 Radiated Emissions (Spurious and Harmonics) Test (Continued)

The emissions from the EUT were investigated with the EUT oriented in each of three axes, X, Y and while operated on each of three channels, 88.1MHz, 98.1MHz and 107.9MHz. The EUT was receiving a 0 dB encoded file from the audio source. This file represents maximum audio input level. The EUT was tested at a 3-meter test distance to obtain the final test data. The worst case scanned and presented was channel 107.9MHz. The final qualification data sheets are located in Appendix E.

#### **Test Results:**

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, sections 15.205, 15.209, and 15.239.

### 7.1.4 Peak radiated EMI

The EUT was tested at a 3-meter test distance to obtain the final test data. The EUT was maximized for position, testing in X, and Y axis to determine worst case. The EUT was receiving a 0 dB encoded file from the audio source. This file represents maximum audio input level. The resolution bandwidth was 100 KHz and video bandwidth 300 KHz. The final qualification data sheets are located in Appendix E. This data also shows compliance at the band edges.

#### **Test Results:**

The EUT complies with Part 15, Subpart C, section 15.239.

## 7.2 Bandwidth of the Fundamental

The -20 dB bandwidth was checked using the EMI Receiver to see that it was wholly within the 200 kHz band centered on the operating frequency. The RBW was set to 10 kHz and the VBW was set to 30 kHz, but no less than 3kHz RBW and 10kHz VBW. The low, middle, and high channels were investigated. Plots of the -20 dB bandwidth are located in Appendix E.

### Test Results:

The EUT complies with the requirements of CFR Title 47, Part 15, Subpart C, section 15.239 (a) for the -20 dB bandwidth of the fundamental. The EUT has a -20 dB bandwidth that is wholly within the 200 kHz band centered on the operating frequency.



**8. CONCLUSIONS**

The TuneBase FM Direct Model: F8Z441 meets all of the specification limits defined in CFR Title 47, Part 15, Subpart B for the digital portion; and the limits defined in Subpart C, sections 15.205, 15.209, and 15.239 for the transmitter portion.





**APPENDIX A**

***LABORATORY RECOGNITIONS***

---

**Brea Division**  
114 Olinda Drive  
Brea, CA 92823  
(714) 579-0500

**Agoura Division**  
2337 Troutdale Drive  
Agoura, CA 91301  
(818) 597-0600

**Silverado Division**  
19121 El Toro Road  
Silverado, CA 92676  
(949) 589-0700

**Lake Forest Division**  
20621 Pascal Way  
Lake Forest, CA 92630  
(949) 587-0400

---

## ***LABORATORY RECOGNITIONS***

### **Compatible Electronics has the following agency accreditations:**

National Voluntary Laboratory Accreditation Program - Lab Code: 200527-0

Voluntary Control Council for Interference - Registration Numbers: R-2848, C-3142, T-1450

Bureau of Standards and Metrology Inspection - Reference Number: SL2-IN-E-1031

Conformity Assessment Body for the EMC Directive Under the US/EU MRA Appointed by NIST

### **Compatible Electronics is recognized or on file with the following agencies:**

Industry Canada  
Site Number: 2154C-1

---

**Brea Division**  
114 Olinda Drive  
Brea, CA 92823  
(714) 579-0500

**Agoura Division**  
2337 Troutdale Drive  
Agoura, CA 91301  
(818) 597-0600

**Silverado Division**  
19121 El Toro Road  
Silverado, CA 92676  
(949) 589-0700

**Lake Forest Division**  
20621 Pascal Way  
Lake Forest, CA 92630  
(949) 587-0400



**APPENDIX B**

***MODIFICATIONS TO THE EUT***

## **MODIFICATIONS TO THE EUT**

The modifications listed below were made to the EUT to pass FCC 15.239 or FCC Class B specifications.

No modifications were made to the EUT.





**APPENDIX C**

***ADDITIONAL MODELS COVERED  
UNDER THIS REPORT***

## **ADDITIONAL MODELS COVERED UNDER THIS REPORT**

USED FOR THE PRIMARY TEST

TuneBase FM Direct  
Model: F8Z441  
S/N: None

Additional Model Numbers:

