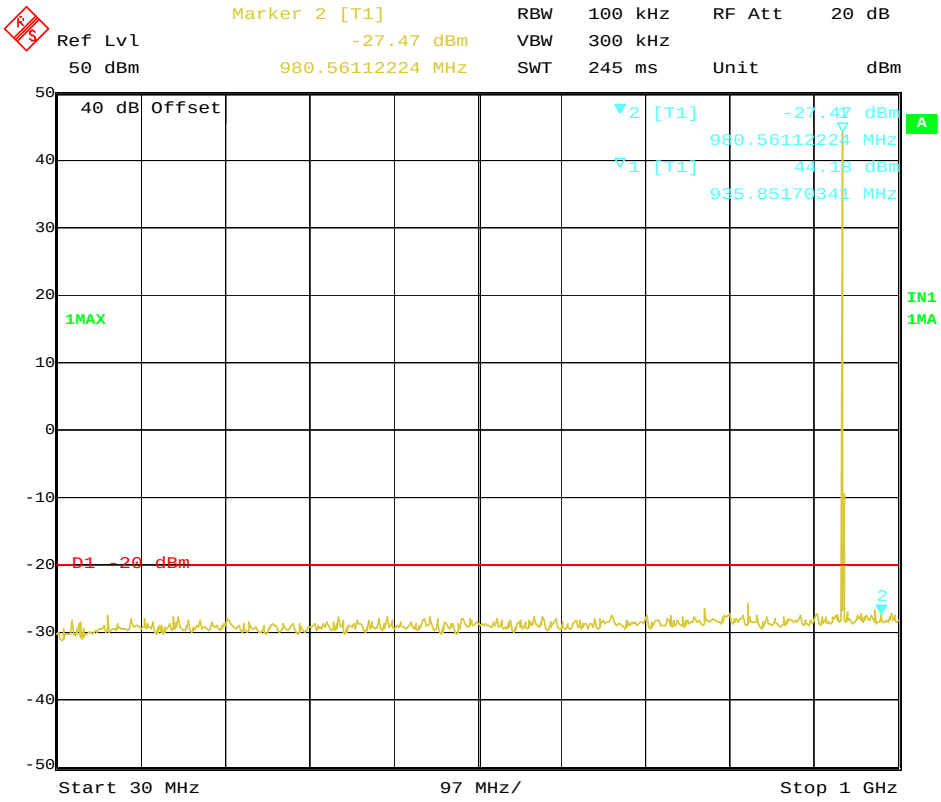
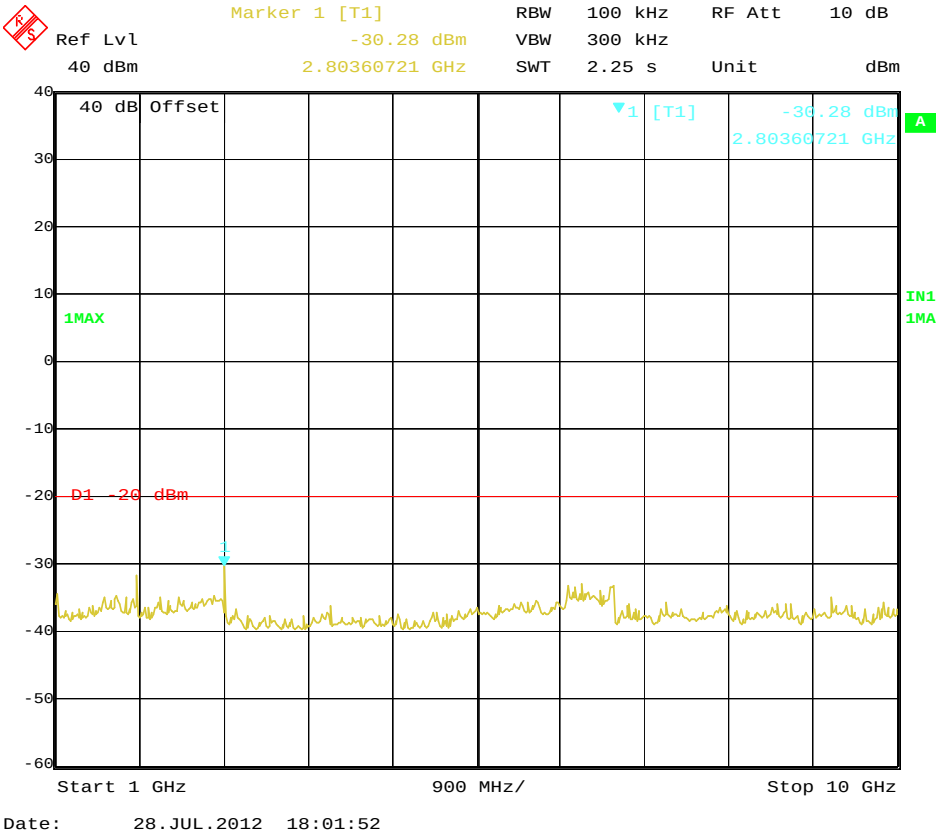
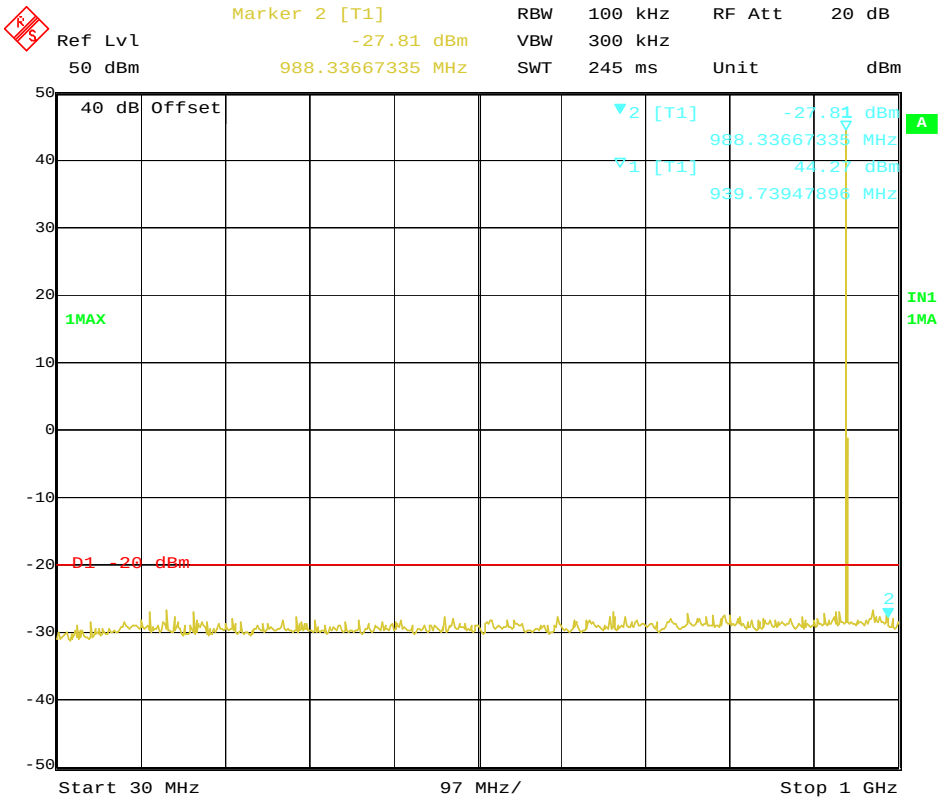
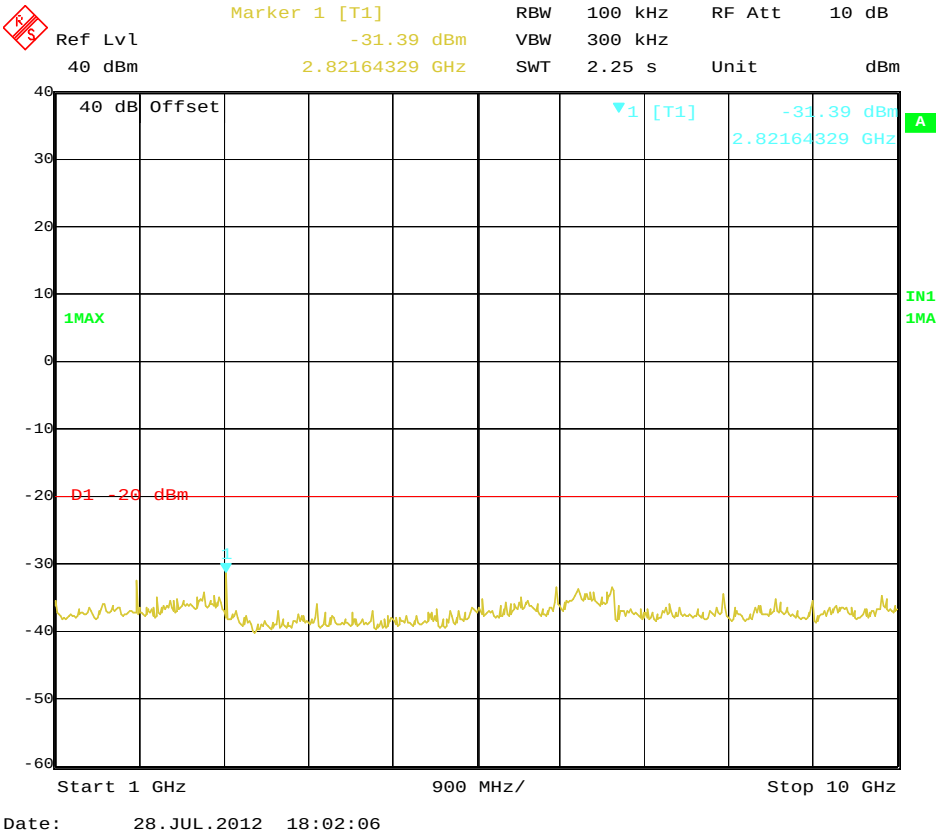
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	Low	935.5000	980.66	-27.47	2803.60	-30.28	-20dBm
Test Results				Compliance				





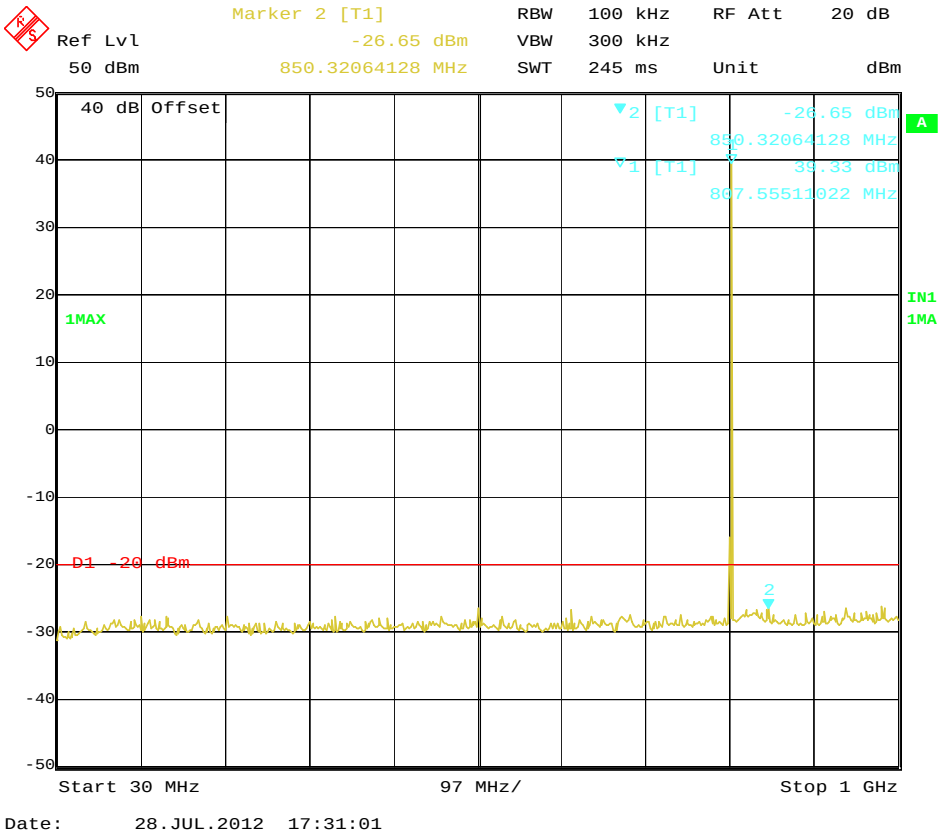
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	High	939.5000	988.33	-27.81	2821.64	-31.39	-20dBm
Test Results				Compliance				

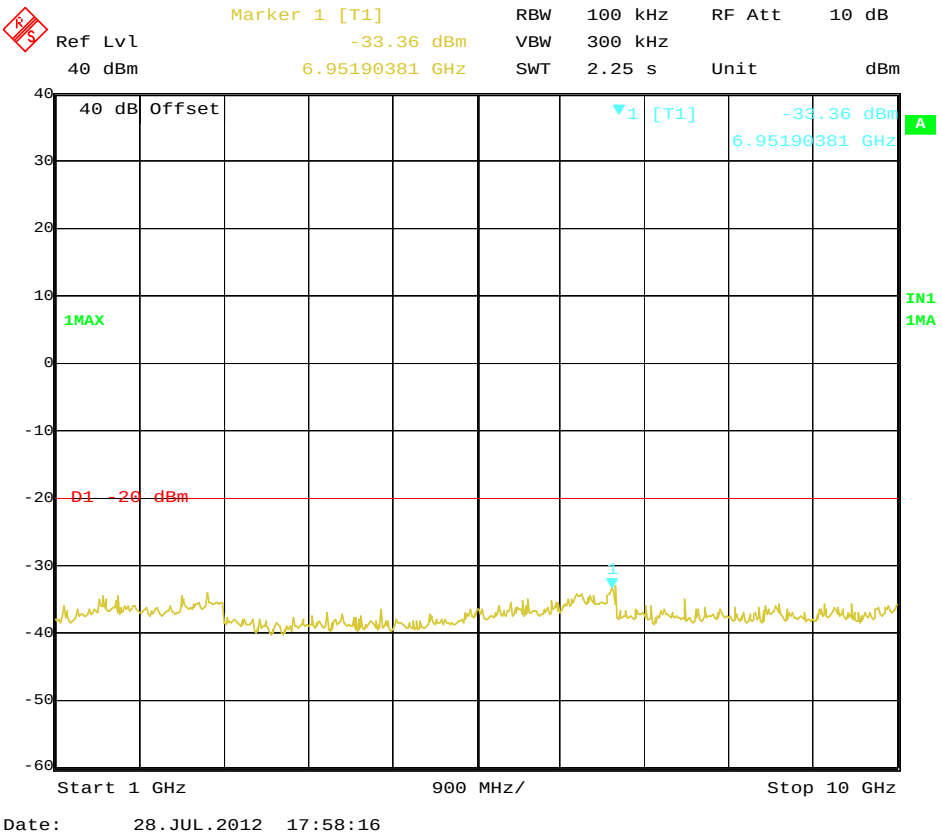




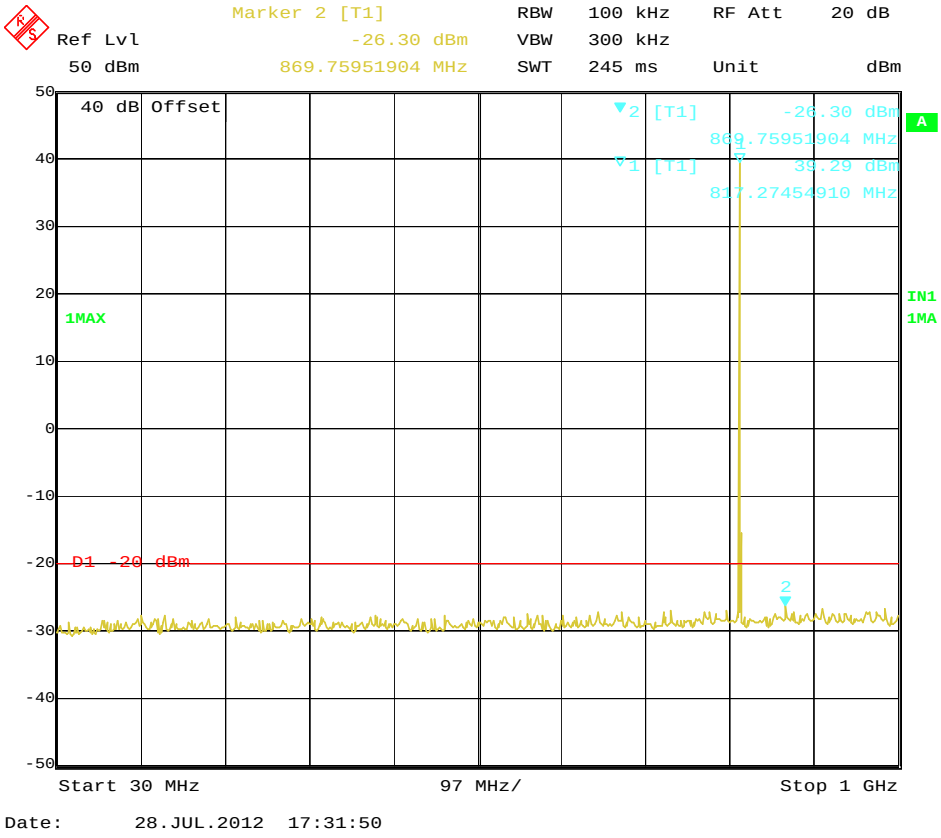
For Rated Low Power (10Watt)

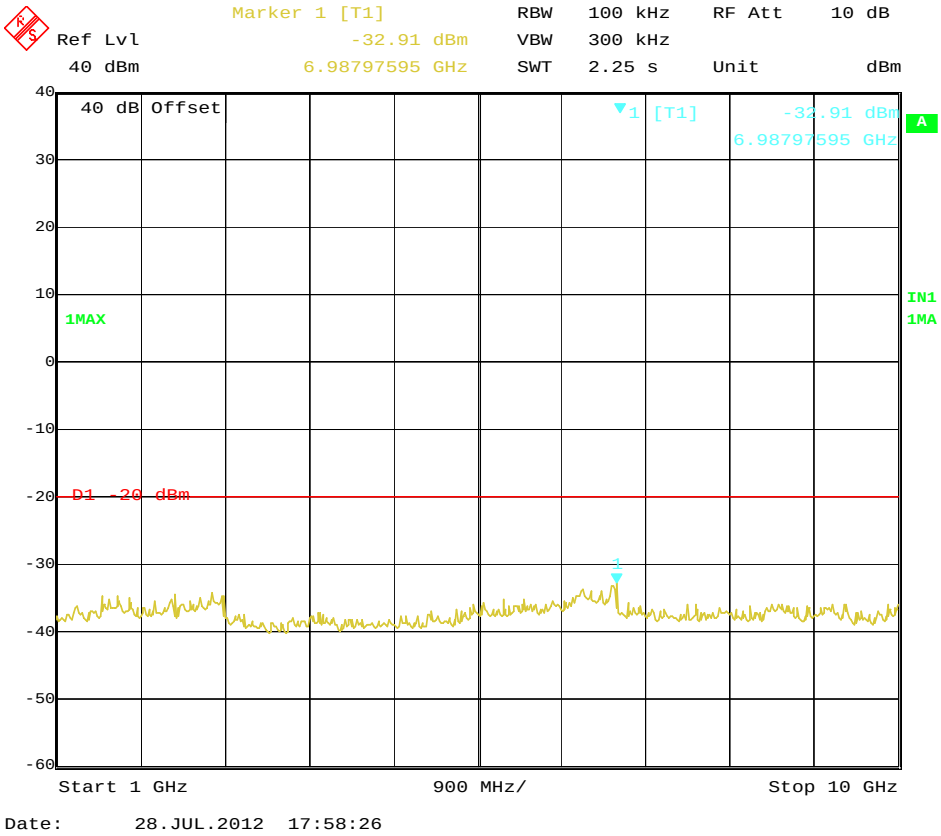
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	Low	806.5000	850.32	-26.65	6951.90	-33.36	-13dBm
Test Results				Compliance				



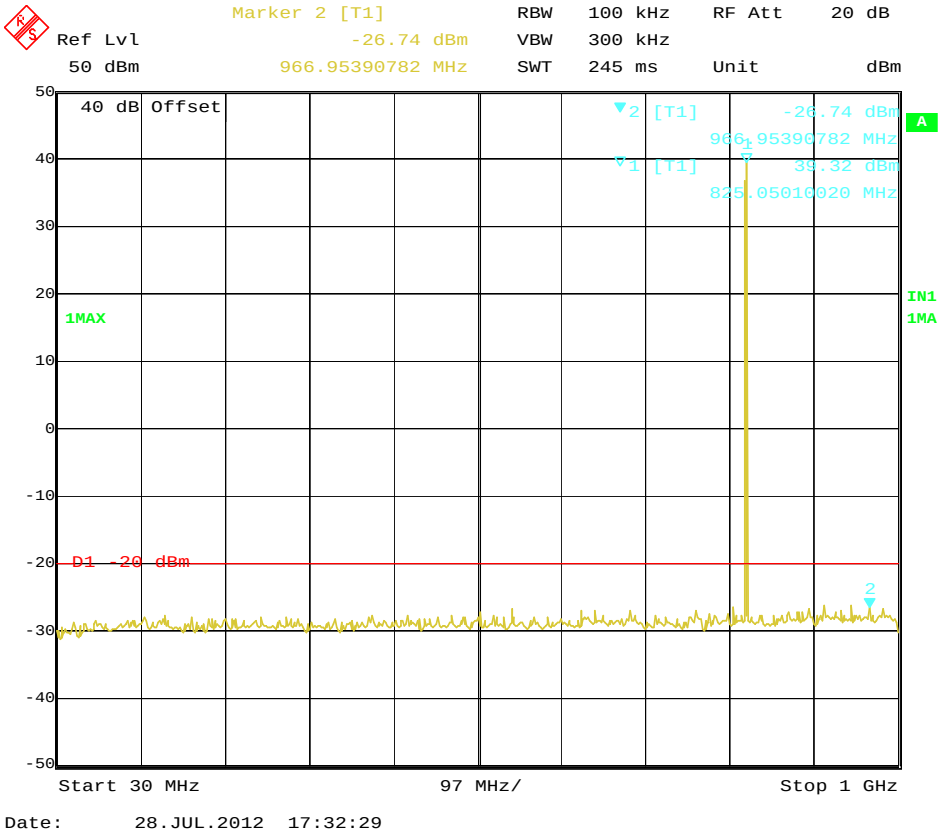


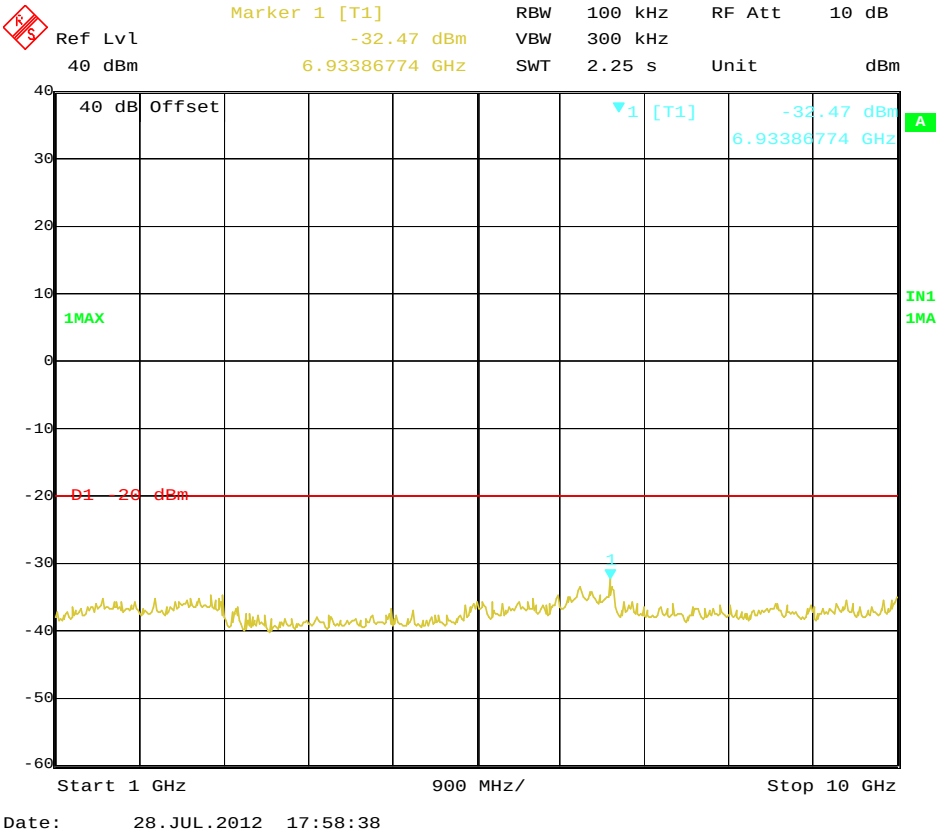
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	Middle	817.0000	869.79	-26.30	6987.97	-32.91	-13dBm
Test Results				Compliance				



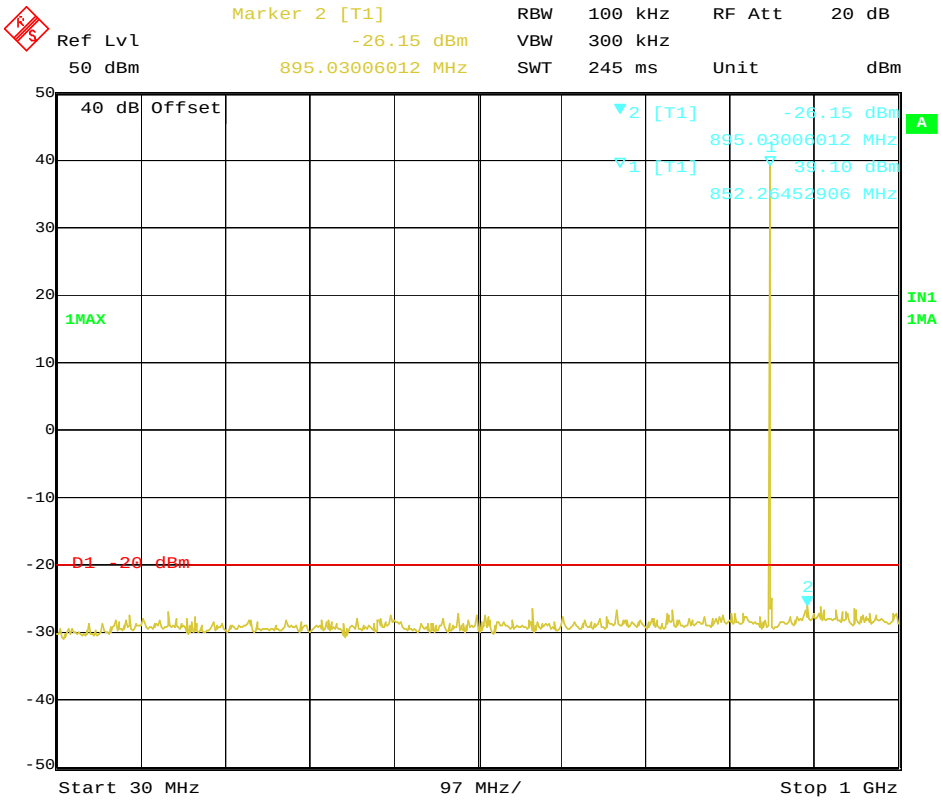


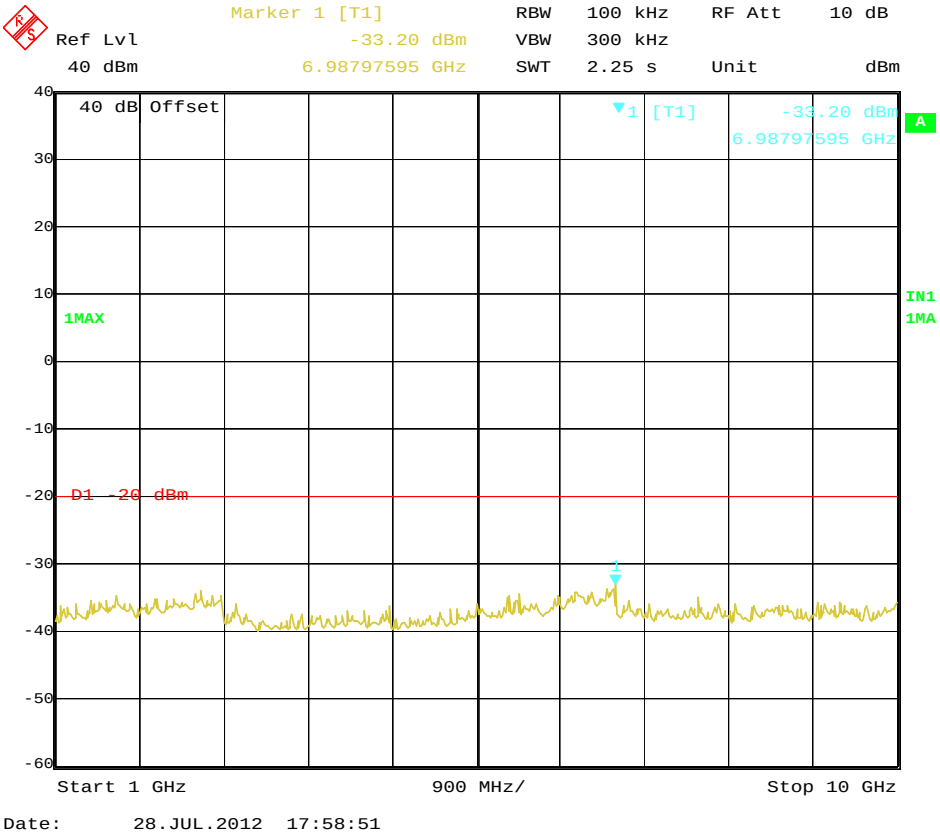
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	High	823.5000	966.95	-26.74	6933.66	-32.47	-13dBm
Test Results				Compliance				



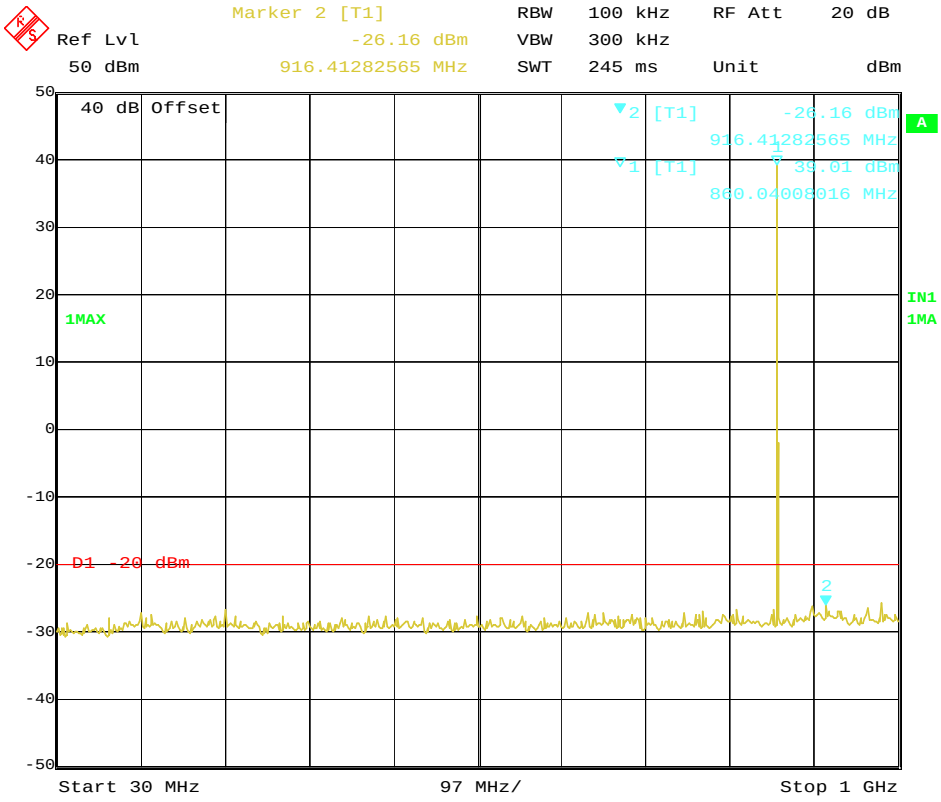


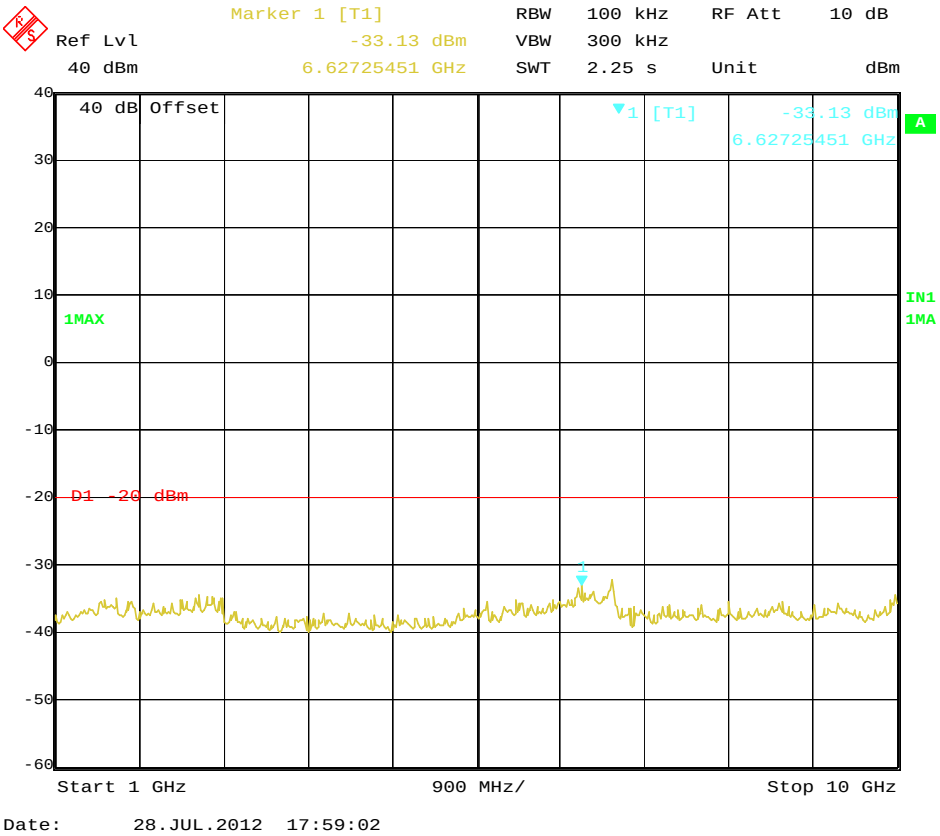
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	Low	851.5000	895.03	-26.15	6987.97	-33.20	-13dBm
Test Results				Compliance				



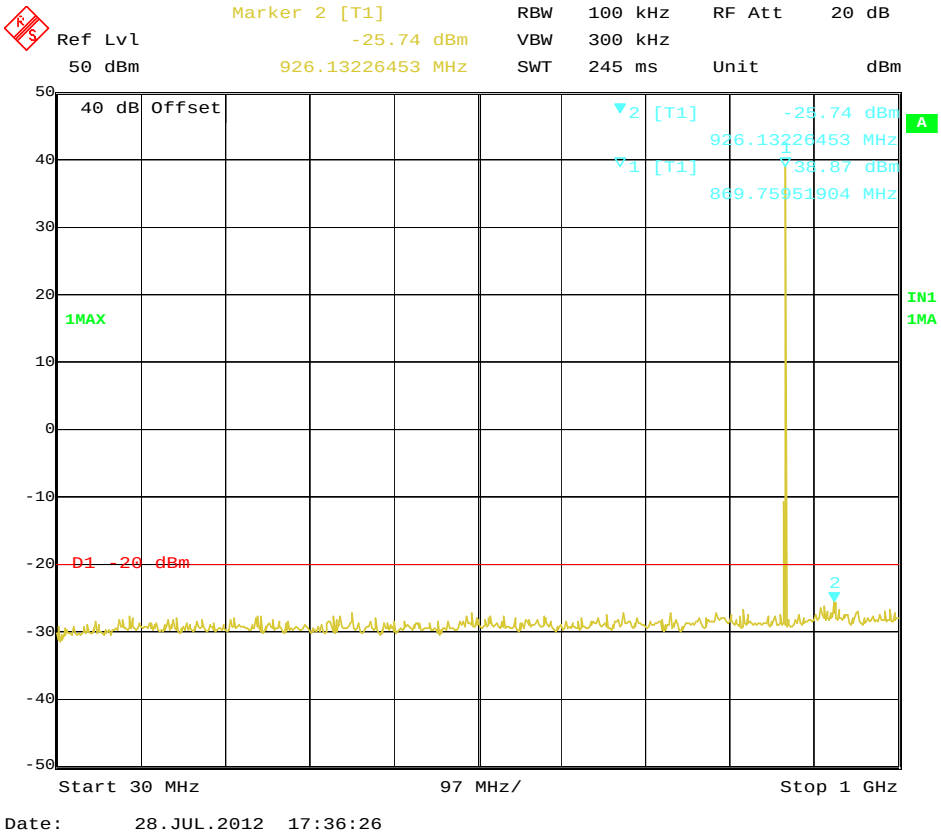


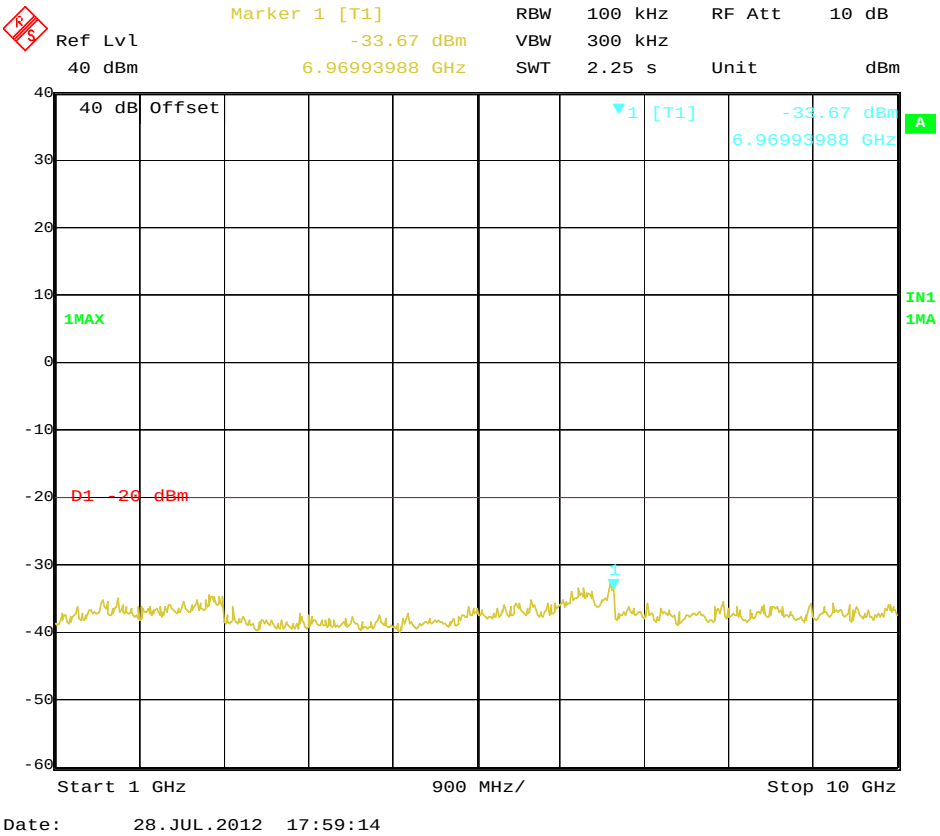
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	Middle	860.0000	916.41	-26.16	6627.25	-33.13	-13dBm
Test Results				Compliance				



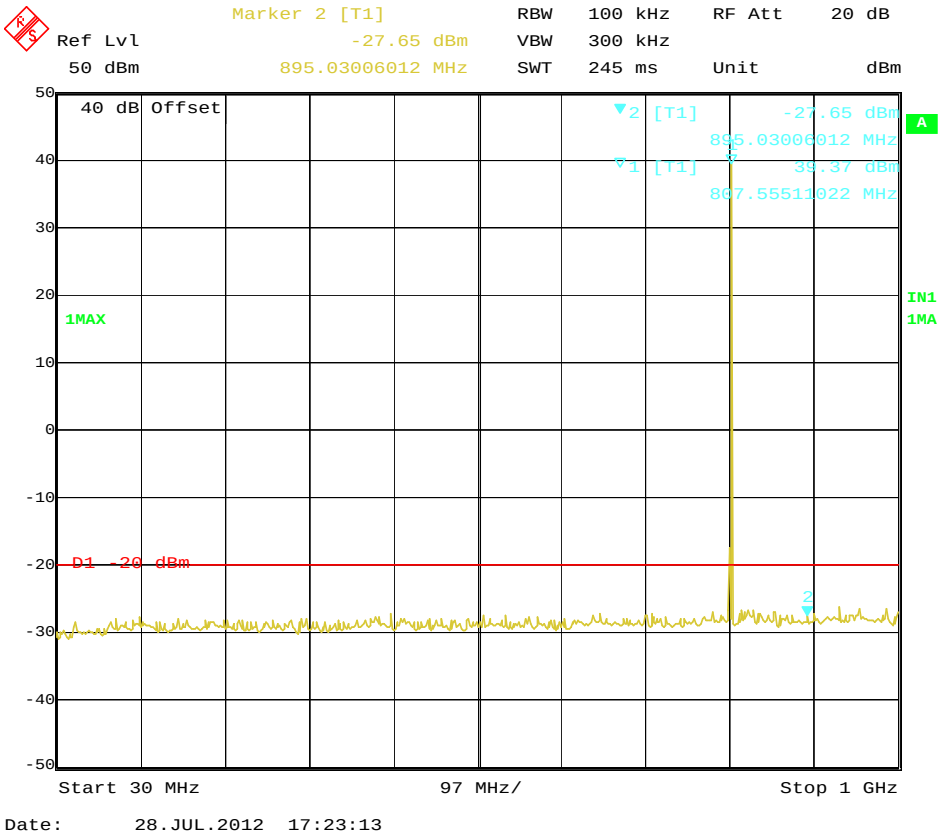


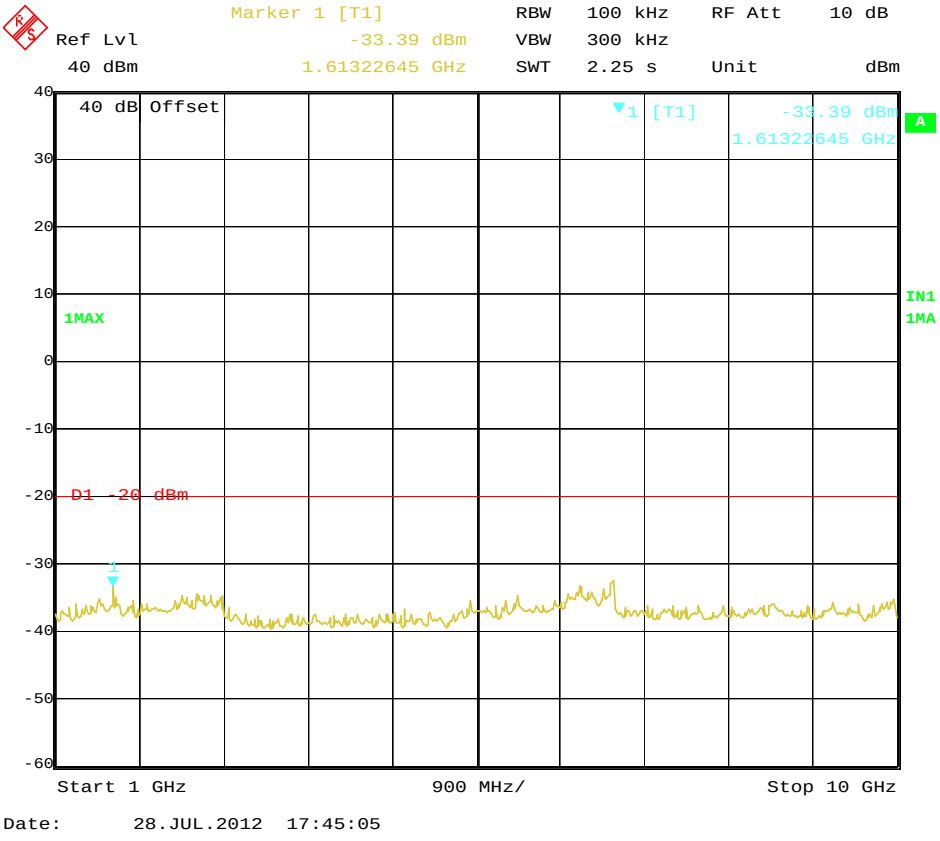
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	High	868.5000	926.13	-25.74	6969.92	-33.67	-13dBm
Test Results				Compliance				



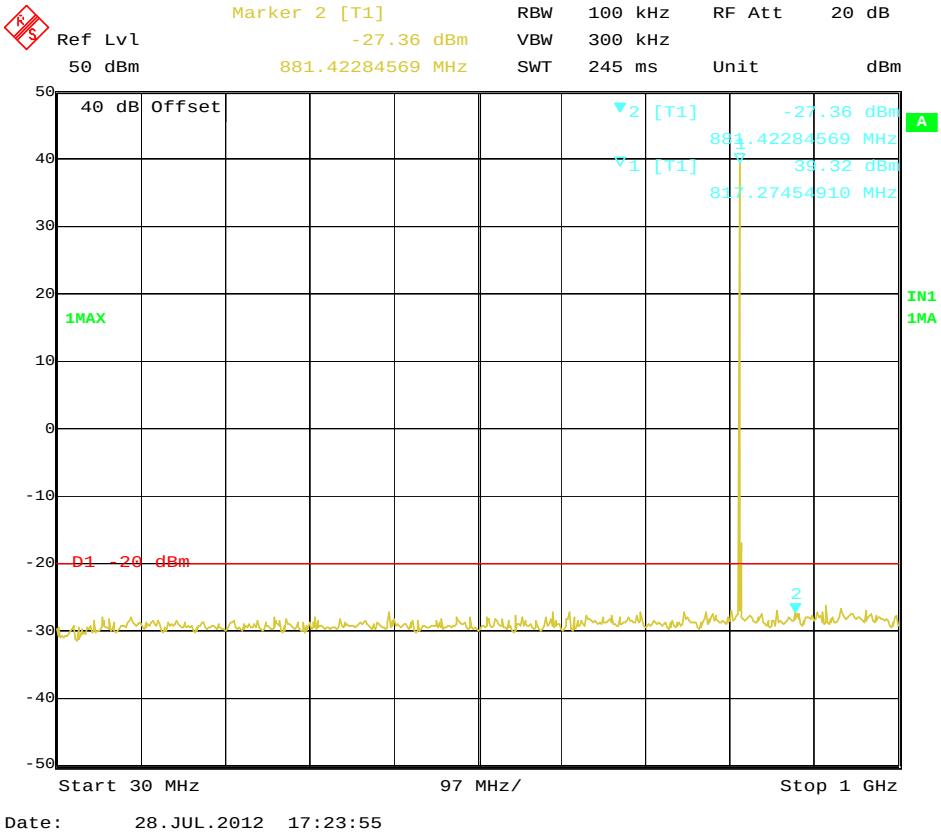


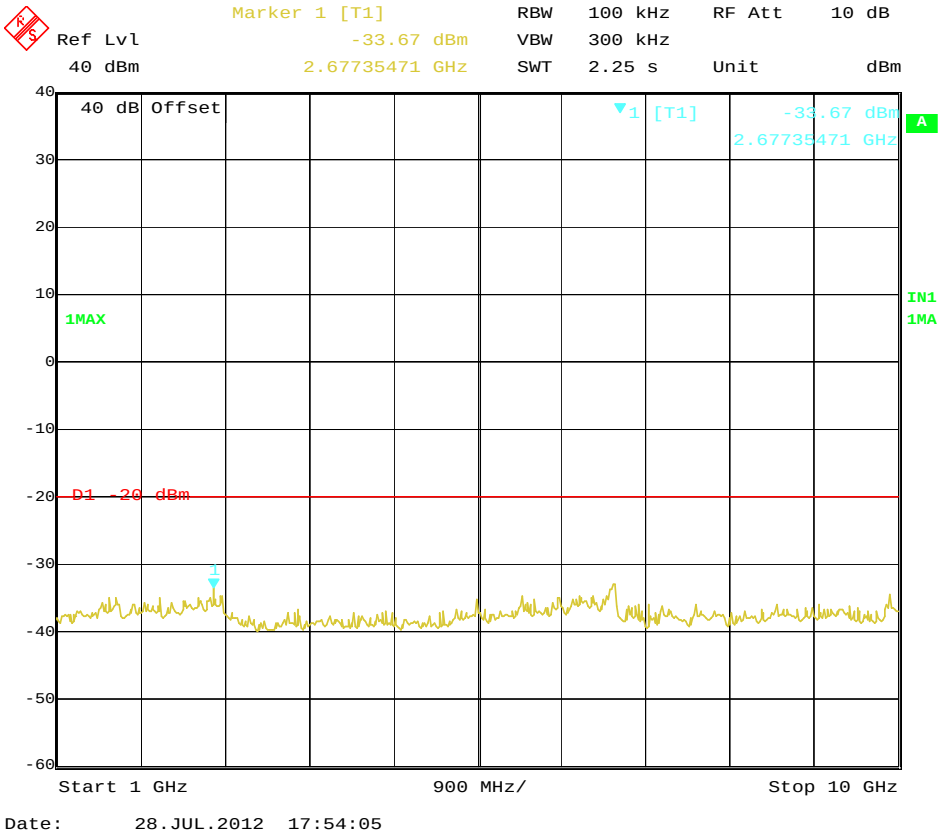
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Low	806.5000	859.03	-27.65	1613.22	-33.39	-20dBm
Test Results				Compliance				



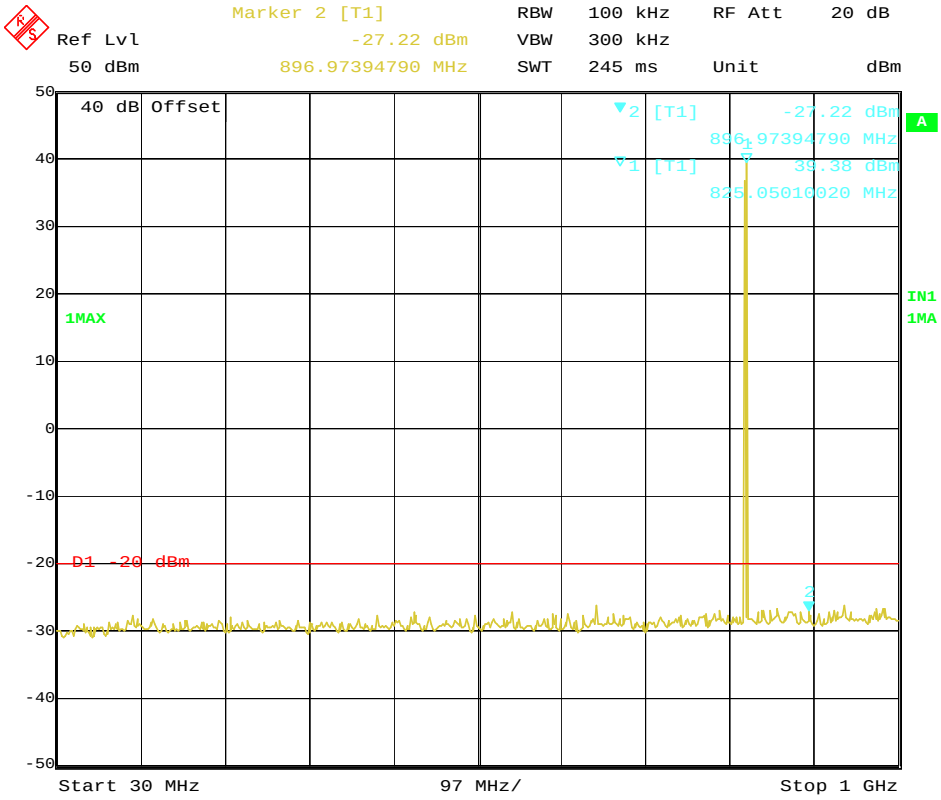


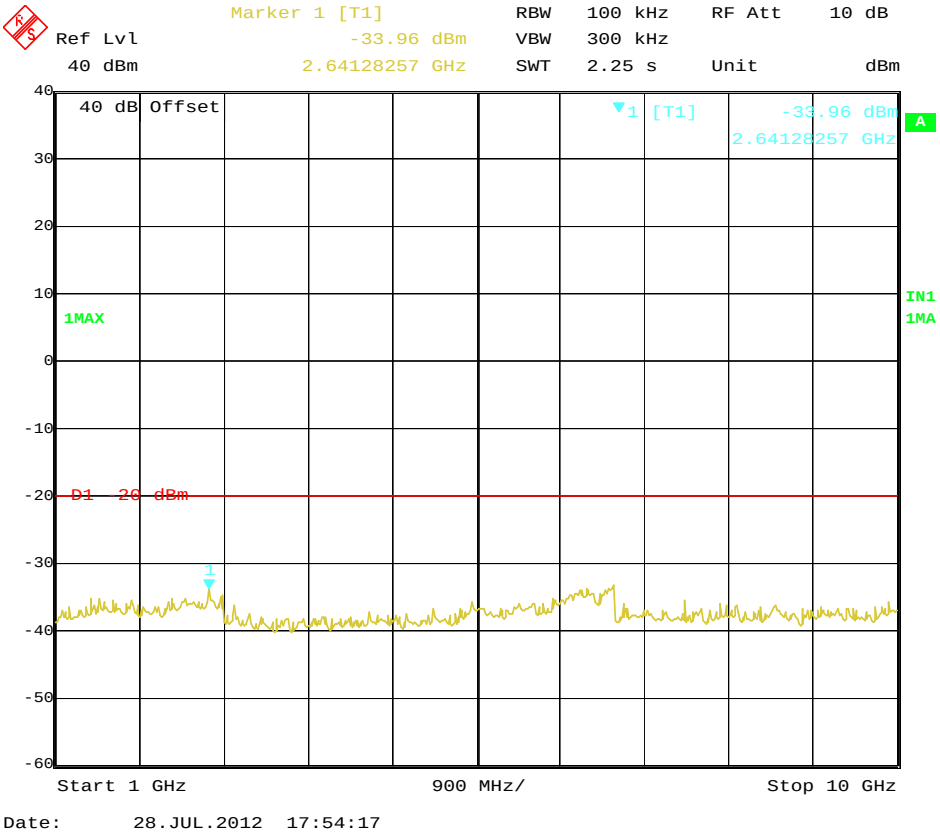
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Middle	817.0000	851.42	-27.36	2677.35	-33.67	-20dBm
Test Results				Compliance				



