TEST REPORT

Part 95(A/B) & IC RSS-210(Issue 8)

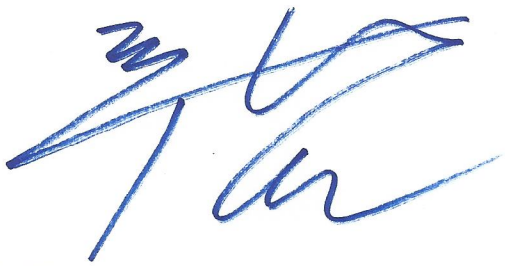
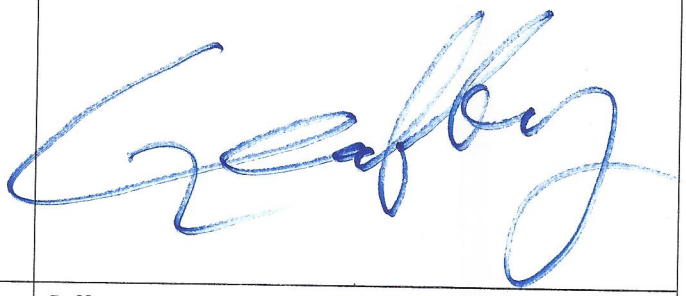
Equipment Under Test	GMRS / FRS 2-way Radio
Model Name	LXT600
FCC ID	MMA LXT600P
IC Certification	3690A- LXT600P
Applicant	Midland Radio Corporation
Manufacturer	Global Link Corporation Ltd.
Date of test(s)	2014.08.11~2014.08.30
Date of issue	2014.09.02

Issued to

Midland Radio Corporation
5900 Parretta Drive, Kansas City, Missouri United States 64120
Tel.: +1-816-241-8500 / Fax.: +1-816-241-571

Issued by

KES Co., Ltd.
C-3701, Simin-daero 365-40, Dongan-gu, Anyang-si,
Gyeonggi-do, 431-716, Korea
473-29, Gayeo-ro, Yeoju-si, Gyeonggi-do, Korea
Tel: +82-31-425-6200 / Fax: +82-31-424-0450

Test and report completed by :	Report approval by :
	
Byeong-Geol Chu Test engineer	Jeff Do Technical manager

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Revision history

Revision	Date of issue	Test report No.	Description
-	2014.09.02	KES-RF-14T0043	Initial

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

TABLE OF CONTENTS

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

1. General information

1.1 EUT description

Equipment under test	FRS / GMRS
Model name	LXT600P
Serial number	1405000001
Frequency Range	462.562 5 ㎒ ~ 462.712 5 ㎒(GMRS Channels 1 ~7)
	467.562 5 ㎒ ~ 467.712 5 ㎒(FRS Channels 8 ~ 14)
	462.550 0 ㎒ ~ 462.725 0 ㎒(GMRS Channels 15 ~ 22)
Emission type	11K0F3E
E.R.P.	GMRS: 0.425 W(High power), 0.082 W(Low power) // FRS: 0.086 W
Number of channel	462.562 5 ㎒ ~ 462.712 5 ㎒(GMRS Channels 1 ~7)
	467.562 5 ㎒ ~ 467.712 5 ㎒(FRS Channels 8 ~ 14)
	462.550 0 ㎒ ~ 462.725 0 ㎒(GMRS Channels 15 ~ 22)
Power source	Rechargeable Ni-MH battery pack(DC 3.6 V)

1.2 Information about variant model

N/A

1.3 Device modifications

N/A

1.4 Test facility

C3701 Dongil Techno Town, 889-1, Gwanyang 2-dong, Dongan-gu, Anyang-si, Gyeonggi-do, 431-716, Korea
477-6, Hageo-ri, Yeoju-eup, Yeoju-gun, Gyeonggi-do, 469-803, Korea

The open area test site is constructed in conformance with the requirements ANSI C63.4-2009.

1.5 Laboratory accreditations and listings

Country	Agency	Scope of accreditation	Certificate No.
USA	FCC	3 & 10 meter Open Area Test Sites and one conducted site to perform FCC Part 15/18 measurements.	343818
KOREA	KC	EMI (10 meter Open Area Test Site and two conducted sites) Radio (3 & 10 meter Open Area Test Sites and one conducted site)	KR0100
CANADA	IC	3 & 10 meter Open Area Test Sites and one conducted site	4769B-1

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

1.6 Conclusion of worst-case for each mode of representative channel respectively

The EUT has 2 type of mode (GMRS and FRS). Each conducted output power as following;

Mode	Channel No.	Frequency(㎒)	High / Low	Conducted output power	
				dBm	W
GMRS	1	462.562 5	High	28.32	0.679
			Low	24.07	0.255
	2	462.587 5	High	28.31	0.677
			Low	23.92	0.246
	3	462.612 5	High	28.30	0.676
			Low	24.05	0.254
	4	462.637 5	High	28.26	0.669
			Low	23.89	0.244
	5	462.662 5	High	28.24	0.666
			Low	23.97	0.249
	6	462.687 5	High	28.26	0.669
			Low	24.03	0.252
	7	462.712 5	High	28.29	0.674
			Low	24.10	0.257
FRS	**8**	**467.562 5**	N/A	**25.09**	**0.322**
	9	467.587 5		24.96	0.313
	10	467.612 5		24.88	0.307
	11	467.637 5		25.04	0.319
	12	467.662 5		25.05	0.319
	13	467.687 5		25.01	0.316
	14	467.712 5		25.04	0.319

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Mode	Channel No.	Frequency(㎒)	High / Low	Conducted output power	
				dBm	W
GMRS	15	462.550 0	High	28.30	0.676
			Low	24.07	0.255
	16	462.575 0	High	28.34	0.682
			Low	23.91	0.246
	17	462.600 0	High	28.31	0.677
			Low	24.14	0.259
	18	462.625 0	High	28.23	0.665
			Low	24.01	0.251
	19	462.650 0	High	28.31	0.677
			Low	24.07	0.255
	20	**462.675 0**	**High**	**28.38**	**0.688**
			Low	**24.18**	**0.261**
	21	462.700 0	High	28.32	0.679
			Low	23.93	0.247
	22	462.725 0	High	28.24	0.666
			Low	24.05	0.254

Therefore all applicable requirements were tested to the two channels, the 20th for GMRS and the 8th for FRS.

DC input into the final amplifier

Mode	Voltage(V)	Current(A)	Power(W)
GMRS(High power)	3.6	0.55	1.98
GMRS(Low power)	3.6	0.40	1.44
FRS	3.6	0.38	1.37

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2. Summary of tests

Section in FCC Part 95 & RSS-210	Parameter	Status
95.639 RSS-210 A6.1.4 RSS-210 A6.2.4	RF output power	PASS
95.635 RSS-210 A6.1.5 RSS-201 A6.2.5	Radiated spurious emissions	PASS
95.637 RSS-210 A6.1.2 RSS-210 A6.2.2	Modulation limiting	PASS
2.1047	Audio frequency response	PASS
95.637 RSS-210 A6.2.2	Low-pass filter response	PASS
2.1049, 95.633, 95.635 RSS-210 A6.1.3 RSS-210 A6.2.3 RSS-210 A6.1.5 RSS-210 A6.2.5	Occupied bandwidth and emission mask	PASS
2.1055, 95.621, 95.627 RSS-210 A6.1.6 RSS-201 A6.2.6	Frequency stability	PASS

Statement;

The measurement procedures described in the American National Standard for Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical and Electronic Equipment in the Range of 9 ㎑ to 40 ㎓ (ANSI C63.4-2009, ANSI/TIA 603C: 2004), RSS-210 (Issue 8) were used in the measurement of the DUT.

