

Prüfbericht - Nr.: 17058162 001
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EMI Sweep(1)

1 / 1

Radiated Emission

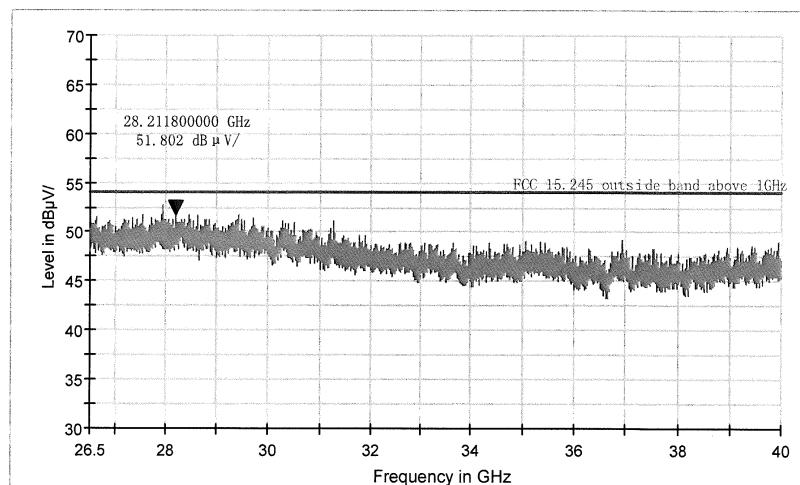
EUT Information

EUT Model Name: e235
Operation mode: TX 5736MHz
Test Voltage: AC 120V/60Hz
Comment: Antenna B

Common Information

Test Site: SMQ EMC Lab.
Environment Conditions:
Antenna Polarization: Horizontal
Operator Name:
Comment:

Copy of FCC Electric Field Strength 26.5-40GHz



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EMI Sweep(1)

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Radiated Emission

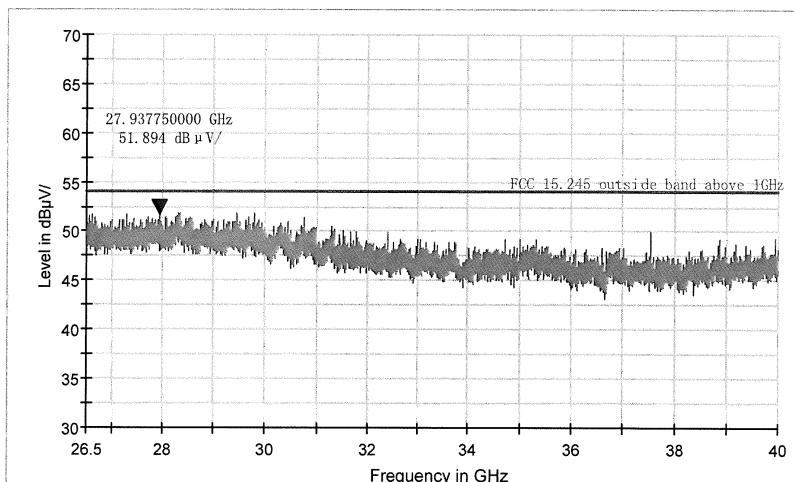
EUT Information

EUT Model Name: e235
Operation mode: TX 5736MHz
Test Voltage: AC 120V/60Hz
Comment: Antenna B

Common Information

Test Site: SMQ EMC Lab.
Environment Conditions:
Antenna Polarization: Vertical
Operator Name:
Comment:

Copy of FCC Electric Field Strength 26.5-40GHz



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Radiated Emission

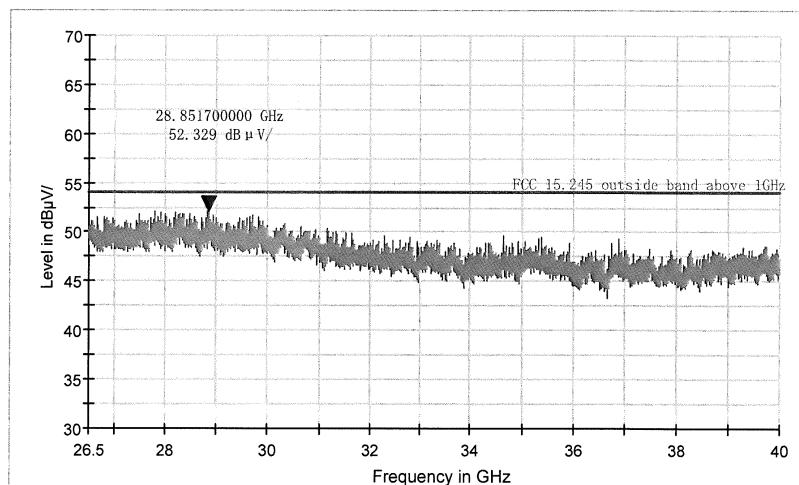
EUT Information

EUT Model Name: e235
Operation mode: TX 5762MHz
Test Voltage: AC 120V/60Hz
Comment: Antenna B

Common Information

Test Site: SMQ EMC Lab.
Environment Conditions:
Antenna Polarization: Horizontal
Operator Name:
Comment:

Copy of FCC Electric Field Strength 26.5-40GHz



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Radiated Emission

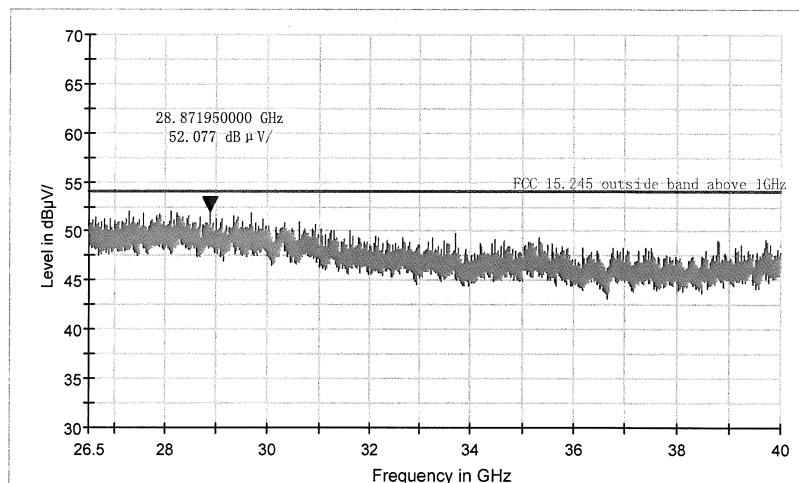
EUT Information

EUT Model Name: e235
Operation mode: TX 5762MHz
Test Voltage: AC 120V/60Hz
Comment: Antenna B

Common Information

Test Site: SMQ EMC Lab.
Environment Conditions:
Antenna Polarization: Vertical
Operator Name:
Comment:

Copy of FCC Electric Field Strength 26.5-40GHz



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Radiated Emission

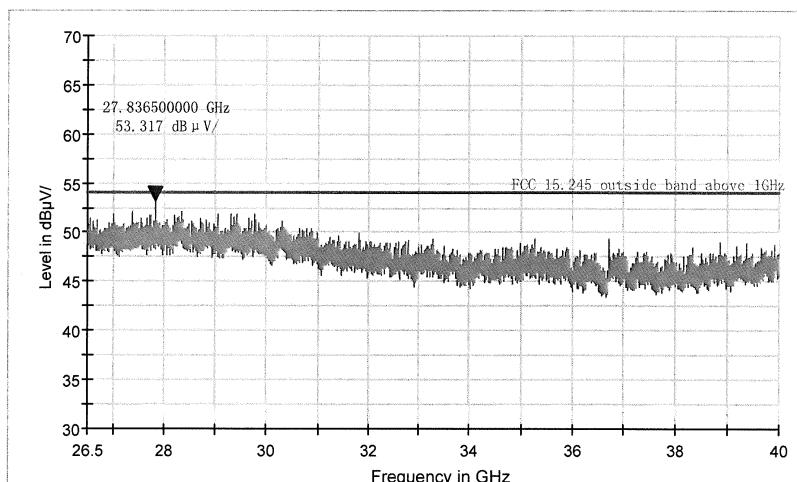
EUT Information

EUT Model Name: e235
Operation mode: TX 5814MHz
Test Voltage: AC 120V/60Hz
Comment: Antenna B

Common Information

Test Site: SMQ EMC Lab.
Environment Conditions:
Antenna Polarization: Horizontal
Operator Name:
Comment:

