ACCURATE TECHNOLOGY CO.,LTD

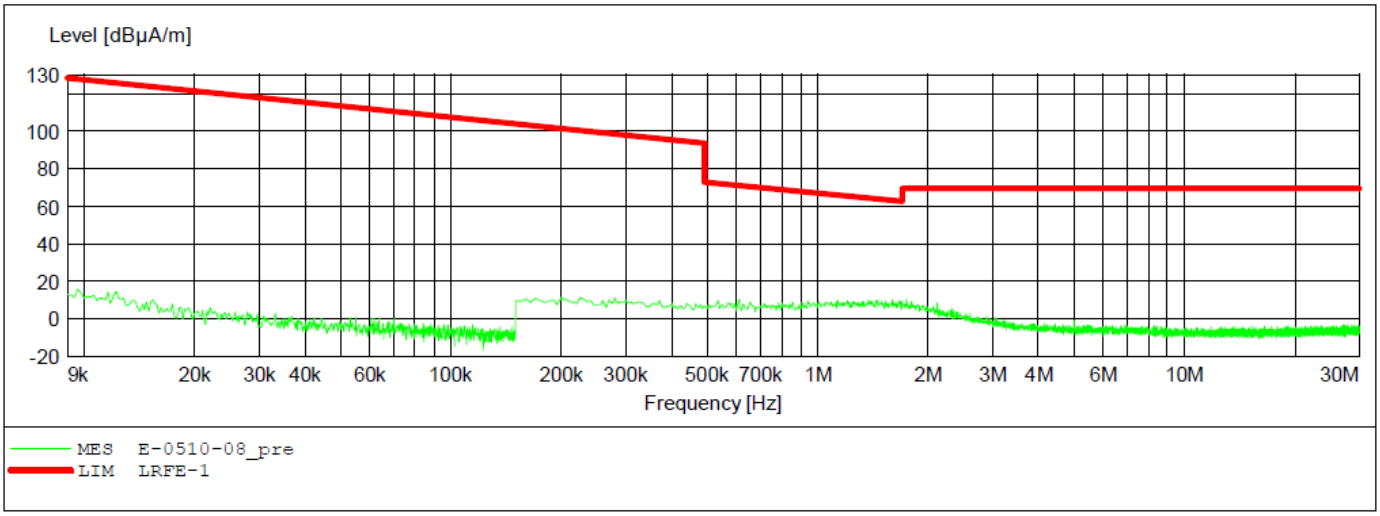
FCC Class B 3M Radiated

EUT: ACTIVE SPEAKER SYSTEM M/N:A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: WADE
Test Specification: AC 120V/60Hz
Comment: Y
Start of Test: 2018-5-10 /

SCAN TABLE: "LFRE Fin"

Short Description: SUB STD VTERM2 1.70

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	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



ACCURATE TECHNOLOGY CO.,LTD

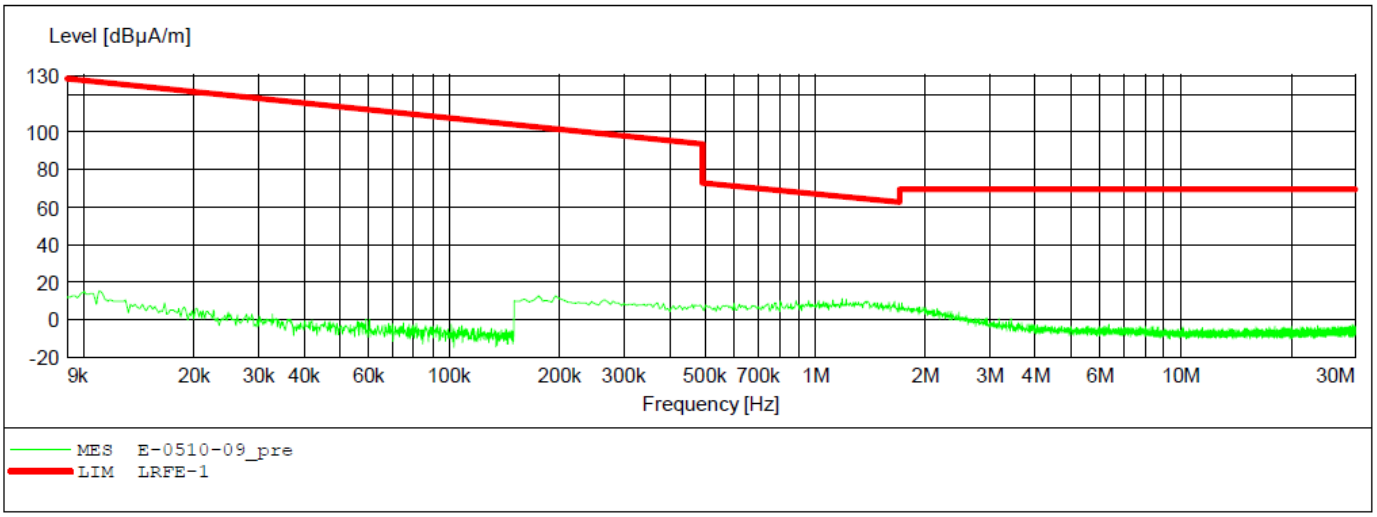
FCC Class B 3M Radiated

EUT: ACTIVE SPEAKER SYSTEM M/N:A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.
Operating Condition: TX 2480MHz
Test Site: 2# Chamber
Operator: WADE
Test Specification: AC 120V/60Hz
Comment: Z
Start of Test: 2018-5-10 /

SCAN TABLE: "LFRE Fin"

Short Description: SUB STD VTERM2 1.70

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	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M

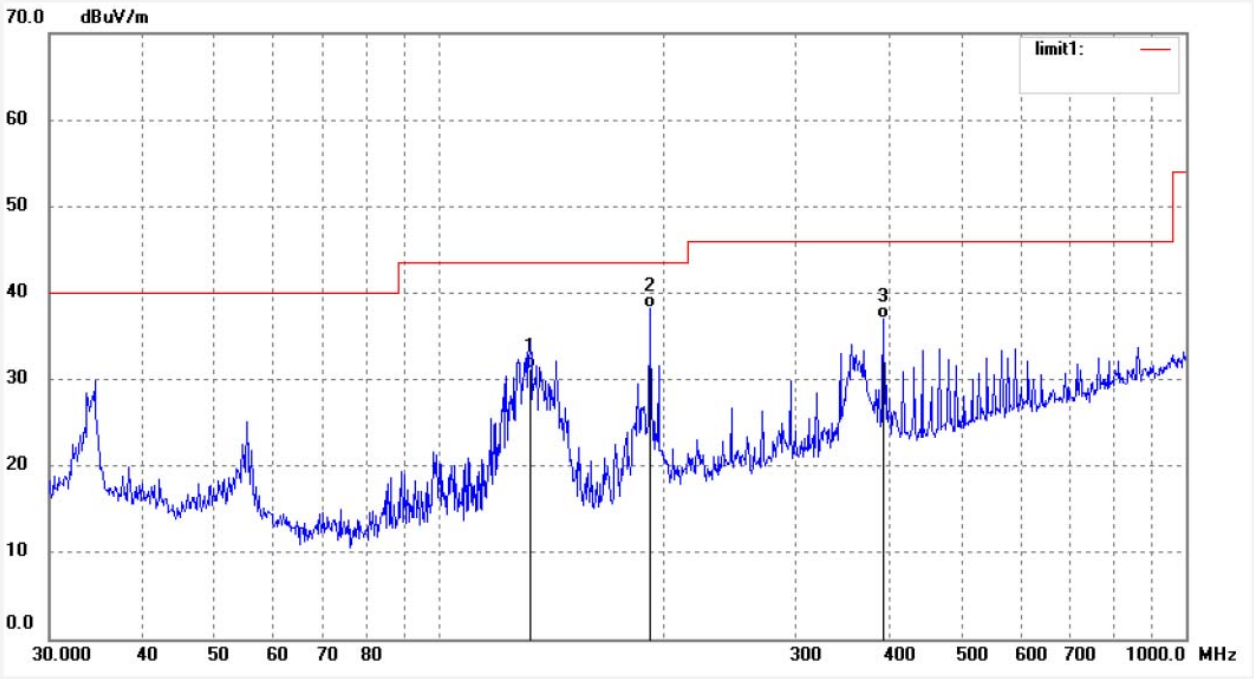


30MHz-1000MHz test data

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.: LGW2018 #971	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	132.2204	45.15	-13.84	31.31	43.50	-12.19	QP			
2	191.0738	50.75	-12.44	38.31	43.50	-5.19	QP			
3	393.4723	43.79	-6.70	37.09	46.00	-8.91	QP			

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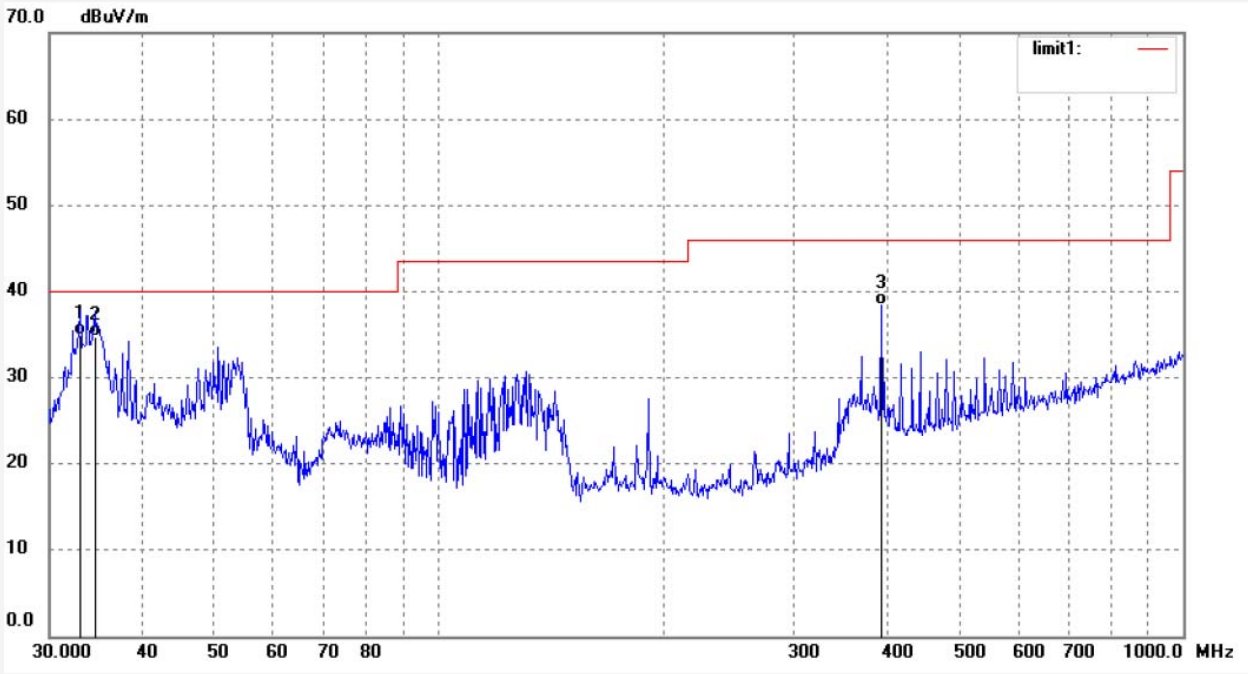
Job No.: LGW2018 #972	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.9791	44.75	-9.81	34.94	40.00	-5.06	QP			
2	34.5172	45.00	-10.27	34.73	40.00	-5.27	QP			
3	393.4723	45.10	-6.70	38.40	46.00	-7.60	QP			

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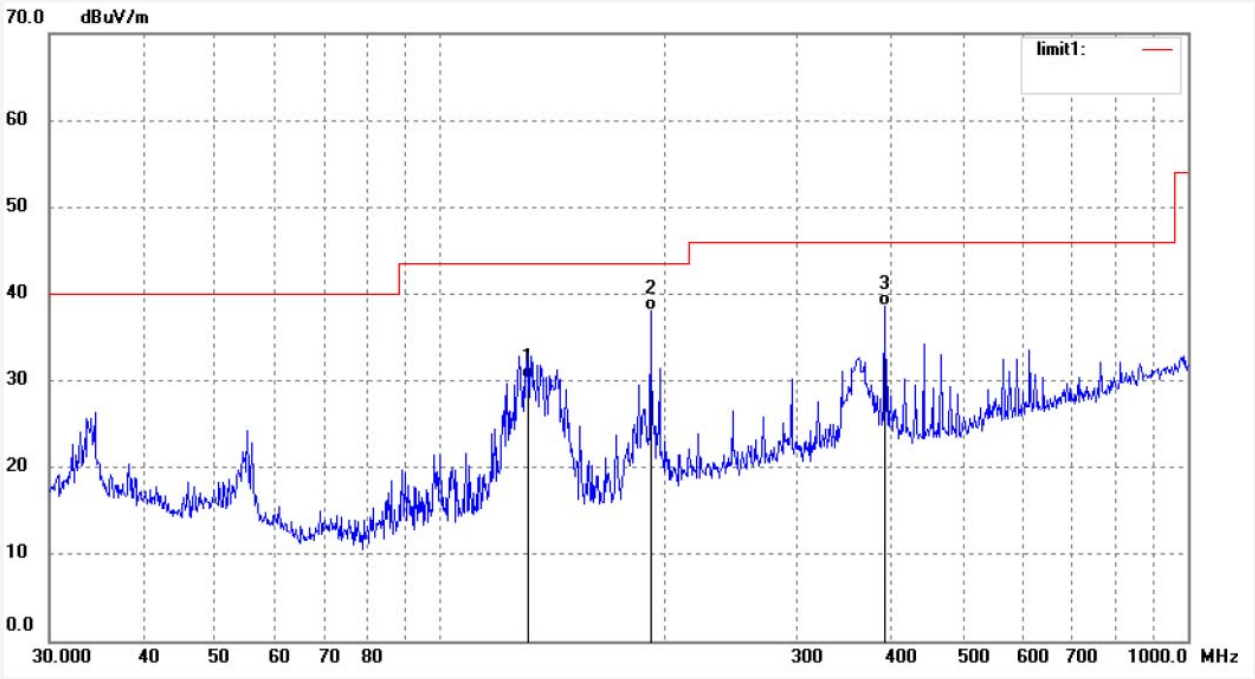
Job No.: LGW2018 #974
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: ACTIVE SPEAKER SYSTEM
Mode: TX 2441MHz
Model: A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/05/07/
Time:
Engineer Signature: WADE
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	131.2965	43.92	-13.81	30.11	43.50	-13.39	QP			
2	191.0738	50.58	-12.44	38.14	43.50	-5.36	QP			
3	393.4723	45.23	-6.70	38.53	46.00	-7.47	QP			

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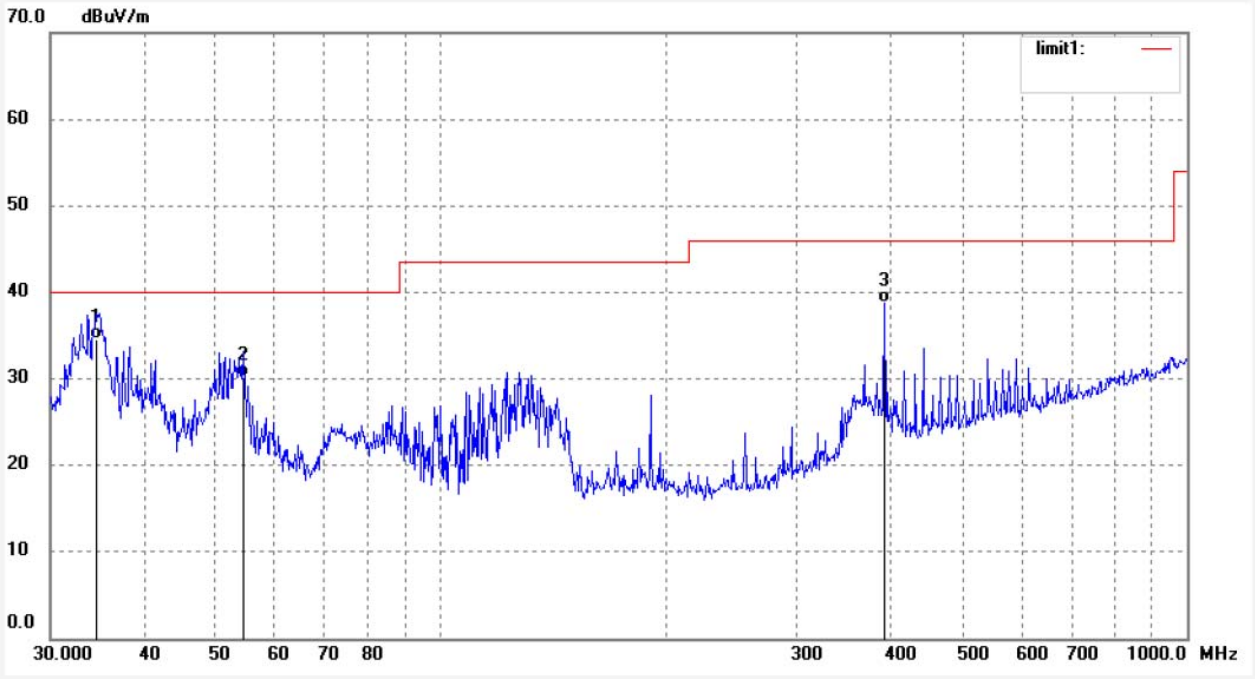
Fax:+86-0755-26503396