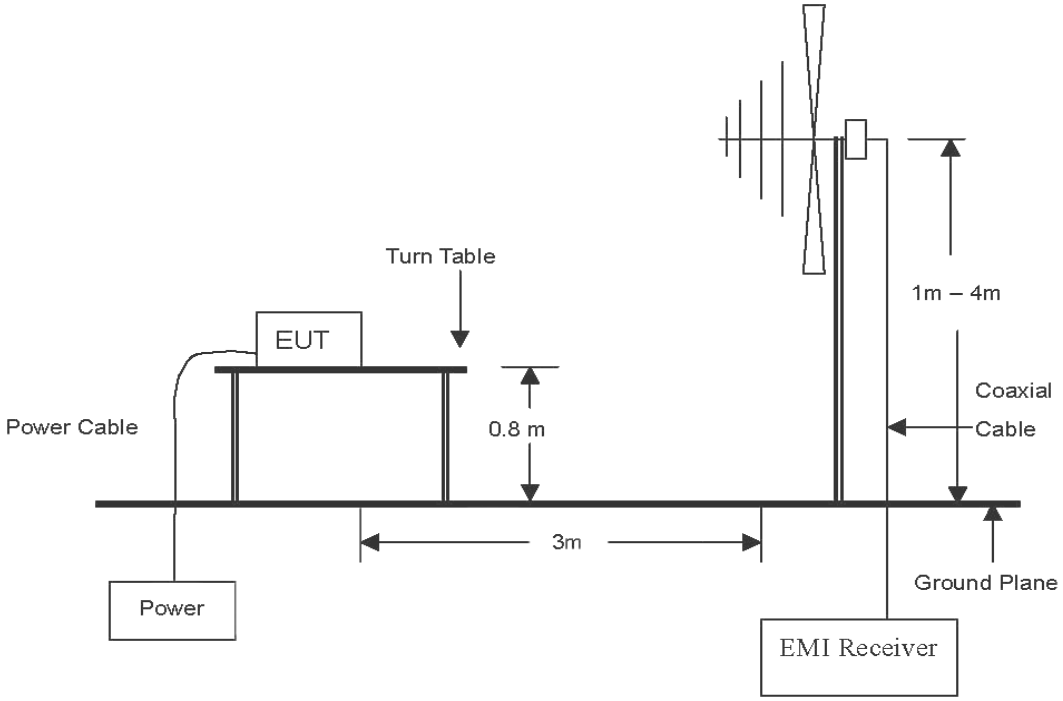
This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2.1 Test data

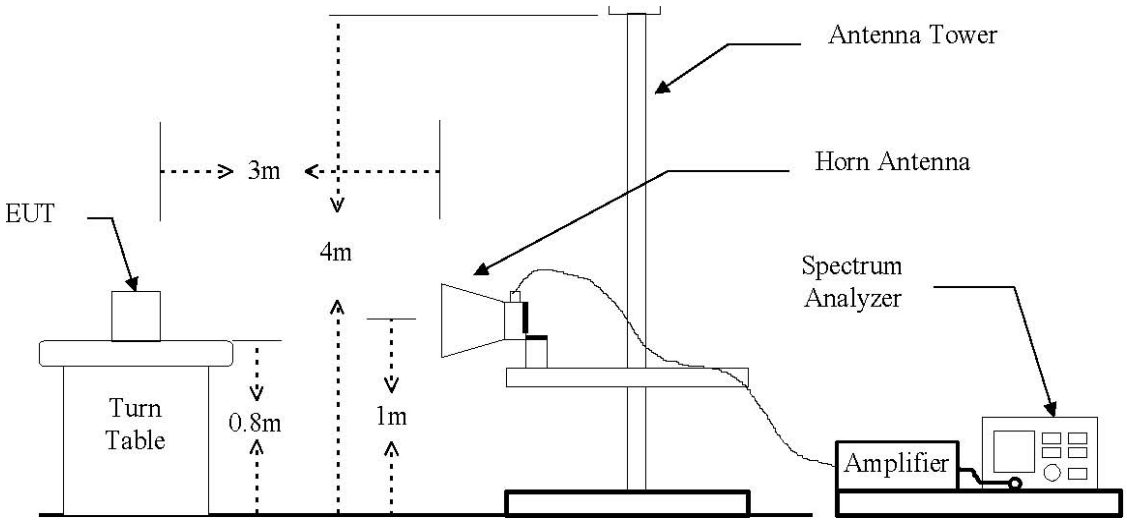
2.1.1 RF output power and radiated spurious emission

Test setup

The diagram below shows the test setup that is utilized to make the measurements for emission from 30 ㎒ to 1 ㎓ Emissions.

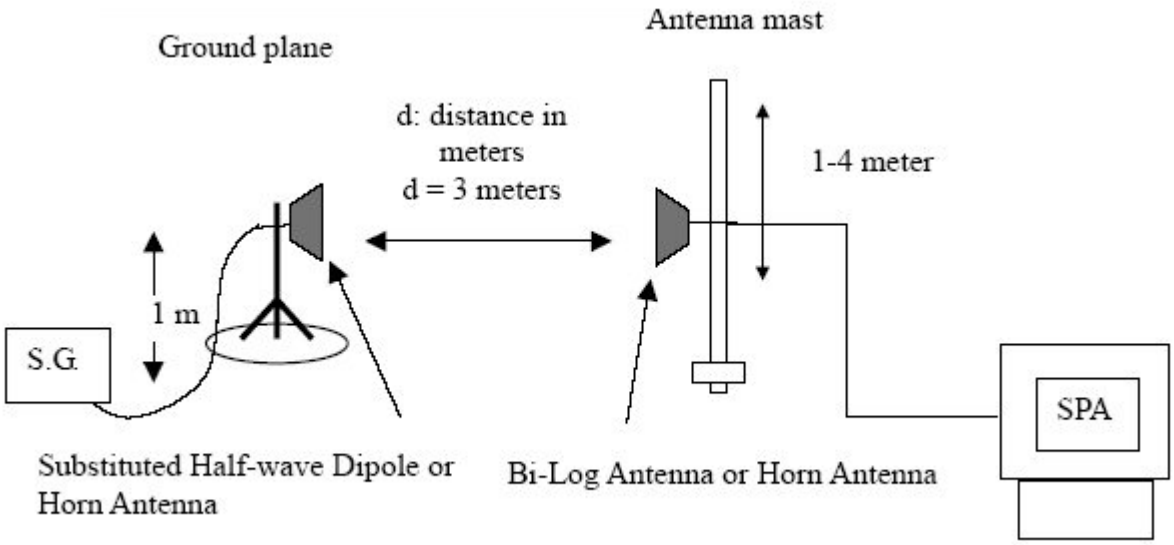


The diagram below shows the test setup that is utilized to make the measurements for emission from 1 ㎓ to 18 ㎓ Emissions.



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

The diagram below shows the test setup for substituted method



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test procedure: Based on ANSI/TIA 603C: 2004

RF output power & radiated spurious emissions

1. On a test site, the EUT shall be placed at 80 ㎝ height on a turn table, and in the position closest to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. During the measurement of the EUT, the resolution bandwidth was to 1 ㎒ and the video bandwidth was set to 1 ㎒
5. The transmitter shall be switched on, the measuring receiver shall be tuned to the frequency of the transmitter under test.
6. The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
7. The transmitter shall then the rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
8. The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
9. The maximum signal level detected by the measuring receiver shall be noted.
10. The EUT was replaced by half-wave dipole(below 1000 ㎒) or horn antenna(above 1000 ㎒) connected to a signal generator.
11. In necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
13. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring received, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
14. The input level to the substitution antenna shall be recorded as power level in ㏈m, corrected for any change of input attenuator setting of the measuring receiver.
15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Limit

RF output power

§95.639
Power output shall not exceed 0.50 Watts effective radiated power for the FRS channels. There can be no provisions for increasing the power or varying the power.
No GMRS channel, under any condition of modulation, shall exceed:

1. 50W Carrier power (average TP during one modulated RF cycle) when transmitting emissions type A1D, F1D, G1D, A3E, F3E, or G3E.
2. 50W peak envelope TP when transmitting emission type H1D, J1D, R1D, H3E, J3E or R3E.