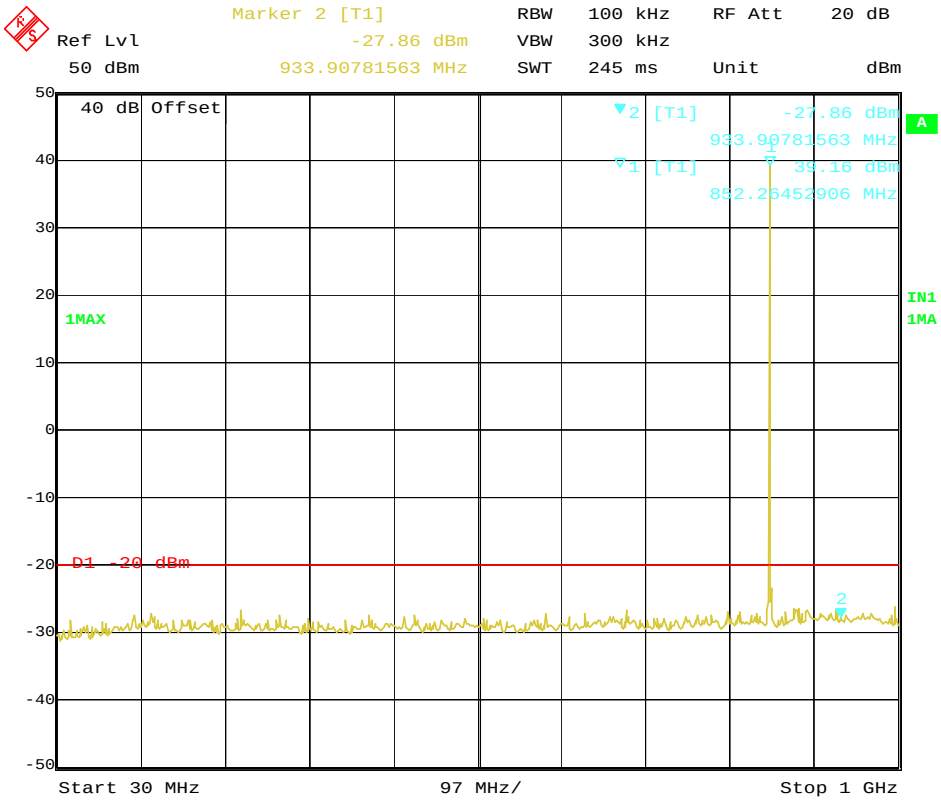


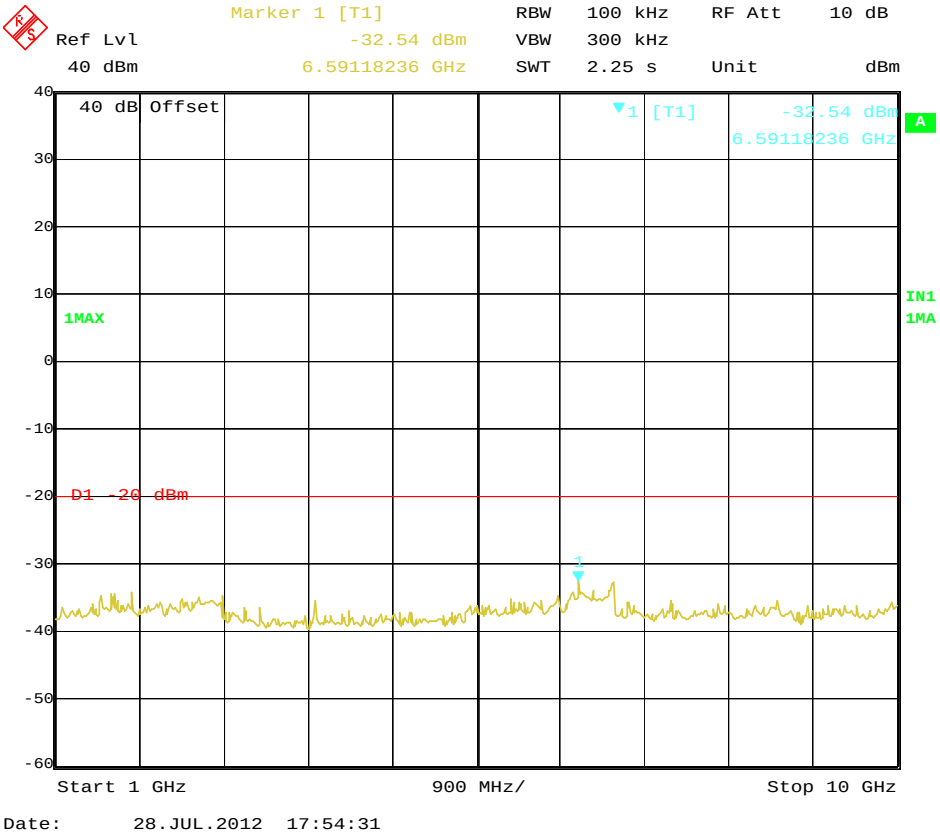
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	High	823.5000	896.91	-27.22	2641.28	-33.96	-20dBm
Test Results				Compliance				



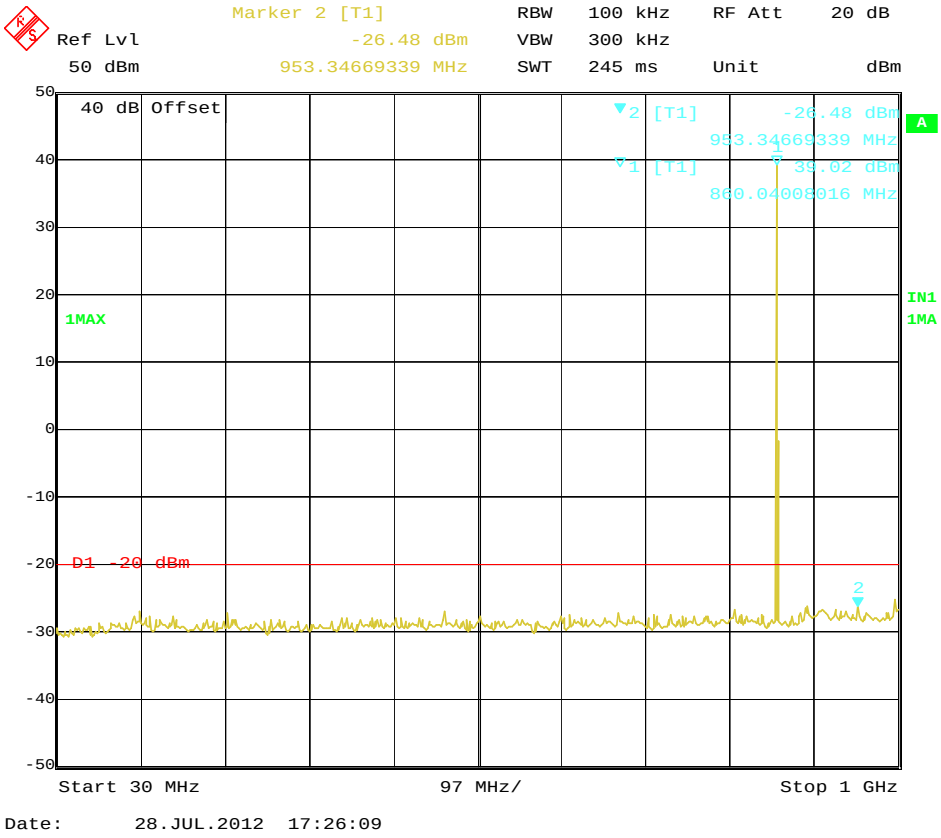


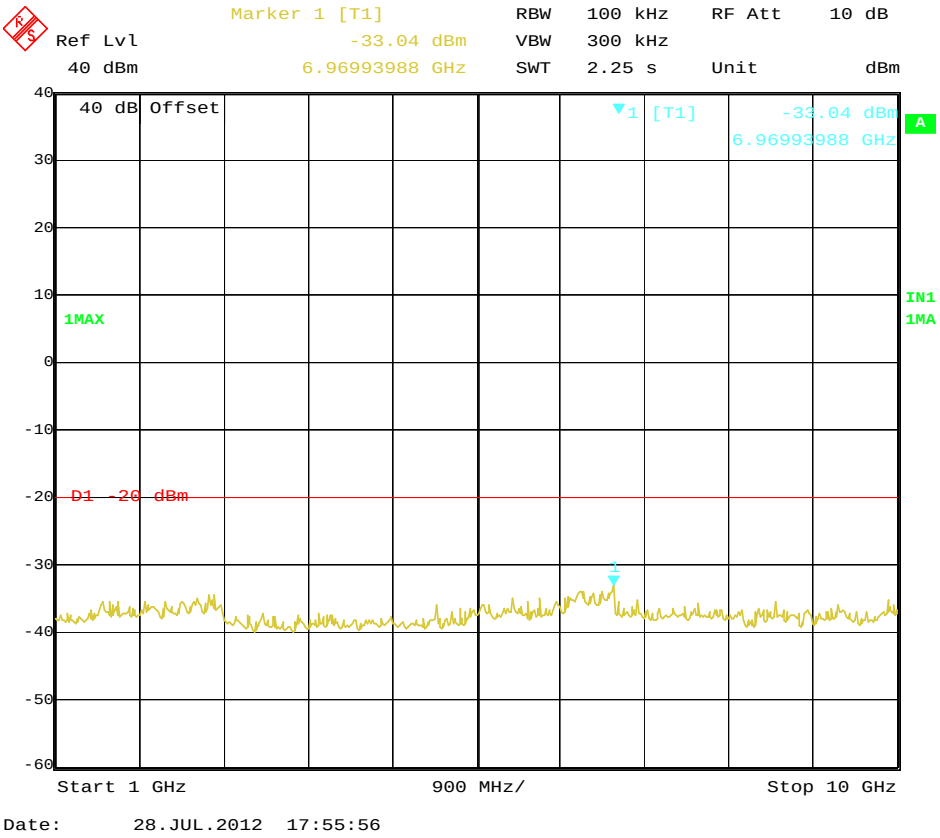
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Low	851.5000	933.90	-27.86	6591.18	-32.54	-20dBm
Test Results				Compliance				



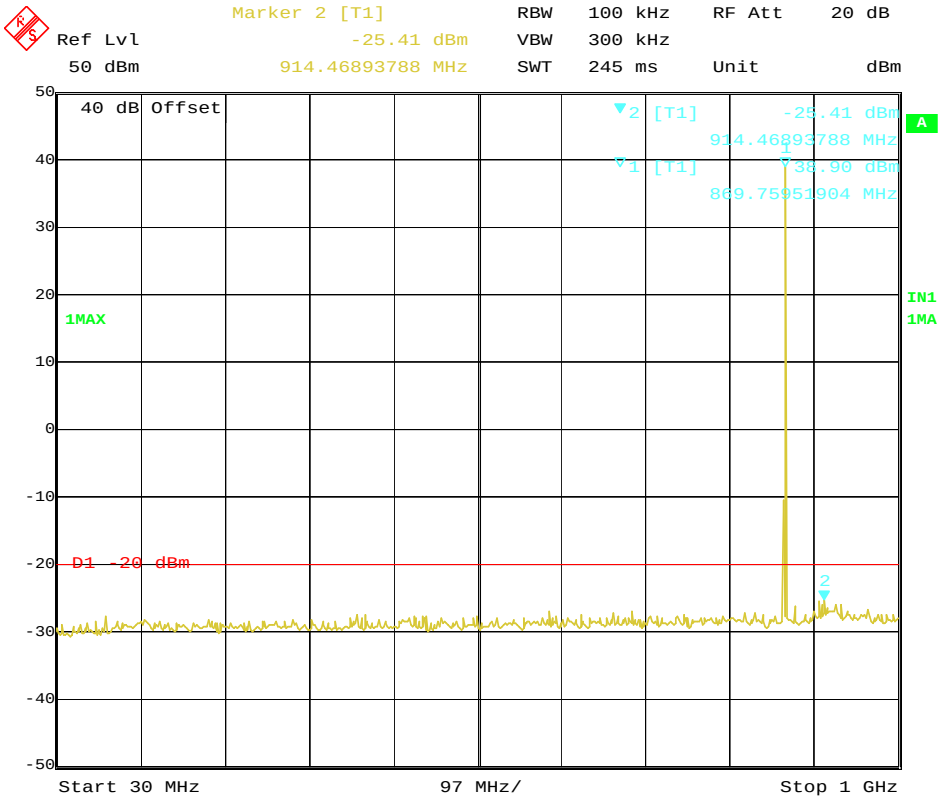


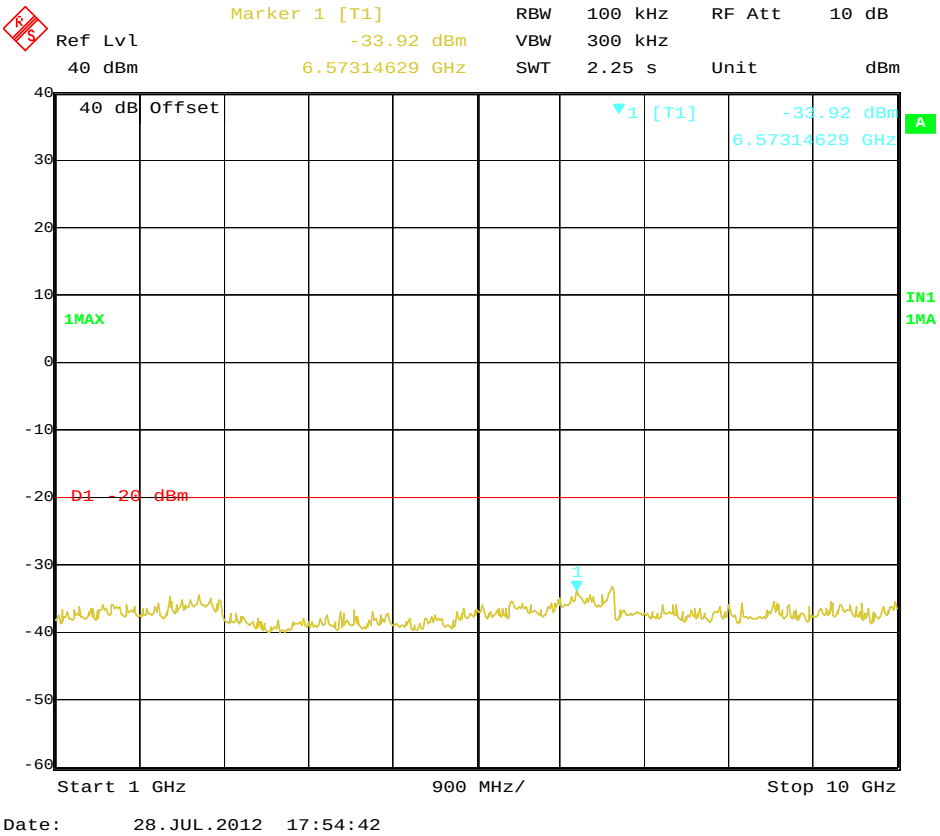
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Middle	860.0000	953.34	-26.48	6969.93	-33.04	-20dBm
Test Results				Compliance				



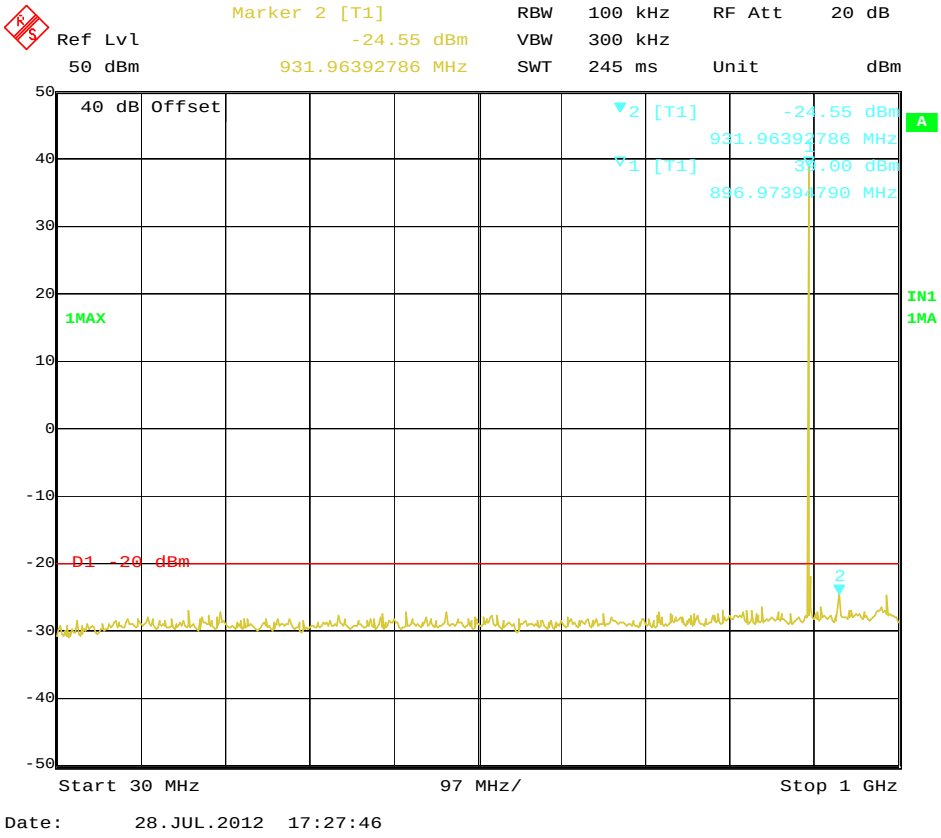


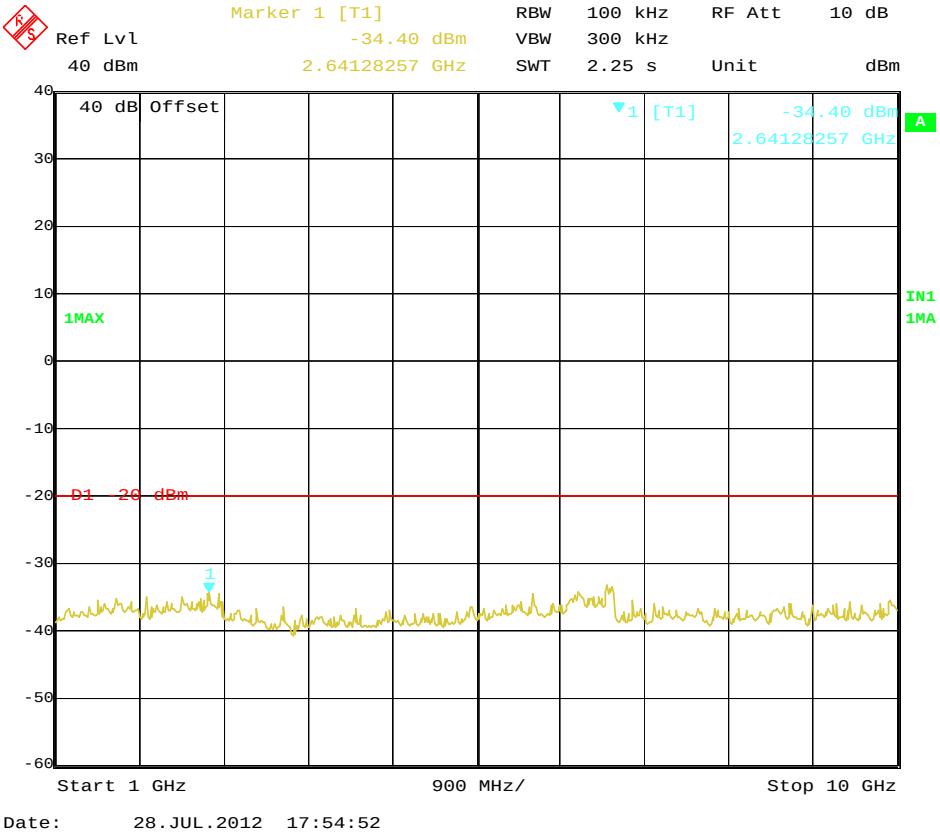
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	High	868.5000	914.46	-25.41	6573.14	-33.92	-20dBm
Test Results				Compliance				



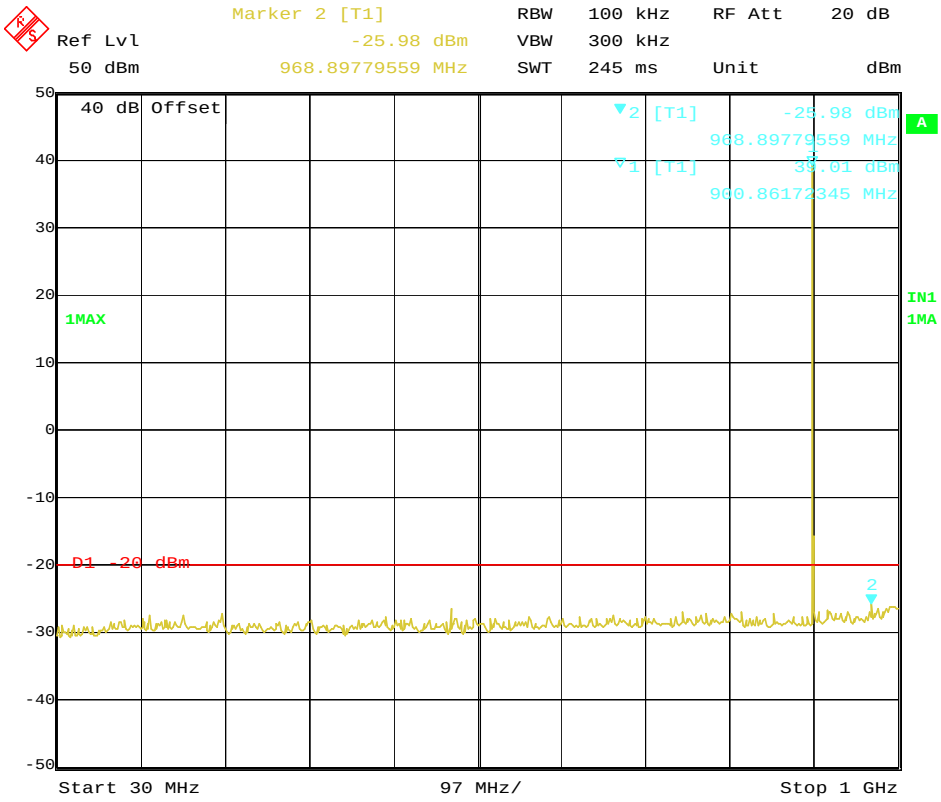


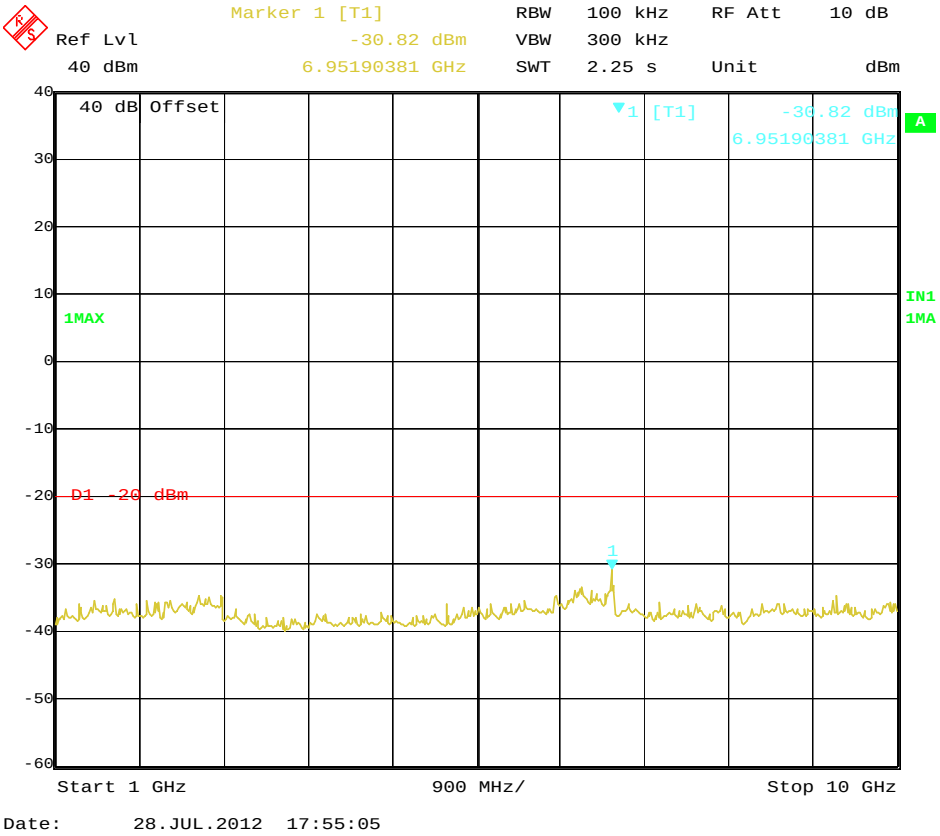
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Low	896.5000	931.96	-24.55	2641.25	-34.40	-20dBm
Test Results				Compliance				



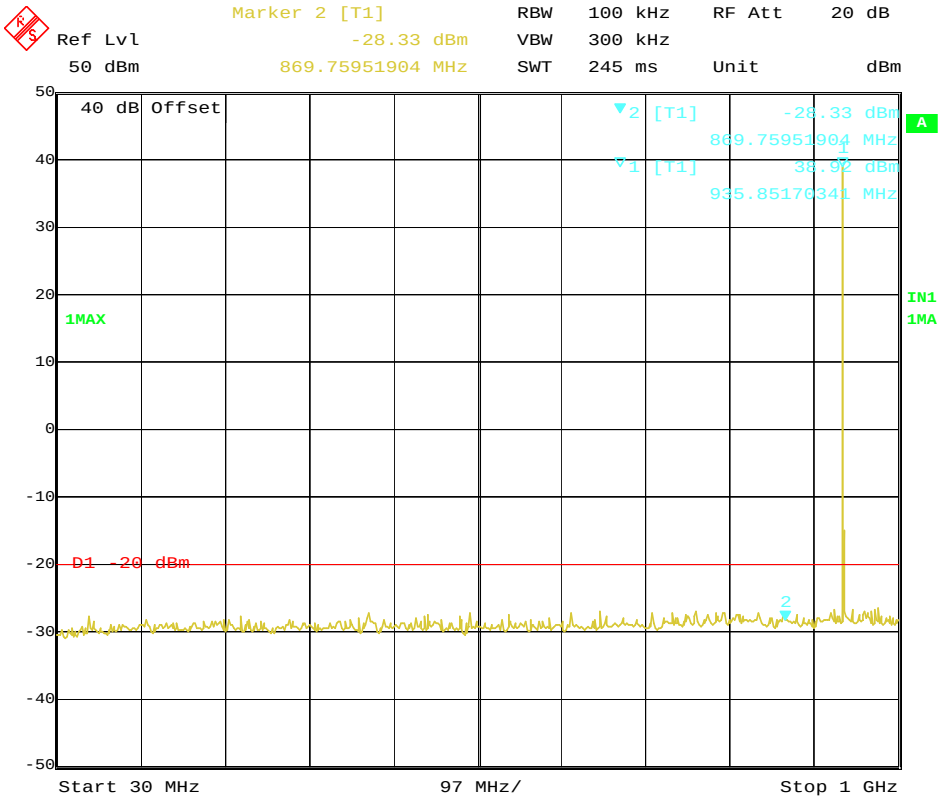


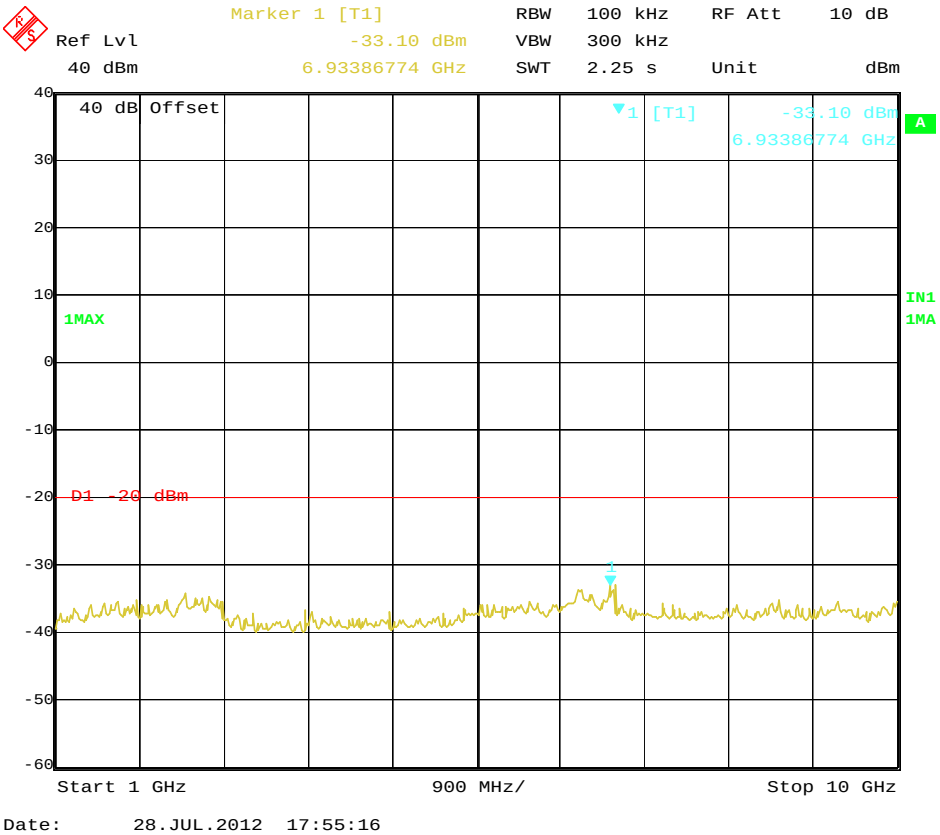
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	High	900.5000	968.59	-25.95	6951.90	-30.52	-20dBm
Test Results				Compliance				



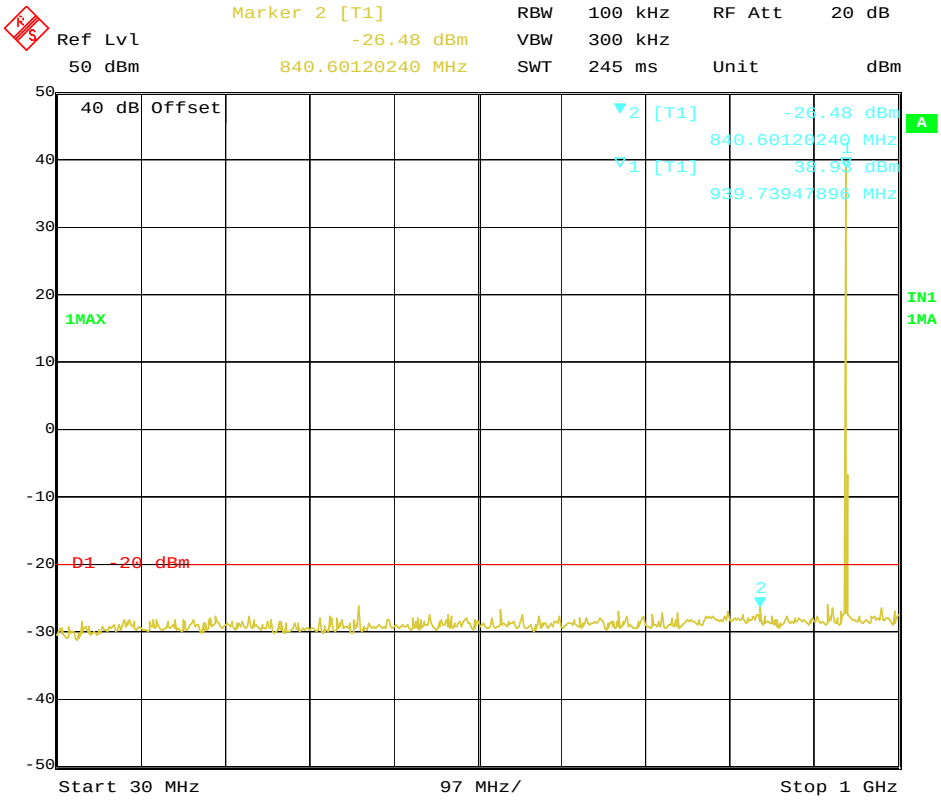


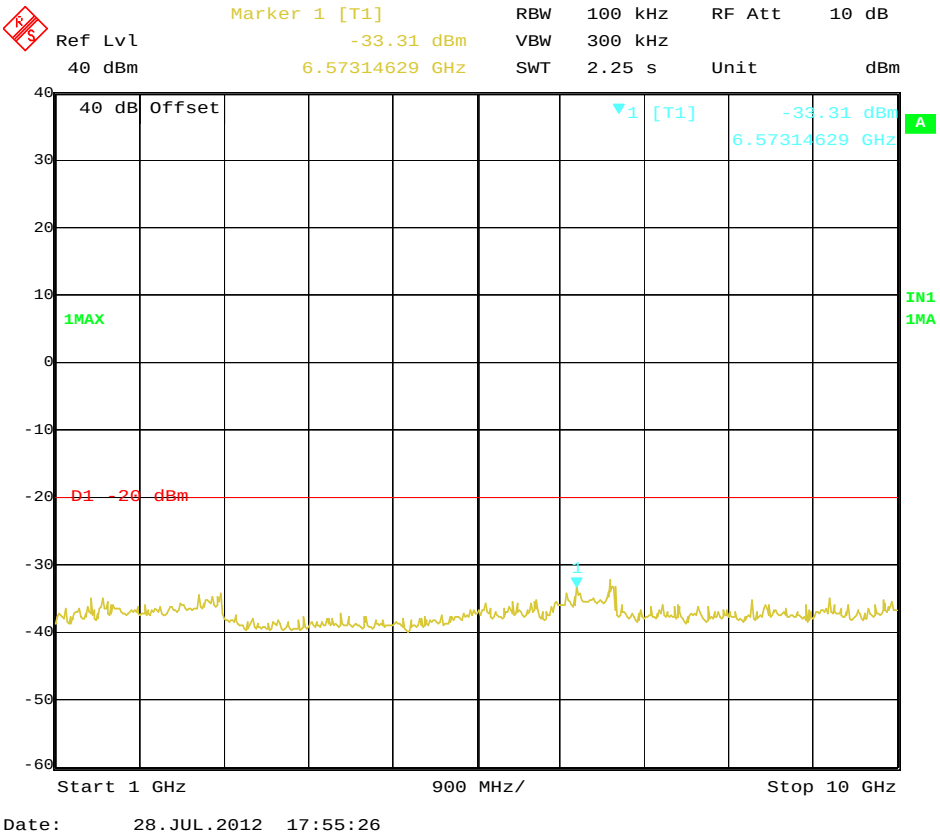
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Low	935.5000	869.75	-28.32	6933.86	-33.10	-20dBm
Test Results				Compliance				



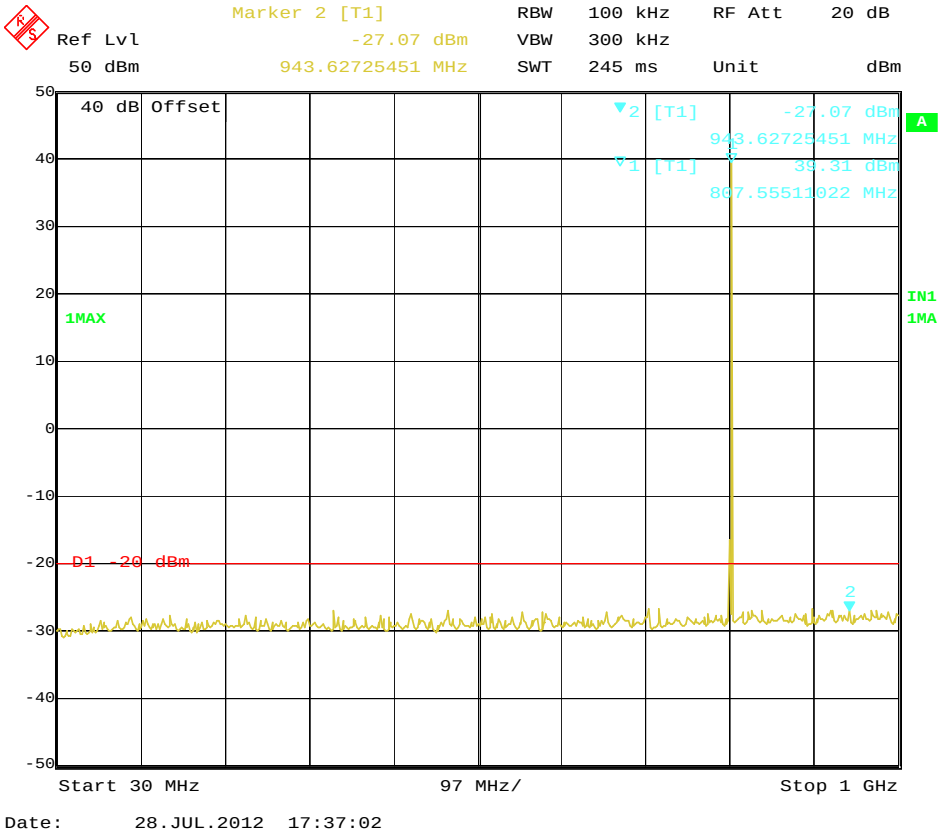


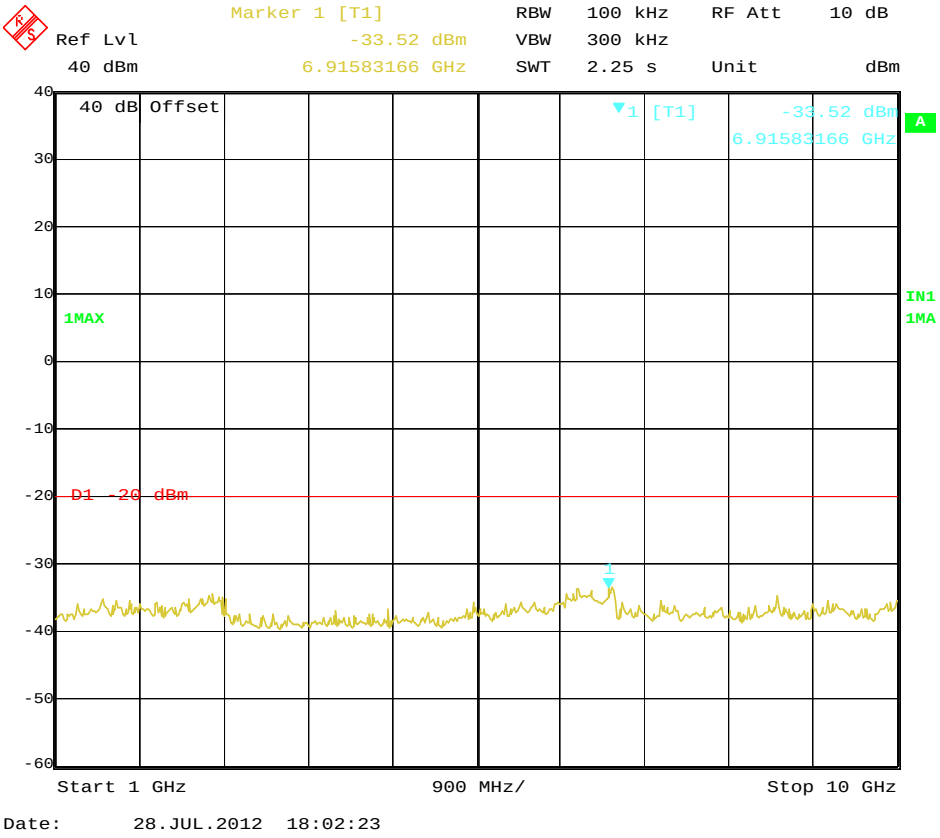
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	High	939.5000	840.60	-26.48	6573.14	-33.31	-20dBm
Test Results				Compliance				



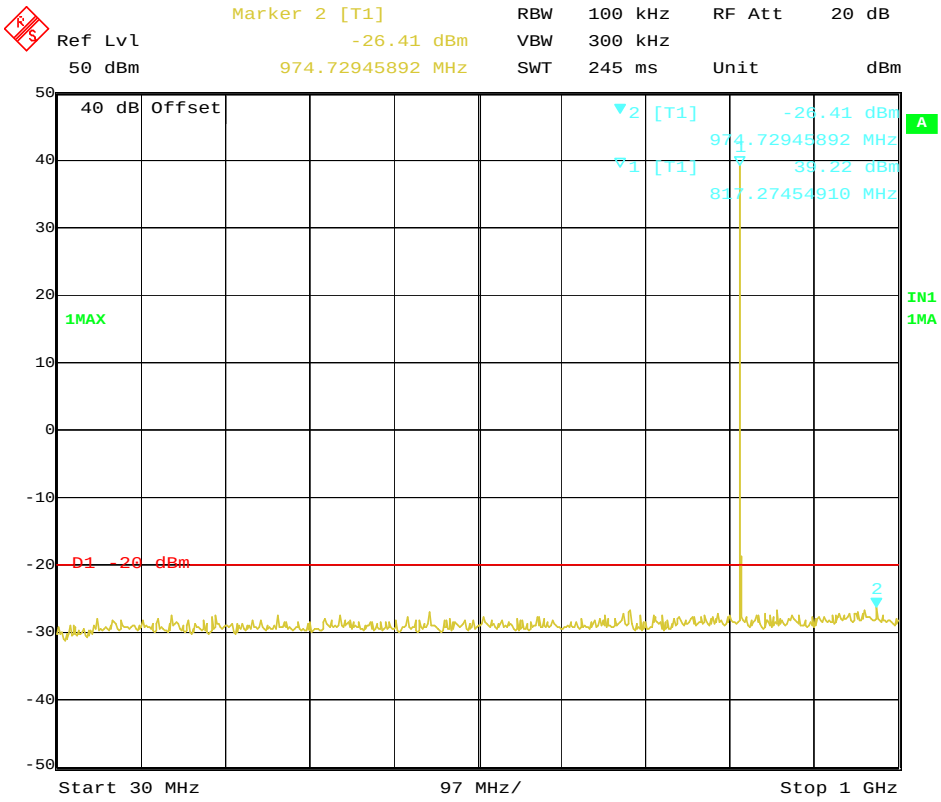


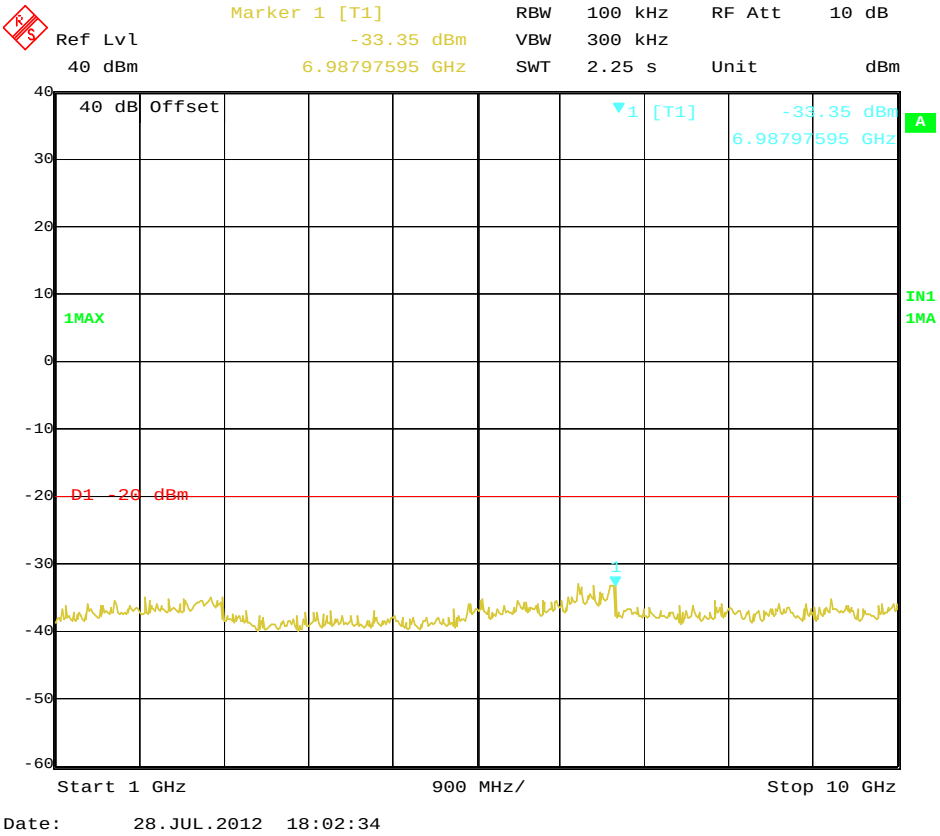
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSk	12.5KHz	Low	806.5000	943.62	-27.07	6915.63	-33.52	-20dBm
Test Results				Compliance				



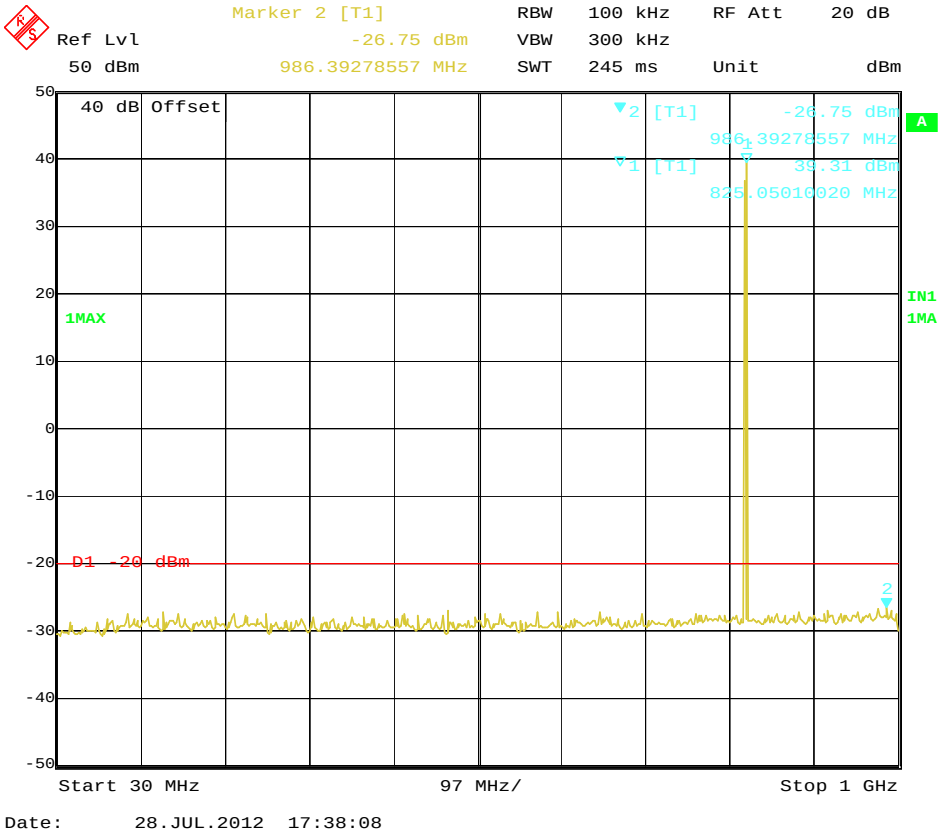


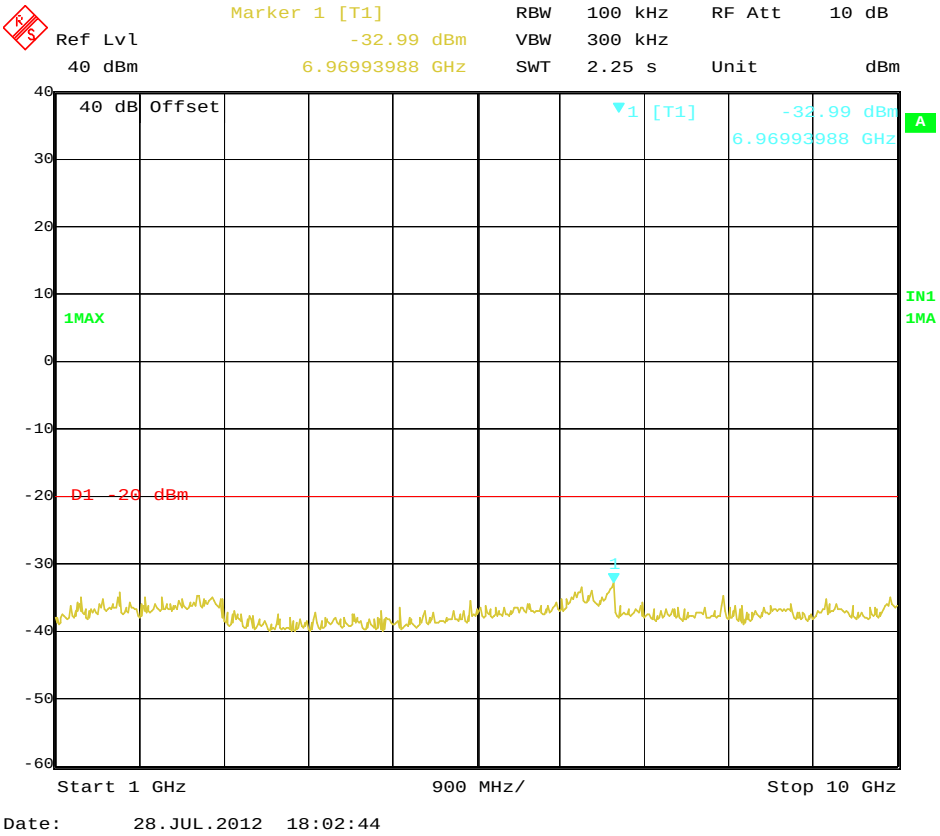
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	Middle	817.0000	974.72	-26.41	6957.97	-33.35	-20dBm
Test Results				Compliance				



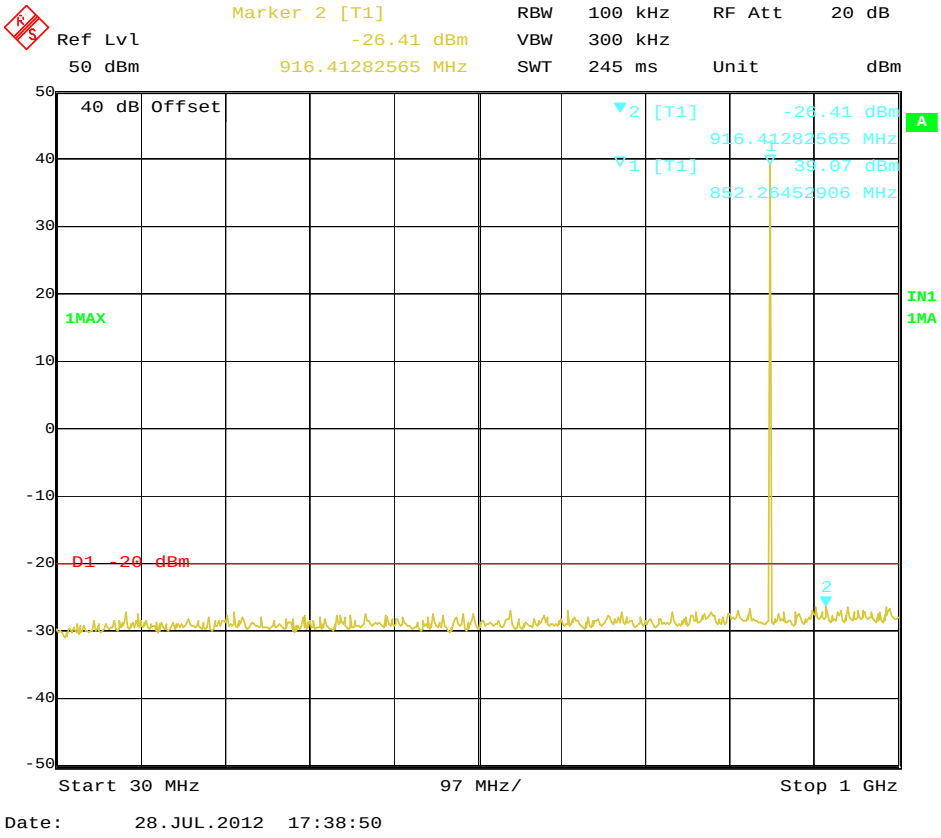


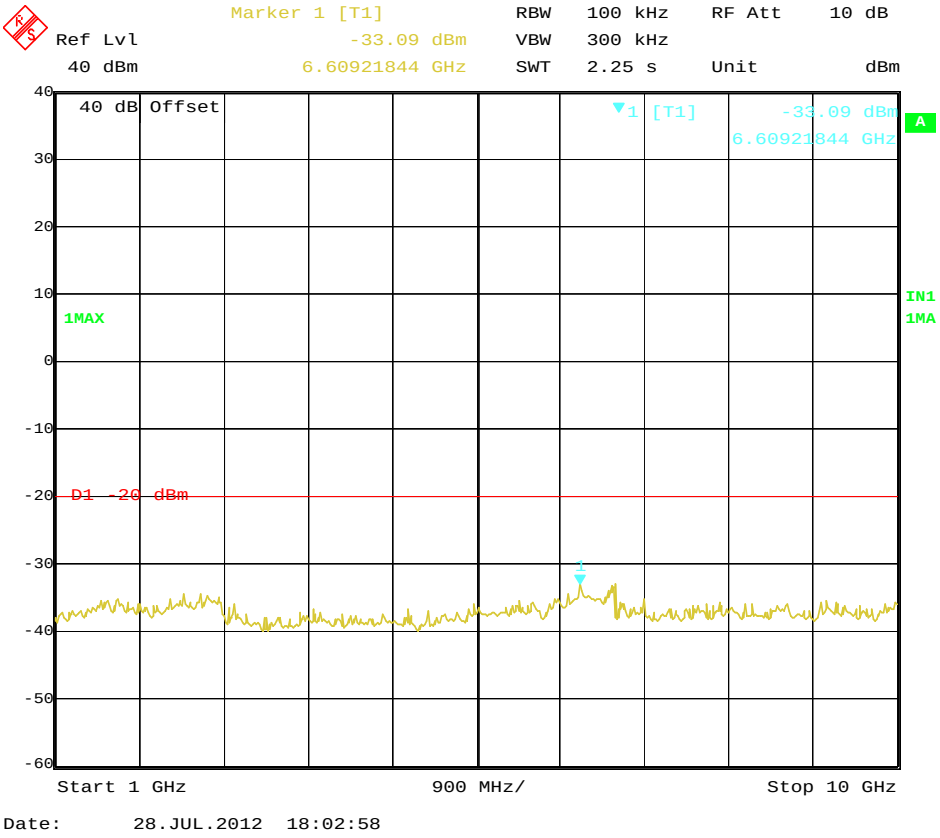
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	High	823.5000	986.39	-26.75	6969.93	-32.99	-20dBm
Test Results				Compliance				



