



Appendix A: Transmitter Output Power

1 Result Table

1.1 Channel Power, Total

NOTE 1: If applicable, the EIRP [W] = $10^{((\text{Channel Power [dBm]} + \text{Antenna Gain [dBi]}) / 10 - 3)}$, and the ERP [W] = EIRP [W] / 1.64.

NOTE 2: When the EUT is put into service, the practical maximum antenna gain may exceed the value as described below, and if exceed, the combination of the practical output power and the practical antenna gain should NOT exceed the required ERP/EIRP limit.

EUT Conf.	Channel Power [dBm]	Verdict
1L5M_B	18.51	Pass
1L5M_M	18.54	Pass
1L5M_T	18.49	Pass
1L10M_B	18.53	Pass
1L10M_M	18.55	Pass
1L10M_T	18.50	Pass
1L15M_B	18.52	Pass
1L15M_M	18.50	Pass
1L15M_T	18.51	Pass
1L20M_B	18.52	Pass
1L20M_M	18.55	Pass
1L20M_T	18.56	Pass
1U_B	21.54	Pass
1U_M	21.59	Pass
1U_T	21.55	Pass
2U_B	17.64,17.58	Pass
2U_M	17.55,17.69	Pass
2U_T	17.65,17.62	Pass
1U1L5M_B	15.52,15.50	Pass
1U1L5M_M	15.54,15.55	Pass
1U1L5M_T	15.52,15.47	Pass
1U1L10M_B	15.53,15.58	Pass
1U1L10M_M	15.51,15.55	Pass
1U1L10M_T	15.52,15.49	Pass
1U1L15M_B	15.52,15.56	Pass
1U1L15M_M	15.50,15.53	Pass
1U1L15M_T	15.52,15.48	Pass

1.2 Power Spectral Density

NOTE 1: If applicable, the EIRP [W/MHz] = $10^{((\text{Power Spectral Density [dBm/MHz]} + \text{Antenna Gain [dBi]}) / 10 - 3)}$, and the ERP [W/MHz] = EIRP [W/MHz] / 1.64.

NOTE 2: When the EUT is put into service, the practical maximum antenna gain may exceed the value as described below, and if exceed, the combination of the practical output power and the practical antenna gain should NOT exceed the required EIRP limit.

EUT Conf.	Channel Power Spectral Density [dBm/MHz]	Verdict
1L5M_B	12.92	Pass
1L5M_M	12.66	Pass
1L5M_T	12.33	Pass
1U_B	17.29	Pass
1U_M	16.94	Pass
1U_T	16.56	Pass

1.3 Peak-to-Average Ratio

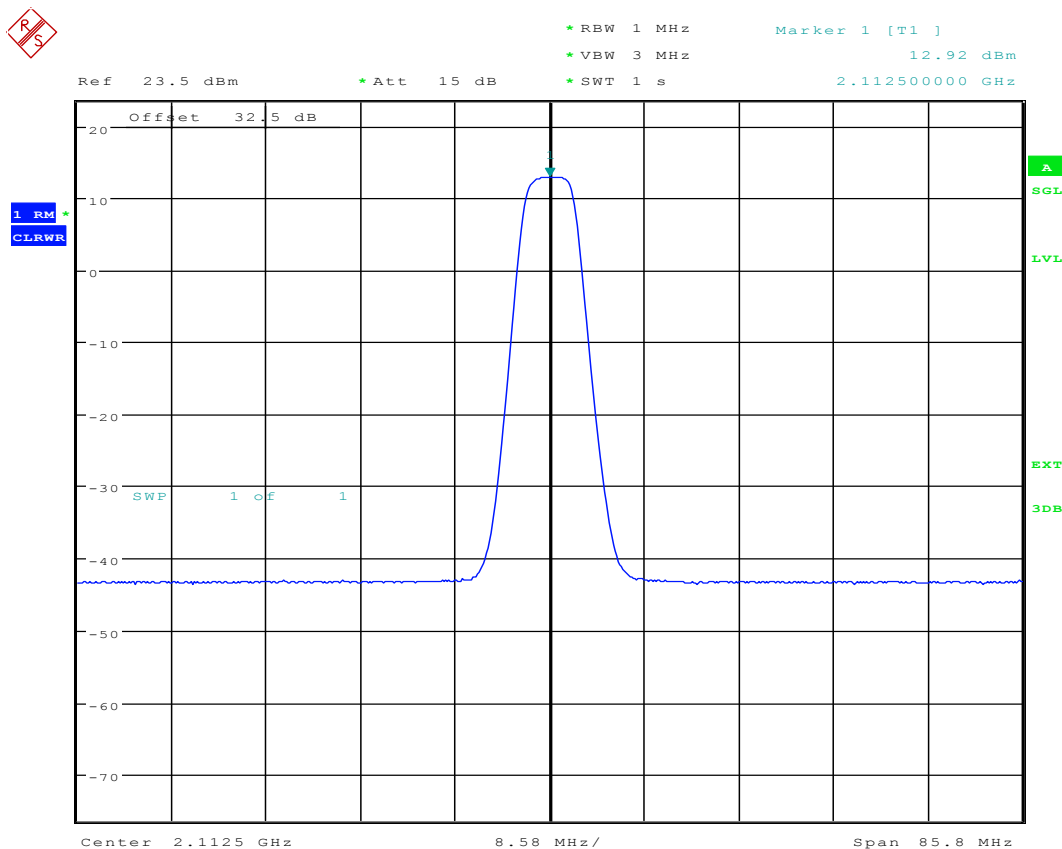
EUT Conf.	Peak-to-Average Ratio [dB]	Verdict
1L5M_B	8.62	Pass
1L5M_M	8.56	Pass
1L5M_T	8.46	Pass
1L20M_B	8.65	Pass
1L20M_M	8.62	Pass
1L20M_T	8.53	Pass
1U_B	7.6	Pass
1U_M	7.76	Pass
1U_T	7.66	Pass

2 Test Plot

NOTE: Only the test plots for the measurements of Spectral Density and Peak-to-Average Ratio are supplied.

