



Engineering Solutions & Electromagnetic Compatibility Services

**FCC & IC Certification Report**

**Harris Corporation  
221 Jefferson Ridge Parkway  
Lynchburg, VA 24501**

**MODEL: XL-185P 7/8 Non-Rebanded C1D2  
Portable Land Mobile Radio**

**FCC ID: OWDTR-0148-E  
IC: 3636B-0148**

**July 21, 2017**

<b>Standards Referenced for this Report</b>	
Part 2: 2016	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
Part 90: 2016	Private Land Mobile Radio Services
ANSI/TIA-603-D 2010	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
Industry Canada RSS-119 Issue 12	Land Mobile and Fixed Equipment Operating in the Frequency Range 27.41-960 MHz

**Report Prepared By: Daniel Baltzell**

**Document Number: 2017070TNF**

*This report may not be reproduced, except in full, without the full written approval of Rhein Tech Laboratories, Inc. and Harris Corporation. Test results relate only to the item tested.*

*These test(s) are accredited under Rhein Tech Laboratories, Inc. ISO/IEC 17025 accreditation issued ANAB. Refer to certificate and scope of accreditation AT-1445.*

Frequency Range (MHz)	Rated Conducted Output Power (W)	Frequency Tolerance (ppm)	Transmit Mode	Emission Designator
769 – 775 (FCC) 768 – 776 (ISED) 799 – 805 (FCC) 798 – 806 (ISED) 806 – 824 851 – 869	0.5-3	0.8	Analog Voice; NB	11K0F3E
769 – 775 (FCC) 768 – 776 (ISED) 799 – 805 (FCC) 798 – 806 (ISED) 806 – 824 851 – 869	0.5-3	0.8	EDACS 2-Level FSK 9600 Data/Digital Voice; NB	11K7F1D/E
769 – 775 (FCC) 768 – 776 (ISED) 799 – 805 (FCC) 798 – 806 (ISED) 806 – 824 851 – 869	0.5-3	0.8	OpenSky; 4-level FSK Data/Voice [SMR]; WB	15K4F9W
769 – 775 (FCC) 768 – 776 (ISED) 799 – 805 (FCC) 798 – 806 (ISED) 806 – 824 851 – 869	0.5-3	0.8	OpenSky; 4-level FSK Data/Voice [Narrowband]; WB	8K40F9W
769 – 775 (FCC) 768 – 776 (ISED) 799 – 805 (FCC) 798 – 806 (ISED) 806 – 824 851 – 869	0.5-3	0.8	4-level C4FM Data/Voice; P25 Phase 1	8K40F1D/E
769 – 775 (FCC) 768 – 776 (ISED) 799 – 805 (FCC) 798 – 806 (ISED) 806 – 824 851 – 869	0.5-3	0.8	4-level H-CPM (TDMA) Data/Voice; P25 Phase 2	8K10DXW
806 – 824 851 – 869	0.5-3	0.6	Analog Voice; WB	16K0F3E
806 – 824 851 – 869	0.5-3	0.6	EDACS 2-Level FSK 9600 Data/Digital Voice; WB	16K0F1D/E

Rhein Tech Laboratories, Inc.  
360 Herndon Parkway  
Suite 1400  
Herndon, VA 20170  
<http://www.rheintech.com>

Client: Harris Corporation  
Model: XL-185P 7/8 NRB C1D2  
IDs: - OWDTR-0148-E/3636B-0148  
Standards: FCC Parts 2, 90/IC RSS-119  
Report #: 2017070TNF

806 – 824 851 – 869	0.5-3	0.6	EDACS Analog Voice (NPSPAC)	14K0F3E
806 – 824 851 – 869	0.5-3	0.6	EDACS 2-Level FSK 9600 Data/Digital Voice (NPSPAC)	14K0F1D/E
806 – 824 851 – 869	0.5-3	0.5	OpenSky; 4-level FSK Data/Voice [NPSPAC]; WB	12K1F9W

## Table of Contents

1	Test Result Summary .....	12
2	General Information.....	12
2.1	Test Facility.....	12
2.2	Related Submittal(s)/Grant(s).....	12
2.3	Grant Notes .....	13
2.4	Tested System Details .....	13
3	FCC Rules and Regulations Part 2.1033(C)(8): Voltages and Currents Through The Final Amplifying Stage .....	15
4	FCC Rules and Regulations Part 2.1046(a): RF Power Output: Conducted, Part 90.541(b)/90.542(a)(6) .....	15
4.1	Test Procedure .....	15
4.2	Test Data.....	16
5	FCC Rules and Regulations Part 2.1051: Spurious Emissions at Antenna Terminals; Part 90.210: Emission Limitations.....	17
5.1	Test Procedure .....	17
5.2	Test Data.....	17
6	FCC Rules and Regulations Part 90.543(a): Emission Limitations: ACP Requirements .....	19
6.1	Test Procedure .....	19
6.2	Test Data.....	21
7	FCC Rules and Regulations Part 90.210(g) and Part 2.1053(a): Field Strength of Spurious Radiation; Part 90.543(f): Out of Band Emissions Limit.....	82
7.1	Test Procedure .....	82
7.2	Test Data.....	83
7.2.1	CFR 47 Part 90.210 Requirements .....	83
7.2.2	CFR 47 Part 90.543(f) Requirements.....	84
8	FCC Rules and Regulations Part 2.1049(c)(1): Occupied Bandwidth; Part 90.210: Authorized Bandwidth .....	86
8.1	Test Procedure .....	86
8.2	Test Data.....	87
9	FCC Rules and Regulation Part 2.1055: Frequency Stability; Part 90.213, 90.539: Frequency Stability .....	194
9.1	Test Procedure .....	194
9.2	Test Data.....	196
9.2.1	Frequency Stability/Voltage Variation.....	200
10	FCC Part 2.1047: Modulation Characteristics.....	204
10.1	Test Procedures.....	204
10.1.1	Audio Frequency Response.....	204
10.1.2	Audio Low Pass Filter Response.....	204
10.1.3	Modulation Limiting.....	204
10.2	Test Data.....	205
10.2.1	Audio Frequency Response.....	205
10.2.2	Audio Low Pass Filter Response.....	214
10.2.3	Modulation Limiting.....	219
11	FCC Rules and Regulations Part 2.202: Necessary Bandwidth and Emission Bandwidth .....	233
12	Conclusion .....	235

**Table of Figures**

Figure 2-1: Configuration of Tested System ..... 14

**Table of Tables**

Table 2-1: Equipment Under Test (EUT)..... 13  
 Table 2-2: Auxiliary Equipment ..... 14  
 Table 4-1: RF Conducted Output Power - Measured..... 16  
 Table 4-2: Test Equipment Used For Testing RF Power Output - Conducted ..... 16  
 Table 5-1: Test Equipment Used For Testing Spurious Emissions ..... 17  
 Table 6-1: Adjacent Channel Power – 768.0125 MHz; Narrowband Analog; 400 kHz – RX band .....21  
 Table 6-2: Adjacent Channel Power – 769.0125 MHz; Narrowband Analog; 400 kHz – RX band .....22  
 Table 6-3: Adjacent Channel Power – 771.0125 MHz; Narrowband Analog; 400 kHz – RX band .....23  
 Table 6-4: Adjacent Channel Power – 775.0125 MHz; Narrowband Analog; 400 kHz – RX band .....24  
 Table 6-5: Adjacent Channel Power – 775.9875 MHz; Narrowband Analog; 400 kHz – RX band .....25  
 Table 6-6: Adjacent Channel Power – 798.0125 MHz; Narrowband Analog; 400 kHz – RX band .....26  
 Table 6-7: Adjacent Channel Power – 799.0125 MHz; Narrowband Analog; 400 kHz – RX band .....27  
 Table 6-8: Adjacent Channel Power – 801.0125 MHz; Narrowband Analog; 400 kHz – RX band .....28  
 Table 6-9: Adjacent Channel Power – 805.0125 MHz; Narrowband Analog; 400 kHz – RX band .....29  
 Table 6-10: Adjacent Channel Power – 805.9875 MHz; Narrowband Analog; 400 kHz – RX band .....30  
 Table 6-11: Adjacent Channel Power – 768.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....31  
 Table 6-12: Adjacent Channel Power – 769.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....32  
 Table 6-13: Adjacent Channel Power – 771.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....33  
 Table 6-14: Adjacent Channel Power – 775.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....34  
 Table 6-15: Adjacent Channel Power – 775.9875 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....35  
 Table 6-16: Adjacent Channel Power – 798.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....36  
 Table 6-17: Adjacent Channel Power – 799.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....37  
 Table 6-18: Adjacent Channel Power – 801.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....38  
 Table 6-19: Adjacent Channel Power – 805.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....39  
 Table 6-20: Adjacent Channel Power – 805.9875 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band .....40  
 Table 6-21: Adjacent Channel Power – 768.0125 MHz; OTP SMR; 400 kHz – RX band .....41  
 Table 6-22: Adjacent Channel Power – 769.0125 MHz; OTP SMR; 400 kHz – RX band .....42  
 Table 6-23: Adjacent Channel Power – 771.0125 MHz; OTP SMR; 400 kHz – RX band .....43  
 Table 6-24: Adjacent Channel Power – 775.0125 MHz; OTP SMR; 400 kHz – RX band .....44  
 Table 6-25: Adjacent Channel Power – 775.9875 MHz; OTP SMR; 400 kHz – RX band .....45  
 Table 6-26: Adjacent Channel Power – 798.0125 MHz; OTP SMR; 400 kHz – RX band .....46  
 Table 6-27: Adjacent Channel Power – 799.0125 MHz; OTP SMR; 400 kHz – RX band .....47  
 Table 6-28: Adjacent Channel Power – 801.0125 MHz; OTP SMR; 400 kHz – RX band .....48  
 Table 6-29: Adjacent Channel Power – 805.0125 MHz; OTP SMR; 400 kHz – RX band .....49  
 Table 6-30: Adjacent Channel Power – 805.9875 MHz; OTP SMR; 400 kHz – RX band .....50  
 Table 6-31: Adjacent Channel Power – 768.0125 MHz; OTP Narrowband; 400 kHz – RX band .....51  
 Table 6-32: Adjacent Channel Power – 769.0125 MHz; OTP Narrowband; 400 kHz – RX band .....52

Table 6-33:	Adjacent Channel Power – 771.0125 MHz; OTP Narrowband; 400 kHz – RX band .....	53
Table 6-34:	Adjacent Channel Power – 775.0125 MHz; OTP Narrowband; 400 kHz – RX band .....	54
Table 6-35:	Adjacent Channel Power – 775.9875 MHz; OTP Narrowband; 400 kHz – RX band .....	55
Table 6-36:	Adjacent Channel Power – 798.0125 MHz; OTP Narrowband; 400 kHz – RX band .....	56
Table 6-37:	Adjacent Channel Power – 799.0125 MHz; OTP Narrowband; 400 kHz – RX band .....	57
Table 6-38:	Adjacent Channel Power – 801.0125 MHz; OTP Narrowband; 400 kHz – RX band .....	58
Table 6-39:	Adjacent Channel Power – 805.0125 MHz; OTP Narrowband; 400 kHz – RX band .....	59
Table 6-40:	Adjacent Channel Power – 805.9875 MHz; OTP Narrowband; 400 kHz – RX band .....	60
Table 6-41:	Adjacent Channel Power – 768.0125 MHz; P25; 400 kHz – RX band .....	61
Table 6-42:	Adjacent Channel Power – 769.0125 MHz; P25; 400 kHz – RX band .....	62
Table 6-43:	Adjacent Channel Power – 771.0125 MHz; P25; 400 kHz – RX band .....	63
Table 6-44:	Adjacent Channel Power – 775.0125 MHz; P25; 400 kHz – RX band .....	64
Table 6-45:	Adjacent Channel Power – 775.9875 MHz; P25; 400 kHz – RX band .....	65
Table 6-46:	Adjacent Channel Power – 798.0125 MHz; P25; 400 kHz – RX band .....	66
Table 6-47:	Adjacent Channel Power – 799.0125 MHz; P25; 400 kHz – RX band .....	67
Table 6-48:	Adjacent Channel Power – 801.0125 MHz; P25; 400 kHz – RX band .....	68
Table 6-49:	Adjacent Channel Power – 805.0125 MHz; P25; 400 kHz – RX band .....	69
Table 6-50:	Adjacent Channel Power – 805.9875 MHz; P25; 400 kHz – RX band .....	70
Table 6-51:	Adjacent Channel Power – 768.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	71
Table 6-52:	Adjacent Channel Power – 769.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	72
Table 6-53:	Adjacent Channel Power – 771.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	73
Table 6-54:	Adjacent Channel Power – 775.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	74
Table 6-55:	Adjacent Channel Power – 775.9875 MHz; P25 Phase 2; 400 kHz – RX band .....	75
Table 6-56:	Adjacent Channel Power – 798.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	76
Table 6-57:	Adjacent Channel Power – 799.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	77
Table 6-58:	Adjacent Channel Power – 801.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	78
Table 6-59:	Adjacent Channel Power – 805.0125 MHz; P25 Phase 2; 400 kHz – RX band .....	79
Table 6-60:	Adjacent Channel Power – 805.9875 MHz; P25 Phase 2; 400 kHz – RX band .....	80
Table 6-61:	Test Equipment Used For Testing ACP Requirements .....	81
Table 7-1:	Field Strength of Spurious Radiation – 806.0125 MHz .....	83
Table 7-2:	Field Strength of Spurious Radiation – 815 MHz .....	83
Table 7-3:	Field Strength of Spurious Radiation – 823.9875 MHz .....	83
Table 7-4:	Field Strength of Spurious Radiation – 851.0125 MHz .....	83
Table 7-5:	Field Strength of Spurious Radiation – 860 MHz .....	84
Table 7-6:	Field Strength of Spurious Radiation – 868.9875 MHz .....	84
Table 7-7:	Field Strength of Spurious Radiation .....	84
Table 7-8:	Test Equipment Used for Testing Field Strength of Spurious Radiation .....	85
Table 8-1:	Test Equipment Used for Testing Occupied Bandwidth .....	193
Table 9-1:	Temperature Frequency Stability – 768.0125 MHz .....	196
Table 9-2:	Temperature Frequency Stability – 769.0125 MHz .....	196
Table 9-3:	Temperature Frequency Stability – 771.0125 MHz .....	196
Table 9-4:	Temperature Frequency Stability – 775.0125 MHz .....	197
Table 9-5:	Temperature Frequency Stability – 775.9875 MHz .....	197
Table 9-6:	Temperature Frequency Stability – 798.0125 MHz .....	197
Table 9-7:	Temperature Frequency Stability – 799.0125 MHz .....	198
Table 9-8:	Temperature Frequency Stability – 806.0125 MHz .....	198
Table 9-9:	Temperature Frequency Stability – 815.0000 MHz .....	198
Table 9-10:	Temperature Frequency Stability – 823.9875 MHz .....	199
Table 9-11:	Temperature Frequency Stability – 851.0125 MHz .....	199
Table 9-12:	Temperature Frequency Stability – 860.0000 MHz .....	199
Table 9-13:	Temperature Frequency Stability – 868.9875 MHz .....	200
Table 9-14:	Frequency Stability/Voltage Variation – 768.0125 MHz .....	200
Table 9-15:	Frequency Stability/Voltage Variation – 769.0125 MHz .....	200
Table 9-16:	Frequency Stability/Voltage Variation – 771.0125 MHz .....	200
Table 9-17:	Frequency Stability/Voltage Variation – 775.0125 MHz .....	201

Table 9-18:	Frequency Stability/Voltage Variation – 775.9875 MHz .....	201
Table 9-19:	Frequency Stability/Voltage Variation – 798.0125 MHz .....	201
Table 9-20:	Frequency Stability/Voltage Variation – 799.0125 MHz .....	201
Table 9-21:	Frequency Stability/Voltage Variation – 806.0125 MHz .....	201
Table 9-22:	Frequency Stability/Voltage Variation – 815.0000 MHz .....	201
Table 9-23:	Frequency Stability/Voltage Variation – 823.9875 MHz .....	202
Table 9-24:	Frequency Stability/Voltage Variation – 851.0125 MHz .....	202
Table 9-25:	Frequency Stability/Voltage Variation – 860.0000 MHz .....	202
Table 9-26:	Frequency Stability/Voltage Variation – 868.9875 MHz .....	202
Table 9-27:	Test Equipment Used For Testing Frequency Stability .....	202
Table 10-1:	Test Equipment Used For Modulation Requirements.....	232

### Table of Plots

Plot 6-1:	Adjacent Channel Power – 768.0125 MHz; Narrowband Analog; <400 kHz.....	21
Plot 6-2:	Adjacent Channel Power – 769.0125 MHz; Narrowband Analog; <400 kHz.....	22
Plot 6-3:	Adjacent Channel Power – 771.0125 MHz; Narrowband Analog; <400 kHz.....	23
Plot 6-4:	Adjacent Channel Power – 775.0125 MHz; Narrowband Analog; <400 kHz.....	24
Plot 6-5:	Adjacent Channel Power – 775.9875 MHz; Narrowband Analog; <400 kHz.....	25
Plot 6-6:	Adjacent Channel Power – 798.0125 MHz; Narrowband Analog; <400 kHz.....	26
Plot 6-7:	Adjacent Channel Power – 799.0125 MHz; Narrowband Analog; <400 kHz.....	27
Plot 6-8:	Adjacent Channel Power – 801.0125 MHz; Narrowband Analog; <400 kHz.....	28
Plot 6-9:	Adjacent Channel Power – 805.0125 MHz; Narrowband Analog; <400 kHz.....	29
Plot 6-10:	Adjacent Channel Power – 805.9875 MHz; Narrowband Analog; <400 kHz.....	30
Plot 6-11:	Adjacent Channel Power – 768.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	31
Plot 6-12:	Adjacent Channel Power – 769.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	32
Plot 6-13:	Adjacent Channel Power – 771.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	33
Plot 6-14:	Adjacent Channel Power – 775.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	34
Plot 6-15:	Adjacent Channel Power – 775.9875 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	35
Plot 6-16:	Adjacent Channel Power – 798.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	36
Plot 6-17:	Adjacent Channel Power – 799.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	37
Plot 6-18:	Adjacent Channel Power – 801.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	38
Plot 6-19:	Adjacent Channel Power – 805.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	39
Plot 6-20:	Adjacent Channel Power – 805.9875 MHz; EDACS 2-Level FSK 9600; <400 kHz.....	40
Plot 6-21:	Adjacent Channel Power – 768.0125 MHz; OTP SMR; <400 kHz.....	41
Plot 6-22:	Adjacent Channel Power – 769.0125 MHz; OTP SMR; <400 kHz.....	42
Plot 6-23:	Adjacent Channel Power – 771.0125 MHz; OTP SMR; <400 kHz.....	43
Plot 6-24:	Adjacent Channel Power – 775.0125 MHz; OTP SMR; <400 kHz.....	44
Plot 6-25:	Adjacent Channel Power – 775.9875 MHz; OTP SMR; <400 kHz.....	45
Plot 6-26:	Adjacent Channel Power – 798.0125 MHz; OTP SMR; <400 kHz.....	46
Plot 6-27:	Adjacent Channel Power – 799.0125 MHz; OTP SMR; <400 kHz.....	47
Plot 6-28:	Adjacent Channel Power – 801.0125 MHz; OTP SMR; <400 kHz.....	48
Plot 6-29:	Adjacent Channel Power – 805.0125 MHz; OTP SMR; <400 kHz.....	49
Plot 6-30:	Adjacent Channel Power – 805.9875 MHz; OTP SMR; <400 kHz.....	50
Plot 6-31:	Adjacent Channel Power – 768.0125 MHz; OTP Narrowband; <400 kHz .....	51
Plot 6-32:	Adjacent Channel Power – 769.0125 MHz; OTP Narrowband; <400 kHz .....	52
Plot 6-33:	Adjacent Channel Power – 771.0125 MHz; OTP Narrowband; <400 kHz .....	53
Plot 6-34:	Adjacent Channel Power – 775.0125 MHz; OTP Narrowband; <400 kHz .....	54
Plot 6-35:	Adjacent Channel Power – 775.9875 MHz; OTP Narrowband; <400 kHz .....	55
Plot 6-36:	Adjacent Channel Power – 798.0125 MHz; OTP Narrowband; <400 kHz .....	56
Plot 6-37:	Adjacent Channel Power – 799.0125 MHz; OTP Narrowband; <400 kHz .....	57
Plot 6-38:	Adjacent Channel Power – 801.0125 MHz; OTP Narrowband; <400 kHz .....	58
Plot 6-39:	Adjacent Channel Power – 805.0125 MHz; OTP Narrowband; <400 kHz .....	59

Plot 6-40:	Adjacent Channel Power – 805.9875 MHz; OTP Narrowband; <400 kHz .....	60
Plot 6-41:	Adjacent Channel Power – 768.0125 MHz; P25; <400 kHz .....	61
Plot 6-42:	Adjacent Channel Power – 769.0125 MHz; P25; <400 kHz .....	62
Plot 6-43:	Adjacent Channel Power – 771.0125 MHz; P25; <400 kHz .....	63
Plot 6-44:	Adjacent Channel Power – 775.0125 MHz; P25; <400 kHz .....	64
Plot 6-45:	Adjacent Channel Power – 775.9875 MHz; P25; <400 kHz .....	65
Plot 6-46:	Adjacent Channel Power – 798.0125 MHz; P25; <400 kHz .....	66
Plot 6-47:	Adjacent Channel Power – 799.0125 MHz; P25; <400 kHz .....	67
Plot 6-48:	Adjacent Channel Power – 801.0125 MHz; P25; <400 kHz .....	68
Plot 6-49:	Adjacent Channel Power – 805.0125 MHz; P25; <400 kHz .....	69
Plot 6-50:	Adjacent Channel Power – 805.9875 MHz; P25; <400 kHz .....	70
Plot 6-51:	Adjacent Channel Power – 768.0125 MHz; P25 Phase 2; <400 kHz.....	71
Plot 6-52:	Adjacent Channel Power – 769.0125 MHz; P25 Phase 2; <400 kHz.....	72
Plot 6-53:	Adjacent Channel Power – 771.0125 MHz; P25 Phase 2; <400 kHz.....	73
Plot 6-54:	Adjacent Channel Power – 775.0125 MHz; P25 Phase 2; <400 kHz.....	74
Plot 6-55:	Adjacent Channel Power – 775.9875 MHz; P25 Phase 2; <400 kHz.....	75
Plot 6-56:	Adjacent Channel Power – 798.0125 MHz; P25 Phase 2; <400 kHz.....	76
Plot 6-57:	Adjacent Channel Power – 799.0125 MHz; P25 Phase 2; <400 kHz.....	77
Plot 6-58:	Adjacent Channel Power – 801.0125 MHz; P25 Phase 2; <400 kHz.....	78
Plot 6-59:	Adjacent Channel Power – 805.0125 MHz; P25 Phase 2; <400 kHz.....	79
Plot 6-60:	Adjacent Channel Power – 805.9875 MHz; P25 Phase 2; <400 kHz.....	80
Plot 8-1:	Occupied Bandwidth – 806.0125 MHz; Narrowband Analog (Mask D).....	87
Plot 8-2:	Occupied Bandwidth – 815.0000 MHz; Narrowband Analog (Mask D).....	88
Plot 8-3:	Occupied Bandwidth – 823.9875 MHz; Narrowband Analog (Mask D).....	89
Plot 8-4:	Occupied Bandwidth – 851.0125 MHz; Narrowband Analog (Mask D).....	90
Plot 8-5:	Occupied Bandwidth – 860.0000 MHz; Narrowband Analog (Mask D).....	91
Plot 8-6:	Occupied Bandwidth – 868.9875 MHz; Narrowband Analog (Mask D).....	92
Plot 8-7:	Occupied Bandwidth – 806.0125 MHz; Narrowband Analog (Mask B).....	93
Plot 8-8:	Occupied Bandwidth – 815.0000 MHz; Narrowband Analog (Mask B).....	94
Plot 8-9:	Occupied Bandwidth – 823.9875 MHz; Narrowband Analog (Mask B).....	95
Plot 8-10:	Occupied Bandwidth – 851.0125 MHz; Narrowband Analog (Mask B).....	96
Plot 8-11:	Occupied Bandwidth – 860.0000 MHz; Narrowband Analog (Mask B).....	97
Plot 8-12:	Occupied Bandwidth – 868.9875 MHz; Narrowband Analog (Mask B).....	98
Plot 8-13:	Occupied Bandwidth – 806.0125 MHz; NPSPAC Analog (Mask B).....	99
Plot 8-14:	Occupied Bandwidth – 815.0000 MHz; NPSPAC Analog (Mask B).....	100
Plot 8-15:	Occupied Bandwidth – 823.9875 MHz; NPSPAC Analog (Mask B).....	101
Plot 8-16:	Occupied Bandwidth – 851.0125 MHz; NPSPAC Analog (Mask B).....	102
Plot 8-17:	Occupied Bandwidth – 860.0000 MHz; NPSPAC Analog (Mask B).....	103
Plot 8-18:	Occupied Bandwidth – 868.9875 MHz; NPSPAC Analog (Mask B).....	104
Plot 8-19:	Occupied Bandwidth – 806.0125 MHz; Wideband Analog (Mask B) .....	105
Plot 8-20:	Occupied Bandwidth – 815.0000 MHz; Wideband Analog (Mask B) .....	106
Plot 8-21:	Occupied Bandwidth – 823.9875 MHz; Wideband Analog (Mask B) .....	107
Plot 8-22:	Occupied Bandwidth – 851.0125 MHz; Wideband Analog (Mask B) .....	108
Plot 8-23:	Occupied Bandwidth – 860.0000 MHz; Wideband Analog (Mask B) .....	109
Plot 8-24:	Occupied Bandwidth – 868.9875 MHz; Wideband Analog (Mask B) .....	110
Plot 8-25:	Occupied Bandwidth – 806.0250 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D) 111	
Plot 8-26:	Occupied Bandwidth – 809.0000 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D) 112	
Plot 8-27:	Occupied Bandwidth – 815.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D) 113	
Plot 8-28:	Occupied Bandwidth – 851.0250 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D) 114	
Plot 8-29:	Occupied Bandwidth – 856.0250 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D) 115	
Plot 8-30:	Occupied Bandwidth – 860.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D) 116	
Plot 8-31:	Occupied Bandwidth – 806.0125 MHz; EDACS Narrowband 2-level FSK 9600 (Mask H) 117	
Plot 8-32:	Occupied Bandwidth – 815.0000 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G) 118	
Plot 8-33:	Occupied Bandwidth – 823.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G) 119	
Plot 8-34:	Occupied Bandwidth – 851.0125 MHz; EDACS Narrowband 2-level FSK 9600 (Mask H) 120	



Plot 8-35:	Occupied Bandwidth – 860.0000 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G)	121
Plot 8-36:	Occupied Bandwidth – 868.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G)	122
Plot 8-37:	Occupied Bandwidth – 806.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G) ....	123
Plot 8-38:	Occupied Bandwidth – 806.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask H).....	124
Plot 8-39:	Occupied Bandwidth – 815.0000 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G) ....	125
Plot 8-40:	Occupied Bandwidth – 815.0000 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask H).....	126
Plot 8-41:	Occupied Bandwidth – 823.9875 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G) ....	127
Plot 8-42:	Occupied Bandwidth – 851.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G) ....	128
Plot 8-43:	Occupied Bandwidth – 851.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask H).....	129
Plot 8-44:	Occupied Bandwidth – 860.0000 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G) ....	130
Plot 8-45:	Occupied Bandwidth – 868.9875 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G) ....	131
Plot 8-46:	Occupied Bandwidth – 806.0125 MHz; EDACS Wideband 2-level FSK 9600 (Mask G) ...	132
Plot 8-47:	Occupied Bandwidth – 806.0125 MHz; EDACS Wideband 2-level FSK 9600 (Mask H) ...	133
Plot 8-48:	Occupied Bandwidth – 815.0000 MHz; EDACS Wideband 2-level FSK 9600 (Mask G) ...	134
Plot 8-49:	Occupied Bandwidth – 815.0000 MHz; EDACS Wideband 2-level FSK 9600 (Mask H) ...	135
Plot 8-50:	Occupied Bandwidth – 823.9875 MHz; EDACS Wideband 2-level FSK 9600 (Mask G) ...	136
Plot 8-51:	Occupied Bandwidth – 851.0125 MHz; EDACS Wideband 2-level FSK 9600 (Mask G) ...	137
Plot 8-52:	Occupied Bandwidth – 851.0125 MHz; EDACS Wideband 2-level FSK 9600 (Mask H) ...	138
Plot 8-53:	Occupied Bandwidth – 860.0000 MHz; EDACS Wideband 2-level FSK 9600 (Mask G) ...	139
Plot 8-54:	Occupied Bandwidth – 868.9875 MHz; EDACS Wideband 2-level FSK 9600 (Mask G) ...	140
Plot 8-55:	Occupied Bandwidth – 806.0125 MHz; OTP Narrowband 4-level FSK (Mask D) .....	141
Plot 8-56:	Occupied Bandwidth – 815.0000 MHz; OTP Narrowband 4-level FSK (Mask D) .....	142
Plot 8-57:	Occupied Bandwidth – 823.9875 MHz; OTP Narrowband 4-level FSK (Mask D) .....	143
Plot 8-58:	Occupied Bandwidth – 851.0125 MHz; OTP Narrowband 4-level FSK (Mask D) .....	144
Plot 8-59:	Occupied Bandwidth – 860.0000 MHz; OTP Narrowband 4-level FSK (Mask D) .....	145
Plot 8-60:	Occupied Bandwidth – 868.9875 MHz; OTP Narrowband 4-level FSK (Mask D) .....	146
Plot 8-61:	Occupied Bandwidth – 806.0125 MHz; OTP Narrowband 4-level FSK (Mask H) .....	147
Plot 8-62:	Occupied Bandwidth – 815.0000 MHz; OTP Narrowband 4-level FSK (Mask G) .....	148
Plot 8-63:	Occupied Bandwidth – 815.0000 MHz; OTP Narrowband 4-level FSK (Mask H) .....	149
Plot 8-64:	Occupied Bandwidth – 823.9875 MHz; OTP Narrowband 4-level FSK (Mask G) .....	150
Plot 8-65:	Occupied Bandwidth – 851.0125 MHz; OTP Narrowband 4-level FSK (Mask H) .....	151
Plot 8-66:	Occupied Bandwidth – 860.0000 MHz; OTP Narrowband 4-level FSK (Mask G) .....	152
Plot 8-67:	Occupied Bandwidth – 868.9875 MHz; OTP Narrowband 4-level FSK (Mask G) .....	153
Plot 8-68:	Occupied Bandwidth – 806.0125 MHz; OTP NPSPAC 4-level FSK (Mask G).....	154
Plot 8-69:	Occupied Bandwidth – 815.0000 MHz; OTP NPSPAC 4-level FSK (Mask G).....	155
Plot 8-70:	Occupied Bandwidth – 815.0000 MHz; OTP NPSPAC 4-level FSK (Mask H) .....	156
Plot 8-71:	Occupied Bandwidth – 823.9875 MHz; OTP NPSPAC 4-level FSK (Mask G).....	157
Plot 8-72:	Occupied Bandwidth – 851.0125 MHz; OTP NPSPAC 4-level FSK (Mask G).....	158
Plot 8-73:	Occupied Bandwidth – 851.0125 MHz; OTP NPSPAC 4-level FSK (Mask H) .....	159
Plot 8-74:	Occupied Bandwidth – 860.0000 MHz; OTP NPSPAC 4-level FSK (Mask G).....	160
Plot 8-75:	Occupied Bandwidth – 868.9875 MHz; OTP NPSPAC 4-level FSK (Mask G).....	161
Plot 8-76:	Occupied Bandwidth – 806.0125 MHz; OTP SMR 4-level FSK (Mask G) .....	162
Plot 8-77:	Occupied Bandwidth – 815.0000 MHz; OTP SMR 4-level FSK (Mask G) .....	163
Plot 8-78:	Occupied Bandwidth – 823.9875 MHz; OTP SMR 4-level FSK (Mask G) .....	164
Plot 8-79:	Occupied Bandwidth – 851.0125 MHz; OTP SMR 4-level FSK (Mask G) .....	165
Plot 8-80:	Occupied Bandwidth – 860.0000 MHz; OTP SMR 4-level FSK (Mask G) .....	166
Plot 8-81:	Occupied Bandwidth – 868.9875 MHz; OTP SMR 4-level FSK (Mask G) .....	167
Plot 8-82:	Occupied Bandwidth – 806.0125 MHz; C4FM (Mask D).....	168
Plot 8-83:	Occupied Bandwidth – 815.0000 MHz; C4FM (Mask D).....	169
Plot 8-84:	Occupied Bandwidth – 823.9875 MHz; C4FM (Mask D).....	170
Plot 8-85:	Occupied Bandwidth – 851.0125 MHz; C4FM (Mask D).....	171
Plot 8-86:	Occupied Bandwidth – 860.0000 MHz; C4FM (Mask D).....	172
Plot 8-87:	Occupied Bandwidth – 868.9875 MHz; C4FM (Mask D).....	173
Plot 8-88:	Occupied Bandwidth – 806.0125 MHz; C4FM (Mask H).....	174
Plot 8-89:	Occupied Bandwidth – 815.0000 MHz; C4FM (Mask H).....	175

Plot 8-90:	Occupied Bandwidth – 815.0000 MHz; C4FM (Mask G).....	176
Plot 8-91:	Occupied Bandwidth – 823.9875 MHz; C4FM (Mask G).....	177
Plot 8-92:	Occupied Bandwidth – 851.0125 MHz; C4FM (Mask H).....	178
Plot 8-93:	Occupied Bandwidth – 860.0000 MHz; C4FM (Mask G).....	179
Plot 8-94:	Occupied Bandwidth – 868.9875 MHz; C4FM (Mask G).....	180
Plot 8-95:	Occupied Bandwidth – 806.0125 MHz; C4FM Phase 2 (Mask D) .....	181
Plot 8-96:	Occupied Bandwidth – 815.0000 MHz; C4FM Phase 2 (Mask D) .....	182
Plot 8-97:	Occupied Bandwidth – 823.9875 MHz; C4FM Phase 2 (Mask D) .....	183
Plot 8-98:	Occupied Bandwidth – 851.0125 MHz; C4FM Phase 2 (Mask D) .....	184
Plot 8-99:	Occupied Bandwidth – 860.0000 MHz; C4FM Phase 2 (Mask D) .....	185
Plot 8-100:	Occupied Bandwidth – 868.9875 MHz; C4FM Phase 2 (Mask D) .....	186
Plot 8-101:	Occupied Bandwidth – 806.0125 MHz; C4FM Phase 2 (Mask H) .....	187
Plot 8-102:	Occupied Bandwidth – 815.0000 MHz; C4FM Phase 2 (Mask G) .....	188
Plot 8-103:	Occupied Bandwidth – 815.0000 MHz; C4FM Phase 2 (Mask H) .....	189
Plot 8-104:	Occupied Bandwidth – 823.9875 MHz; C4FM Phase 2 (Mask G) .....	190
Plot 8-105:	Occupied Bandwidth – 851.0125 MHz; C4FM Phase 2 (Mask H) .....	191
Plot 8-106:	Occupied Bandwidth – 860.0000 MHz; C4FM Phase 2 (Mask G) .....	192
Plot 8-107:	Occupied Bandwidth – 868.9875 MHz; C4FM Phase 2 (Mask G) .....	193
Plot 10-1:	Modulation Characteristics - Audio Frequency Response – 768.0125 MHz .....	205
Plot 10-2:	Modulation Characteristics - Audio Frequency Response – 775.9875 MHz .....	206
Plot 10-3:	Modulation Characteristics - Audio Frequency Response – 805.9875 MHz .....	207
Plot 10-4:	Modulation Characteristics - Audio Frequency Response – 806.0125 MHz .....	208
Plot 10-5:	Modulation Characteristics - Audio Frequency Response – 815.0000 MHz .....	209
Plot 10-6:	Modulation Characteristics - Audio Frequency Response – 823.9875 MHz .....	210
Plot 10-7:	Modulation Characteristics - Audio Frequency Response – 851.0125 MHz .....	211
Plot 10-8:	Modulation Characteristics - Audio Frequency Response – 860.0000 MHz .....	212
Plot 10-9:	Modulation Characteristics - Audio Frequency Response – 868.9875 MHz .....	213
Plot 10-10:	Modulation Characteristics – Audio Low Pass Filter – 768.0125 MHz.....	214
Plot 10-11:	Modulation Characteristics – Audio Low Pass Filter – 775.9875 MHz.....	215
Plot 10-12:	Modulation Characteristics – Audio Low Pass Filter – 805.9875 MHz.....	216
Plot 10-13:	Modulation Characteristics – Audio Low Pass Filter – 815.0000 MHz.....	217
Plot 10-14:	Modulation Characteristics – Audio Low Pass Filter – 860.0000 MHz.....	218
Plot 10-15:	Modulation Characteristics – Modulation Limiting – 768.0125 MHz; Positive Peak; NB....	219
Plot 10-16:	Modulation Characteristics – Modulation Limiting - 768.0125 MHz; Negative Peak; NB ...	220
Plot 10-17:	Modulation Characteristics – Modulation Limiting – 775.9875 MHz; Positive Peak; NB....	221
Plot 10-18:	Modulation Characteristics – Modulation Limiting - 775.9875 MHz; Negative Peak; NB ...	222
Plot 10-19:	Modulation Characteristics – Modulation Limiting – 805.9875 MHz; Positive Peak; NB....	223
Plot 10-20:	Modulation Characteristics – Modulation Limiting – 805.9875 MHz; Negative Peak; NB ..	224
Plot 10-21:	Modulation Characteristics – Modulation Limiting – 815 MHz; Positive Peak; NB .....	225
Plot 10-22:	Modulation Characteristics – Modulation Limiting – 815 MHz; Negative Peak; NB .....	226
Plot 10-23:	Modulation Characteristics – Modulation Limiting - 860 MHz; Positive Peak; NB .....	227
Plot 10-24:	Modulation Characteristics – Modulation Limiting - 860 MHz; Negative Peak; NB.....	228
Plot 10-25:	Modulation Characteristics – Modulation Limiting – 815 MHz; Positive Peak; WB.....	229
Plot 10-26:	Modulation Characteristics – Modulation Limiting – 815 MHz; Negative Peak; WB .....	230
Plot 10-27:	Modulation Characteristics – Modulation Limiting - 860 MHz; Positive Peak; WB.....	231
Plot 10-28:	Modulation Characteristics – Modulation Limiting - 860 MHz; Negative Peak; WB.....	232

---

---

### Table of Appendixes

---

---

Appendix A:	FCC Part 1.1307, 1.1310, 2.1091, 2.1093: RF Exposure.....	236
Appendix B:	FCC Agency Authorization.....	237
Appendix C:	FCC & IC Short-Term and Permanent Confidentiality Request Letter .....	238
Appendix D:	IC Letters.....	239
Appendix E:	Canadian-Based Representative Attestation .....	240
Appendix F:	Part 90 Subpart R Application Review.....	242
Appendix G:	AFC Attestation .....	243
Appendix H:	Label Information.....	244
Appendix I:	Operational Description .....	245
Appendix J:	Parts List .....	246
Appendix K:	Test / Tune Procedure .....	247
Appendix L:	Schematics.....	248
Appendix M:	Block Diagram .....	249
Appendix N:	Manual .....	250
Appendix O:	Test Configuration Photographs.....	251
Appendix P:	External Photographs .....	253
Appendix Q:	Internal Photographs .....	254

---

---

### Table of Photographs

---

---

Photograph 1:	Radiated Emissions .....	251
Photograph 2:	Radiated Emissions .....	252

## 1 Test Result Summary

Test	FCC & IC References	Result
RF Power Output	FCC 2.1046(a), 90.541(b), 90.542(a)(6) IC RSS-119 5.4	Complies
Spurious Emissions at Antenna Terminals	FCC 2.1051, 90.210, IC RSS-119 5.8:	Complies
Field Strength of Spurious Radiation	FCC 2.1053(a), 90.543(c), (d), and (f) IC RSS-119 5.8, IC RSS-119 5.11	Complies
Occupied Bandwidth/Emission Masks	FCC 2.1049(c)(1), 90.210 IC RSS-119 5.8	Complies
Adjacent Channel Power	FCC 90.543(b) IC RSS-119 5.8.9	Complies
Frequency Stability vs. Temperature and Voltage	FCC 2.1055, 90.213, 90.539 IC RSS-119 5.3	Complies
Modulation Characteristics	FCC 2.1047(a)(b)	Complies
Transient Frequency Response	FCC 90.214 IC RSS-119 5.9	Complies

## 2 General Information

The following Certification Report is prepared on behalf of **Harris Corporation** in accordance with the Federal Communications Commission and Industry Canada rules and regulations. The Equipment Under Test (EUT) was the **XL-185P 7/8 Non-Rebanded C1D2 Portable Land Mobile Radio; FCC ID: OWDTR-0148-E, IC: 3636B-0148.**

The radio is subject to FCC DoC. DoC testing was performed and the data is contained in a separate DoC report.

All measurements contained in this application were conducted in accordance with the applicable sections of FCC Rules and Regulations CFR 47 §2 and 90. Calibration checks are performed regularly on the instruments, and all accessories including high pass filter, coaxial attenuator, preamplifier and cables.

### 2.1 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located on the parking lot of Rhein Tech Laboratories, Inc. 360 Herndon Parkway, Suite 1400, Herndon, Virginia 20170. This site has been fully described in a report submitted to, and approved by, the Federal Communications Commission to perform AC line conducted and radiated emissions testing.

### 2.2 Related Submittal(s)/Grant(s)

This FCC and IC application includes an Industry Canada Family Certification application, which includes 4 model numbers under IC: 3636B-0148:

XS-PFS2M, XS-PFS2Y, XS-PPS2M, XS-PPS2Y

### 2.3 Grant Notes

Manufacturer's Rated Power:

700 MHz Bands: 3W  
800 MHz Bands: 3W

### 2.4 Tested System Details

The test sample was received on December 18, 2015. Listed below are the identifiers and descriptions of all equipment, cables, and internal devices used with the EUT for this test, as applicable.

The EUT includes a System model and a Scan model, the difference being that the System model has a DTMF keypad. The System model is considered to be representative of the radio family and to have the worst case emissions, and was therefore used for testing.

The device was programmed for multiple modes of operation and modulation types.

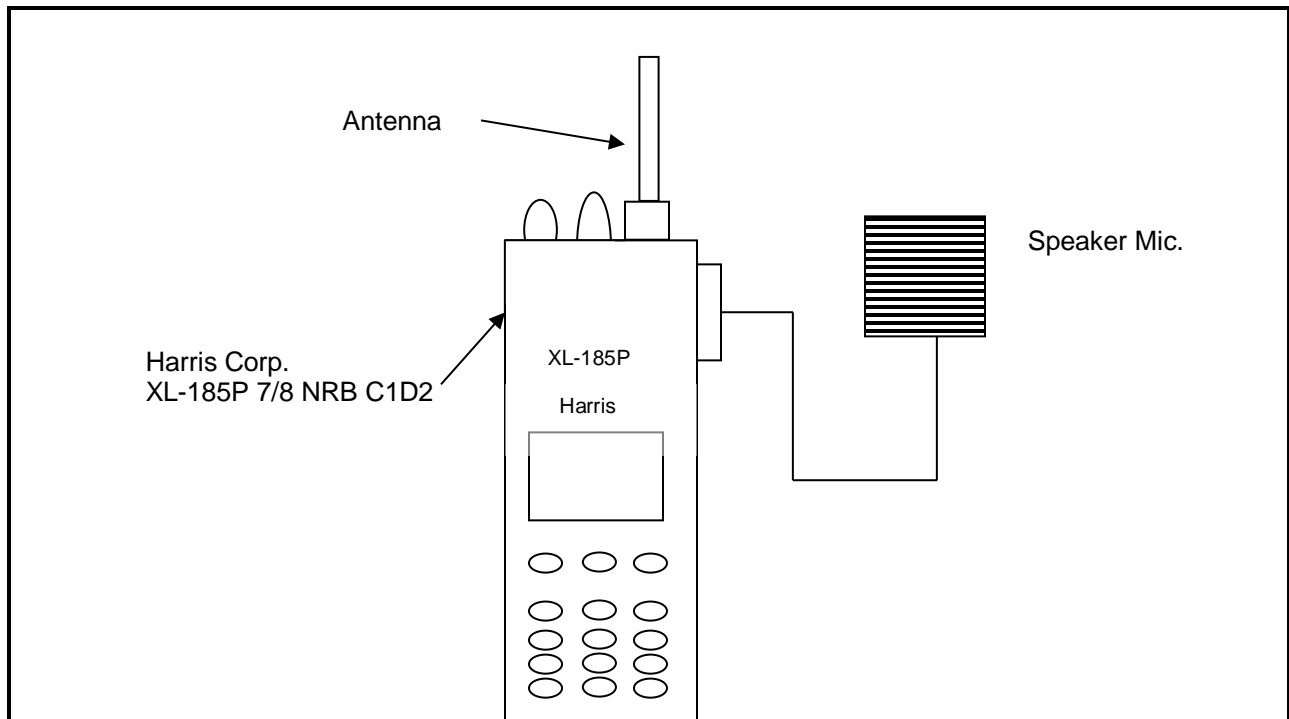
**Table 2-1: Equipment Under Test (EUT)**

Part	Manufacturer	Model	SN	FCC ID	RTL Bar Code
Radio	Harris Corporation	XL-185P 7/8 NRB C1D2	A-40184xxxxxx (System)	OWDTR-0148-E	21965

**Table 2-2: Auxiliary Equipment**

Part	Manufacturer	Model	PN/SN	FCC ID	RTL Bar Code
AC Adapter	FP	FWA020012A	002844	N/A	21549
Charger	Harris Corporation	Single Bay Charger	14035-1800-01/ 00060	N/A	21550
Speaker/ Microphone	Harris Corporation	EM105	N/A	N/A	21563
Full-Spectrum Multiband Antenna	Harris Corporation	14035-4000-01	T1-11	N/A	21556
Antenna (762-870 MHz)	Harris Corporation	14035-4440-02	N/A	N/A	21719
7.2V Li-Ion Battery	Harris Corporation	Li-Ion	22	N/A	21551
7.2V Li-Ion Battery	Harris Corporation	BAT	L-CASE-R-HR003	N/A	21552
Battery Eliminator	Harris Corporation	N/A	14035-4300-01	N/A	21553
Audio Breakout	Harris Corporation	12082-7980-01	ENG027	N/A	20599
Power Supply	Alinco	DM-33MVT 32A	1638	N/A	901124

**Figure 2-1: Configuration of Tested System**



**3 FCC Rules and Regulations Part 2.1033(C)(8): Voltages and Currents Through The Final Amplifying Stage**

700 MHz: 7.4 V / 1.79 A

800 MHz: 7.4 V / 1.55 A

**4 FCC Rules and Regulations Part 2.1046(a): RF Power Output: Conducted, Part 90.541(b)/90.542(a)(6)**

**4.1 Test Procedure**

TIA-603-D 2010, section 2.2.1

The EUT was connected to a coaxial attenuator having a 50  $\Omega$  load impedance.

**Manufacturer's Rated Power:**

700 MHz Bands: 3W

800 MHz Bands: 3W

## 4.2 Test Data

**Table 4-1: RF Conducted Output Power - Measured**

Frequency (MHz)	Power (dBm)	Power (W)
768.0125	34.3	2.7
769.0125	34.4	2.8
771.0125	34.4	2.8
775.0125	34.4	2.8
775.9875	34.4	2.8
798.0125	34.4	2.8
799.0125	34.4	2.8
806.0125	34.9	3.1
815.0000	35.0	3.2
823.9875	35.0	3.2
851.0125	35.0	3.2
860.0000	34.9	3.1
868.9875	34.9	3.1
806.0125	34.9	3.1
815.0000	35.0	3.2
823.9875	35.0	3.2

Notes: Data presented is for Analog mode. All other modes were investigated and found to have equivalent power within measurement tolerances.

**Table 4-2: Test Equipment Used For Testing RF Power Output - Conducted**

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	11/13/16
900948	Weinschel Corporation	47-10-43	Attenuator DC-18 GHz 10 dB 50W	BH1487	9/10/16
901536	Weinschel Corporation	48-40-34	Attenuator DC-18 GHz 40 dB 100W	CB6627	9/11/16

### Test Personnel:

Daniel Baltzell EMC Test Engineer	 Signature	December 13, 2014; January 8, 2016 Dates of Test
--------------------------------------	--	--



## 5 FCC Rules and Regulations Part 2.1051: Spurious Emissions at Antenna Terminals; Part 90.210: Emission Limitations

### 5.1 Test Procedure

TIA-603-D 2010, Section 2.2.13

The transmitter is terminated with a 50  $\Omega$  load and interfaced with a spectrum analyzer.

Device with digital modulation: Modulated to its maximum extent using a pseudo-random data sequence.

### 5.2 Test Data

Frequency range of measurement per Part 2.1057: 9 kHz to 10 x Fc

Limits: (43 + 10 LOG P(W)) for wideband and 50 + 10 LOG P(W)) for narrowband

The following channels (in MHz) were investigated:

**700 MHz:** 768.0125, 769.0125, 771.0125, 775.0125, 775.9875, 798.0125, 799.0125, 801.0125, 805.0125, 805.9875

**800 MHz:** 806.0125, 815.0000, 823.9875, 851.0125, 860.0000, and 868.9875

Both high and low power settings were checked; high power was found to be worst case. All modes were investigated and analog mode is presented as representative data.

All frequencies were found to be greater than 20 dB below the limit; per FCC 2.1051 no data is being reported.

**Table 5-1: Test Equipment Used For Testing Spurious Emissions**

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
901129	Par Electronics	188-174 (25W)	VHF Notch Filters	N/A	9/16/16
901135	Par Electronics	400-512 (25W)	UHF Notch Filter	N/A	9/16/16
901128	Par Electronics	806-902 (25W)	UHF Notch Filter	N/A	9/16/16
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	11/13/16
900948	Weinschel Corporation	47-10-43	Attenuator DC-18 GHz 10 dB 50W	BH1487	9/10/16
900819	Weinschel Corporation	2	10 dB Attenuator; 5 W	BF0830	9/10/16
901536	Weinschel Corporation	48-40-34	Attenuator DC-18 GHz 40 dB 100W	CB6627	9/11/16

Rhein Tech Laboratories, Inc.  
360 Herndon Parkway  
Suite 1400  
Herndon, VA 20170  
<http://www.rheintech.com>

Client: Harris Corporation  
Model: XL-185P 7/8 NRB C1D2  
IDs: - OWDTR-0148-E/3636B-0148  
Standards: FCC Parts 2, 90/IC RSS-119  
Report #: 2017070TNF

**Test Personnel:**

<p>Daniel Baltzell EMC Test Engineer</p>	 Signature	<p>December 18, 2014 and January 8, 2016 Dates of Test</p>
--	--	--

## 6 FCC Rules and Regulations Part 90.543(a): Emission Limitations: ACP Requirements

Effective October 23, 2007, transmitters designed to operate in the 769–775 MHz and 799–805 MHz frequency bands must meet the emission limitations in paragraphs (a) through (d) of this section. Transmitters operating in the 763–768 MHz and 793–798 MHz bands must meet the emission limitations in (e) of this section.

### 6.1 Test Procedure

Device with digital modulation: Modulated to its maximum extent using a pseudo-random data sequence.

For a Portable transmitter designed to operate with a 12.5 kHz channel bandwidth, the ACP shall be in accordance with the values in the following table:

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP Relative (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 kHz to 12 MHz	30(s)	-75
12 MHz to paired receive band	30(s)	-75
In the paired receive band	30(s)	-100

For a Portable transmitter designed to operate with a 25 kHz channel bandwidth, the ACP shall be in accordance with the values in the following table:

Offset from Center Frequency (kHz)	Measurement Bandwidth (kHz)	Maximum ACP Relative (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

### **FCC Rules and Regulations Part 90.543(b)**

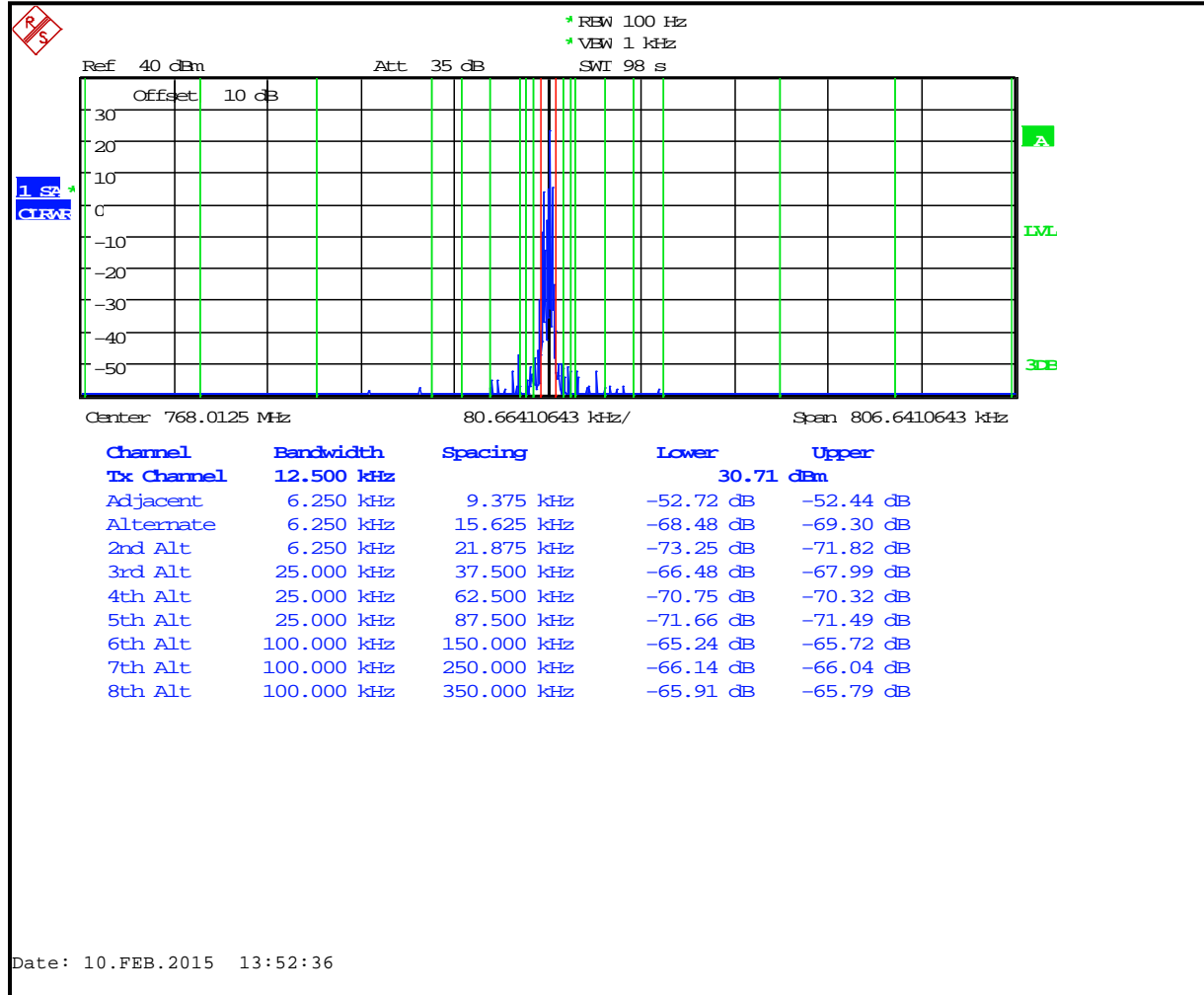
Setting Reference Level - Part 90.543(b)(1): Using a spectrum analyzer capable of ACP measurements, set the measurement bandwidth to the channel size. Set the frequency offset of the measurement to zero and adjust the center frequency of the spectrum analyzer to give the power level in the measurement bandwidth. Record this power as the reference power level.

Measuring the power level at the frequency offset <400 kHz - Part 90.543(b)(2): Using a spectrum analyzer capable of adjacent channel power (ACP) measurements, set the measurement bandwidth as shown in table. Measure ACP in dBm. These measurements are made at maximum power. Calculate the coupled power by subtracting the measurements made in this step from the reference power level. The absolute ACP values must be less than the values given in the table for each condition.

Measuring the power level at the frequency offset >400 kHz - Part 90.543(b)(3): Set the spectrum analyzer to 30 kHz resolution bandwidth, 1 MHz video bandwidth and sample detection mode. Sweep +/- 6 MHz from the carrier frequency. Set the reference level to the RMS value of the transmitter power and note the power. The response at frequencies >400 kHz must be less than the values listed in the table.

