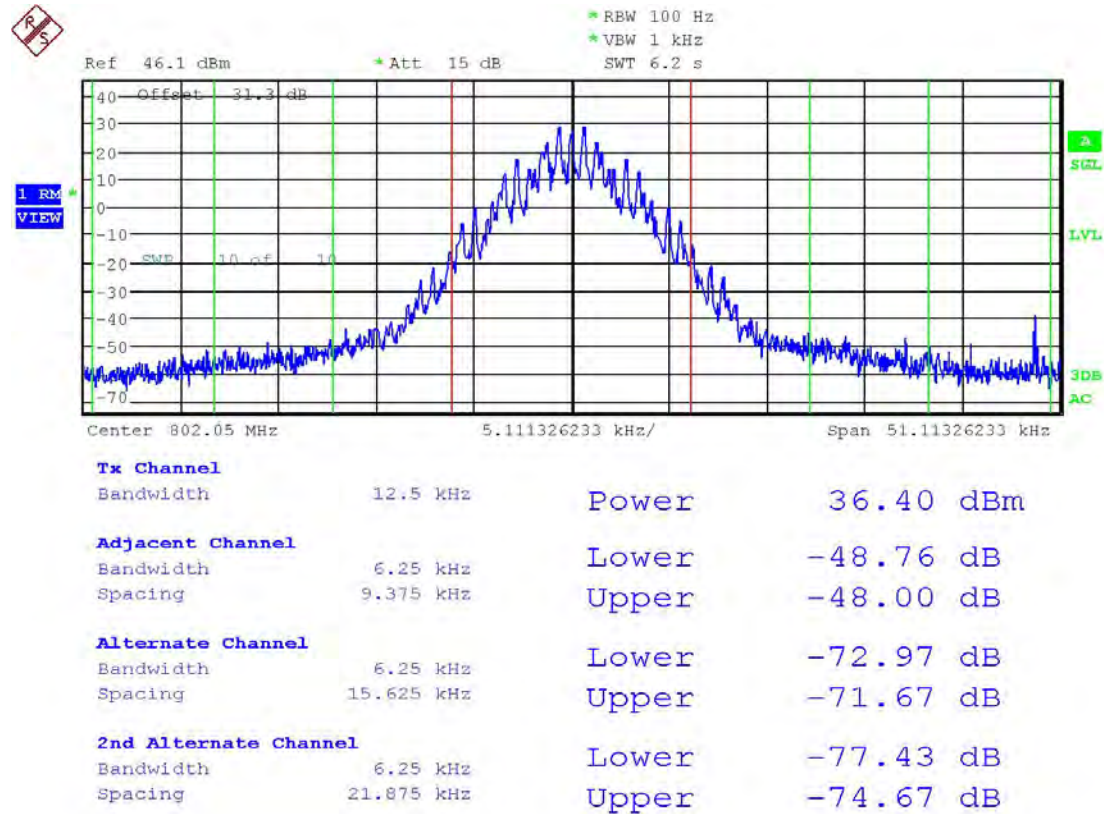


ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



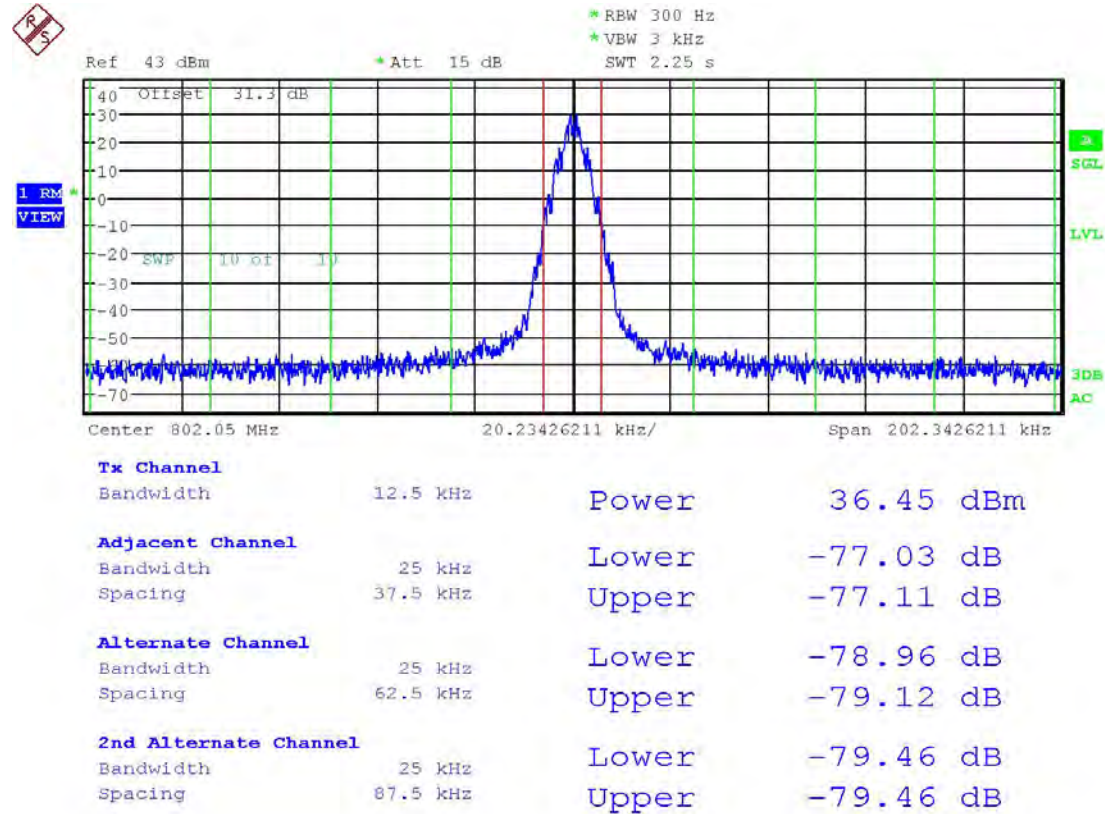
Date: 16.FEB.2016 11:56:10

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

25 KHz Measurement Bandwidth



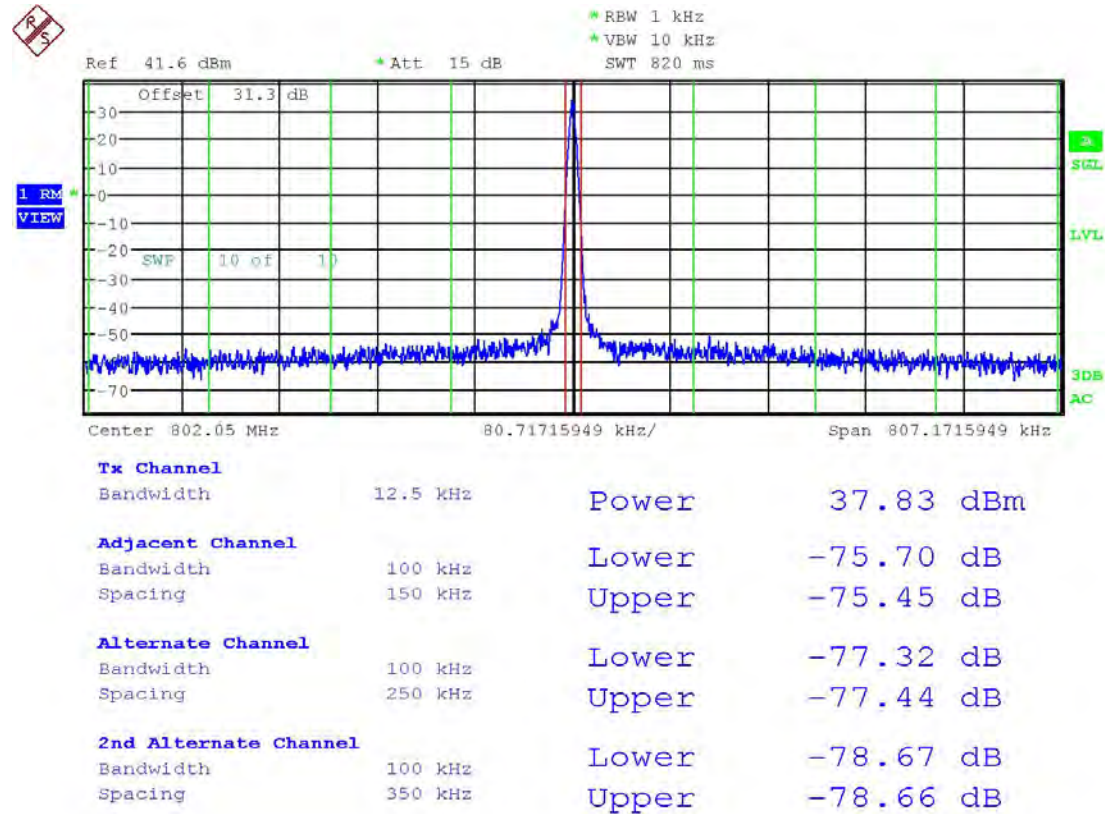
Date: 25.FEB.2016 20:18:06

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:15:55

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-11K0F3E

Swept 30 KHz Bandwidth Measurement

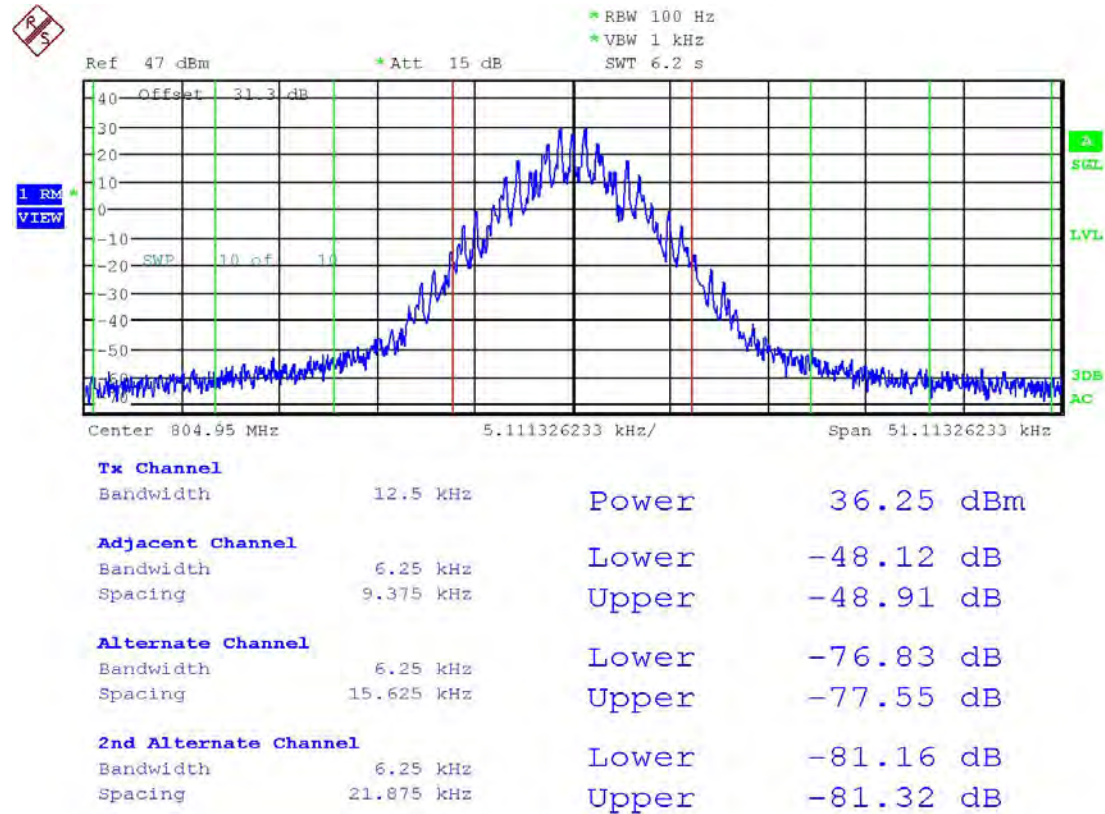
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.5	6.5
		Lower	-82.11	7.1
12 MHz to paired rx band	-75	-114.09		39.1
paired rx band	-100	-113.11		13.1

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-11K0F3E

6.25 KHz Measurement Bandwidth



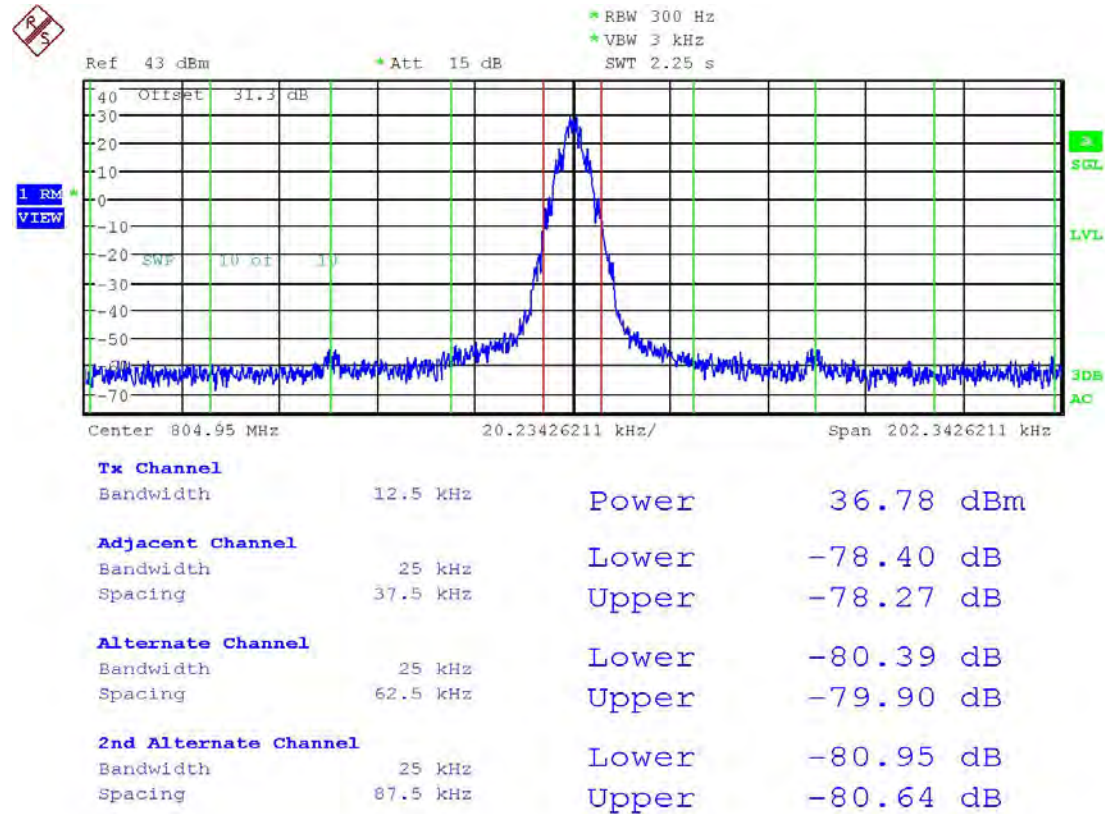
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[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-11K0F3E

25 KHz Measurement Bandwidth



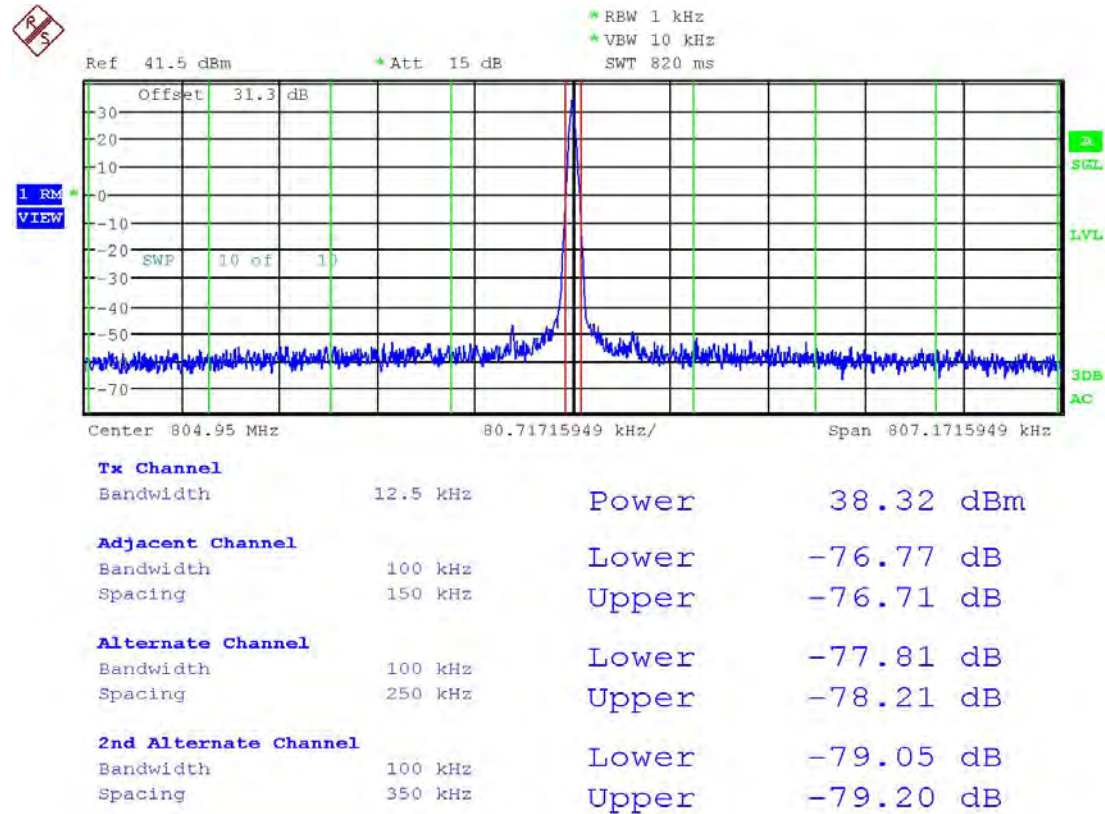
Date: 25.FEB.2016 20:17:00

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-11K0F3E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:16:15