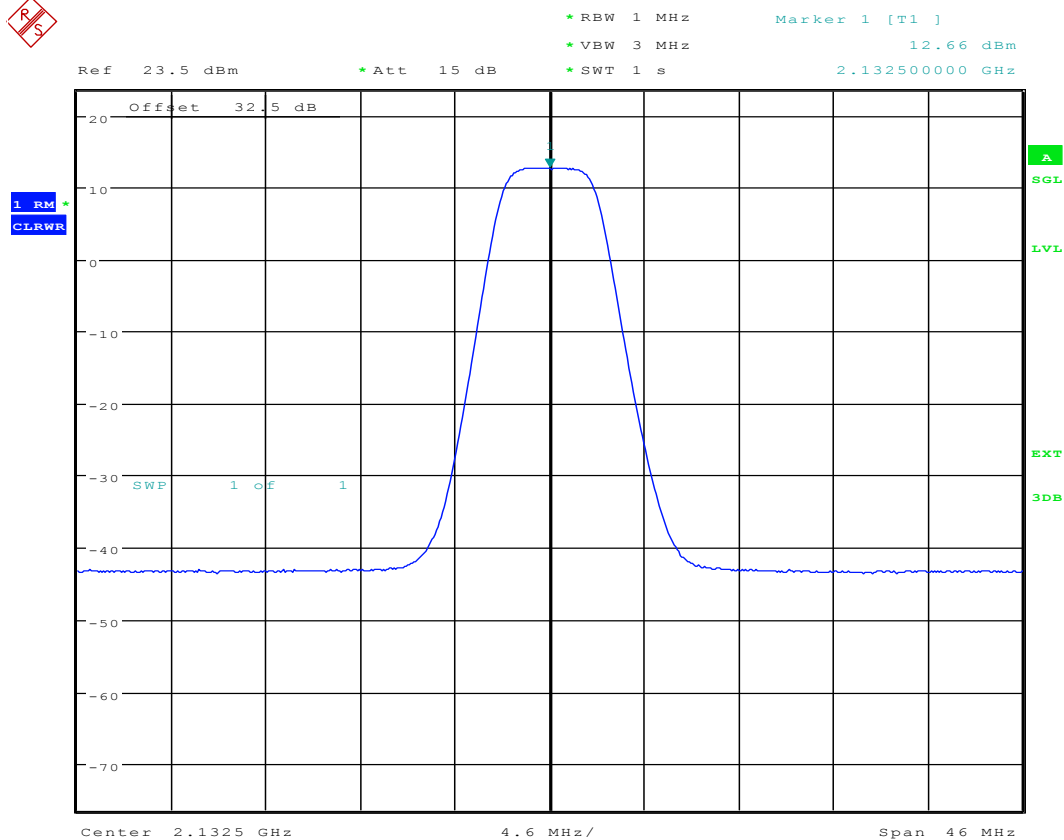
2.1 Power Spectral Density

2.1.1 1L5M_B



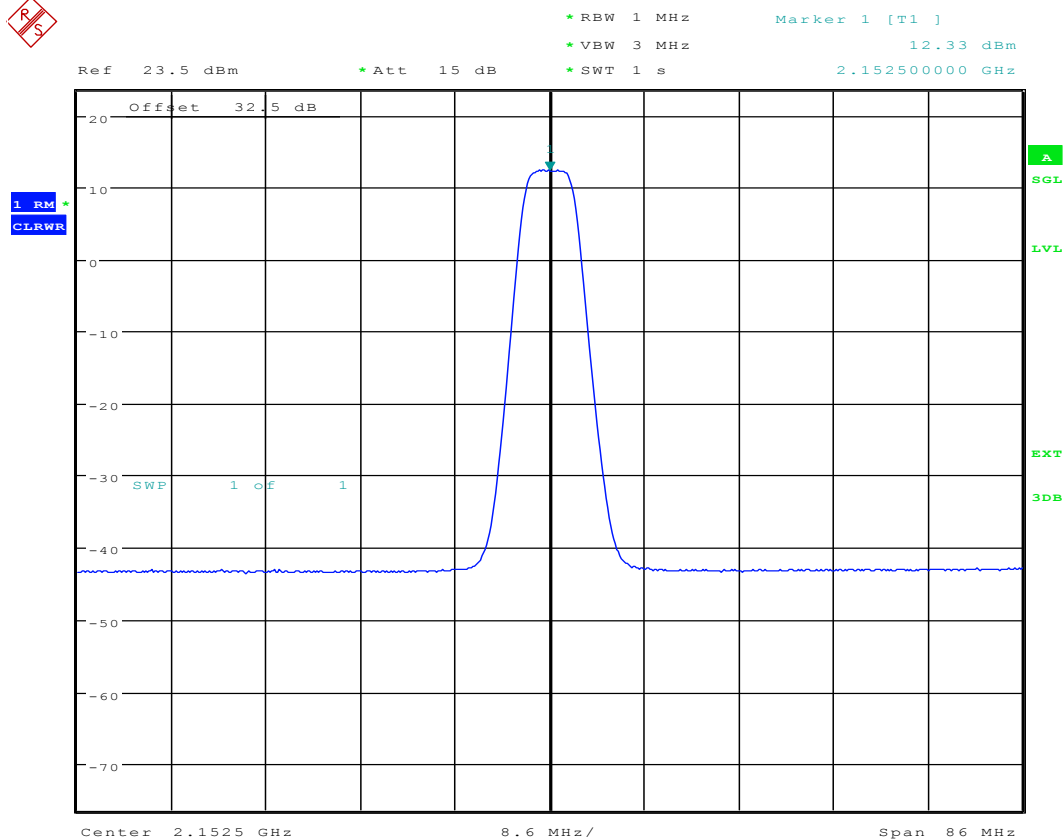
Date: 18.MAY.2016 23:25:49

2.1.2 1L5M_M



Date: 18.MAY.2016 23:28:15

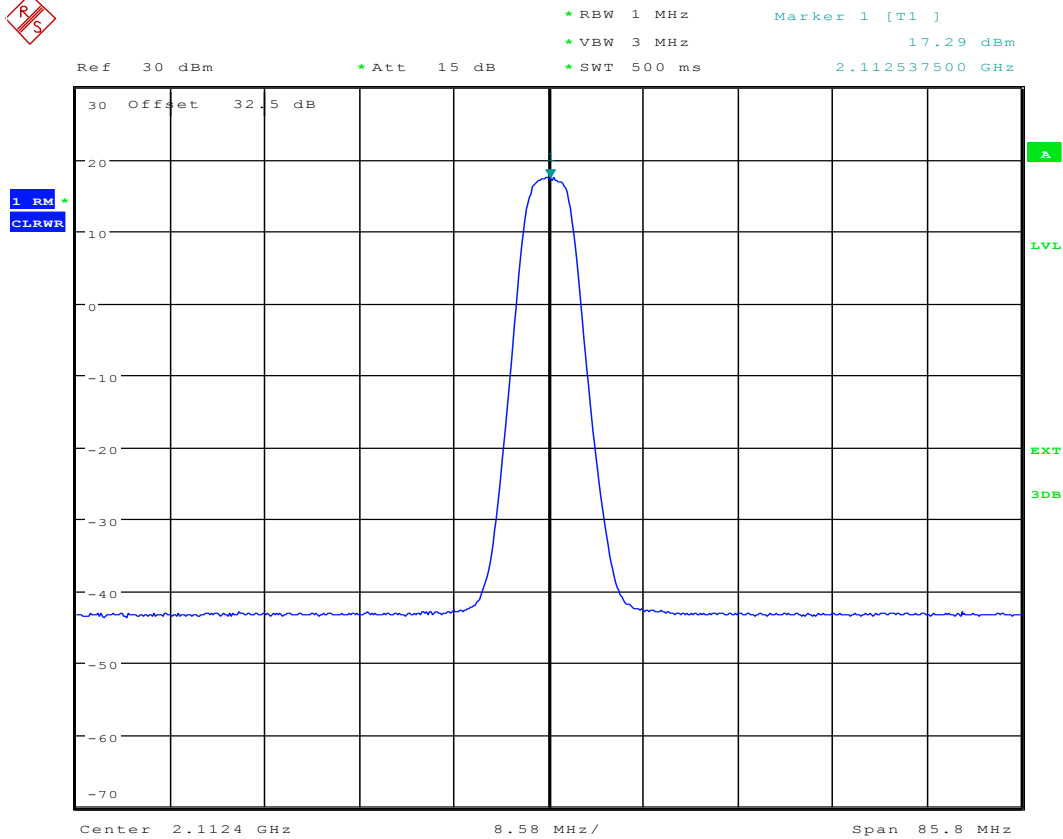
2.1.3 1L5M_T



Date: 18.MAY.2016 23:30:26



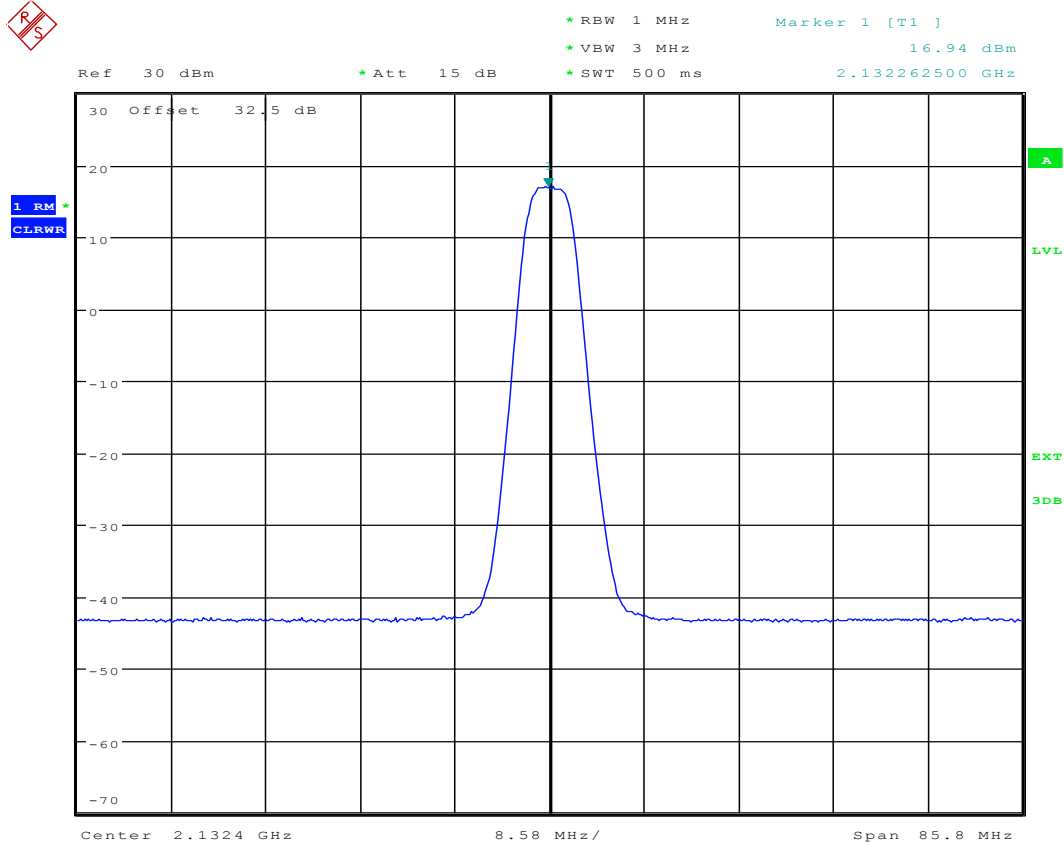
2.1.4 1U_B



Date: 19.MAY.2016 23:33:53



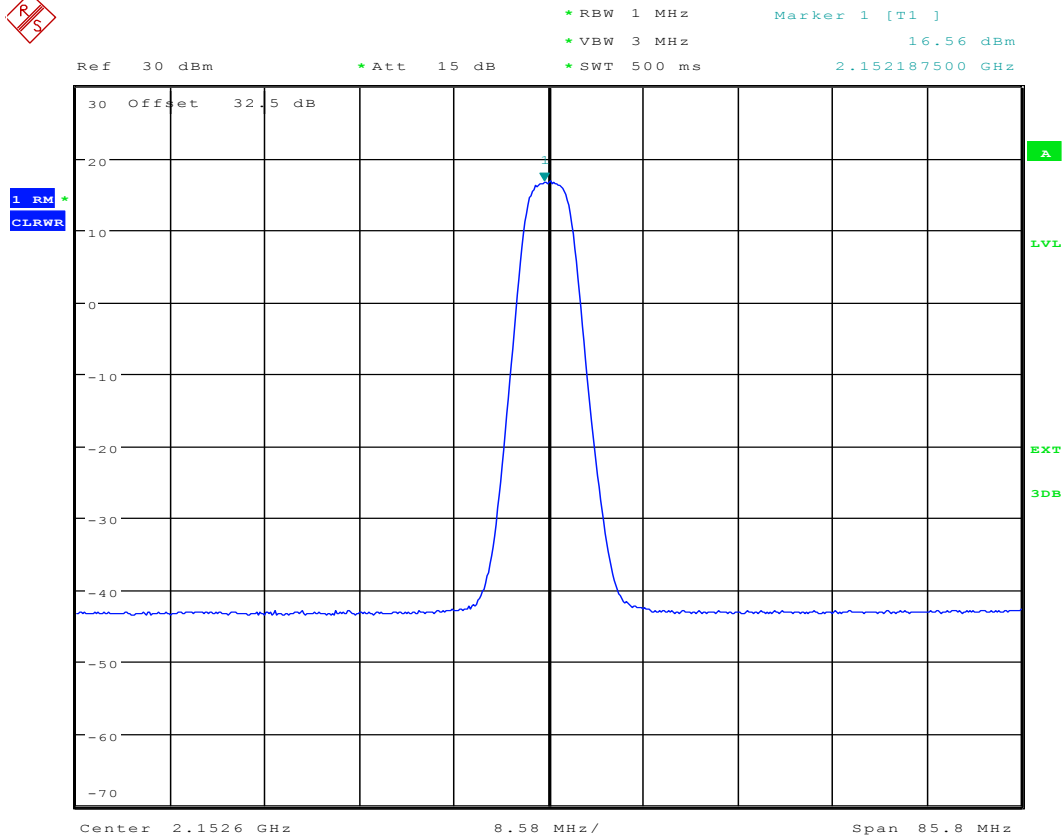
2.1.5 1U_M



Date: 19.MAY.2016 23:20:32



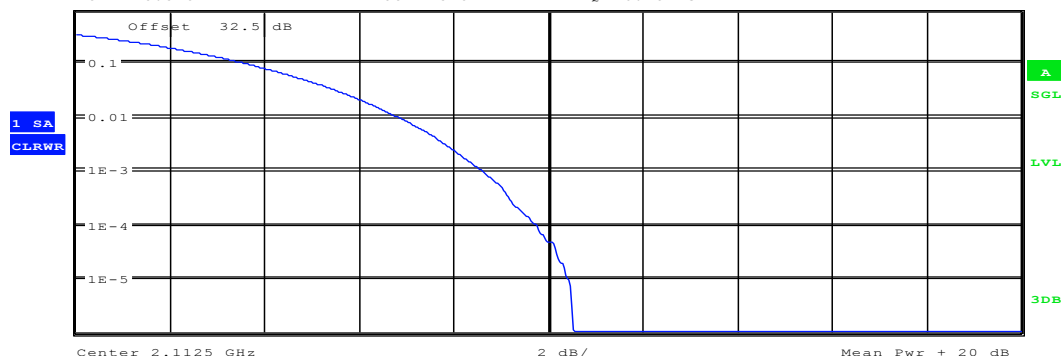
2.1.6 1U_T



Date: 19.MAY.2016 22:28:47

2.2 Peak-to-Average Ratio

2.2.1 1L5M_B



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

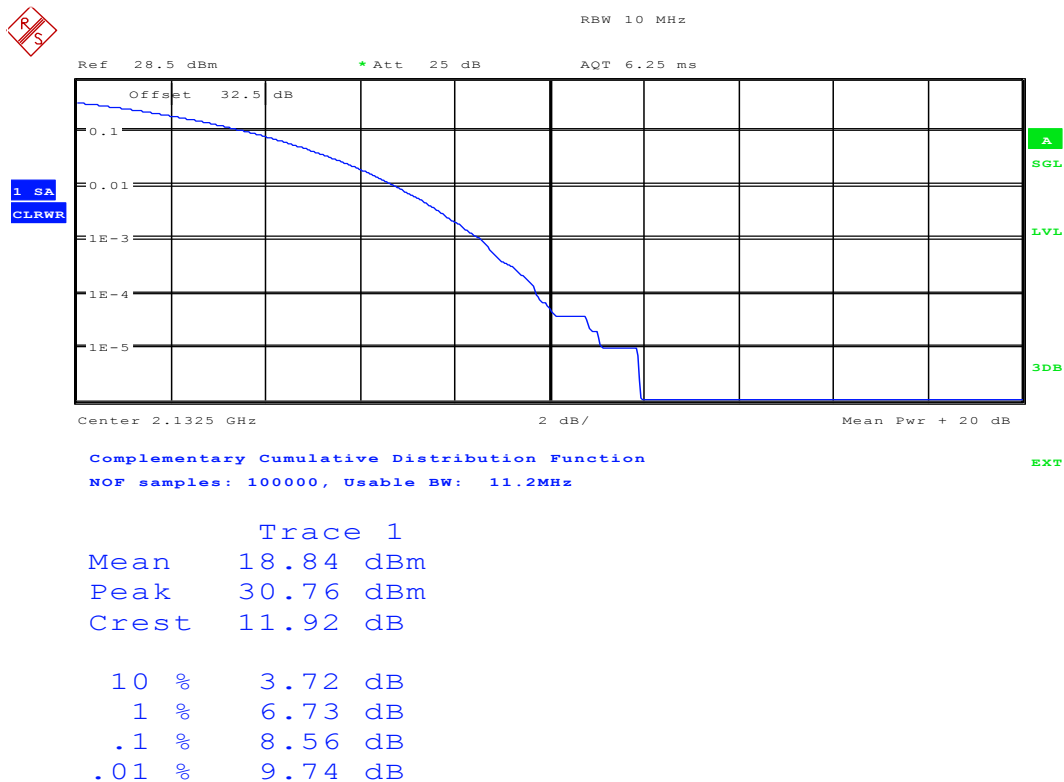
EXT

Trace 1
Mean 18.96 dBm
Peak 29.47 dBm
Crest 10.52 dB

10 % 3.69 dB
1 % 6.86 dB
.1 % 8.62 dB
.01 % 9.78 dB

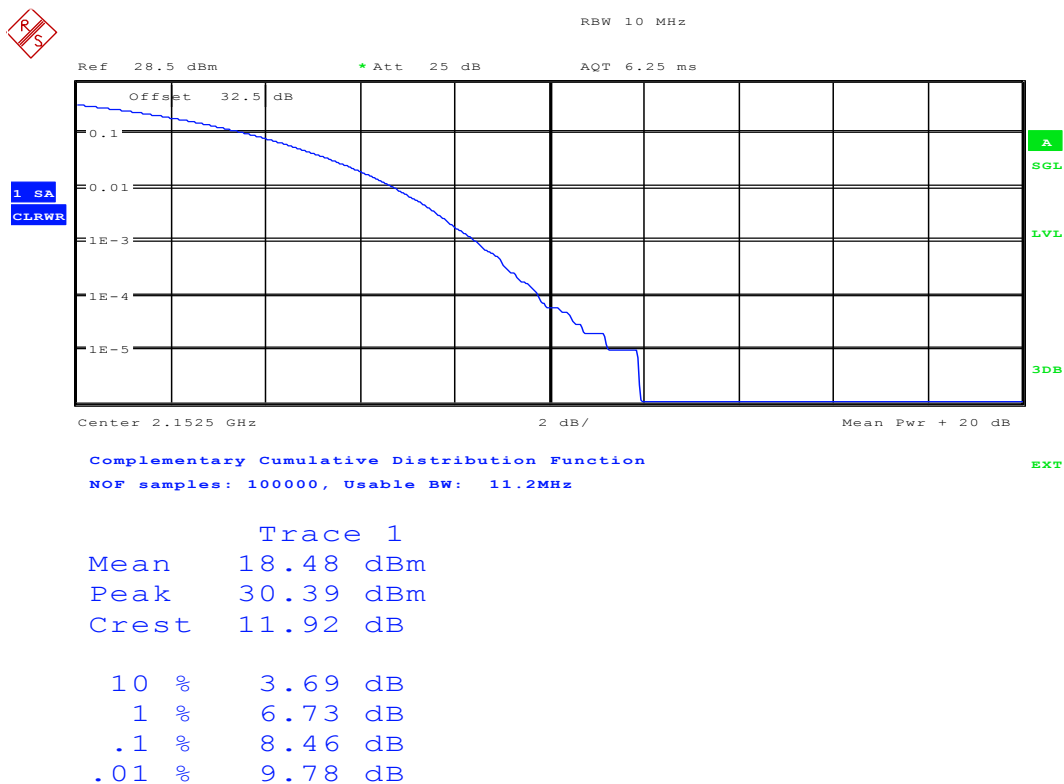
Date: 18.MAY.2016 23:25:33

2.2.2 1L5M_M



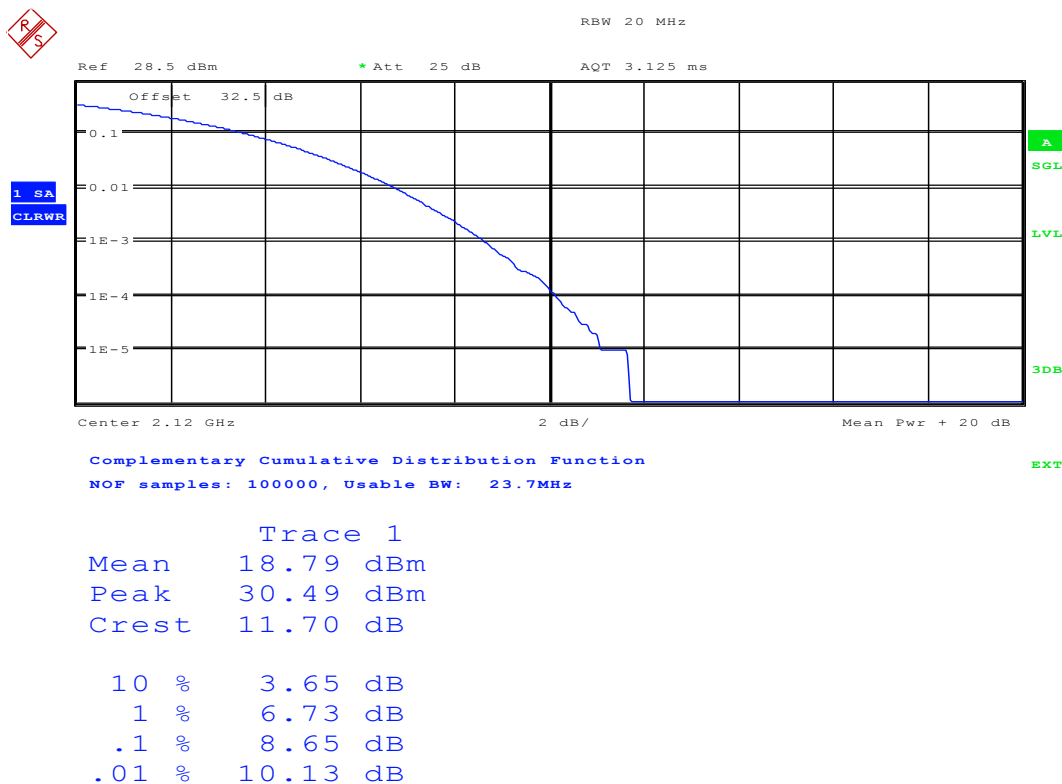
Date: 18.MAY.2016 23:27:58

2.2.3 1L5M_T



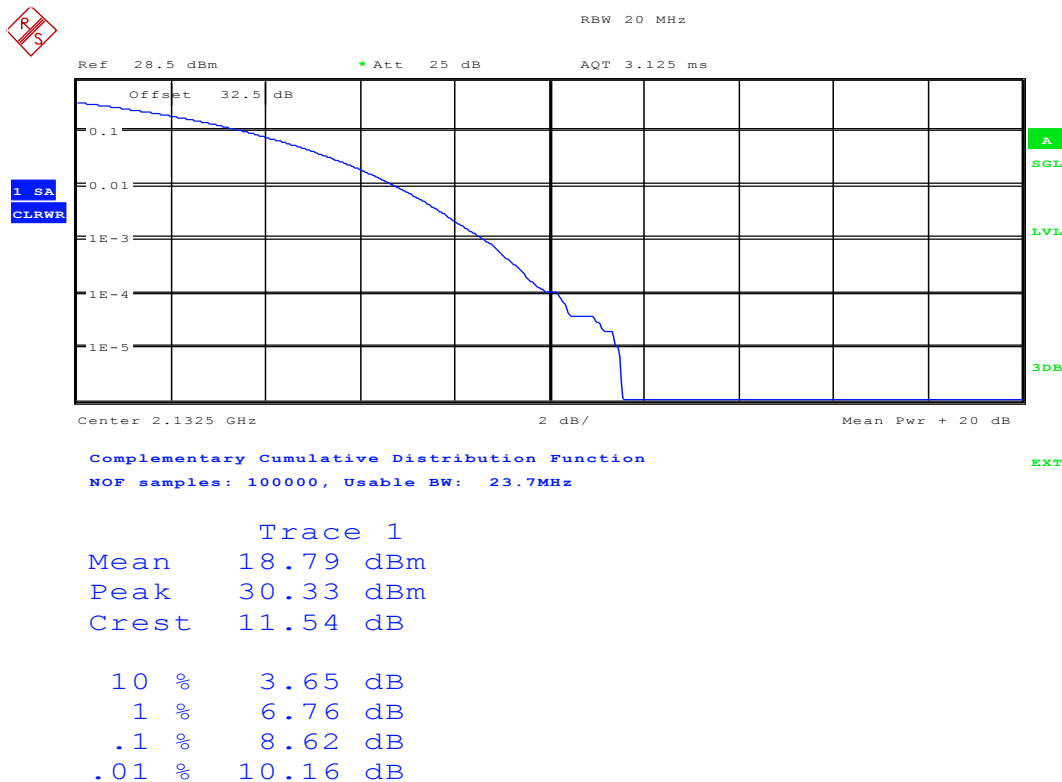
Date: 18.MAY.2016 23:30:10

2.2.4 1L20M_B



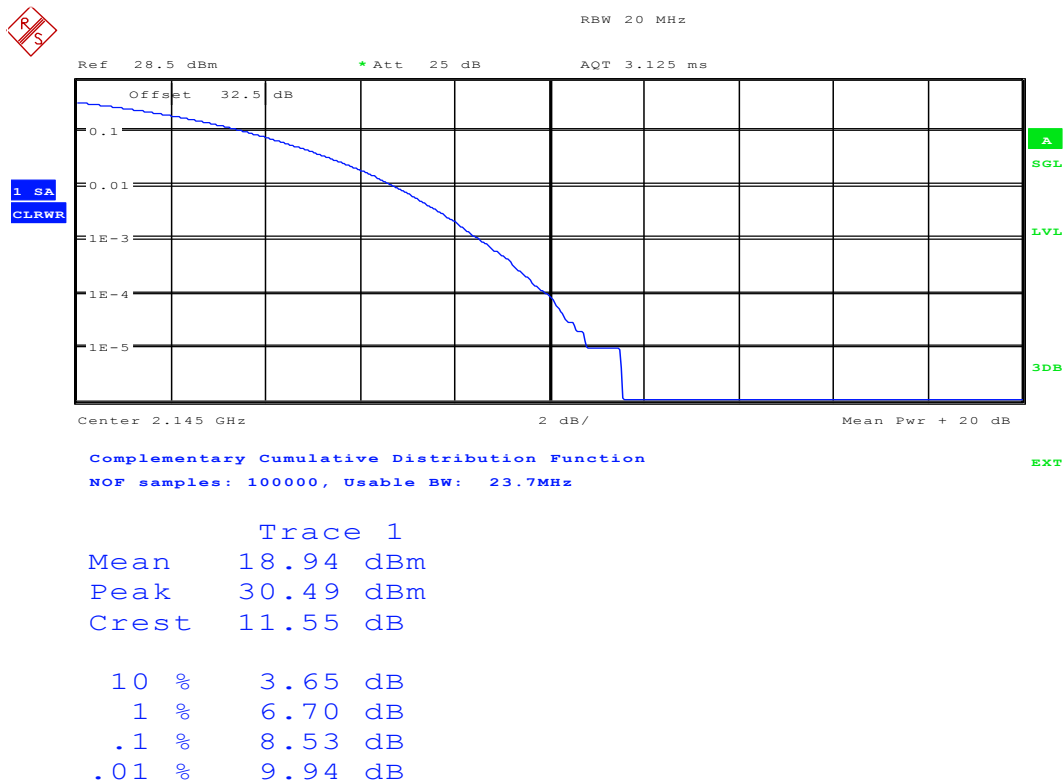
Date: 19.MAY.2016 01:44:57

2.2.5 1L20M_M



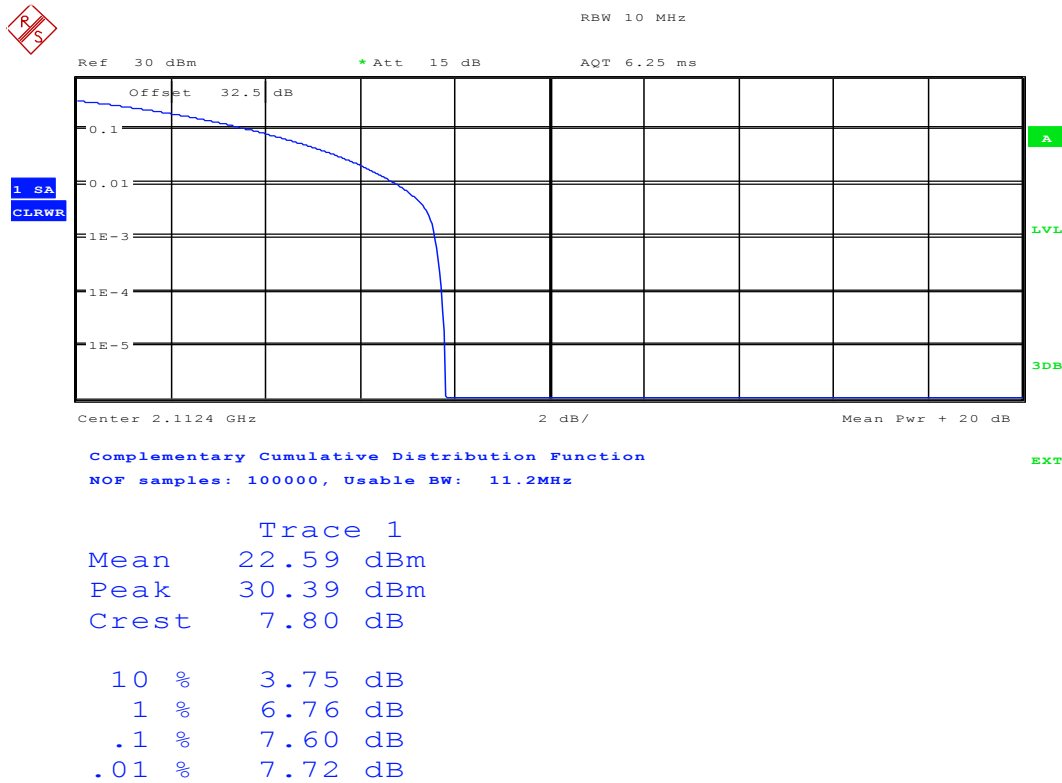
Date: 19.MAY.2016 01:47:24

2.2.6 1L20M_T



Date: 19.MAY.2016 01:49:37

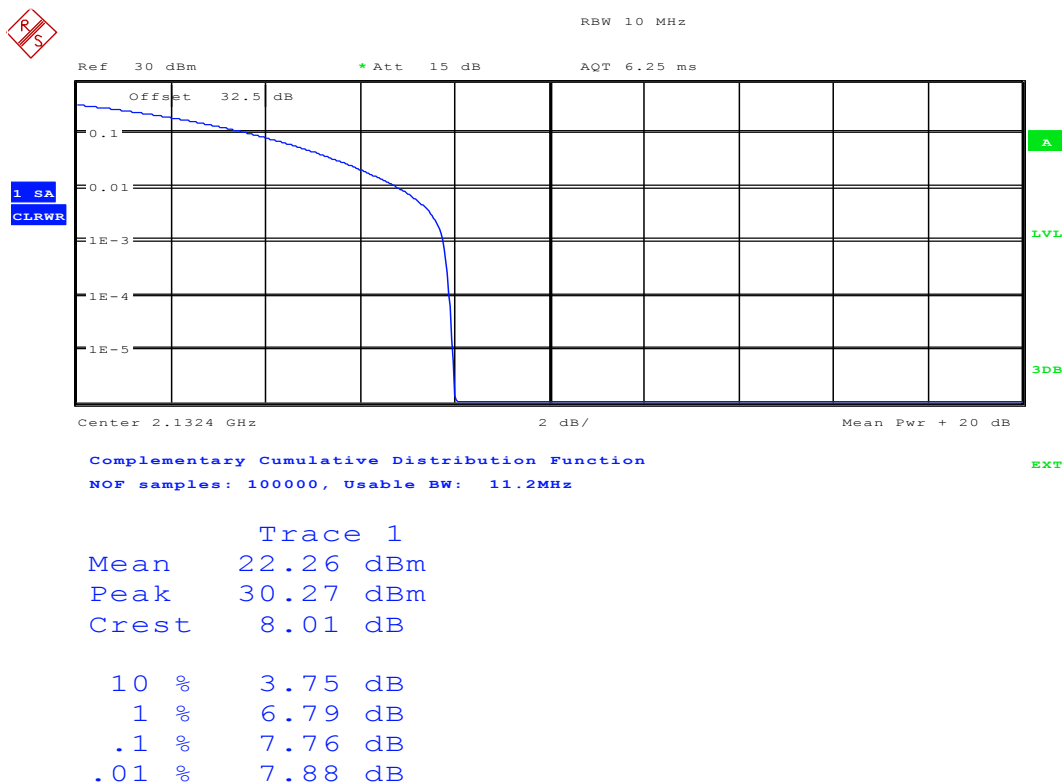
2.2.7 1U_B



Date: 19.MAY.2016 23:34:28

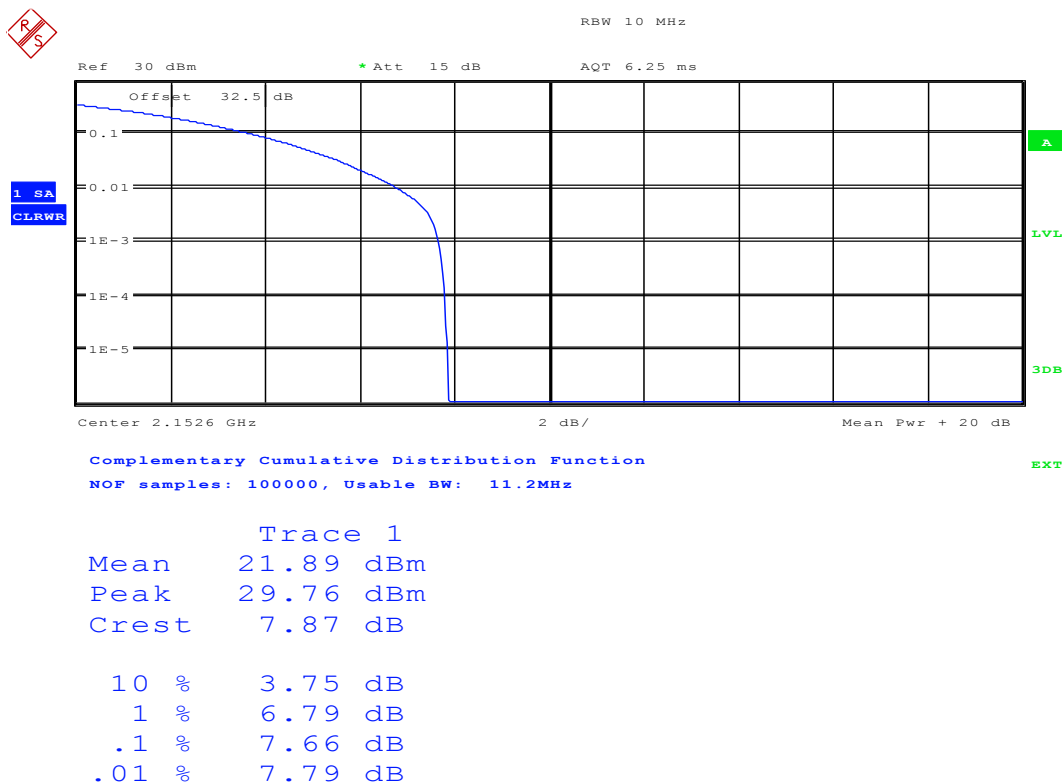


2.2.8 1U_M



Date: 19.MAY.2016 23:20:57

2.2.9 1U_T



Date: 19.MAY.2016 22:29:07



Appendix B: Bandwidth



1 Result Table

1.1 Occupied Bandwidth

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
1L5M_B	4.495	---
1L5M_M	4.495	---
1L5M_T	4.495	---
1L10M_B	8.942	---
1L10M_M	8.942	---
1L10M_T	8.942	---
1L15M_B	13.413	---
1L15M_M	13.414	---
1L15M_T	13.413	---
1L20M_B	17.788	---
1L20M_M	17.836	---
1L20M_T	17.836	---
1U_B	4.282	---
1U_M	4.282	---
1U_T	4.282	---

1.2 Emission Bandwidth

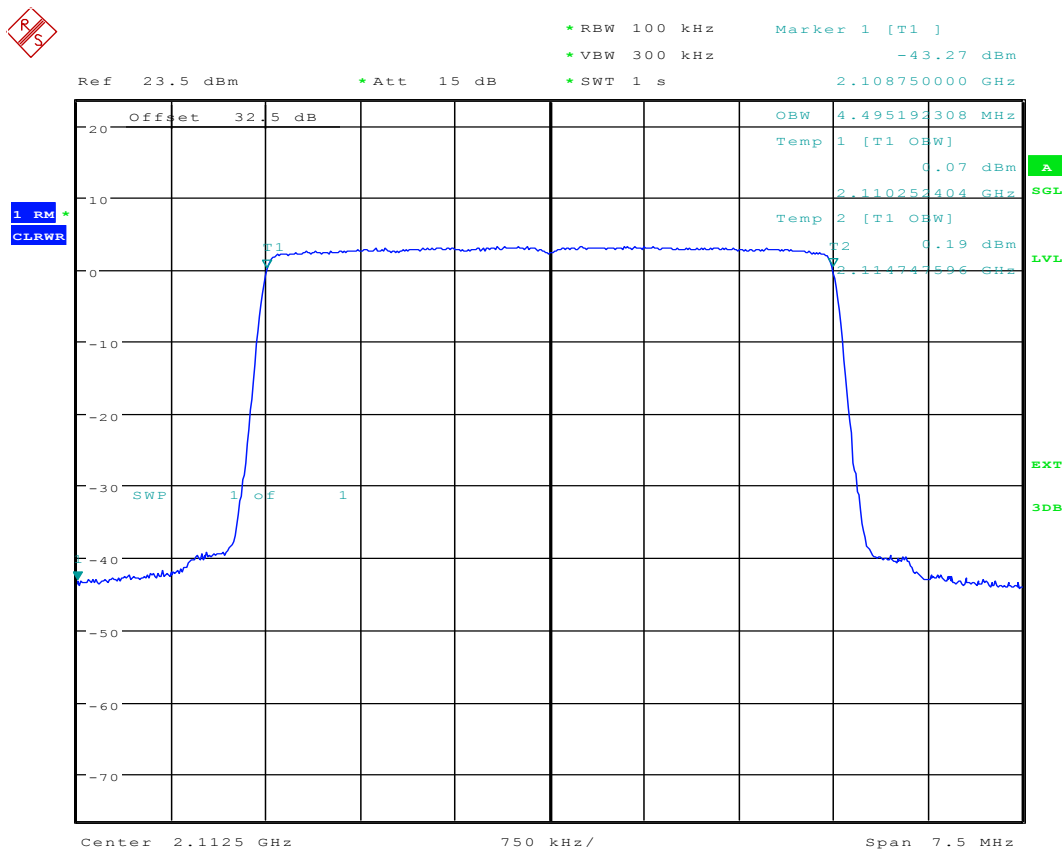
EUT Conf.	Emission Bandwidth, -26 dBc [MHz]	Verdict
1L5M_B	4.735	---
1L5M_M	4.759	---
1L5M_T	4.723	---
1L10M_B	9.326	---
1L10M_M	9.326	---
1L10M_T	9.326	---
1L15M_B	14.206	---
1L15M_M	14.206	---
1L15M_T	14.206	---
1L20M_B	18.750	---
1L20M_M	18.750	---
1L20M_T	18.750	---
1U_B	4.695	---
1U_M	4.679	---
1U_T	4.679	---