Copy of FCC Electric Field Strength 26.5-40GHz



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Radiated Emission

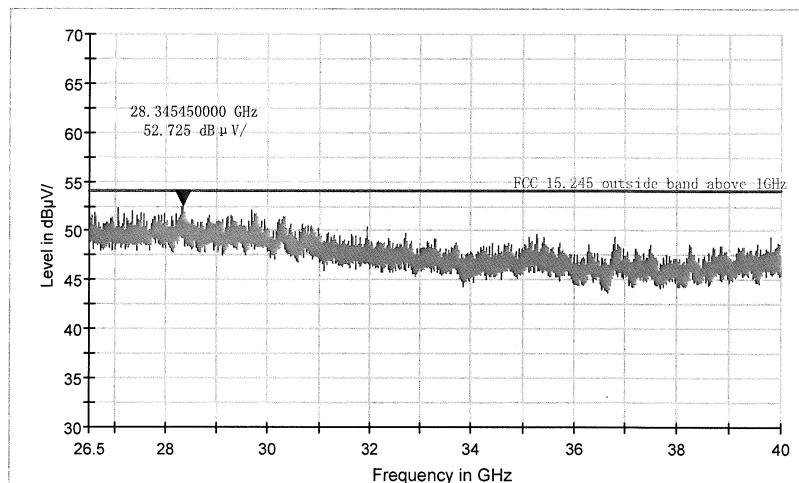
EUT Information

EUT Model Name: e235
Operation mode: TX 5814MHz
Test Voltage: AC 120V/60Hz
Comment: Antenna B

Common Information

Test Site: SMQ EMC Lab.
Environment Conditions:
Antenna Polarization: Vertical
Operator Name:
Comment:

Copy of FCC Electric Field Strength 26.5-40GHz



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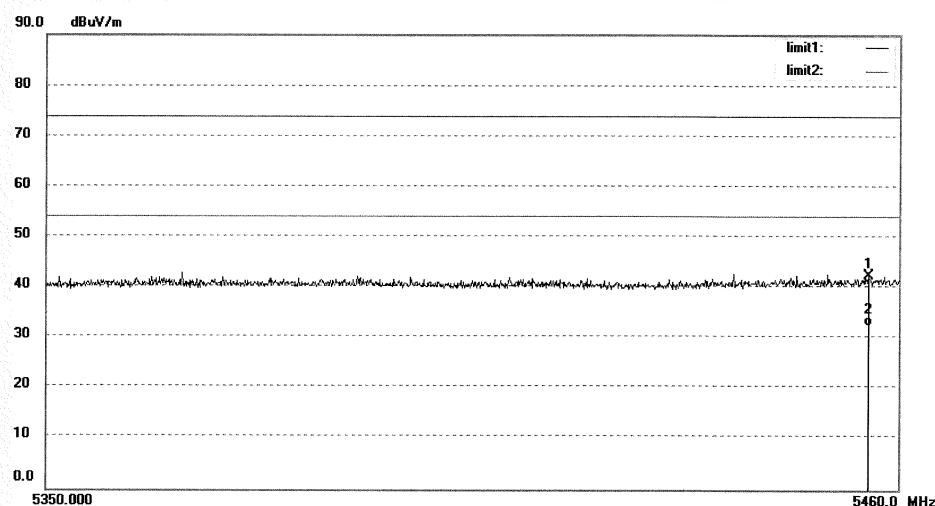
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #641	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2016/01/23
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Multimedia Speaker	Engineer Signature: LGWADE
Mode: TX 5736MHz	Distance: 3m
Model: e235	
Manufacturer: EDIFIER	
Note: Antenna B	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5456.040	41.48	0.97	42.45	74.00	-31.55	peak			
2	5456.040	31.59	0.97	32.56	54.00	-21.44	AVG			

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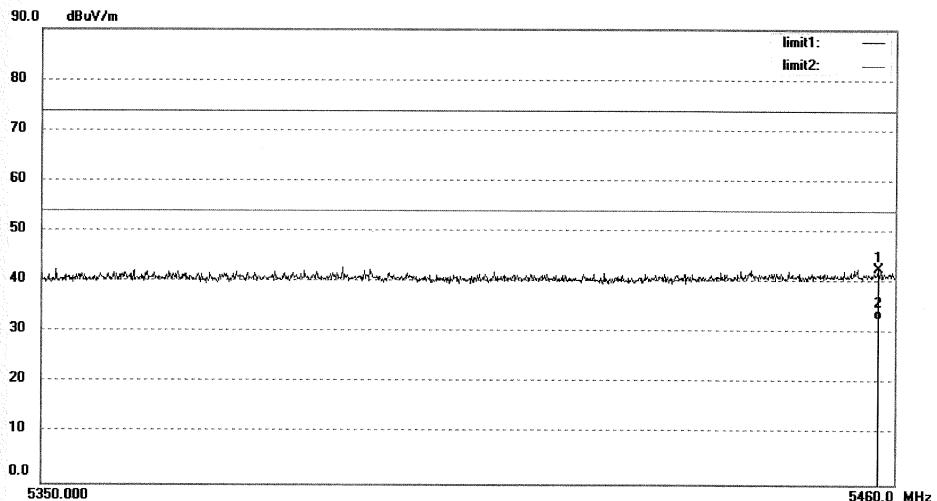
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #640	Polarization: Vertical
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2016/01/23
Temp. (C)/Hum.(%) 23 C / 48 %	Time:
EUT: Multimedia Speaker	Engineer Signature: LGWADE
Mode: TX 5736MHz	Distance: 3m
Model: e235	
Manufacturer: EDIFIER	
Note: Antenna B	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5457.800	41.61	0.97	42.58	74.00	-31.42	peak			
2	5457.800	31.79	0.97	32.76	54.00	-21.24	AVG			

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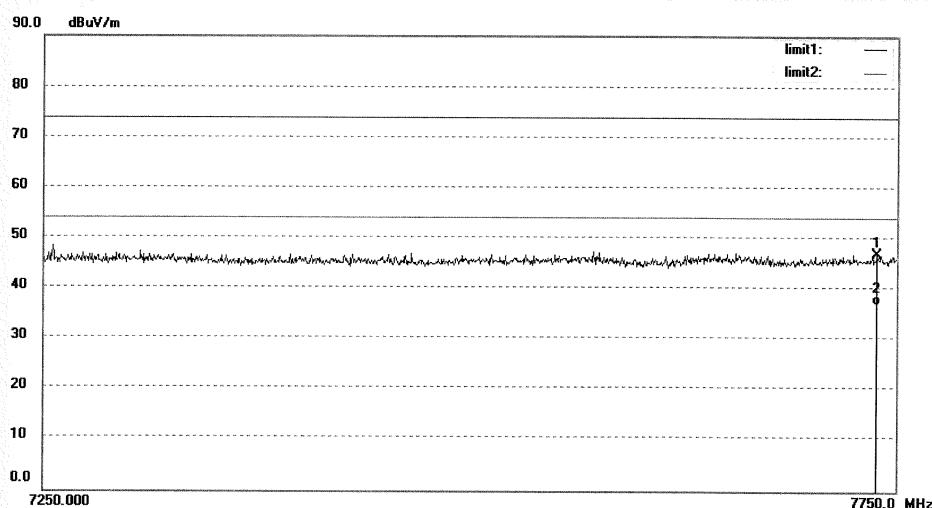
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #646	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 2016/01/23
Temp. (C)/Hum.(%) 23 C / 48 %	Time:
EUT: Multimedia Speaker	Engineer Signature: LGWADE
Mode: TX 5814MHz	Distance: 3m
Model: e235	
Manufacturer: EDIFIER	
Note: Antenna B	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7738.500	41.39	5.43	46.82	74.00	-27.18	peak			
2	7738.500	31.53	5.43	36.96	54.00	-17.04	AVG			

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 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
 Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

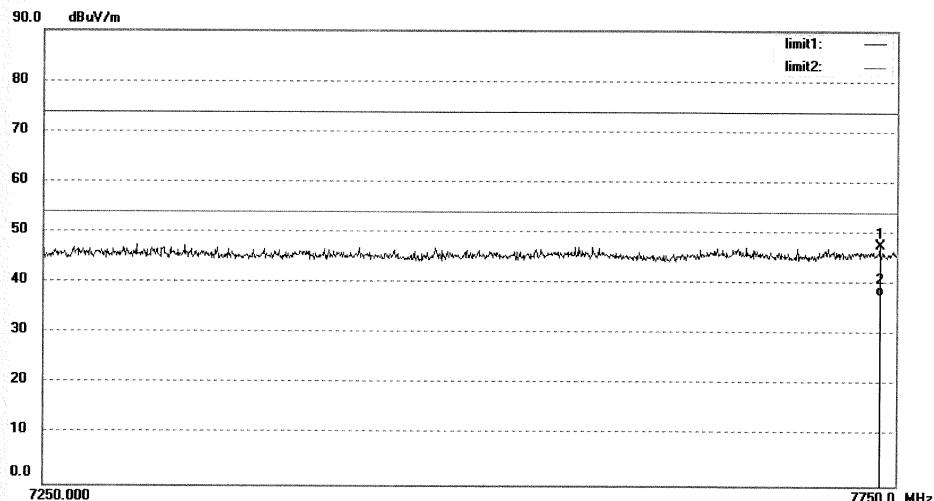
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #647
 Standard: FCC (Band Edge)
 Test item: Radiation Test
 Temp. (C)/Hum.(%) 23 C / 48 %
 EUT: Multimedia Speaker
 Mode: TX 5814MHz
 Model: e235
 Manufacturer: EDIFIER

