

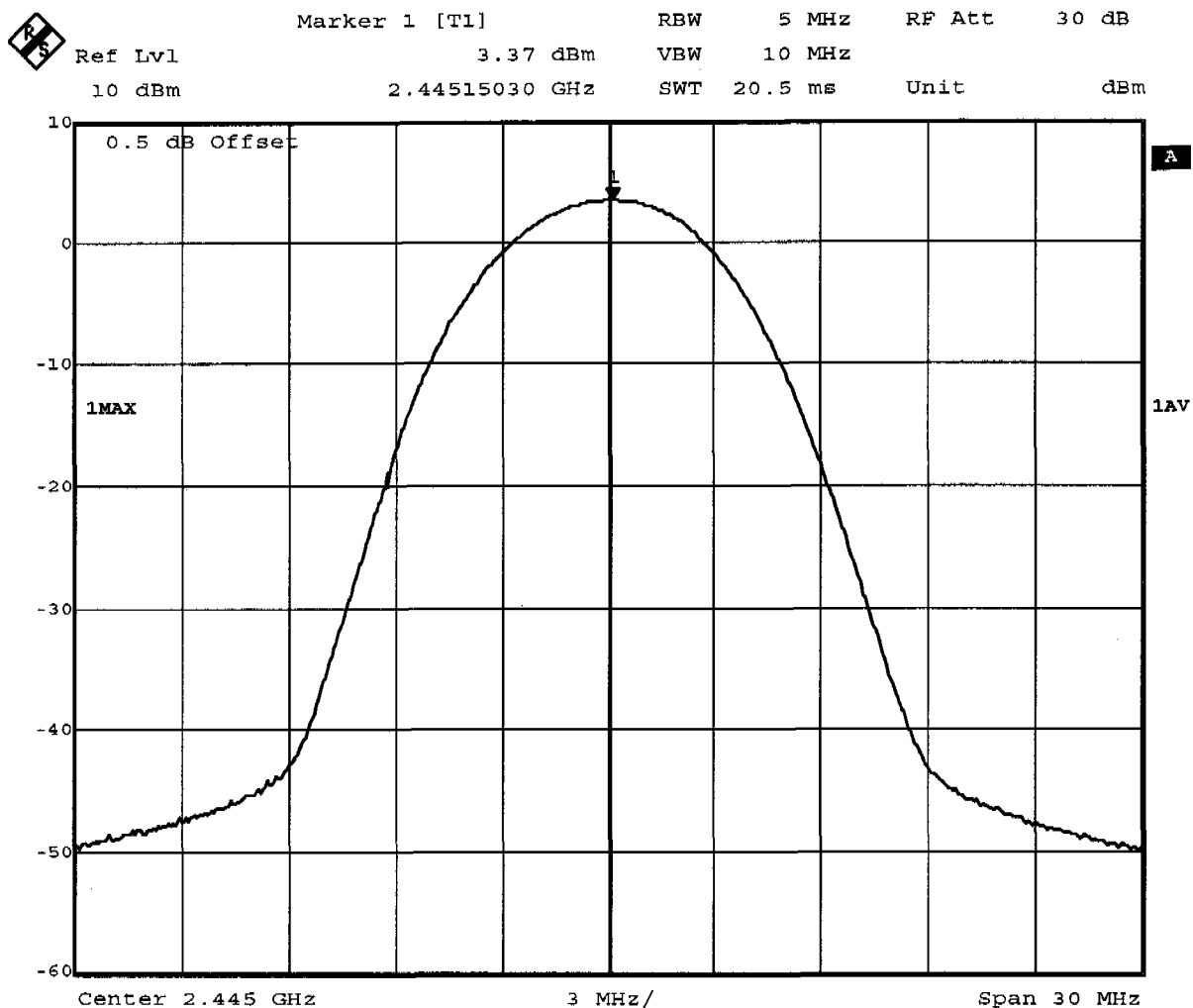
Appendix B

RF power output conducted

FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 19 / 2445 MHz
Comment 3	



Date: 6.MAR.2007 11:59:54

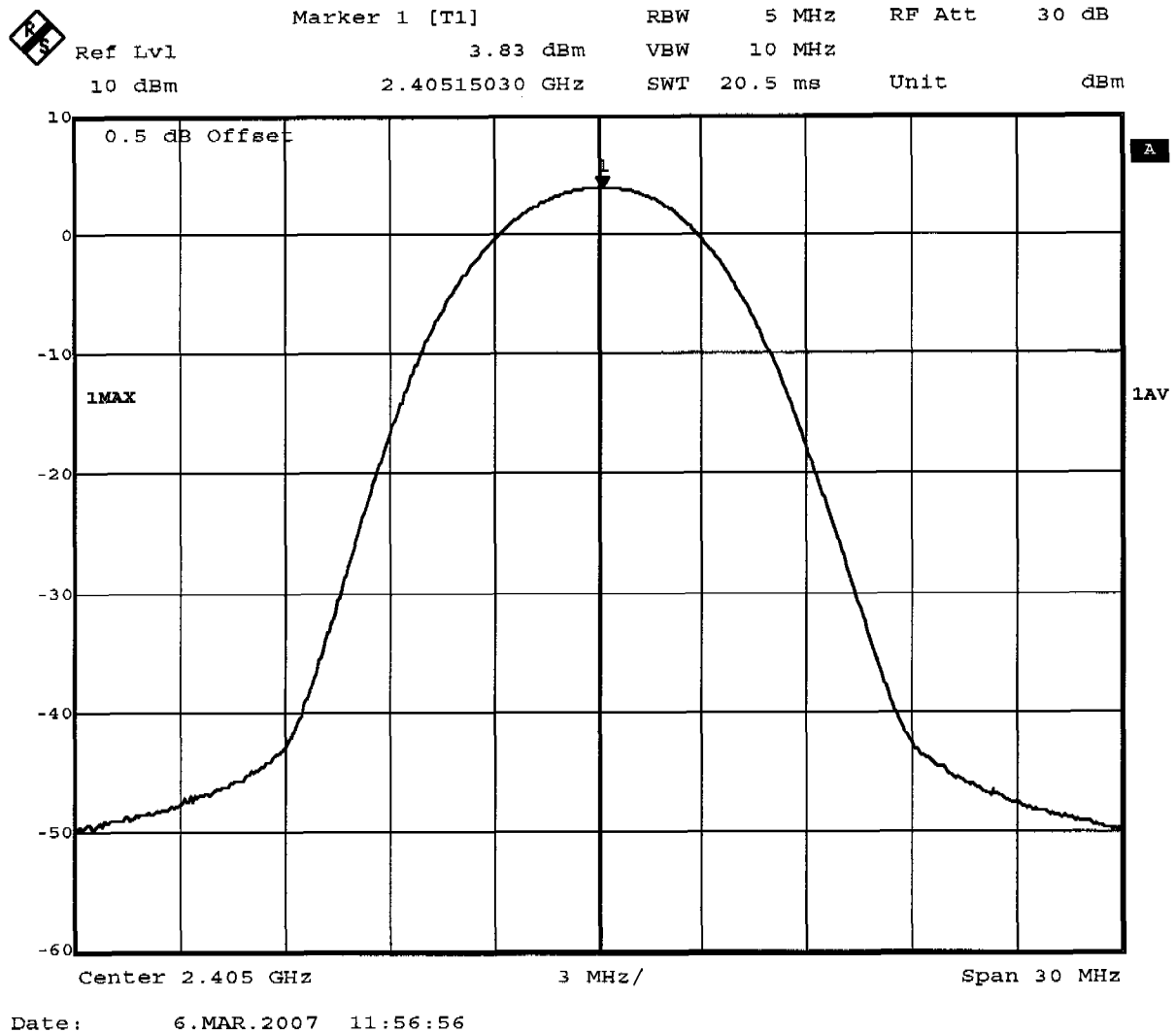
Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)
Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 11 / 2405 MHz
Comment 3	



Measurement diagram

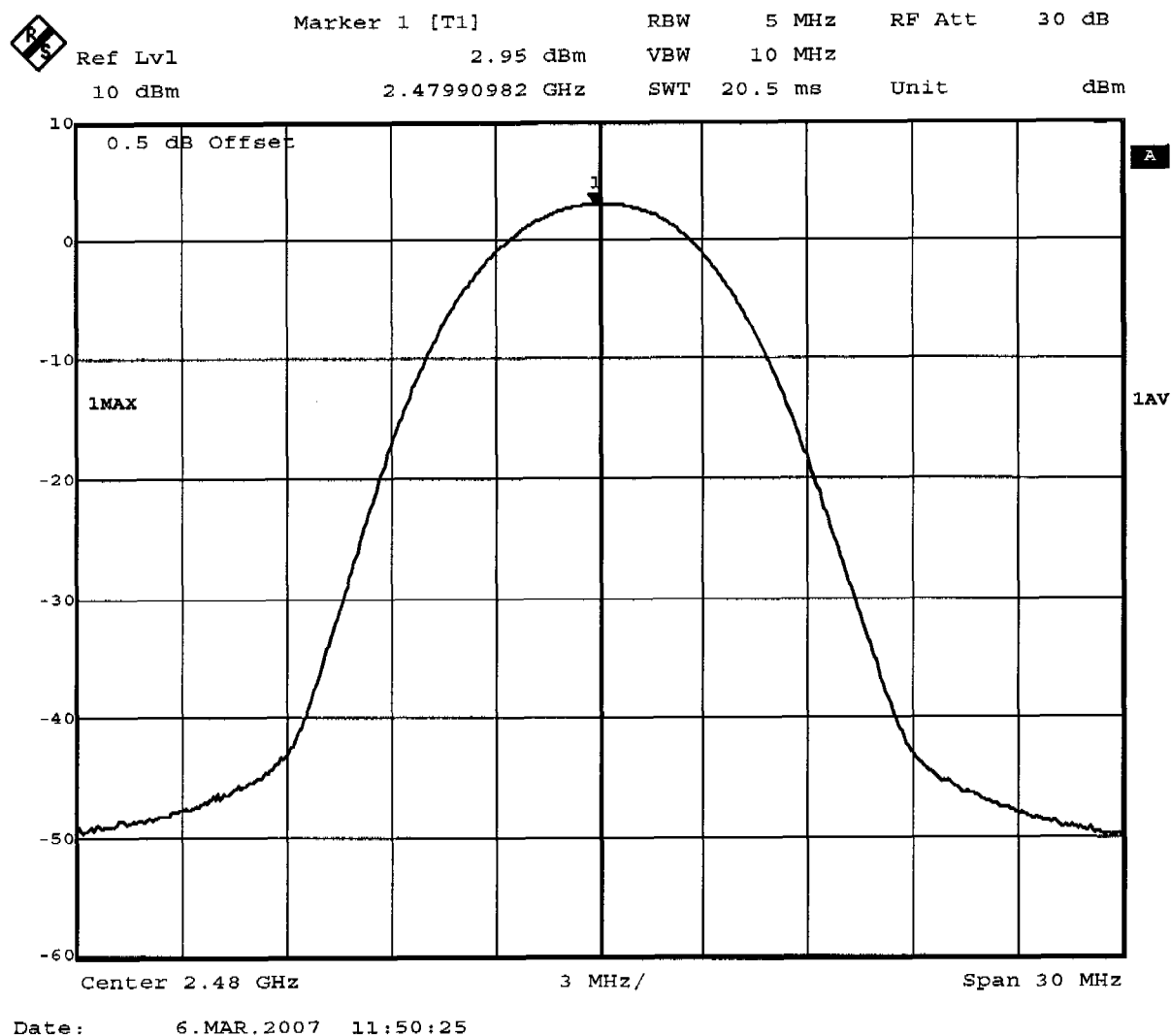
ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel : 26 / 2480 MHz
Comment 3	



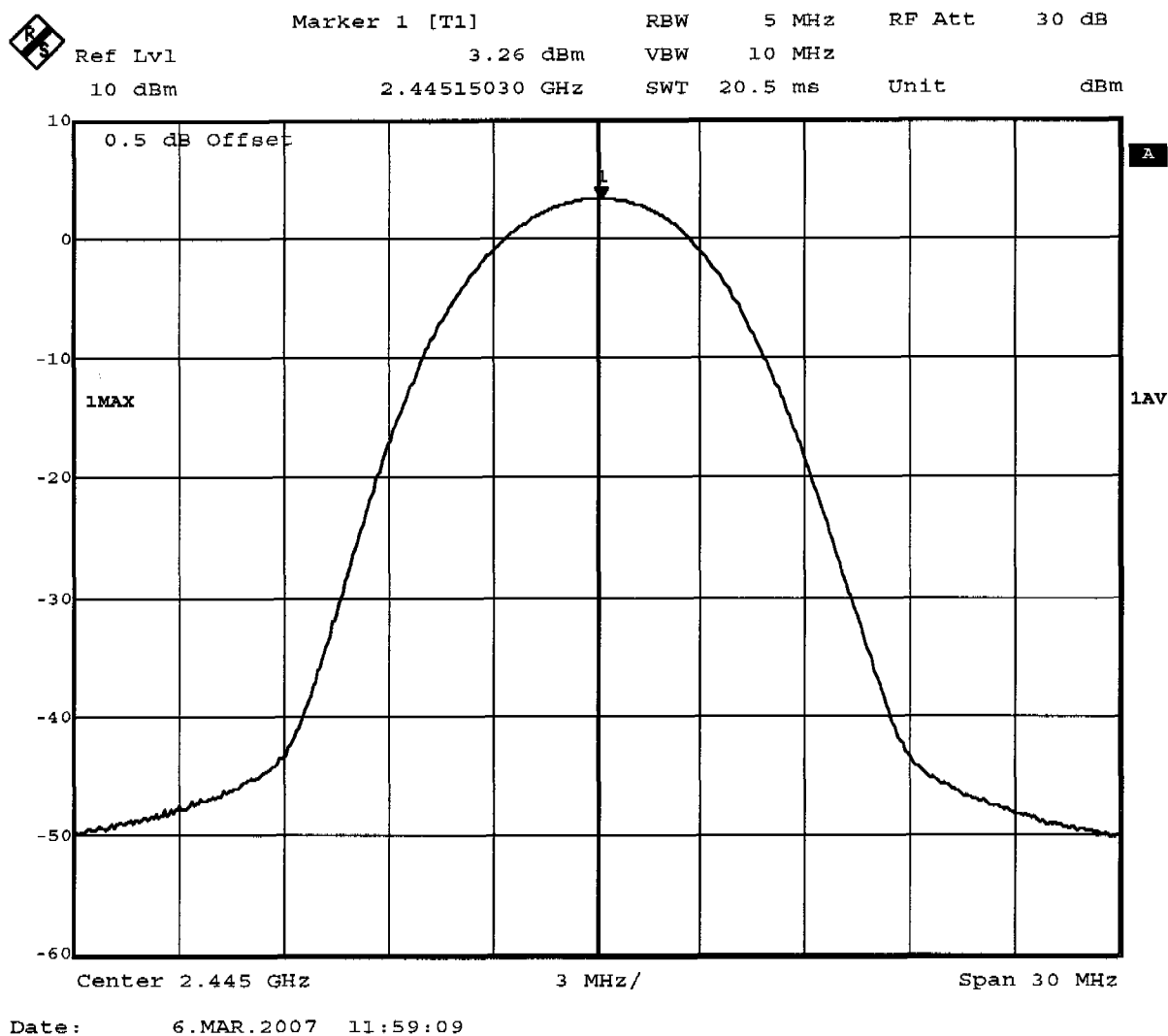
Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)
Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vmin
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 19 / 2445 MHz
Comment 3	



Measurement diagram

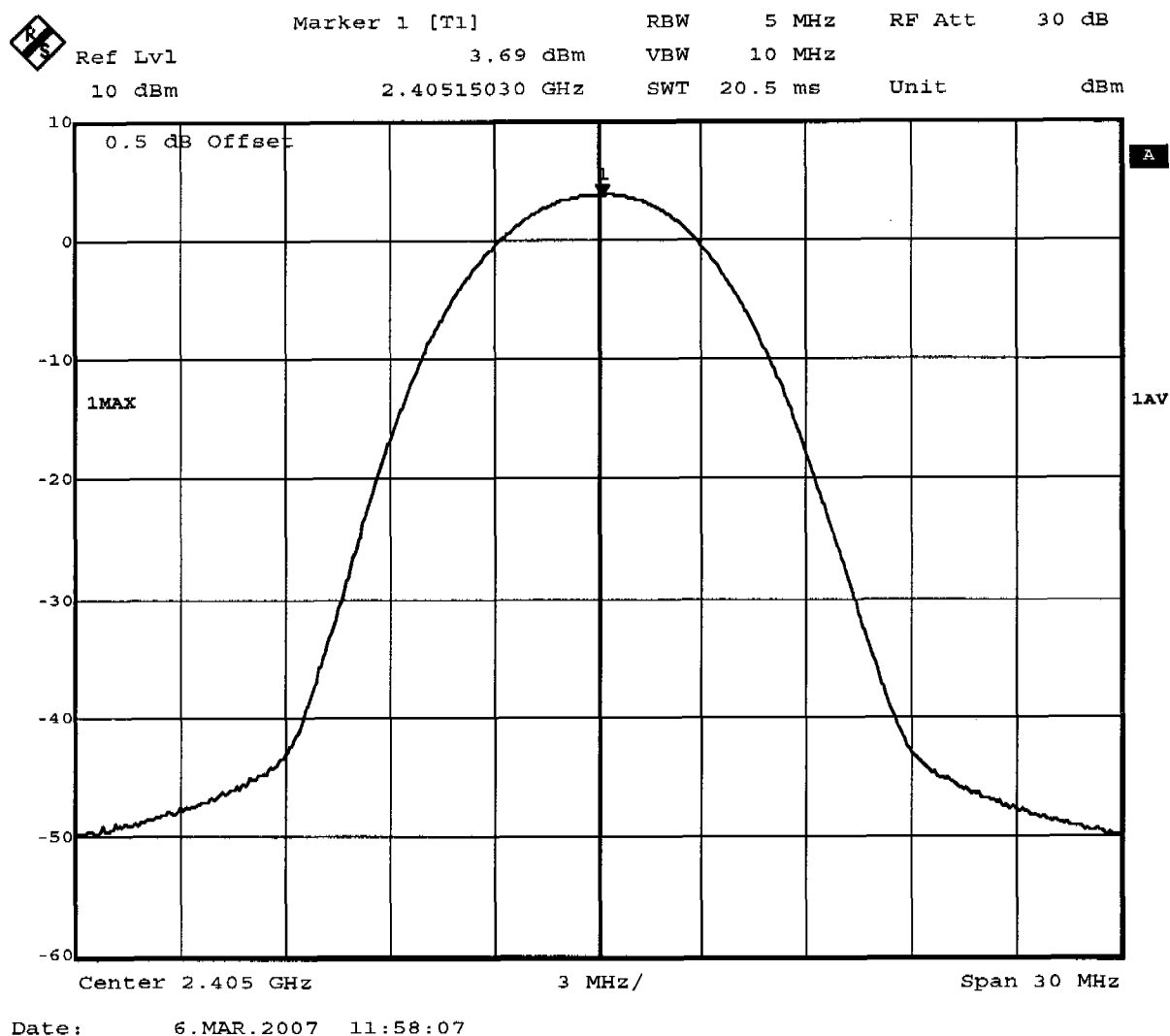
ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vmin
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 11 / 2405 MHz
Comment 3	



Measurement diagram

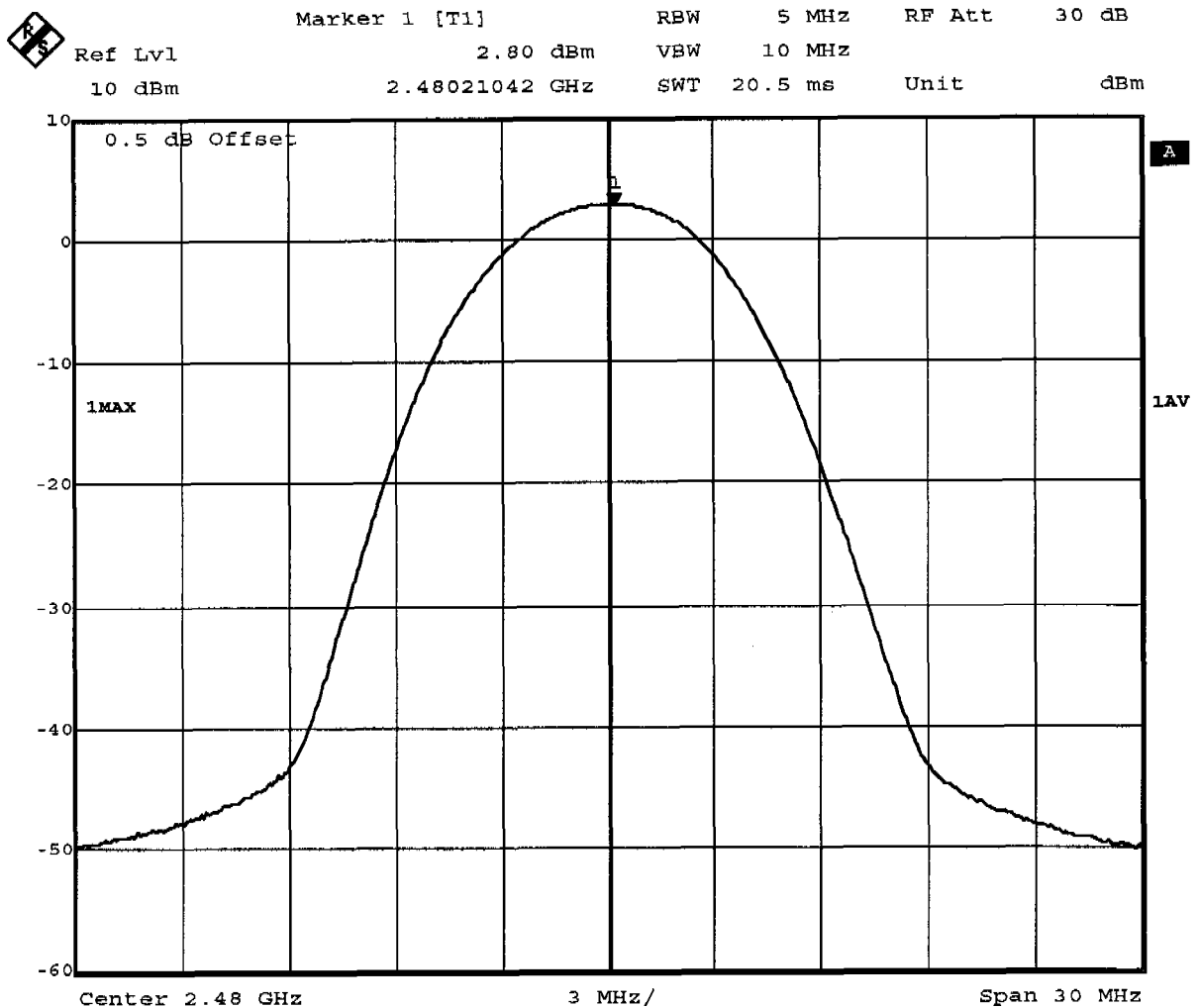
ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vmin
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 26 / 2480 MHz
Comment 3	



Date: 6.MAR.2007 11:47:32

Measurement diagram

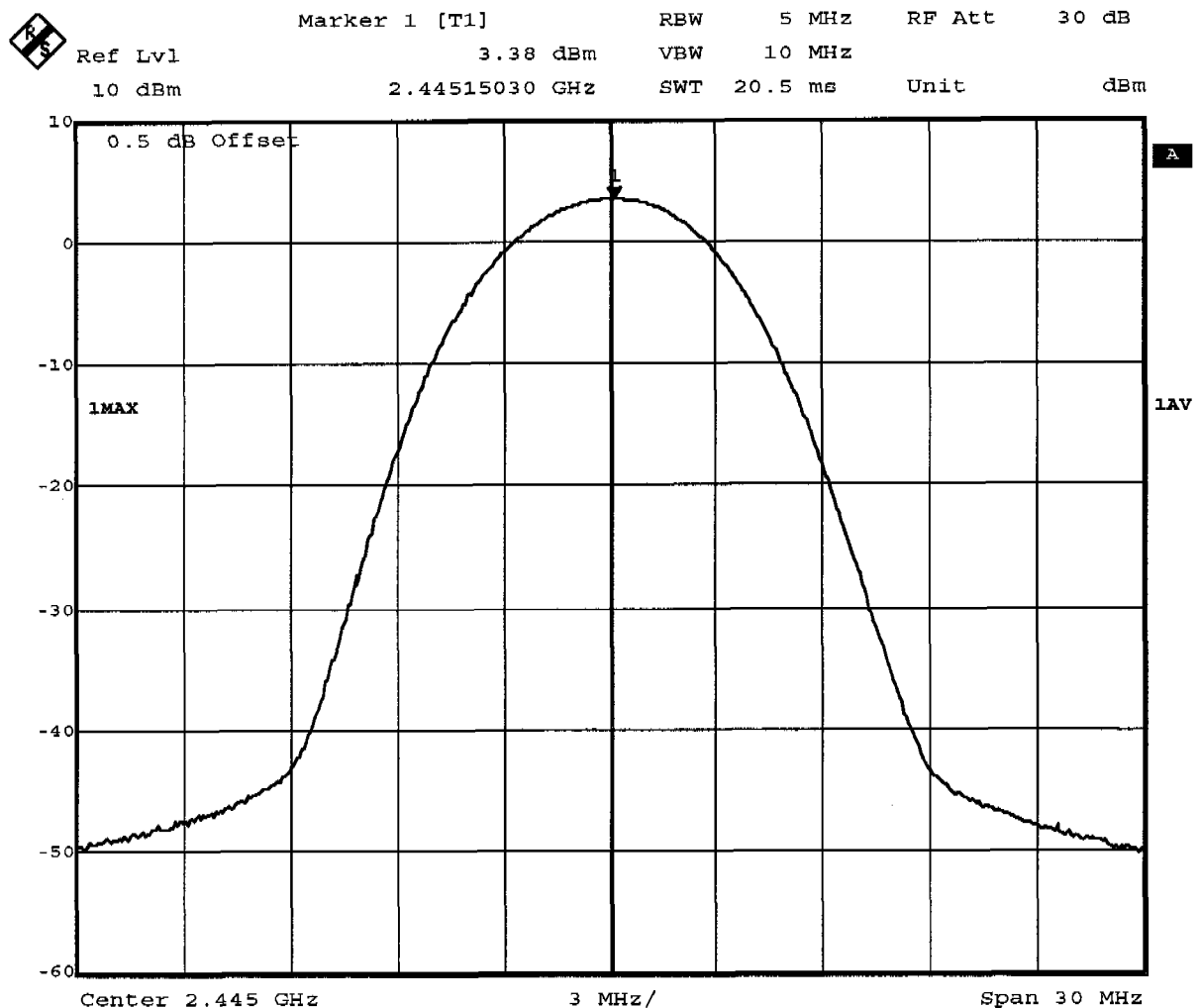
ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vmax
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 19 / 2445 MHz
Comment 3	



Date: 6.MAR.2007 12:00:43

Measurement diagram

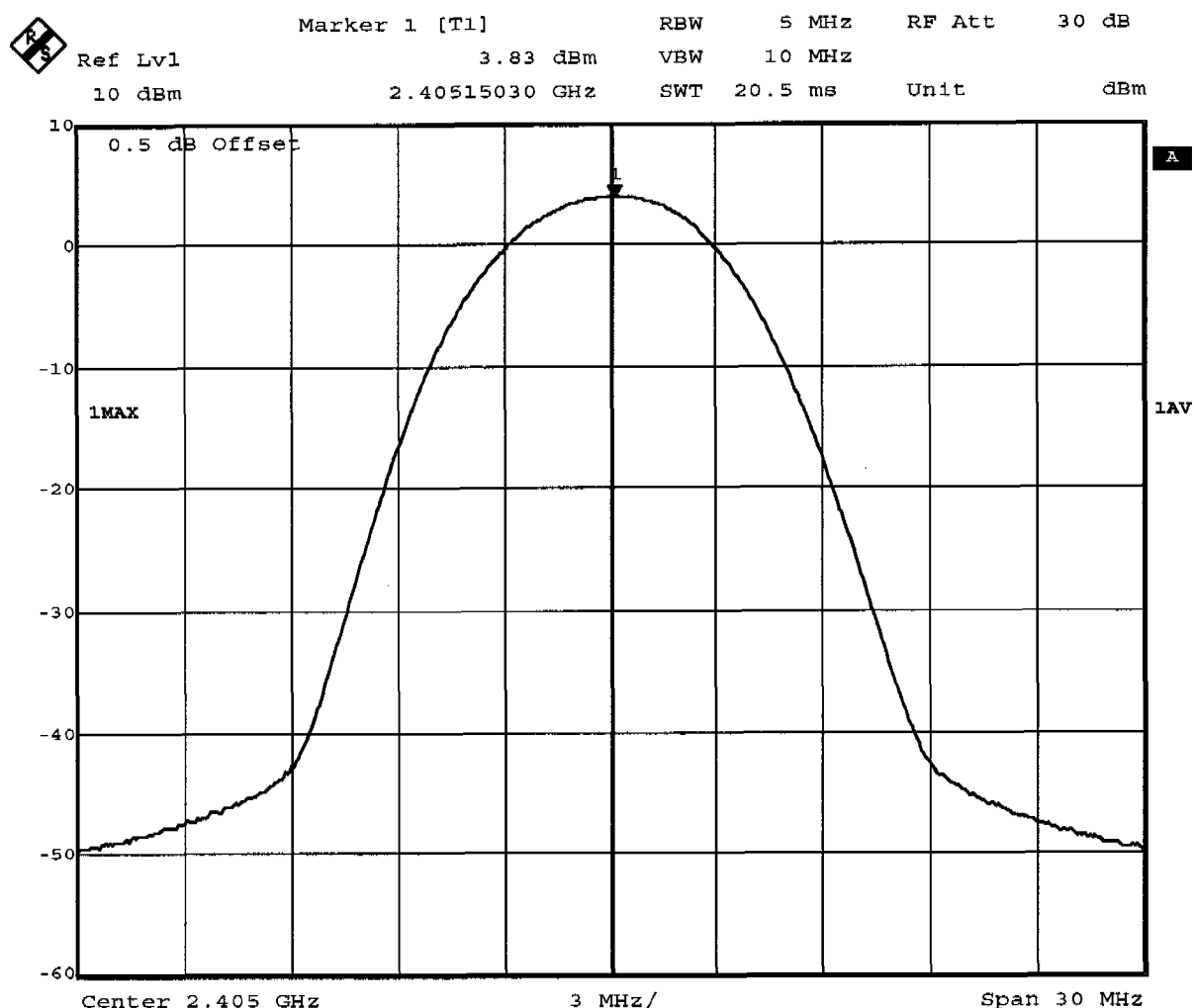
ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vmax
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 11 / 2405 MHz
Comment 3	