RSS-210 A6.1.4
The maximum permissible transmitter output power under any operating conditions is 0.5 W effective radiated power (e.r.p.). The radio shall be equipped with an integral antenna.

RSS-210 A6.2.4
A GMRS transmitter may transmit with a maximum power of 2 W e.r.p.

Radiated spurious emissions

§95.635 & RSS-201 A6.1.5, A6.2.5
(7) At least 43 + 10 $\log_{10}$(T) dB on any frequency removed from the center of the authorized bandwidth by more than 250%.

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test results

RF output power

GMRS (High power)

Frequency (㎒)	Ant. Pol. (H/V)	E.R.P.	
		(dBm)	(W)
462.6750	H	26.28	0.425
462.6750	V	17.38	0.055

GMRS (Low power)

Frequency (㎒)	Ant. Pol. (H/V)	E.R.P.	
		(dBm)	(W)
462.6750	H	19.15	0.082
462.6750	V	15.18	0.033

FRS

Frequency (㎒)	Ant. Pol. (H/V)	E.R.P.	
		(dBm)	(W)
467.5625	H	19.36	0.086
467.5625	V	15.04	0.032

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Radiated spurious emissions

GMRS (High power)

Frequency (㎒)	Ant. Pol. (H/V)	Spurious attenuation (dBc)	Limit (dBc)	Margin (dB)
925.350	H	50.61	39.28	11.33
925.350	V	51.51	39.28	12.23
1388.025	H	40.34	39.28	1.06
1388.025	V	49.58	39.28	10.30
1850.700	H	40.29	39.28	1.01
1850.700	V	44.07	39.28	4.79
2313.375	H	40.37	39.28	1.09
2313.375	V	43.84	39.28	4.56
2776.050	H	42.36	39.28	3.08
2776.050	V	46.93	39.28	7.65
3238.725	H	44.76	39.28	5.48
3238.725	V	44.46	39.28	5.18
3701.400	H	48.16	39.28	8.88
3701.400	V	47.35	39.28	8.07
4164.075	H	41.21	39.28	1.93
4164.075	V	40.87	39.28	1.59
4626.750	H	53.91	39.28	14.63
4626.750	V	52.73	39.28	13.45

Remark;
1. Spurious attenuation = EUT max. output power(㏈m) - absolute level
2. Spurious attenuation limit in ㏈ = 43 + 10log(power in watts)

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

GMRS (Low power)

Frequency (㎒)	Ant. Pol. (H/V)	Spurious attenuation (dBc)	Limit (dBc)	Margin (dB)
925.350	H	49.68	32.15	17.53
925.350	V	53.97	32.15	21.82
1388.025	H	33.20	32.15	1.05
1388.025	V	41.12	32.15	8.97
1850.700	H	34.03	32.15	1.88
1850.700	V	41.18	32.15	9.03
2313.375	H	45.77	32.15	13.62
2313.375	V	44.88	32.15	12.73
2776.050	H	34.89	32.15	2.74
2776.050	V	40.76	32.15	8.61
3238.725	H	58.50	32.15	26.35
3238.725	V	53.93	32.15	21.78
3701.400	H	59.94	32.15	27.79
3701.400	V	57.41	32.15	25.26
4164.075	H	59.25	32.15	27.10
4164.075	V	55.88	32.15	23.73
4626.750	H	69.35	32.15	37.20
4626.750	V	73.46	32.15	41.31

Remark;
1. Spurious attenuation = EUT max. output power(㏈m) - absolute level
2. Spurious attenuation limit in ㏈ = 43 + 10log(power in watts)

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

FRS

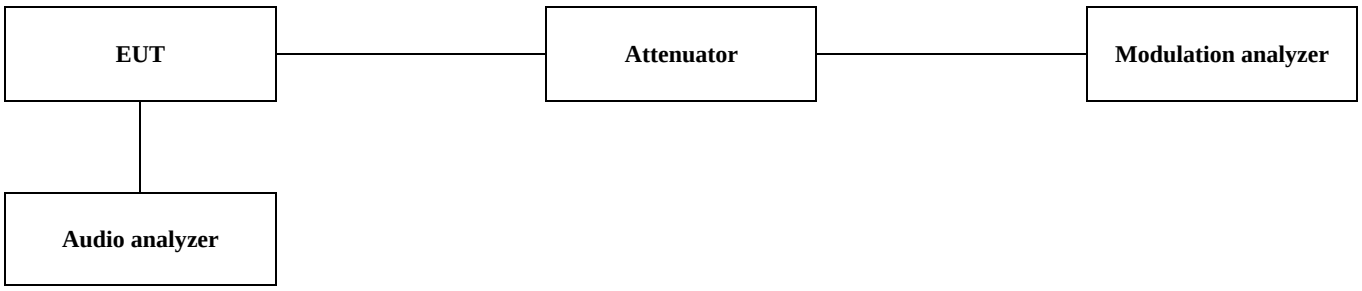
Frequency (㎒)	Ant. Pol. (H/V)	Spurious attenuation (dBc)	Limit (dBc)	Margin (dB)
935.1250	H	52.16	32.36	19.80
935.1250	V	55.67	32.36	23.31
1402.6875	H	42.35	32.36	9.99
1402.6875	V	50.41	32.36	18.05
1870.2500	H	36.12	32.36	3.76
1870.2500	V	42.33	32.36	9.97
2337.8125	H	43.03	32.36	10.67
2337.8125	V	45.41	32.36	13.05
2805.3750	H	42.34	32.36	9.98
2805.3750	V	45.05	32.36	12.69
3272.9375	H	53.75	32.36	21.39
3272.9375	V	53.99	32.36	21.63
3740.5000	H	60.72	32.36	28.36
3740.5000	V	61.01	32.36	28.65
4208.0625	H	59.66	32.36	27.30
4208.0625	V	54.44	32.36	22.08
4675.6250	H	66.19	32.36	33.83
4675.6250	V	68.67	32.36	36.31

Remark;
1. Spurious attenuation = EUT max. output power(㏈m) - absolute level
2. Spurious attenuation limit in ㏈ = 43 + 10log(power in watts)

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2.1.2 Modulation limiting

Test setup



Test procedure
TIA/EIA-603-C

Limit
§95.639
(a) A GMRS transmitter that transmits emission types F1D, G1D, or G3E must not exceed a peak frequency deviation of plus or minus 5 ㎑. A GMRS transmitter that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 5 ㎑. A FRS unit that transmits emission type F3E must not exceed a peak frequency deviation of plus or minus 2.5 ㎑, and the audio frequency response must not exceed 3.125 ㎑.

RSS-210 A6.1.2
(c) The peak frequency deviation shall not exceed ±2.5 ㎑. The limiter shall be followed by a low-pass filter to remove unwanted harmonics.

