ELECTRONIC SYSTEMS, INC.
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

TABLE OF CONTENTS

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

6.0 FIELD STRENGTH OF SPURIOUS EMISSION MEASUREMENTS

The radiated measurements made at D.L.S. Electronic Systems, Inc., for the SoundBridge M1001, Model Number: M1001, are shown in tabulated and graph form. Preliminary radiation measurements were performed at a 3 meter test distance with the limits adjusted linearly when required. The frequency range from 30 MHz to over 960 MHz, depending upon the fundamental frequency as stated in Part 15.33a, was automatically scanned and plotted at various angles.

Measurements for the SoundBridge M1001 were made up to 26000 MHz, in accordance with Section 15.33a for Intentional Radiators with a fundamental frequency of 2400 MHz. For intentional radiators, the frequency range to be investigated is determined by the lowest radio frequency generated by the device without going below 30 MHz, up to at least the tenth harmonic of the highest fundamental frequency or 10 GHz, whichever is lower. At those frequencies where significant signals were detected, measurements were made over the entire frequency range specified in FCC Part 15, Subpart C, Section 15.247 at the open field test site, located at Genoa City, Wisconsin, FCC file number **31040/SIT**. When required, levels were extrapolated from 10 meters to 3 meters using a linear extrapolation.

All signals in the frequency range of 30 MHz to 2000 MHz were measured with a Biconical Antenna or tuned dipoles and from 200 MHz to 1000 MHz, a Log Periodic or Tuned Dipoles were used. From 1000 MHz to 25 GHz Horn Antennas were used. During the test the equipment was rotated and the antenna was raised and lowered from 1 meter to 4 meters to find the maximum level of emissions. In order to find maximum emissions, the cables were moved through all the positions the equipment would be expected to experience in the field. The EUT, peripheral equipment and cables were configured to meet the conditions in ANSI C63.4-2003, Clauses 6 & 8 and Clause 12.1.4. Tests were made with the receive antenna(s) in both the horizontal and vertical planes of polarization. In each case, the table was rotated to find the maximum emissions.

As stated in Section 15.247(b) the allowed maximum peak output power of the transmitter shall not exceed 1 Watt. In any 100 kHz bandwidth outside these frequency bands (the power that is produced by the modulation products of the spreading sequence), the information sequence and the carrier frequency shall be either at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Attenuation below the general limits specified in 15.209 is not required.

ELECTRONIC SYSTEMS, INC.
1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

6.0 FIELD STRENGTH OF SPURIOUS EMISSION MEASUREMENTS (CON'T)

Field strength limits are at a distance of 3 meters. The emission limits shown are based on measurement instrumentation employing an average detector.

Emissions radiated outside of the specified frequency bands, except for harmonics are attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Preliminary radiated emission measurements were performed at a 3 meter test distance. The frequency range from 30 MHz to 1000 MHz was automatically scanned and plotted at various angles.

For receivers the tests were performed according to the procedures of the FCC as stated in the "Methods of Measurement of Radio-Noise Emissions for Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz" found in the American National Standards Institute, ANSI C63.4-2003, Clause 12.1.

All preliminary data below 1000 MHz was automatically plotted using the ESI 26/ESI 40 Fixed Tuned Receiver. The data was taken using Peak, Quasi-Peak or the Average Detector Functions as required. This information was then used to determine the frequencies of maximum emissions. Above 1000 MHz, final data was taken using the Average Detector.

Below 1000 MHz, final data was taken using the ESI 26/ESI 40 Fixed Tuned Receiver. These plots were made using the Peak or Quasi-Peak Detector functions, with manual measurements performed on the questionable frequencies using the Quasi-Peak or the Average Detector Function of the Analyzer or ESI 26/ESI 40 Receiver as required. Above 1000 MHz, final data was taken using the Peak Detector on the Spectrum Analyzer.

The bandwidths used are specified by the FCC as stated in the American National Standards Institute, ANSI C63.4-2003, Clause 4.2. From 150 kHz to 30 MHz a bandwidth of 9 or 10 kHz was used and from 30 MHz to 1000 MHz a bandwidth of 120 kHz and above 1000 MHz, a bandwidth of 1 MHz was used.

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

6.0 FIELD STRENGTH OF SPURIOUS EMISSION MEASUREMENTS (CON'T)

The allowed radiated emissions for Receivers and all other Unintentional Radiators shall not exceed the following field strength limits at a distance of ten meters as stated in FCC Part 15, Subpart B Sections 15.109a:

Frequency range in MHz	Measured at 3 meters in dBuV
30 to 88 88 to 216	40.00 43.52
216 to 960	46.02
Above 960	53.98

Preliminary radiation measurements may have been performed at a 3 meter or ten meter test distance. The frequency range from 30 MHz to over 960 MHz as stated in Section 15.33b, was scanned at receive antenna heights from one to four meters, and with a 360° rotation of the EUT. Plots were made and the worst-case emissions were recorded.

During the test for frequencies below 1000 MHz, the equipment was rotated and the antenna was raised and lowered from 1 meter to 4 meters to find the maximum level of emissions. For frequencies greater than 1000 MHz the Double Ridge Horn Antenna was set at 1 or 3 meters from the EUT with the antenna height varied from 1 to 4 meters above the ground plane. The EUT, peripheral equipment and cables were configured to meet the conditions in ANSI C63.4-2003, Clause 12.1.4.

NOTE:

All radiated emissions measurements were made at a test room temperature of **75°F** at **53%** relative humidity.

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RADIATED DATA AND GRAPH(S) TAKEN FOR

FIELD STRENGTH

SPURIOUS EMISSION MEASUREMENTS

TRANSMIT MODE

PART 15.247

FCC Part 15 Class B

Electric Field Strength

```
EUT:                  M1000CR
Manufacturer:         ROKU
Operating Condition:  68 deg. F; 47% R.H.
Test Site:            DLS OF Site 3
Operator:             Craig Brandt
Test Specification:   120 V   60 Hz
Comment:
                      Date: 05-11-2005
```

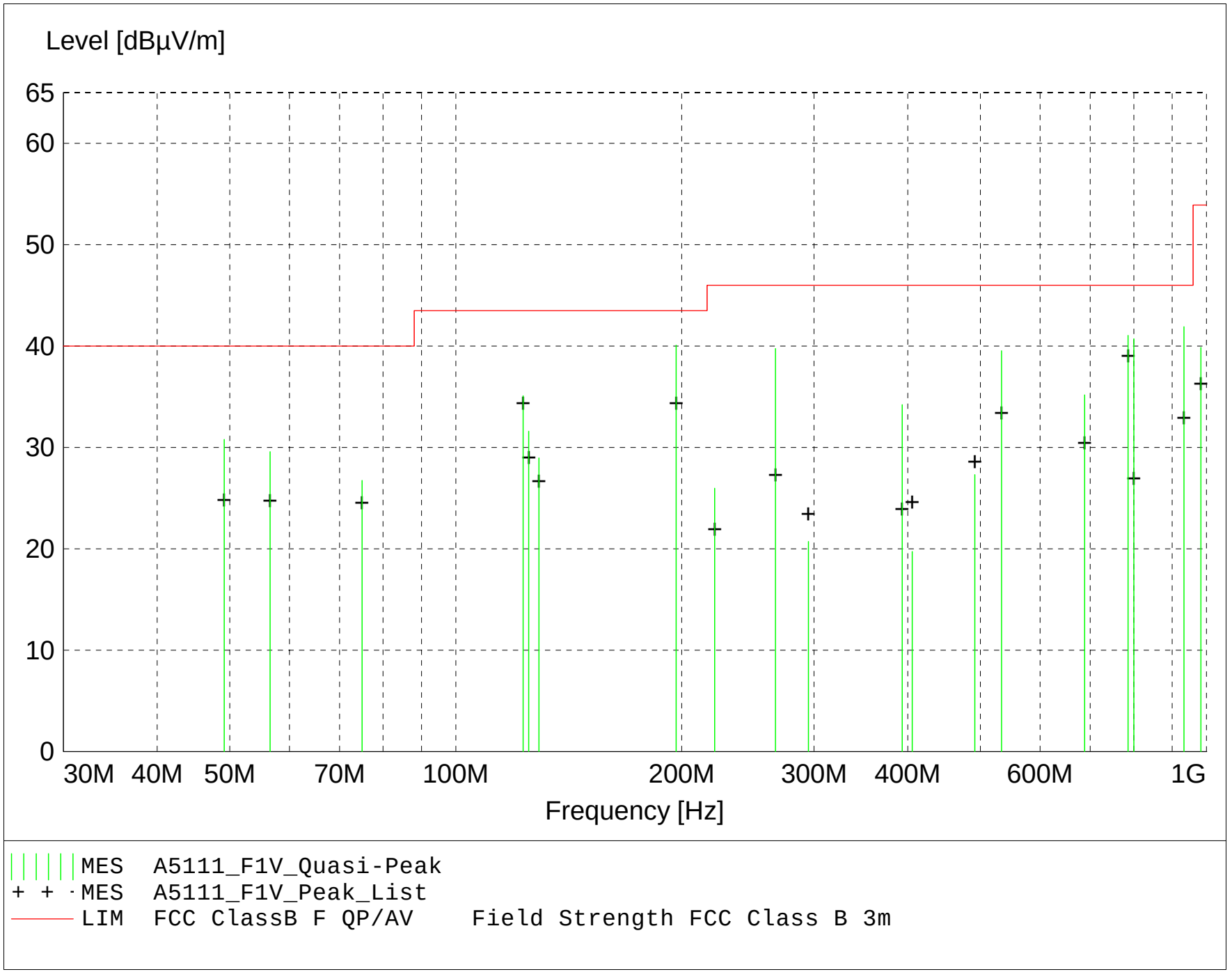
TEXT: "Site 3 MidV 3M"

```
  Short Description:            Test Set-up Vert30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

                Antennas ---
                Biconical    -- EMCO 3104C SN: 9701-4785
                Log Periodic -- EMCO 3146  SN: 9702-4895

                Pre-Amp  --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP:    EuT Measured at 3 Meters with VERTICAL Antenna Polarisation
```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60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A5111_F1V_Quasi-Peak
MES A5111_F1V_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A5111_F1V_Final"

5/12/2005 11:34AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
196.600000	45.61	17.16	-22.7	40.1	43.5	3.4	1.00	315	QUASI-PEAK	None
933.250000	37.22	22.81	-18.2	41.9	46.0	4.1	1.10	180	QUASI-PEAK	None
786.380000	38.79	21.24	-19.0	41.0	46.0	5.0	1.10	315	QUASI-PEAK	None
799.940000	38.50	21.42	-19.2	40.7	46.0	5.3	1.00	315	QUASI-PEAK	None
266.640000	48.88	13.02	-22.1	39.8	46.0	6.2	1.00	45	QUASI-PEAK	None
533.290000	42.50	17.86	-20.8	39.5	46.0	6.5	1.00	45	QUASI-PEAK	None
122.865000	45.29	13.10	-23.3	35.1	43.5	8.4	1.00	135	QUASI-PEAK	None
49.140000	43.45	11.59	-24.3	30.8	40.0	9.2	1.00	270	QUASI-PEAK	None
56.535000	43.23	10.54	-24.2	29.6	40.0	10.4	1.00	225	QUASI-PEAK	None
688.080000	33.40	21.16	-19.4	35.2	46.0	10.8	1.30	135	QUASI-PEAK	None
393.180000	40.14	15.51	-21.4	34.2	46.0	11.8	1.10	180	QUASI-PEAK	None
125.000000	42.18	12.72	-23.3	31.6	43.5	11.9	1.00	315	QUASI-PEAK	None
74.980000	44.29	6.42	-24.0	26.7	40.0	13.3	1.00	225	QUASI-PEAK	None
982.980000	33.64	23.81	-17.6	39.9	53.9	14.0	1.10	135	QUASI-PEAK	None
129.020000	39.65	12.58	-23.3	29.0	43.5	14.5	1.00	225	QUASI-PEAK	None
491.490000	30.94	17.24	-20.9	27.3	46.0	18.7	1.10	180	QUASI-PEAK	None
221.190000	37.19	11.28	-22.5	26.0	46.0	20.0	1.00	45	QUASI-PEAK	None
294.890000	28.27	14.42	-22.0	20.7	46.0	25.3	1.00	45	QUASI-PEAK	None
405.510000	25.36	15.74	-21.4	19.7	46.0	26.3	1.00	0	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

```
EUT:                  M1000CR
Manufacturer:         ROKU
Operating Condition: 68 deg. F; 47% R.H.
Test Site:            DLS OF Site 3
Operator:             Craig Brandt
Test Specification:   120 V   60 Hz
Comment:
                      Date: 05-11-2005
```

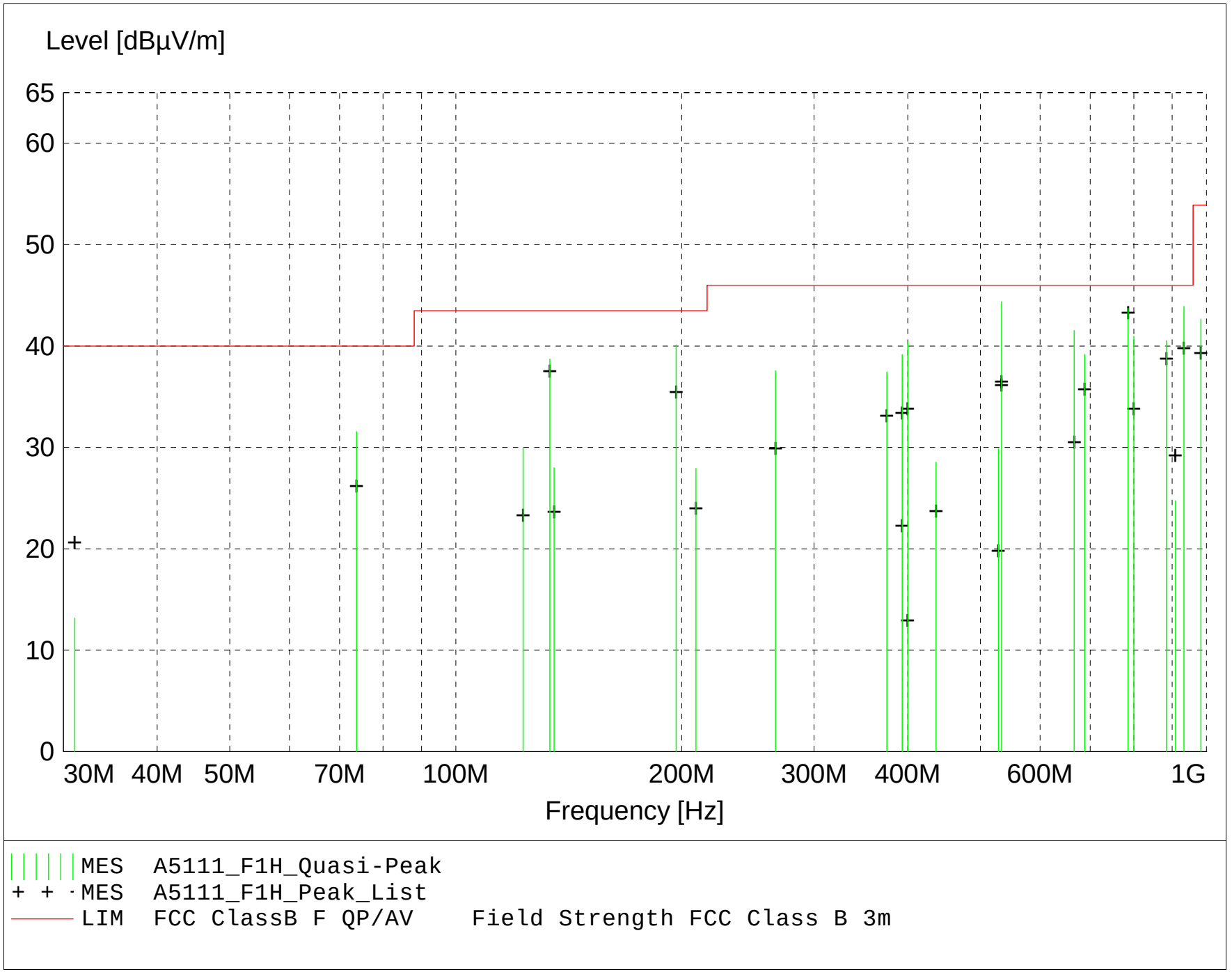
TEXT: "Site 3 MidH 3M"

```
  Short Description:            Test Set-up Horz30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

                Antennas ---
                Biconical    -- EMCO 3104C SN: 9701-4785
                Log Periodic -- EMCO 3146  SN: 9702-4895

                Pre-Amp  --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP:    EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation
```


Level [dBµV/m]
65
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A5111_F1H_Quasi-Peak
MES A5111_F1H_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A5111_F1H_Final"

5/12/2005 11:28AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
533.280000	47.32	17.86	-20.8	44.4	46.0	1.6	1.00	270	QUASI-PEAK	None
933.270000	39.29	22.81	-18.2	43.9	46.0	2.1	1.00	135	QUASI-PEAK	None
786.380000	41.46	21.24	-19.0	43.7	46.0	2.3	1.10	225	QUASI-PEAK	None
196.600000	45.61	17.16	-22.7	40.1	43.5	3.4	2.00	135	QUASI-PEAK	None
666.600000	40.50	20.81	-19.8	41.5	46.0	4.5	1.50	180	QUASI-PEAK	None
133.340000	49.68	12.31	-23.3	38.7	43.5	4.8	1.00	200	QUASI-PEAK	None
799.920000	38.75	21.42	-19.2	40.9	46.0	5.1	1.00	225	QUASI-PEAK	None
884.680000	36.55	22.61	-18.7	40.5	46.0	5.5	1.00	225	QUASI-PEAK	None
399.960000	46.10	15.66	-21.4	40.4	46.0	5.6	1.00	200	QUASI-PEAK	None
393.190000	45.10	15.51	-21.4	39.2	46.0	6.8	1.00	135	QUASI-PEAK	None
688.090000	37.37	21.16	-19.4	39.2	46.0	6.8	1.20	135	QUASI-PEAK	None
266.640000	46.68	13.02	-22.1	37.6	46.0	8.4	1.00	180	QUASI-PEAK	None
73.710000	48.91	6.62	-24.0	31.6	40.0	8.4	3.00	180	QUASI-PEAK	None
375.010000	43.87	15.13	-21.6	37.4	46.0	8.6	1.00	225	QUASI-PEAK	None
982.980000	36.43	23.81	-17.6	42.6	53.9	11.3	2.00	135	QUASI-PEAK	None
122.865000	40.18	13.10	-23.3	30.0	43.5	13.5	3.00	315	QUASI-PEAK	None
135.155000	38.86	12.39	-23.3	28.0	43.5	15.5	2.20	0	QUASI-PEAK	None
208.880000	38.89	11.61	-22.6	27.9	43.5	15.6	2.00	135	QUASI-PEAK	None
528.350000	32.70	17.97	-20.8	29.9	46.0	16.1	1.00	180	QUASI-PEAK	None
436.200000	33.57	16.20	-21.2	28.5	46.0	17.5	3.00	90	QUASI-PEAK	None
909.250000	20.54	22.61	-18.4	24.7	46.0	21.3	1.00	0	QUASI-PEAK	None
31.050000	25.97	11.82	-24.6	13.2	40.0	26.8	3.00	270	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 77 deg F; 54% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

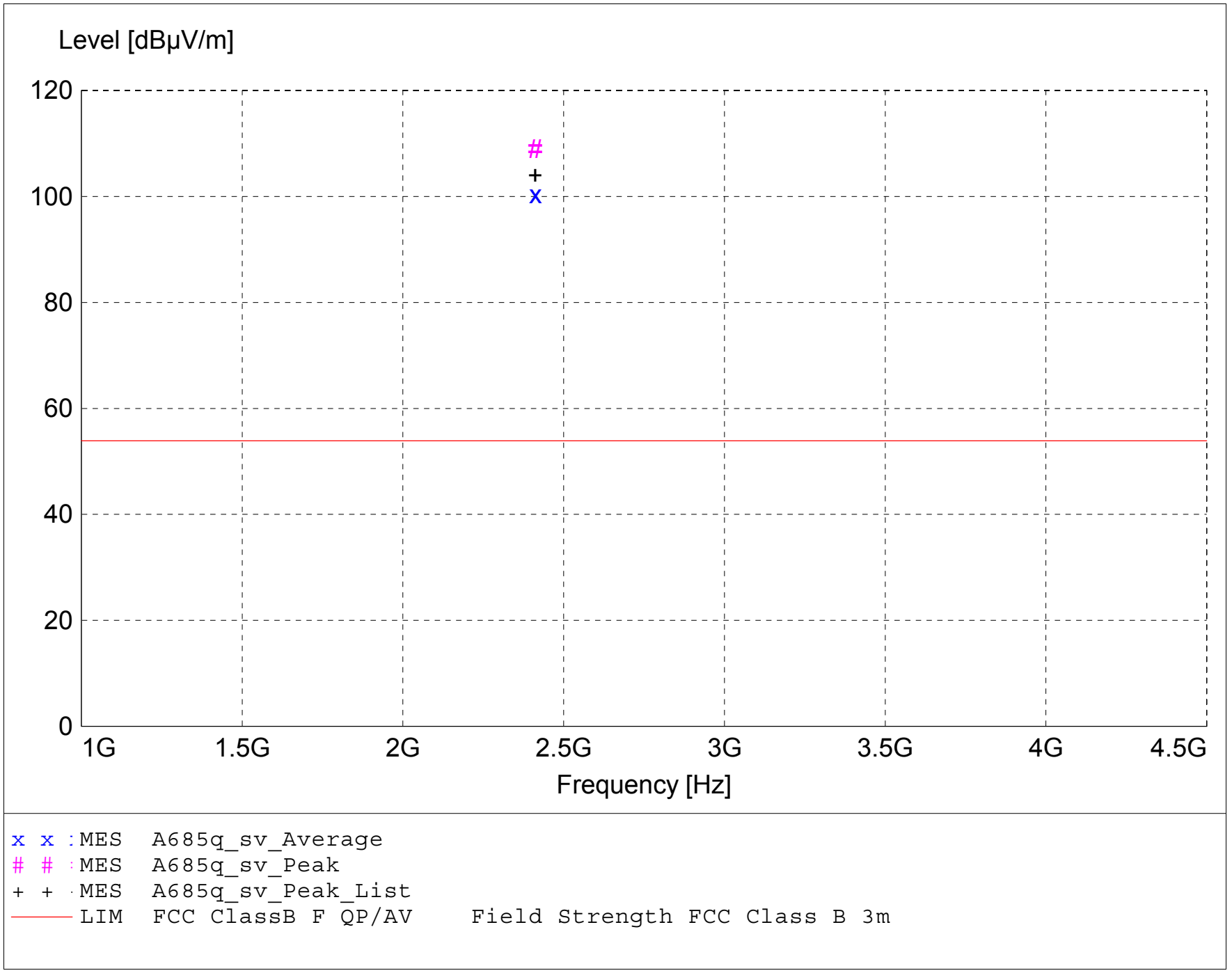
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation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120
100
80
60
40
20
0
1G
1.5G
2G
2.5G
3G
3.5G
4G
4.5G
Frequency [Hz]
x x : MES A685q_sv_Average
: MES A685q_sv_Peak
+ + : MES A685q_sv_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685q_sv_Final"

6/8/2005 12:34PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2412.000000	78.74	28.27	1.8	108.8	53.9	-54.9	1.20	180	MAX PEAK	Fundamental
2412.000000	70.28	28.27	1.8	100.4	53.9	-46.5	1.20	180	AVERAGE	Fundamental

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 77 deg F; 54% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

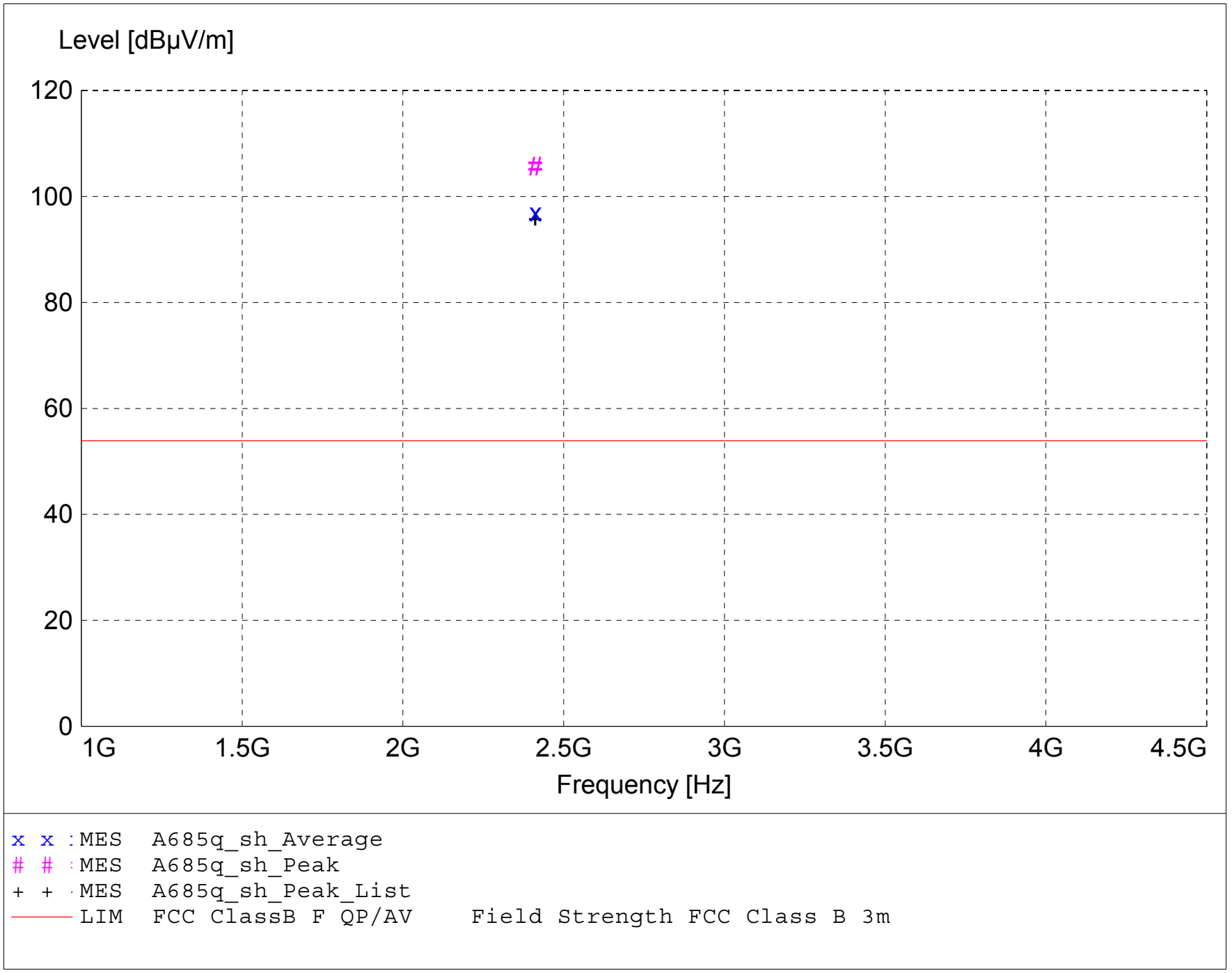
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation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120
100
80
60
40
20
0
1G
1.5G
2G
2.5G
3G
3.5G
4G
4.5G
Frequency [Hz]
x x : MES A685q_sh_Average
: MES A685q_sh_Peak
+ + : MES A685q_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685q_sh_Final"