Polarization: Vertical
 Power Source: AC 120V/60Hz
 Date: 2016/01/23
 Time:
 Engineer Signature: LGWADE
 Distance: 3m

Note: Antenna B



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	7740.000	42.18	5.43	47.61	74.00	-26.39	peak			
2	7740.000	32.35	5.43	37.78	54.00	-16.22	AVG			

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Page 171 of 197**5.1.16 Conducted emissions****RESULT:****Pass**

Date of testing	:	2016-01-18
Test standard	:	FCC Part 15.107 (a) FCC Part 15.207 RSS-Gen Clause 8.8 ICES-003 Issue 6 January 2016
Basic standard	:	ANSI C63.4: 2014
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207 Table 3 of RSS-Gen
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation Mode	:	A, B, C
Earthing	:	Not Connected
Ambient temperature	:	25°C
Relative humidity	:	52%
Atmospheric pressure	:	101kPa

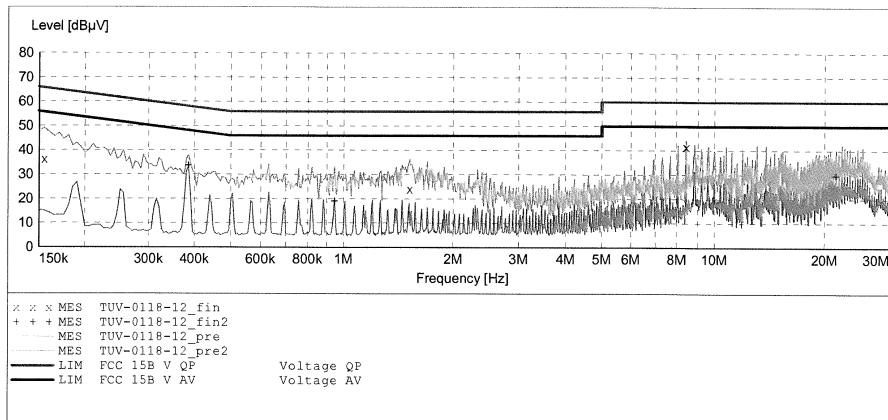
For details refer to following test plot.

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(R Speaker)
 Manufacturer: EDIFIER
 Operating Condition: On with Bluetooth+5G TX
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
			Average			
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			


MEASUREMENT RESULT: "TUV-0118-12_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB _µ V	dB	dB _µ V	dB			
	0.155000	36.30	10.5	66	29.4	QP	L1	GND
	1.520000	24.10	10.9	56	31.9	QP	L1	GND
	8.450000	41.60	11.3	60	18.4	QP	L1	GND

MEASUREMENT RESULT: "TUV-0118-12_fin2"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB _µ V	dB	dB _µ V	dB			
	0.385000	33.60	10.7	48	14.6	AV	L1	GND
	0.945000	19.00	10.8	46	27.0	AV	L1	GND
	21.505000	29.70	11.4	50	20.3	AV	L1	GND

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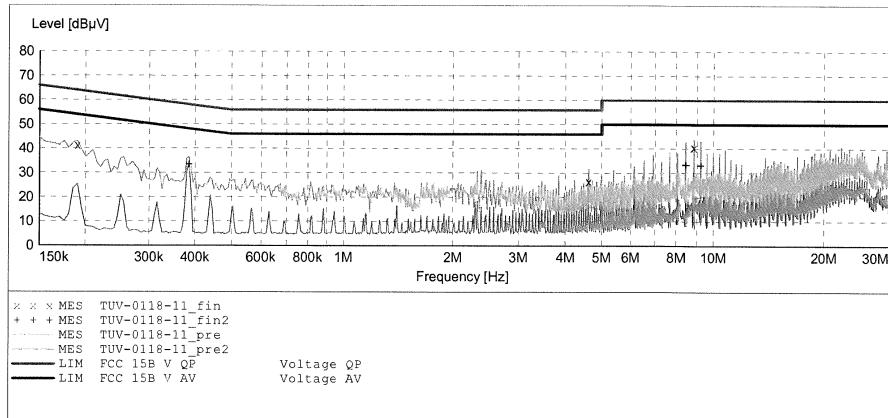
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(R Speaker)
 Manufacturer: EDIFIER
 Operating Condition: On with Bluetooth+5G TX
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
			Average			
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "TUV-0118-11_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB _µ V	dB	dB _µ V	dB			
	0.190000	41.30	10.5	64	22.7	QP	N	GND
	4.610000	26.50	11.1	56	29.5	QP	N	GND
	8.830000	40.60	11.3	60	19.4	QP	N	GND

MEASUREMENT RESULT: "TUV-0118-11_fin2"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB _µ V	dB	dB _µ V	dB			
	0.385000	33.40	10.7	48	14.8	AV	N	GND
	8.450000	33.30	11.3	50	16.7	AV	N	GND
	9.220000	33.10	11.3	50	16.9	AV	N	GND

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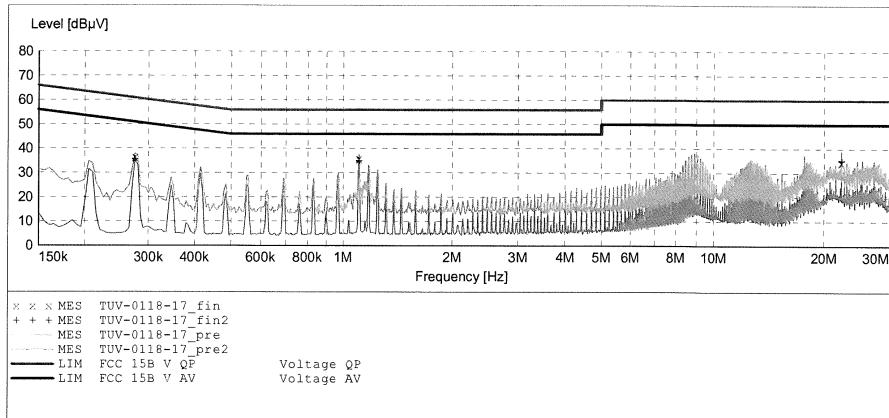
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235 (Subwoofer)
 Manufacturer: EDIFIER
 Operating Condition: On with Bluetooth+5G RX
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas.	IF Time	Transducer Bandw.
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
Average						
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
Average						



MEASUREMENT RESULT: "TUV-0118-17_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	36.50	10.6	61	24.5	QP	L1	GND
	1.105000	35.80	10.9	56	20.2	QP	L1	GND
	22.270000	34.60	11.4	60	25.4	QP	L1	GND

MEASUREMENT RESULT: "TUV-0118-17_fin2"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	35.50	10.6	51	15.5	AV	L1	GND
	1.105000	34.80	10.9	46	11.2	AV	L1	GND
	22.270000	35.10	11.4	50	14.9	AV	L1	GND

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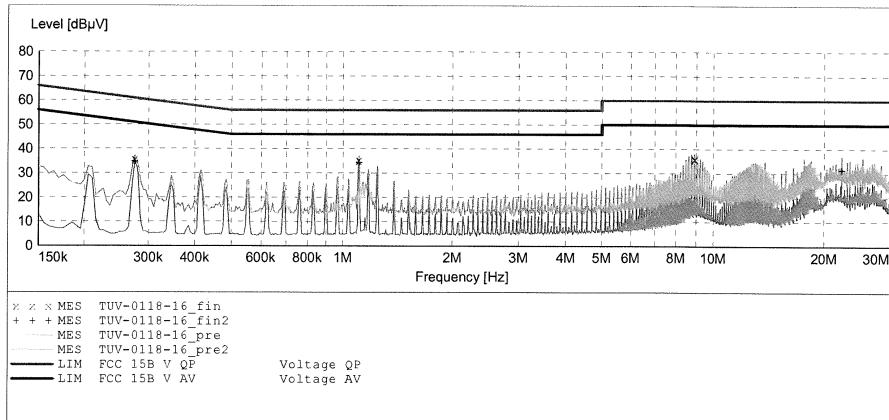
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235 (Subwoofer)
 Manufacturer: EDIFIER
 Operating Condition: On with Bluetooth+5G RX
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average