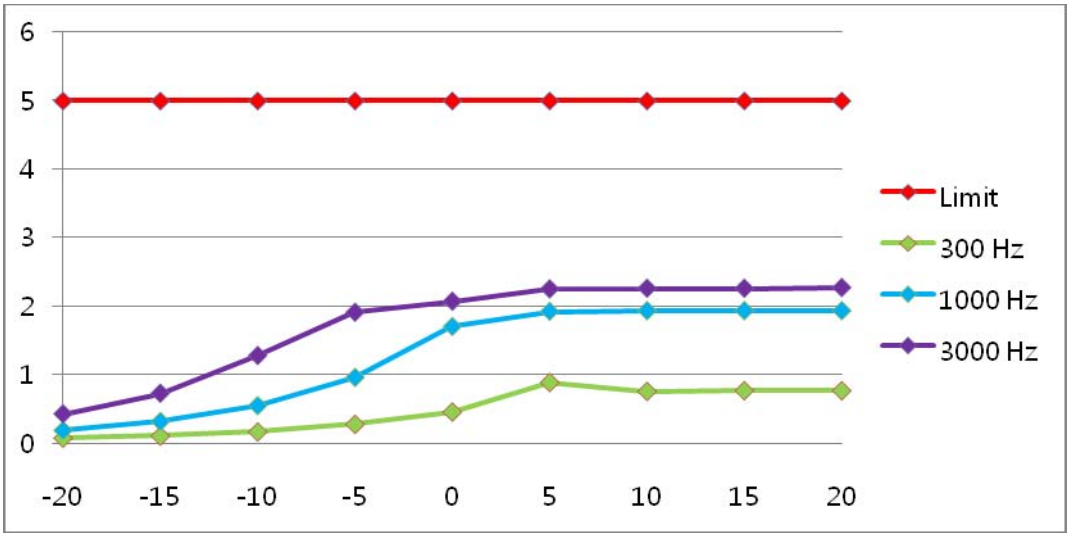
RSS-210 A6.2.2
(b) For emission types F1D, G1D, G3E, F3E or F2D, the peak frequency deviation shall not exceed ±5 ㎑. GMRS transmitters must include an audio frequency low-pass filter, unless they comply with the appropriate emission masks in Section A6.2.5 below. The filter must be between the modulation limiter and the modulated stage of the transmitter. The filter attenuation must be as follows: for 3 ㎑ ≤ f ≤ 20 ㎑, the attenuation is at least 60 $\log_{10}$(f, ㎑/3) ㏈ greater than the attenuation at 1 ㎑; and for f > 20 ㎑, the attenuation is at least 50 ㏈ greater than the attenuation at 1 ㎑.

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test results

GMRS

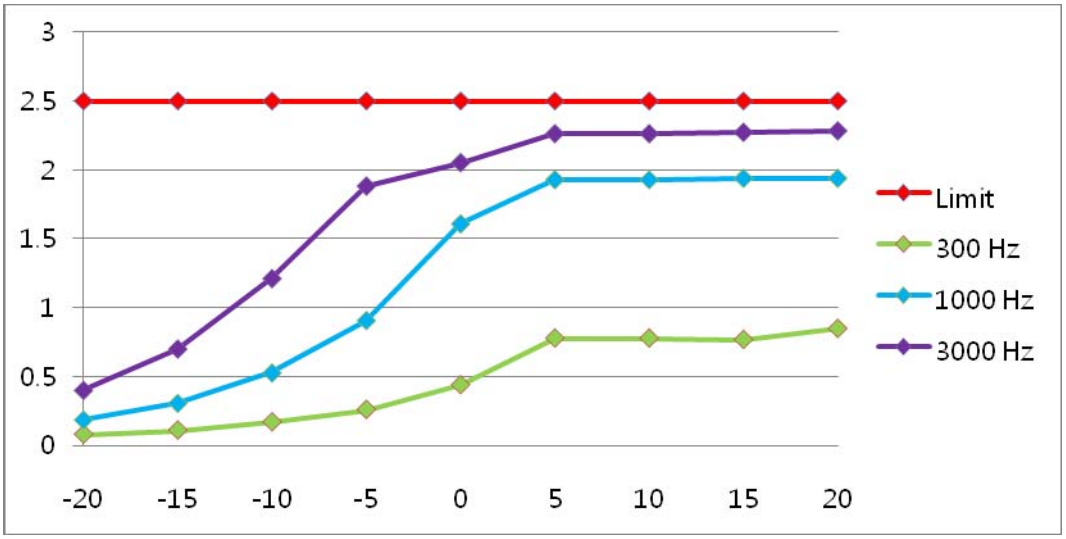
Audio level (dB)	Deviation at 300 Hz	Deviation at 1 kHz	Deviation at 3 kHz	Limit (kHz)
-20	0.08	0.20	0.43	5
-15	0.11	0.33	0.73	5
-10	0.17	0.56	1.28	5
-5	0.28	0.97	1.91	5
0	0.46	1.71	2.07	5
5	0.89	1.93	2.25	5
10	0.76	1.94	2.26	5
15	0.77	1.94	2.26	5
20	0.77	1.94	2.27	5



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

FRS

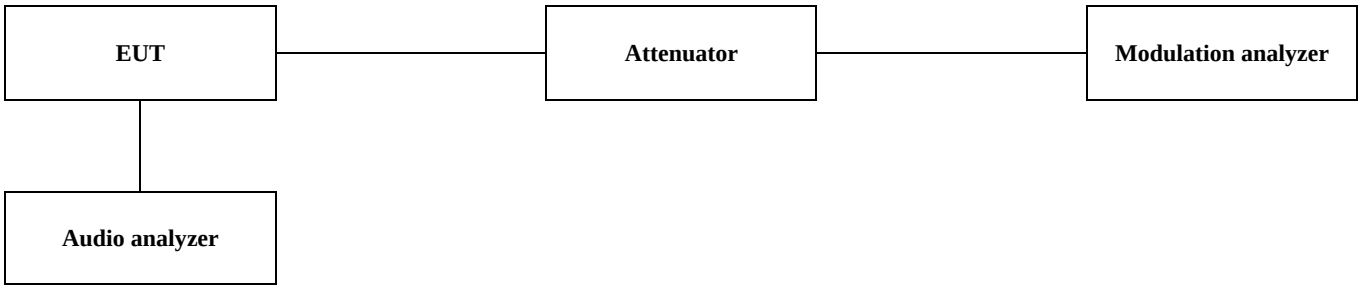
Audio level (dB)	Deviation at 300 Hz	Deviation at 1 kHz	Deviation at 3 kHz	Limit (kHz)
-20	0.08	0.19	0.40	2.5
-15	0.11	0.31	0.70	2.5
-10	0.17	0.53	1.21	2.5
-5	0.26	0.91	1.88	2.5
0	0.44	1.61	2.05	2.5
5	0.78	1.93	2.26	2.5
10	0.78	1.93	2.26	2.5
15	0.77	1.94	2.27	2.5
20	0.85	1.94	2.28	2.5



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2.1.3 Audio frequency response