## 6.2 Test Data

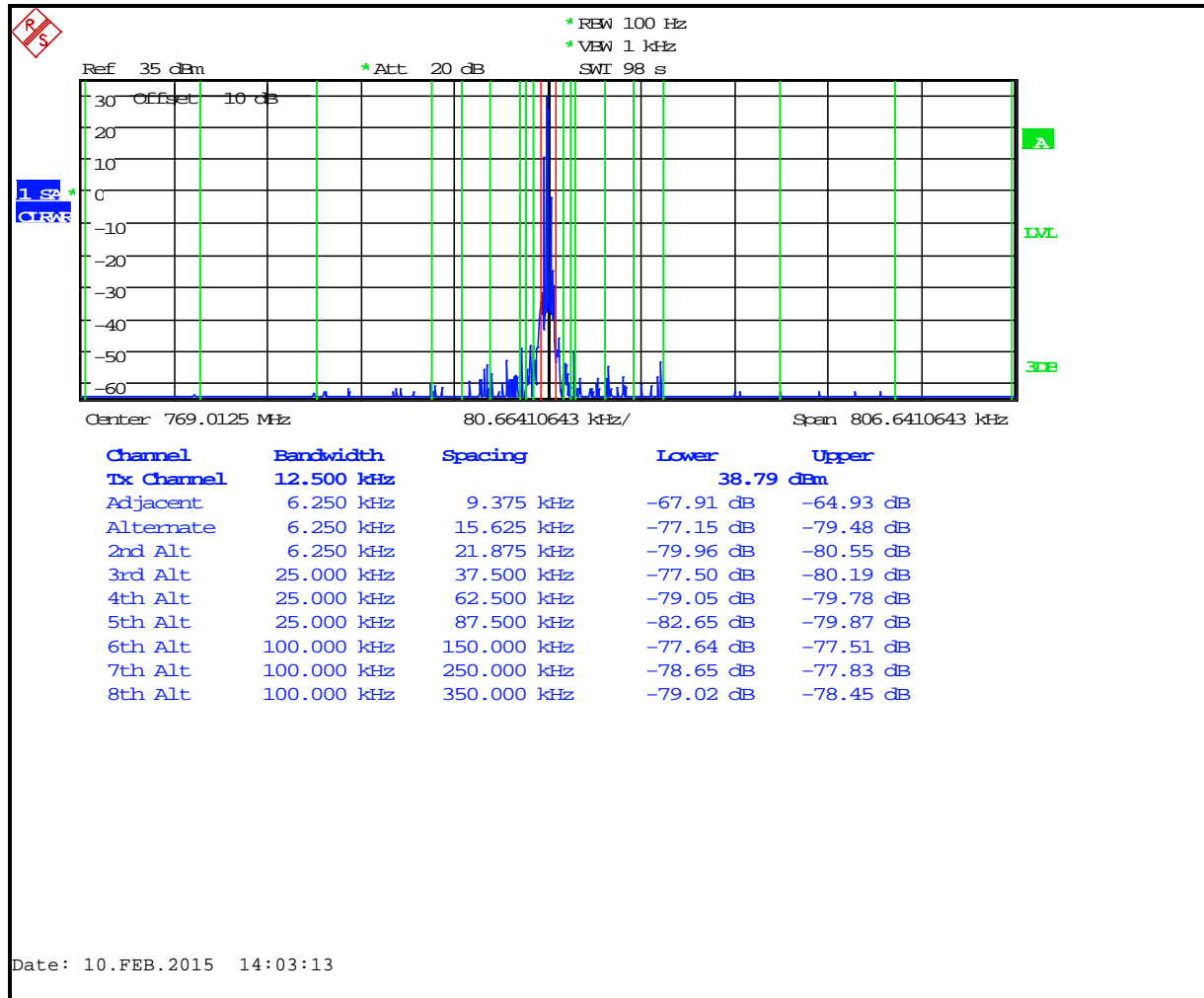
**Plot 6-1: Adjacent Channel Power – 768.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-1: Adjacent Channel Power – 768.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-82.1
12 MHz to receive band	30(s)	-75	-102.5
In receive band	30(s)	-100	-111.8

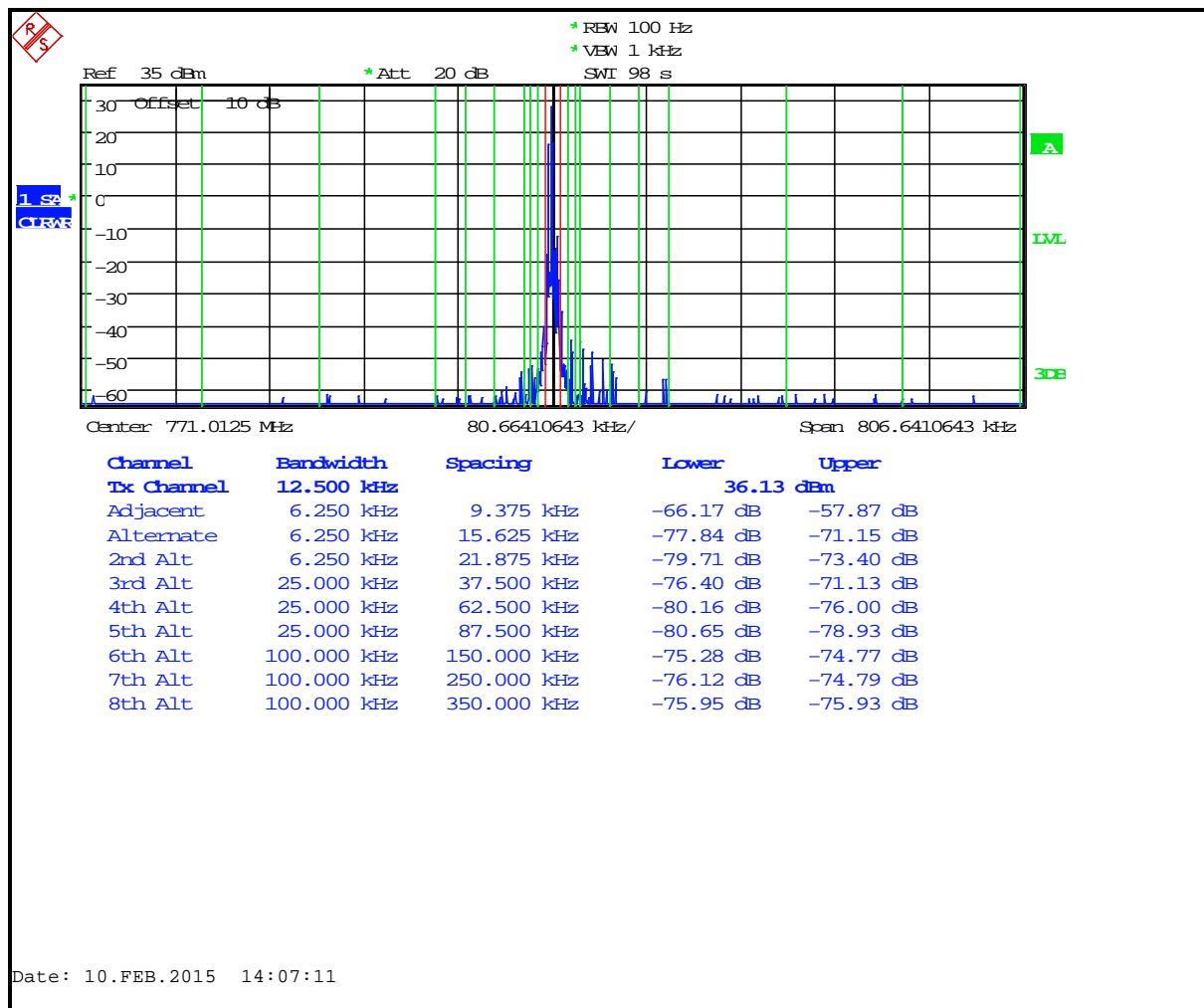
**Plot 6-2: Adjacent Channel Power – 769.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-2: Adjacent Channel Power – 769.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.7
12 MHz to receive band	30(s)	-75	-105.3
In receive band	30(s)	-100	-111.9

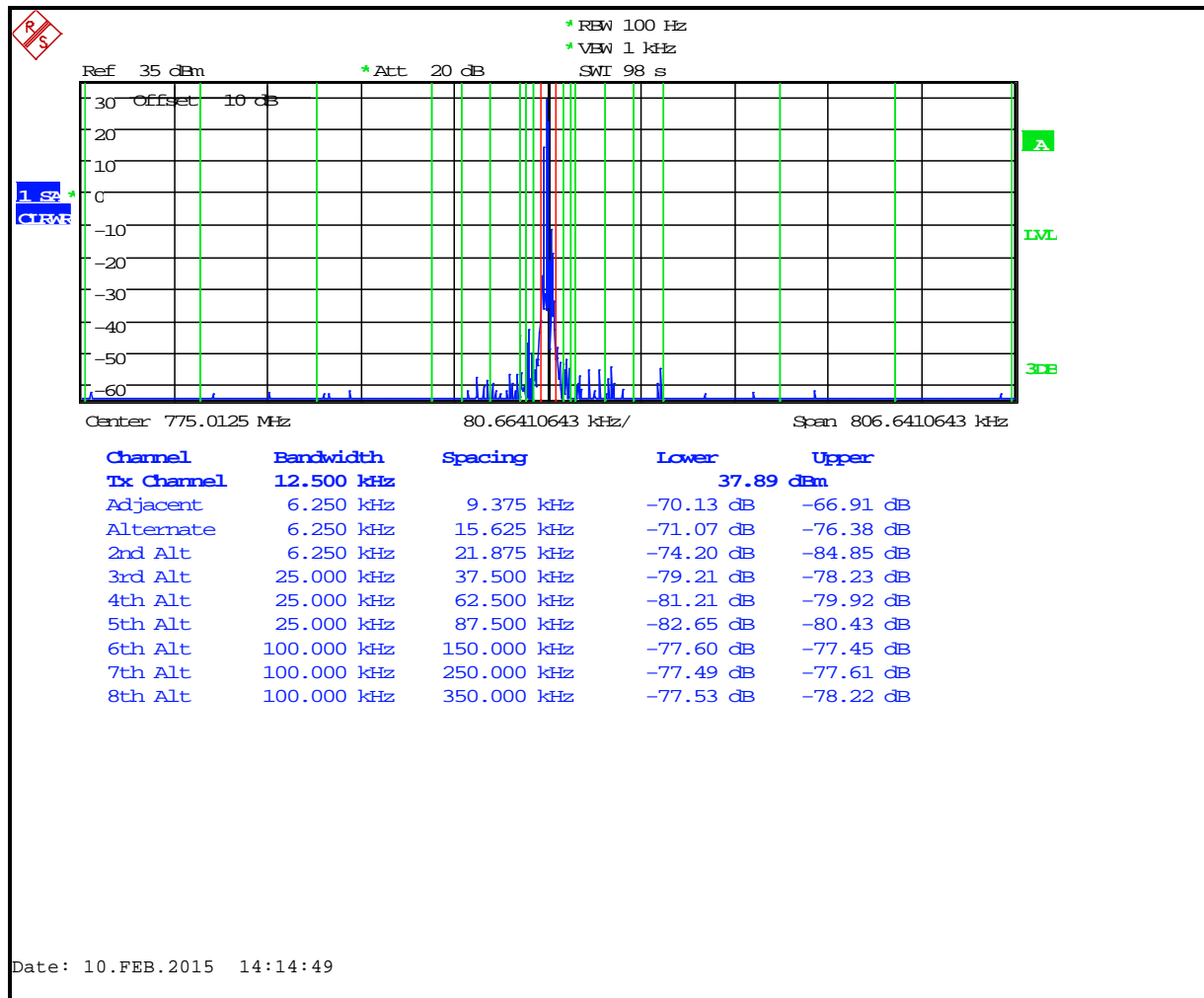
**Plot 6-3: Adjacent Channel Power – 771.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-3: Adjacent Channel Power – 771.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.4
12 MHz to receive band	30(s)	-75	-107.3
In receive band	30(s)	-100	-111.2

**Plot 6-4: Adjacent Channel Power – 775.0125 MHz; Narrowband Analog; <400 kHz**

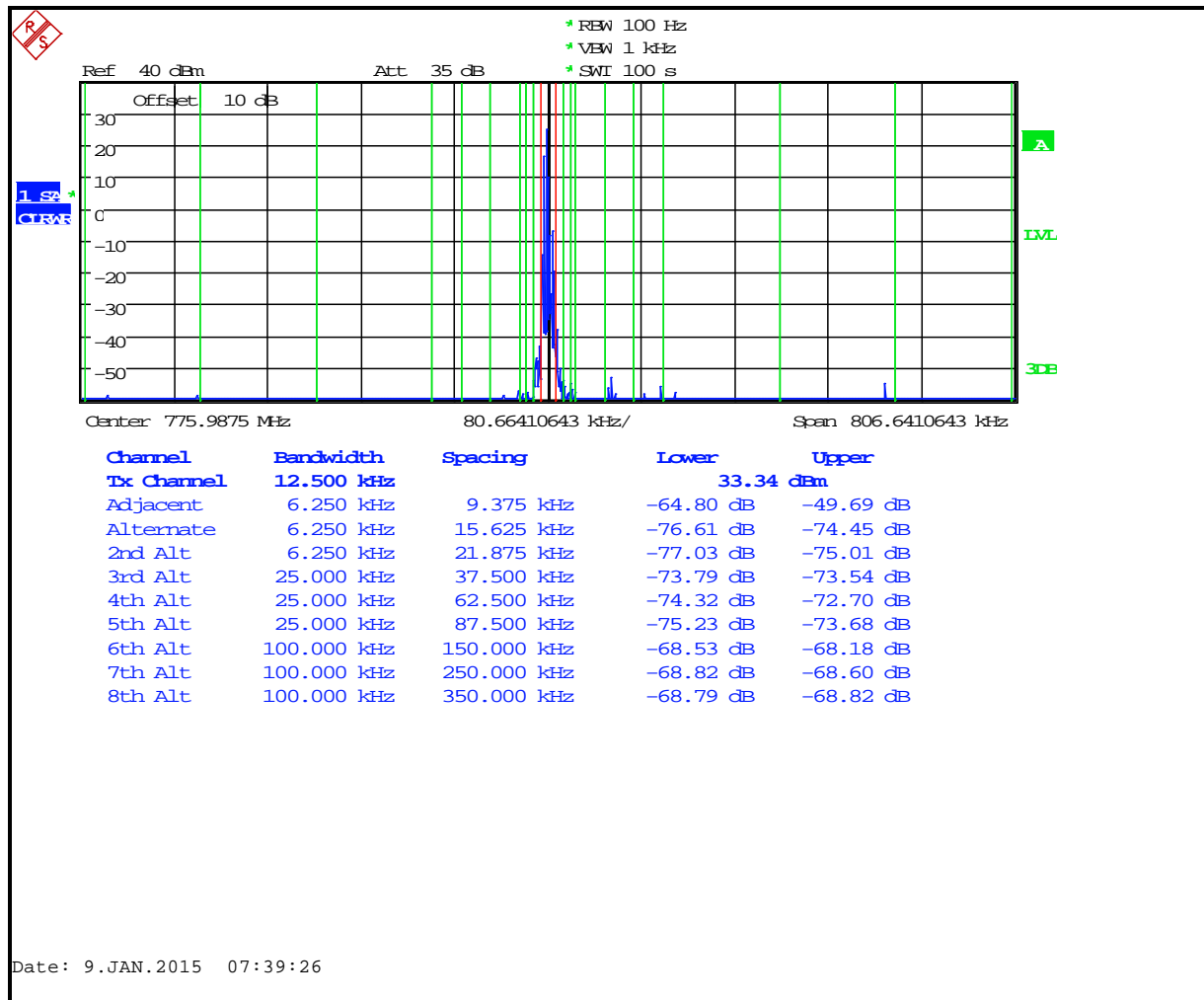


**Table 6-4: Adjacent Channel Power – 775.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-82.0
12 MHz to receive band	30(s)	-75	-104.7
In receive band	30(s)	-100	-110.1



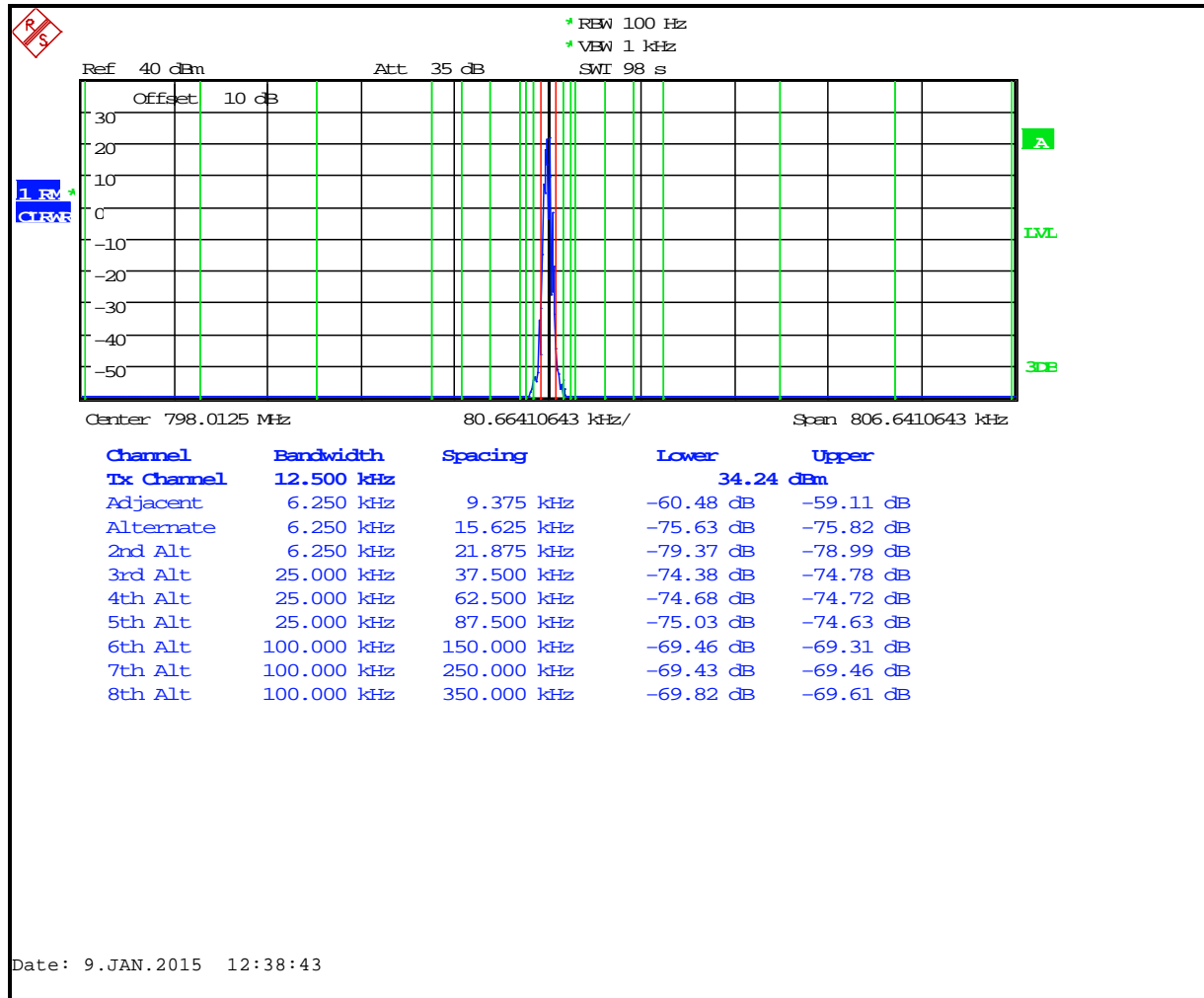
**Plot 6-5: Adjacent Channel Power – 775.9875 MHz; Narrowband Analog; <400 kHz**



**Table 6-5: Adjacent Channel Power – 775.9875 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.4
12 MHz to receive band	30(s)	-75	-101.4
In receive band	30(s)	-100	-107.8

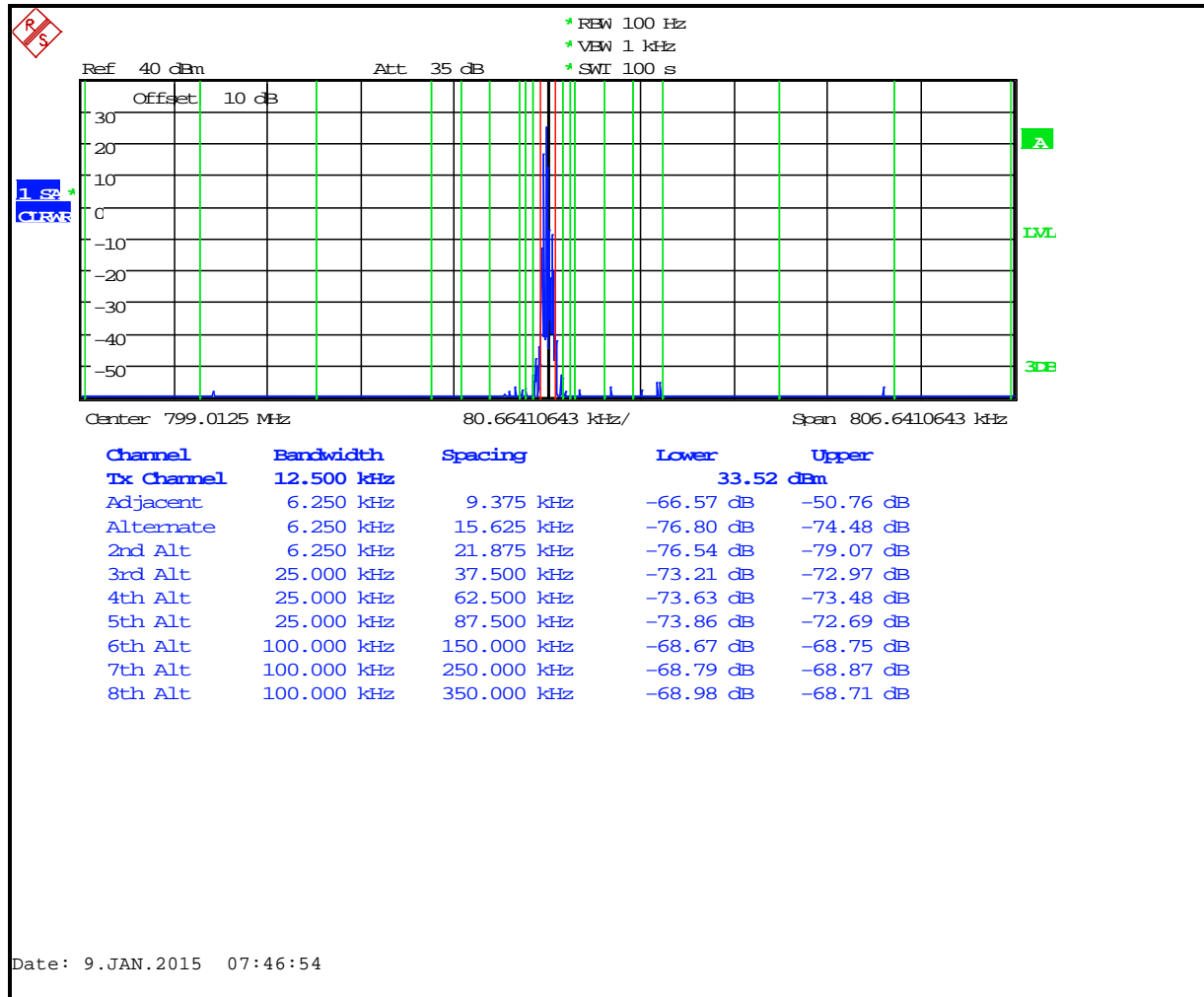
**Plot 6-6: Adjacent Channel Power – 798.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-6: Adjacent Channel Power – 798.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.4
12 MHz to receive band	30(s)	-75	-99.3
In receive band	30(s)	-100	-102.4

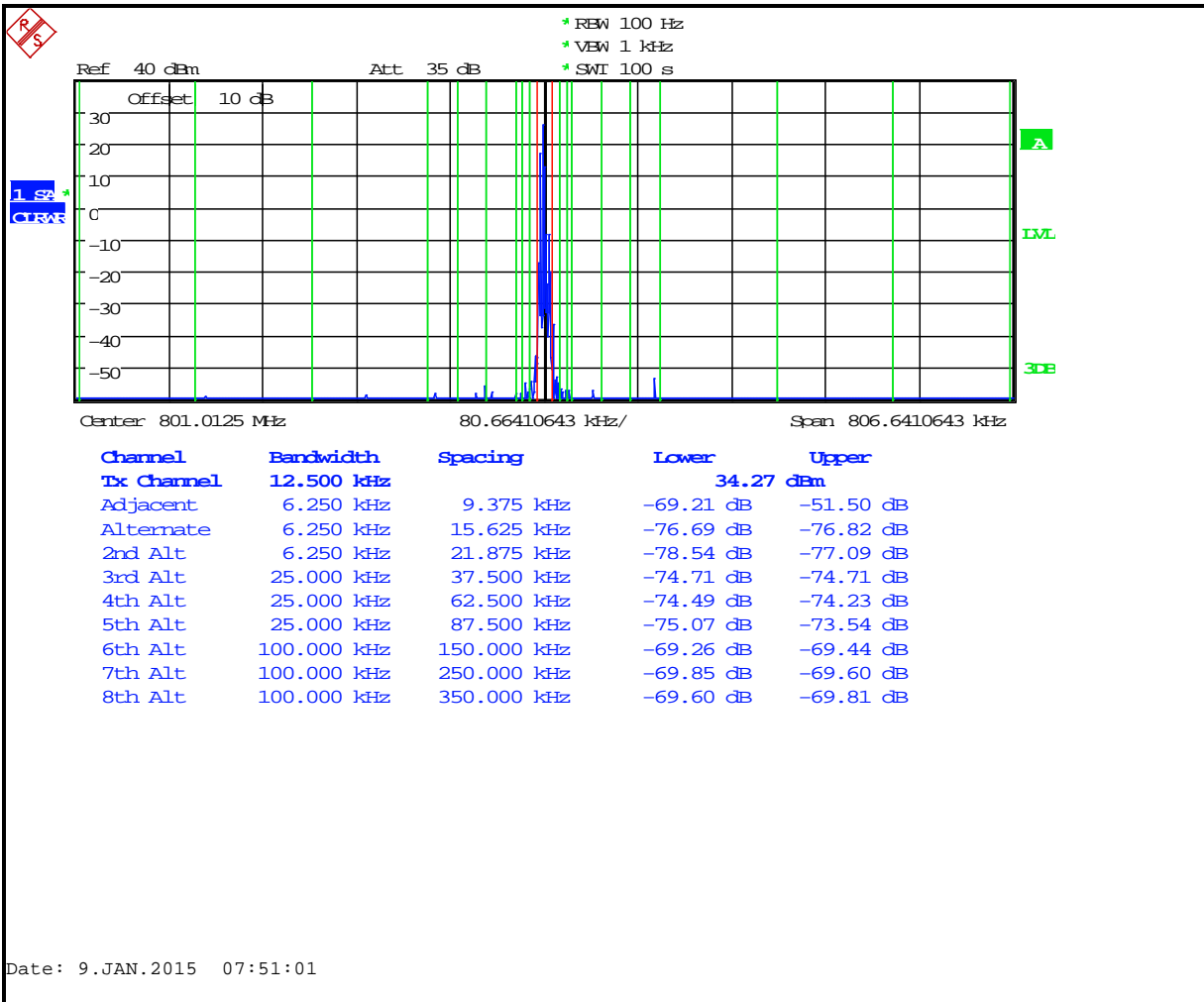
**Plot 6-7: Adjacent Channel Power – 799.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-7: Adjacent Channel Power – 799.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.5
12 MHz to receive band	30(s)	-75	-99.5
In receive band	30(s)	-100	-101.8

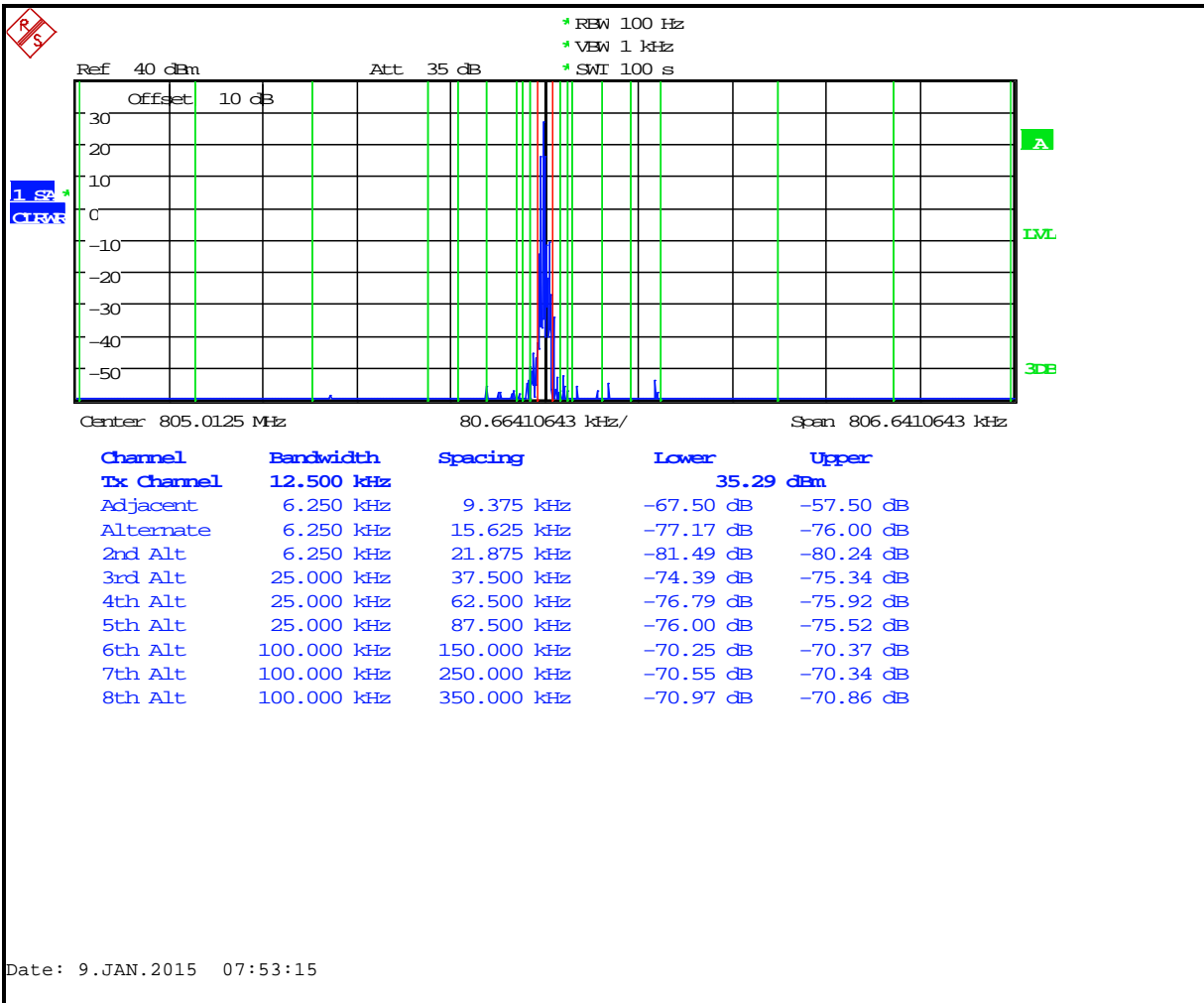
**Plot 6-8: Adjacent Channel Power – 801.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-8: Adjacent Channel Power – 801.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-82.1
12 MHz to receive band	30(s)	-75	-101.4
In receive band	30(s)	-100	-105.8

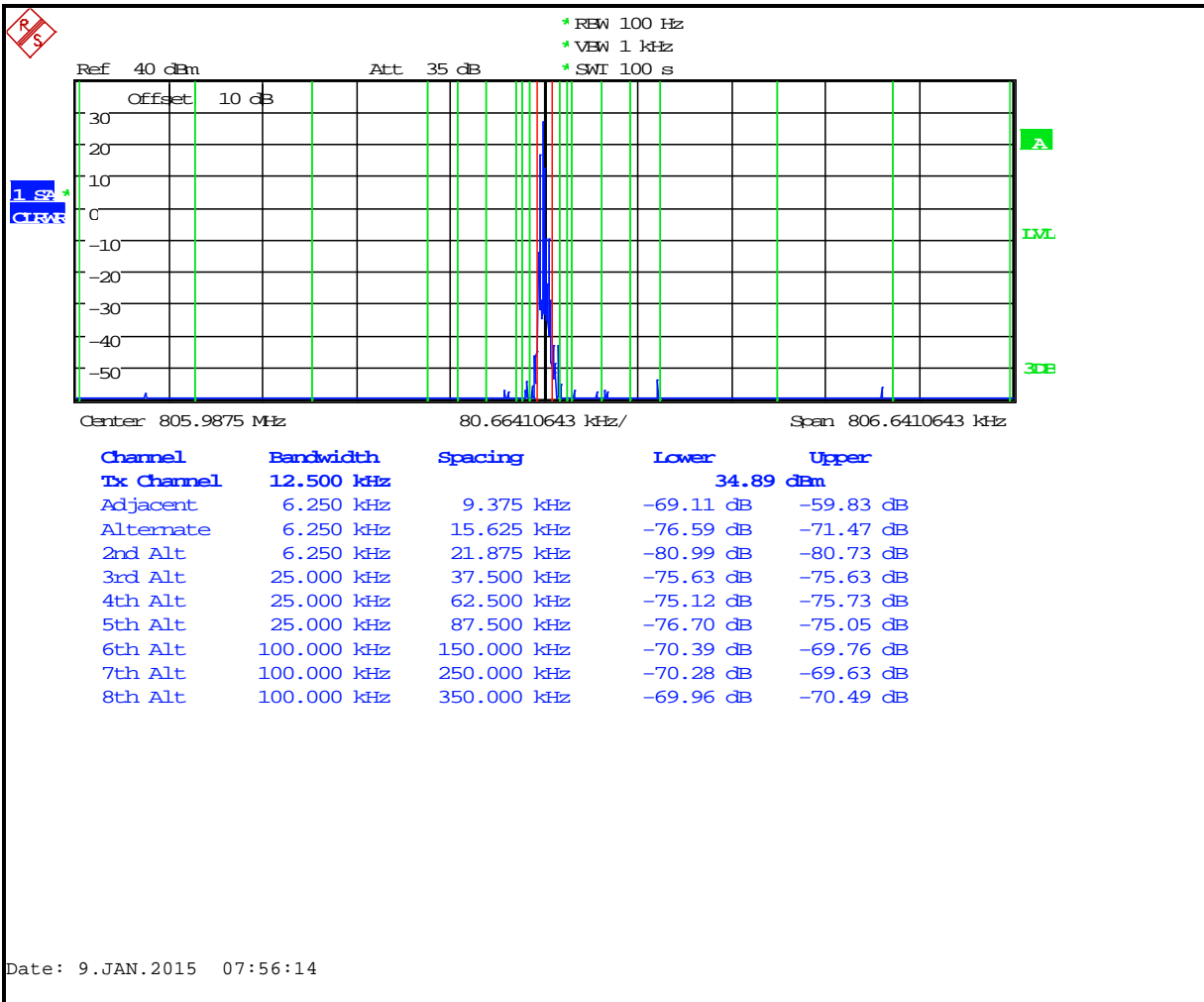
**Plot 6-9: Adjacent Channel Power – 805.0125 MHz; Narrowband Analog; <400 kHz**



**Table 6-9: Adjacent Channel Power – 805.0125 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.3
12 MHz to receive band	30(s)	-75	-93.6
In receive band	30(s)	-100	-107.6

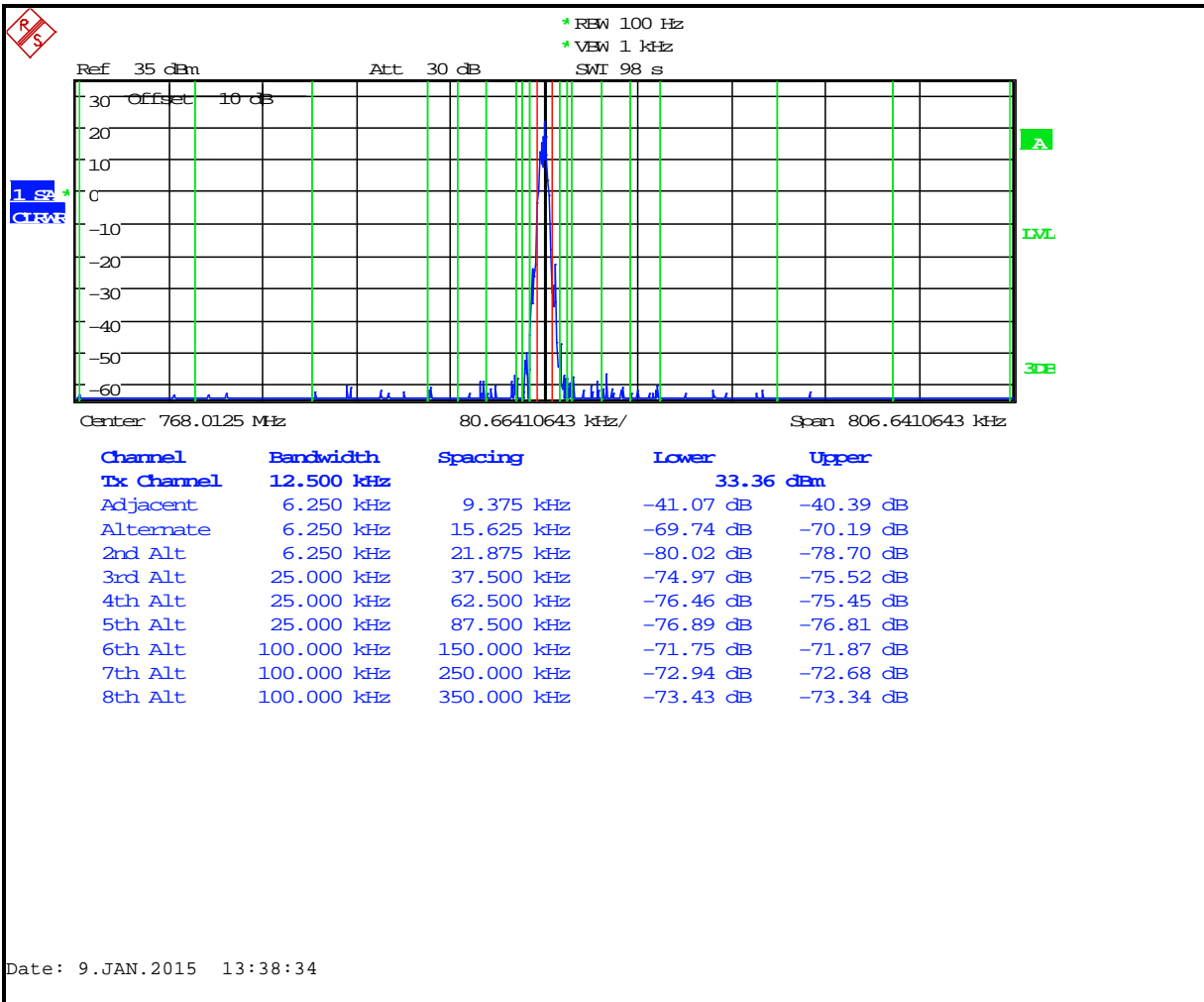
**Plot 6-10: Adjacent Channel Power – 805.9875 MHz; Narrowband Analog; <400 kHz**



**Table 6-10: Adjacent Channel Power – 805.9875 MHz; Narrowband Analog; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-77.1
12 MHz to receive band	30(s)	-75	-95.1
In receive band	30(s)	-100	-106.6

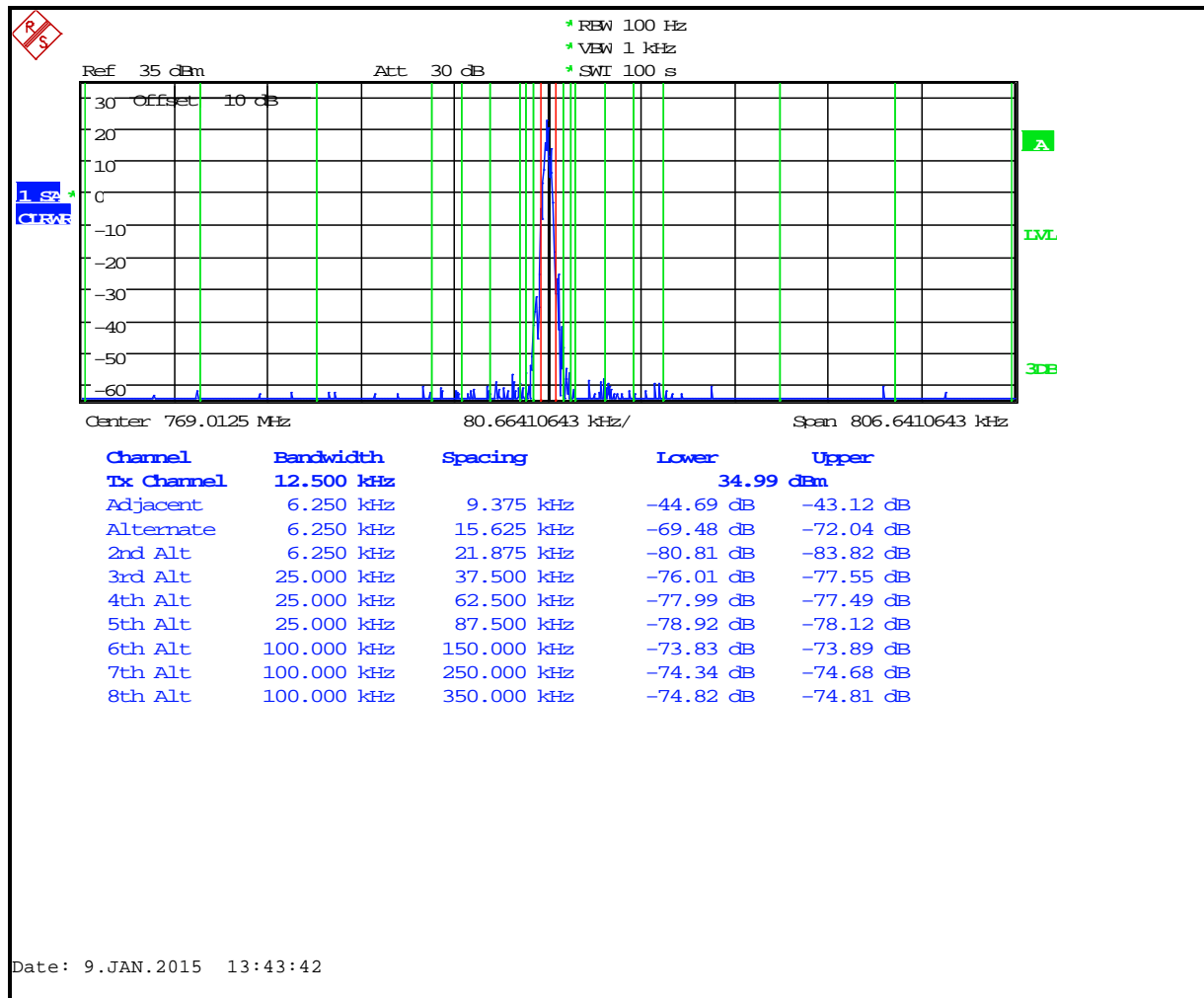
**Plot 6-11: Adjacent Channel Power – 768.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-11: Adjacent Channel Power – 768.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-86.2
12 MHz to receive band	30(s)	-75	-105.2
In receive band	30(s)	-100	-107.0

**Plot 6-12: Adjacent Channel Power – 769.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**

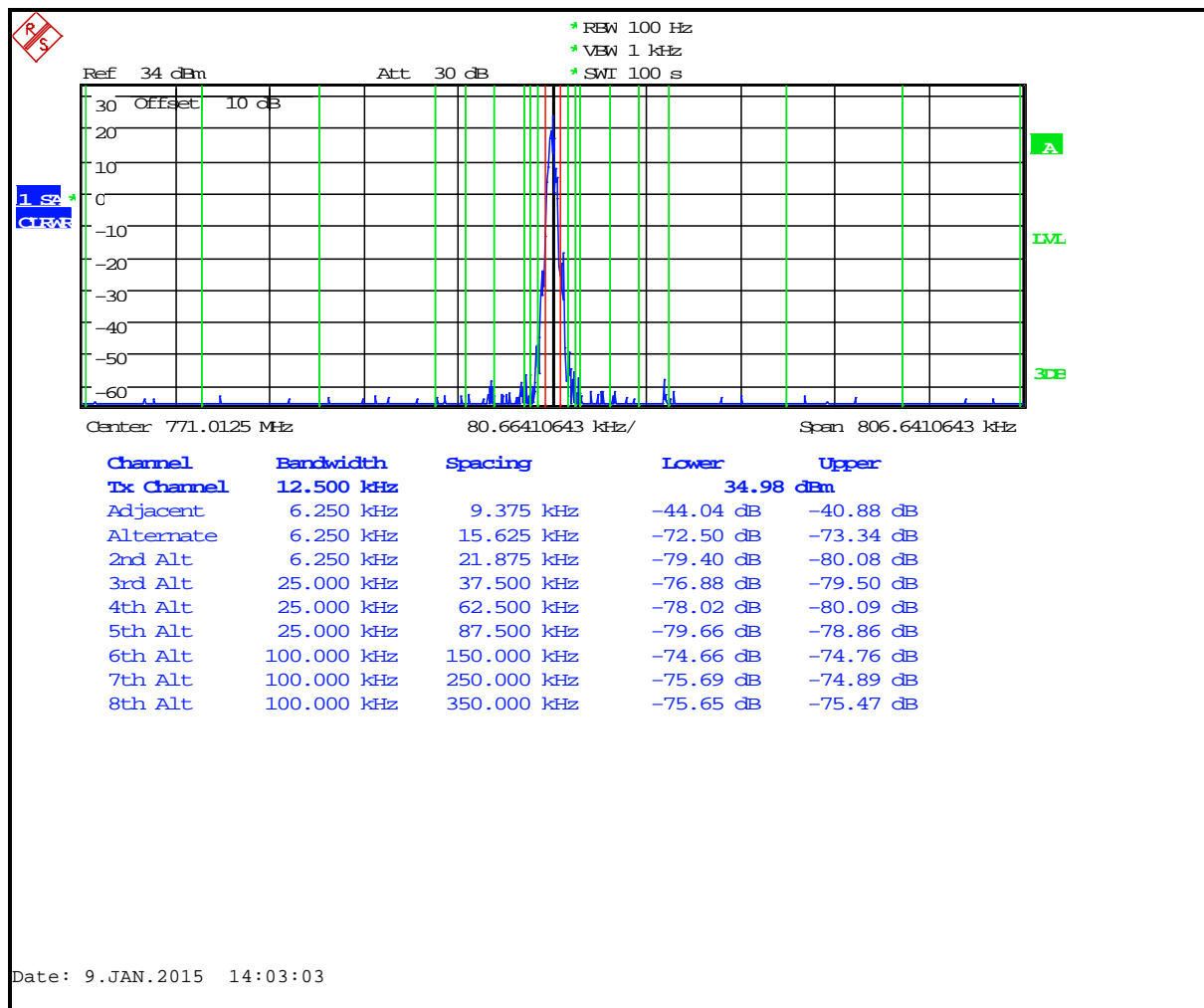


**Table 6-12: Adjacent Channel Power – 769.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.4
12 MHz to receive band	30(s)	-75	-106.4
In receive band	30(s)	-100	-105.7



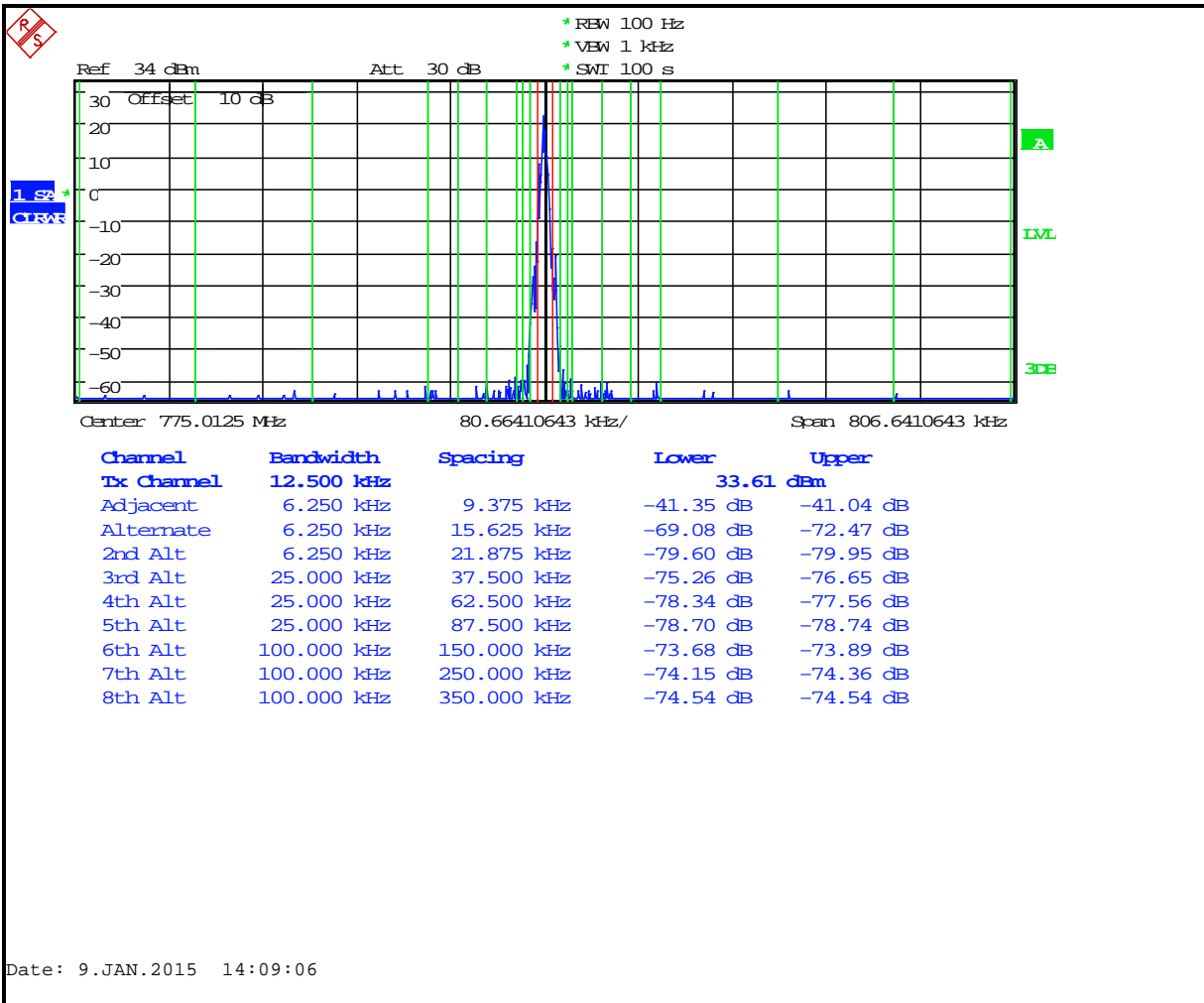
**Plot 6-13: Adjacent Channel Power – 771.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-13: Adjacent Channel Power – 771.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-83.8
12 MHz to receive band	30(s)	-75	-107.3
In receive band	30(s)	-100	-107.2

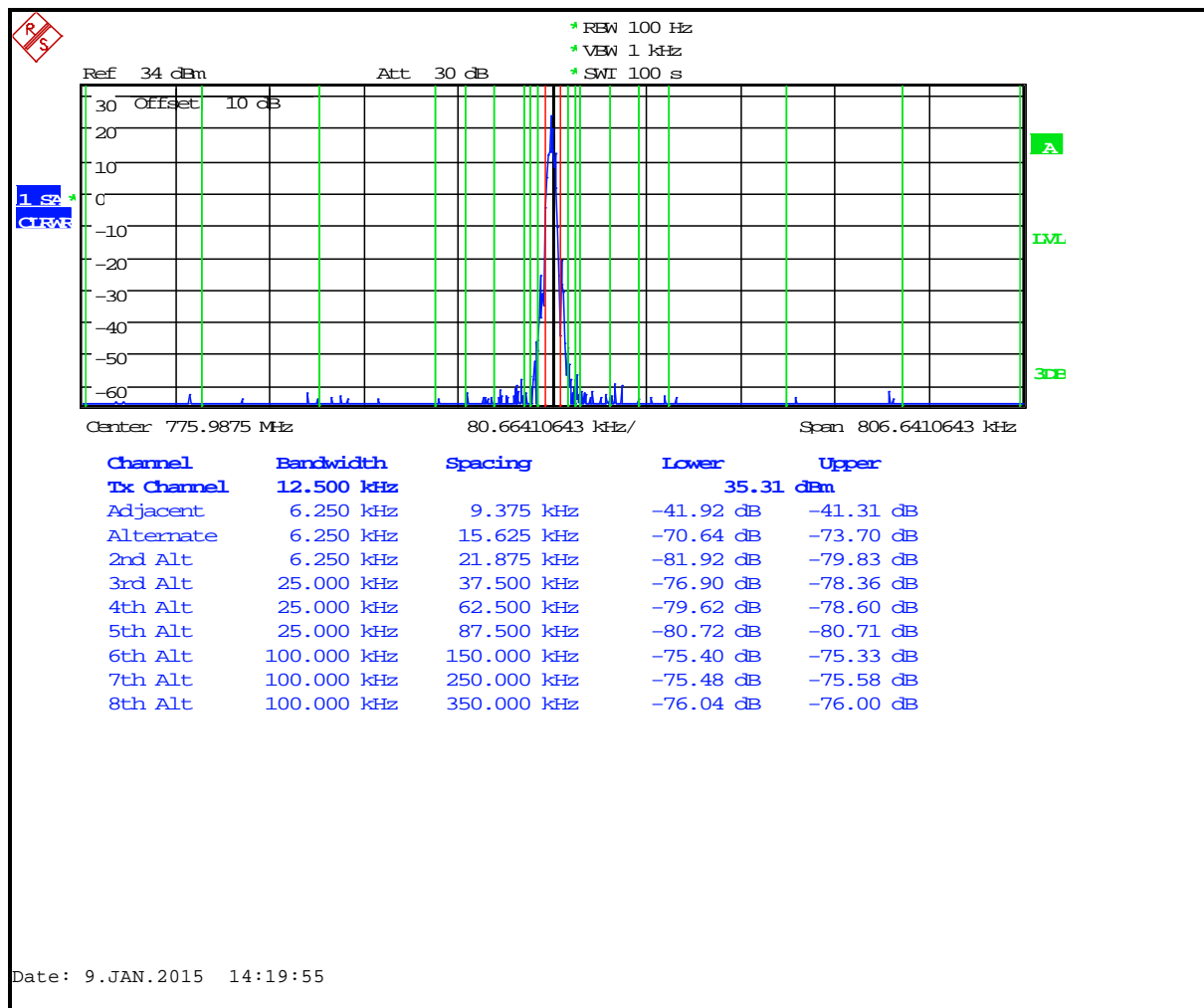
**Plot 6-14: Adjacent Channel Power – 775.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-14: Adjacent Channel Power – 775.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.3
12 MHz to receive band	30(s)	-75	-104.0
In receive band	30(s)	-100	-107.1

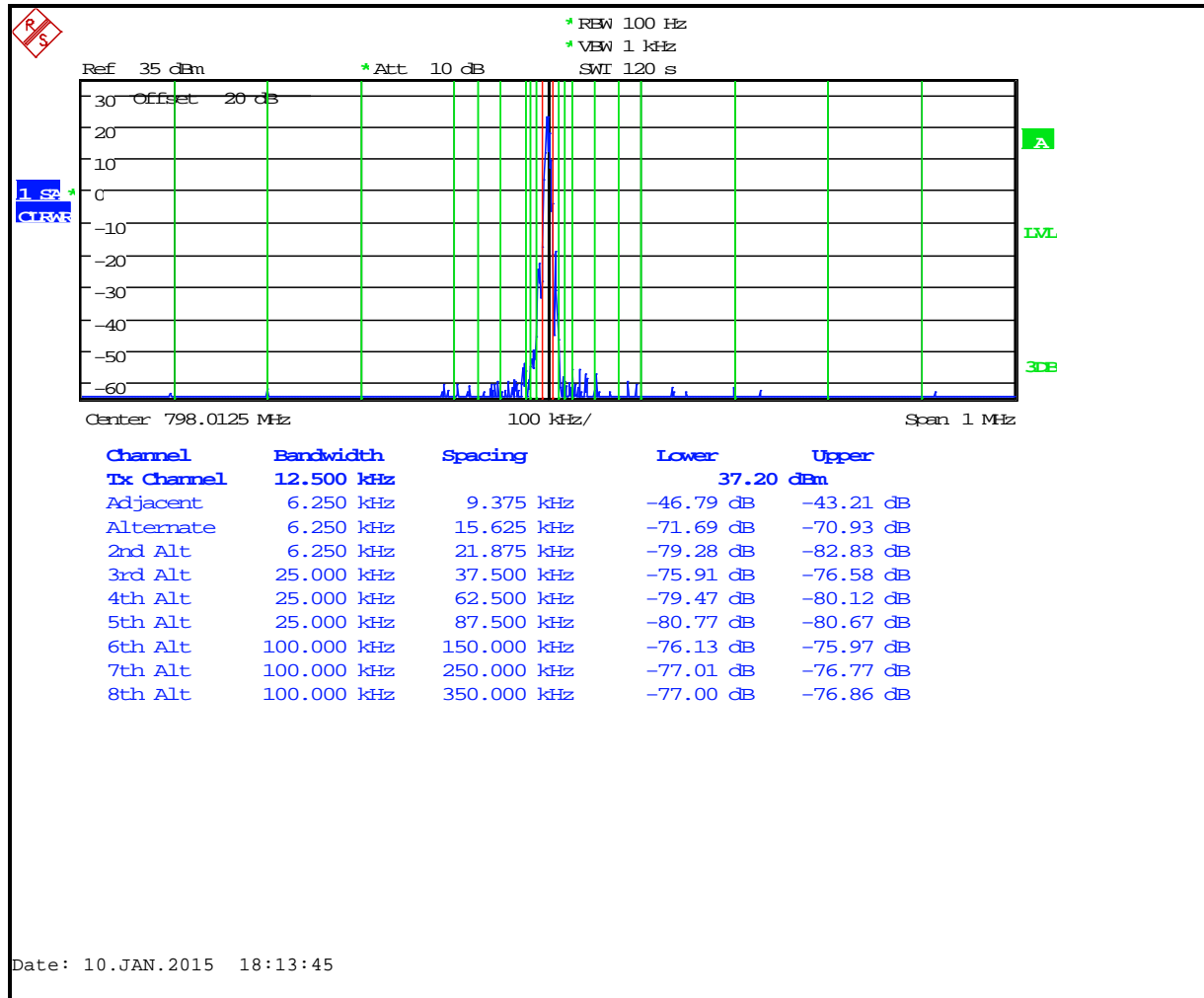
**Plot 6-15: Adjacent Channel Power – 775.9875 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-15: Adjacent Channel Power – 775.9875 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-78.7
12 MHz to receive band	30(s)	-75	-101.4
In receive band	30(s)	-100	-106.7

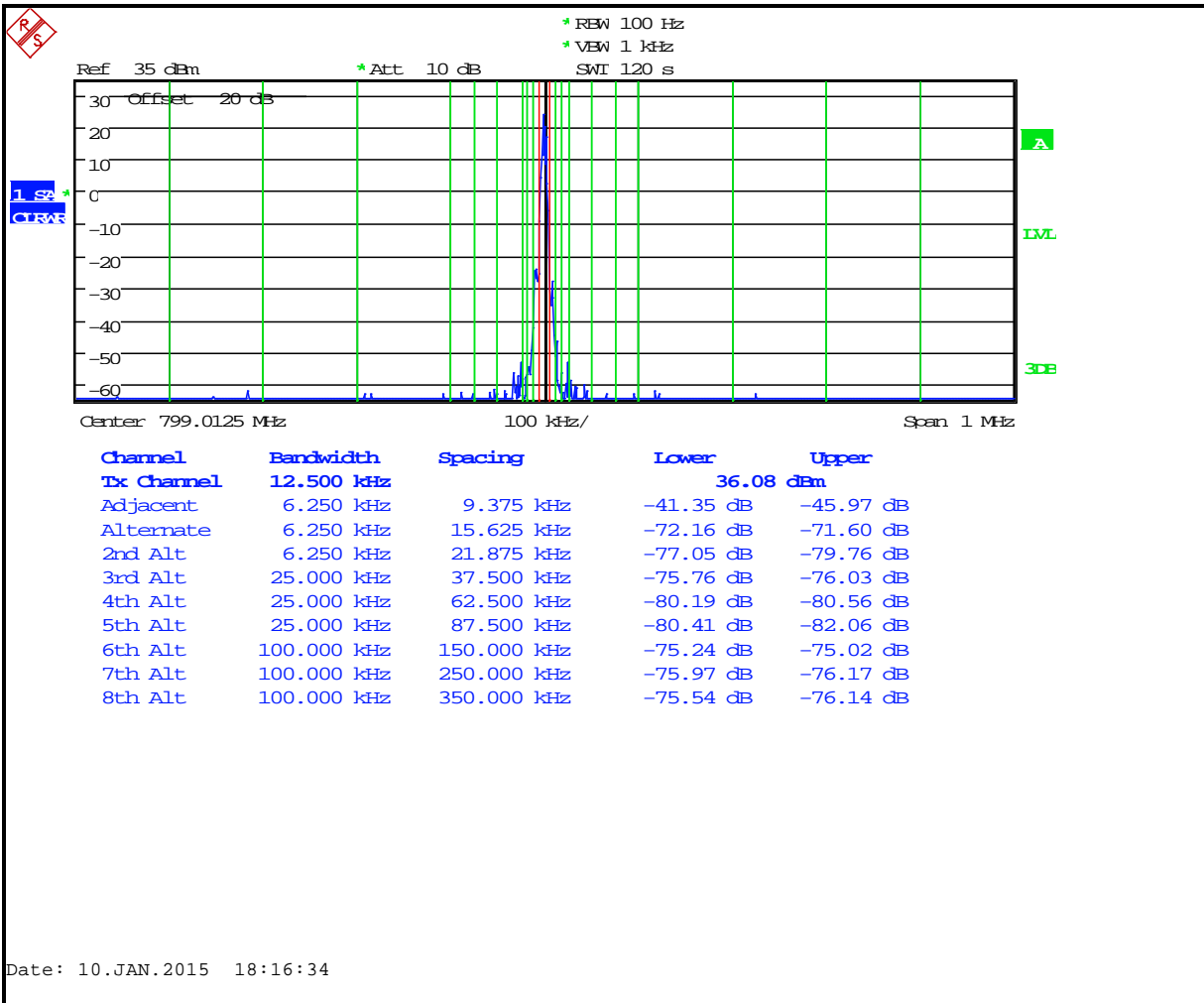
**Plot 6-16: Adjacent Channel Power – 798.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-16: Adjacent Channel Power – 798.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-85.6
12 MHz to receive band	30(s)	-75	-98.0
In receive band	30(s)	-100	-101.0

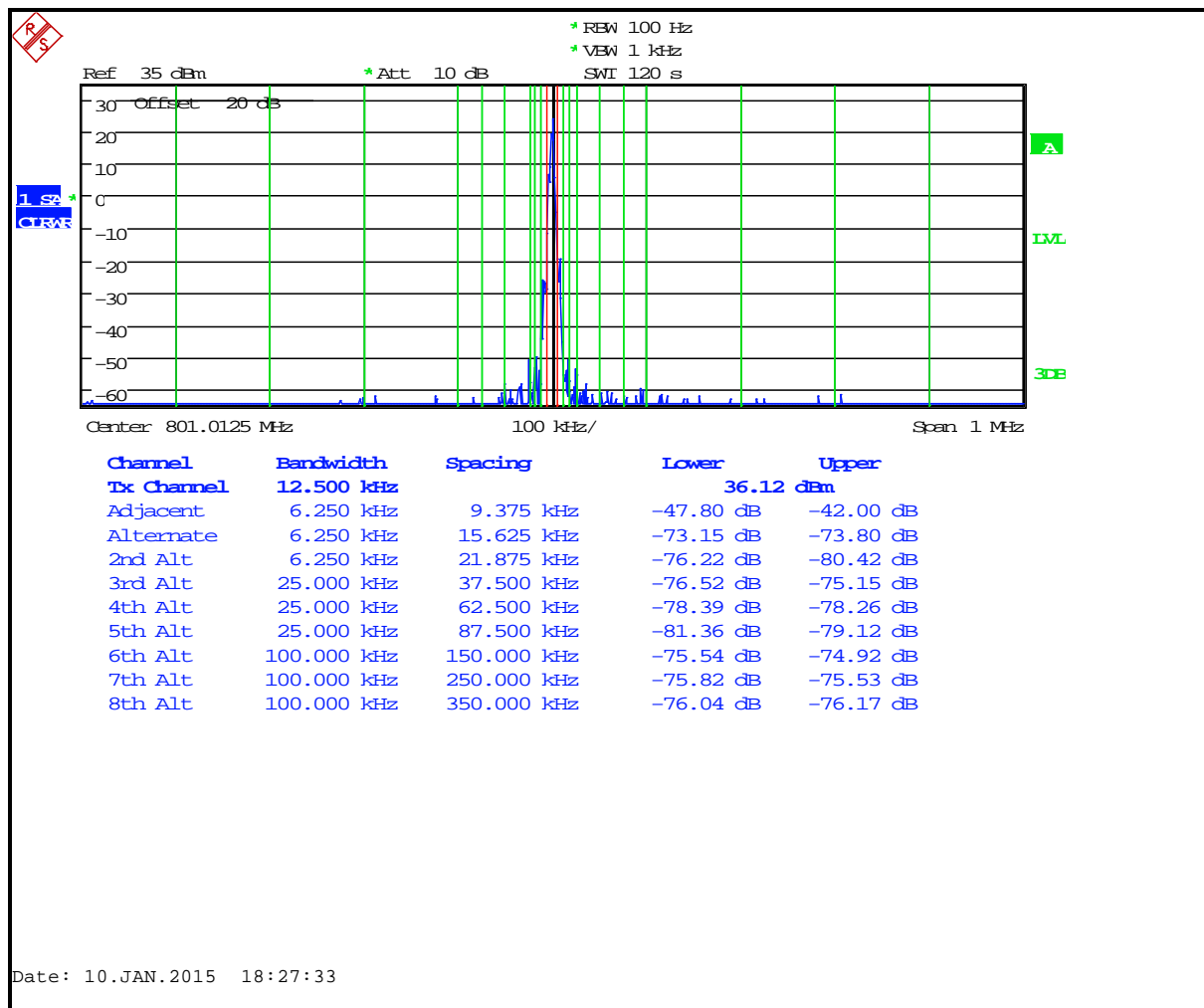
**Plot 6-17: Adjacent Channel Power – 799.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-17: Adjacent Channel Power – 799.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.0
12 MHz to receive band	30(s)	-75	-100.1
In receive band	30(s)	-100	-103.7