6/8/2005 12:38PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2412.000000	75.47	28.27	1.8	105.6	53.9	-51.7	1.10	225	MAX PEAK	Fundamental
2412.000000	66.87	28.27	1.8	97.0	53.9	-43.1	1.10	225	AVERAGE	Fundamental

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 77 deg F; 54% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

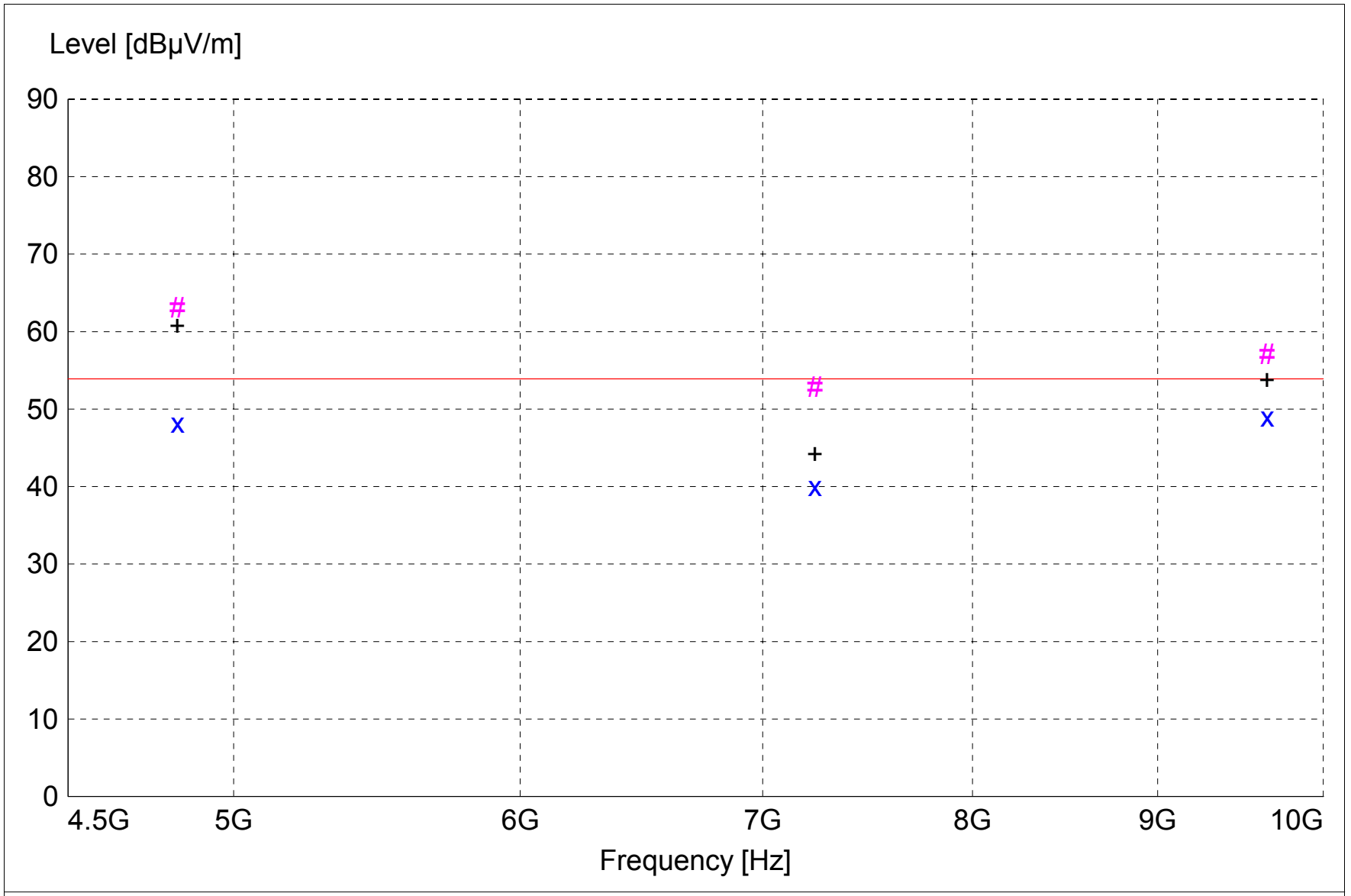
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



x x :MES A685r_sv_Average
:MES A685r_sv_Peak
+ + :MES A685r_sv_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685r_sv_Final"

6/8/2005 12:52PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4824.000000	66.61	32.77	-36.3	63.1	53.9	-9.2	1.10	225	MAX PEAK	2nd Harmonic
9648.000000	53.71	37.77	-34.4	57.1	53.9	-3.2	1.30	300	MAX PEAK	4th Harmonic
7236.000000	52.25	35.58	-35.0	52.8	53.9	1.1	1.10	240	MAX PEAK	3rd Harmonic
9648.000000	45.57	37.77	-34.4	48.9	53.9	5.0	1.30	300	AVERAGE	4th Harmonic
4824.000000	51.70	32.77	-36.3	48.2	53.9	5.7	1.10	225	AVERAGE	2nd Harmonic
7236.000000	39.44	35.58	-35.0	40.0	53.9	13.9	1.10	240	AVERAGE	3rd Harmonic

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 77 deg F; 54% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

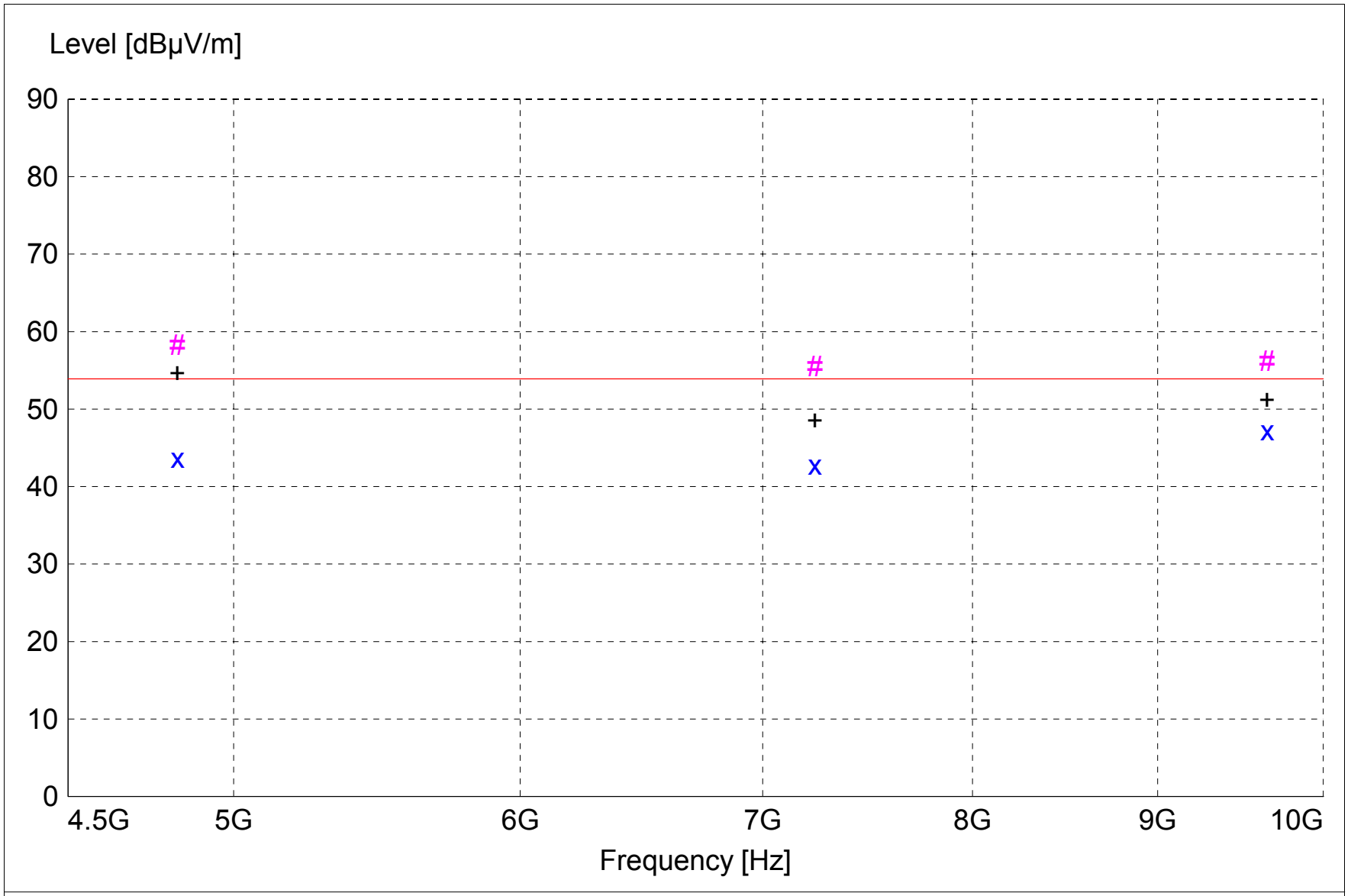
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



x x :MES A685r_sh_Average
:MES A685r_sh_Peak
+ + :MES A685r_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685r_sh_Final"

6/8/2005 12:58PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4824.000000	61.76	32.77	-36.3	58.2	53.9	-4.3	1.10	240	MAX PEAK	2nd Harmonic
9648.000000	52.79	37.77	-34.4	56.1	53.9	-2.2	1.10	240	MAX PEAK	4th Harmonic
7236.000000	54.94	35.58	-35.0	55.5	53.9	-1.6	1.10	270	MAX PEAK	3rd Harmonic
9648.000000	43.85	37.77	-34.4	47.2	53.9	6.7	1.10	240	AVERAGE	4th Harmonic
4824.000000	47.24	32.77	-36.3	43.7	53.9	10.2	1.10	240	AVERAGE	2nd Harmonic
7236.000000	42.16	35.58	-35.0	42.7	53.9	11.2	1.10	270	AVERAGE	3rd Harmonic

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 77 deg F; 54% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

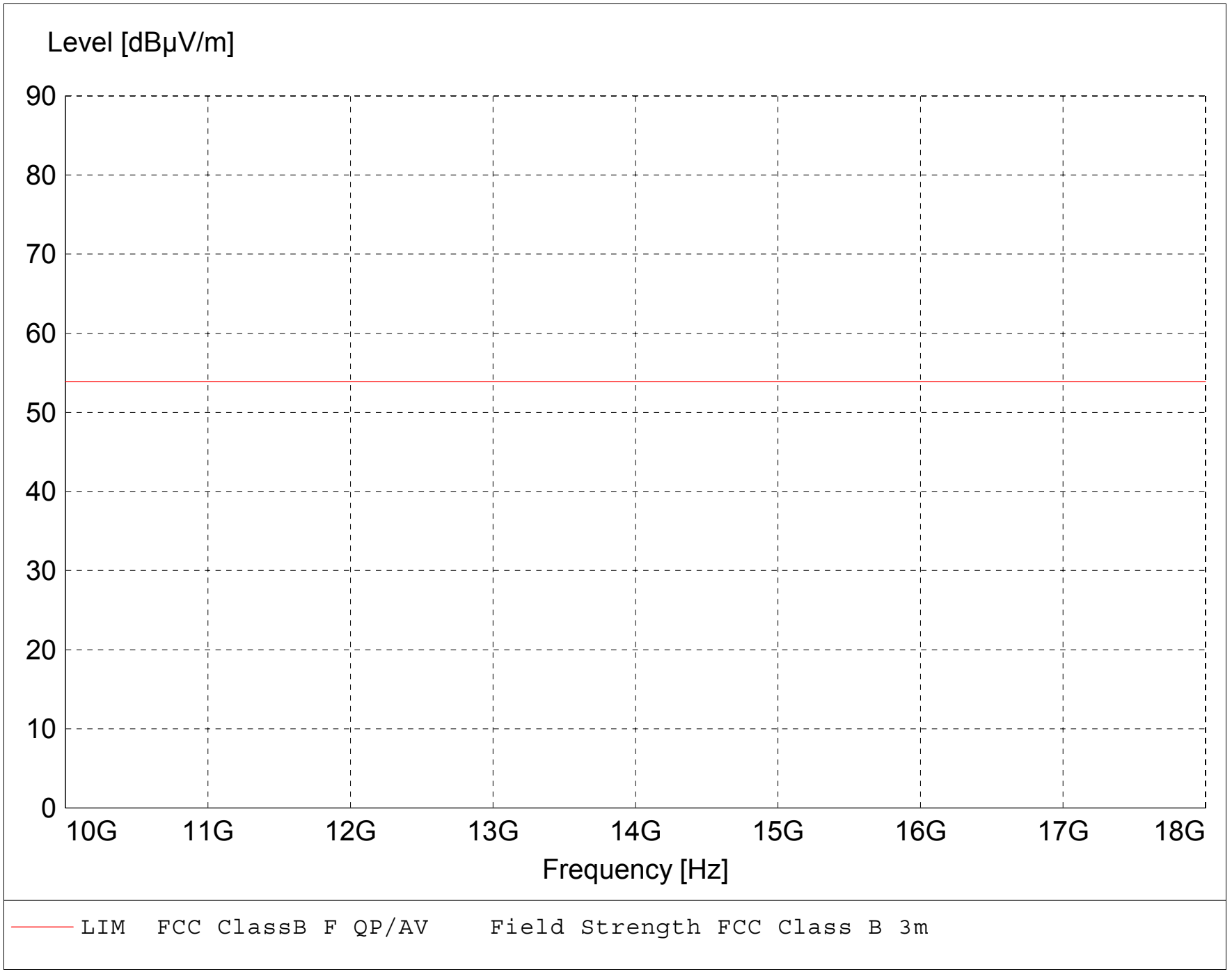
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation


Level [dBµV/m]
90
80
70
60
50
40
30
20
10
0
10G
11G
12G
13G
14G
15G
16G
17G
18G
Frequency [Hz]
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 77 deg F; 54% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

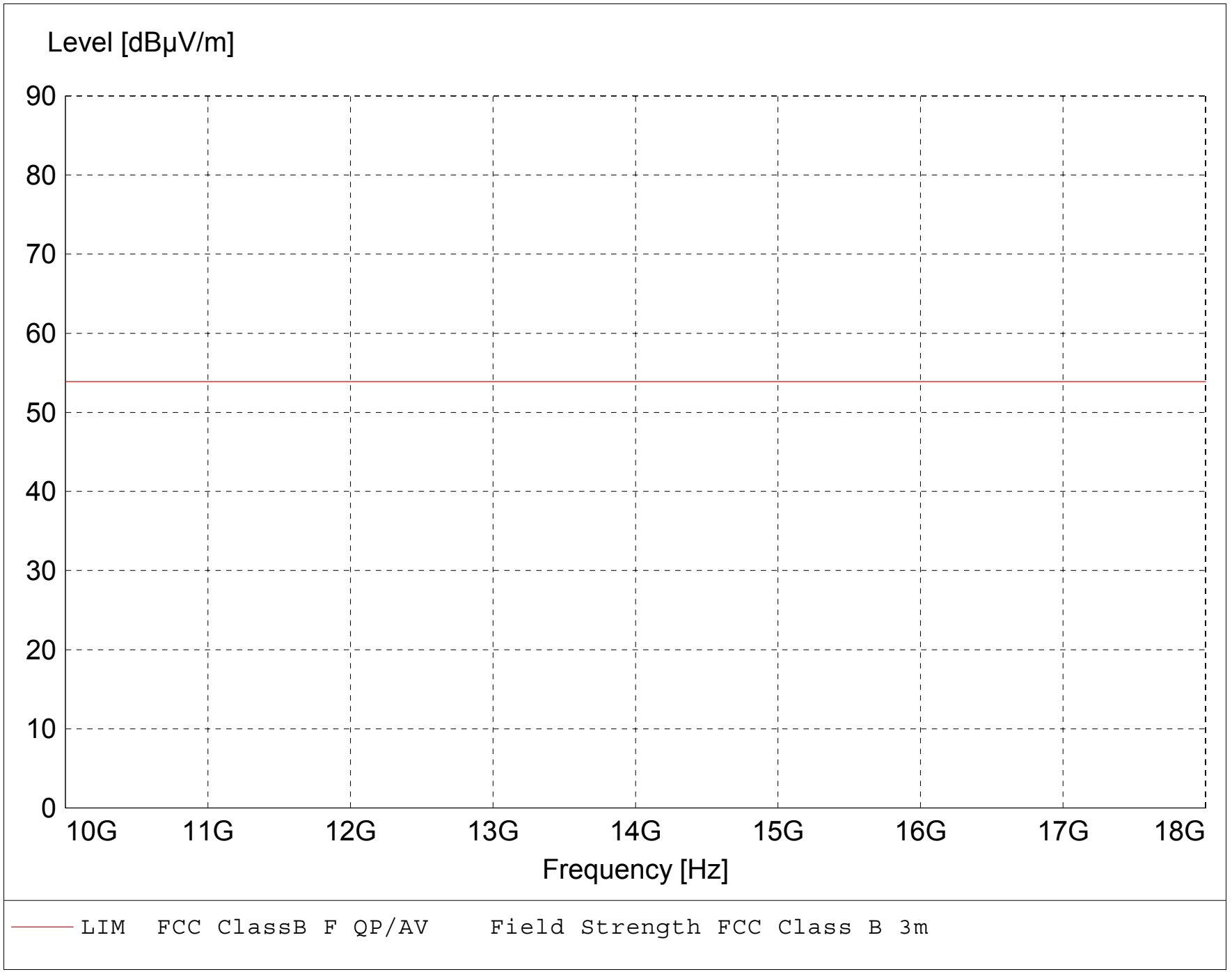
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation


Level [dBµV/m]
90
80
70
60
50
40
30
20
10
0
10G
11G
12G
13G
14G
15G
16G
17G
18G
Frequency [Hz]
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 55% R.H.
Test Site: DLS OF Site 3
Operator: Jason L
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

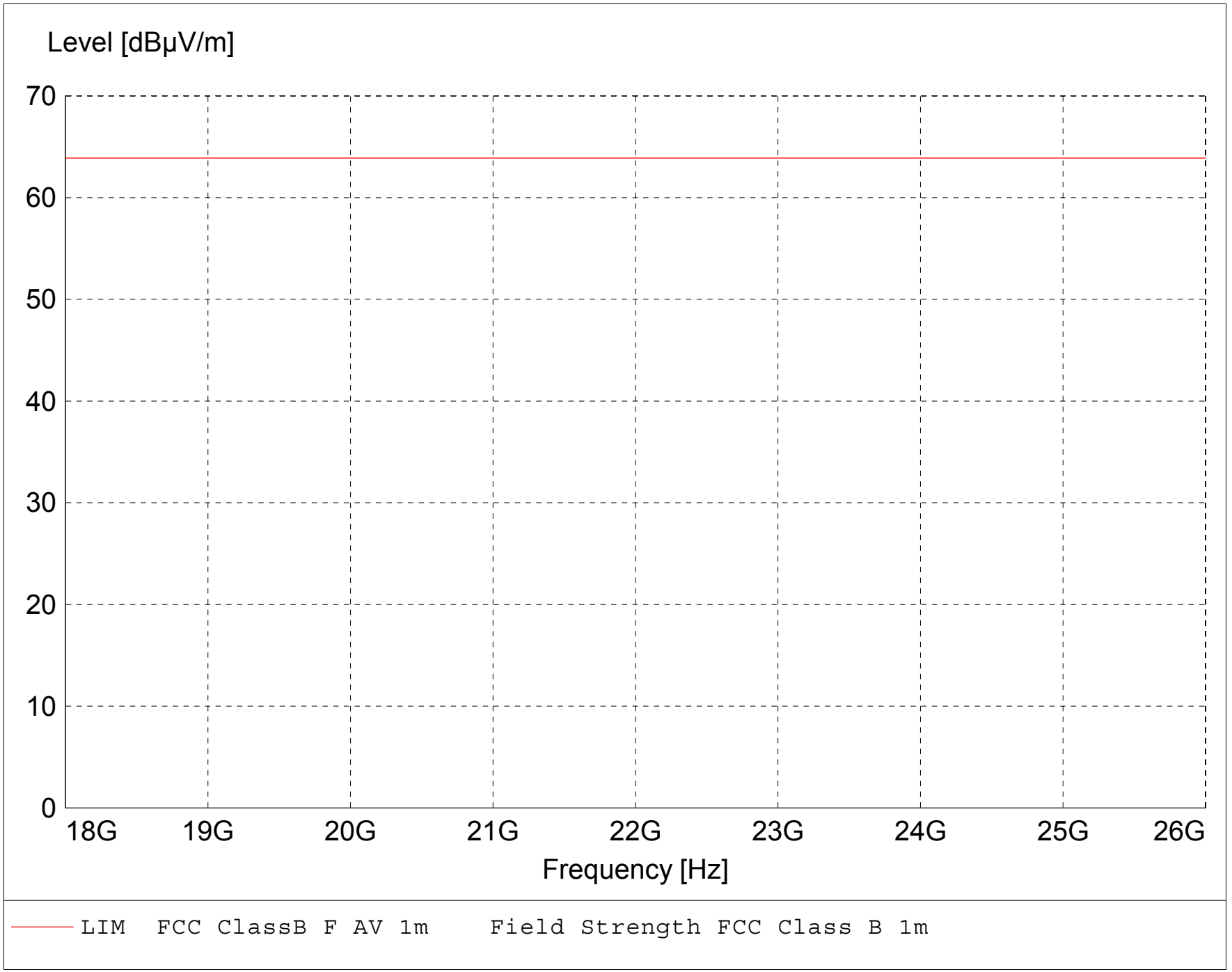
TEXT: "Site 3 35017&181 V1M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- EMC Test Systems 3116 SN: 35017

Pre-Amp ---
18 - 26 GHz -- Miteq AMF-8B-180265-40-10P SN: 438727

TEST SET-UP: EuT Measured at 1 Meter with VERTICAL Antenna Polarisation


Level [dBµV/m]
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
26G
Frequency [Hz]
LIM FCC ClassB F AV 1m Field Strength FCC Class B 1m

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 55% R.H.
Test Site: DLS OF Site 3
Operator: Jason L
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2412 MHz
Date: 6/8/05