NO ADDITIONAL MODELS



**APPENDIX D**

***DIAGRAMS, CHARTS, AND PHOTOS***



**FIGURE 1: PLOT MAP AND LAYOUT OF RADIATED TEST SITE**

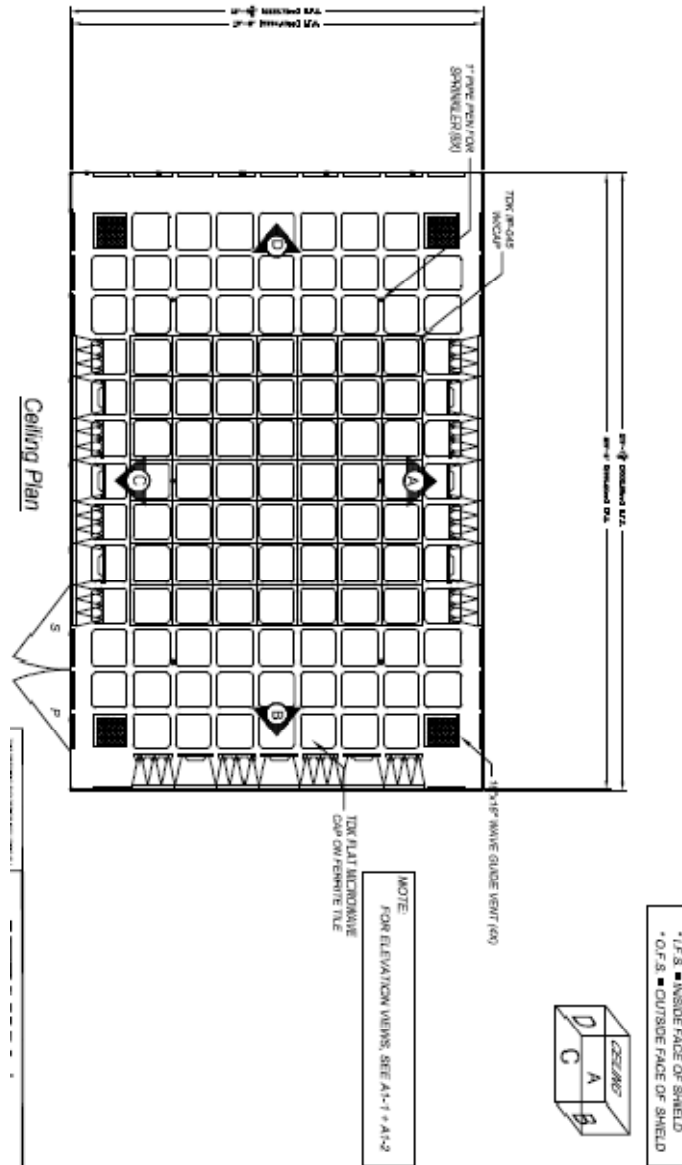


Figure 1ITDK FAC-3 test chamber

**COM-POWER AC-220****COMBYLOG ANTENNA**

S/N: 001

CALIBRATION DATE: 9/3/08

<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>	<b>FREQUENCY (MHz)</b>	<b>FACTOR (dB)</b>
20.0	22.1	300.0	14.9
25.0	21.1	400.0	16.5
30.0	20.6	500.0	18.5
40.0	19.8	700.0	21.1
50.0	19.0	900.0	23.2
60.0	13.8	1000.0	24.6
70.0	9.6	1100.0	24.8
80.0	8.7	1300.0	24.9
100.0	11.6	1500.0	27.2
150.0	9.4	1700.0	27.2
200.0	10.8	2000.0	29.0
250.0	14.9	2100.0	29.0

**COM-POWER AL-130****LOOP ANTENNA**

S/N: 17085

CALIBRATION DATE: 8/1/08

<b>FREQUENCY (MHz)</b>	<b>MAGNETIC (dB/m)</b>	<b>ELECTRIC (dB/m)</b>	<b>FREQUENCY (MHz)</b>	<b>MAGNETIC (dB/m)</b>	<b>ELECTRIC (dB/m)</b>
0.009	-43	8.5	0.8	-41.53	9.97
0.01	-41.93	9.57	0.9	-41.46	10.04
0.02	-41.29	10.21	1	-41.29	10.21
0.03	-40.73	10.77	2	-40.97	10.53
0.04	-41.03	10.47	3	-41.1	10.4
0.05	-42.37	9.13	4	-41.36	10.14
0.06	-41.6	9.9	5	-40.93	10.57
0.07	-41.96	9.54	6	-40.67	10.83
0.08	-42.1	9.4	7	-41.07	10.43
0.09	-41.83	9.67	8	-40.9	10.6
0.1	-41.83	9.67	9	-40.1	11.4
0.2	-44.46	7.04	10	-41.16	10.34
0.3	-41.73	9.77	15	-47.97	3.53
0.4	-41.8	9.7	20	-40.77	10.73
0.5	-41.8	9.7	25	-44.37	7.13
0.6	-41.33	10.17	30	-43.1	8.4
0.7	-41.36	10.14			



**BACK VIEW (Y Axis)**

BELKIN INTERNATIONAL, INC.  
TUNEBASE FM DIRECT  
MODEL: F8Z441  
FCC SUBPART B AND C – RADIATED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



**FRONT VIEW (Y-Axis)**

BELKIN INTERNATIONAL, INC.  
TUNEBASE FM DIRECT  
MODEL: F8Z441  
FCC SUBPART B AND C – RADIATED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



**APPENDIX E**

***DATA SHEETS***



***RADIATED EMISSIONS***

SPURIOUS AND HARMONICS

***DATA SHEETS***



***TRANSMITTING***



Title: FCC 15.239

File: Radiated Pre-scan 30-1000Mhz 107.set

Operator: Josh Hansen

EUT Type: TuneBase FM Direct (F8Z441)

