



849 NW STATE ROAD 45
NEWBERRY, FL 32669 USA
PH: 888.472.2424 OR
352.472.5500
FAX: 352.472.2030
EMAIL: INFO@TIMCOENGR.COM
[HTTP://WWW.TIMCOENGR.COM](http://WWW.TIMCOENGR.COM)

FCC PART 90 VHF/700/800 MHz TEST REPORT

APPLICANT	EF JOHNSON COMPANY
ADDRESS	37121 Knoll Drive Waseca Minnesota 56093 USA
FCC ID	ATH2425M80
MODEL NUMBER	242-5M80
PRODUCT DESCRIPTION	DUAL BAND VHF AND 700-800 MHZ MOBILE TRANSCEIVER
DATE SAMPLE RECEIVED	7/29/2015
FINAL TEST DATE	10/22/2015
TESTED BY	Cory Leverett
APPROVED BY	Sid Sanders
TEST RESULTS	<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL

Report Number	Version Number	Description	Issue Date
1535AUT15TestReport	Rev1	Initial Issue	9/22/2015
	Rev2	Updated Report	10/22/2015

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

TABLE OF CONTENTS

GENERAL REMARKS5

GENERAL INFORMATION6

TEST RESULTS SUMMARY.....7

RF POWER OUTPUT8

MODULATION CHARACTERISTICS9

 BANDWIDTH CALCULATION9

 AUDIO FREQUENCY RESPONSE – 12.5 kHz 10

 AUDIO FREQUENCY RESPONSE – 25 kHz..... 11

 AUDIO LOW PASS FILTER 12.5 kHz 12

 AUDIO LOW PASS FILTER 25 kHz 13

 MODULATION LIMITING 12.5 kHz..... 14

 MODULATION LIMITING 25 kHz 15

OCCUPIED BANDWIDTH..... 16

 TEST FREQ. 150.85 MHz–11k0F3E..... 17

 TEST FREQ. 150.85 MHz–8K10F1E/8K10F1D 18

 TEST FREQ. 150.85 MHz–8K10F7E 19

 TEST FREQ. 161.5 MHz–11k0F3E 20

 TEST FREQ. 161.5 MHz–8K10F1E/8K10F1D 21

 TEST FREQ. 161.5 MHz–8K10F7E 22

 TEST FREQ. 173.4 MHz–11k0F3E 23

 TEST FREQ. 173.4 MHz–8K10F1E/8K10F1D 24

 TEST FREQ. 173.4 MHz–8K10F7E 25

 TEST FREQ. 806.05 MHz–16k0F3E..... 26

 TEST FREQ. 806.05 MHz–14k0F3E..... 27

 TEST FREQ. 806.05 MHz–11k0F3E..... 28

 TEST FREQ. 806.05 MHz–8K10F1E/8K10F1D 29

 TEST FREQ. 806.05 MHz–8K10F7E 30

 TEST FREQ. 815.05 MHz–16k0F3E..... 31

 TEST FREQ. 815.05 MHz–14k0F3E..... 32

 TEST FREQ. 815.05 MHz–11k0F3E..... 33

 TEST FREQ. 815.05 MHz–8K10F1E/8K10F1D 34

 TEST FREQ. 815.05 MHz–8K10F7E 35

 TEST FREQ. 823.95 MHz–16k0F3E..... 36

 TEST FREQ. 823.95 MHz–14k0F3E..... 37

 TEST FREQ. 823.95 MHz–11k0F3E..... 38

 TEST FREQ. 823.95 MHz–8K10F1E/8K10F1D 39

 TEST FREQ. 823.95 MHz–8K10F7E 40

 TEST FREQ. 851.05 MHz–16k0F3E..... 41

TEST FREQ. 851.05 MHz-14k0F3E.....	42
TEST FREQ. 851.05 MHz-11k0F3E.....	43
TEST FREQ. 851.05 MHz-8K10F1E/8K10F1D	44
TEST FREQ. 851.05 MHz-8K10F7E	45
TEST FREQ. 860.05 MHz-16k0F3E.....	46
TEST FREQ. 860.05 MHz-14k0F3E.....	47
TEST FREQ. 860.05 MHz-11k0F3E.....	48
TEST FREQ. 860.05 MHz-8K10F1E/8K10F1D	49
TEST FREQ. 860.05 MHz-8K10F7E	50
TEST FREQ. 868.95 MHz-16k0F3E.....	51
TEST FREQ. 868.95 MHz-14k0F3E.....	52
TEST FREQ. 868.95 MHz-11k0F3E.....	53
TEST FREQ. 868.95 MHz-8K10F1E/8K10F1D	54
TEST FREQ. 868.95 MHz-8K10F7E	55
ADJACENT CHANNEL POWER (ACP)	56
TEST FREQ. 769.05 MHz-16K0F3E.....	58
TEST FREQ. 769.05 MHz-11K0F3E.....	61
TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D	64
TEST FREQ. 769.05 MHz-8K10F7E.....	67
TEST FREQ. 772.05 MHz-16K0F3E.....	70
TEST FREQ. 772.05 MHz-11K0F3E.....	73
TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D	76
TEST FREQ. 772.05 MHz-8K10F7E.....	79
TEST FREQ. 774.95 MHz-16K0F3E.....	82
TEST FREQ. 774.95 MHz-11K0F3E.....	85
TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D	88
TEST FREQ. 774.95 MHz-8K10F7E.....	91
TEST FREQ. 799.05 MHz-16K0F3E.....	94
TEST FREQ. 799.05 MHz-11K0F3E.....	97
TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D	100
TEST FREQ. 799.05 MHz-8K10F7E.....	103
TEST FREQ. 802.05 MHz-16K0F3E.....	106
TEST FREQ. 802.05 MHz-11K0F3E.....	109
TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D	112
TEST FREQ. 802.05 MHz-8K10F7E.....	115
TEST FREQ. 804.95 MHz-16K0F3E.....	118
TEST FREQ. 804.95 MHz-11K0F3E.....	121
TEST FREQ. 804.95 MHz-8K10F1E/8K10F1D	124
TEST FREQ. 804.95 MHz-8K10F7E.....	127
SPURIOUS EMISSIONS AT ANTENNA TERMINALS (CONDUCTED).....	130
Test Data: High Power 150.85 MHz.....	132
Test Data: High Power 161.65 MHz.....	133



Test Data: High Power 173.4 MHz 134

Test Data: High Power 763.50 MHz..... 135

Test Data: High Power 769.05 MHz..... 136

Test Data: High Power 775.0 MHz 137

Test Data: High Power 793.50 MHz..... 138

Test Data: High Power 798.50 MHz..... 139

Test Data: High Power 804.95 MHz..... 140

Test Data: High Power 806.50 MHz..... 141

Test Data: High Power 815.50 MHz..... 142

Test Data: High Power 823.95 MHz..... 143

Test Data: High Power 851.50 MHz..... 144

Test Data: High Power 860.05 MHz..... 145

Test Data: High Power 868.95 MHz..... 146

FIELD STRENGTH OF SPURIOUS RADIATION EMISSIONS 147

Test Data: High Power 173.3 MHz 149

Test Data: High Power 769.05 MHz..... 149

Test Data: High Power 802.05 MHz..... 150

Test Data: High Power 823.95 MHz..... 150

Test Data: High Power 868.95 MHz..... 151

FREQUENCY STABILITY 152

Test Data: 815.05 MHz 12.5 KHz..... 152

TRANS:IENT FREQUENCY RESPONSE 153

Test Data: 12.5 KHz Channel Spacing Turn On 155

Test Data: 12.5 KHz Channel Spacing Turn Off..... 156

Test Data: 25 KHz Channel Spacing Turn On..... 157

Test Data: 25 KHz Channel Spacing Turn Off..... 158

EQUIPMENT LIST..... 159

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
 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, under my supervision, at:

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

Authorized Signatory Name:



Project Manager/Testing Technician

Date: 10/22/2015

[Table of Contents](#)

GENERAL INFORMATION

EUT Specification

EUT Description	DUAL BAND VHF AND 700-800 MHZ MOBILE TRANSCEIVER
FCC ID	ATH2425M80
Model Number	242-5M80
Operating Frequency	150-174, 769-775, 799-805, 806-824, 851-869 MHz
Test Frequencies	150.85, 161.5, 173.4, 769.05, 772.05, 774.95, 799.05, 802.05, 804.95, 806.05, 815.05, 823.95, 851.05, 860.05, 868.95 MHz
Type of Emission	16K0F3E, 14K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 8K10F7E
Modulation	FM
EUT Power Source	<input type="checkbox"/> 110-120Vac/50- 60Hz
	<input checked="" type="checkbox"/> DC Power 12V
	<input type="checkbox"/> Battery Operated Exclusively
Test Item	<input type="checkbox"/> Prototype
	<input checked="" type="checkbox"/> Pre-Production
	<input type="checkbox"/> Production
Type of Equipment	<input type="checkbox"/> Fixed
	<input checked="" type="checkbox"/> Mobile
	<input type="checkbox"/> Portable
Test Conditions	Temperature: 24-26°C Relative Humidity: 50 - 65%.
Modification to the EUT	None
Test Exercise	The EUT was operated in a normal mode.
Regulatory Standard	FCC CFR 47 Part 90, 90R, 90S
Measurement Standard	ANSI/TIA 603-D:2010 ANSI C63.4 - 2014 ANSI C63.4 - 2009 (TEST SITE VALIDATION)
Test Facility	Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA.

[Table of Contents](#)

TEST RESULTS SUMMARY

Test Description	FCC RULE PART NO.	RESULT
Modulation Characteristics	2.1047(a)(b)	Pass
RF Power Output	2.1046(a), 90.541(d), 90.542(a)(7), 90.635(b)	Pass
Occupied Bandwidth	2.1049(c)(h), 90.210(b)(g)(h), 90.691	Pass
Adjacent Channel Power	90.543(a)	Pass
Spurious Emissions at Antenna Terminal	2.1051(a), 90.210(b)(g)(h), 90.691, 90.543(c)	Pass
Field Strength of Spurious Radiation	2.1053, 90.210(b)(g)(h), 90.691, 90.543(c)	Pass
Frequency Stability	2.1055, 90.213, 90.539(c)	Pass
Transient Frequency Response	90.214	Pass

[Table of Contents](#)

RF POWER OUTPUT

Rule Part No.: Part 2.1046(a), Part 90.541(d), 90.635(b)

Test Requirements:

769-775 MHz and 799-805 MHz frequency bands

The maximum output power of the transmitter for mobile stations is 100 watts

806-824 and 851-869 MHz frequency bands.

The maximum output power of the transmitter for mobile stations is 100 watts

Method of Measurement: RF power is measured by using a 50-ohm, resistive wattmeter to the RF output connector. With a nominal battery voltage (if battery operated), or a properly adjusted power supply (if not battery operated), and the transmitter properly adjusted the RF output measures:

Test Setup Diagram:



Test Data:

Tuned Frequency (MHz)	RF POWER (W)	
	HI	LOW
150.85	50	
161.5	50	
173.3	50	
769.05	25	-
772.05	25	-
774.95	25	-
799.05	25	-
802.05	25	-
804.95	25	-
806.05	35	-
815.05	35	-
823.95	35	-
851.05	35	-
860.05	35	-
868.95	35	-

Part 2.1033 (C) (8) DC Input into the final amplifier

FOR HIGH POWER SETTING INPUT POWER: (13.6V) (7.1A) = 96.56Watts

[Table of Contents](#)

MODULATION CHARACTERISTICS

Part 2.1033(c)

Part 2.1033(c) (4) Type of Emission: 11K2F1D, 11K2F2D, and 11K2F3E

FCC Part 90.209

FCC Part 90.207

DMR TDMA

BANDWIDTH CALCULATION

Type of Emission: 11K0F3E

$$B_n = 2M + 2DK$$

$$M = 3000$$

$$D = 2500$$

$$K=1$$

$$B_n = 2(3000) + 2(2500) = 11.0k$$

Type of Emission: 14K0F3E

$$B_n = 2M + 2DK$$

$$M = 3000$$

$$D = 2500$$

$$K=1$$

$$B_n = 2(3000) + 2(4000) = 14.0k$$

Type of Emission: 16K0F3E

$$B_n = 2M + 2DK$$

$$M = 3000$$

$$D = 5000$$

$$K=1$$

$$B_n = 2(3000) + 2(5000) = 16.0k$$

APCO 25 modulation phase 1 and phase 2 as defined in ANSI/ TIA-102.BABA.

[Table of Contents](#)

MODULATION CHARACTERISTICS

AUDIO FREQUENCY RESPONSE

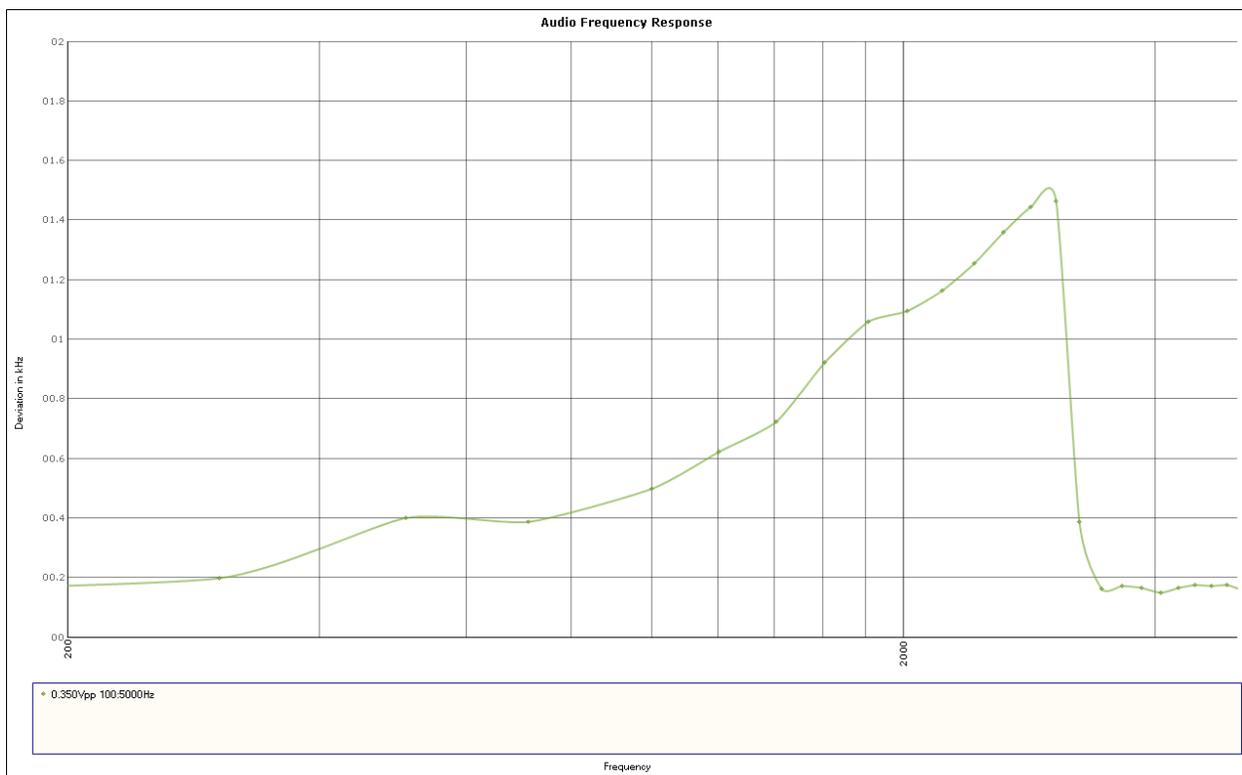
Rule Part No.: Part 2.1047(a) (b)

Test Requirements: Reporting Only

Method of Measurement: ANSI/TIA-603 § 2.2.6 Audio Frequency Response

TEST DATA:

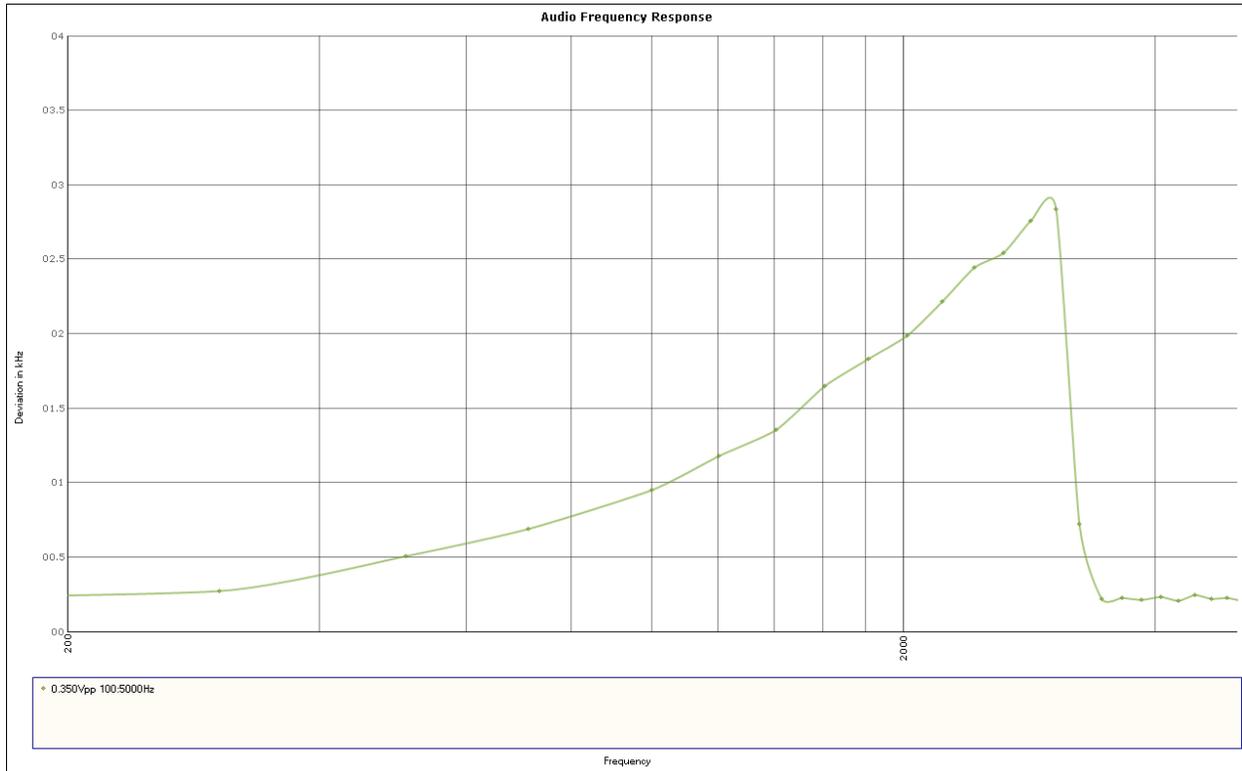
AUDIO FREQUENCY RESPONSE – 12.5 kHz



MODULATION CHARACTERISTICS

AUDIO FREQUENCY RESPONSE

AUDIO FREQUENCY RESPONSE – 25 kHz



[Table of Contents](#)

MODULATION CHARACTERISTICS

AUDIO LOW PASS FILTER

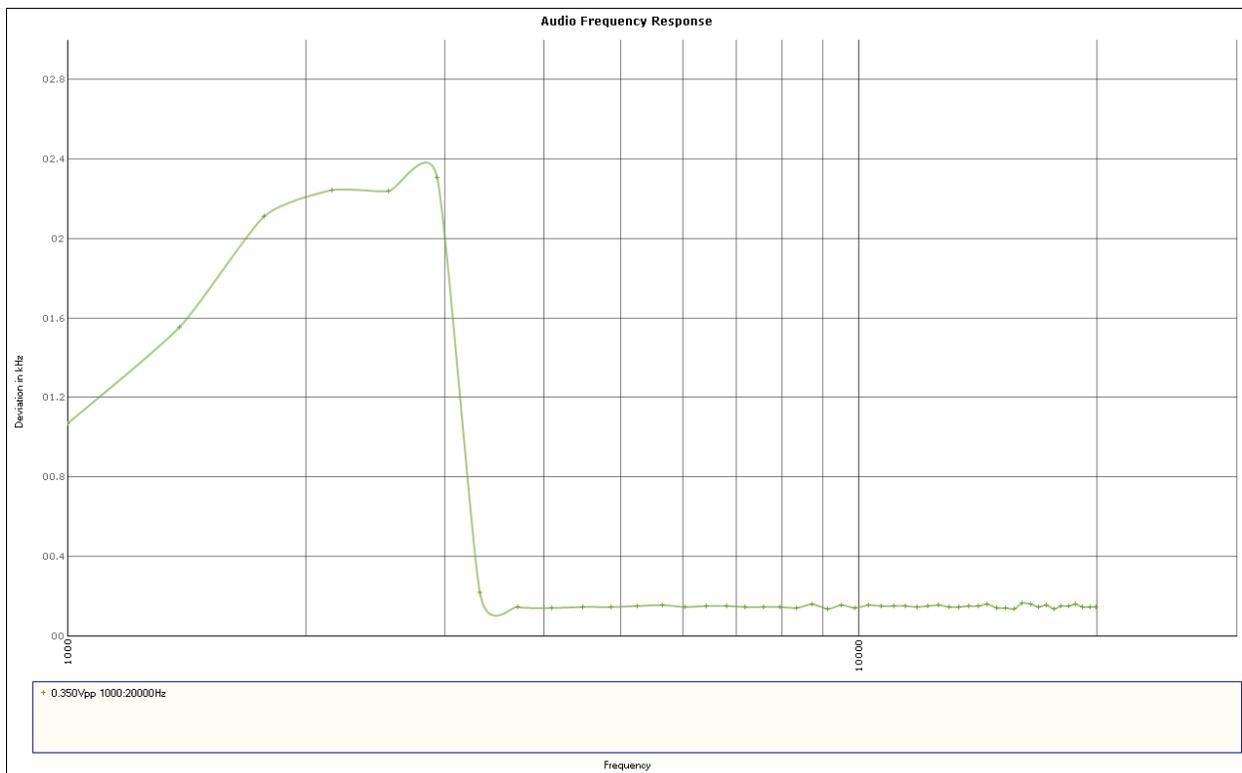
Rule Part No.: Part 2.1047(a) (b)

Test Requirements: For equipment required to have an audio low-pass filter, a curve showing the frequency response of the filter or of all the circuitry installed between the modulation limiter and the modulated stage shall be submitted.

Method of Measurement: ANSI/TIA-603 § 2.2.15 Audio Low pass filter Response

TEST DATA:

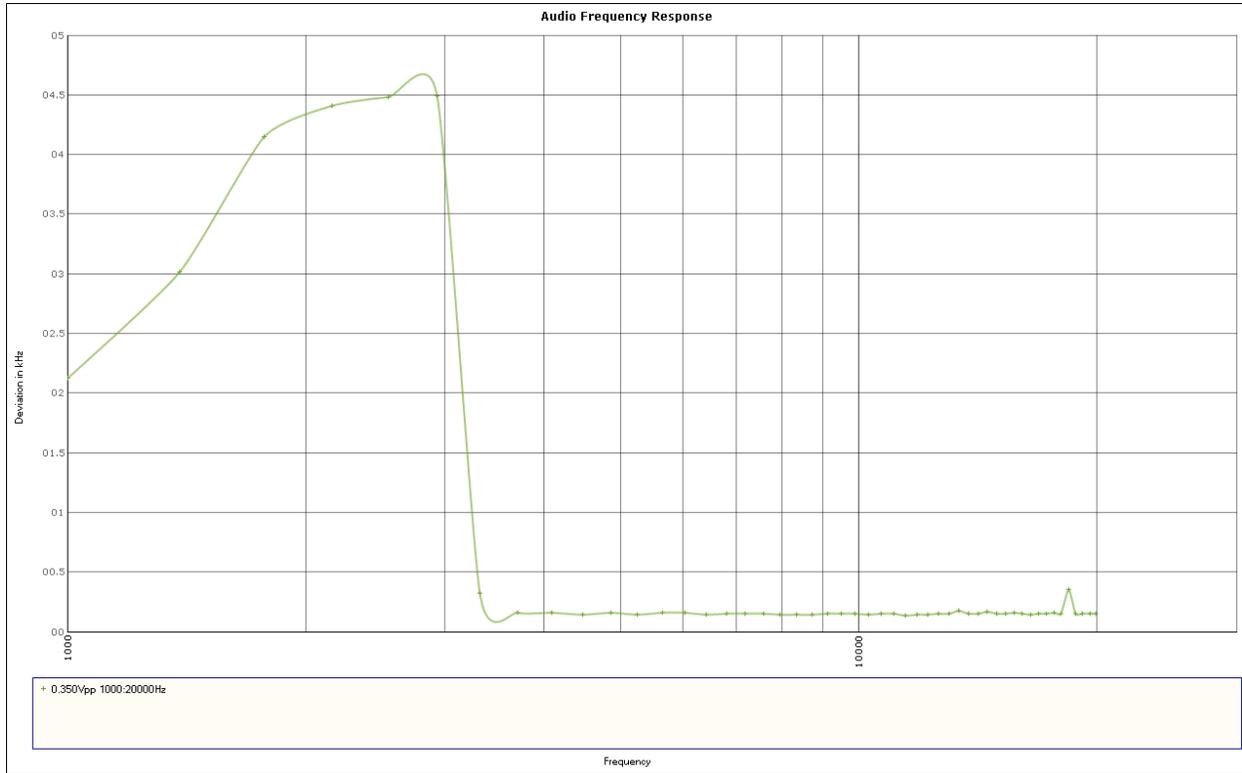
AUDIO LOW PASS FILTER 12.5 kHz



[Table of Contents](#)

MODULATION CHARACTERISTICS

AUDIO LOW PASS FILTER 25 kHz



[Table of Contents](#)

MODULATION CHARACTERISTICS -

AUDIO INPUT VERSUS MODULATION

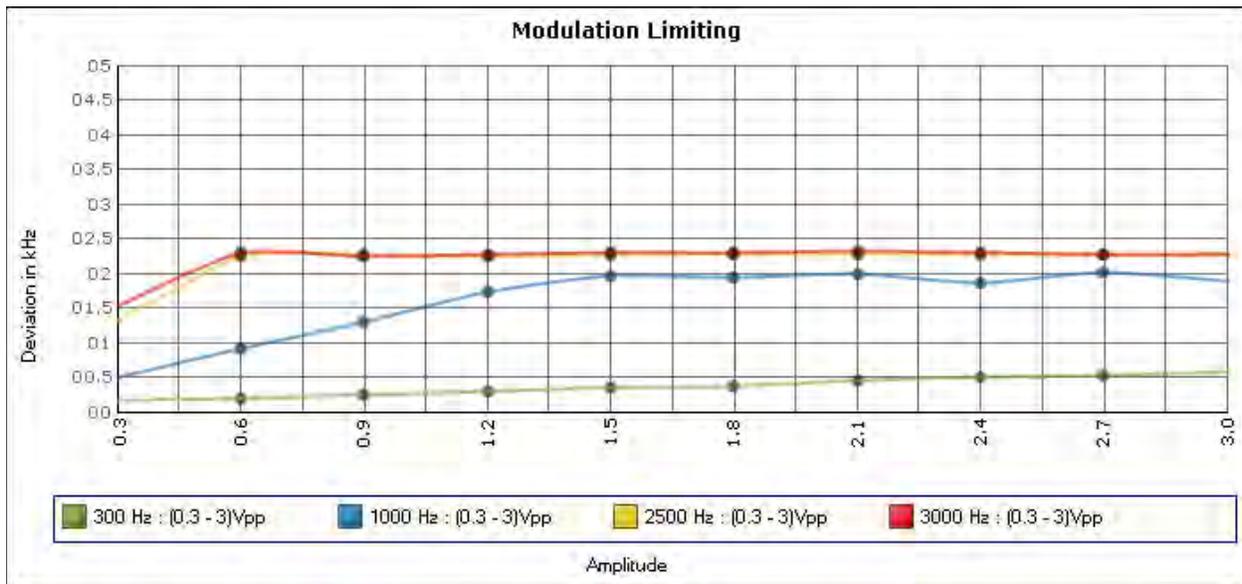
RULE PART NO: Part 2.1047(b) & 90

REQUIREMENT Modulation cannot exceed 100% of the rated FM deviation.

Method of Measurement: ANSI/TIA-603 § 2.2.3

Test data:

MODULATION LIMITING 12.5 kHz

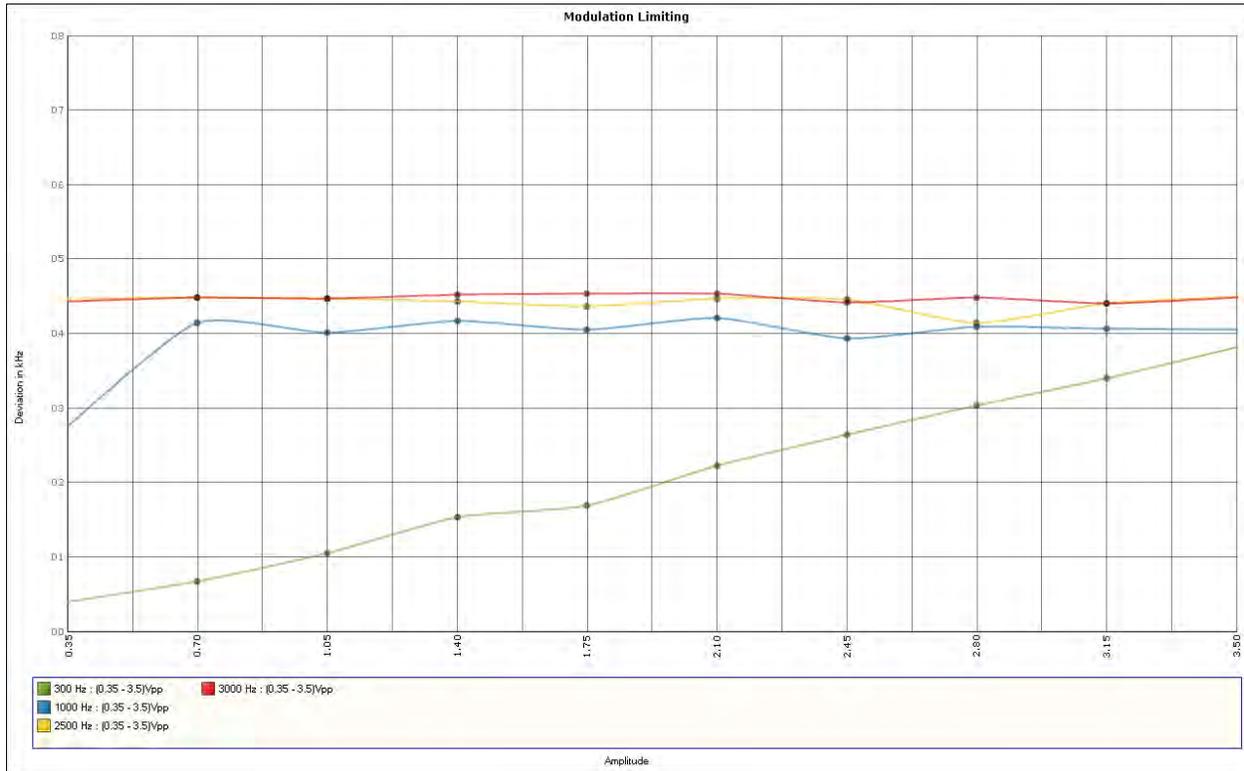


[Table of Contents](#)

MODULATION CHARACTERISTICS

AUDIO INPUT VERSUS MODULATION

MODULATION LIMITING 25 kHz



[Table of Contents](#)

OCCUPIED BANDWIDTH

RULE PART NO.: 2.1049(c) & 90.210

REQUIREMENTS: Applicable Emission Masks

Frequency band (MHz)	Mask for equipment with audio low pass filter	Mask for equipment without audio low pass filter
150-174 ²	B or D	C or D
806-809/851-854	B	H
809-824/854-869 ^{3 5}	B	G

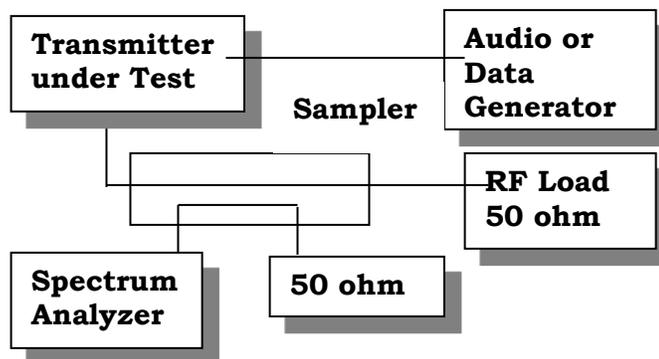
²Equipment designed to operate with a 25 kHz channel bandwidth must meet the requirements of Emission Mask B or C, as applicable. Equipment designed to operate with a 12.5 kHz channel bandwidth must meet the requirements of Emission Mask D

³Equipment used in this licensed to EA or non-EA systems shall comply with the emission mask provisions of §90.691 of this chapter.

⁵Equipment may alternatively meet the Adjacent Channel Power limits of §90.221.

METHOD OF MEASUREMENT: ANSI/TIA-603 § 2.2.11 Sideband Spectrum

SETUP DIAGRAM:



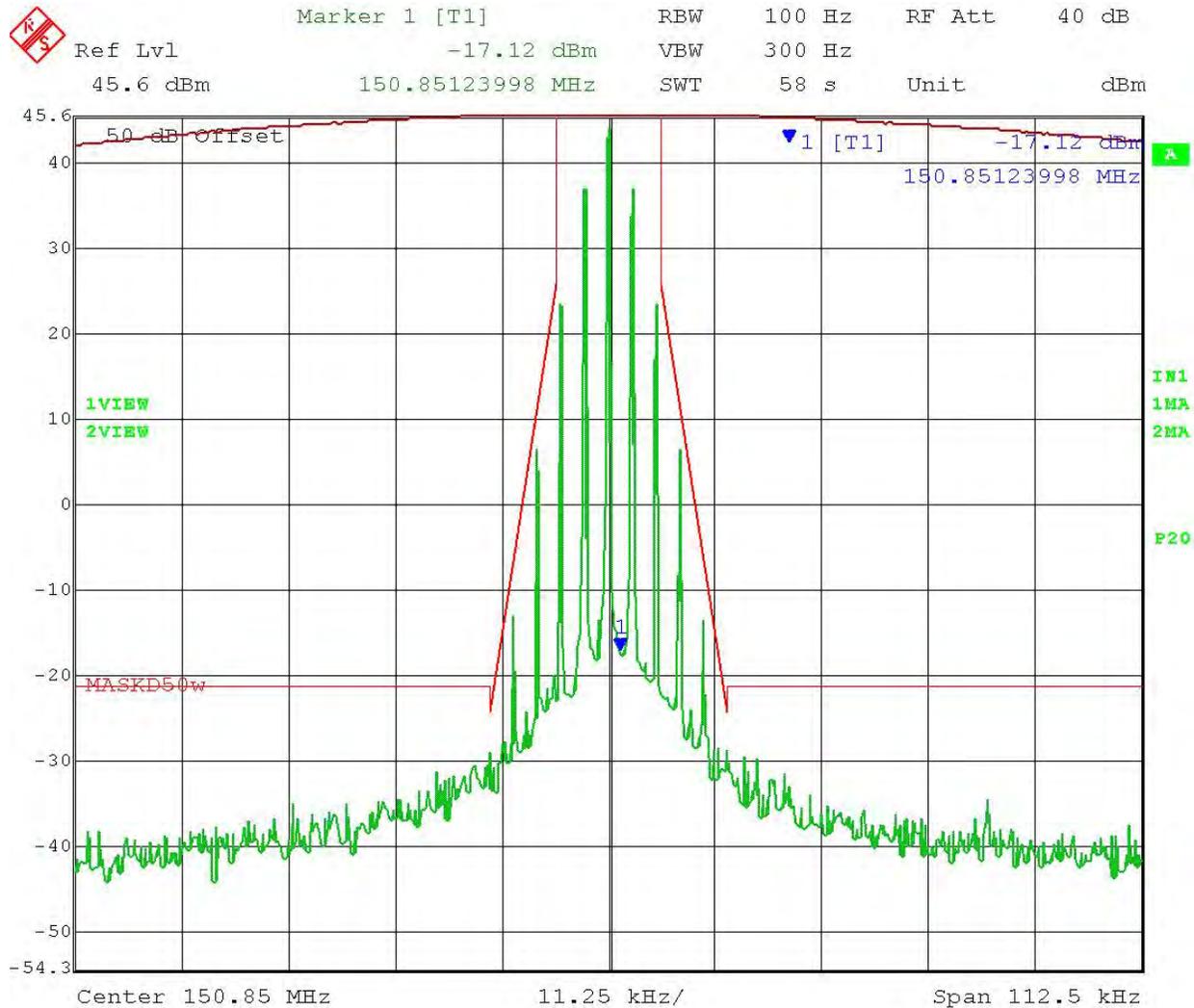
TEST DATA: See the plots on following pages.

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 150.85 MHz-11kOF3E

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment with audio Low pass filter



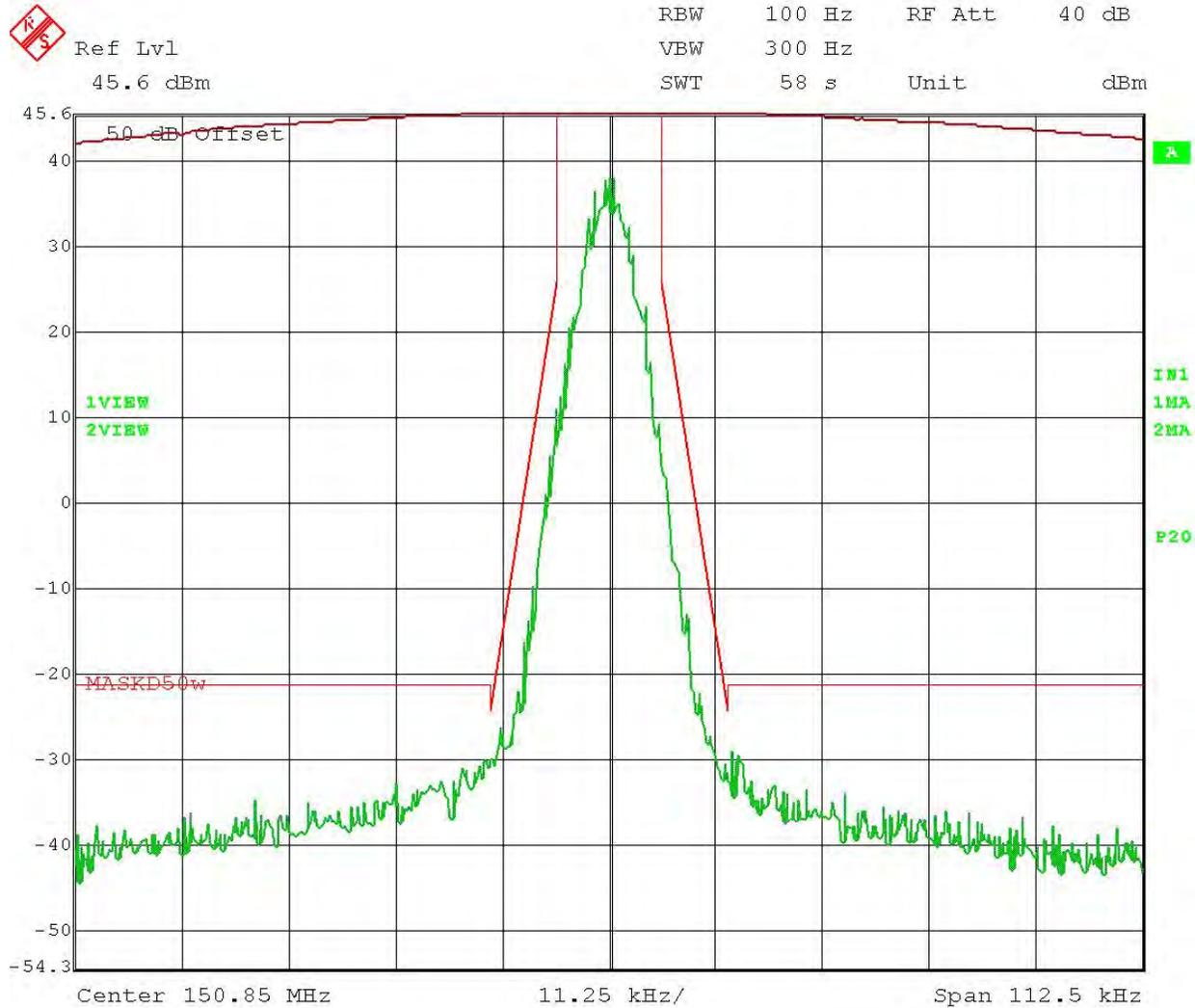
Date: 15.SEP.2015 10:36:03

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 150.85 MHz-8K10F1E/8K10F1D

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment without Low pass filter



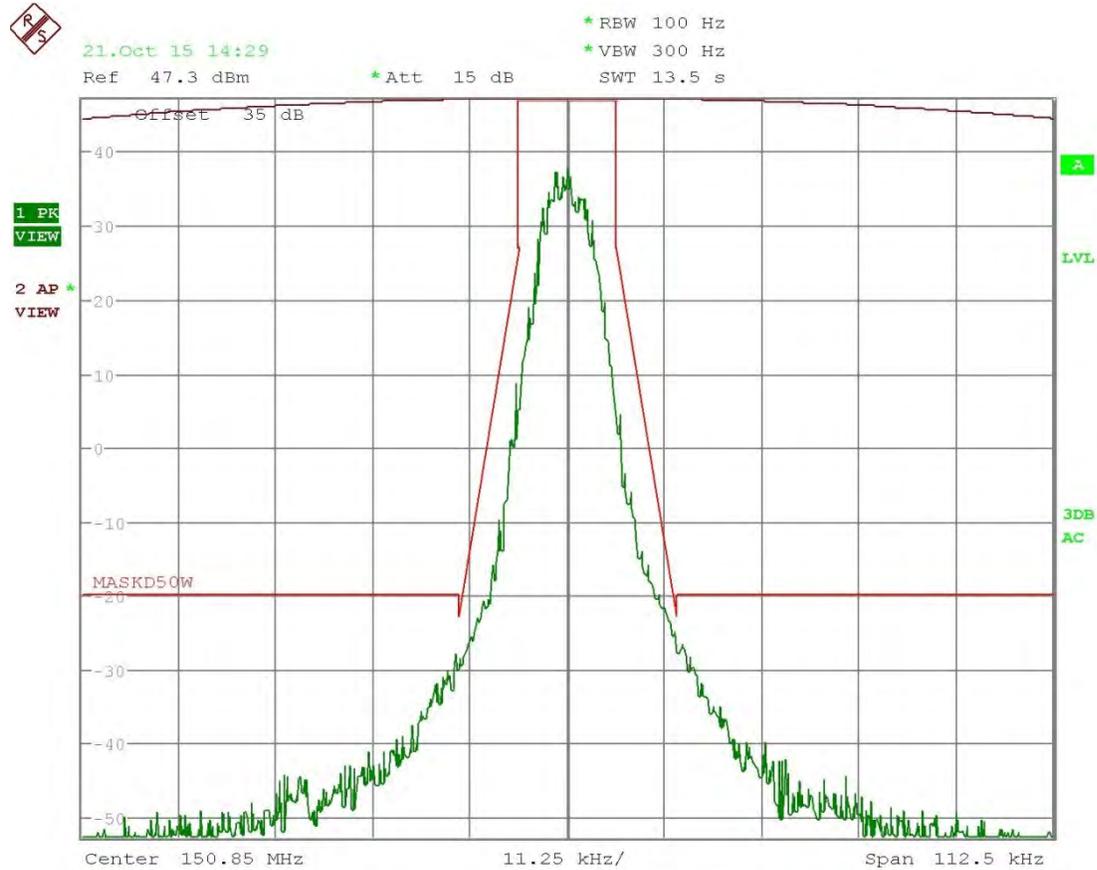
Date: 15.SEP.2015 10:38:25

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 150.85 MHz-8K10F7E

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment without Low pass filter



