Appendix A: Transmitter Output Power

1 Result Table

1.1 Average Power (Total)

1.1.1 For test number SYBH(R)00102012

Test Mode	Carrier Conf.	RF Ch.	Average Power [dBm]	Average Power [W]	Average Power [W/MHz]	Verdict
TM-1	1*U(60W)	B	47.71	59.02	11.804	Pass
		M	47.63	57.94	11.588	Pass
		T	47.58	57.28	11.456	Pass
	2*U(30W)	B	48.15	65.31	13.062	Pass
		M	48.23	66.53	13.306	Pass
		T	47.29	53.58	10.716	Pass
	3*U(20W)	B	47.17	52.12	10.424	Pass
		M	47.73	59.29	11.858	Pass
		T	47.73	59.29	11.858	Pass
	4*U(15W)	B	47.97	62.66	12.532	Pass
		M	48.19	65.92	13.184	Pass
		T	47.06	50.82	10.164	Pass
GMSK	1*G(60W)	B	47.59	57.41	---	Pass
		M	47.65	58.21	---	Pass
		T	47.66	58.34	---	Pass
	2*G(30W)	B	44.22/44.20	52.73	---	Pass
		M	44.44/44.18	53.98	---	Pass
		T	44.42/44.38	55.09	---	Pass
	3*G(20W)	B	42.51/42.47/42.64	53.85	---	Pass
		M	42.53/42.62/42.55	54.18	---	Pass
		T	42.74/42.57/42.60	55.06	---	Pass
	4*G(15W)	B	41.23/41.38/41.36 /41.29	54.15	---	Pass
		M	41.31/41.45/41.45 /41.58	55.84	---	Pass
		T	41.38/41.34/41.23 /41.25	53.96	---	Pass
8PSK	1*G(60W)	B	47.68	58.61	---	Pass
		M	47.71	59.02	---	Pass
		T	47.84	60.81	---	Pass
	2*G(30W)	B	44.69/44.88	60.21	---	Pass
		M	44.30/44.31	53.89	---	Pass
		T	44.39/44.20	53.78	---	Pass
	3*G(20W)	B	42.50/42.71/42.39	53.78	---	Pass
		M	42.53/42.58/42.41	53.44	---	Pass

Test Mode	Carrier Conf.	RF Ch.	Average Power [dBm]	Average Power [W]	Average Power [W/MHz]	Verdict
		T	42.68/42.81/42.62	55.91	---	Pass
	4*G(15W)	B	39.33/39.75/39.49 /39.57	35.96	---	Pass
		M	39.61/39.57/39.87 /39.64	37.11	---	Pass
		T	39.53/39.52/39.58 /39.61	36.15	---	Pass
E-TM 1.1	1*L1.4M(60W)	B	47.75	59.57	42.55	Pass
		M	47.89	61.52	43.943	Pass
		T	47.93	62.09	44.35	Pass
	1*L3M(60W)	B	47.85	60.95	20.317	Pass
		M	47.83	60.67	20.223	Pass
		T	47.95	62.37	20.79	Pass
	1*L5M(60W)	B	47.46	55.72	11.144	Pass
		M	47.60	57.54	11.508	Pass
		T	47.68	58.61	11.722	Pass
	1*L10M(60W)	B	47.76	59.70	5.97	Pass
		M	47.44	55.46	5.546	Pass
		T	47.65	58.21	5.821	Pass
	1*L15M(60W)	B	48.00	63.10	4.207	Pass
		M	47.76	59.70	3.98	Pass
		T	47.67	58.48	3.899	Pass
	2*L1.4M(30W)	B	47.69	58.75	41.964	Pass
		M	47.86	61.09	43.636	Pass
		T	47.88	61.38	43.843	Pass
	2*L3M(30W)	B	47.97	62.66	20.887	Pass
		M	47.89	61.52	20.507	Pass
		T	47.82	60.53	20.177	Pass
	2*L5M(30W)	B	48.08	64.27	12.854	Pass
		M	47.99	62.95	12.59	Pass
		T	47.93	62.09	12.418	Pass
	2*L10M(30W)	B	48.10	64.57	6.457	Pass
		M	48.06	63.97	6.397	Pass
		T	48.04	63.68	6.368	Pass
	2*L15M(30W)	B	48.22	66.37	4.425	Pass
		T	48.00	63.10	4.207	Pass
MSR_TM1	1*G(30W) & 1*U(30W)	B	44.16 & 44.95	57.32	6.252	Pass
		T	44.35 & 44.86	57.85	6.124	Pass
	2*G(20W) & 1*U(20W)	B	42.33/42.98 & 43.03	57.05	4.018	Pass

Test Mode	Carrier Conf.	RF Ch.	Average Power [dBm]	Average Power [W]	Average Power [W/MHz]	Verdict
		T	42.8/42.6 & 43.1	57.67	4.084	Pass
	2*G(20W) & 2*U(10W)	B	42.2/42.84 & 40.3/40.05	56.66	4.166	Pass
		T	42.71/42.48 & 39.92/39.94	56.05	3.936	Pass
	3*G(15W) & 1*U(15W)	B	42.05/42.1/41.9 & 42.1	63.96	3.244	Pass
		T	42.4/42.43/41.4 & 41.9	64.17	3.098	Pass
	1*G(30W) & 2*U(15W)	B	43.78 & 41.66/41.88	53.95	6.014	Pass
		T	44.43 & 42/41.74	58.51	6.156	Pass
	1*G(15W) & 3*U(15W)	B	41.1 & 41.80/41.75/41.71	57.81	8.984	Pass
		T	41.1 & 41.87/41.88/41.86	59.03	9.228	Pass

1.1.2 For test number SYBH(R)01271108

NOTE: If applicable, the EIPR [W] = 10 ^ ((Average Power [dBm] + Antenna Gain [dBi]) / 10 - 3), and the ERP [W] = EIRP [W] / 1.64.

The following configurations for 40 W (antenna port A) and 80 W (antenna port B) were tested on the two antenna ports and calculate the total power to verify the compliance with the FCC standard.

The antenna gain is the recommended maximum gain with the measured total power. When the EUT is put into service, the practical maximum antenna gain will be changed with the actual antenna conducted power, the combination of the practical output power and the practical antenna gain should NOT exceed the required ERP/EIRP limit.

EUT Conf.	Average Power [dBm]	Total Power[dBm]	Antenna Gain [dBi]	EIPR [W]	Verdict
1U_80W_B_TM1_TRXB	49.23	50.95	11.18	1640	Pass
1U_40W_B_TM1_TRXA	46.12				
1U_80W_M_TM1_TRXB	49.09	50.86	11.27	1640	Pass
1U_40W_M_TM1_TRXA	46.11				
1U_80W_T_TM1_TRXB	49.16	50.83	11.3	1640	Pass
1U_40W_T_TM1_TRXA	45.88				
1G_80W_B_TM1_TRXB	49.09	50.91	11.22	1640	Pass
1G_40W_B_TM1_TRXA	46.27				
1G_80W_M_TM1_TRXB	49.11	50.91	11.22	1640	Pass
1G_40W_M_TM1_TRXA	46.22				
1G_80W_T_TM1_TRXB	48.93	50.73	11.4	1640	Pass
1G_40W_T_TM1_TRXA	46.05				
1G1U_80W_B_TM1_TRXB	1G:45.95	51.45	10.68	1640	Pass

EUT Conf.	Average Power [dBm]	Total Power[dBm]	Antenna Gain [dBi]	EIPR [W]	Verdict
	1U:46.12				
1G1U_40W_B_TM1_TRXA	1G:42.89 1U:46.02				
1G1U_80W_M_TM1_TRXB	1G: 45.73 1U: 46.03	50.73	11.41	1640	Pass
1G1U_40W_M_TM1_TRXA	1G: 43.14 1U: 43.05				
1G1U_80W_T_TM1_TRXB	1G: 45.96 1U: 45.9	50.73	11.4	1640	Pass
1G1U_40W_T_TM1_TRXA	1G: 43.11 1U: 42.95				
1U1L_1.4M_80W_B_TM1_TRXB	1U:46.08 1L:46.26	50.93	11.21	1640	Pass
1U1L_1.4M_40W_B_TM1_TRXA	1U:43.18 1L:43.06				
1U1L_1.4M_80W_M_TM1_TRXB	1U: 45.87 1L: 45.83	50.67	11.47	1640	Pass
1U1L_1.4M_40W_M_TM1_TRXA	1U:43.11 1L:42.86				
1U1L_1.4M_80W_T_TM1_TRXB	1U: 46.08 1L: 45.72	50.72	11.41	1640	Pass
1U1L_1.4M_40W_T_TM1_TRXA	1U:43.08 1L:42.99				

The following configurations were tested the conducted power on one antenna ports.

EUT Conf.	Average Power [dBm]	Total Power[dBm]	Verdict
4U_80W_B_TM1_TRXB	42.54/42.85/43.16/43.14	48.95	Pass
4U_80W_M_TM1_TRXB	42.88/42.94//43.02/43.09	49.00	Pass
4U_80W_T_TM1_TRXB	43.13/43.19/43.12/42.97	49.12	Pass
8G_80W_B_TM1_TRXB	37.15/37.25/37.35/37.38/37.41/37.53/37.42/37.46	46.4	Pass
8G_80W_M_TM1_TRXB	37.29/37.30/37.33/37.34/37.37/37.38/37.31/37.21	46.34	Pass
8G_80W_T_TM1_TRXB	37.34/37.30/37.31/37.28/37.23/37.18/37.22/37.18	46.28	Pass
3G1U_80W_B_TM1_TRXB	3G: 42.58/42.74/43.56 1U: 43.5	49.13	Pass
3G1U_80W_M_TM1_TRXB	3G: 43.07/43.15/43.21 1U: 43.23	49.18	Pass
3G1U_80W_T_TM1_TRXB	3G: 43.17/43.2/42.74 1U: 43.27	49.12	Pass

EUT Conf.	Average Power [dBm]	Total Power[dBm]	Verdict
1U1L_20M_80W_B_TM1_TRXB	1U:45.54 1L:45.72	48.64	Pass
1U1L_20M_80W_M_TM1_TRXB	1U: 45.7 1L: 45.67	48.69	Pass
1U1L_20M_80W_T_TM1_TRXB	1U: 46.12 1L: 45.89	49.01	Pass
3U1L_1.4M_80W_B_TM1_TRXB	3U:42.85/43.08/43.19 1L:43.2	49.1	Pass
3U1L_1.4M_80W_M_TM1_TRXB	3U: 42.94/42.97/43.02 1L: 42.87	48.97	Pass
3U1L_1.4M_80W_T_TM1_TRXB	3U: 42.84/42.9/43.03 1L: 42.63	48.87	Pass
3U1L_20M_80W_B_TM1_TRXB	3U:42.55/42.78/42.84 1L:42.88	48.78	Pass
3U1L_20M_80W_M_TM1_TRXB	3U: 42.75/42.8/42.82 1L: 42.74	48.8	Pass
3U1L_20M_80W_T_TM1_TRXB	3U: 42.99/43.05/43.08 1L: 42.84	49.01	Pass
1G1L_1.4M_60W_B_TM1_TRXA	1G: 44.68 1L: 45.08	47.89	Pass
1G1L_1.4M_60W_M_TM1_TRXA	1G: 45.07 1L: 45.17	48.13	Pass
1G1L_1.4M_60W_T_TM1_TRXA	1G: 44.84 1L: 44.56	47.71	Pass
1G1L_20M_60W_B_TM1_TRXA	1G:44.65 1L:44.98	47.82	Pass
1G1L_20M_60W_M_TM1_TRXA	1G: 44.82 1L: 44.90	47.87	Pass
1G1L_20M_60W_T_TM1_TRXA	1G: 45.01 1L: 44.91	47.97	Pass
3G1L_1.4M_60W_B_TM1_TRXA	3G: 40.57/40.57/41.07 1L: 43.23	47.53	Pass
3G1L_1.4M_60W_M_TM1_TRXA	3G: 40.63/40.68/40.88 1L: 42.96	47.42	Pass
3G1L_1.4M_60W_T_TM1_TRXA	3G: 40.68/40.77/40.48 1L: 42.94	47.38	Pass
3G1L_20M_60W_B_TM1_TRXA	3G:40.30/40.37/40.86 1L:42.90	47.26	Pass
3G1L_20M_60W_M_TM1_TRXA	3G: 40.57/40.67/40.69 1L: 42.87	47.33	Pass
3G1L_20M_60W_T_TM1_TRXA	3G: 40.61/40.65/40.45 1L: 42.81	47.26	Pass

EUT Conf.	Average Power [dBm]	Total Power[dBm]	Verdict
1L_20M_60W_B_TM1_TRXA	47.32	47.32	Pass
1L_20M_60W_M_TM1_TRXA	47.28	47.28	Pass
1L_20M_60W_T_TM1_TRXA	47.11	47.11	Pass
2L_20M_60W_B_TM1_TRXA	44.61/44.87	47.75	Pass
2L_20M_60W_T_TM1_TRXA	44.8/44.8	47.8	Pass

1.2 Peak-to-Average Ratio

1.2.1 For test number SYBH(R)00102012

Test Mode	Carrier Conf.	RF Ch.	Peak-to-Average Ratio [dB]	Verdict
TM 1	1*U(60W)	B	7.25	Pass
		M	7.19	Pass
		T	7.32	Pass
GMSK	1*G(60W)	B	0.31	Pass
		M	0.34	Pass
		T	0.3	Pass
8PSK	1*G(60W)	B	3.38	Pass
		M	3.71	Pass
		T	3.8	Pass
E-TM 1.1	1*L15M(60W)	B	7.54	Pass
		M	7.20	Pass
		T	7.55	Pass

1.2.2 For test number SYBH(R)01271108

EUT Conf.	Peak-to-Average Ratio@0.1% [dB]	Verdict
1L_20M_60W_B_TM1_TRXA	7.05	Pass
1L_20M_60W_M_TM1_TRXA	6.86	Pass
1L_20M_60W_T_TM1_TRXA	6.96	Pass

Appendix B: Bandwidth

1 Result Table

1.1 Occupied Bandwidth

1.1.1 For test number SYBH(R)00102012

Test Mode	Carrier Conf.	RF Ch.	Occupied Bandwidth [MHz]	Verdict
TM-1	1*U(60W)	B	4.13	Pass
		M	4.14	Pass
		T	4.15	Pass
GMSK	1*G(60W)	B	0.246	Pass
		M	0.245	Pass
		T	0.246	Pass
8PSK	1*G(60W)	B	0.248	Pass
		M	0.245	Pass
		T	0.245	Pass
E-TM 1.1	1*L1.4M(60W)	B	1.090	Pass
		M	1.093	Pass
		T	1.091	Pass
	1*L3M(60W)	B	2.696	Pass
		M	2.691	Pass
		T	2.694	Pass
	1*L5M(60W)	B	4.481	Pass
		M	4.490	Pass
		T	4.492	Pass
	1*L10M(60W)	B	8.932	Pass
		M	8.950	Pass
		T	8.919	Pass
	1*L15M(60W)	B	13.40	Pass
		M	13.43	Pass
		T	13.39	Pass

1.1.2 For test number SYBH(R)01271108

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
1L_20M_60W_B_TM1_TRXA	17.888	Pass
1L_20M_60W_M_TM1_TRXA	17.888	Pass
1L_20M_60W_T_TM1_TRXA	17.888	Pass

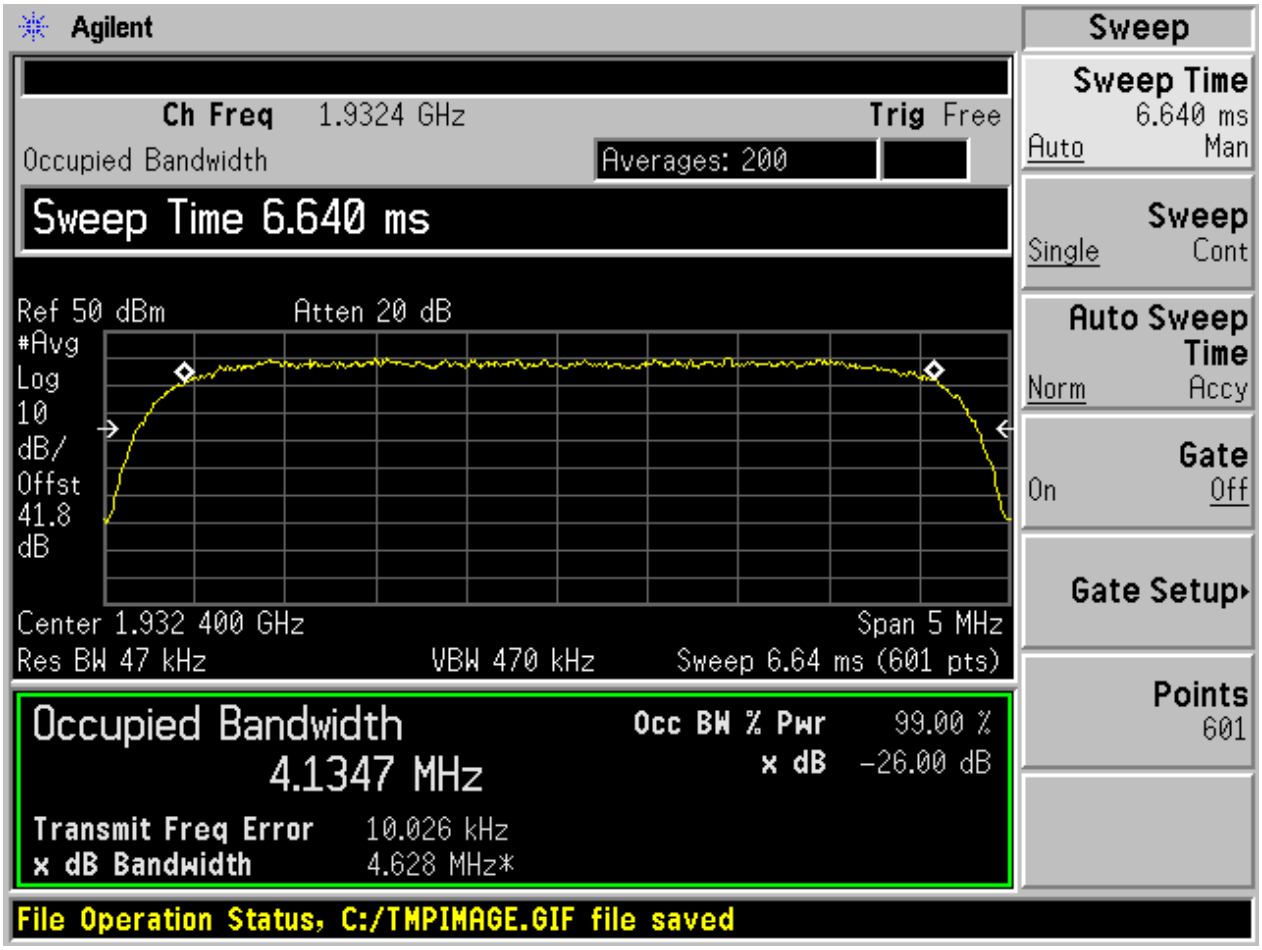
2 Test Plot

2.1 For test number SYBH(R)00102012

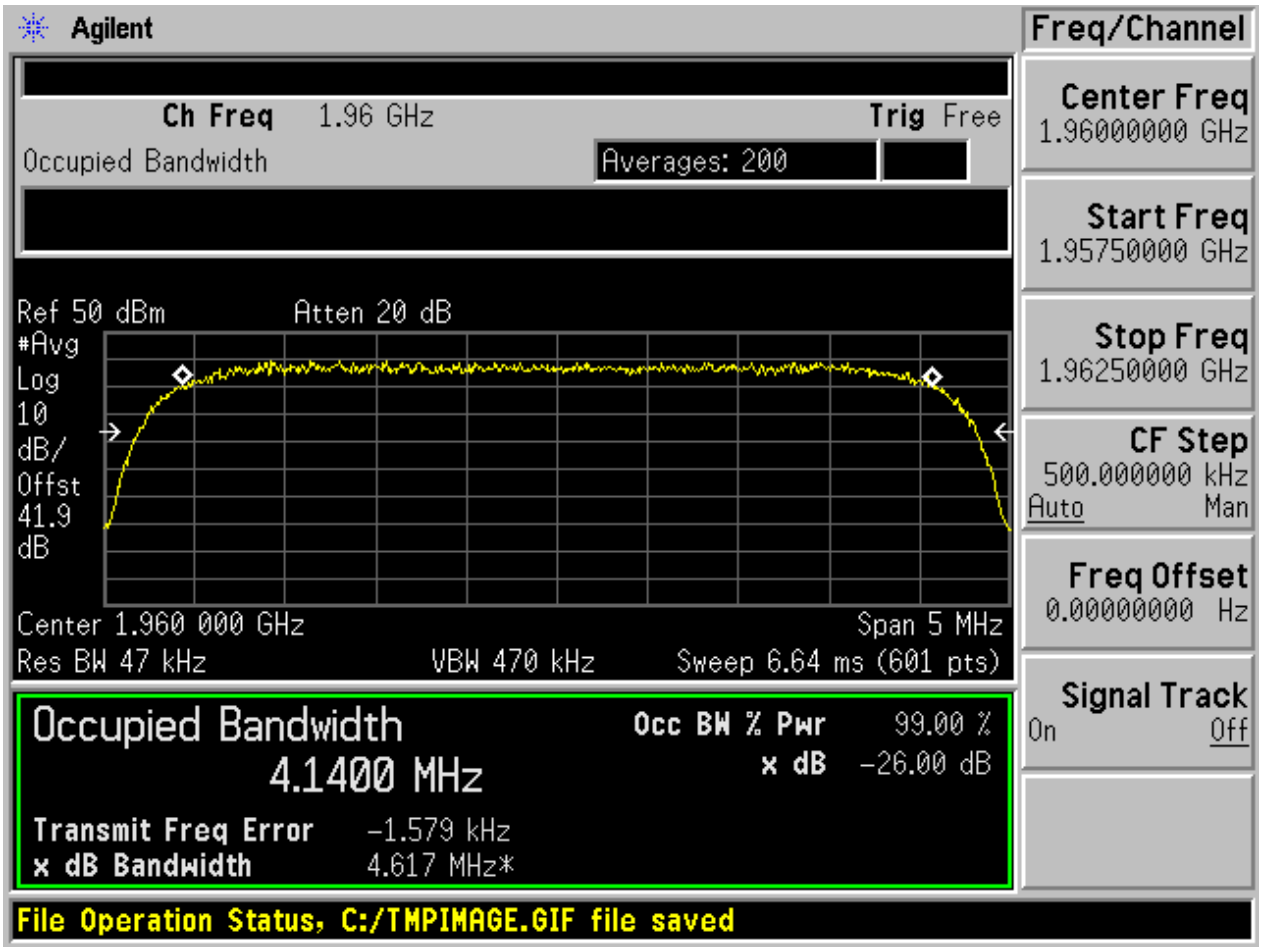
2.1.1 Test Mode = TM-1

2.1.1.1 Carrier Conf. = 1*U(60W)

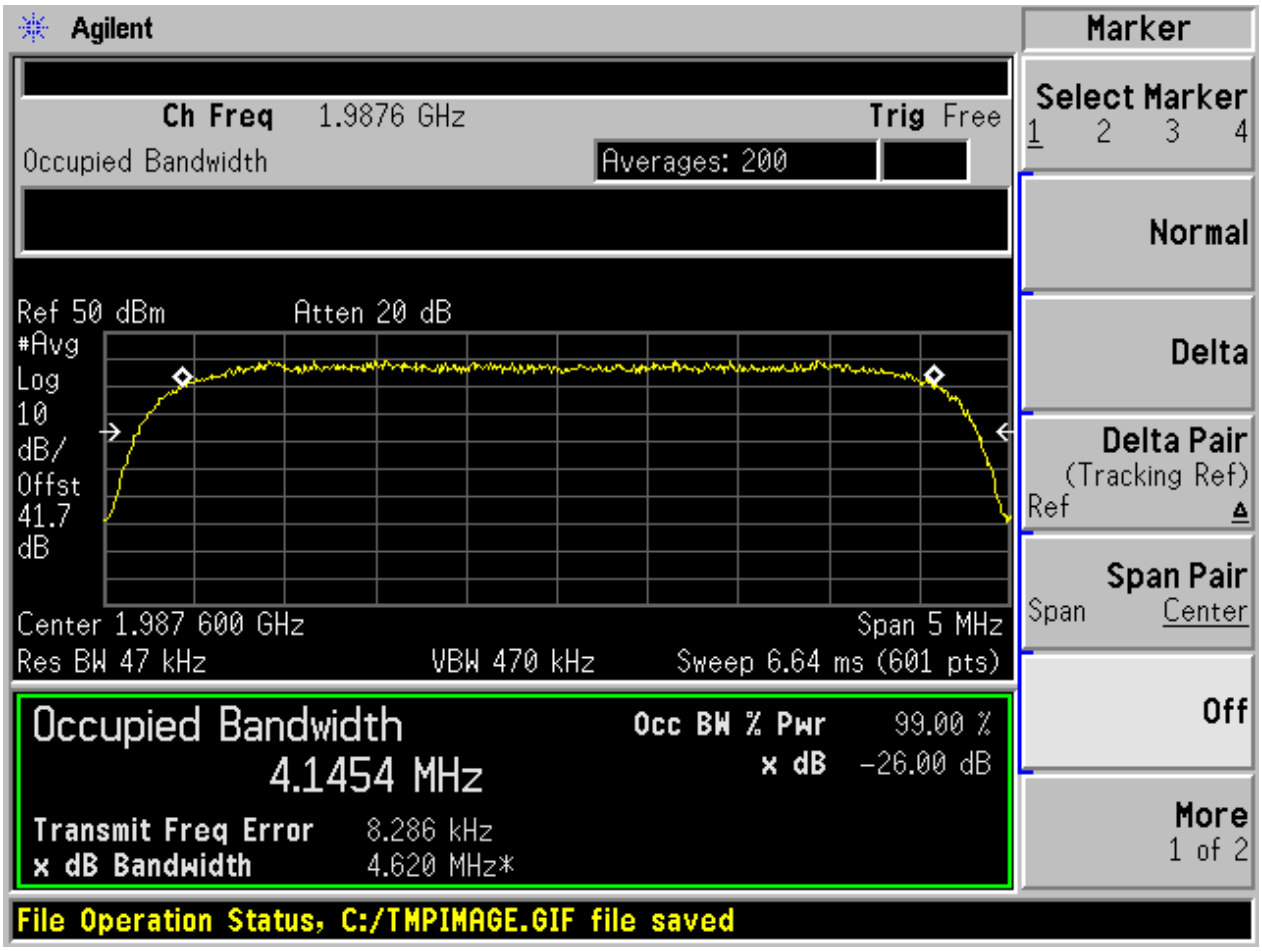
2.1.1.1.1 Ch. B



2.1.1.1.2 Ch. M



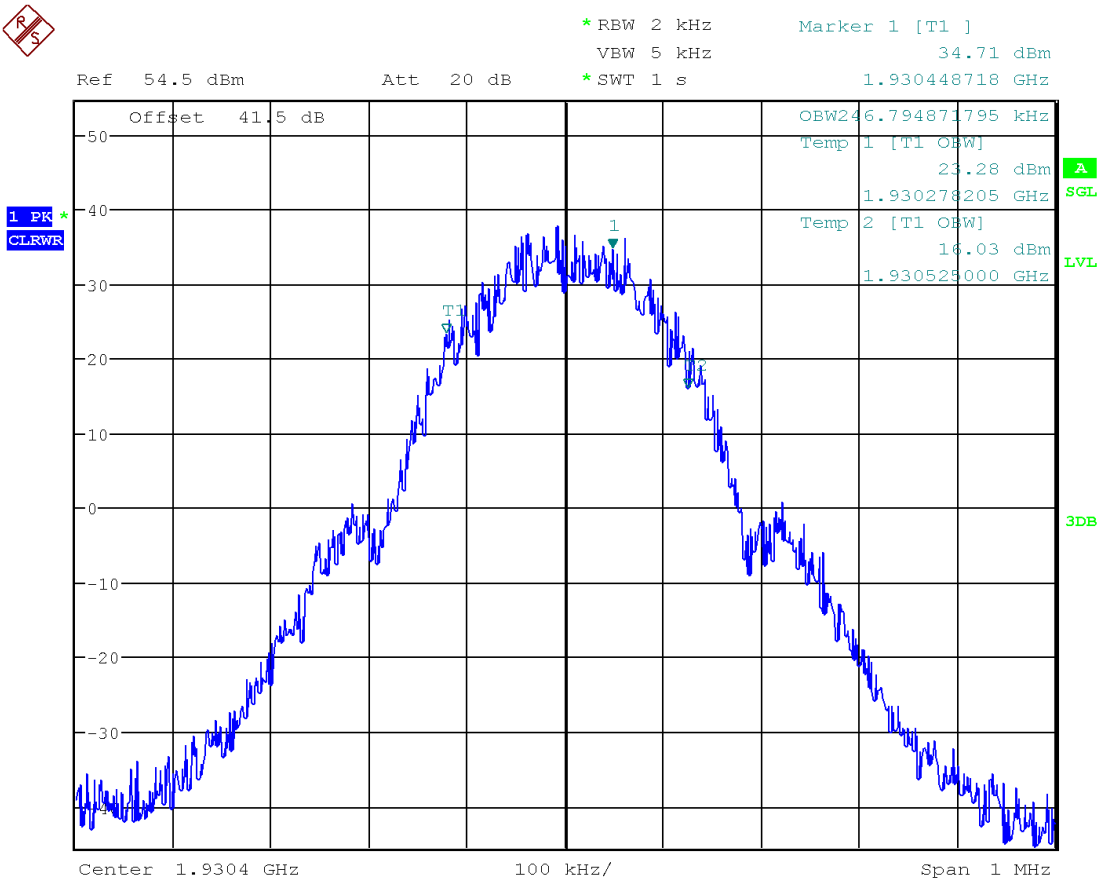
2.1.1.1.3 Ch. T



2.1.2 Test Mode = GMSK

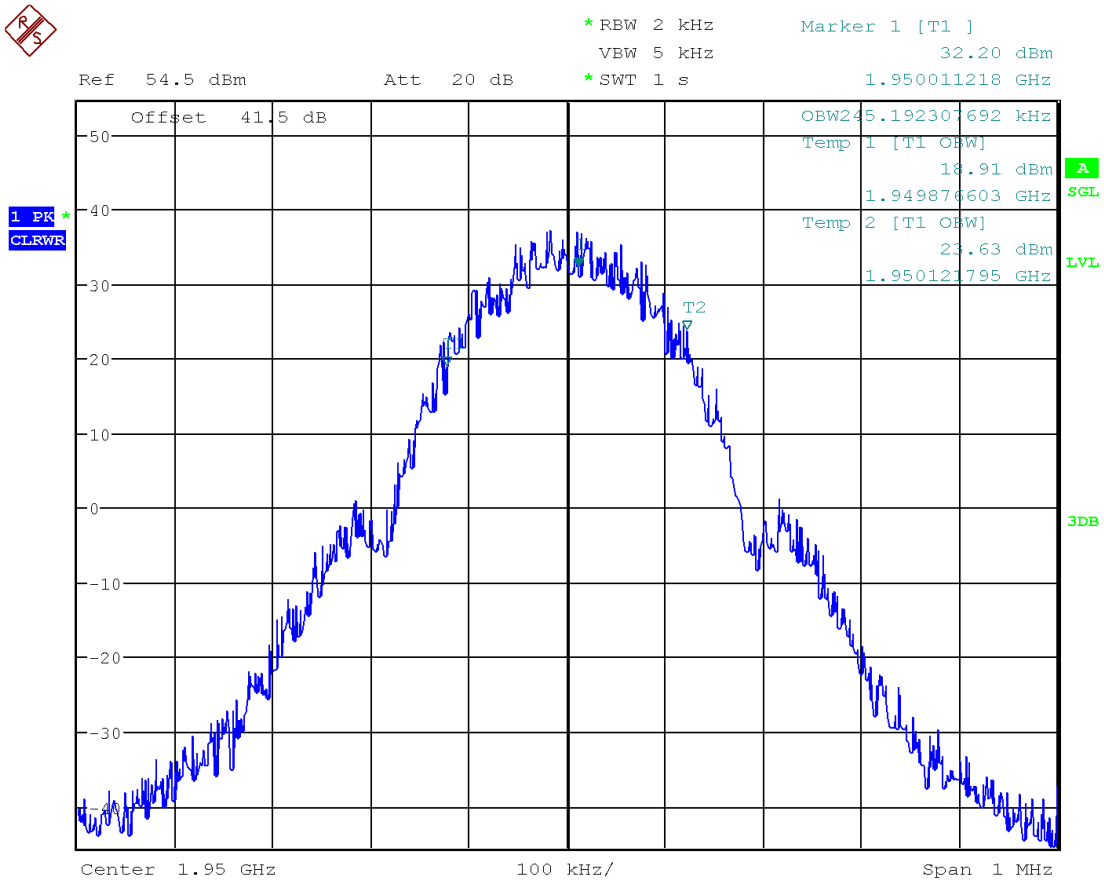
2.1.2.1 Carrier Conf. = 1*G(60W)

2.1.2.1.1 Ch. B



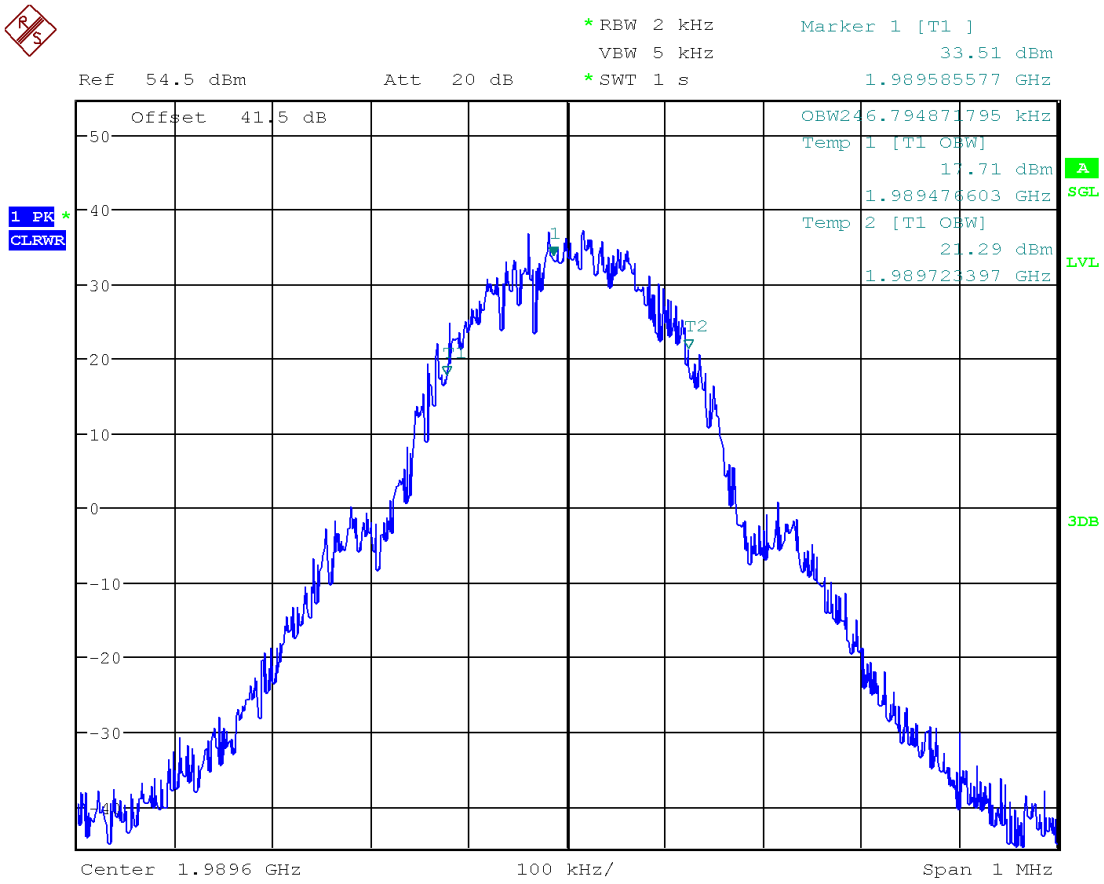
Date: 23.DEC.2011 10:45:48

2.1.2.1.2 Ch. M



Date: 23.DEC.2011 10:47:02

2.1.2.1.3 Ch. T

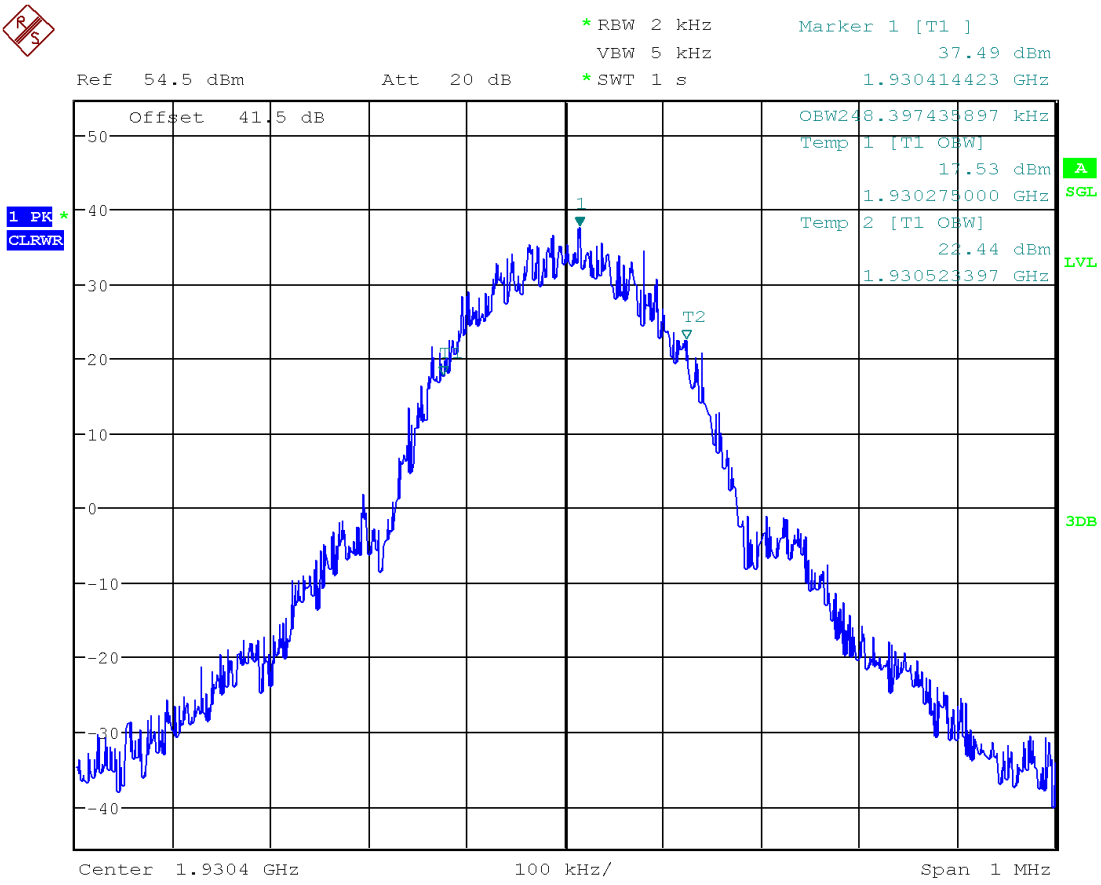


Date: 23.DEC.2011 10:47:59

2.1.3 Test Mode = 8PSK

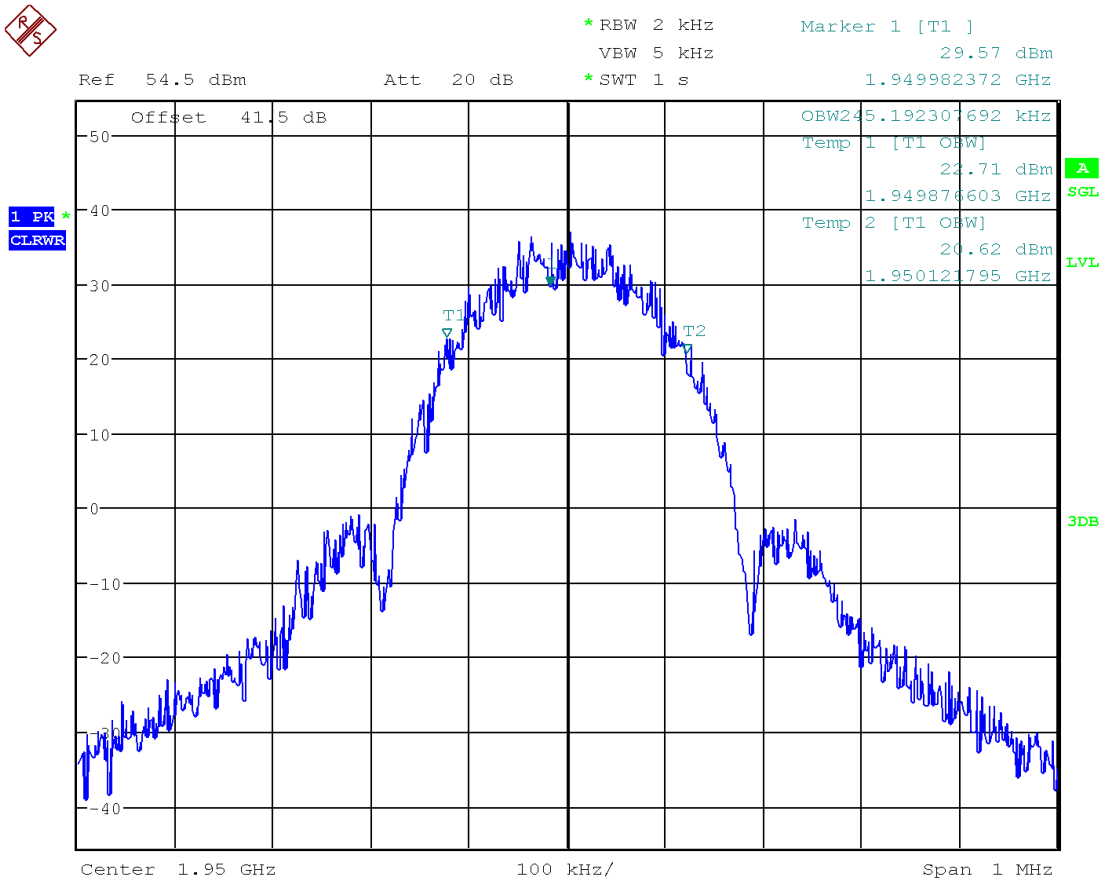
2.1.3.1 Carrier Conf. = 1*G(60W)