EUT Condition: Song played: Linkin Park "Don't Stay" 0dB encode

Comments: Y Axis, Charge USB terminated

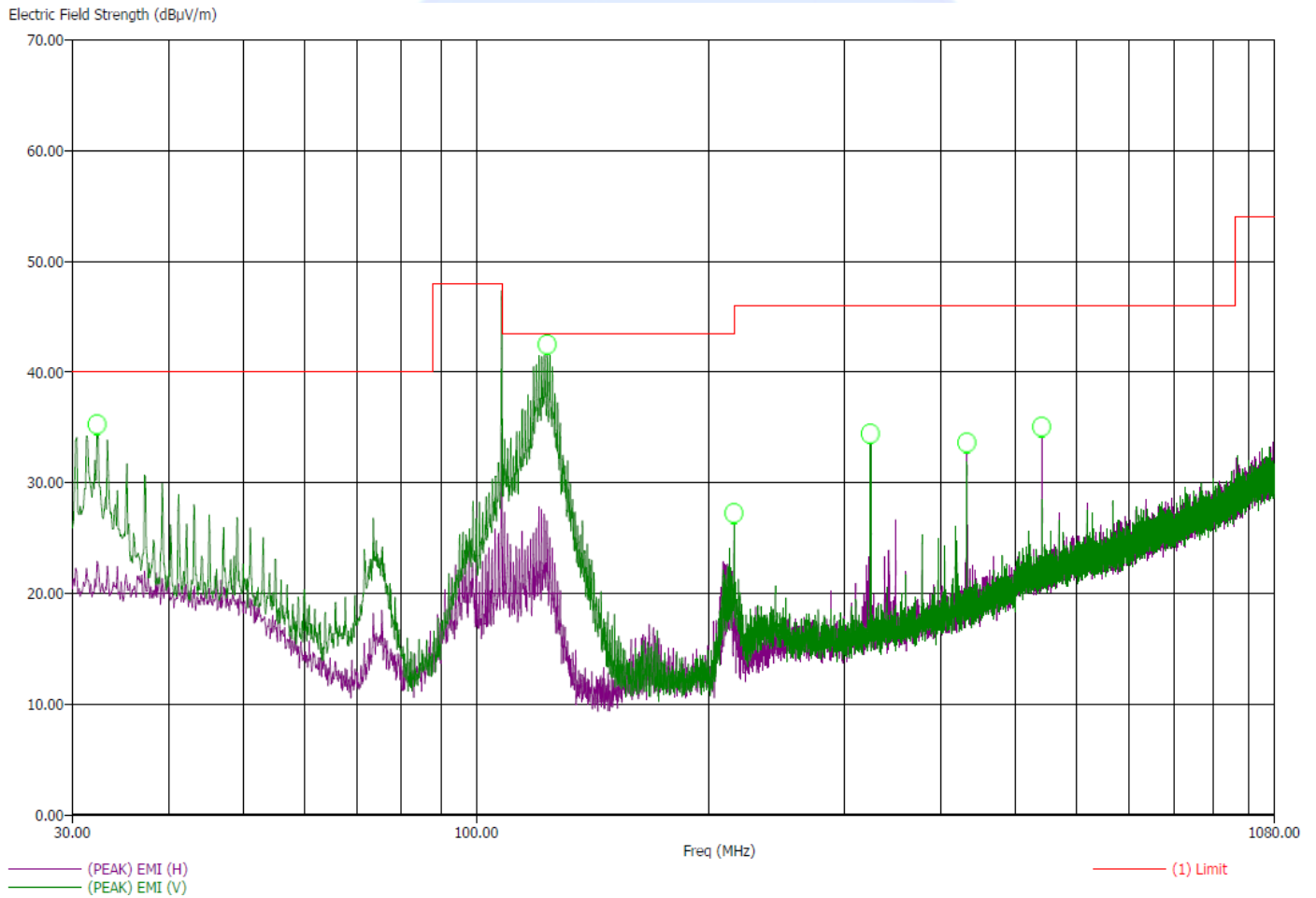
Temp: 68F

Hum: 56%

5/4/2009 10:46:13 AM

Sequence: Preliminary Scan

Compatible Electronics, Inc. FAC-3



**Brea Division**  
 114 Olinda Drive  
 Brea, CA 92823  
 (714) 579-0500

**Agoura Division**  
 2337 Troutdale Drive  
 Agoura, CA 91301  
 (818) 597-0600

**Silverado Division**  
 19121 El Toro Road  
 Silverado, CA 92676  
 (949) 589-0700

**Lake Forest Division**  
 20621 Pascal Way  
 Lake Forest, CA 92630  
 (949) 587-0400

Title: FCC 15.239

5/4/2009 10:46:13 AM

File: Radiated Pre-scan 30-1000Mhz 107.set

Sequence: Preliminary Scan

Operator: Josh Hansen

EUT Type: TuneBase FM Direct (F8Z441)

EUT Condition: Song played: Linkin Park "Don't Stay" 0dB encode

Comments: Y Axis, Charge USB terminated

Temp: 68F

Hum: 56%

## Compatible Electronics, Inc. FAC-3

Freq (MHz)	(QP) Margin (dB)	(QP) EMI (dB $\mu$ V/m)	(PEAK) EMI (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Pol	Ttbl Agl (deg)	Twr Ht (cm)
32.30	-6.04	33.96	35.51	40.00	V	146.50	159.23
123.60	-2.84	40.66	44.40	43.50	V	160.50	156.23
215.80	-19.99	23.51	26.48	43.50	V	0.25	151.76
324.00	-11.66	34.34	35.26	46.00	V	165.00	164.88
432.10	-18.19	27.81	32.51	46.00	H	0.00	245.94
540.10	-17.24	28.76	33.34	46.00	H	107.75	271.41