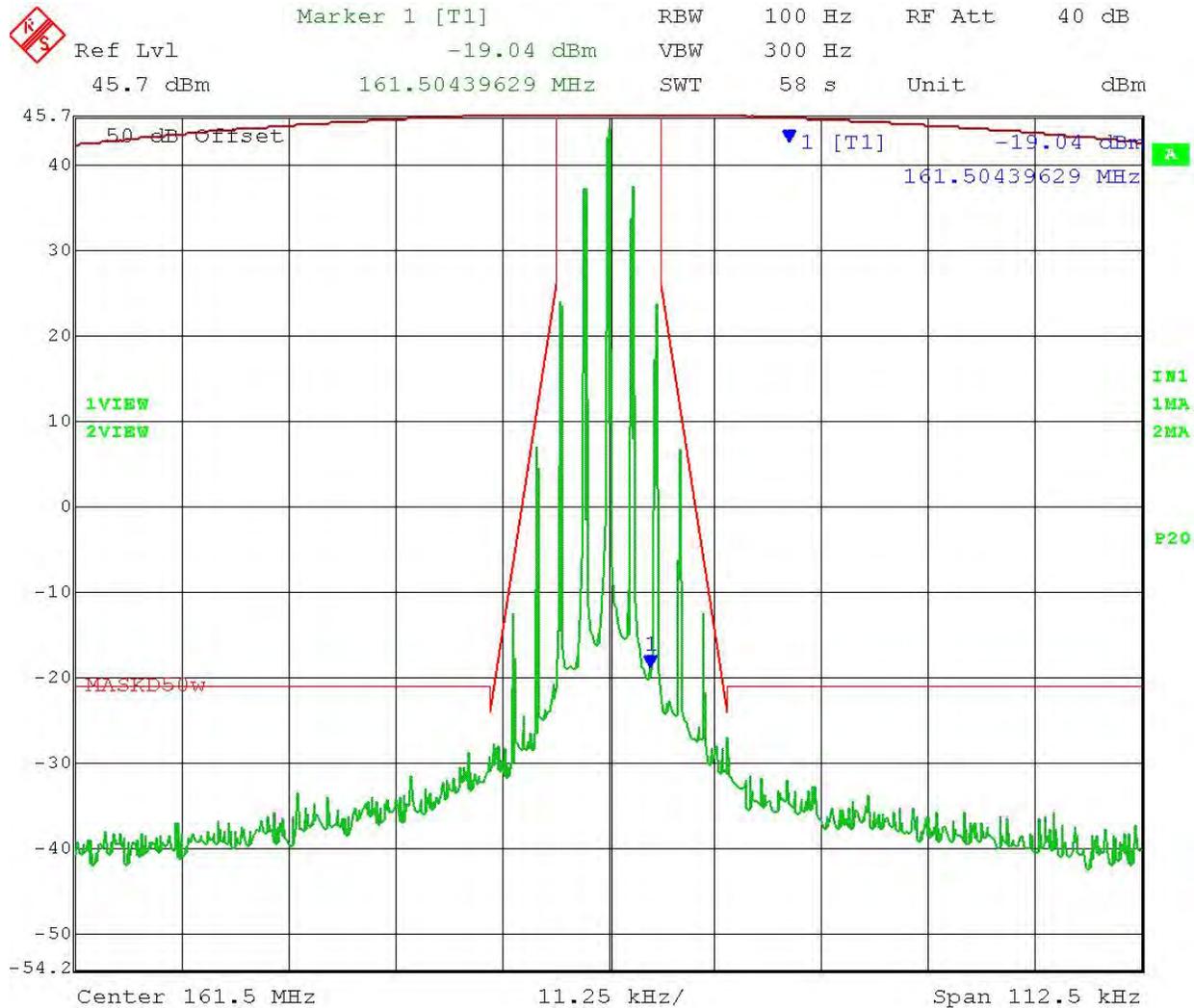
Date: 21.OCT.2015 14:29:04

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 161.5 MHz-11KOF3E

Part 90.210(d) Emission Mask D - 12.5KHz Equipment with audio Low pass filter



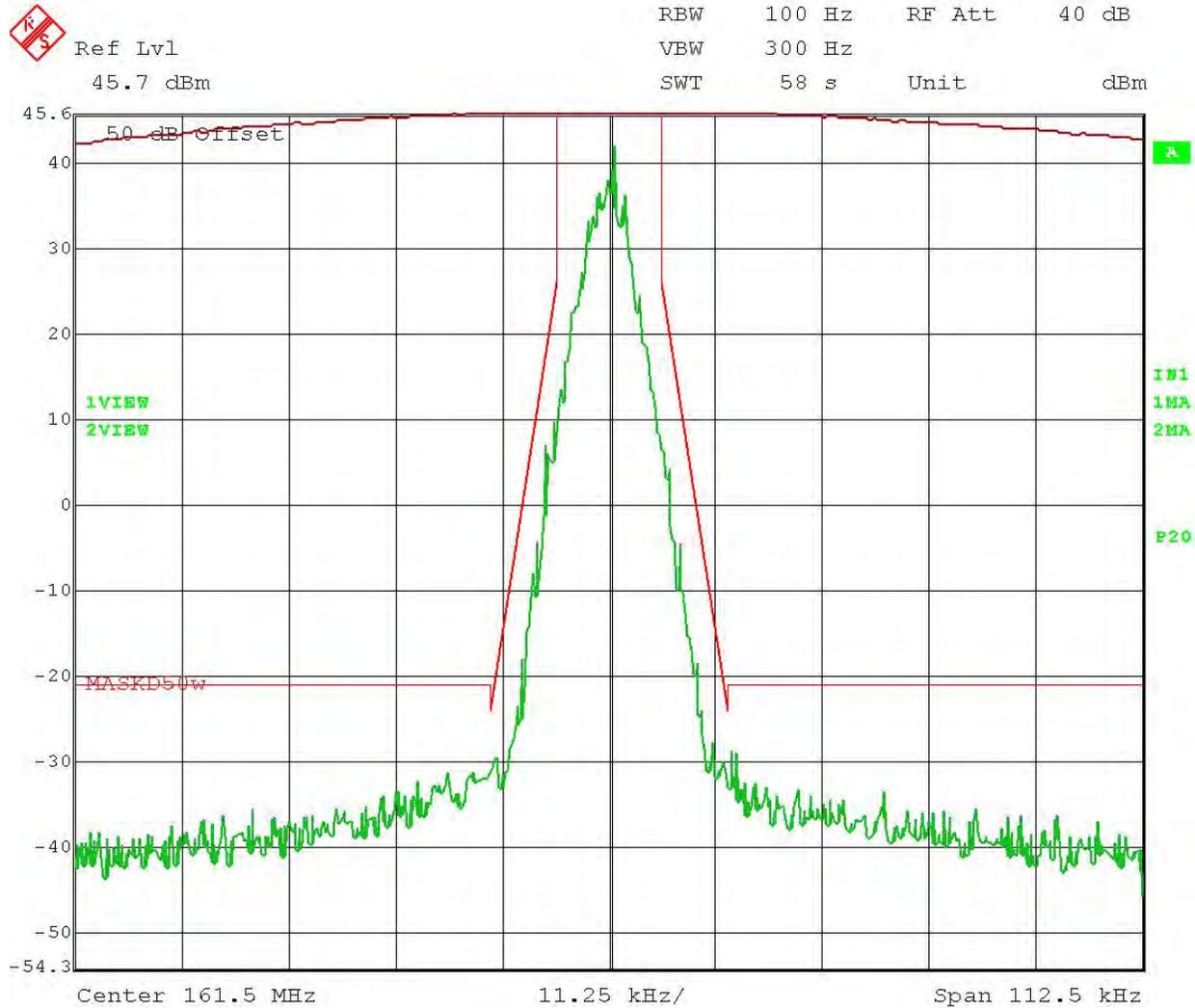
Date: 15.SEP.2015 11:13:23

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 161.5 MHz-8K10F1E/8K10F1D

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment without Low pass filter



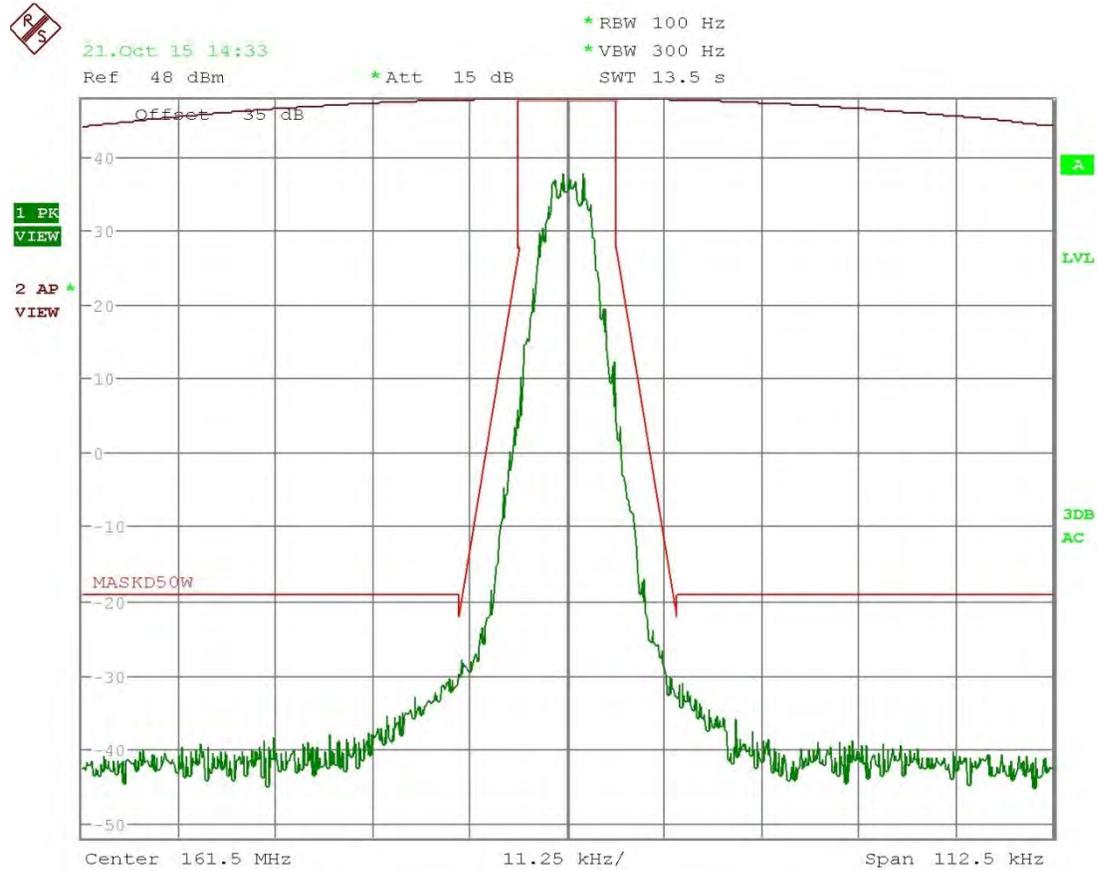
Date: 15.SEP.2015 10:42:18

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 161.5 MHz-8K10F7E

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment without Low pass filter



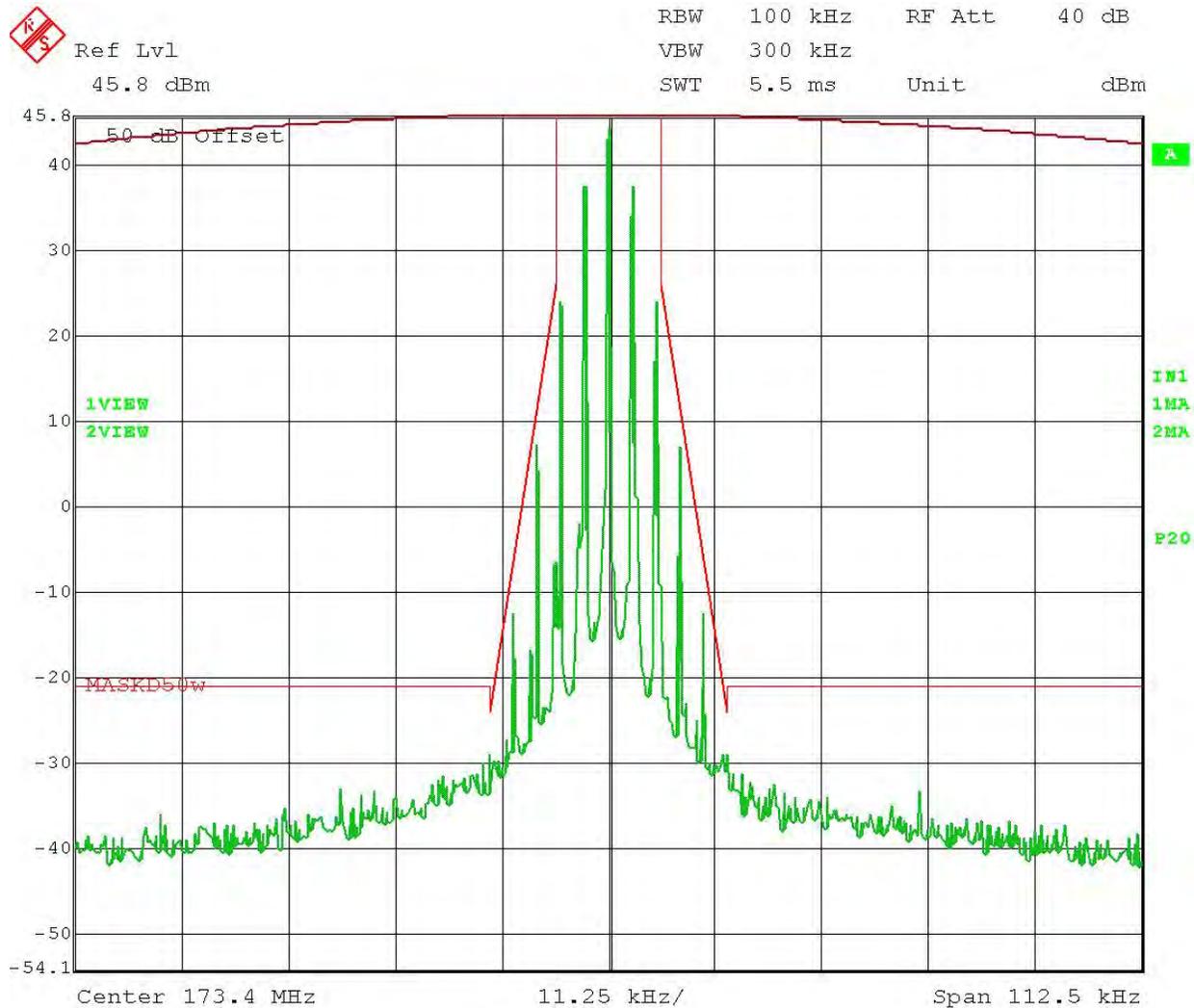
Date: 21.OCT.2015 14:33:10

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 173.4 MHz-11KOF3E

Part 90.210(d) Emission Mask D - 12.5KHz Equipment with audio Low pass filter



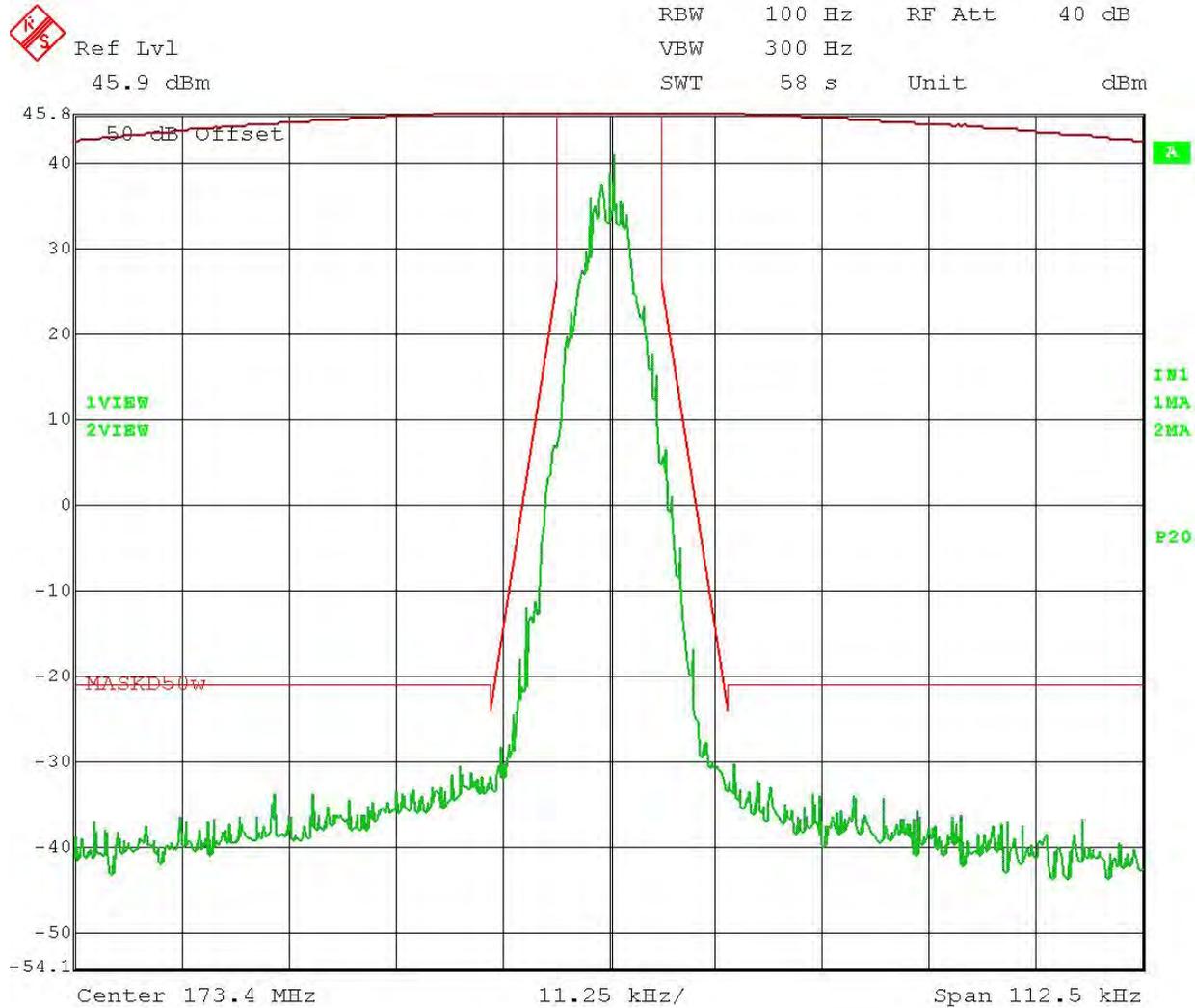
Date: 15.SEP.2015 11:17:22

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 173.4 MHz-8K10F1E/8K10F1D

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment without Low pass filter



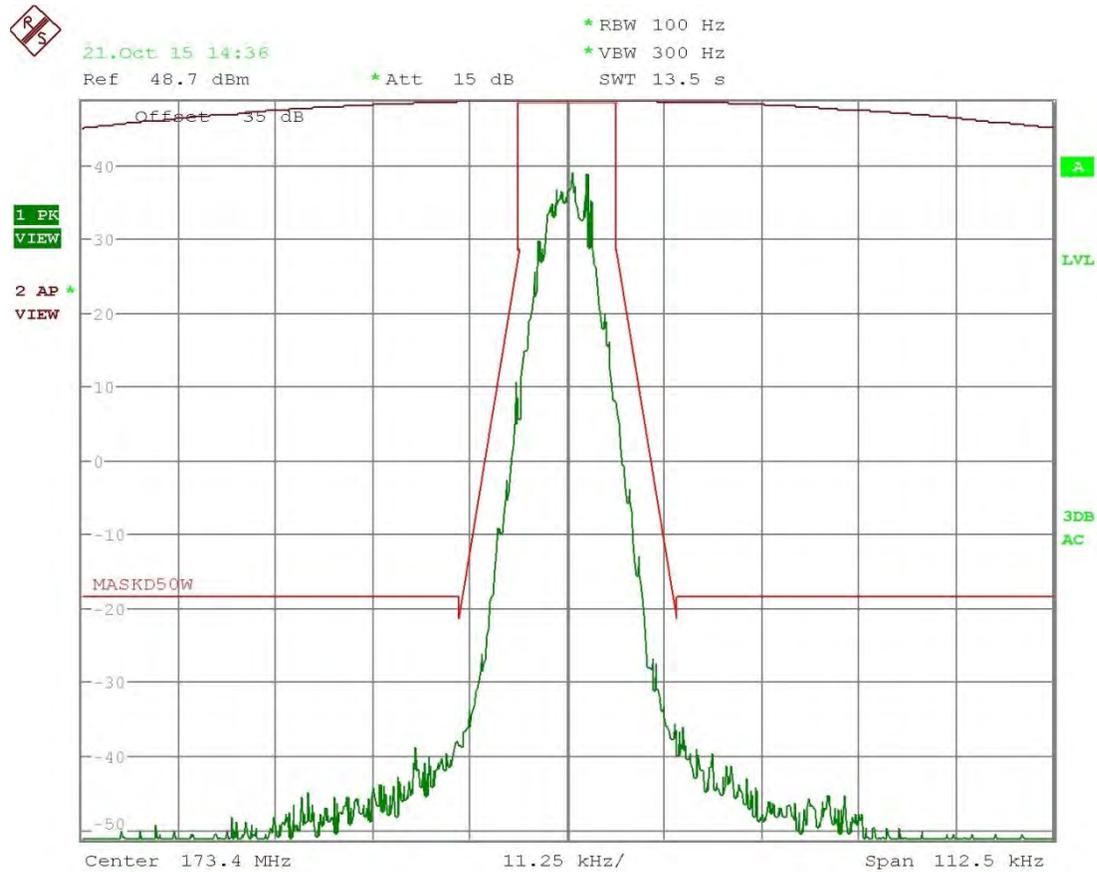
Date: 15.SEP.2015 11:19:35

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 173.4 MHz-8K10F7E

Part 90.210(d) Emission Mask D - 12.5 KHz Equipment without Low pass filter



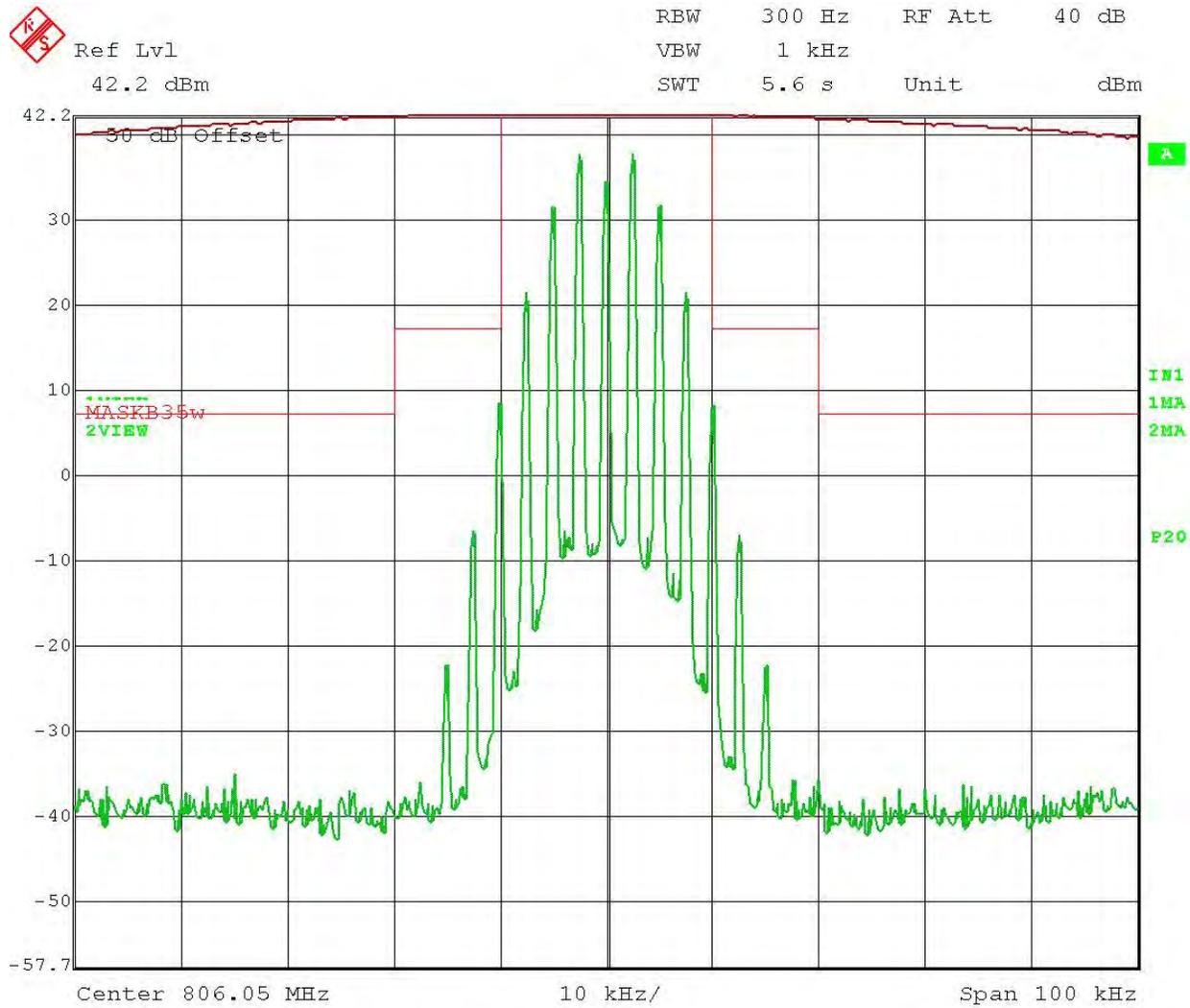
Date: 21.OCT.2015 14:36:21

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 806.05 MHz-16kOF3E

Part 90.210(b) Emission Mask B - Equipment with audio Low pass filter



Date: 15.SEP.2015 11:30:06

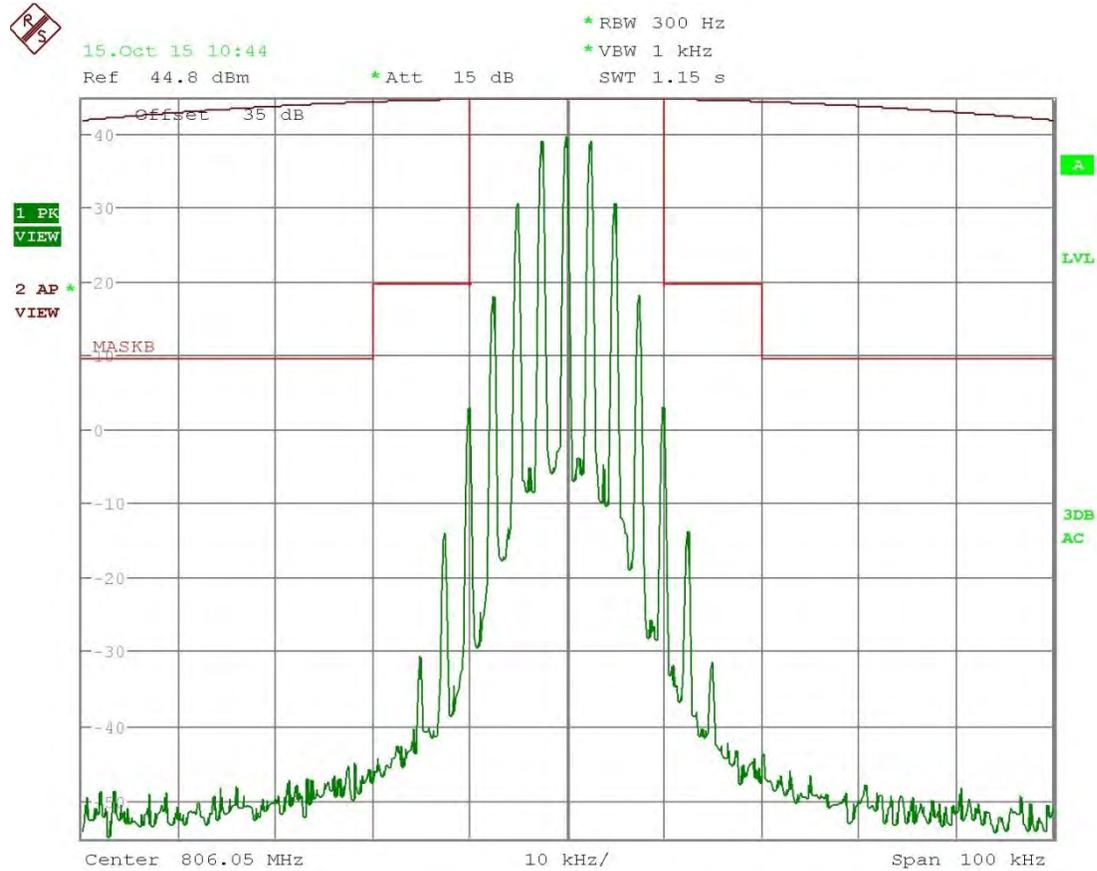
_B

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 806.05 MHz-14kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



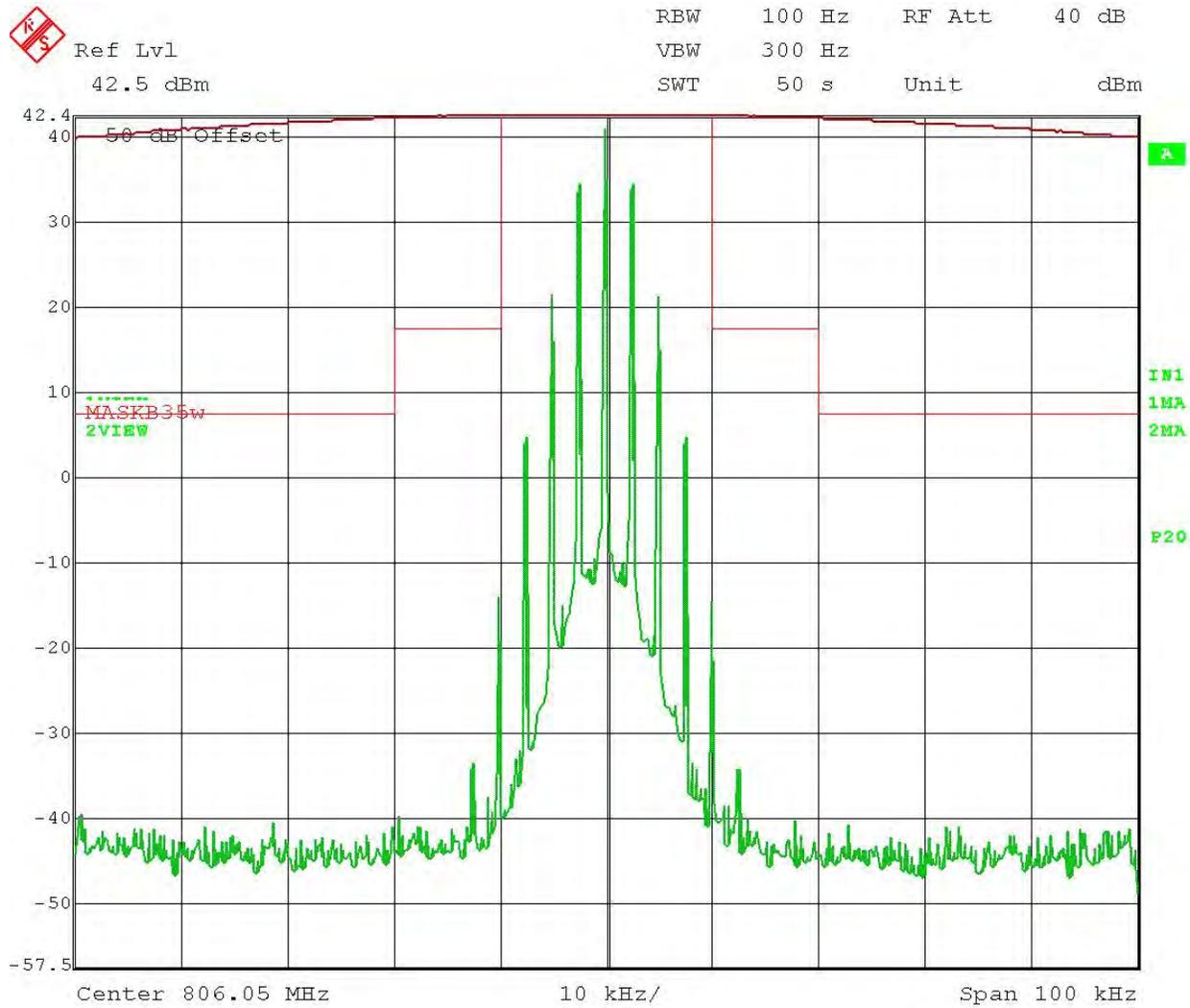
Date: 15.OCT.2015 10:44:20

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 806.05 MHz-11kOF3E

Part 90.210(b) Emission Mask B - Equipment with audio Low pass filter



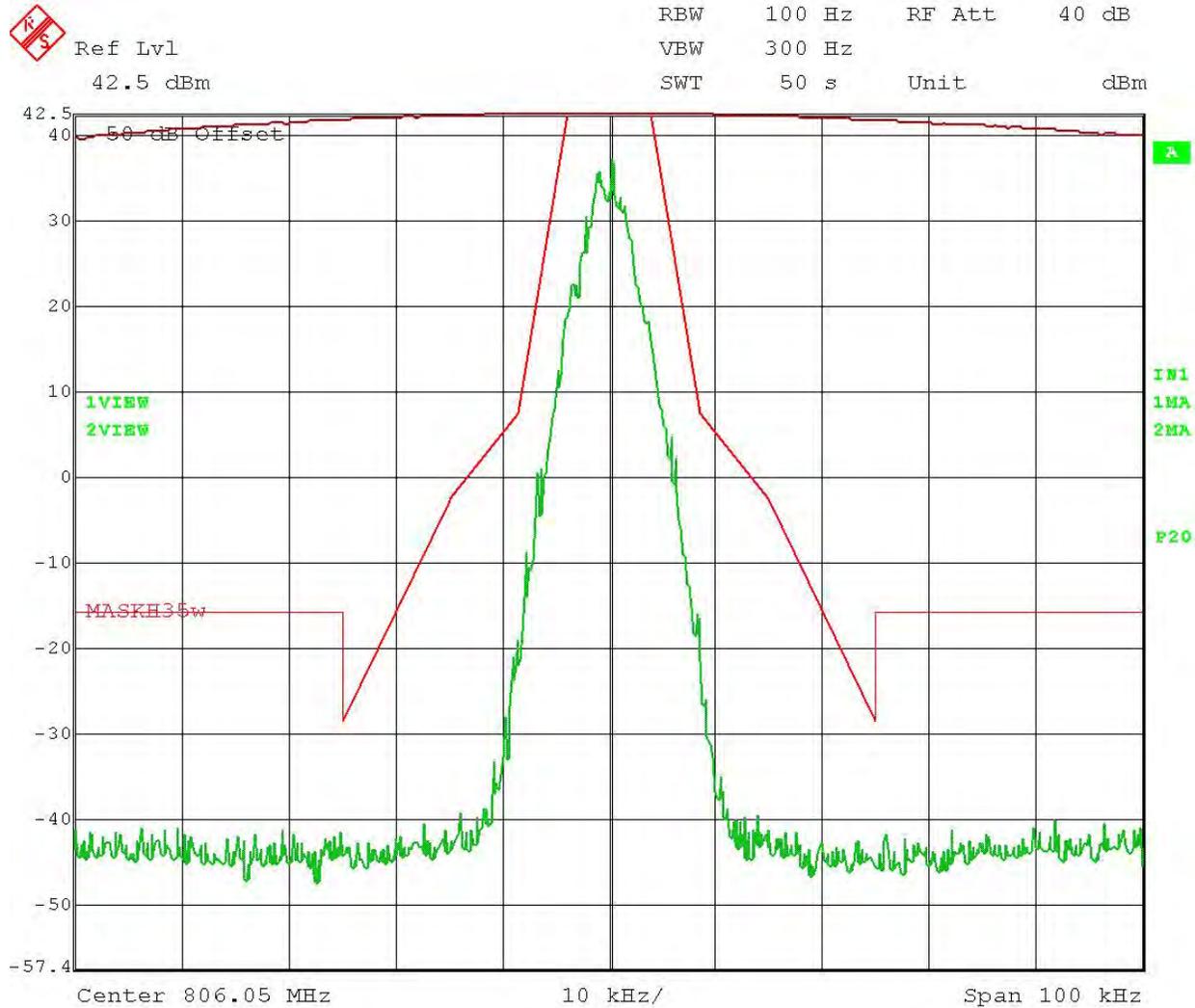
Date: 15.SEP.2015 15:12:38

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 806.05 MHz-8K10F1E/8K10F1D

Part 90.210(h) Emission Mask H - Equipment without Low pass filter



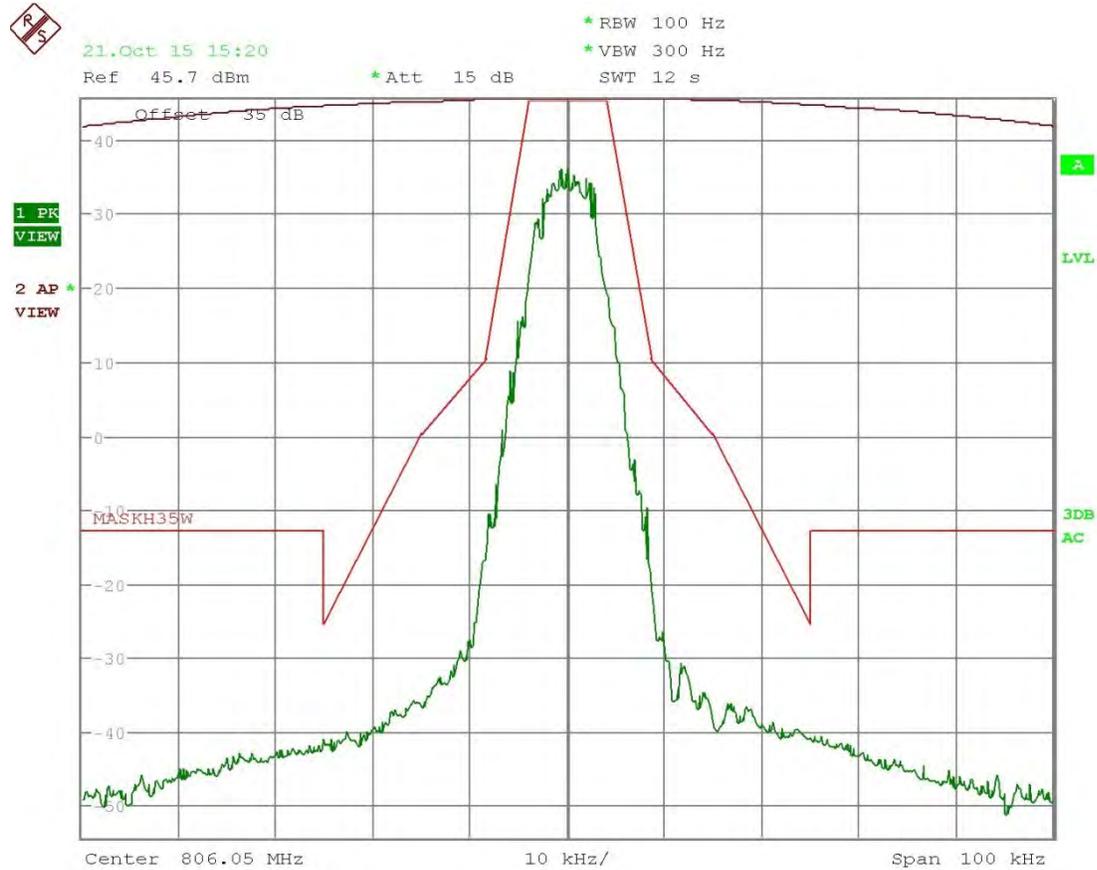
Date: 15.SEP.2015 15:26:49

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 806.05 MHz-8K10F7E

Part 90.210(h) Emission Mask H – Equipment without Low pass filter



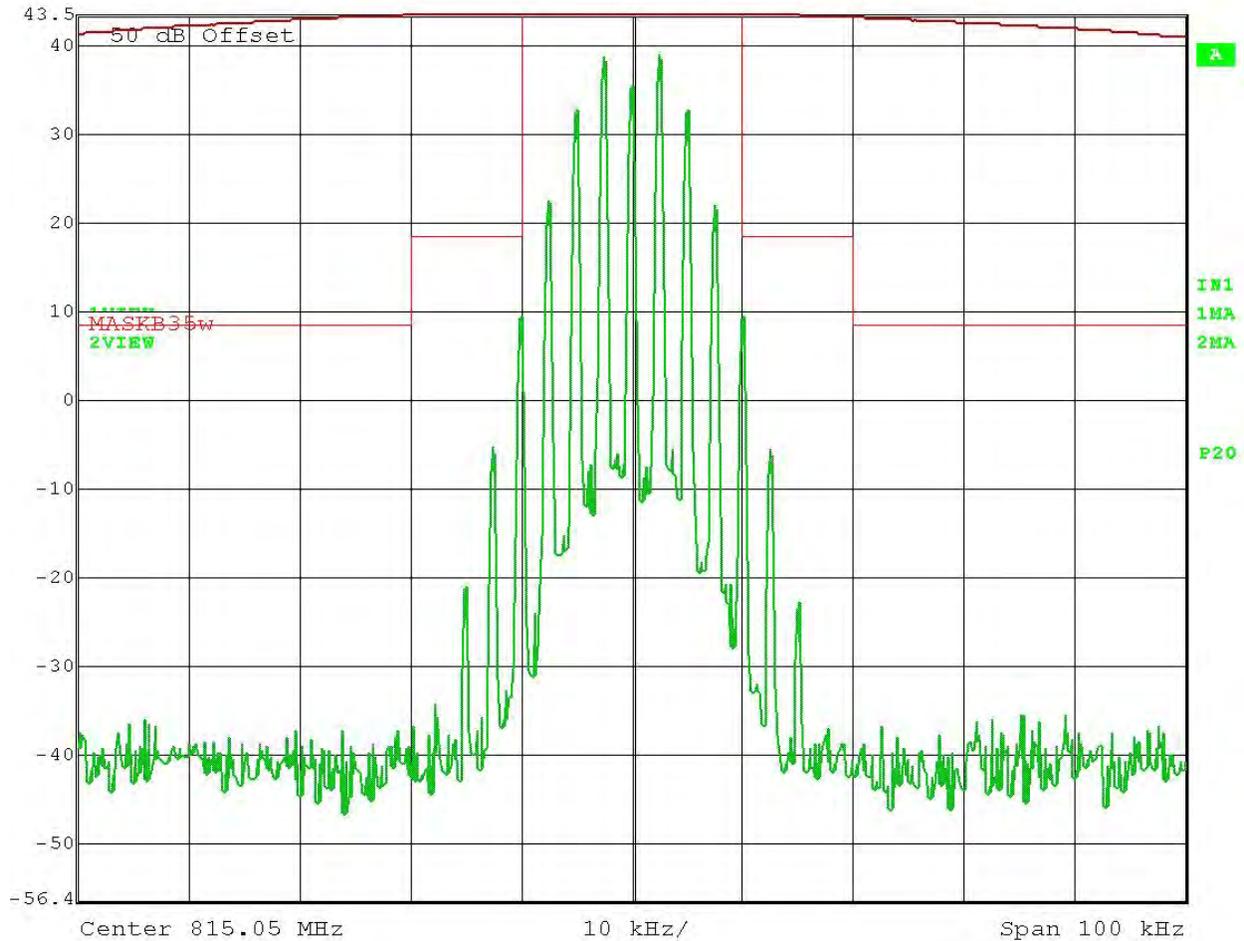
Date: 21.OCT.2015 15:20:09

[Table of Contents](#)