2.1.3.1.1 Ch. B



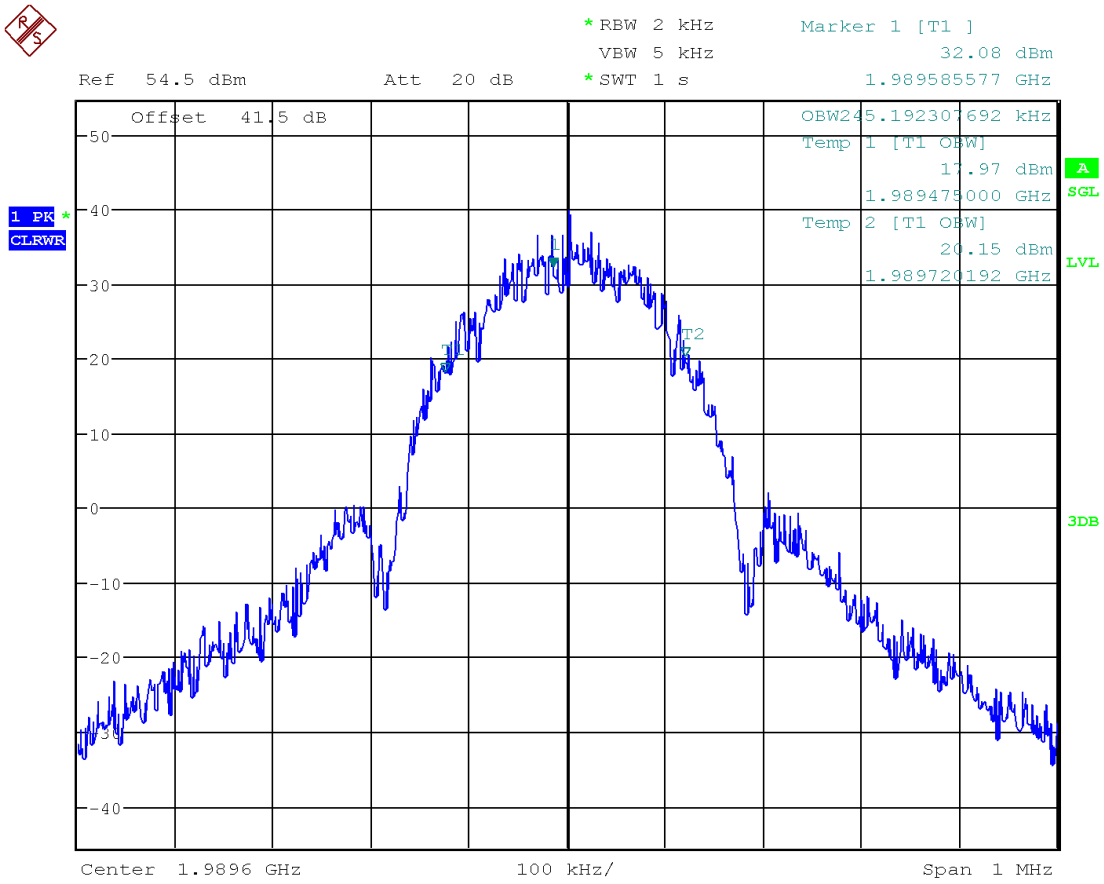
Date: 23.DEC.2011 10:52:50

2.1.3.1.2 Ch. M



Date: 23.DEC.2011 10:49:12

2.1.3.1.3 Ch. T

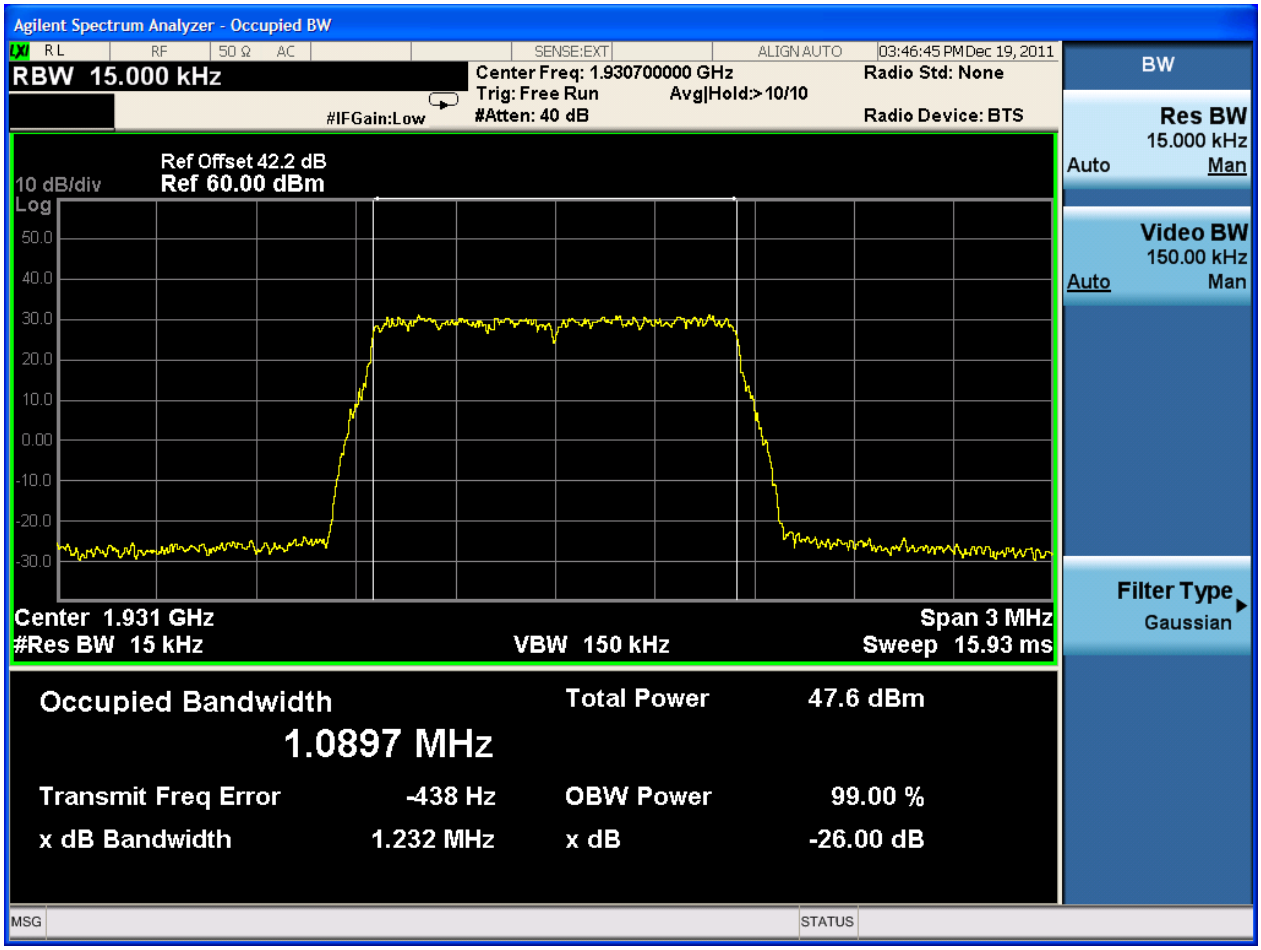


Date: 23.DEC.2011 10:48:32

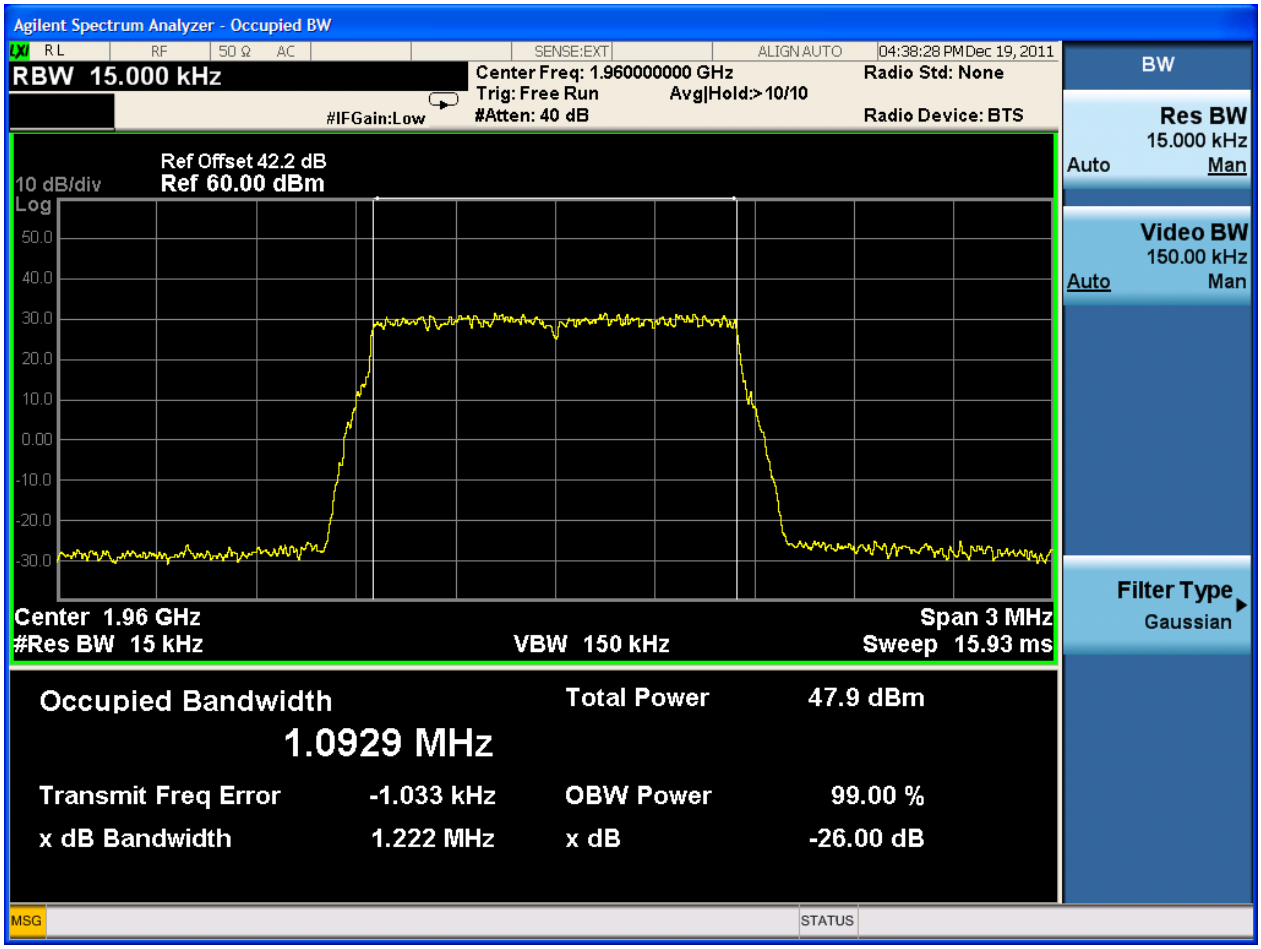
2.1.4 Test Mode = E-TM 1.1

2.1.4.1 Carrier Conf. = 1*L1.4M(60W)

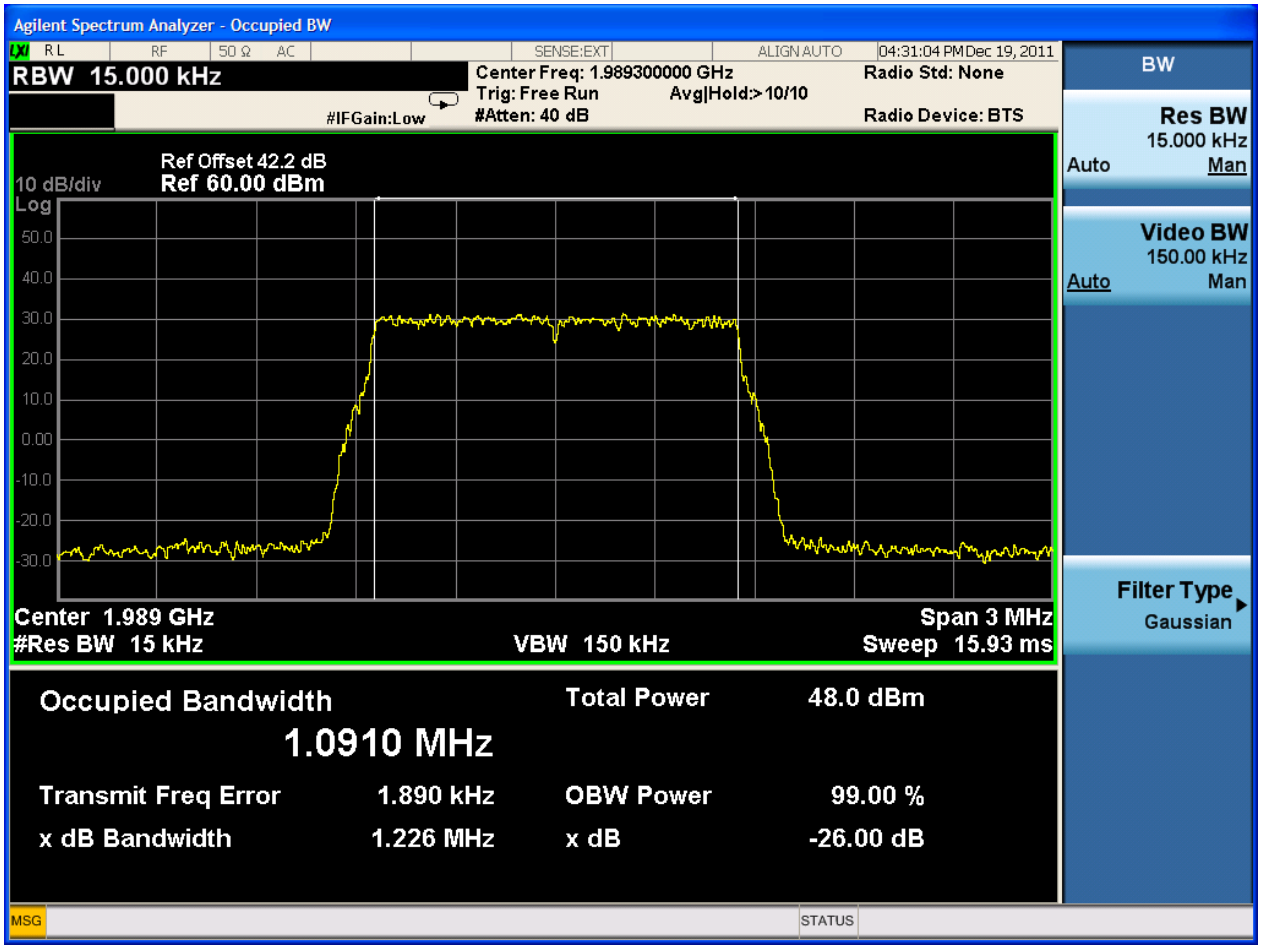
2.1.4.1.1 Ch. B



2.1.4.1.2 Ch. M

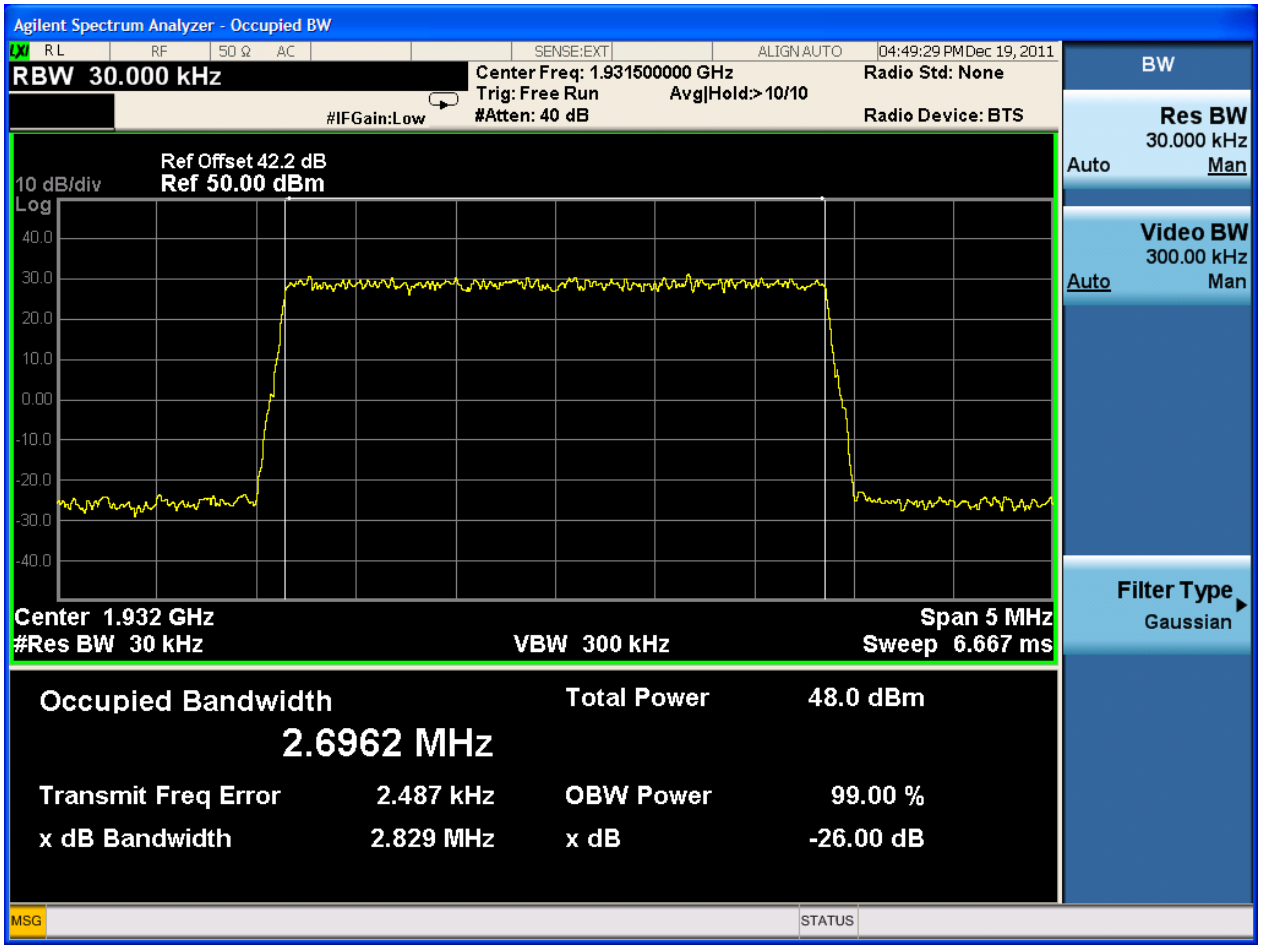


2.1.4.1.3 Ch. T

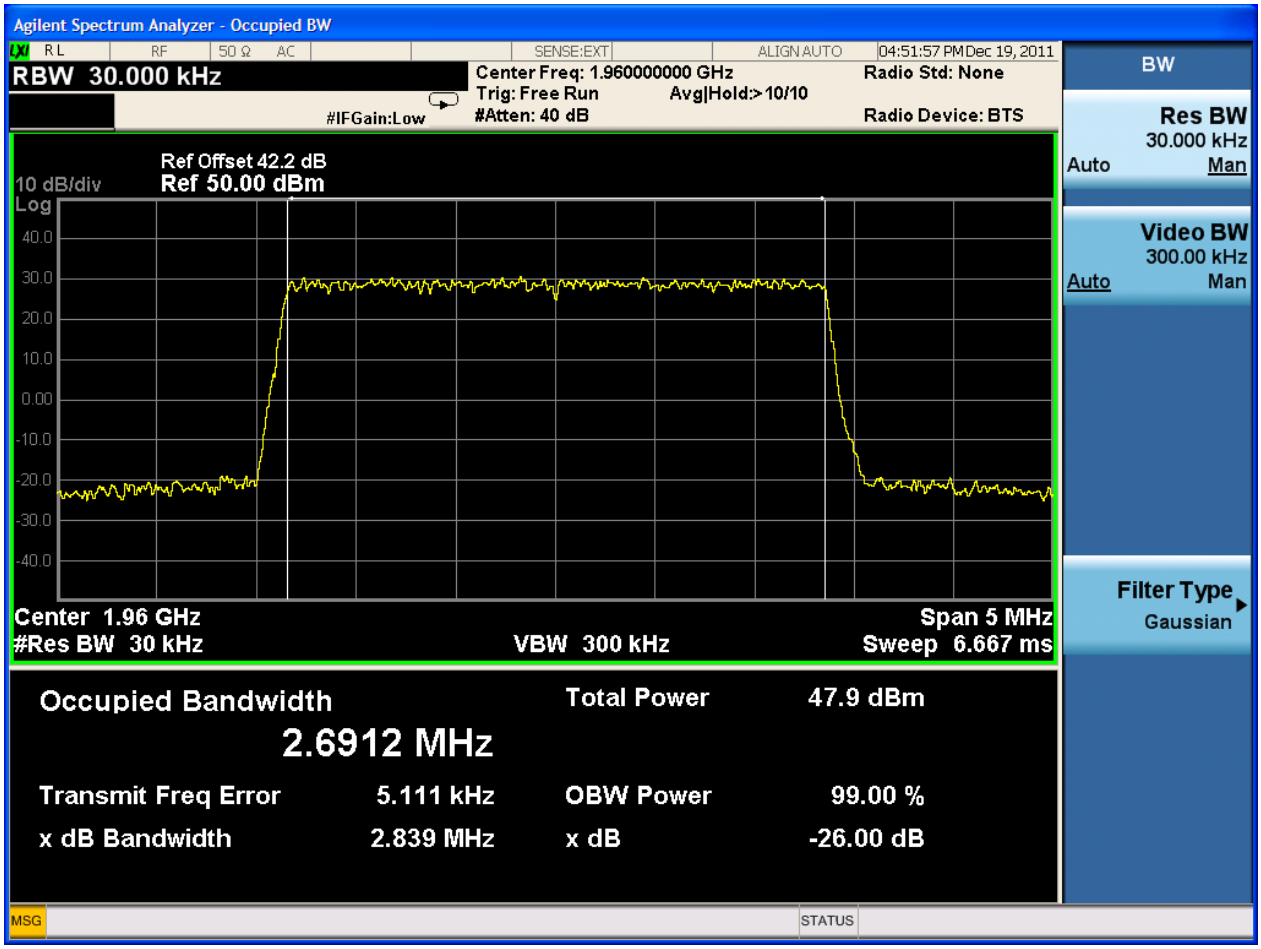


2.1.4.2 Carrier Conf. = 1*L3M(60W)

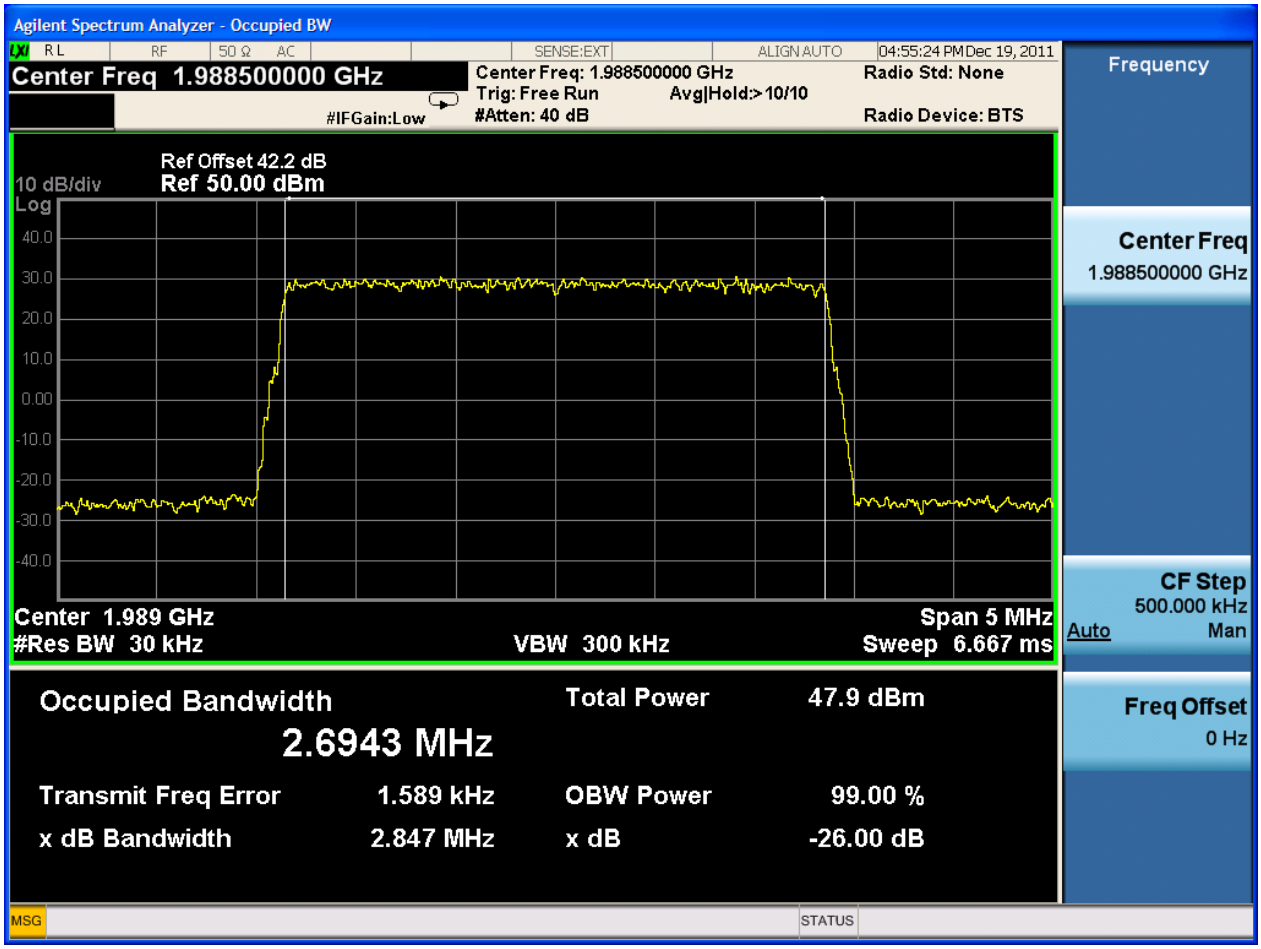
2.1.4.2.1 Ch. B



2.1.4.2.2 Ch. M

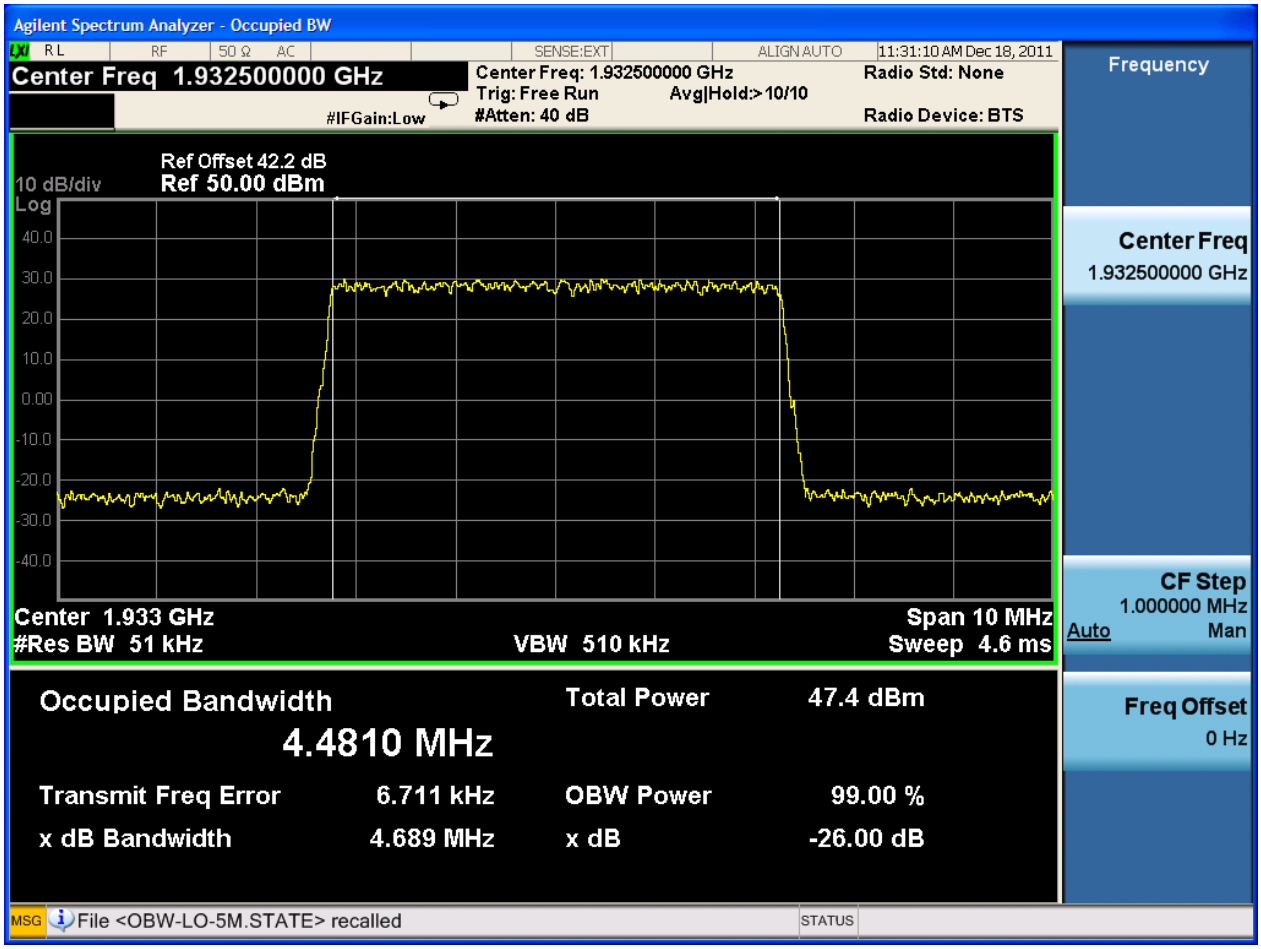


2.1.4.2.3 Ch. T

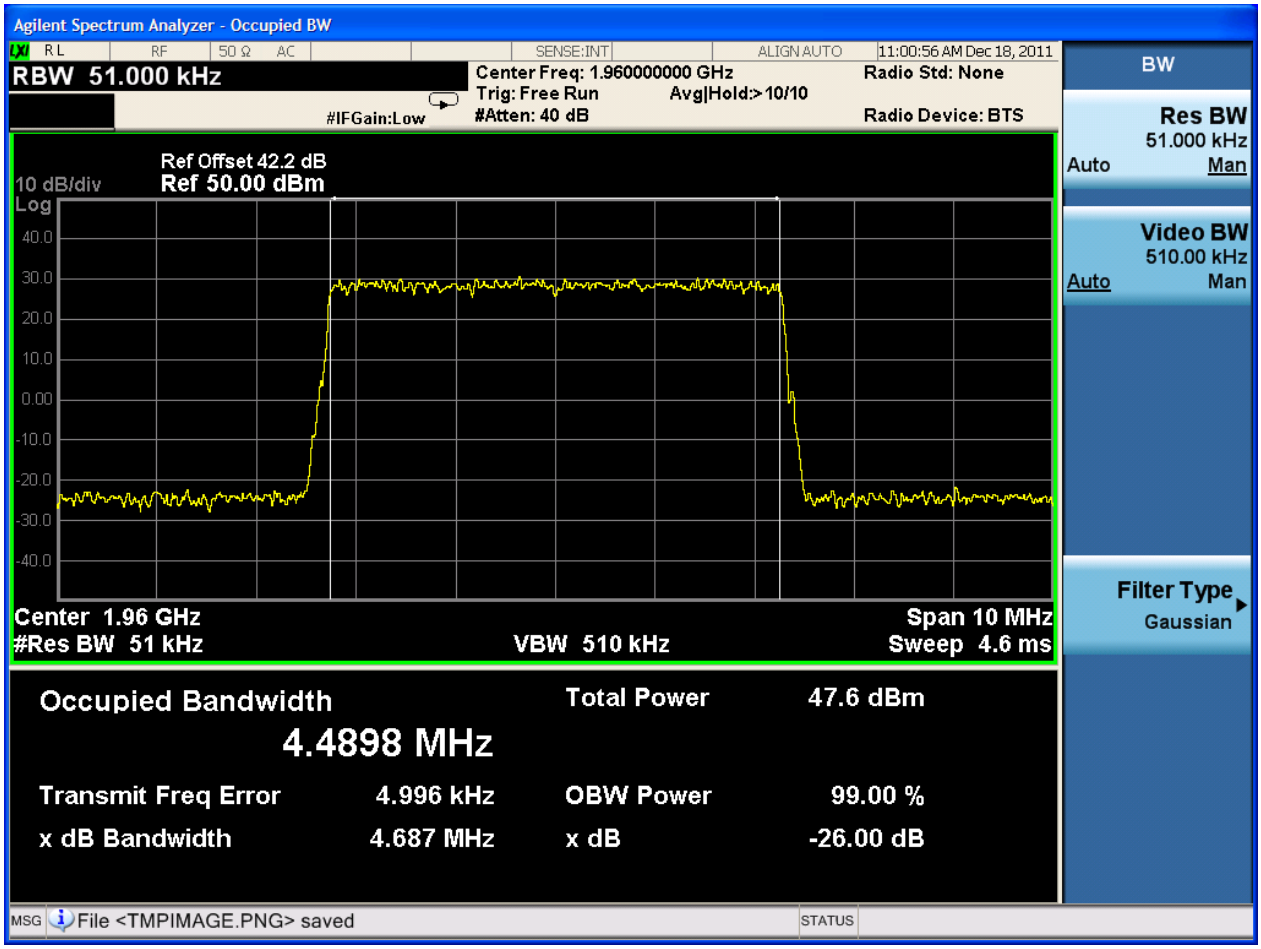


2.1.4.3 Carrier Conf. = 1*L5M(60W)

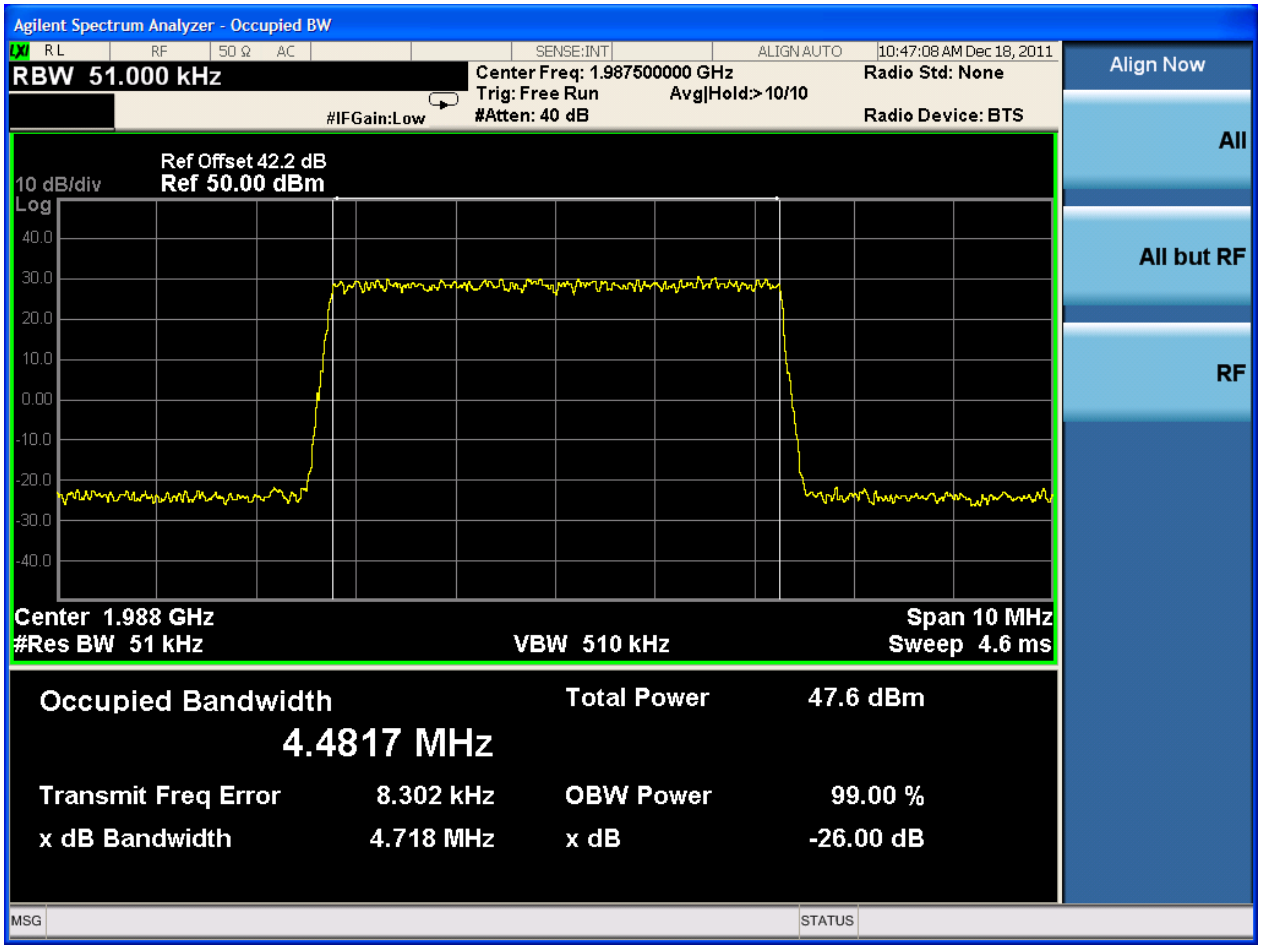
2.1.4.3.1 Ch. B



2.1.4.3.2 Ch. M

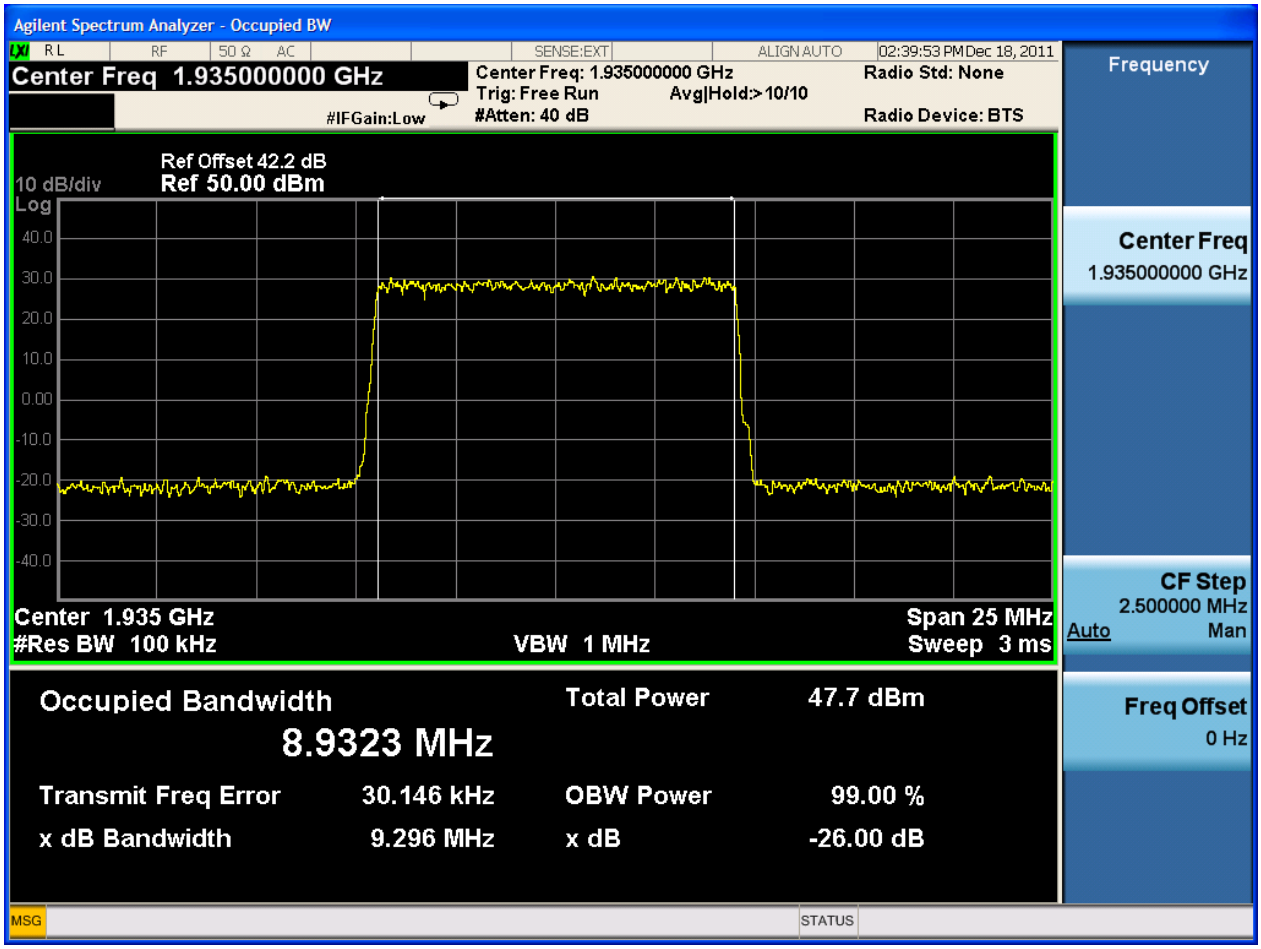


2.1.4.3.3 Ch. T

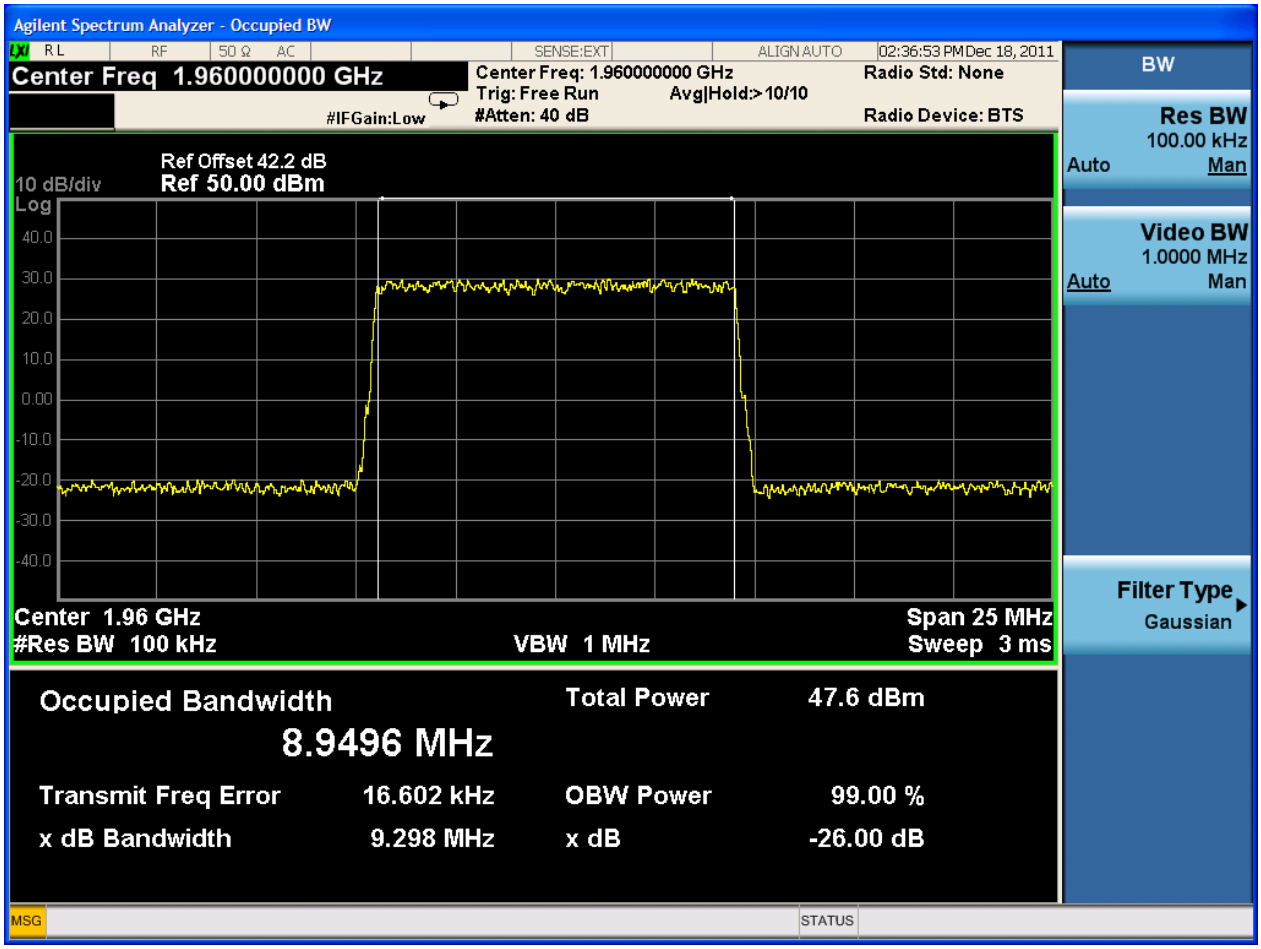


2.1.4.4 Carrier Conf. = 1*L10M(60W)

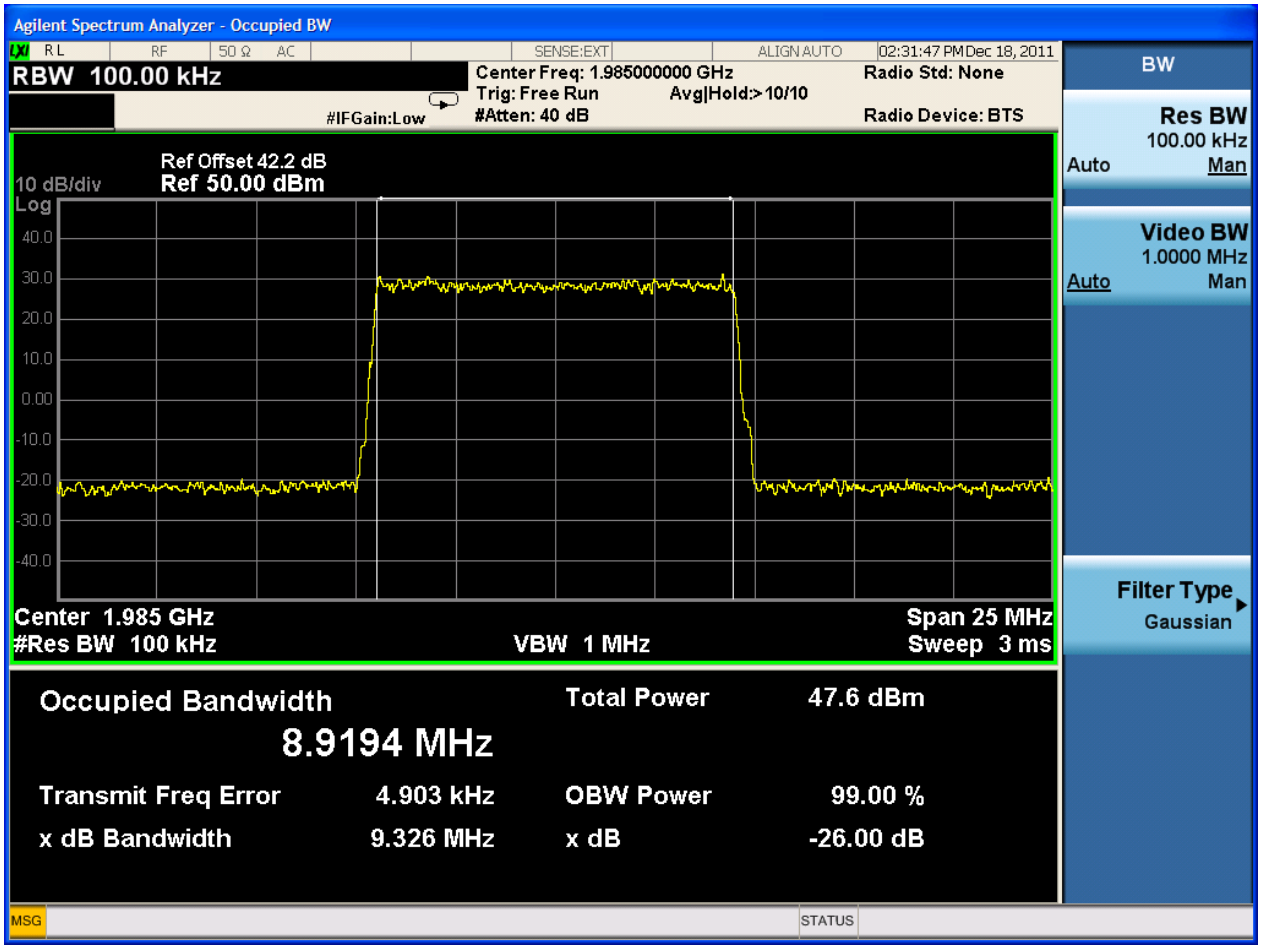
2.1.4.4.1 Ch. B



2.1.4.4.2 Ch. M

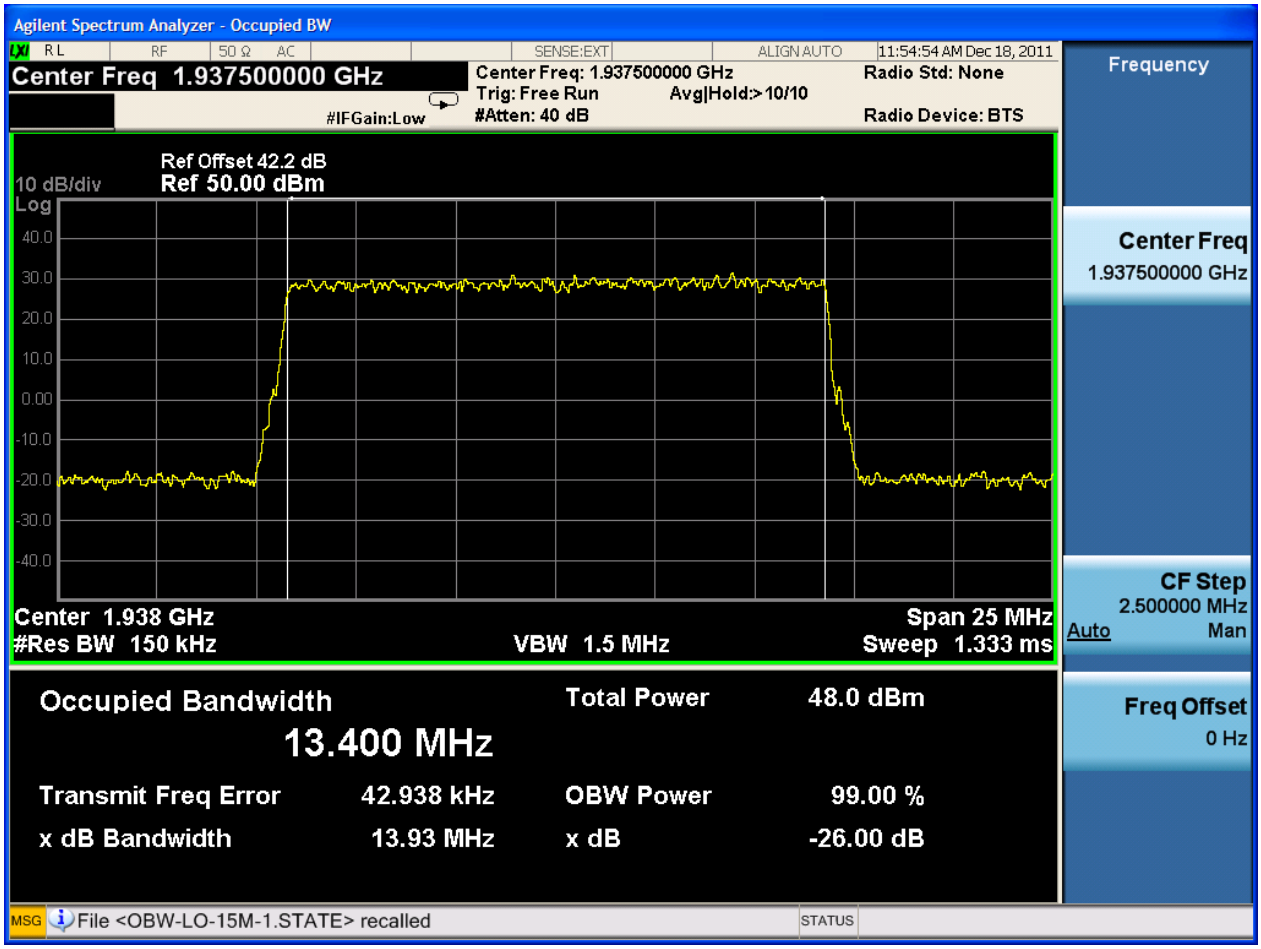


2.1.4.4.3 Ch. T

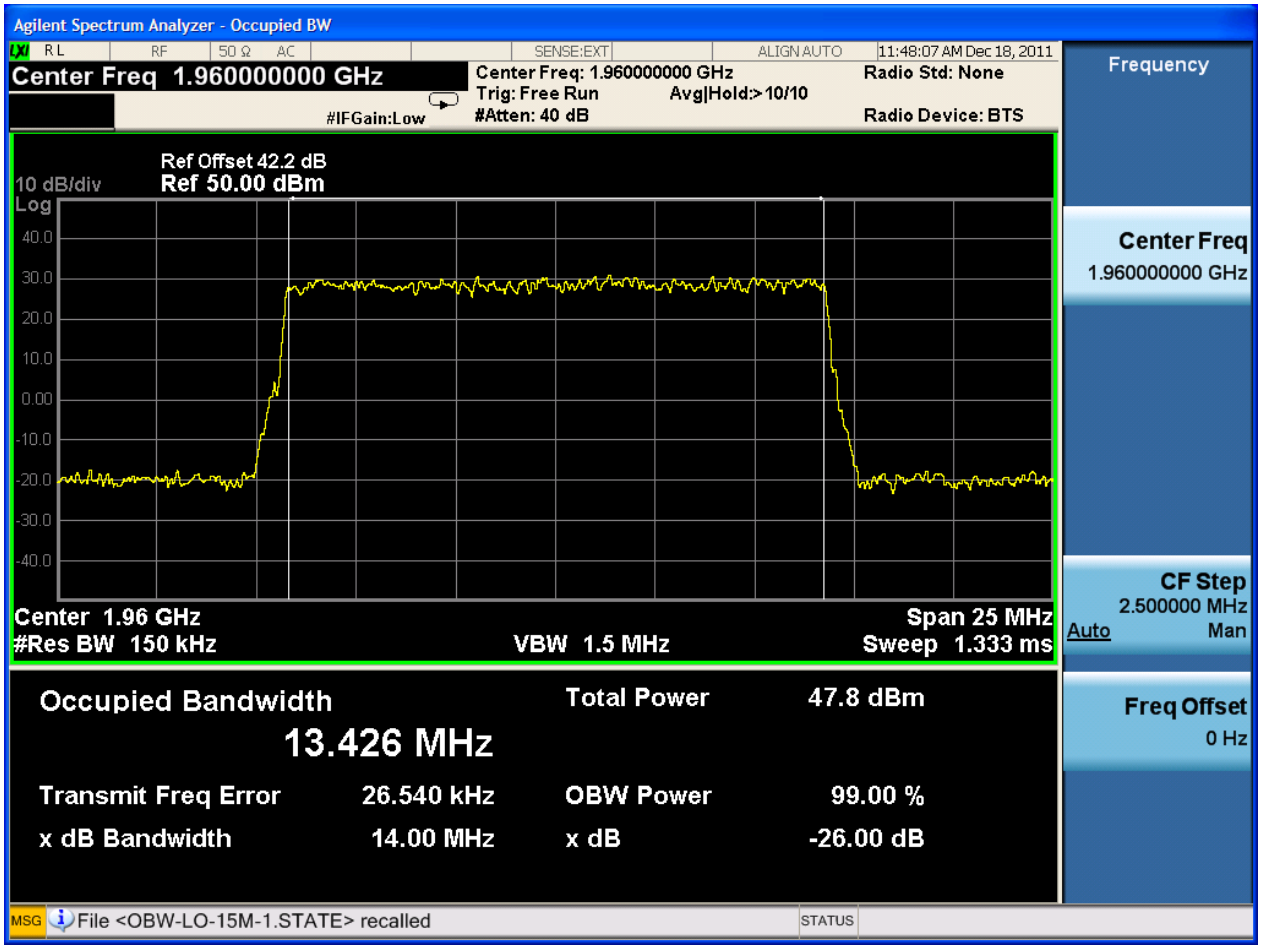


2.1.4.5 Carrier Conf. = 1*L15M(60W)

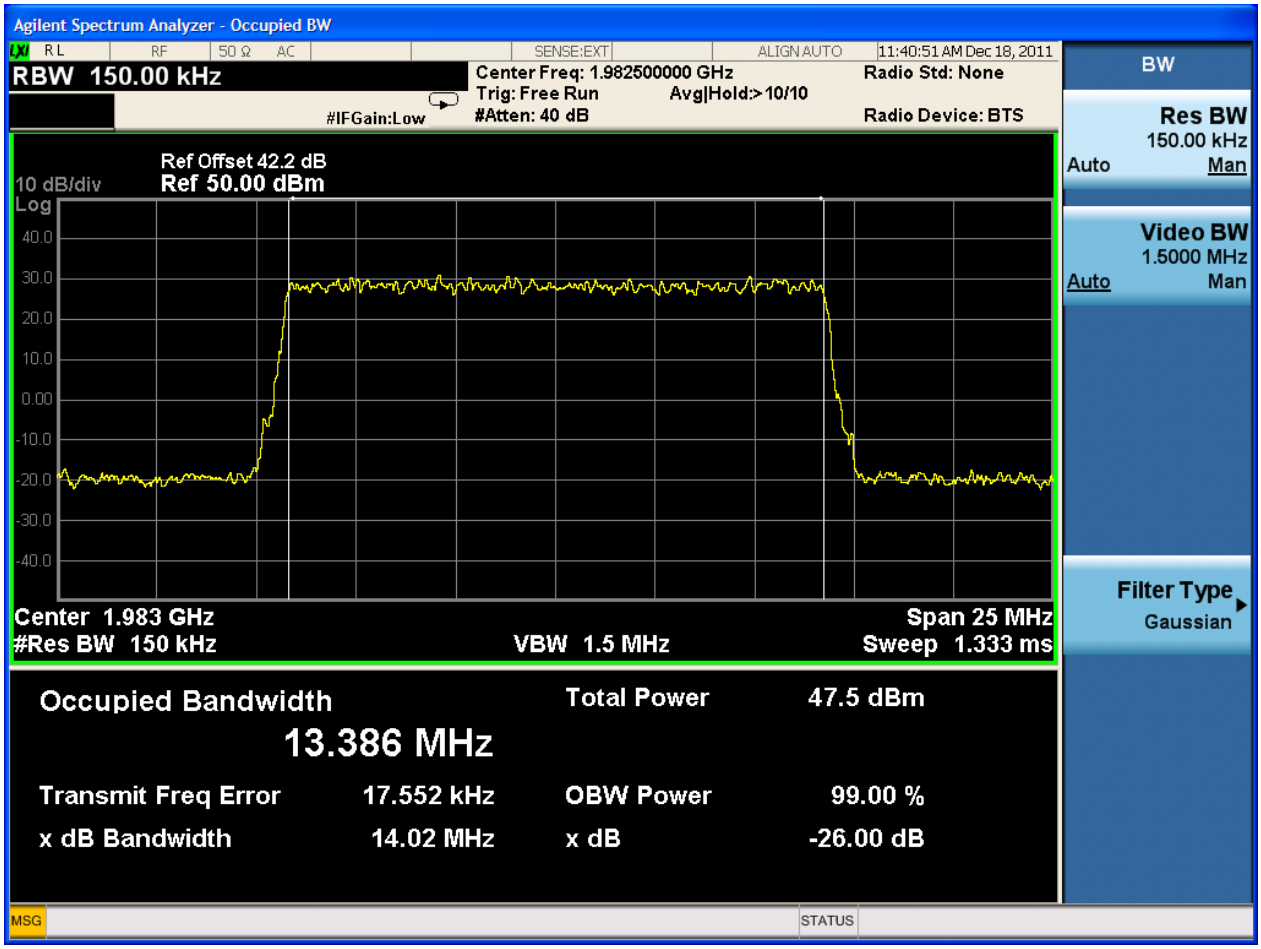
2.1.4.5.1 Ch. B



2.1.4.5.2 Ch. M



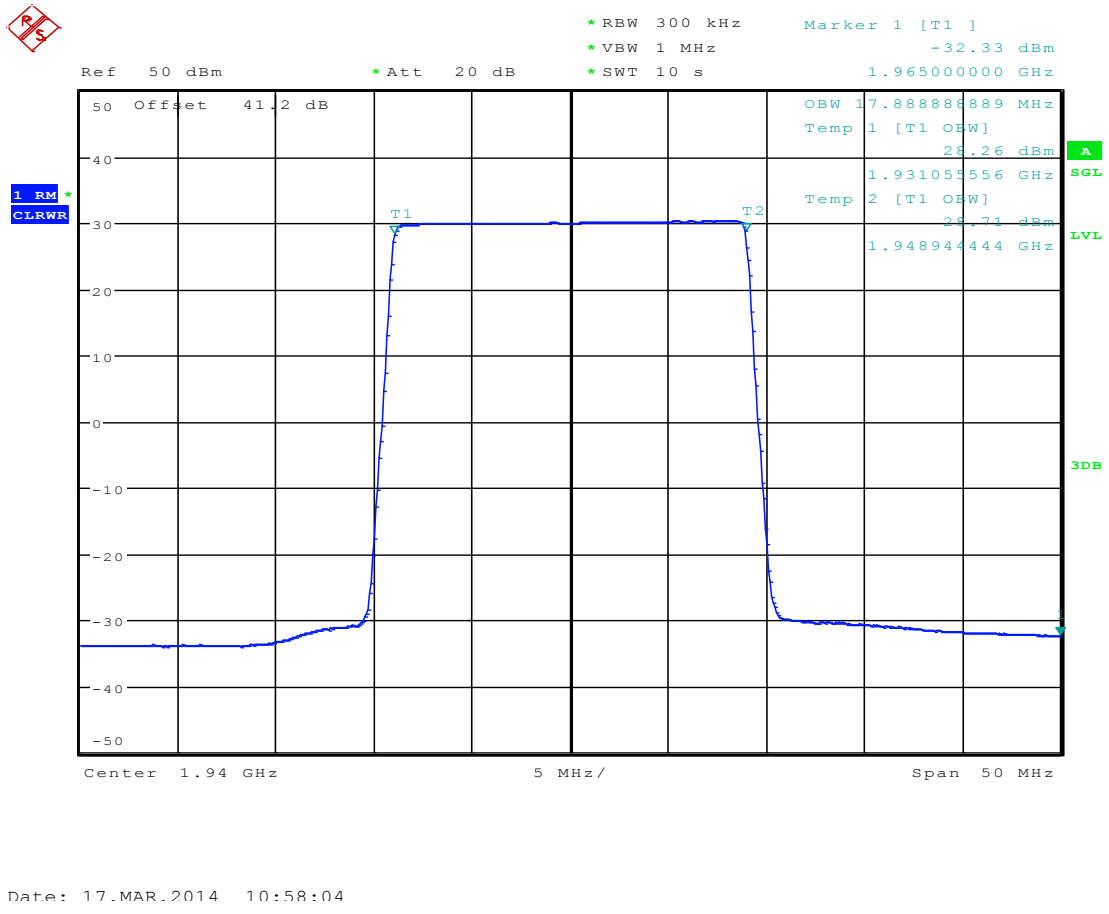
2.1.4.5.3 Ch. T



2.2 For test number SYBH(R)01271108

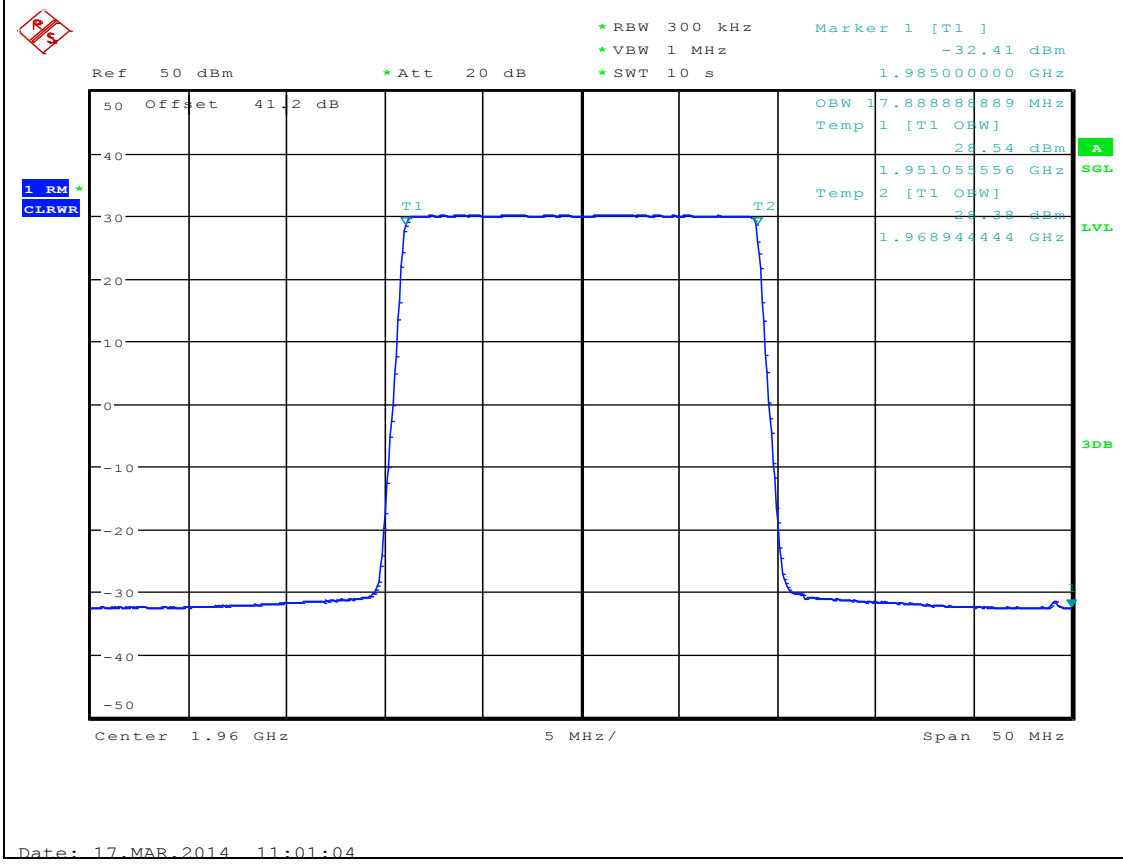
2.2.1 1L_20M_60W_B_TM1_TRXA

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1940	99	Auto	RMS	17.888889	No Conclusion



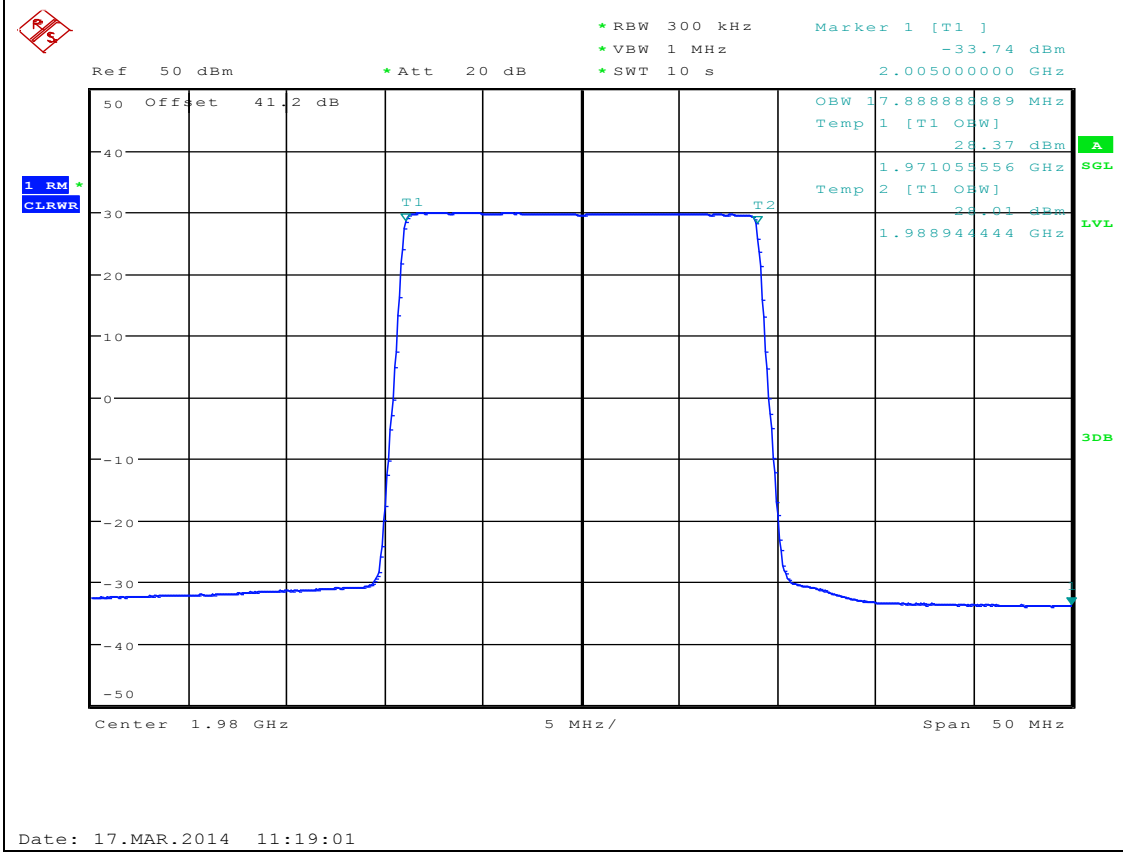
2.2.2 1L_20M_60W_M_TM1_TRXA

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1960	99	Auto	RMS	17.888889	No Conclusion



2.2.3 1L_20M_60W_T_TM1_TRXA

Center Frequency [MHz]	OBW Power [%]	RBW [MHz]	Detector	OBW [MHz]	Verdict
1980	99	Auto	RMS	17.888889	No Conclusion



Appendix C: Band Edges Compliance

1 Result Table

NOTE: The offset of measurement filter -3dB point may be considered when identifying the maximum emission for e.g. the CDMA, WCDMA, WiMAX, LTE systems.

The following configurations tested on one antenna ports. Before comparing the results to the limit, 3dB[10*log(2)] should be added according to method described in the FCC KDB662911 D01 Multiple Transmitter Output V02.

1.1 For test number SYBH(R)00102012

Test Mode	Carrier Conf.	RF Ch.	Band Edges Emissions [dBm]	Verdict
TM-1	1*U(60W)	B	-16.56	Pass
		T	-16.58	Pass
	4*U(15W)	B	-20.29	Pass
		T	-19.74	Pass
GMSK	1*G(60W)	B	-32.04	Pass
		T	-31.48	Pass
	4*G(15W)	B	-30.59	Pass
		T	-31.33	Pass
8PSK	1*G(60W)	B	-26.06	Pass
		T	-18.61	Pass
	4*G(15W)	B	-32.18	Pass
		T	-31.99	Pass
E-TM 1.1	1*L1.4M(60W)	B	-25.76	Pass
		T	-27.03	Pass
	1*L15M(60W)	B	-18.86	Pass
		T	-18.59	Pass
	2*L1.4M(30W)	B	-28.94	Pass
		T	-29.74	Pass
	2*L15M(30W)	B	-22.33	Pass
		T	-22.41	Pass
MSR_TM1	1*G(40W) & 1*U(20W)	B	-33.05	Pass
		T	-24.79	Pass
	3*G(15W) & 1*U(15W)	B	-29.23	Pass
		T	-33.92	Pass
	1*G(15W) & 3*U(15W)	B	-26.32	Pass
		T	-24.37	Pass
MSR_TM2	1*G(40W) & 1*U(20W)	B	-27.59	Pass
		T	-24.30	Pass
	3*G(15W) &	B	-25.29	Pass

Test Mode	Carrier Conf.	RF Ch.	Band Edges Emissions [dBm]	Verdict
	1*U(15W)			
		T	-30.0	Pass
	1*G(15W) & 3*U(15W)	B	-24.79	Pass
		T	-25.44	Pass

1.2 For test number SYBH(R)01271108

EUT Conf.	Test Result(dBm)	Verdict
1U_80W_B_TM1_TRXB	-18.20	Pass
1U_80W_T_TM1_TRXB	-18.80	Pass
4U_80W_B_TM1_TRXB	-18.25	Pass
4U_80W_T_TM1_TRXB	-20.78	Pass
1G_80W_B_TM1_TRXB	-37	Pass
1G_80W_T_TM1_TRXB	-38.79	Pass
8G_80W_B_TM1_TRXB	-38.40	Pass
8G_80W_T_TM1_TRXB	-43.49	Pass
1G1U_80W_B_TM1_TRXB	-35	Pass
1G1U_80W_T_TM1_TRXB	-18.32	Pass
3G1U_80W_B_TM1_TRXB	-41.14	Pass
3G1U_80W_T_TM1_TRXB	-32.34	Pass
1U1L_1.4M_80W_B_TM1_TRXB	-16.82	Pass
1U1L_1.4M_80W_T_TM1_TRXB	-20.81	Pass
1U1L_20M_80W_B_TM1_TRXB	-17.84	Pass
1U1L_20M_80W_T_TM1_TRXB	-21.88	Pass
3U1L_1.4M_80W_B_TM1_TRXB	-20.24	Pass
3U1L_1.4M_80W_T_TM1_TRXB	-28.27	Pass
3U1L_20M_80W_B_TM1_TRXB	-21.38	Pass
3U1L_20M_80W_T_TM1_TRXB	-28.21	Pass
1G1L_1.4M_60W_B_TM1_TRXA	-33.44	Pass
1G1L_1.4M_60W_T_TM1_TRXA	-33.54	Pass
1G1L_20M_60W_B_TM1_TRXA	-29.96	Pass
1G1L_20M_60W_T_TM1_TRXA	-32.56	Pass
3G1L_1.4M_60W_B_TM1_TRXA	-36.78	Pass
3G1L_1.4M_60W_T_TM1_TRXA	-39.04	Pass
3G1L_20M_60W_B_TM1_TRXA	-40.34	Pass
3G1L_20M_60W_T_TM1_TRXA	-40.50	Pass
1L_20M_60W_B_TM1_TRXA	-28.88	Pass
1L_20M_60W_T_TM1_TRXA	-27.03	Pass
2L_20M_60W_B_TM1_TRXA	-32.29	Pass
2L_20M_60W_T_TM1_TRXA	-31.49	Pass

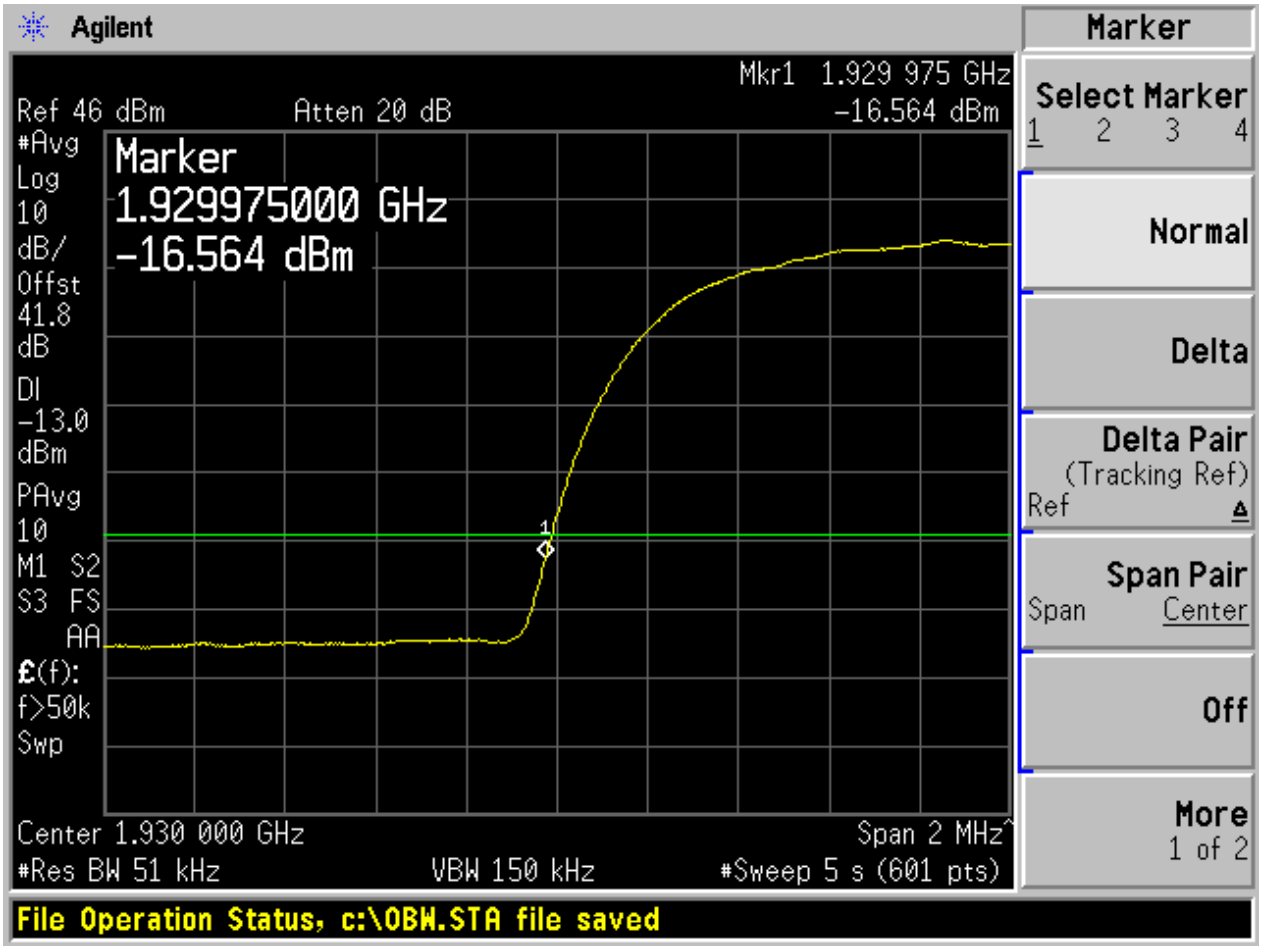
2 Test Plot

2.1 For test number SYBH(R)00102012

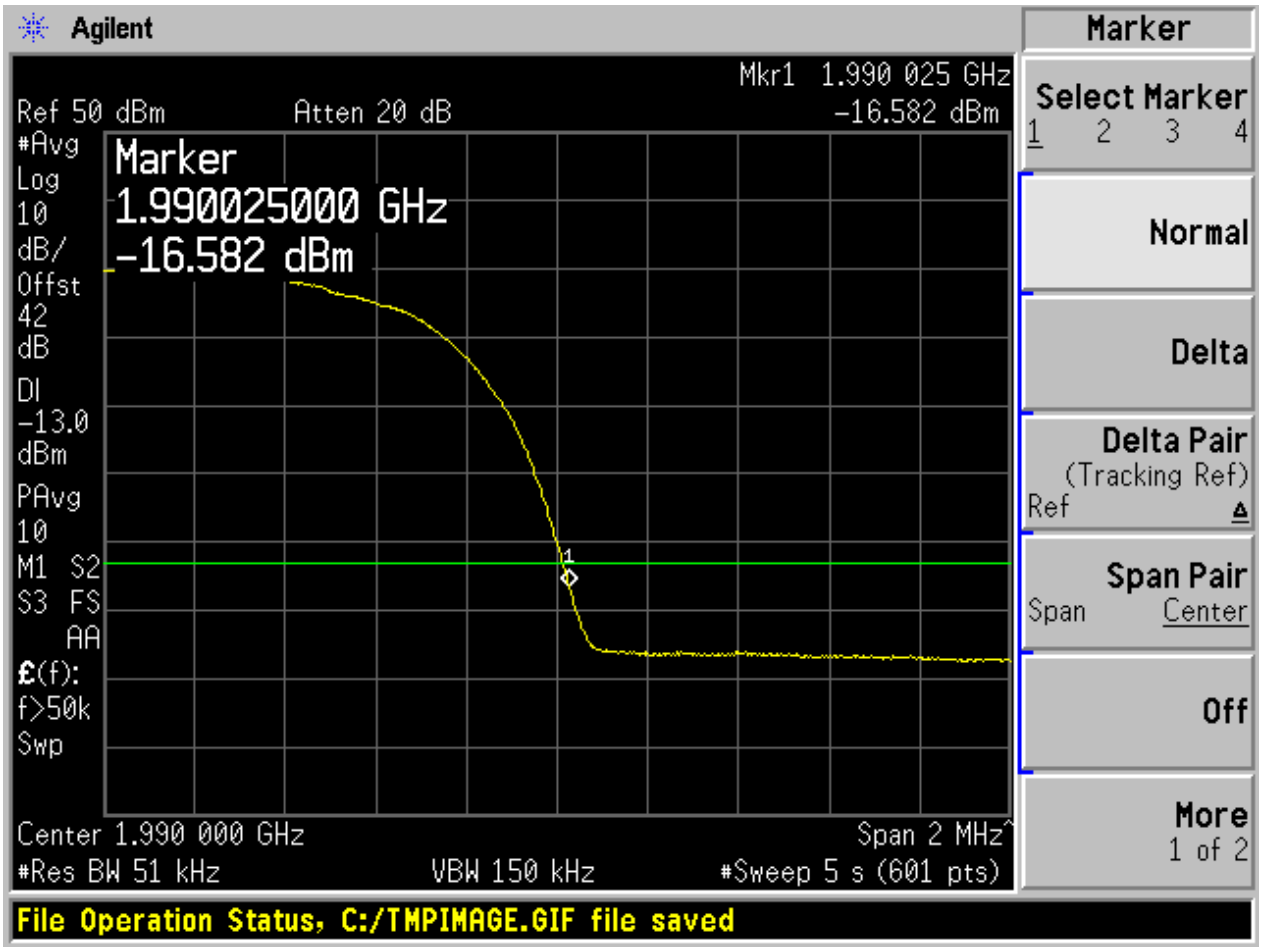
2.1.1 Test Mode = TM-1

2.1.1.1 Carrier Conf. = 1*U(60W)

2.1.1.1.1 Ch. B

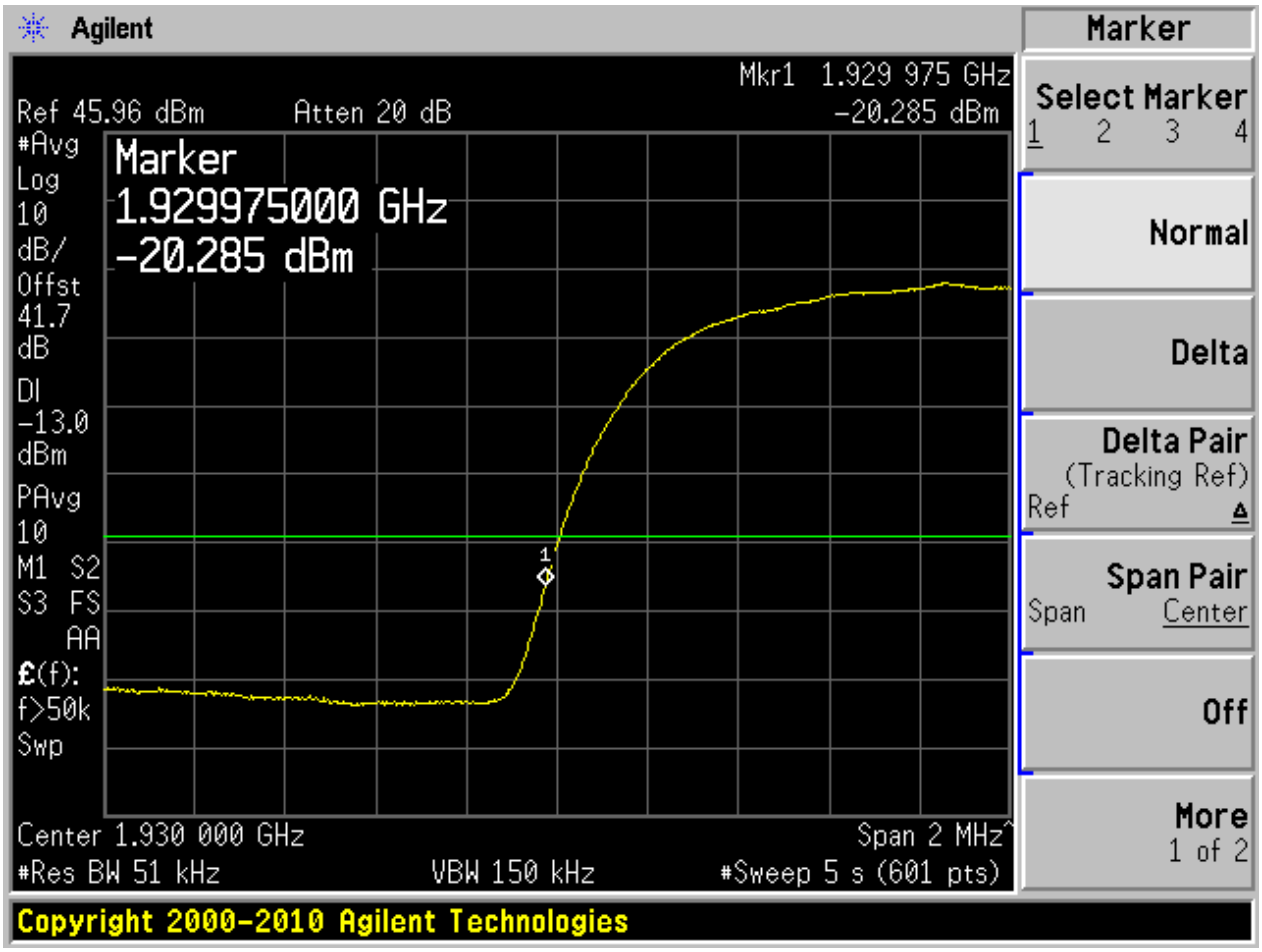


2.1.1.1.2 Ch. T

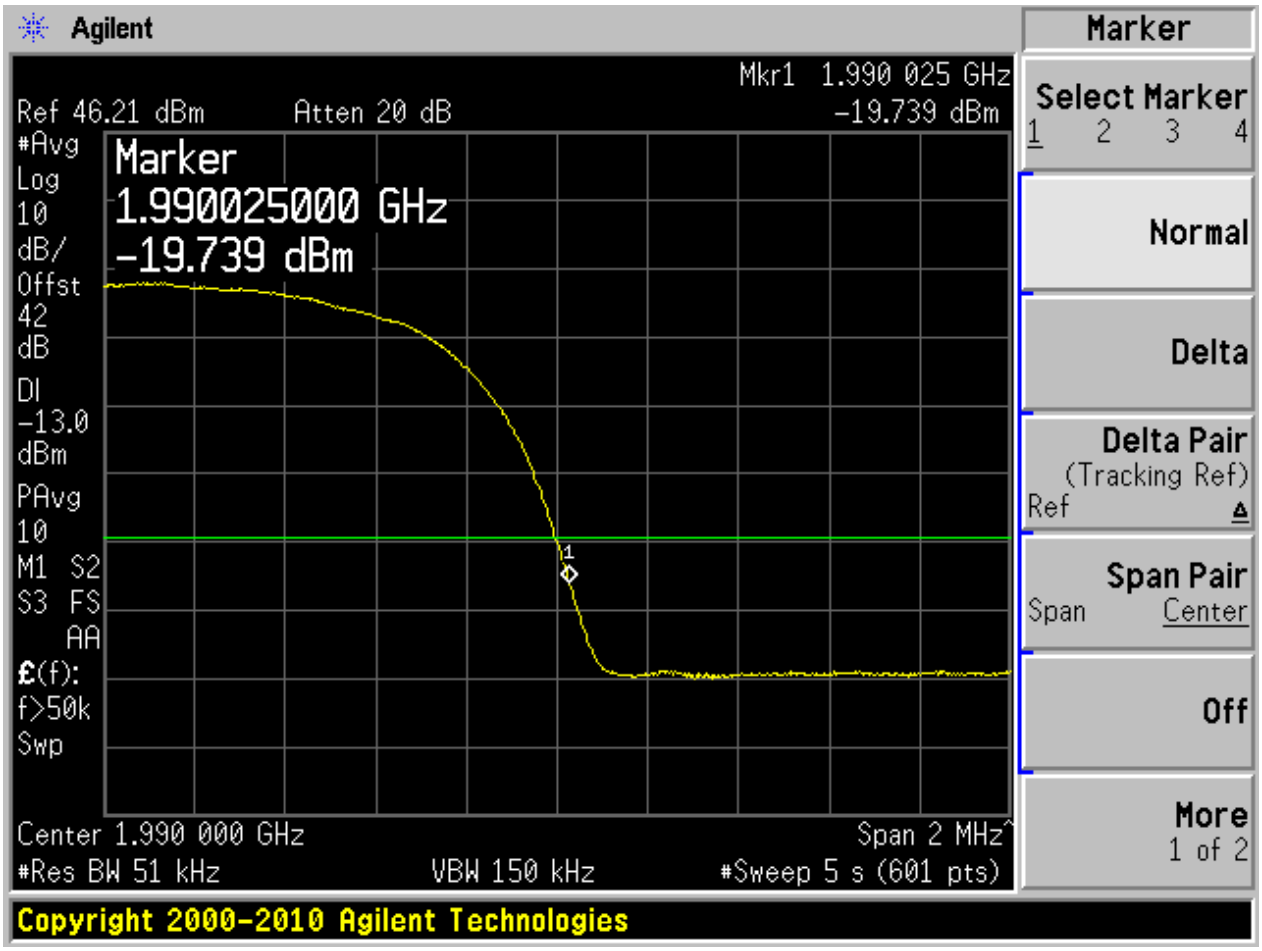


2.1.1.2 Carrier Conf. = 4*U(15W)

2.1.1.2.1 Ch. B



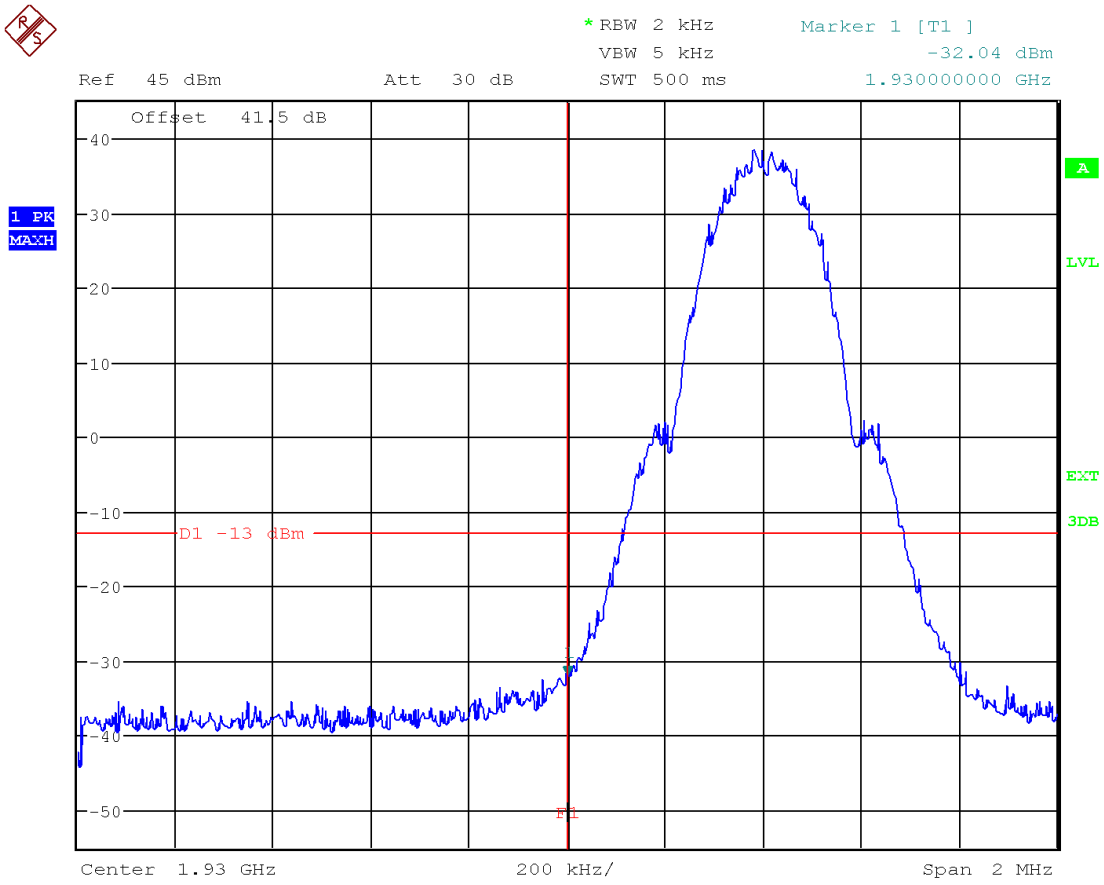
2.1.1.2.2 Ch. T



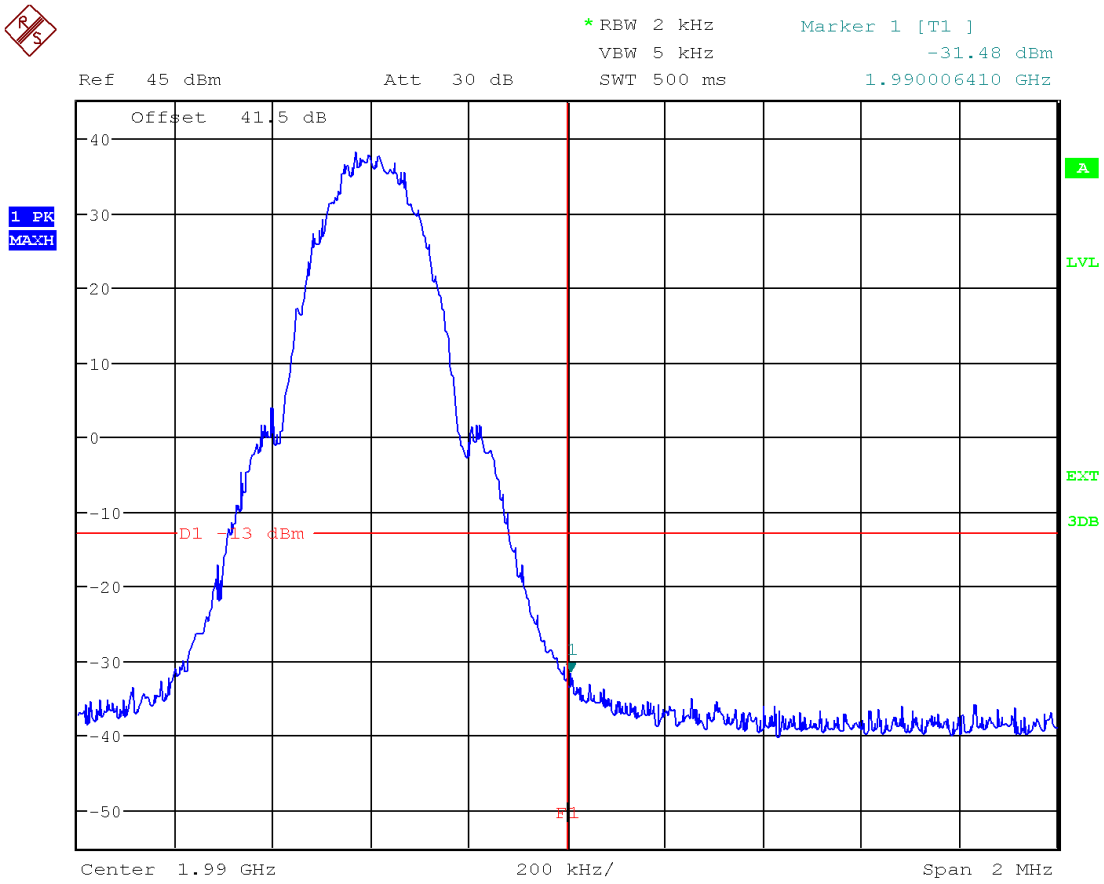
2.1.2 Test Mode = GMSK

2.1.2.1 Carrier Conf. = 1*G(60W)

2.1.2.1.1 Ch. B

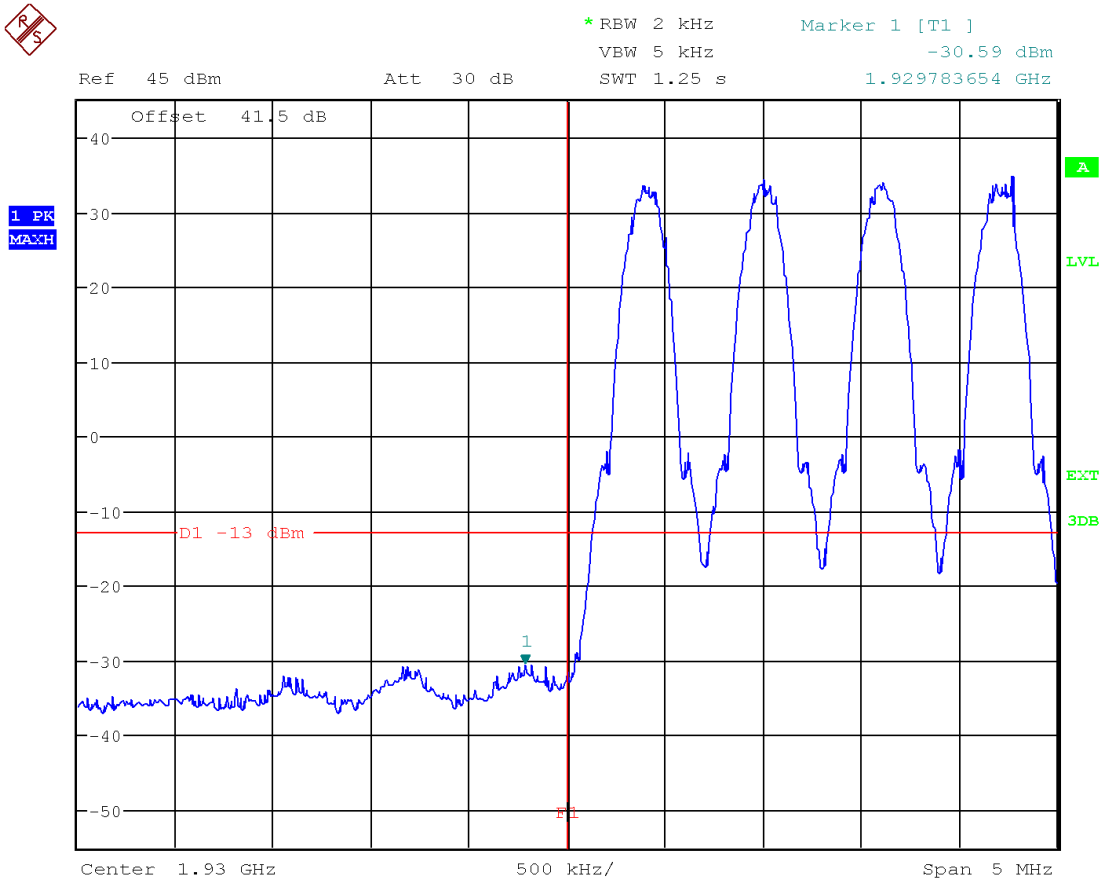


2.1.2.1.2 Ch. T

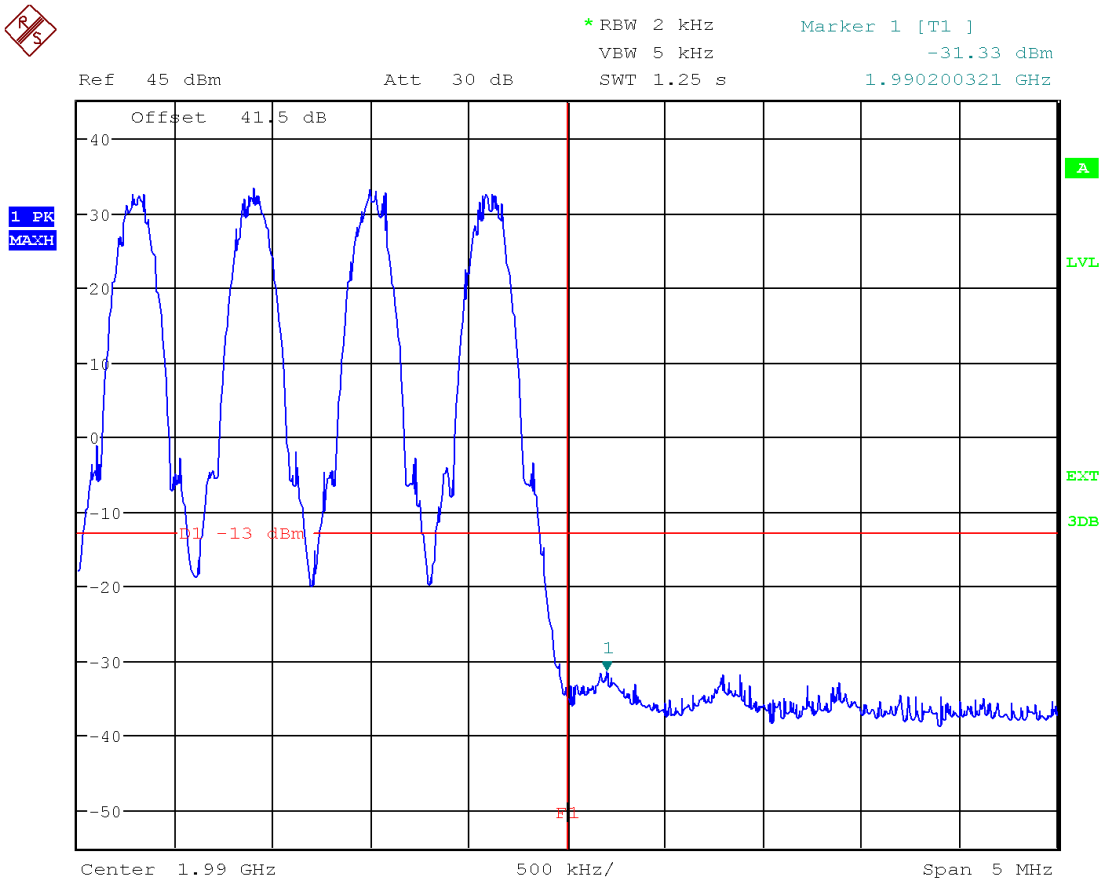


2.1.2.2 Carrier Conf. = 4*G(15W)

2.1.2.2.1 Ch. B



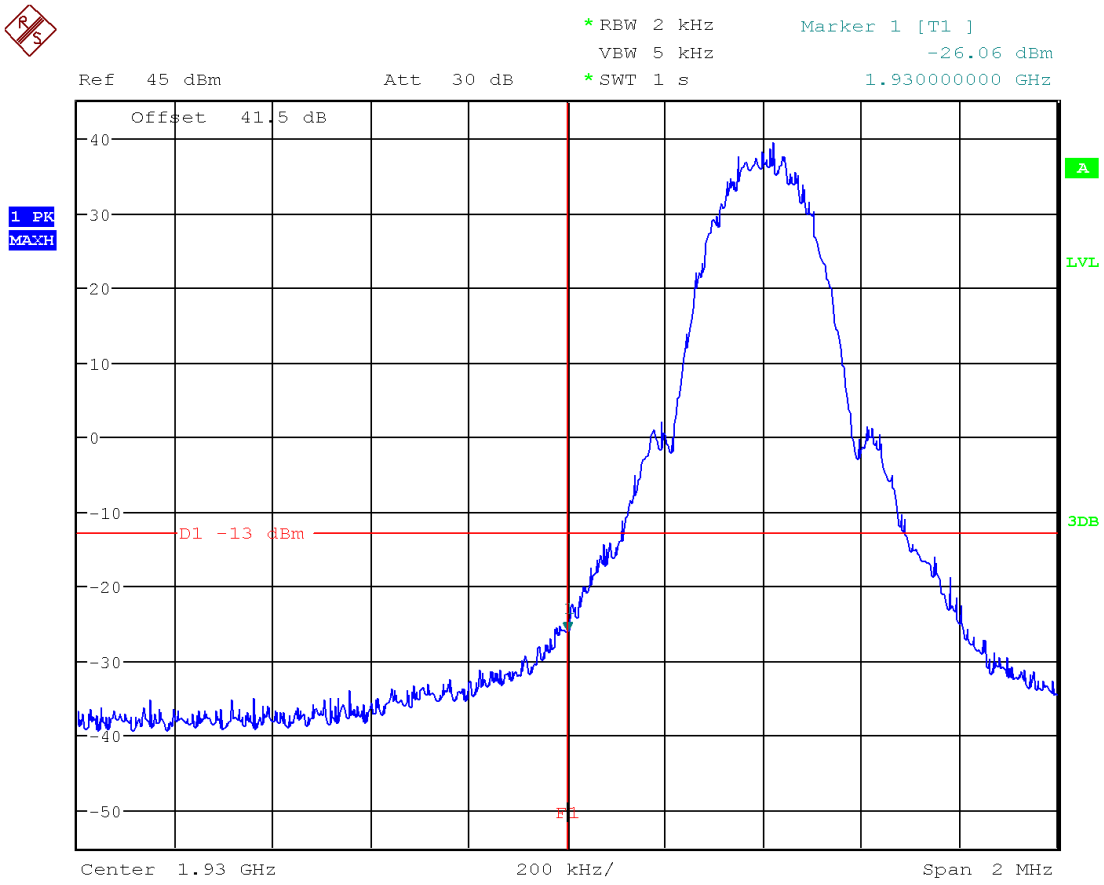
2.1.2.2.2 Ch. T



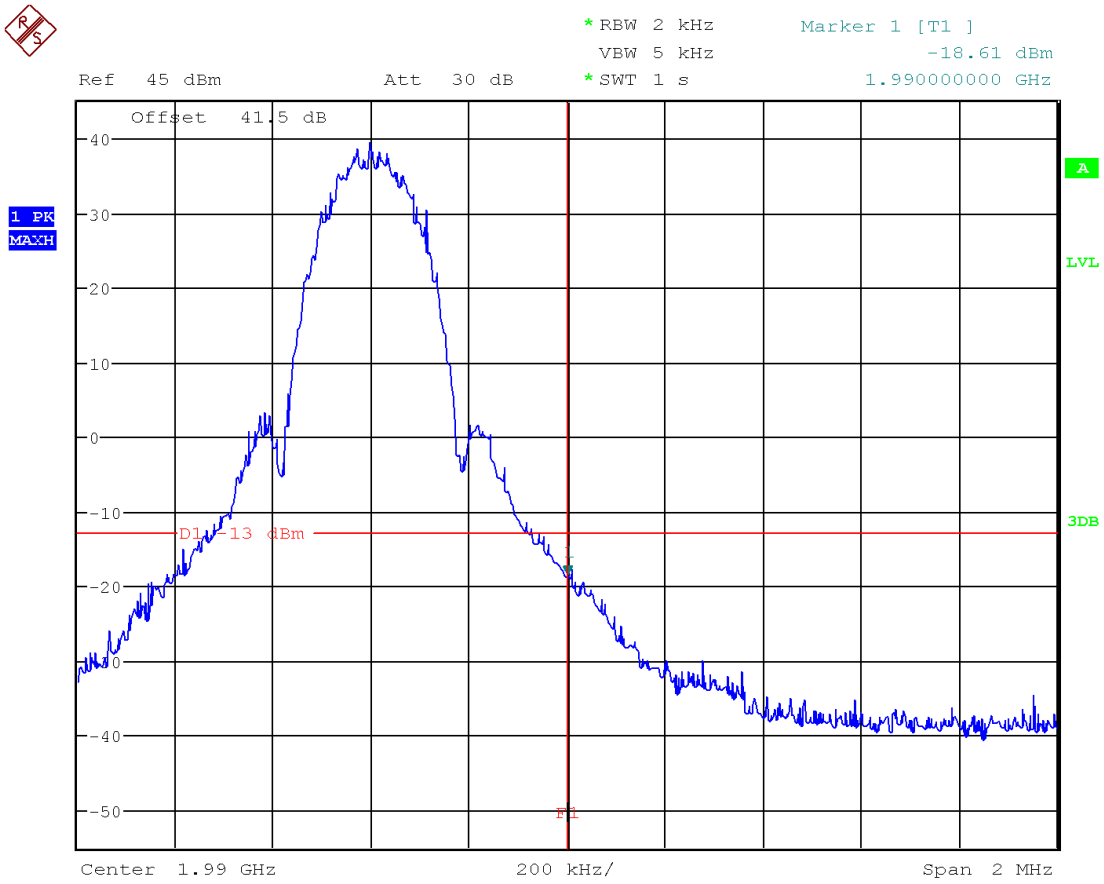
2.1.3 Test Mode = 8PSK

2.1.3.1 Carrier Conf. = 1*G(60W)

2.1.3.1.1 Ch. B



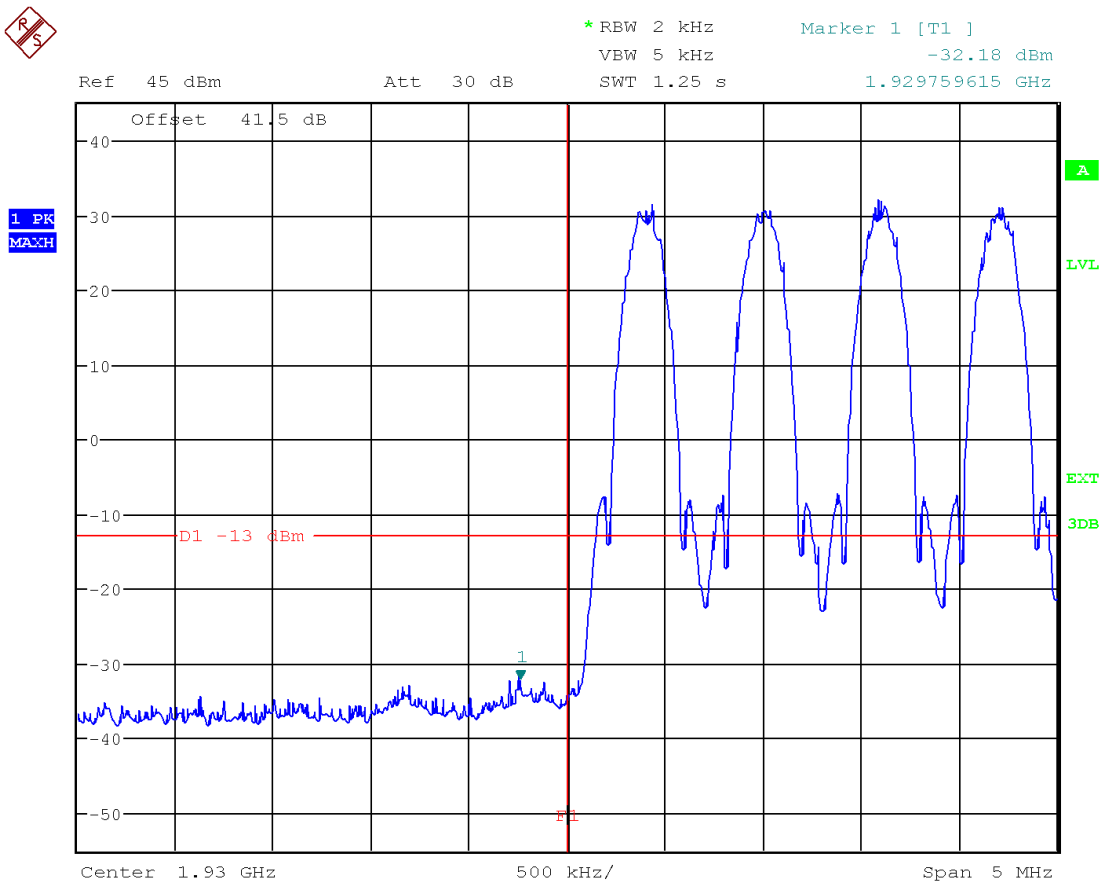
2.1.3.1.2 Ch. T



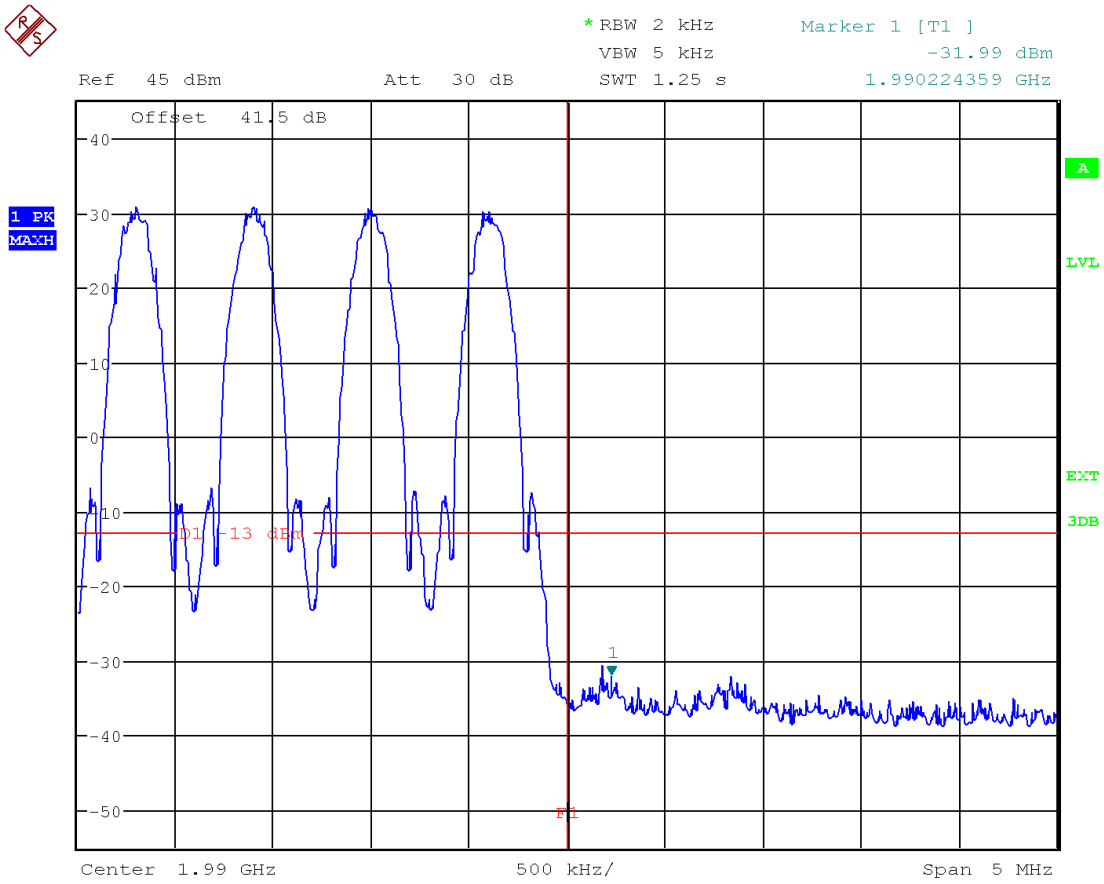
Date: 23.DEC.2011 11:17:44

2.1.3.2 Carrier Conf. = 4*G(15W)

2.1.3.2.1 Ch. B



2.1.3.2.2 Ch. T

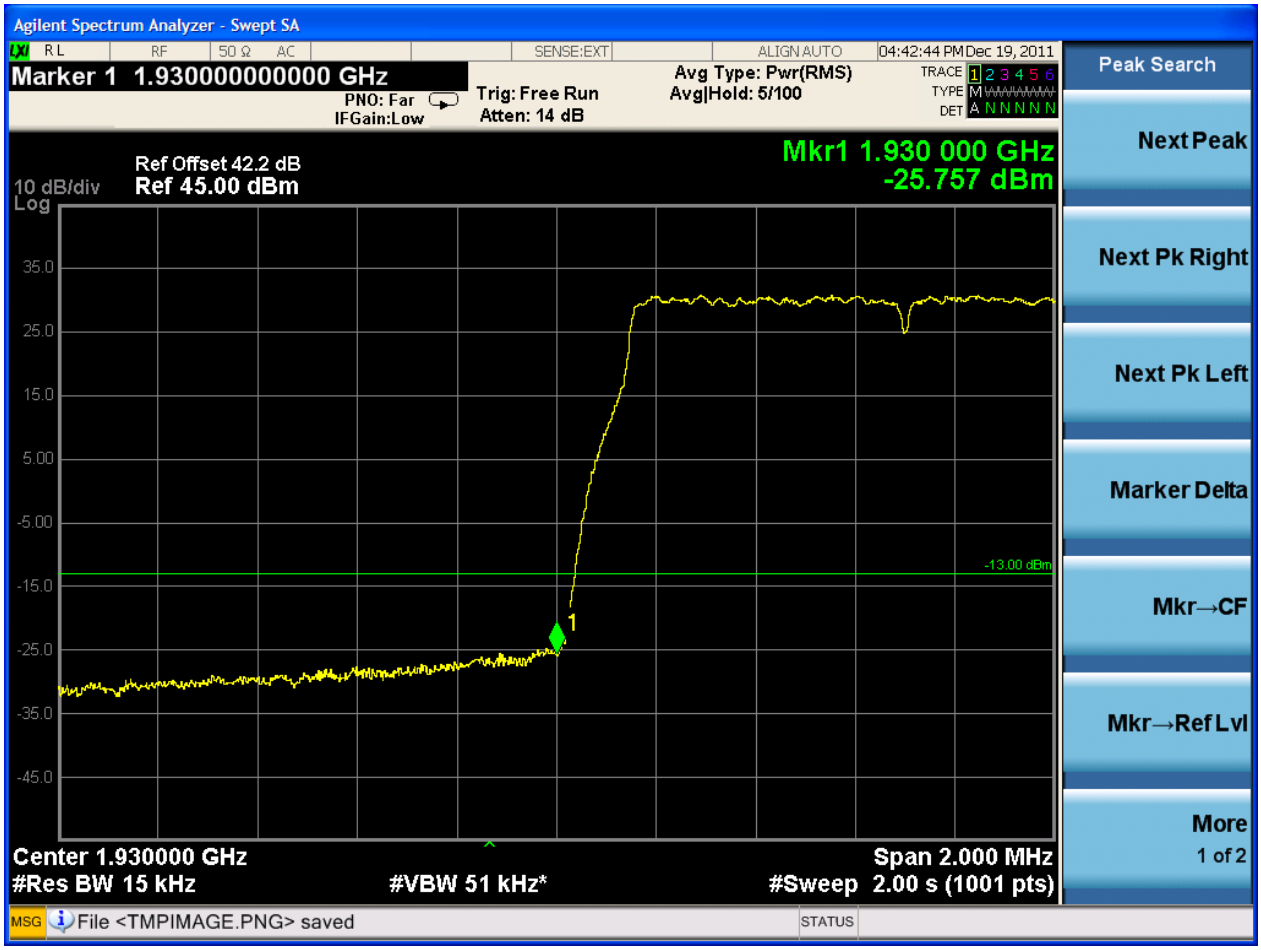


Date: 23.DEC.2011 14:47:43

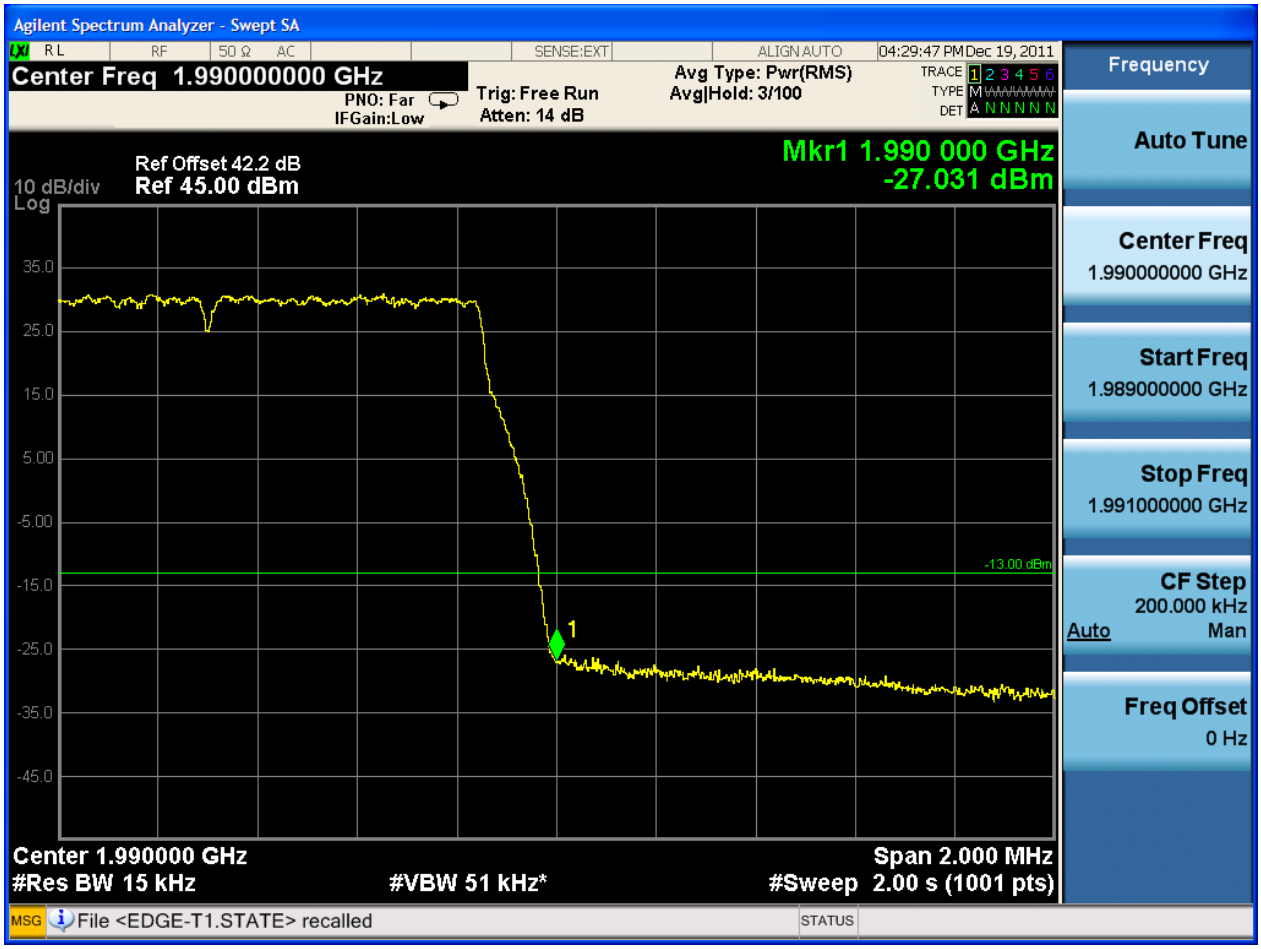
2.1.4 Test Mode = E-TM 1.1

2.1.4.1 Carrier Conf. = 1*L1.4M(60W)

2.1.4.1.1 Ch. B

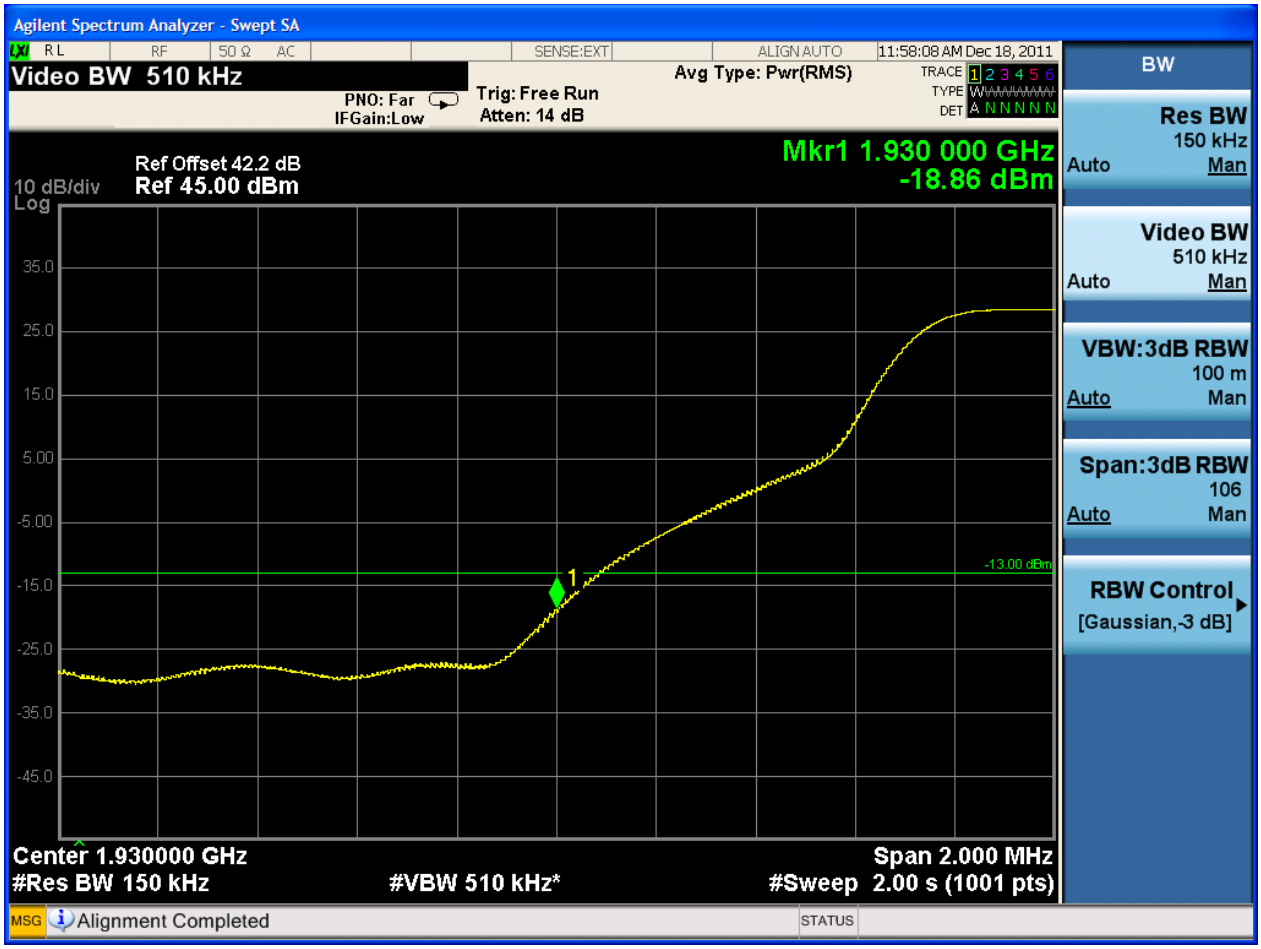


2.1.4.1.2 Ch. T



2.1.4.2 Carrier Conf. = 1*L15M(60W)

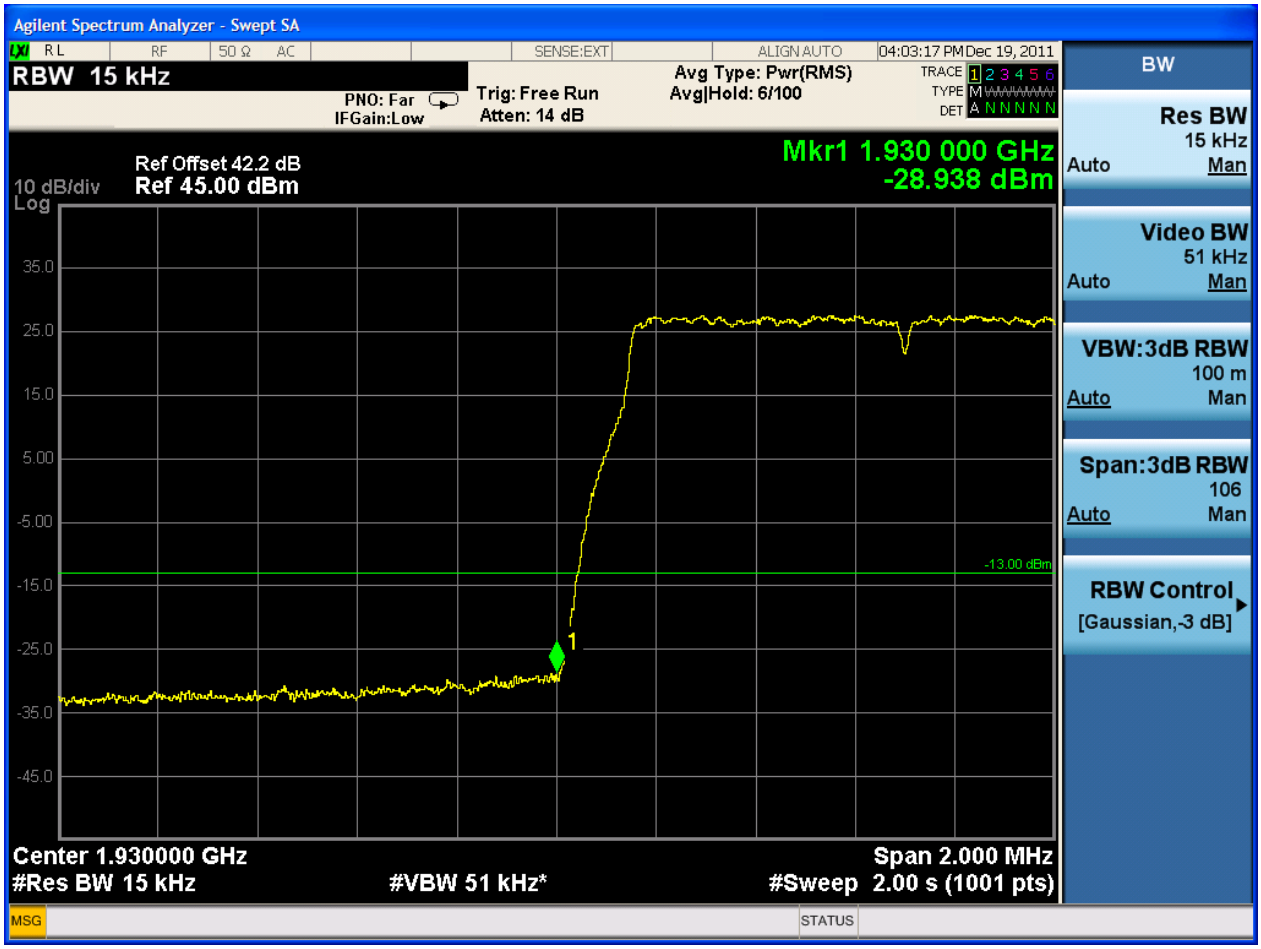
2.1.4.2.1 Ch. B



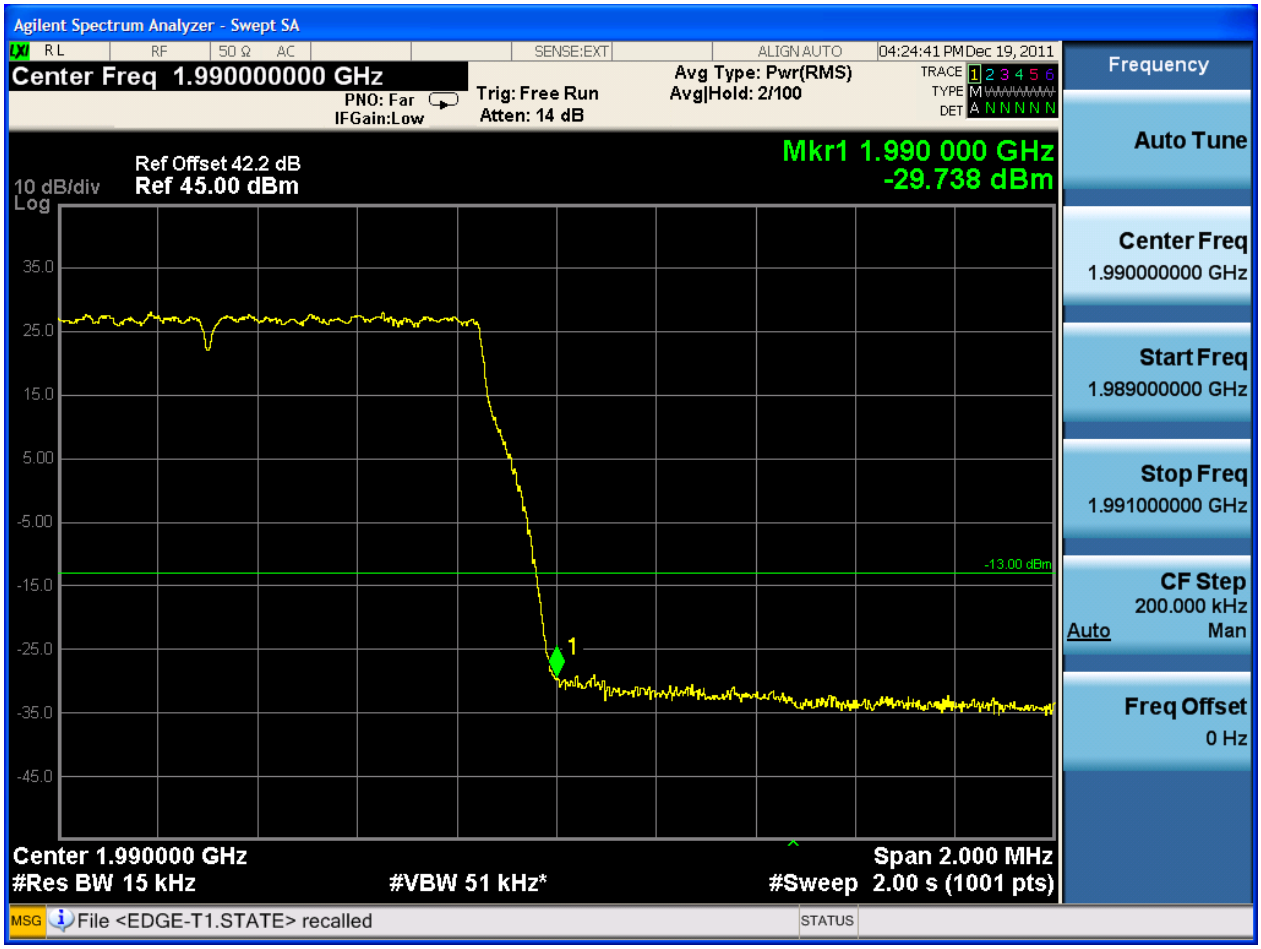
2.1.4.2.2 Ch. T

2.1.4.3 Carrier Conf. = 2*L1.4M(30W)

2.1.4.3.1 Ch. B



2.1.4.3.2 Ch. T



2.1.4.4 Carrier Conf. = 2*L15M(30W)

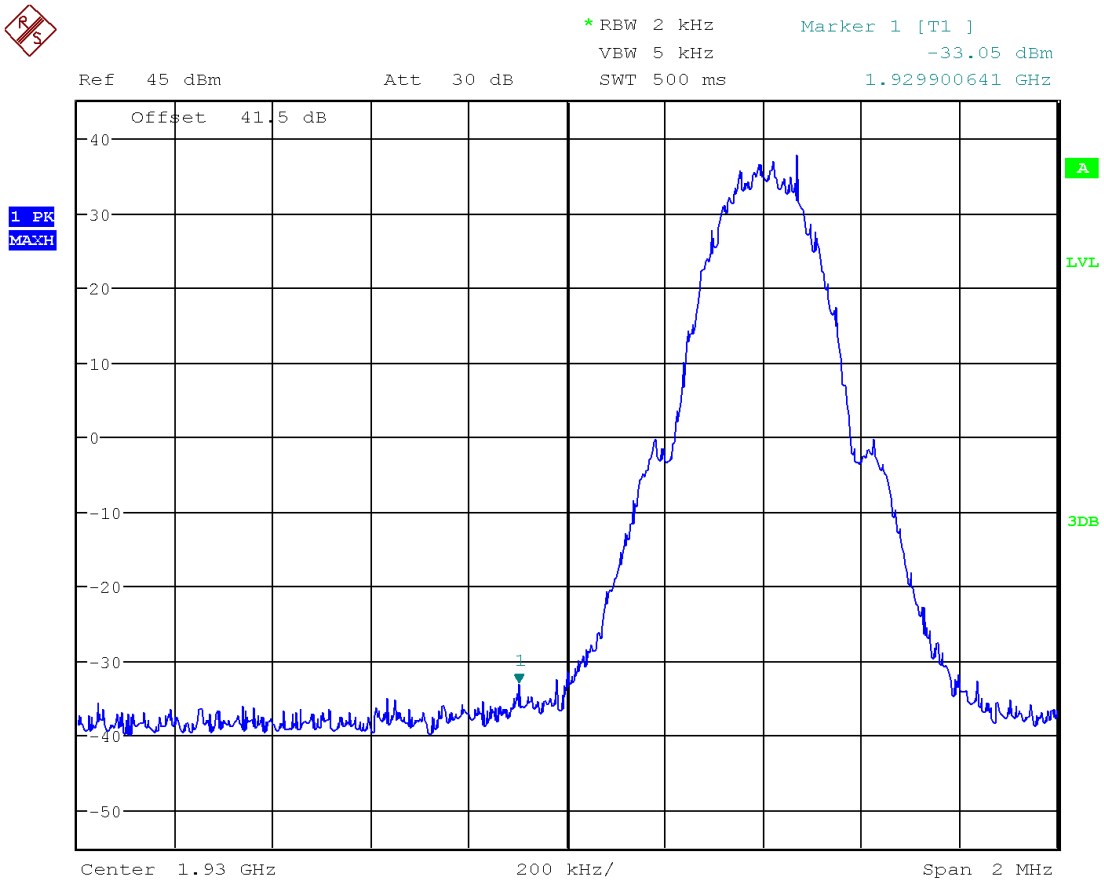
2.1.4.4.1 Ch. B

2.1.4.4.2 Ch. T

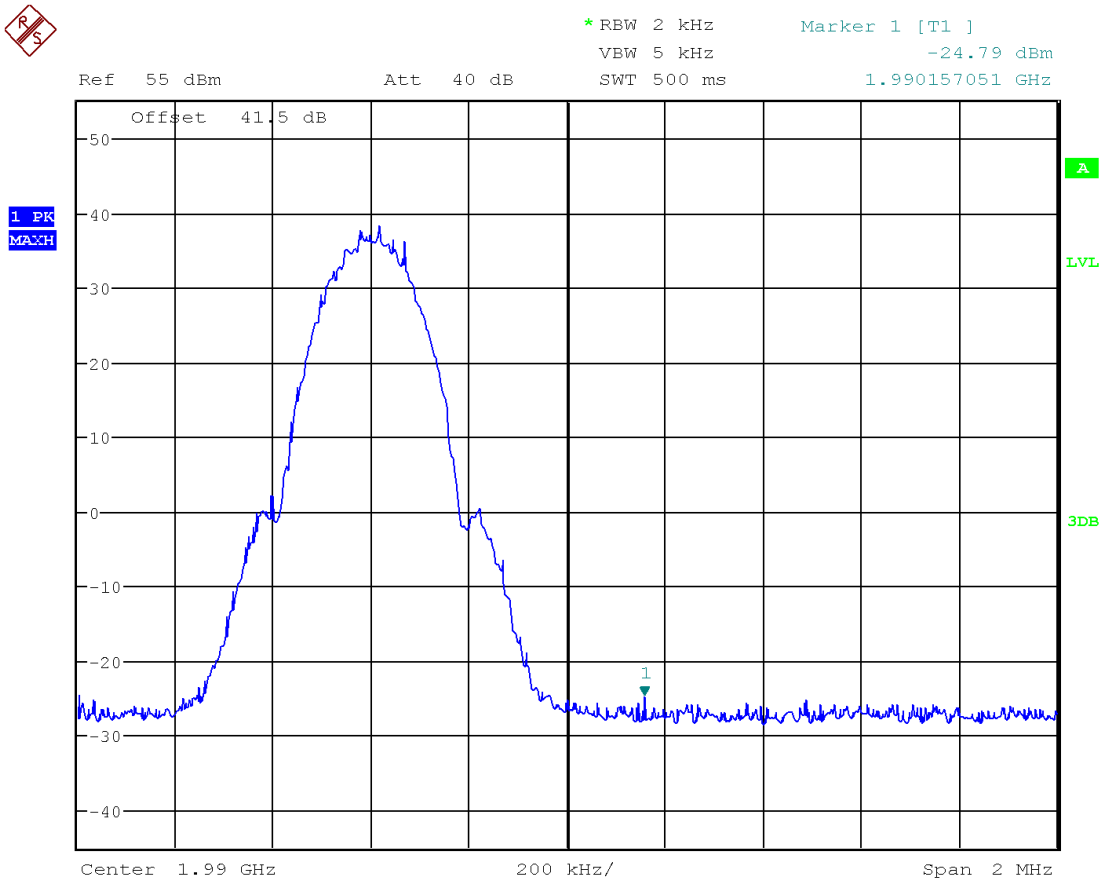
2.1.5 MSR_TM1

2.1.5.1 Carrier Conf. = 1*G(40W) & 1*U(20W)

2.1.5.1.1 Ch. B



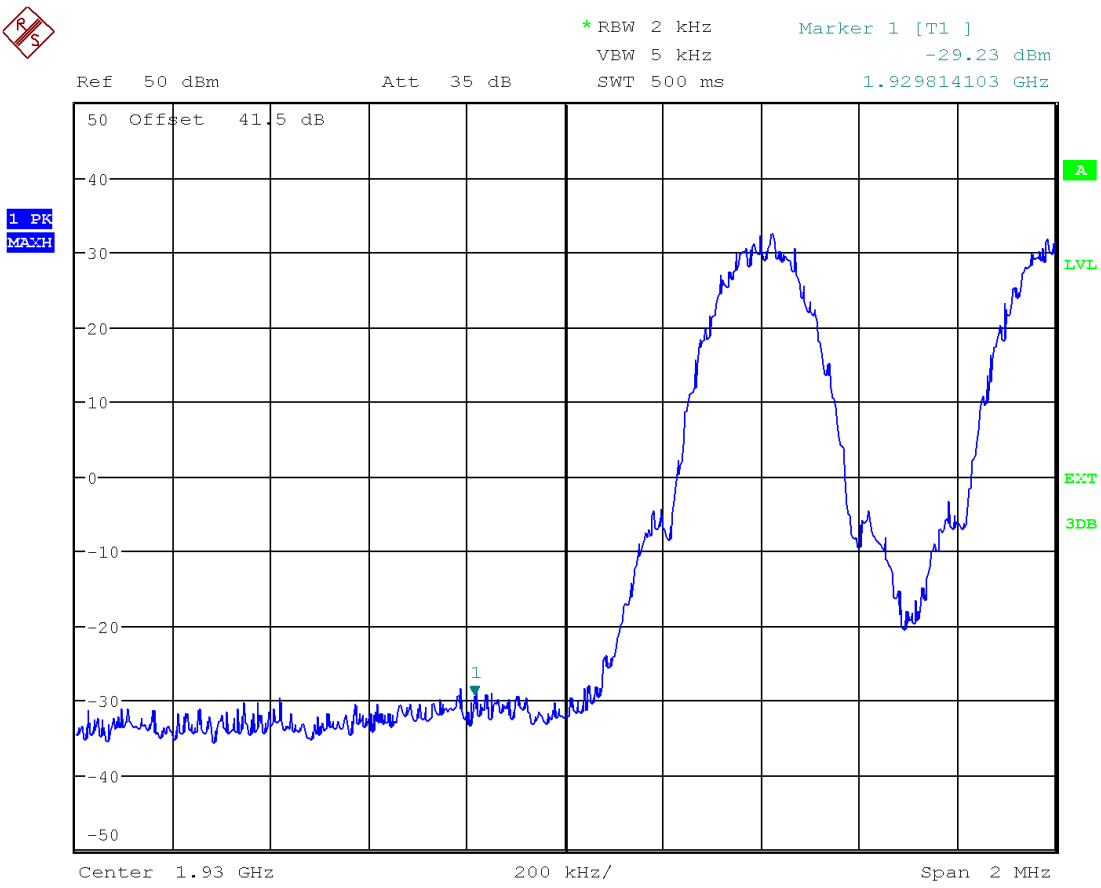
2.1.5.1.2 Ch. T



Date: 27.DEC.2011 21:01:50

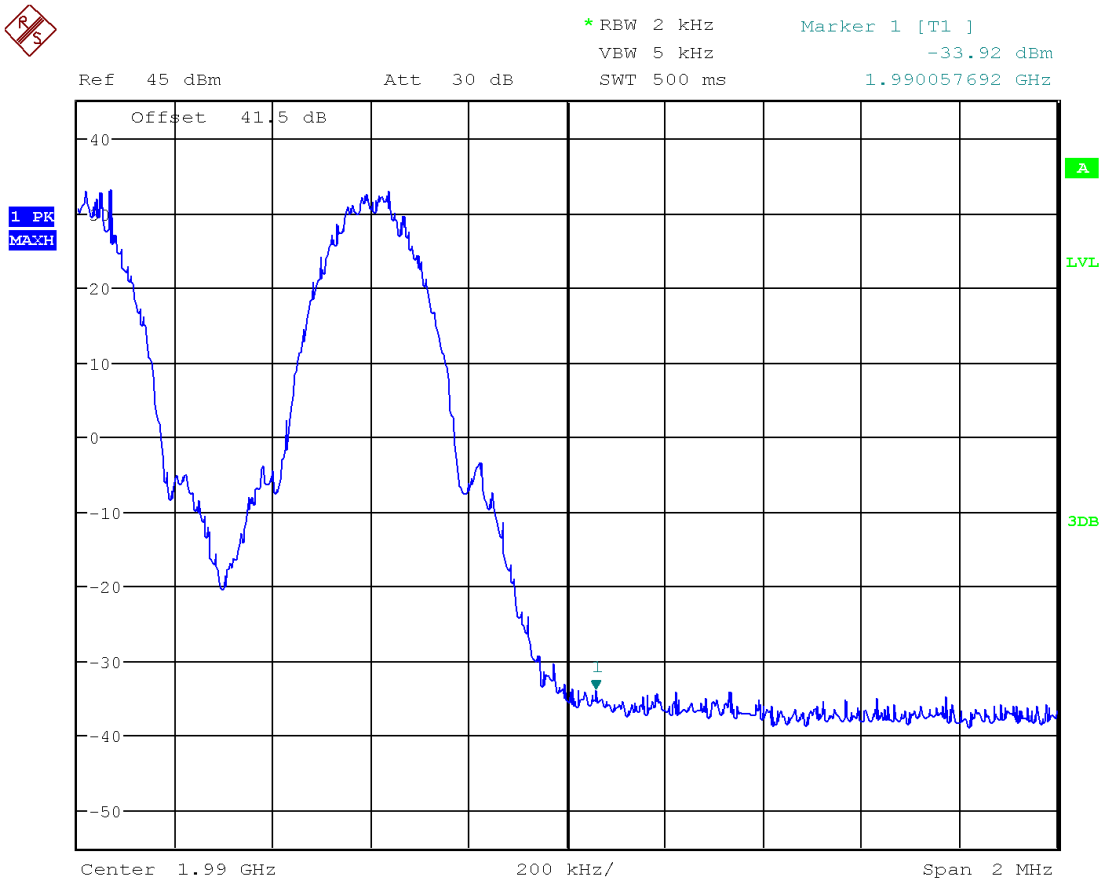
2.1.5.2 Carrier Conf. = 3*G(15W) & 1*U(15W)