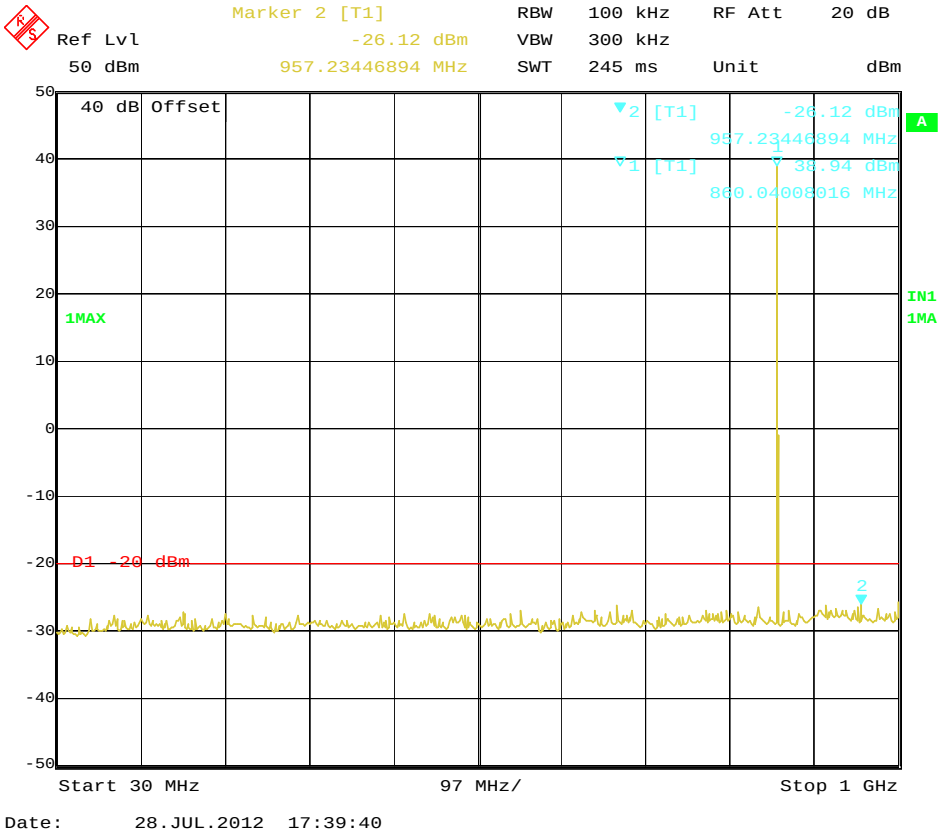


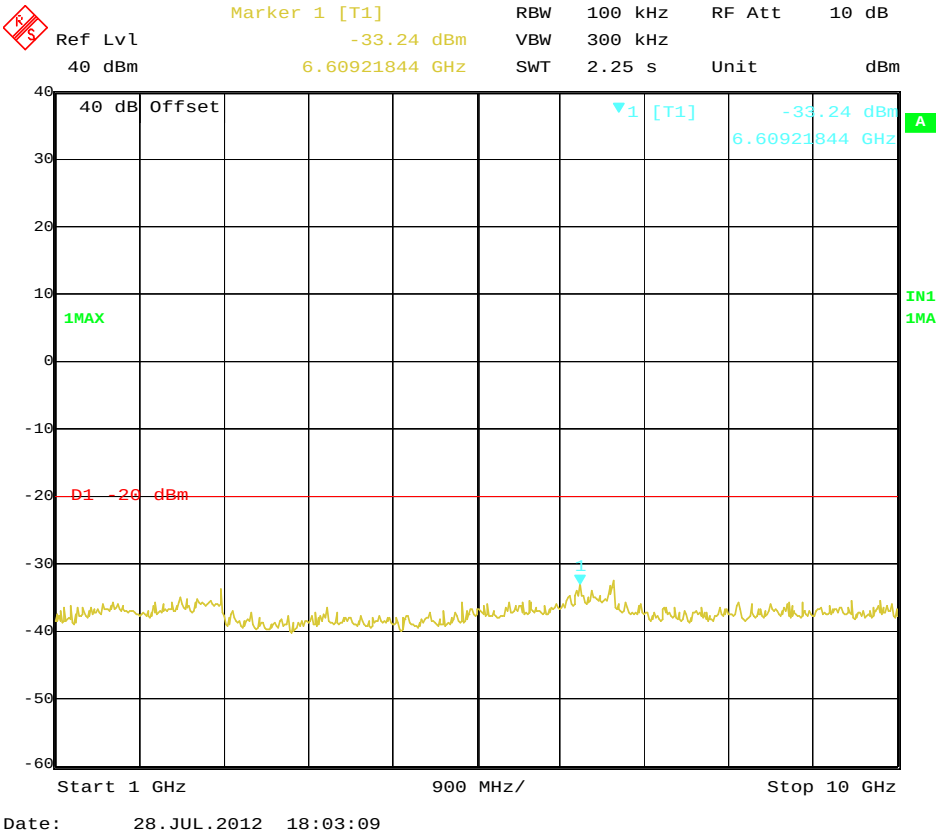
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	Low	851.5000	916.41	-26.41	6609.21	-33.09	-20dBm
Test Results				Compliance				



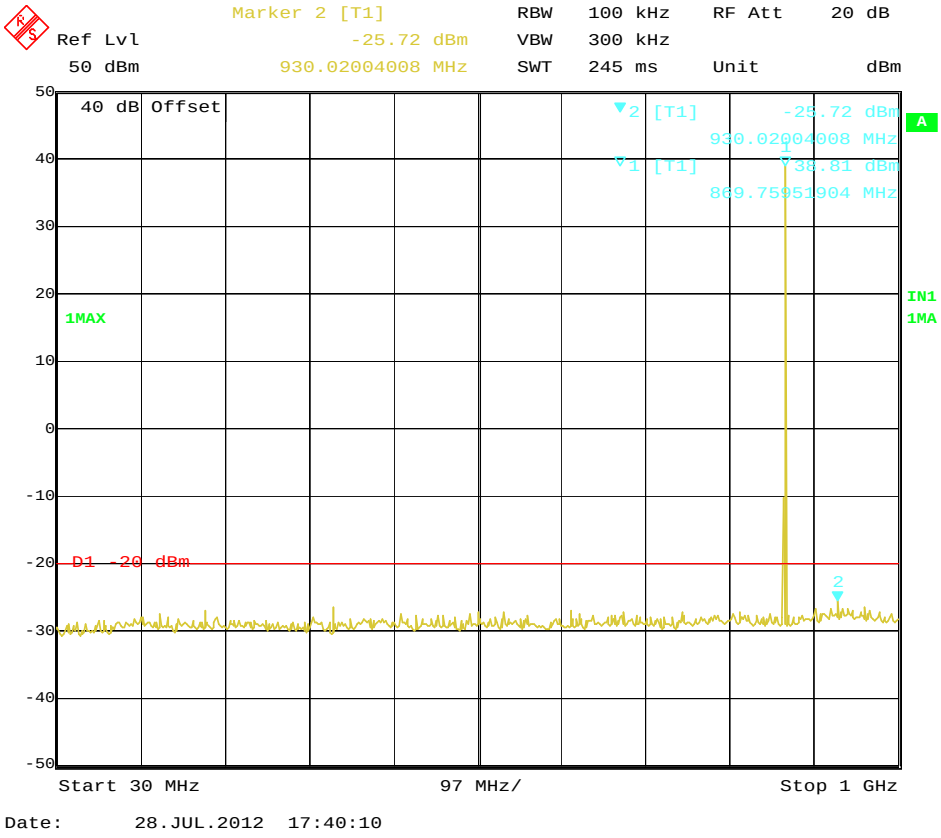


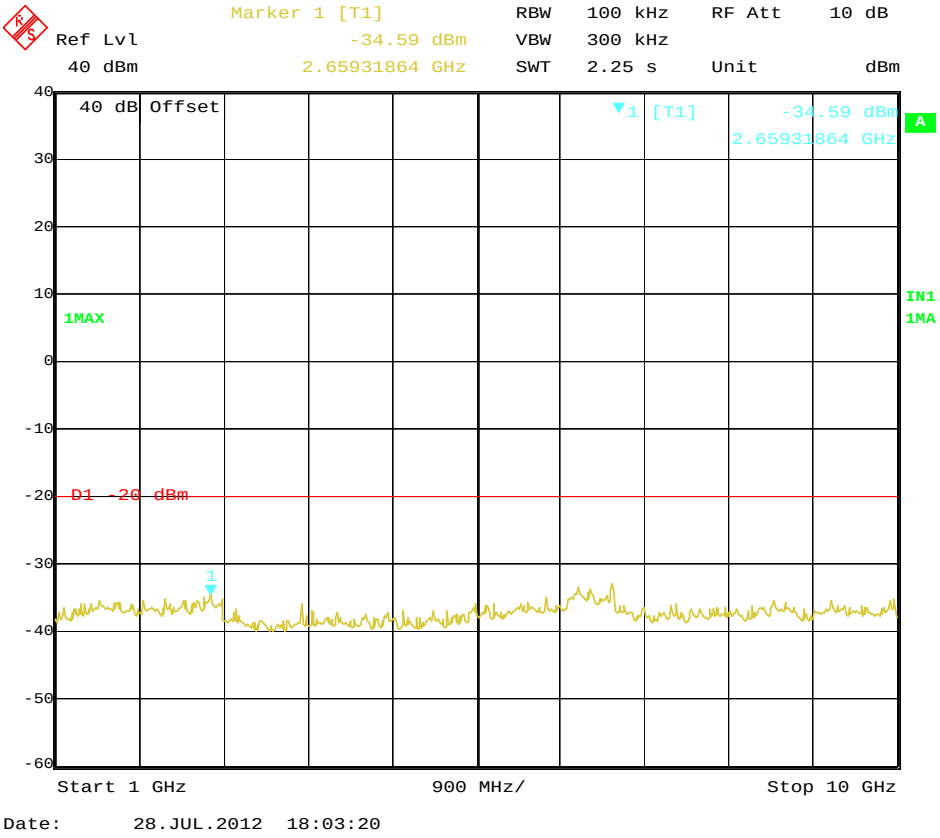
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	Middle	860.0000	957.23	-26.12	6609.21	-33.24	-20dBm
Test Results				Compliance				



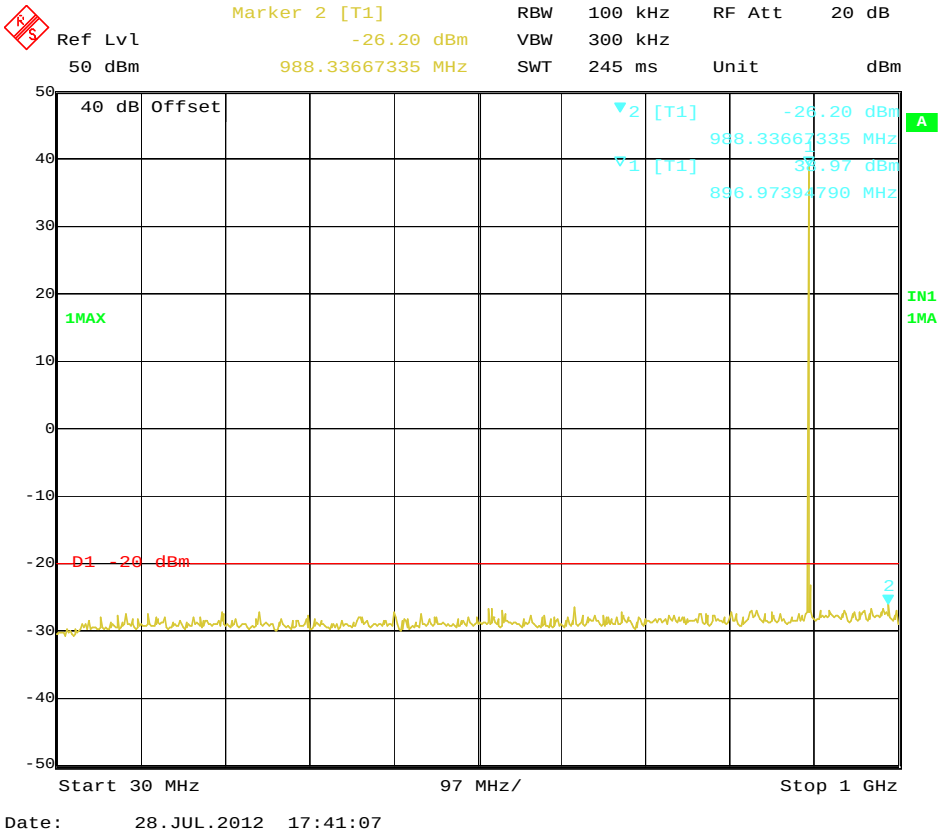


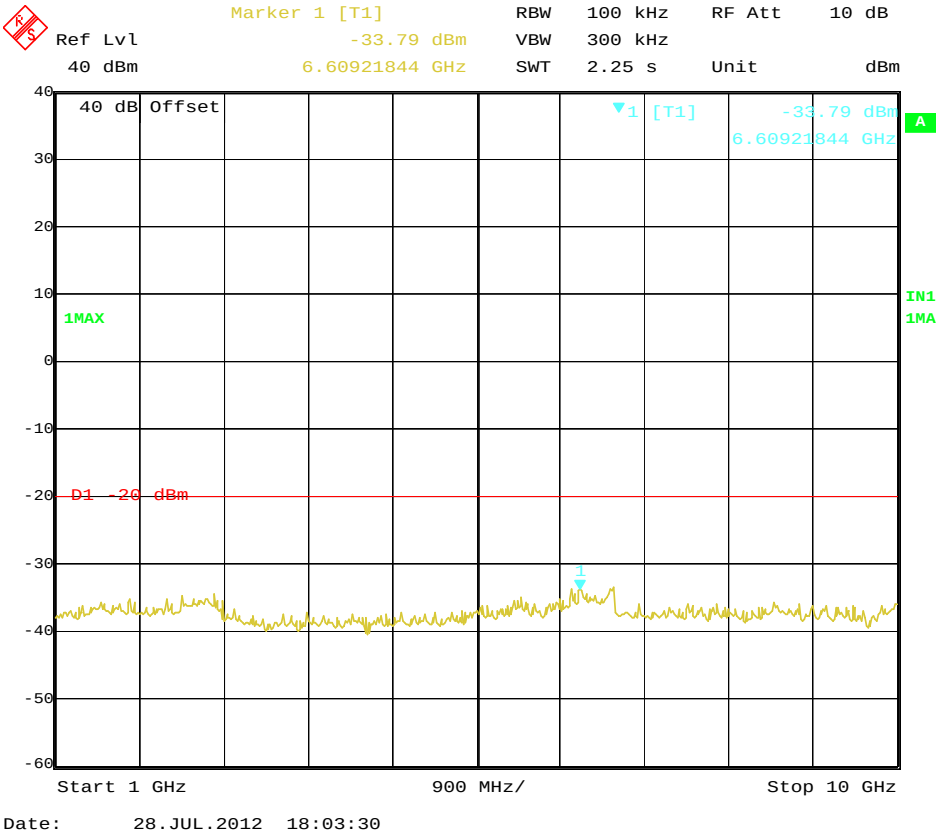
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	High	868.5000	930.02	-25.72	2659.31	-34.59	-20dBm
Test Results				Compliance				



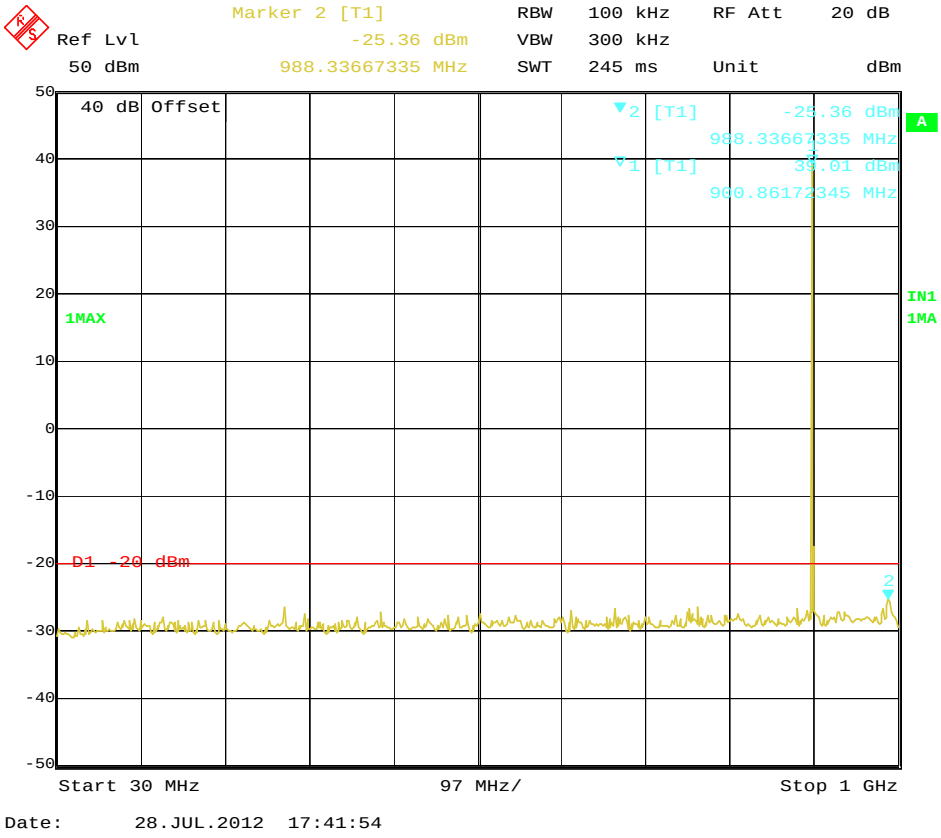


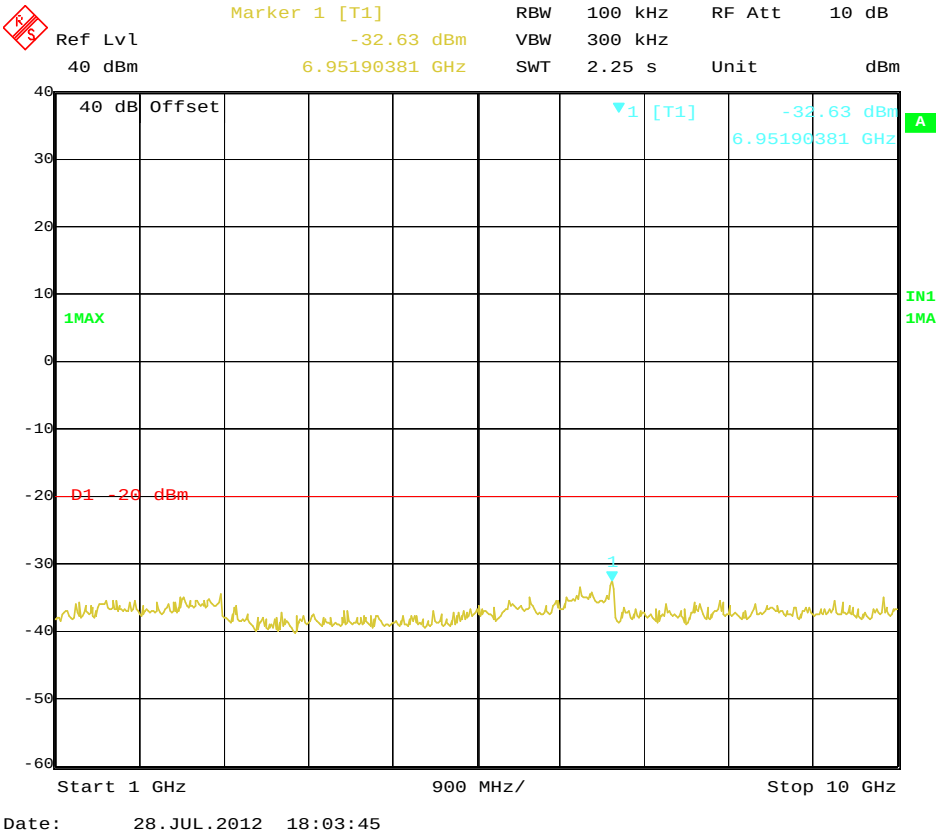
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	Low	896.5000	958.33	-26.20	6609.21	-33.79	-20dBm
Test Results				Compliance				



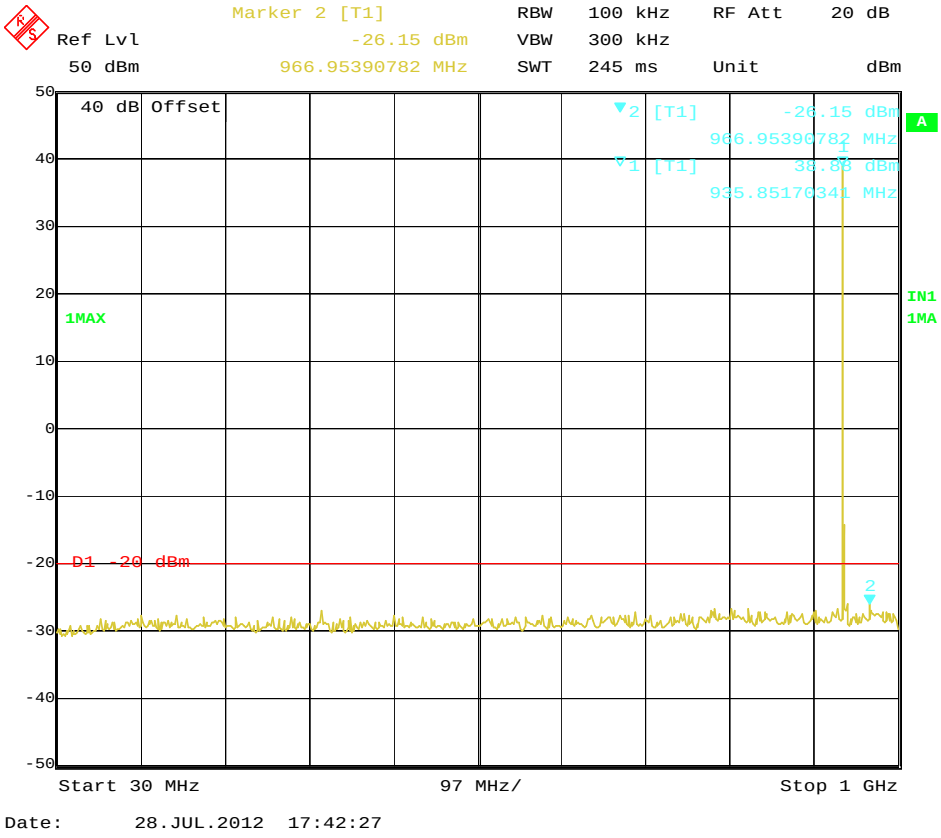


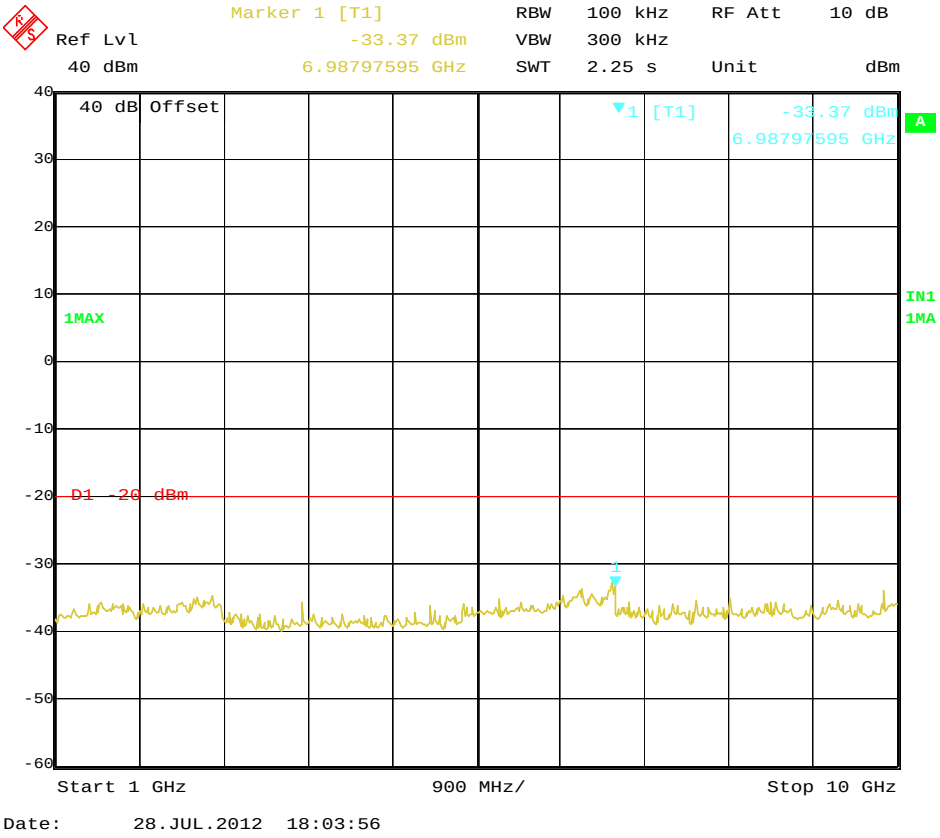
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	High	900.5000	988.33	-25.36	6951.90	-32.63	-20dBm
Test Results				Compliance				



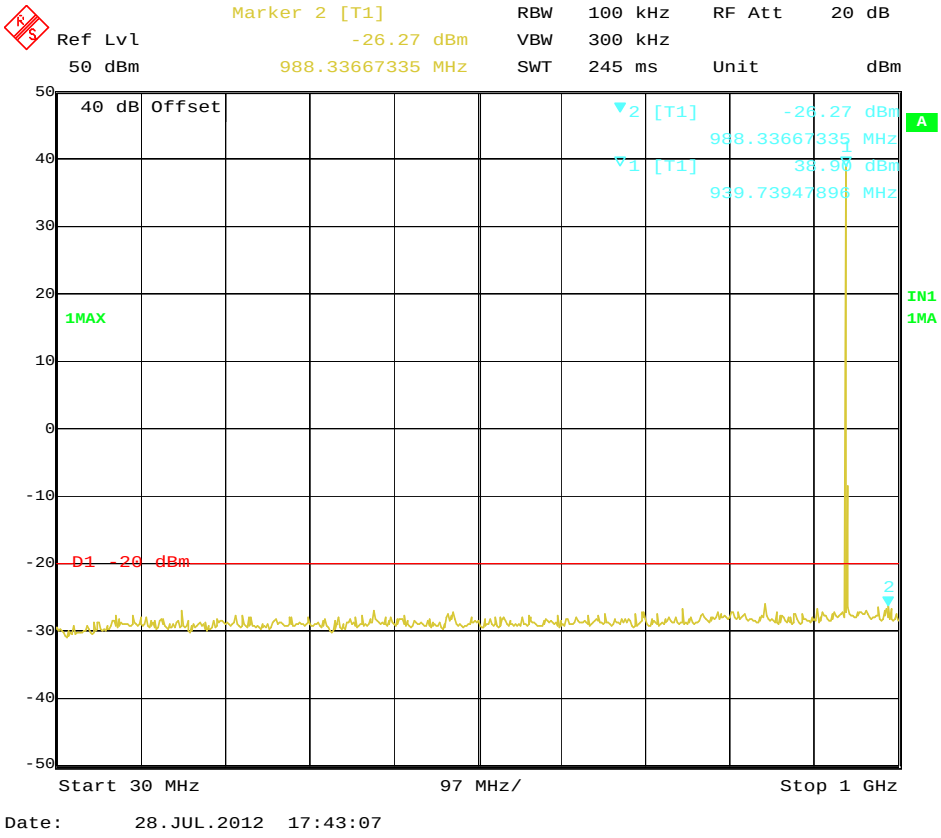


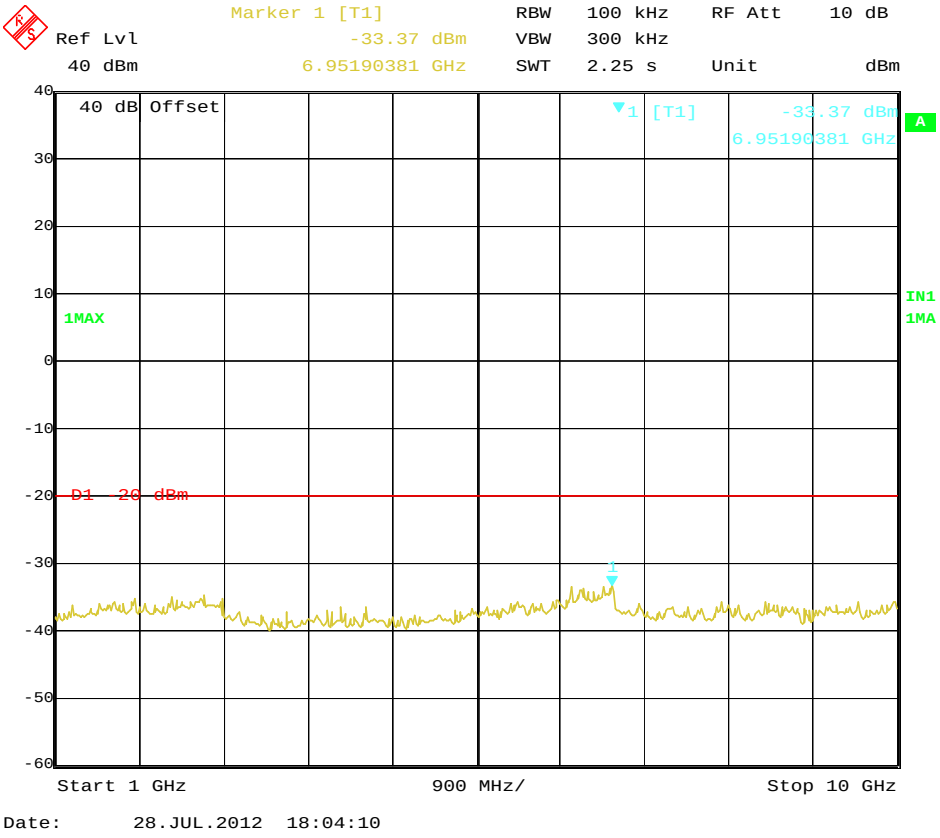
Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	Low	935.5000	966.95	-26.15	6987.97	-33.37	-20dBm
Test Results				Compliance				





Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
4FSK	12.5KHz	High	939.5000	988.33	-26.27	6951.90	-33.37	-20dBm
Test Results				Compliance				





4.5. Modulation Charcateristics

TEST APPLICABLE

According toCFR47 section 2.1047(a), for Voice Modulation Communication Equipment, the frequency response of the audio modulation circuit over a range of 100 to 5000Hz shall be measured.

TEST PROCEDURE

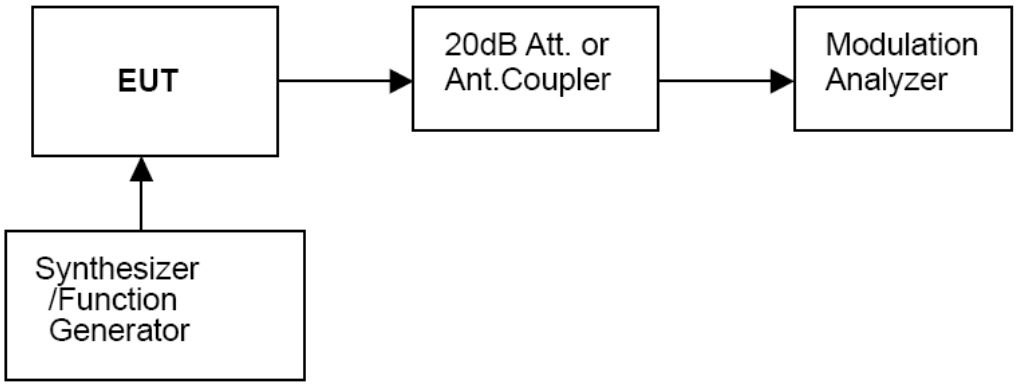
Modulation Limit

1 Configure the EUT as shown in figure 1, adjust the audio input for 60% of rated system deviation at 1 KHz using this level as a reference (0dB) and vary the input level from –20 to +20dB. Record the frequency deviation obtained as a function of the input level.
2 Repeat step 1 with input frequency changing to 300, 1004, 1500 and 2500Hz in sequence.

Audio Frequency Response

1 Configure the EUT as shown in figure 1.
2 Adjust the audio input for 20% of rated system deviation at 1 KHz using this level as a reference (0dB).
3 Vary the Audio frequency from 100 Hz to 3 KHz and record the frequency deviation.
4 Audio Frequency Response =20log10 (Deviation of test frequency/Deviation of 1 KHz reference).

TEST CONFIGURATION

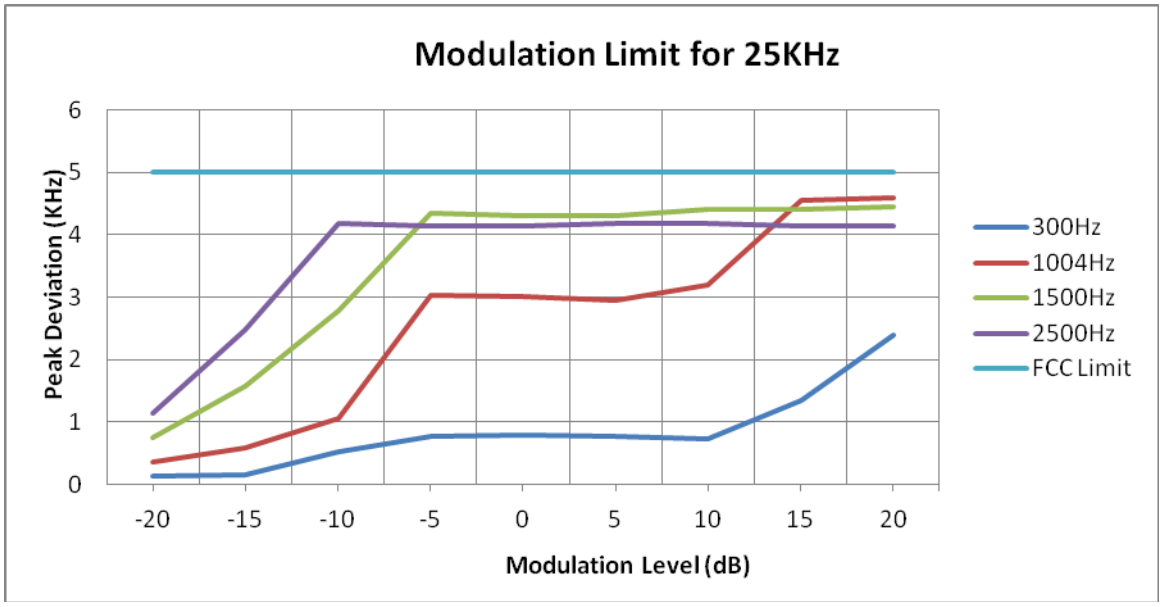


TEST RESULTS

Modulation Type: FM

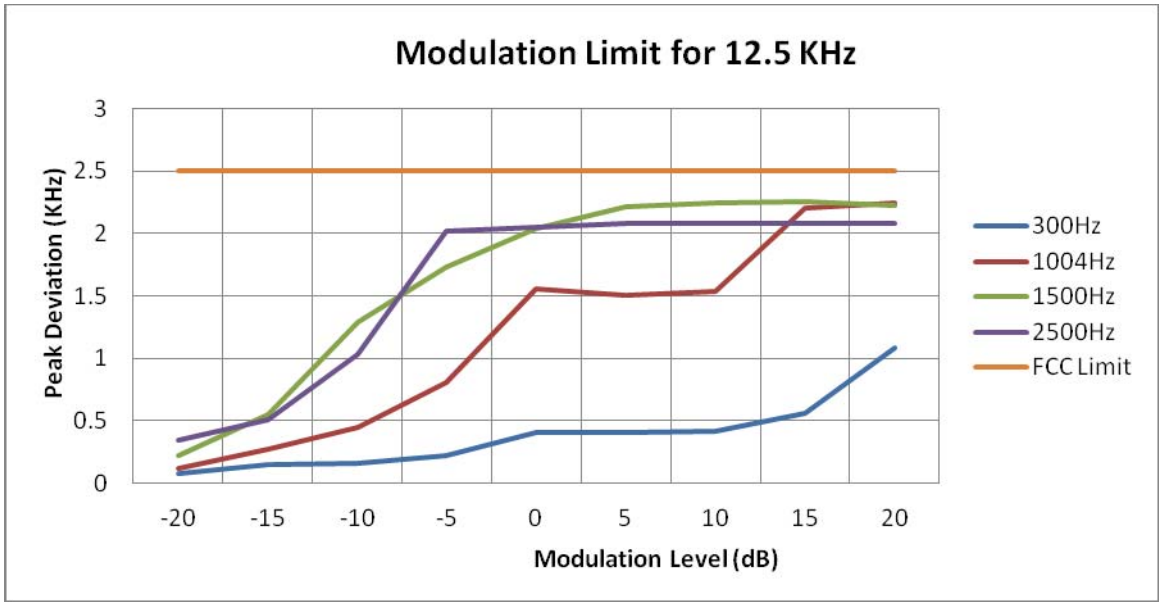
25 KHz Channel Separation

Modulation Level(dB)	Peak Freq. Deviation At 300 Hz(KHz)	Peak Freq. Deviation At 1004 Hz(KHz)	Peak Freq. Deviation At 1500 Hz(KHz)	Peak Freq. Deviation At 2500 Hz(KHz)
-20	0.13	0.35	0.75	1.15
-15	0.15	0.58	1.58	2.48
-10	0.52	1.05	2.79	4.18
-5	0.76	3.04	4.35	4.15
0	0.79	3.02	4.31	4.14
+5	0.78	2.96	4.31	4.19
+10	0.72	3.19	4.42	4.18
+15	1.35	4.55	4.42	4.15
+20	2.39	4.59	4.45	4.15



12.5 KHz Channel Separation

Modulation Level(dB)	Peak Freq. Deviation At 300 Hz(KHz)	Peak Freq. Deviation At 1004 H(KHz)	Peak Freq. Deviation At 1500 Hz(KHz)	Peak Freq. Deviation At 2500 Hz(KHz)
-20	0.08	0.12	0.22	0.34
-15	0.15	0.27	0.55	0.51
-10	0.16	0.45	1.29	1.03
-5	0.22	0.81	1.73	2.02
0	0.41	1.56	2.04	2.05
+5	0.41	1.51	2.22	2.08
+10	0.42	1.54	2.25	2.08
+15	0.56	2.21	2.26	2.08
+20	1.08	2.25	2.23	2.08



Modulation type: 4FSK

Channel bandwidth: 12.5 kHz

It is not applicable for devices which operate with the digitized voice/data modulation type.

b). Audio Frequency Response:

Rule Part No.: Part 2.1407(a) (b)

Method of Measurement:

The audio frequency response was measured in accordance with TIA/EIA Specification 603 with no exception. A curve or equivalent data showing the frequency response of the audio modulating circuit over a range of 300-3000Hz shall be submitted and Audio Post Limiter Low Pass Filter Response from 3.0 KHz to 50KHz.However, the audio frequency response should test from 100Hz to 5.0 KHz according to FCC Part 90.

Modulation Type: FM

The audio frequency response curve is show below.and

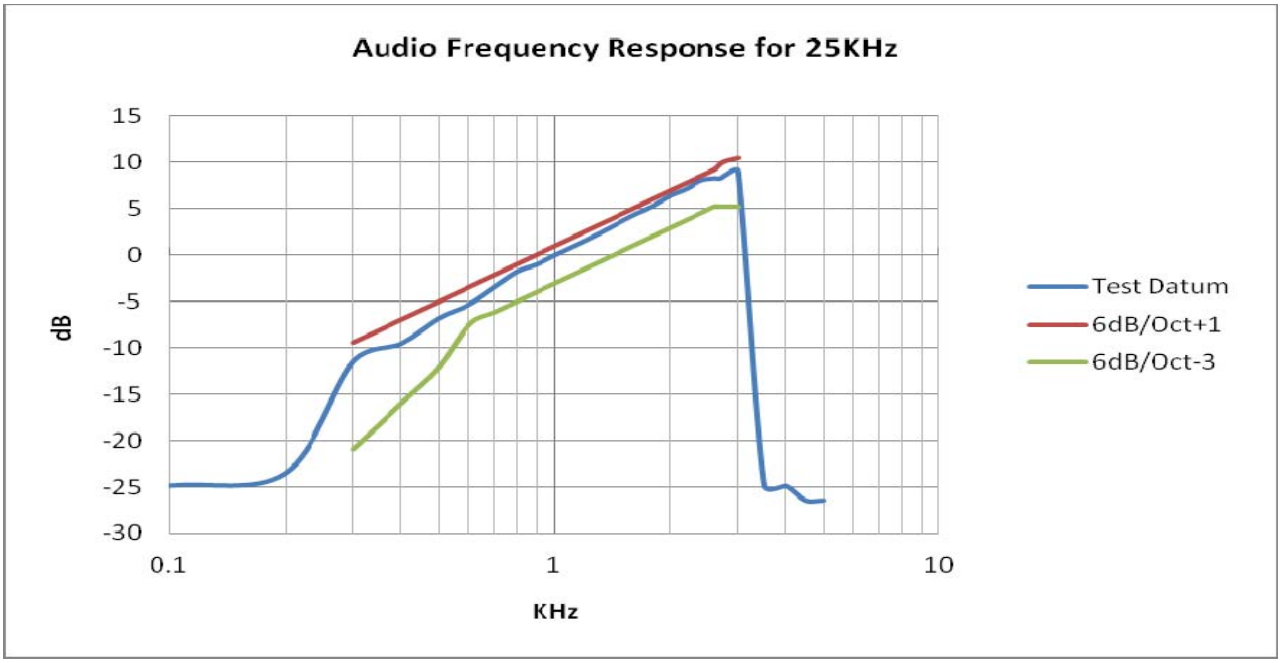
Test Audio Level (1 KHz and 20% maximum deviation) for 25 KHz channel separation is 2.28mv and 2.28mv for 12.5 KHz channel separation.

Note:

1 Not applicable to new standard. However, tests are conducted under FCC's recommendation.
2 The Audio Frequency Response is identical for 12.5 KHz and 25 KHz channel separation

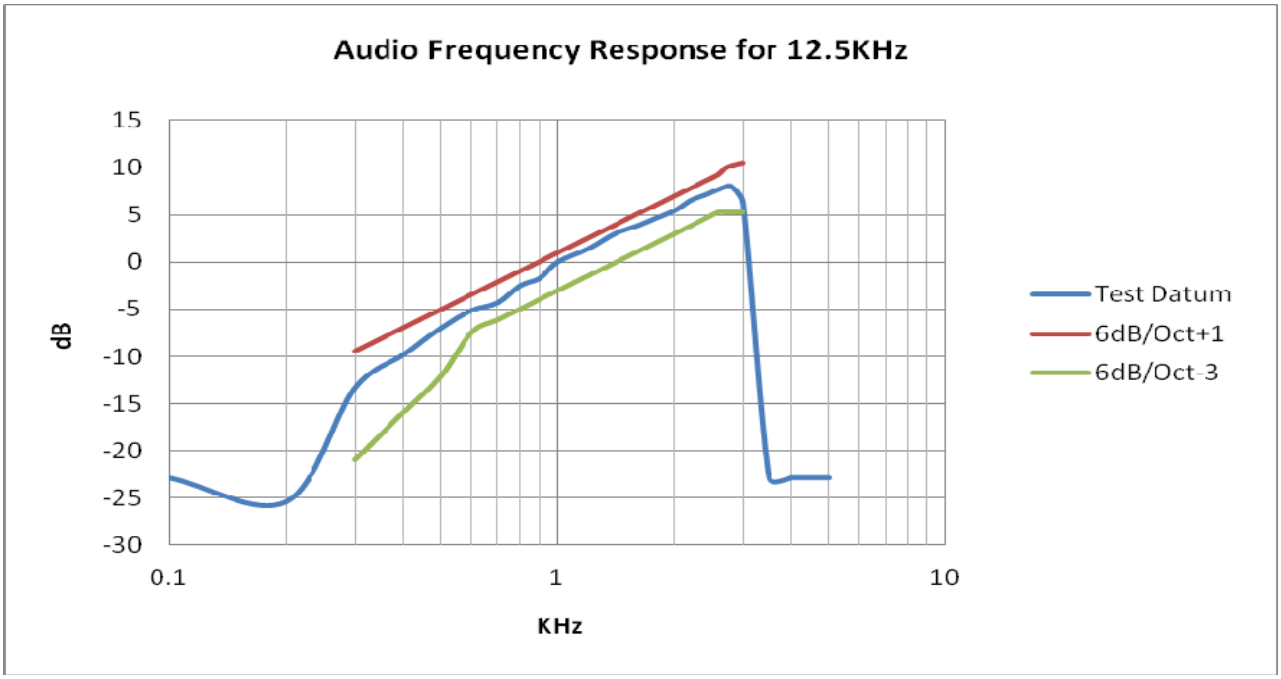
For 25 KHz

Frequency (KHz)	Frequency Deviation (KHz)	1KHz Reference Deviation (KHz)	Audio Frequency Response (dB)
0.1	0.06	1.05	-24.86
0.2	0.07	1.05	-23.52
0.3	0.28	1.05	-11.48
0.4	0.35	1.05	-9.54
0.5	0.48	1.05	-6.80
0.6	0.57	1.05	-5.31
0.7	0.71	1.05	-3.40
0.8	0.86	1.05	-1.73
0.9	0.94	1.05	-0.96
1.0	1.05	1.05	0.00
1.2	1.26	1.05	1.58
1.4	1.49	1.05	3.04
1.6	1.73	1.05	4.34
1.8	1.94	1.05	5.33
2.0	2.21	1.05	6.46
2.2	2.40	1.05	7.18
2.4	2.67	1.05	8.11
2.6	2.74	1.05	8.33
2.7	2.74	1.05	8.33
2.8	2.88	1.05	8.76
3.0	3.00	1.05	9.12
3.5	0.06	1.05	-24.86
4.0	0.06	1.05	-24.86
4.5	0.05	1.05	-26.44
5.0	0.05	1.05	-26.44



For 12.5 KHz

Frequency (KHz)	Frequency Deviation (KHz)	1KHz Refenerce Deviation (KHz)	Audio Frequency Response (dB)
0.1	0.04	0.56	-22.92
0.2	0.03	0.56	-25.42
0.3	0.12	0.56	-13.38
0.4	0.18	0.56	-9.86
0.5	0.25	0.56	-7.00
0.6	0.31	0.56	-5.14
0.7	0.34	0.56	-4.33
0.8	0.42	0.56	-2.50
0.9	0.46	0.56	-1.71
1.0	0.56	0.56	0.00
1.2	0.66	0.56	1.43
1.4	0.79	0.56	2.99
1.6	0.87	0.56	3.83
1.8	0.96	0.56	4.68
2.0	1.05	0.56	5.46
2.2	1.19	0.56	6.55
2.4	1.27	0.56	7.11
2.6	1.36	0.56	7.71
2.7	1.40	0.56	7.96
2.8	1.41	0.56	8.02
3.0	1.15	0.56	6.25
3.5	0.04	0.56	-22.92
4.0	0.04	0.56	-22.92
4.5	0.04	0.56	-22.92
5.0	0.04	0.56	-22.92



Modulation type: 4FSK

Channel bandwidth: 12.5 kHz

It is not applicable for devices which operate with the digitized voice/data modulation type.

4.6. Frequency Stability Test

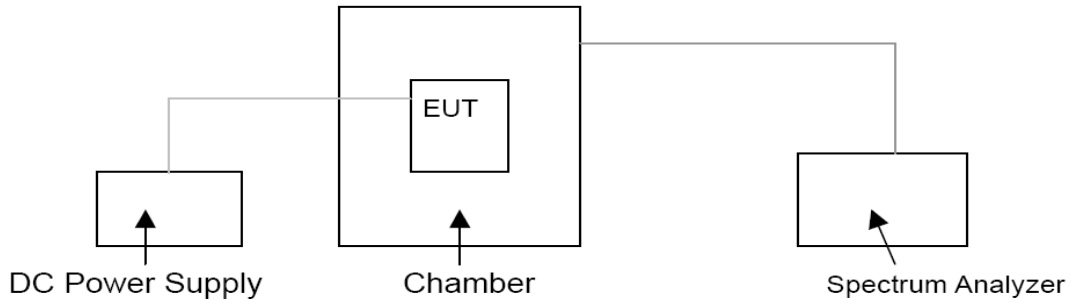
TEST APPLICABLE

1 According to FCC Part 2 Section 2.1055 (a)(1), the frequency stability shall be measured with variation of ambient temperature from -30℃ to +60℃ centigrade.
2 According to FCC Part 2 Section 2.1055 (a) (2), for battery powered equipment, the frequency stability shall be measured with reducing primary supply voltage to the battery operating end point, which is specified by the manufacture.
3 Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.
4 According to §90.213, the frequency stability limit is 2.5 ppm for 806-809MHz/851-854MHz/896-901MHz/935-940MHz and 1.5ppm for 809-824MHz/854-869MHz.
5 According to Section 5.3 of RSS-119, the frequency stability limit is 1.5 ppm for 806-809MHz/851-854MHz/896-901MHz/935-940MHz and 809-824MHz/854-869MHz of 12.5KHz channel separation while 2.5ppm for 806-824MHz/851-869MHz of 25KHz channel separation.

TEST PROCEDURE

The EUT was set in the climate chamber and connected to an external DC power supply. The RF output was directly connected to Spectrum Analyzer ESI 26. The coupling loss of the additional cables was recorded and taken in account for all the measurements. After temperature stabilization (approx. 20 min for each stage), the frequency for the lower, the middle and the highest frequency range was recorded. For Frequency stability Vs. Voltage the EUT was connected to a DC power supply and the voltage was adjusted in the required ranges. The result was recorded.

TEST CONFIGURATION



TEST LIMITS

According to 90.213, Transmitters used must have minimum frequency stability as specified in the following table.

Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
Below 25	[1,2,3] 100	100	200
25–50	20	20	50
72–76	5		50
150–174	[5,11] 5	[6] 5	[4,6] 50
216–220	1.0		1.0
220–222 [12]	0.1	1.5	1.5
421–512	[7,11,14] 2.5	[8] 5	[8] 5
806–809	[14] 1.0	1.5	1.5
809–824	[14] 1.5	2.5	2.5
851–854	1.0	1.5	1.5
854–869	1.5	2.5	2.5
896–901	[14] 0.1	1.5	1.5
902–928	2.5	2.5	2.5
902–928 [13]	2.5	2.5	2.5
929–930	1.5		
935–940	0.1	1.5	1.5
1427–1435	[9] 300	300	300
Above 2450 [10]			

According to section 5.3, Transmitters used must have minimum frequency stability as specified in the following table.