TEST FREQ. 815.05 MHz-16kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter

	Ref Lvl	RBW	300 Hz	RF Att	40 dB
	43.6 dBm	VBW	1 kHz	Unit	dBm
		SWT	5.6 s		



Date: 15.SEP.2015 11:32:18

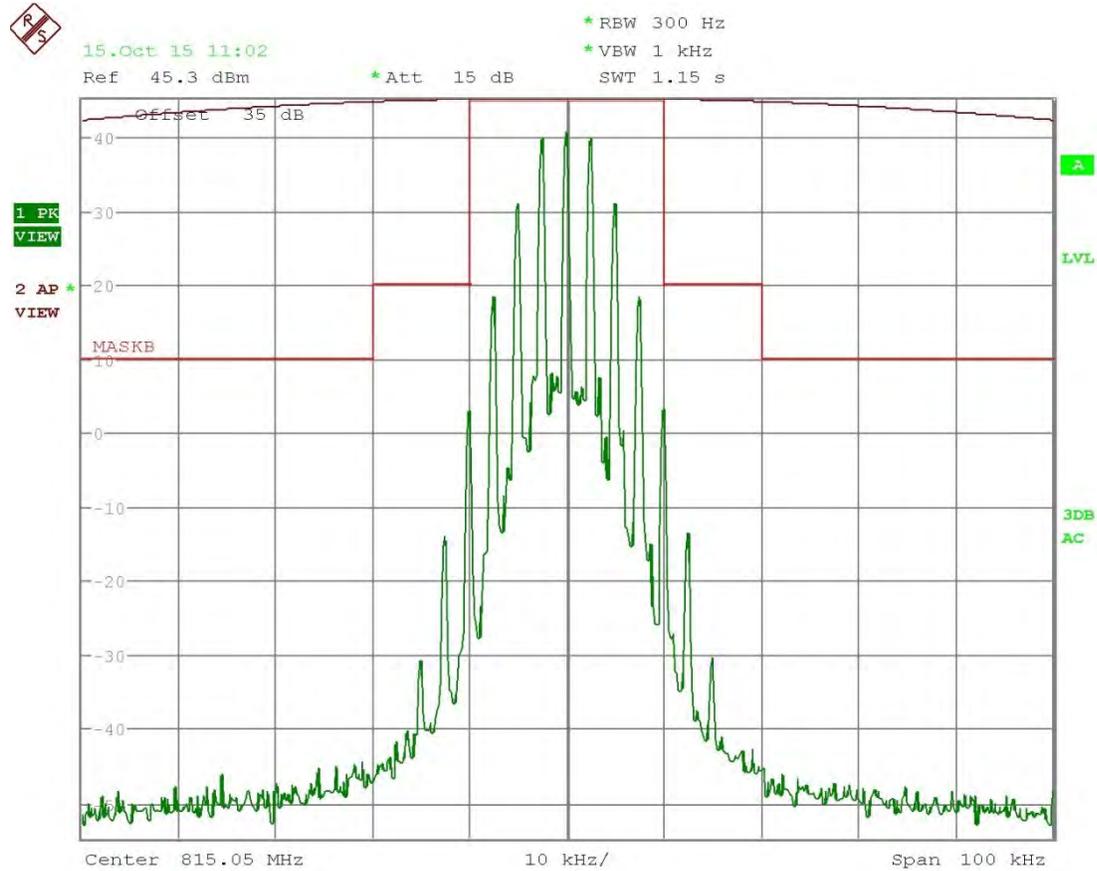
_B

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 815.05 MHz-14kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



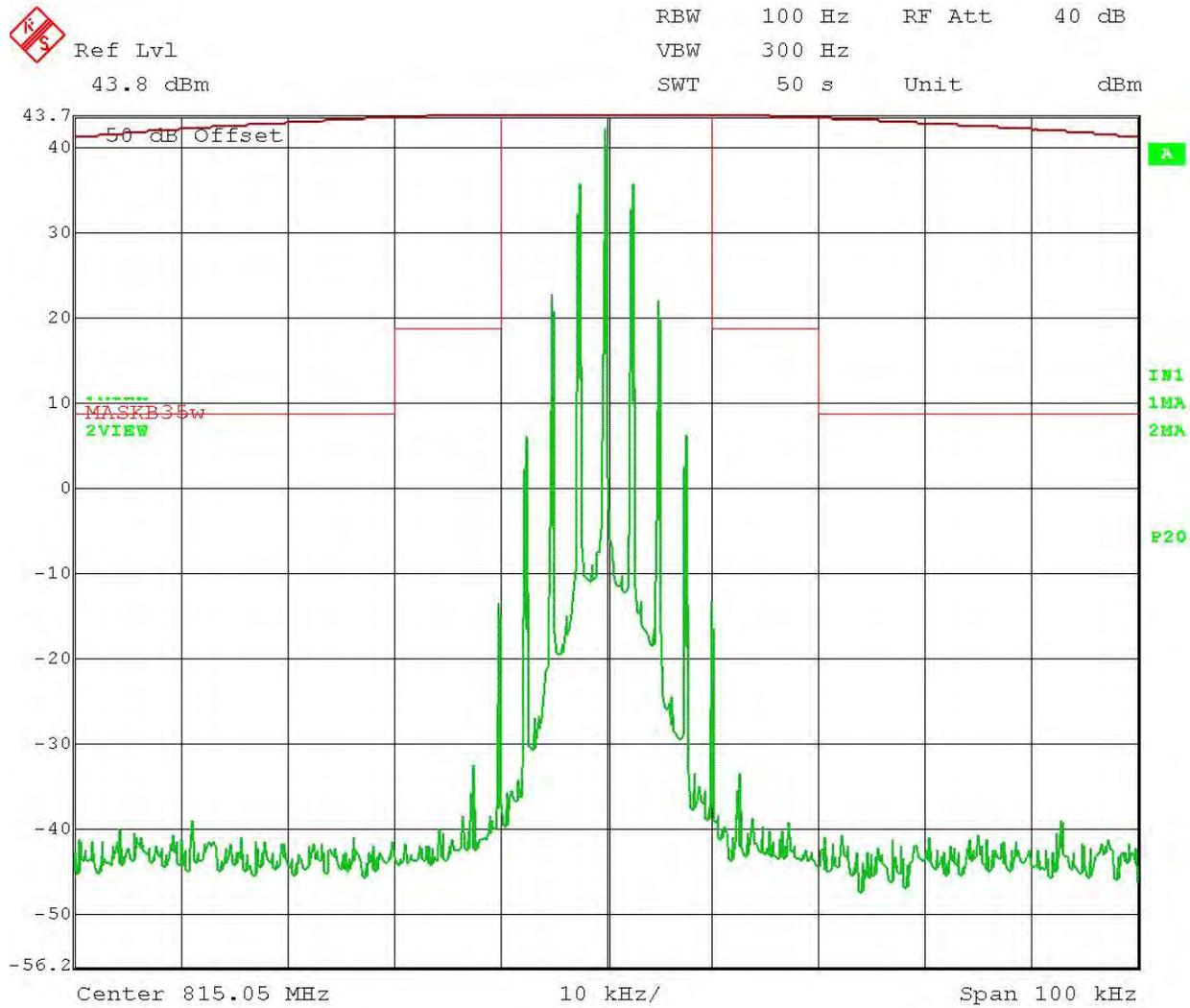
Date: 15.OCT.2015 11:02:50

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 815.05 MHz-11kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



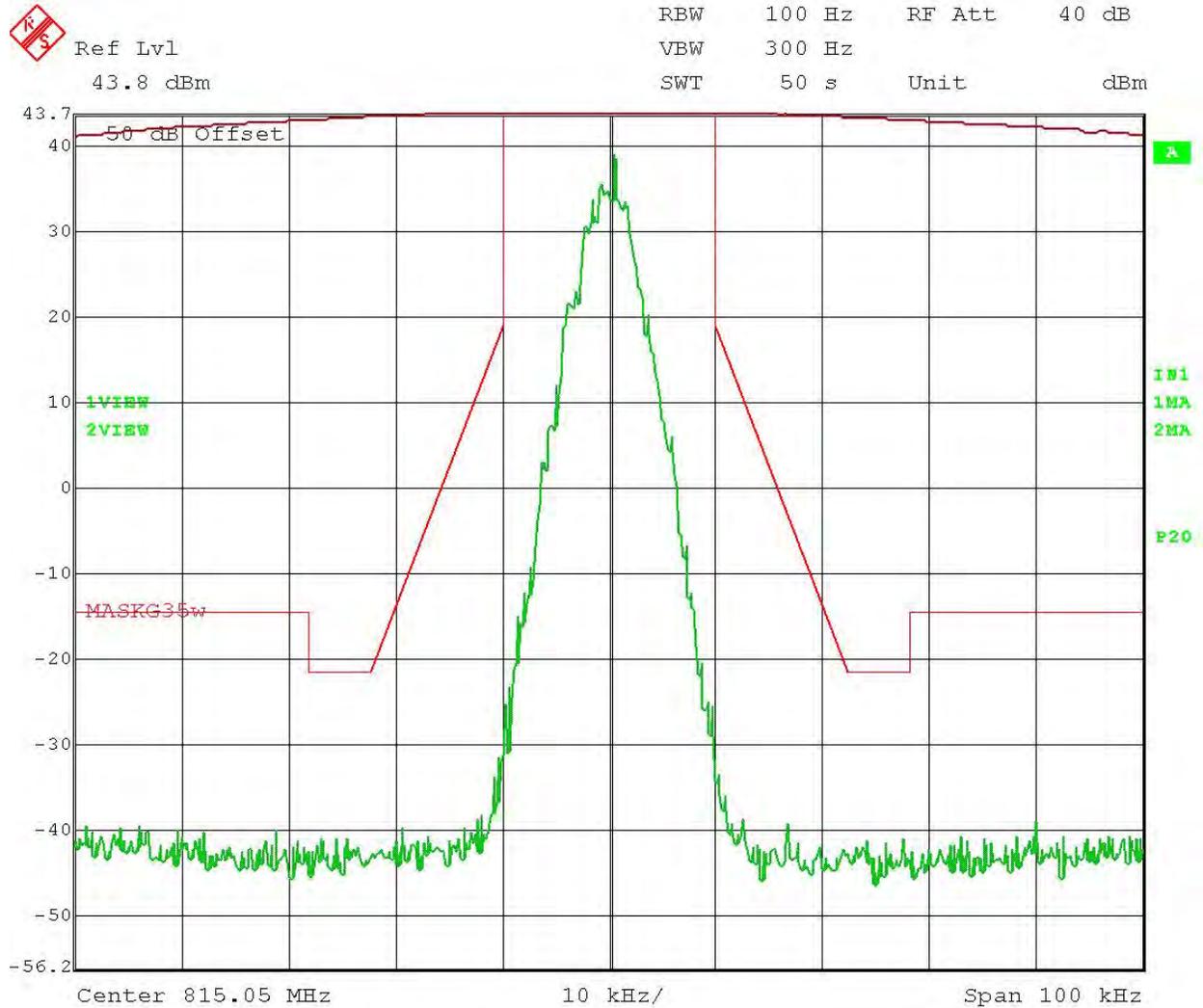
Date: 15.SEP.2015 15:09:40

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 815.05 MHz-8K10F1E/8K10F1D

Part 90.210(g) Emission Mask G - Equipment without Low pass filter



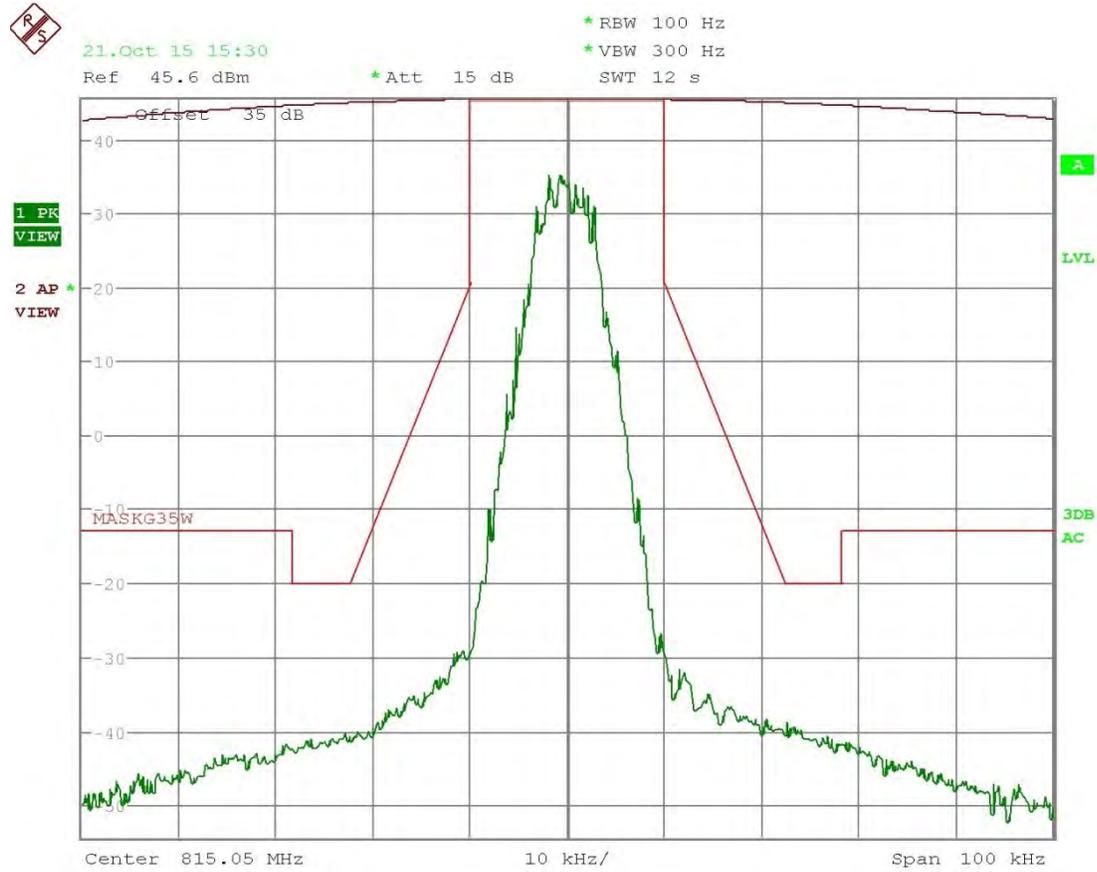
Date: 15.SEP.2015 15:36:12

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 815.05 MHz-8K10F7E

Part 90.210(g) Emission Mask G - Equipment without Low pass filter



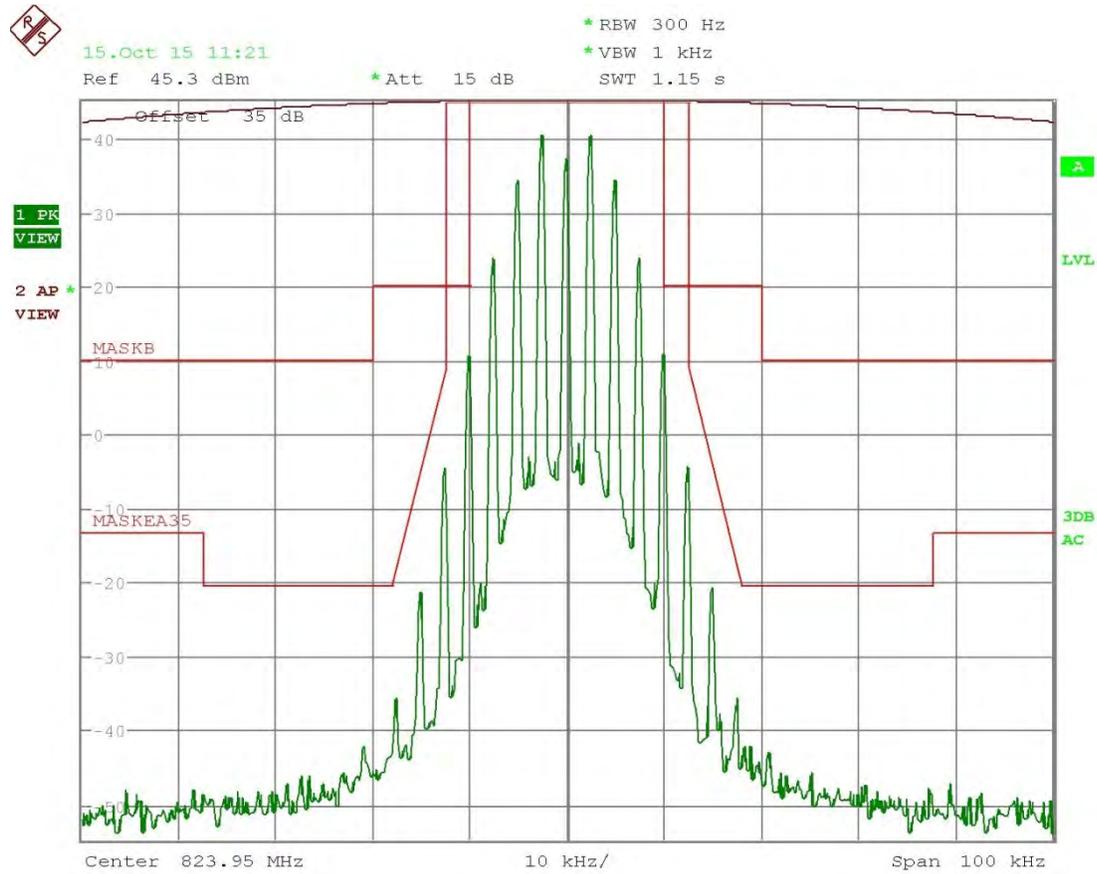
Date: 21.OCT.2015 15:30:54

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 823.95 MHz-16kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



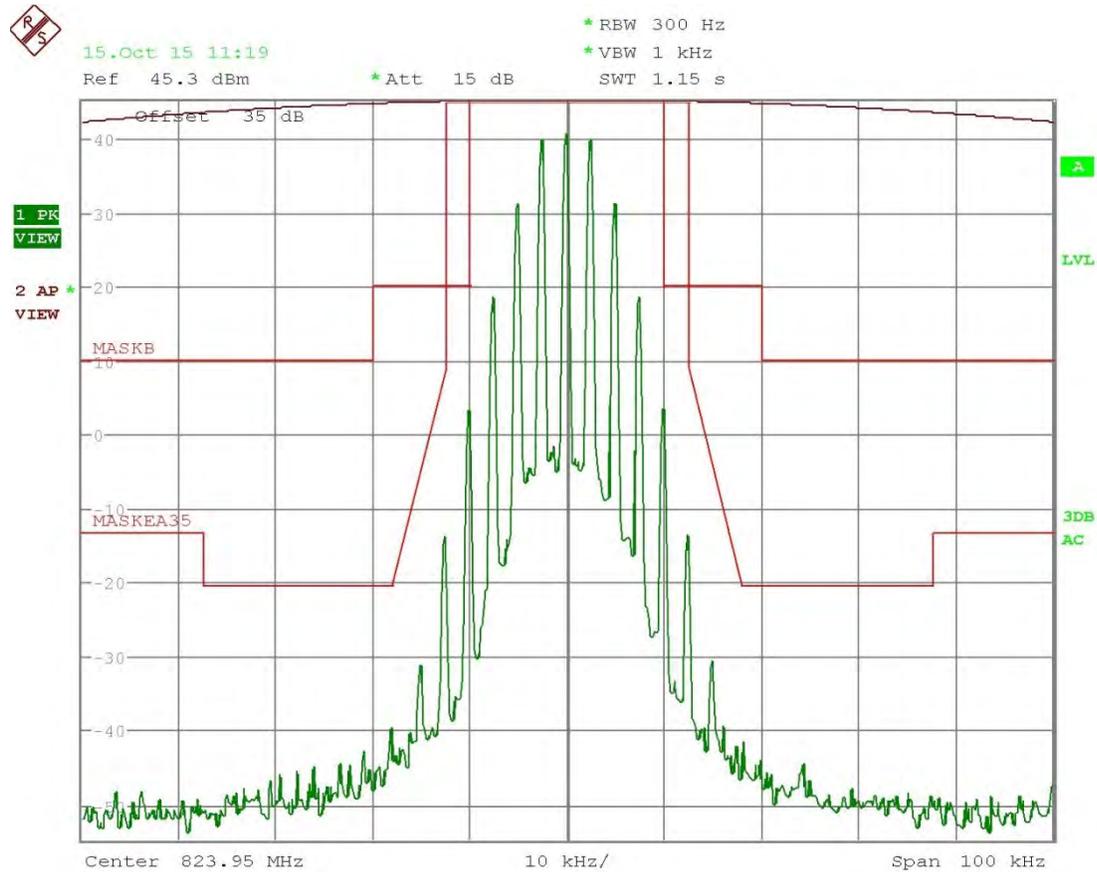
Date: 15.OCT.2015 11:21:30

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 823.95 MHz-14kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



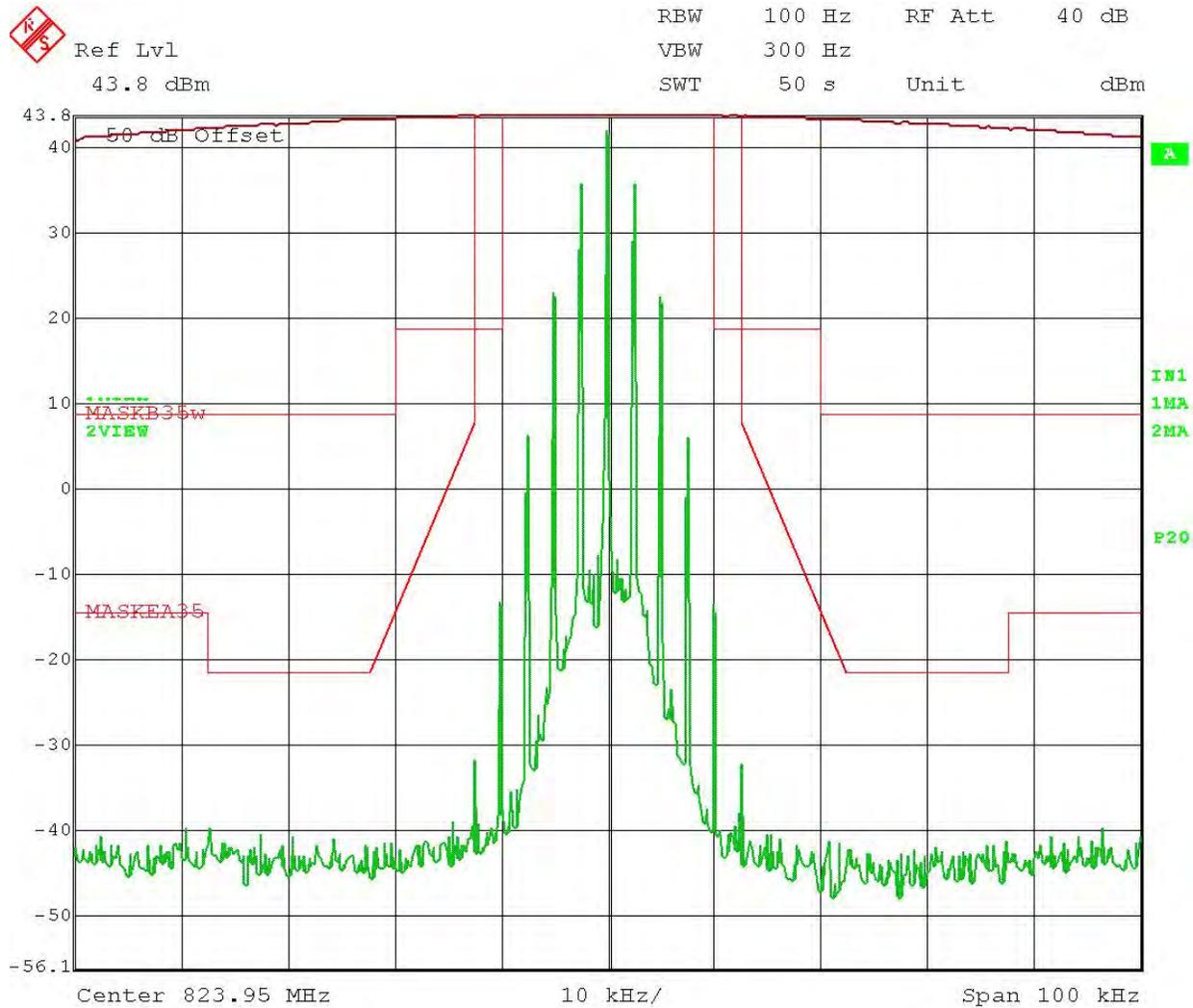
Date: 15.OCT.2015 11:19:32

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 823.95 MHz-11kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



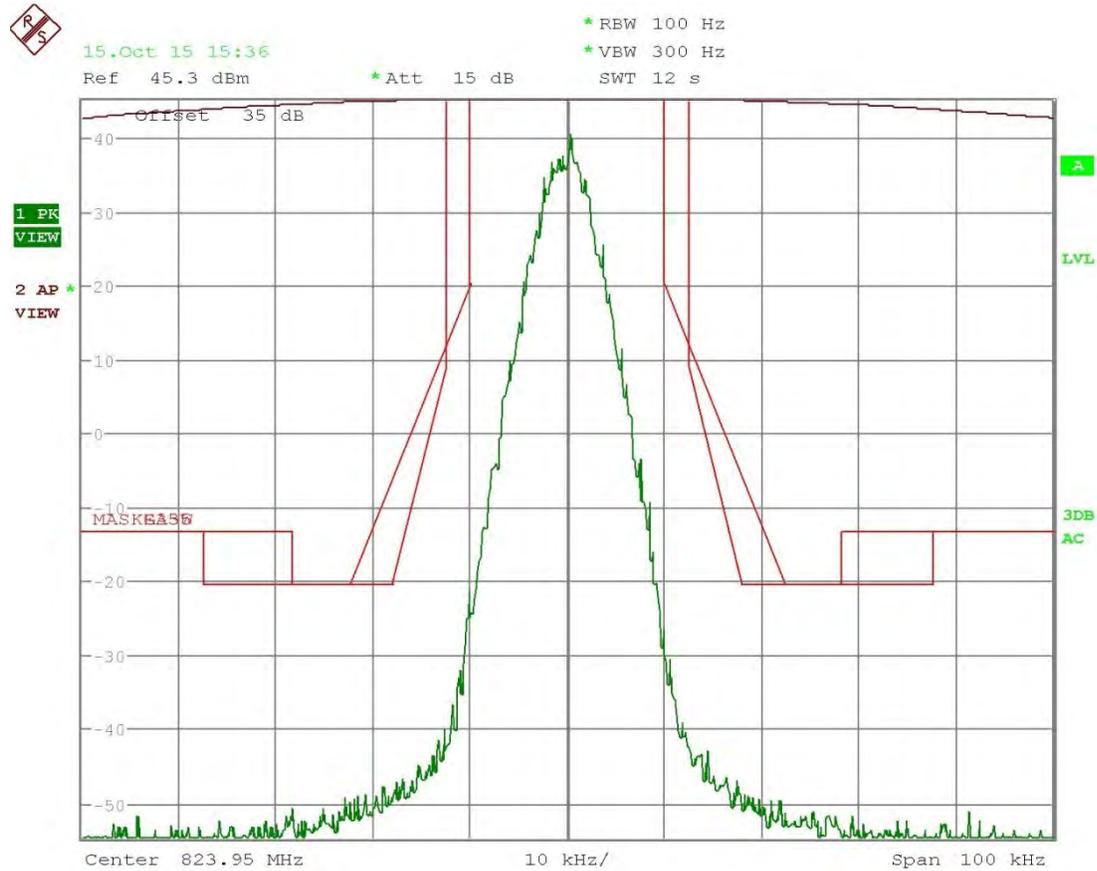
Date: 15.SEP.2015 15:06:18

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 823.95 MHz-8K10F1E/8K10F1D

Part 90.210(g) Emission Mask G – Equipment without Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



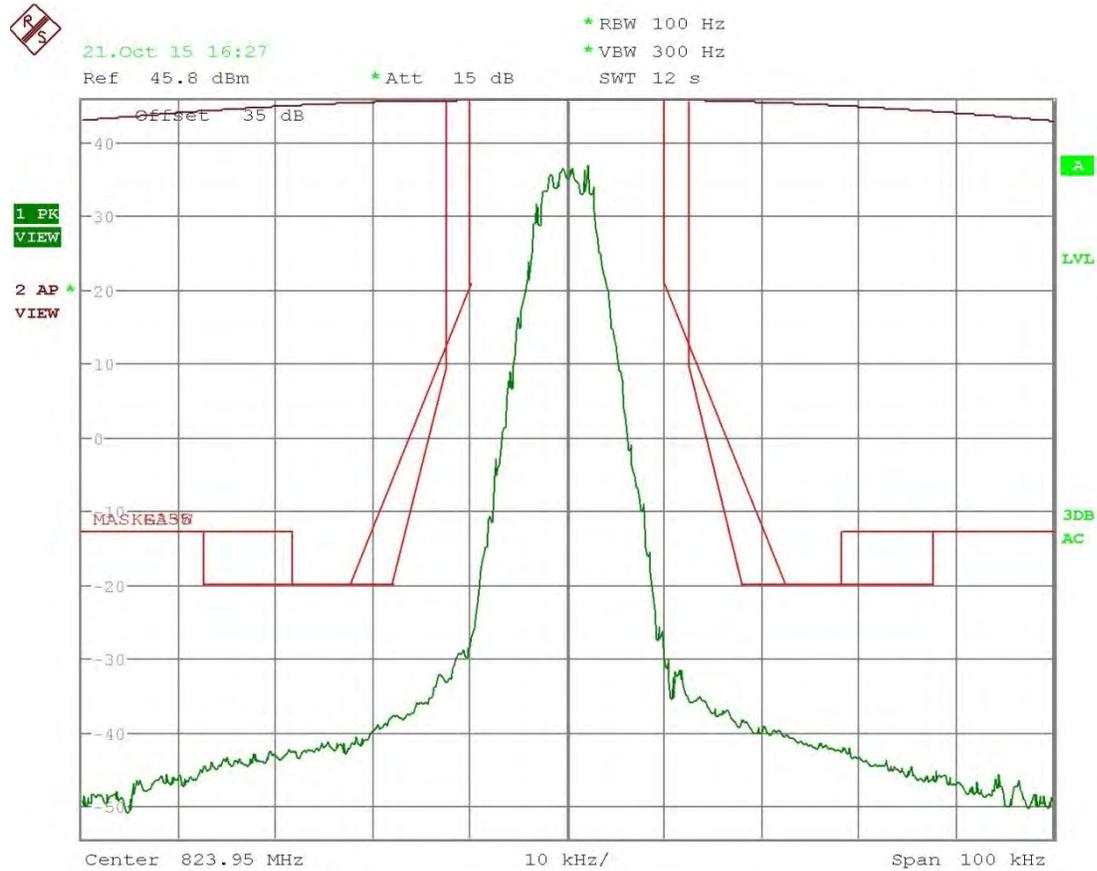
Date: 15.OCT.2015 15:36:25

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 823.95 MHz-8K10F7E

Part 90.210(g) Emission Mask G – Equipment without Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



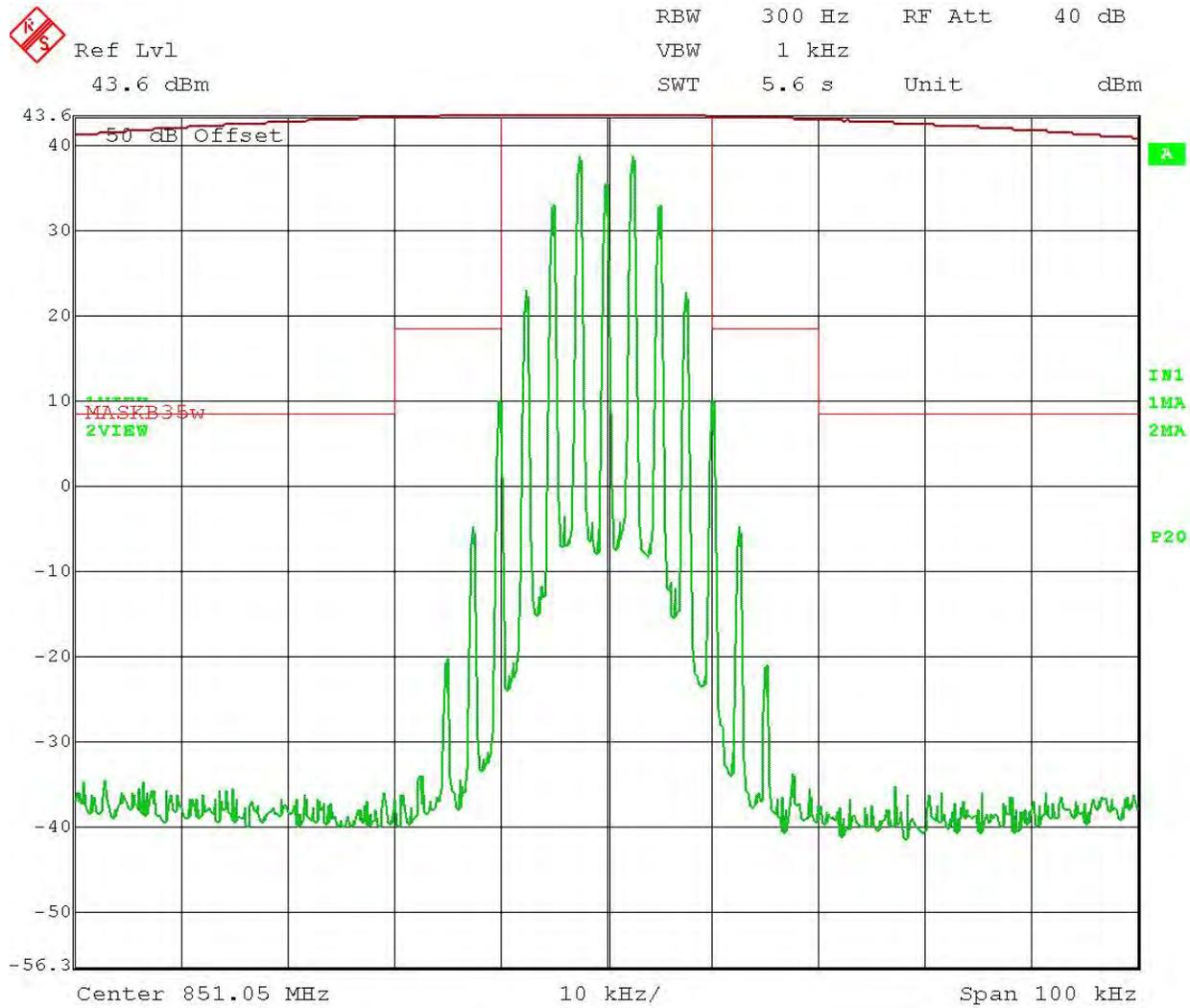
Date: 21.OCT.2015 16:27:29

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 851.05 MHz-16kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



Date: 15.SEP.2015 11:36:42

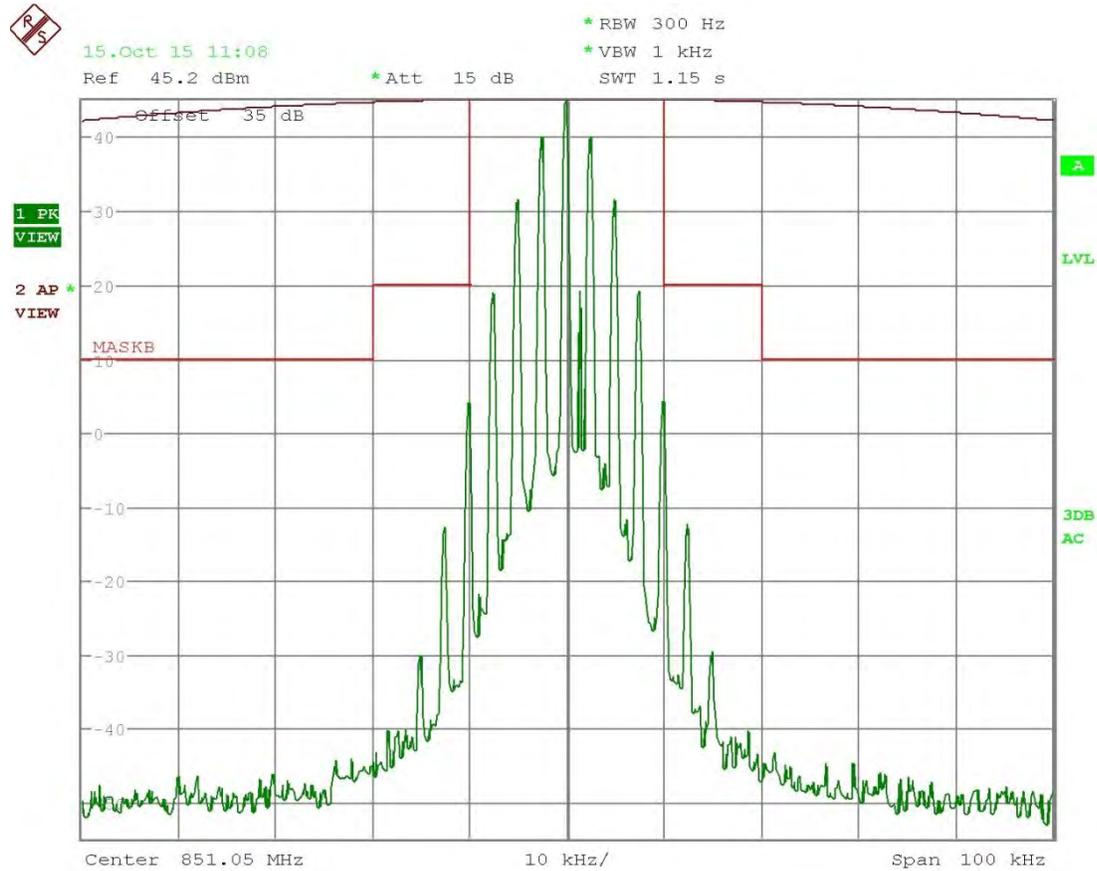
_B

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 851.05 MHz-14kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



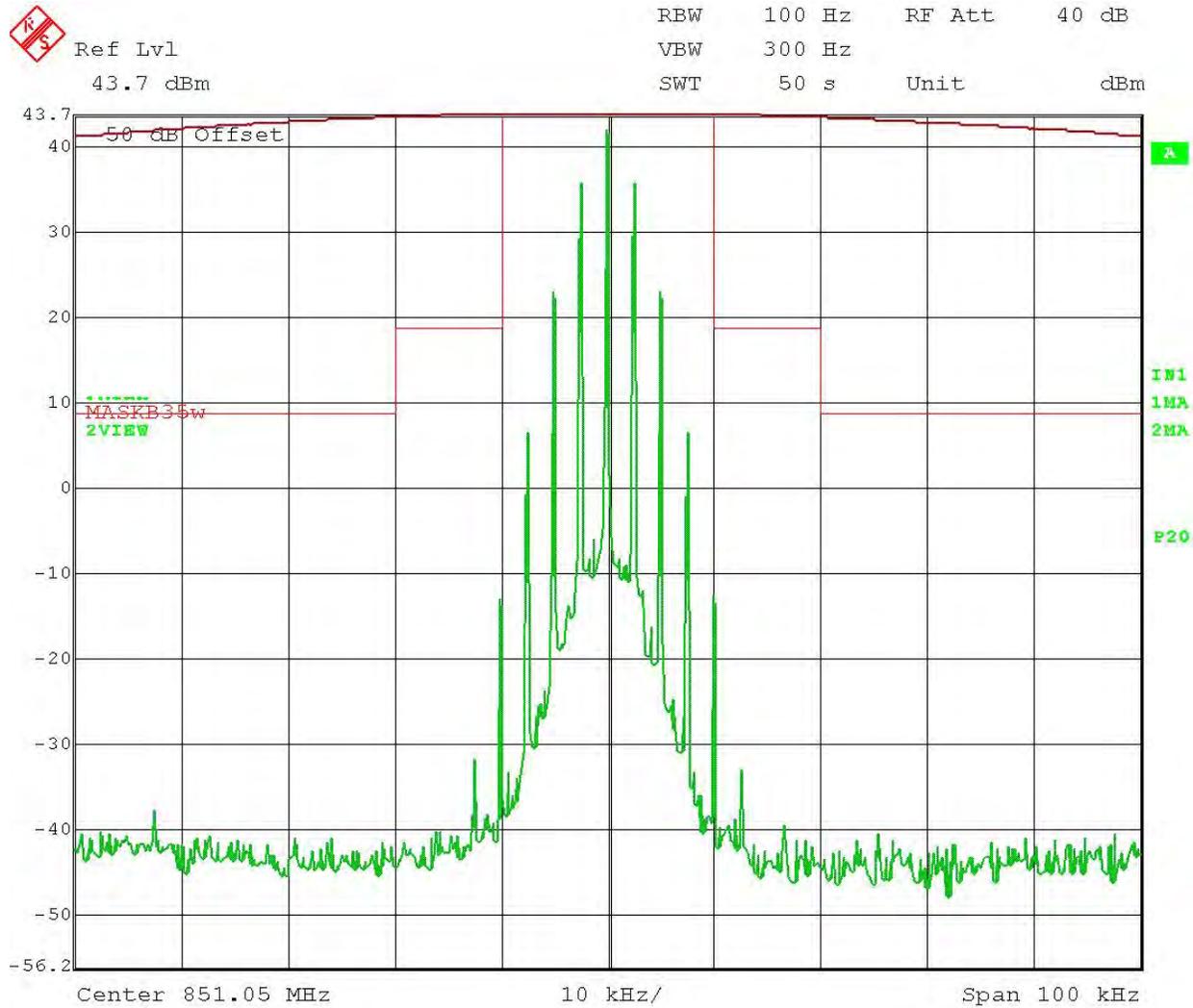
Date: 15.OCT.2015 11:08:00

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 851.05 MHz-11kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