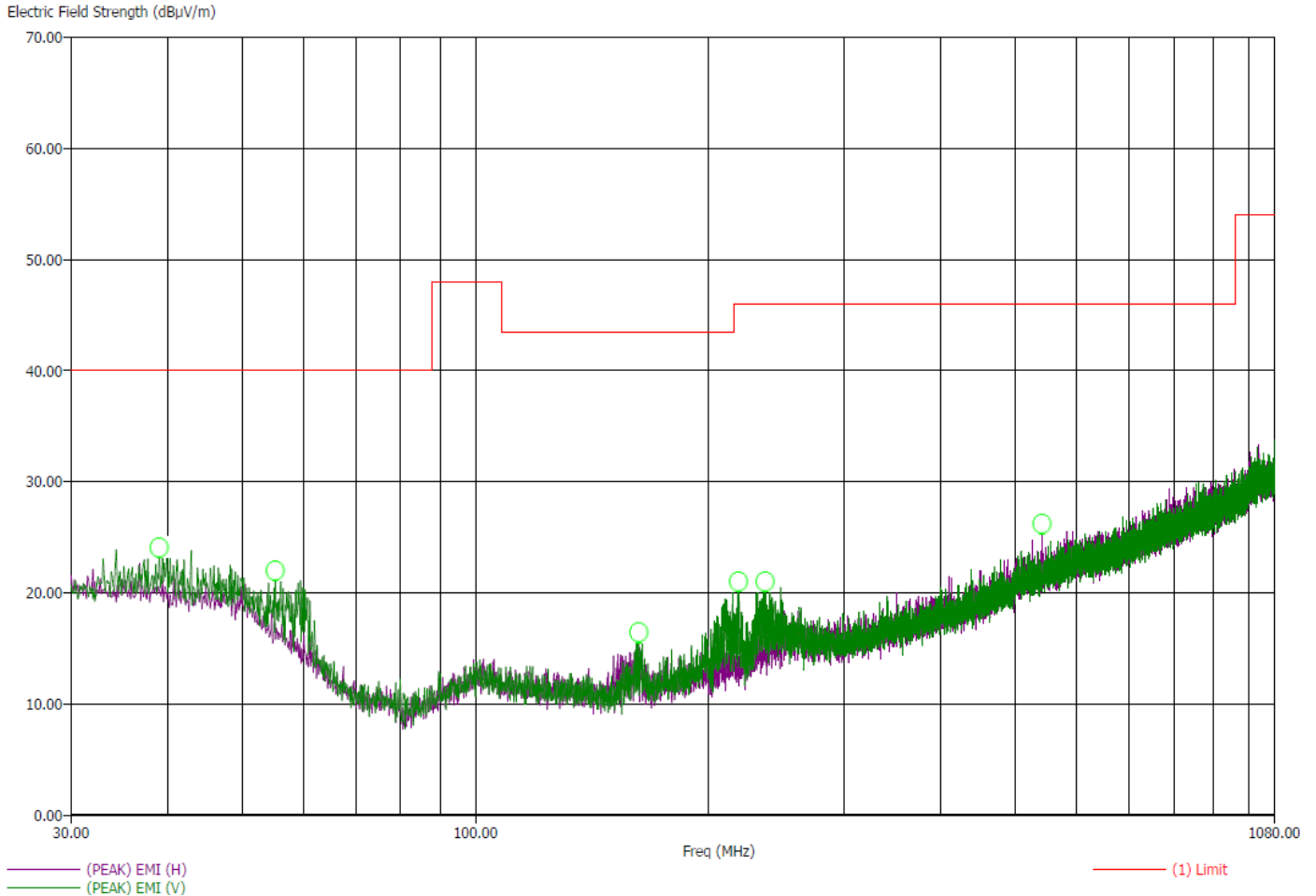


***DIRECT CONNECTION***

Title: FCC 15.239  
 File: Radiated Pre-scan 30-1000Mhz 107 2.set  
 Operator: Josh Hansen  
 EUT Type: TuneBase FM Direct (F8Z441)  
 EUT Condition: Song played: Linkin Park "Don't Stay" 0dB encode  
 Comments: Y Axis, Charge USB terminated, 3.5mm Phone jack terminated to speakers (TX off)  
 Temp: 68F  
 Hum: 56%

5/4/2009 11:32:30 AM  
 Sequence: Preliminary Scan

Compatible Electronics, Inc. FAC-3



Title: FCC 15.239  
File: Radiated Final 107 30-1000Mhz 2.set  
Operator: Josh Hansen  
EUT Type: TuneBase FM Direct (F8Z441)  
EUT Condition: Song played: Linkin Park "Don't Stay" 0dB encode  
Comments: Y Axis, Charge USB terminated, 3.5mm Phone jack terminated to speakers (TX off)  
Temp: 68F  
Hum: 56%

5/4/2009 11:51:05 AM  
Sequence: Final Measurements

## Compatible Electronics, Inc. FAC-3

Freq (MHz)	(QP) Margin (dB)	(QP) EMI (dB $\mu$ V/m)	(PEAK) EMI (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Pol	Ttbl Agl (deg)	Twr Ht (cm)
39.00	-18.55	21.45	25.24	40.00	V	125.75	200.23
55.10	-24.49	15.51	21.85	40.00	V	0.00	175.47
162.70	-28.76	14.74	18.19	43.50	V	93.00	156.23
219.00	-29.88	16.12	20.05	46.00	V	175.75	205.41
237.00	-25.89	20.11	23.05	46.00	V	195.00	210.17
540.60	-27.23	18.77	24.11	46.00	H	360.00	328.64