2.1.5.2.1 Ch. B



Date: 27.DEC.2011 15:28:15

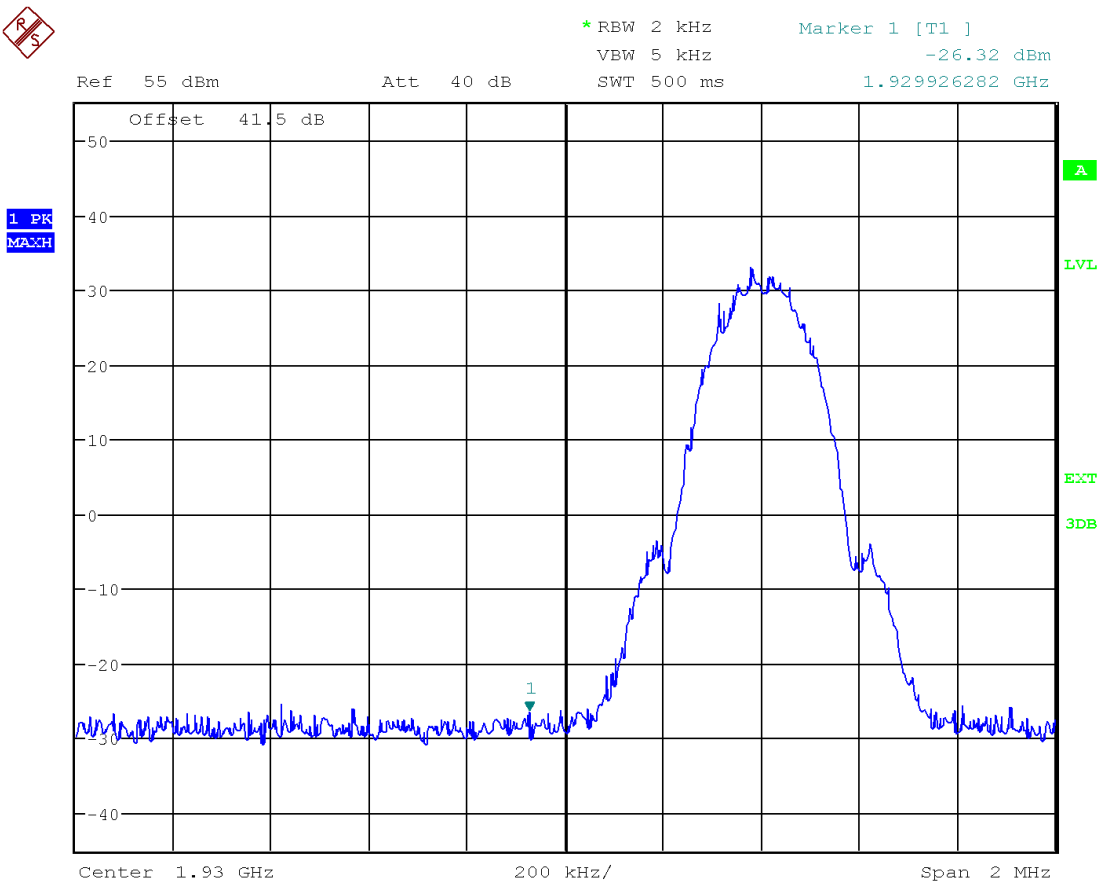
2.1.5.2.2 Ch. T



Date: 27.DEC.2011 21:39:30

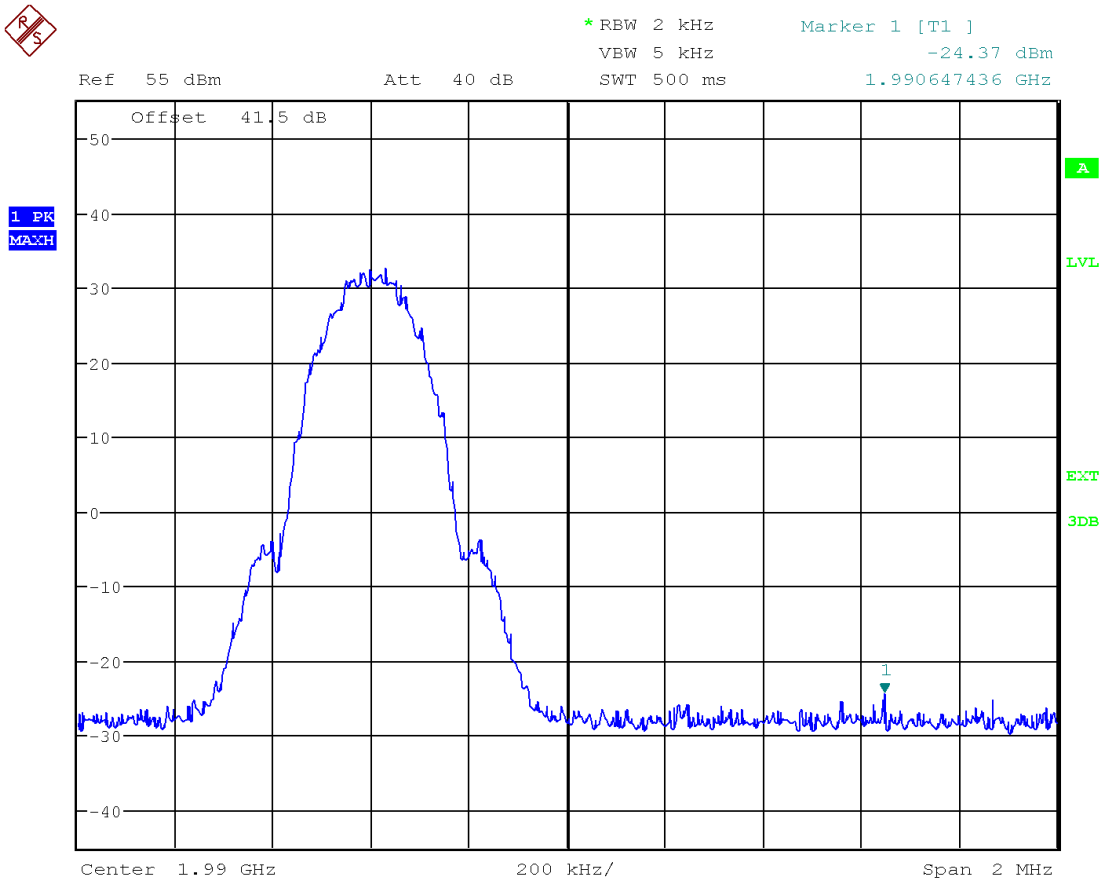
2.1.5.3 Carrier Conf. = 1*G(15W) & 3*U(15W)

2.1.5.3.1 Ch. B



Date: 28.DEC.2011 11:49:59

2.1.5.3.2 Ch. T

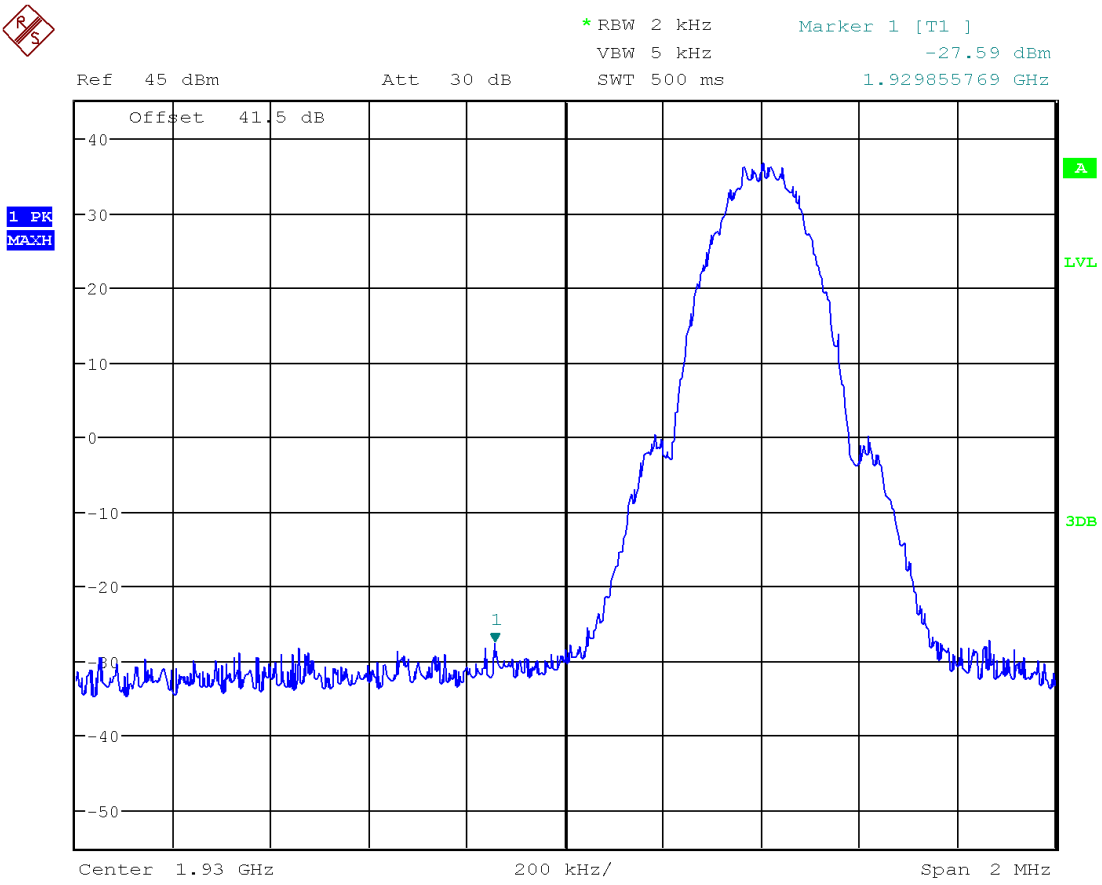


Date: 27.DEC.2011 15:56:15

2.1.6 MSR_TM2

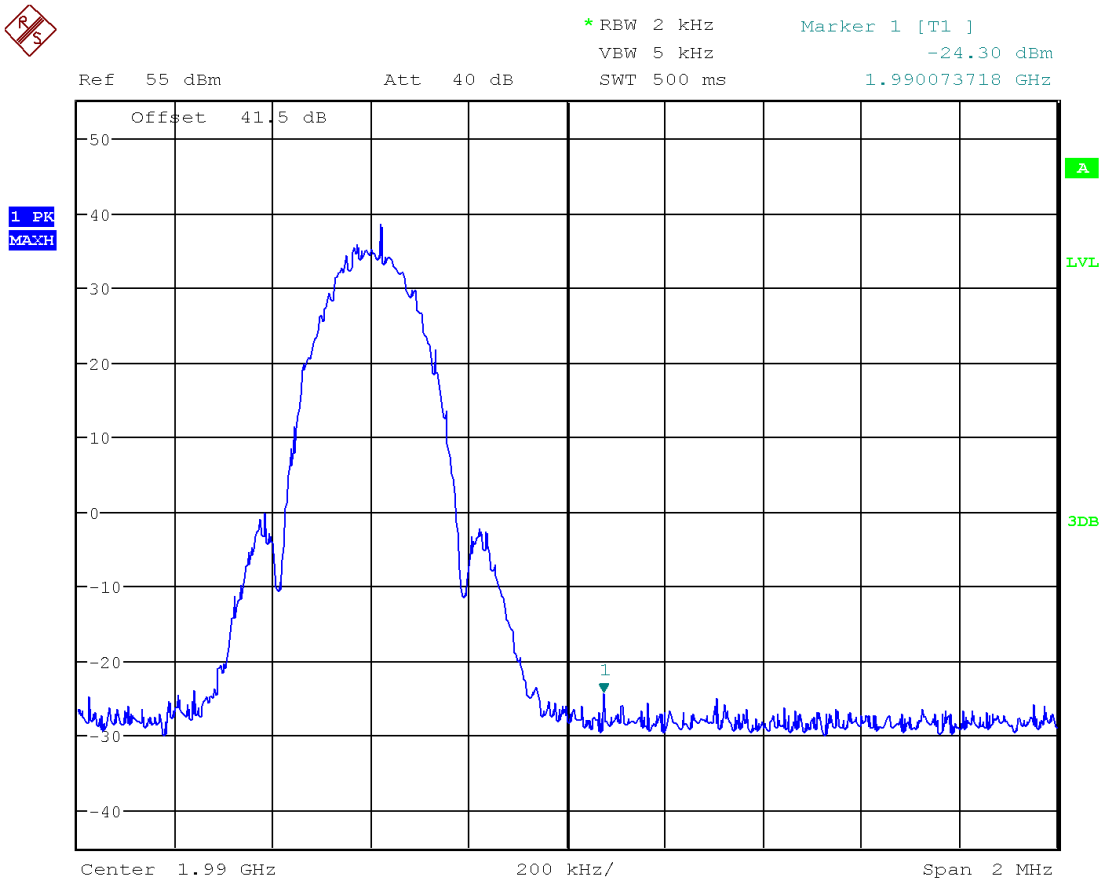
2.1.6.1 Carrier Conf. = 1*G(40W) & 1*U(20W)

2.1.6.1.1 Ch. B



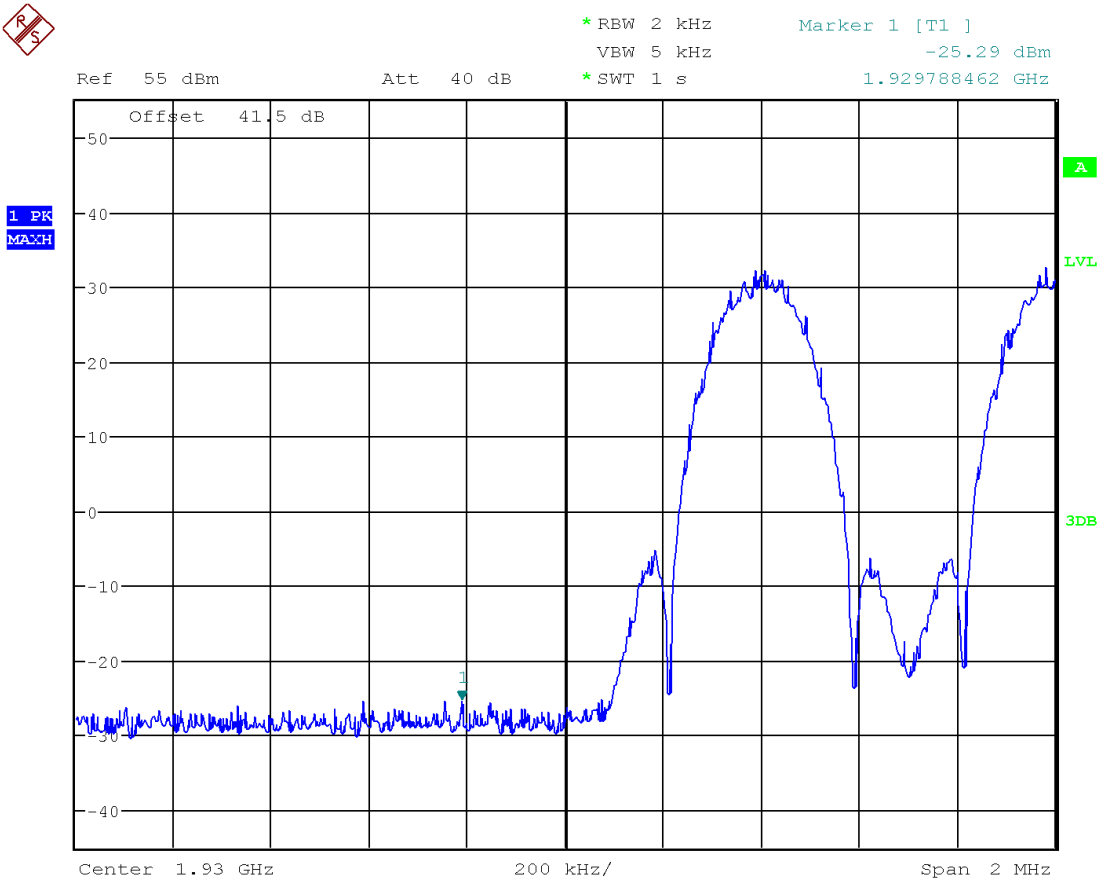
Date: 27.DEC.2011 21:58:42

2.1.6.1.2 Ch. T



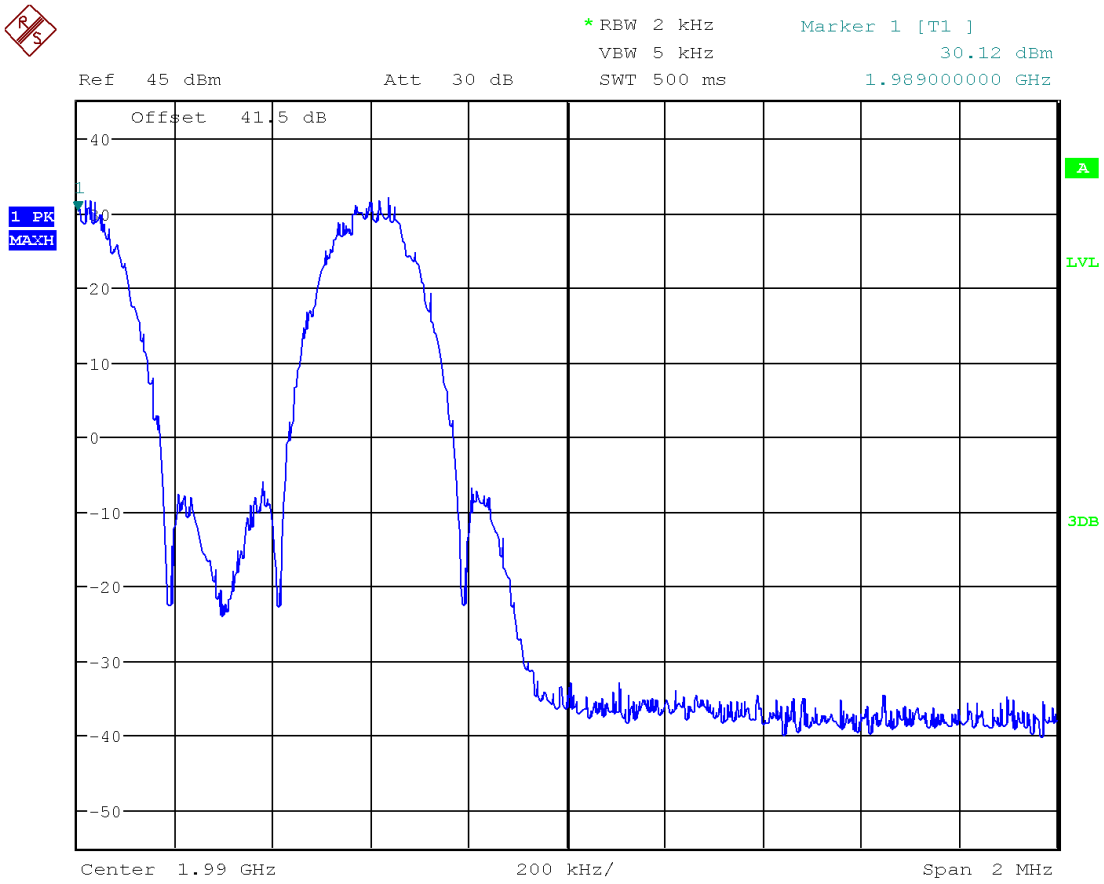
2.1.6.2 Carrier Conf. = 3*G(15W) & 1*U(15W)

2.1.6.2.1 Ch. B



Date: 27.DEC.2011 21:19:39

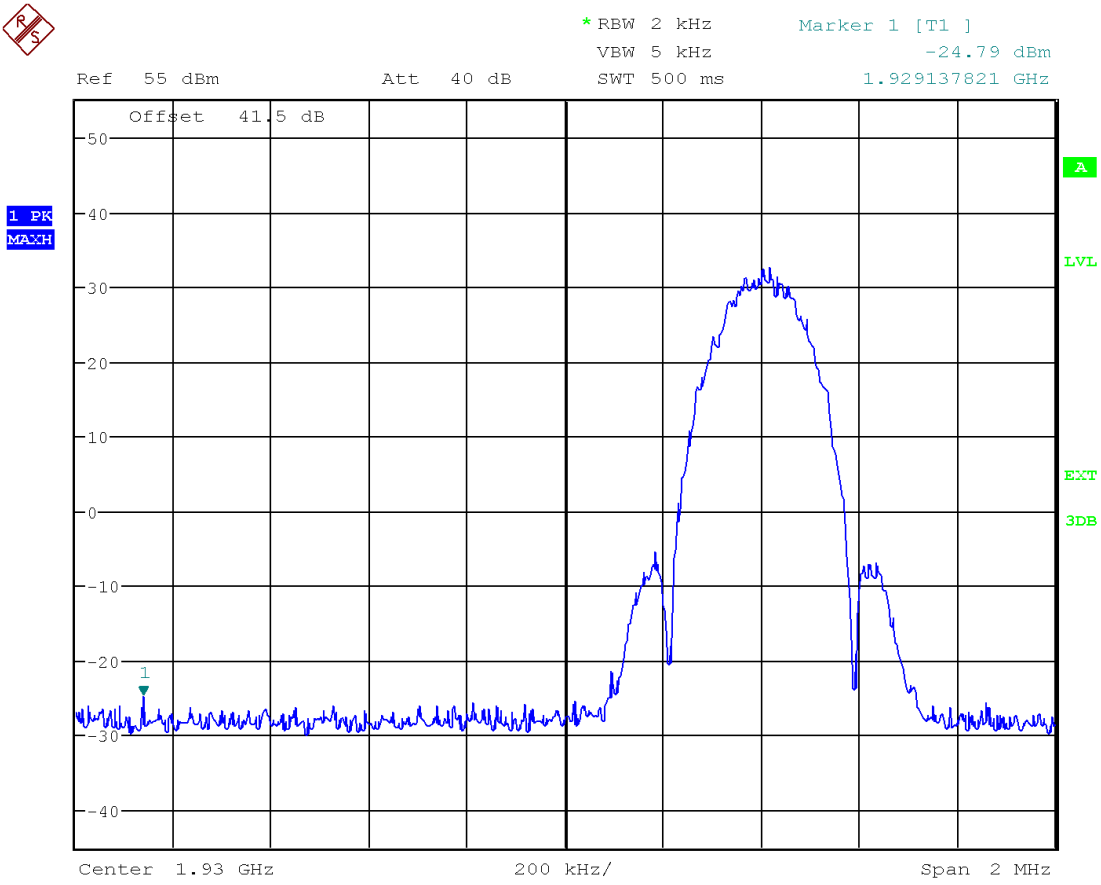
2.1.6.2.2 Ch. T



Date: 27.DEC.2011 21:34:39

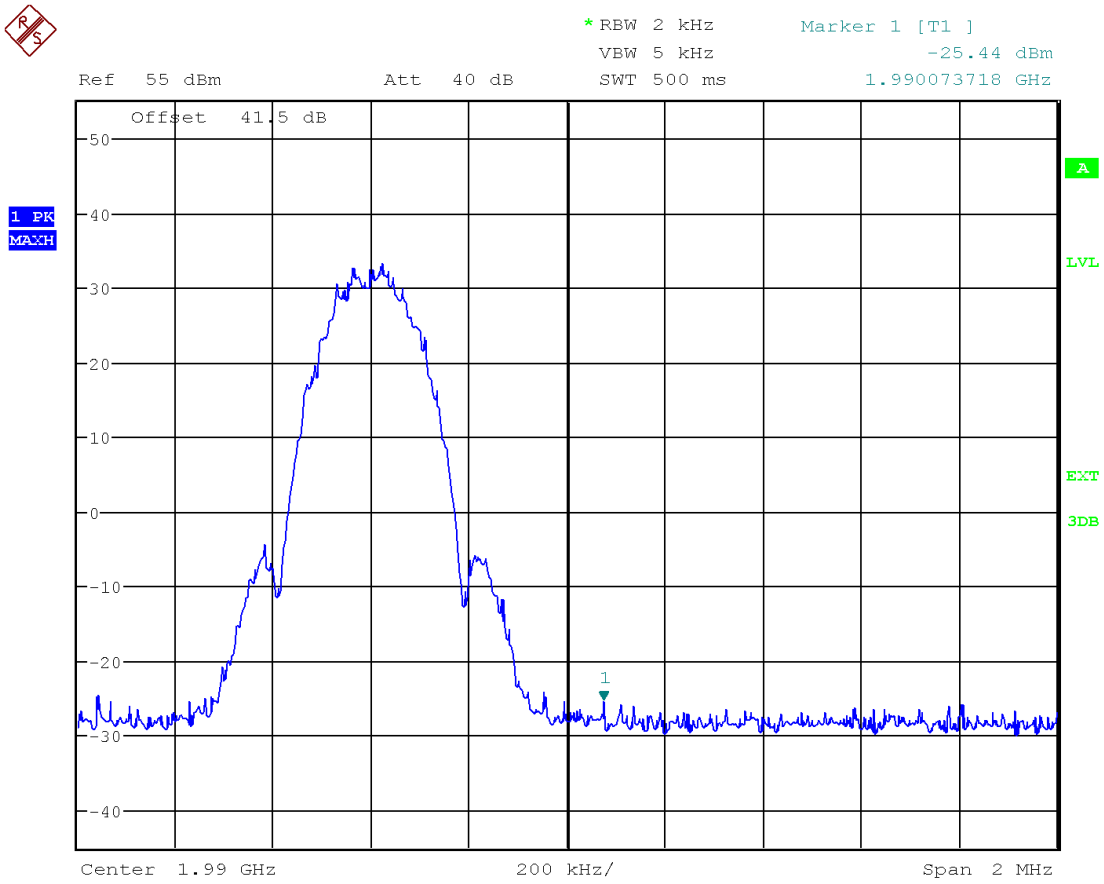
2.1.6.3 Carrier Conf. = 1*G(15W) & 3*U(15W)

2.1.6.3.1 Ch. B



Date: 28.DEC.2011 11:46:31

2.1.6.3.2 Ch. T

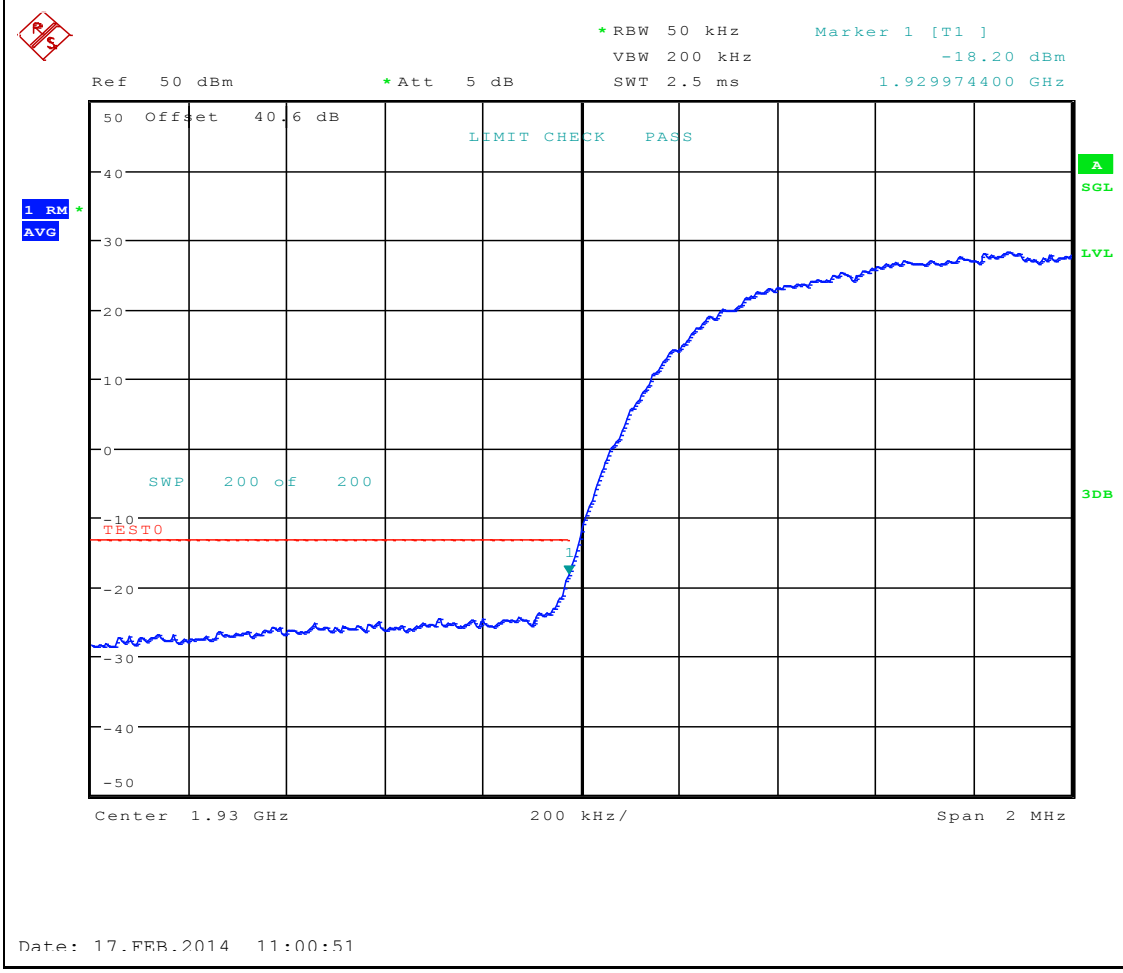


Date: 28.DEC.2011 11:41:19

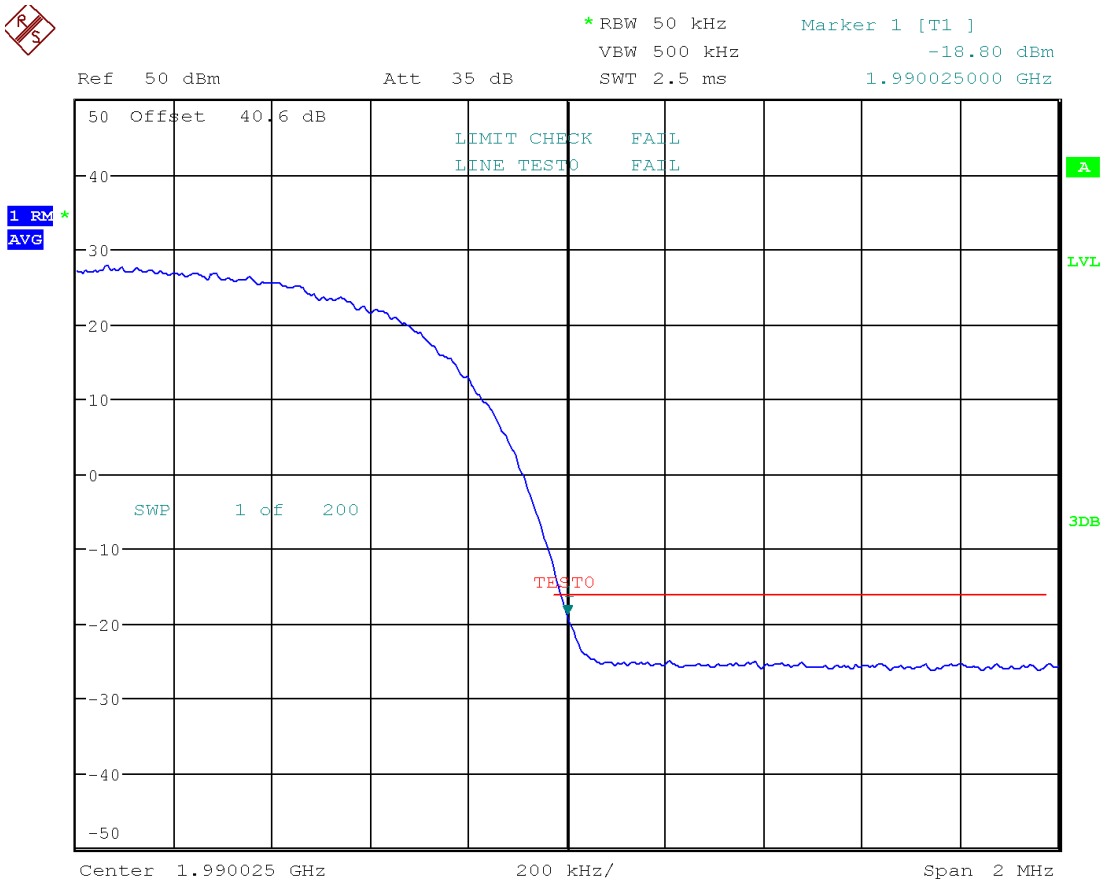
2.2 For test number SYBH(R)01271108

2.2.1 1U_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.05	RMS	Pass	625

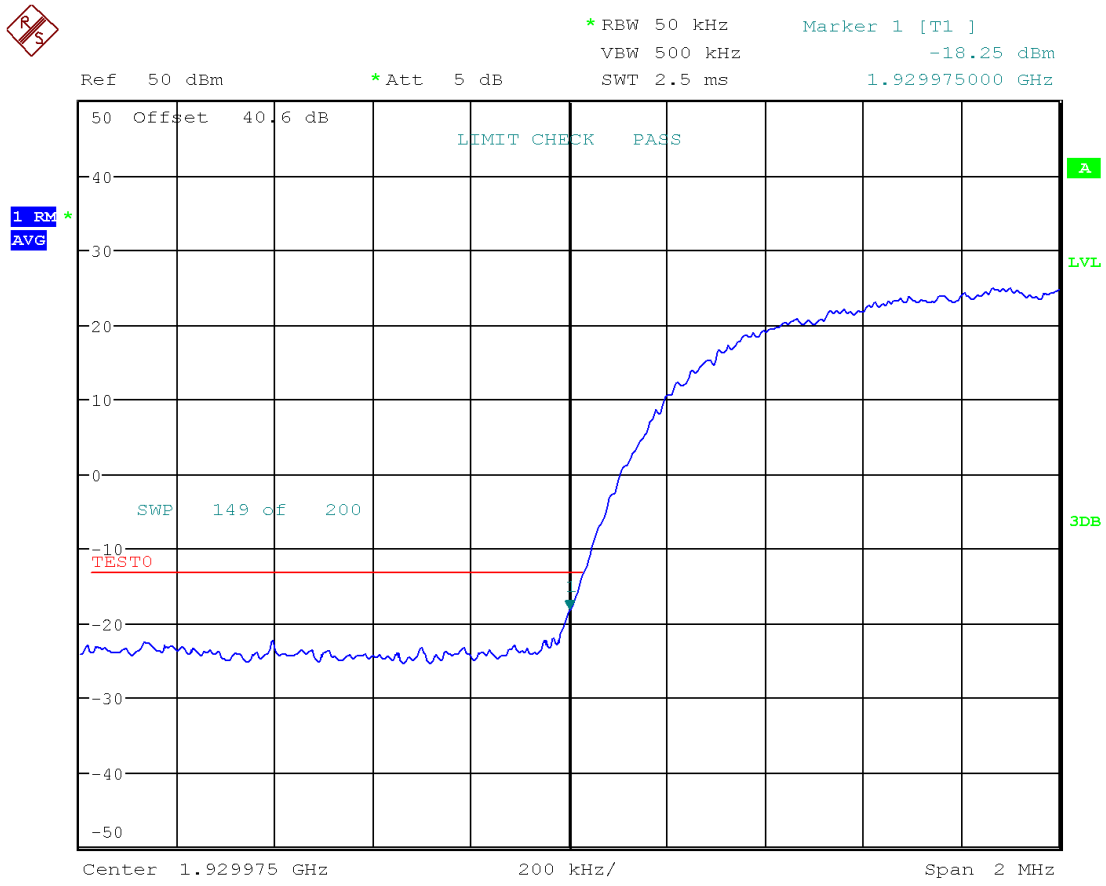


2.2.2 1U_80W_T_TM1_TRXB



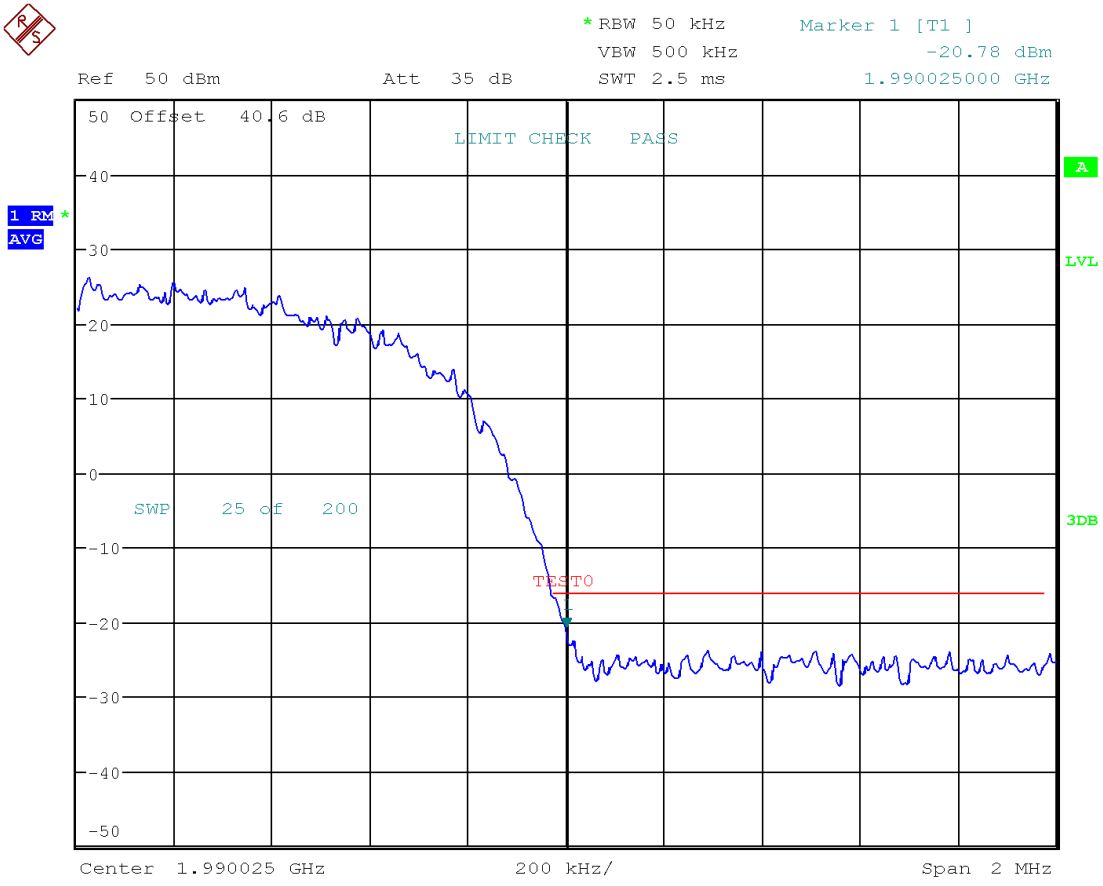
Date: 17.FEB.2014 10:45:48

2.2.3 4U_80W_B_TM1_TRXB



Date: 17.FEB.2014 16:43:05

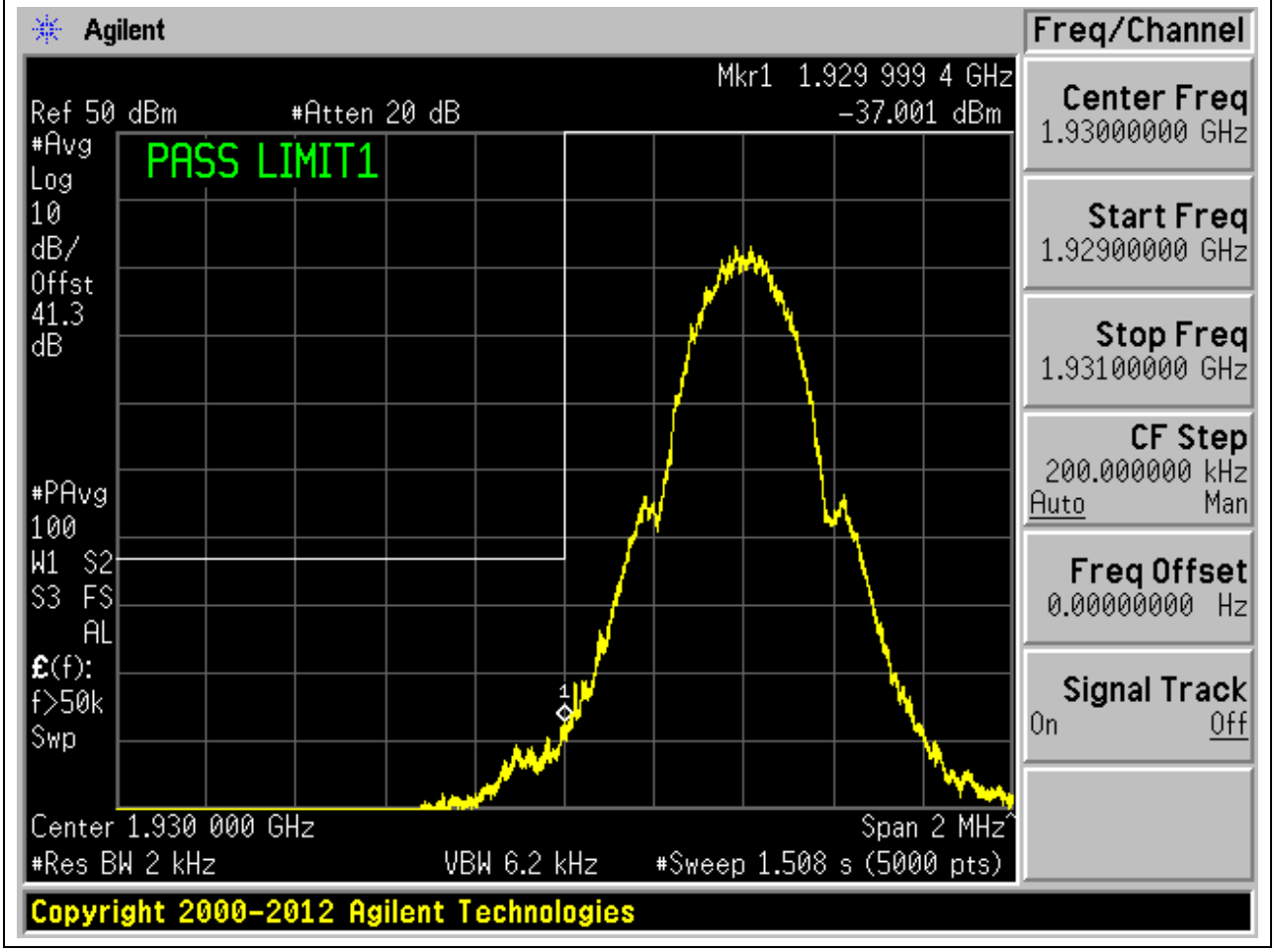
2.2.4 4U_80W_T_TM1_TRXB



Date: 17.FEB.2014 17:03:38

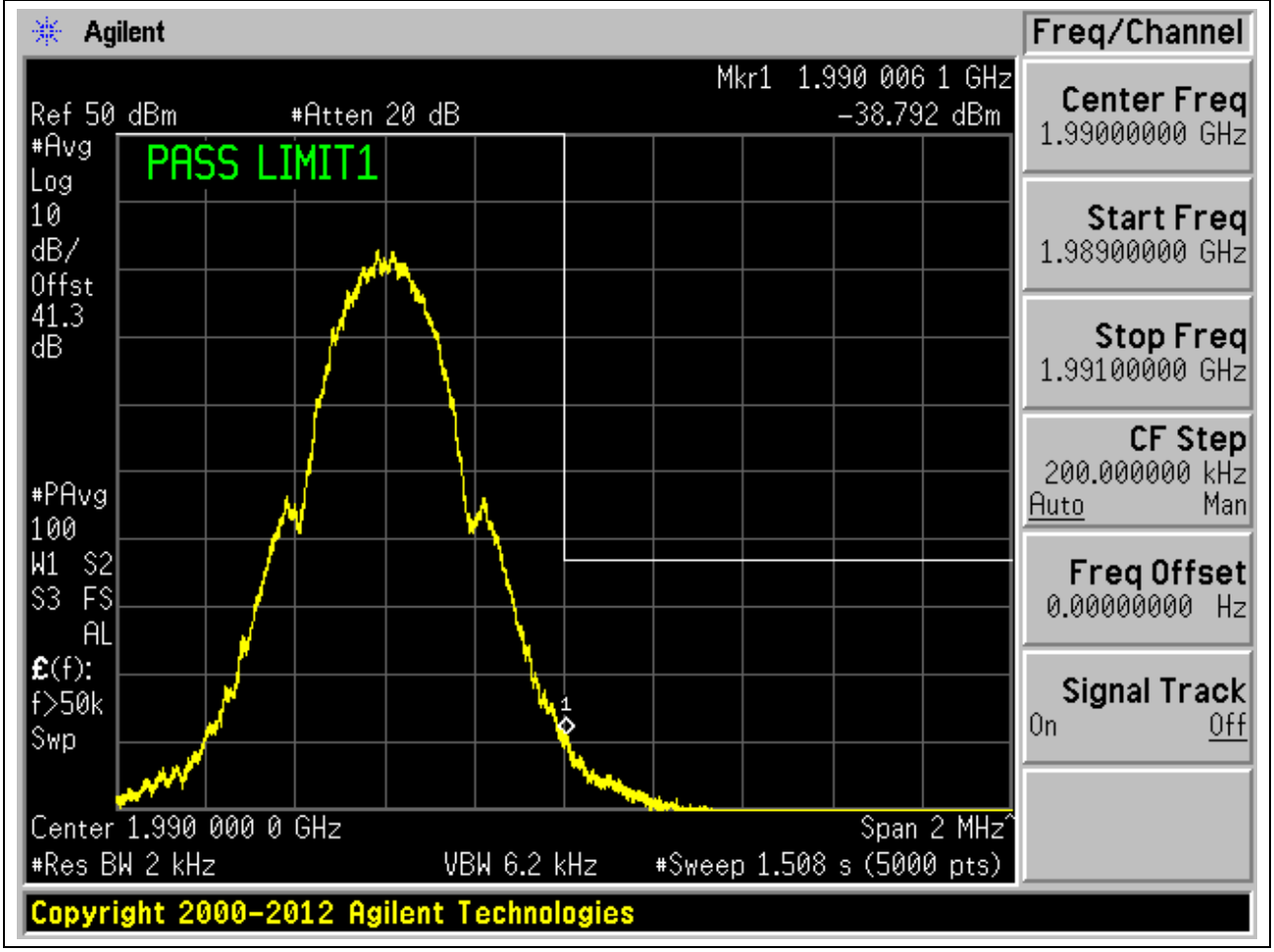
2.2.5 1G_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5000



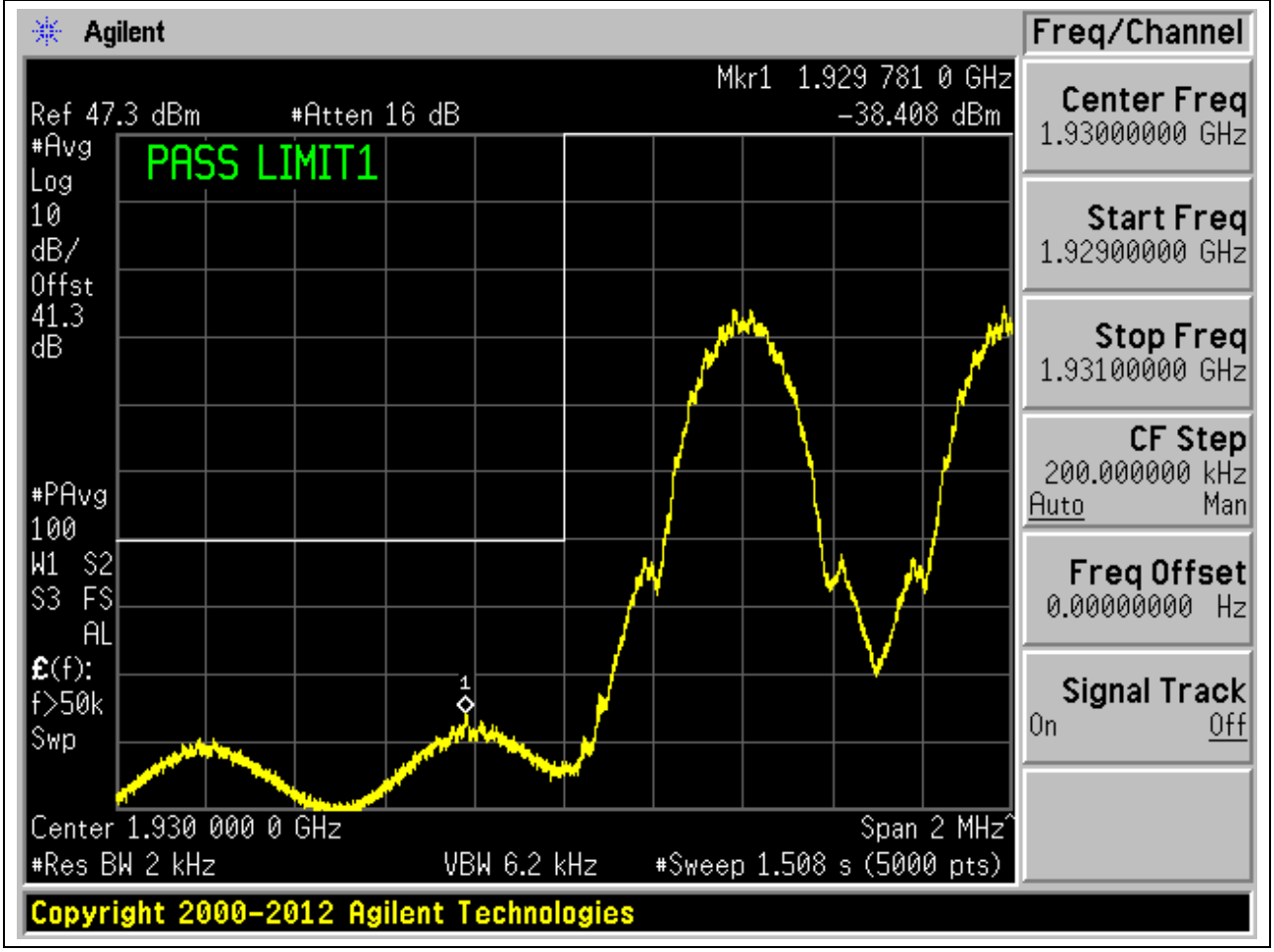
2.2.6 1G_80W_T_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5000



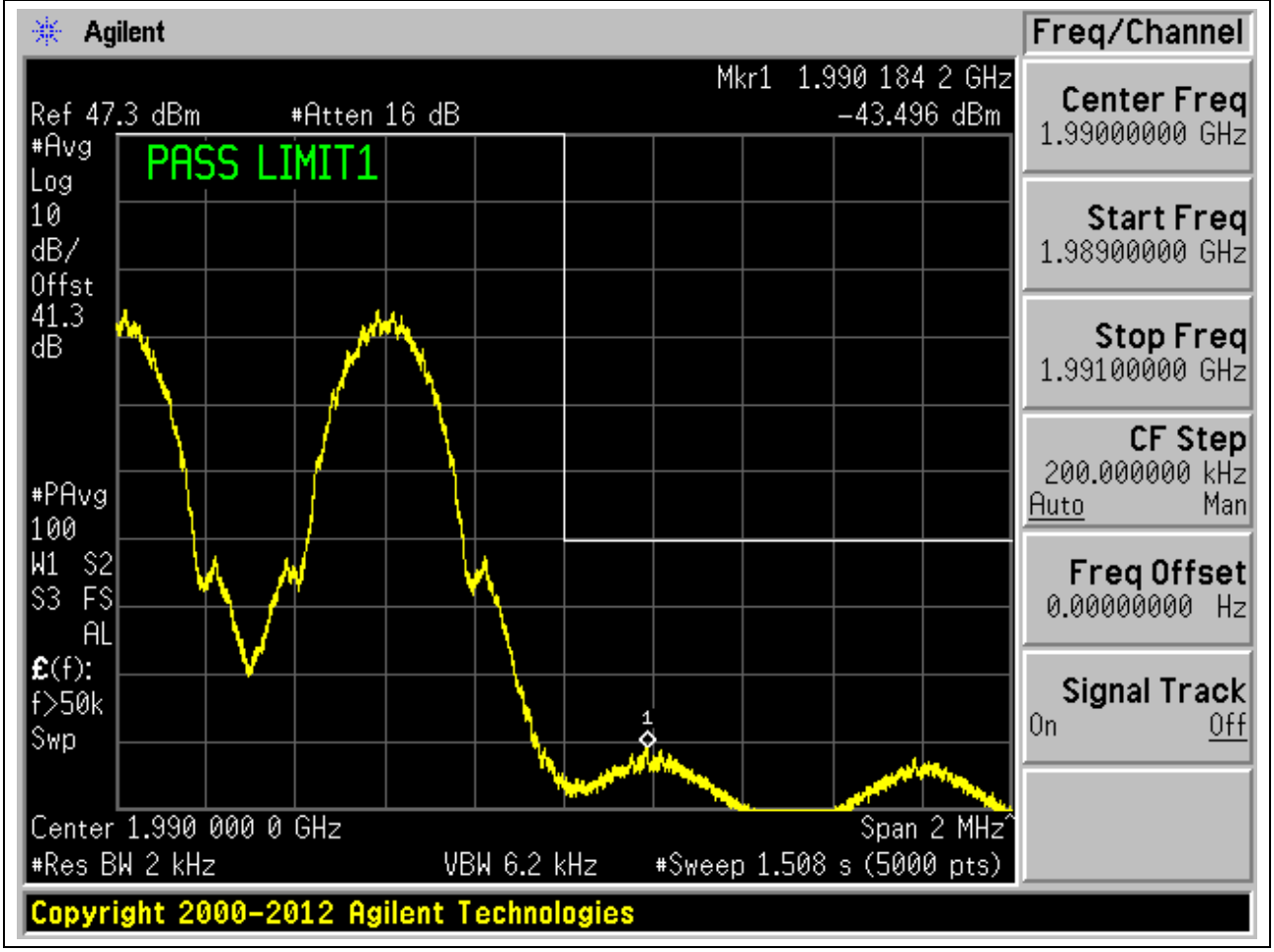
2.2.7 8G_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5000



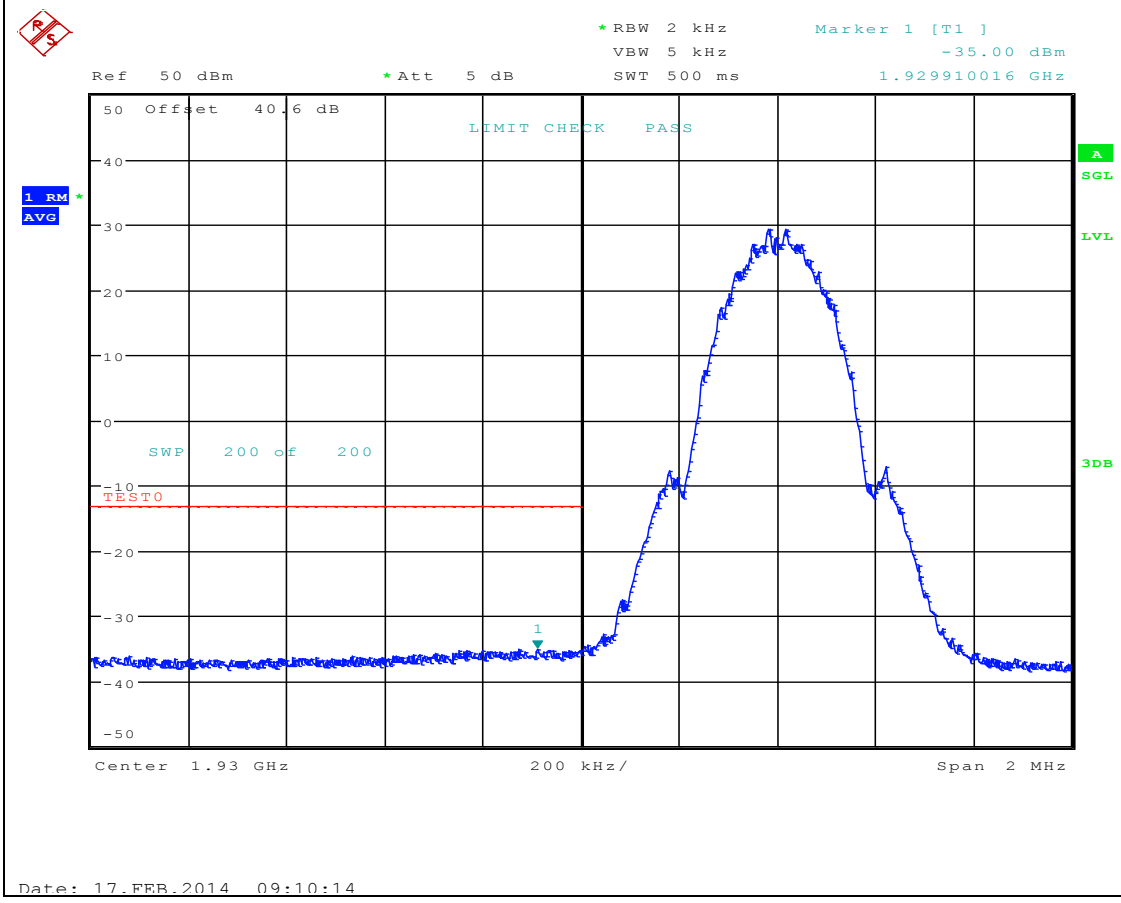
2.2.8 8G_80W_T_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5000

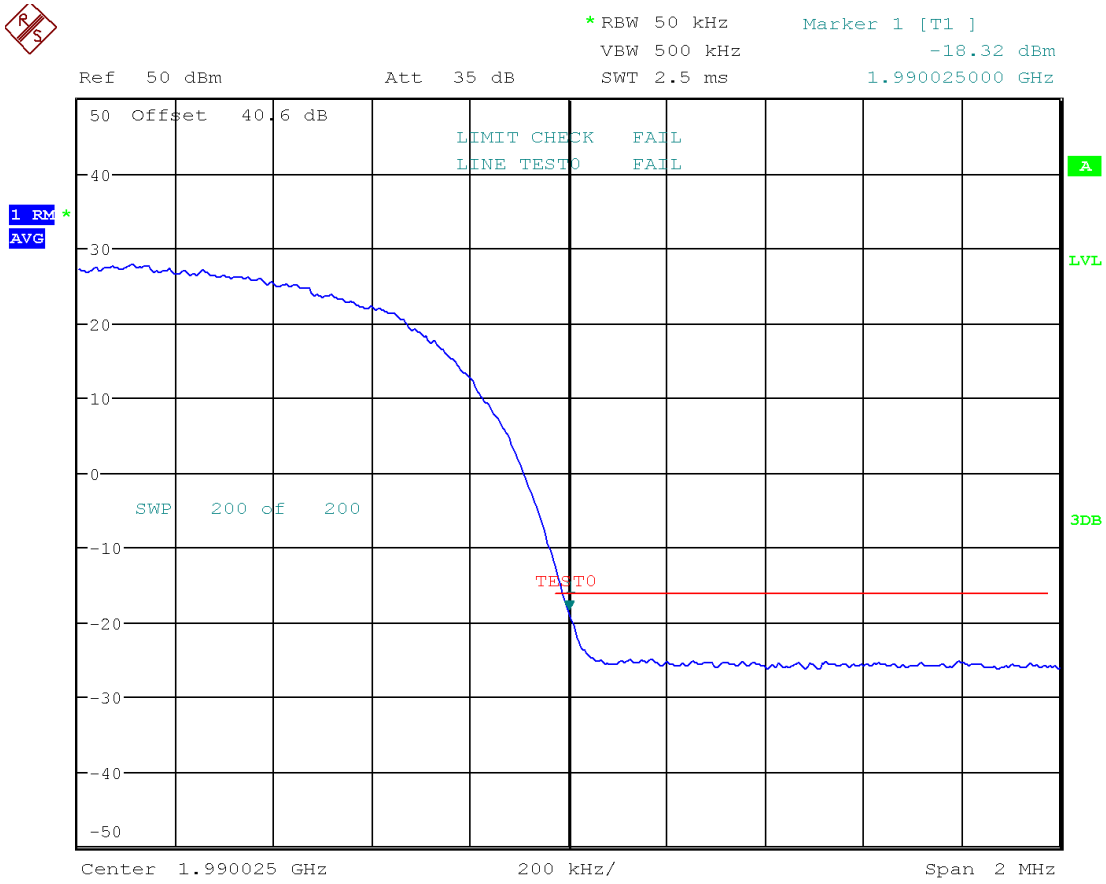


2.2.9 1G1U_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5001



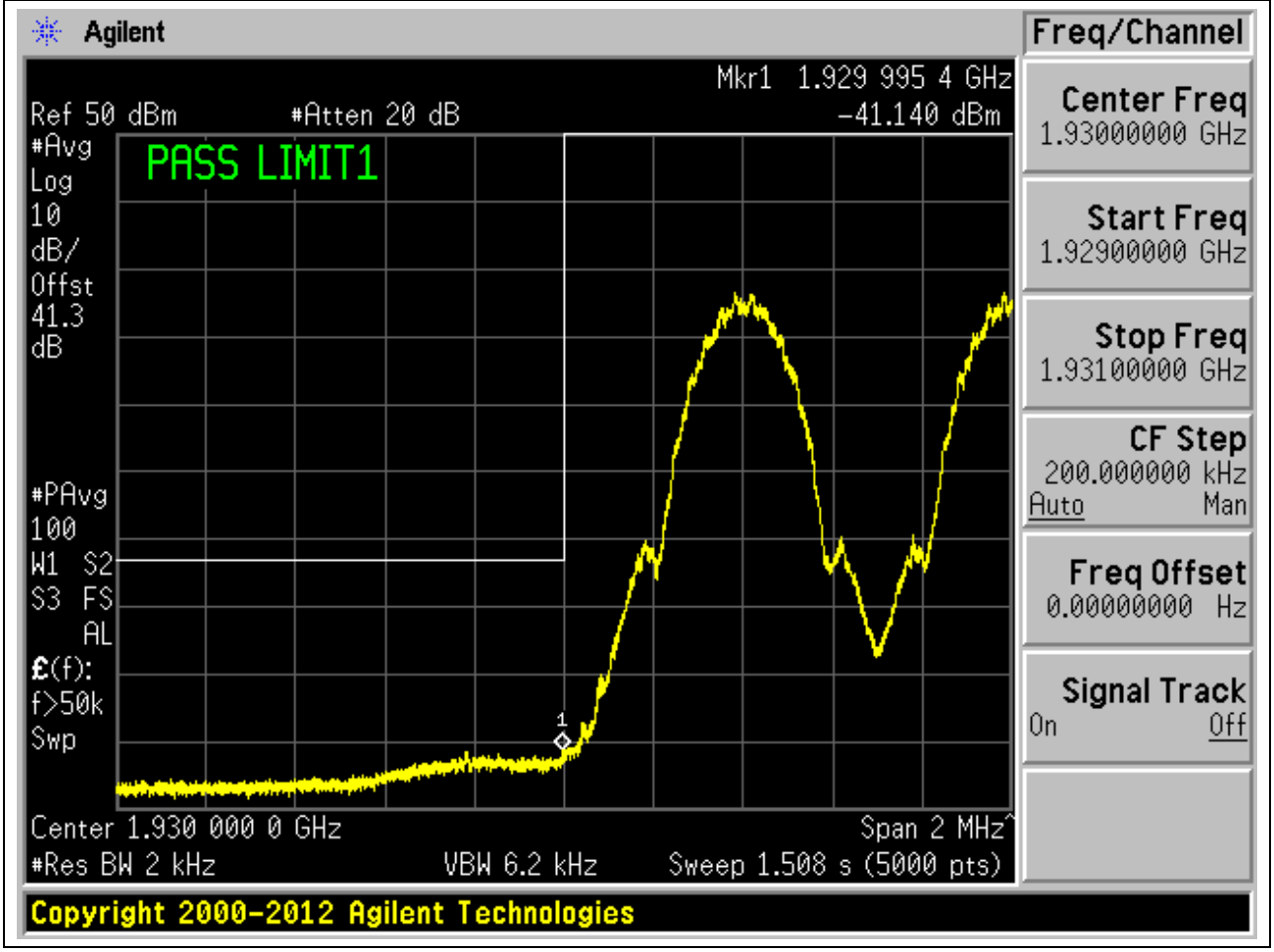
2.2.10 1G1U_80W_T_TM1_TRXB



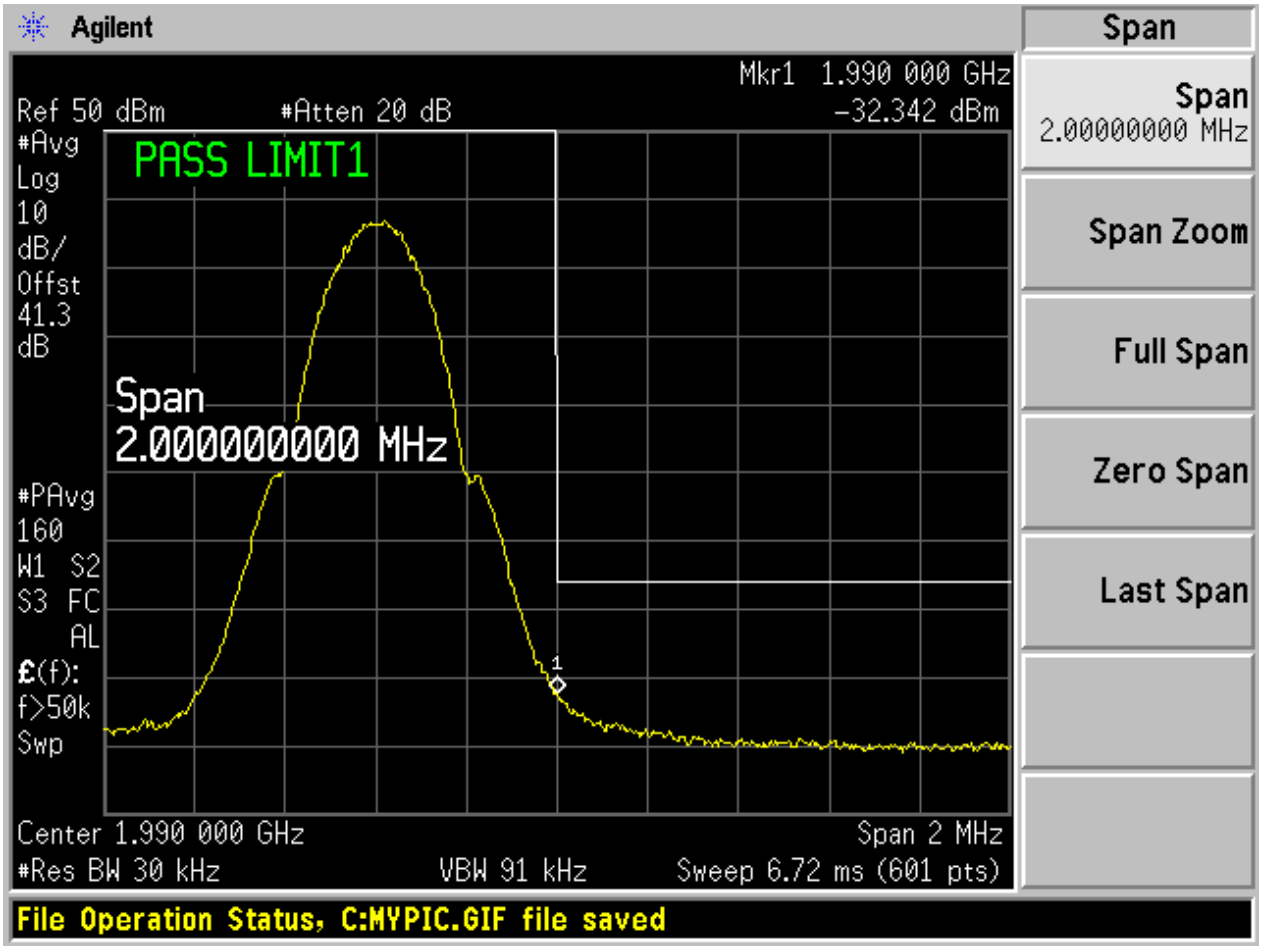
Date: 17.FEB.2014 10:46:53

2.2.11 3G1U_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5000

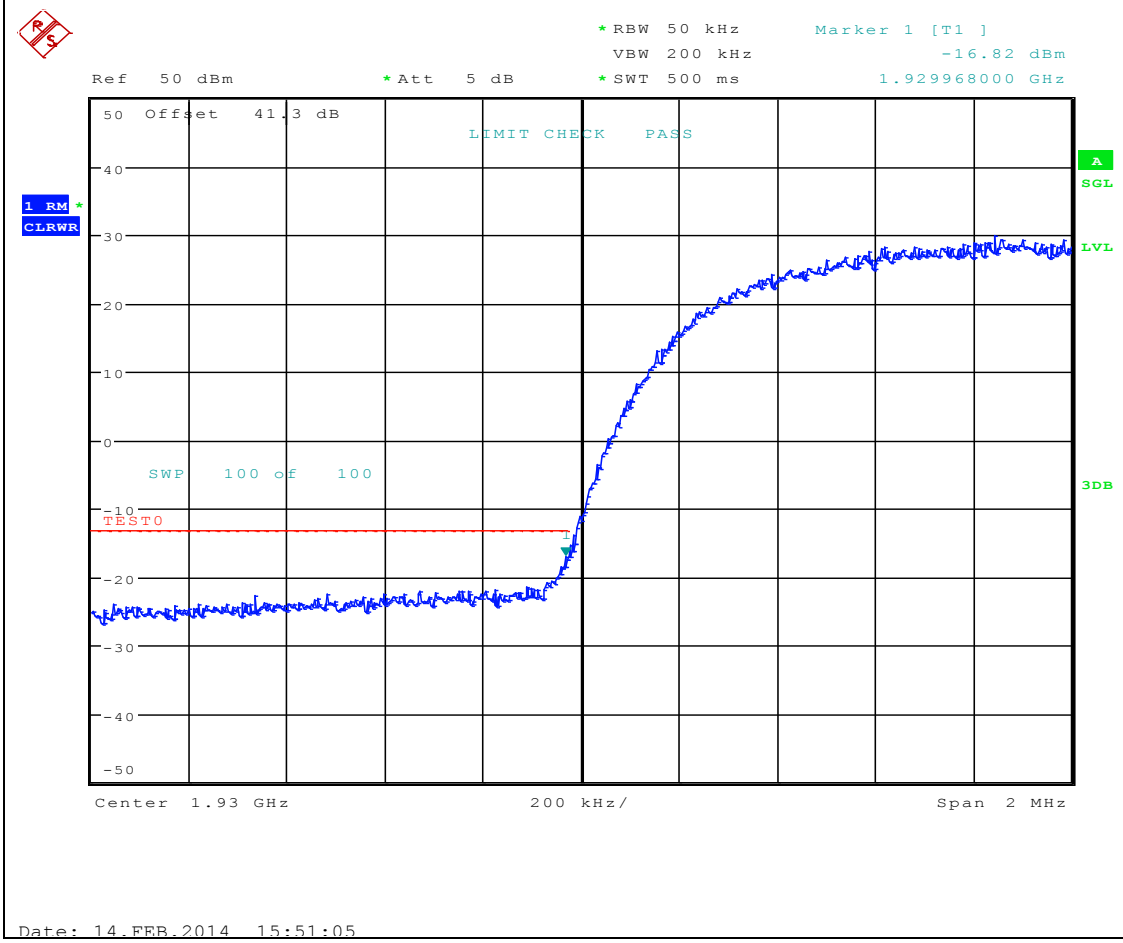


2.2.12 3G1U_80W_T_TM1_TRXB



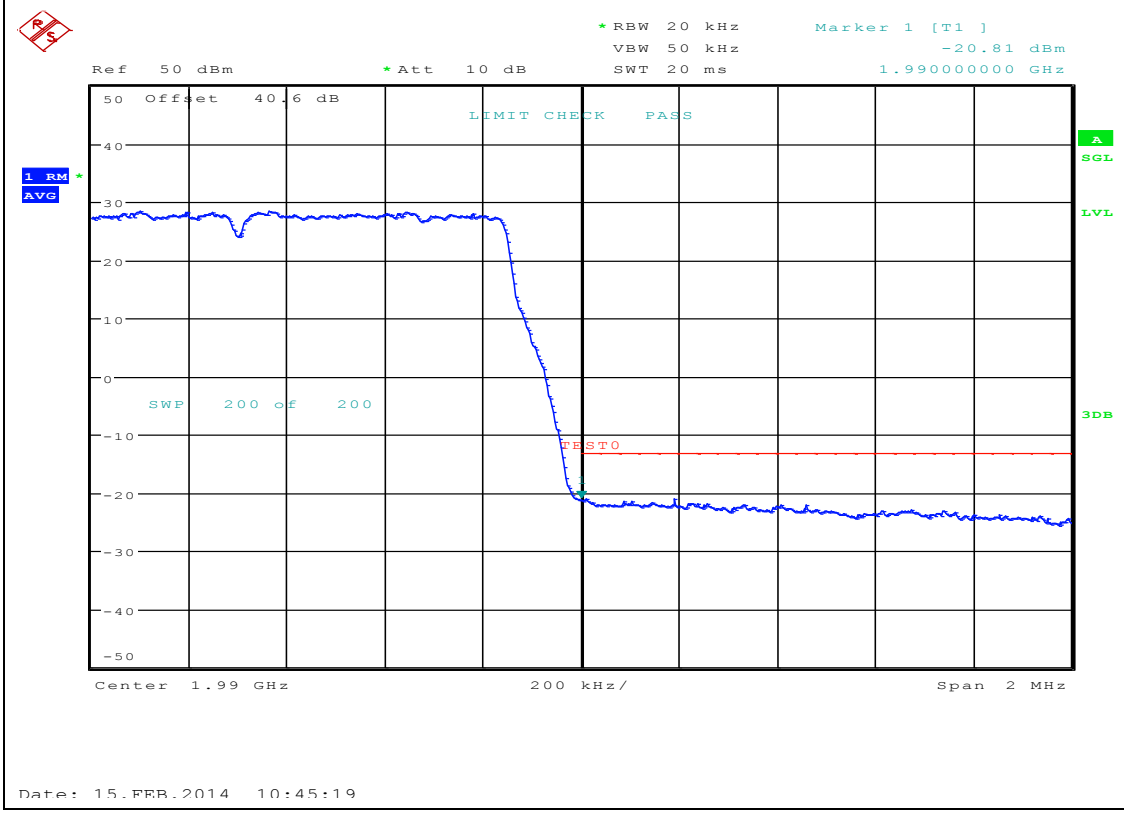
2.2.13 1U1L_1.4M_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.05	RMS	Pass	625



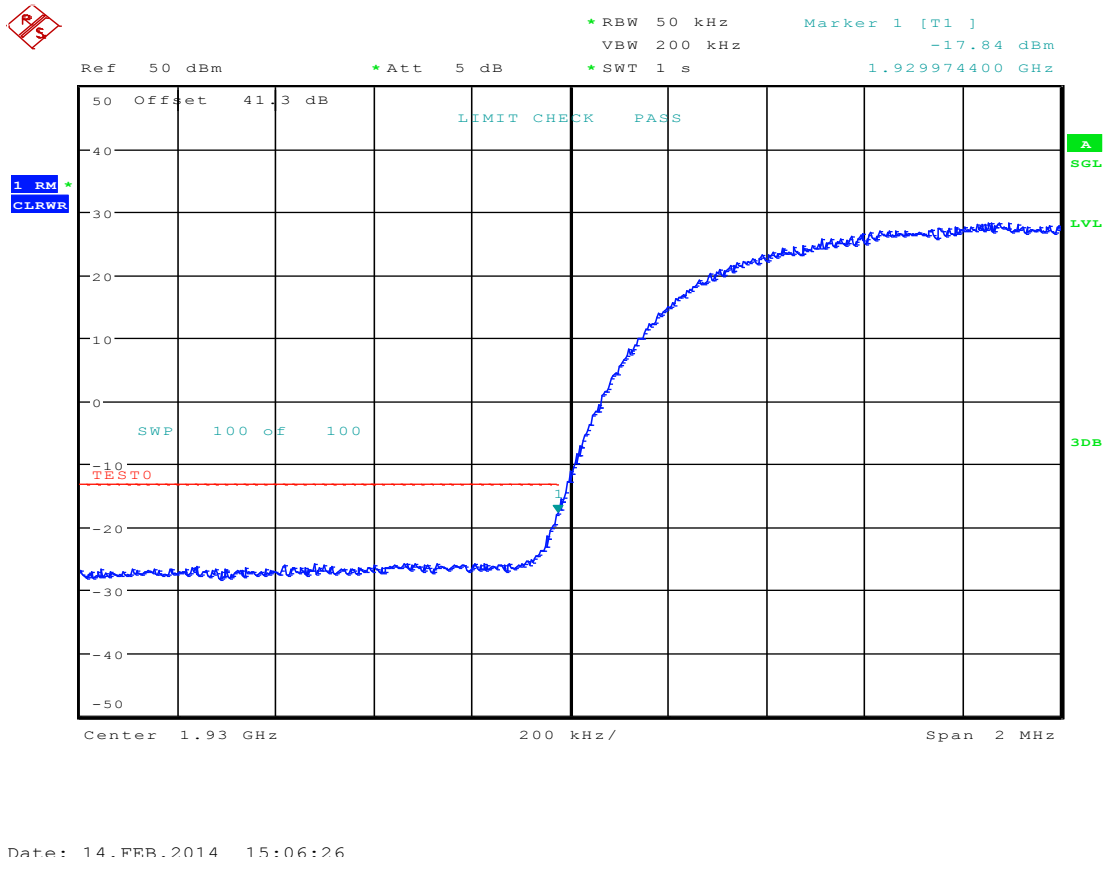
2.2.14 1U1L_1.4M_80W_T_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.02	RMS	Pass	625



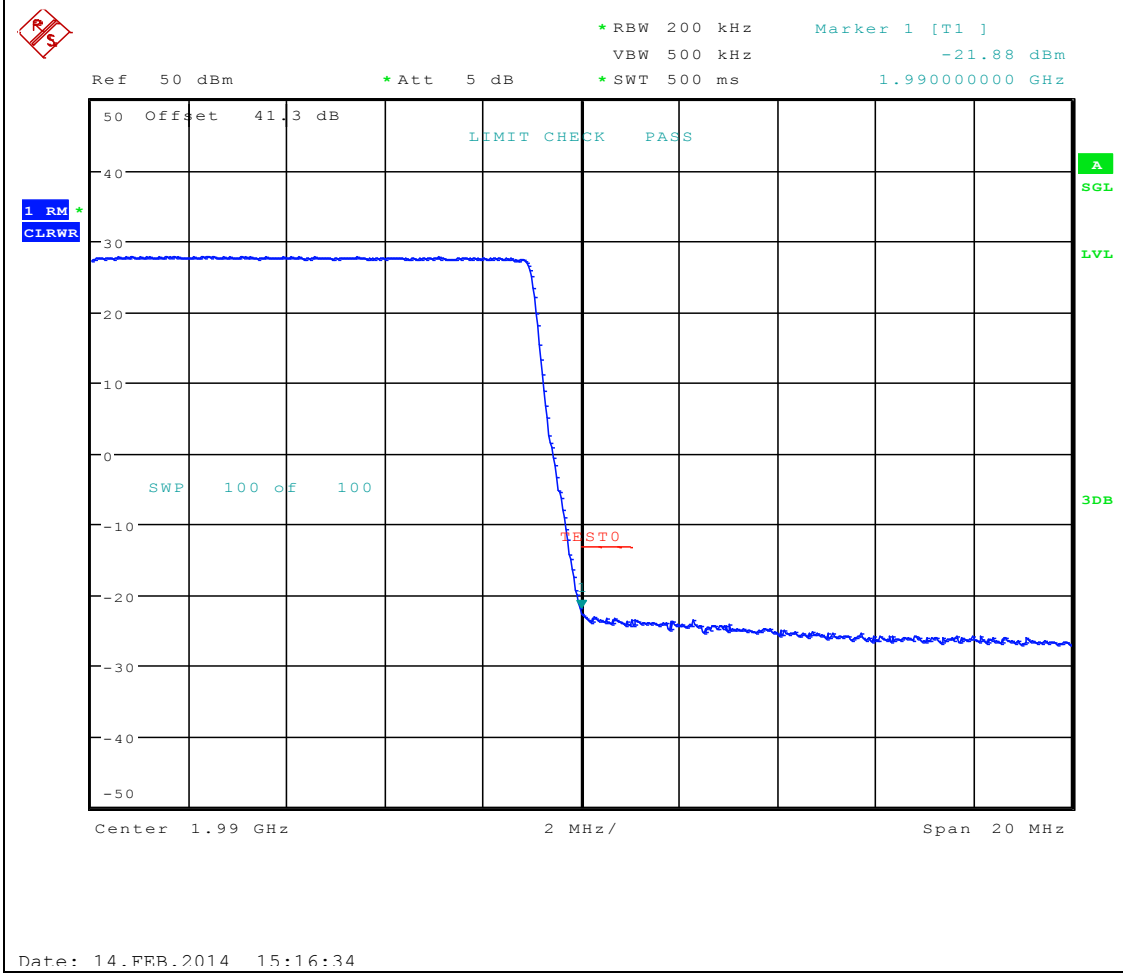
2.2.15 1U1L_20M_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.05	RMS	Pass	625



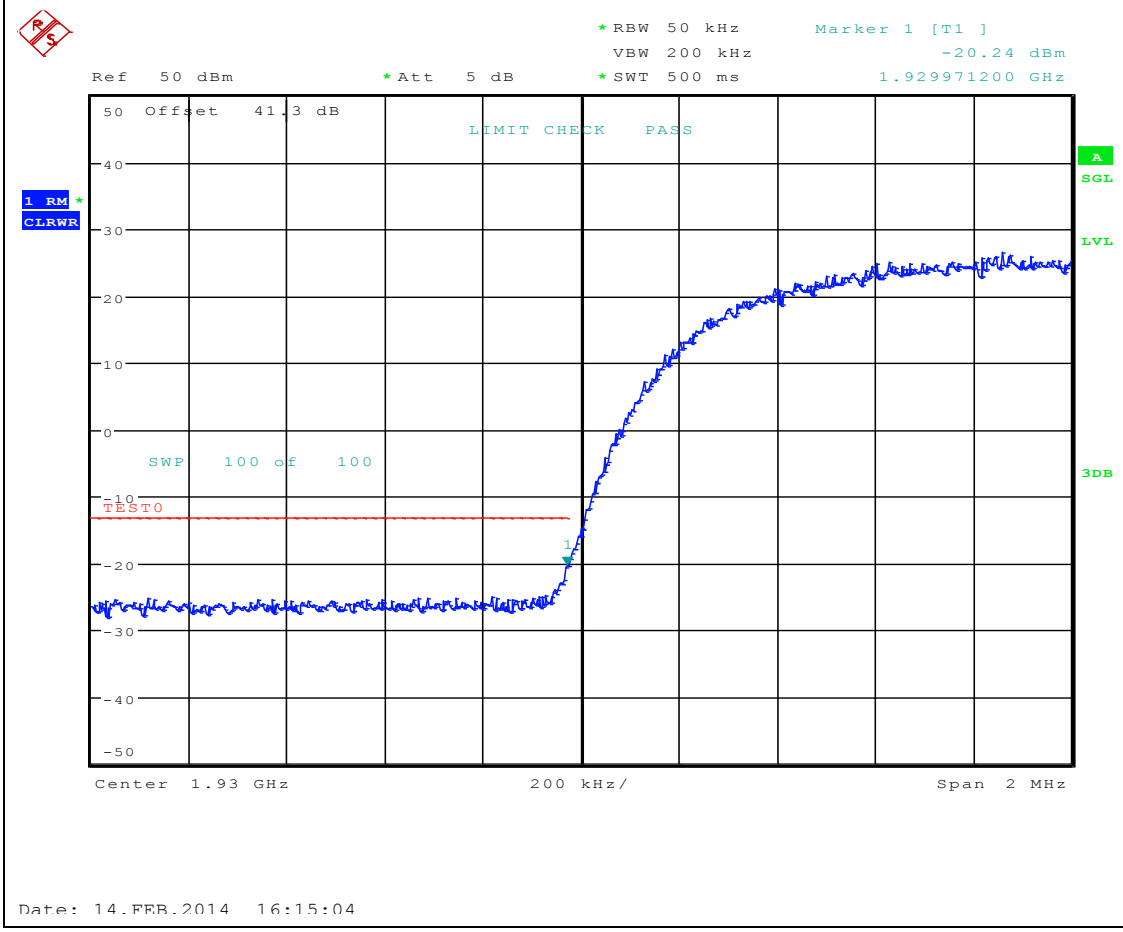
2.2.16 1U1L_20M_80W_T_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	20	0.2	RMS	Pass	625