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-11K0F3E

Swept 30 KHz Bandwidth Measurement

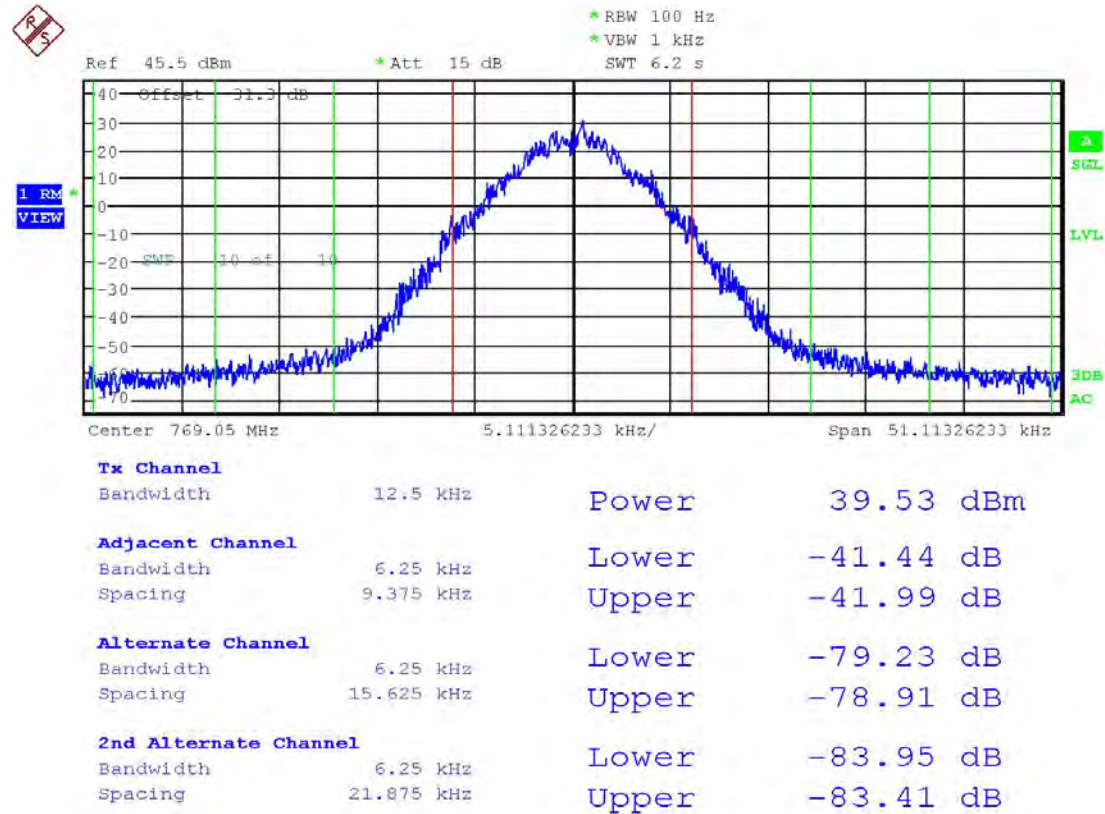
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.95	6.9
		Lower	-82.41	7.4
12 MHz to paired rx band	-75	-114.15		39.2
paired rx band	-100	-114.92		14.9

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



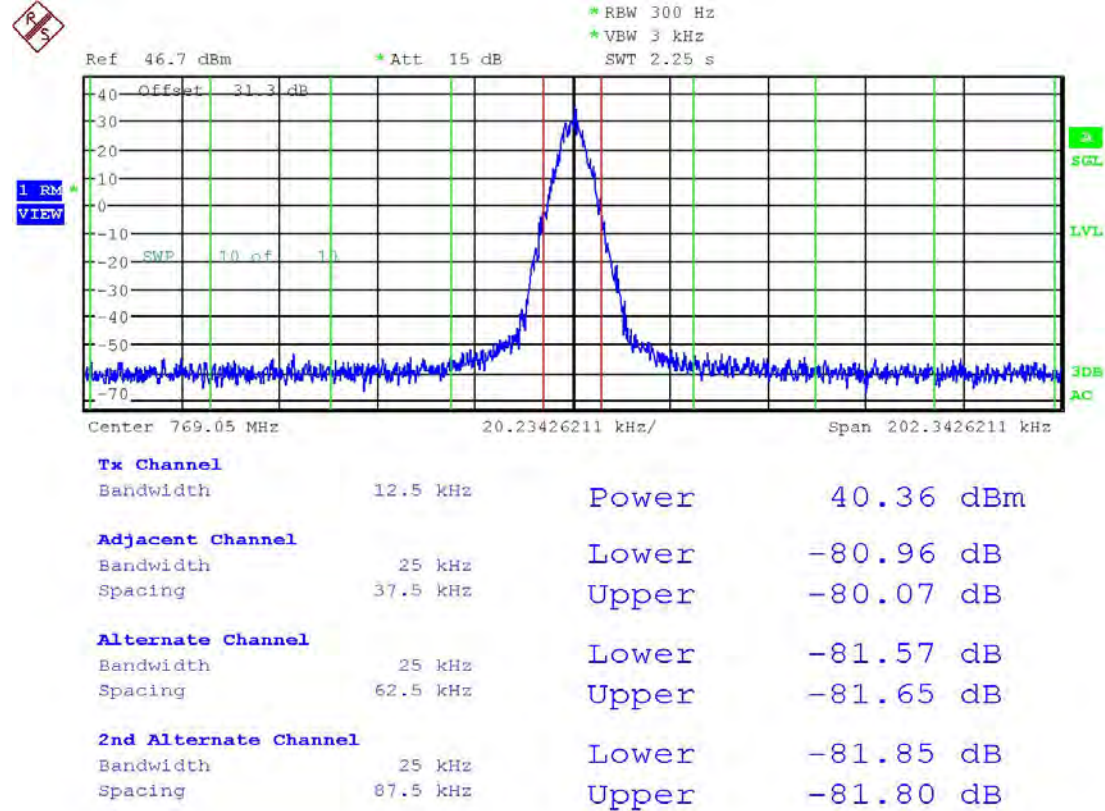
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[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



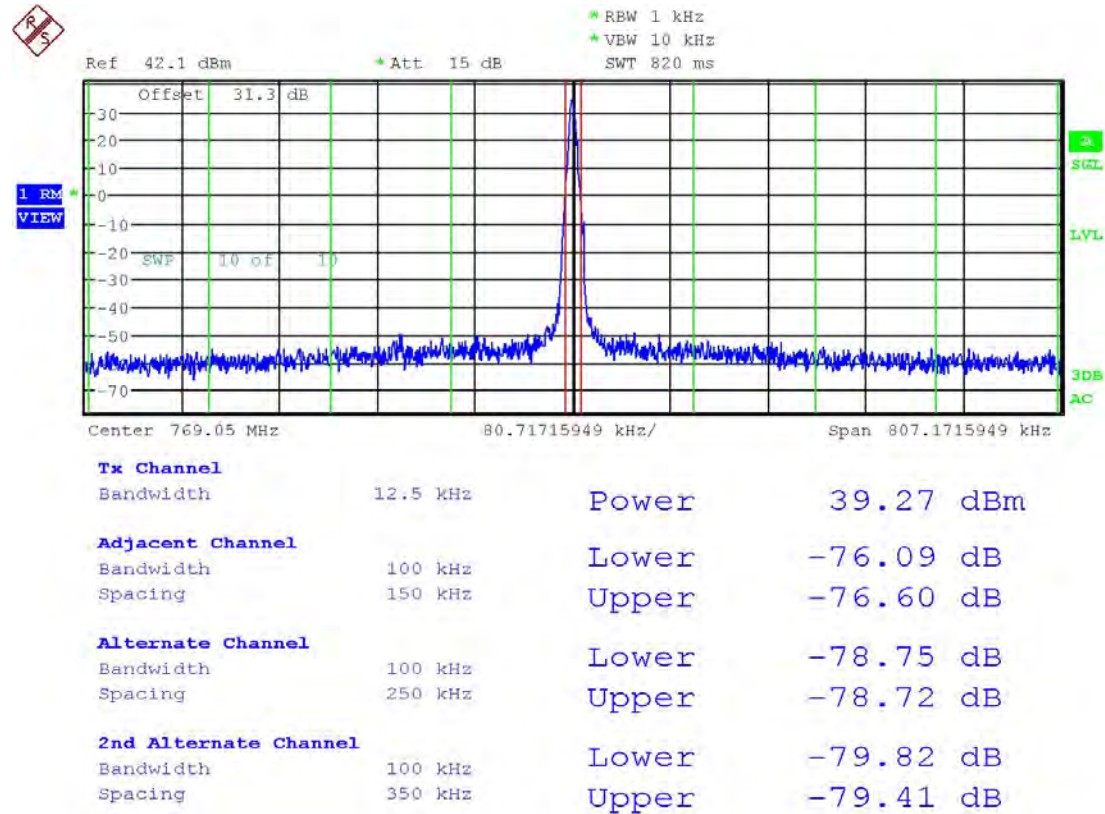
Date: 25.FEB.2016 20:26:15

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:16:53

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F1E/8K10F1D

Swept 30 KHz Bandwidth Measurement

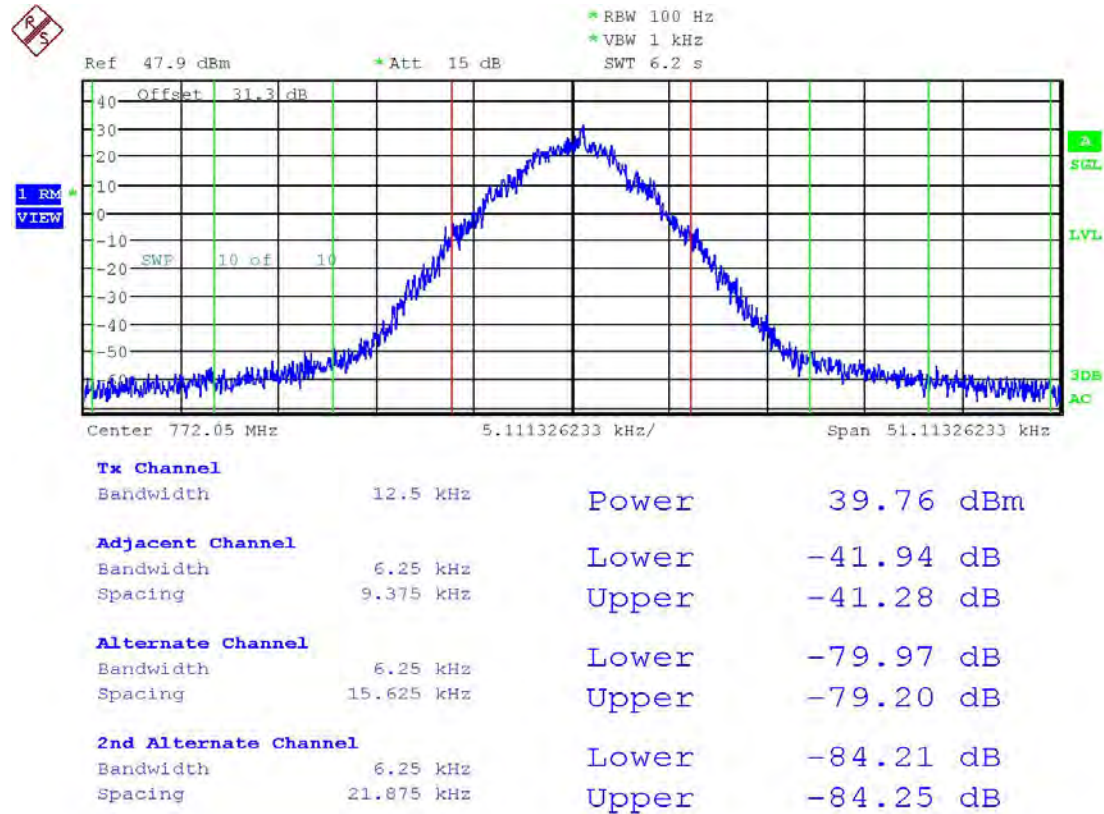
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.11	6.1
		Lower	-82.54	7.5
12 MHz to paired rx band	-75	-115.1		40.1
paired rx band	-100	-111.55		11.6

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



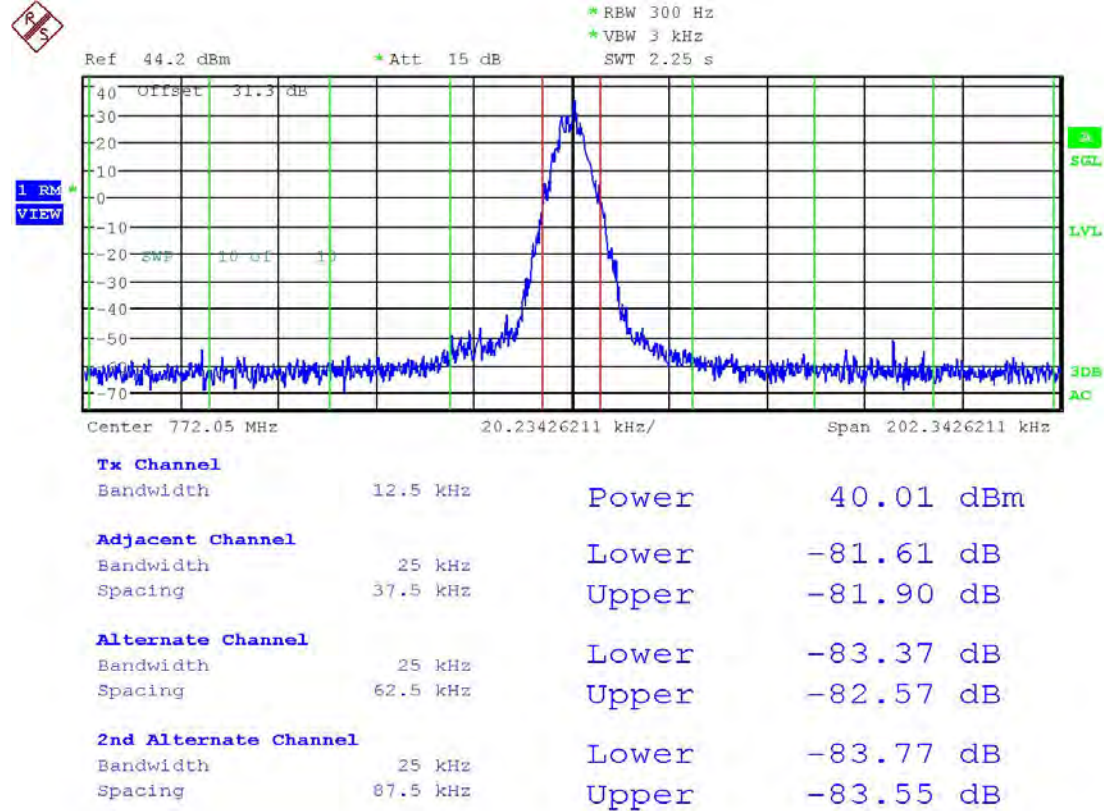
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[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



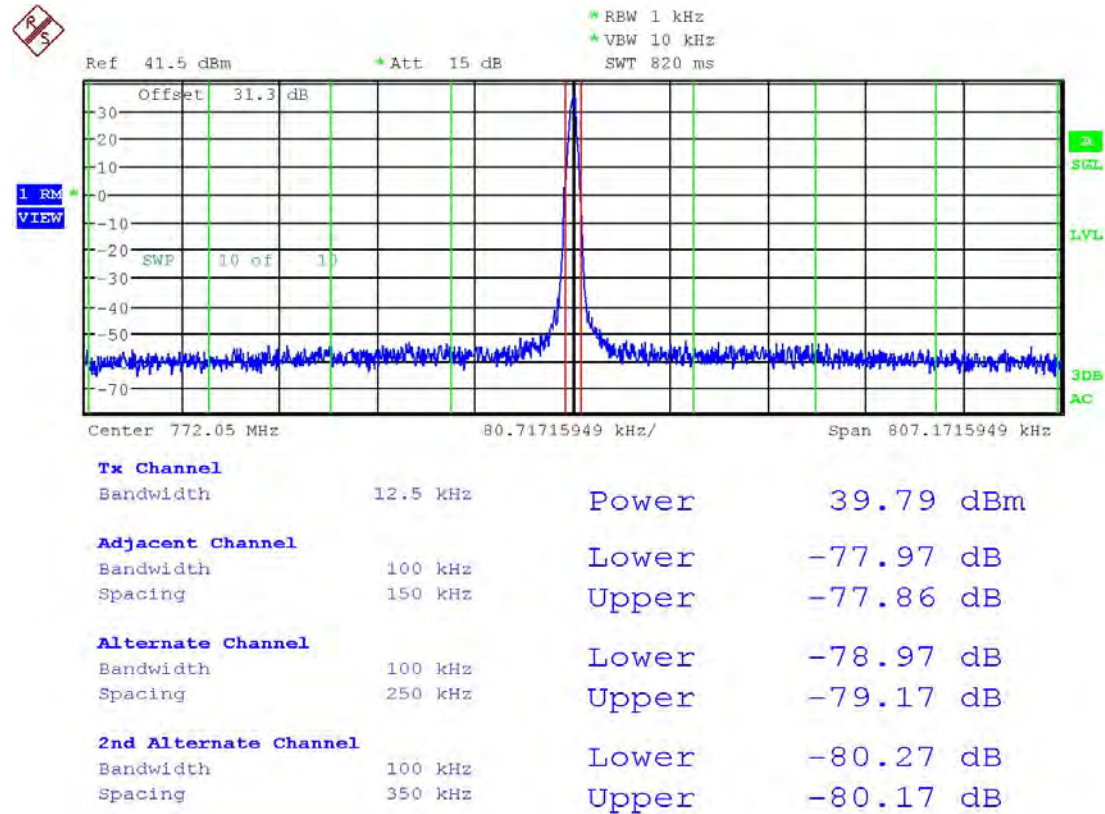
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[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:17:29

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F1E/8K10F1D

Swept 30 KHz Bandwidth Measurement

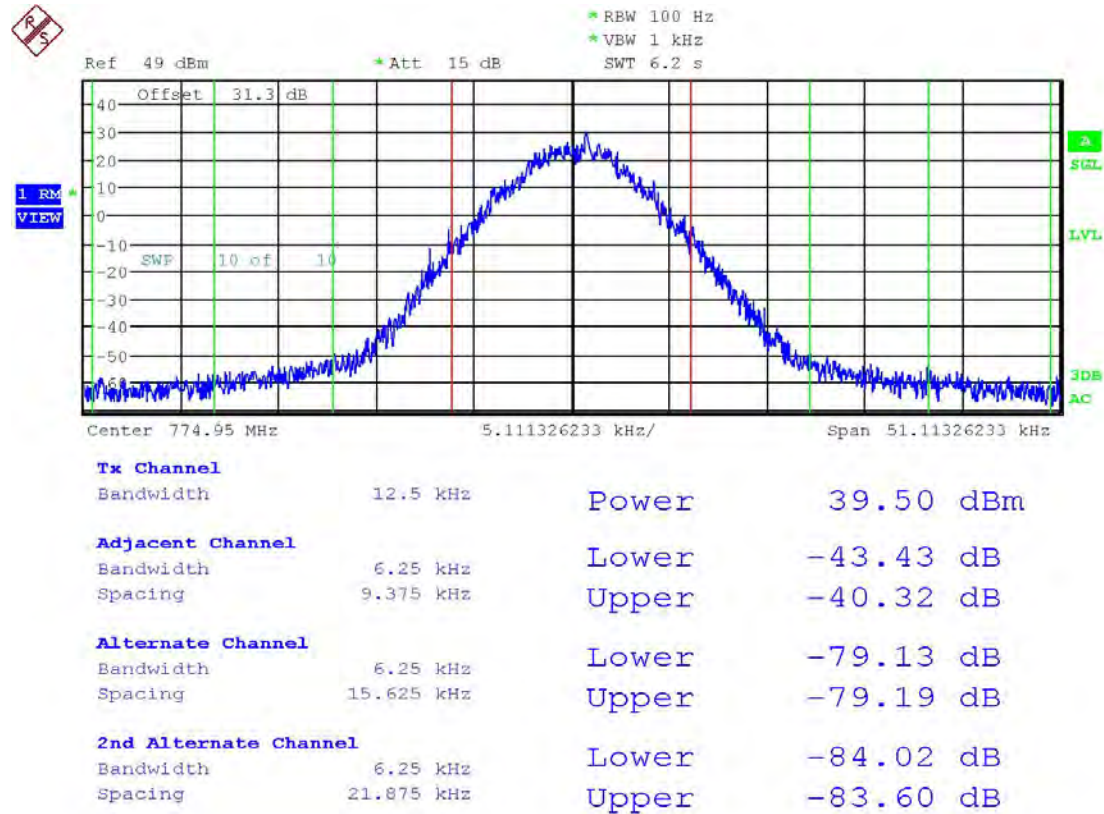
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.72	6.7
		Lower	-81.42	6.4
12 MHz to paired rx band	-75	-116.31		41.3
paired rx band	-100	-116.49		16.5