Date: 15.SEP.2015 15:02:11

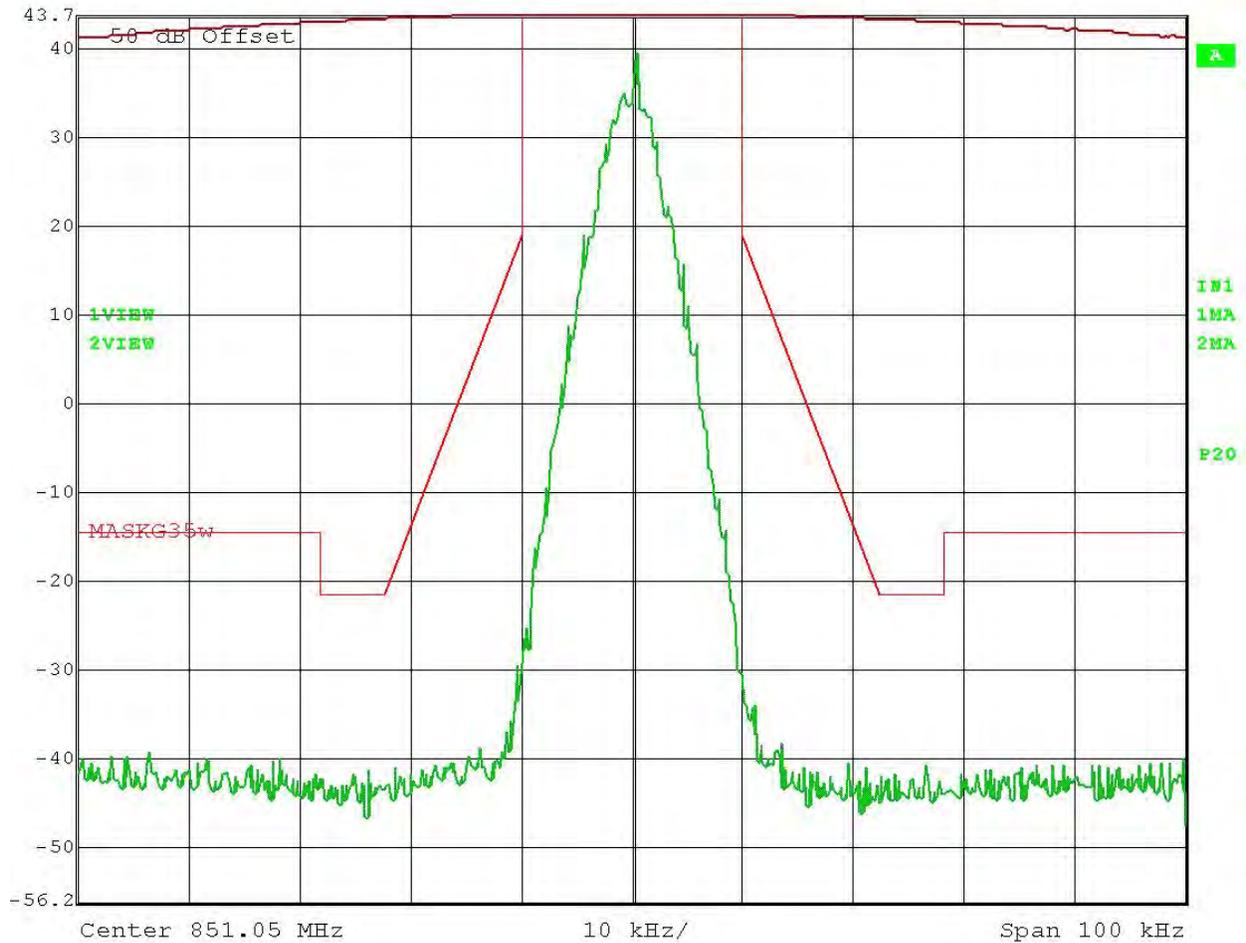
[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 851.05 MHz-8K10F1E/8K10F1D

Part 90.210(g) Emission Mask G – Equipment without Low pass filter

	Ref Lvl	RBW	100 Hz	RF Att	40 dB
	43.8 dBm	VBW	300 Hz	Unit	dBm
		SWT	50 s		



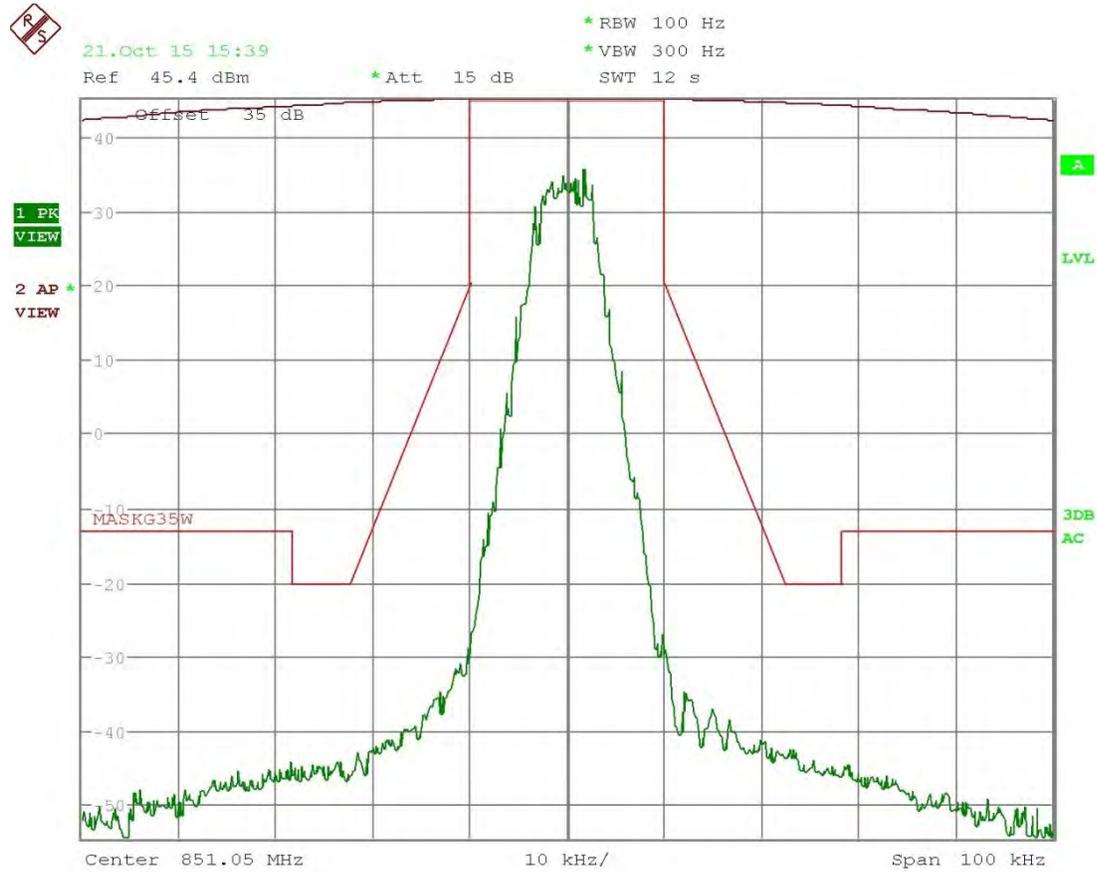
Date: 15.SEP.2015 15:45:53

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 851.05 MHz-8K10F7E

Part 90.210(g) Emission Mask G – Equipment without Low pass filter



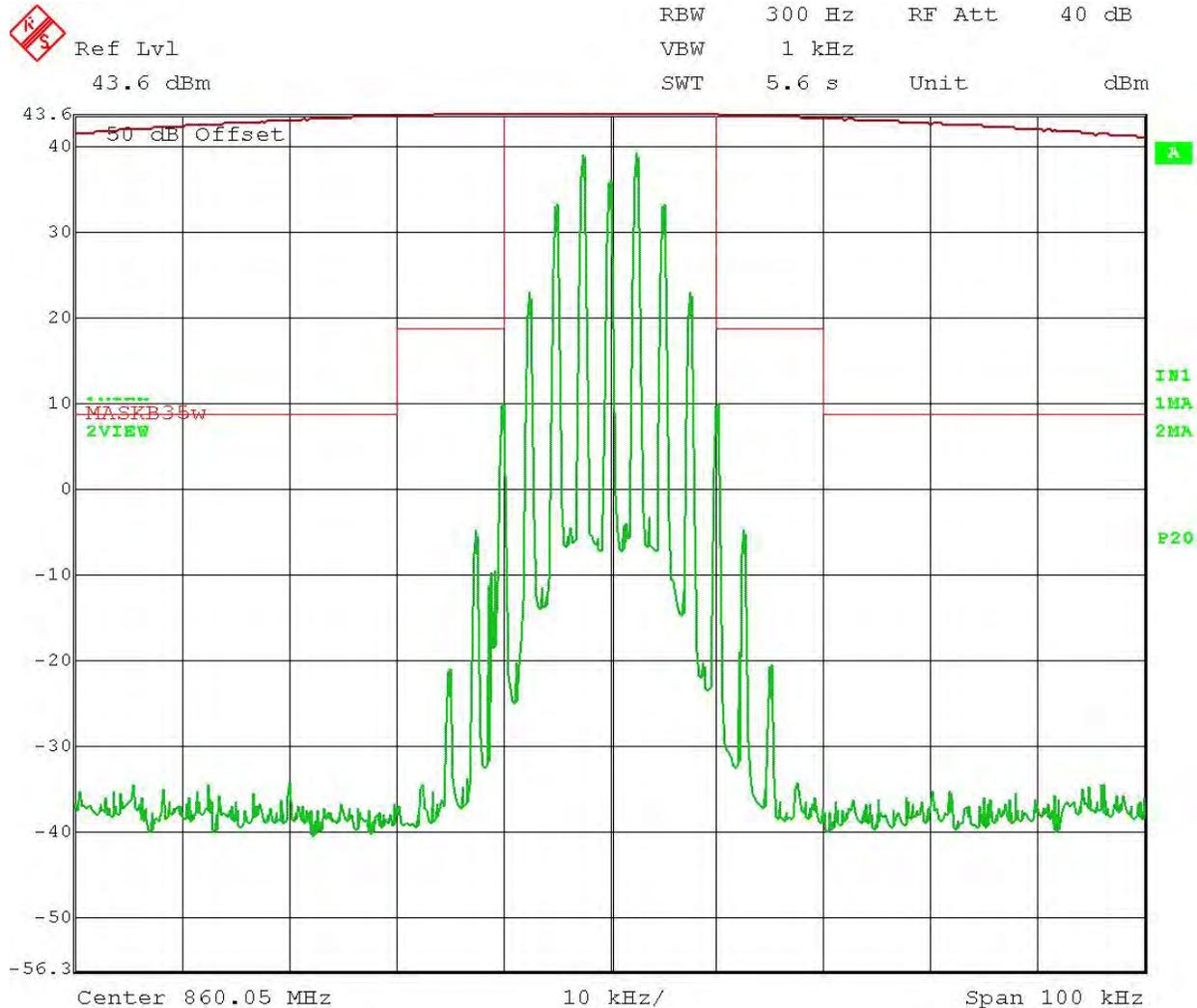
Date: 21.OCT.2015 15:39:46

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 860.05 MHz-16kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



Date: 15.SEP.2015 11:40:02

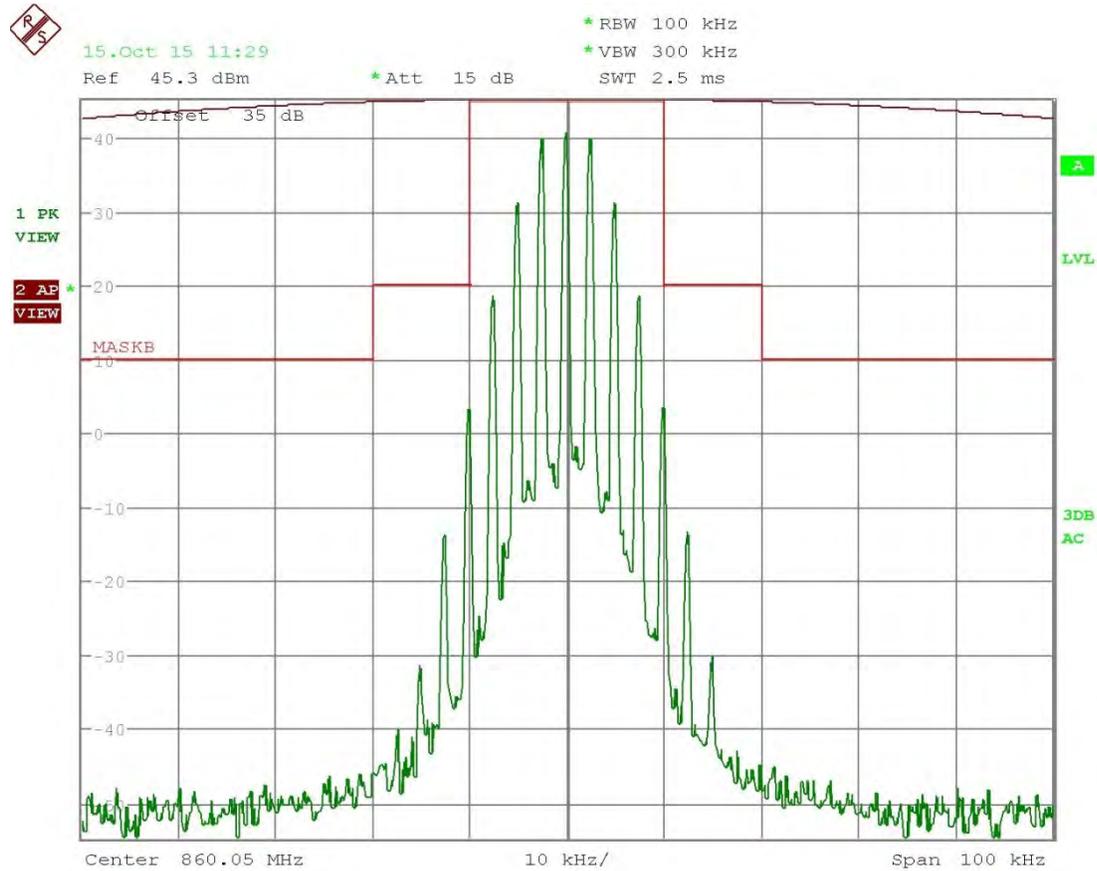
_B

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 860.05 MHz-14kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



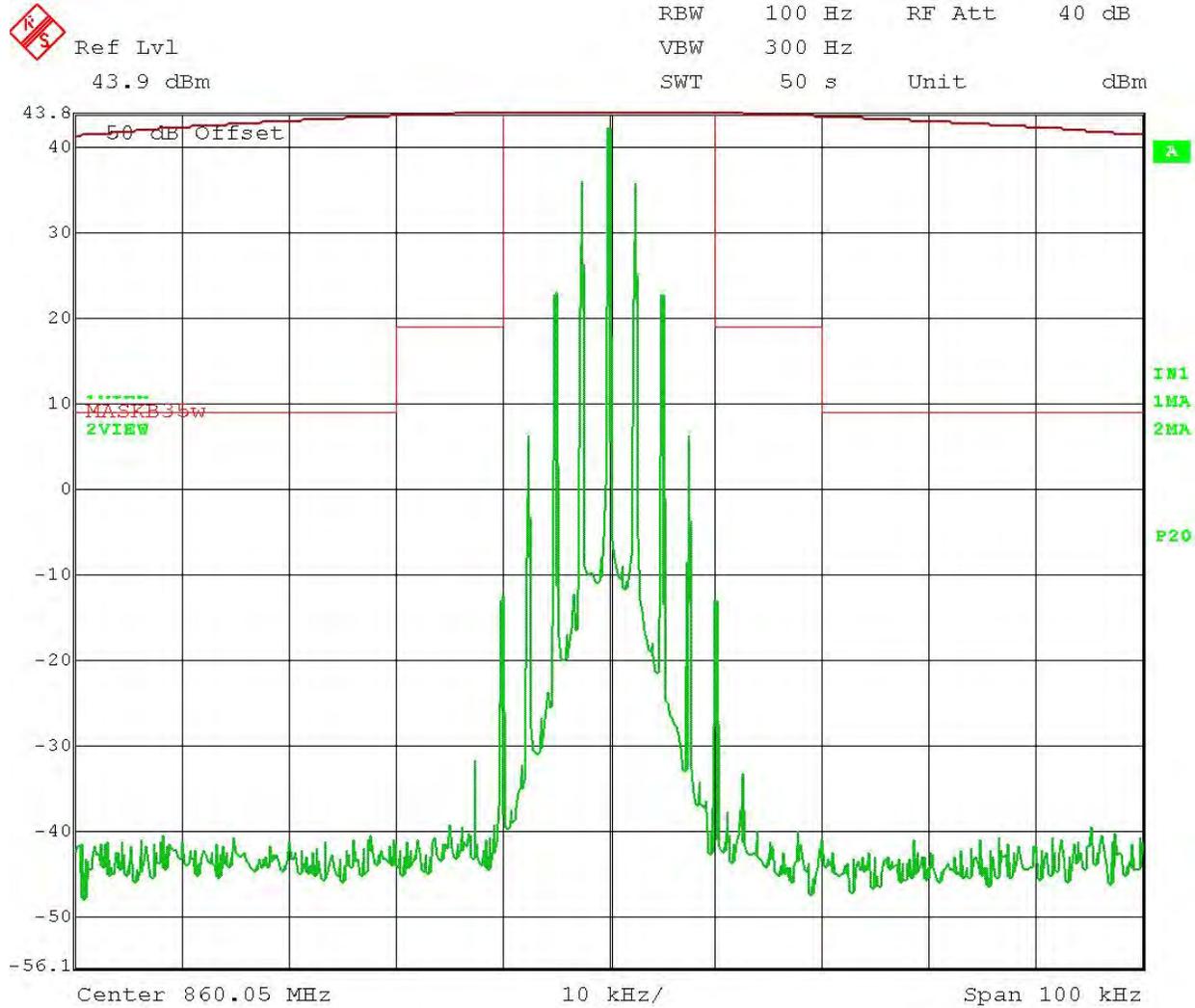
Date: 15.OCT.2015 11:29:12

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 860.05 MHz-11kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter



Date: 15.SEP.2015 14:58:00

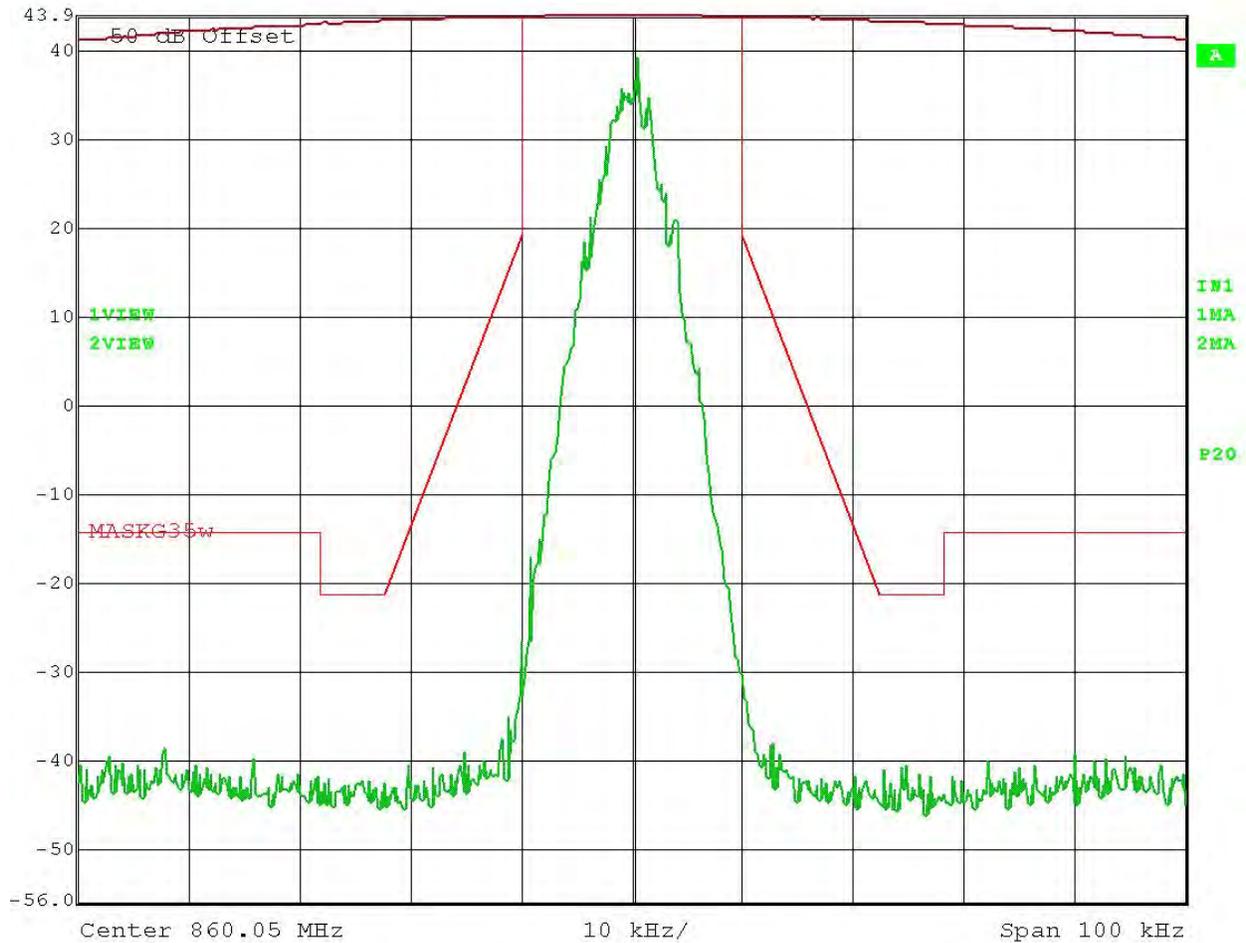
[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 860.05 MHz-8K10F1E/8K10F1D

Part 90.210(g) Emission Mask G – Equipment without Low pass filter

	Ref Lvl	RBW	100 Hz	RF Att	40 dB
	43.9 dBm	VBW	300 Hz	Unit	dBm
		SWT	50 s		



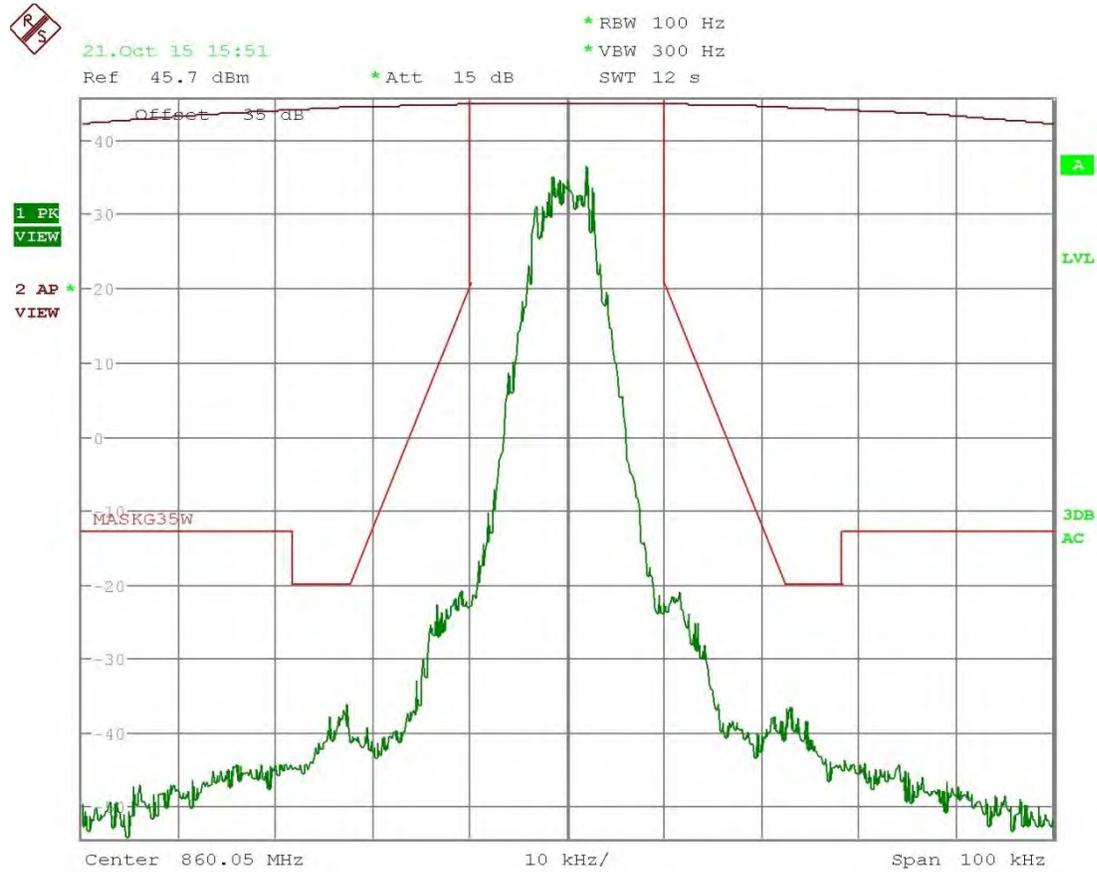
Date: 15.SEP.2015 15:48:36

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 860.05 MHz-8K10F7E

Part 90.210(g) Emission Mask G – Equipment without Low pass filter



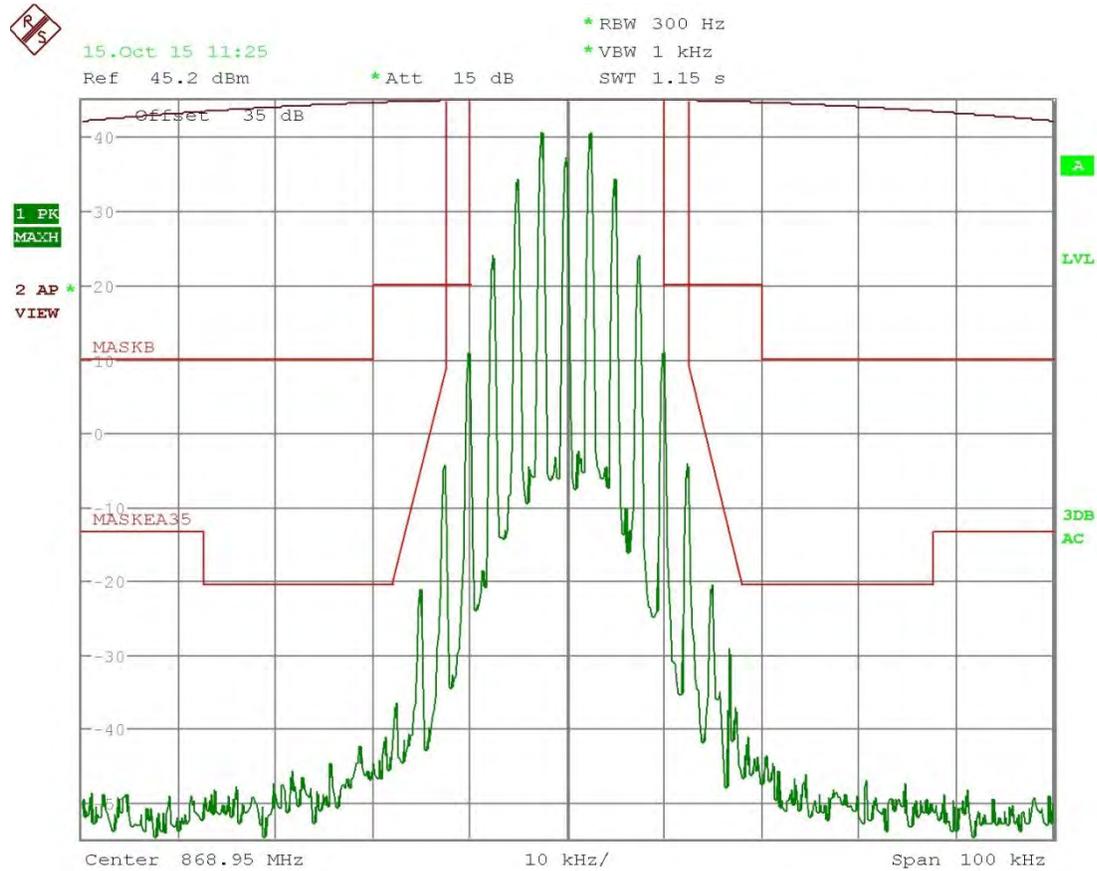
Date: 21.OCT.2015 15:51:18

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 868.95 MHz-16kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



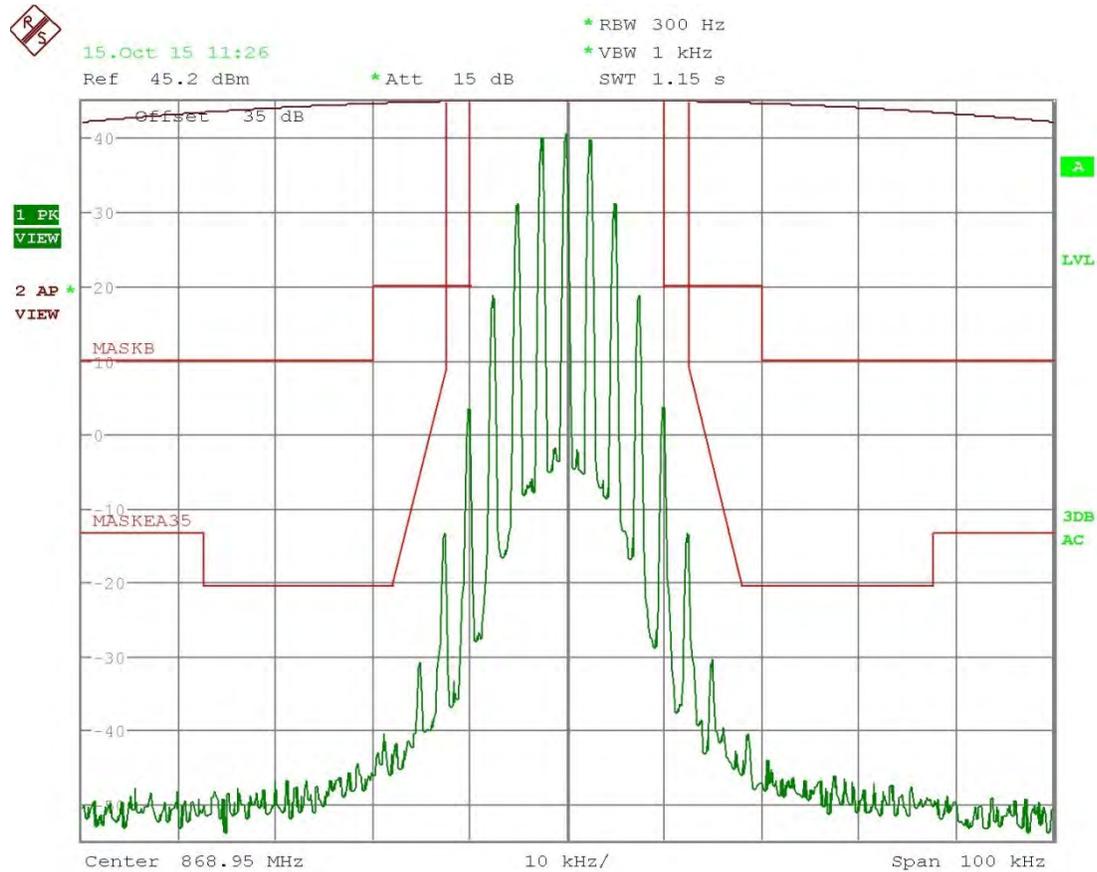
Date: 15.OCT.2015 11:25:20

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 868.95 MHz-14kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



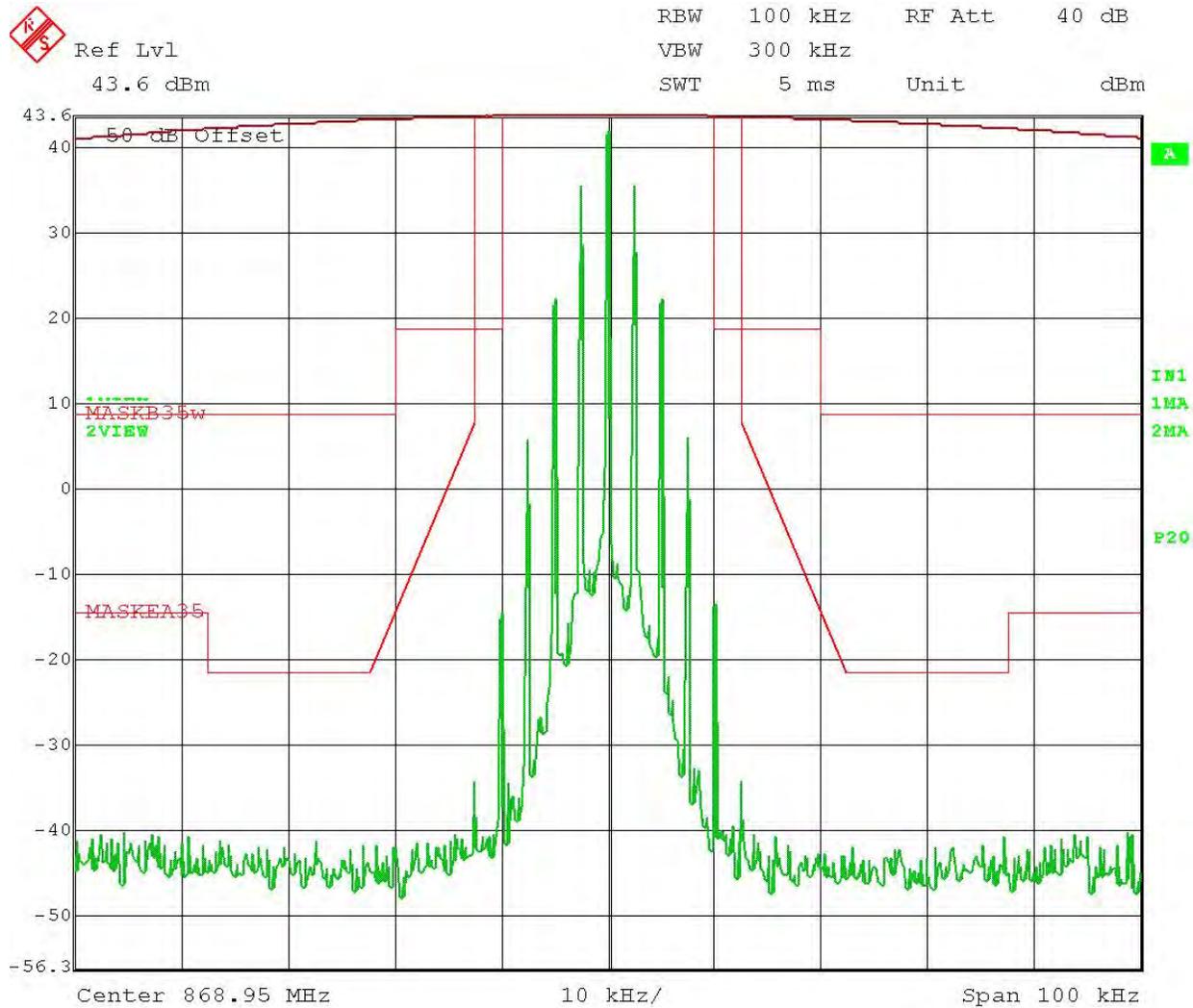
Date: 15.OCT.2015 11:26:44

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 868.95 MHz-11kOF3E

Part 90.210(b) Emission Mask B – Equipment with audio Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



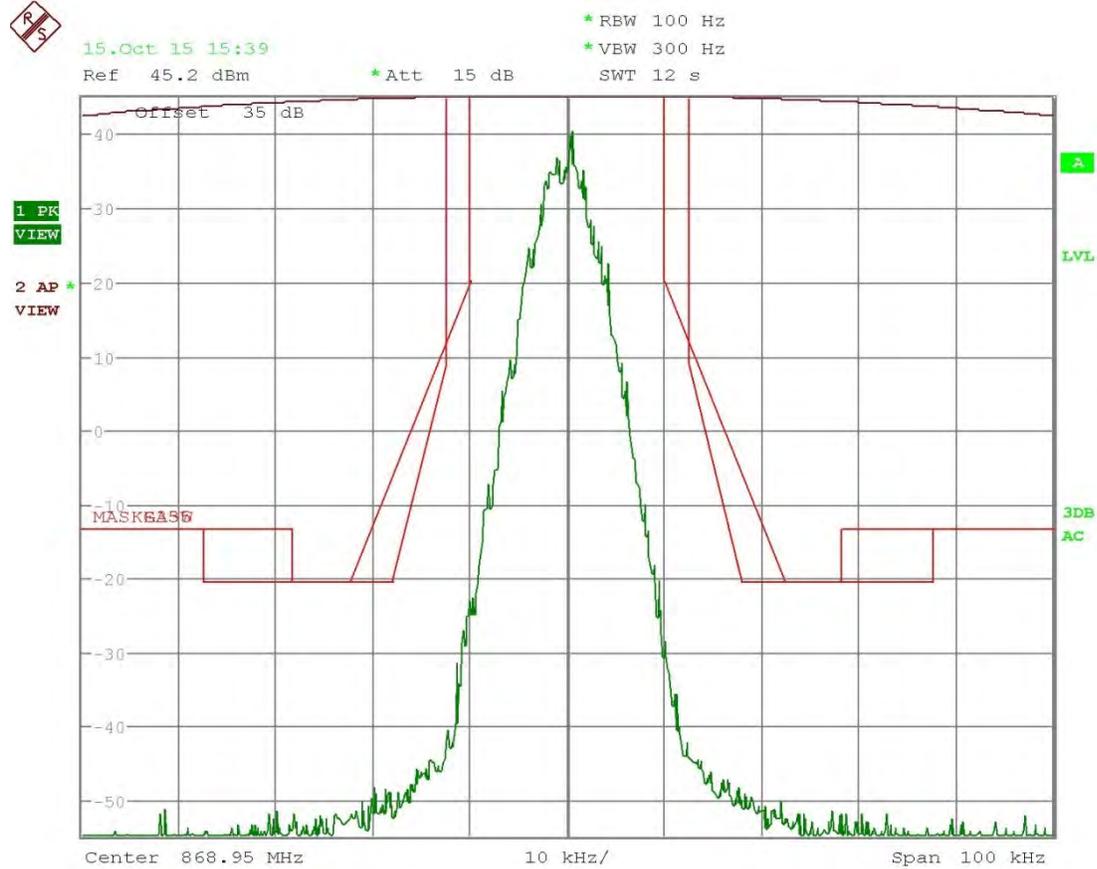
Date: 15.SEP.2015 14:52:05

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 868.95 MHz-8K10F1E/8K10F1D

Part 90.210(g) Emission Mask G – Equipment without Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



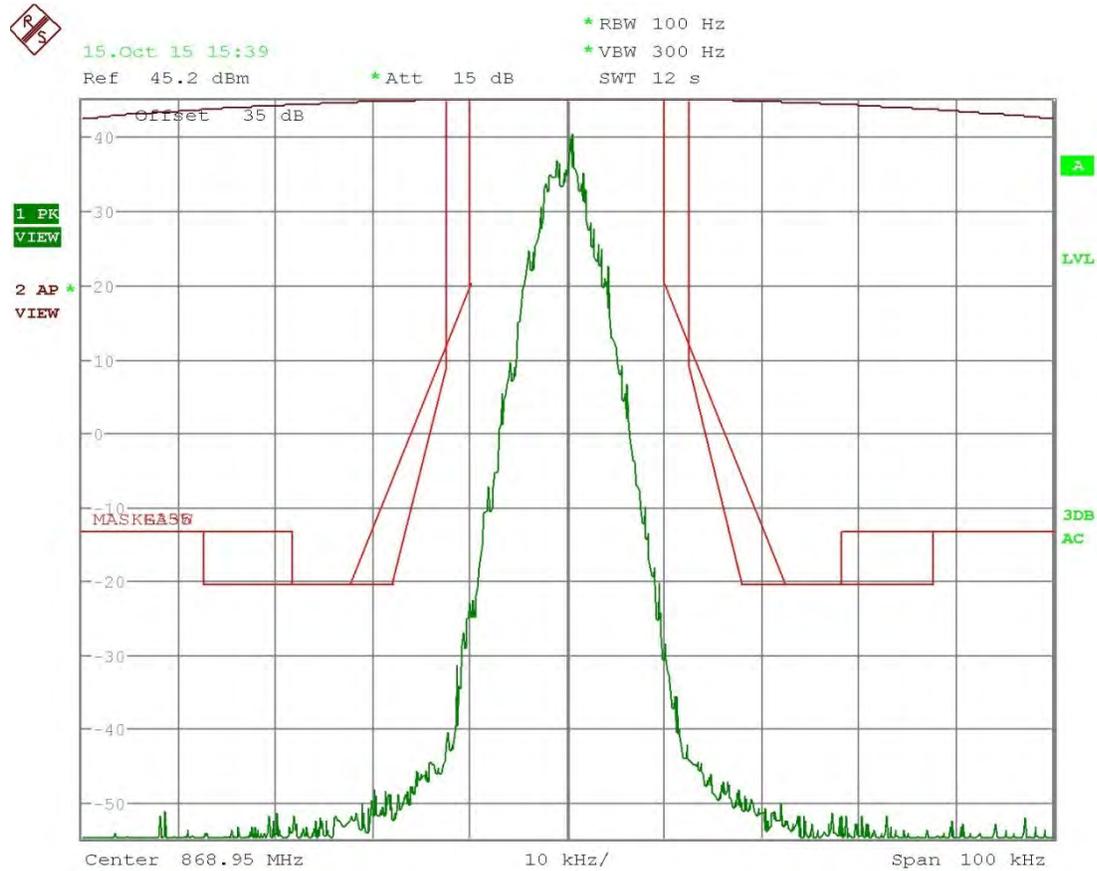
Date: 15.OCT.2015 15:39:19

[Table of Contents](#)

OCCUPIED BANDWIDTH

TEST FREQ. 868.95 MHz-8K10F7E

Part 90.210(g) Emission Mask G – Equipment without Low pass filter
 Part 90.691(a) Emission Mask EA – EA-based systems



Date: 15.OCT.2015 15:39:19

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

RULE PARTS. NO.: 90.543(a)

REQUIREMENTS: Transmitters designed to operate in the 769-775 MHz and 799-805 MHz frequency bands must meet the emission limitations.

12.5 kHz Mobile Transmitter ACP Requirements		
Offset from center frequency	Measurement bandwidth	Maximum ACP relative
(kHz)	(kHz)	(dBc)
9.375	6.25	-40
15.625	6.25	-60
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350	100	-65
>400 to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

25 kHz Mobile Transmitter ACP Requirements		
Offset from center frequency	Measurement bandwidth	Maximum ACP relative
(kHz)	(kHz)	(dBc)
15.625	6.25	-40
21.875	6.25	-60
37.5	25	-60
62.5	25	-65
87.5	25	-65
150	100	-65
250	100	-65
350	100	-65
>400 kHz to 12 MHz	30 (s)	-75
12 MHz to paired receive band	30 (s)	-75
In the paired receive band	30 (s)	-100

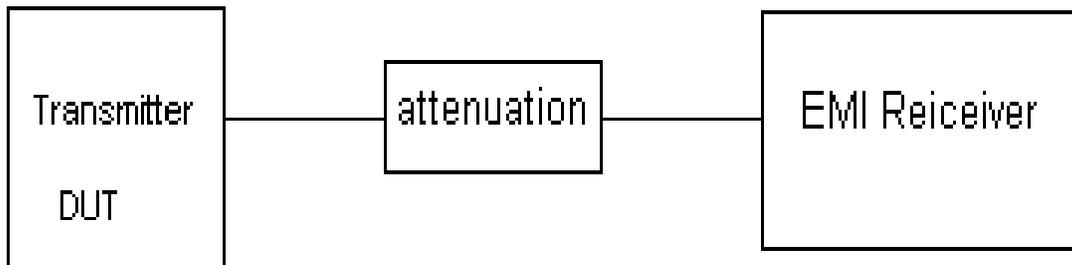
(s) Indicates that a swept measurement may be used.