Date: 6.MAR.2007 11:55:40

Measurement diagram

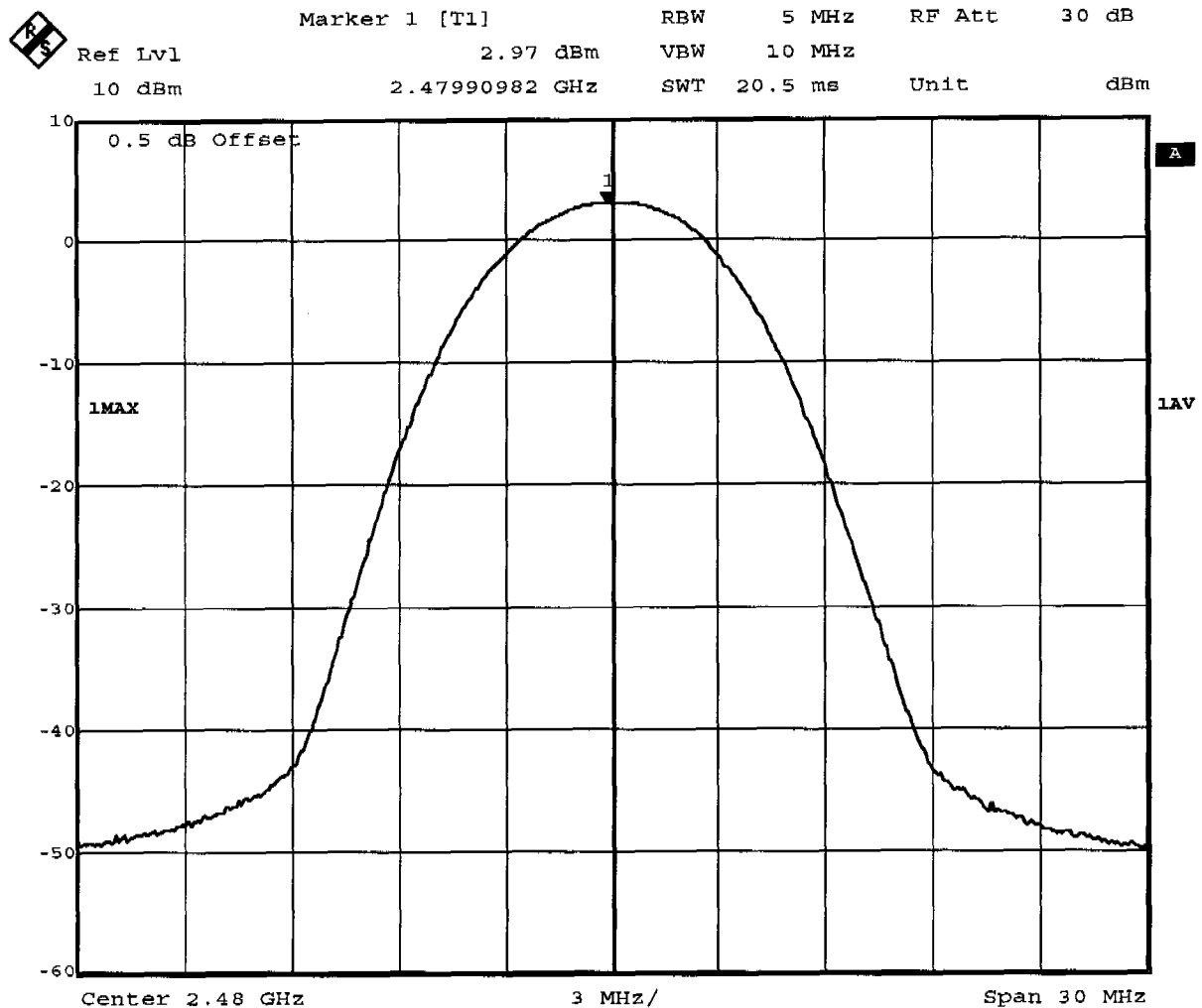
ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (b)

Power Output

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vmax
Test Site / Operator	ETS
Test Specification	Power Output Option 1
Comment 1	Output Power conducted
Comment 2	Channel: 26 / 2480 MHz
Comment 3	



Date: 6.MAR.2007 11:52:23

Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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Appendix C

RF power output radiated (EIRP)

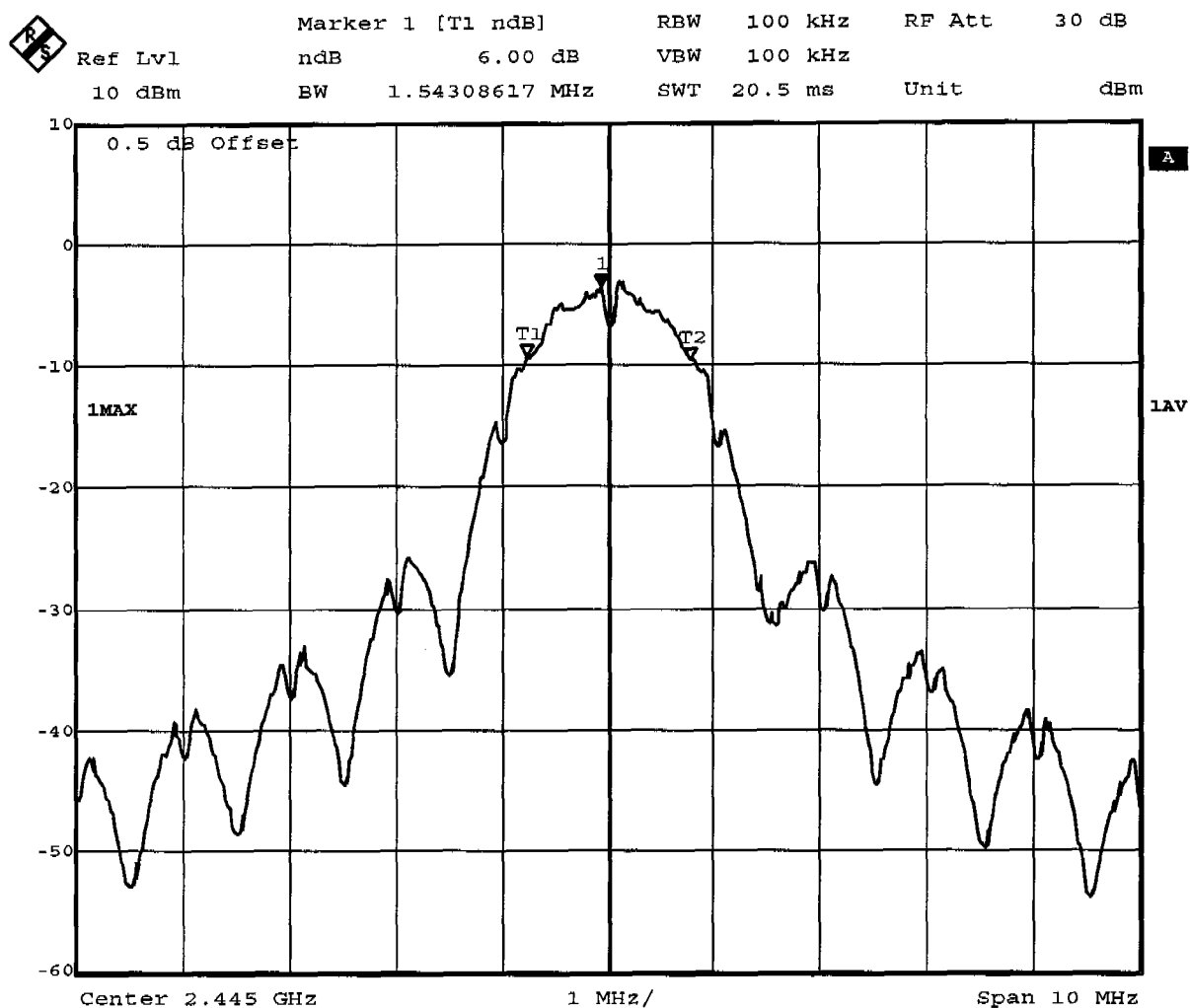
Appendix D

6 dB bandwidth

FCC part 15.247 (a)2

Bandwidth

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	FCC part 15.247 (a)2
Comment 1	Bandwidth
Comment 2	Channel: 19 / 2445 MHz
Comment 3	



Date: 6.MAR.2007 13:45:45

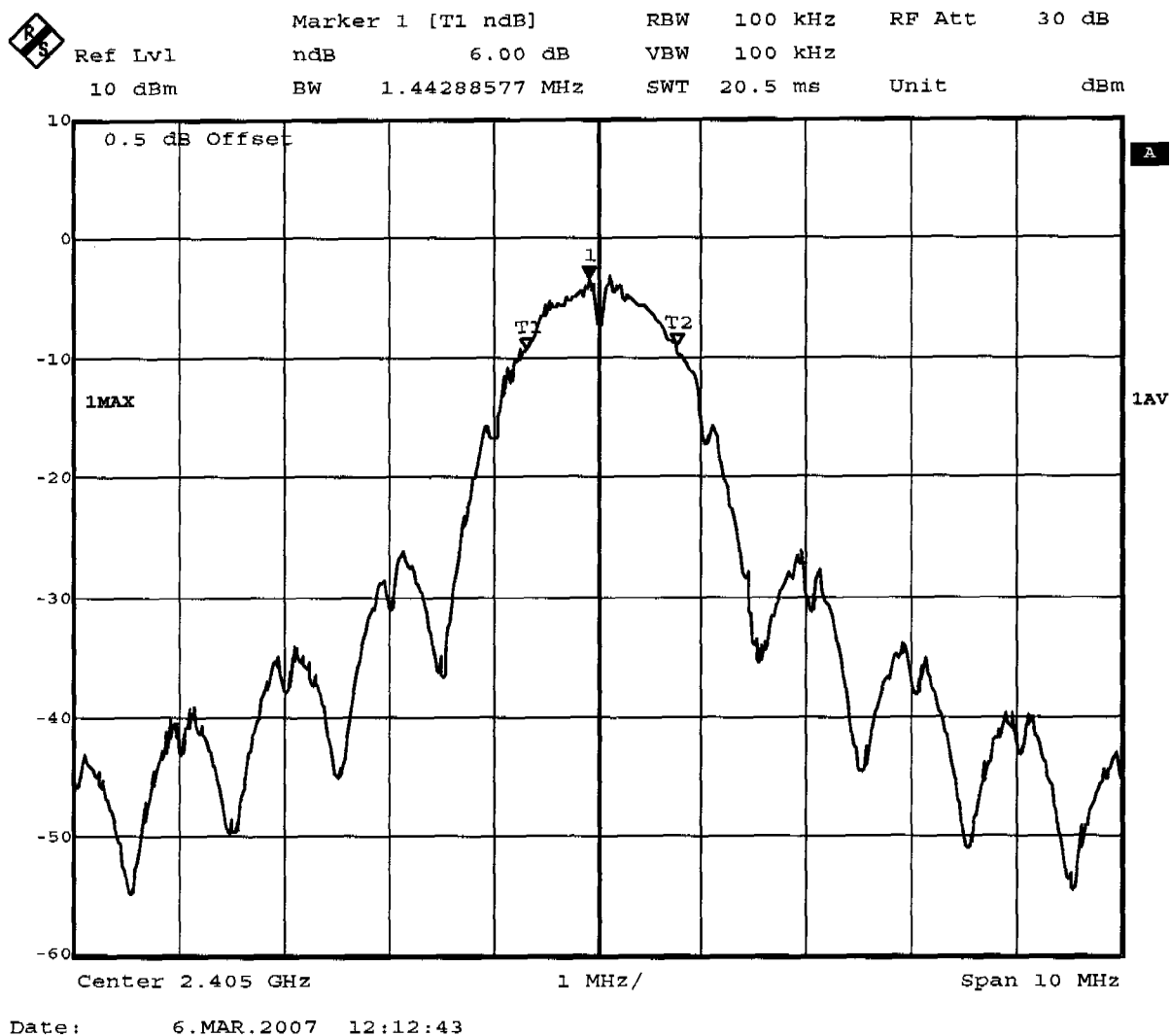
Measurement diagram

ETS Product Service AG
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FCC part 15.247 (a)2
Bandwidth

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	FCC part 15.247 (a)2
Comment 1	Bandwidth
Comment 2	Channel: 11 / 2405 MHz
Comment 3	



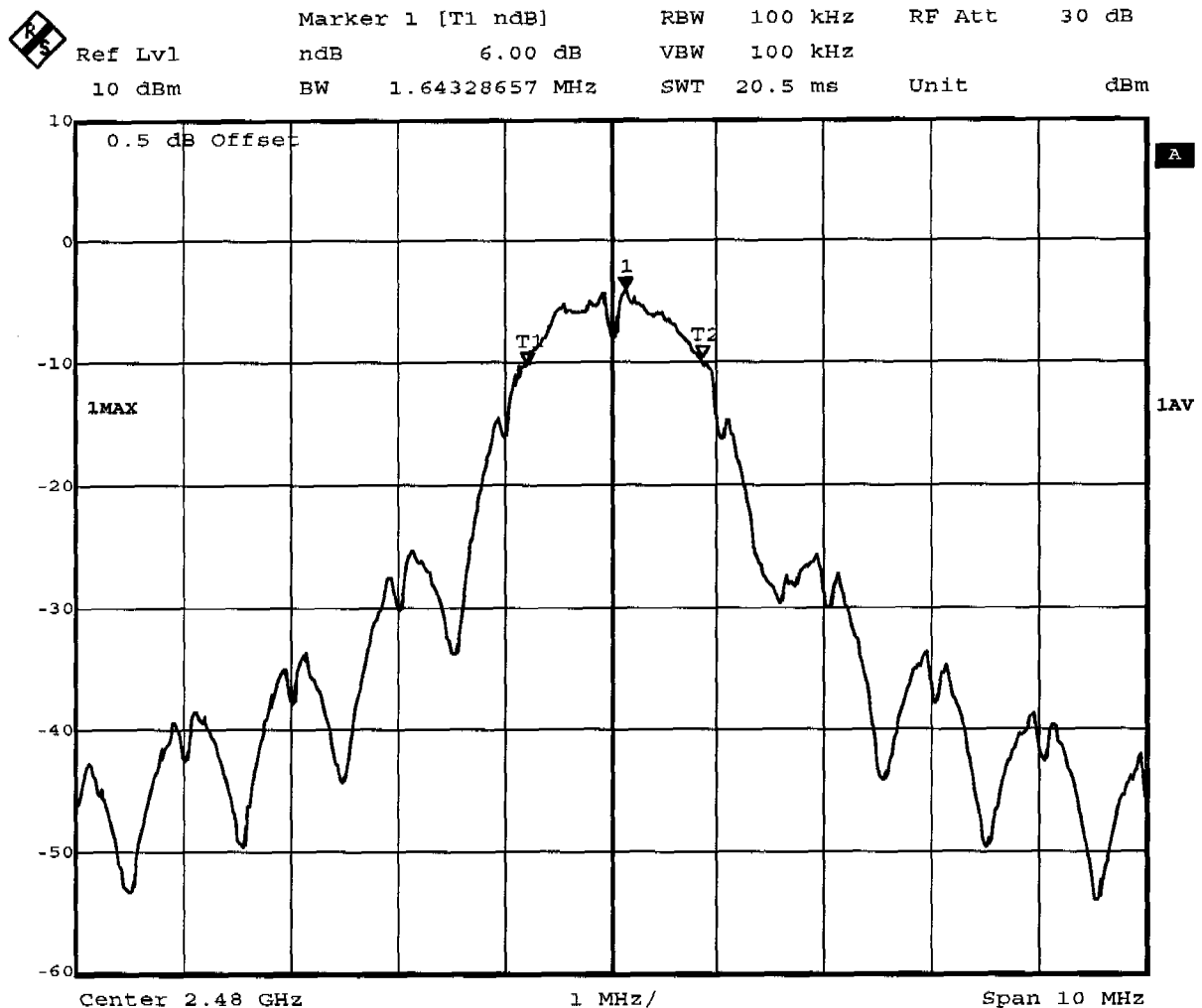
Measurement diagram

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FCC part 15.247 (a)2
Bandwidth

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	FCC part 15.247 (a)2
Comment 1	Bandwidth
Comment 2	Channel: 26 / 2480 MHz
Comment 3	



Date: 6.MAR.2007 13:59:42

Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

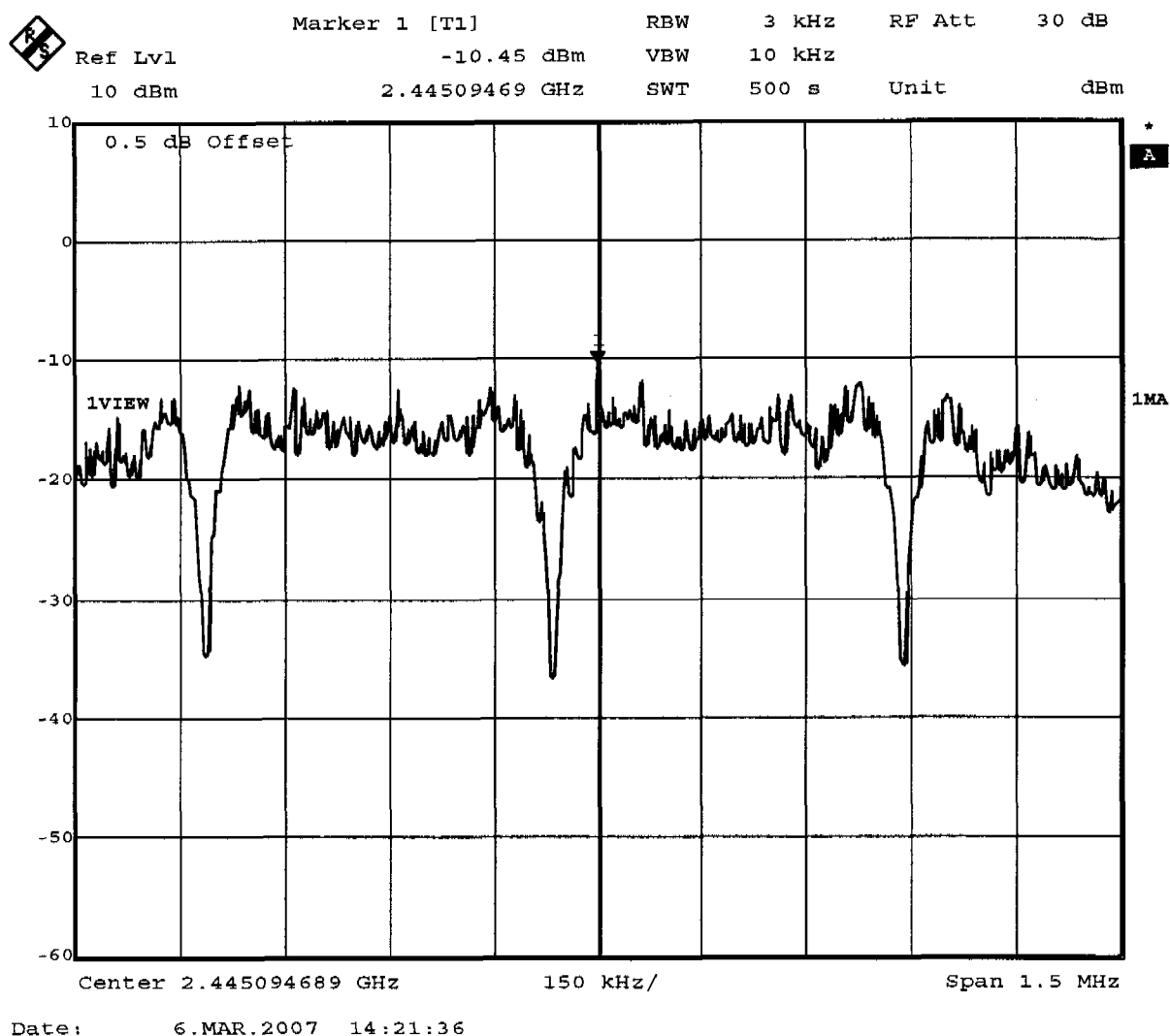
Page 1 of 1

Appendix E

Peak power spectral density

FCC part 15.247 (d)
Power spectral density (PSD)

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	FCC part 15.247 (d) (PSD)
Comment 1	Power spectral density conducted
Comment 2	Channel: 19 / 2445 MHz
Comment 3	



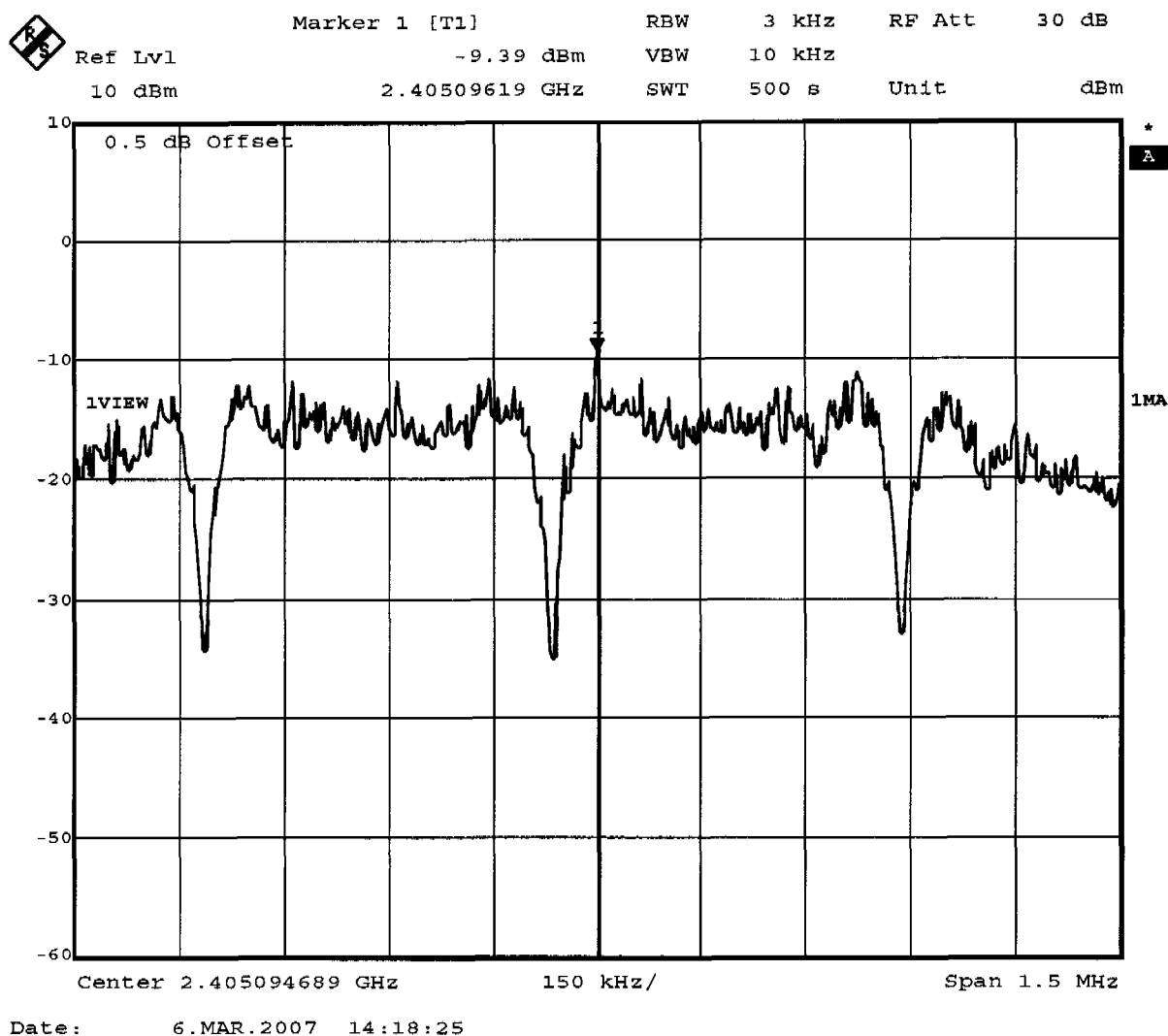
Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (d)
Power spectral density (PSD)

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	FCC part 15.247 (d) (PSD)
Comment 1	Power spectral density conducted
Comment 2	Channel: 11 / 2405 MHz
Comment 3	



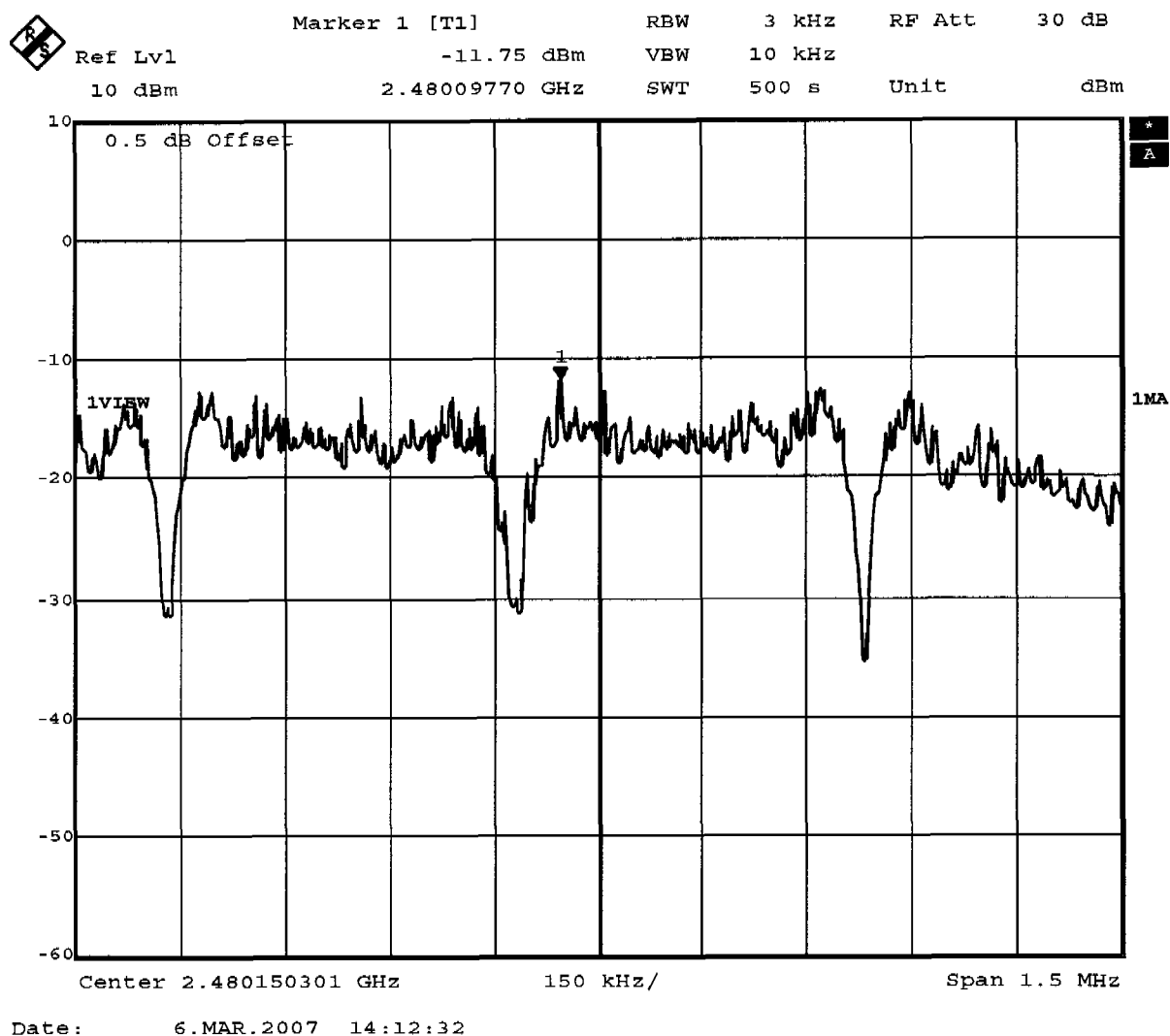
Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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FCC part 15.247 (d)
Power spectral density (PSD)

EUT	2.4GHz 802.15.4/ZigBee OEM module
Model	ZDM-A1281-A2
Approval Holder	LuxLabs Ltd. DBA MeshNetics
Temperature / Voltage	23°C / Vnom
Test Site / Operator	ETS
Test Specification	FCC part 15.247 (d) (PSD)
Comment 1	Power spectral density conducted
Comment 2	Channel: 19 / 2445 MHz
Comment 3	



Measurement diagram

ETS Product Service AG
Storkower Str. 38C, D-15526 REICHENWALDE B. BERLIN

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Appendix F

Spurious emission conducted

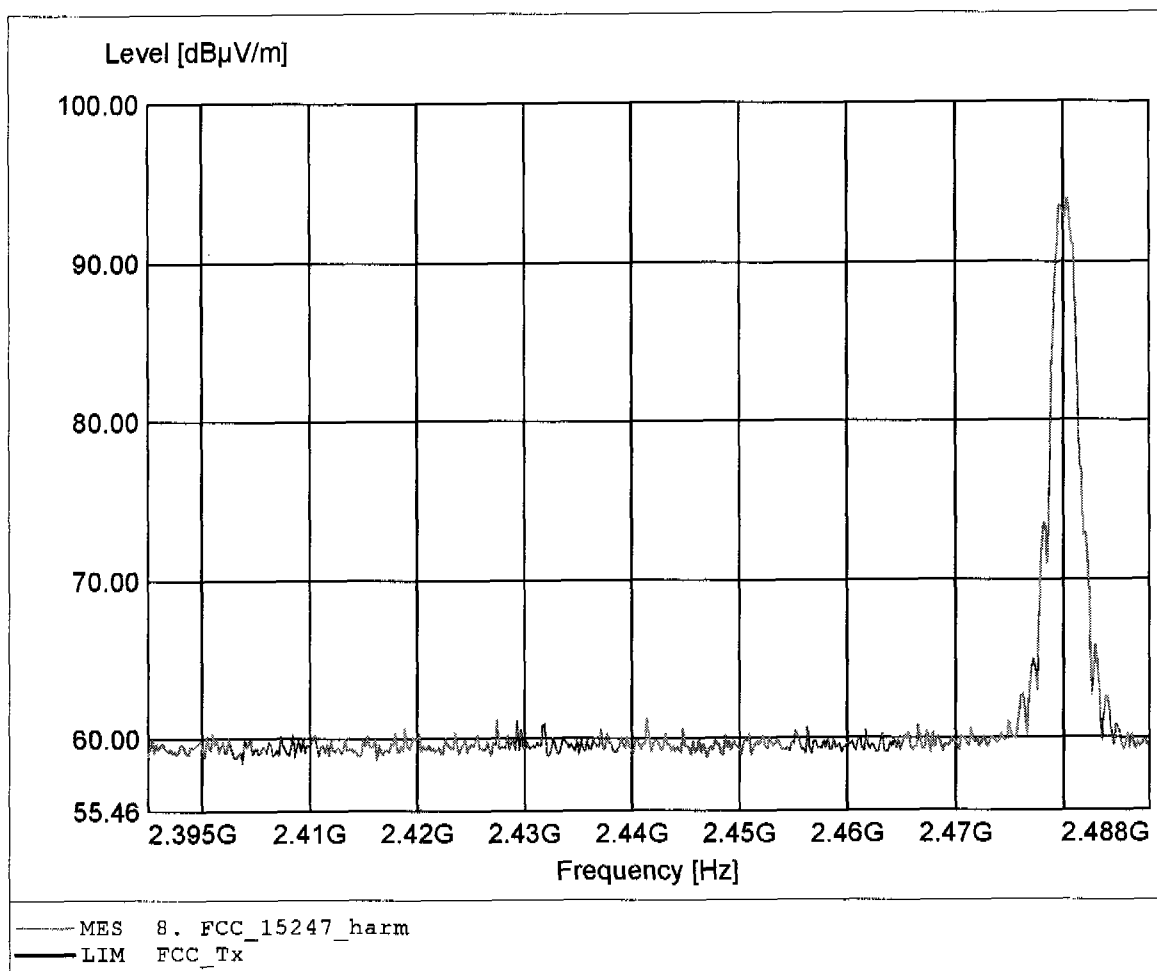
Appendix G

Spurious emission radiated

Carrier power (Field Strength)