MEASUREMENT RESULT: "TUV-0118-16_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	35.70	10.6	61	25.3	QP	N	GND
	1.105000	35.30	10.9	56	20.7	QP	N	GND
	8.930000	36.00	11.3	60	24.0	QP	N	GND

MEASUREMENT RESULT: "TUV-0118-16_fin2"

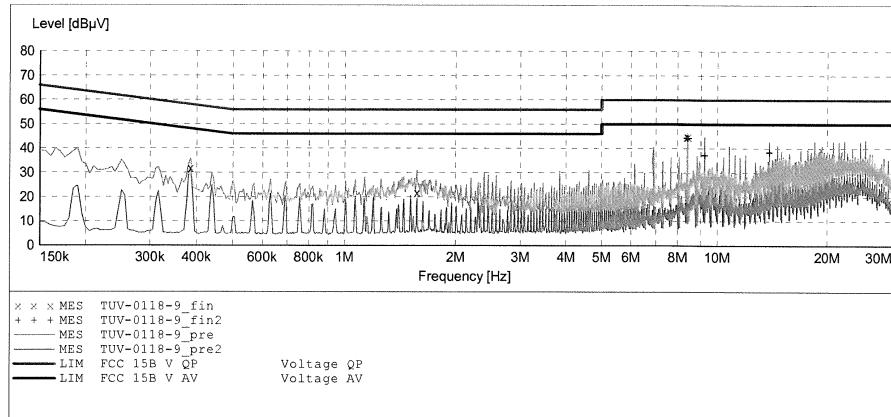
1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	34.70	10.6	51	16.3	AV	N	GND
	1.105000	34.30	10.9	46	11.7	AV	N	GND
	22.270000	31.40	11.4	50	18.6	AV	N	GND

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(R Speaker)
 Manufacturer: EDIFIER
 Operating Condition: Aux in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average


MEASUREMENT RESULT: "TUV-0118-9_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.385000	31.90	10.7	58	26.3	QP	L1	GND
	1.570000	21.80	10.9	56	34.2	QP	L1	GND
	8.450000	44.90	11.3	60	15.1	QP	L1	GND

MEASUREMENT RESULT: "TUV-0118-9_fin2"

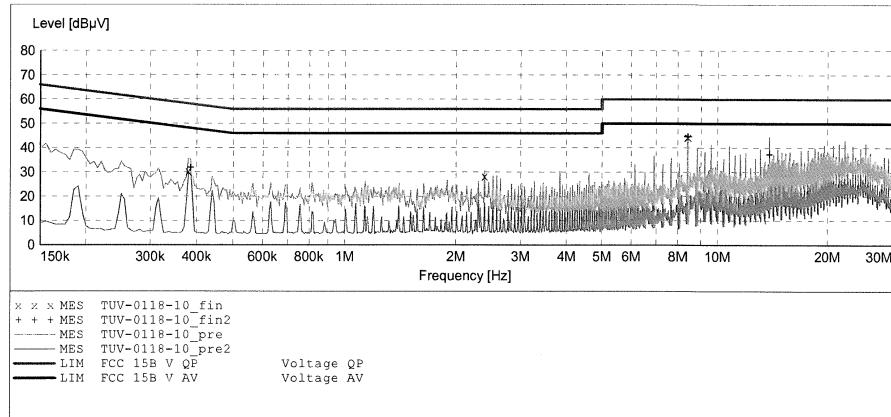
1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	8.450000	44.20	11.3	50	5.8	AV	L1	GND
	9.220000	37.20	11.3	50	12.8	AV	L1	GND
	13.825000	38.40	11.4	50	11.6	AV	L1	GND

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(R Speaker)
 Manufacturer: EDIFIER
 Operating Condition: Aux in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas.	IF Time	Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126	2008
			Average				
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126	2008
			Average				


MEASUREMENT RESULT: "TUV-0118-10_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.380000	30.40	10.7	58	27.9	QP	N	GND
	2.390000	28.30	11.0	56	27.7	QP	N	GND
	8.450000	44.50	11.3	60	15.5	QP	N	GND

MEASUREMENT RESULT: "TUV-0118-10_fin2"

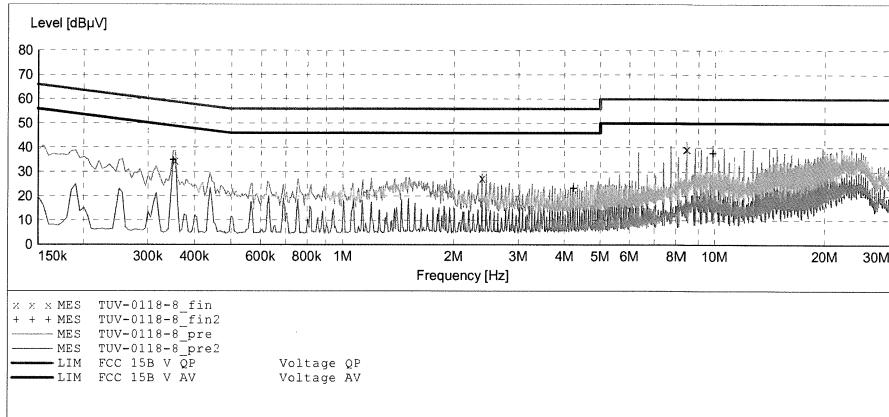
1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.385000	31.80	10.7	48	16.4	AV	N	GND
	8.450000	44.60	11.3	50	5.4	AV	N	GND
	13.825000	37.30	11.4	50	12.7	AV	N	GND

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CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(R Speaker)
 Manufacturer: EDIFIER
 Operating Condition: Optical in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average


MEASUREMENT RESULT: "TUV-0118-8_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.355000	34.70	10.6	59	24.1	QP	L1	GND
	2.390000	27.40	11.0	56	28.6	QP	L1	GND
	8.470000	39.40	11.3	60	20.6	QP	L1	GND

MEASUREMENT RESULT: "TUV-0118-8_fin2"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.350000	34.80	10.6	49	14.2	AV	L1	GND
	4.230000	23.20	11.1	46	22.8	AV	L1	GND
	9.880000	37.70	11.3	50	12.3	AV	L1	GND

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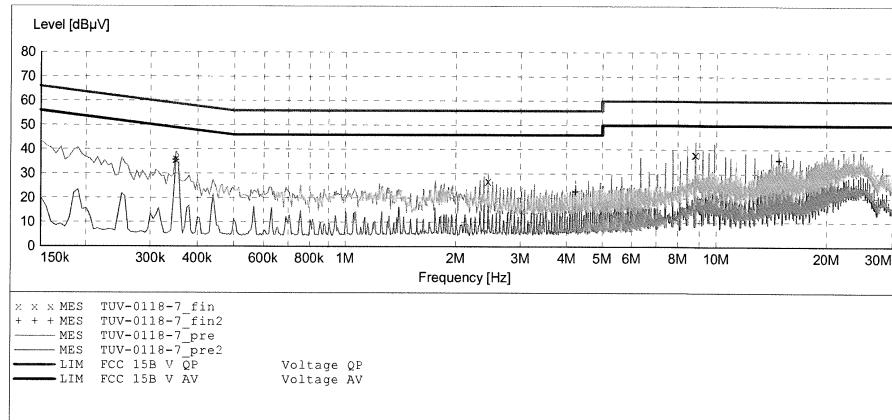
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(R Speaker)
 Manufacturer: EDIFIER
 Operating Condition: Optical in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Start	Stop	Step	Detector	Meas.	IF	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
				Average		
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
				Average		



MEASUREMENT RESULT: "TUV-0118-7_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.350000	36.10	10.6	59	22.9	QP	N	GND
	2.450000	27.00	11.0	56	29.0	QP	N	GND
	8.820000	38.00	11.3	60	22.0	QP	N	GND

MEASUREMENT RESULT: "TUV-0118-7_fin2"

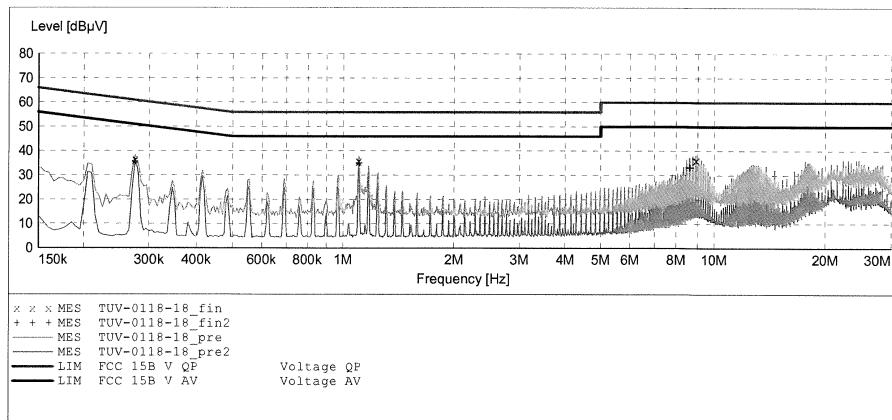
1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.350000	35.60	10.6	49	13.4	AV	N	GND
	4.230000	22.50	11.1	46	23.5	AV	N	GND
	14.815000	35.60	11.4	50	14.4	AV	N	GND