2 Test Plot

2.1 Occupied Bandwidth

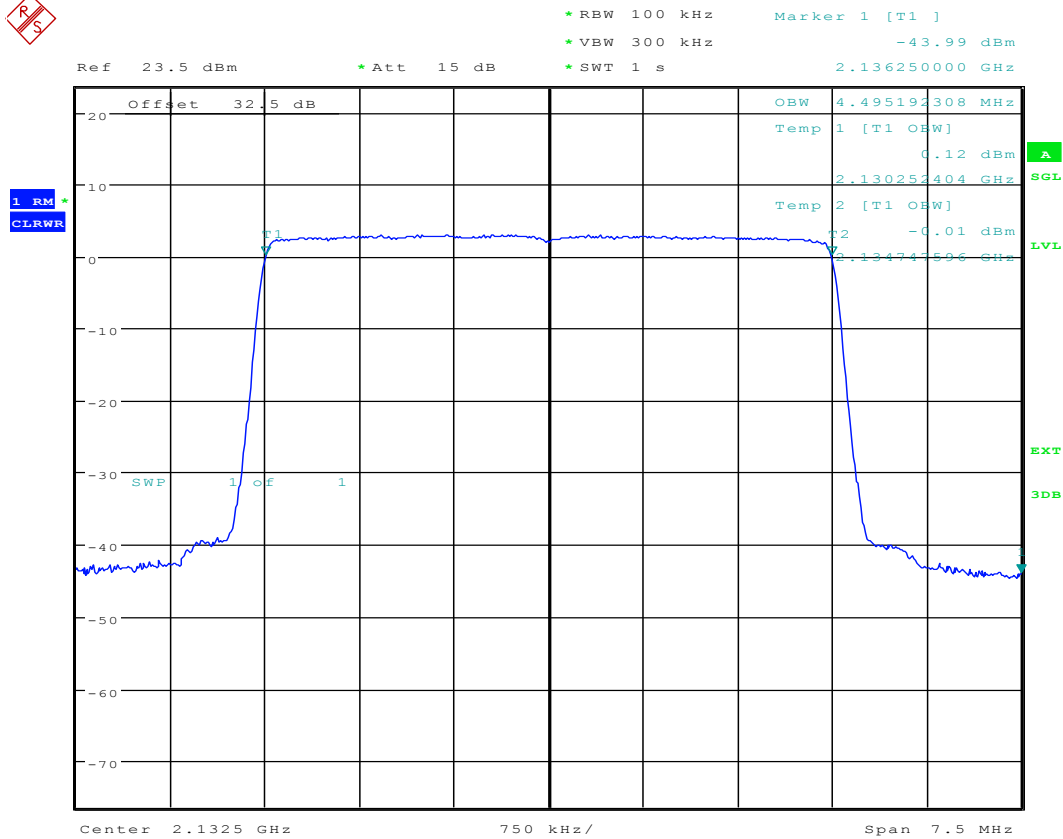
2.1.1 1L5M_B



Date: 18.MAY.2016 23:24:55



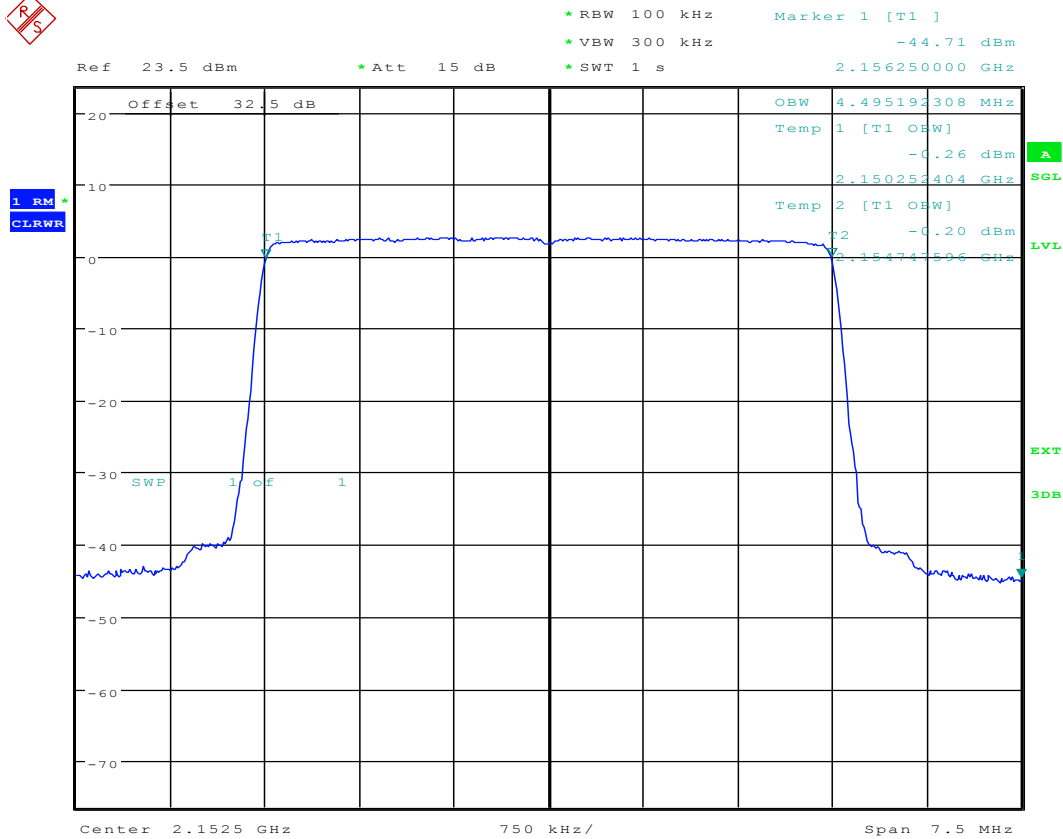
2.1.2 1L5M_M



Date: 18.MAY.2016 23:27:35



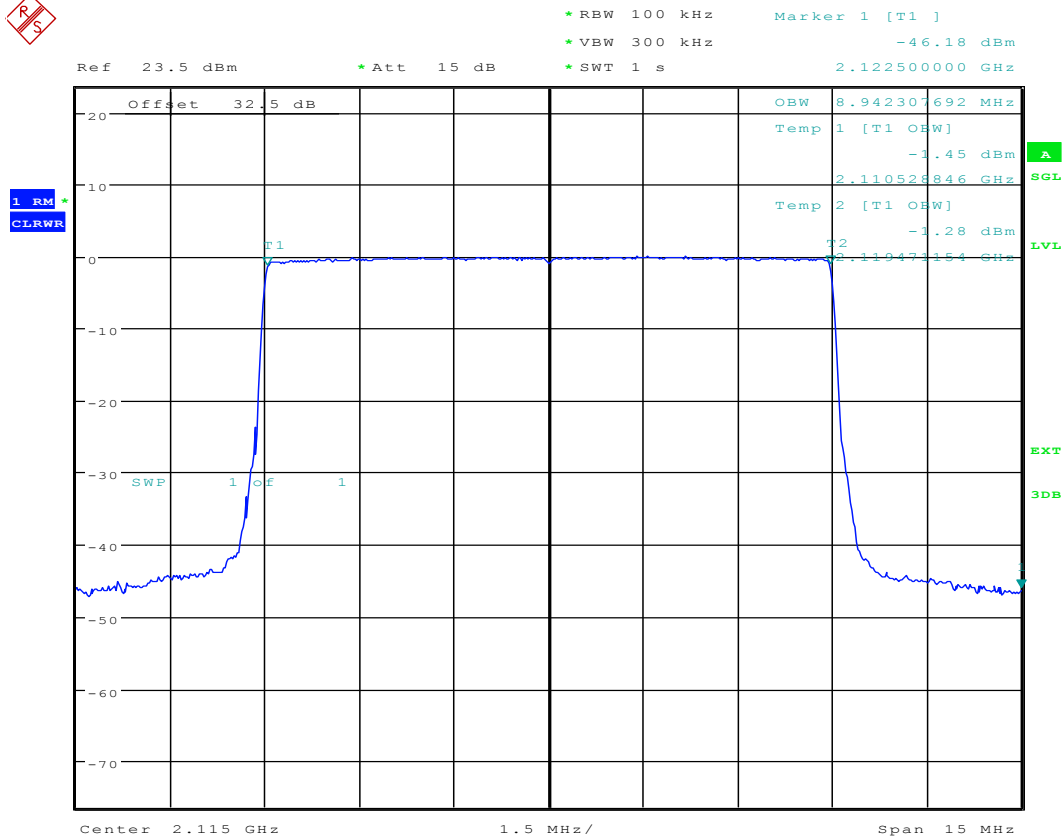
2.1.3 1L5M_T



Date: 18.MAY.2016 23:29:30



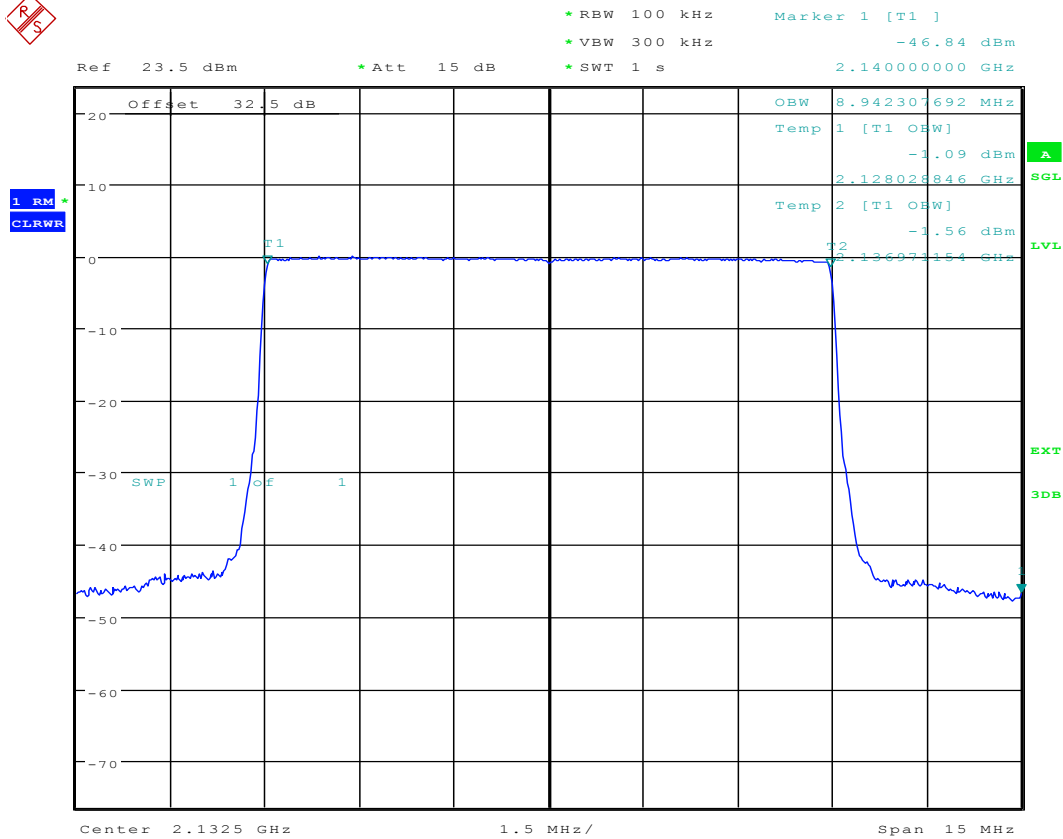
2.1.4 1L10M_B



Date: 18.MAY.2016 23:32:38



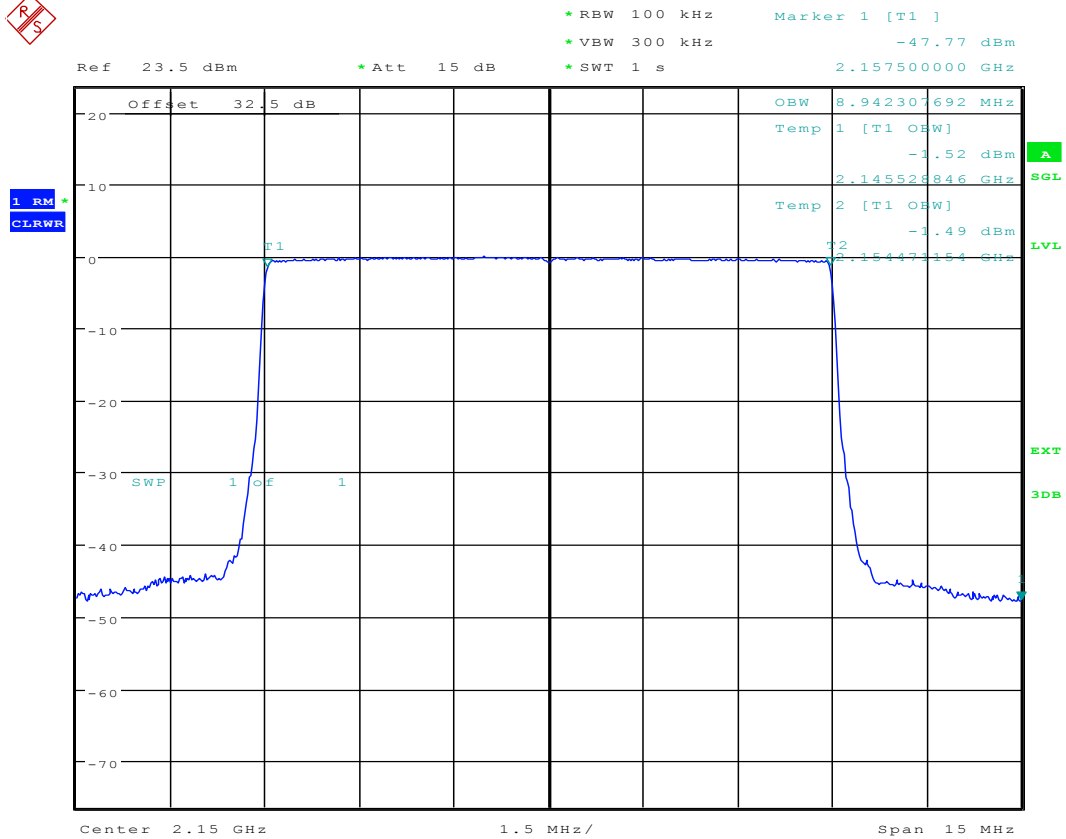
2.1.5 1L10M_M



Date: 19.MAY.2016 01:24:08



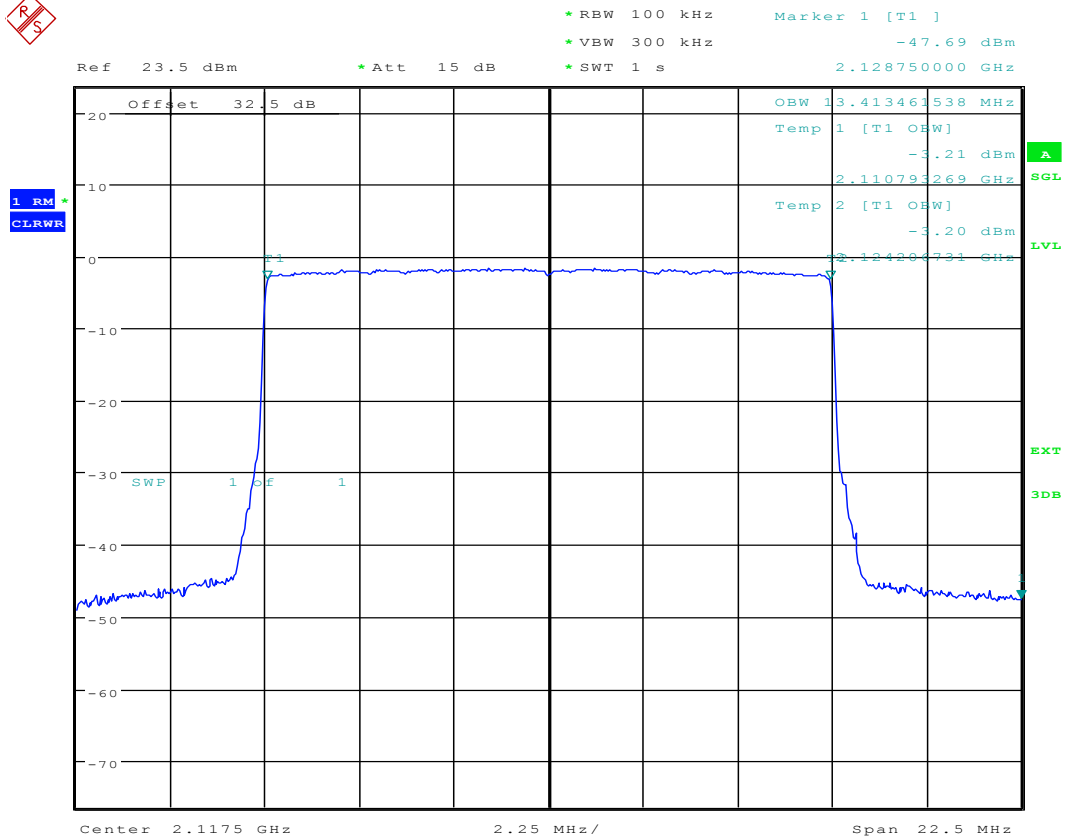
2.1.6 1L10M_T



Date: 19.MAY.2016 01:26:03



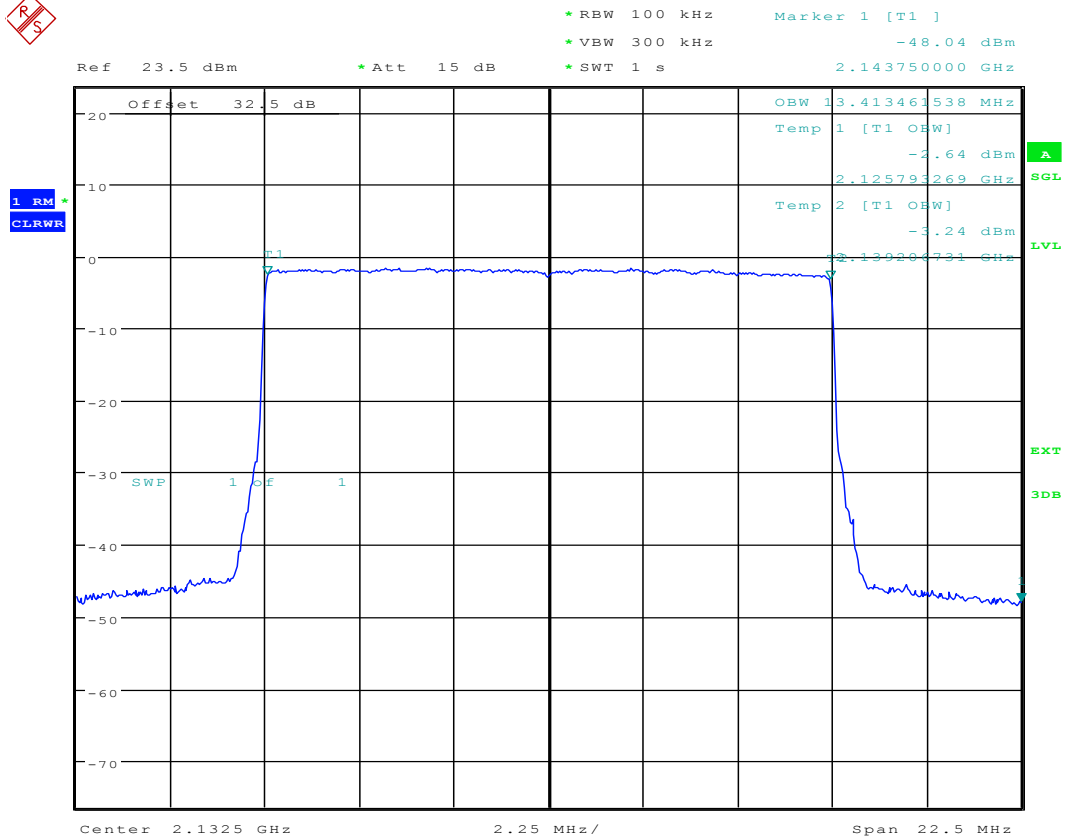
2.1.7 1L15M_B



Date: 19.MAY.2016 01:29:24



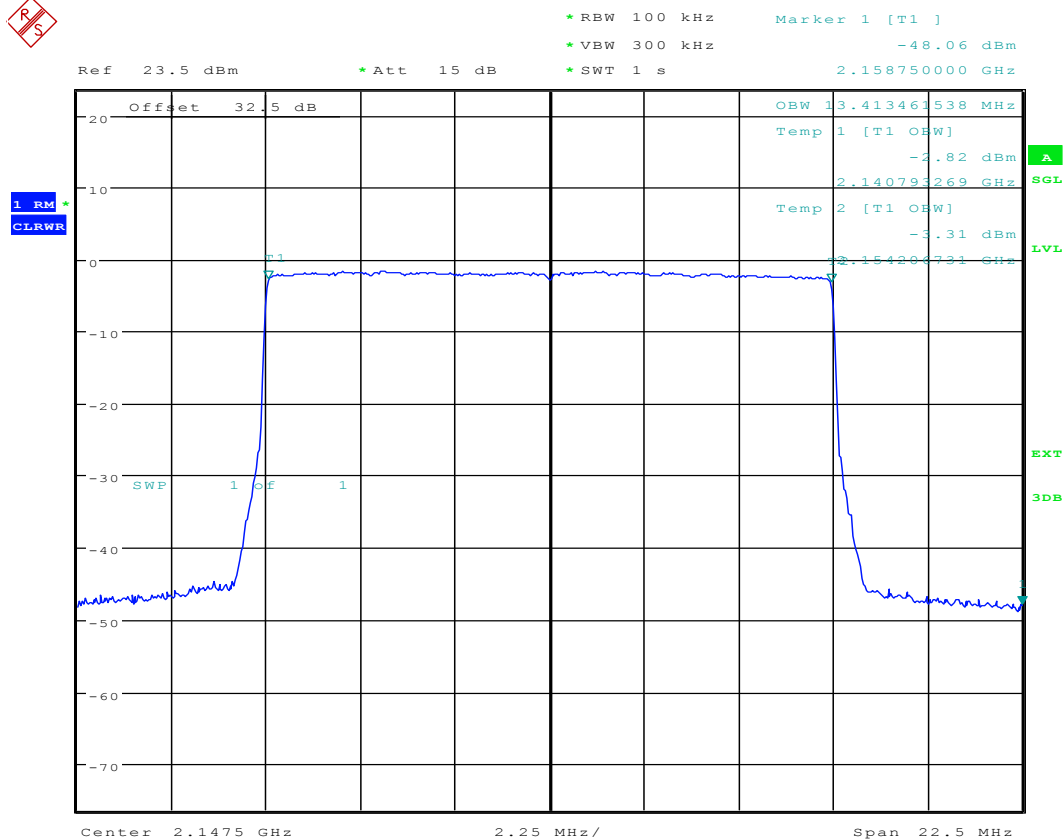
2.1.8 1L15M_M



Date: 19.MAY.2016 01:32:08



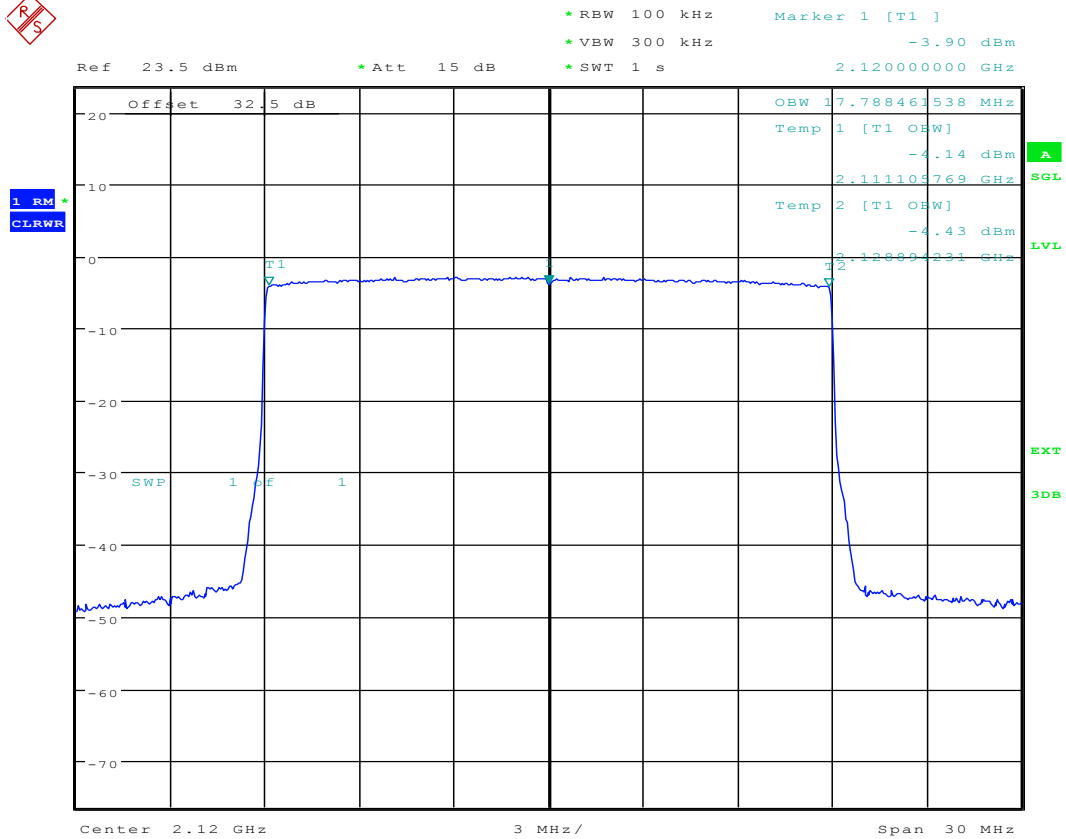
2.1.9 1L15M_T



Date: 19.MAY.2016 01:41:18

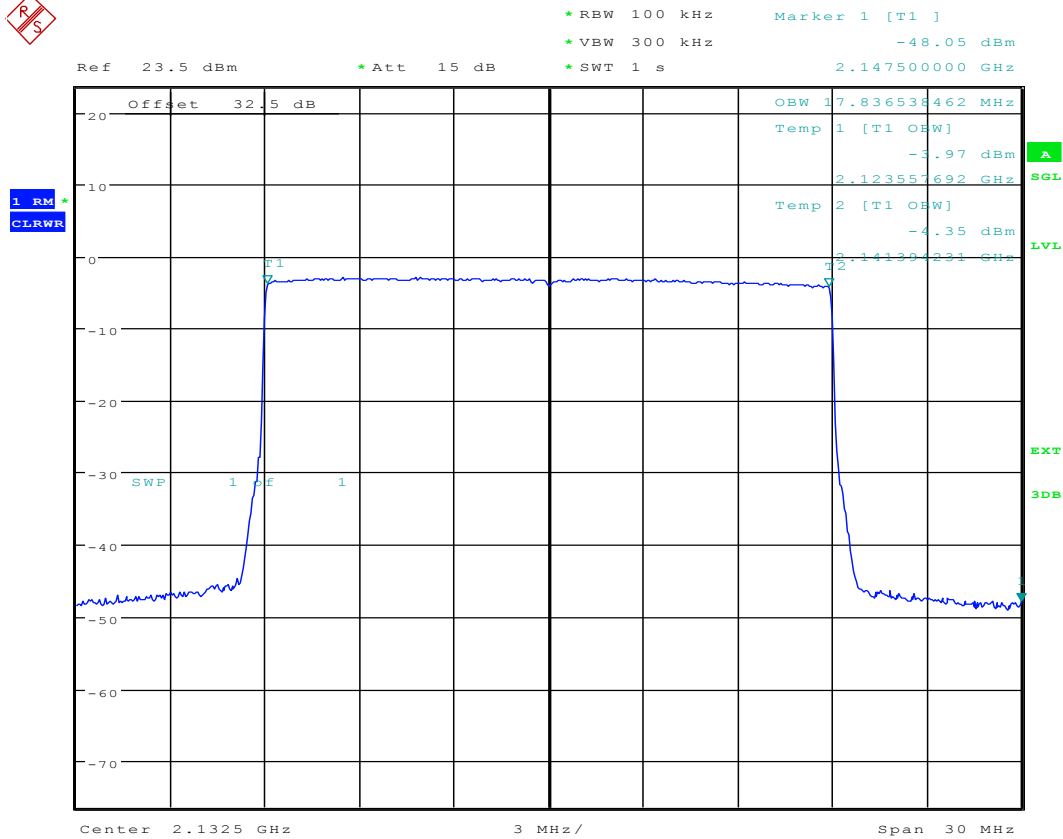


2.1.10 1L20M_B



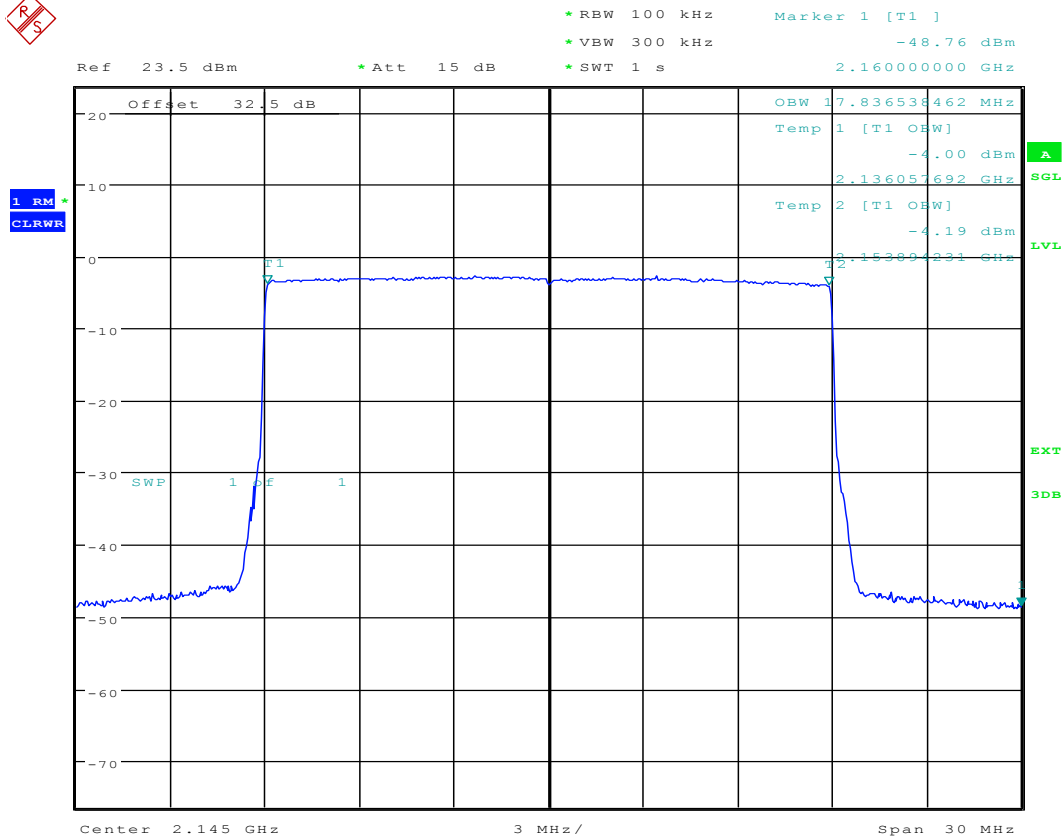
Date: 19.MAY.2016 01:44:17

2.1.11 1L20M_M



Date: 19.MAY.2016 01:47:01

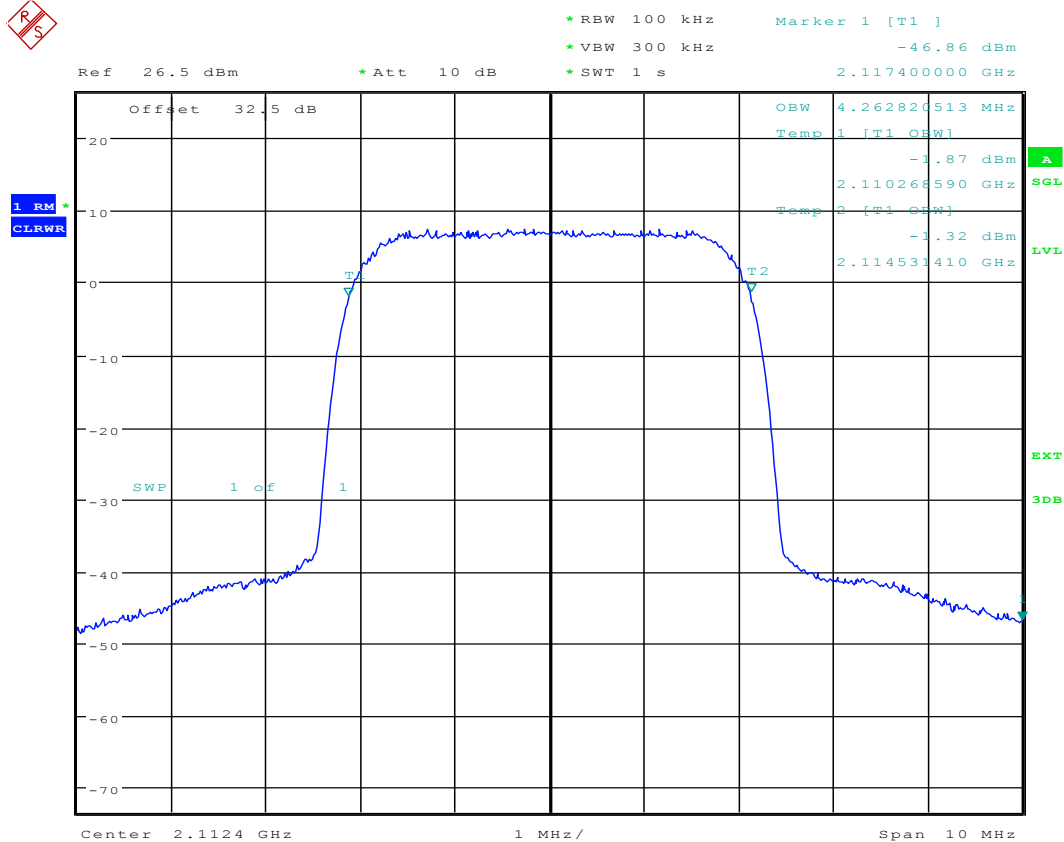