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



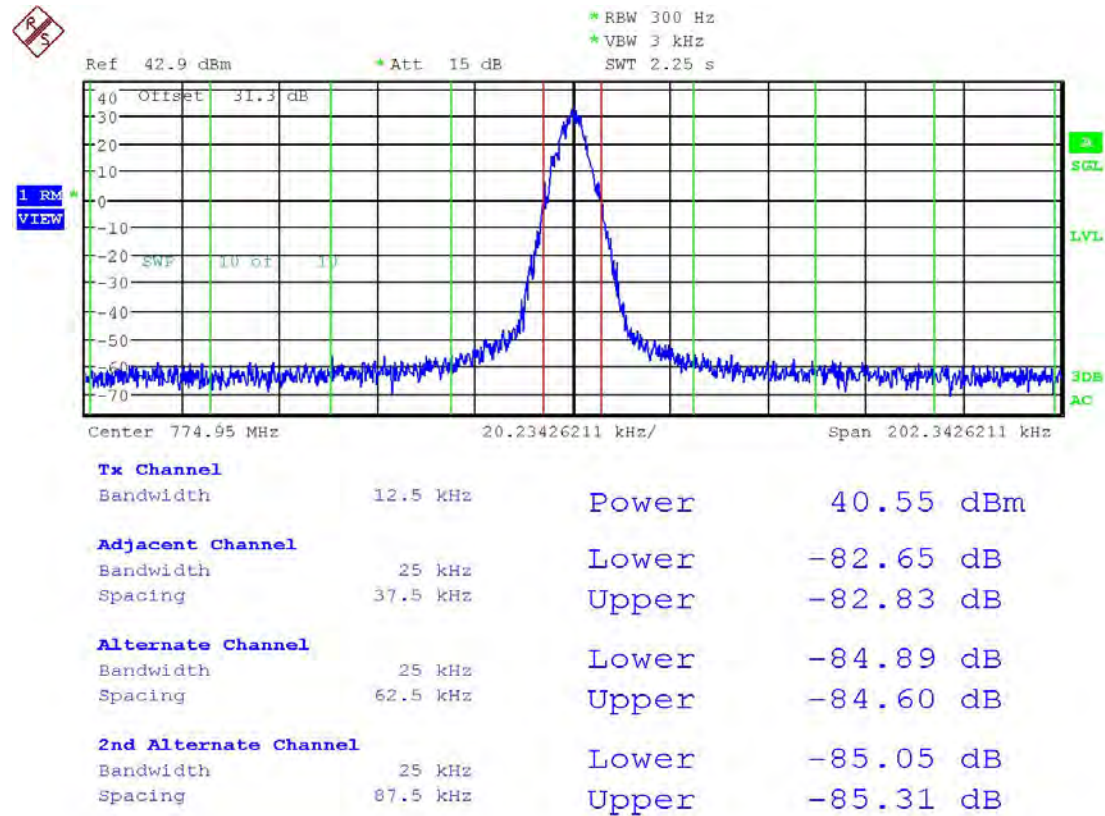
Date: 16.FEB.2016 23:15:30

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



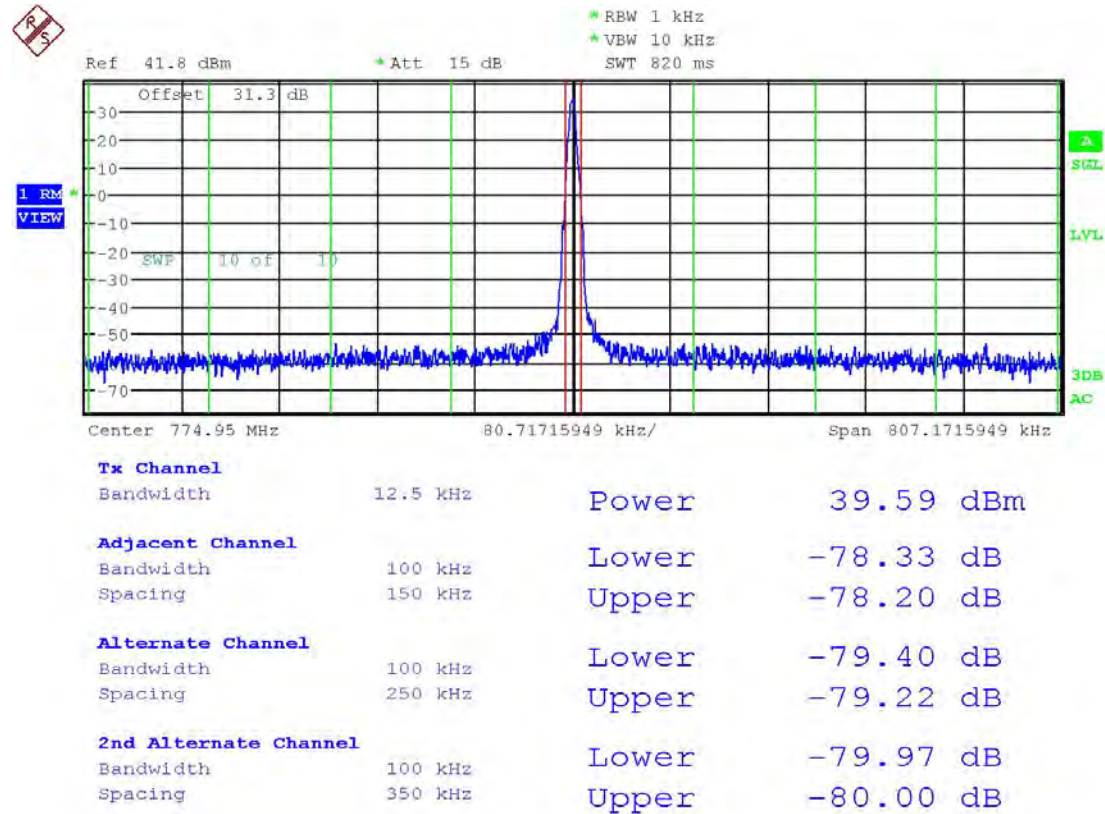
Date: 25.FEB.2016 20:28:33

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:17:51

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F1E/8K10F1D

Swept 30 KHz Bandwidth Measurement

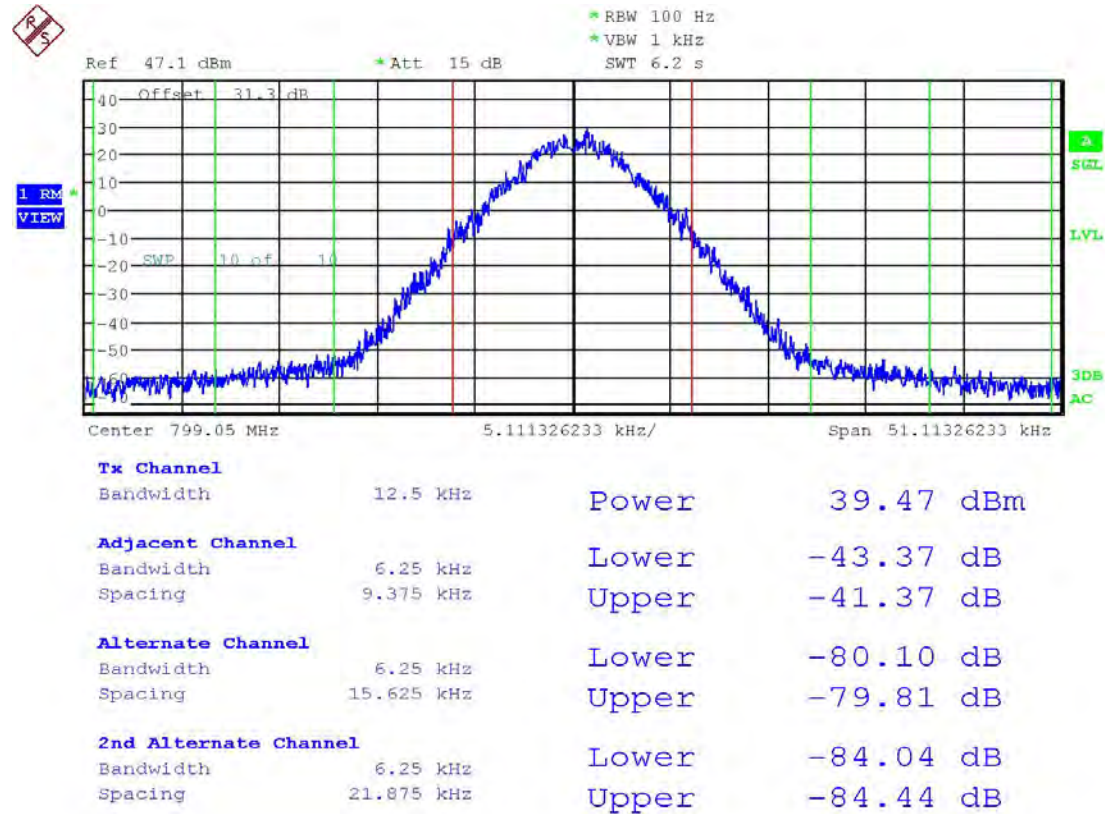
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-80.75	5.8
		Lower	-80.89	5.9
12 MHz to paired rx band	-75	-116.57		41.6
paired rx band	-100	-116.62		16.6

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



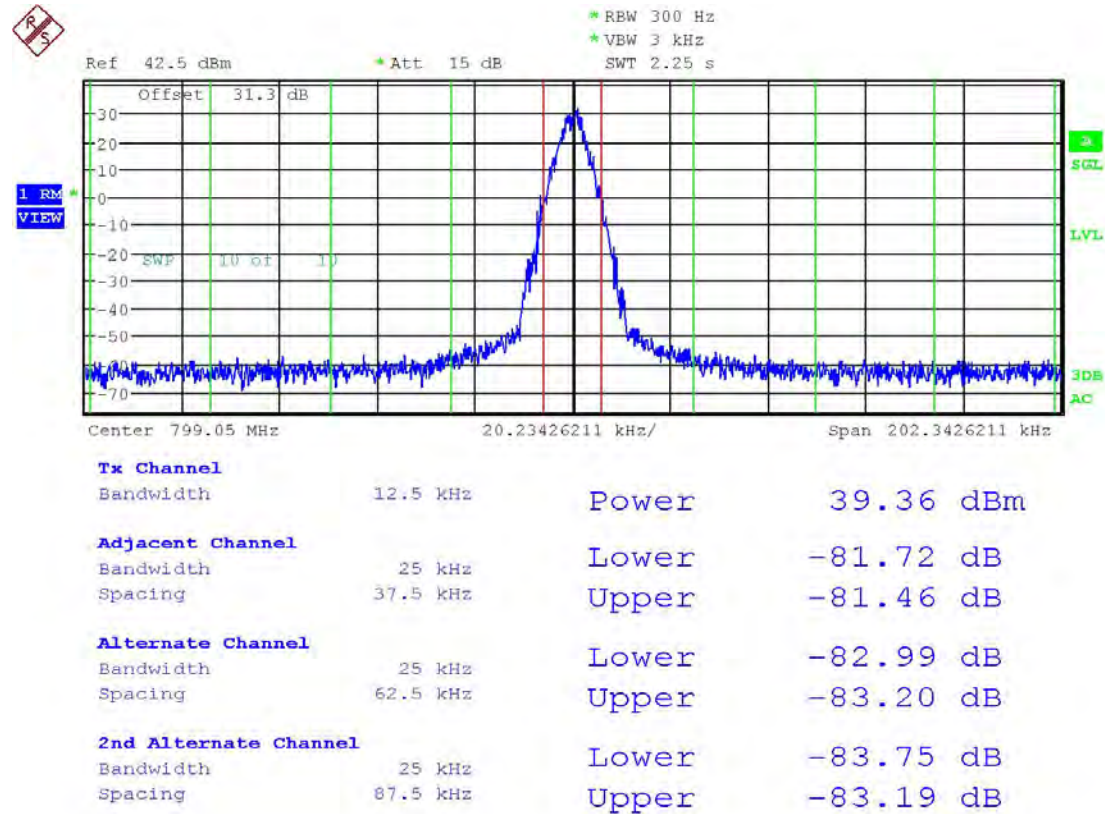
Date: 16.FEB.2016 23:17:18

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



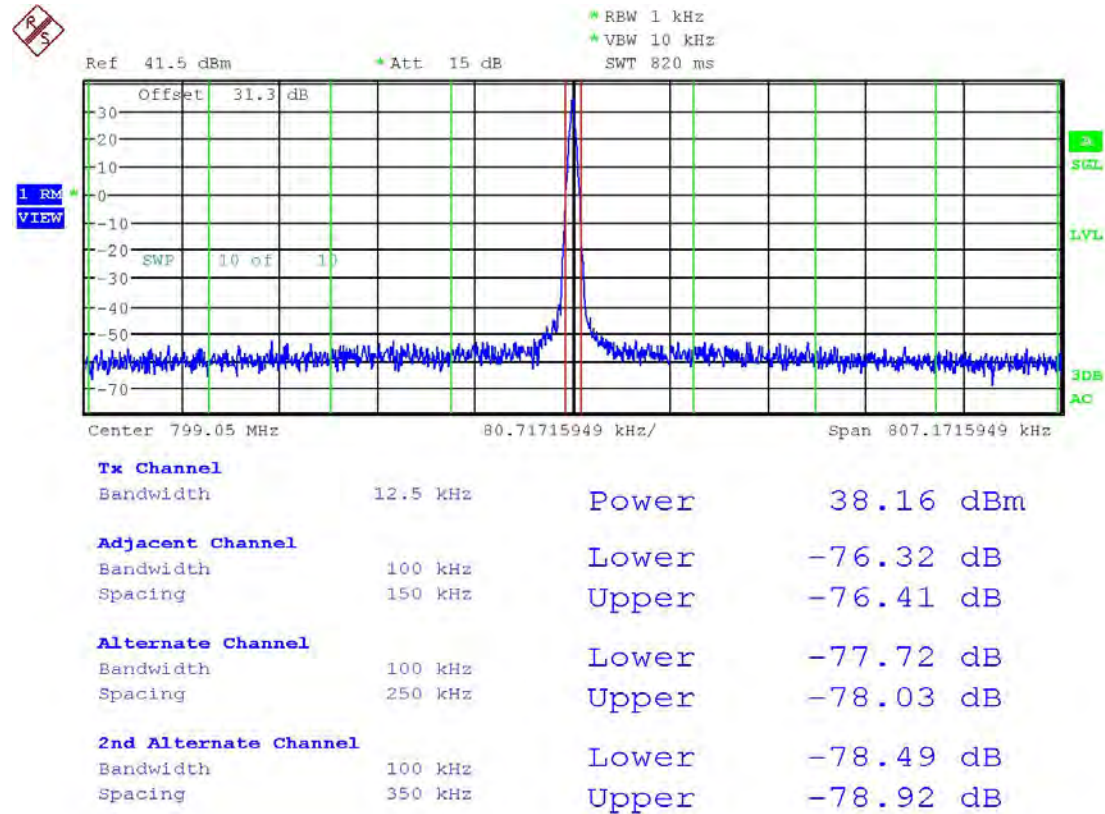
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[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:15:27

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F1E/8K10F1D

Swept 30 KHz Bandwidth Measurement

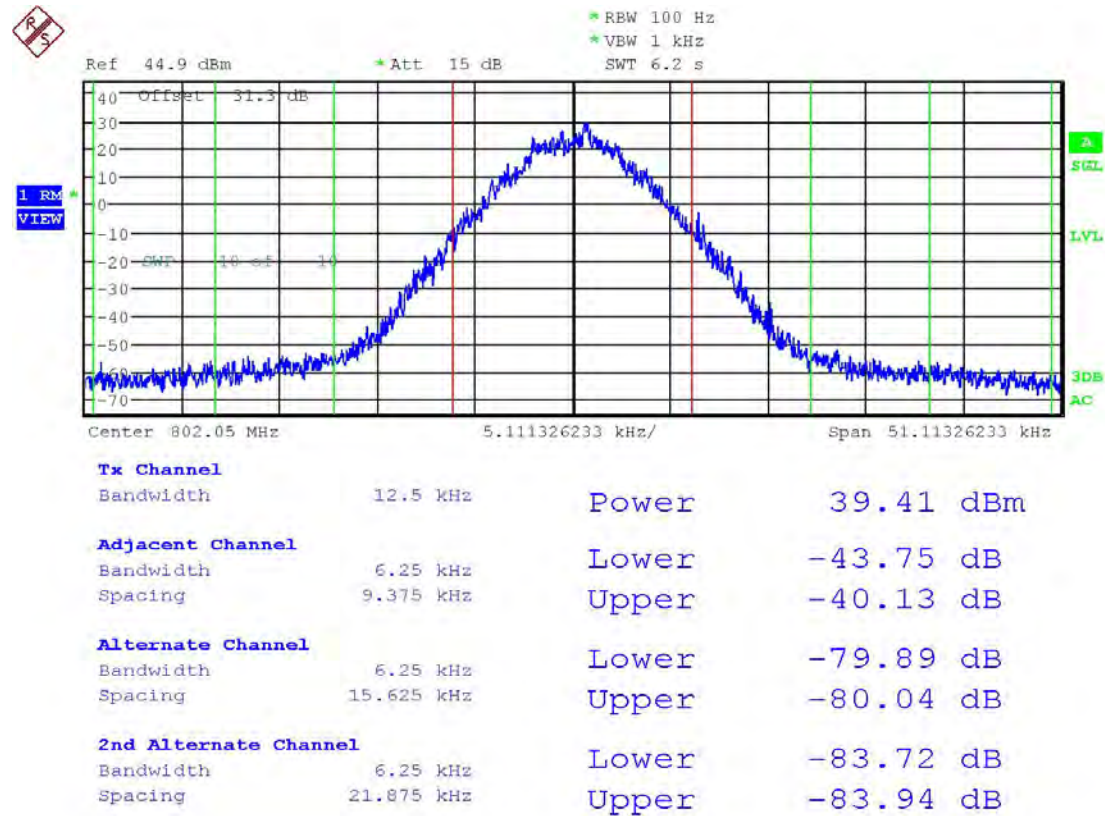
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.92	6.9
		Lower	-81.95	7.0
12 MHz to paired rx band	-75	-113.71		38.7
paired rx band	-100	-113.66		13.7