Test setup



Test procedure
TIA/EIA-603-C

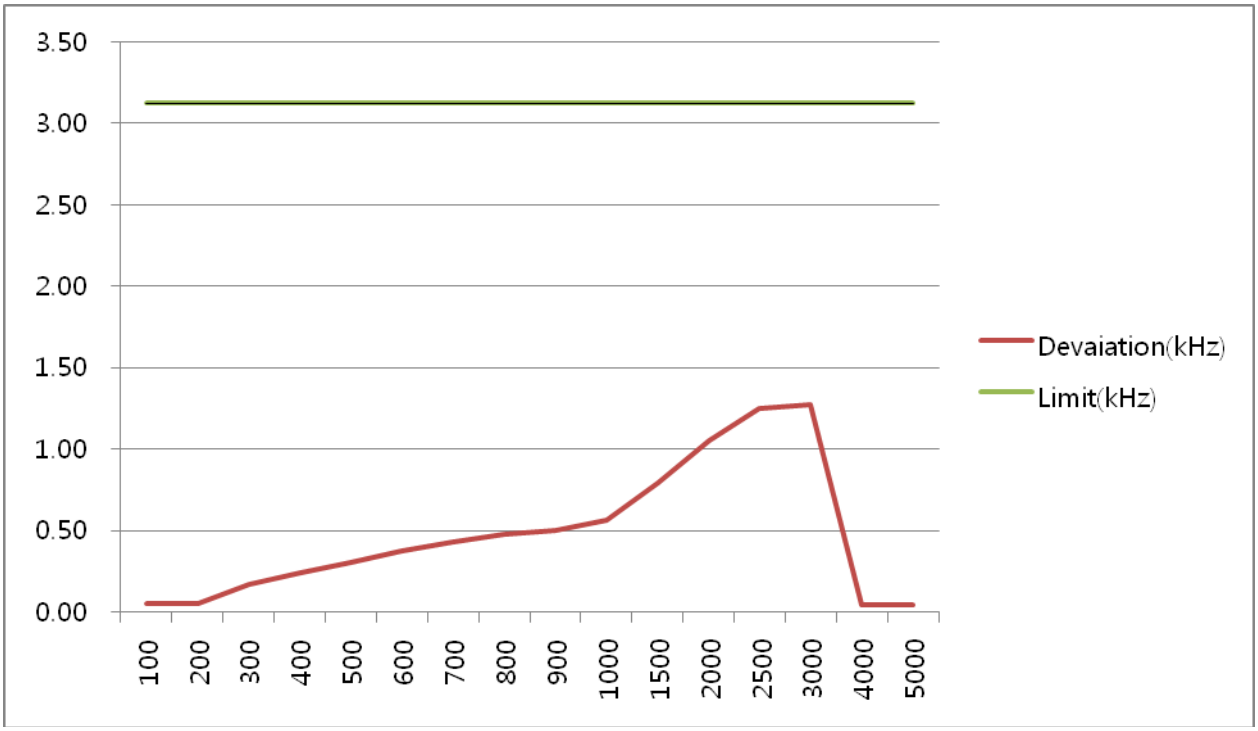
Limit
§2.1047
a) Voice modulated communication equipment. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 100 to 5000 ㎐ shall be submitted. For equipment required to have an audio low-pass filter, a curve showing the frequency response of the filter or of all circuitry installed between the modulation limiter and the modulated stage shall be submitted.

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test results

FRS

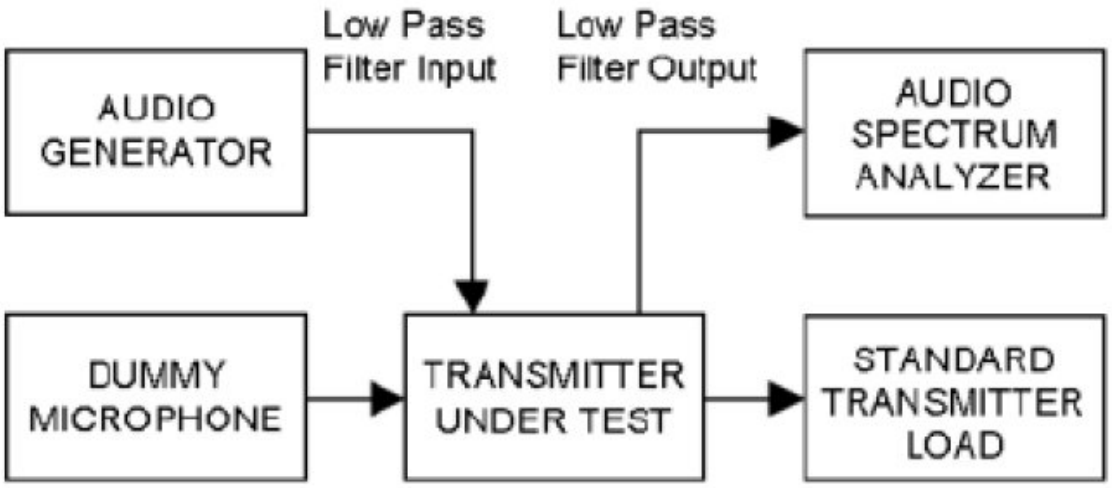
Audio frequency(㎐)	Deviation(㎑)	Limit(㎑)
100	0.05	3.125
200	0.05	3.125
300	0.17	3.125
400	0.24	3.125
500	0.30	3.125
600	0.37	3.125
700	0.43	3.125
800	0.47	3.125
900	0.50	3.125
1000	0.56	3.125
1500	0.79	3.125
2000	1.05	3.125
2500	1.25	3.125
3000	1.27	3.125
4000	0.04	3.125
5000	0.04	3.125



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2.1.4 Low-pass filter response

Test setup



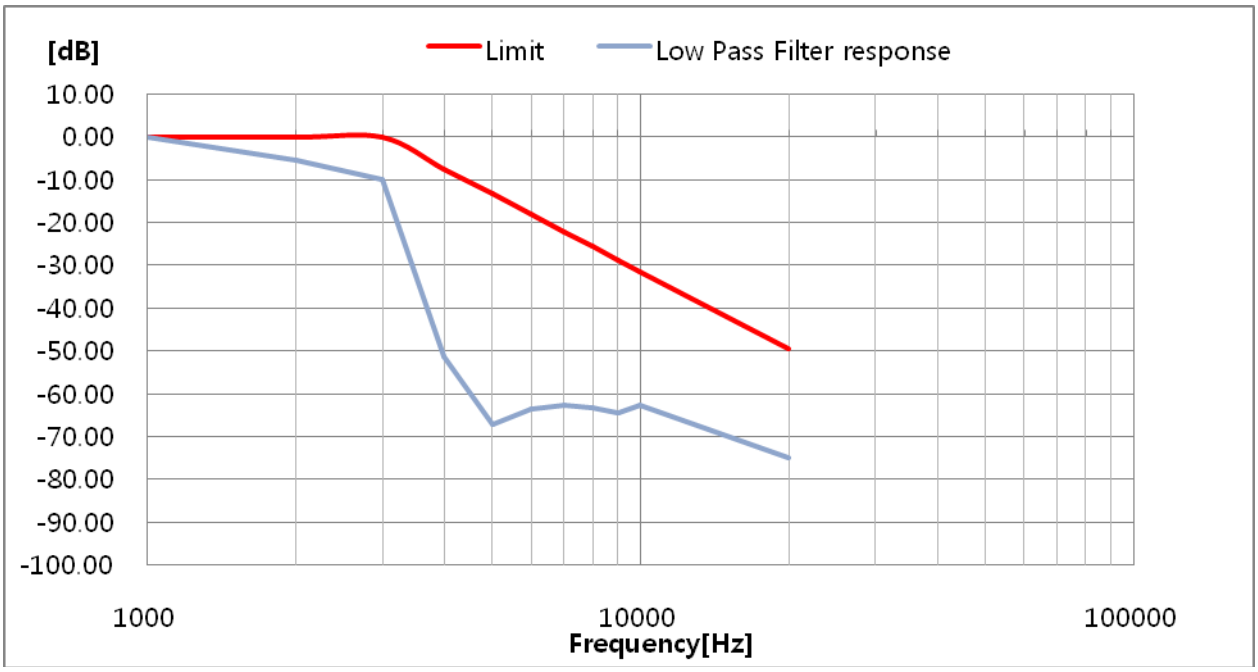
Test procedure
TIA/EIA-603-C

Limit
§95.637 & RSS-210 A6.2.2
(b) Each GMRS transmitter, except a mobile station transmitter with a power output of 2.5 W or less, must automatically prevent a greater than normal audio level from causing over modulation. The transmitter also must include audio frequency low pass filtering, unless it complies with the applicable paragraphs of §95.631 (without filtering.) The filter must be between the modulation limiter and the modulated stage of the transmitter. At any frequency (f in ㎑) between 3 and 20 ㎑, the filter must have an attenuation of at least 60 $\log_{10}$(f/3) ㏈ greater than the attenuation at 1 ㎑. Above 20 ㎑, it must have an attenuation of at least 50 ㏈ greater than the attenuation at 1 ㎑.

