



Test Report

FCC Part 15.407

Industry Canada RSS210

Model #: MX9, FC300

**125 Technology Parkway
Norcross, GA 30092
U.S.A**

**FCC ID: KDZLXE4831P
IC ID: 1995B-4831**

**TEST REPORT #: EMC_LXEIN_007_09001_15_407_MX9_LXE4831_Rev2
DATE: 2009-8-20**



**FCC listed:
A2LA
accredited**

**IC recognized #
3462B**

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TABLE OF CONTENTS

1	Assessment	4
2	Administrative Data	5
2.1	Identification of the Testing Laboratory Issuing the EMC Test Report	5
2.2	Identification of the Client	5
2.3	Identification of the Manufacturer	5
3	Equipment under Test (EUT)	6
3.1	Specification of the Equipment under Test	6
3.2	Identification of the Equipment under Test (EUT)	6
3.3	Identification of Accessory equipment	6
4	Subject Of Investigation	7
5	Radiated Measurements	8
5.1	Maximum Peak Output Power § 15.407 (Radiated)	8
5.1.1	FCC Limits:	8
5.1.2	Measurement Plots	9
5.2	Restricted Band Edge Compliance §15.407(b)/15.205	12
5.2.1	Limits	12
5.2.2	Results Sub-band 1, 802.11a MODE	13
5.3	Transmitter Spurious Emission § 15.407(b)/15.205/15.209	17
5.3.1	Limits	17
5.3.2	Sub-band 1 802.11a MODE	18
5.4	Receiver Spurious Emission § 15.209/RSS210	26
5.4.1	Limits	26
6	Conducted Measurements	29
6.1	26dB bandwidth and 99% bandwidth.	29
6.1.1	Limit	29
6.1.2	Test Results	29
6.2	Conducted Power Measurement	29
6.2.1	FCC Limits:	29
6.2.2	IC Limits	29
6.2.3	Measurement Results	29
6.3	Power Spectral Density	30
6.3.1	FCC Limit	30
6.3.2	IC Limit	30
6.3.3	Results	30
6.4	Peak Excursion	30
6.4.1	Limit	30
6.4.2	Results	30
6.5	Conducted Spurious Emission	30

Test Report #: EMC_LXEIN_007_09001_15_407_MX9_LXE4831_Rev2

Date of Report: 2009-8-20

Page 3 of 39



6.5.1	Limit	30
6.5.2	Results:	30
6.6	AC Power Line Conducted Emissions § 15.107/207	31
6.6.1	LIMITS	31
6.6.2	RESULTS TX mode Neutral:	32
6.6.3	RESULTS Receiver mode Neutral:	34
6.6.4	RESULTS Receiver mode Line:	35
7	TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS	36
8	BLOCK DIAGRAMS	37
9	Revision History	39



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 #
LXE, Inc.	MX9 Handheld Computer FC300 Handheld Computer	MX9, FC300

This report is reviewed by:

Marc Douat

2009-8-20 EMC & Radio (EMC Lab Manager)

Date	Section	Name	Signature
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This report is prepared by:

Peter Mu

2009-8-20 EMC & Radio (Project Manager)

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 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:	Marc Douat
Responsible Project Leader:	Ahmad Safdari
Date of test:	2009-07-08 to 2009-7-14

2.2 Identification of the Client

APPLICANT	
Applicant (Company Name)	LXE, Inc.
Street Address	125 Technology Parkway
City/Zip Code	Norcross, Georgia, US 30092
Country	USA
Contact Person	Brett Davis
Telephone	(770) 447-4224 x6456
Fax	(770) 447-6928
e-mail	davis.b@lxe.com

2.3 Identification of the Manufacturer

MANUFACTURER (If different from Applicant)	
Applicant (Firm Name):	LXE, Inc.
Contact Person:	Brett Davis
Telephone:	(770) 447-4224 x6456
Fax:	(770) 447-6928
Address Line 1:	125 Technology Parkway
City:	Norcross, Georgia
Postal Code/ Country:	US 30092
e-mail:	davis.b@lxe.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.):	N/A
Description:	MX9 Handheld Computer FC300 Handheld Computer
Model No:	MX9, FC300
FCC ID:	KDZLXE4831P
IC ID:	1995B-4831

Frequency Range:	5180-5250MHz
Type(s) of Modulation:	OFDM
Antenna Type:	Dipole 2dBi.
Max Output Power:	Sub-band 1: 5150-5250MHz 802.11a mode: EIRP: 20.67dBm, (116.6mW)

3.2 Identification of the Equipment under Test (EUT)

EUT #	TYPE	MANF.	MODEL	SERIAL #
1	EUT	LXE, Inc.	MX9	N/A

3.3 Identification of Accessory equipment

AE #	TYPE	MANF.	MODEL	SERIAL #
1	AC/DC ADAPTER	GlobalTek Inc.	GT-81081-6015-T3	N/A



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. The test results of this test report relate exclusively to radiated measurement only. Radio module used in this product has been previously certified under its own FCC and IC ID. Refer to FCC ID: **KDZLXE4831P** IC ID # **1995B-4831**.

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),

B is the 26-dB emission bandwidth in MHz.

Directional gain is 2dBi < 6dBi so EIRP limit = Conducted Limit + 6dBm.

EIRP 802.11a MODE:

TEST CONDITIONS $T_{nom}(23)^{\circ}C$, $V_{nom}VDC$	Channel Frequency	EIRP (dBm)	EIRP (mW)	EIRP Limit (dBm)
Sub-band 1: 5150-5250MHz	5180	20.32	107.65	23.0
	5220	19.5	89.13	23.0
	5240	20.67	116.68	23.0

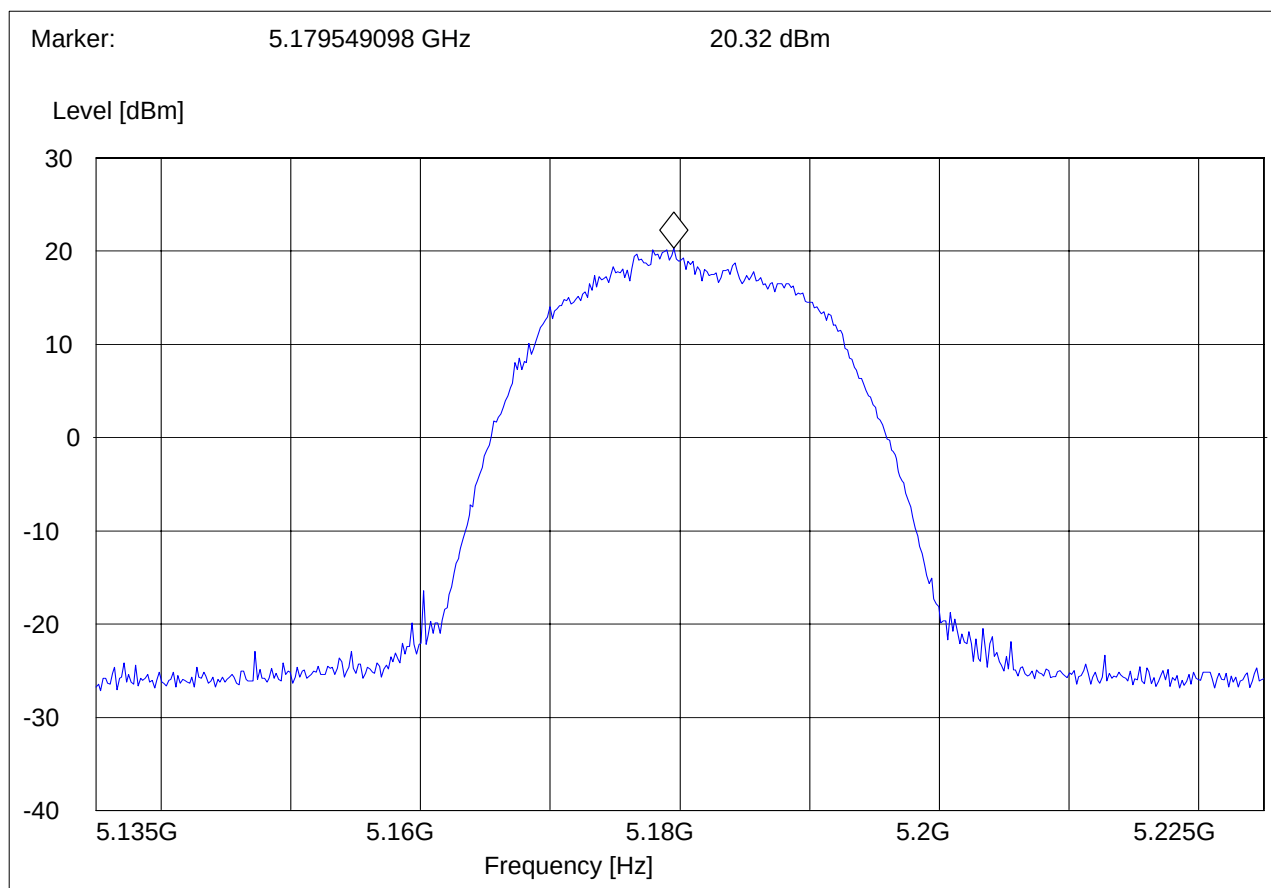
5.1.2 Measurement Plots

EIRP 5180 MHz

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a CH 36
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

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			

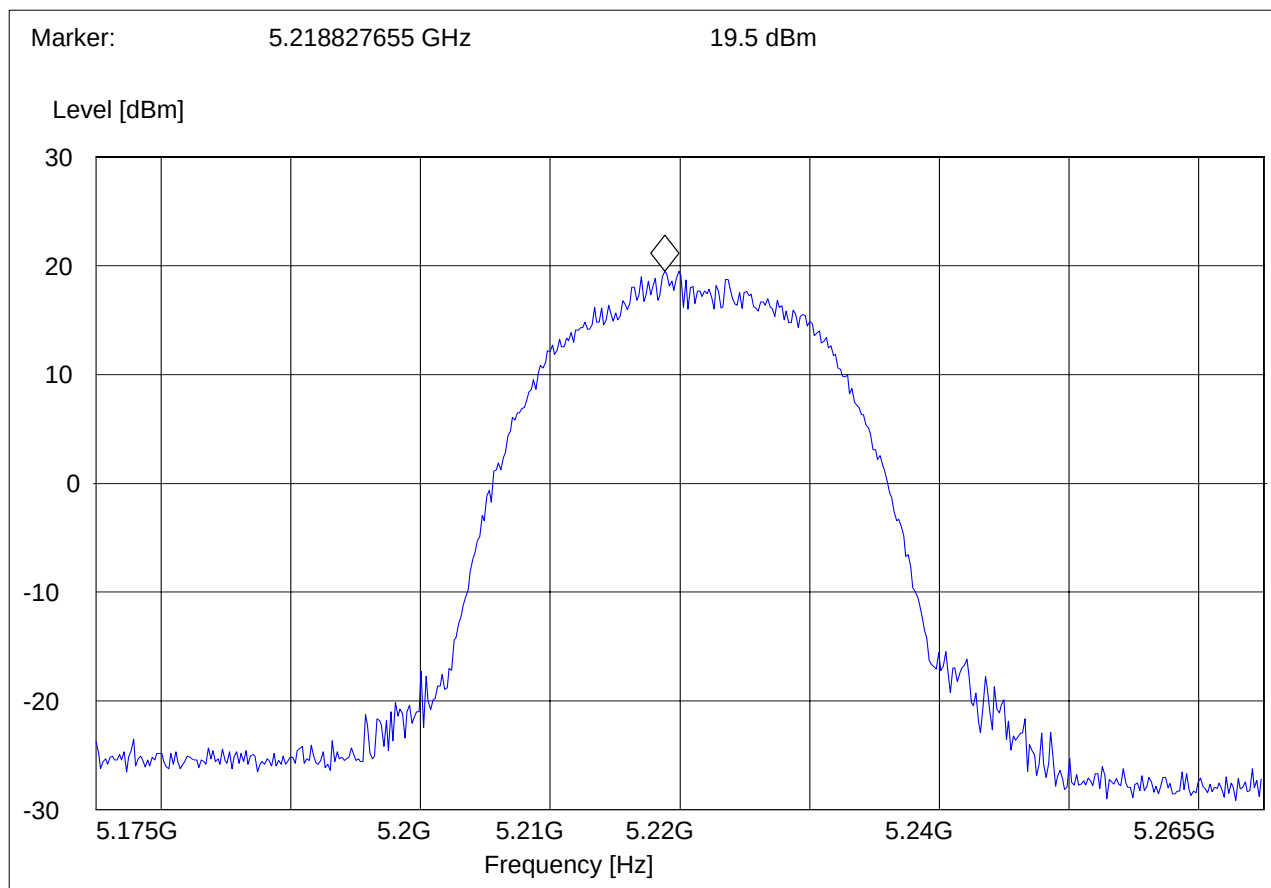


EIRP 5220 MHz

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a CH 44
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