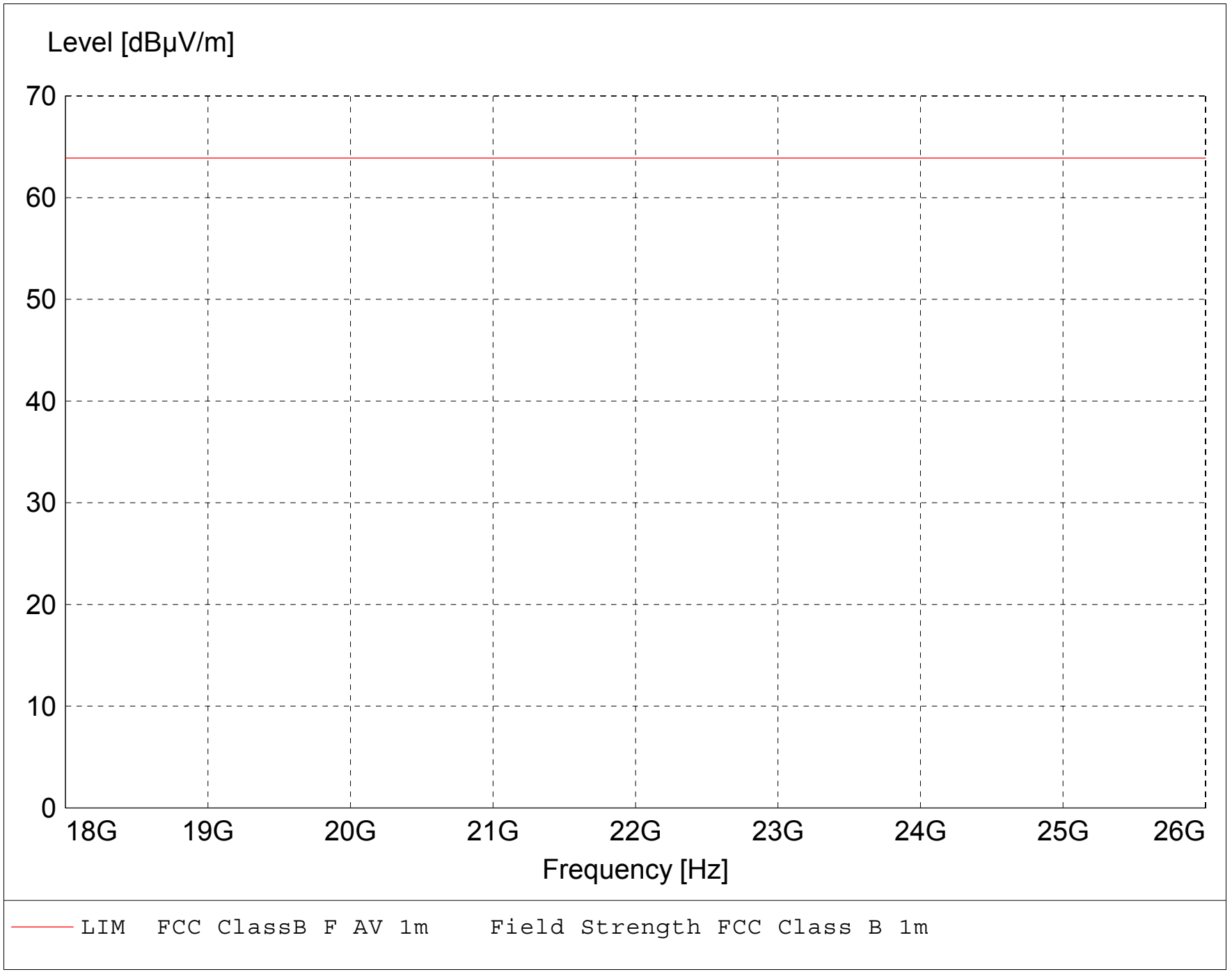
TEXT: "Site 3 35017&181 H1M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 40 SN: 837808/006

Horn Antenna --- EMC Test Systems 3116 SN: 35017

Pre-Amp ---
18 - 26 GHz -- Miteq AMF-8B-180265-40-10P SN: 438727

TEST SET-UP: EuT Measured at 1 Meter with HORIZONTAL Antenna Polarisation


Level [dBµV/m]
70
60
50
40
30
20
10
0
18G
19G
20G
21G
22G
23G
24G
25G
26G
Frequency [Hz]
LIM FCC ClassB F AV 1m Field Strength FCC Class B 1m

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2437 MHz
Date: 6/8/05

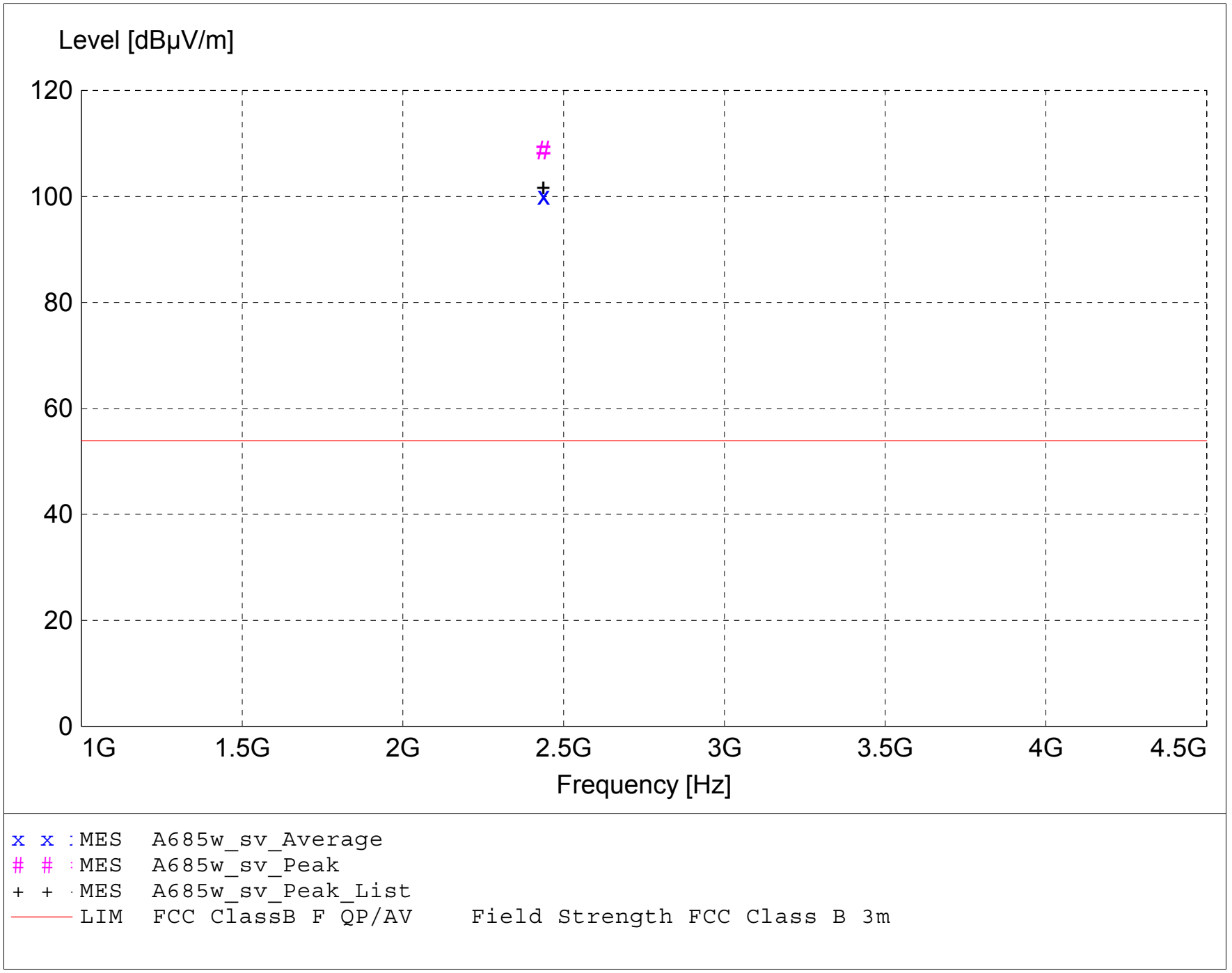
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation


Level [dBµV/m]
120
100
80
60
40
20
0
1G
1.5G
2G
2.5G
3G
3.5G
4G
4.5G
Frequency [Hz]
x x : MES A685w_sv_Average
: MES A685w_sv_Peak
+ + : MES A685w_sv_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685w_sv_Final"

6/8/2005 1:53PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2437.000000	78.47	28.32	1.8	108.6	53.9	-54.7	1.20	180	MAX PEAK	Fundamental
2437.000000	70.02	28.32	1.8	100.2	53.9	-46.3	1.20	180	AVERAGE	Fundamental

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2437 MHz
Date: 6/8/05

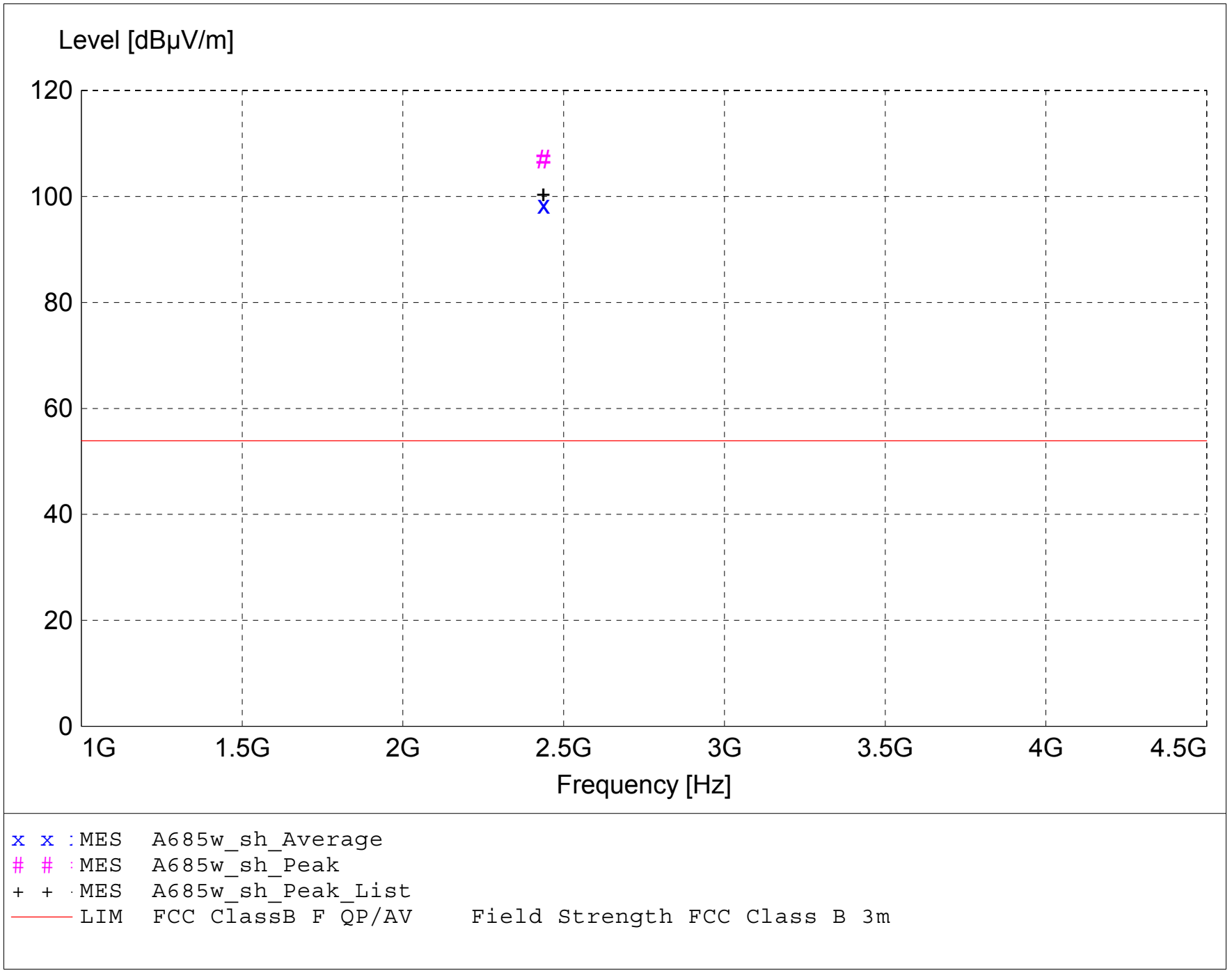
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation


Level [dBµV/m]
120
100
80
60
40
20
0
1G
1.5G
2G
2.5G
3G
3.5G
4G
4.5G
Frequency [Hz]
x x : MES A685w_sh_Average
: MES A685w_sh_Peak
+ + : MES A685w_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685w_sh_Final"

6/8/2005 1:57PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2437.000000	76.83	28.32	1.8	107.0	53.9	-53.1	1.10	225	MAX PEAK	Fundamental
2437.000000	68.24	28.32	1.8	98.4	53.9	-44.5	1.10	225	AVERAGE	Fundamental

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2437 MHz
Date: 6/8/05

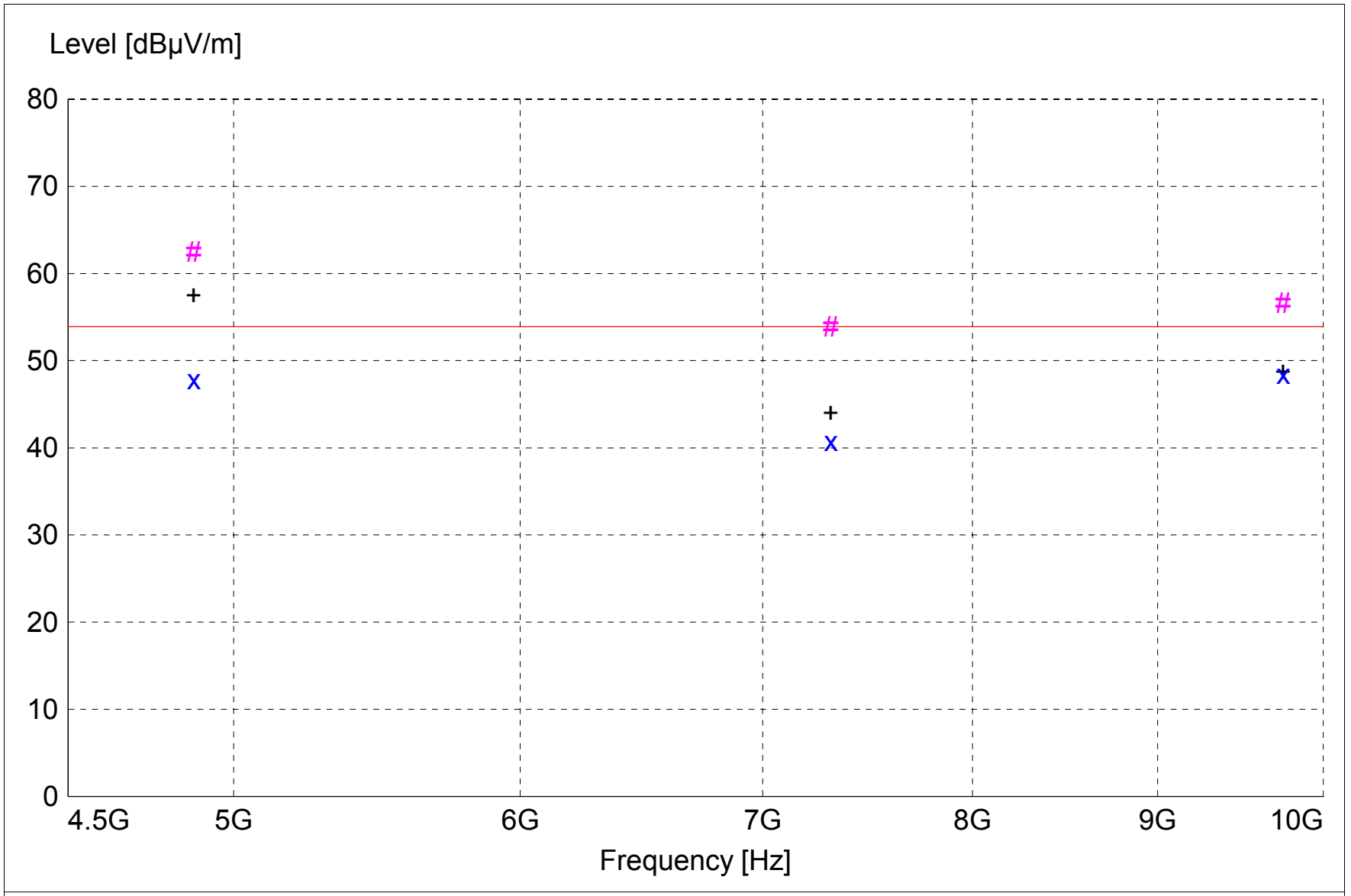
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



x x :MES A685x_sv_Average
:MES A685x_sv_Peak
+ + :MES A685x_sv_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685x_sv_Final"

6/8/2005 2:15PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4874.000000	65.85	32.87	-36.3	62.4	53.9	-8.5	1.10	240	MAX PEAK	2nd Harmonic
9748.000000	52.79	37.86	-34.1	56.5	53.9	-2.6	1.10	260	MAX PEAK	4th Harmonic
7311.000000	53.05	35.75	-35.0	53.8	53.9	0.1	1.20	225	MAX PEAK	3rd Harmonic
9748.000000	44.65	37.86	-34.1	48.4	53.9	5.5	1.10	260	AVERAGE	4th Harmonic
4874.000000	51.26	32.87	-36.3	47.8	53.9	6.1	1.10	240	AVERAGE	2nd Harmonic
7311.000000	39.97	35.75	-35.0	40.7	53.9	13.2	1.20	225	AVERAGE	3rd Harmonic

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2437 MHz
Date: 6/8/05

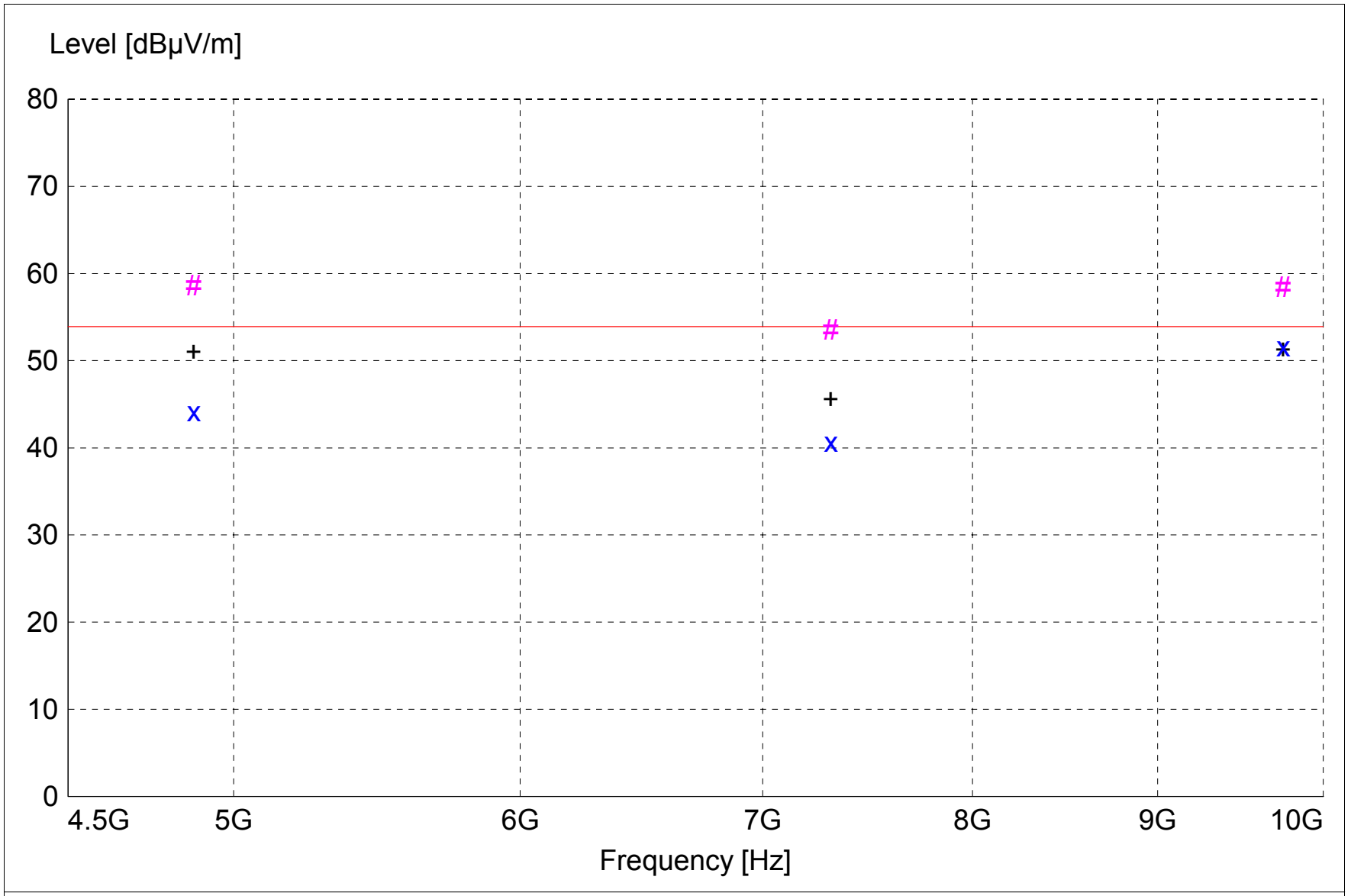
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



x x :MES A685x_sh_Average
:MES A685x_sh_Peak
+ + :MES A685x_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685x_sh_Final"

6/8/2005 2:09PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4874.000000	62.02	32.87	-36.3	58.6	53.9	-4.7	1.10	225	MAX PEAK	2nd Harmonic
9748.000000	54.67	37.86	-34.1	58.4	53.9	-4.5	1.10	225	MAX PEAK	4th Harmonic
7311.000000	52.79	35.75	-35.0	53.5	53.9	0.4	1.10	250	MAX PEAK	3rd Harmonic
9748.000000	47.81	37.86	-34.1	51.6	53.9	2.3	1.10	225	AVERAGE	4th Harmonic
4874.000000	47.56	32.87	-36.3	44.1	53.9	9.8	1.10	225	AVERAGE	2nd Harmonic
7311.000000	39.85	35.75	-35.0	40.6	53.9	13.3	1.10	250	AVERAGE	3rd Harmonic

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2462 MHz
Date: 6/8/05

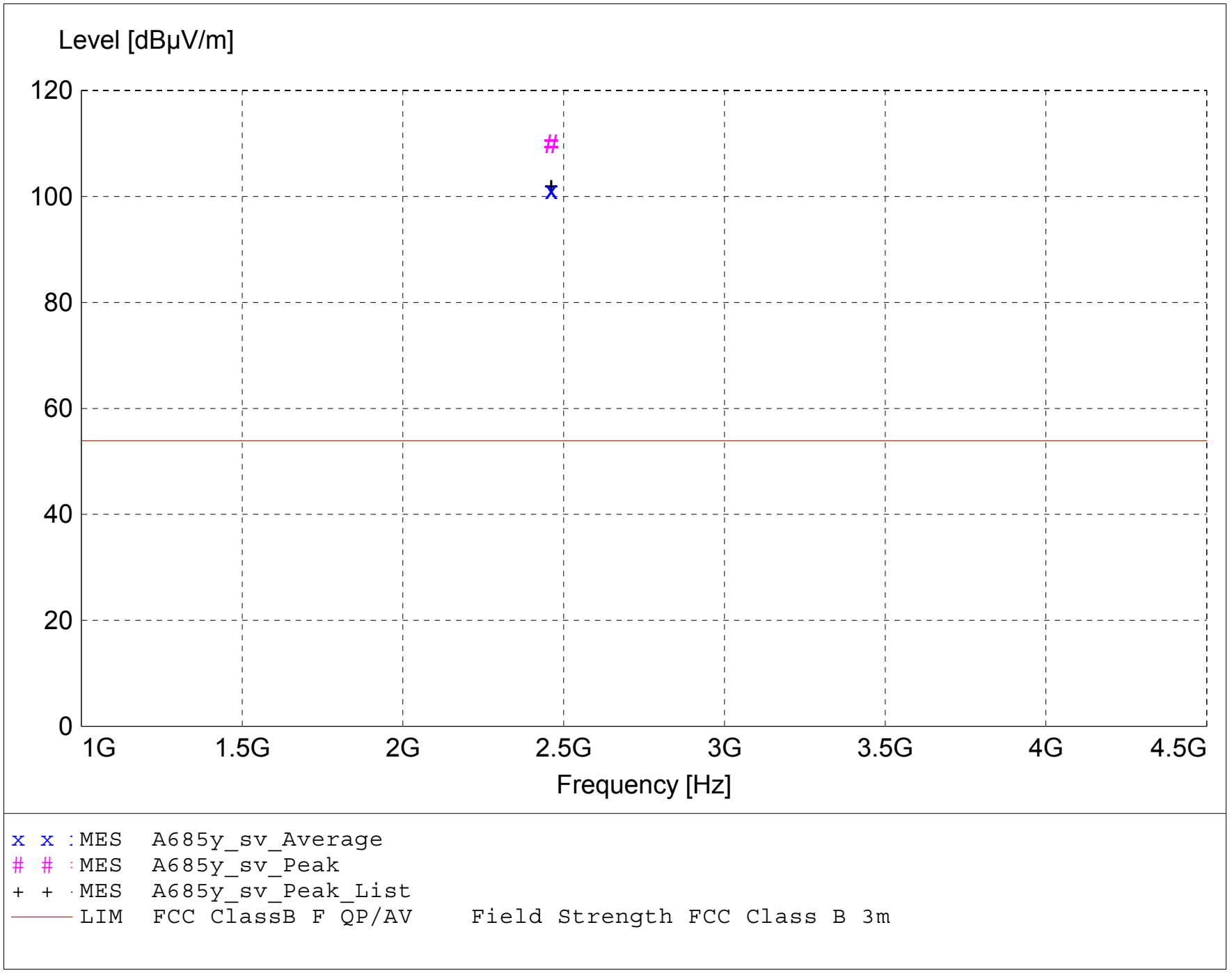
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation


Level [dBµV/m]
120
100
80
60
40
20
0
1G
1.5G
2G
2.5G
3G
3.5G
4G
4.5G
Frequency [Hz]
x x : MES A685y_sv_Average
: MES A685y_sv_Peak
+ + : MES A685y_sv_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685y_sv_Final"

6/8/2005 2:25PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2462.000000	79.62	28.37	1.8	109.8	53.9	-55.9	1.20	250	MAX PEAK	Fundamental
2462.000000	71.03	28.37	1.8	101.2	53.9	-47.3	1.20	250	AVERAGE	Fundamental