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ACCURATE TECHNOLOGY CO., LTD
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235 (Subwoofer)
 Manufacturer: EDIFIER
 Operating Condition: Aux in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB_STD_VTERM2 1.70					
Start Frequency	Stop Frequency	Step Width	Detector	Meas.	IF Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz NSLK8126 2008
			Average		
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz NSLK8126 2008
			Average		


MEASUREMENT RESULT: "TUV-0118-18_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	36.50	10.6	61	24.5	QP	L1	GND
	1.105000	35.80	10.9	56	20.2	QP	L1	GND
	8.930000	36.30	11.3	60	23.7	QP	L1	GND

MEASUREMENT RESULT: "TUV-0118-18_fin2"

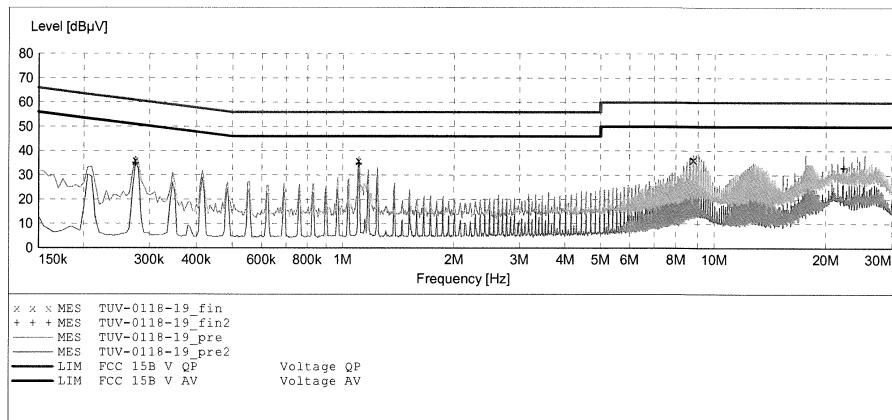
1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	35.50	10.6	51	15.5	AV	L1	GND
	1.105000	34.90	10.9	46	11.1	AV	L1	GND
	8.650000	33.10	11.3	50	16.9	AV	L1	GND

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ACCURATE TECHNOLOGY CO., LTD
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(Subwoofer)
 Manufacturer: EDIFIER
 Operating Condition: Aux in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB_STD_VTERM2 1.70
 Start Stop Step -SUB_STD_VTERM2 1.70
 Frequency Frequency Width Detector Meas. IF Transducer
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average


MEASUREMENT RESULT: "TUV-0118-19_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	36.00	10.6	61	25.0	QP	N	GND
	1.105000	35.90	10.9	56	20.1	QP	N	GND
	8.790000	36.50	11.3	60	23.5	QP	N	GND

MEASUREMENT RESULT: "TUV-0118-19_fin2"

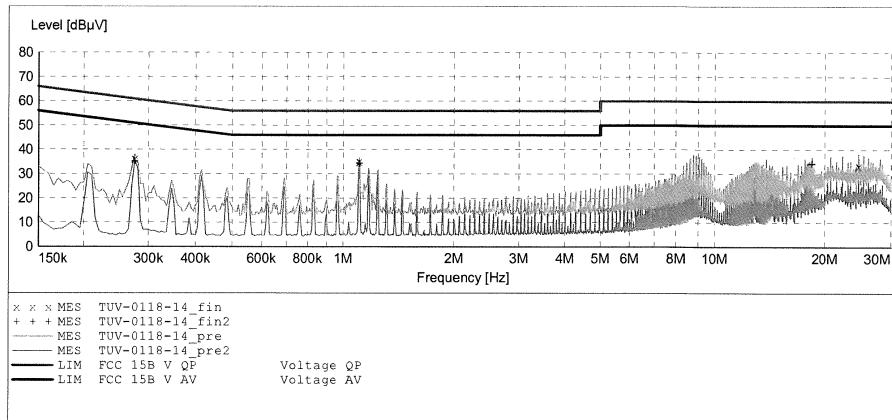
1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	34.90	10.6	51	16.1	AV	N	GND
	1.105000	34.70	10.9	46	11.3	AV	N	GND
	22.270000	32.90	11.4	50	17.1	AV	N	GND

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ACCURATE TECHNOLOGY CO., LTD
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235(Subwoofer)
 Manufacturer: EDIFIER
 Operating Condition: Optical in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB_STD_VTERM2 1.70
 Start Stop Step Detector Meas. IF Transducer
 Frequency Frequency Width Time Bandw.
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008
 Average
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008
 Average


MEASUREMENT RESULT: "TUV-0118-14_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	36.30	10.6	61	24.7	QP	L1	GND
	1.105000	35.10	10.9	56	20.9	QP	L1	GND
	24.580000	33.50	11.5	60	26.5	QP	L1	GND

MEASUREMENT RESULT: "TUV-0118-14_fin2"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	35.10	10.6	51	15.9	AV	L1	GND
	1.105000	34.30	10.9	46	11.7	AV	L1	GND
	18.430000	34.20	11.4	50	15.8	AV	L1	GND

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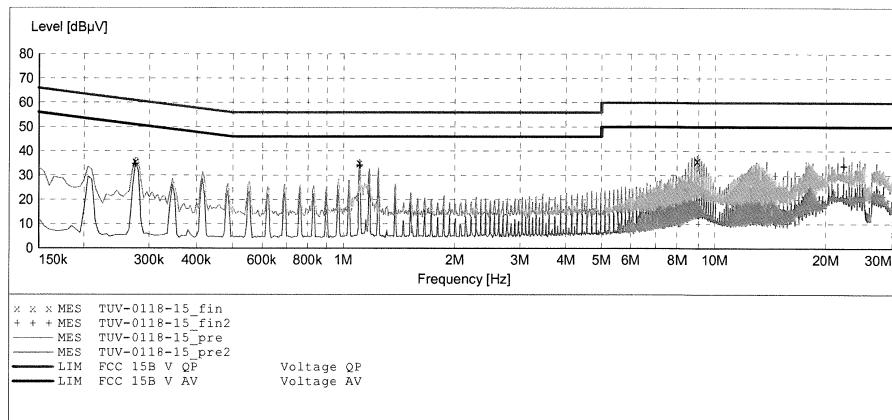
ACCURATE TECHNOLOGY CO., LTD

CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Multimedia Speaker M/N:e235 (Subwoofer)
 Manufacturer: EDIFIER
 Operating Condition: Optical in
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/18/2016 /

SCAN TABLE: "V 9K-30MHz fin"

Start Frequency	Stop Frequency	Step Width	Detector	Meas.	IF Time	Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126	2008
				Average			
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126	2008
				Average			



MEASUREMENT RESULT: "TUV-0118-15_fin"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	35.70	10.6	61	25.3	QP	N	GND
	1.105000	35.20	10.9	56	20.8	QP	N	GND
	8.920000	36.10	11.3	60	23.9	QP	N	GND

MEASUREMENT RESULT: "TUV-0118-15_fin2"

1/18/2016	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dB μ V	dB	dB μ V	dB			
	0.275000	34.70	10.6	51	16.3	AV	N	GND
	1.105000	34.10	10.9	46	11.9	AV	N	GND
	22.270000	33.80	11.4	50	16.2	AV	N	GND

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5.1.17 Radiated Emission

RESULT:

Pass

Date of testing	:	2016-01-25
Test standard	:	FCC Part 15.109 (a) ICES-003 Issue 6 January 2016
Test procedure	:	ANSI C63.4: 2014
Frequency range	:	30 - 6000MHz
Equipment Classification	:	Class B
Limits	:	FCC Part 15.109 (a) ICES-003 Issue 6 January 2016
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	AC 120V, 60Hz
Operation mode	:	B, C
Earthing	:	Not connected
Ambient temperature	:	23°C
Relative humidity	:	48%
Atmospheric pressure	:	101kPa