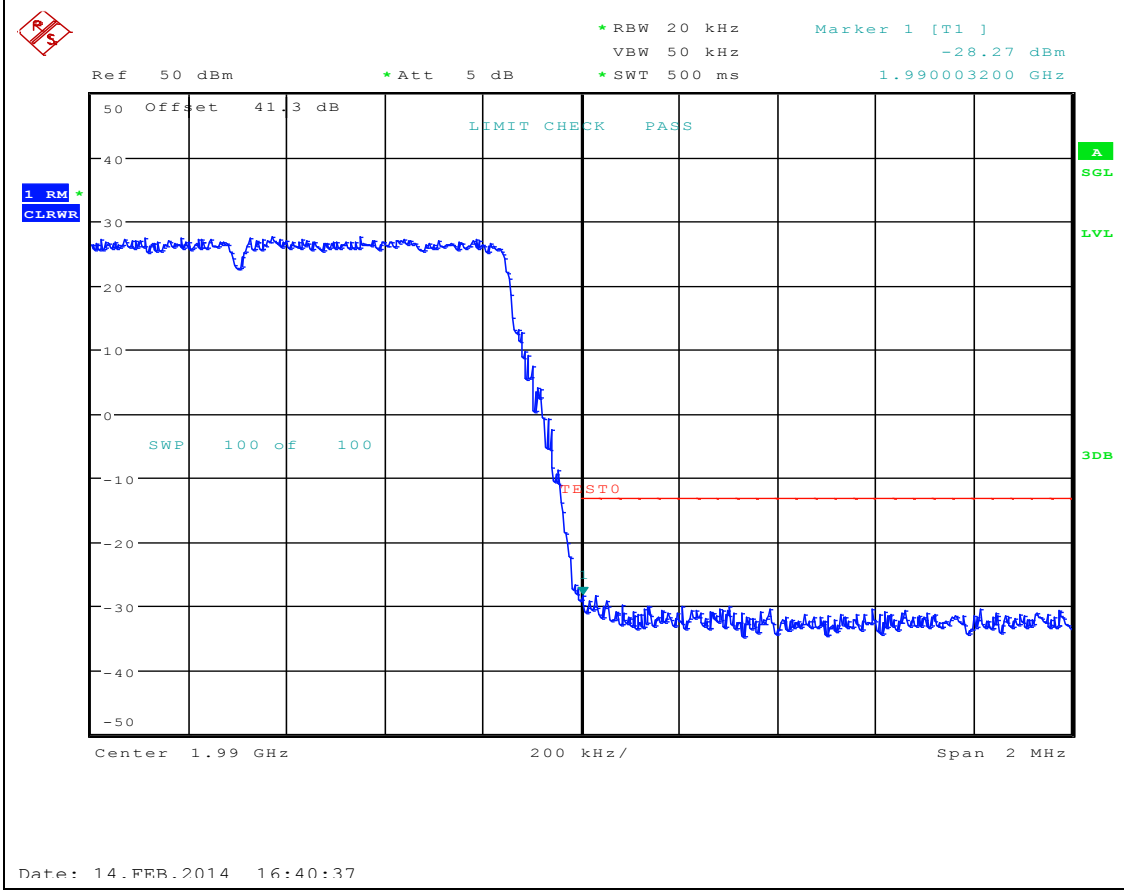
2.2.17 3U1L_1.4M_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.05	RMS	Pass	625



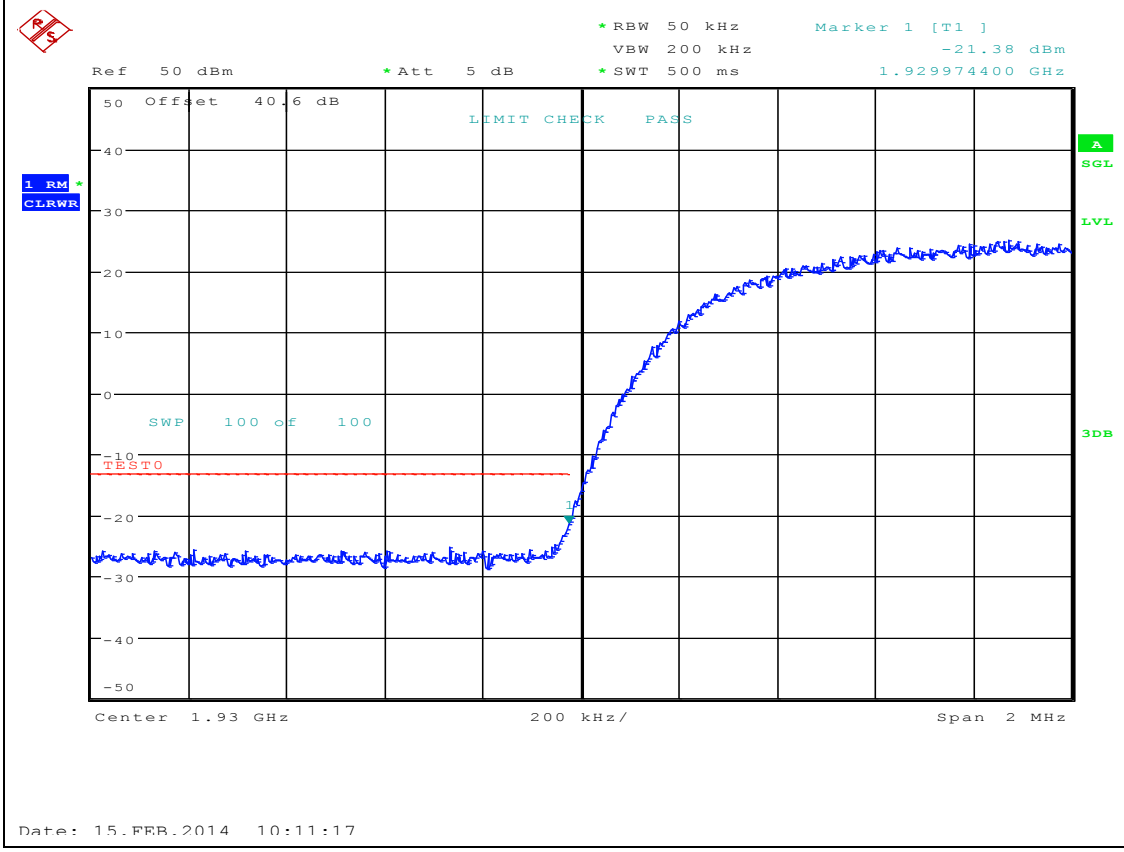
2.2.18 3U1L_1.4M_80W_T_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.02	RMS	Pass	625



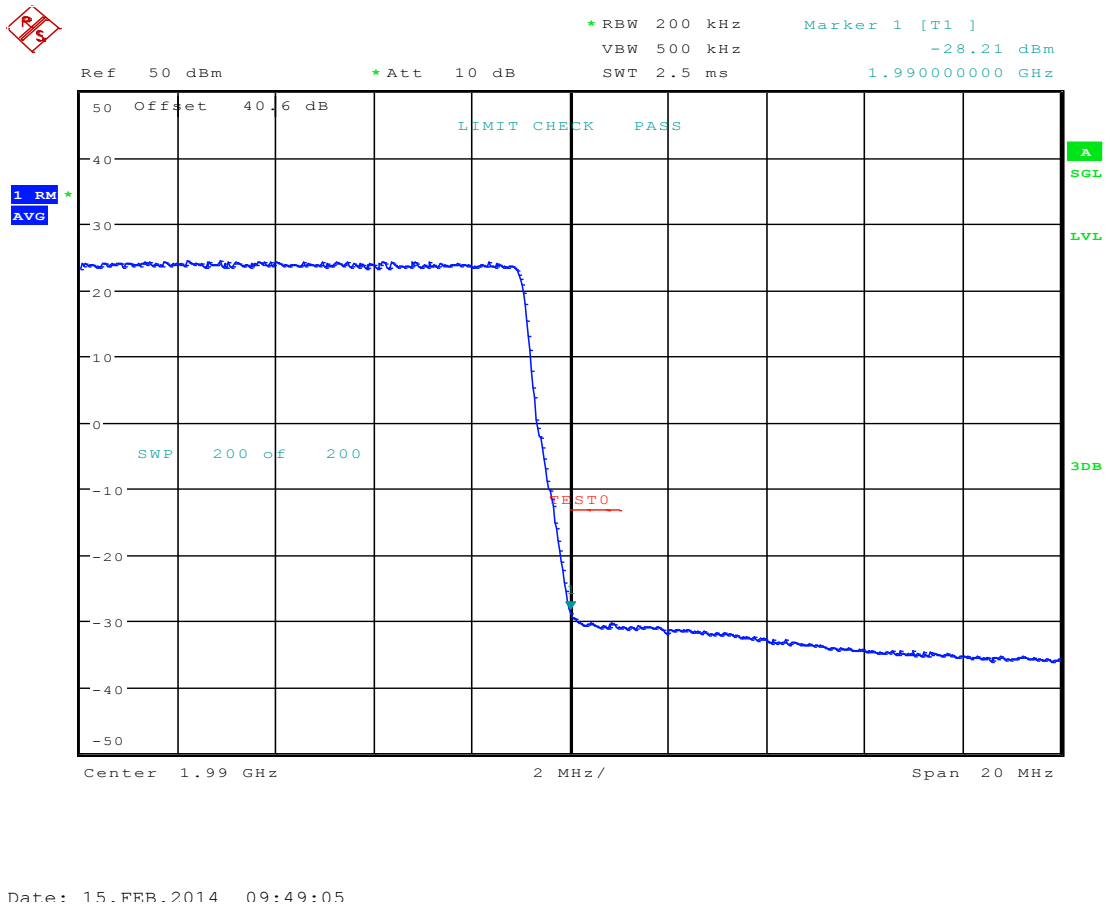
2.2.19 3U1L_20M_80W_B_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.05	RMS	Pass	625



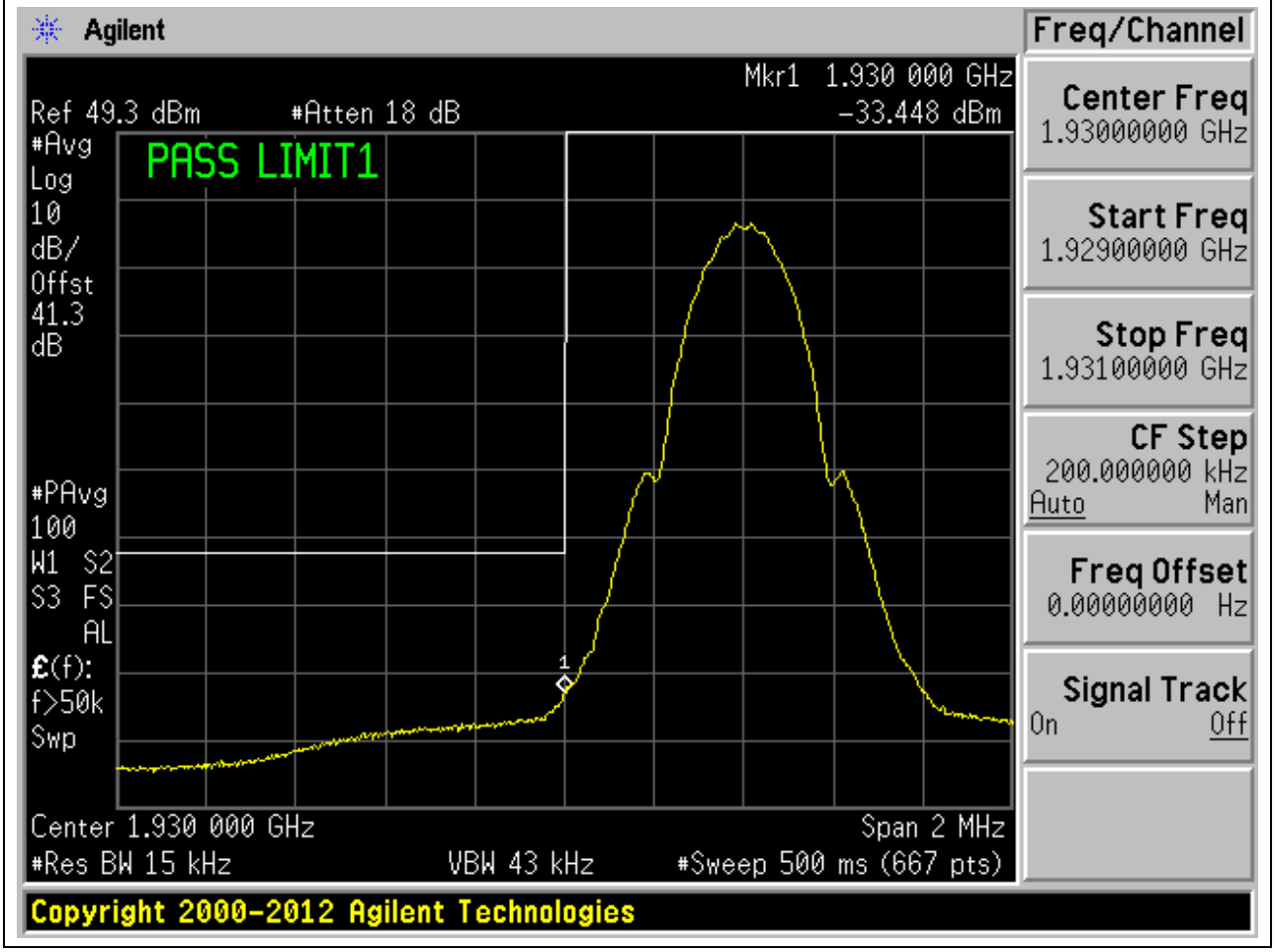
2.2.20 3U1L_20M_80W_T_TM1_TRXB

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	20	0.2	RMS	Pass	625



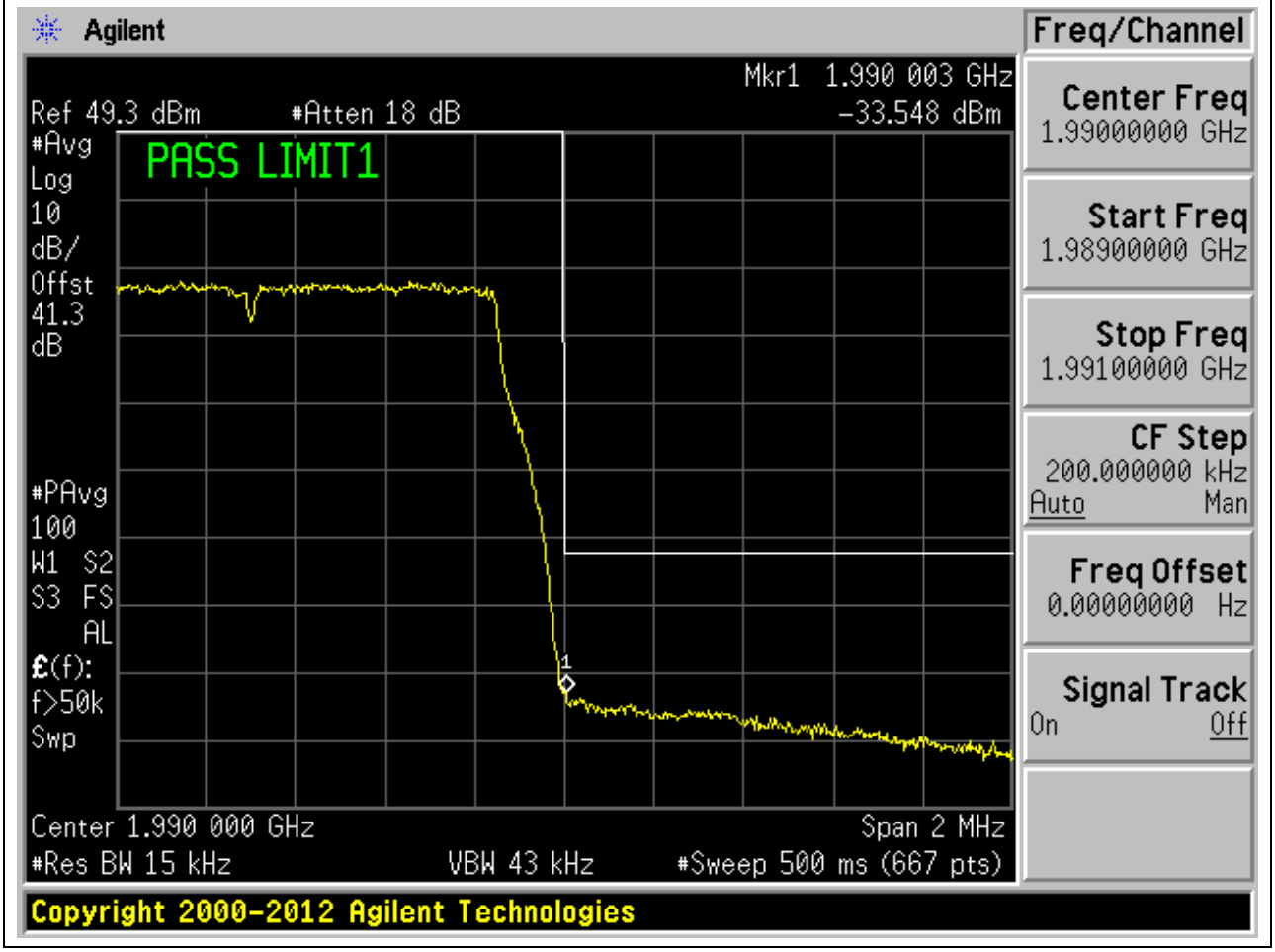
2.2.21 1G1L_1.4M_60W_B_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.015	RMS	Pass	667



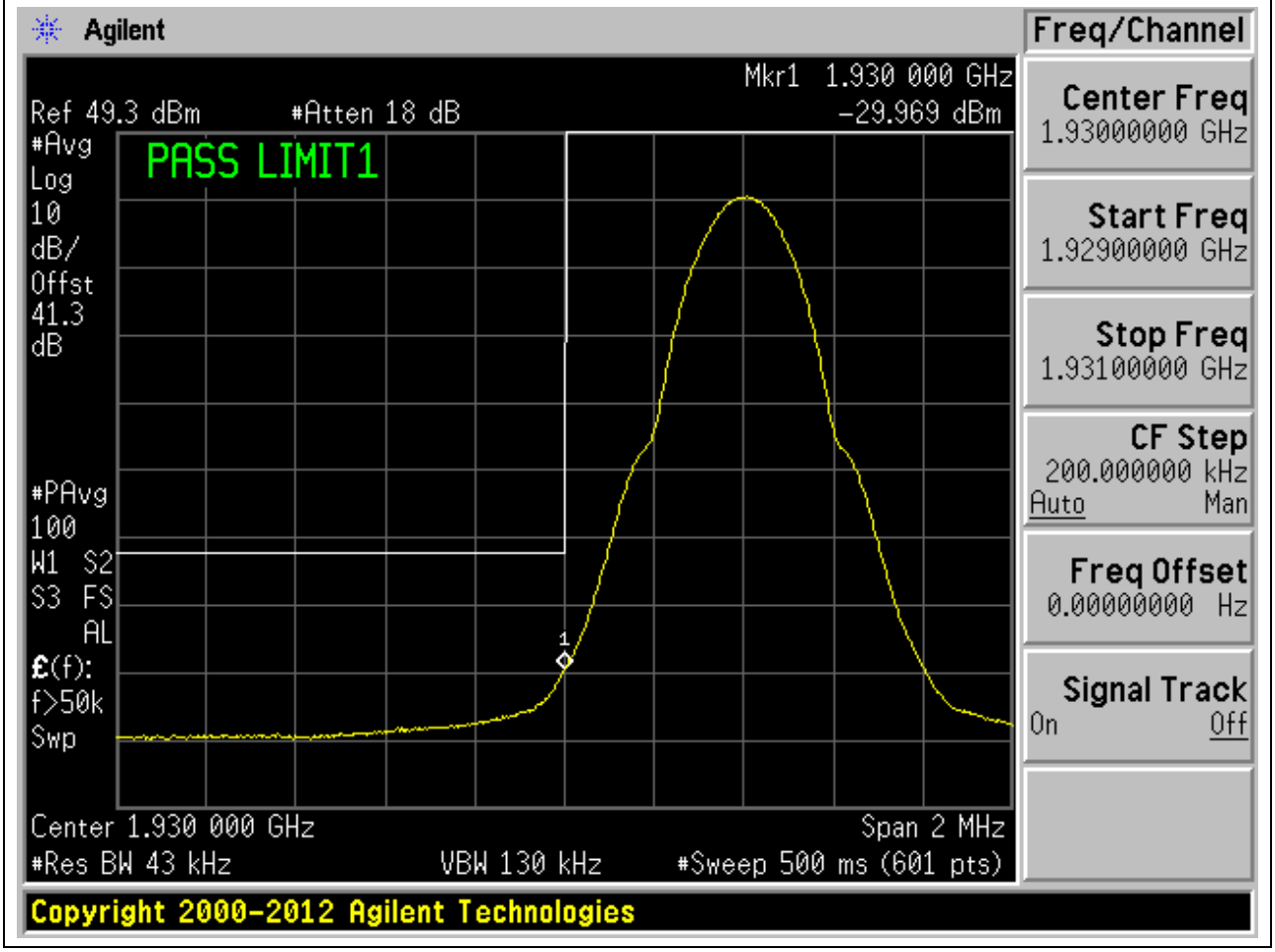
2.2.22 1G1L_1.4M_60W_T_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.015	RMS	Pass	667



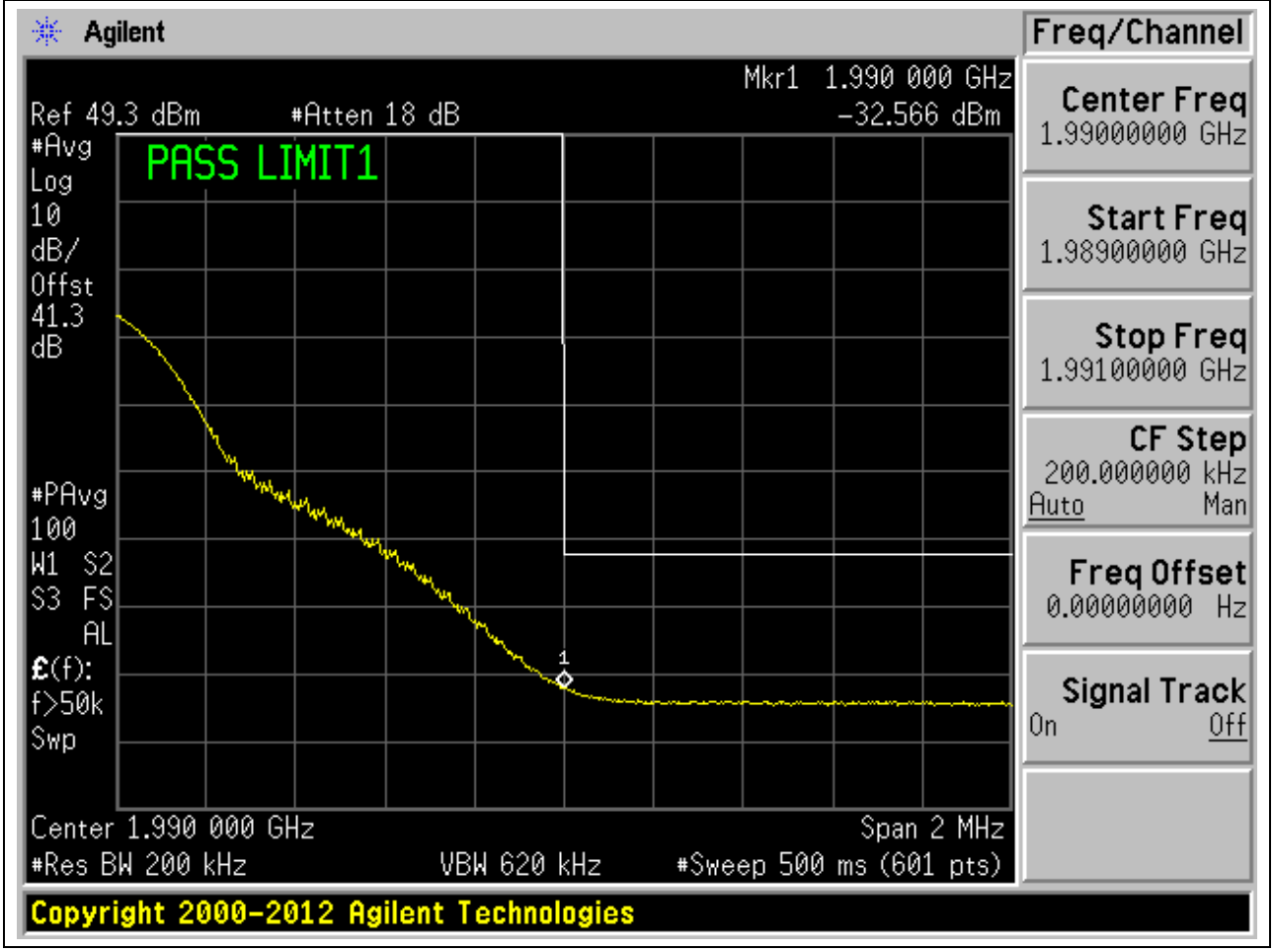
2.2.23 1G1L_20M_60W_B_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.043	RMS	Pass	601



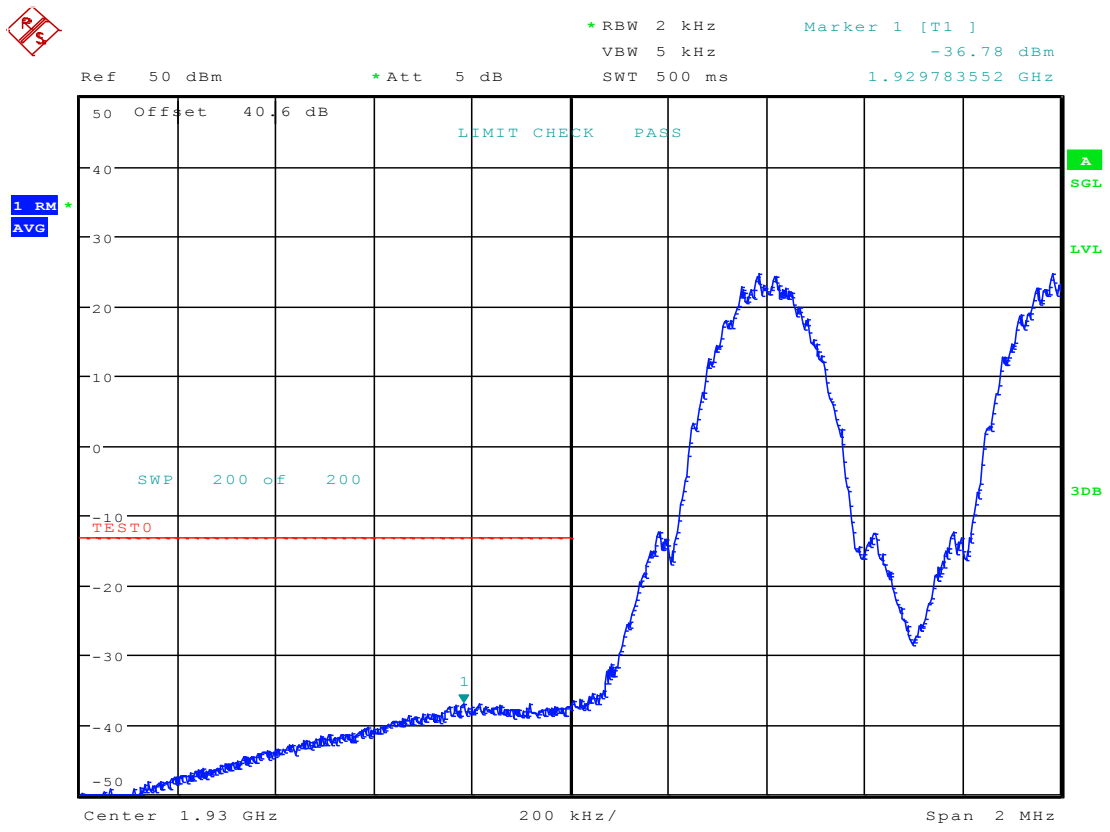
2.2.24 1G1L_20M_60W_T_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.2	RMS	Pass	601



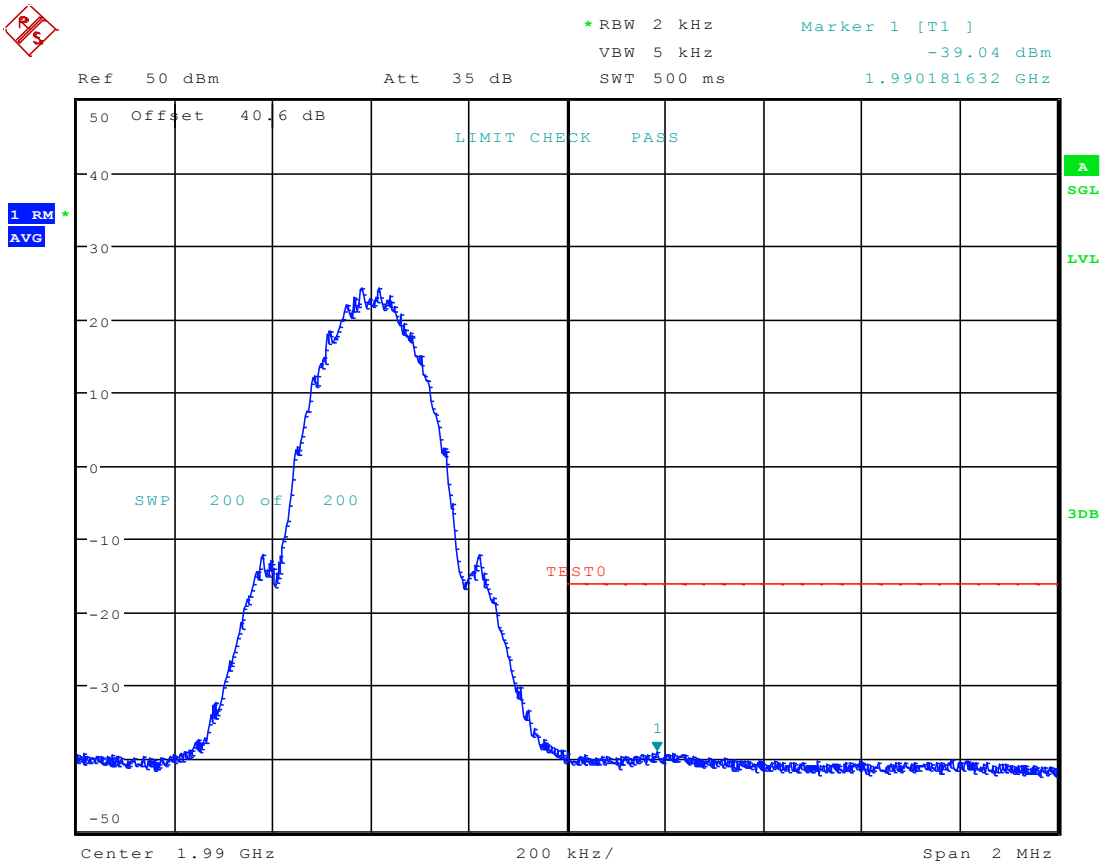
2.2.25 3G1L_1.4M_60W_B_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5001



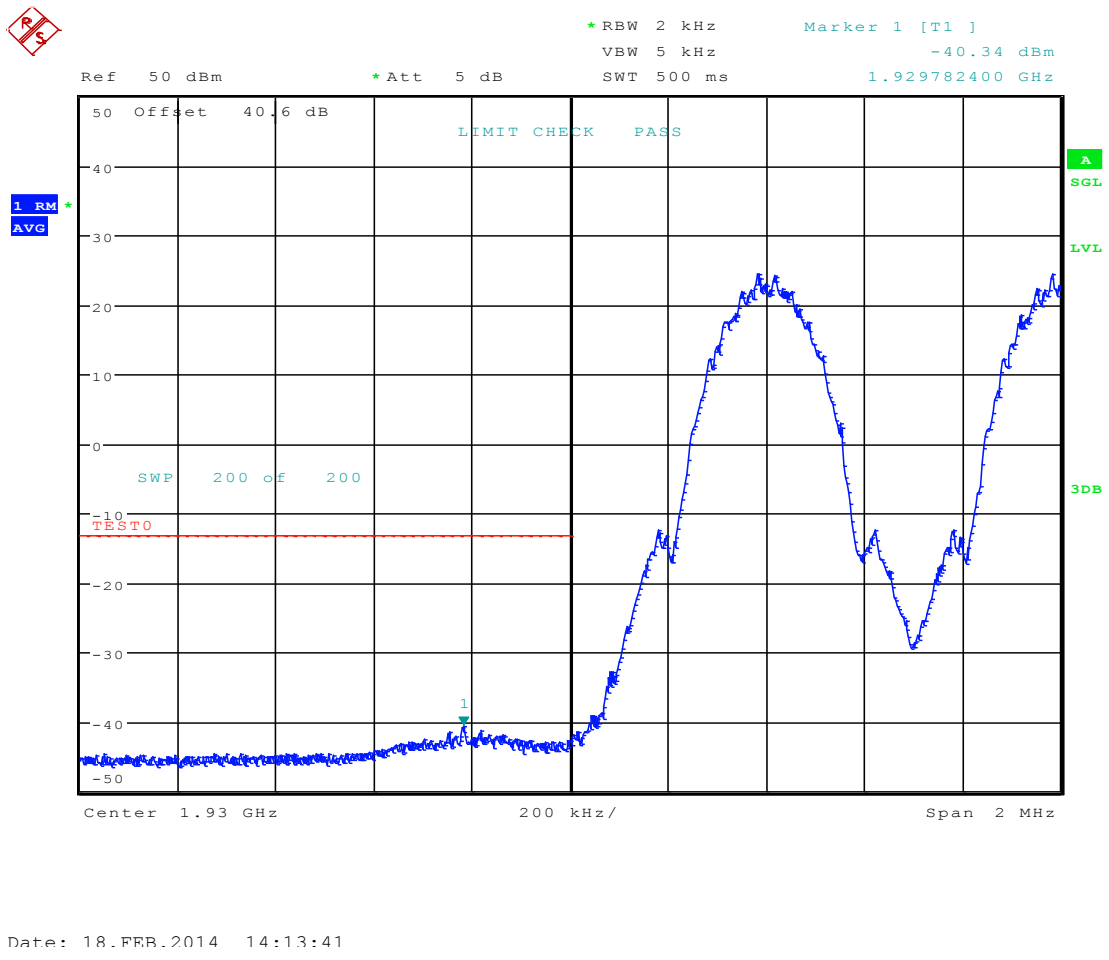
2.2.26 3G1L_1.4M_60W_T_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5001



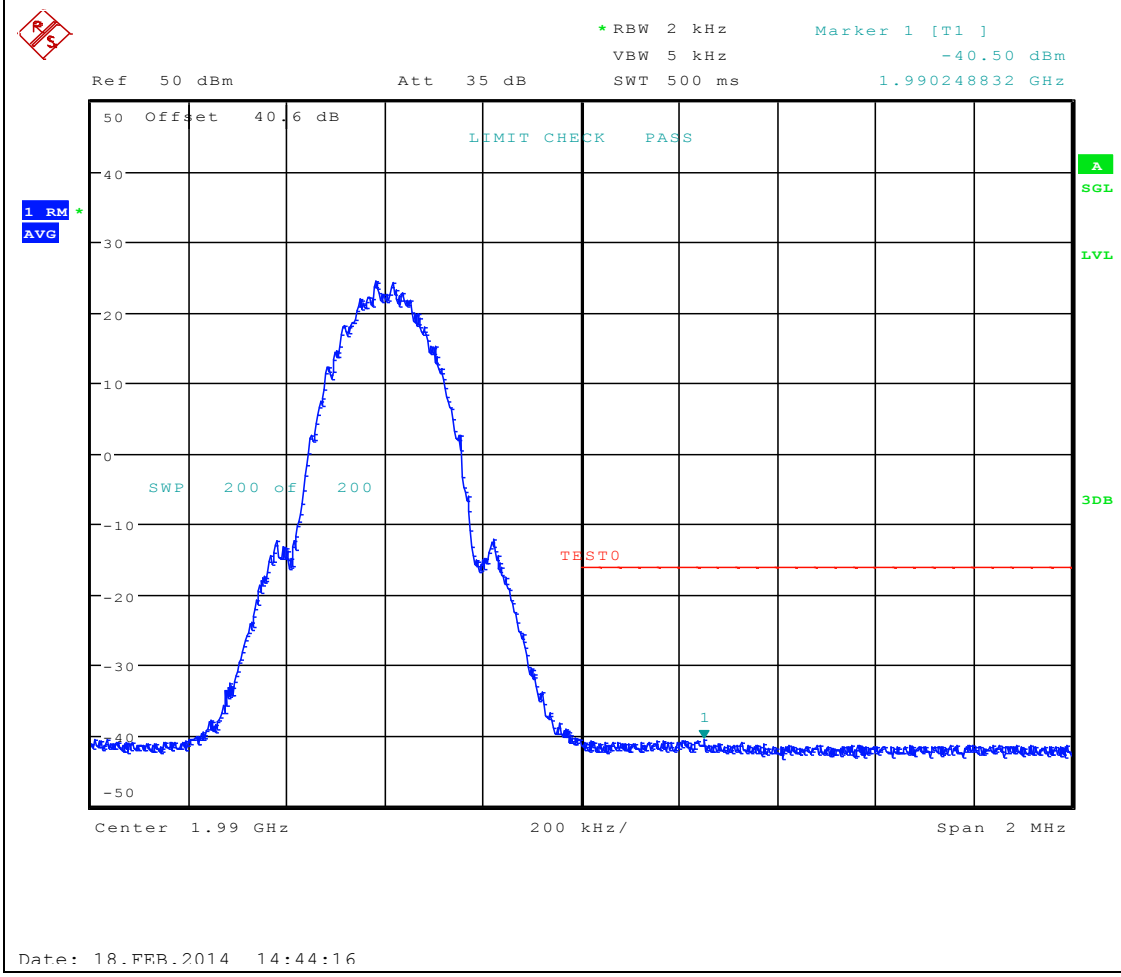
2.2.27 3G1L_20M_60W_B_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.002	RMS	Pass	5001



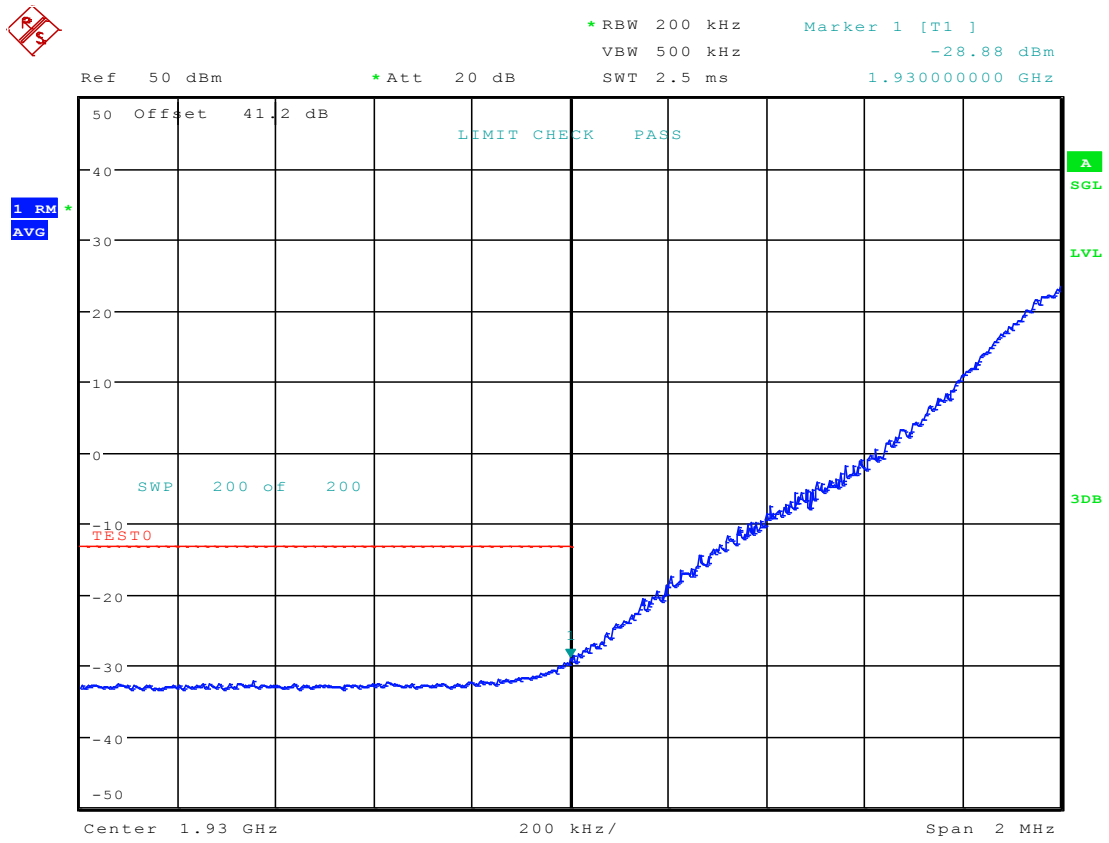
2.2.28 3G1L_20M_60W_T_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.002	RMS	Pass	5001



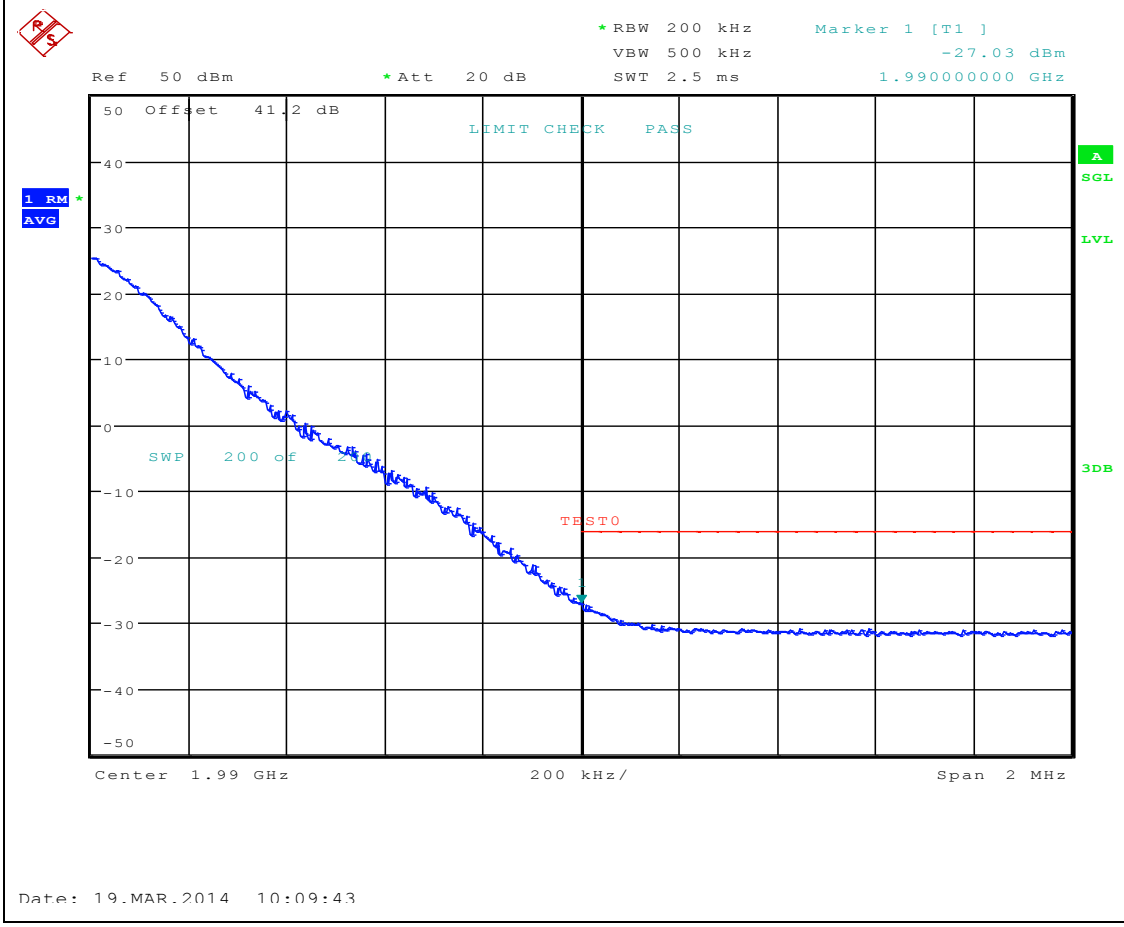
2.2.29 1L_20M_60W_B_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.2	RMS	Pass	625



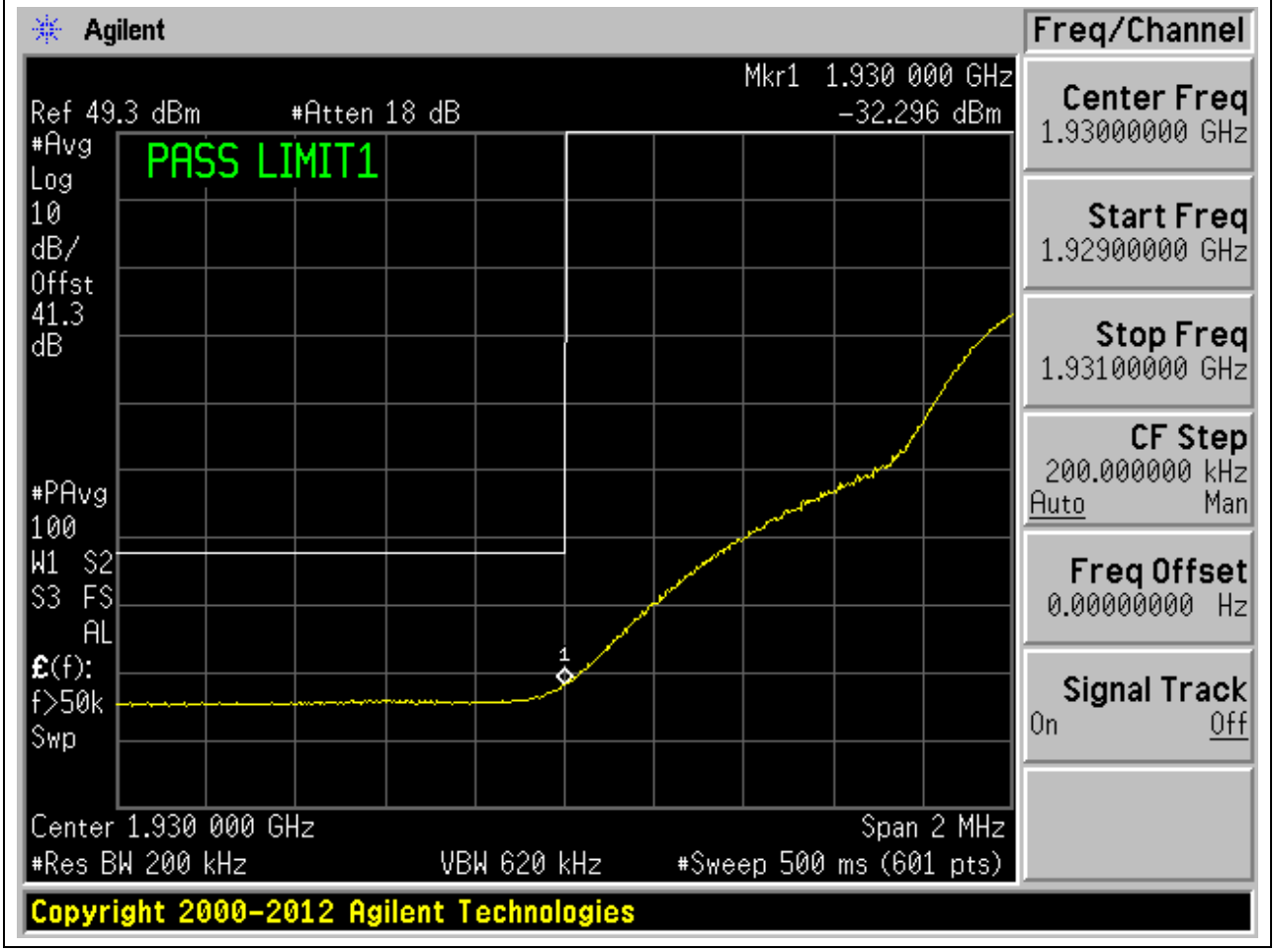
2.2.30 1L_20M_60W_T_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.2	RMS	Pass	625



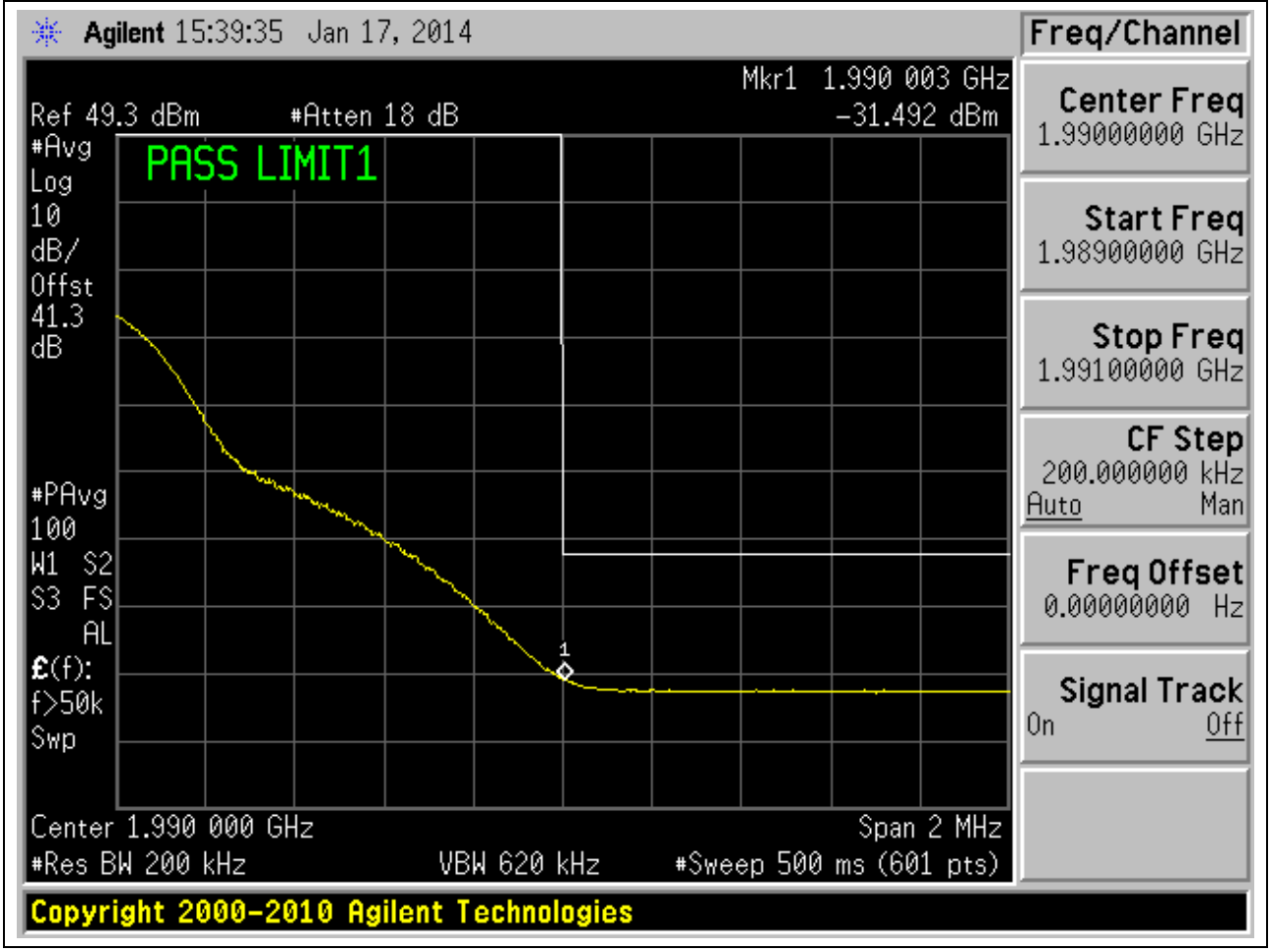
2.2.31 2L_20M_60W_B_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1930	2	0.2	RMS	Pass	601



2.2.32 2L_20M_60W_T_TM1_TRXA

Center Frequency[MHz]	Span [MHz]	RBW [MHz]	Detector	Verdict	Sweep Point
1990	2	0.2	RMS	Pass	601



Appendix D: Spurious Emission at Antenna Terminals

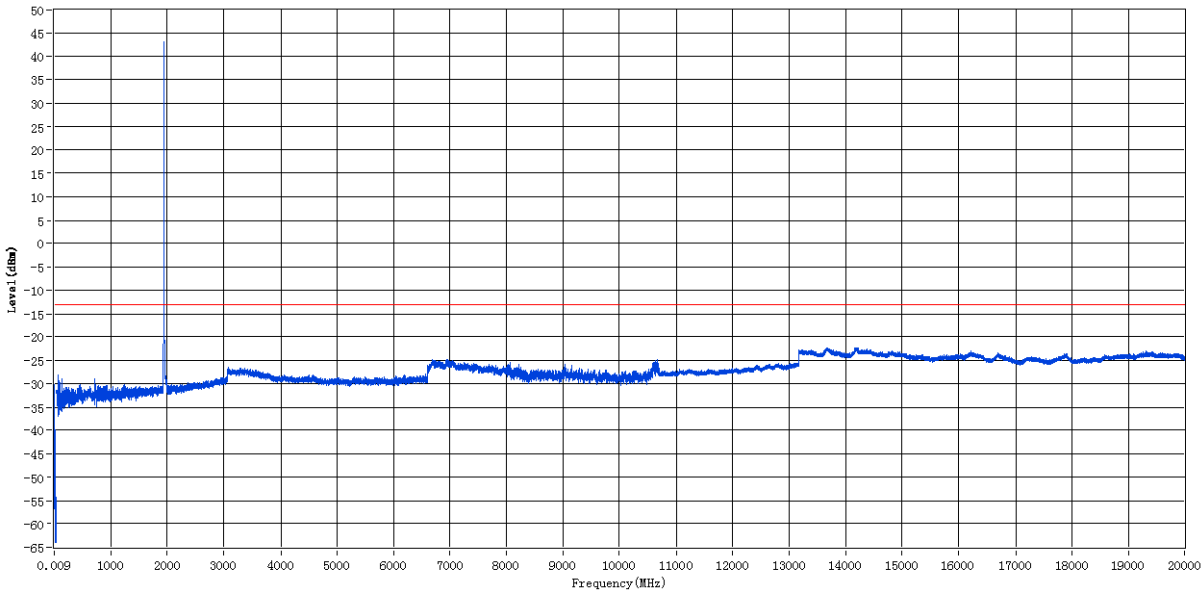
1 Result Table and Test Plot

1.1 For test number SYBH(R)00102012

1.1.1 Test Mode = TM-1

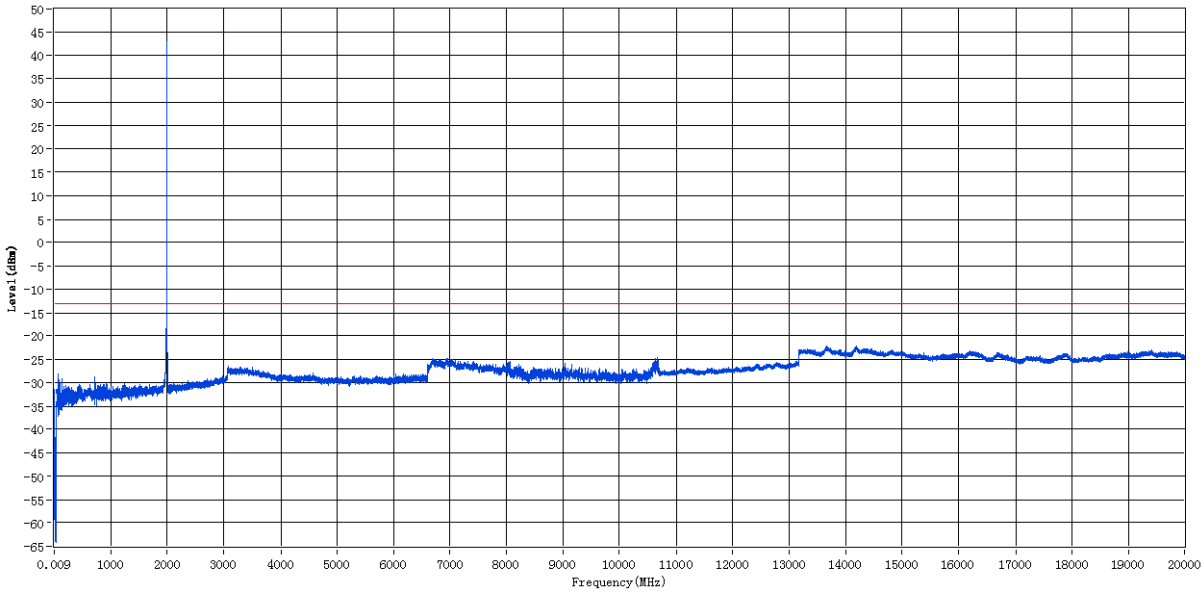
1.1.1.1 Carrier Conf. = 1*U(60W)

1.1.1.1.1 Ch. B



Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Transducer [dB]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	12.908 k	-39.84	42.25	-13.00	26.84	Pass
0.15	30	0.01	RMS	248.912 k	-30.15	42.25	-13.00	17.15	Pass
30	20000	1	RMS	1.933 G	43.19	42.32	-13.00	-56.19	Pass

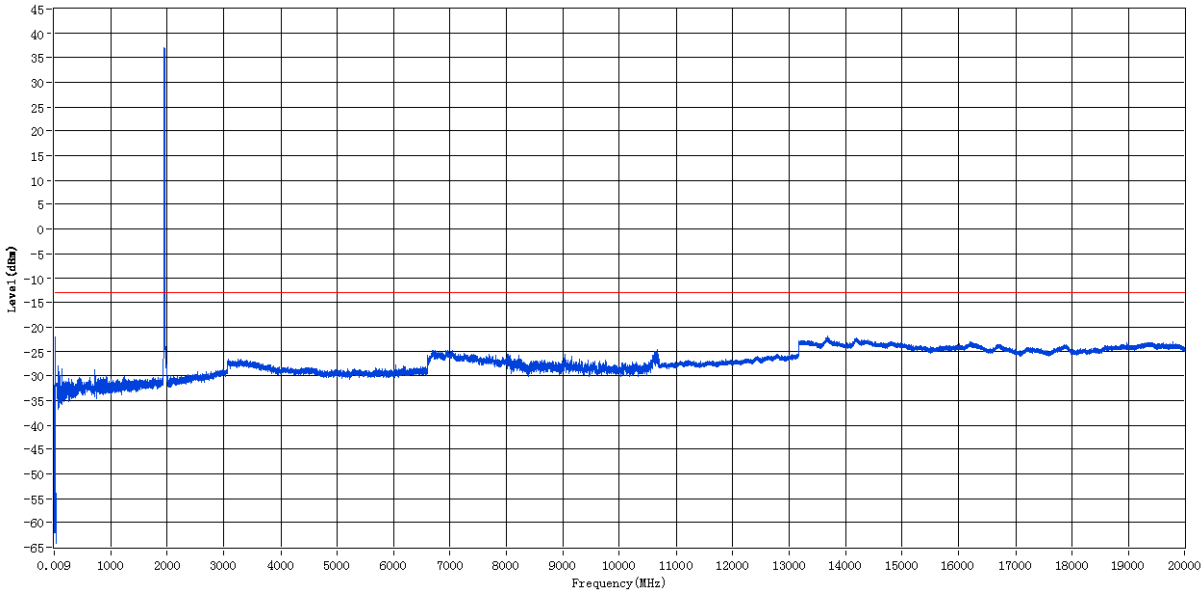
1.1.1.1.2 Ch. T



Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Transducer [dB]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	12.873 k	-41.18	42.25	-13.00	28.18	Pass
0.15	30	0.01	RMS	248.912 k	-31.28	42.25	-13.00	18.28	Pass
30	20000	1	RMS	1.988 G	42.96	42.16	-13.00	-55.96	Pass

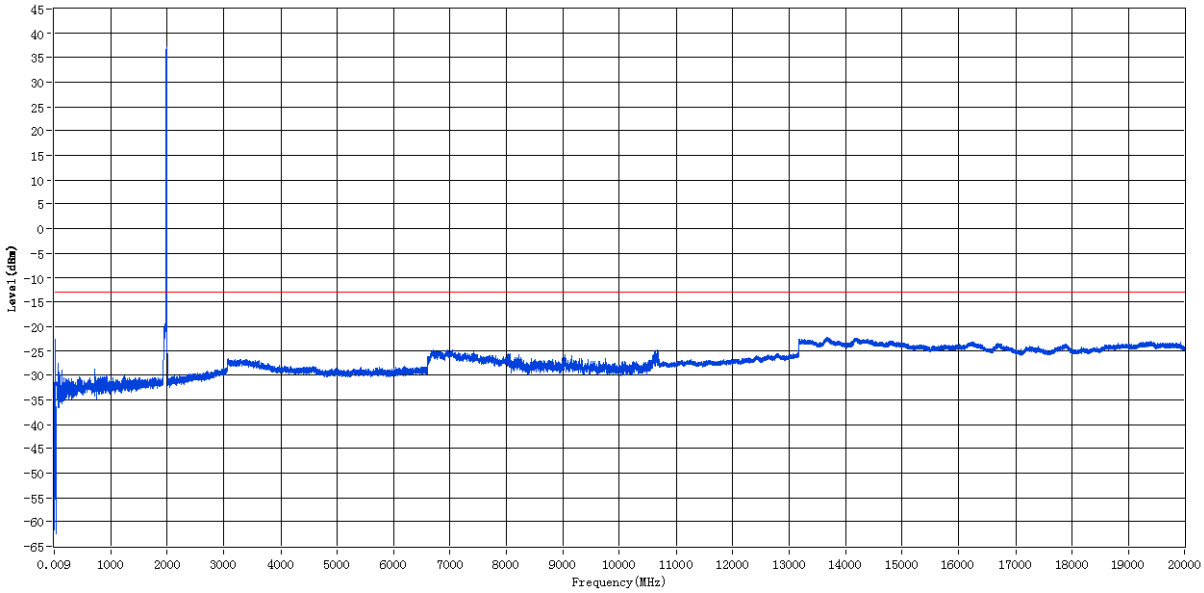
1.1.1.2 Carrier Conf. = 4*U(15W)

1.1.1.2.1 Ch. B



Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Transducer [dB]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	124.954 k	-43.27	42.25	-13.00	30.27	Pass
0.15	30	0.01	RMS	4.999 M	-22.02	42.25	-13.00	9.02	Pass
30	20000	1	RMS	1.933 G	37.04	42.32	-13.00	-50.04	Pass

1.1.1.2.2 Ch. T

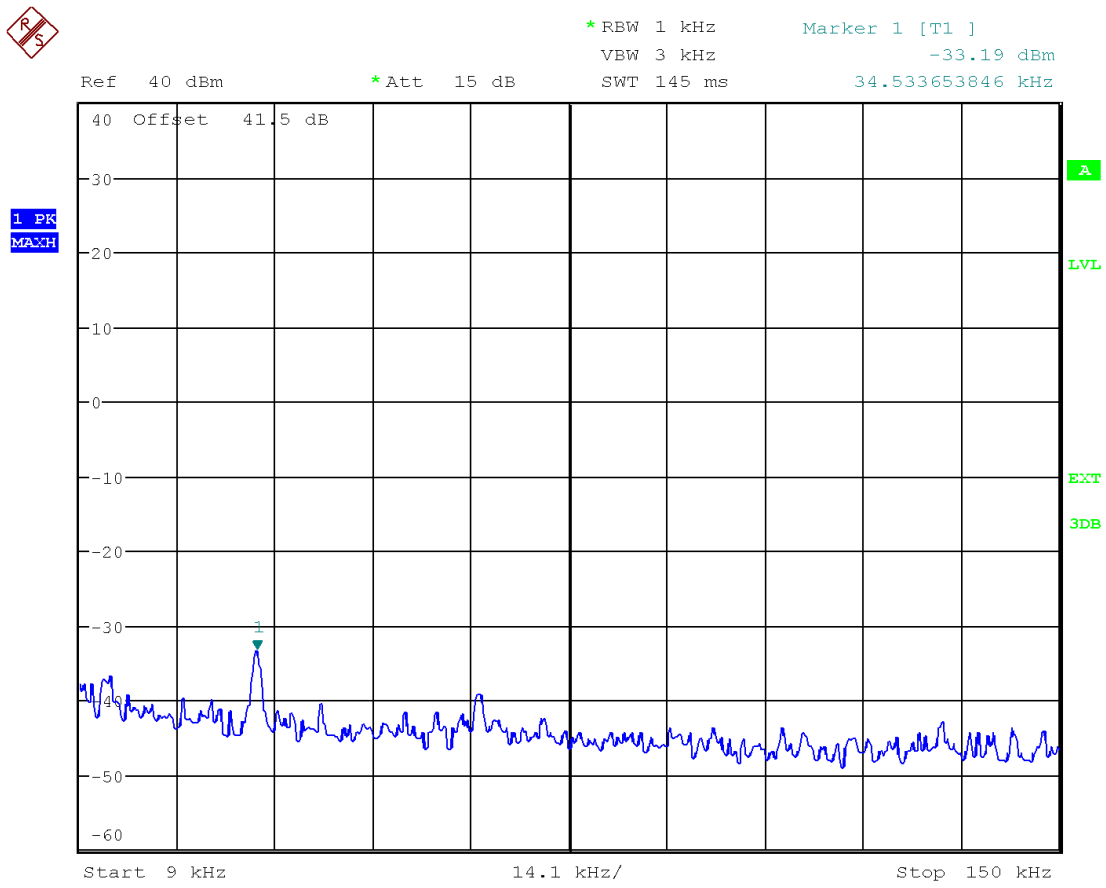


Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Transducer [dB]	Limit [dBm]	Margin [dB]	Verdict
0.009	0.15	0.001	RMS	124.868 k	-43.12	42.25	-13.00	30.12	Pass
0.15	30	0.01	RMS	4.999 M	-22.67	42.25	-13.00	9.67	Pass
30	20000	1	RMS	1.983 G	37.32	42.43	-13.00	-50.32	Pass