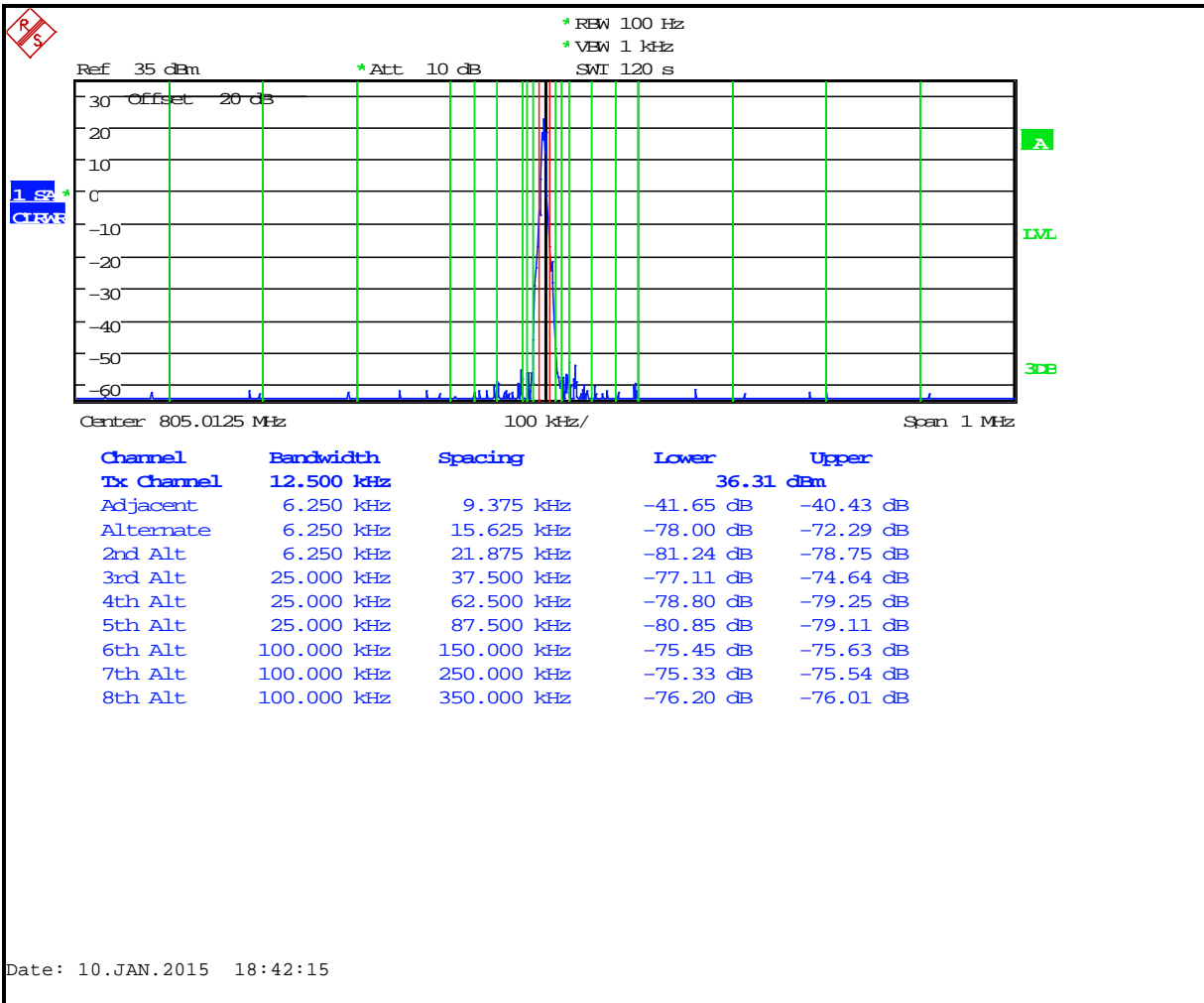
**Plot 6-18: Adjacent Channel Power – 801.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-18: Adjacent Channel Power – 801.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.3
12 MHz to receive band	30(s)	-75	-99.9
In receive band	30(s)	-100	-107.8

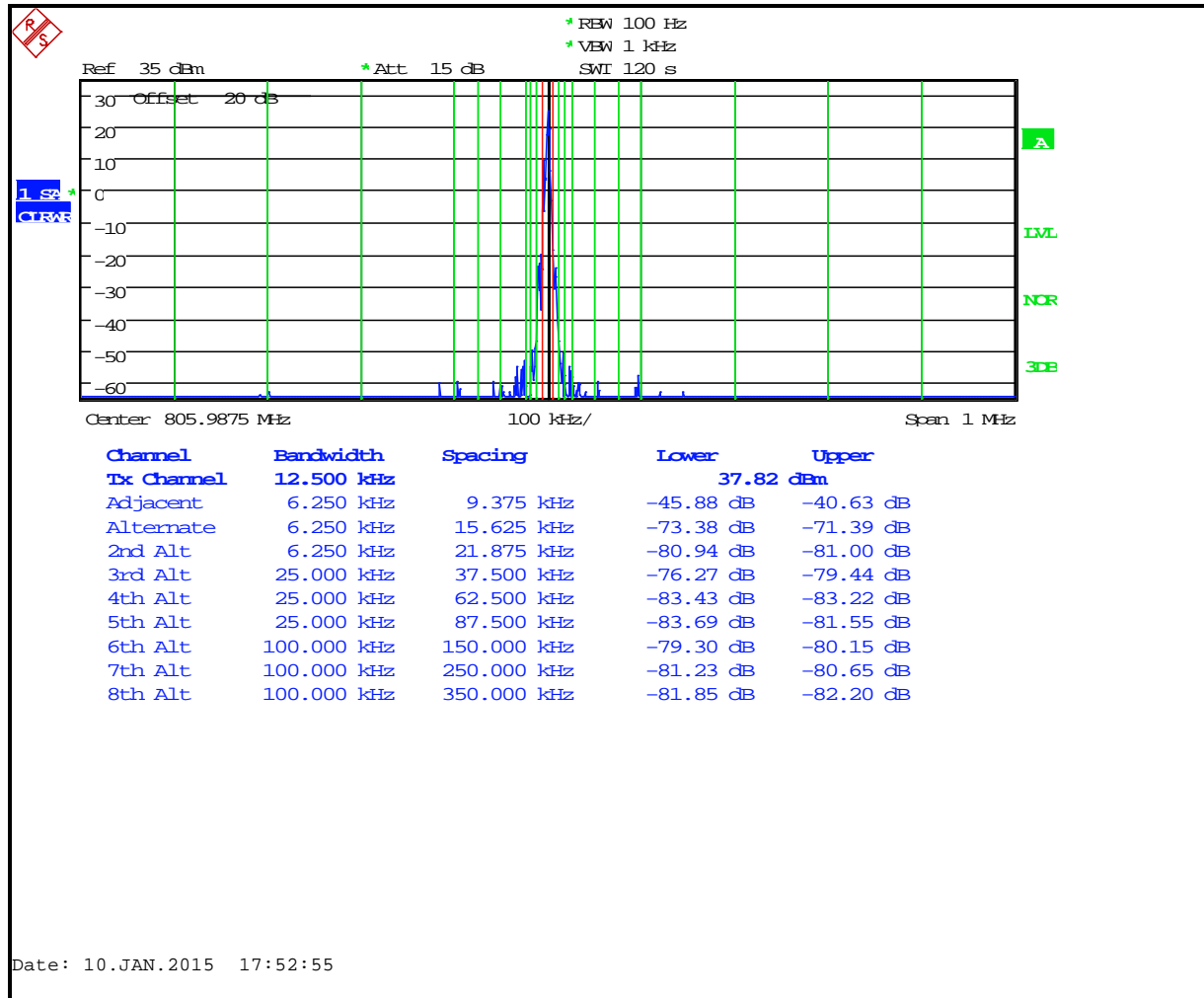
**Plot 6-19: Adjacent Channel Power – 805.0125 MHz; EDACS 2-Level FSK 9600; <400 kHz**



**Table 6-19: Adjacent Channel Power – 805.0125 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.6
12 MHz to receive band	30(s)	-75	-94.5
In receive band	30(s)	-100	-108.0

**Plot 6-20: Adjacent Channel Power – 805.9875 MHz; EDACS 2-Level FSK 9600; <400 kHz**

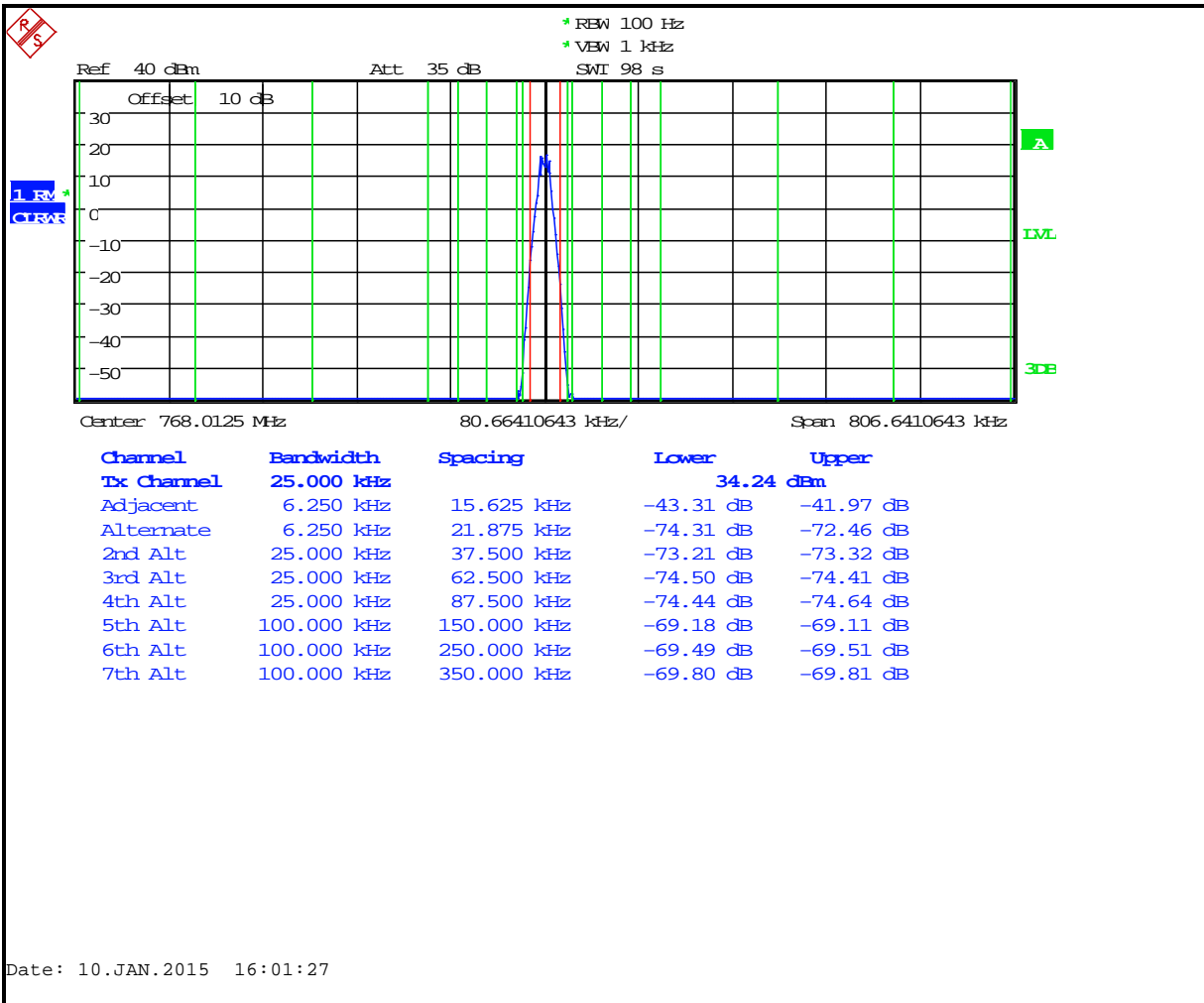


**Table 6-20: Adjacent Channel Power – 805.9875 MHz; EDACS 2-Level FSK 9600; 400 kHz–RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.2
12 MHz to receive band	30(s)	-75	-94.1
In receive band	30(s)	-100	-107.3



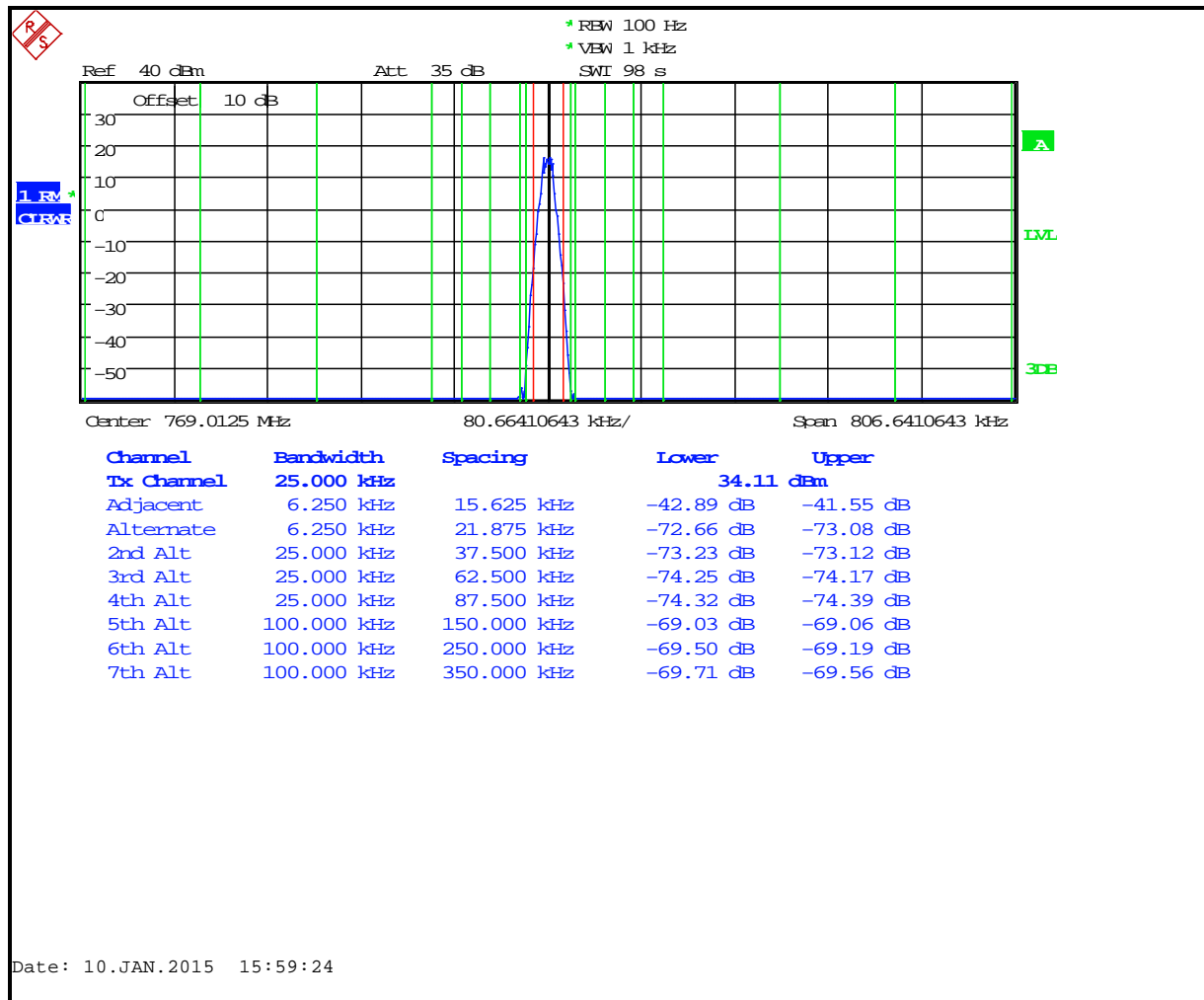
**Plot 6-21: Adjacent Channel Power – 768.0125 MHz; OTP SMR; <400 kHz**



**Table 6-21: Adjacent Channel Power – 768.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-86.3
12 MHz to receive band	30(s)	-75	-107.1
In receive band	30(s)	-100	-107.1

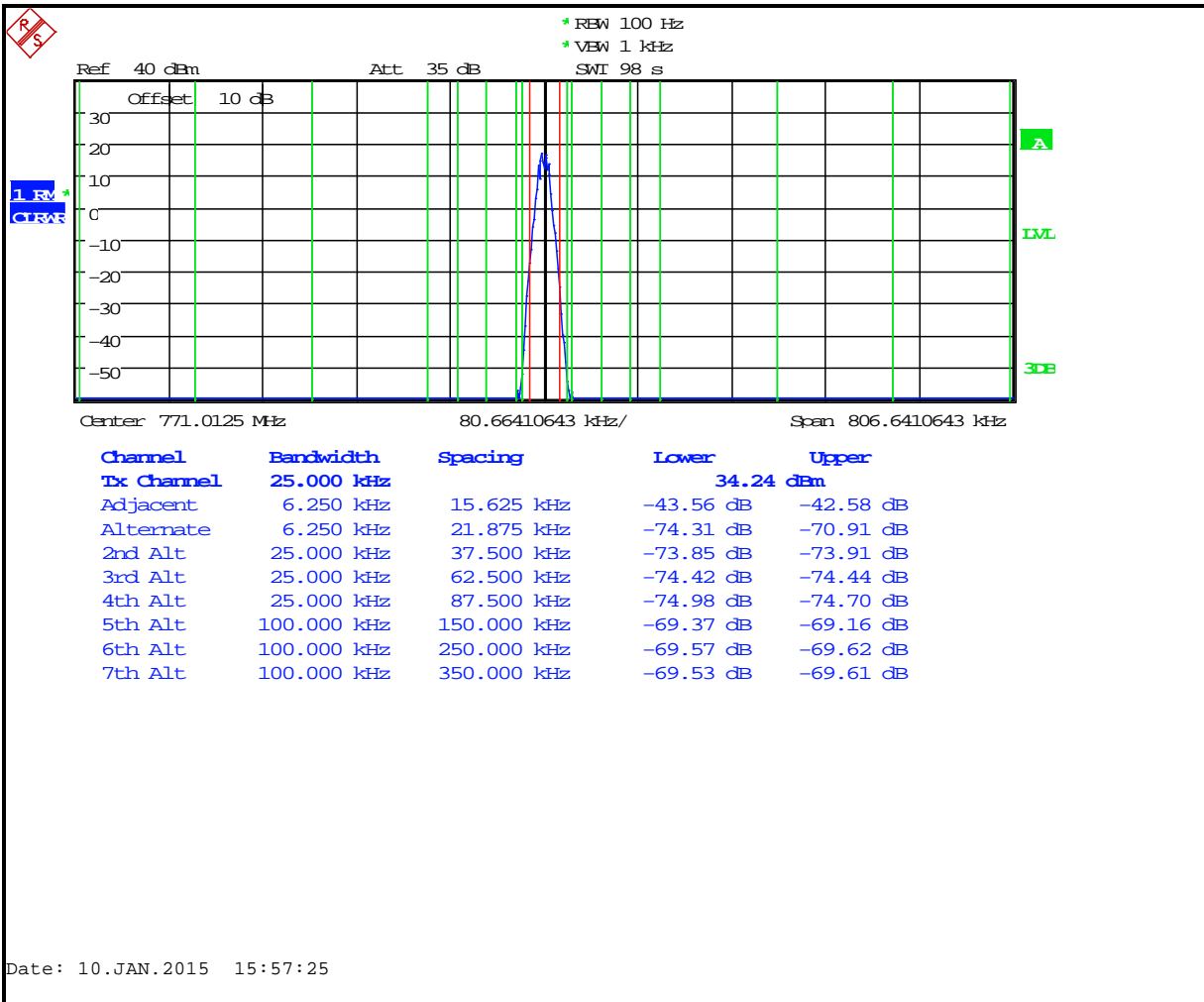
**Plot 6-22: Adjacent Channel Power – 769.0125 MHz; OTP SMR; <400 kHz**



**Table 6-22: Adjacent Channel Power – 769.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-78.6
12 MHz to receive band	30(s)	-75	-106.4
In receive band	30(s)	-100	-107.4

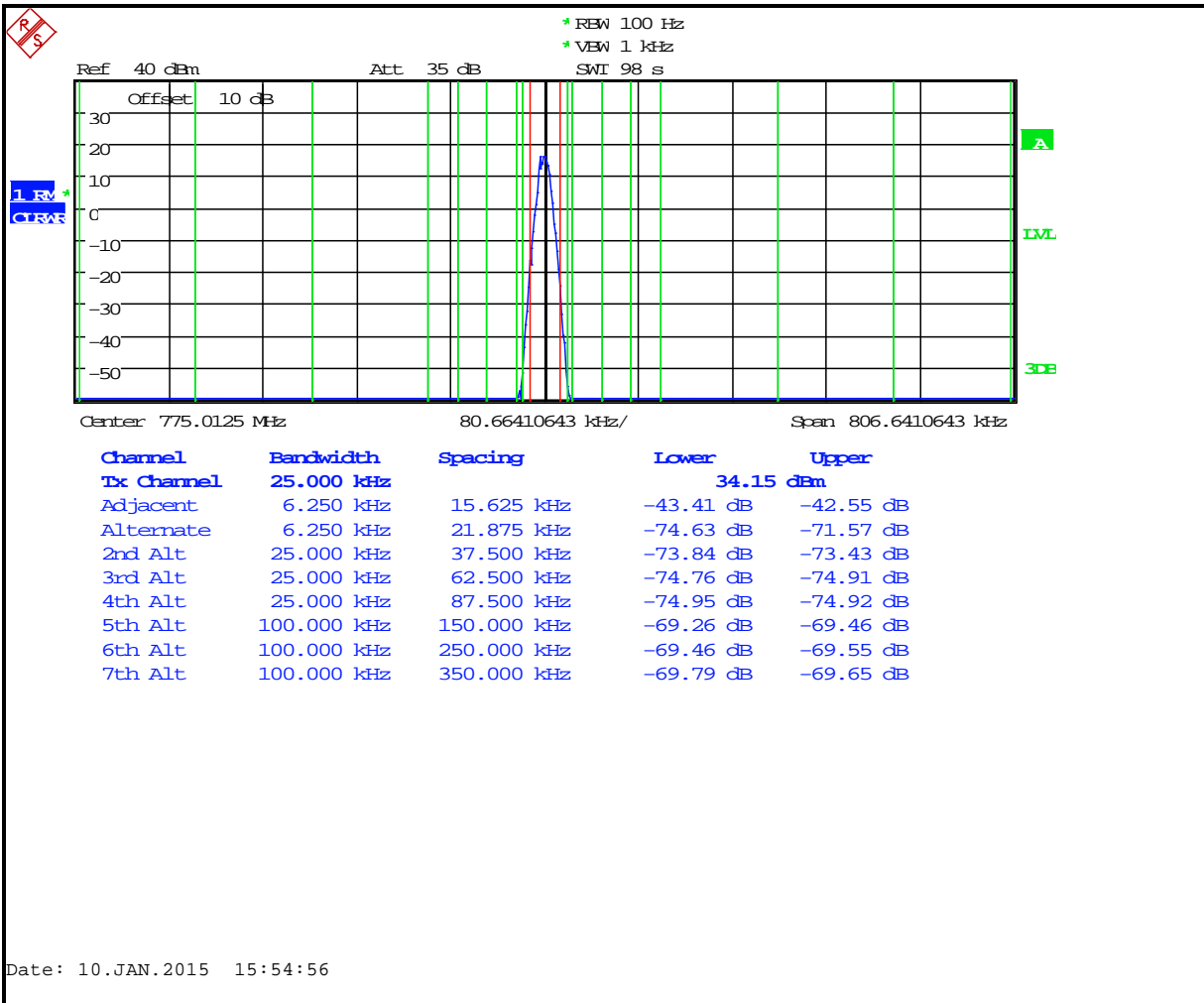
**Plot 6-23: Adjacent Channel Power – 771.0125 MHz; OTP SMR; <400 kHz**



**Table 6-23: Adjacent Channel Power – 771.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.5
12 MHz to receive band	30(s)	-75	-106.7
In receive band	30(s)	-100	-107.9

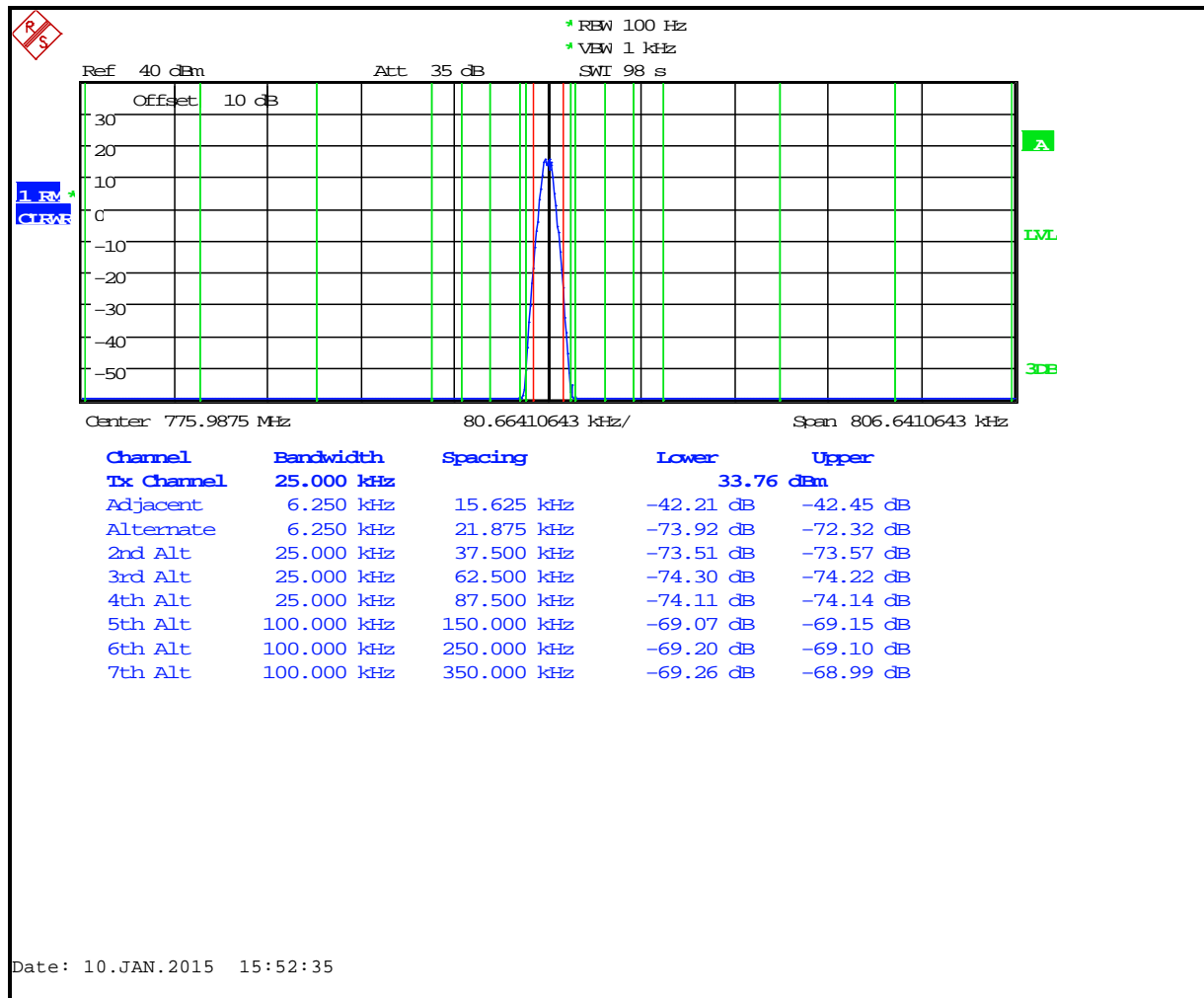
**Plot 6-24: Adjacent Channel Power – 775.0125 MHz; OTP SMR; <400 kHz**



**Table 6-24: Adjacent Channel Power – 775.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.1
12 MHz to receive band	30(s)	-75	-104.8
In receive band	30(s)	-100	-105.8

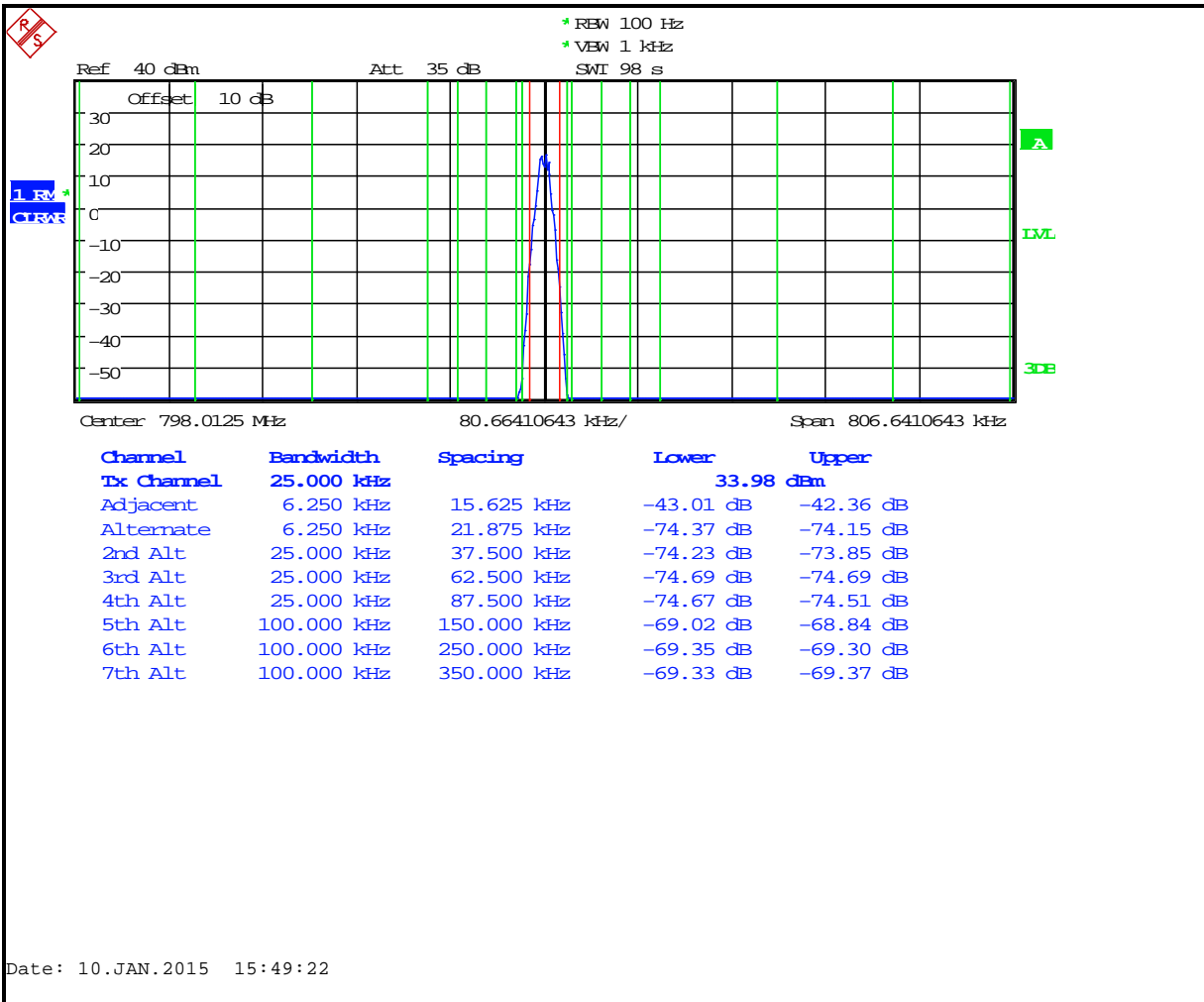
**Plot 6-25: Adjacent Channel Power – 775.9875 MHz; OTP SMR; <400 kHz**



**Table 6-25: Adjacent Channel Power – 775.9875 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	80.4
12 MHz to receive band	30(s)	-75	102.1
In receive band	30(s)	-100	106.9

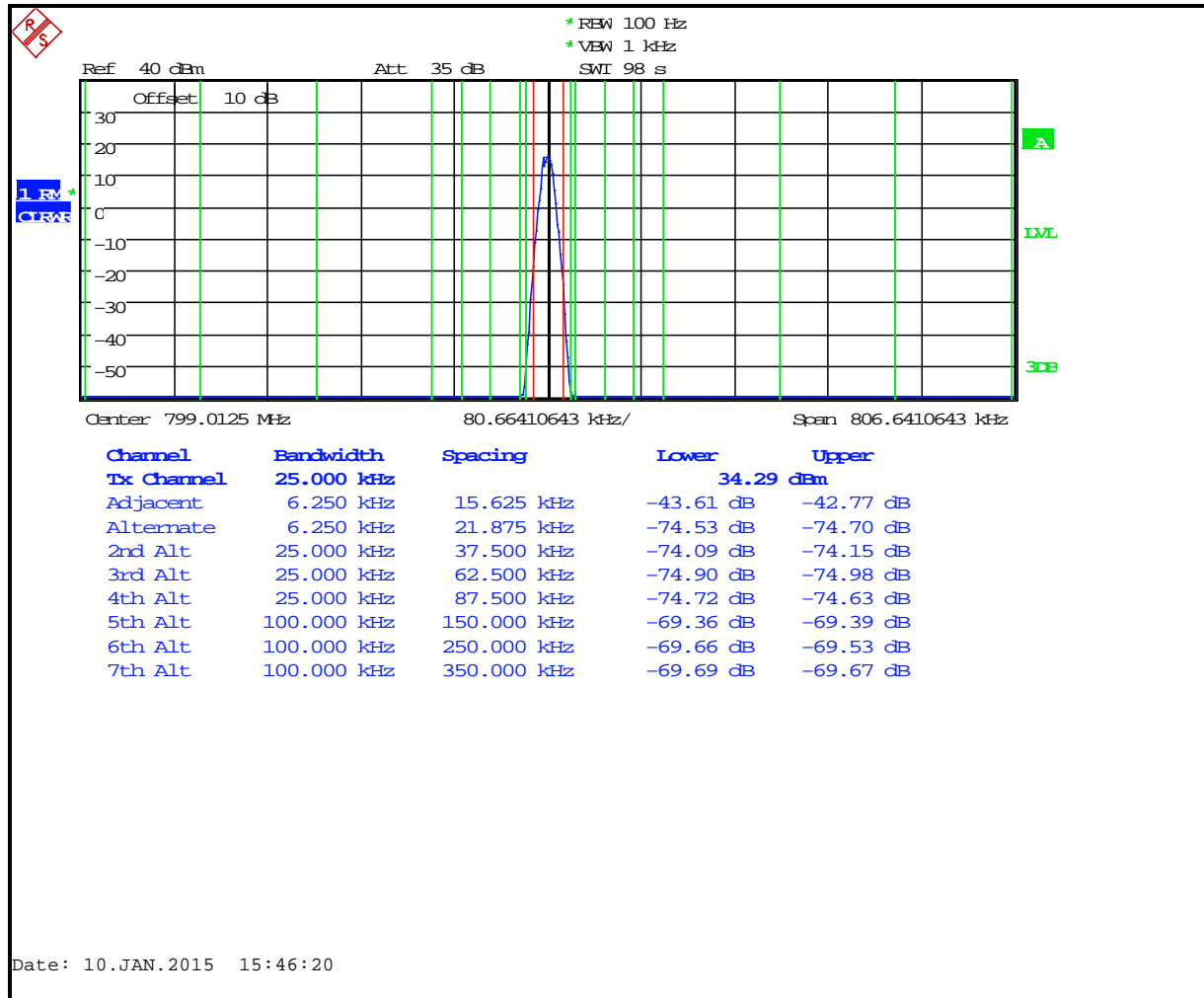
**Plot 6-26: Adjacent Channel Power – 798.0125 MHz; OTP SMR; <400 kHz**



**Table 6-26: Adjacent Channel Power – 798.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.0
12 MHz to receive band	30(s)	-75	-98.7
In receive band	30(s)	-100	-101.8

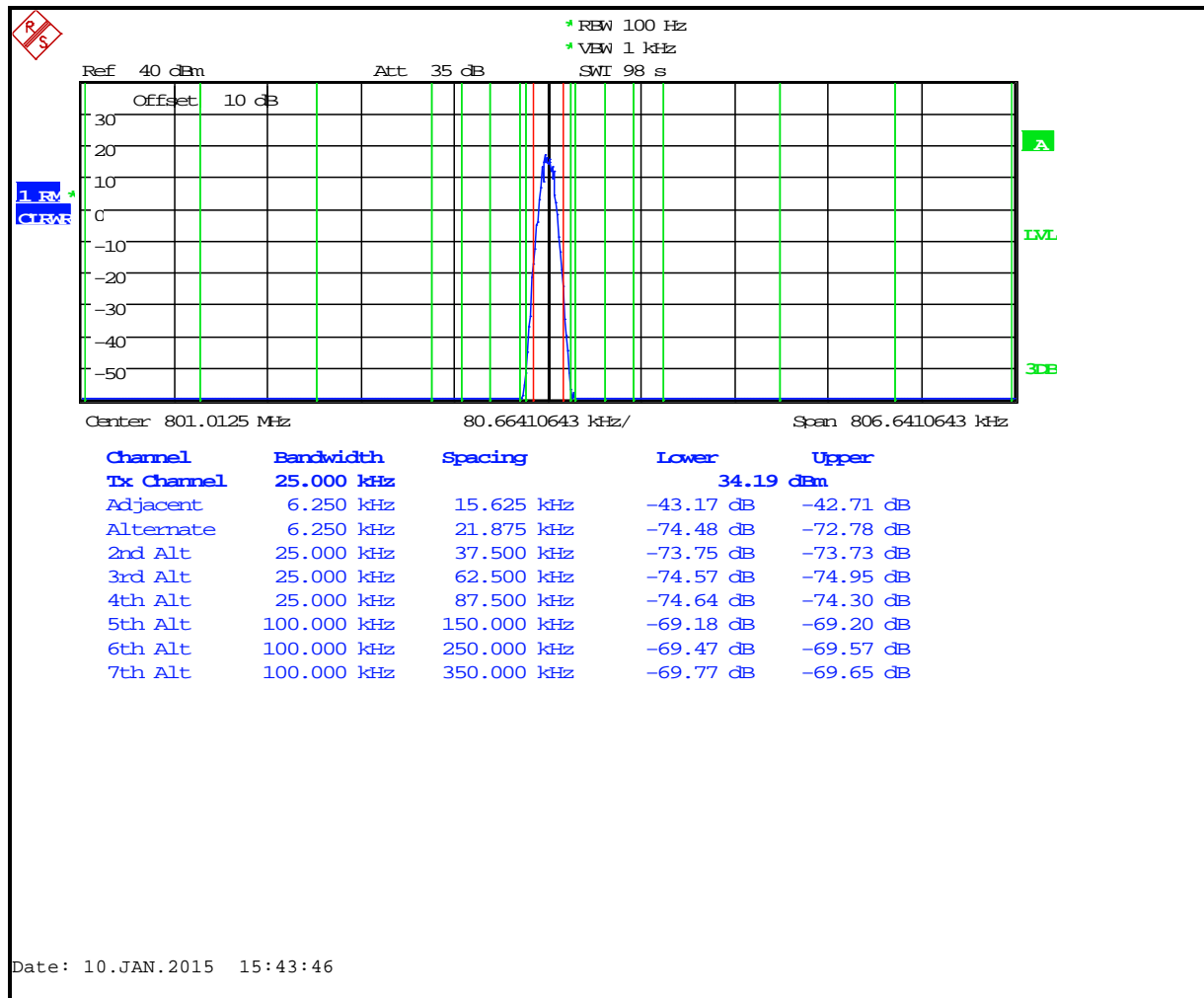
**Plot 6-27: Adjacent Channel Power – 799.0125 MHz; OTP SMR; <400 kHz**



**Table 6-27: Adjacent Channel Power – 799.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.6
12 MHz to receive band	30(s)	-75	-97.4
In receive band	30(s)	-100	-102.1

**Plot 6-28: Adjacent Channel Power – 801.0125 MHz; OTP SMR; <400 kHz**

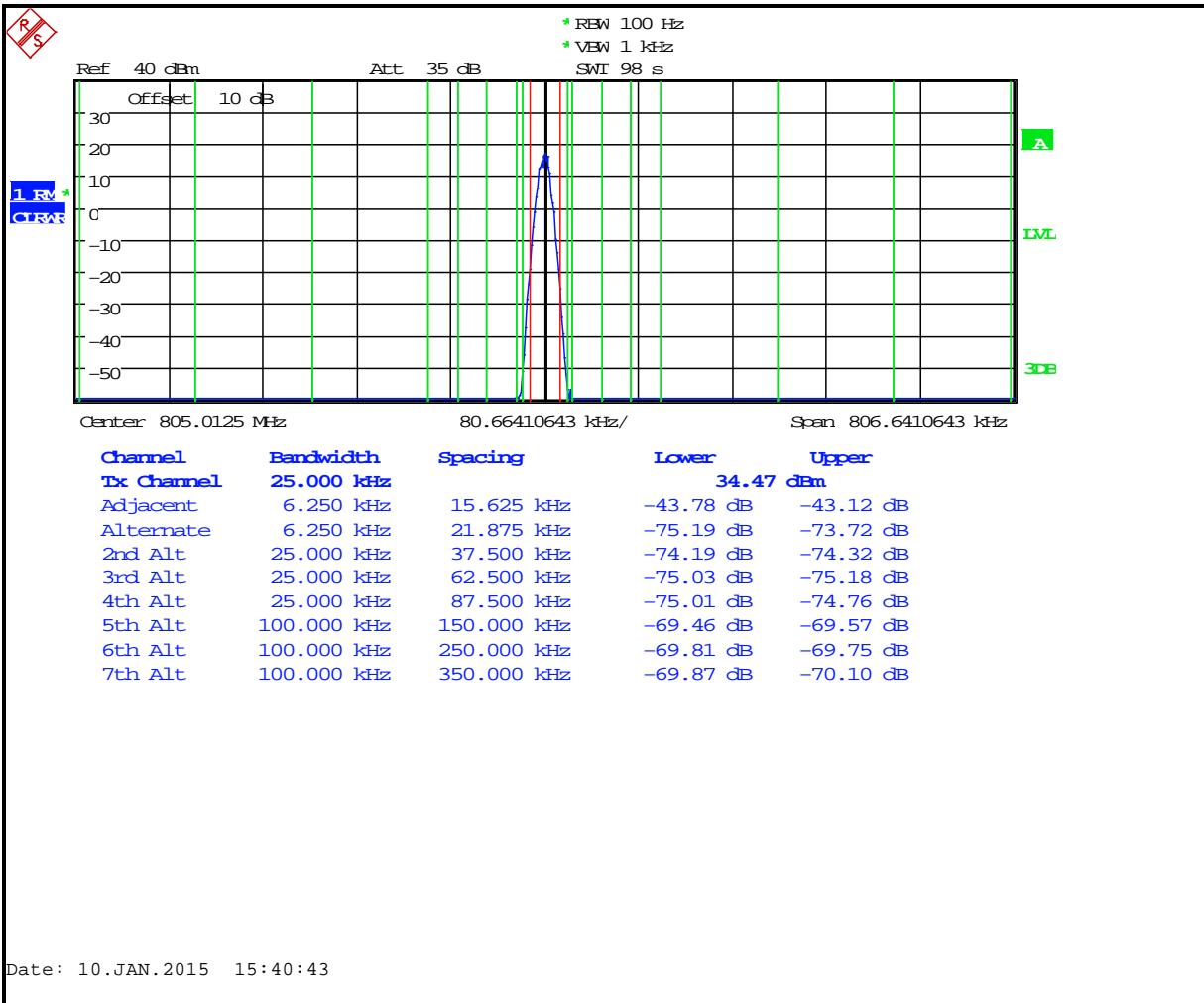


**Table 6-28: Adjacent Channel Power – 801.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.1
12 MHz to receive band	30(s)	-75	-99.1
In receive band	30(s)	-100	-106.7



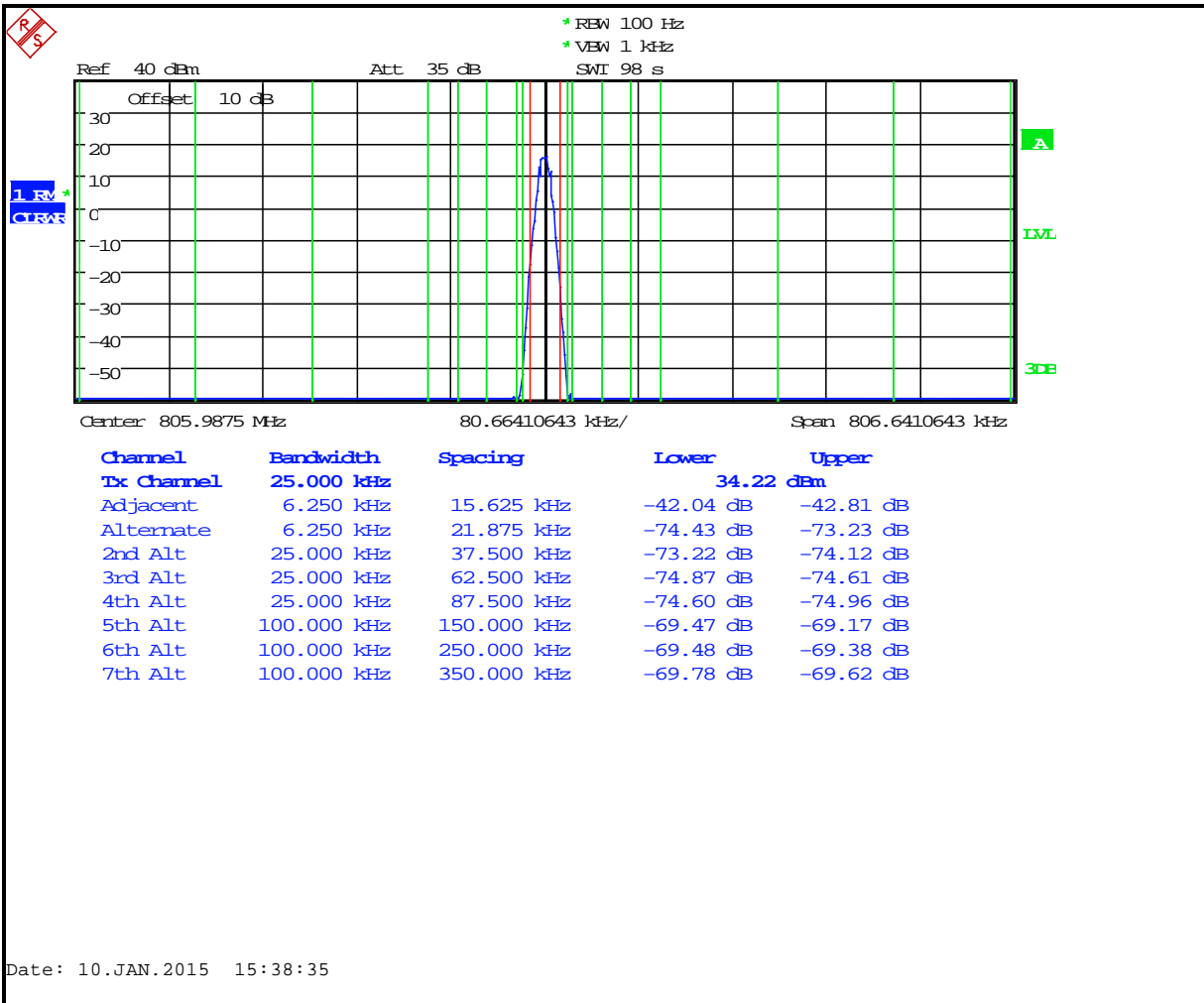
**Plot 6-29: Adjacent Channel Power – 805.0125 MHz; OTP SMR; <400 kHz**



**Table 6-29: Adjacent Channel Power – 805.0125 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-78.7
12 MHz to receive band	30(s)	-75	-96.1
In receive band	30(s)	-100	-106.1

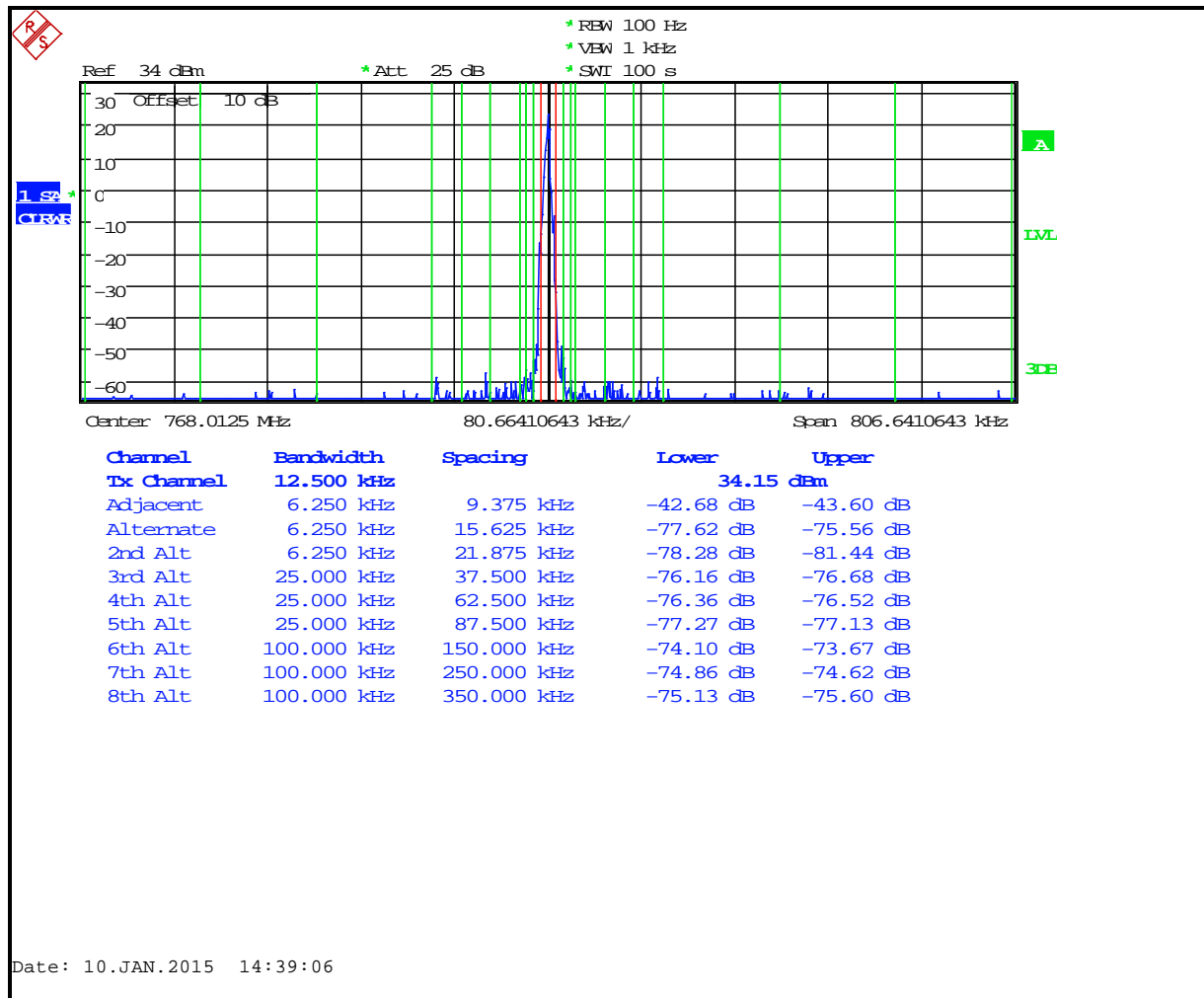
**Plot 6-30: Adjacent Channel Power – 805.9875 MHz; OTP SMR; <400 kHz**



**Table 6-30: Adjacent Channel Power – 805.9875 MHz; OTP SMR; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.5
12 MHz to receive band	30(s)	-75	-95.4
In receive band	30(s)	-100	-106.2

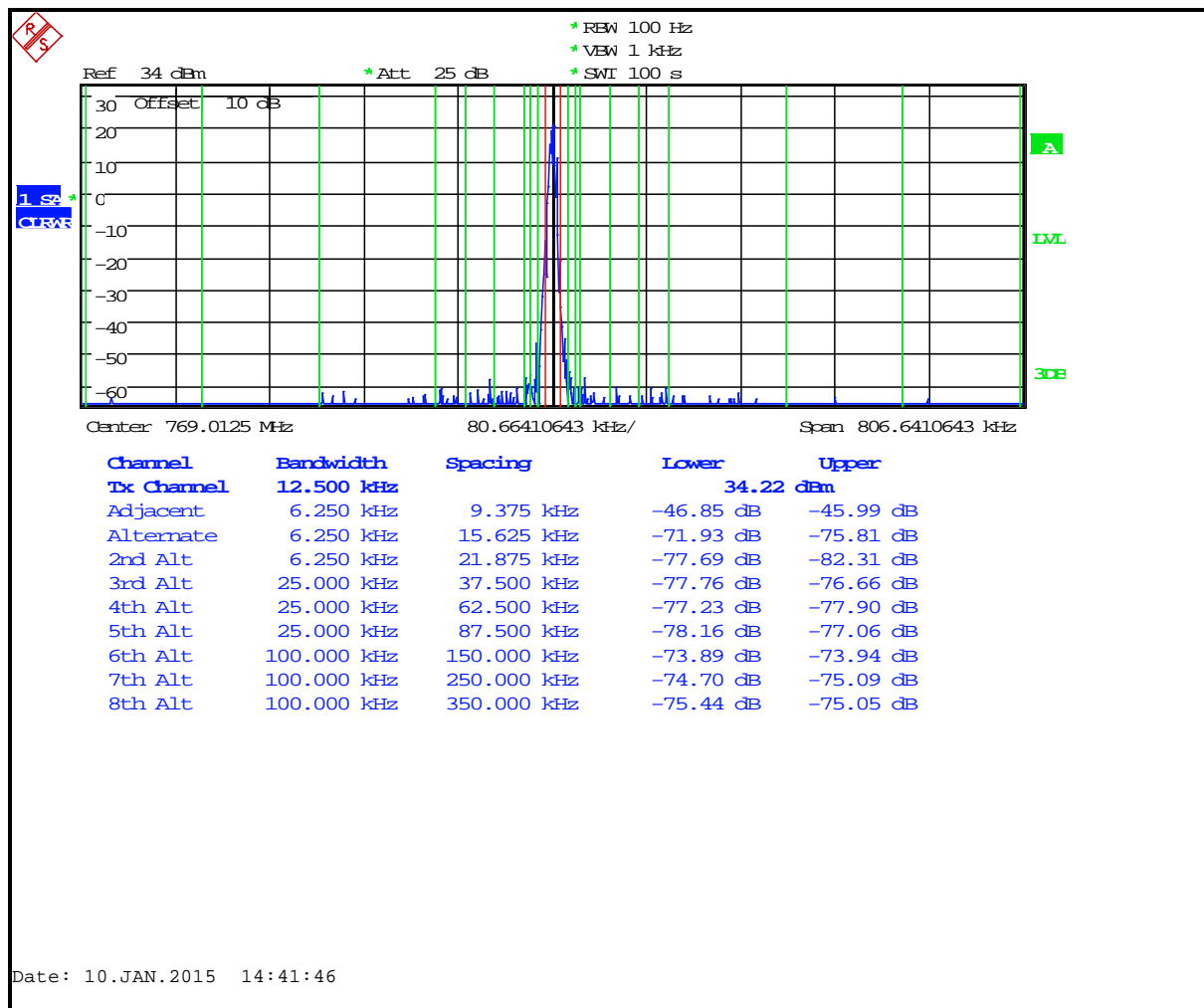
**Plot 6-31: Adjacent Channel Power – 768.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-31: Adjacent Channel Power – 768.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-86.6
12 MHz to receive band	30(s)	-75	-106.2
In receive band	30(s)	-100	-106.3

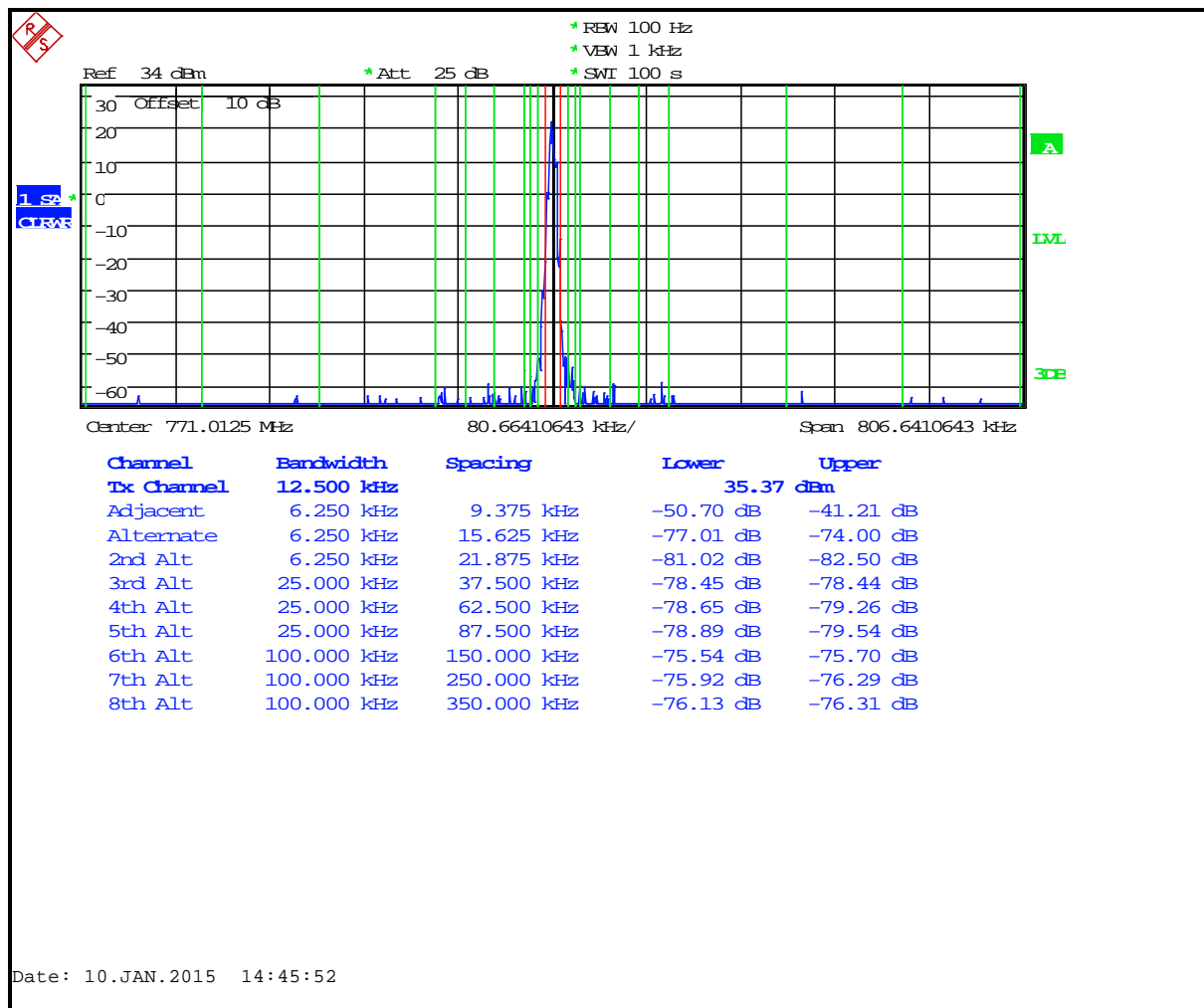
**Plot 6-32: Adjacent Channel Power – 769.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-32: Adjacent Channel Power – 769.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.9
12 MHz to receive band	30(s)	-75	-107.1
In receive band	30(s)	-100	-104.3

