



**ETS Dr.GenZ Taiwan PS Co., Ltd.**

**FCC Registration No.: 930600**

**Industry Canada filed test laboratory      Reg. No. IC 5679**

**Accredited Testing Laboratory**



**A2LA Cert.No.: 2300.01**

**PTCRB Accredited Type Certification Test House**

# **FCC**

# **TEST - REPORT**

**FCC RULES PART 15 / SUBPART C § 15.249**

**FCC ID : TYN-WA-0002D**

**Test report no.: W6M20601-6522-P-15**

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## **1 General Information**

### **1.1 Notes**

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has Passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.

The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

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 ETS Dr. Genz Taiwan PS Co., Ltd.

### **Tester:**

06.02.2006

Jay Chaing



Date

ETS-Lab.

Name

Signature

### **Technical responsibility for area of testing:**

06.02.2006

Steven Chuang



Date

ETS

Name

Signature

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## **1.2 Testing laboratory**

### **1.2.1 Location**

OATS  
No.5-1, Shuang Sing Village,  
LiShuei Rd., Wanli Township,  
Taipei County 207, Taiwan (R.O.C.)

Company  
ETS Dr. Genz Taiwan PS Co., Ltd.  
6F, NO. 58, LANE 188, RUEY-KUANG RD.  
NEIHU, TAIPEI 114, TAIWAN R.O.C.  
Tel : 886-2-66068877  
Fax : 886-2-66068879

### **1.2.2 Details of accreditation status**

#### **Accredited testing laboratory**

**A2LA-registration number: 2300.01**

**FCC filed test laboratory Reg. No. 930600**

**Industry Canada filed test laboratory Reg. No. IC 5679**

**PTCRB Accredited Type Certification Test House**

## **1.3 Details of approval holder**

|            |  |
|------------|--|
| Name:      | SynerTech International Limited                          |
| Street:    | 1st Floor, Dah Way Industrial Building, 86 Hung To Road, |
| Town:      | Kwun Tong  |
| Country:   | Hong Kong  |
| Telephone: | (852)2687-6828   |
| Fax:       | (852)2687-6936   |

|            |                   |
|------------|-------------------|
| Contact    | Mr. Gregory Cheng |
| Telephone: | (852)2687-6828    |

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#### 1.4 Application details

Date of receipt of application: 12.01.2006  
Date of receipt of test item: 12.01.2006  
Date of test: 12.01.2006 to 03.02.2006

#### 1.5 General information of Test item

Type of test item : Wireless audio door phone - Door Station 2 buttons

Model Number : WA-0002D

Serial number : without

Photos : see Annex

##### Technical data

Frequency band : 2.4 GHz – 2.4835 GHz

Operation Frequency : 2.402, 2.403, 2.404 GHz

Frequency 1 ( ch 1) : 2.474 GHz

Frequency 2 ( ch 2) : 2.475 GHz

Frequency 3 ( ch 3) : 2.476 GHz

Number of Channels : 3

Operation modes : Duplex

Modulation Type : FM

Antenna transmitter : dipole antenna

Power supply : 6 VDC ( battery )



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**Manufacturer:**  
(if applicable)

Name : SynerTech International Limited  
Street : Industrial Zone 2 Qingxi Zhen Dongguan City  
Town : Guangdong Province  
Country : China

Additional information : --

**1.6 Test standards**

Technical standard : FCC RULES PART 15 / SUBPART C § 15.249

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## **2 Technical test**

### **2.1 Summary of test results**

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



**or**

The deviations as specified in 2.5 were ascertained in the course of the tests performed.



### **2.2 Test environment**

|                               |                     |
|-------------------------------|---------------------|
| Temperature                   | : 23 °C             |
| Relative humidity content     | : 20 ... 75 %       |
| Air pressure                  | : 86 ... 103 kPa    |
| Details of power supply       | : 6 VDC ( battery ) |
| Extreme conditions parameters | : Not required      |

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### 2.3 Test Equipment List

| No.          | Test equipment                                  | Type                | Serial No.             | Manufacturer                  | Cal. Date  | Next Cal. Date |
|--------------|---|---------------------|------------------------|-------------------------------|------------|----------------|
| ETSTW-CE 001 | EMI TEST RECEIVER                               | ESHS10              | 842121/013             | R&S                           | 2005/10/27 | 2006/10/26     |
| ETSTW-CE 002 | PREREULATOR MODE DC POWER SUPPLY                | None                | None                   |                               |            |                |
| ETSTW-CE 003 | AC POWER SOURCE                                 | APS-9102            | D161137                | GW                            |            |                |
| ETSTW-CE 004 | ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK | ESH3-Z5             | 840731/011             | R&S                           | 2005/10/25 | 2006/10/24     |
| ETSTW-CE 005 | Line-Impedance Stabilisation Network            | NNBM 8126D          | 137                    | Schwarzbeck                   | 2005/10/21 | 2006/10/20     |
| ETSTW-CE 006 | IMPULS-BEGRENZER PULSE LIMITER                  | ESH3-Z2             | 100226                 | R&S                           | 2004/11/11 | 2006/11/10     |
| ETSTW-CE 007 | SPECTRUM ANALYZER 5GHz                          | FSB                 | 849670/001             | R&S                           |            |                |
| ETSTW-CE 008 | ABSORBING CLAMP                                 | MDS 21              | 3469                   | ABSORPTIONS-MESSWANDLER-ZANGE | 2005/10/24 | 2006/10/23     |
| ETSTW-CE 009 | TEMP.&HUMIDITY CHAMBER                          | GTH-225-40-1P-U     | MAA0305-009            | GIANT FORCE                   | 2005/8/18  | 2006/8/17      |
| ETSTW-CE 010 | Comb Generator-conducted                        | None                | None                   | ETS                           |            |                |
| ETSTW-CE 011 | Power Line Conducted Emission Only              | None                | None                   | ETS                           |            |                |
| ETSTW-CE 012 | Dual-Phase-V-Network                            | NNB-2/16Z           | 03/10201               | Telemeter                     | 2005/4/12  | 2006/4/11      |
| ETSTW-CS 001 | SIGNAL GENERATOR                                | SMX                 | 849254/003             | R&S                           | 2005/10/14 | 2006/10/13     |
| ETSTW-CS 002 | COUPLING AND DECOUPLING NETWORK                 | CDN S751            | 19263                  | SCHAFFNER                     | 2005/10/14 | 2006/10/13     |
| ETSTW-CS 003 | COUPLING AND DECOUPLING NETWORK                 | CDN T400            | 19820                  | SCHAFFNER                     | 2005/10/14 | 2006/10/13     |
| ETSTW-CS 004 | COUPLING AND DECOUPLING NETWORK                 | CDN M016            | 20053                  | SCHAFFNER                     | 2005/10/27 | 2006/10/26     |
| ETSTW-CS 005 | RF Power Amplifier                              | 100A250A            | 306547                 | AR                            | 2005/10/14 | 2006/10/13     |
| ETSTW-CS 004 | Terminal 50Ω Load                               | 50T-116 M           | None                   | JFW                           |            |                |
| ETSTW-CS 004 | Terminal 50Ω Load                               | 50T-116 F           | None                   | JFW                           |            |                |
| ETSTW-CS 004 | 6 dB Attenuator                                 | HFP-5100-3/06 N M/F | 2010876106             |                               |            |                |
| ETSTW-RE 001 | Controller                                      | CD 1000             | C01000/154/867 /004/L  | Heinrich Deisel               |            |                |
| ETSTW-RE 002 | Function Generator                              | 33220A              | MY43004982             | Agilent                       | 2005/10/14 | 2006/10/13     |
| ETSTW-RE 003 | EMI TEST RECEIVER                               | ESI 26              | 831438/001             | R&S                           | 2005/10/24 | 2006/10/23     |
| ETSTW-RE 004 | EMI TEST RECEIVER                               | ESI 40              | 832427/004             | R&S                           | 2005/10/29 | 2006/10/30     |
| ETSTW-RE 005 | EMI TEST RECEIVER                               | ESVS10              | 843207/020             | R&S                           | 2005/10/16 | 2006/10/15     |
| ETSTW-RE 008 | Controller                                      | HD100               | C0100-L/047/ 6670703/L | Heinrich Deisel               |            |                |
| ETSTW-RE 009 | Controller                                      | HD100               | 100/341                | Heinrich Deisel               |            |                |
| ETSTW-RE 010 | PROGRAMMABLE LINEAR POWER SUPPLY                | LPS-305             | 30503070181            | MOTECH                        |            |                |



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|              |                                      |                  |                |            |            |            |
|--------------|--------------------------------------|------------------|----------------|------------|------------|------------|
| ETSTW-RE 011 | PROGRAMMABLE LINEAR POWER SUPPLY     | LPS-305          | 30503070165    | MOTECH     |            |            |
| ETSTW-RE 012 | TUNABLE BANDREJECT FILTER            | D.C 0309         | 146            | K&L        |            |            |
| ETSTW-RE 013 | TUNABLE BANDREJECT FILTER            | D.C 0036         | 397            | K&L        |            |            |
| ETSTW-RE 014 | DUAL TRACKING WITH 5V FIXED          | GPC-3030D        | None           | GW         |            |            |
| ETSTW-RE 015 | ANTENNA                              | HK116            | 841489/003     | R&S        |            |            |
| ETSTW-RE 016 | ANTENNA                              | HL223            | 848953/006     | R&S        |            |            |
| ETSTW-RE 017 | ANTENNA                              | HL025            | 352886/001     | R&S        |            |            |
| ETSTW-RE 018 | ANTENNA                              | AT4560           | 27212          | AR         | 2004/11/8  | 2006/11/7  |
| ETSTW-RE 019 | ANTENNA , HORN                       | 22240-25         | 121074         | FM         |            |            |
| ETSTW-RE 020 | MICROWAVE HORN ANTENNA               | AT4002A          | 306915         | AR         |            |            |
| ETSTW-RE 021 | SWEEP GENERATOR                      | SWM05            | 835130/010     | R&S        | 2005/10/14 | 2006/10/13 |
| ETSTW-RE 022 | AMPLIFIER                            | 8447D            | 2944A09837     | Brüel&Kjær | 2005/10/14 | 2006/10/13 |
| ETSTW-RE 023 | Shielded room                        | SR 1             | None           | Frankonia  |            |            |
| ETSTW-RE 024 | Anechoic Chamber                     | CHC 1            | None           | Frankonia  |            |            |
| ETSTW-RE 025 | Anechoic Chamber                     | CHC 2            | None           | Frankonia  |            |            |
| ETSTW-RE 026 | Open Area Test Site                  | 10m              | None           | ETS        |            |            |
| ETSTW-RE 027 | Passive Loop Antenna                 | 6512             | 34563          | EMCO       | 2004/6/30  | 2006/6/29  |
| ETSTW-RE 028 | Log-Periodic DipoleArray Antenna     | 3148             | 34429          | EMCO       | 2004/6/15  | 2006/6/14  |
| ETSTW-RE 029 | Biconical Antenna                    | 3109             | 33524          | EMCO       | 2004/6/17  | 2006/6/16  |
| ETSTW-RE 030 | Double-Ridged Waveguide Horn Antenna | 3117             | 35224          | EMCO       | 2004/5/5   | 2006/5/4   |
| ETSTW-RE 031 | Comb Generator-radiated              | None             | None           | ETS        |            |            |
| ETSTW-RE 032 | Millivoltmeter                       | URV 55           | 849086/013     | R&S        | 2005/10/17 | 2006/10/16 |
| ETSTW-RE 033 | 4CH 1GHz 5GS/s DSO                   | WAVERUNNER 6100A | LCRY0604P14508 | LeCory     |            |            |
| ETSTW-RE 034 | Power Sensor                         | URV5-Z4          | 839313/006     | R&S        | 2005/10/17 | 2006/10/16 |
| ETSTW-RE 035 | 1.5GHz Active Voltage Probe          | HFP1500          | 2332           | LeCory     |            |            |
| ETSTW-RE 036 | 100MHz High Voltage Diff Probe       | ADP305           | 3305           | LeCory     |            |            |
| ETSTW-RE 037 | Log-Periodic DipoleArray Antenna     | 3148             | 00034546       | EMCO       | 2004/11/18 | 2006/11/17 |
| ETSTW-RE 038 | Log-Periodic DipoleArray Antenna     | 3148             | 00034547       | EMCO       | 2004/11/18 | 2006/11/17 |
| ETSTW-RE 039 | Biconical Antenna                    | 3110B            | 41760          | EMCO       | 2004/11/18 | 2006/11/17 |
| ETSTW-RE 040 | Biconical Antenna                    | 3110B            | 41761          | EMCO       | 2004/11/18 | 2006/11/17 |
| ETSTW-RE 041 | Anechoic Chamber                     | CHC 3            | None           | Frankonia  |            |            |
| ETSTW-RE 042 | ANTENNA                              | HK116            | 100172         | R&S        | 2005/1/14  | 2007/1/13  |

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|               |                                       |                |               |             |            |            |
|---------------|---------------------------------------|----------------|---------------|-------------|------------|------------|
| ETSTW-RE 043  | ANTENNA                               | HL223          | 100166        | R&S         | 2004/4/16  | 2006/4/15  |
| ETSTW-RE 044  | ANTENNA                               | HL050          | 100094        | R&S         |            |            |
| ETSTW-RE 048  | Triple Loop Antenna                   | HXYZ 9170      | HXYZ 9170-134 | Schwarzbeck | 2005/3/22  | 2007/3/21  |
| ETSTW-RE 049  | TRILOG Super Broadband test Antenna   | VULB 9160      | 9160-3185     | Schwarzbeck | 2005/5/19  | 2007/5/18  |
| ETSTW-RE 004  | Attenuator 10dB                       | 50HF-010       | None          | JFW         |            |            |
| ETSTW-RE 004  | Attenuator 6dB                        | 50HF-006       | None          | JFW         |            |            |
| ETSTW-RE 004  | Attenuator 3dB                        | 50HF-003       | None          | JFW         |            |            |
| ETSTW-RE 004  | Attenuator 3dB                        | 50HF-003       | None          | JFW         |            |            |
| ETSTW-RE 004  | Attenuator 3dB                        | 50HF-003       | None          | JFW         |            |            |
| ETSTW-RE 055  | SPECTRUM ANALYZER                     | FSU-26         | 200074        | R&S         | 2005/9/6   | 2006/9/5   |
| ETSTW-RE 056  | Matching Pad (75Ω -> 50Ω)             | 57Z-3G         | None          |             |            |            |
| ETSTW-RE 057  | Matching Pad (75Ω -> 50Ω)             | 57Z-3G         | None          |             |            |            |
| ETSTW-RE 058  | Matching Pad (75Ω -> 50Ω)             | 57Z-3G         | None          |             |            |            |
| ETSTW-RE 059  | Matching Pad (75Ω -> 50Ω)             | 57Z-3G         | None          |             |            |            |
| ETSTW-EMI 001 | HARMONICS 1000                        | HAR1000-1P     | 93            | EMC-PARTNER | 2005/9/11  | 2006/11/10 |
| ETSTW-EMS 001 | Clamp BASELSTRASSE 160 CH-4242 LAUFEN | CN-EFT1000     | 354           | EMC-PARTNER | 2004/11/2  | 2006/11/1  |
| ETSTW-EMS 002 | Frequency Converter                   | YF-6020        | 0308014       |             |            |            |
| ETSTW-EMS 003 | EMC Immunity Test System              | TRA2000IN6     | 579           | EMC-PARTNER | 2005/10/27 | 2006/10/26 |
| ETSTW-EMS 004 | ESD generator minizap                 | ESD2000        | 016           | EMC-PARTNER | 2005/10/27 | 2006/10/26 |
| ETSTW-EMS 003 | Attenauter (50Ω)                      | VERI50         | 051           | EMC-PARTNER | 2004/8/31  | 2006/8/30  |
| ETSTW-EMS 003 | Attenauter (1 KΩ)                     | VERI1K         | 019           | EMC-PARTNER | 2004/10/21 | 2006/10/20 |
| ETSTW-EMS 003 | 20GΩ Divider                          | ESD-VERI-V     | 021           | EMC-PARTNER | 2004/3/17  | 2006/3/16  |
| ETSTW-EMS 008 | Safety Test Solutions                 | ELT-400        | E-0039        | Narda       | 2005/1/4   | 2007/1/3   |
| ETSTW-EMS 009 | Magnetic Field Antenna                | MF1000-1       | 104           | EMC-PARTNER | 2004/12/3  | 2006/12/2  |
| ETSTW-EMS 010 | Coupling De-coupling Network          | CDN-UTP8       | 014           | EMC-PARTNER | 2005/9/1   | 2006/8/31  |
| ETSTW-EMS 011 | Calibration Ficture                   | F-2031-CF-23MM | 451           | FCC         | 2005/8/11  | 2006/8/11  |
| ETSTW-EMS 012 | EM Injection Clamp                    | F-2031-23MM    | 476           | FCC         | 2005/8/11  | 2006/8/11  |
| ETSTW-RS 001  | 14" COLOR VIDEO MONITOR               | TP-1480HR      | P009799       | TOPICA      |            |            |
| ETSTW-RS 002  | 14" COLOR VIDEO MONITOR               | TP-1480HR      | P009814       | TOPICA      |            |            |
| ETSTW-RS 003  | RF Power Amplifier                    | 30S1G3         | 306933        | AR          |            |            |
| ETSTW-RS 004  | RF Power Amplifier                    | 150W1000       | 307009        | AR          | 2005/10/21 | 2006/10/20 |
| ETSTW-RS 005  | Electric Field Probe Type 8.3         | 2244/90.21     | AF-0016       | Narda       | 2005/9/7   | 2006/9/6   |

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|              |                                      |  |                 |                |            |            |
|--------------|--------------------------------------|--|-----------------|----------------|------------|------------|
| ETSTW-RS 006 | SIGNAL GENERATOR                     | SML03                                  | 101551          | R&S            | 2005/10/21 | 2006/10/20 |
| ETSTW-GSM 01 | SIM Simulator                        | IT3                                    | B2004-50106     | ORGA           | 2005/9/15  | 2006/9/14  |
| ETSTW-GSM 02 | Universal Radio Communication Tester | CMU 200                                | 103489          | R&S            | 2005/11/15 | 2006/11/14 |
| ETSTW-GSM 03 | Agilent 8960 Test Set 1              | E5515C                                 | GB44052675      | Agilent        | 2004/7/14  | 2006/7/13  |
| ETSTW-GSM 04 | Agilent 8960 Test Set 2              | E5515C                                 | GB44052665      | Agilent        | 2004/7/14  | 2006/7/13  |
| ETSTW-GSM 05 | Agilent 8960 Test Set 3              | E5515C                                 | GB44052652      | Agilent        | 2004/7/17  | 2006/7/16  |
| ETSTW-GSM 06 | Agilent 8960 Test Set 4              | E5515C                                 | GB44052684      | Agilent        | 2004/7/16  | 2006/7/15  |
| ETSTW-GSM 07 | Agilent 8960 Test Set 5              | E5515C                                 | GB44052658      | Agilent        | 2004/7/14  | 2006/7/13  |
| ETSTW-GSM 08 | Agilent 8960 Test Set 6              | E5515C                                 | GB44052666      | Agilent        | 2004/7/16  | 2006/7/15  |
| ETSTW-GSM 09 | Controller PC                        | Dell GX 270                            | 700F61J         | Dell           |            |            |
| ETSTW-GSM 10 | Combiner Wessex / Anite              | B4605/100                              | 053             | Wessex / Anite | 2004/7/14  | 2006/7/13  |
| ETSTW-GSM 11 | GSM 850,900,1800,1900 Test system    | TS8950G                                |                 | R&S            | 2005/11/1  | 2006/10/31 |
| ETSTW-GSM 12 | Acoustical Calibrator                | 4231                                   | 2463874         | Brüel&Kjær     | 2005/10/31 | 2006/10/30 |
| ETSTW-GSM 13 | Conditioning Amplifier               | 2690--0S2                              | 2437856         | Brüel&Kjær     |            |            |
| ETSTW-GSM 14 | Telephone Test Head                  | 4602B                                  | 2465324         | Brüel&Kjær     |            |            |
| ETSTW-GSM 15 | Mouth Simulator                      | 4227                                   | 2462516         | Brüel&Kjær     |            |            |
| ETSTW-GSM 16 | TEMP.&HUMIDITY CHAMBER               | GTH-120-40-1P-U                        | MAA0501002      | GIANT FORCE    | 2005/12/29 | 2006/12/28 |
| ETSTW-GSM 17 | ANTENNT COPLER                       | CMU-Z10                                | 100988          | R&S            |            |            |
| ETSTW-GSM 18 | AUDIO ANALYZER                       | UPL16                                  | 100173          | R&S            | 2005/10/29 | 2006/10/28 |
| ETSTW-GSM 19 | Band Reject Filter                   | WRCTF824/849-822/851-40 /12+9SS        | 3               | WI             |            |            |
| ETSTW-GSM 20 | Band Reject Filter                   | WRCD1747/1748-1743/1752-32/5SS         | 1               | WI             |            |            |
| ETSTW-GSM 21 | Band Reject Filter                   | WRCD1879.5/1880.5-1875.5/1884.5-32/5SS | 3               | WI             |            |            |
| ETSTW-GSM 22 | Band Reject Filter                   | WRCT901.9/903.1-904.25-50/8SS          | 1               | WI             |            |            |
| ETSTW-GSM 23 | SPLITTER                             | 4901.19.A                              | None            | SUHNER         |            |            |
| ETSTW-GSM 24 | Vibration Testing System             | VS-100V                                | 5494            | Vibration      | 2005/12/20 | 2006/12/19 |
| ETSTW-GSM 25 | Reference Phone                      | N70                                    | 357927002616186 | Nokia          |            |            |
| ETSTW-GSM 26 | Reference Phone                      | 6230                                   | 354327002906419 | Nokia          |            |            |

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## 2.4 General Test Procedure

**POWER LINE CONDUCTED INTERFERENCE:** The procedure used was ANSI STANDARD C63.4-2003 using a 50 $\mu$ H LISN (if necessary). Both lines were observed. The bandwidth of the spectrum analyzer was 10 kHz with an appropriate sweep speed.

**RADIATION INTERFERENCE:** The test procedure used was according to ANSI STANDARD C63.4-2003 employing a spectrum analyzer. For investigated frequency is equal to or below 1GHz, the RBW and VBW of the spectrum analyzer was 100 kHz and 100kHz respectively with an appropriate sweep speed. For investigated frequency is above 1GHz, both of RBW and VBW of the spectrum analyzer were 1 MHz with an appropriate sweep speed. The analyzer was calibrated in dB above a microvolt at the output of the antenna. The ambient temperature of the UUT was 23°C with a humidity of 40 %.

**FORMULA OF CONVERSION FACTORS:** The Field Strength at 3m was established by adding the meter reading of the spectrum analyzer (which is set to read in units of dB $\mu$ V) to the antenna correction factor supplied by the antenna manufacturer. The antenna correction factors are stated in terms of dB.

Example:

|            |  |
|------------|--|
| Freq (MHz) | METER READING + ACF + CABLE LOSS (to the receiver) = FS  |
| 33         | 20 dB $\mu$ V + 10.36 dB + 6 dB = 36.36 dB $\mu$ V/m @3m |

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES: The UUT was placed on a table 80 cm high and with dimensions of 1m by 1.5m (non metallic table). The UUT was placed in the center of the table. The table used for radiated measurements is capable of continuous rotation. The spectrum was scanned from 30 MHz to 10<sup>th</sup> harmonic of the fundamental.

Peak readings were taken in three (3) orthogonal planes and the highest readings.

Measurements were made by ETS Dr. Genz Taiwan PS Co., Ltd. at the registered open field test site located at No.5-1, Shuang Sing Village, LiShuei Rd., Wanli Township, Taipei County 207, Taiwan (R.O.C.). The Registration Number: 930600.

When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical planes.

ANTENNA & GROUND:

**This unit uses dipole antenna. (see photo).**

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### **3 Test results (enclosure)**

| TEST CASE   | Required                            | Test passed                         | Test failed              |
|---|-------------------------------------|-------------------------------------|--------------------------|
| Peak Output Power 15.249 (b)                                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Spurious Emissions radiated – Transmitter operating 15.249 (e)  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Spurious Emissions conducted – Transmitter operating 15.249 (e) | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| Out of Band Spurious Emission, Band edge-Transmitter operating  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Power Line Conducted Emission 15.207                            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The follows is intended to leave blank.

Registration number: W6M20601-6522-P-15  
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### 3.1 Peak Output Power (transmitter)

FCC Rule: 15.249 (b)

This measurement applies to equipment with an integral antenna and to equipment with an antenna connector and equipped with an antenna as declared by the applicant.

The power was measured with modulation (declared by the applicant).

| Test conditions<br>Channel 1 |                          | Transmitter field strength of<br>fundamental | Transmitter field strength of<br>harmonics |
|------------------------------|--------------------------|--|--|
|                              |                          | [dB $\mu$ V/m]                               |  |
| T <sub>nom</sub> = 23 ° C    | V <sub>nom</sub> = 6 VDC | 83.38  | --   |
| Measurement uncertainty      |                          | < 3 dB                                       |  |

| Test conditions<br>Channel 2 |                          | Transmitter field strength of<br>fundamental | Transmitter field strength of<br>harmonics |
|------------------------------|--------------------------|--|--|
|                              |                          | [dB $\mu$ V/m]                               |  |
| T <sub>nom</sub> = 23 ° C    | V <sub>nom</sub> = 6 VDC | 83.47  | --   |
| Measurement uncertainty      |                          | < 3 dB                                       |  |

| Test conditions<br>Channel 4 |                          | Transmitter field strength of<br>fundamental | Transmitter field strength of<br>harmonics |
|------------------------------|--------------------------|--|--|
|                              |                          | [dB $\mu$ V/m]                               |  |
| T <sub>nom</sub> = 23 ° C    | V <sub>nom</sub> = 6 VDC | 83.15  | --   |
| Measurement uncertainty      |                          | < 3 dB                                       |  |

Test equipment used: ETSTW-RE 003, ETSTW-RE 012, ETSTW-RE 017, ETSTW-RE 024  
Remarks: The diagrams for the field strength measurements are included in appendix.

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FCC ID: TYN-WA-0002D

### 3.2 Equivalent isotropic radiated power

Because using an permanent antenna there are no deviations from the radiated test results according 3.1.

#### 3.2.1 Transmitter

##### Integral Antenna:

At the transmitter the measurement was transacted with the modulation declared by the manufacturer and the maximum available output power of the EUT.

In this arrangement the EUT fulfils the requirements of the FCC rules § 15.249, subpart C, This unit uses permanent antenna. There is no provision for an external antenna (see photo).

### 3.3 RF Exposure Compliance Requirements

Not applicable for this Wireless audio door phone - Door Station 2 buttons for the low power level.

### 3.4 Out of Band Radiated Emissions

FCC Rule: 15.49 (d)(e), 15.35(b)

Emission radiated outside of the specified frequency bands, except for harmonics, shall be 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.

For frequency above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

Limits:

| Frequency of Emission<br>(MHz) | Field strength<br>(microvolts/meter) | Field Strength<br>(dB microvolts/meter) |
|--------------------------------|--------------------------------------|---|
| 30 - 88                        | 100                                  | 40.0                                    |
| 88 - 216                       | 150                                  | 43.5                                    |
| 216 - 960                      | 200                                  | 46.5                                    |
| Above 960                      | 500                                  | 54.0                                    |

For frequencies above 1 GHz (Peak measurements).