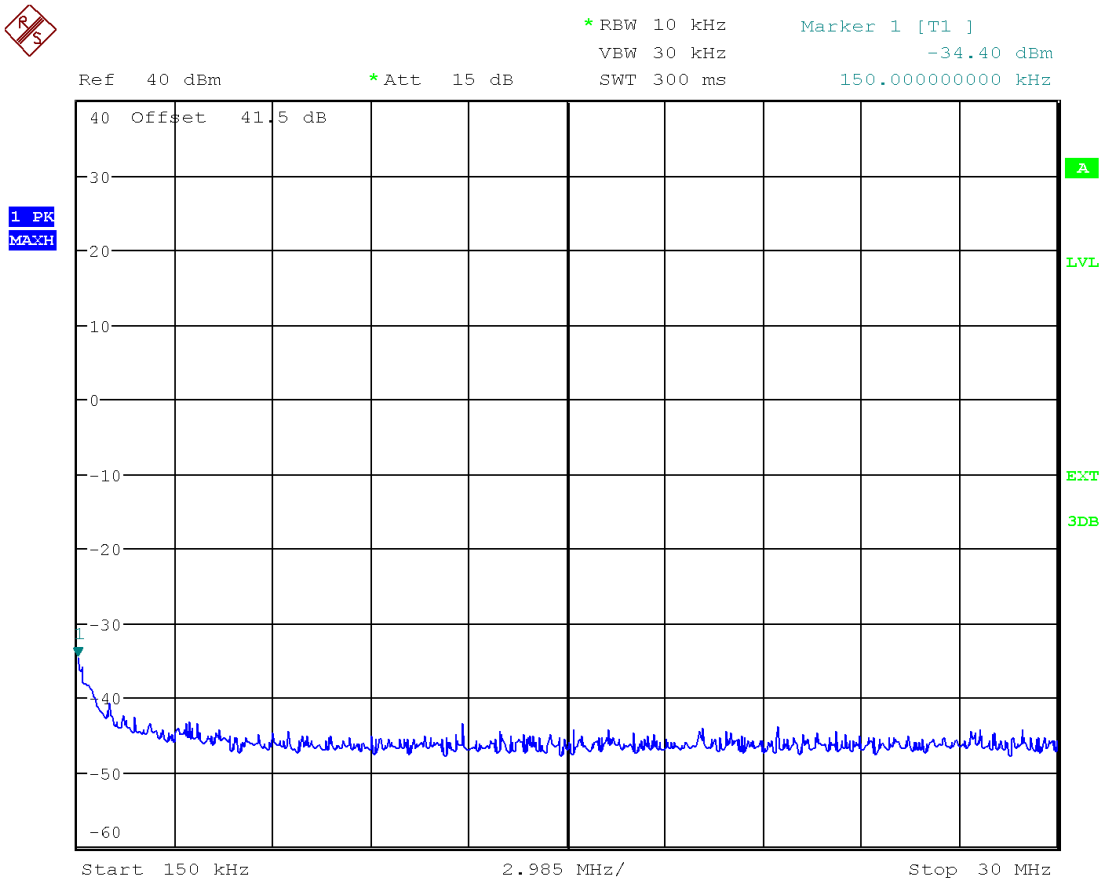
1.1.2 Test Mode = GMSK

1.1.2.1 Carrier Conf. = 1*G(60W)

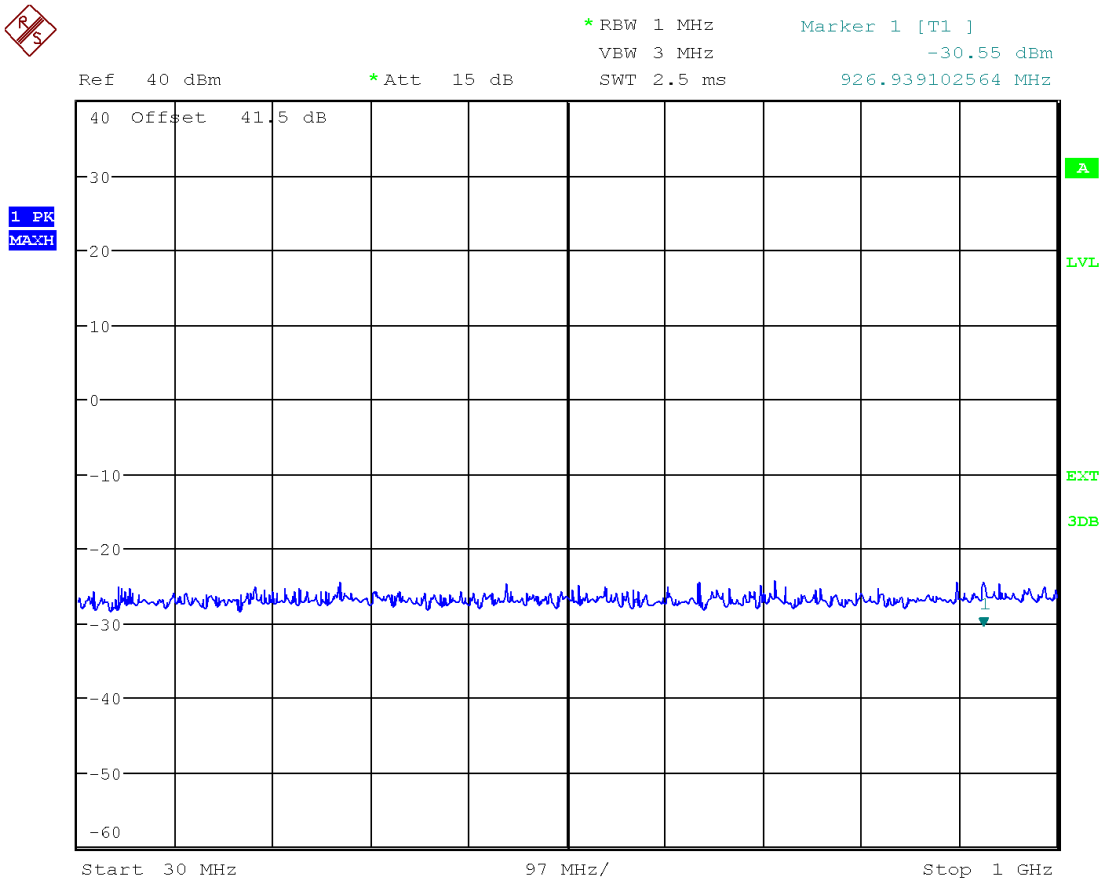
1.1.2.1.1 Ch. B



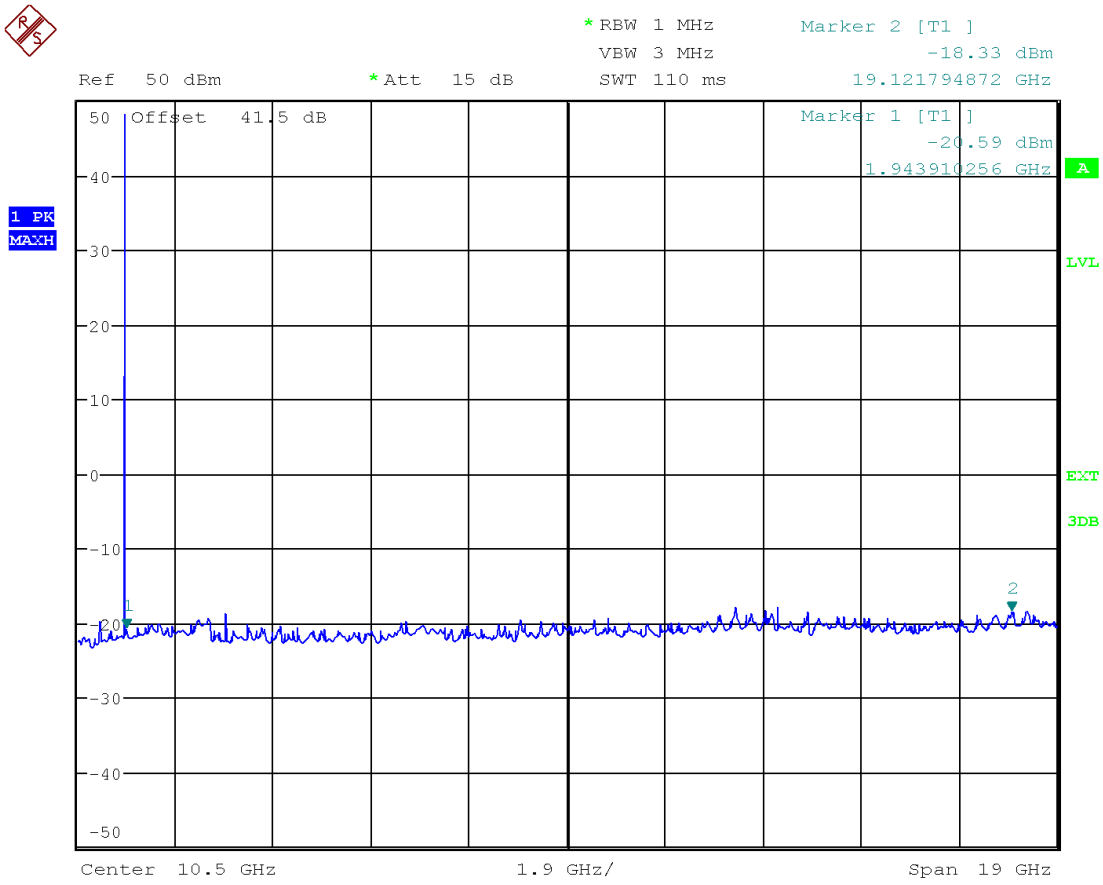
Date: 23.DEC.2011 11:41:16



Date: 23.DEC.2011 11:42:52

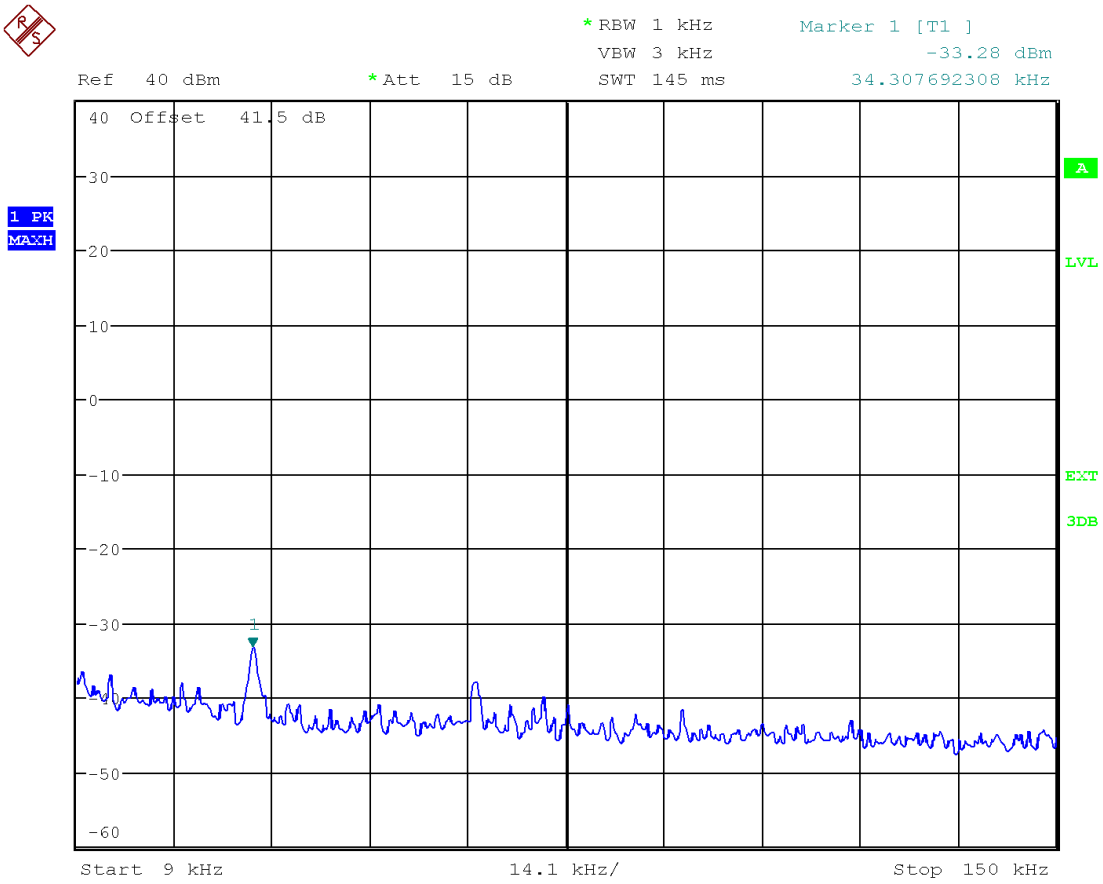


Date: 23.DEC.2011 11:40:15

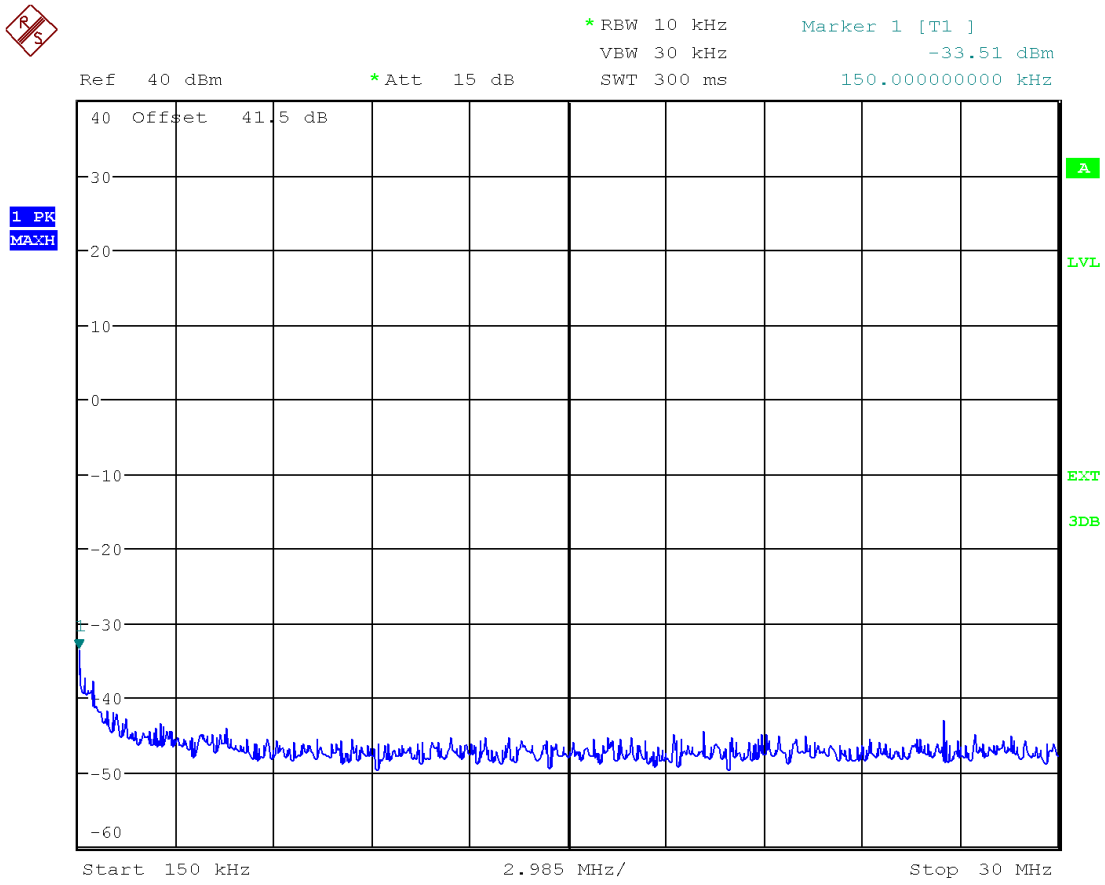


Date: 23.DEC.2011 11:38:38

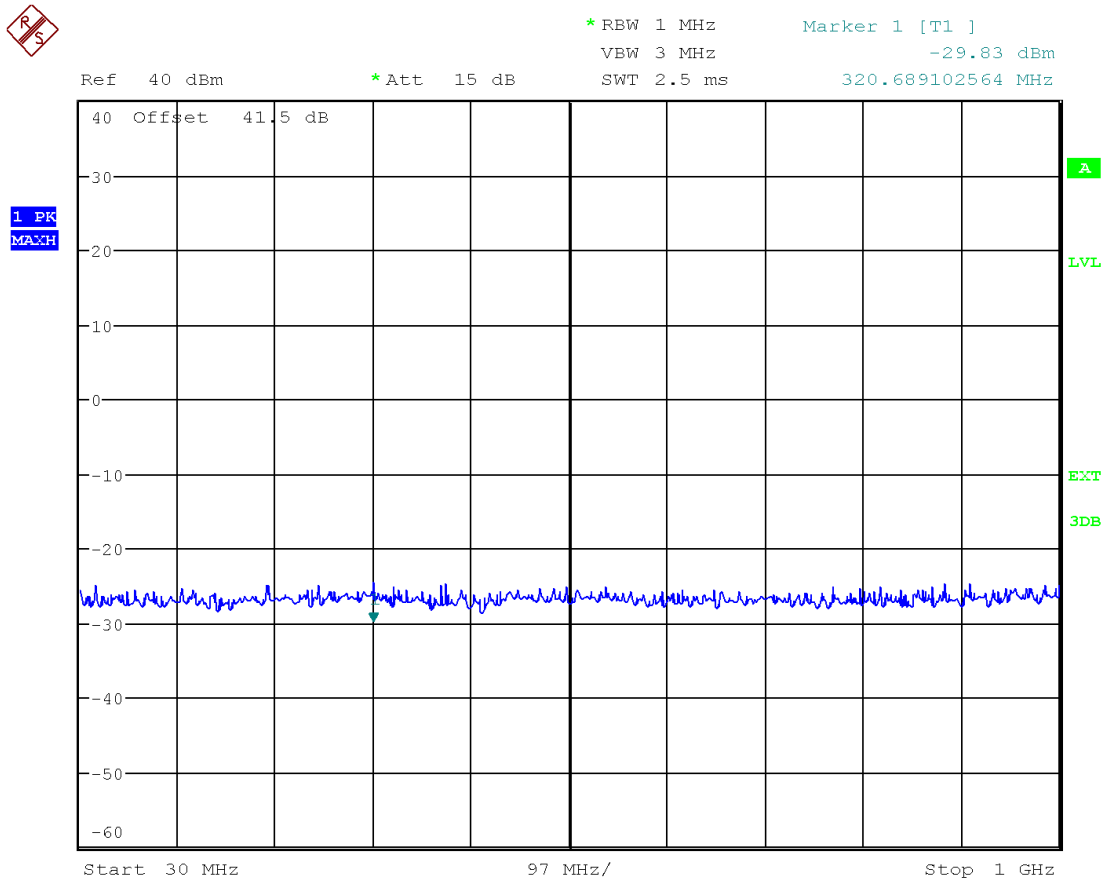
1.1.2.1.2 Ch. T



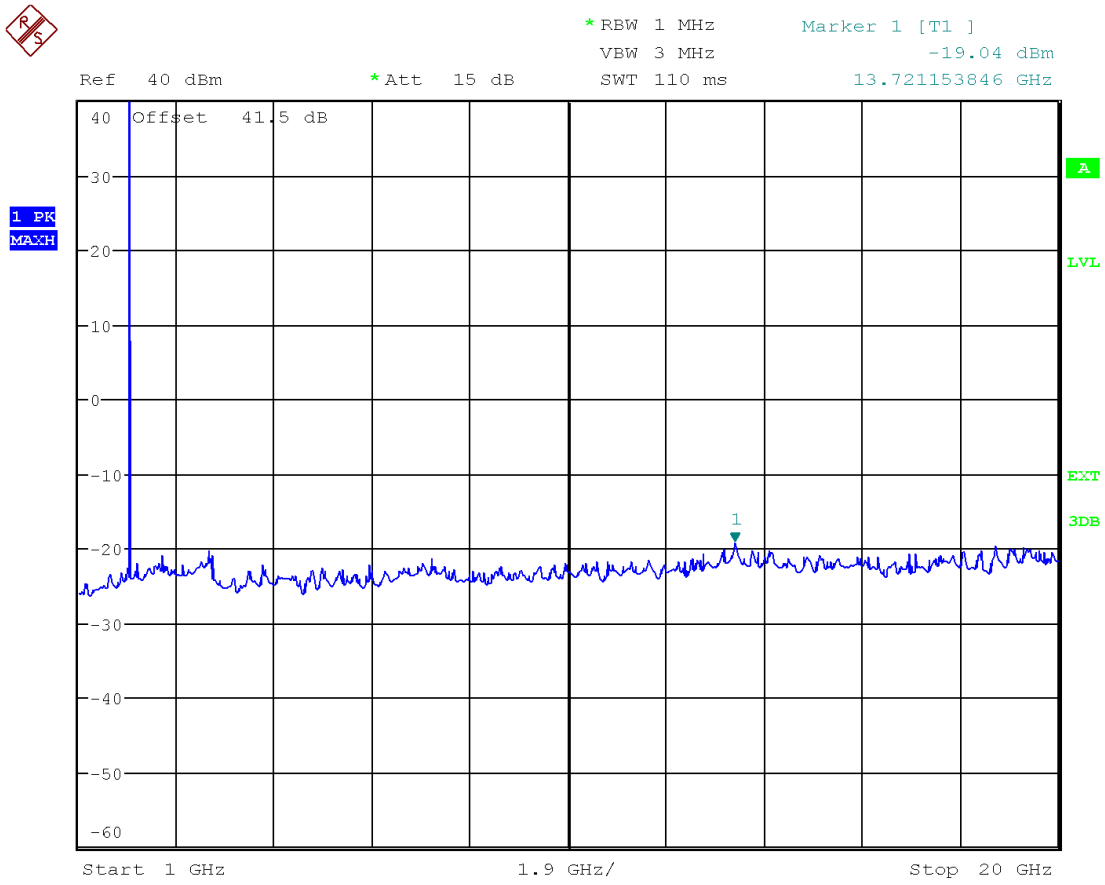
Date: 23.DEC.2011 11:45:14



Date: 23.DEC.2011 11:46:01



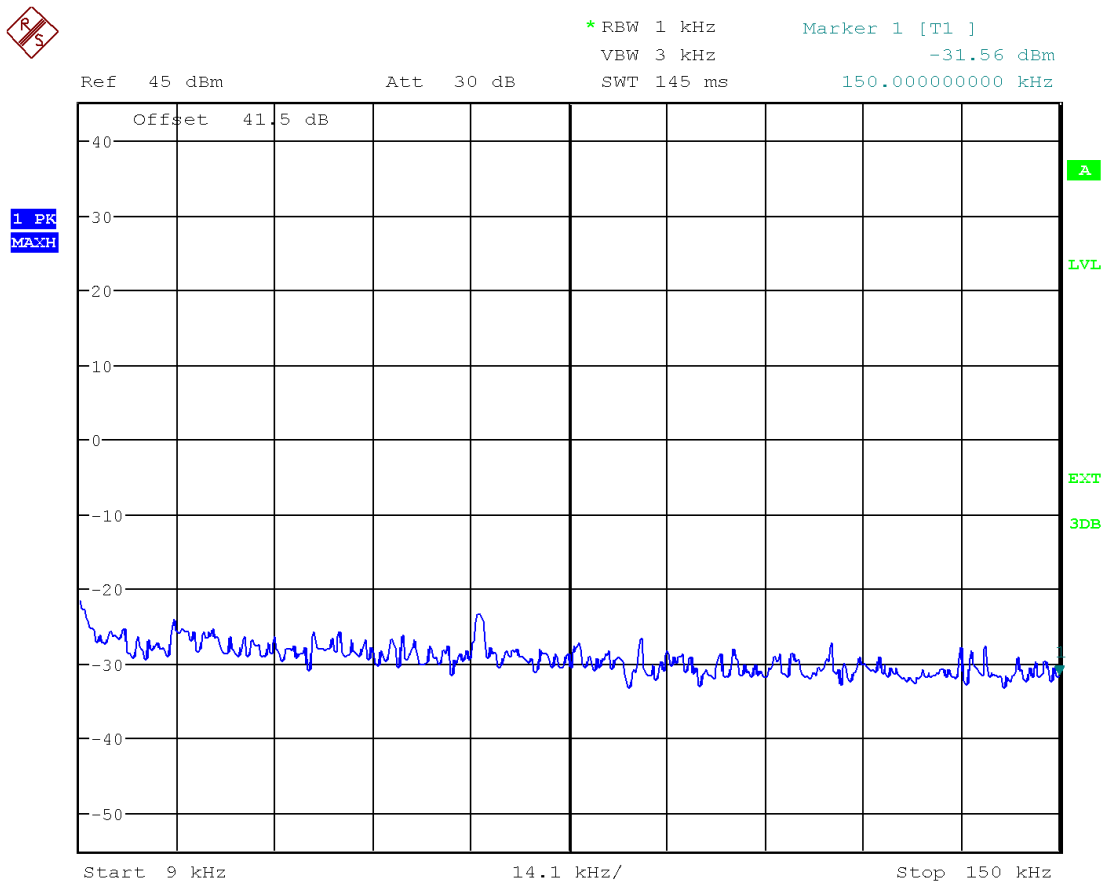
Date: 23.DEC.2011 11:46:39



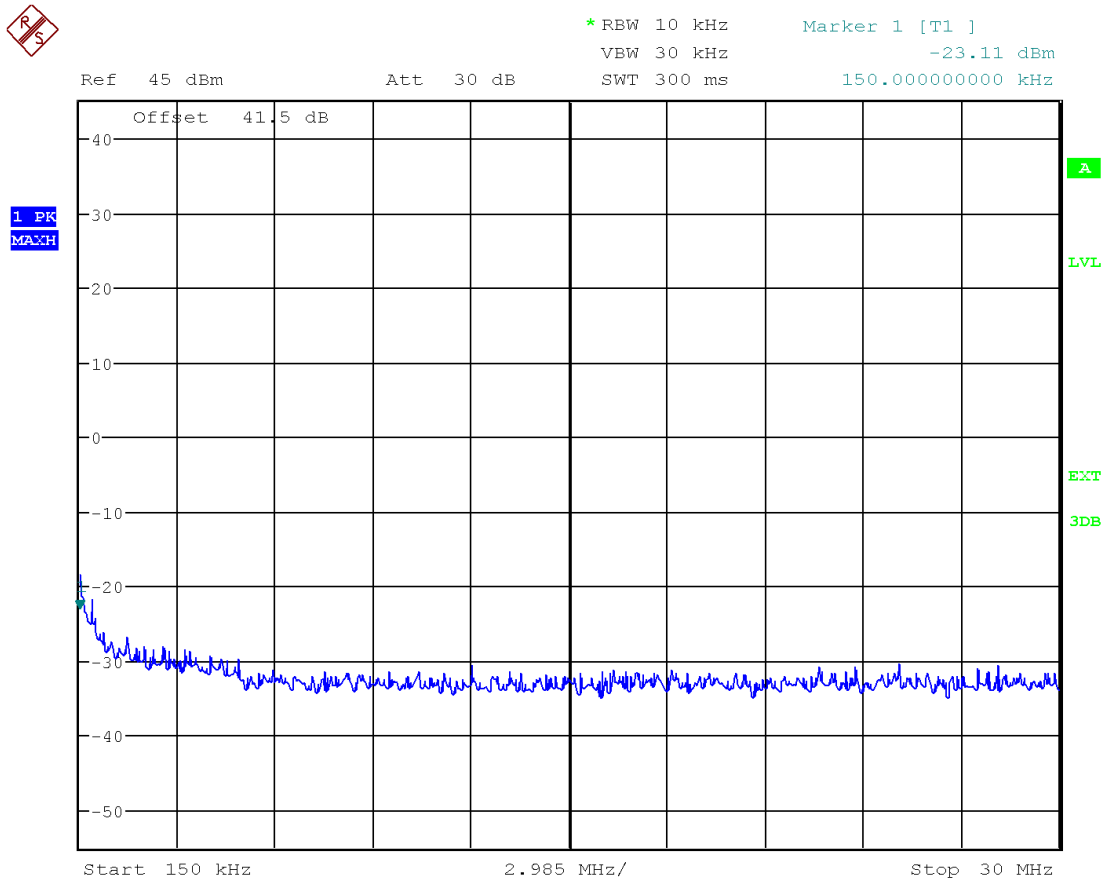
Date: 23.DEC.2011 11:47:32

1.1.2.2 Carrier Conf. = 4*G(15W)

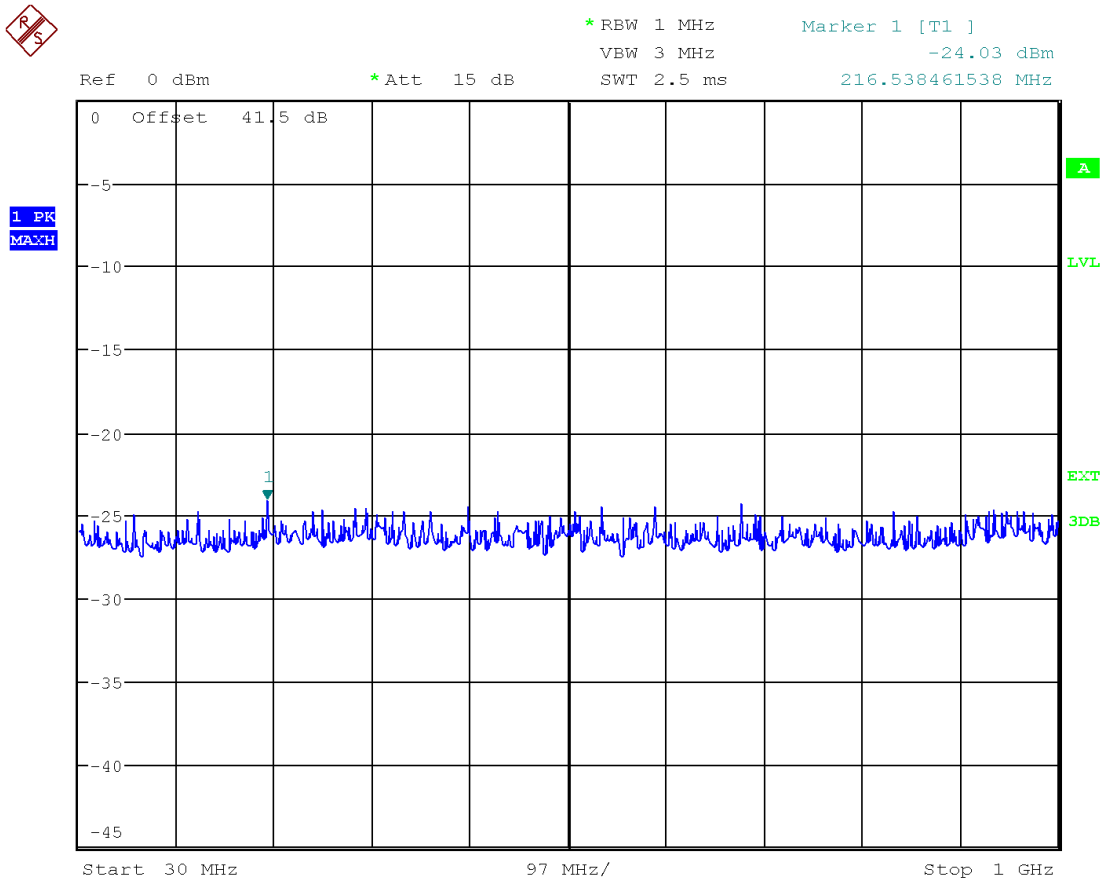
1.1.2.2.1 Ch. B



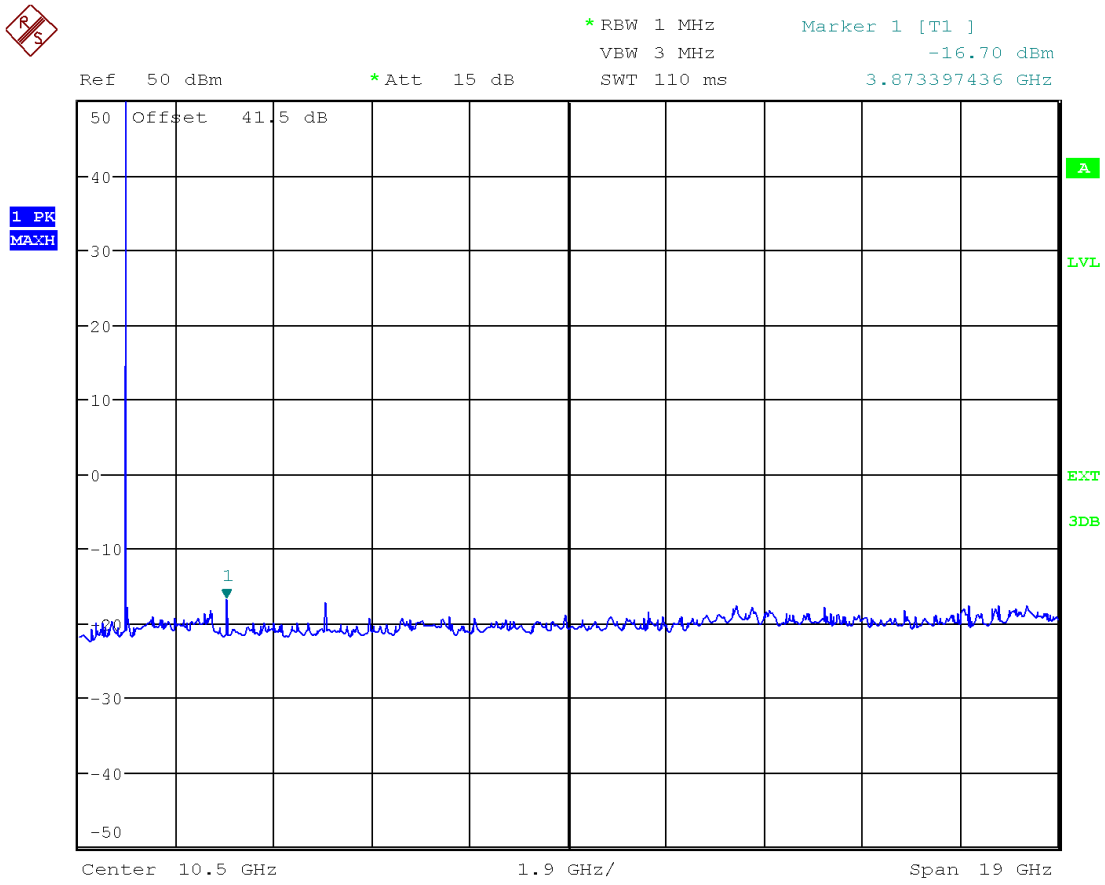
Date: 24.DEC.2011 14:09:53



Date: 24.DEC.2011 14:20:03

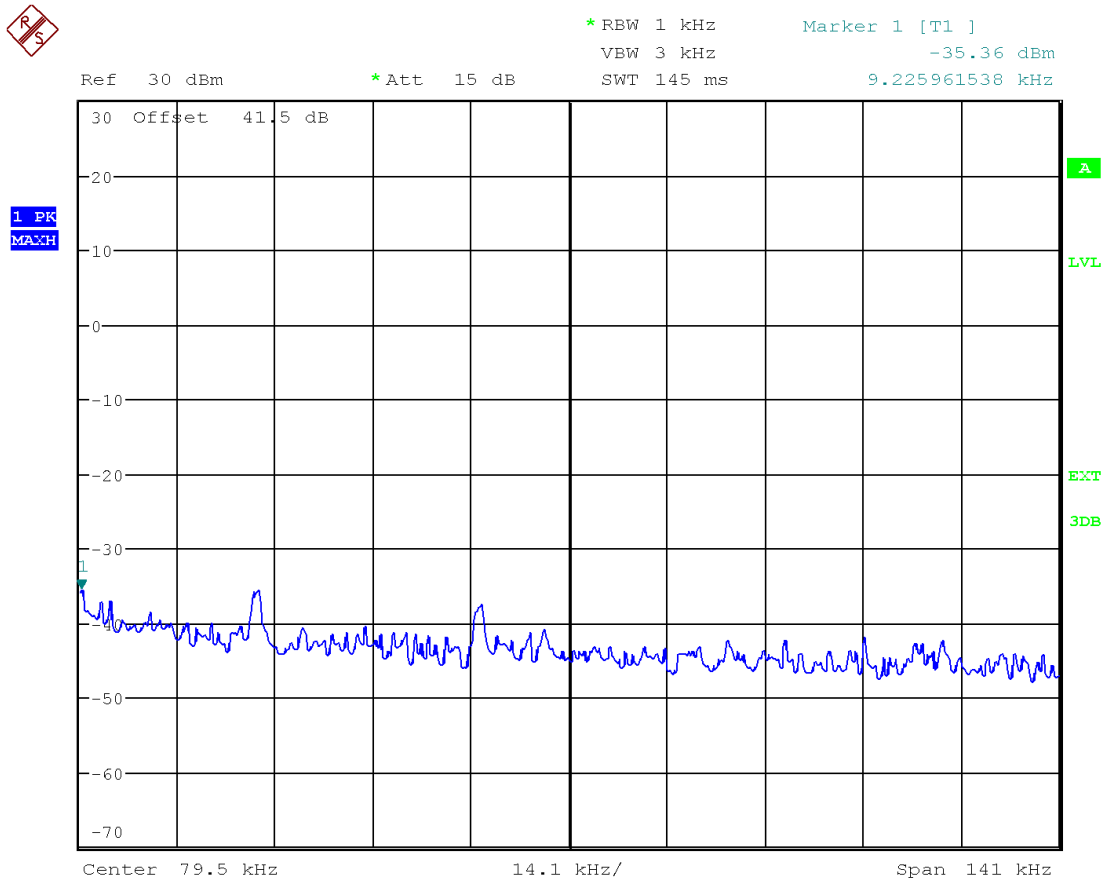


Date: 24.DEC.2011 14:28:11

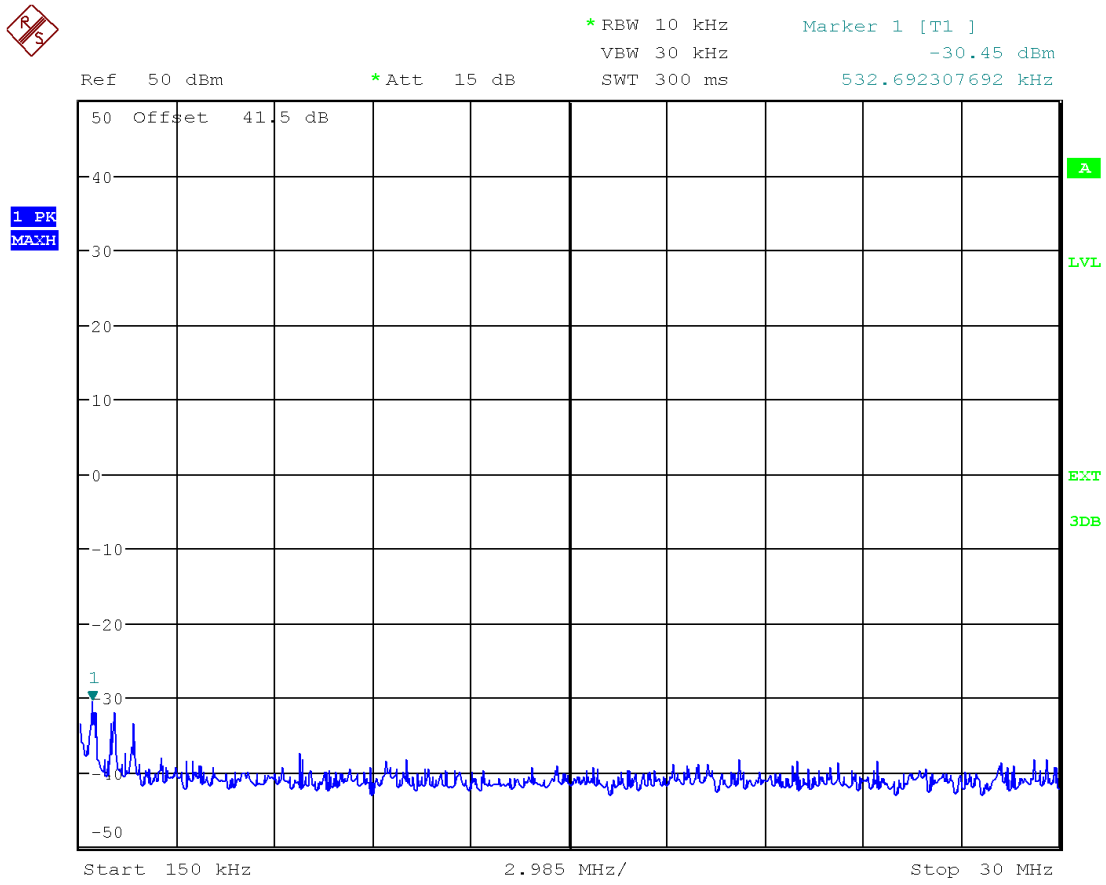


Date: 24.DEC.2011 14:41:55

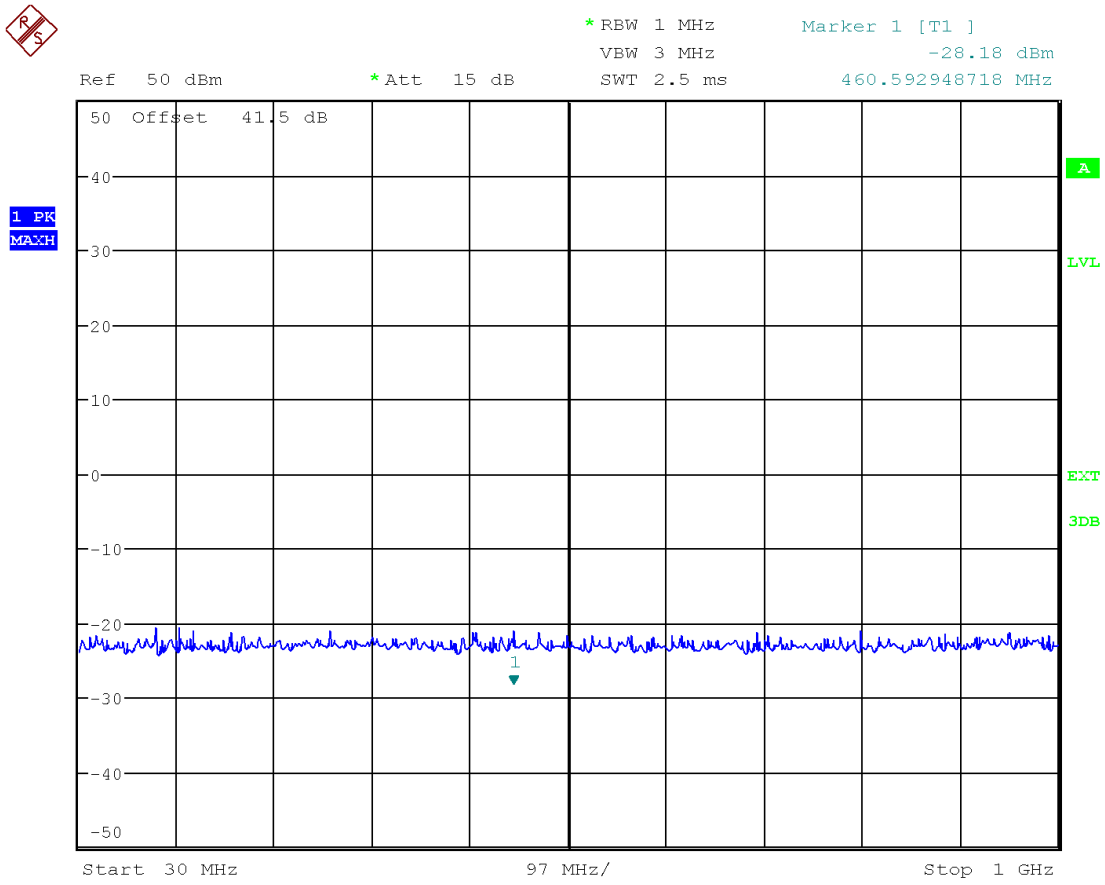
1.1.2.2.2 Ch. T



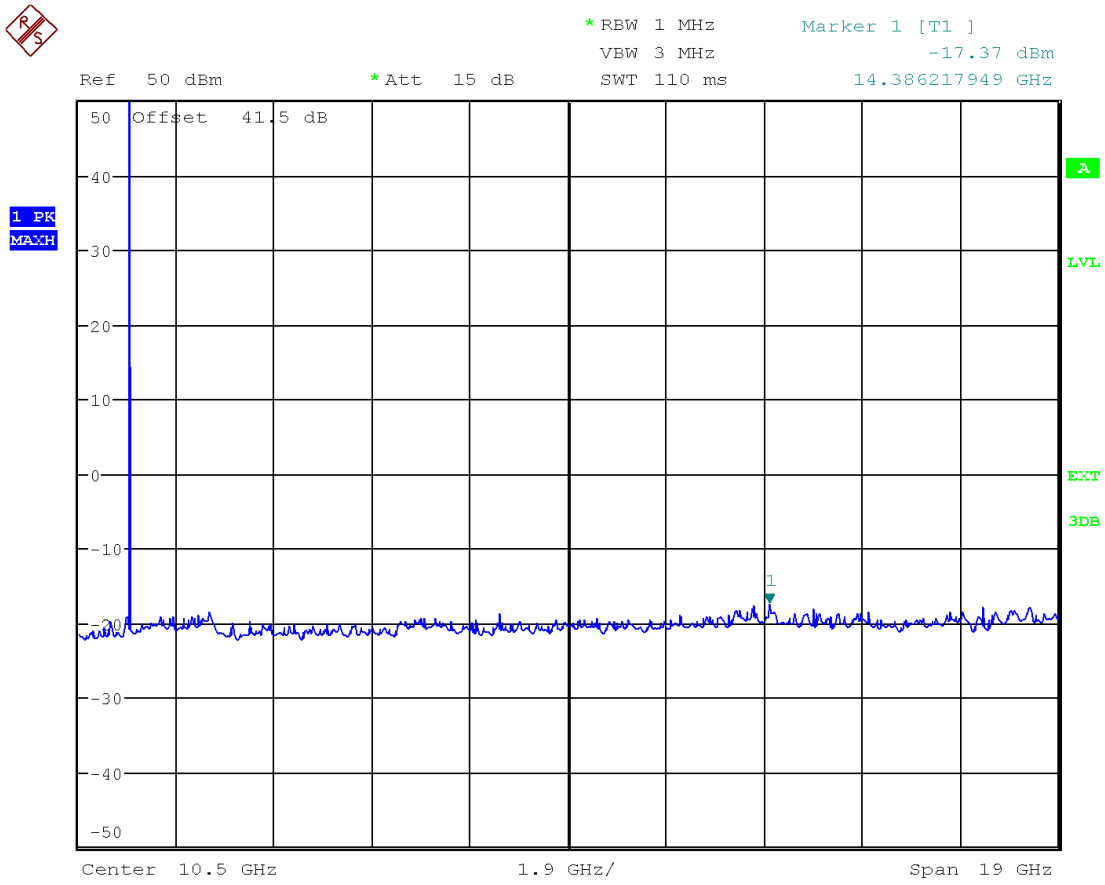
Date: 24.DEC.2011 14:56:54



Date: 24.DEC.2011 14:54:53



Date: 24.DEC.2011 14:53:03

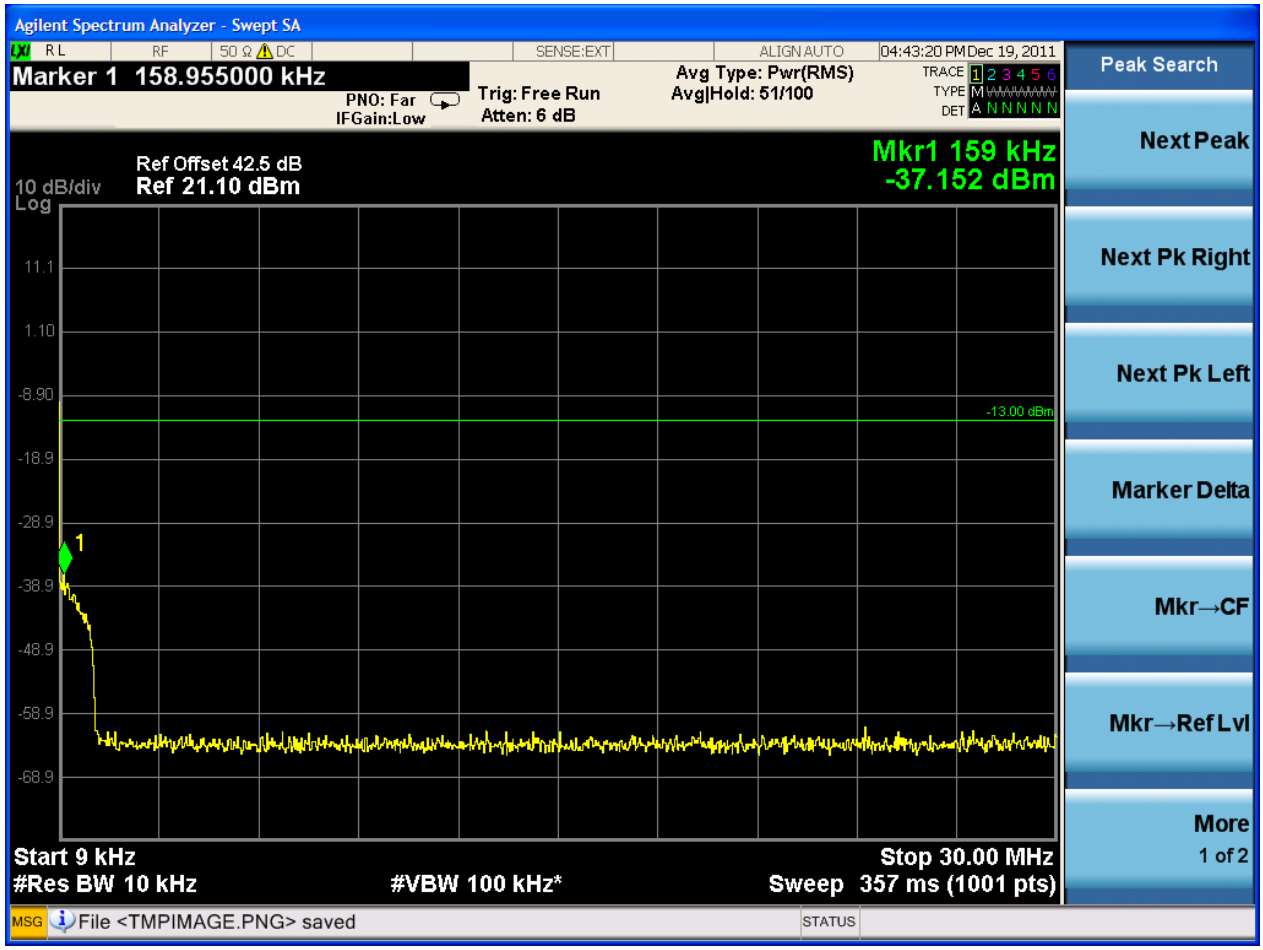


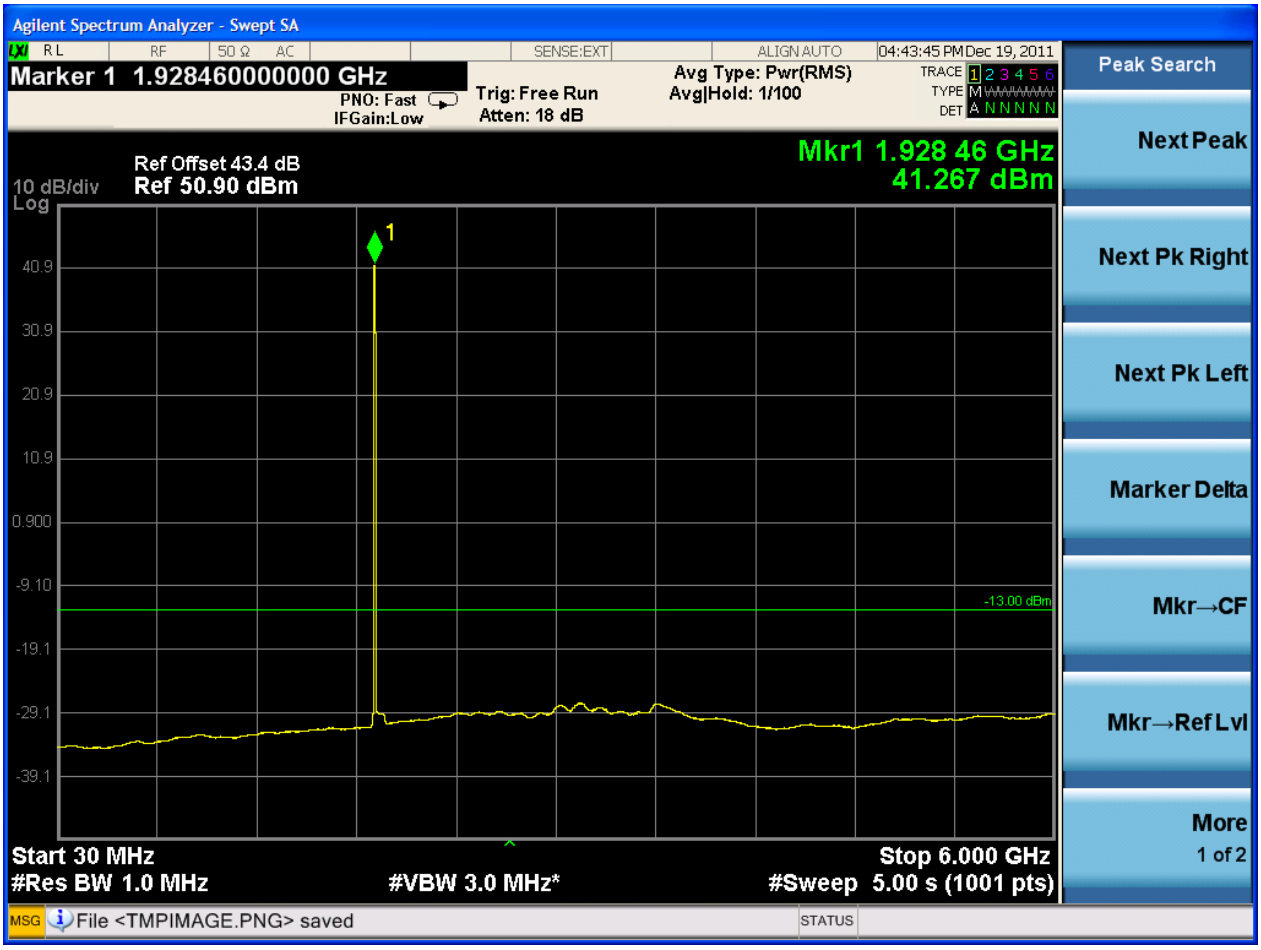
Date: 24.DEC.2011 14:51:28

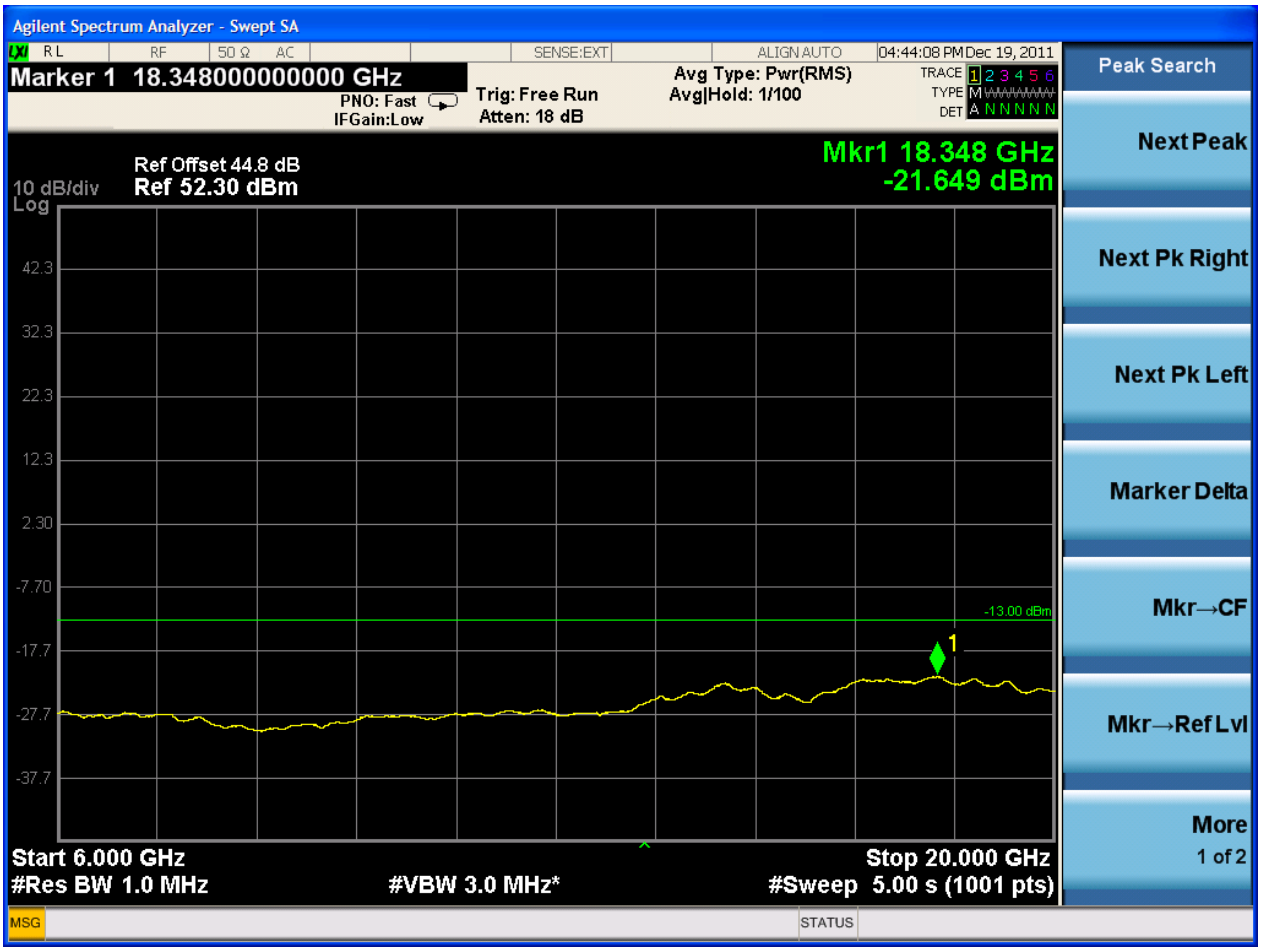
1.1.3 Test Mode = E-TM 1.1

1.1.3.1 Carrier Conf. = 1*L1.4M(60W)

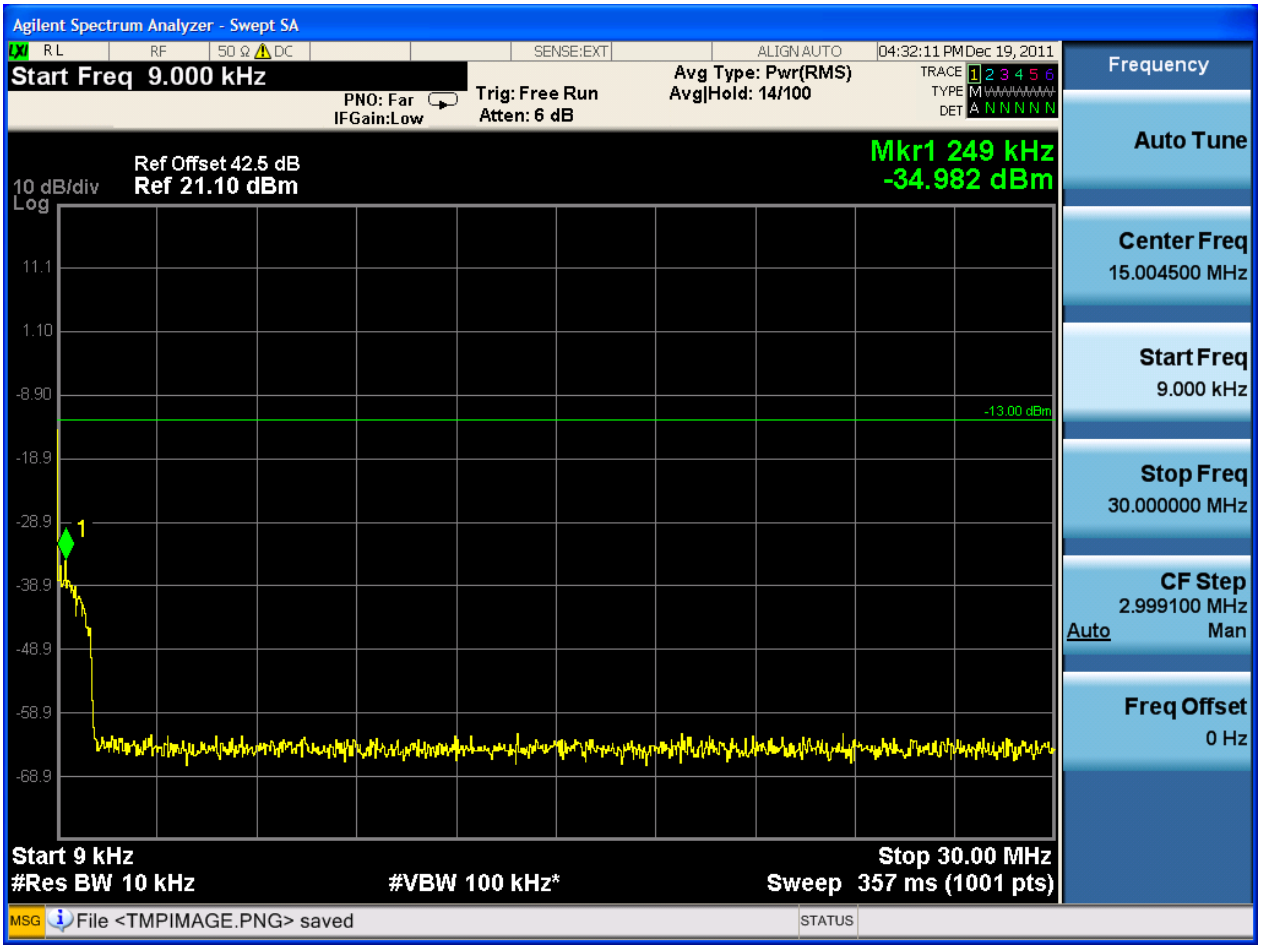
1.1.3.1.1 Ch. B

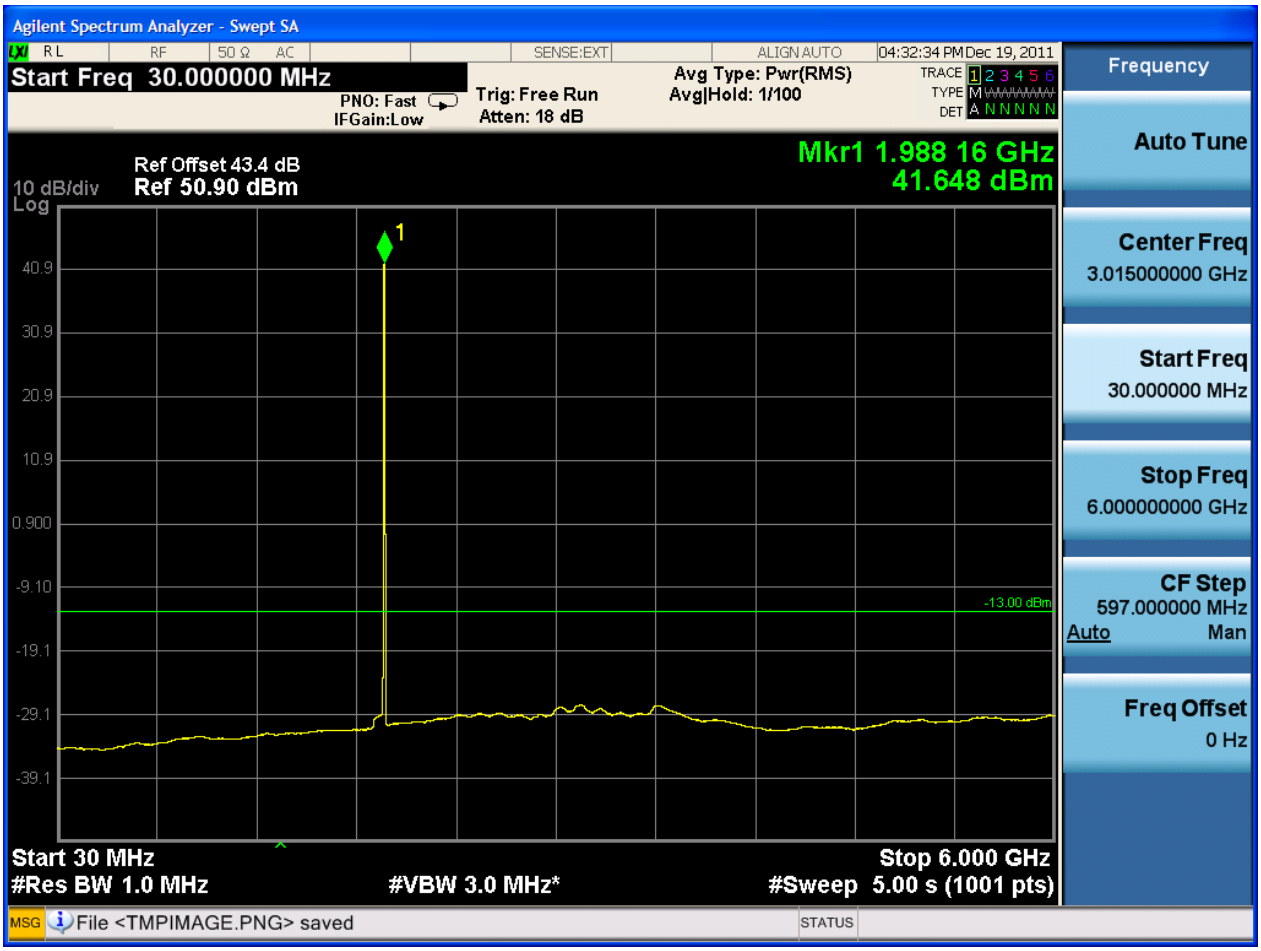


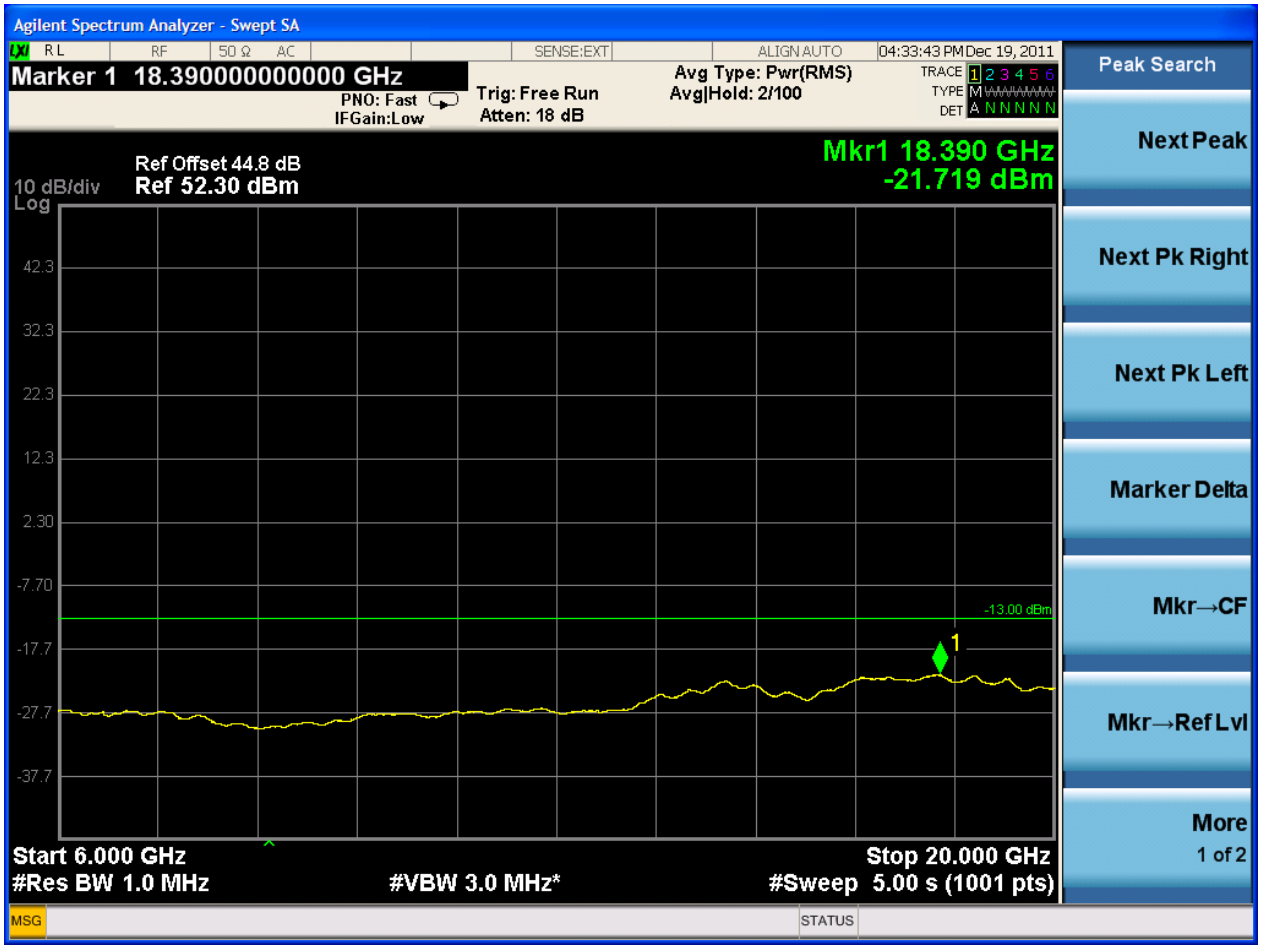




1.1.3.1.2 Ch. T

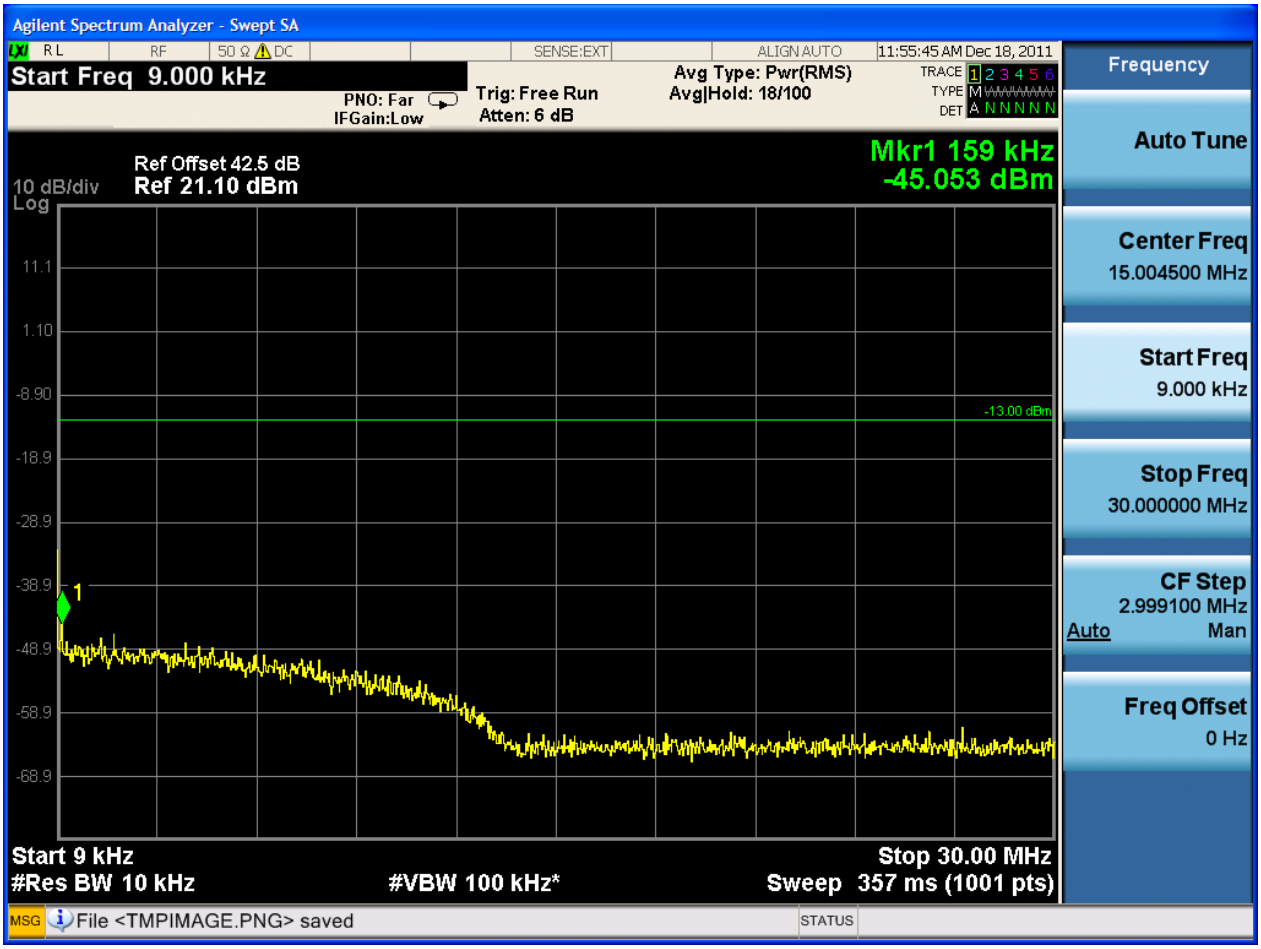


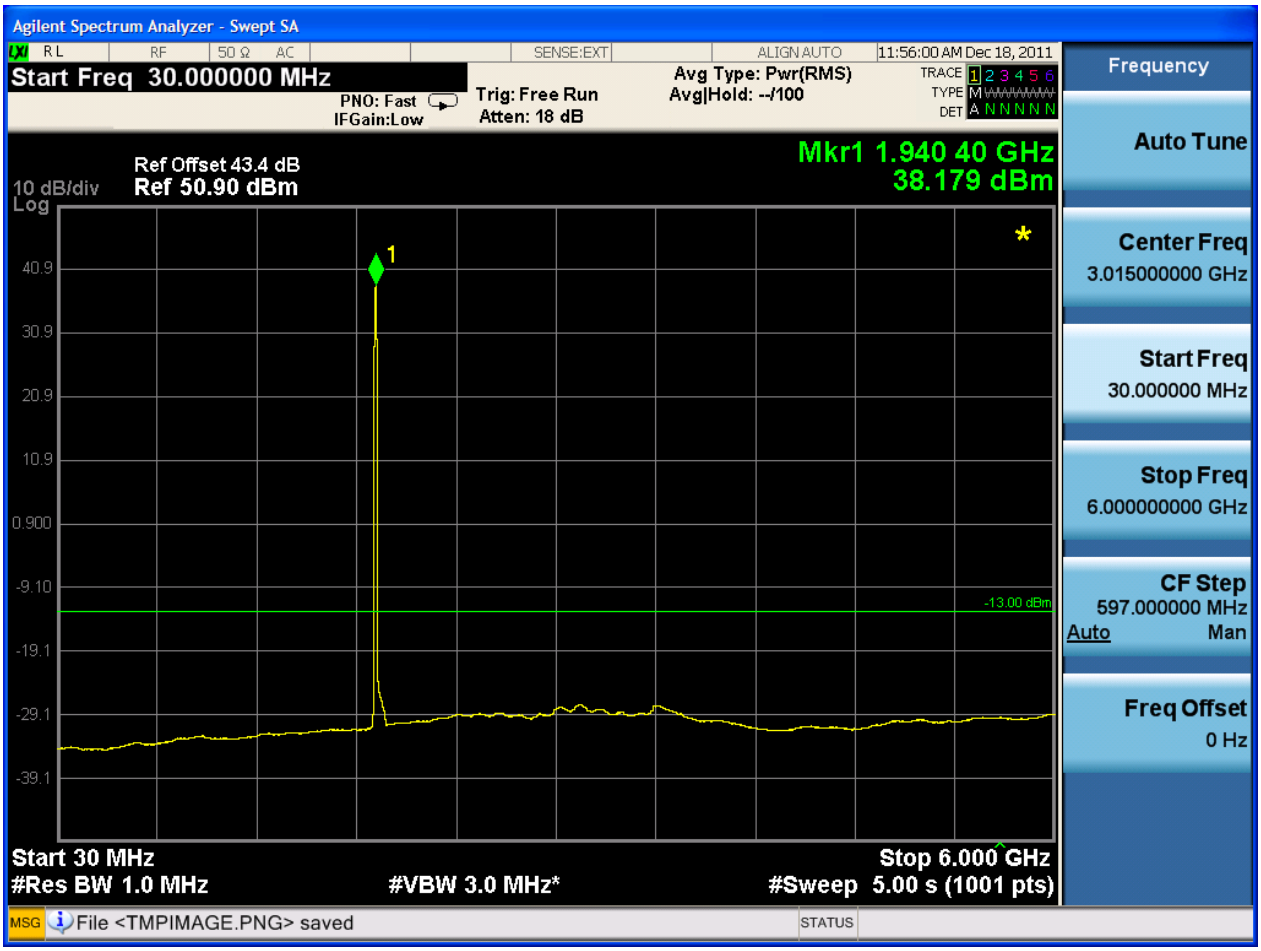


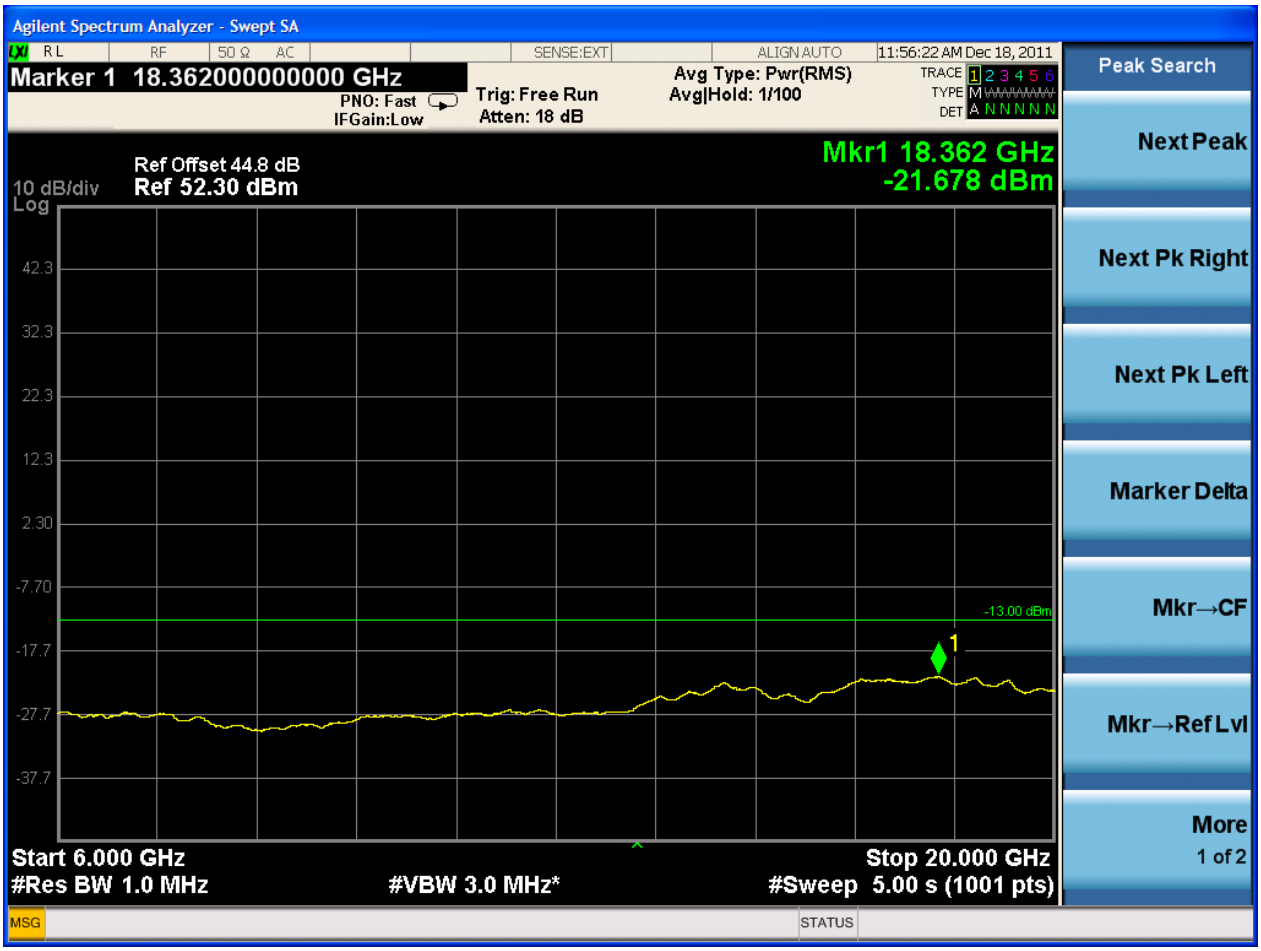


1.1.3.2 Carrier Conf. = 1*L15M(60W)

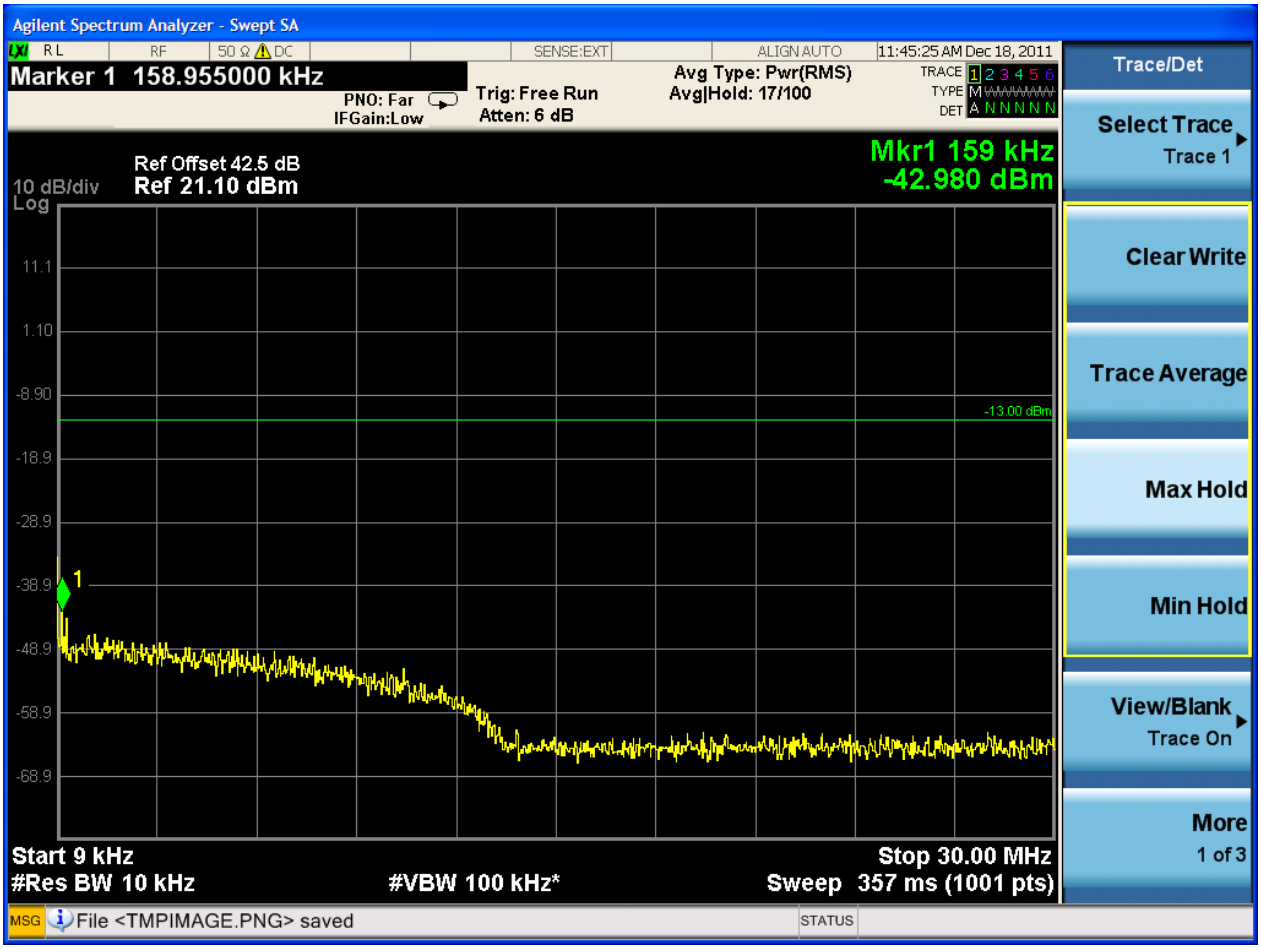
1.1.3.2.1 Ch. B

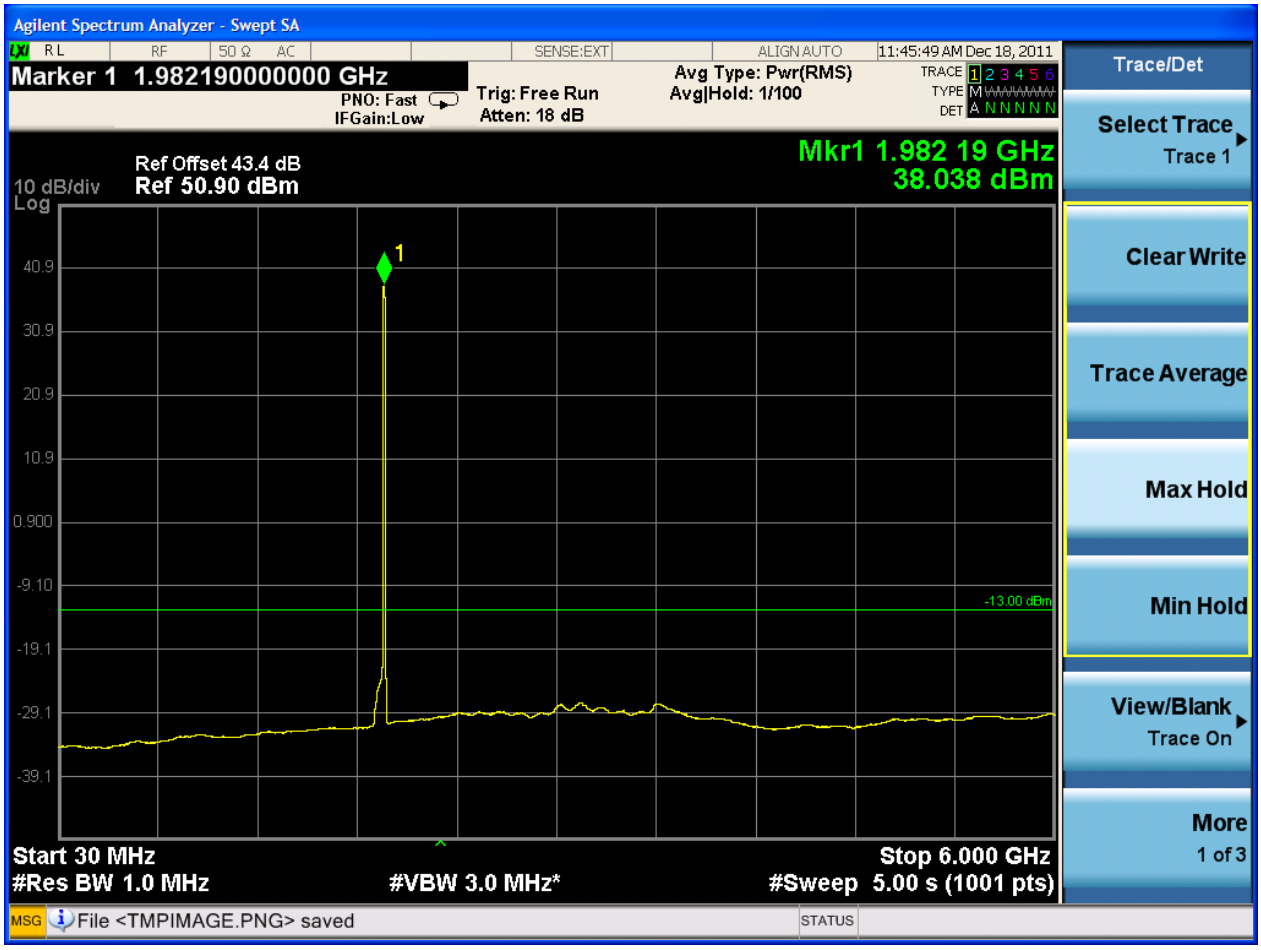


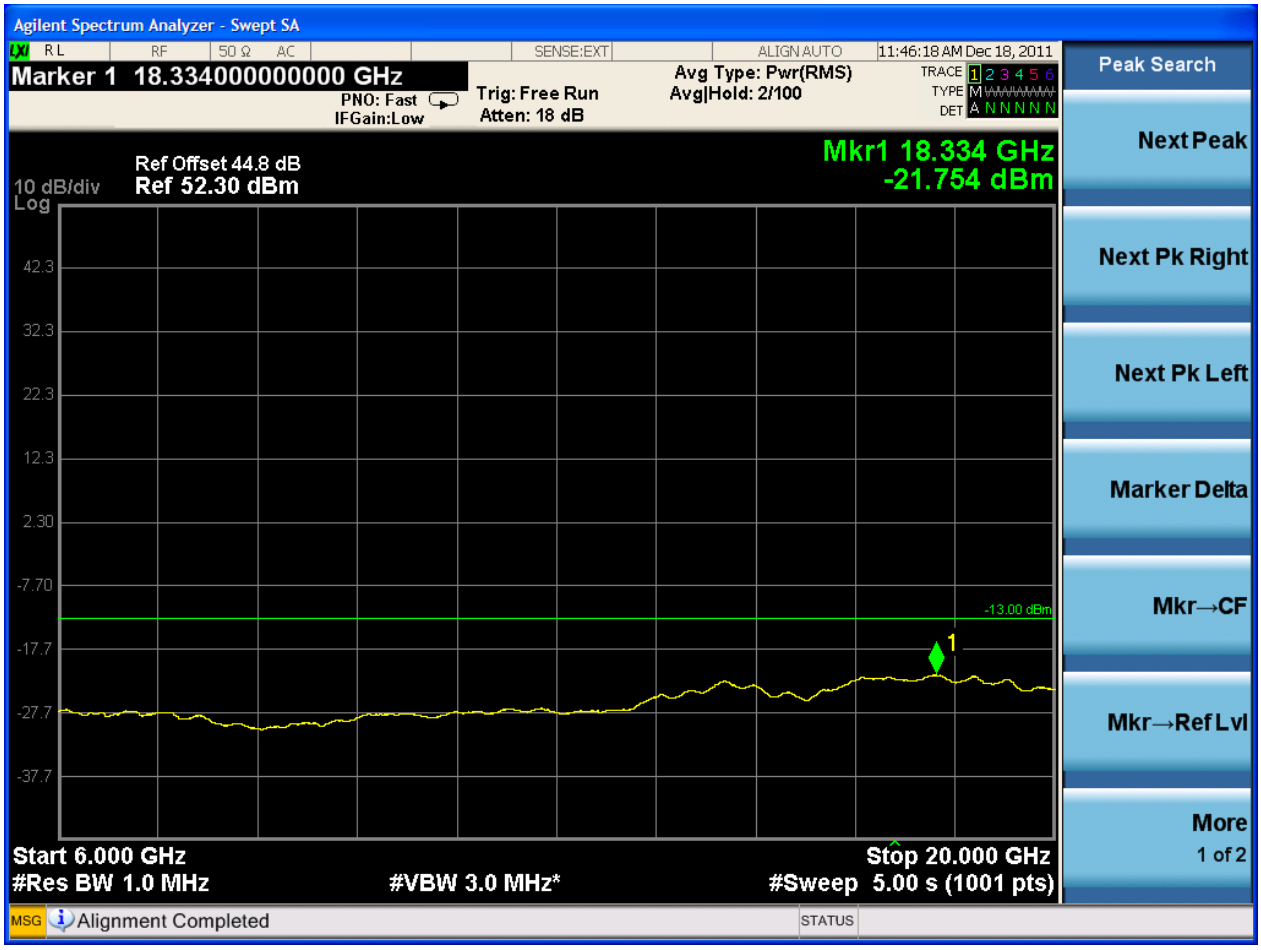




1.1.3.2.2 Ch. T

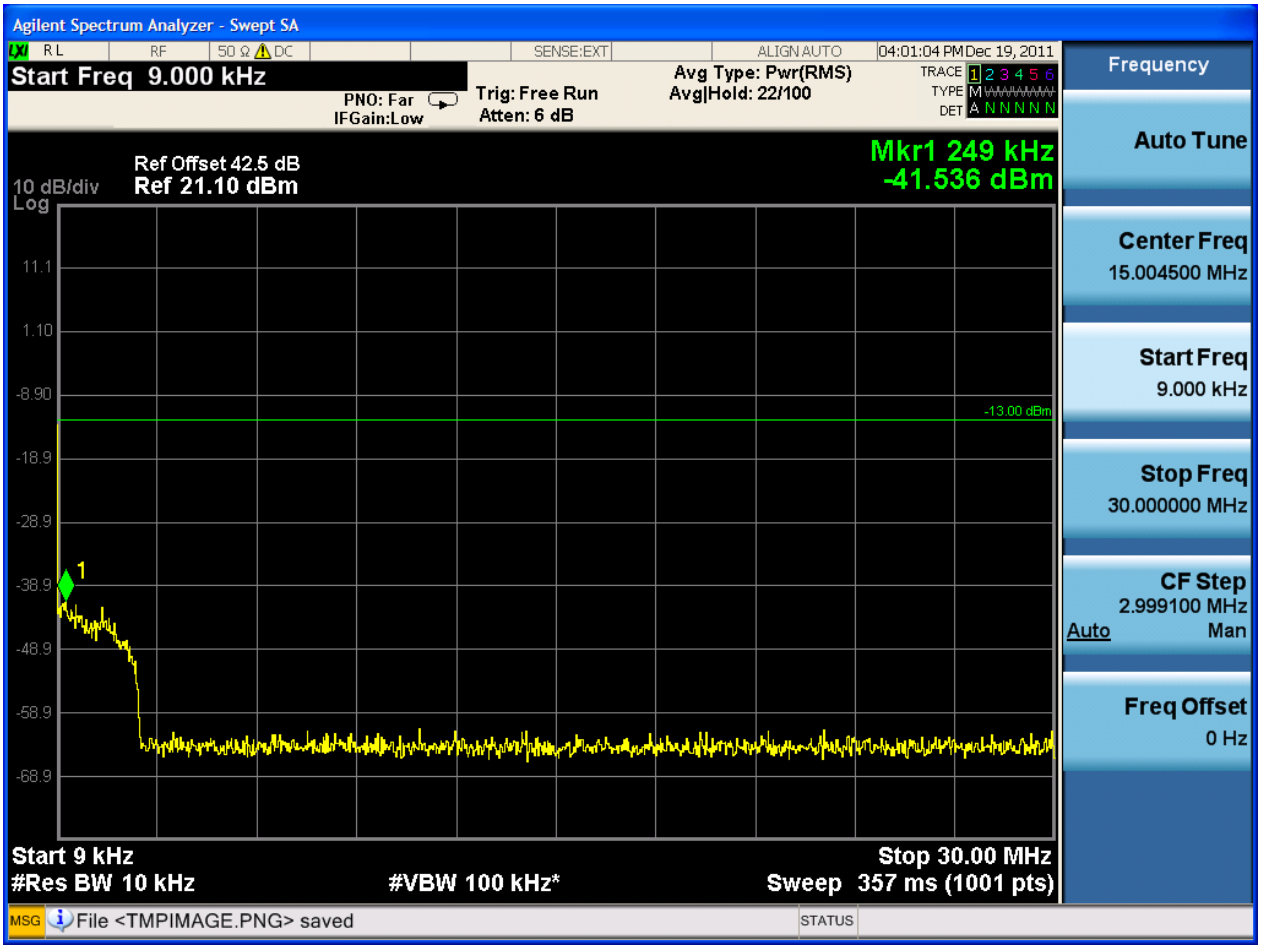


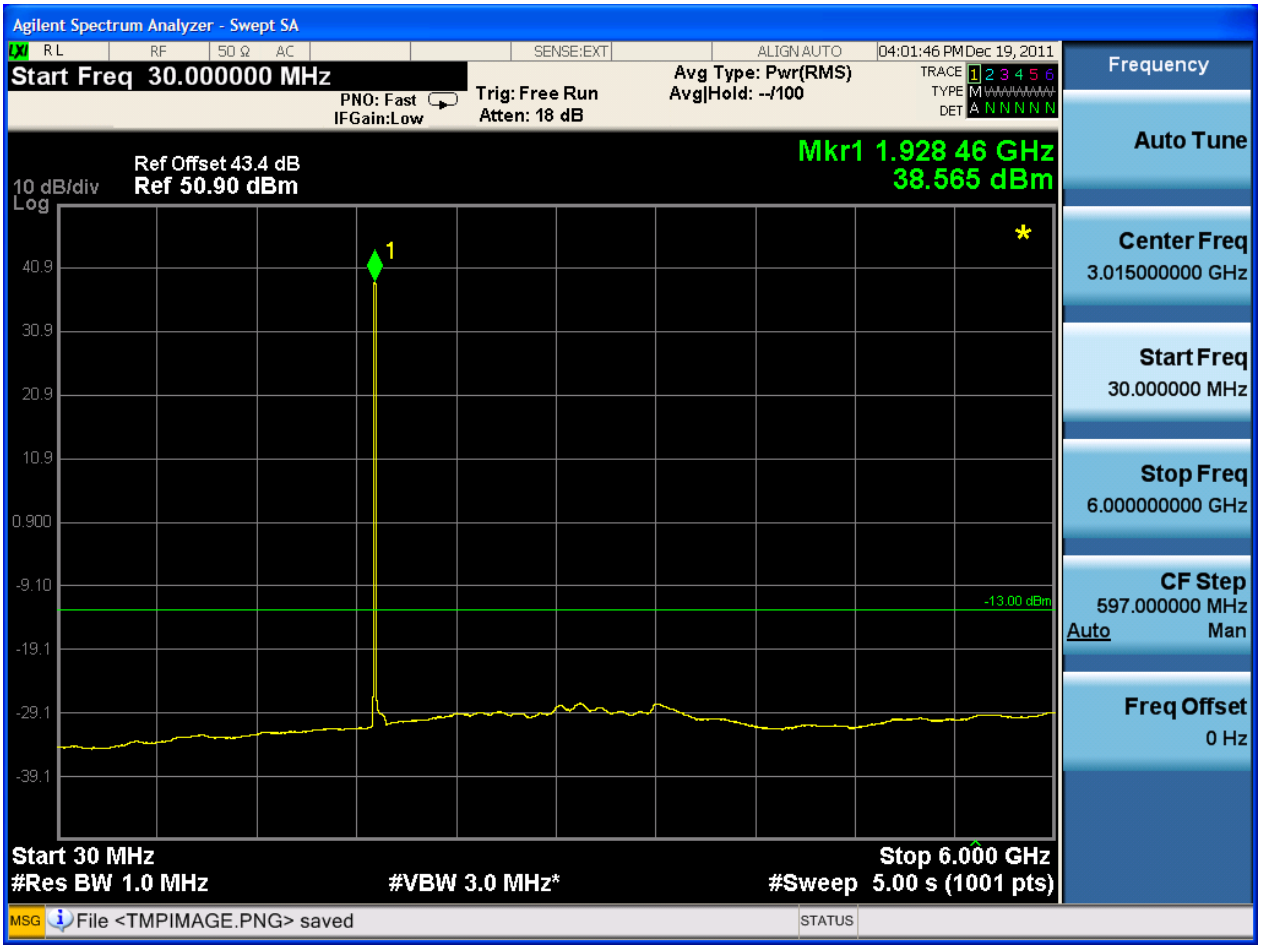


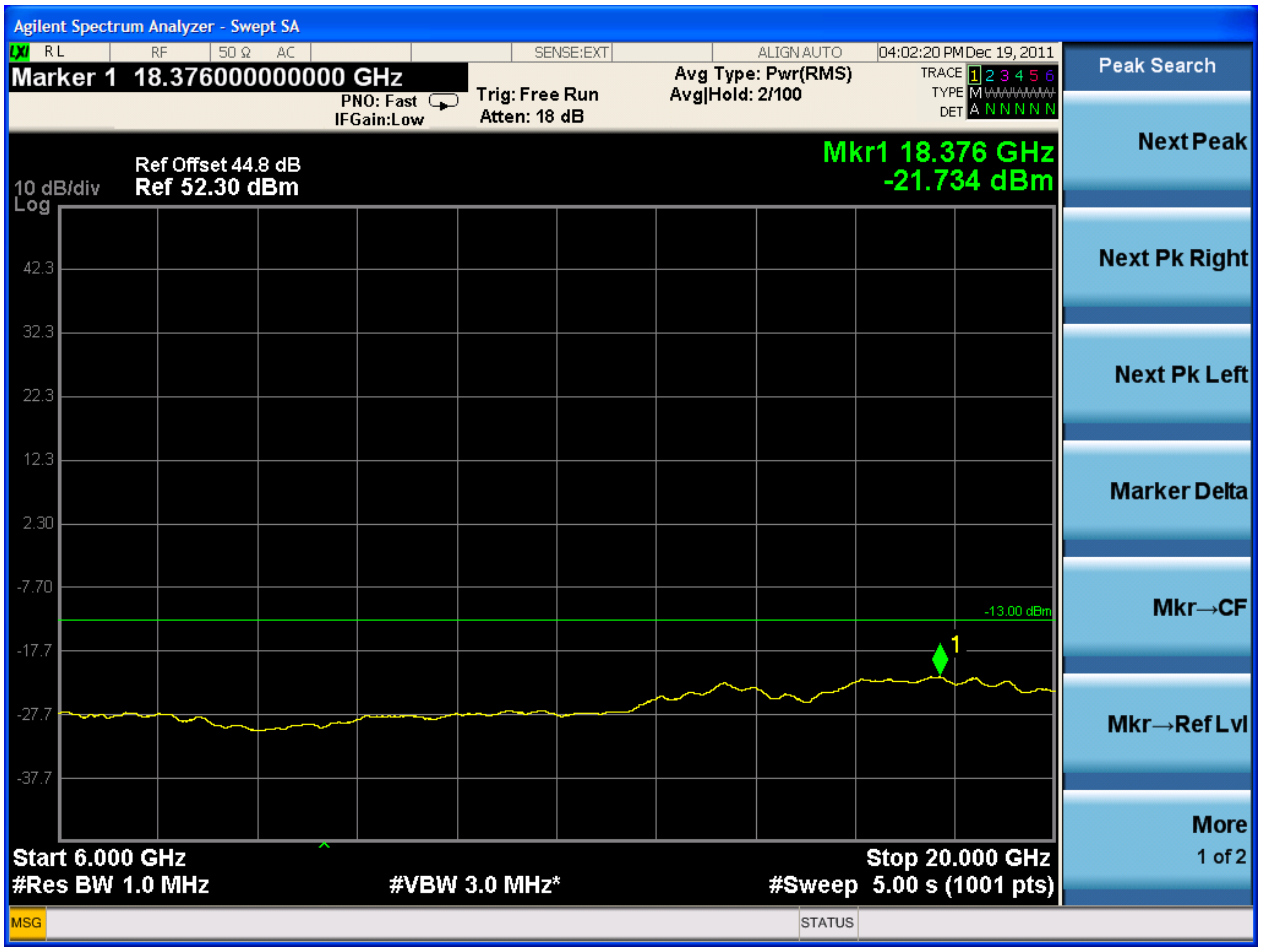


1.1.3.3 Carrier Conf. = 2*L1.4M(30W)

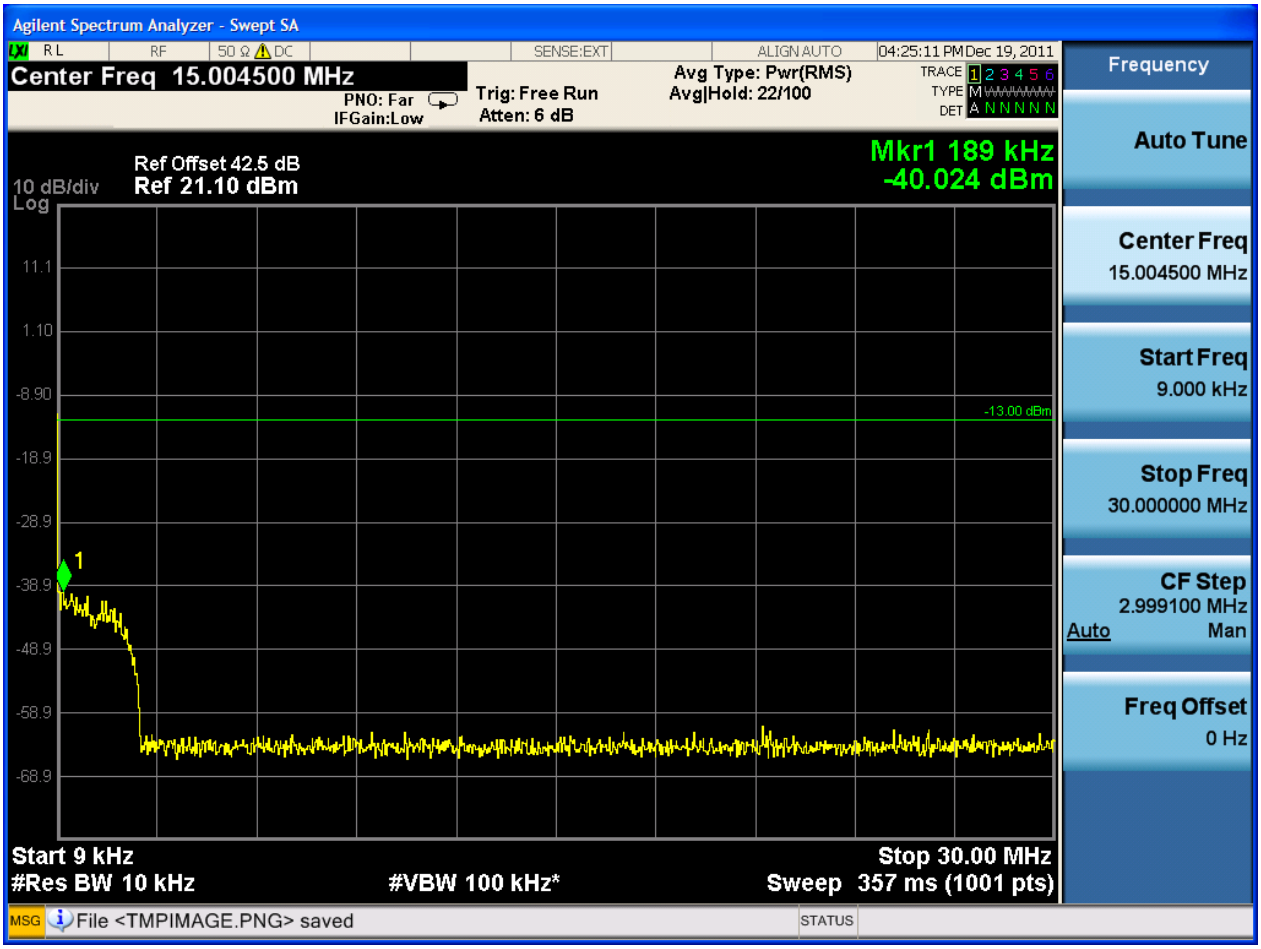
1.1.3.3.1 Ch. B

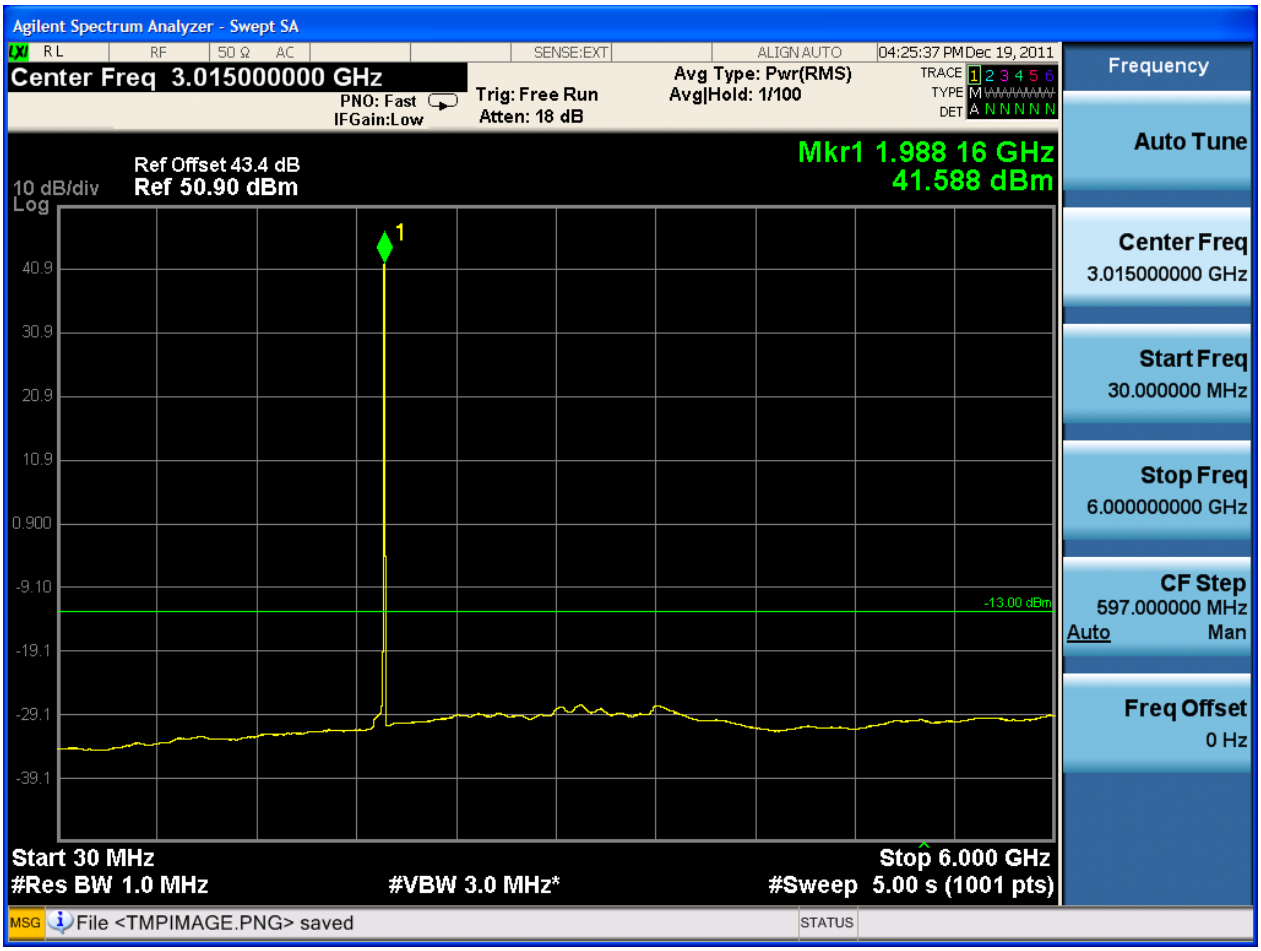


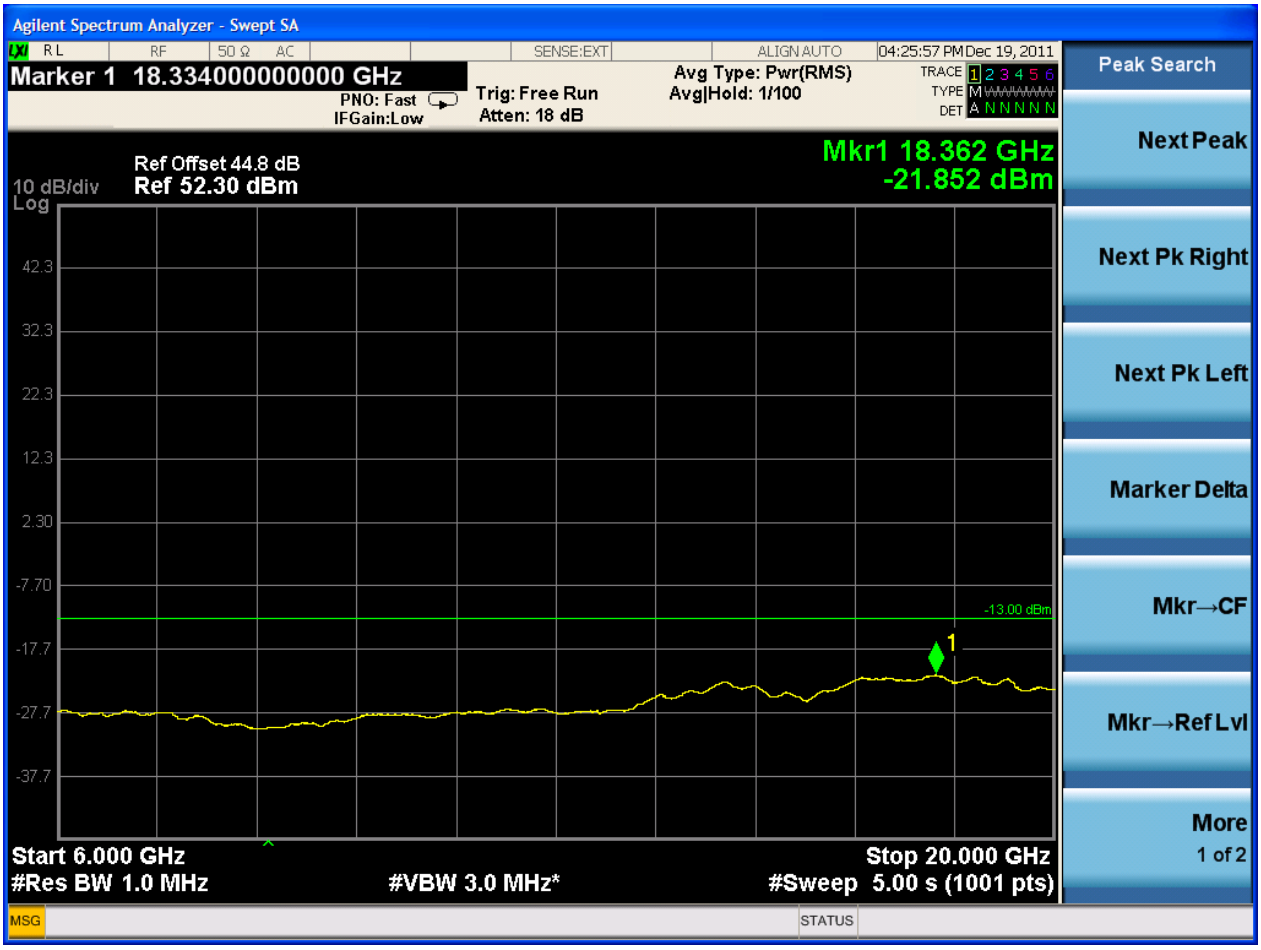




1.1.3.3.2 Ch. T

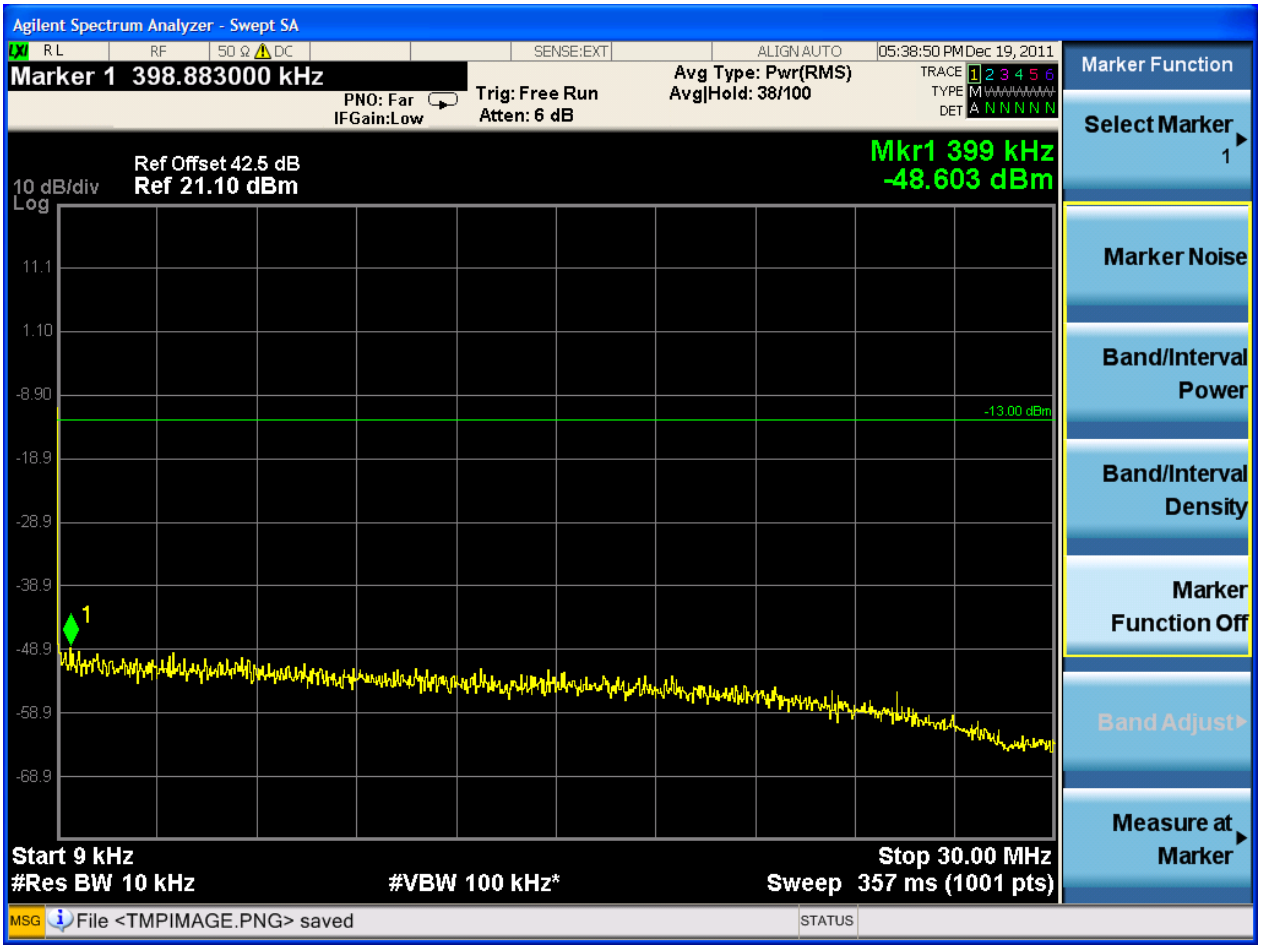


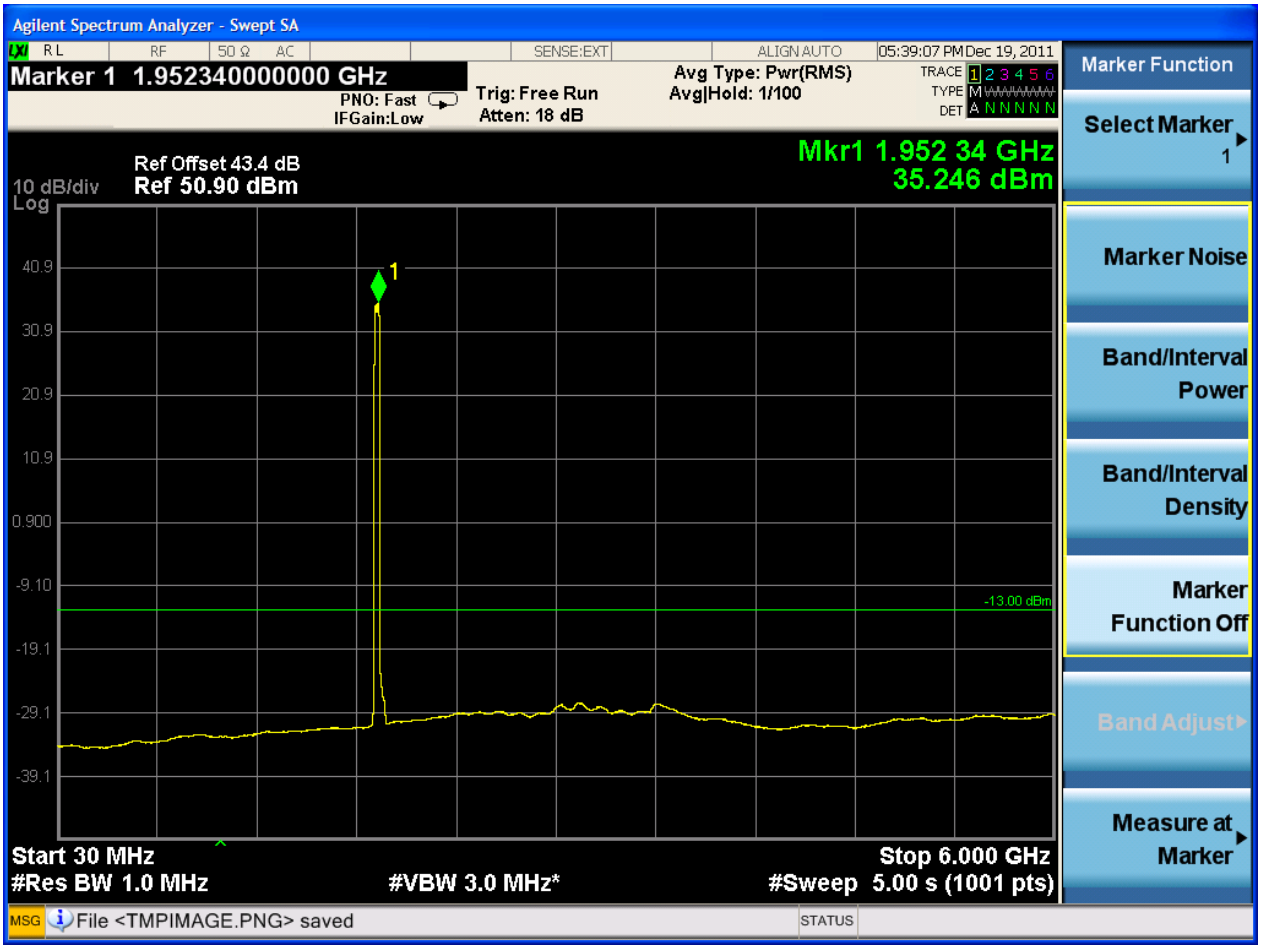


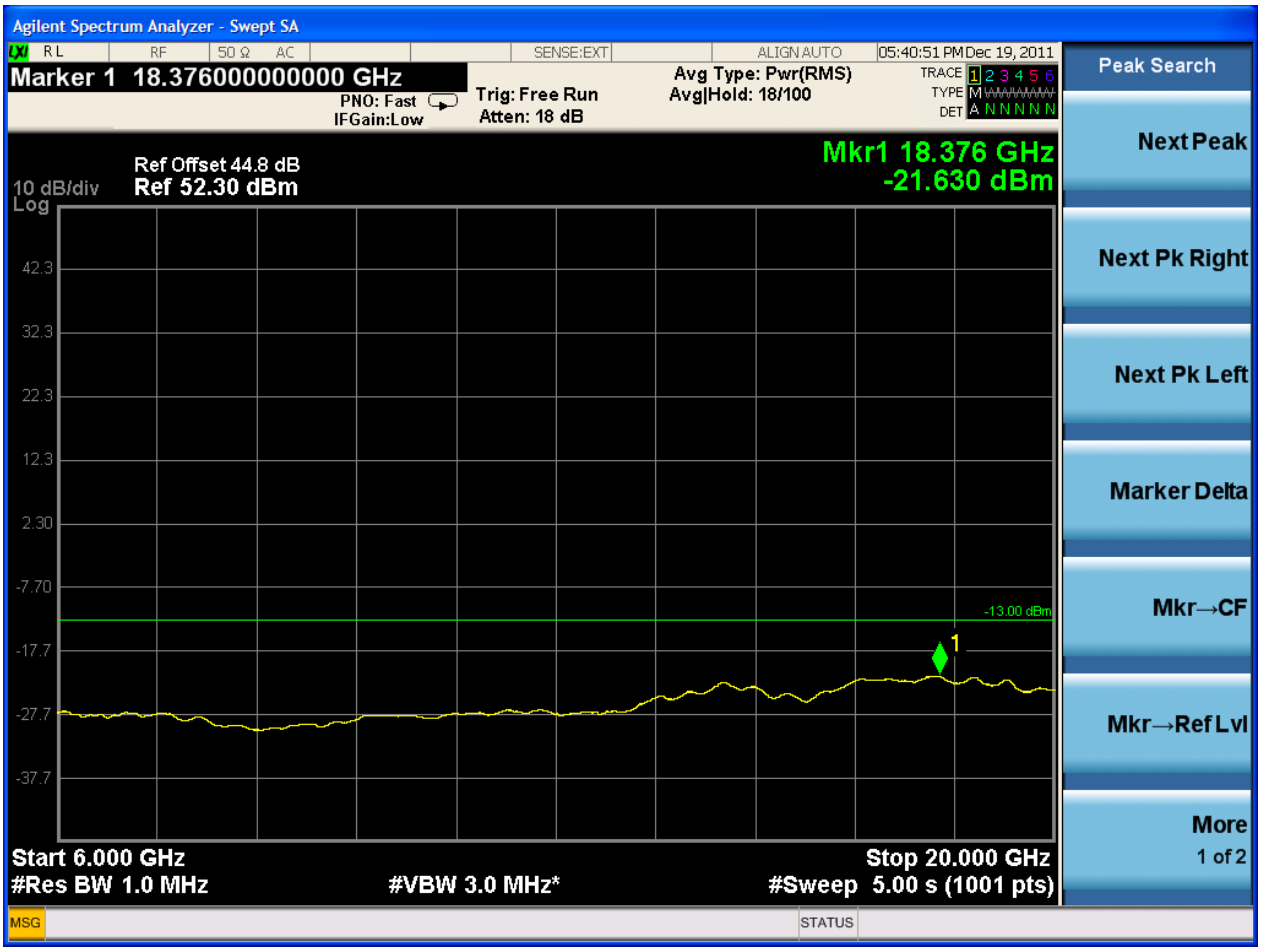