Job No.: LGW2018 #973	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	34.5172	44.84	-10.27	34.57	40.00	-5.43	QP			
2	54.4515	43.09	-12.91	30.18	40.00	-9.82	QP			
3	393.4723	45.45	-6.70	38.75	46.00	-7.25	QP			

ACCURATE TECHNOLOGY CO., LTD.
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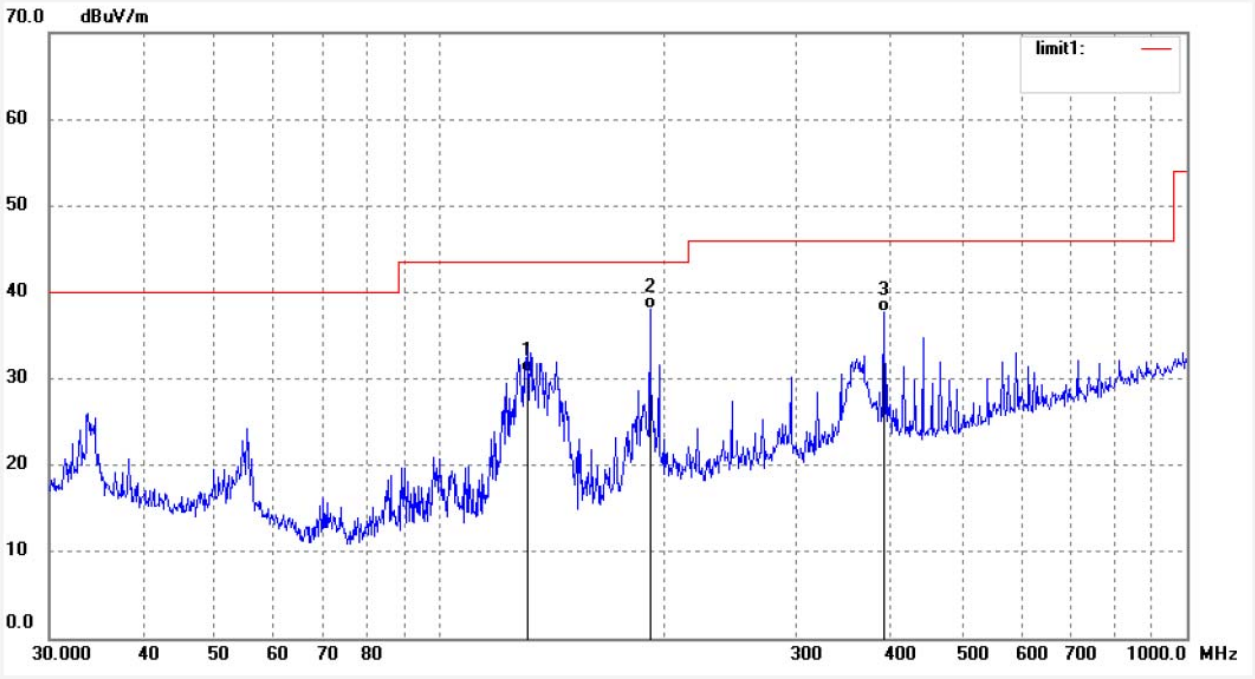
Job No.: LGW2018 #975	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	131.2965	44.54	-13.81	30.73	43.50	-12.77	QP			
2	191.0738	50.45	-12.44	38.01	43.50	-5.49	QP			
3	393.4723	44.43	-6.70	37.73	46.00	-8.27	QP			

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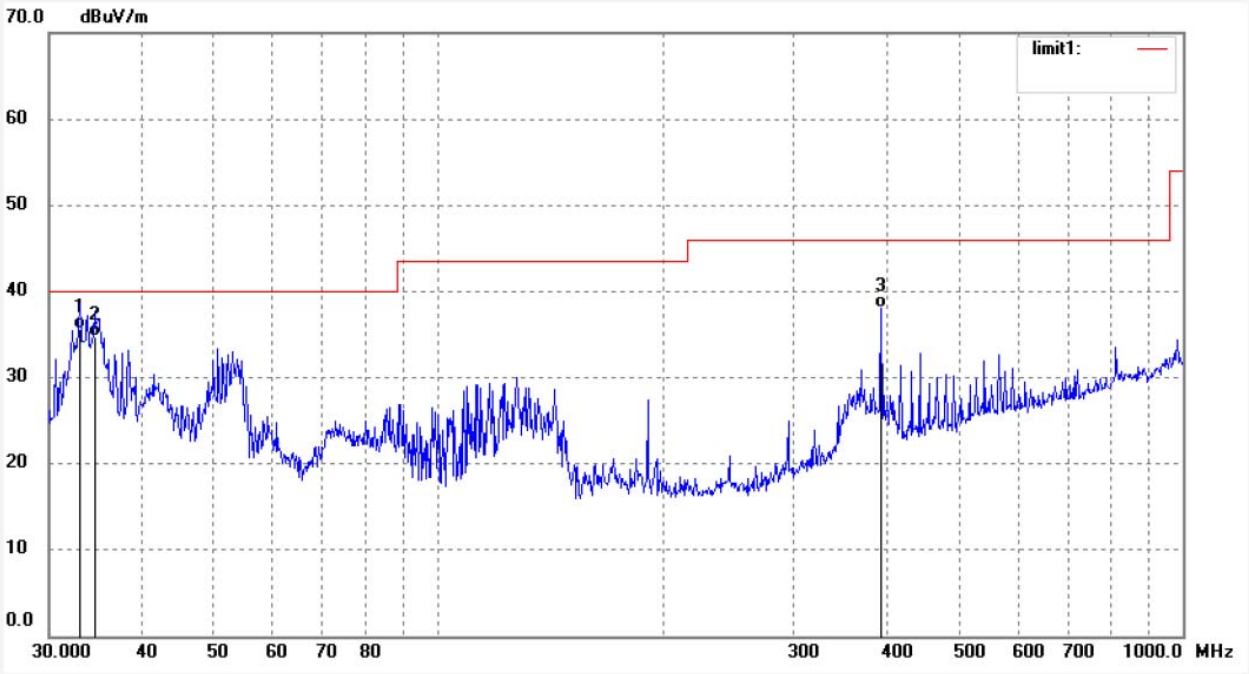
Fax:+86-0755-26503396

Job No.: LGW2018 #976	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.9791	45.38	-9.81	35.57	40.00	-4.43	QP			
2	34.5172	44.96	-10.27	34.69	40.00	-5.31	QP			
3	393.4723	44.82	-6.70	38.12	46.00	-7.88	QP			

1GHz-18GHz test data

ACCURATE TECHNOLOGY CO., LTD.
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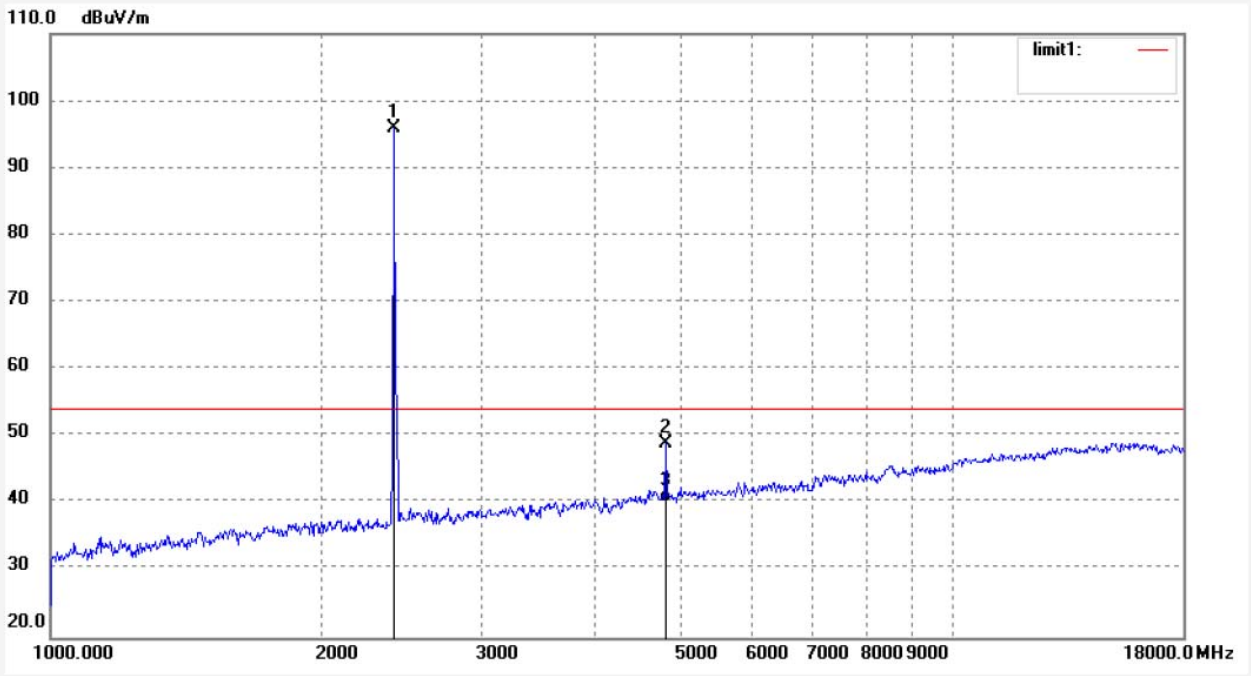
Job No.: LGW2018 #939	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	94.97	0.89	95.86	/	/	peak			
2	4804.024	41.50	7.40	48.90	74.00	-25.10	peak			
3	4804.024	32.84	7.40	40.24	54.00	-13.76	AVG			

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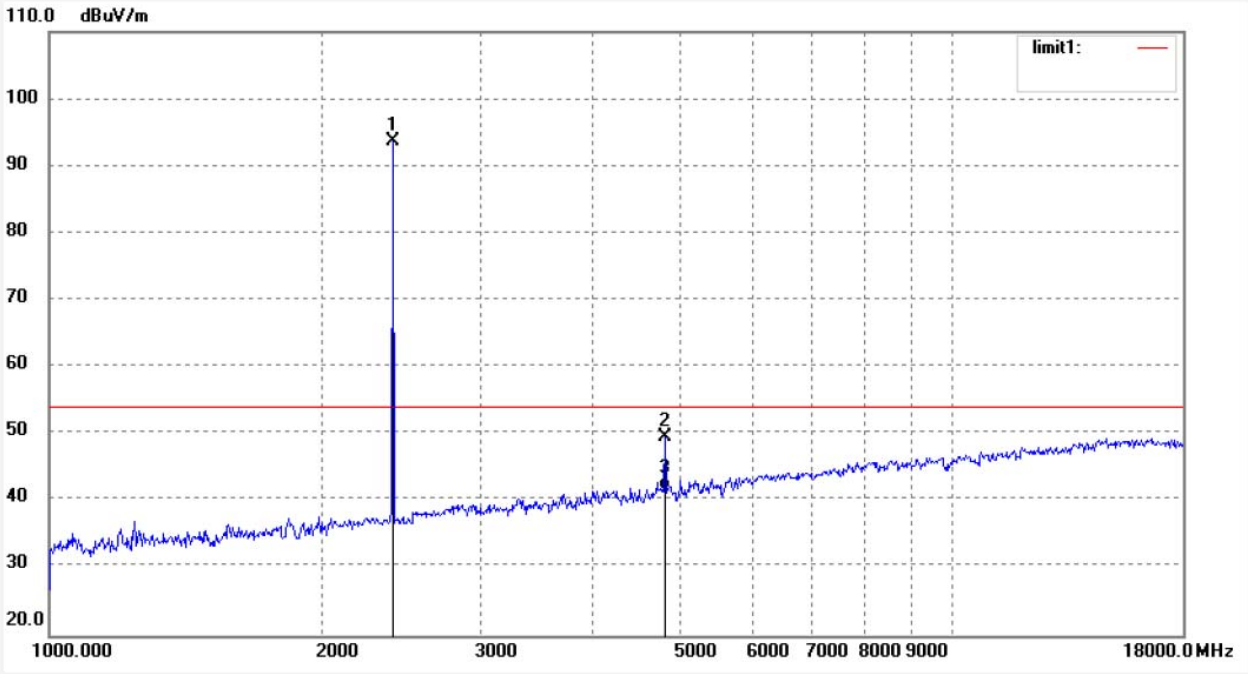
Job No.: LGW2018 #940	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	92.76	0.89	93.65	/	/	peak			
2	4804.025	42.10	7.40	49.50	74.00	-24.50	peak			
3	4804.025	34.25	7.40	41.65	54.00	-12.35	AVG			

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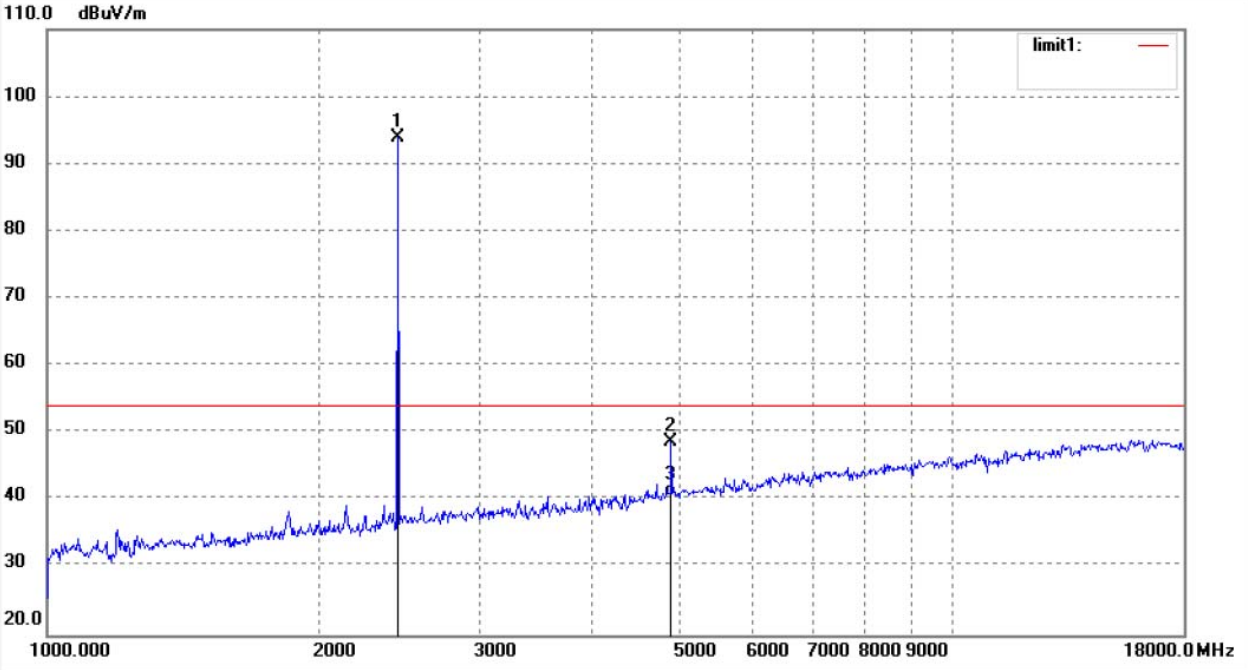
Fax:+86-0755-26503396