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test results

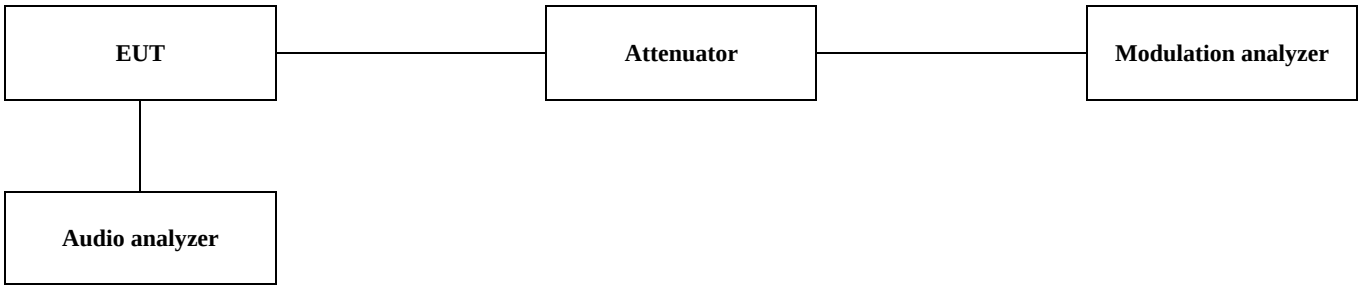
Audio frequency(Hz)	Response(dB)	Limit(dB)
1000	0.00	0.00
2000	-5.56	0.00
3000	-9.90	0.00
4000	-51.31	-7.50
5000	-66.98	-13.31
6000	-63.39	-18.06
7000	-62.68	-22.08
8000	-63.12	-25.56
9000	-64.30	-28.63
10000	-62.73	-31.37
20000	-74.89	-49.43



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2.1.5 Occupied bandwidth and emission mask

Test setup



Test procedure
TIA/EIA-603-C section 2.2.11
(Modulate the transmitter with a 2 500 ㎐ sine wave at an input level 16 ㏈ greater than that necessary to produce 50 % of rated system deviation.)

Limit
§95.633 & RSS-210 A6.1.3, A6.2.3
The authorized bandwidth (maximum permissible bandwidth of a transmission) for emission type H1D, J1D, R1D, H3E, J3E or R3E is 4 ㎑. The authorized bandwidth for emission type A1D or A3E is 8 ㎑. The authorized bandwidth for emission type F1D, G1D, F3E or G3E is 20 ㎑.

The authorized bandwidth for emission type F3E or F2D transmitted by a FRS unit is 12.5 ㎑.

§95.635 & RSS-210 A6.1.5, A6.2.5
At least 25 ㏈ (decibels) on any frequency removed from the center of the authorized bandwidth by more than 50 % up to and including 100 % of the authorized bandwidth.

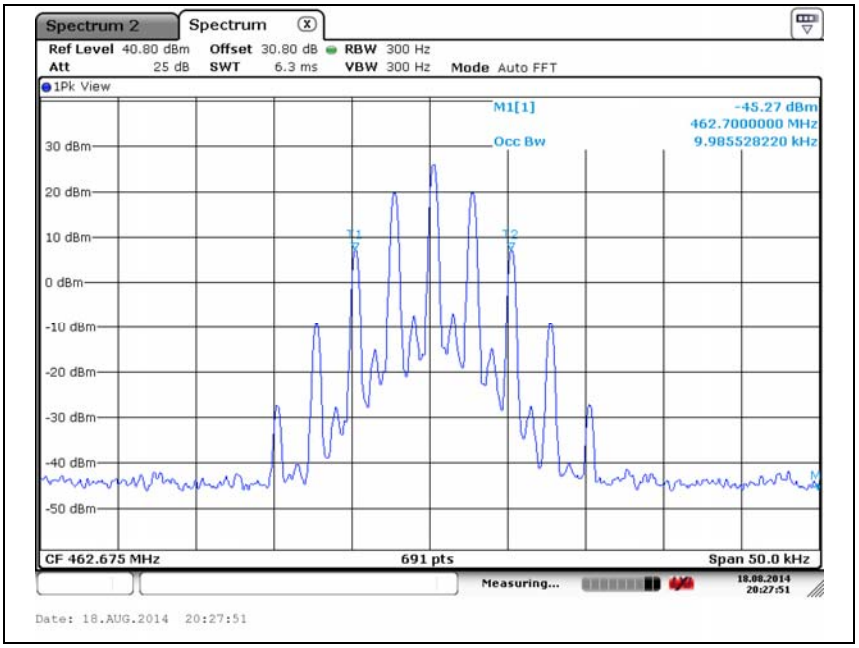
At least 35 ㏈ on any frequency removed from the center of the authorized bandwidth by more than 100 % up to and including 250 % of the authorized bandwidth.

At least 43 + 10 $\log_{10}$(T) ㏈ on any frequency removed from the center of the authorized bandwidth by more than 250 %.

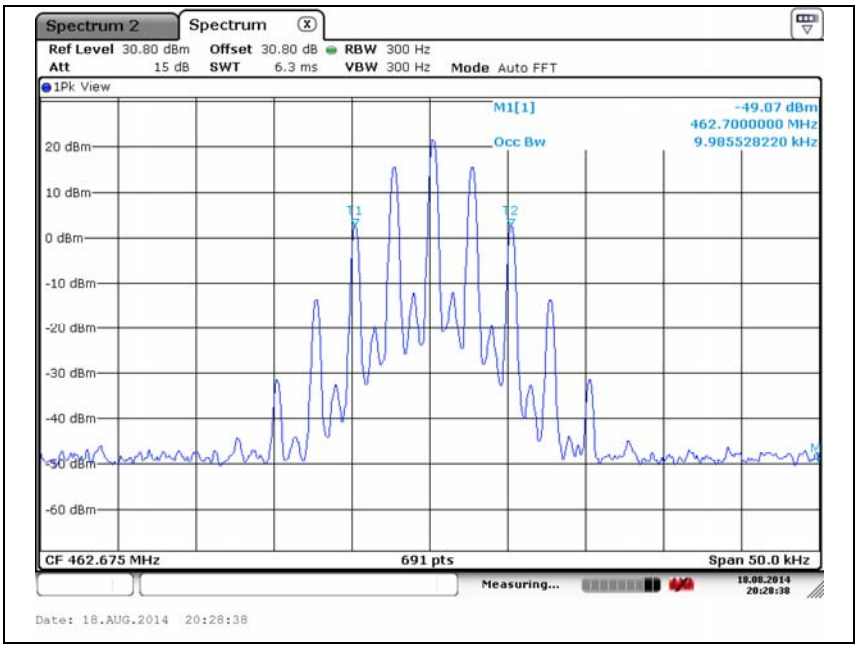
This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test results

99 % bandwidth for GMRS (High power)