ADJACENT CHANNEL POWER (ACP)

TEST PROCEEDURE: ANSI/TIA-603 § 2.2.14 Adjacent Channel Power Ratio
FCC Part 90.543(b) ACP Measurement Procedure

1. All the measurement are made at the transmitter's antenna port.
2. The ACP was made with the EMI receiver which has a direct ACP function.
3. The Nominal RBW was less than 2% of the measurement BW

TEST SETUP DIAGRAM:



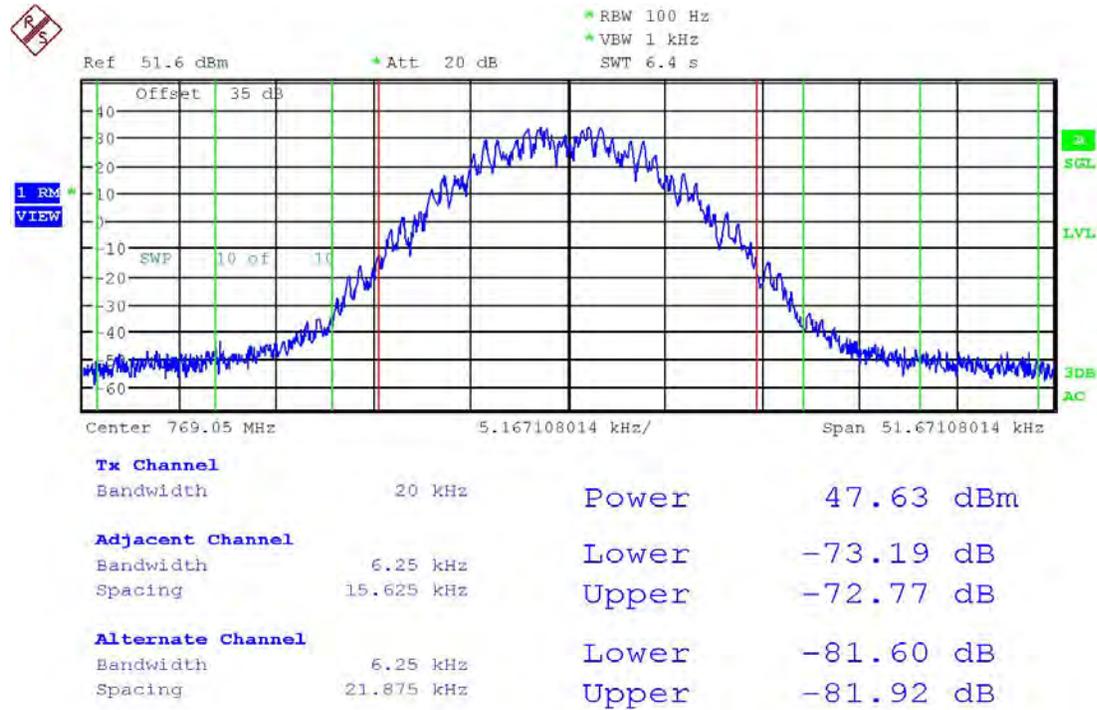
TEST DATA: See the plots on the following pages

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-16KOF3E

6.25 KHz Measurement Bandwidth



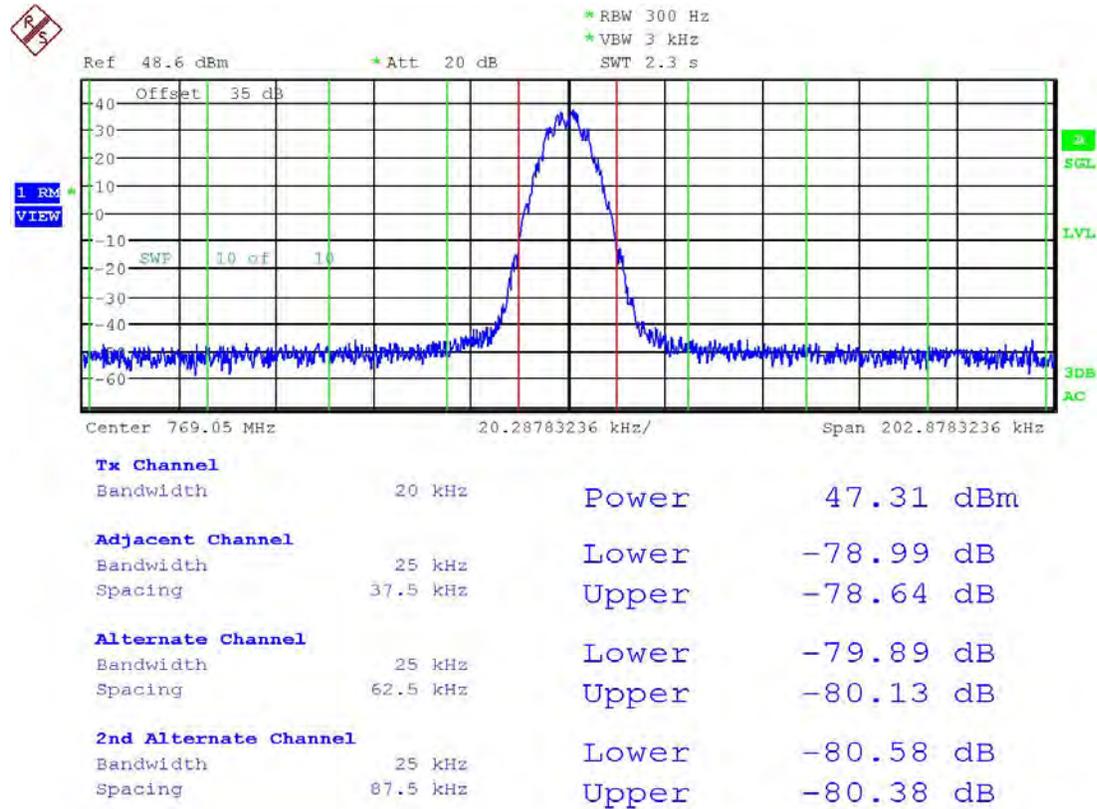
Date: 15.OCT.2015 11:44:02

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-16KOF3E

25 KHz Measurement Bandwidth



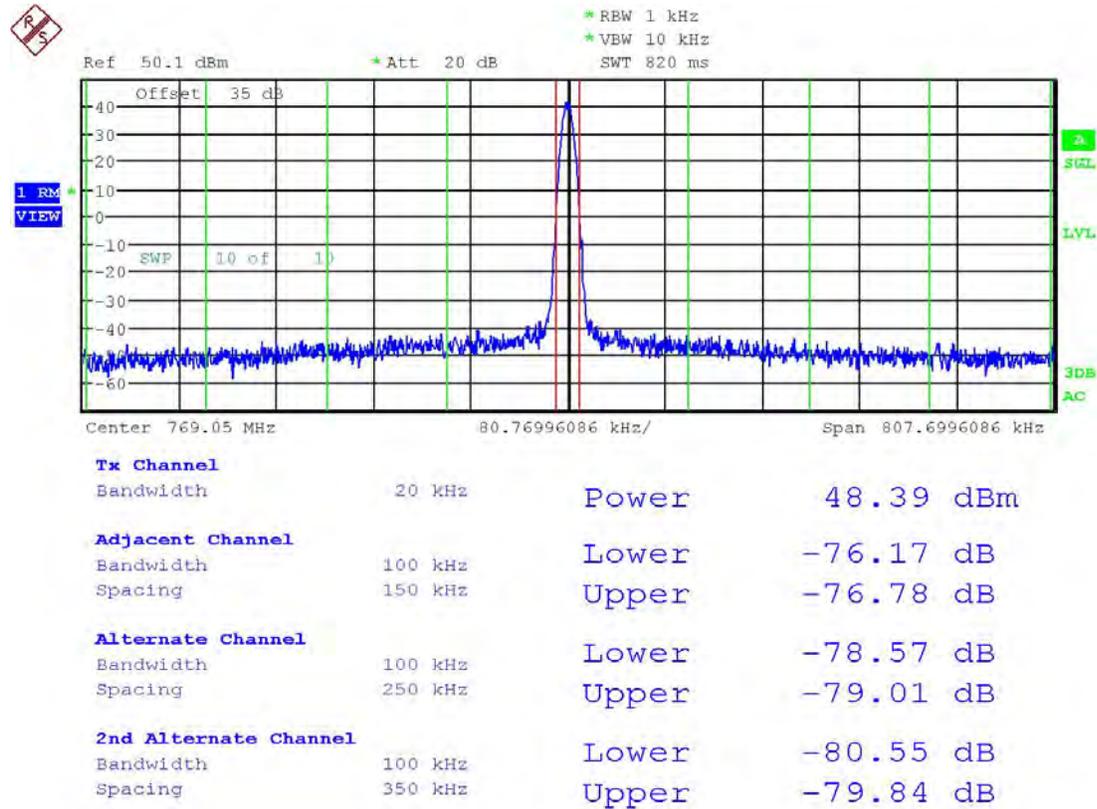
Date: 15.OCT.2015 14:26:38

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-16KOF3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:32:28

Swept 30 KHz Bandwidth Measurement

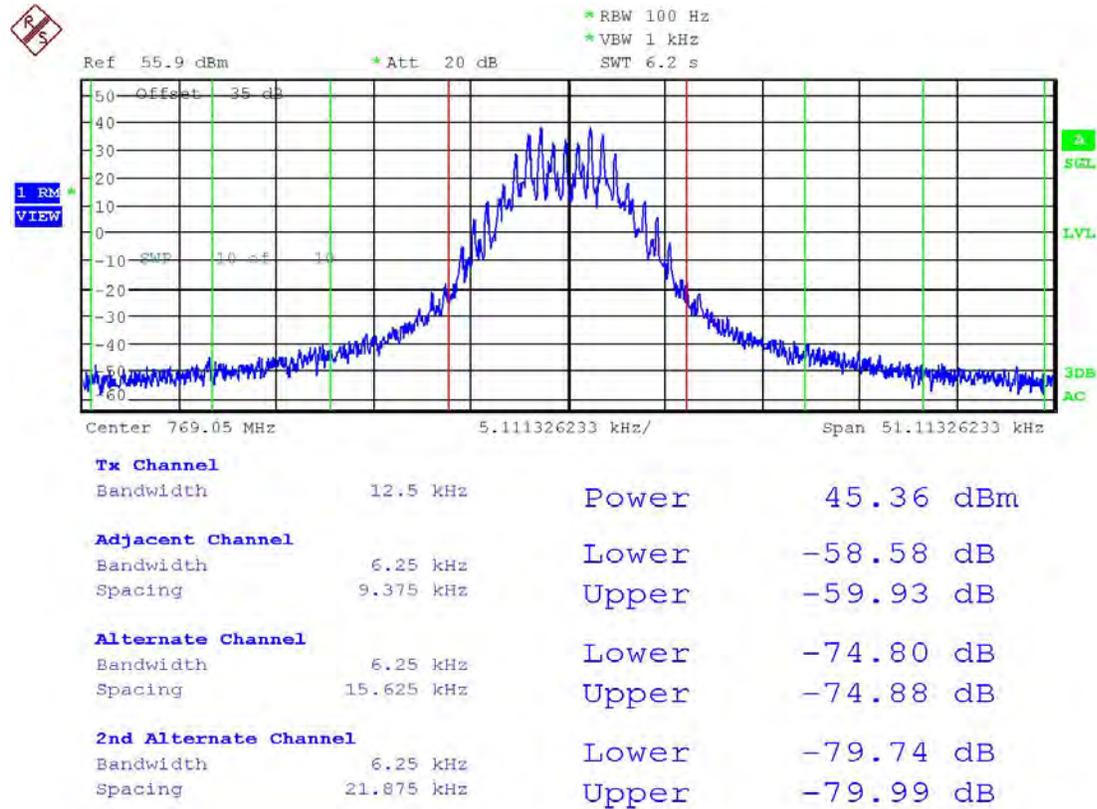
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-97.9	22.9
		Lower	-103	28.1
12 MHz to paired rx band	-75	-100.22		25.2
In the paired rx band	-100	-103.73		3.7

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



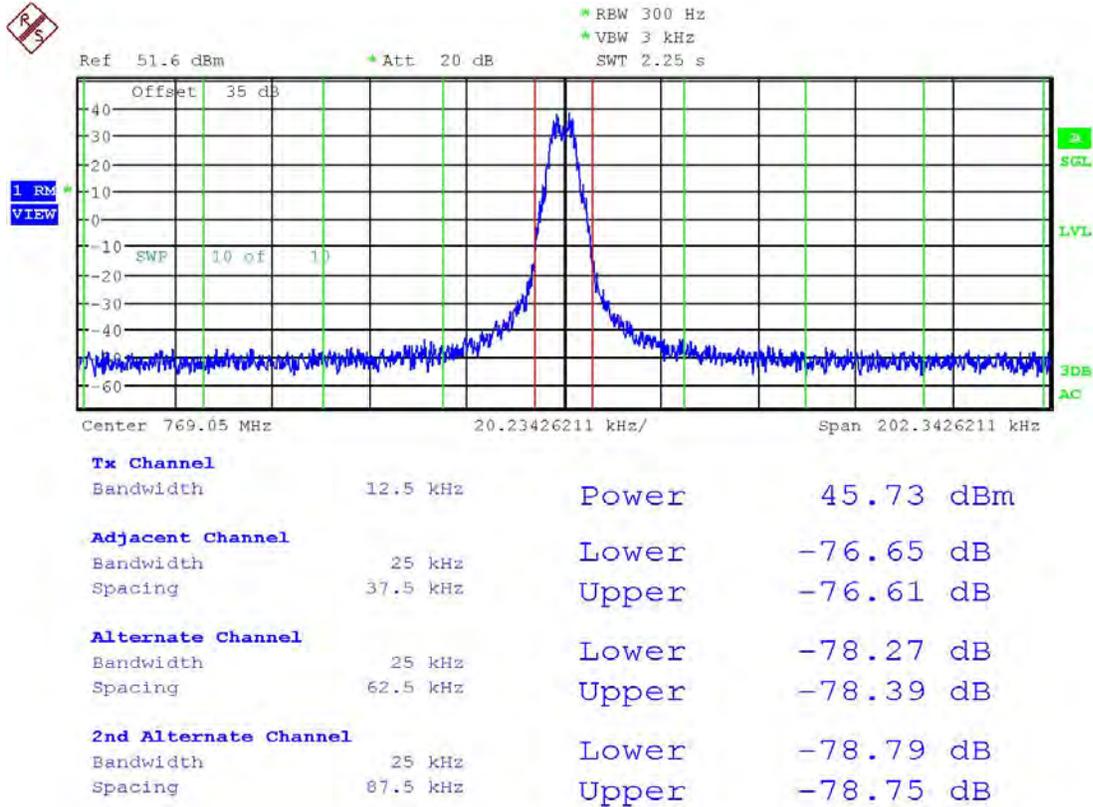
Date: 14.OCT.2015 12:49:40

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-11K0F3E

25 KHz Measurement Bandwidth



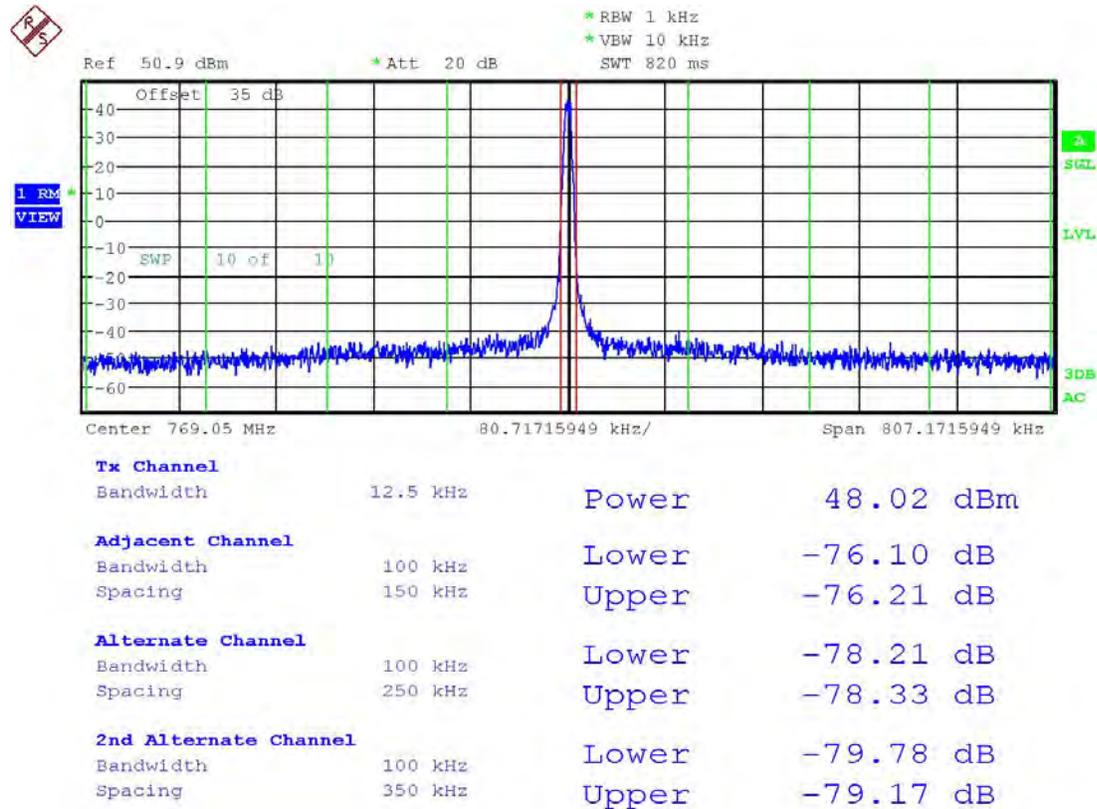
Date: 14.OCT.2015 14:26:13

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-11K0F3E

100 KHz Measurement Bandwidth



Date: 14.OCT.2015 14:39:17

Swept 30 KHz Bandwidth Measurement

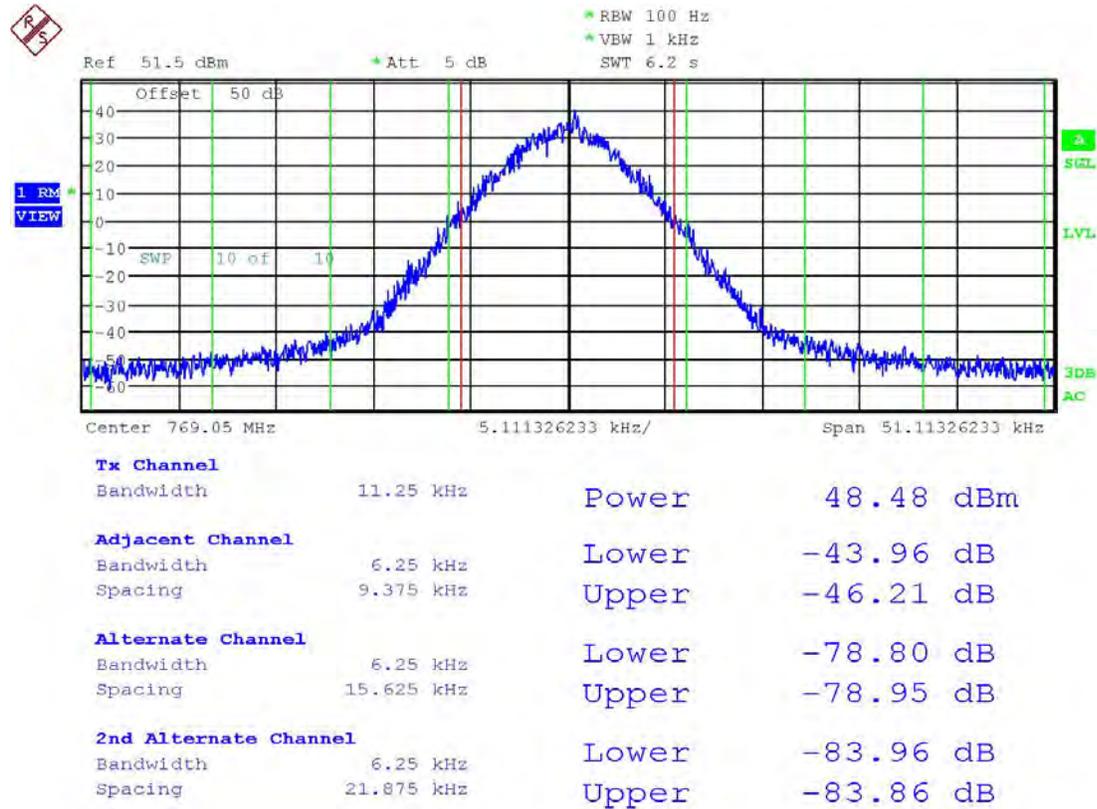
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
		Upper	Lower	
>400 KHz to 12 MHz	-75	Upper	-97.3	22.3
		Lower	-104	28.8
12 MHz to paired rx band	-75		-100.2	25.2
In the paired rx band	-100		-103.07	3.1

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



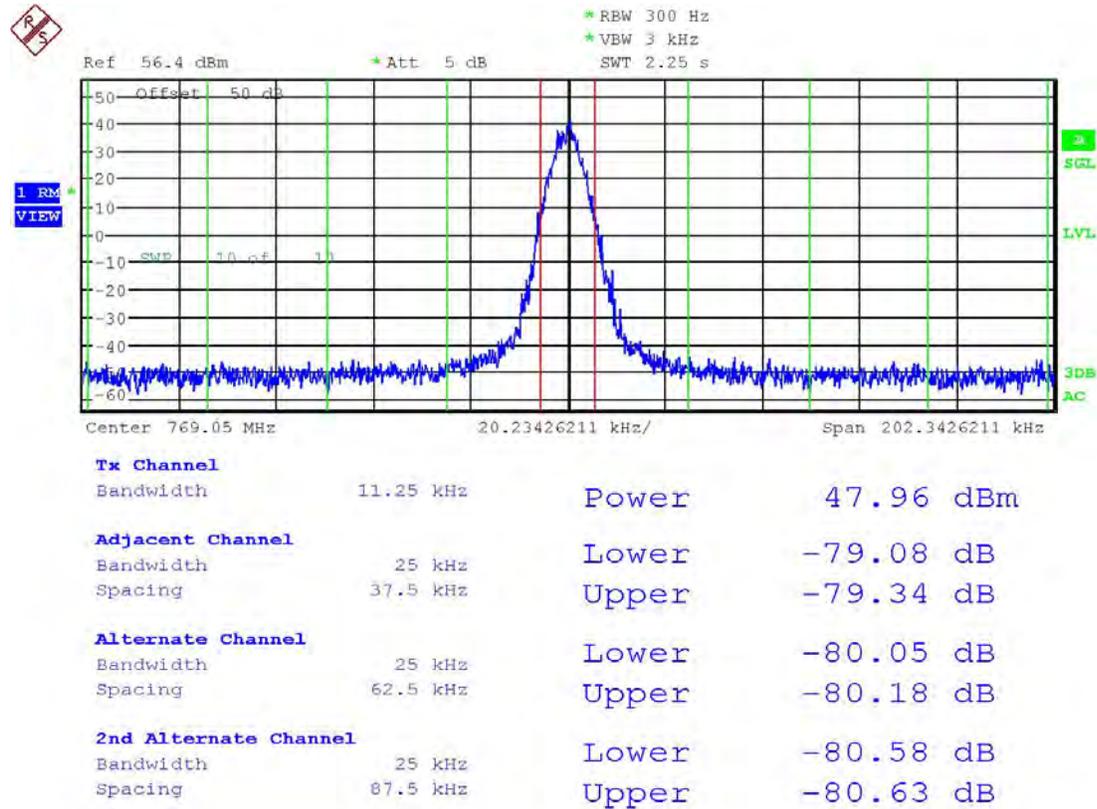
Date: 14.SEP.2015 10:18:39

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



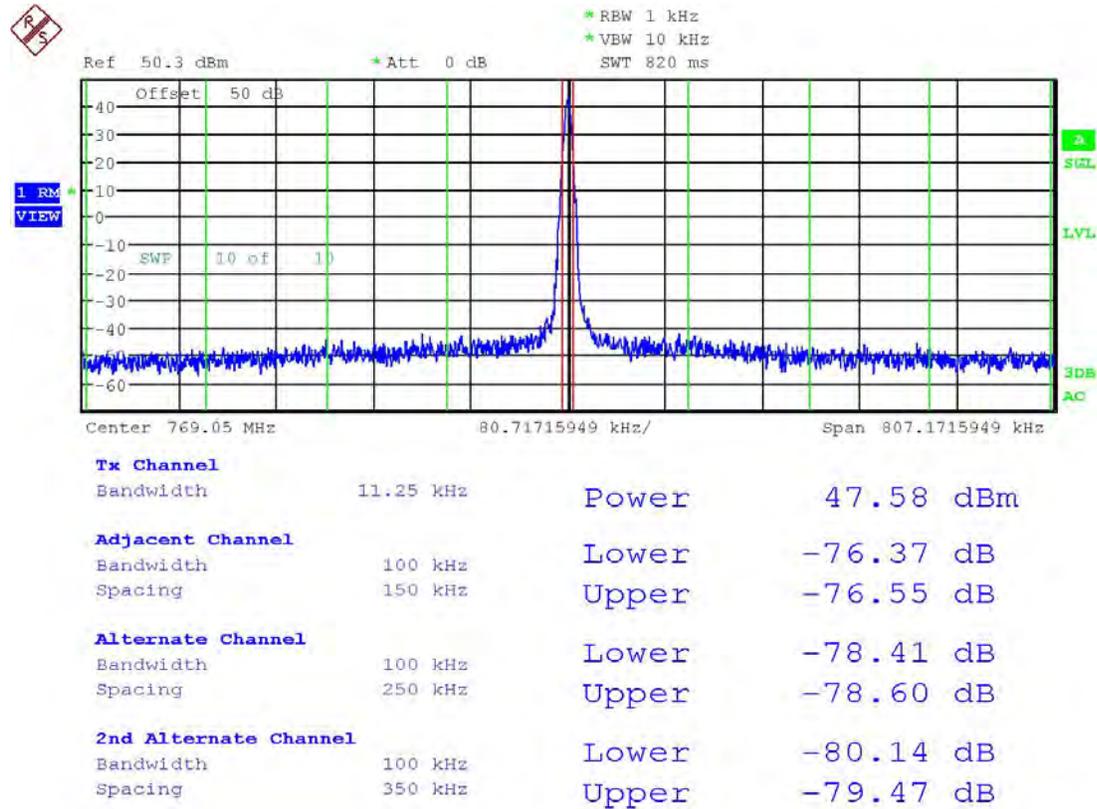
Date: 14.SEP.2015 10:26:03

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 14.SEP.2015 10:33:57

Swept 30 KHz Bandwidth Measurement

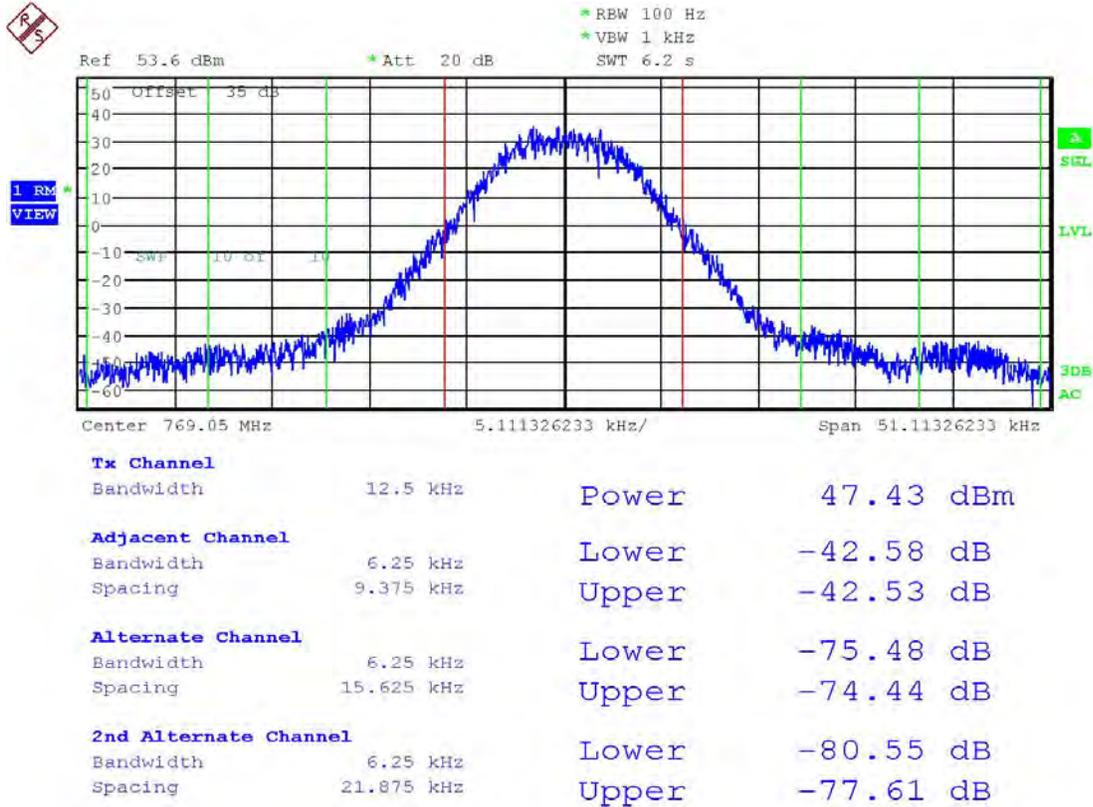
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-103	27.6
		Lower	-108	32.8
12 MHz to paired rx band	-75	-104.24		29.2
In the paired rx band	-100	-107.19		7.2

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



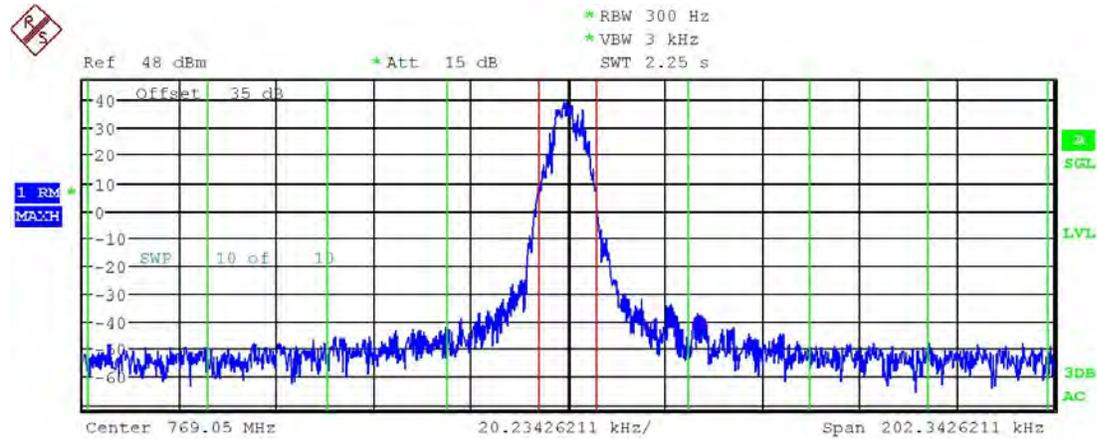
Date: 20.OCT.2015 12:03:26

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



Tx Channel			
Bandwidth	12.5 kHz	Power	47.94 dBm
Adjacent Channel			
Bandwidth	25 kHz	Lower	-77.86 dB
Spacing	37.5 kHz	Upper	-76.16 dB
Alternate Channel			
Bandwidth	25 kHz	Lower	-81.78 dB
Spacing	62.5 kHz	Upper	-82.00 dB
2nd Alternate Channel			
Bandwidth	25 kHz	Lower	-82.78 dB
Spacing	87.5 kHz	Upper	-82.26 dB

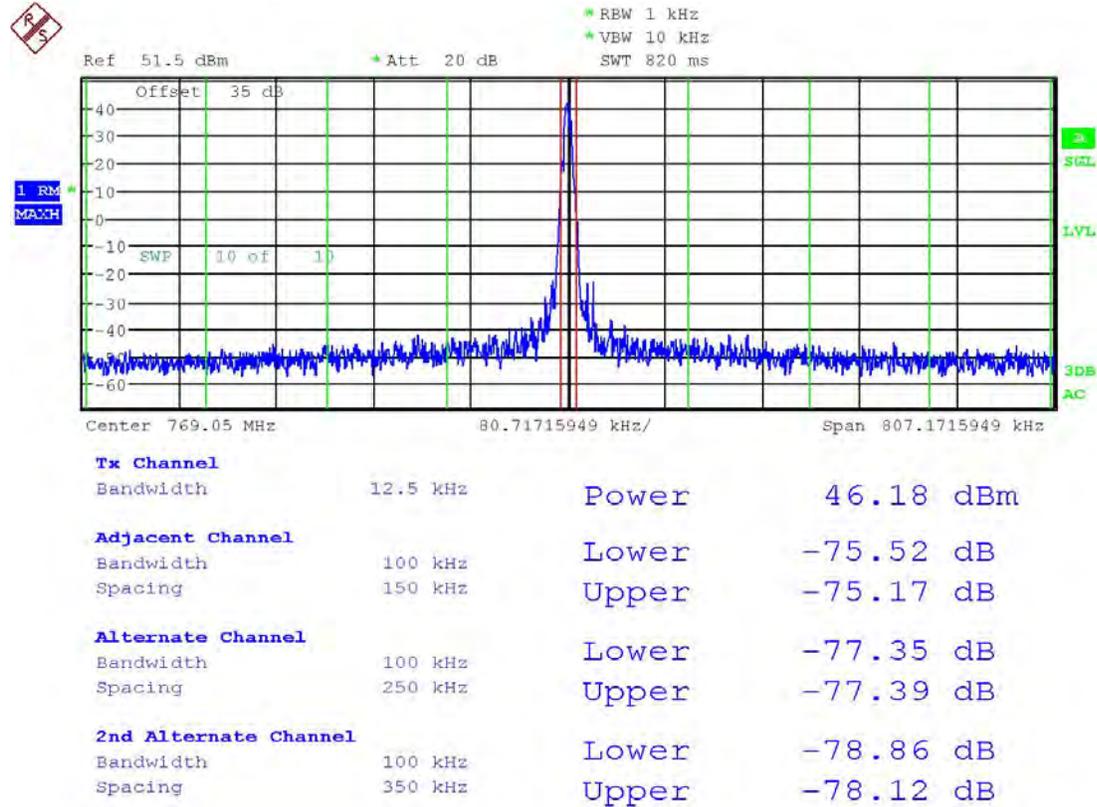
Date: 20.OCT.2015 13:11:46

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F7E

100 KHz Measurement Bandwidth



Date: 20.OCT.2015 13:23:49

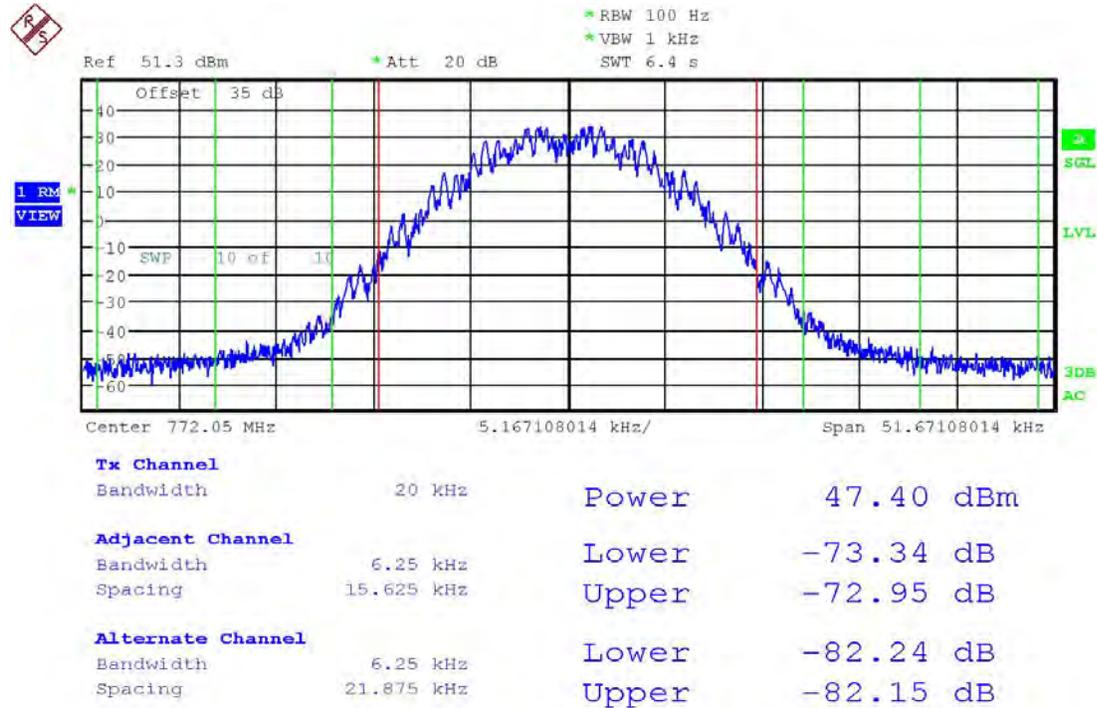
Swept 30 KHz Bandwidth Measurement

Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
		Upper	Lower	
>400 KHz to 12 MHz	-75	Upper	-117	41.6
		Lower	-120	44.8
12 MHz to paired rx band	-75		-116.42	41.4
In the paired rx band	-100		-116.11	16.1

[Table of Contents](#)

TEST FREQ. 772.05 MHz-16KOF3E

6.25 KHz Measurement Bandwidth



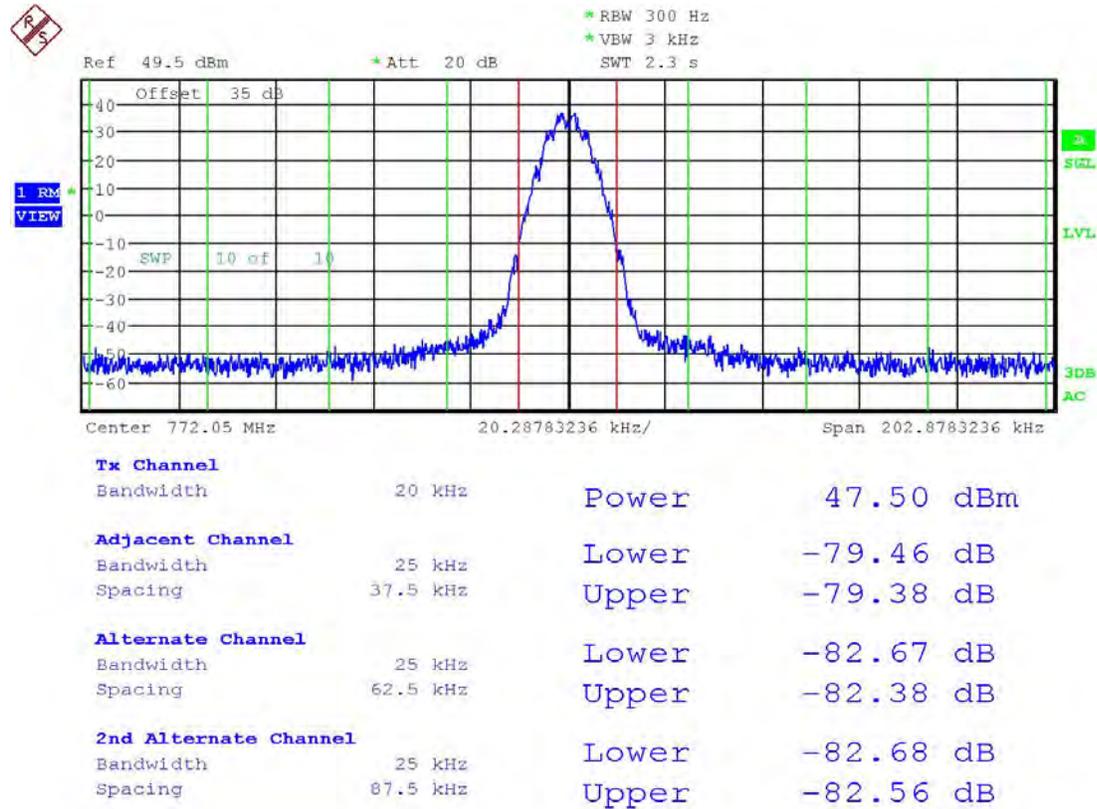
Date: 15.OCT.2015 11:42:18

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-16KOF3E

25 KHz Measurement Bandwidth



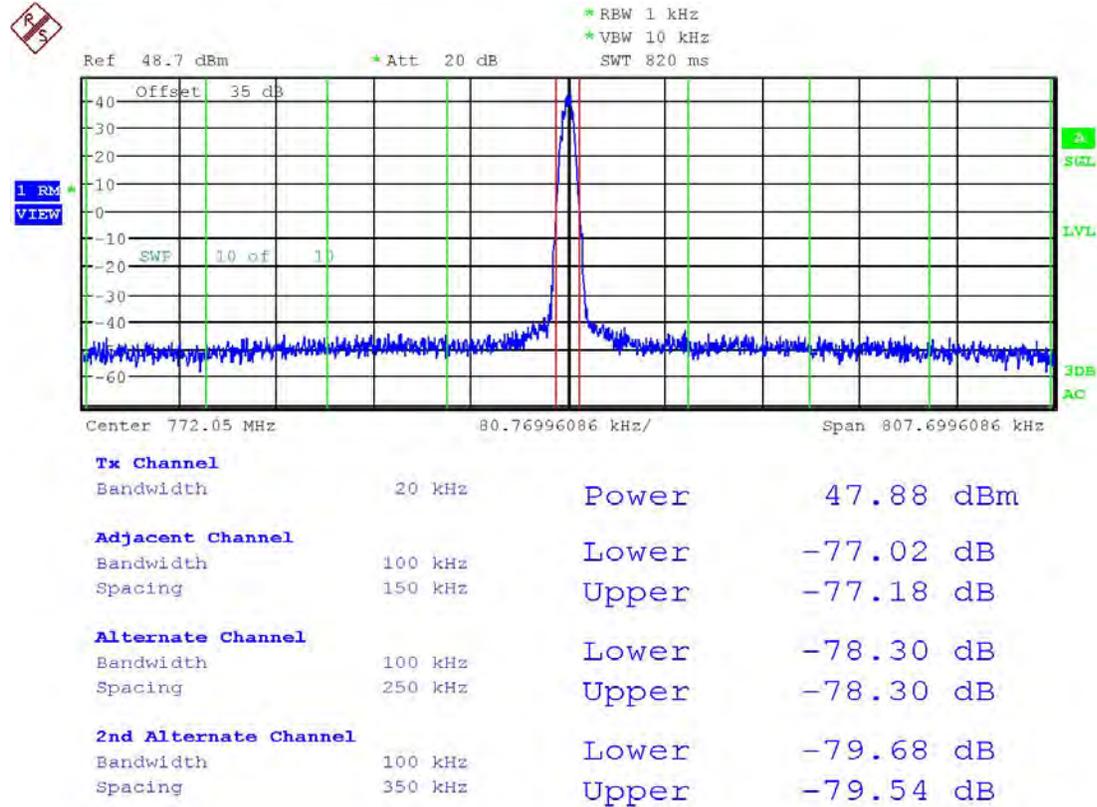
Date: 15.OCT.2015 14:23:46

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-16KOF3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:33:50