Frequency Band (MHz)	Channel Spacing (kHz)	Frequency Stability (ppm)		
		Base/Fixed	Mobile Station	
			>2 watts	≤ 2 watts
27.41-28 and 29.7-50	20	20	20	50
72-76	20	5	20	50
138-174	30	5	5	5
	15	2.5	5	5
	7.5	1	2	5
217-218 and 219-220	12.5	1	5	5
220-222 (Note 1)	5	0.1	1.5	1.5
406.1-430 and 450-470 (Note 6)	25 (Note 2)	0.5	1	1
	25	2.5	5	5
	12.5	1.5	2.5	2.5
	6.25	0.5	1	1
764-776 and 794-806 (Note 3)	6.25 12.5 25	0.1	0.4 (Note 4)	0.4 (Note 4)
	50	1	1.25 (Note 5)	1.25 (Note 5)
806-821/851-866 and 821-824/866-869 (Note 6)	25 (Note2)	0.1	0.1	0.1
	25	1.5	2.5	2.5
	12.5	1	1.5	1.5
896-901/935-940 (Note 6)	12.5	0.1	1.5	1.5
929-930/931-932	25	1.5	N/A	N/A
928-929/952-953 and 932-932.5/941-941.5	25	1.5	N/A	N/A
	12.5	1	3 (for remote station)	N/A
932.5-935/941.5-944	25	2.5	N/A	N/A
	12.5	2.5	N/A	N/A

TEST RESULTS

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)		
		Voltage(V)	Temp(℃)	806.5MHz	817.0MHz	823.5MHz
Analog/FM	25KHz	13.60	-30	1.05	1.02	0.92
			-20	1.02	1.06	0.96
			-10	0.93	0.91	0.84
			0	0.86	0.72	0.77
			10	0.72	0.66	0.65
			20	0.62	0.62	0.68
			30	0.65	0.64	0.65
			40	0.76	0.75	0.62
			50	0.89	0.86	0.71
		11.56 (85% Rated)	20	0.64	0.75	0.61
		15.64 (115% Rated)	20	0.65	0.68	0.62
Limit for FCC				1.50	2.50	2.50
Limit for IC				2.50	2.50	2.50
Conclusion			Complies			

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)		
		Voltage(V)	Temp(℃)	851.5MHz	860.0MHz	868.5MHz
Analog/FM	25KHz	13.60	-30	0.96	0.98	0.92
			-20	0.92	0.85	0.85
			-10	0.85	0.82	0.88
			0	0.78	0.72	0.74
			10	0.62	0.53	0.61
			20	0.51	0.56	0.52
			30	0.56	0.55	0.56
			40	0.62	0.65	0.52
			50	0.78	0.64	0.63
		11.56 (85% Rated)	20	0.54	0.56	0.51
		15.64 (115% Rated)	20	0.65	0.55	0.55
Limit for FCC				1.50	2.50	2.50
Limit for IC				2.50	2.50	2.50
Conclusion			Complies			

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)		
		Voltage(V)	Temp(℃)	806.5MHz	817.0MHz	823.5MHz
Analog/FM	12.5KHz	13.60	-30	1.02	1.02	0.98
			-20	1.05	1.02	0.95
			-10	0.99	0.95	0.82
			0	0.85	0.86	0.73
			10	0.79	0.62	0.76
			20	0.67	0.62	0.54
			30	0.62	0.62	0.64
			40	0.75	0.72	0.65
			50	0.81	0.82	0.78
		11.56 (85% Rated)	20	0.65	0.66	0.62
		15.64 (115% Rated)	20	0.65	0.69	0.61
Limit for FCC				1.50	2.50	2.50
Limit for IC				1.50	1.50	1.50
Conclusion			Complies			

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)		
		Voltage(V)	Temp(℃)	851.5MHz	860.0MHz	868.5MHz
Analog/FM	12.5KHz	13.60	-30	0.95	0.92	0.96
			-20	0.98	0.95	0.92
			-10	0.95	0.86	0.88
			0	0.71	0.79	0.75
			10	0.63	0.65	0.61
			20	0.56	0.52	0.56
			30	0.55	0.51	0.59
			40	0.69	0.65	0.62
			50	0.75	0.66	0.61
		11.56 (85% Rated)	20	0.59	0.65	0.68
		15.64 (115% Rated)	20	0.55	0.52	0.66
Limit for FCC				1.50	2.50	2.50
Limit for IC				1.50	1.50	1.50
Conclusion			Complies			

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)	
		Voltage(V)	Temp(℃)	896.5MHz	900.5MHz
Analog/FM	12.5KHz	13.60	-30	0.86	0.85
			-20	0.82	0.88
			-10	0.64	0.75
			0	0.58	0.61
			10	0.45	0.52
			20	0.44	0.43
			30	0.45	0.45
			40	0.55	0.56
			50	0.65	0.69
		11.56 (85% Rated)	20	0.46	0.44
		15.64 (115% Rated)	20	0.49	0.45
Limit for FCC				1.50	1.50
Limit for IC				1.50	1.50
Conclusion			Complies		

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)	
		Voltage(V)	Temp(℃)	935.5MHz	939.5MHz
Analog/FM	12.5KHz	13.60	-30	0.80	0.76
			-20	0.72	0.79
			-10	0.63	0.65
			0	0.51	0.58
			10	0.42	0.45
			20	0.45	0.37
			30	0.46	0.32
			40	0.45	0.41
			50	0.66	0.62
		11.56 (85% Rated)	20	0.42	0.35
		15.64 (115% Rated)	20	0.56	0.32
Limit for FCC				1.50	1.50
Limit for IC				1.50	1.50
Conclusion			Complies		

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)		
		Voltage(V)	Temp(℃)	806.5MHz	817.0MHz	823.5MHz
Digital/4FSK	12.5KHz	13.60	-30	1.00	1.02	1.02
			-20	0.92	0.92	0.91
			-10	0.95	0.81	0.82
			0	0.86	0.81	0.71
			10	0.78	0.75	0.73
			20	0.60	0.65	0.62
			30	0.57	0.66	0.62
			40	0.56	0.79	0.61
			50	0.86	0.88	0.72
		11.56 (85% Rated)	20	0.68	0.61	0.62
		15.64 (115% Rated)	20	0.65	0.62	0.61
Limit for FCC				1.50	2.50	2.50
Limit for IC				1.50	1.50	1.50
Conclusion			Complies			

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)		
		Voltage(V)	Temp(℃)	851.5MHz	860.0MHz	868.5MHz
Digital/4FSK	12.5KHz	13.60	-30	0.96	0.98	0.95
			-20	0.95	0.95	0.88
			-10	0.88	0.85	0.85
			0	0.88	0.74	0.78
			10	0.79	0.65	0.65
			20	0.55	0.52	0.54
			30	0.54	0.56	0.51
			40	0.62	0.62	0.65
			50	0.71	0.75	0.76
		11.56 (85% Rated)	20	0.66	0.59	0.65
		15.64 (115% Rated)	20	0.69	0.69	0.68
Limit for FCC				1.50	2.50	2.50
Limit for IC				1.50	1.50	1.50
Conclusion			Complies			

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)	
		Voltage(V)	Temp(℃)	896.5MHz	900.5MHz
Digital/4FSK	12.5KHz	13.60	-30	0.84	0.84
			-20	0.81	0.84
			-10	0.72	0.78
			0	0.65	0.64
			10	0.52	0.54
			20	0.46	0.45
			30	0.42	0.45
			40	0.55	0.58
			50	0.65	0.68
		11.56 (85% Rated)	20	0.41	0.48
		15.64 (115% Rated)	20	0.41	0.45
Limit for FCC				1.50	1.50
Limit for IC				1.50	1.50
Conclusion			Complies		

Modulation Type	Channel Separation	Test conditions		Frequency error (ppm)	
		Voltage(V)	Temp(℃)	935.5MHz	939.5MHz
Digital/4FSK	12.5KHz	13.60	-30	0.85	0.85
			-20	0.72	0.75
			-10	0.65	0.68
			0	0.56	0.58
			10	0.59	0.48
			20	0.45	0.39
			30	0.48	0.38
			40	0.45	0.45
			50	0.62	0.81
		11.56 (85% Rated)	20	0.45	0.38
		15.64 (115% Rated)	20	0.48	0.38
Limit for FCC				1.50	1.50
Limit for IC				1.50	1.50
Conclusion			Complies		

4.7. Maximum Transmitter Power

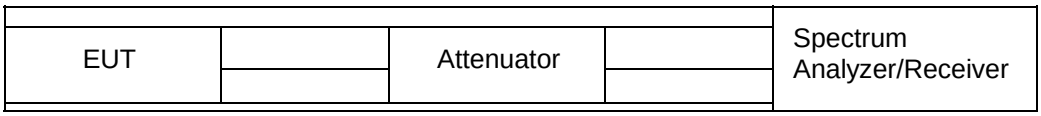
TEST APPLICABLE

Per FCC «2.1046 and «90.205: Maximum ERP is dependent upon the station's antenna HAAT and required service area.
Per RSS-119 Section 5.4 and 5.4.1: The output power shall be within ±1.0 dB of the manufacturer's rated power. Typical transmitter output powers are 110 watts for base and/or fixed stations (paging transmitters excepted), and 30 watts for mobile stations. Higher powers may be certified, but it should be noted that mobile stations are normally only licensed up to 30 watts. See the SRSP relevant to the operating frequency for equipment power limits.

TEST PROCEDURE

Measurements shall be made to establish the radio frequency power delivered by the transmitter the standard output termination. The power output shall be monitored and recorded and no adjustment shall be made to the transmitter after the test has begun, except as noted bellow:
If the power output is adjustable, measurements shall be made for the highest and lowest power levels.
The EUT connect to the Receiver through 20 dB attenuator.
Measurement with Spectrum Analyzer FSP40 or Aglient E4407B conducted, external power supply with 13.60 V stabilized supply voltage.

TEST CONFIGURATION



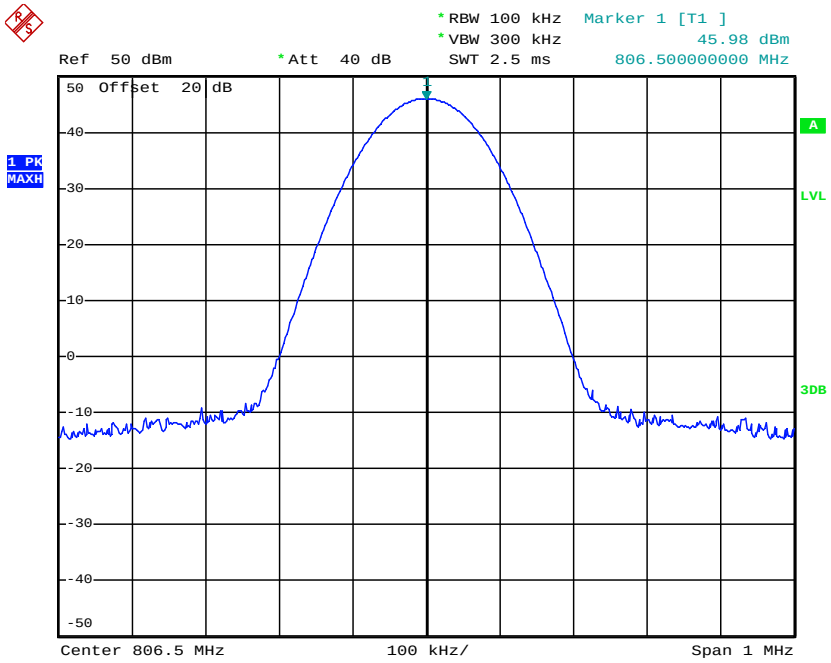
The EUT was directly connected to a RF Communication Test set by a 20 dB attenuator

TEST RESULTS

Frequency Range (MHz)	Modulation Type	Channel Separation (KHz)	Test Channel	Maximum Output Power Test Results (dBm)	
				Rated High Power	Rated Low Power
806-825	Analog/FM	25	Low	45.98	40.27
			Middle	46.03	40.00
			High	46.11	40.04
		12.5	Low	46.01	40.37
			Middle	45.97	40.06
			High	46.10	40.08
	Digital/4FSK	12.5	Low	46.18	40.66
			Middle	46.16	40.39
			High	46.14	40.39
851-870	Analog/FM	25	Low	46.20	39.85
			Middle	46.13	40.24
			High	46.14	40.09
		12.5	Low	46.18	39.92
			Middle	46.18	40.00
			High	46.16	40.09
	Digital/4FSK	12.5	Low	46.18	40.17
			Middle	46.18	40.15
			High	46.12	40.27
896-902	Analog/FM	12.5	Low	45.47	40.09
			High	45.49	40.20
	Digital/4FSK		Low	45.50	40.39
			High	45.46	40.33
935-941	Analog/FM	12.5	Low	45.14	40.24
			High	44.96	40.20
	Digital/4FSK		Low	45.23	40.38
			High	45.40	40.24
Limit	FCC:The limit is dependent upon the station's antenna HAAT and required service area.				
	IC:The output power shall be within ±1.0 dB of the manufacturer's rated power.				
Test Results	Compliance				

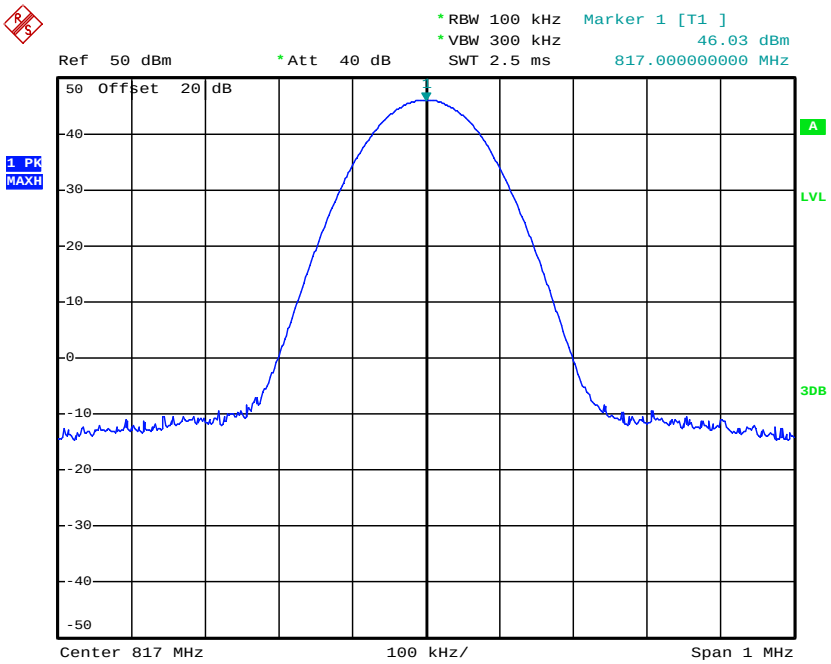
Plots of Maximum Transmitter Power Measurement

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	806.5000	35	45.98	Varies	45.44±1	Complicance



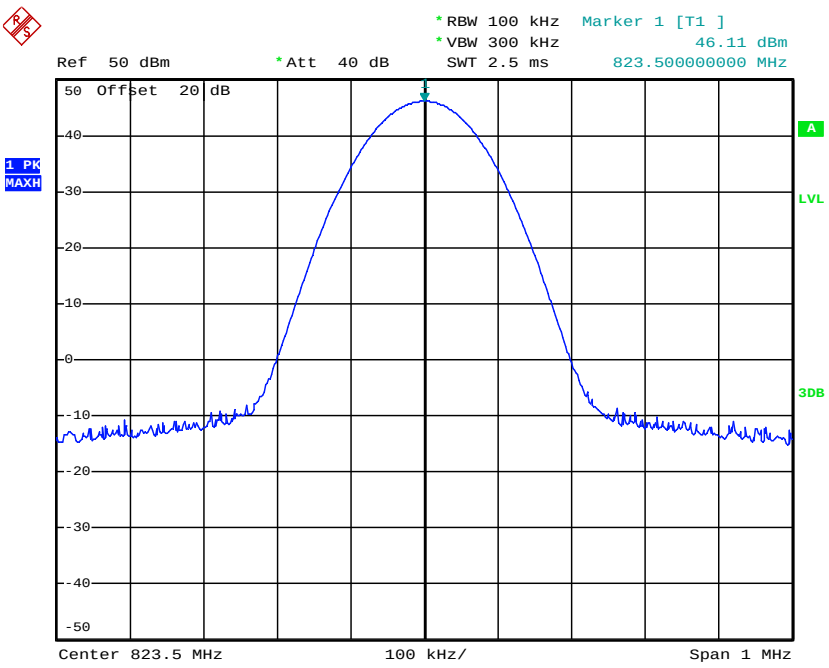
Date: 24.JUL.2012 11:07:23

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	817.0000	35	46.03	Varies	45.44±1	Complicance



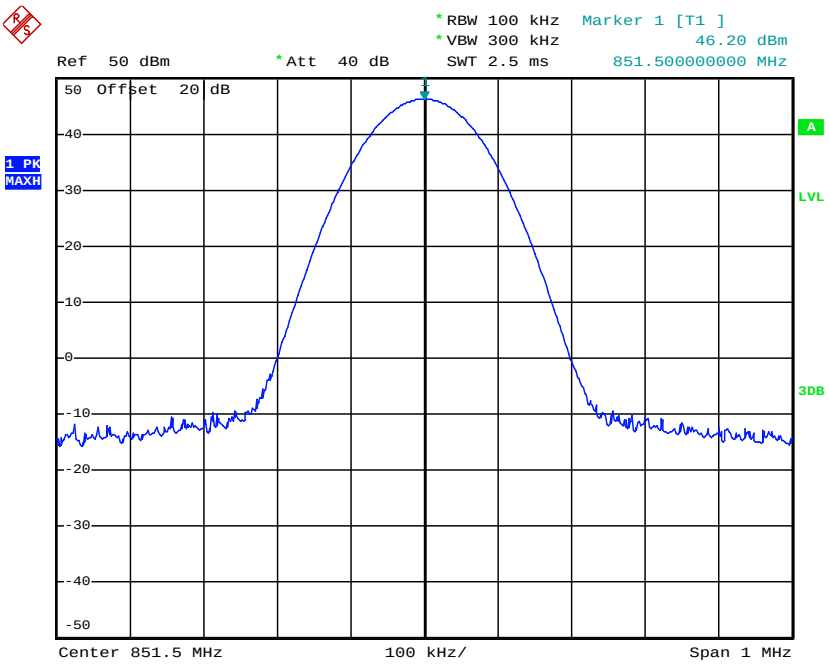
Date: 24.JUL.2012 11:08:47

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	823.5000	35	46.11	Varies	45.44±1	Complicance



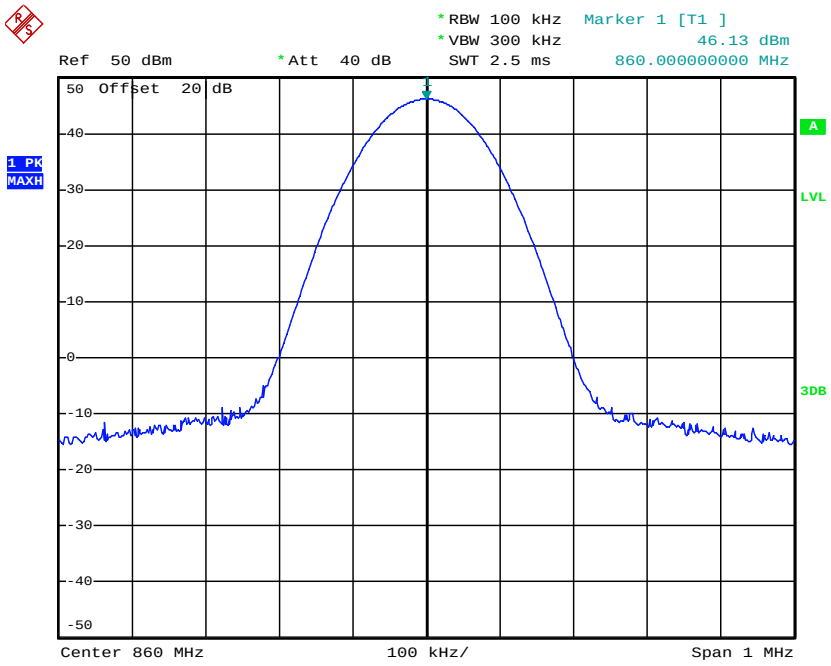
Date: 24.JUL.2012 11:10:00

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	851.5000	35	46.20	Varies	45.44±1	Complicance



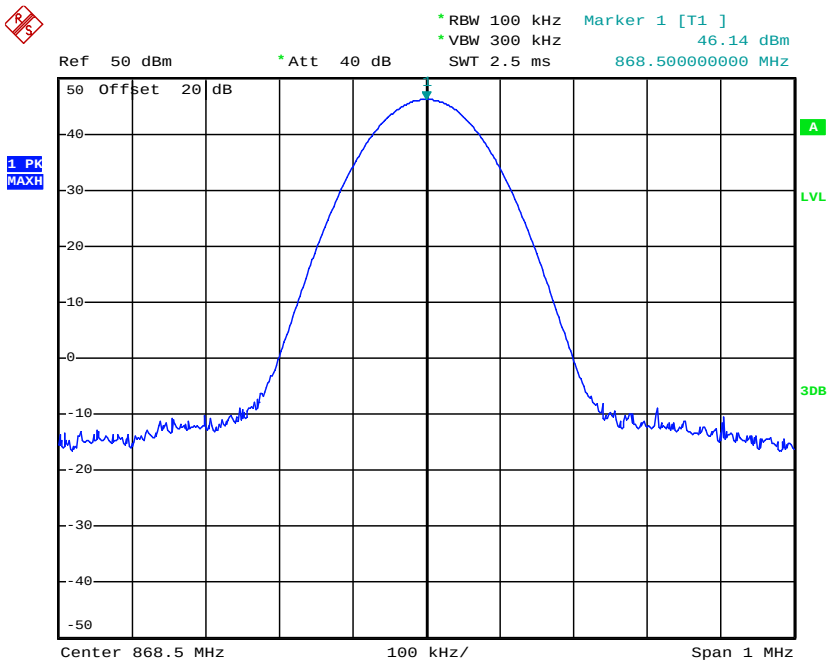
Date: 24.JUL.2012 11:12:15

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	860.0000	35	46.13	Varies	45.44±1	Complicance



Date: 24.JUL.2012 11:13:06

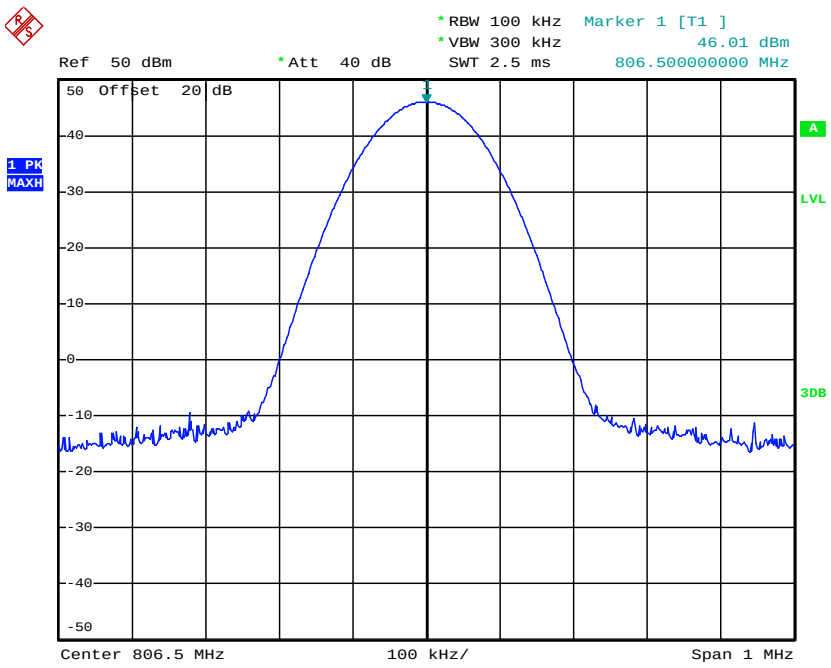
Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	868.5000	35	46.14	Varies	45.44±1	Complicance



Date: 24.JUL.2012 11:29:57

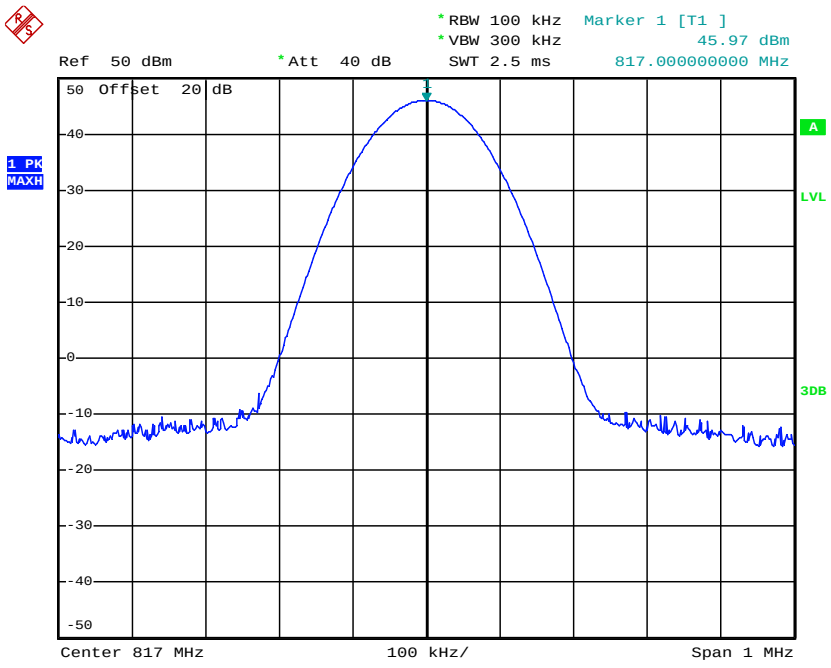
\

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	806.5000	35	46.01	Varies	45.44±1	Complicance



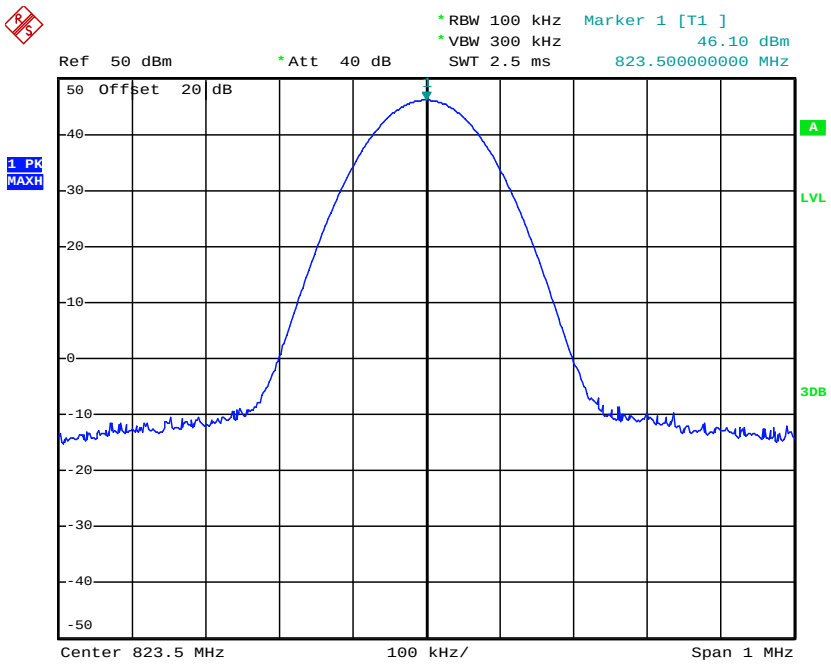
Date: 24.JUL.2012 10:43:20

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	817.0000	35	45.97	Varies	45.44±1	Complicance



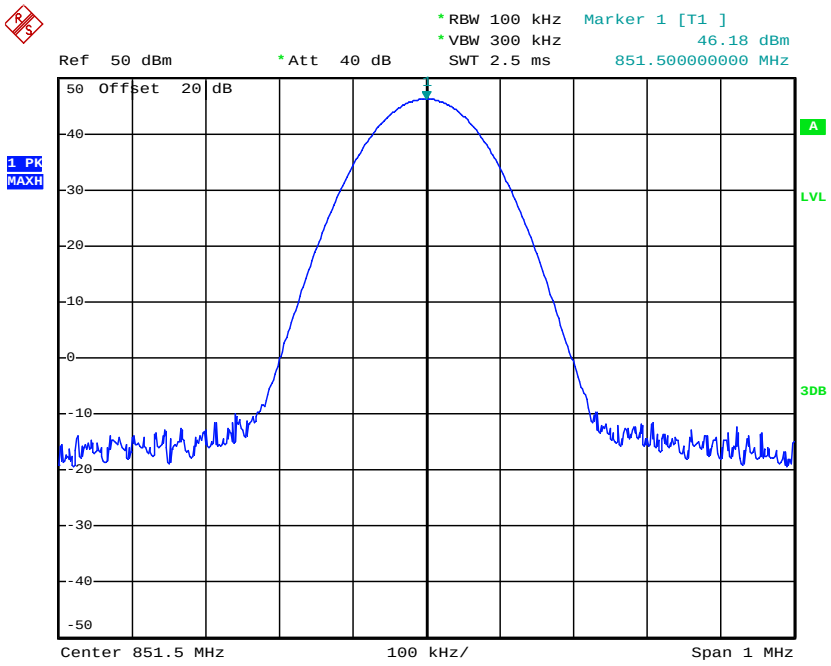
Date: 24.JUL.2012 10:45:31

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	823.5000	35	46.10	Varies	45.44±1	Complicance



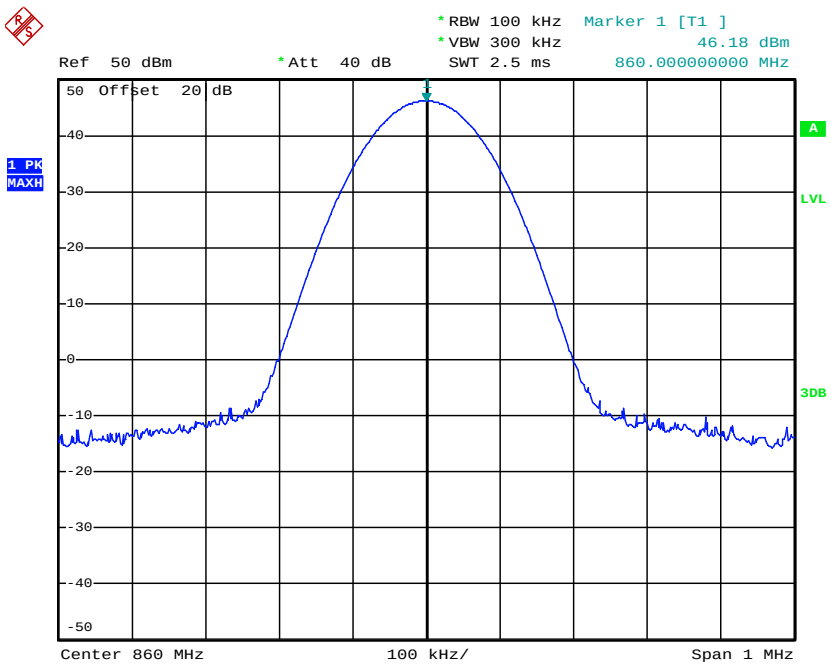
Date: 24.JUL.2012 10:46:58

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	851.5000	35	46.18	Varies	45.44±1	Complicance



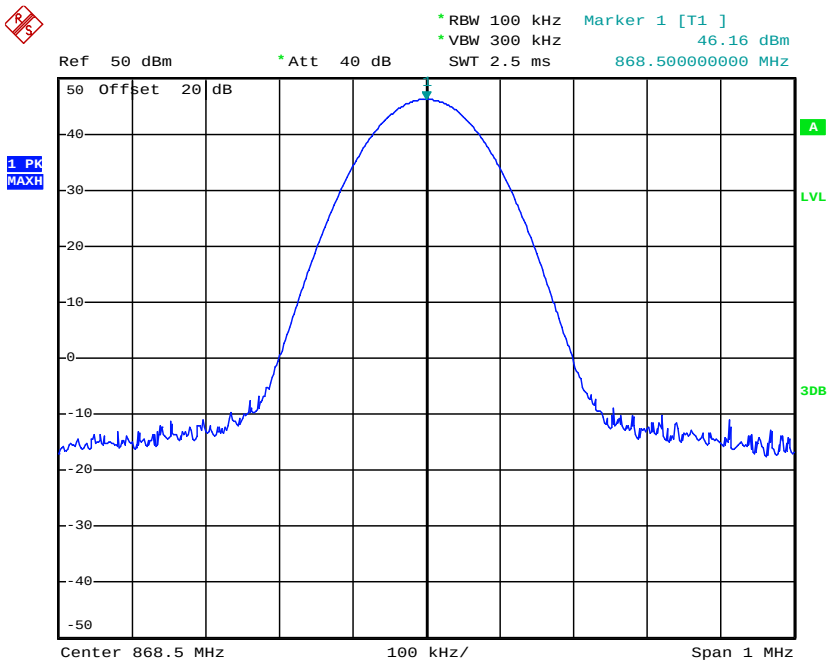
Date: 24.JUL.2012 10:49:20

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	860.0000	35	46.18	Varies	45.44±1	Complicance



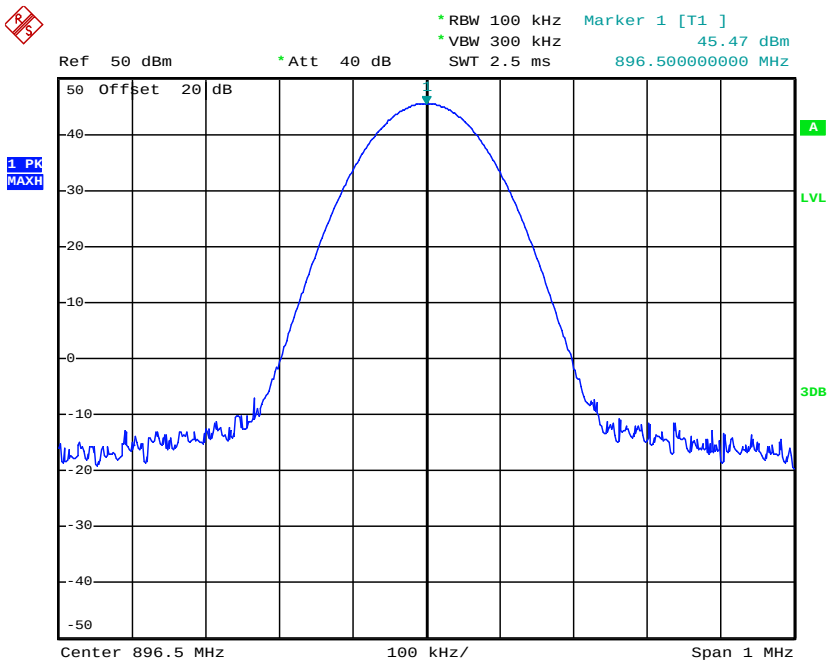
Date: 24.JUL.2012 10:50:22

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	868.5000	35	46.16	Varies	45.44±1	Complicance



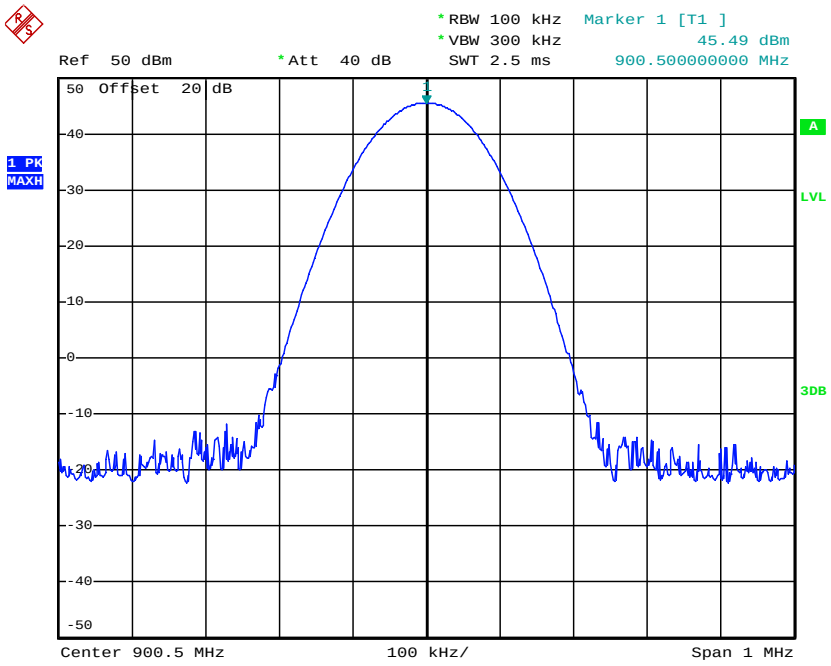
Date: 24.JUL.2012 10:51:15

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	896.5000	30	45.47	Varies	44.77±1	Complicance



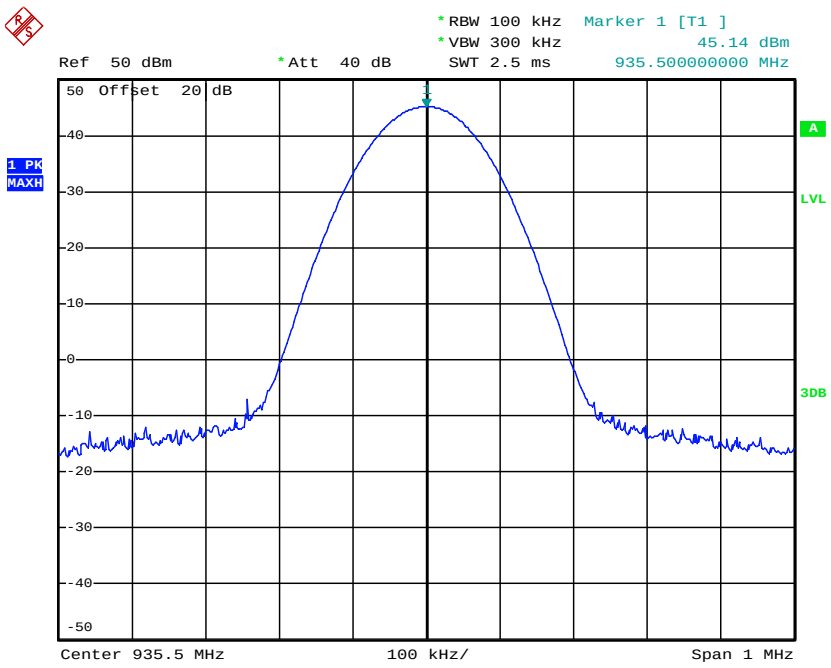
Date: 24.JUL.2012 10:53:45

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	900.5000	30	45.49	Varies	44.77±1	Complicance



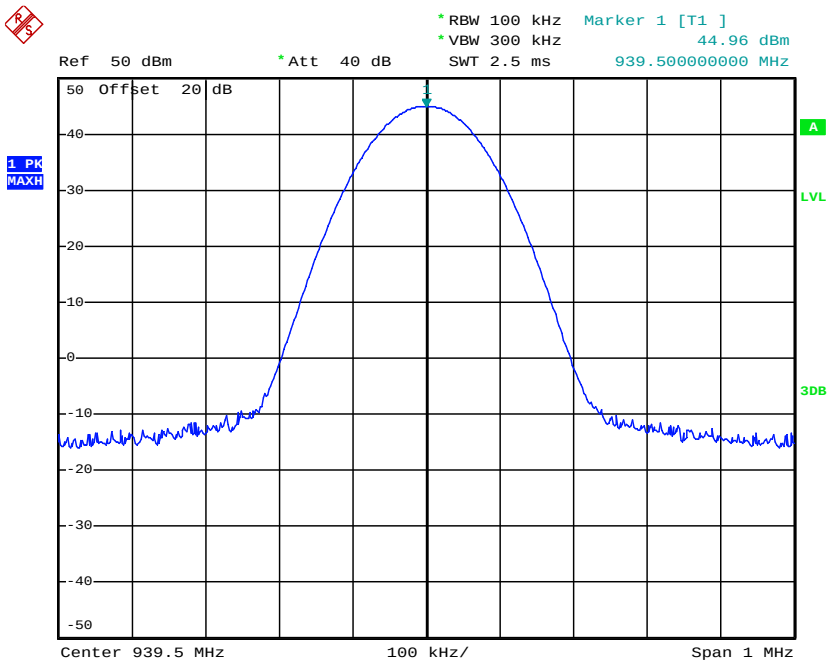
Date: 24.JUL.2012 10:56:11

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	935.5000	30	45.14	Varies	44.77±1	Complicance



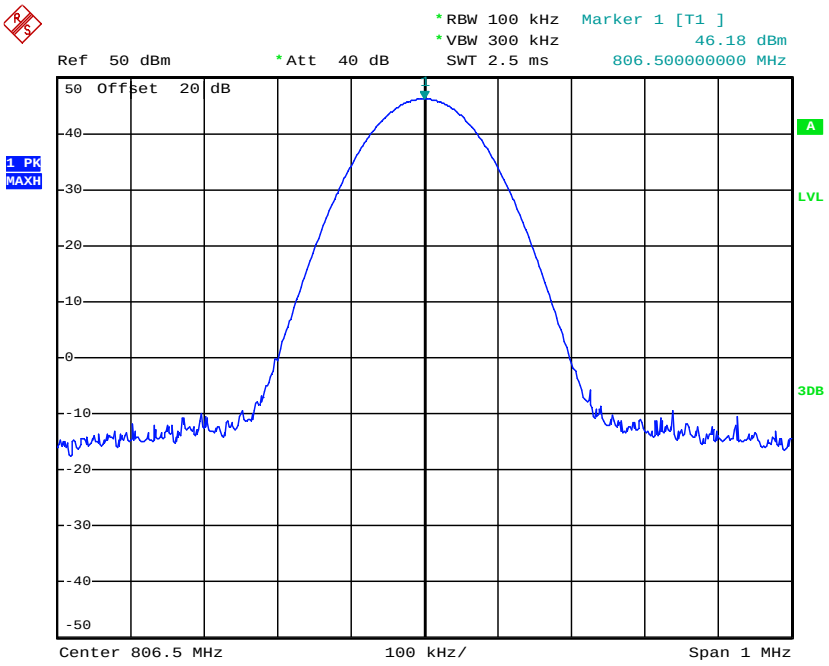
Date: 24.JUL.2012 11:04:01

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	939.5000	30	44.96	Varies	44.77±1	Complicance



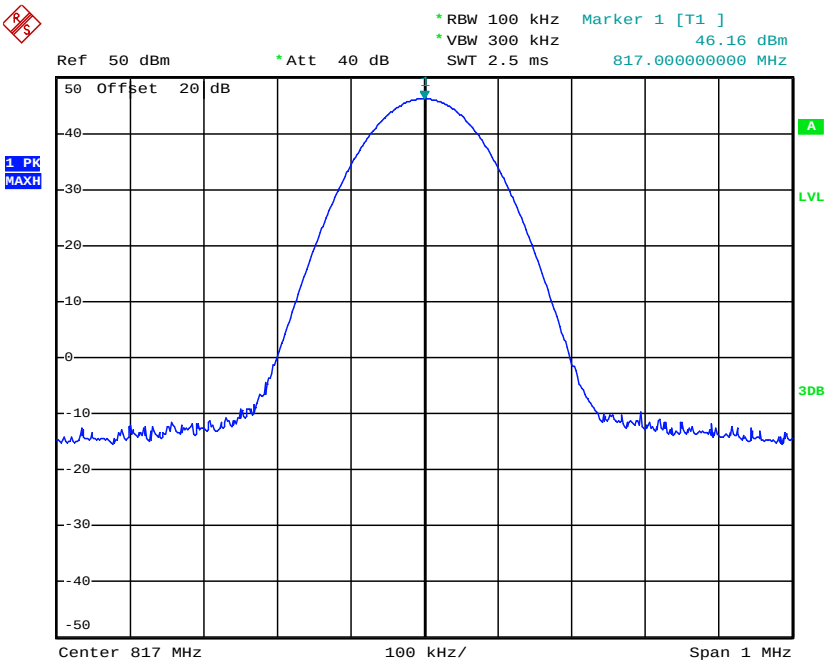
Date: 24.JUL.2012 11:05:14

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	806.5000	35	46.18	Varies	45.44±1	Complicance



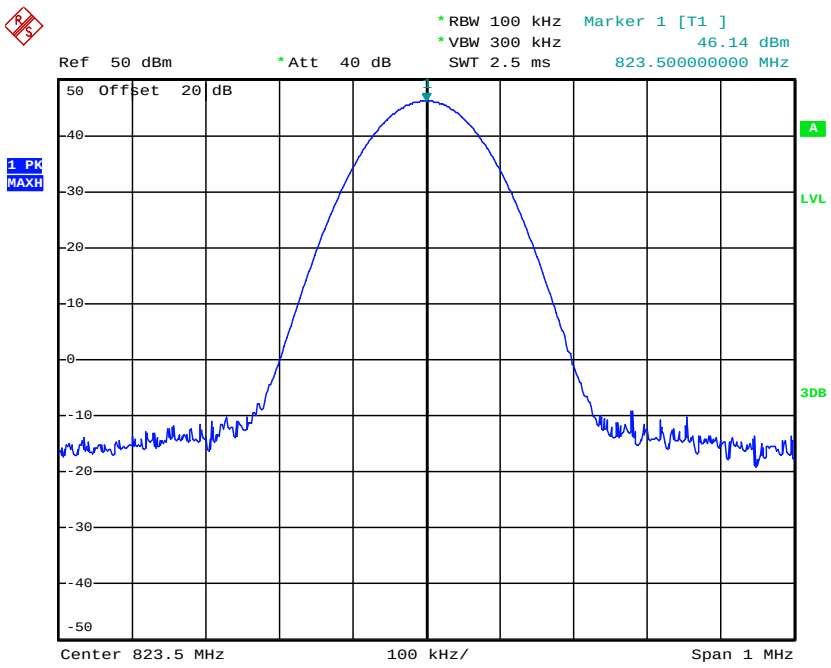
Date: 27.JUL.2012 13:28:54

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	817.0000	35	46.16	Varies	45.44±1	Complicance



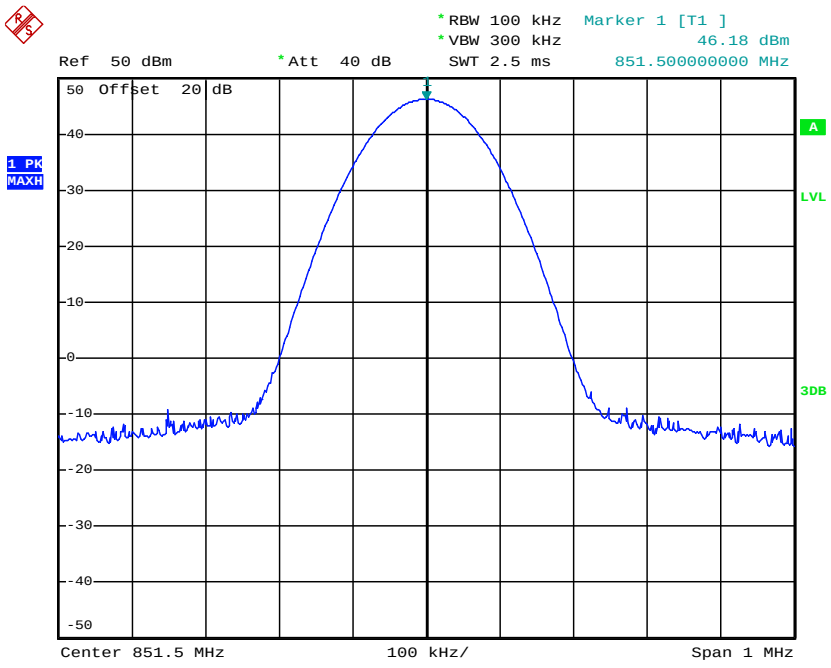
Date: 27.JUL.2012 13:29:38

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	823.5000	35	46.14	Varies	45.44±1	Complicance



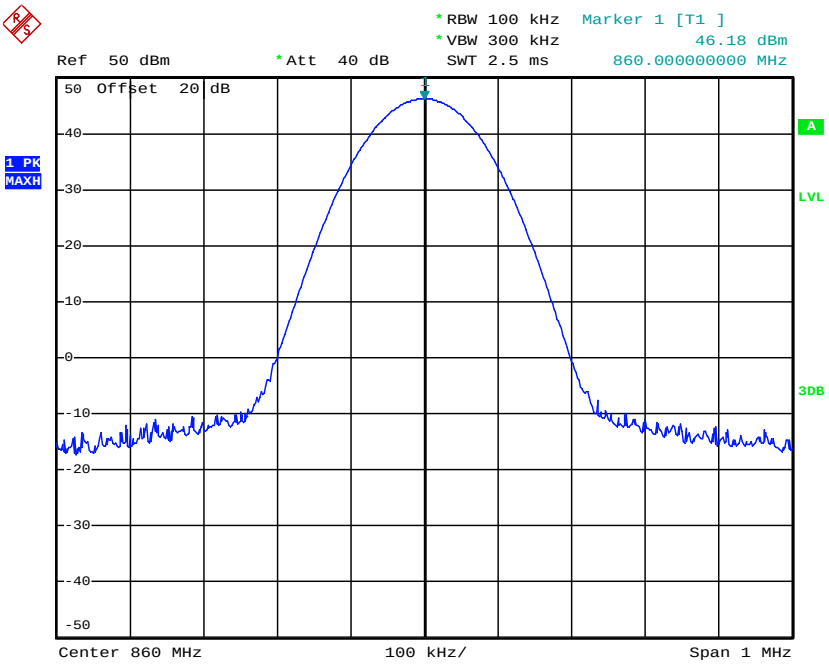
Date: 27.JUL.2012 13:31:22

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	851.5000	35	46.18	Varies	45.44±1	Complicance



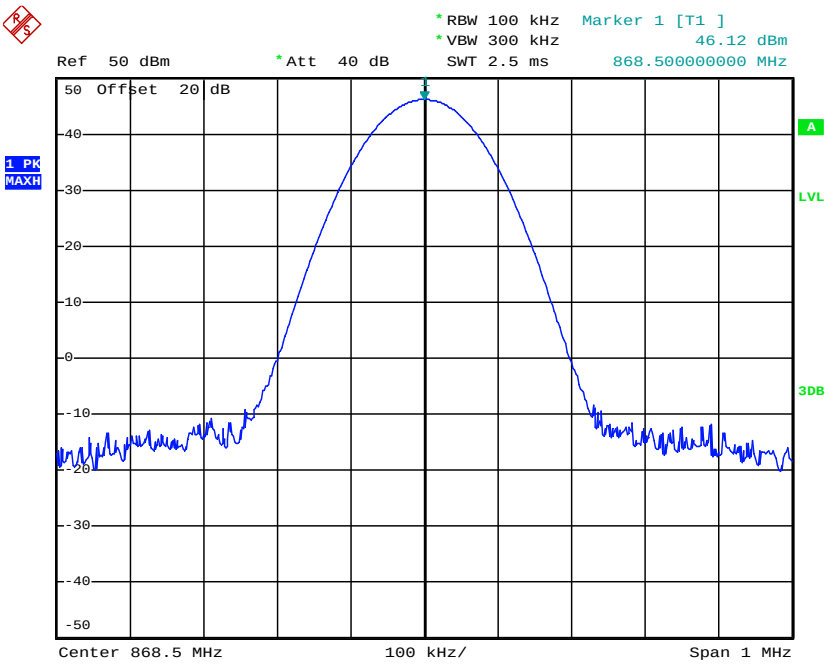
Date: 27.JUL.2012 13:47:24

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	860.0000	35	46.18	Varies	45.44±1	Complicance



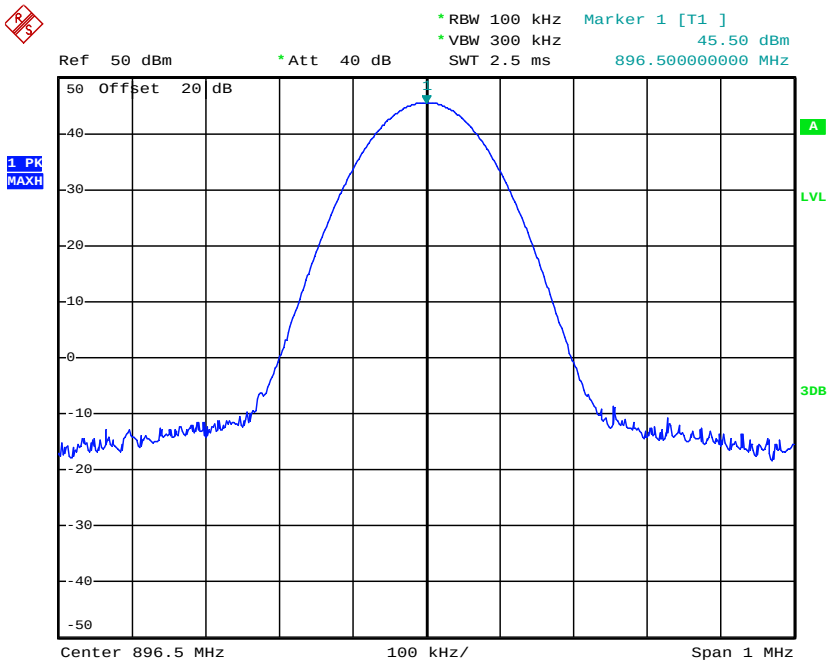
Date: 27.JUL.2012 13:35:51

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	868.5000	35	46.12	Varies	45.44±1	Complicance