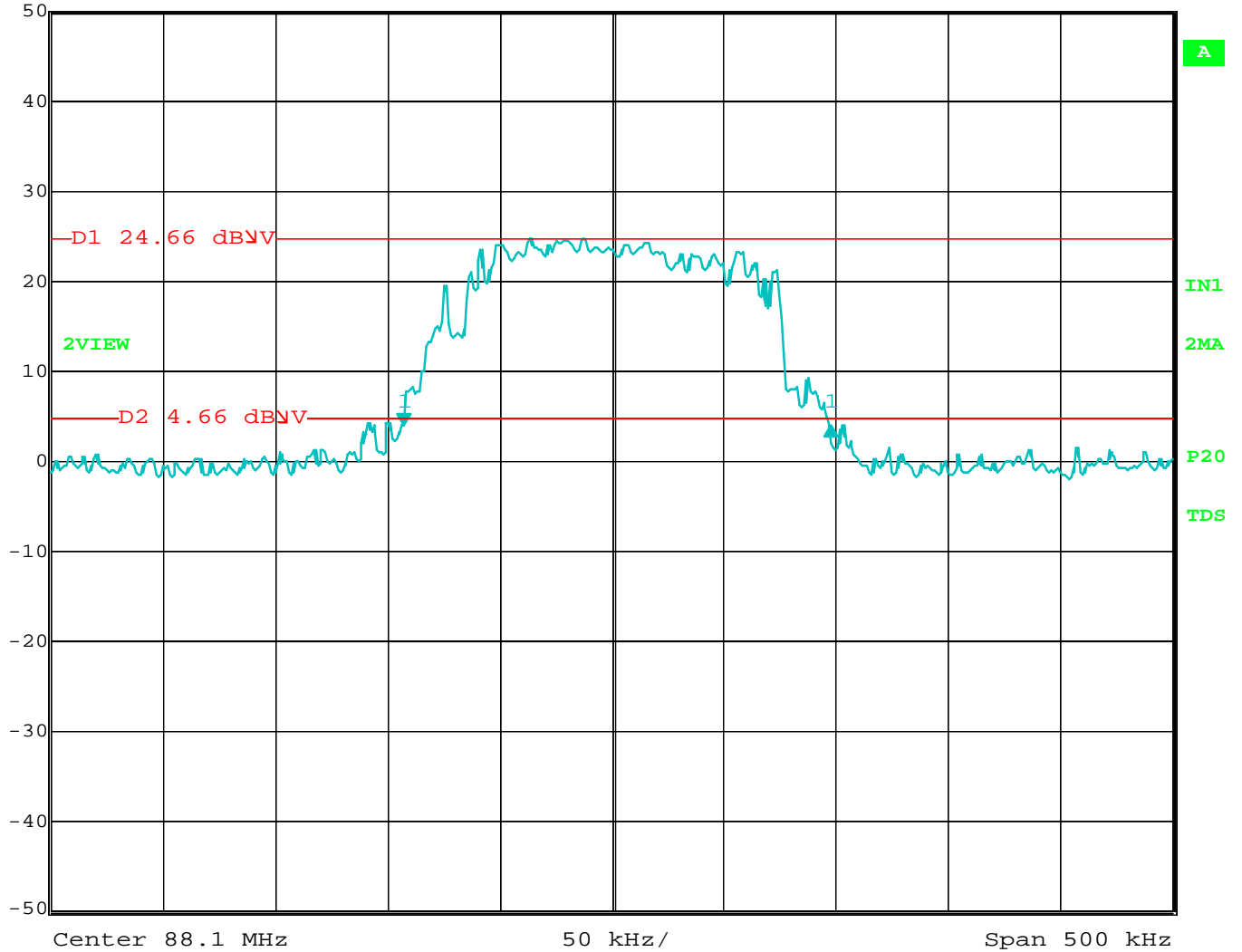


***-20 dB BANDWIDTH***

***DATA SHEETS***



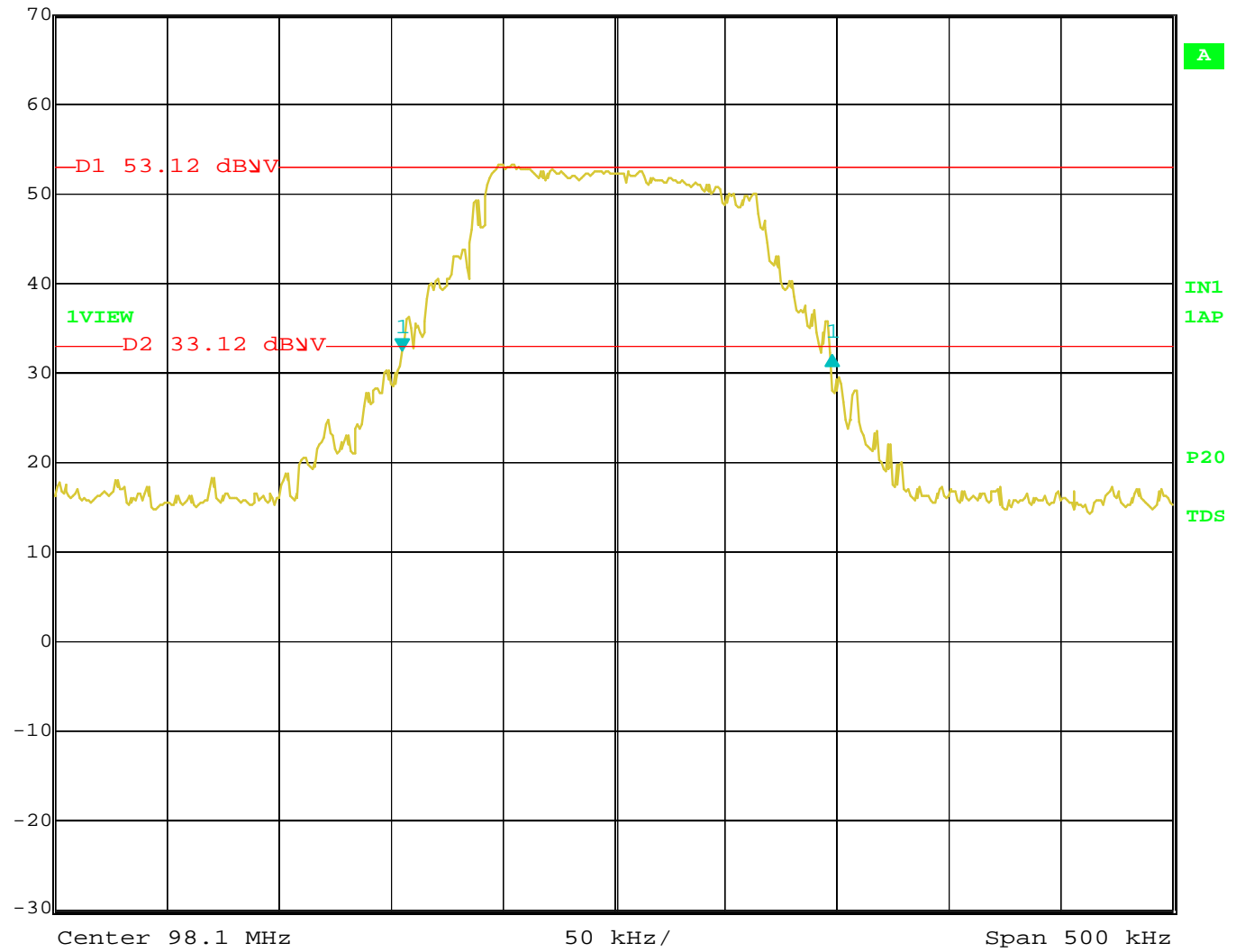
Delta 1 [T2] RBW 10 kHz RF Att 0 dB  
 Ref Lvl 0.04 dB VBW 30 kHz  
 50 dBV 190.38076152 kHz SWT 15 ms Unit dBV