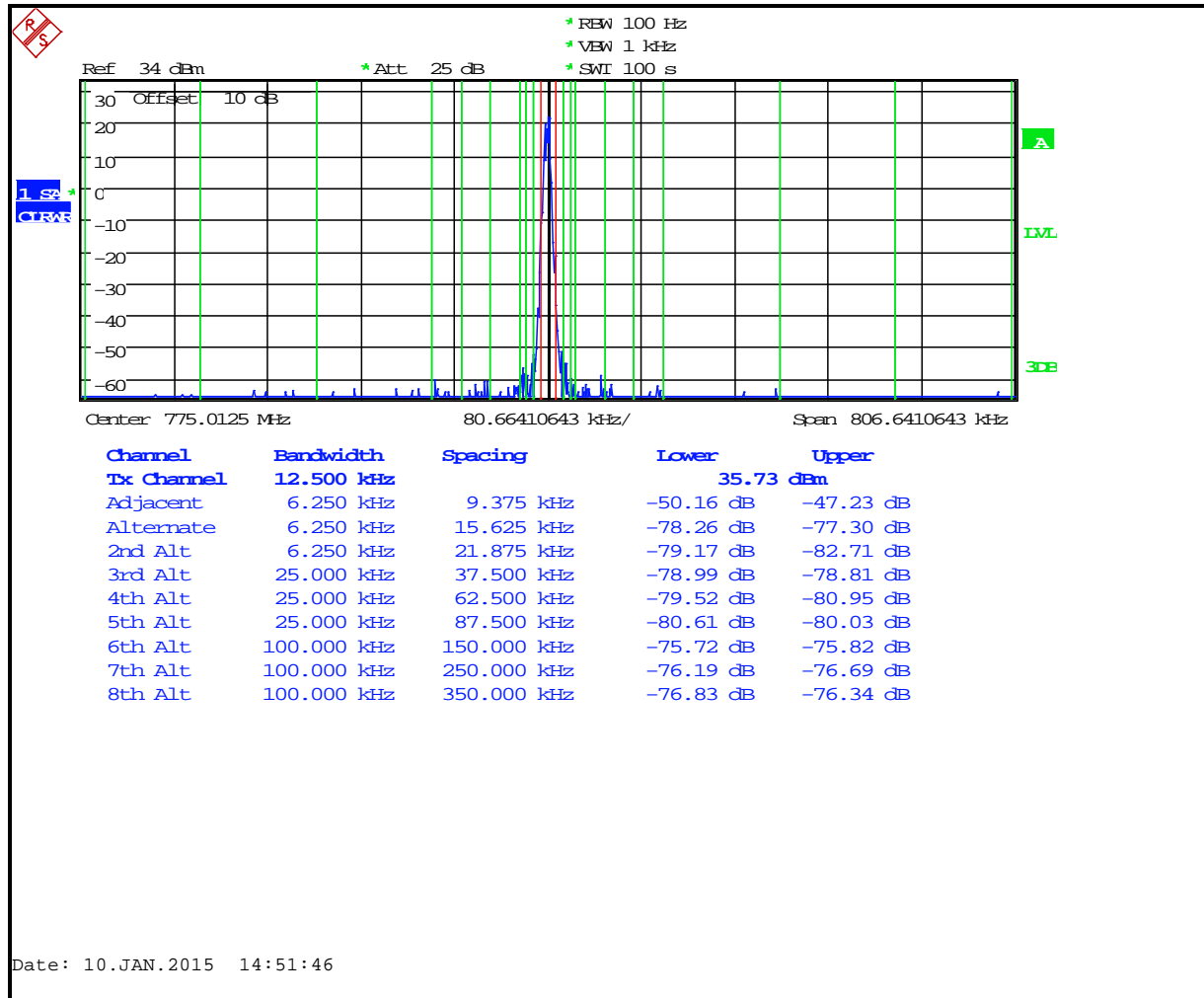
**Plot 6-33: Adjacent Channel Power – 771.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-33: Adjacent Channel Power – 771.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.2
12 MHz to receive band	30(s)	-75	-106.2
In receive band	30(s)	-100	-106.5

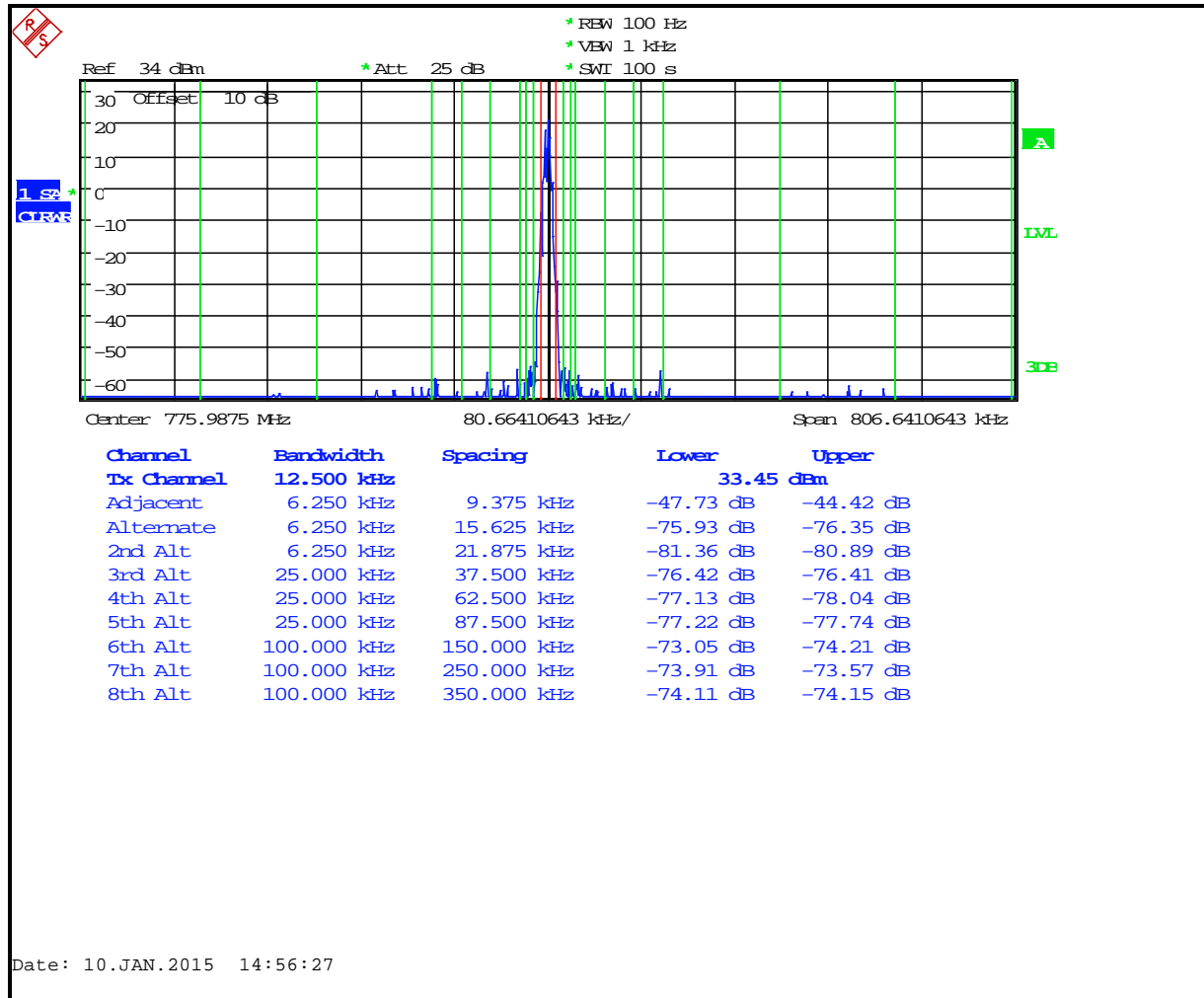
**Plot 6-34: Adjacent Channel Power – 775.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-34: Adjacent Channel Power – 775.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.7
12 MHz to receive band	30(s)	-75	-104.0
In receive band	30(s)	-100	-107.2

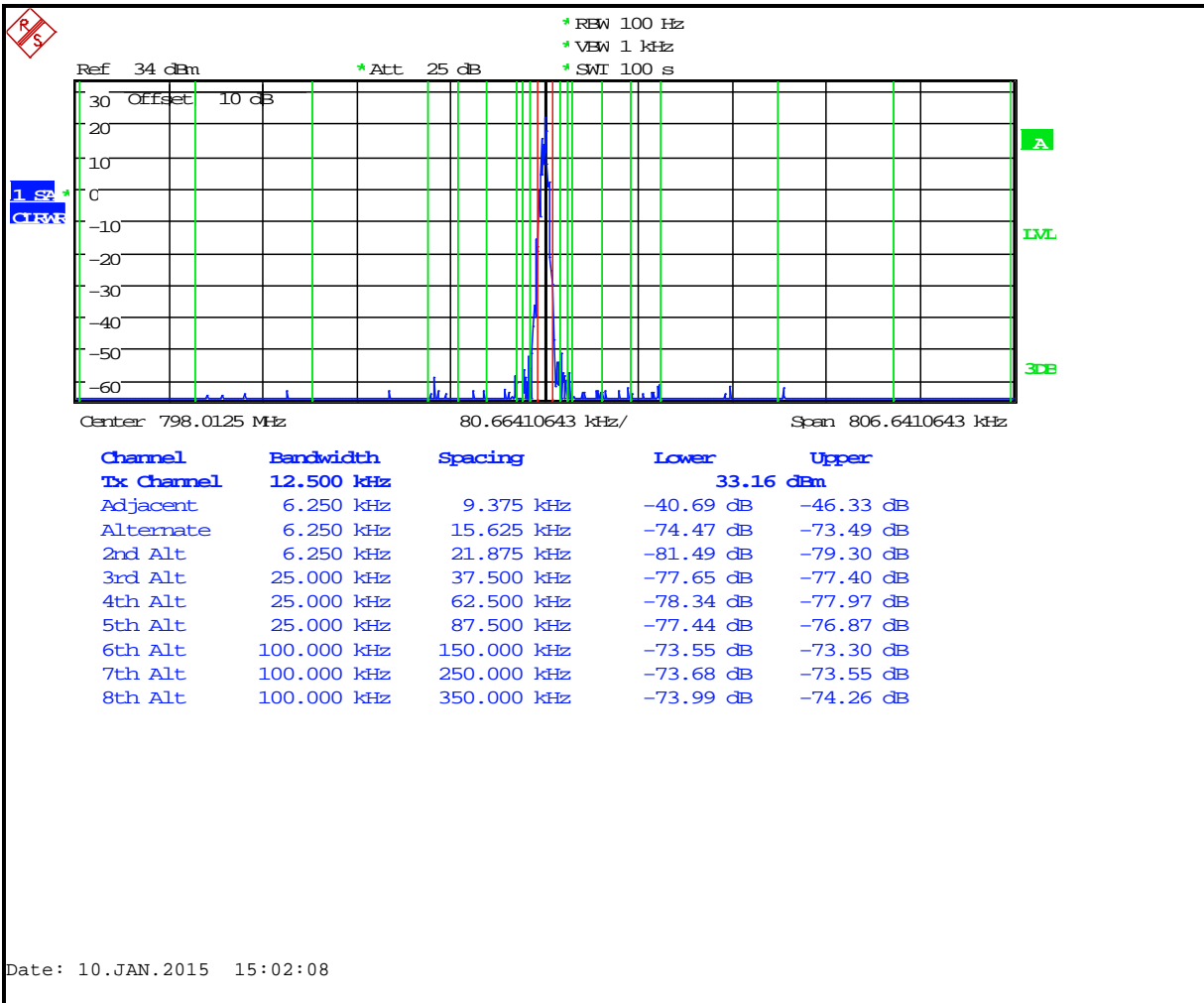
**Plot 6-35: Adjacent Channel Power – 775.9875 MHz; OTP Narrowband; <400 kHz**



**Table 6-35: Adjacent Channel Power – 775.9875 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.7
12 MHz to receive band	30(s)	-75	-100.1
In receive band	30(s)	-100	-106.3

**Plot 6-36: Adjacent Channel Power – 798.0125 MHz; OTP Narrowband; <400 kHz**

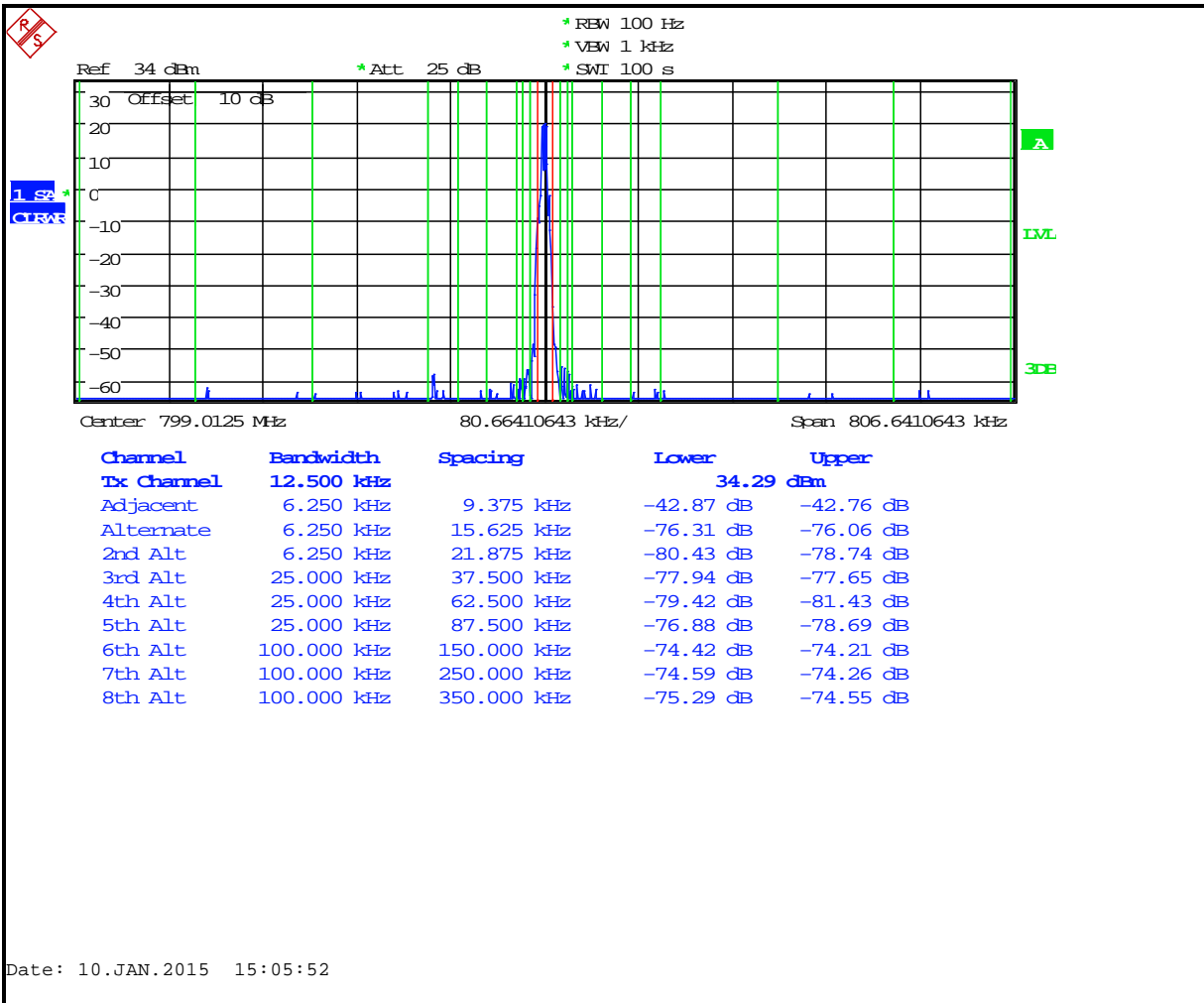


**Table 6-36: Adjacent Channel Power – 798.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.3
12 MHz to receive band	30(s)	-75	-98.6
In receive band	30(s)	-100	-101.8



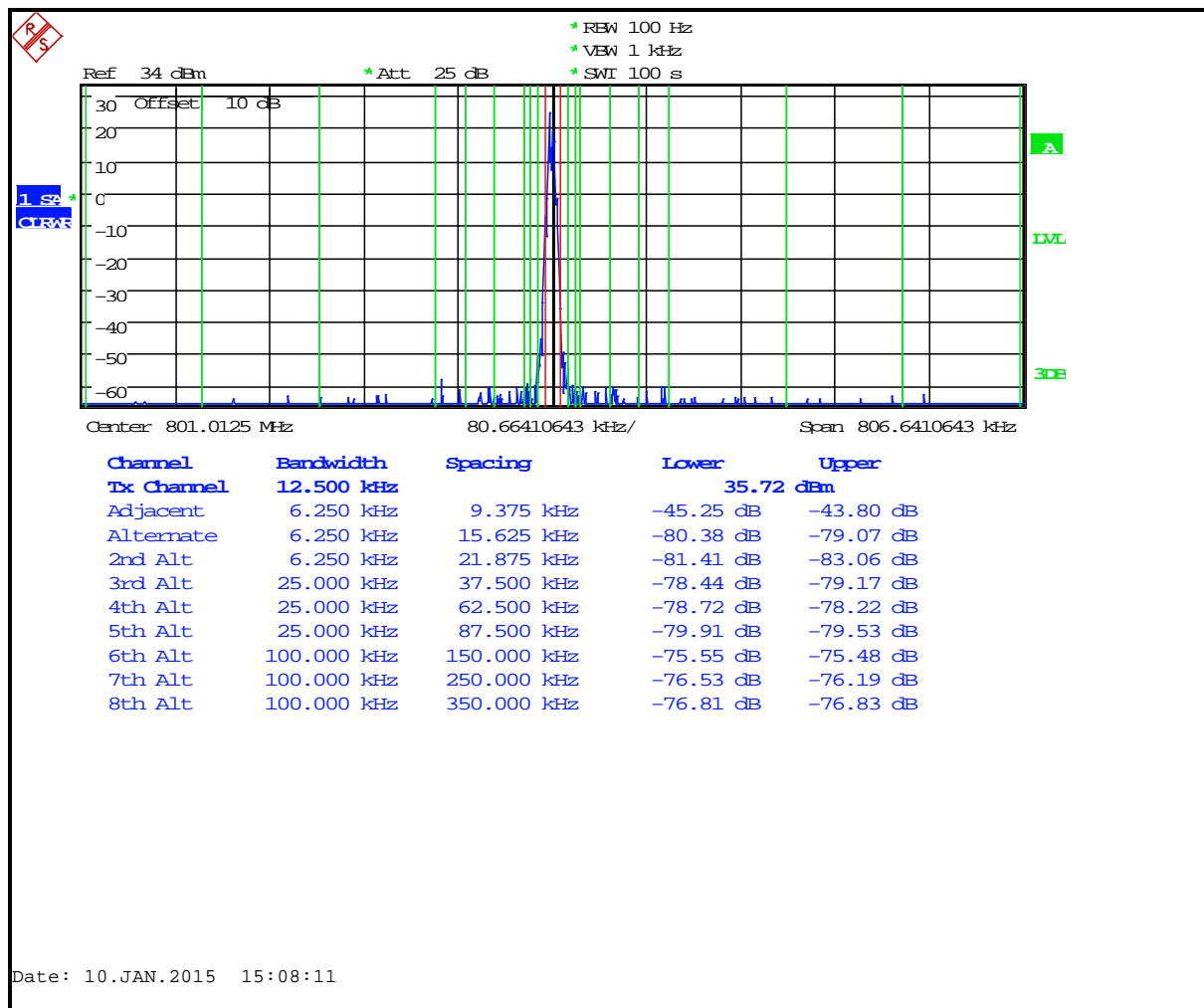
**Plot 6-37: Adjacent Channel Power – 799.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-37: Adjacent Channel Power – 799.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.0
12 MHz to receive band	30(s)	-75	-98.7
In receive band	30(s)	-100	-102.6

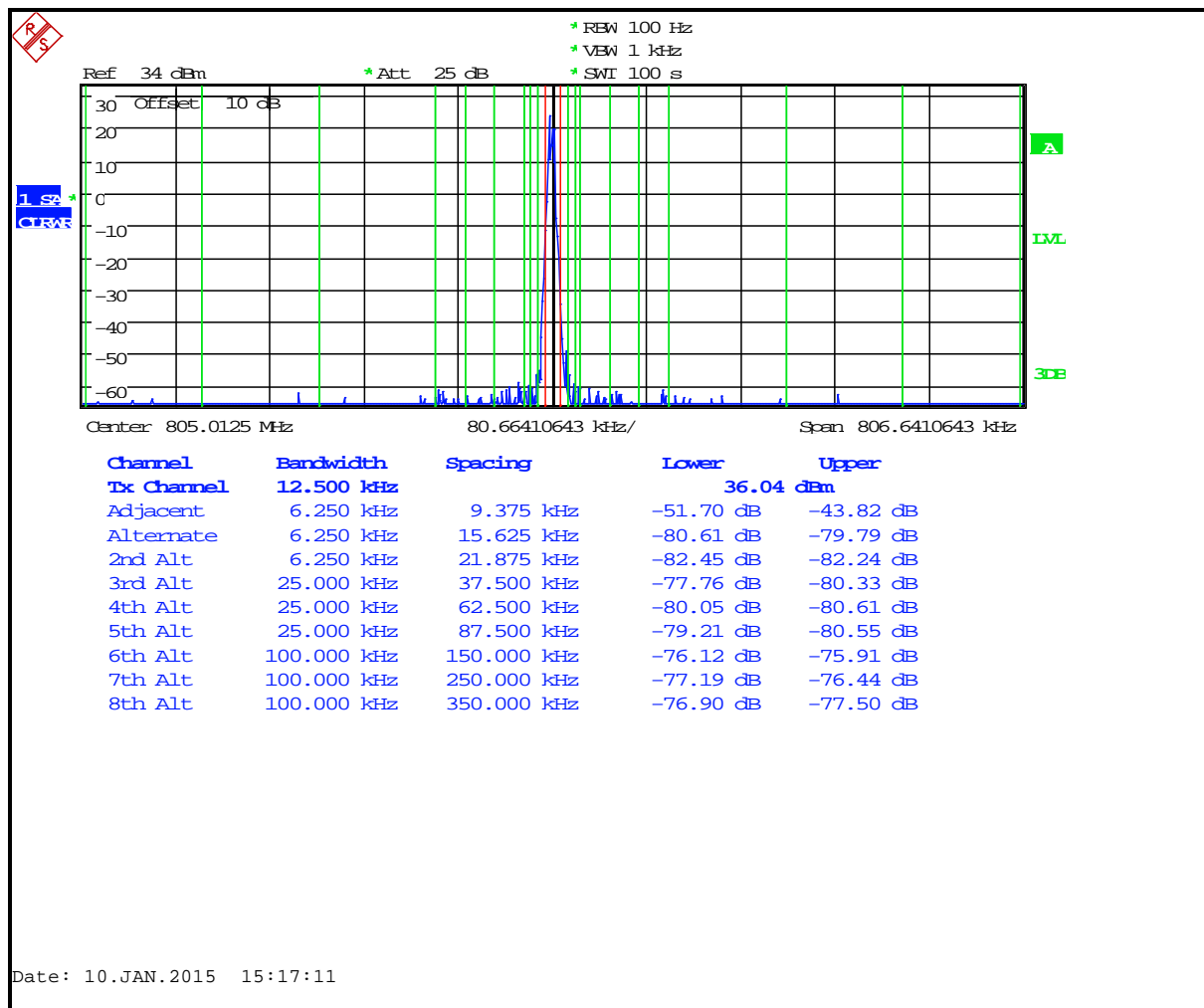
**Plot 6-38: Adjacent Channel Power – 801.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-38: Adjacent Channel Power – 801.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.7
12 MHz to receive band	30(s)	-75	-98.9
In receive band	30(s)	-100	-102.8

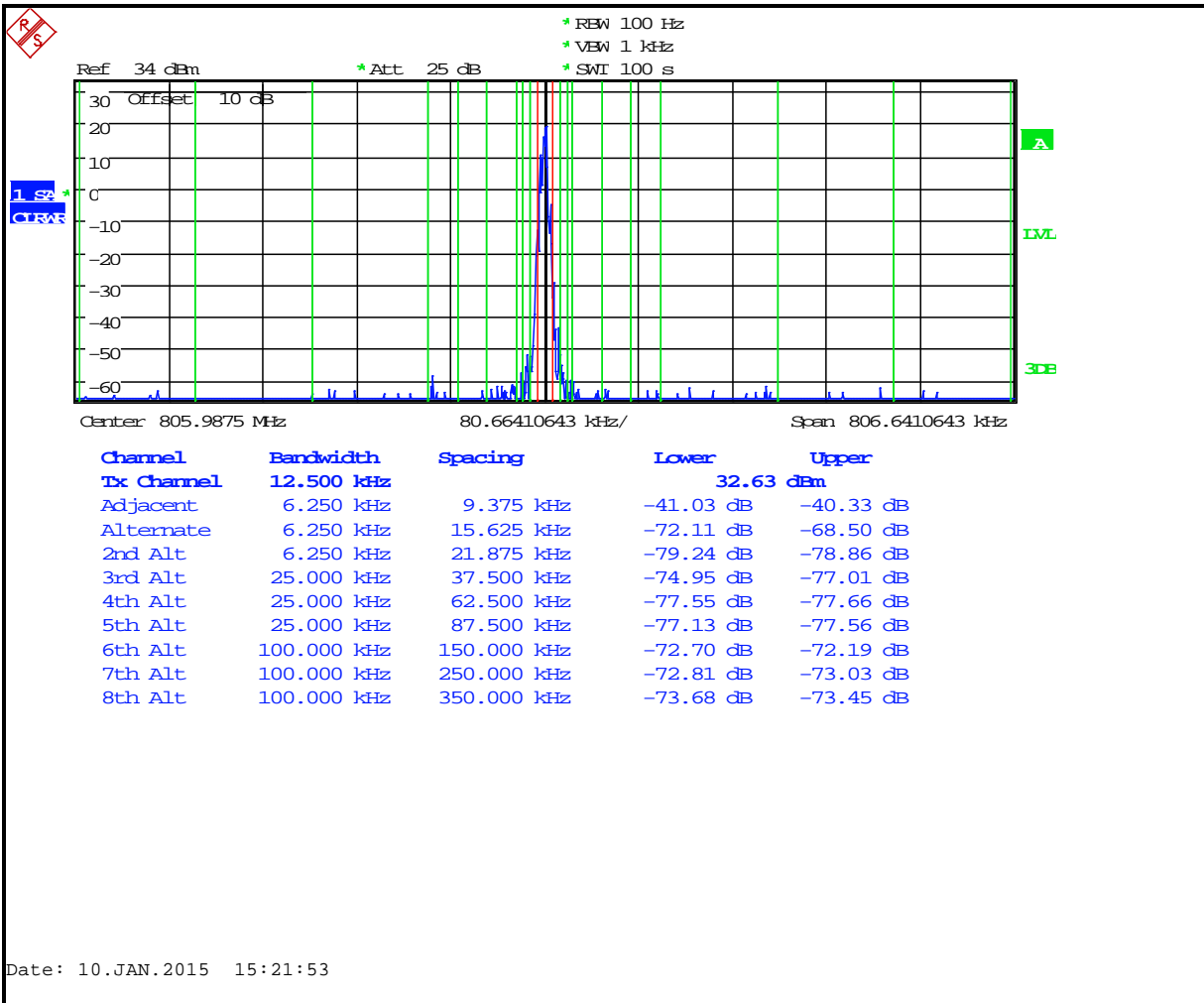
**Plot 6-39: Adjacent Channel Power – 805.0125 MHz; OTP Narrowband; <400 kHz**



**Table 6-39: Adjacent Channel Power – 805.0125 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.4
12 MHz to receive band	30(s)	-75	-94.7
In receive band	30(s)	-100	-106.0

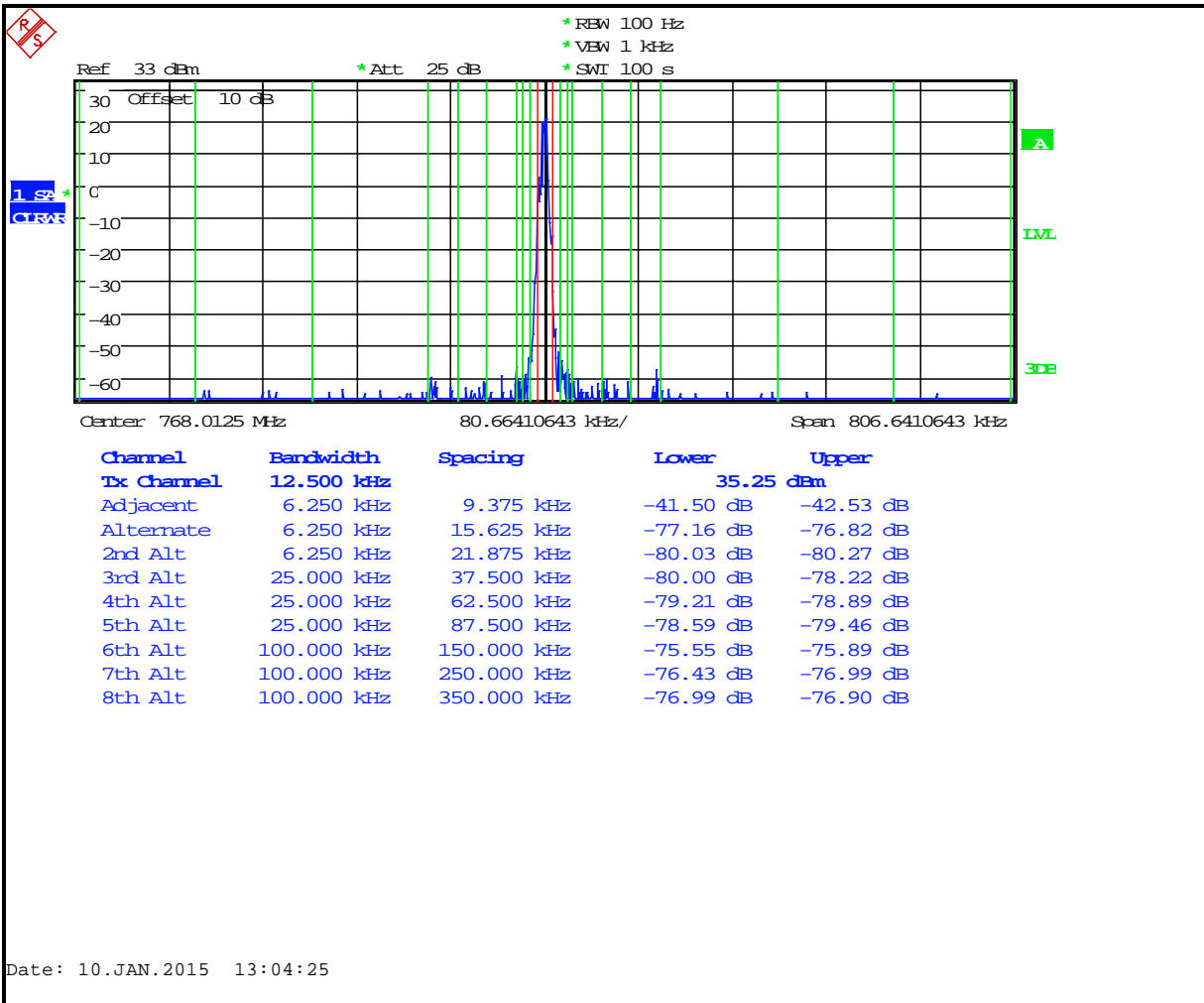
**Plot 6-40: Adjacent Channel Power – 805.9875 MHz; OTP Narrowband; <400 kHz**



**Table 6-40: Adjacent Channel Power – 805.9875 MHz; OTP Narrowband; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.0
12 MHz to receive band	30(s)	-75	-93.4
In receive band	30(s)	-100	-107.2

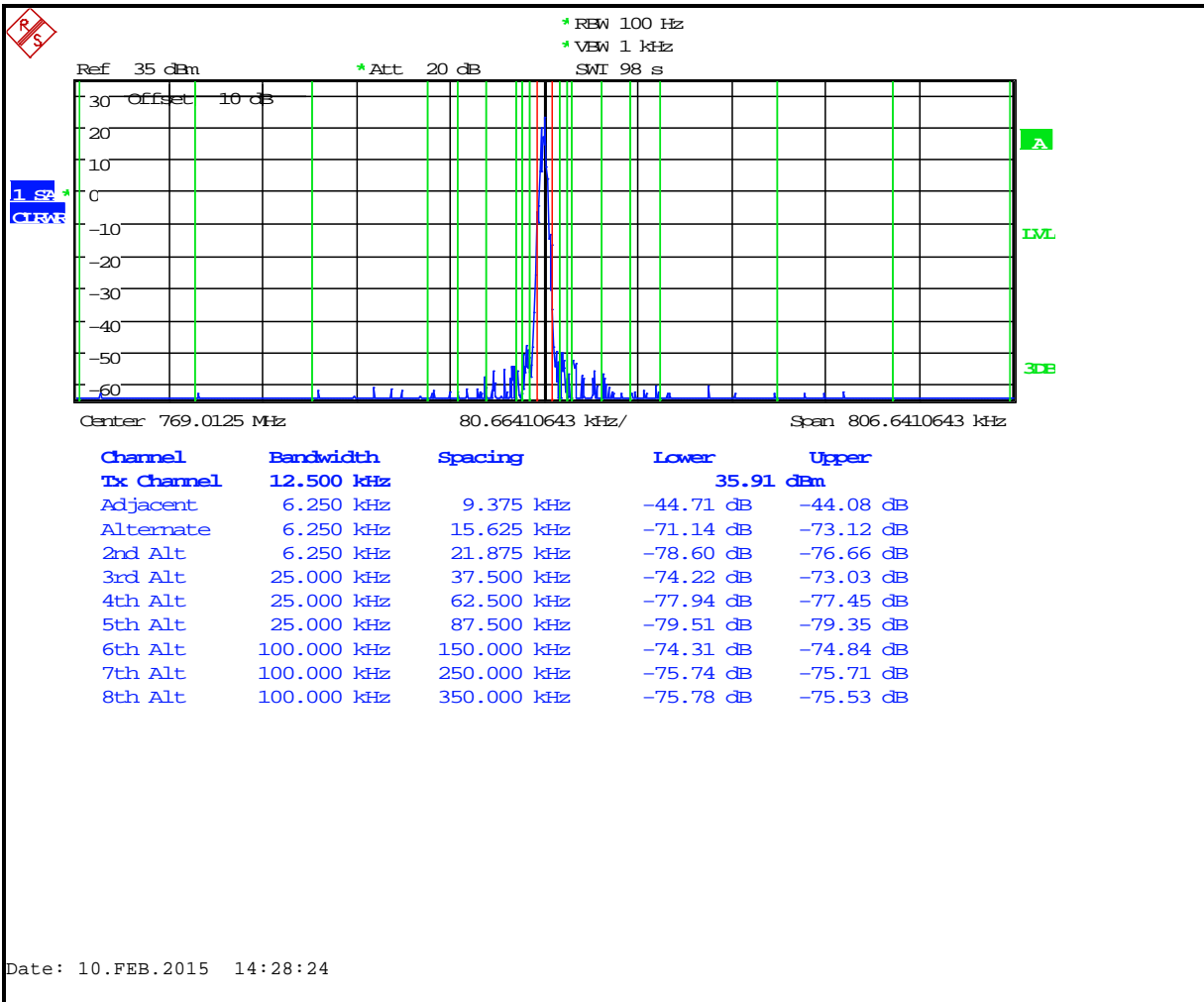
**Plot 6-41: Adjacent Channel Power – 768.0125 MHz; P25; <400 kHz**



**Table 6-41: Adjacent Channel Power – 768.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-86.1
12 MHz to receive band	30(s)	-75	-108.3
In receive band	30(s)	-100	-107.5

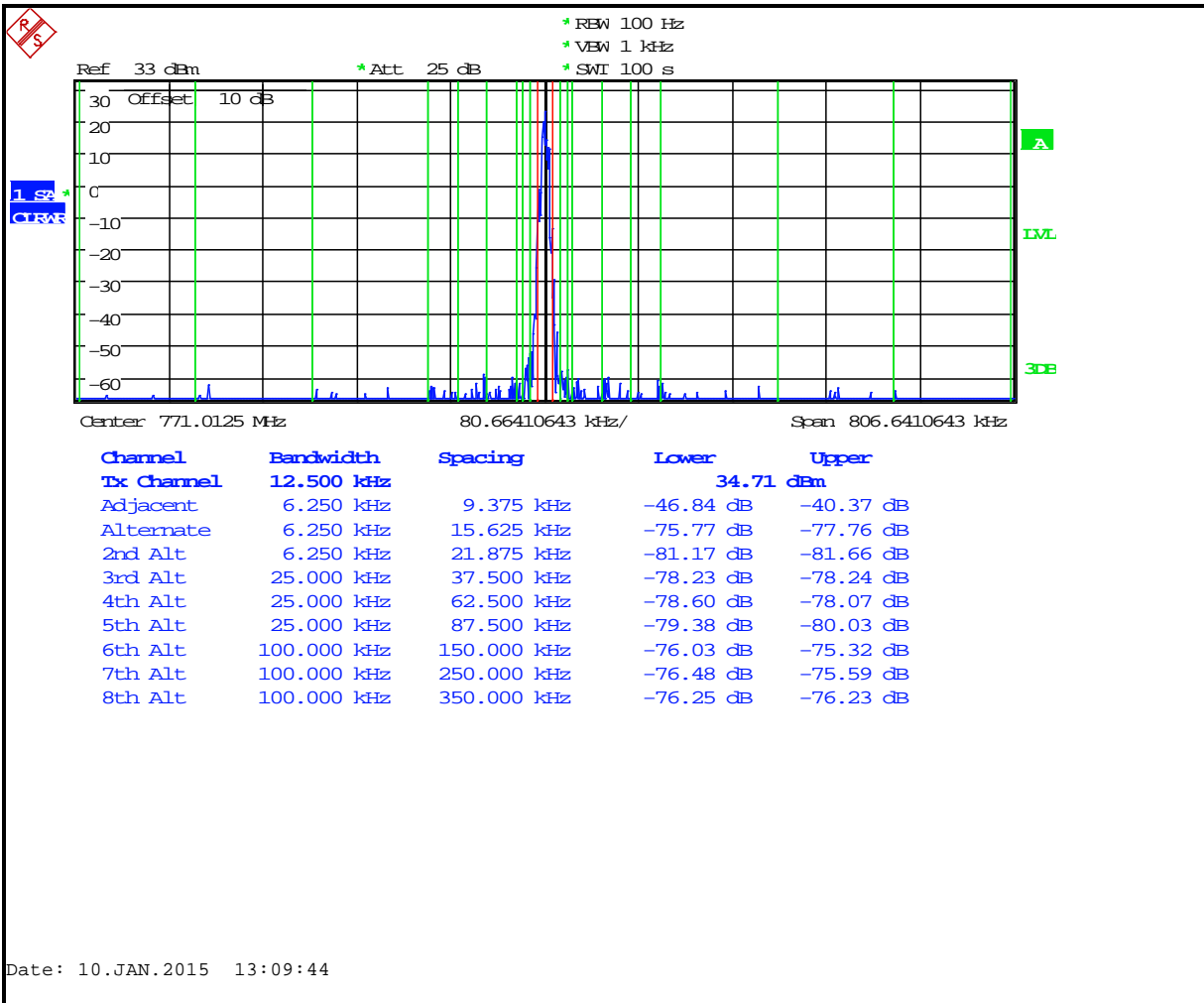
**Plot 6-42: Adjacent Channel Power – 769.0125 MHz; P25; <400 kHz**



**Table 6-42: Adjacent Channel Power – 769.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.6
12 MHz to receive band	30(s)	-75	-105.0
In receive band	30(s)	-100	-107.0

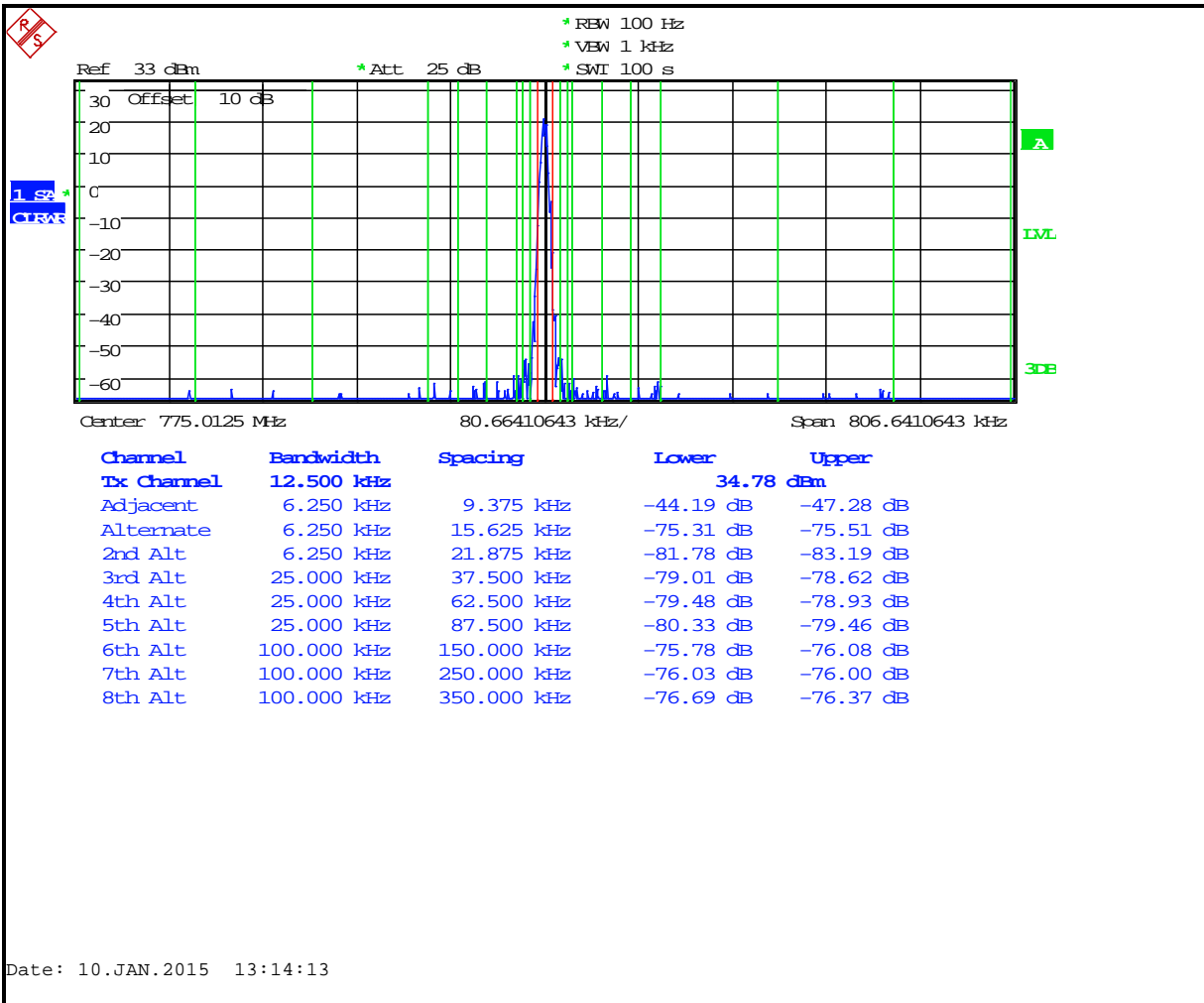
**Plot 6-43: Adjacent Channel Power – 771.0125 MHz; P25; <400 kHz**



**Table 6-43: Adjacent Channel Power – 771.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-82.6
12 MHz to receive band	30(s)	-75	-106.8
In receive band	30(s)	-100	-106.5

**Plot 6-44: Adjacent Channel Power – 775.0125 MHz; P25; <400 kHz**

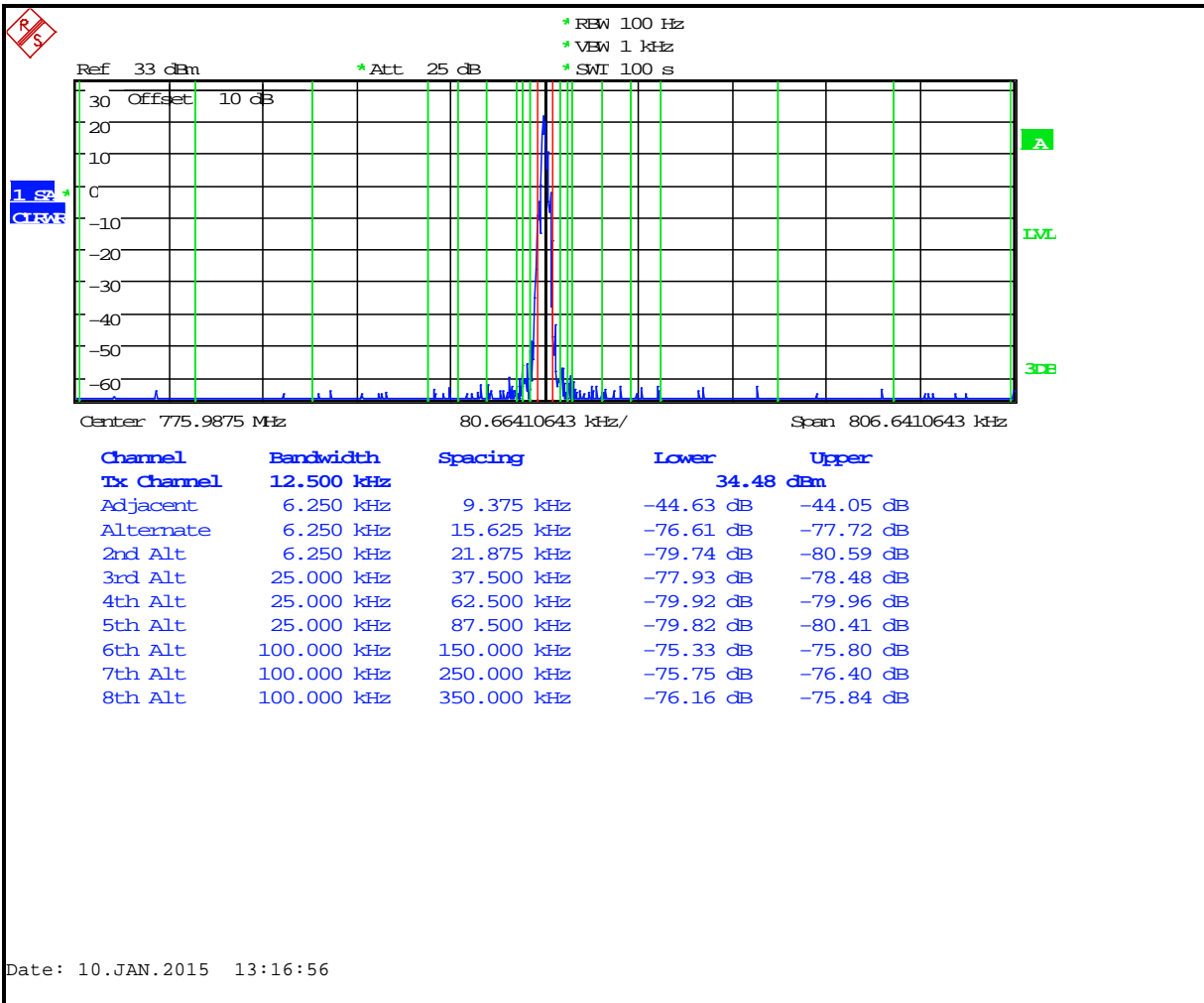


**Table 6-44: Adjacent Channel Power – 775.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-77.2
12 MHz to receive band	30(s)	-75	-103.0
In receive band	30(s)	-100	-107.5



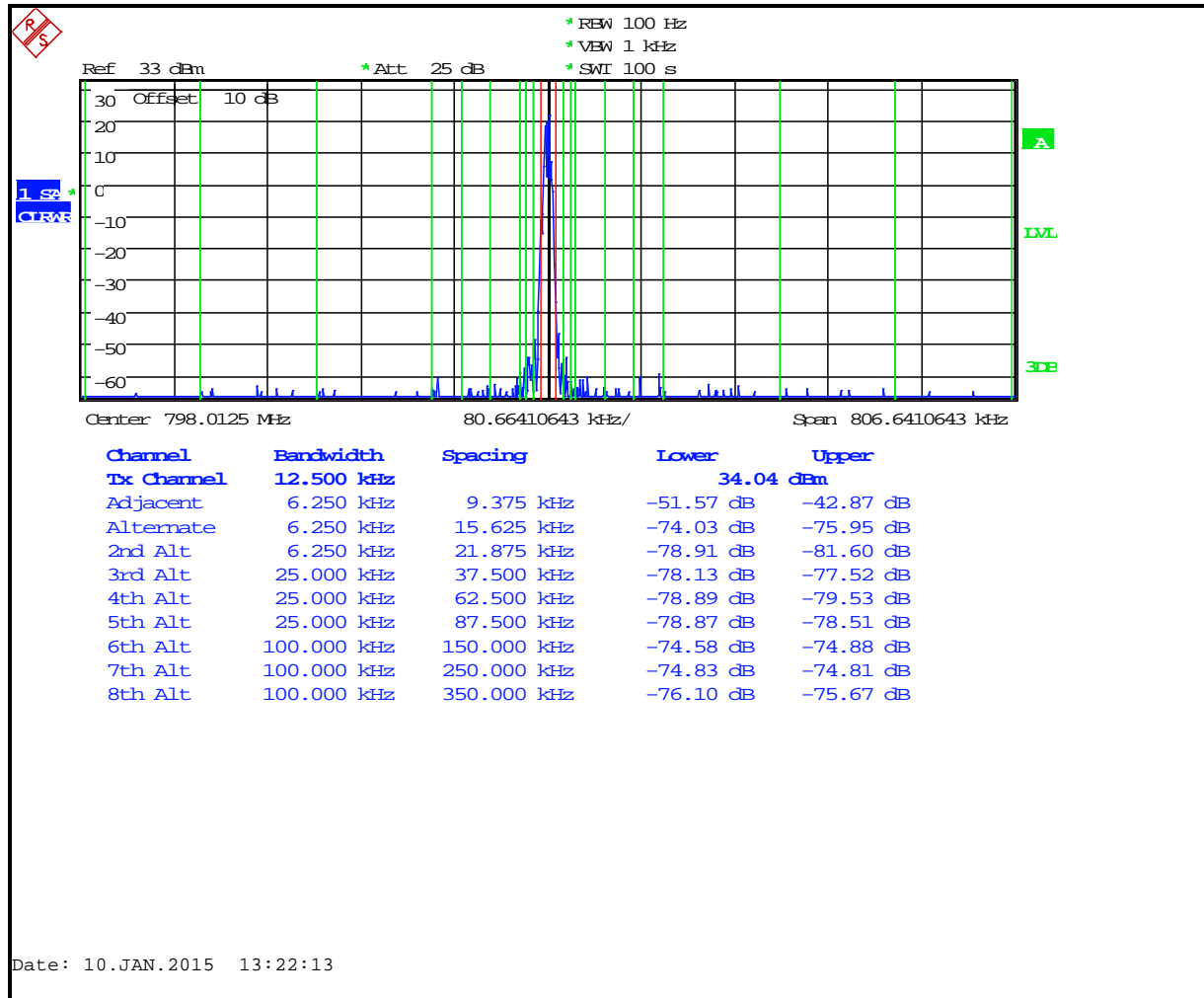
**Plot 6-45: Adjacent Channel Power – 775.9875 MHz; P25; <400 kHz**



**Table 6-45: Adjacent Channel Power – 775.9875 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.7
12 MHz to receive band	30(s)	-75	-101.2
In receive band	30(s)	-100	-106.1

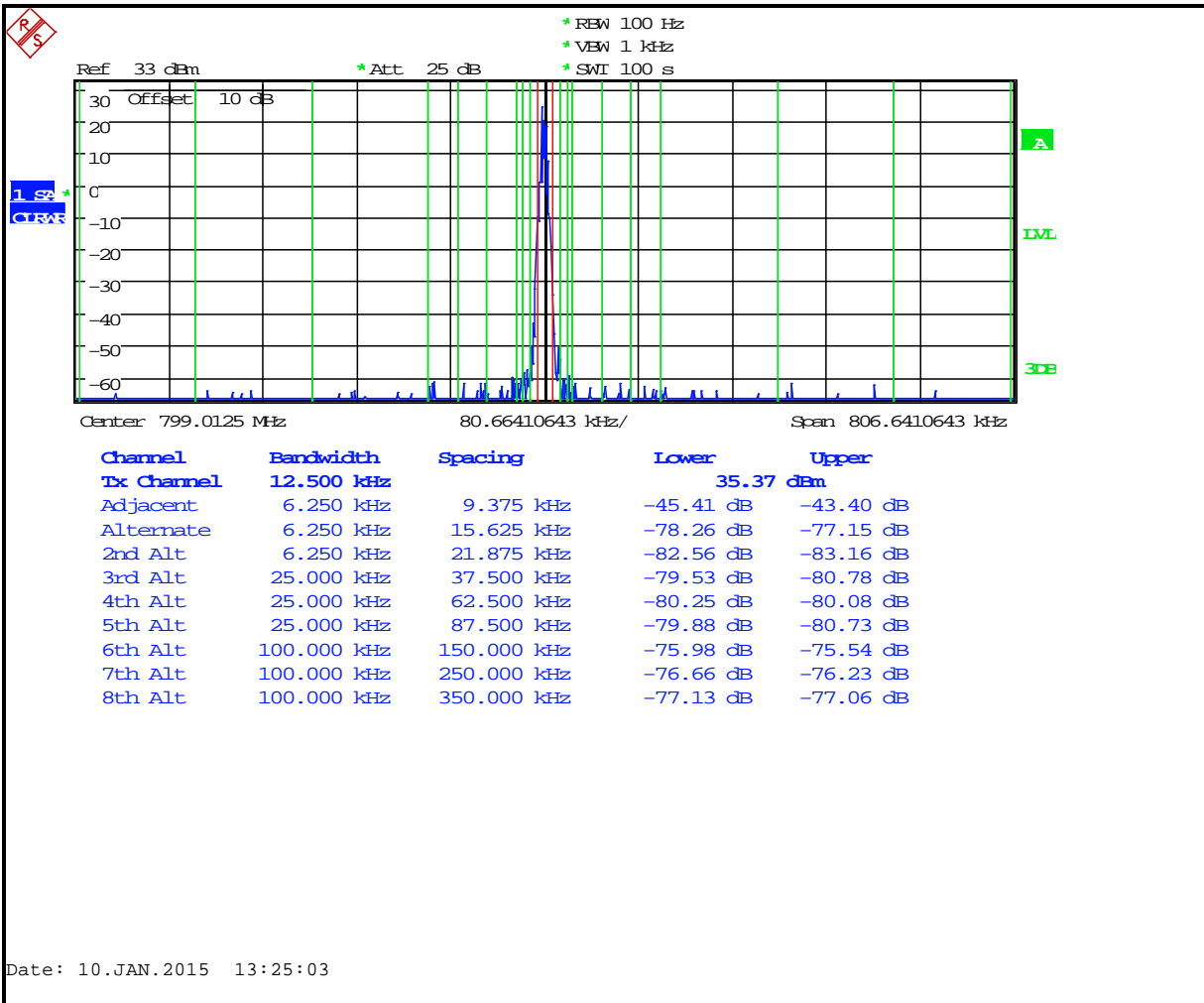
**Plot 6-46: Adjacent Channel Power – 798.0125 MHz; P25; <400 kHz**



**Table 6-46: Adjacent Channel Power – 798.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-78.6
12 MHz to receive band	30(s)	-75	-96.4
In receive band	30(s)	-100	-100.9

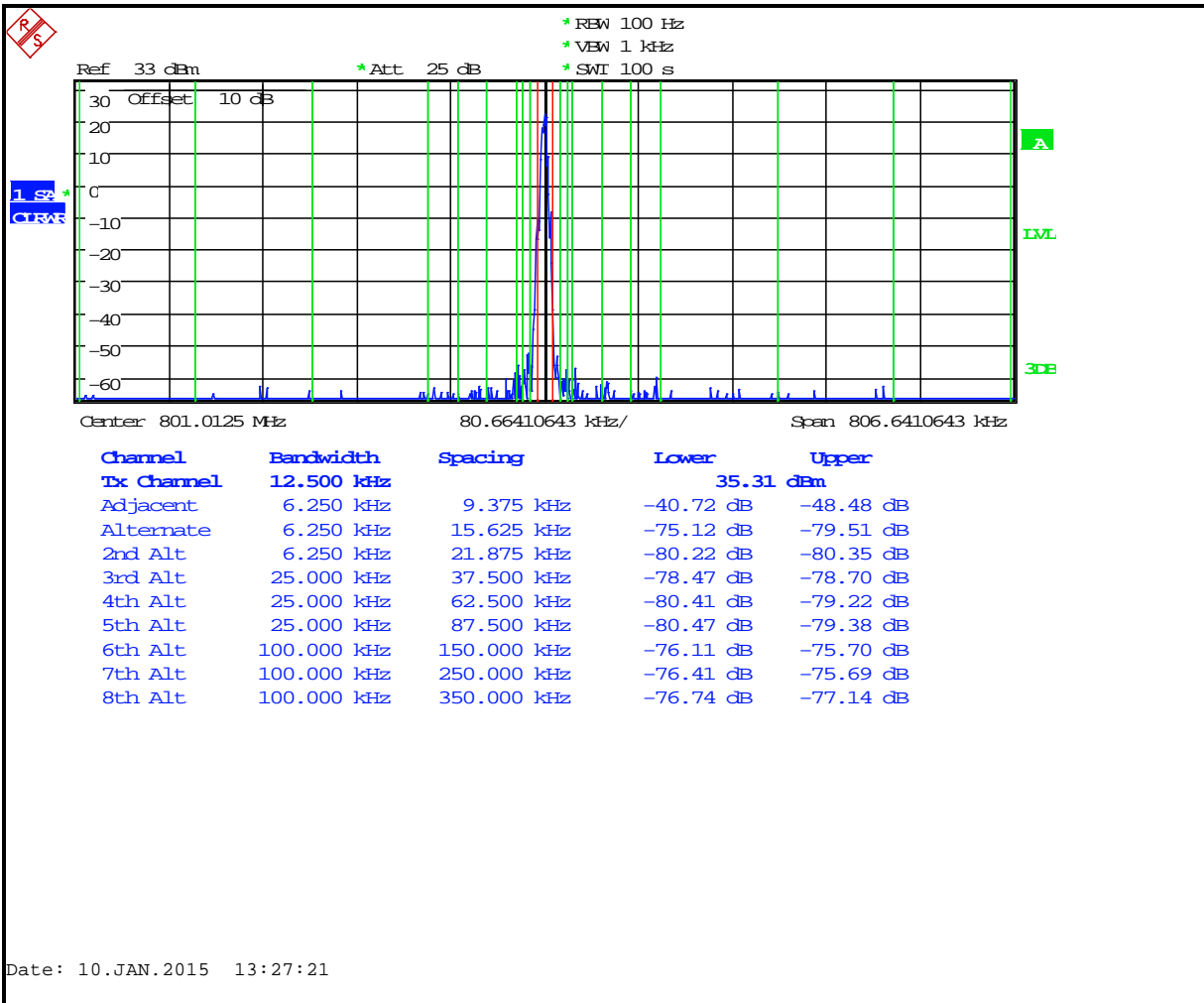
**Plot 6-47: Adjacent Channel Power – 799.0125 MHz; P25; <400 kHz**



**Table 6-47: Adjacent Channel Power – 799.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.6
12 MHz to receive band	30(s)	-75	-99.1
In receive band	30(s)	-100	-101.6