1.1.3.4 Carrier Conf. = 2*L15M(30W)

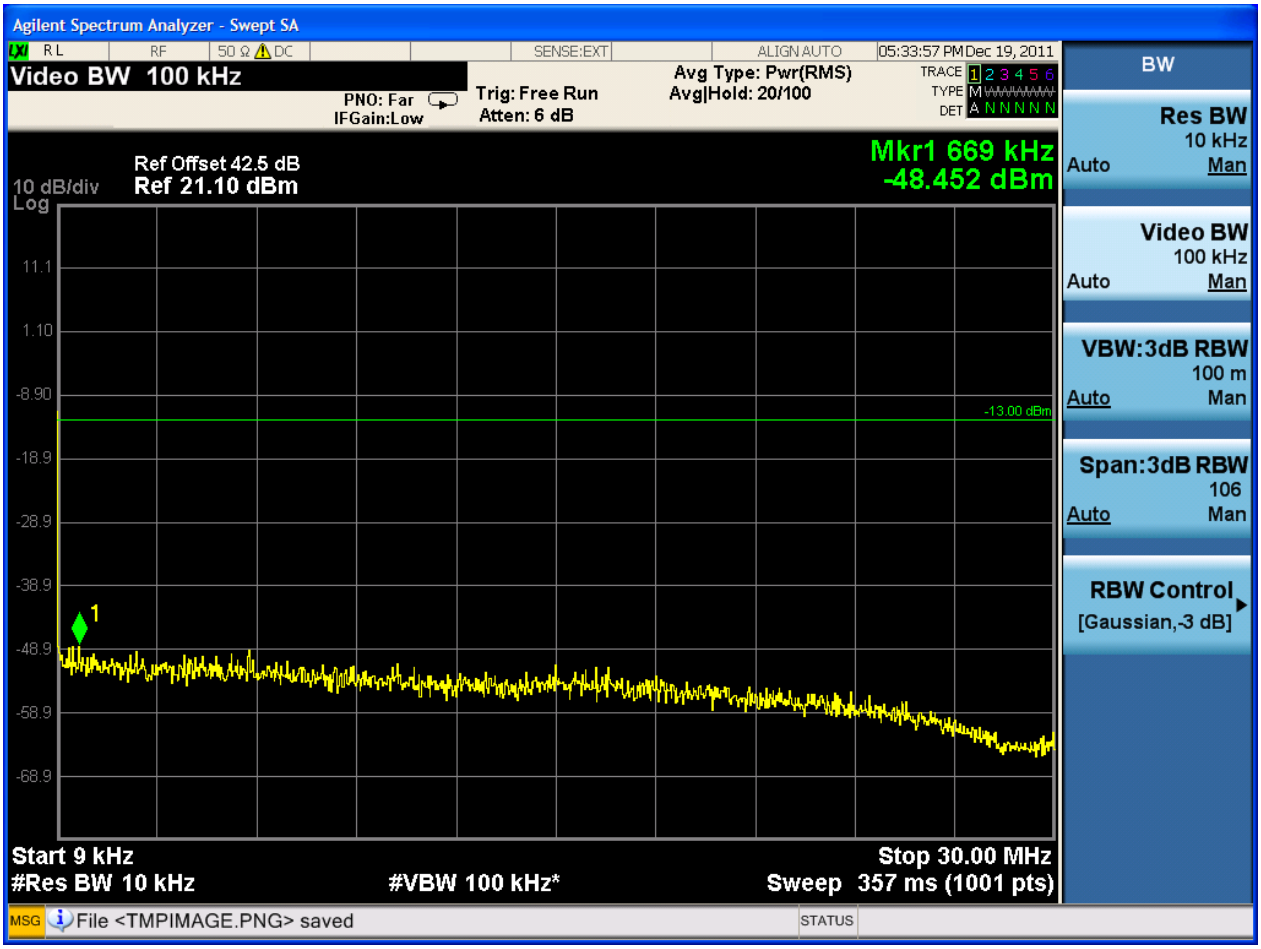
1.1.3.4.1 Ch. B

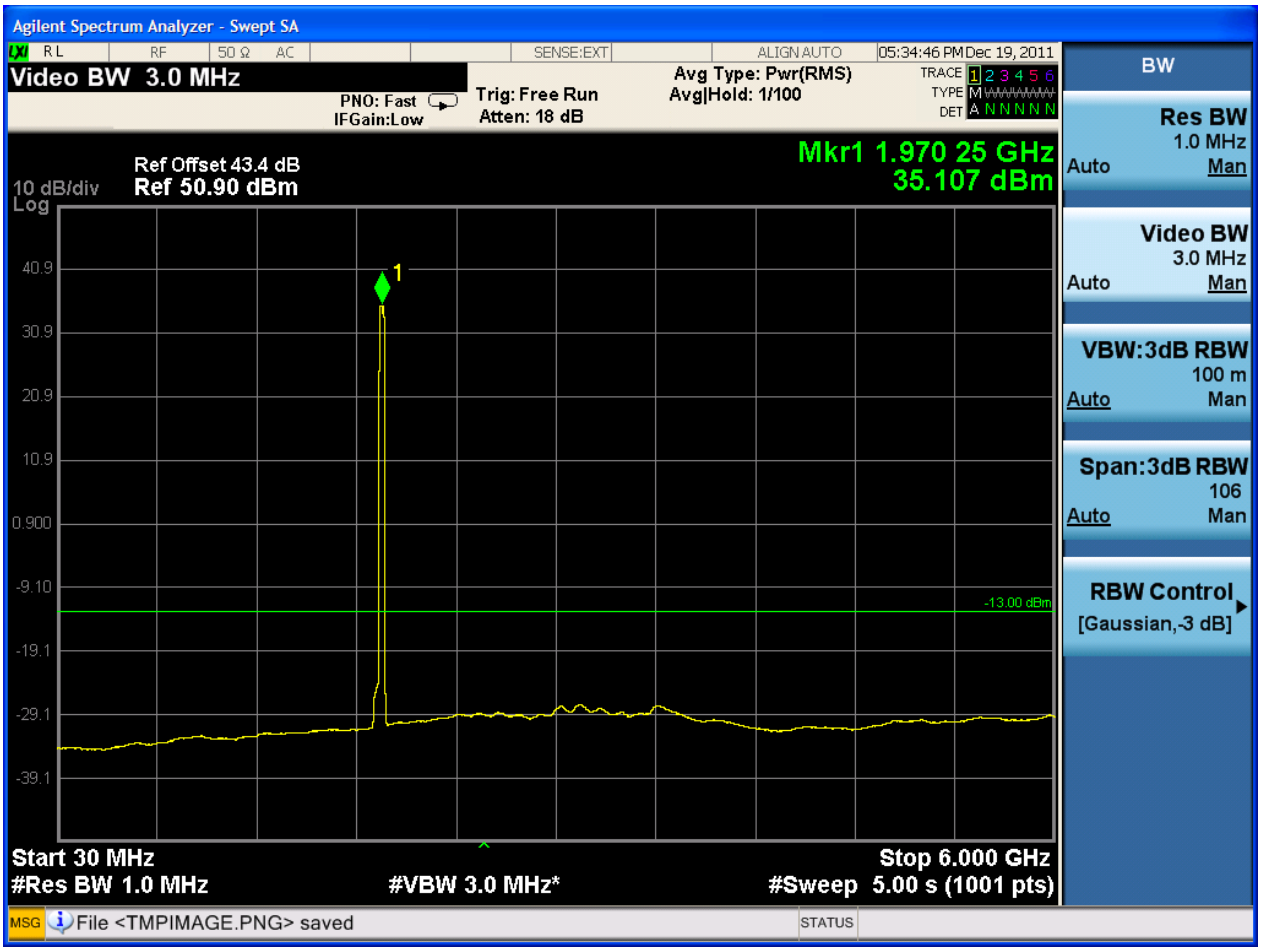


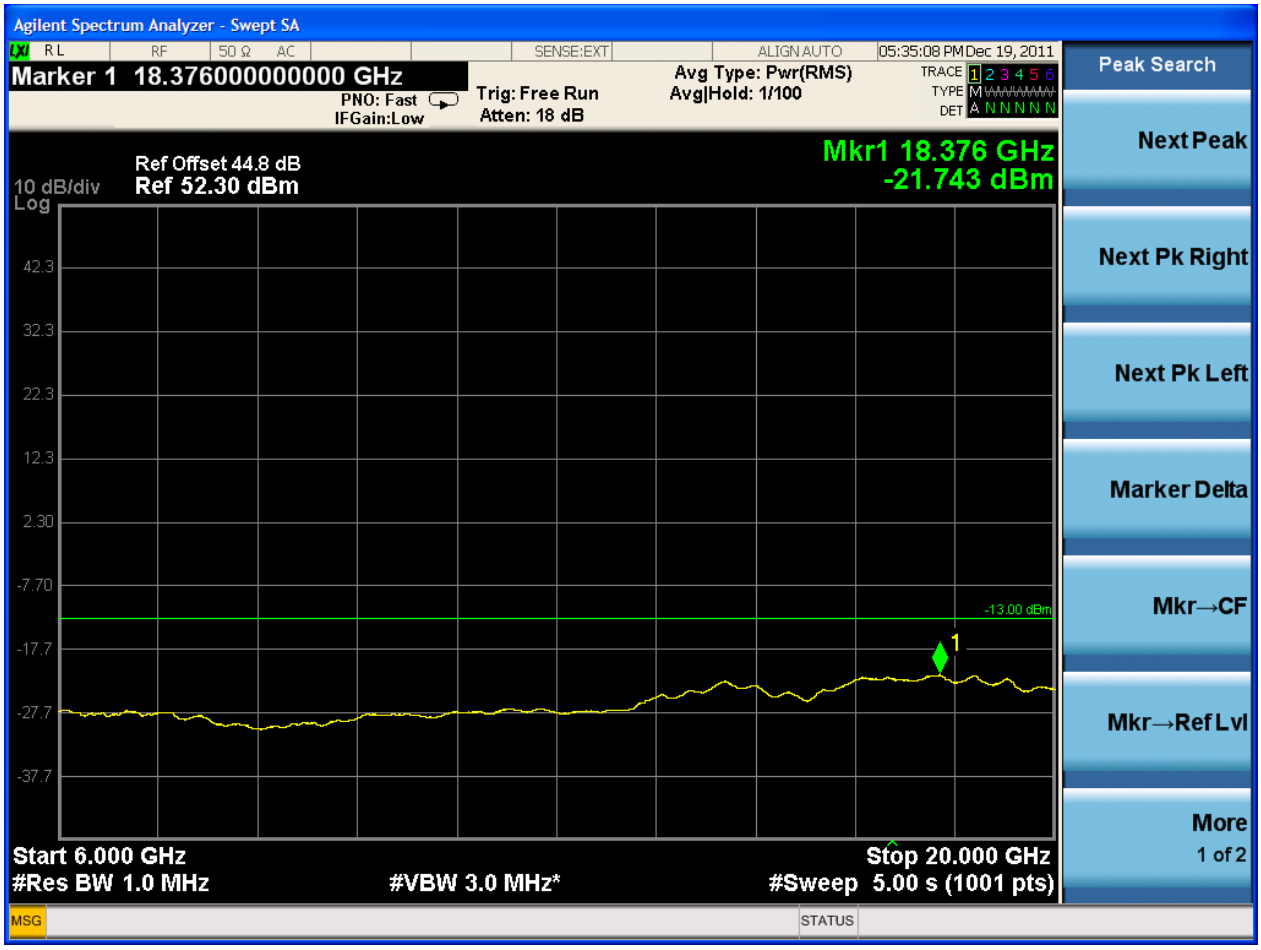




1.1.3.4.2 Ch. T



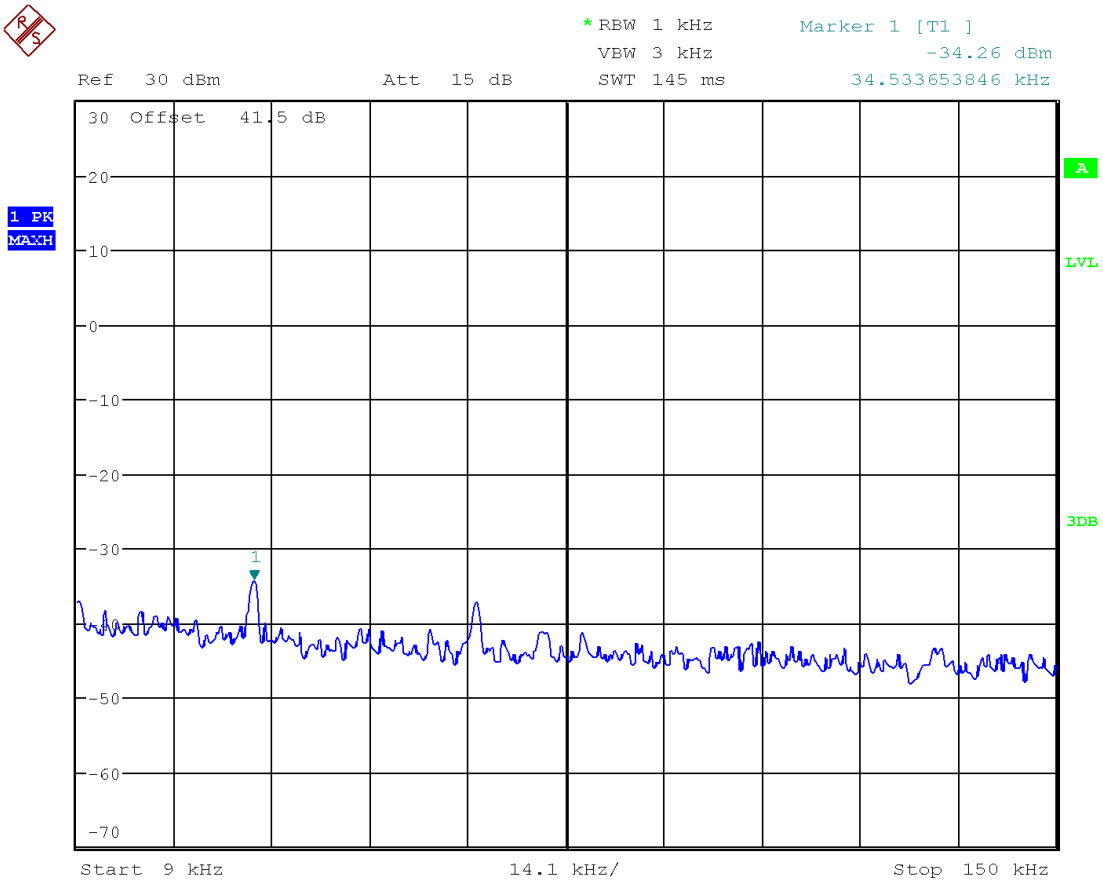


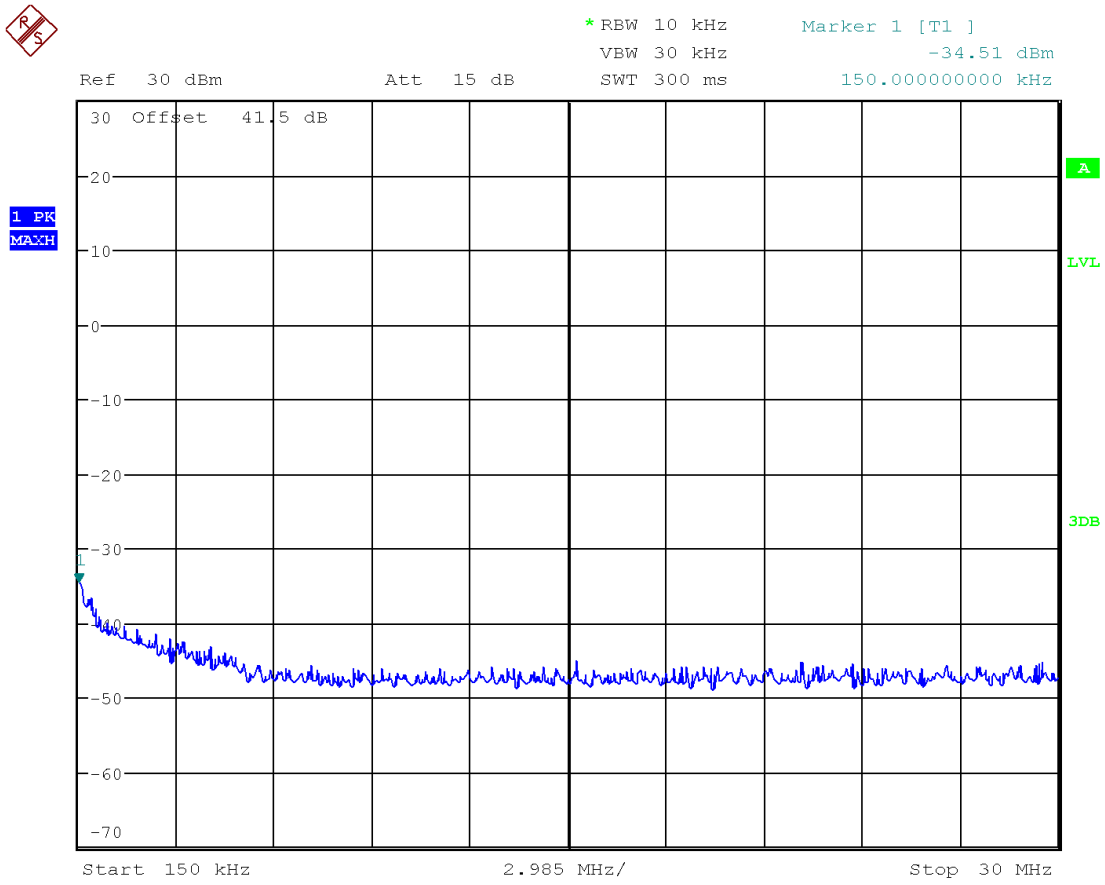


1.1.4 MSR_TM1

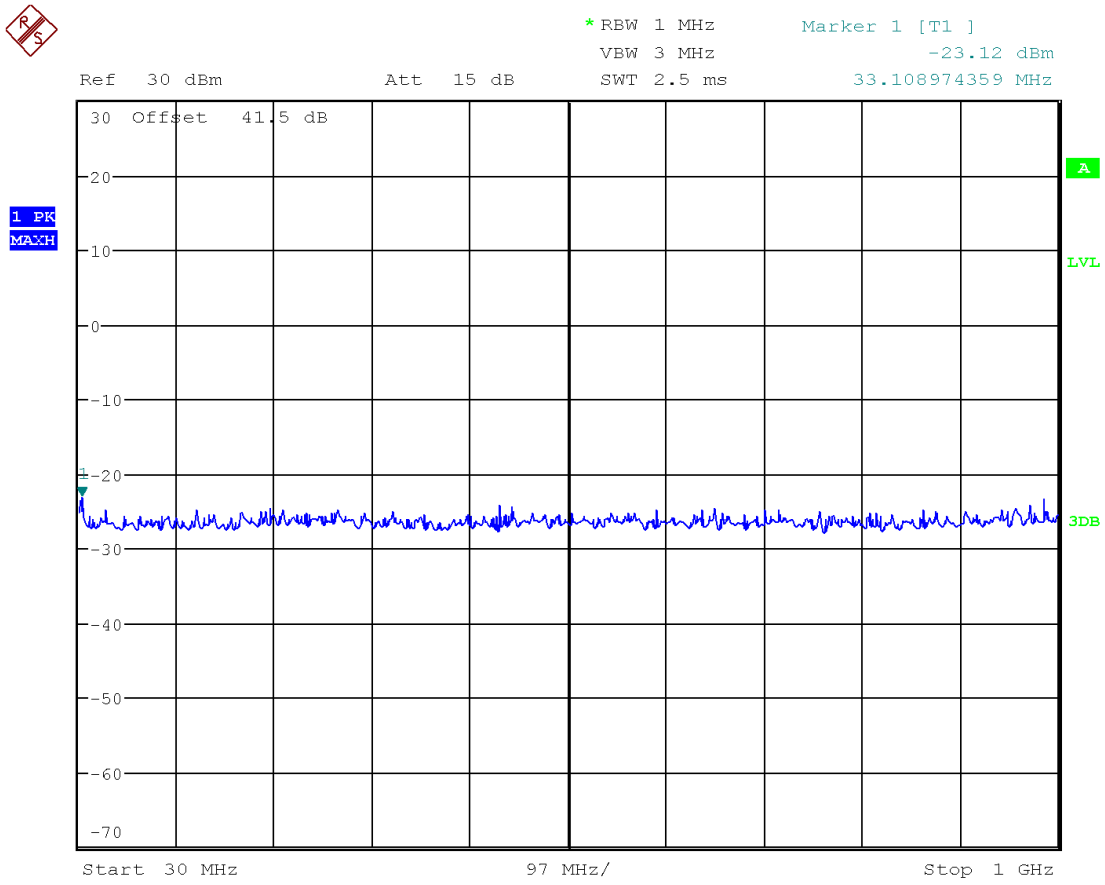
1.1.4.1 Carrier Conf. = 1*G(40W) & 1*U(20W)

1.1.4.1.1 Ch. B

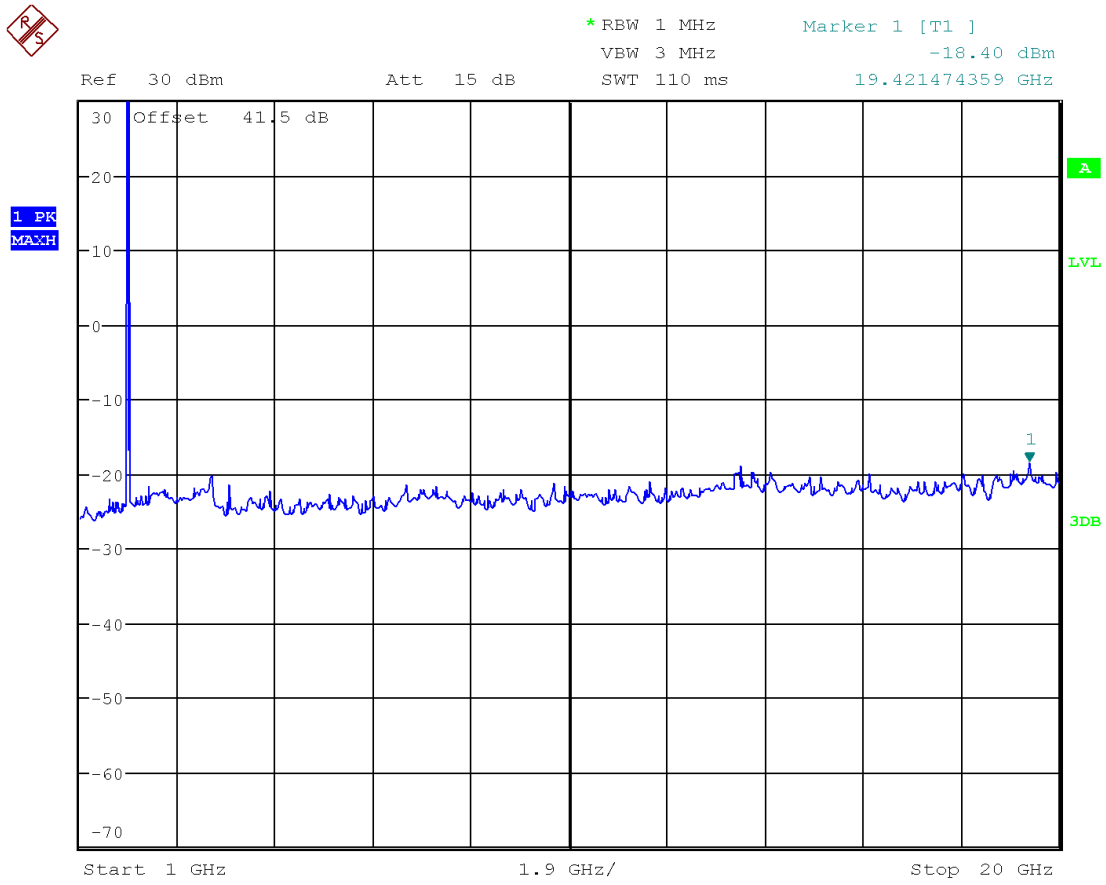




Date: 26.DEC.2011 19:38:10

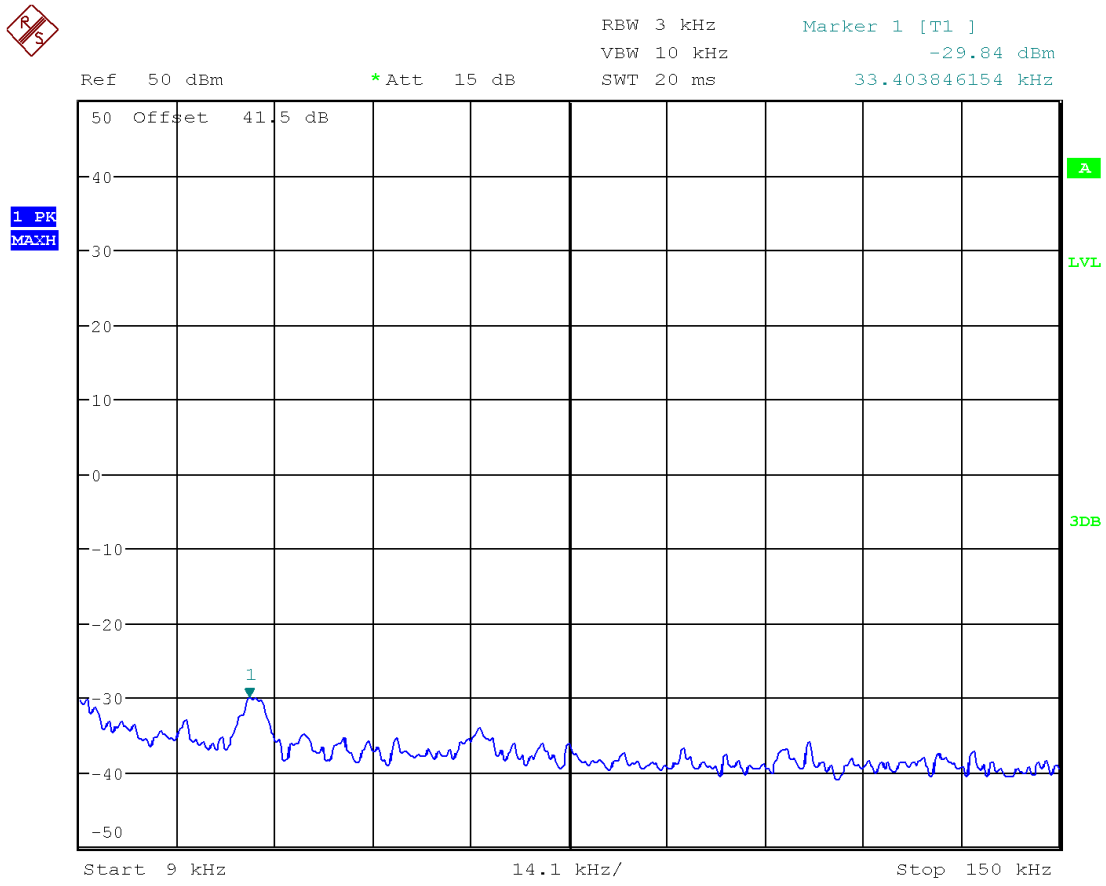


Date: 26.DEC.2011 19:41:09

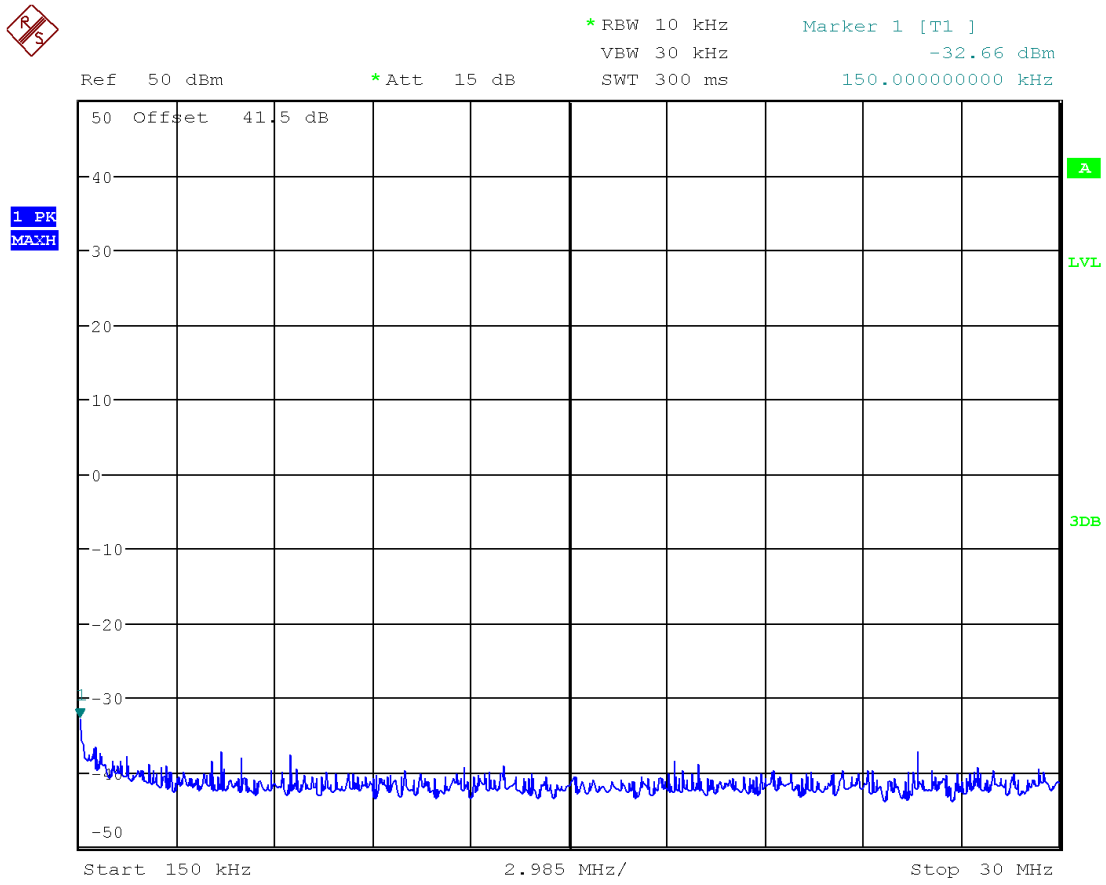


Date: 26.DEC.2011 19:42:21

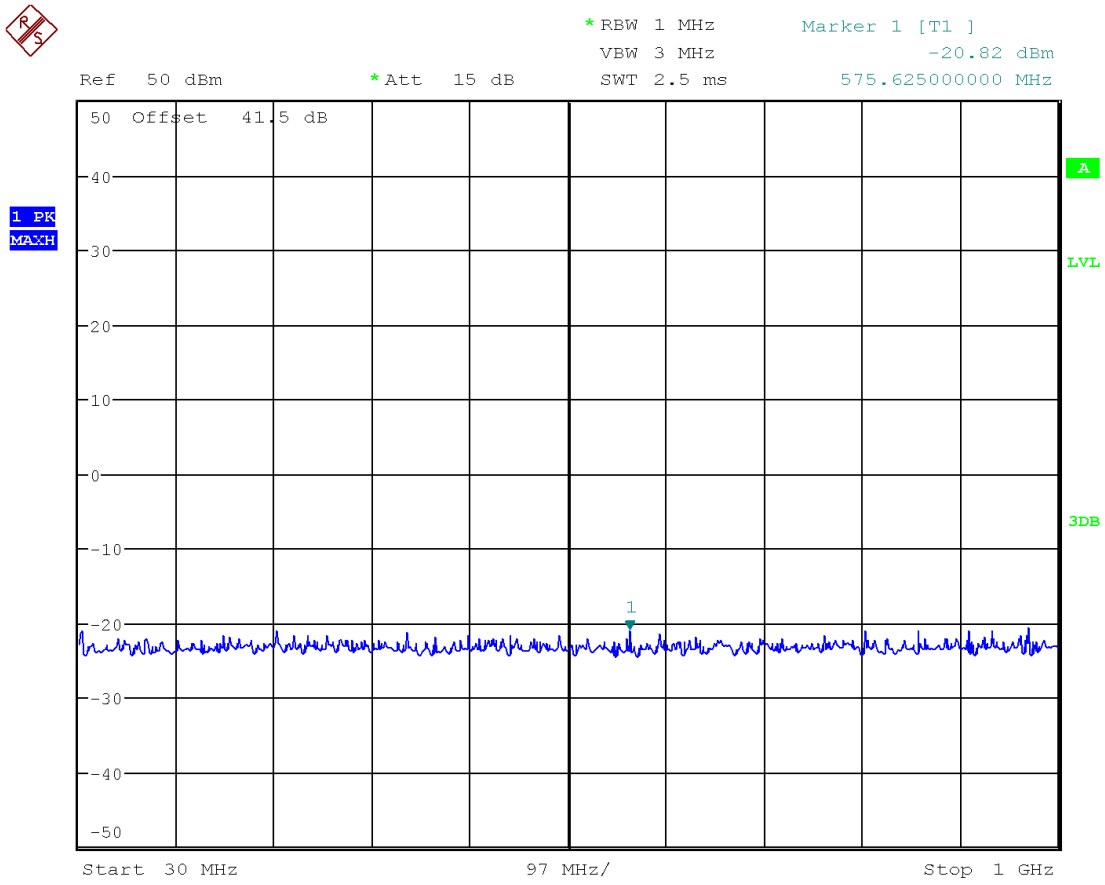
1.1.4.1.2 Ch. T



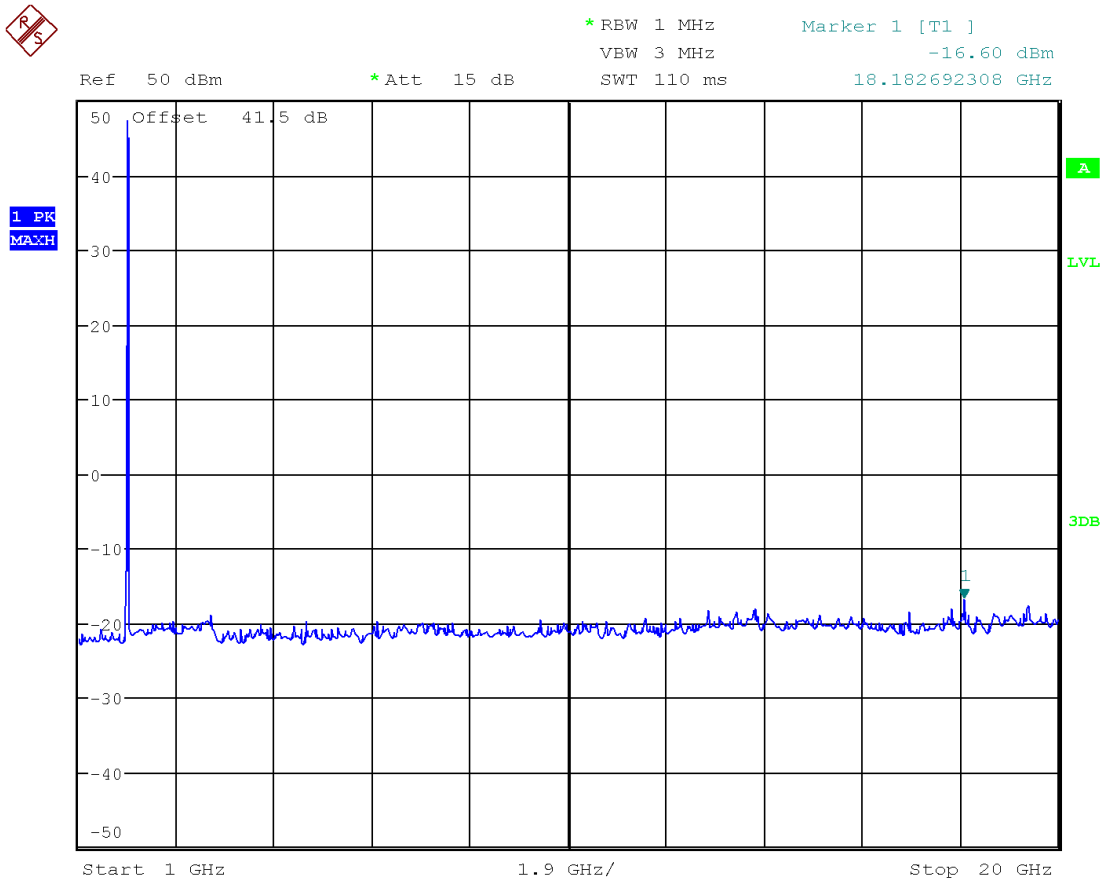
Date: 26.DEC.2011 20:29:55



Date: 26.DEC.2011 20:30:47



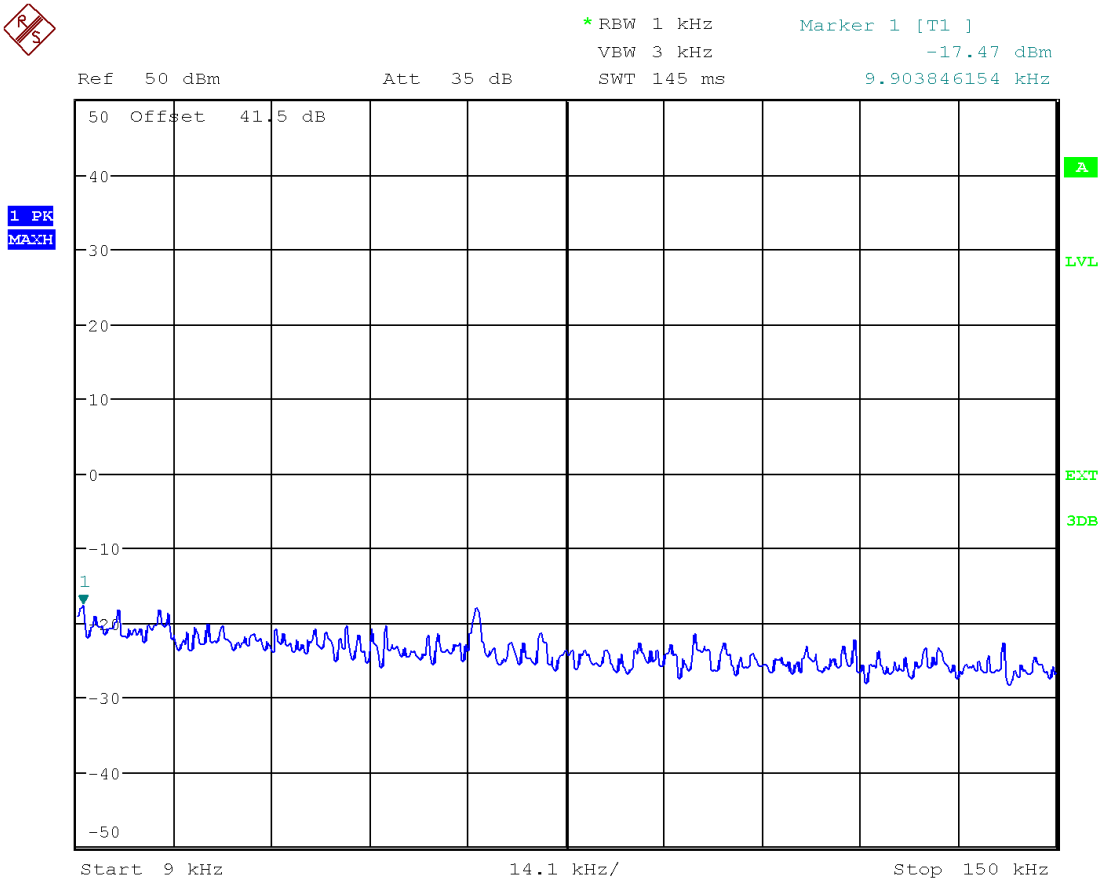
Date: 26.DEC.2011 20:31:50



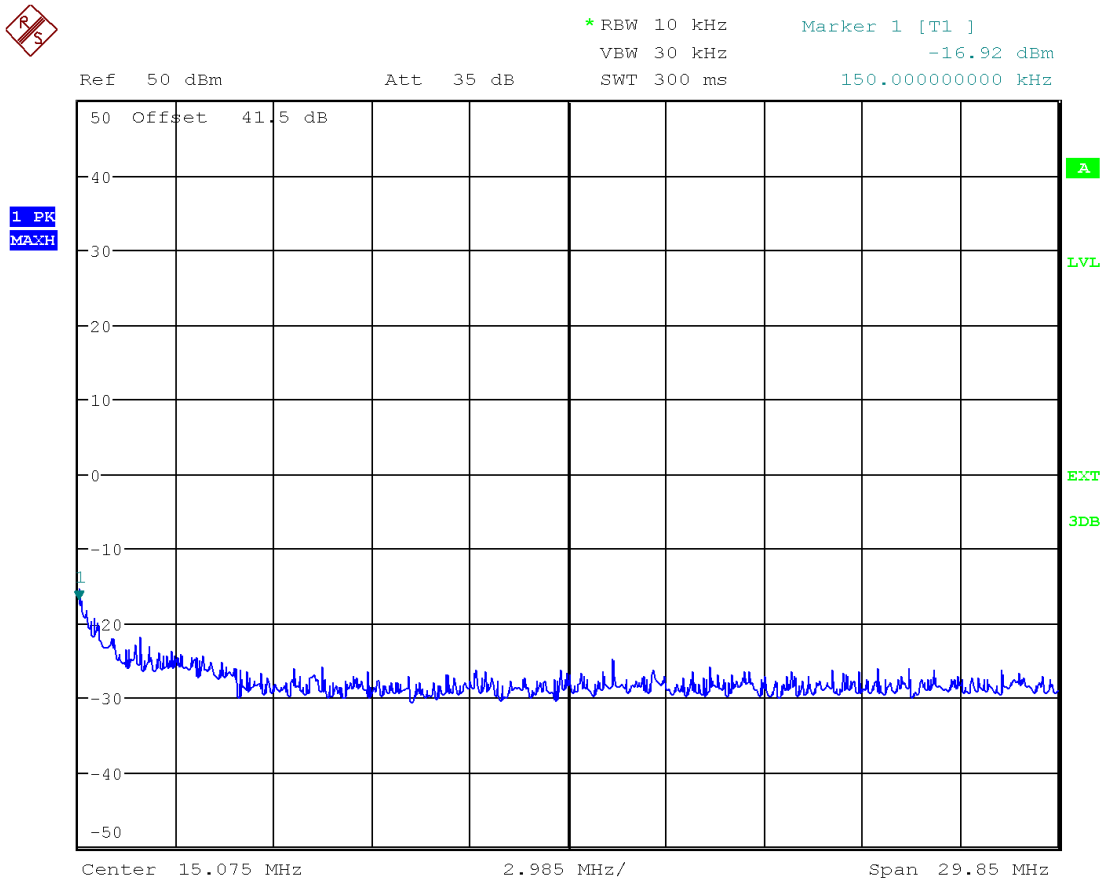
Date: 26.DEC.2011 20:32:56

1.1.4.2 Carrier Conf. = 3*G(15W) & 1*U(15W)

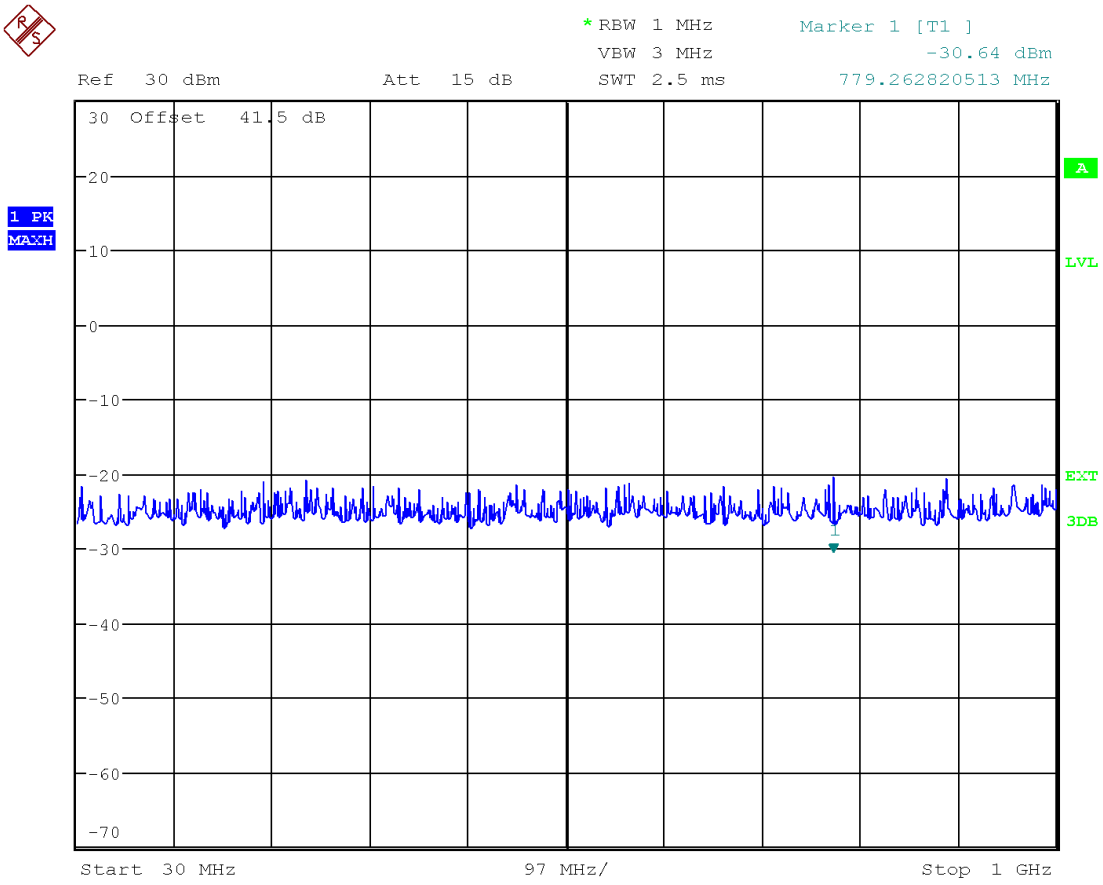
1.1.4.2.1 Ch. B



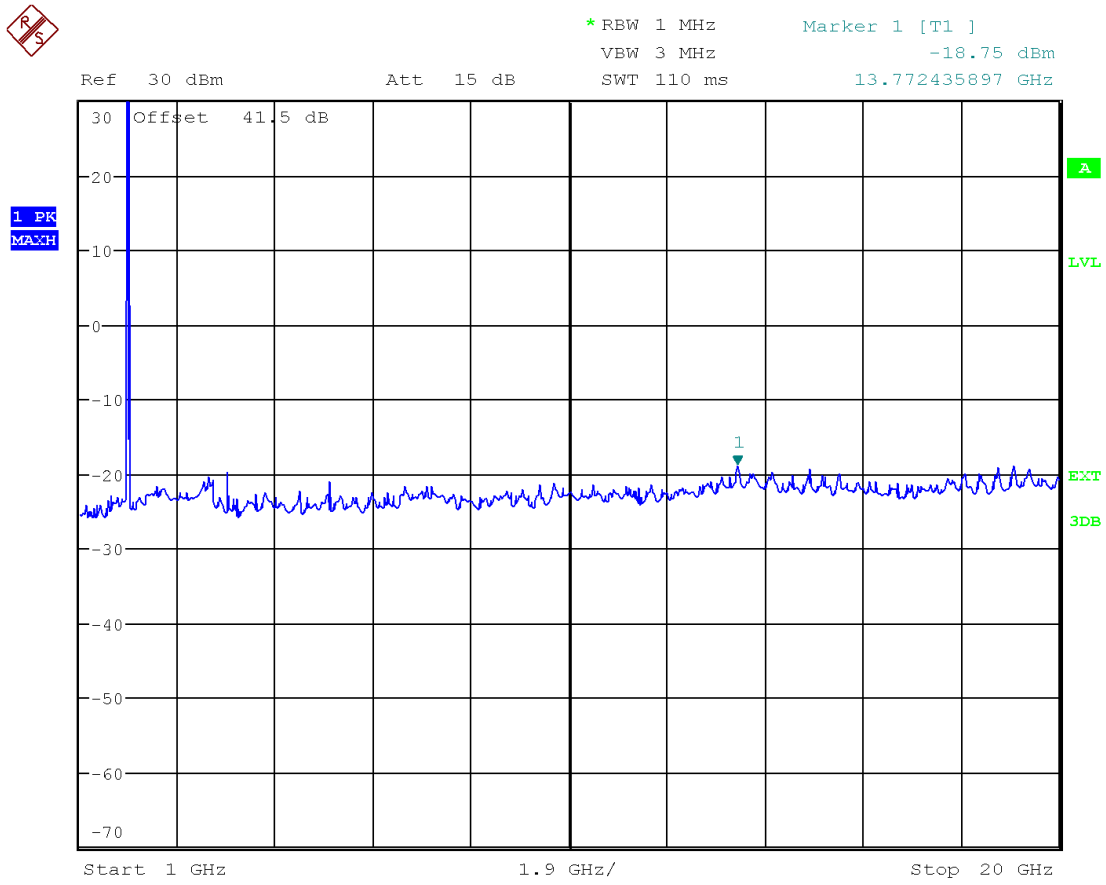
Date: 27.DEC.2011 15:31:17



Date: 27.DEC.2011 15:32:00

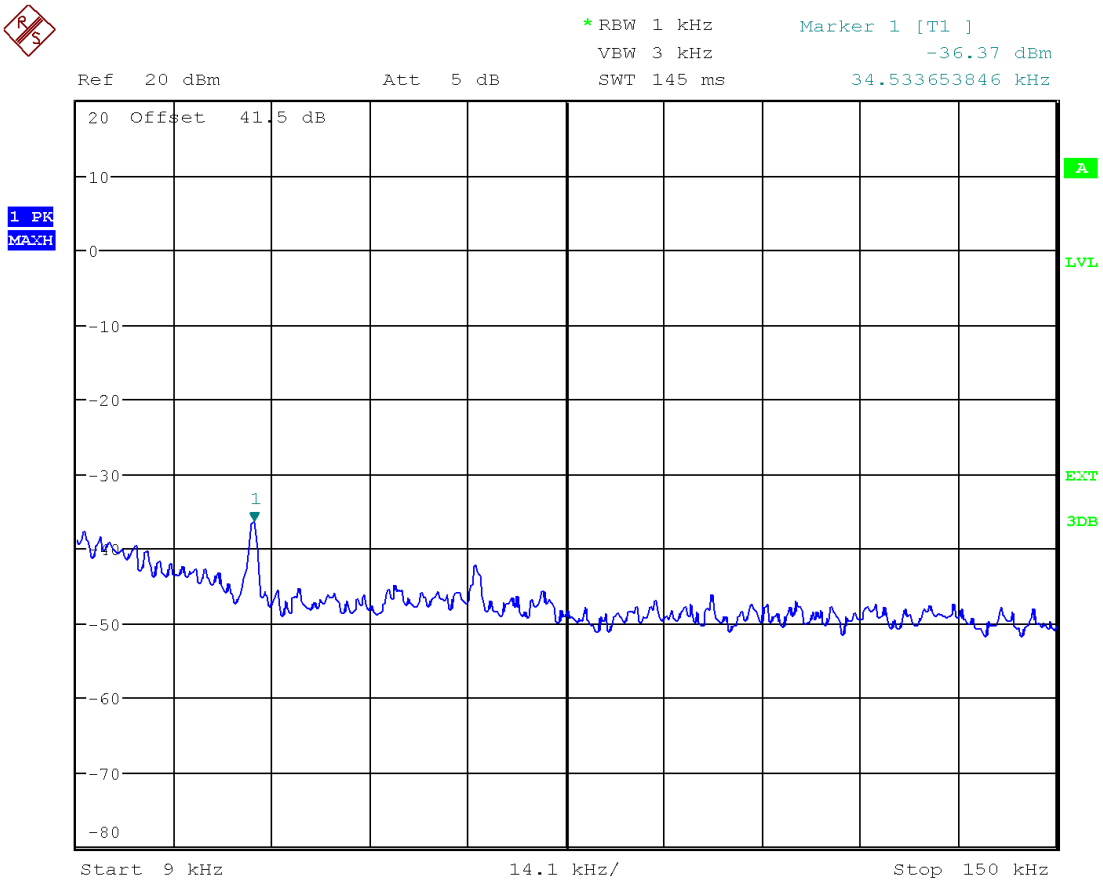


Date: 27.DEC.2011 15:33:36

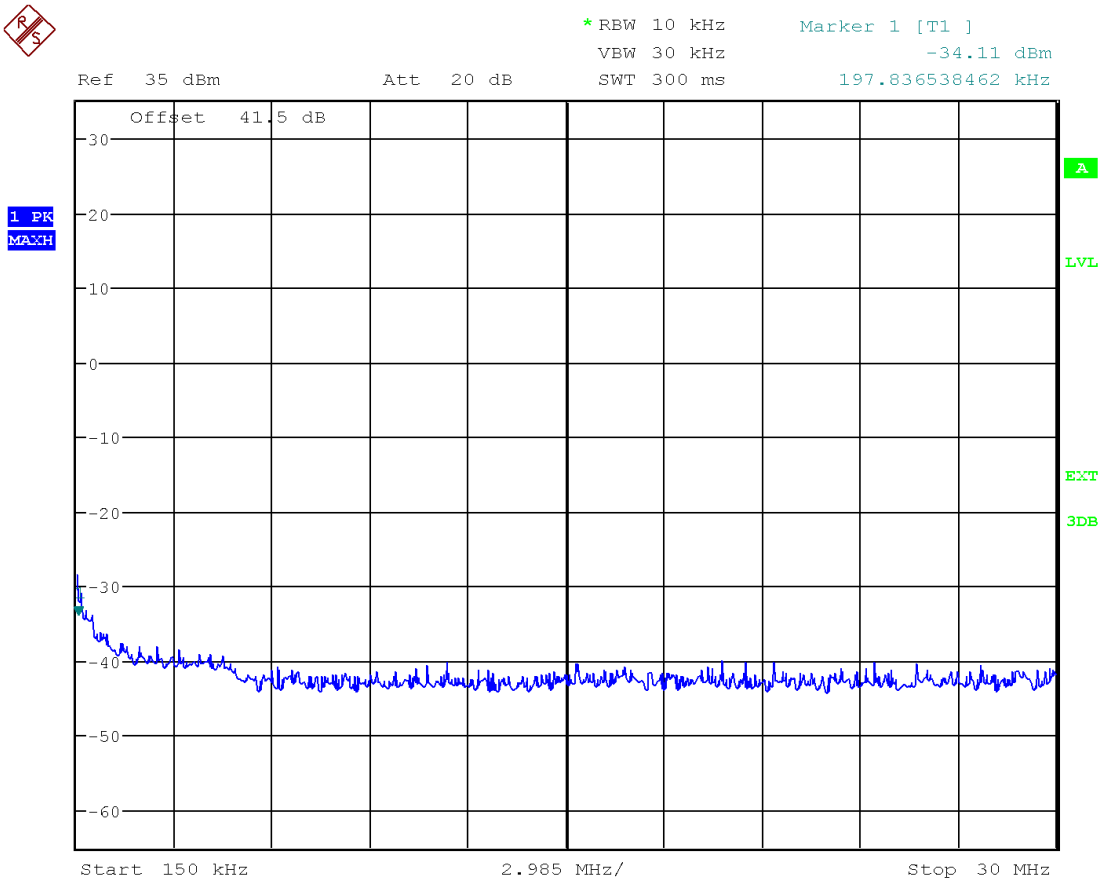


Date: 27.DEC.2011 15:34:29

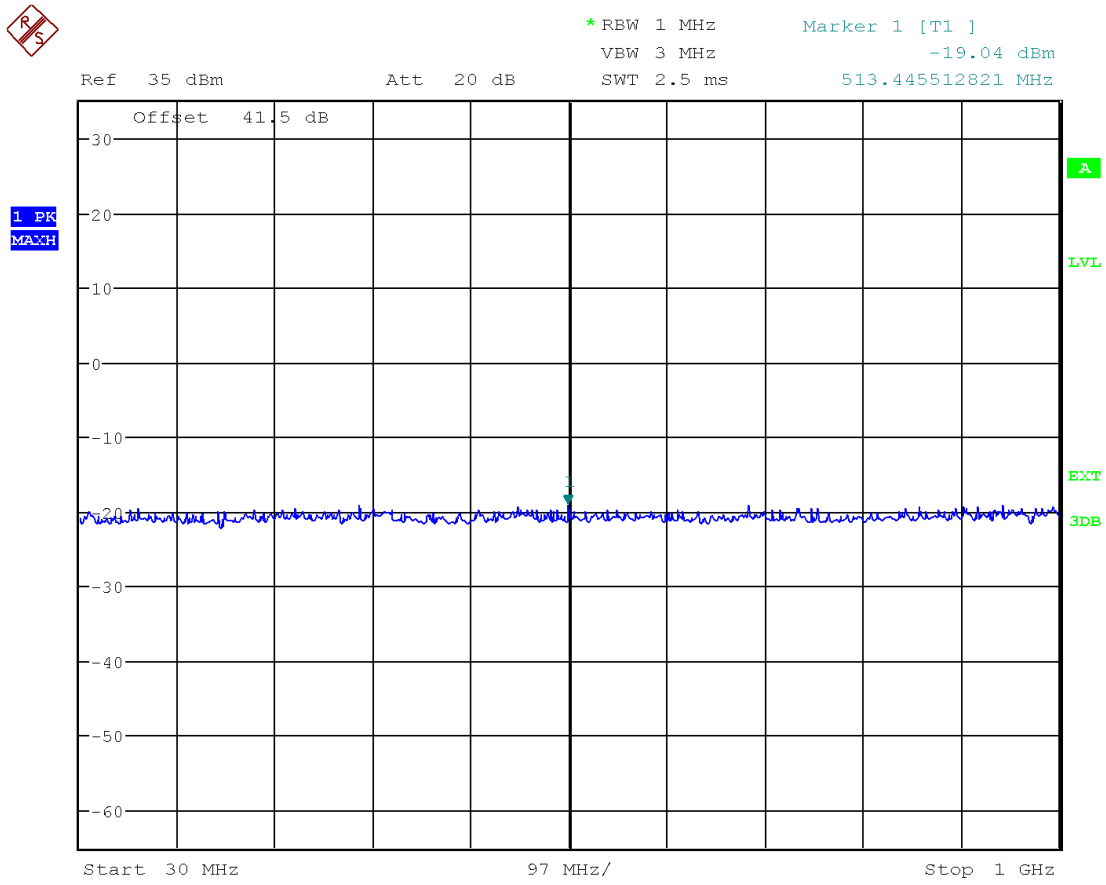
1.1.4.2.2 Ch. T



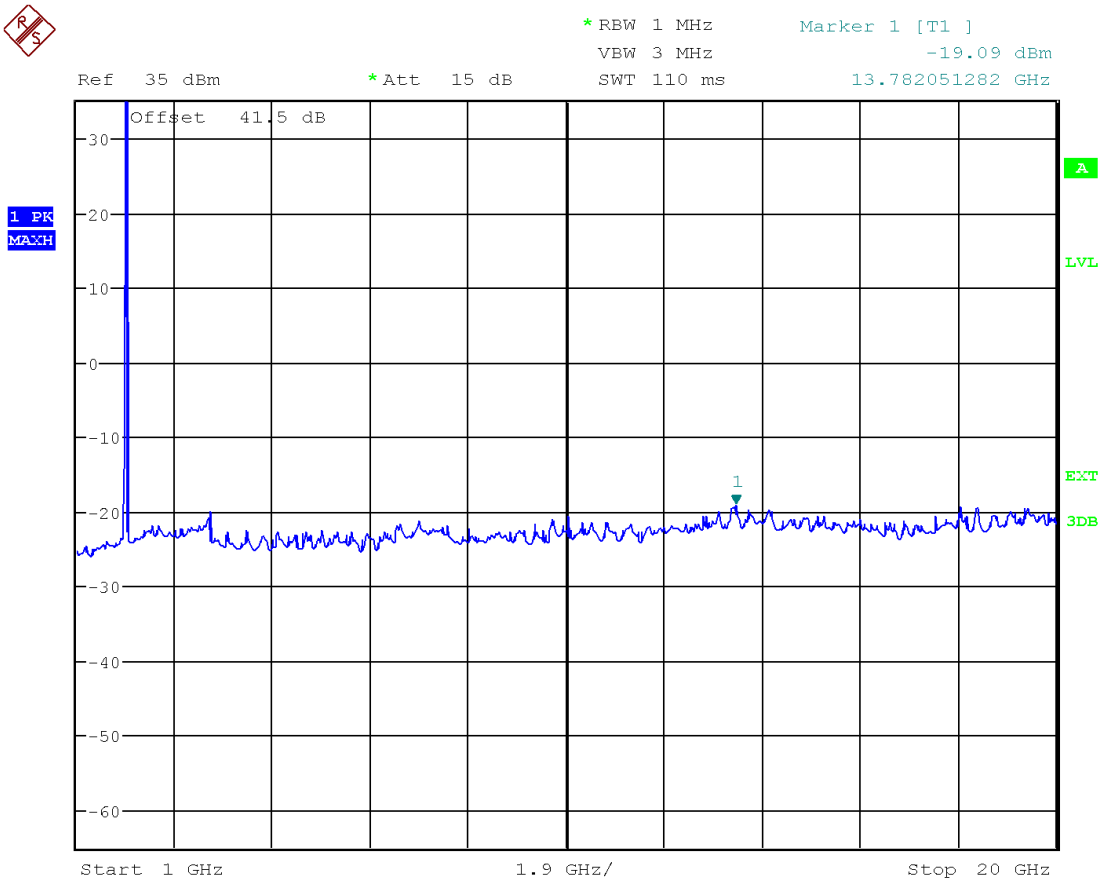
Date: 27.DEC.2011 15:59:08



Date: 27.DEC.2011 16:00:35



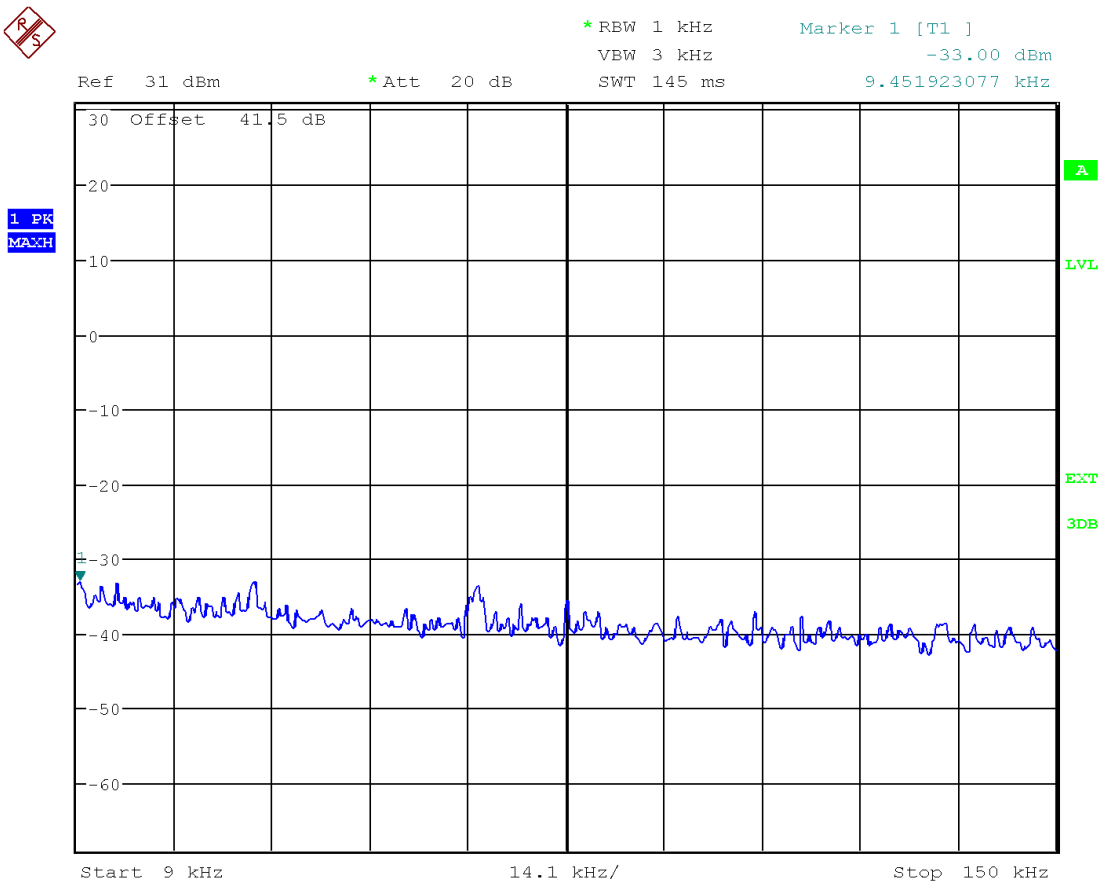
Date: 27.DEC.2011 16:01:56



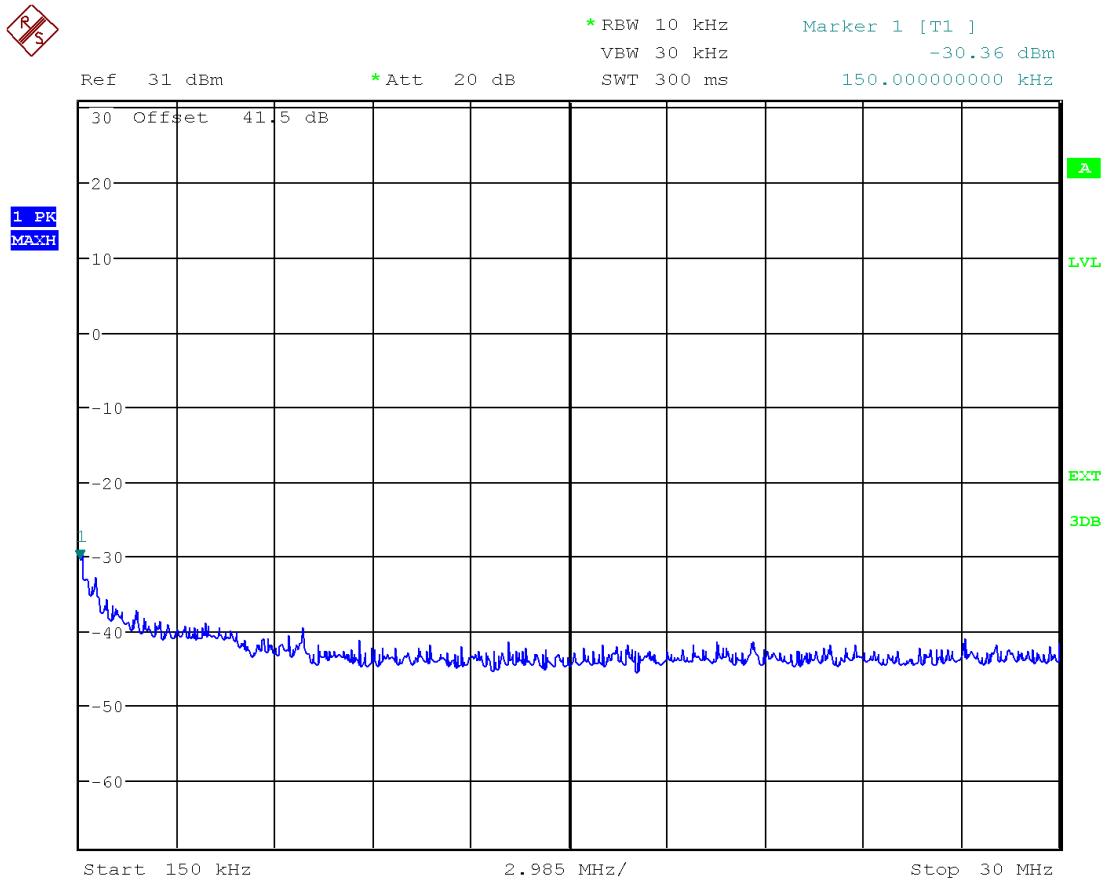
Date: 27.DEC.2011 16:02:56

1.1.4.3 Carrier Conf. = 1*G(15W) & 3*U(15W)

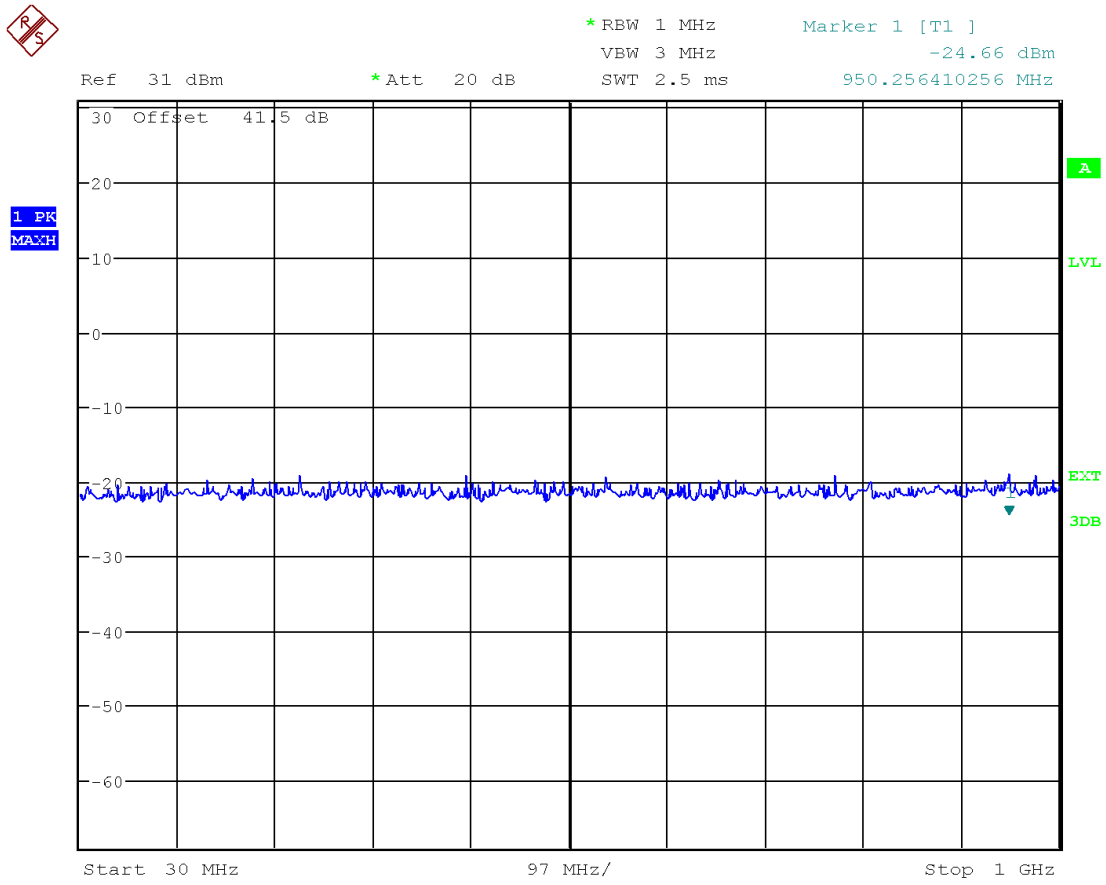
1.1.4.3.1 Ch. B



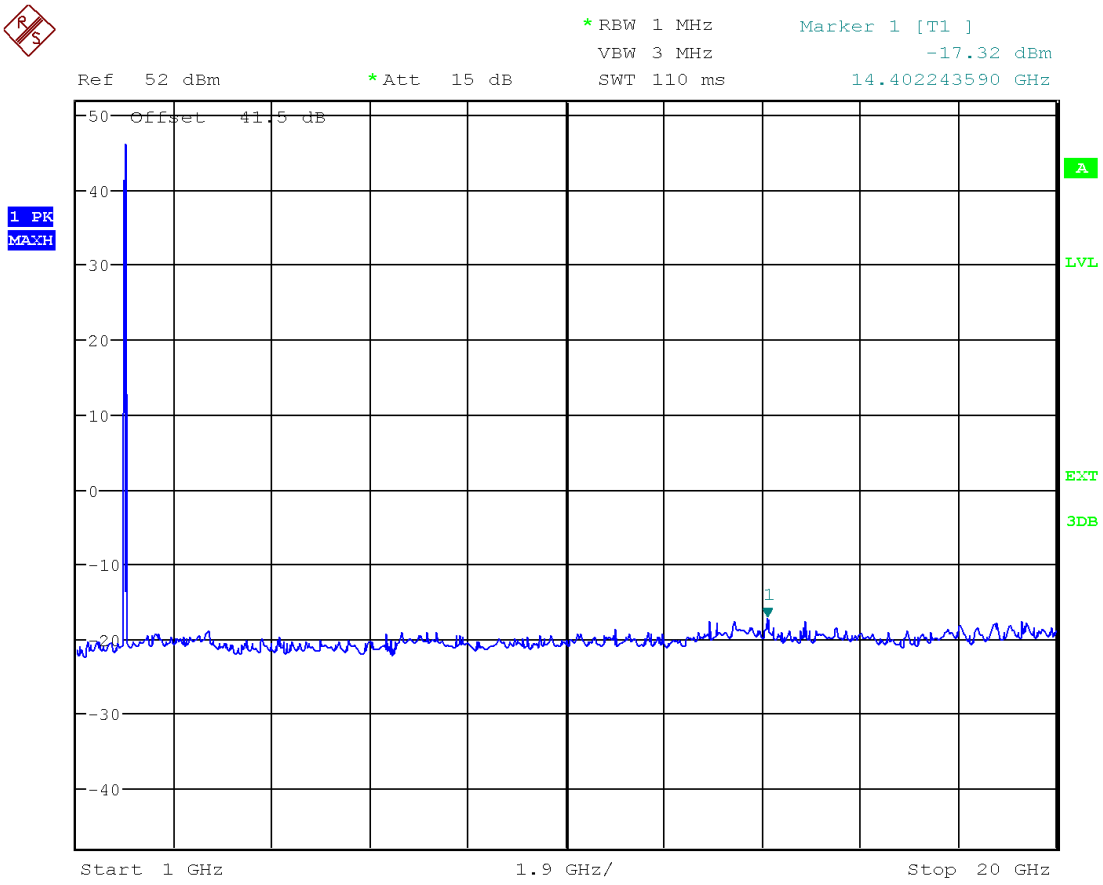
Date: 28.DEC.2011 11:53:29



Date: 28.DEC.2011 11:55:01

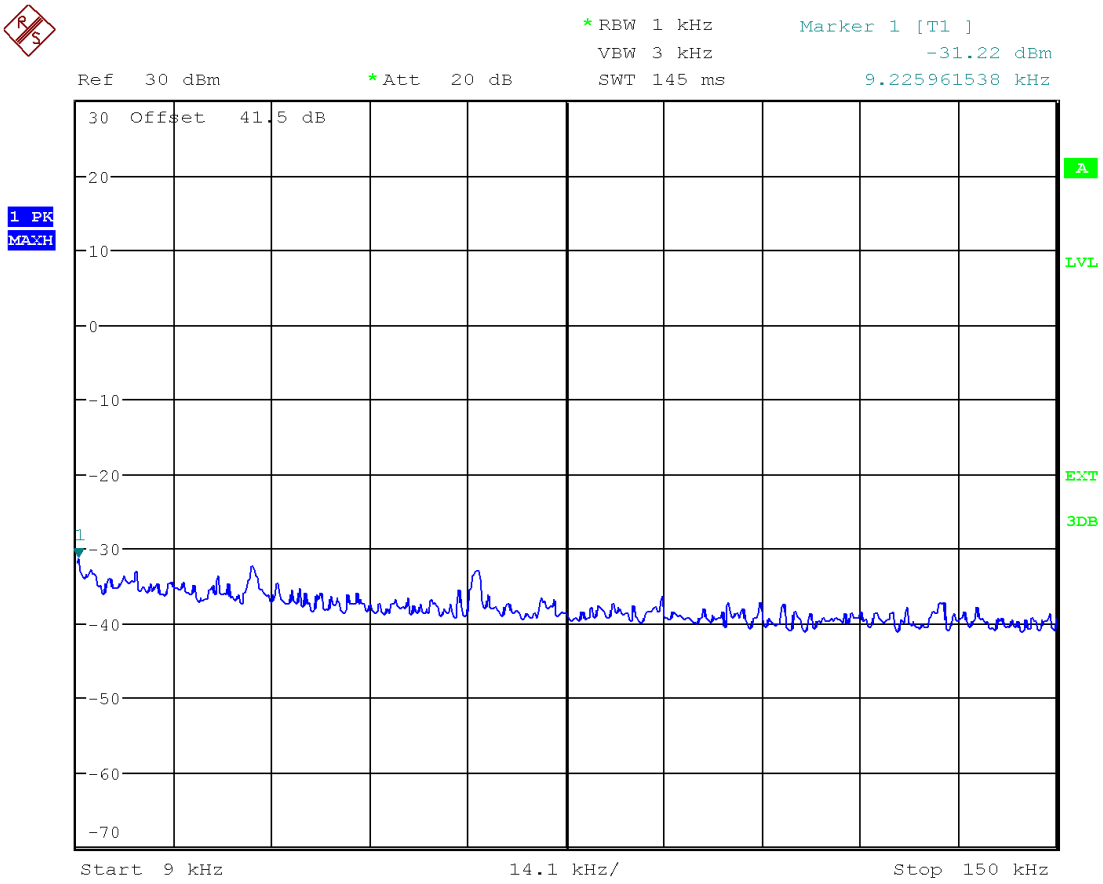


Date: 28.DEC.2011 11:55:54

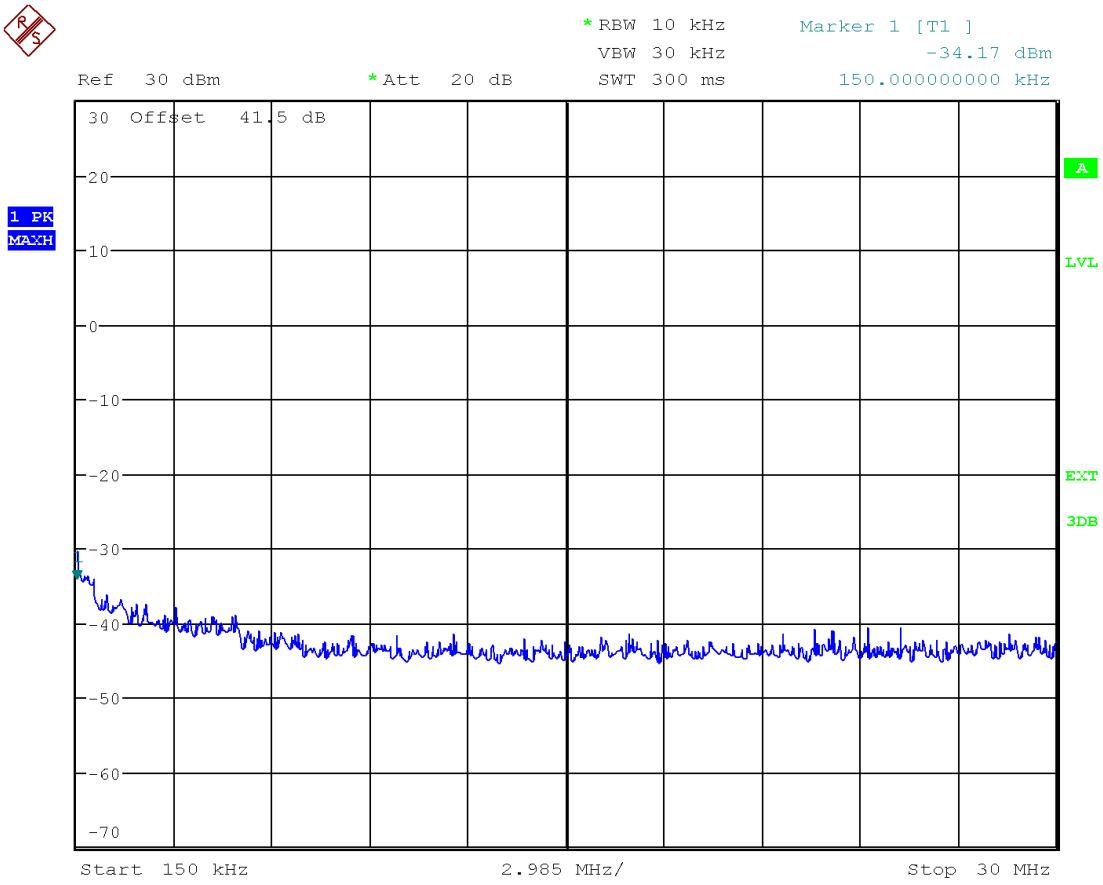


Date: 28.DEC.2011 11:57:21

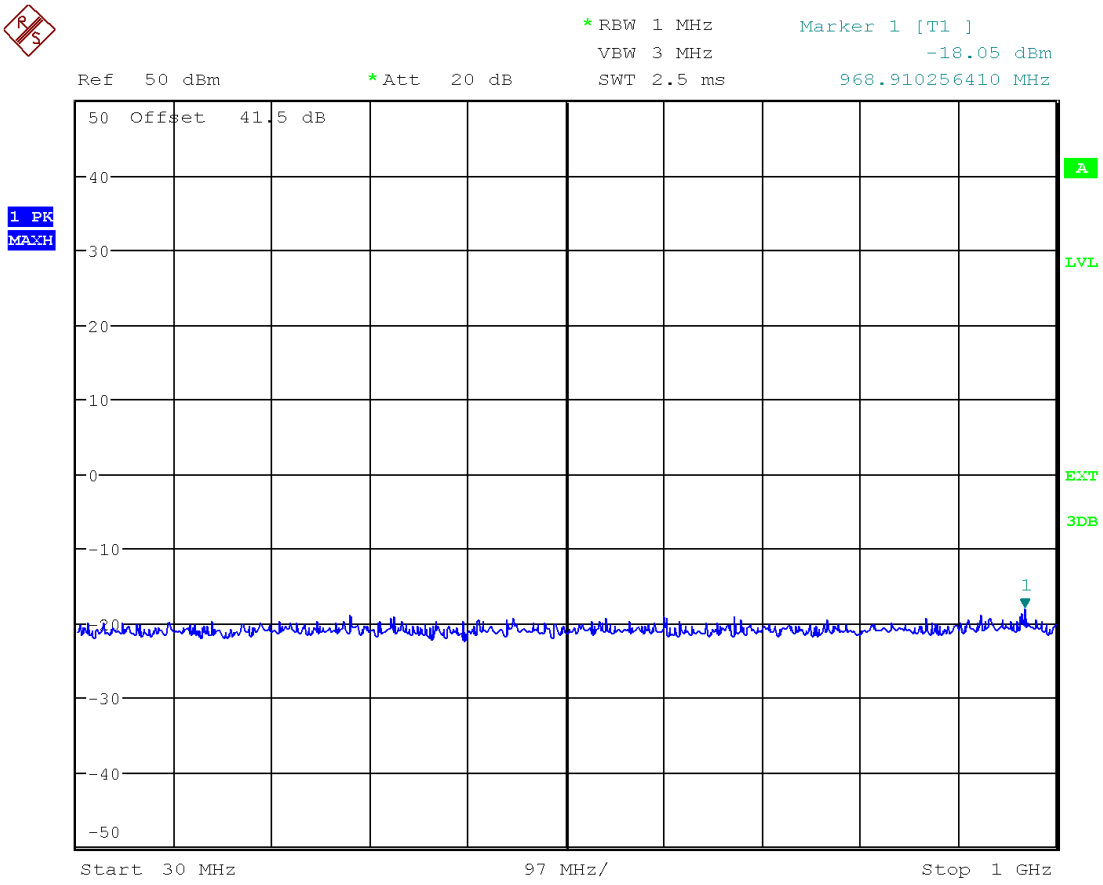
1.1.4.3.2 Ch. T



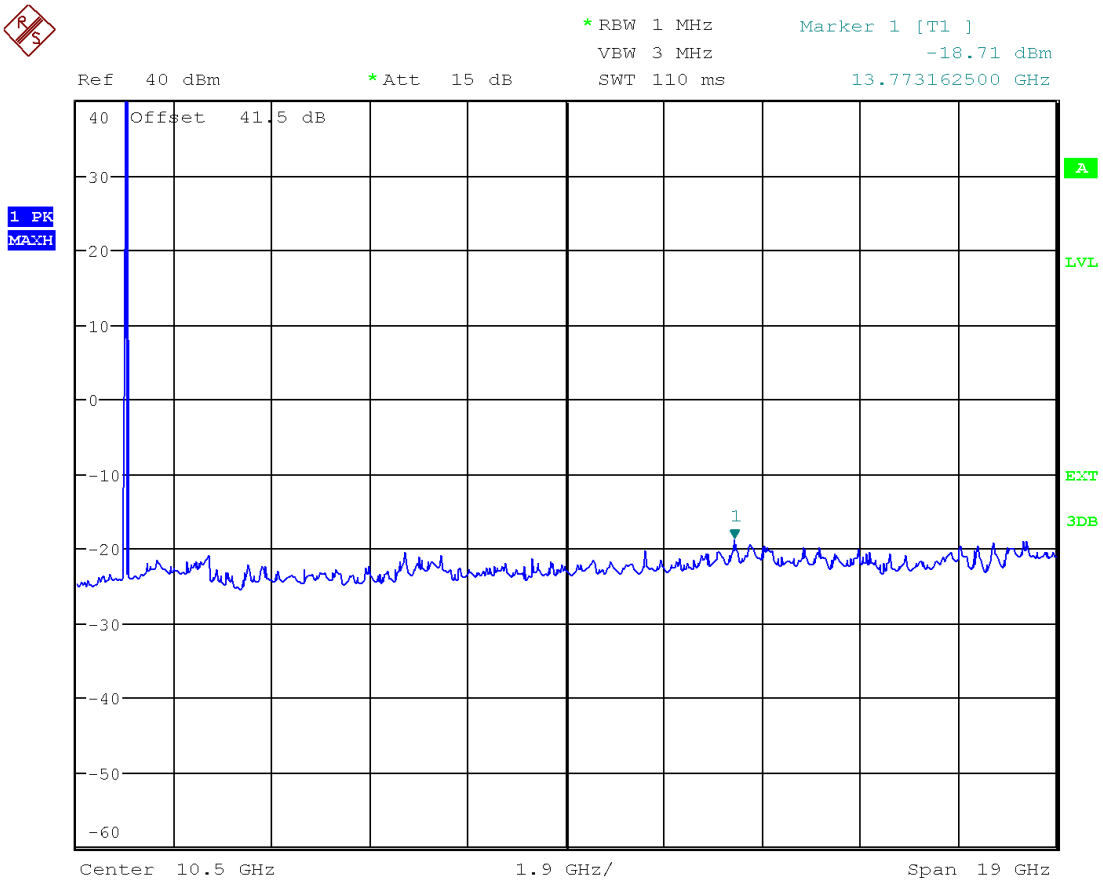
Date: 28.DEC.2011 11:10:43



Date: 28.DEC.2011 11:11:47



Date: 28.DEC.2011 11:12:45



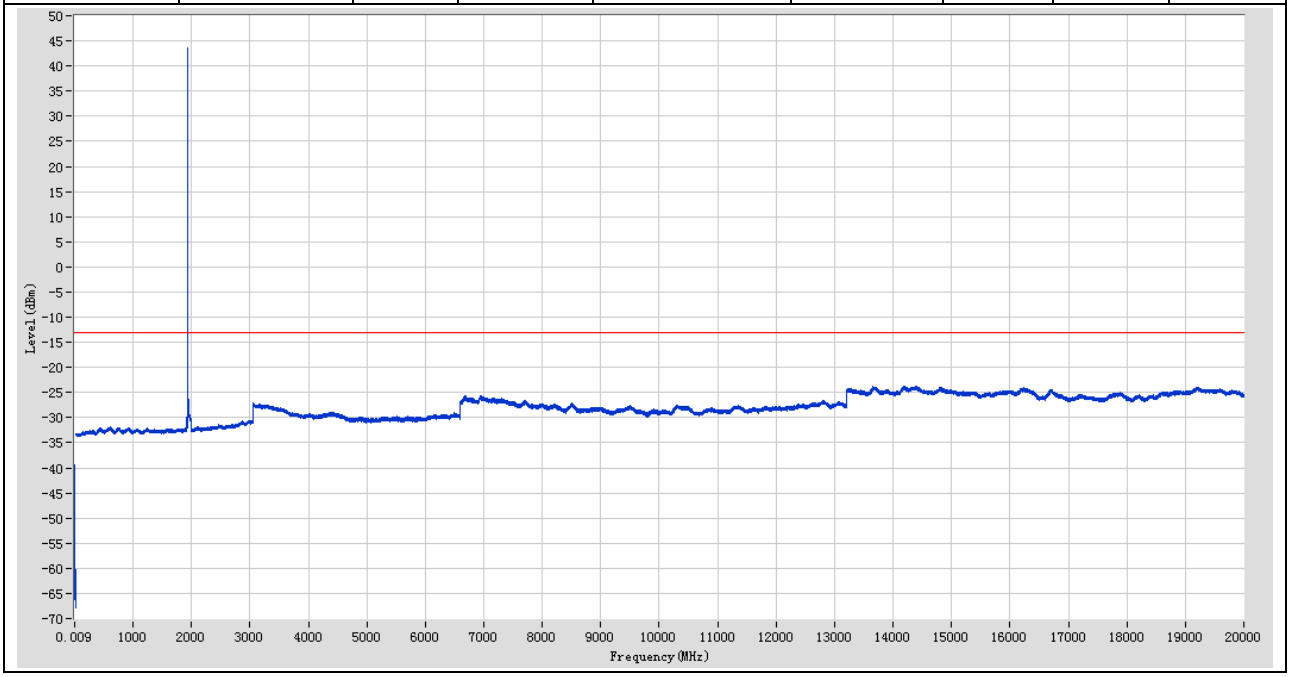
Date: 28.DEC.2011 11:36:36

1.2 For test number SYBH(R)01271108

Before comparing the results to the limit, 3dB[10*log(2)] should be added according to method described in the FCC KDB662911 D01 Multiple Transmitter Output V02.