FCC RULES PART 15, SUBPART C

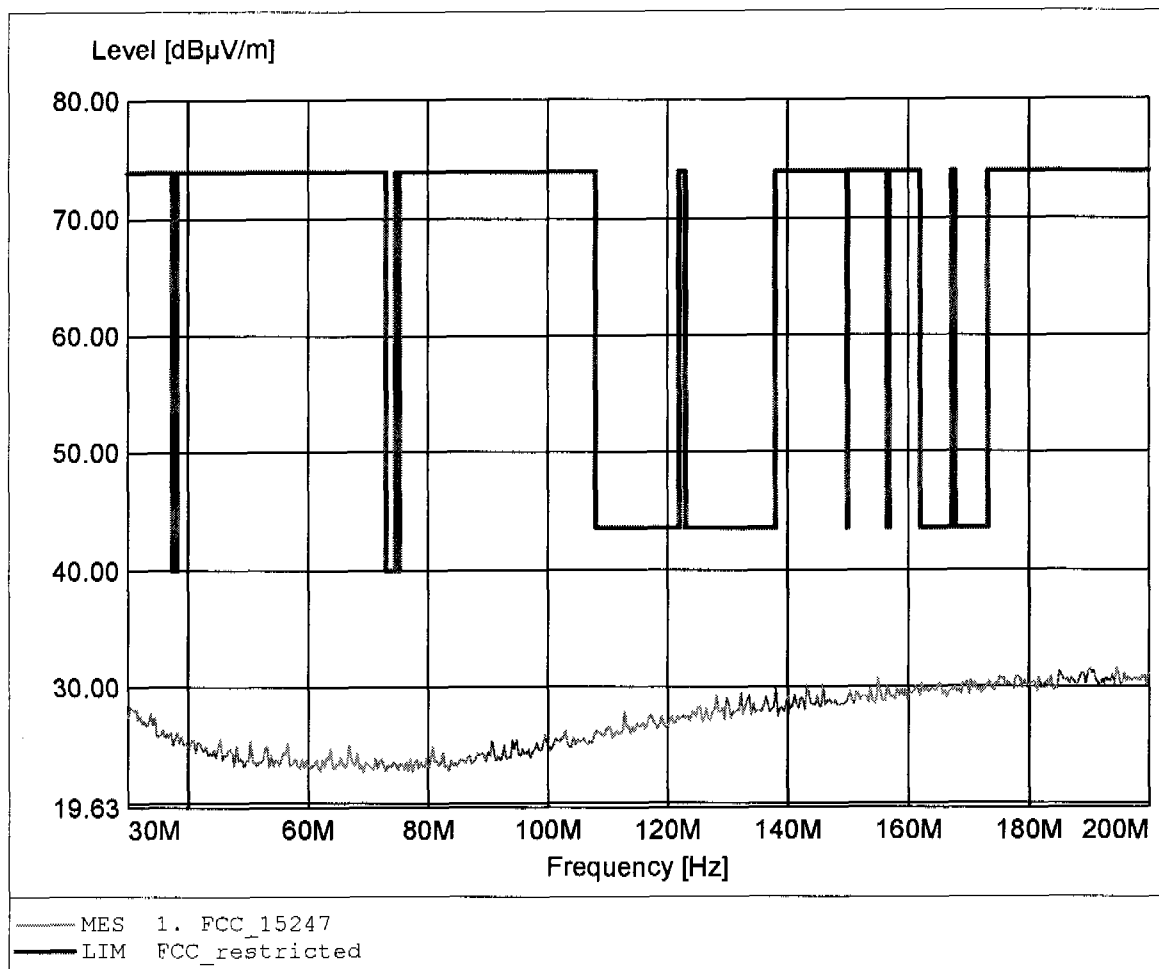
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: BBHA9120D
Comment 2: Freq: 2.480GHz, Emax: 93.95dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

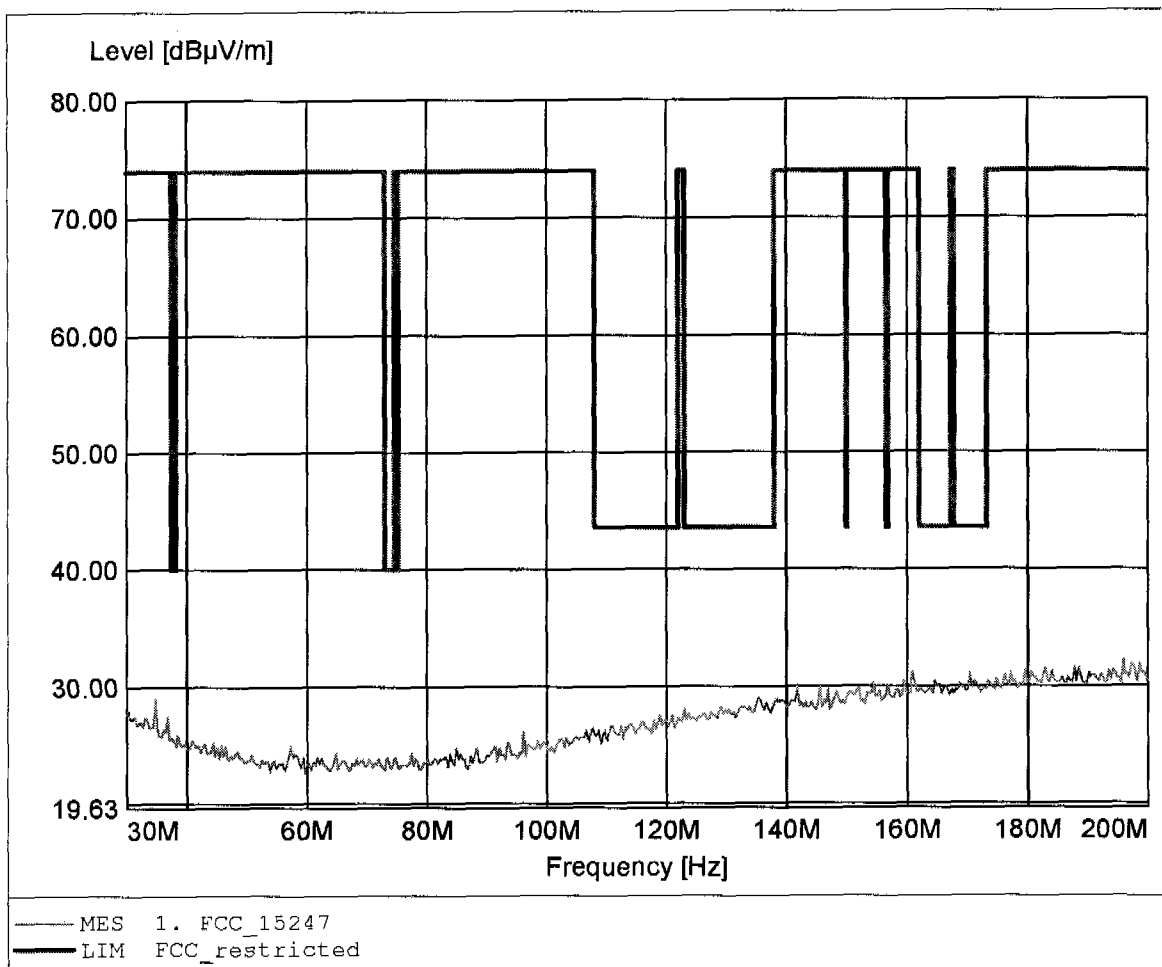
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 194.549MHz, Emax: 31.57dBuV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

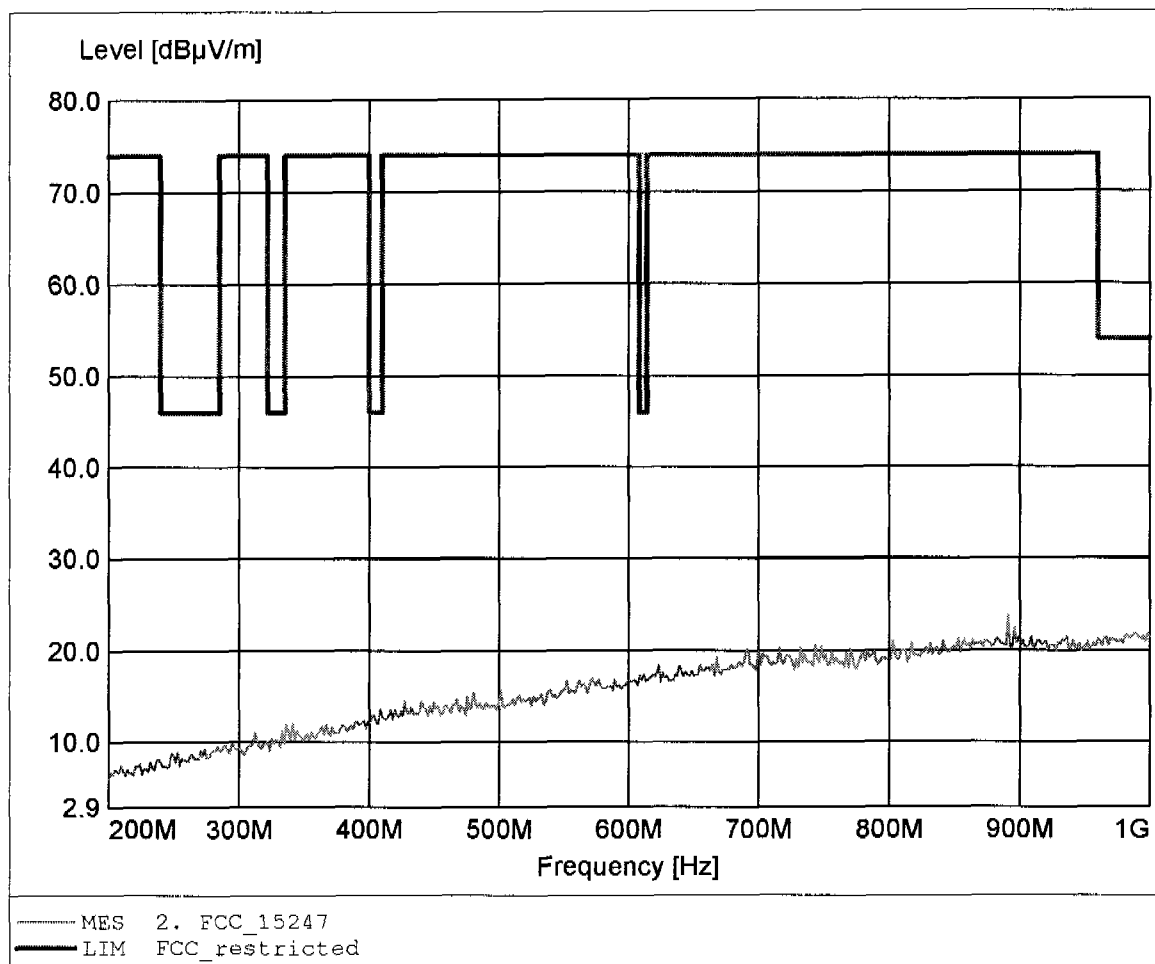
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 195.912MHz, Emax: 32.22dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

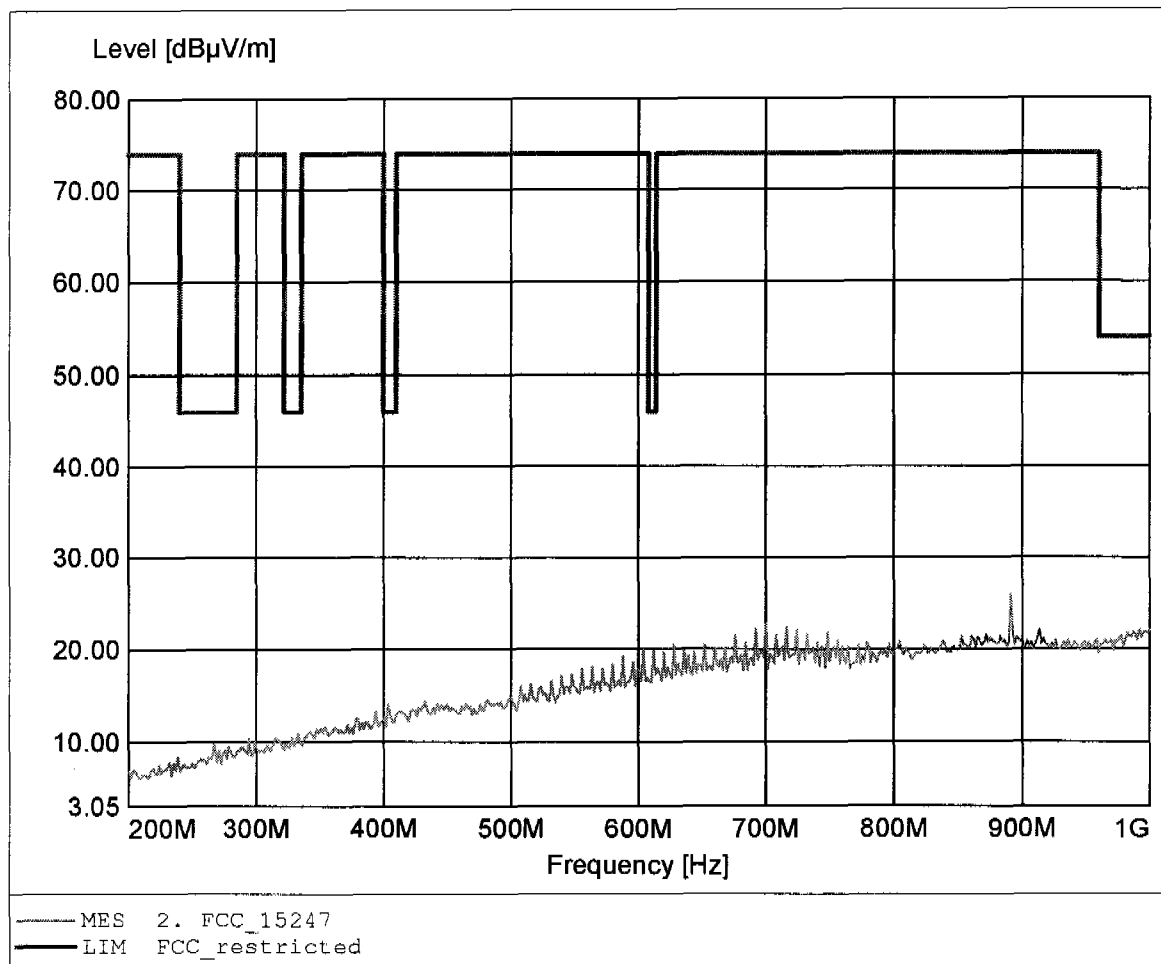
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 890.982MHz, Emax: 23.73dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

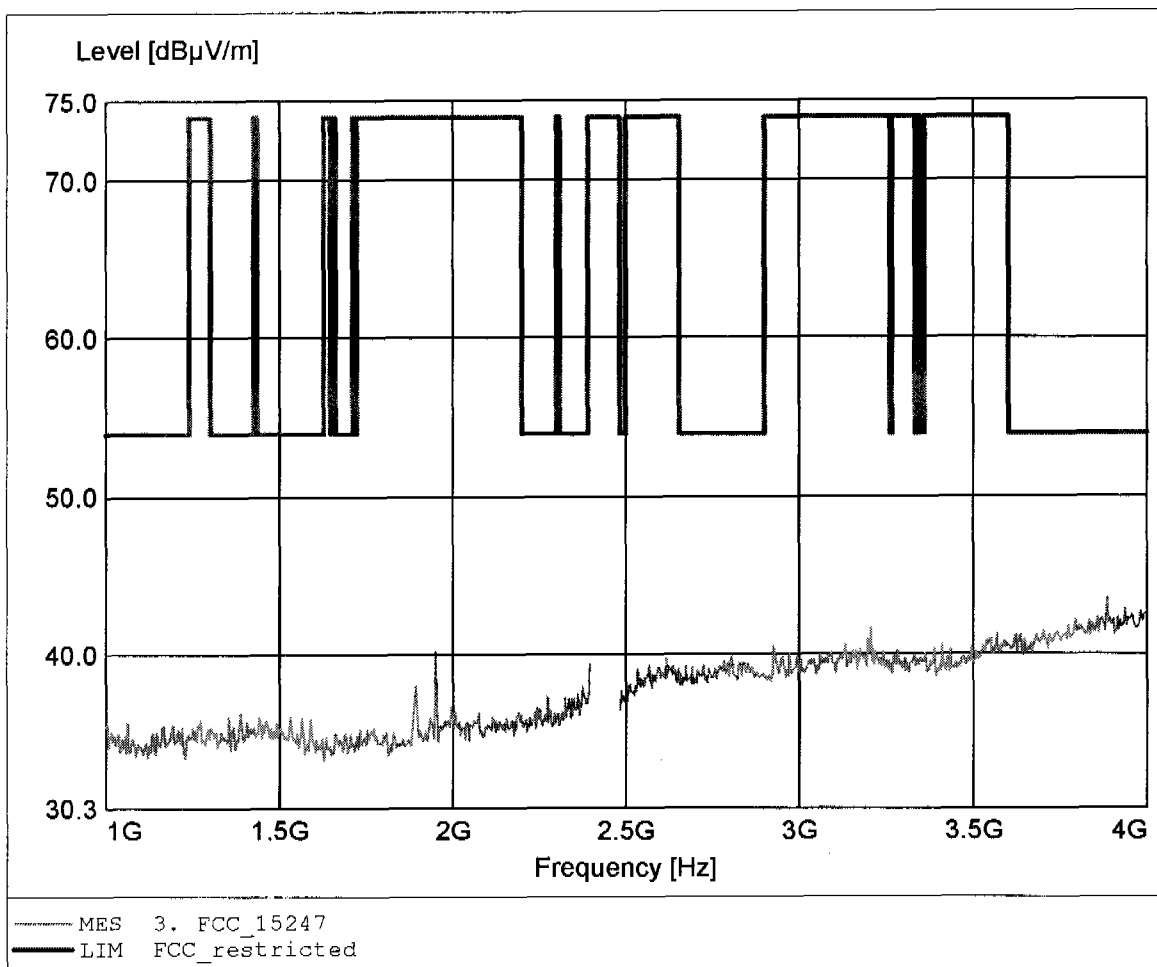
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 890.982MHz, Emax: 25.92dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

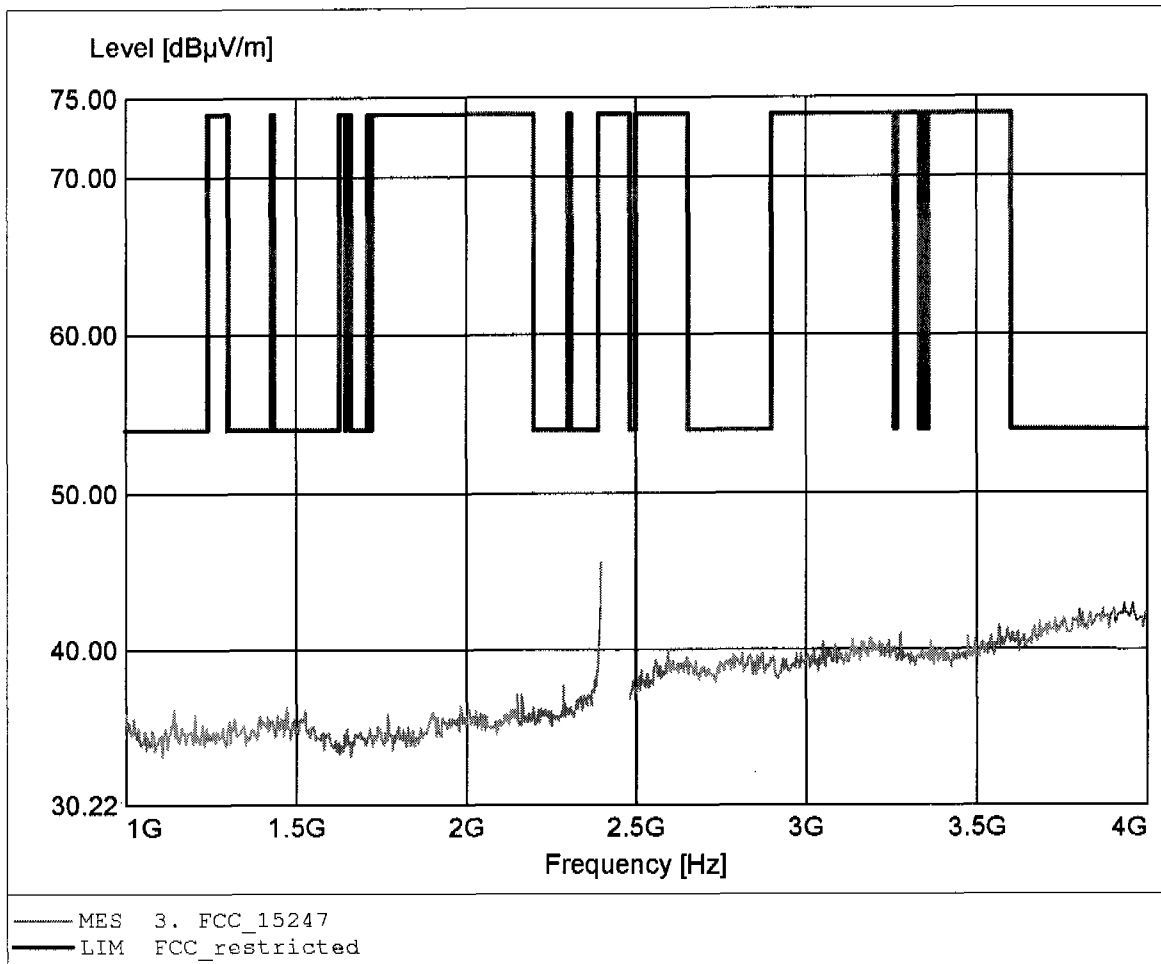
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 3.885GHz, Emax: 43.55dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

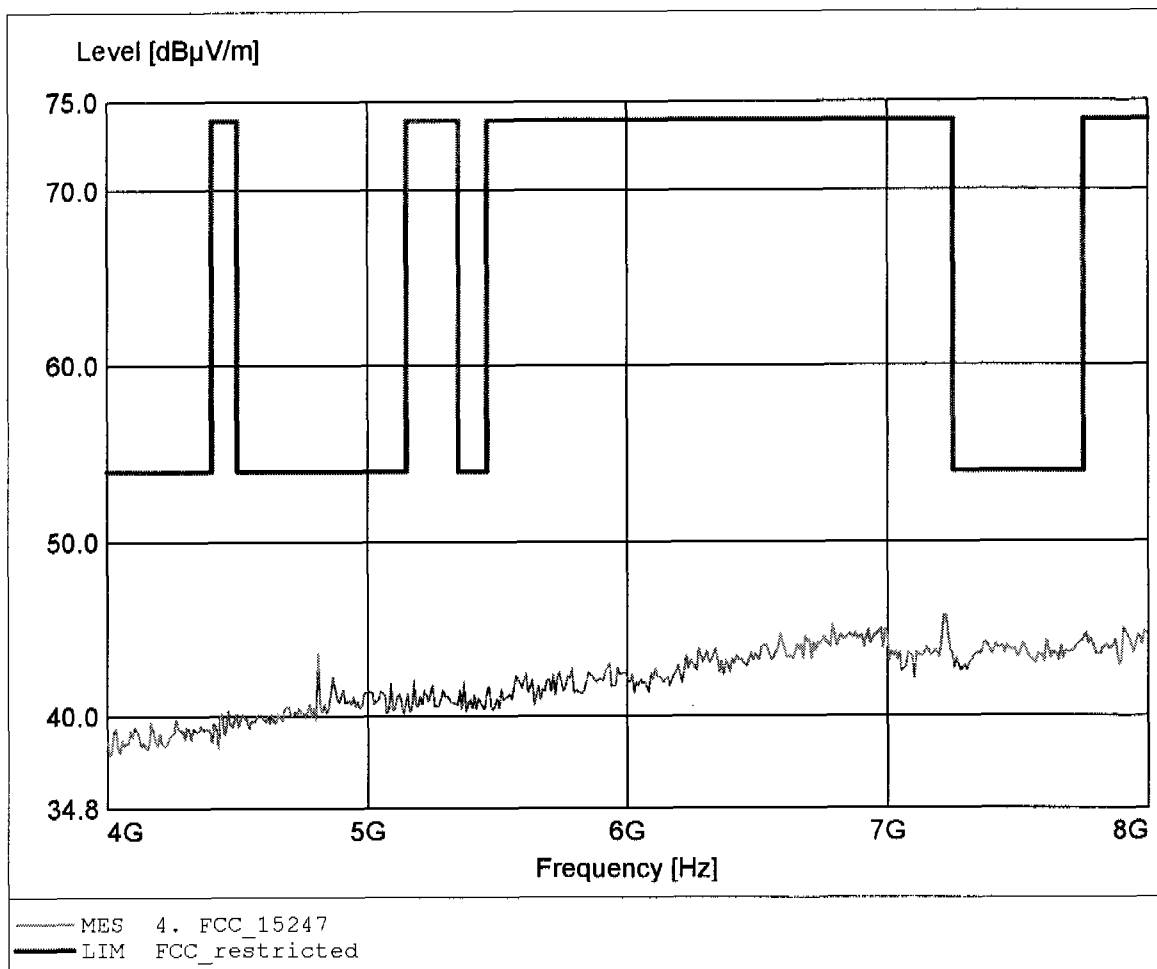
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 2.397GHz, Emax: 45.63dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

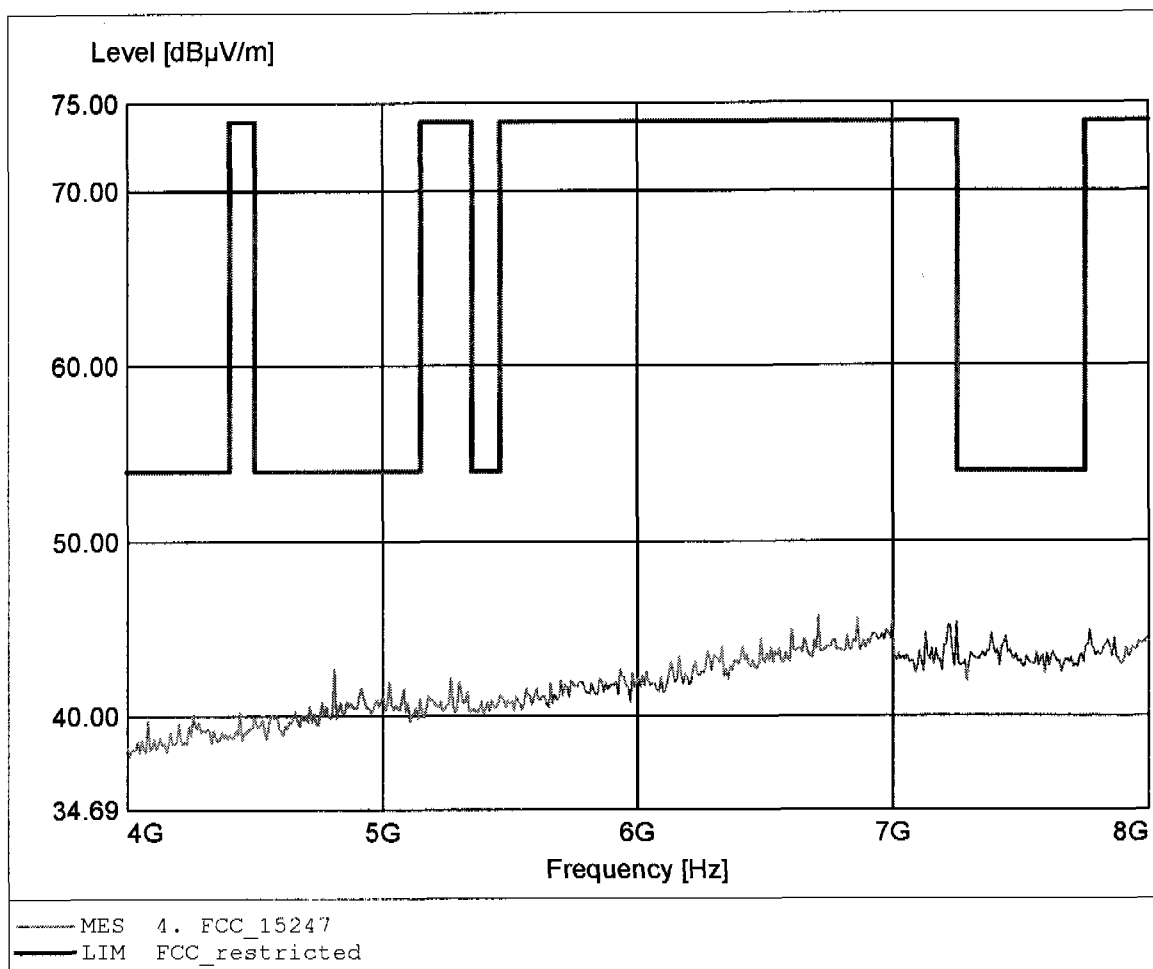
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 7.222GHz, Emax: 45.80dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

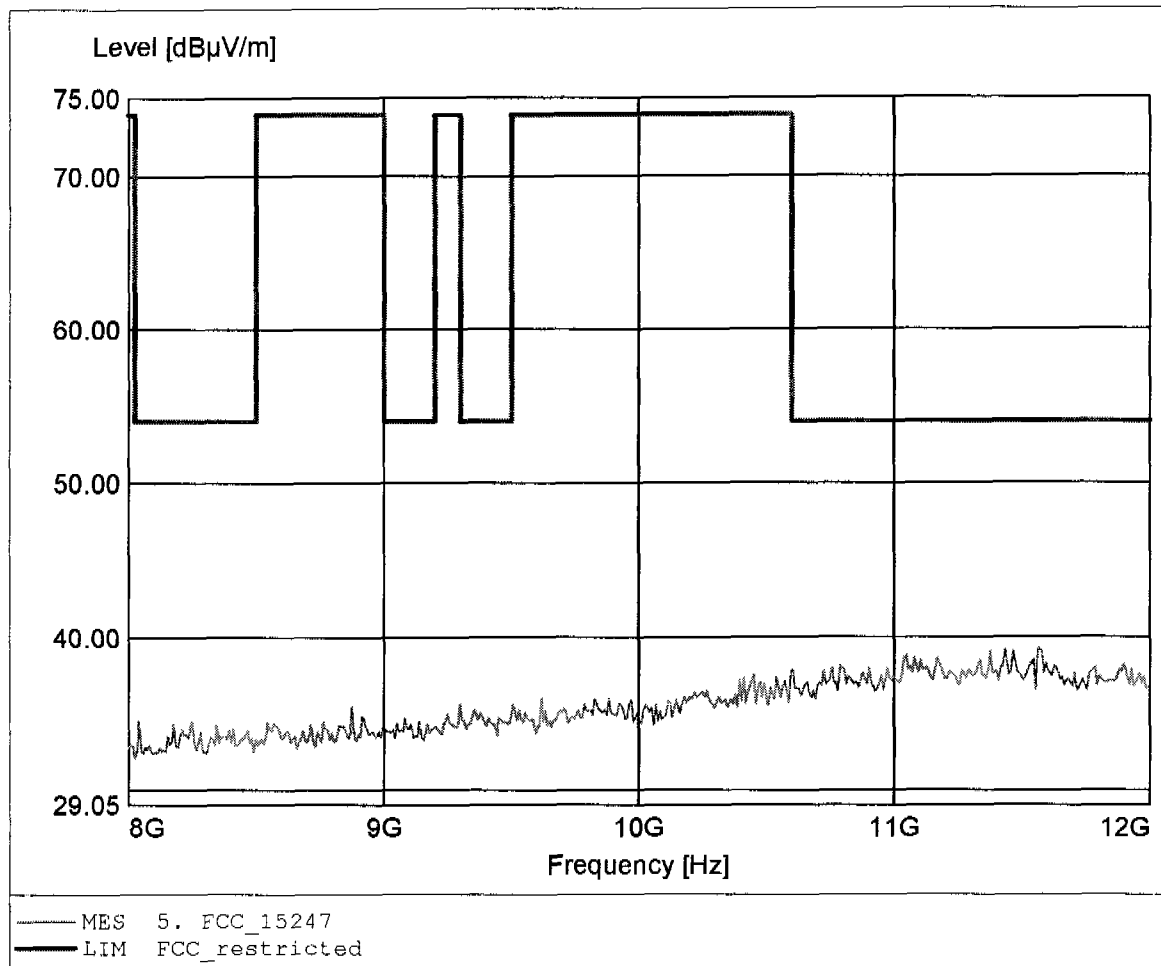
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 6.709GHz, Emax: 45.73dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

