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## FCC PART 15B ANALOGUE SCANNING RECEIVER TEST REPORT

<b>Applicant</b>	<b>YAESU MUSEN CO., LTD.</b>
<b>Address</b>	<b>TENNOZU PARKSIDE BUILDING 2-5-8 HIGASHI-SHINAGAWA, SHINAGAWA-KU, TOKYO, 140-0002 JAPAN</b>
<b>FCC ID:</b>	<b>K6603770X30</b>
<b>Model Number</b>	<b>FT-818</b>
<b>Product Description</b>	<b>HF/VHF/UHF/TRANSCIEVER</b>
<b>Date Sample Received</b>	<b>1/24/2018</b>
<b>Final Test Date</b>	<b>01/29/2018</b>
<b>Tested By</b>	<b>Franklin Rose</b>
<b>Approved By</b>	<b>Tim Royer</b>
<b>Test Results</b>	<input checked="" type="checkbox"/> <b>PASS</b> <input type="checkbox"/> <b>FAIL</b>

Report Number	Version Number	Description	Issue Date
112AUT18TestReport	Rev1	Initial Issue	01/29/2018
112AUT18TestReport	Rev2	Clerical Update	02/05/2018

**THE ATTACHED REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL OF TIMCO ENGINEERING, INC.**

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## GENERAL REMARKS

The attached report shall not be reproduced except in full without the written permission of Timco Engineering Inc.

## Summary

The device under test does:

- Fulfill the general approval requirements as identified in this test report and was selected by the customer.
- Not fulfill the general approval requirements as identified in this test report

## Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

**Timco Engineering Inc.**  
**849 NW State Road 45**  
**Newberry, FL 32669**



### Tested by:

Name and Title: Franklin Rose, Project Manager/Testing Technician

**Date: 01/29/2018**



### Reviewed and approved by:

Name and Title: Tim Royer, Engineer

**Date: 2/1/2017**

## GENERAL INFORMATION

The test results relate only to the items tested.

<b>EUT Description</b>	<b>HF/VHF/UHF/TRANSCEIVER</b>
<b>FCC ID</b>	<b>K6603770X30</b>
<b>Model Number</b>	<b>FT-818</b>
<b>Range</b>	0.1 – 470 MHz, Tri-Band Rx
<b>Receiver Circuit Type</b>	Superheterodyne
<b>Lowest Internal Frequency</b>	> 9 kHz
<b>2<sup>nd</sup> Harmonic of Highest Tuned Frequency</b>	940 MHz
<b>Antenna Connector</b>	BNC
<b>EUT Power Source</b>	<input type="checkbox"/> 110–120Vac/50– 60Hz
	<input checked="" type="checkbox"/> 13.8 VDC Nominal (Optional)
	<input checked="" type="checkbox"/> Battery Operated Exclusively
<b>Test Item</b>	<input type="checkbox"/> Prototype
	<input checked="" type="checkbox"/> Pre-Production
	<input type="checkbox"/> Production
<b>Modifications required for Testing</b>	None

## REPORT SUMMARY

<b>Regulatory Standard</b>	CFR Title 47 FCC Rule part 15B § 15.109, 15.111, & 15.121
<b>Test Procedures</b>	FCC Part 15.31, 15.33, 15.35 ANSI C63.4 – 2014
<b>Operational Modes</b>	Stopped at the Lowest, middle, and highest frequency of each frequency range. In addition, scanning all frequencies of tuning range.
<b>Test Frequencies</b>	Low: 100 kHz; 50, 76, & 420 MHz
	Middle: 15, 115, & 445 MHz
	High: 30, 54, 154, & 470 MHz
	Scan: 100 kHz to 470 MHz
<b>Environmental Condition in the laboratory</b>	Temperature: 24-26°C Relative humidity: 50-65% Barometric Pressure: 1021 mb
<b>Deviation from the standard/procedure</b>	No deviation

## RESULTS SUMMARY

Requirement	Limit	Pass/Fail
15.109 Radiated Spurious Emissions	15.109(a)	Pass
15.111 Receiver Conducted Power	15.111(a)	NA <sup>(1)</sup>
15.121 38 dB Rejection	38 dB	NA <sup>(2)</sup>

### Notes:

- 1) EUT is not intended for connection with AC Mains.
- 2) Manufacturer provided attestation letter, no test required.

## RADIATED SPURIOUS EMISSIONS

**Rule Part No.:** FCC Part 15 Subpart B

**Requirements:** FCC Part 15.109(a) Radiated Emission Limit

Class B Field Strength Limits @ 3 Meters	
Frequency (MHz)	Level (dBuV/m)
30 – 88	40.0
80 – 216	43.5
216 – 960	46.0
Above 960	54.0

FCC Part 15.109(f) Radiated Emission Limit

For a receiver which employs terminals for the connection of an external receiving antenna, the receiver shall be tested to demonstrate compliance with the provisions of this section with an antenna connected to the antenna terminals unless the antenna conducted power is measured as specified in §15.111(a).

**Procedure:** FCC Part 15.33(b)(3) Frequency range of radiated measurements

FCC Part 15.35(a) Measurement detector functions and bandwidths

ANSI C63.4 Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment 9 kHz to 40 GHz