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2462 MHz
Date: 6/8/05

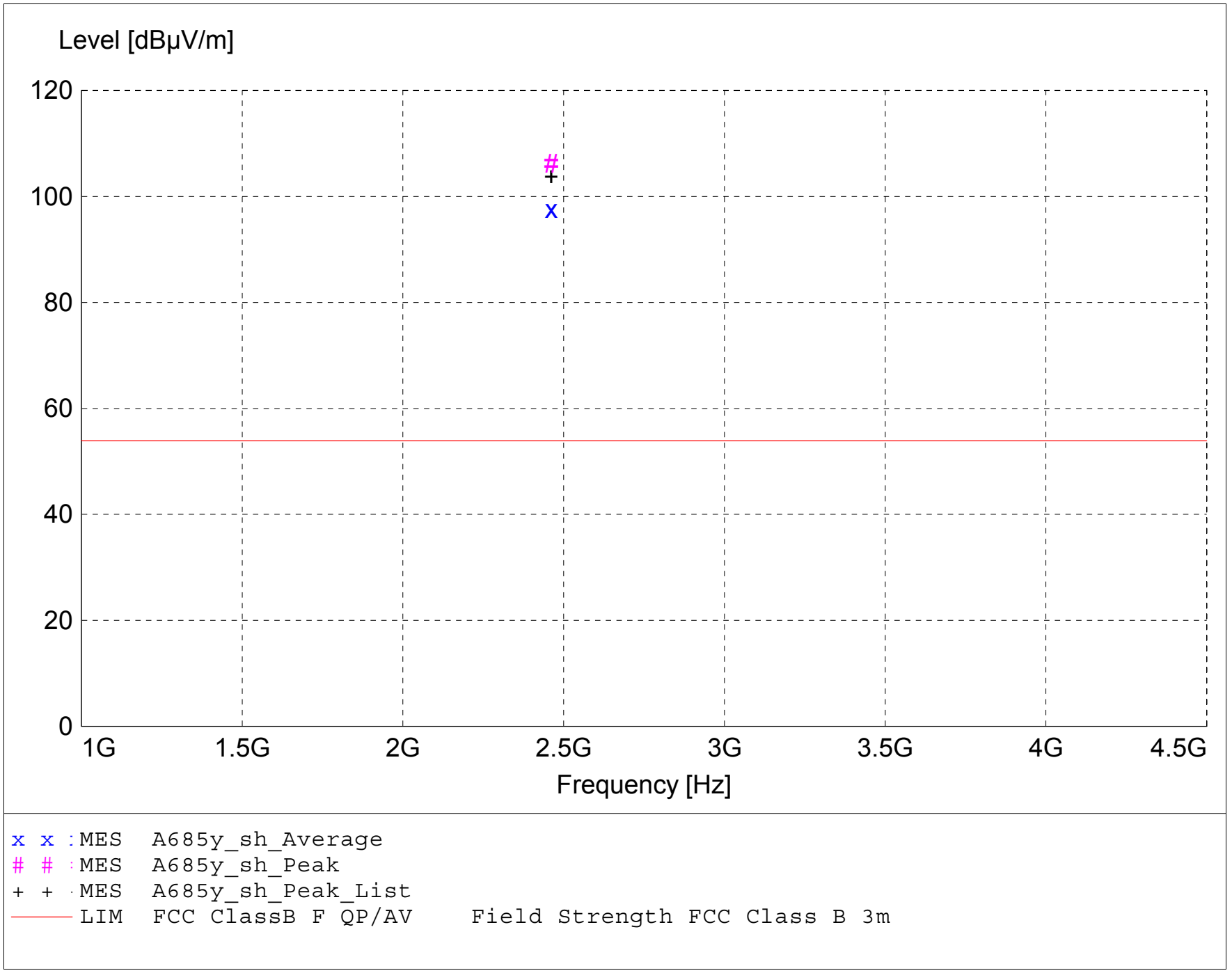
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation


Level [dBµV/m]
120
100
80
60
40
20
0
1G
1.5G
2G
2.5G
3G
3.5G
4G
4.5G
Frequency [Hz]
x x : MES A685y_sh_Average
: MES A685y_sh_Peak
+ + : MES A685y_sh_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685y_sh_Final"

6/8/2005 2:28PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2462.000000	75.97	28.37	1.8	106.2	53.9	-52.3	1.20	250	MAX PEAK	Fundamental
2462.000000	67.42	28.37	1.8	97.6	53.9	-43.7	1.20	250	AVERAGE	Fundamental

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2462 MHz
Date: 6/8/05

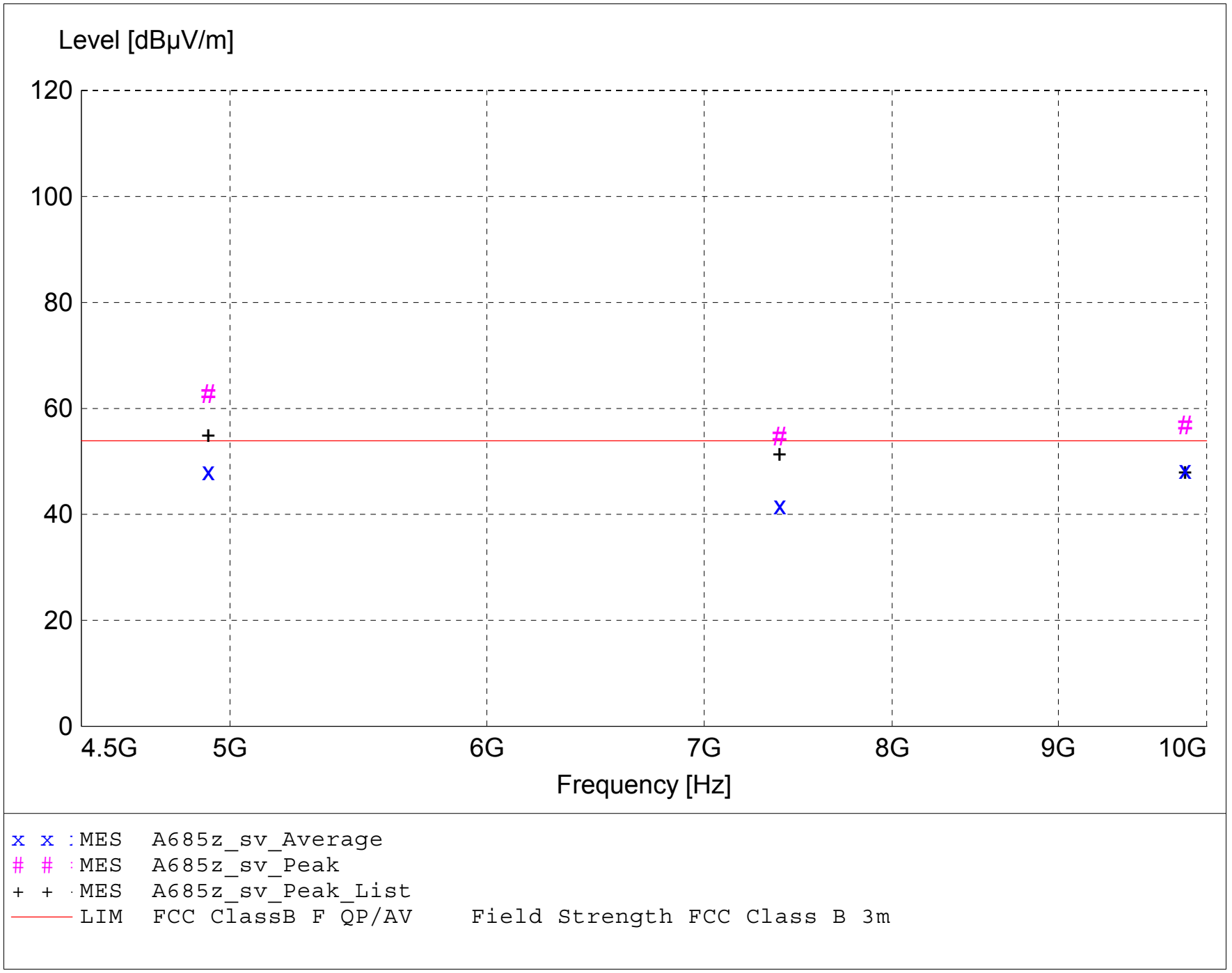
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



x x : MES A685z_sv_Average
: MES A685z_sv_Peak
+ + : MES A685z_sv_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685z_sv_Final"

6/8/2005 2:42PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4924.000000	65.98	32.98	-36.3	62.6	53.9	-8.7	1.10	270	MAX PEAK	2nd Harmonic
9848.000000	52.65	37.95	-33.8	56.8	53.9	-2.9	1.10	270	MAX PEAK	4th Harmonic
7386.000000	53.71	35.92	-35.0	54.7	53.9	-0.8	1.10	230	MAX PEAK	3rd Harmonic
9848.000000	44.15	37.95	-33.8	48.3	53.9	5.6	1.10	270	AVERAGE	4th Harmonic
4924.000000	51.45	32.98	-36.3	48.1	53.9	5.8	1.10	270	AVERAGE	2nd Harmonic
7386.000000	40.69	35.92	-35.0	41.6	53.9	12.3	1.10	230	AVERAGE	3rd Harmonic

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 75 deg F; 53% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Transmitter Frequency - 2462 MHz
Date: 6/8/05

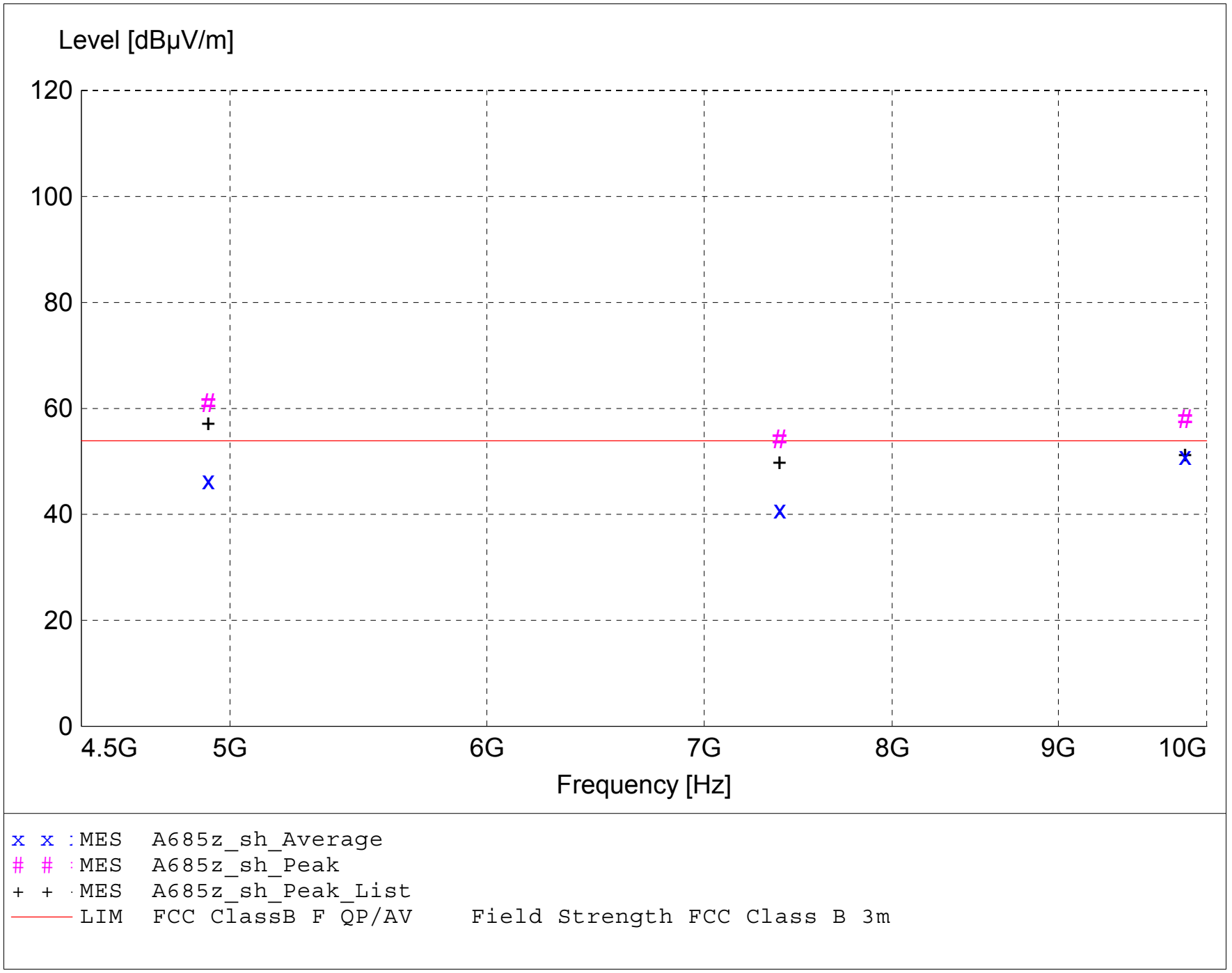
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



x x : MES A685z_sh_Average
: MES A685z_sh_Peak
+ + : MES A685z_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A685z_sh_Final"

6/8/2005 2:36PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
4924.000000	64.29	32.98	-36.3	61.0	53.9	-7.1	1.20	225	MAX PEAK	2nd Harmonic
9848.000000	53.71	37.95	-33.8	57.9	53.9	-4.0	1.10	225	MAX PEAK	4th Harmonic
7386.000000	53.18	35.92	-35.0	54.1	53.9	-0.2	1.10	240	MAX PEAK	3rd Harmonic
9848.000000	46.76	37.95	-33.8	50.9	53.9	3.0	1.10	225	AVERAGE	4th Harmonic
4924.000000	49.66	32.98	-36.3	46.3	53.9	7.6	1.20	225	AVERAGE	2nd Harmonic
7386.000000	39.94	35.92	-35.0	40.9	53.9	13.0	1.10	240	AVERAGE	3rd Harmonic

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

RADIATED DATA AND GRAPH(S) TAKEN FOR

FIELD STRENGTH

SPURIOUS EMISSION MEASUREMENTS

RECEIVE MODE

PART 15.109

FCC Part 15 Class B

Electric Field Strength

```
EUT:                  M1000CR
Manufacturer:         ROKU
Operating Condition:  68 deg. F; 47% R.H.
Test Site:            DLS OF Site 3
Operator:             Craig Brandt
Test Specification:   120 V   60 Hz
Comment:
                      Date: 05-11-2005
```

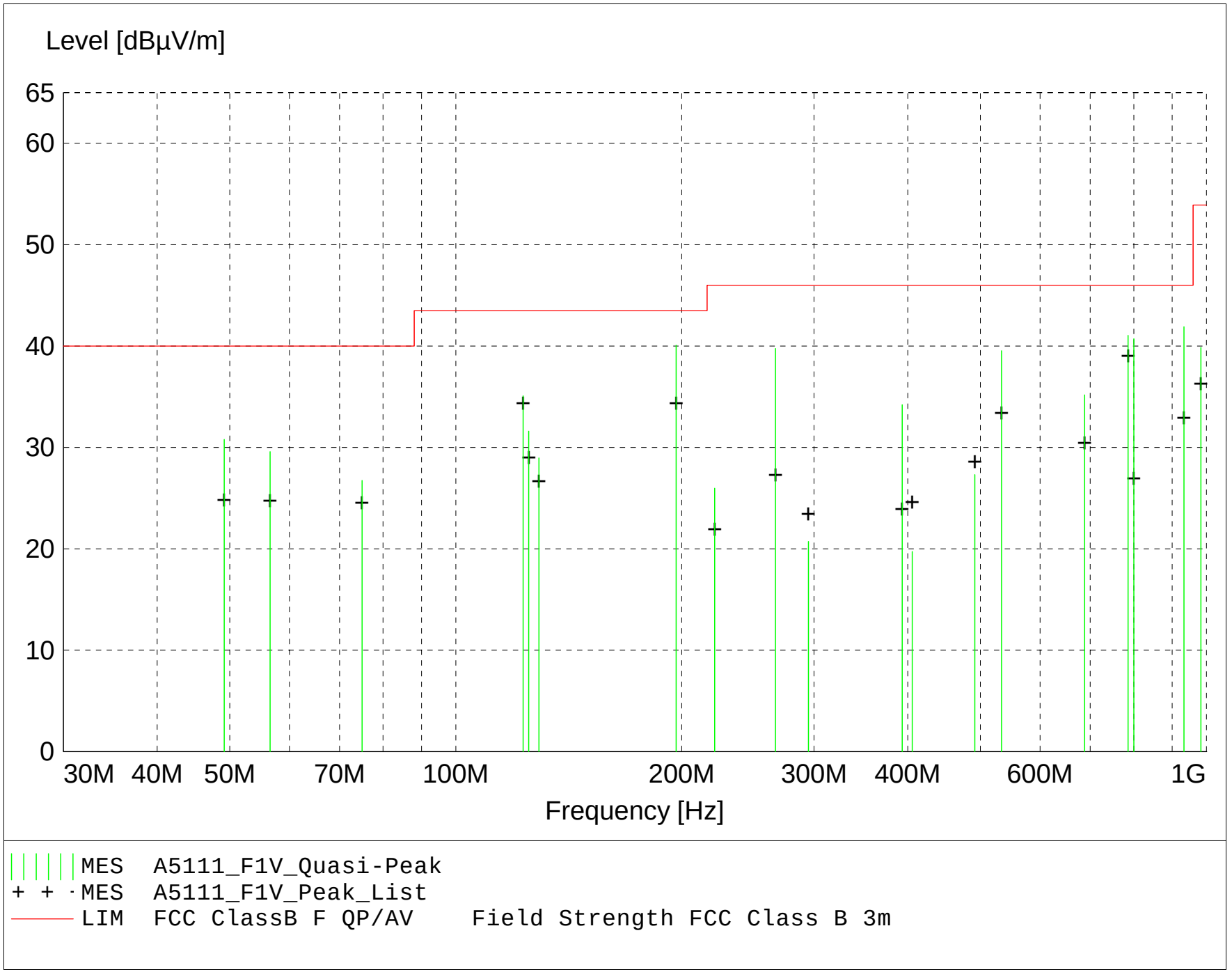
TEXT: "Site 3 MidV 3M"

```
  Short Description:            Test Set-up Vert30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

                Antennas ---
                Biconical    -- EMCO 3104C SN: 9701-4785
                Log Periodic -- EMCO 3146  SN: 9702-4895

                Pre-Amp  --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP:    EuT Measured at 3 Meters with VERTICAL Antenna Polarisation
```


Level [dBµV/m]
65
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A5111_F1V_Quasi-Peak
MES A5111_F1V_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A5111_F1V_Final"

5/12/2005 11:34AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
196.600000	45.61	17.16	-22.7	40.1	43.5	3.4	1.00	315	QUASI-PEAK	None
933.250000	37.22	22.81	-18.2	41.9	46.0	4.1	1.10	180	QUASI-PEAK	None
786.380000	38.79	21.24	-19.0	41.0	46.0	5.0	1.10	315	QUASI-PEAK	None
799.940000	38.50	21.42	-19.2	40.7	46.0	5.3	1.00	315	QUASI-PEAK	None
266.640000	48.88	13.02	-22.1	39.8	46.0	6.2	1.00	45	QUASI-PEAK	None
533.290000	42.50	17.86	-20.8	39.5	46.0	6.5	1.00	45	QUASI-PEAK	None
122.865000	45.29	13.10	-23.3	35.1	43.5	8.4	1.00	135	QUASI-PEAK	None
49.140000	43.45	11.59	-24.3	30.8	40.0	9.2	1.00	270	QUASI-PEAK	None
56.535000	43.23	10.54	-24.2	29.6	40.0	10.4	1.00	225	QUASI-PEAK	None
688.080000	33.40	21.16	-19.4	35.2	46.0	10.8	1.30	135	QUASI-PEAK	None
393.180000	40.14	15.51	-21.4	34.2	46.0	11.8	1.10	180	QUASI-PEAK	None
125.000000	42.18	12.72	-23.3	31.6	43.5	11.9	1.00	315	QUASI-PEAK	None
74.980000	44.29	6.42	-24.0	26.7	40.0	13.3	1.00	225	QUASI-PEAK	None
982.980000	33.64	23.81	-17.6	39.9	53.9	14.0	1.10	135	QUASI-PEAK	None
129.020000	39.65	12.58	-23.3	29.0	43.5	14.5	1.00	225	QUASI-PEAK	None
491.490000	30.94	17.24	-20.9	27.3	46.0	18.7	1.10	180	QUASI-PEAK	None
221.190000	37.19	11.28	-22.5	26.0	46.0	20.0	1.00	45	QUASI-PEAK	None
294.890000	28.27	14.42	-22.0	20.7	46.0	25.3	1.00	45	QUASI-PEAK	None
405.510000	25.36	15.74	-21.4	19.7	46.0	26.3	1.00	0	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

```
EUT:                  M1000CR
Manufacturer:         ROKU
Operating Condition: 68 deg. F; 47% R.H.
Test Site:            DLS OF Site 3
Operator:             Craig Brandt
Test Specification:   120 V   60 Hz
Comment:
                      Date: 05-11-2005
```

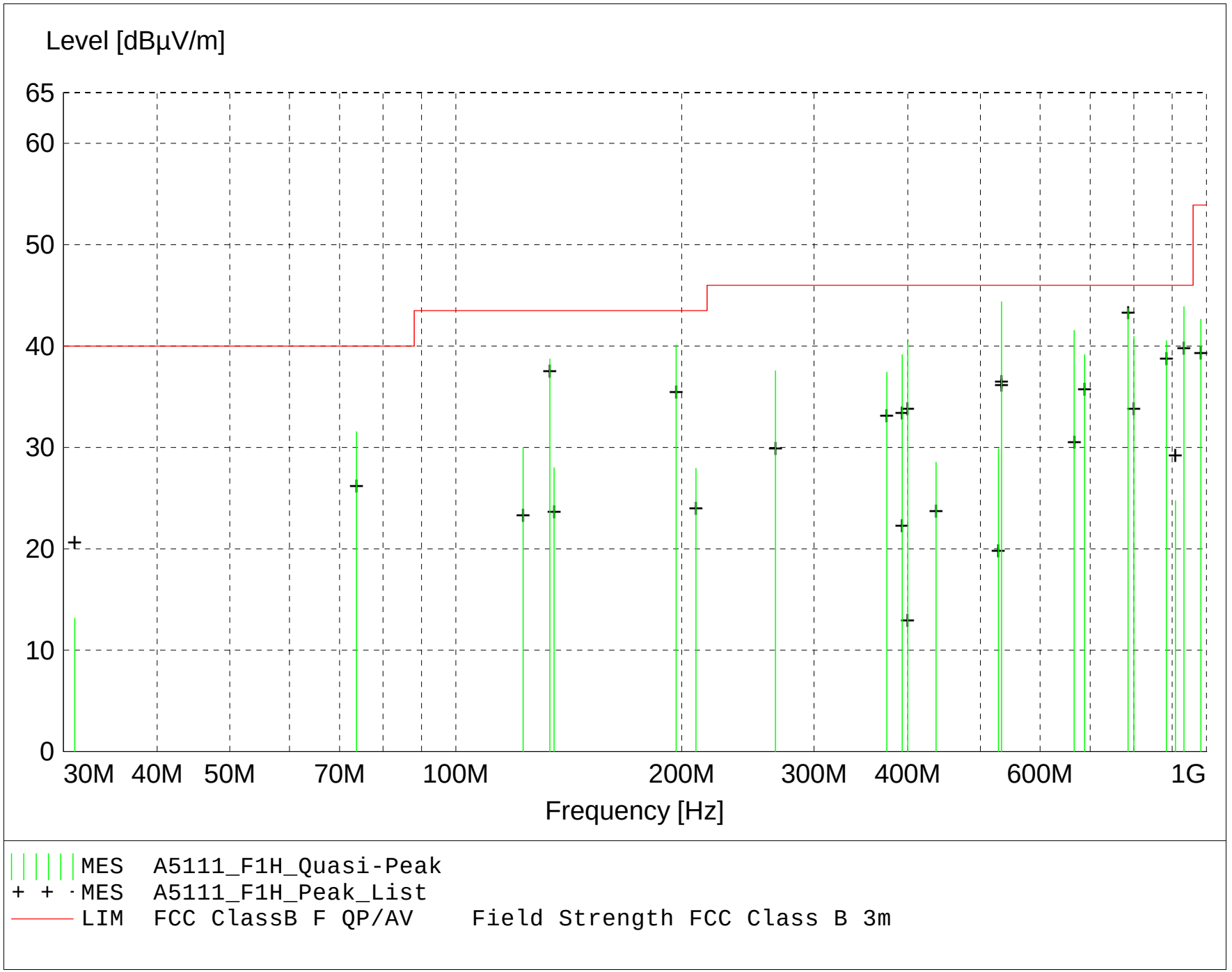
TEXT: "Site 3 MidH 3M"

```
  Short Description:            Test Set-up Horz30-1000MHz
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

                Antennas ---
                Biconical    -- EMCO 3104C SN: 9701-4785
                Log Periodic -- EMCO 3146  SN: 9702-4895

                Pre-Amp  --- Rohde&Schwarz TS-PR10 SN: 032001/005

TEST SET-UP:    EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation
```


Level [dBµV/m]
65
60
50
40
30
20
10
0
30M
40M
50M
70M
100M
200M
300M
400M
600M
1G
Frequency [Hz]
MES A5111_F1H_Quasi-Peak
MES A5111_F1H_Peak_List
LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A5111_F1H_Final"