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			

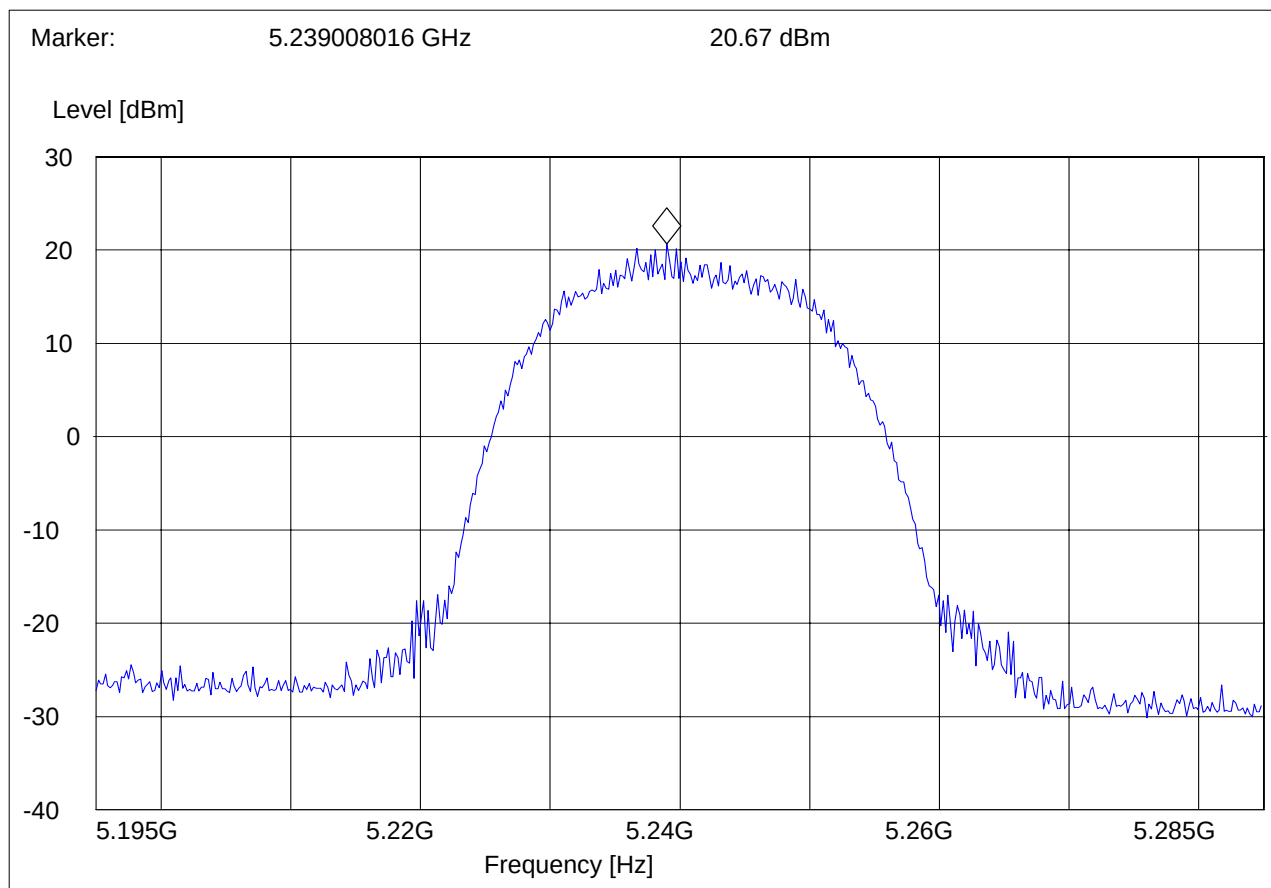


EIRP 5240 MHz

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a CH 48
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

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			



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

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
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

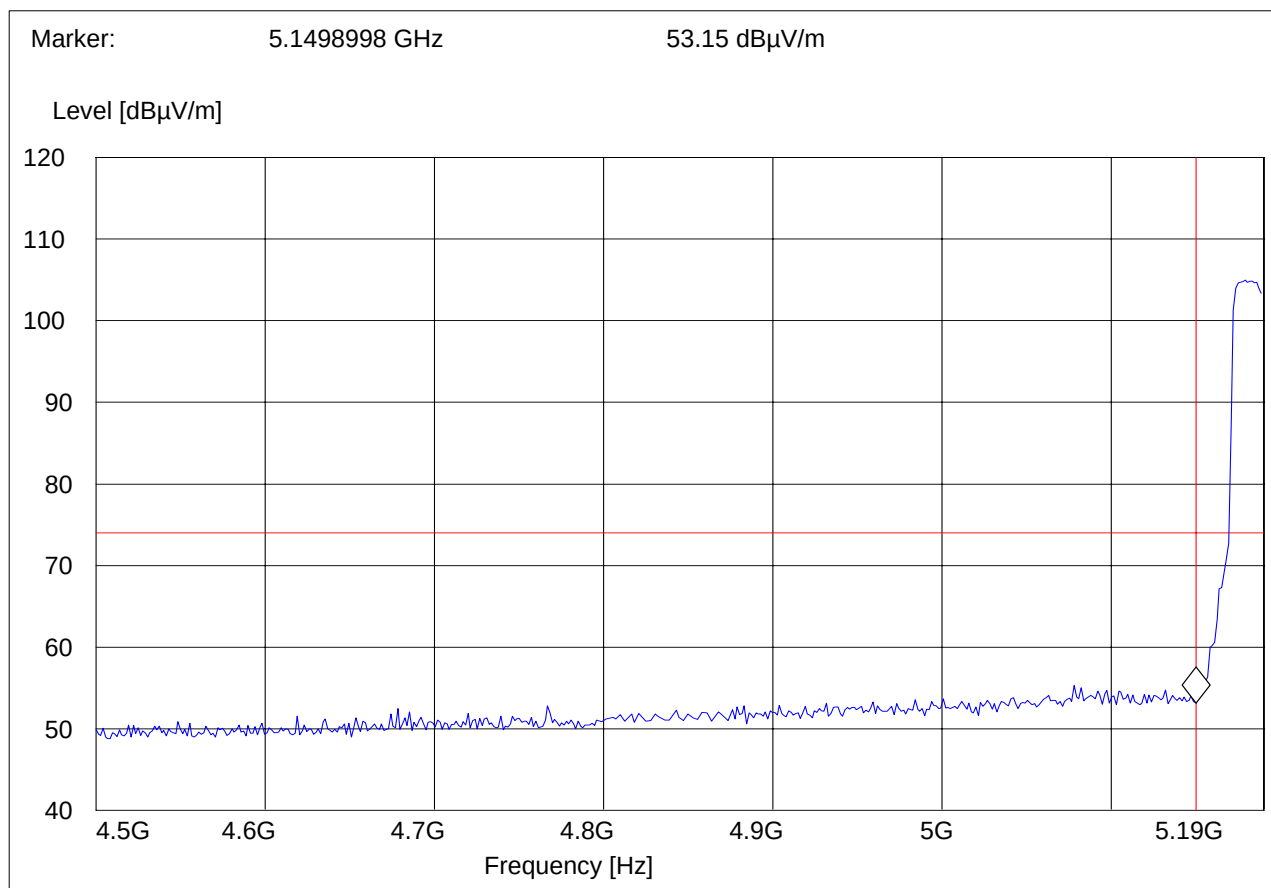
5.2.2 Results Sub-band 1, 802.11a MODE

Lower band edge PEAK

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5180MHz
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

SWEEP TABLE: "FCC15.407 A_LBE_PK"

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

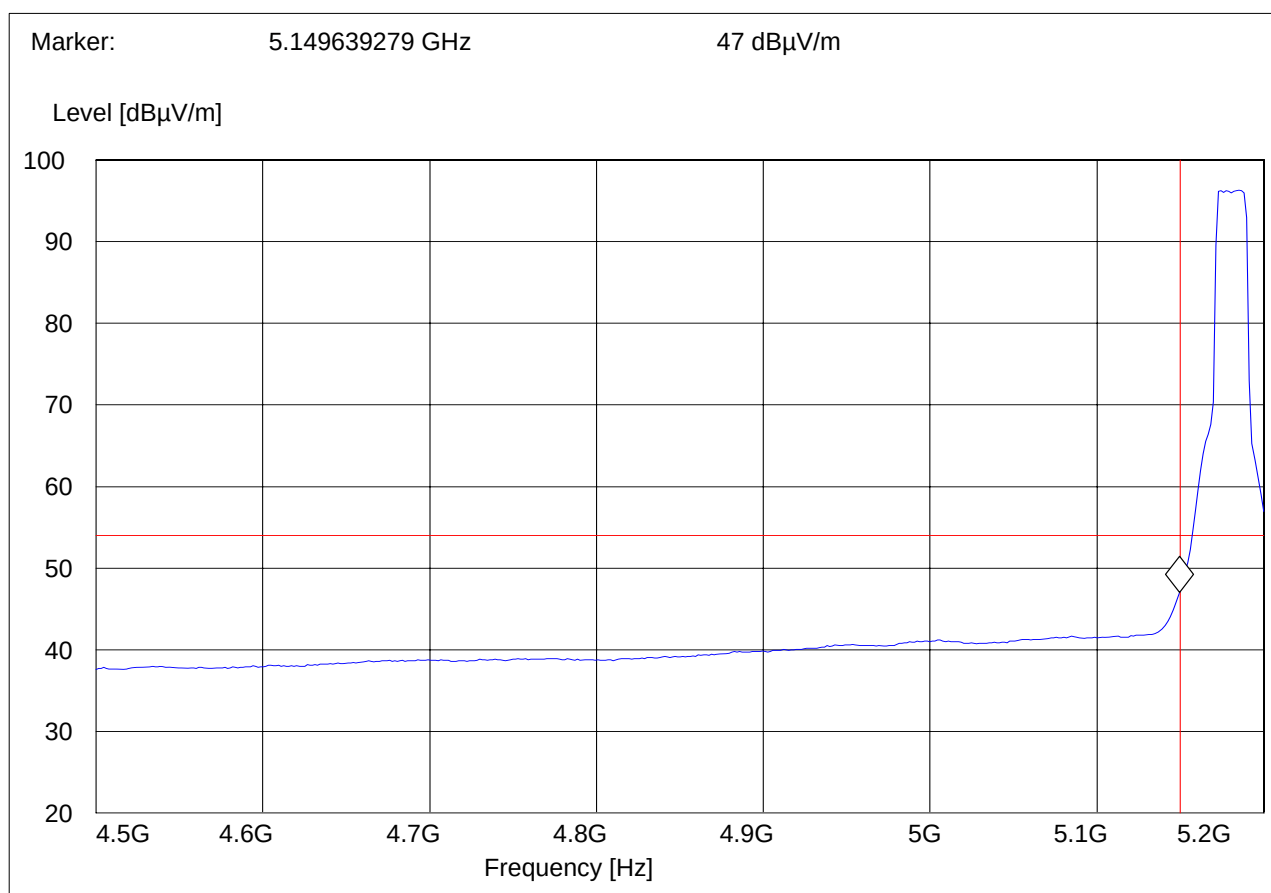


Lower band edge AVERAGE

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5180MHz
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