2.1.12 1L20M_T



Date: 19.MAY.2016 01:48:56



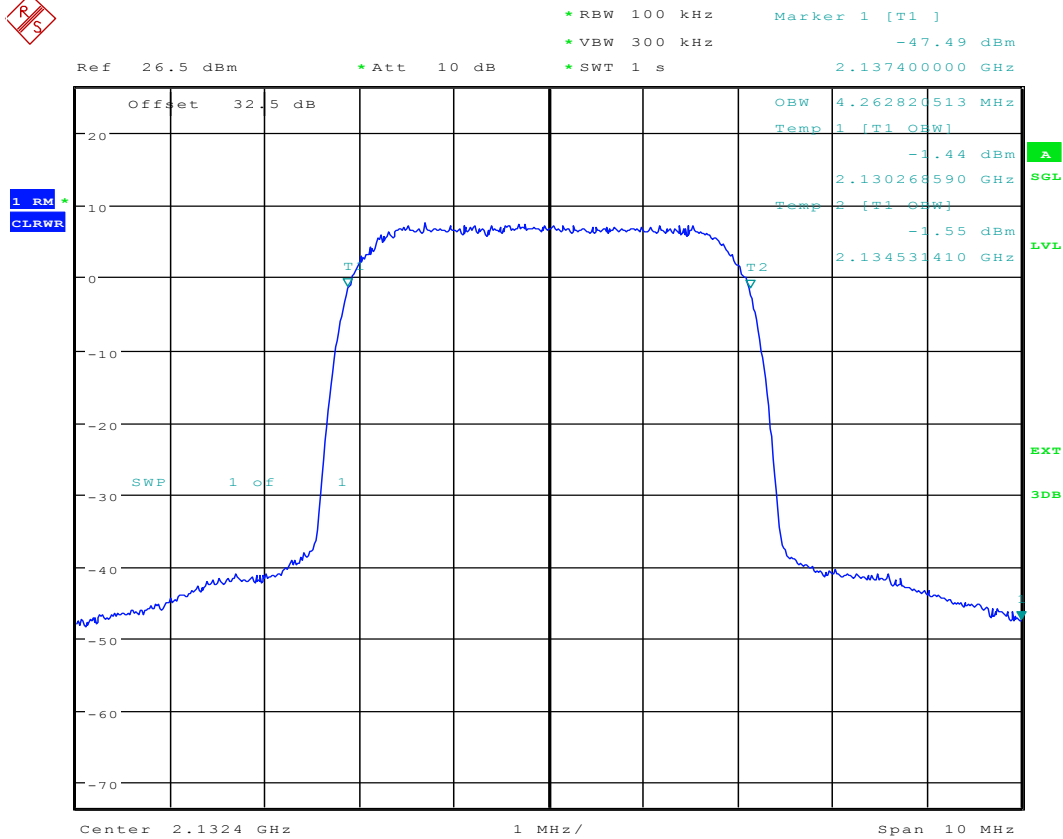
2.1.13 1U_B



Date: 19.MAY.2016 01:52:53

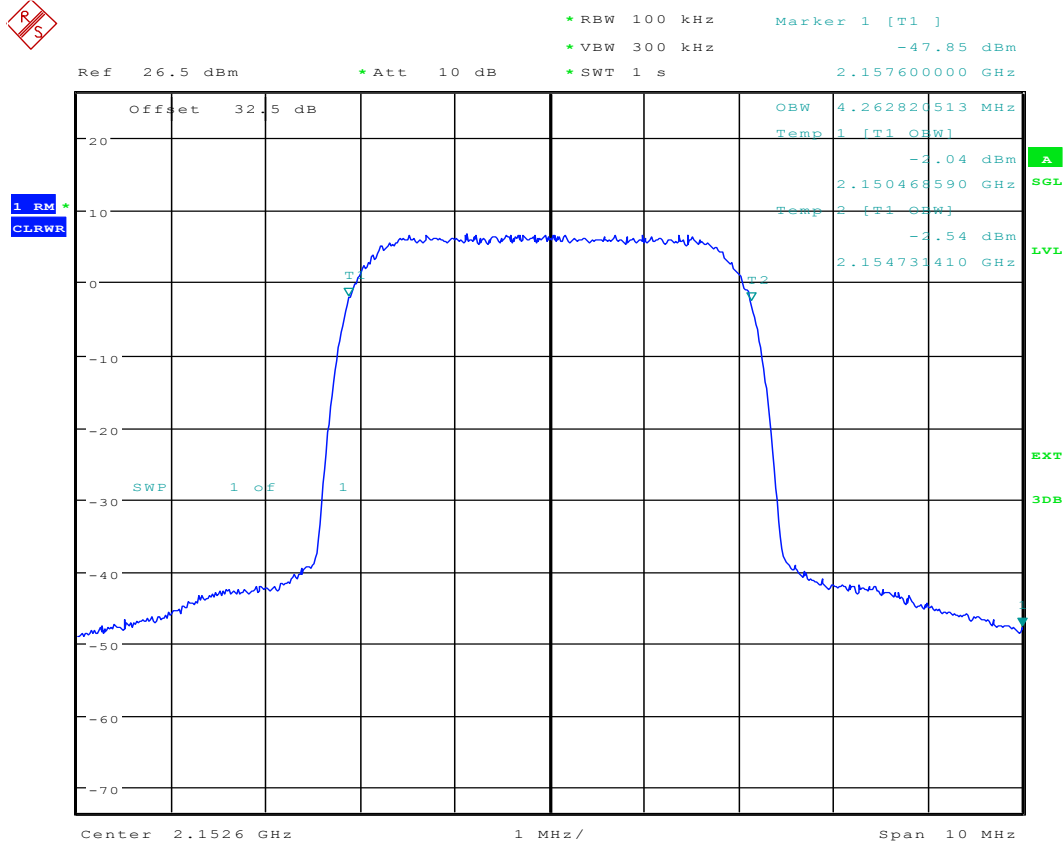


2.1.14 1U_M



Date: 19.MAY.2016 19:20:30

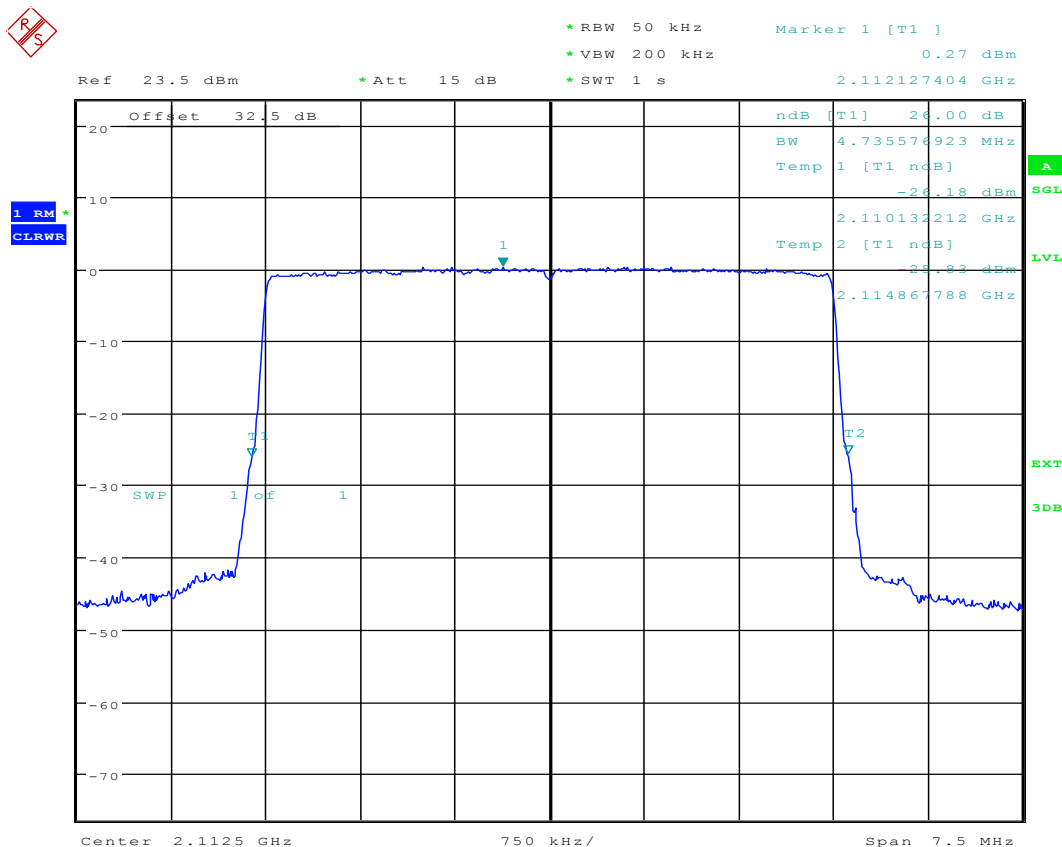
2.1.15 1U_T



Date: 19.MAY.2016 01:54:30

2.2 Emission Bandwidth(-26 dBc)

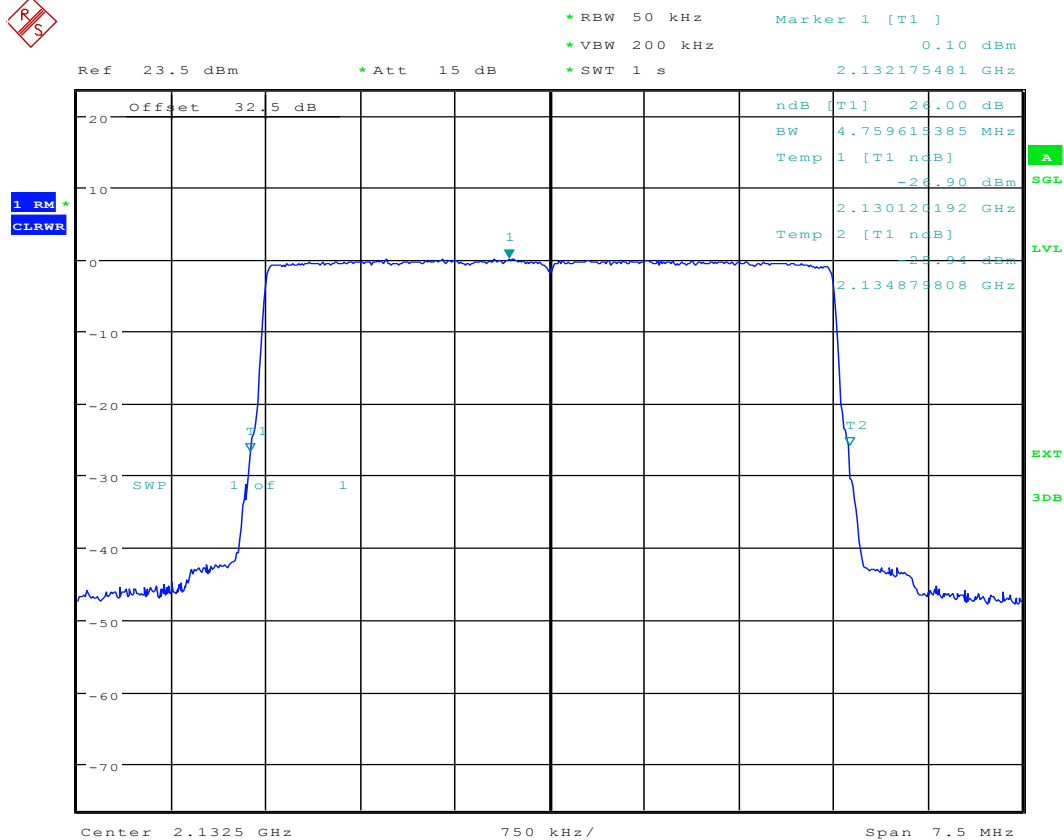
2.2.1 1L5M_B



Date: 18.MAY.2016 23:26:42



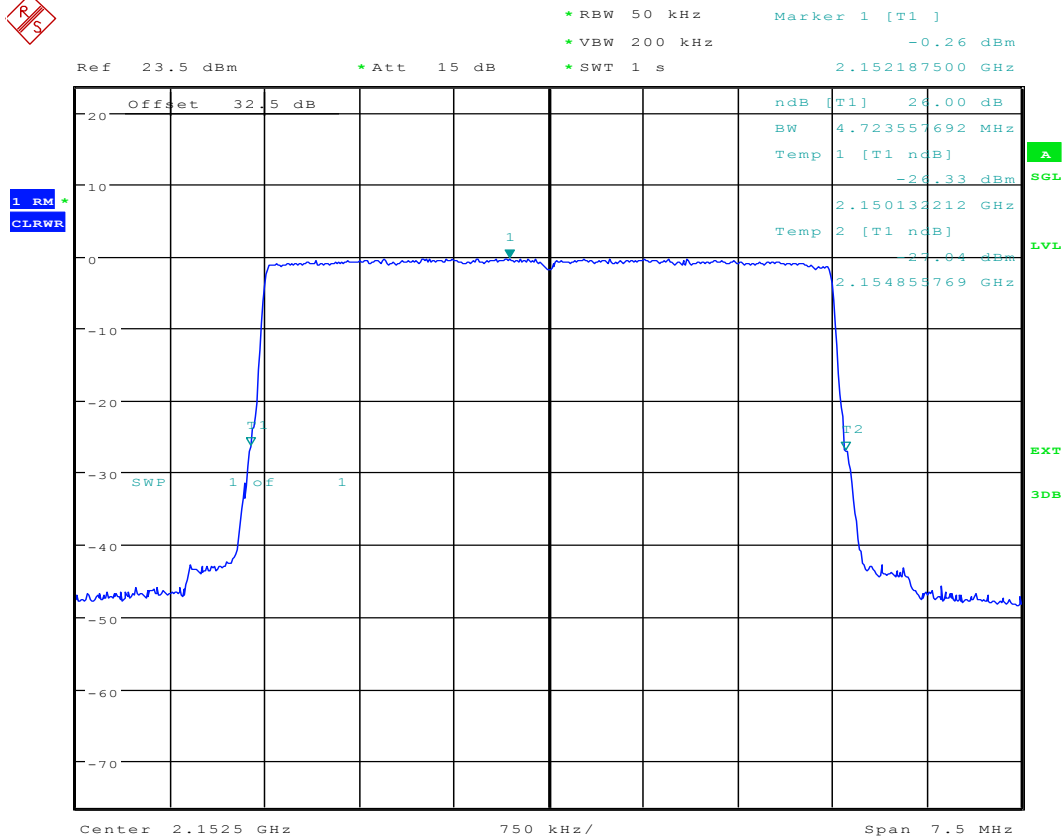
2.2.2 1L5M_M



Date: 18.MAY.2016 23:28:37

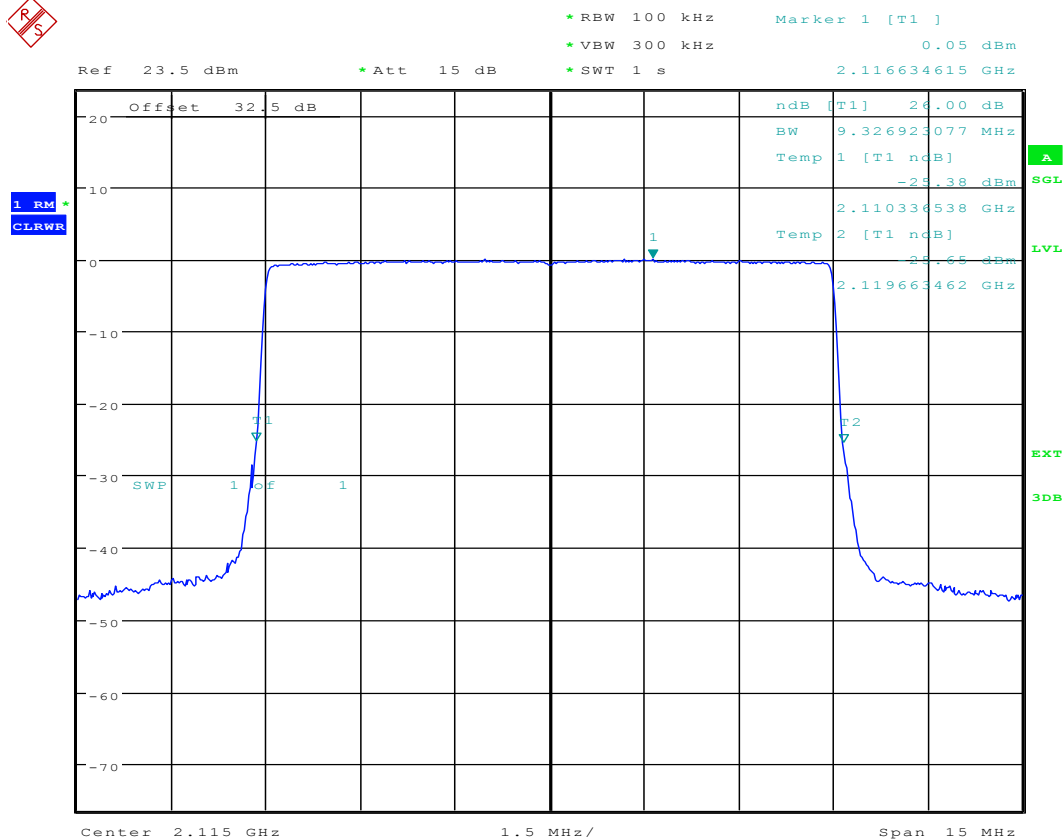


2.2.3 1L5M_T



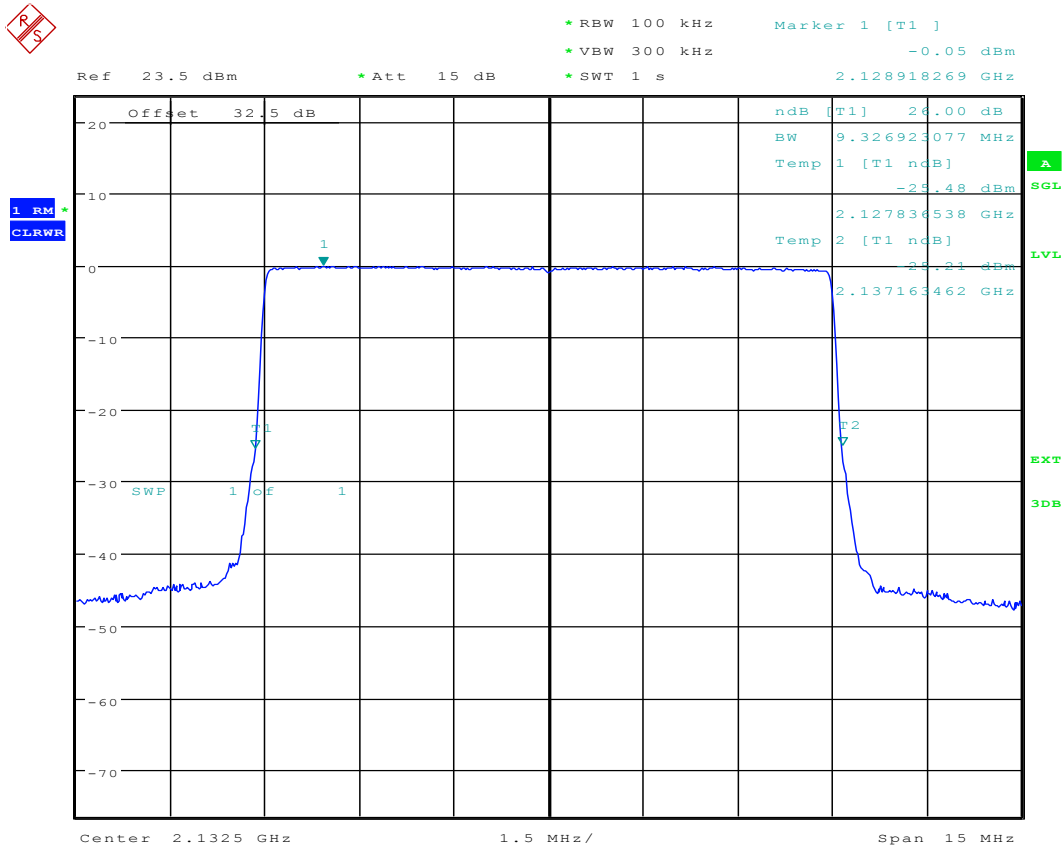
Date: 18.MAY.2016 23:31:19

2.2.4 1L10M_B



Date: 19.MAY.2016 01:23:15

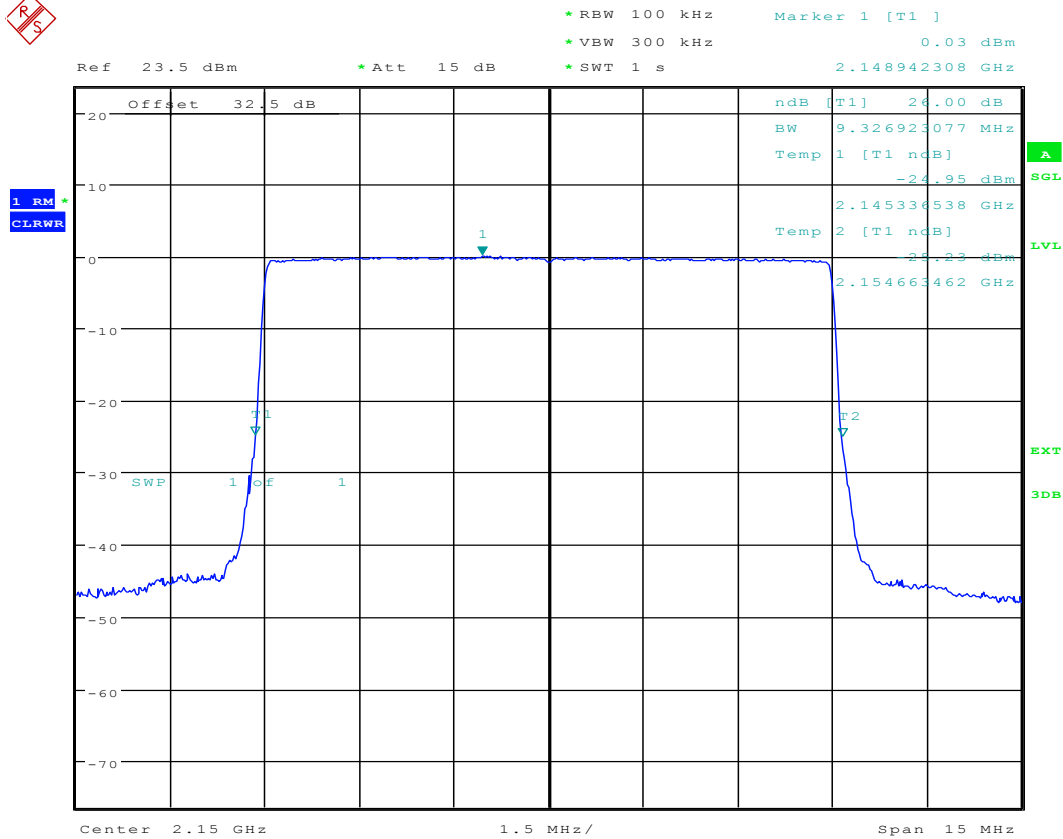
2.2.5 1L10M_M



Date: 19.MAY.2016 01:25:10



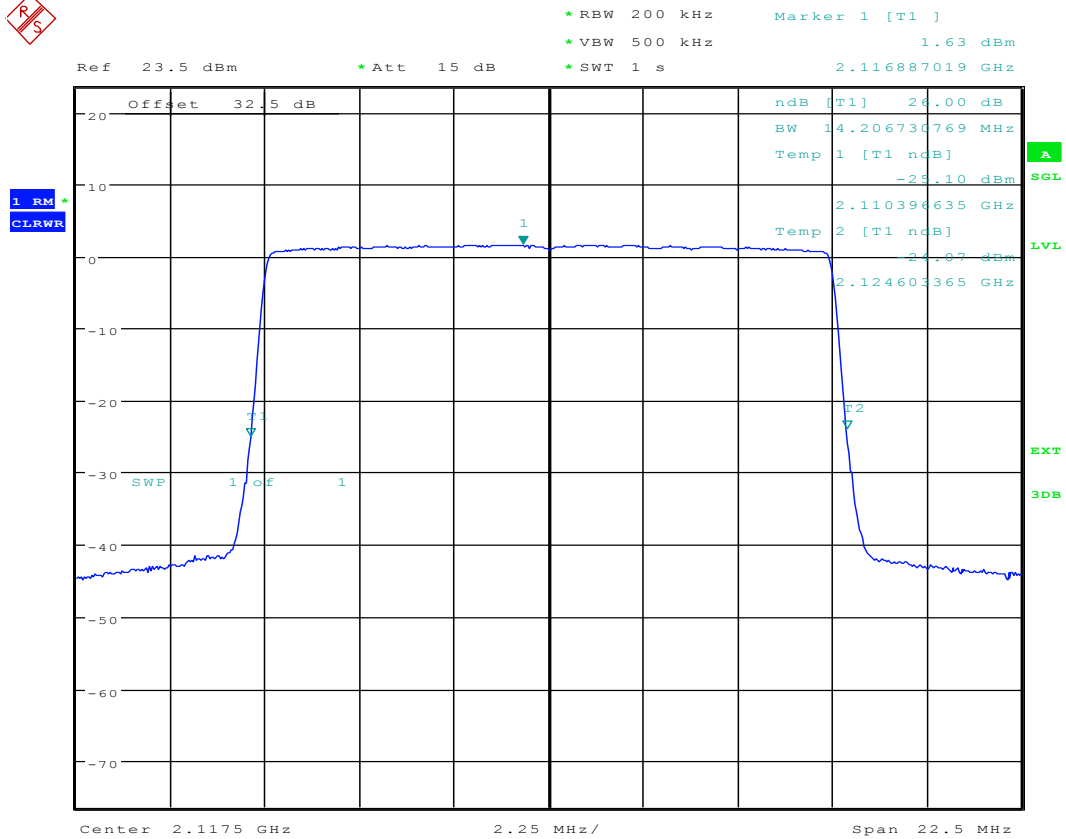
2.2.6 1L10M_T



Date: 19.MAY.2016 01:27:53



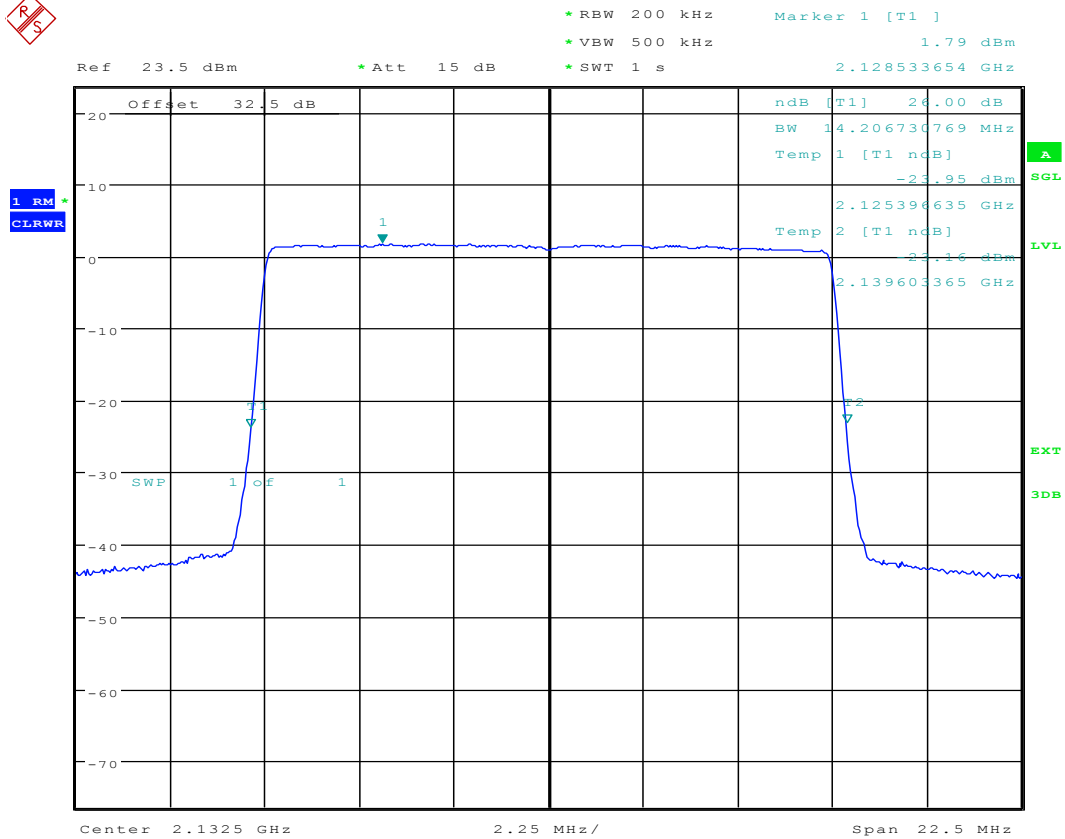
2.2.7 1L15M_B



Date: 19.MAY.2016 01:31:15

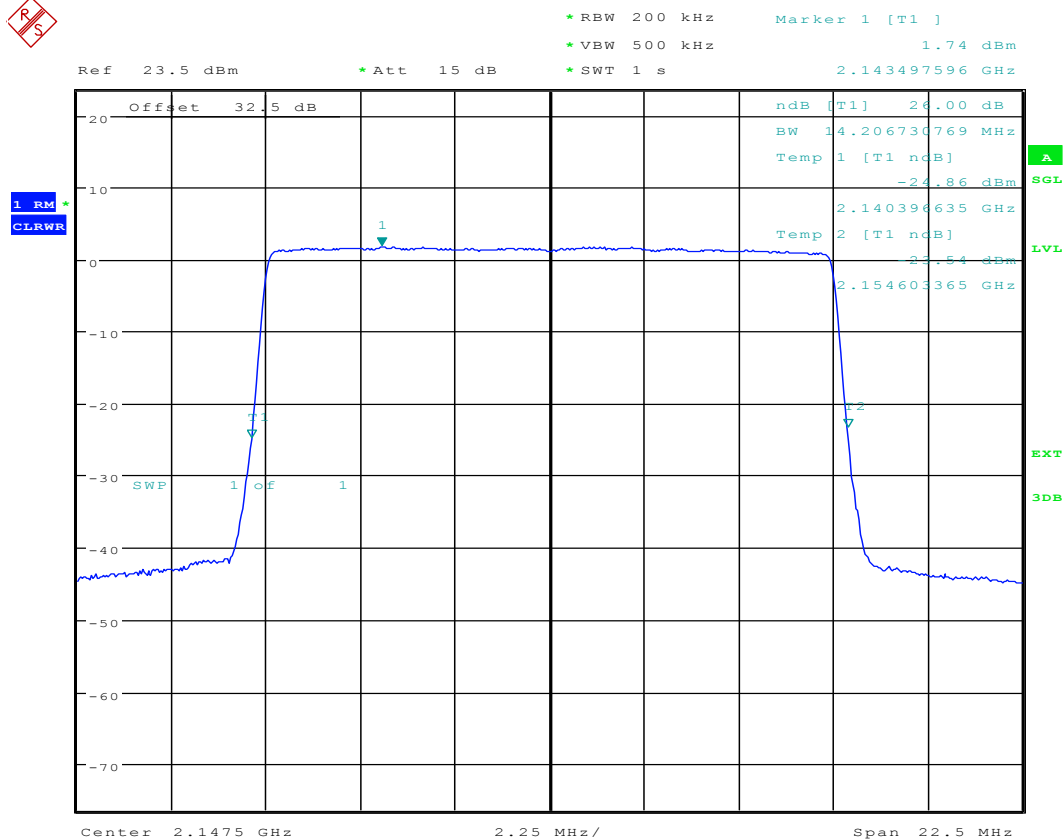


2.2.8 1L15M_M