5/12/2005 11:28AM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
533.280000	47.32	17.86	-20.8	44.4	46.0	1.6	1.00	270	QUASI-PEAK	None
933.270000	39.29	22.81	-18.2	43.9	46.0	2.1	1.00	135	QUASI-PEAK	None
786.380000	41.46	21.24	-19.0	43.7	46.0	2.3	1.10	225	QUASI-PEAK	None
196.600000	45.61	17.16	-22.7	40.1	43.5	3.4	2.00	135	QUASI-PEAK	None
666.600000	40.50	20.81	-19.8	41.5	46.0	4.5	1.50	180	QUASI-PEAK	None
133.340000	49.68	12.31	-23.3	38.7	43.5	4.8	1.00	200	QUASI-PEAK	None
799.920000	38.75	21.42	-19.2	40.9	46.0	5.1	1.00	225	QUASI-PEAK	None
884.680000	36.55	22.61	-18.7	40.5	46.0	5.5	1.00	225	QUASI-PEAK	None
399.960000	46.10	15.66	-21.4	40.4	46.0	5.6	1.00	200	QUASI-PEAK	None
393.190000	45.10	15.51	-21.4	39.2	46.0	6.8	1.00	135	QUASI-PEAK	None
688.090000	37.37	21.16	-19.4	39.2	46.0	6.8	1.20	135	QUASI-PEAK	None
266.640000	46.68	13.02	-22.1	37.6	46.0	8.4	1.00	180	QUASI-PEAK	None
73.710000	48.91	6.62	-24.0	31.6	40.0	8.4	3.00	180	QUASI-PEAK	None
375.010000	43.87	15.13	-21.6	37.4	46.0	8.6	1.00	225	QUASI-PEAK	None
982.980000	36.43	23.81	-17.6	42.6	53.9	11.3	2.00	135	QUASI-PEAK	None
122.865000	40.18	13.10	-23.3	30.0	43.5	13.5	3.00	315	QUASI-PEAK	None
135.155000	38.86	12.39	-23.3	28.0	43.5	15.5	2.20	0	QUASI-PEAK	None
208.880000	38.89	11.61	-22.6	27.9	43.5	15.6	2.00	135	QUASI-PEAK	None
528.350000	32.70	17.97	-20.8	29.9	46.0	16.1	1.00	180	QUASI-PEAK	None
436.200000	33.57	16.20	-21.2	28.5	46.0	17.5	3.00	90	QUASI-PEAK	None
909.250000	20.54	22.61	-18.4	24.7	46.0	21.3	1.00	0	QUASI-PEAK	None
31.050000	25.97	11.82	-24.6	13.2	40.0	26.8	3.00	270	QUASI-PEAK	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 73 deg F; 52% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Receive Mode - 2412 MHz
Date: 6/8/05

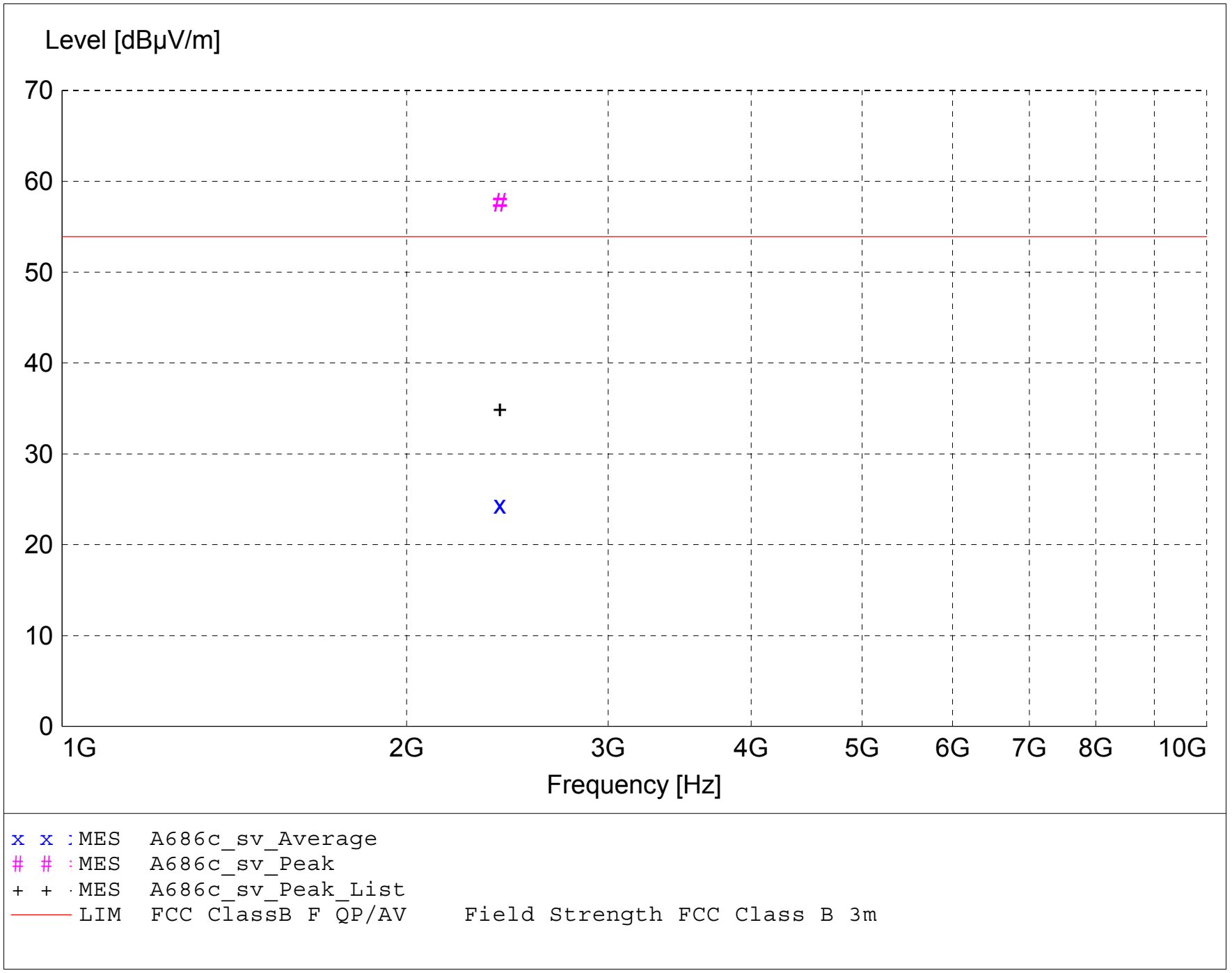
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



x x :MES A686c_sv_Average
:MES A686c_sv_Peak
+ + :MES A686c_sv_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A686c_sv_Final"

6/8/2005 3:19PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2412.100000	69.10	28.27	-39.7	57.6	53.9	-3.7	1.00	180	MAX PEAK	None
2412.100000	35.87	28.27	-39.7	24.4	53.9	29.5	1.00	180	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 73 deg F; 52% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Receive Mode - 2412 MHz
Date: 6/8/05

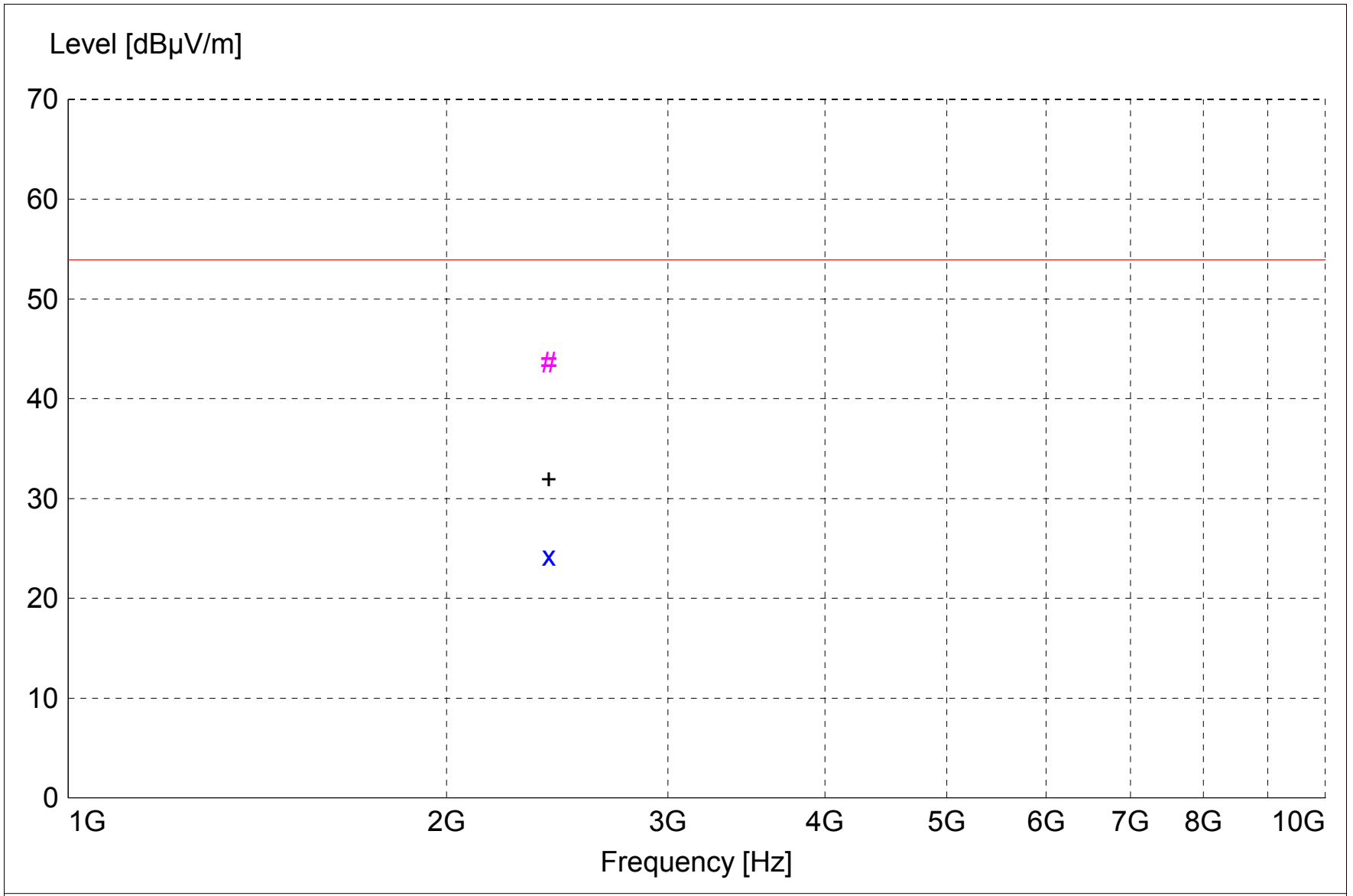
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



x x :MES A686c_sh_Average
:MES A686c_sh_Peak
+ + :MES A686c_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A686c_sh_Final"

6/8/2005 3:23PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2412.000000	55.08	28.27	-39.7	43.6	53.9	10.3	1.00	180	MAX PEAK	None
2412.000000	35.66	28.27	-39.7	24.2	53.9	29.7	1.00	180	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 73 deg F; 52% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Receive Mode - 2437 MHz
Date: 6/8/05

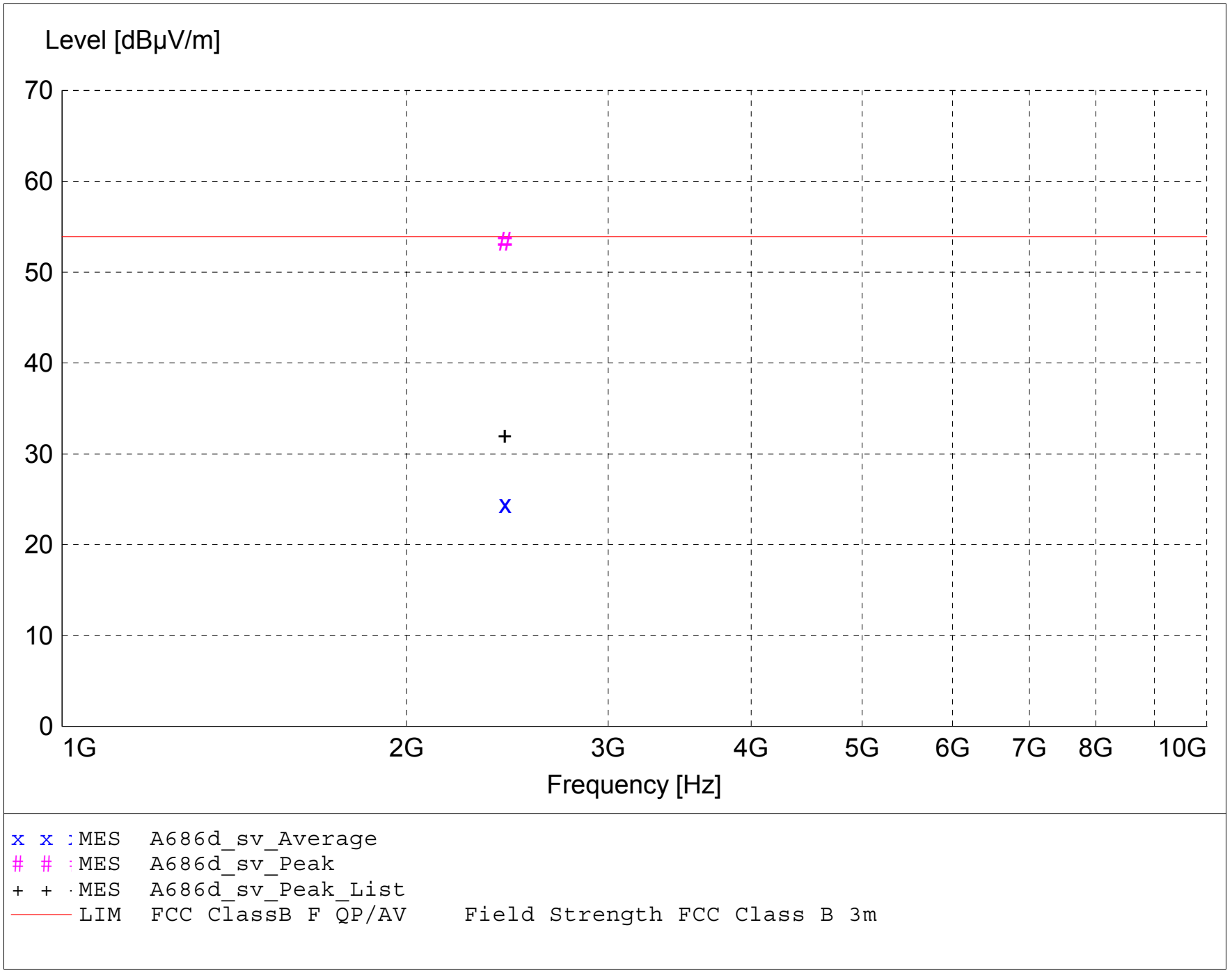
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



x x :MES A686d_sv_Average
:MES A686d_sv_Peak
+ + :MES A686d_sv_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A686d_sv_Final"

6/8/2005 3:35PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2437.000000	64.69	28.32	-39.7	53.3	53.9	0.6	1.00	180	MAX PEAK	None
2437.000000	35.76	28.32	-39.7	24.4	53.9	29.5	1.00	180	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 73 deg F; 52% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Receive Mode - 2437 MHz
Date: 6/8/05

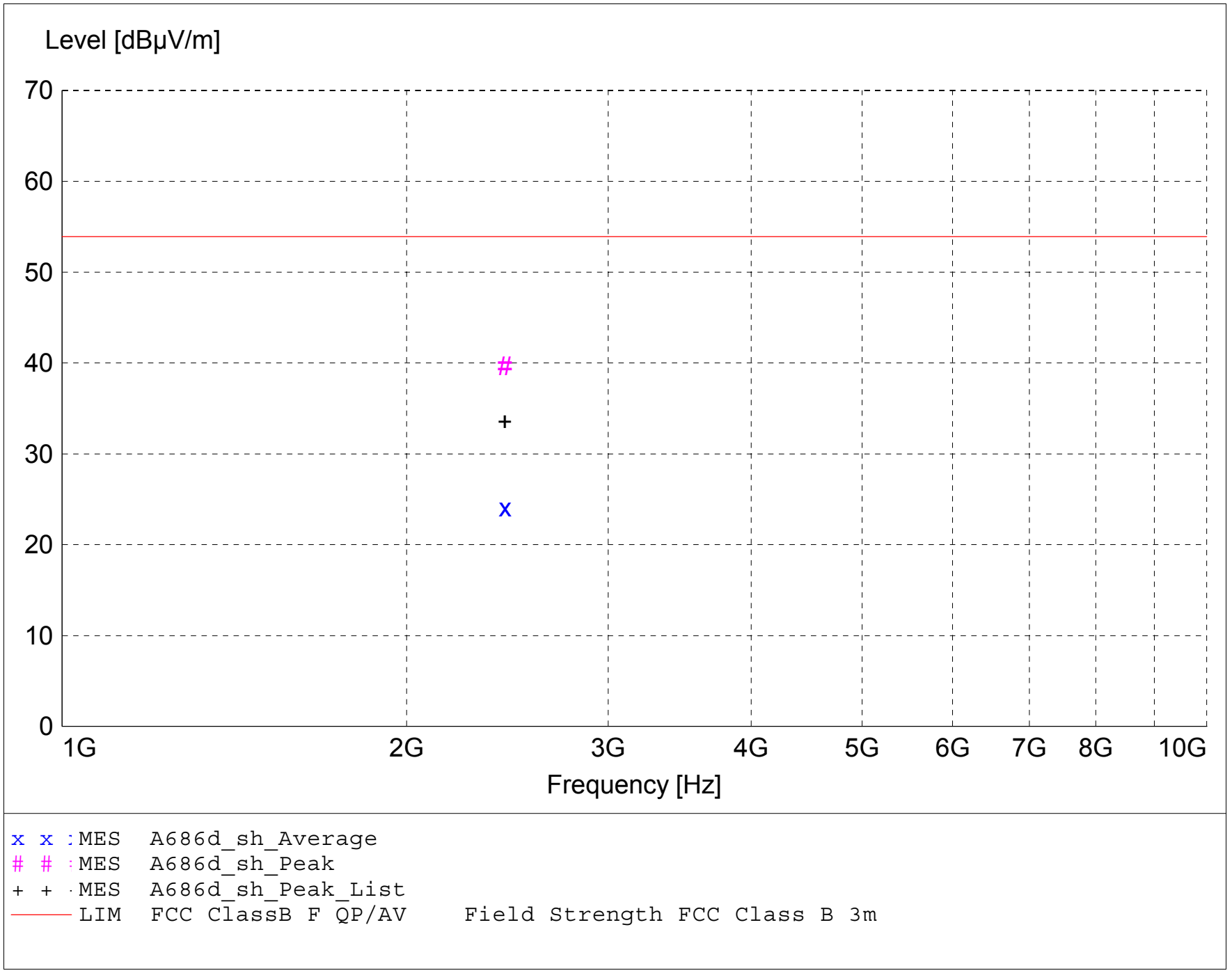
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



x x :MES A686d_sh_Average
:MES A686d_sh_Peak
+ + :MES A686d_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A686d_sh_Final"

6/8/2005 3:30PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2437.000000	50.96	28.32	-39.7	39.6	53.9	14.3	1.00	180	MAX PEAK	None
2437.000000	35.46	28.32	-39.7	24.1	53.9	29.8	1.00	180	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 73 deg F; 52% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Receive Mode - 2462 MHz
Date: 6/8/05

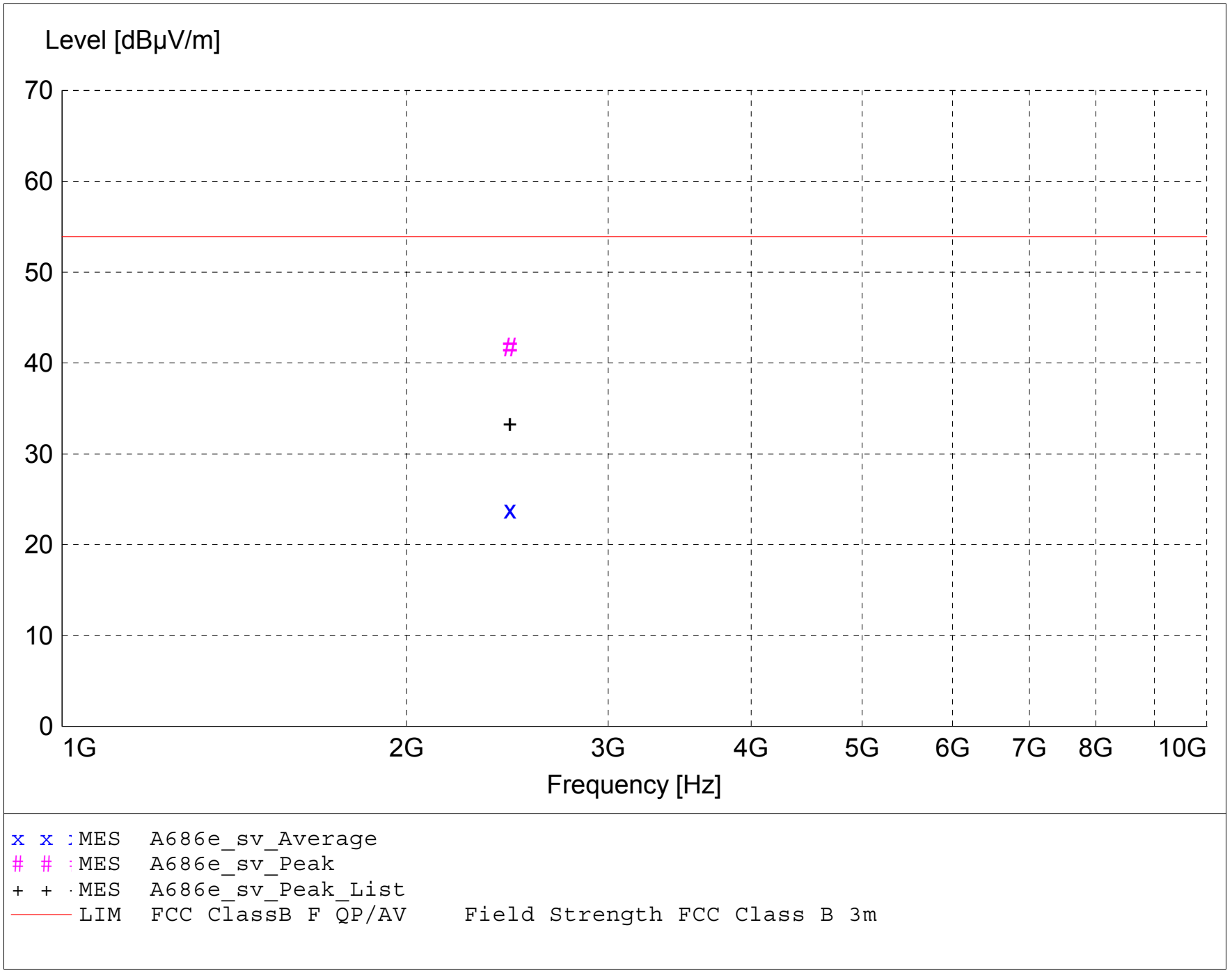
TEXT: "Site 3 5731&184 V3M"

Short Description: Test Set-up Vert1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with VERTICAL Antenna Polarisation



x x :MES A686e_sv_Average
:MES A686e_sv_Peak
+ + :MES A686e_sv_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A686e_sv_Final"

6/8/2005 3:41PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2462.000000	52.92	28.37	-39.6	41.7	53.9	12.2	1.00	180	MAX PEAK	None
2462.000000	35.04	28.37	-39.6	23.8	53.9	30.1	1.00	180	AVERAGE	None

FCC Part 15 Class B

Electric Field Strength

EUT: Sound Bridge M1000
Manufacturer: Roku Labs
Operating Condition: 73 deg F; 52% R.H.
Test Site: D.L.S. O.F. Site 3
Operator: Jason L.
Test Specification: 120 V; 60 Hz
Comment: Receive Mode - 2462 MHz
Date: 6/8/05

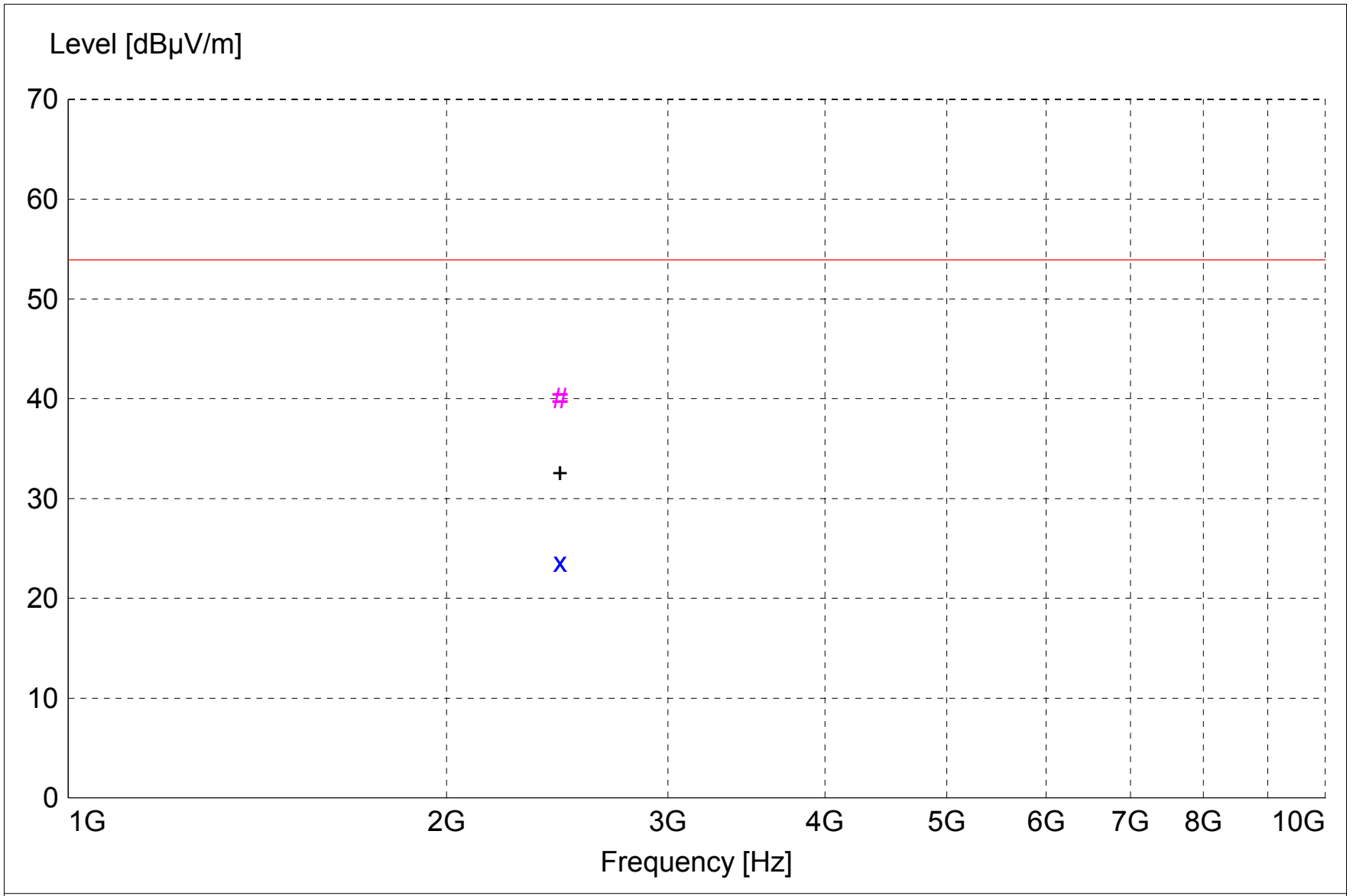
TEXT: "Site 3 5731&184 H3M"