Date: 4.MAY.2009 11:30:58



Delta 1 [T1]      RBW    10 kHz    RF Att    0 dB  
 Ref Lvl                      -0.68 dB    VBW    30 kHz  
 70 dBμV                      192.38476954 kHz    SWT    15 ms    Unit    dBμV

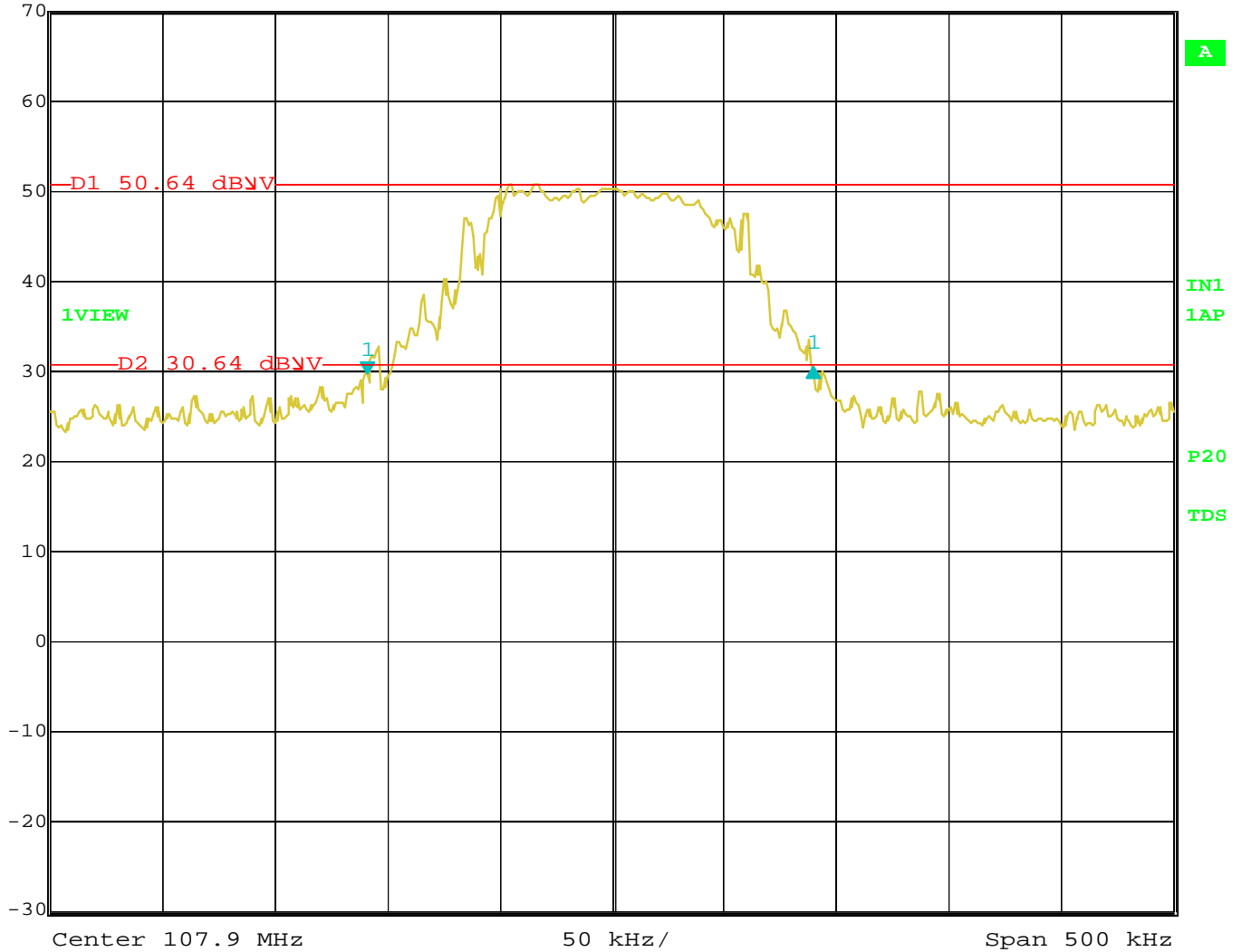


Date:      7.MAY.2009    16:08:09





Ref Lvl	Delta 1 [T1]	RBW	10 kHz	RF Att	0 dB
70 dBV	0.68 dB	VBW	30 kHz	Unit	dBV
	198.39679359 kHz	SWT	15 ms		