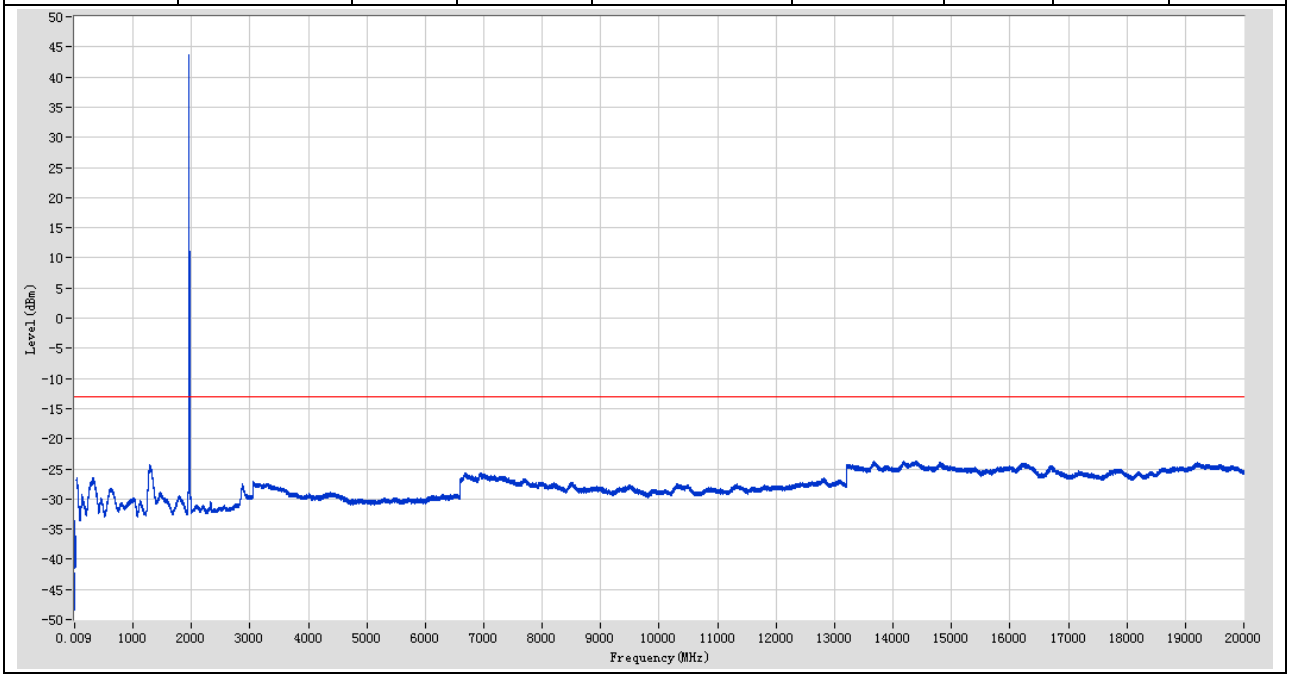
1.2.1 1U_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	13.006 k	-44.45	-13	Pass	705
0.15	30	0.01	RMS	3.83845 M	-39.39	-13	Pass	14925
30	4000	1	RMS	1932.632255 M	--	-13	Pass	19850
4000	10000	1	RMS	6940.158906 M	-25.59	-13	Pass	30000
10000	20000	1	RMS	14196.11222 M	-23.74	-13	Pass	50000



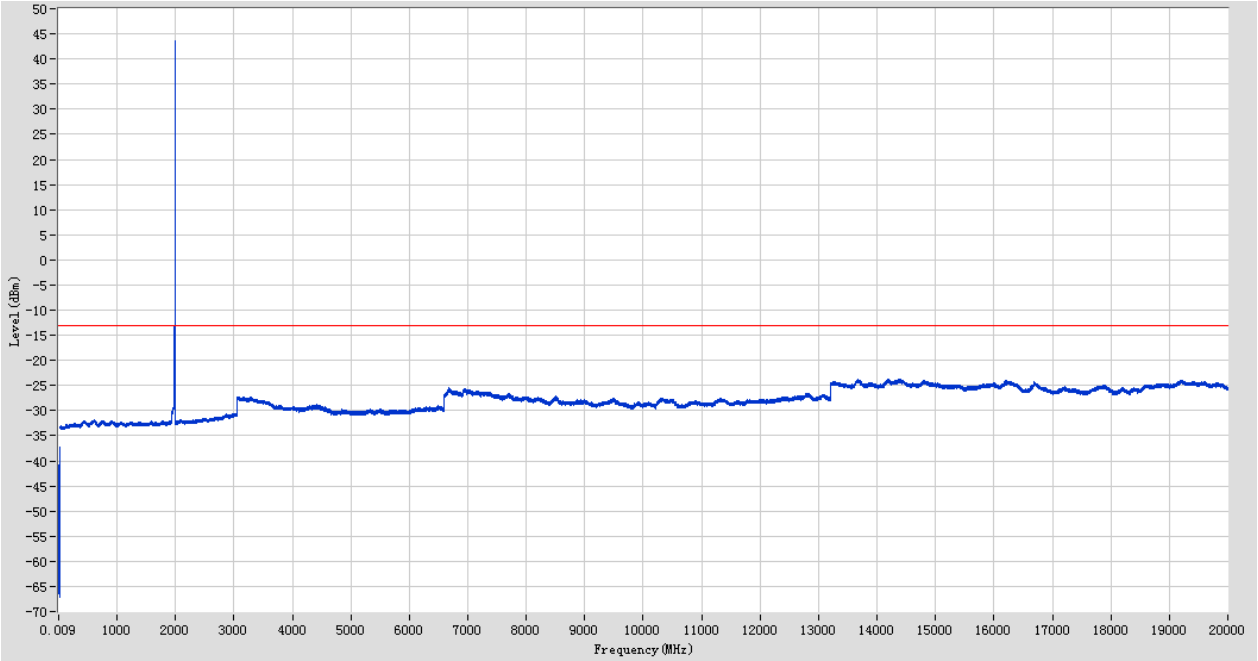
1.2.2 1U_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	14.007 k	-42.22	-13	Pass	705
0.15	30	0.01	RMS	206.007 k	-33.56	-13	Pass	14925
30	4000	1	RMS	1959.835576 M	--	-13	Pass	19850
4000	10000	1	RMS	6949.160005 M	-25.59	-13	Pass	30000
10000	20000	1	RMS	14396.33666 M	-23.72	-13	Pass	50000



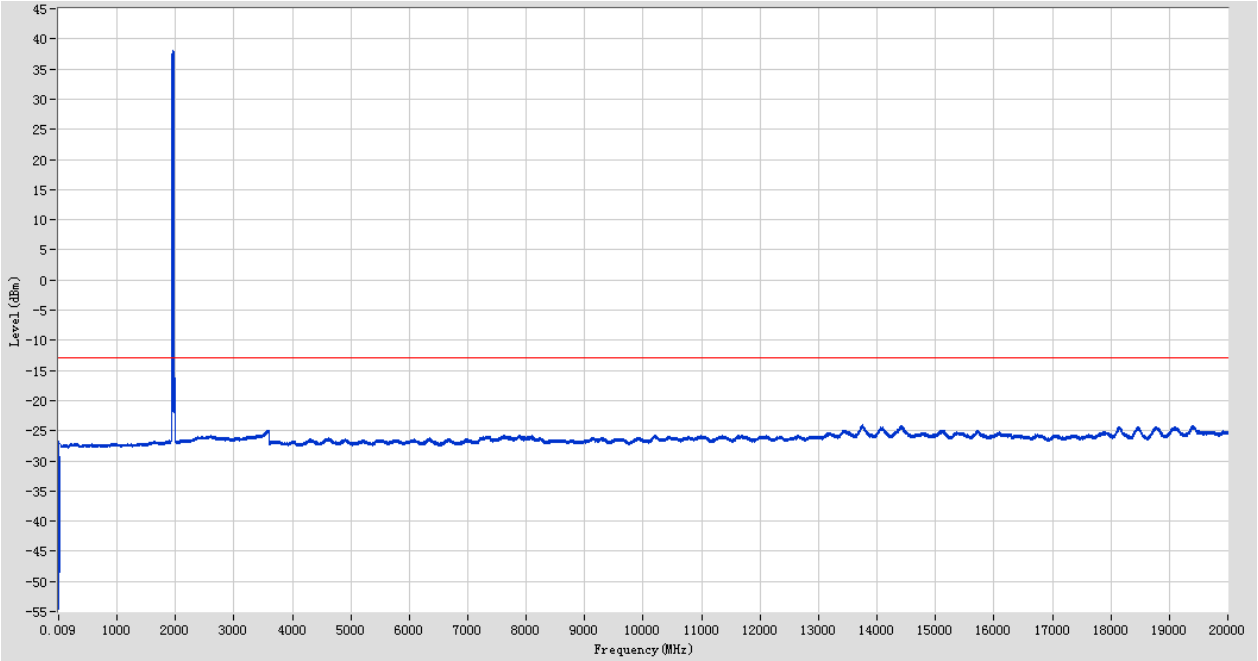
1.2.3 1U_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	13.006 k	-45.23	-13	Pass	705
0.15	30	0.01	RMS	27.233589 M	-37.31	-13	Pass	14925
30	4000	1	RMS	1987.838994 M	--	-13	Pass	19850
4000	10000	1	RMS	6673.926407 M	-25.51	-13	Pass	30000
10000	20000	1	RMS	14189.31139 M	-23.69	-13	Pass	50000



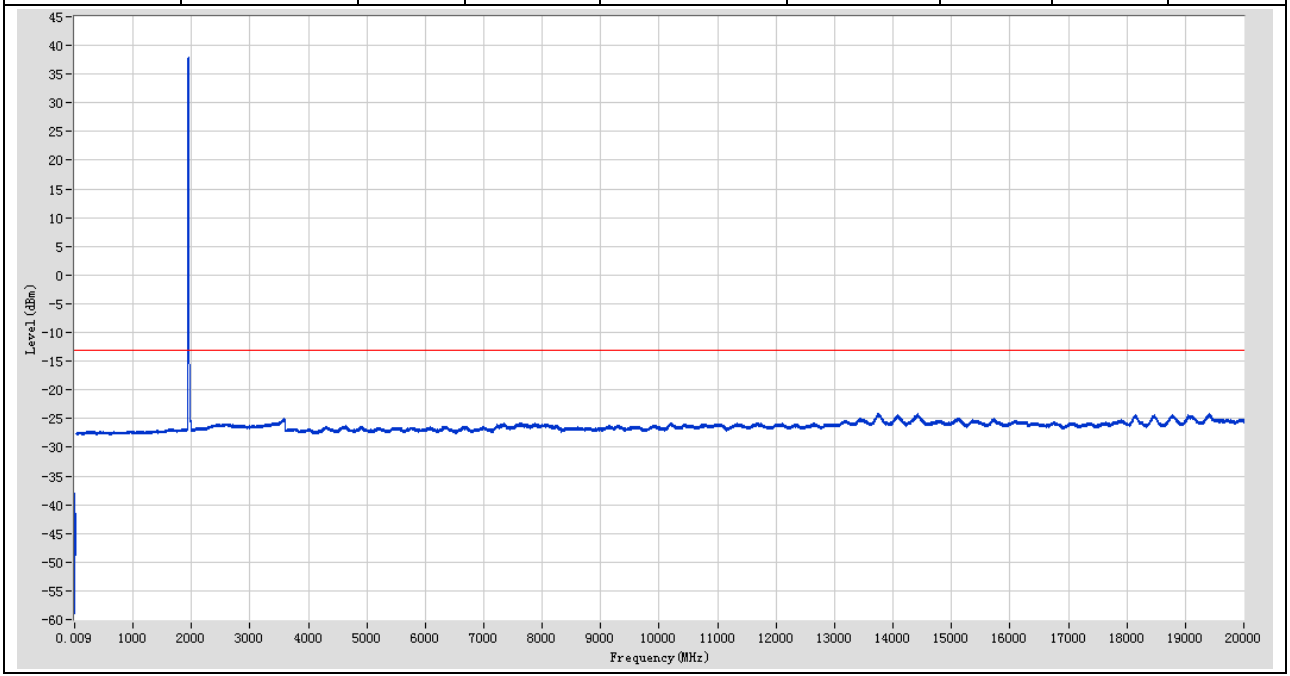
1.2.4 4U_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	12.877 k	-41.1	-13	Pass	801
0.15	30	0.01	RMS	4.99963 M	-26.78	-13	Pass	15001
30	4000	1	RMS	1962.73165 M	--	-13	Pass	19901
4000	10000	1	RMS	7887 M	-25.75	-13	Pass	30001
10000	20000	1	RMS	13752.5250 M	-24.05	-13	Pass	50002



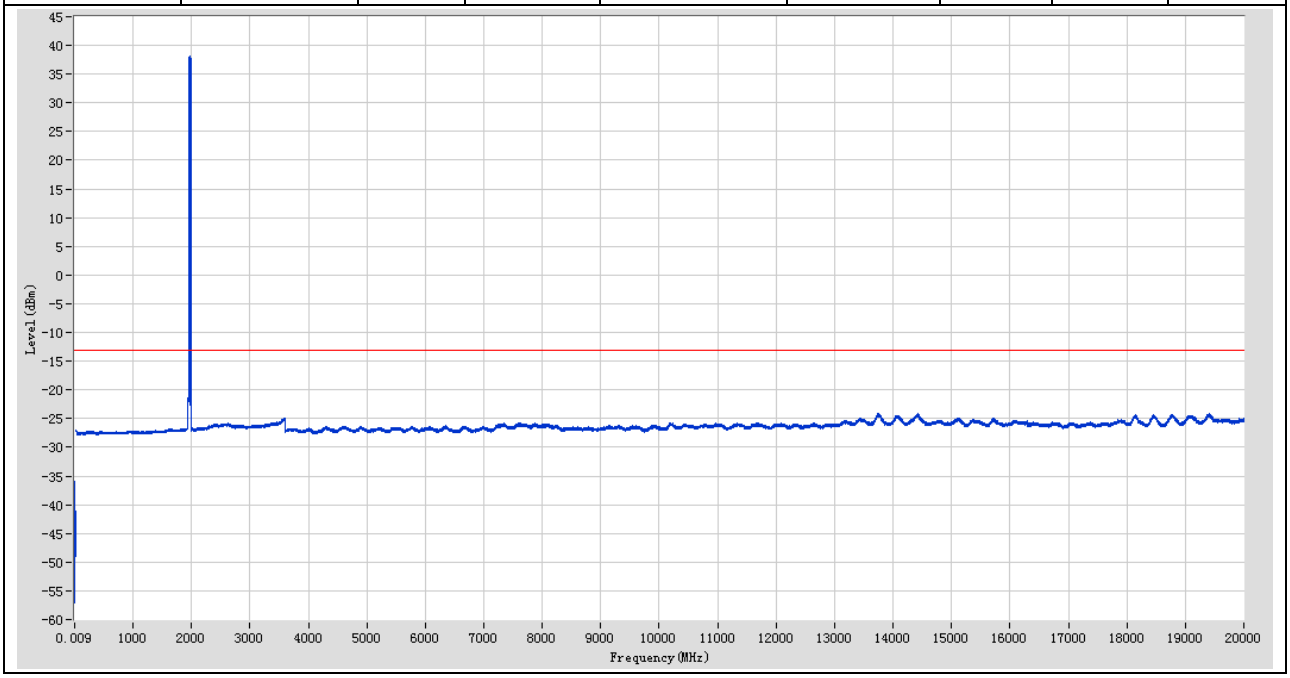
1.2.5 4U_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.81 k	-42.33	-13	Pass	801
0.15	30	0.01	RMS	239.55 k	-38.08	-13	Pass	15001
30	4000	1	RMS	1952.55728 M	--	-13	Pass	19901
4000	10000	1	RMS	7621.4 M	-25.79	-13	Pass	30001
10000	20000	1	RMS	19408.2295 M	-24.07	-13	Pass	50002



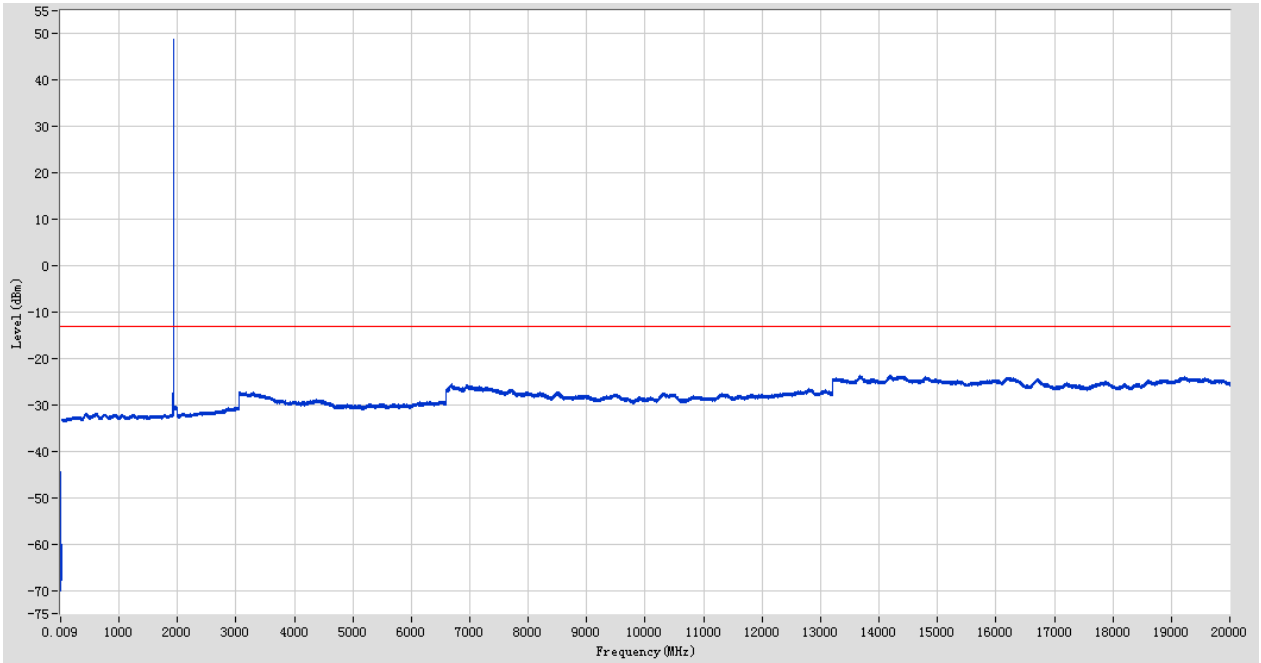
1.2.6 4U_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.634 k	-42.91	-13	Pass	801
0.15	30	0.01	RMS	237.56 k	-35.86	-13	Pass	15001
30	4000	1	RMS	1982.68140 M	--	-13	Pass	19901
4000	10000	1	RMS	7621 M	-25.76	-13	Pass	30001
10000	20000	1	RMS	13747.7249 M	-24.15	-13	Pass	50002



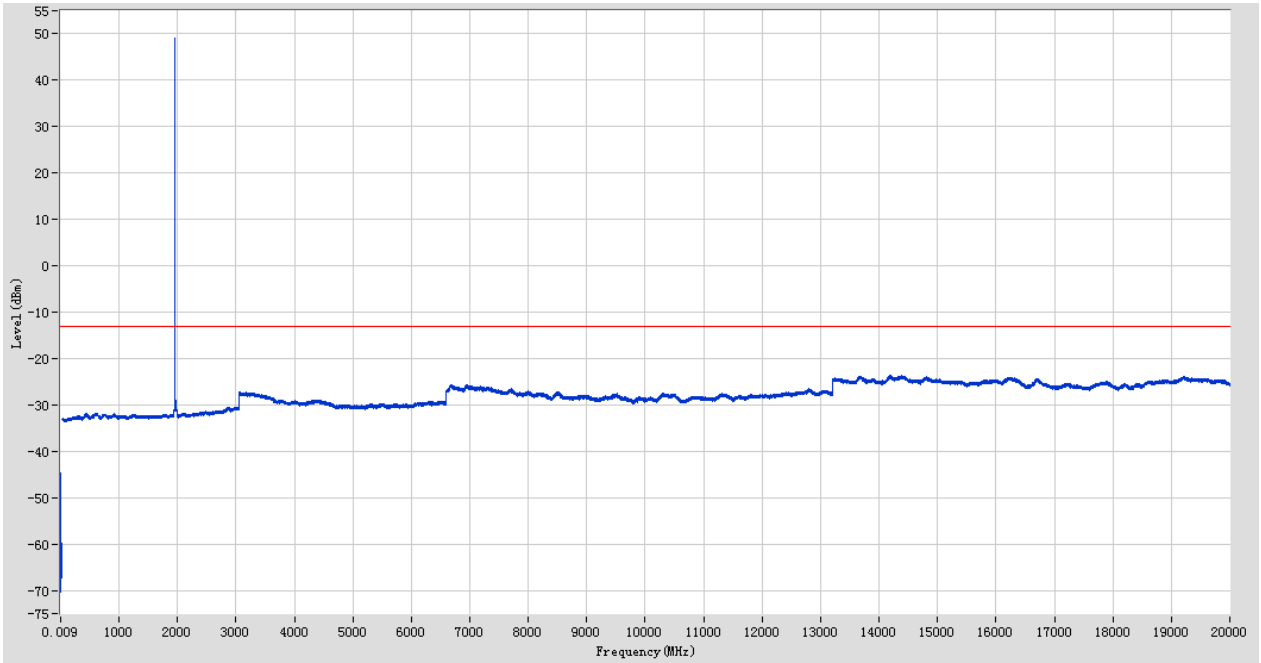
1.2.7 1G_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.602 k	-44.46	-13	Pass	705
0.15	30	0.01	RMS	164.002 k	-56.16	-13	Pass	14925
30	4000	1	RMS	1930.431986 M	--	-13	Pass	19850
4000	10000	1	RMS	6685.927872 M	-25.48	-13	Pass	30000
10000	20000	1	RMS	13675.04861 M	-23.65	-13	Pass	50000



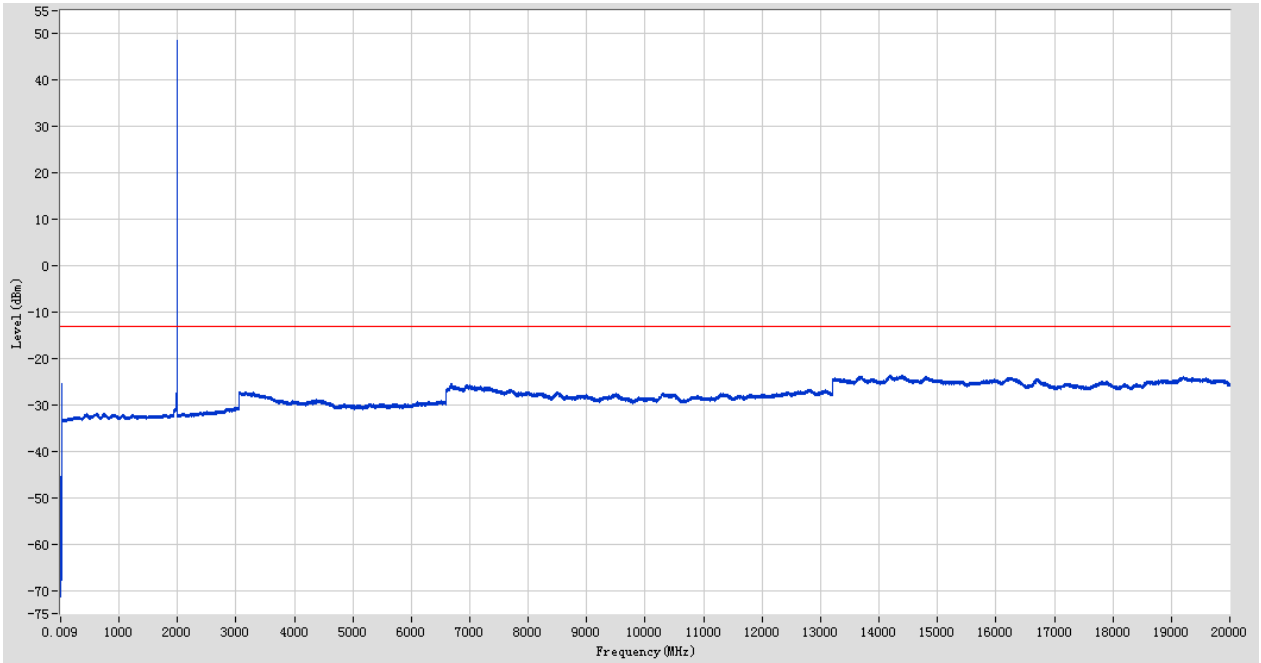
1.2.8 1G_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.602 k	-44.8	-13	Pass	705
0.15	30	0.01	RMS	202.006 k	-57.28	-13	Pass	14925
30	4000	1	RMS	1960.0356 M	--	-13	Pass	19850
4000	10000	1	RMS	6677.326822 M	-25.56	-13	Pass	30000
10000	20000	1	RMS	14200.91280 M	-23.66	-13	Pass	50000



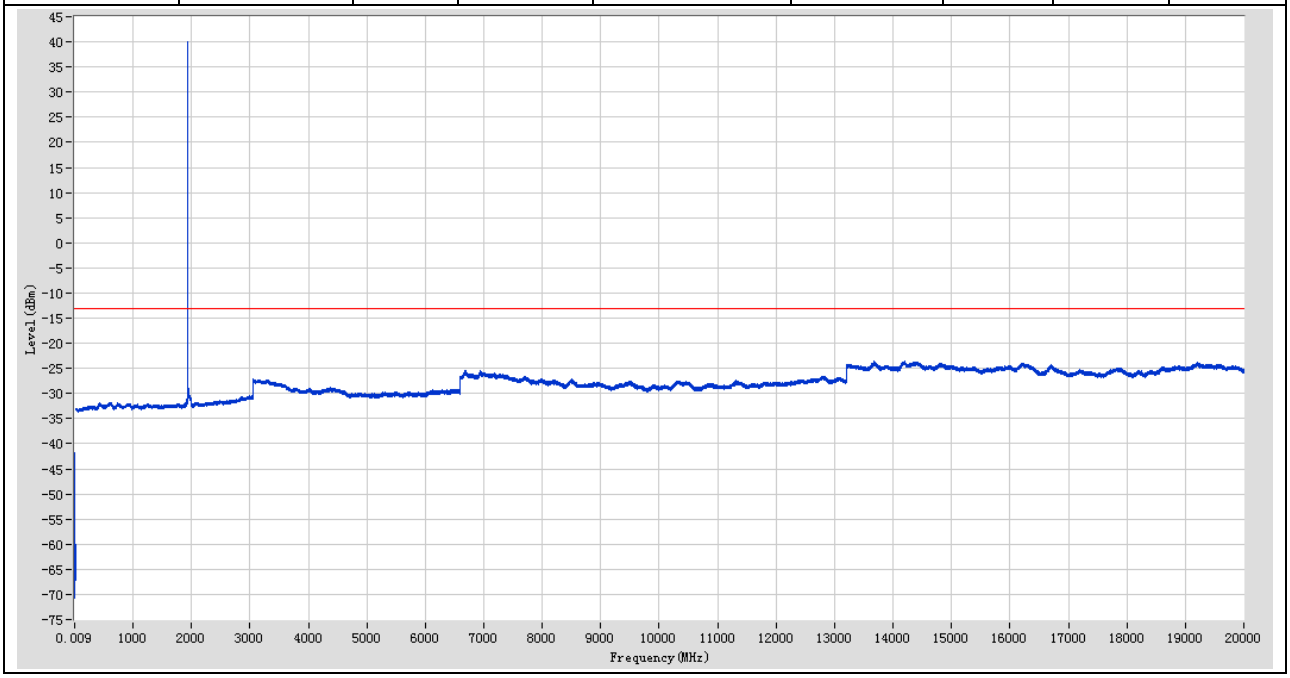
1.2.9 1G_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-45.53	-13	Pass	705
0.15	30	0.01	RMS	28.831827 M	-25.36	-13	Pass	14925
30	4000	1	RMS	1989.639214 M	--	-13	Pass	19850
4000	10000	1	RMS	6685.527823 M	-25.42	-13	Pass	30000
10000	20000	1	RMS	14197.31236 M	-23.59	-13	Pass	50000



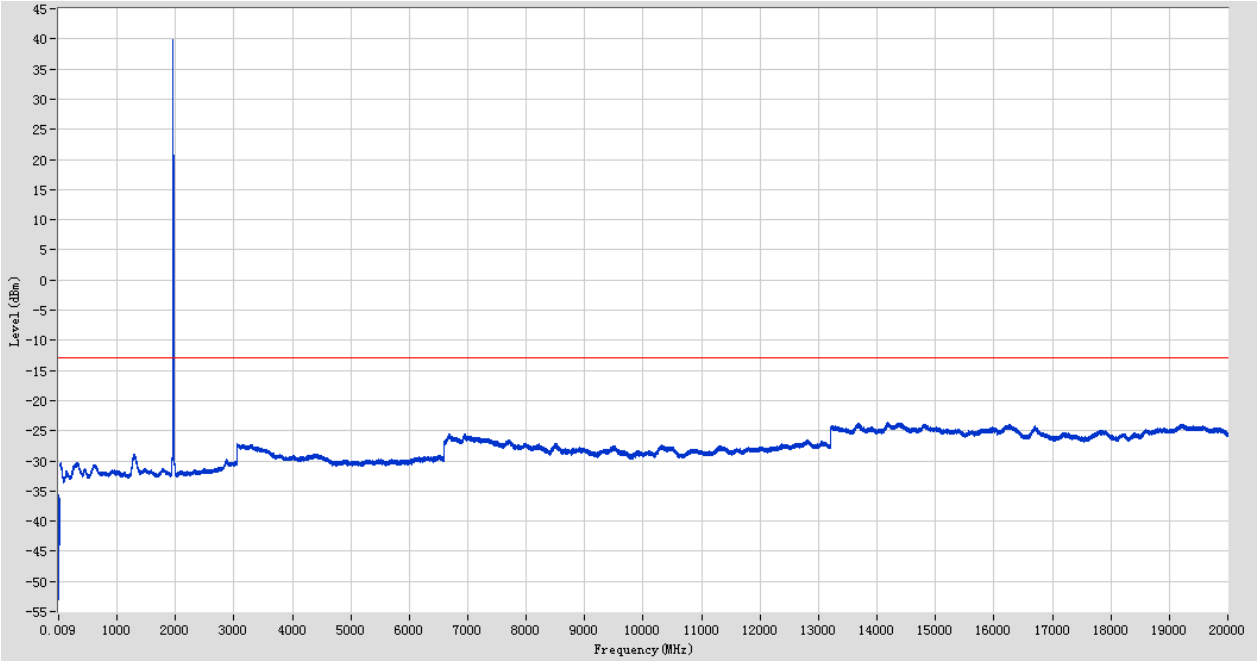
1.2.10 8G_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-48.95	-13	Pass	705
0.15	30	0.01	RMS	596.054 k	-41.69	-13	Pass	14925
30	4000	1	RMS	1933.032304 M	--	-13	Pass	19850
4000	10000	1	RMS	6680.527213 M	-25.45	-13	Pass	30000
10000	20000	1	RMS	14196.11222 M	-23.64	-13	Pass	50000



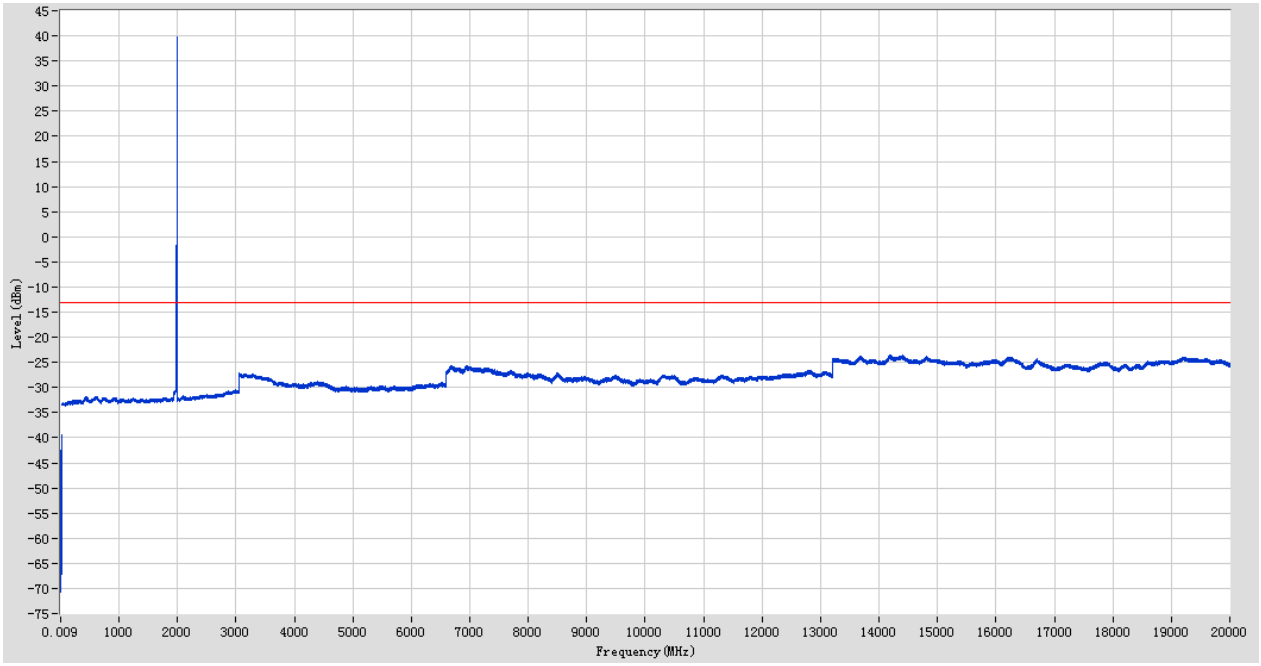
1.2.11 8G_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.402 k	-43.86	-13	Pass	705
0.15	30	0.01	RMS	568.051 k	-35.56	-13	Pass	14925
30	4000	1	RMS	1960.835698 M	--	-13	Pass	19850
4000	10000	1	RMS	6680.927262 M	-25.57	-13	Pass	30000
10000	20000	1	RMS	14186.31102 M	-23.58	-13	Pass	50000



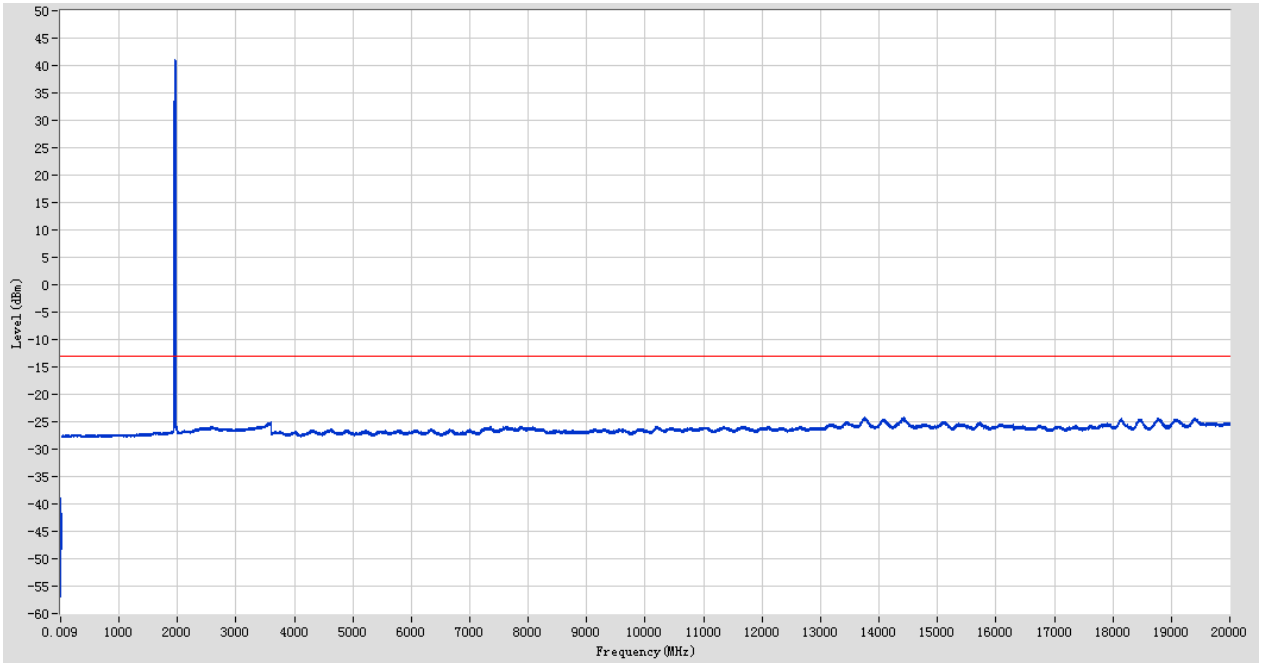
1.2.12 8G_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	12.205 k	-49.84	-13	Pass	705
0.15	30	0.01	RMS	26.83353 M	-39.41	-13	Pass	14925
30	4000	1	RMS	1987.63897 M	--	-13	Pass	19850
4000	10000	1	RMS	6936.158418 M	-25.58	-13	Pass	30000
10000	20000	1	RMS	14181.31041 M	-23.57	-13	Pass	50000



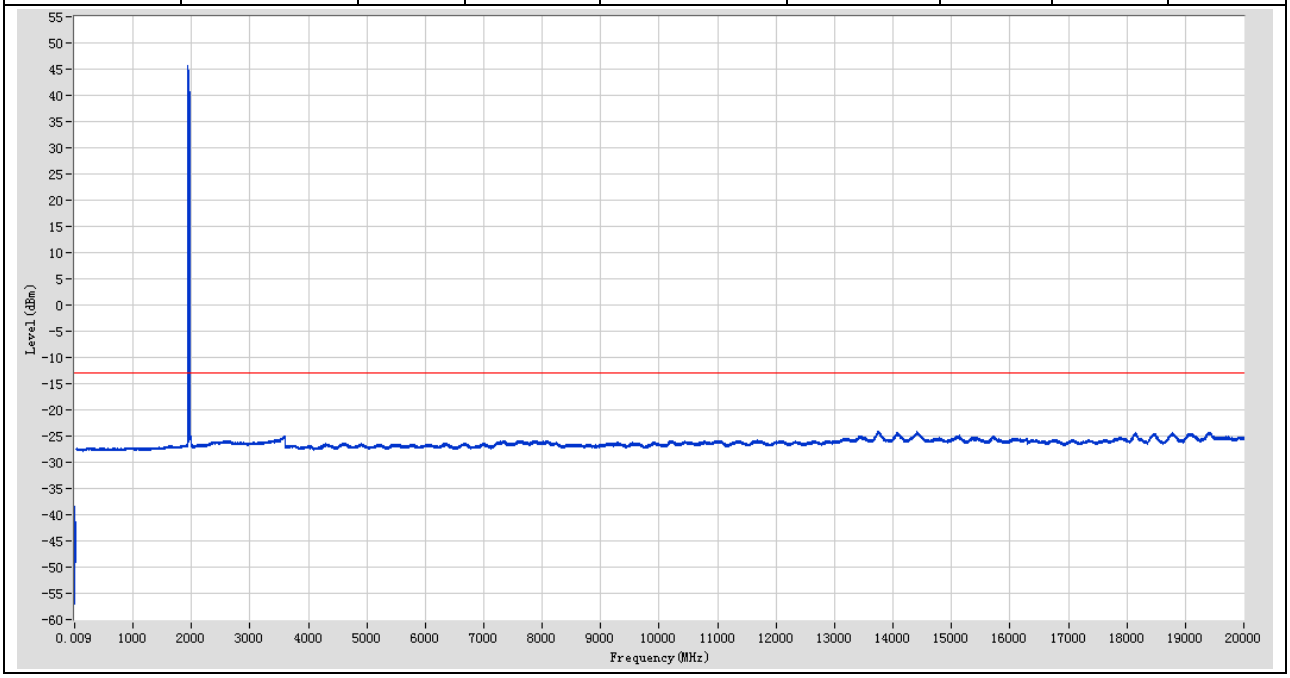
1.2.13 1G1U_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.529 k	-44.57	-13	Pass	801
0.15	30	0.01	RMS	151.99 k	-38.91	-13	Pass	15001
30	4000	1	RMS	1962.13316 M	--	-13	Pass	19901
4000	10000	1	RMS	7871.2 M	-25.91	-13	Pass	30001
10000	20000	1	RMS	13748.3249 M	-24.19	-13	Pass	50002



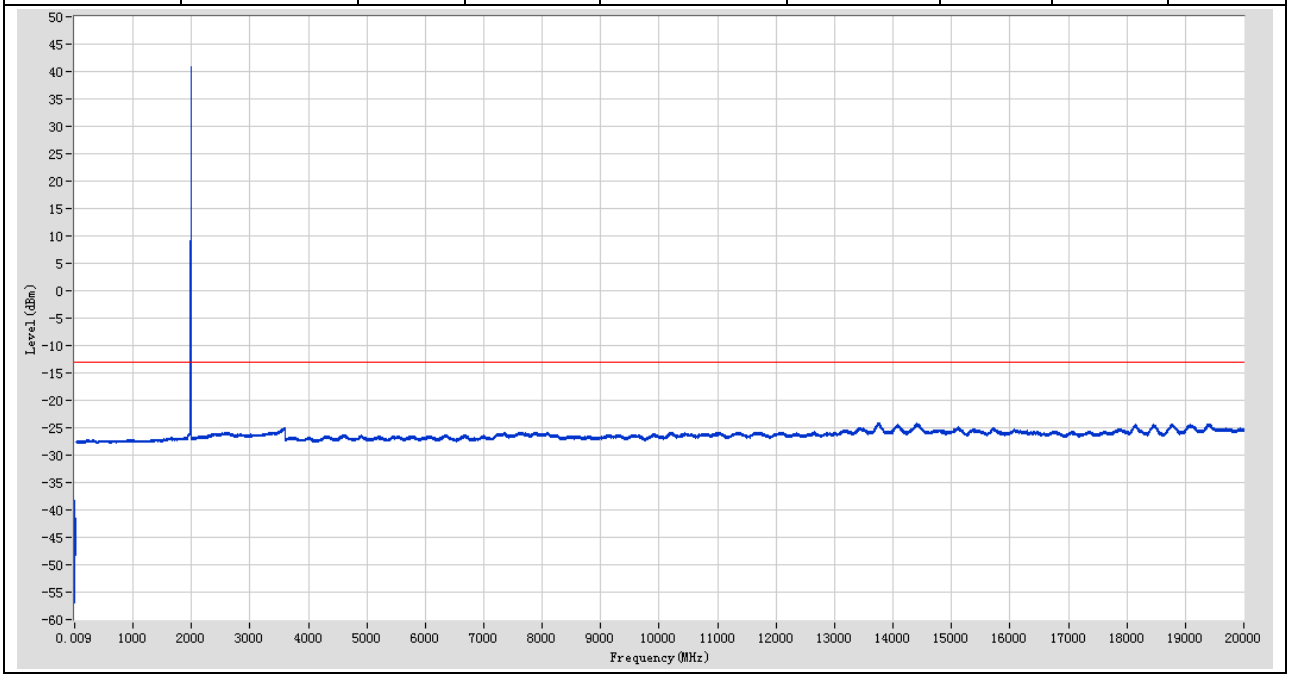
1.2.14 1G1U_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.41 k	-43.83	-13	Pass	801
0.15	30	0.01	RMS	237.56 k	-38.46	-13	Pass	15001
30	4000	1	RMS	1942.78191 M	--	-13	Pass	19901
4000	10000	1	RMS	7870 M	-25.82	-13	Pass	30001
10000	20000	1	RMS	13753.7251 M	-24.17	-13	Pass	50002



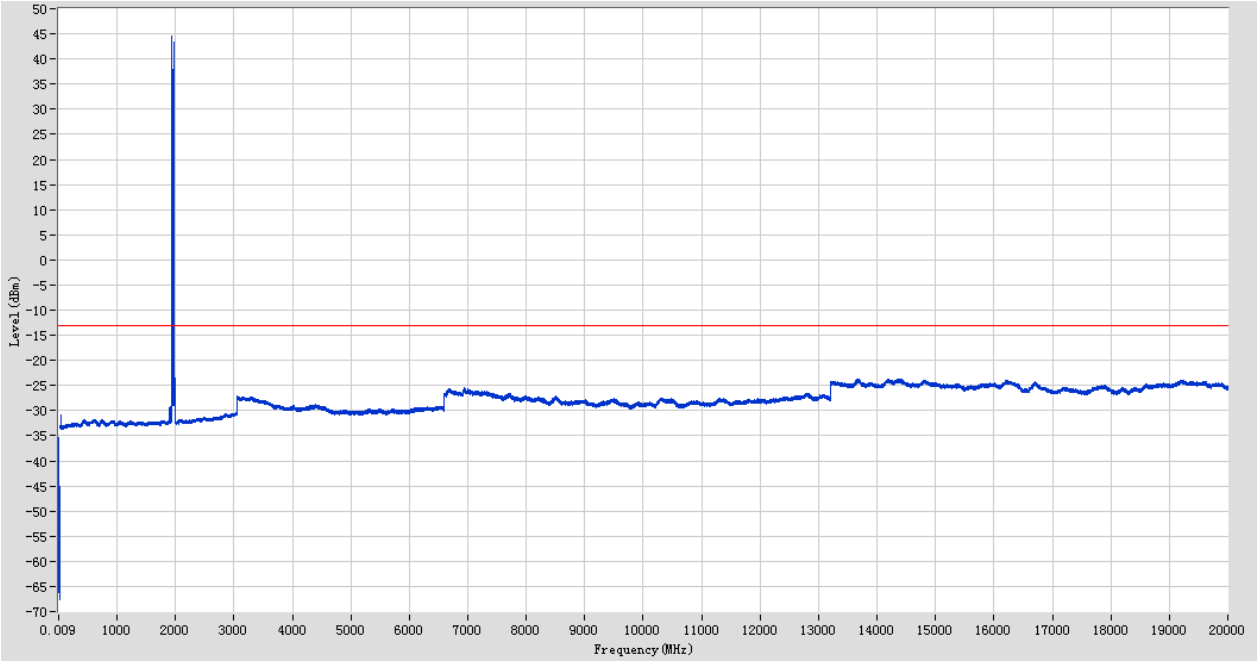
1.2.15 1G1U_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.281 k	-42.89	-13	Pass	801
0.15	30	0.01	RMS	173.88 k	-38.37	-13	Pass	15001
30	4000	1	RMS	1987.46934 M	--	-13	Pass	19901
4000	10000	1	RMS	7621.4 M	-25.81	-13	Pass	30001
10000	20000	1	RMS	13754.9256 M	-24.09	-13	Pass	50002



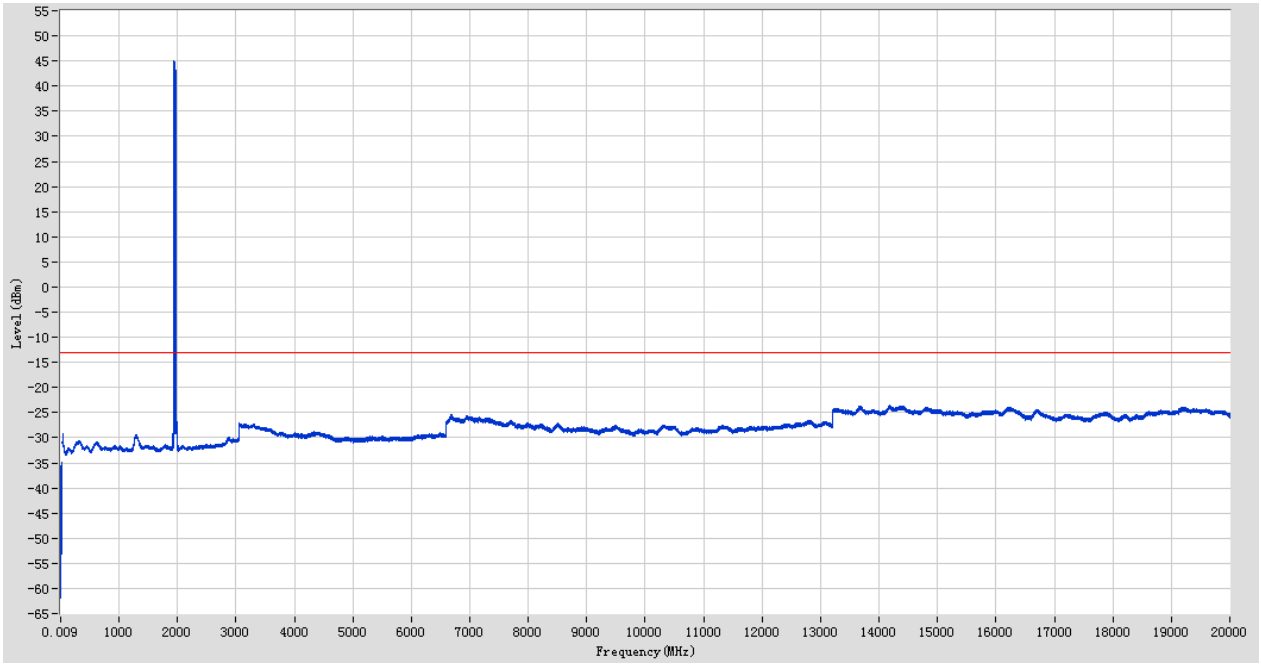
1.2.16 3G1U_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	12.405 k	-47.53	-13	Pass	705
0.15	30	0.01	RMS	600.055 k	-35.33	-13	Pass	14925
30	4000	1	RMS	1930.632011 M	--	-13	Pass	19850
4000	10000	1	RMS	6942.559199 M	-25.45	-13	Pass	30000
10000	20000	1	RMS	14186.71107 M	-23.68	-13	Pass	50000



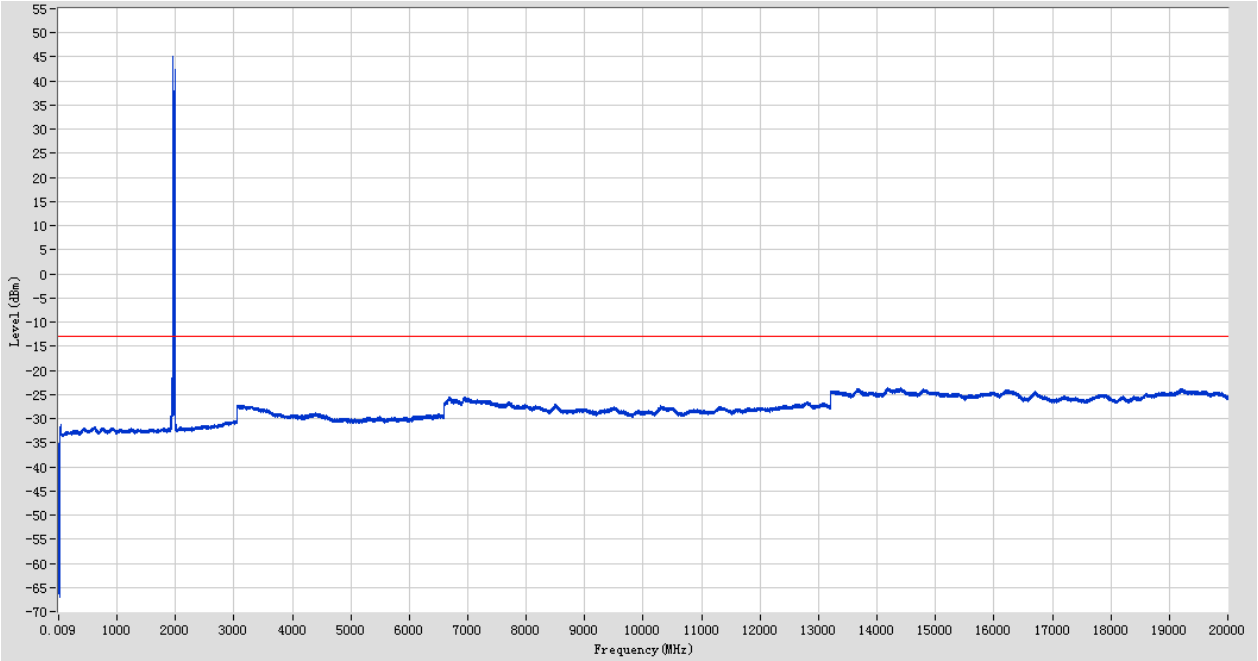
1.2.17 3G1U_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	12.205 k	-45.38	-13	Pass	705
0.15	30	0.01	RMS	16.568005 M	-34.9	-13	Pass	14925
30	4000	1	RMS	1943.033525 M	--	-13	Pass	19850
4000	10000	1	RMS	6680.727237 M	-25.43	-13	Pass	30000
10000	20000	1	RMS	14181.51043M	-23.62	-13	Pass	50000



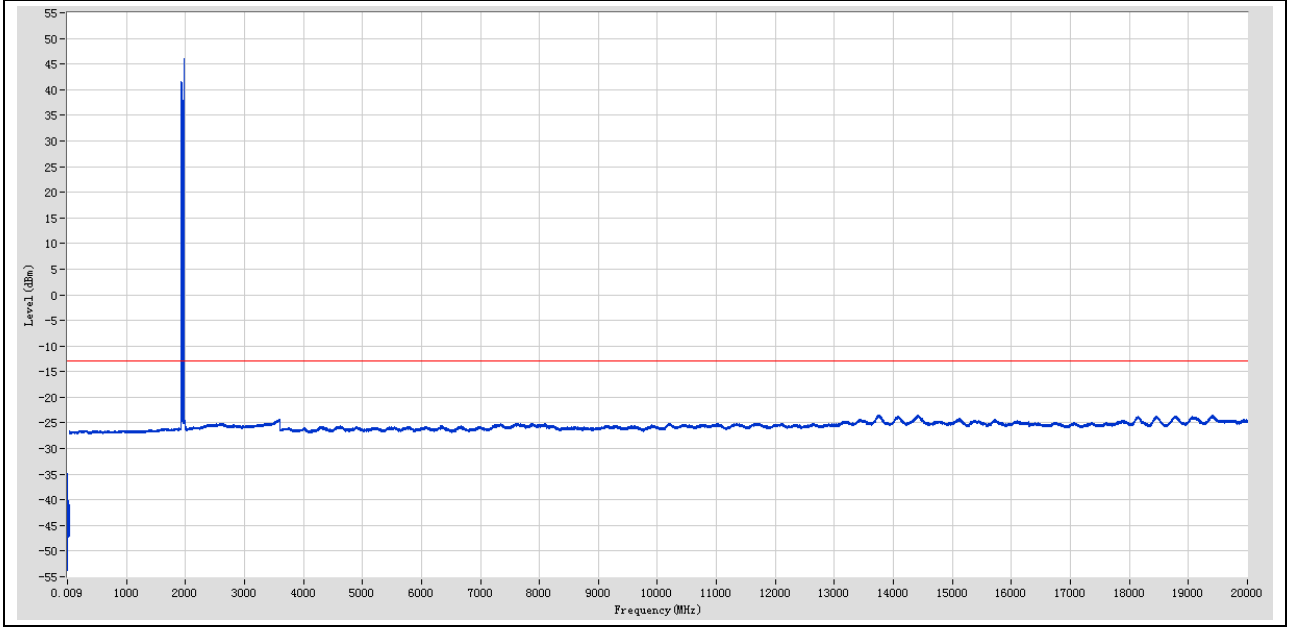
1.2.18 3G1U_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.602 k	-47.26	-13	Pass	705
0.15	30	0.01	RMS	11.69741 M	-31.67	-13	Pass	14925
30	4000	1	RMS	1955.435038 M	--	-13	Pass	19850
4000	10000	1	RMS	6684.92775 M	-25.51	-13	Pass	30000
10000	20000	1	RMS	14186.31102 M	-23.65	-13	Pass	50000



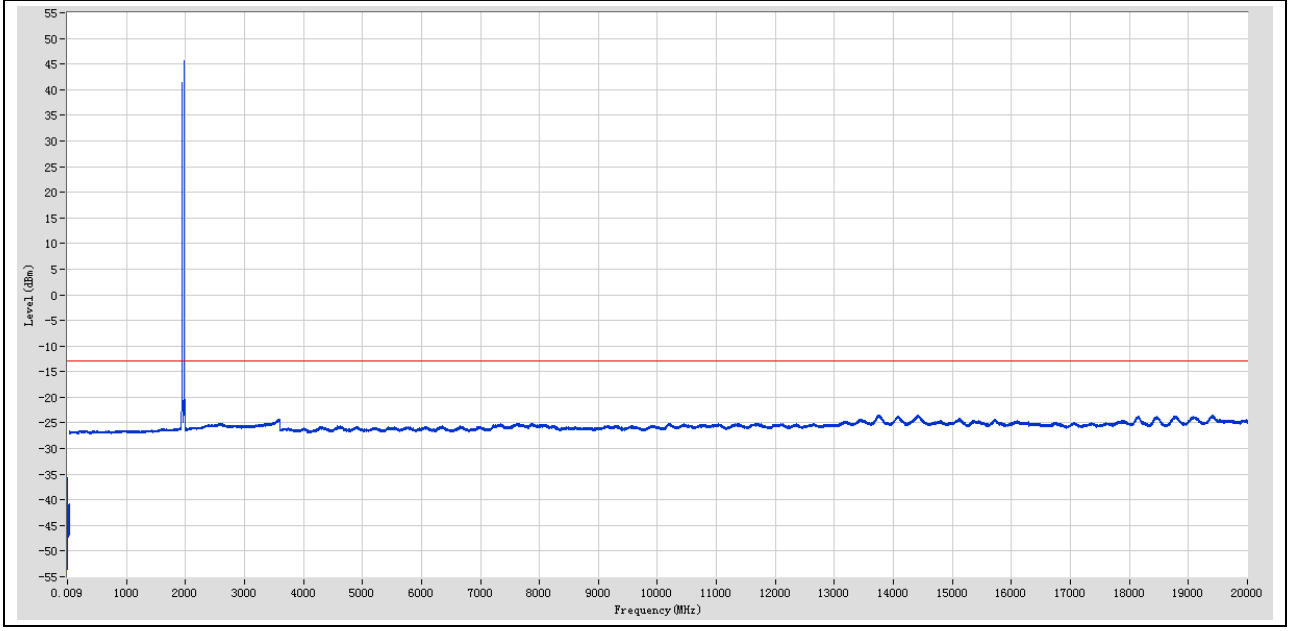
1.2.19 1U1L_1.4M_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.705 k	-42.65	-13	Pass	801
0.15	30	0.01	RMS	277.36 k	-34.85	-13	Pass	15001
30	4000	1	RMS	1969.31507 M	--	-13	Pass	19901
4000	10000	1	RMS	7617.4 M	-25.1	-13	Pass	30001
10000	20000	1	RMS	13739.9246 M	-23.38	-13	Pass	50002



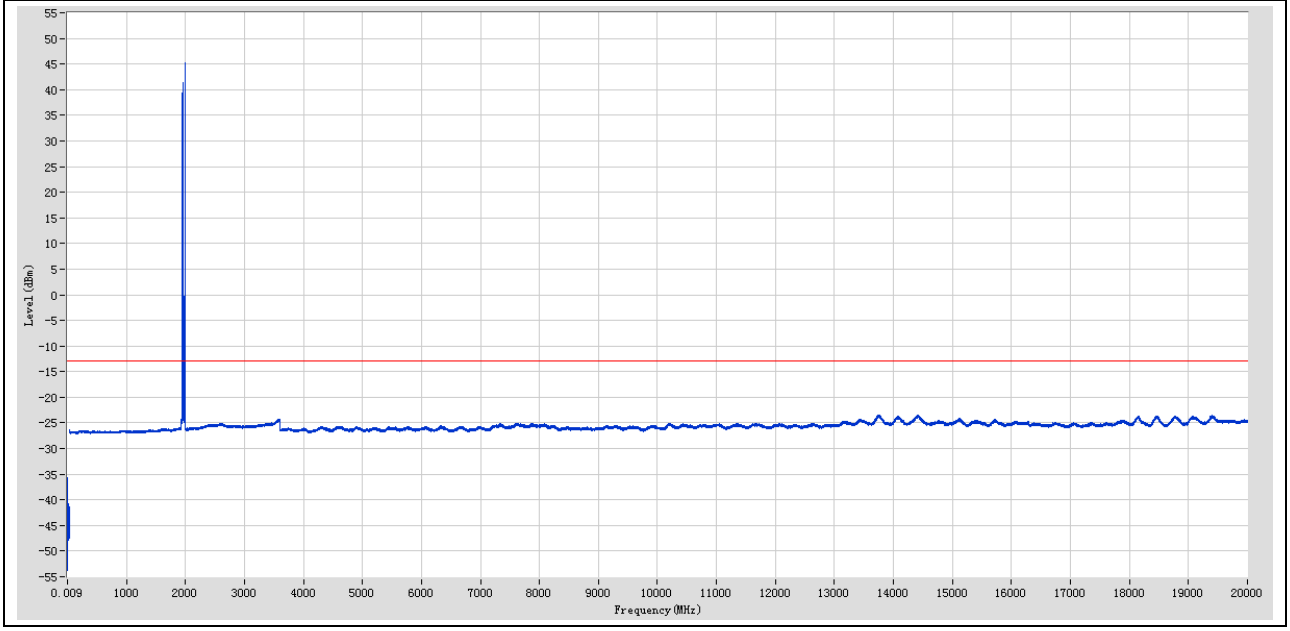
1.2.20 1U1L_1.4M_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-42.31	-13	Pass	801
0.15	30	0.01	RMS	223.63 k	-35.59	-13	Pass	15001
30	4000	1	RMS	1979.28995 M	--	-13	Pass	19901
4000	10000	1	RMS	7599.8 M	-25.1	-13	Pass	30001
10000	20000	1	RMS	13749.32497 M	-23.38	-13	Pass	50002



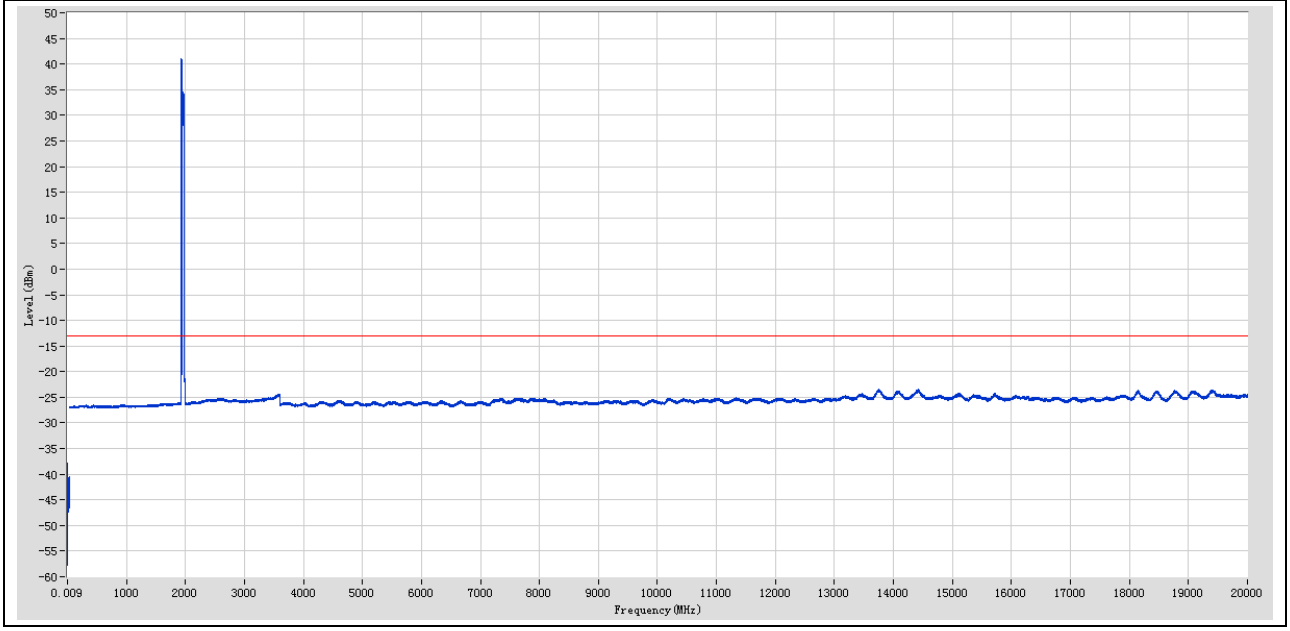
1.2.21 1U1L_1.4M_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.705 k	-43.36	-13	Pass	801
0.15	30	0.01	RMS	350.99 k	-35.78	-13	Pass	15001
30	4000	1	RMS	1989.264824 M	--	-13	Pass	19901
4000	10000	1	RMS	7632.2 M	-25.12	-13	Pass	30001
10000	20000	1	RMS	13738.32460 M	-23.4	-13	Pass	50002



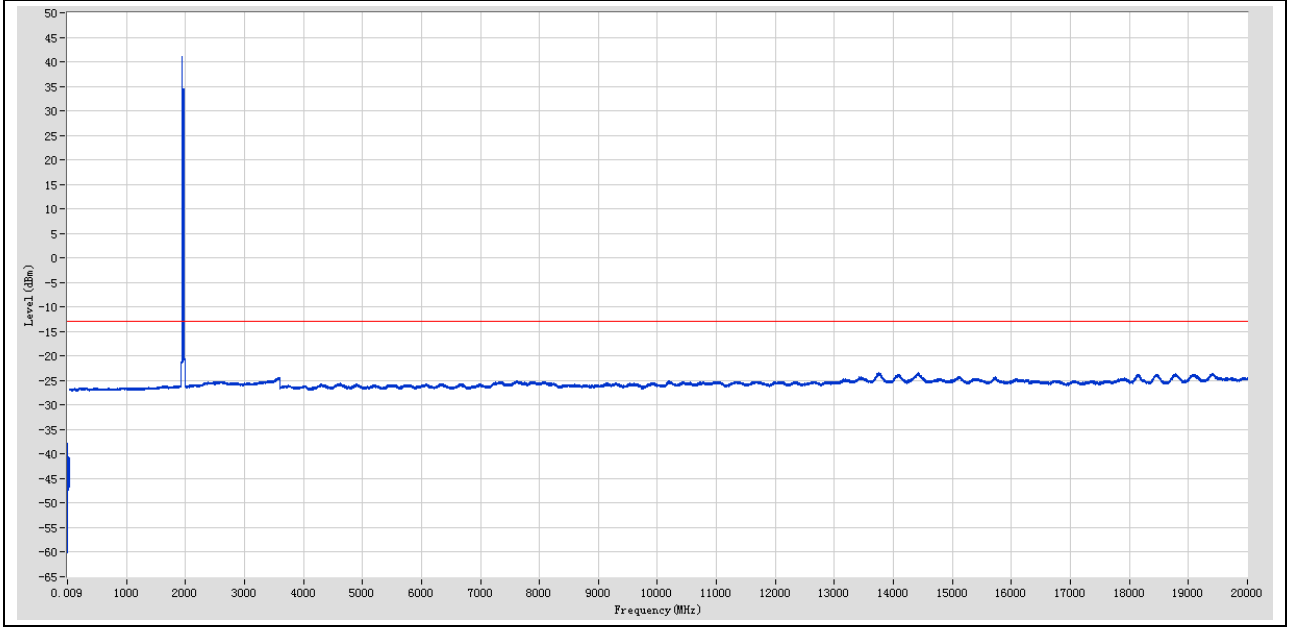
1.2.22 1U1L_20M_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-42.05	-13	Pass	801
0.15	30	0.01	RMS	177.86 k	-37.77	-13	Pass	15001
30	4000	1	RMS	1932.208543 M	--	-13	Pass	19901
4000	10000	1	RMS	7630.4 M	-25.16	-13	Pass	30001
10000	20000	1	RMS	13752.32507 M	-23.45	-13	Pass	50002



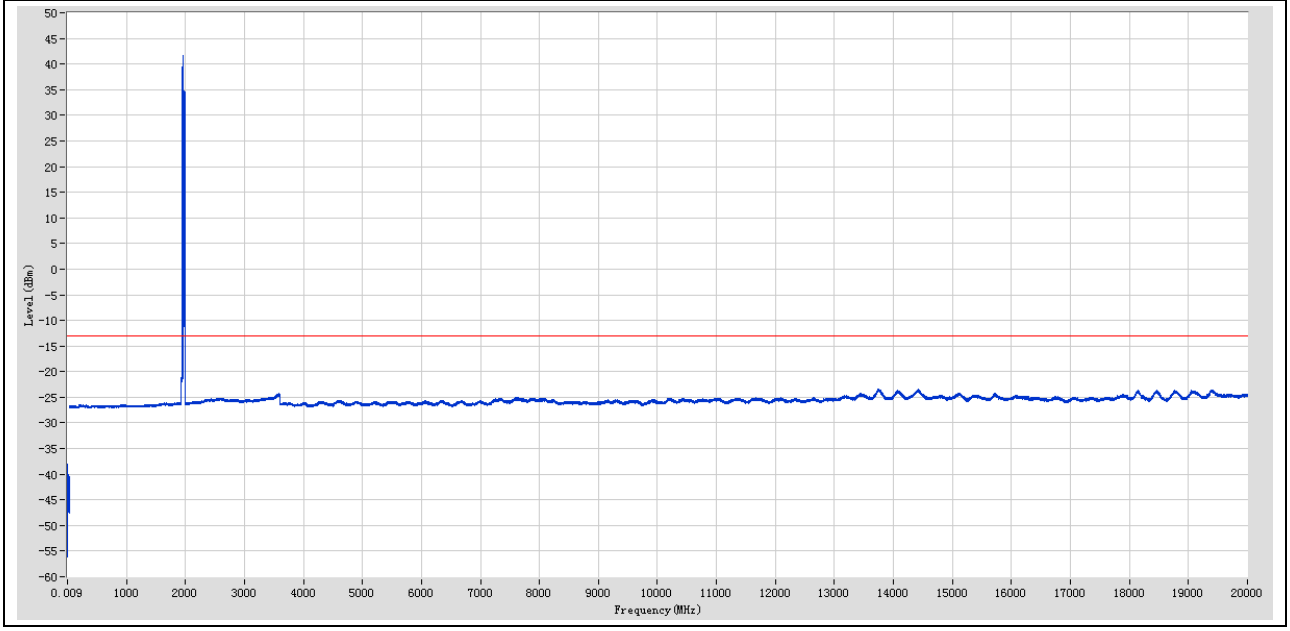
1.2.23 1U1L_20M_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-43.44	-13	Pass	801
0.15	30	0.01	RMS	155.97 k	-37.89	-13	Pass	15001
30	4000	1	RMS	1941.98392 M	--	-13	Pass	19901
4000	10000	1	RMS	7629.4 M	-25.07	-13	Pass	30001
10000	20000	1	RMS	14422.34740 M	-23.42	-13	Pass	50002



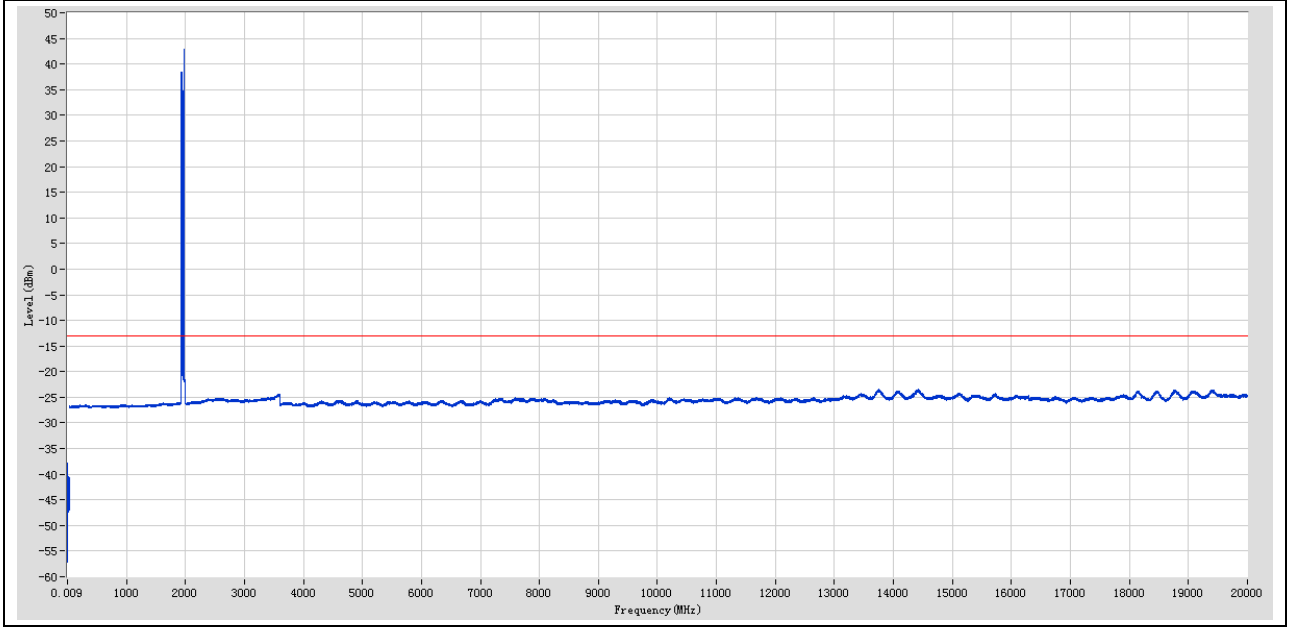
1.2.24 1U1L_20M_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.352 k	-43.97	-13	Pass	801
0.15	30	0.01	RMS	157.96 k	-38	-13	Pass	15001
30	4000	1	RMS	1951.958794 M	--	-13	Pass	19901
4000	10000	1	RMS	7606 M	-25.08	-13	Pass	30001
10000	20000	1	RMS	13747.52491 M	-23.36	-13	Pass	50002



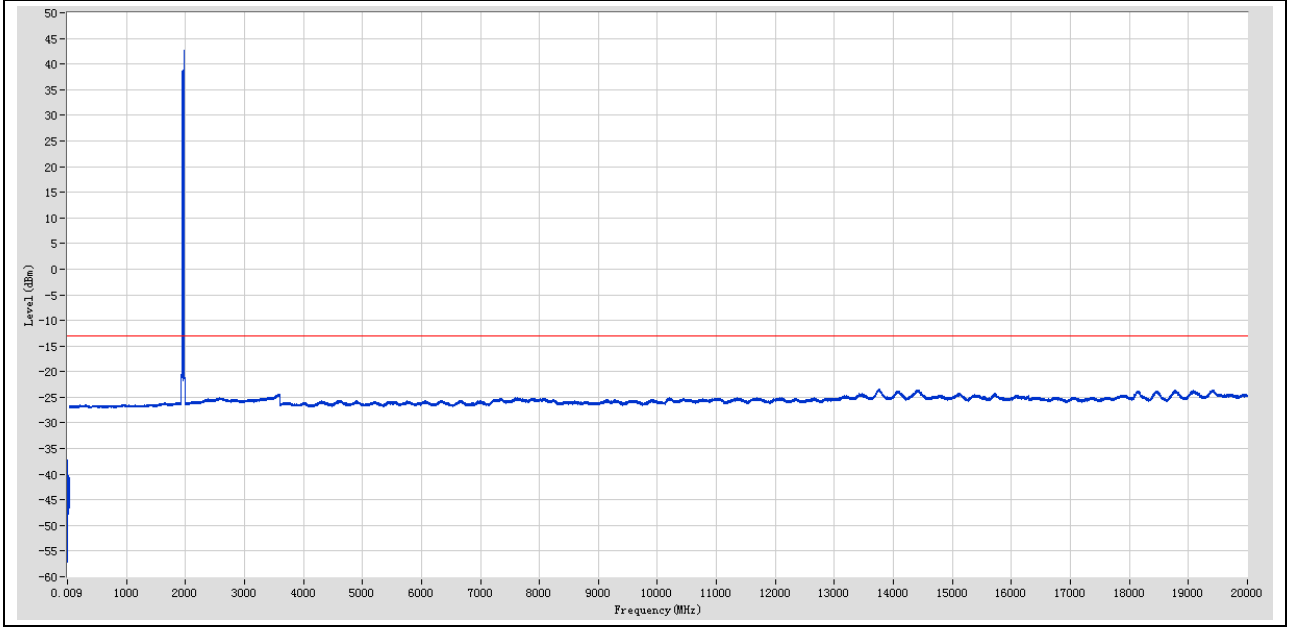
1.2.25 3U1L_1.4M_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-44.23	-13	Pass	801
0.15	30	0.01	RMS	159.95 k	-37.9	-13	Pass	15001
30	4000	1	RMS	1969.315075 M	--	-13	Pass	19901
4000	10000	1	RMS	7597.8 M	-25.04	-13	Pass	30001
10000	20000	1	RMS	13751.12503 M	-23.35	-13	Pass	50002



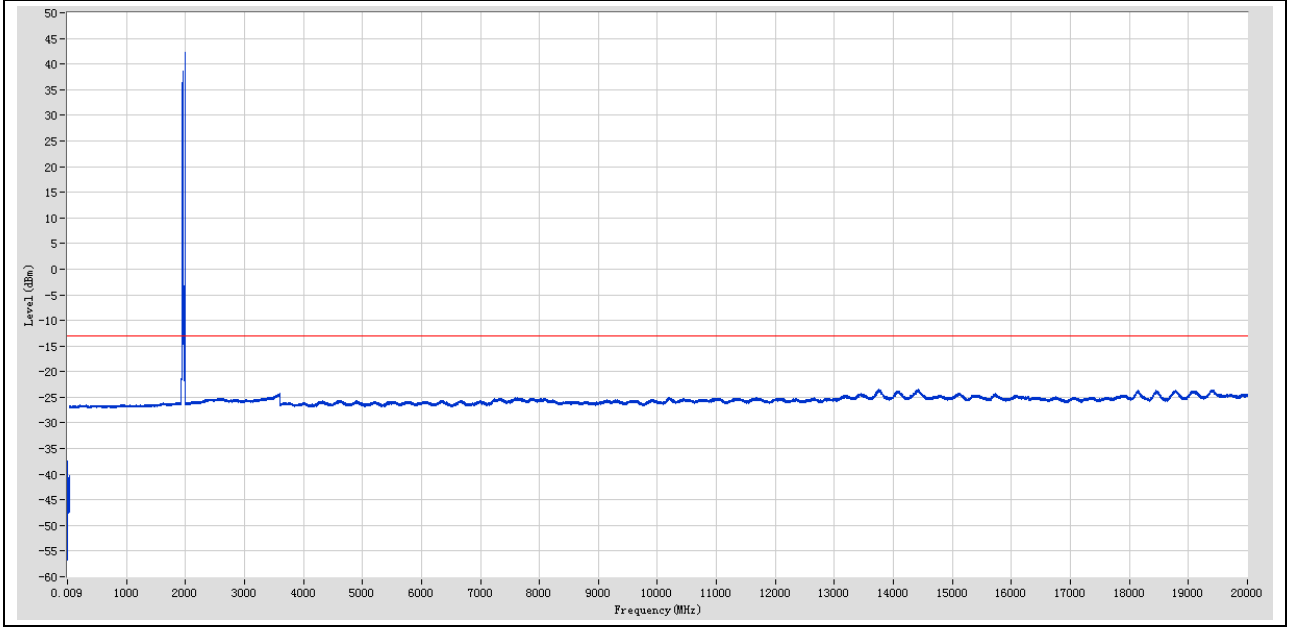
1.2.26 3U1L_1.4M_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.81 k	-42.96	-13	Pass	801
0.15	30	0.01	RMS	153.98 k	-37.32	-13	Pass	15001
30	4000	1	RMS	1979.28995 M	--	-13	Pass	19901
4000	10000	1	RMS	7591.4 M	-25.09	-13	Pass	30001
10000	20000	1	RMS	13751.72505 M	-23.32	-13	Pass	50002



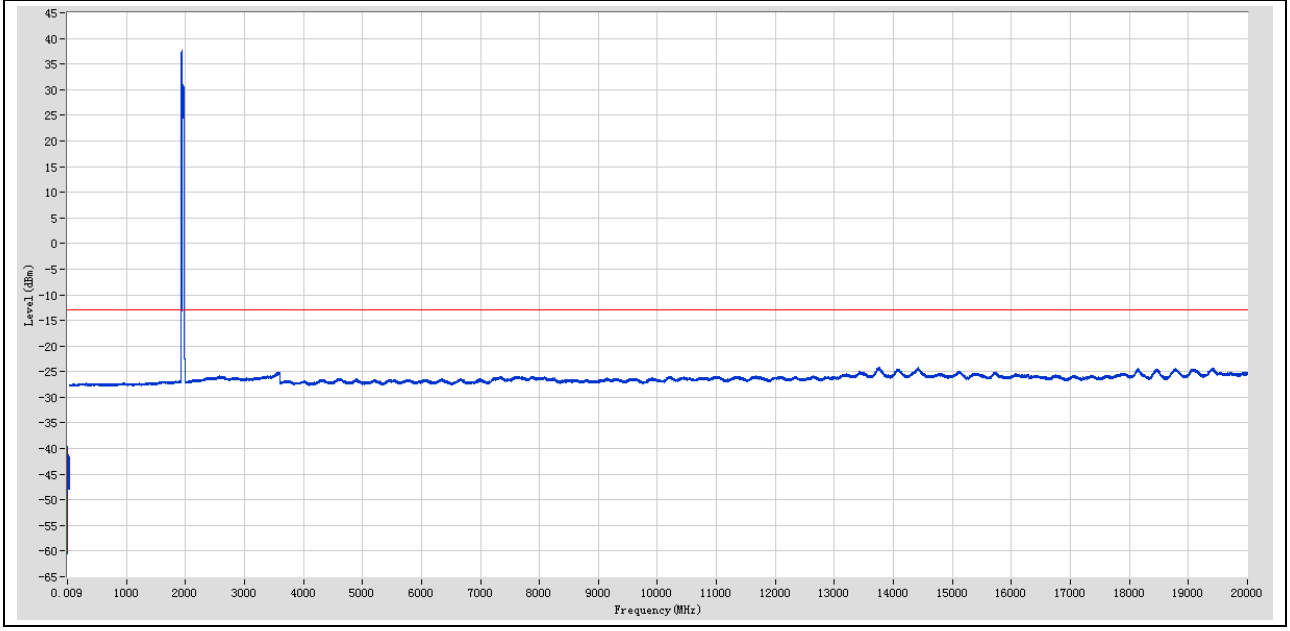
1.2.27 3U1L_1.4M_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-42.16	-13	Pass	801
0.15	30	0.01	RMS	223.63 k	-37.53	-13	Pass	15001
30	4000	1	RMS	1989.26482 M	--	-13	Pass	19901
4000	10000	1	RMS	7626 M	-25.1	-13	Pass	30001
10000	20000	1	RMS	13748.9249 M	-23.47	-13	Pass	50002