Short Description: Test Set-up Horz1GHz-
TEST EQUIPMENT: Receiver --- Rohde&Schwarz ESI 26 SN: 837491/010

Horn Antenna --- EMCO 3115 SN: 9903-5731

Pre-Amps ---
1 - 10 GHz -- Miteq AMF-6D-010100-50 SN: 682425
10 - 18 GHz -- Miteq AMF-6F-100200-50-10P SN: 668382

TEST SET-UP: EuT Measured at 3 Meters with HORIZONTAL Antenna Polarisation



x x :MES A686e_sh_Average
:MES A686e_sh_Peak
+ + :MES A686e_sh_Peak_List
——— LIM FCC ClassB F QP/AV Field Strength FCC Class B 3m

MEASUREMENT RESULT: "A686e_sh_Final"

6/8/2005 3:44PM

Frequency	Level	Antenna Factor	System Loss	Total Level	Limit	Margin	Height Ant.	EuT Angle	Final Detector	Comment
MHz	dBµV	dBµV/m	dB	dBµV/m	dBµV/m	dB	m	deg		
2462.000000	51.22	28.37	-39.6	40.0	53.9	13.9	1.00	180	MAX PEAK	None
2462.000000	34.87	28.37	-39.6	23.6	53.9	30.3	1.00	180	AVERAGE	None

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

6 dB BANDWIDTH GRAPHS

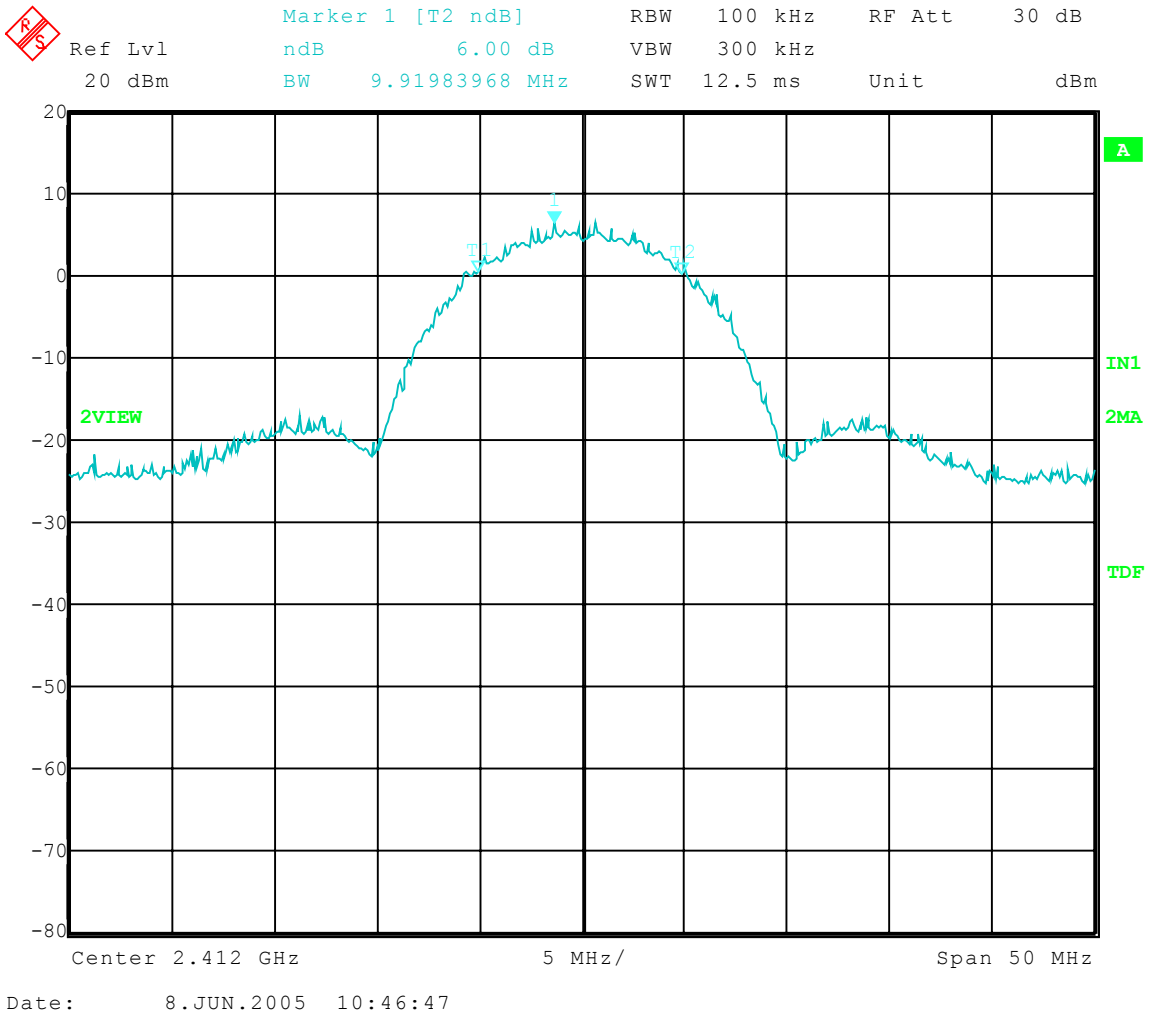
PART 15.247

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: 6 dB Bandwidth - Conducted
Operator: Jason L.
Comment: Low Channel: Frequency – 2.412 GHz

6 dB Bandwidth = 9.92 MHz

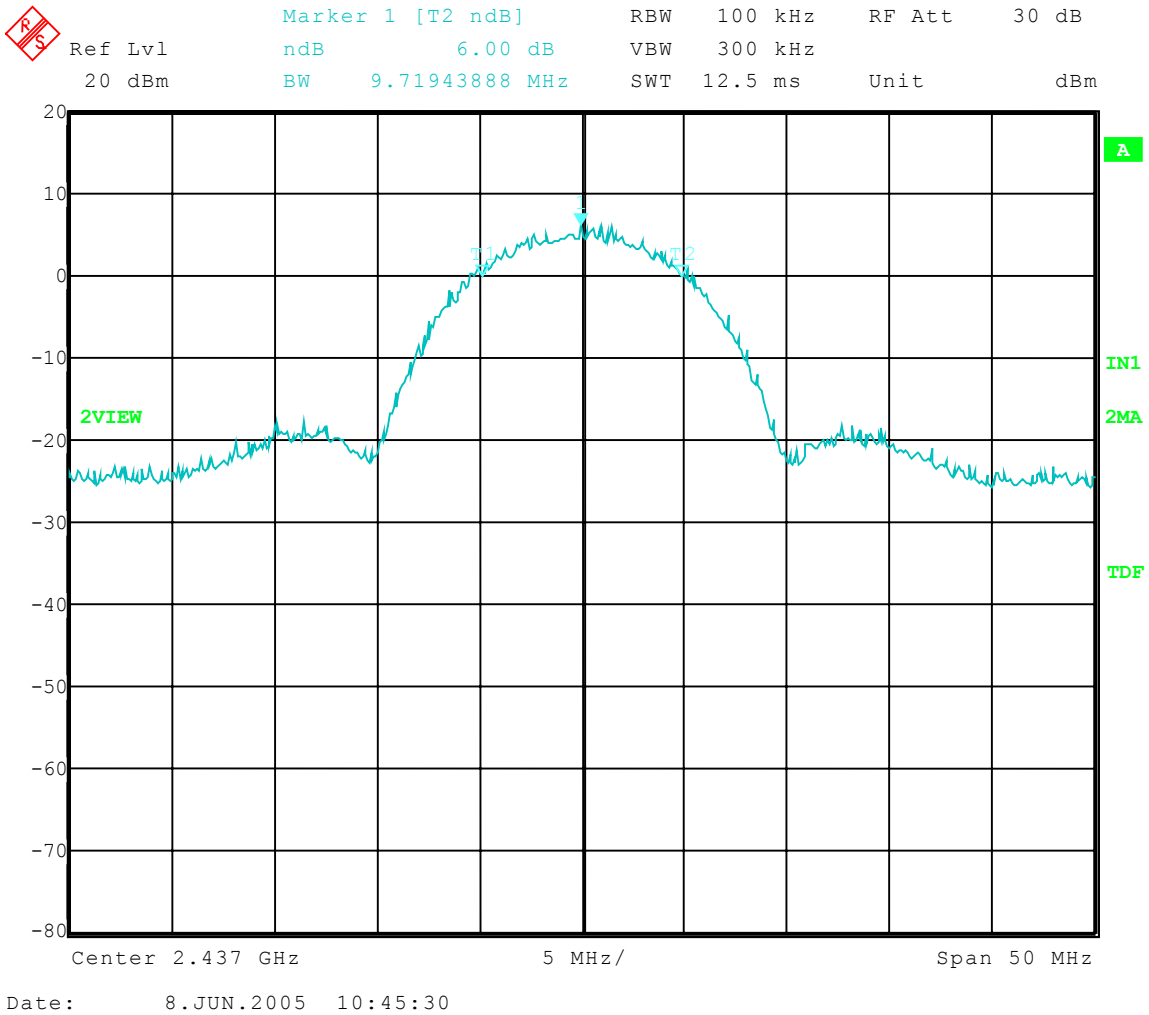


1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: 6 dB Bandwidth - Conducted
Operator: Jason L.
Comment: Middle Channel: Frequency – 2.437 GHz

6 dB Bandwidth = 9.72 MHz

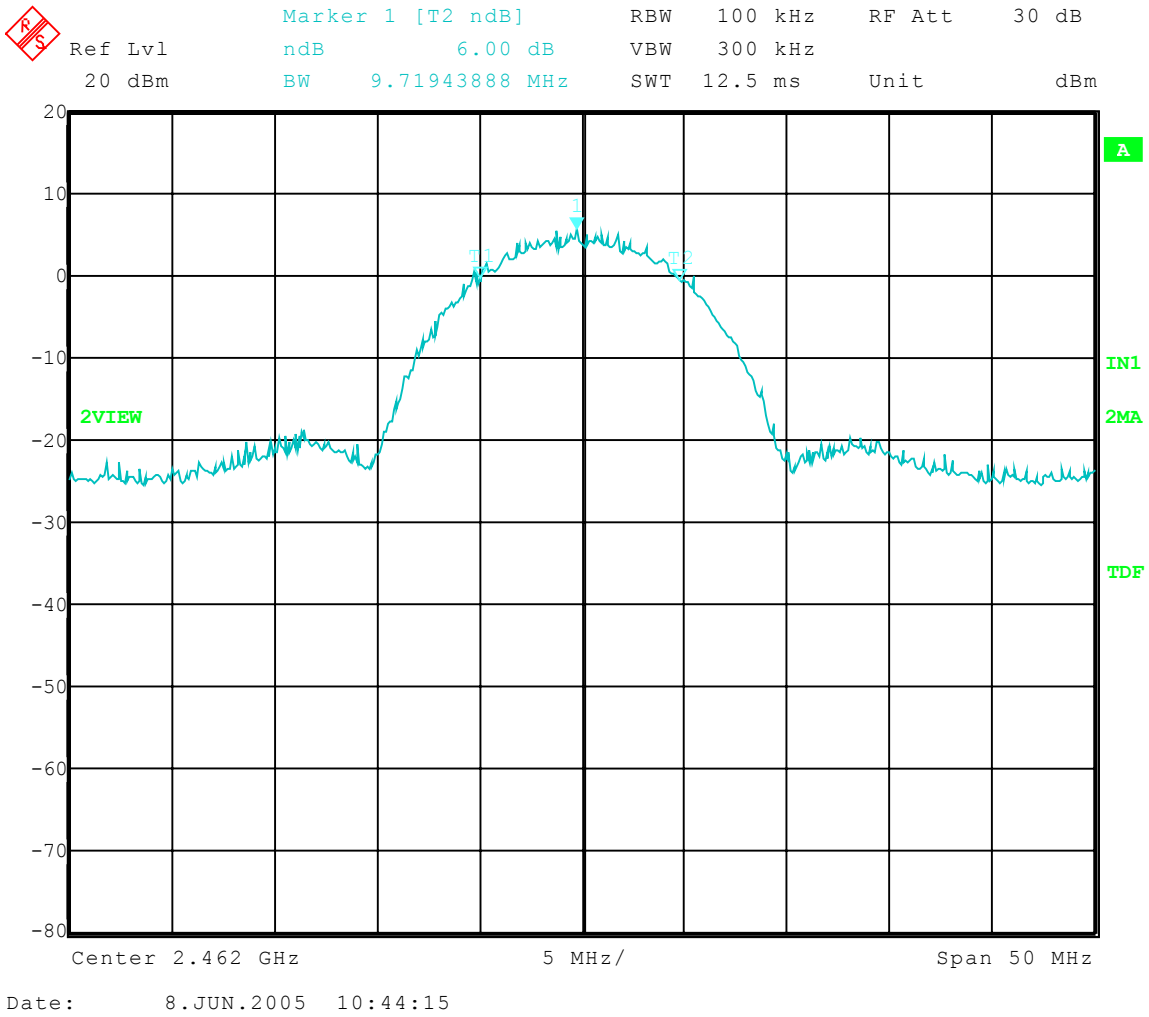


1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: 6 dB Bandwidth - Conducted
Operator: Jason L.
Comment: High Channel: Frequency – 2.462 GHz

6 dB Bandwidth = 9.72 MHz



1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

CONDUCTED PEAK OUTPUT POWER

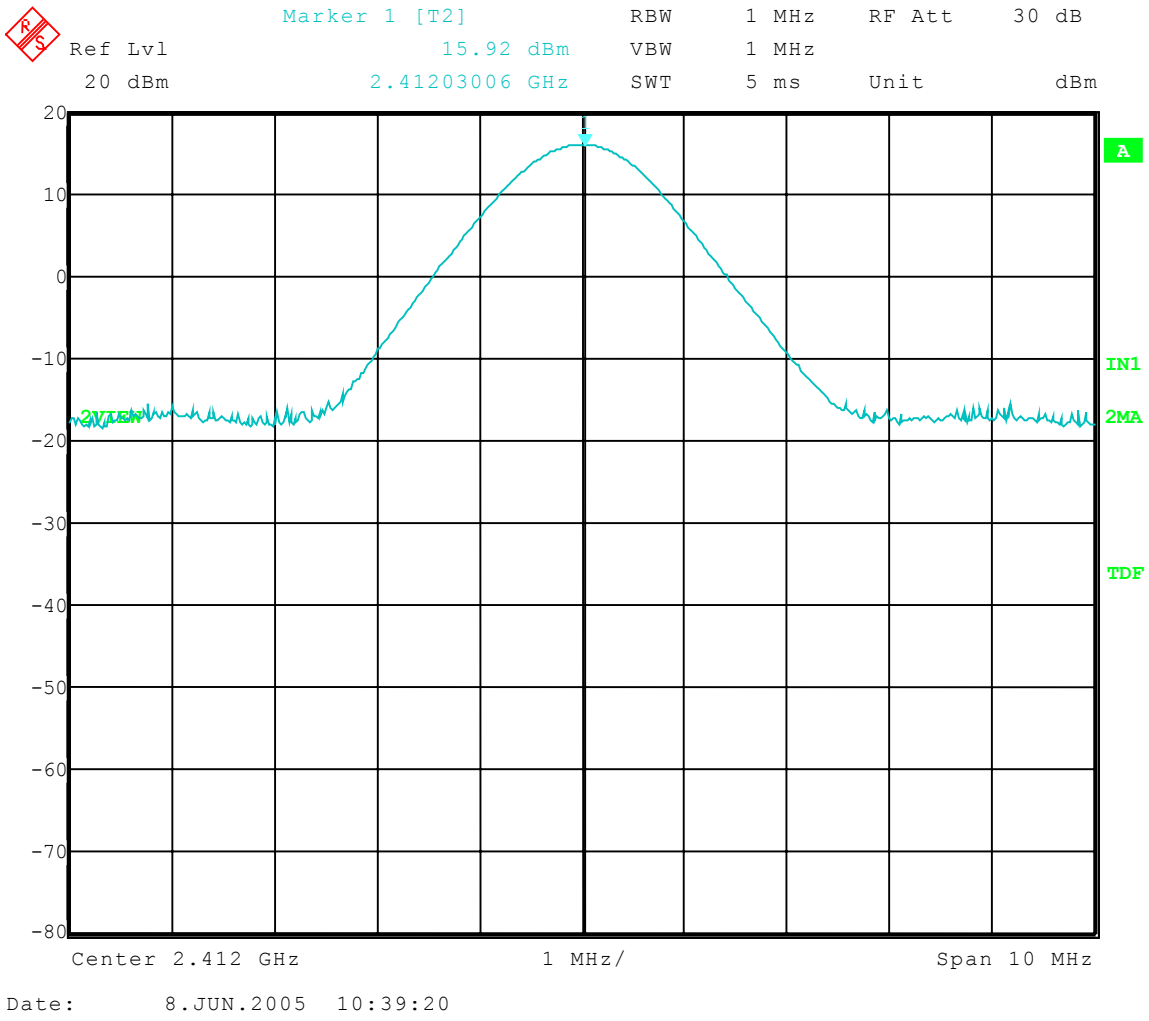
PART 15.247

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: Peak Output Power - Conducted
Operator: Jason L.
Comment: Low Channel: Frequency – 2.412 GHz

Peak Output Power = 15.92 dBm = 39.08 mW

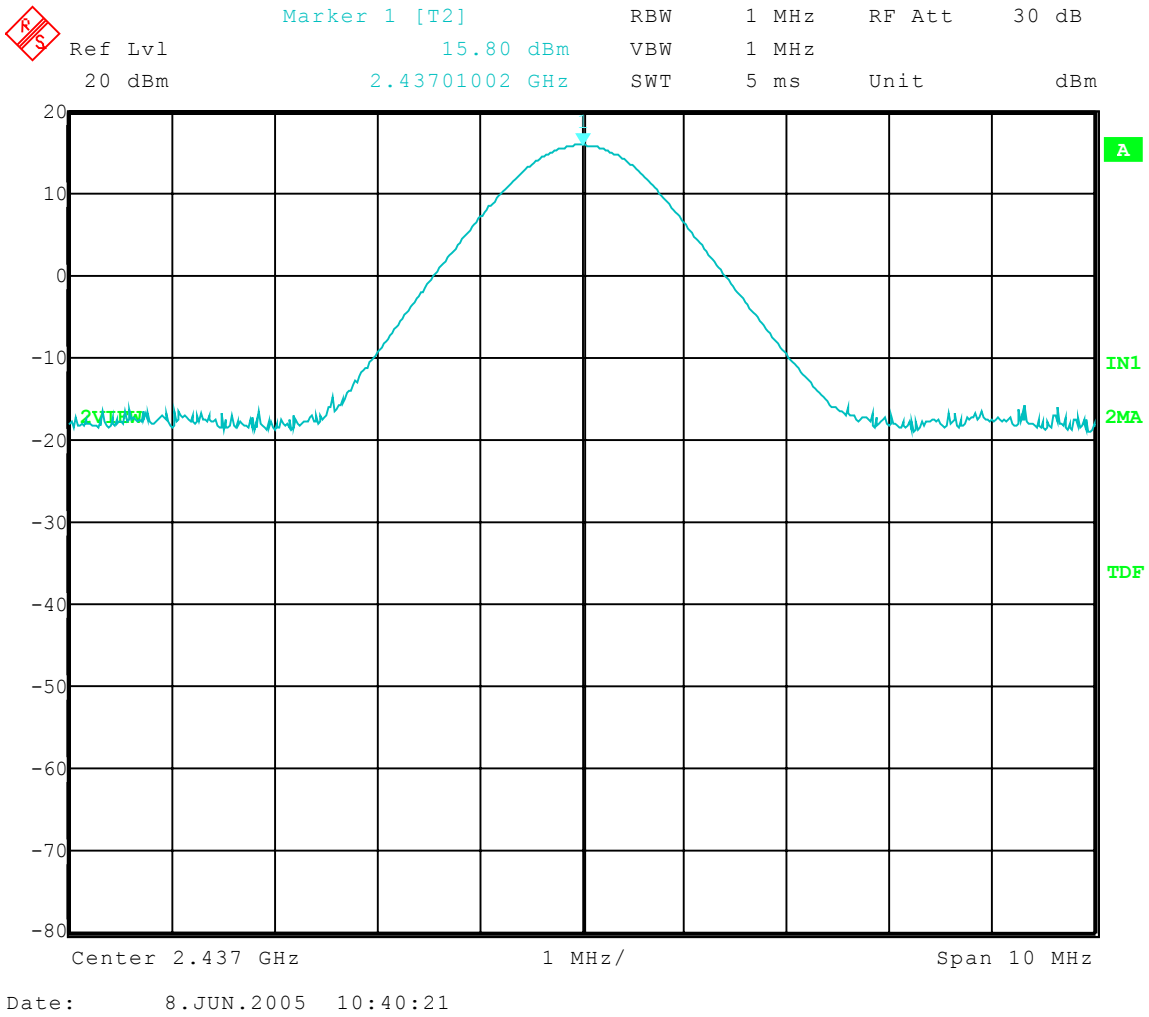


1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: Peak Output Power - Conducted
Operator: Jason L.
Comment: Middle Channel: Frequency – 2.437 GHz

Peak Output Power = 15.80 dBm = 38.02 mW

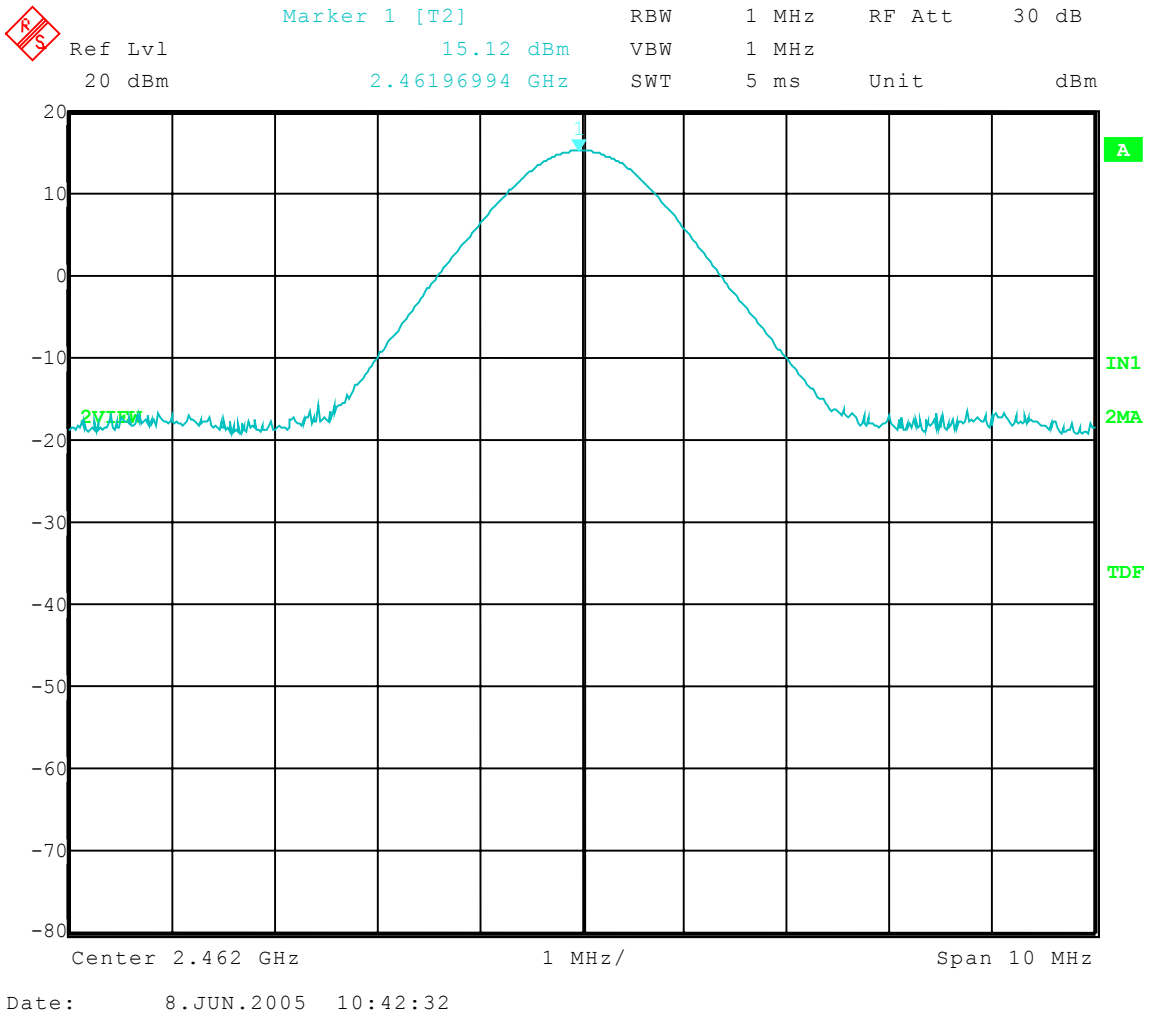


1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: Peak Output Power - Conducted
Operator: Jason L.
Comment: High Channel: Frequency – 2.462 GHz