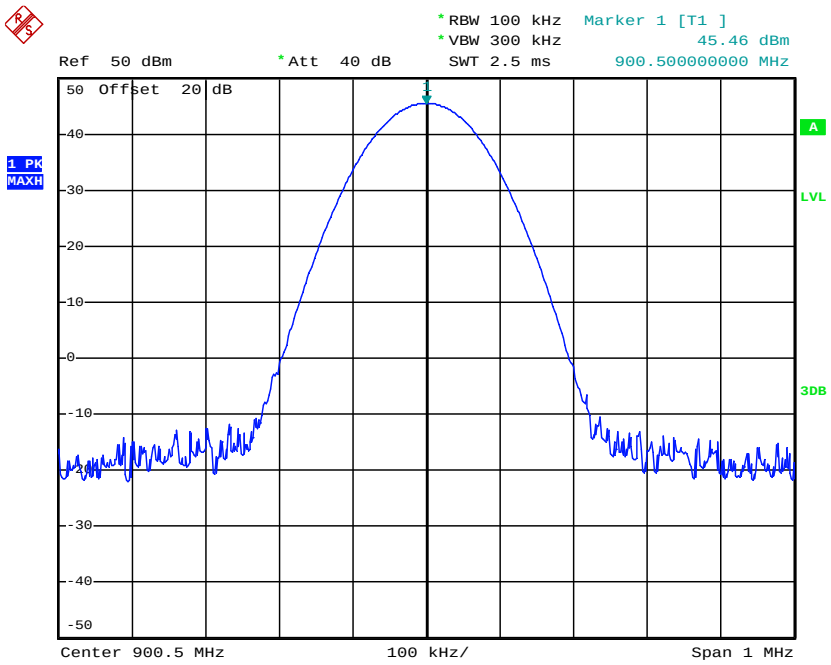
Date: 27.JUL.2012 13:37:00

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	896.5000	30	45.50	Varies	44.77±1	Complicance



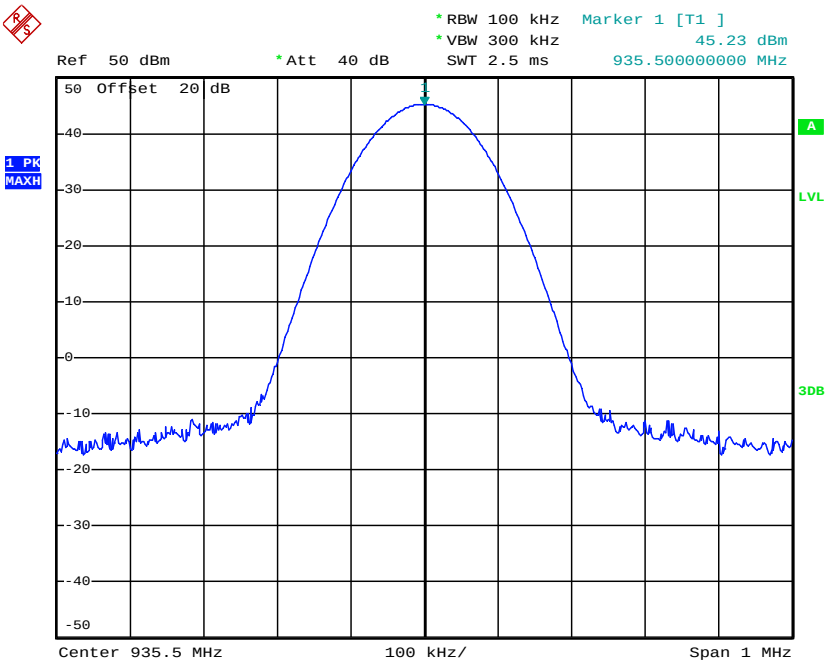
Date: 27.JUL.2012 13:45:51

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	900.5000	30	45.46	Varies	44.77±1	Complicance



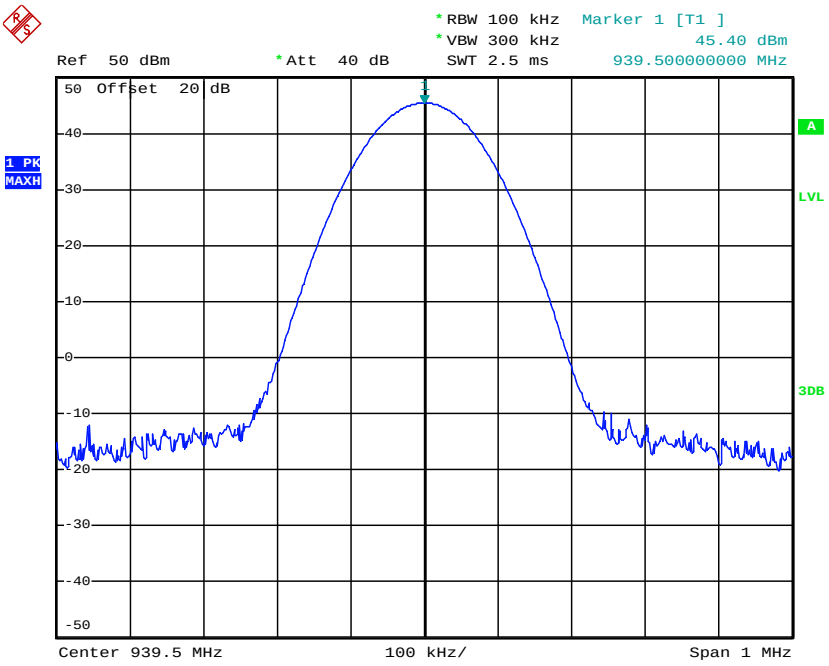
Date: 27.JUL.2012 13:44:56

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	935.5000	30	45.23	Varies	44.77±1	Complicance



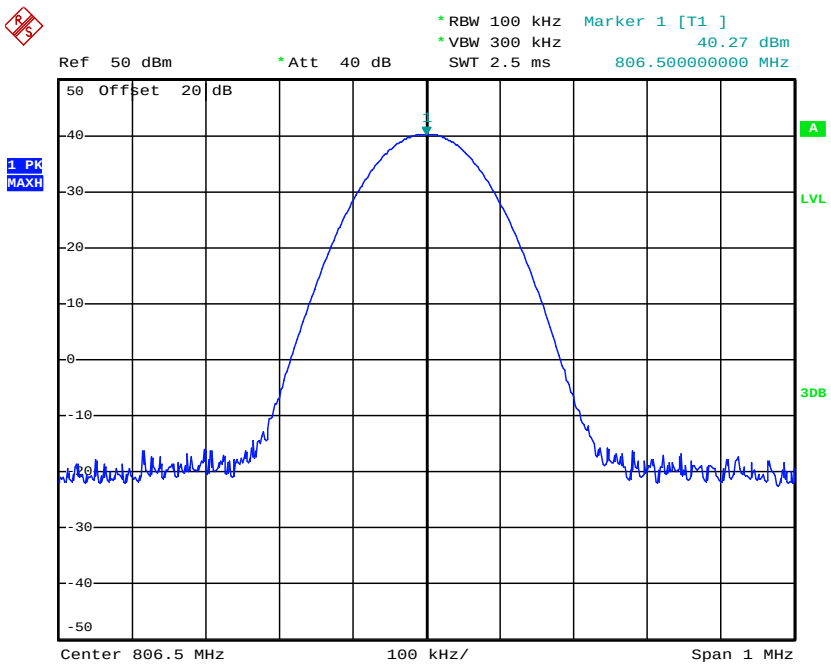
Date: 27.JUL.2012 13:43:59

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	939.5000	30	45.40	Varies	44.77±1	Complicance



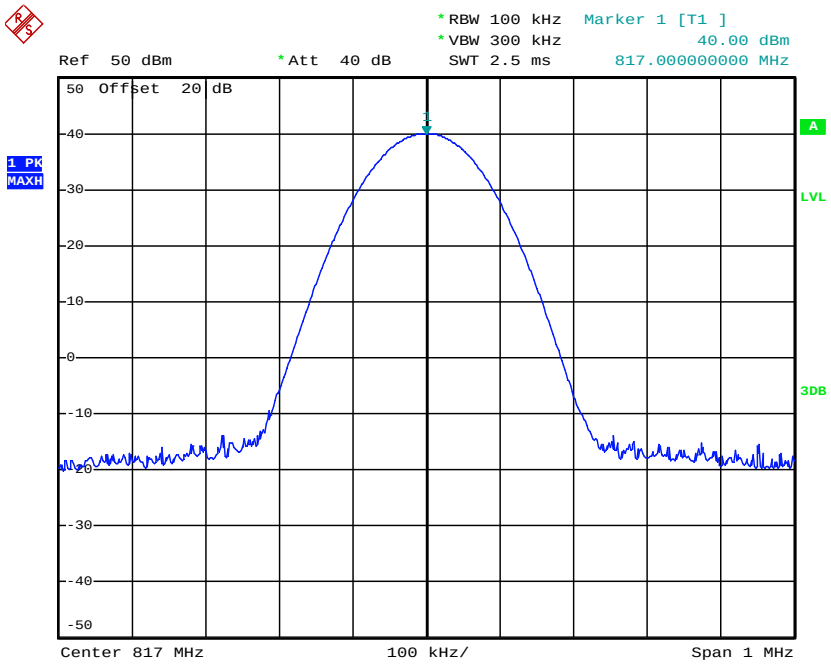
Date: 27.JUL.2012 13:43:29

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	806.5000	10	40.27	Varies	40.00±1	Complicance



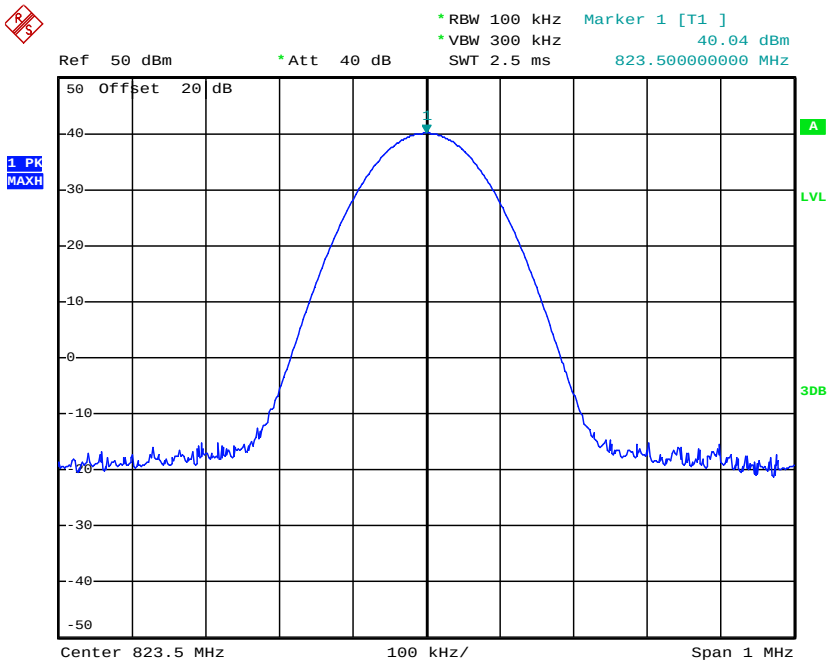
Date: 24.JUL.2012 11:07:47

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	817.0000	10	40.00	Varies	40.00±1	Complicance



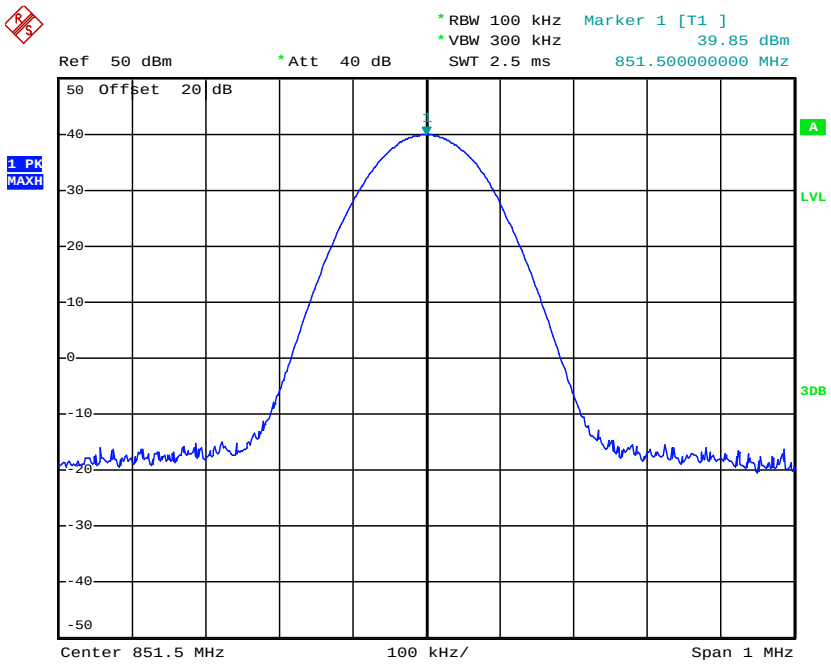
Date: 24.JUL.2012 11:09:19

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	823.5000	10	40.04	Varies	40.00±1	Complicance



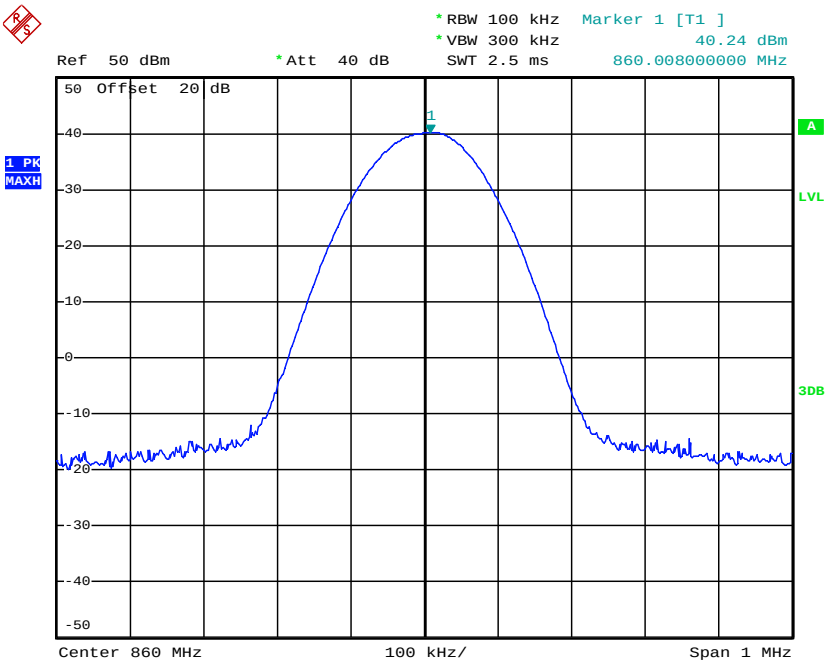
Date: 24.JUL.2012 11:10:21

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	851.5000	10	39.85	Varies	40.00±1	Complicance



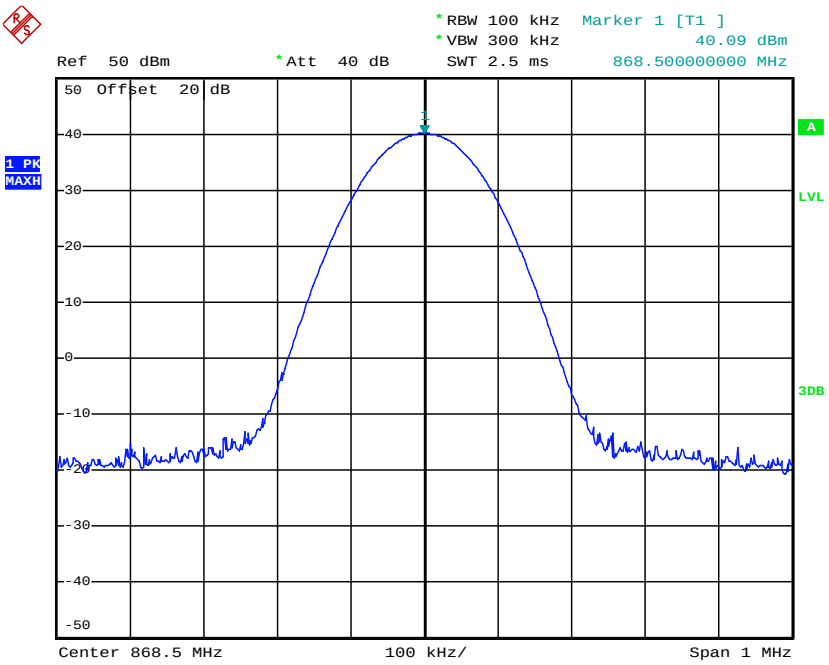
Date: 24.JUL.2012 11:11:16

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	860.0000	10	40.24	Varies	40.00±1	Complicance



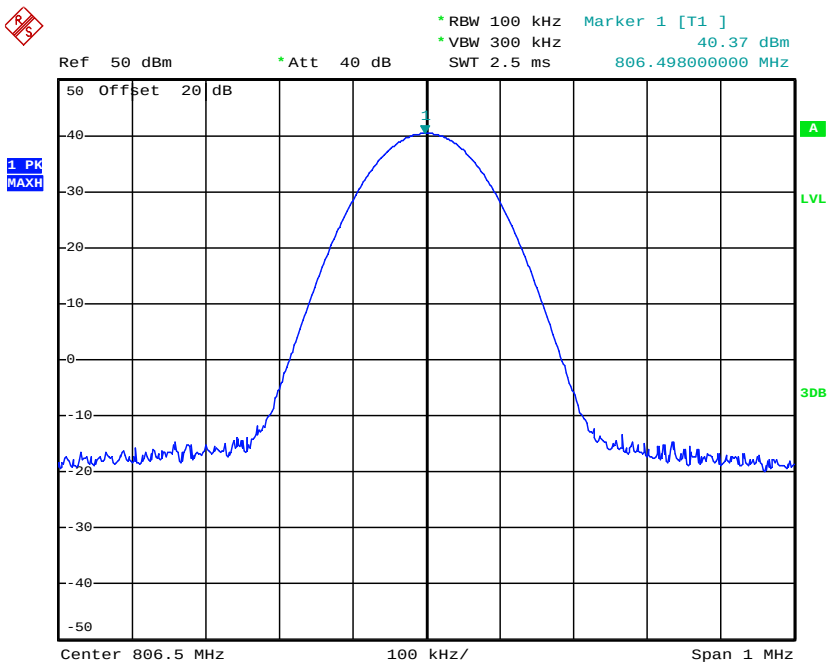
Date: 24.JUL.2012 11:29:19

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	25 KHz	868.5000	10	40.09	Varies	40.00±1	Complicance



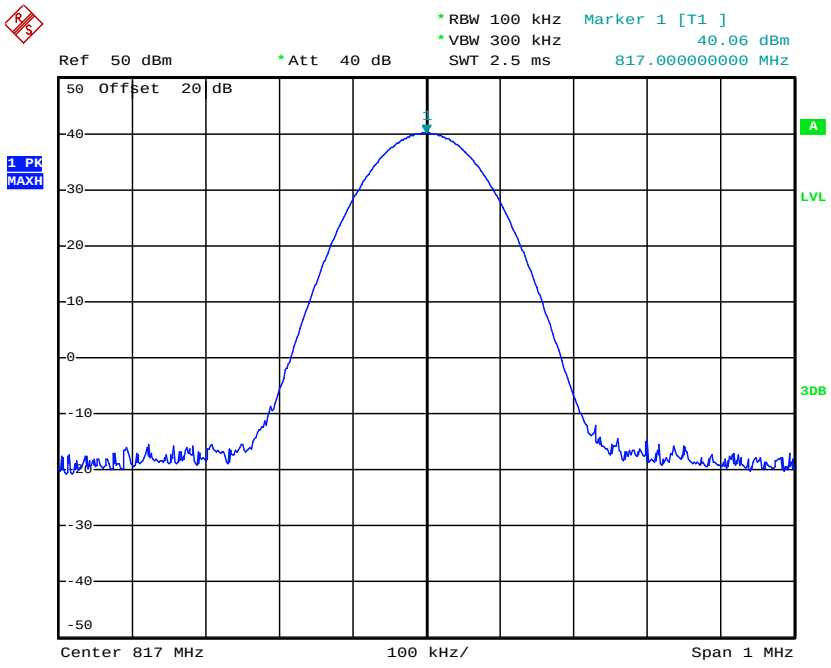
Date: 24.JUL.2012 11:30:25

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	806.5000	10	40.37	Varies	40.00±1	Complicance



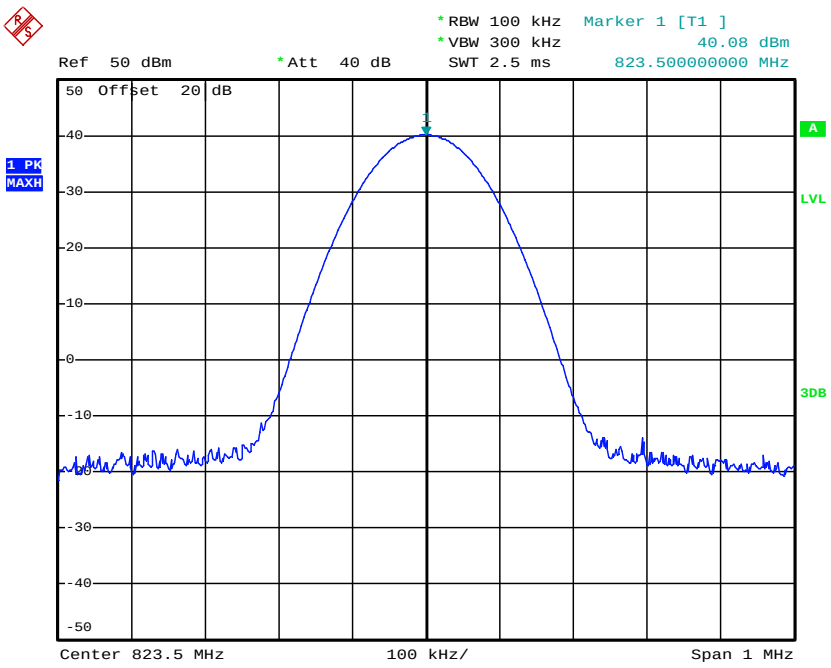
Date: 24.JUL.2012 10:44:34

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	817.0000	10	40.06	Varies	40.00±1	Complicance



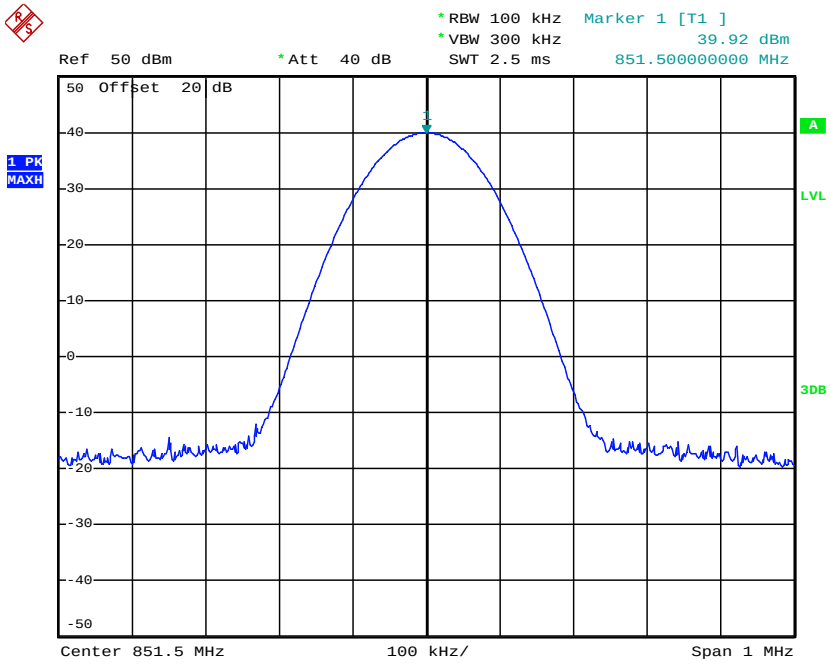
Date: 24.JUL.2012 10:45:57

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	823.5000	10	40.08	Varies	40.00±1	Complicance



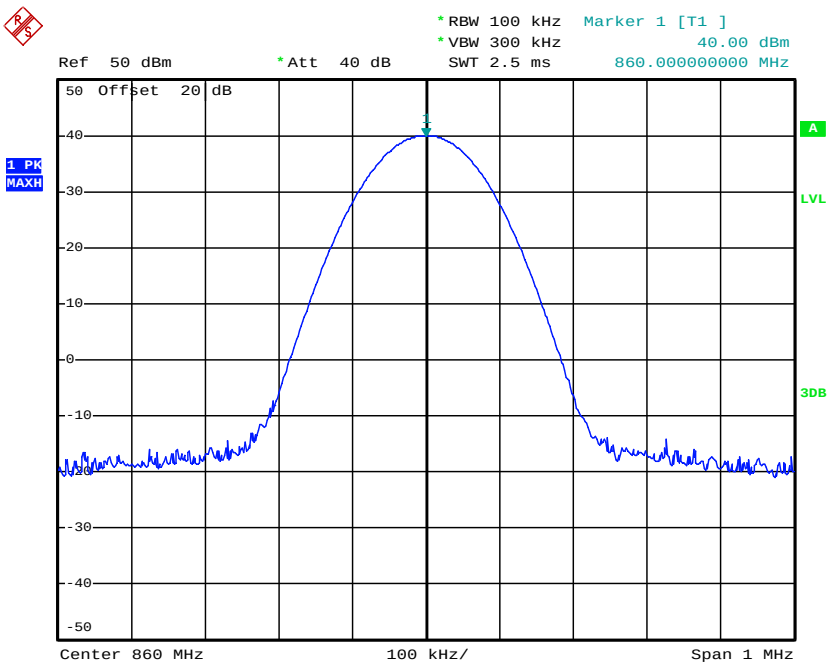
Date: 24.JUL.2012 10:47:24

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	851.5000	10	39.92	Varies	40.00±1	Complicance



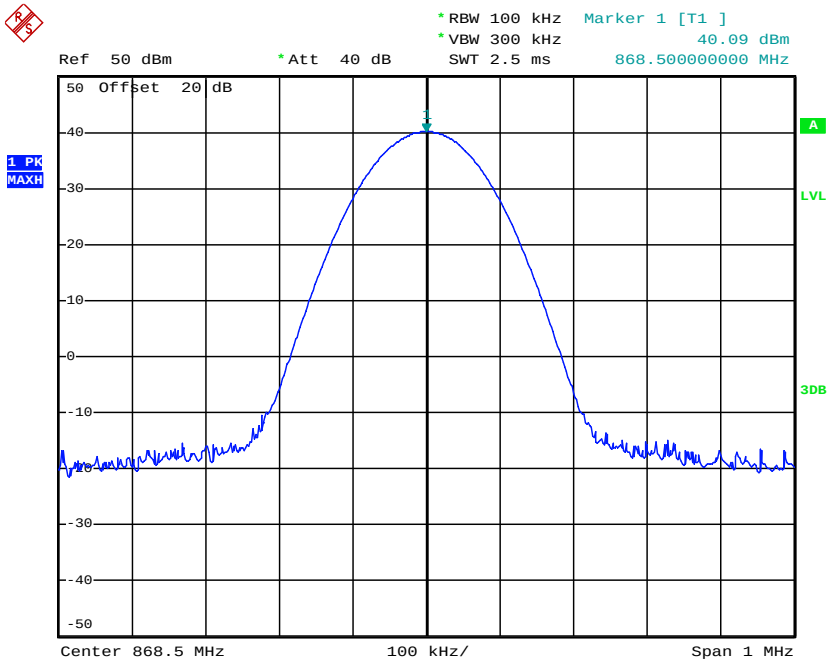
Date: 24.JUL.2012 10:48:43

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	860.0000	10	40.00	Varies	40.00±1	Complicance



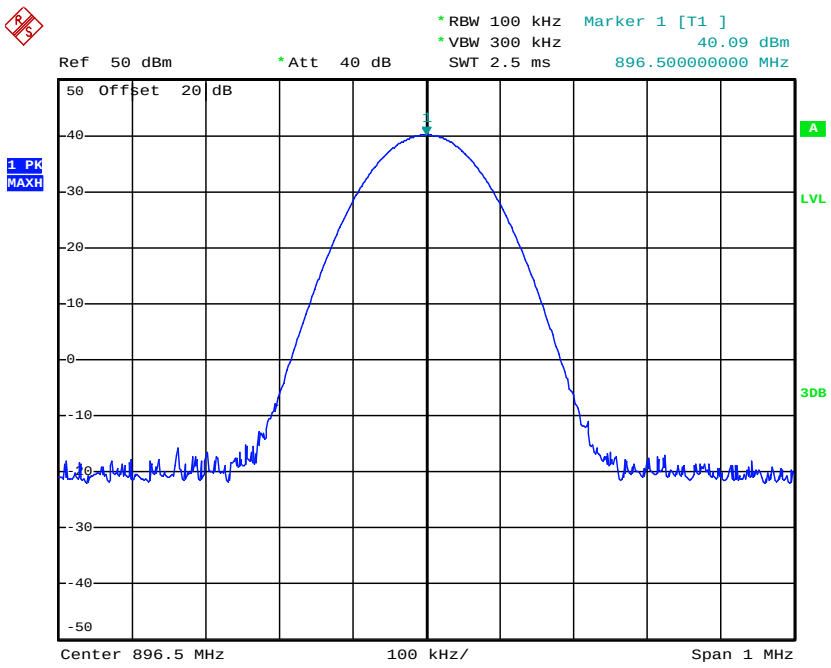
Date: 24.JUL.2012 10:49:58

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	868.5000	10	40.09	Varies	40.00±1	Complicance



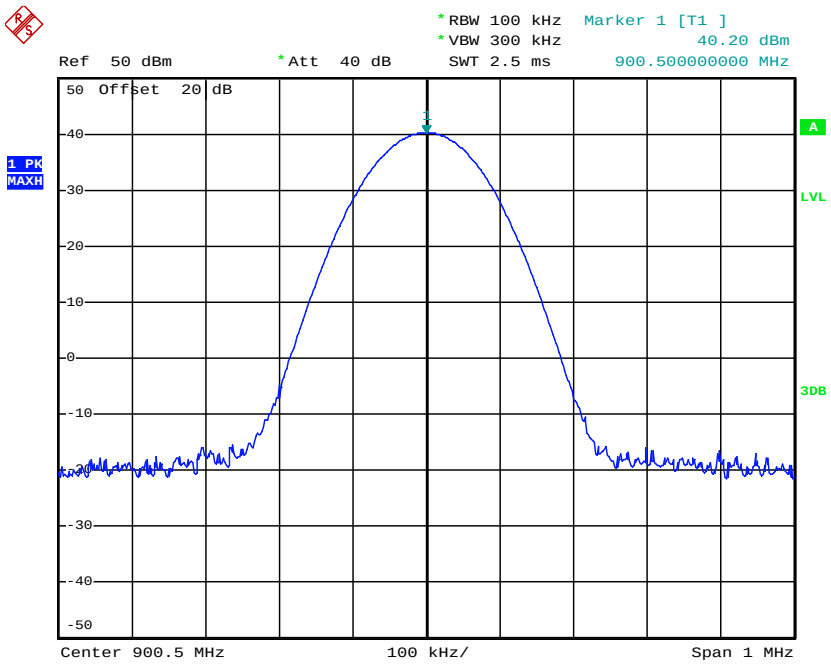
Date: 24.JUL.2012 10:50:56

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	896.5000	10	40.09	Varies	40.00±1	Complicance



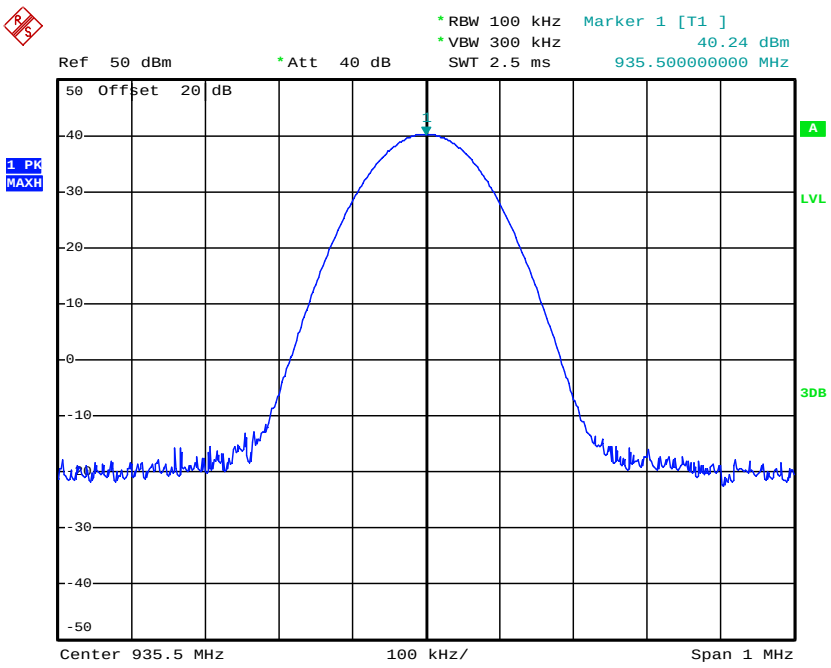
Date: 24.JUL.2012 10:52:00

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	900.5000	10	40.20	Varies	40.00±1	Complicance



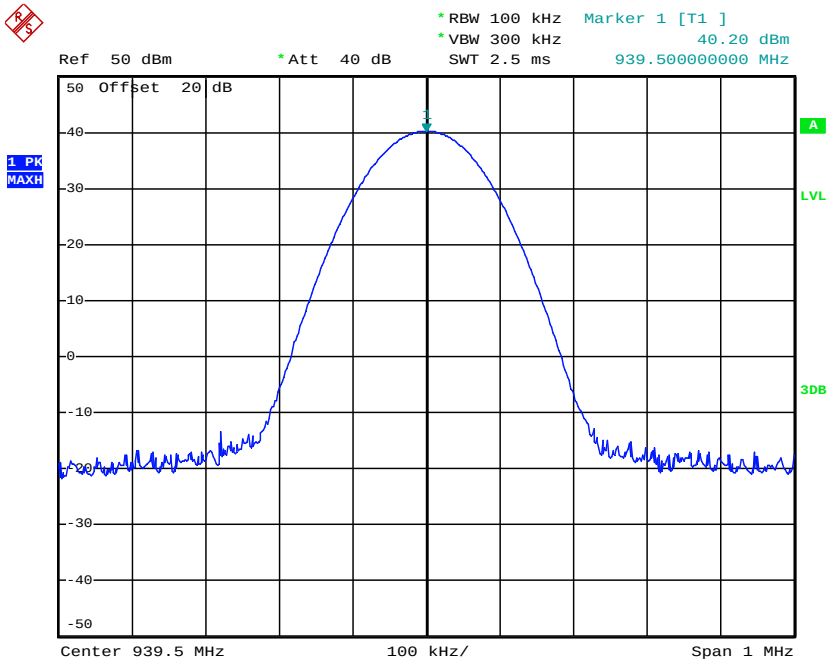
Date: 24.JUL.2012 10:55:46

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	935.5000	10	40.24	Varies	40.00±1	Complicance



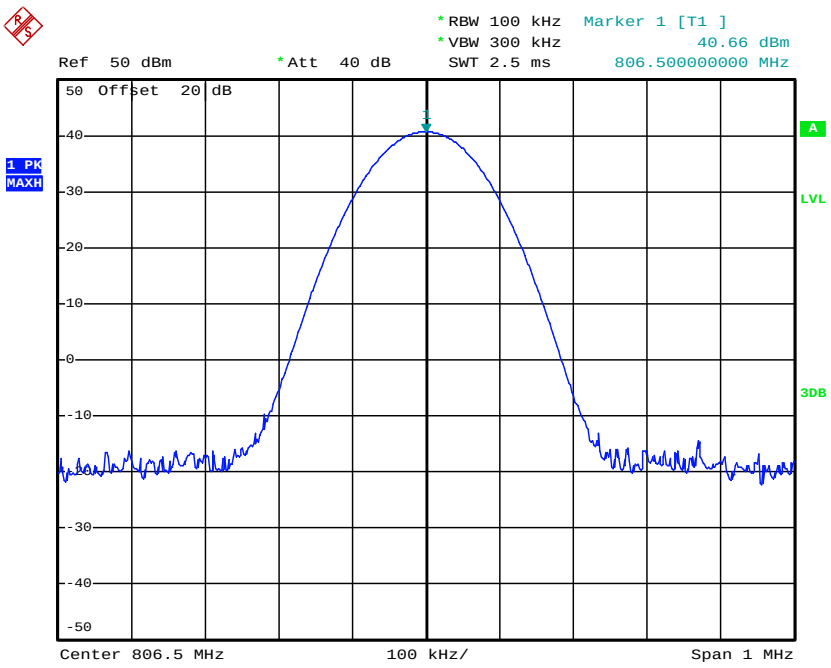
Date: 24.JUL.2012 11:03:22

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
FM	12.5 KHz	939.5000	10	40.20	Varies	40.00±1	Complicance



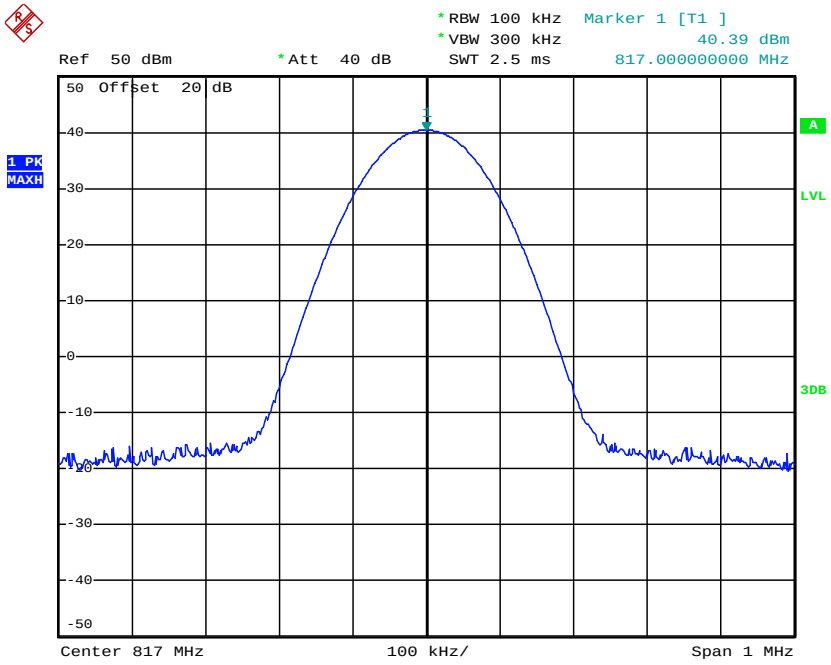
Date: 24.JUL.2012 11:04:46

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	806.5000	10	40.66	Varies	40.00±1	Complicance



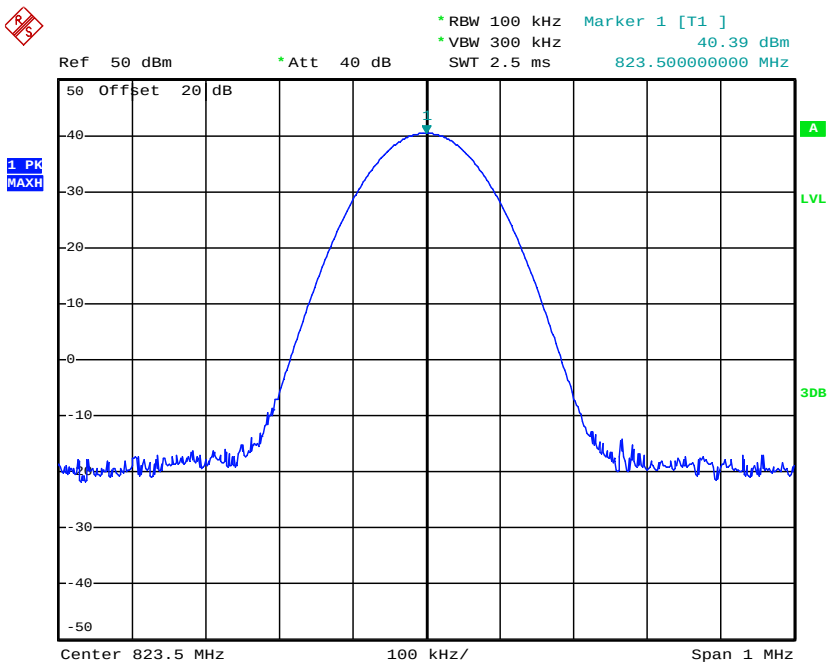
Date: 27.JUL.2012 13:30:30

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	817.0000	10	40.39	Varies	40.00±1	Complicance



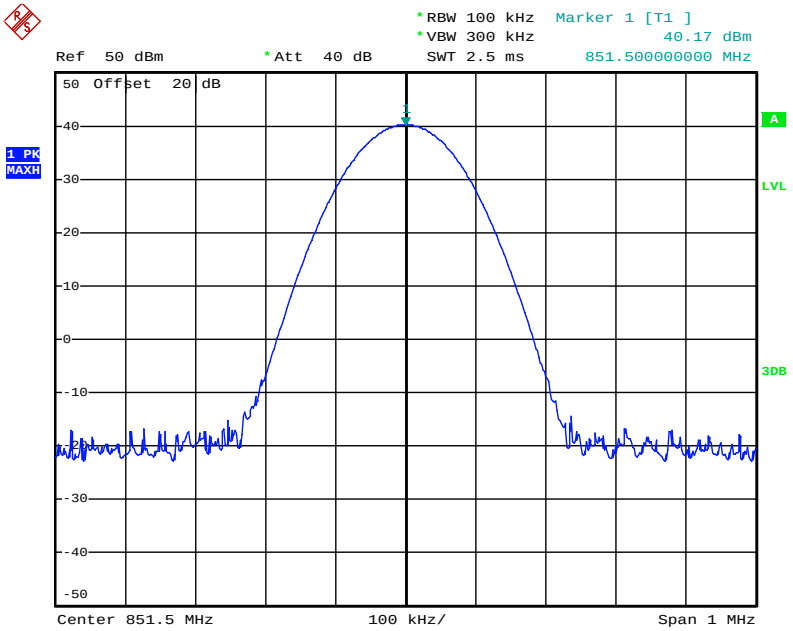
Date: 27.JUL.2012 13:30:00

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	823.5000	10	40.39	Varies	40.00±1	Complicance



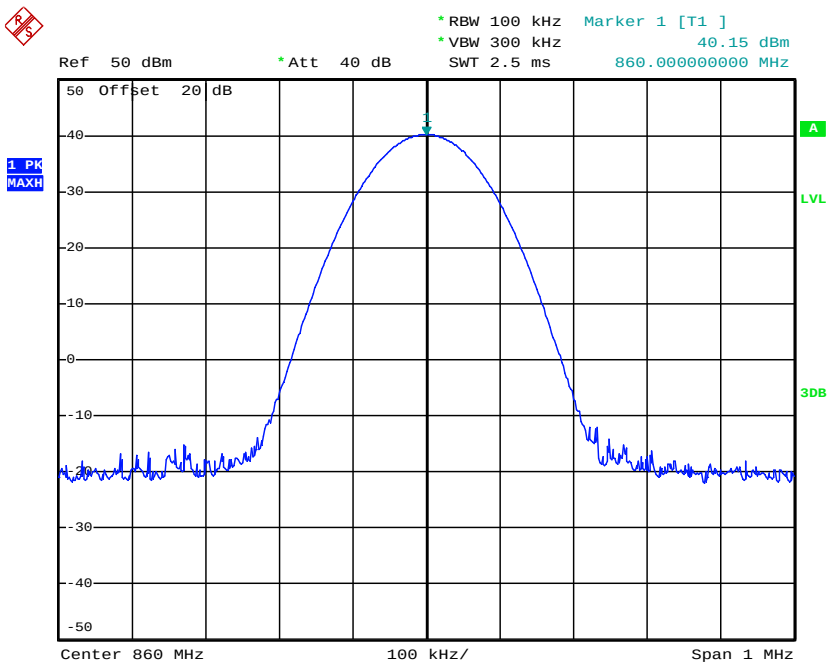
Date: 27.JUL.2012 13:31:38

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	851.5000	10	40.17	Varies	40.00±1	Complicance



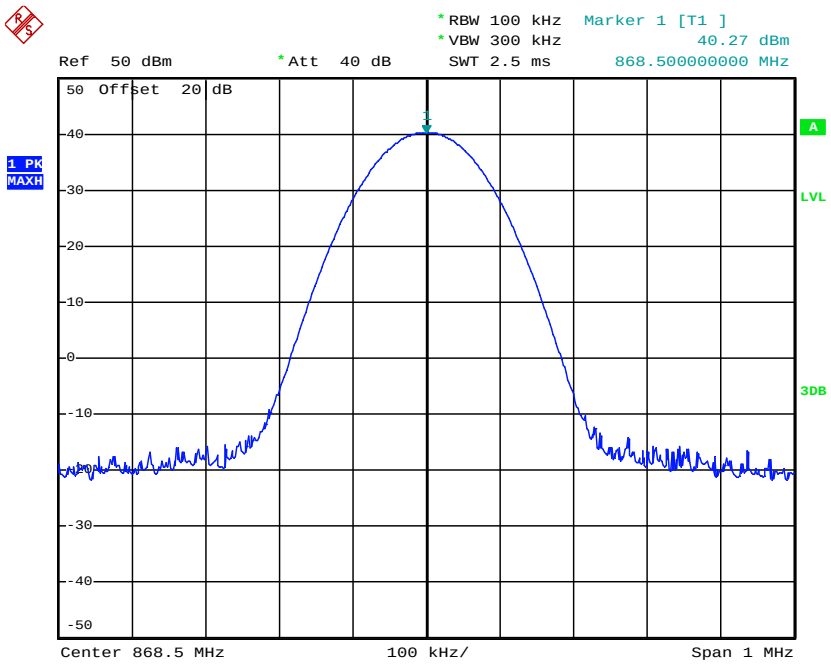
Date: 27.JUL.2012 13:35:34

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	860.0000	10	40.15	Varies	40.00±1	Complicance



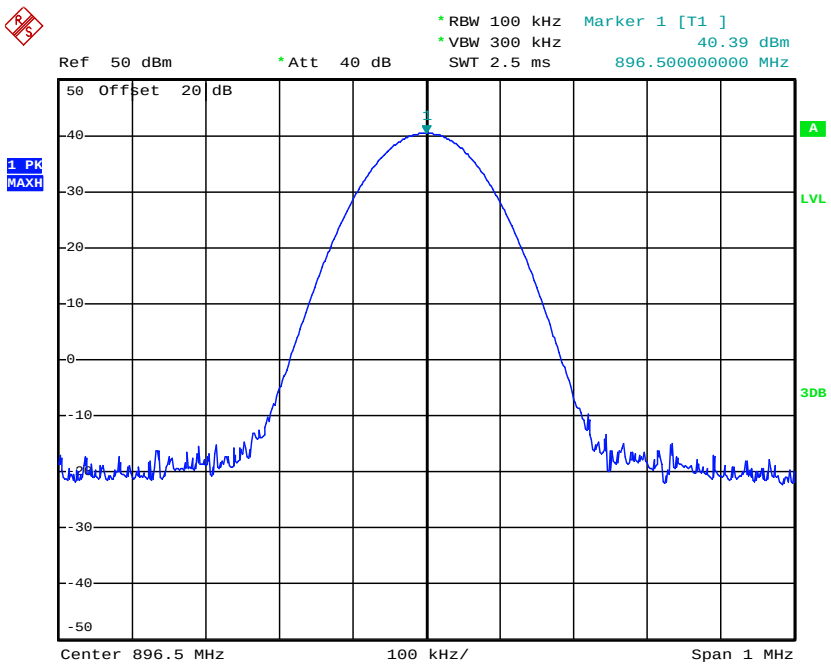
Date: 27.JUL.2012 13:36:22

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	868.5000	10	40.27	Varies	40.00±1	Complicance



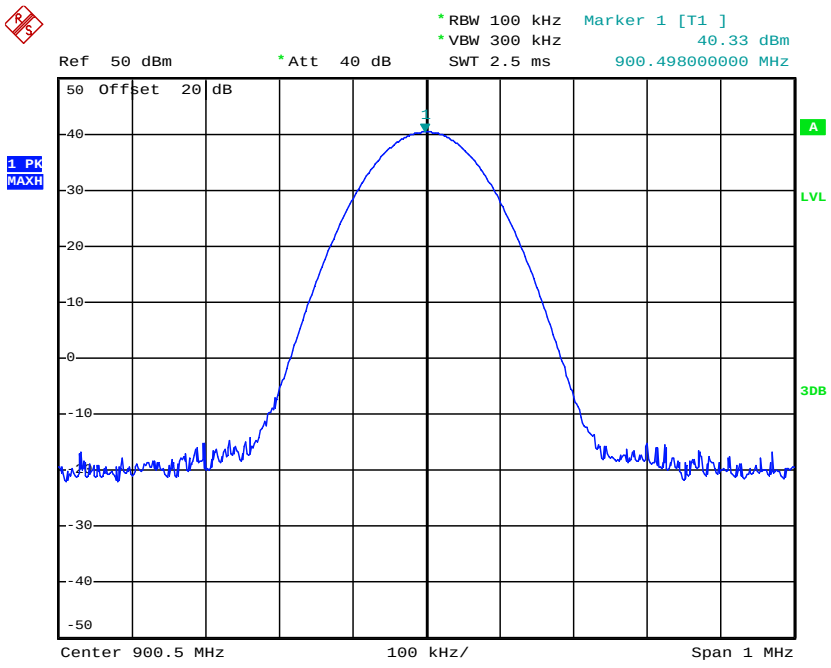
Date: 27.JUL.2012 13:37:27

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	896.5000	10	40.39	Varies	40.00±1	Complicance



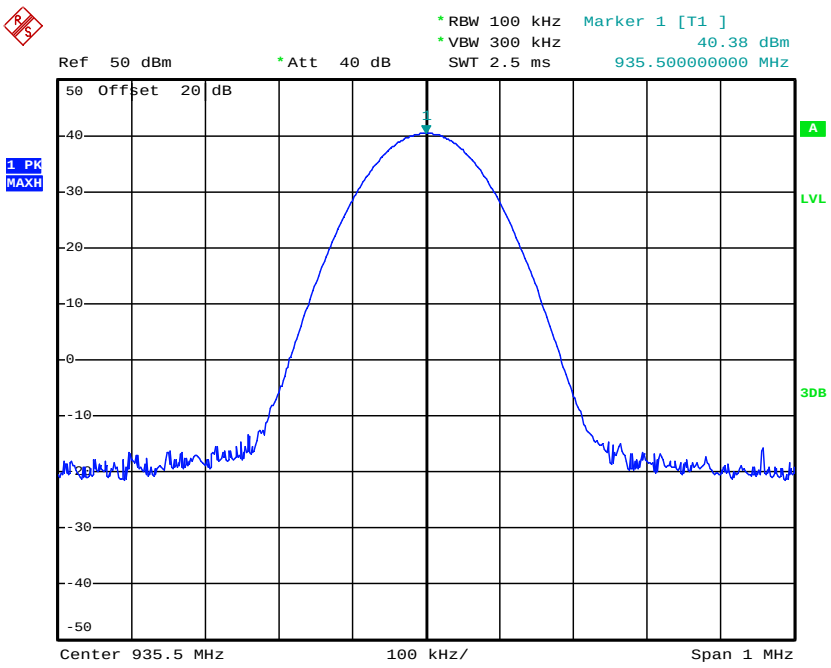
Date: 27.JUL.2012 13:38:46

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	900.5000	10	40.33	Varies	40.00±1	Complicance



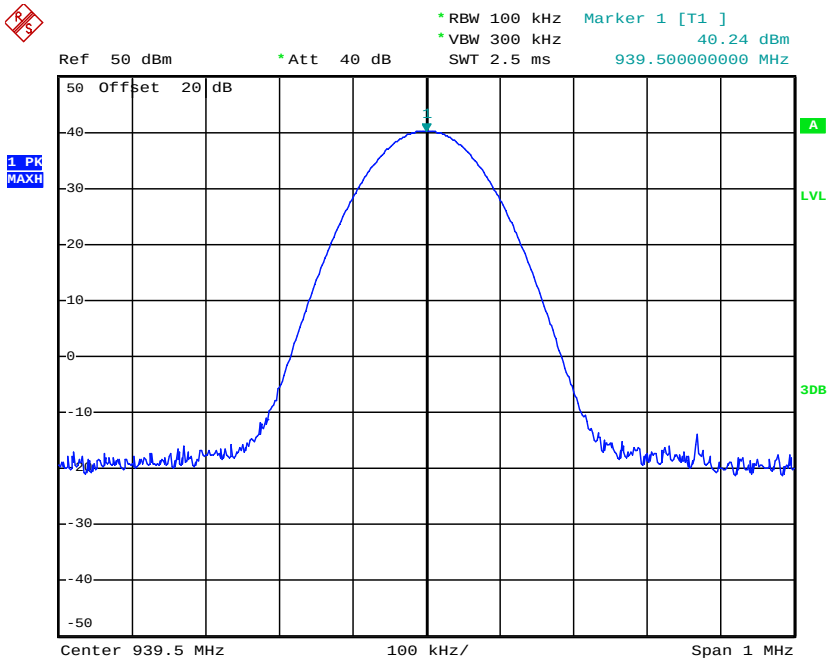
Date: 27.JUL.2012 13:39:54

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	935.5000	10	40.38	Varies	40.00±1	Complicance



Date: 27.JUL.2012 13:42:18

Modulation Type	Channel Separation	Freq.(MHz)	Rated Power (Watt)	Measurement (dBm)	FCC Limit	IC Limit (dB)	Results
4FSK	12.5 KHz	939.5000	10	40.24	Varies	40.00±1	Complicance



Date: 27.JUL.2012 13:49:28

4.8. Receiver Radiated Spurious Emssion

TEST APPLICABLE

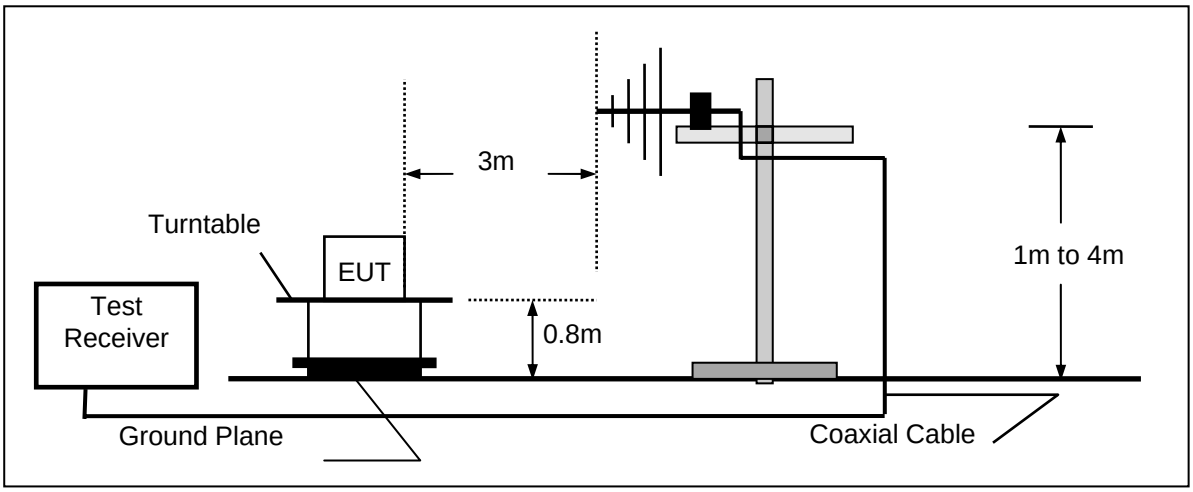
The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

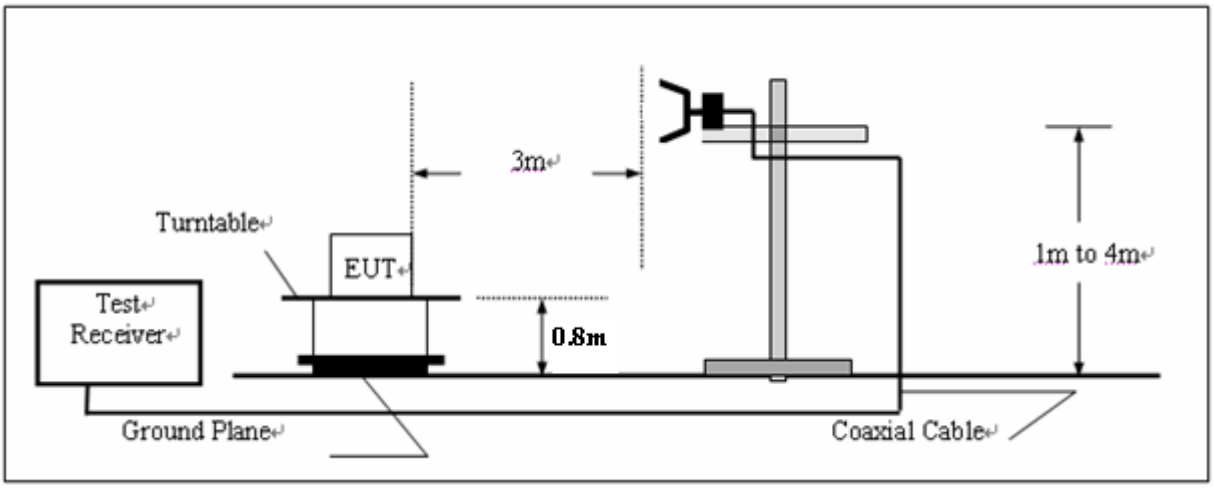
Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

TEST CONFIGURATION

(A) Radiated Emission Test Set-Up, Frequency below 1000MHz



(B) Radiated Emission Test Set-Up, Frequency above 1000MHz



TEST PROCEDURE

1 The EUT was placed on a turn table which is 0.8m above ground plane.
2 Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0℃ to 360℃ to acquire the highest emissions from EUT
3 And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4 Repeat above procedures until all frequency measurements have been completed.