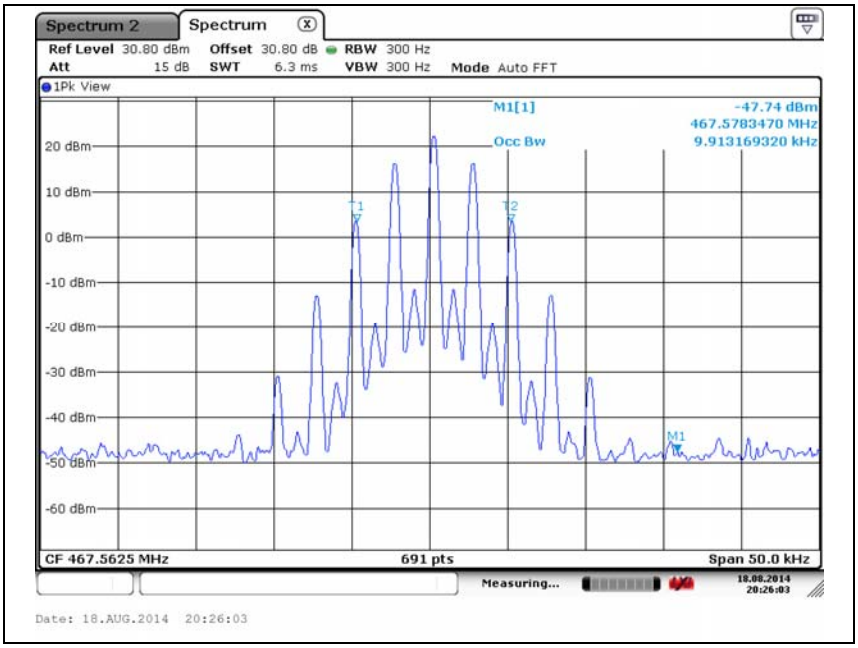


99 % bandwidth for GMRS(Low power)



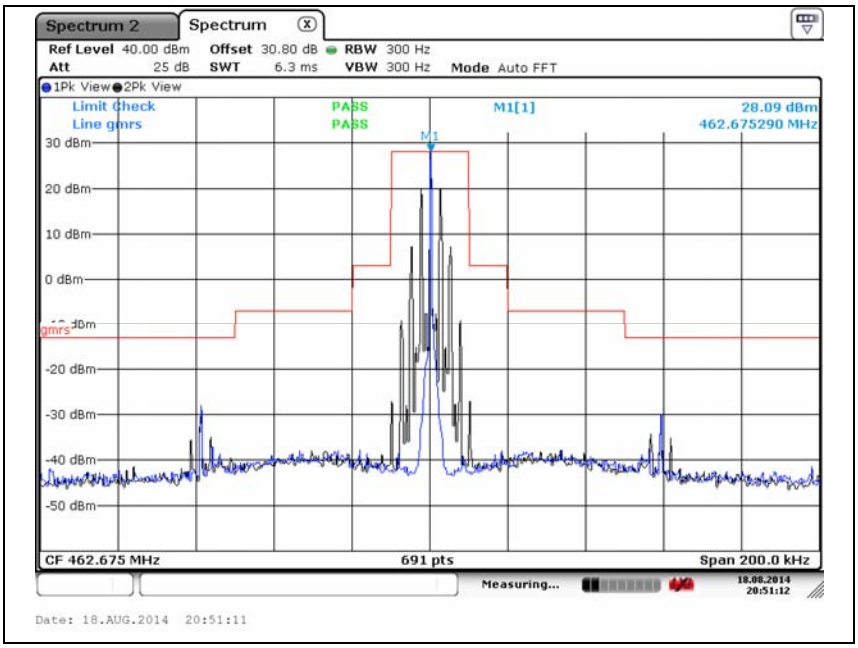
This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

99 % bandwidth for FRS

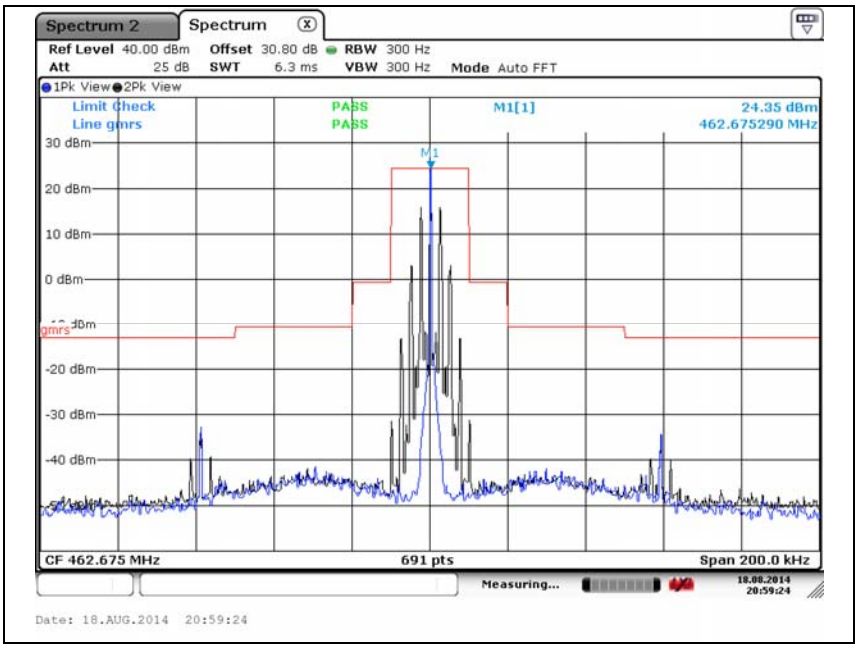


This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Emission mask for GMRS (High power)

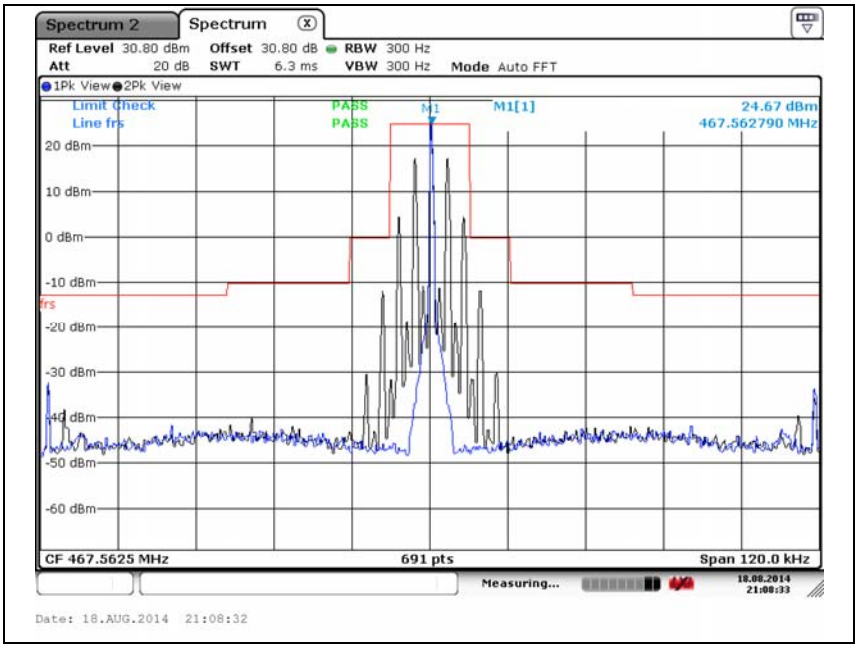


Emission mask for GMRS (Low power)



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

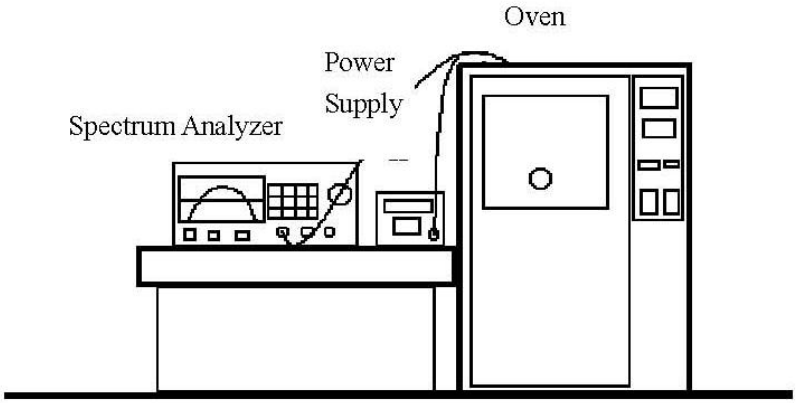
Emission mask for FRS



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

2.1.6 Frequency stability

Test setup



Test procedure

1. The transmitter output was connected to the spectrum analyzer through an attenuator.
2. The transmission time was measured with the spectrum analyzer using RBW=1 ㎑, VBW=1 ㎑.
3. Set the temperature of chamber to -30℃. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize. While maintaining a constant temperature inside the chamber, turn the EUT on and measure the EUT operating frequency.
4. Repeat step 2 with a 10℃ decreased per stage until the highest temperature 50℃ is measured, record all measured frequencies on each temperature step.