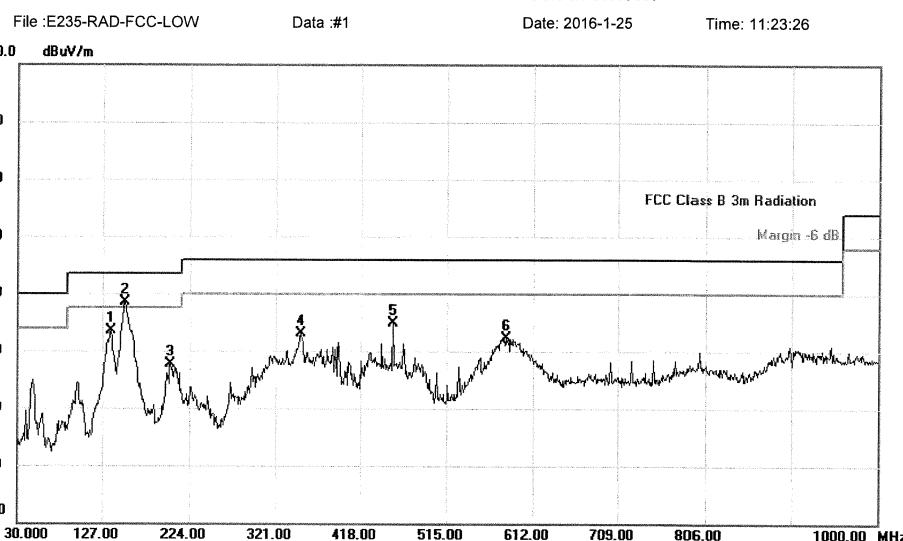
For details refer to following test plot.

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No.3.JinShaGang 1st Road,ShiXia,DaLang Town,DongGuan,China.
 Tel: (0769)-8318-3000 Fax:(0769)-8319-6000 Post Code: 523792
www.newbtl.com

Site: DG-CB03
 Limit: FCC Class B 3m Radiation
 EUT: Speaker
 M/N: E235
 Note: 1K+100Hz

Polarization: **Horizontal**
 Power: AC 120V/60Hz
 Distance: 3m
 Mode: Aux in
 Temperature: 22 (C)
 Humidity: 56 %

Radiated Emission Measurement


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1		136.7000	47.33	-13.74	33.59	43.50	-9.91	peak
2	*	152.2200	51.48	-12.88	38.60	43.50	-4.90	peak
3		202.6600	42.67	-15.06	27.61	43.50	-15.89	peak
4		350.1000	44.37	-11.34	33.03	46.00	-12.97	peak
5		454.8600	43.16	-8.23	34.93	46.00	-11.07	peak
6		580.9600	39.21	-6.83	32.38	46.00	-13.62	peak

*:Maximum data x:Over limit !:over margin

(Reference Only)

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BTL Inc.
be the best

 No.3.JinShaGang 1st Road,ShiXia,DaLang Town,DongGuan,China.
 Tel: (0769)-8318-3000 Fax:(0769)-8319-6000 Post Code: 523792
www.newbtl.com

 Site: DG-CB03
 Limit: FCC Class B 3m Radiation
 EUT: Speaker
 M/N: E235
 Note: 1K+100Hz

 Polarization: **Vertical**
 Power: AC 120V/60Hz
 Distance: 3m
 Mode: Aux in
 Temperature: 22 (C)
 Humidity: 56 %

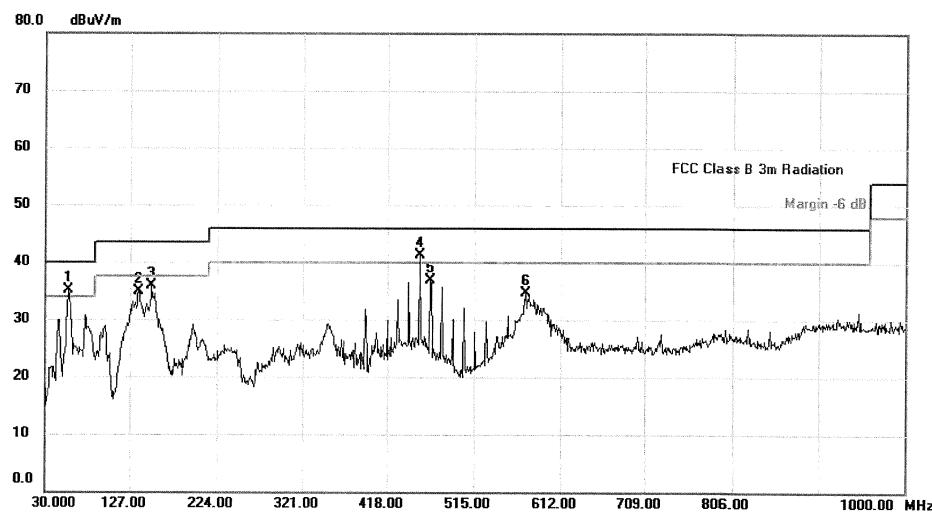
Radiated Emission Measurement

File :E235-RAD-FCC-LOW

Data #:2

Date: 2016-1-25

Time: 11:28:15



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin dB	Detector	Comment
1	!	56.1900	48.90	-13.88	35.02	40.00	-4.98	peak	
2		136.7000	48.57	-13.74	34.83	43.50	-8.67	peak	
3		151.2500	48.93	-12.93	36.00	43.50	-7.50	peak	
4	*	454.8600	49.59	-8.23	41.36	46.00	-4.64	peak	
5		466.5000	45.55	-8.69	36.86	46.00	-9.14	peak	
6		572.2300	41.03	-6.36	34.67	46.00	-11.33	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

File :E235-RAD-FCC-LOWData #:2

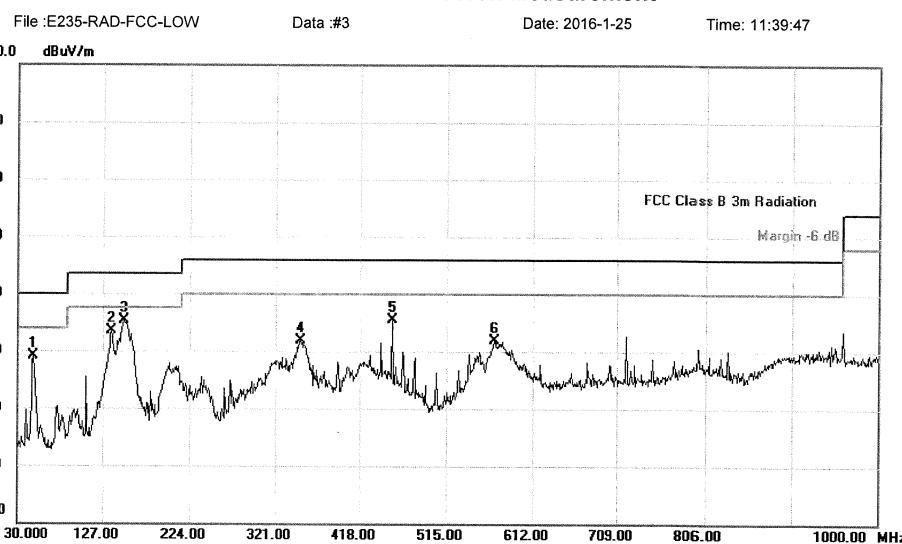
Page: 1

Engineer Signature:

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No.3.JinShaGang 1st Road,ShiXia,DaLang Town,DongGuan,China.
 Tel: (0769)-8318-3000 Fax:(0769)-8319-6000 Post Code: 523792
www.newbtl.com

Site: DG-CB03 Polarization: **Horizontal** Temperature: 22 (C)
 Limit: FCC Class B 3m Radiation Power: AC 120V/60Hz Humidity: 56 %
 EUT: Speaker Distance: 3m
 M/N: E235 Mode: Optical in
 Note: 1K+100Hz

Radiated Emission Measurement


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin dB	Detector	Comment
1		47.4600	42.67	-13.62	29.05	40.00	-10.95	peak	
2		136.7000	47.29	-13.74	33.55	43.50	-9.95	peak	
3 *		151.2500	48.28	-12.93	35.35	43.50	-8.15	peak	
4		350.1000	43.25	-11.34	31.91	46.00	-14.09	peak	
5		454.8600	43.79	-8.23	35.56	46.00	-10.44	peak	
6		568.3500	38.04	-6.14	31.90	46.00	-14.10	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

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No.3.JinShaGang 1st Road,ShiXia,DaLang Town,DongGuan,China.
 Tel: (0769)-8318-3000 Fax:(0769)-8319-6000 Post Code: 523792
www.newbtl.com

Site: DG-CB03
 Limit: FCC Class B 3m Radiation
 EUT: Speaker
 M/N: E235
 Note: 1K+100Hz

Polarization: *Vertical*
 Power: AC 120V/60Hz
 Distance: 3m
 Mode: Optical in
 Temperature: 22 (C)
 Humidity: 56 %