Date: 7.MAY.2009 16:16:57

---

***PEAK TRANSMIT EMI and BAND EDGE***



***DATA SHEETS***

---

**Y-AXIS**

Title: FCC 15.239  
File: Final ETSI 15.239.set  
Operator: Josh Hansen  
EUT Type: TuneBase FM Hands Free (F8Z441)  
EUT Condition: Song played: Linkin Park "Don't Stay" 0dB encode  
Comments: Y Axis  
Temp: 68F  
Hum: 56%

5/4/2009 9:20:39 AM  
Sequence: Final Measurements

Compatible Electronics, Inc. FAC-3

Freq (MHz)	(AVG) Margin (dB)	(AVG) EMI (dB $\mu$ V/m)	(PEAK) EMI (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Pol	Ttbl Agl (deg)	Twr Ht (cm)
88.10	-22.87	25.08	33.06	47.95	H	273.00	364.88
88.10	-21.84	26.11	36.23	47.95	V	256.00	151.35
98.10	-32.73	15.22	22.40	47.95	H	360.00	185.82
98.10	-4.16	43.79	47.80	47.95	V	260.50	159.52
107.90	-16.24	31.71	34.68	47.95	H	101.50	349.88
107.90	-10.48	37.47	45.81	47.95	V	291.00	151.52

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**X-AXIS**

Title: FCC 15.239  
File: Final ETSI 15.239 X.set  
Operator: Josh Hansen  
EUT Type: TuneBase FM Hands Free (F8Z441)  
EUT Condition: Song played: Linkin Park "Don't Stay" 0dB encode  
Comments: X Axis  
Temp: 68F  
Hum: 56%

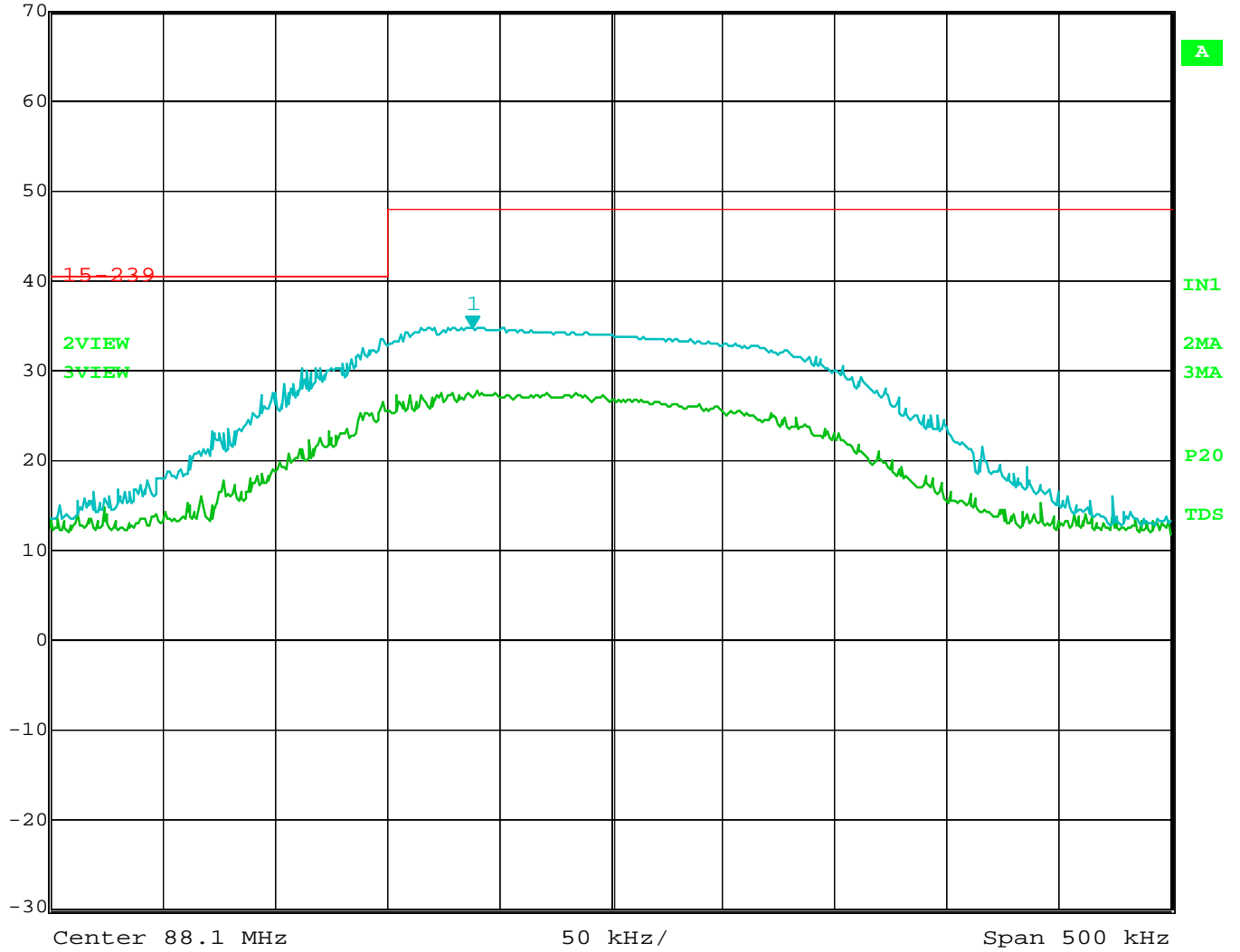
5/4/2009 9:43:54 AM  
Sequence: Final Measurements