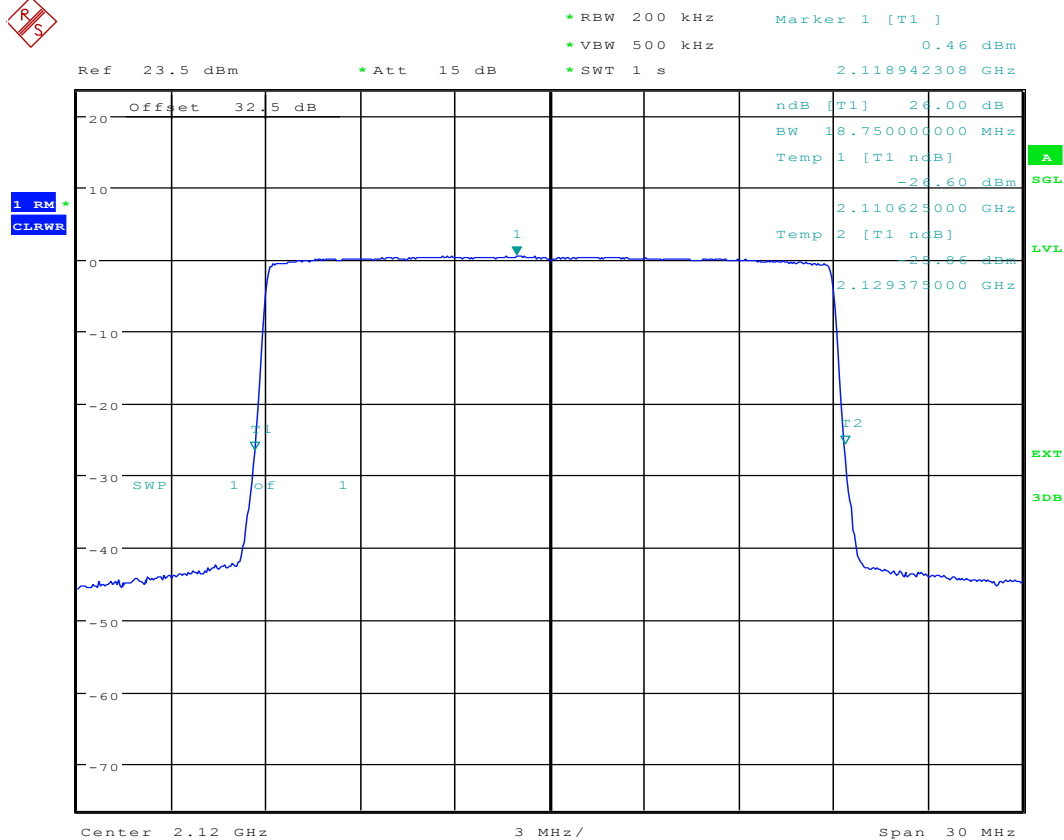
Date: 19.MAY.2016 01:40:25

2.2.9 1L15M_T



Date: 19.MAY.2016 01:43:08

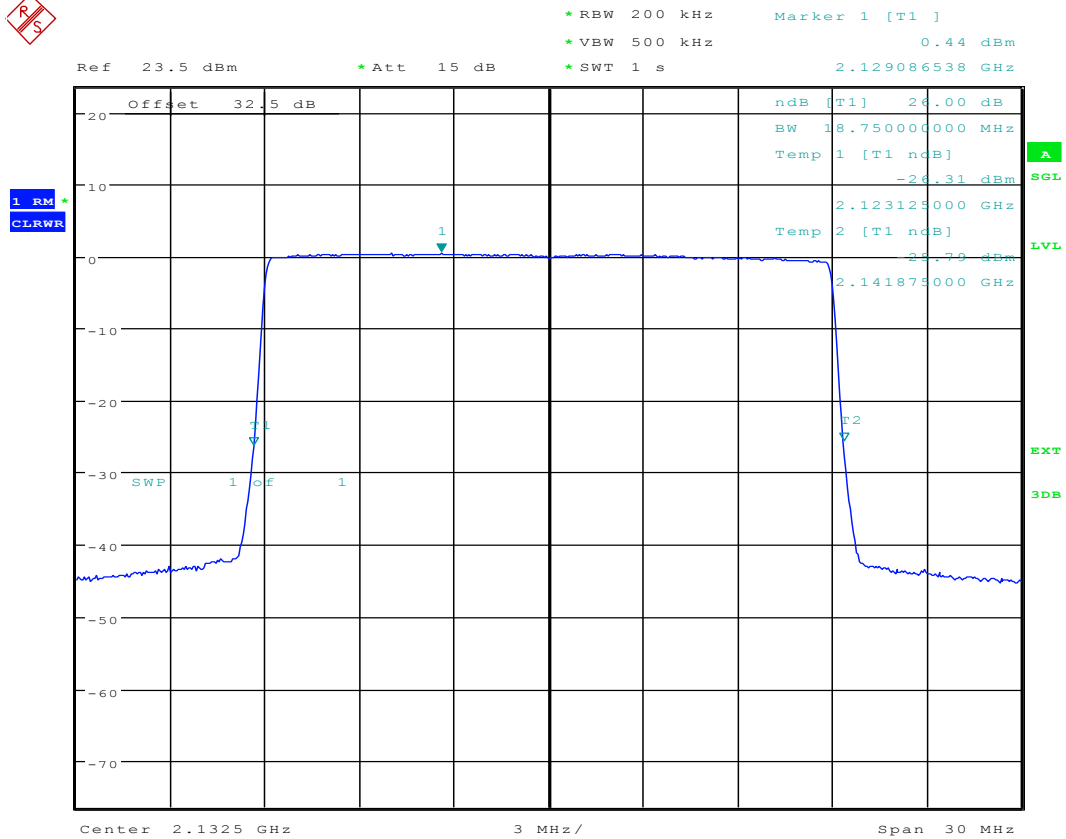
2.2.10 1L20M_B



Date: 19.MAY.2016 01:46:07



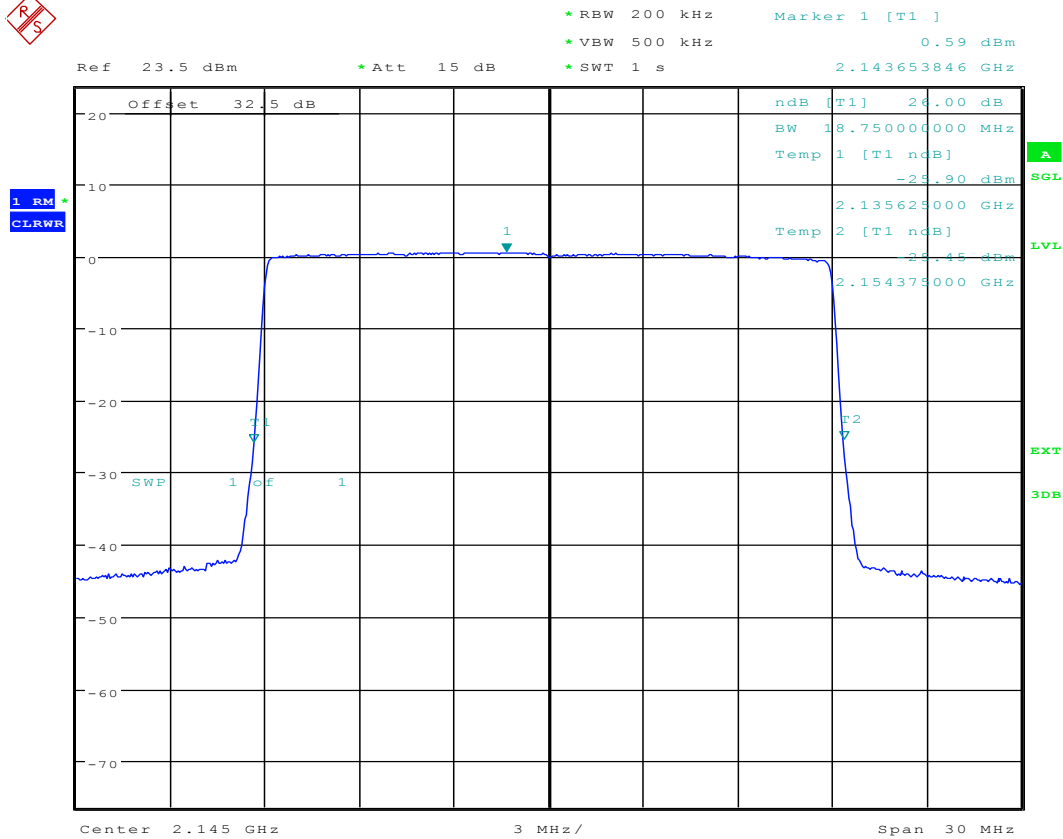
2.2.11 1L20M_M



Date: 19.MAY.2016 01:48:03

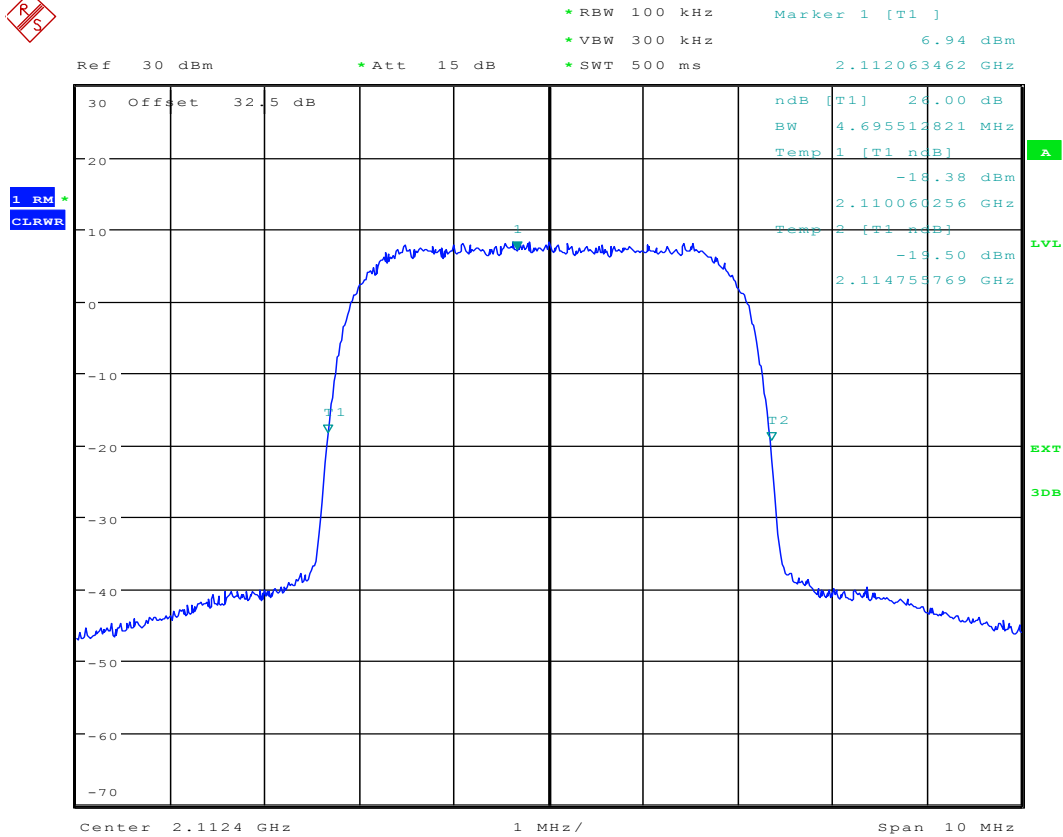


2.2.12 1L20M_T



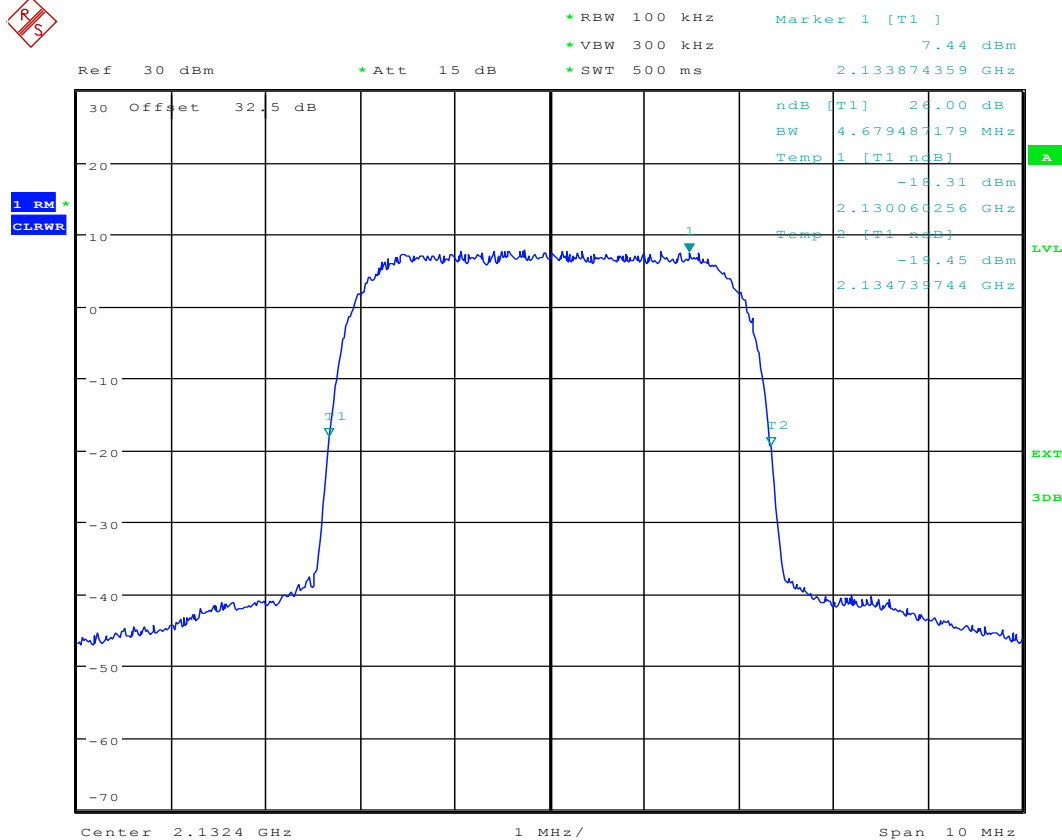
Date: 19.MAY.2016 01:50:46

2.2.13 1U_B



Date: 19.MAY.2016 23:30:45

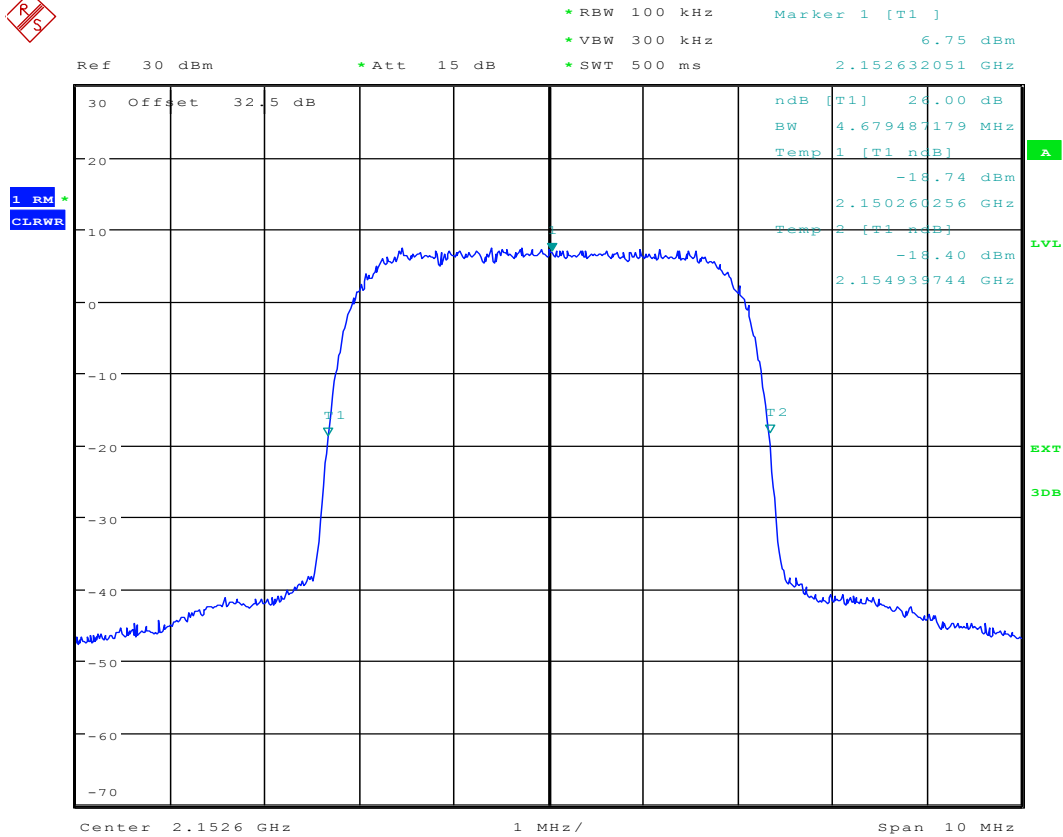
2.2.14 1U_M



Date: 19.MAY.2016 23:18:23



2.2.15 1U_T



Date: 19.MAY.2016 22:30:41



Appendix C: Band Edges Compliance



1 Result Table

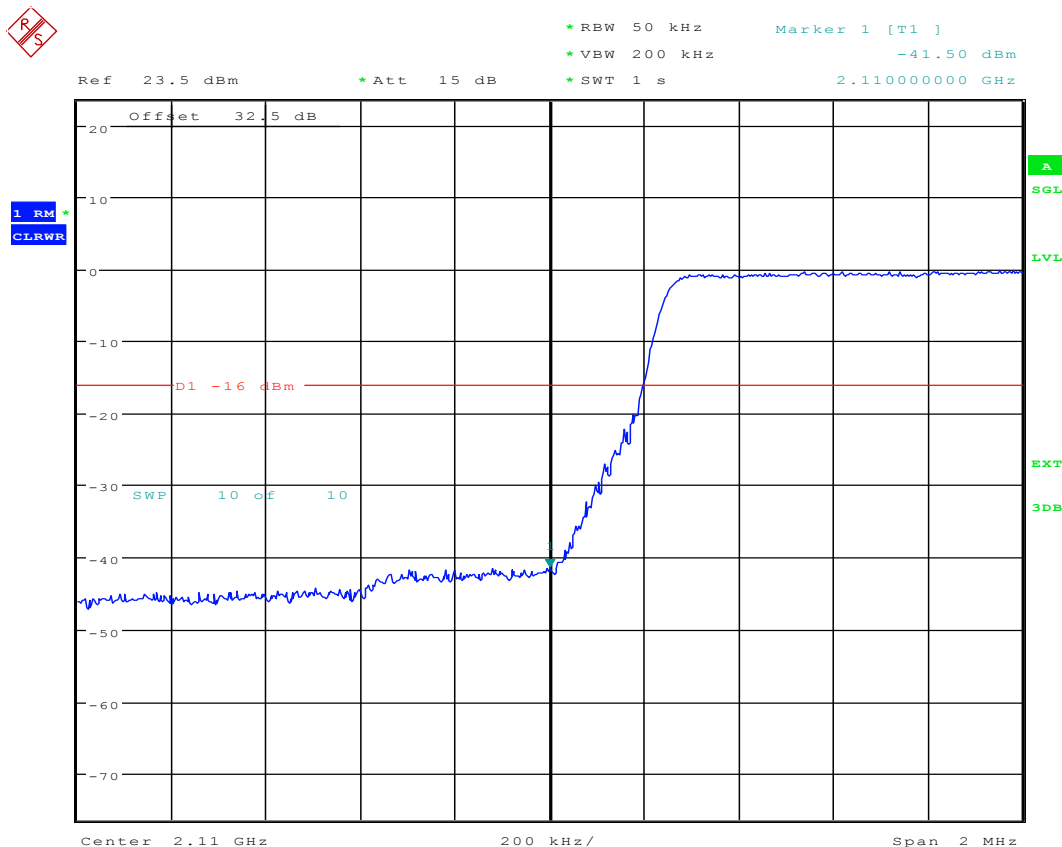
NOTE: The offset of measurement filter -3dB point may be considered when identifying the maximum emission for e.g. the CDMA, WCDMA, WiMAX, LTE systems.

EUT Conf.	Maximum Emission [dBm]	Verdict
1L5M_B	<-13	Pass
1L5M_T	<-13	Pass
1L20M_B	<-13	Pass
1L20M_T	<-13	Pass
1U_B	<-13	Pass
1U_T	<-13	Pass
1U1L5M_B	<-13	Pass
1U1L5M_T	<-13	Pass