Swept 30 KHz Bandwidth Measurement

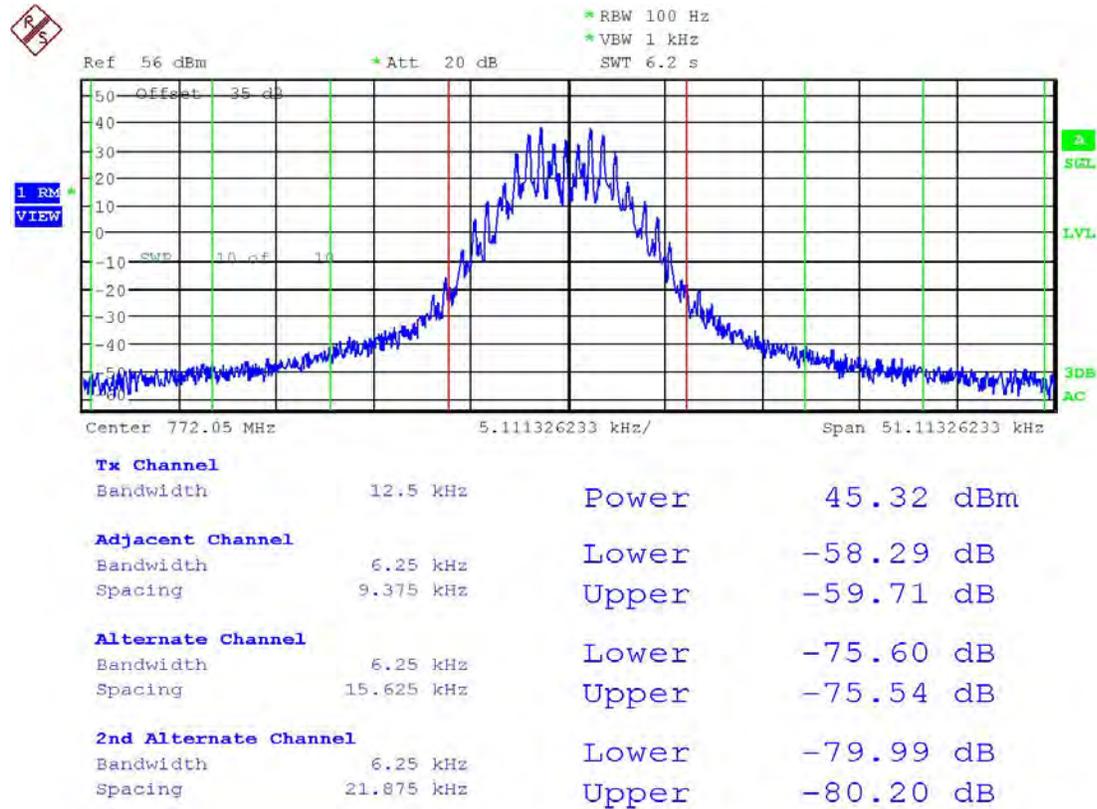
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)	Margin (dB)
>400 KHz to 12 MHz	-75	Upper -98.7	23.7
		Lower -104	28.9
12 MHz to paired rx band	-75	-101.05	26.1
In the paired rx band	-100	-103.54	3.5

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



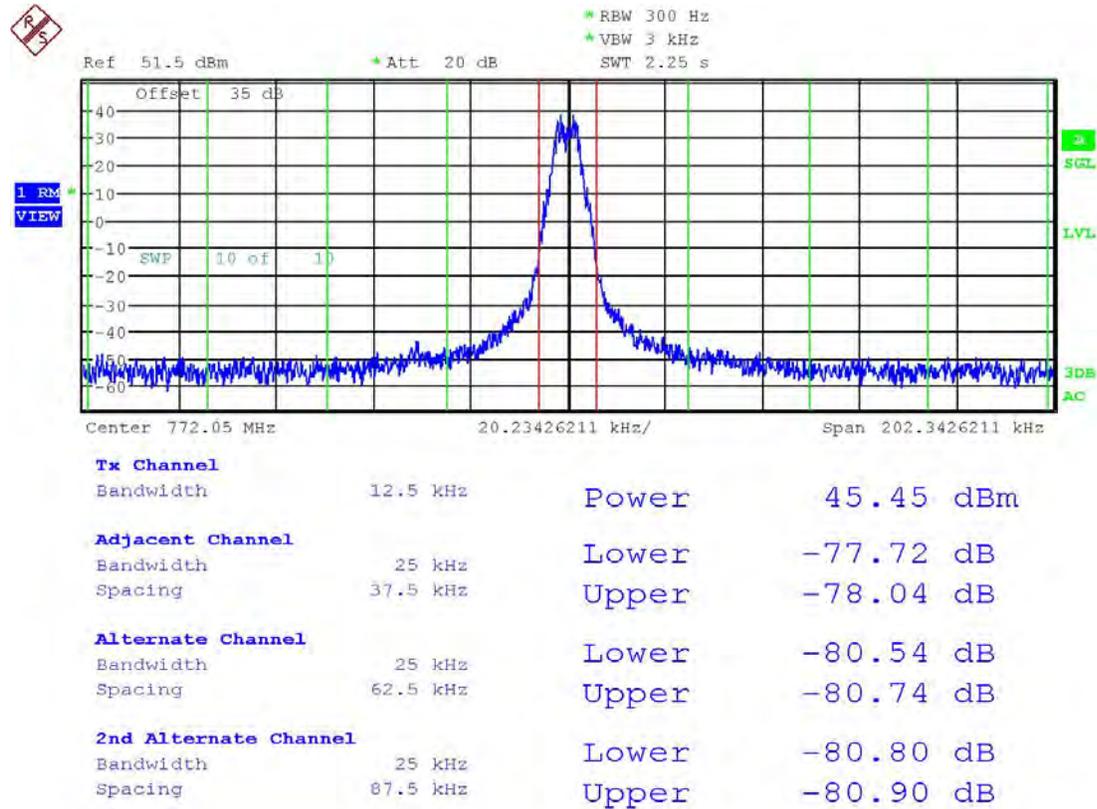
Date: 14.OCT.2015 13:25:17

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-11K0F3E

25 KHz Measurement Bandwidth



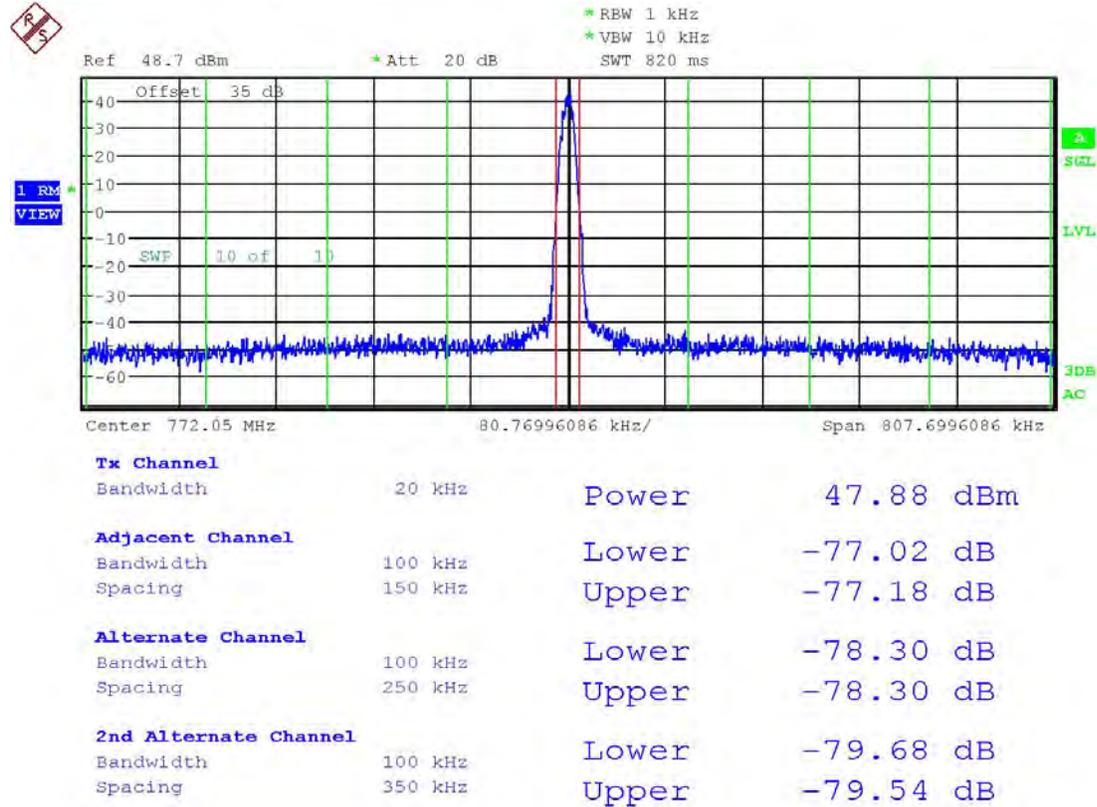
Date: 14.OCT.2015 14:27:03

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-11K0F3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:33:50

Swept 30 KHz Bandwidth Measurement

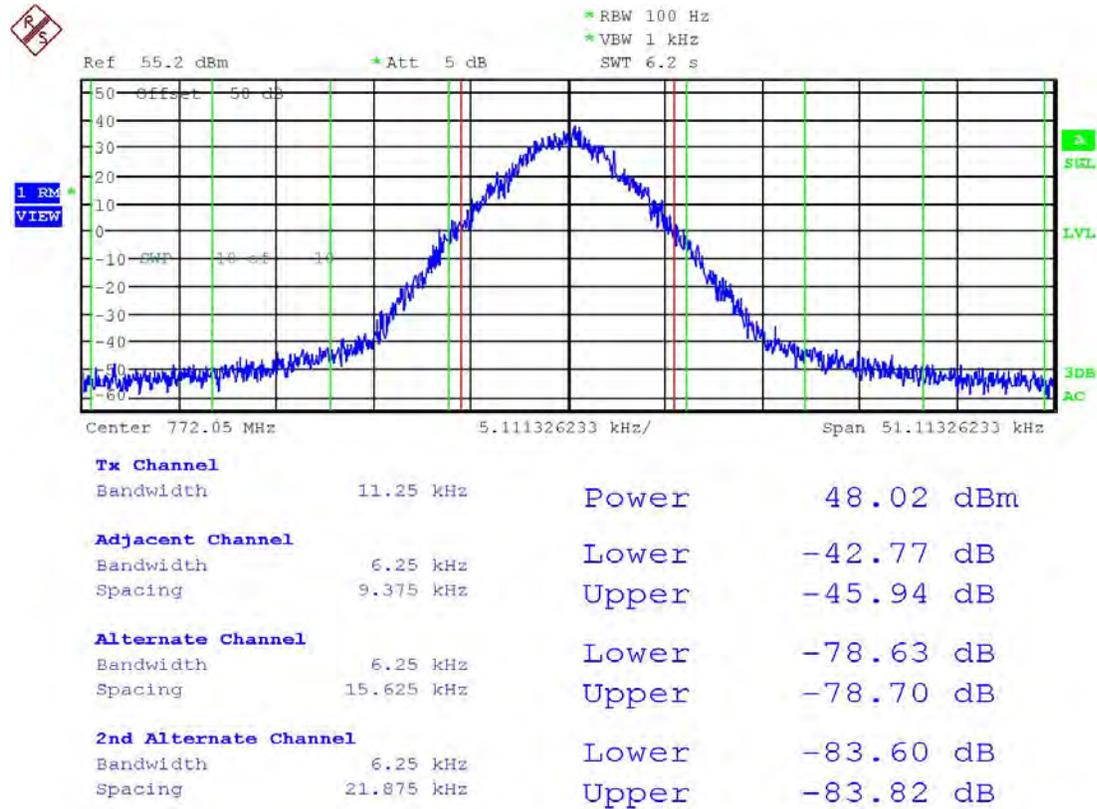
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-97.6	22.6
		Lower	-103	28.4
12 MHz to paired rx band	-75	-100.35		25.4
In the paired rx band	-100	-103.22		3.2

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



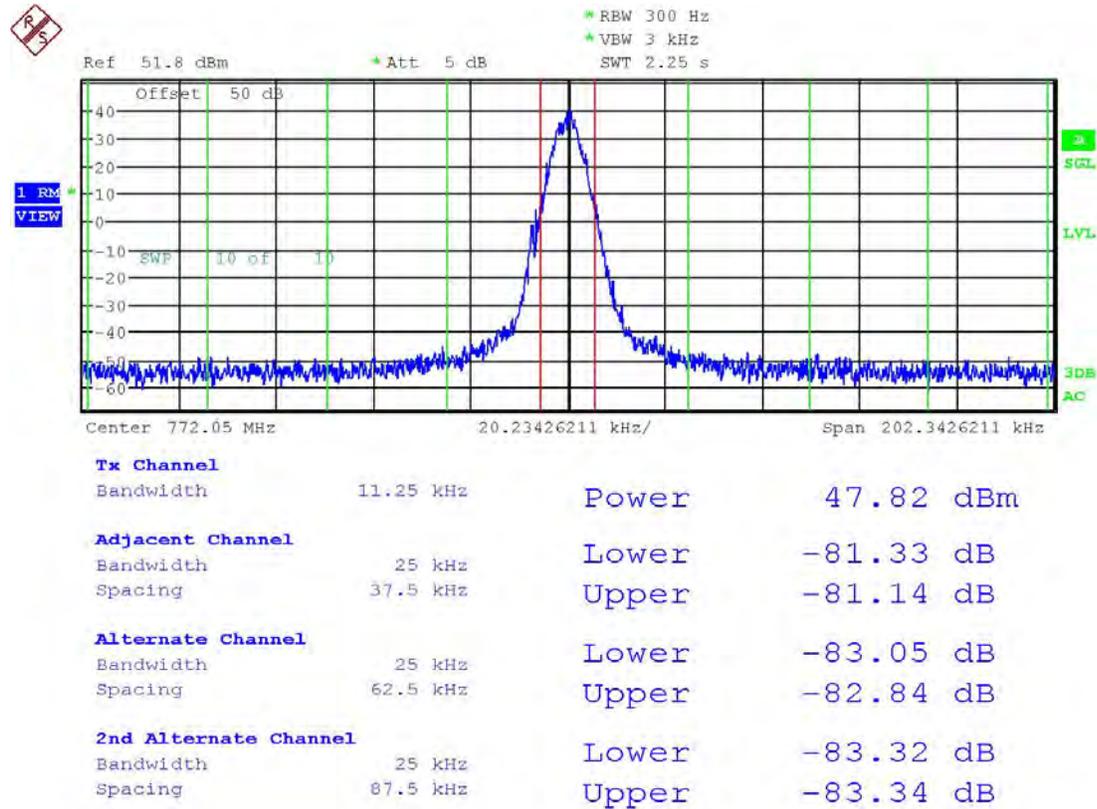
Date: 14.SEP.2015 10:20:26

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



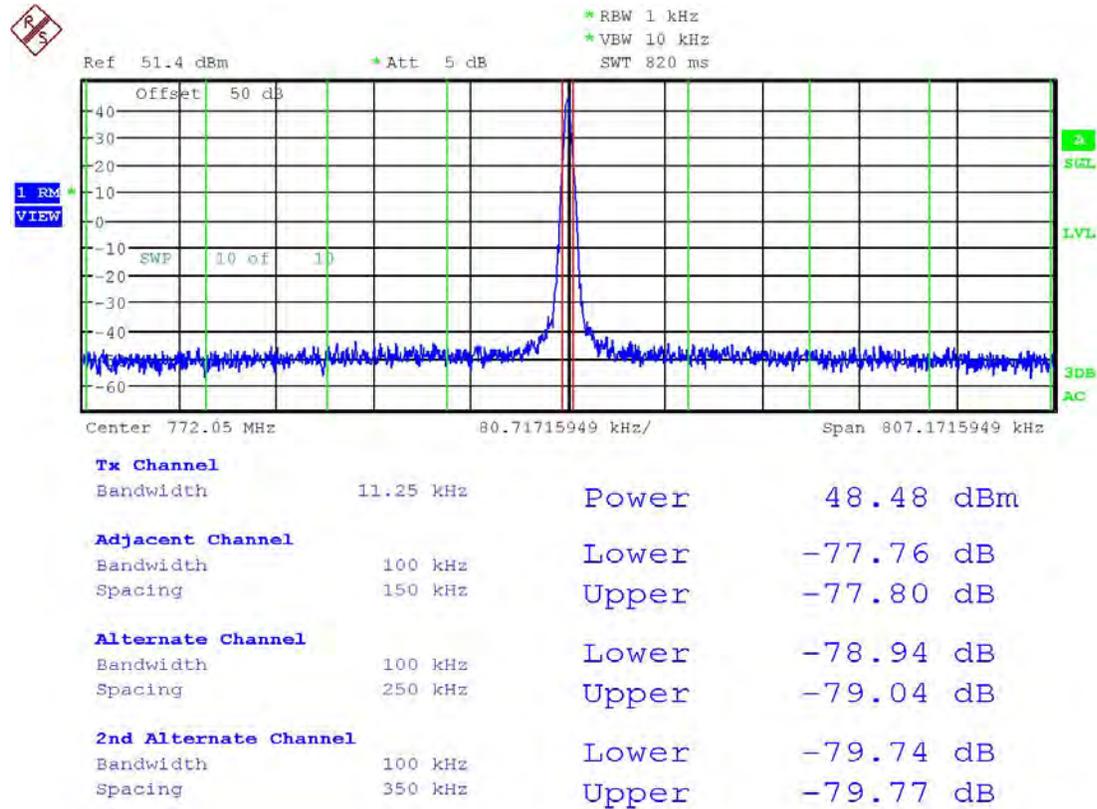
Date: 14.SEP.2015 10:25:01

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 14.SEP.2015 10:33:19

Swept 30 KHz Bandwidth Measurement

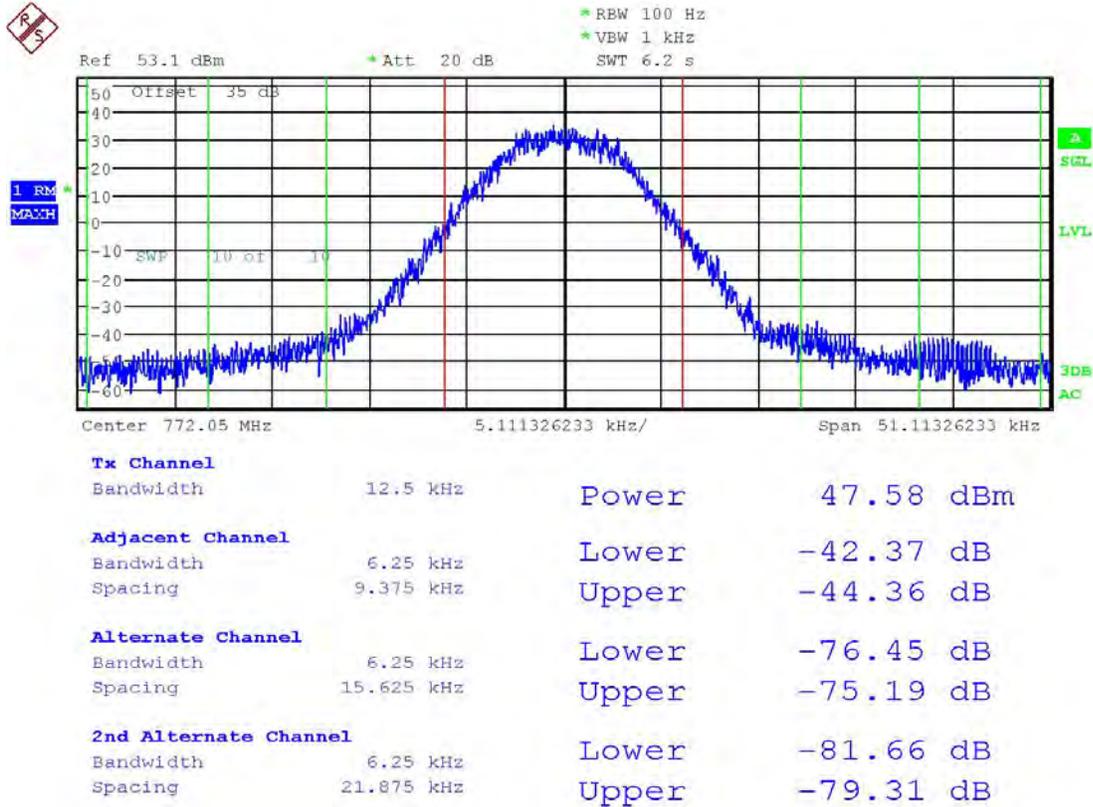
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
		Upper	Lower	
>400 KHz to 12 MHz	-75	Upper	-104	28.7
		Lower	-109	33.8
12 MHz to paired rx band	-75		-104.54	29.5
In the paired rx band	-100		-108.25	8.3

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



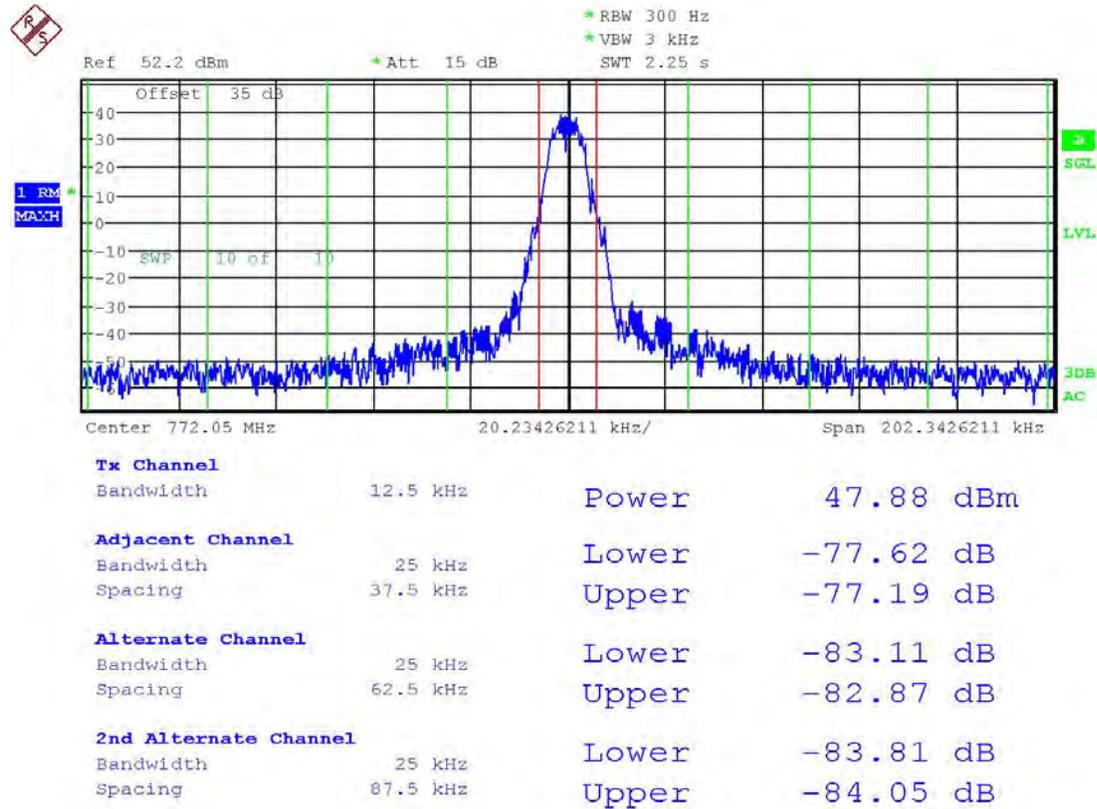
Date: 20.OCT.2015 12:59:16

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



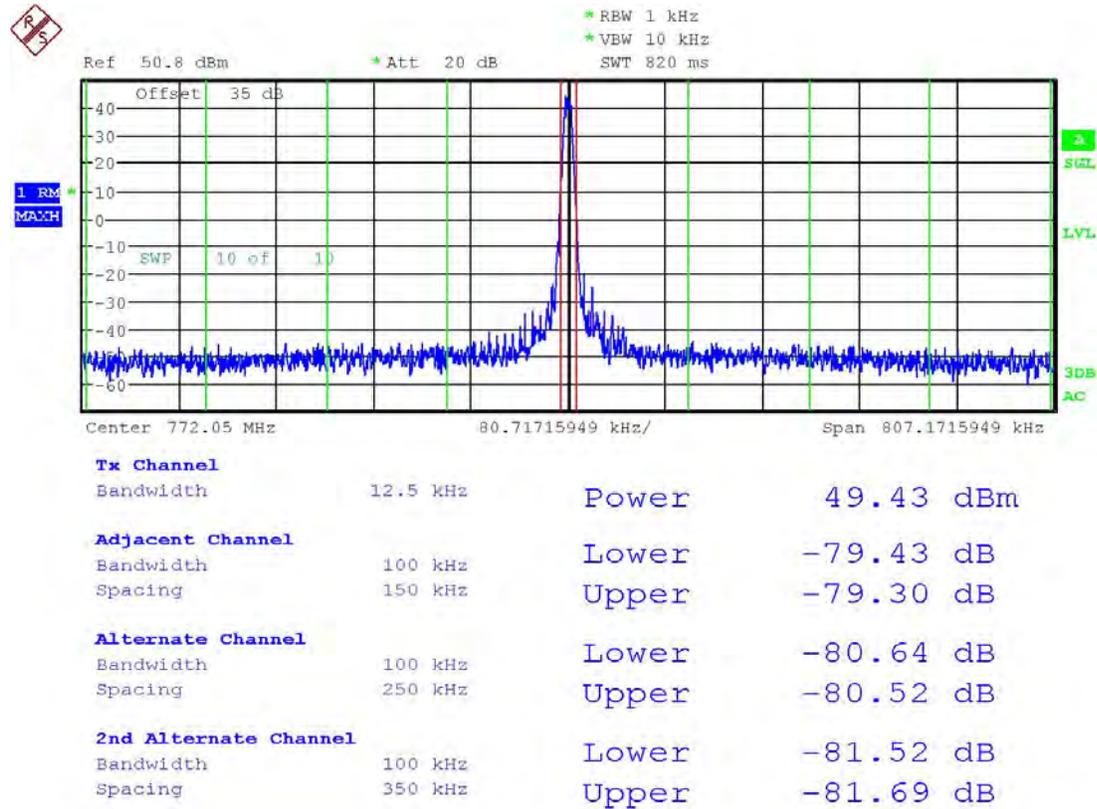
Date: 20.OCT.2015 13:13:01

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F7E

100 KHz Measurement Bandwidth



Date: 20.OCT.2015 13:24:18

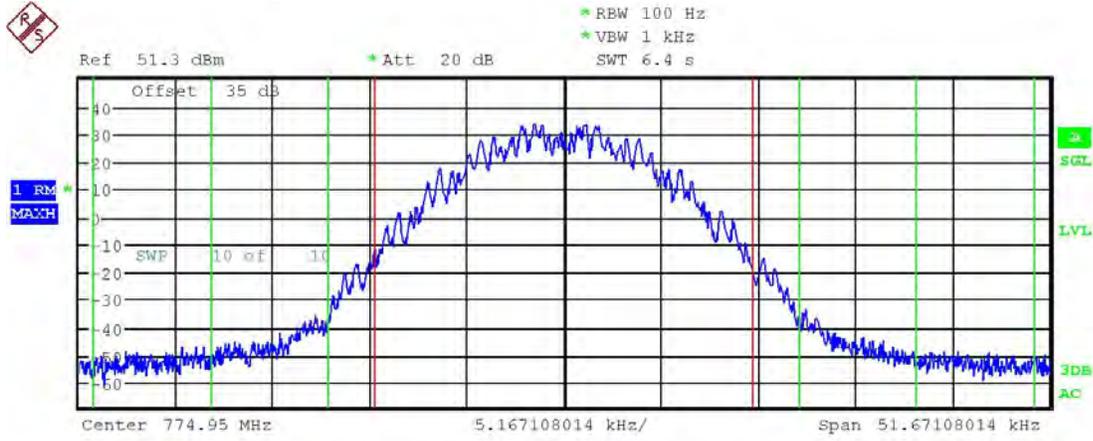
Swept 30 KHz Bandwidth Measurement

Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
		Upper	Lower	
>400 KHz to 12 MHz	-75	Upper	-117	42.0
		Lower	-120	45.0
12 MHz to paired rx band	-75		-117.39	42.4
In the paired rx band	-100		-115.38	15.4

[Table of Contents](#)

TEST FREQ. 774.95 MHz-16KOF3E

6.25 KHz Measurement Bandwidth



Tx Channel		Power	47.59 dBm
Bandwidth	20 kHz		
Adjacent Channel		Lower	-73.50 dB
Bandwidth	6.25 kHz	Upper	-73.37 dB
Spacing	15.625 kHz		
Alternate Channel		Lower	-82.30 dB
Bandwidth	6.25 kHz	Upper	-82.76 dB
Spacing	21.875 kHz		

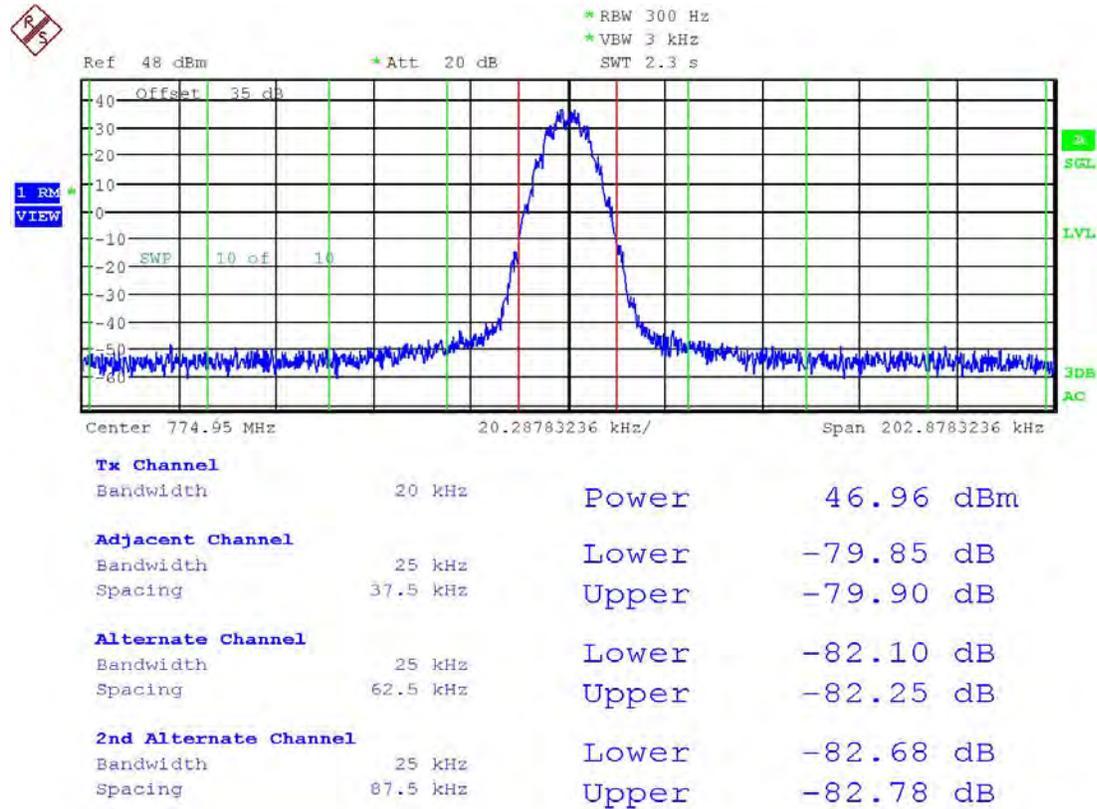
Date: 15.OCT.2015 11:47:13

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-16KOF3E

25 KHz Measurement Bandwidth



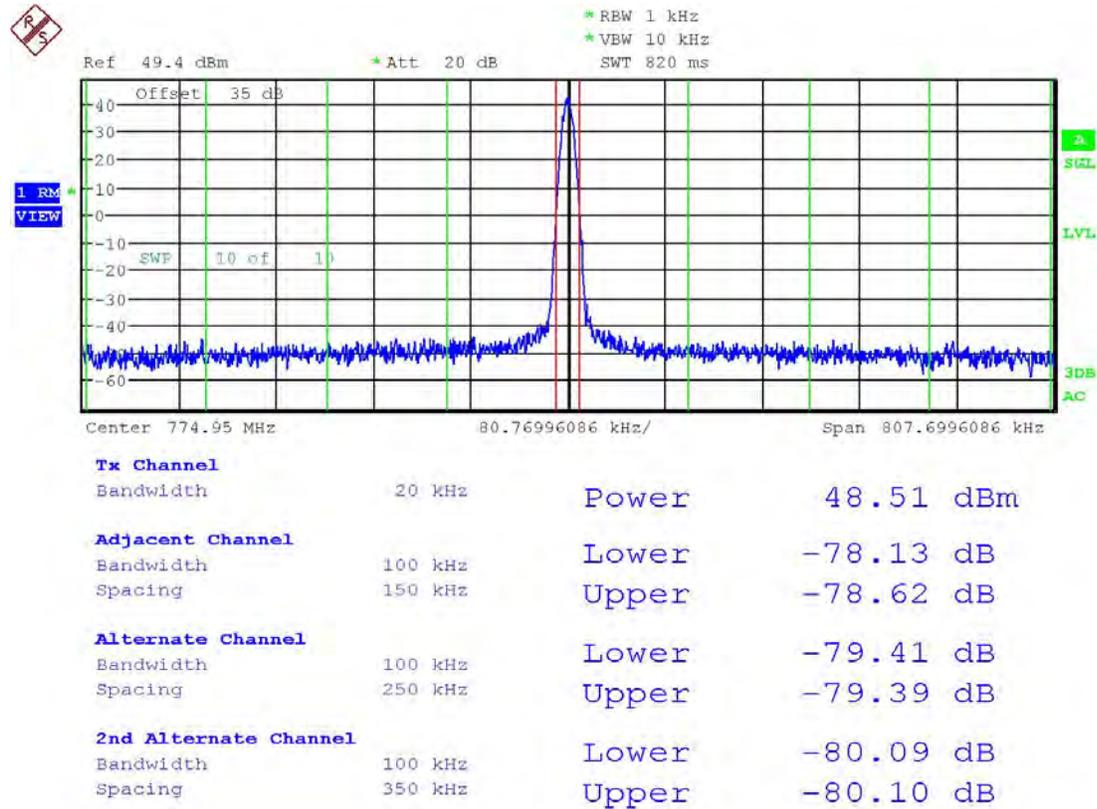
Date: 15.OCT.2015 14:22:48

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-16KOF3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:49:54

Swept 30 KHz Bandwidth Measurement

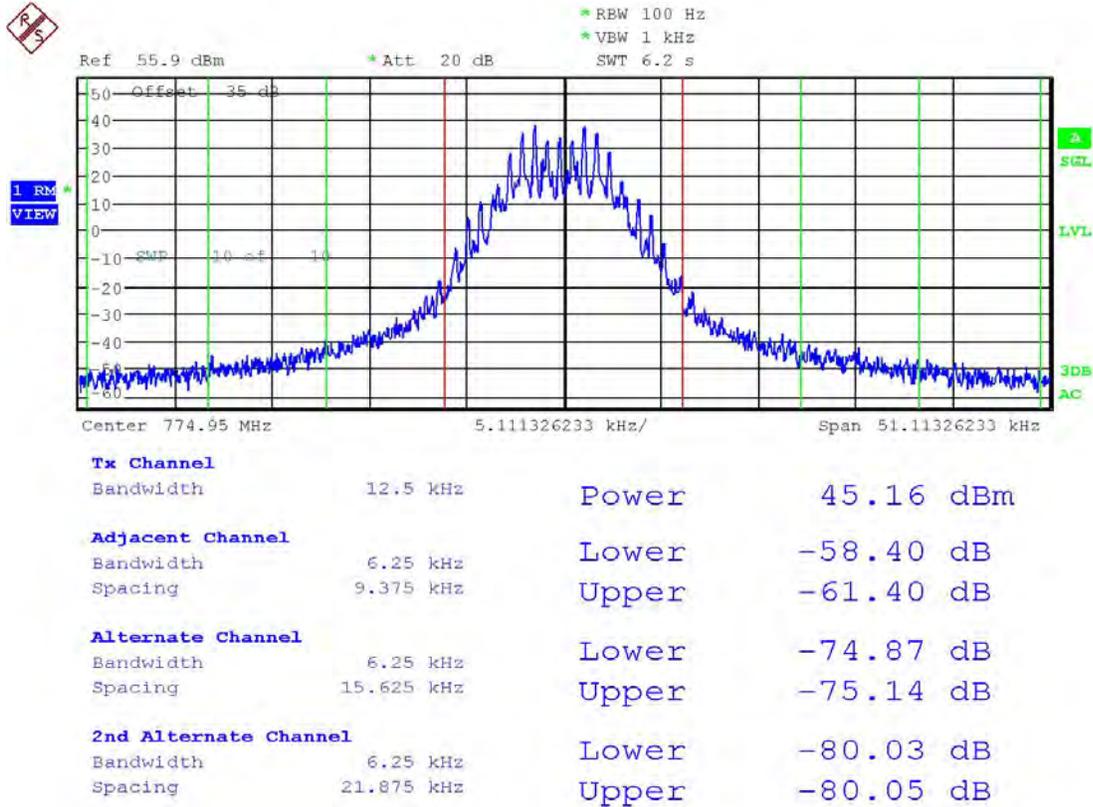
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-98.6	23.6
		Lower	-104	28.8
12 MHz to paired rx band	-75	-100.44		25.4
In the paired rx band	-100	-102.87		2.9

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



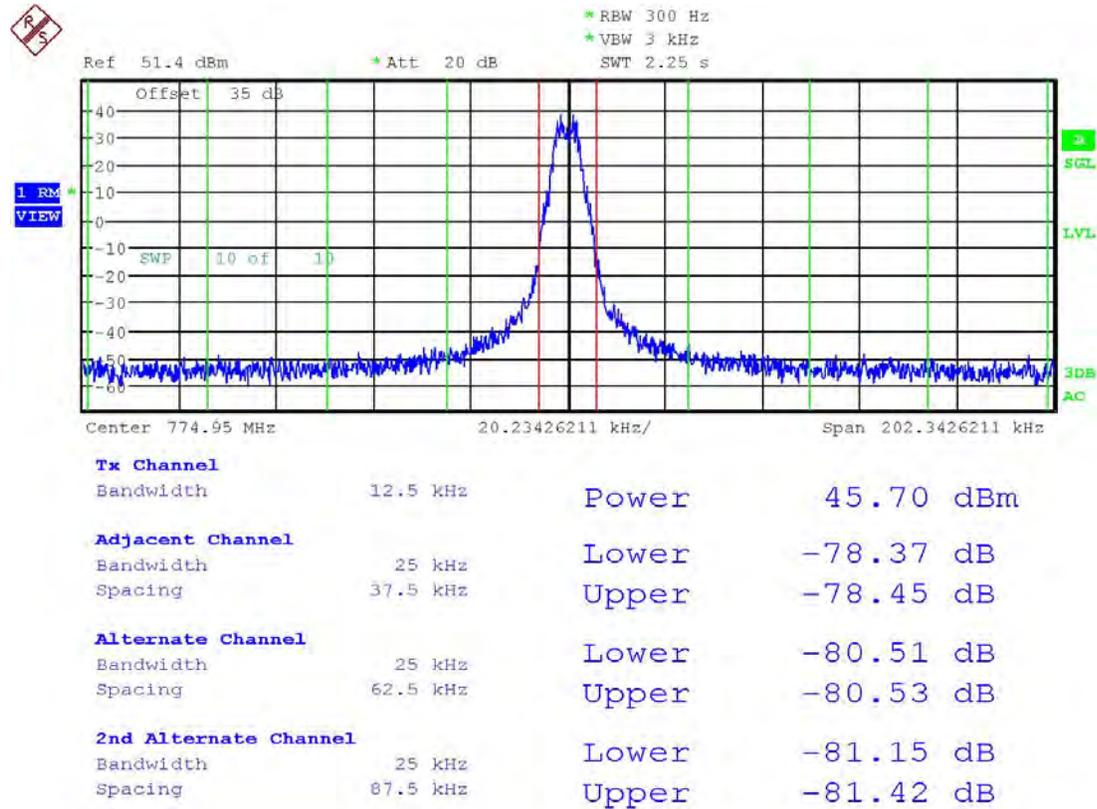
Date: 14.OCT.2015 14:34:01

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-11KOF3E

25 KHz Measurement Bandwidth



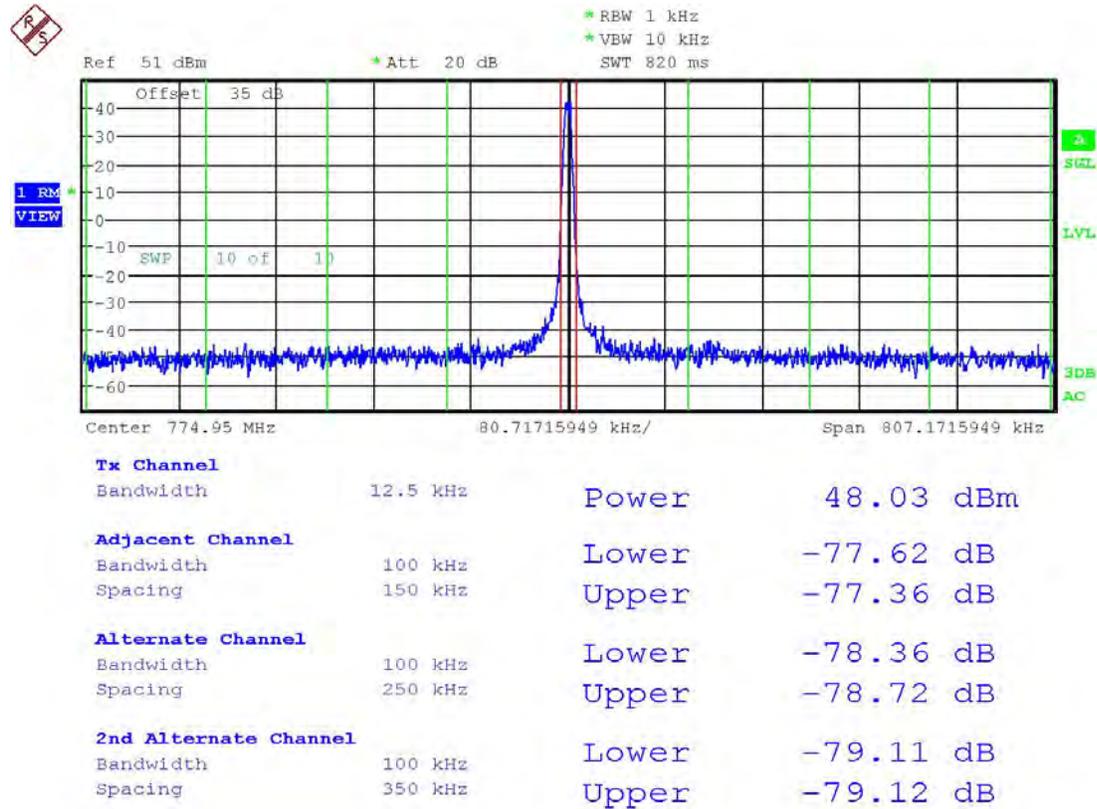
Date: 14.OCT.2015 14:28:22

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-11KOF3E

100 KHz Measurement Bandwidth



Date: 14.OCT.2015 14:29:53

Swept 30 KHz Bandwidth Measurement

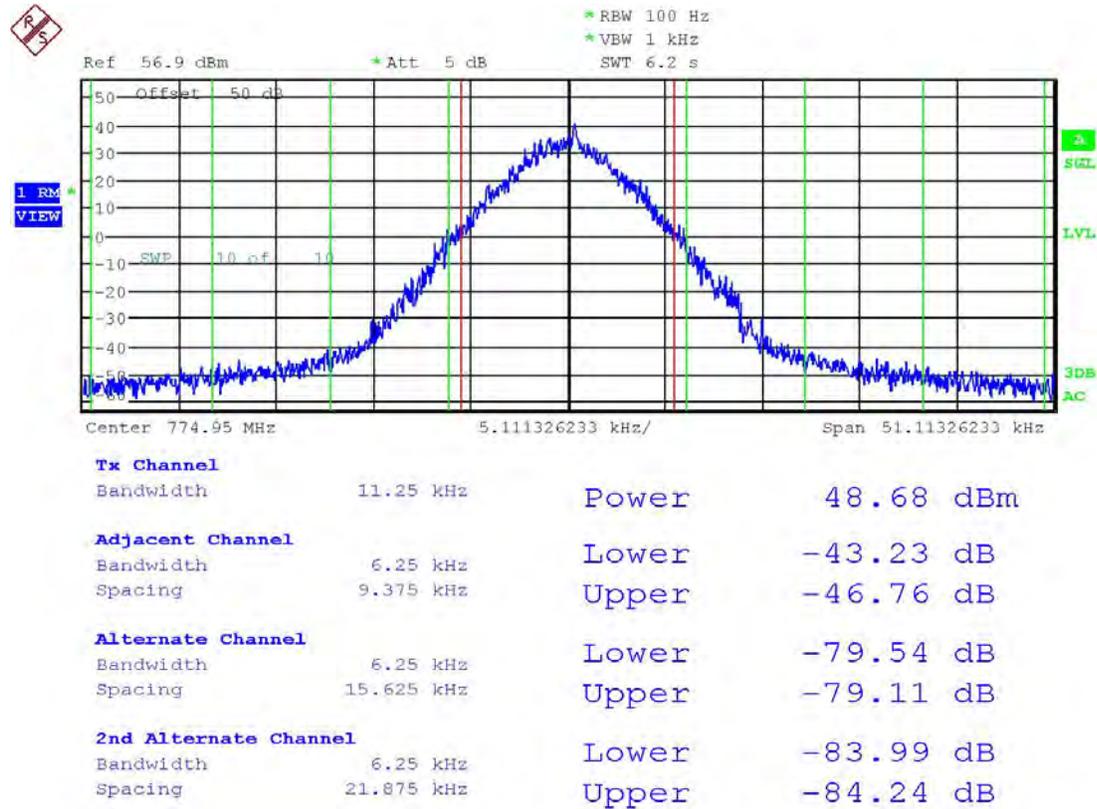
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)	Margin (dB)
>400 KHz to 12 MHz	-75	Upper -99.5	24.5
		Lower -104	28.9
12 MHz to paired rx band	-75	-100.21	25.2
In the paired rx band	-100	-103.72	3.7