§ 6.2 Operating conditions

§ 6.3 Arrangement of EUT

§ 8.3.1 Exploratory radiated emissions measurements

§ 8.3.2 Final radiated emission measurements

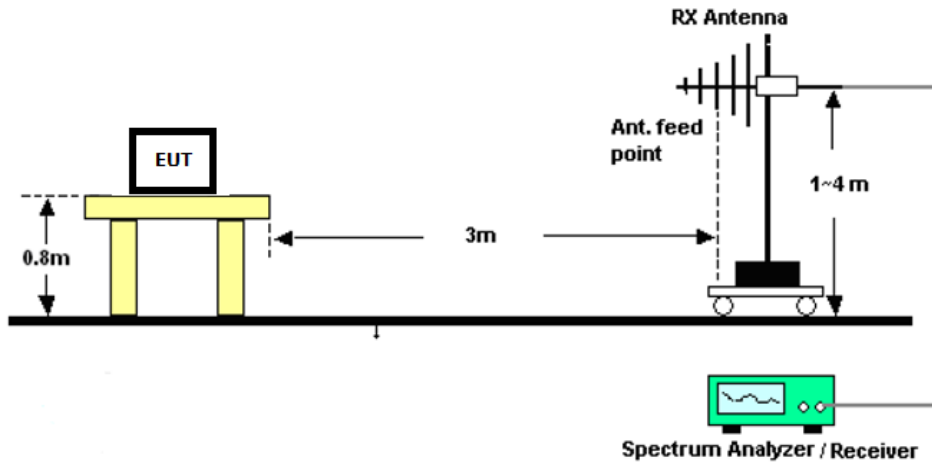
**Configuration:** The scanner receiver spurious emissions are to be measured when the receiver is in the scanning mode and repeated when the scanning is stopped, all while the antenna terminals are terminated into a non-radiating 50 Ω load.



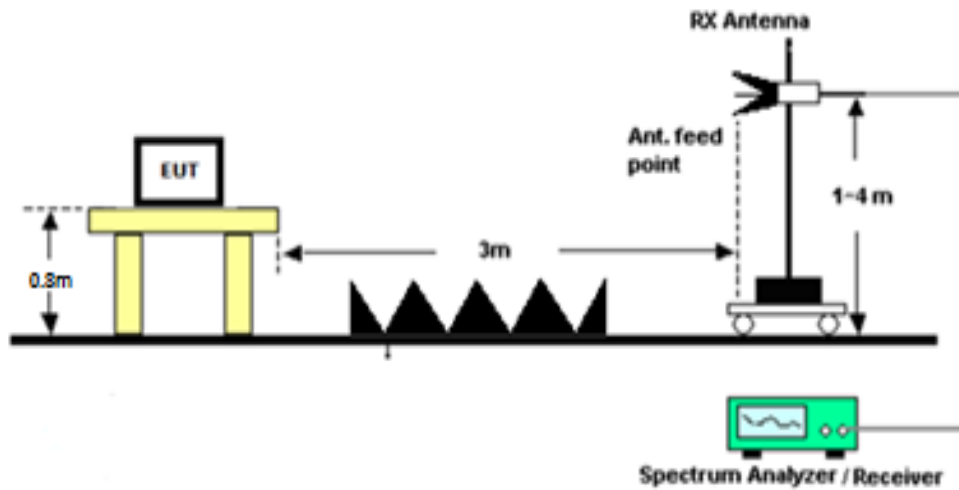
## RADIATED SPURIOUS EMISSIONS

Setup:

### Emissions 30 – 1000 MHz



### Emissions above 1 GHz



# RADIATED SPURIOUS EMISSIONS

Scanning Receiver Function, Scanned 30 MHz to 200 MHz

Test Data: Field Strength Plot, Horiz. Polarity



29.Jan 18 13:27

Test Spec CISPR 22 Radiated Disturbances

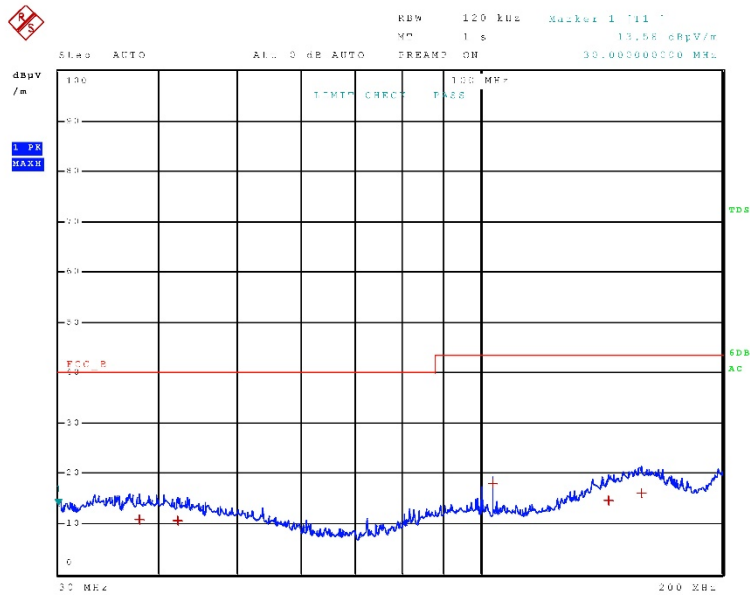
Polarity

H

**Stepped Scan (1 Range)**

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Field Strength Table, Horiz. Polarity

29.Jan 18 13:27

Test Spec CISPR 22 Radiated Disturbances

Polarity  
H

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 5

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	37.760000000 MHz	10.72	Quasi Peak	-29.28
1	42.160000000 MHz	10.57	Quasi Peak	-29.43
1	103.720000000 MHz	17.86	Quasi Peak	-25.64
1	144.320000000 MHz	14.50	Quasi Peak	-29.00
1	158.680000000 MHz	16.06	Quasi Peak	-27.44

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Applicant: YAESU MUSEN CO., LTD.  
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# RADIATED SPURIOUS EMISSIONS