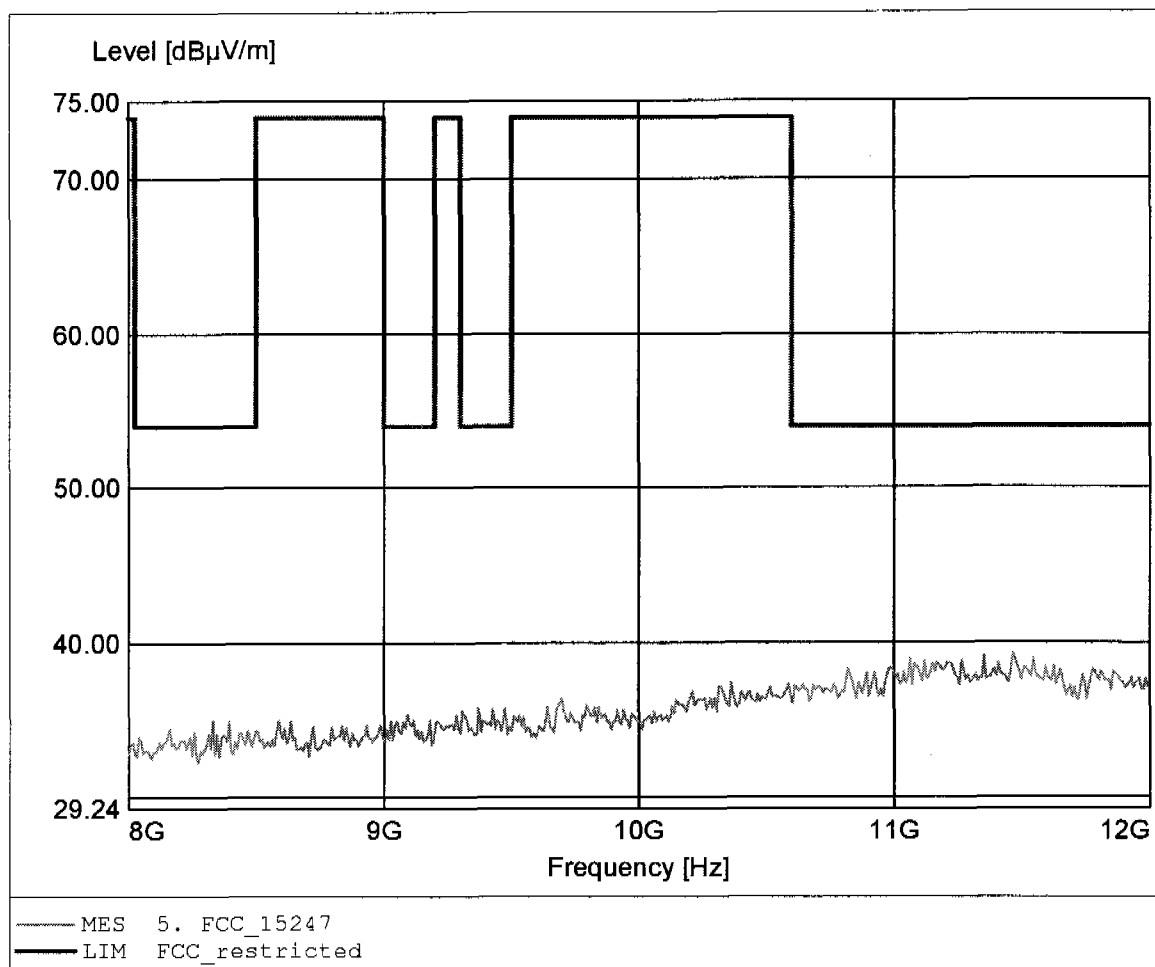
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 11.559GHz, Emax: 39.30dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

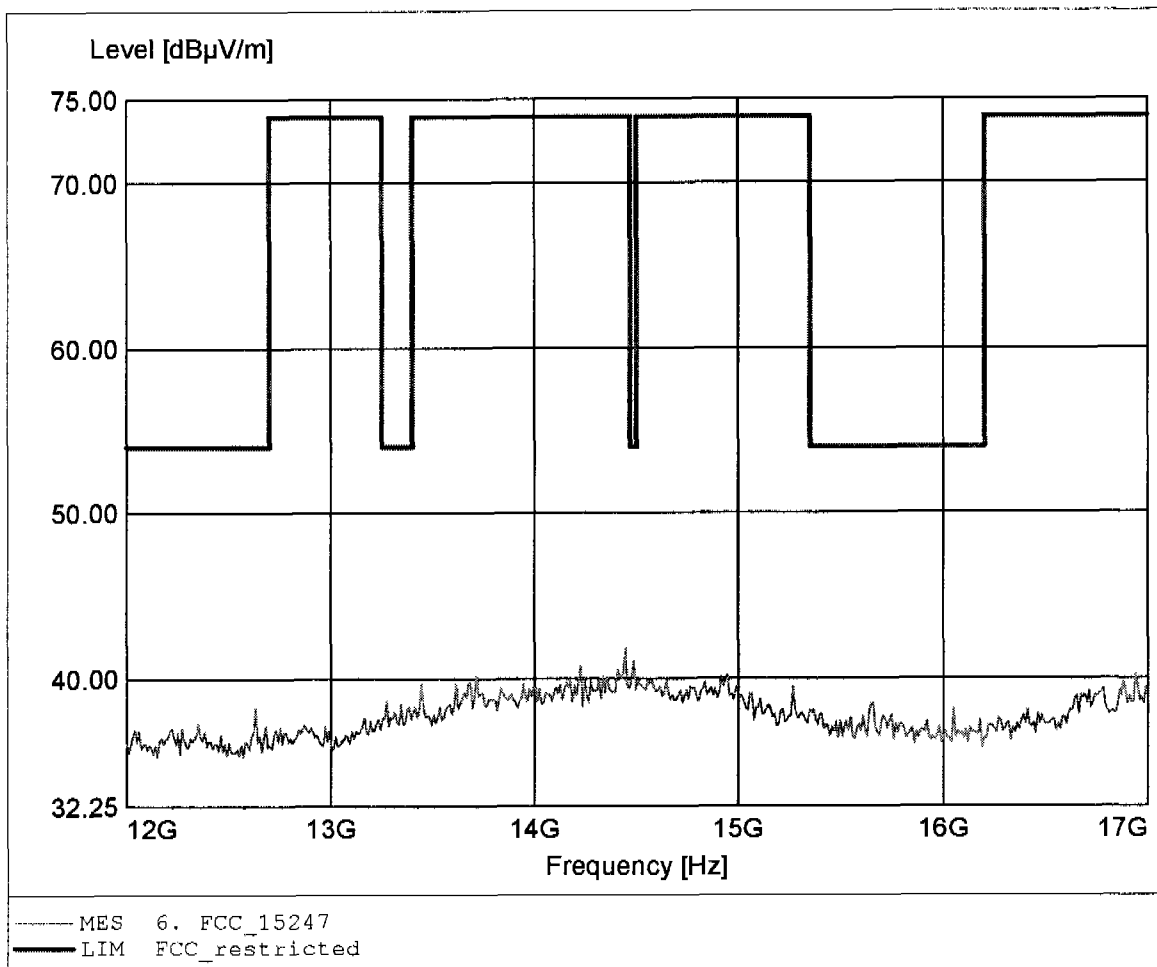
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 11.463GHz, Emax: 39.32dBμV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

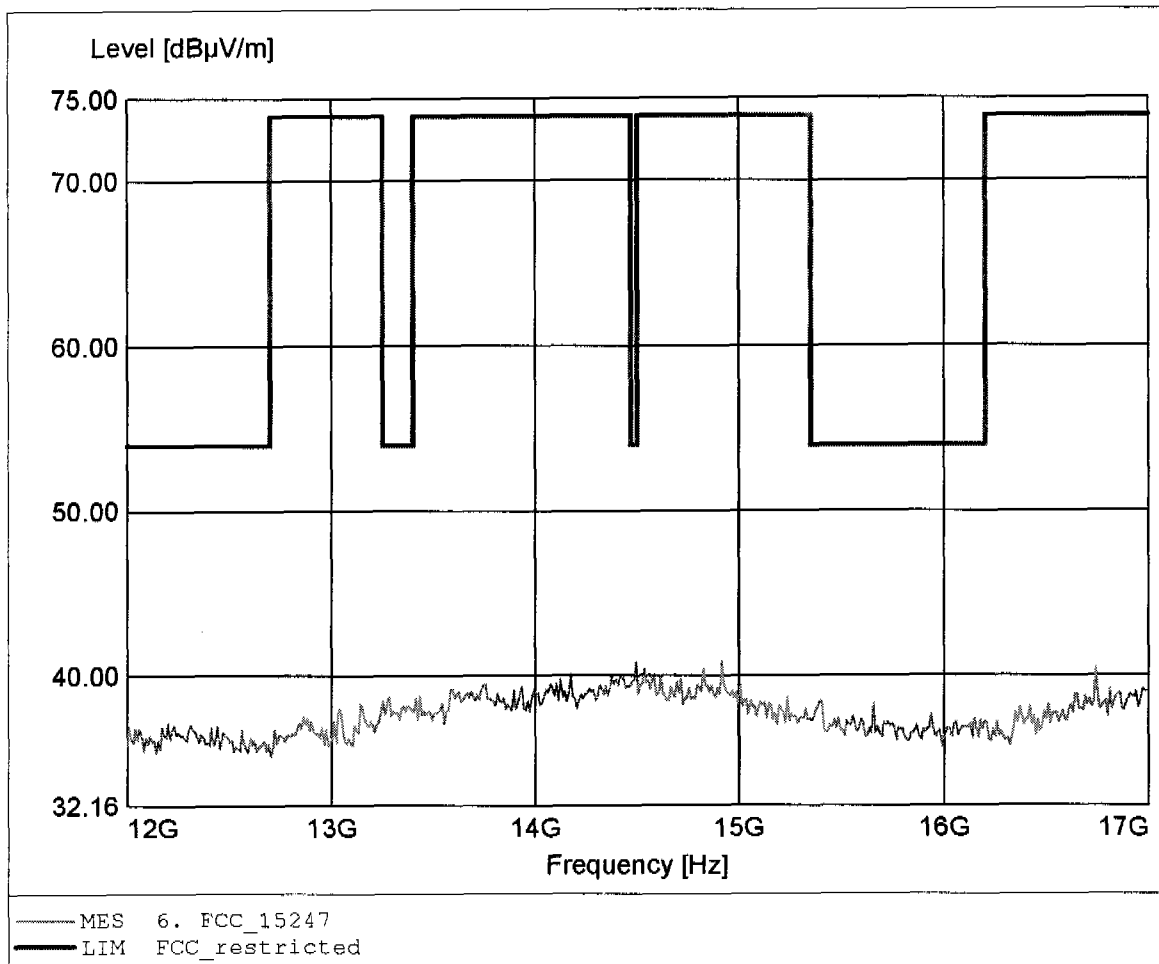
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 14.445GHz, Emax: 41.85dBμV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

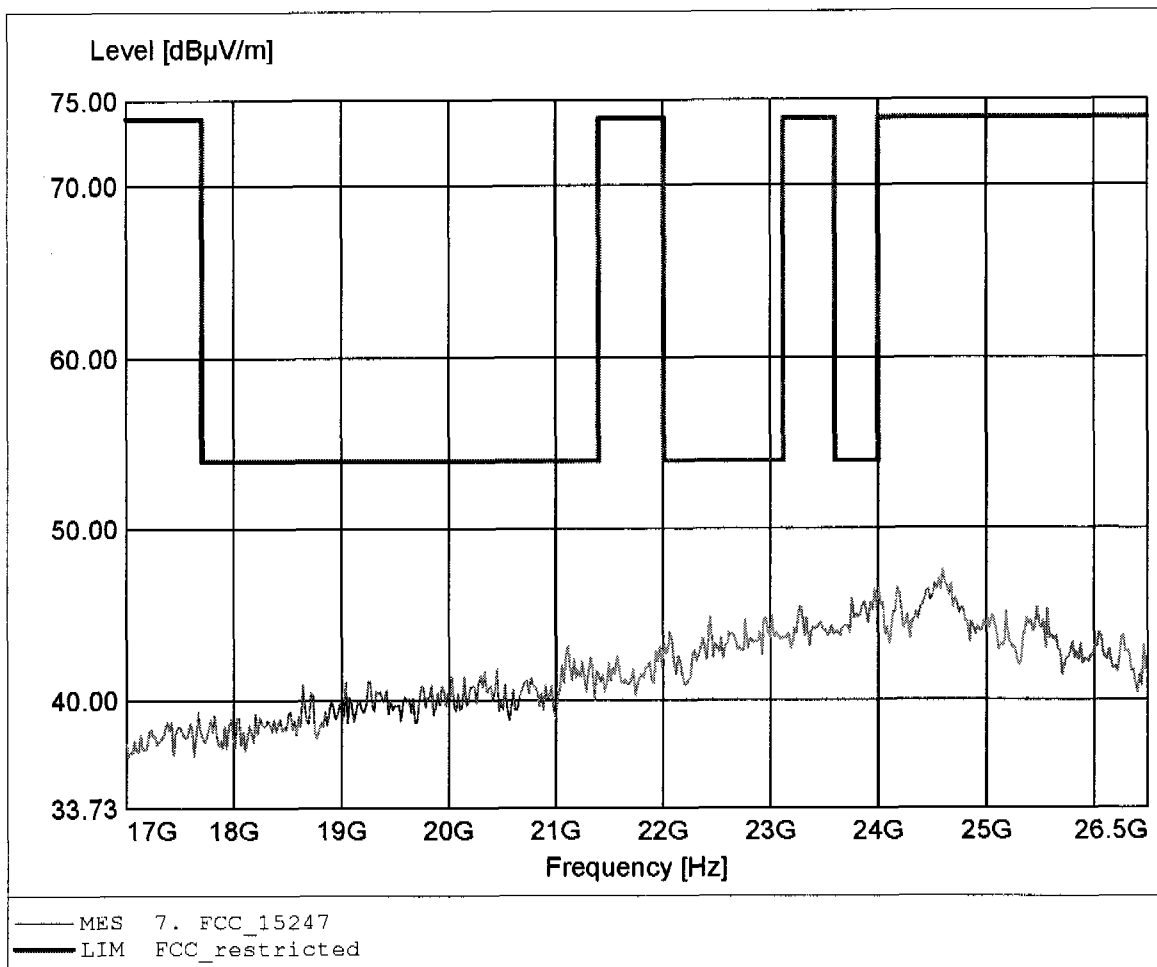
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 14.916GHz, Emax: 40.86dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

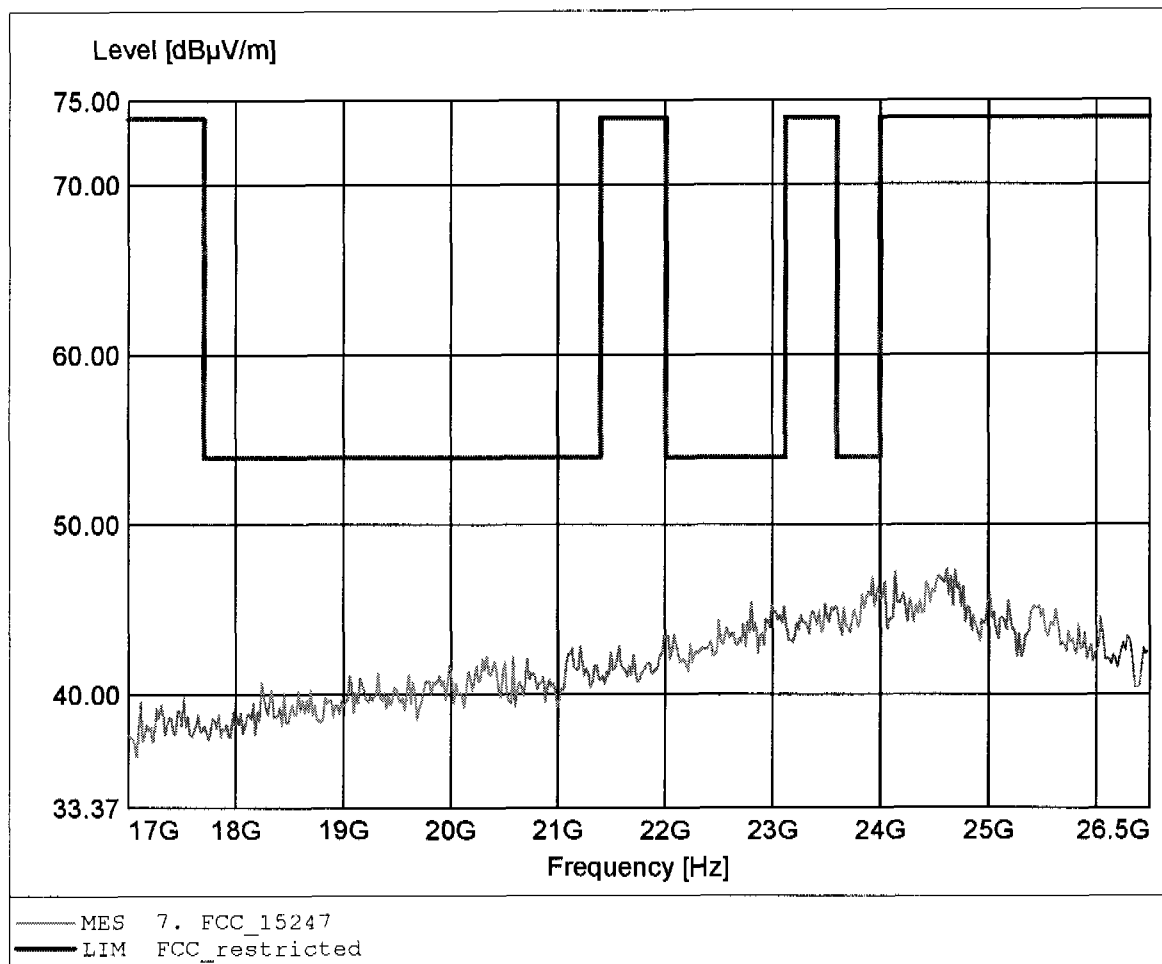
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.596GHz, Emax: 47.53dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

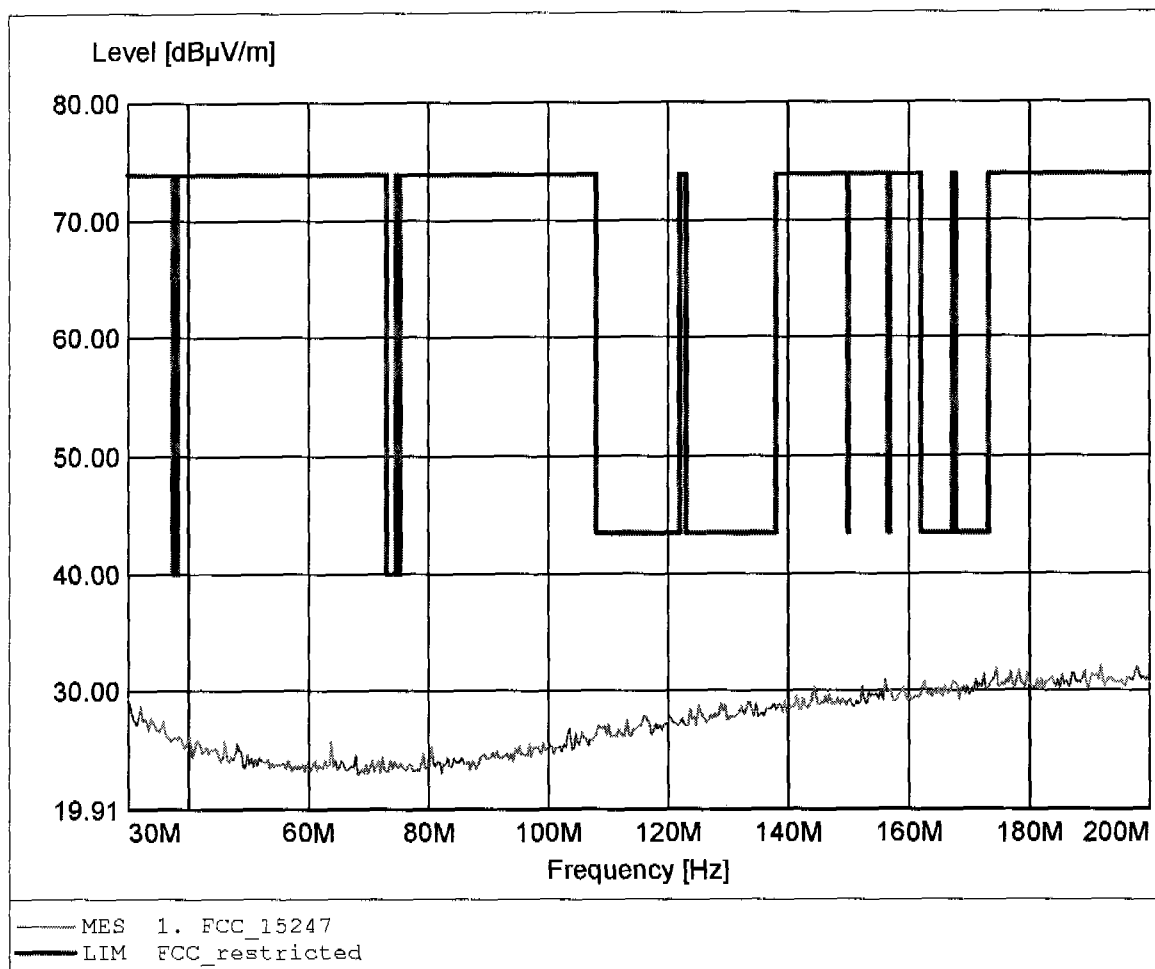
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 11 / 2405 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.615GHz, Emax: 47.35dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

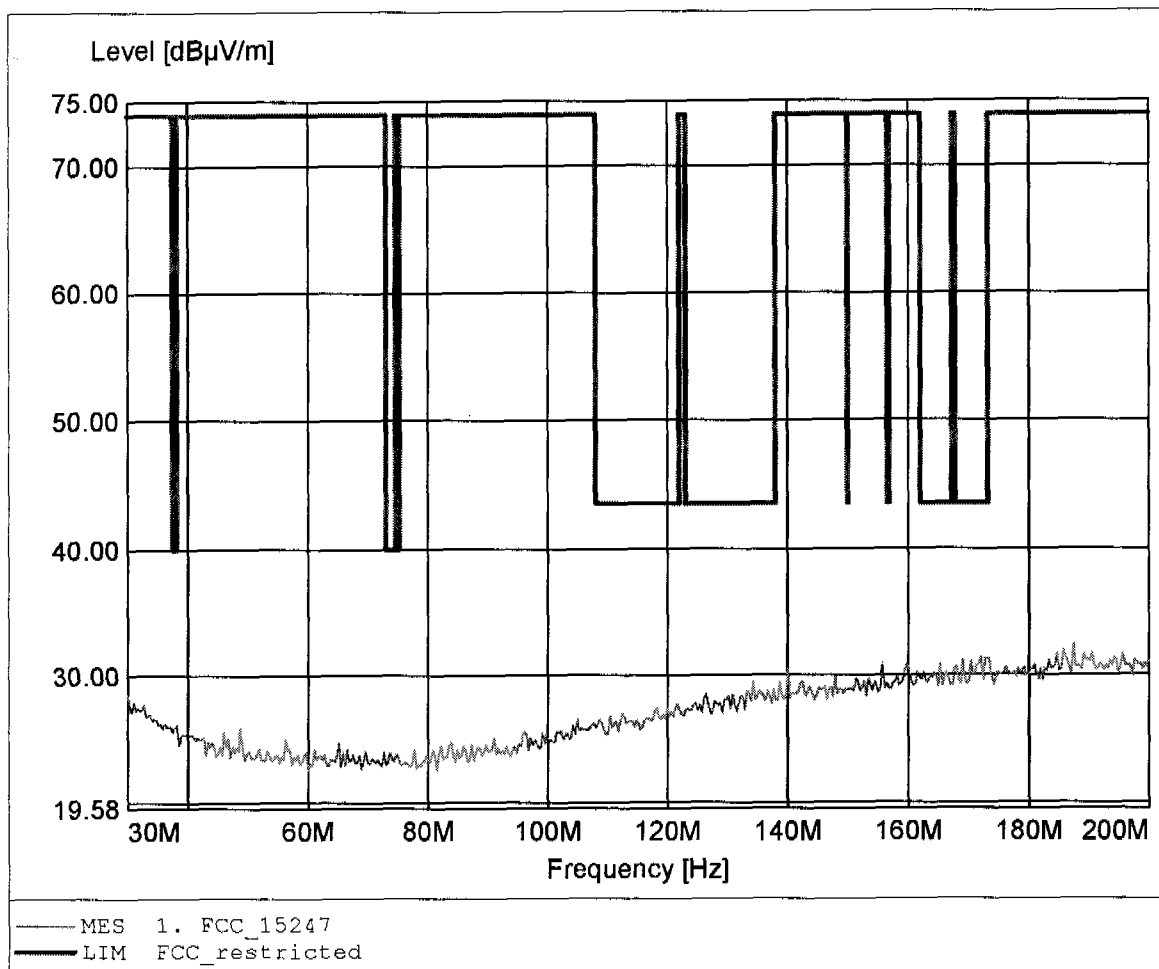
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 191.824MHz, Emax: 32.08dBμV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

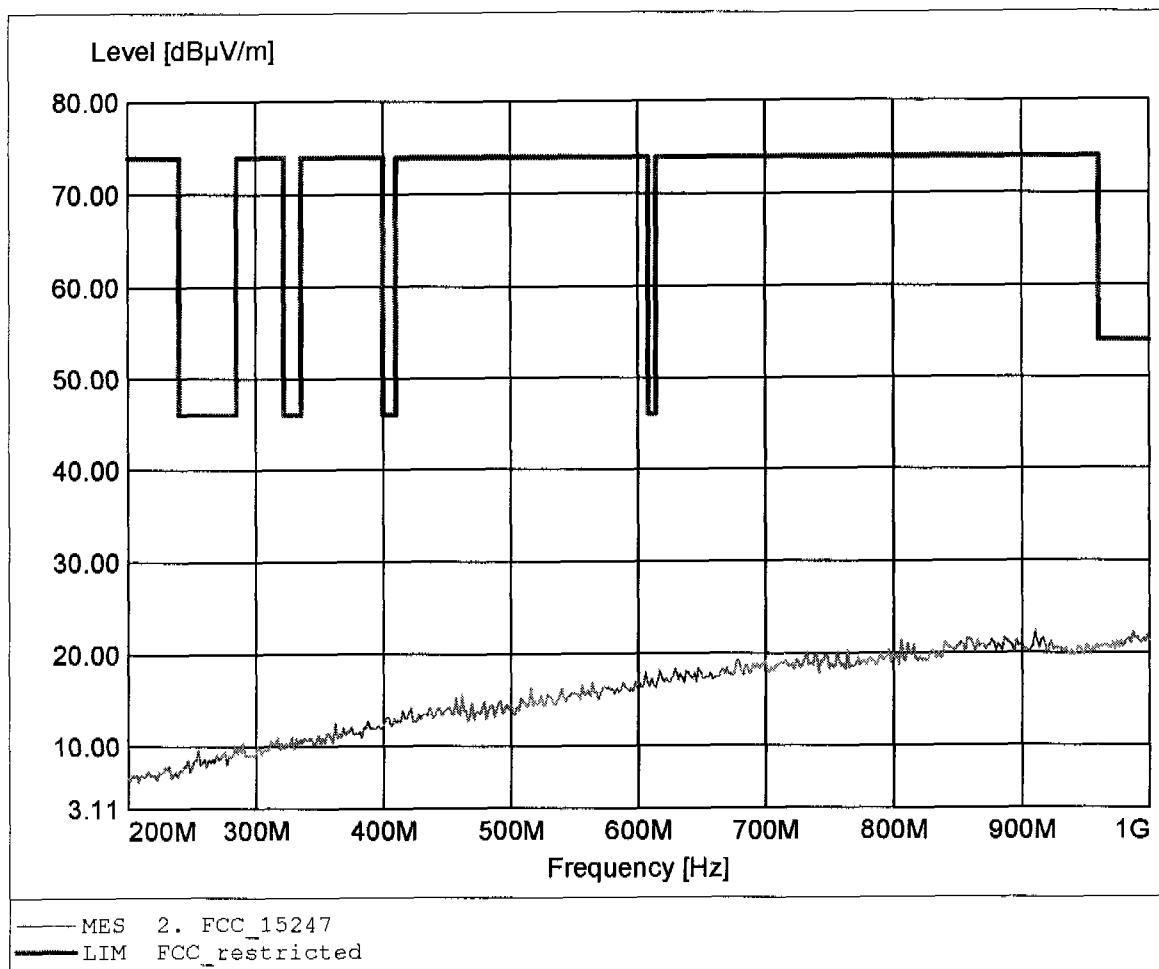
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 187.395MHz, Emax: 32.45dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

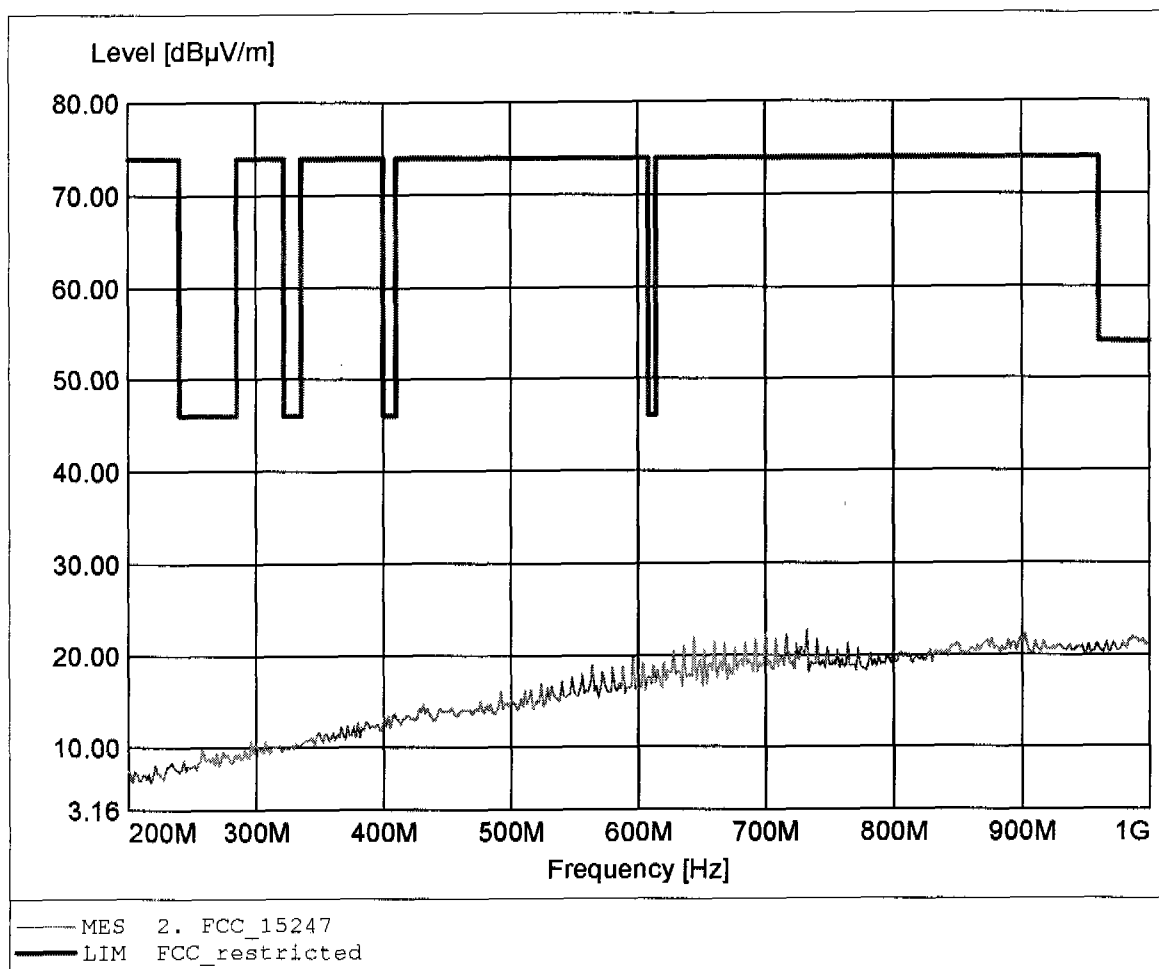
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 910.220MHz, Emax: 22.43dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