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



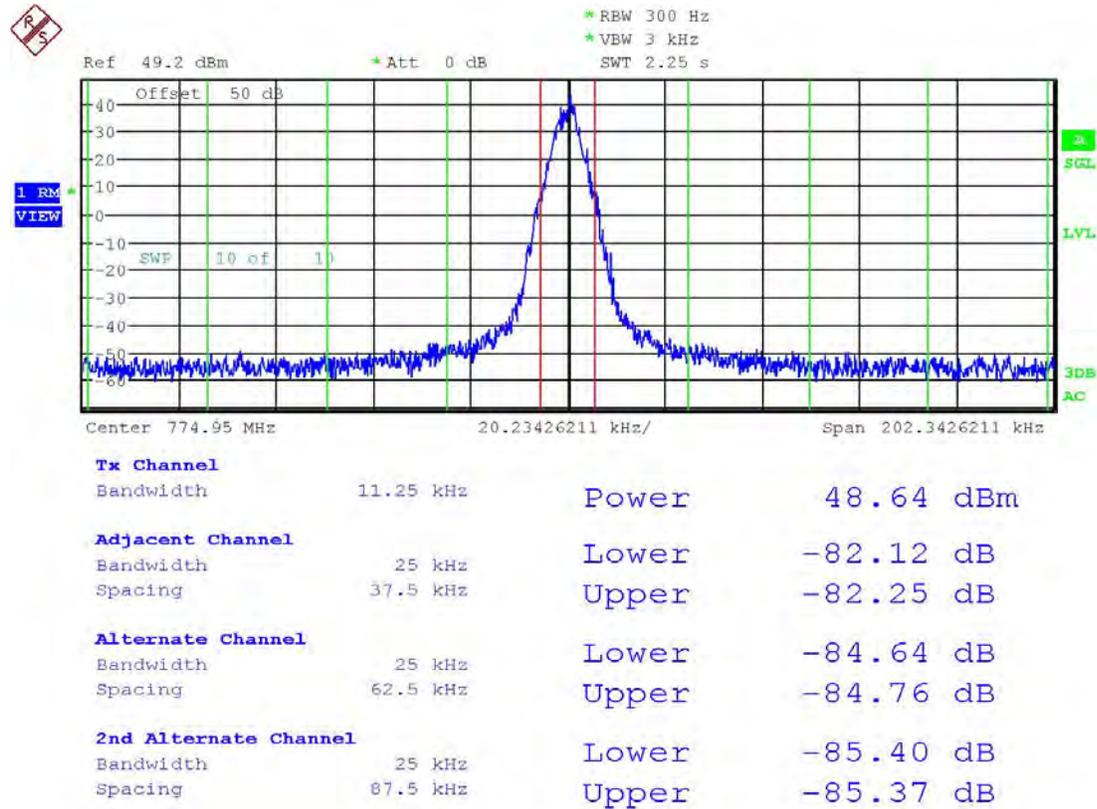
Date: 14.SEP.2015 10:22:08

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



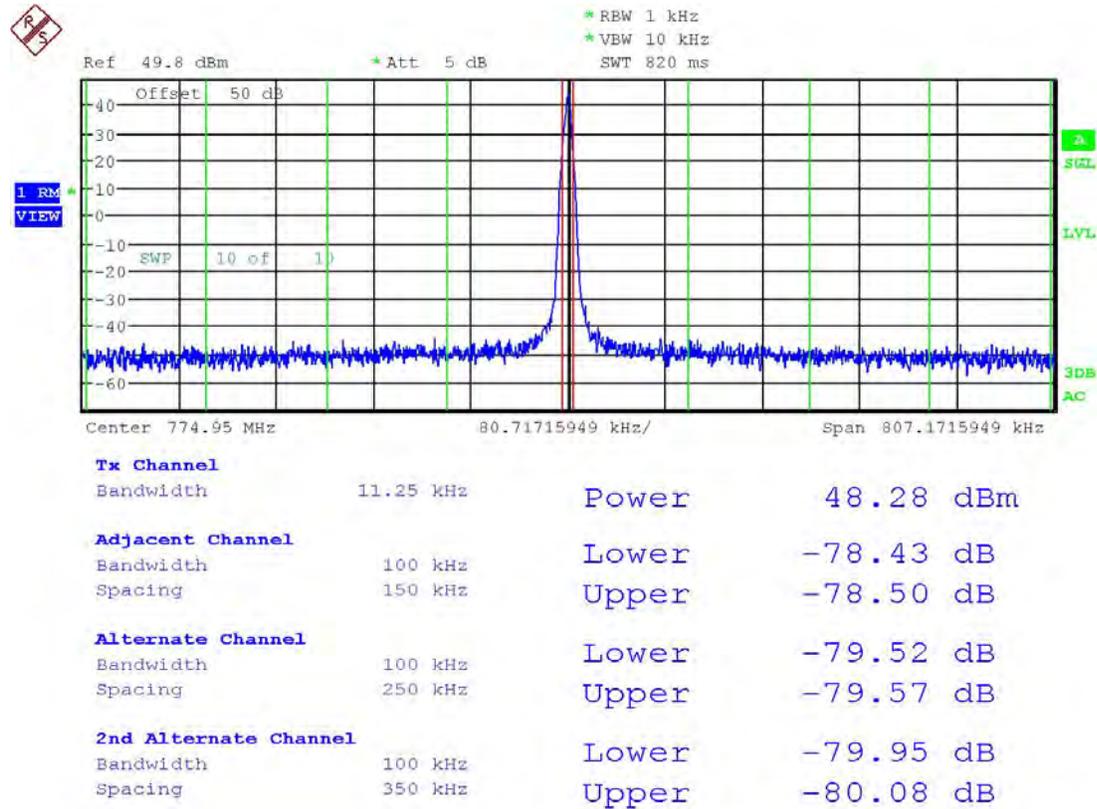
Date: 14.SEP.2015 10:23:57

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 14.SEP.2015 10:32:23

Swept 30 KHz Bandwidth Measurement

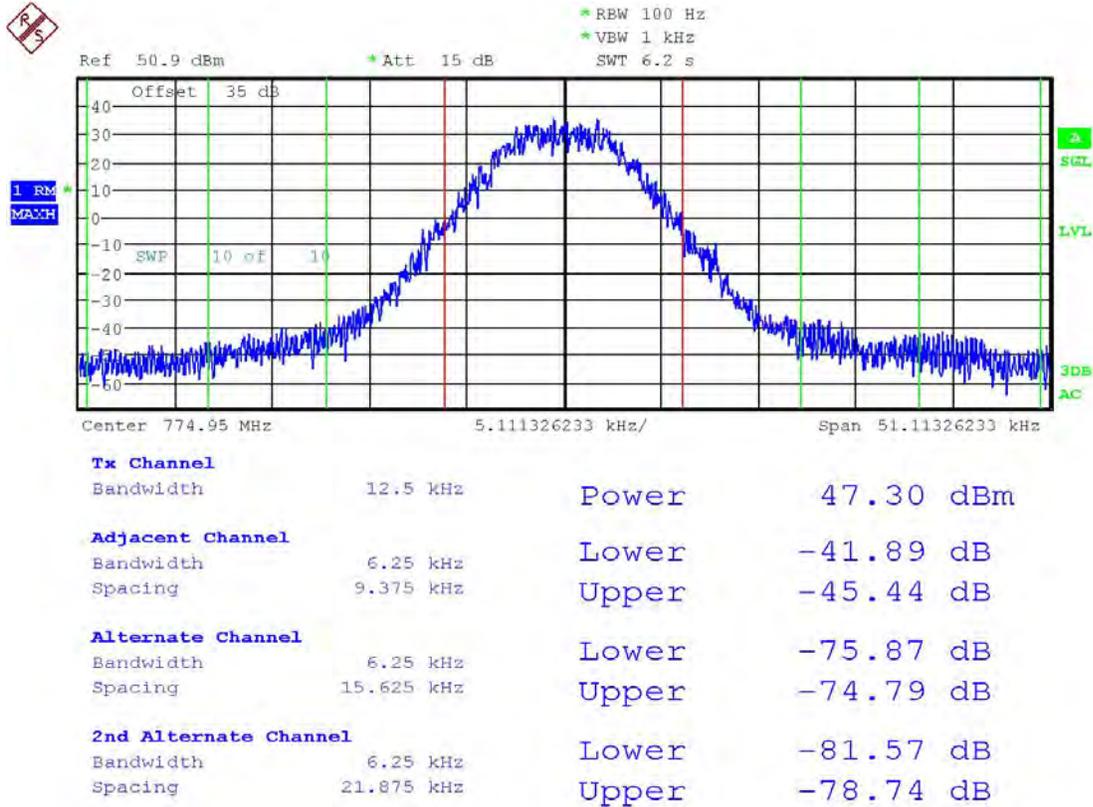
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-103	27.5
		Lower	-108	32.9
12 MHz to paired rx band	-75	-104.85		29.9
In the paired rx band	-100	-107.55		7.6

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



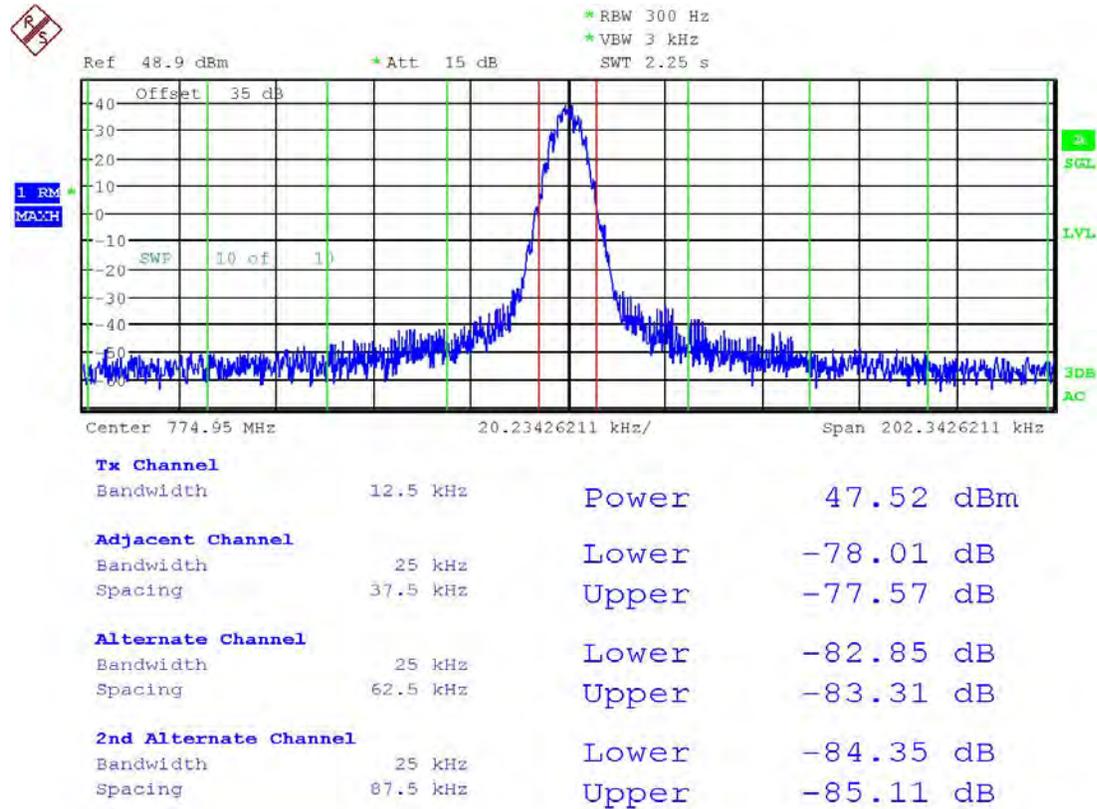
Date: 20.OCT.2015 13:02:43

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F7E

25 KHz Measurement Bandwidth



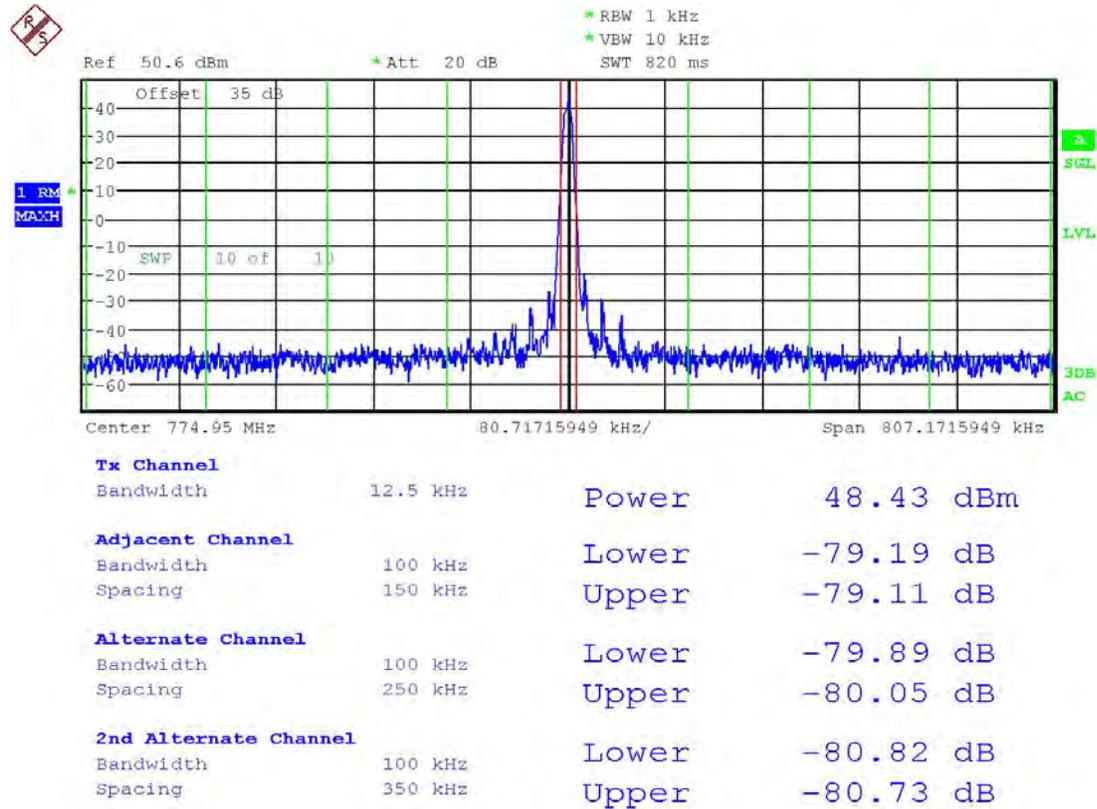
Date: 20.OCT.2015 13:19:25

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F7E

100 KHz Measurement Bandwidth



Date: 20.OCT.2015 13:24:58

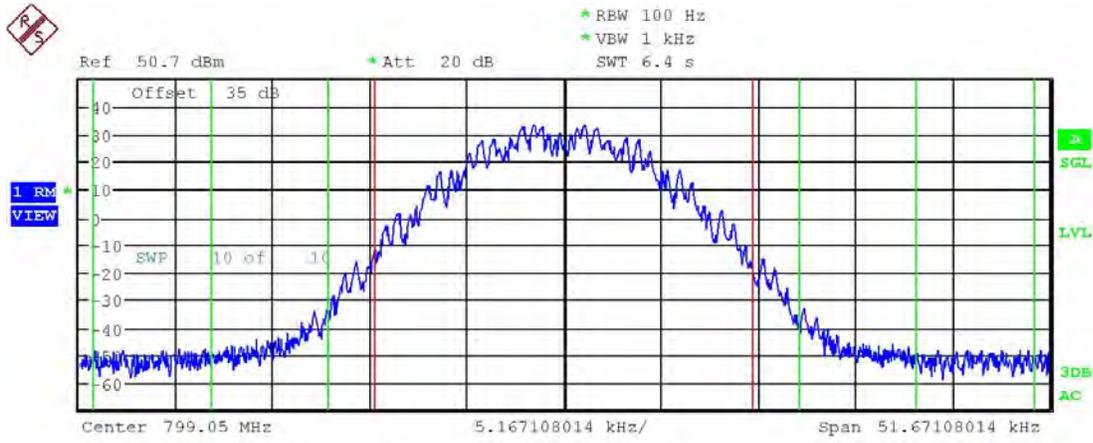
Swept 30 KHz Bandwidth Measurement

Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
		Upper	Lower	
>400 KHz to 12 MHz	-75	Upper	-118	43.3
		Lower	-119	44.3
12 MHz to paired rx band	-75	-116.65		41.7
In the paired rx band	-100	-117.12		17.1

[Table of Contents](#)

TEST FREQ. 799.05 MHz-16KOF3E

6.25 KHz Measurement Bandwidth



Tx Channel		Power	47.49 dBm
Bandwidth	20 kHz		
Adjacent Channel		Lower	-72.93 dB
Bandwidth	6.25 kHz	Upper	-73.51 dB
Spacing	15.625 kHz		
Alternate Channel		Lower	-81.53 dB
Bandwidth	6.25 kHz	Upper	-81.51 dB
Spacing	21.875 kHz		

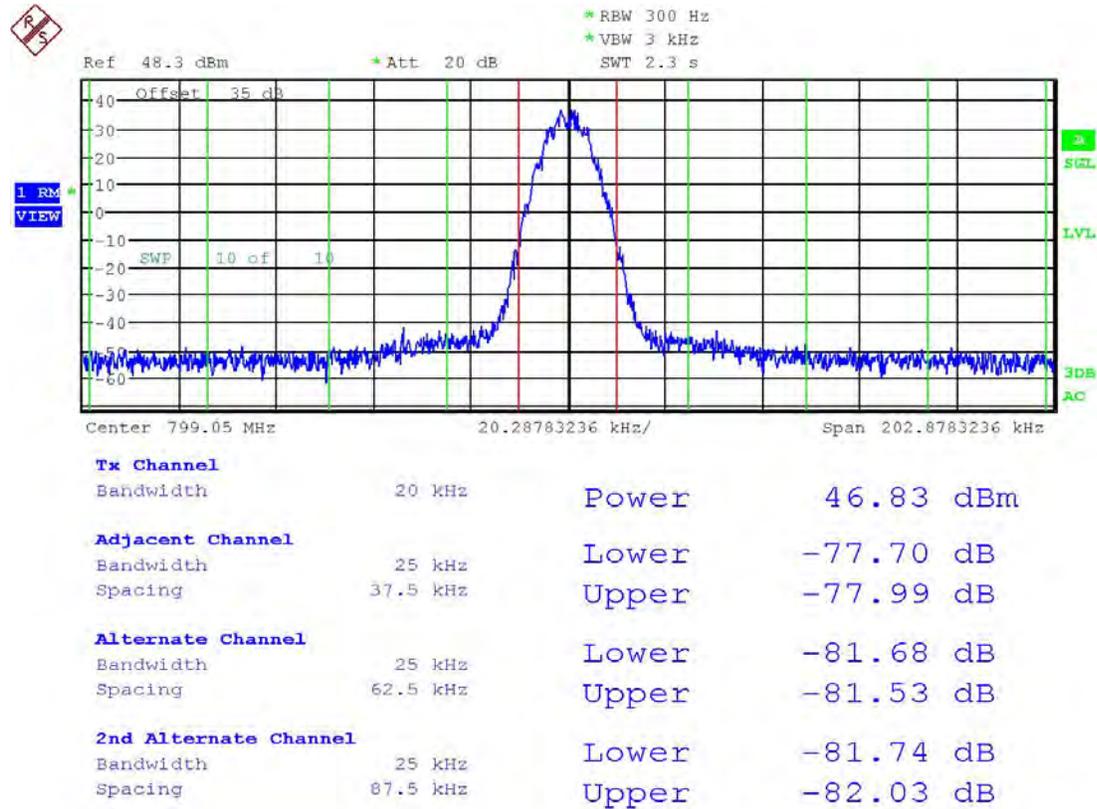
Date: 15.OCT.2015 11:50:08

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-16KOF3E

25 KHz Measurement Bandwidth



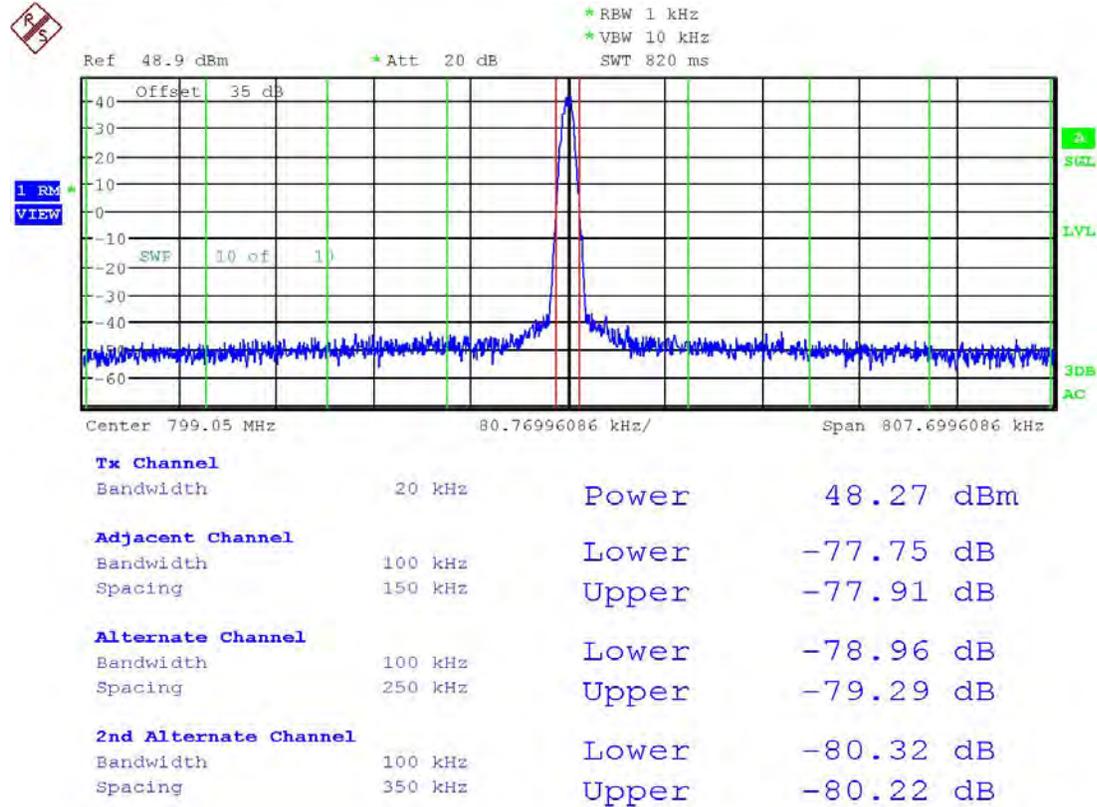
Date: 15.OCT.2015 14:21:50

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-16KOF3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:51:26

Swept 30 KHz Bandwidth Measurement

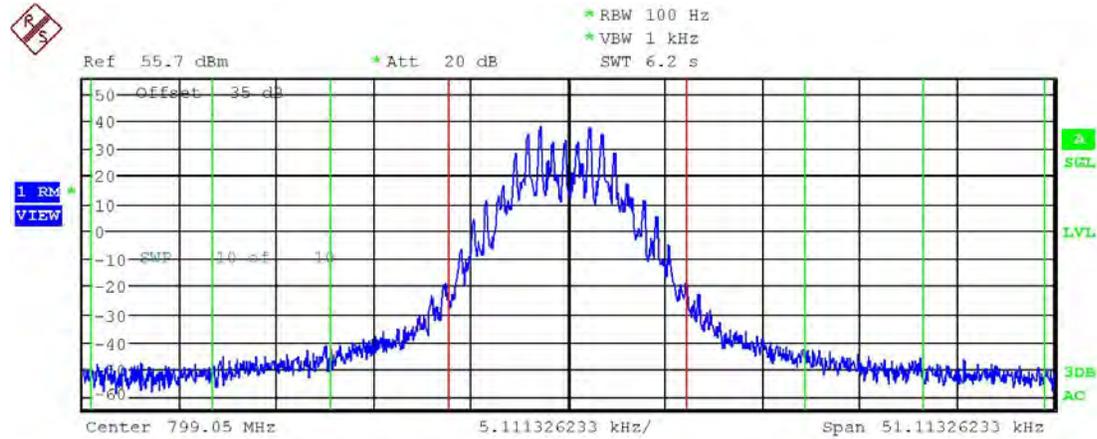
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)	Margin (dB)
>400 KHz to 12 MHz	-75	Upper -98.7	23.7
		Lower -104	29.1
12 MHz to paired rx band	-75	-103.42	28.4
In the paired rx band	-100	-105.4	5.4

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



Tx Channel			
Bandwidth	12.5 kHz	Power	44.90 dBm
Adjacent Channel			
Bandwidth	6.25 kHz	Lower	-58.93 dB
Spacing	9.375 kHz	Upper	-61.52 dB
Alternate Channel			
Bandwidth	6.25 kHz	Lower	-75.52 dB
Spacing	15.625 kHz	Upper	-75.79 dB
2nd Alternate Channel			
Bandwidth	6.25 kHz	Lower	-79.34 dB
Spacing	21.875 kHz	Upper	-79.18 dB

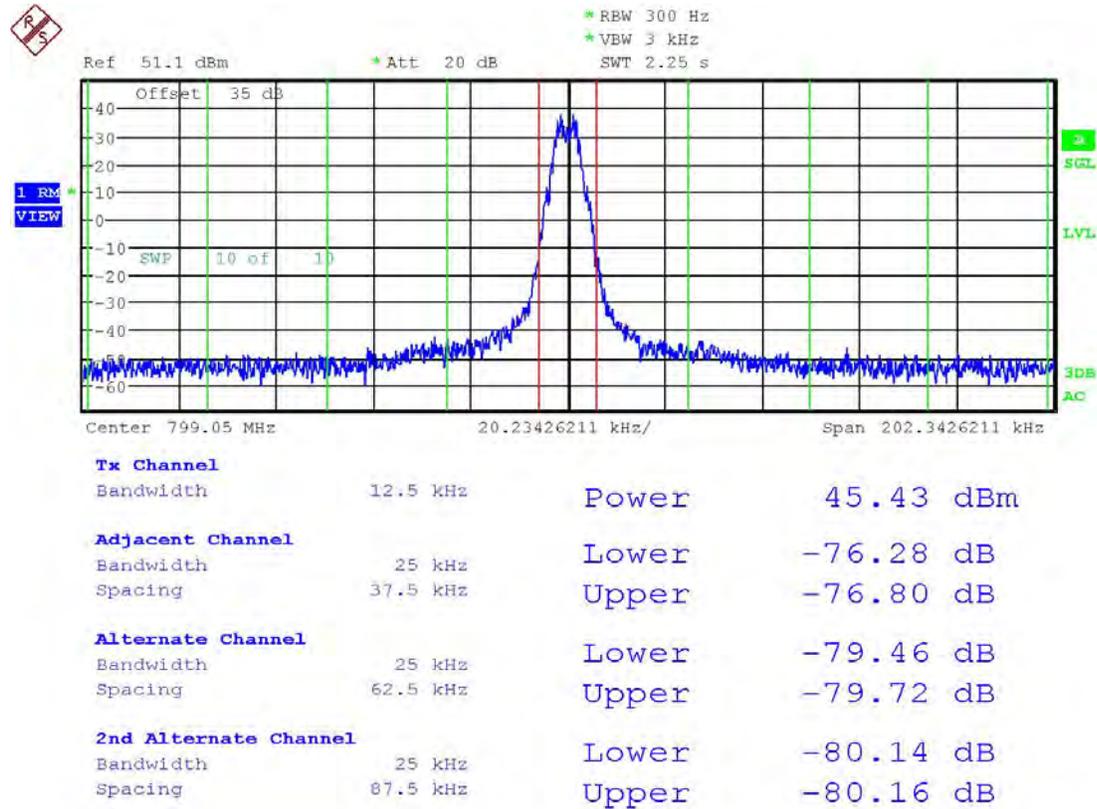
Date: 14.OCT.2015 13:42:14

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-11K0F3E

25 KHz Measurement Bandwidth



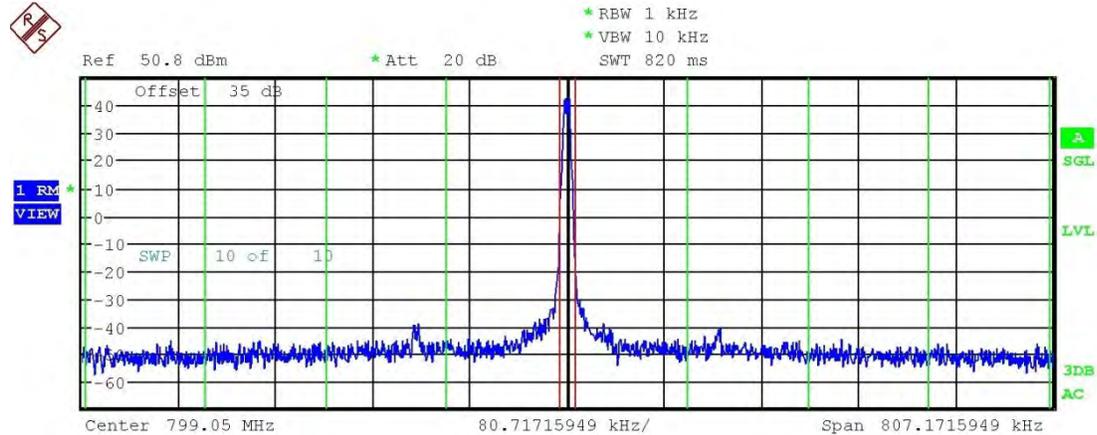
Date: 14.OCT.2015 14:22:30

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-11K0F3E

100 KHz Measurement Bandwidth



Tx Channel			
Bandwidth	12.5 kHz	Power	47.46 dBm
Adjacent Channel			
Bandwidth	100 kHz	Lower	-75.29 dB
Spacing	150 kHz	Upper	-75.94 dB
Alternate Channel			
Bandwidth	100 kHz	Lower	-77.67 dB
Spacing	250 kHz	Upper	-78.14 dB
2nd Alternate Channel			
Bandwidth	100 kHz	Lower	-78.70 dB
Spacing	350 kHz	Upper	-78.85 dB

Date: 14.OCT.2015 14:41:10

Swept 30 KHz Bandwidth Measurement

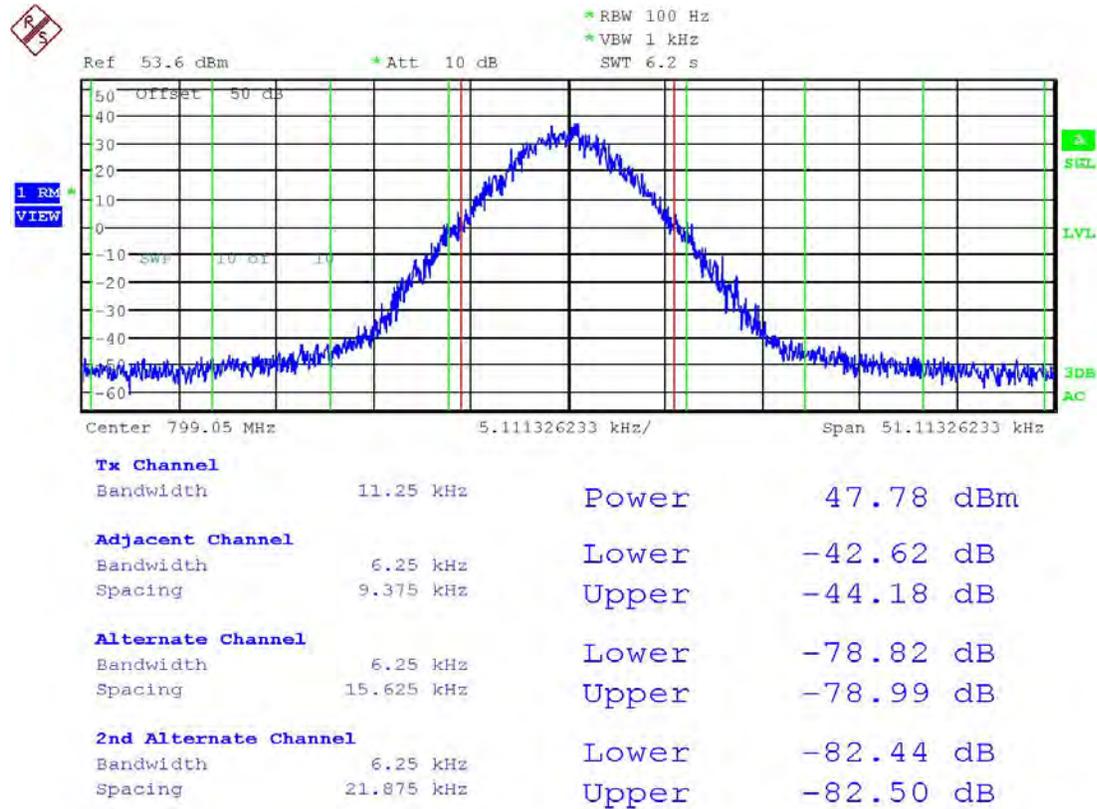
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-98.8	23.8
		Lower	-104	29.1
12 MHz to paired rx band	-75	-104.18		29.2
In the paired rx band	-100	-104.93		4.9

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



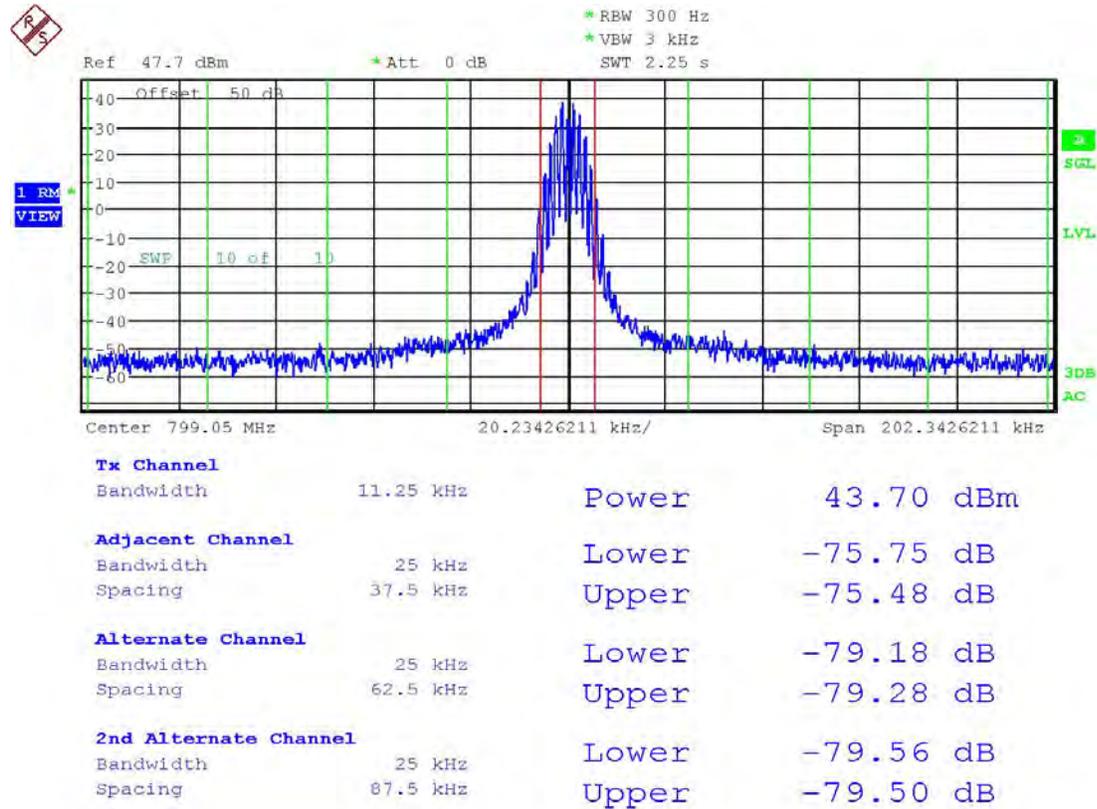
Date: 11.SEP.2015 11:29:26

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



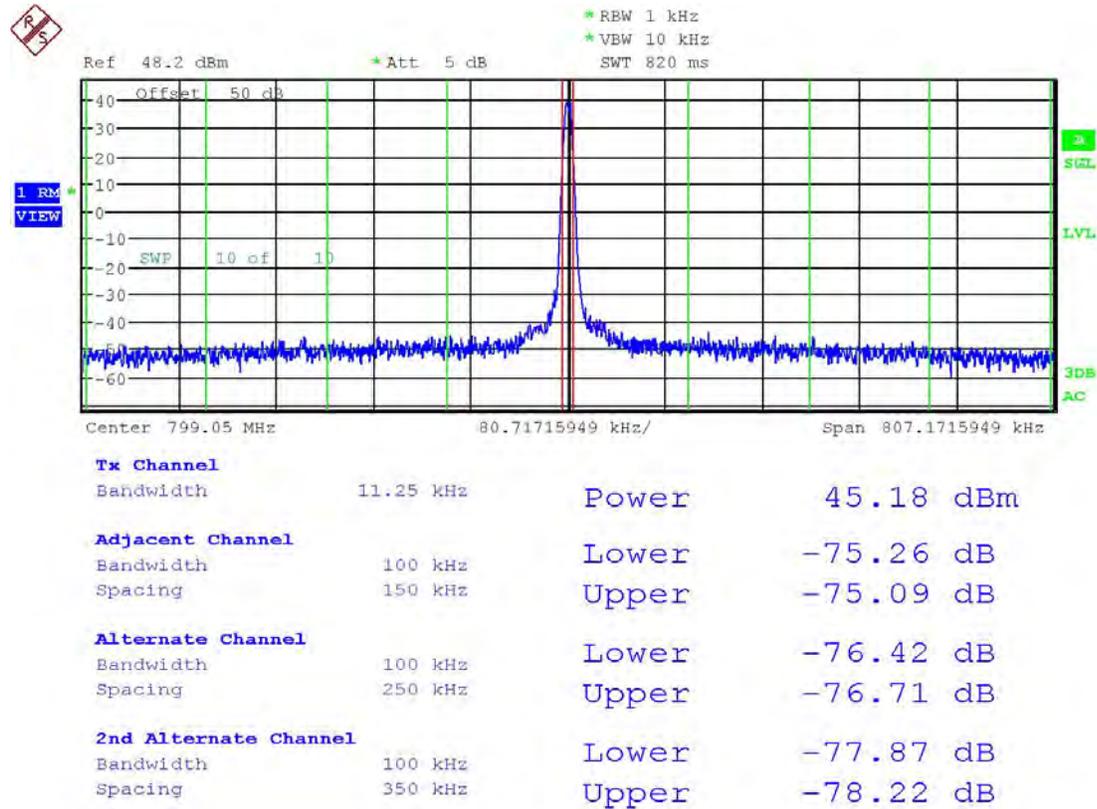
Date: 11.SEP.2015 11:37:05

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 11.SEP.2015 11:38:14

Swept 30 KHz Bandwidth Measurement

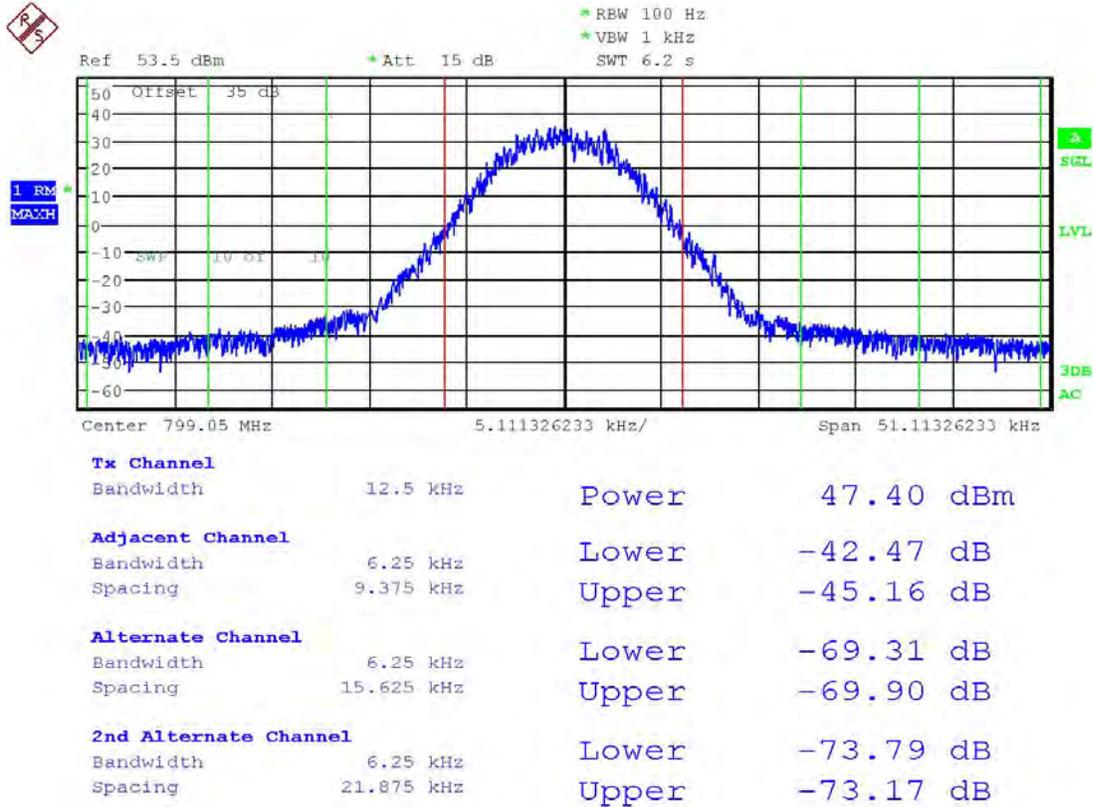
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-101	26.1
		Lower	-106	30.8
12 MHz to paired rx band	-75	-105.88		30.9
In the paired rx band	-100	-106.89		6.9