## Test Data: Field Strength Plot, Vert. Polarity



29.Jan 18 13:29

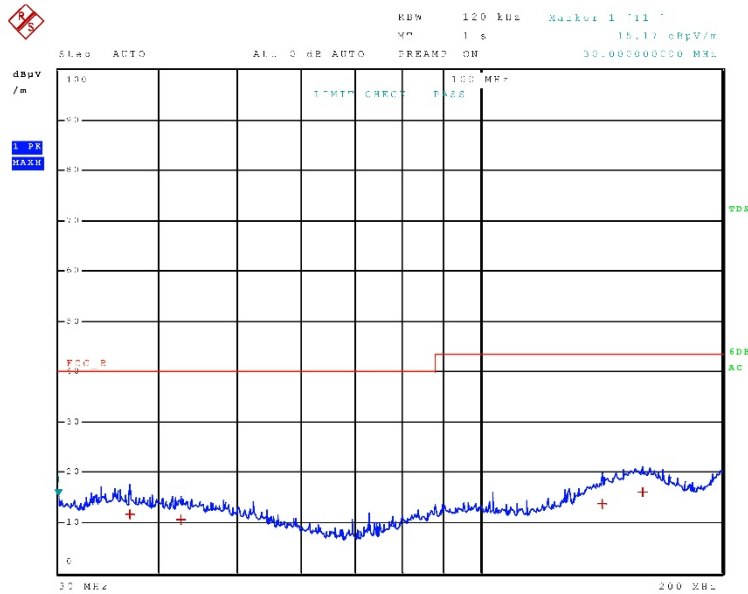
Test Spec CISPR 22 Radiated Disturbances

Polarity  
V

**Stepped Scan (1 Range)**

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Field Strength Table, Vert. Polarity

29.Jan 18 13:29

Test Spec CISPR 22 Radiated Disturbances

Polarity  
V

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	36.760000000 MHz	11.69	Quasi Peak	-28.31
1	42.560000000 MHz	10.56	Quasi Peak	-29.44
1	141.880000000 MHz	13.74	Quasi Peak	-29.76
1	159.320000000 MHz	15.97	Quasi Peak	-27.53

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# RADIATED SPURIOUS EMISSIONS

100 kHz to 30 MHz Receiver Band, Scanned 30 MHz to 200 MHz

Test Data: Low End of Band 100 kHz Field Strength Plot, Horiz. Polarity



29.Jan 18 12:54

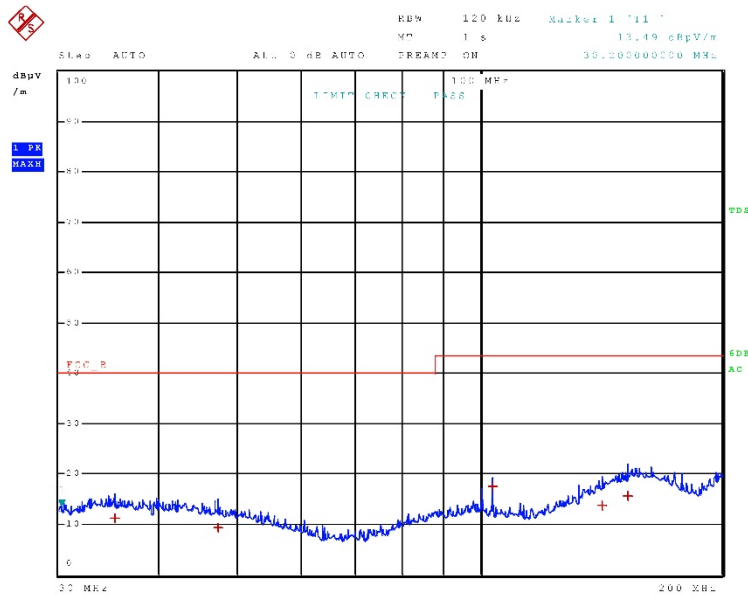
Test Spec CISPR 22 Radiated Disturbances

Polarity  
HORIZONTAL

**Stepped Scan (1 Range)**

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 100 kHz Field Strength Table, Horiz. Polarity

29.Jan 18 12:54

Test Spec CISPR 22 Radiated Disturbances

Polarity  
HORIZONTAL

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 5

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.240000000 MHz	11.32	Quasi Peak	-28.68
1	47.360000000 MHz	9.32	Quasi Peak	-30.68
1	103.640000000 MHz	17.61	Quasi Peak	-25.89
1	141.920000000 MHz	13.75	Quasi Peak	-29.75
1	152.680000000 MHz	15.73	Quasi Peak	-27.77

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# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 100 kHz Field Strength Plot, Vert. Polarity



29.Jan 18 12:50

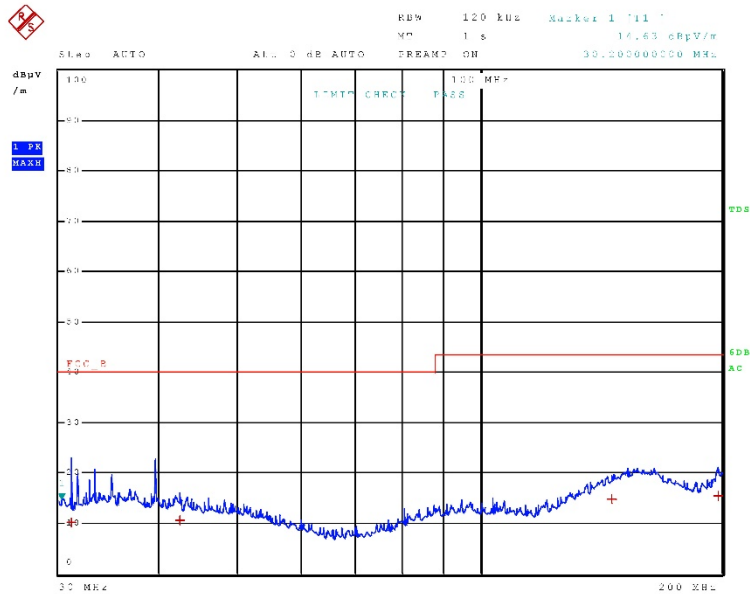
Test Spec CISPR 22 Radiated Disturbances

Polarity  
Vertical

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1



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# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 100 kHz Field Strength Table, Vert. Polarity

29.Jan 18 12:50

Test Spec CISPR 22 Radiated Disturbances

Polarity

Vertical

### Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	31.040000000 MHz	10.28	Quasi Peak	-29.72
1	42.440000000 MHz	10.53	Quasi Peak	-29.47
1	145.760000000 MHz	14.88	Quasi Peak	-28.62
1	197.440000000 MHz	15.52	Quasi Peak	-27.98