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



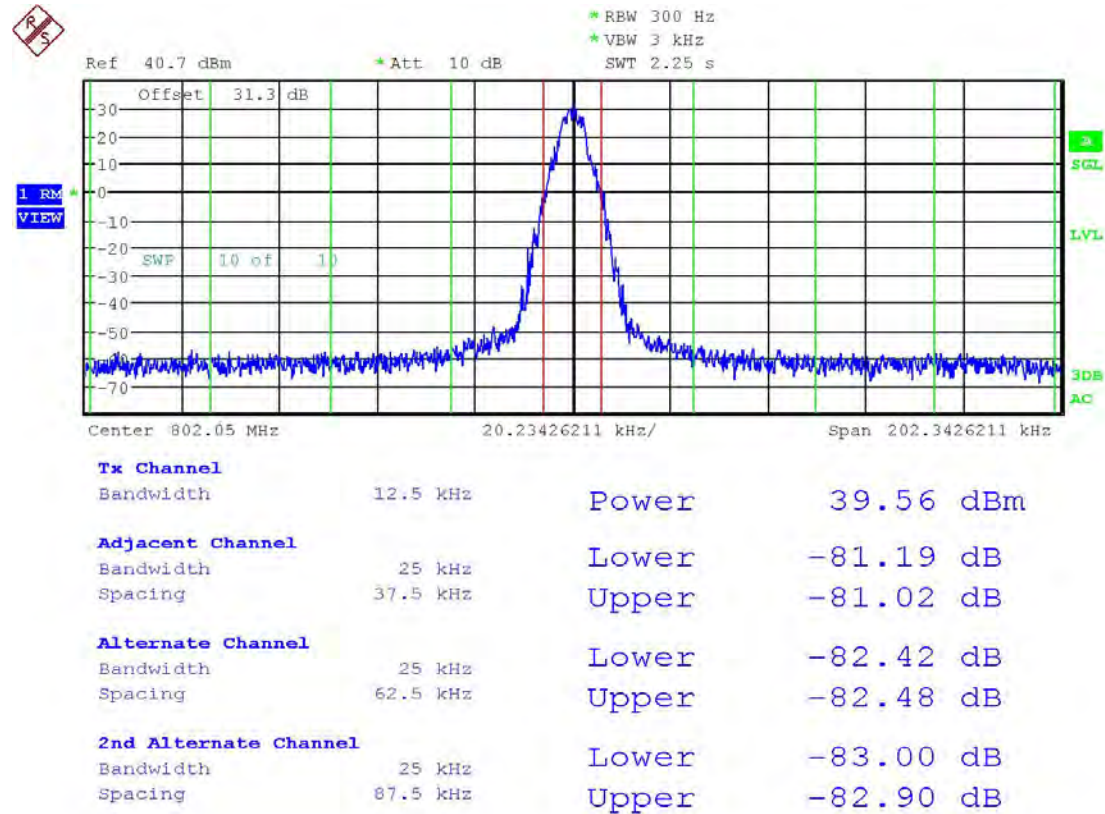
Date: 16.FEB.2016 23:18:57

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



Date: 25.FEB.2016 20:30:12

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F1E/8K10F1D

Swept 30 KHz Bandwidth Measurement

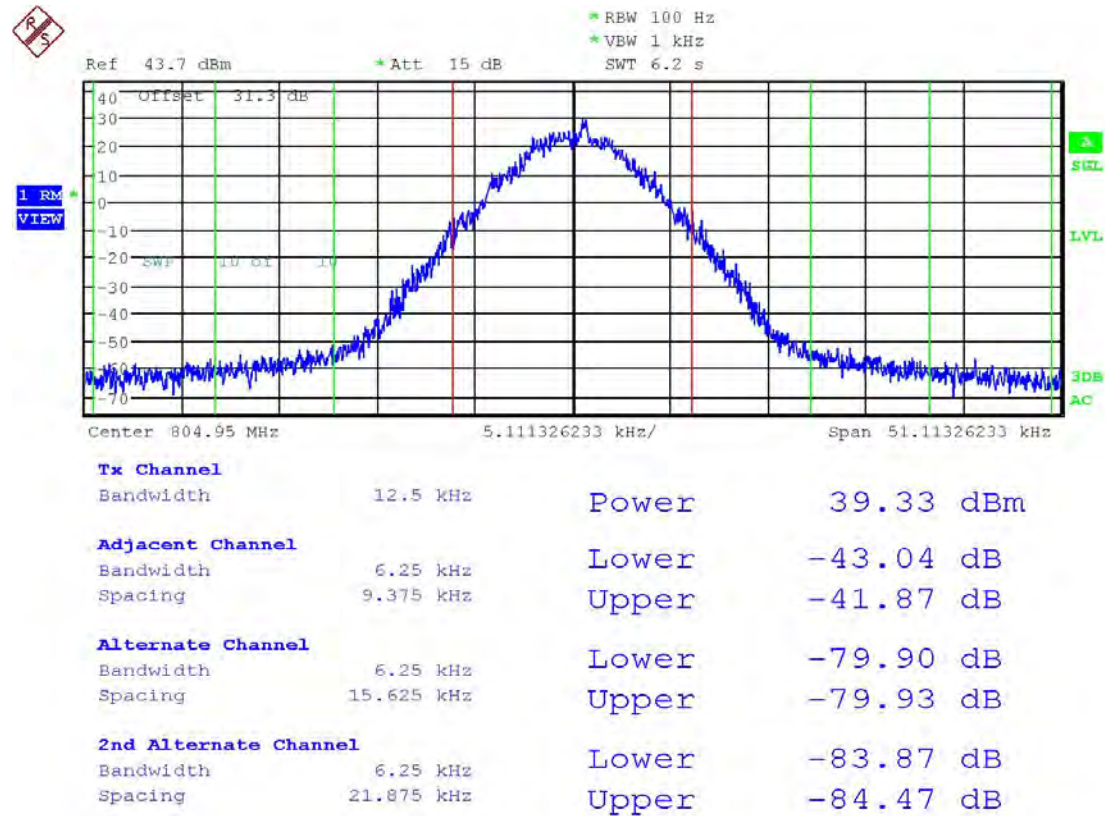
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.26	6.3
		Lower	-82.12	7.1
12 MHz to paired rx band	-75	-114.15		39.2
paired rx band	-100	-113.11		13.1

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F1E/8K10F1D

6.25 KHz Measurement Bandwidth



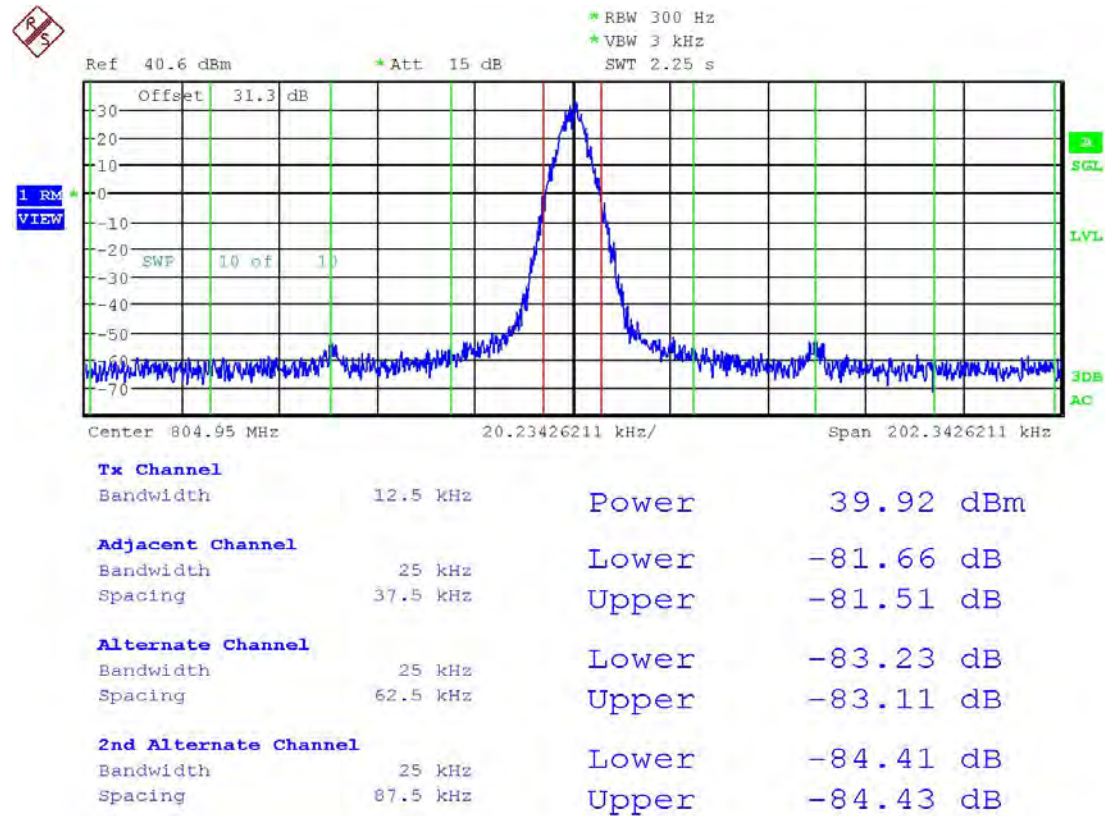
Date: 16.FEB.2016 23:21:04

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F1E/8K10F1D

25 KHz Measurement Bandwidth



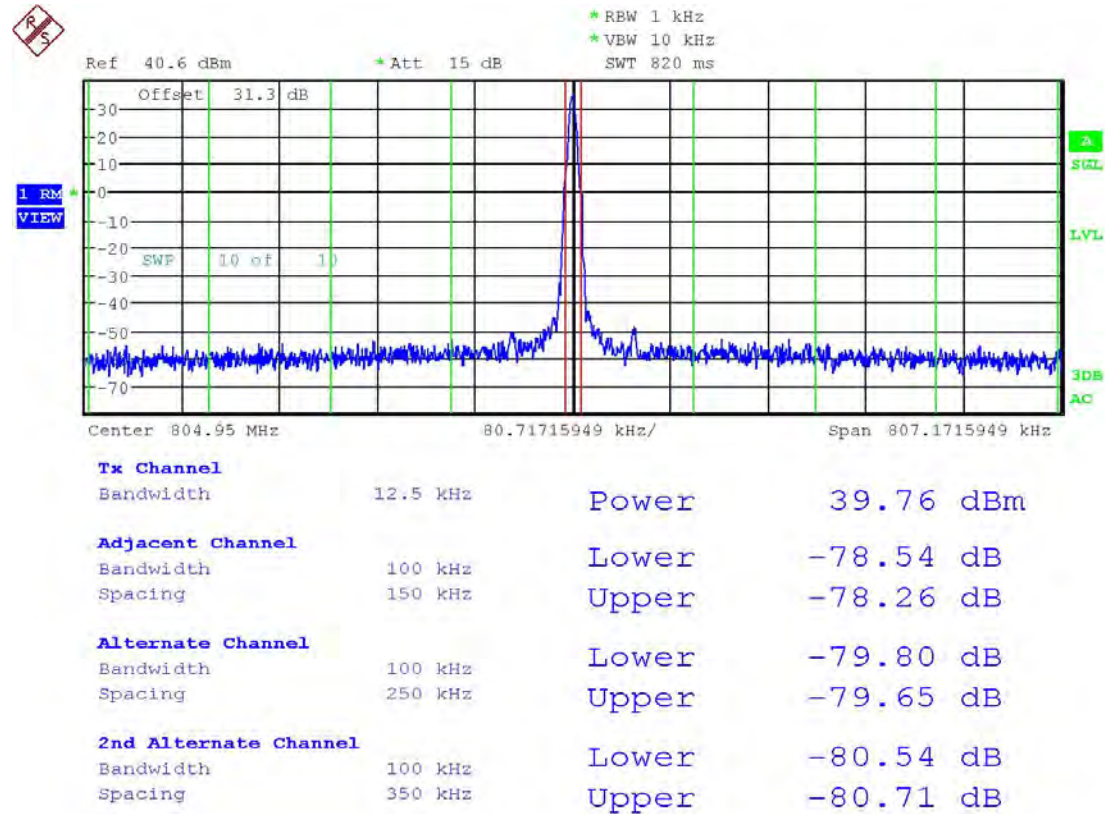
Date: 25.FEB.2016 20:31:01

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F1E/8K10F1D

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:19:21

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F1E/8K10F1D

Swept 30 KHz Bandwidth Measurement

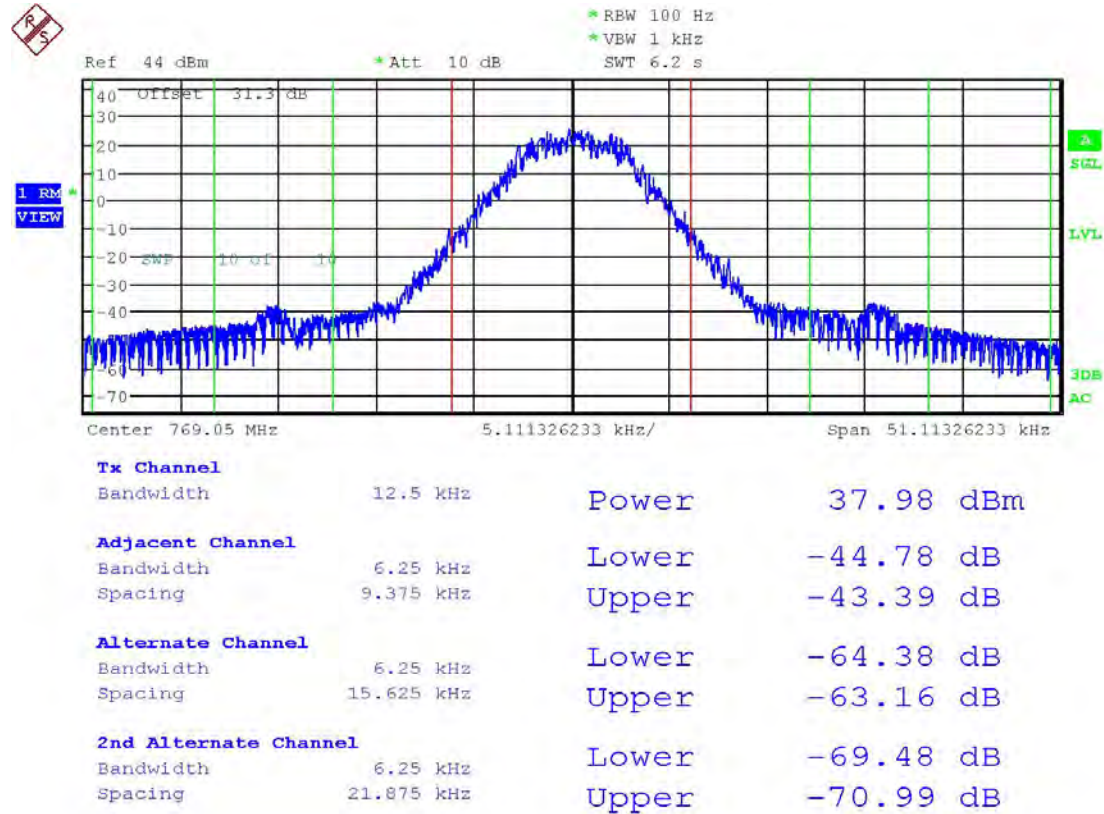
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.16	6.2
		Lower	-81.95	6.9
12 MHz to paired rx band	-75	-115.04		40.0
paired rx band	-100	-114.13		14.1

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



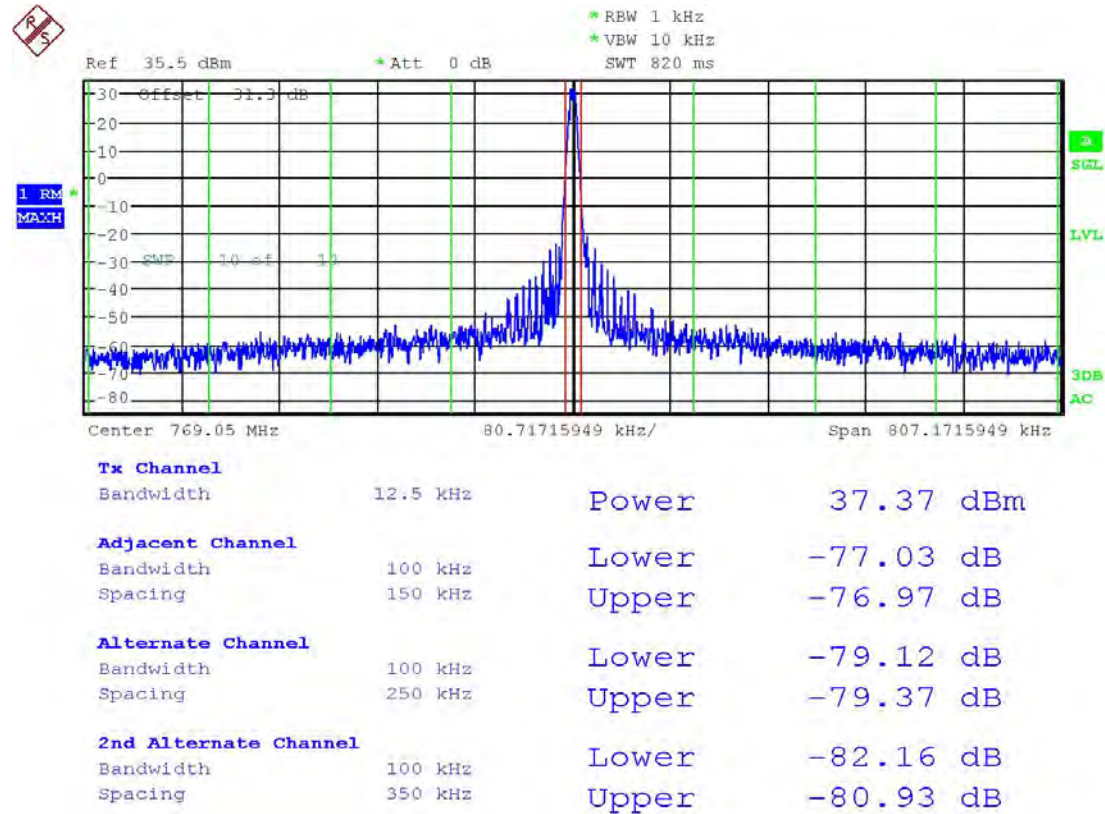
Date: 16.FEB.2016 23:28:35

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F17E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:20:46