Job No.: LGW2018 #943	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	92.88	1.06	93.94	/	/	peak			
2	4882.026	40.61	8.11	48.72	74.00	-25.28	peak			
3	4882.026	32.43	8.11	40.54	54.00	-13.46	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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Site: 2# Chamber
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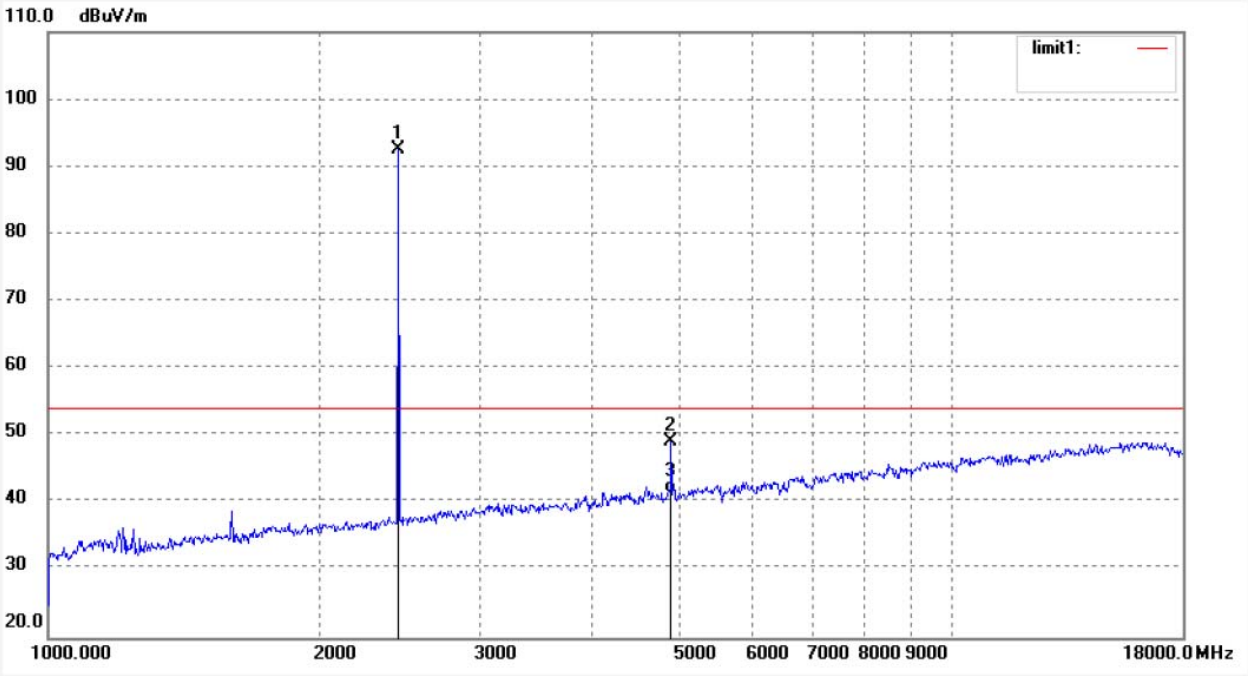
Fax:+86-0755-26503396

Job No.: LGW2018 #944	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	91.61	1.06	92.67	/	/	peak			
2	4882.027	41.05	8.11	49.16	74.00	-24.84	peak			
3	4882.027	33.41	8.11	41.52	54.00	-12.48	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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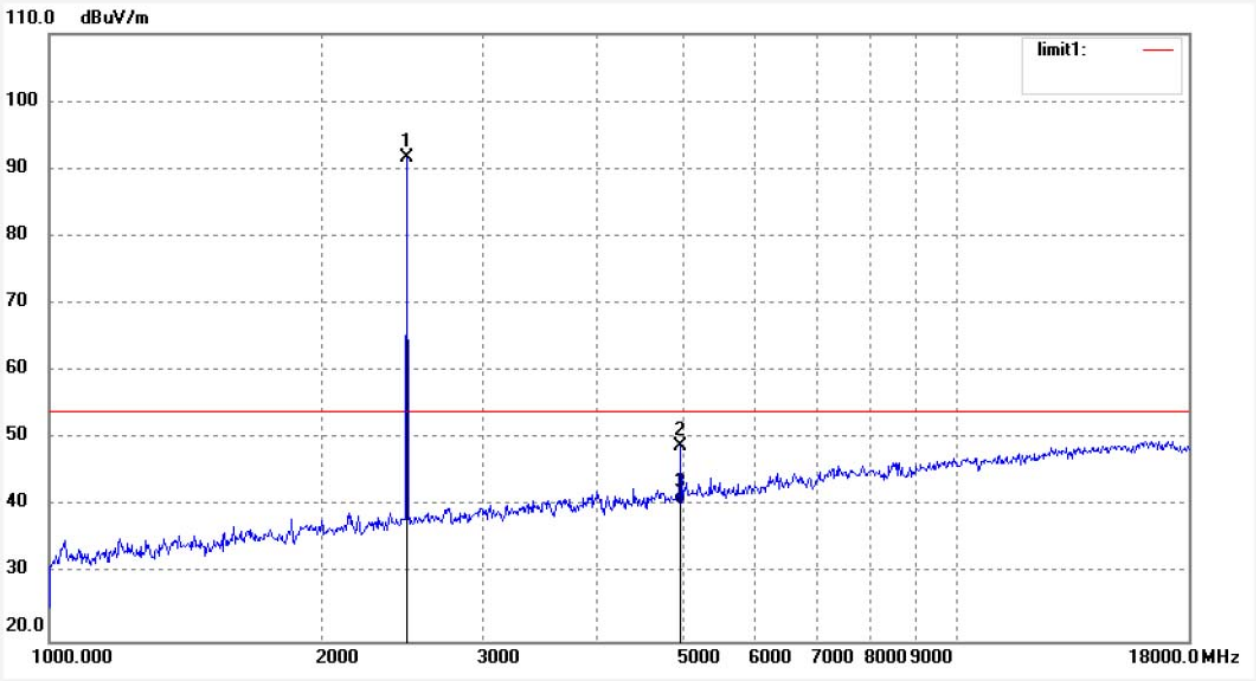
Job No.: LGW2018 #946	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	90.56	1.10	91.66	/	/	peak			
2	4960.028	40.24	8.60	48.84	74.00	-25.16	peak			
3	4960.028	31.68	8.60	40.28	54.00	-13.72	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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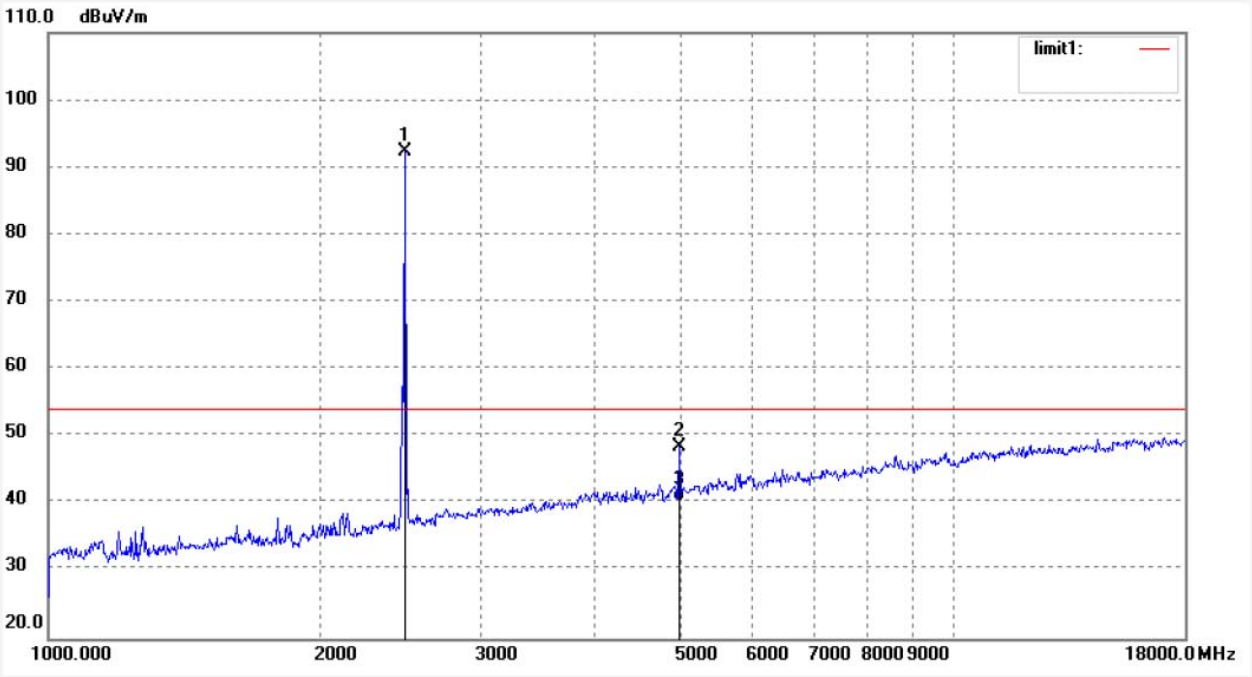
Job No.: LGW2018 #945	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	91.16	1.10	92.26	/	/	peak			
2	4960.029	39.91	8.60	48.51	74.00	-25.49	peak			
3	4960.029	31.74	8.60	40.34	54.00	-13.66	AVG			

18GHz-26.5GHz test data

ACCURATE TECHNOLOGY CO., LTD.
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Site: 2# Chamber
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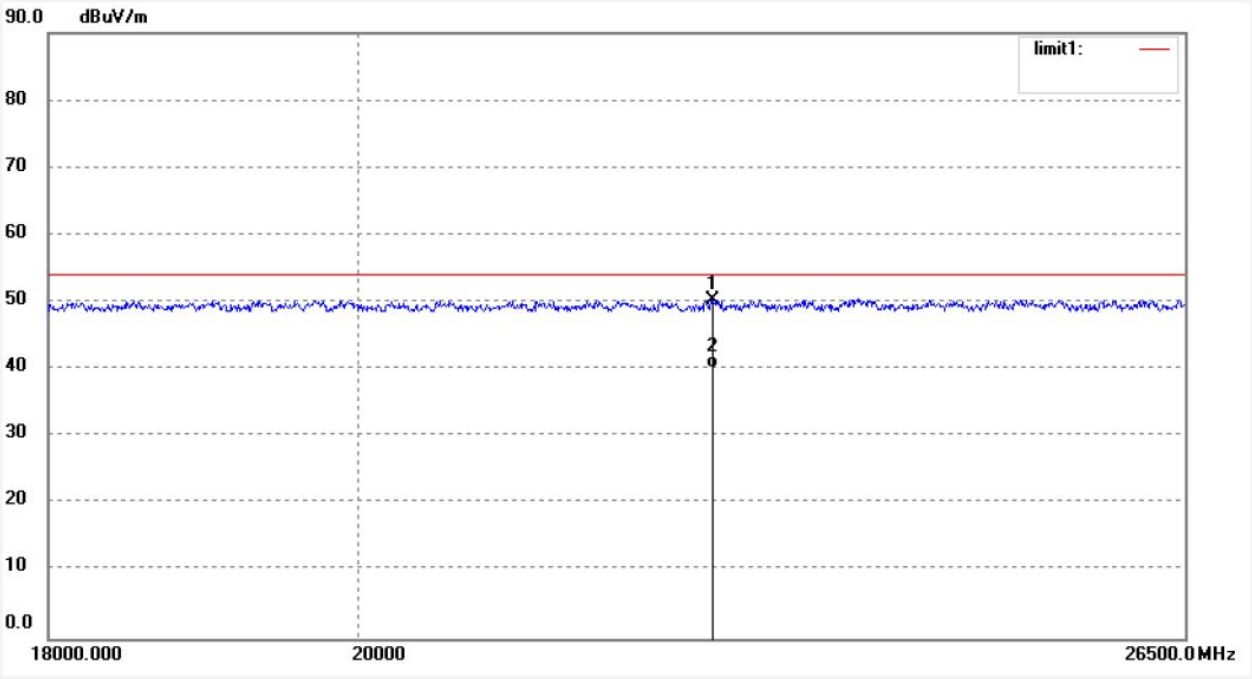
Fax:+86-0755-26503396

Job No.: LGW2018 #950	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	22561.551	10.58	39.80	50.38	74.00	-23.62	peak			
2	22561.551	0.34	39.80	40.14	54.00	-13.86	AVG			

ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
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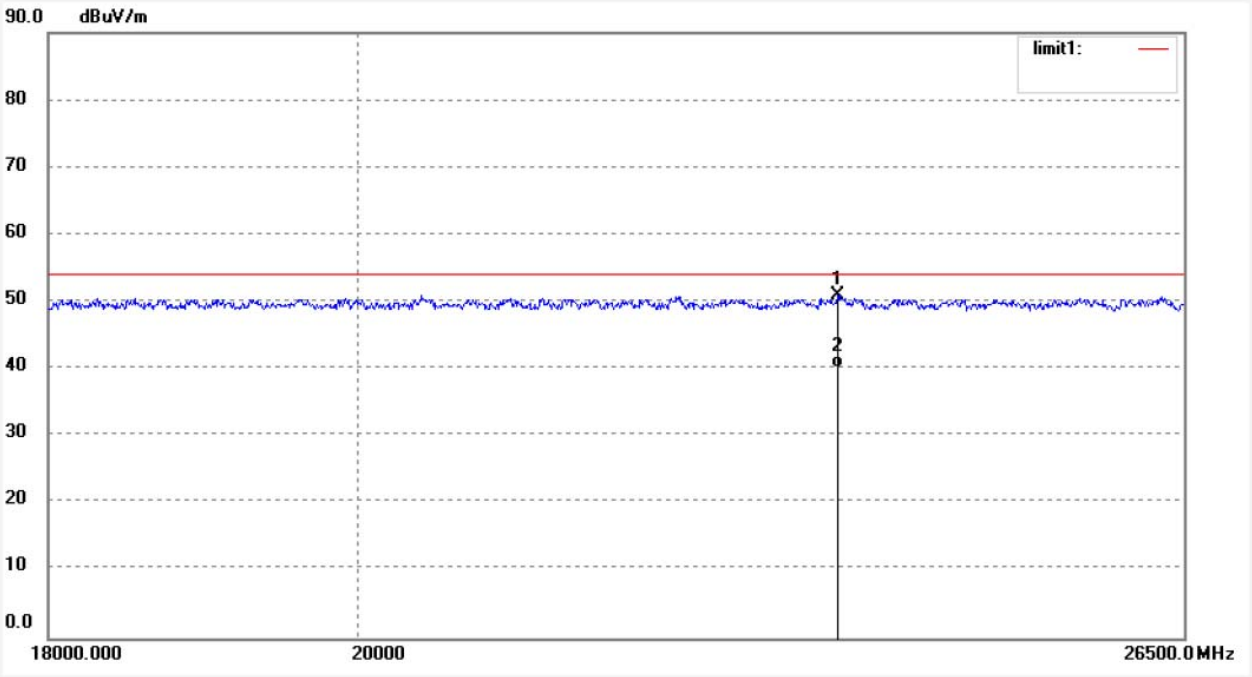
Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2018 #949
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: ACTIVE SPEAKER SYSTEM
Mode: TX 2402MHz
Model: A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.