Peak Output Power = 15.12 dBm = 32.51 mW



1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

PEAK POWER SPECTRAL DENSITY

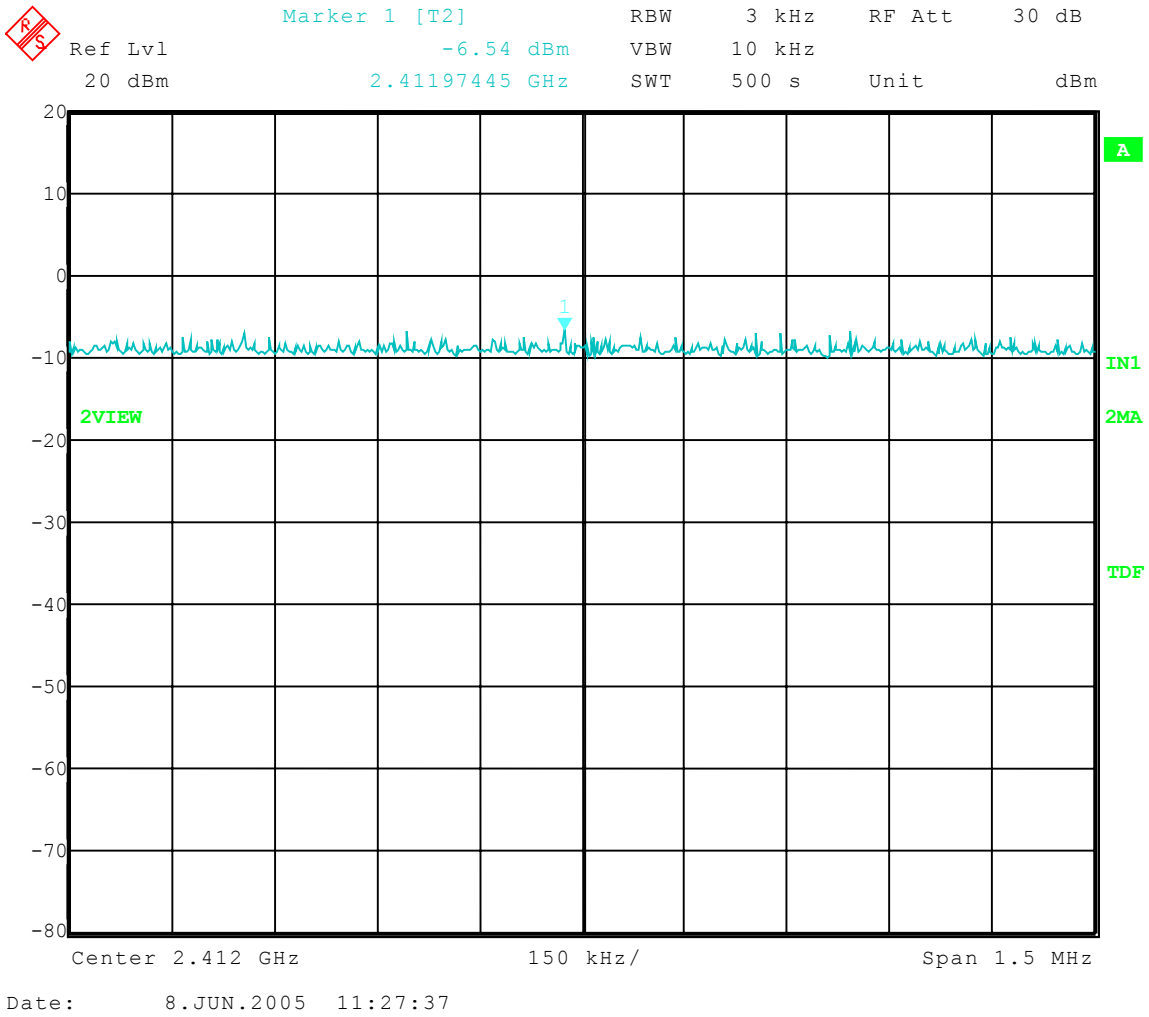
PART 15.247

1250 Peterson Dr., Wheeling, IL 60090

APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: Peak Power Spectral Density - Conducted
Operator: Jason L.
Comment: Low Channel: Frequency – 2.412 GHz

3 kHz Bandwidth = -6.54 dBm



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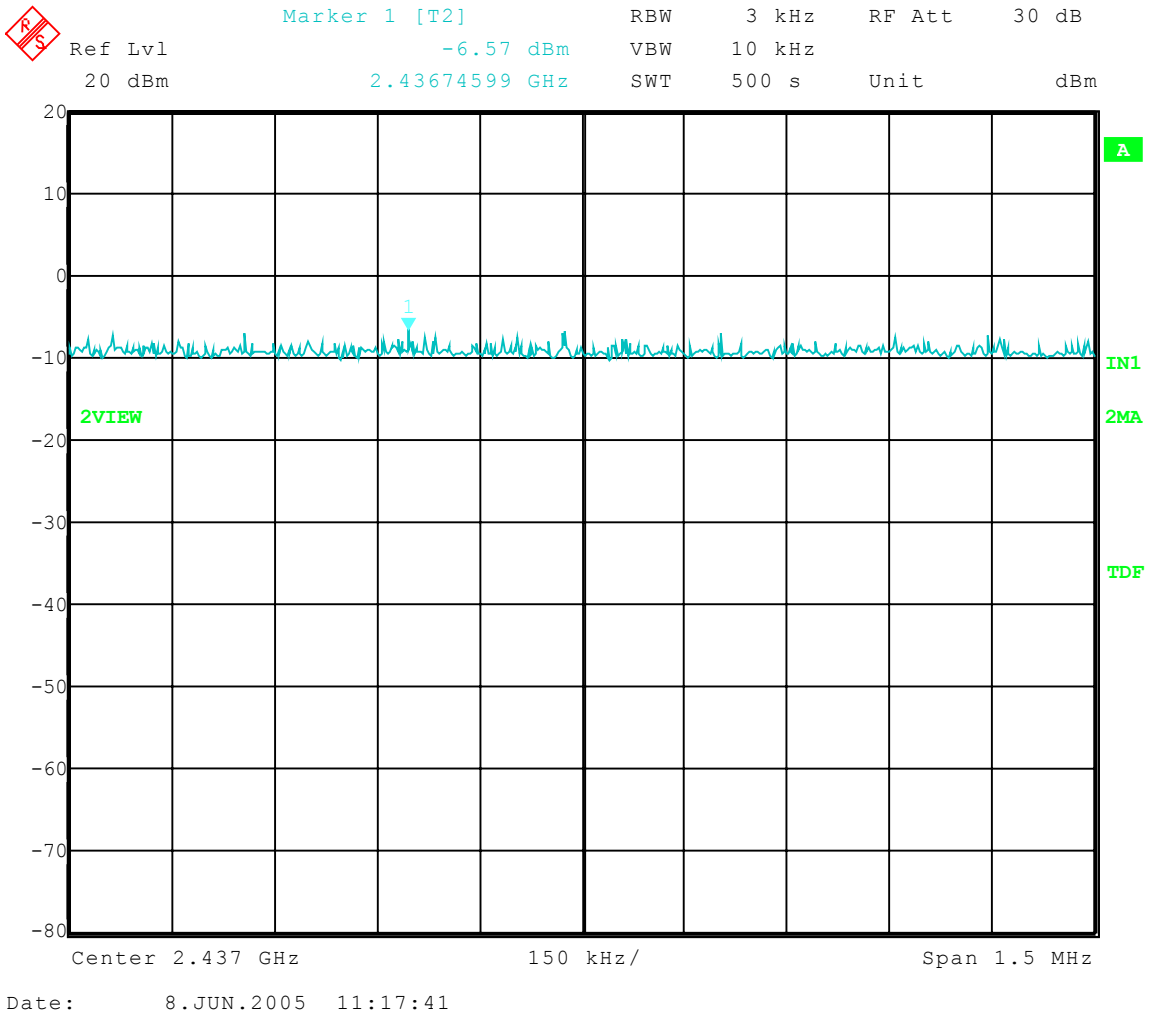
APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: Peak Power Spectral Density - Conducted
Operator: Jason L.
Comment: Middle Channel: Frequency – 2.437 GHz

3 kHz Bandwidth = -6.57 dBm



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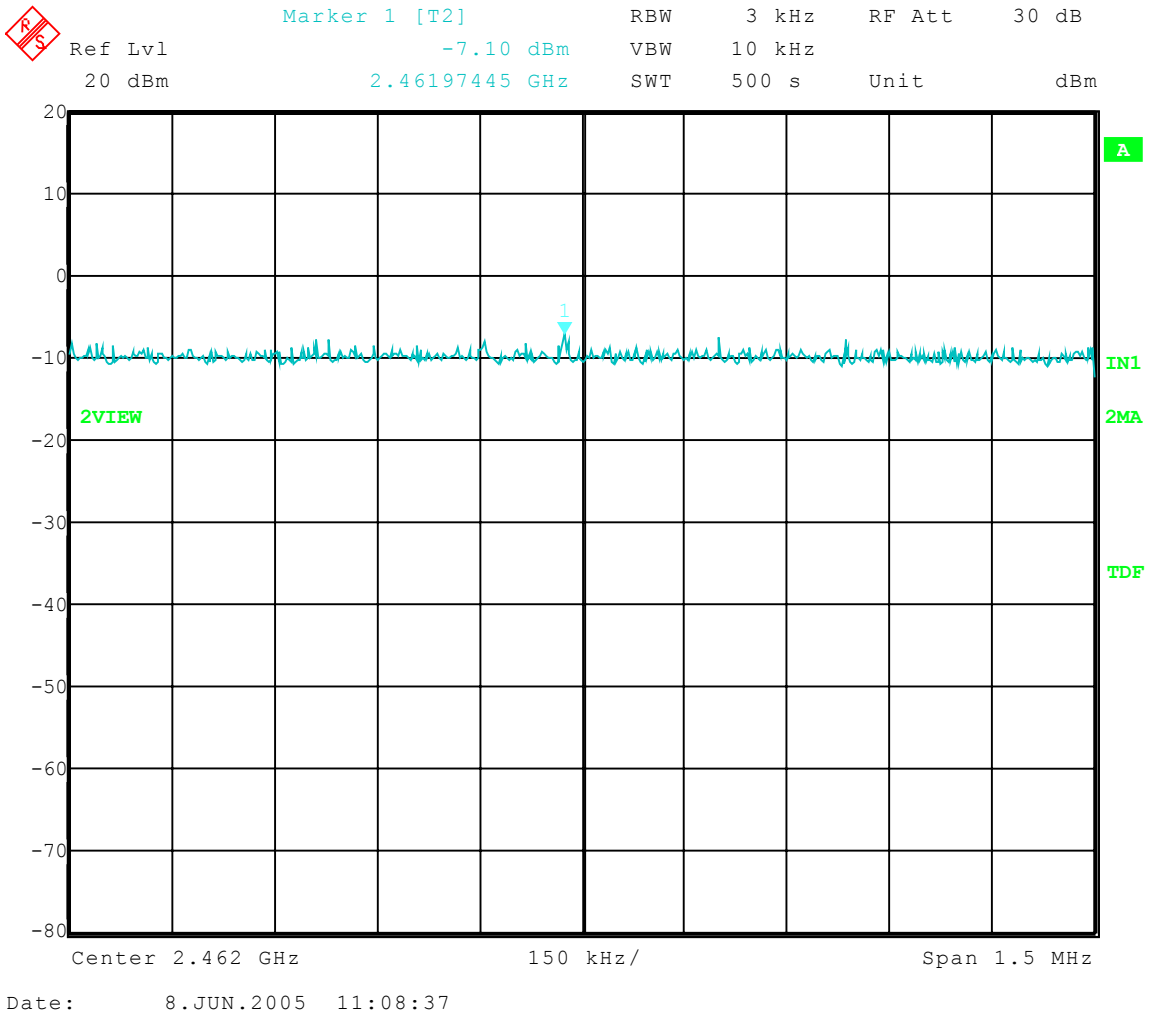
APPENDIX A

Test Date: 6-8-05
Company: Roku Labs
EUT: SoundBridge M1000
Test: Peak Power Spectral Density - Conducted
Operator: Jason L.
Comment: High Channel: Frequency – 2.462 GHz

3 kHz Bandwidth = -7.10 dBm



ELECTRONIC SYSTEMS, INC.
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APPENDIX A

OUT-OF-BAND EMISSIONS

2437 MHz

PART 15.247

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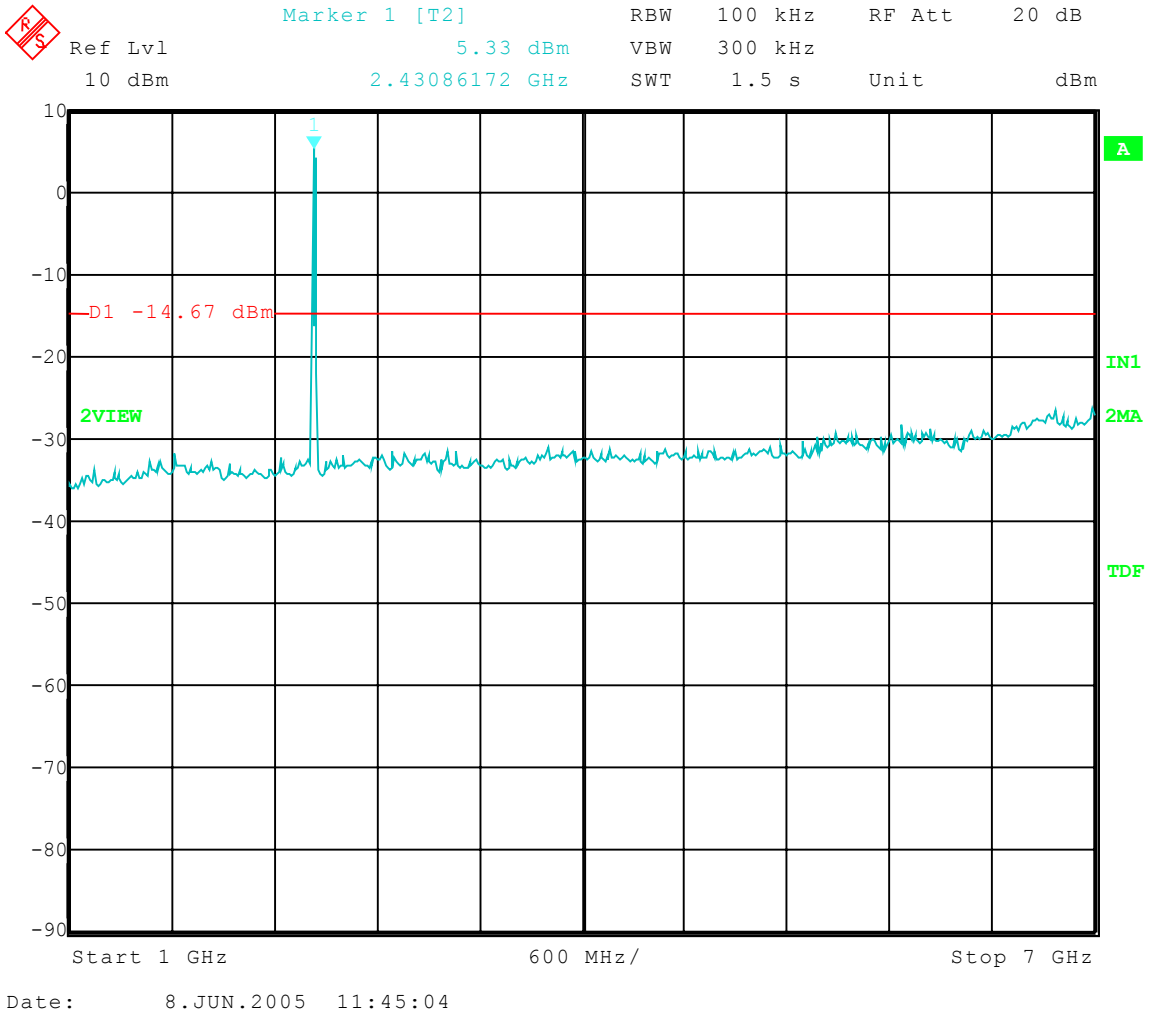
APPENDIX A



Out of Band – Mid Channel #6 – 2437 MHz

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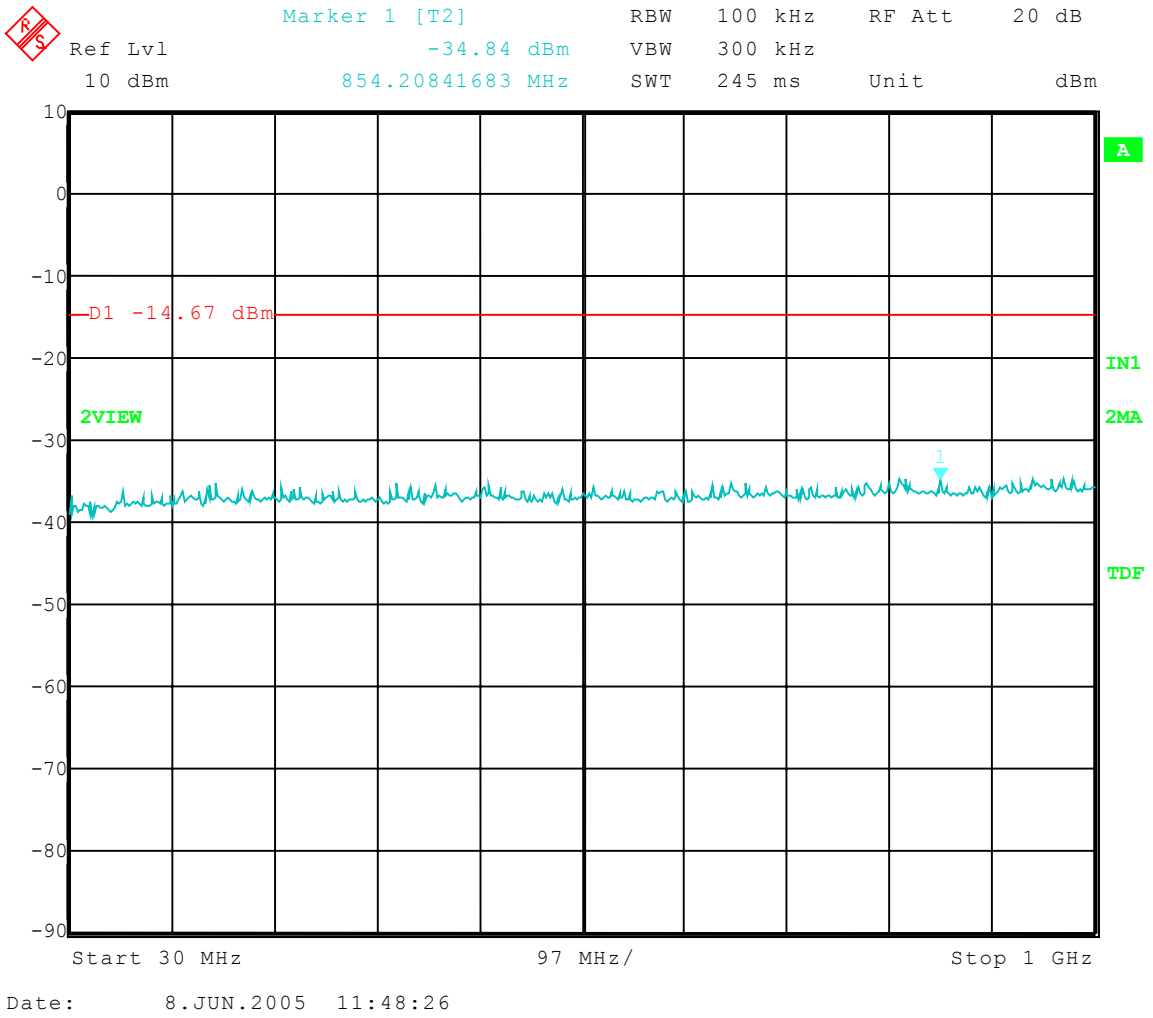
APPENDIX A



Out of Band – Mid Channel #6 – 2437 MHz

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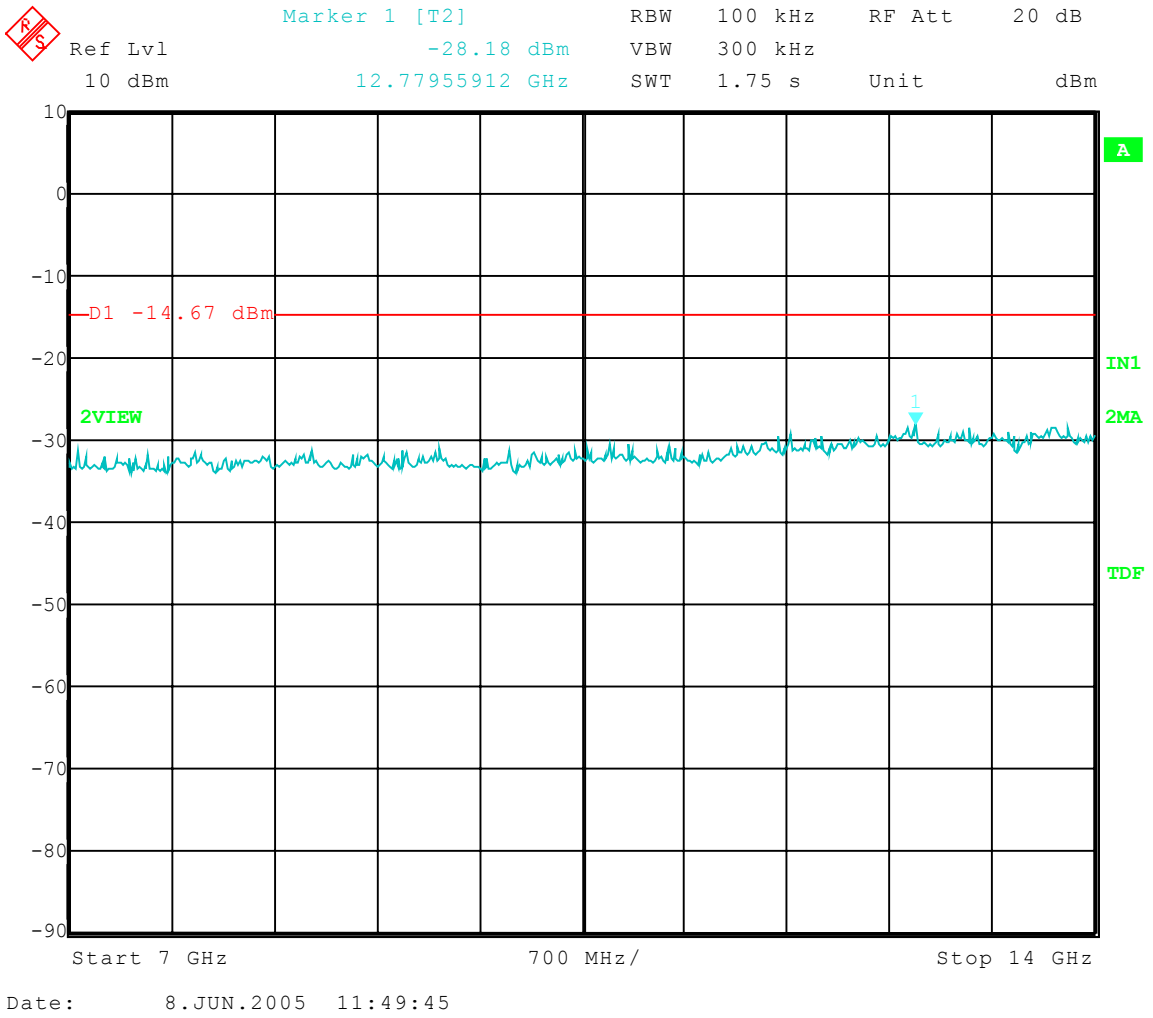
APPENDIX A