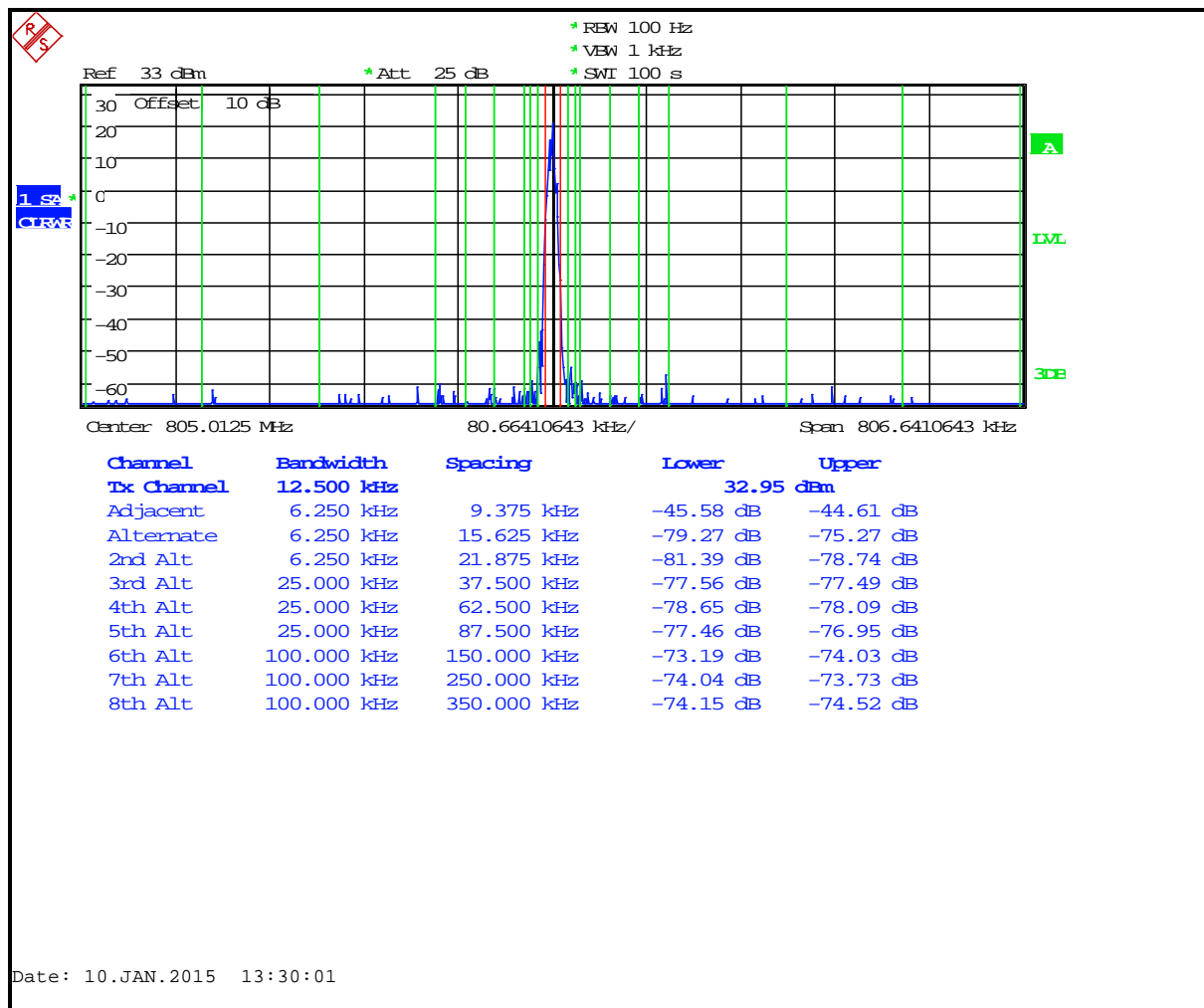
**Plot 6-48: Adjacent Channel Power – 801.0125 MHz; P25; <400 kHz**



**Table 6-48: Adjacent Channel Power – 801.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.9
12 MHz to receive band	30(s)	-75	-100.0
In receive band	30(s)	-100	-105.8

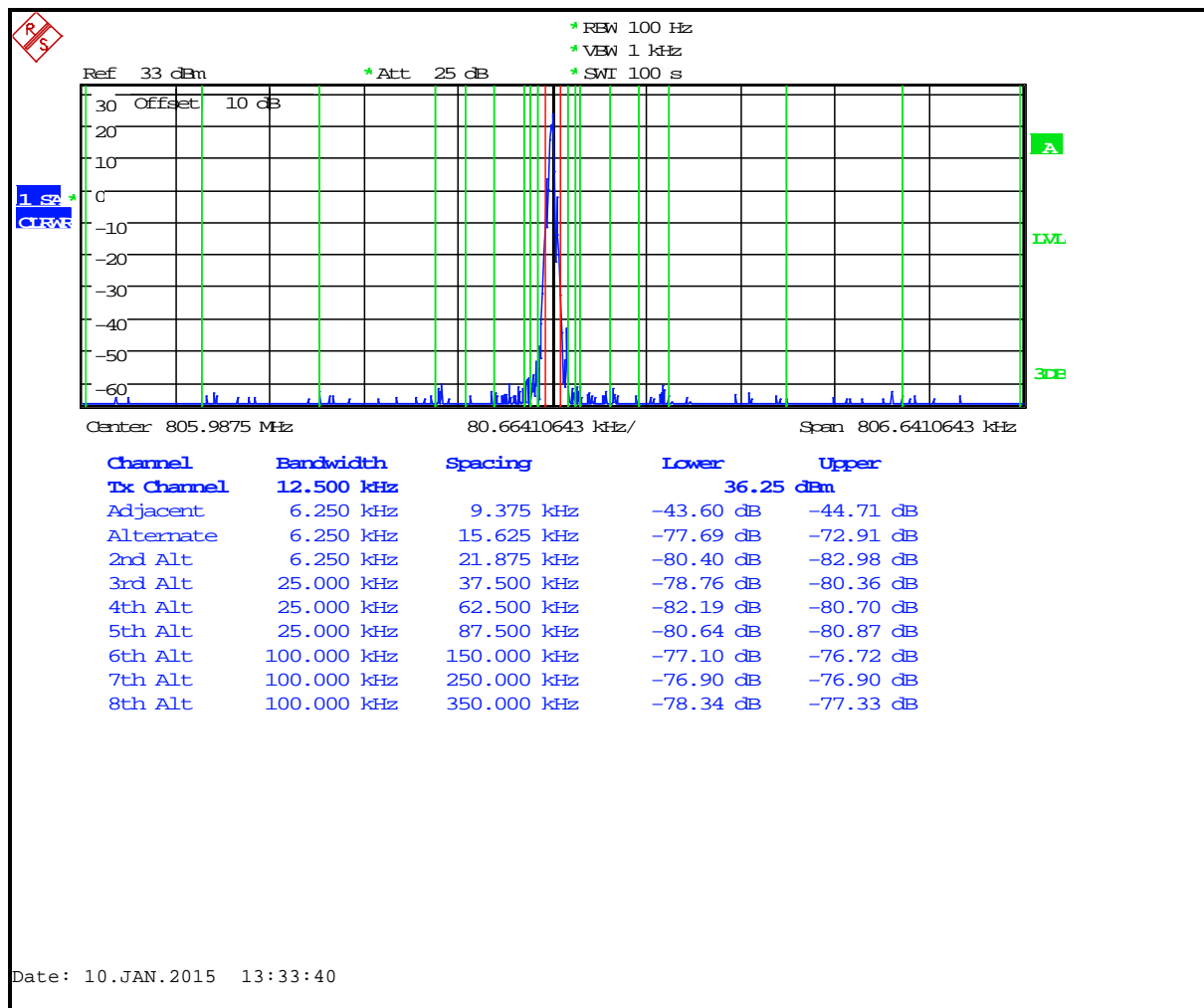
**Plot 6-49: Adjacent Channel Power – 805.0125 MHz; P25; <400 kHz**



**Table 6-49: Adjacent Channel Power – 805.0125 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.9
12 MHz to receive band	30(s)	-75	-96.5
In receive band	30(s)	-100	-107.4

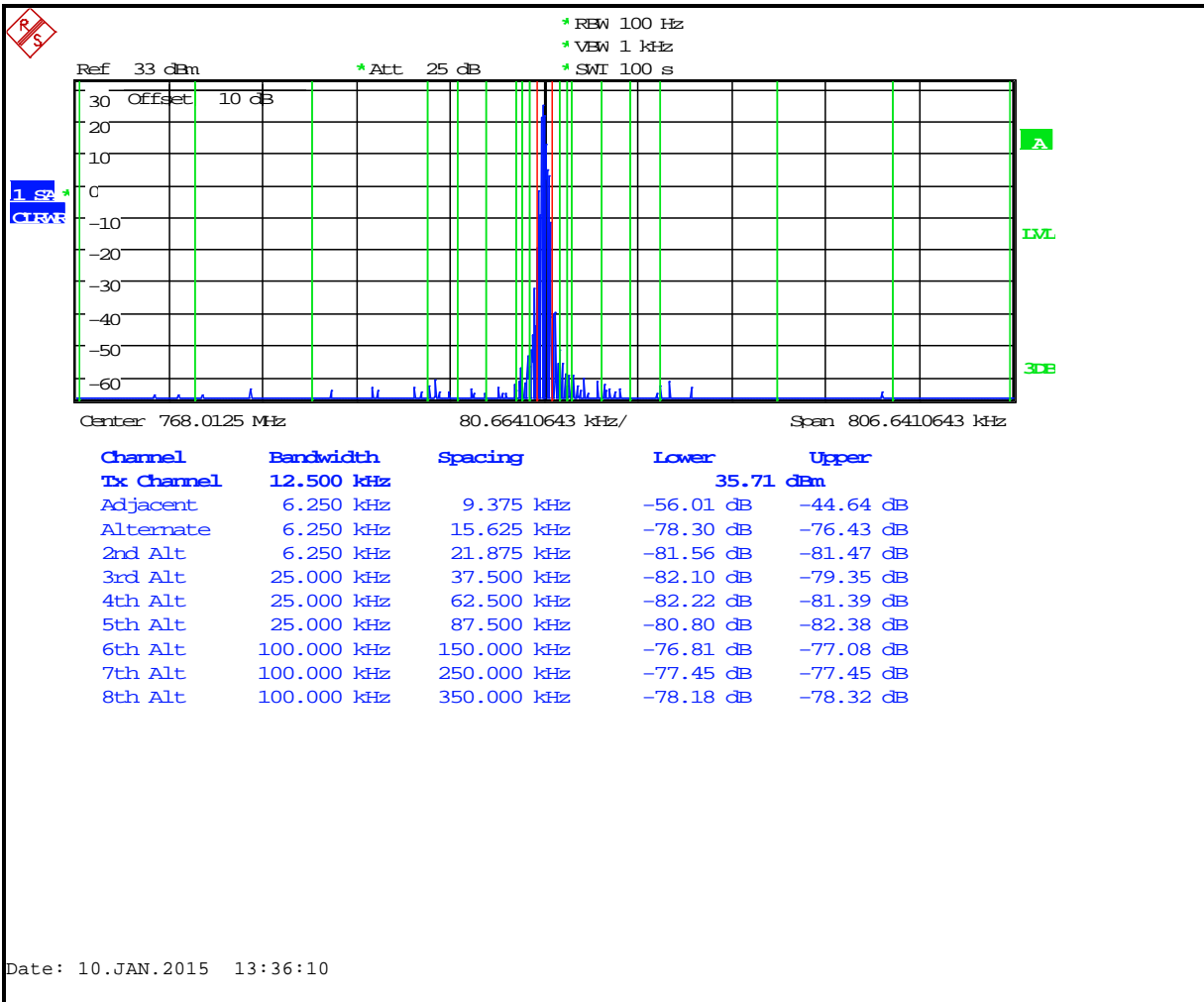
**Plot 6-50: Adjacent Channel Power – 805.9875 MHz; P25; <400 kHz**



**Table 6-50: Adjacent Channel Power – 805.9875 MHz; P25; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.2
12 MHz to receive band	30(s)	-75	-95.8
In receive band	30(s)	-100	-106.8

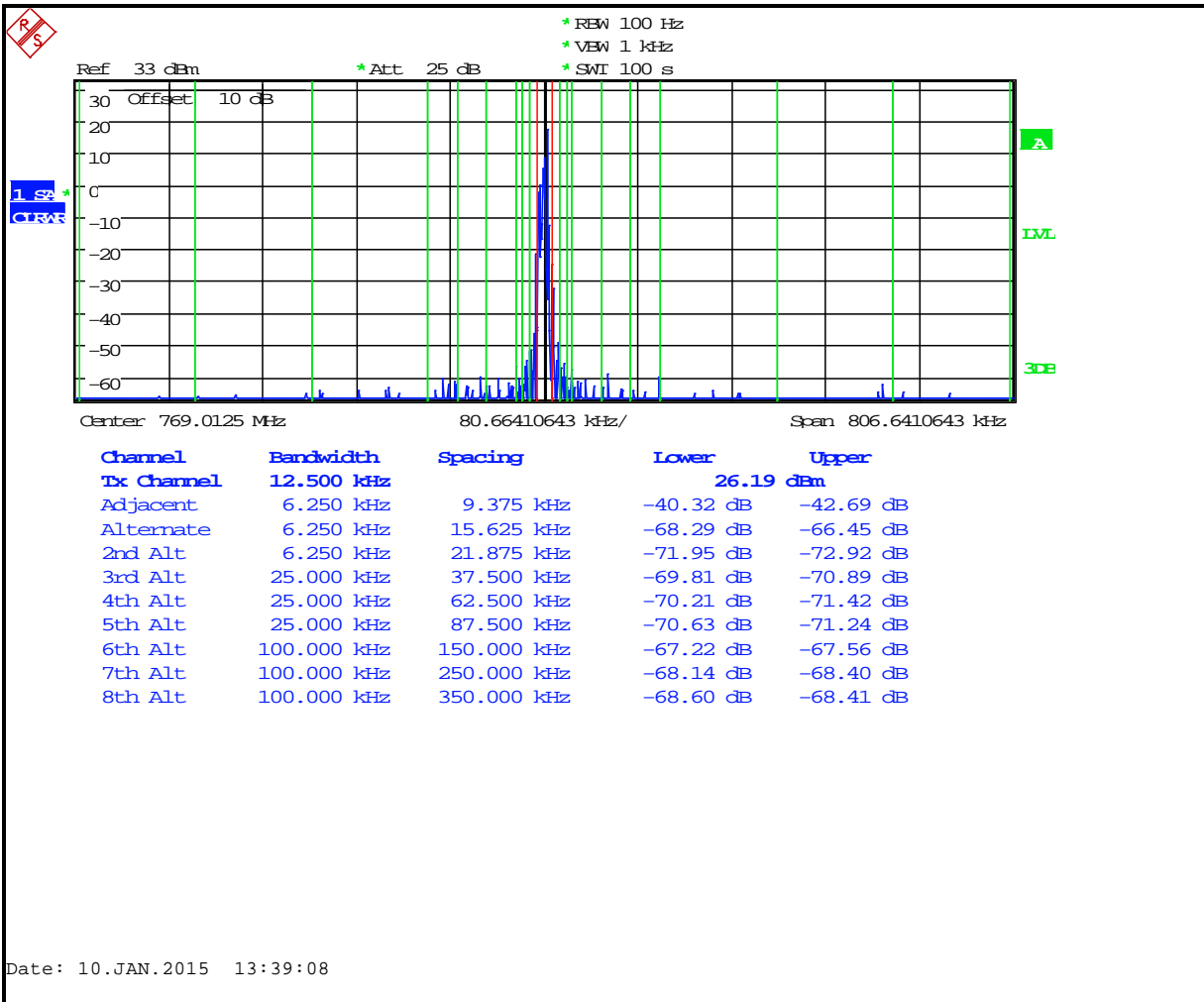
**Plot 6-51: Adjacent Channel Power – 768.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-51: Adjacent Channel Power – 768.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-87.3
12 MHz to receive band	30(s)	-75	-108.6
In receive band	30(s)	-100	-107.8

**Plot 6-52: Adjacent Channel Power – 769.0125 MHz; P25 Phase 2; <400 kHz**

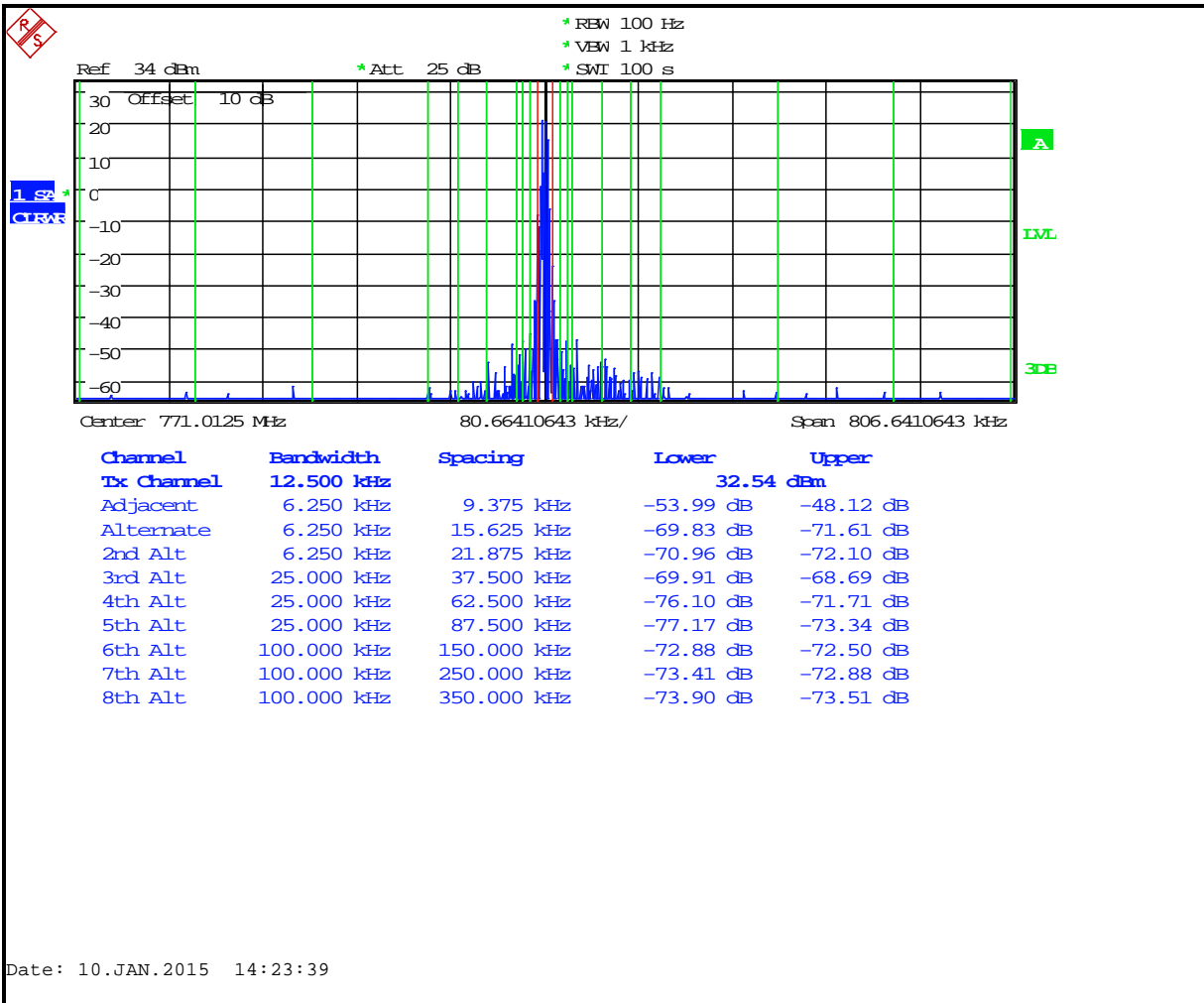


**Table 6-52: Adjacent Channel Power – 769.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-79.5
12 MHz to receive band	30(s)	-75	-105.1
In receive band	30(s)	-100	-108.7



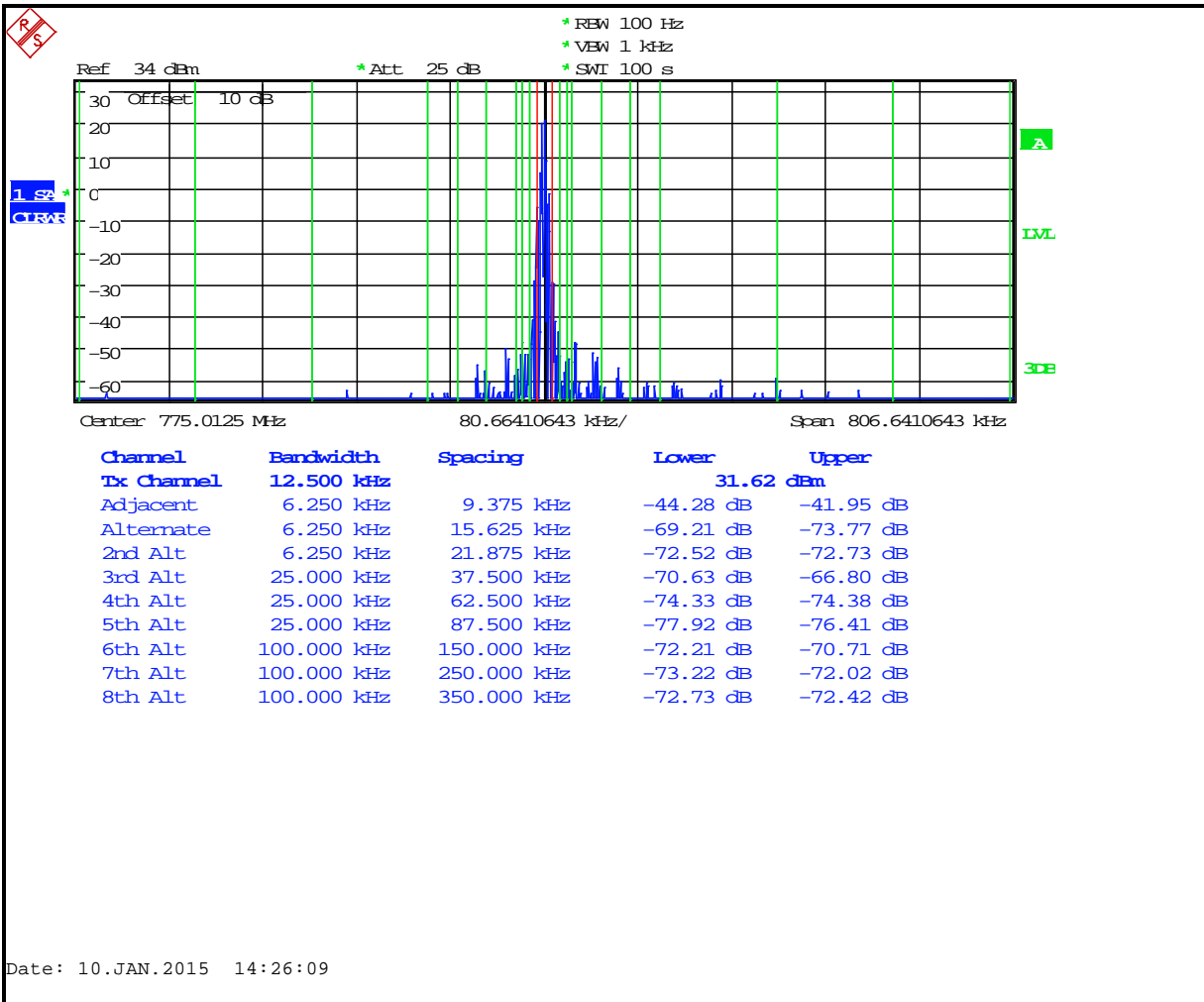
**Plot 6-53: Adjacent Channel Power – 771.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-53: Adjacent Channel Power – 771.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.1
12 MHz to receive band	30(s)	-75	-106.1
In receive band	30(s)	-100	-107.2

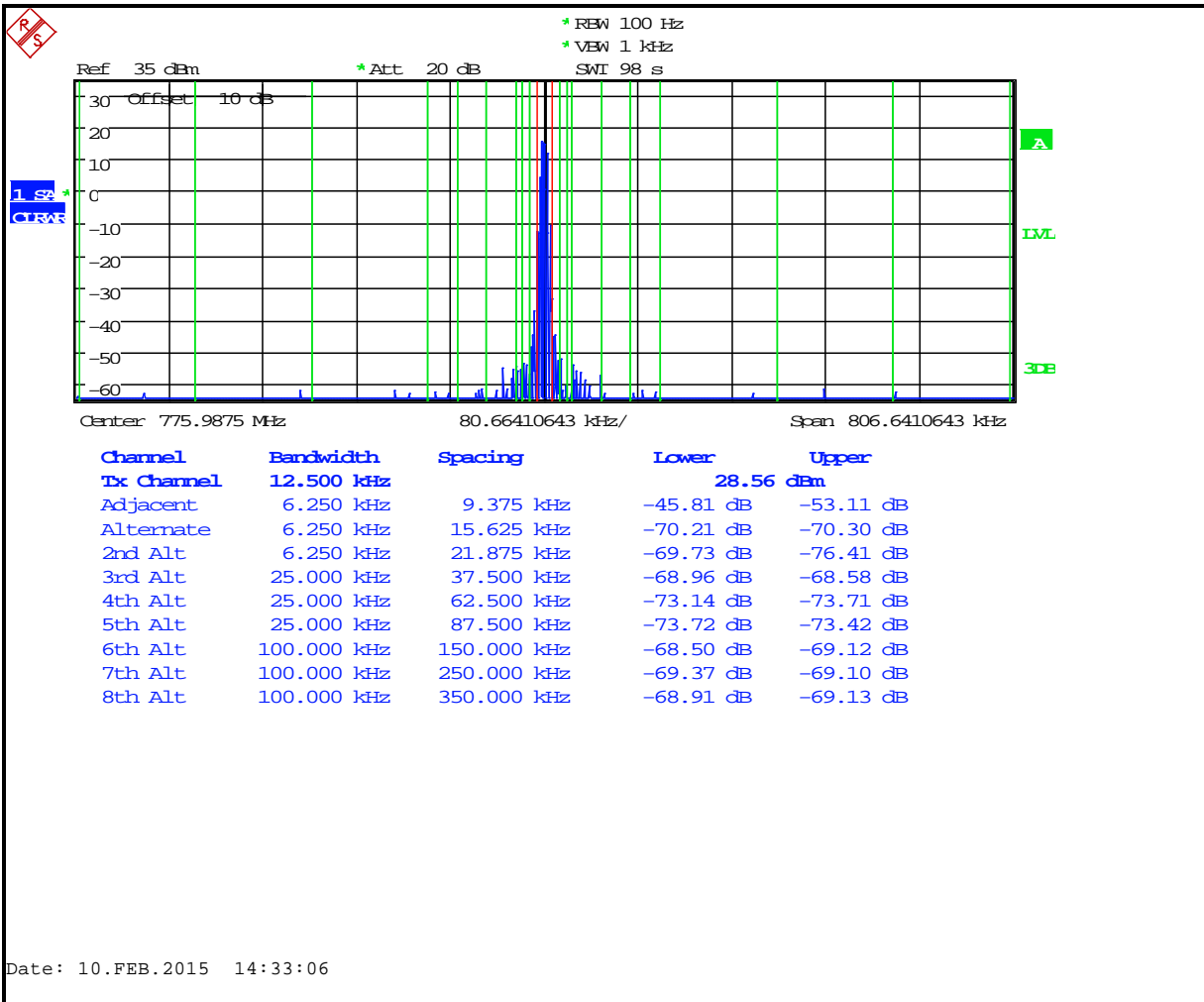
**Plot 6-54: Adjacent Channel Power – 775.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-54: Adjacent Channel Power – 775.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.5
12 MHz to receive band	30(s)	-75	-101.9
In receive band	30(s)	-100	-105.4

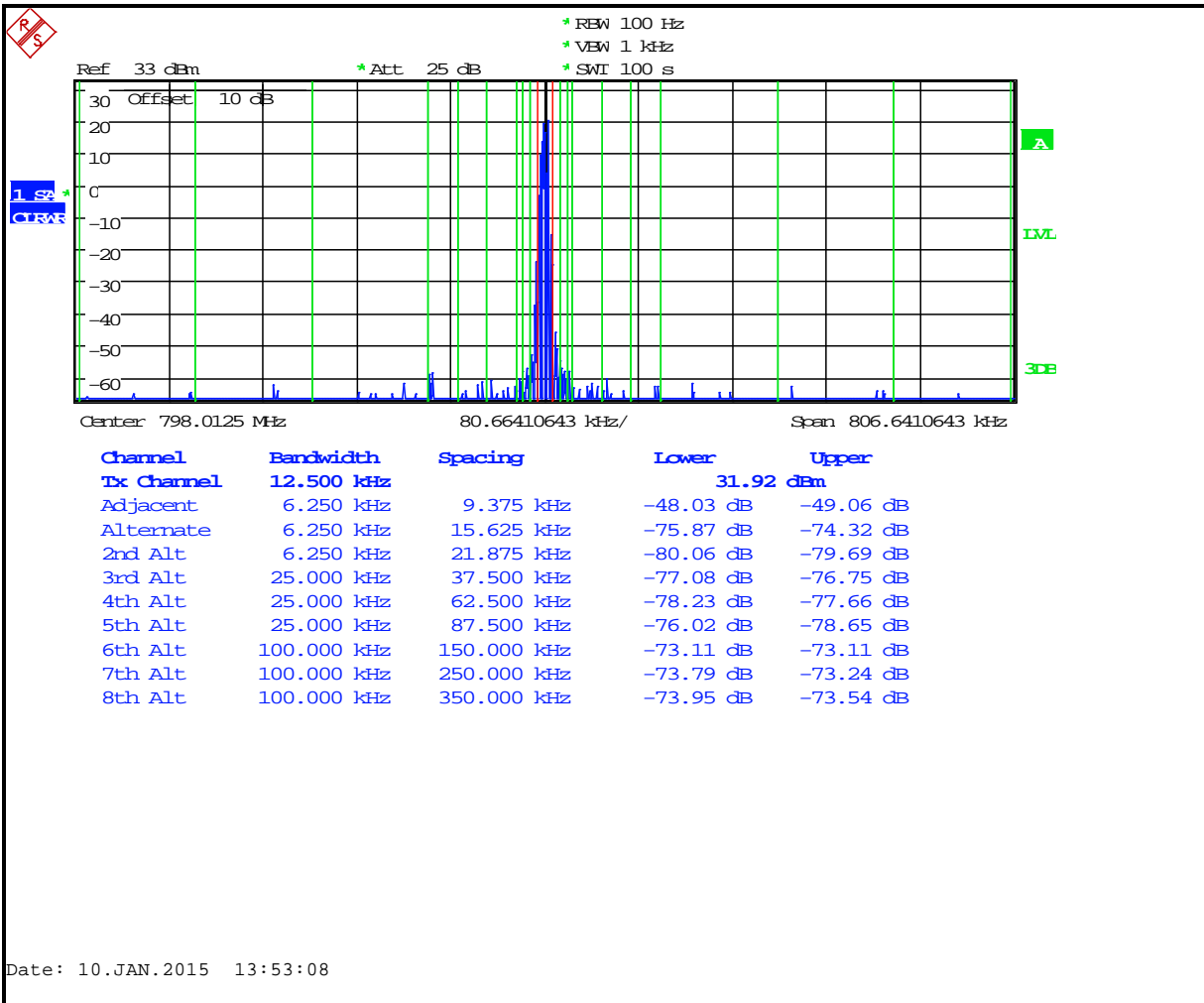
**Plot 6-55: Adjacent Channel Power – 775.9875 MHz; P25 Phase 2; <400 kHz**



**Table 6-55: Adjacent Channel Power – 775.9875 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.6
12 MHz to receive band	30(s)	-75	-100.1
In receive band	30(s)	-100	-105.2

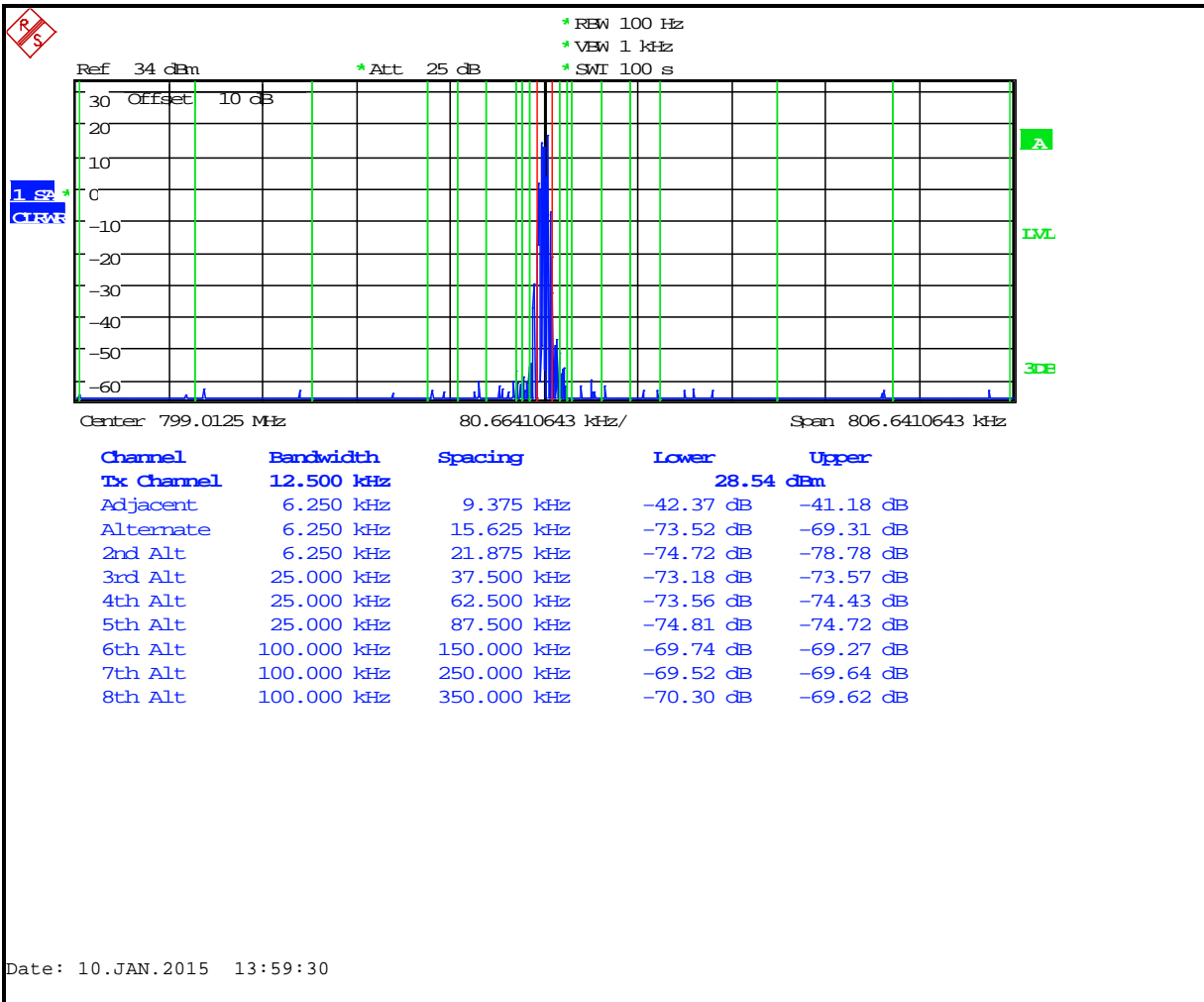
**Plot 6-56: Adjacent Channel Power – 798.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-56: Adjacent Channel Power – 798.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-80.6
12 MHz to receive band	30(s)	-75	-101.4
In receive band	30(s)	-100	-101.7

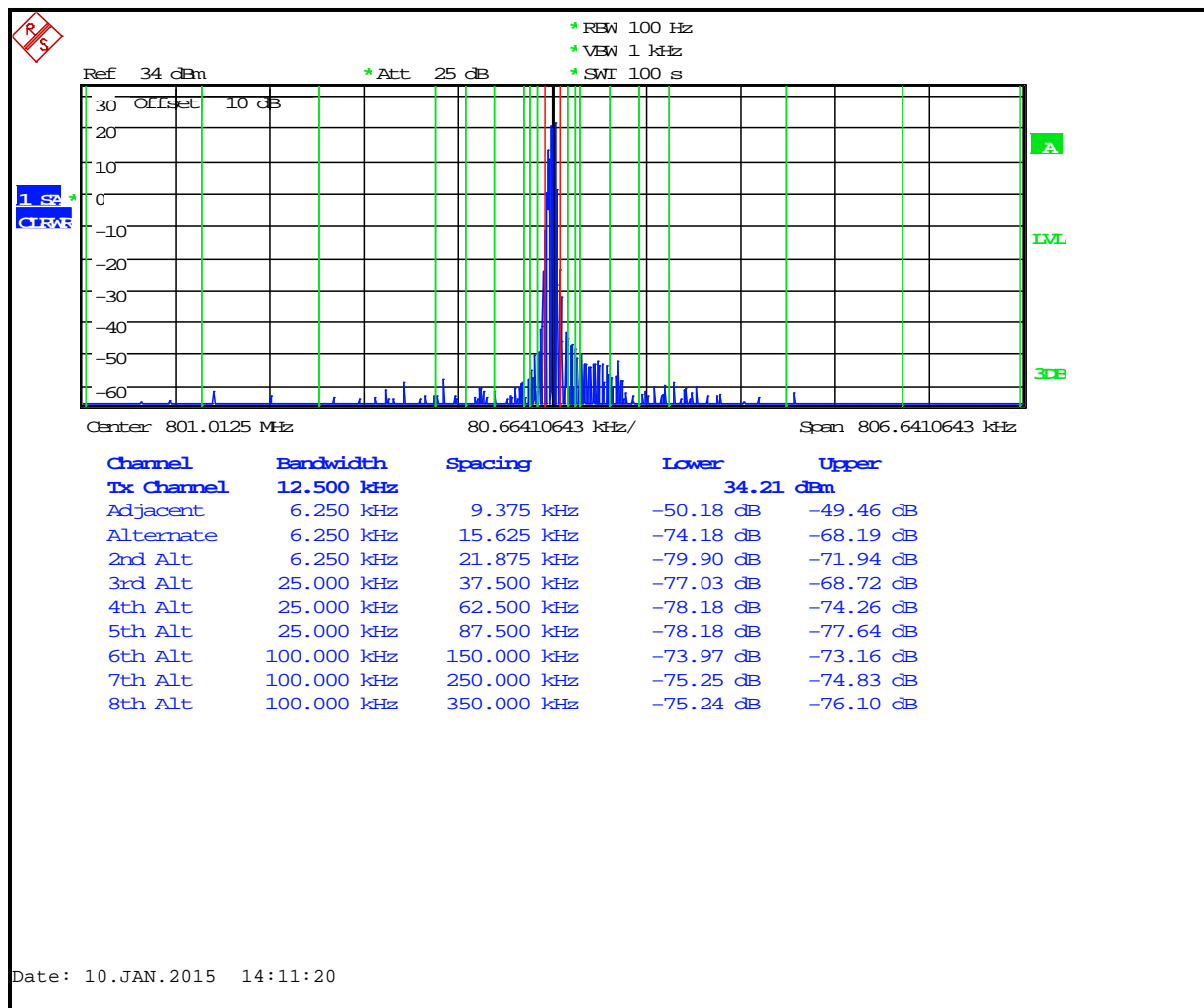
**Plot 6-57: Adjacent Channel Power – 799.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-57: Adjacent Channel Power – 799.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.4
12 MHz to receive band	30(s)	-75	-99.1
In receive band	30(s)	-100	-103.0

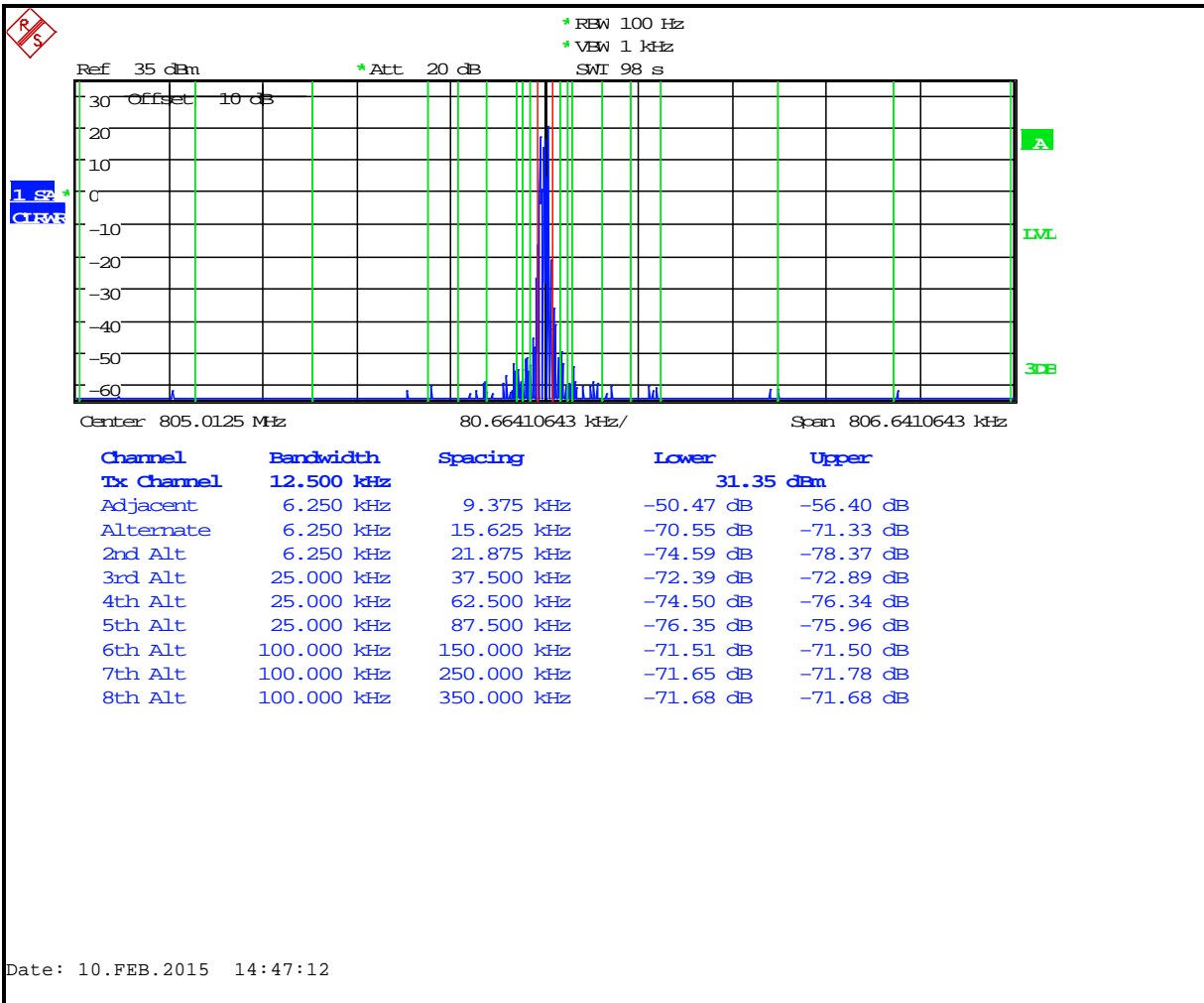
**Plot 6-58: Adjacent Channel Power – 801.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-58: Adjacent Channel Power – 801.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-83.1
12 MHz to receive band	30(s)	-75	-100.4
In receive band	30(s)	-100	-106.0

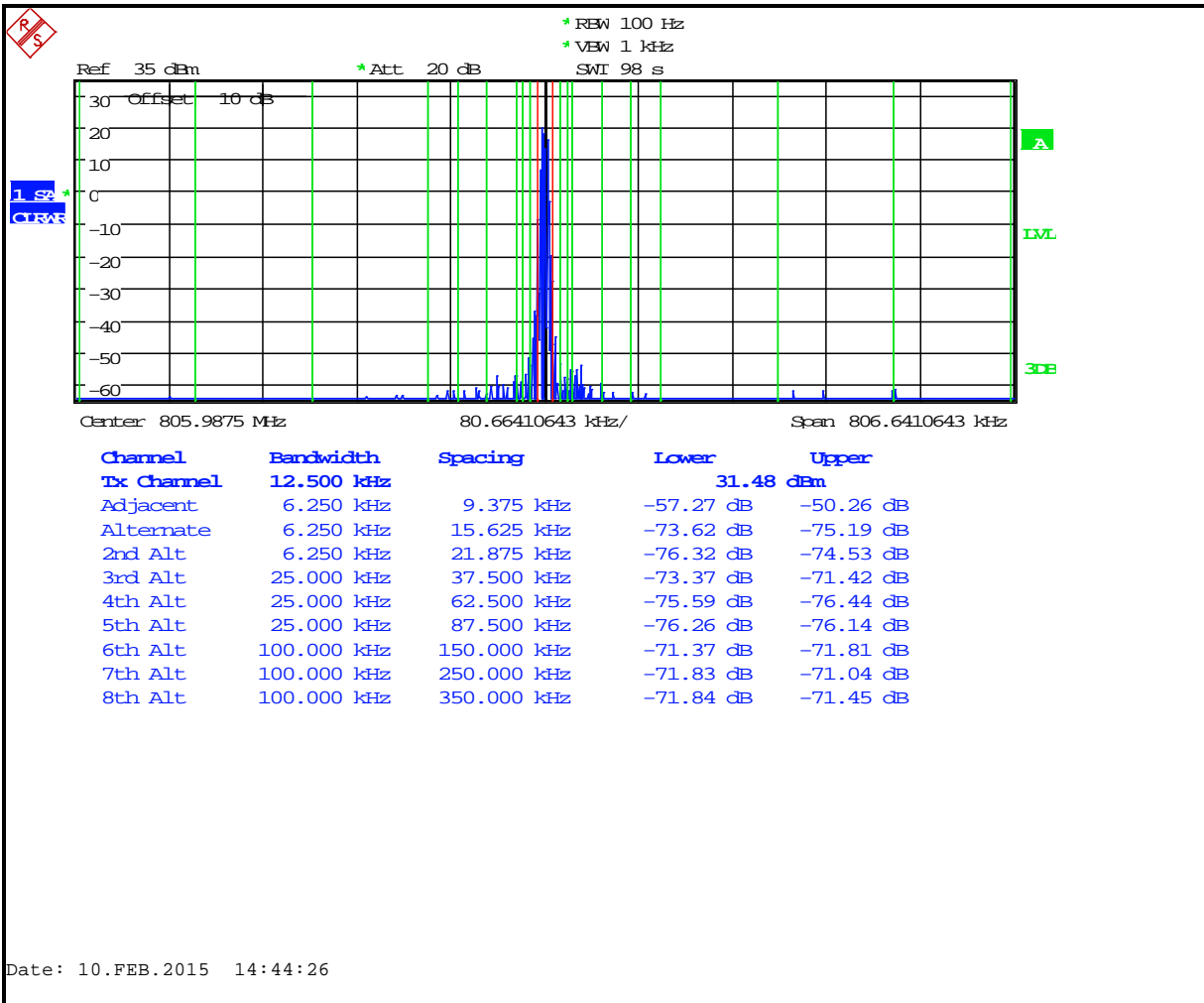
**Plot 6-59: Adjacent Channel Power – 805.0125 MHz; P25 Phase 2; <400 kHz**



**Table 6-59: Adjacent Channel Power – 805.0125 MHz; P25 Phase 2; 400 kHz – RX band**

Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.7
12 MHz to receive band	30(s)	-75	-96.2
In receive band	30(s)	-100	-107.7

**Plot 6-60: Adjacent Channel Power – 805.9875 MHz; P25 Phase 2; <400 kHz**



**Table 6-60: Adjacent Channel Power – 805.9875 MHz; P25 Phase 2; 400 kHz – RX band**


Offset from Center Frequency (kHz)	Measurement BW (kHz)	Max ACP (dBc)	Max ACP (dBc)
>400 to 12 MHz	30(s)	-75	-81.0
12 MHz to receive band	30(s)	-75	-94.8
In receive band	30(s)	-100	-105.2



**Table 6-61: Test Equipment Used For Testing ACP Requirements**

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	11/13/15
900948	Weinschel Corporation	47-10-43	Attenuator DC-18 GHz 10 dB 50W	BH1487	6/16/15
900819	Weinschel Corporation	2	10 dB Attenuator; 5 W	BF0830	7/1/15
901139	Weinschel Corporation	48-20-34 DC-18GHz	Attenuator, 100W 20dB	BK5859	3/25/16

**Test Personnel:**

Daniel Baltzell EMC Test Engineer	 Signature	January 9-10 & February 10, 2015 Dates of Tests
--------------------------------------	---	--

## **7 FCC Rules and Regulations Part 90.210(g) and Part 2.1053(a): Field Strength of Spurious Radiation; Part 90.543(f): Out of Band Emissions Limit**

### **7.1 Test Procedure**

TIA-603-D 2010, section 2.2.12

Analog Modulation: The transmitter is terminated with a 50  $\Omega$  load and is modulated with a 2,500 Hz sine wave at an input level 16 dB greater than that required to produce 50% of the rated system deviation at 1,000 Hz.

Device with digital modulation: Modulated to its maximum extent using a pseudo-random data sequence – 19,200 bps for OTP and 9,600 bps for P25 and EDACS modes.

The spurious emissions levels were measured, and the device under test was replaced by a substitution antenna connected to a signal generator. This signal generator level was then corrected by subtracting the cable loss from the substitution antenna to the signal generator, and the gain of the antenna (dBi) was added to achieve the EIRP level, then converted from the corrected signal generator level (dBm) to dBW for the GNSS band and compared to the limit.

For emissions in the 1559-1610 band, Part 15.543(f) states: "For operations in the 763–775 MHz and 793–805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation."

## 7.2 Test Data

### 7.2.1 CFR 47 Part 90.210 Requirements

The magnitude of emissions attenuated more than 20 dB below the FCC limit need not be recorded.

The following emissions were found to be within a 20 dB margin of the limit. All other emissions are not listed.

**Table 7-1: Field Strength of Spurious Radiation – 806.0125 MHz**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Substitution Measurement (dBm)	Substitution Cable Loss (dB)	Substitution Antenna Gain (dBi)	Corrected Signal Generator Level (dBd)	Margin (dB)
2418.038	41.7	-34.7	0.5	9.5	69.6	-14.7

**Table 7-2: Field Strength of Spurious Radiation – 815 MHz**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Substitution Measurement (dBm)	Substitution Cable Loss (dB)	Substitution Antenna Gain (dBi)	Corrected Signal Generator Level (dBd)	Margin (dB)
2445.000	31.6	-46.8	0.5	9.5	72.8	-17.8

**Table 7-3: Field Strength of Spurious Radiation – 823.9875 MHz**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Substitution Measurement (dBm)	Substitution Cable Loss (dB)	Substitution Antenna Gain (dBi)	Corrected Signal Generator Level (dBd)	Margin (dB)
2471.963	34.6	-41.8	0.5	9.5	67.8	-12.8

**Table 7-4: Field Strength of Spurious Radiation – 851.0125 MHz**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Substitution Measurement (dBm)	Substitution Cable Loss (dB)	Substitution Antenna Gain (dBi)	Corrected Signal Generator Level (dBd)	Margin (dB)
2553.038	31.0	-45.2	0.5	9.5	71.2	-16.2

**Table 7-5: Field Strength of Spurious Radiation – 860 MHz**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Substitution Measurement (dBm)	Substitution Cable Loss (dB)	Substitution Antenna Gain (dBi)	Corrected Signal Generator Level (dBd)	Margin (dB)
2580.000	33.2	-45.3	0.5	9.6	71.1	-16.2

**Table 7-6: Field Strength of Spurious Radiation – 868.9875 MHz**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Substitution Measurement (dBm)	Substitution Cable Loss (dB)	Substitution Antenna Gain (dBi)	Corrected Signal Generator Level (dBd)	Margin (dB)
2606.963	35.7	-42.3	0.5	9.6	68.1	-13.2

**7.2.2 CFR 47 Part 90.543(f) Requirements**

The worst-case emissions test data are shown.

Limit: -80 dBW EIRP for discrete emissions

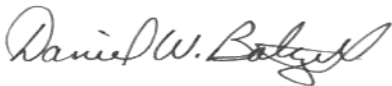
**Table 7-7: Field Strength of Spurious Radiation**

Frequency (MHz)	Spectrum Analyzer Level (dBuV)	Signal Generator Level (dBm)	Cable Loss to Transmit Antenna (dB)	Antenna Gain (dBi)	Corrected Signal Generator Level (dBW)	Margin (dB)
1536.025	25.6	-48.6	0.4	8.0	-71.0	-1.0
1538.025	22.8	-51.8	0.4	8.0	-74.2	-4.2
1542.025	23.5	-50.7	0.4	8.1	-73.0	-3.0
1596.025	23.1	-52.0	0.4	8.8	-73.6	-3.6
1598.025	26.1	-48.8	0.4	8.9	-70.3	-0.3
1602.025	22.0	-52.8	0.4	8.9	-74.3	-4.3

**Table 7-8: Test Equipment Used for Testing Field Strength of Spurious Radiation**

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
900932	Hewlett Packard	8449B OPT H02	Preamplifier (1 - 26.5 GHz)	3008A00505	9/10/16
900878	Rhein Tech Laboratories	AM3-1197-0005	3 meter antenna mast, polarizing	OATS1	N/A
901592	Insulated Wire Inc.	KPS-1503-3600-KPR	SMK RF Cables 20'	NA	9/4/16
901593	Insulated Wire Inc.	KPS-1503-360-KPR	SMK RF Cables 36"	NA	9/4/16
901594	Insulated Wire Inc.	KPS-1503-360-KPR	SMK RF Cables 36"	NA	9/4/16
901242	Rhein Tech Laboratories	WRT-000-0003	Wood rotating table	N/A	N/A
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	11/13/16
901582	Rohde & Schwarz	1167.0000.02	Signal Generator	101903	11/14/16
900791	Chase	CBL6111B	Bilog Antenna (30 MHz – 2000 MHz)	N/A	6/11/17
900321	EMCO	3161-03	Horn Antennas (4 – 8 GHz)	9508-1020	4/9/18
900323	EMCO	3160-07	Horn Antennas (8.2 – 12 GHz)	9605-1054	4/9/18
900772	EMCO	3161-02	Horn Antenna (2 - 4 GHz)	9804-1044	4/9/18
901132	Par Electronics	806-902 (25W)	UHF Notch Filter	N/A	9/16/16
901133	Par Electronics	806-902 (25W)	UHF Notch Filter	N/A	9/16/16

**Test Personnel:**

Daniel Baltzell Test Engineer	 Signature	January 13-February 9, 2015, January 12, 2016 Dates of Tests
----------------------------------	---	--

**8 FCC Rules and Regulations Part 2.1049(c)(1): Occupied Bandwidth; Part 90.210: Authorized Bandwidth**

Occupied Bandwidth - Compliance with the Emission Masks

**8.1 Test Procedure**

TIA-603-D 2010, section 2.2.11 and TIA/EIA-102.CAAA-2002 section 2.2.5

Device with digital modulation: Modulated to its maximum extent using a pseudo-random data sequence.

<b>Applicable Emission Masks</b>		
<b>Frequency Band (MHz)</b>	<b>Mask for Equipment with Audio Low Pass Filter</b>	<b>Mask for Equipment Without Audio Low Pass Filter</b>
Below 25 <sup>1</sup> .....	A or B	A or C
25–50.....	B	C
72–76.....	B	C
150–174 <sup>2</sup> .....	B, D, or E	C, D, or E
150 Paging-only .....	B	C
220–222 .....	F	F
421–512 <sup>2</sup> .....	B, D, or E	C, D, or E
450 Paging-only .....	B	G
806–809/851–854 .....	B	H
809–824/854–869 <sup>3</sup> .....	B	G
896–901/935–940 .....	I	J
902–928 .....	K	K
929–930 .....	B	G
4940–4990 MHz .....	L or M	L or M
5850–5925 <sup>4</sup> .....		
All other bands	B	C

1 Equipment using single sideband J3E emission must meet the requirements of Emission Mask A. Equipment using other emissions must meet the requirements of Emission Mask B or C, as applicable.

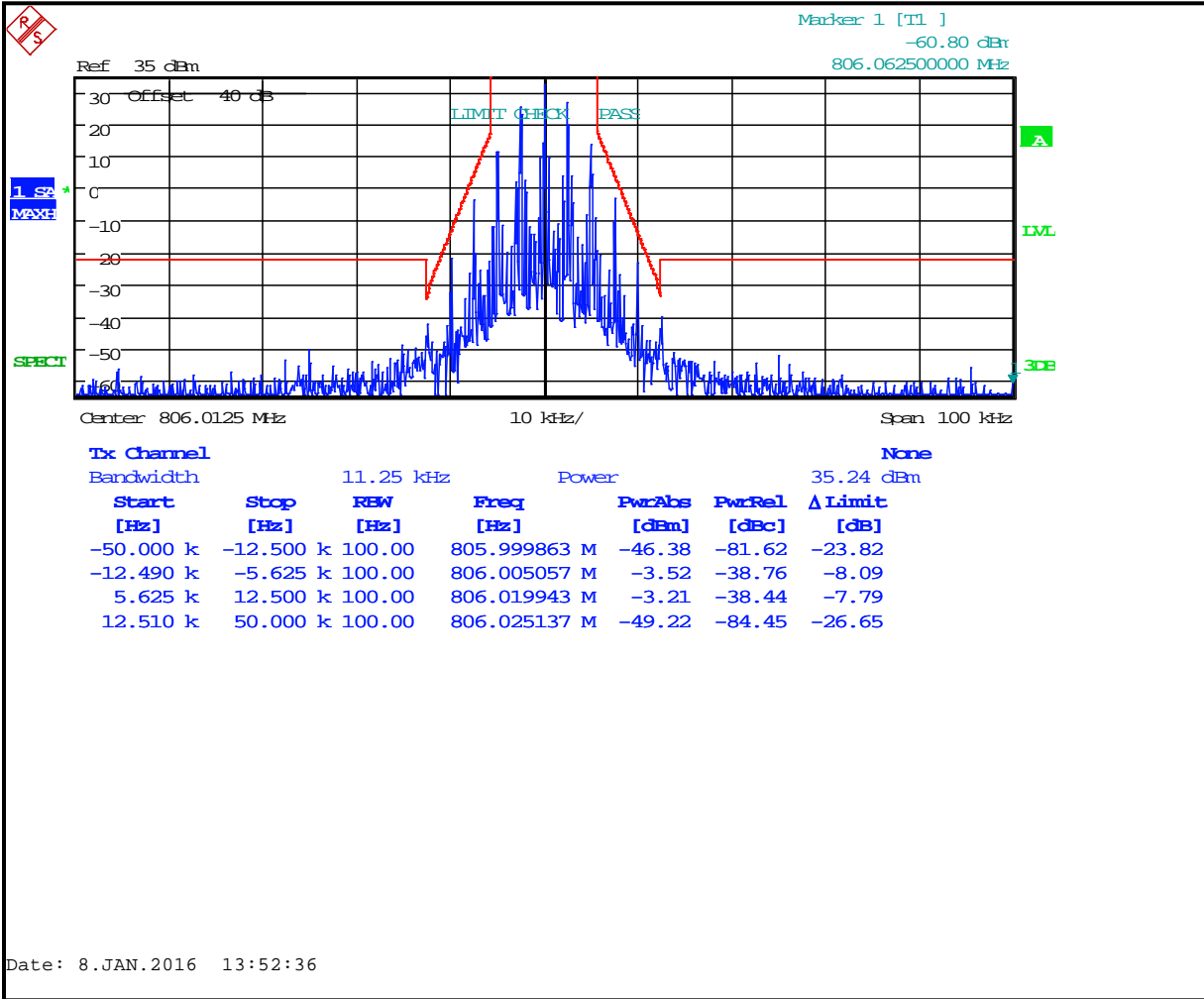
2 Equipment designed to operate with a 25 kHz channel bandwidth must meet the requirements of Emission Mask B or C, as applicable. Equipment designed to operate with a 12.5 kHz channel bandwidth must meet the requirements of Emission Mask D, and equipment designed to operate with a 6.25 kHz channel bandwidth must meet the requirements of Emission Mask E.