Compatible Electronics, Inc. FAC-3

Freq (MHz)	(AVG) Margin (dB)	(AVG) EMI (dB $\mu$ V/m)	(PEAK) EMI (dB $\mu$ V/m)	Limit (dB $\mu$ V/m)	Pol	Ttbl Agl (deg)	Twr Ht (cm)
88.10	-18.36	29.59	34.63	47.95	H	206.75	328.23
88.10	-21.60	26.35	30.26	47.95	V	246.25	315.05
98.10	-11.95	36.00	45.45	47.95	H	190.50	344.94
98.10	-14.09	33.86	40.21	47.95	V	290.50	151.52
107.90	-9.63	38.32	43.61	47.95	H	193.50	379.94
107.90	-14.45	33.50	36.31	47.95	V	289.50	151.35



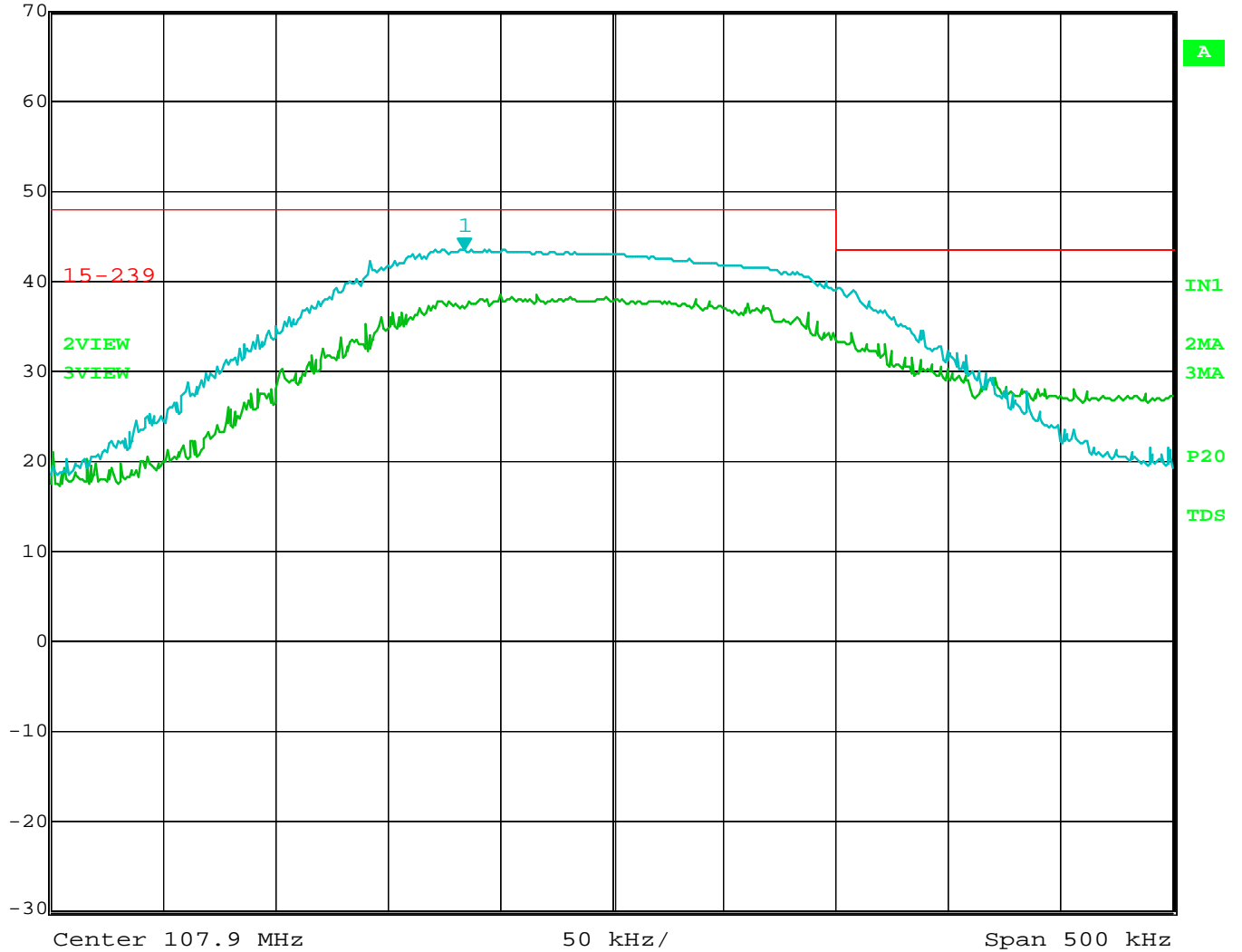
Marker 1 [T2]      RBW 120 kHz      RF Att 0 dB  
 Ref Lvl 34.71 dBµV      VBW 500 kHz  
 70 dBµV      88.03837675 MHz      SWT 5.5 ms      Unit dBµV



Date: 4.MAY.2009 11:37:42



Marker 1 [T2] RBW 120 kHz RF Att 0 dB  
 Ref Lvl 43.48 dBV VBW 500 kHz  
 70 dBV 107.83436874 MHz SWT 5.5 ms Unit dBV



Date: 4.MAY.2009 11:42:07