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 769.05 MHz-8K10F7E

Swept 30 KHz Bandwidth Measurement

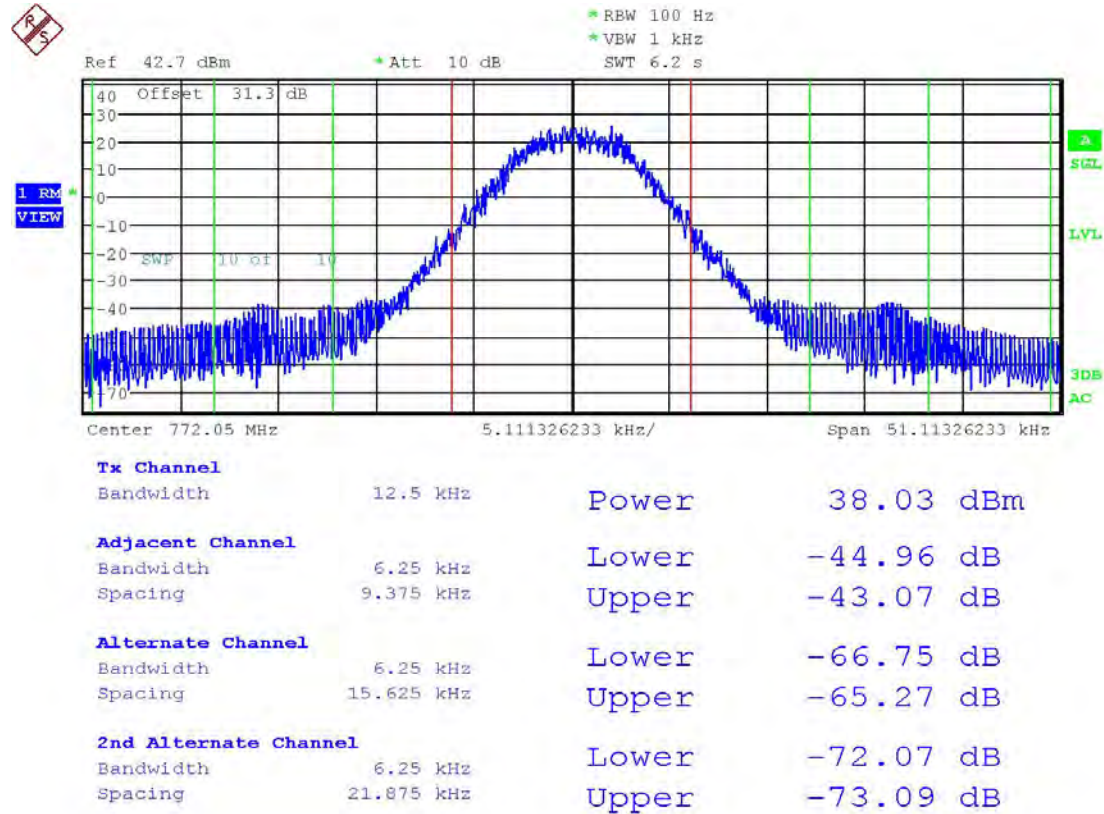
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.87	6.9
		Lower	-80.89	5.9
12 MHz to paired rx band	-75	-115.08		40.1
paired rx band	-100	-111.35		11.4

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



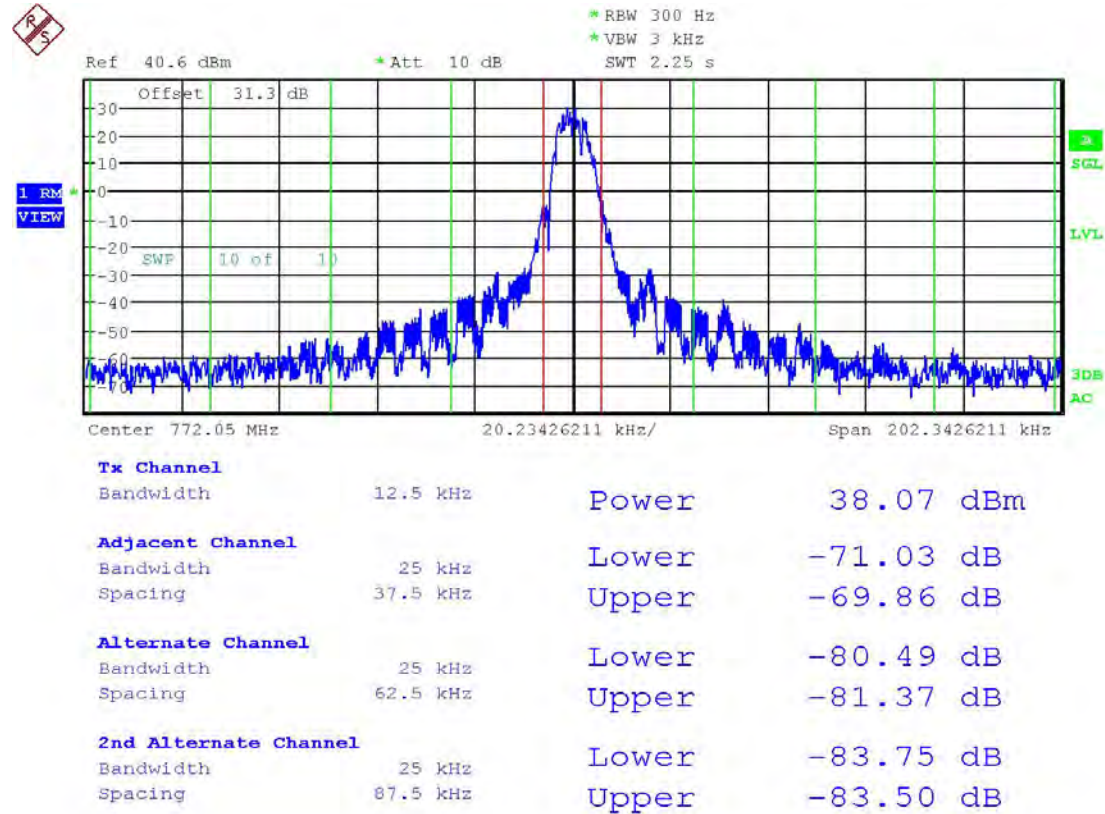
Date: 16.FEB.2016 23:31:22

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



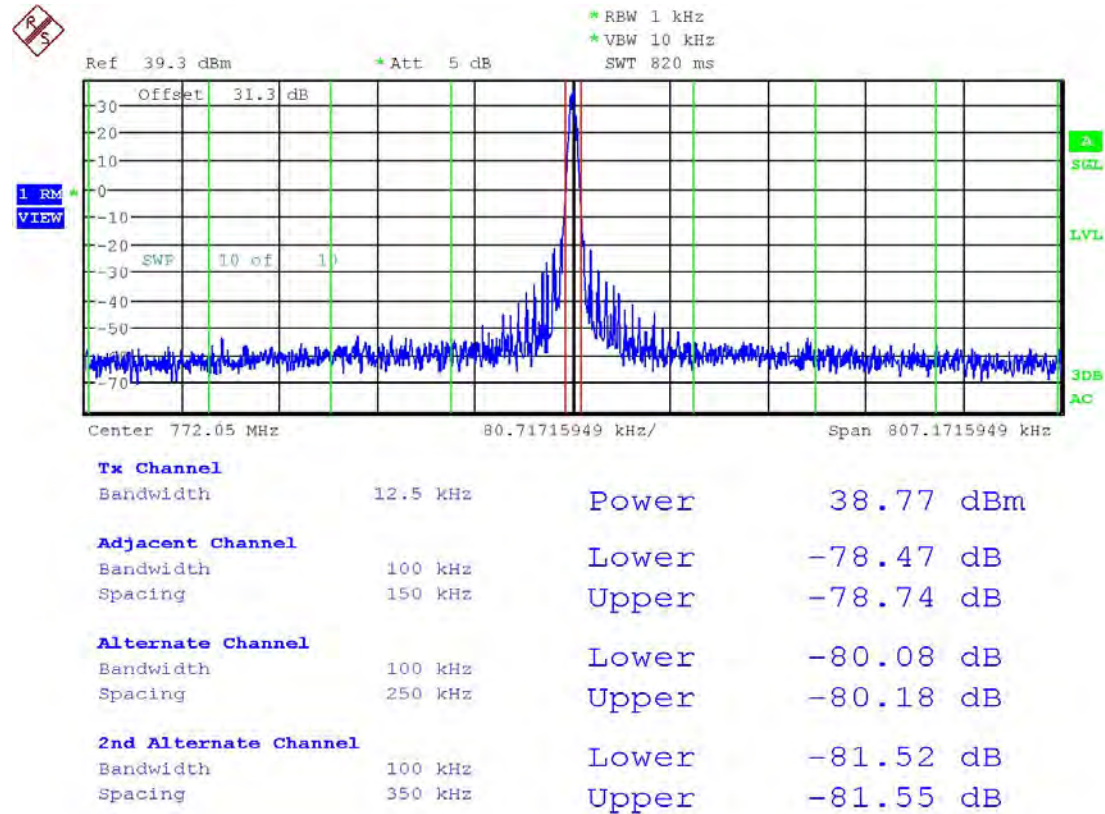
Date: 16.FEB.2016 23:40:23

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F17E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:22:53

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 772.05 MHz-8K10F7E

Swept 30 KHz Bandwidth Measurement

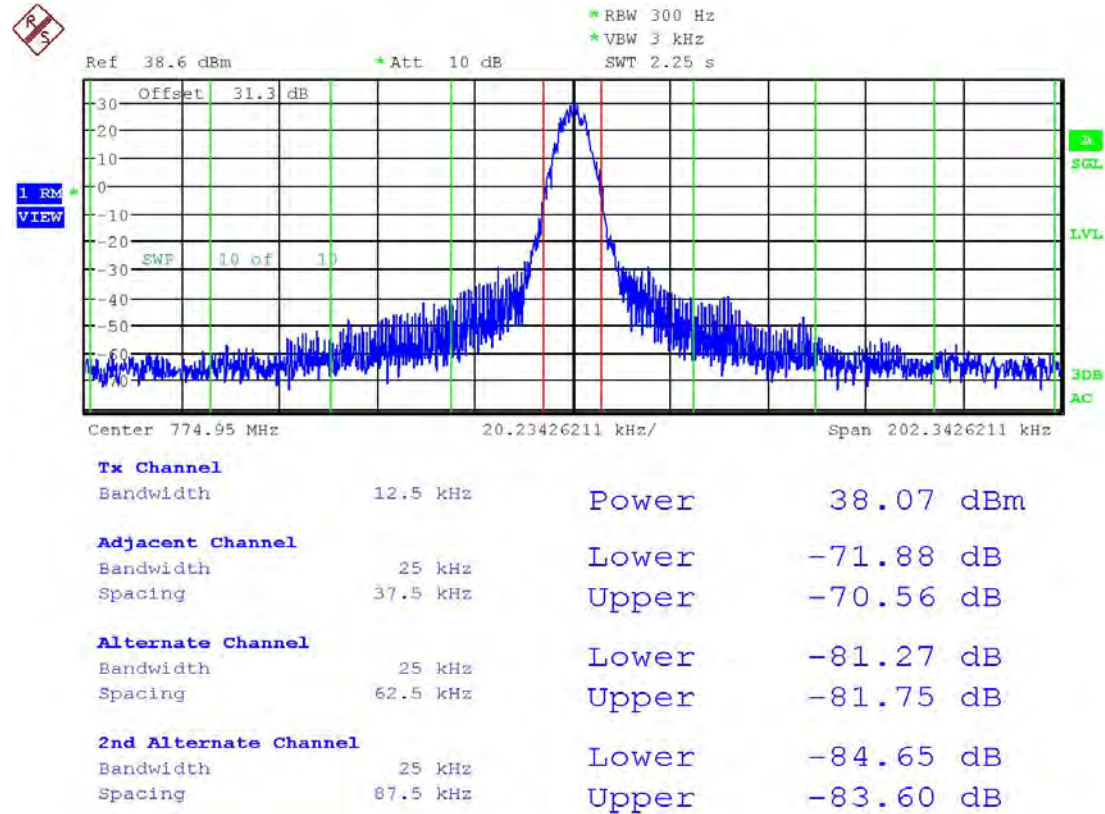
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-82.23	7.2
		Lower	-81.63	6.6
12 MHz to paired rx band	-75	-116.58		41.6
paired rx band	-100	-116.13		16.1

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



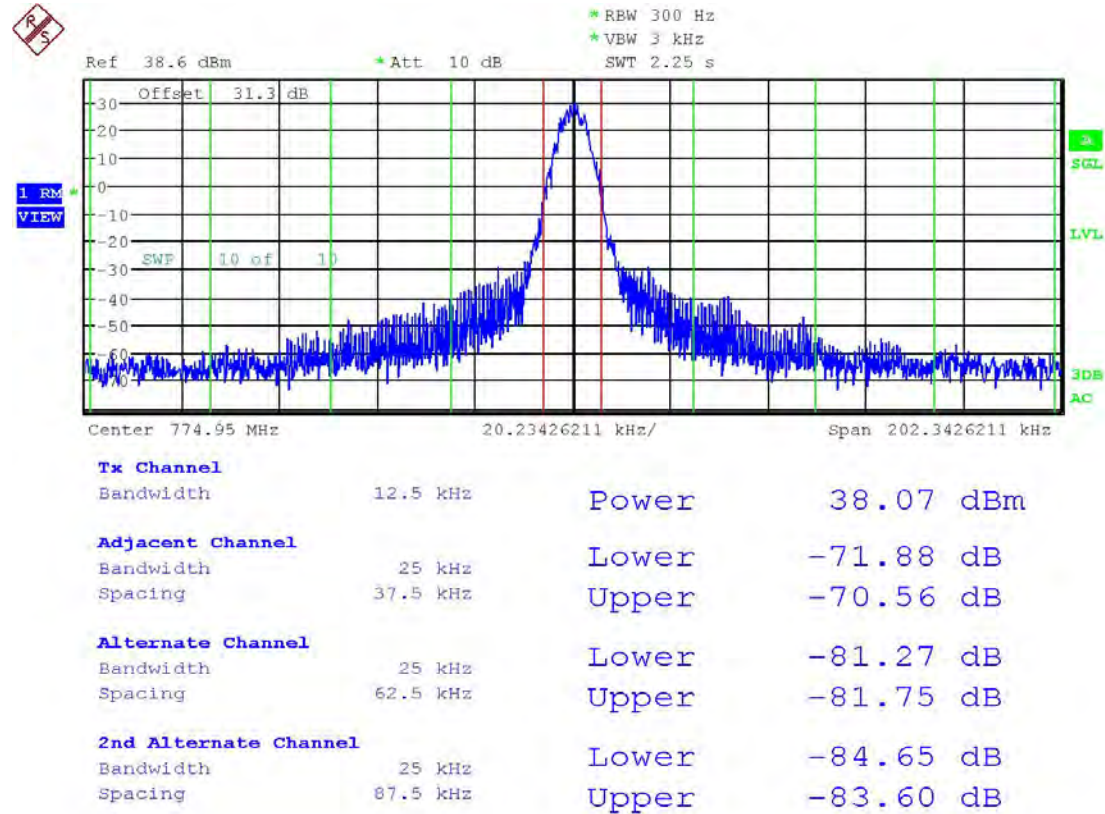
Date: 16.FEB.2016 23:41:33

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F7E

25 KHz Measurement Bandwidth



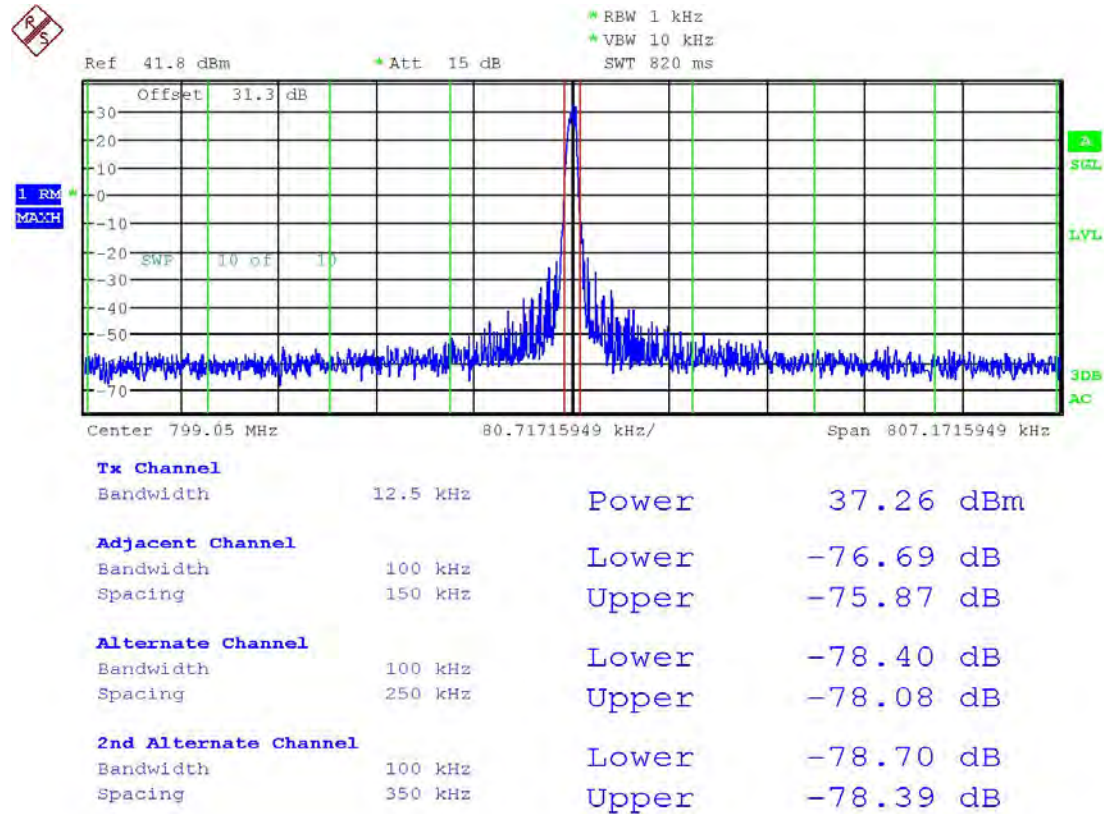
Date: 16.FEB.2016 23:41:33

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F17E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:24:28

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 774.95 MHz-8K10F7E

Swept 30 KHz Bandwidth Measurement

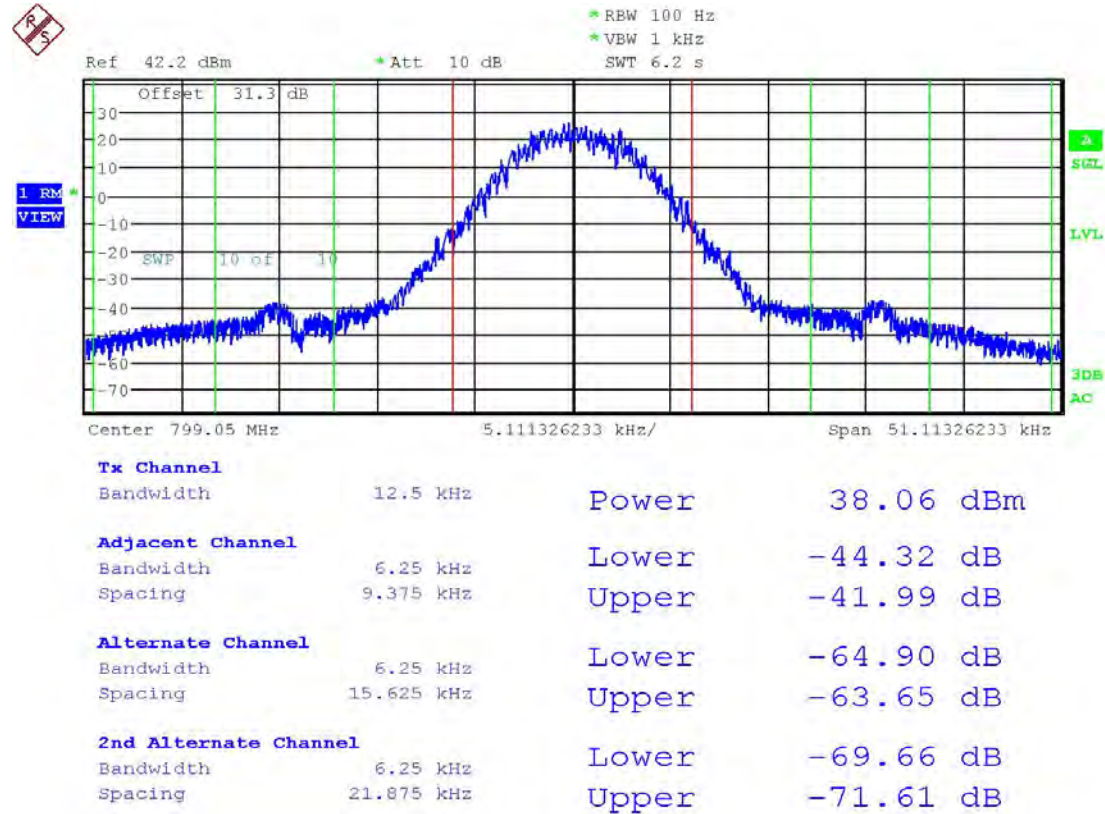
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-81.58	6.6
		Lower	-81.08	6.1
12 MHz to paired rx band	-75	-116.53		41.5
paired rx band	-100	-116.37		16.4