Polarization: Vertical
Power Source: AC 120V/60Hz
Date: 18/05/07/
Time:
Engineer Signature: WADE
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	23551.252	11.17	39.69	50.86	74.00	-23.14	peak			
2	23551.252	0.56	39.69	40.25	54.00	-13.75	AVG			

ACCURATE TECHNOLOGY CO., LTD.
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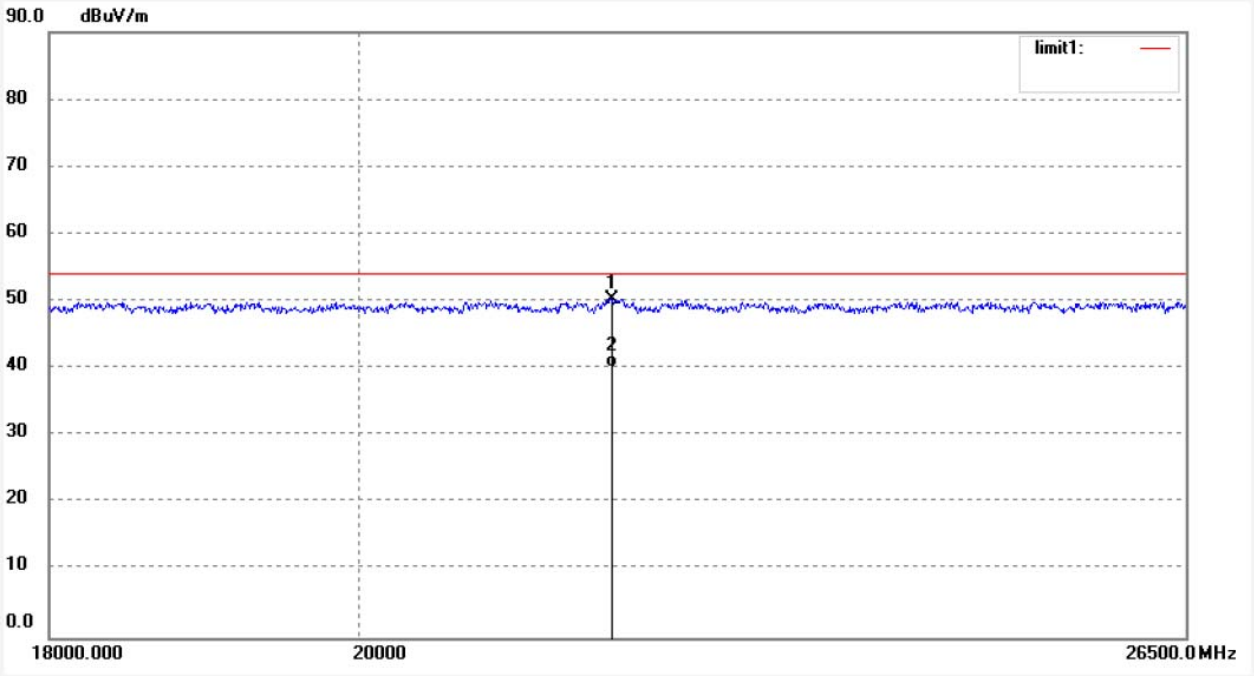
Fax:+86-0755-26503396

Job No.: LGW2018 #951
Standard: FCC Class B 3M Radiated
Test item: Radiation Test
Temp.(C)/Hum.(%) 23 C / 48 %
EUT: ACTIVE SPEAKER SYSTEM
Mode: TX 2441MHz
Model: A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.

Polarization: Horizontal
Power Source: AC 120V/60Hz
Date: 18/05/07/
Time:
Engineer Signature: WADE
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	21798.134	11.24	39.05	50.29	74.00	-23.71	peak			
2	21798.134	1.19	39.05	40.24	54.00	-13.76	AVG			

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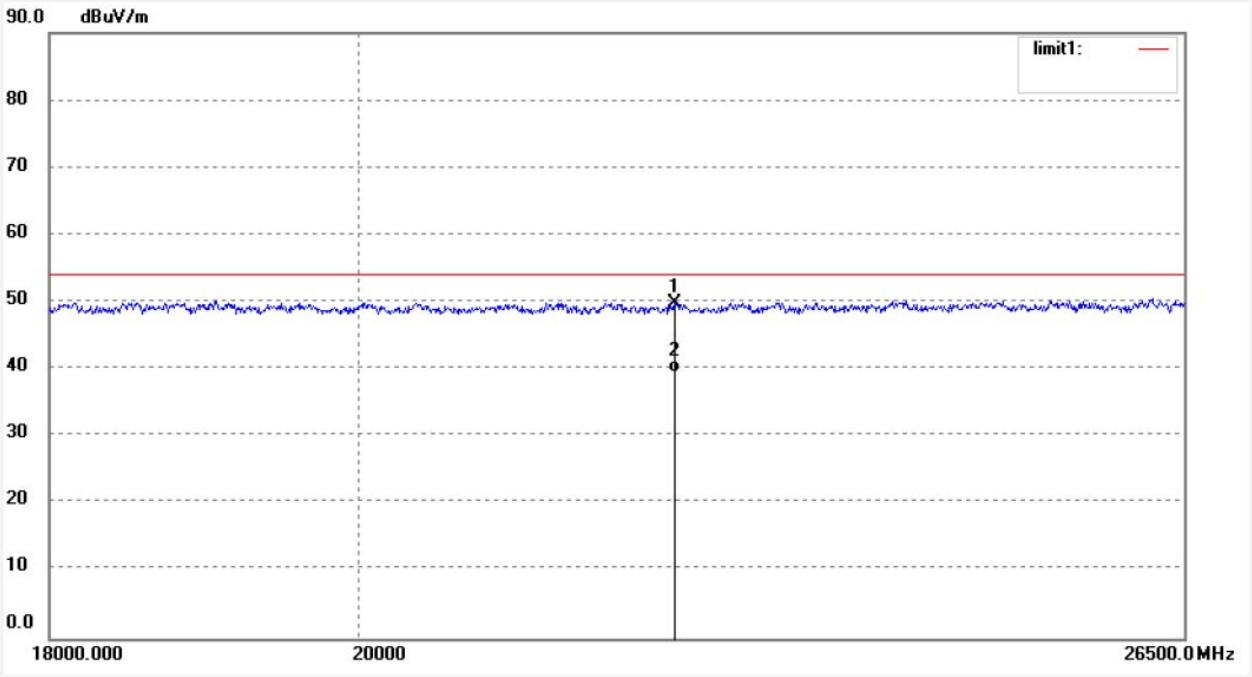
Job No.: LGW2018 #952	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2441MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	22275.416	10.52	39.30	49.82	74.00	-24.18	peak			
2	22275.416	0.26	39.30	39.56	54.00	-14.44	AVG			

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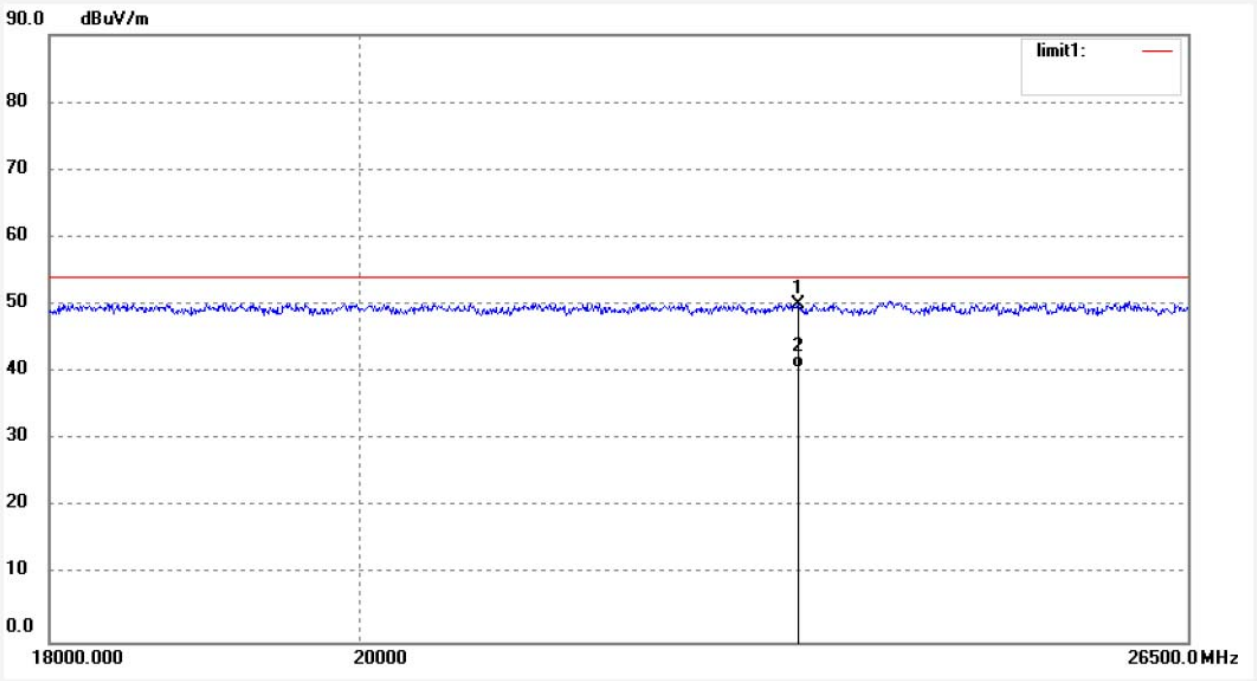
Job No.: LGW2018 #954	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	23216.619	10.25	39.78	50.03	74.00	-23.97	peak			
2	23216.619	0.79	39.78	40.57	54.00	-13.43	AVG			

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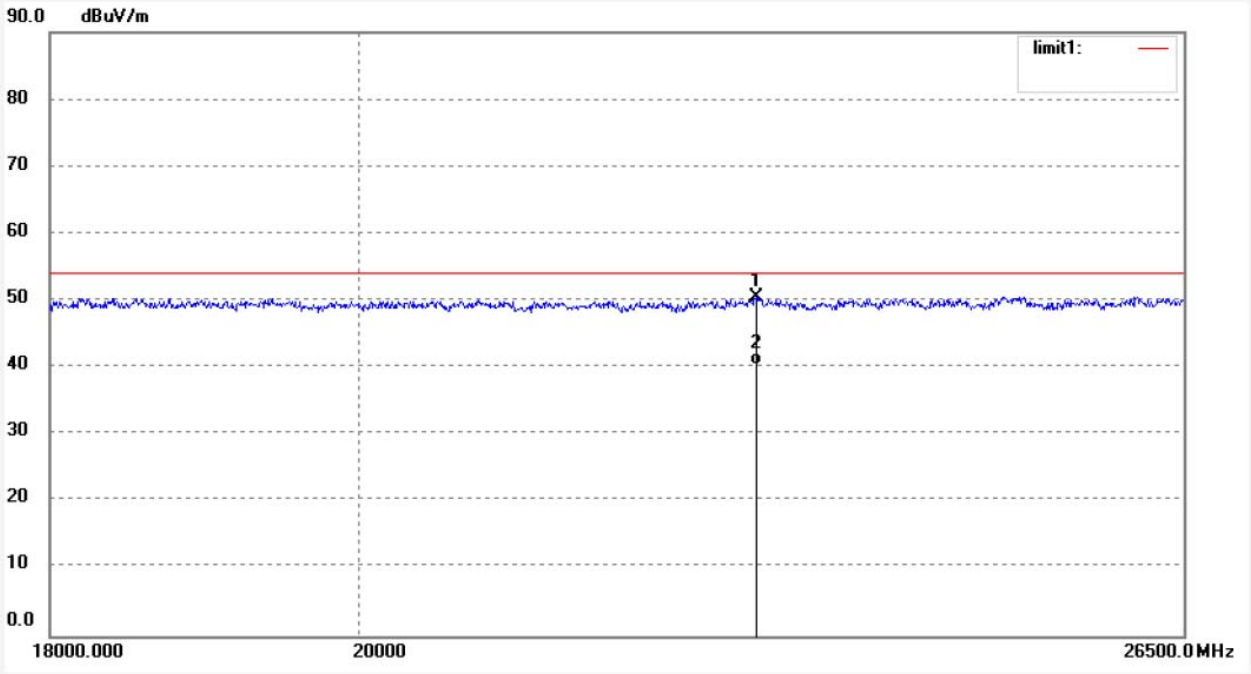
Job No.: LGW2018 #953	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

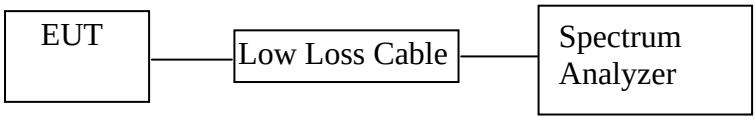
Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	22904.452	10.75	39.74	50.49	74.00	-23.51	peak			
2	22904.452	0.61	39.74	40.35	54.00	-13.65	AVG			

11.BAND EDGE COMPLIANCE TEST

11.1.Block Diagram of Test Setup



(EUT: ACTIVE SPEAKER SYSTEM)

11.2.The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

11.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

11.4.Operating Condition of EUT

11.4.1.Setup the EUT and simulator as shown as Section 11.1.

11.4.2.Turn on the power of all equipment.

11.4.3.Let the EUT work in TX (Hopping off, Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

11.5.Test Procedure

11.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

11.5.2.Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz with convenient frequency span including 100 kHz bandwidth from band edge.

11.5.3.The band edges was measured and recorded.

11.6.Test Result

Non-hopping mode

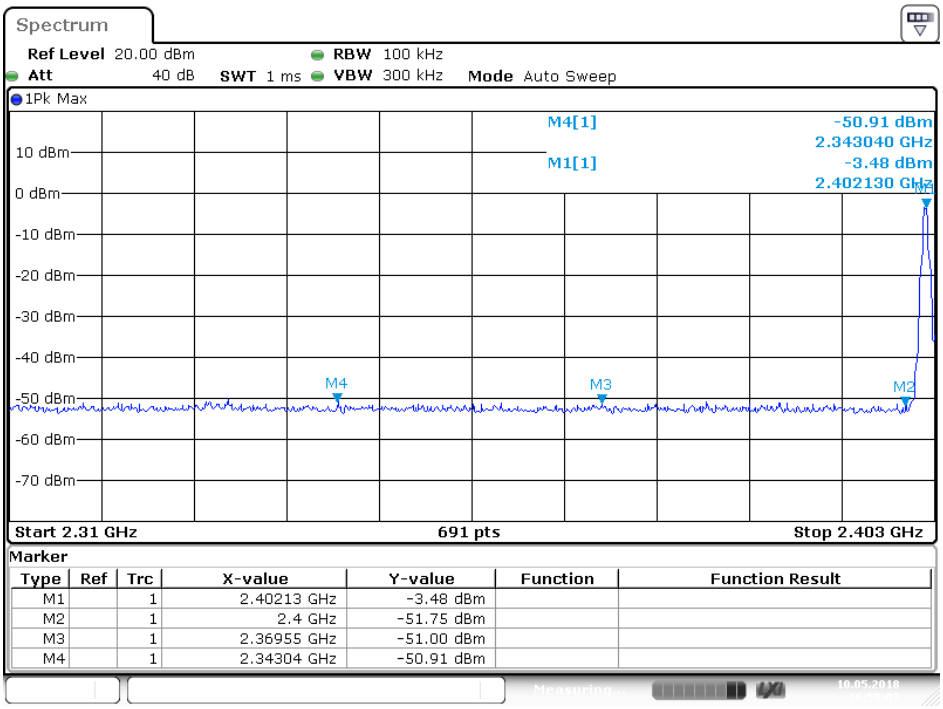
Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
BDR mode		
2343.04	47.43	> 20dBc
2488.65	53.62	> 20dBc
EDR mode		
2369.29	44.39	> 20dBc
2489.287	49.45	> 20dBc

Hopping mode

Frequency (MHz)	Result of Band Edge (dBc)	Limit of Band Edge (dBc)
BDR mode		
2352.14	47.36	> 20dBc
2486.936	51.93	> 20dBc
EDR mode		
2381.70	43.17	> 20dBc
2487.701	48.21	> 20dBc