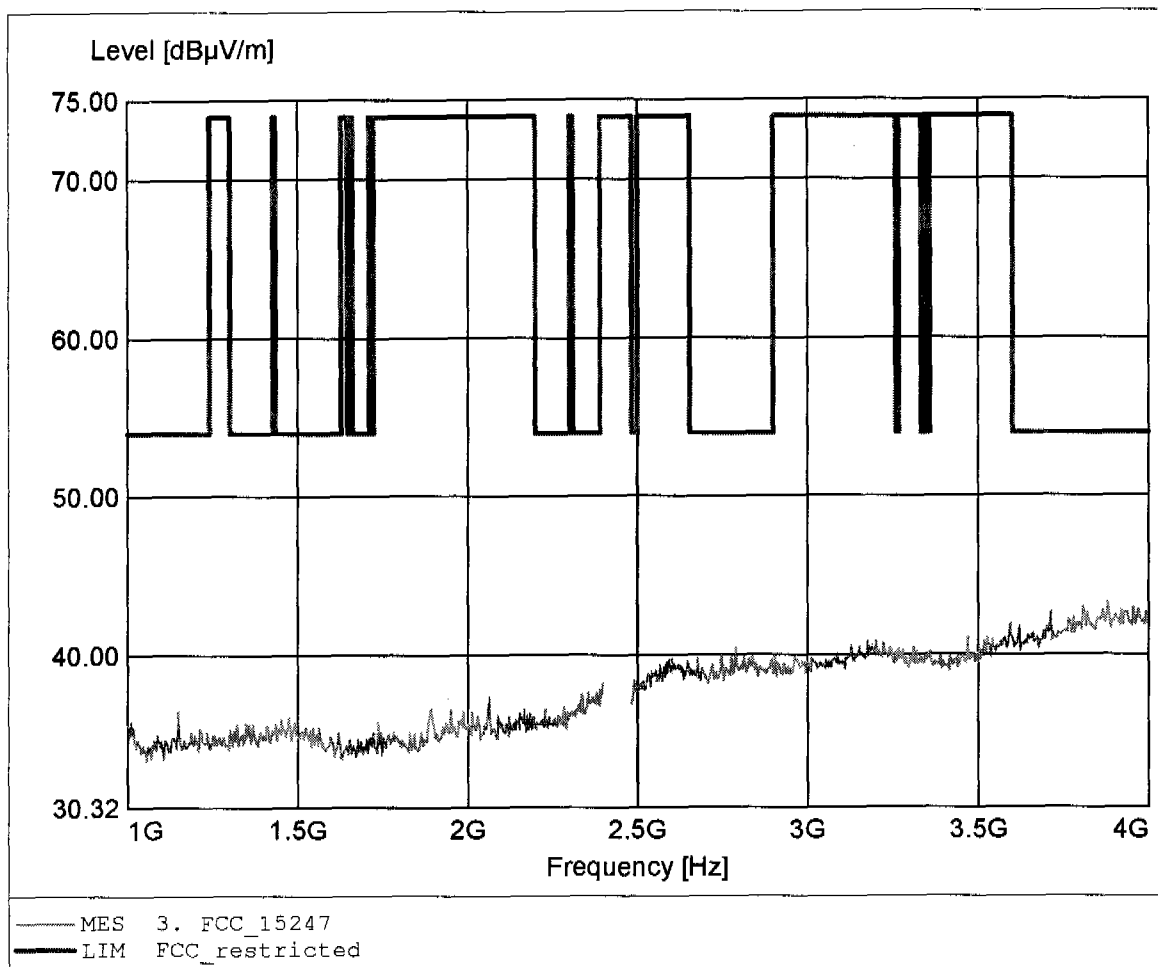
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 732.265MHz, Emax: 22.74dBμV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

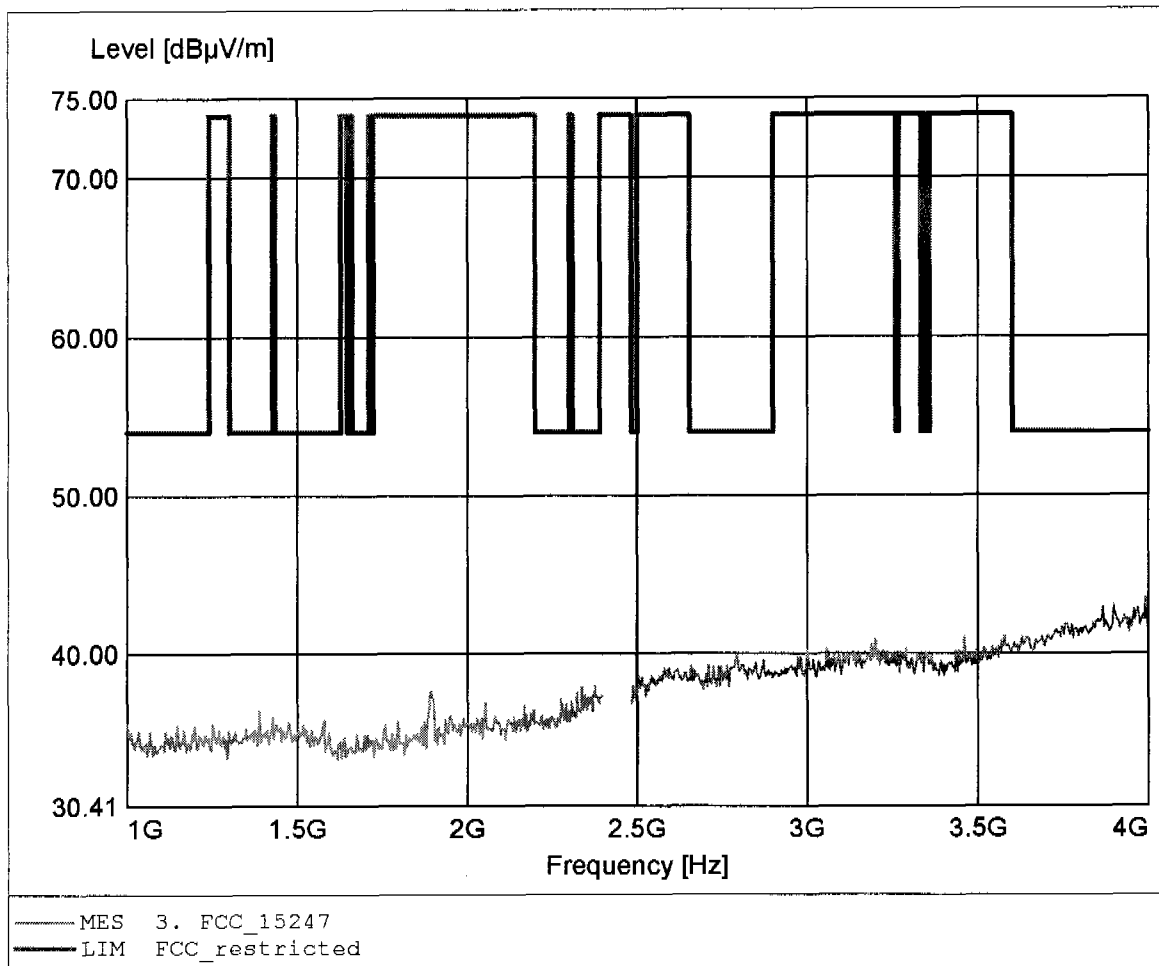
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 3.878GHz, Emax: 43.27dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

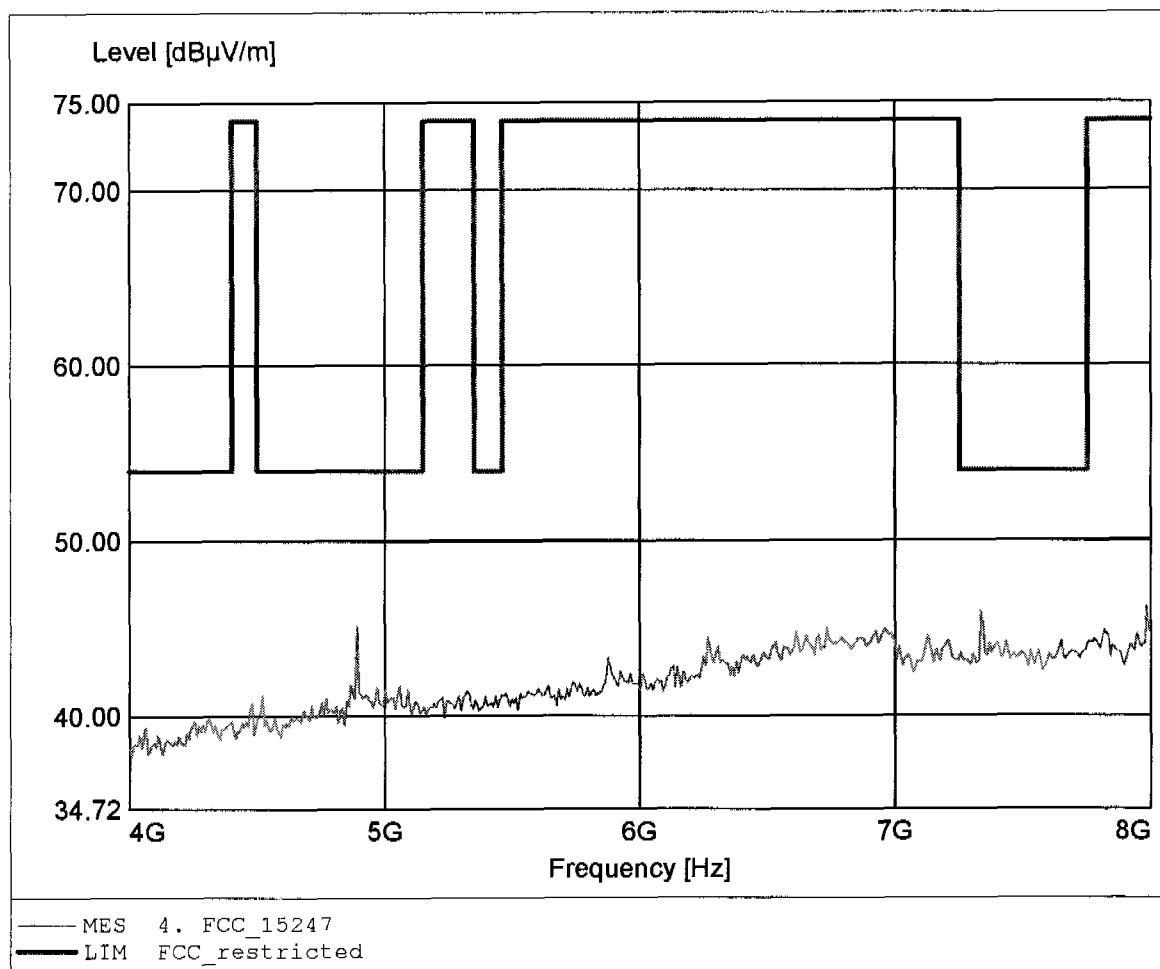
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 3.991GHz, Emax: 43.55dBμV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

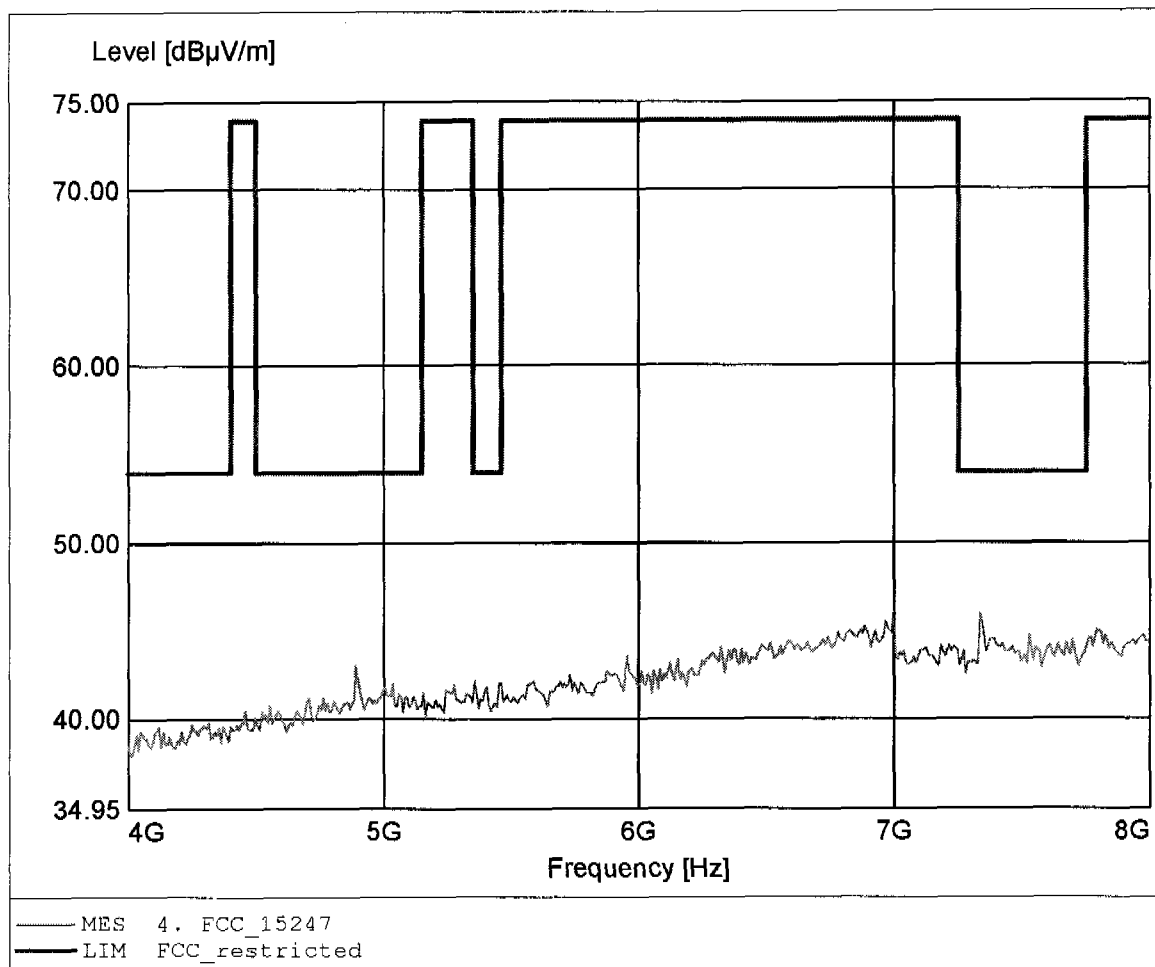
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EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 7.984GHz, Emax: 46.15dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

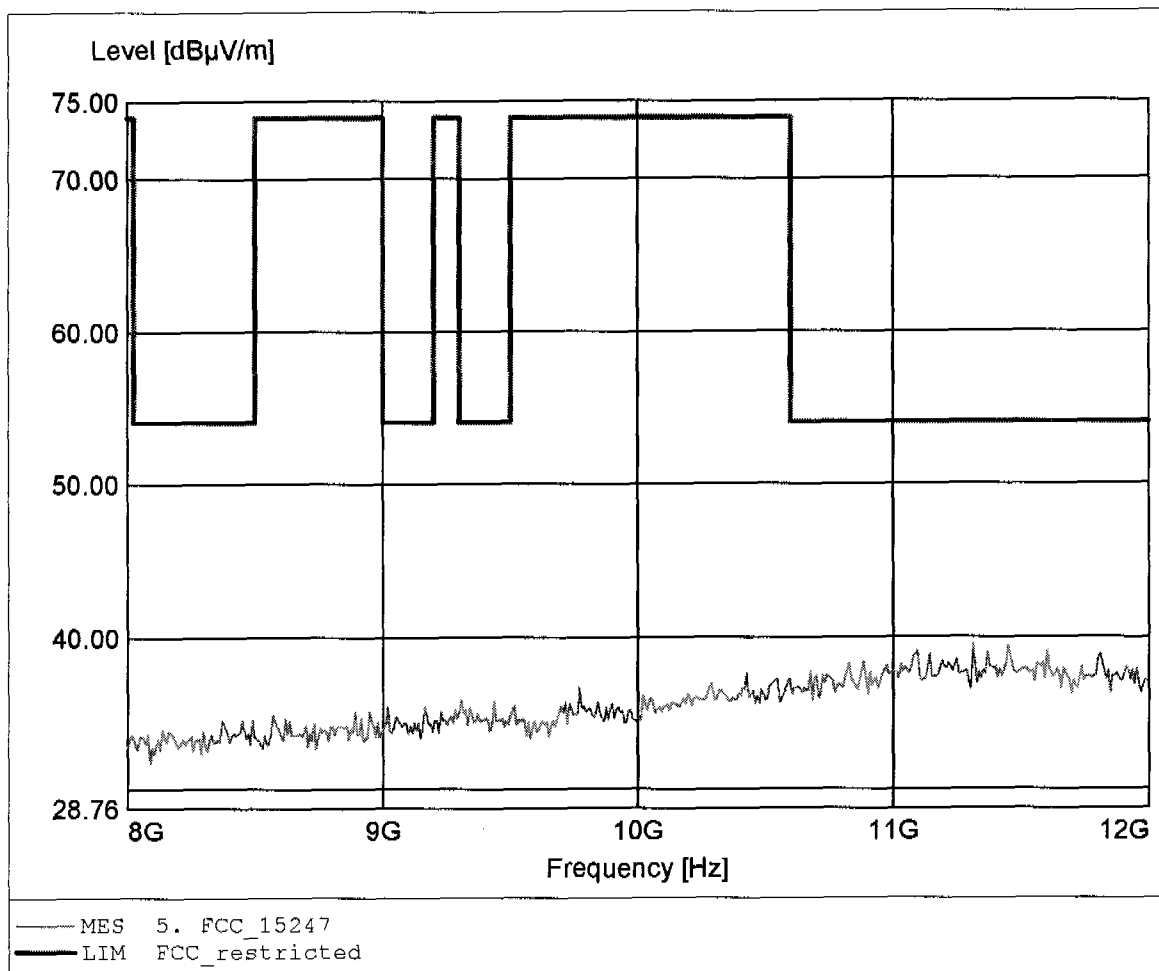
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 6.998GHz, Emax: 45.98dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

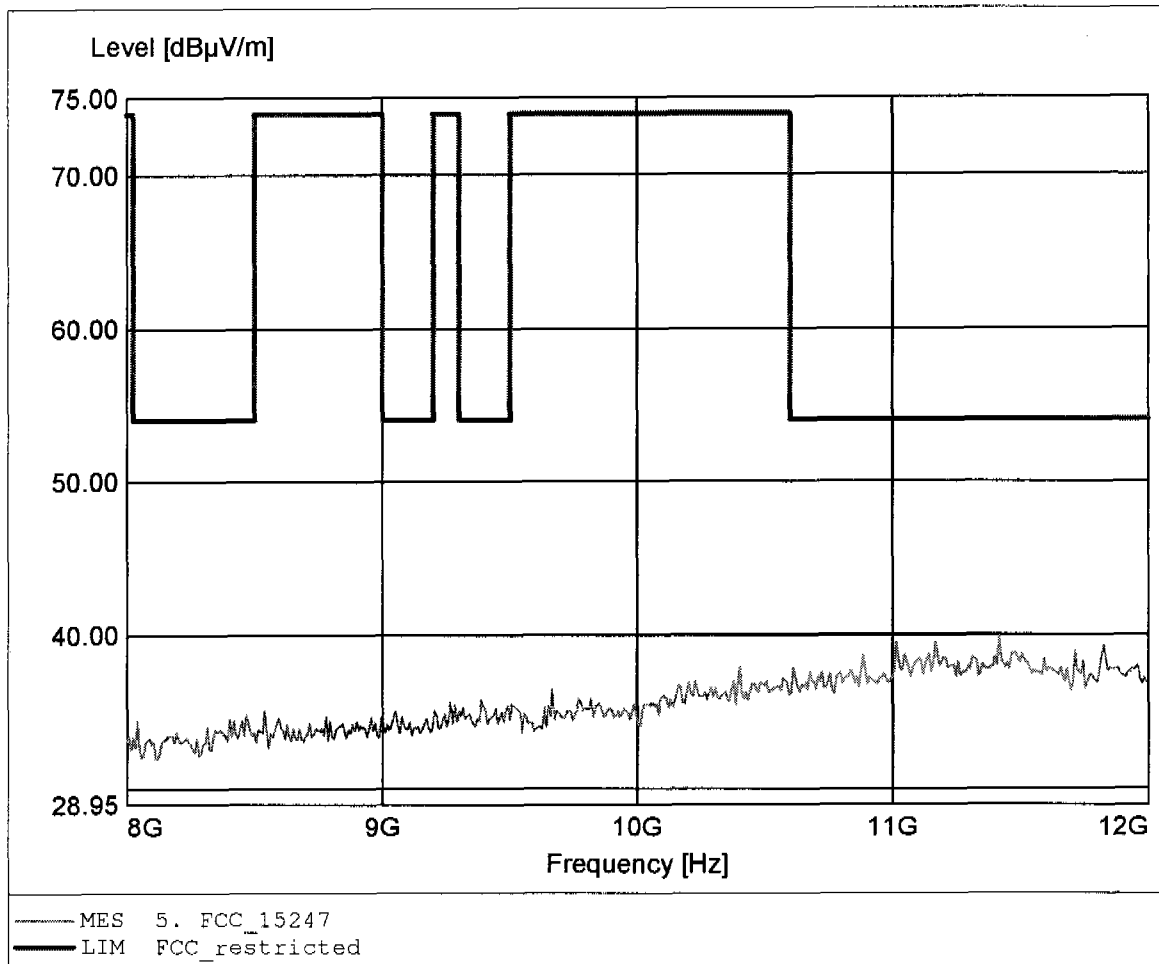
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 11.311GHz, Emax: 39.53dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

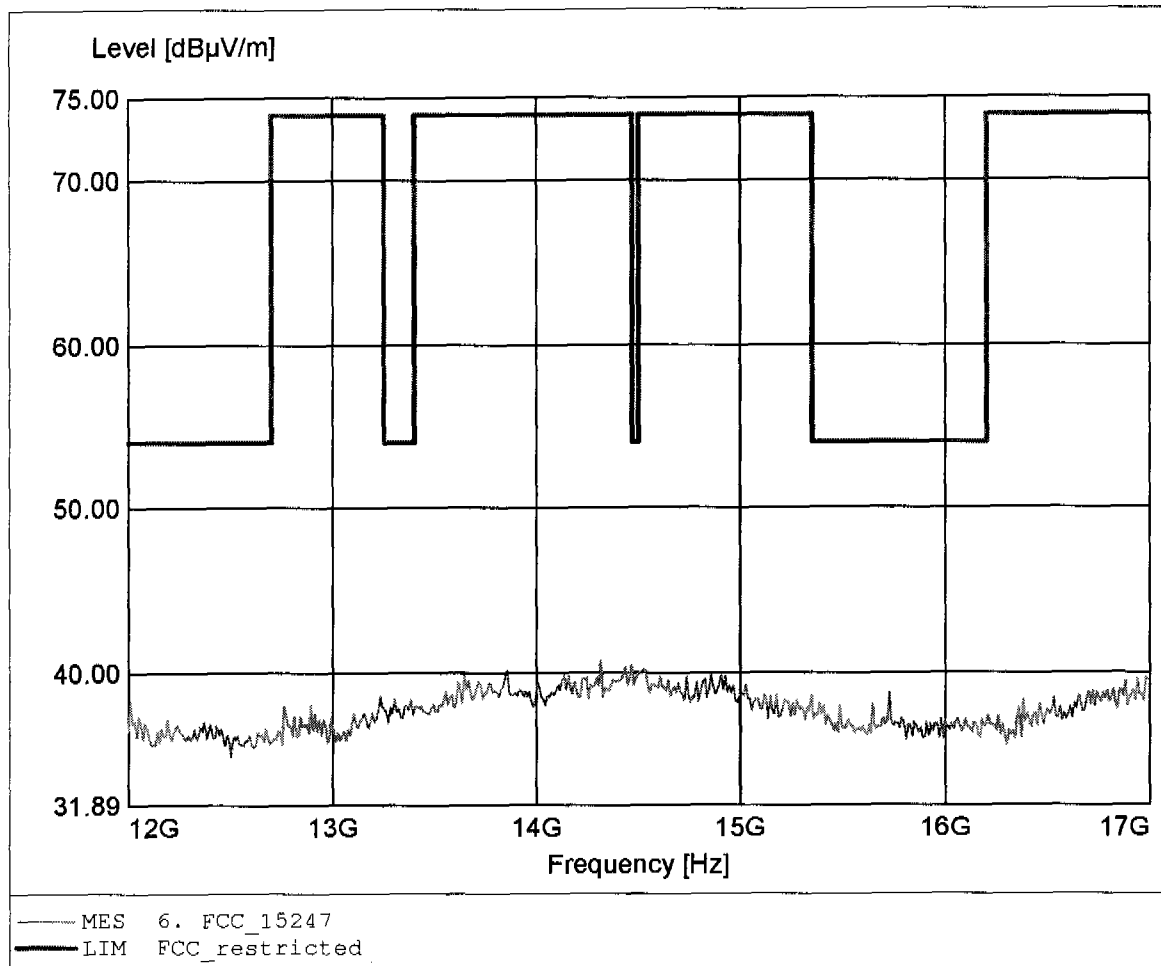
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 11.415GHz, Emax: 39.92dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

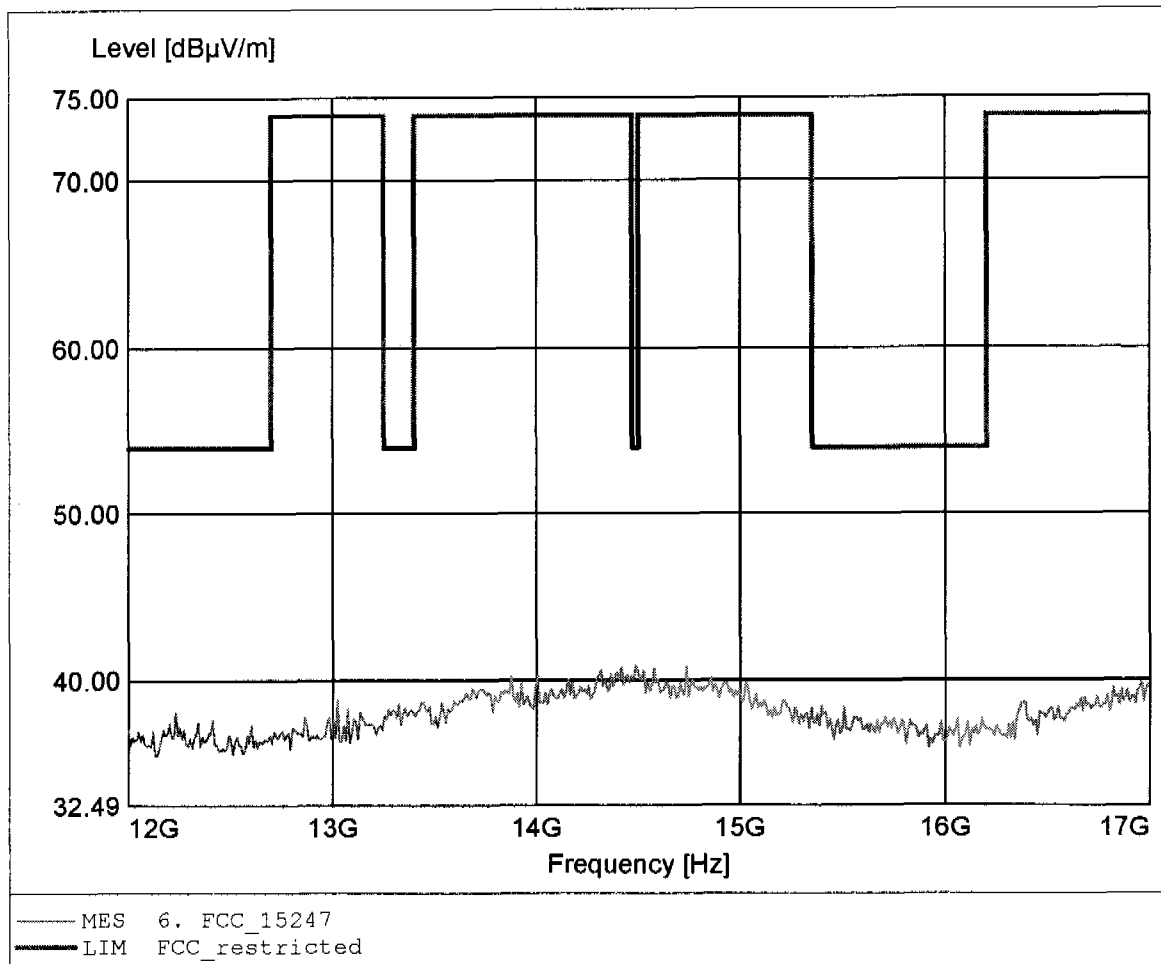
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 14.315GHz, Emax: 40.74dBμV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

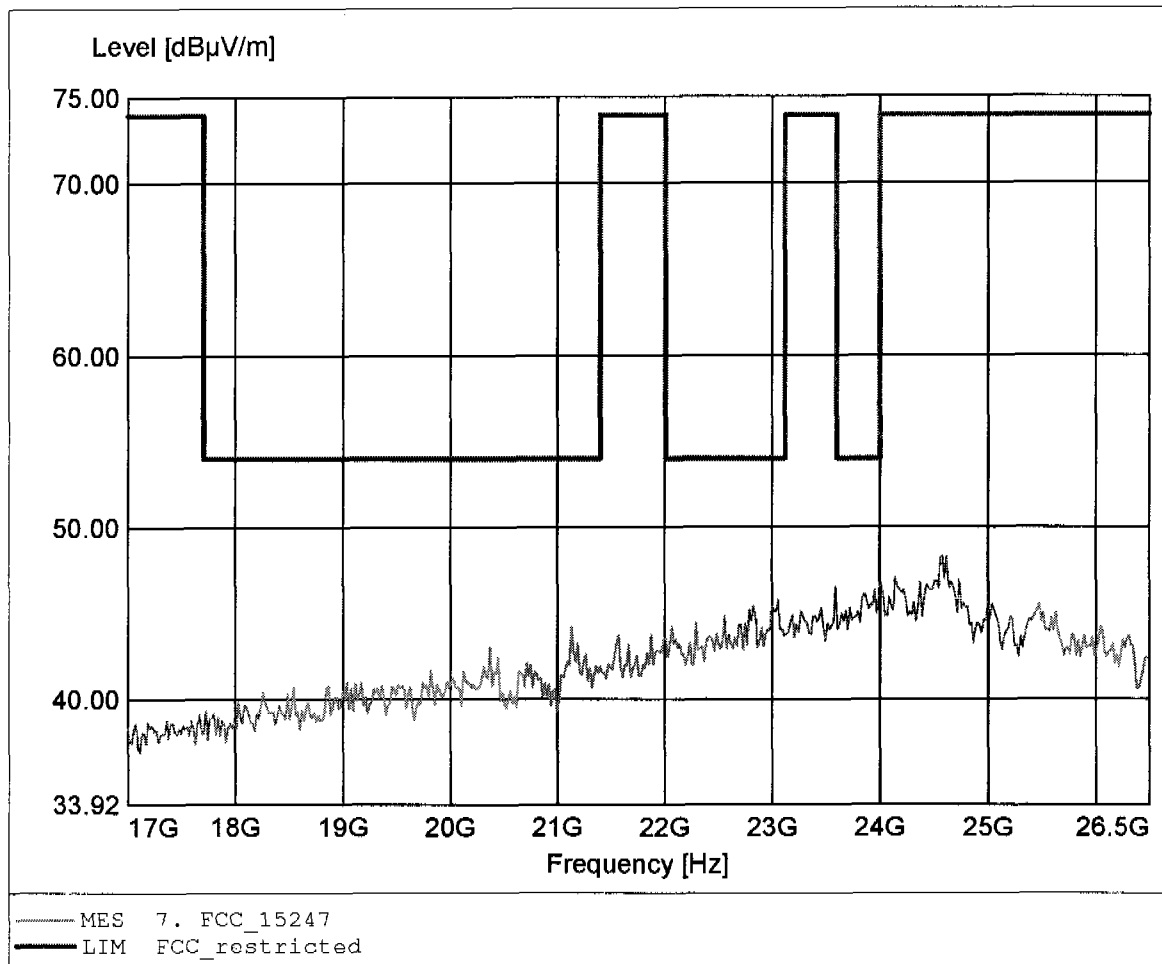
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 14.485GHz, Emax: 40.87dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