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



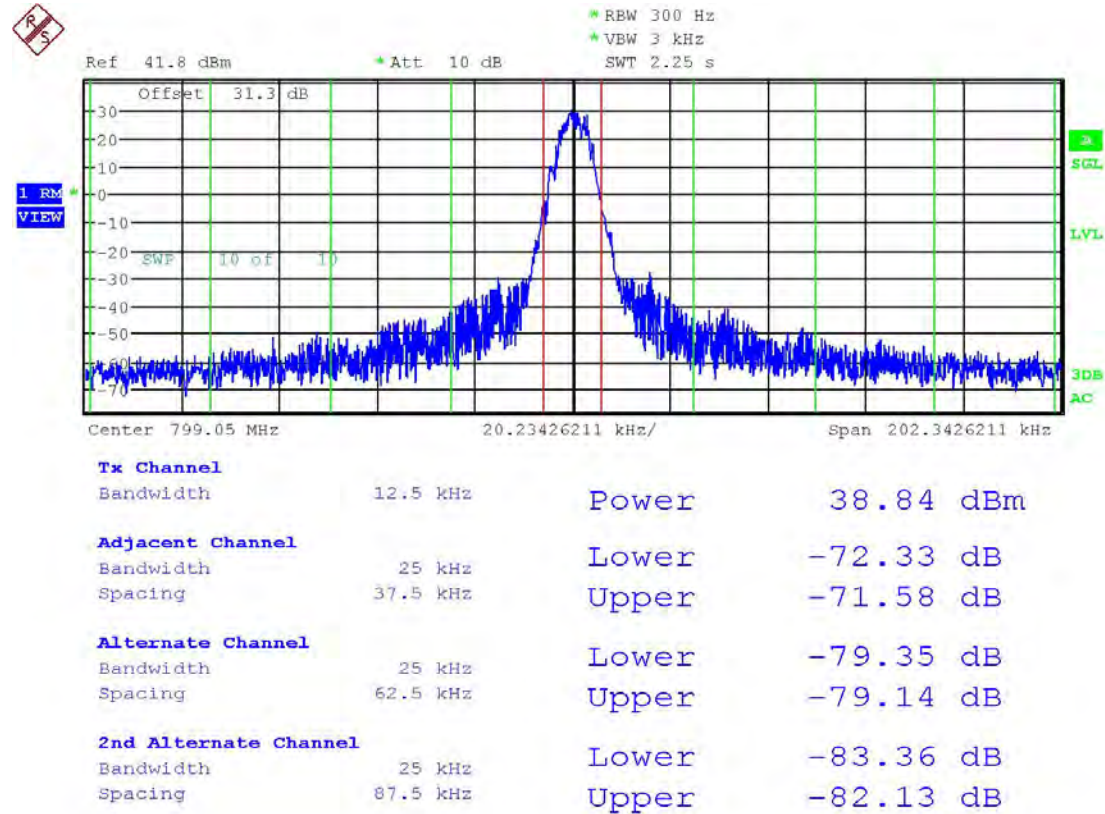
Date: 16.FEB.2016 23:34:51

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



Date: 25.FEB.2016 19:44:04

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 799.05 MHz-8K10F7E

Swept 30 KHz Bandwidth Measurement

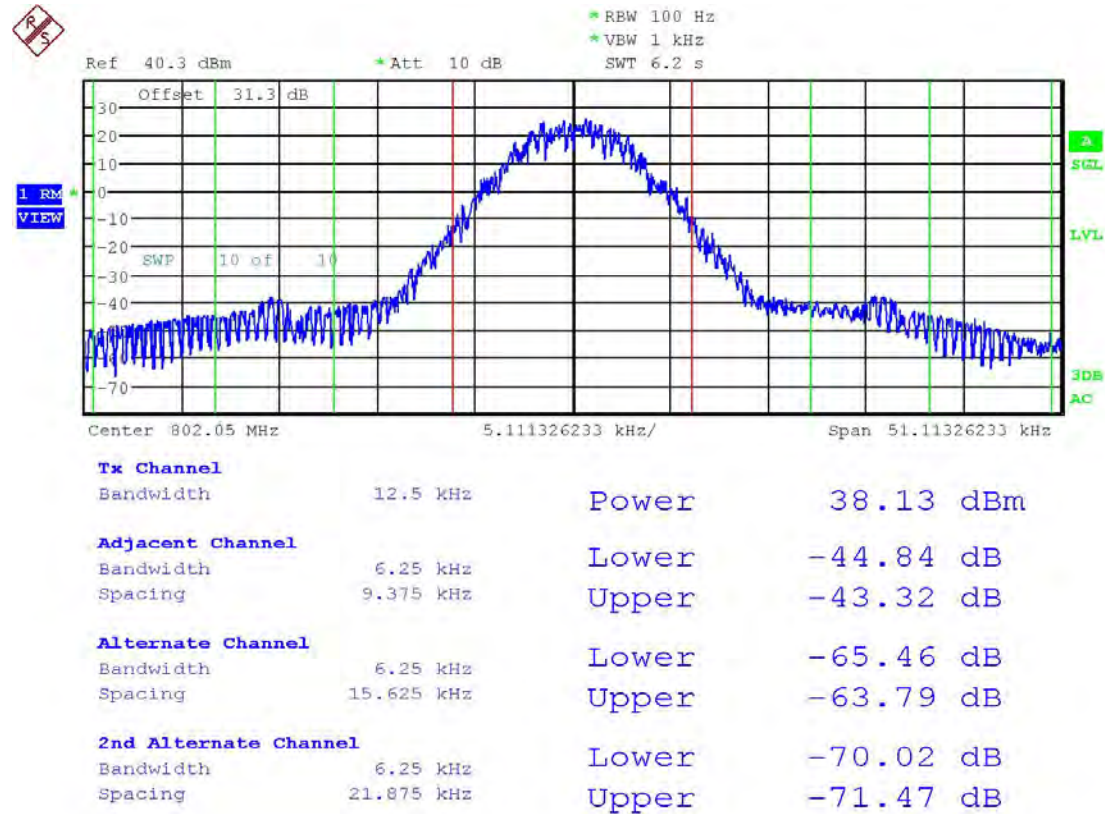
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-79.65	4.7
		Lower	-77.72	2.7
12 MHz to paired rx band	-75	-113.54		38.5
paired rx band	-100	-113.68		13.7

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



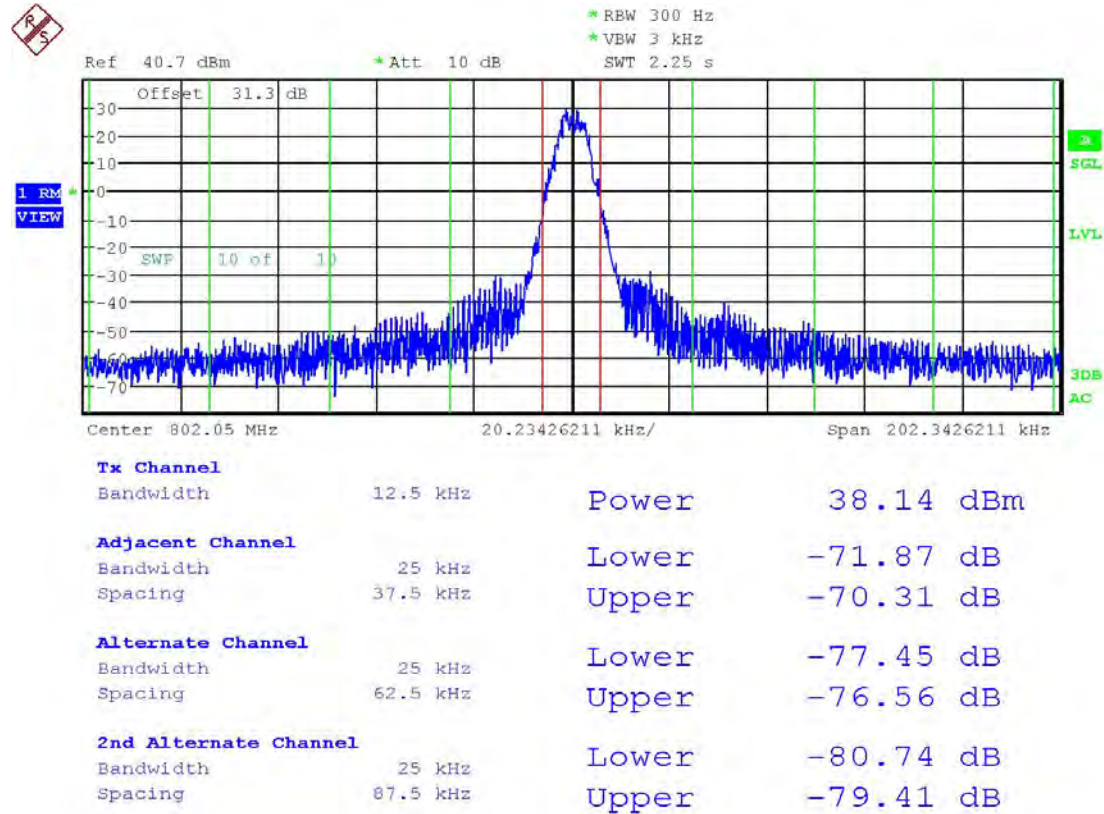
Date: 16.FEB.2016 23:36:24

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F7E

25 KHz Measurement Bandwidth



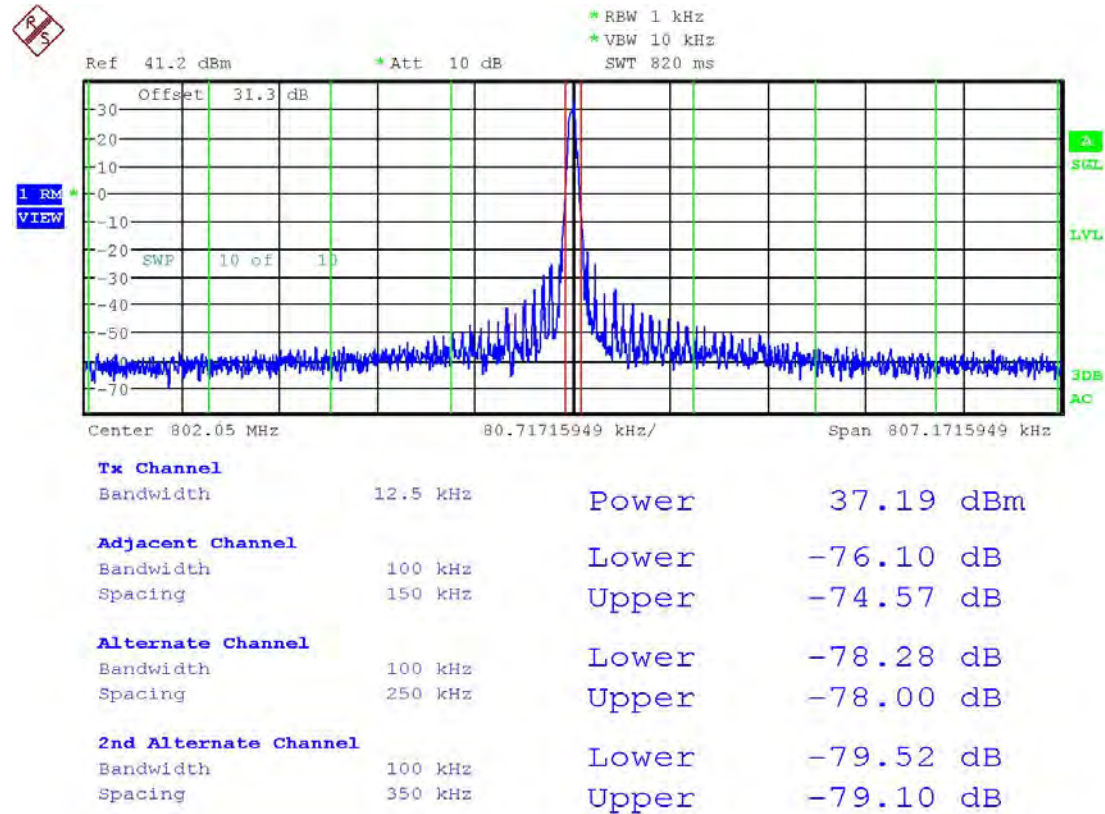
Date: 25.FEB.2016 20:01:03

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F17E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:26:38

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 802.05 MHz-8K10F7E

Swept 30 KHz Bandwidth Measurement

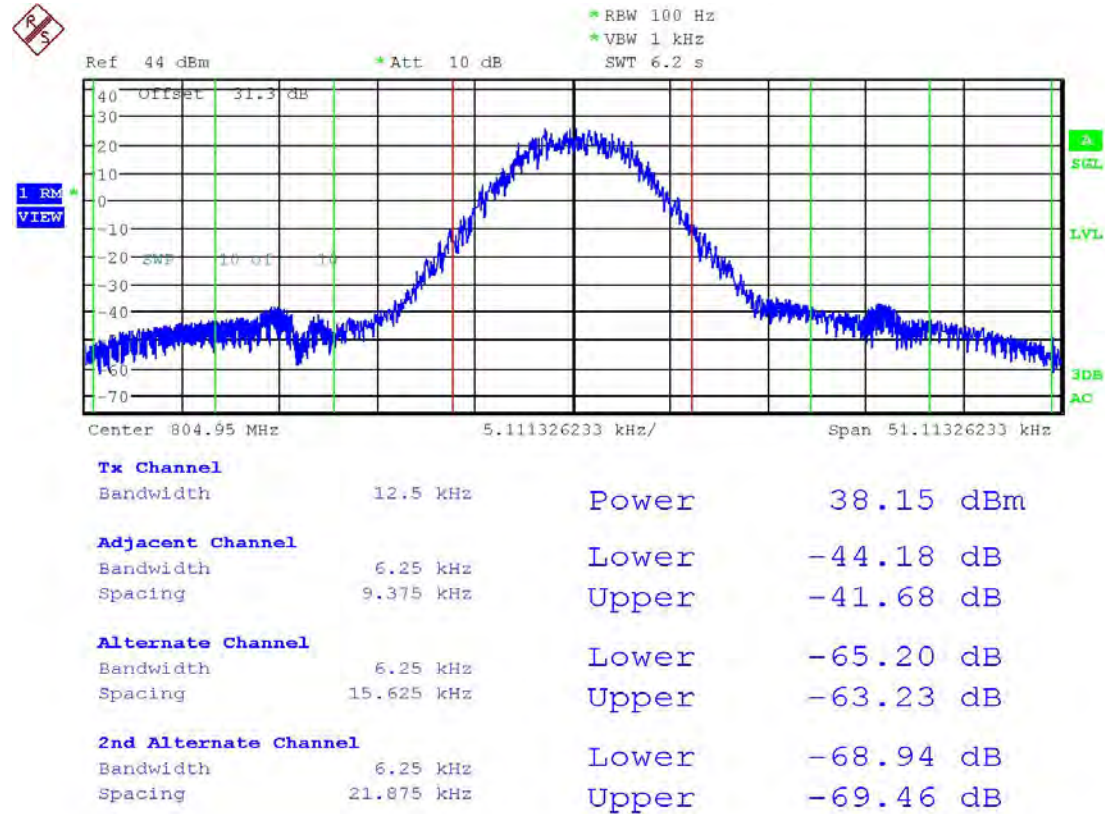
Offset from center frequency	ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
>400 KHz to 12 MHz	-75	Upper	-78.01	3.0
		Lower	-77.21	2.2
12 MHz to paired rx band	-75	-115.65		40.7
paired rx band	-100	-115.23		15.2

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F7E

6.25 KHz Measurement Bandwidth



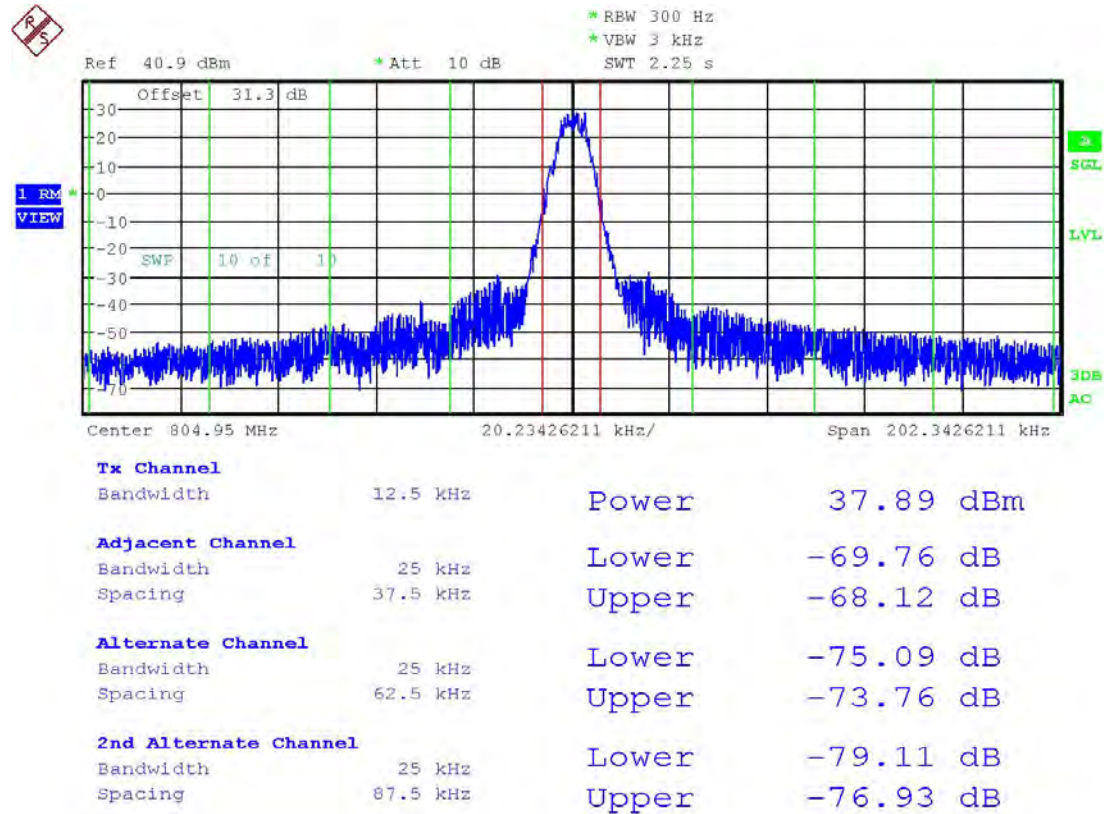
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[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F7E