Limit + 20 dB

$$54.0 \text{ dB}\mu\text{V/m} + 20 \text{ dB} = 74 \text{ dB}\mu\text{V/m}$$

Or

Must be antenuatted at least 50dB below the level of fundament

Test equipment used: ETSTW-RE 003 , ETSTW-RE 012 , ETSTW-RE 015 , ETSTW-RE 016 ,  
ETSTW-RE 017 , ETSTW-RE 024

Remark: see attached diagram

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FCC ID: TYN-WA-0002D

### 3.5 Spurious emission (tx)

Spurious emission was measured with modulation (declared by manufacturer).

Emission radiated outside of the specified frequency bands, except for harmonics, shall be 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.

For frequencies above 1000 MHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

SAMPLE CALCULATION OF LIMIT. ALL results will be updated by an automatic measuring system in accordance with point 2.3.

The peak and average spurious emission plots was measured with the average limits.  
The critical peak value listed in the table agree with the above calculated limits.

#### Summary table with radiated data of the test plots

| Freq | Used Ch | Frequency Marker [MHz] | Polarization | corrections dB | Corrected Reading [dBuV/m] | Compliance Limit [dBuV/m] | Detector | BW [MHz] | Margin |
|------|---------|------------------------|--------------|----------------|----------------------------|---------------------------|----------|----------|--------|
| 1    | 1       | 31.703407              | V            | --             | 26.65                      | 40                        | PK       | 0.1      | 13.35  |
| 1    | 1       | 109.038076             | V            | --             | 26.91                      | 43.5                      | PK       | 0.1      | 16.59  |
| 2    | 1       | 797.995992             | V            | --             | 37.97                      | 46                        | PK       | 0.1      | 8.03   |
| 2    | 1       | 825.250501             | V            | --             | 43.36                      | 46                        | PK       | 0.1      | 2.64   |
| 3    | 1       | 3188.376754            | V            | --             | 45.15                      | 54                        | PK       | 1        | 8.85   |
| 4    | 1       | 4777.55511             | V            | --             | 47.05                      | 54                        | PK       | 1        | 6.95   |
| 1    | 1       | 172.064128             | H            | --             | 30.93                      | 43.5                      | PK       | 0.1      | 12.57  |
| 2    | 1       | 786.773547             | H            | --             | 34.49                      | 46                        | PK       | 0.1      | 11.51  |
| 2    | 1       | 825.250501             | H            | --             | 44.71                      | 46                        | PK       | 0.1      | 1.29   |
| 2    | 1       | 824.7701653            | H            | --             | 45.51                      | 46                        | QP       | 0.1      | 0.49   |
| 3    | 1       | 2190.380762            | H            | --             | 38.91                      | 54                        | PK       | 1        | 15.09  |
| 4    | 1       | 4777.55511             | H            | --             | 46.22                      | 54                        | PK       | 1        | 7.78   |
| 1    | 2       | 31.703407              | V            | --             | 27.7                       | 40                        | PK       | 0.1      | 12.3   |
| 1    | 2       | 148.216433             | V            | --             | 26.52                      | 43.5                      | PK       | 0.1      | 16.98  |
| 2    | 2       | 797.995992             | V            | --             | 38.43                      | 46                        | PK       | 0.1      | 7.57   |
| 2    | 2       | 825.250501             | V            | --             | 42.18                      | 46                        | PK       | 0.1      | 3.82   |



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|   |   |             |   |    |       |      |    |     |       |
|---|---|-------------|---|----|-------|------|----|-----|-------|
| 3 | 2 | 3194.388778 | V | -- | 44.46 | 54   | PK | 1   | 9.54  |
| 4 | 2 | 4785.571142 | V | -- | 46.89 | 54   | PK | 1   | 7.11  |
| 1 | 2 | 156.052104  | H | -- | 28.27 | 43.5 | PK | 0.1 | 15.23 |
| 2 | 2 | 203.206413  | H | -- | 26.35 | 43.5 | PK | 0.1 | 17.15 |
| 2 | 2 | 528.4377501 | H | -- | 45.49 | 46   | QP | 0.1 | 0.51  |
| 3 | 2 | 1709.418838 | H | -- | 36.27 | 54   | PK | 1   | 17.73 |
| 4 | 2 | 4785.571142 | H | -- | 46.64 | 54   | PK | 1   | 7.36  |
| 1 | 3 | 31.703407   | V | -- | 27.61 | 40   | PK | 0.1 | 12.39 |
| 1 | 3 | 147.875752  | V | -- | 25.86 | 43.5 | PK | 0.1 | 17.64 |
| 2 | 3 | 797.995992  | V | -- | 38.11 | 46   | PK | 0.1 | 7.89  |
| 2 | 3 | 825.250501  | V | -- | 42.51 | 46   | PK | 0.1 | 3.49  |
| 3 | 3 | 3194.388778 | V | -- | 44.55 | 54   | PK | 1   | 9.45  |
| 4 | 3 | 4785.571142 | V | -- | 46.92 | 54   | PK | 1   | 7.08  |
| 1 | 3 | 148.216433  | H | -- | 28.03 | 43.5 | PK | 0.1 | 15.47 |
| 2 | 3 | 824.8437653 | H | -- | 45.46 | 46   | QP | 0.1 | 0.54  |
| 3 | 3 | 1757.51503  | H | -- | 45.75 | 54   | PK | 1   | 8.25  |
| 3 | 3 | 3194.388778 | H | -- | 42.36 | 54   | PK | 1   | 11.64 |
| 4 | 3 | 4785.571142 | H | -- | 46.87 | 54   | PK | 1   | 7.13  |

Freq. – Frequency Range:

|    |     |   |          |
|----|-----|---|----------|
| 1: | 30  | - | 200 MHz  |
| 2: | 200 | - | 1000 MHz |
| 3: | 1   | - | 4 GHz    |
| 4: | 4   | - | 8 GHz    |
| 5: | 8   | - | 12 GHz   |
| 6: | 12  | - | 17 GHz   |
| 7: | 17  | - | 26.5 GHz |

**TEST RESULT (Transmitter):** The unit DOES meet the FCC requirements.

Comment: see attached diagrams

Test equipment used: ETSTW-RE 003, ETSTW-RE 012, ETSTW-RE 015, ETSTW-RE 016,  
ETSTW-RE 017, ETSTW-RE 024

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### 3.6 Radiated Emission on the bandedge

From the following plots, they show that the fundamental emissions are confined in the specified band and hey at least 50 dB below the carrier level at band edge (2400,0 and 2483,5 MHz). It meets the requirement of section 15.249(d).

| Test conditions<br>T <sub>nom</sub> = 23°C, V <sub>nom</sub> = 120V<br>Frequency [MHz] | Transmitter field strength of<br>Radiated Emission<br>(Peak Detector)<br>[dBμV/m] | Transmitter field strength of<br>Radiated Emission<br>(Average Detector) |
|--|---|--|
| 2400   | 40.85   | --   |
| 2483,5   | 42.01   | --   |

Limit:

| Frequency Range (MHz)                                      | Limit (dBμV/m) |         |
|--|----------------|---------|
|  | Peak           | Average |
| 902 – 928<br>2400 – 2483,5<br>5725 – 5875<br>24000 - 24250 | 74             | 54      |

Test equipment used: ETSTW-RE 003, ETSTW-RE 012, ETSTW-RE 017, ETSTW-RE 024

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### 3.7 Power Line Conducted Emission

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the table bellows with this provision shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminals.

This measurement was transact first with instrumentation using an average and peak detector and a 10 kHz bandwidth. If the peak detector achieves a calculated level, the measurement is repeated by an instrumentation using a quasi-peak detector.

| Frequency | Level (dB $\mu$ V) |                  |
|-----------|--------------------|------------------|
|           | quasi-peak         | average          |
| 150 kHz   | lower limit line   | Lower limit line |

#### Limits:

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

**Test is not required the sample is battery used.**

Test equipment used: ETSTW-CE 004, ETSTW-CE 001, ETSTW-RE 023

**Comment:** The test is not applicable.



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## **Appendix**

- A Fundamental Field Strength
- B Spurious Emissions radiated – Transmitter operating
- C Pictures



Registration number: W6M20601-6522-P-15  
FCC ID: TYN-WA-0002D

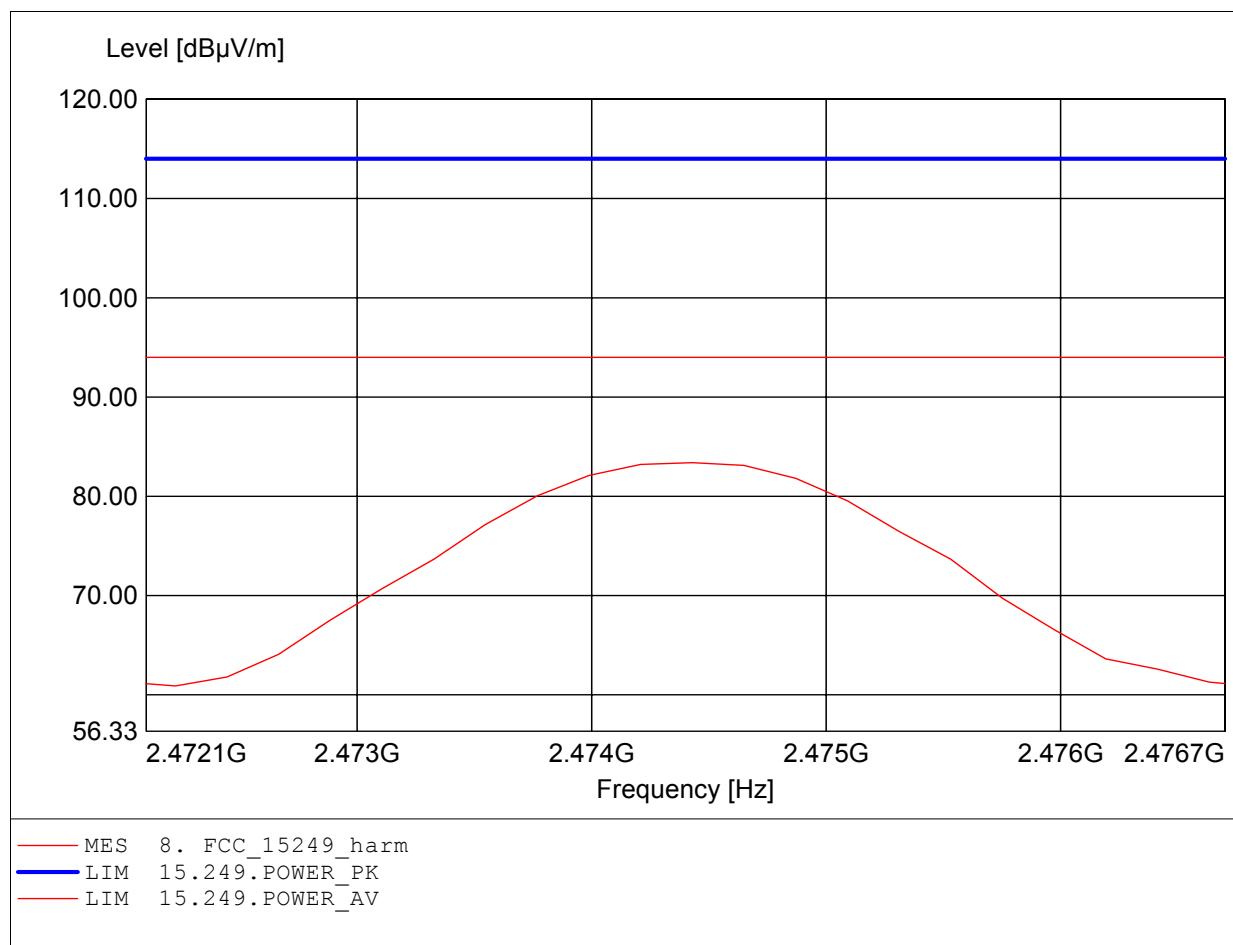
## Appendix A

### Fundamental Field Strength

## Carrier power (Field Strength)

### FCC RULES PART 15, SUBPART C

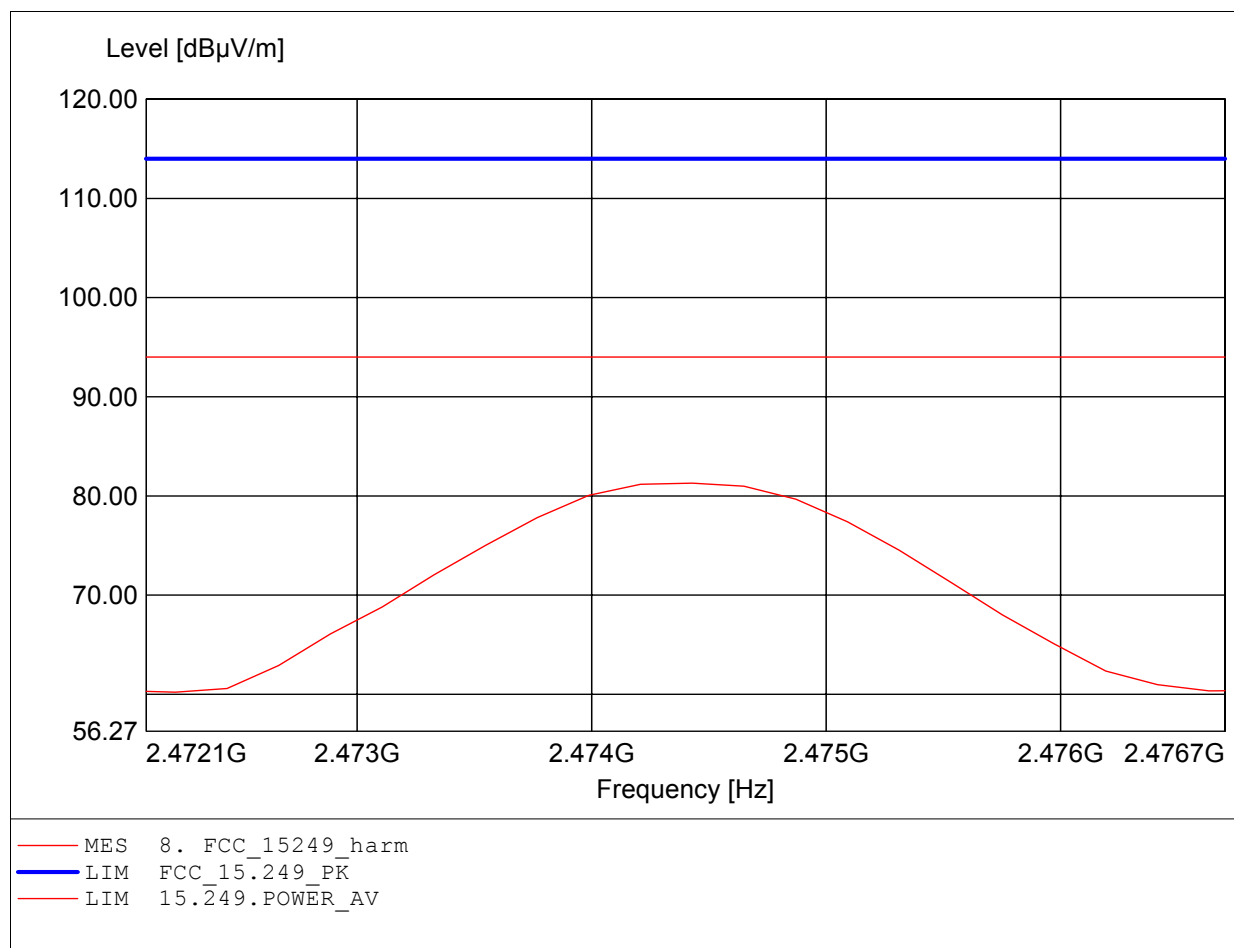
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.474GHz, Emax: 83.38dBµV/m, RBW: 1MHz



## Carrier power (Field Strength)

### FCC RULES PART 15, SUBPART C

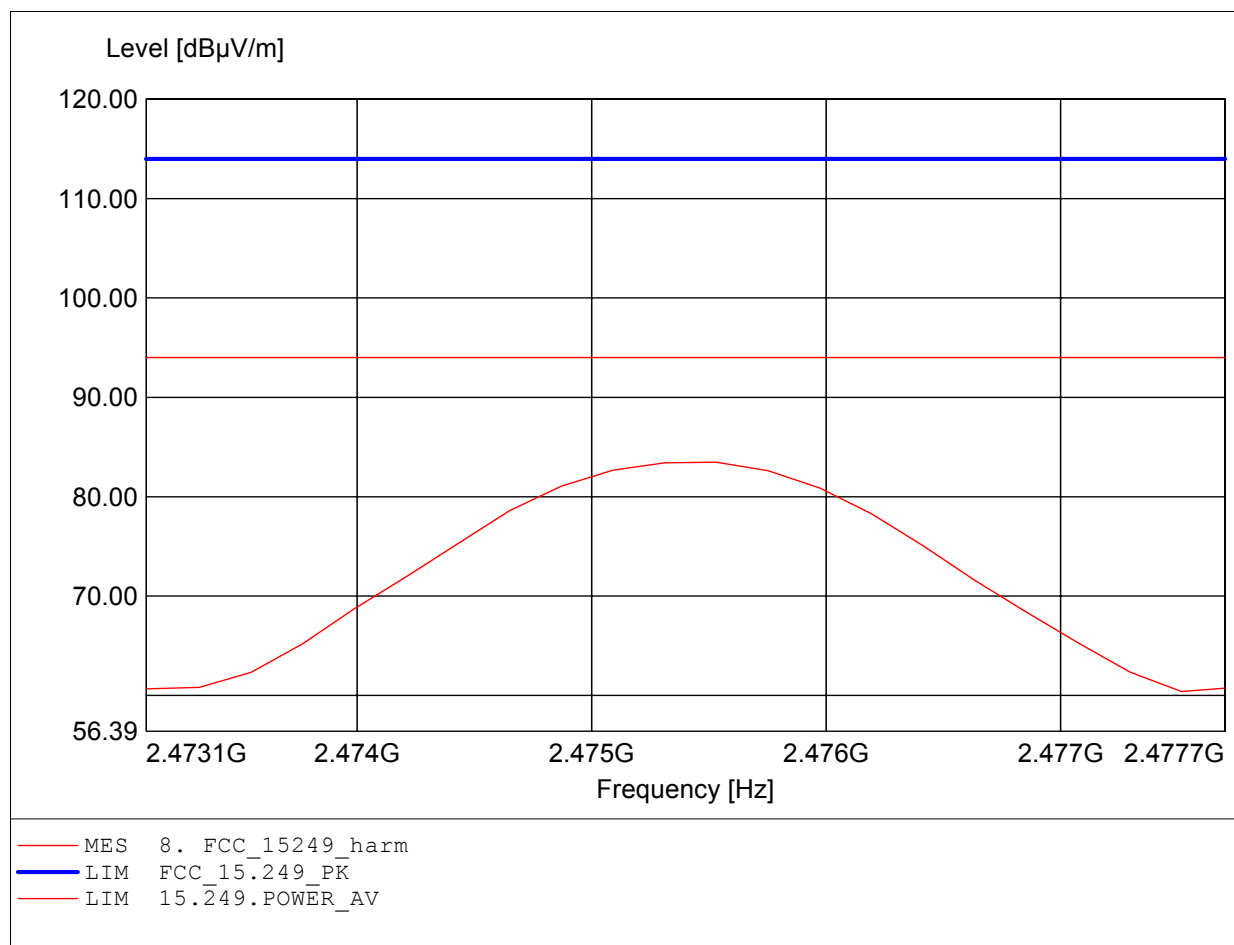
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.474GHz, Emax: 81.28dBµV/m, RBW: 1MHz



## Carrier power (Field Strength)

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.476GHz, Emax: 83.47dBµV/m, RBW: 1MHz

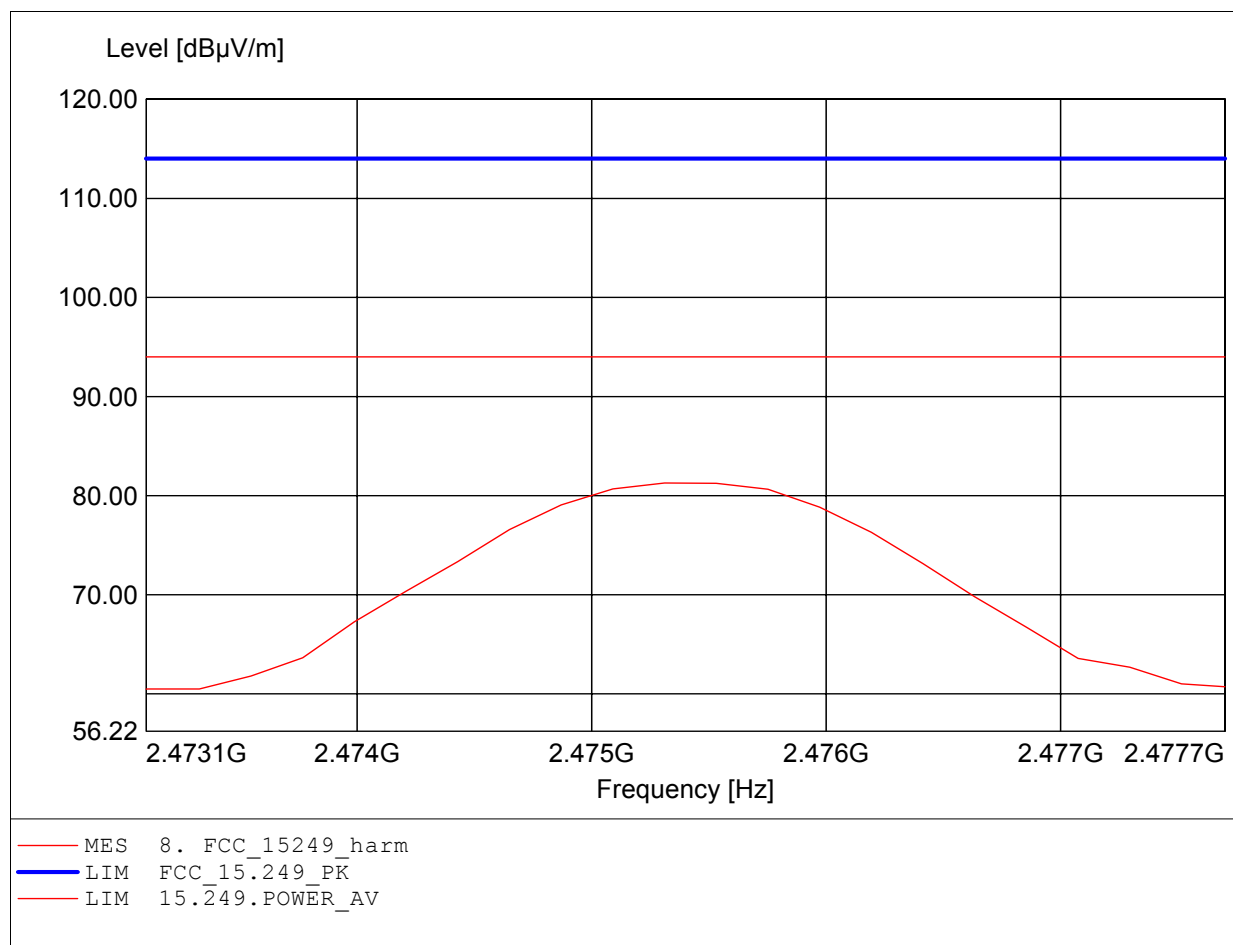




## Carrier power (Field Strength)

### FCC RULES PART 15, SUBPART C

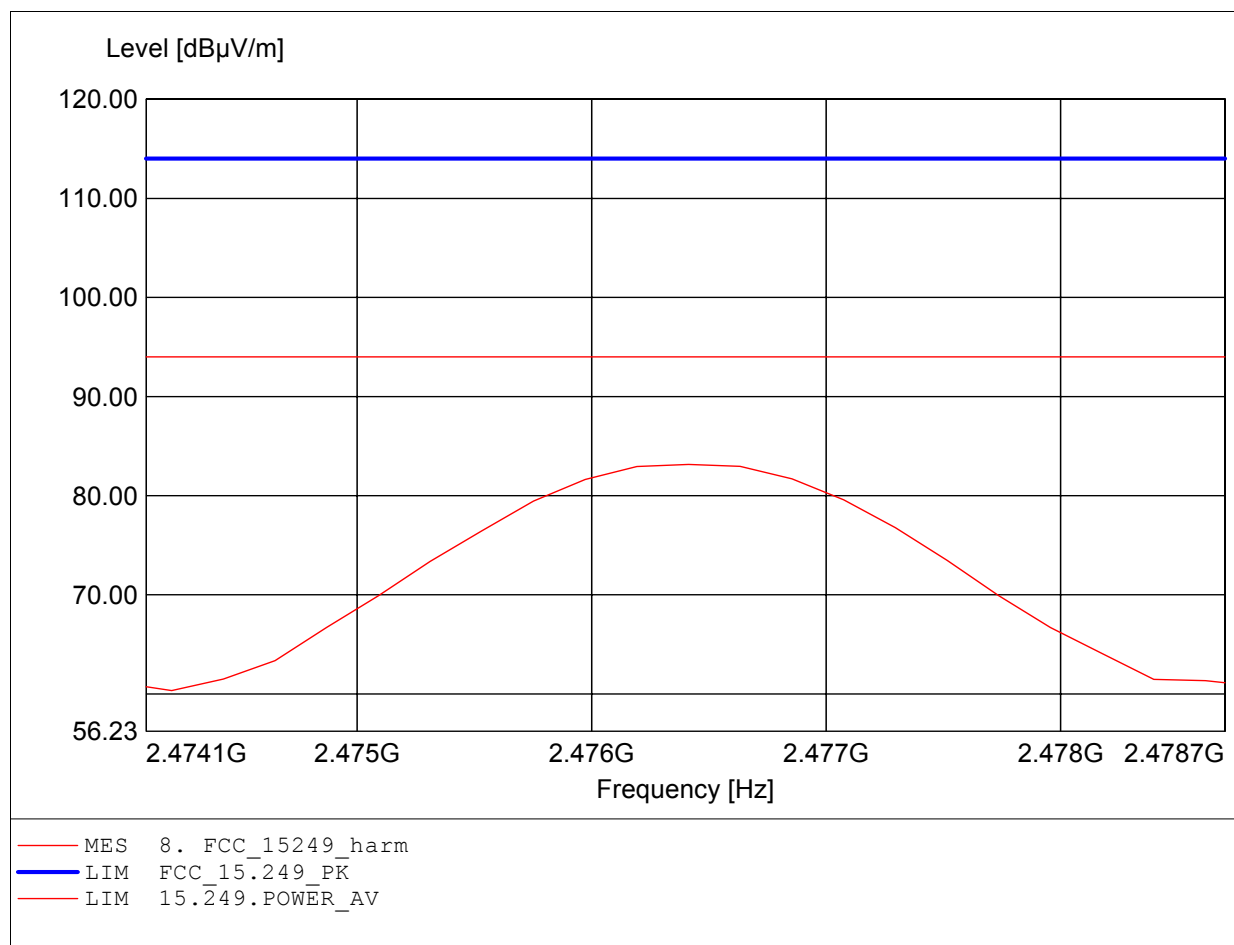
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.475GHz, Emax: 81.26dBµV/m, RBW: 1MHz