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



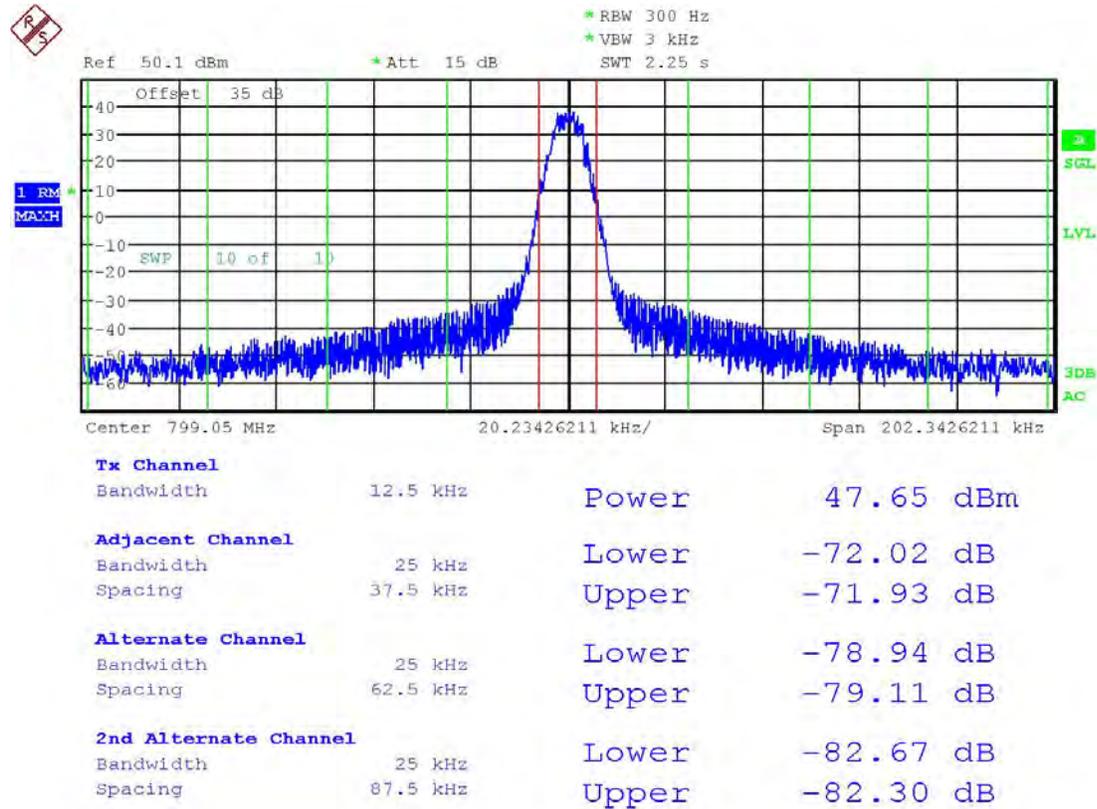
Date: 20.OCT.2015 13:04:45

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



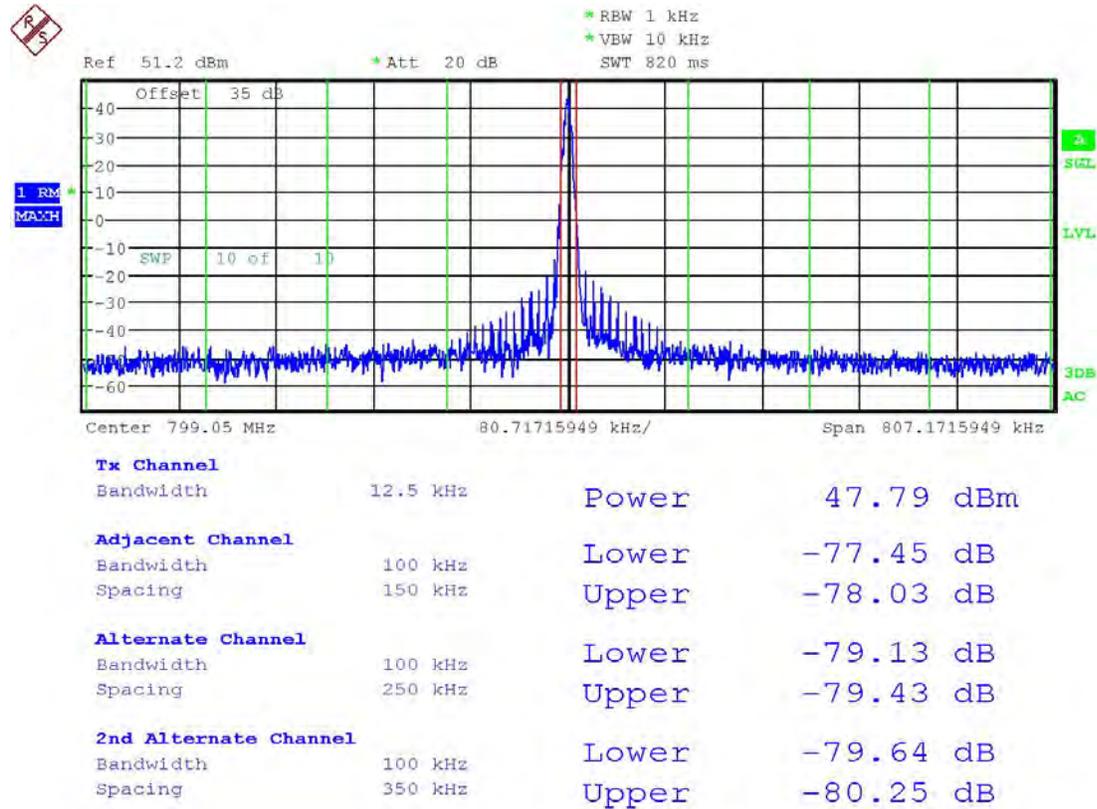
Date: 20.OCT.2015 13:20:22

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F7E

100 KHz Measurement Bandwidth



Date: 20.OCT.2015 13:25:40

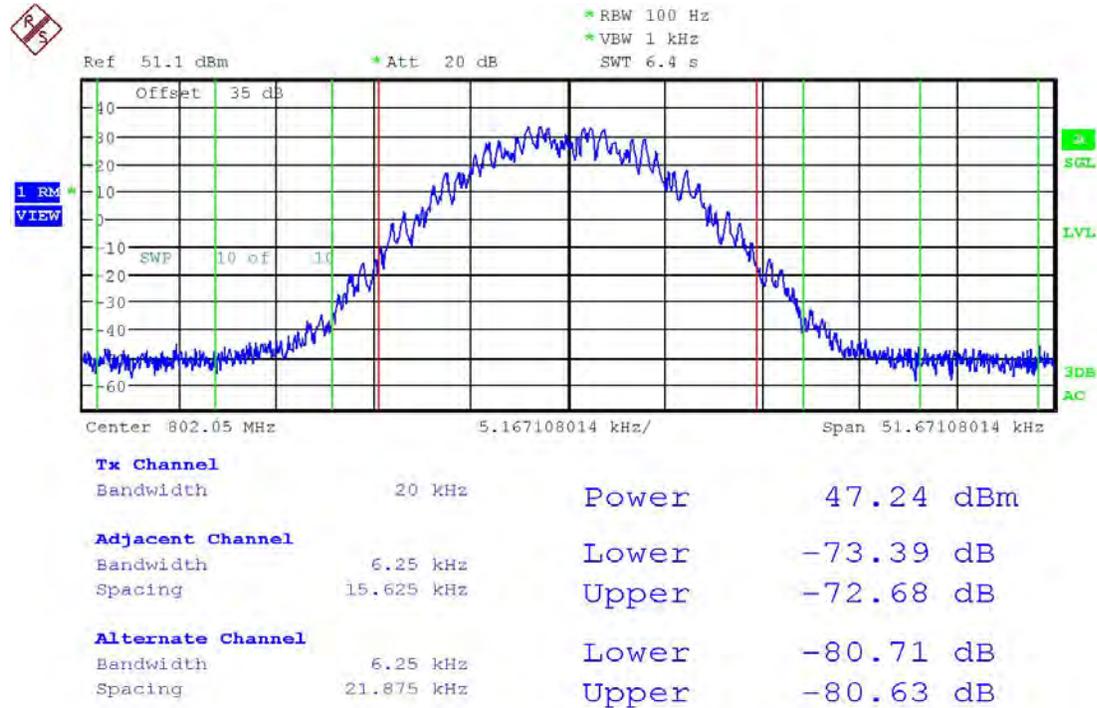
Swept 30 KHz Bandwidth Measurement

Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
		Upper	Lower	
>400 KHz to 12 MHz	-75	Upper	-119	43.7
		Lower	-120	44.5
12 MHz to paired rx band	-75	-117.87		42.9
In the paired rx band	-100	-113.8		13.8

[Table of Contents](#)

TEST FREQ. 802.05 MHz-16KOF3E

6.25 KHz Measurement Bandwidth



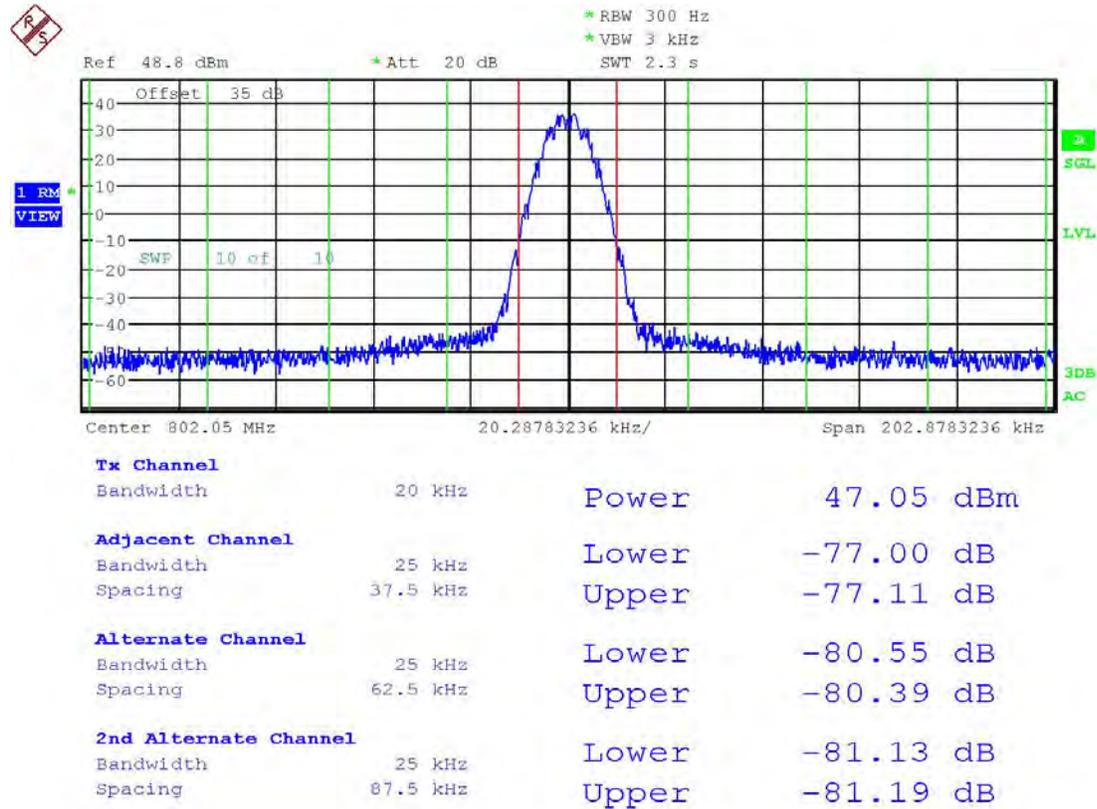
Date: 15.OCT.2015 14:16:02

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-16KOF3E

25 KHz Measurement Bandwidth



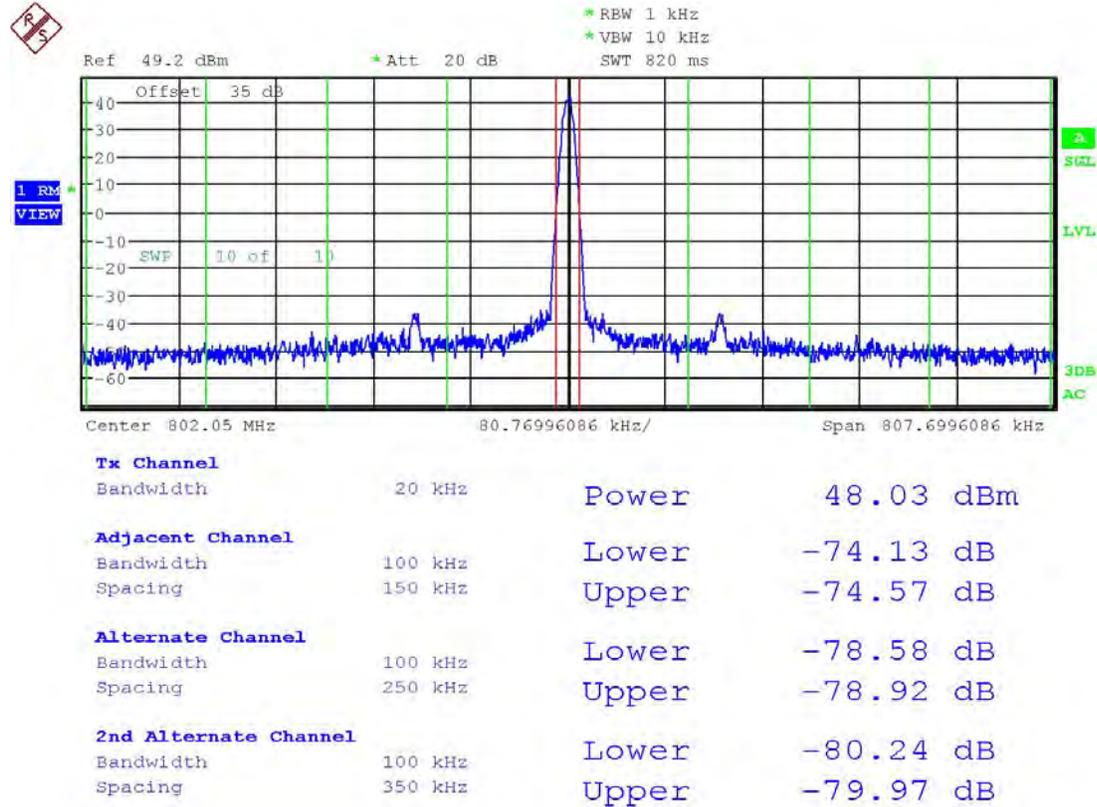
Date: 15.OCT.2015 14:20:04

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-16KOF3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:52:08

Swept 30 KHz Bandwidth Measurement

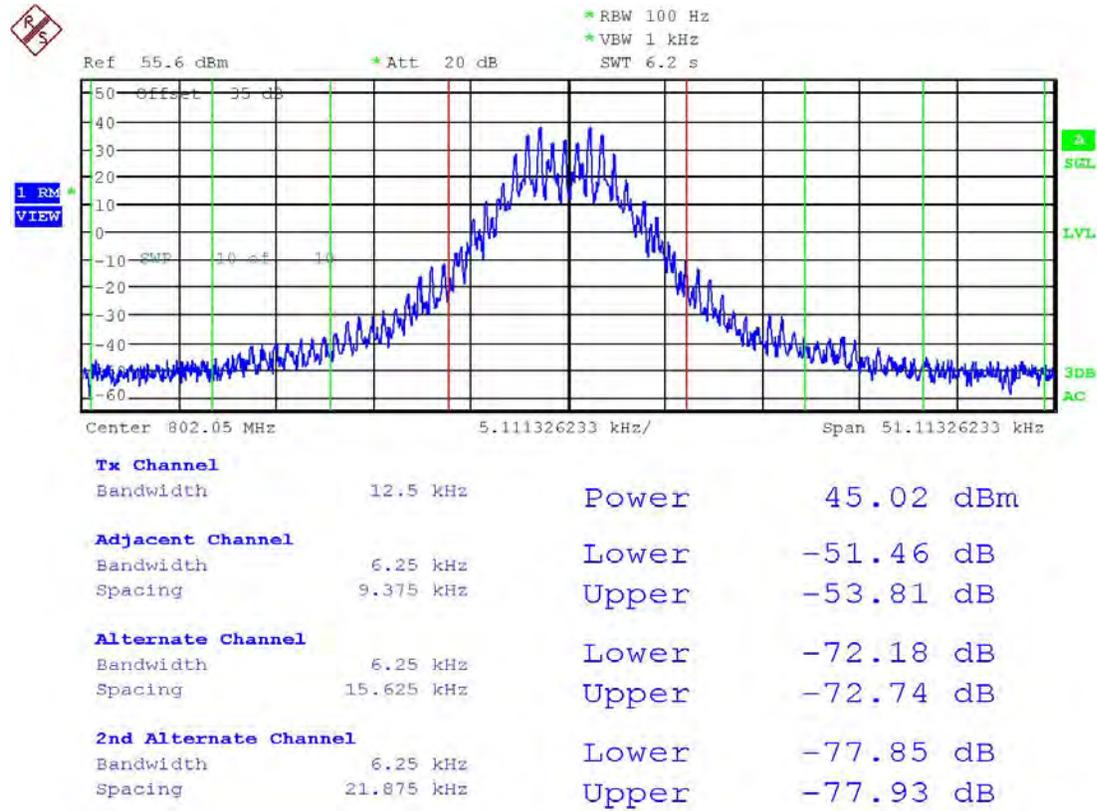
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)	Margin (dB)
>400 KHz to 12 MHz	-75	Upper -99.2	24.2
		Lower -105	29.6
12 MHz to paired rx band	-75	-104.54	29.5
In the paired rx band	-100	-104.42	4.4

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



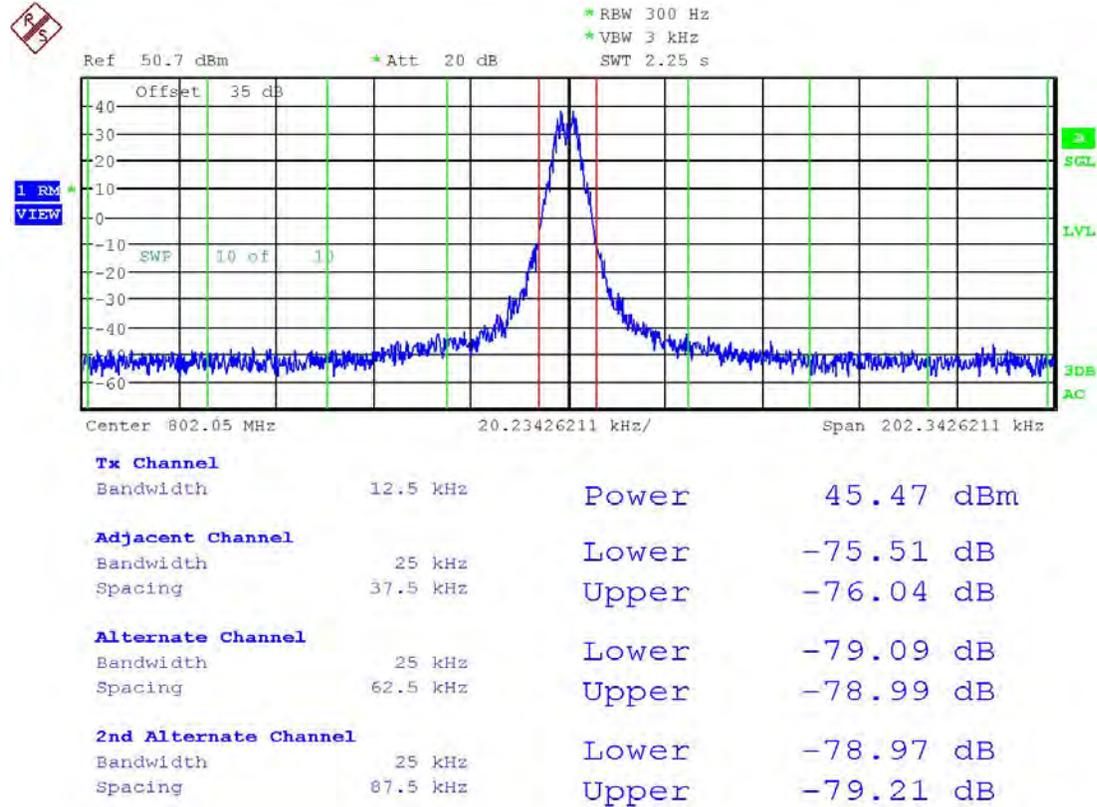
Date: 14.OCT.2015 13:44:37

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

25 KHz Measurement Bandwidth



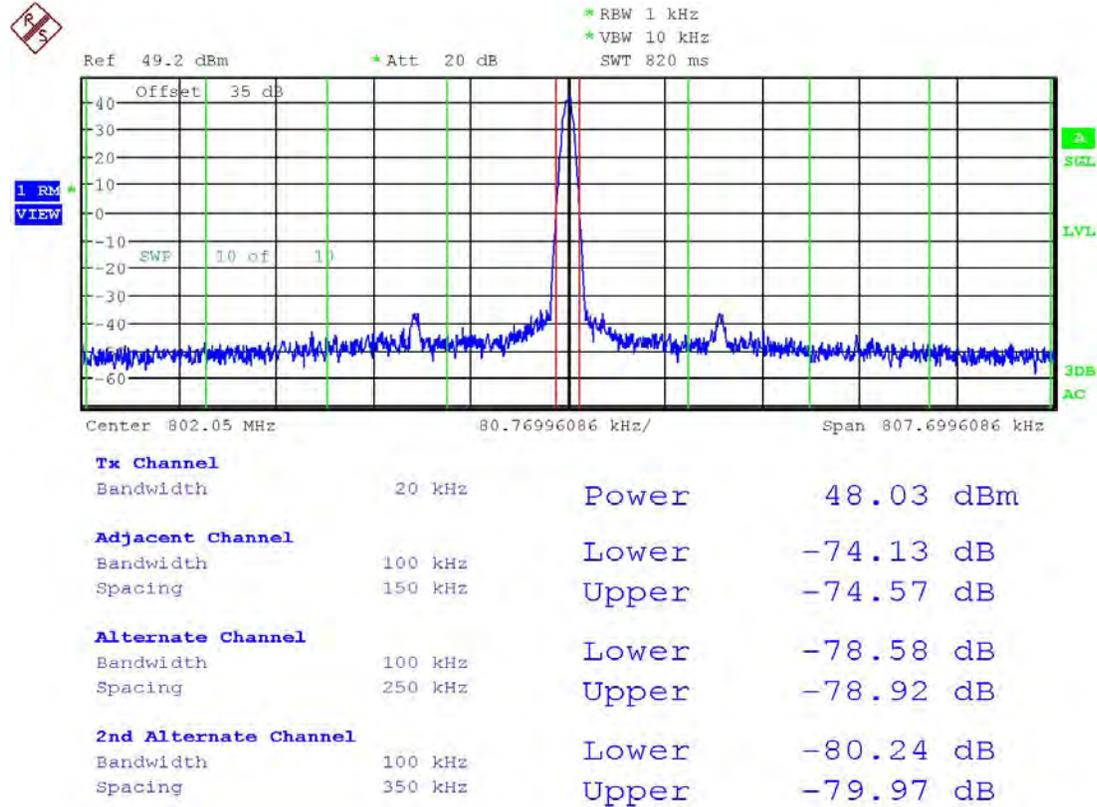
Date: 14.OCT.2015 14:23:46

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

100 KHz Measurement Bandwidth



Date: 15.OCT.2015 14:52:08

Swept 30 KHz Bandwidth Measurement

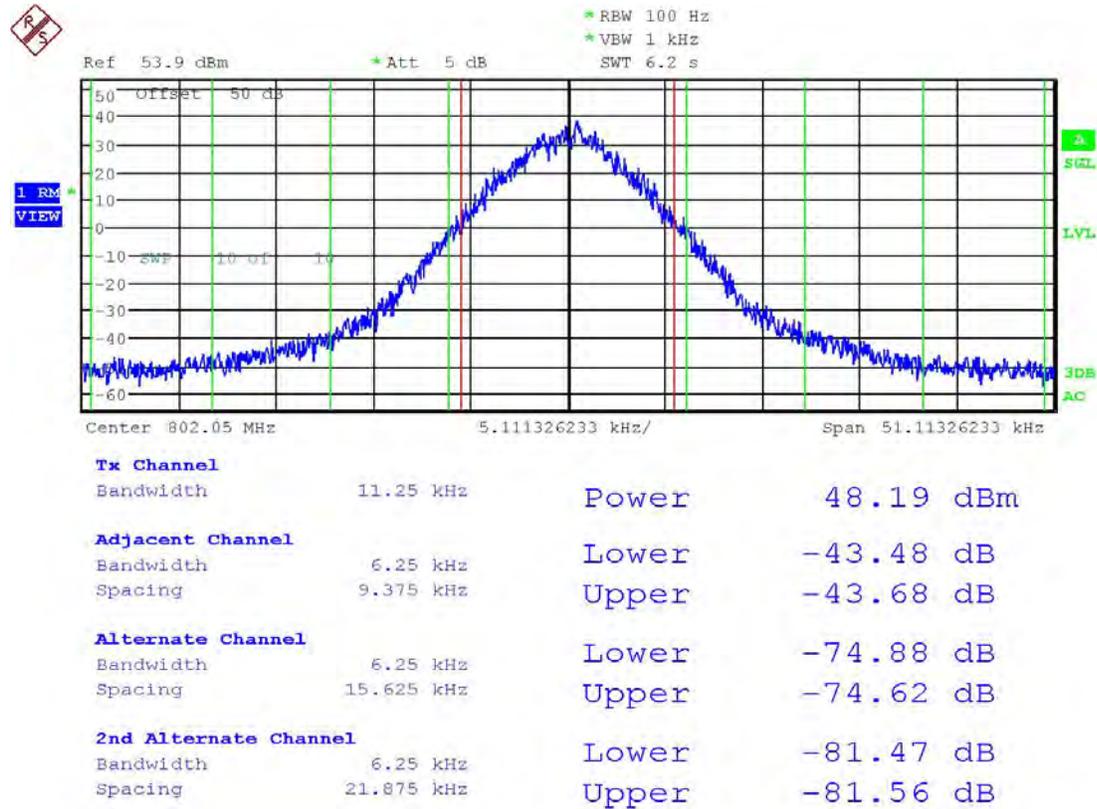
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-99.2	24.2
		Lower	-105	29.9
12 MHz to paired rx band	-75	-104.45		29.5
In the paired rx band	-100	-104.47		4.5

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



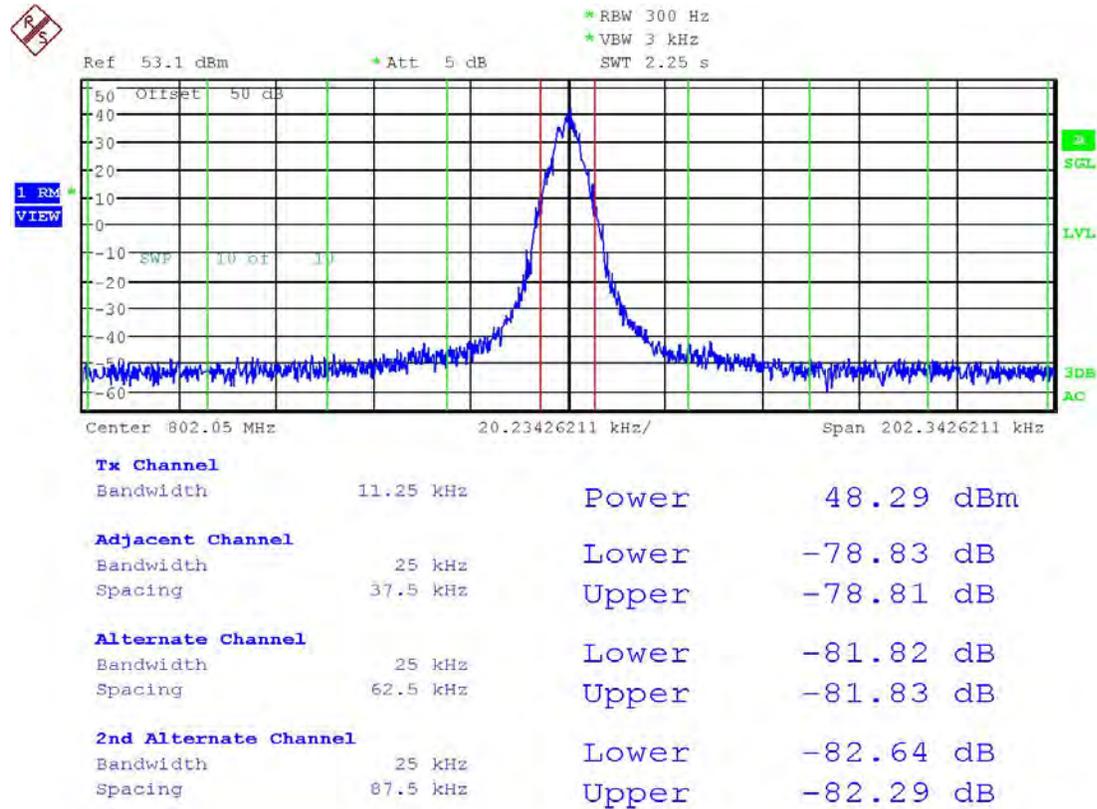
Date: 14.SEP.2015 10:11:13

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



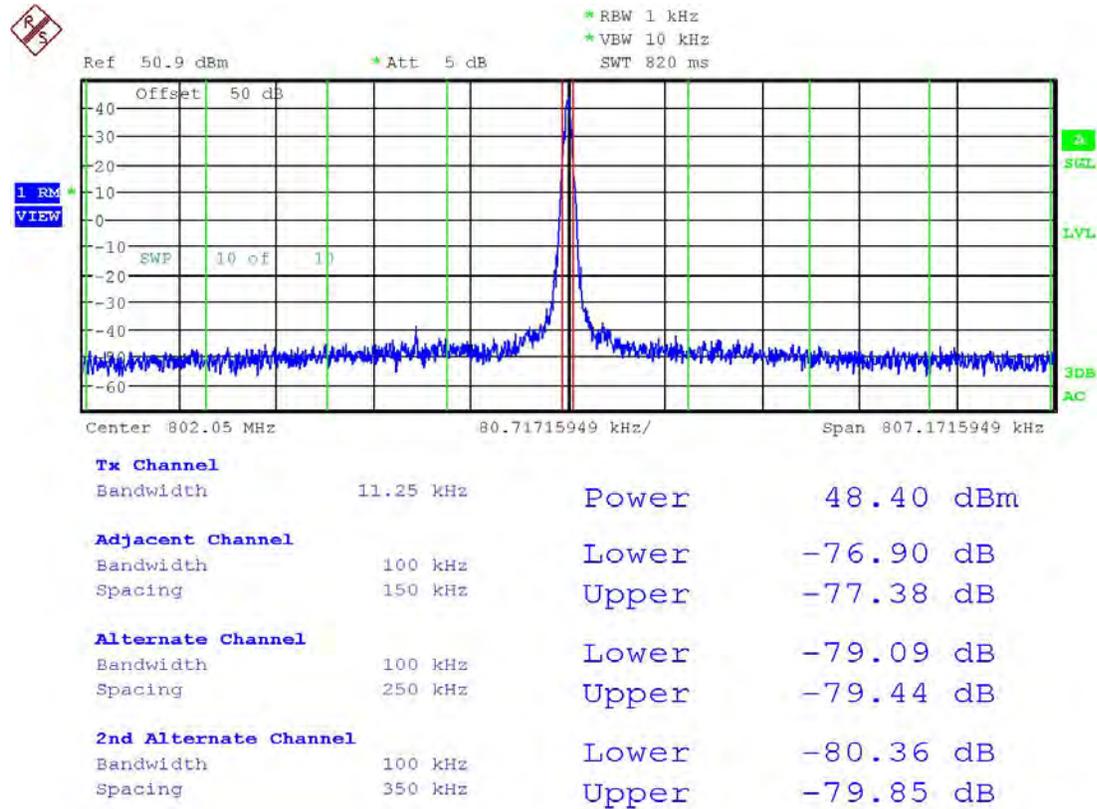
Date: 14.SEP.2015 10:27:36

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 14.SEP.2015 10:31:04

Swept 30 KHz Bandwidth Measurement

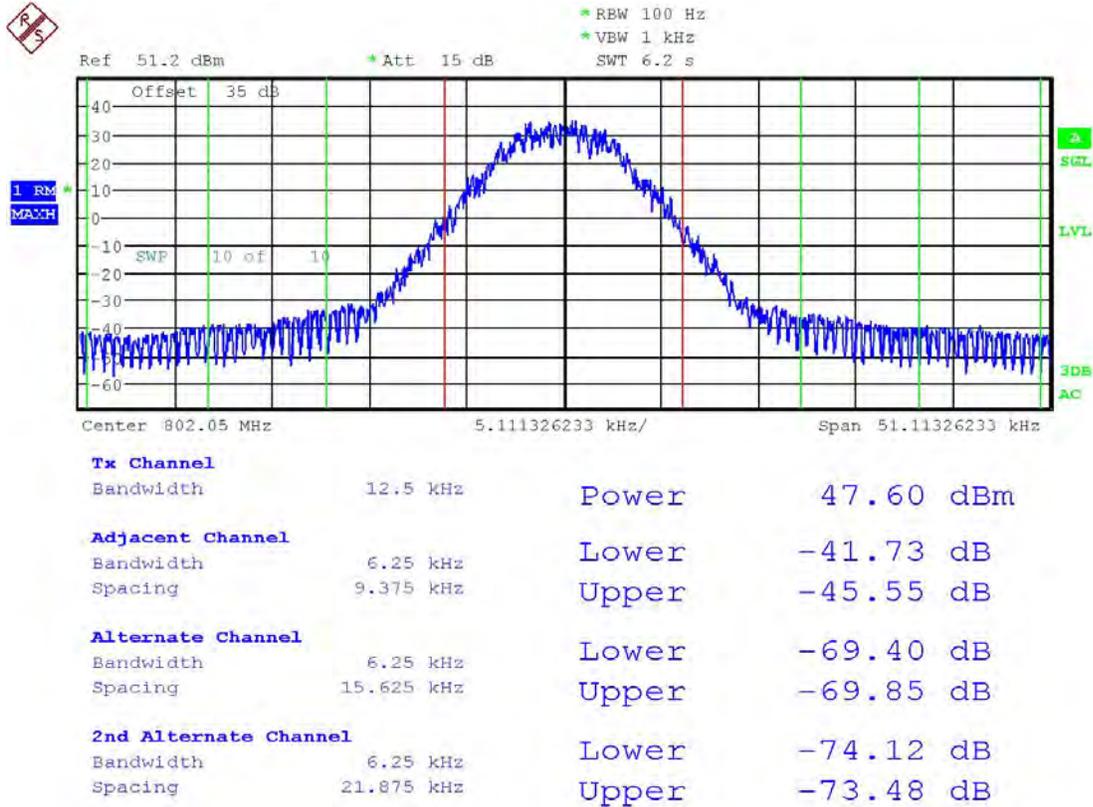
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-103	27.9
		Lower	-109	33.9
12 MHz to paired rx band	-75	-109.13		34.1
In the paired rx band	-100	-108.88		8.9

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



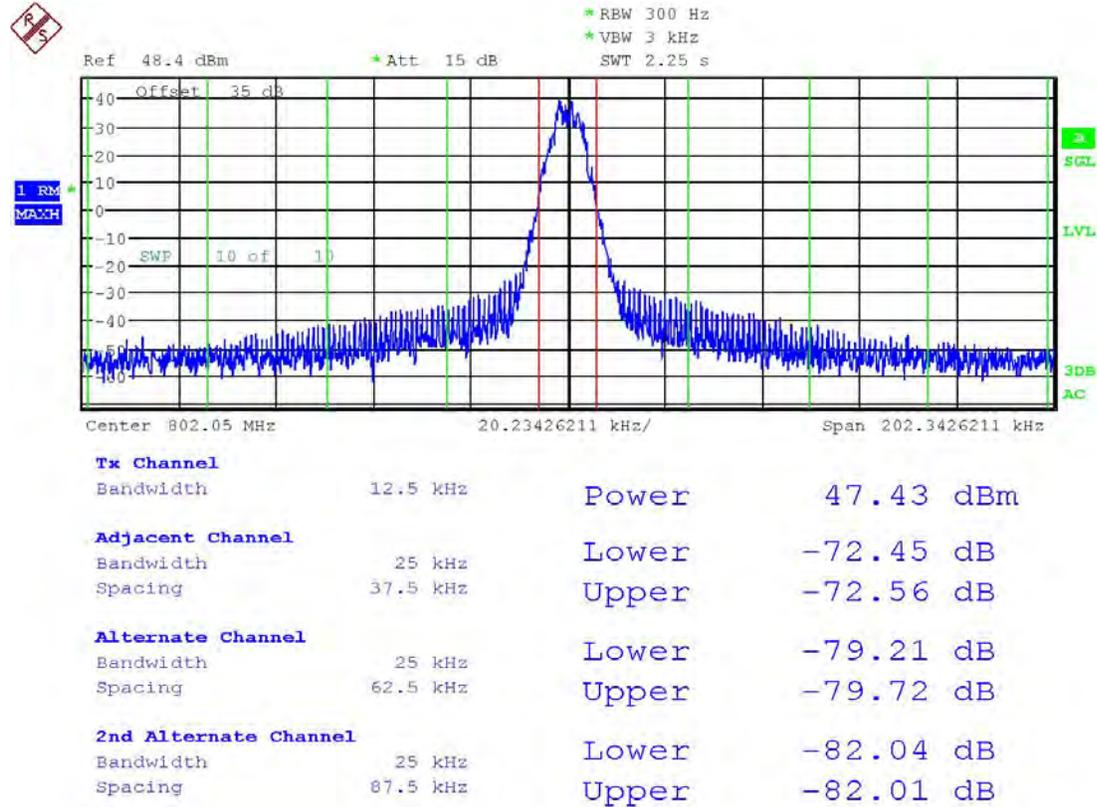
Date: 20.OCT.2015 13:06:29

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



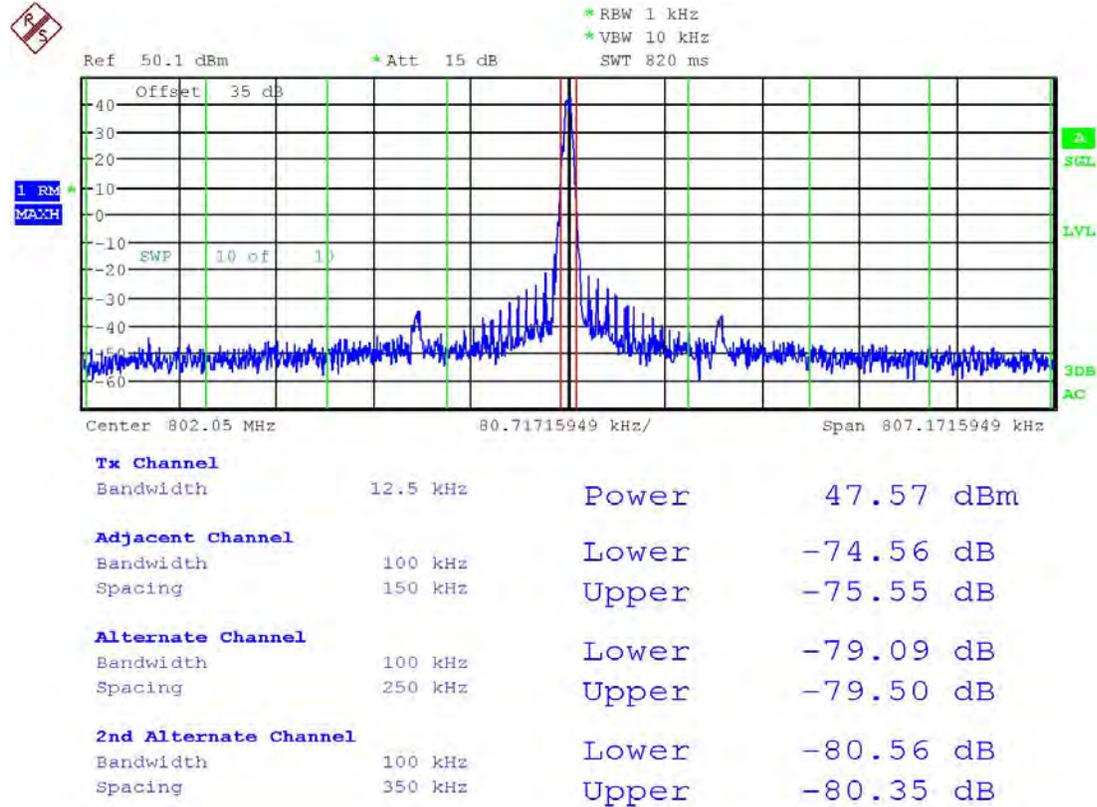
Date: 20.OCT.2015 13:21:07

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F7E

100 KHz Measurement Bandwidth



Date: 20.OCT.2015 13:26:04

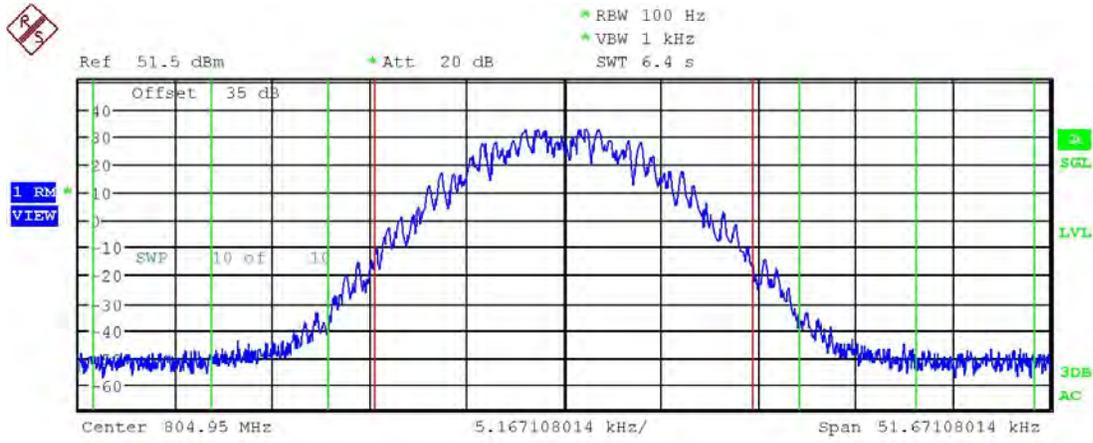
Swept 30 KHz Bandwidth Measurement

Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-118	43.2
		Lower	-120	44.7
12 MHz to paired rx band	-75	-116.71		41.7
In the paired rx band	-100	-115.97		16.0

[Table of Contents](#)

TEST FREQ. 804.95 MHz-16KOF3E

6.25 KHz Measurement Bandwidth



Tx Channel		Power	47.13 dBm
Bandwidth	20 kHz		
Adjacent Channel		Lower	-72.83 dB
Bandwidth	6.25 kHz	Upper	-72.68 dB
Spacing	15.625 kHz		
Alternate Channel		Lower	-80.87 dB
Bandwidth	6.25 kHz	Upper	-80.57 dB
Spacing	21.875 kHz		

Date: 15.OCT.2015 14:18:04

[Table of Contents](#)