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

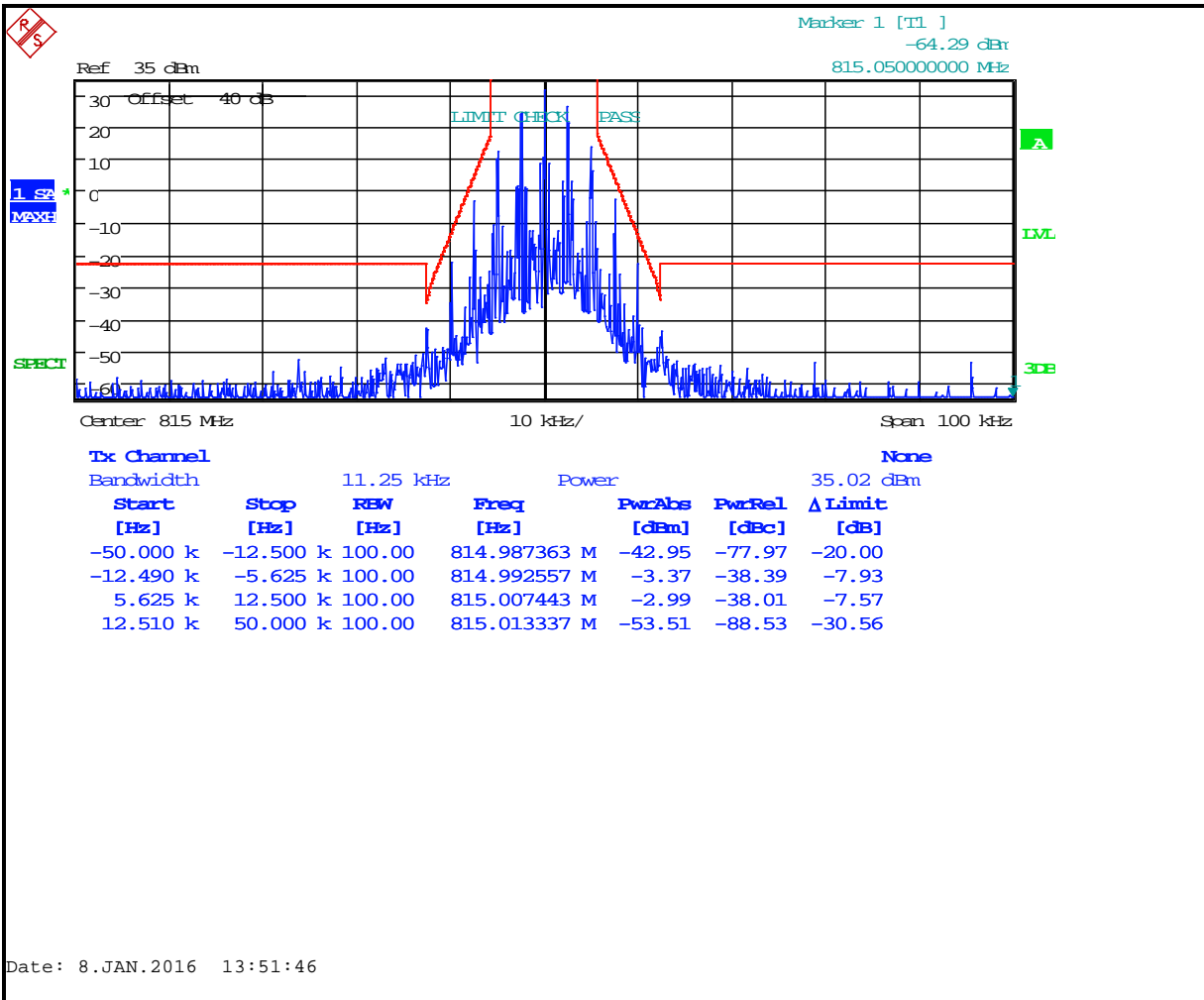
4 DSRCS Roadside Units equipment in the 5850–5925 MHz band is governed under subpart M of this part.

## 8.2 Test Data

**Plot 8-1: Occupied Bandwidth – 806.0125 MHz; Narrowband Analog (Mask D)**

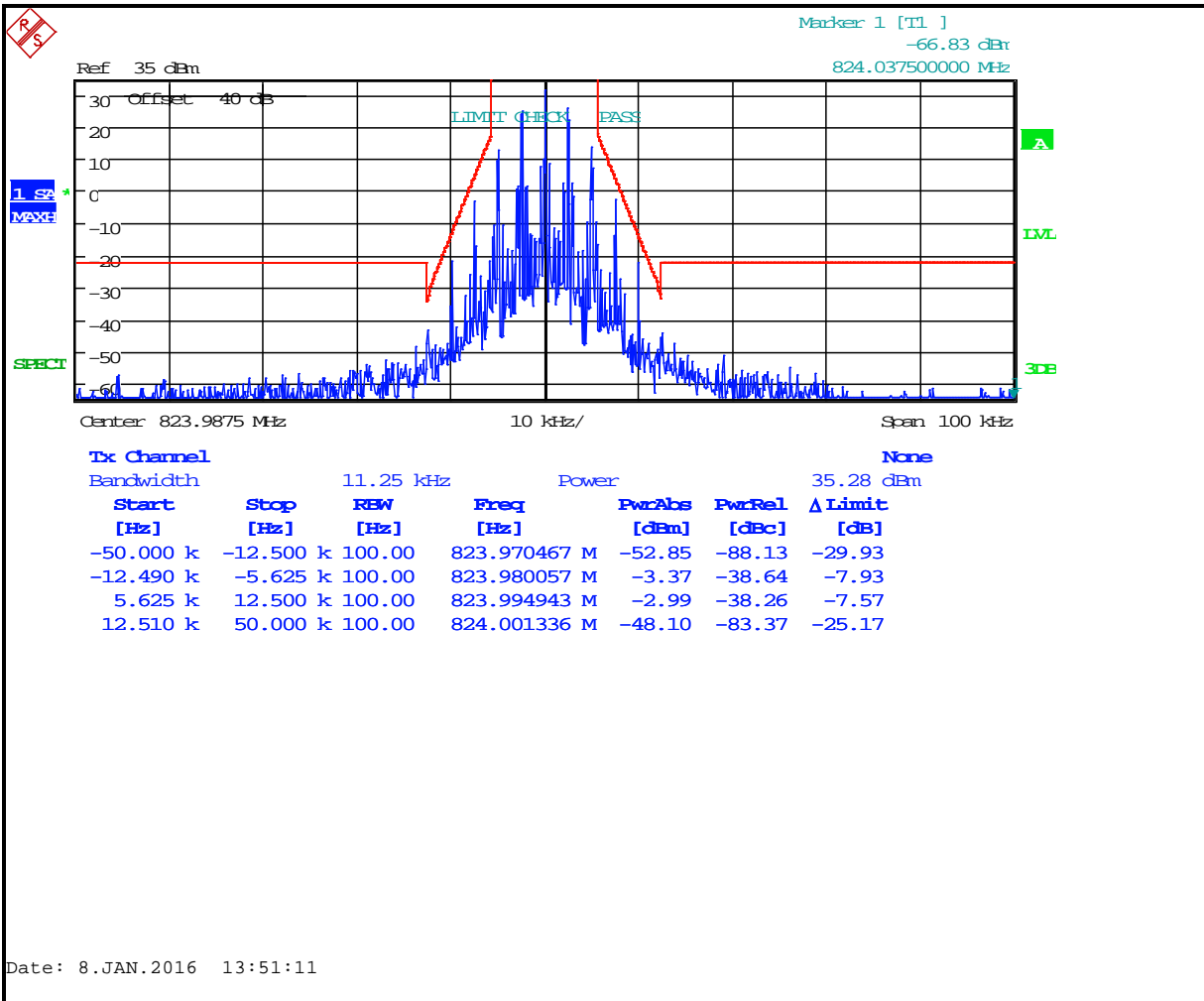


**Plot 8-2: Occupied Bandwidth – 815.0000 MHz; Narrowband Analog (Mask D)**

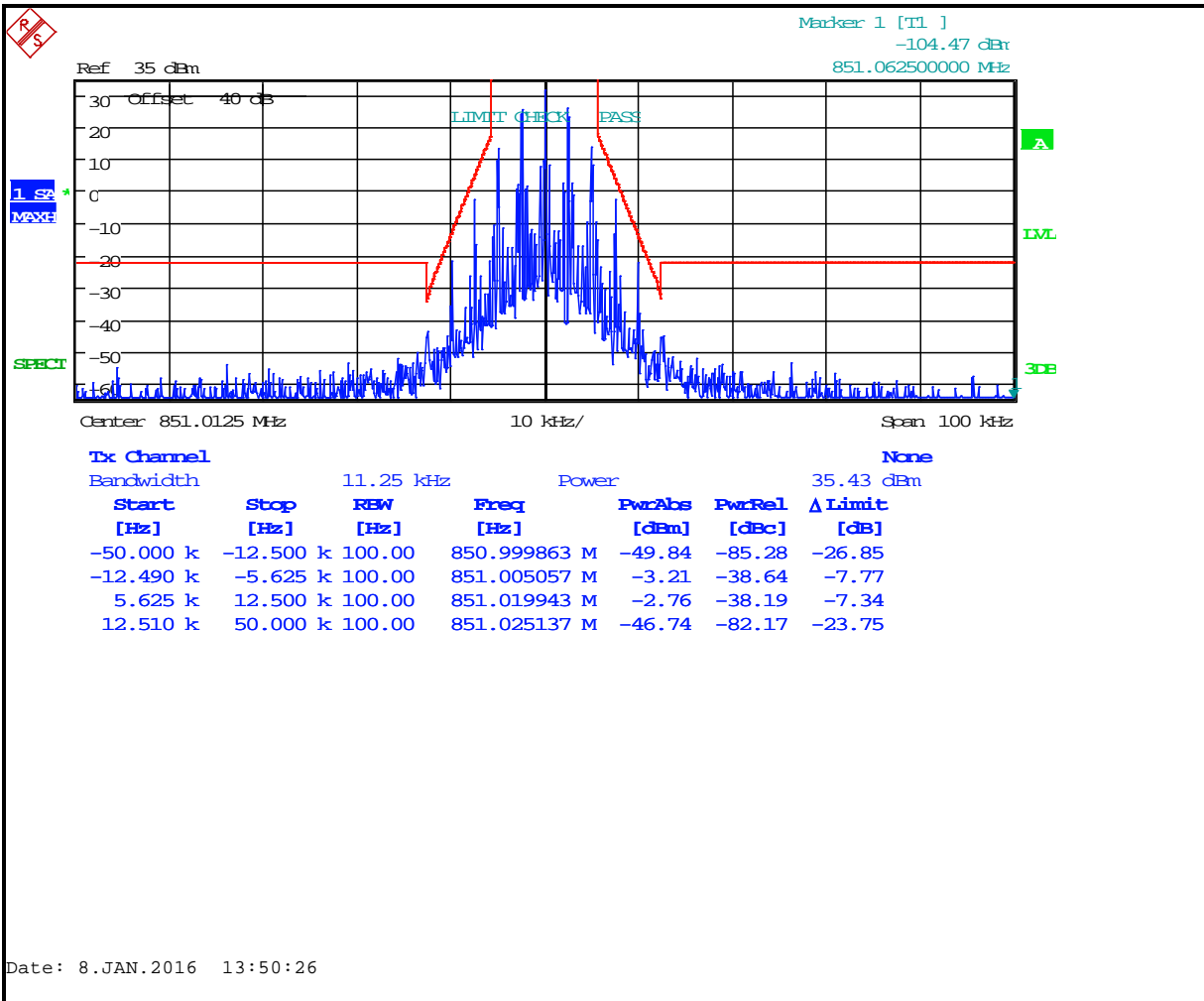




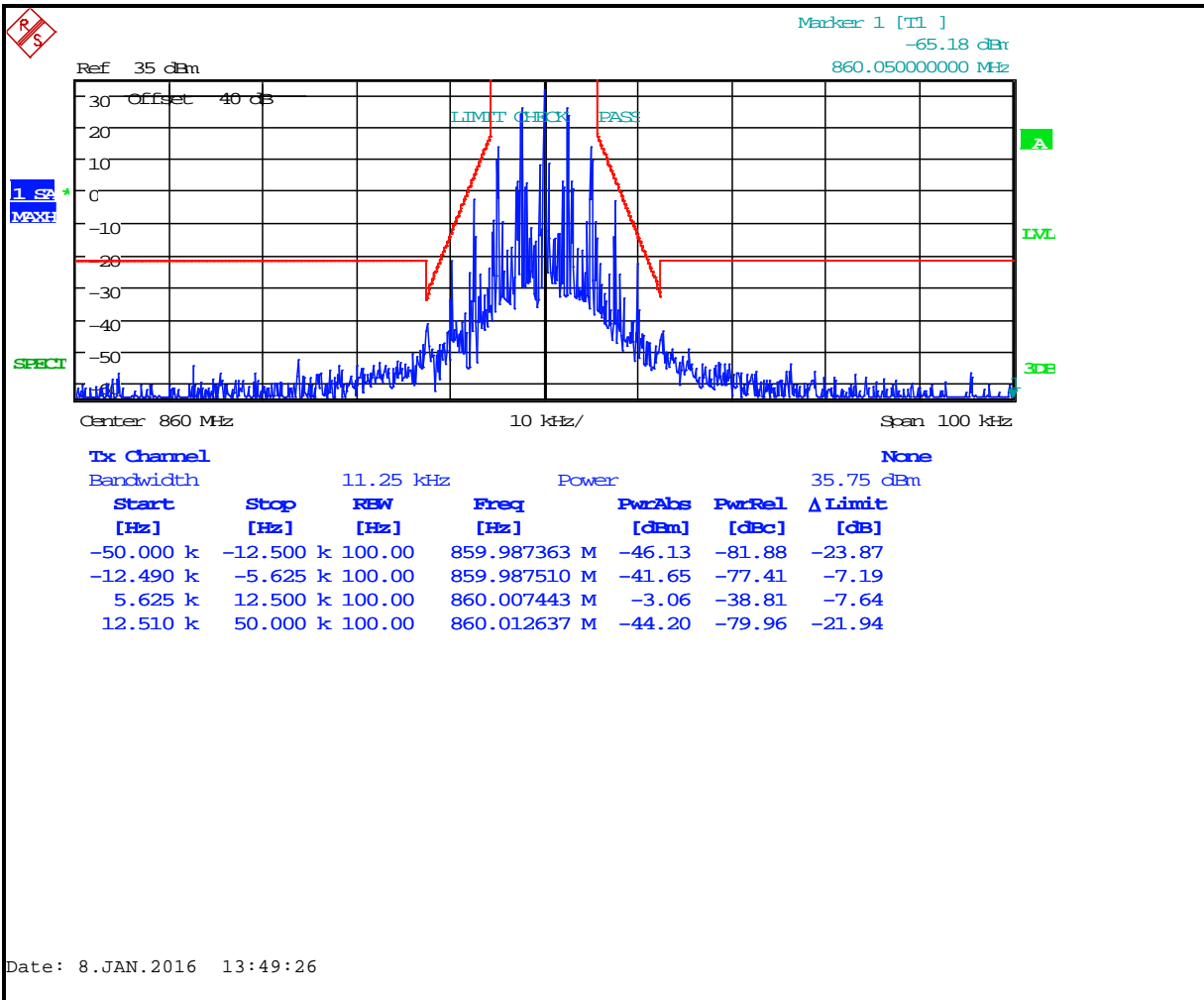
**Plot 8-3: Occupied Bandwidth – 823.9875 MHz; Narrowband Analog (Mask D)**



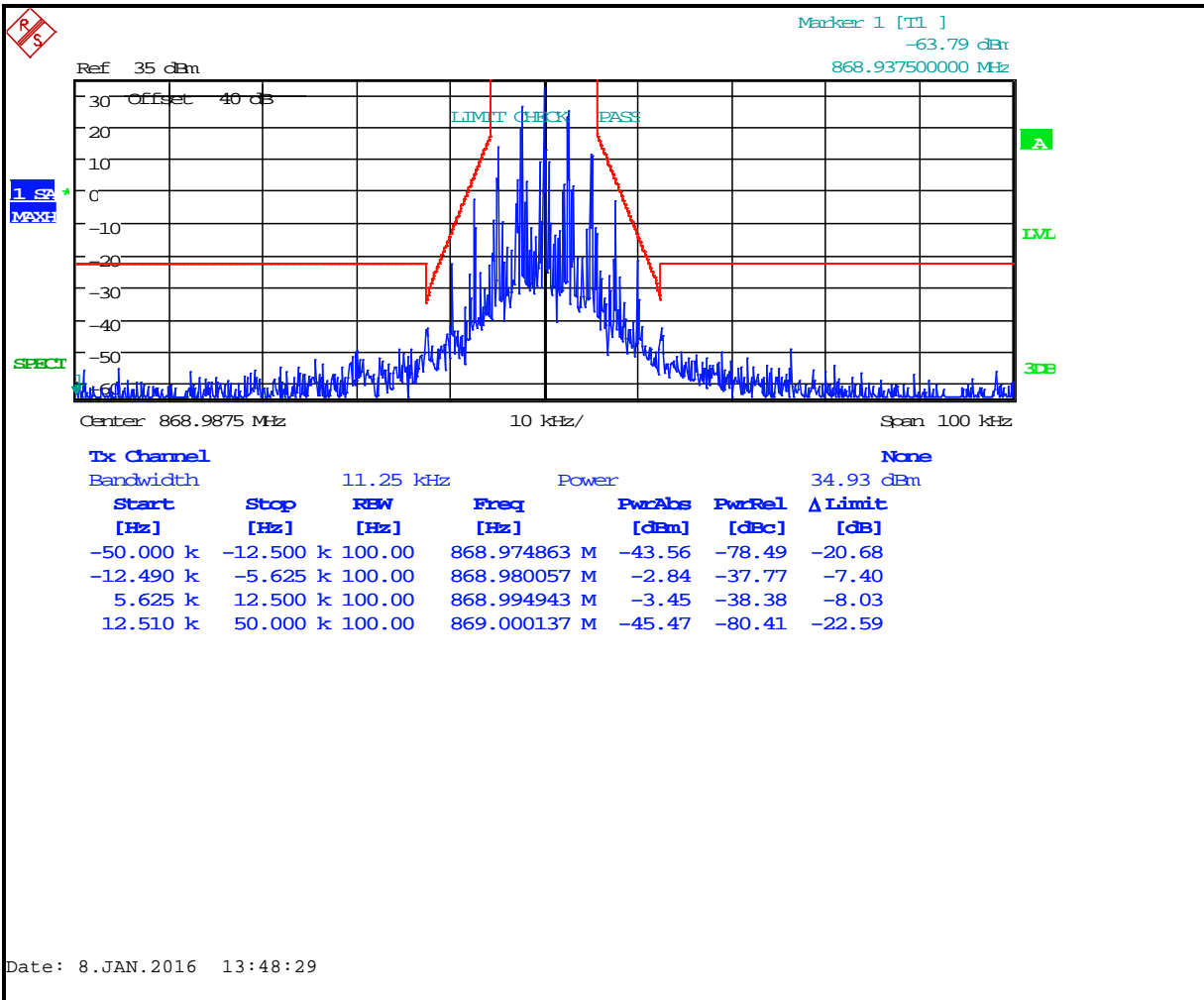
**Plot 8-4: Occupied Bandwidth – 851.0125 MHz; Narrowband Analog (Mask D)**



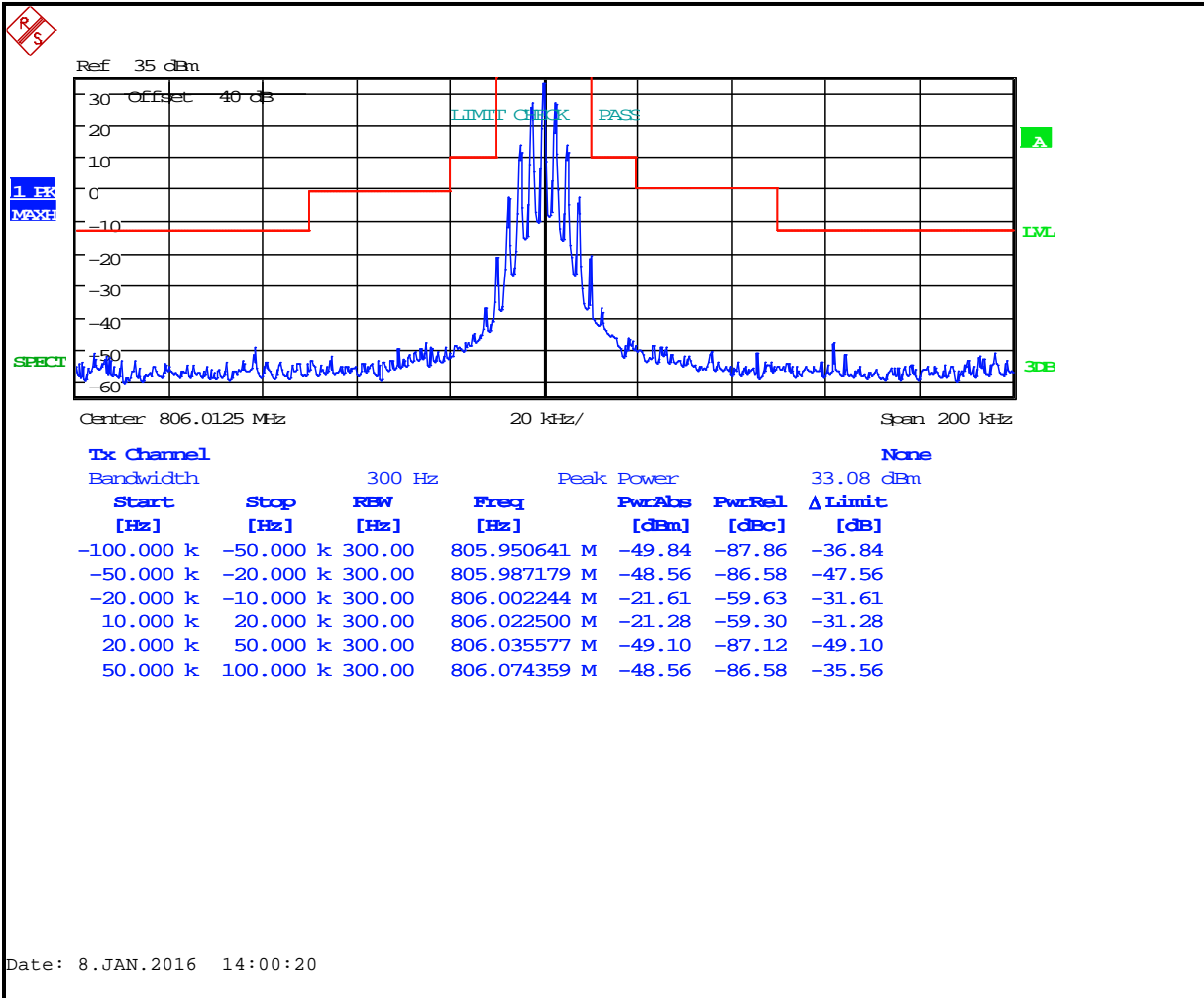
**Plot 8-5: Occupied Bandwidth – 860.0000 MHz; Narrowband Analog (Mask D)**



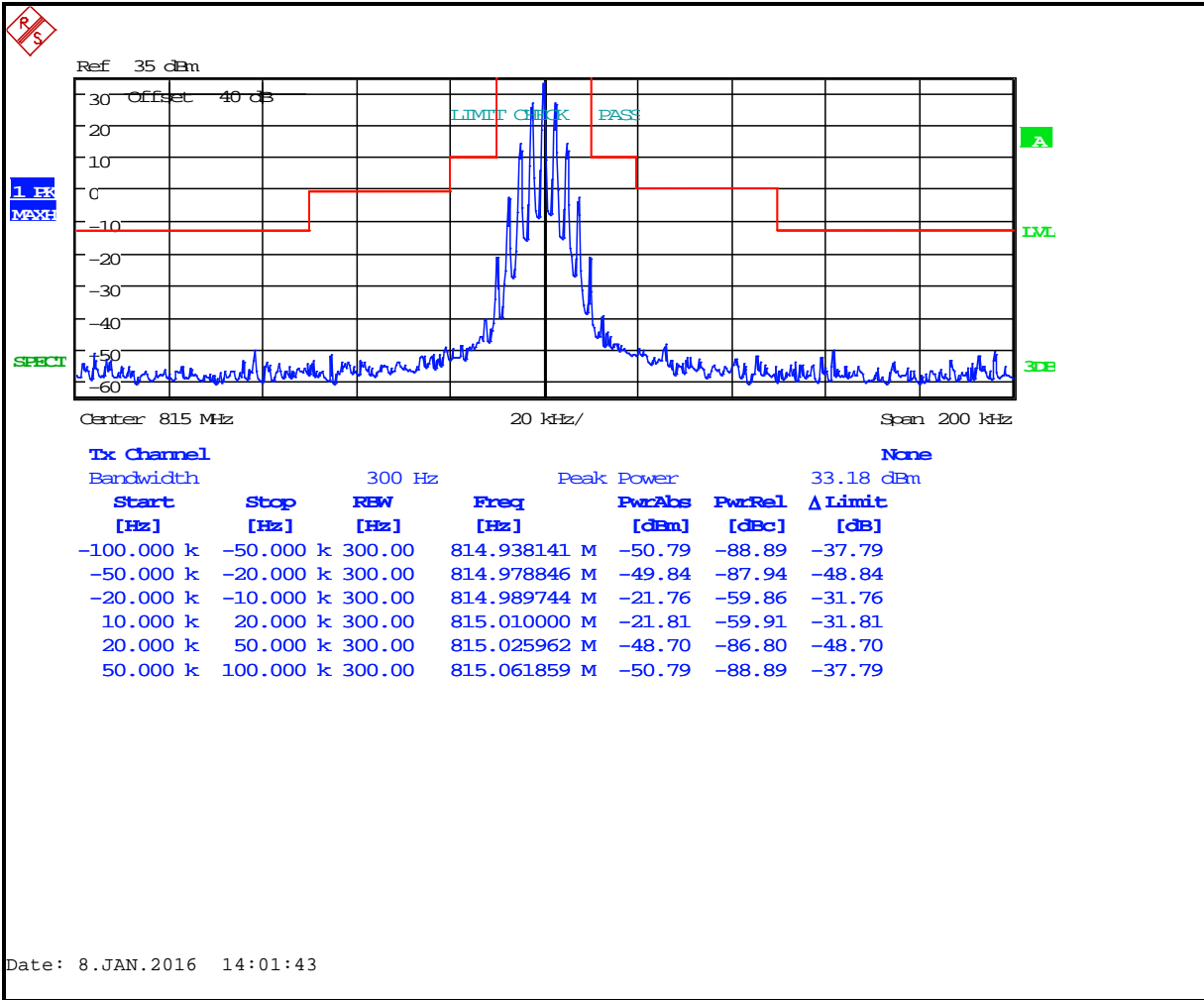
**Plot 8-6: Occupied Bandwidth – 868.9875 MHz; Narrowband Analog (Mask D)**



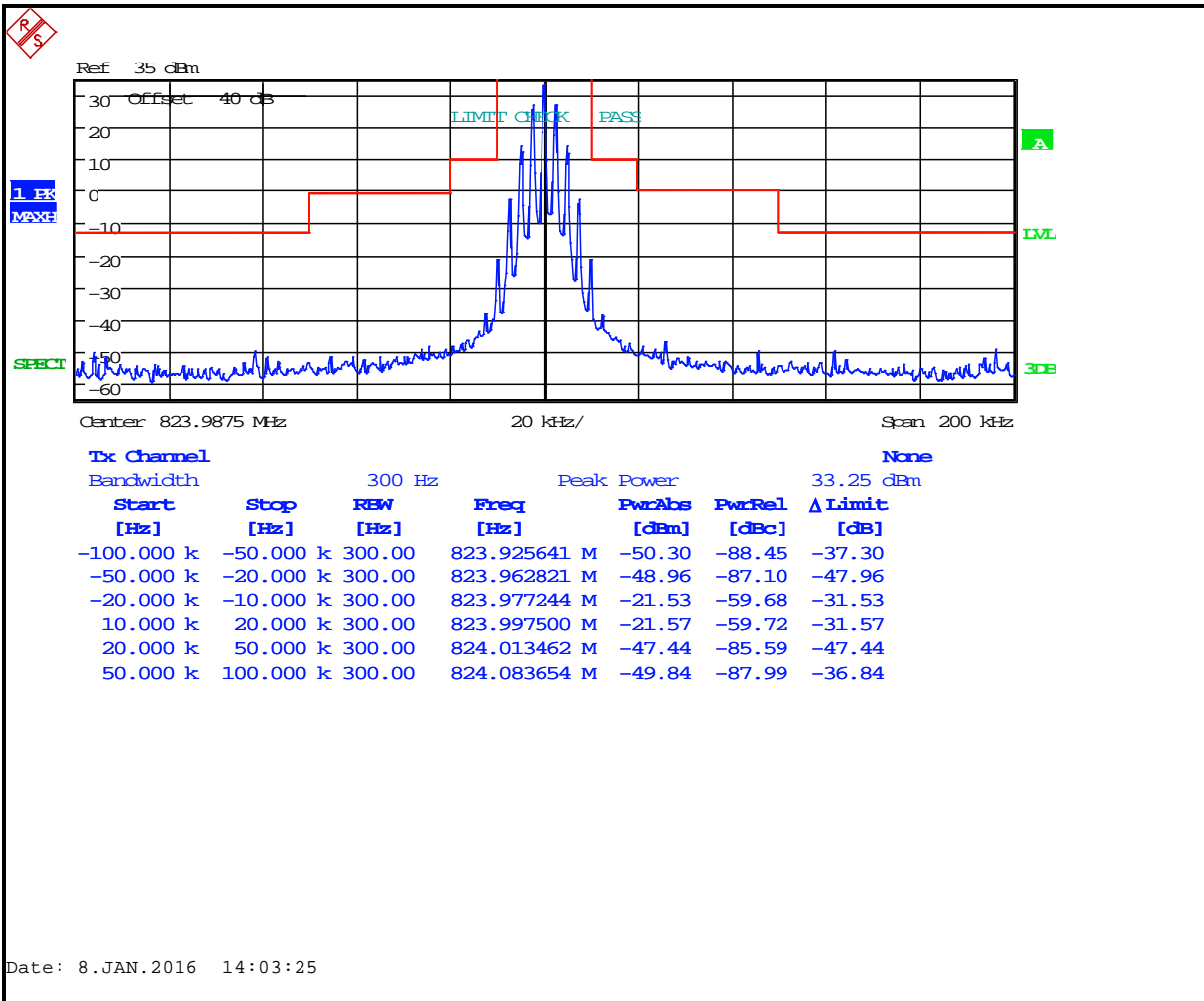
**Plot 8-7: Occupied Bandwidth – 806.0125 MHz; Narrowband Analog (Mask B)**



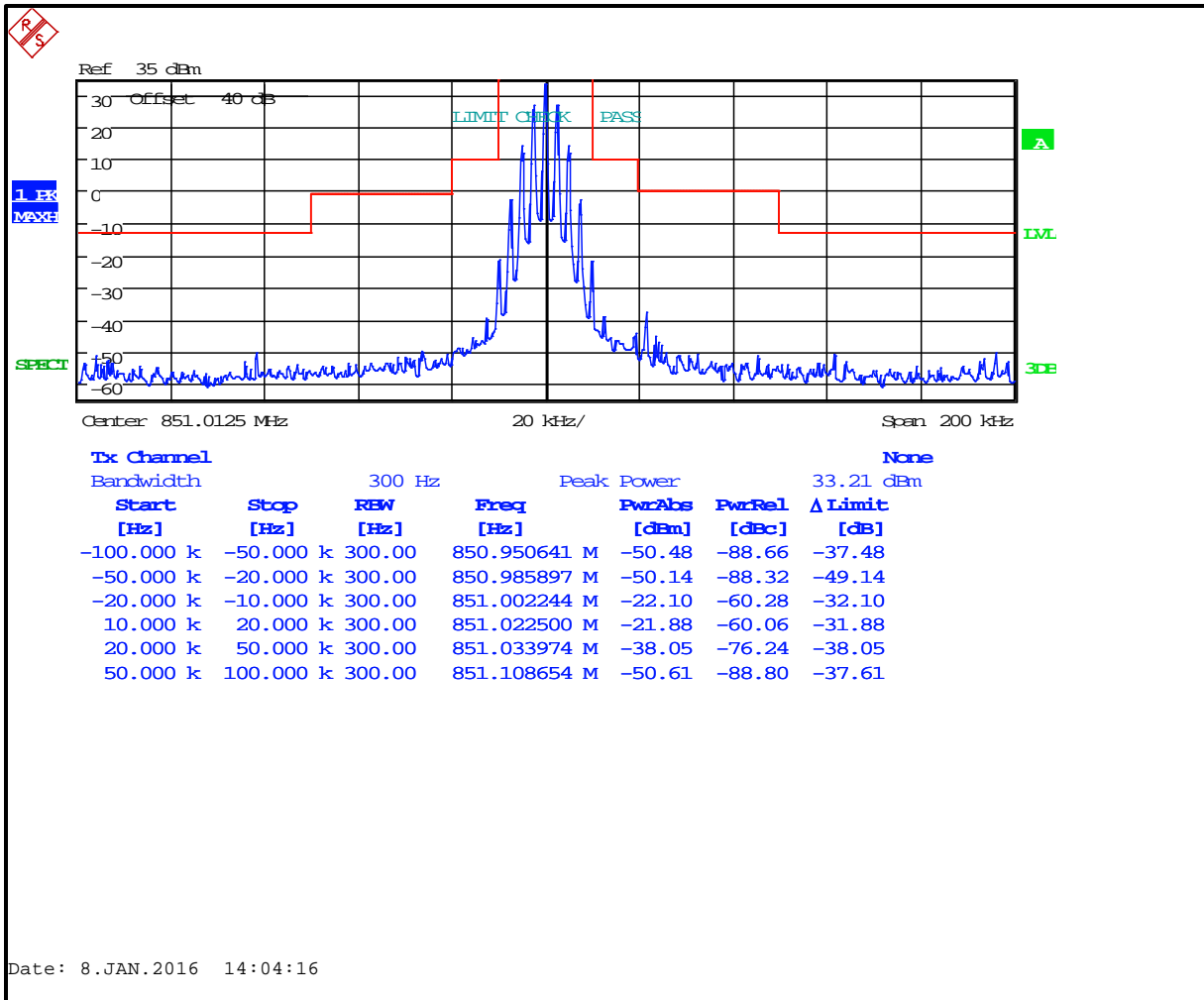
**Plot 8-8: Occupied Bandwidth – 815.0000 MHz; Narrowband Analog (Mask B)**



**Plot 8-9: Occupied Bandwidth – 823.9875 MHz; Narrowband Analog (Mask B)**

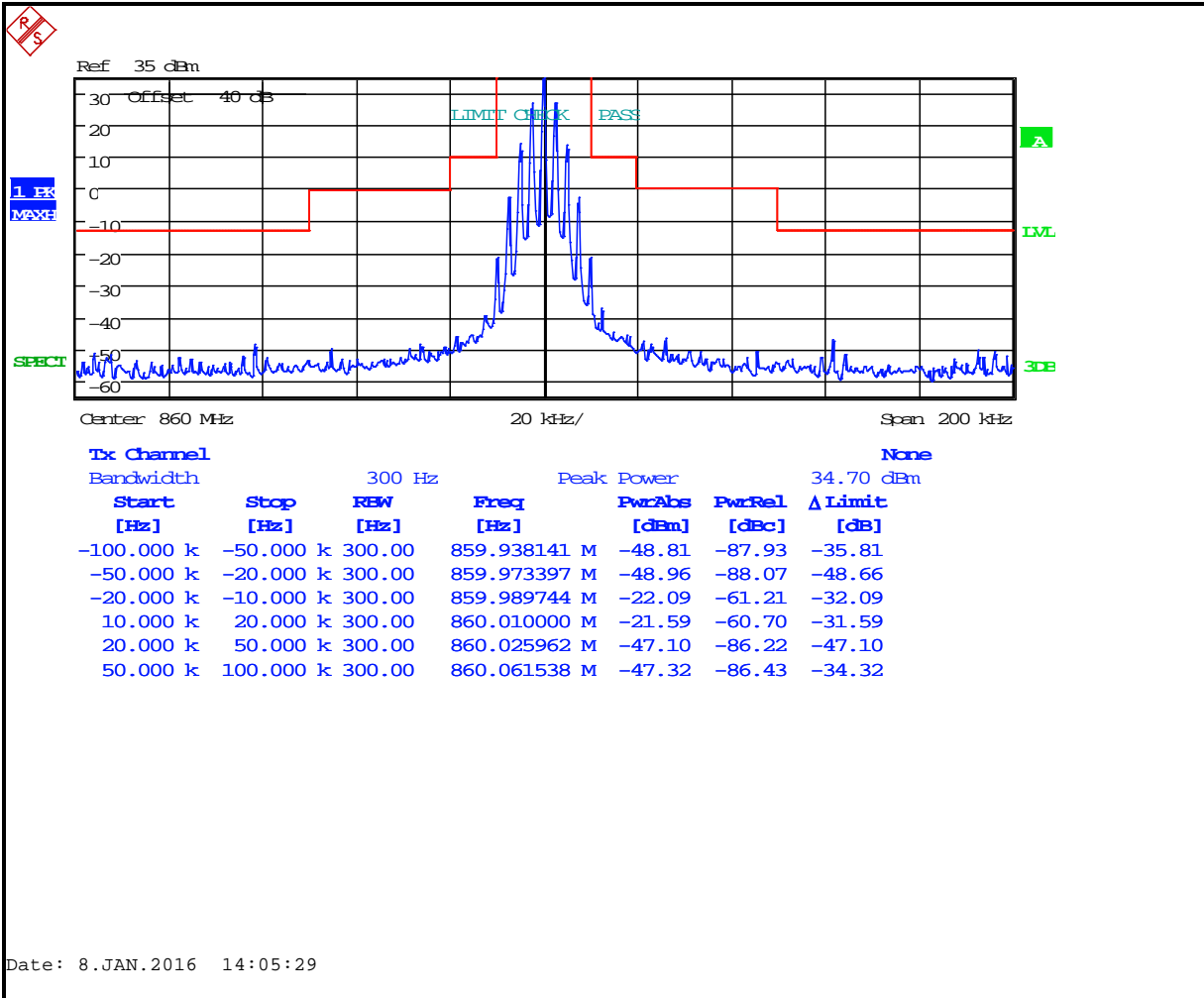


**Plot 8-10: Occupied Bandwidth – 851.0125 MHz; Narrowband Analog (Mask B)**

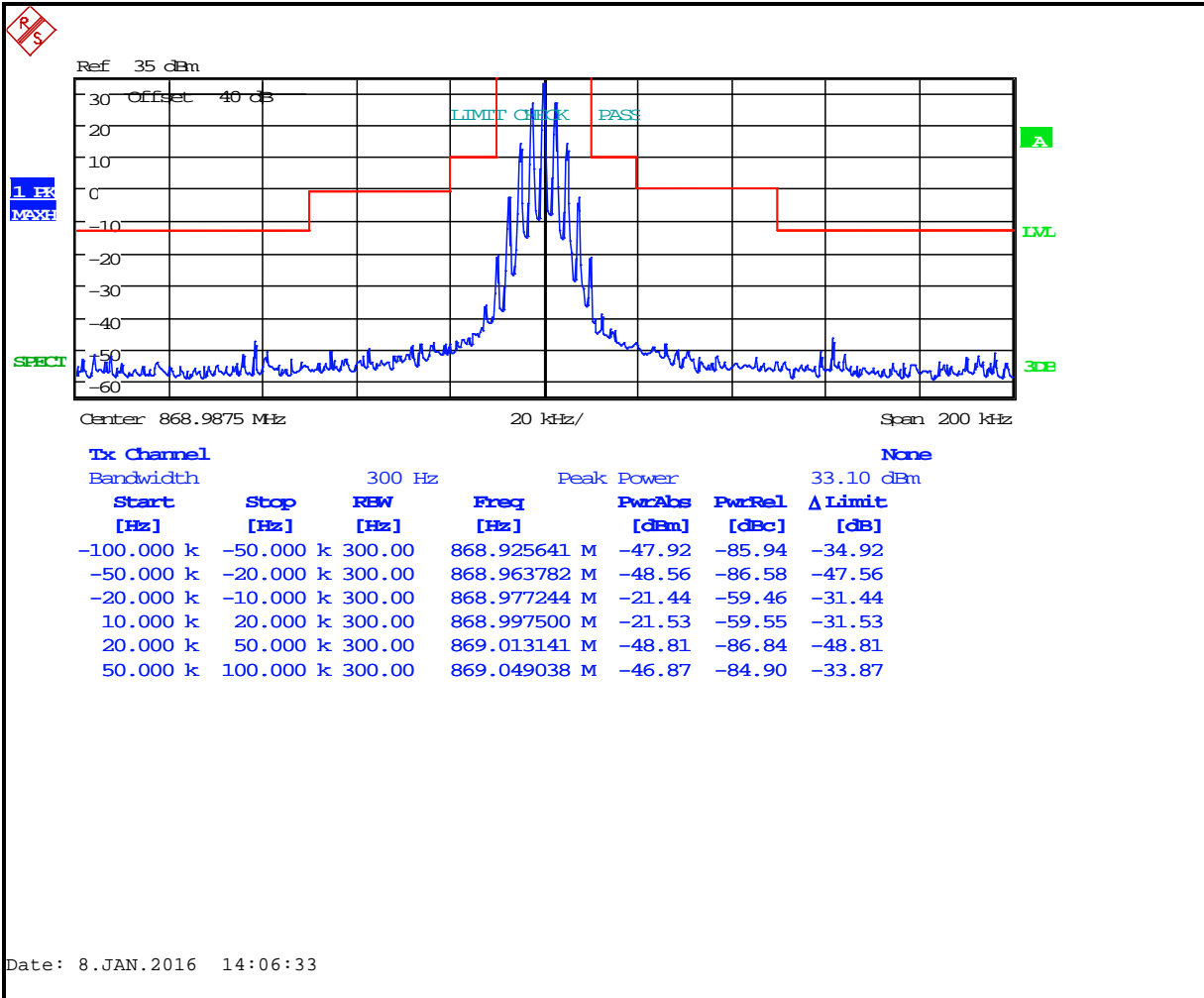




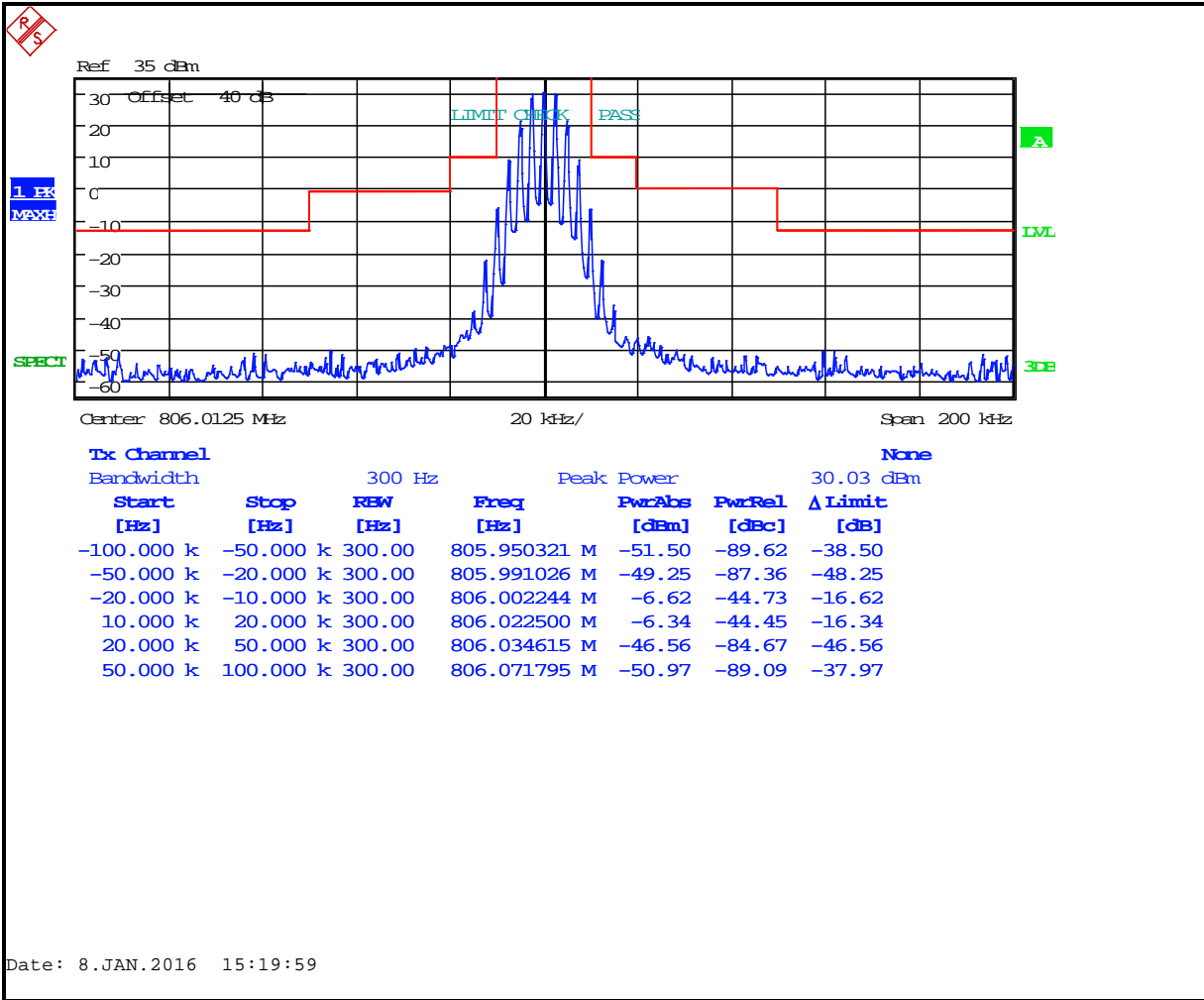
**Plot 8-11: Occupied Bandwidth – 860.000 MHz; Narrowband Analog (Mask B)**



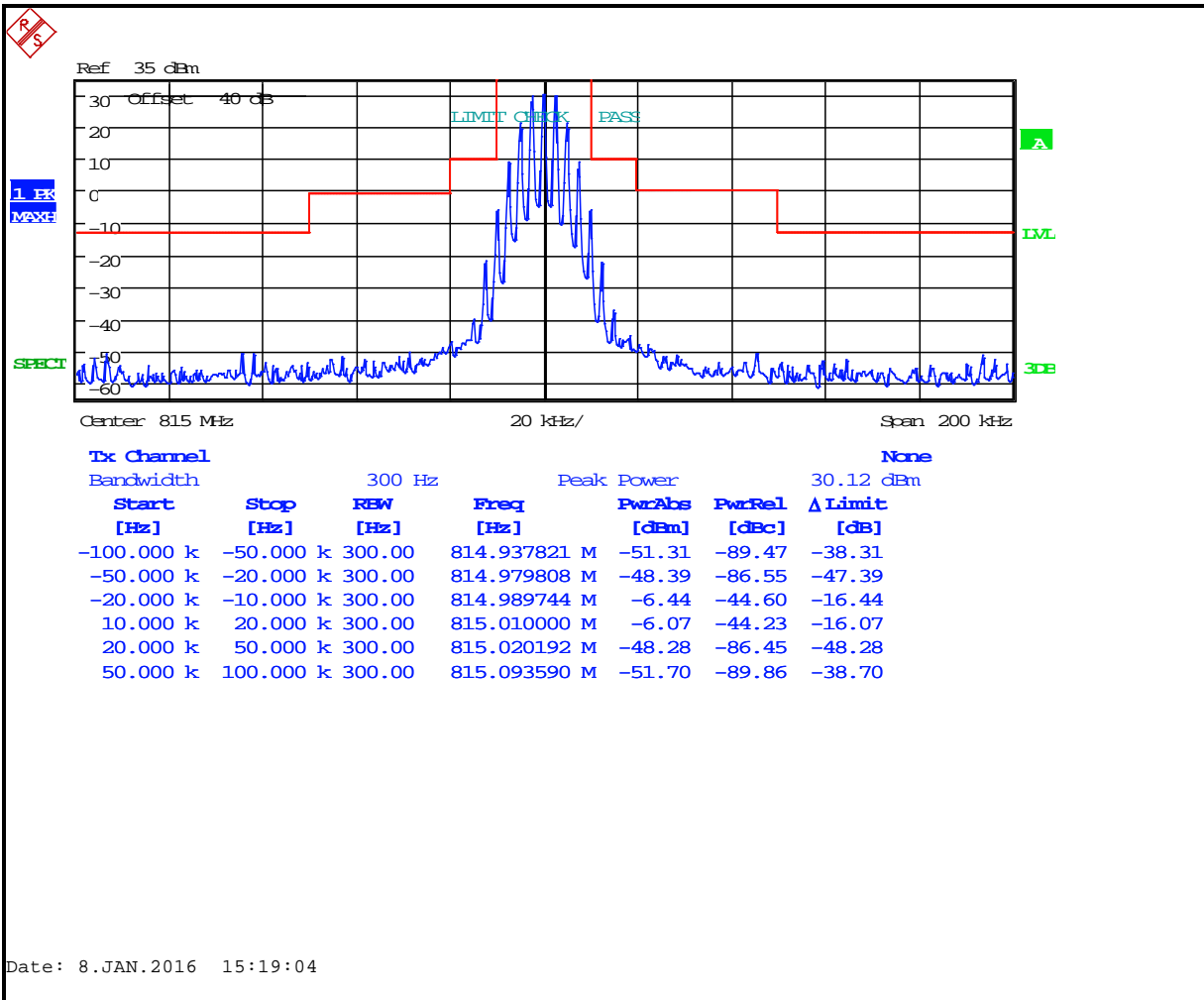
**Plot 8-12: Occupied Bandwidth – 868.9875 MHz; Narrowband Analog (Mask B)**



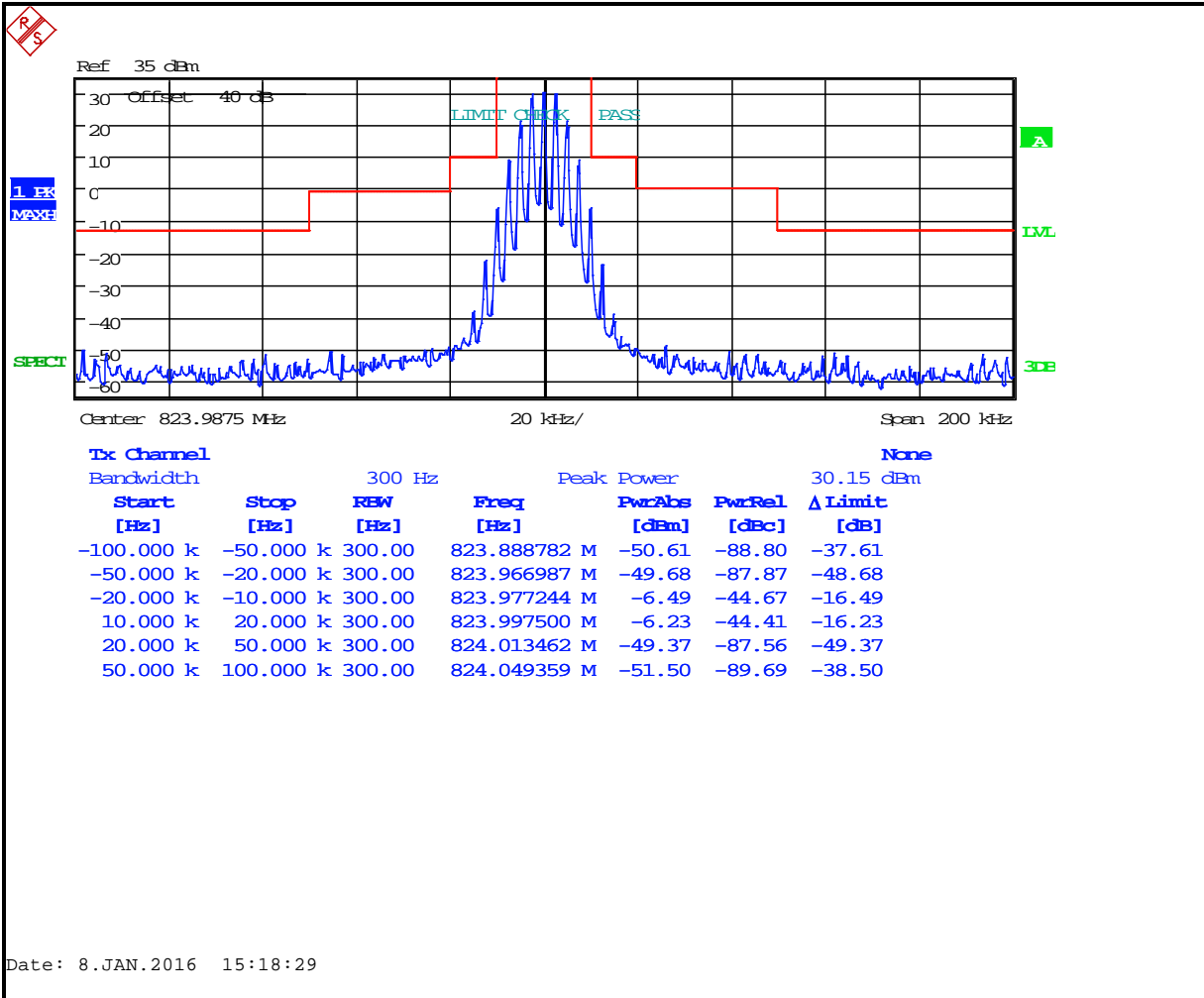
**Plot 8-13: Occupied Bandwidth – 806.0125 MHz; NPSPAC Analog (Mask B)**



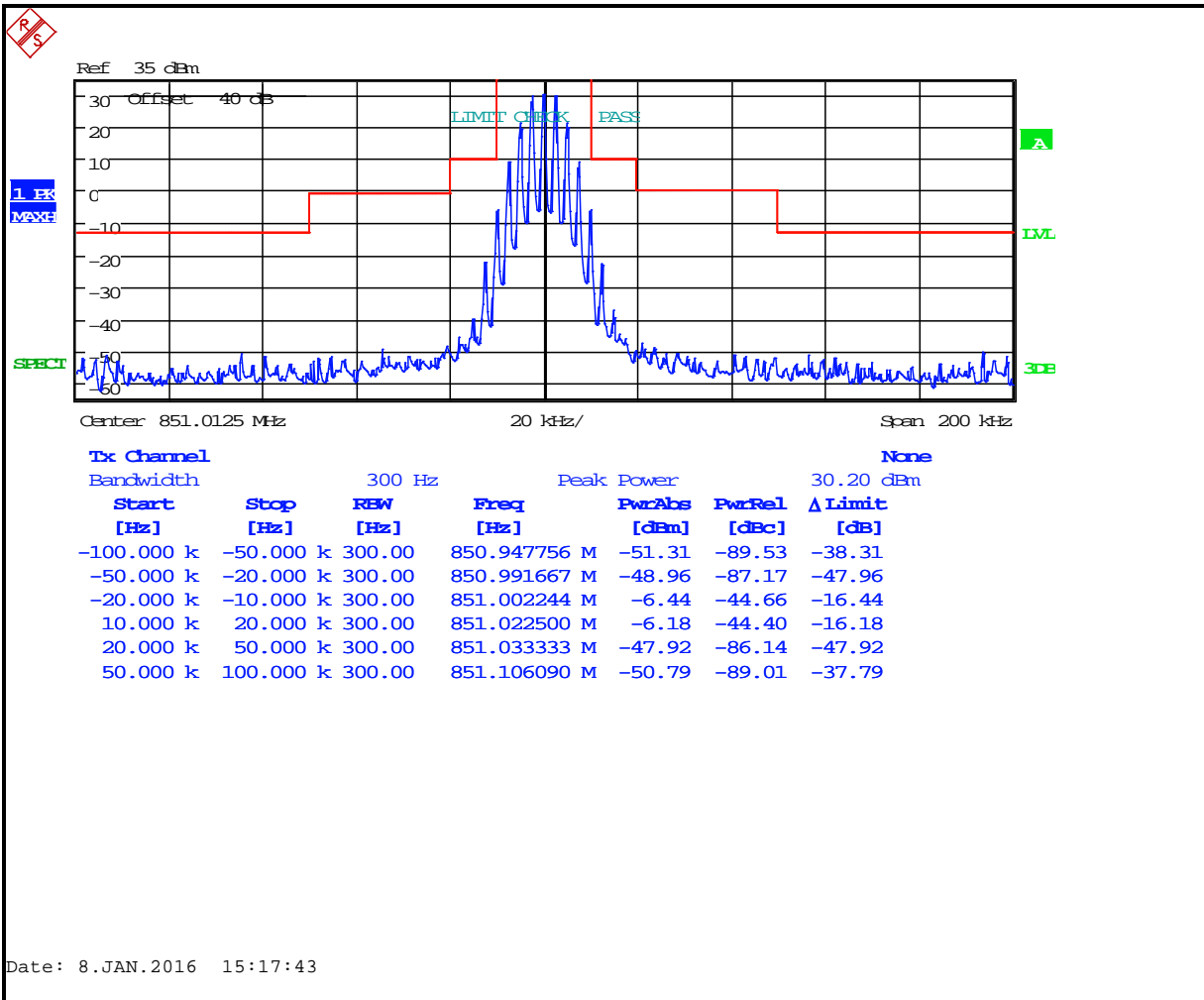
**Plot 8-14: Occupied Bandwidth – 815.0000 MHz; NPSPAC Analog (Mask B)**



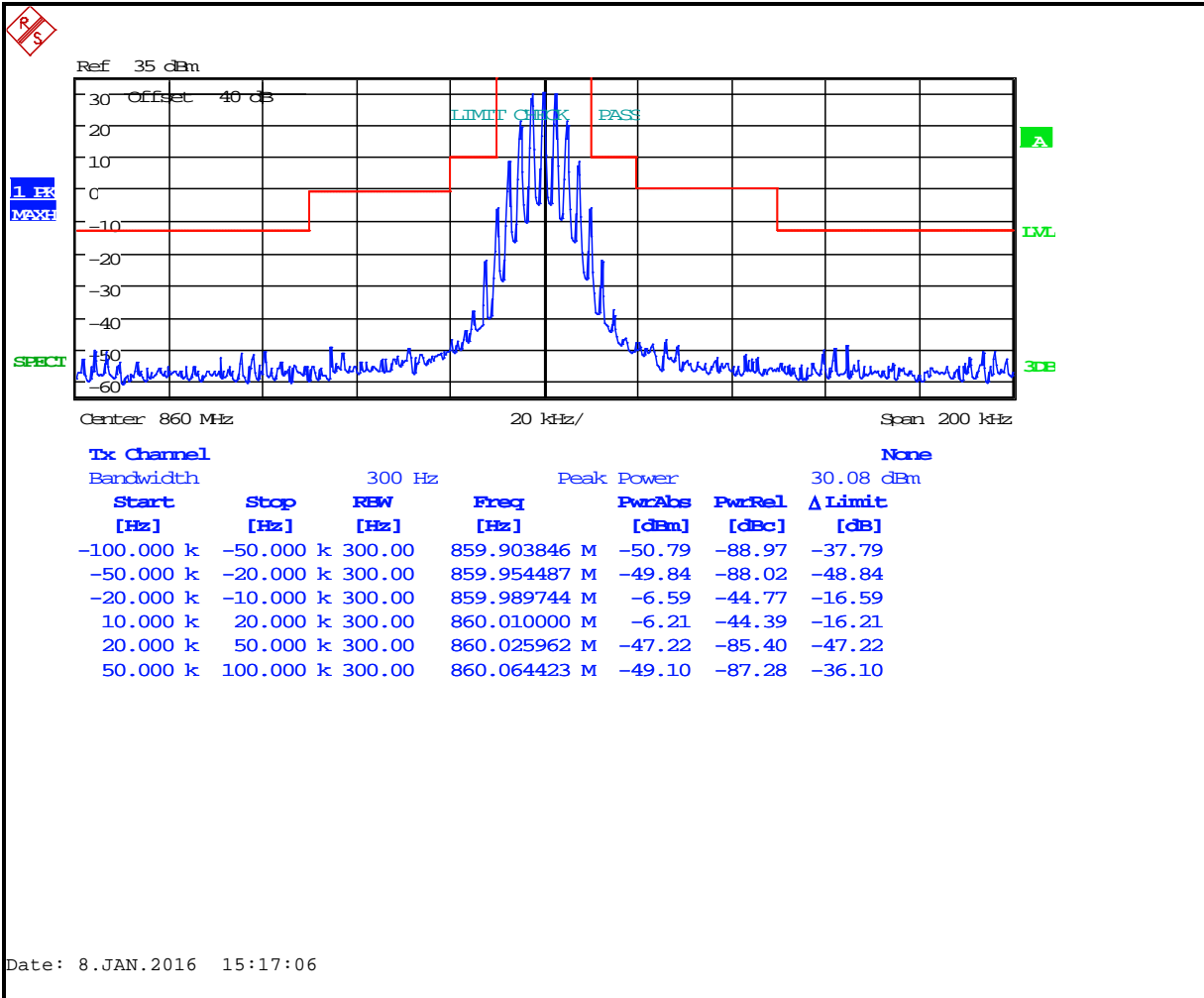
**Plot 8-15: Occupied Bandwidth – 823.9875 MHz; NPSPAC Analog (Mask B)**