RECEIVER RADIATED SPOUIOUS LIMIT

For unintentional device, according to § 15.109(a) and RSS-Gen, except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values：

Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

TEST RESULTS

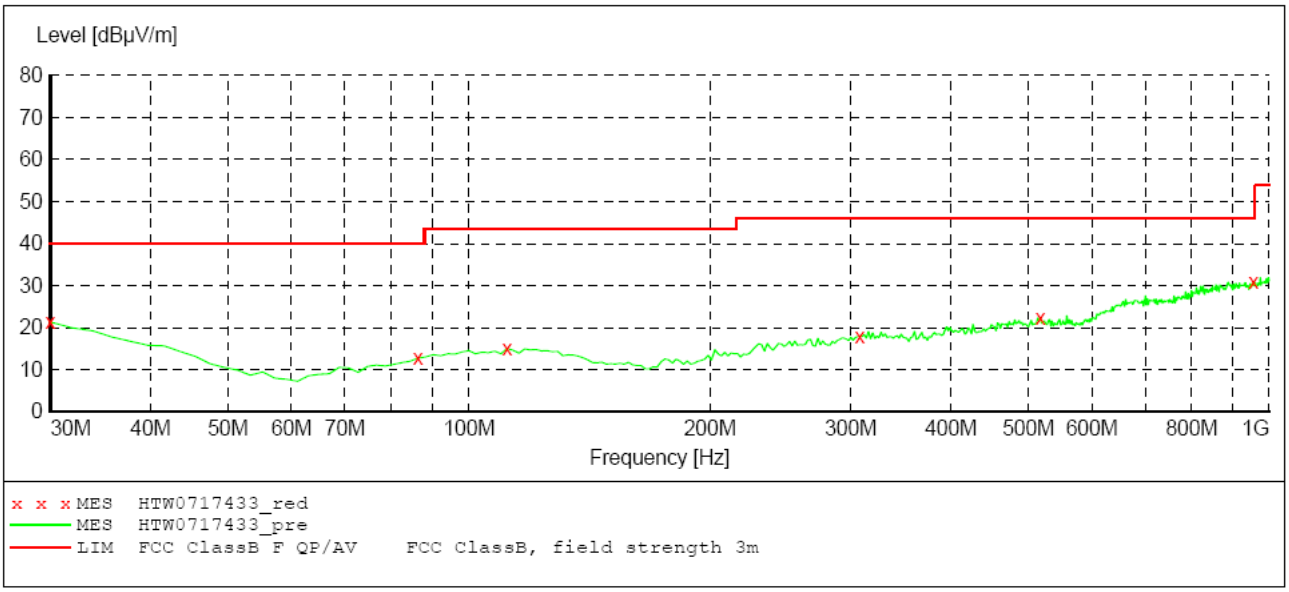
The Radiated Measurement are performed to the five channels (the top channel, the middle channel and the bottom channel), the datum recorded below is the worst case for each channel separation;and the EUT shall be scanned from 30 MHz to the 5th harmonic of the highest oscillator frequency in the digital devices or 1 GHz whichever is higher.

Both For FCC and IC Review

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
FM	25 KHz	806.5000	H	955.29	30.90	46.00
			V	916.41	31.30	46.00
Test Results			Compliance			

SWEEP TABLE: "test (30M-1G)"

```
Short Description:            Field Strength
Start      Stop       Detector  Meas.     IF        Transducer
Frequency  Frequency            Time      Bandw.
30.0 MHz   1.0 GHz    MaxPeak   Coupled   120 kHz   HL562 201106
```



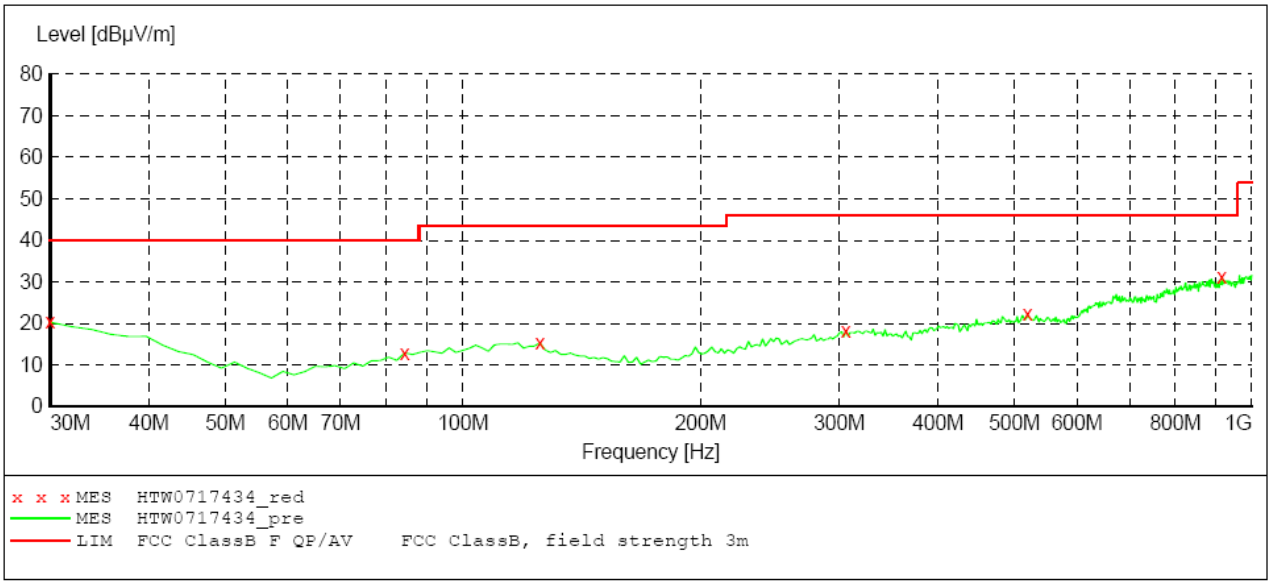
MEASUREMENT RESULT: "HTW0717433_red"

7/17/2012 7:51PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	21.30	-11.3	40.0	18.7	PK	100.0	254.00	HORIZONTAL
86.372745	12.70	-20.8	40.0	27.3	PK	300.0	358.00	HORIZONTAL
111.643287	15.00	-19.5	43.5	28.5	PK	100.0	337.00	HORIZONTAL
307.975952	18.00	-16.4	46.0	28.0	PK	100.0	204.00	HORIZONTAL
517.915832	22.30	-13.0	46.0	23.7	PK	100.0	231.00	HORIZONTAL
955.290581	30.90	-7.1	46.0	15.1	PK	300.0	257.00	HORIZONTAL

SWEEP TABLE: "test (30M-1G)"

Short Description:			Field Strength		
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0717434_red"

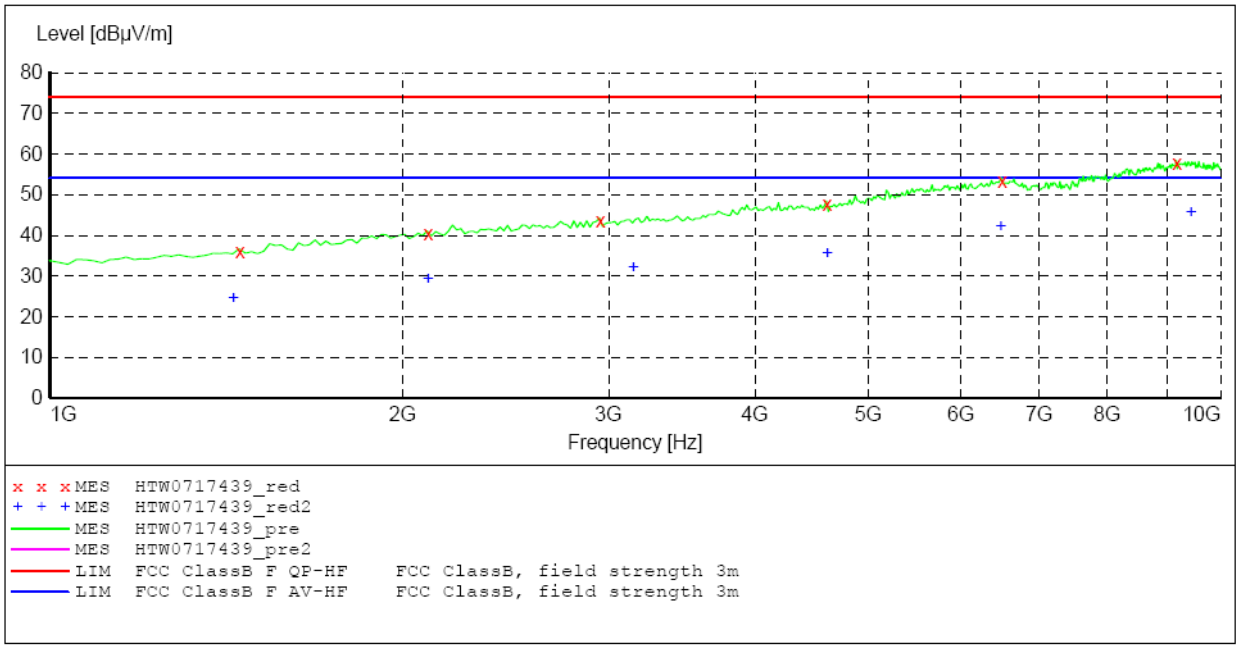
7/17/2012 7:53PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	20.30	-11.3	40.0	19.7	PK	100.0	3.00	VERTICAL
84.428858	12.90	-21.2	40.0	27.1	PK	100.0	24.00	VERTICAL
125.250501	15.30	-19.7	43.5	28.2	PK	100.0	0.00	VERTICAL
306.032064	18.20	-16.6	46.0	27.8	PK	100.0	162.00	VERTICAL
519.859719	22.30	-12.9	46.0	23.7	PK	100.0	103.00	VERTICAL
916.412826	31.30	-7.2	46.0	14.7	PK	100.0	295.00	VERTICAL

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
FM	25 KHz	806.5000	H	9422.84	46.30	54.00
			V	9422.84	46.50	54.00
Test Results			Compliance			

SWEEP TABLE: "test (1G-18G) P"

```
Short Description:                EN 55022 Field Strength
Start       Stop        Detector  Meas.     IF          Transducer
Frequency   Frequency              Time      Bandw.
1.0 GHz     18.0 GHz    MaxPeak   Coupled   1 MHz       HF906 2011
                        Average
```



MEASUREMENT RESULT: "HTW0717439_red"

7/17/2012 8:11PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1450.901804	36.60	-10.2	74.0	37.4	PK	100.0	263.00	VERTICAL
2100.200401	41.00	-6.2	74.0	33.0	PK	100.0	216.00	VERTICAL
2947.895792	44.30	-3.4	74.0	29.7	PK	100.0	69.00	VERTICAL
4607.214429	48.40	-0.3	74.0	25.6	PK	100.0	28.00	VERTICAL
6501.002004	54.10	4.8	74.0	19.9	PK	100.0	7.00	VERTICAL
9170.340681	58.40	11.1	74.0	15.6	PK	100.0	284.00	VERTICAL

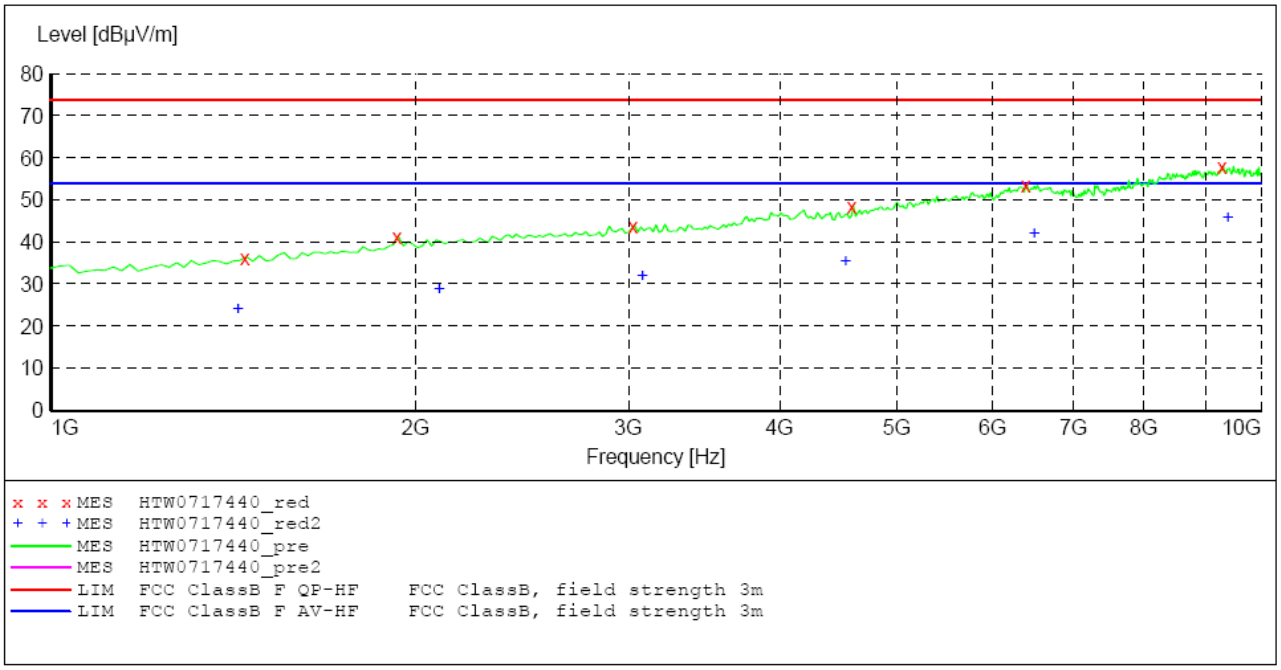
MEASUREMENT RESULT: "HTW0717439_red2"

7/17/2012 8:11PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1432.865731	25.10	-10.3	54.0	28.9	AV	100.0	189.00	VERTICAL
2100.200401	29.90	-6.2	54.0	24.1	AV	100.0	101.00	VERTICAL
3146.292585	32.90	-3.1	54.0	21.1	AV	100.0	221.00	VERTICAL
4607.214429	36.40	-0.3	54.0	17.6	AV	100.0	28.00	VERTICAL
6482.965932	42.90	4.8	54.0	11.1	AV	100.0	242.00	VERTICAL
9422.845691	46.50	11.8	54.0	7.5	AV	100.0	249.00	VERTICAL

SWEEP TABLE: "test (1G-18G) P"

Short Description:		EN 55022 Field Strength			
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak Average	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0717440_red"

7/17/2012 8:15PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1450.901804	36.60	-10.2	74.0	37.4	PK	100.0	68.00	HORIZONTAL
1937.875752	41.50	-7.0	74.0	32.5	PK	100.0	95.00	HORIZONTAL
3038.076152	44.10	-3.2	74.0	29.9	PK	100.0	118.00	HORIZONTAL
4607.214429	48.70	-0.3	74.0	25.3	PK	100.0	234.00	HORIZONTAL
6410.821643	53.80	4.5	74.0	20.2	PK	100.0	242.00	HORIZONTAL
9314.629259	58.20	11.5	74.0	15.8	PK	100.0	356.00	HORIZONTAL

MEASUREMENT RESULT: "HTW0717440_red2"

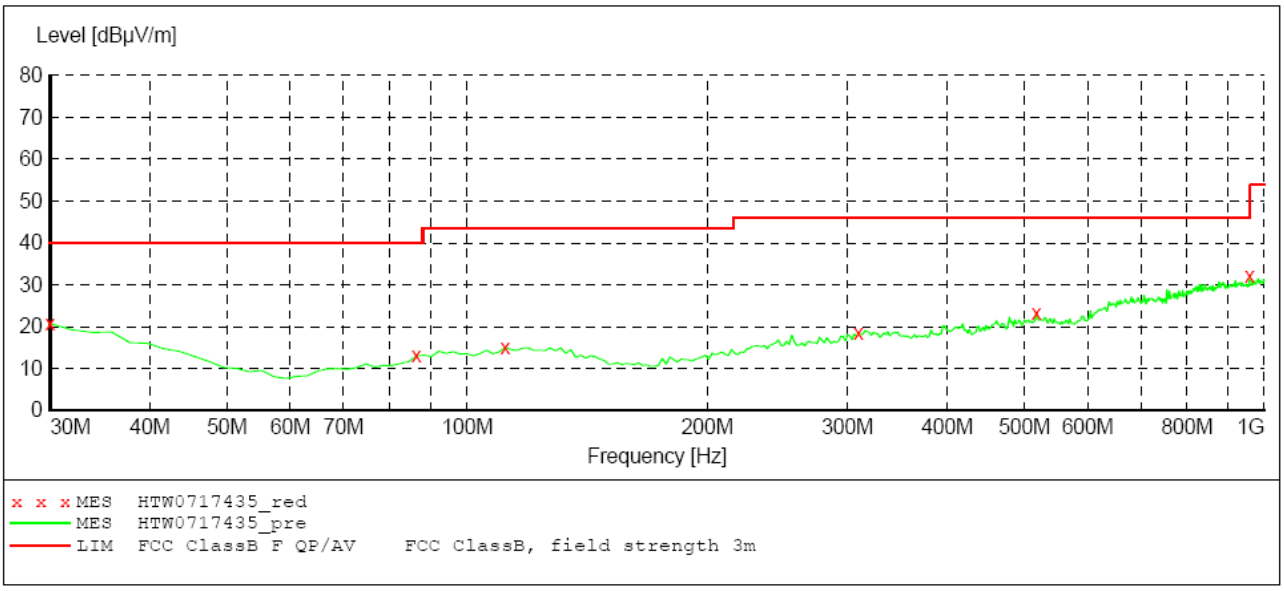
7/17/2012 8:15PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1432.865731	24.60	-10.3	54.0	29.4	AV	100.0	195.00	HORIZONTAL
2100.200401	29.40	-6.2	54.0	24.6	AV	100.0	269.00	HORIZONTAL
3092.184369	32.40	-3.1	54.0	21.6	AV	100.0	101.00	HORIZONTAL
4553.106212	35.90	-0.5	54.0	18.1	AV	100.0	308.00	HORIZONTAL
6519.038076	42.60	4.8	54.0	11.4	AV	100.0	187.00	HORIZONTAL
9422.845691	46.30	11.8	54.0	7.7	AV	100.0	192.00	HORIZONTAL

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
FM	12.5 KHz	806.5000	H	959.17	32.10	46.00
			V	947.52	31.40	46.00
Test Results			Compliance			

SWEEP TABLE: "test (30M-1G)"

```
Short Description:              Field Strength
Start       Stop        Detector  Meas.      IF         Transducer
Frequency   Frequency              Time       Bandw.
30.0 MHz    1.0 GHz     MaxPeak   Coupled    120 kHz    HL562 201106
```



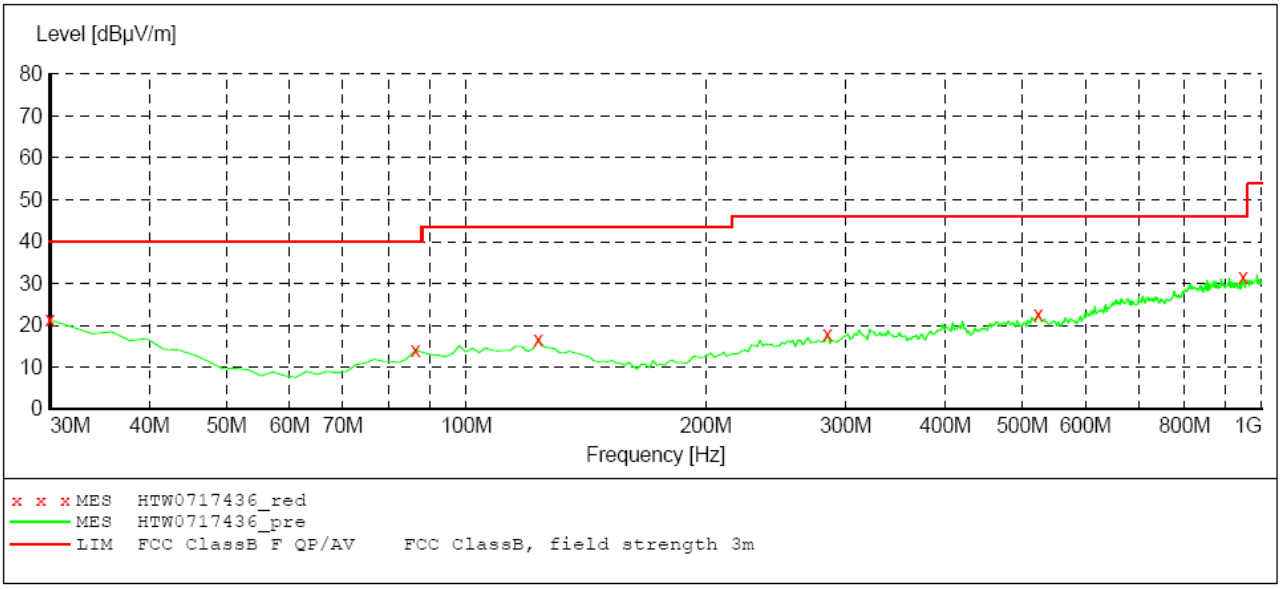
MEASUREMENT RESULT: "HTW0717435_red"

7/17/2012 7:58PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	20.70	-11.3	40.0	19.3	PK	100.0	83.00	HORIZONTAL
86.372745	13.00	-20.8	40.0	27.0	PK	300.0	206.00	HORIZONTAL
111.643287	15.00	-19.5	43.5	28.5	PK	300.0	215.00	HORIZONTAL
309.919840	18.40	-16.3	46.0	27.6	PK	100.0	103.00	HORIZONTAL
517.915832	23.30	-13.0	46.0	22.7	PK	100.0	74.00	HORIZONTAL
959.178357	32.10	-6.9	46.0	13.9	PK	300.0	330.00	HORIZONTAL

SWEEP TABLE: "test (30M-1G)"

Short Description:			Field Strength		
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0717436_red"

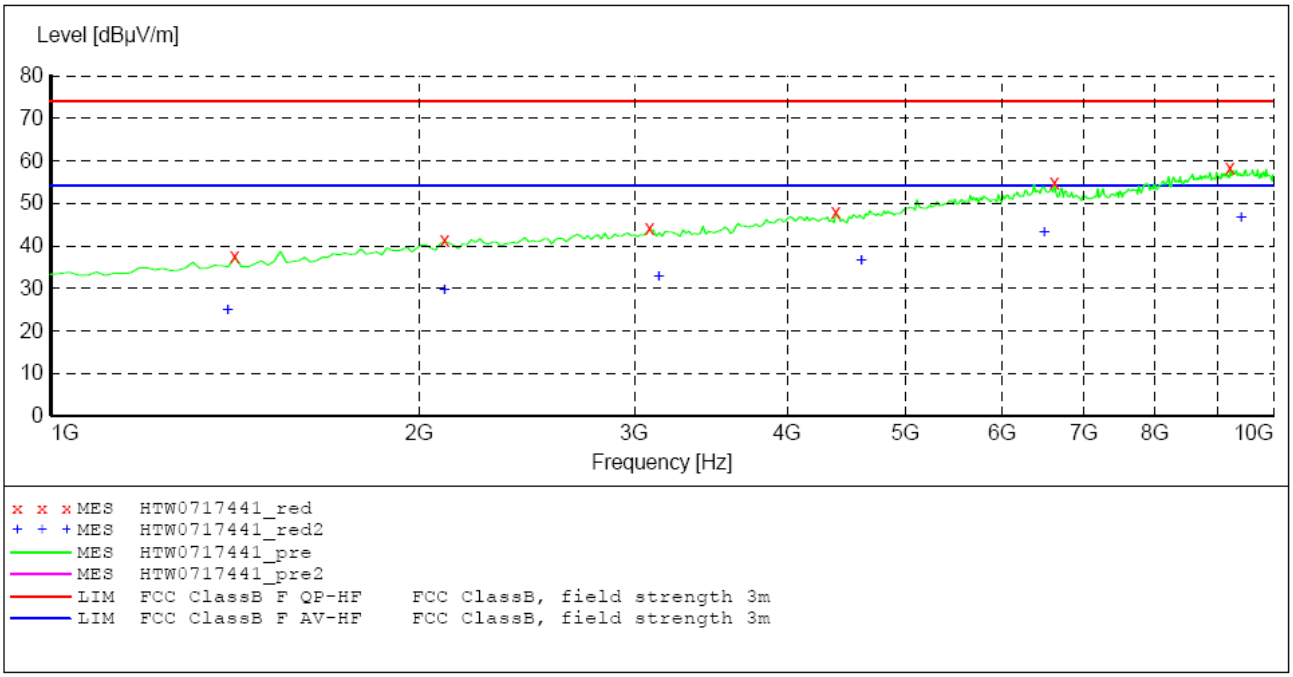
7/17/2012 8:00PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	21.20	-11.3	40.0	18.8	PK	100.0	254.00	VERTICAL
86.372745	14.00	-20.8	40.0	26.0	PK	100.0	51.00	VERTICAL
123.306613	16.50	-19.5	43.5	27.0	PK	100.0	89.00	VERTICAL
284.649299	18.00	-17.9	46.0	28.0	PK	100.0	57.00	VERTICAL
523.747495	22.50	-13.0	46.0	23.5	PK	100.0	80.00	VERTICAL
947.515030	31.40	-7.4	46.0	14.6	PK	100.0	151.00	VERTICAL

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
FM	12.5 KHz	806.5000	H	9422.50	46.30	54.00
			V	9422.50	46.30	54.00
Test Results			Compliance			

SWEEP TABLE: "test (1G-18G) P"

```
Short Description:              EN 55022 Field Strength
Start       Stop        Detector  Meas.     IF          Transducer
Frequency   Frequency              Time      Bandw.
1.0 GHz     18.0 GHz    MaxPeak   Coupled   1 MHz       HF906 2011
                        Average
```



MEASUREMENT RESULT: "HTW0717441_red"

7/17/2012 8:17PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1414.829659	37.20	-10.4	74.0	36.8	PK	100.0	113.00	HORIZONTAL
2100.200401	41.00	-6.2	74.0	33.0	PK	100.0	278.00	HORIZONTAL
3092.184369	43.80	-3.1	74.0	30.2	PK	100.0	189.00	HORIZONTAL
4390.781563	47.60	-0.6	74.0	26.4	PK	100.0	275.00	HORIZONTAL
6627.254509	54.50	4.4	74.0	19.5	PK	100.0	195.00	HORIZONTAL
9224.448898	58.00	11.2	74.0	16.0	PK	100.0	210.00	HORIZONTAL

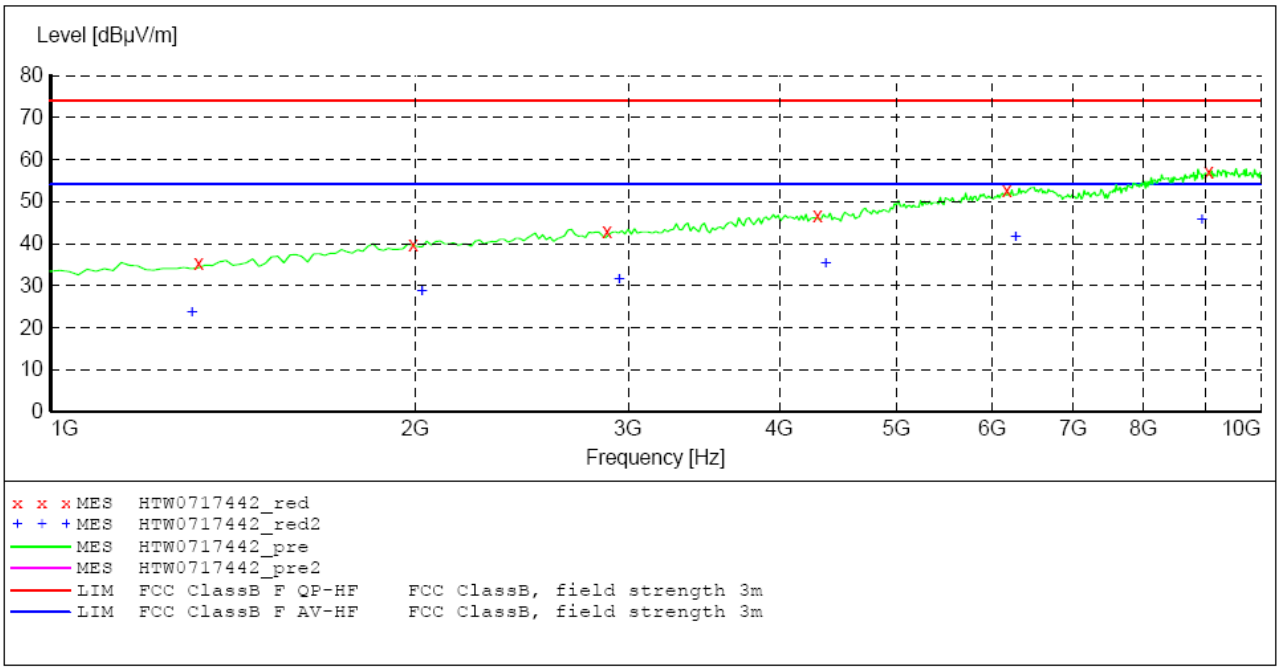
MEASUREMENT RESULT: "HTW0717441_red2"

7/17/2012 8:17PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1396.793587	24.60	-10.4	54.0	29.4	AV	100.0	304.00	HORIZONTAL
2100.200401	29.20	-6.2	54.0	24.8	AV	100.0	122.00	HORIZONTAL
3146.292585	32.40	-3.1	54.0	21.6	AV	100.0	101.00	HORIZONTAL
4607.214429	36.00	-0.3	54.0	18.0	AV	100.0	331.00	HORIZONTAL
6501.002004	42.70	4.8	54.0	11.3	AV	100.0	210.00	HORIZONTAL
9422.845691	46.30	11.8	54.0	7.7	AV	100.0	331.00	HORIZONTAL

SWEEP TABLE: "test (1G-18G) P"

Short Description:		EN 55022 Field Strength			
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak Average	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0717442_red"

7/17/2012 8:20PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1396.793587	35.90	-10.4	74.0	38.1	PK	100.0	153.00	VERTICAL
2100.200401	40.50	-6.2	74.0	33.5	PK	100.0	79.00	VERTICAL
3038.076152	43.50	-3.2	74.0	30.5	PK	100.0	329.00	VERTICAL
4535.070140	47.40	-0.6	74.0	26.6	PK	100.0	241.00	VERTICAL
6501.002004	53.30	4.8	74.0	20.7	PK	100.0	274.00	VERTICAL
9549.098196	57.80	12.0	74.0	16.2	PK	100.0	200.00	VERTICAL

MEASUREMENT RESULT: "HTW0717442_red2"

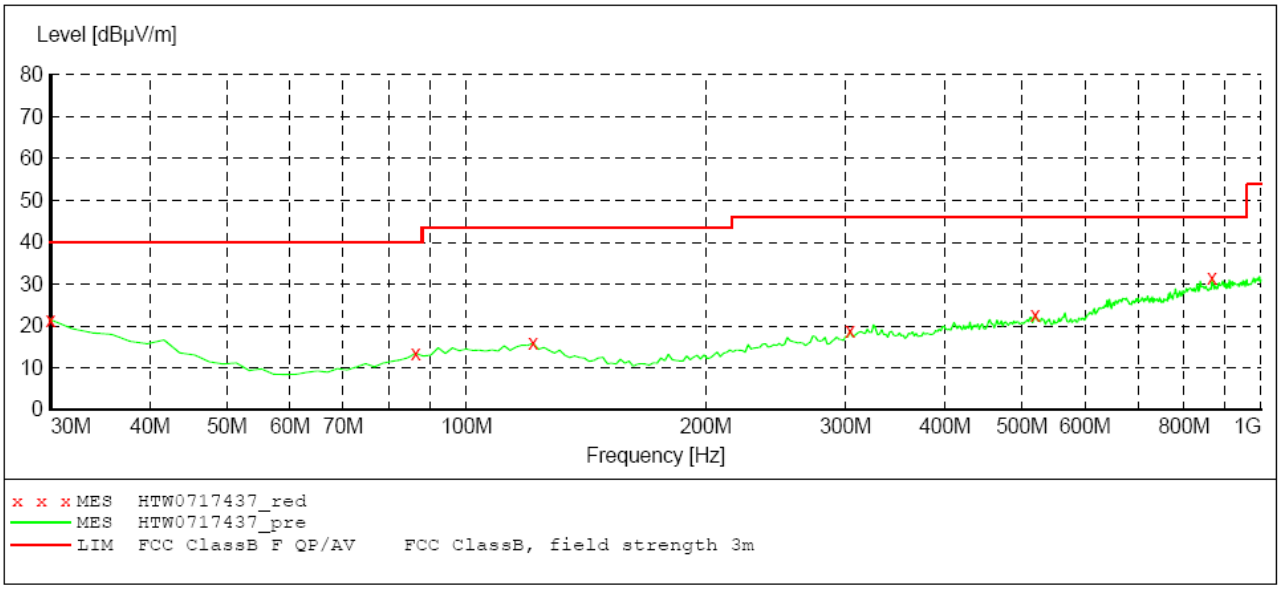
7/17/2012 8:20PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1378.757515	24.40	-10.5	54.0	29.6	AV	100.0	6.00	VERTICAL
2136.272545	29.20	-6.0	54.0	24.8	AV	100.0	310.00	VERTICAL
3110.220441	32.10	-3.1	54.0	21.9	AV	100.0	59.00	VERTICAL
4607.214429	35.80	-0.3	54.0	18.2	AV	100.0	241.00	VERTICAL
6609.218437	42.30	4.5	54.0	11.7	AV	100.0	117.00	VERTICAL
9422.845691	46.30	11.8	54.0	7.7	AV	100.0	12.00	VERTICAL

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
4FSK	12.5 KHz	806.5000	H	867.81	31.40	46.00
			V	928.07	30.70	40.00
Test Results			Compliance			

SWEEP TABLE: "test (30M-1G)"

Short Description:			Field Strength		
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	120 kHz	HL562 201106



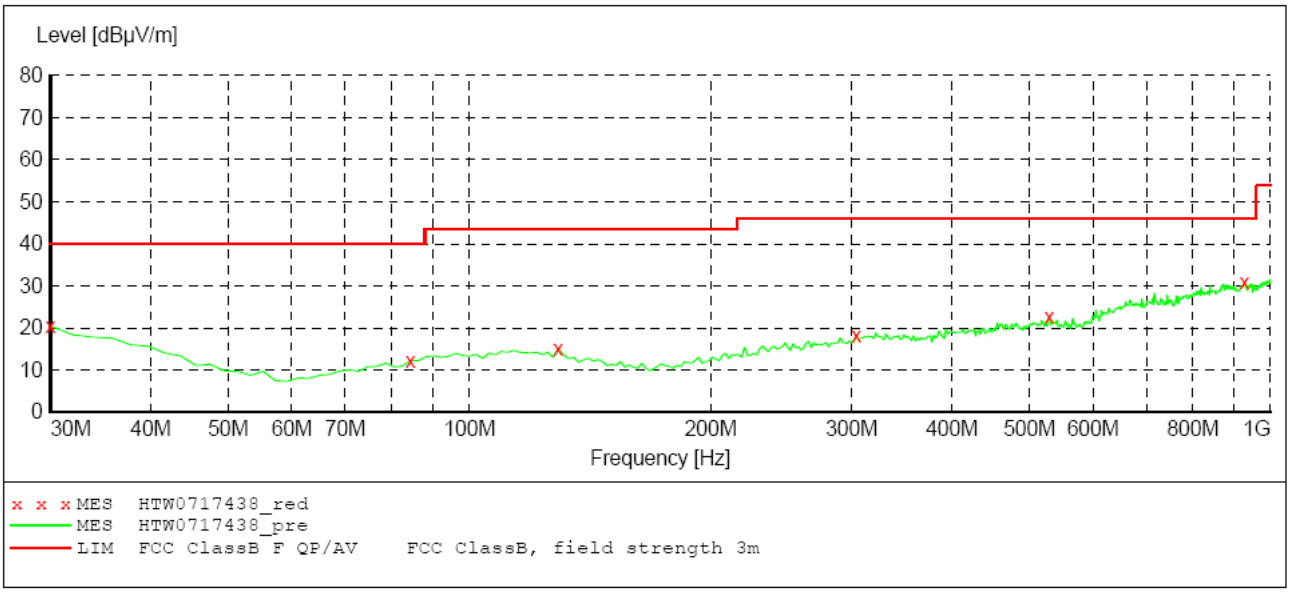
MEASUREMENT RESULT: "HTW0717437_red"

7/17/2012 8:02PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	21.50	-11.3	40.0	18.5	PK	100.0	65.00	HORIZONTAL
86.372745	13.50	-20.8	40.0	26.5	PK	300.0	285.00	HORIZONTAL
121.362725	15.90	-19.4	43.5	27.6	PK	300.0	156.00	HORIZONTAL
304.088176	18.90	-16.7	46.0	27.1	PK	300.0	198.00	HORIZONTAL
519.859719	22.70	-12.9	46.0	23.3	PK	300.0	183.00	HORIZONTAL
867.815631	31.40	-7.1	46.0	14.6	PK	100.0	329.00	HORIZONTAL

SWEEP TABLE: "test (30M-1G)"

Short Description:			Field Strength		
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0717438_red"

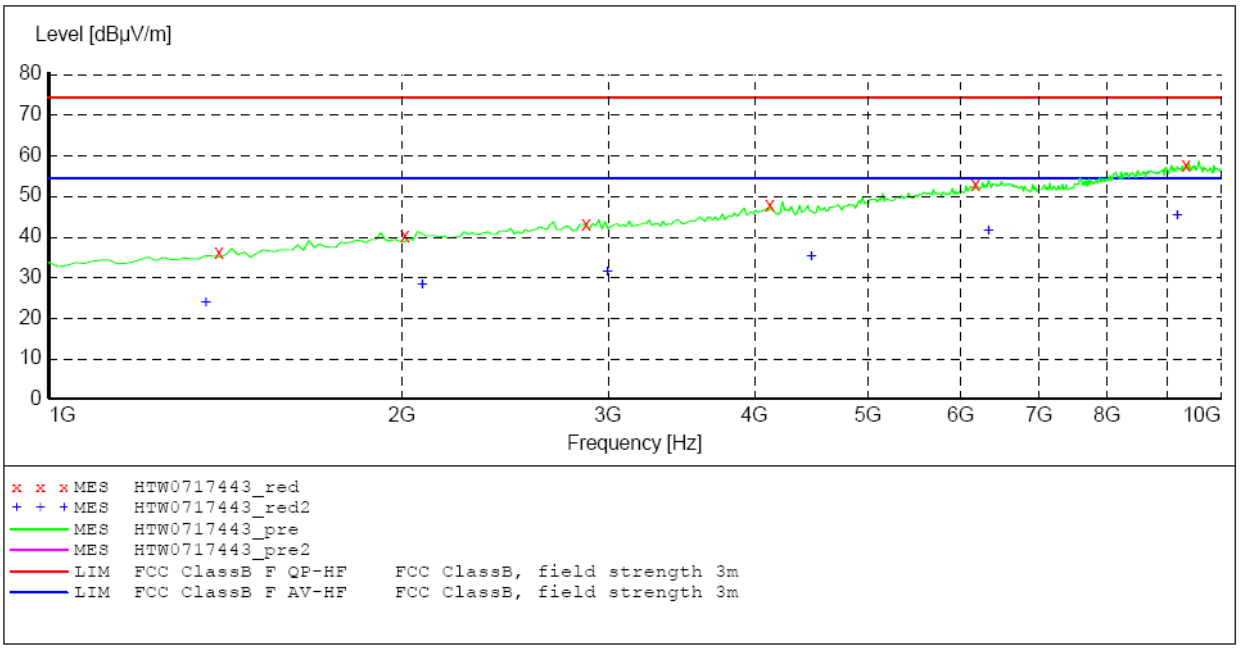
7/17/2012 8:04PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	20.50	-11.3	40.0	19.5	PK	100.0	150.00	VERTICAL
84.428858	12.20	-21.2	40.0	27.8	PK	100.0	203.00	VERTICAL
129.138277	15.10	-20.3	43.5	28.4	PK	100.0	212.00	VERTICAL
304.088176	18.30	-16.7	46.0	27.7	PK	100.0	338.00	VERTICAL
529.579158	22.50	-13.1	46.0	23.5	PK	100.0	352.00	VERTICAL
928.076152	30.70	-7.1	46.0	15.3	PK	100.0	352.00	VERTICAL

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
4FSK	12.5 KHz	806.5000	H	9422.85	46.30	54.00
			V	9422.85	46.10	54.00
Test Results			Compliance			

SWEEP TABLE: "test (1G-18G) P"

```
Short Description:              EN 55022 Field Strength
Start       Stop        Detector  Meas.     IF         Transducer
Frequency   Frequency              Time      Bandw.
1.0 GHz     18.0 GHz    MaxPeak   Coupled   1 MHz      HF906 2011
                        Average
```



MEASUREMENT RESULT: "HTW0717443_red"

7/17/2012 8:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1432.865731	36.80	-10.3	74.0	37.2	PK	100.0	40.00	VERTICAL
2064.128257	41.00	-6.3	74.0	33.0	PK	100.0	201.00	VERTICAL
2947.895792	43.90	-3.4	74.0	30.1	PK	100.0	341.00	VERTICAL
4228.456914	48.40	-0.5	74.0	25.6	PK	100.0	294.00	VERTICAL
6338.677355	53.60	4.1	74.0	20.4	PK	100.0	114.00	VERTICAL
9585.170341	58.40	12.0	74.0	15.6	PK	100.0	274.00	VERTICAL

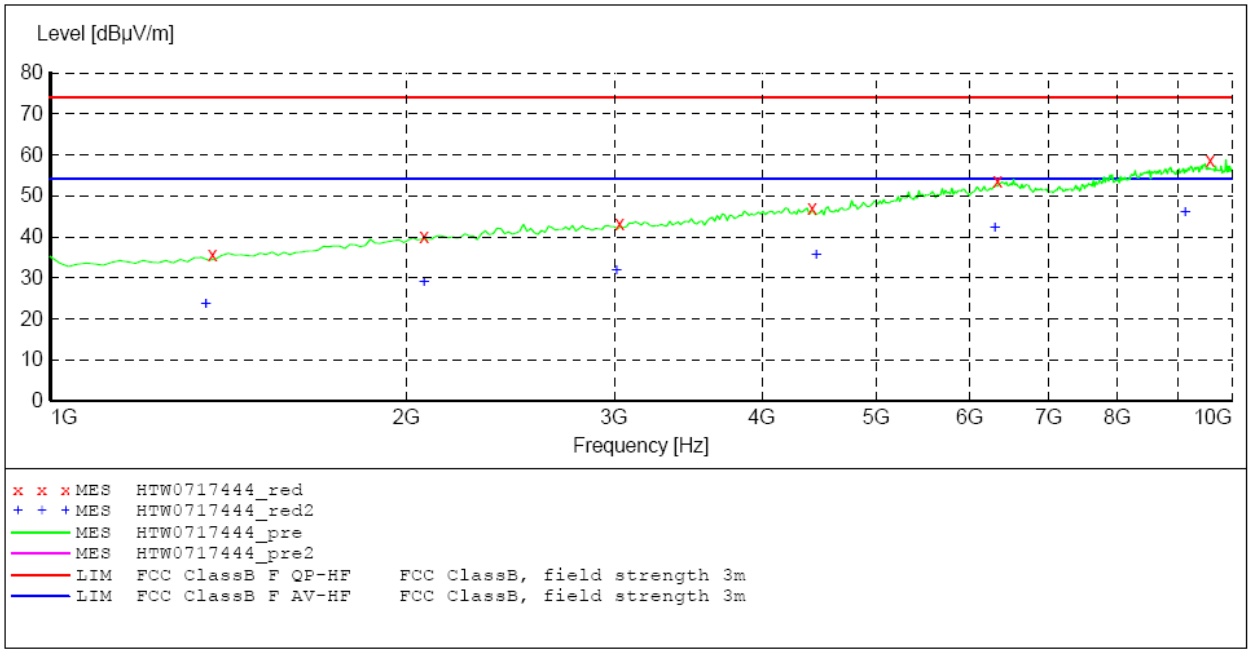
MEASUREMENT RESULT: "HTW0717443_red2"

7/17/2012 8:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1396.793587	24.40	-10.4	54.0	29.6	AV	100.0	341.00	VERTICAL
2136.272545	29.00	-6.0	54.0	25.0	AV	100.0	34.00	VERTICAL
3074.148297	32.20	-3.2	54.0	21.8	AV	100.0	176.00	VERTICAL
4589.178357	35.90	-0.3	54.0	18.1	AV	100.0	238.00	VERTICAL
6501.002004	42.30	4.8	54.0	11.7	AV	100.0	333.00	VERTICAL
9422.845691	46.10	11.8	54.0	7.9	AV	100.0	140.00	VERTICAL

SWEEP TABLE: "test (1G-18G) P"

Short Description:		EN 55022 Field Strength			
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak Average	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0717444_red"

7/17/2012 8:25PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1414.829659	35.90	-10.4	74.0	38.1	PK	100.0	74.00	HORIZONTAL
2136.272545	40.20	-6.0	74.0	33.8	PK	100.0	165.00	HORIZONTAL
3128.256513	43.60	-3.1	74.0	30.4	PK	100.0	183.00	HORIZONTAL
4553.106212	47.30	-0.5	74.0	26.7	PK	100.0	0.00	HORIZONTAL
6537.074148	53.90	4.7	74.0	20.1	PK	100.0	55.00	HORIZONTAL
9891.783567	58.80	12.0	74.0	15.2	PK	100.0	121.00	HORIZONTAL

MEASUREMENT RESULT: "HTW0717444_red2"

7/17/2012 8:25PM

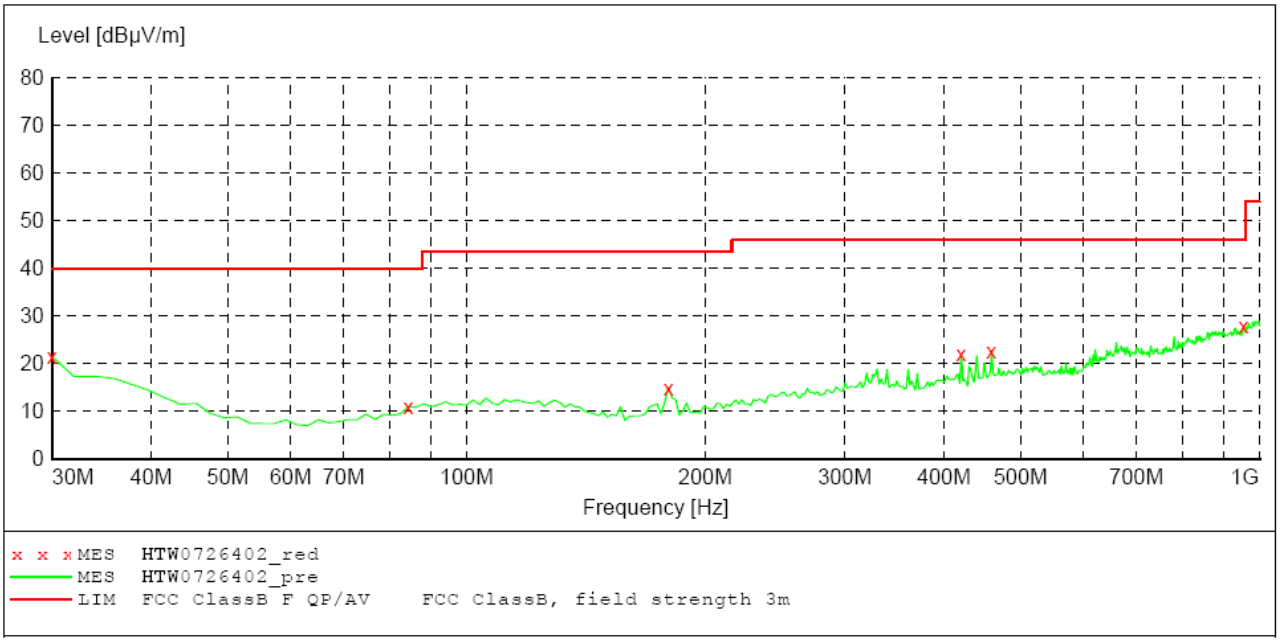
Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1396.793587	24.00	-10.4	54.0	30.0	AV	100.0	245.00	HORIZONTAL
2136.272545	29.40	-6.0	54.0	24.6	AV	100.0	106.00	HORIZONTAL
3110.220441	32.10	-3.1	54.0	21.9	AV	100.0	38.00	HORIZONTAL
4589.178357	35.90	-0.3	54.0	18.1	AV	100.0	31.00	HORIZONTAL
6501.002004	42.40	4.8	54.0	11.6	AV	100.0	295.00	HORIZONTAL
9422.845691	46.30	11.8	54.0	7.7	AV	100.0	215.00	HORIZONTAL

Only For IC Review Not For FCC Review

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
GPS	12.5 KHz	806.5000	H	955.29	27.90	46.00
			V	30.00	21.50	40.00
Test Results			Compliance			

SWEEP TABLE: "test (30M-1G)"

```
Short Description:              Field Strength
Start      Stop       Detector  Meas.     IF         Transducer
Frequency  Frequency             Time      Bandw.
30.0 MHz   1.0 GHz    MaxPeak   Coupled   120 kHz    HL562 201106
```