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# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 15 MHz Field Strength Plot, Horiz. Polarity



29.Jan 18 13:19

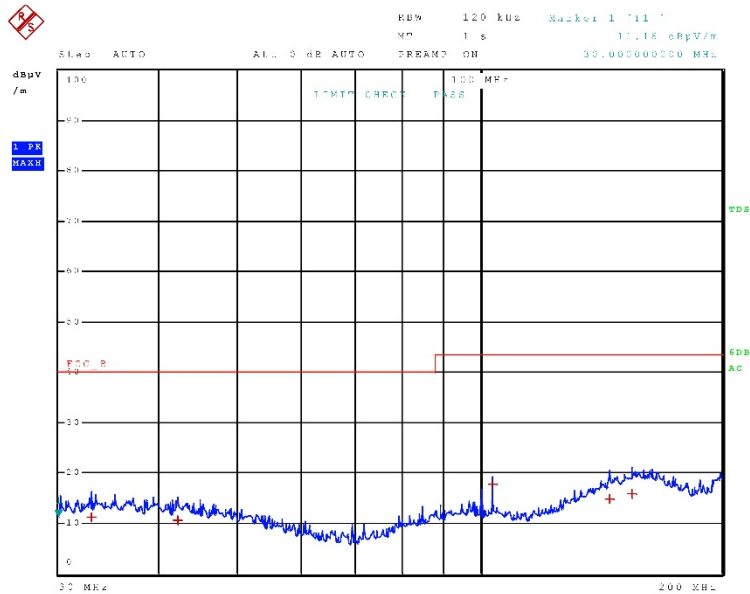
Test Spec CISPR 22 Radiated Disturbances

Polarity  
H

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 15 MHz Field Strength Table, Horiz. Polarity

29.Jan 18 13:19

Test Spec CISPR 22 Radiated Disturbances

Polarity

H

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 5

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	32.920000000 MHz	11.34	Quasi Peak	-28.66
1	42.120000000 MHz	10.68	Quasi Peak	-29.32
1	103.680000000 MHz	17.85	Quasi Peak	-25.65
1	145.040000000 MHz	14.71	Quasi Peak	-28.79
1	154.280000000 MHz	15.93	Quasi Peak	-27.57

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# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 15 MHz Field Strength Plot, Vert. Polarity



29.Jan 18 13:18

Test Spec CISPR 22 Radiated Disturbances

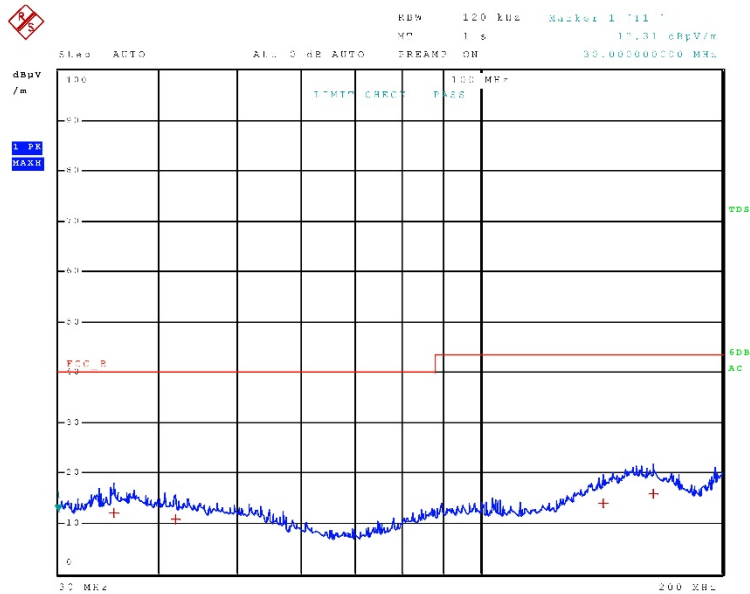
Polarity

V

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 15 MHz Field Strength Table, Vert. Polarity

29 Jan 18 13:18

**Test Spec** CISPR 22 Radiated Disturbances

**Polarity**  
V

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.08000000 MHz	12.18	Quasi Peak	-27.82
1	41.92000000 MHz	10.75	Quasi Peak	-29.25
1	142.32000000 MHz	13.91	Quasi Peak	-29.59
1	164.08000000 MHz	15.78	Quasi Peak	-27.72

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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 30 MHz Field Strength Plot, Horiz. Polarity



29.Jan 18 12:55

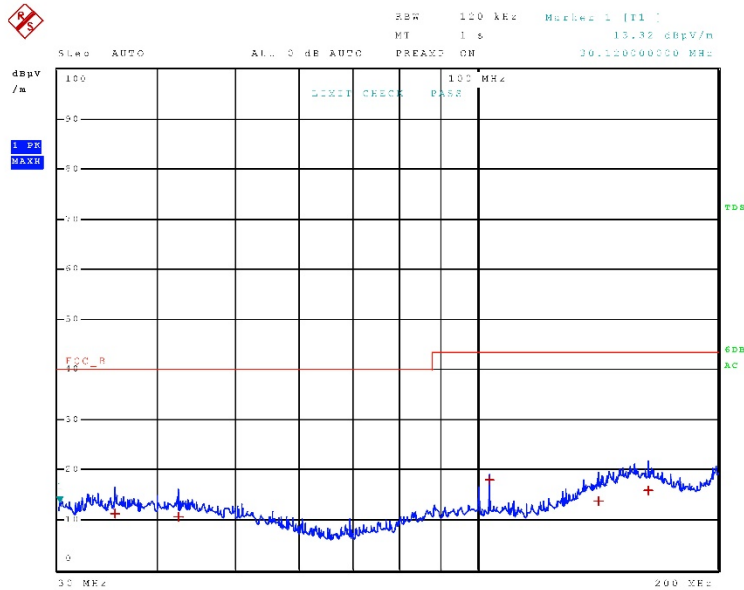
Test Spec: CISPR 22 Radiated Disturbances