## Carrier power (Field Strength)

### FCC RULES PART 15, SUBPART C

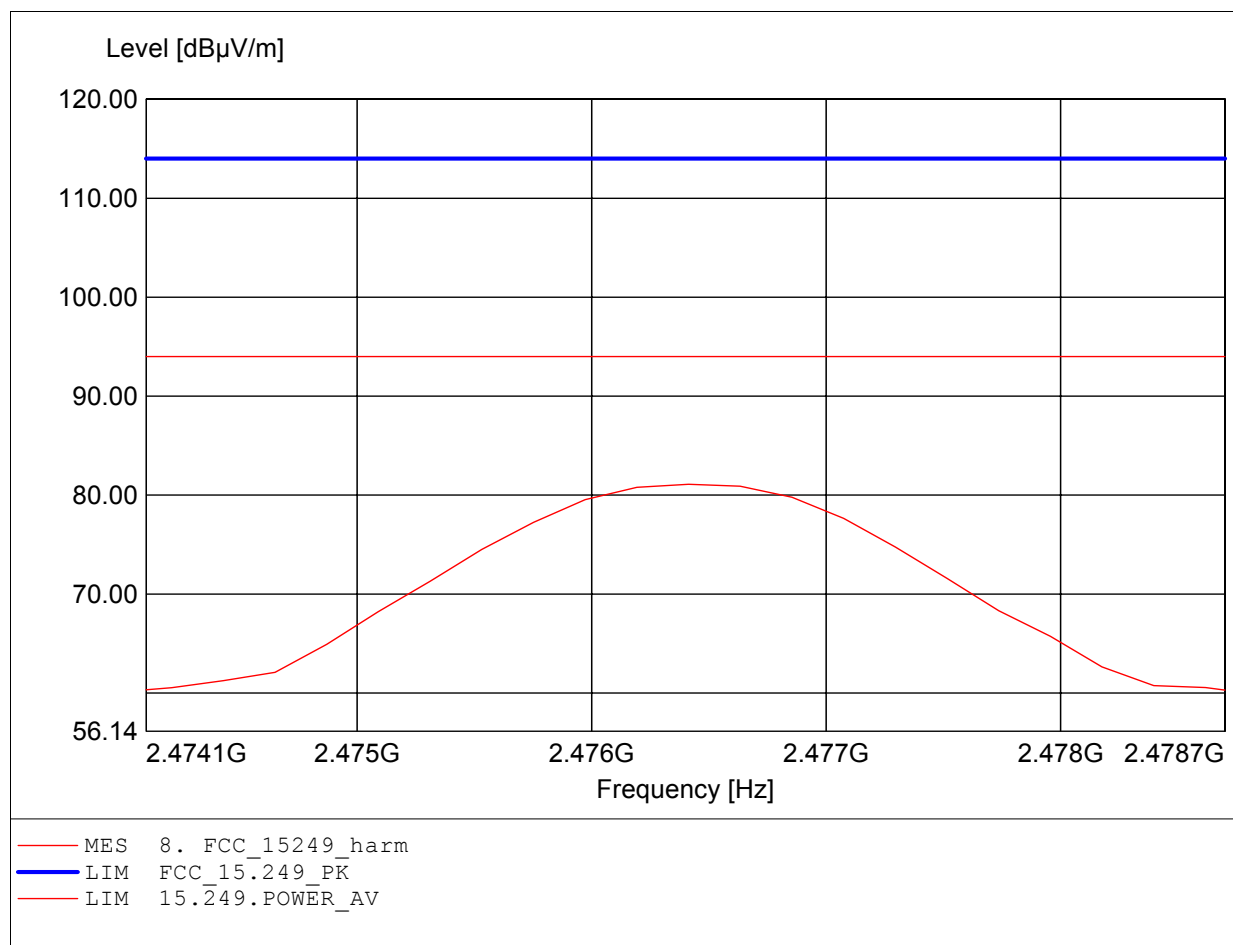
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.476GHz, Emax: 83.15dBµV/m, RBW: 1MHz



## Carrier power (Field Strength)

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025  
Freq: 2.476GHz, Emax: 81.10dBµV/m, RBW: 1MHz





Registration number: W6M20601-6522-P-15  
FCC ID: TYN-WA-0002D

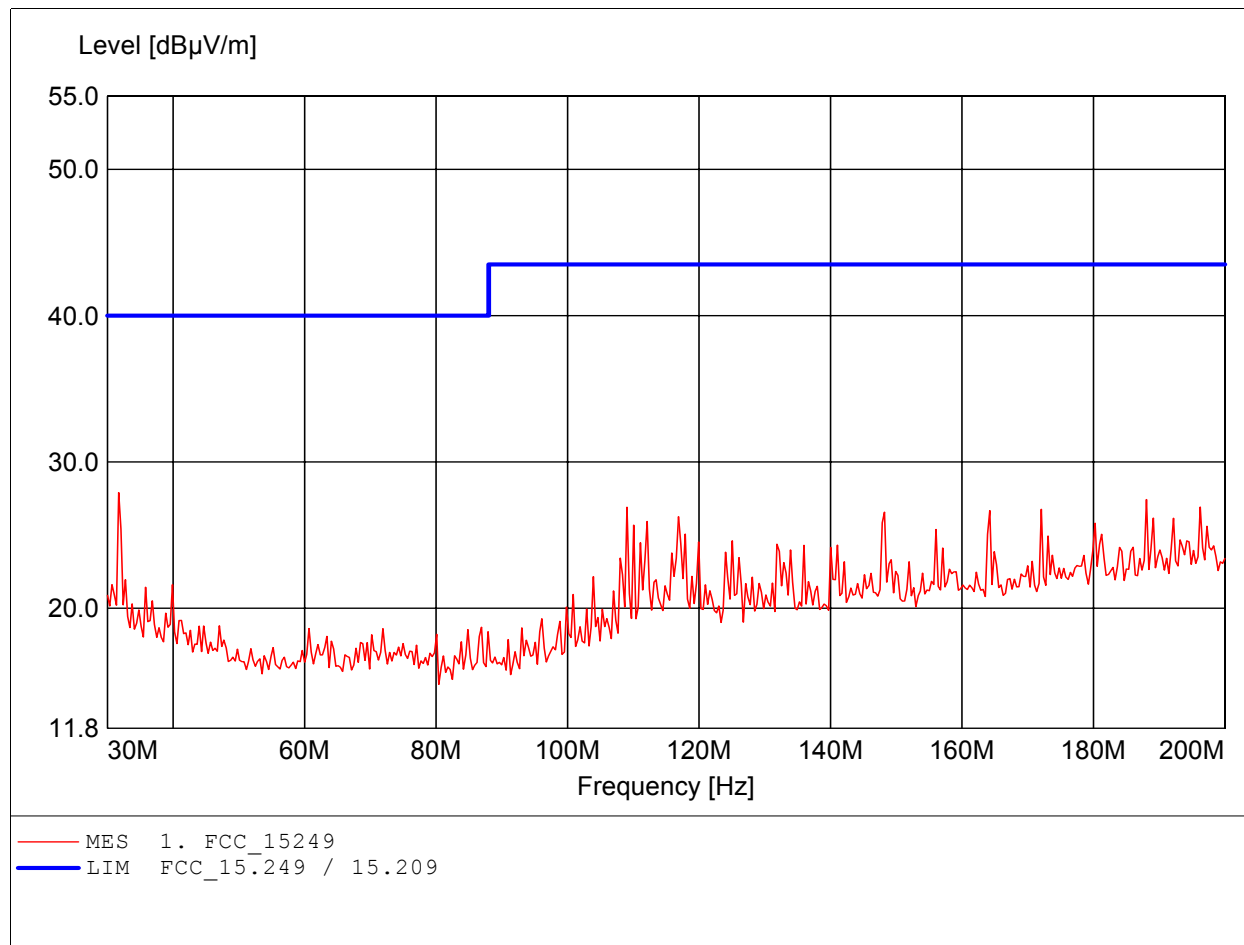
## Appendix B

Spurious Emissions radiated – Transmitter operating

## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

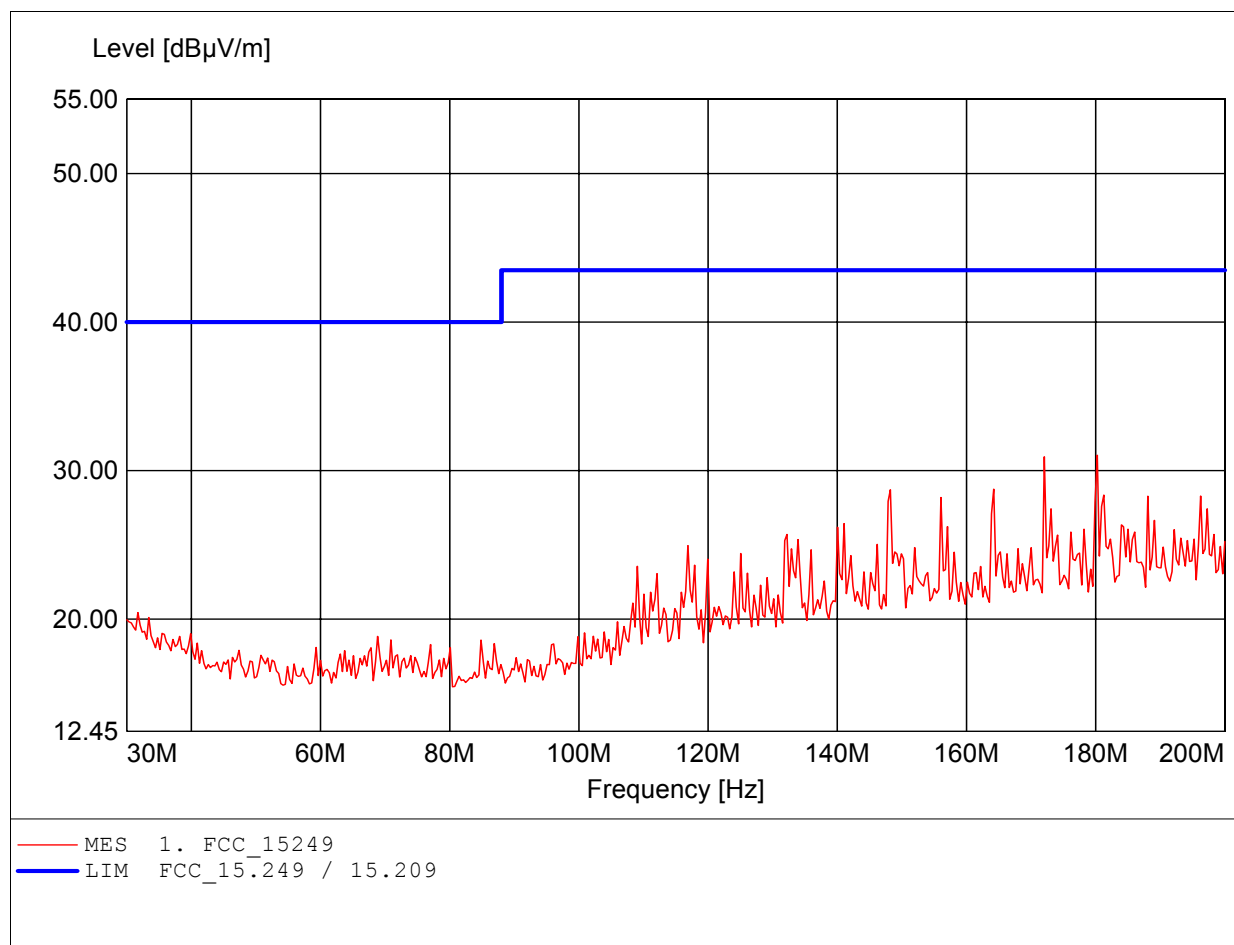
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 31.703MHz, Emax: 27.90dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

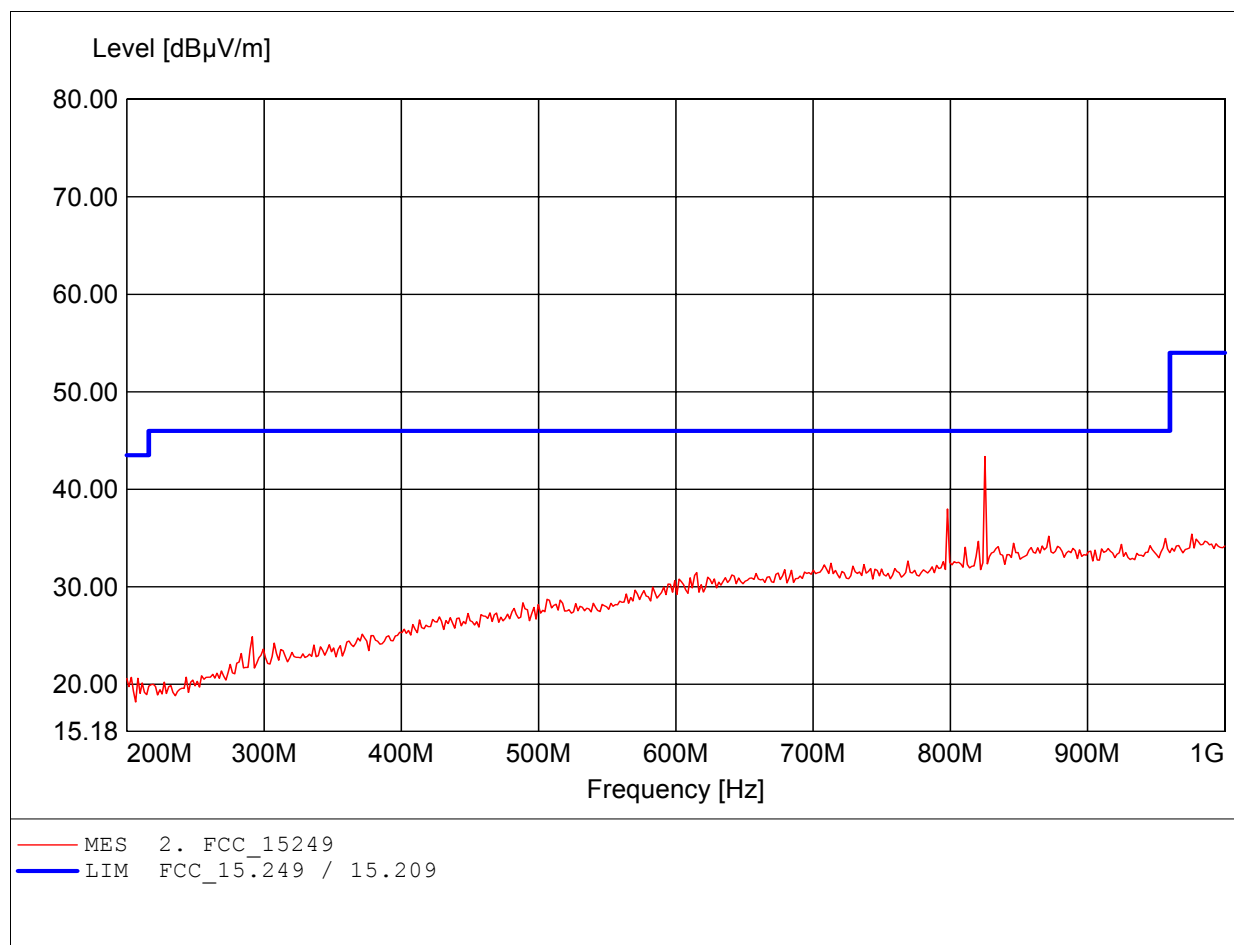
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 180.240MHz, Emax: 31.03dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

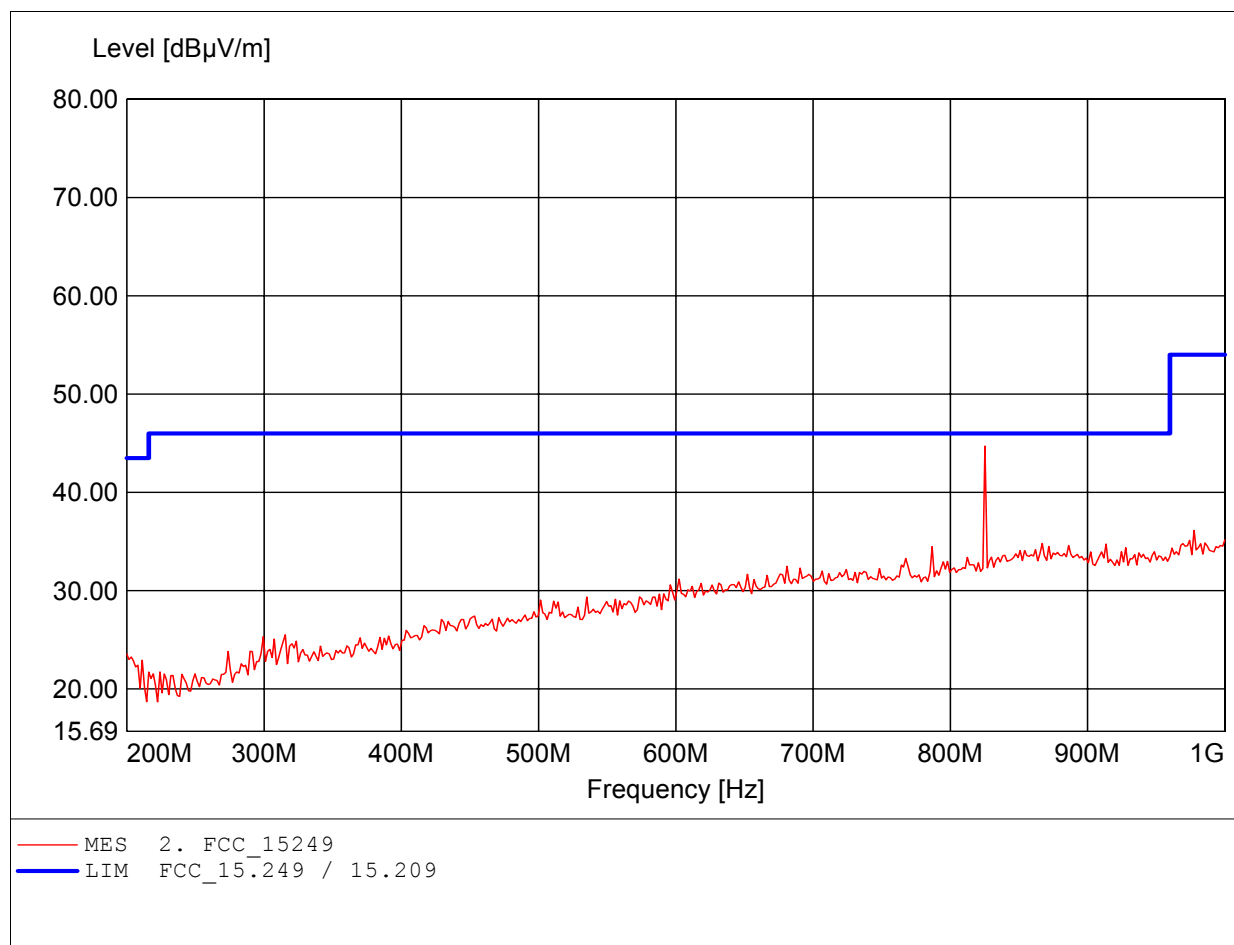
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 825.251MHz, Emax: 43.36dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 825.251MHz, Emax: 44.71dBµV/m, RBW: 100kHz

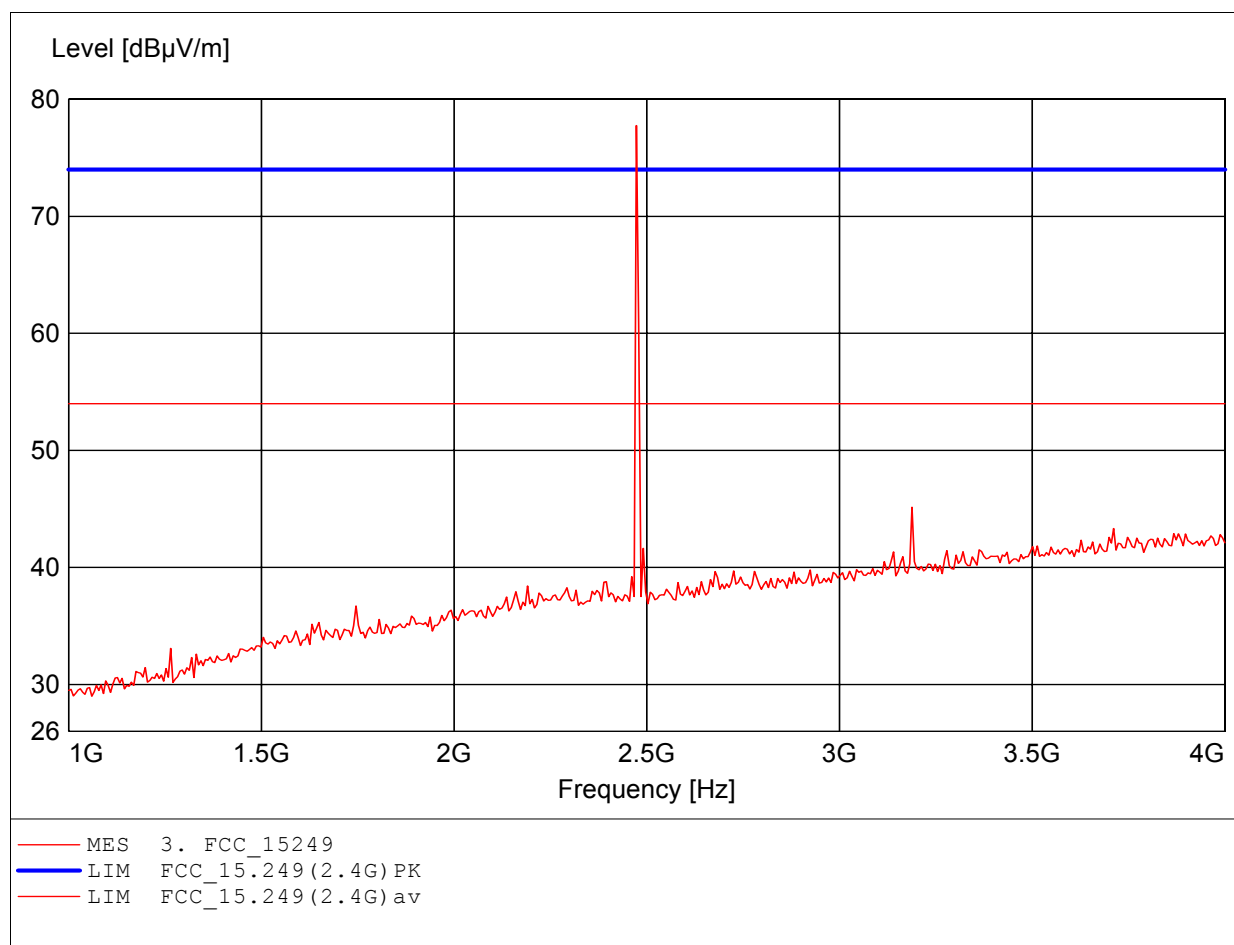




## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

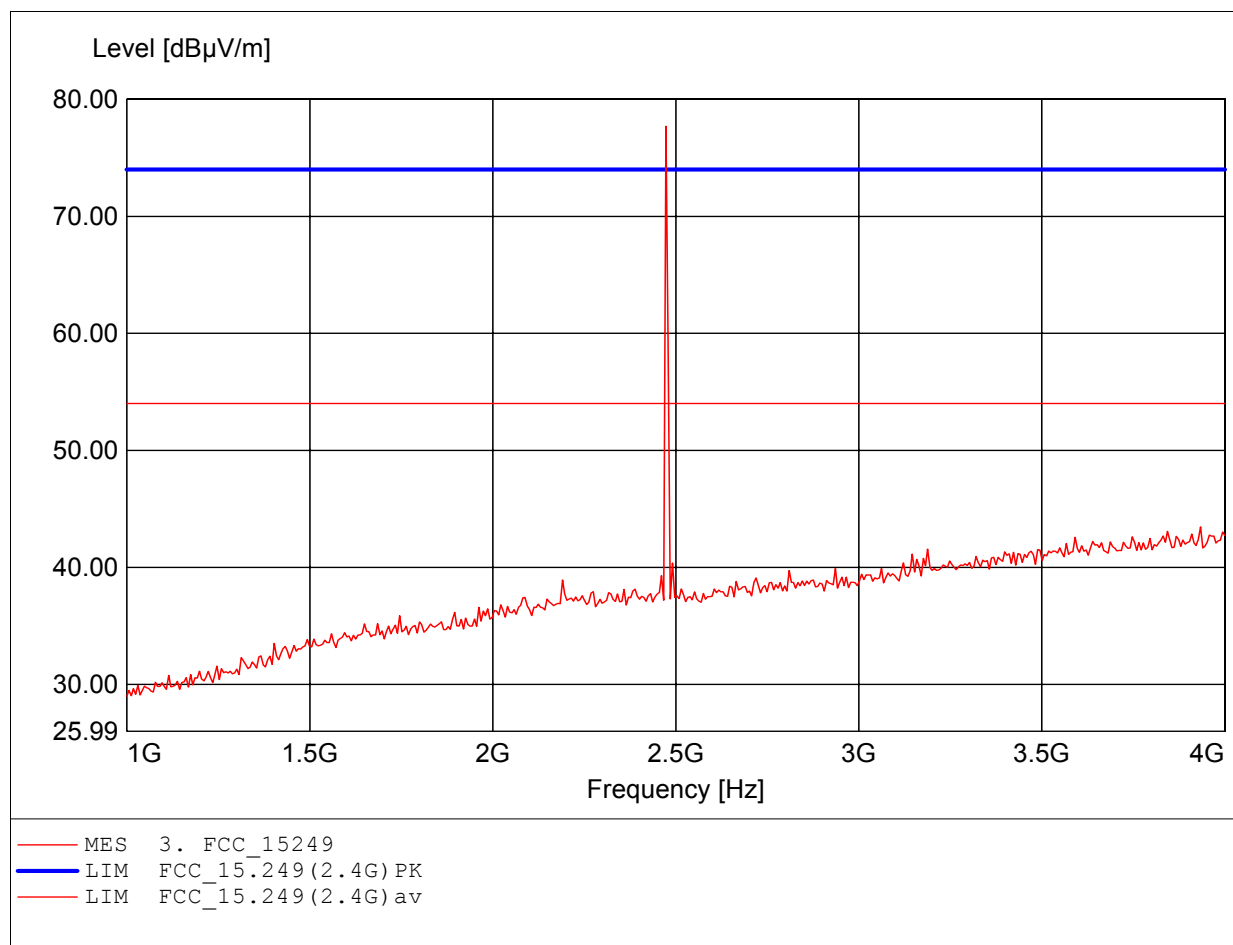
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 2.473GHz, Emax: 77.76dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