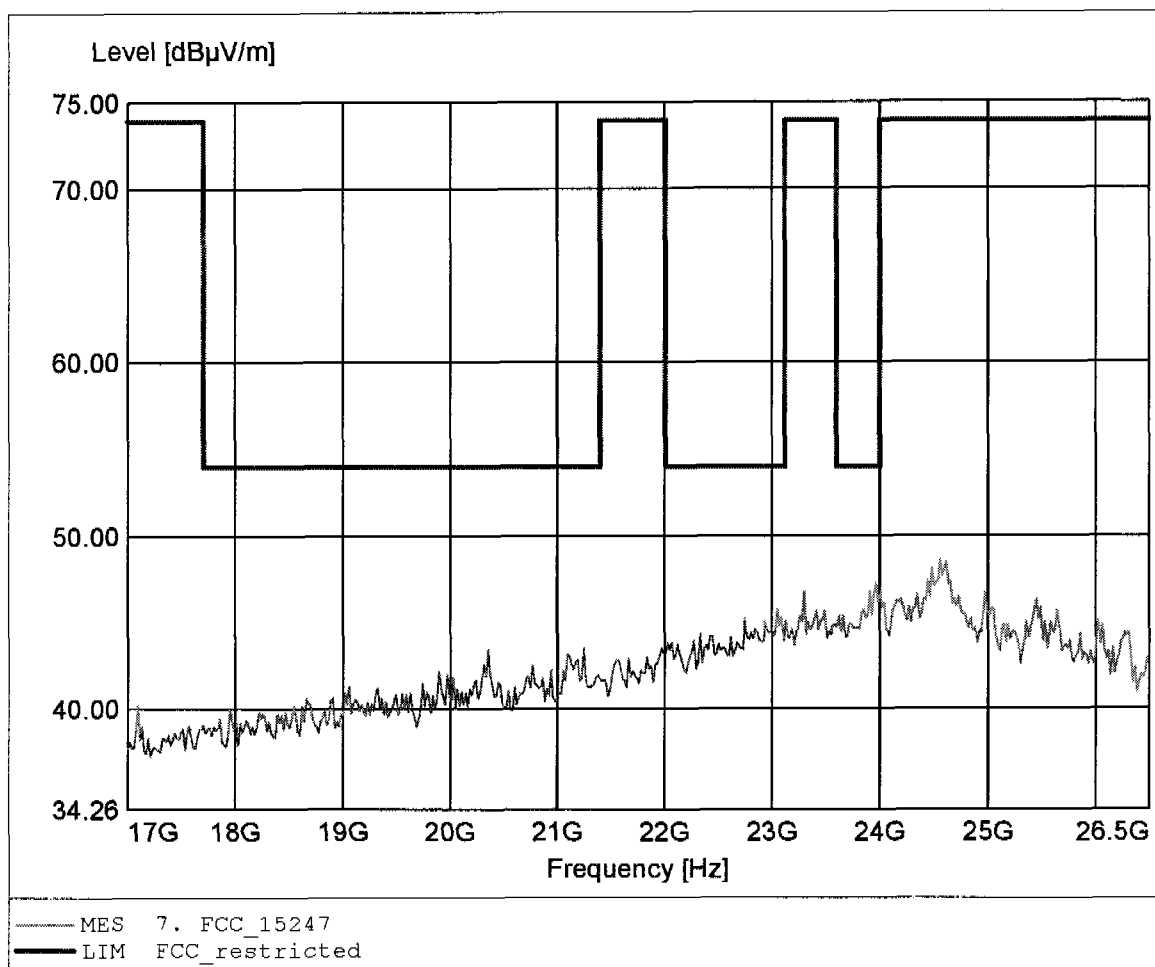
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.615GHz, Emax: 48.32dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

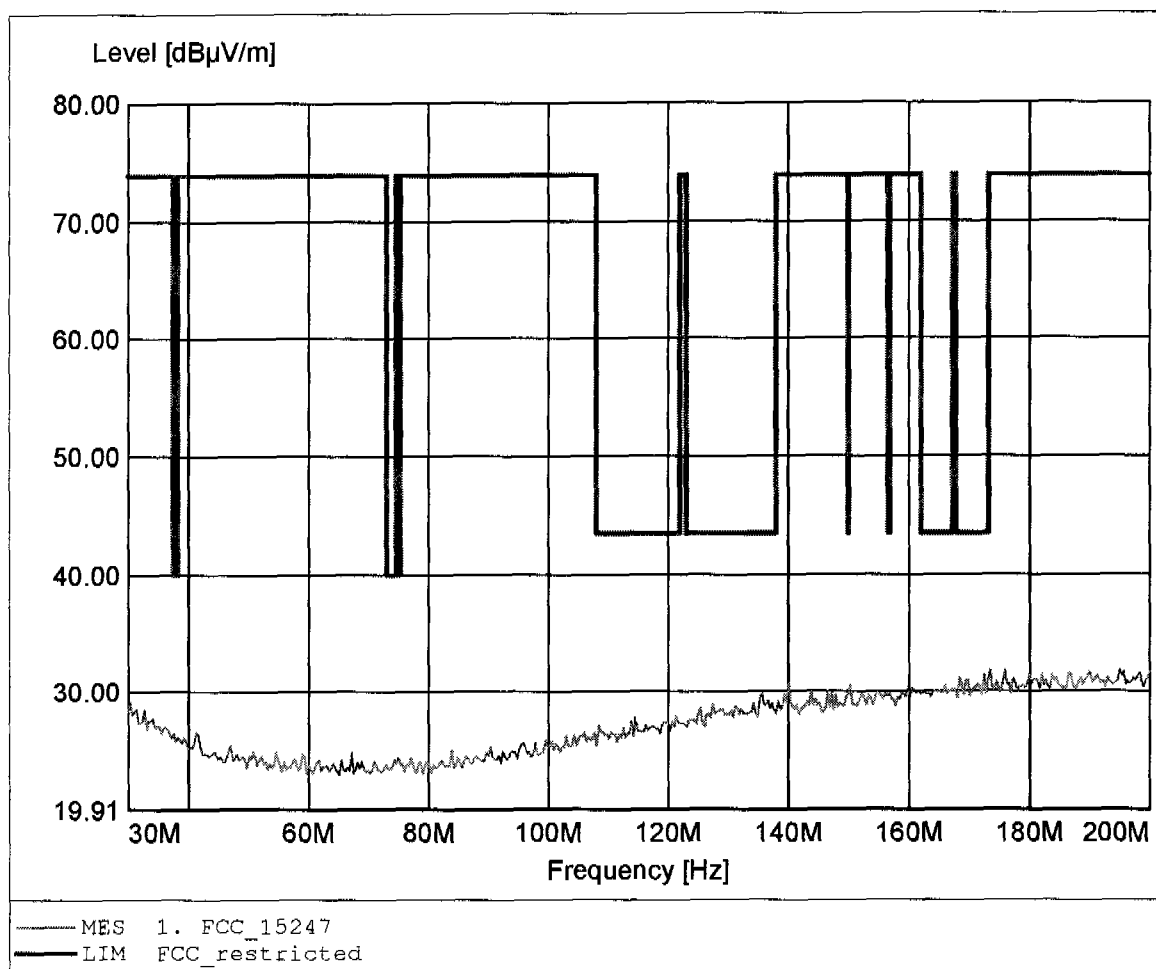
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.558GHz, Emax: 48.61dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

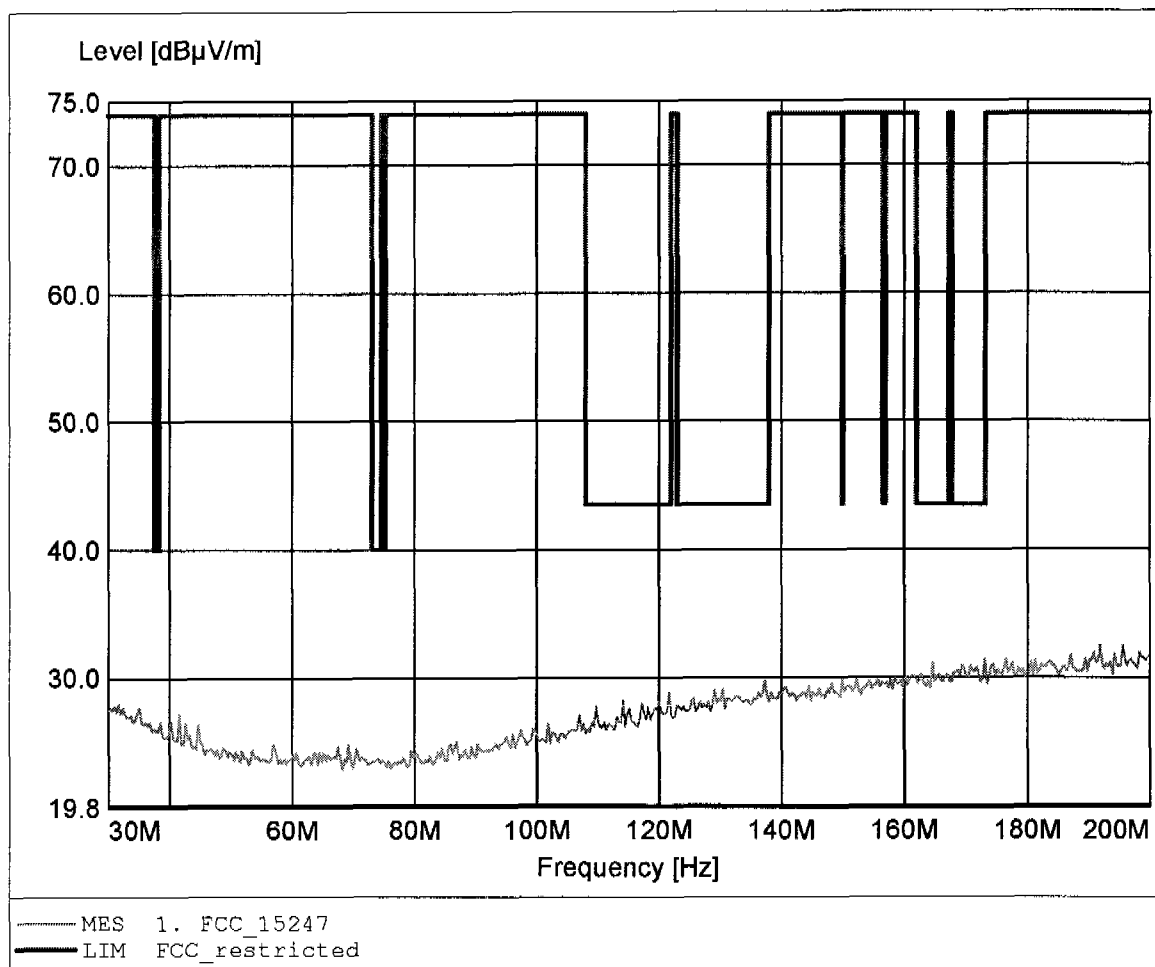
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 175.812MHz, Emax: 31.87dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

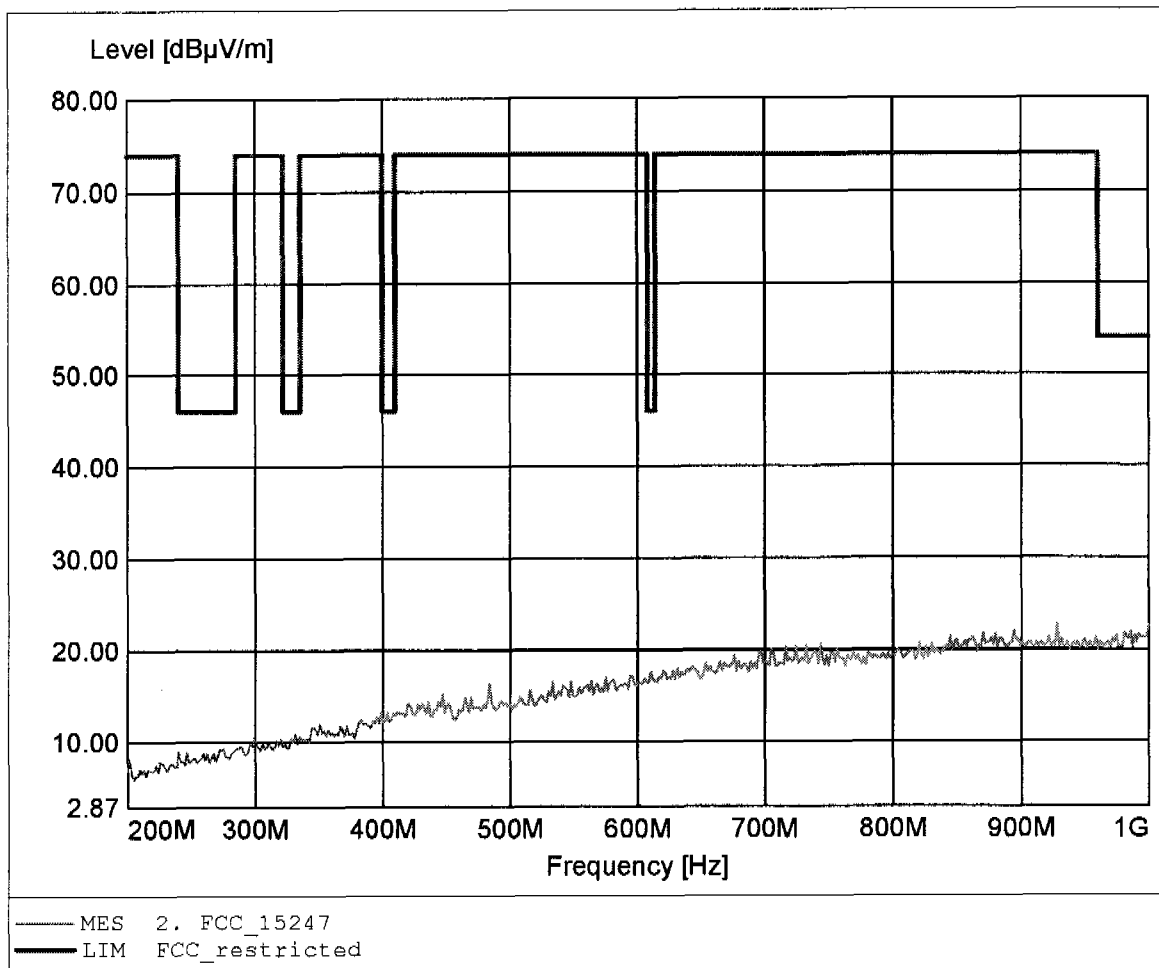
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq: 191.824MHz, Emax: 32.49dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

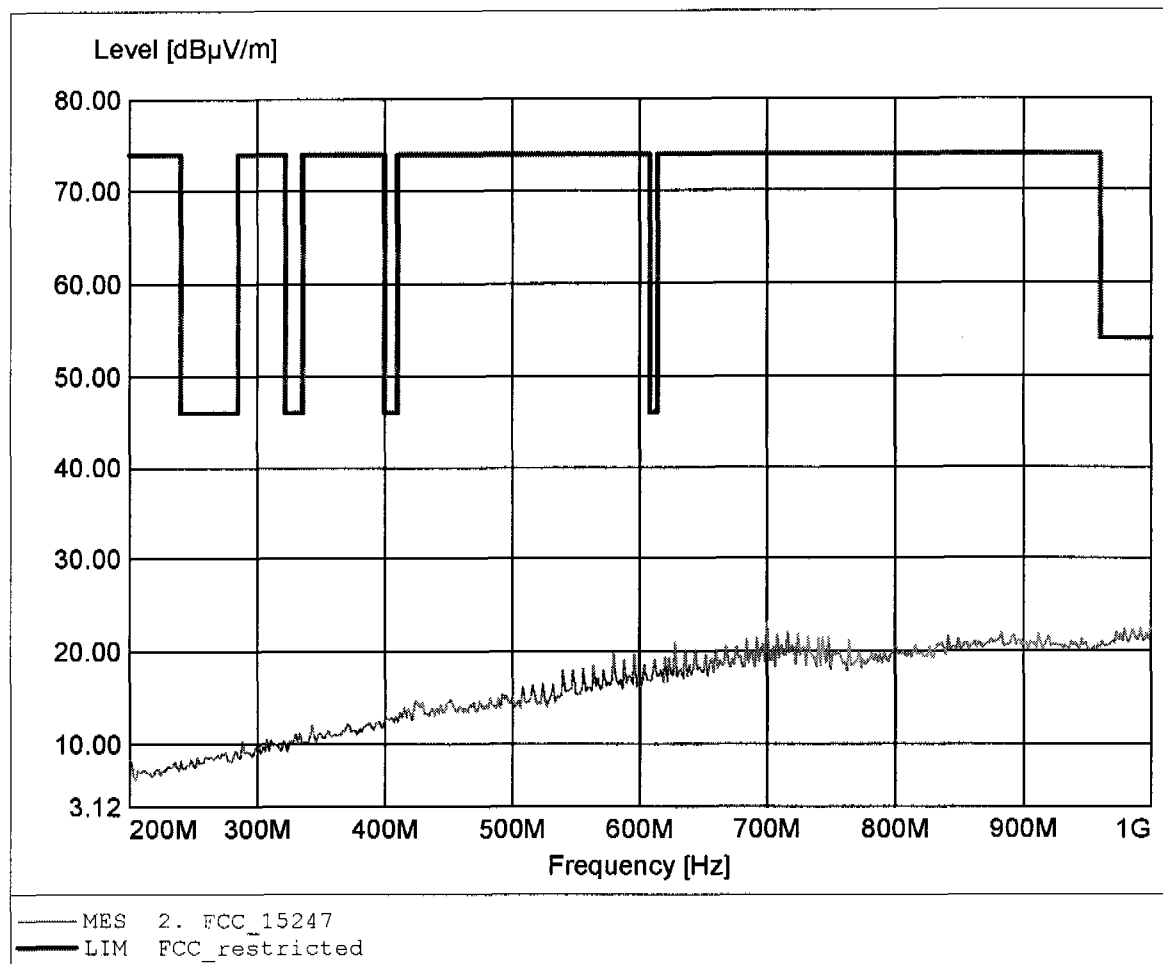
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 927.856MHz, Emax: 22.75dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

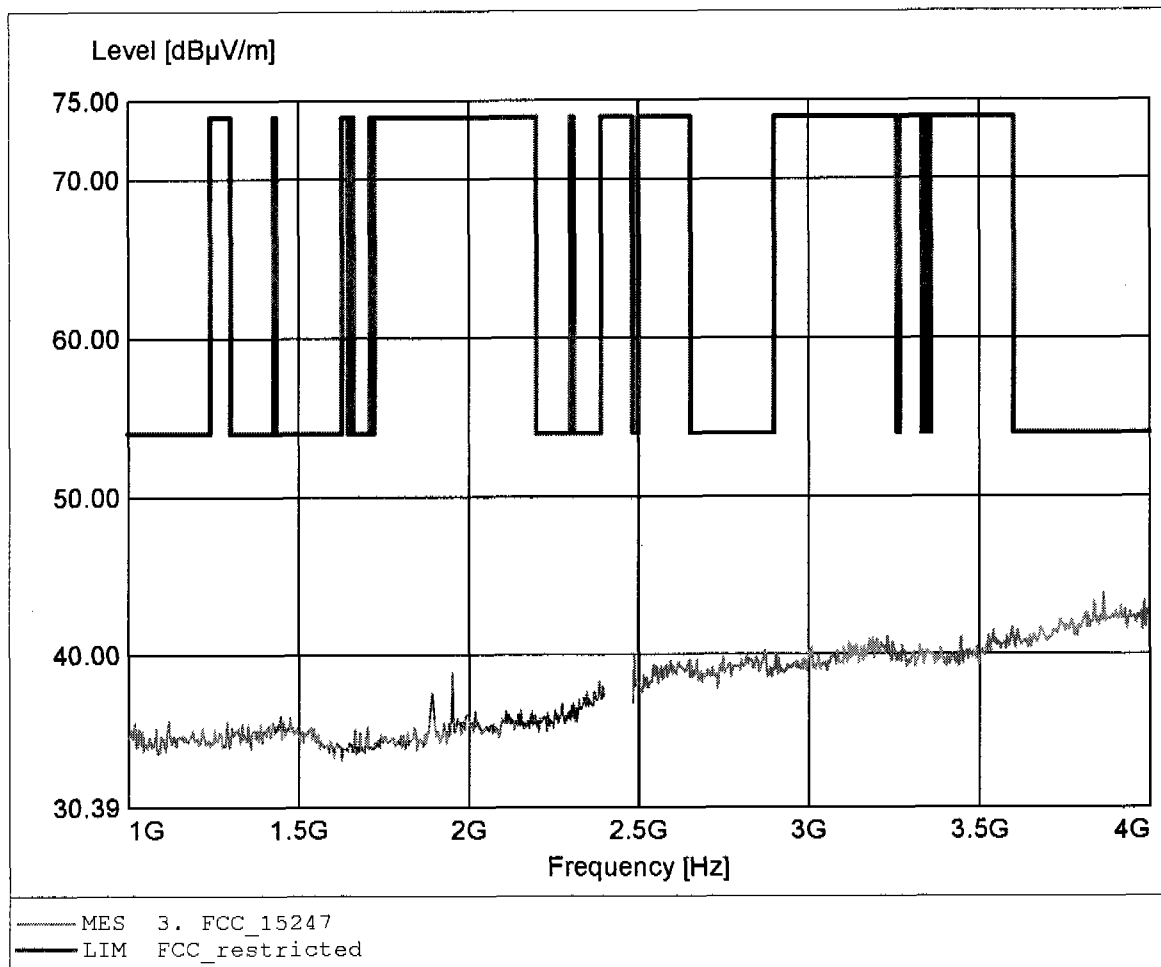
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247
Comment 1: Dist.: 3m, Ant.: HL 223, amplif.
Comment 2: Freq: 700.200MHz, Emax: 23.17dBµV/m, RBW: 100kHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

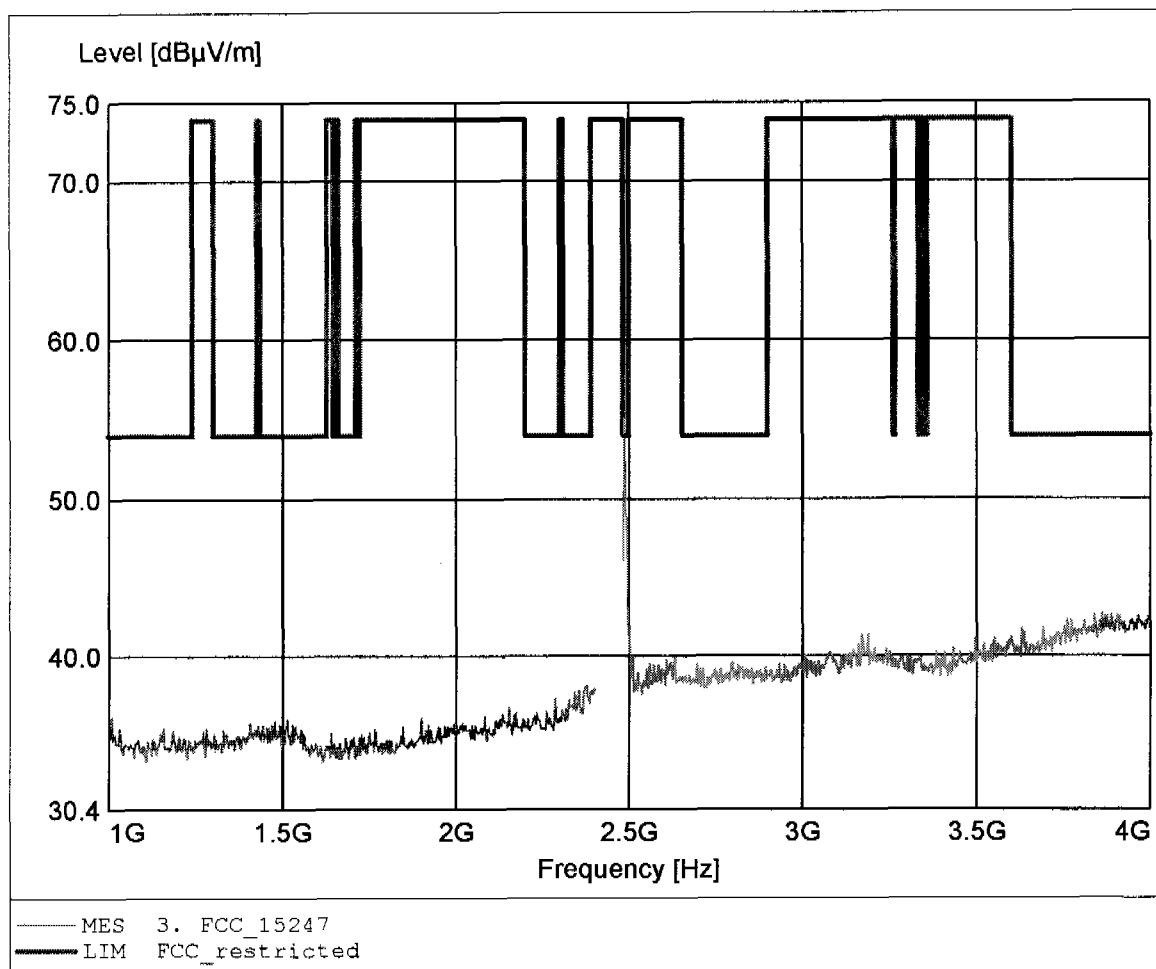
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 3.863GHz, Emax: 43.87dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

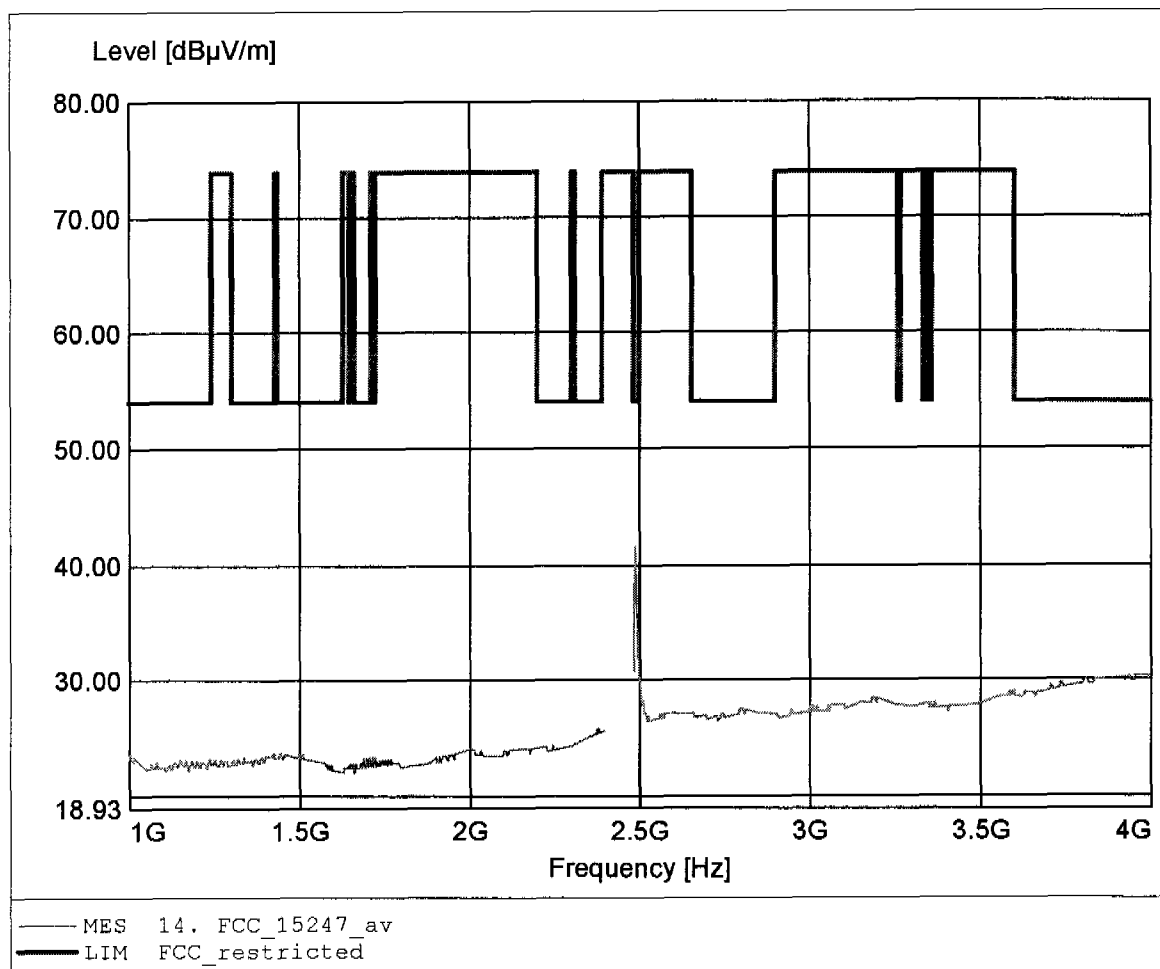
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 2.487GHz, Emax: 55.08dBμV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

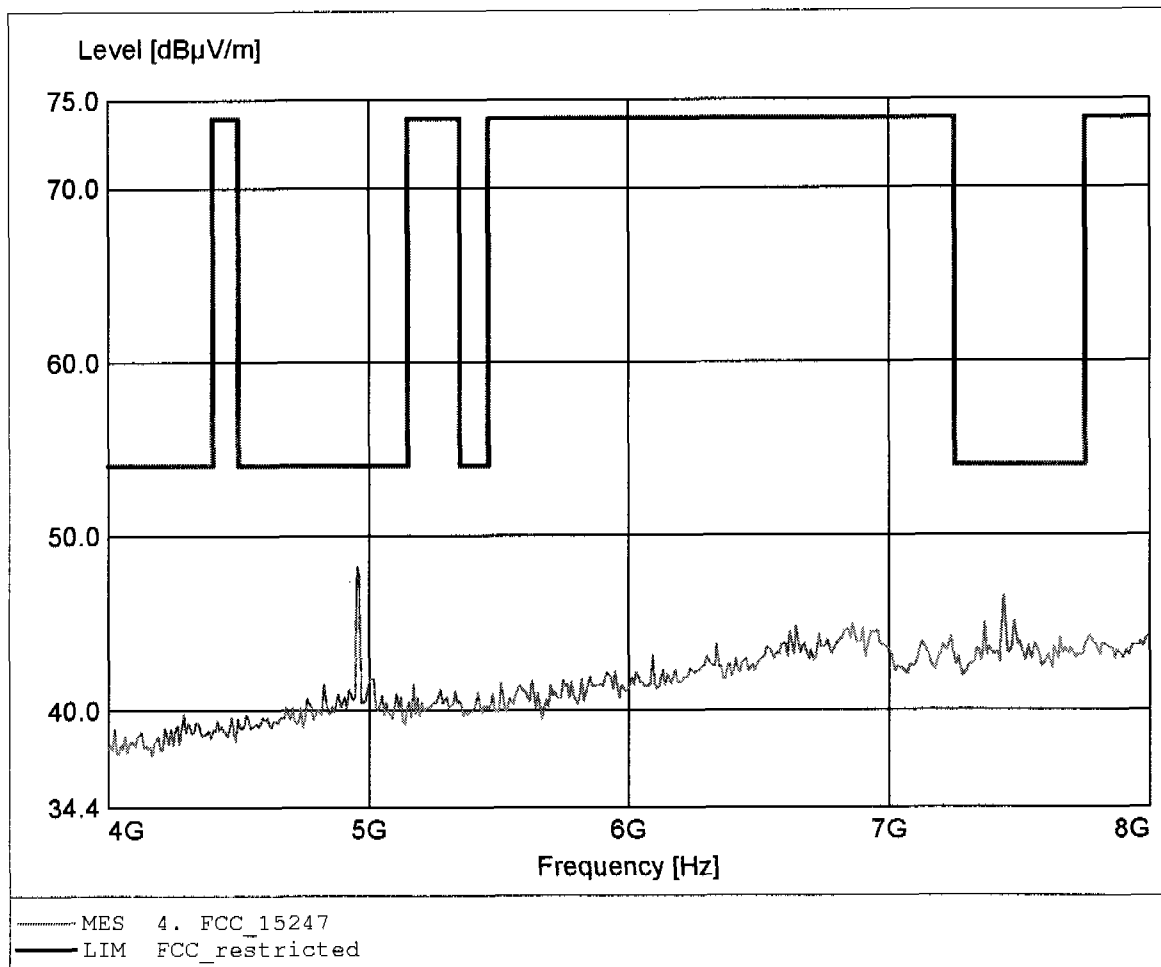
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, average detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, amplif., notch-filter
Comment 2: Freq: 2.487GHz, Emax: 41.56dBuV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