Frequency stability vs voltage;

1. Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment
2. For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

The output frequency was recorded for each voltage.

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Limit

§95.621

(b) Each GMRS transmitter for mobile station, small base station and control station operation must be maintained within a frequency tolerance of 0.000 5%. Each GMRS transmitter for base station (except small base), mobile relay station or fixed station operation must be maintained within a frequency tolerance of 0.000 25%.

§95.627

(b) Each FRS unit must be maintained within a frequency tolerance of 0.000 25%.

RSS-210 A6.1.6

FRS Devices: Carrier frequency tolerance shall be better that ±5 ppm

RSS-210 A6.2.6

GMRS Devices: Carrier frequency tolerance shall be better that ±5 ppm

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Test results

Assigned frequency (㎒): 462.675 0

Temperature (℃)	Measure frequency (㎒)	Frequency deviation (㎐)	Frequency deviation (ppm)	Frequency deviation (%)
-30	462.674030	-970	-2.097	-0.000210
-20	462.674568	-432	-0.934	-0.000093
-10	462.675265	265	0.573	0.000057
0	462.675697	697	1.506	0.000151
10	462.675548	548	1.184	0.000118
20	462.675595	595	1.286	0.000129
30	462.675267	267	0.577	0.000058
40	462.675188	188	0.406	0.000041
50	462.675175	175	0.378	0.000038

Temperature (℃)	Voltage (V)	Measure frequency (㎒)	Frequency deviation (ppm)	Frequency deviation (%)
25	3.06	462.675165	0.357	0.000036
25	4.14	462.675185	0.400	0.000040

Assigned frequency (㎒): 467.562 5

Temperature (℃)	Measure frequency (㎒)	Frequency deviation (㎐)	Frequency deviation (ppm)	Frequency deviation (%)
-30	467.563154	654	1.399	0.000140
-20	467.562742	242	0.518	0.000052
-10	467.562835	335	0.716	0.000072
0	467.562790	290	0.620	0.000062
10	467.562467	-33	-0.071	-0.000007
20	467.563120	620	1.326	0.000133
30	467.562779	279	0.597	0.000060
40	467.562848	348	0.744	0.000074
50	467.562720	220	0.471	0.000047

Temperature (℃)	Voltage (V)	Measure frequency (㎒)	Frequency deviation (ppm)	Frequency deviation (%)
25	3.06	467.562700	0.428	0.000043
25	4.14	467.562730	0.492	0.000049

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Appendix A. Test equipment used for test

Equipment	Manufacturer	Model	Serial No.	Calibration interval	Calibration due.
Spectrum analyzer	R&S	FSV30	101389	1 year	2015.04.30
Wideband Power Sensor	R&S	NRP-Z81	1137.9009.02-101886-ds	1 year	2015.01.07
Vector signal generator	R&S	SMBV2100A	1407.6004K02	1 year	2015.01.06
Trilog-broadband antenna	Schwarzbeck	VULB 9168	9168-385	2 years	2015.05.09
Dipole antenna	R&S	VHAP	574	2 years	2015.05.09
Dipole antenna	R&S	VHAP	575	2 years	2015.05.09
Dipole antenna	R&S	UHAP	545	2 years	2015.05.09
Dipole antenna	R&S	UHAP	546	2 years	2015.05.09
Horn antenna	A.H.	SAS-571	414	2 years	2015.02.28
Horn antenna	A.H.	SAS-571	781	2 years	2015.05.13
Preamplifier	HP	8447F	2805A02570	1 year	2015.04.30
Preamplifier	Schwarzbeck	BBV 9721	9721-003	2 years	2015.09.04
Brodband coaxial preamplifier	Schwarzbeck Mess-Elektronik	BB9718	9168-385	2 years	2014.09.23
Attenuator	HP	8494B	2630A12857	1 year	2015.04.30
Attenuator	BRID	8325	4676	1 year	2015.04.30
EMI Test Receiver	LIG NEX1	ISA-80	L0912K014	1 year	2014.11.15
High pass filter	Mini-circuits	NHP-800+	15542	1 year	2015.07.23
High pass filter	Weinschel	WHKX1.2/15G-6TT	1	1 year	2015.07.23
Modulation analyzer	HP	8901B	3438A05094	1 year	2015.04.30
Audio analyzer	HP	8903B	3413A14728	1 year	2015.07.23
DC power supply	HP	6674A	US36370369	1 year	2015.07.23
Temperature chamber	TABAI	MC711P	112000492	1 year	2015.04.30

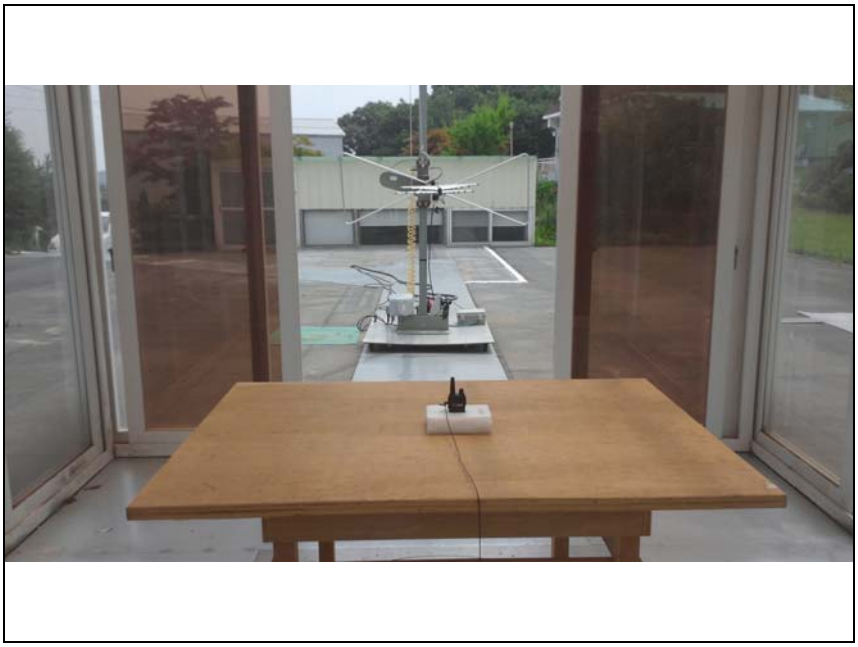
Peripheral devices

Device	Manufacturer	Model No.	Serial No.
N/A			

This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.

Appendix B. Test setup photo

Radiated field emissions



This report shall not be reproduced except in full, without the written approval of KES Co., Ltd.
The test results in the report only apply to the tested sample.