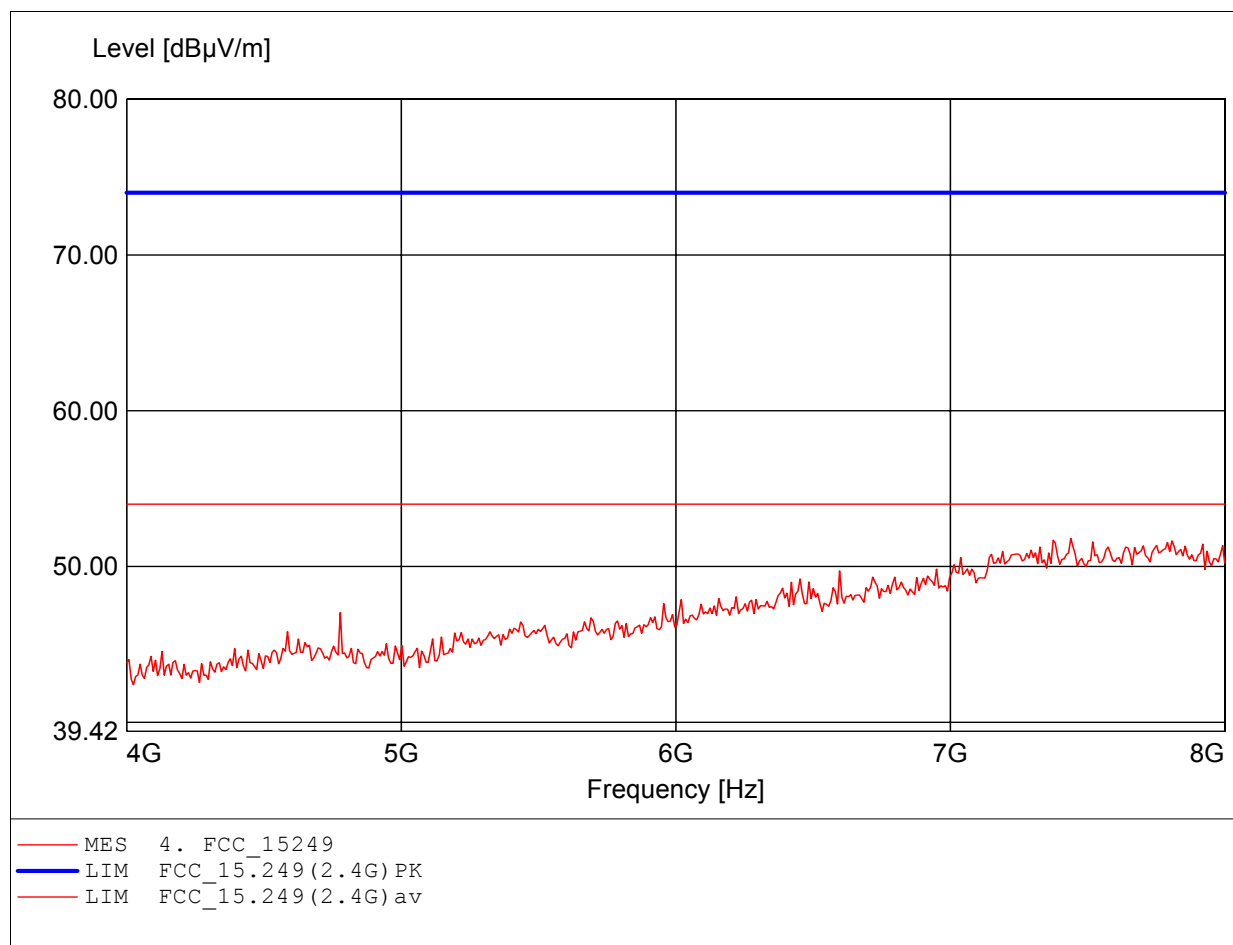
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 2.473GHz, Emax: 77.69dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

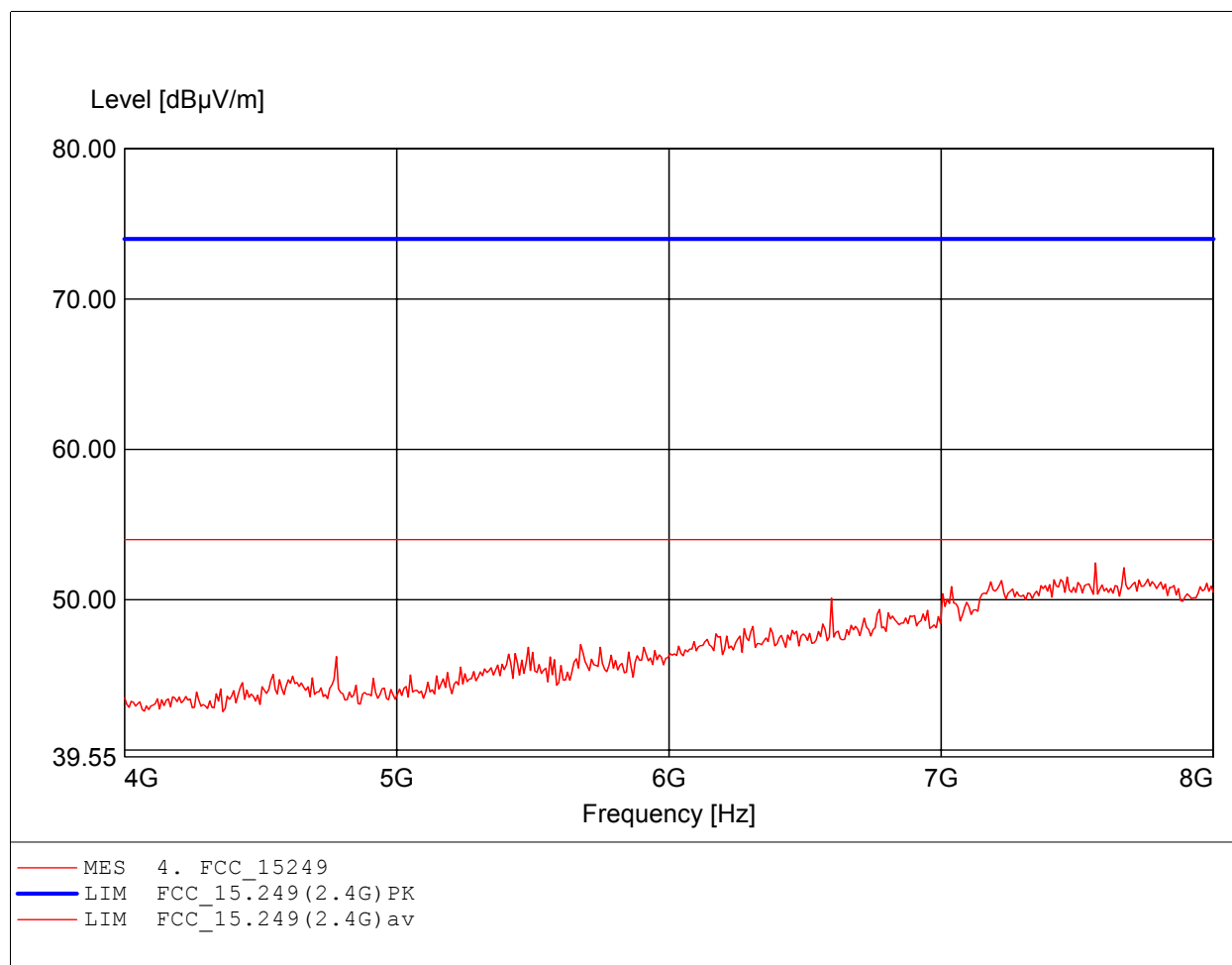
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.439GHz, Emax: 51.81dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

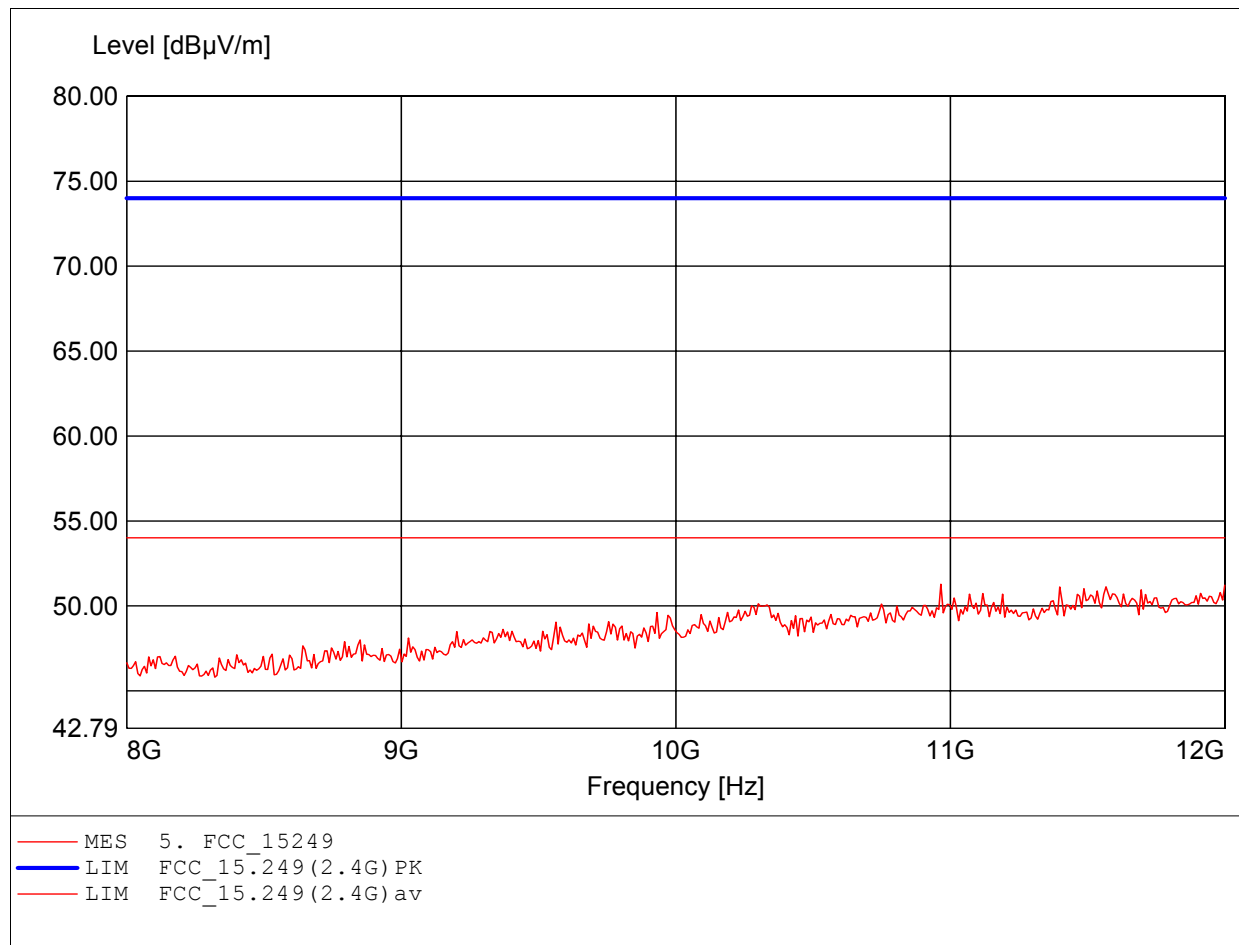
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.567GHz, Emax: 52.44dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

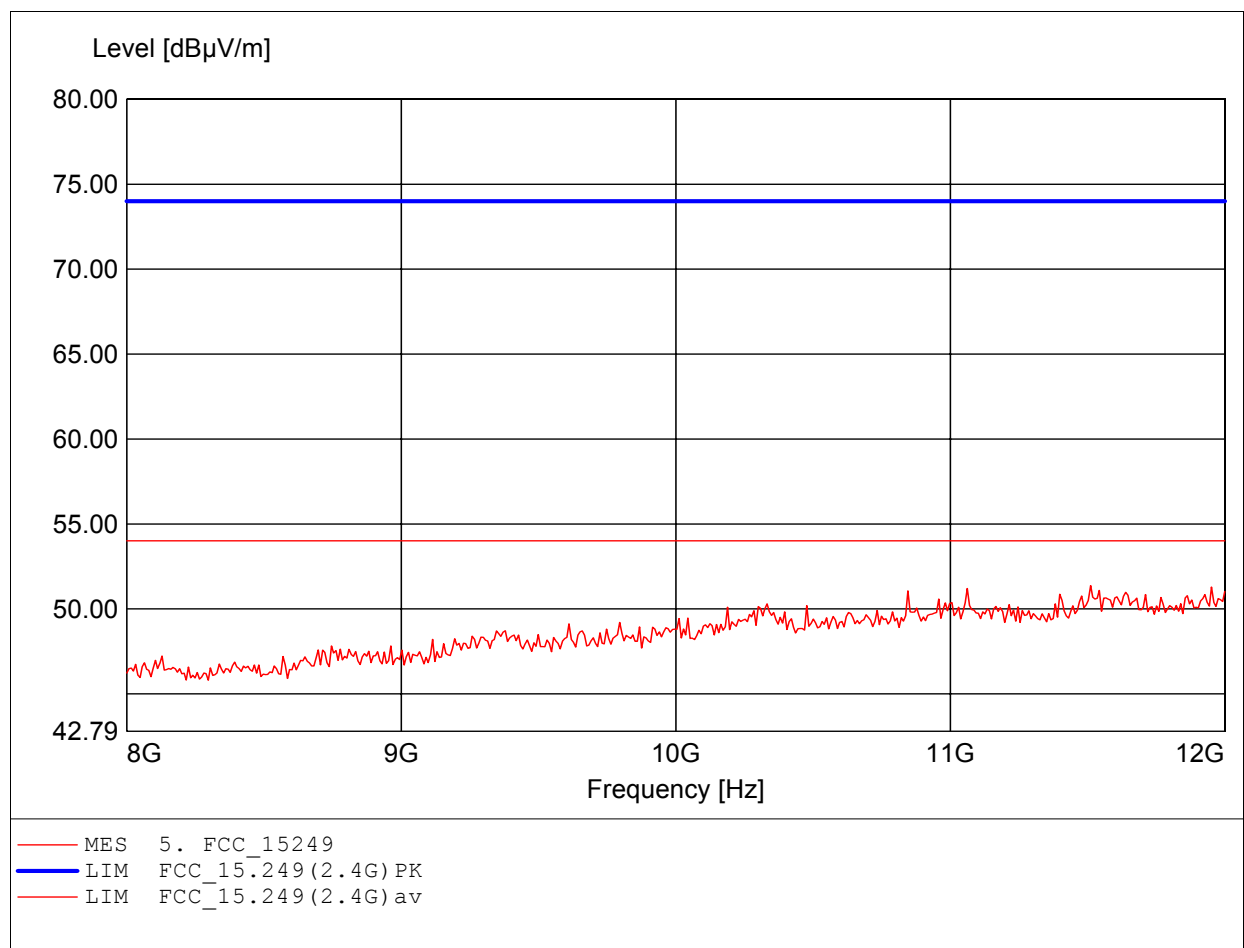
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 10.966GHz, Emax: 51.27dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

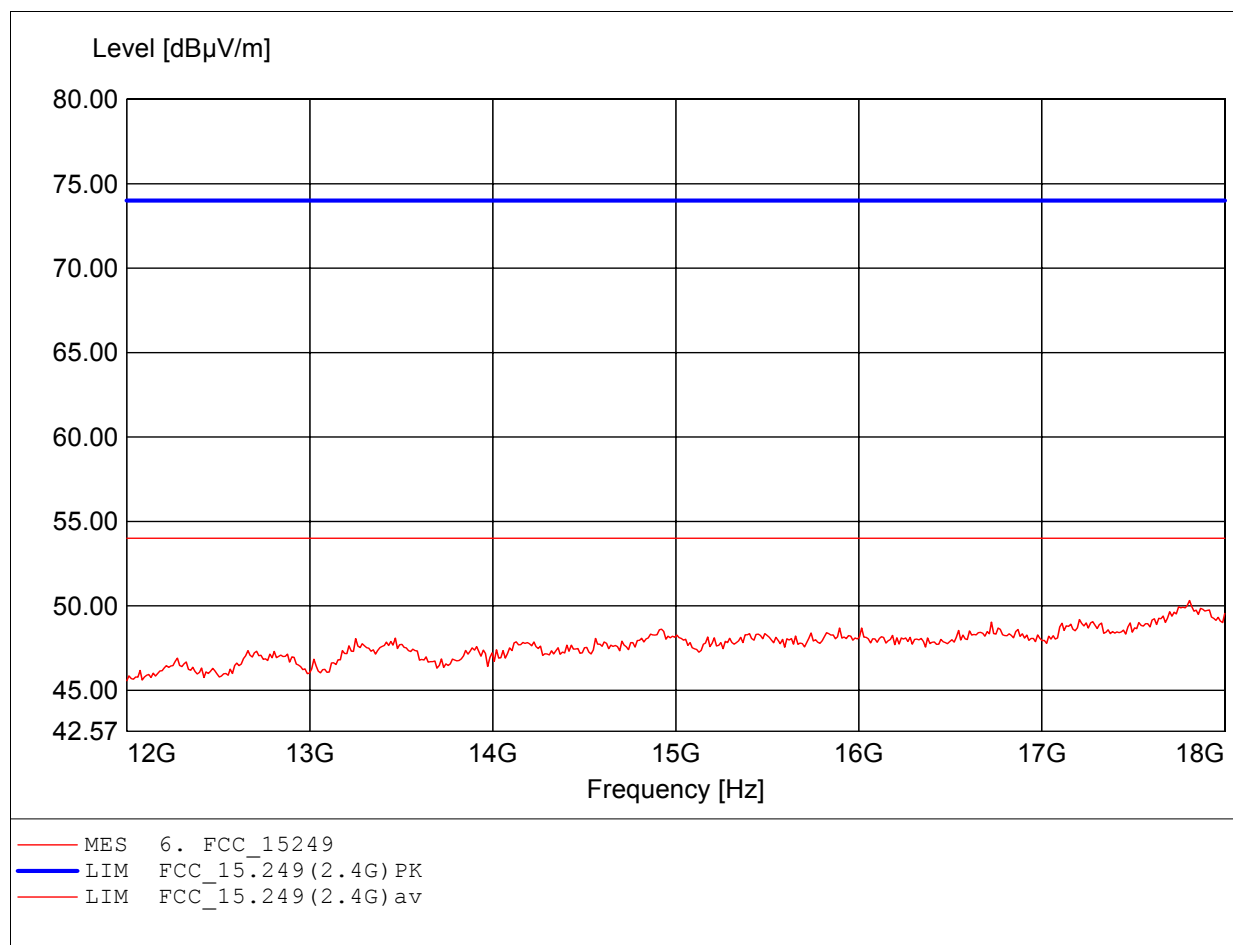
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.511GHz, Emax: 51.36dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

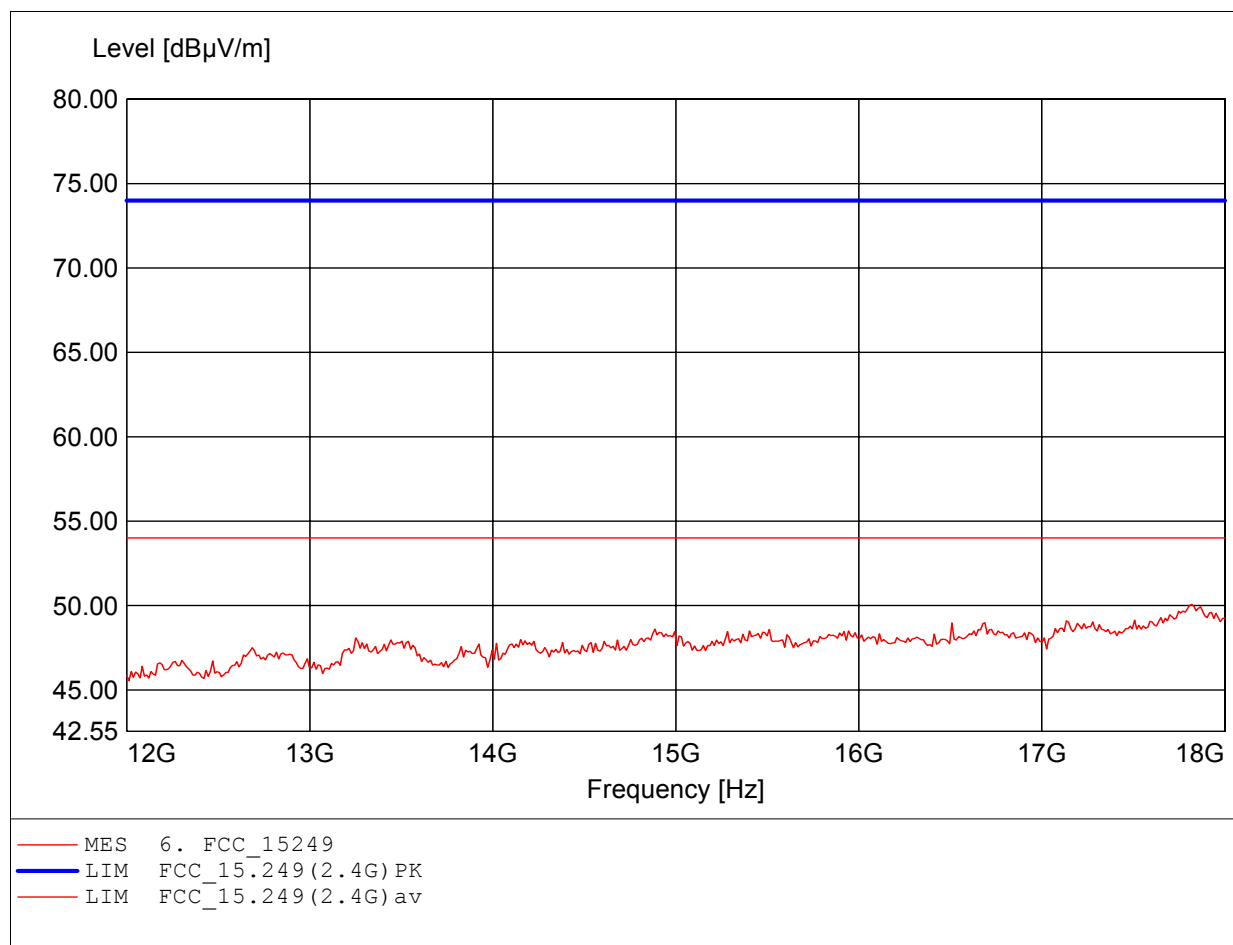
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.808GHz, Emax: 50.31dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.820GHz, Emax: 50.06dBμV/m, RBW: 1MHz

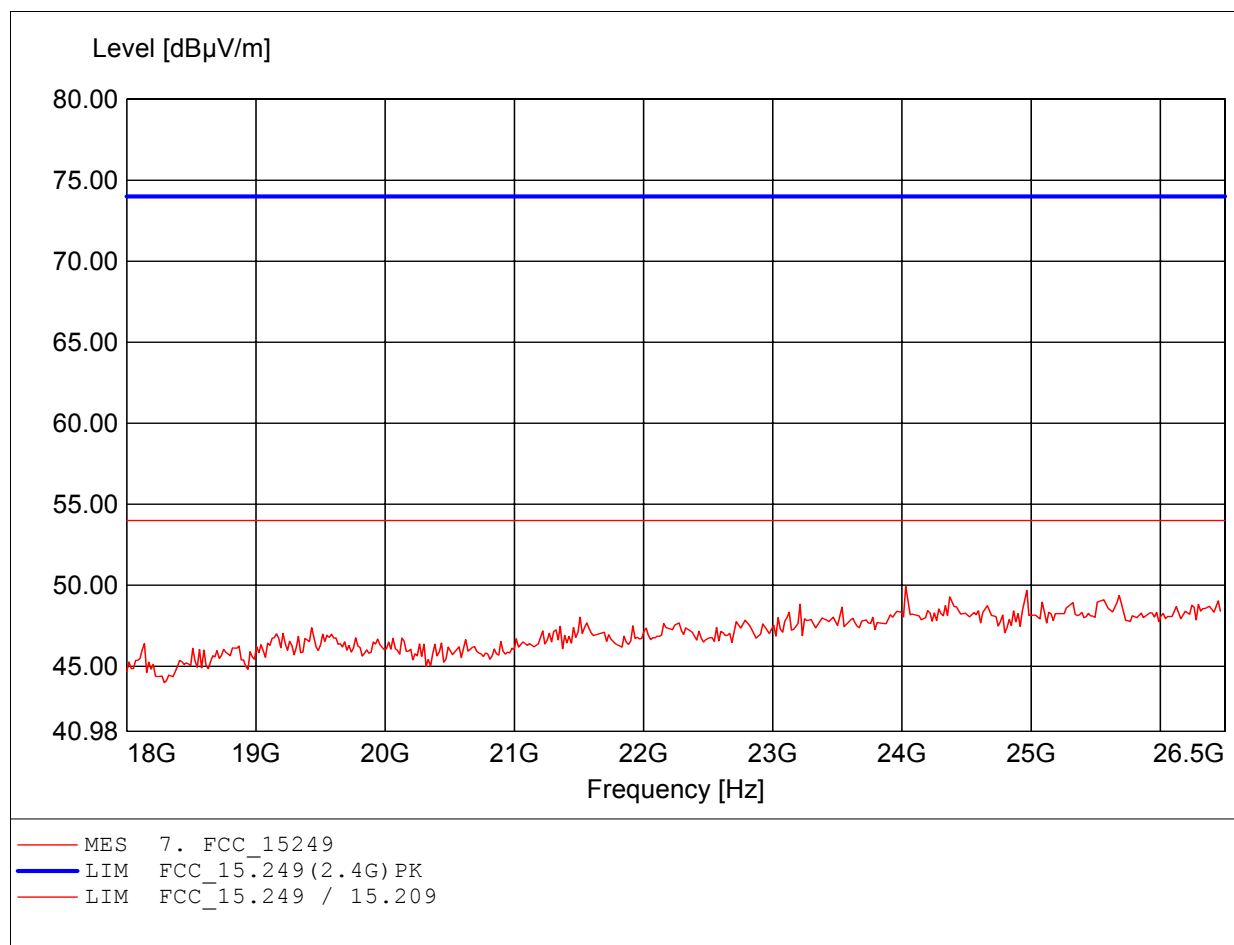




## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

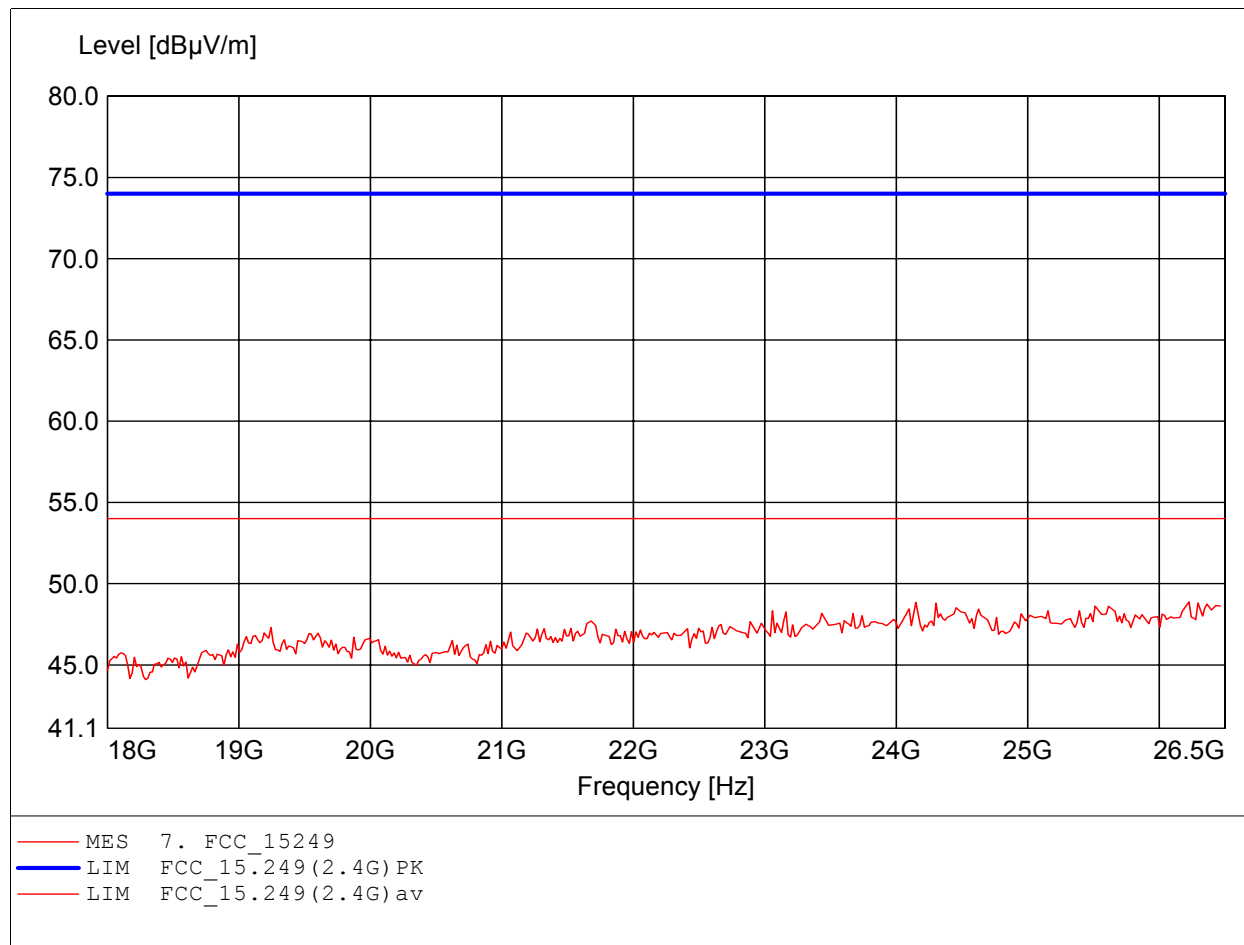
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 24.030GHz, Emax: 49.92dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