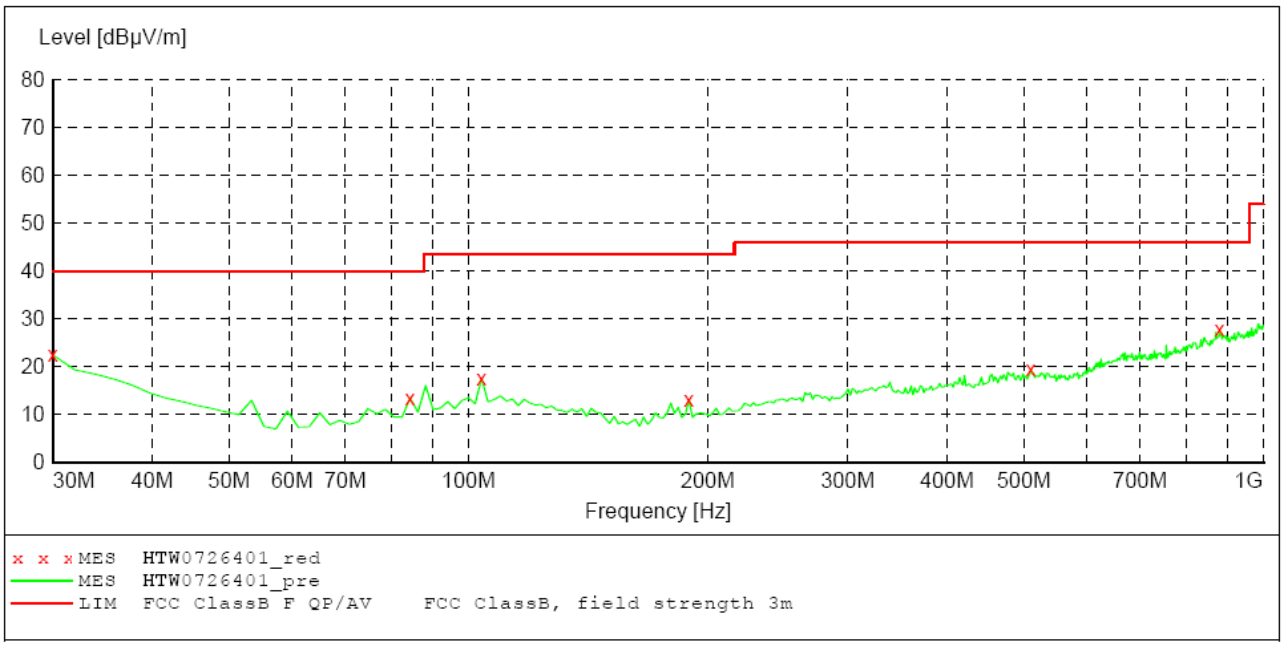
MEASUREMENT RESULT: "HTW0726402_red"

7/26/2012 10:47PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	21.50	-11.5	40.0	18.5	PK	100.0	129.00	HORIZONTAL
84.428858	11.00	-21.5	40.0	29.0	PK	100.0	278.00	HORIZONTAL
179.679359	14.90	-22.8	43.5	28.6	PK	300.0	270.00	HORIZONTAL
420.721443	22.00	-16.0	46.0	24.0	PK	100.0	33.00	HORIZONTAL
459.599198	22.60	-14.9	46.0	23.4	PK	100.0	57.00	HORIZONTAL
955.290581	27.90	-7.0	46.0	18.1	PK	300.0	165.00	HORIZONTAL

SWEEP TABLE: "test (30M-1G)"

Short Description:			Field Strength		
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
30.0 MHz	1.0 GHz	MaxPeak	Coupled	120 kHz	HL562 201106



MEASUREMENT RESULT: "HTW0726401_red"

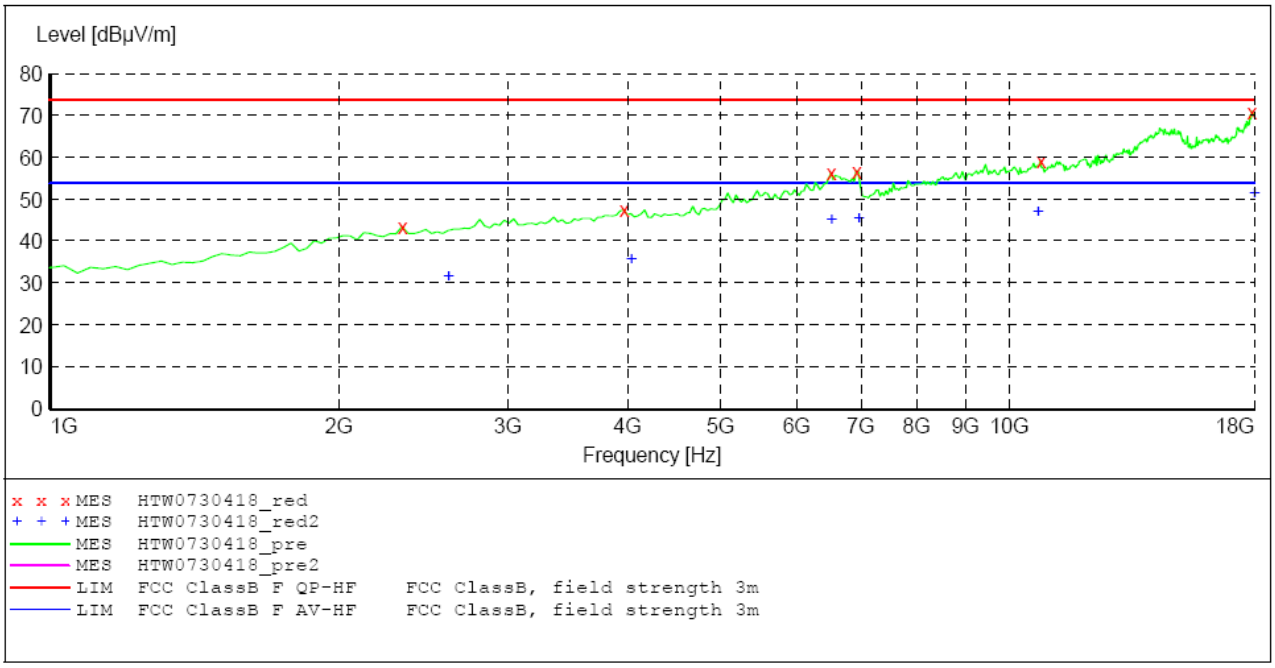
7/26/2012 10:44PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
30.000000	22.50	-11.5	40.0	17.5	PK	100.0	33.00	VERTICAL
84.428858	13.50	-21.5	40.0	26.5	PK	100.0	100.00	VERTICAL
103.867735	17.60	-20.2	43.5	25.9	PK	100.0	83.00	VERTICAL
189.398798	13.10	-23.0	43.5	30.4	PK	100.0	43.00	VERTICAL
510.140281	19.50	-14.2	46.0	26.5	PK	100.0	239.00	VERTICAL
881.422846	27.80	-7.4	46.0	18.2	PK	100.0	351.00	VERTICAL

Modulation Type	Channel Separation	Test Frequency (MHz)	Polar.	Maximum Radiated Emissions		FCC Limit (dBuV/m)
				Frequency (MHz)	Datum (dBuV/m)	
GPS	12.5 KHz	806.5000	H	18000.00	52.30	54.00
			V	18000.00	52.50	54.00
Test Results			Compliance			

SWEEP TABLE: "test (1G-18G) P"

```
Short Description:            EN 55022 Field Strength
Start       Stop       Detector  Meas.     IF         Transducer
Frequency   Frequency             Time      Bandw.
1.0 GHz     18.0 GHz   MaxPeak   Coupled   1 MHz      HF906 2011
                       Average
```



MEASUREMENT RESULT: "HTW0730418_red"

7/30/2012 11:25PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2328.657315	43.70	2.2	74.0	30.3	PK	100.0	0.00	VERTICAL
3963.927856	47.70	7.0	74.0	26.3	PK	100.0	327.00	VERTICAL
6519.038076	56.60	12.1	74.0	17.4	PK	100.0	121.00	VERTICAL
6927.855711	57.10	11.1	74.0	16.9	PK	100.0	242.00	VERTICAL
10777.555110	59.50	18.6	74.0	14.5	PK	100.0	7.00	VERTICAL
17897.795591	71.30	31.2	74.0	2.7	PK	100.0	68.00	VERTICAL

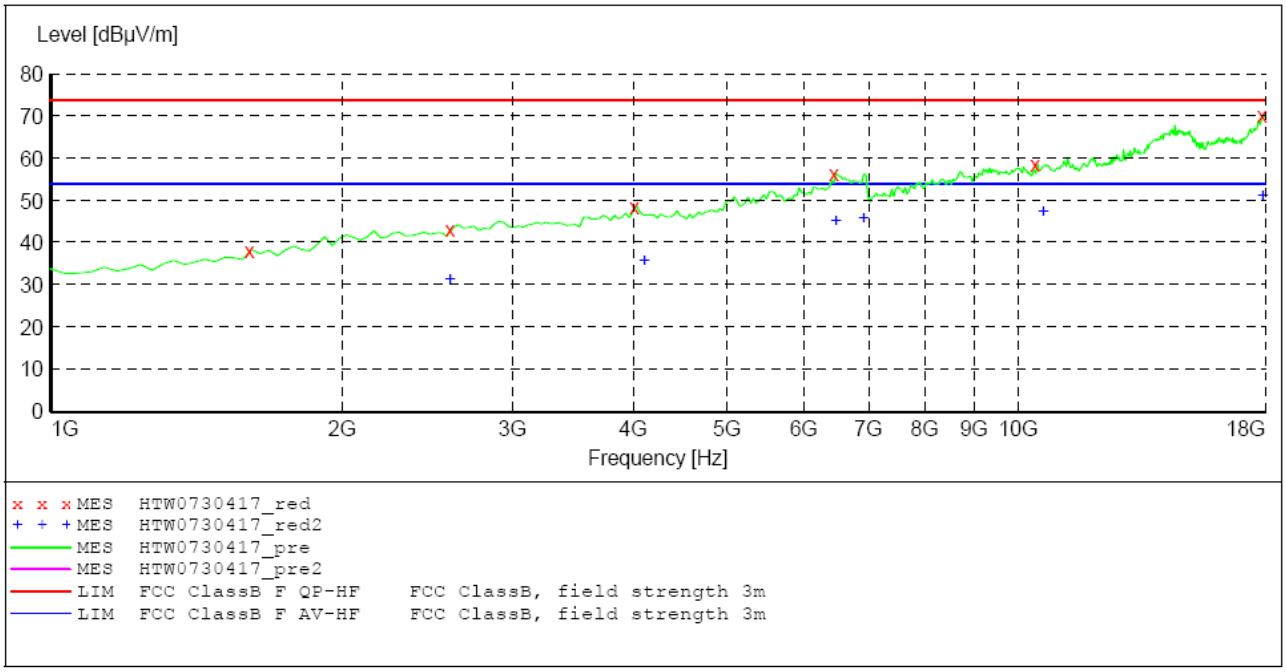
MEASUREMENT RESULT: "HTW0730418_red2"

7/30/2012 11:25PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2601.202405	32.20	3.3	54.0	21.8	AV	100.0	357.00	VERTICAL
4032.064128	36.00	7.1	54.0	18.0	AV	100.0	273.00	VERTICAL
6519.038076	45.60	12.1	54.0	8.4	AV	100.0	83.00	VERTICAL
6961.923848	46.00	11.0	54.0	8.0	AV	100.0	229.00	VERTICAL
10709.418838	47.40	18.5	54.0	6.6	AV	100.0	181.00	VERTICAL
18000.000000	52.50	31.9	54.0	1.5	AV	100.0	166.00	VERTICAL

SWEEP TABLE: "test (1G-18G) P"

Short Description:		EN 55022 Field Strength			
Start Frequency	Stop Frequency	Detector	Meas. Time	IF Bandw.	Transducer
1.0 GHz	18.0 GHz	MaxPeak Average	Coupled	1 MHz	HF906 2011



MEASUREMENT RESULT: "HTW0730417_red"

7/30/2012 11:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
1613.226453	38.50	-2.6	74.0	35.5	PK	100.0	38.00	HORIZONTAL
2601.202405	43.40	3.3	74.0	30.6	PK	100.0	262.00	HORIZONTAL
4032.064128	49.00	7.1	74.0	25.0	PK	100.0	106.00	HORIZONTAL
6484.969940	56.80	12.2	74.0	17.2	PK	100.0	160.00	HORIZONTAL
10470.941884	58.90	18.1	74.0	15.1	PK	100.0	254.00	HORIZONTAL
17965.931864	70.60	31.7	74.0	3.4	PK	100.0	150.00	HORIZONTAL

MEASUREMENT RESULT: "HTW0730417_red2"

7/30/2012 11:22PM

Frequency MHz	Level dBµV/m	Transd dB	Limit dBµV/m	Margin dB	Det.	Height cm	Azimuth deg	Polarization
2601.202405	31.80	3.3	54.0	22.2	AV	100.0	321.00	HORIZONTAL
4134.268537	36.20	7.1	54.0	17.8	AV	100.0	321.00	HORIZONTAL
6519.038076	45.60	12.1	54.0	8.4	AV	100.0	301.00	HORIZONTAL
6961.923848	46.20	11.0	54.0	7.8	AV	100.0	218.00	HORIZONTAL
10675.350701	47.80	18.5	54.0	6.2	AV	100.0	136.00	HORIZONTAL
18000.000000	52.30	31.9	54.0	1.7	AV	100.0	239.00	HORIZONTAL

4.9. Receiver Conducted Spurious Emssion

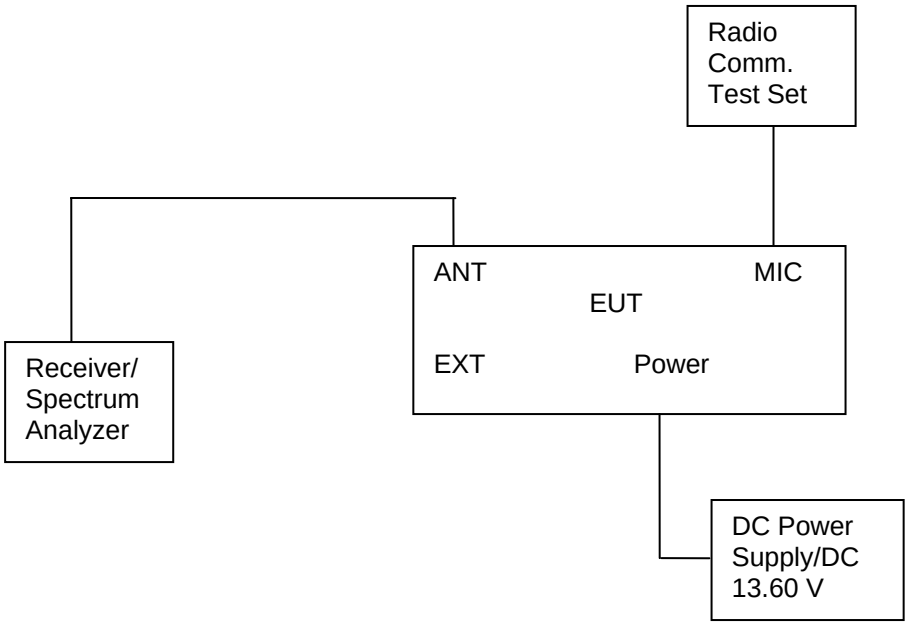
TEST APPLICABLE

The same as Section 4.3

TEST PROCEDURE

The spectrum analyzer was connected to the RF output power of the EUT, the EUT was setup in receiving mode; The RBW of the spectrum analyzer was set to 100 kHz and the VBW set to 300 KHz below the test frequency 1GHz. While the RBW of the spectrum analyzer was set to the 1MHz and VBW set to the 3MHz from 1GHz to the 10^{th} harmonic.

TEST CONFIGURATION



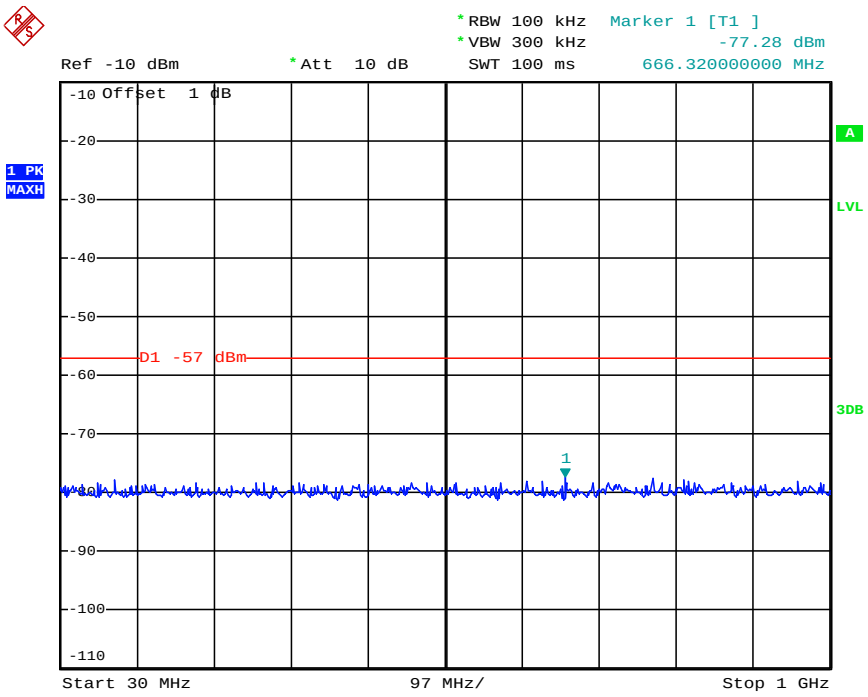
LIMIT

The power at the antenna terminal shall not exceed 2.0 nanowatts (-57dBm).

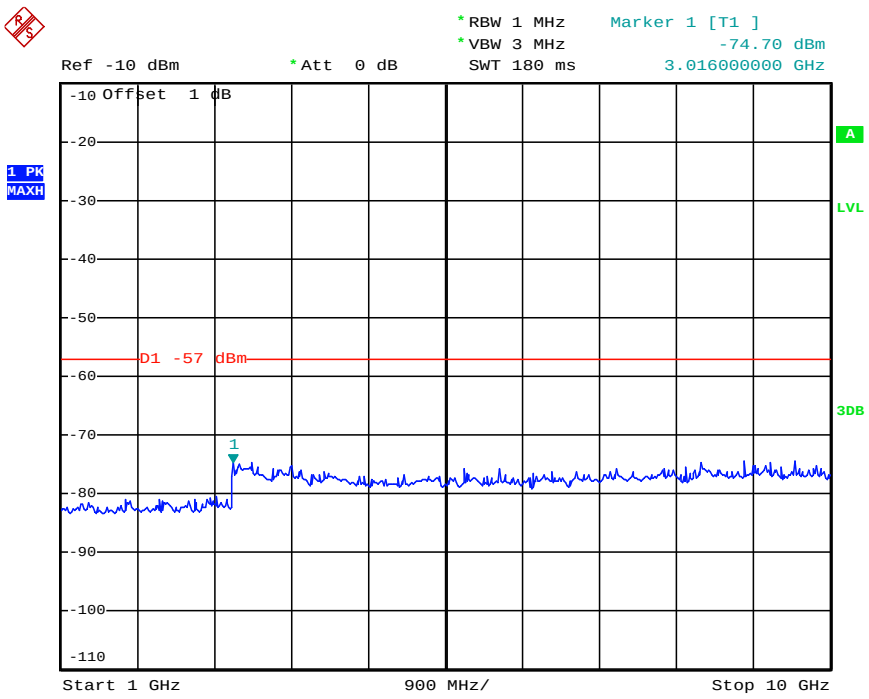
TEST RESULTS

The Receiver Conducted Spurious Emssions Measurement is performed to the thre channels (the top channel, the middle channel and the bottom channel), the datums recorded below were for the three channels; and the EUT shall be scanned from 30 MHz to the 10 GHz.

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	Low	851.5000	666.32	-77.28	3016.00	-74.70	-57dBm
Test Results				Compliance				

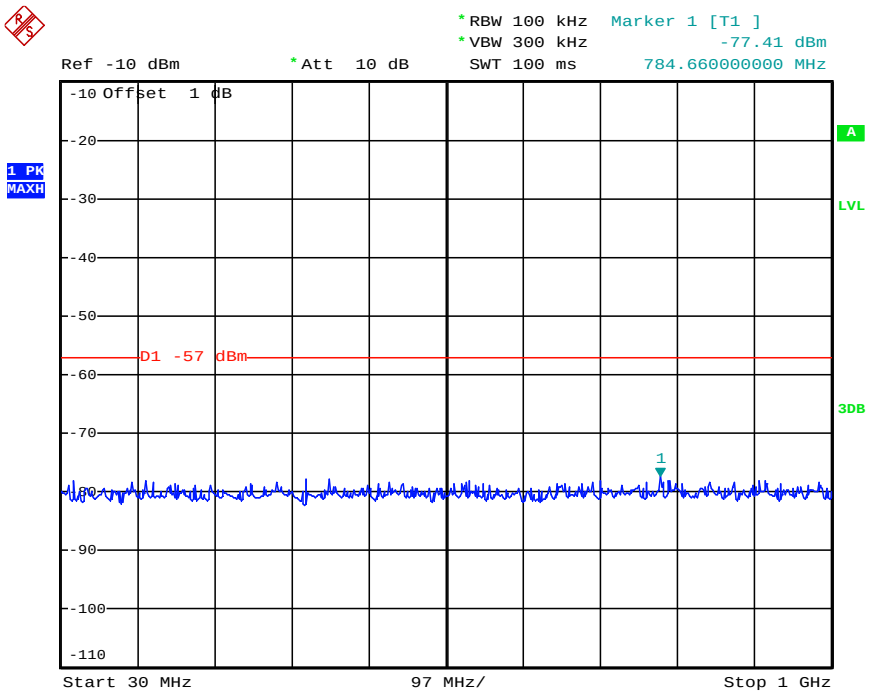


Date: 28.JUL.2012 11:03:10

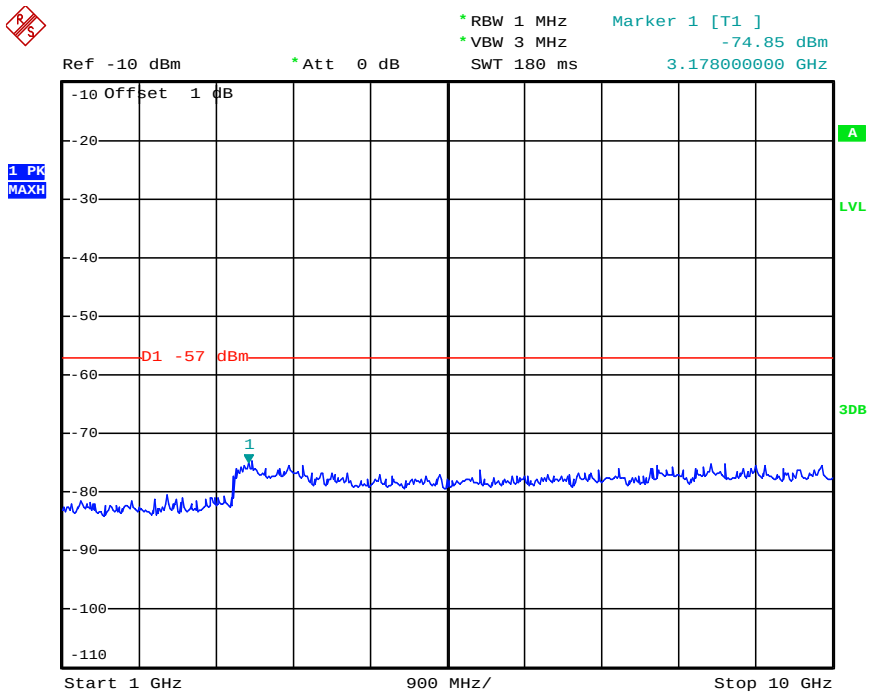


Date: 28.JUL.2012 11:04:38

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	Middle	860.0000	784.66	-77.41	3178.00	-74.85	-57dBm
Test Results				Compliance				

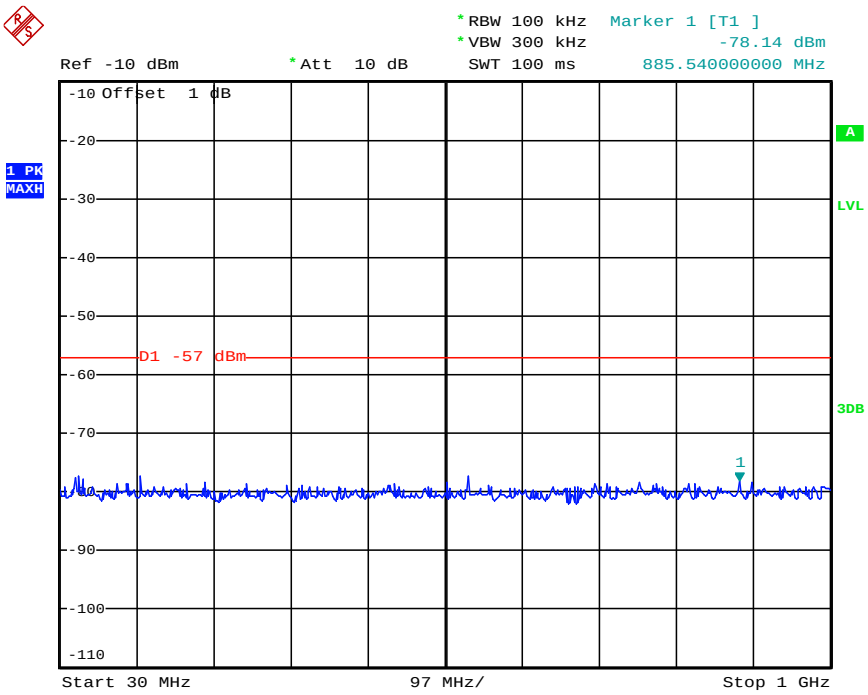


Date: 28.JUL.2012 11:03:35

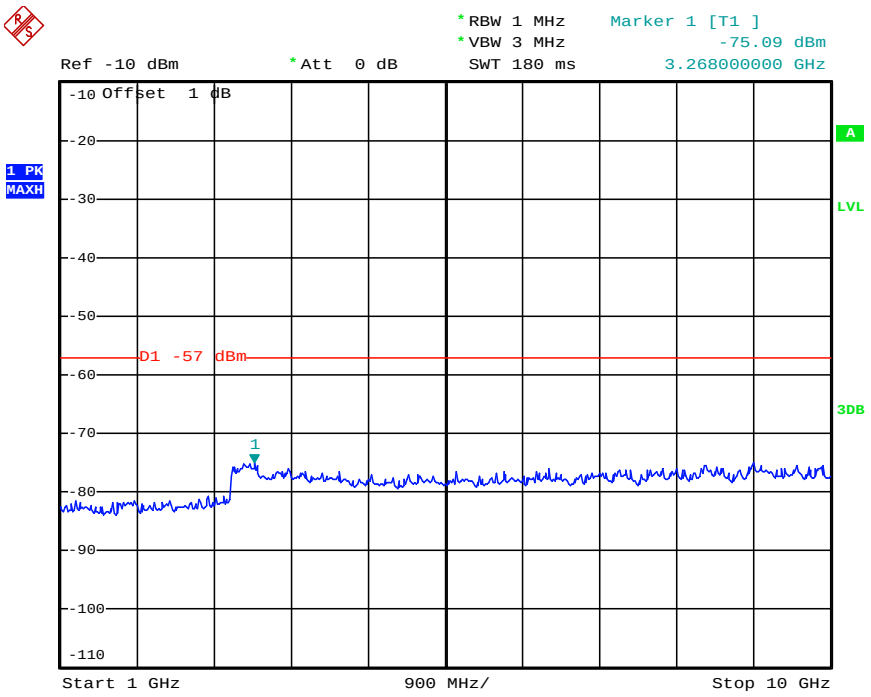


Date: 28.JUL.2012 11:04:53

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	25KHz	High	868.5000	885.54	-78.14	3268.00	-75.09	-57dBm
Test Results				Compliance				

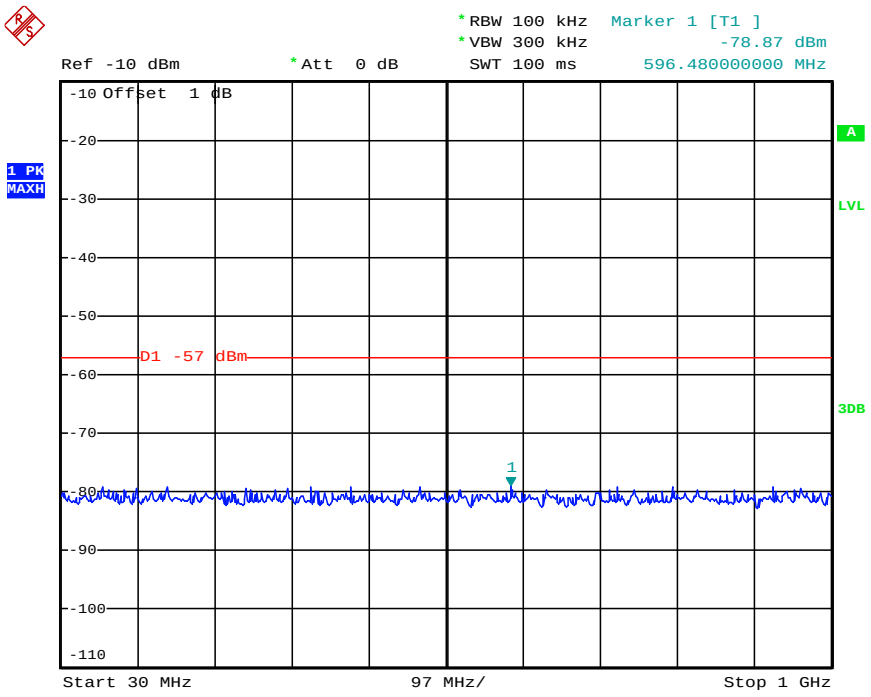


Date: 28.JUL.2012 11:03:51

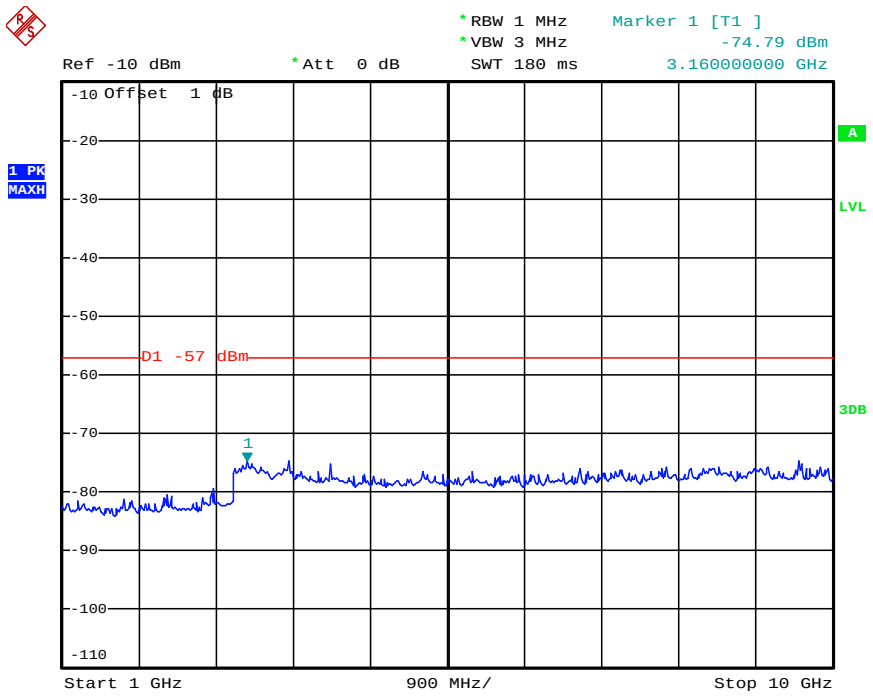


Date: 28.JUL.2012 11:05:13

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Low	851.5000	596.48	-78.87	3160.00	-74.79	-57dBm
Test Results				Compliance				

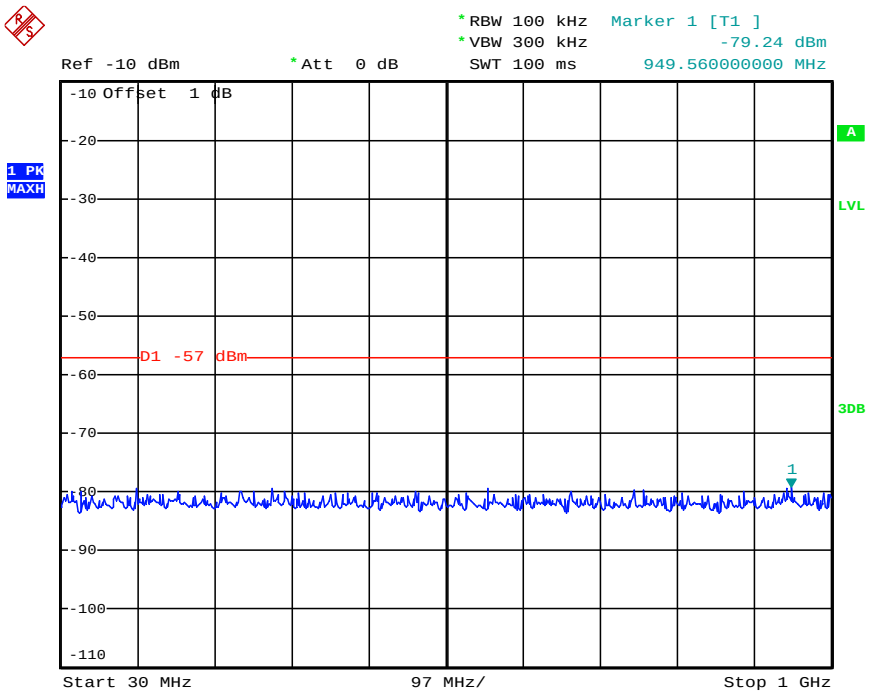


Date: 28.JUL.2012 11:07:42

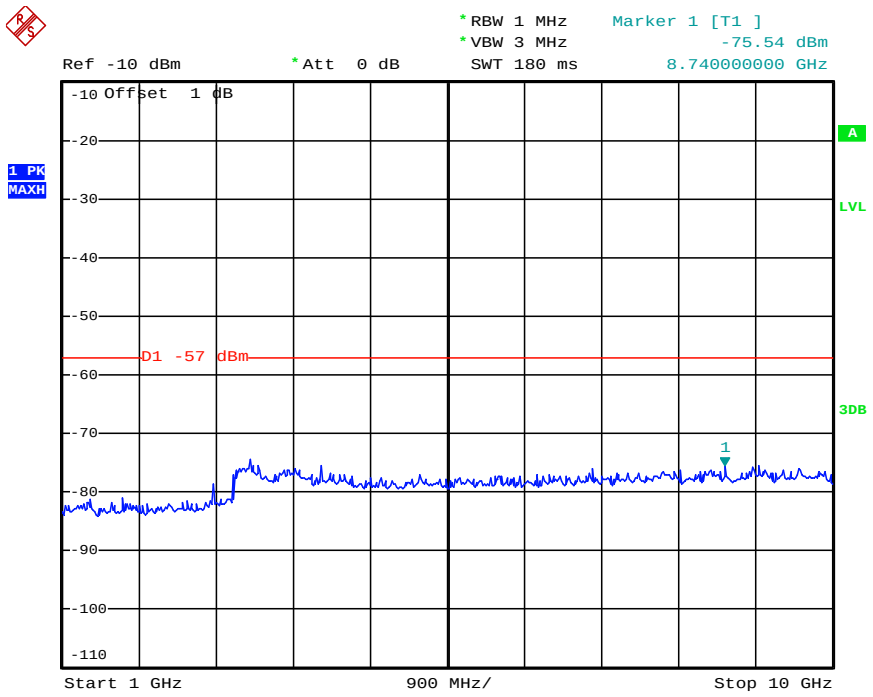


Date: 28.JUL.2012 11:05:43

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Middle	860.0000	949.56	-79.24	8740.00	-75.54	-57dBm
Test Results				Compliance				

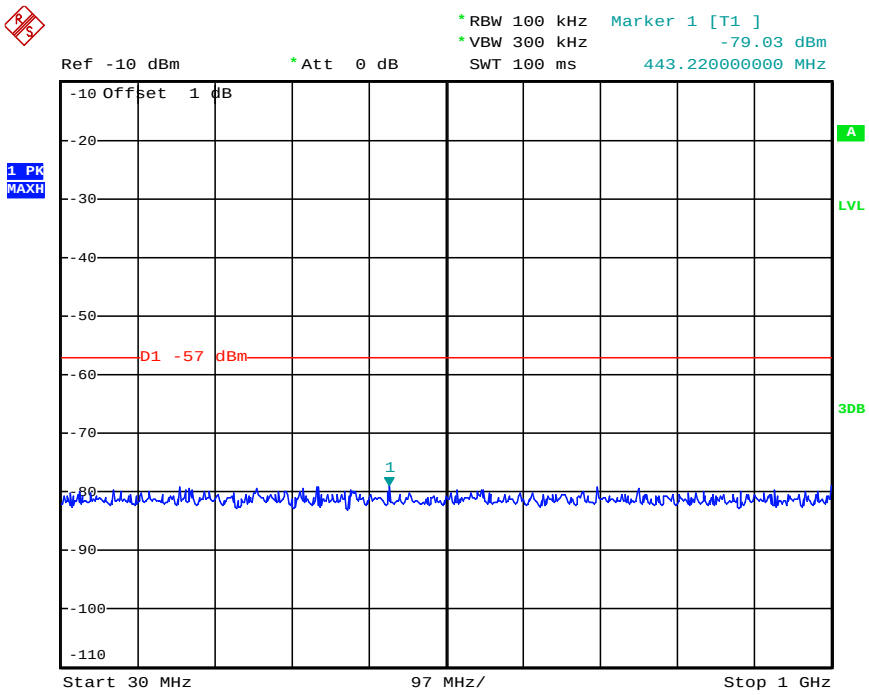


Date: 28.JUL.2012 11:07:57

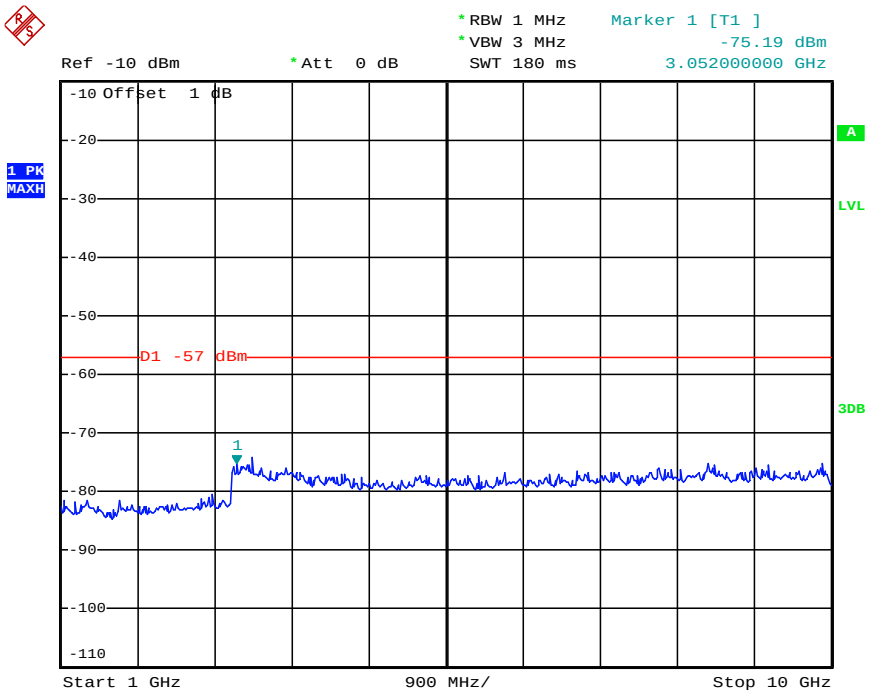


Date: 28.JUL.2012 11:05:55

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	High	868.5000	443.22	-79.03	3052.00	-75.19	-57dBm
Test Results				Compliance				

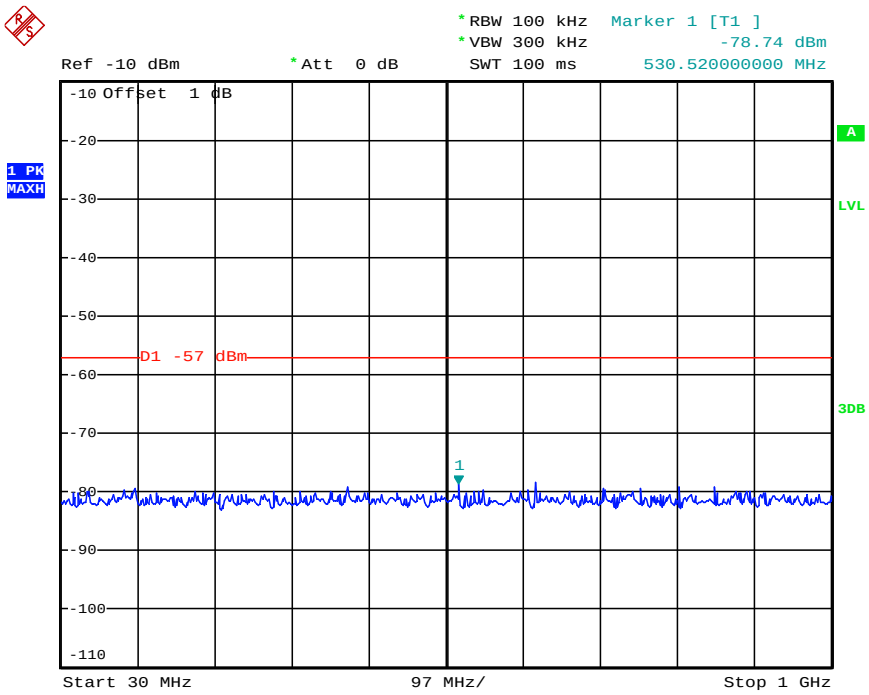


Date: 28.JUL.2012 11:08:12

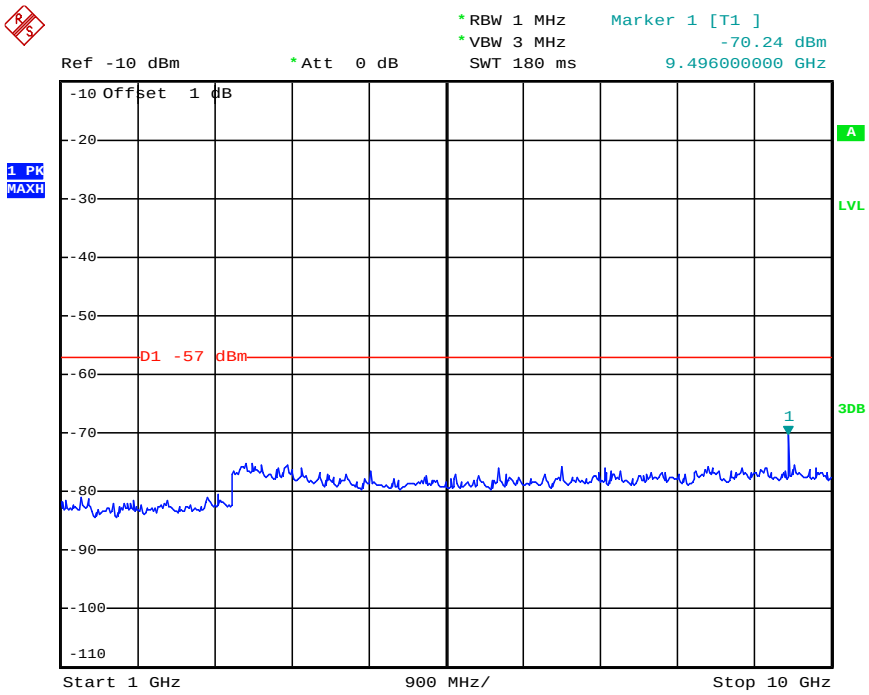


Date: 28.JUL.2012 11:06:07

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	Low	935.5000	530.52	-78.74	9496.00	-70.24	-57dBm
Test Results				Compliance				

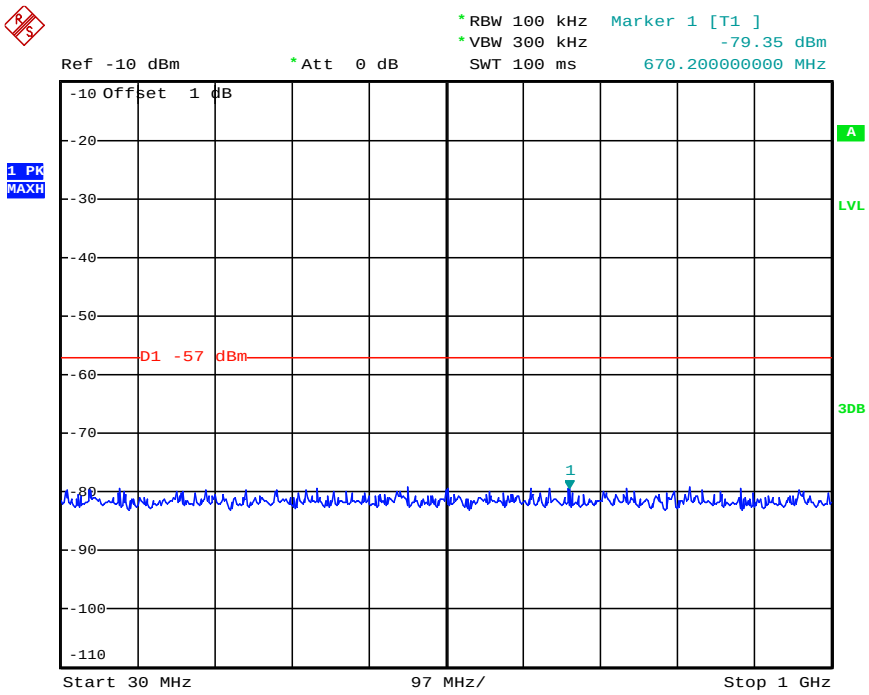


Date: 28.JUL.2012 11:08:36

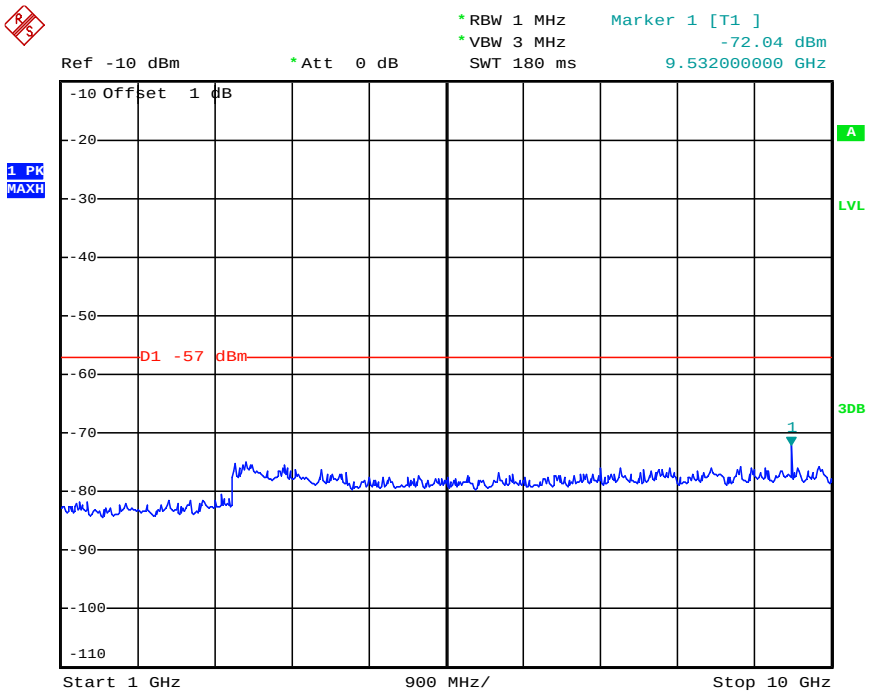


Date: 28.JUL.2012 11:06:30

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FM	12.5KHz	High	939.5000	670.20	-79.35	9532.00	-72.04	-57dBm
Test Results				Compliance				

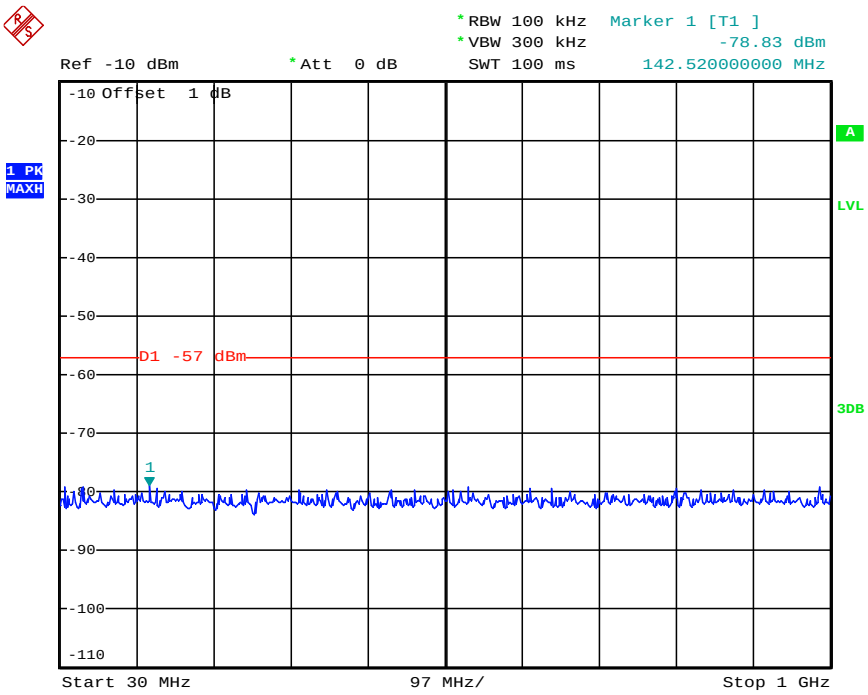


Date: 28.JUL.2012 11:08:55

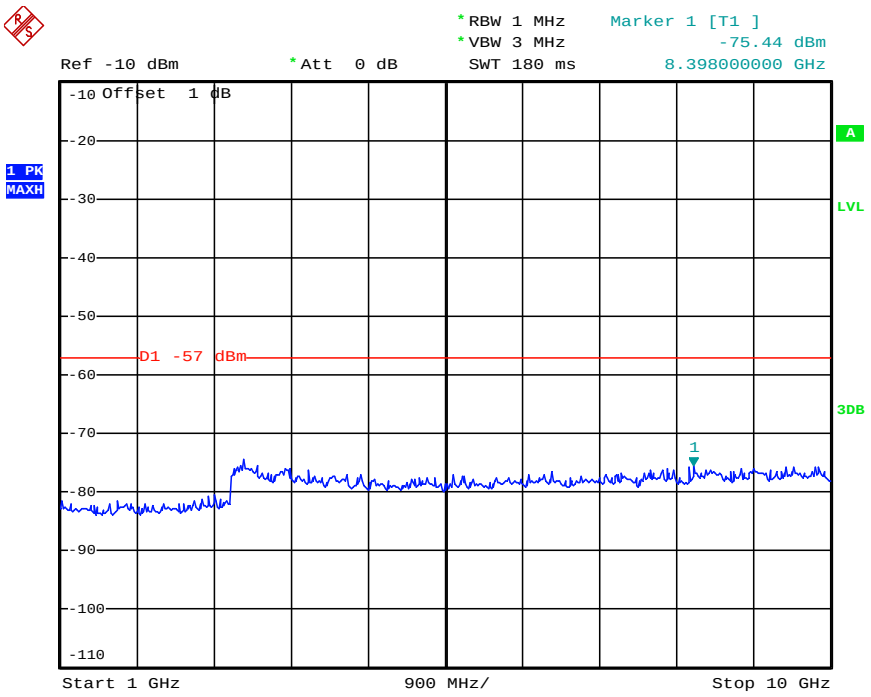


Date: 28.JUL.2012 11:06:51

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FSK	12.5KHz	Low	851.5000	142.52	-78.83	8398.00	-75.44	-57dBm
Test Results				Compliance				

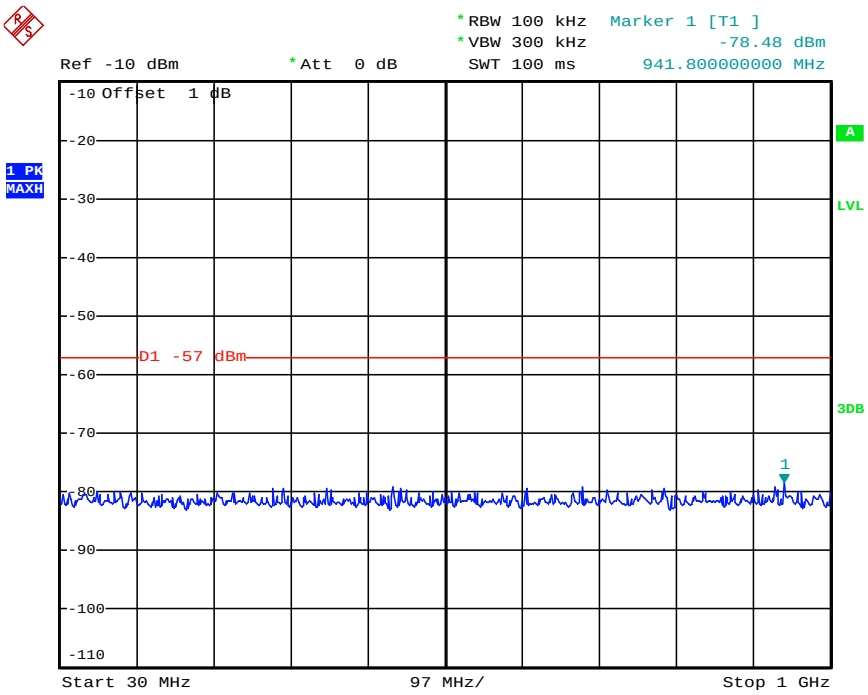


Date: 28.JUL.2012 11:09:17

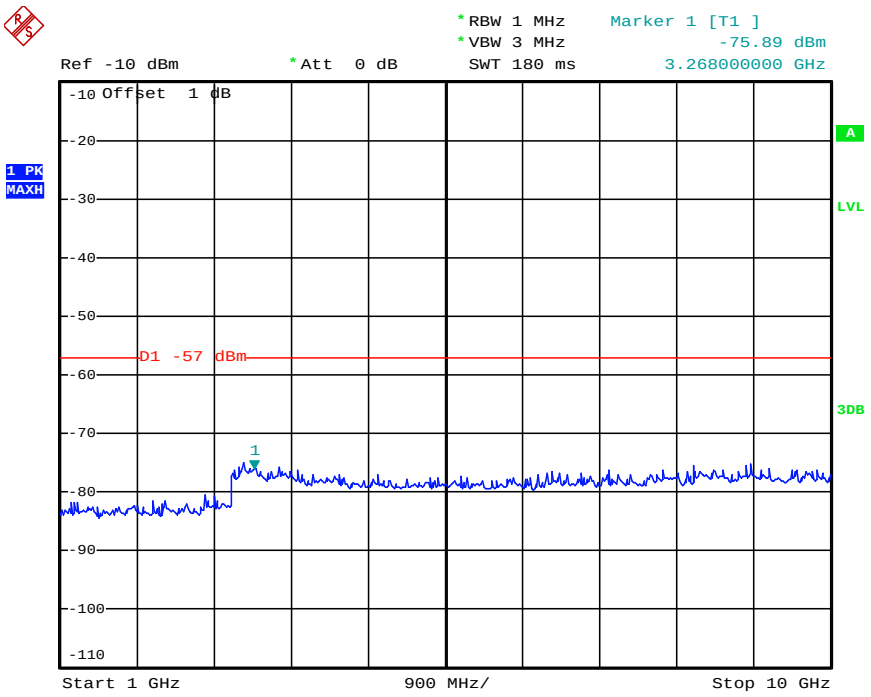


Date: 28.JUL.2012 11:11:34

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FSK	12.5KHz	Middle	860.0000	941.80	-78.48	3268.00	-75.89	-57dBm
Test Results				Compliance				