25 KHz Measurement Bandwidth



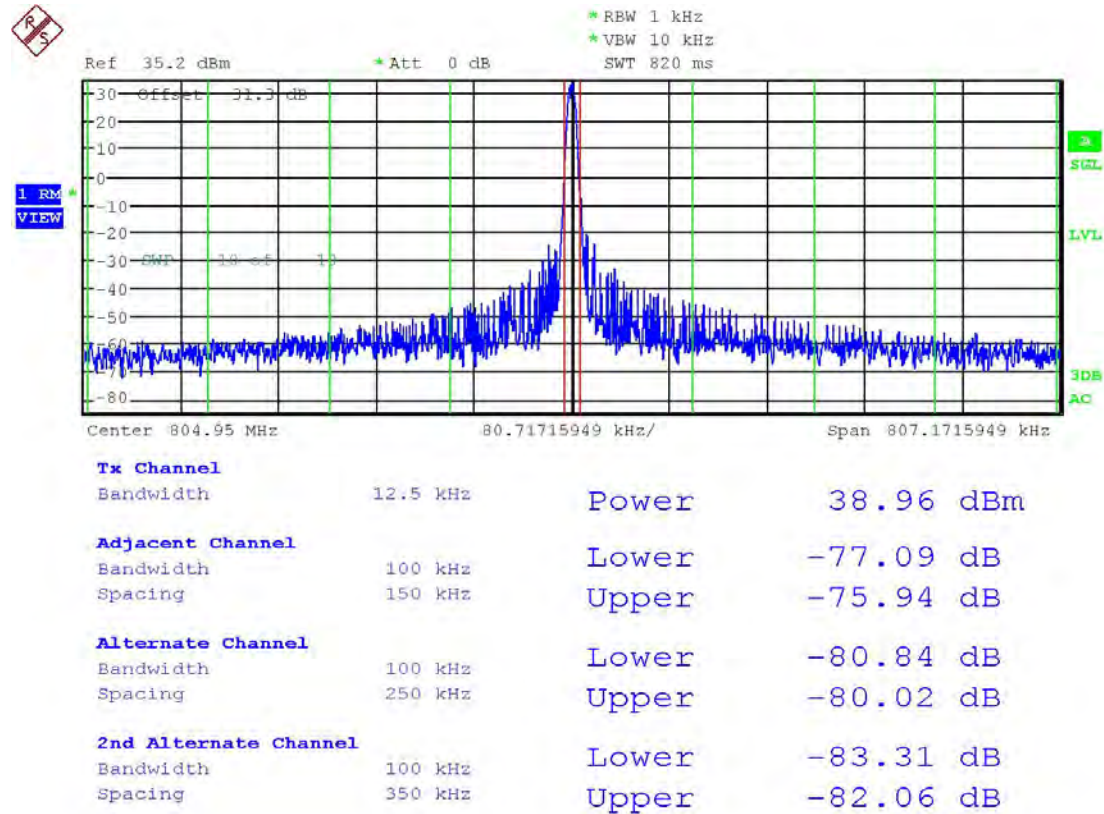
Date: 25.FEB.2016 20:02:49

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F7E

100 KHz Measurement Bandwidth



Date: 25.FEB.2016 22:27:16

[Table of Contents](#)

ADJACENT CHANNEL POWER (ACP)

TEST FREQ. 804.95 MHz-8K10F7E

Swept 30 KHz Bandwidth Measurement

ACP Limit (dBc)	ACP Level (dBc)		Margin (dB)
-75	Upper	-76.36	1.4
	Lower	-75.82	0.8
-75	-111.21		36.2
-100	-106.31		6.3

[Table of Contents](#)

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

RULE PART NO.: Part 2.1051(a), 90.210(b)(g)(h), 90.691, 90.543(c)

REQUIREMENTS:

Transmit Band (MHz)	Equipment Type	Rule Part	Requirement
421 - 512	12.5 KHz equipment With or Without Audio Low Pass Filter	90.210(d)(3)	50 + 10log (P) dB
	25 KHz equipment With Audio Low Pass Filter	90.210(b)(3)	43 + 10log (P) dB
769-775 & 799-805	All Equipment Types	90.543(c)	43 + 10log (P) dB
806-824 & 851-869	With Audio Low Pass Filter	90.210(b)(3)	43 + 10 log (P) dB.
806-809 & 851-854	Without Audio Low Pass Filter	90.210(h)(5)	43 + 10 log (P) dB.
809-824 & 854-869	Without Audio Low Pass Filter	90.210(g)(2)	43 + 10 log (P) dB.
809-824 & 854-869	All Equipment Types (EA-Band)	90.691(a)(2)	43 + 10 log (P) dB.

METHOD OF MEASUREMENT: ANSI/TIA-603 § 2.2.13 Unwanted Emissions:
Conducted Spurious

[Table of Contents](#)

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST FREQ. 470.05 MHz

	dBm	Watts	Limit
Power Output	36.22	4.19	56.22
	Frequency	dBc	Margin
	470.05	0	0.0
	940.10	78.4	22.2
	1410.15	100.1	43.9
	1880.20	114.9	58.7
	2350.25	115.2	59.0
*	2820.30	114.2	58.0
*	3290.35	109.7	53.5
*	3760.40	113.3	57.1
*	4230.45	114.5	58.3
	4700.50	106.8	50.6

* Indicates only the noise floor was present

[Table of Contents](#)

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST FREQ. 769.05 MHz

	dBm	Watts	Limit
Power Output	34.42	2.77	54.42
	Frequency	dBc	Margin
	769.05	0	0.0
	1538.10	108.7	54.3
	2307.15	103.5	49.1
	3076.20	108.6	54.2
	3845.25	102.7	48.3
	4614.30	110.8	56.4
	5383.35	95.5	41.1
	6152.40	100.9	46.5
	6921.45	106.4	52.0
*	7690.50	112.9	58.5

* Indicates only the noise floor was present

[Table of Contents](#)

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST FREQ. 804.95 MHz

	dBm	Watts	Limit
Power Output	34.45	2.79	54.45
	Frequency	dBc	Margin
	804.95	0	0.0
*	1609.90	112.3	57.8
	2414.85	72.3	17.8
	3219.80	104.0	49.5
	4024.75	100.7	46.2
	4829.70	68.7	14.2
	5634.65	77.7	23.2
	6439.60	73.5	19.0
	7244.55	71.1	16.6
	8049.50	88.5	34.0

* Indicates only the noise floor was present

[Table of Contents](#)

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST FREQ. 823.95 MHz

	dBm	Watts	Limit
Power Output	35.14	3.27	55.14
	Frequency	dBc	Margin
	823.95	0	0.0
	1647.90	113.8	58.6
	2471.85	90.8	35.7
	3295.80	101.2	46.1
	4119.75	86.3	31.2
	4943.70	92.8	37.7
	5767.65	99.0	43.9
	6591.60	95.6	40.5
	7415.55	93.6	38.5
	8239.50	99.3	44.2

* Indicates only the noise floor was present

[Table of Contents](#)

SPURIOUS EMISSIONS AT ANTENNA TERMINALS

TEST FREQ. 868.95 MHz

	dBm	Watts	Limit
Power Output	35.26	3.36	55.26
	Frequency	dBc	Margin
	868.95	0	0.0
	1737.90	110.5	55.2
	2606.85	111.1	55.8
	3475.80	94.9	39.6
	4344.75	77.9	22.6
	5213.70	74.9	19.6
	6082.65	74.0	18.7
	6951.60	65.8	10.5
*	7820.55	110.9	55.6
	8689.50	95.8	40.6

* Indicates only the noise floor was present

[Table of Contents](#)

FIELD STRENGTH OF SPURIOUS RADIATION EMISSIONS

RULE PARTS. NO.: Part 2.1053, 90.210, 90.543(c)(f)

REQUIREMENTS: Out of Band Emission Limits

Transmit Band (MHz)	Equipment Type	Rule Part	Requirement
421 - 512	12.5 KHz equipment With or Without Audio Low Pass Filter	90.210(d)(3)	50 + 10log (P) dB
	25 KHz equipment With Audio Low Pass Filter	90.210(b)(3)	43 + 10log (P) dB
769-775 & 799-805	All Equipment Types	90.543(c)	43 + 10log (P) dB Except for emissions in the band 1559-1610 MHz
		90.543(f)	-70 dBW/MHz EIRP for wideband signals, & -80 dBW/MHz EIRP for discrete emissions of less than 700 Hz bandwidth for all emissions in the band 1559-1610 MHz
806-824 & 851-869	With Audio Low Pass Filter	90.210(b)(3)	43 + 10 log (P) dB.
806-809 & 851-854	Without Audio Low Pass Filter	90.210(h)(5)	43 + 10 log (P) dB.
809-824 & 854-869	Without Audio Low Pass Filter	90.210(g)(2)	43 + 10 log (P) dB.
809-824 & 854-869	All Equipment Types (EA-Band)	90.691(a)(2)	43 + 10 log (P) dB.

METHOD OF MEASUREMENT: The following test methods were used

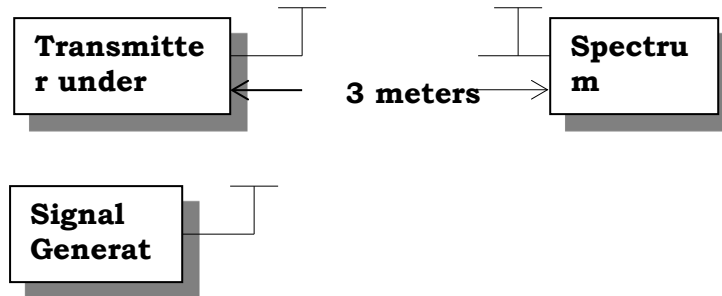
ANSI/TIA-603 § 2.2.12 Unwanted Emissions: Radiated Spurious
(Out of Band Emissions from 9 KHz – Tenth Harmonic of Fundamental)

ANSI C63.4 § 8 Radiated emission measurements
(EIRP of Emissions In the 1559 – 1610 MHz Band)

[Table of Contents](#)

FIELD STRENGTH OF SPURIOUS RADIATION EMISSIONS

TEST SETUP DIAGRAM:



Test Data: Emissions in Band 1559 – 1610 MHz

Note: For the purpose of equipment authorization, during this test the transmitter was tested with an antenna that is representative of the type that will be used with the equipment in normal operation. All modes of modulation were tested; the following is the worst case results

Worst Mode: 8K10F1E/8K10F1D using Public safety handset

Tuned Freq MHz	Emission Freq MHz	Meter Reading dBuV	Ant Polarity	Coax Loss dB	Filter Insertion Loss dB	Correction Factor dB/M	Field Strength dBu V/M	EIRP dBW/MHz	Margin dB
799.05	1598.1	17.72	H	4.61	0.60	28.10	51.03	-74.27	4.27
799.05	1598.1	14.55	V	4.61	0.60	28.10	47.86	-77.44	7.44
802.05	1604.1	18.53	H	4.61	0.60	28.15	51.89	-73.41	3.41
802.05	1604.1	15.12	V	4.61	0.60	28.15	48.48	-76.82	6.82
804.95	1609.9	18.11	H	4.61	0.60	28.21	51.53	-73.77	3.77
804.95	1609.9	14.65	V	4.61	0.60	28.21	48.07	-77.23	7.23

Results meet requirements

[Table of Contents](#)

FIELD STRENGTH OF SPURIOUS RADIATION EMISSIONS

TEST FREQ. 470.05 MHz

Emission Frequency (MHz)	Power Mode	ERP Power Output (dBm)	ERP Power Output (Watts)	FCC Requirement dB	Bandwidth - BW - kHz
470.05	Hi	36.22	4.19	56.22	12.50
Emission Frequency (MHz)	Ant. Polarity		Below Carrier (dBc)	Margin	
940.10	H		83.40	27.18	
1,410.15	V		88.46	32.24	
1,880.20	V		87.19	30.97	
2,350.25	H		81.66	25.44	
2,820.30	H		85.74	29.52	
3,290.35	H		82.83	26.61	
3,760.40	H		75.94	19.72	
4,230.45	V		80.69	24.47	
4,700.50	V		82.85	26.63	

TEST FREQ. 769.05 MHz

Emission Frequency (MHz)	Power Mode	ERP Power Output (dBm)	ERP Power Output (Watts)	FCC Requirement dB	Bandwidth - BW - kHz
769.05	Hi	34.42	2.77	54.42	12.50
Emission Frequency (MHz)	Ant. Polarity		Below Carrier (dBc)	Margin	
1,538.10	V		88.36	33.94	
2,307.15	H		71.32	16.90	
3,076.20	H		73.46	19.04	
3,845.25	H		73.04	18.62	
4,614.30	H		80.45	26.03	
5,383.35	V		66.57	12.15	
6,152.40	V		68.80	14.38	
6,921.45	V		72.18	17.76	
7,690.50	H		69.78	15.36	

[Table of Contents](#)

FIELD STRENGTH OF SPURIOUS RADIATION EMISSIONS

TEST FREQ. 804.95 MHz

Emission Frequency (MHz)	Power Mode	ERP Power Output (dBm)	ERP Power Output (Watts)	FCC Requirement dB	Bandwidth - BW - kHz
804.95	Hi	34.45	2.79	54.45	12.50
Emission Frequency (MHz)	Ant. Polarity	Below Carrier (dBc)	Margin		
1,609.90	H	88.53	34.08		
2,414.85	H	64.45	10.00		
3,219.80	H	72.80	18.35		
4,024.75	V	74.23	19.78		
4,829.70	H	67.58	13.13		
5,634.65	V	70.12	15.67		
6,439.60	V	69.18	14.73		
7,244.55	V	72.38	17.93		
8,049.50	H	66.85	12.40		

TEST FREQ. 823.95 MHz

Emission Frequency (MHz)	Power Mode	ERP Power Output (dBm)	ERP Power Output (Watts)	FCC Requirement dB	Bandwidth - BW - kHz
823.95	Hi	35.14	3.27	55.14	12.50
Emission Frequency (MHz)	Ant. Polarity	Below Carrier (dBc)	Margin		
1,647.90	H	88.93	33.79		
2,471.85	H	65.93	10.79		
3,295.80	H	72.77	17.63		
4,119.75	V	70.74	15.60		
4,943.70	V	65.21	10.07		
5,767.65	V	72.57	17.43		
6,591.60	V	70.10	14.96		
7,415.55	V	72.78	17.64		
8,239.50	H	67.39	12.25		

[Table of Contents](#)

FIELD STRENGTH OF SPURIOUS RADIATION EMISSIONS

TEST FREQ. 869.95 MHz

Emission Frequency (MHz)	Power Mode	ERP Power Output (dBm)	ERP Power Output (Watts)	FCC Requirement dB	Bandwidth - BW - kHz
868.95	Hi	35.26	3.36	55.26	12.50
Emission Frequency (MHz)	Ant. Polarity		Below Carrier (dBc)	Margin	
1,737.90	H		85.74	30.48	
2,606.85	H		77.60	22.34	
3,475.80	H		76.91	21.65	
4,344.75	H		73.56	18.30	
5,213.70	V		65.95	10.69	
6,082.65	H		70.02	14.76	
6,951.60	H		71.67	16.41	
7,820.55	H		70.16	14.90	
8,689.50	H		67.44	12.18	

[Table of Contents](#)

FREQUENCY STABILITY

RULE PARTS. NO.: Part 2.1055, Part 90.213, 90.539(c)

Requirements: Temperature range requirements: -30 to +50° C.
Voltage Variation +, -15%

Frequency Band (MHz)	Frequency Stability (PPM)	Channel Bandwidth (KHz)
769 - 775	±1.5	12.5
799 - 805	±1.5	
769 - 775	±2.5	25
799 - 805	±2.5	
806 - 809	±1.5	12.5, 20, 25
809 - 824	±2.5	
851 - 854	±1.5	
854 - 869	±2.5	

METHOD OF MEASUREMENTS: ANSI/TIA-603 § 2.2.2 Carrier Frequency Stability

Test Data: 869.95 MHz 12.5 KHz

All modes of operation were checked in each band, the worst case is reported below.

Temperature	Frequency MHz	Cycles	PPM
25°C (reference)	868.94917	0	0
-30°C	868.94902	-150	-0.173
-20°C	868.94904	-130	-0.150
-10°C	868.94905	-120	-0.138
0°C	868.94910	-70	-0.081
10°C	868.94915	-20	-0.023
20°C	868.94914	-30	-0.035
30°C	868.94919	20	0.023
40°C	868.94921	40	0.046
50°C	868.94923	60	0.069
Battery Voltage (VDC)	Frequency	Cycles	PPM
8.51	868.94919	20	0.023
7.40	868.94917	0	0.000
6.29	868.94912	-50	-0.058

Results incomplete at time of report

[Table of Contents](#)

TRANSIENT FREQUENCY RESPONSE

RULE PARTS. NO.: 90.214

Requirements: Transmitters designed to operate in the 150-174 MHz and 421-512 MHz frequency bands must maintain transient frequencies within the maximum transient frequencies within the maximum frequency difference limits during the time intervals indicated:

Time intervals ^{1 2}	Maximum frequency difference ³	All equipment	
		150 to 174 MHz	421 to 512 MHz
Transient Frequency Behavior for Equipment Designed to Operate on 25 kHz Channels			
t ₁ ⁴	±25.0 kHz	5.0 ms	10.0 ms
t ₂	±12.5 kHz	20.0 ms	25.0 ms
t ₃ ⁴	±25.0 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 12.5 kHz Channels			
t ₁ ⁴	±12.5 kHz	5.0 ms	10.0 ms
t ₂	±6.25 kHz	20.0 ms	25.0 ms
t ₃ ⁴	±12.5 kHz	5.0 ms	10.0 ms
Transient Frequency Behavior for Equipment Designed to Operate on 6.25 kHz Channels			
t ₁ ⁴	±6.25 kHz	5.0 ms	10.0 ms
t ₂	±3.125 kHz	20.0 ms	25.0 ms
t ₃ ⁴	±6.25 kHz	5.0 ms	10.0 ms

¹ t_{on} is the instant when a 1 kHz test signal is completely suppressed, including any capture time due to phasing.

t_1 is the time period immediately following t_{on} .

t_2 is the time period immediately following t_1 .

t_3 is the time period from the instant when the transmitter is turned off until t_{off} .

t_{off} is the instant when the 1 kHz test signal starts to rise.

² During the time from the end of t_2 to the beginning of t_3 , the frequency difference must not exceed the limits specified in §90.213.

³ Difference between the actual transmitter frequency and the assigned transmitter frequency.