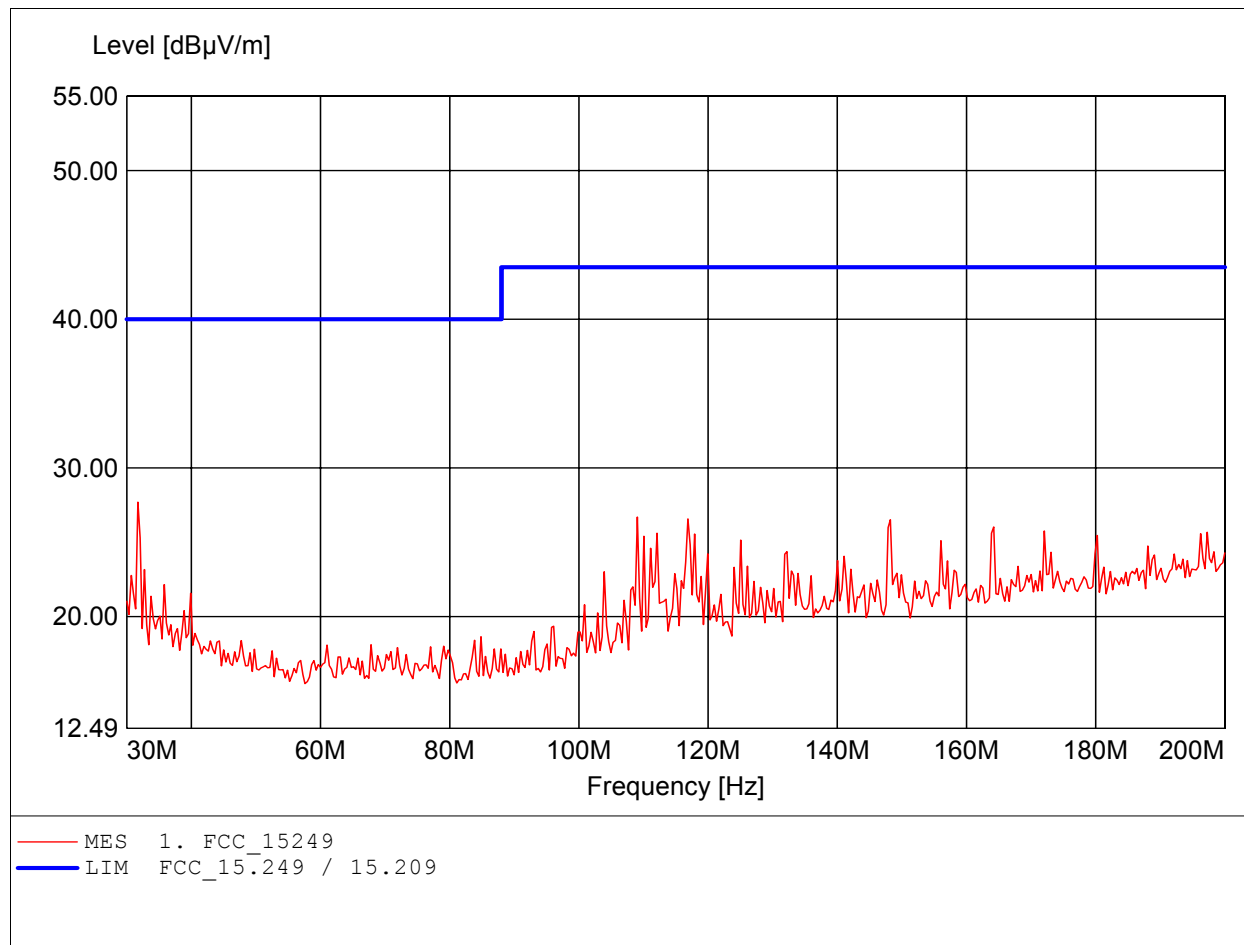
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D low channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 26.227GHz, Emax: 48.89dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

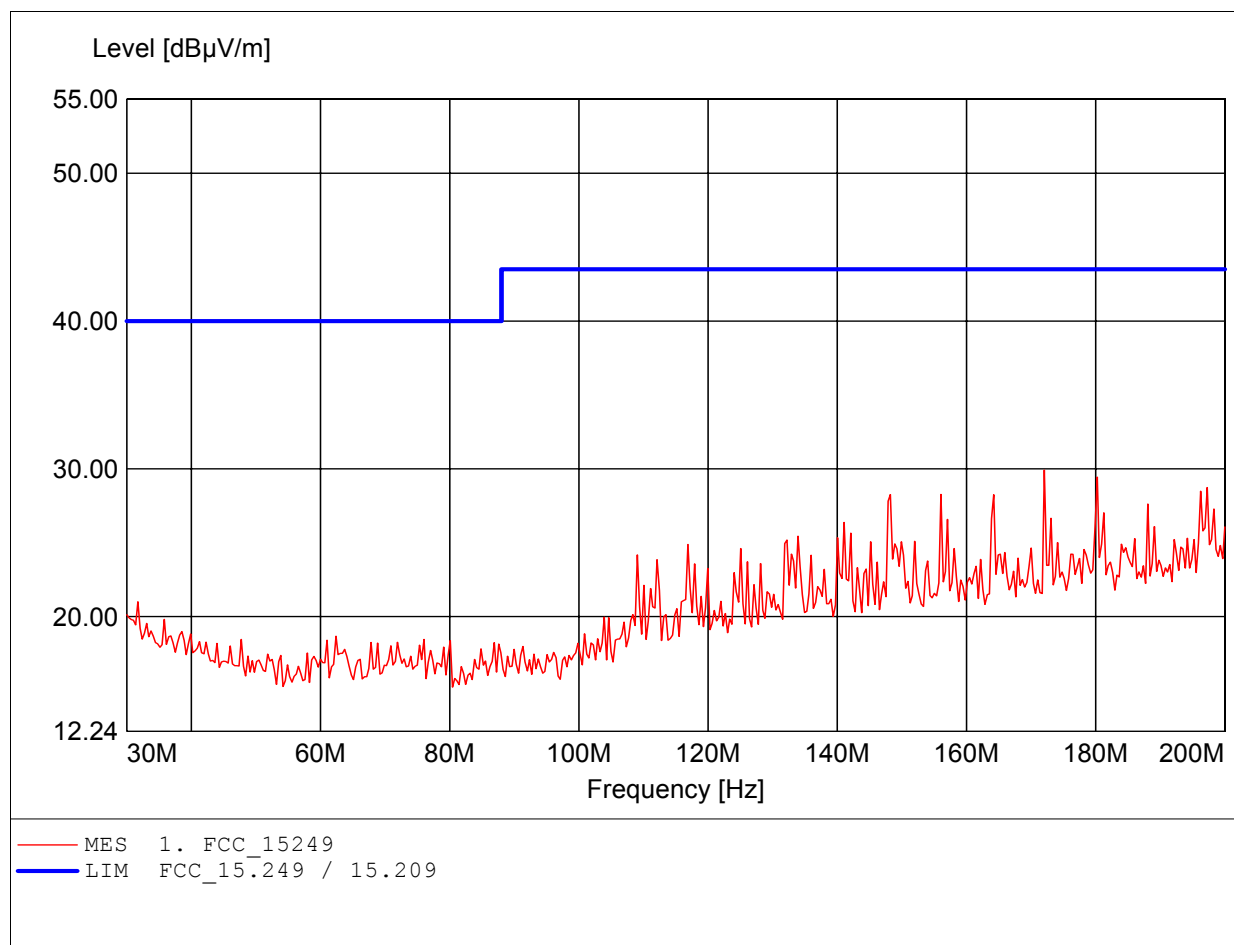
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 31.703MHz, Emax: 27.70dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

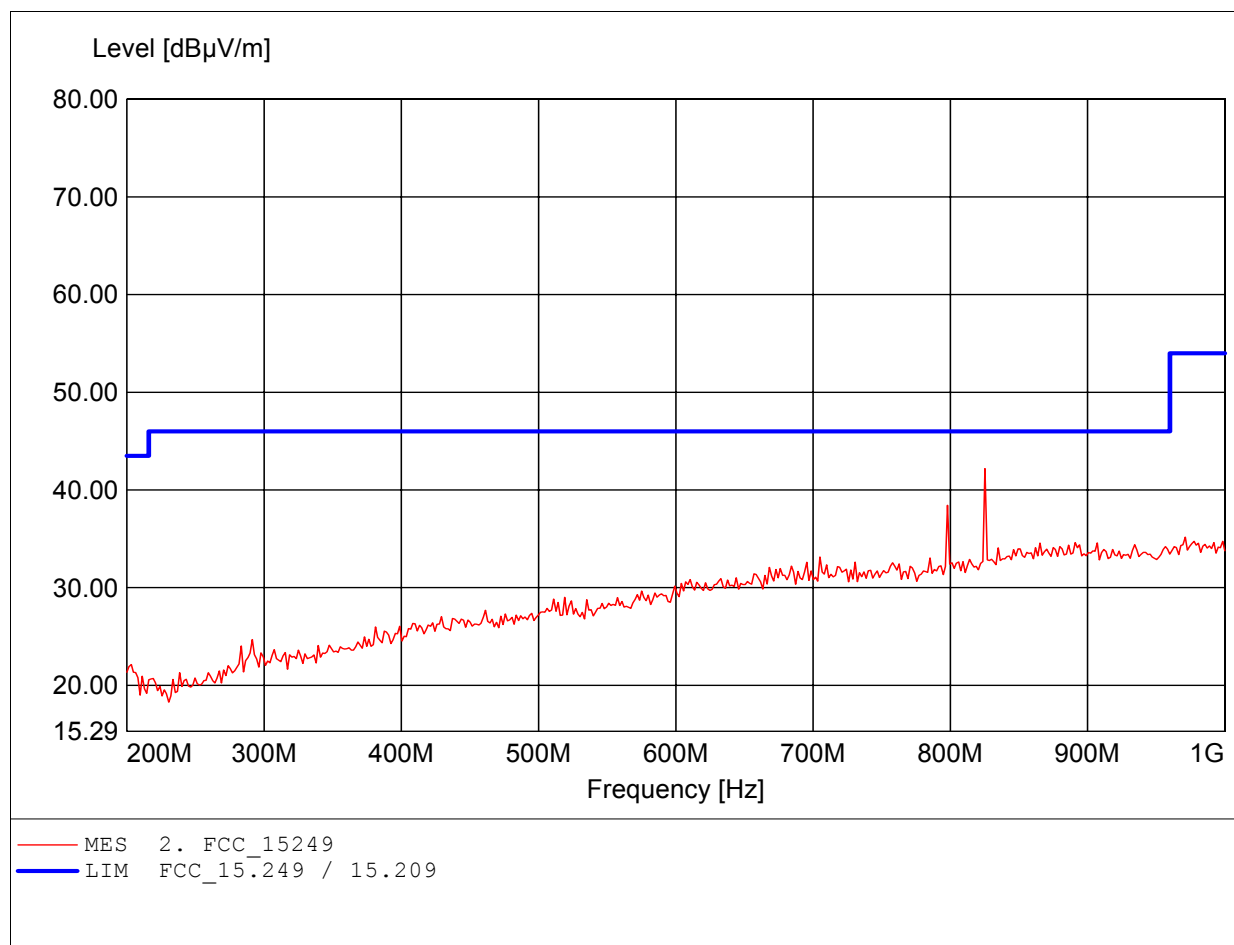
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 172.064MHz, Emax: 29.92dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

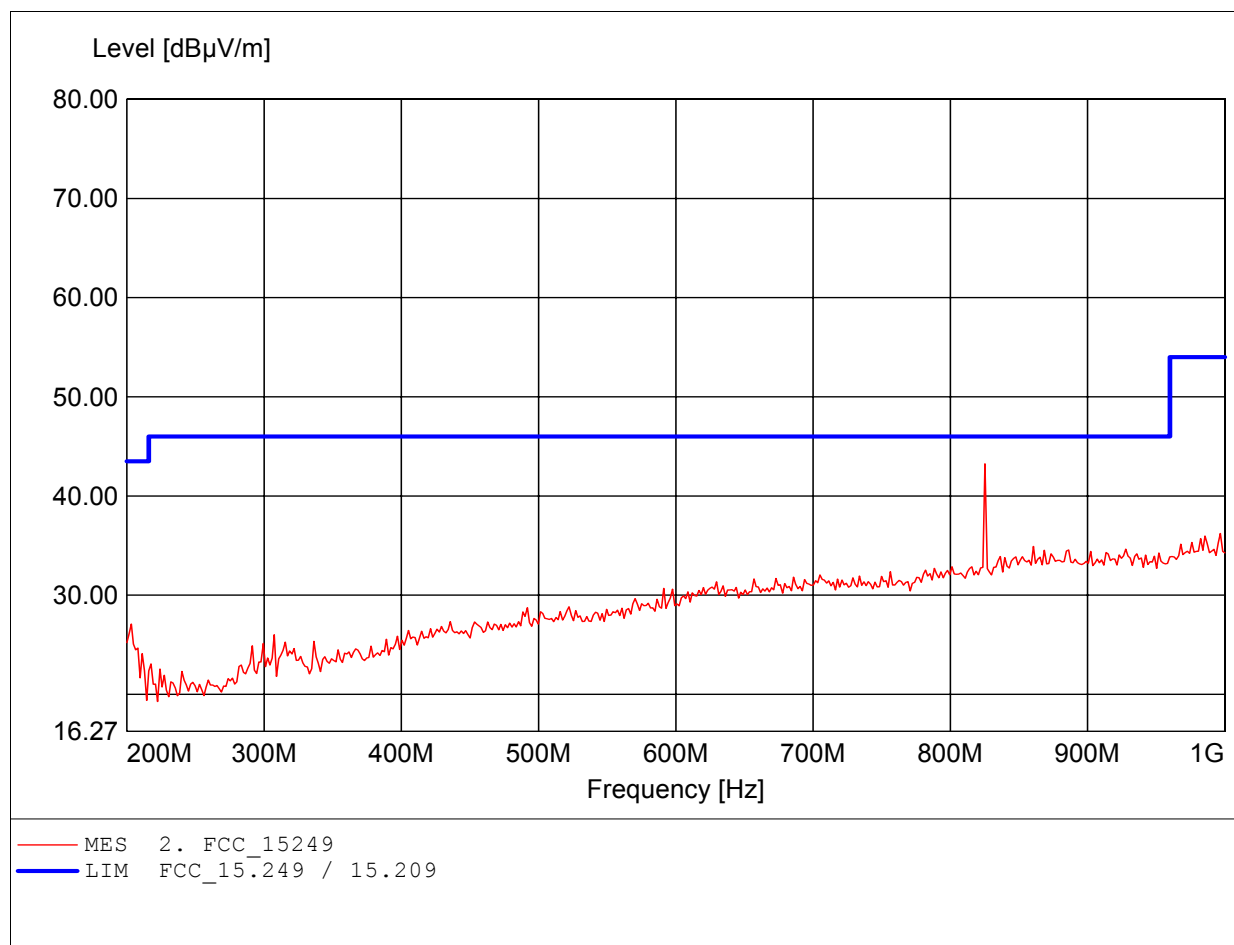
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 825.251MHz, Emax: 42.18dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

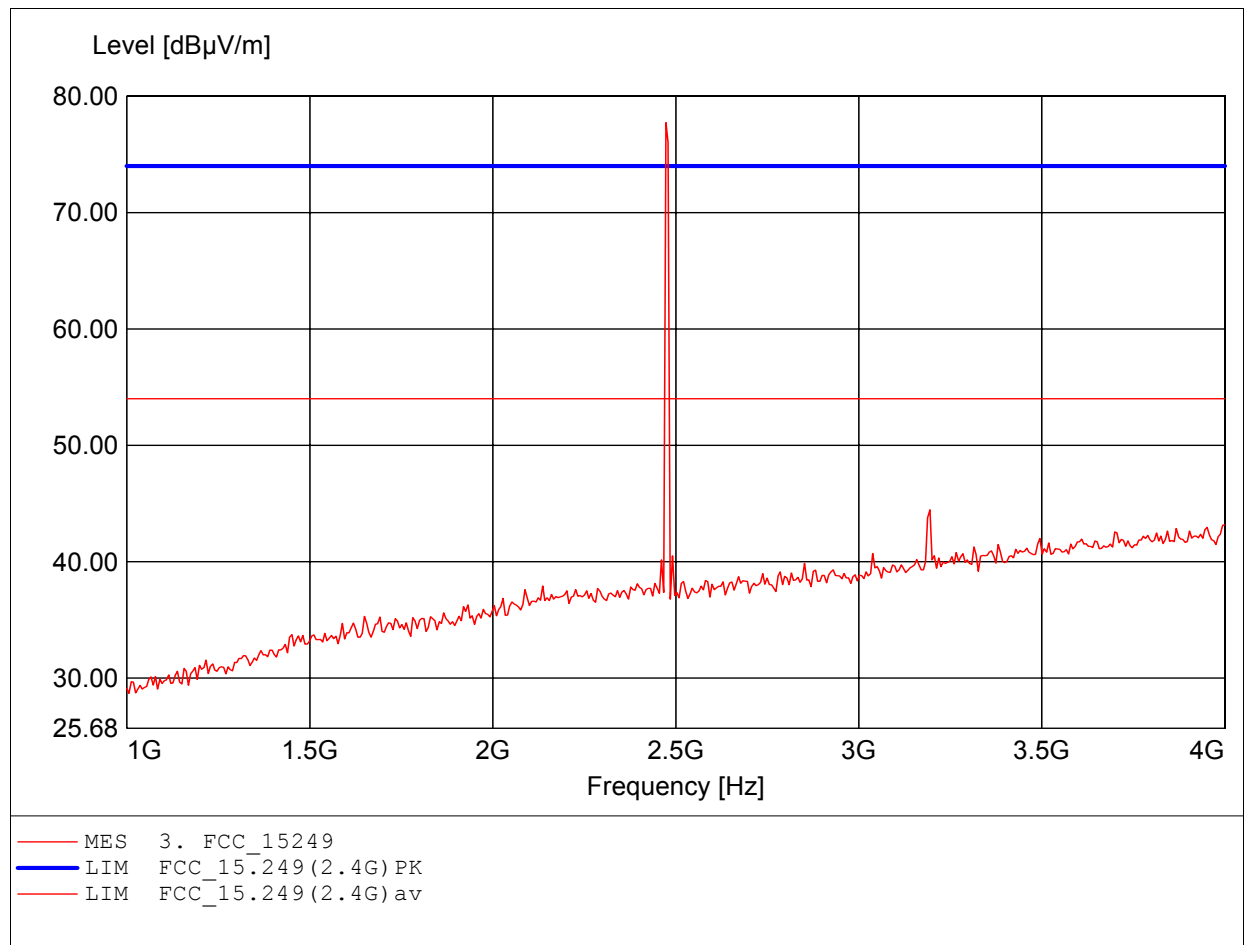
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 825.251MHz, Emax: 43.23dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

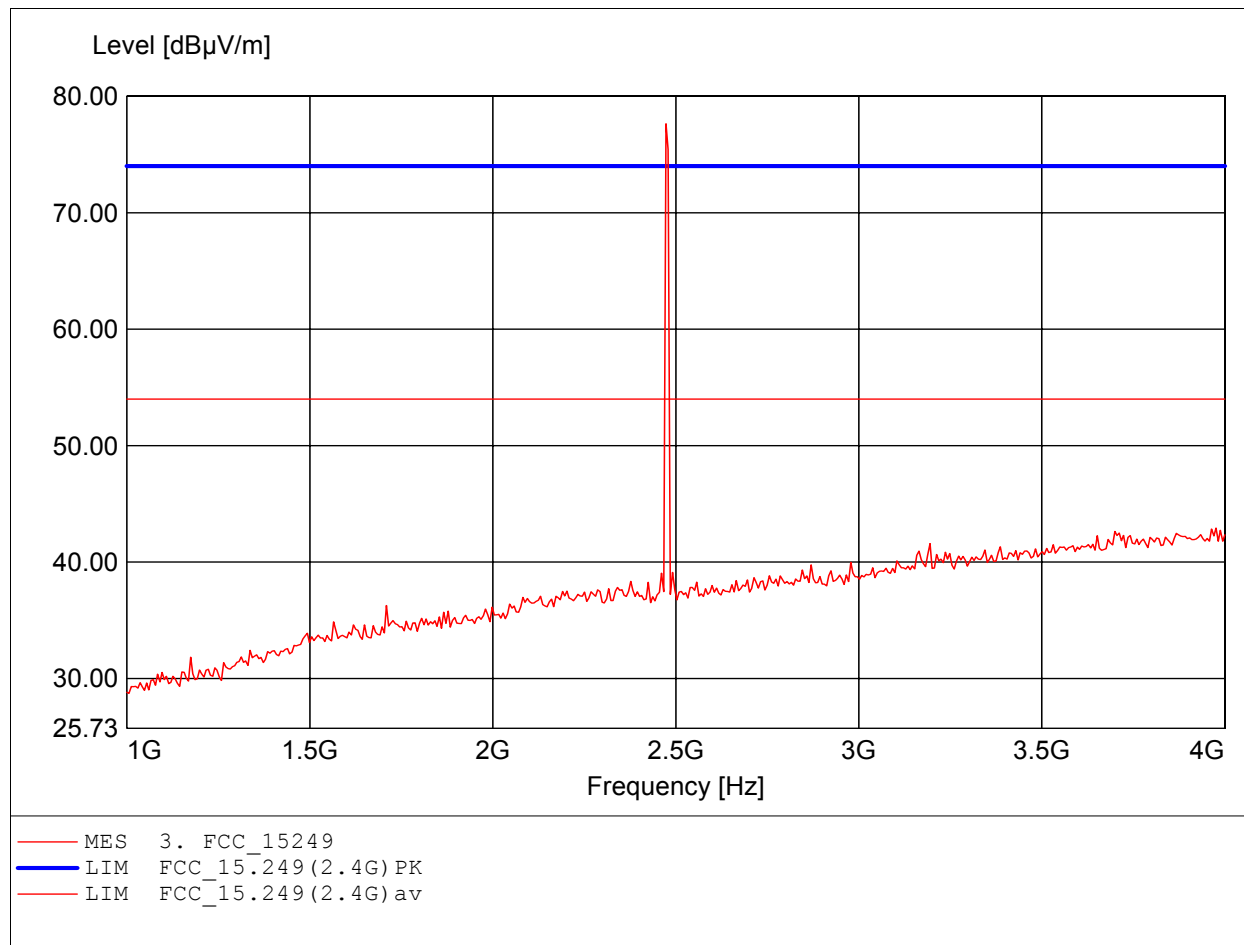
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 2.473GHz, Emax: 77.73dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 2.473GHz, Emax: 77.64dBµV/m, RBW: 1MHz