Out of Band – Mid Channel #6 – 2437 MHz

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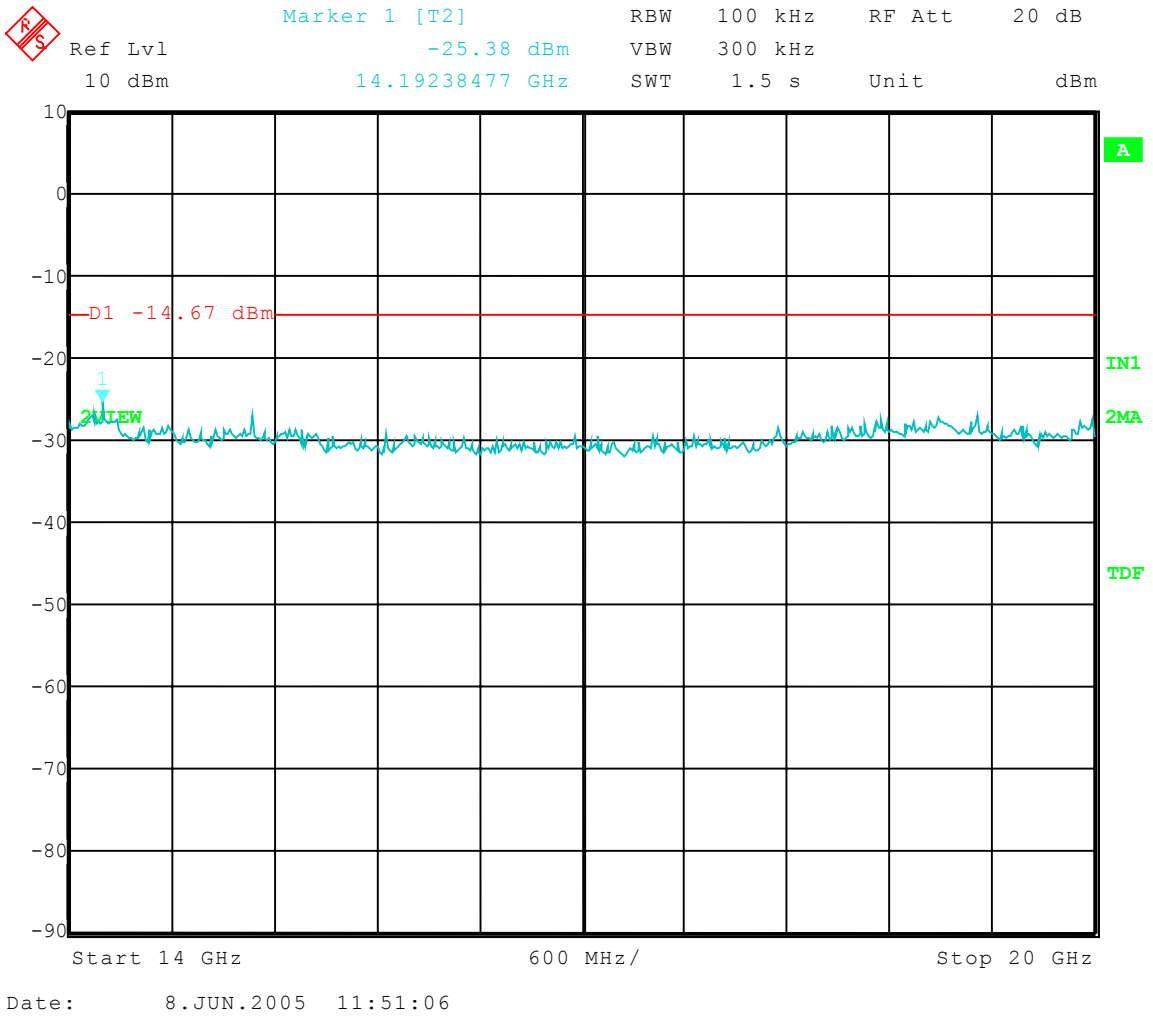
APPENDIX A



Out of Band – Mid Channel #6 – 2437 MHz

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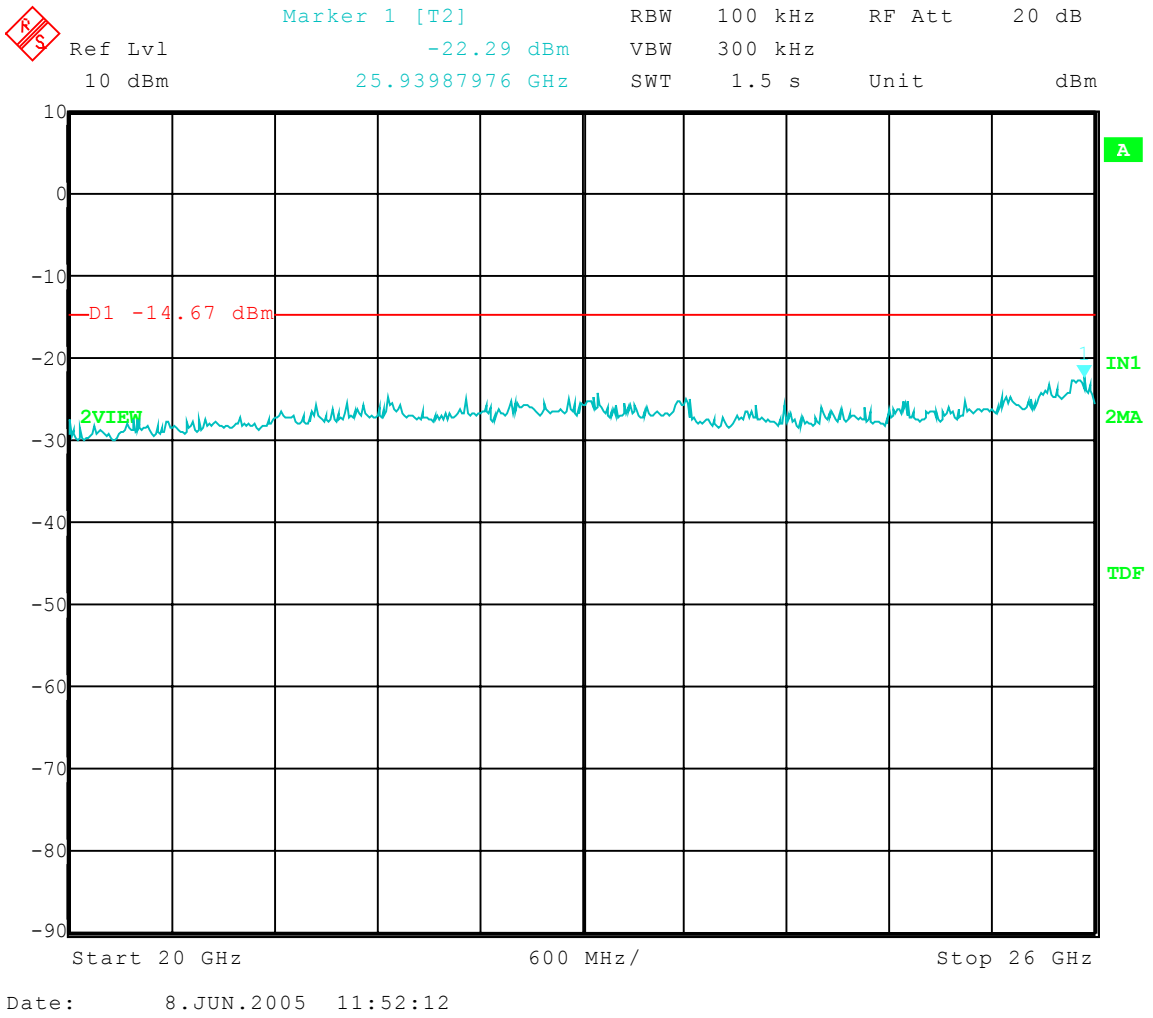
APPENDIX A



Out of Band – Mid Channel #6 – 2437 MHz

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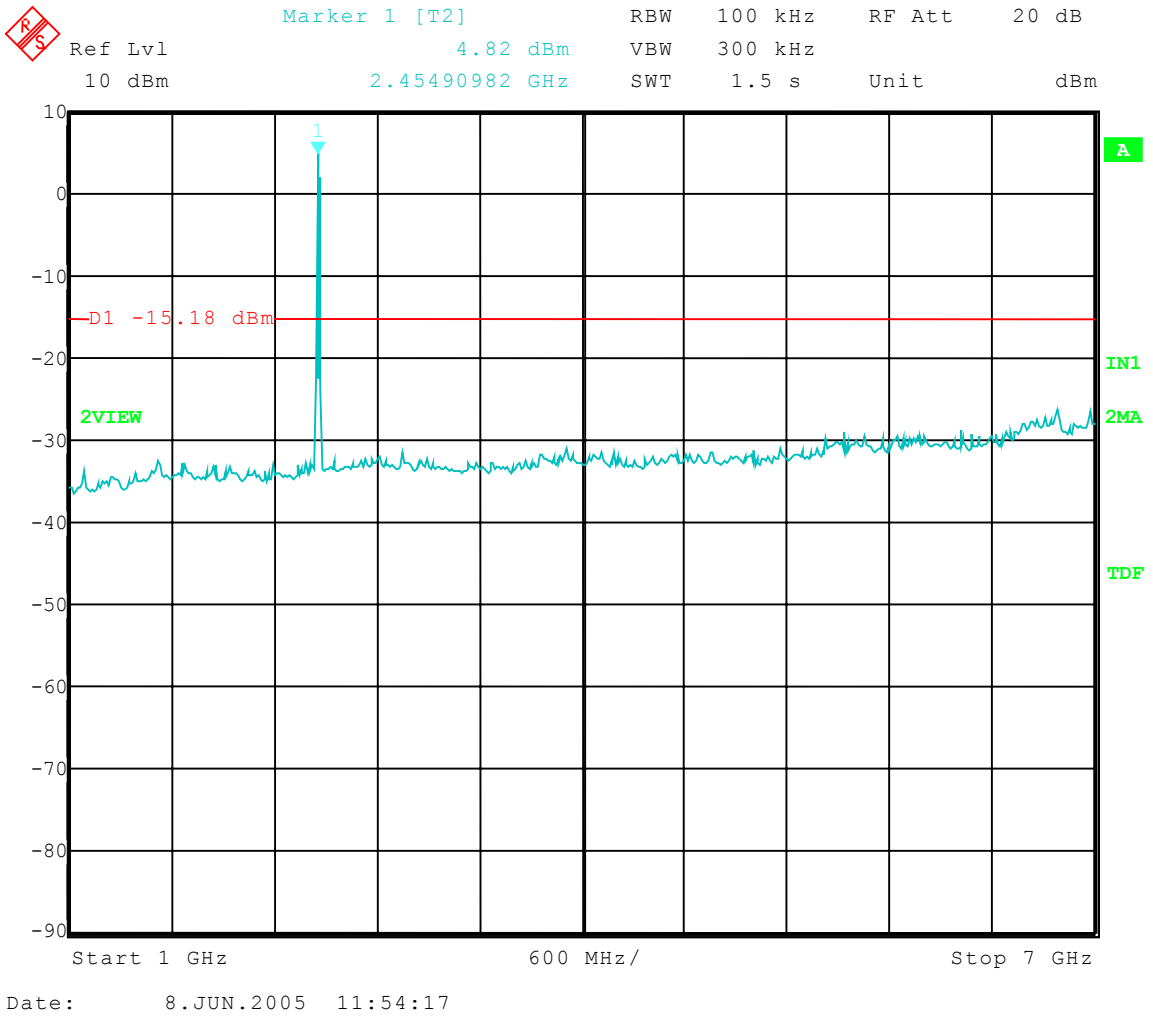
APPENDIX A



Out of Band – High Channel #11 – 2462 MHz

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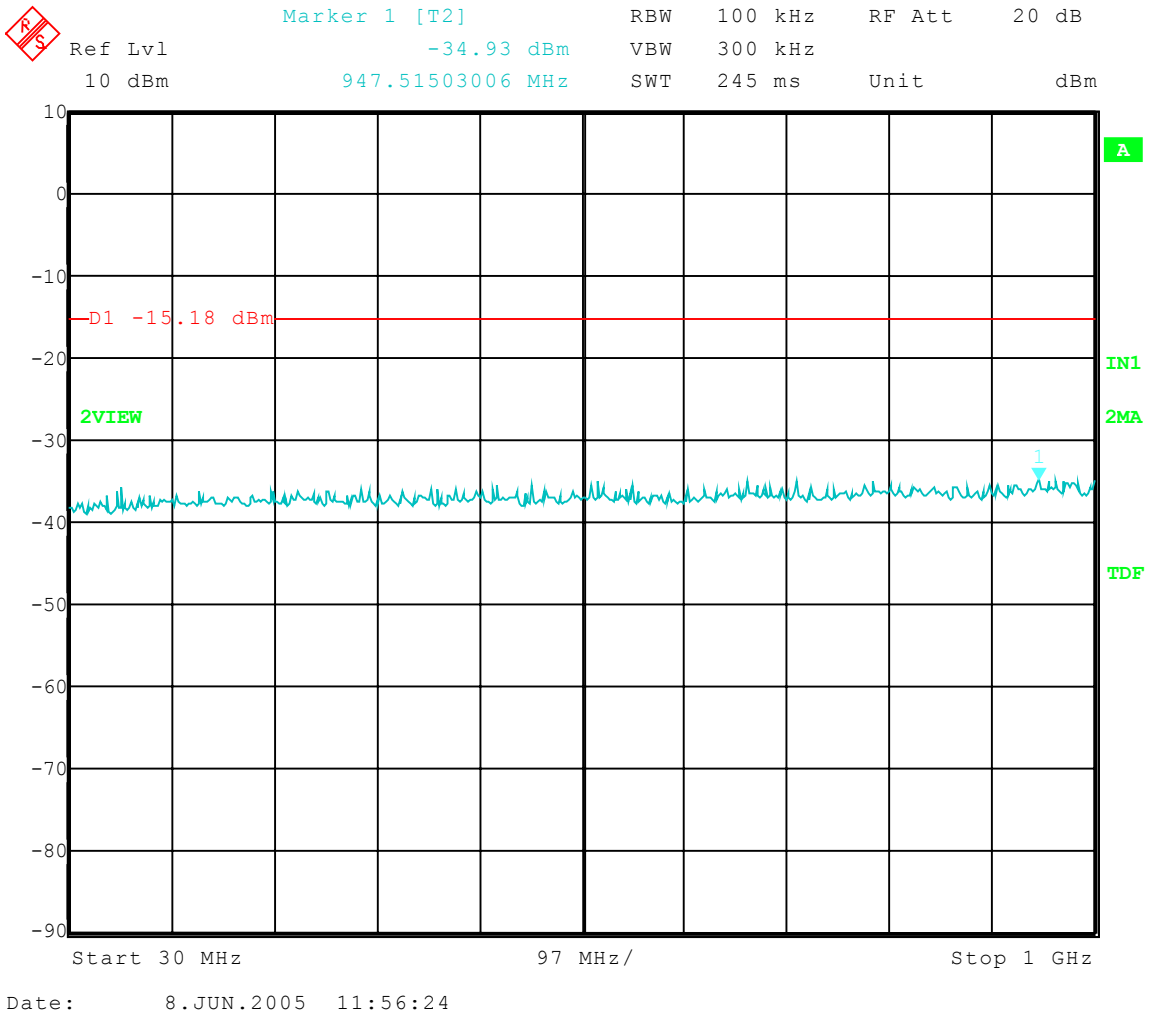
APPENDIX A



Out of Band – High Channel #11 – 2462 MHz

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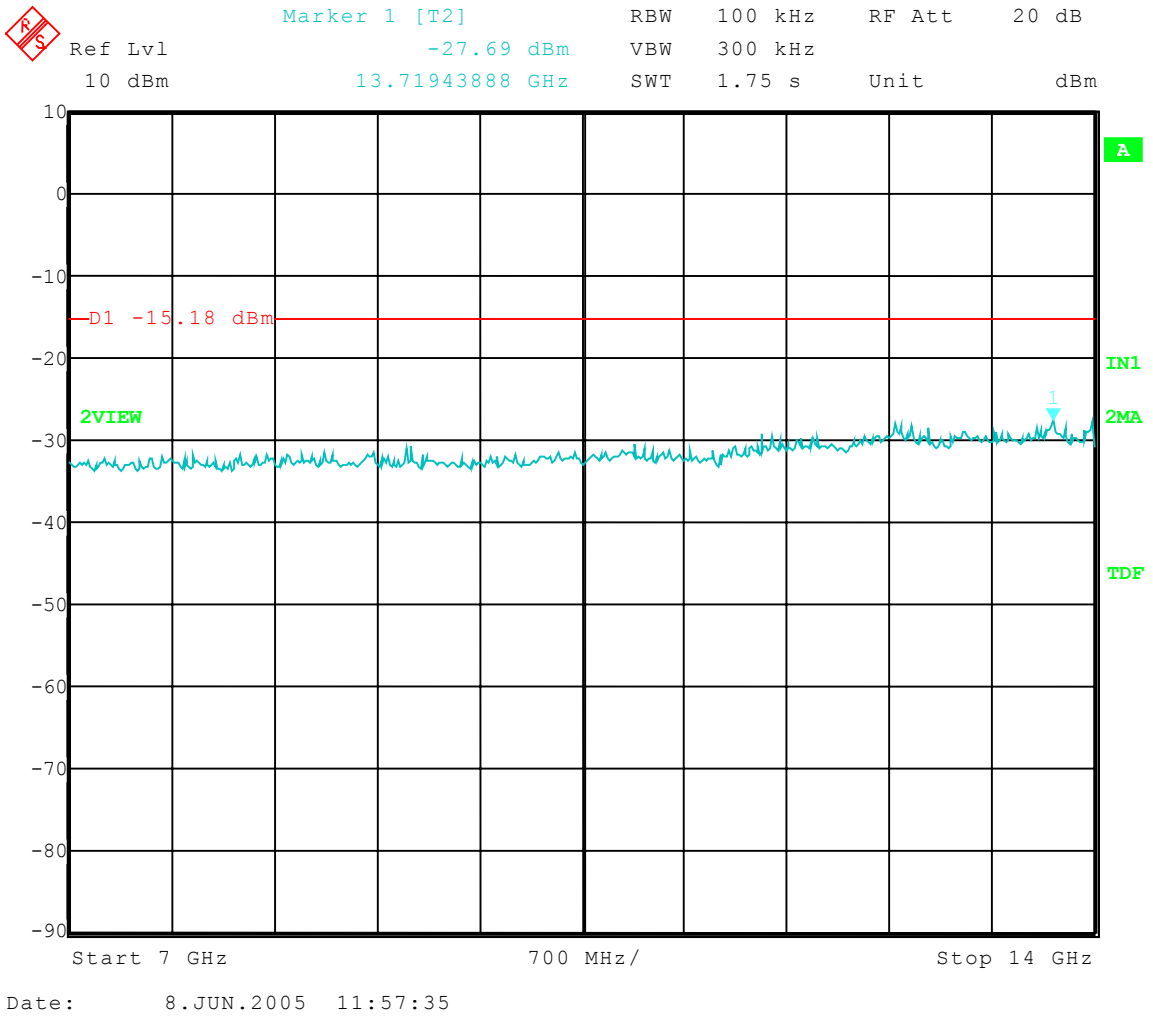
APPENDIX A



Out of Band – High Channel #11 – 2462 MHz

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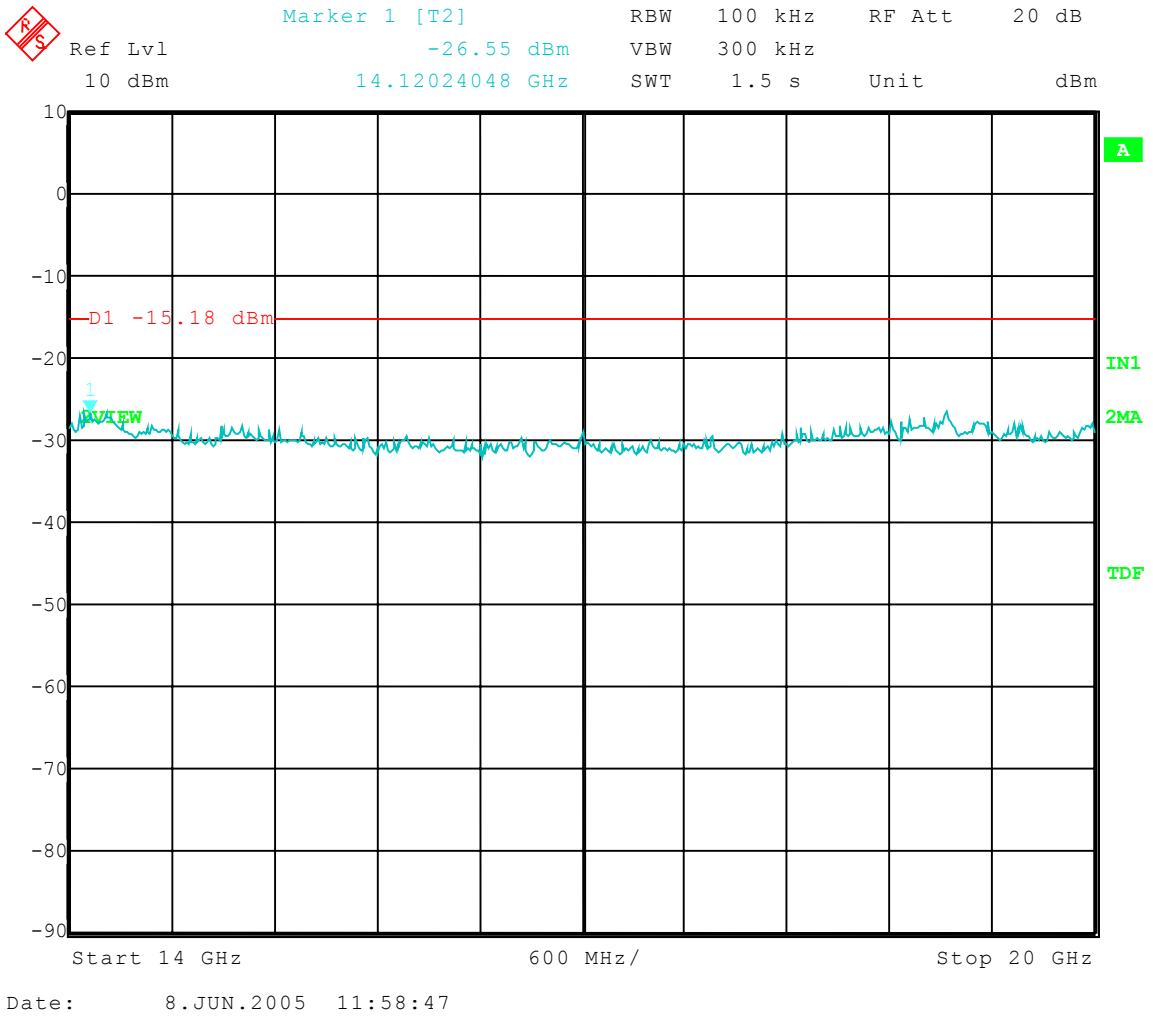
APPENDIX A



Out of Band – High Channel #11 – 2462 MHz

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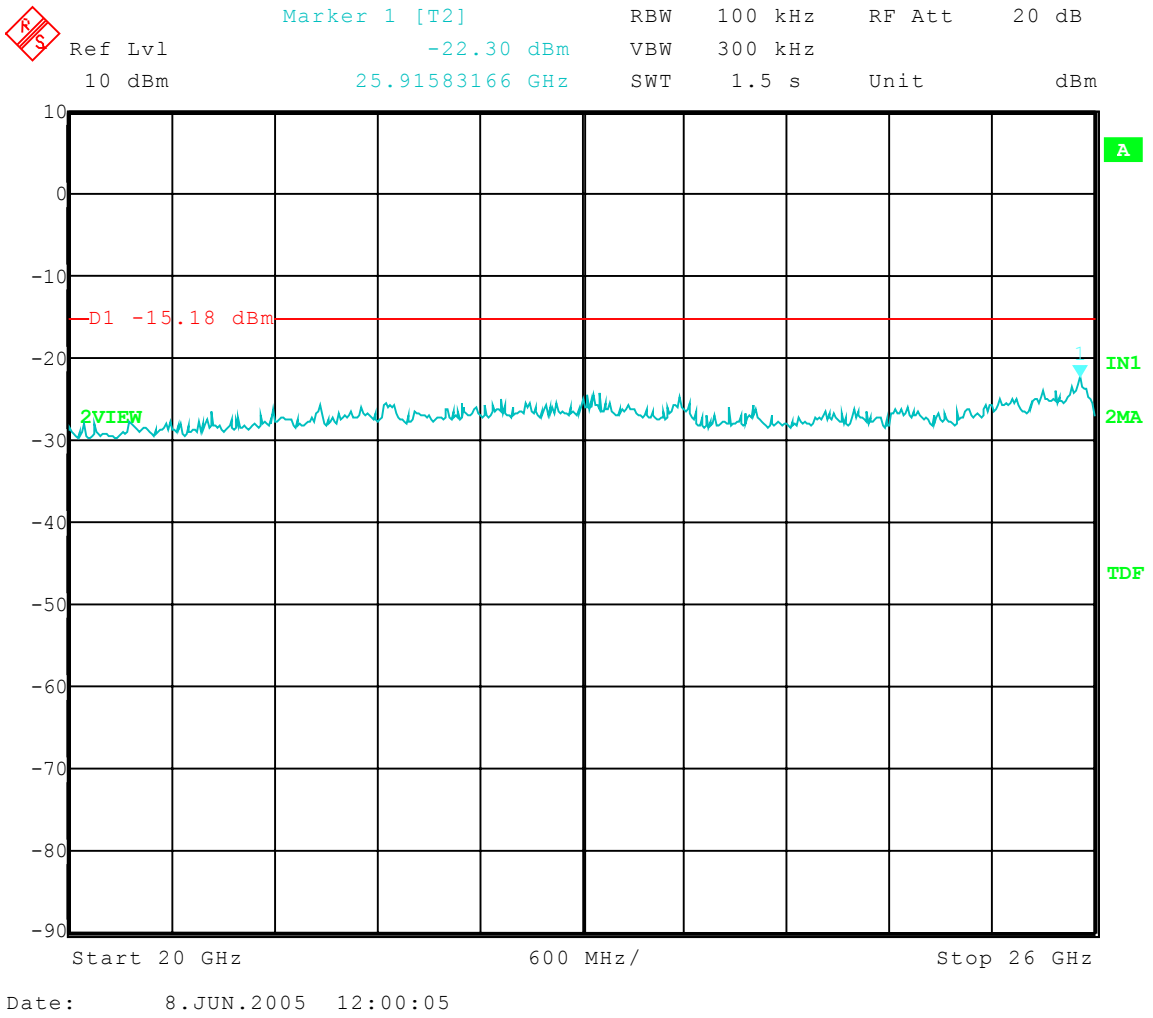
APPENDIX A



Out of Band – High Channel #11 – 2462 MHz