Non-hopping mode

BDR mode



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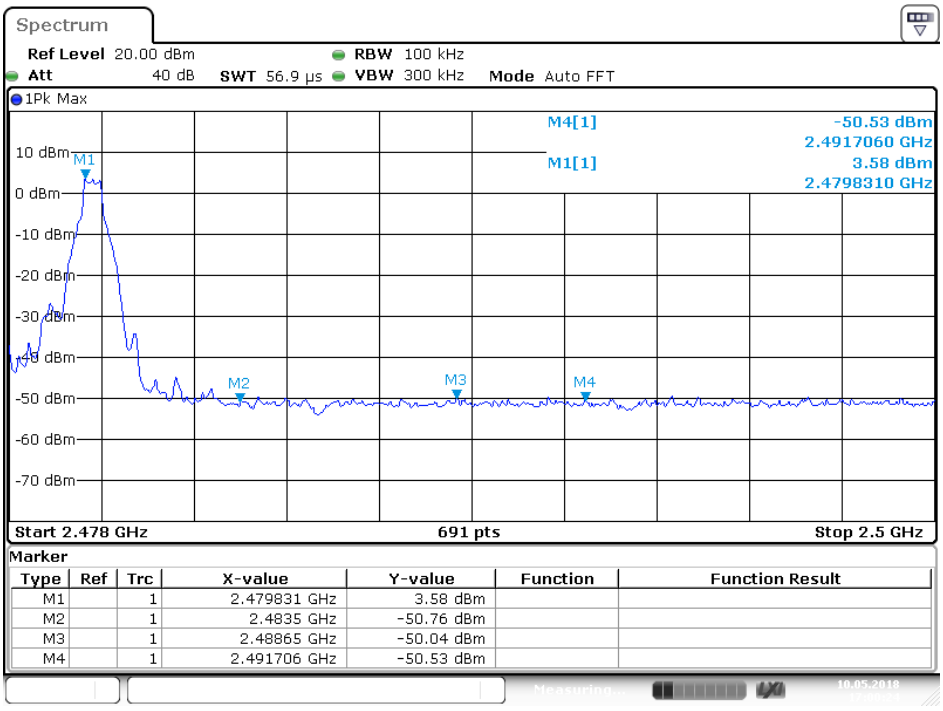
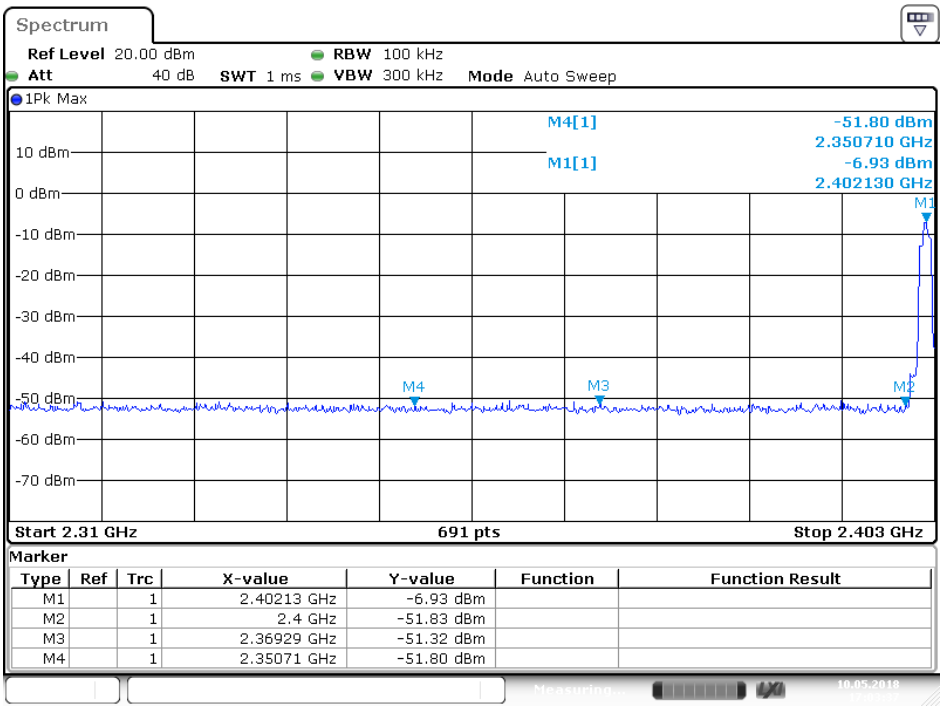


Date: 10.MAY.2018 17:00:23

EDR mode



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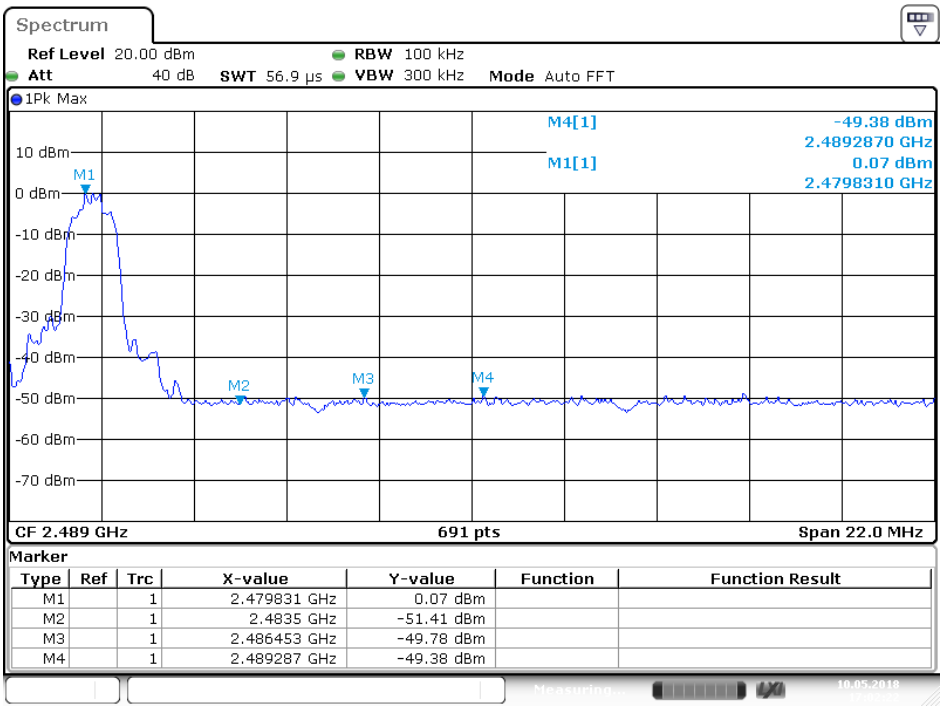
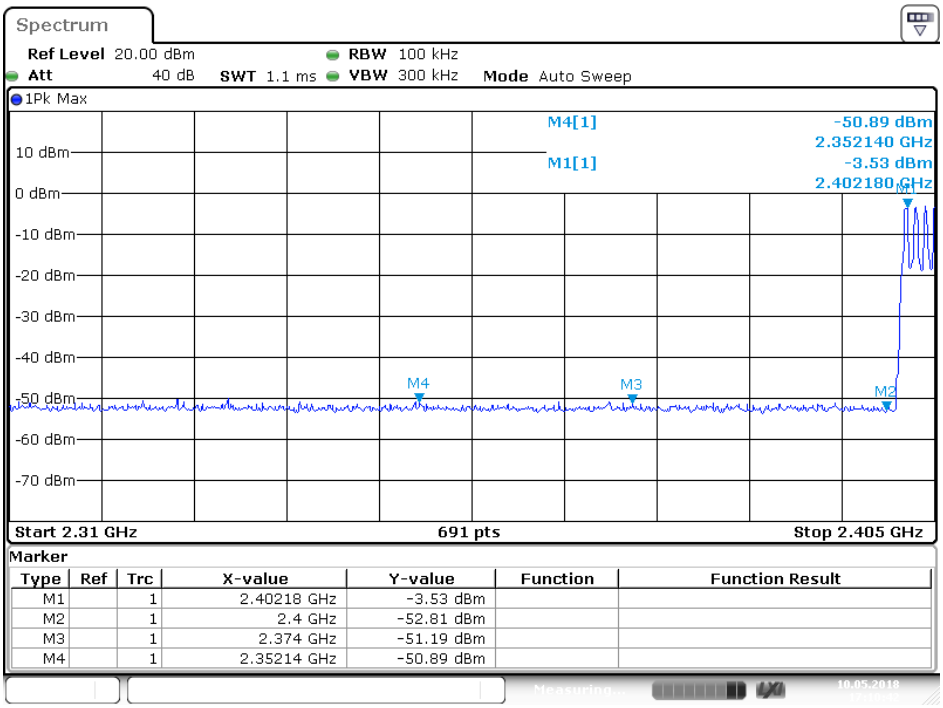


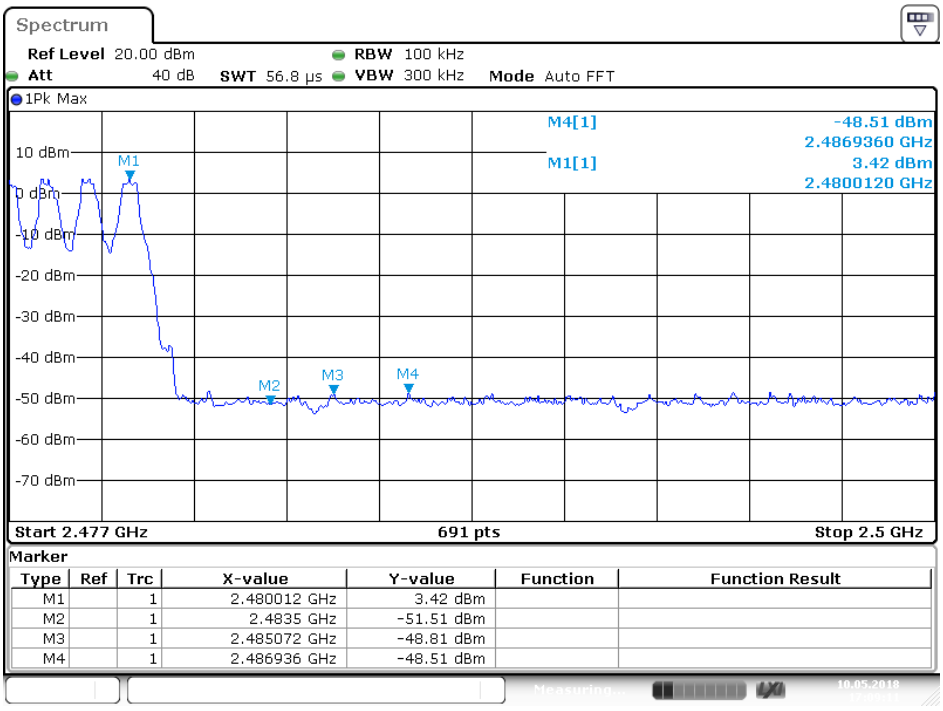
Date: 10.MAY.2018 17:02:22

hopping mode

BDR mode

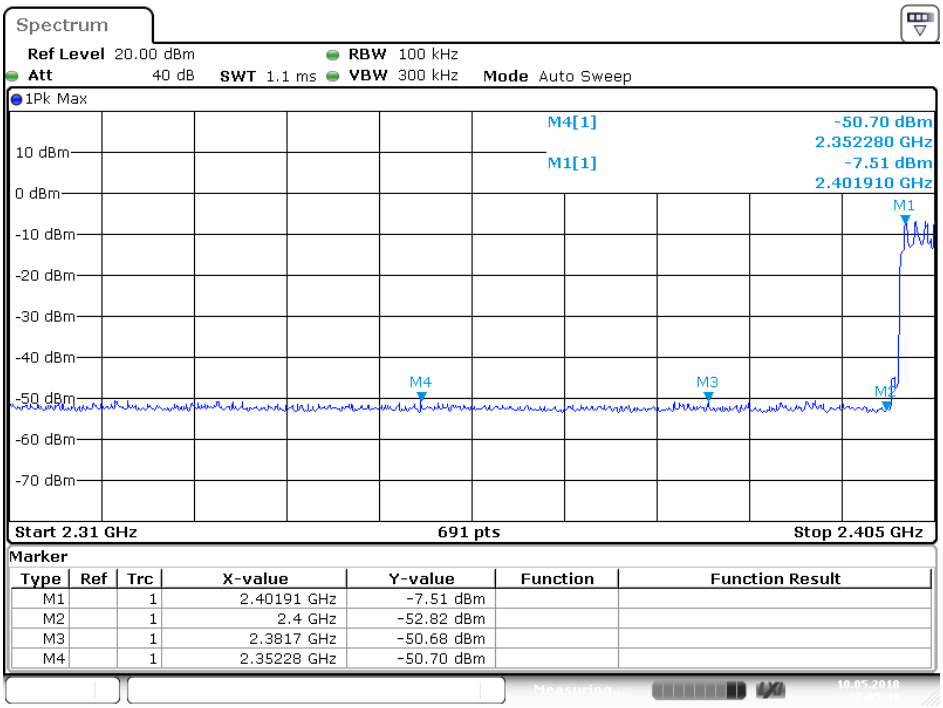


Date: 10.MAY.2018 17:10:42



Date: 10.MAY.2018 17:09:12

EDR mode



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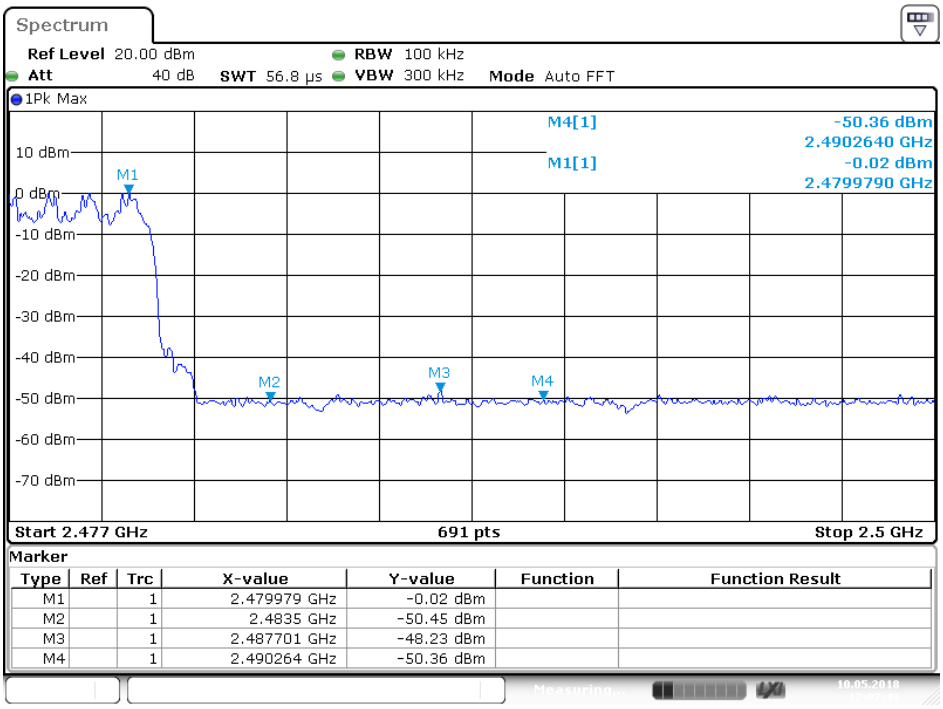

Date: 10.MAY.2018 17:07:42

Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

   Result = Reading + Corrected Factor
3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

Let the EUT work in TX (Hopping off, Hopping on) modes measure it.
We select 2402MHz, 2480MHz TX frequency to transmit(Hopping off mode).
We select 2402-2480MHz TX frequency to transmit(Hopping on mode).

During the radiated emission test, the spectrum analyzer was set with the following configurations:
1.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
3.All modes of operation were investigated and the worst-case emissions are reported.