SWEEP TABLE: "FCC15.407 A_LBE_AVG"

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

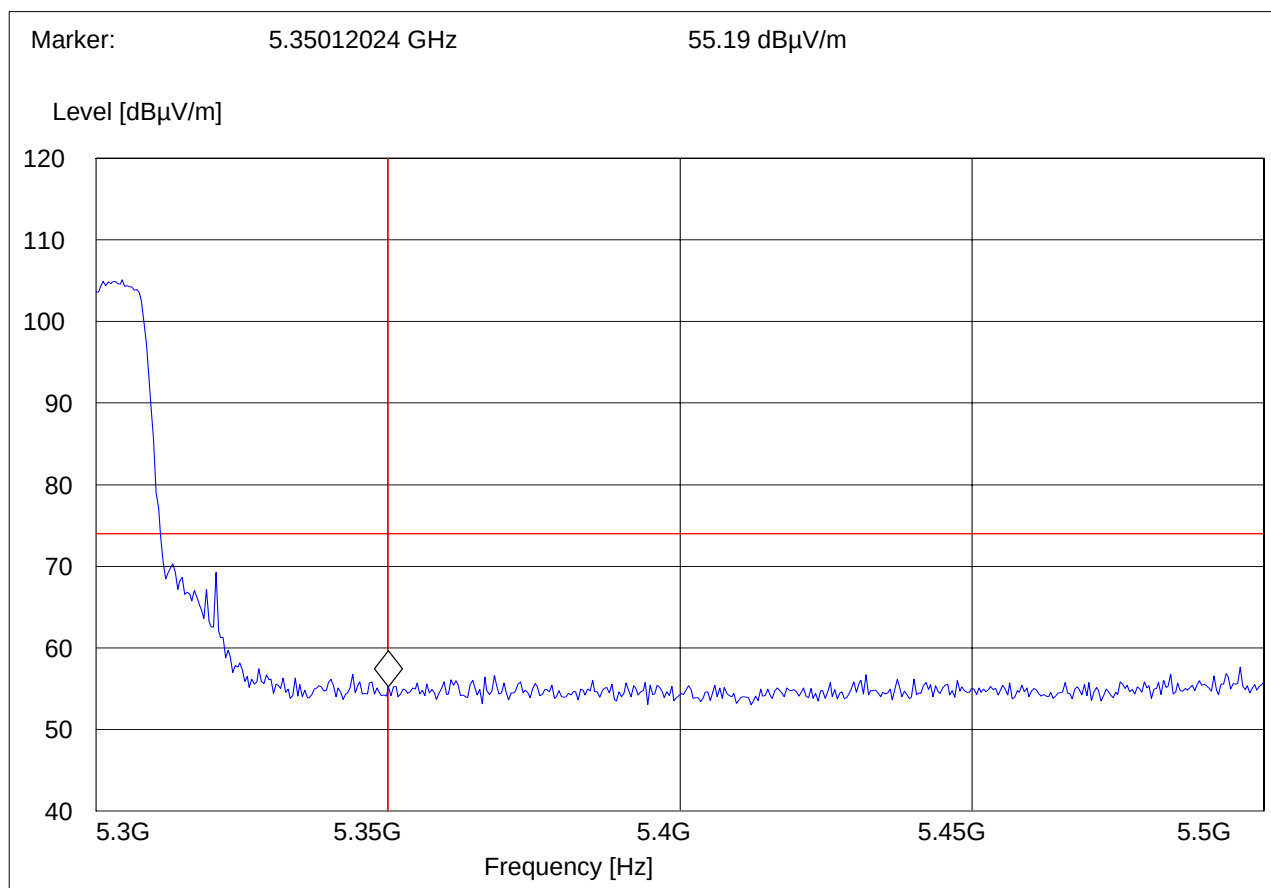


Higher band edge PEAK

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5320MHz
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

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

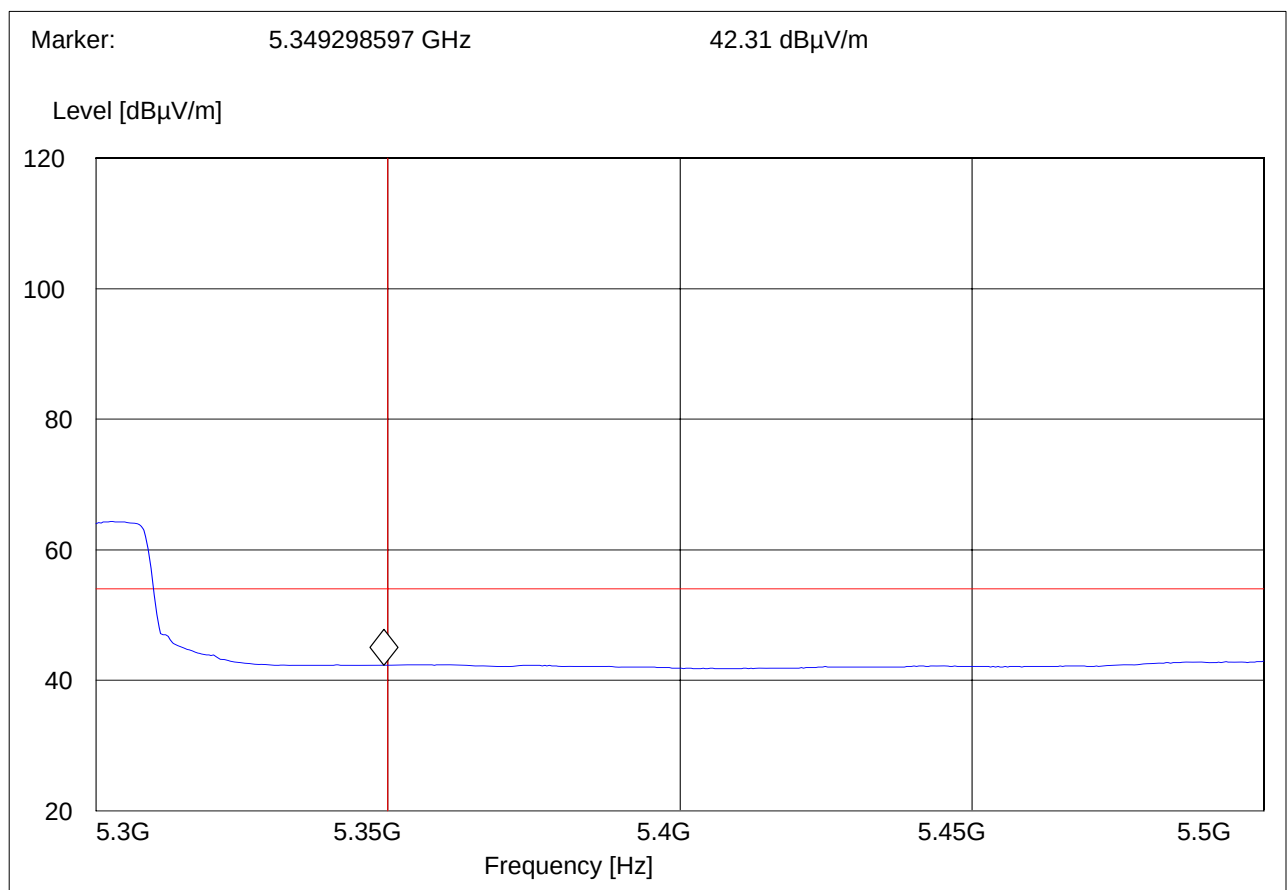


**Higher band edge Average**

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5320MHz
ANT Orientation: H
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

SWEEP TABLE: "FCC15.407 B_HBE_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 Transmitter Spurious Emission § 15.407(b)/15.205/15.209

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 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

5.3.2 Sub-band 1 802.11a MODE

30MHz – 1GHz, Antenna: Vertical/Horizontal

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

EUT Information

Description:

EUT Name: MX9
 Manufacturer: LXE
 Operating Mode: 802.11a 5180MHz
 Comment: FCC Unit

Test

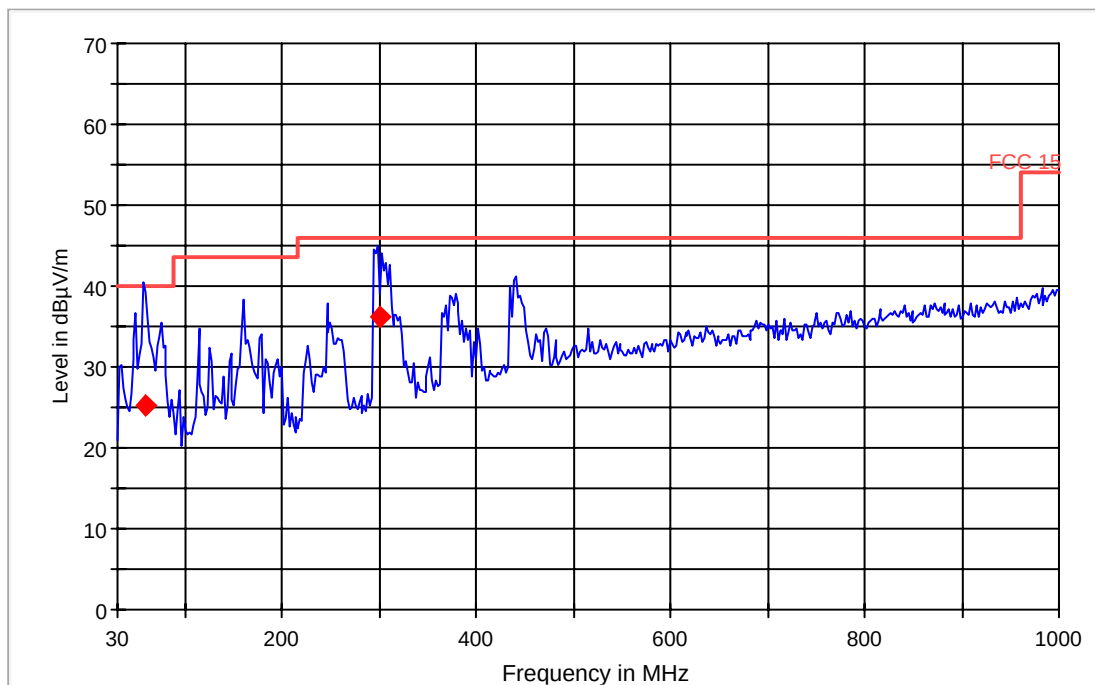
Final Result 1

Frequency (MHz)	QuasiPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
58.426854	25.2	20.000	120.000	119.8	V	112.0	7.7	14.8	40.0
300.270541	36.2	20.000	120.000	120.2	V	292.0	15.6	9.8	46.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
58.426854	
300.270541	

FCC 15 30-1000MHz



FCC 15.LimitLine

Preview Result 1



Final Result 1

1-18GHz (5180MHz) Antenna: Horizontal/ Vertical

Note: The peak above the limit line is the carrier freq.