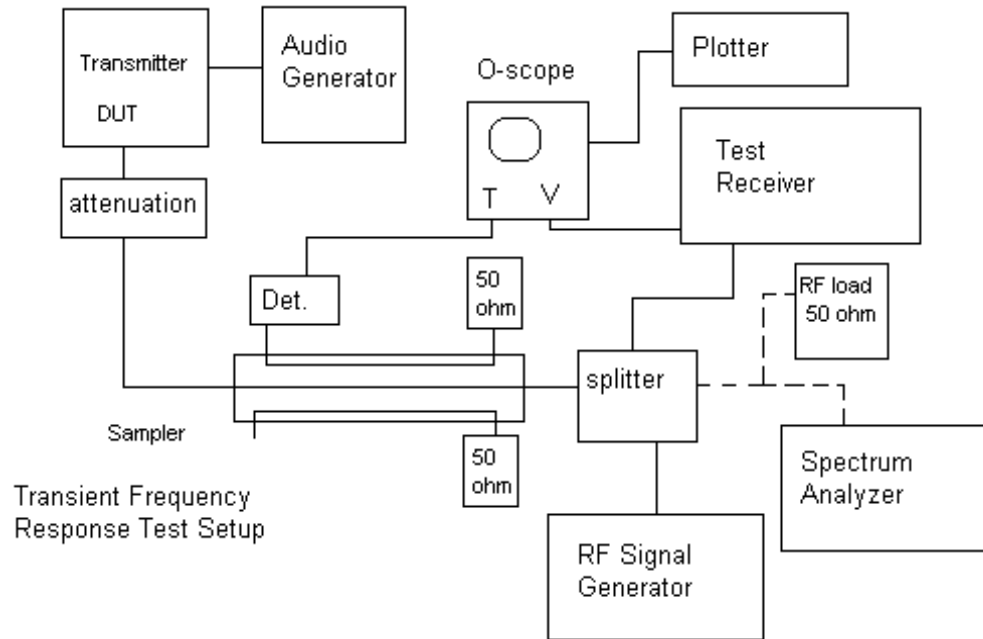
⁴ If the transmitter carrier output power rating is 6 watts or less, the frequency difference during this time period may exceed the maximum frequency difference for this time period.

[Table of Contents](#)

TRANSIENT FREQUENCY RESPONSE

METHOD OF MEASUREMENTS: ANSI/TIA-603 § 2.2.2 Carrier Frequency Stability

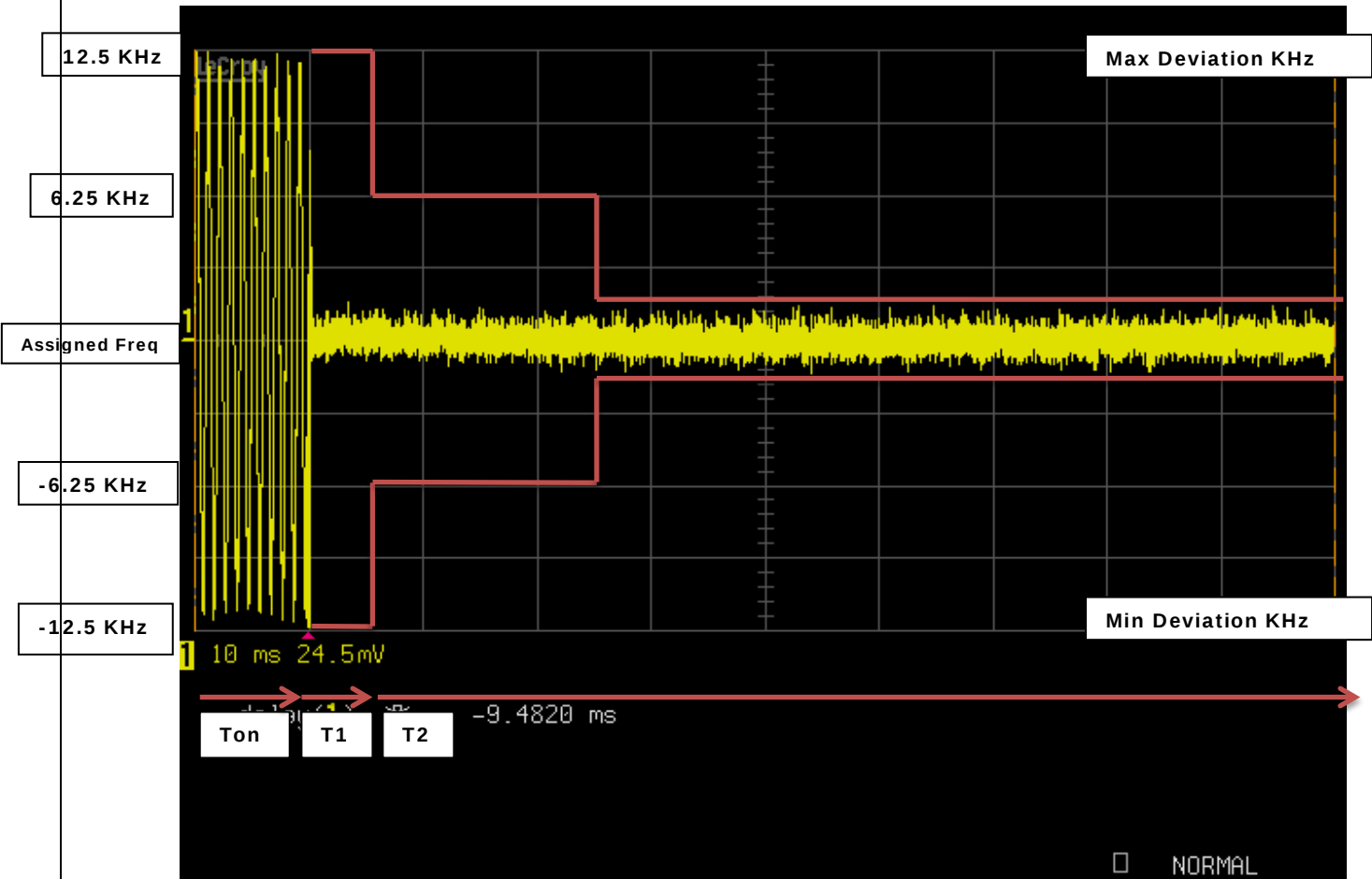
TEST SETUP DIAGRAM:



[Table of Contents](#)

TRANSIENT FREQUENCY RESPONSE

Test Data: 12.5 KHz Channel Spacing Turn On

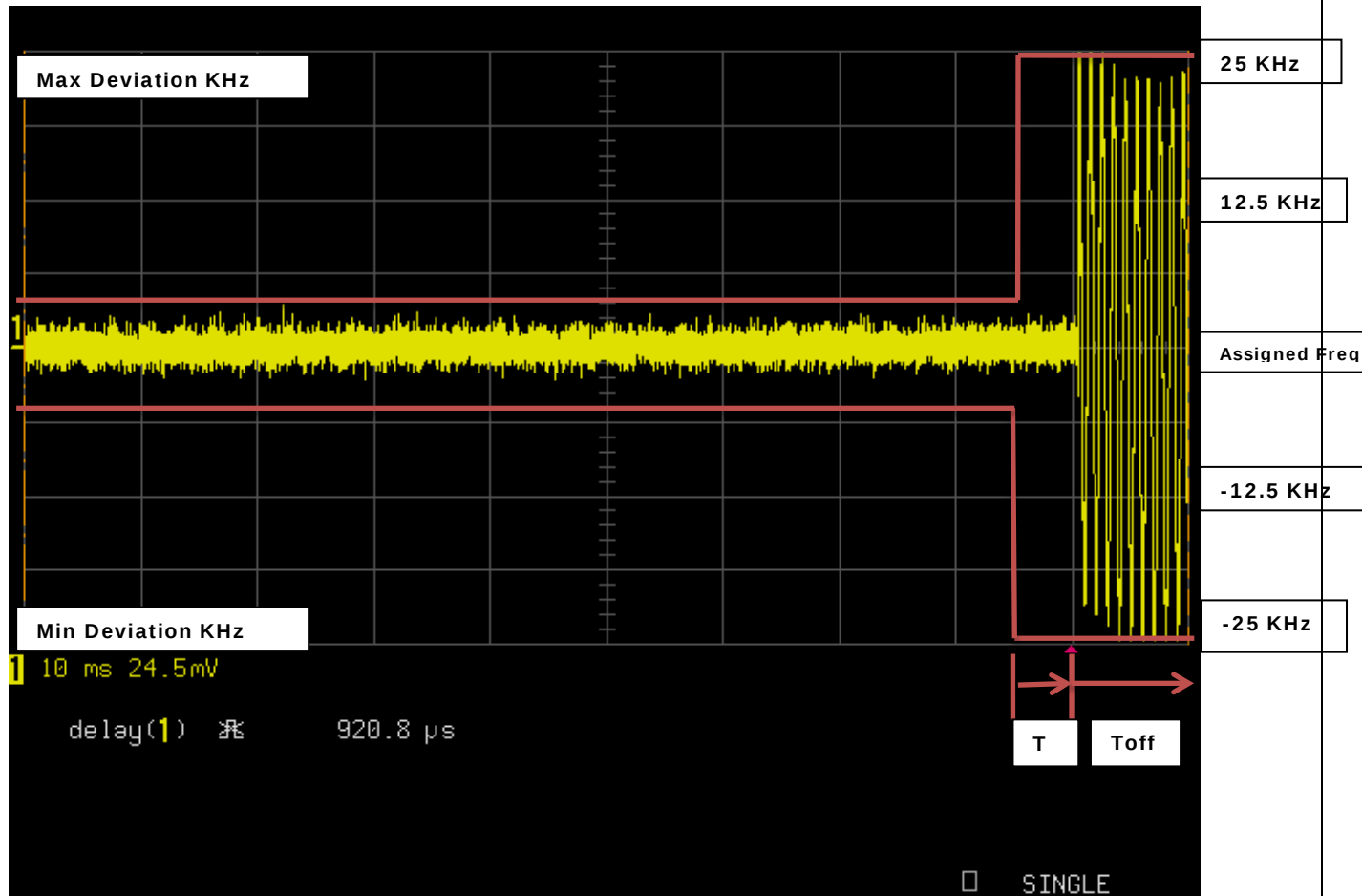


Results meet requirements

[Table of Contents](#)

TRANSIENT FREQUENCY RESPONSE

Test Data: 12.5 KHz Channel Spacing Turn Off

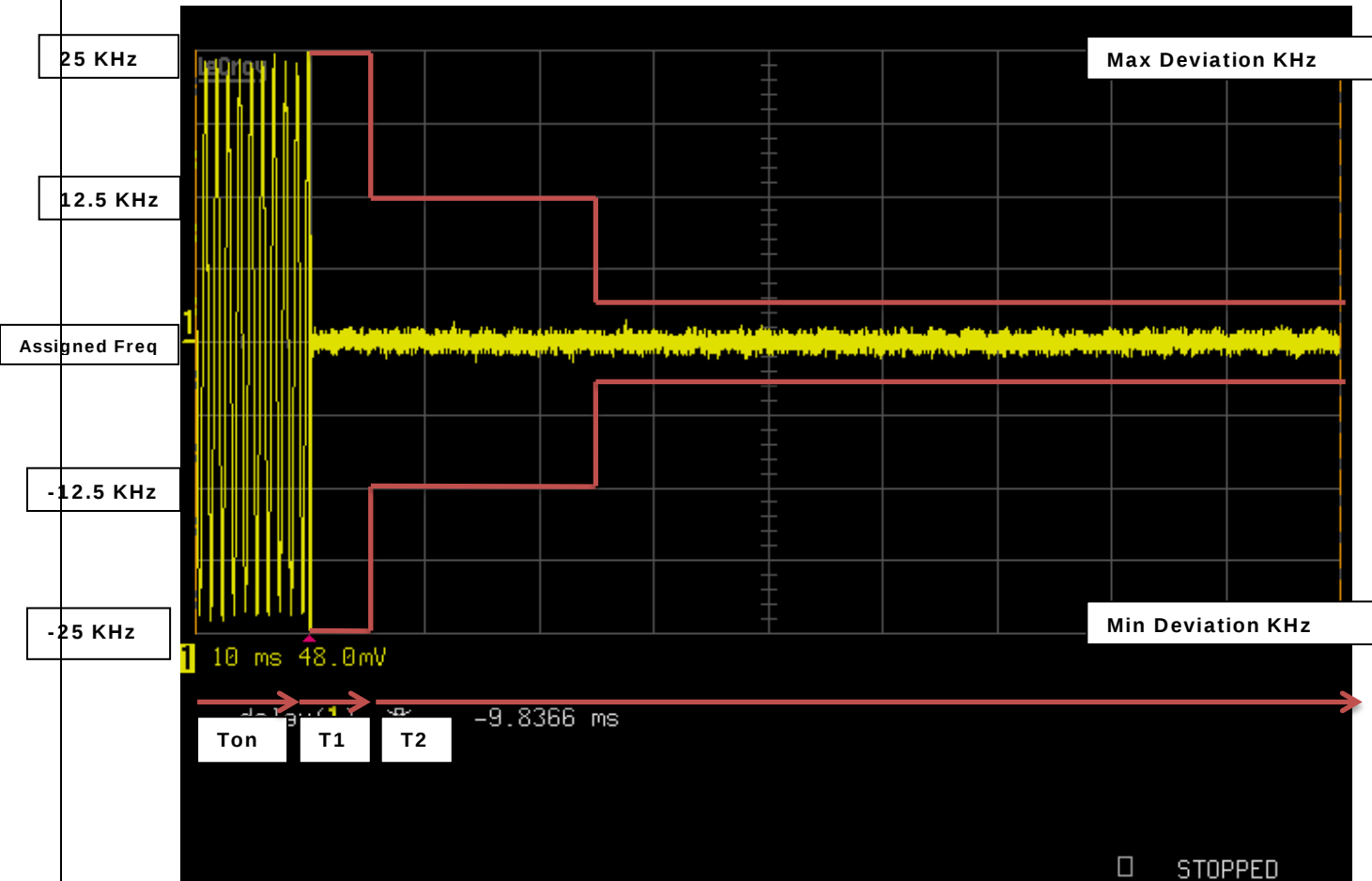


Results meet requirements

[Table of Contents](#)

TRANSIENT FREQUENCY RESPONSE

Test Data: 25 KHz Channel Spacing Turn On

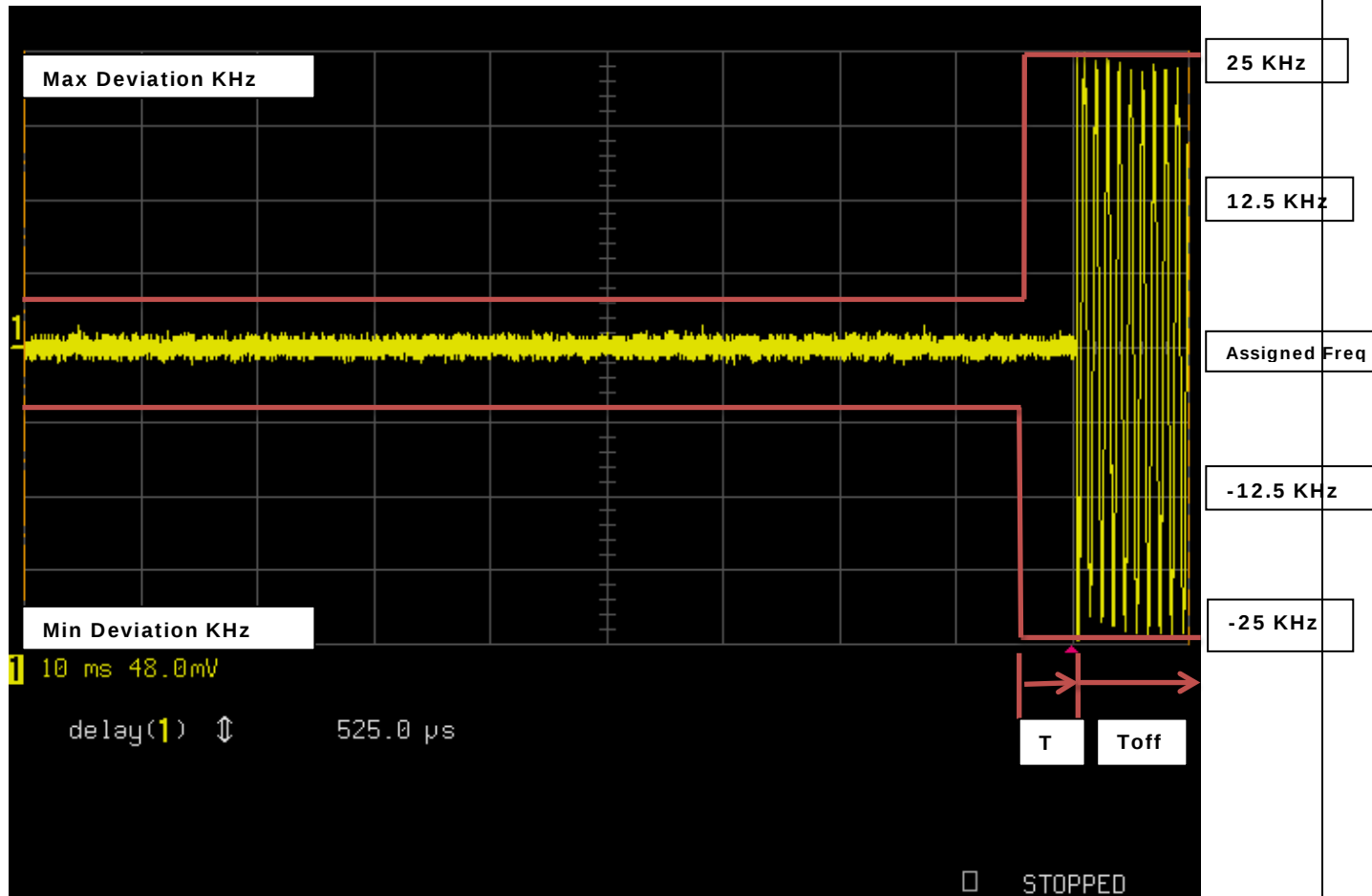


Results meet requirements

[Table of Contents](#)

TRANSIENT FREQUENCY RESPONSE

Test Data: 25 KHz Channel Spacing Turn Off



Results meet requirements

[Table of Contents](#)

EQUIPMENT LIST

Device	Manufacturer	Model	Serial Number	Cal / Char Date	Due Date
DC Power Supply	HP	6286A	1744A03842	NA	NA
Antenna: Biconnical	Eaton	94455-1	1057	11/18/15	11/18/17
Antenna: Log-Periodic	Eaton	96005	1243	02/09/16	02/09/18
Temperature Chamber LARGE	Tenney Engineering	TTRC	11717-7	08/19/14	08/19/16
AC Voltmeter	HP	400FL	2213A14728	10/24/15	10/24/17
Digital Multimeter	Fluke	77	35053830	10/21/15	10/21/17
Frequency Counter Large Chamber	HP	5352B	2632A00165	07/01/15	07/01/17
CHAMBER	Panashield	3M	N/A	02/18/16	02/18/19
Antenna: Double-Ridged Horn/ETS Horn 1	ETS-Lindgren	3117	00035923	06/13/14	06/13/16
Modulation Analyzer	HP	8901A	3050A05856	04/16/15	04/16/17
EMI Test Receiver R & S ESIB 40 Screen Room	Rohde & Schwarz	ESIB 40	100274	08/12/14	08/12/16
Software: Field Strength Program	Timco	N/A	Version 4.0	NA	NA
Antenna: Active Loop	ETS-Lindgren	6502	00062529	11/18/15	11/18/17
Hygro-Thermometer	Extech	445703	0602	06/30/15	06/30/17
Signal Generator	Anritsu	68369B	985112	10/28/15	10/28/17

*EMI RECEIVER SOFTWARE VERSION

The receiver firmware used was version 4.43 Service Pack 3

[Table of Contents](#)