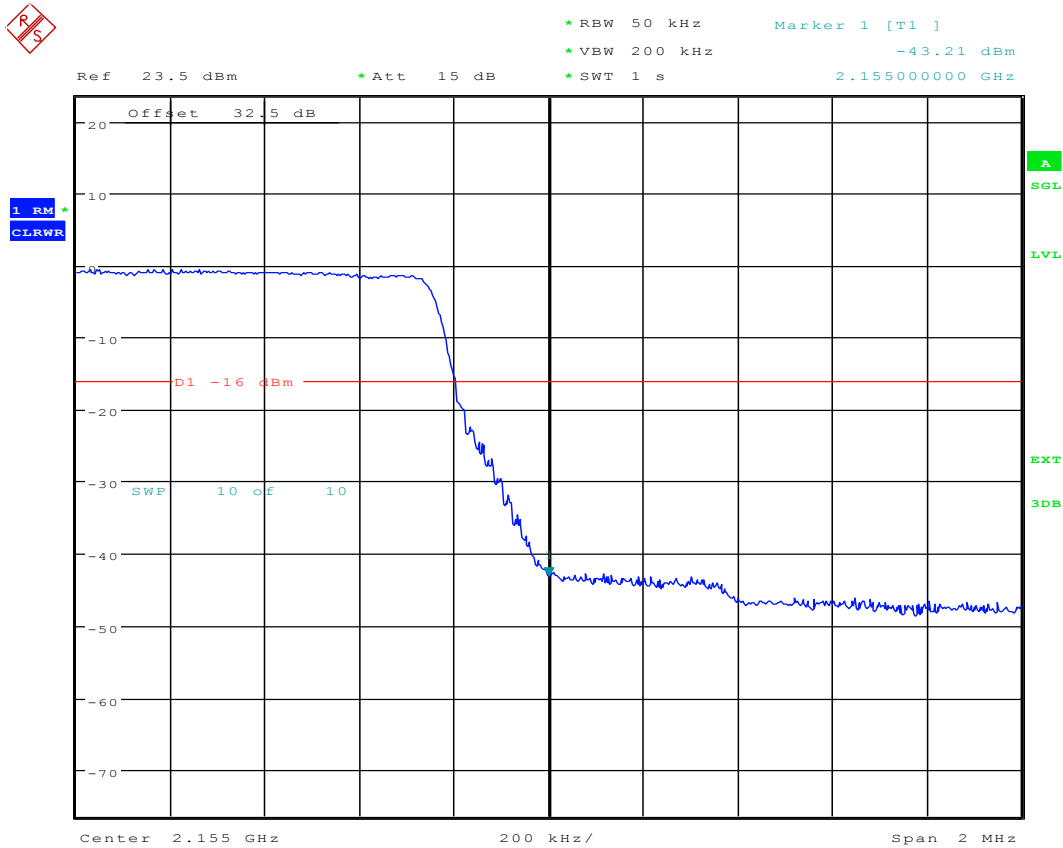
2 Test Plot

2.1 1L5M_B



Date: 18.MAY.2016 23:26:25

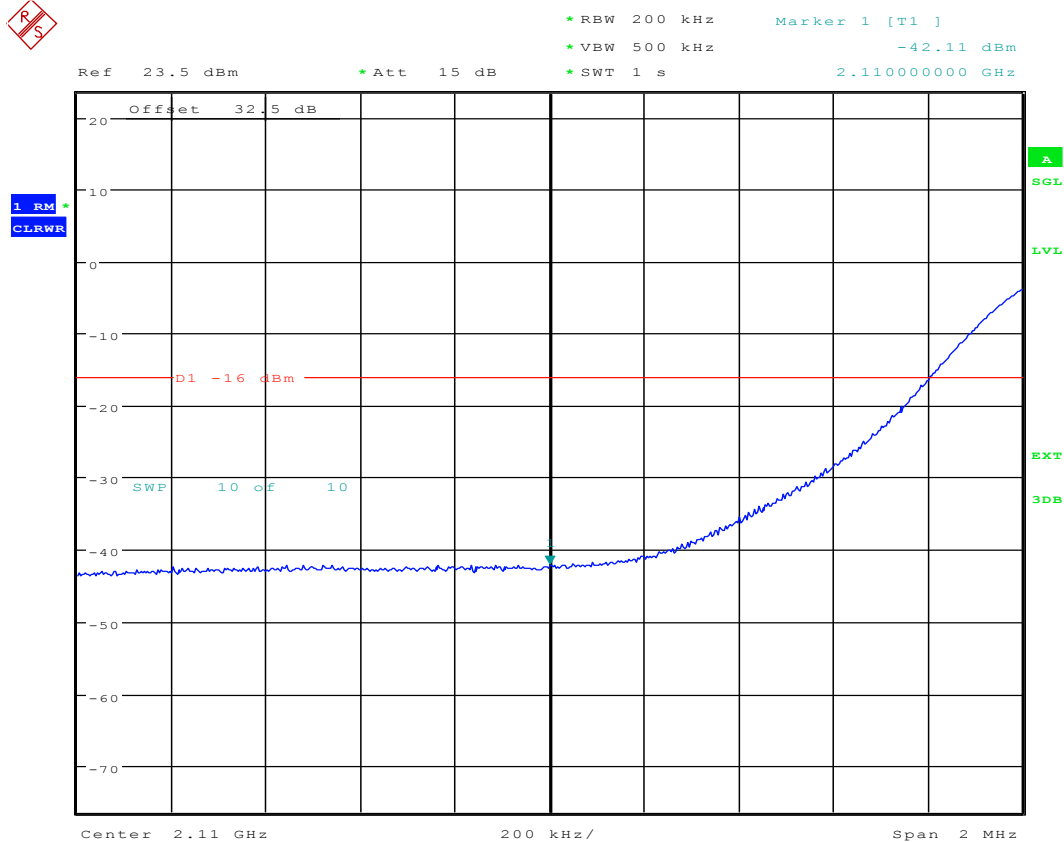
2.2 1L5M_T



Date: 18.MAY.2016 23:31:02

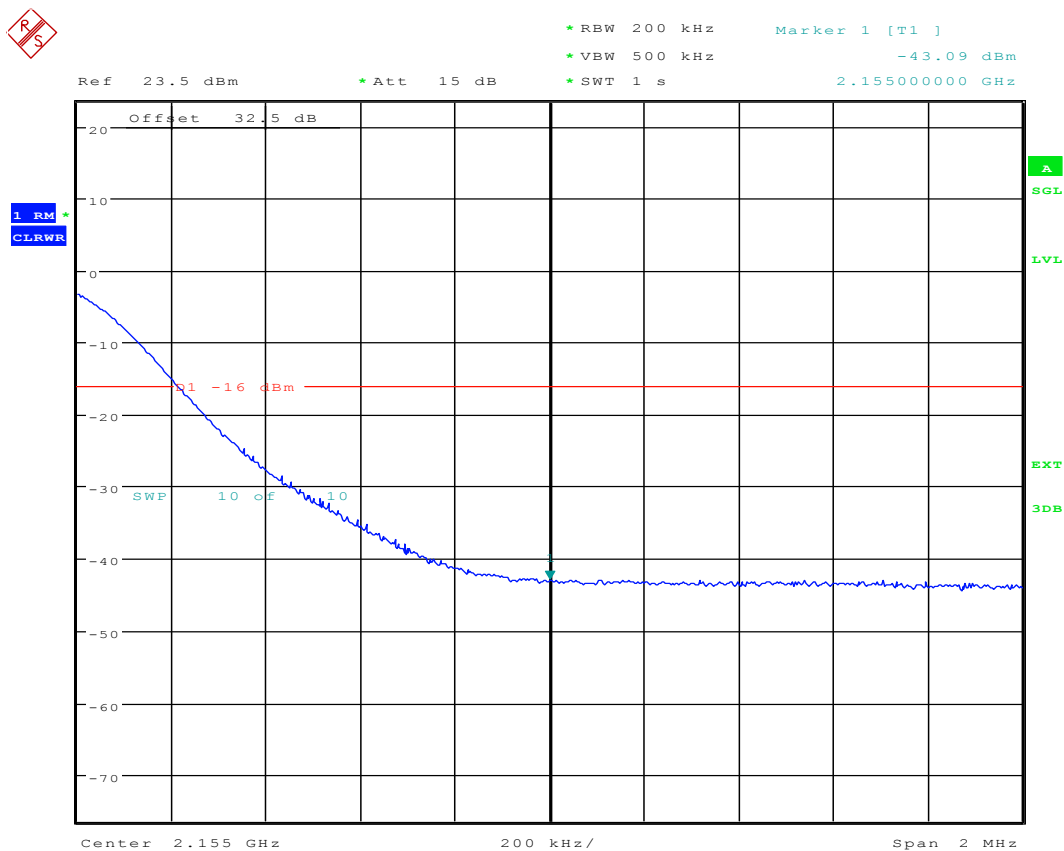


2.3 1L20M_B



Date: 19.MAY.2016 01:45:50

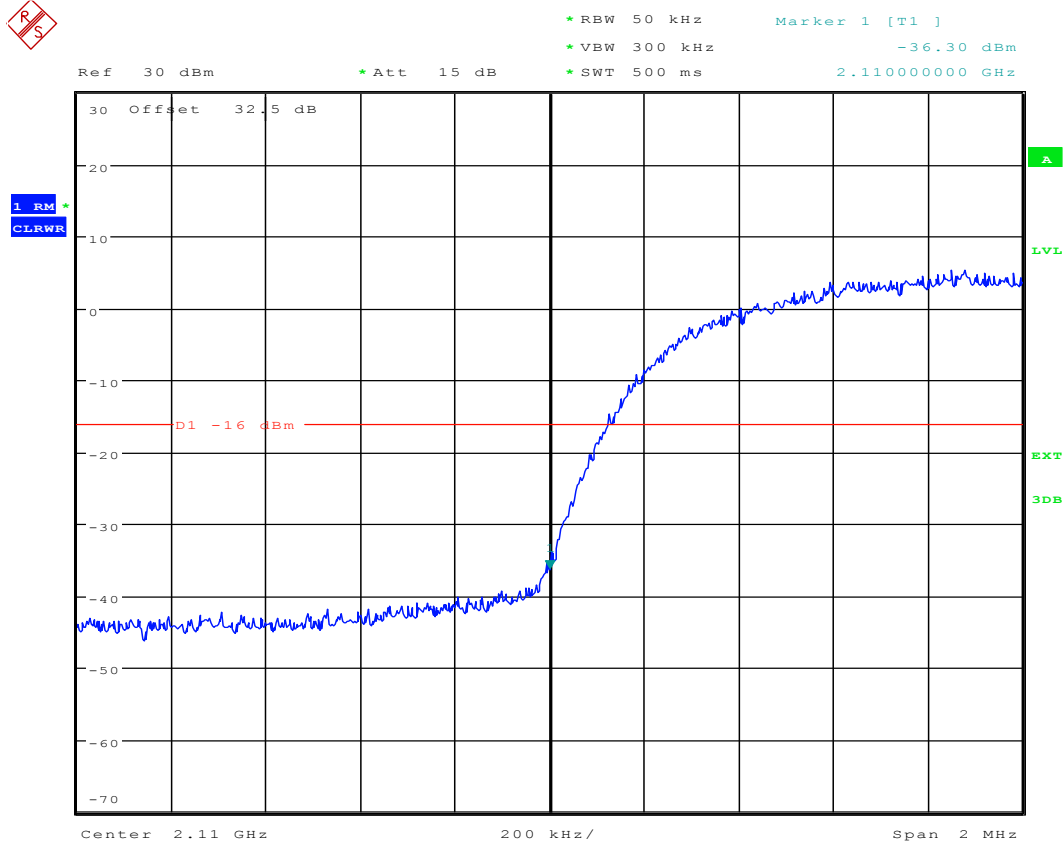
2.4 1L20M_T



Date: 19.MAY.2016 01:50:30

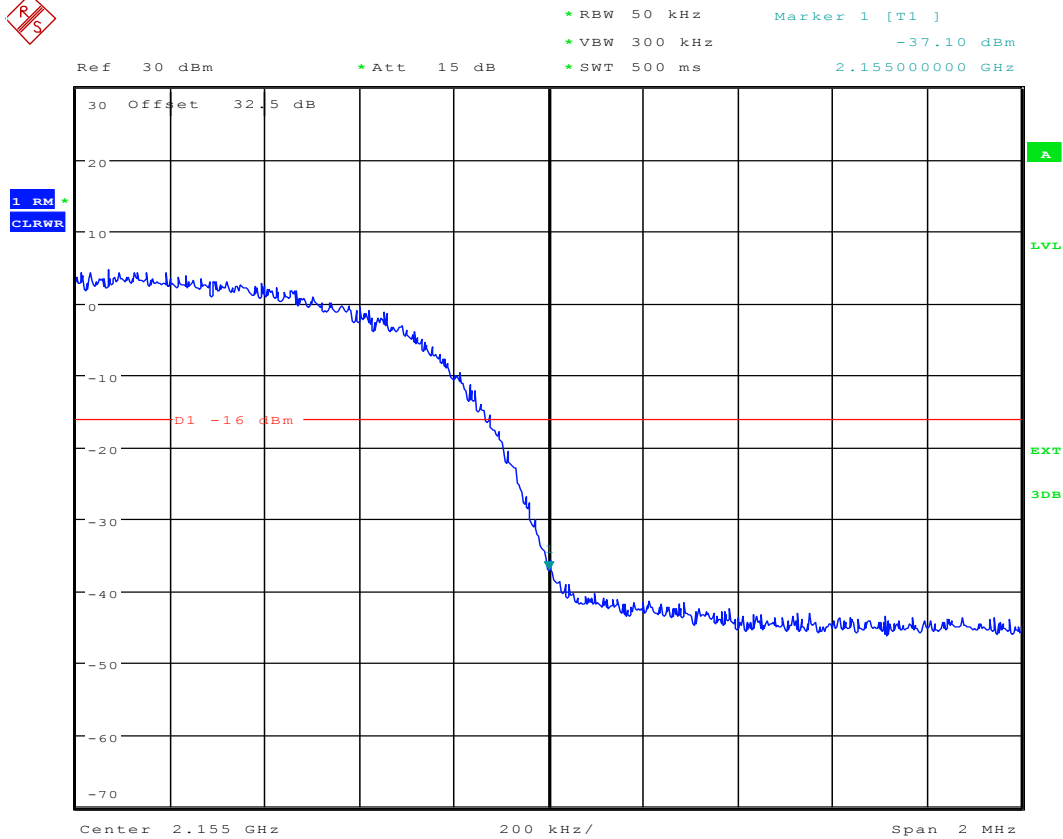


2.5 1U_B



Date: 19.MAY.2016 23:29:14

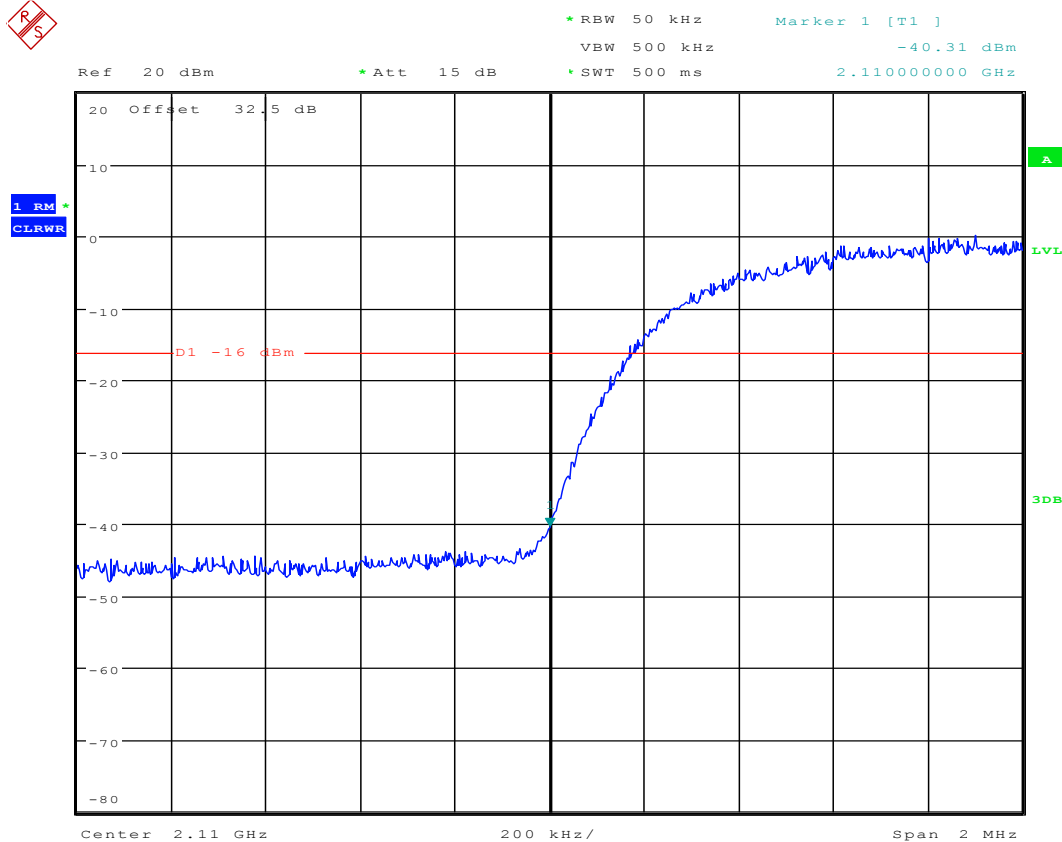
2.6 1U_T



Date: 19.MAY.2016 22:38:52

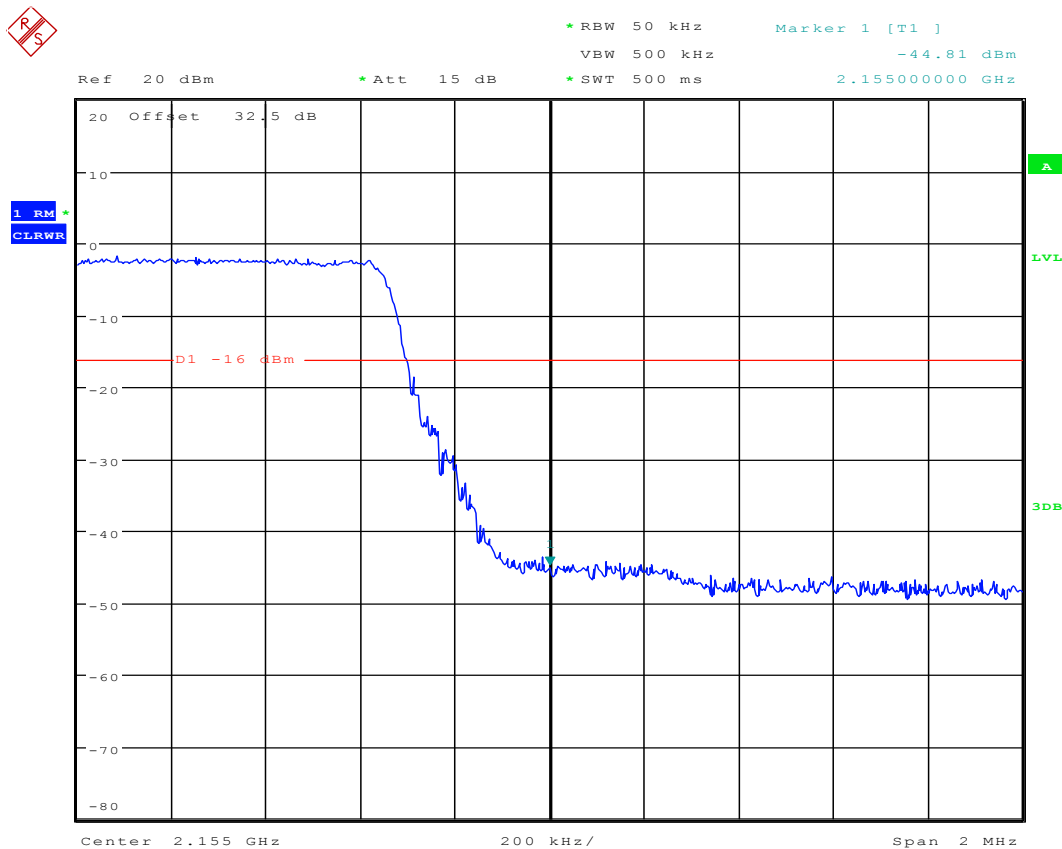


2.7 1U1L5M_B



Date: 3.JUN.2016 12:37:21

2.8 1U1L5M_T



Date: 3.JUN.2016 12:40:56



Appendix D: Spurious Emission at Antenna Terminals



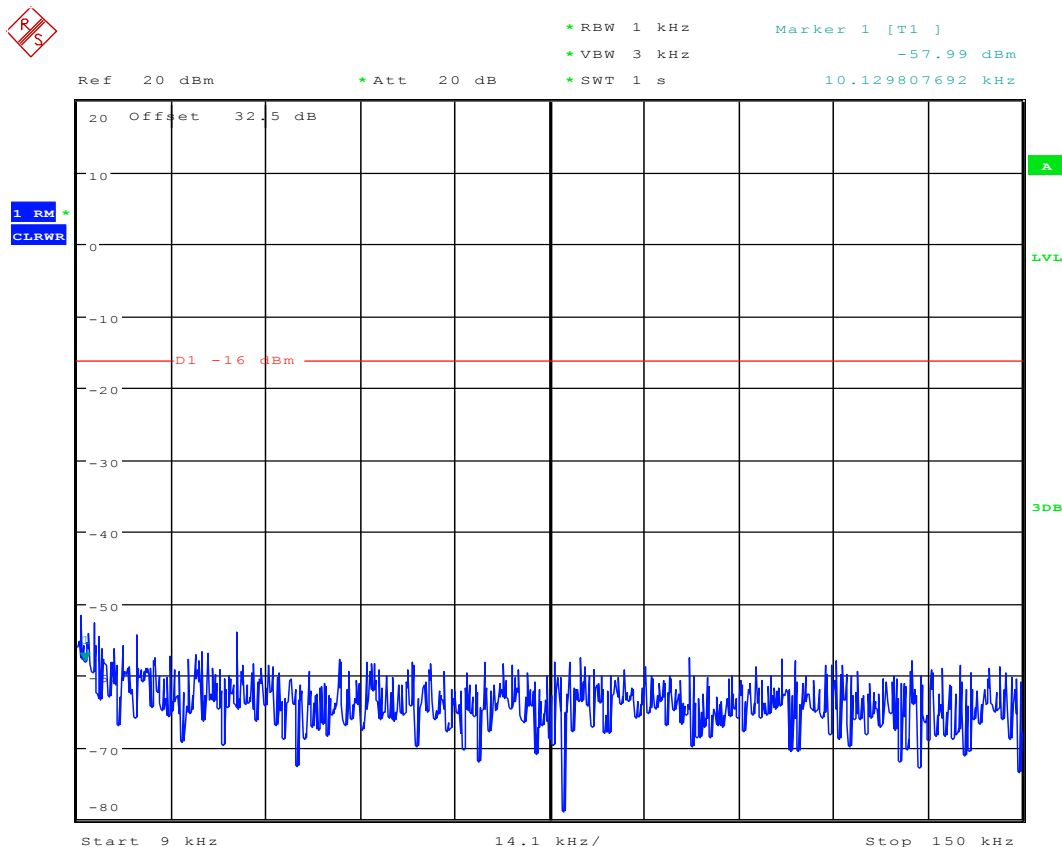
1 Result Table

EUT Conf.	Maximum Emission [dBm]	Verdict
1L20M_B	<-13	Pass
1L20M_M	<-13	Pass
1L20M_T	<-13	Pass
1U_B	<-13	Pass
1U_M	<-13	Pass
1U_T	<-13	Pass
1U1L5M_B	<-13	Pass
1U1L5M_M	<-13	Pass
1U1L5M_T	<-13	Pass