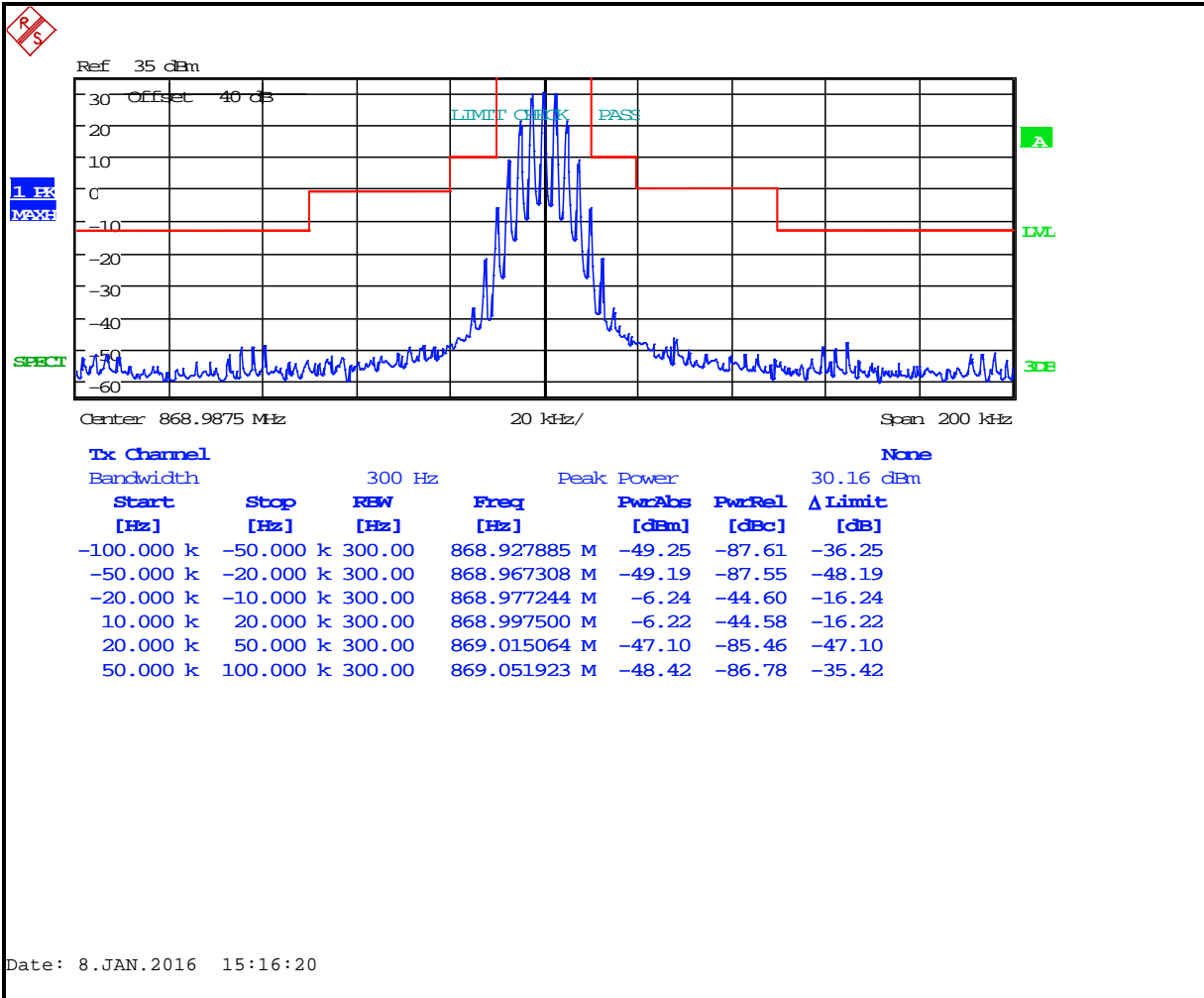
**Plot 8-16: Occupied Bandwidth – 851.0125 MHz; NPSPAC Analog (Mask B)**



**Plot 8-17: Occupied Bandwidth – 860.000 MHz; NPSPAC Analog (Mask B)**

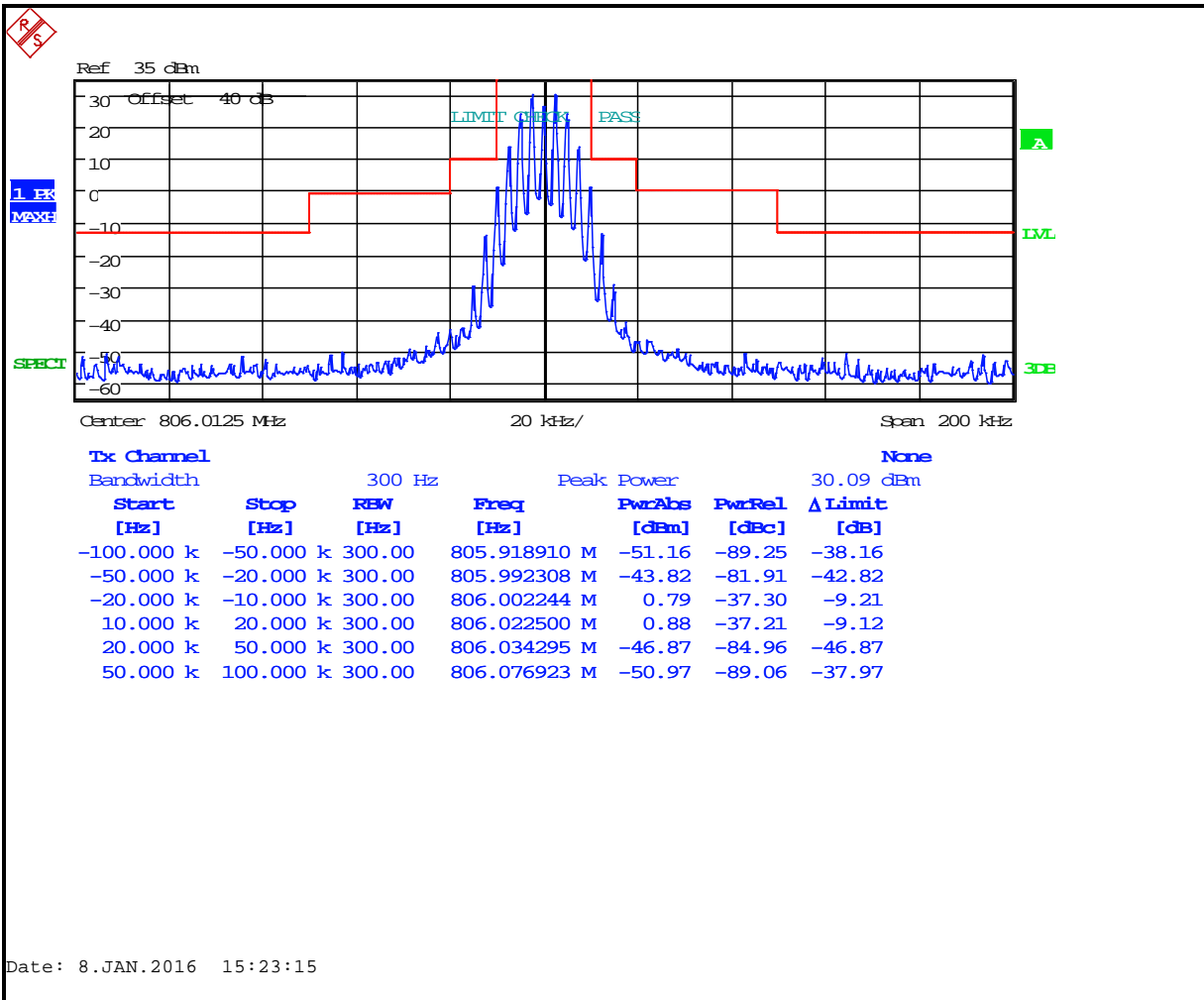


**Plot 8-18: Occupied Bandwidth – 868.9875 MHz; NPSPAC Analog (Mask B)**

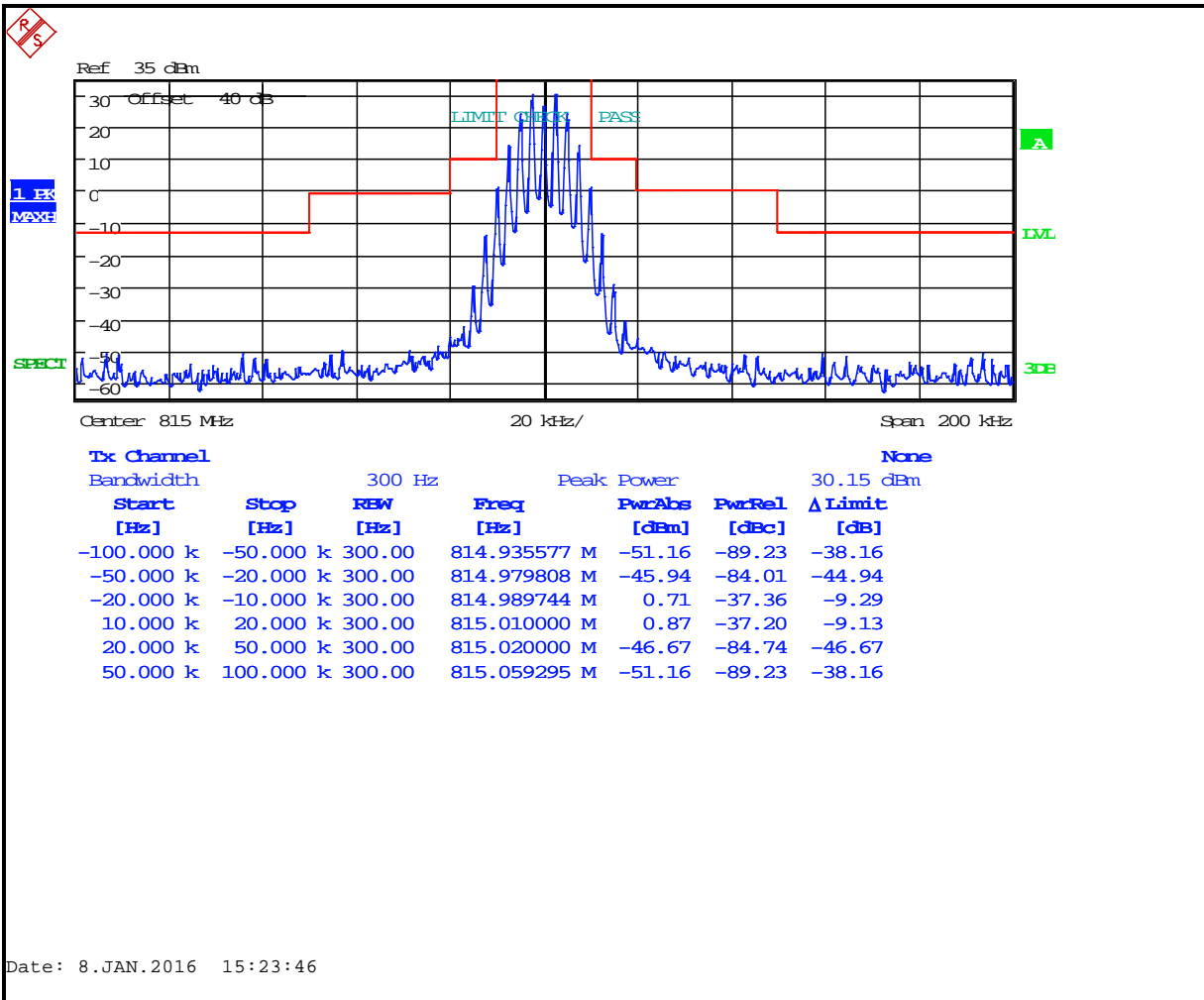




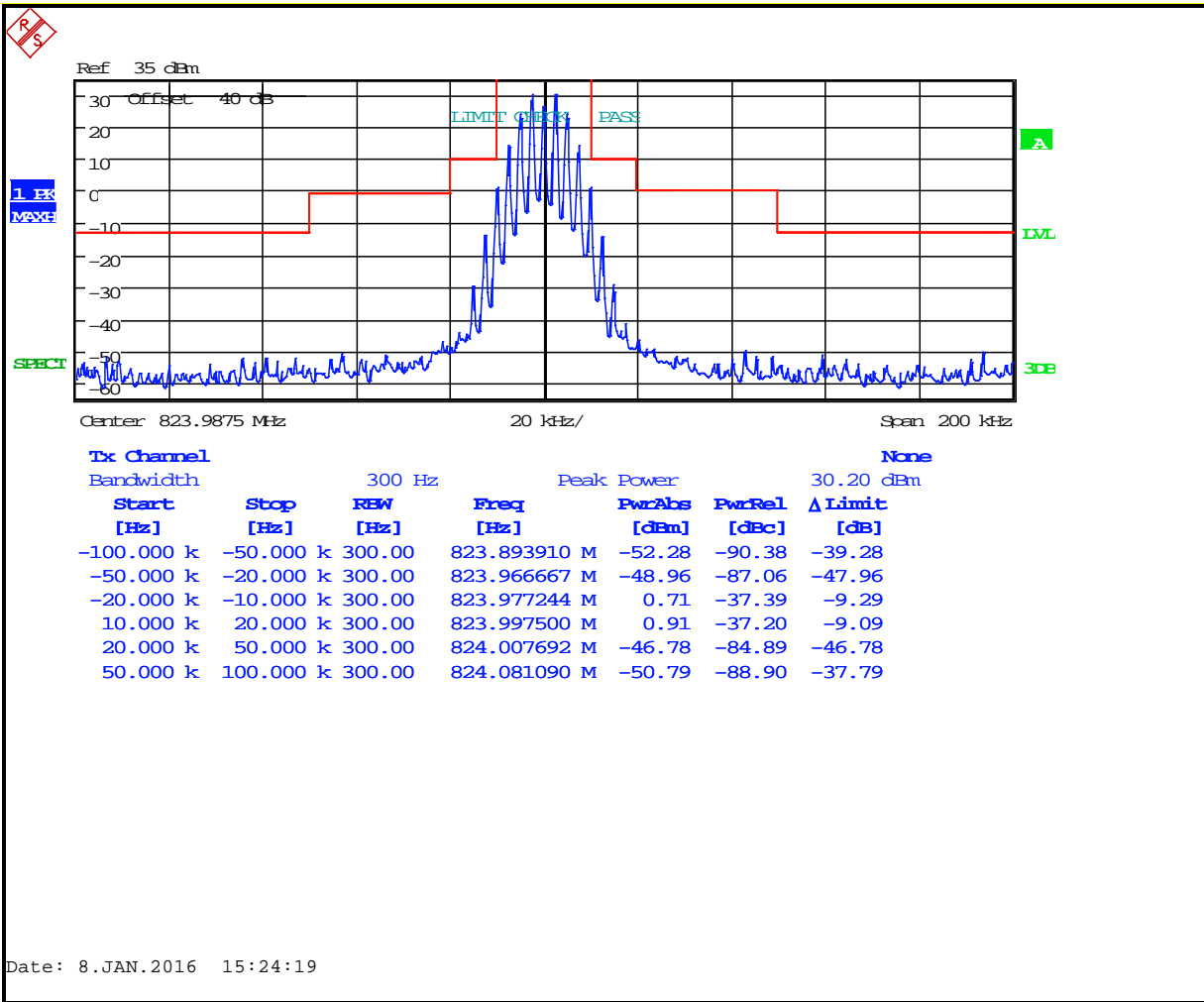
**Plot 8-19: Occupied Bandwidth – 806.0125 MHz; Wideband Analog (Mask B)**



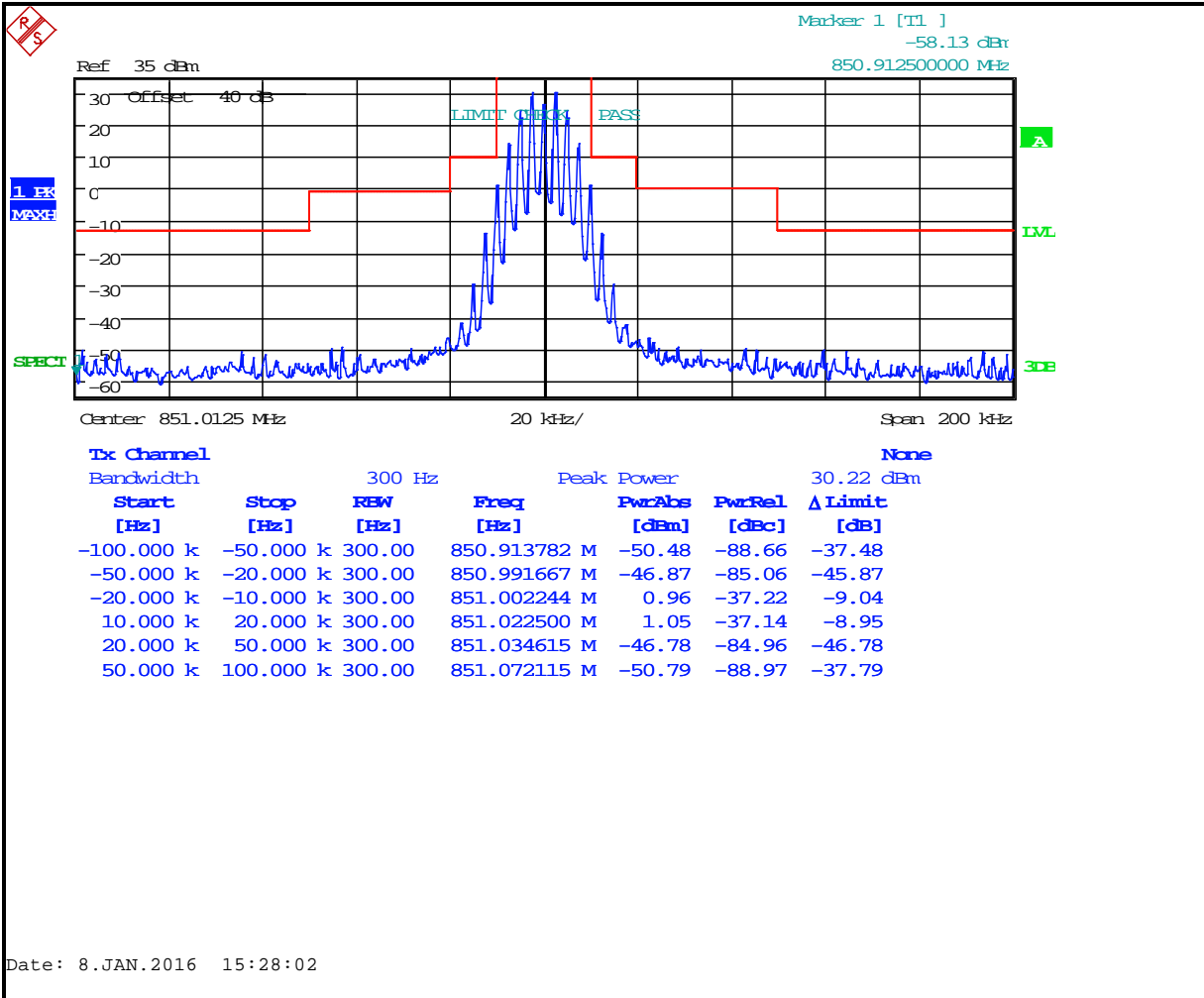
**Plot 8-20: Occupied Bandwidth – 815.0000 MHz; Wideband Analog (Mask B)**



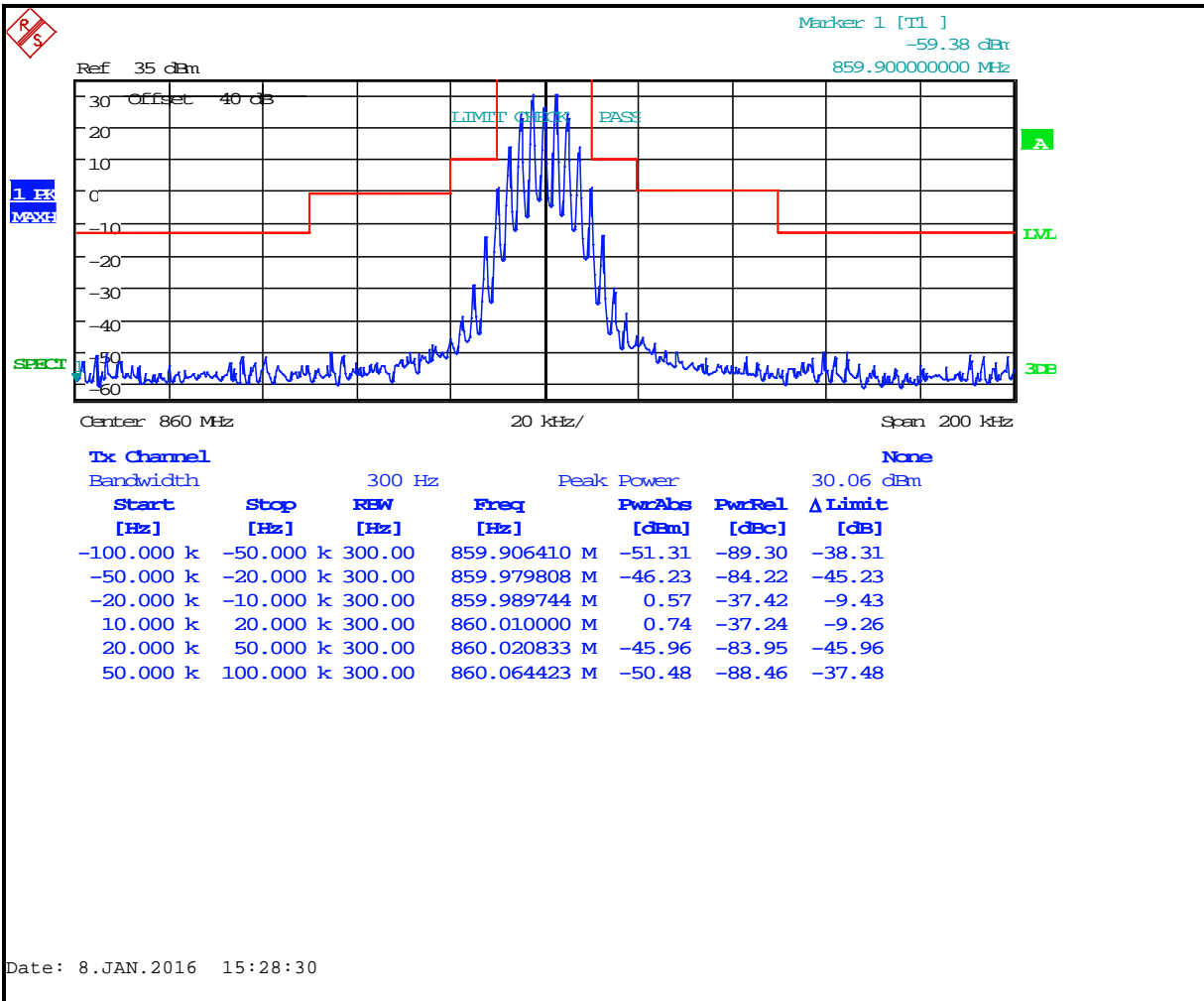
**Plot 8-21: Occupied Bandwidth – 823.9875 MHz; Wideband Analog (Mask B)**



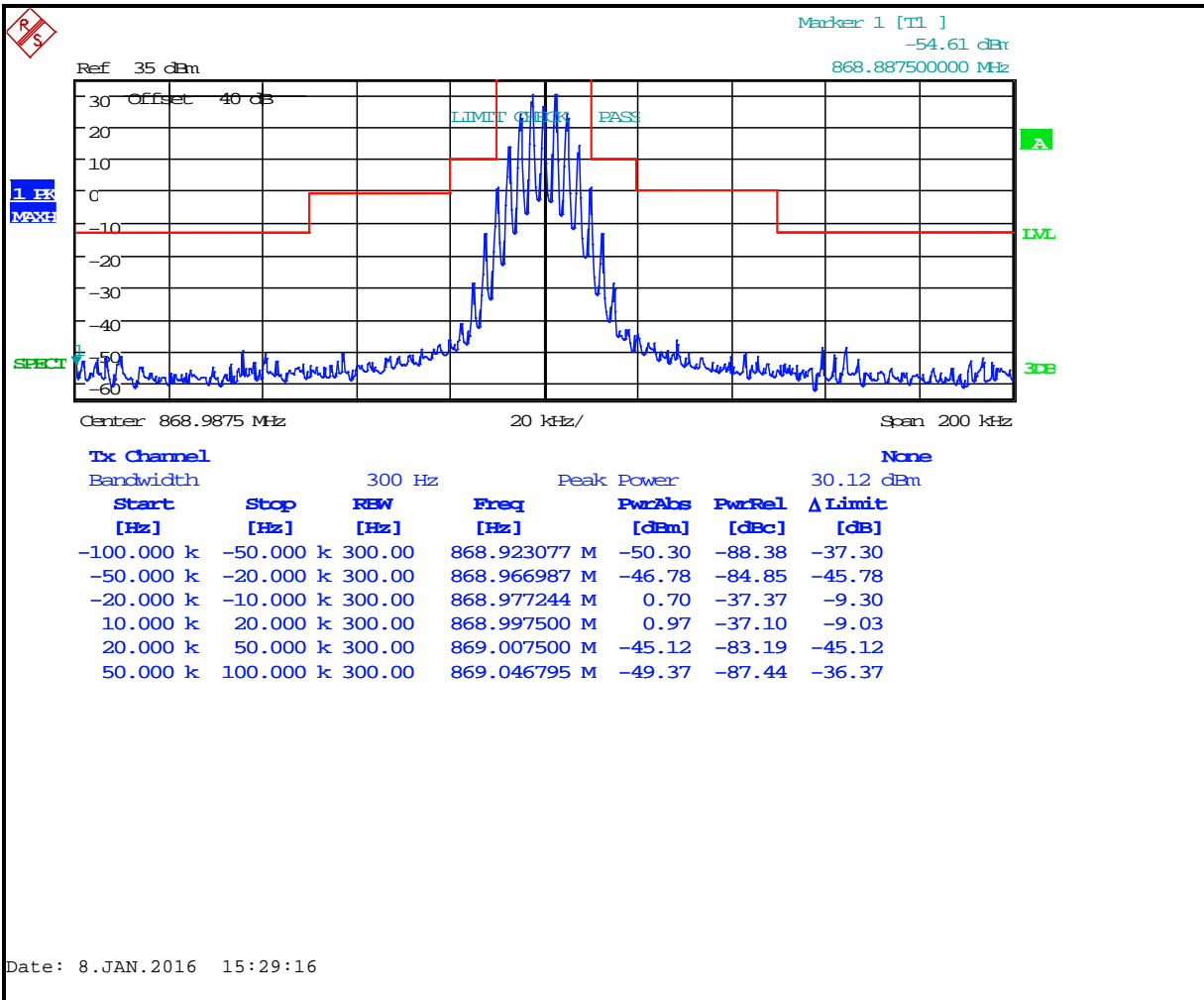
**Plot 8-22: Occupied Bandwidth – 851.0125 MHz; Wideband Analog (Mask B)**



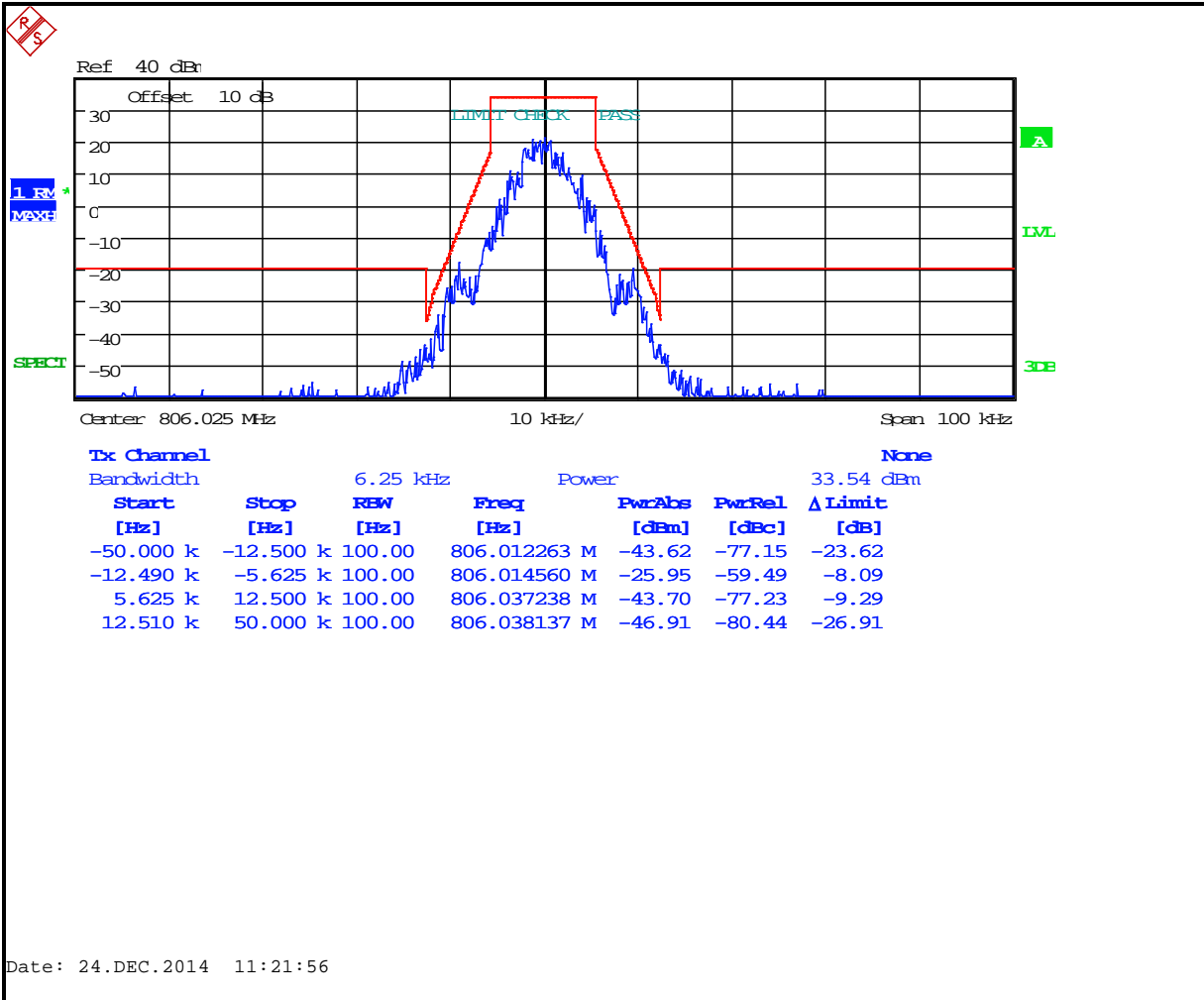
**Plot 8-23: Occupied Bandwidth – 860.0000 MHz; Wideband Analog (Mask B)**



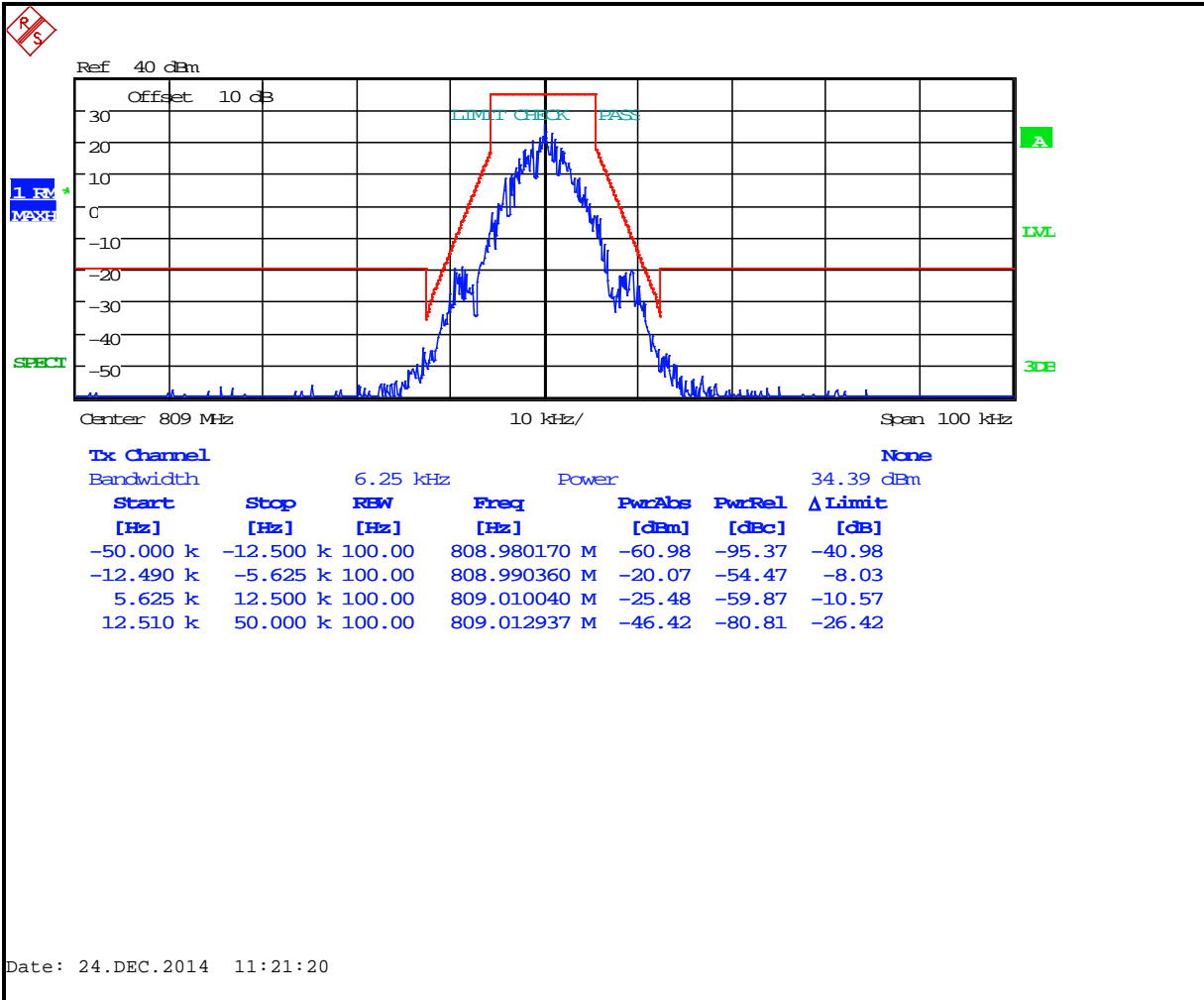
**Plot 8-24: Occupied Bandwidth – 868.9875 MHz; Wideband Analog (Mask B)**



**Plot 8-25: Occupied Bandwidth – 806.0250 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D)**

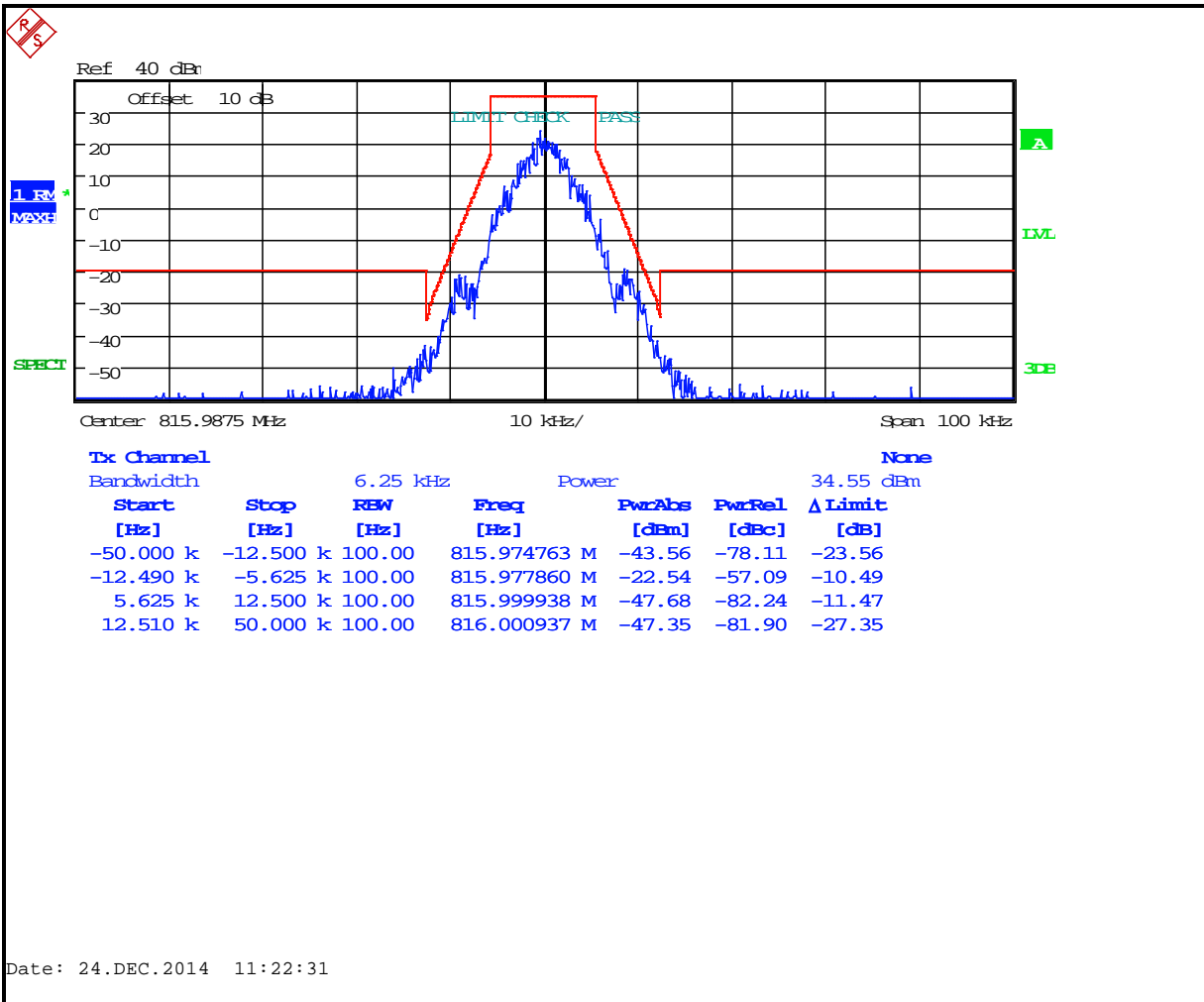


**Plot 8-26: Occupied Bandwidth – 809.0000 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D)**

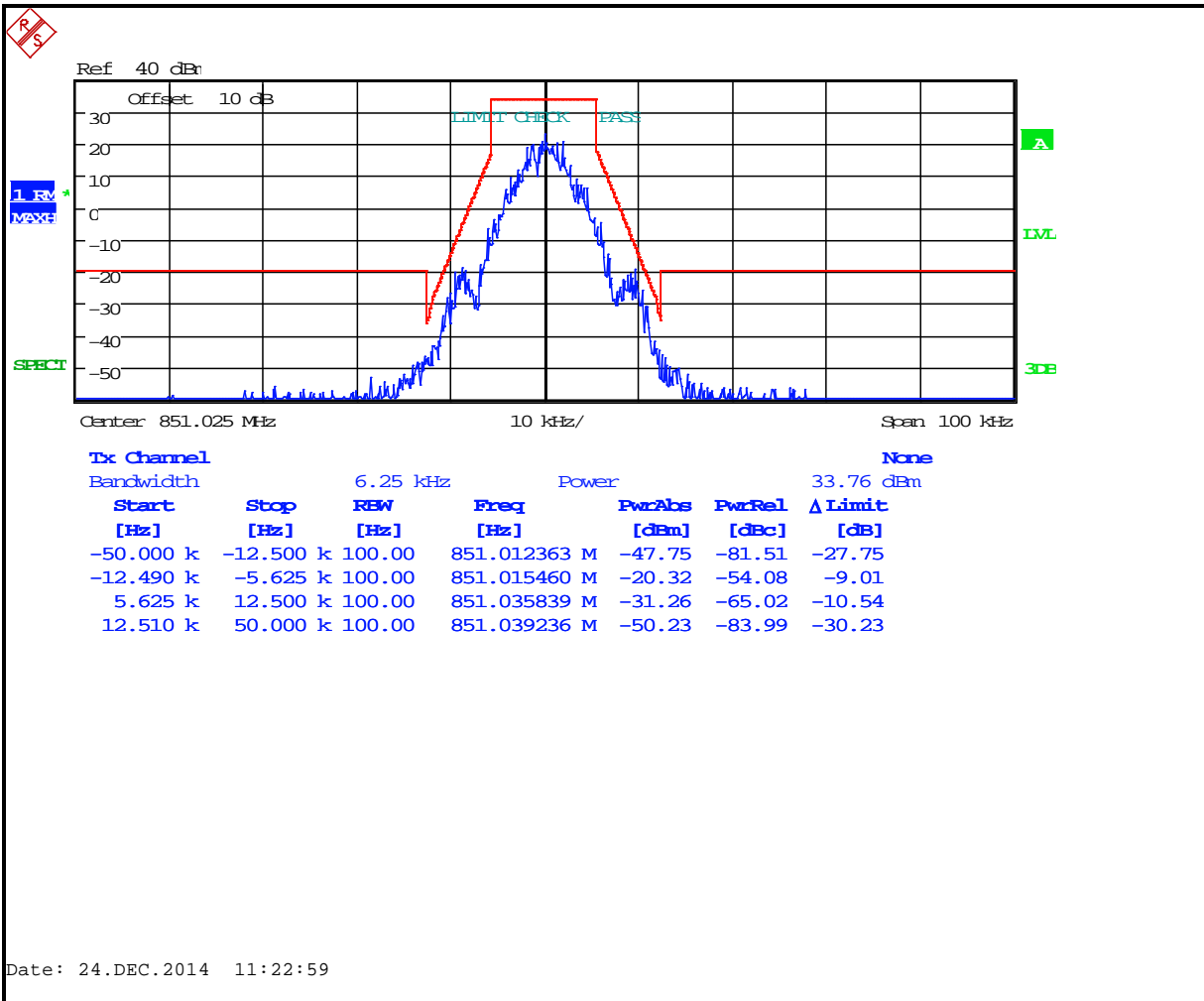




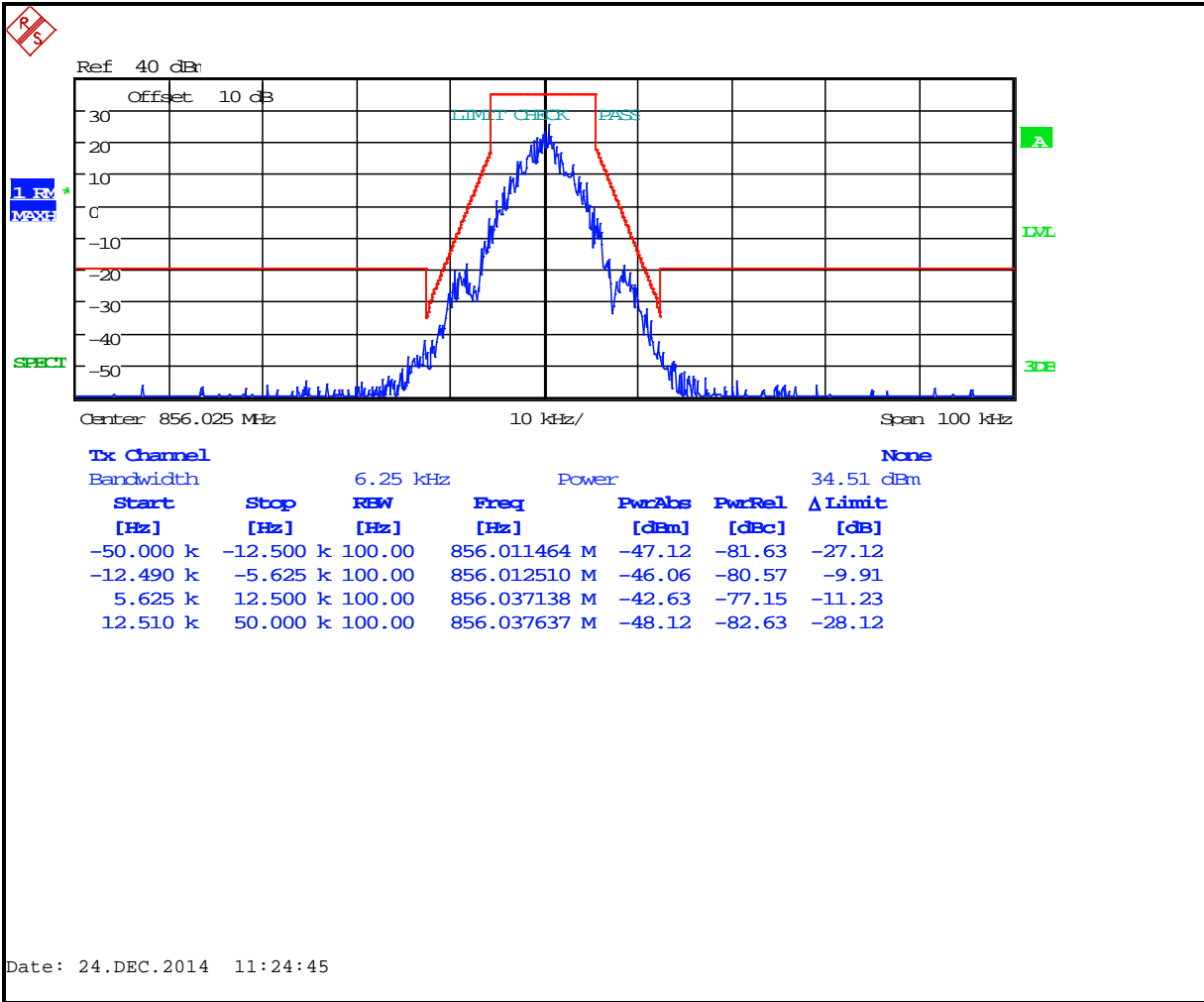
**Plot 8-27: Occupied Bandwidth – 815.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D)**



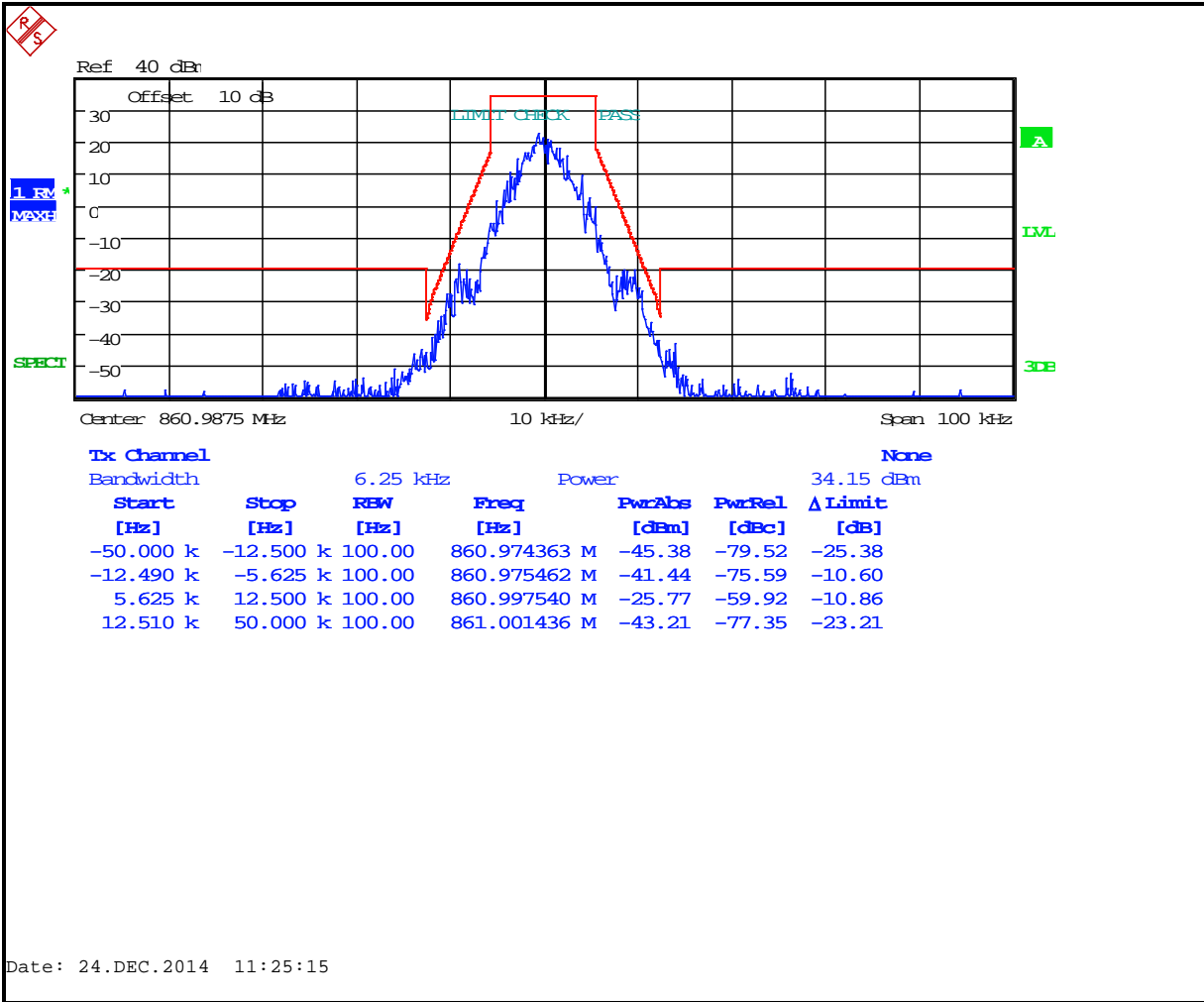
**Plot 8-28: Occupied Bandwidth – 851.0250 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D)**



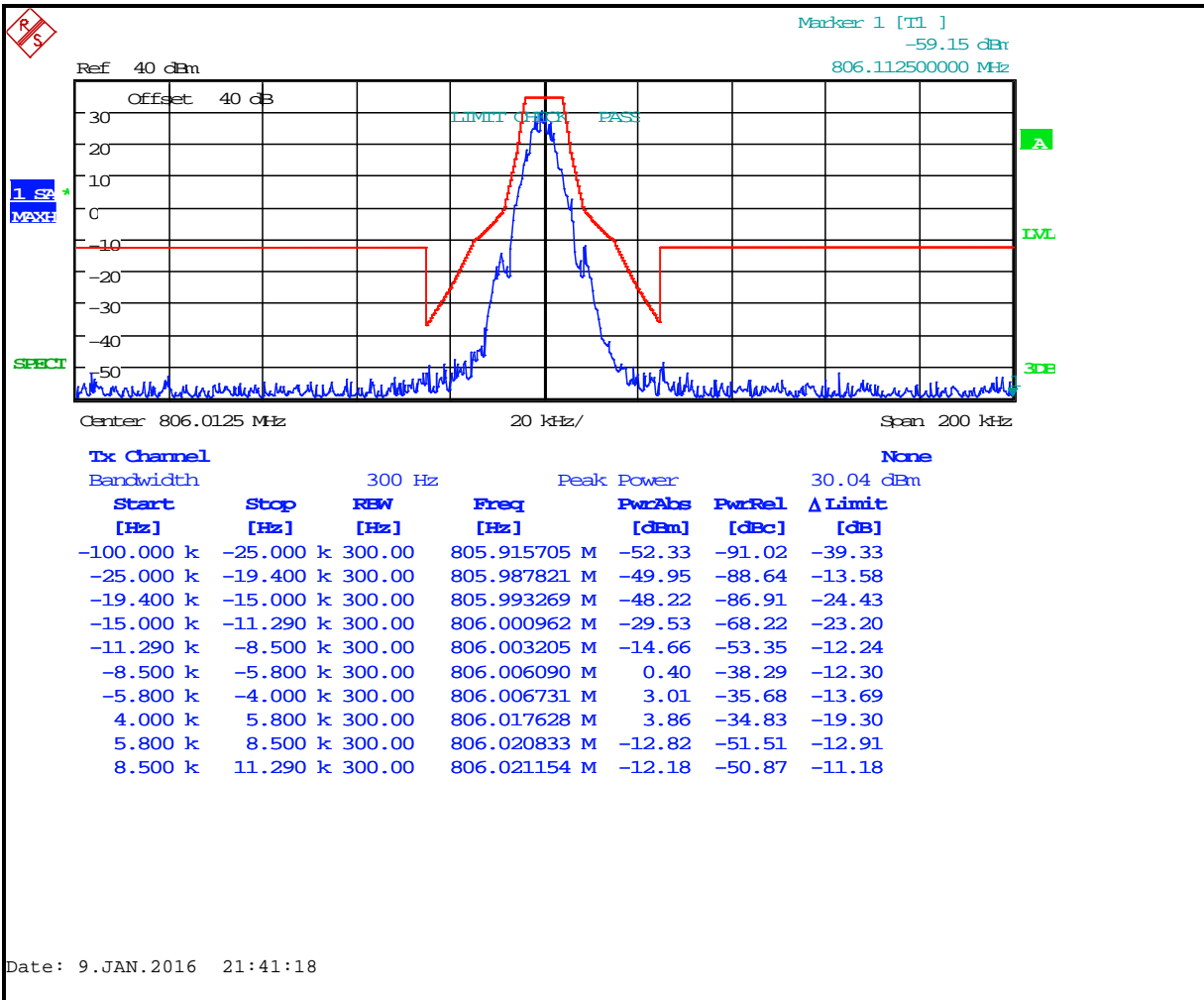
**Plot 8-29: Occupied Bandwidth – 856.0250 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D)**



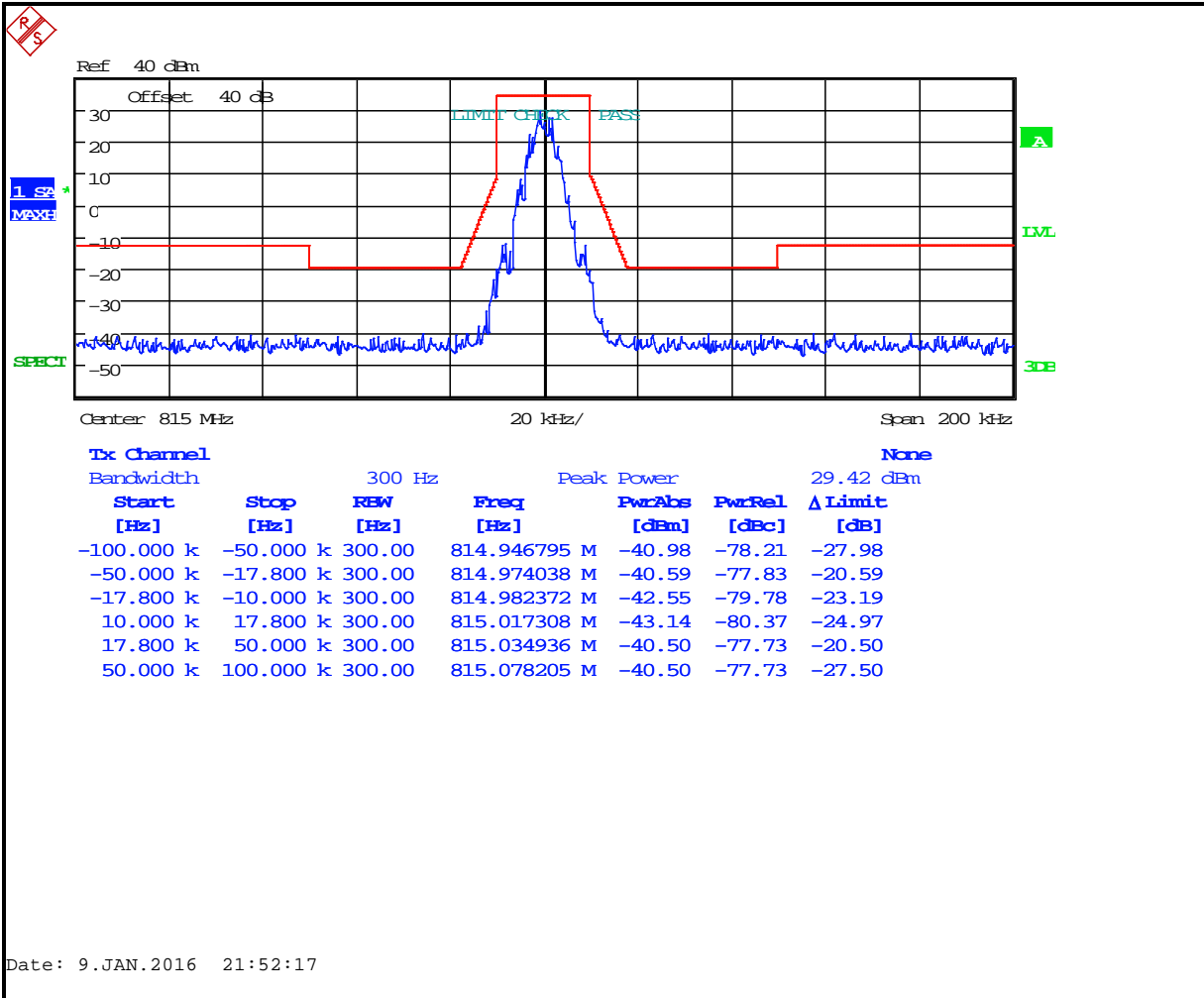
**Plot 8-30: Occupied Bandwidth – 860.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask D)**



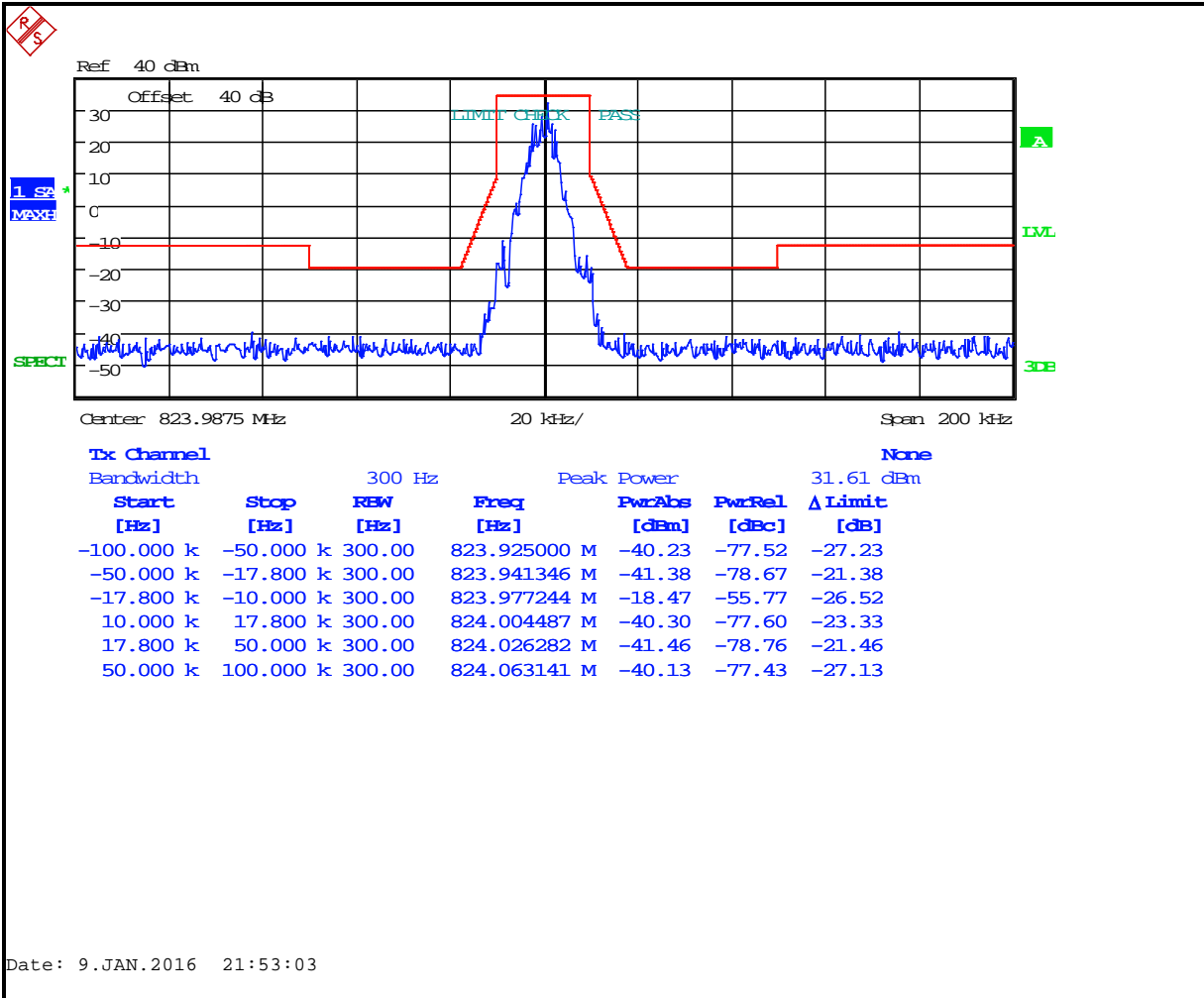
**Plot 8-31: Occupied Bandwidth – 806.0125 MHz; EDACS Narrowband 2-level FSK 9600 (Mask H)**