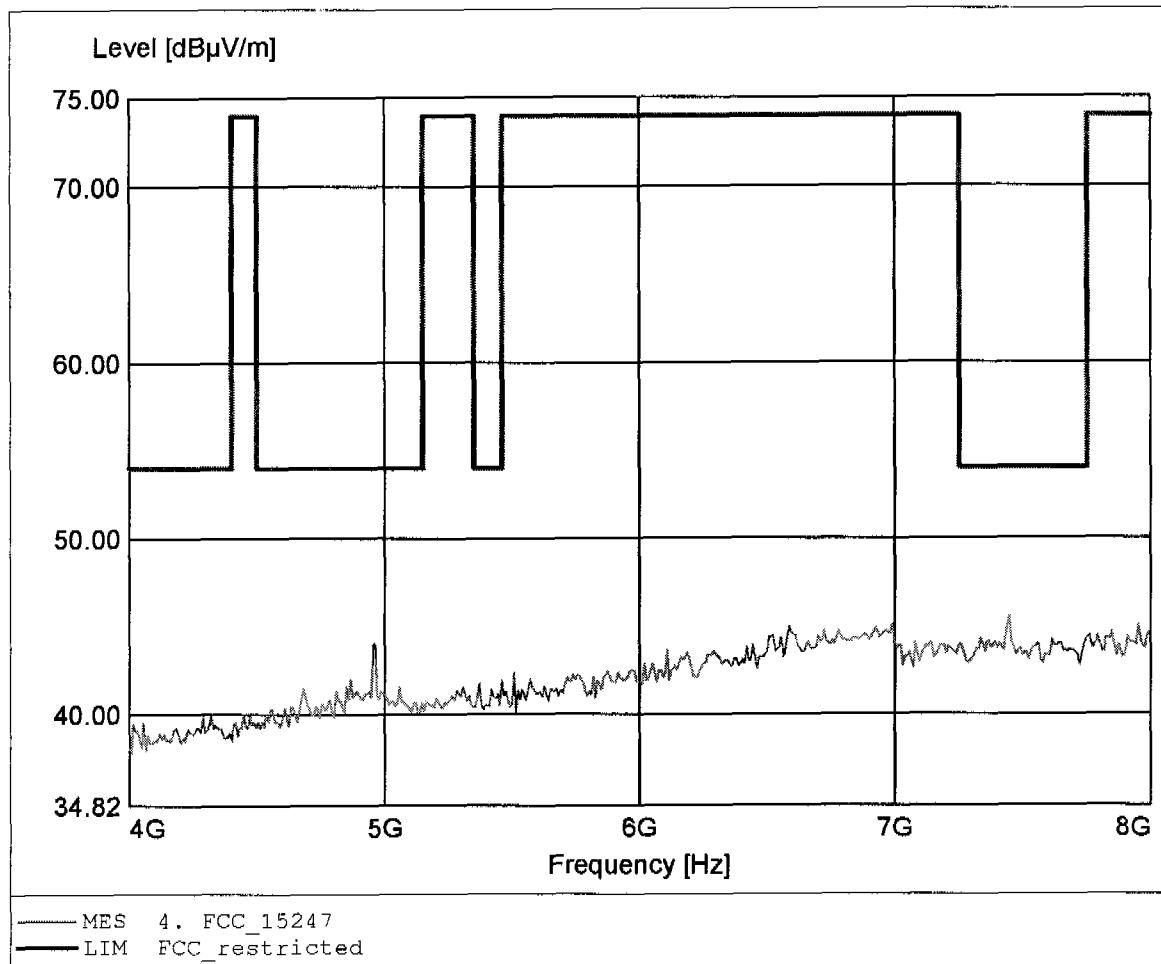
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 4.954GHz, Emax: 48.27dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

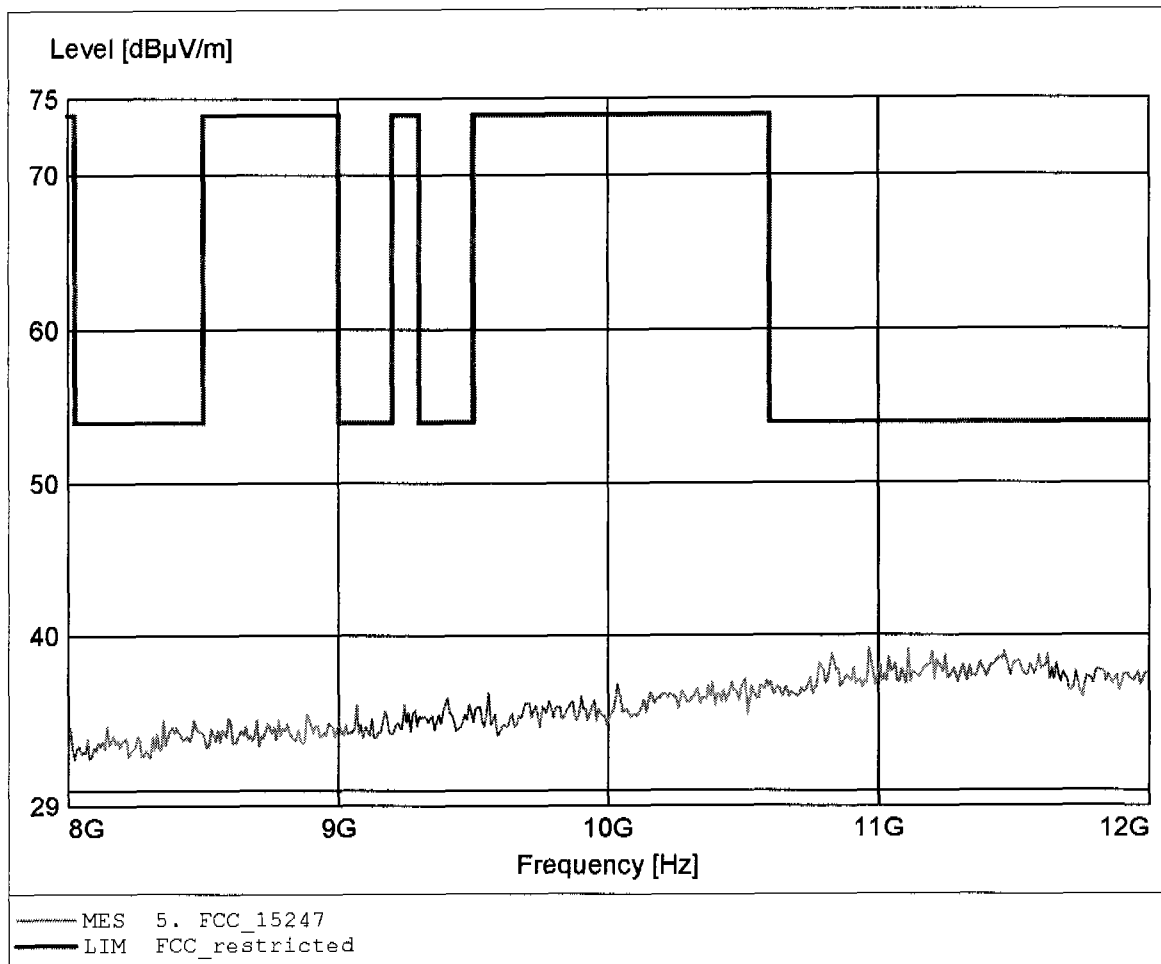
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 7.447GHz, Emax: 45.52dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

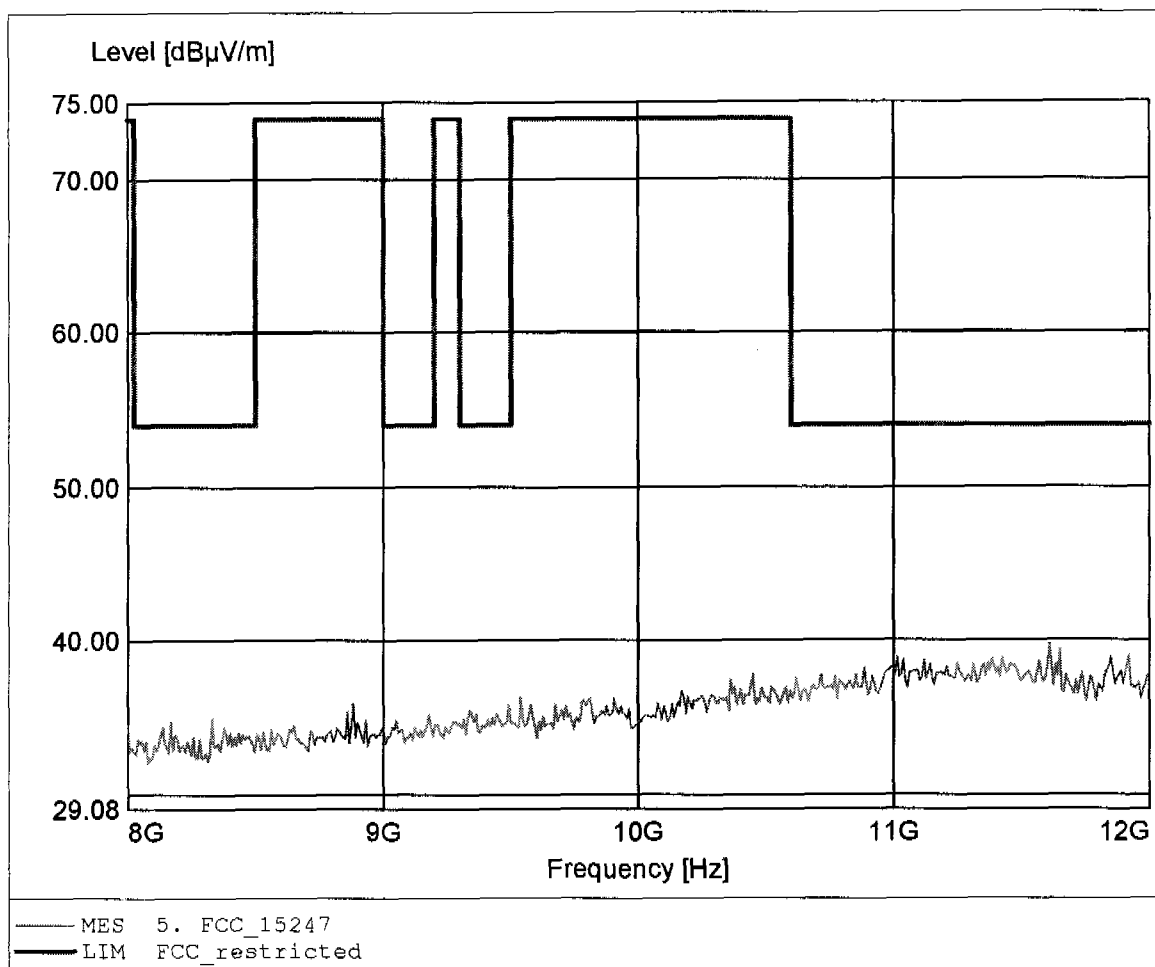
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 10.966GHz, Emax: 39.15dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

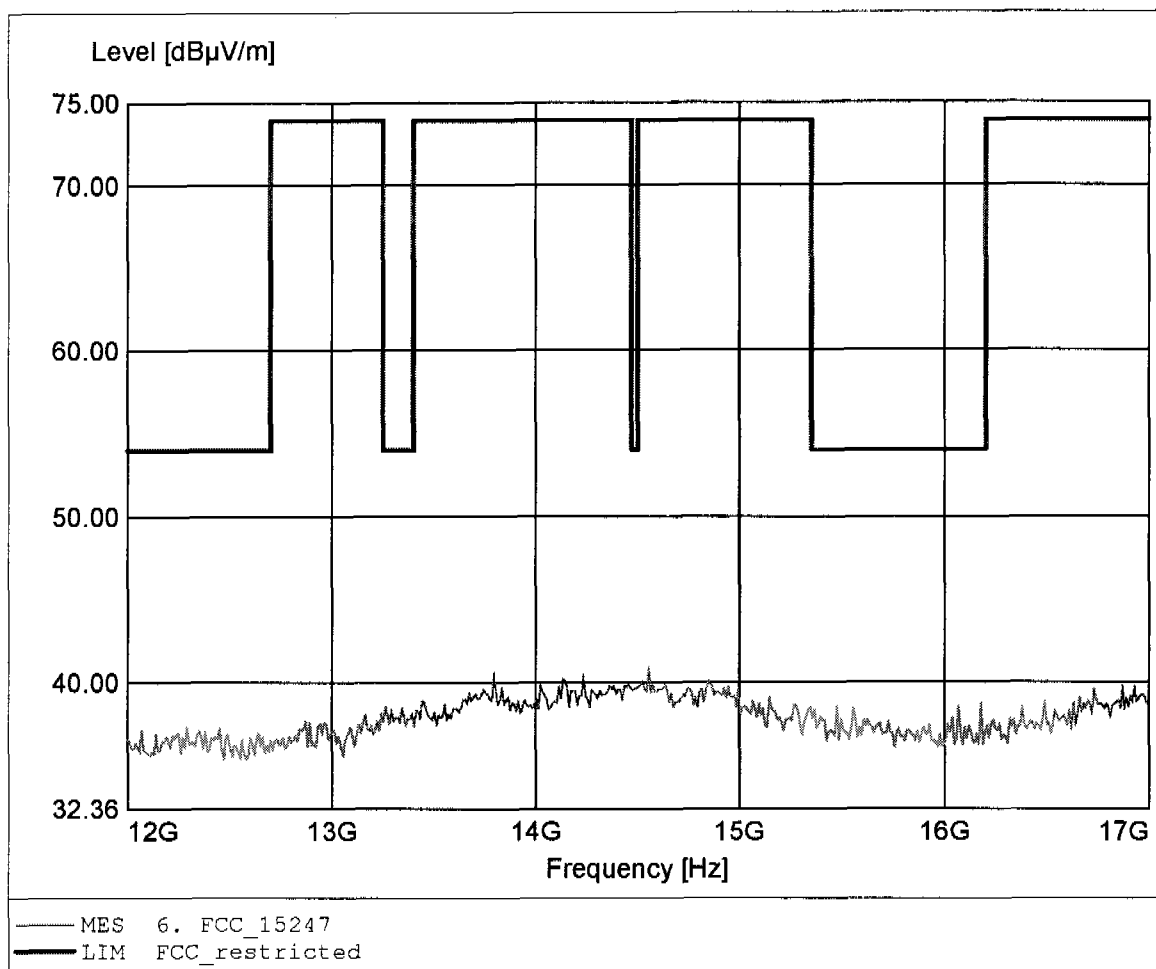
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 11.607GHz, Emax: 39.69dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

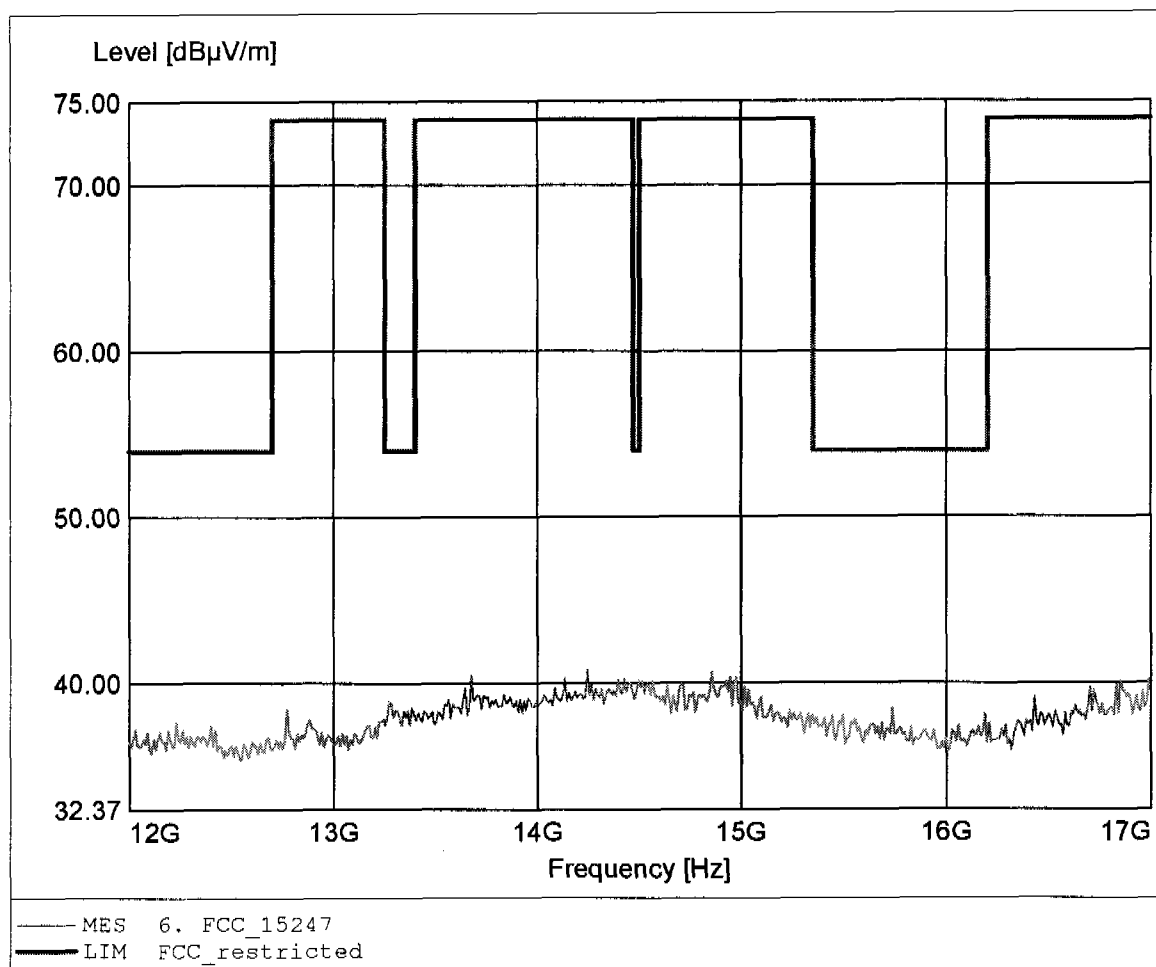
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EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 14.555GHz, Emax: 40.92dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

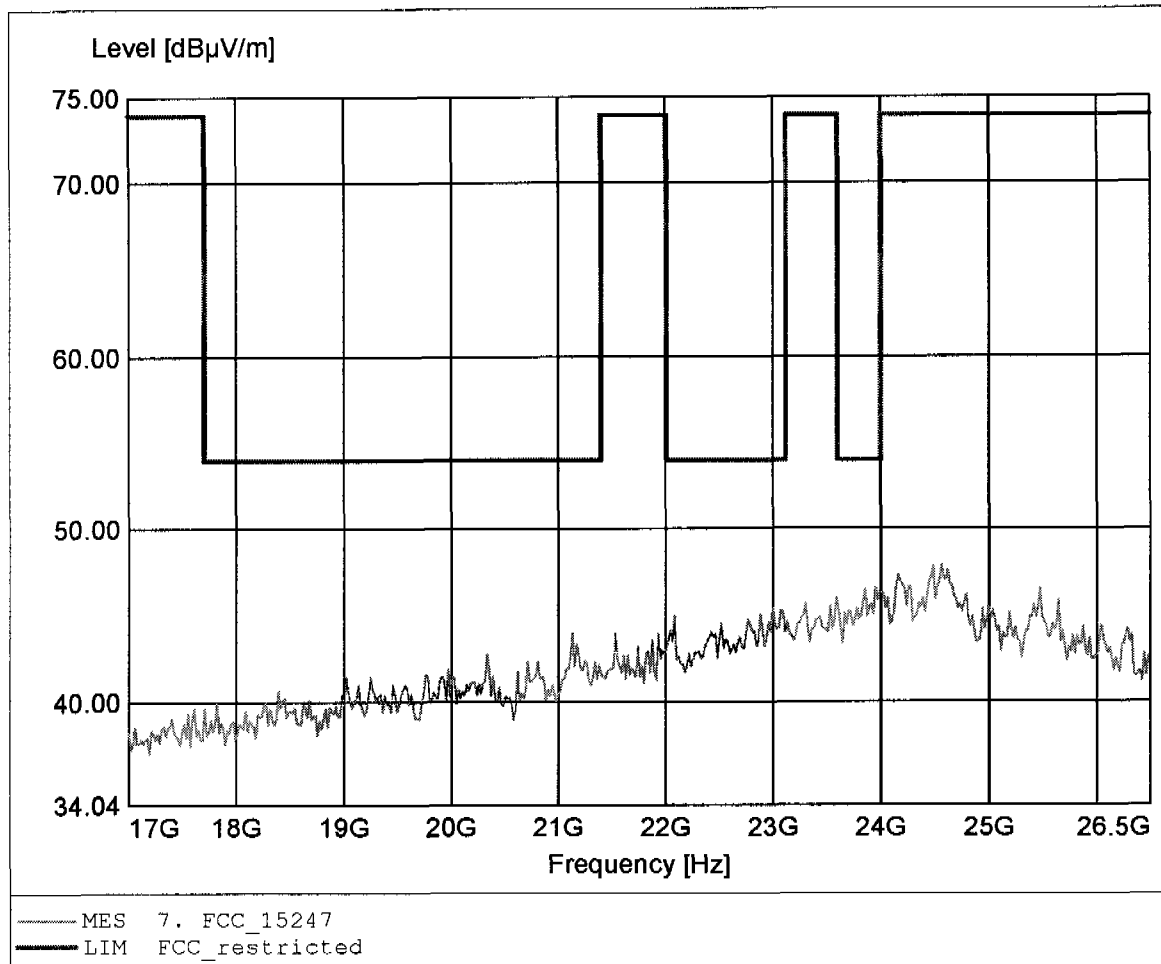
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.+HP.
Comment 2: Freq: 14.244GHz, Emax: 40.80dBμV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

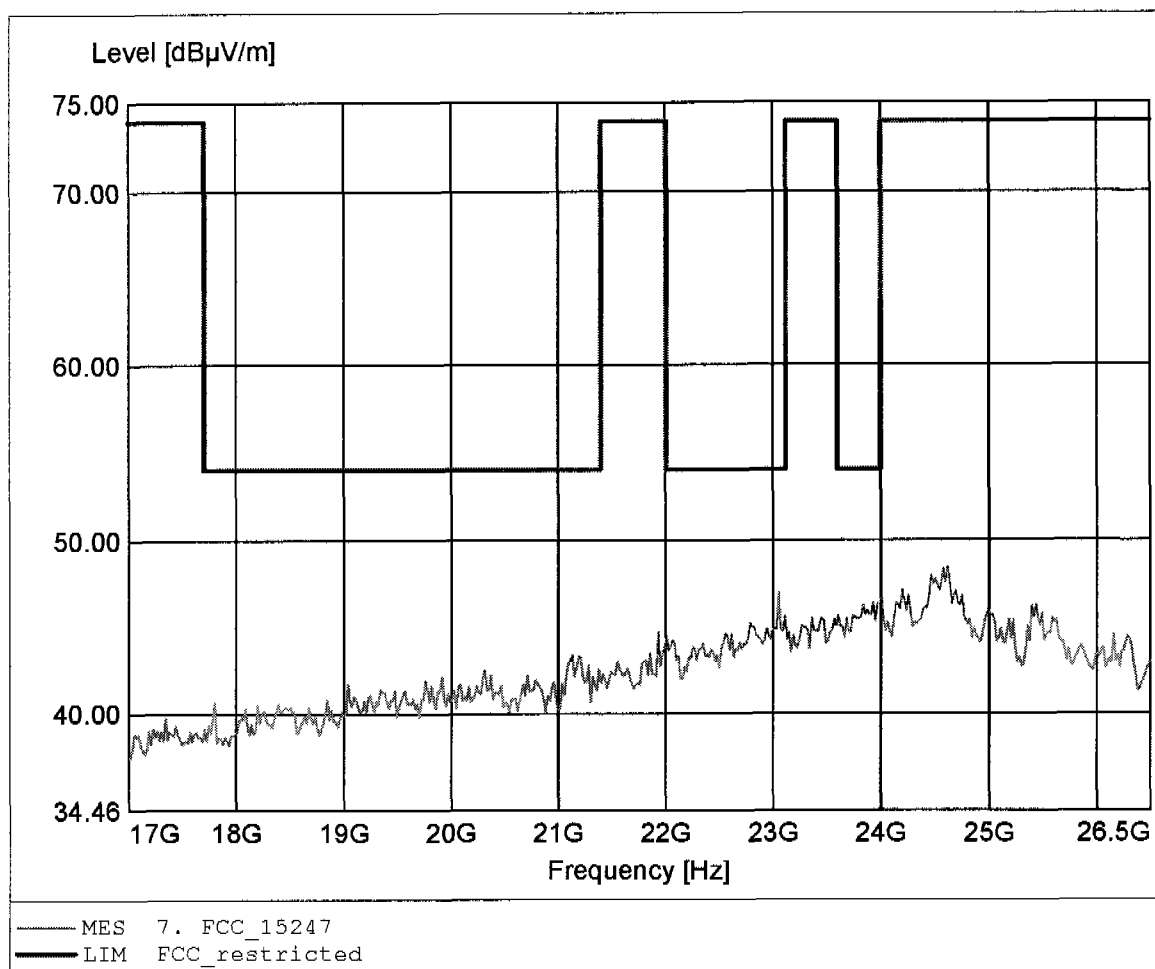
Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to S15.247, peak detector
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.558GHz, Emax: 47.84dBµV/m, RBW: 1MHz



Spurious emissions Field Strength

FCC RULES PART 15, SUBPART C

Approval Holder: LuxLabs Ltd. DBA MeshNetics
EUT / Model: 2.4 GHz 802.15.4 / ZigBee OEM module / ZDM-A1281-A2
Mode: Channel: 26 / 2480 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (battery)
Test Specification: according to §15.247, peak detector
Comment 1: Dist.: 3m, Ant.: HL025, amplif.
Comment 2: Freq: 24.615GHz, Emax: 48.47dBµV/m, RBW: 1MHz

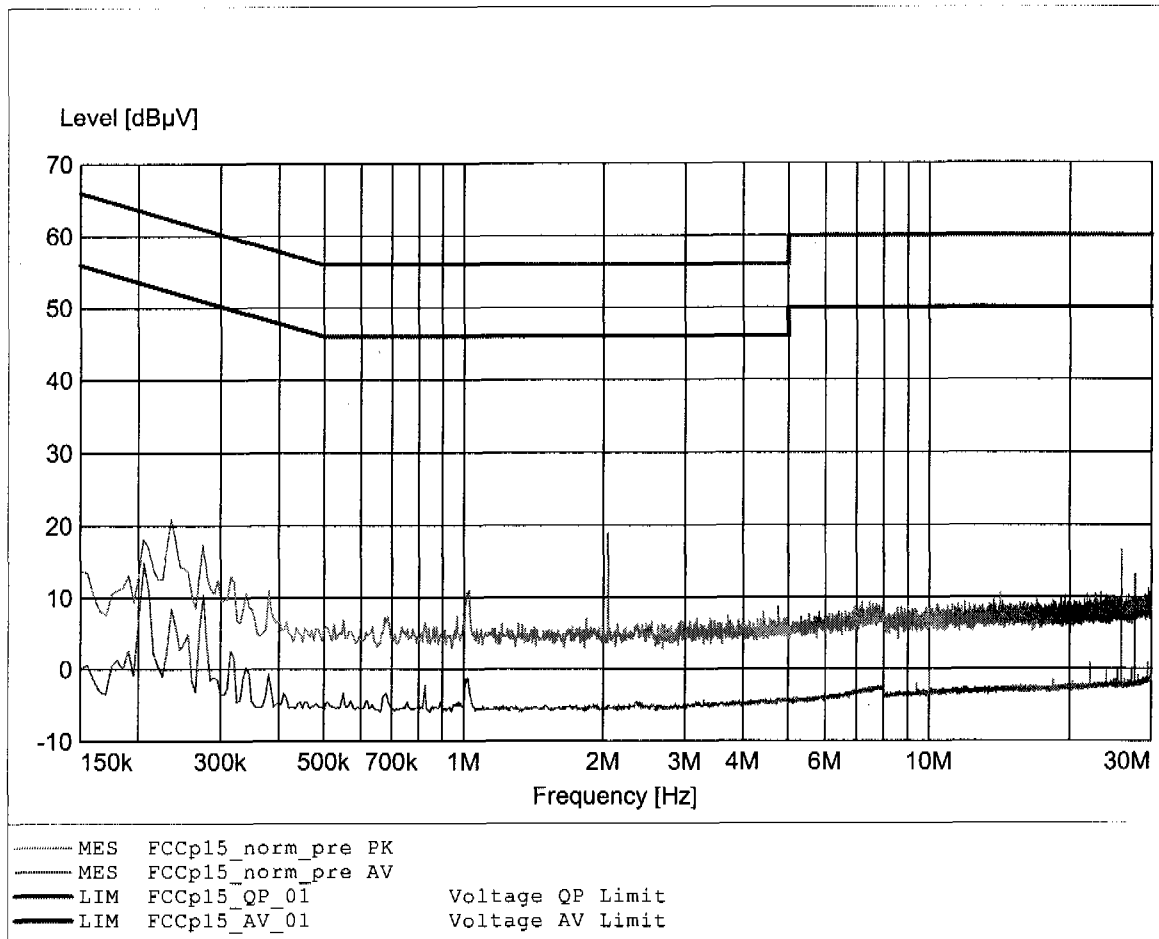


Appendix H

AC power line conducted emissions

**EMI voltage test in the ac-mains according
to FCC part 15**

EUT: 2.4GHz 802.15.4/ZigBee OEM module
Manufacturer: LuxLabs Ltd. DBA MeshNetics
Operating Condition: Unom: 120VAC (AC/DC-adaptor), Tnom: 23°C
Test Site: ETS
Operator: Mr. Pflug
Test Specification: V-Network: ESH2-Z5 (L1/N)
Comment: model: ZDM-A1281-A2 brandname: ZigBit
mode: bluetooth-link