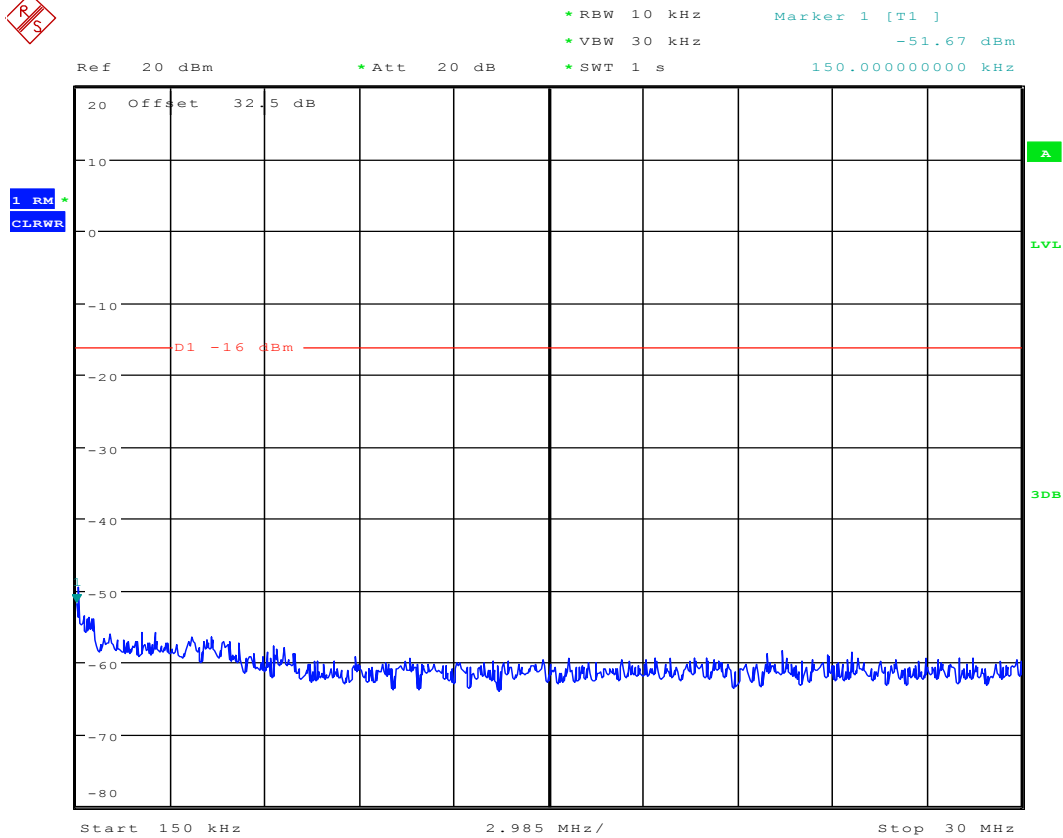


2 Test Plot

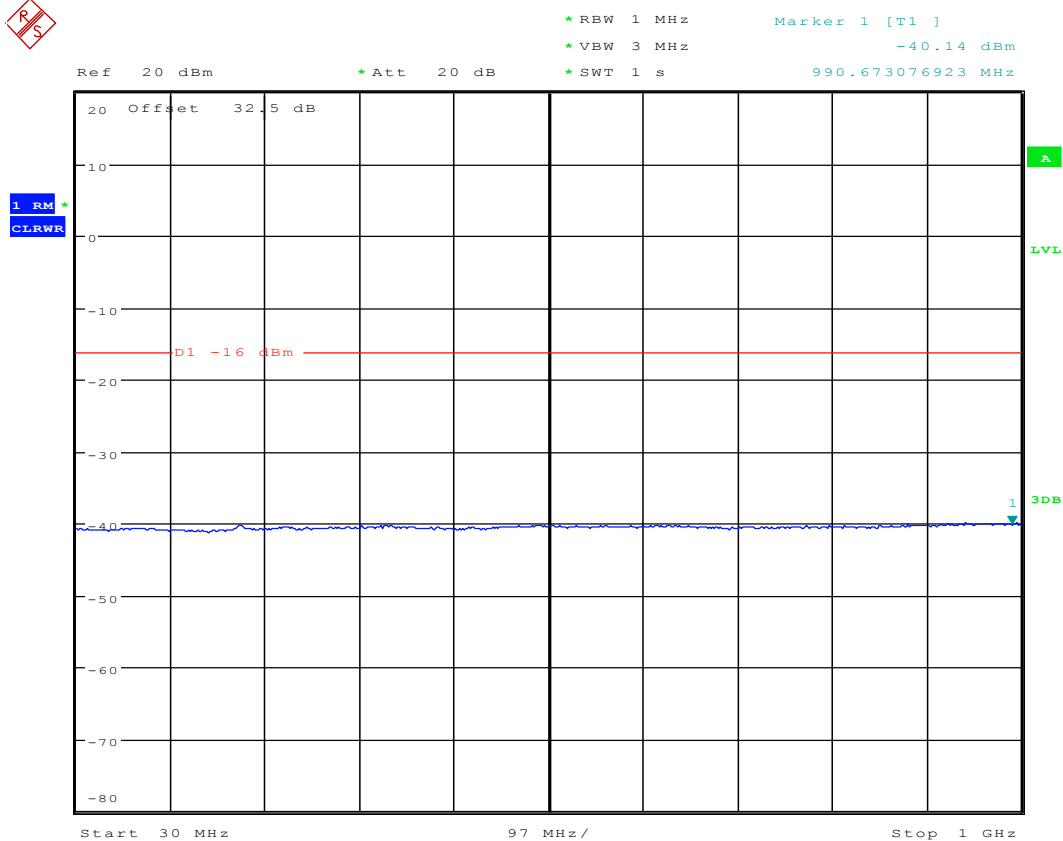
2.1 1L20M_B



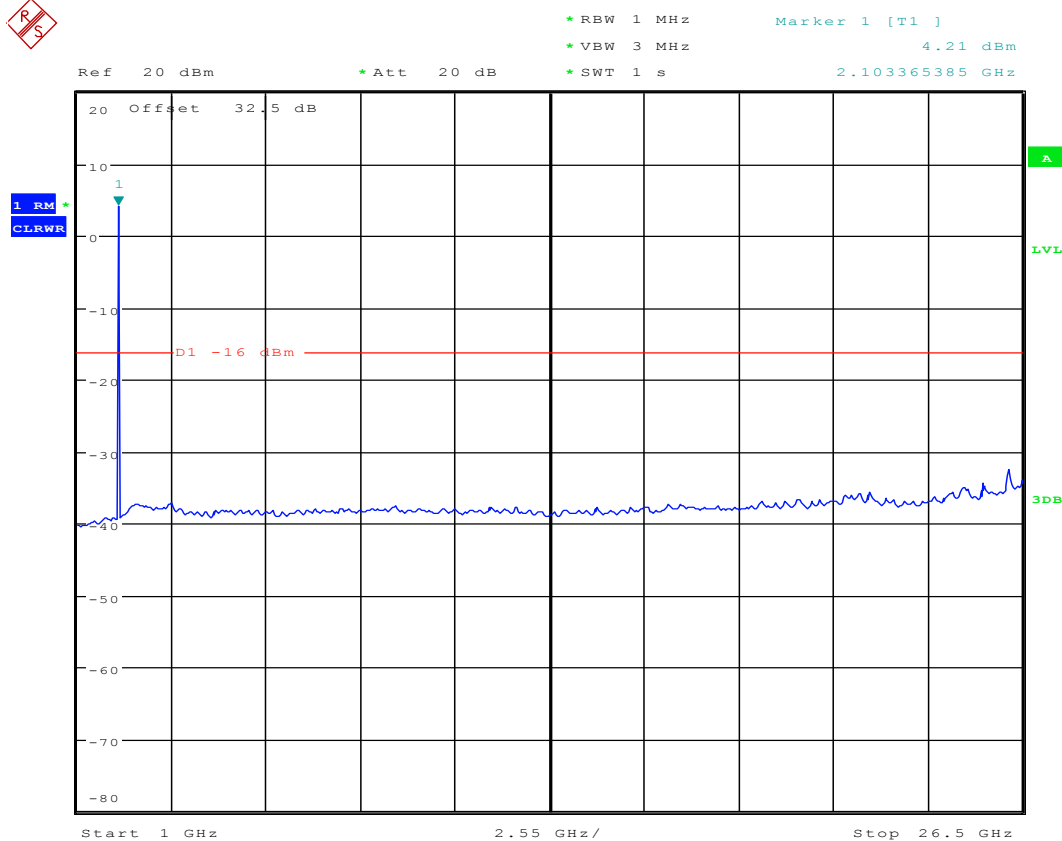
Date: 28.APR.2016 22:39:44



Date: 28.APR.2016 22:40:02



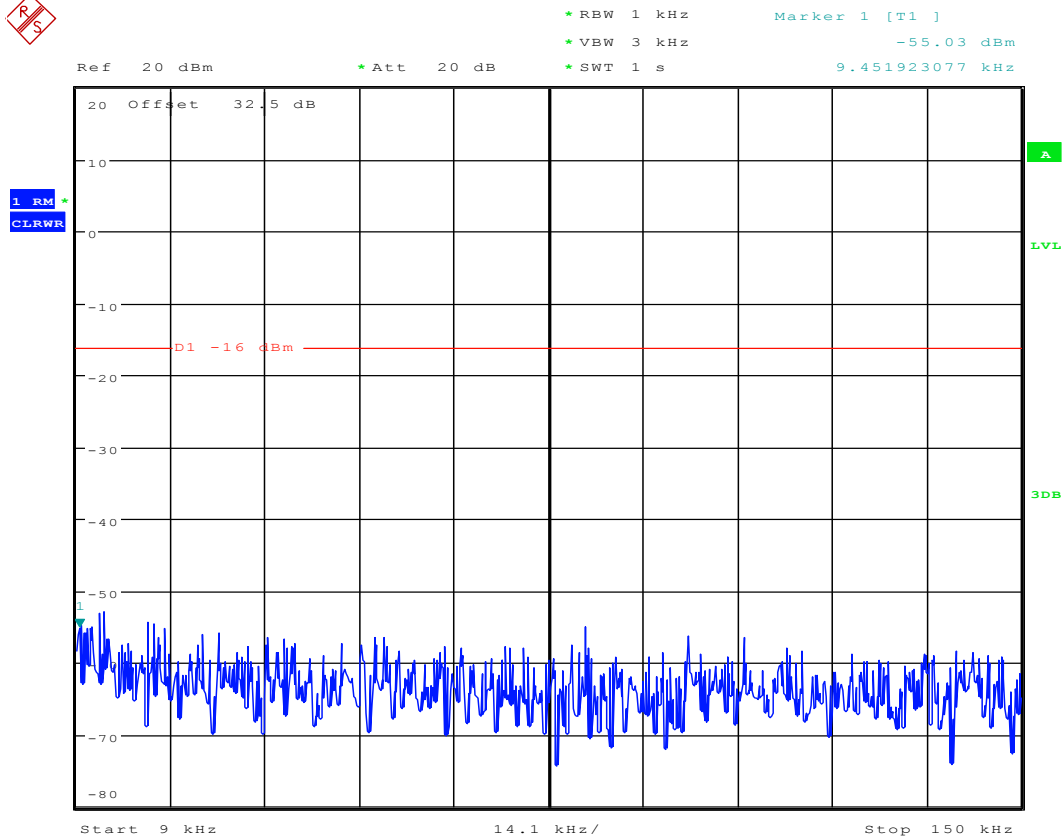
Date: 28.APR.2016 22:40:26



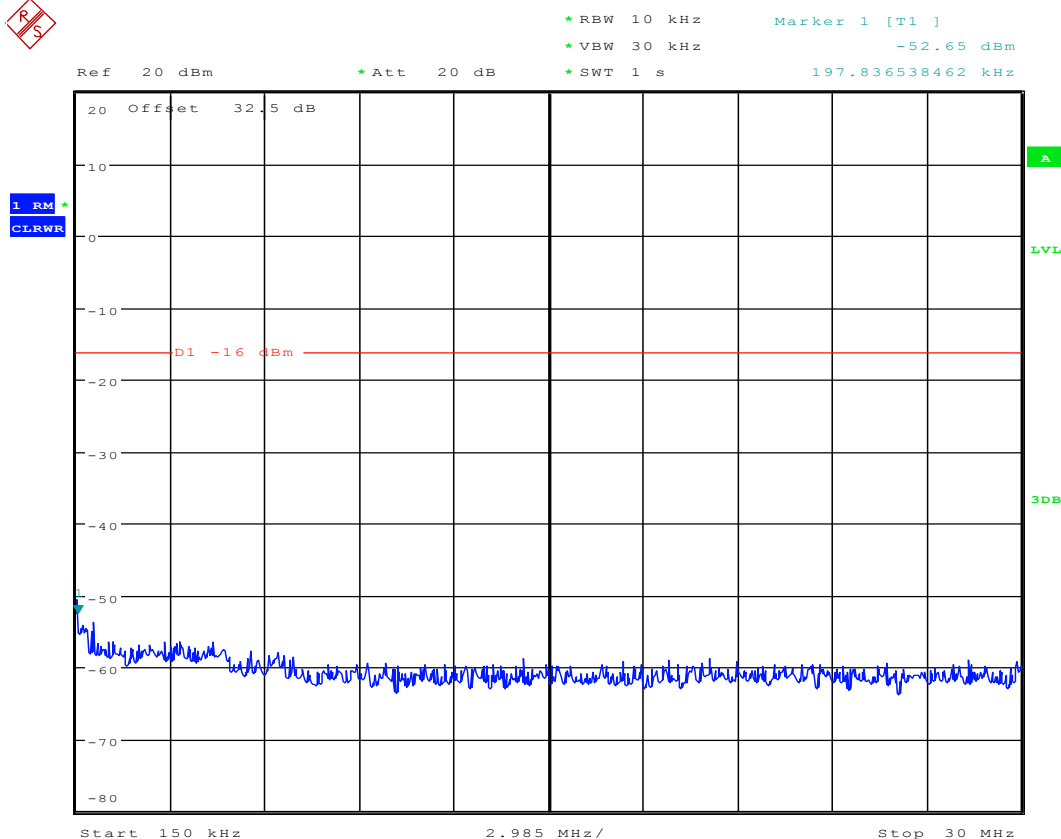
Date: 28.APR.2016 22:40:41



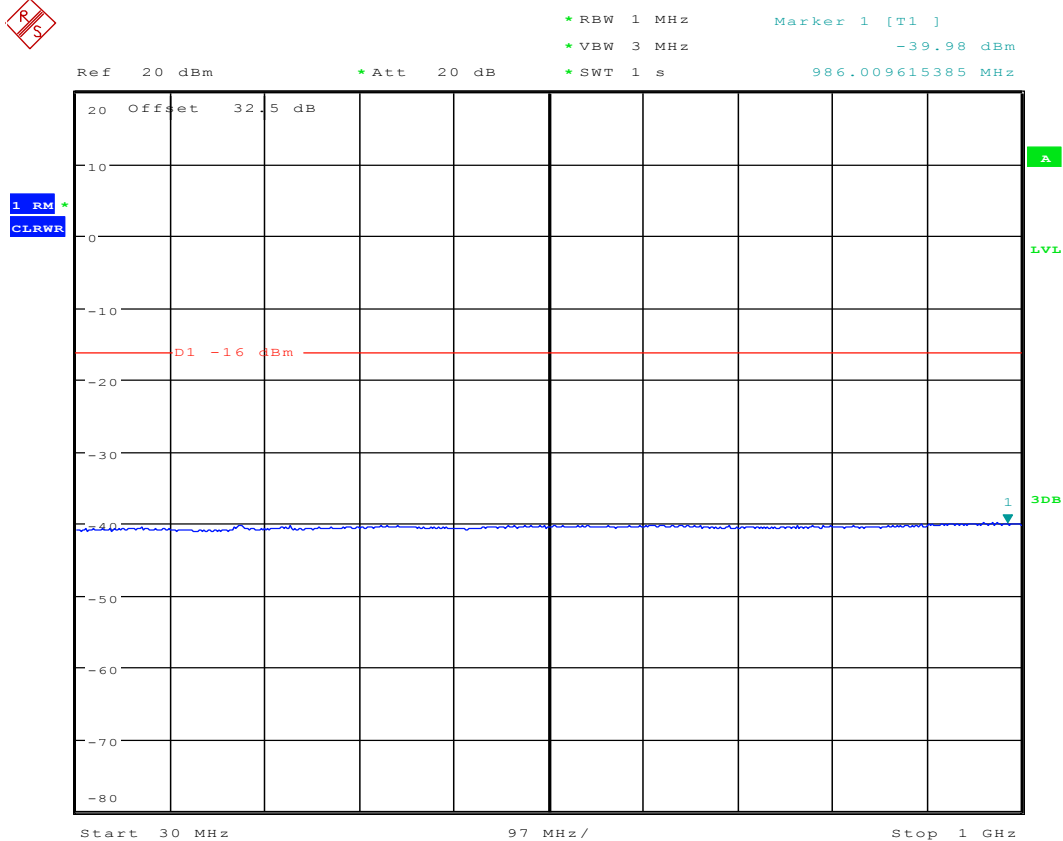
2.2 1L20M_M



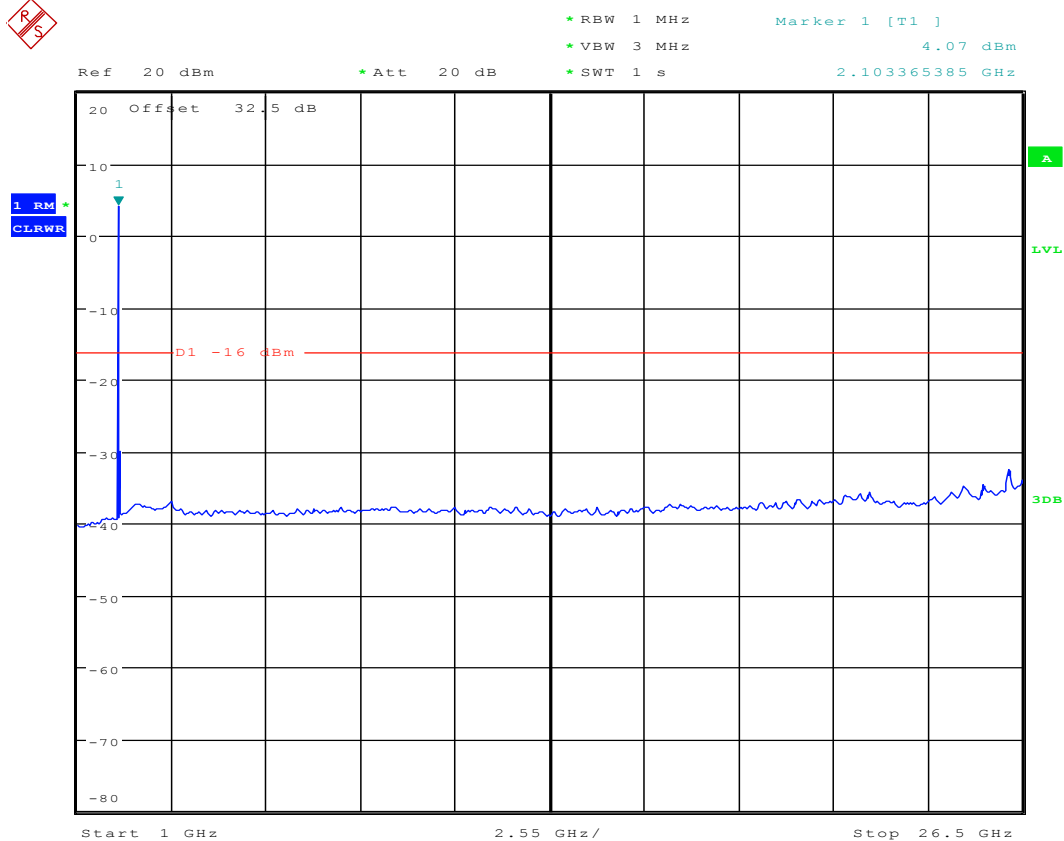
Date: 28.APR.2016 22:48:01



Date: 28.APR.2016 22:48:20



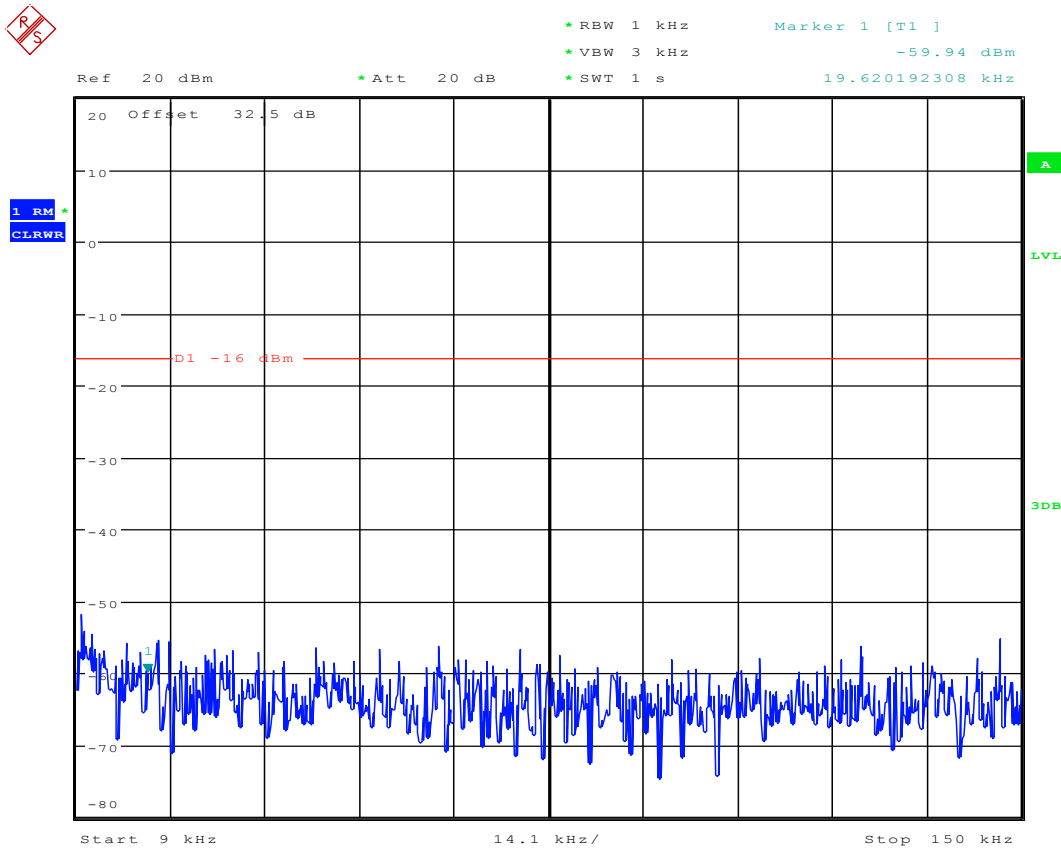
Date: 28.APR.2016 22:48:39



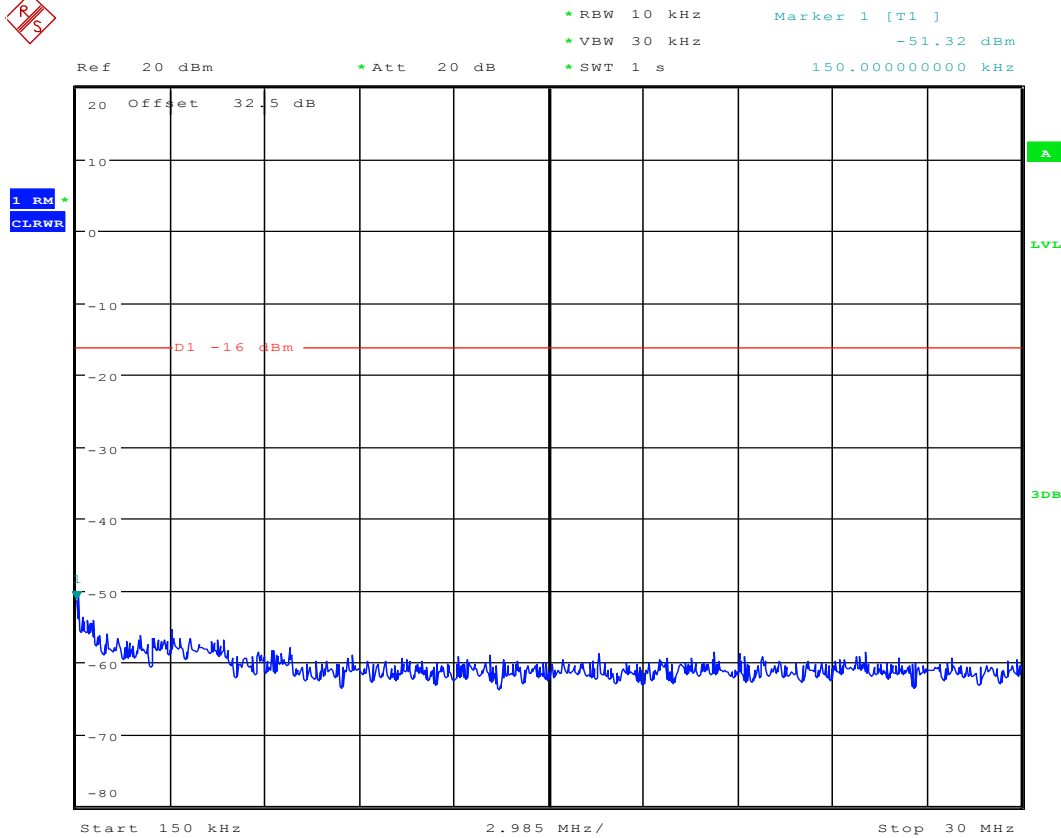
Date: 28.APR.2016 22:49:09



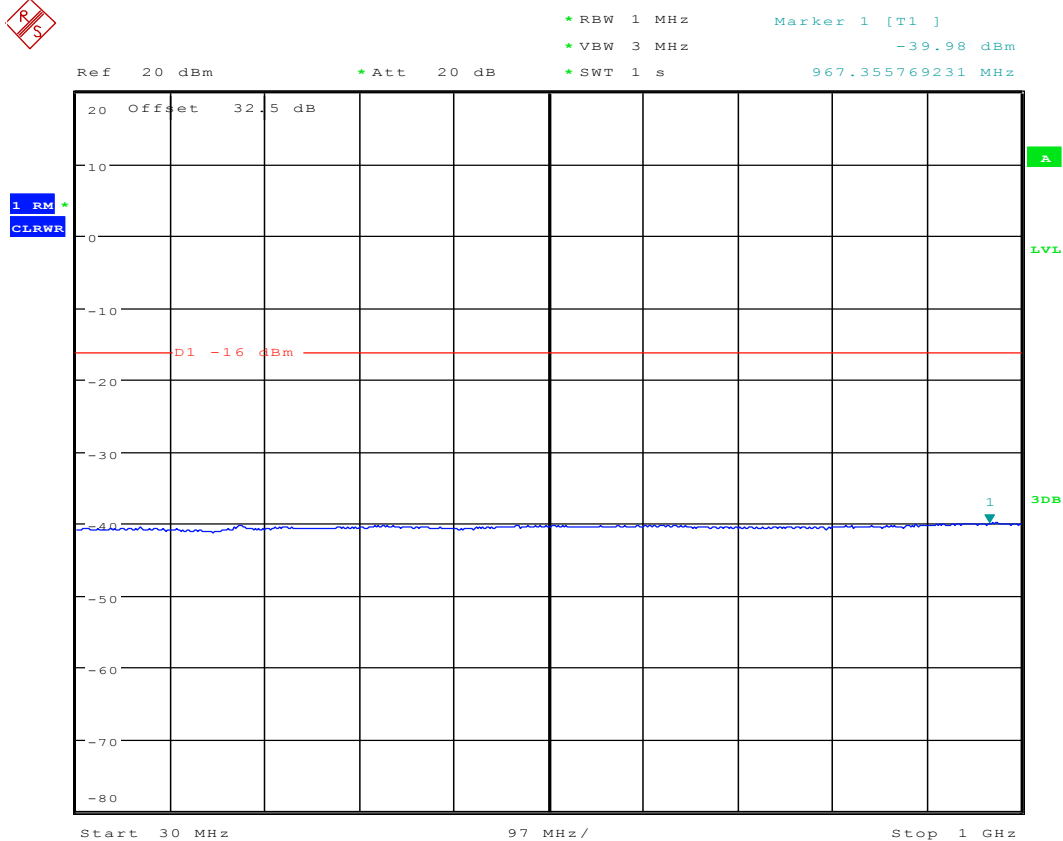
2.3 1L20M_T



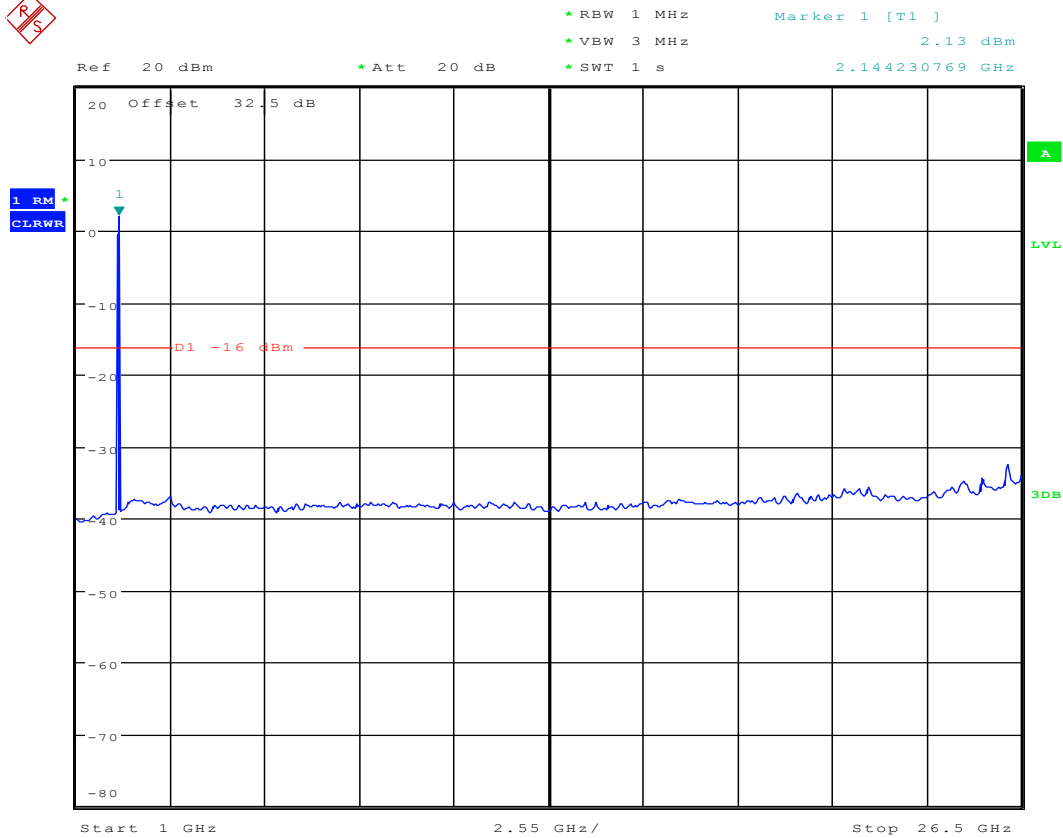
Date: 28.APR.2016 22:53:51



Date: 28.APR.2016 22:54:09



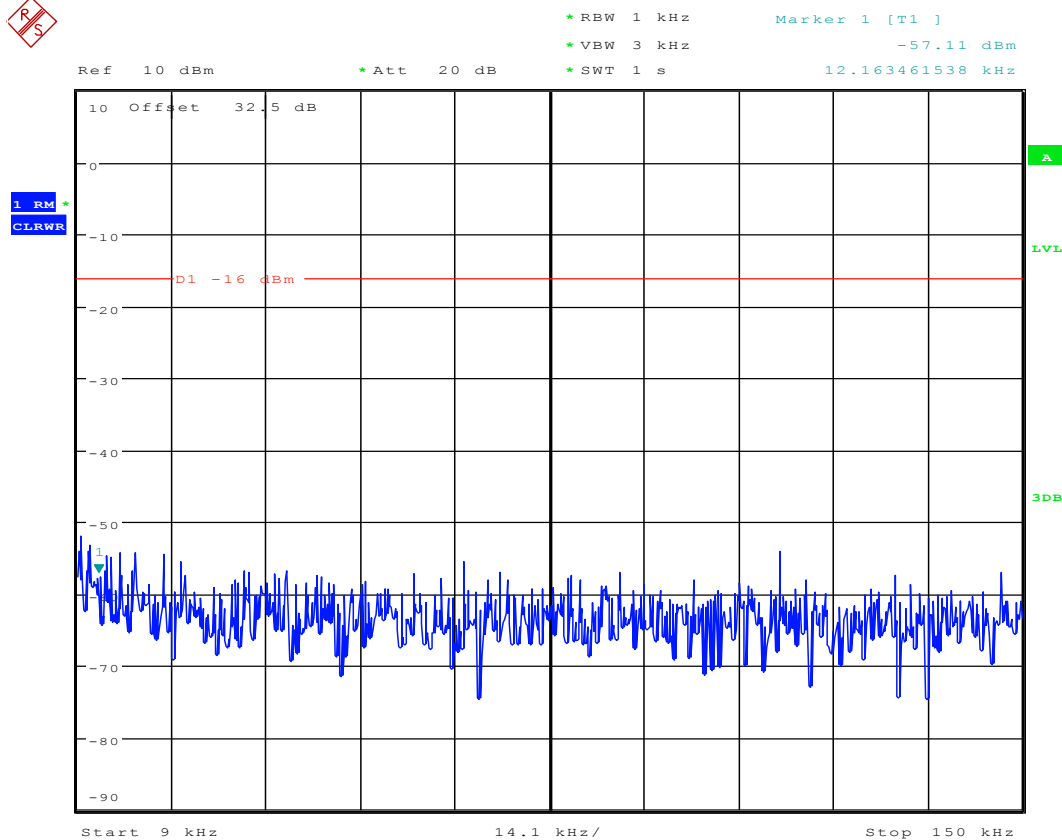
Date: 28.APR.2016 22:54:26



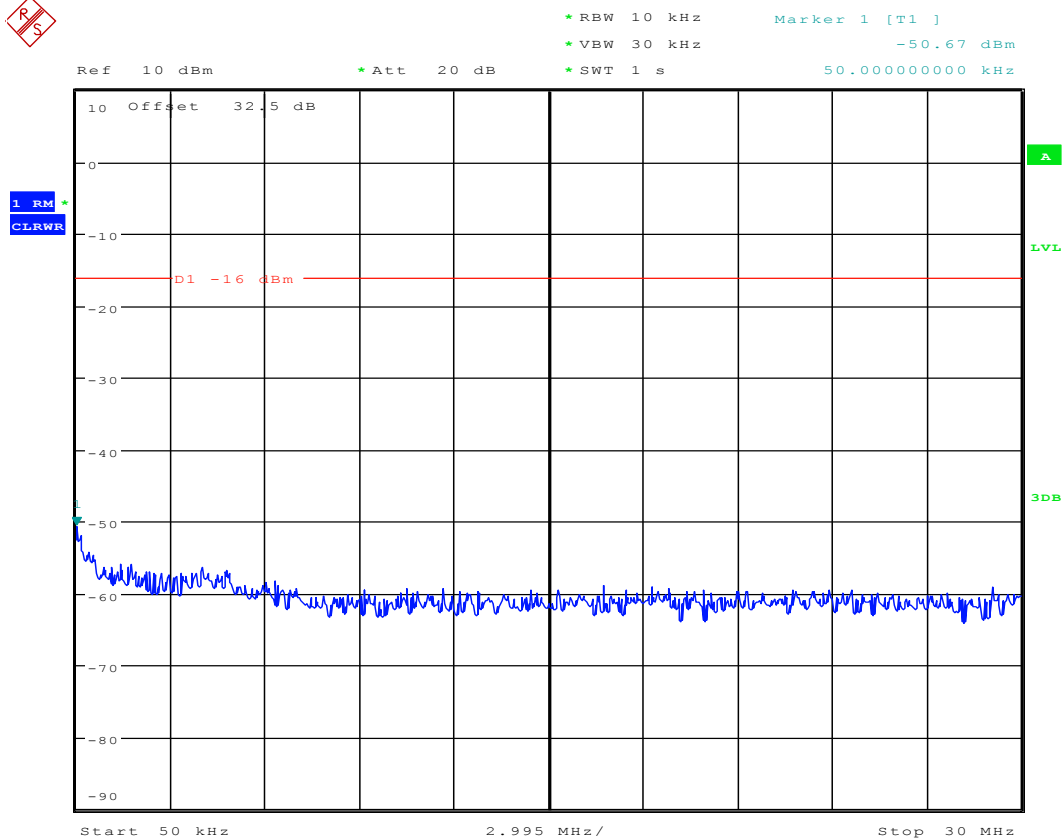
Date: 28.APR.2016 22:54:39



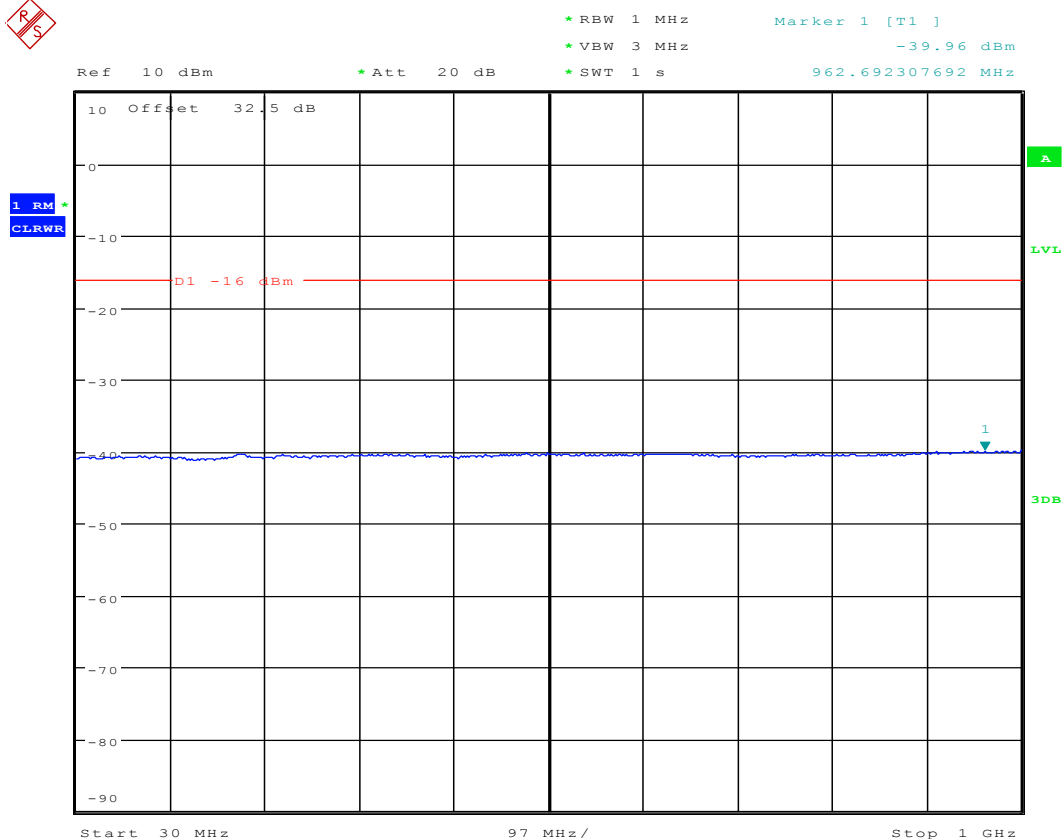
2.4 1U_B



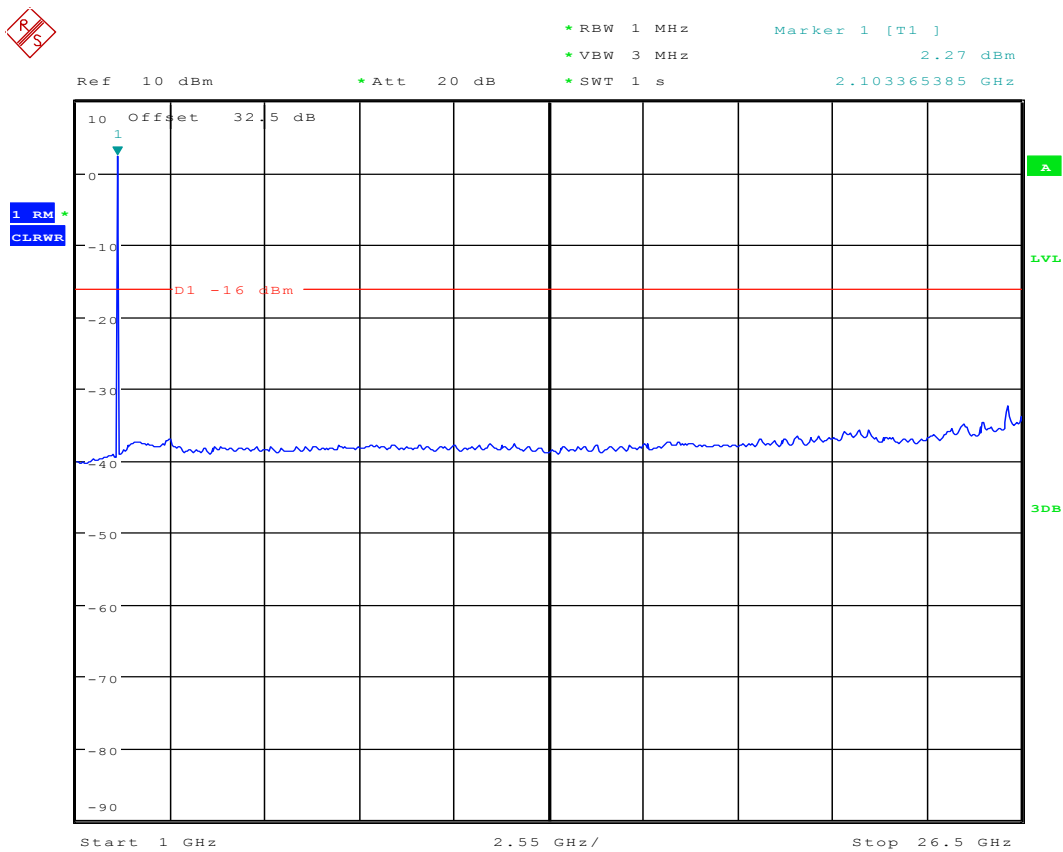