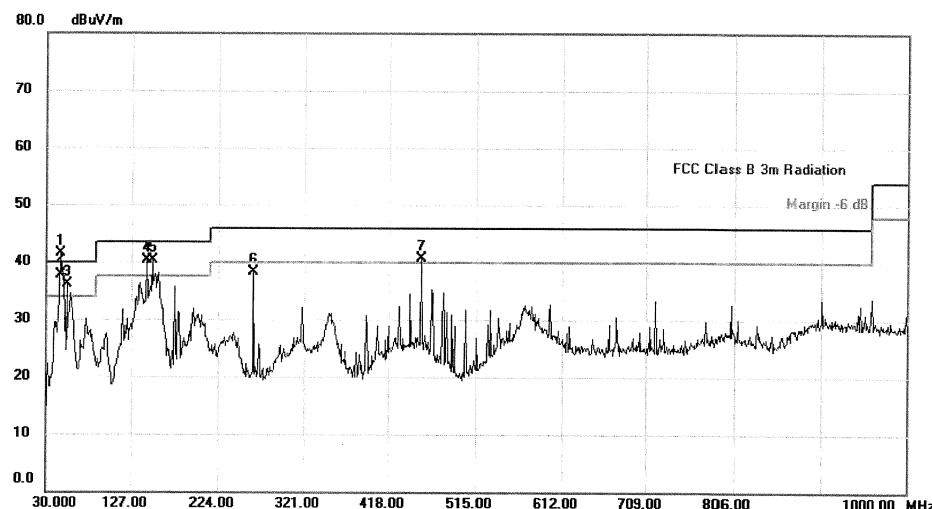
Radiated Emission Measurement

File :E235-RAD-FCC-LOW

Data #:4

Date: 2016-1-25

Time: 11:43:24



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Margin	Detector	Comment
1	*	45.5200	54.81	-13.25	41.56	40.00	1.56	peak	
2	!	45.5200	50.90	-13.25	37.65	40.00	-2.35	QP	
3	!	53.2800	49.82	-13.67	36.15	40.00	-3.85	peak	
4	!	144.4600	54.00	-13.60	40.40	43.50	-3.10	peak	
5	!	150.2800	53.22	-13.00	40.22	43.50	-3.28	peak	
6		263.7700	52.37	-14.06	38.31	46.00	-7.69	peak	
7	!	454.8600	48.96	-8.23	40.73	46.00	-5.27	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

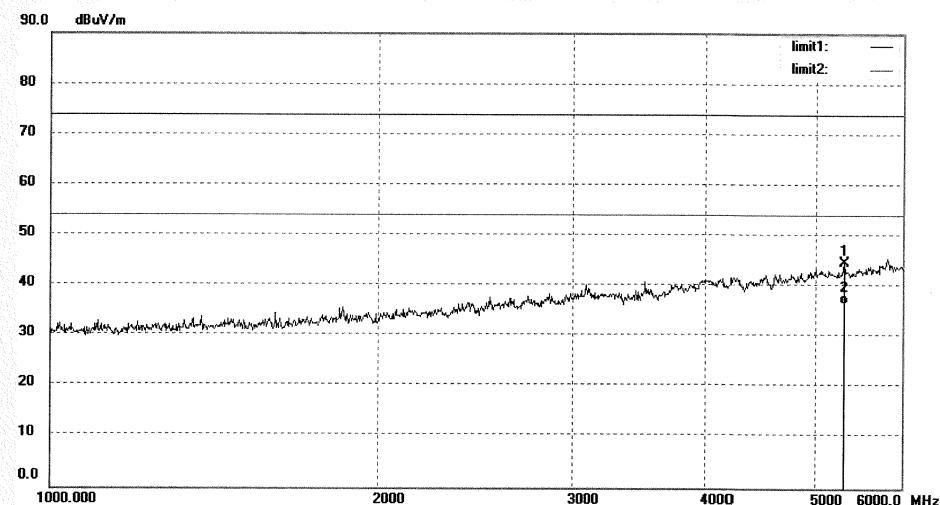
Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #470
 Standard: FCC Class B 3M Radiated
 Test item: Radiation Test
 Temp.(C)/Hum.(%) 23 C / 48 %
 EUT: Multimedia Speaker
 Mode: Aux in
 Model: e235
 Manufacturer: EDIFIER

Polarization: Horizontal
 Power Source: AC 120V/60Hz
 Date: 2016-1-13
 Time:
 Engineer Signature: LGWADE
 Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5302.233	43.58	1.01	44.59	74.00	-29.41	peak			
2	5302.233	35.62	1.01	36.63	54.00	-17.37	Avg			

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #471

Polarization: Vertical

Standard: FCC Class B 3M Radiated

Power Source: AC 120V/60Hz

Test item: Radiation Test

Date: 2016-1-13

Temp.(C)/Hum.(%) 23 C / 48 %

Time:

EUT: Multimedia Speaker

Engineer Signature: LGWADE

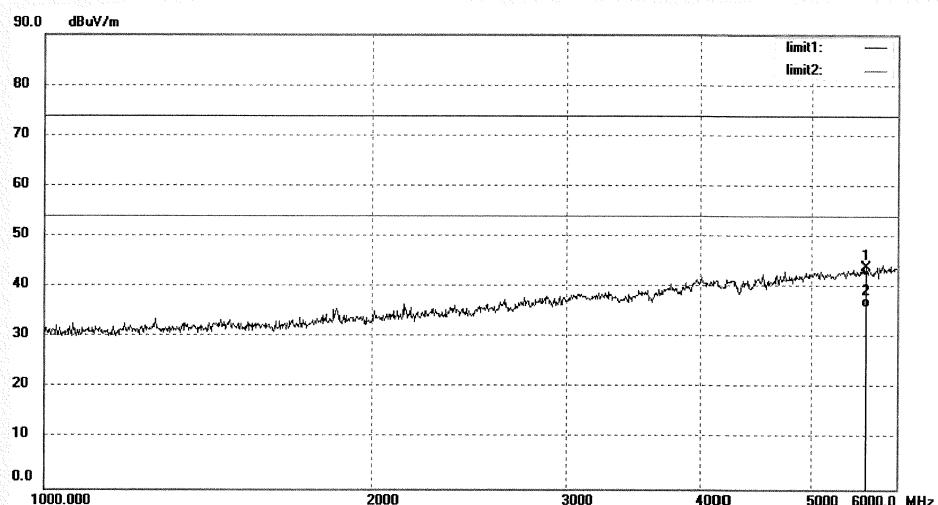
Mode: Aux in

Distance: 3m

Model: e235

Manufacturer: EDIFIER

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5615.128	42.63	1.40	44.03	74.00	-29.97	peak			
2	5615.128	34.74	1.40	36.14	54.00	-17.86	Avg			

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ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: Igwade #472

Polarization: Horizontal

Standard: FCC Class B 3M Radiated

Power Source: AC 120V/60Hz

Test item: Radiation Test

Date: 2016-1-13

Temp.(C)/Hum.(%) 23 C / 48 %

Time:

EUT: Multimedia Speaker

Engineer Signature: LGWADE

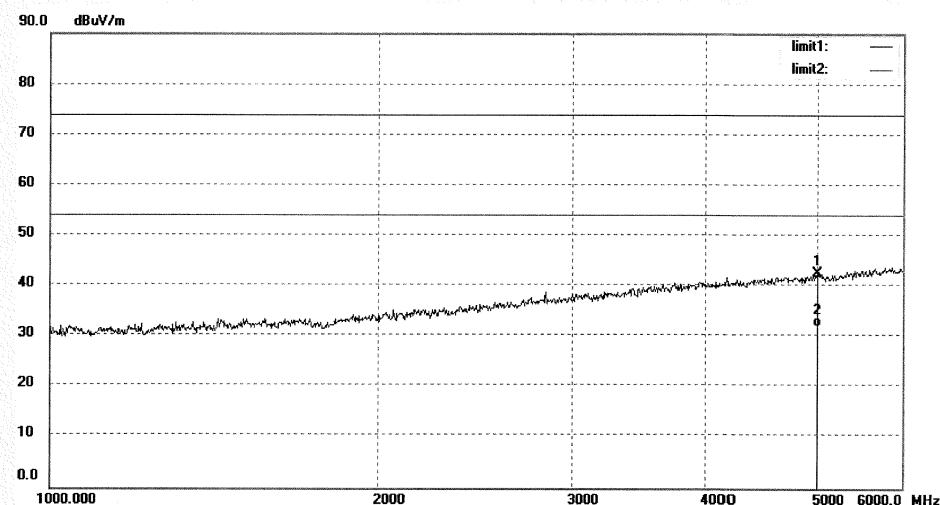
Mode: Optical in

Distance: 3m

Model: e235

Manufacturer: EDIFIER

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5010.345	42.05	0.67	42.72	74.00	-31.28	peak			
2	5010.345	31.36	0.67	32.03	54.00	-21.97	AVG			