Polarity: HORIZONTAL

**Stepped Scan (1 Range)**

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 30 MHz Field Strength Table, Horiz. Polarity

29.Jan.18 12:55

Test Spec CISPR 22 Radiated Disturbances

Polarity  
HORIZONTAL

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 5

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.280000000 MHz	11.25	Quasi Peak	-28.75
1	42.360000000 MHz	10.53	Quasi Peak	-29.47
1	103.720000000 MHz	17.96	Quasi Peak	-25.54
1	142.000000000 MHz	13.74	Quasi Peak	-29.76
1	163.440000000 MHz	15.83	Quasi Peak	-27.67

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 30 MHz Field Strength Plot, Vert. Polarity



29 Jan 18 12:57

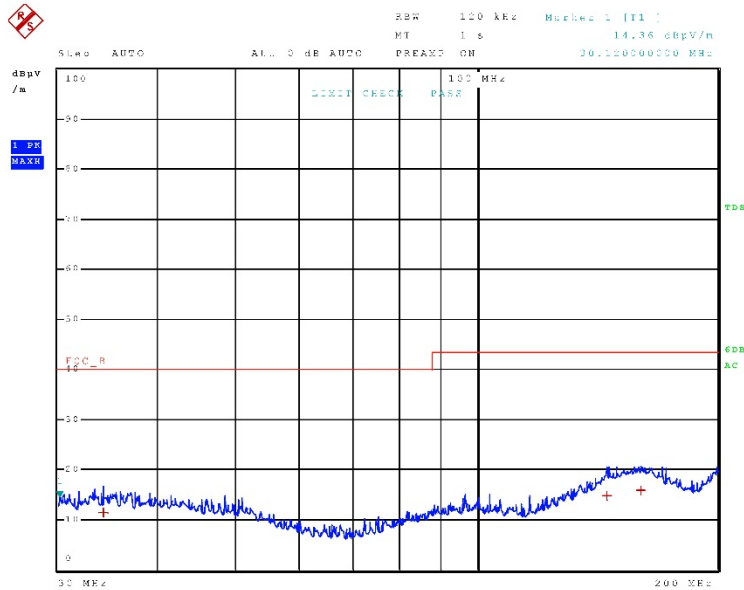
Test Spec: CISPR 22 Radiated Disturbances

Polarity: VERTICAL

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1







# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 30 MHz Field Strength Table, Vert. Polarity

29.Jan 18 12:57

Test Spec CISPR 22 Radiated Disturbances

Polarity  
VERTICAL

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 3

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	34.20000000 MHz	11.46	Quasi Peak	-28.54
1	145.12000000 MHz	14.73	Quasi Peak	-28.77
1	160.04000000 MHz	15.84	Quasi Peak	-27.66

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

50 MHz to 54 MHz Receiver Band, Scanned 30 MHz to 200 MHz

Test Data: Low End of Band 50 MHz Field Strength Plot, Horiz. Polarity



29.Jan 18 13:15

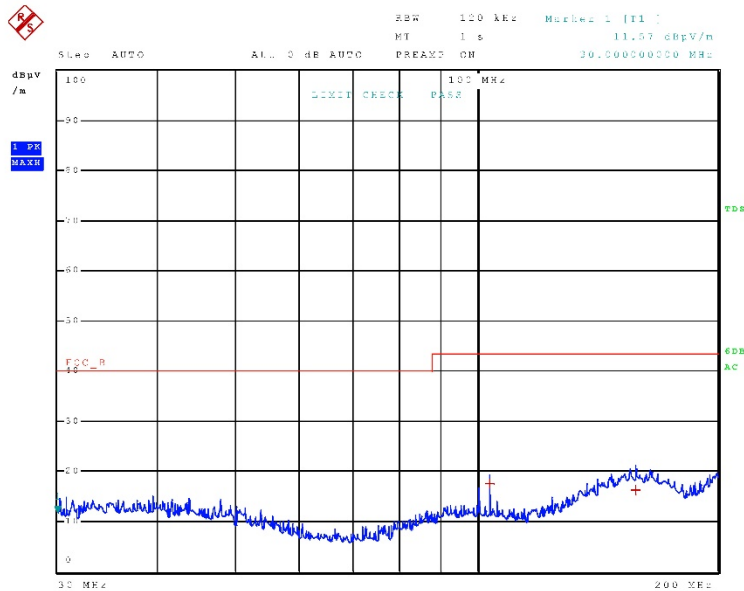
Test Spec CISPR 22 Radiated Disturbances

Polarity  
H

**Stepped Scan (1 Range)**

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μs	Auto	20 dB	INPUT1





## RADIATED SPURIOUS EMISSIONS

### Test Data: Low End of Band 50 MHz Field Strength Table, Horiz. Polarity

29.Jan 18 13:15

Test Spec CISPR 22 Radiated Disturbances

Polarity

H

#### Final Measurement

Meas Time: 1 s

Margin: 25 dB

Subranges: 2

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	103.720000000 MHz	17.59	Quasi Peak	-25.91
1	157.560000000 MHz	16.22	Quasi Peak	-27.28

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
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# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 50 MHz Field Strength Plot, Vert. Polarity