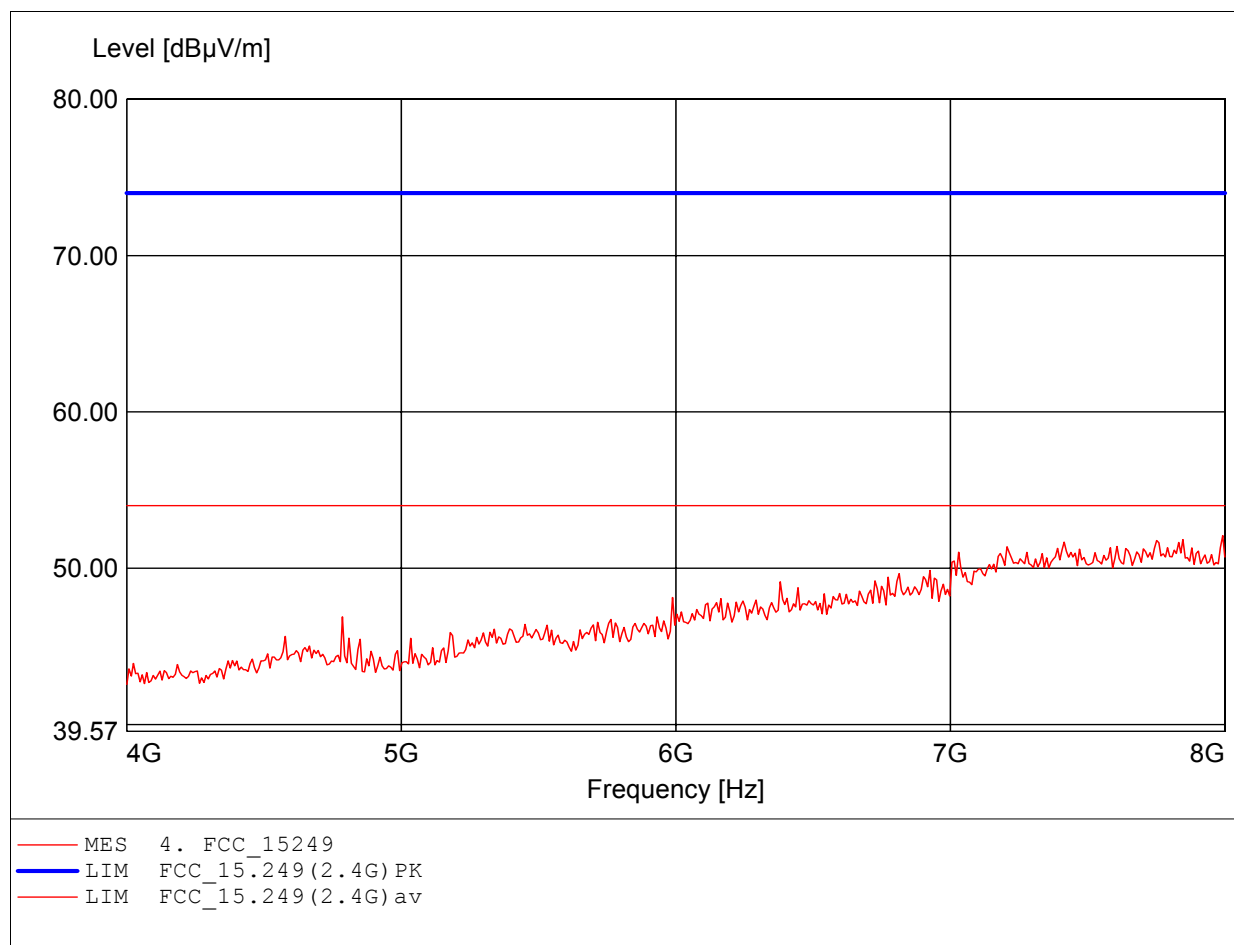




## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

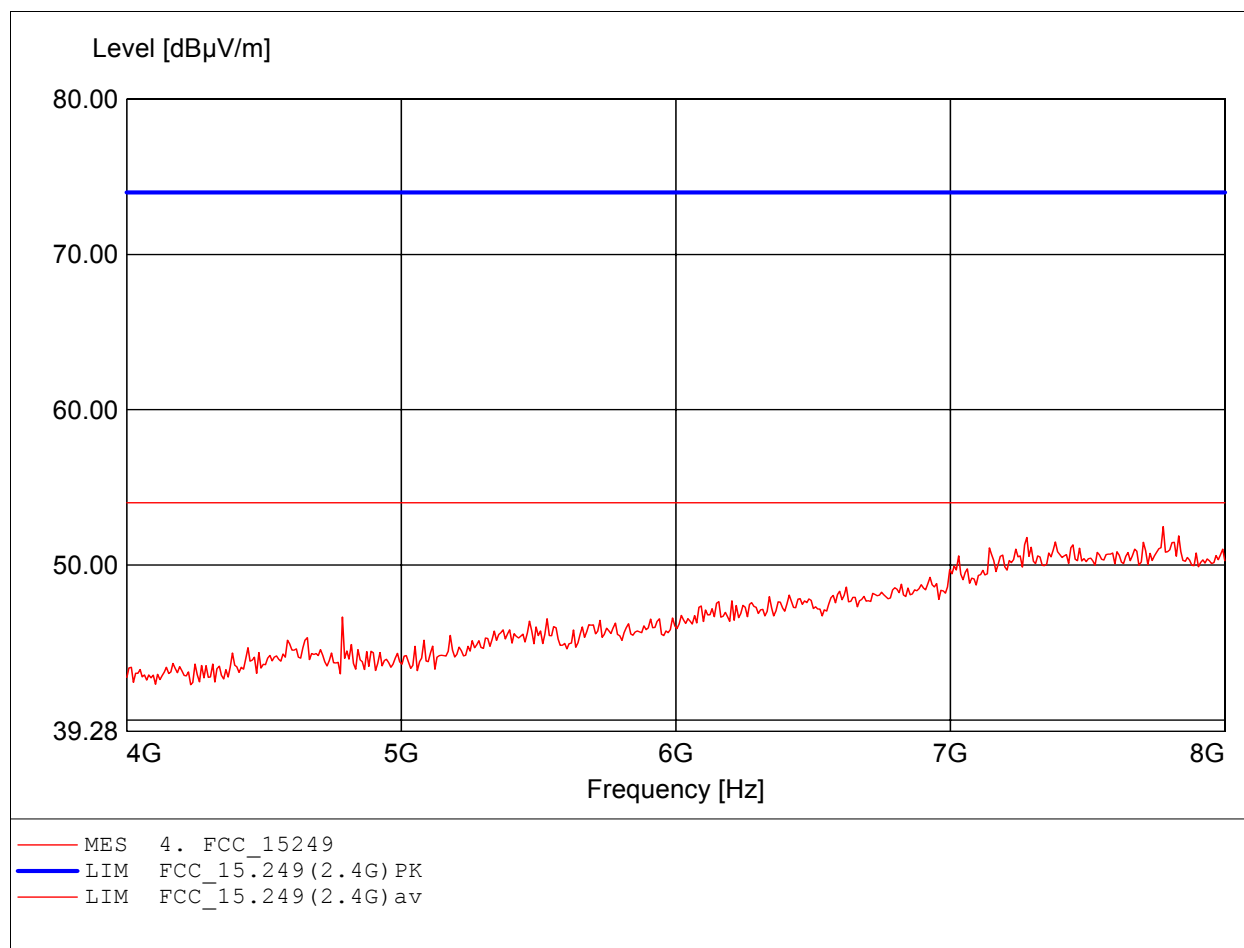
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.992GHz, Emax: 52.08dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

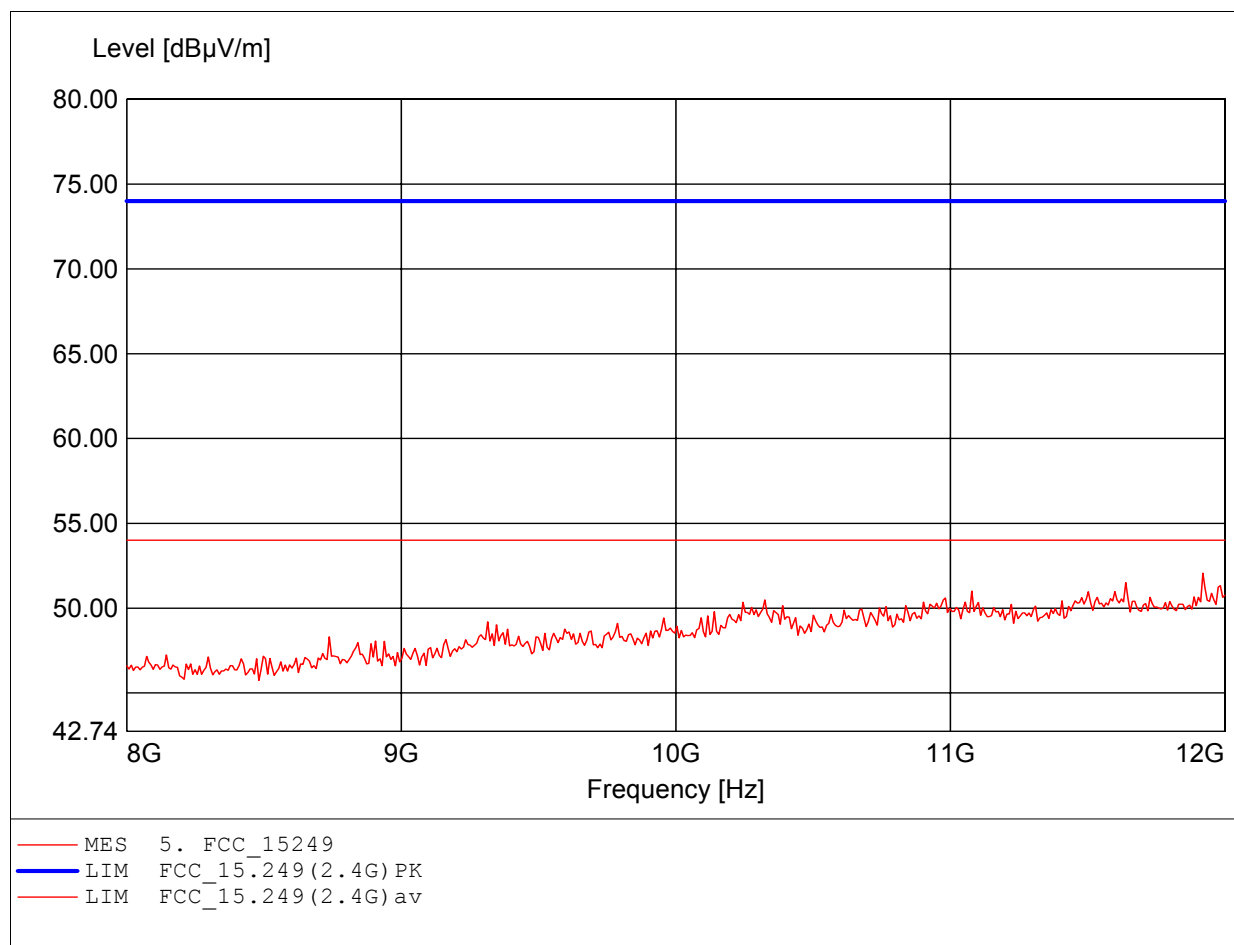
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.776GHz, Emax: 52.47dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

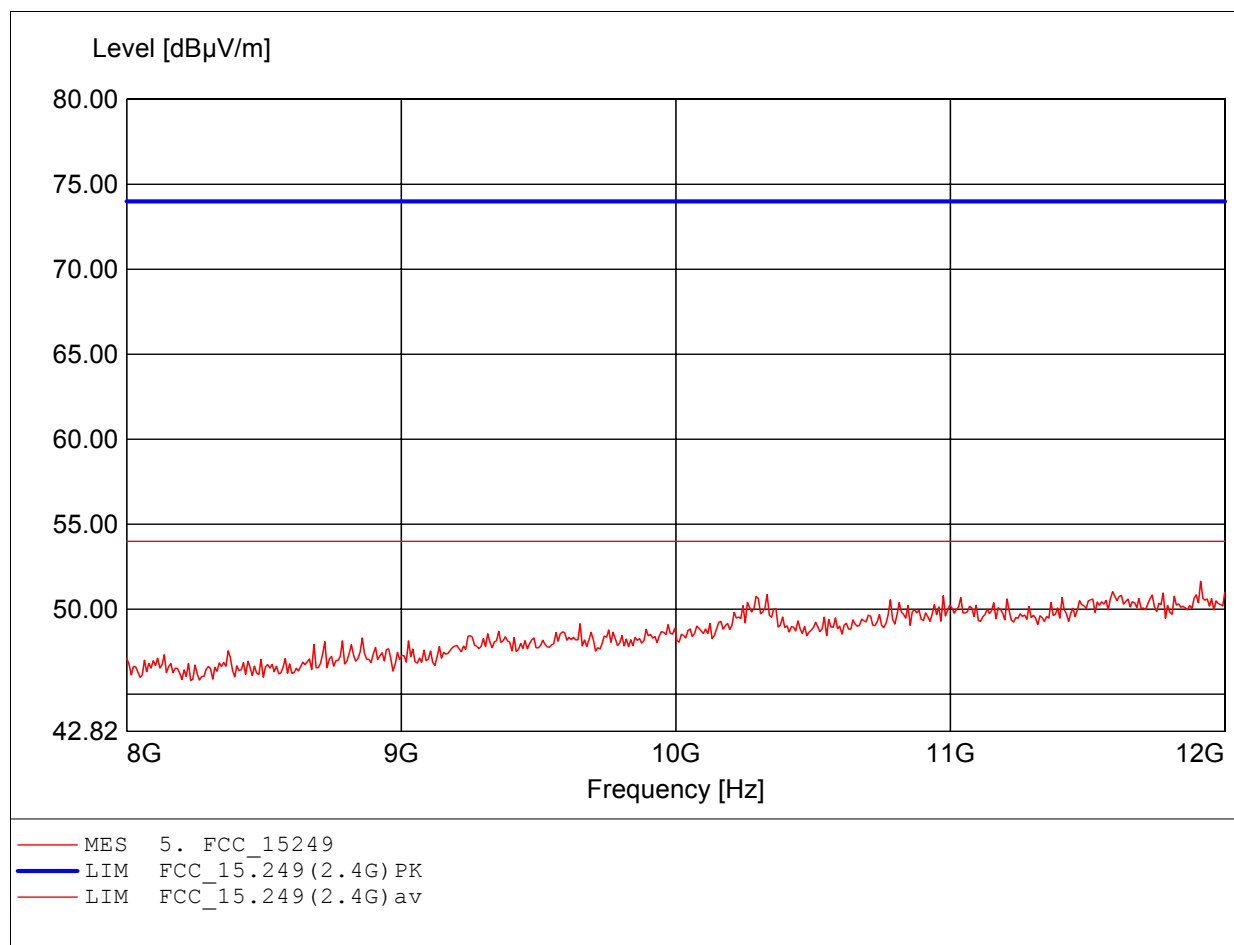
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.920GHz, Emax: 52.07dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

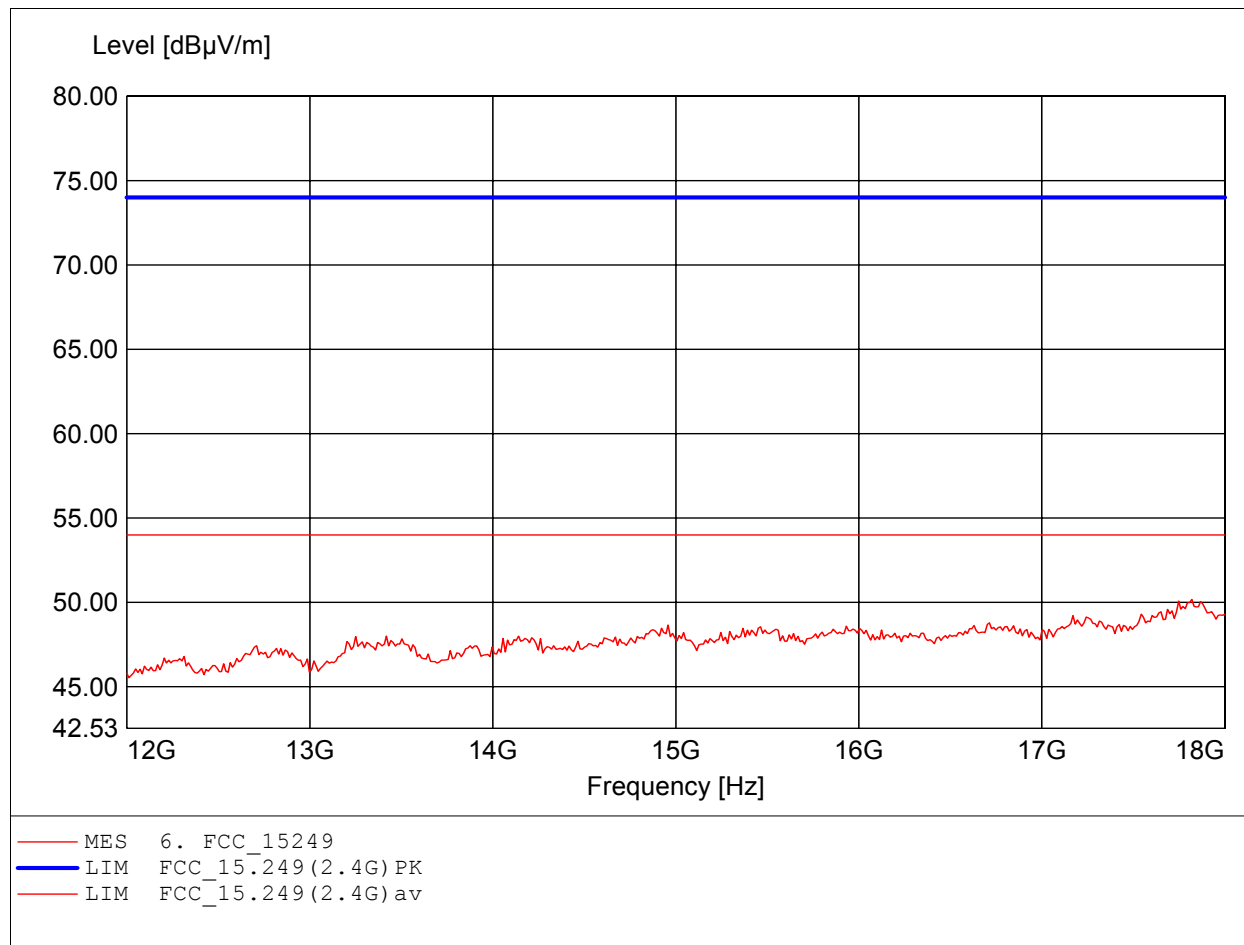
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.912GHz, Emax: 51.64dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

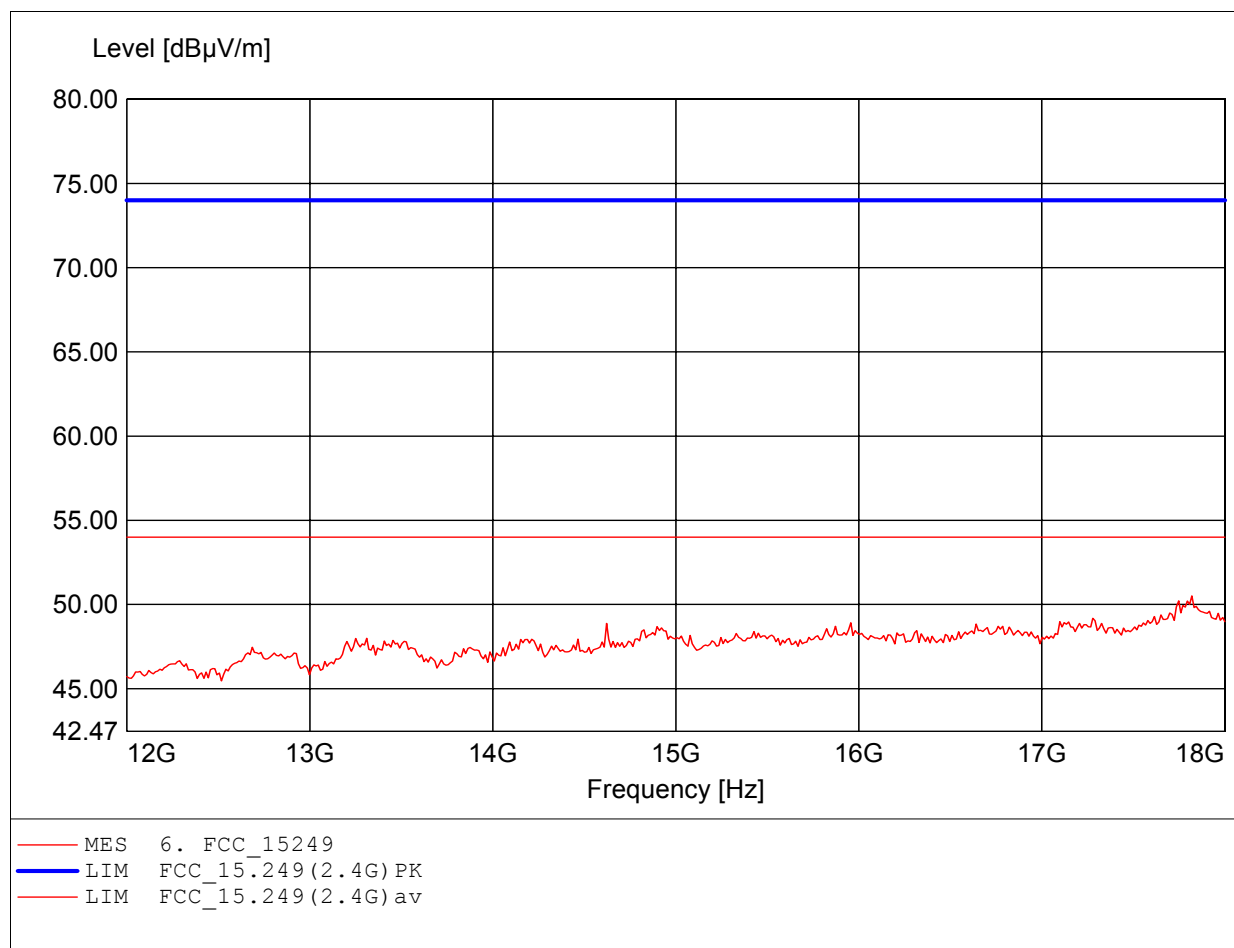
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.820GHz, Emax: 50.17dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

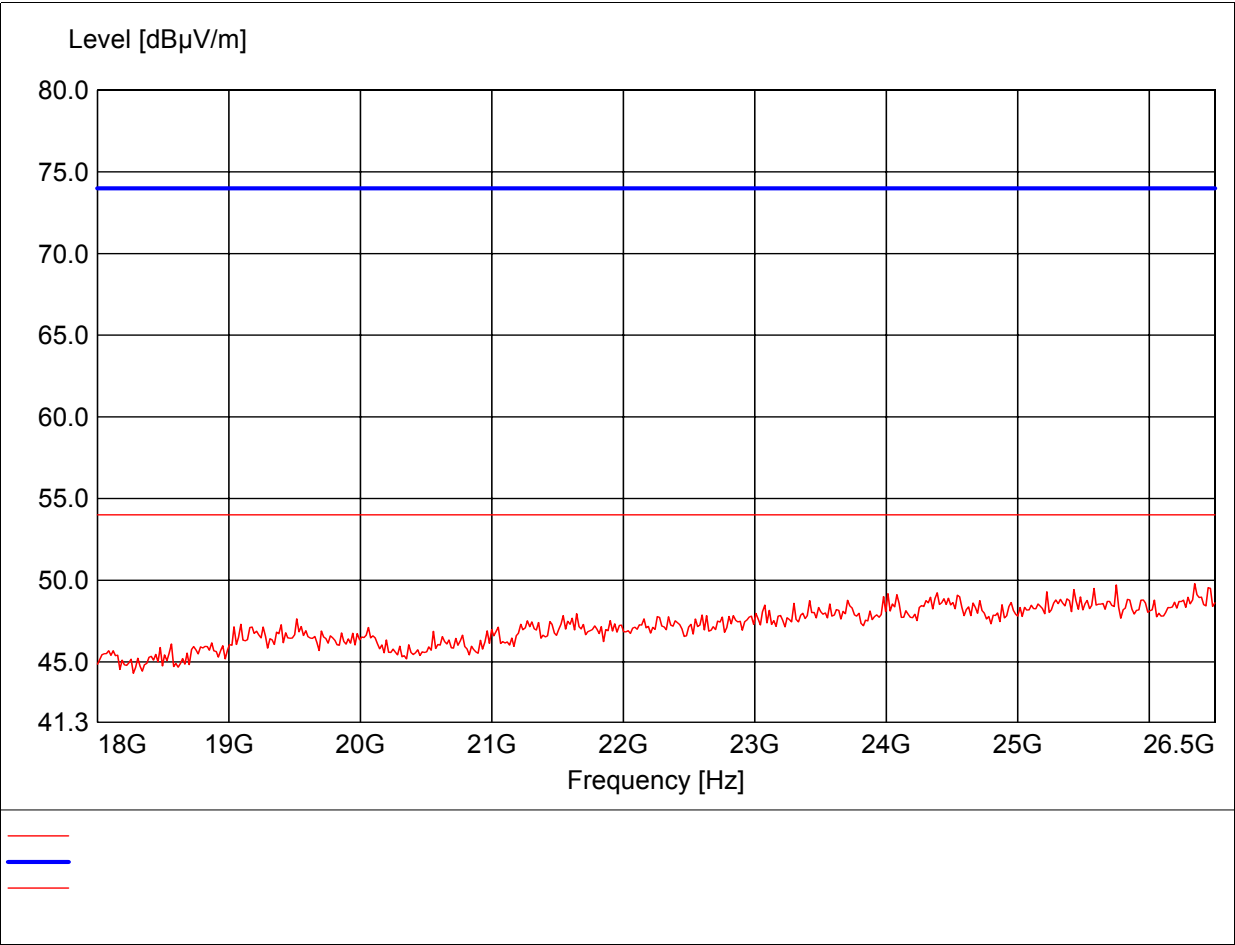
### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.820GHz, Emax: 50.51dBμV/m, RBW: 1MHz



*Spurious emissions Field Strength*

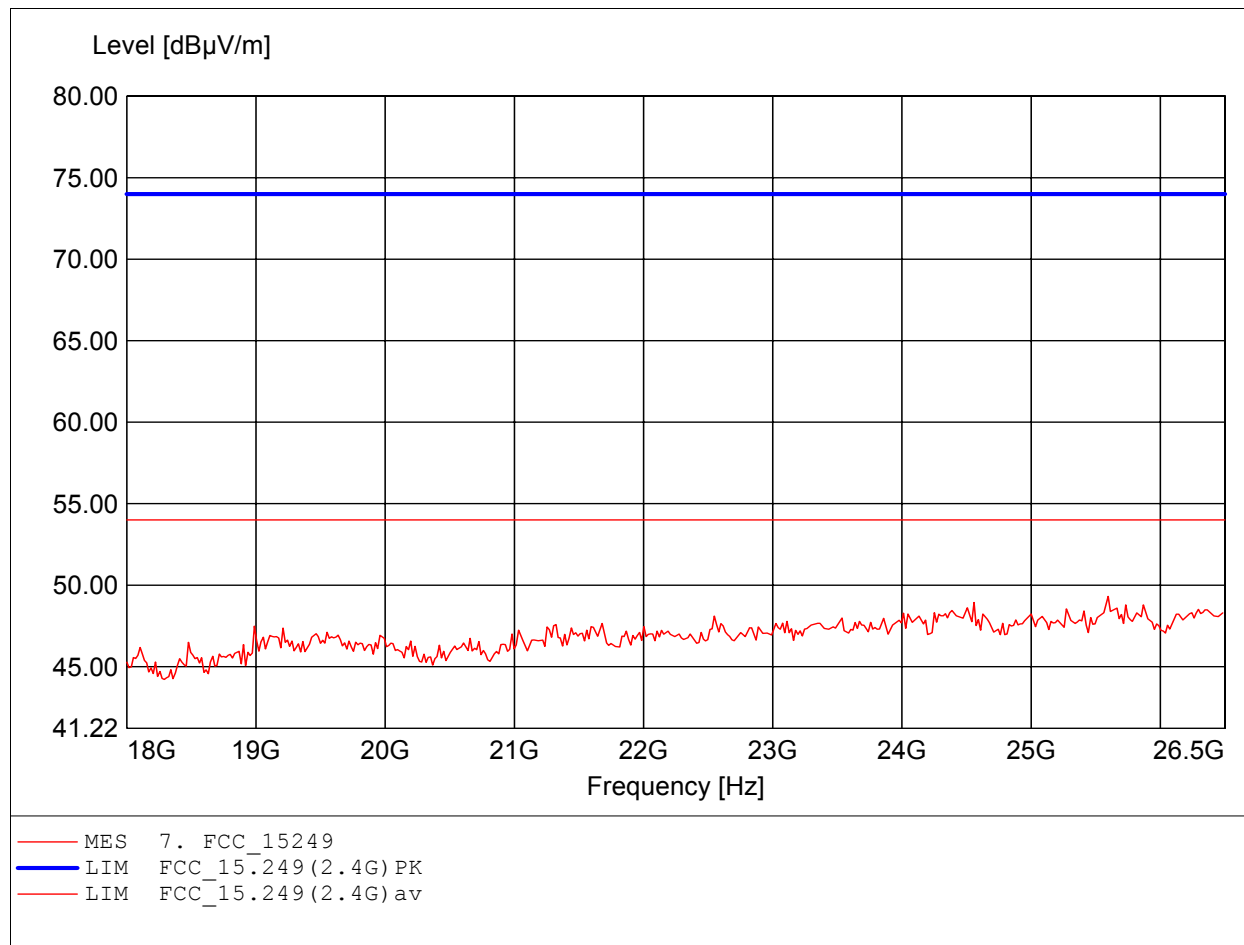
*FCC RULES PART 15, SUBPART C*



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D middle channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 25.597GHz, Emax: 49.31dBμV/m, RBW: 1MHz