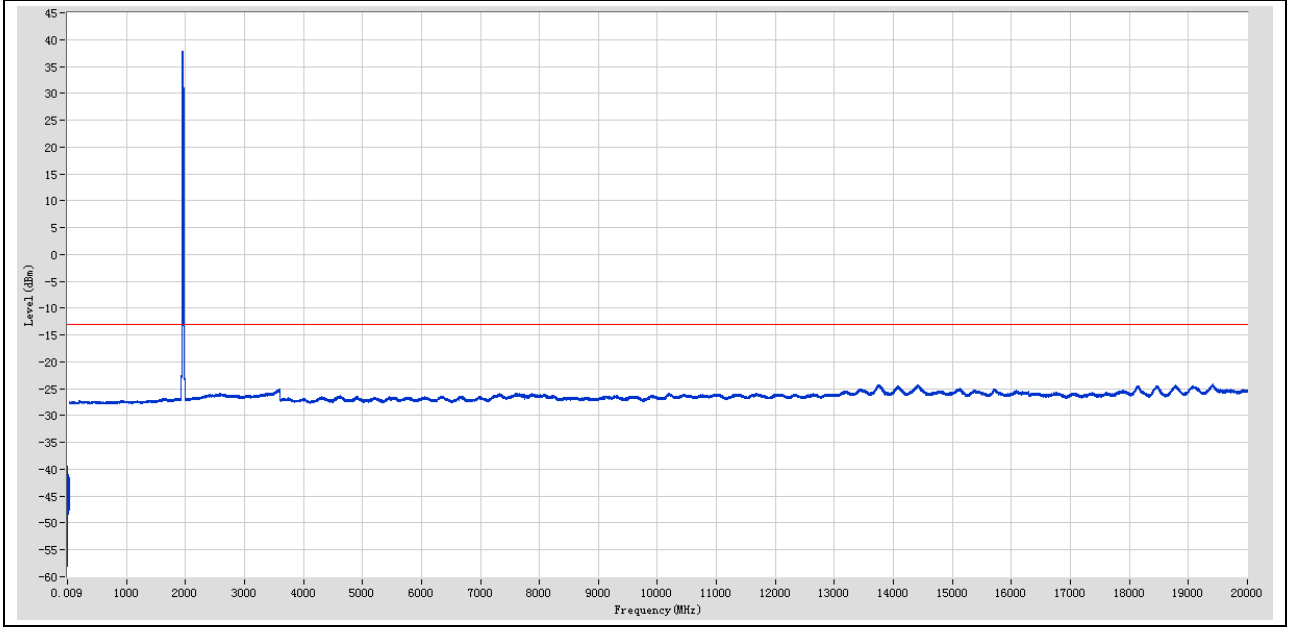
1.2.28 3U1L_20M_80W_B_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.986 k	-45.79	-13	Pass	801
0.15	30	0.01	RMS	235.57 k	-39.65	-13	Pass	15001
30	4000	1	RMS	1942.582412 M	--	-13	Pass	19901
4000	10000	1	RMS	7862 M	-25.86	-13	Pass	30001
10000	20000	1	RMS	13761.12536 M	-24.22	-13	Pass	50002



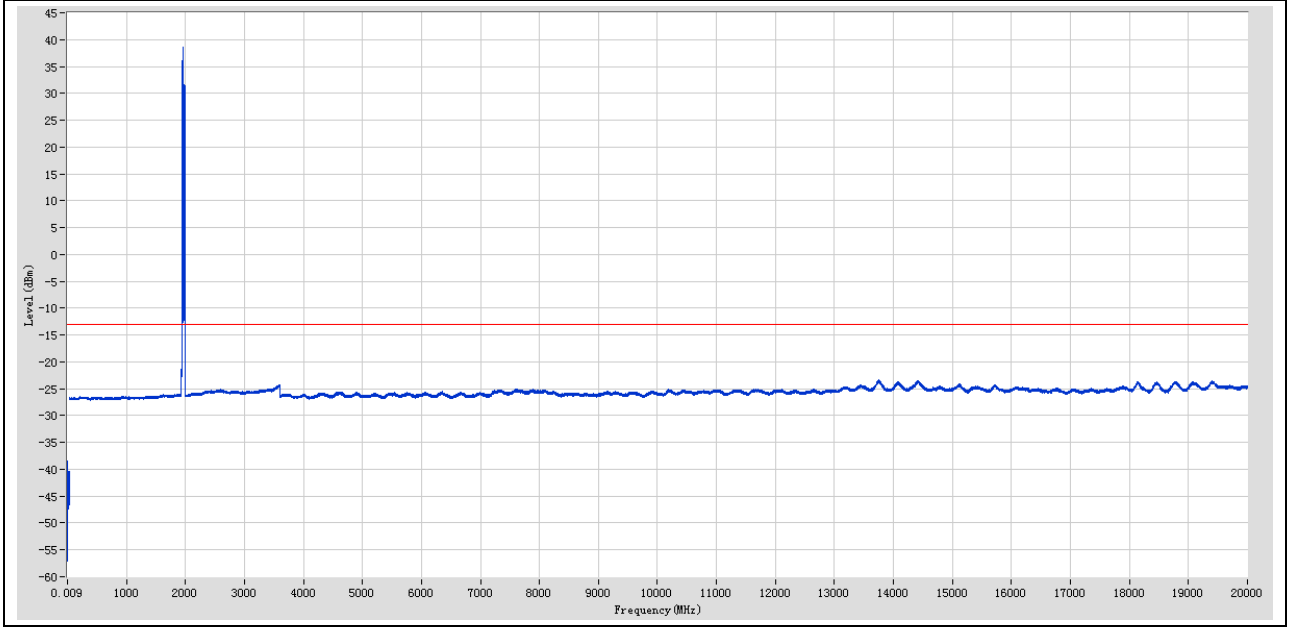
1.2.29 3U1L_20M_80W_M_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.281 k	-45.39	-13	Pass	801
0.15	30	0.01	RMS	239.55 k	-39.35	-13	Pass	15001
30	4000	1	RMS	1942.58241 M	--	-13	Pass	19901
4000	10000	1	RMS	7619.6 M	-25.87	-13	Pass	30001
10000	20000	1	RMS	19416.8291 M	-24.12	-13	Pass	50002



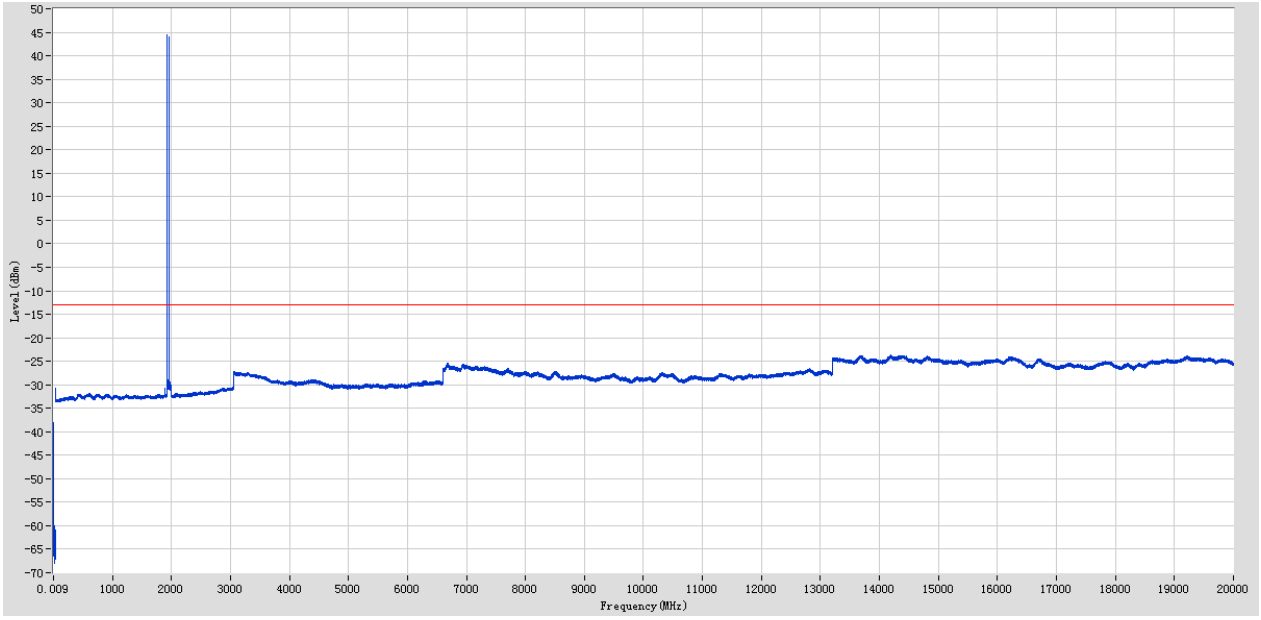
1.2.30 3U1L_20M_80W_T_TM1_TRXB

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-44.14	-13	Pass	801
0.15	30	0.01	RMS	241.54 k	-38.5	-13	Pass	15001
30	4000	1	RMS	1957.345226 M	--	-13	Pass	19901
4000	10000	1	RMS	7885 M	-25.03	-13	Pass	30001
10000	20000	1	RMS	13751.52504 M	-23.4	-13	Pass	50002



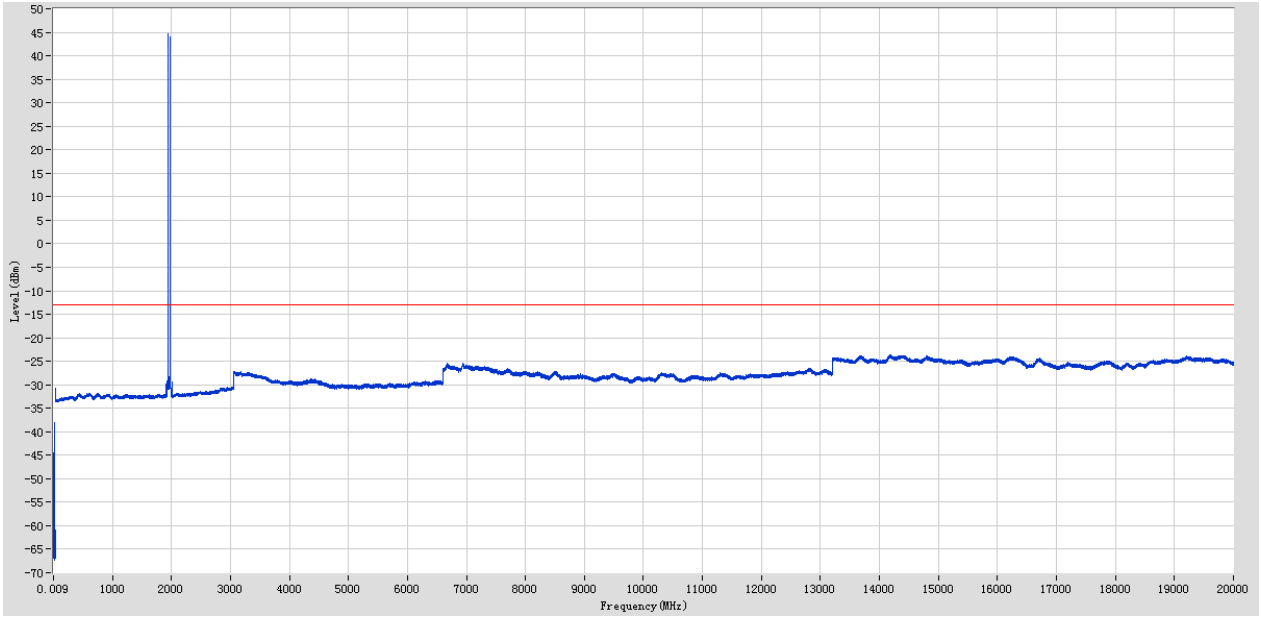
1.2.31 1G1L_1.4M_60W_B_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	11.003 k	-50.14	-13	Pass	705
0.15	30	0.01	RMS	3.526412 M	-38.17	-13	Pass	14925
30	4000	1	RMS	1930.431986 M	--	-13	Pass	19850
4000	10000	1	RMS	6684.92775 M	-25.45	-13	Pass	30000
10000	20000	1	RMS	14186.91109 M	-23.62	-13	Pass	50000



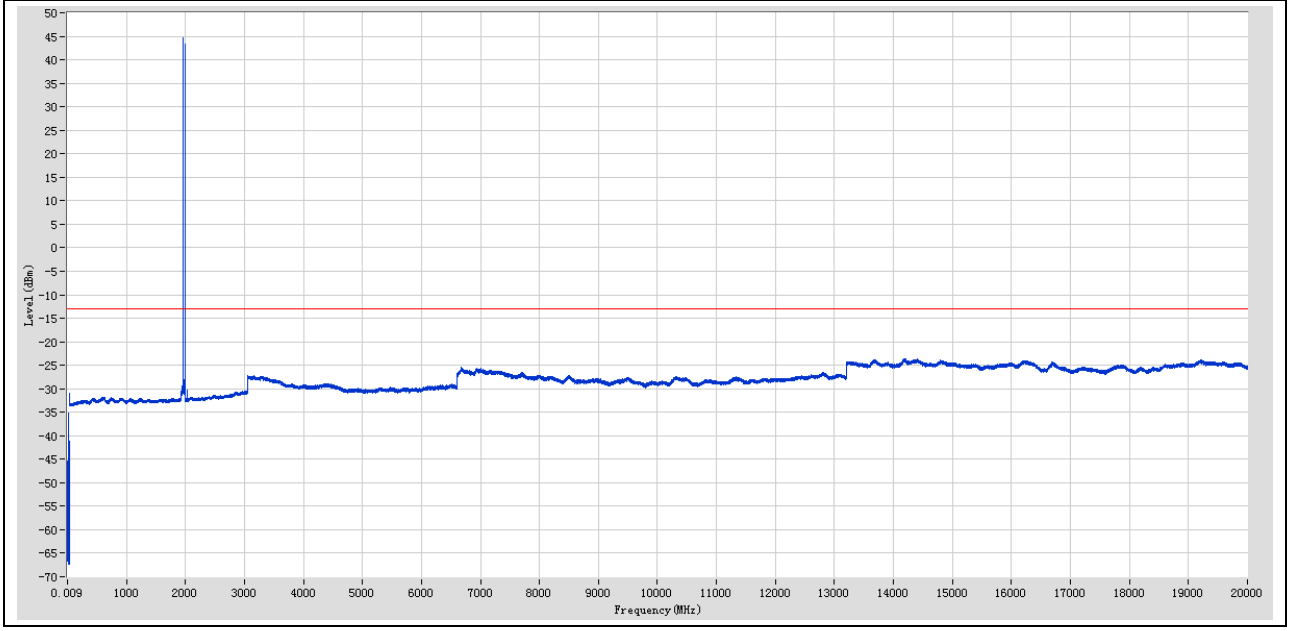
1.2.32 1G1L_1.4M_60W_M_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.602 k	-49.87	-13	Pass	705
0.15	30	0.01	RMS	16.129951 M	-38.13	-13	Pass	14925
30	4000	1	RMS	1942.8335 M	--	-13	Pass	19850
4000	10000	1	RMS	6676.726749 M	-25.37	-13	Pass	30000
10000	20000	1	RMS	14184.71082 M	-23.67	-13	Pass	50000



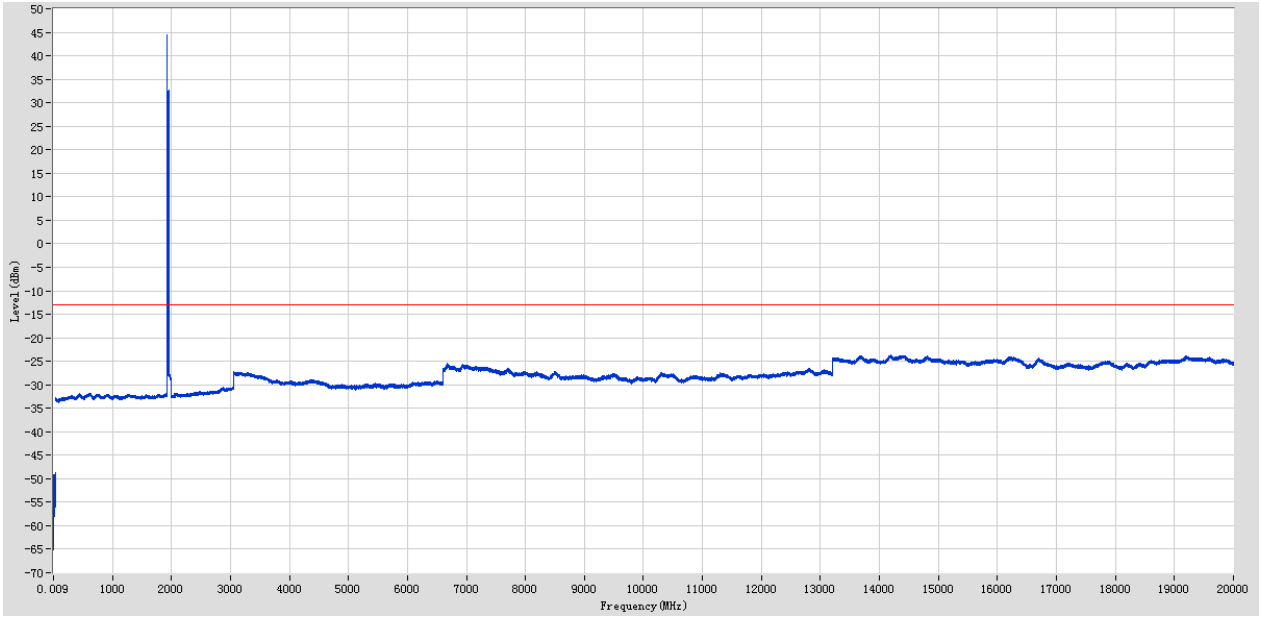
1.2.33 1G1L_1.4M_60W_T_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.803 k	-50.45	-13	Pass	705
0.15	30	0.01	RMS	11.755417 M	-35.28	-13	Pass	14925
30	4000	1	RMS	1955.235014 M	--	-13	Pass	19850
4000	10000	1	RMS	6679.727115 M	-25.47	-13	Pass	30000
10000	20000	1	RMS	14187.31114 M	-23.7	-13	Pass	50000



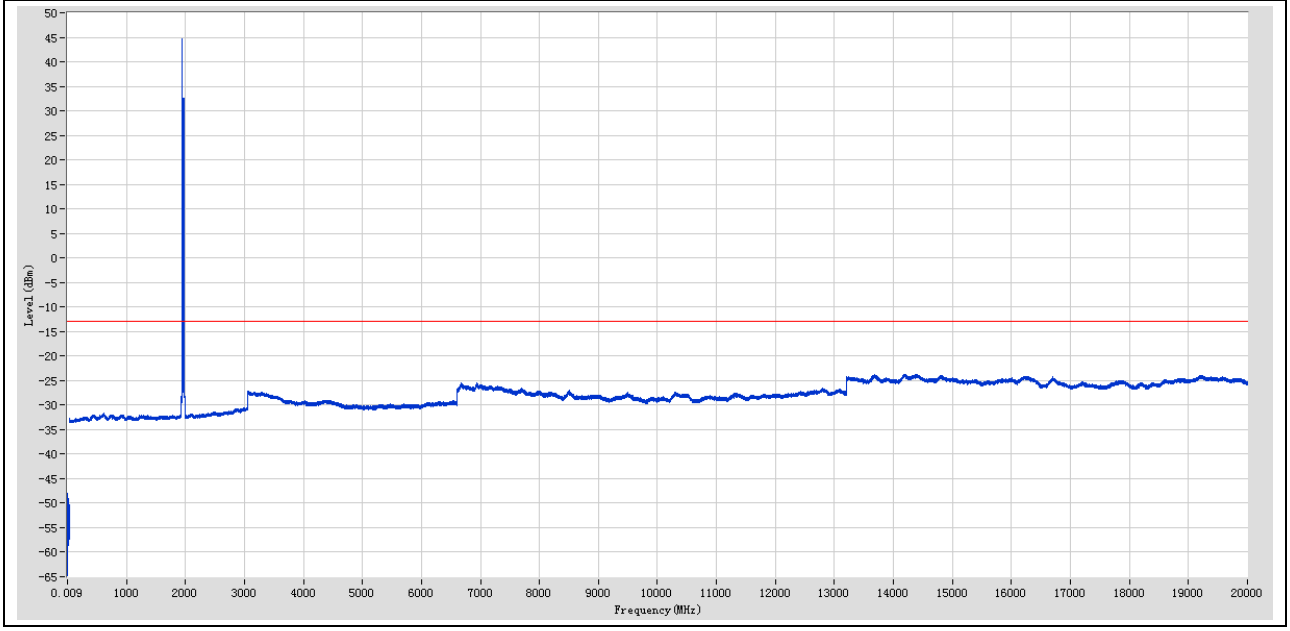
1.2.34 1G1L_20M_60W_B_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	14.207 k	-52.02	-13	Pass	705
0.15	30	0.01	RMS	28.25174 M	-48.68	-13	Pass	14925
30	4000	1	RMS	1930.431986 M	--	-13	Pass	19850
4000	10000	1	RMS	6679.127042 M	-25.5	-13	Pass	30000
10000	20000	1	RMS	14190.11148 M	-23.68	-13	Pass	50000



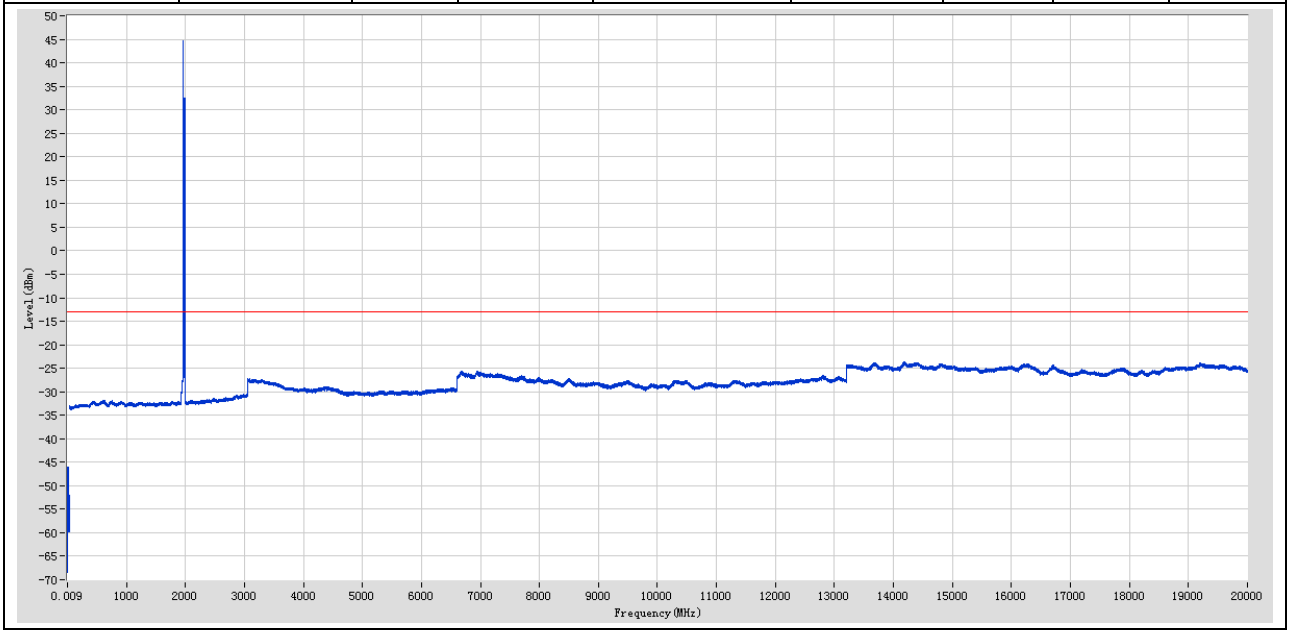
1.2.35 1G1L_20M_60W_M_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	12.405 k	-50.85	-13	Pass	705
0.15	30	0.01	RMS	7.940951 M	-47.92	-13	Pass	14925
30	4000	1	RMS	1942.8335 M	--	-13	Pass	19850
4000	10000	1	RMS	6679.92714 M	-25.45	-13	Pass	30000
10000	20000	1	RMS	14194.91207 M	-23.7	-13	Pass	50000



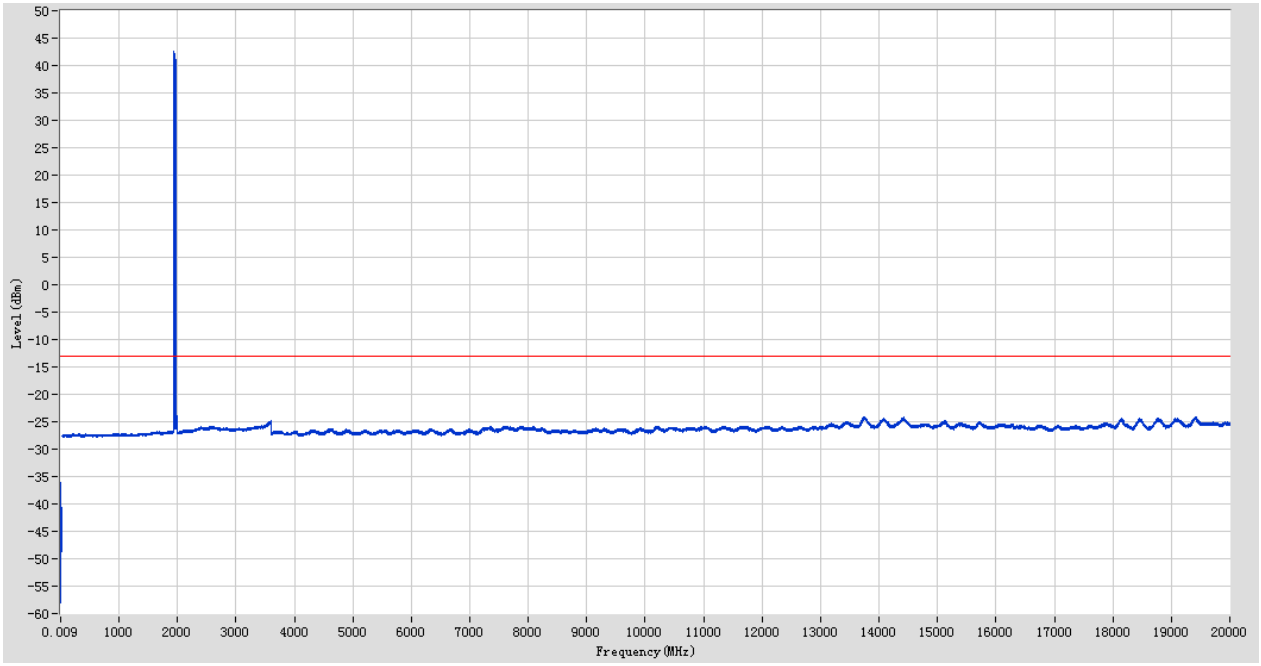
1.2.36 1G1L_20M_60W_T_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9 k	-52	-13	Pass	705
0.15	30	0.01	RMS	10.091214 M	-46.03	-13	Pass	14925
30	4000	1	RMS	1955.235014 M	--	-13	Pass	19850
4000	10000	1	RMS	6683.527579 M	-25.57	-13	Pass	30000
10000	20000	1	RMS	14191.51165 M	-23.68	-13	Pass	50000



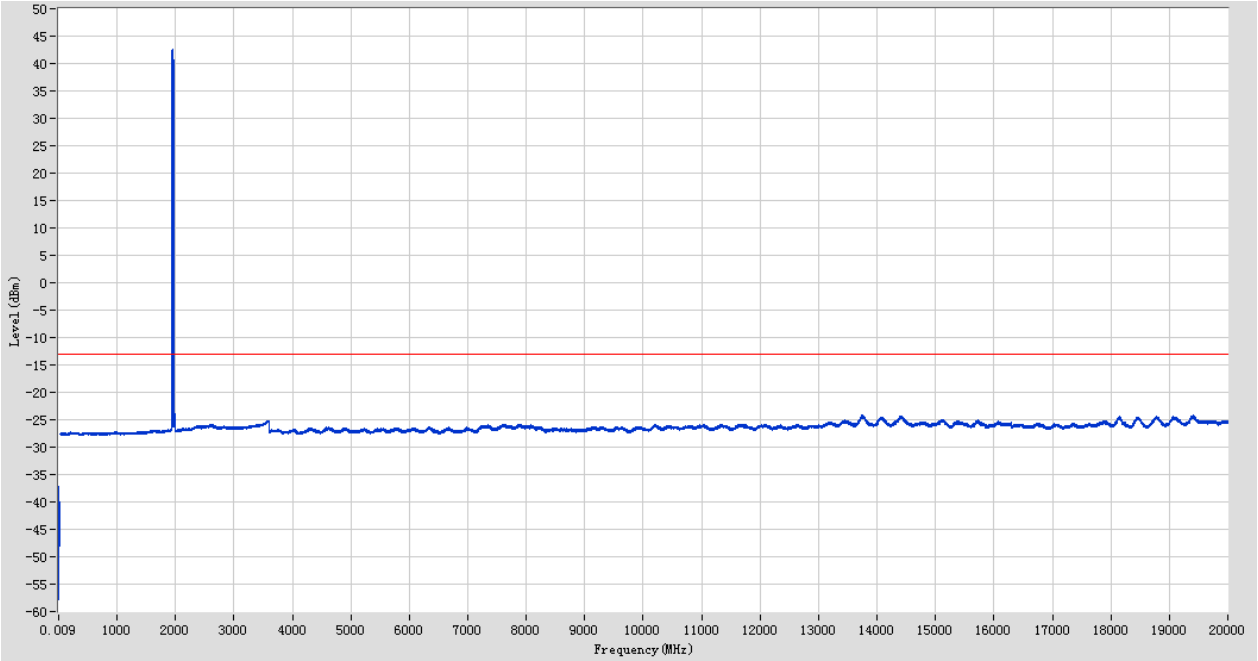
1.2.37 3G1L_1.4M_60W_B_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.281 k	-44.25	-13	Pass	801
0.15	30	0.01	RMS	599.74 k	-36.07	-13	Pass	15001
30	4000	1	RMS	1930.81206 M	--	-13	Pass	19901
4000	10000	1	RMS	7608.4 M	-25.77	-13	Pass	30001
10000	20000	1	RMS	13748.9249 M	-24.1	-13	Pass	50002



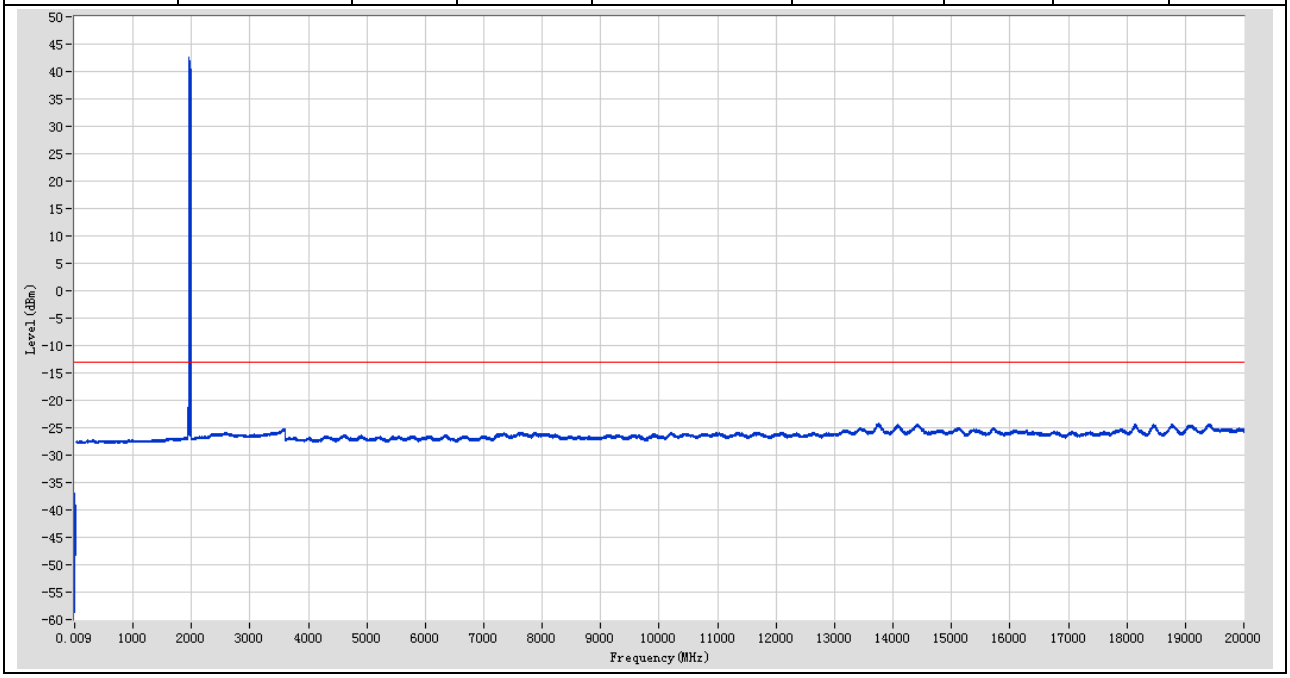
1.2.38 3G1L_1.4M_60W_M_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	9.705 k	-44.21	-13	Pass	801
0.15	30	0.01	RMS	599.74 k	-37.08	-13	Pass	15001
30	4000	1	RMS	1943.180905 M	--	-13	Pass	19901
4000	10000	1	RMS	7626.8 M	-25.84	-13	Pass	30001
10000	20000	1	RMS	13749.92499 M	-24.14	-13	Pass	50002



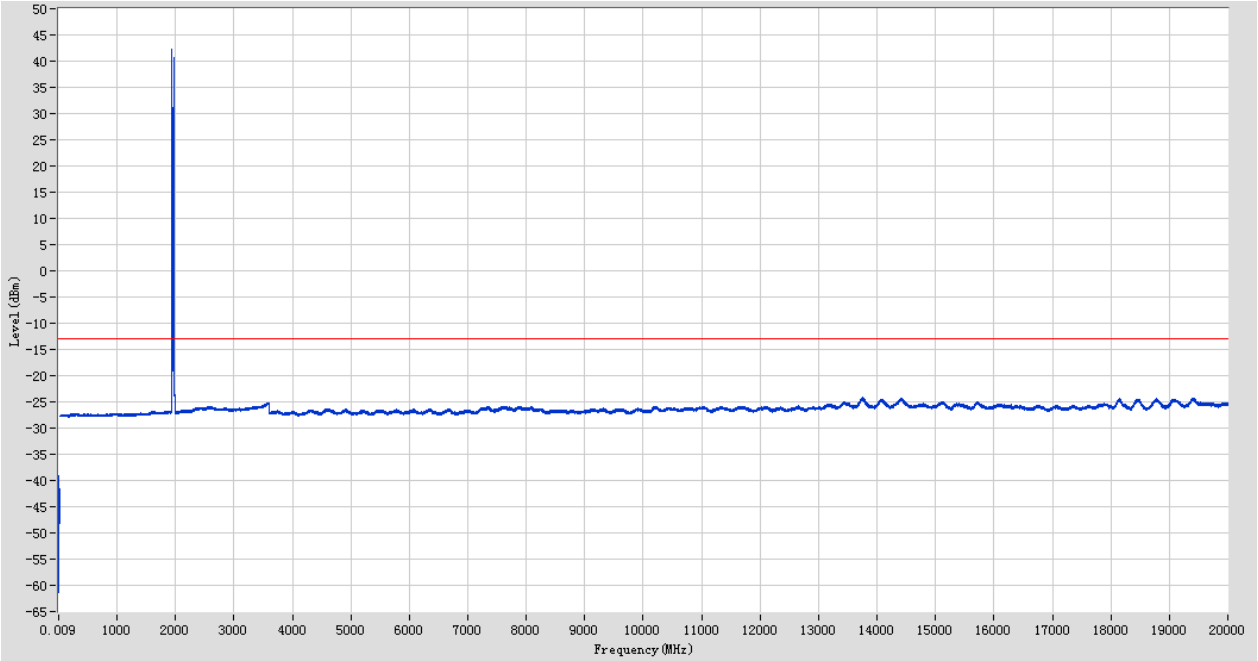
1.2.39 3G1L_1.4M_60W_T_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.281 k	-44.5	-13	Pass	801
0.15	30	0.01	RMS	593.77 k	-37.06	-13	Pass	15001
30	4000	1	RMS	1955.549749 M	--	-13	Pass	19901
4000	10000	1	RMS	7634.4 M	-25.83	-13	Pass	30001
10000	20000	1	RMS	13756.32520 M	-24.16	-13	Pass	50002



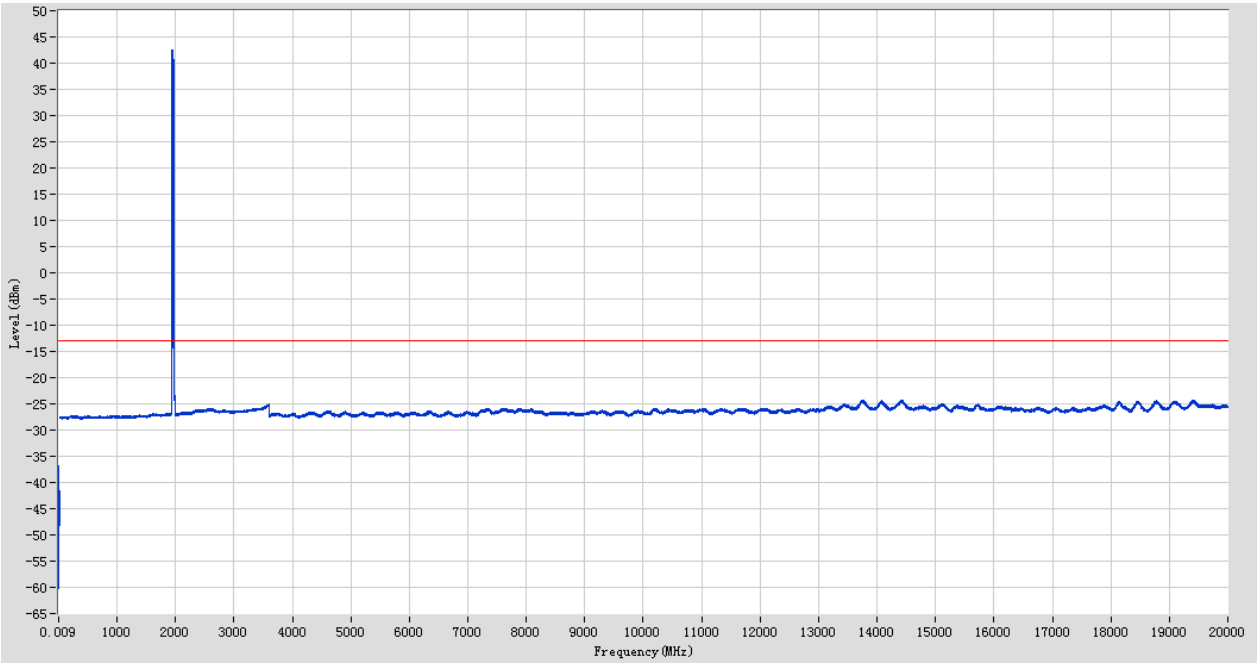
1.2.40 3G1L_20M_60W_B_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.457 k	-45	-13	Pass	801
0.15	30	0.01	RMS	591.78 k	-39.11	-13	Pass	15001
30	4000	1	RMS	1930.61256 M	--	-13	Pass	19901
4000	10000	1	RMS	7615.6 M	-25.86	-13	Pass	30001
10000	20000	1	RMS	13753.1251 M	-24.18	-13	Pass	50002



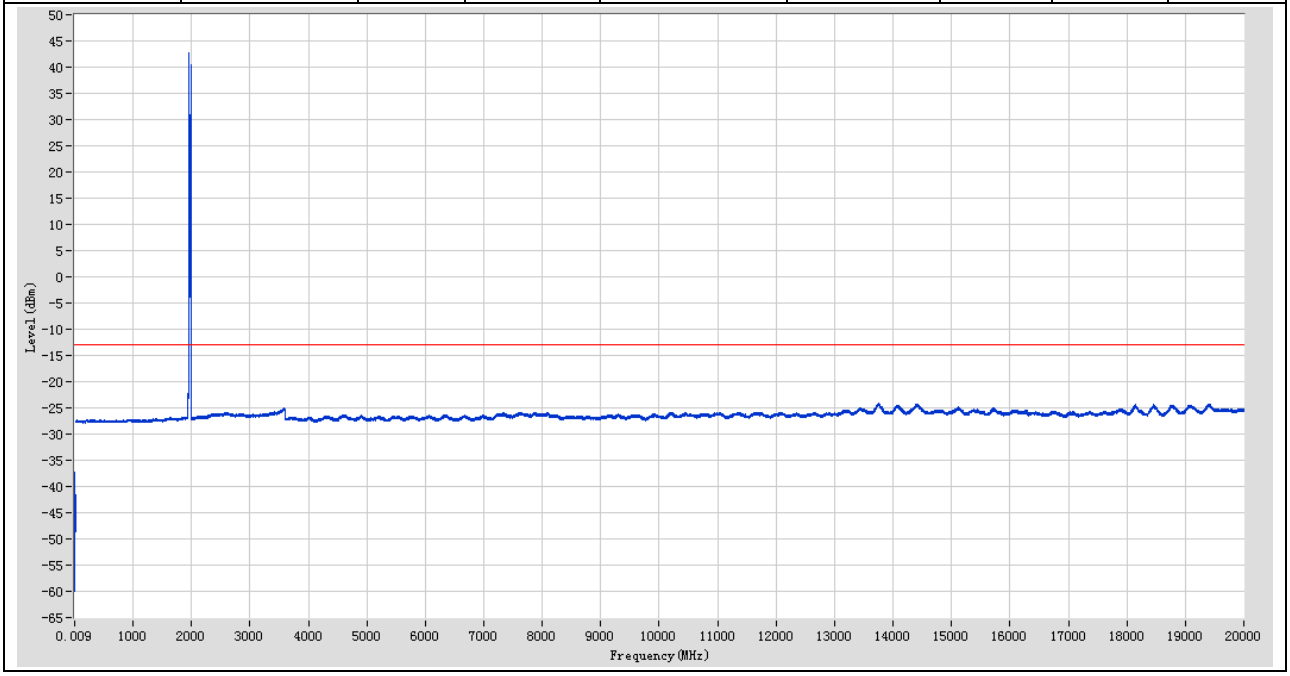
1.2.41 3G1L_20M_60W_M_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.634 k	-45.64	-13	Pass	801
0.15	30	0.01	RMS	601.73 k	-36.81	-13	Pass	15001
30	4000	1	RMS	1943.18090 M	--	-13	Pass	19901
4000	10000	1	RMS	7603 M	-25.87	-13	Pass	30001
10000	20000	1	RMS	14426.3475 M	-24.21	-13	Pass	50002



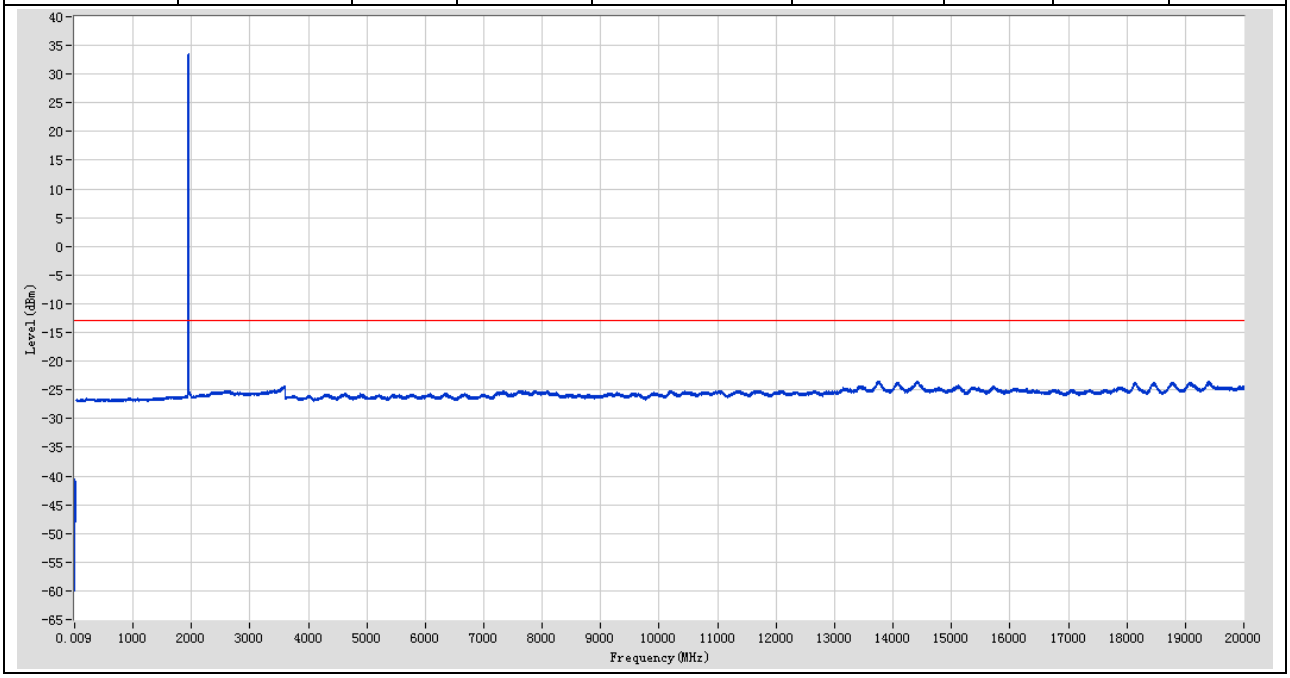
1.2.42 3G1L_20M_60W_T_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.105 k	-45.13	-13	Pass	801
0.15	30	0.01	RMS	591.78 k	-37.29	-13	Pass	15001
30	4000	1	RMS	1955.54974 M	--	-13	Pass	19901
4000	10000	1	RMS	7611.6 M	-25.83	-13	Pass	30001
10000	20000	1	RMS	13762.1254 M	-24.18	-13	Pass	50002



1.2.43 1L_20M_60W_B_TM1_TRXA

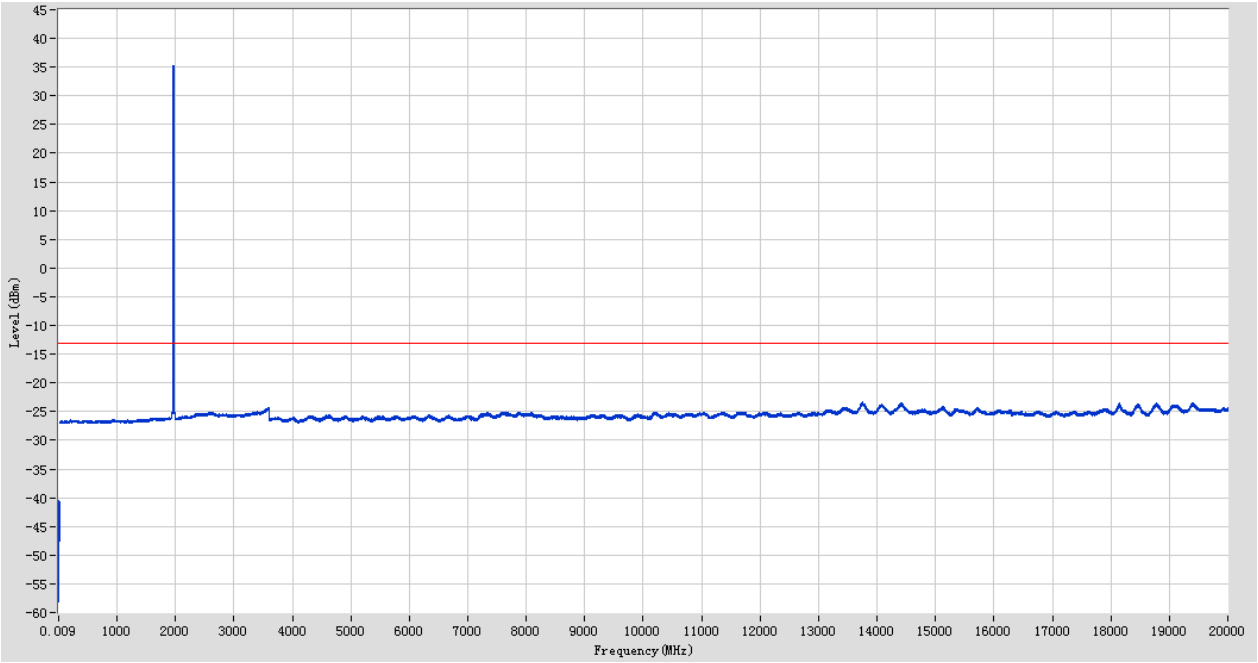
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.634 k	-41.63	-13	Pass	801
0.15	30	0.01	RMS	153.98 k	-40.61	-13	Pass	15001
30	4000	1	RMS	1947.569849 M	33.55	-13	Fail	19901
4000	10000	1	RMS	7614.2 M	-25.13	-13	Pass	30001
10000	20000	1	RMS	13750.925027 M	-23.43	-13	Pass	50002



1.2.44 1L_20M_60W_M_TM1_TRXA

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.281 k	-42.61	-13	Pass	801
0.15	30	0.01	RMS	4.5479 M	-40.5	-13	Pass	15001
30	4000	1	RMS	1961.534673 M	35.34	-13	Fail	19901
4000	10000	1	RMS	7602.2 M	-25.06	-13	Pass	30001
10000	20000	1	RMS	13758.725287 M	-23.34	-13	Pass	50002

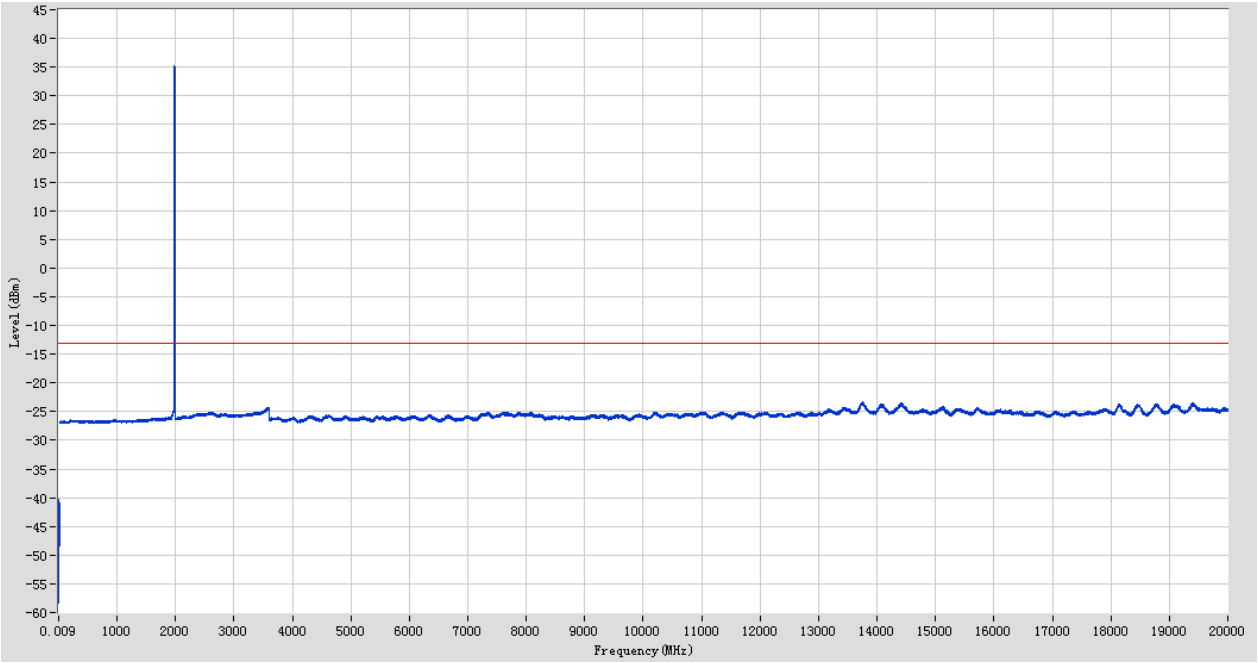
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point



1.2.45 1L_20M_60W_T_TM1_TRXA

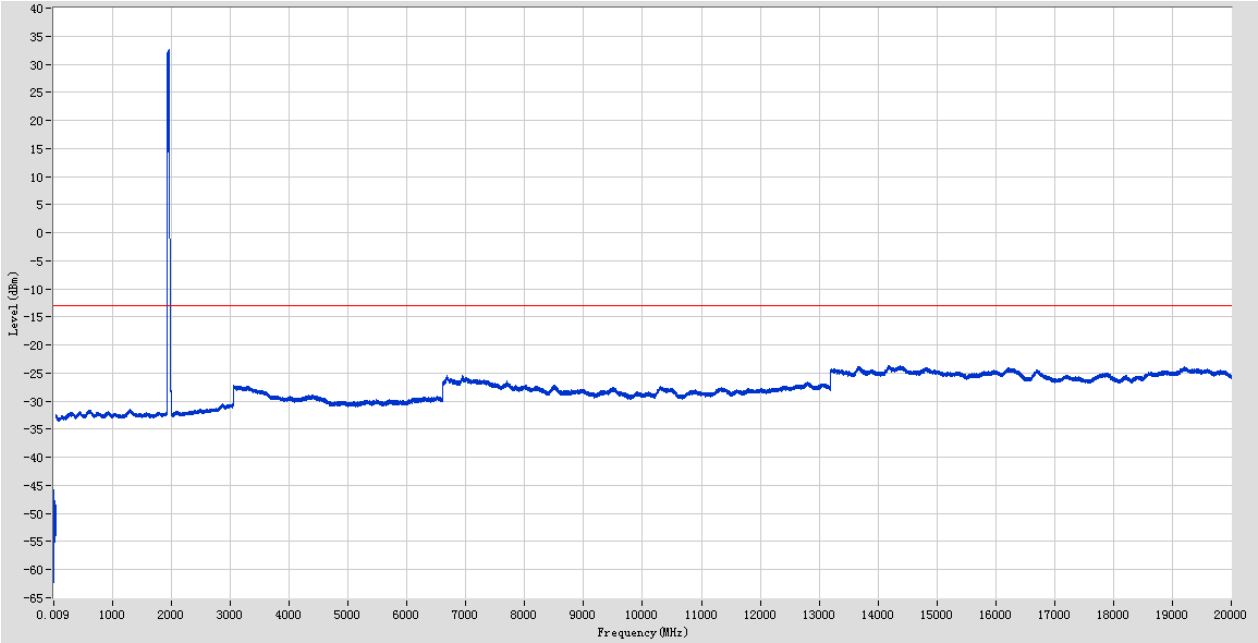
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	66.281 k	-41.56	-13	Pass	801
0.15	30	0.01	RMS	269.4 k	-40.24	-13	Pass	15001
30	4000	1	RMS	1976.696482 M	35.28	-13	Fail	19901
4000	10000	1	RMS	7624.6 M	-25.04	-13	Pass	30001
10000	20000	1	RMS	13751.125033 M	-23.29	-13	Pass	50002

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point



1.2.46 2L_20M_60W_B

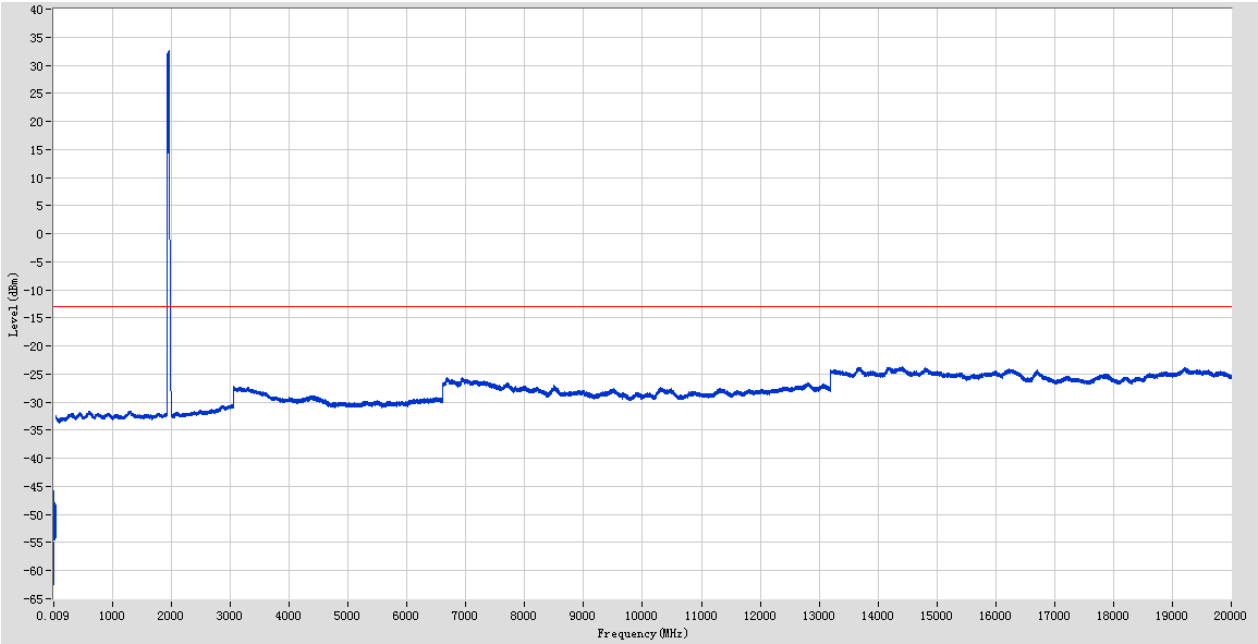
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	10.803 k	-53.59	-13	Pass	705
0.15	30	0.01	RMS	154 k	-45.87	-13	Pass	14925
30	4000	1	RMS	1961.435771 M	--	-13	Pass	19850
4000	10000	1	RMS	6681.927384 M	-25.44	-13	Pass	30000
10000	20000	1	RMS	14192.51178 M	-23.64	-13	Pass	50000



1.2.47 2L_20M_60W_T

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point
0.009	0.15	0.001	RMS	14.608 k	-55	-13	Pass	705
0.15	30	0.01	RMS	156.001 k	-45.84	-13	Pass	14925
30	4000	1	RMS	1965.03621 M	--	-13	Pass	19850
4000	10000	1	RMS	6685.327799 M	-25.57	-13	Pass	30000
10000	20000	1	RMS	14407.93807 M	-23.73	-13	Pass	50000

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict	Sweep Point



Appendix E: Field Strength of Spurious Radiation

1 Result Table

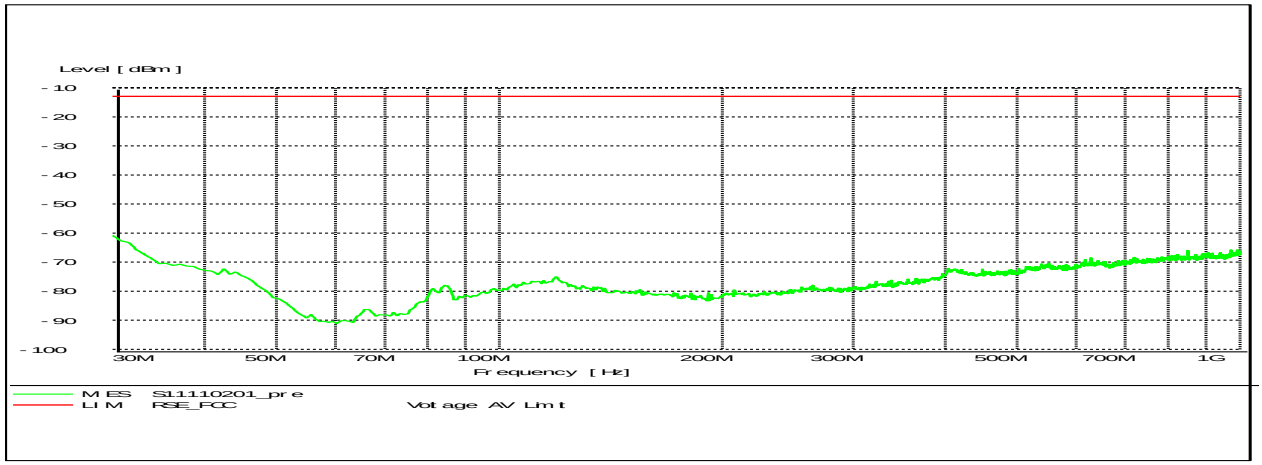
Test Mode	Carrier Conf.	RF Ch.	Field Strength of Spurious Radiation [dBm]	Verdict
GMSK	1*G(60W) (each TRX)	M	< -13	Pass
GMSK	1*G(40W) (TRXA) + 1*G(80W) (TRXB)	M	< -13	Pass

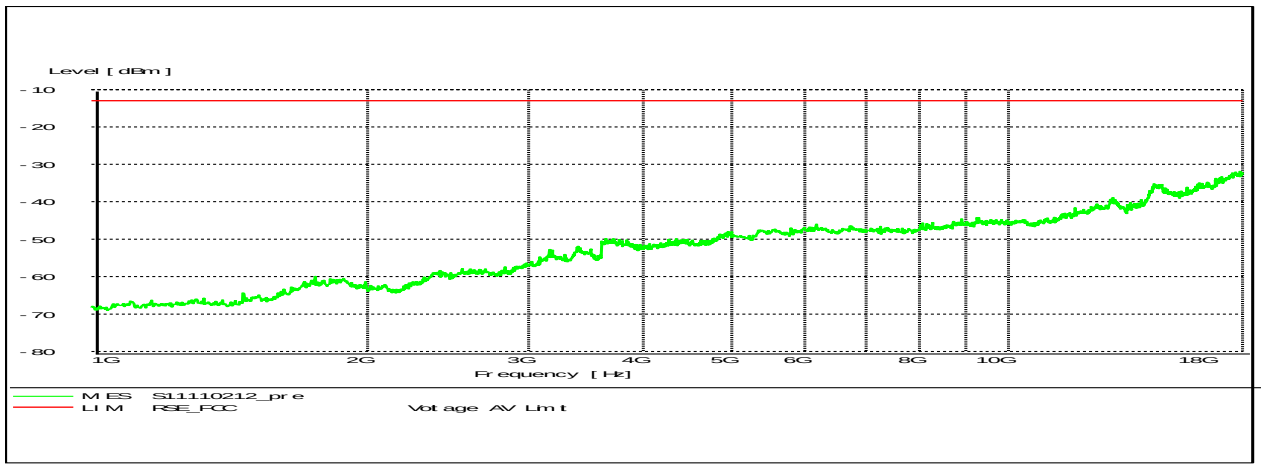
2 Test Plot

2.1 Test Mode = GMSK

2.1.1 Carrier Conf. = 1*G(60W) (each TRX)

2.1.1.1 Ch. M

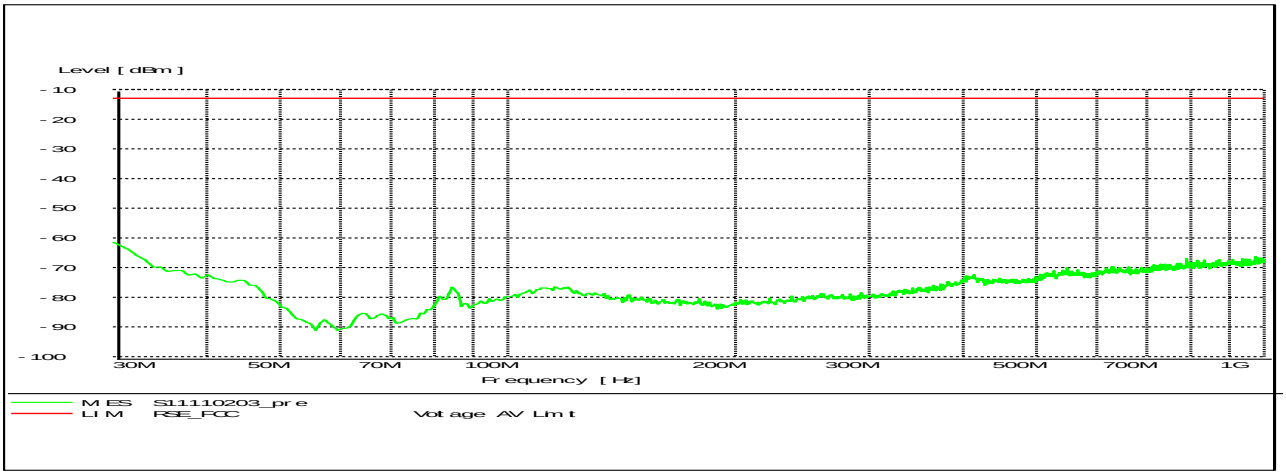


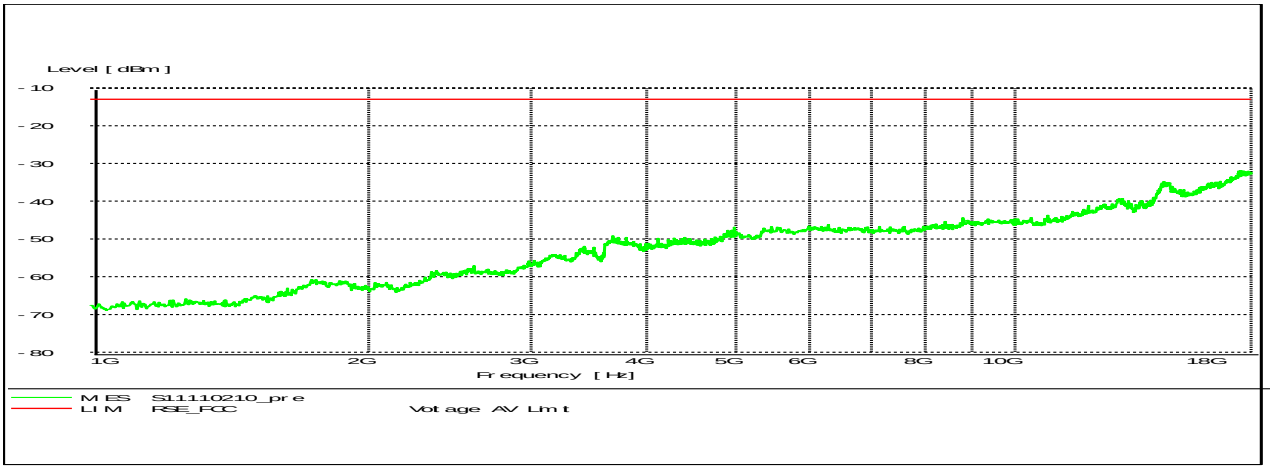


2.2 Test Mode = GMSK

2.2.1 Carrier Conf. = 1*G(40W) (TRXA) + 1*G(80W) (TRXB)

2.2.1.1 Ch. M





Appendix F: Frequency Stability

1 Frequency Error vs. Temperature:

Test Mode	Carrier Conf.	RF Ch.	Volt.	Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
GMSK	1*G(60W)	M	100%	-30 °C	-0.2	-0.0001	0.0005	Pass
				-20 °C	-0.8	-0.0004	0.0002	Pass
				-10 °C	-0.7	-0.0004	0.0002	Pass
				0 °C	0.5	0.0003	0.0008	Pass
				10 °C	0.7	0.0004	0.0009	Pass
				20 °C	-1.1	-0.0006	---	Pass
				30 °C	0.8	0.0004	0.001	Pass
				40 °C	-0.9	-0.0005	0.0001	Pass
				50 °C	1.3	-0.0007	0.0012	Pass

2 Frequency Error vs. Voltage:

Test Mode	Carrier Conf.	RF Ch.	Temp.	Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
GMSK	1*G(60W)	M	20 °C	85 %	-0.9	-0.0005	-0.0001	Pass
				100 %	-0.7	-0.0004	---	Pass
				115 %	1.0	0.0005	0.0009	Pass

Appendix G: Receiver Spurious Emissions (Conducted)

NOTE: The requirements are only applicable to IC requirements.

1 Result Table

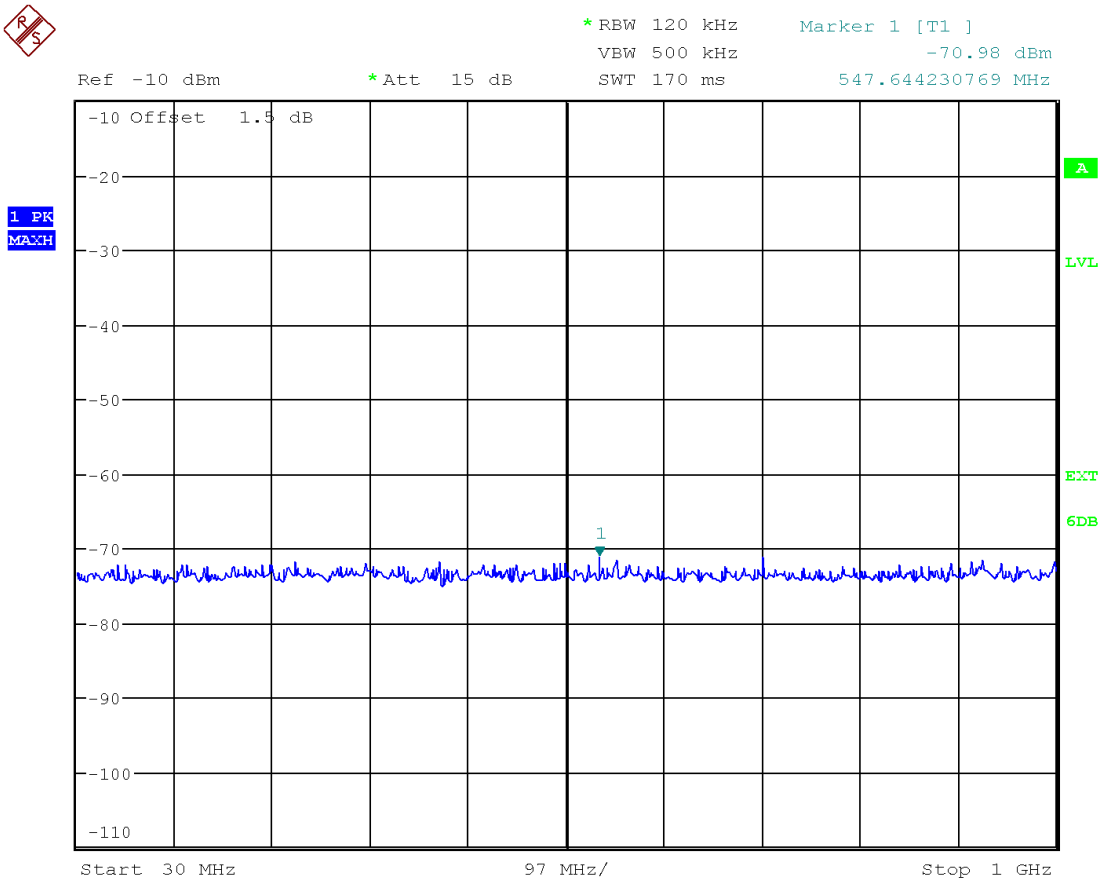
Test Mode	Carrier Conf.	RF Ch.	Receiver Spurious Emissions (Conducted) [dBm]	Verdict
GMSK	1*G(60W)	M	< -57/-53	Pass
8PSK	1*G(60W)	M	< -57/-53	Pass
E-TM 1.1	1*L5M(60W)	M	< -57/-53	Pass

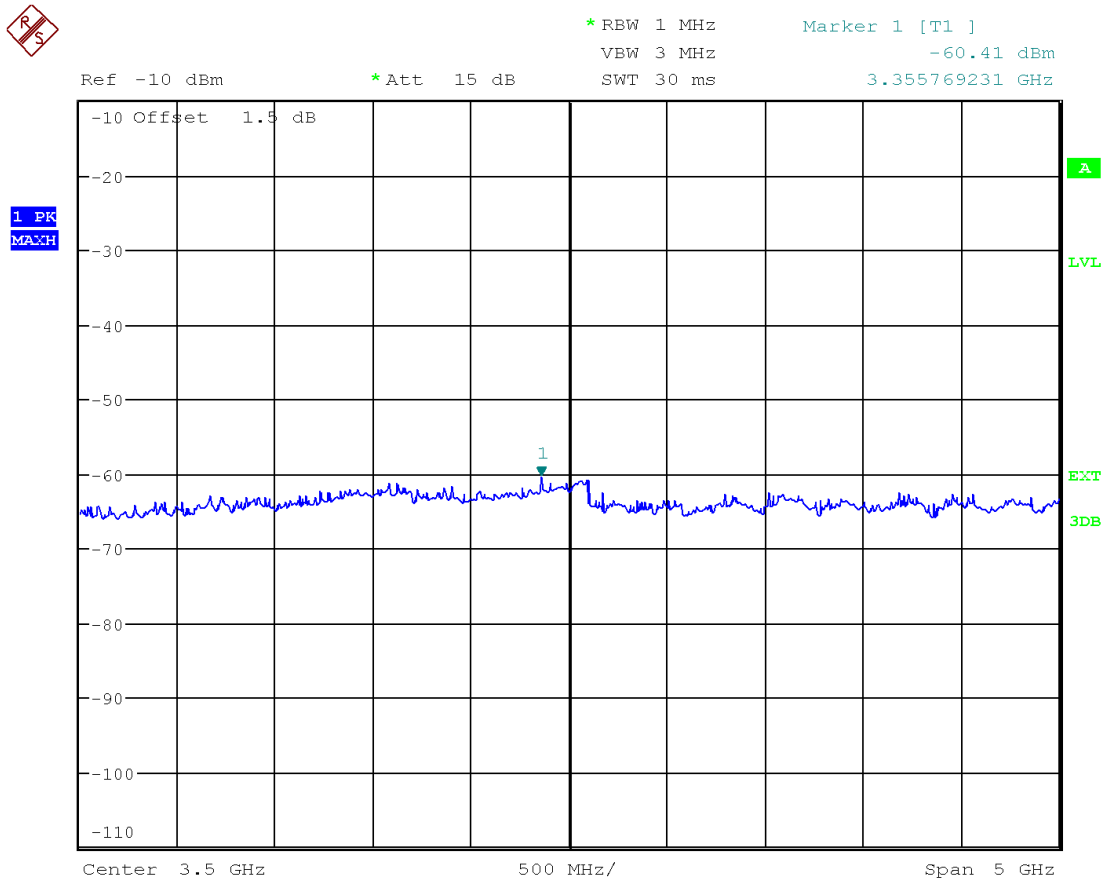
2 Test Plot

2.1 Test Mode = GMSK

2.1.1 Carrier Conf. = 1*G(60W)

2.1.1.1 Ch. M



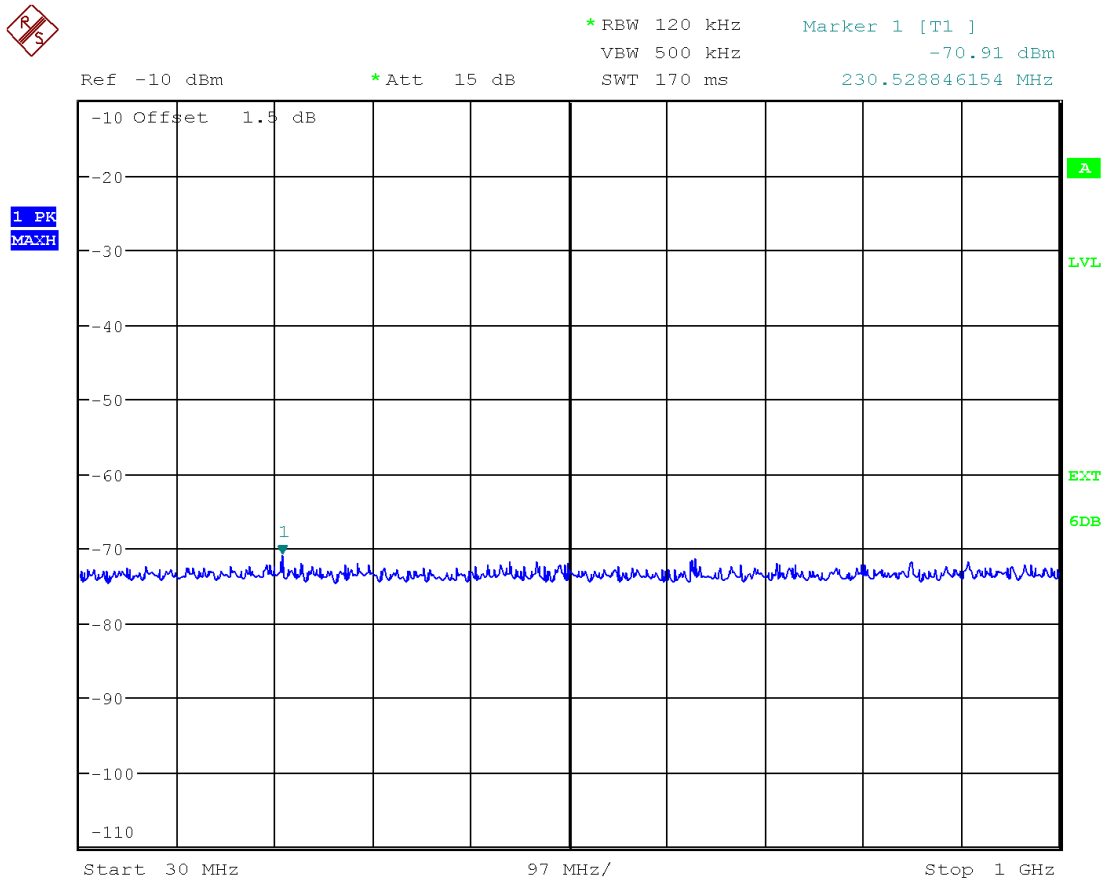


Date: 24.DEC.2011 16:24:30

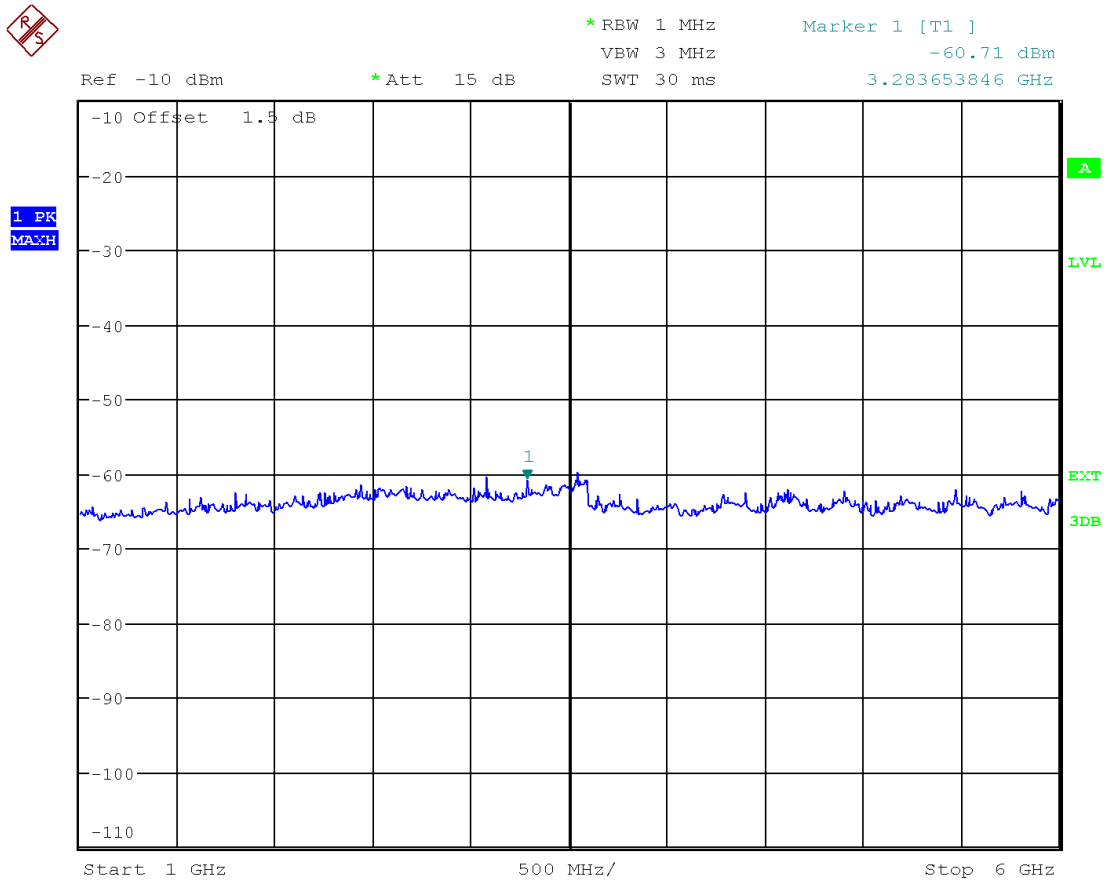
2.2 Test Mode = 8PSK

2.2.1 Carrier Conf. = 1*G(60W)

2.2.1.1 Ch. M



Date: 24.DEC.2011 16:12:45

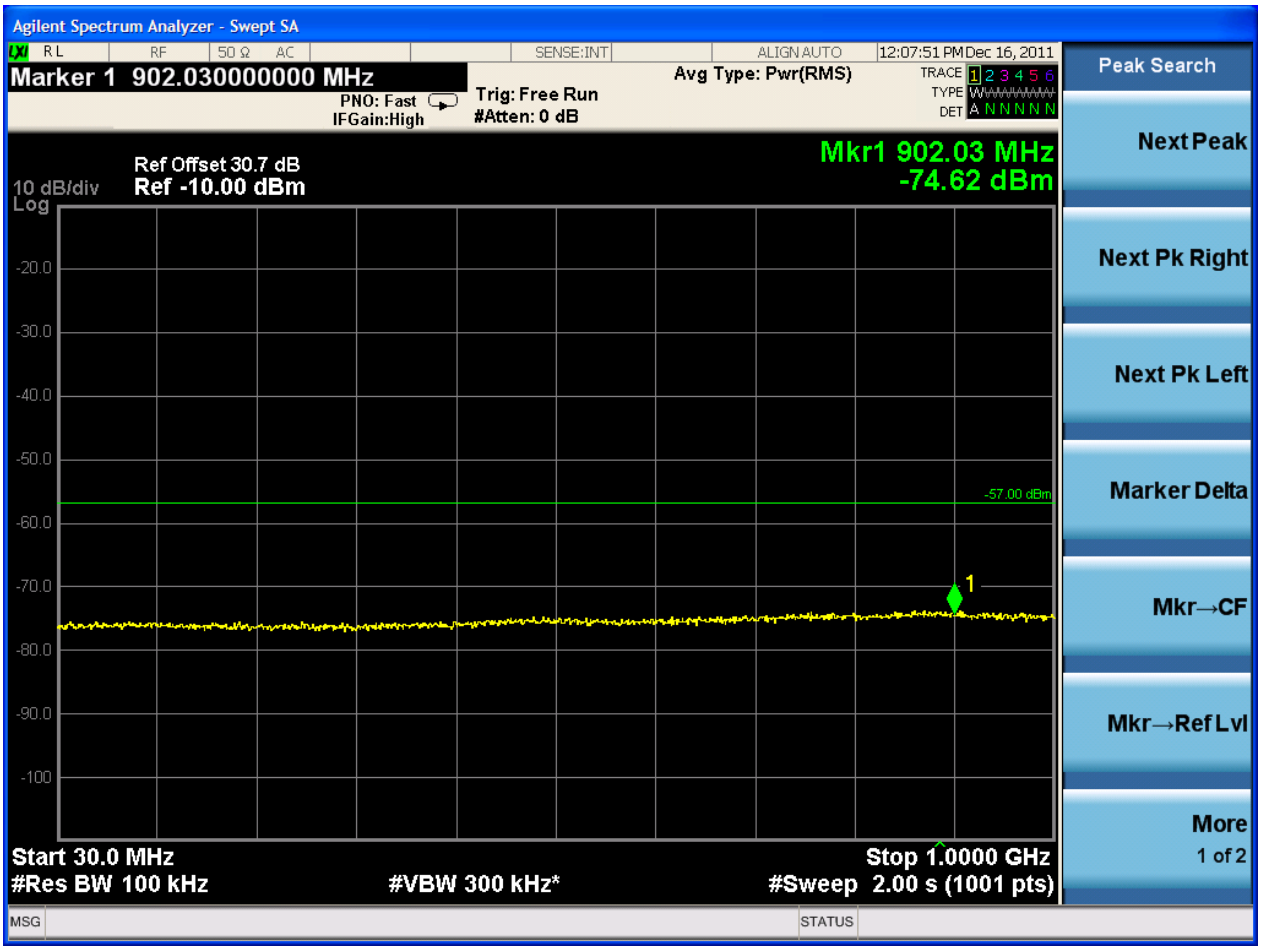


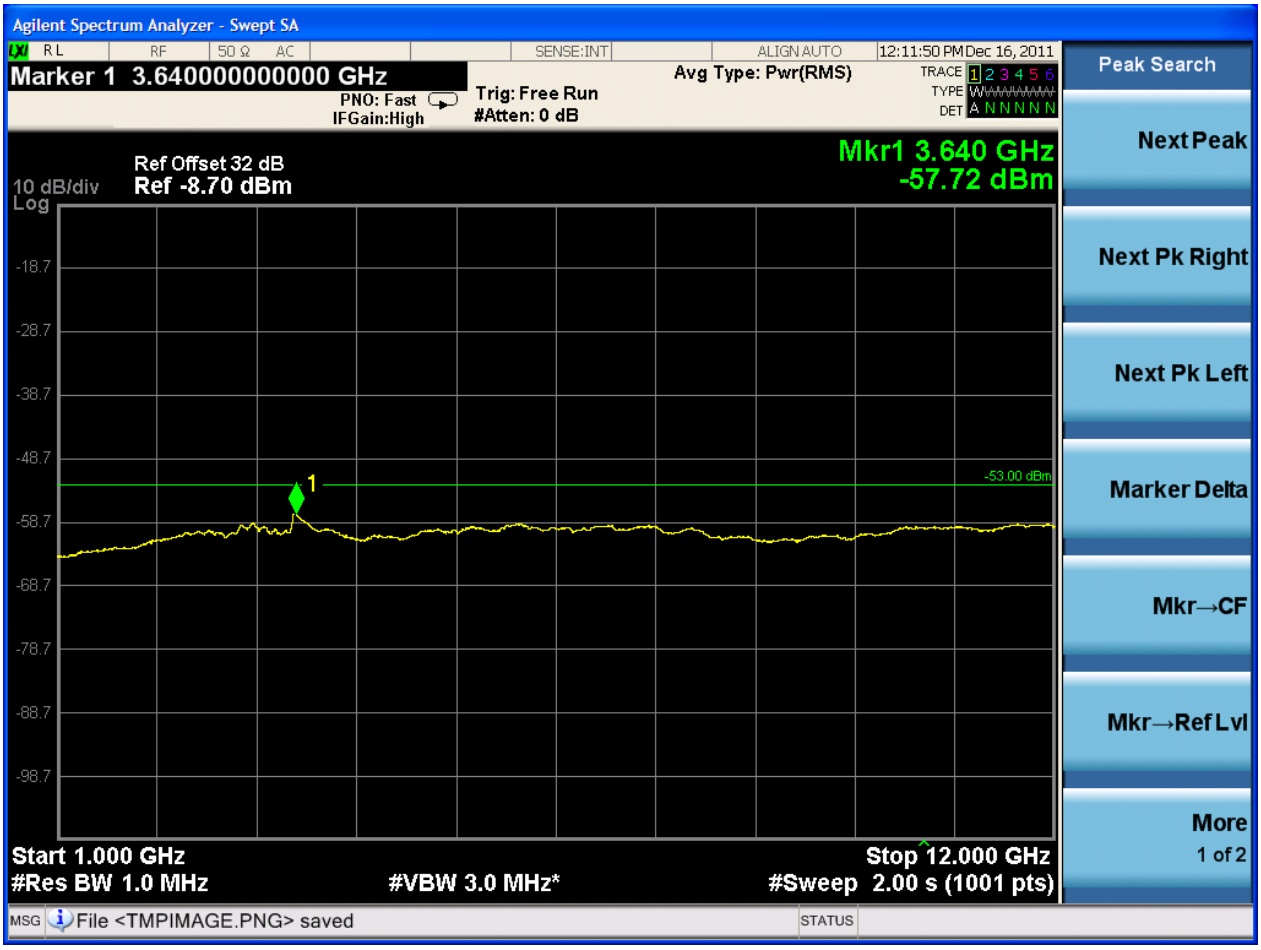
Date: 24.DEC.2011 16:19:09

2.3 Test Mode = E-TM1.1

2.3.1 Carrier Conf. = 1*L5M(60W)

2.3.1.1 Ch. M

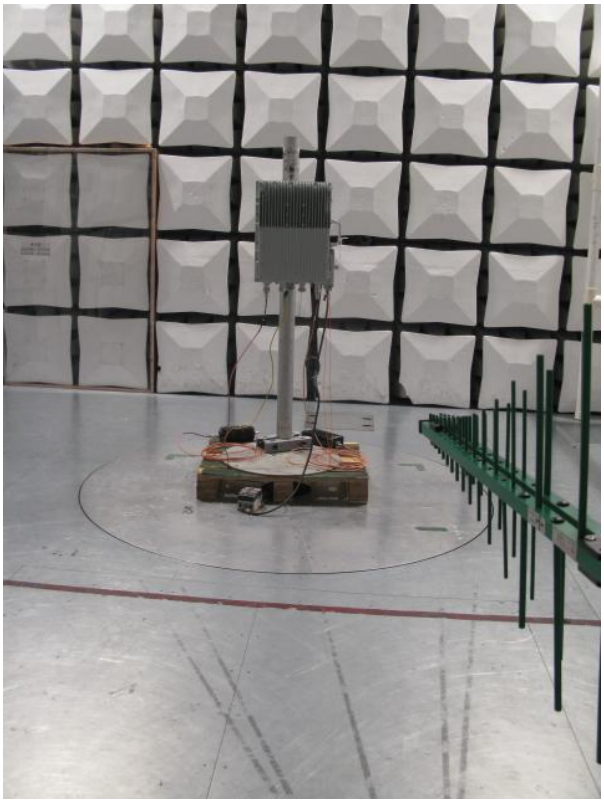




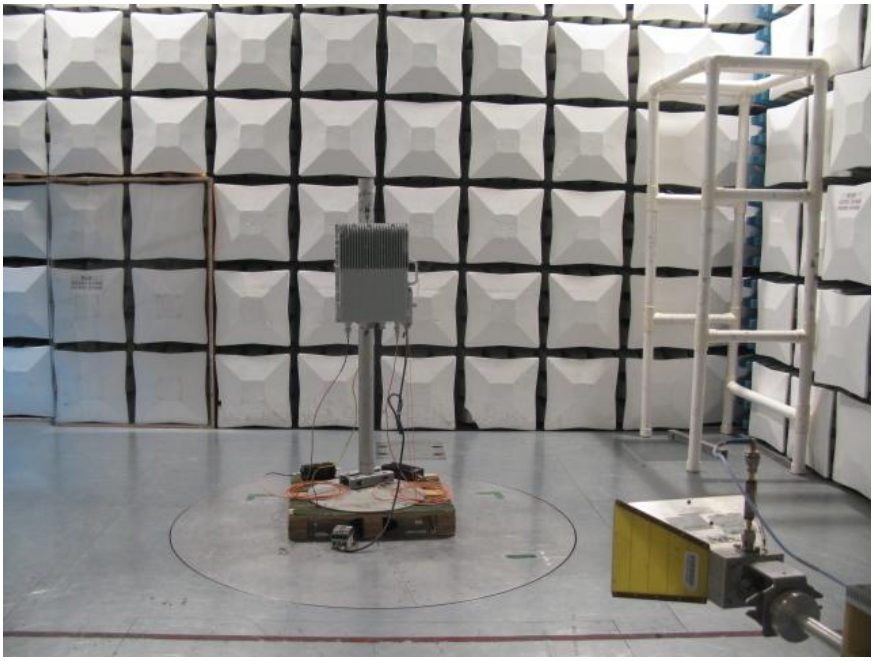
Appendix H: Photos of Test Setup

1 Test Setup 3

1.1 Frequency range below 1 GHz



1.2 Frequency range above 1 GHz



END