29.Jan 18 13:16

Test Spec CISPR 22 Radiated Disturbances

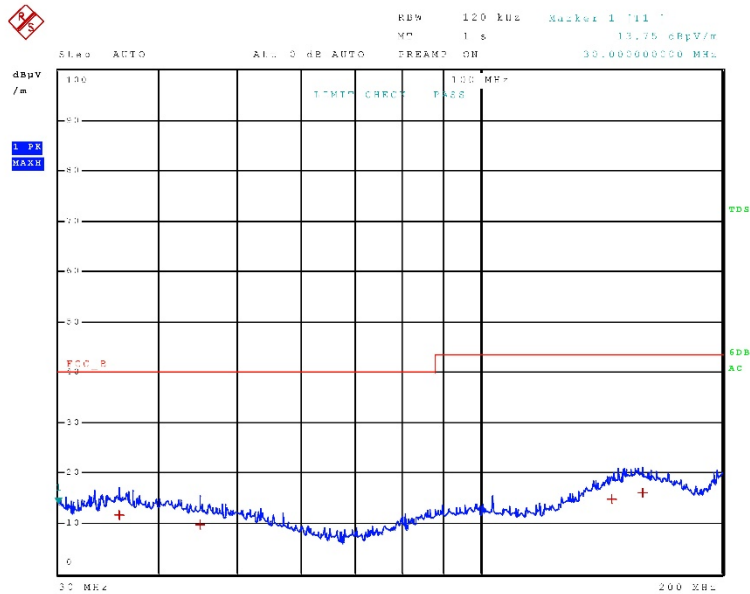
Polarity

V

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 50 MHz Field Strength Table, Vert. Polarity

29.Jan 18 13:16

Test Spec CISPR 22 Radiated Disturbances

Polarity  
V

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.640000000 MHz	11.72	Quasi Peak	-28.28
1	44.920000000 MHz	9.83	Quasi Peak	-30.17
1	145.680000000 MHz	14.86	Quasi Peak	-28.64
1	159.040000000 MHz	16.00	Quasi Peak	-27.50

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 54 MHz Field Strength Plot, Horiz. Polarity



29.Jan 18 12:59

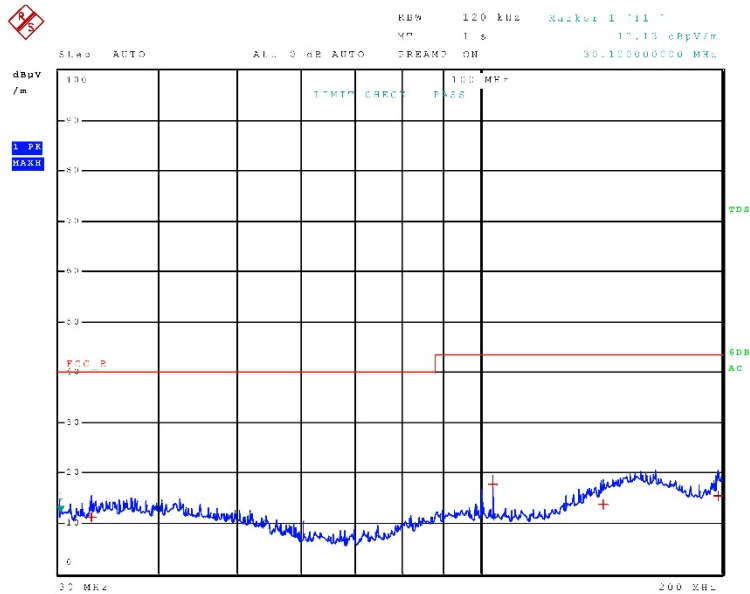
Test Spec CISPR 22 Radiated Disturbances

Polarity  
HORIZONTAL

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 54 MHz Field Strength Table, Horiz. Polarity

29.Jan 18 12:59

Test Spec CISPR 22 Radiated Disturbances

Polarity  
HORIZONTAL

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	32.960000000 MHz	11.29	Quasi Peak	-28.71
1	103.680000000 MHz	17.80	Quasi Peak	-25.70
1	142.040000000 MHz	13.76	Quasi Peak	-29.74
1	197.280000000 MHz	15.49	Quasi Peak	-28.01

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 54 MHz Field Strength Plot, Vert. Polarity



29.Jan 18 12:58

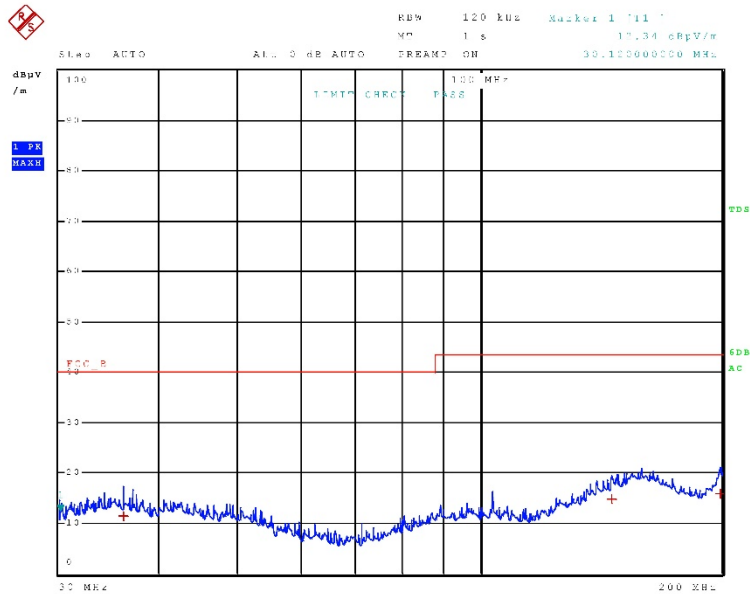
Test Spec CISPR 22 Radiated Disturbances

Polarity  
VERTICAL

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1







# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 54 MHz Field Strength Table, Vert. Polarity

29.Jan 18 12:58

Test Spec CISPR 22 Radiated Disturbances

Polarity  
VERTICAL

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 3

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	36.120000000 MHz	11.53	Quasi Peak	-28.47
1	145.600000000 MHz	14.81	Quasi Peak	-28.69
1	198.680000000 MHz	15.85	Quasi Peak	-27.65