EUT Information

Description:

EUT Name: MX9
Manufacturer: LXE
Operating Mode: 802.11a 5180MHz
Comment: FCC Unit

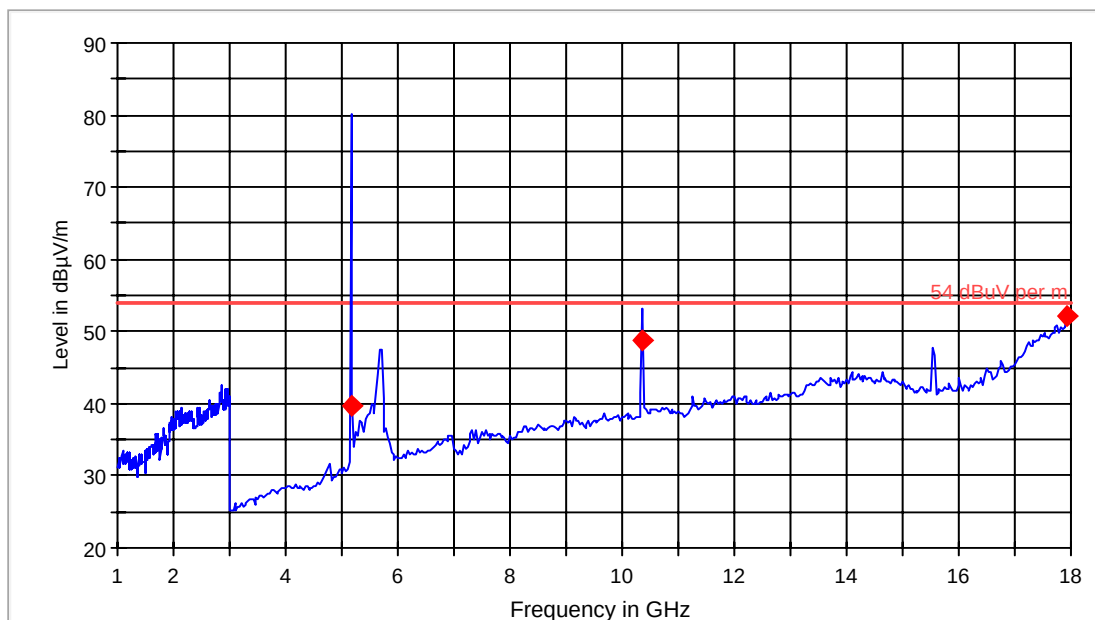
Test**Final Result 1**

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
5168.166332	39.7	20.000	1000.000	120.0	V	69.0	4.9	14.3	54.0
10363.617235	48.9	20.000	1000.000	120.0	V	188.0	15.2	5.1	54.0
17938.747495	52.3	20.000	1000.000	120.0	V	267.0	29.3	1.7	54.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
5168.166332	
10363.617235	
17938.747495	

FCC 15 1-18GHz



54 dBμV per m LimitLine

Preview Result 1



Final Result 1

1-18GHz (5220MHz) Antenna: Horizontal/ Vertical**Note:** The peak above the limit line is the carrier freq**EUT Information**

Description:

EUT Name: MX9
Manufacturer: LXE
Operating Mode: 802.11a 5220MHz
Comment: FCC Unit

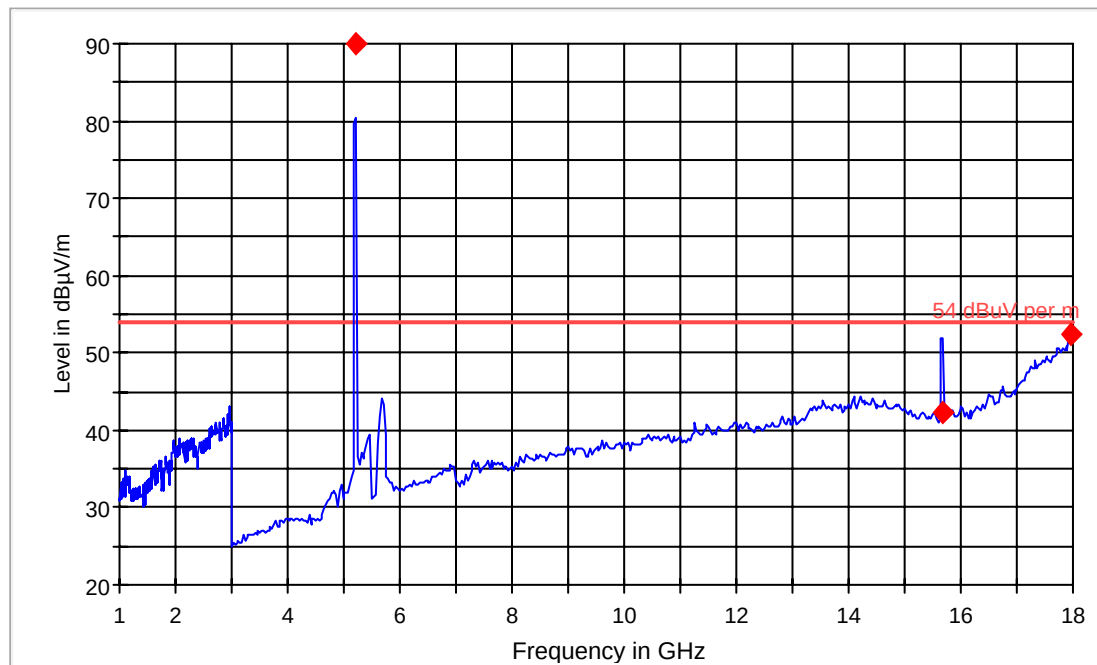
Test**Final Result 1**

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
5223.236473	89.9	20.000	1000.000	139.0	H	251.0	5.0	-35.9	54.0
15682.394789	42.3	20.000	1000.000	120.0	V	177.0	17.6	11.7	54.0
17965.380762	52.3	20.000	1000.000	170.0	V	1.0	29.6	1.7	54.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
5223.236473	
15682.394789	
17965.380762	

FCC 15 1-18GHz



— 54 dBμV per m.LimitLine

— Preview Result 1



◆ Final Result 1

1-18GHz (5240MHz) Antenna: Horizontal/ Vertical**Note:** The peak above the limit line is the carrier freq**EUT Information**

Description:

EUT Name: MX9
 Manufacturer: LXE
 Operating Mode: 802.11a 5240MHz
 Comment: FCC Unit

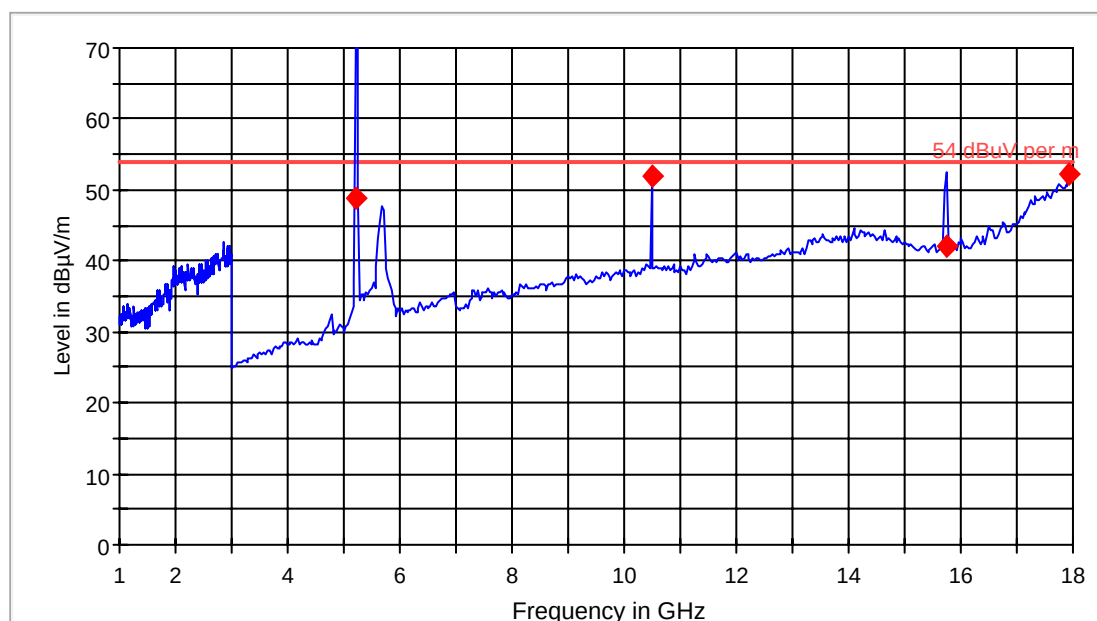
Test**Final Result 1**

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
5226.242485	48.8	20.000	1000.000	120.0	H	202.0	5.0	5.2	54.0
10482.795591	52.0	20.000	1000.000	155.0	V	257.0	14.5	2.0	54.0
15742.775551	42.2	20.000	1000.000	120.0	H	0.0	18.2	11.8	54.0
17939.509019	52.2	20.000	1000.000	170.0	V	112.0	29.3	1.8	54.0

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
5226.242485	
10482.795591	
15742.775551	
17939.509019	