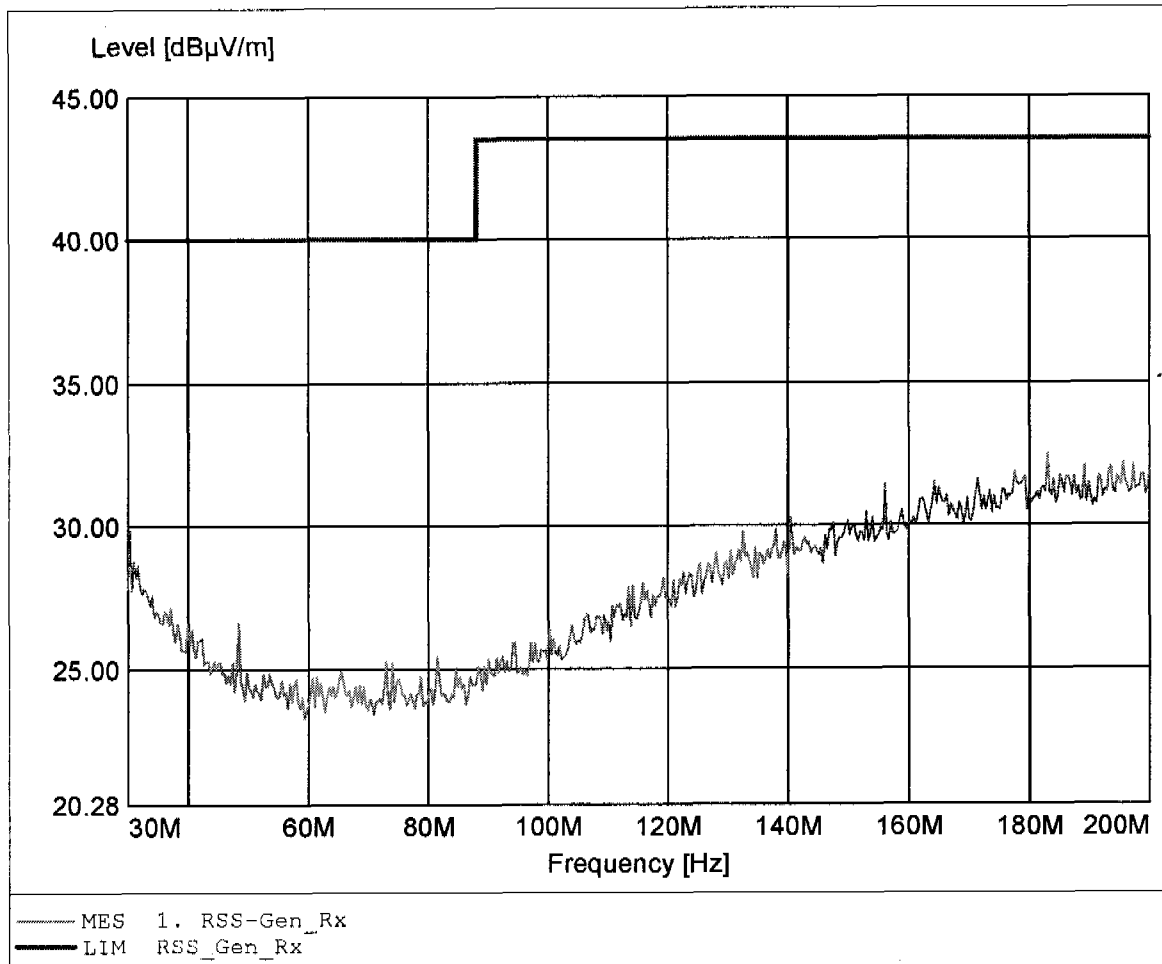
Appendix I

Receiver radiated emisissions

Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

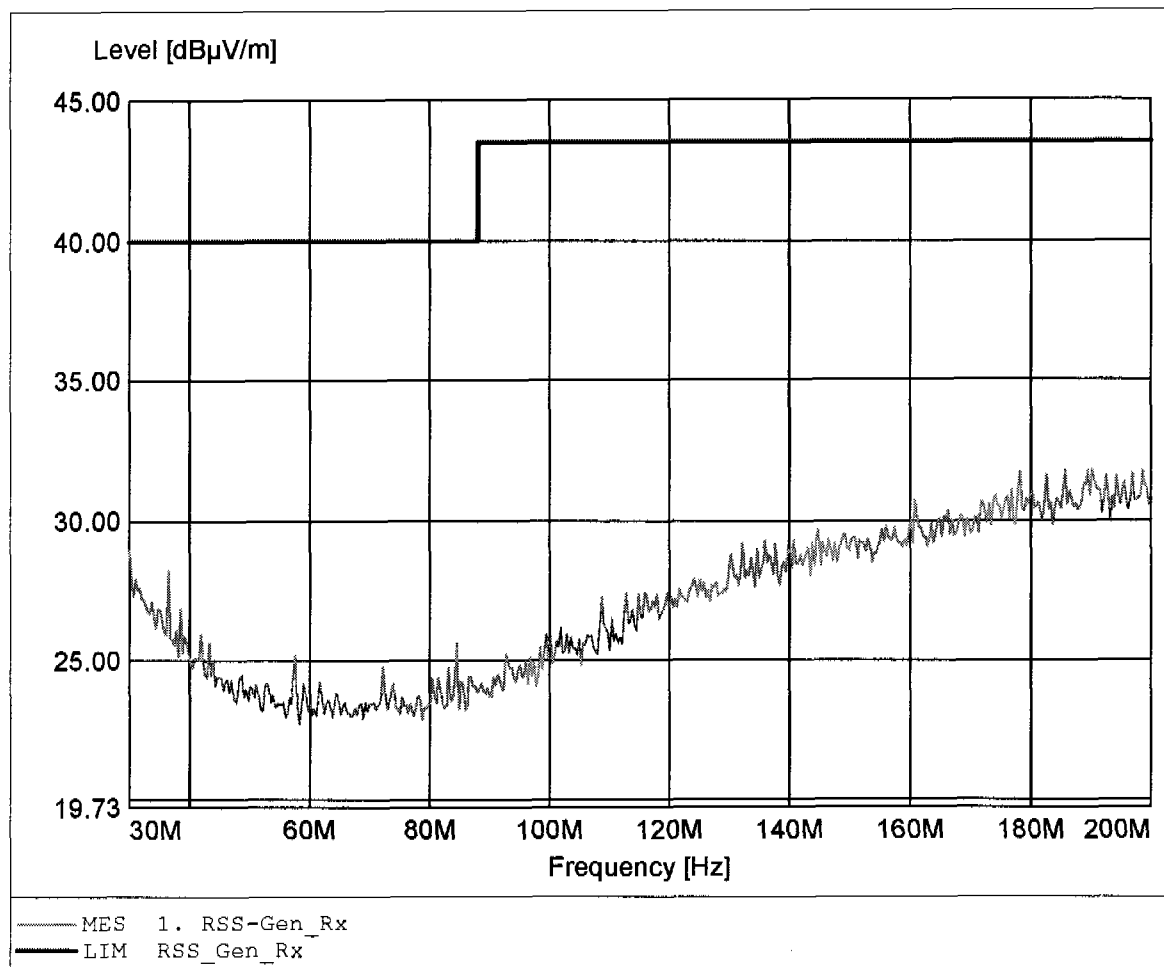
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq:182.966MHz Emax:32.54dBµV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

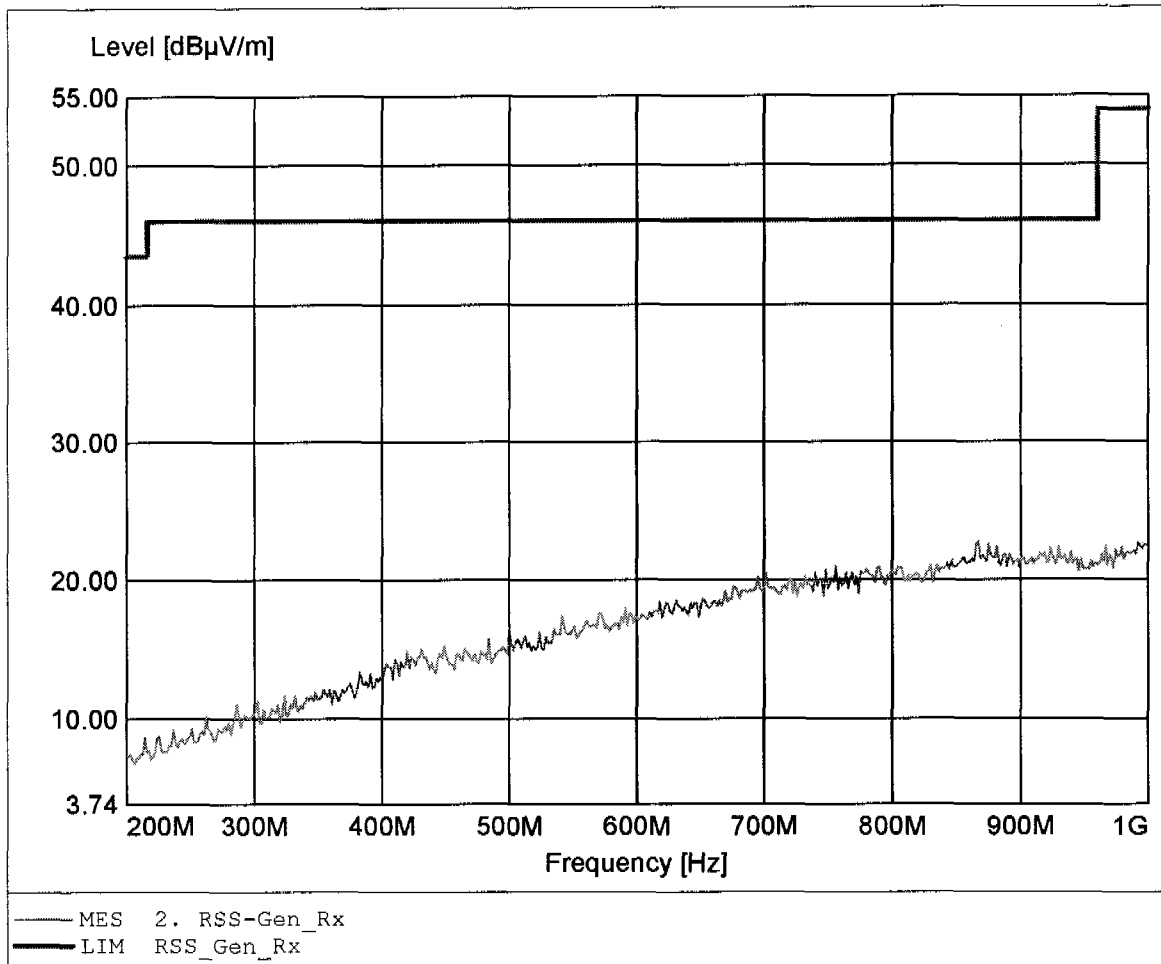
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: HK 116
Comment 2: Freq:190.120MHz Emax:31.81dBuV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

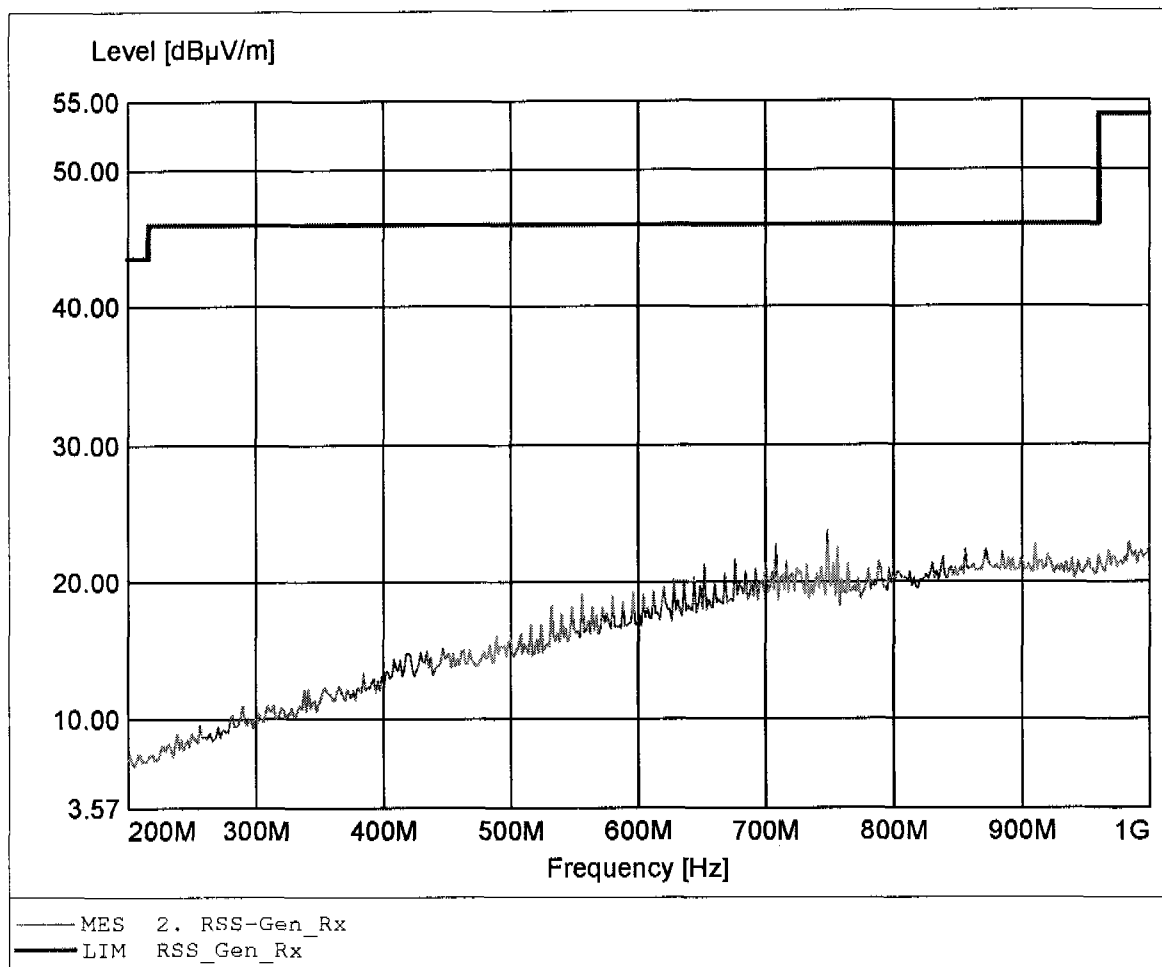
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.
Comment 2: Freq:866.934MHz Emax:22.71dBµV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

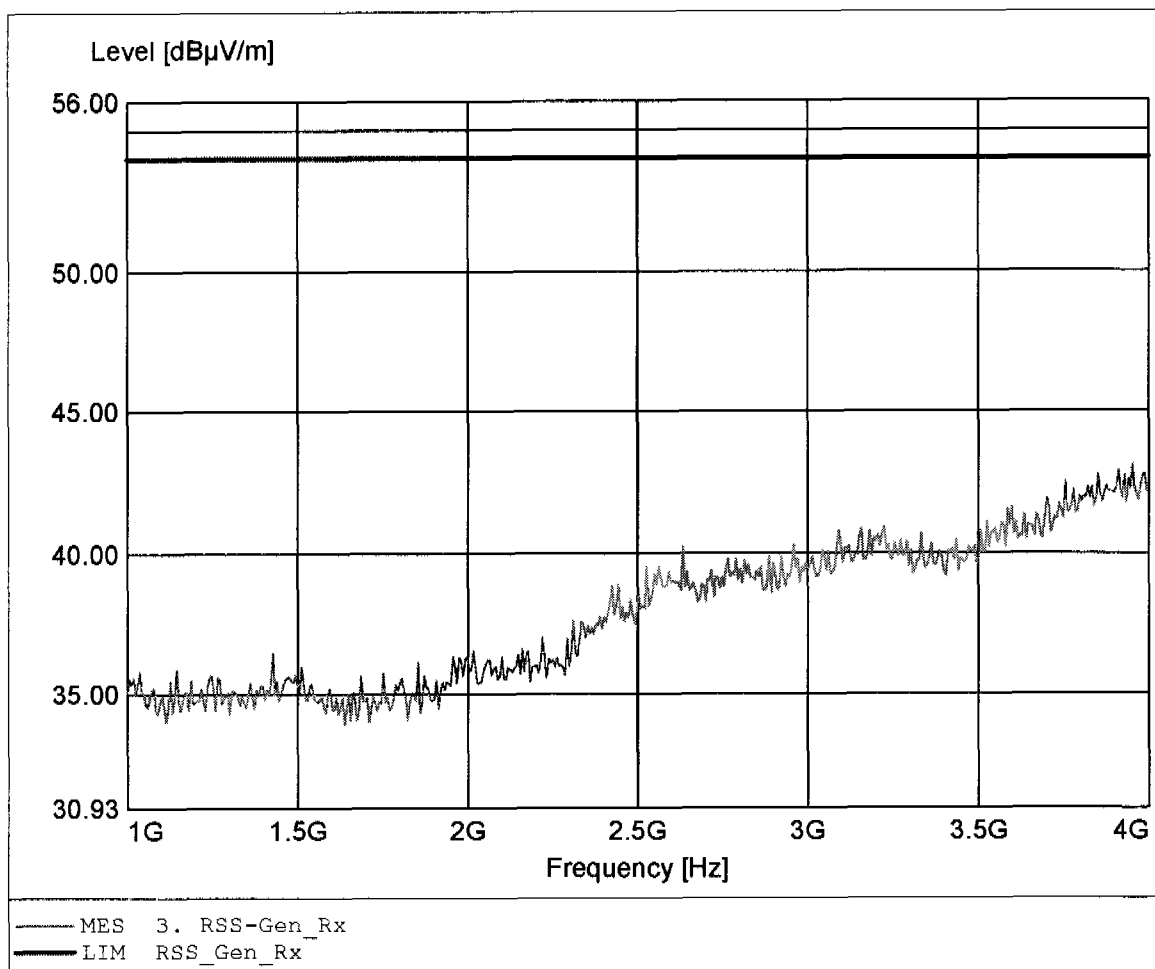
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: HL 223, ampl.
Comment 2: Freq: 748.297MHz Emax: 23.78dBuV/m RBW: 100 kHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

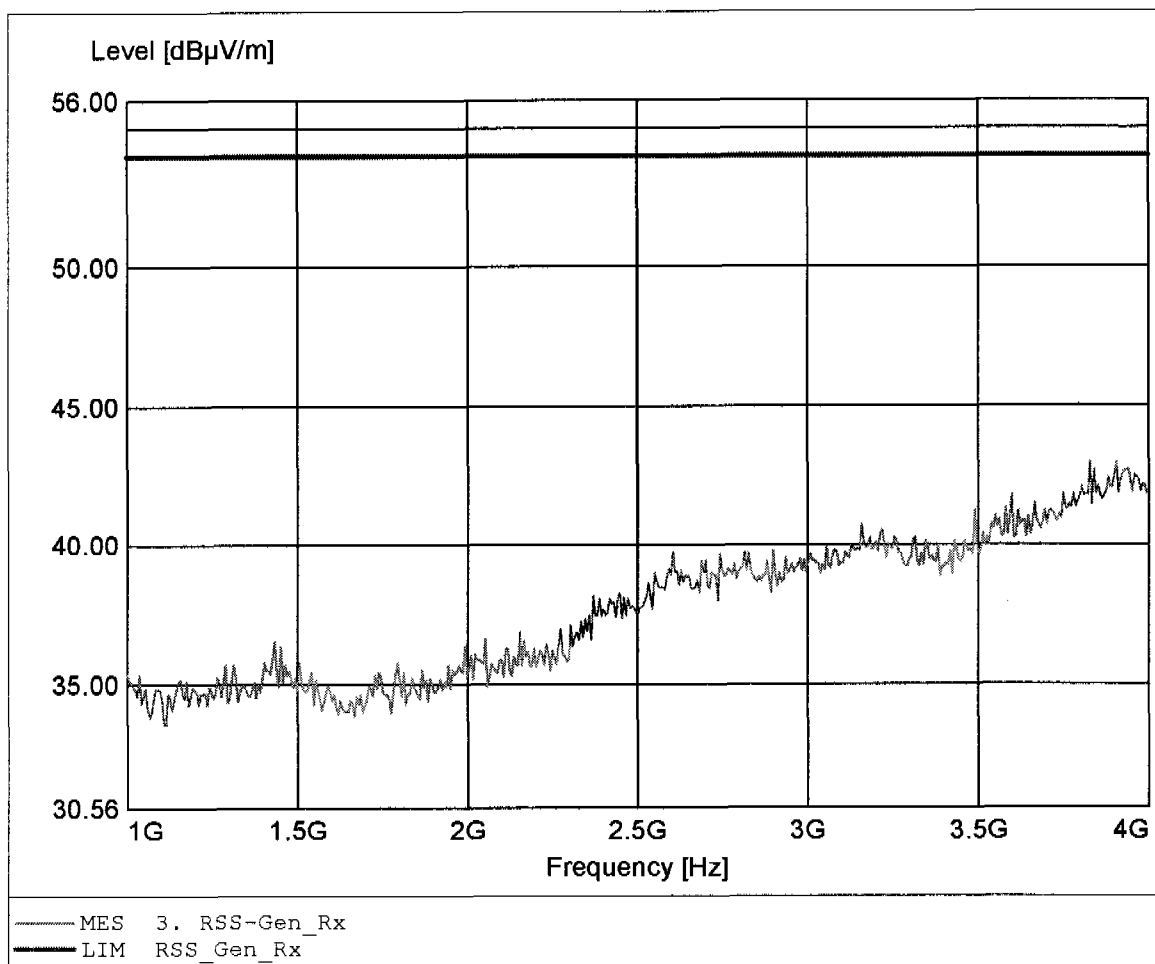
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.
Comment 2: Freq:3.952GHz Emax:43.11dBuV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

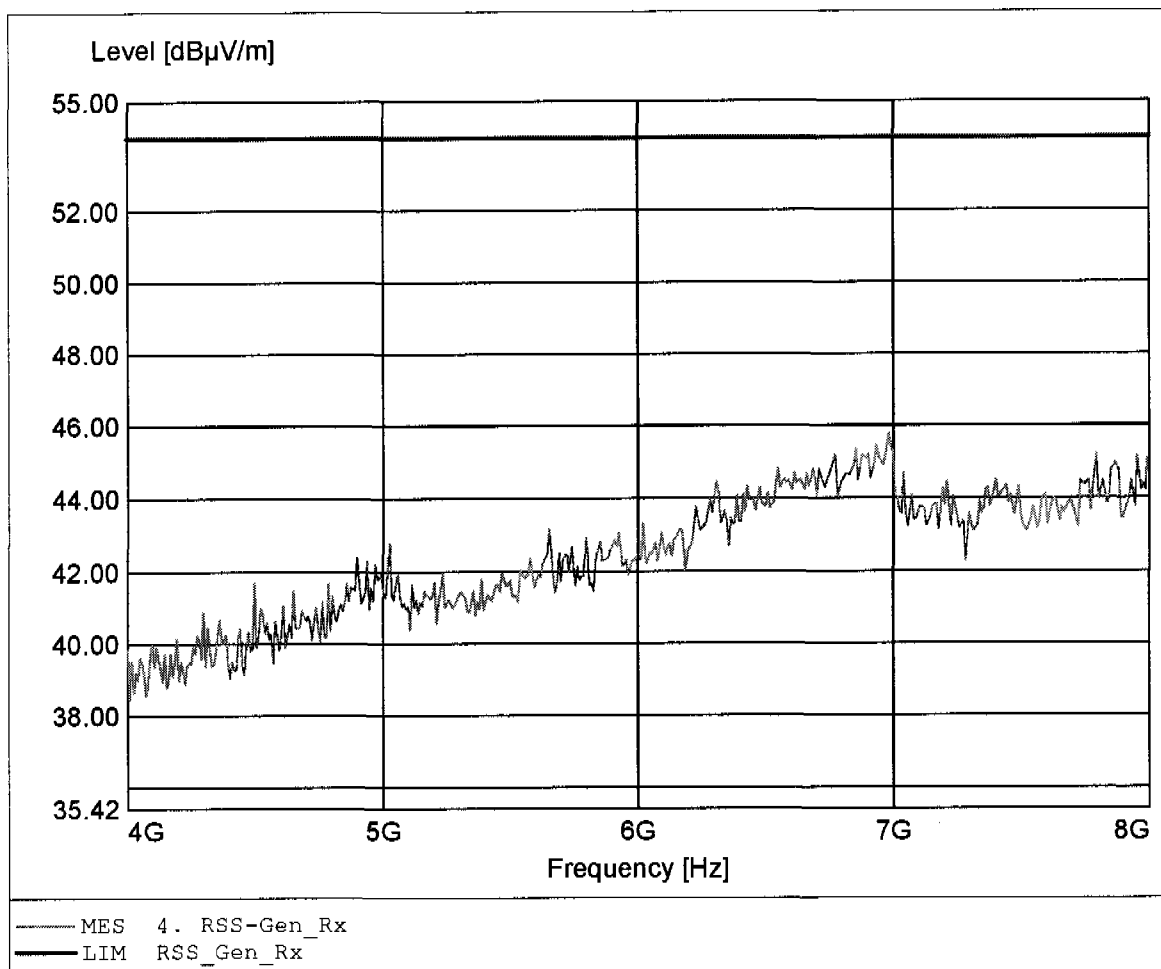
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.
Comment 2: Freq:3.826GHz Emax:42.97dBμV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

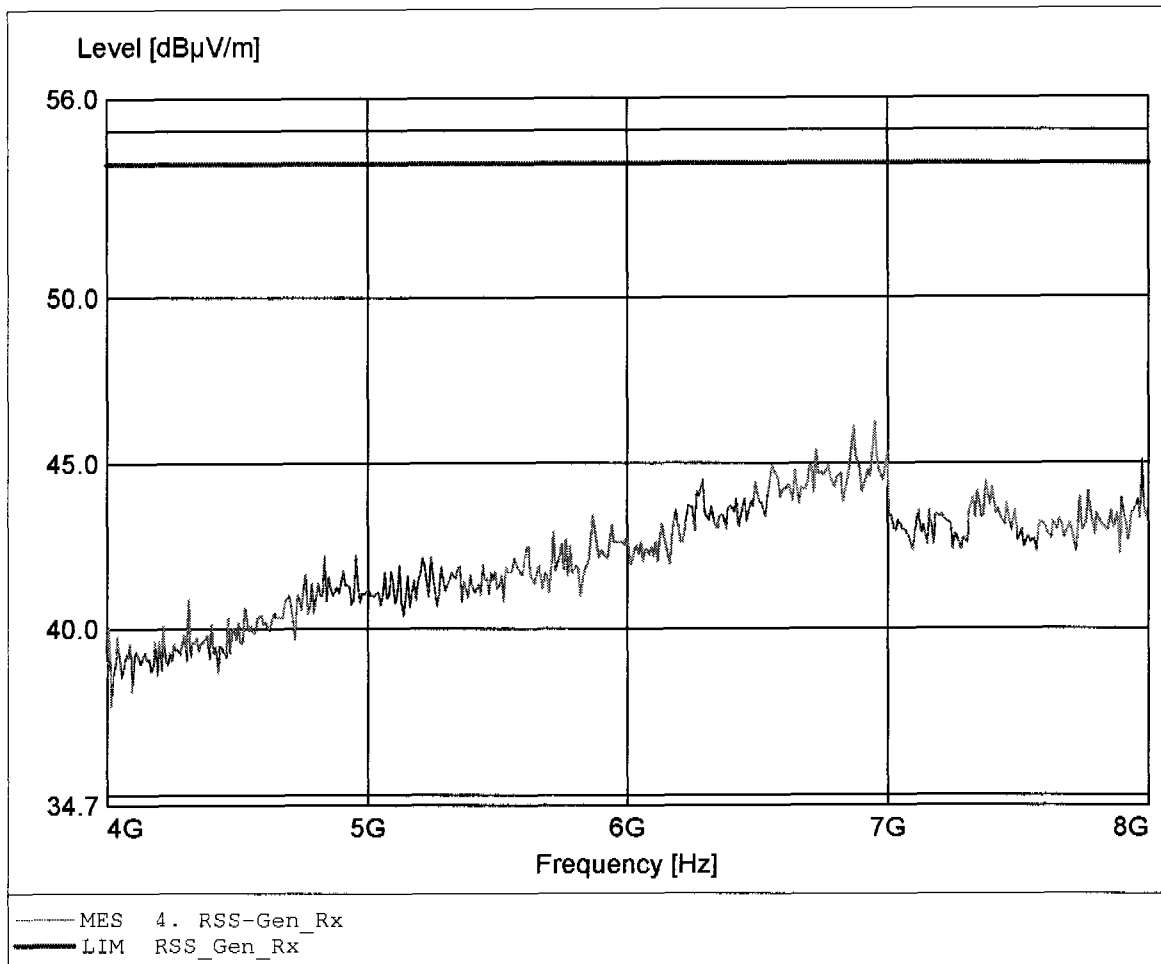
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.
Comment 2: Freq: 6.982GHz Emax: 45.77dBuV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

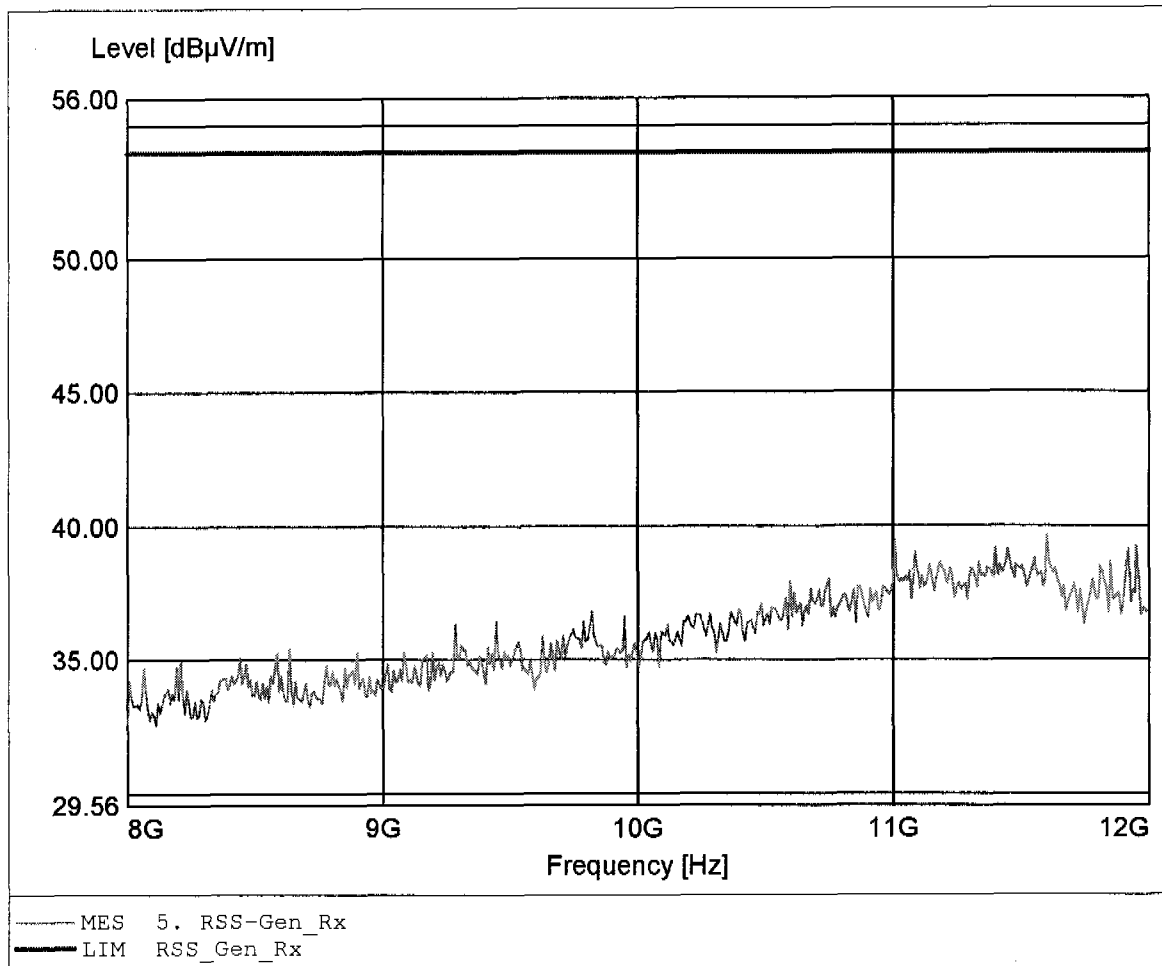
Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.
Comment 2: Freq: 6.950GHz Emax: 46.21dBµV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.
Comment 2: Freq:11.599GHz Emax:39.66dBµV/m RBW: 1 MHz



Field Strength under normal conditions

Standards Industry Canada, RSS-GEN

Approval Holder: LUXLABS LTD. DBA MESHNETICS
EUT / Model: 2.4 GHZ 802.15.4 / ZIGBEE OEM MODULE / ZDM-A1281-A2
Mode: Channel: 19 / 2445 MHz
Test Site / Operator: ETS / Mr. Schlaps
Test Condition: 25°C / Unom.: 2 x 1.5 V DC (BATTERY)
Test Specification: according to RSS-Gen Issue 1
Comment 1: Dist.: 3m, Ant.: BBHA9120D, ampl.
Comment 2: Freq: 11.599GHz Emax: 39.35dB μ V/m RBW: 1 MHz