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

76 MHz to 154 MHz Receiver Band, Scanned 30 MHz to 200 MHz

Test Data: Low End of Band 76 MHz Field Strength Plot, Horiz. Polarity



29.Jan.18 13:00

Test Spec CISPR 22 Radiated Disturbances

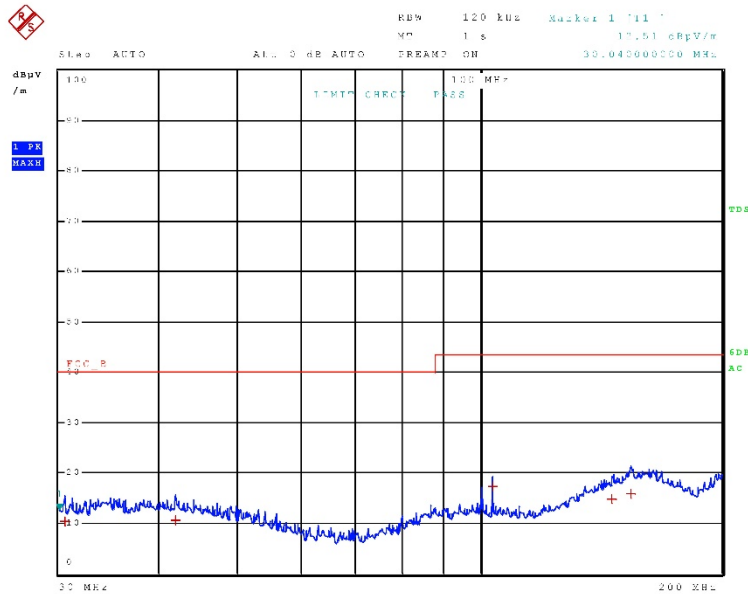
Polarity

H

**Stepped Scan (1 Range)**

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 μs	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 76 MHz Field Strength Table, Horiz. Polarity

29.Jan.18 13:00

Test Spec CISPR 22 Radiated Disturbances

Polarity

H

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 5

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	30.480000000 MHz	10.50	Quasi Peak	-29.50
1	41.920000000 MHz	10.66	Quasi Peak	-29.34
1	103.760000000 MHz	17.36	Quasi Peak	-26.14
1	145.640000000 MHz	14.87	Quasi Peak	-28.63
1	153.920000000 MHz	15.88	Quasi Peak	-27.62

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 76 MHz Field Strength Plot, Vert. Polarity



29 Jan 18 13:01

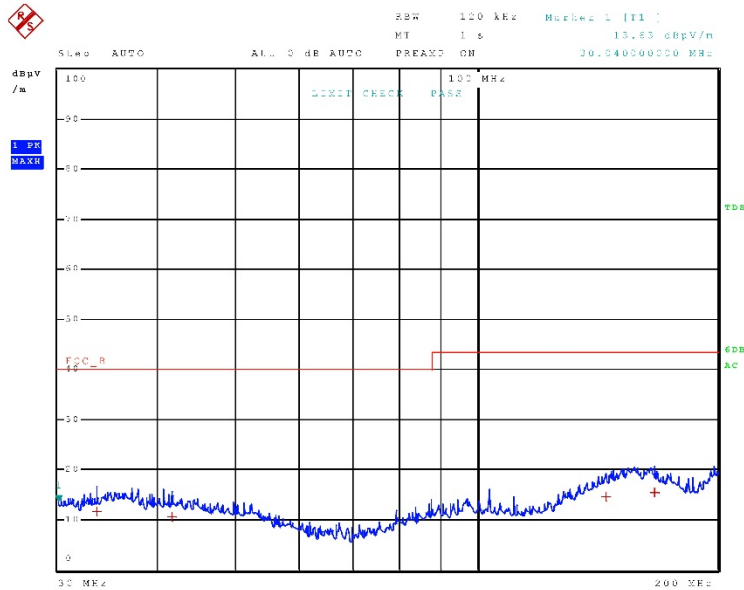
Test Spec: CISPR 22 Radiated Disturbances

Polarity: V

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Low End of Band 76 MHz Field Strength Table, Vert. Polarity

29.Jan 18 13:01

Test Spec CISPR 22 Radiated Disturbances

Polarity  
V

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	33.560000000 MHz	11.61	Quasi Peak	-28.39
1	41.600000000 MHz	10.69	Quasi Peak	-29.31
1	144.880000000 MHz	14.69	Quasi Peak	-28.81
1	166.680000000 MHz	15.48	Quasi Peak	-28.02

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 115 MHz Field Strength Plot, Horiz. Polarity



29.Jan 18 13:04

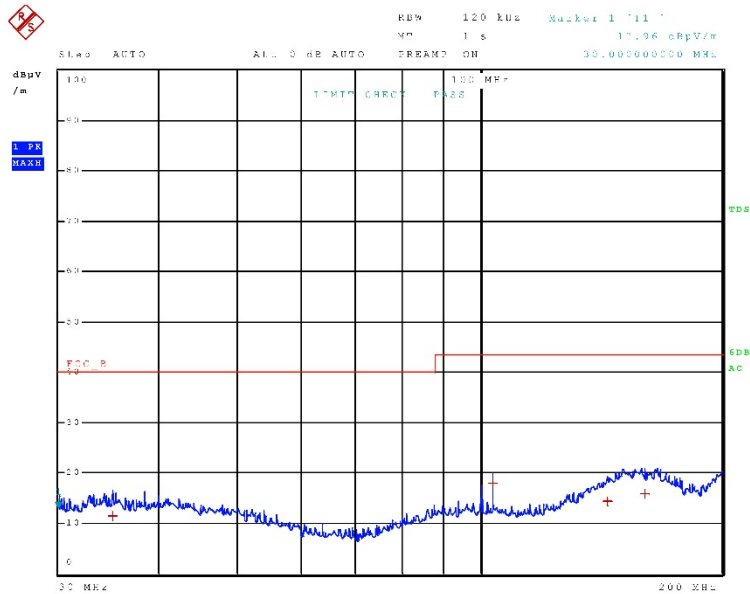
Test Spec CISPR 22 Radiated Disturbances

Polarity  
H

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 115 MHz Field Strength Table, Horiz. Polarity