FCC 15 1-18GHz



54 dBμV per m.LimitLine

Preview Result 1



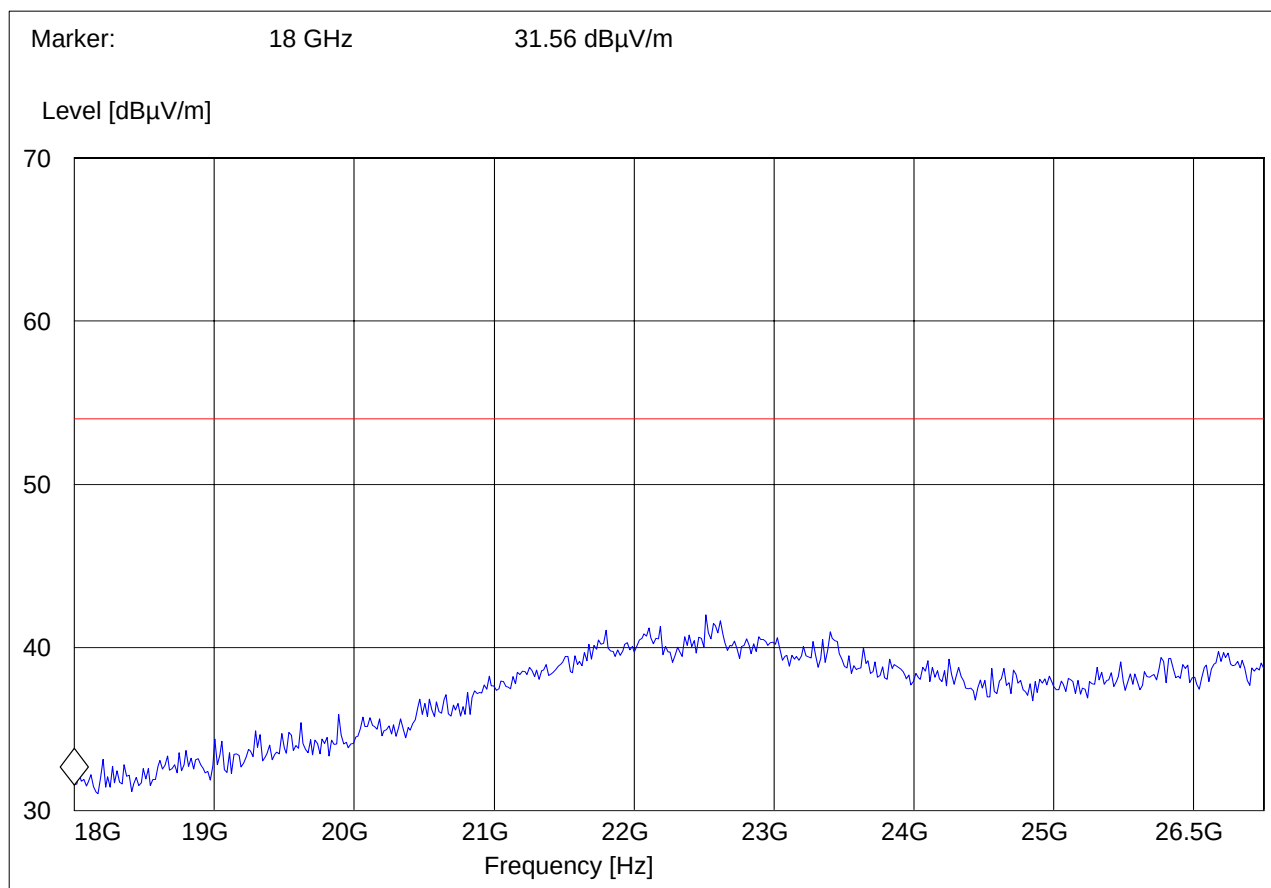
Final Result 1

18-26.5GHz (5180MHz)**Note: Peak Reading vs. Average limit**

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5180
ANT Orientation: V
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
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**

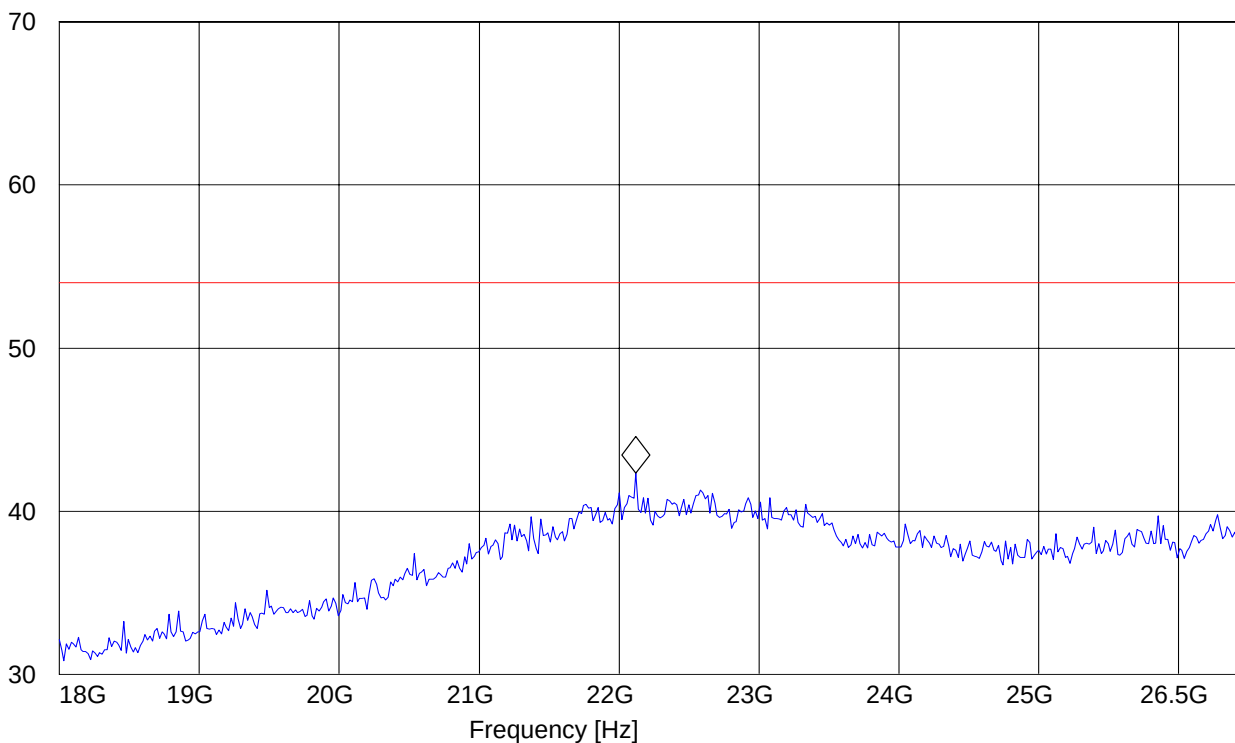
EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5220
ANT Orientation: V
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

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

Marker: 22.122244489 GHz 42.34 dBμV/m

Level [dBμV/m]



18-26.5GHz (5240MHz)**Note: Peak Reading vs. Average limit**

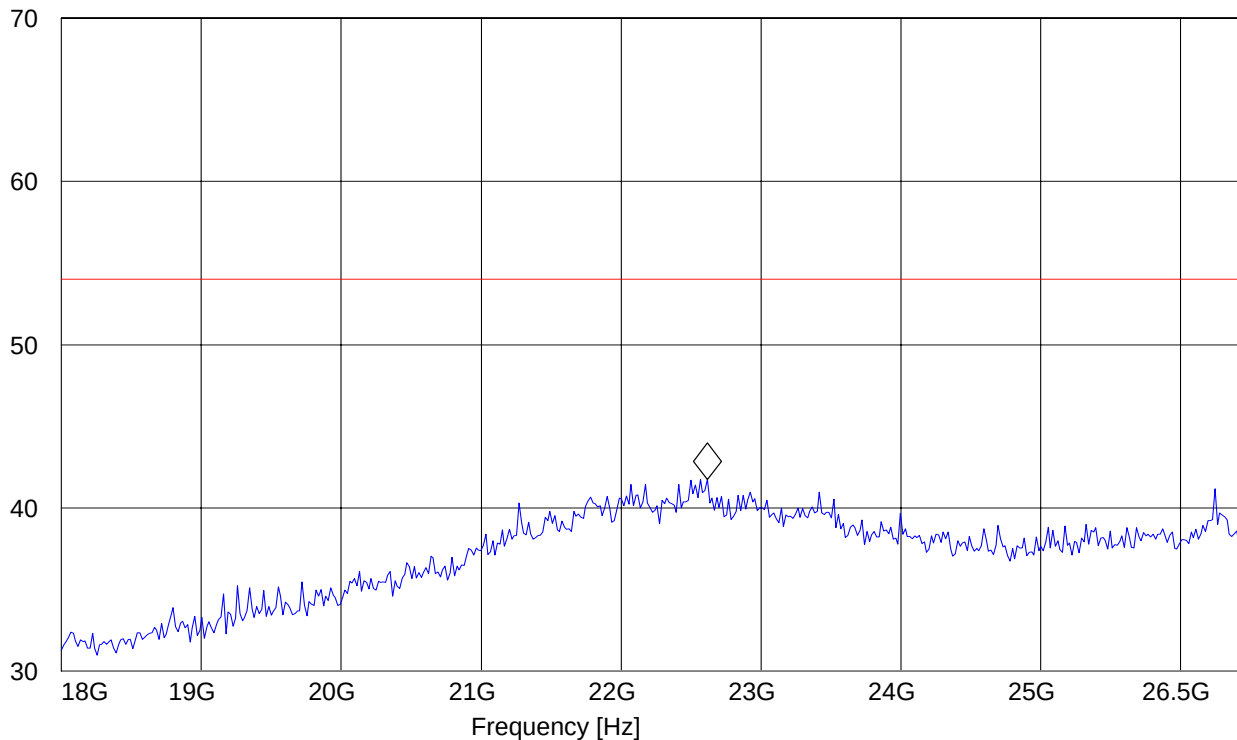
EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5240
ANT Orientation: V
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
Comments:

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

Marker: 22.616232465 GHz 41.75 dBμV/m

Level [dBμV/m]

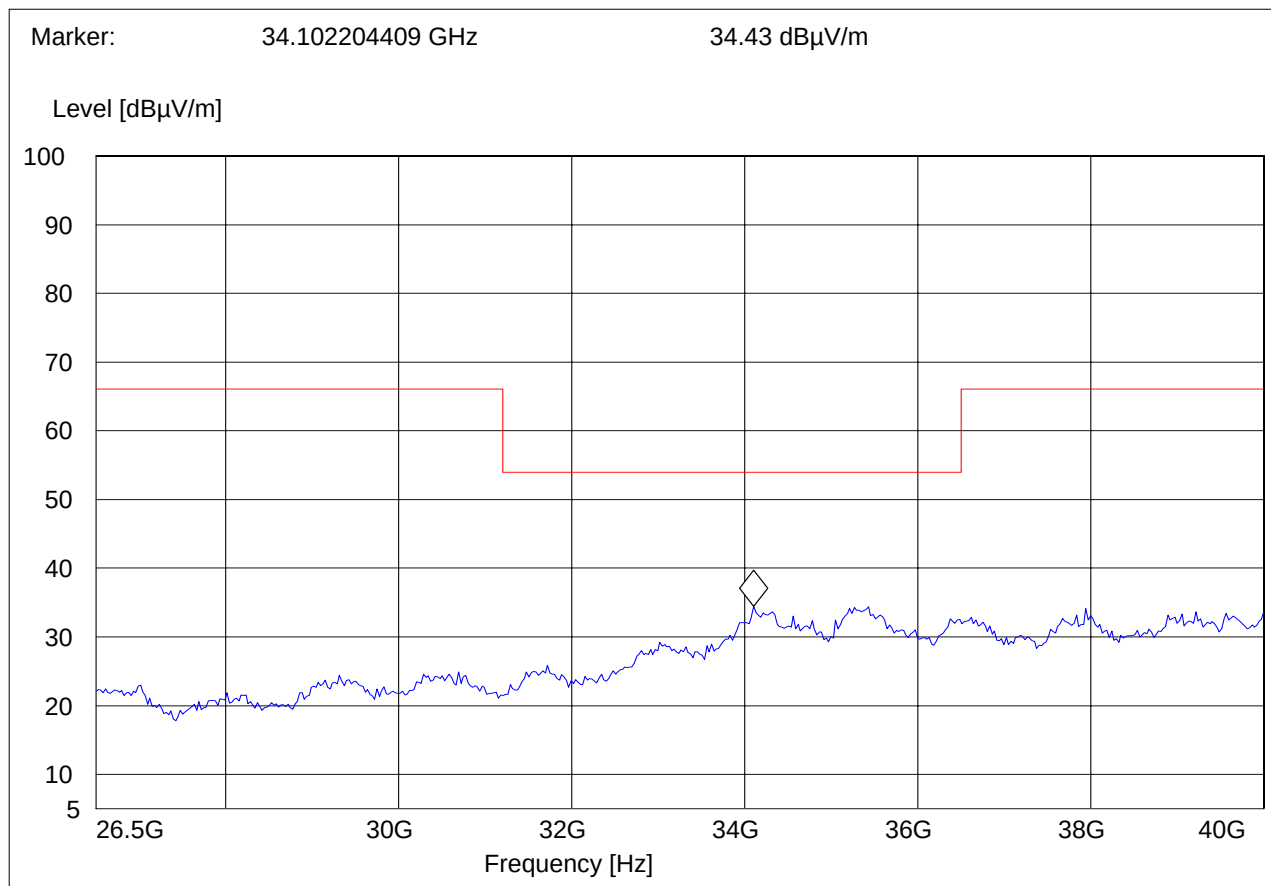


26.5-40GHz**Note:** This plot is valid for low, mid, high channels (worst-case plot)**Note:** Peak Reading vs. Average limit

EUT: MX9
Customer:: LXE, Inc.
Test Mode: 802.11a 5220
ANT Orientation: V
EUT Orientation: V
Test Engineer: Ahmad
Voltage:
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 Receiver Spurious Emission § 15.209/RSS210**5.4.1 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.