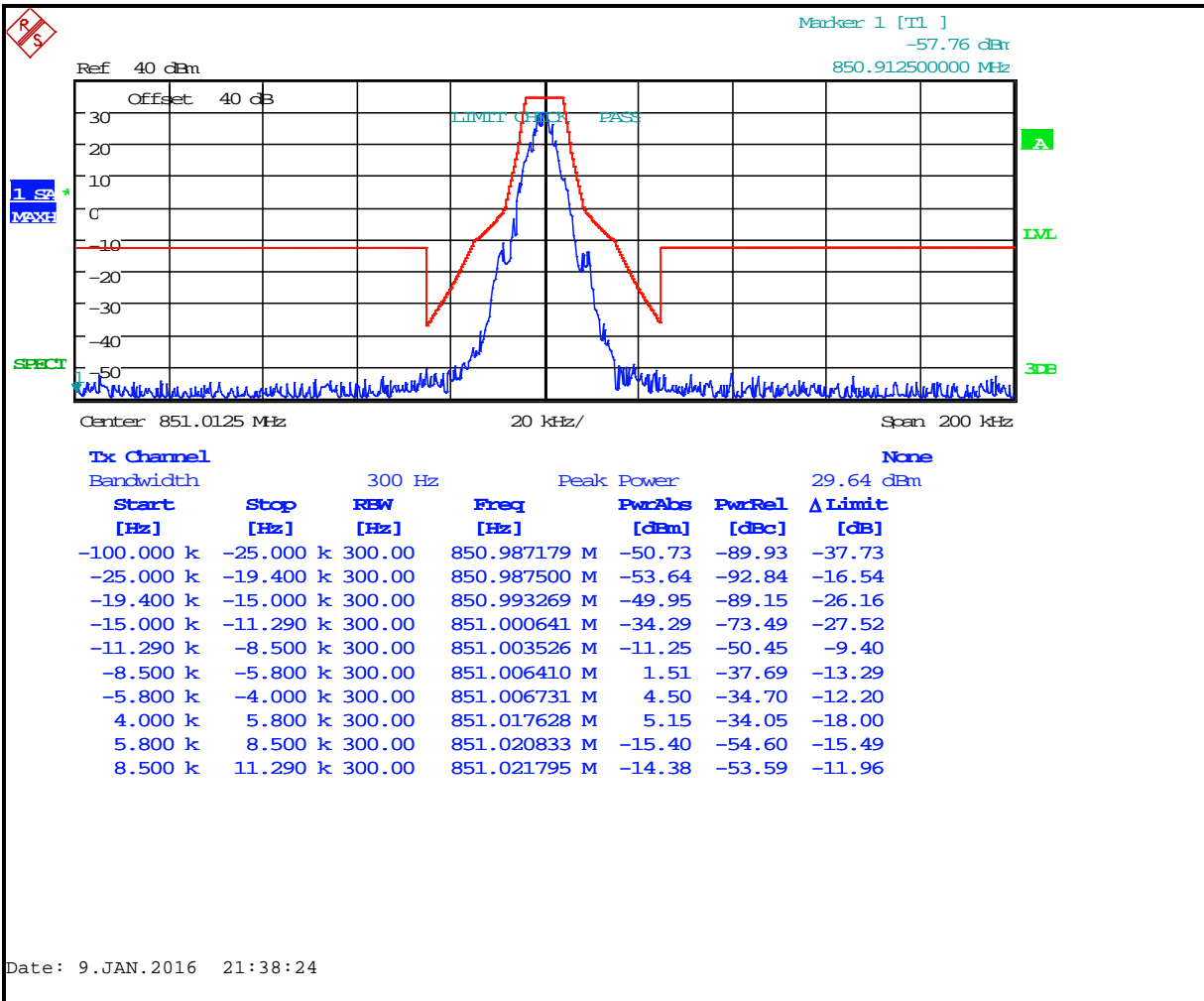
**Plot 8-32: Occupied Bandwidth – 815.0000 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G)**



**Plot 8-33: Occupied Bandwidth – 823.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G)**

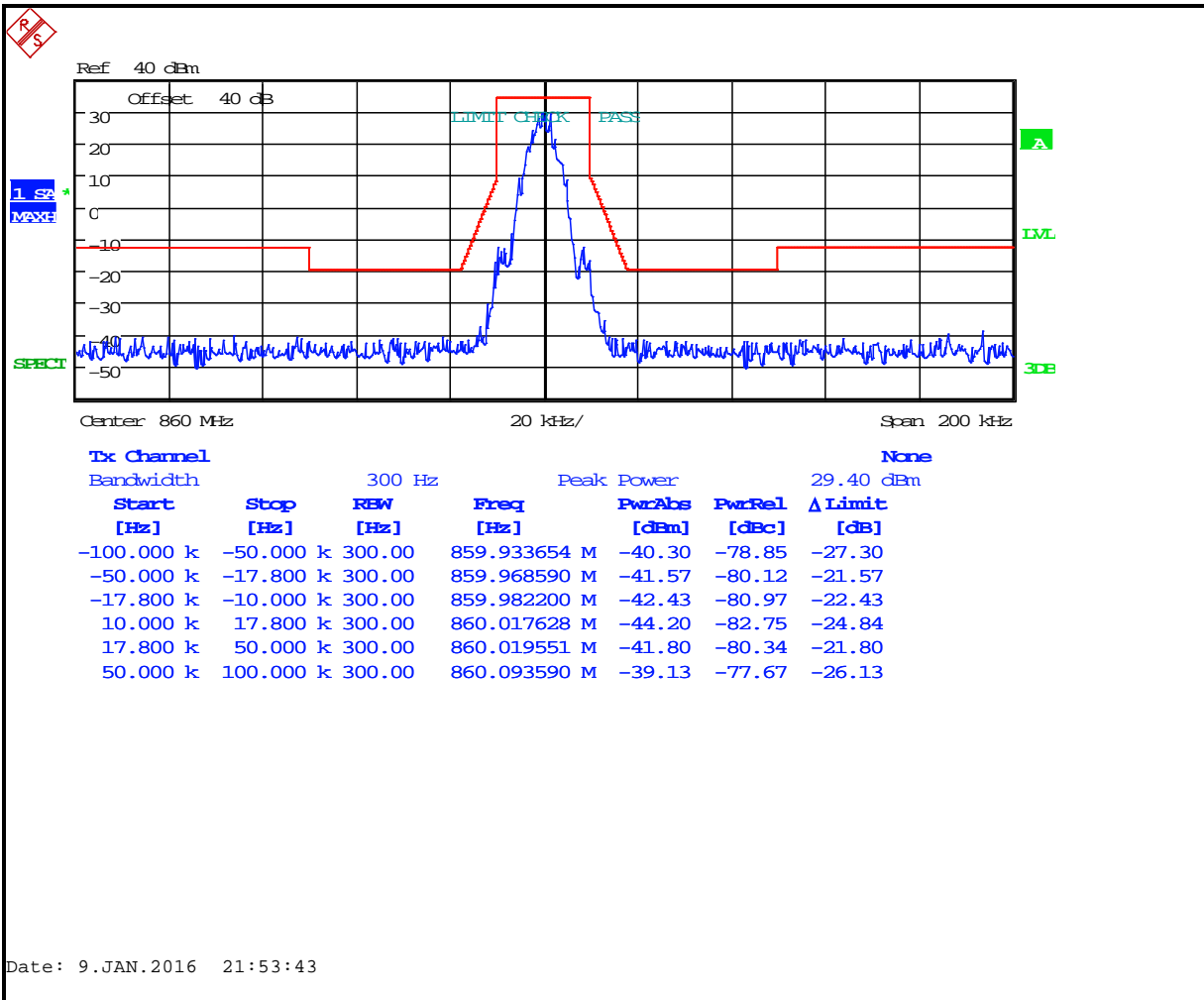


**Plot 8-34: Occupied Bandwidth – 851.0125 MHz; EDACS Narrowband 2-level FSK 9600 (Mask H)**

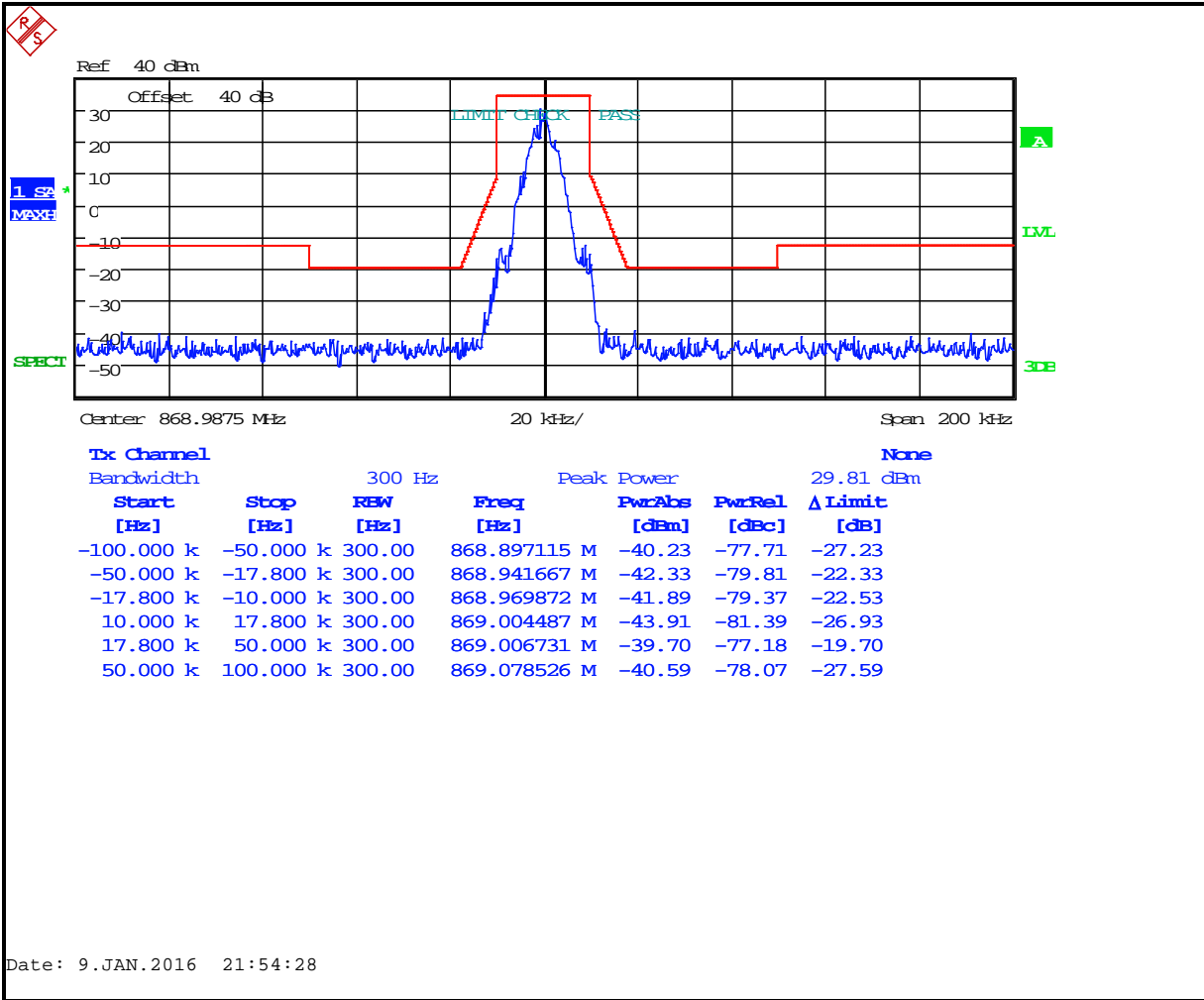




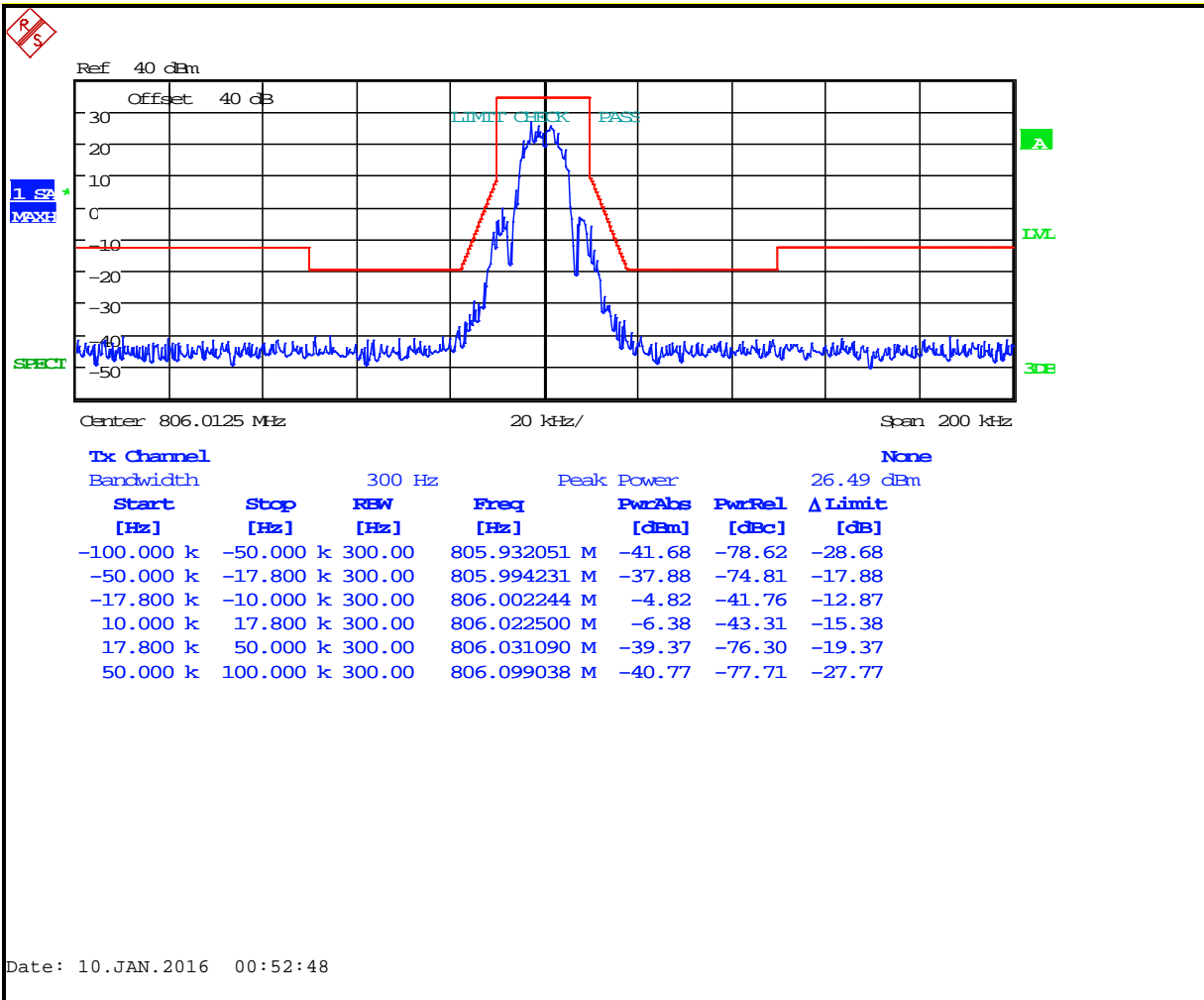
**Plot 8-35: Occupied Bandwidth – 860.000 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G)**



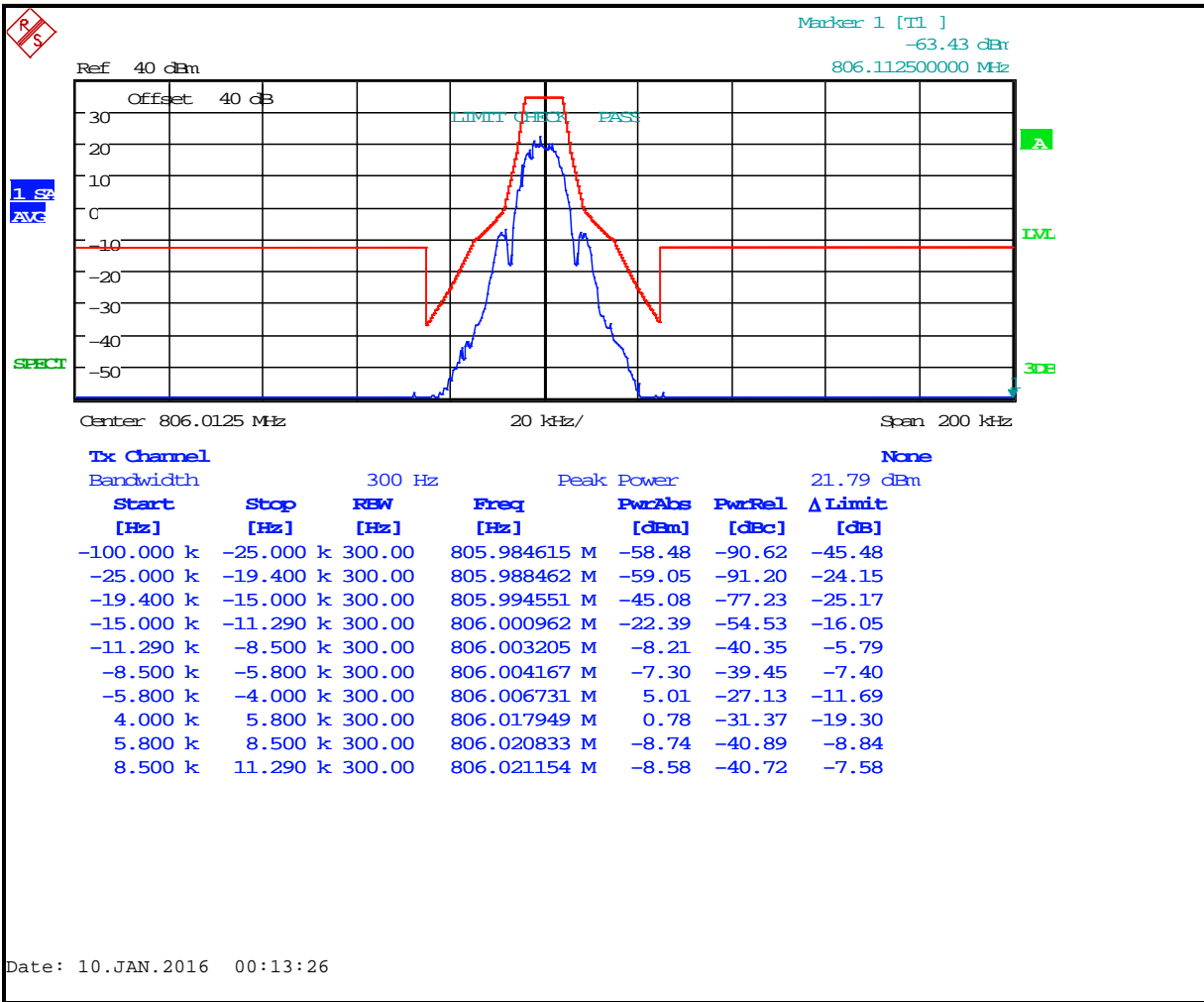
**Plot 8-36: Occupied Bandwidth – 868.9875 MHz; EDACS Narrowband 2-level FSK 9600 (Mask G)**



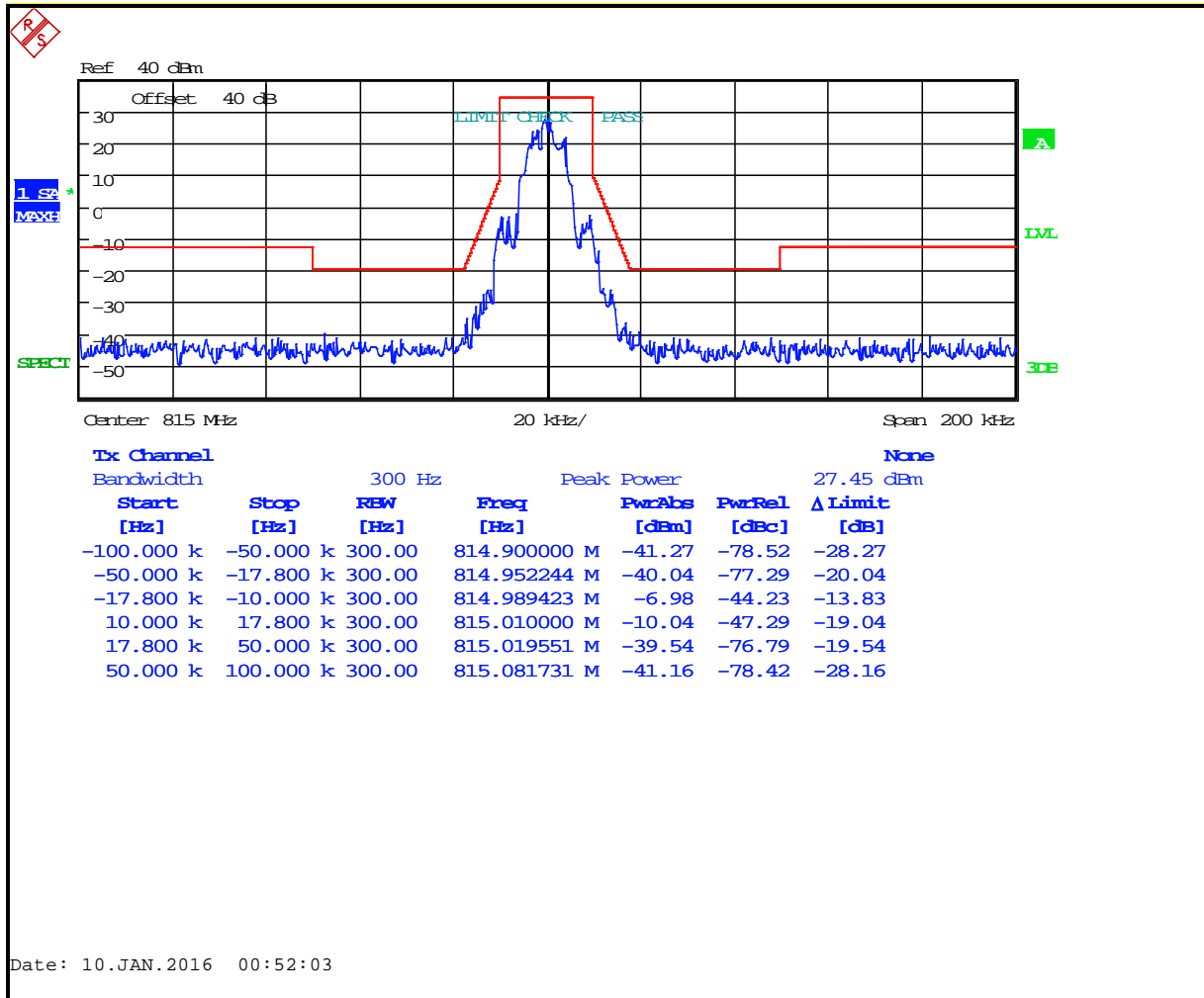
**Plot 8-37: Occupied Bandwidth – 806.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G)**



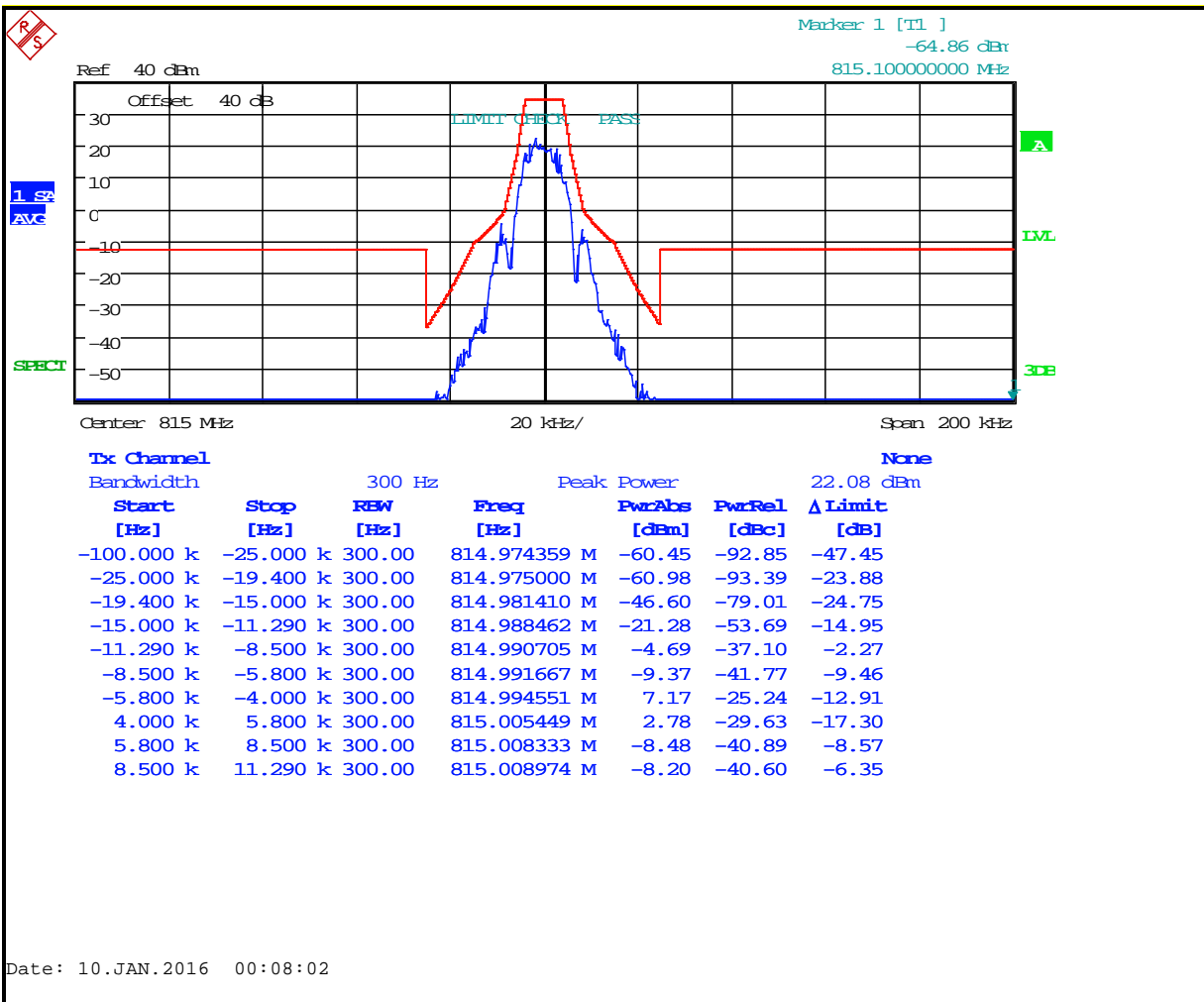
**Plot 8-38: Occupied Bandwidth – 806.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask H)**



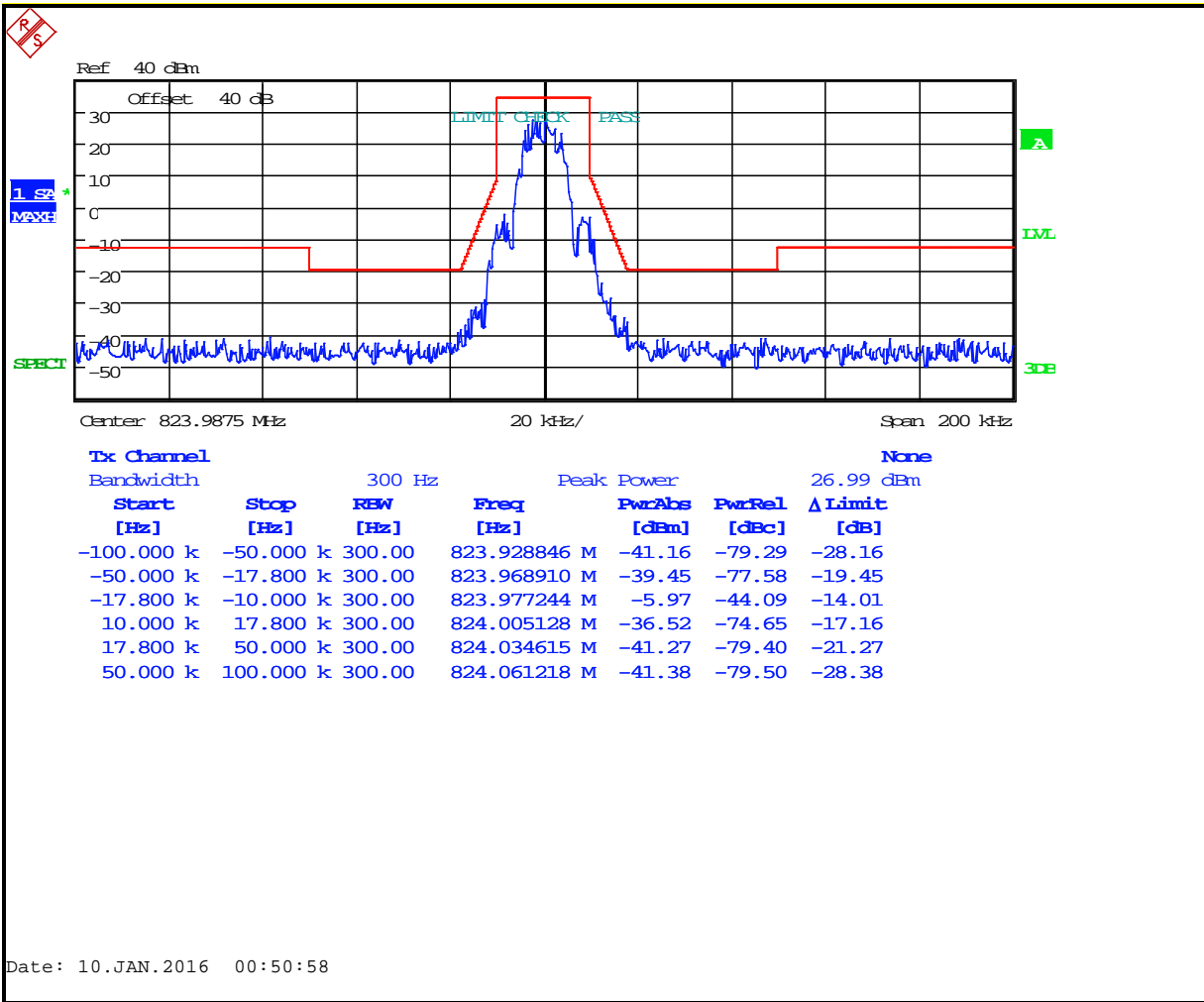
**Plot 8-39: Occupied Bandwidth – 815.0000 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G)**



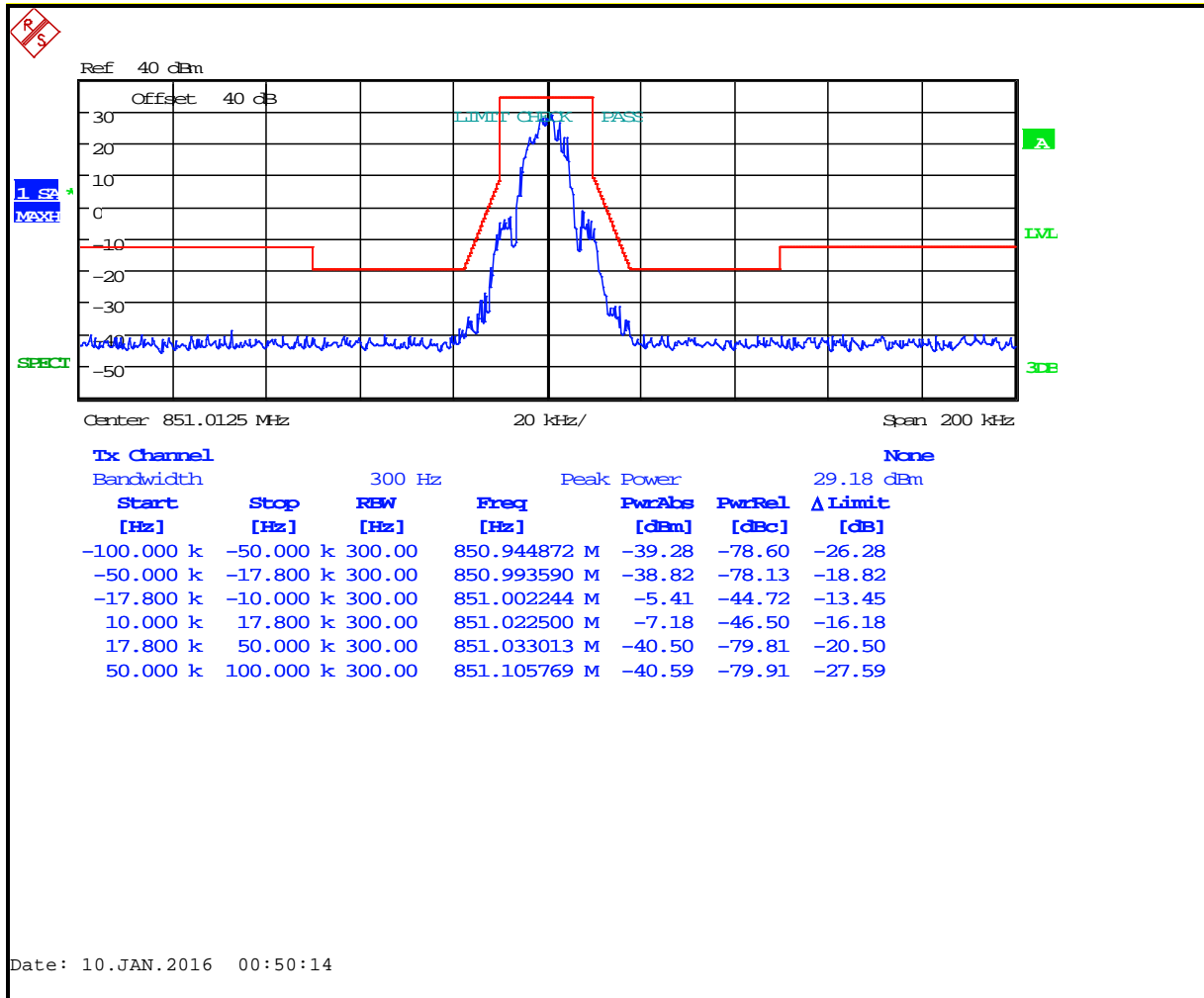
**Plot 8-40: Occupied Bandwidth – 815.0000 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask H)**



**Plot 8-41: Occupied Bandwidth – 823.9875 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G)**

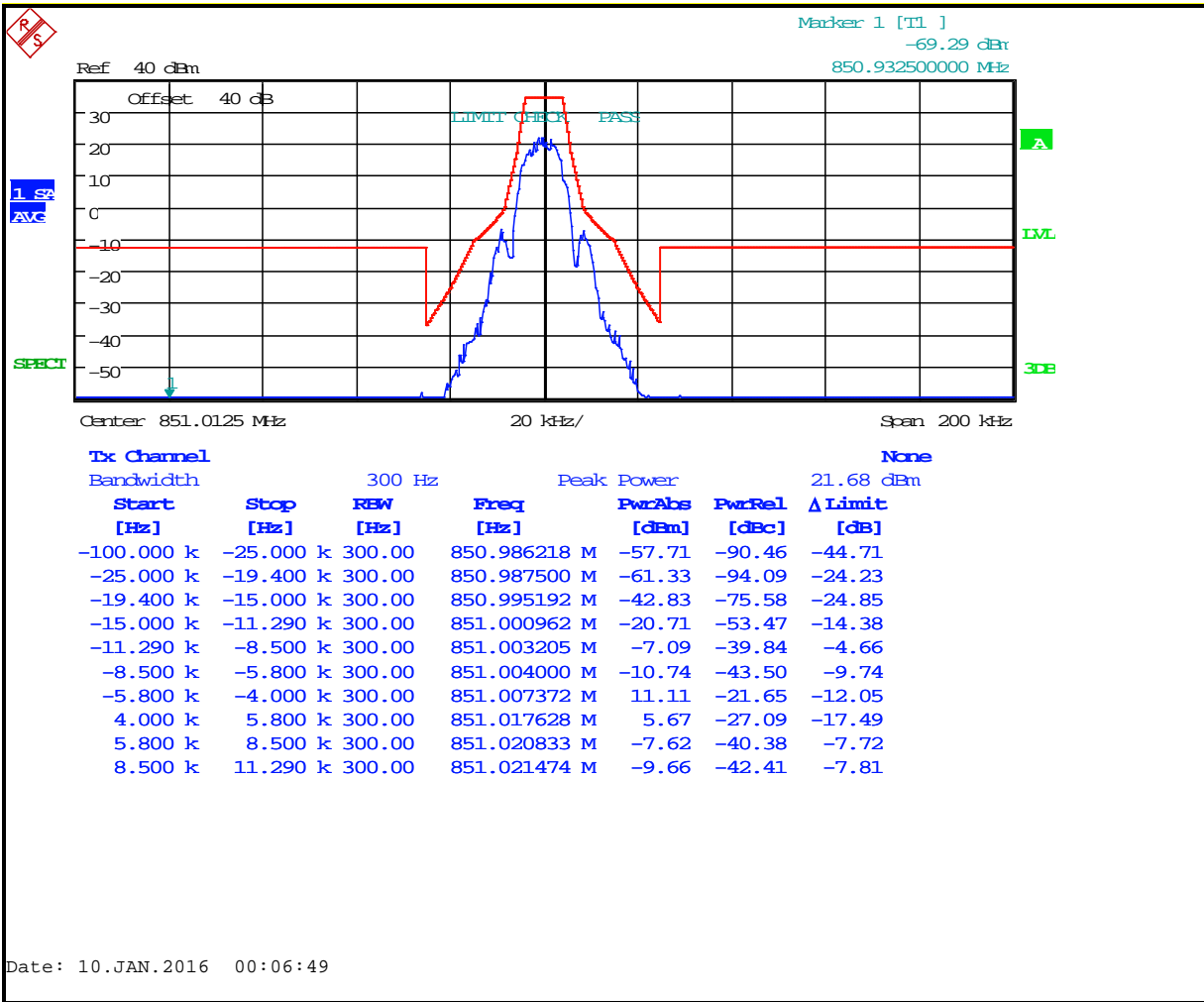


**Plot 8-42: Occupied Bandwidth – 851.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G)**

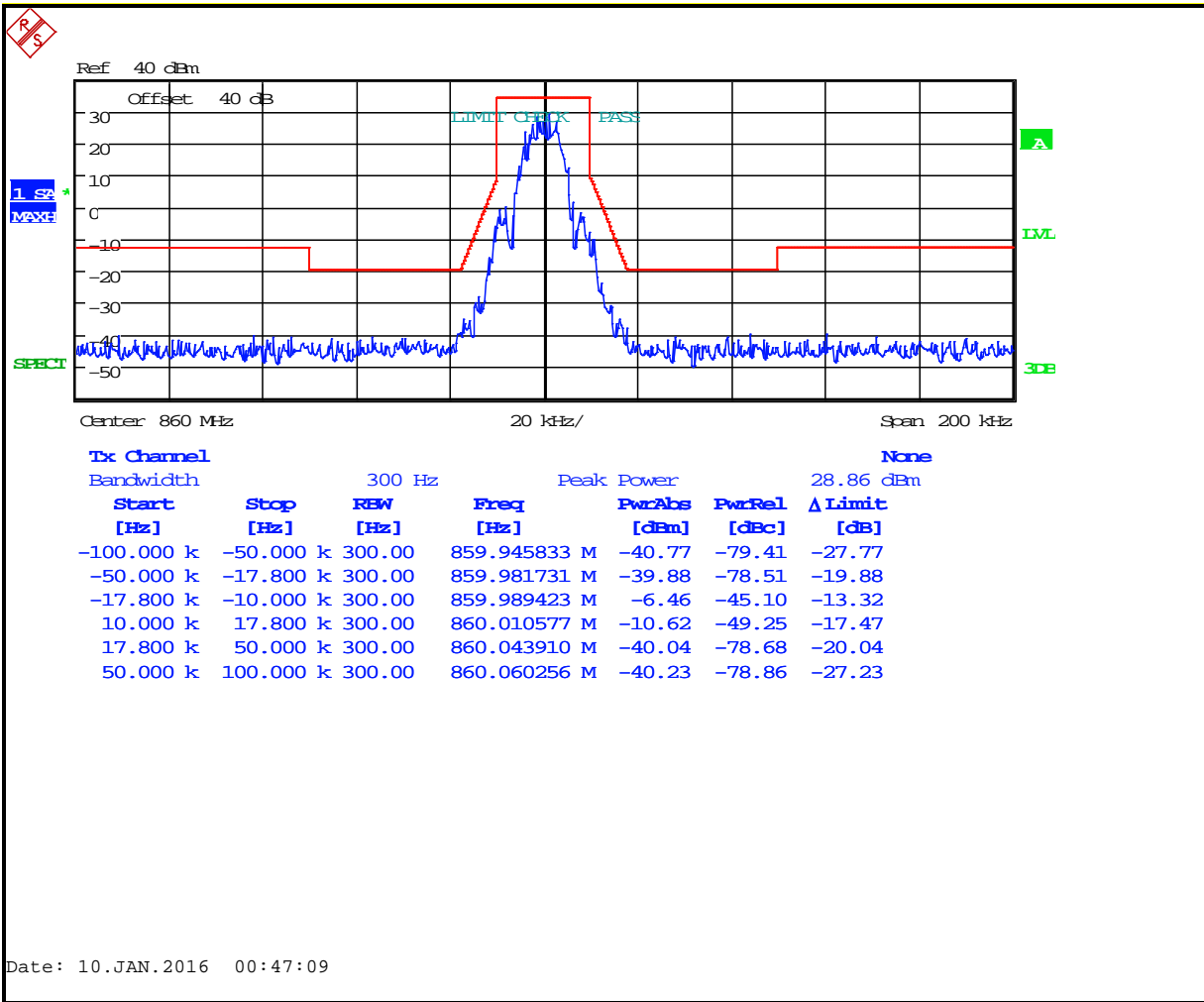




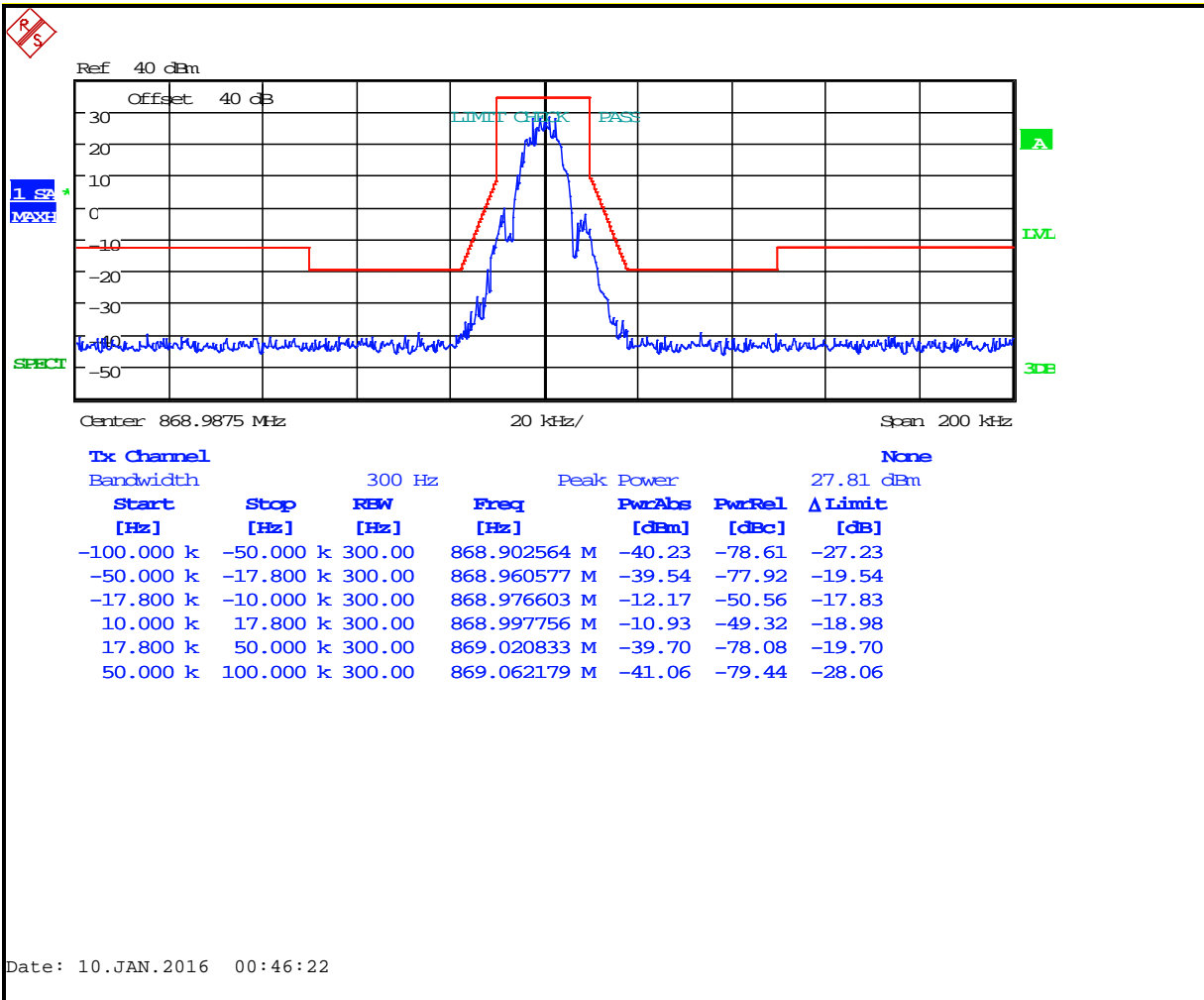
**Plot 8-43: Occupied Bandwidth – 851.0125 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask H)**



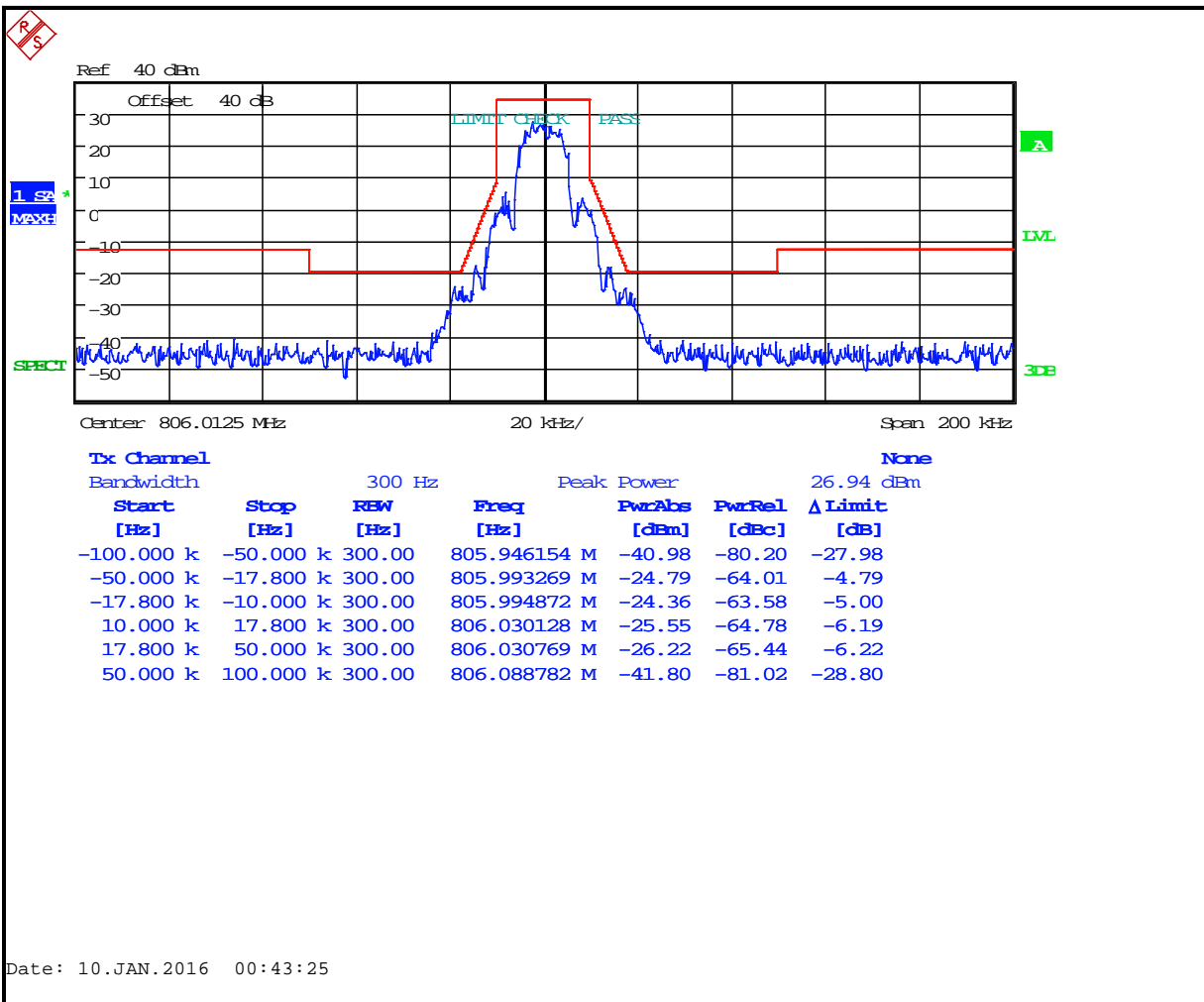
**Plot 8-44: Occupied Bandwidth – 860.000 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G)**



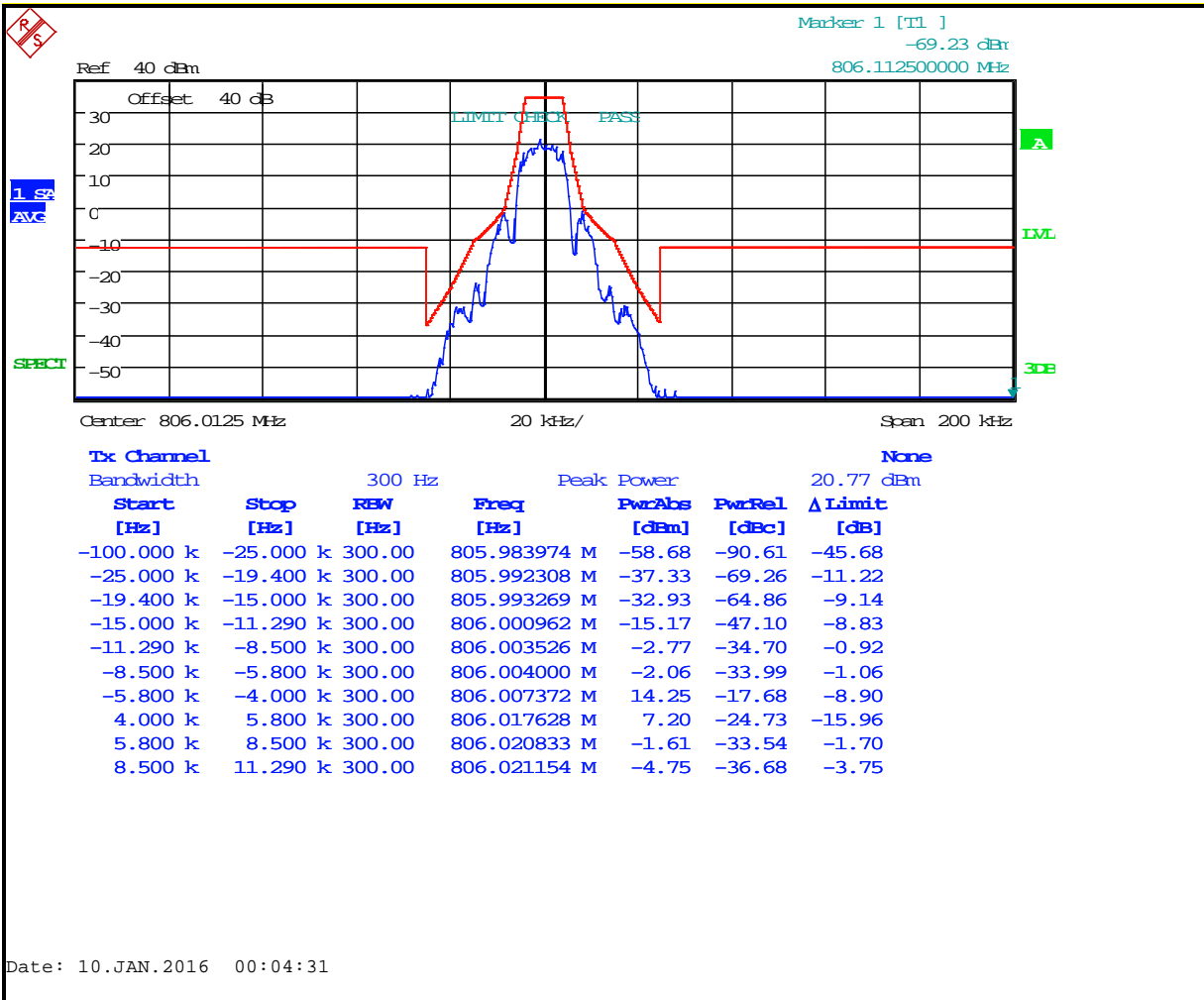
**Plot 8-45: Occupied Bandwidth – 868.9875 MHz; EDACS NPSPAC 2-level FSK 9600 (Mask G)**



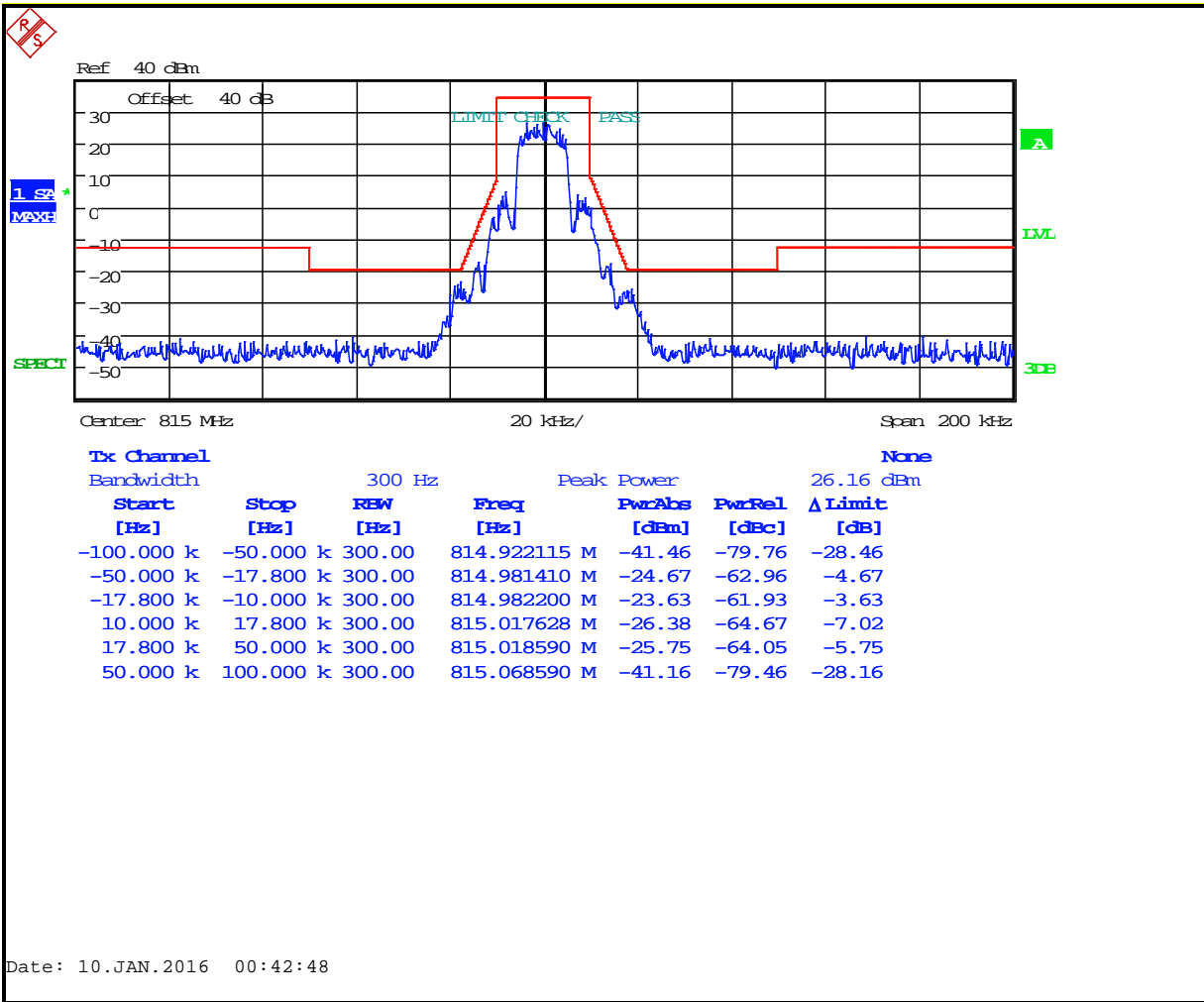
**Plot 8-46: Occupied Bandwidth – 806.0125 MHz; EDACS Wideband 2-level FSK 9600 (Mask G)**



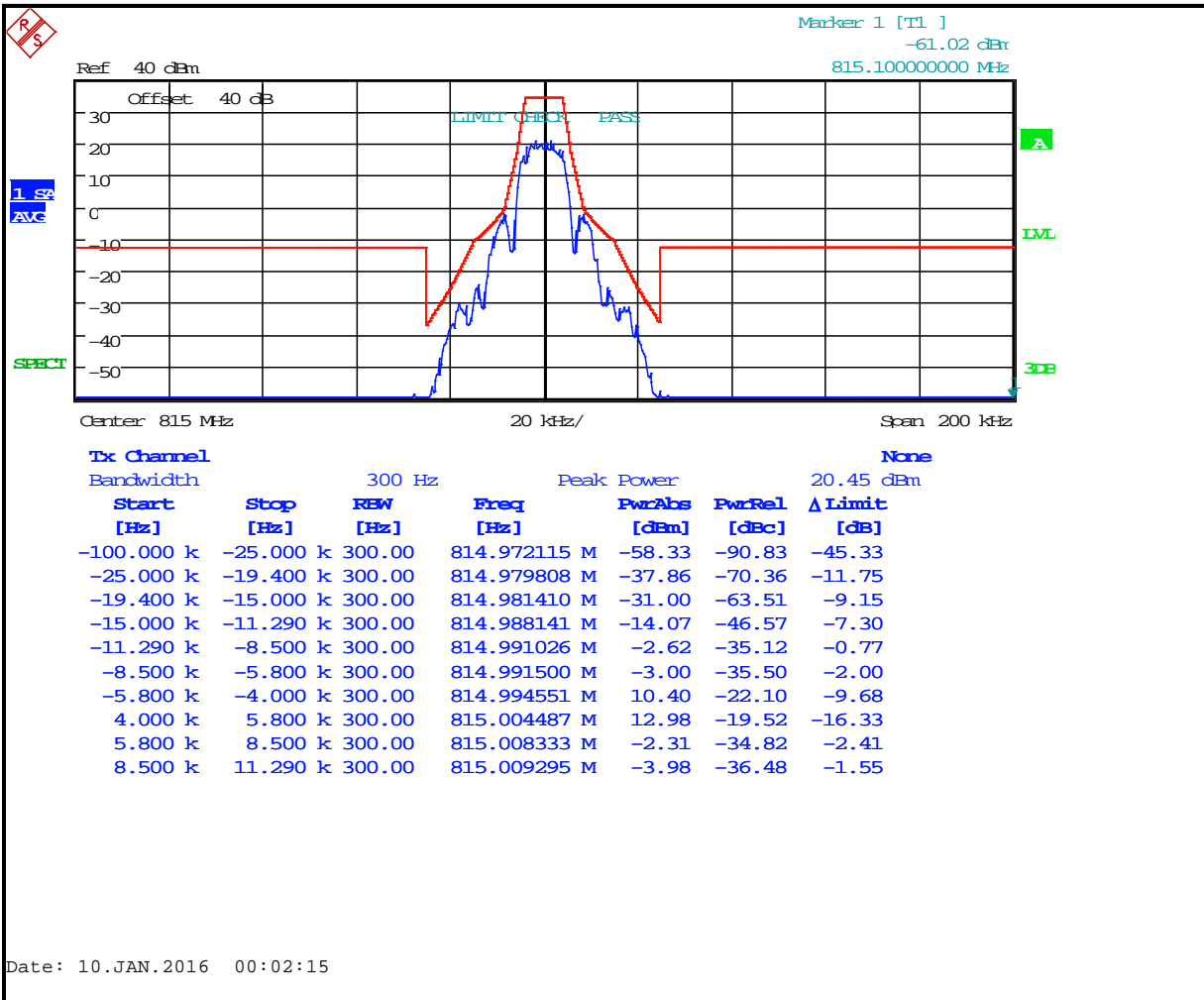
**Plot 8-47: Occupied Bandwidth – 806.0125 MHz; EDACS Wideband 2-level FSK 9600 (Mask H)**



**Plot 8-48: Occupied Bandwidth – 815.0000 MHz; EDACS Wideband 2-level FSK 9600 (Mask G)**



**Plot 8-49: Occupied Bandwidth – 815.0000 MHz; EDACS Wideband 2-level FSK 9600 (Mask H)**



**Plot 8-50: Occupied Bandwidth – 823.9875 MHz; EDACS Wideband 2-level FSK 9600 (Mask G)**