Non-hopping mode

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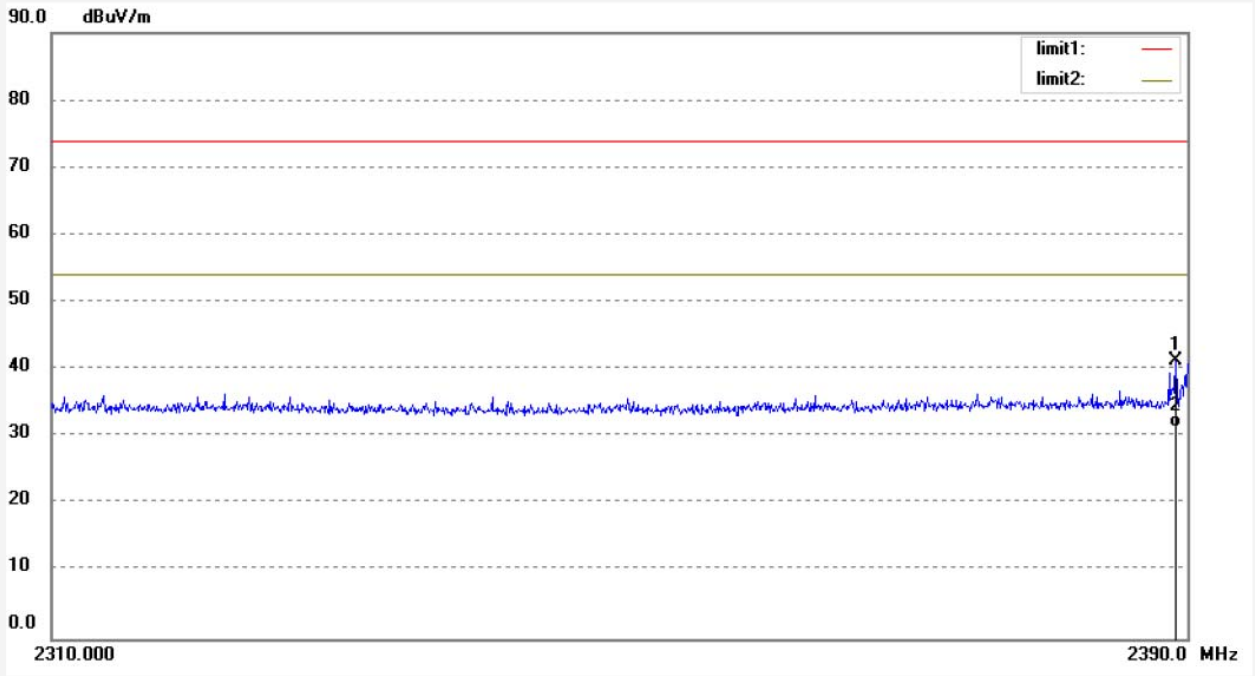
Job No.: LGW2018 #942	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2389.200	40.44	0.79	41.23	74.00	-32.77	peak			
2	2389.200	30.65	0.79	31.44	54.00	-22.56	AVG			

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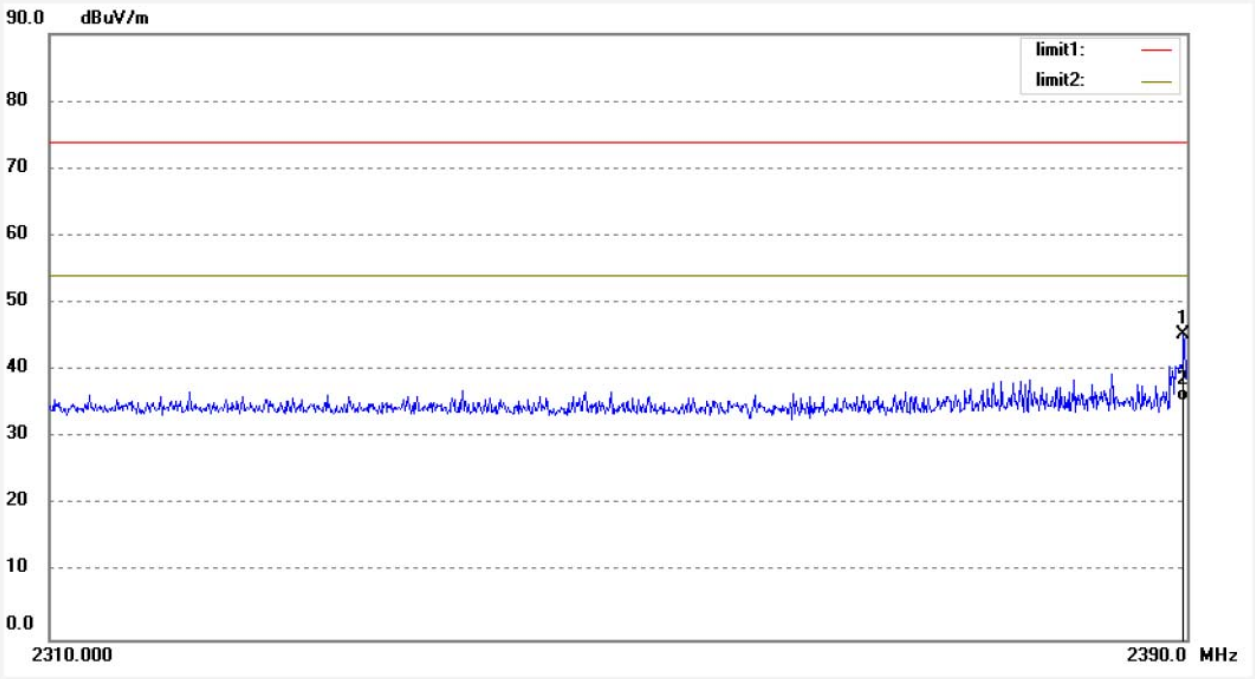
Job No.: LGW2018 #941	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2402MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2389.760	44.50	0.79	45.29	74.00	-28.71	peak			
2	2389.760	34.66	0.79	35.45	54.00	-18.55	AVG			

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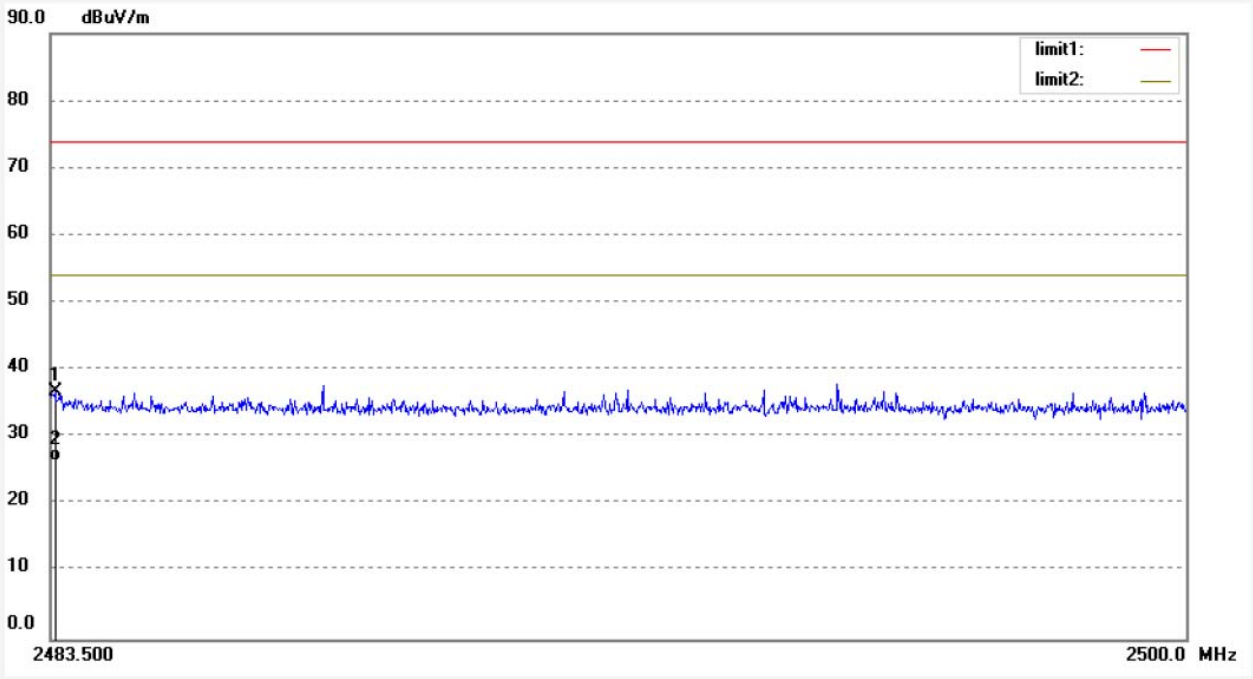
Job No.: LGW2018 #947	Polarization: Horizontal
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2483.566	35.63	1.10	36.73	74.00	-37.27	peak			
2	2483.566	25.25	1.10	26.35	54.00	-27.65	AVG			

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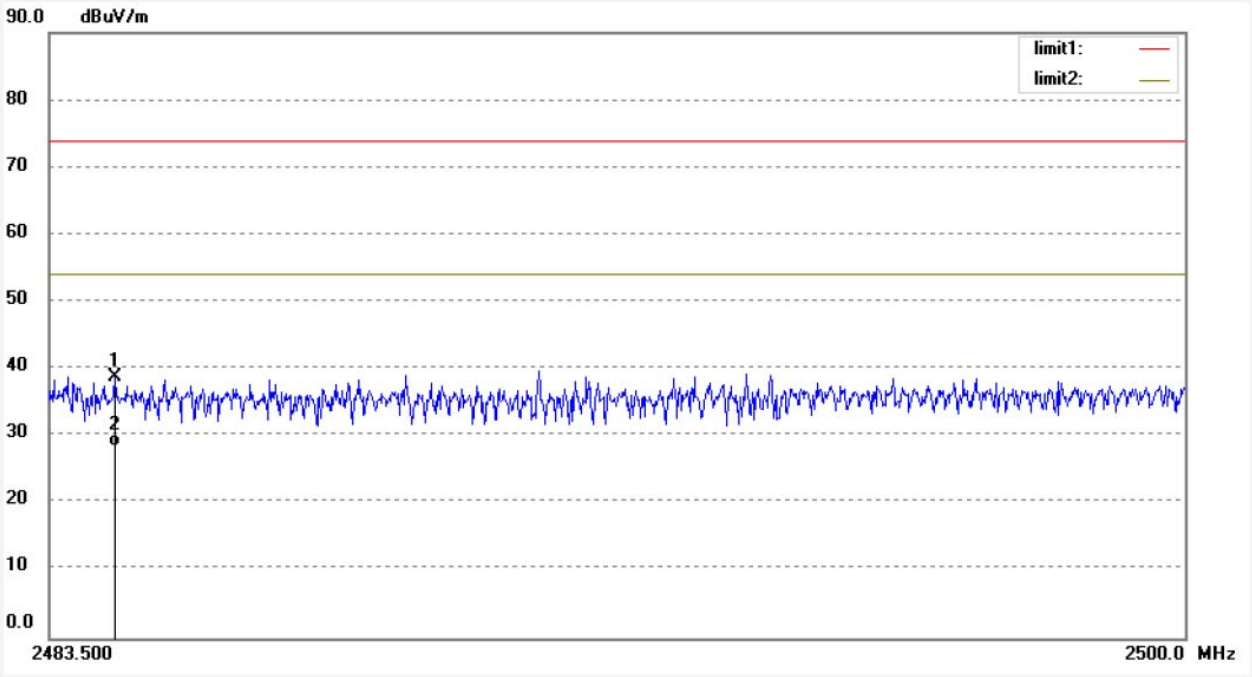
Job No.: LGW2018 #948	Polarization: Vertical
Standard: FCC PK	Power Source: AC 120V/60Hz
Test item: Radiation Test	Date: 18/05/07/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: ACTIVE SPEAKER SYSTEM	Engineer Signature: WADE
Mode: TX 2480MHz	Distance: 3m
Model: A100	
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.	

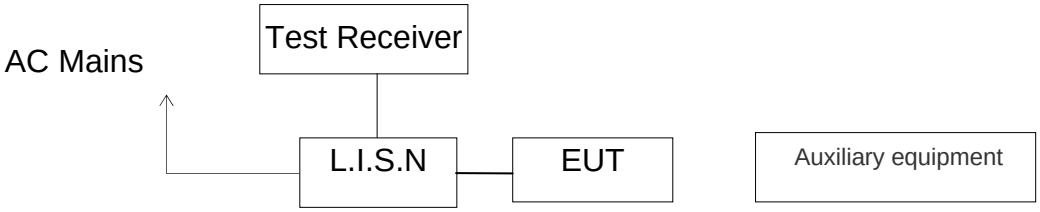
Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2484.457	37.63	1.09	38.72	74.00	-35.28	peak			
2	2484.457	27.36	1.09	28.45	54.00	-25.55	AVG			

12. AC POWER LINE CONDUCTED EMISSION FOR FCC PART 15 SECTION 15.207(A)

12.1. Block Diagram of Test Setup



(EUT: ACTIVE SPEAKER SYSTEM)

12.2. Power Line Conducted Emission Measurement Limits

Frequency (MHz)	Limit dB(μV)	
	Quasi-peak Level	Average Level
0.15 - 0.50	66.0 – 56.0 *	56.0 – 46.0 *
0.50 - 5.00	56.0	46.0
5.00 - 30.00	60.0	50.0
NOTE1: The lower limit shall apply at the transition frequencies. NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.		

12.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

12.4.Operating Condition of EUT

12.4.1.Setup the EUT and simulator as shown as Section 12.1.

12.4.2.Turn on the power of all equipment.

12.4.3.Let the EUT work in test mode and measure it.

12.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2014 on Conducted Emission Measurement.
The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

12.6.Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150kHz to 30MHz is checked.

Test mode : BT Playing(AC 120V/60Hz)

MEASUREMENT RESULT: "TUV-0508-2_fin"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	40.80	10.7	57	16.3	QP	L1	GND
0.770000	37.60	10.8	56	18.4	QP	L1	GND
3.840000	35.70	11.1	56	20.3	QP	L1	GND
20.740000	37.80	11.4	60	22.2	QP	L1	GND

MEASUREMENT RESULT: "TUV-0508-2_fin2"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	34.10	10.7	47	13.0	AV	L1	GND
0.770000	36.90	10.8	46	9.1	AV	L1	GND
1.535000	31.20	10.9	46	14.8	AV	L1	GND
6.910000	37.50	11.2	50	12.5	AV	L1	GND

MEASUREMENT RESULT: "TUV-0508-1_fin"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	41.50	10.7	57	15.6	QP	N	GND
0.770000	33.10	10.8	56	22.9	QP	N	GND
1.535000	39.80	10.9	56	16.2	QP	N	GND
6.910000	39.40	11.2	60	20.6	QP	N	GND

MEASUREMENT RESULT: "TUV-0508-1_fin2"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	35.10	10.7	47	12.0	AV	N	GND
0.770000	30.40	10.8	46	15.6	AV	N	GND
1.535000	38.90	10.9	46	7.1	AV	N	GND
6.910000	38.40	11.2	50	11.6	AV	N	GND

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are attached as below.

ACCURATE TECHNOLOGY CO.,LTD

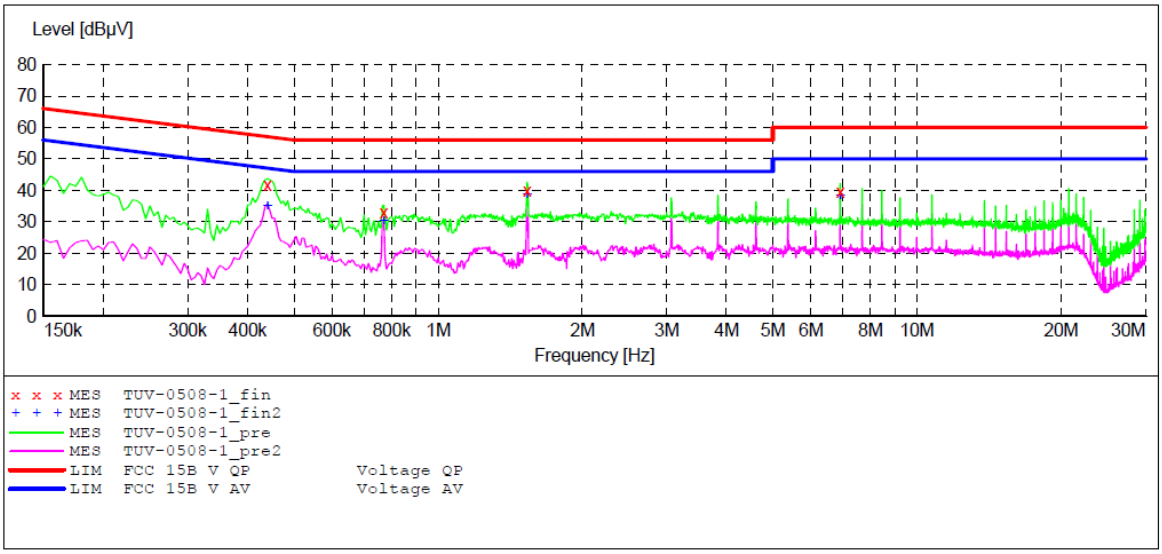
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: ACTIVE SPEAKER SYSTEM M/N:A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.
Operating Condition: Bluetooth playing
Test Site: 1#Shielding Room
Operator: WADE
Test Specification: N 120V/60Hz
Comment: Mains port
Start of Test: 5/8/2018 /

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

Short Description: SUB STD VTERM2 1.70

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



MEASUREMENT RESULT: "TUV-0508-1_fin"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	41.50	10.7	57	15.6	QP	N	GND
0.770000	33.10	10.8	56	22.9	QP	N	GND
1.535000	39.80	10.9	56	16.2	QP	N	GND
6.910000	39.40	11.2	60	20.6	QP	N	GND