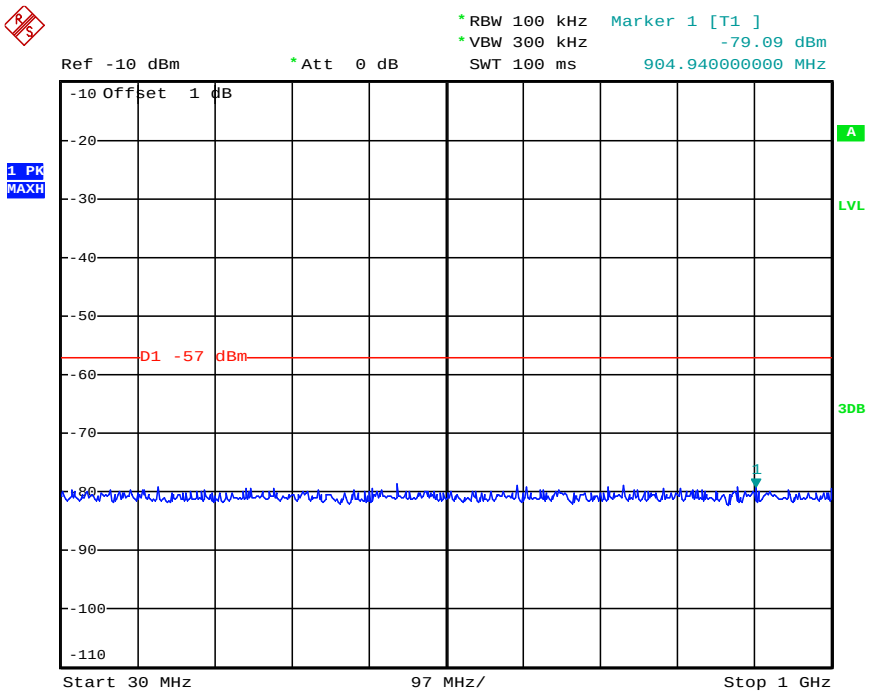


Date: 28.JUL.2012 11:09:27

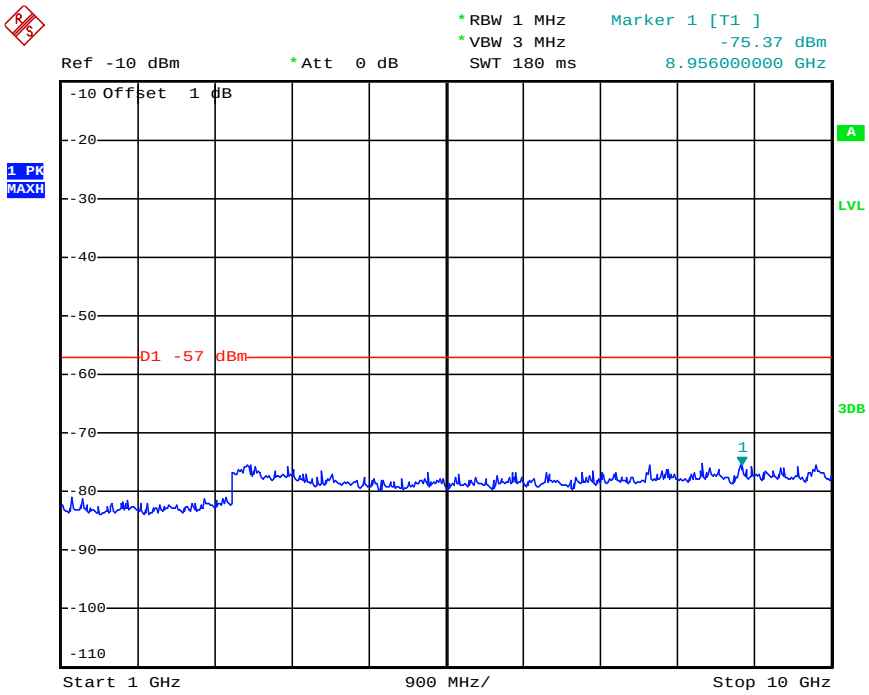


Date: 28.JUL.2012 11:11:20

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FSK	12.5KHz	High	868.5000	904.94	-79.09	8956.00	-75.37	-57dBm
Test Results				Compliance				

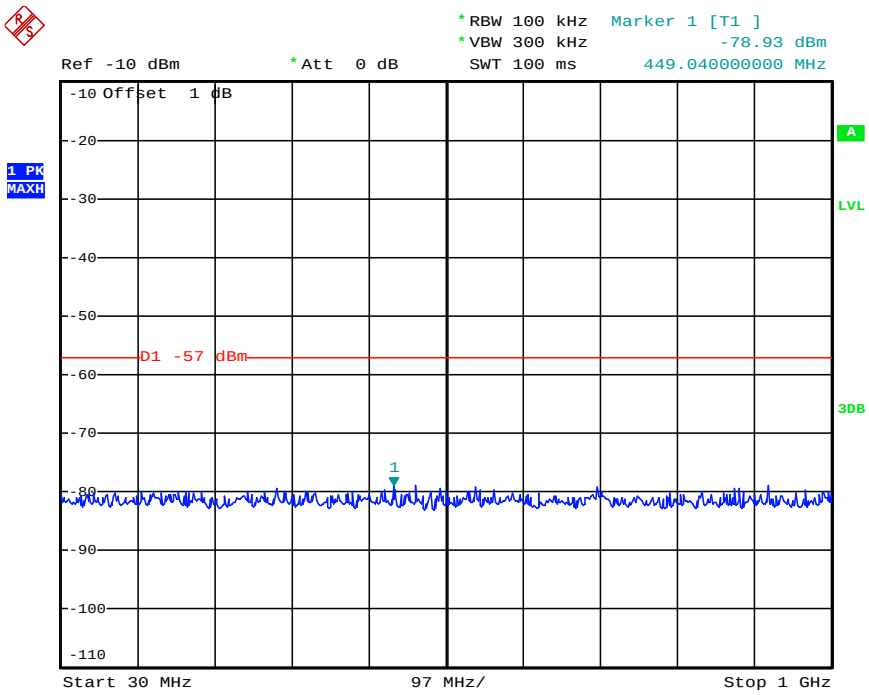


Date: 28.JUL.2012 11:09:42

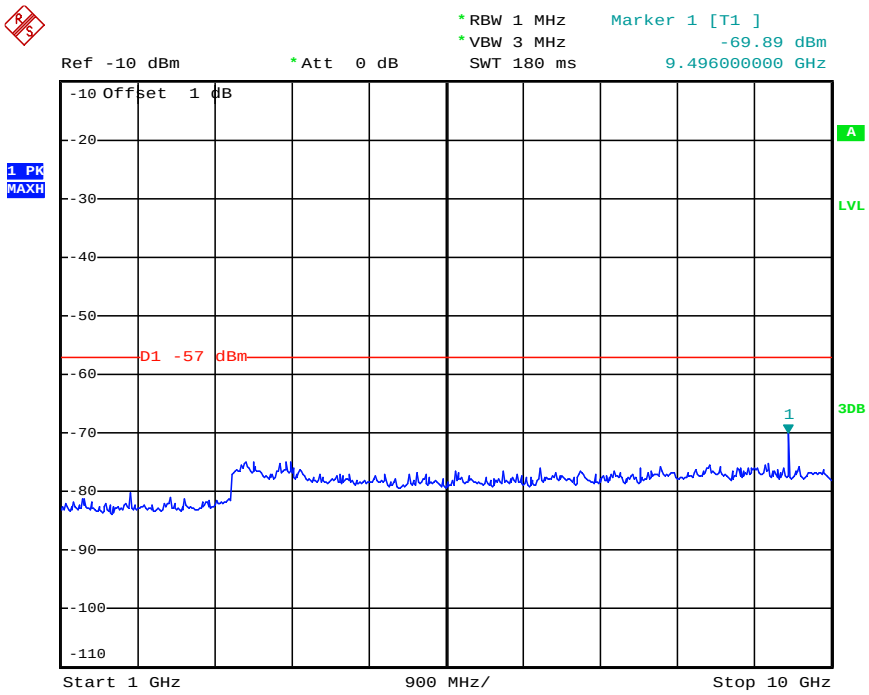


Date: 28.JUL.2012 11:11:03

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FSK	12.5KHz	Low	935.5000	449.04	-78.93	9496.00	-69.89	-57dBm
Test Results				Compliance				

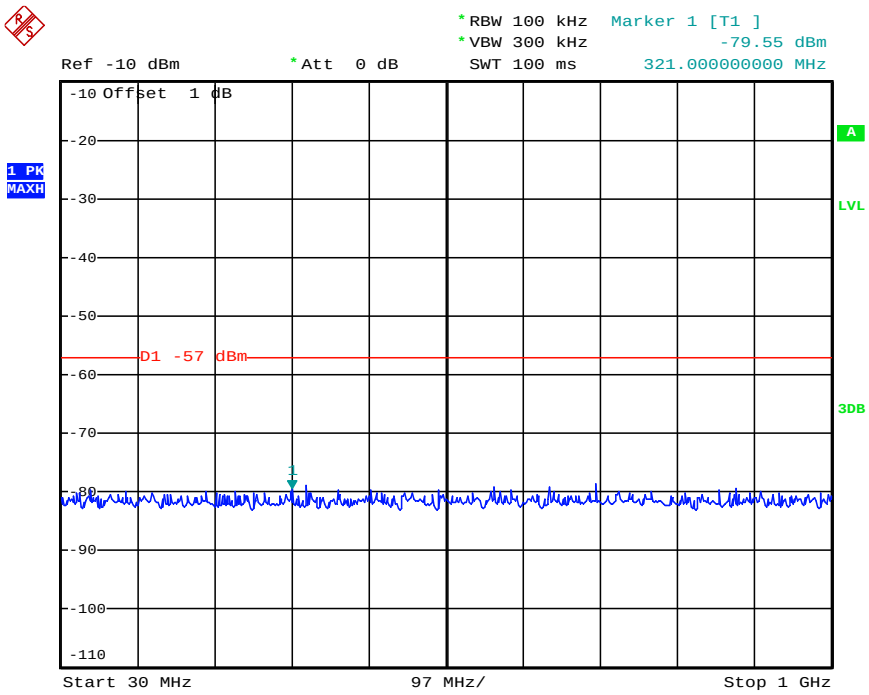


Date: 28.JUL.2012 11:09:52

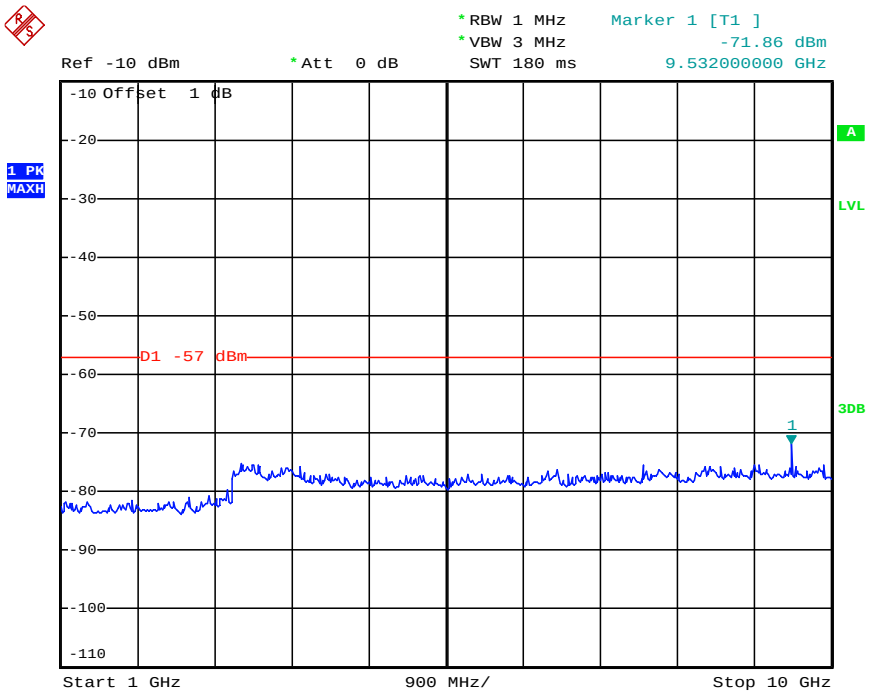


Date: 28.JUL.2012 11:10:47

Modulation Type	Channel Sparation	Test Channel	Test Frequency (MHz)	Maximum Conducted Spurious Emissions Below 1GHz		Maximum Conducted Spurious Emissions Above1GHz		FCC Limit
				Frequency (MHz)	Datum (dBm)	Frequency (MHz)	Datum (dBm)	
FSK	12.5KHz	High	939.5000	321.00	-79.55	9532.00	-71.86	-57dBm
Test Results				Compliance				

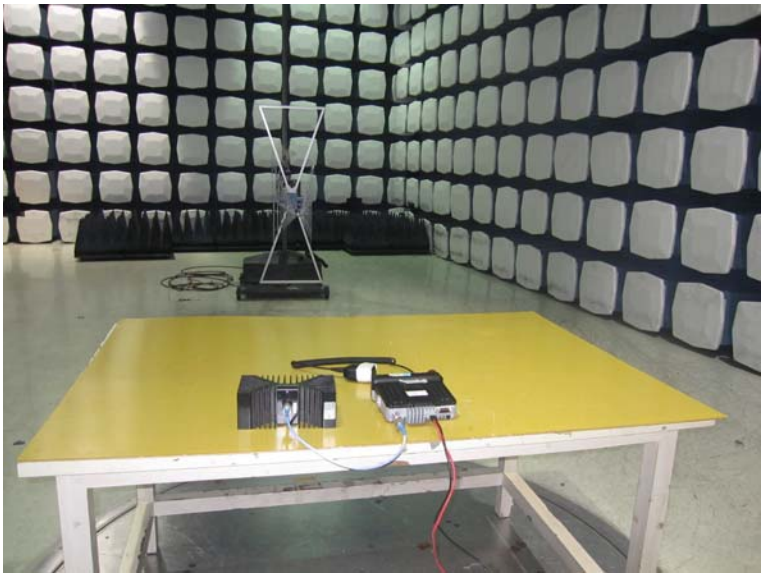


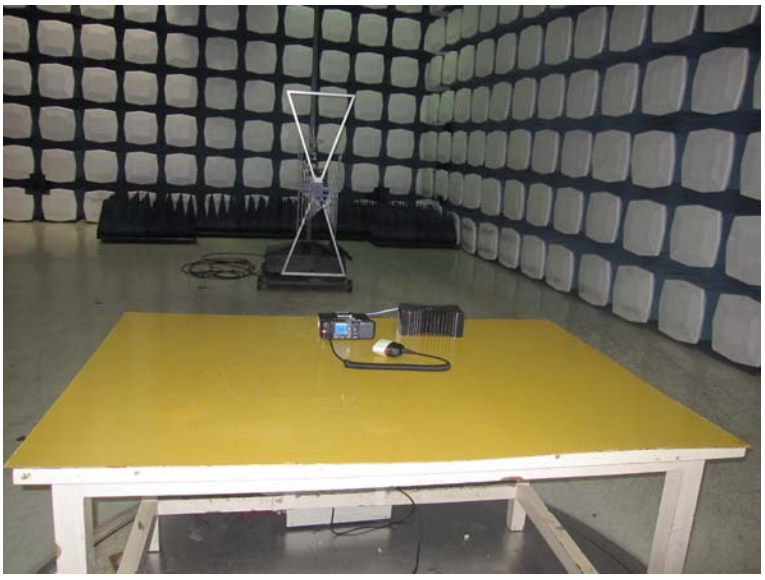
Date: 28.JUL.2012 11:10:03

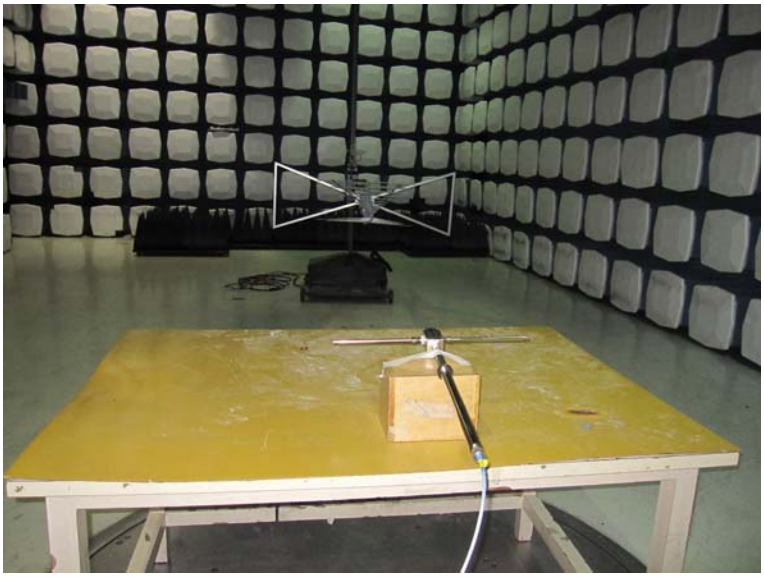


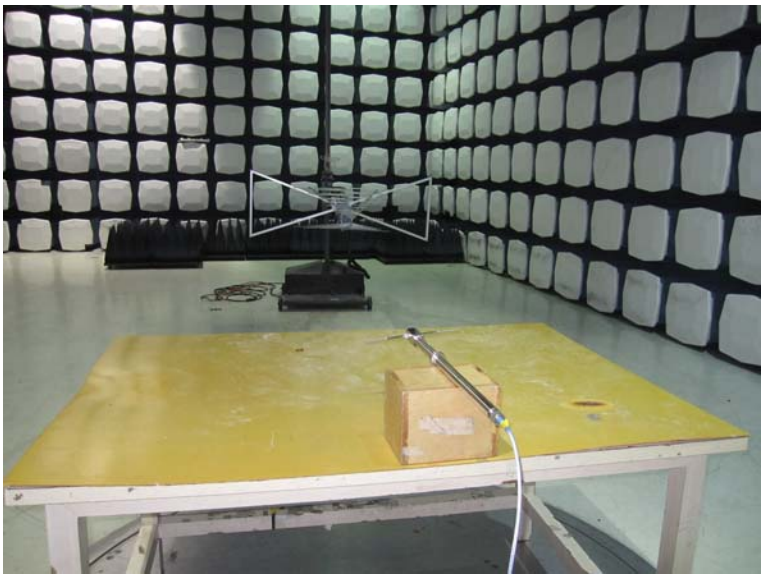
Date: 28.JUL.2012 11:10:30

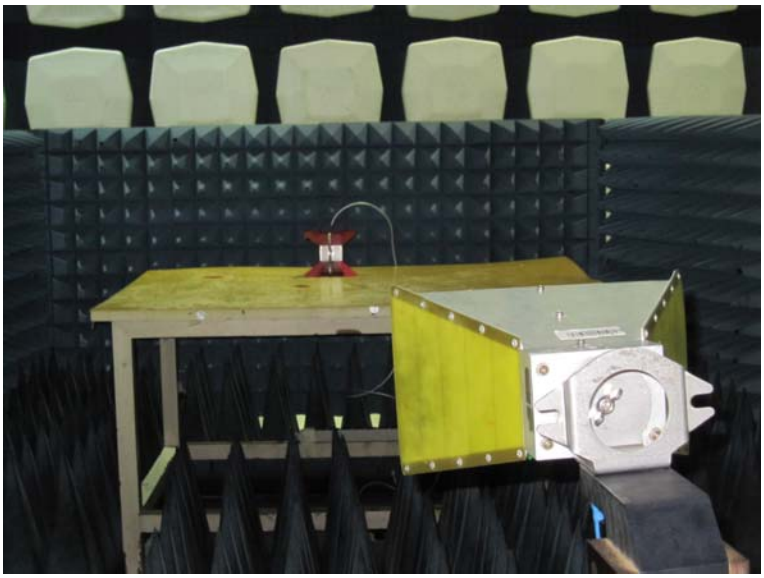
5. Test Setup Photos of the EUT

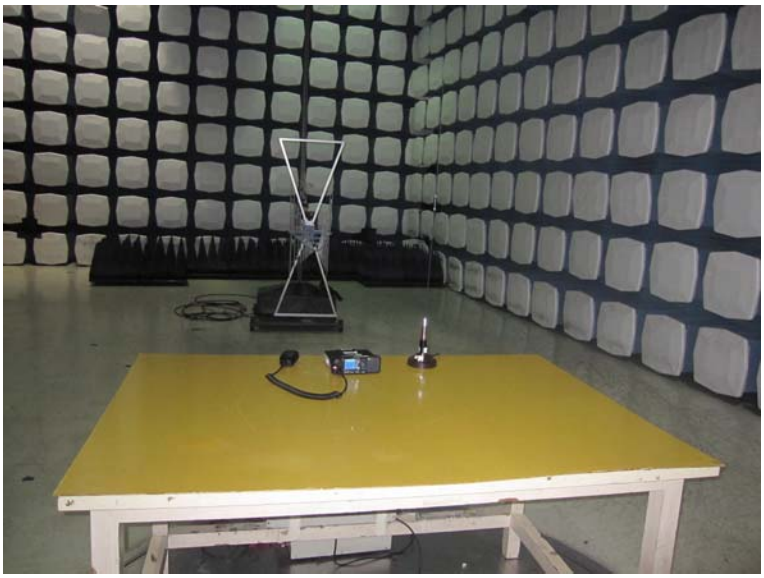


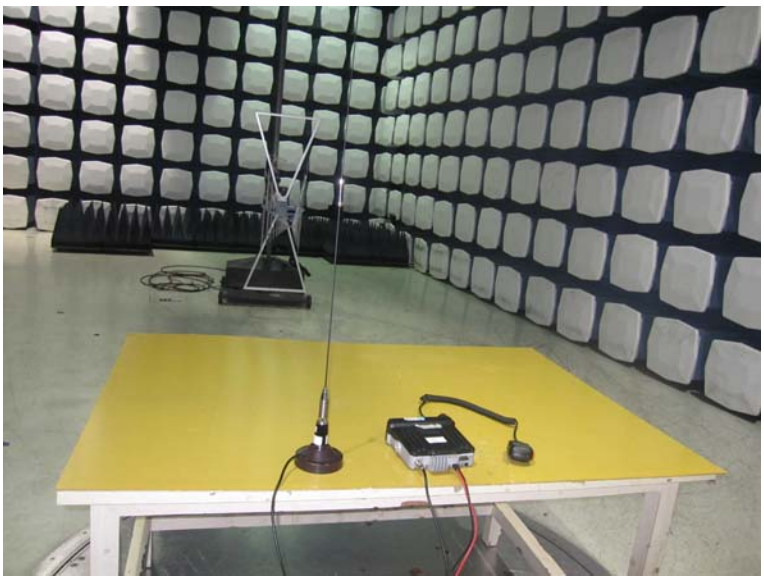


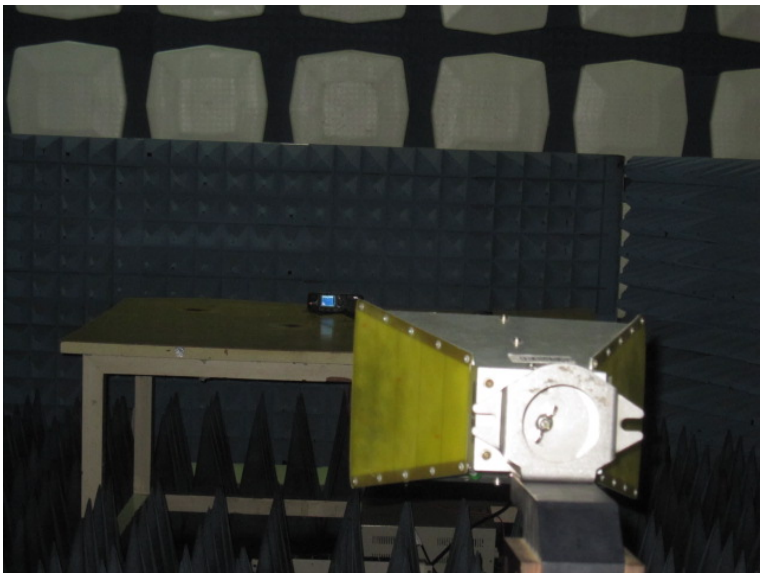












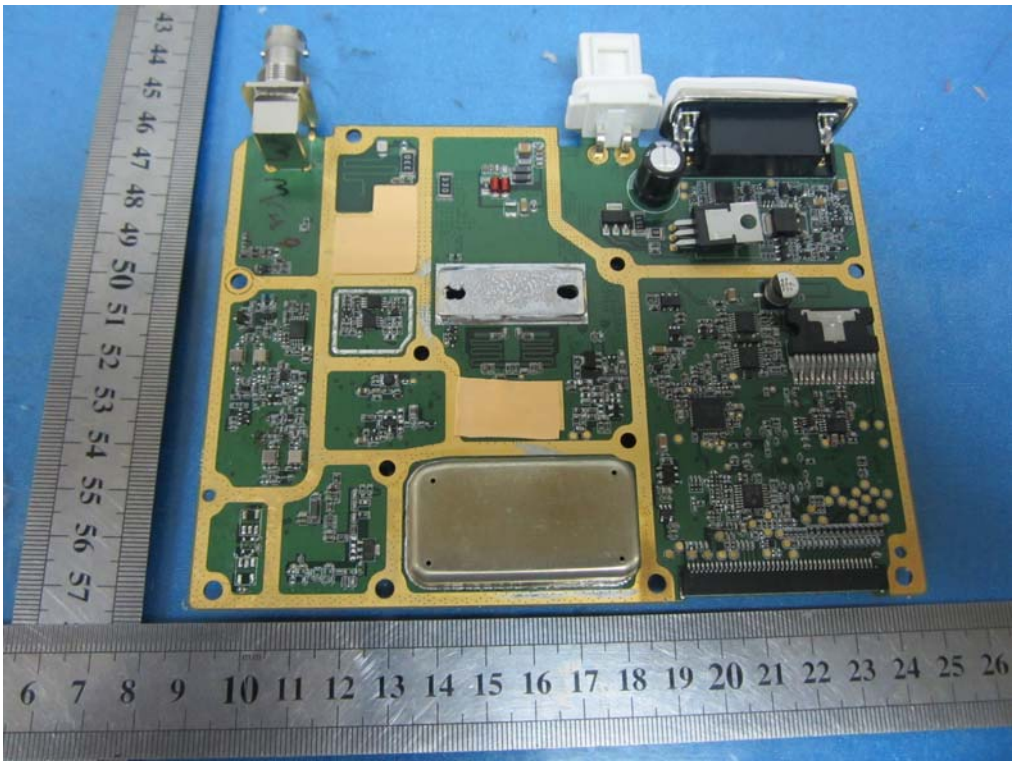
6. External and Internal Photos of the EUT

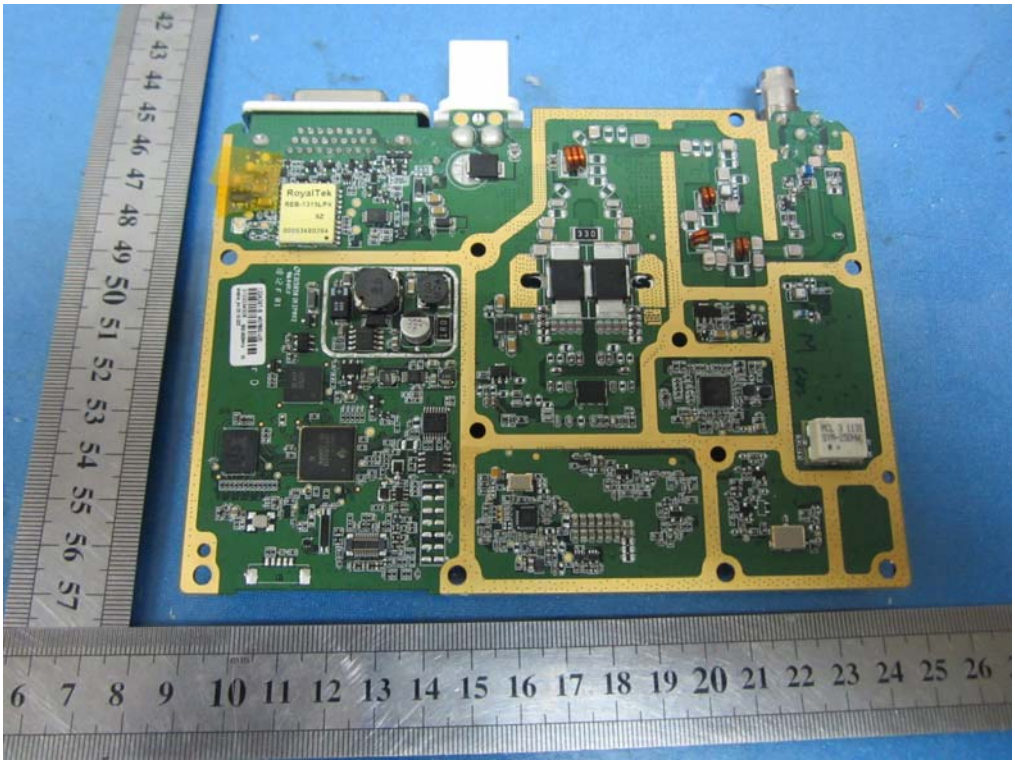
External photos of the EUT

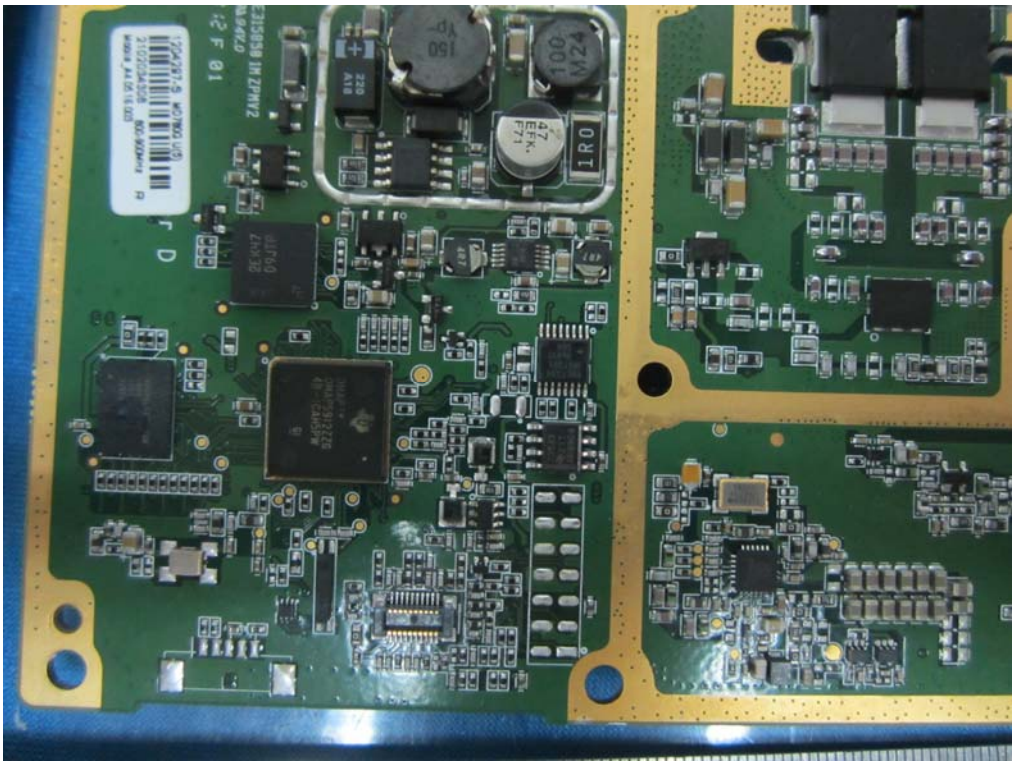

P1
P2
P3
P4

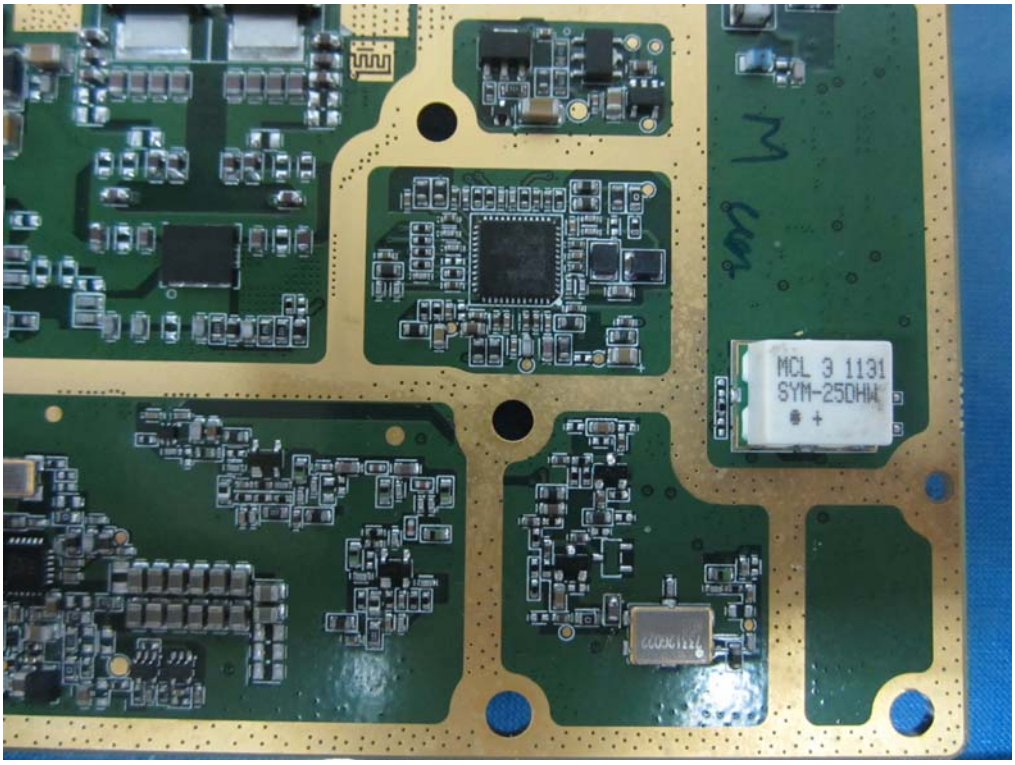

Hytera

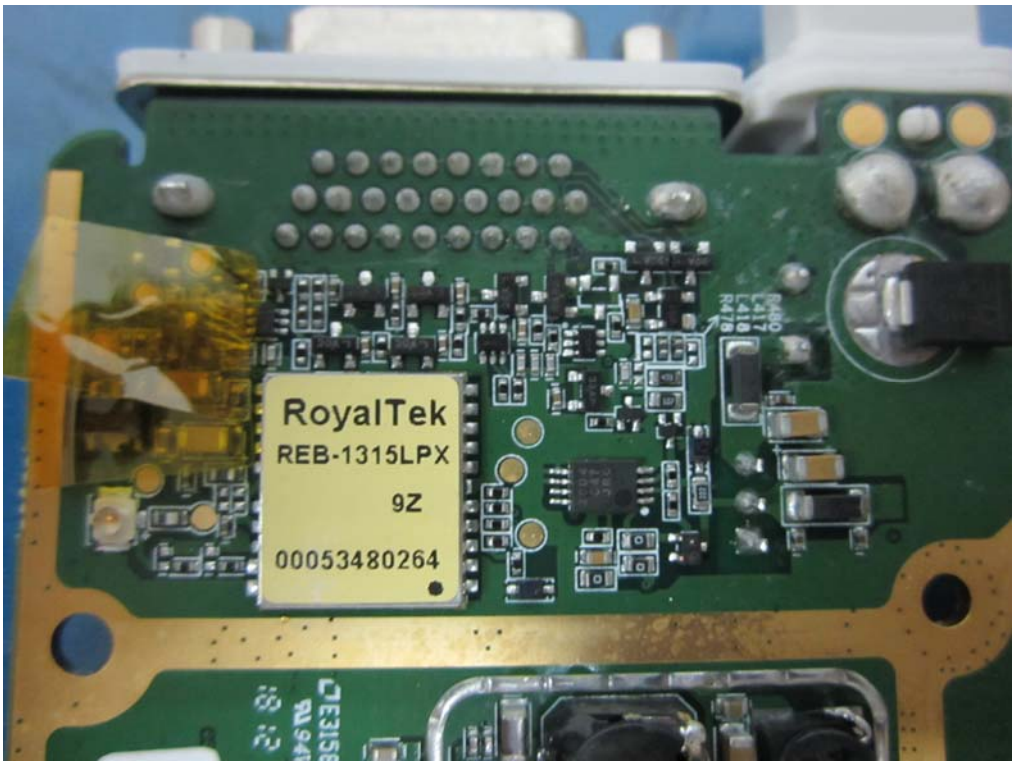
Internal photos of the EUT

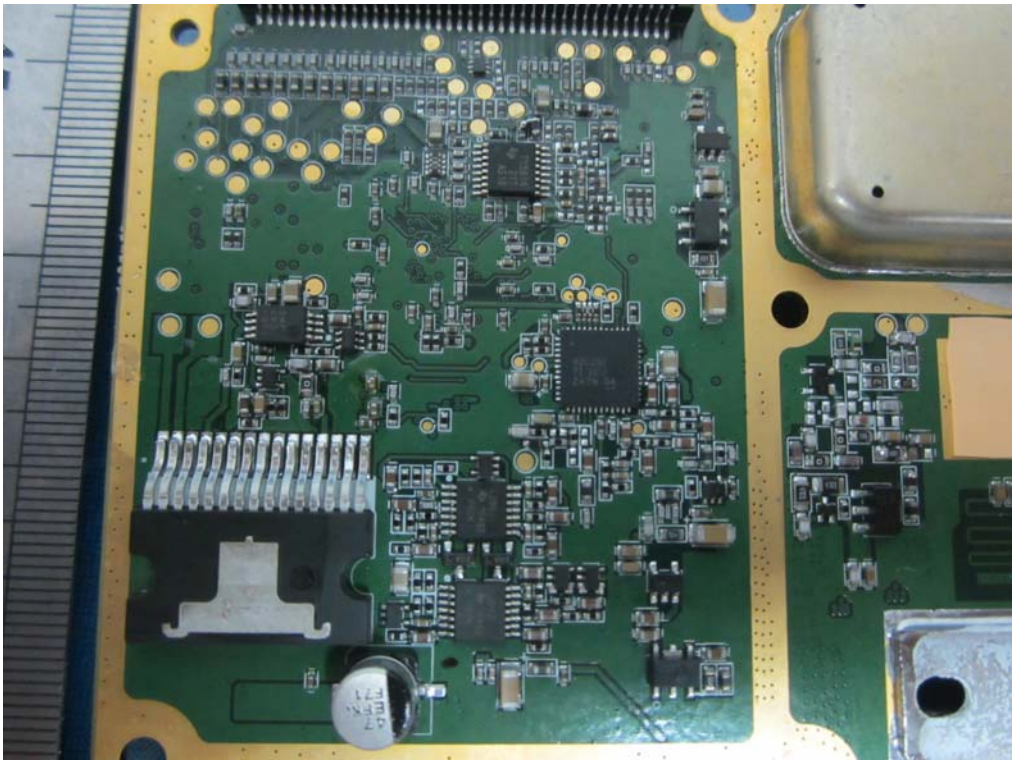


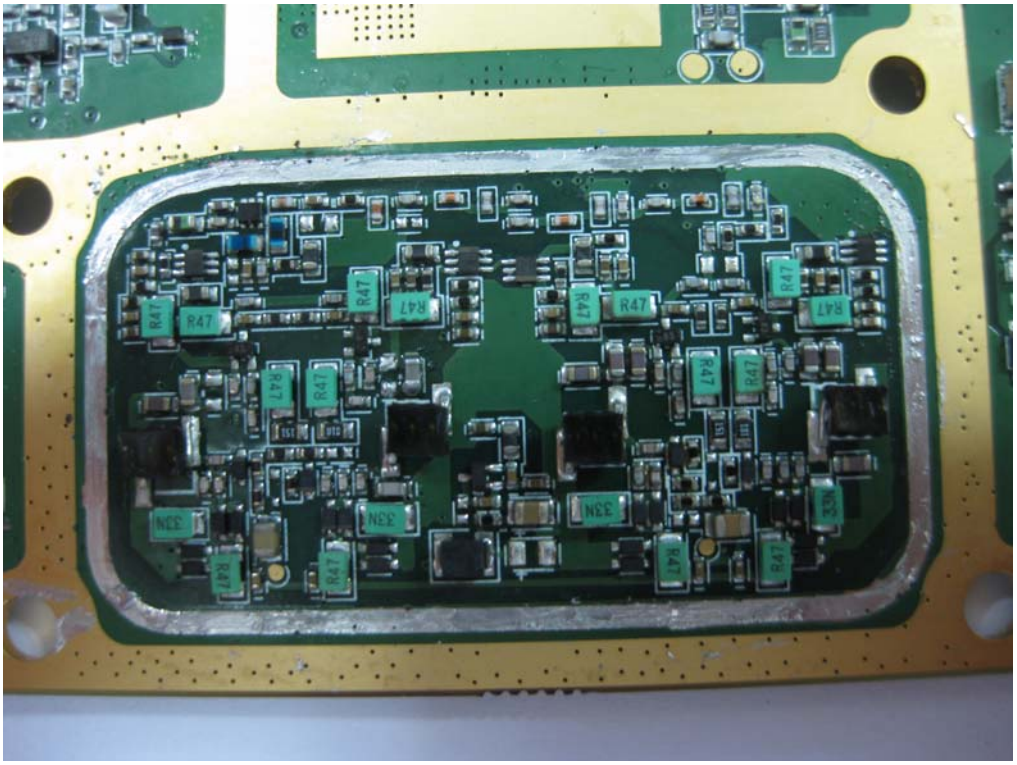


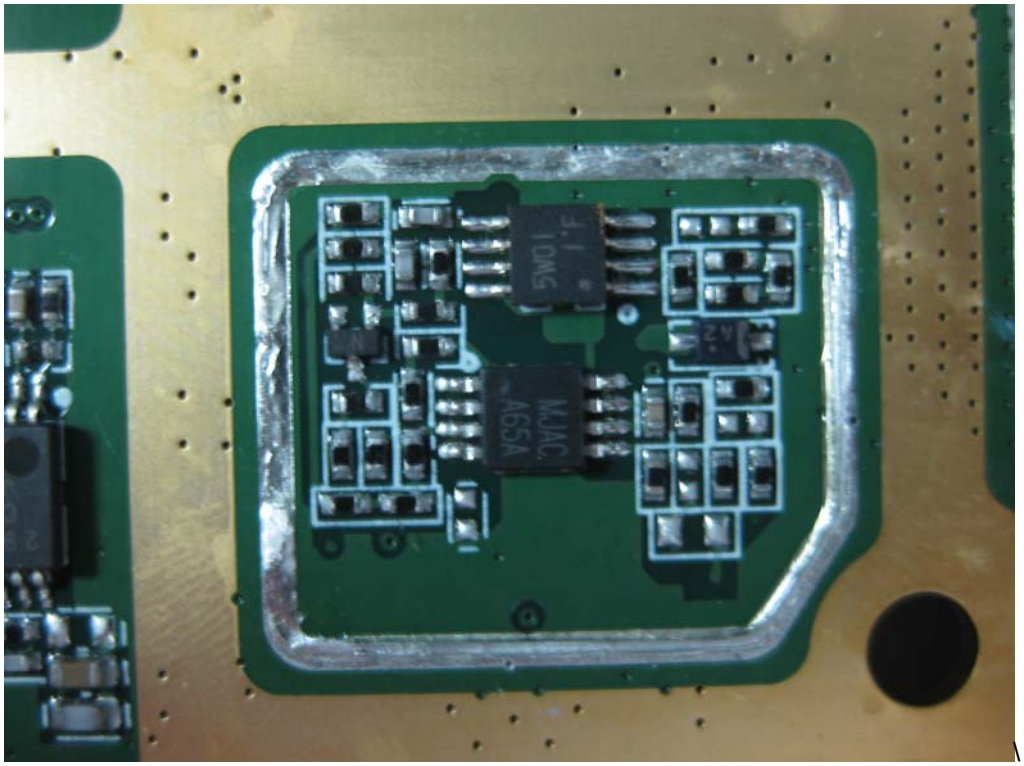



MCL 3 1131
SYM-25DHW

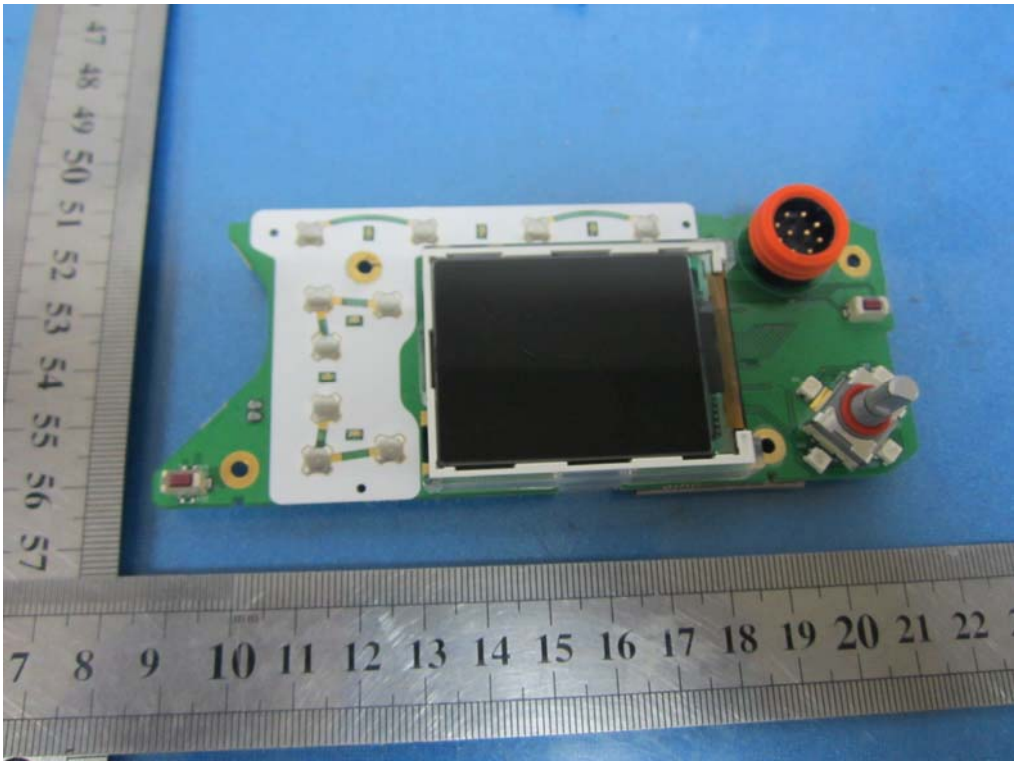

RoyalTek
REB-1315LPX
9Z
00053480264

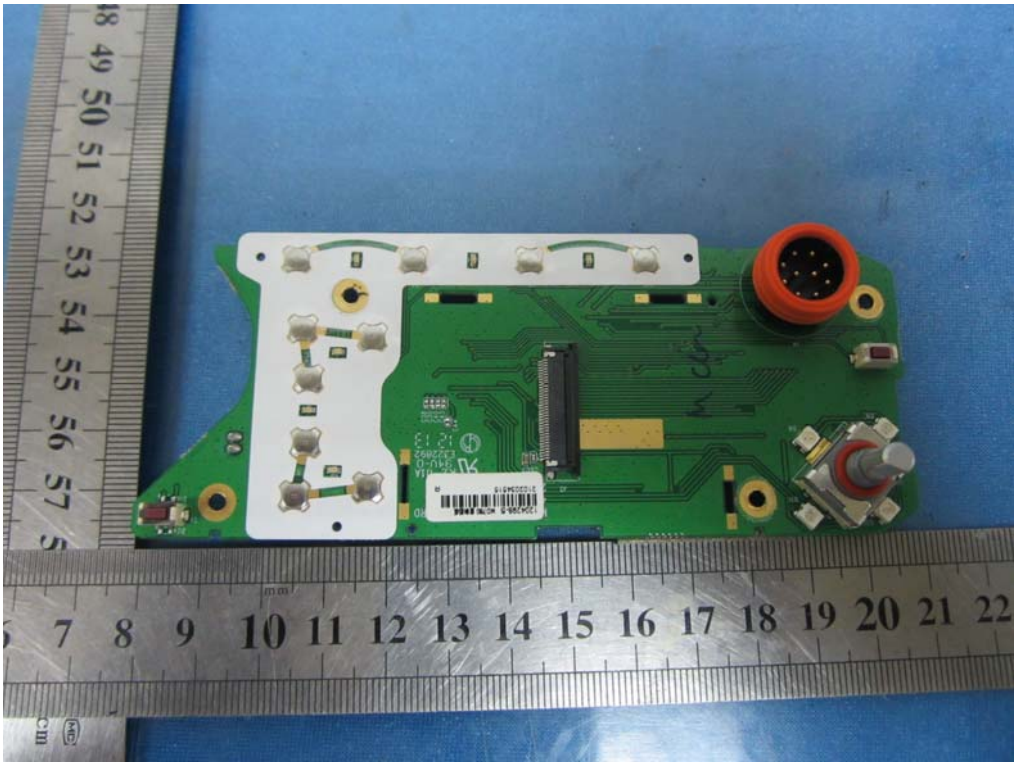


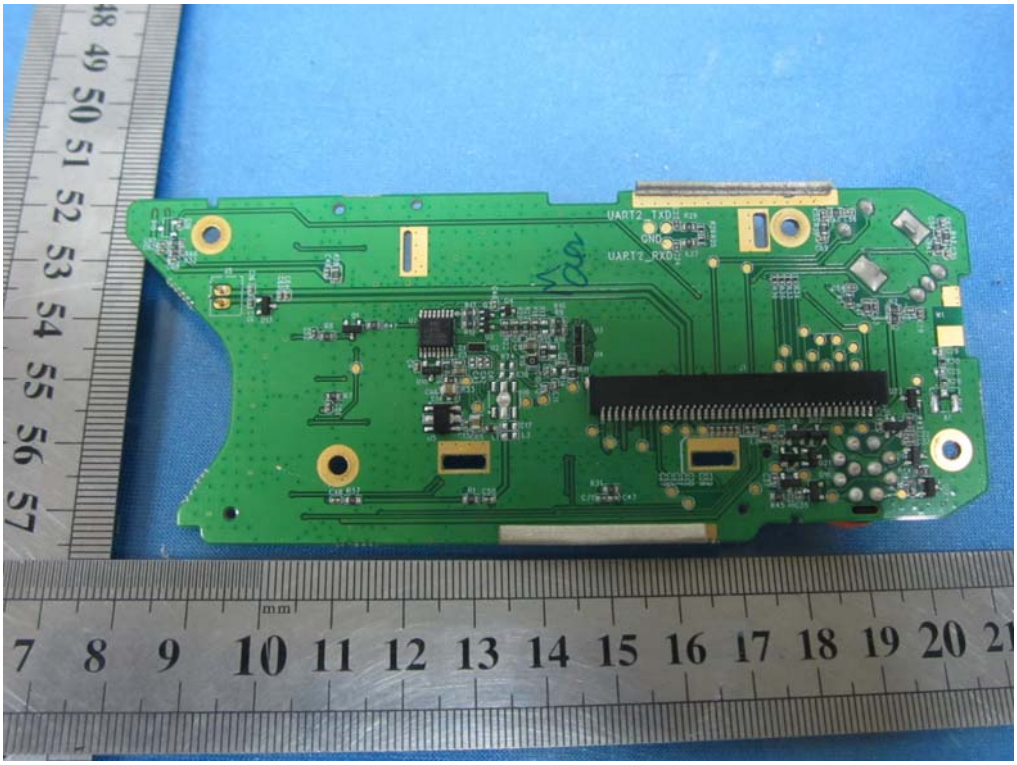

R47
33N


M.JAC
A65A


2139
20Ω 4W
25077







.....End of Report.....