30MHz – 1GHz, Antenna: Horizontal/ Vertical

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

EUT Information

Description:

EUT Name: MX9
Manufacturer: LXE
Operating Mode: 802.11a Rx
Comment: FCC Unit

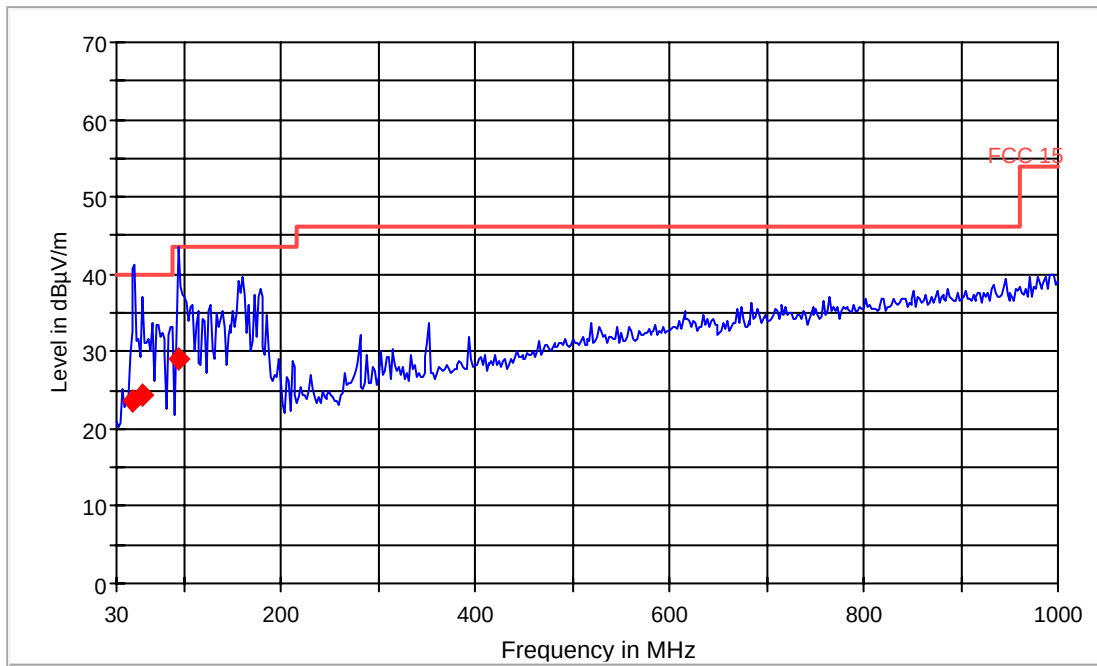
Test**Final Result 1**

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Antenna height (cm)	Polarity	Turntable position (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
47.024048	23.7	20.000	120.000	138.1	V	292.0	6.4	16.3	40.0
56.683367	24.4	20.000	120.000	120.2	V	10.0	7.5	15.6	40.0
94.238477	28.9	20.000	120.000	152.1	H	17.0	10.9	14.6	43.5

(continuation of the "Final Result 1" table from column 10 ...)

Frequency (MHz)	Comment
47.024048	
56.683367	
94.238477	

FCC 15 30-1000MHz



— FCC 15.LimitLine

— Preview Result 1



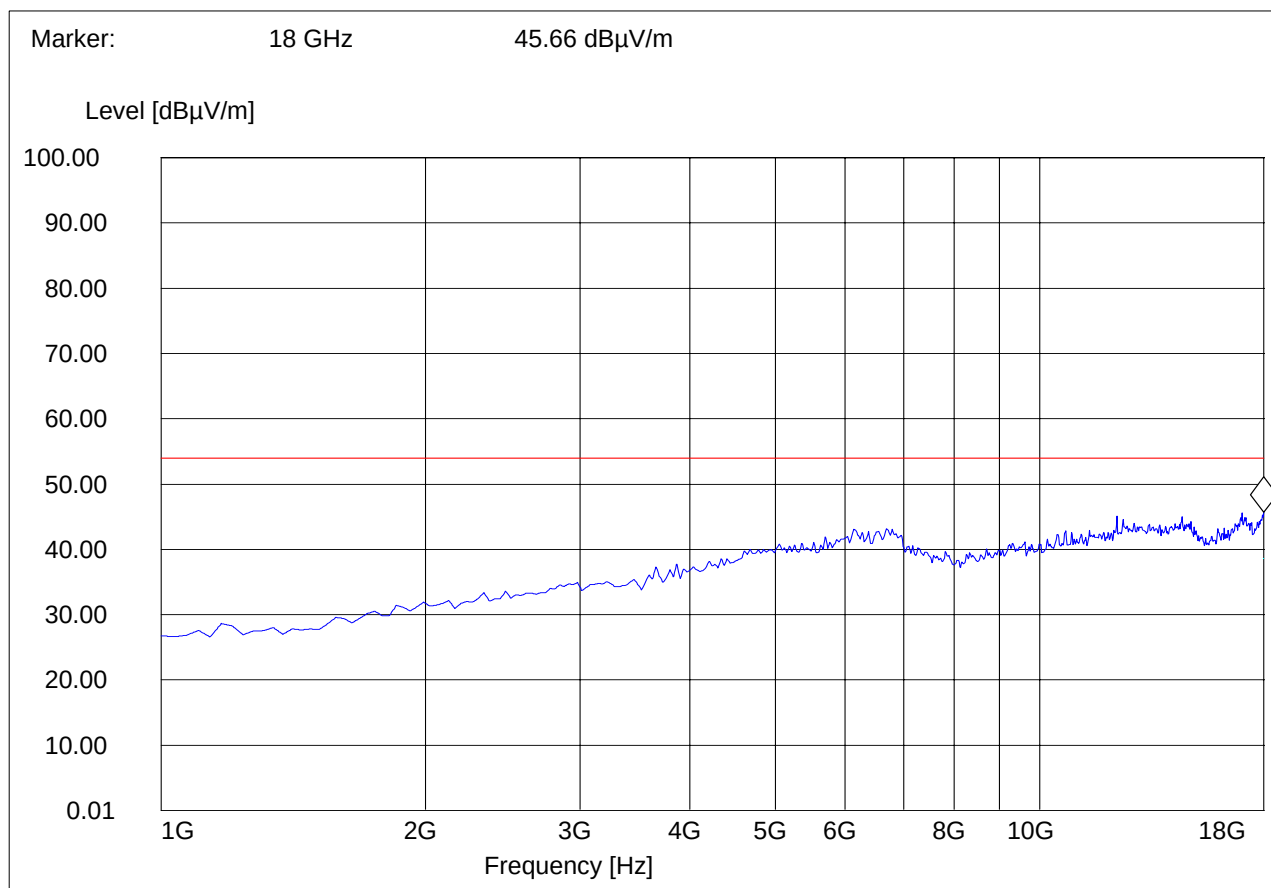
Final Result 1

1-18GHz**Note: Peak Reading vs. Average limit**

EUT / Description: MX9
Customer: LXE, Inc.
Operation Mode: Rx
ANT Orientation: : H
EUT Orientation:: V
Test Engineer: Chris
Voltage: Internal Battery
Comments::

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





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 4: 5725-5825MHz: 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 3: 5725-5825MHz: 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 4: 5725-5825MHz 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 4: 5725-5825MHz 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 TX mode Neutral:

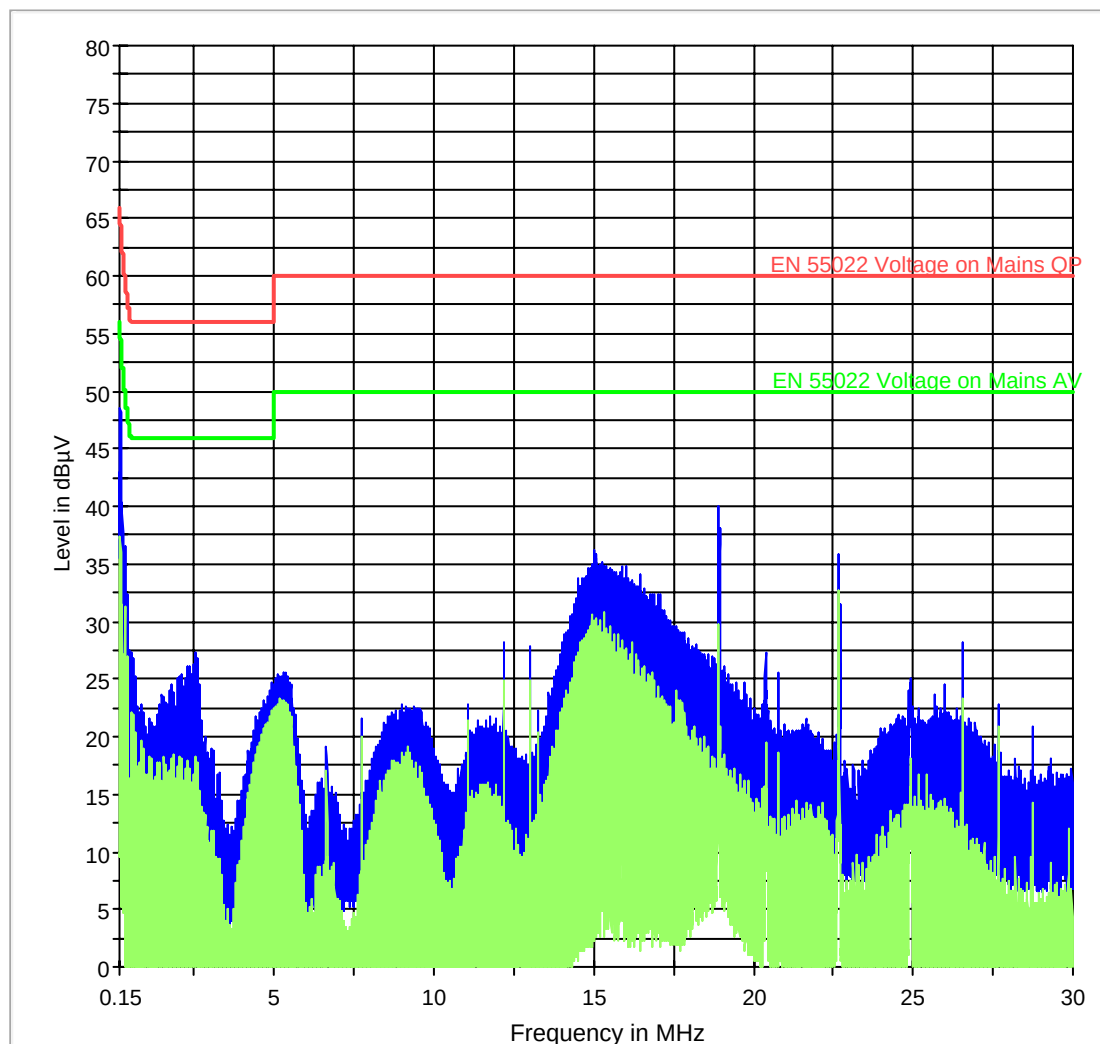
EUT Information

Description:

EUT Name:	MX9
Manufacturer:	LXE
Operating Mode:	802.11a Tx
Comment:	FCC Unit

Neutral

CISPR 22 Mains Conducted - N



EN 55022 Voltage on Mains QP.LimitLine
Preview Result 1

EN 55022 Voltage on Mains AV.LimitLine
Preview Result 2

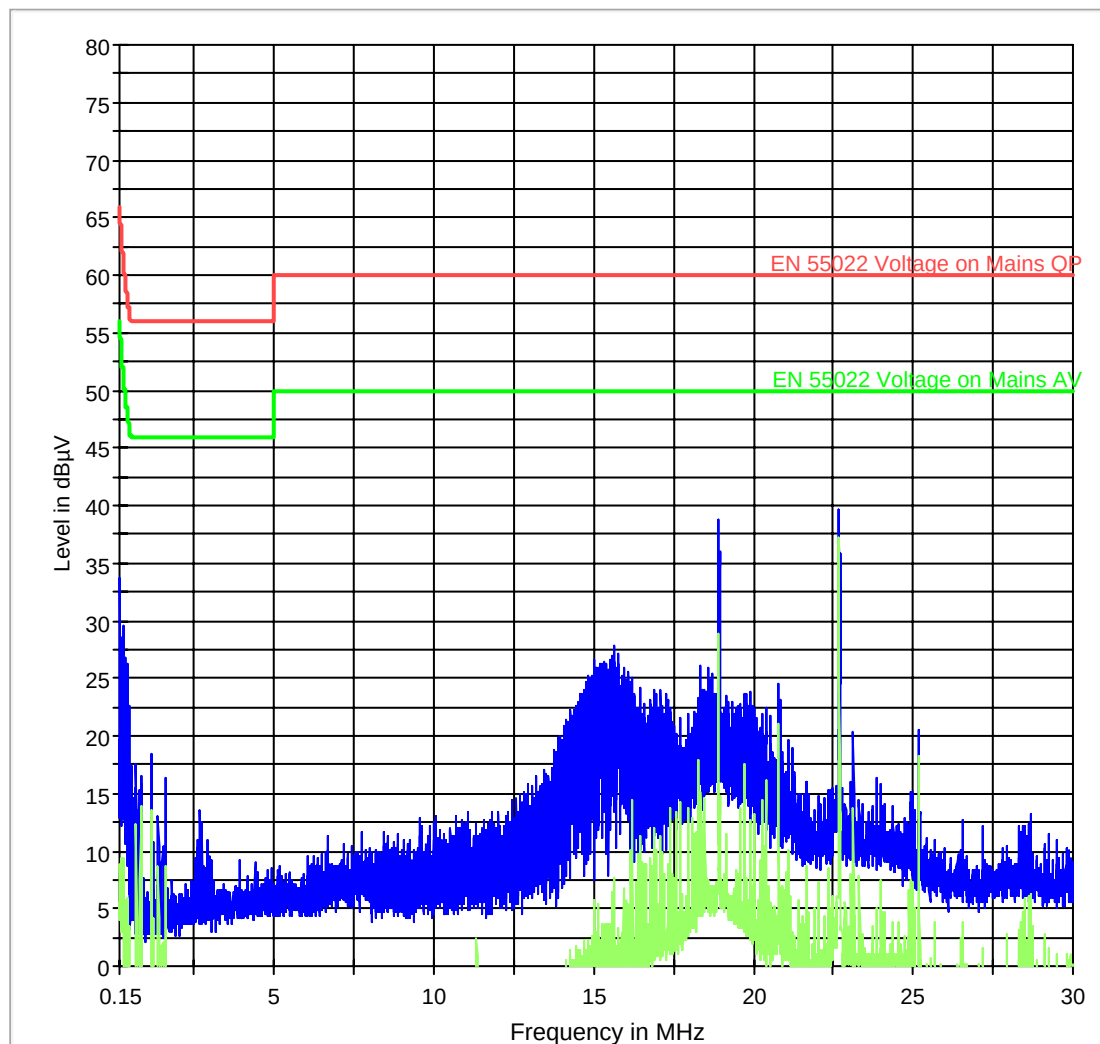
EUT Information

Description:

EUT Name:	MX9
Manufacturer:	LXE
Operating Mode:	802.11a Tx
Comment:	FCC Unit

Line

CISPR 22 Mains Conducted - L



— EN 55022 Voltage on Mains QP.LimitLine
— Preview Result 1

— EN 55022 Voltage on Mains AV.LimitLine
— Preview Result 2

6.6.3 RESULTS Receiver mode Neutral:

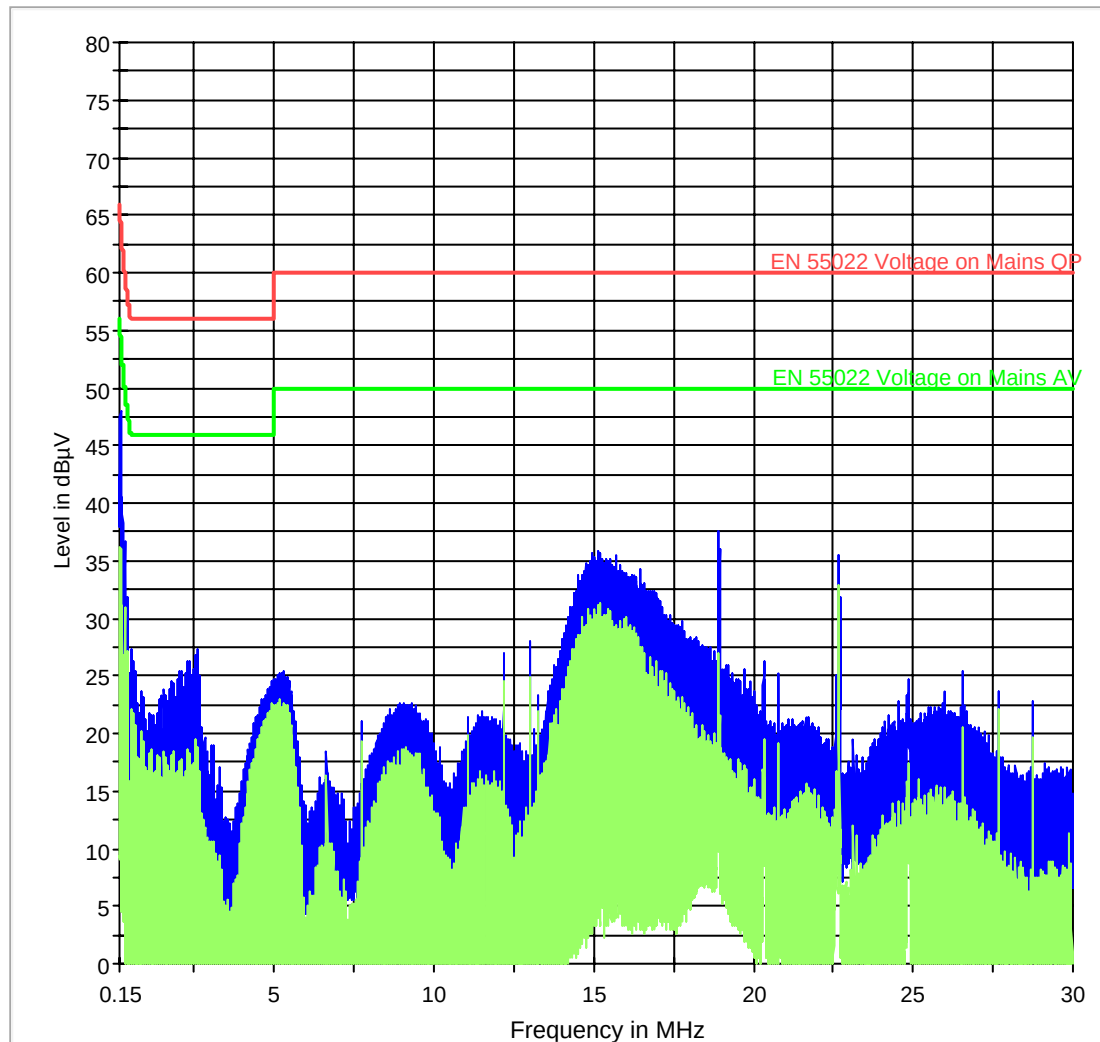
EUT Information

Description:

EUT Name:	MX9
Manufacturer:	LXE
Operating Mode:	802.11a Rx
Comment:	FCC Unit

Neutral

CISPR 22 Mains Conducted - N



EN 55022 Voltage on Mains QP.LimitLine
Preview Result 1

EN 55022 Voltage on Mains AV.LimitLine
Preview Result 2

6.6.4 RESULTS Receiver mode Line:

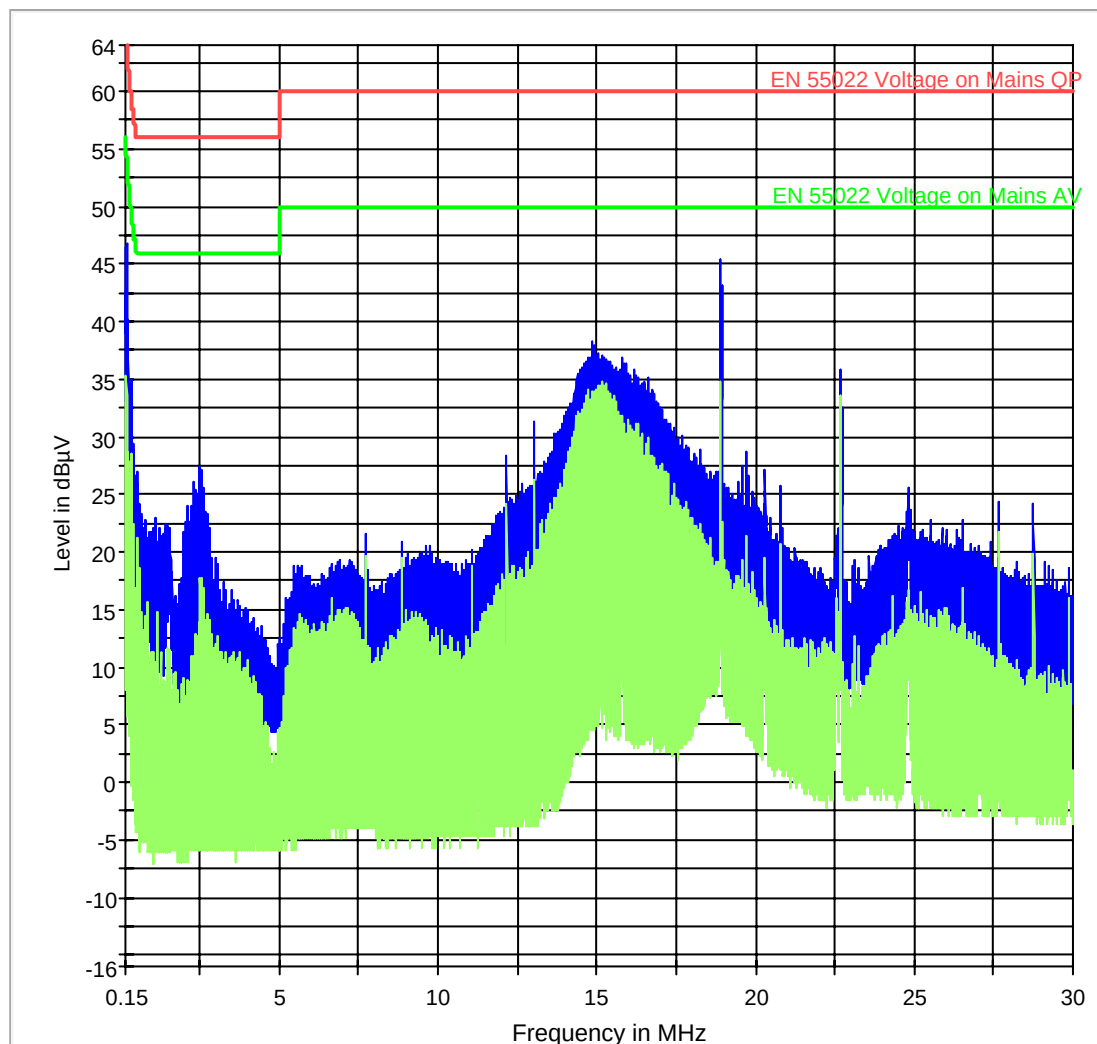
EUT Information

Description:

EUT Name:	MX9
Manufacturer:	LXE
Operating Mode:	802.11a Rx
Comment:	FCC Unit

Line

CISPR 22 Mains Conducted - L



EN 55022 Voltage on Mains QP.LimitLine
Preview Result 1

EN 55022 Voltage on Mains AV.LimitLine
Preview Result 2

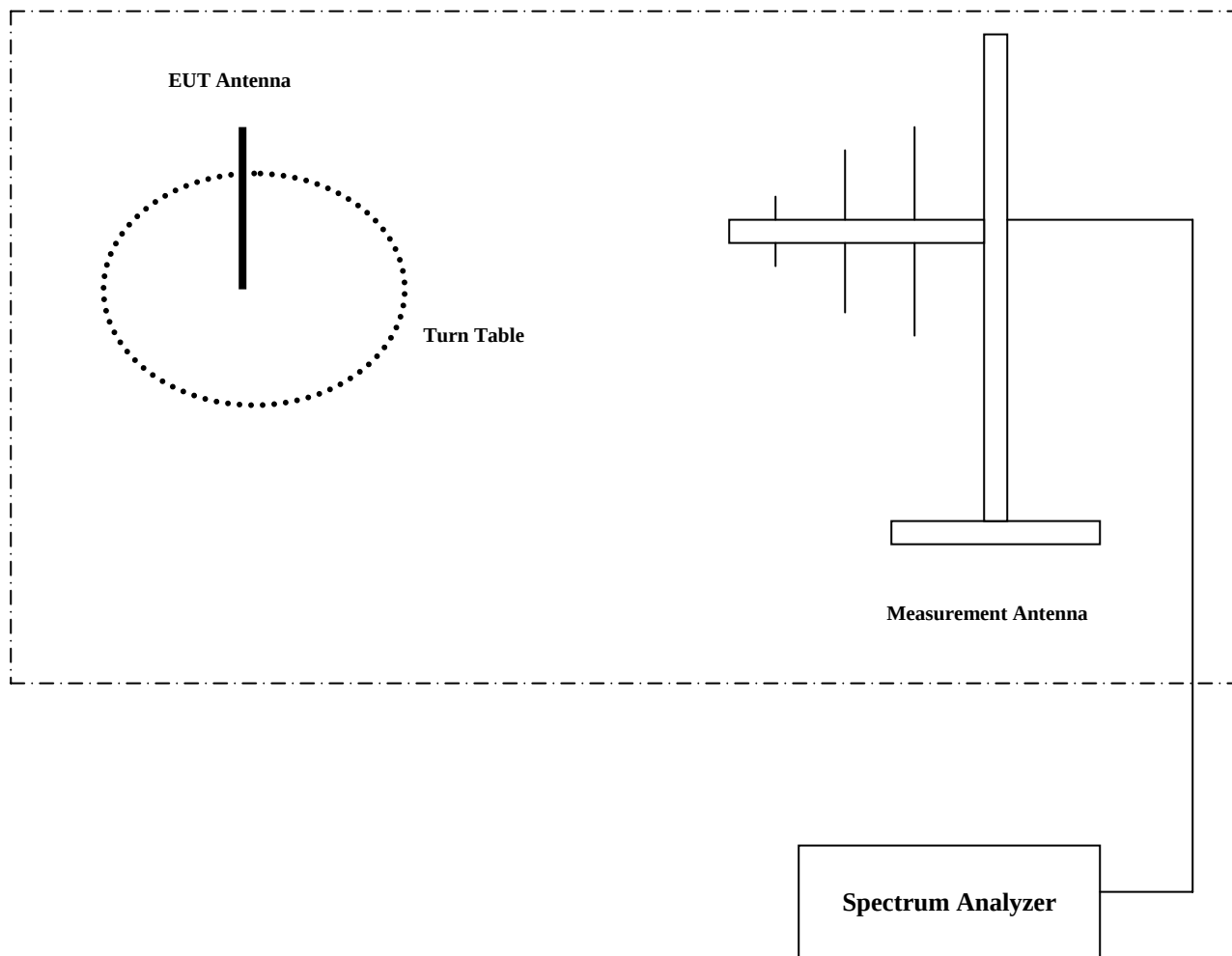
7 TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

No	Instrument/Ancillary	Type	Manufacturer	Serial No.	Cal Due	Interval
01	Spectrum Analyzer	ESIB 40	Rohde & Schwarz	100107	May 2010	1 year
02	Spectrum Analyzer	FSEM 30	Rohde & Schwarz	100017	August 2010	1 year
03	Signal Generator	SMY02	Rohde & Schwarz	836878/011	May 2010	1 year
04	Power-Meter	NRVD	Rohde & Schwarz	0857.8008.0 2	May 2010	1 year
05	Biconilog Antenna	3141	EMCO	0005-1186	June 2010	1 year
06	Horn Antenna (1-18GHz)	SAS-200/571	AH Systems	325	June 2010	1 year
07	Horn Antenna (18-26.5GHz)	3160-09	EMCO	1240	June 2010	1 year
08	Power Splitter	11667B	Hewlett Packard	645348	n/a	n/a
09	Climatic Chamber	VT4004	Voltsch	G1115	May 2010	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 2010	1 year
13	Power Sensor	URV5-Z2	Rohde & Schwarz	DE30807	May 2010	1 year
14	Digital Radio Comm. Tester	CMD-55	Rohde & Schwarz	847958/008	May 2010	1 year
15	Universal Radio Comm. Tester	CMU 200	Rohde & Schwarz	832221/06	May 2010	1 year
16	LISN	ESH3-Z5	Rohde & Schwarz	836679/003	May 2010	1 year
17	Loop Antenna	6512	EMCO	00049838	July 2010	2 years

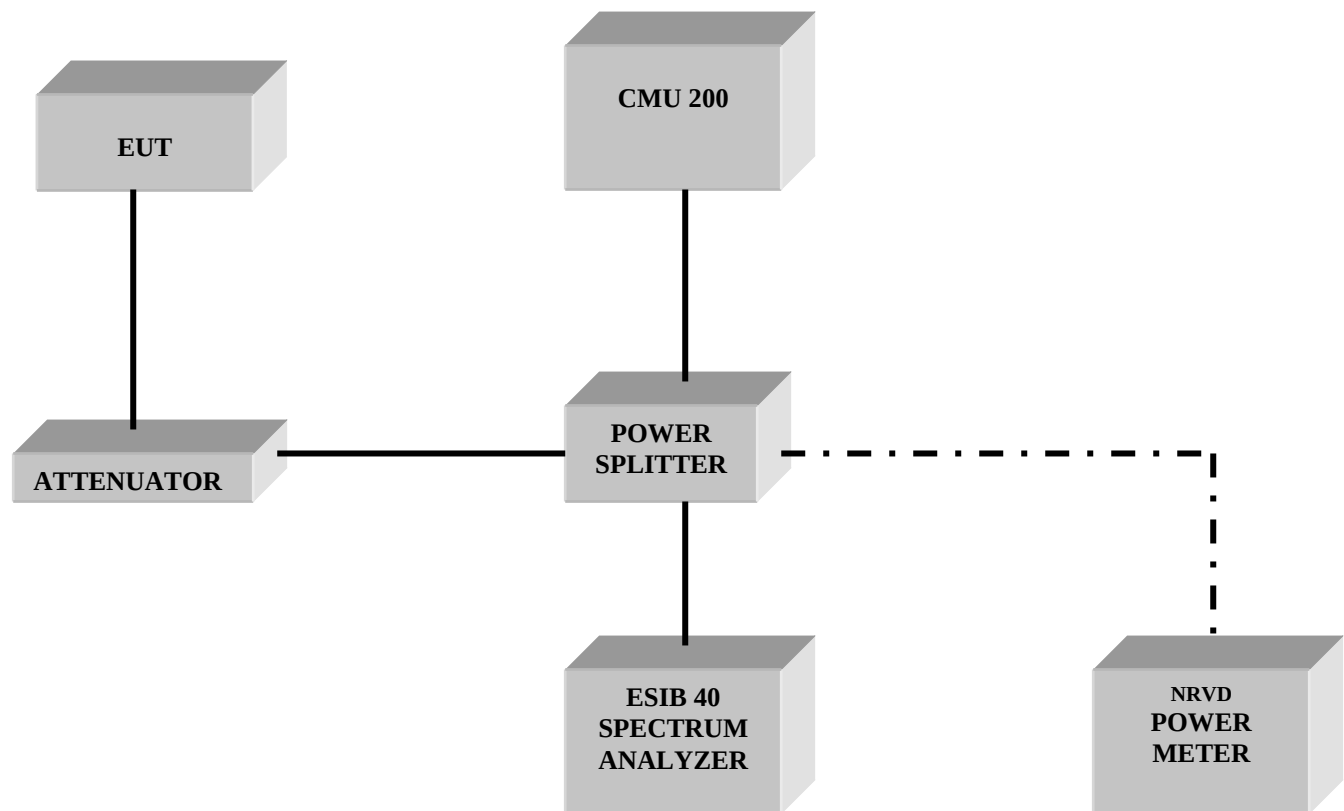
8 BLOCK DIAGRAMS

Radiated Testing

ANECHOIC CHAMBER



Conducted Testing





9 Revision History

2009-7-20: First Issue

2009-8-05: Rev.1

2009-8-20: Revision 2. Deleted 15.247 measurement results in 5.7G and corrected typos. Replaces original titled *EMC_LXEIN_007_09001_15.407_MX9_rev1* and dated 2009-8-5.