MEASUREMENT RESULT: "TUV-0508-1_fin2"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	35.10	10.7	47	12.0	AV	N	GND
0.770000	30.40	10.8	46	15.6	AV	N	GND
1.535000	38.90	10.9	46	7.1	AV	N	GND
6.910000	38.40	11.2	50	11.6	AV	N	GND

ACCURATE TECHNOLOGY CO.,LTD

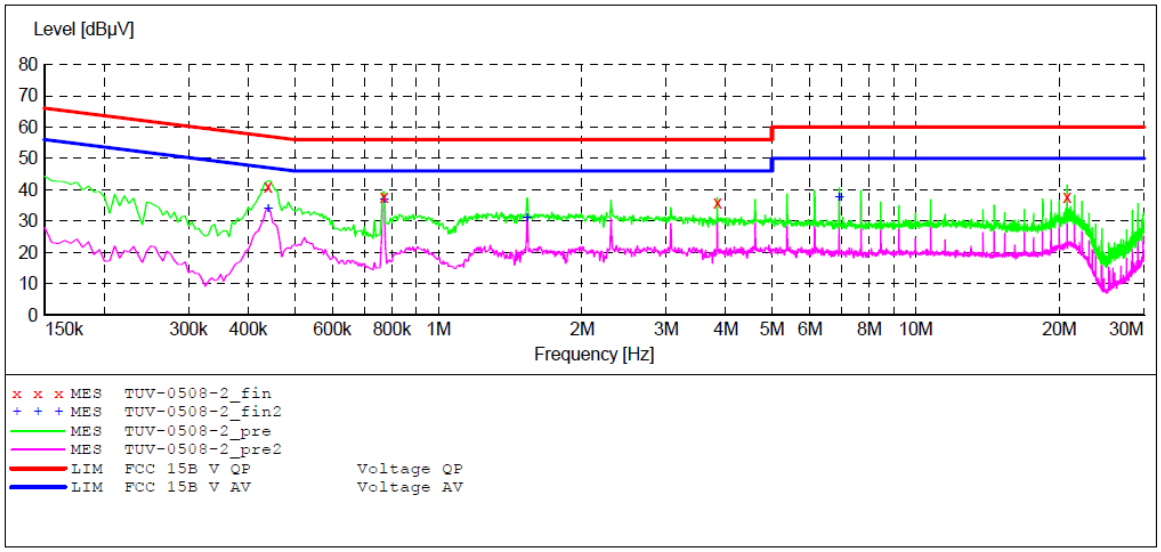
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: ACTIVE SPEAKER SYSTEM M/N:A100
Manufacturer: Dongguan Platinum Audio Systems Co., Ltd.
Operating Condition: Bluetooth playing
Test Site: 1#Shielding Room
Operator: WADE
Test Specification: L 120V/60Hz
Comment: Mains port
Start of Test: 5/8/2018 /

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

Short Description: SUB STD VTERM2 1.70

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



MEASUREMENT RESULT: "TUV-0508-2_fin"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	40.80	10.7	57	16.3	QP	L1	GND
0.770000	37.60	10.8	56	18.4	QP	L1	GND
3.840000	35.70	11.1	56	20.3	QP	L1	GND
20.740000	37.80	11.4	60	22.2	QP	L1	GND

MEASUREMENT RESULT: "TUV-0508-2_fin2"

5/8/2018

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.440000	34.10	10.7	47	13.0	AV	L1	GND
0.770000	36.90	10.8	46	9.1	AV	L1	GND
1.535000	31.20	10.9	46	14.8	AV	L1	GND
6.910000	37.50	11.2	50	12.5	AV	L1	GND

13.99% OCCUPIED BANDWIDTH

13.1.The Requirement for RSS-Gen Clause 6.6

The emission bandwidth (x dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated x dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth. When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth

13.2.EUT Configuration on Measurement

The following equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

13.3.Operating Condition of EUT

13.3.1.Setup the EUT and simulator as shown as Section 5.1.

13.3.2.Turn on the power of all equipment.

13.3.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, 2480MHz TX frequency to transmit.

13.4.Test Procedure

13.4.1.The transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The transmitter output was connected to the spectrum analyzer through a low loss cable.

13.4.2.The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3x RBW. Set RBW of spectrum analyzer to 30kHz and VBW to 100kHz.

13.4.3.Set SPA “Meas” function, Select “Occupied Bandwidth” function, Select “99% Power Bandwidth”. The frequency of the upper and lower markers indicating the edges of the transmitters “99% Power” emission bandwidth shall be recorded to automate by SPA.

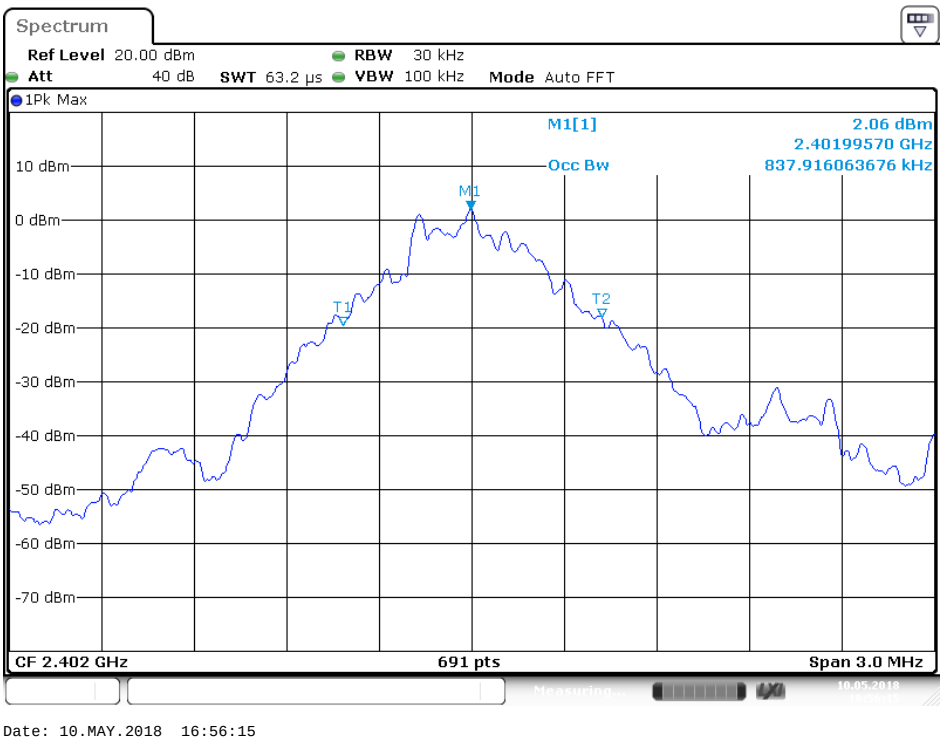
13.5.Measurement Result

Channel	Frequency (MHz)	BDR mode 99% Bandwidth (MHz)	EDR mode 99% Bandwidth (MHz)	Result
Low	2402	0.838	1.155	Pass
Middle	2441	0.838	1.142	Pass
High	2480	0.838	1.146	Pass

The spectrum analyzer plots are attached as below.

BDR mode

Low channel



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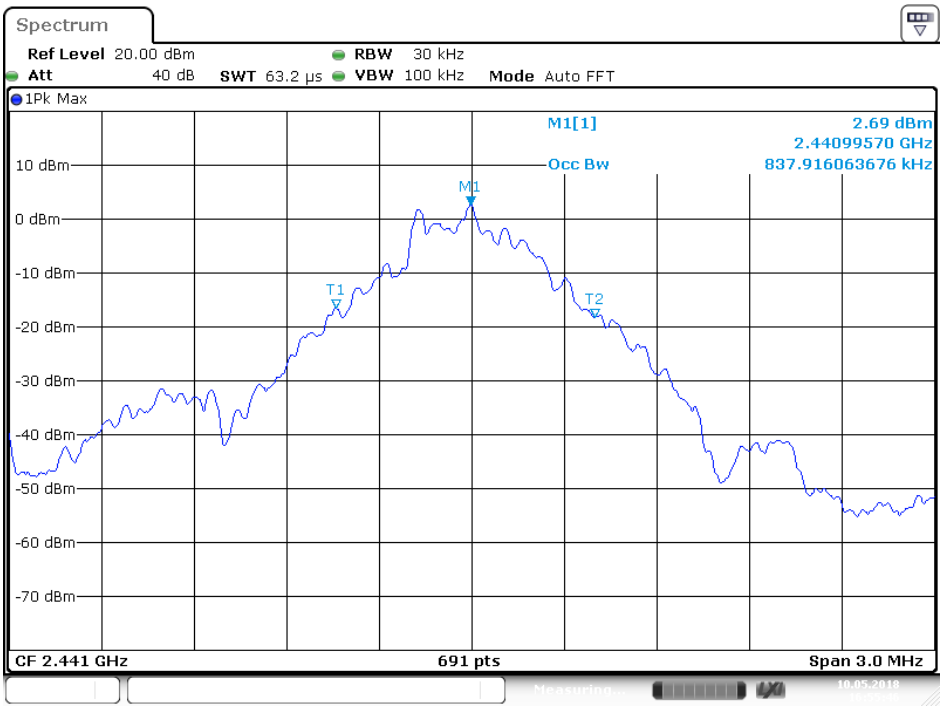
Middle channel



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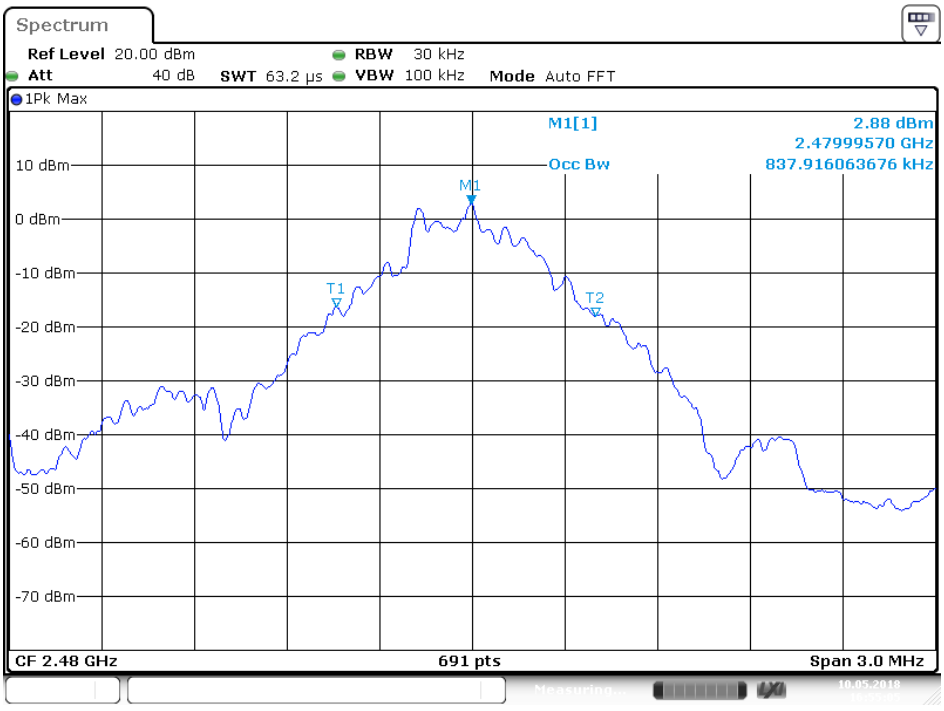
High channel



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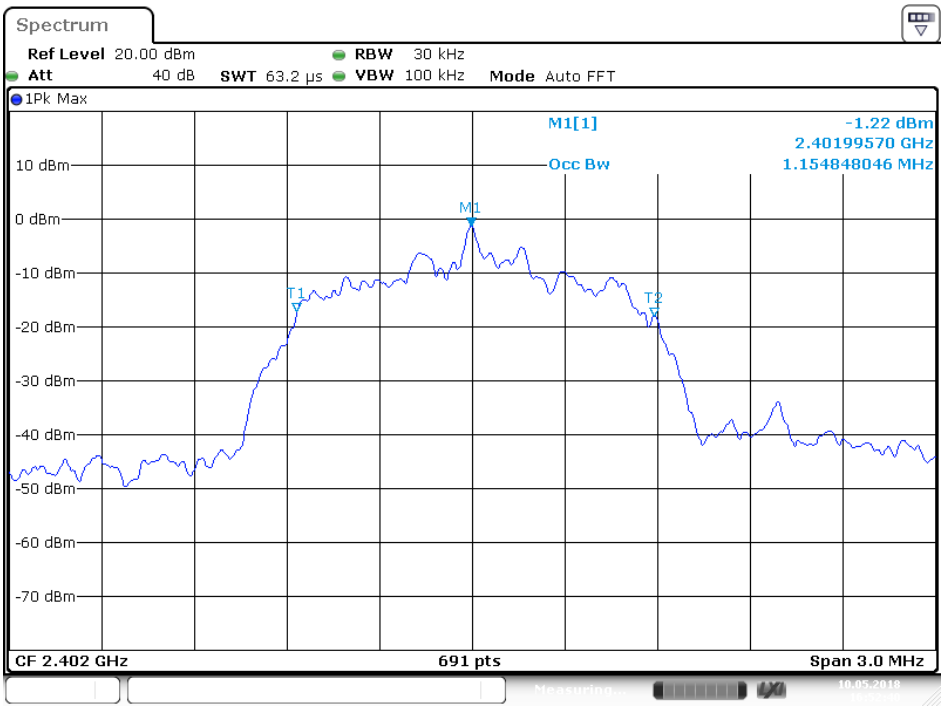
EDR mode

Low channel



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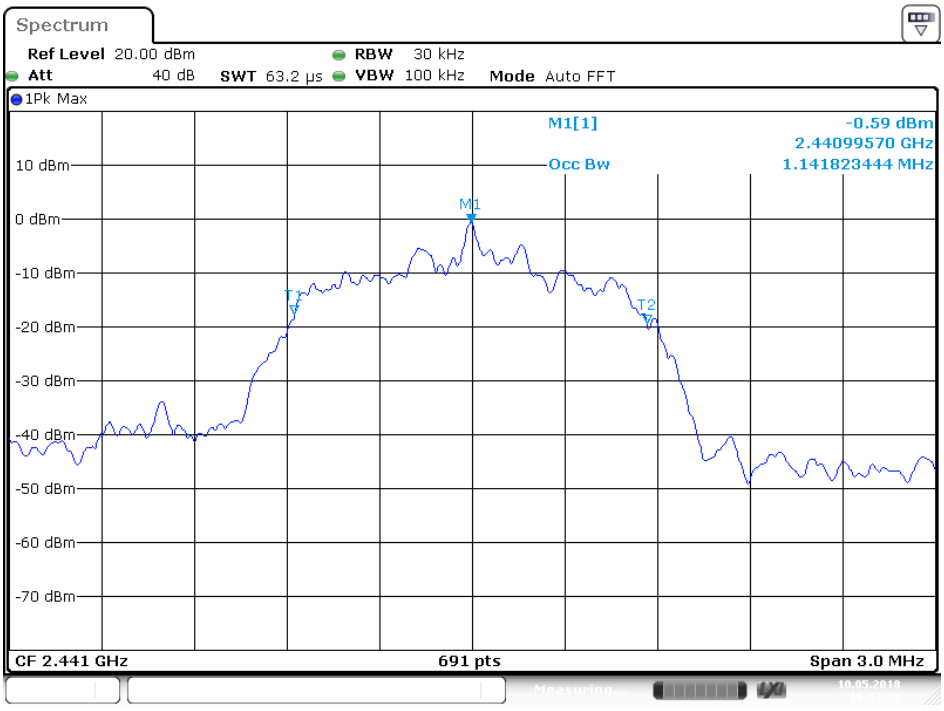
Middle channel