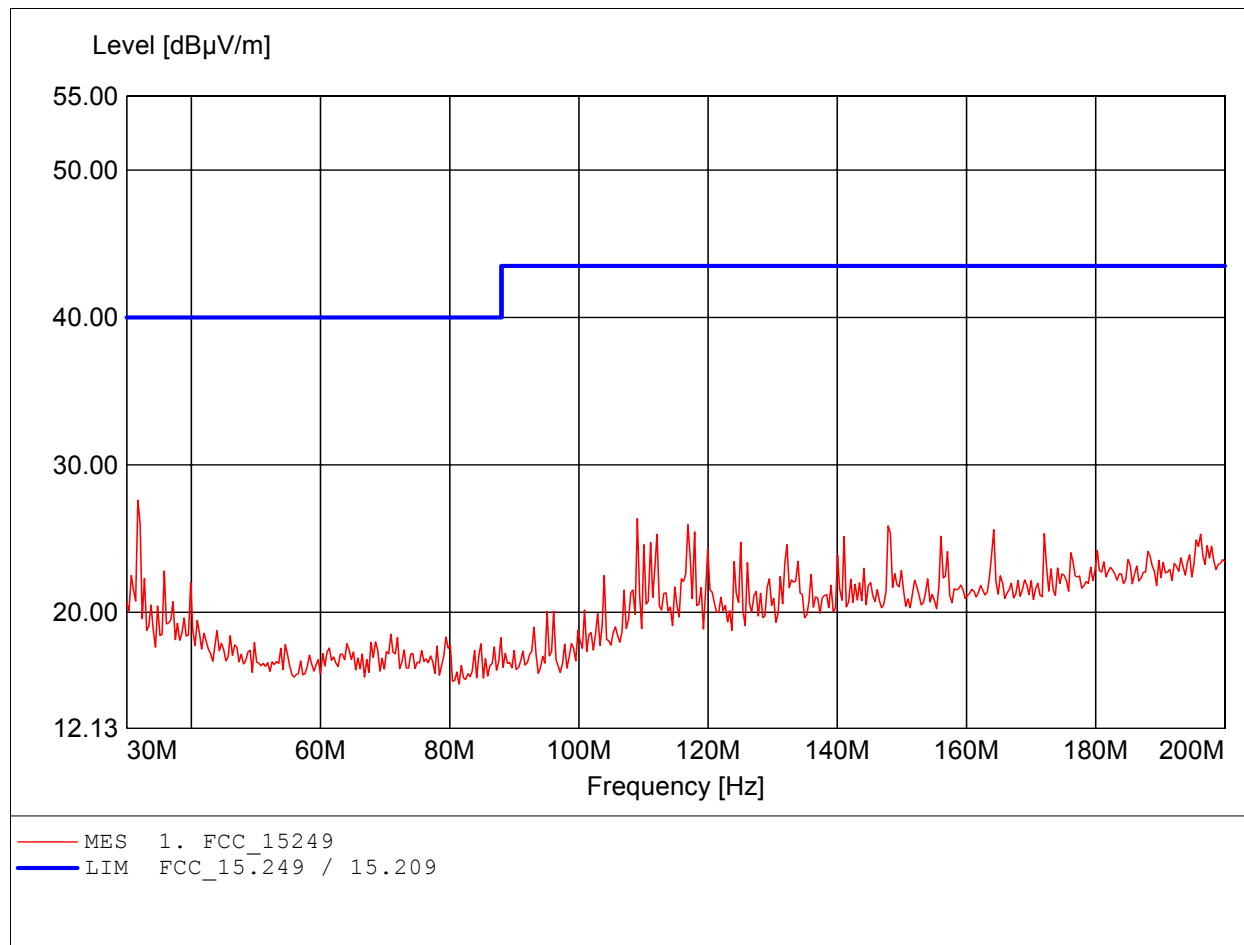




## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

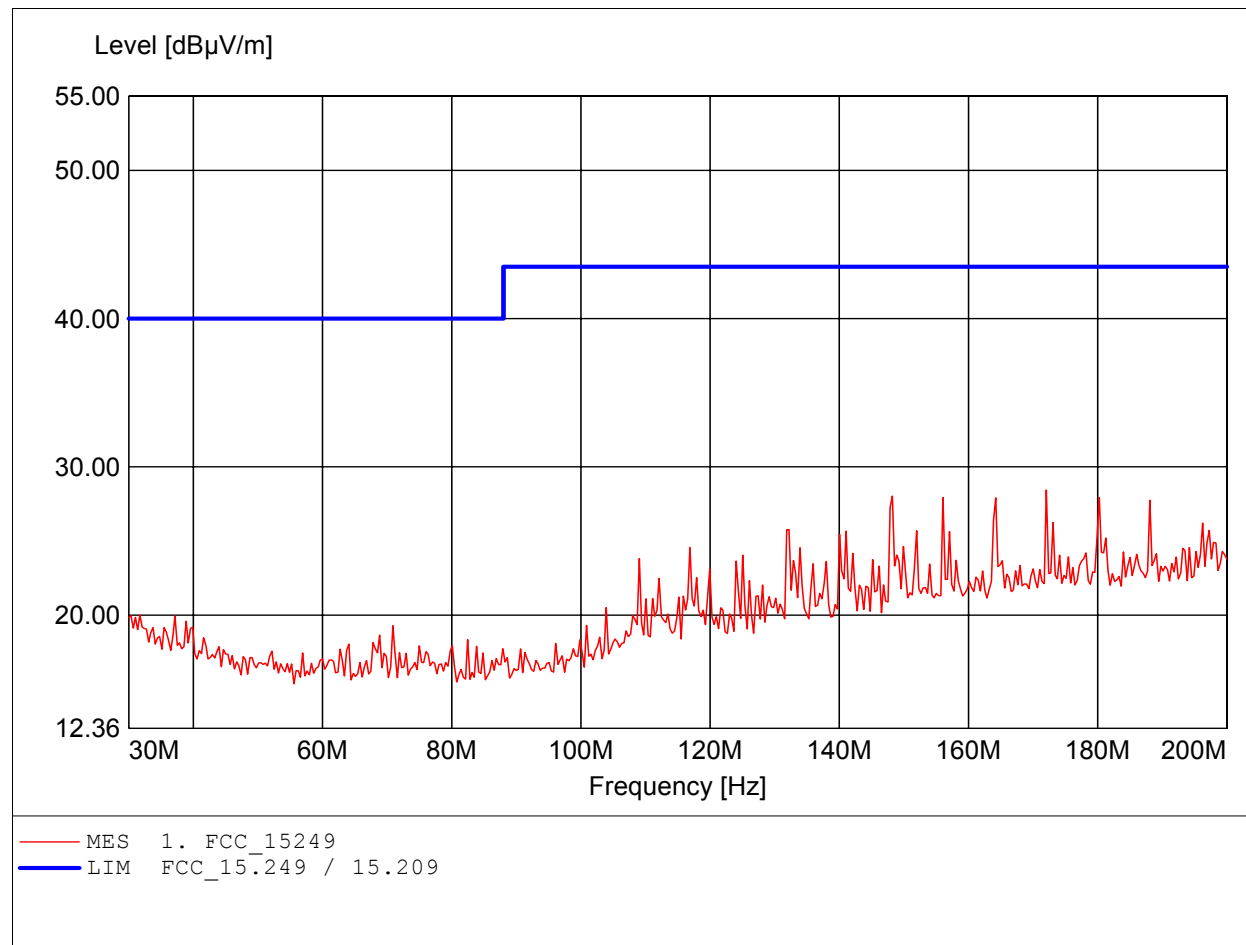
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 31.703MHz, Emax: 27.61dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

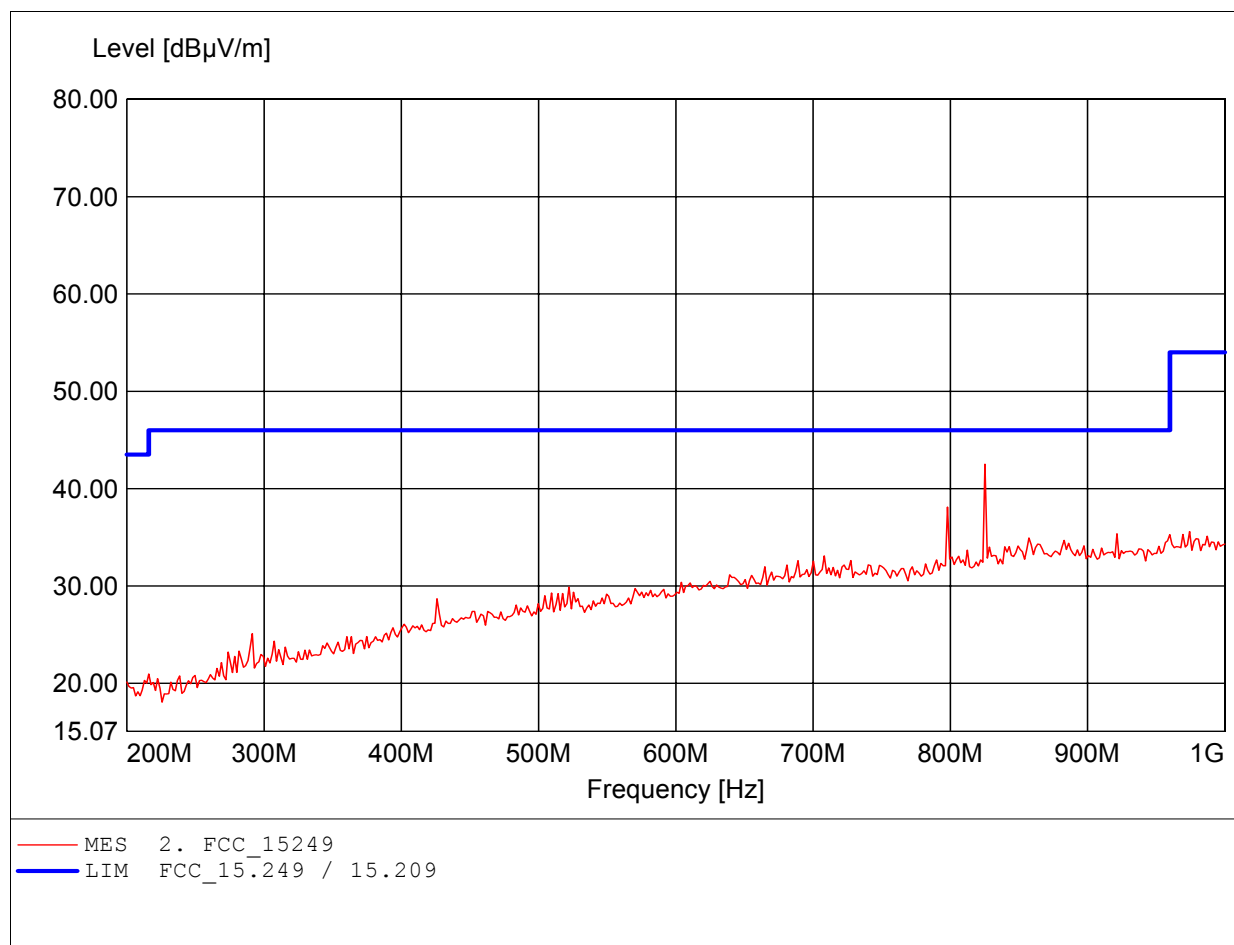
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HK 116  
Freq: 172.064MHz, Emax: 28.44dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

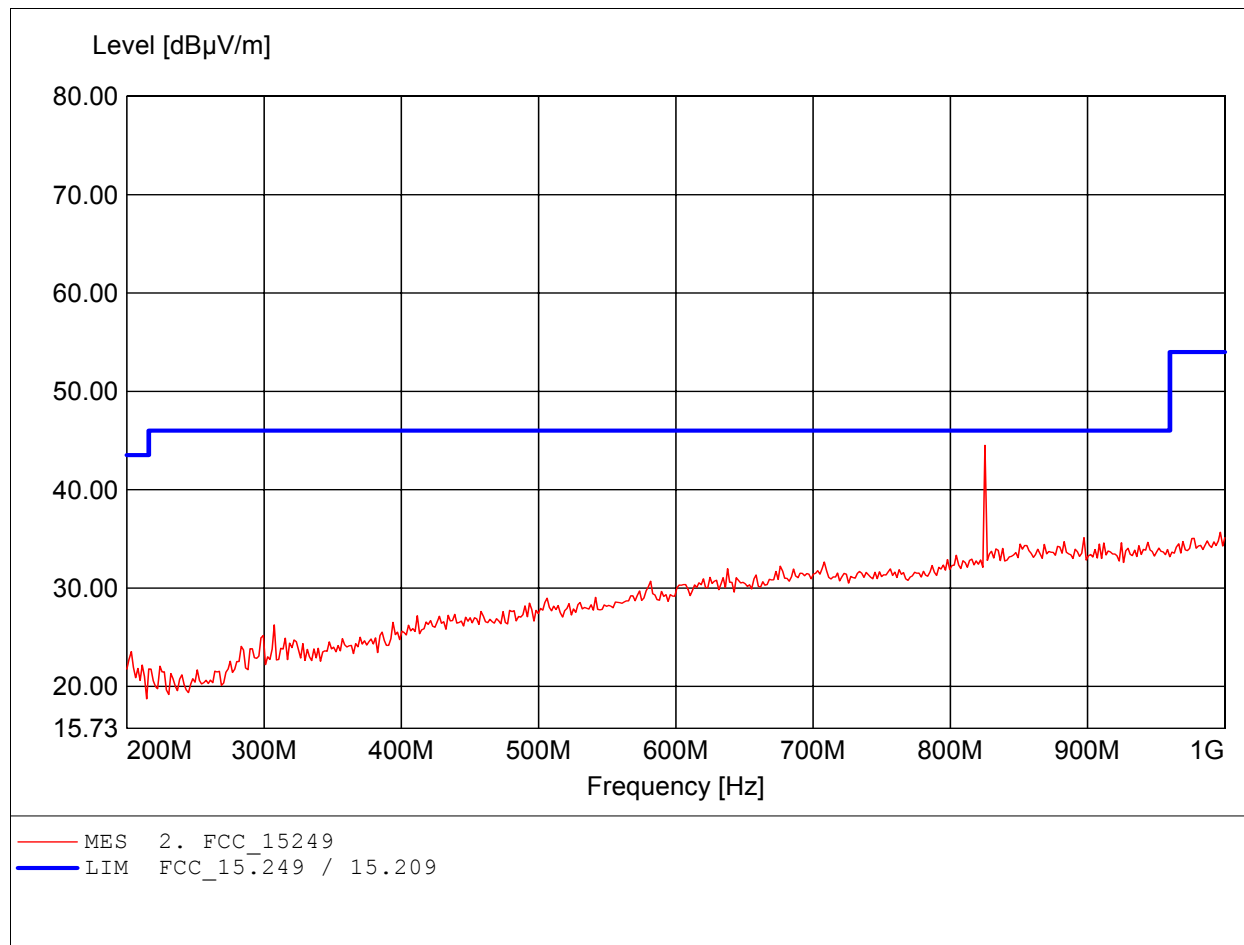
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 825.251MHz, Emax: 42.51dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

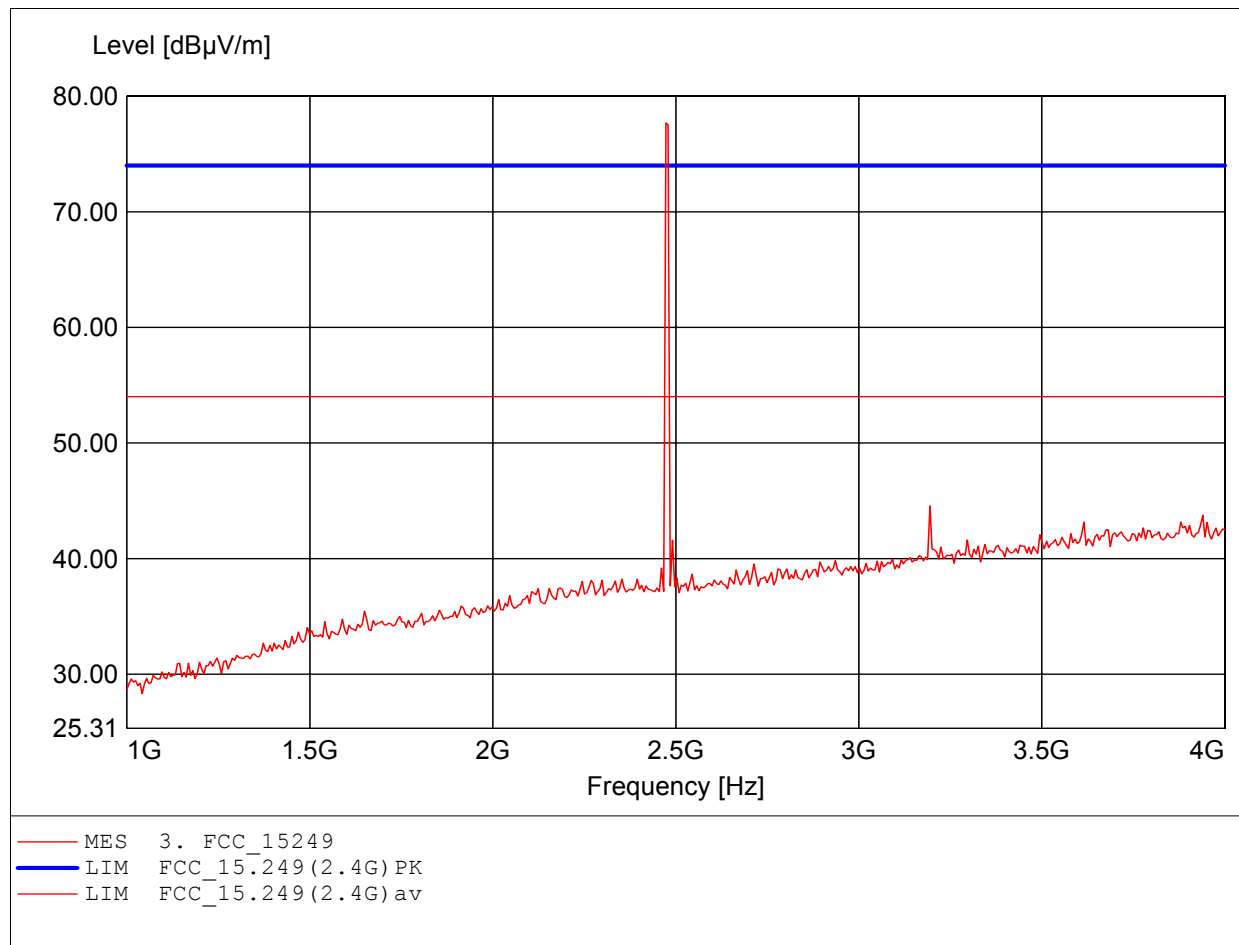
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.  
Freq: 825.251MHz, Emax: 44.50dBµV/m, RBW: 100kHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

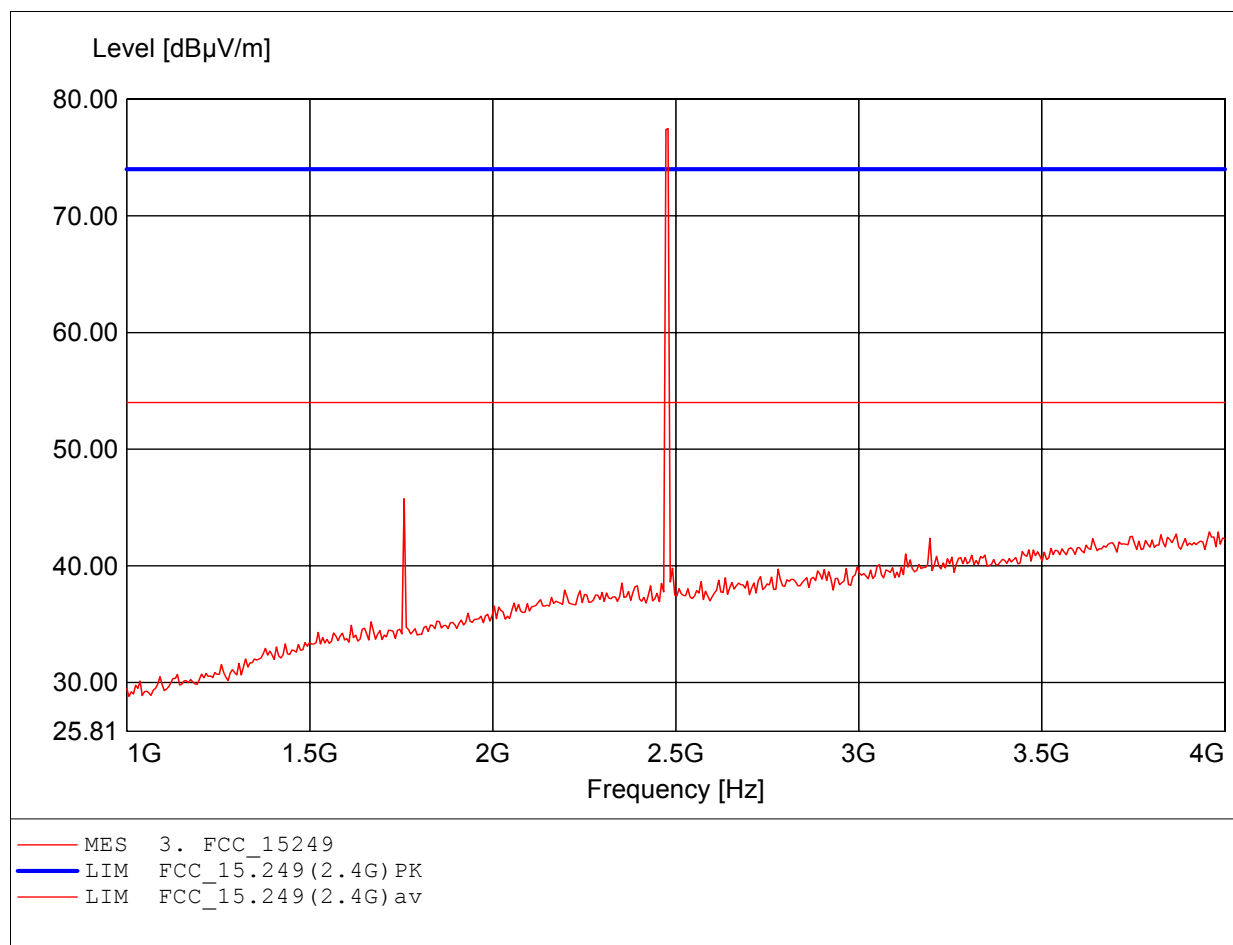
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 2.473GHz, Emax: 77.69dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

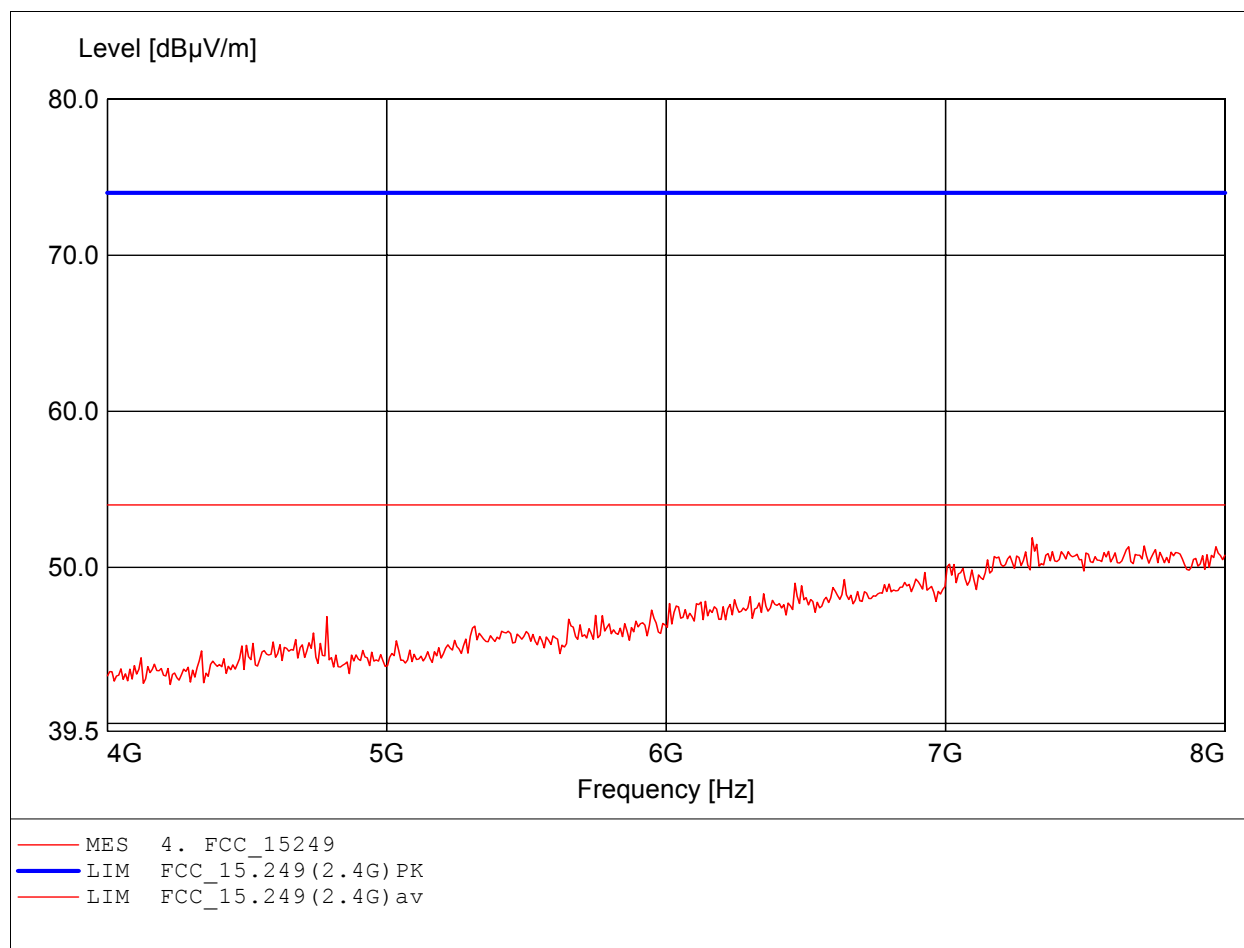
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 2.479GHz, Emax: 77.49dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