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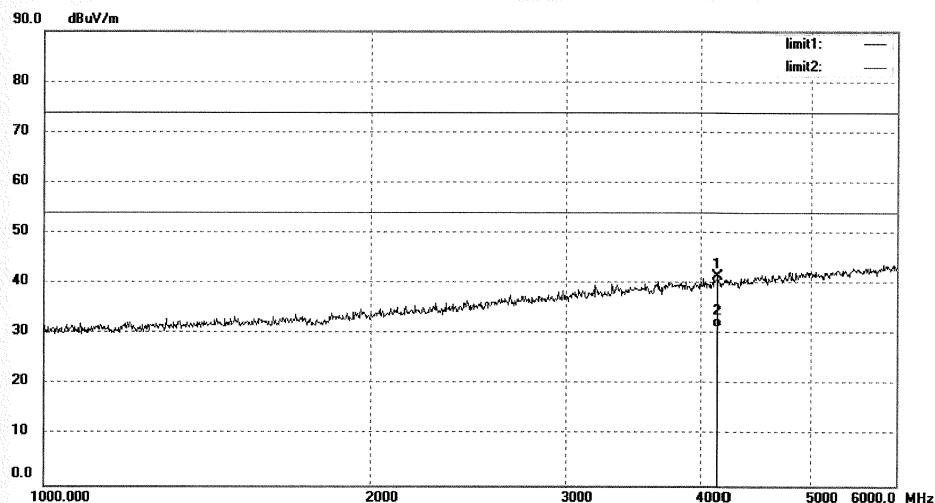
ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.:	Igwade #473	Polarization:	Vertical
Standard:	FCC Class B 3M Radiated	Power Source:	AC 120V/60Hz
Test item:	Radiation Test	Date:	2016-1-13
Temp.(C)/Hum.(%)	23 C / 48 %	Time:	
EUT:	Multimedia Speaker	Engineer Signature:	LGWADE
Mode:	Optical in	Distance:	3m
Model:	e235		
Manufacturer:	EDIFIER		

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	4142.023	43.06	-1.51	41.55	74.00	-32.45	peak			
2	4140.023	32.83	-1.51	31.32	54.00	-22.68	AVG			

1. Safety Human exposure

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT:
Pass

Test standard : RSS-102 Issue 5 March 2015
 FCC KDB Publication 447498 D01 v06
 FCC KDB Publication 447498 D03 v01
 FCC Part 2 (Section 2.1091)

MPE Calculation Formula:

$$Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$$

Where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Calculation Result for Single antenna transmissions:

Operation Frequency (MHz)	Max. Output Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2450MHz	4.02	2.5	20	0.000893	1
5800MHz	8.32	3.2	20	0.002823	1

Calculation Result for Multi antenna transmissions:

Condition	Power Density (mW/cm ²)	Limit (mW/cm ²)
Bluetooth + WiFi	0.003716	1

Conclusion:

Therefore the maximum calculations of above situations are less than the Power Density Limit.

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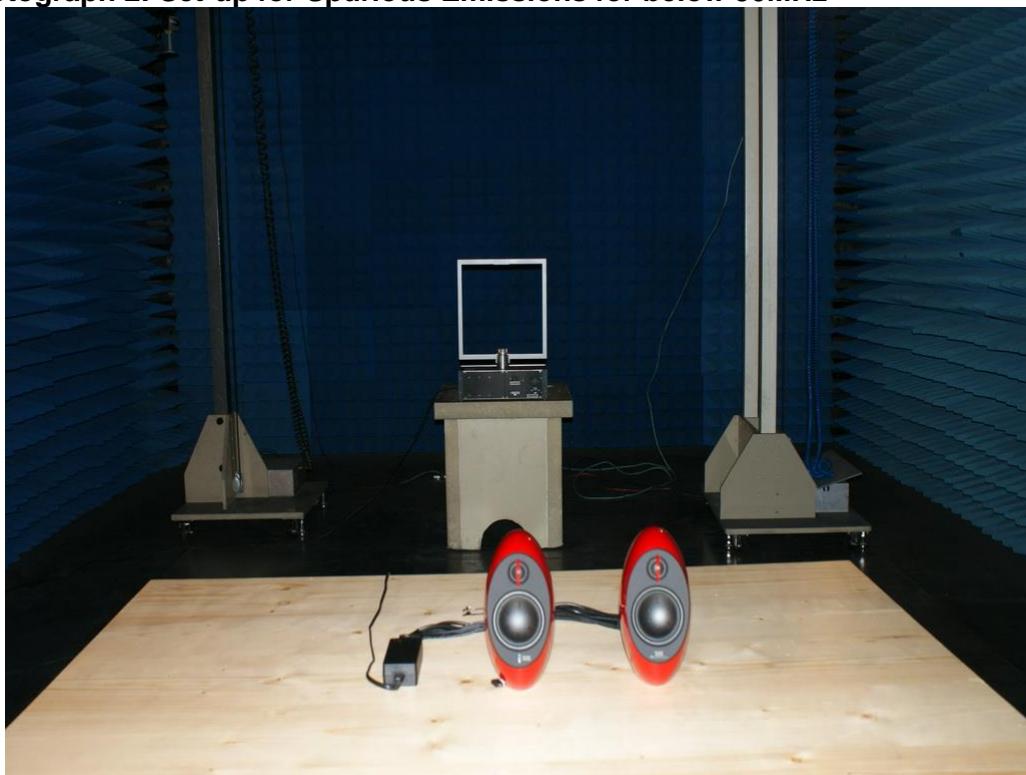
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2. Photographs of the Test Set-Up

Photograph 1: Set-up for Conducted Emissions



Photograph 2: Set-up for Spurious Emissions for below 30MHz



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Photograph 3: Set-up for Spurious Emissions for 30 - 1000MHz



Photograph 4: Set-up for Spurious Emissions for 1 - 18GHz



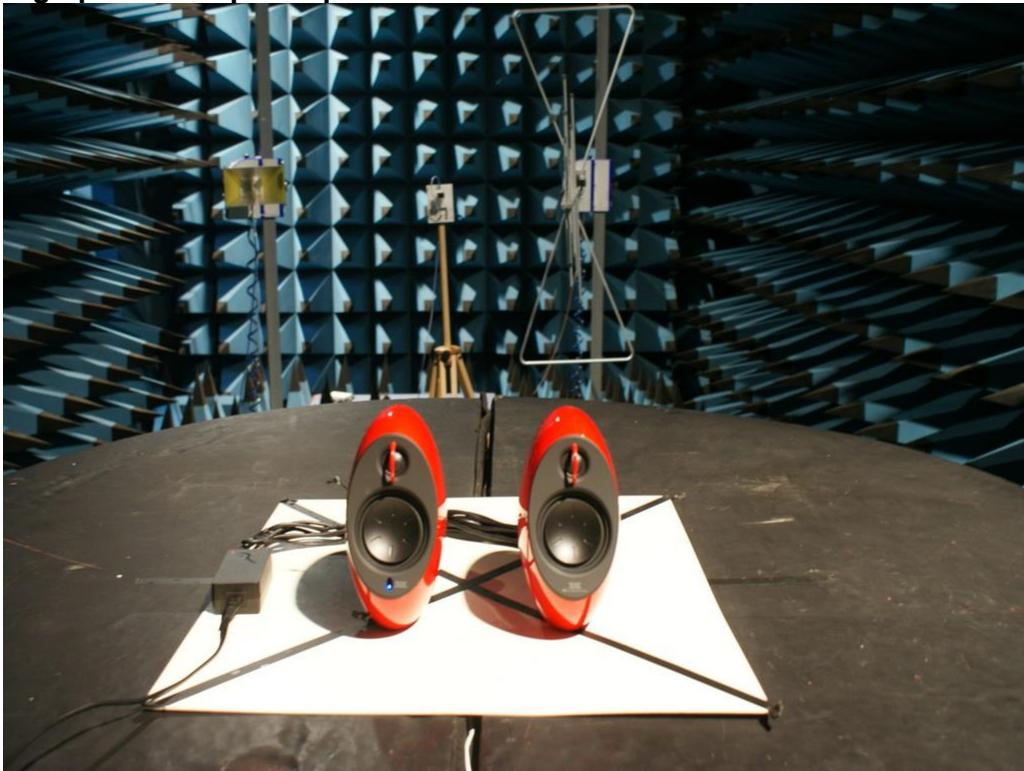
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Photograph 5: Set-up for Spurious Emissions for 18 - 26.5GHz



Photograph 6: Set-up for Spurious Emissions for 26.5 - 40GHz



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