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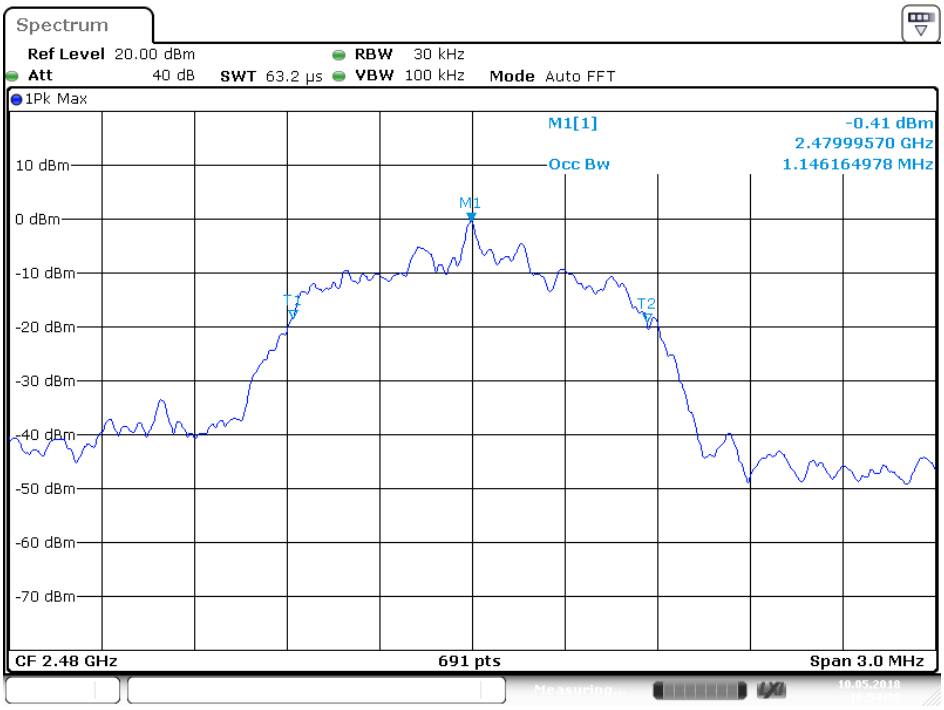
High channel



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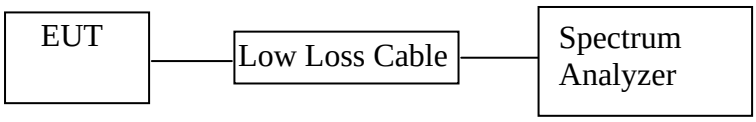
14.CONDUCTED SPURIOUS EMISSION COMPLIANCE TEST

14.1.Block Diagram of Test Setup



(EUT: ACTIVE SPEAKER SYSTEM)

14.2.The Requirement For Section 15.247(d)

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

14.3.EUT Configuration on Measurement

The equipment is installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

14.4.Operating Condition of EUT

14.4.1.Setup the EUT and simulator as shown as Section 14.1.

14.4.2.Turn on the power of all equipment.

14.4.3.Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480 MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

14.5.Test Procedure

14.5.1.The transmitter output was connected to the spectrum analyzer via a low loss cable.

14.5.2.Set RBW of spectrum analyzer to 100kHz and VBW to 300kHz

14.5.3.The Conducted Spurious Emission was measured and recorded.

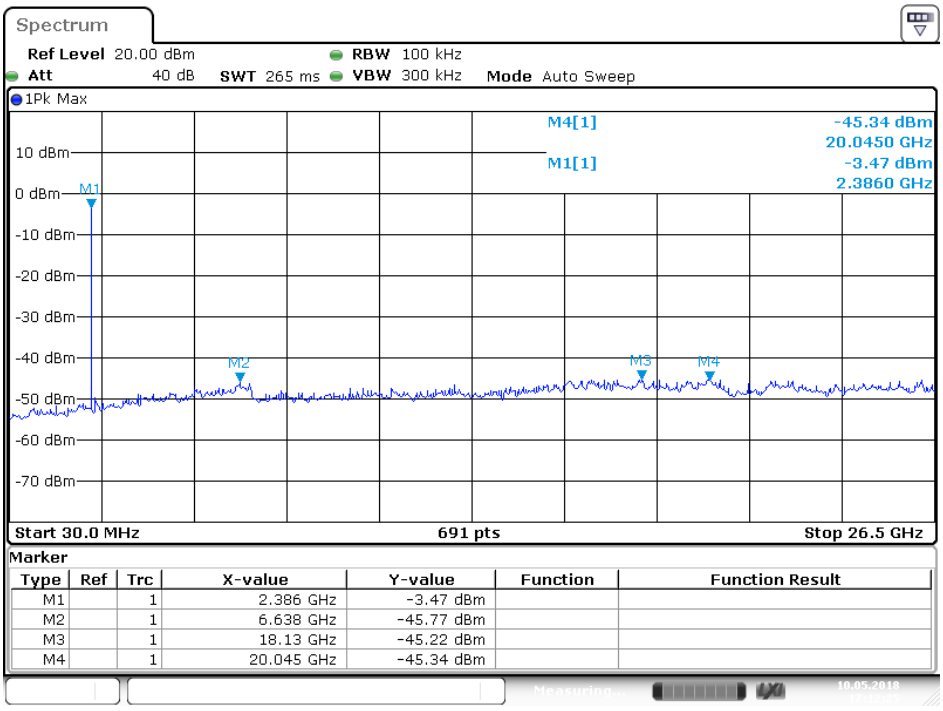
14.6.Test Result

Pass.

The spectrum analyzer plots are attached as below.

BDR mode

Low Channel 2402MHz



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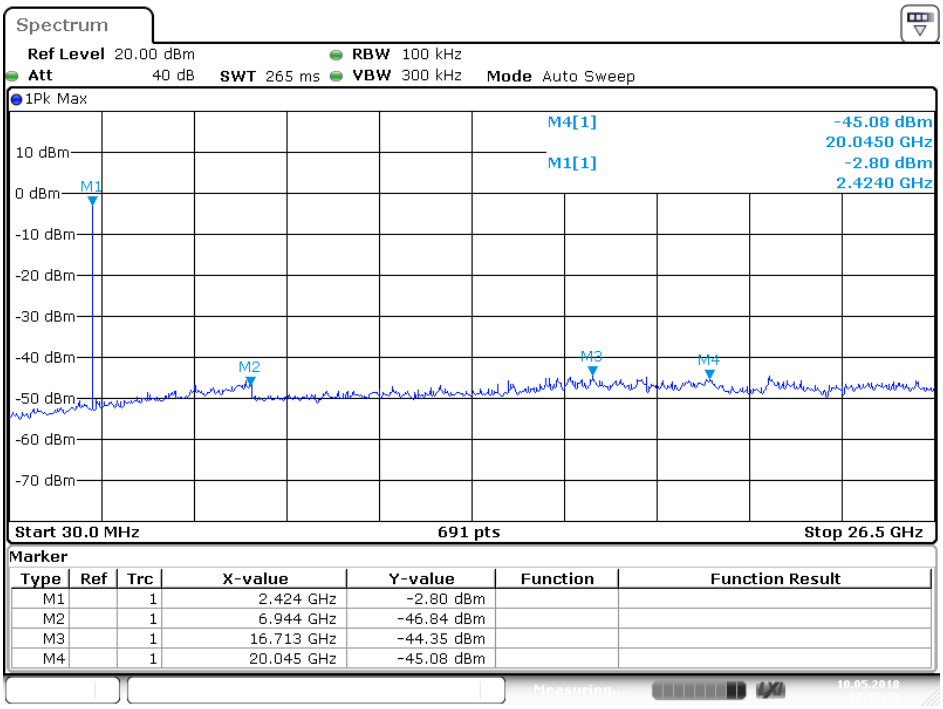
Middle Channel 2441MHz



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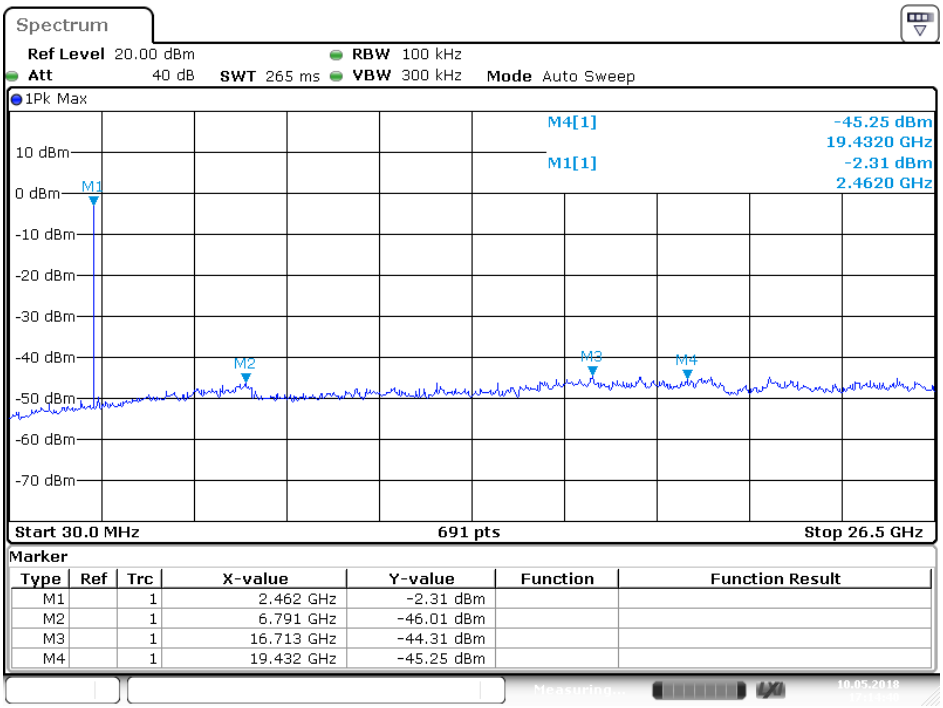
High Channel 2480MHz



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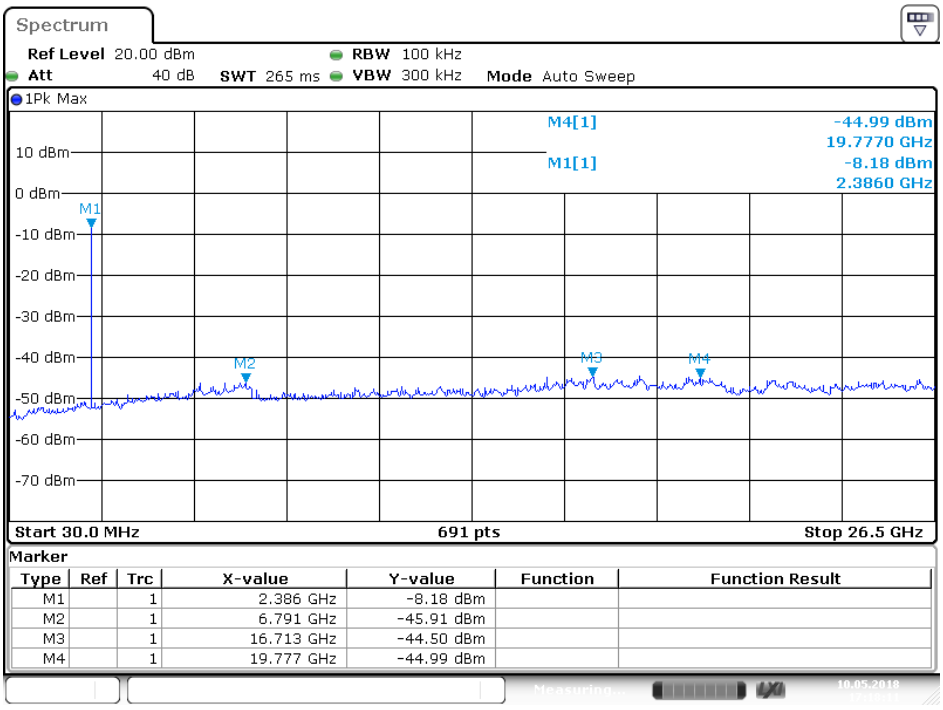
EDR mode

Low Channel 2402MHz



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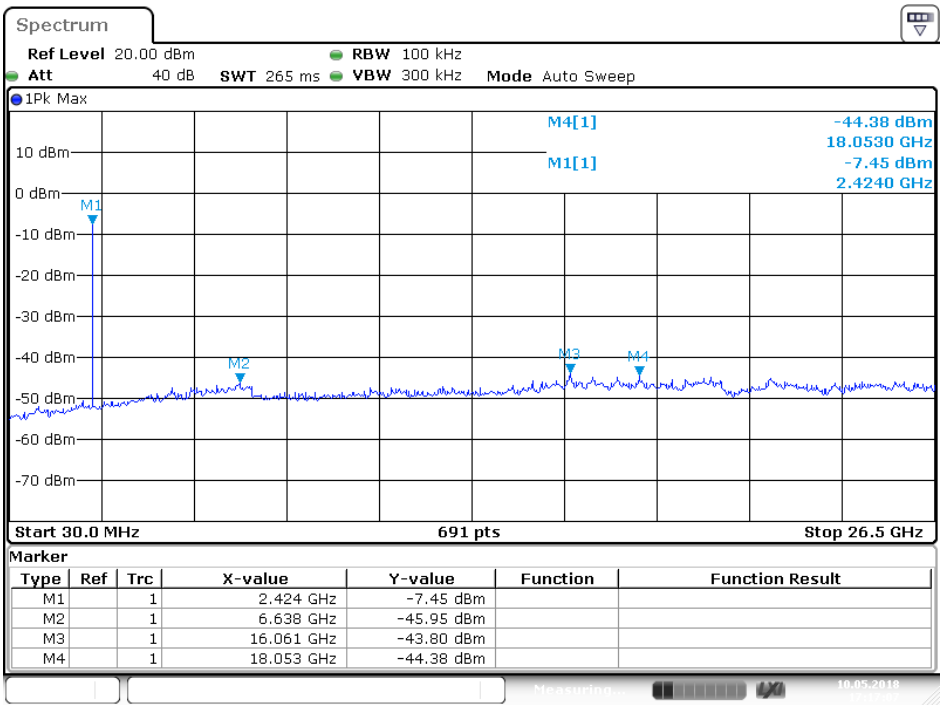
Middle Channel 2441MHz



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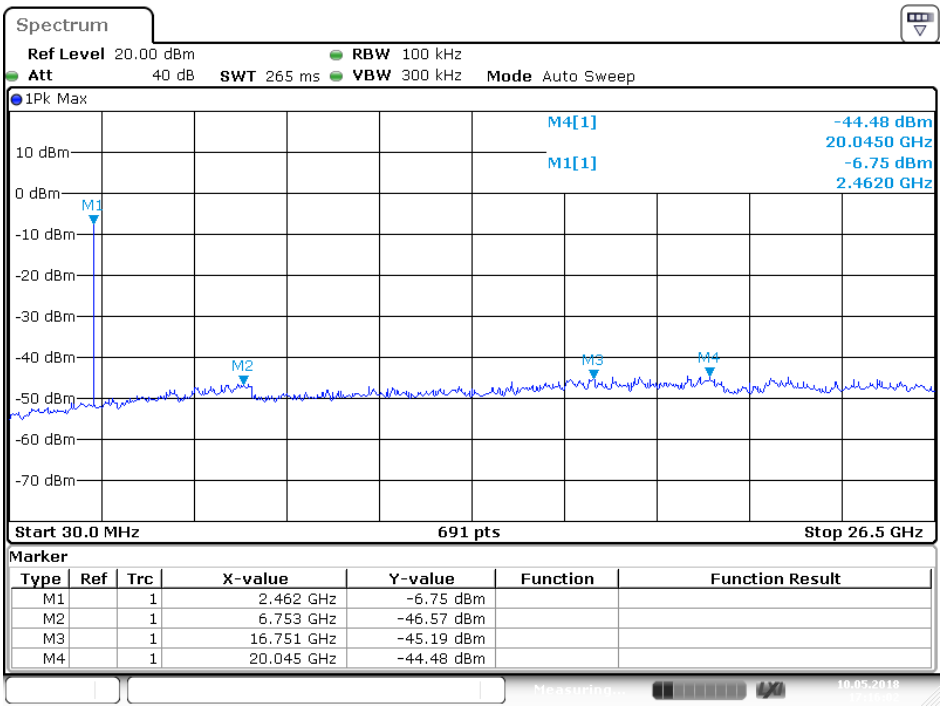
High Channel 2480MHz



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15. ANTENNA REQUIREMENT

15.1. The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

15.2. Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Max Antenna gain of EUT is 2.87dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.