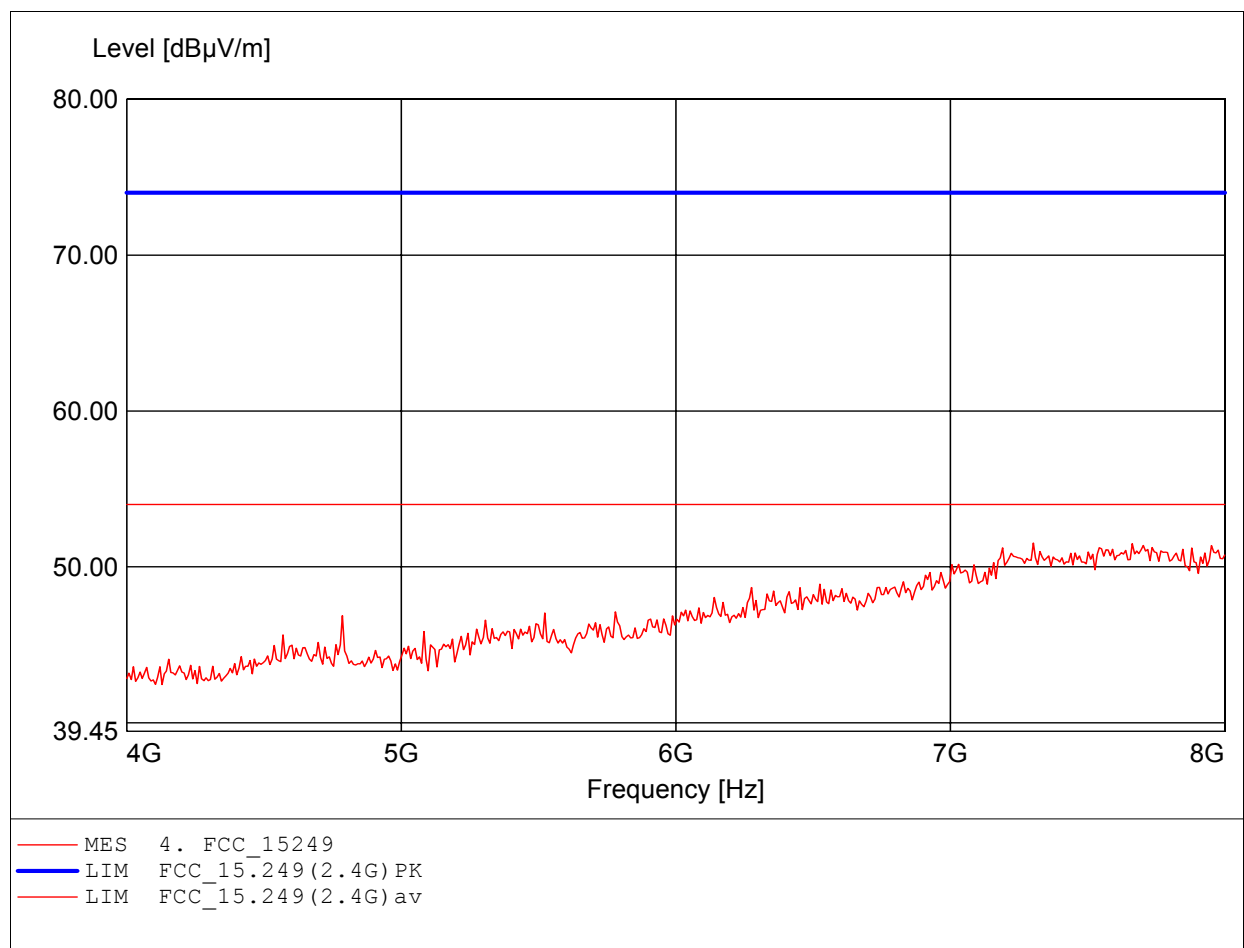
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.311GHz, Emax: 51.90dBµV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 7.303GHz, Emax: 51.53dBµV/m, RBW: 1MHz

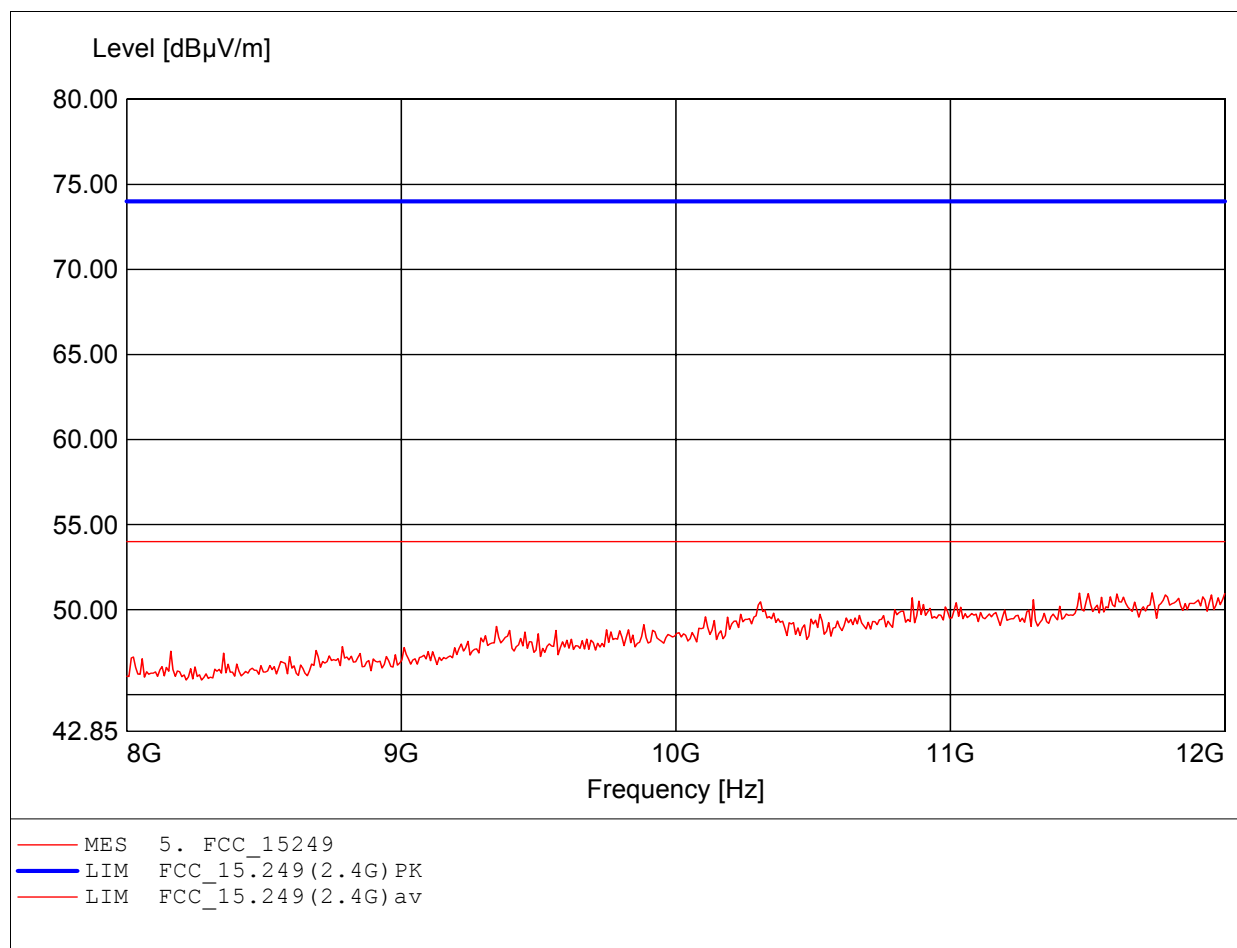




## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

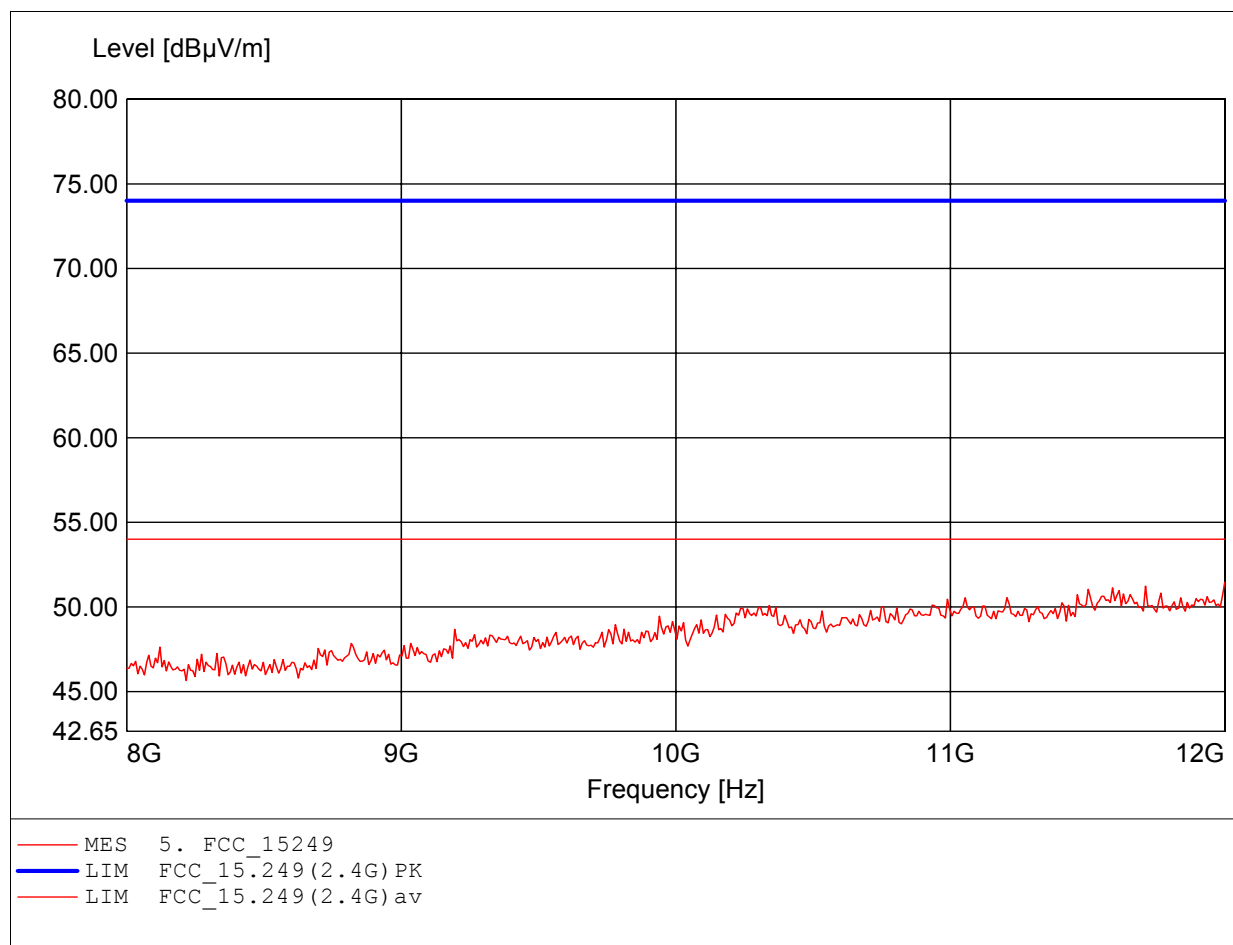
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 11.735GHz, Emax: 50.99dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

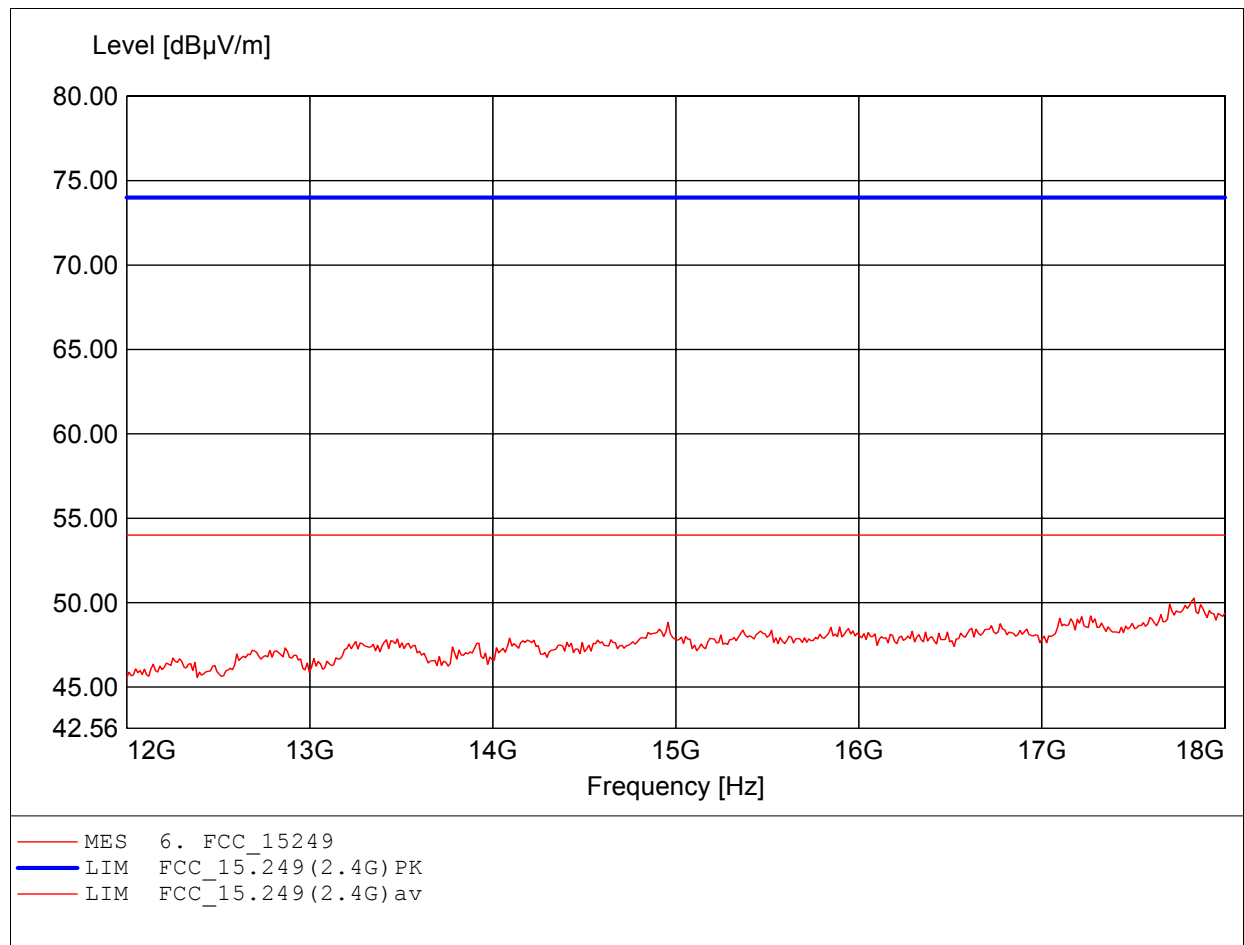
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 12.000GHz, Emax: 51.46dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

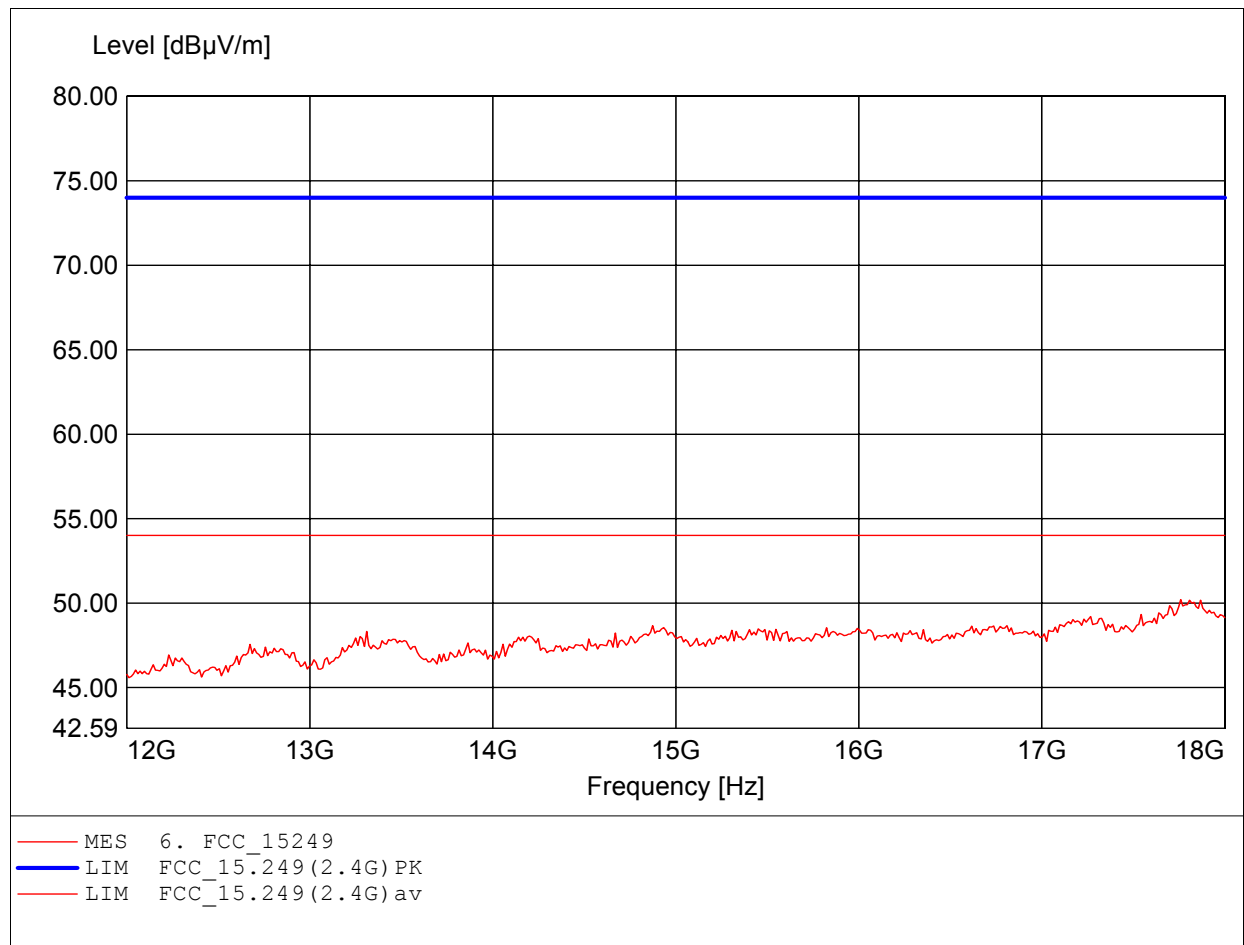
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.832GHz, Emax: 50.27dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

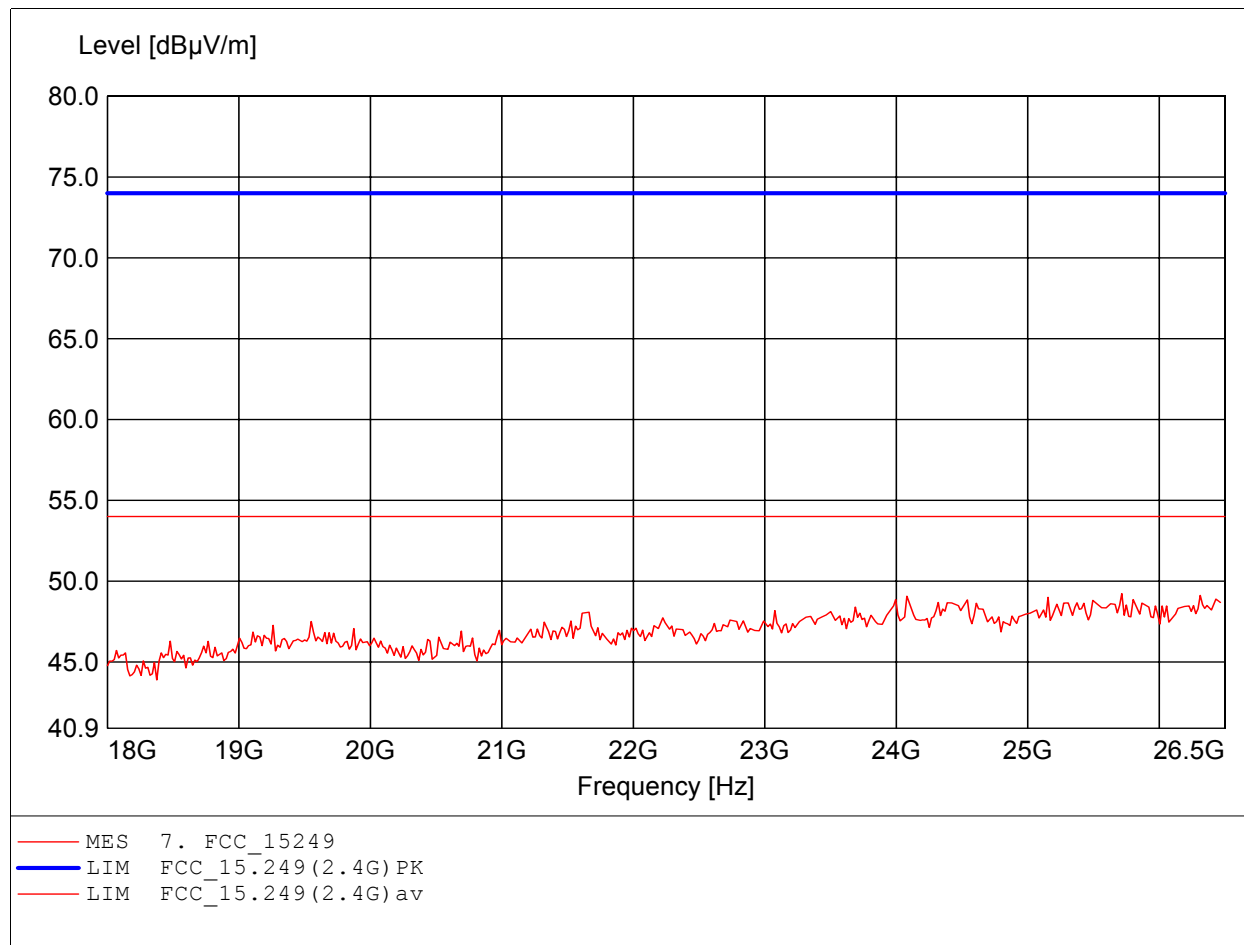
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, ampl.+HP.  
Freq: 17.760GHz, Emax: 50.21dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

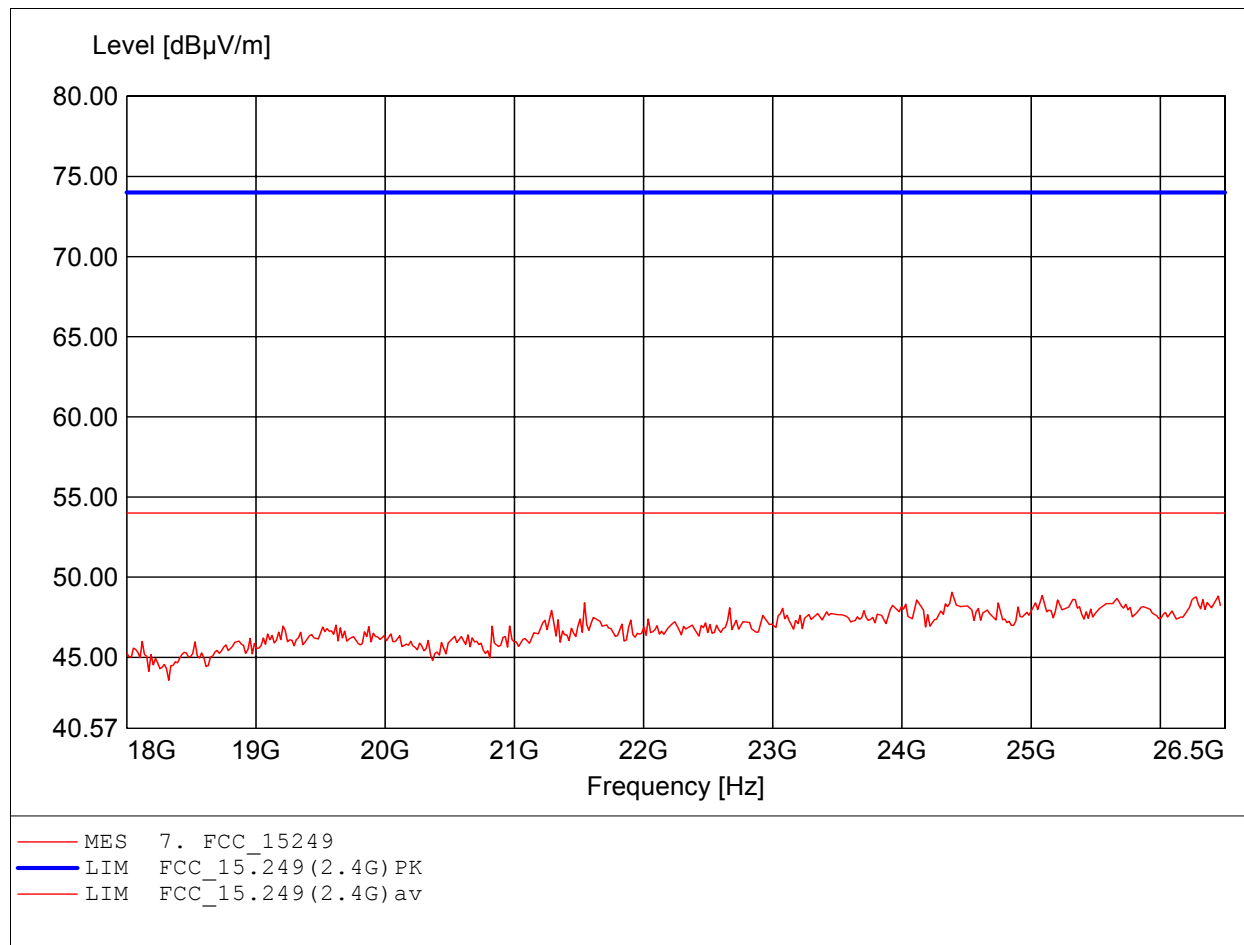
EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 25.716GHz, Emax: 49.23dBμV/m, RBW: 1MHz



## Spurious emissions Field Strength

### FCC RULES PART 15, SUBPART C

EUT: Wireless audio door phone - Door Station 2 buttons  
MODEL NO.: WA-0002D high channel  
Approval Holder: SynerTech International Limited  
Test Site / Operator: ETS / Dennis  
Temperature/Voltage: Temp.: 23°C/ Unom.: 6 VDC ( battery )  
Test Specification: according to §15.249, peak detector  
Comment 1: Dist.: 3m, Ant.: HL025, amplif.  
Freq: 24.388GHz, Emax: 49.05dBμV/m, RBW: 1MHz





Registration number: W6M20601-6522-P-15  
FCC ID: TYN-WA-0002D

## **Appendix C**

## Pictures