29.Jan.18 13:04

Test Spec CISPR 22 Radiated Disturbances

Polarity

H

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.000000000 MHz	11.40	Quasi Peak	-28.60
1	103.680000000 MHz	17.89	Quasi Peak	-25.61
1	144.000000000 MHz	14.46	Quasi Peak	-29.04
1	160.120000000 MHz	15.79	Quasi Peak	-27.71

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: Middle of Band 115 MHz Field Strength Table, Vert. Polarity

29 Jan 18 13:03

**Test Spec** CISPR 22 Radiated Disturbances

**Polarity**  
V

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.64000000 MHz	11.71	Quasi Peak	-28.29
1	43.80000000 MHz	10.38	Quasi Peak	-29.62
1	144.36000000 MHz	14.53	Quasi Peak	-28.97
1	168.24000000 MHz	15.00	Quasi Peak	-28.50

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 154 MHz Field Strength Plot, Horiz. Polarity



29 Jan 18 13:05

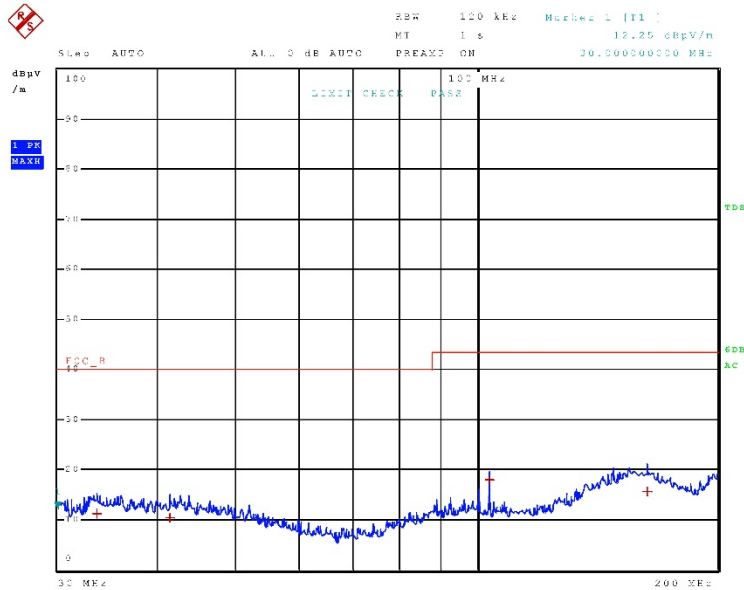
Test Spec: CISPR 22 Radiated Disturbances

Polarity: H

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
 Scan Stop: 200 MHz  
 Detector: Trace 1: MAX PEAK  
 Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1





# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 154 MHz Field Strength Table, Horiz. Polarity

29.Jan 18 13:05

Test Spec CISPR 22 Radiated Disturbances

Polarity  
H

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 4

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	33.560000000 MHz	11.17	Quasi Peak	-28.83
1	41.400000000 MHz	10.49	Quasi Peak	-29.51
1	103.720000000 MHz	17.90	Quasi Peak	-25.60
1	162.920000000 MHz	15.75	Quasi Peak	-27.75

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
Report: 112AUT18TestReport\_Rev2

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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 154 MHz Field Strength Plot, Vert. Polarity



29.Jan 18 13:06

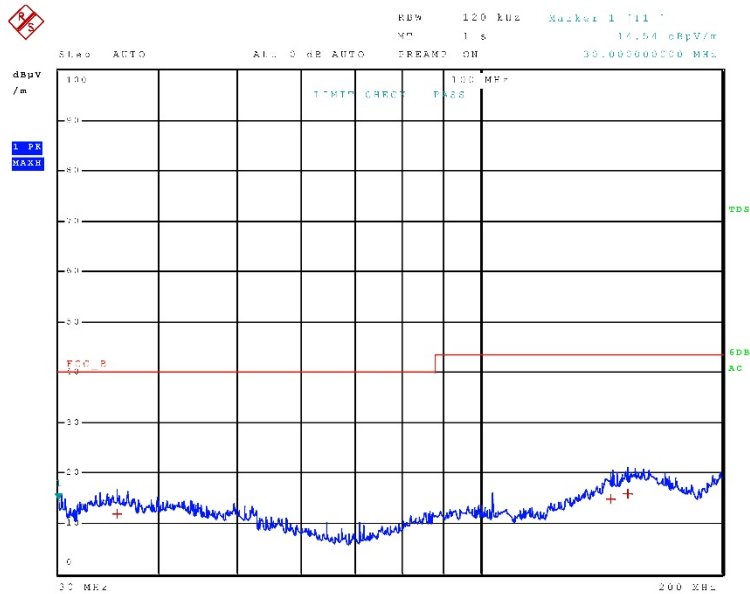
Test Spec CISPR 22 Radiated Disturbances

Polarity  
V

### Stepped Scan (1 Range)

Scan Start: 30 MHz  
Scan Stop: 200 MHz  
Detector: Trace 1: MAX PEAK  
Transducer: TDS\_01

Start Frequency	Stop Frequency	Step Size	Res BW	Meas Time	RF Atten	Preamp	Input
30.000000 MHz	200.000000 MHz	40.00 kHz	120.00 kHz	50 $\mu$ s	Auto	20 dB	INPUT1



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# RADIATED SPURIOUS EMISSIONS

## Test Data: High End of Band 154 MHz Field Strength Table, Vert. Polarity

29 Jan 18 13:06

**Test Spec** CISPR 22 Radiated Disturbances

**Polarity**  
V

### Final Measurement

Meas Time: 1 s  
Margin: 25 dB  
Subranges: 3

Trace	Frequency	Level (dB $\mu$ V/m)	Detector	Delta Limit/dB
1	35.44000000 MHz	11.87	Quasi Peak	-28.13
1	145.52000000 MHz	14.79	Quasi Peak	-28.71
1	152.56000000 MHz	15.82	Quasi Peak	-27.68

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Applicant: YAESU MUSEN CO., LTD.  
FCC ID: K6603770X30  
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