Date: 29.APR.2016 12:08:23



Date: 29.APR.2016 12:08:45



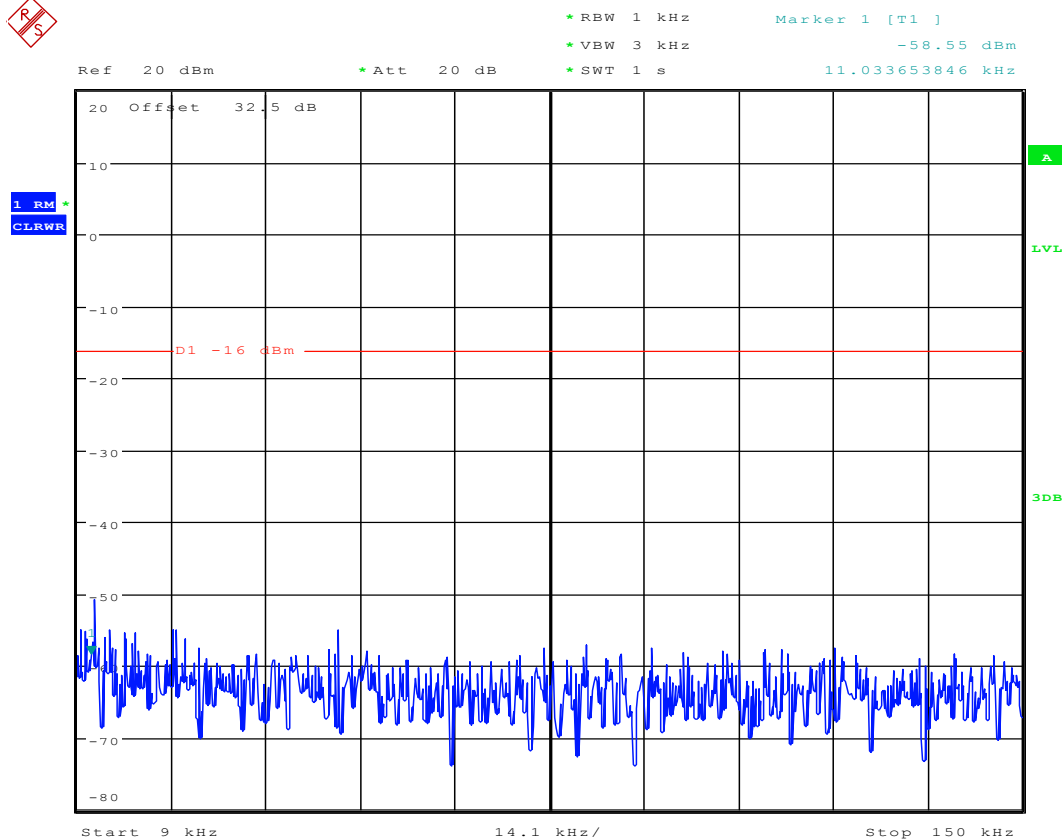
Date: 29.APR.2016 12:09:14



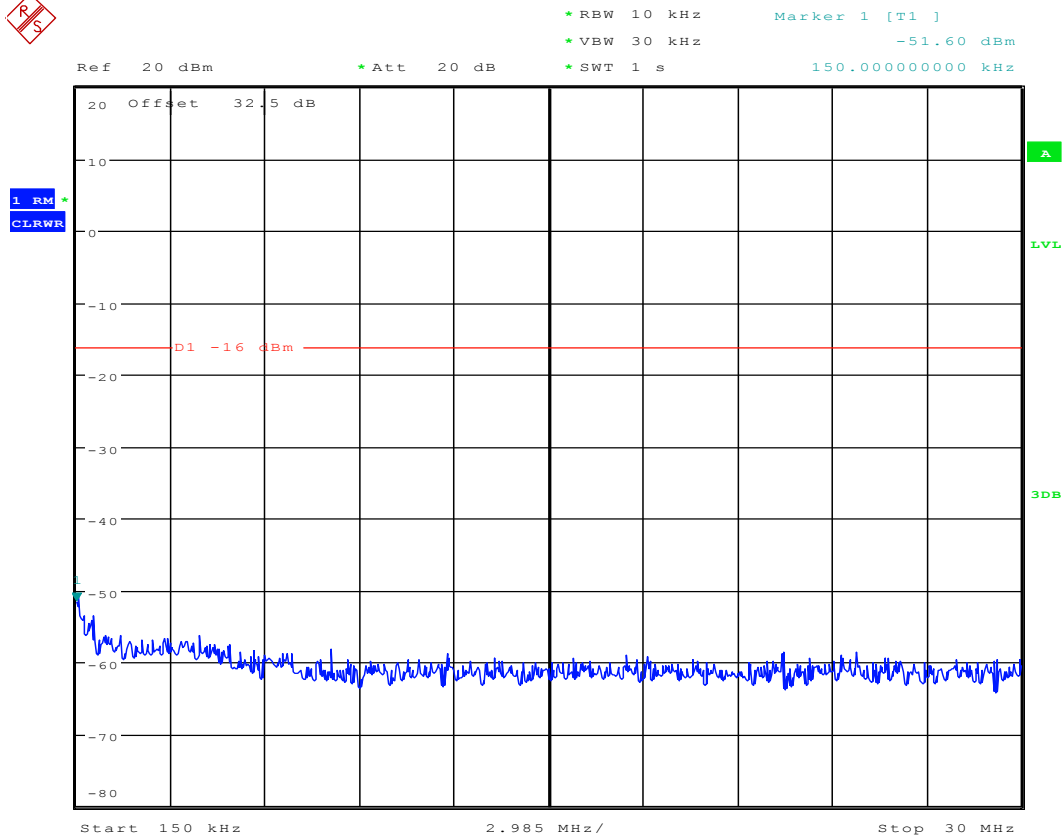
Date: 29.APR.2016 12:09:30



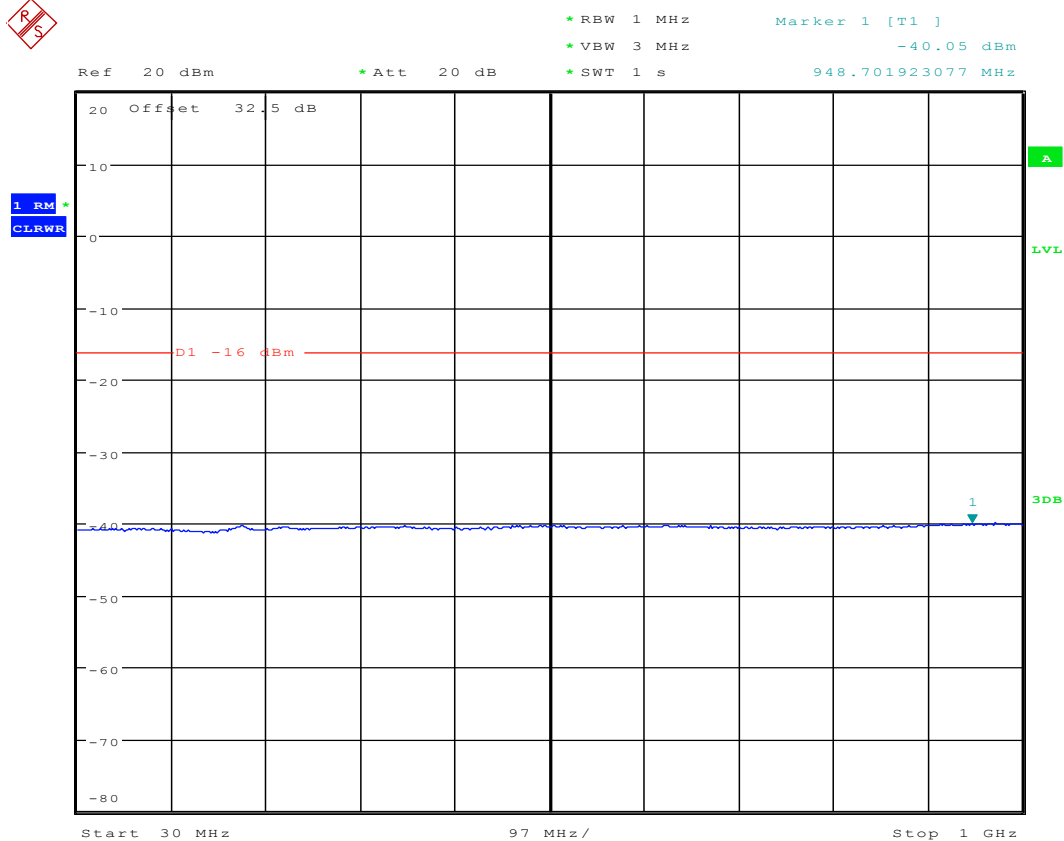
2.5 1U_M



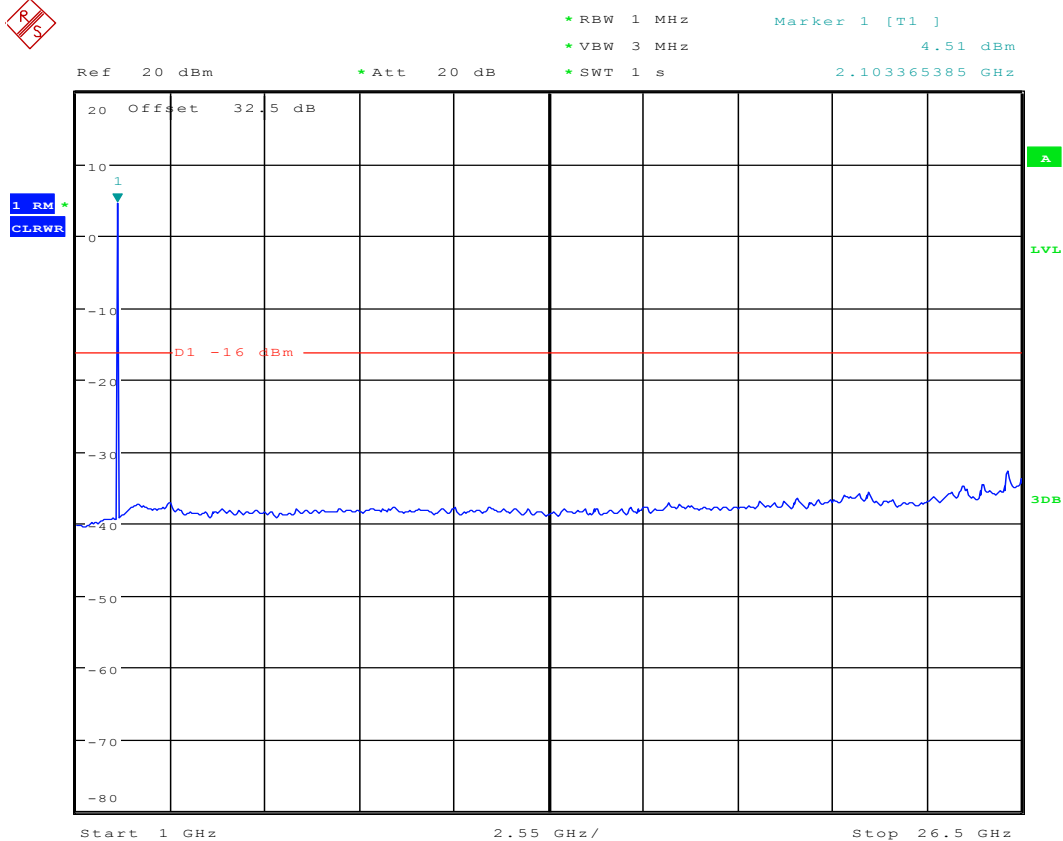
Date: 29.APR.2016 12:13:31



Date: 29.APR.2016 12:13:54



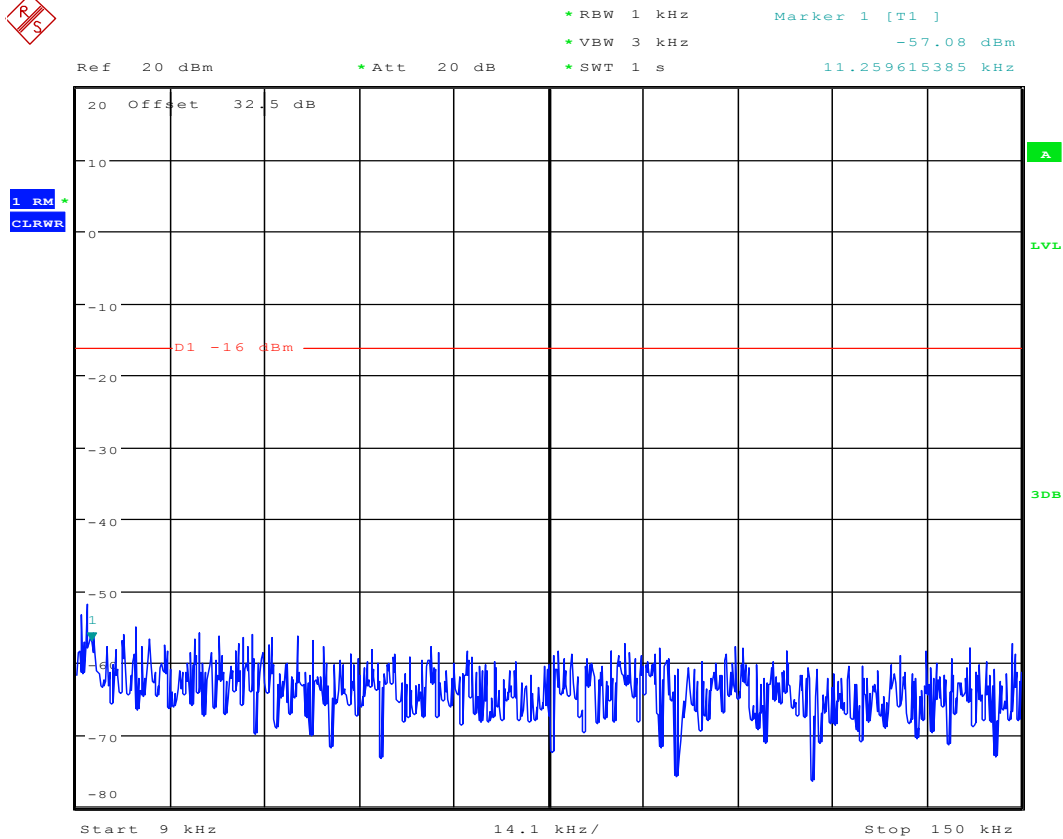
Date: 29.APR.2016 12:14:21



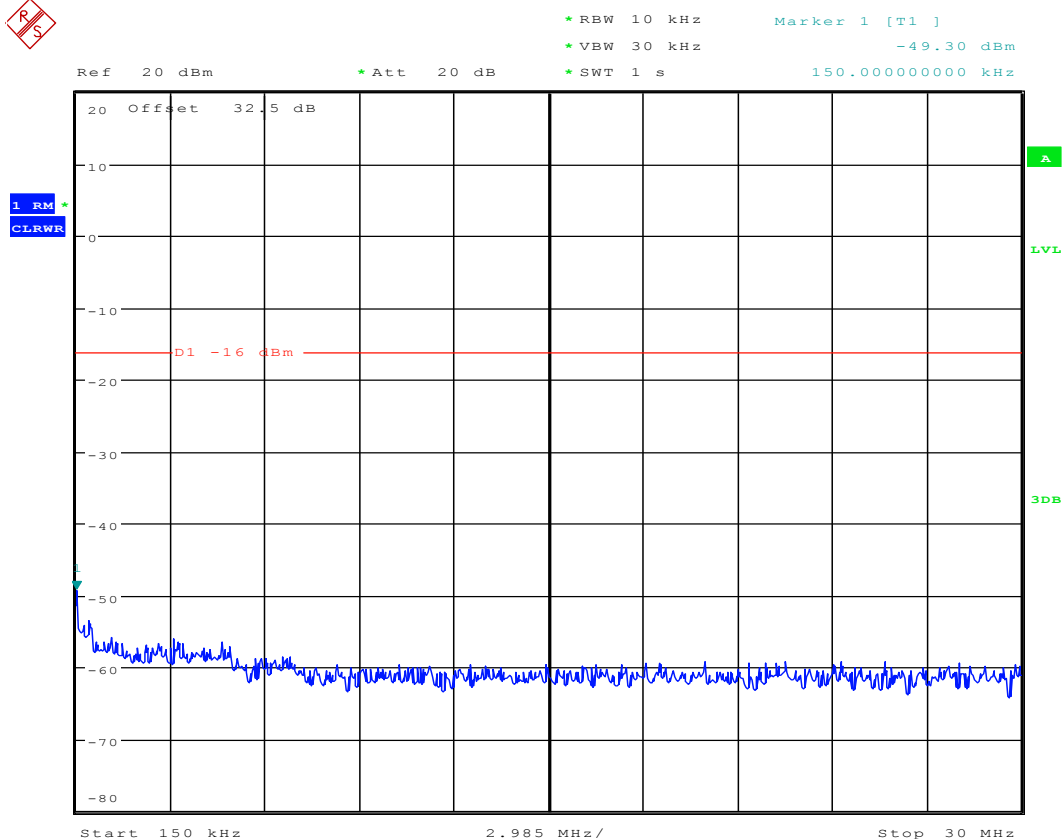
Date: 29.APR.2016 12:14:40



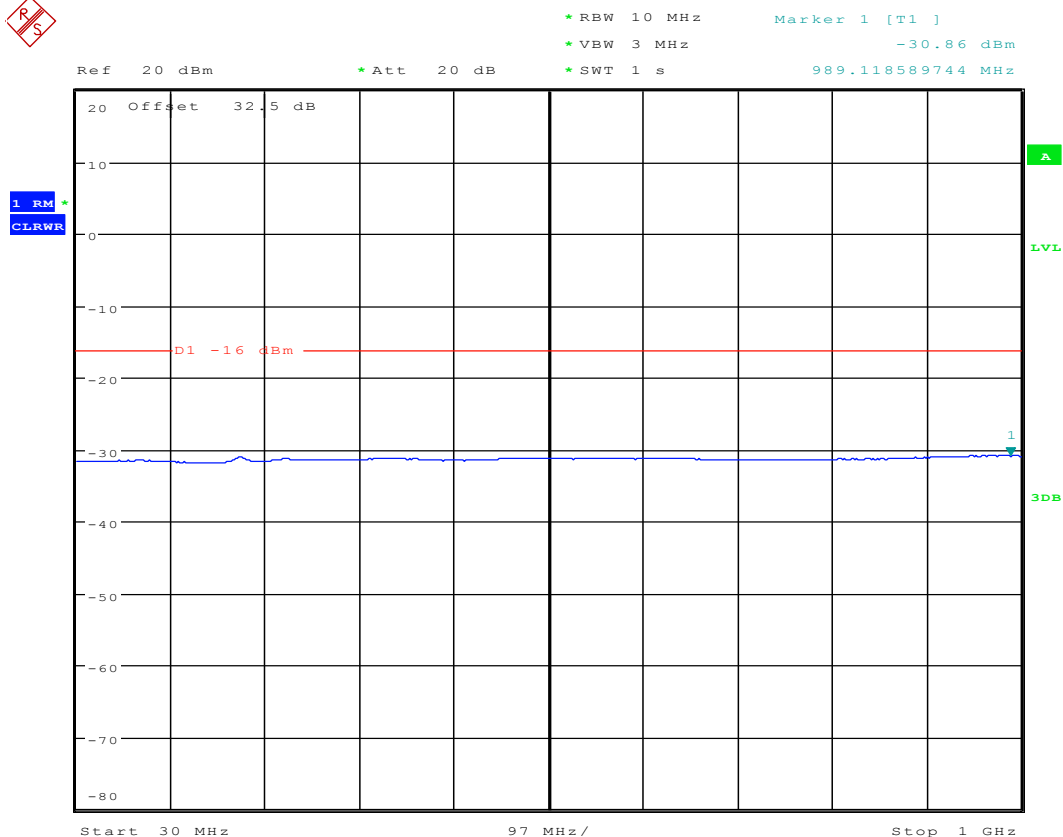
2.6 1U_T



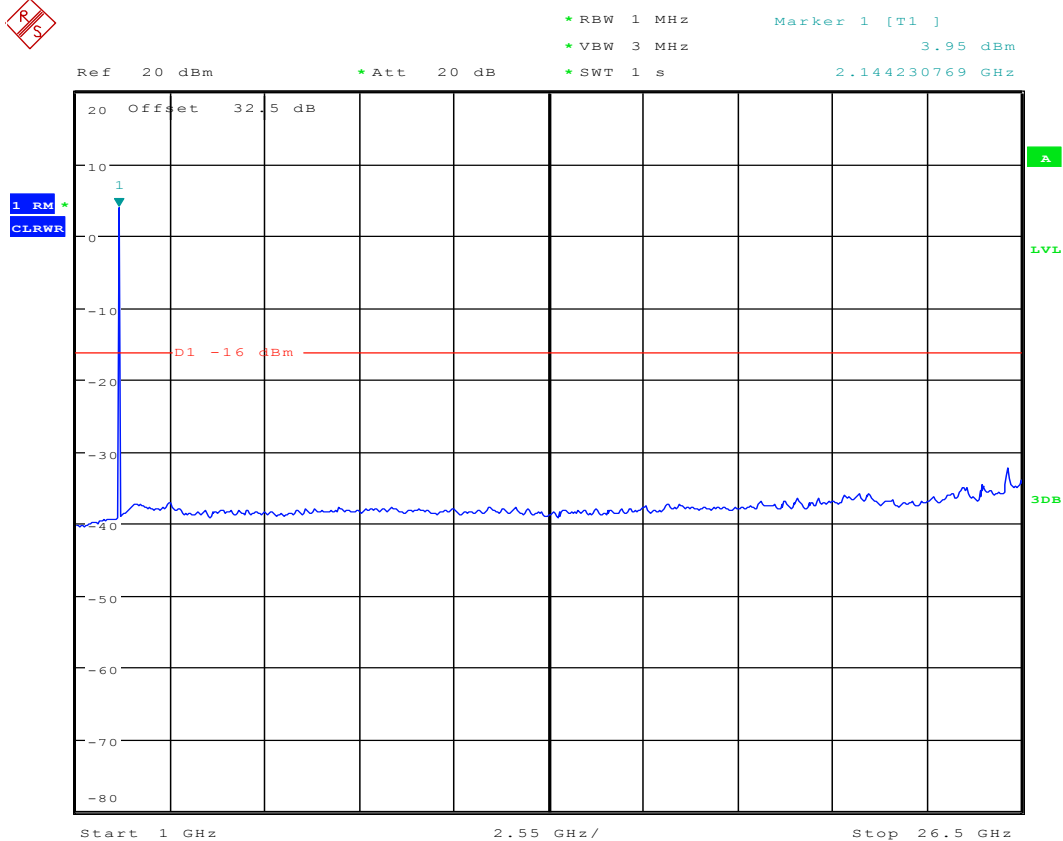
Date: 29.APR.2016 12:19:33



Date: 29.APR.2016 12:20:08



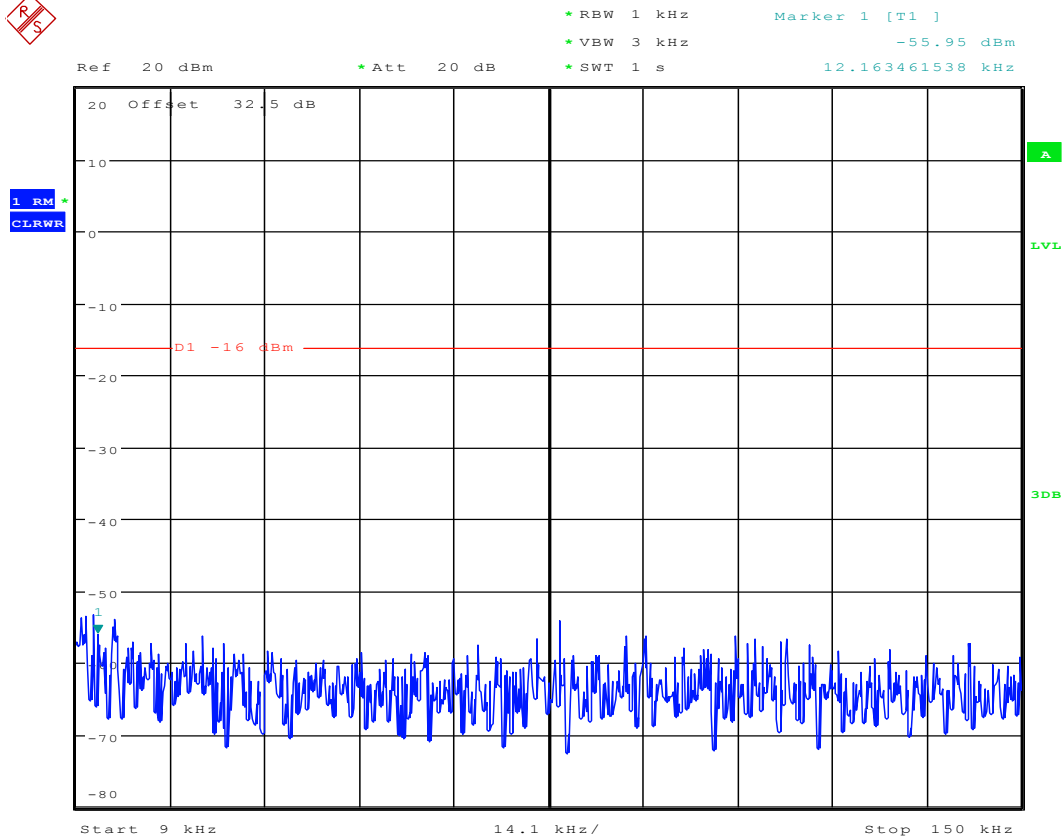
Date: 29.APR.2016 12:20:33



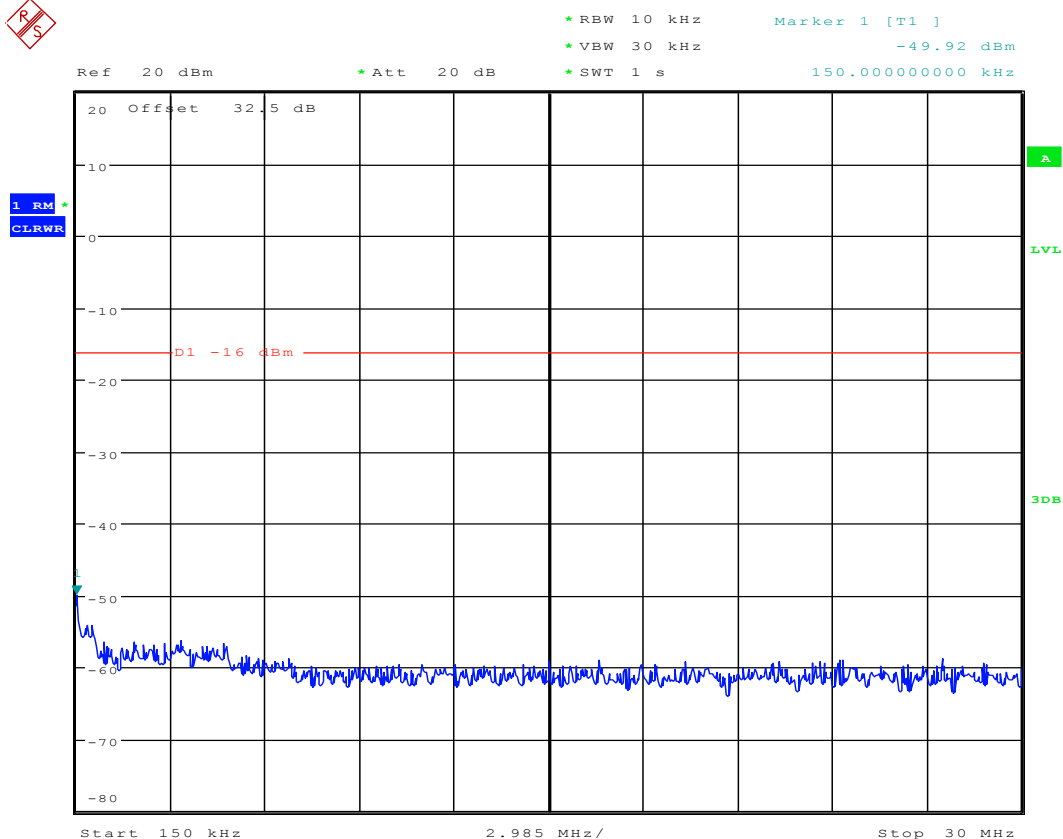
Date: 29.APR.2016 12:21:48



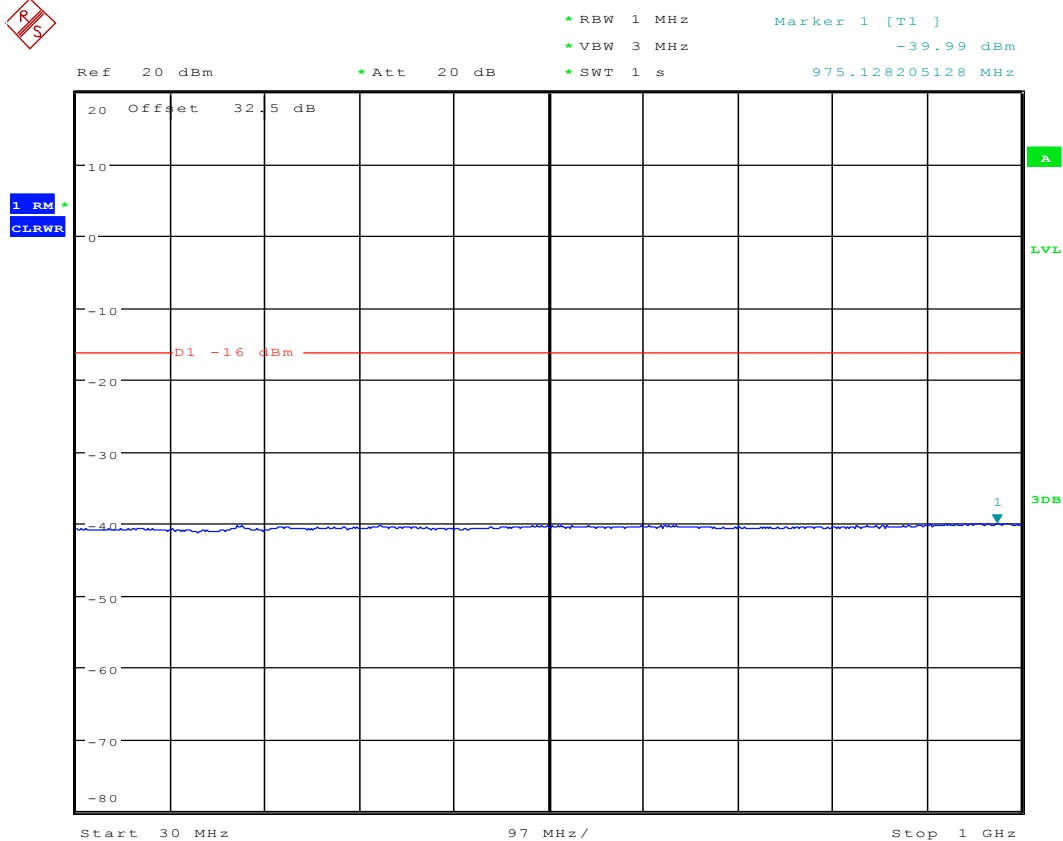
2.7 1U1L5M_B



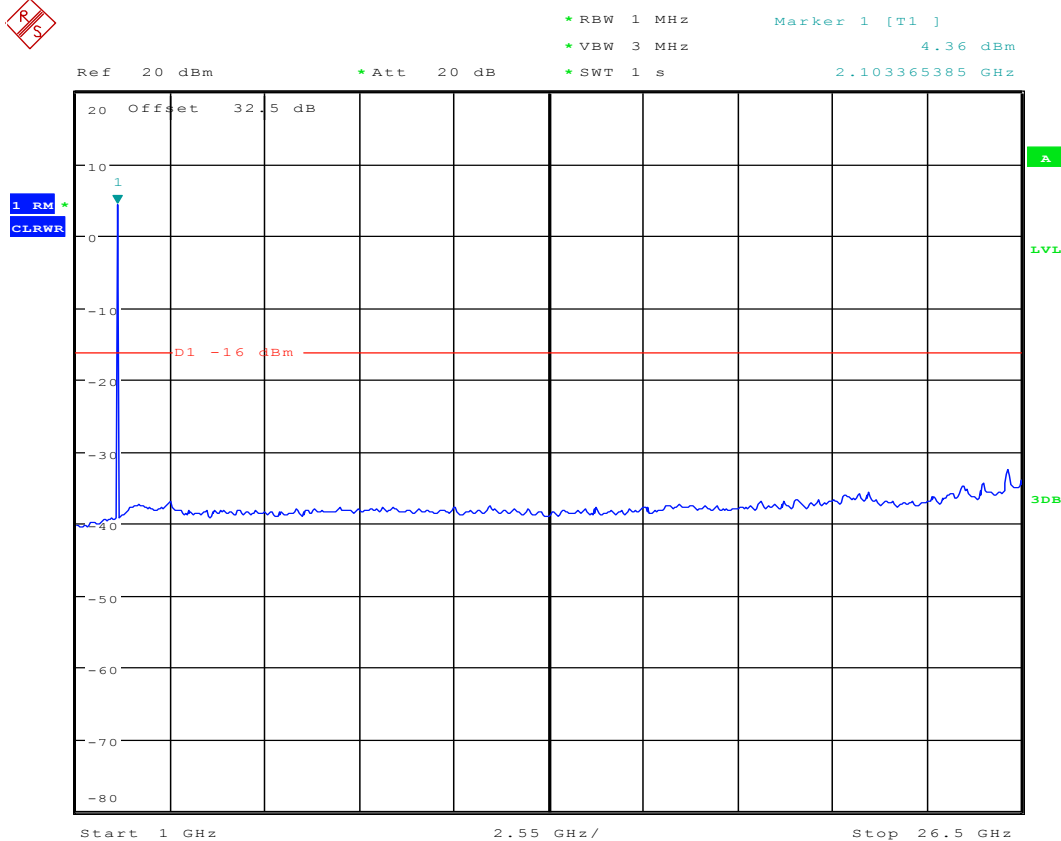
Date: 29.APR.2016 12:28:46



Date: 29.APR.2016 12:29:08



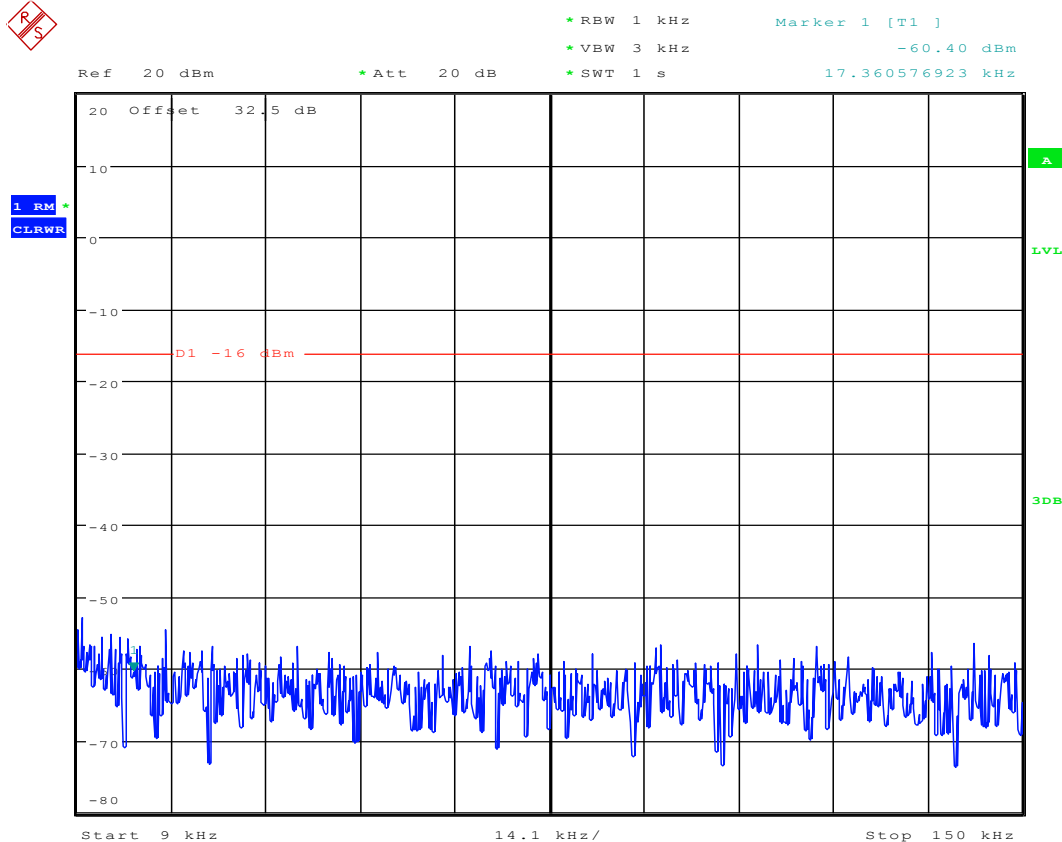
Date: 29.APR.2016 12:29:33



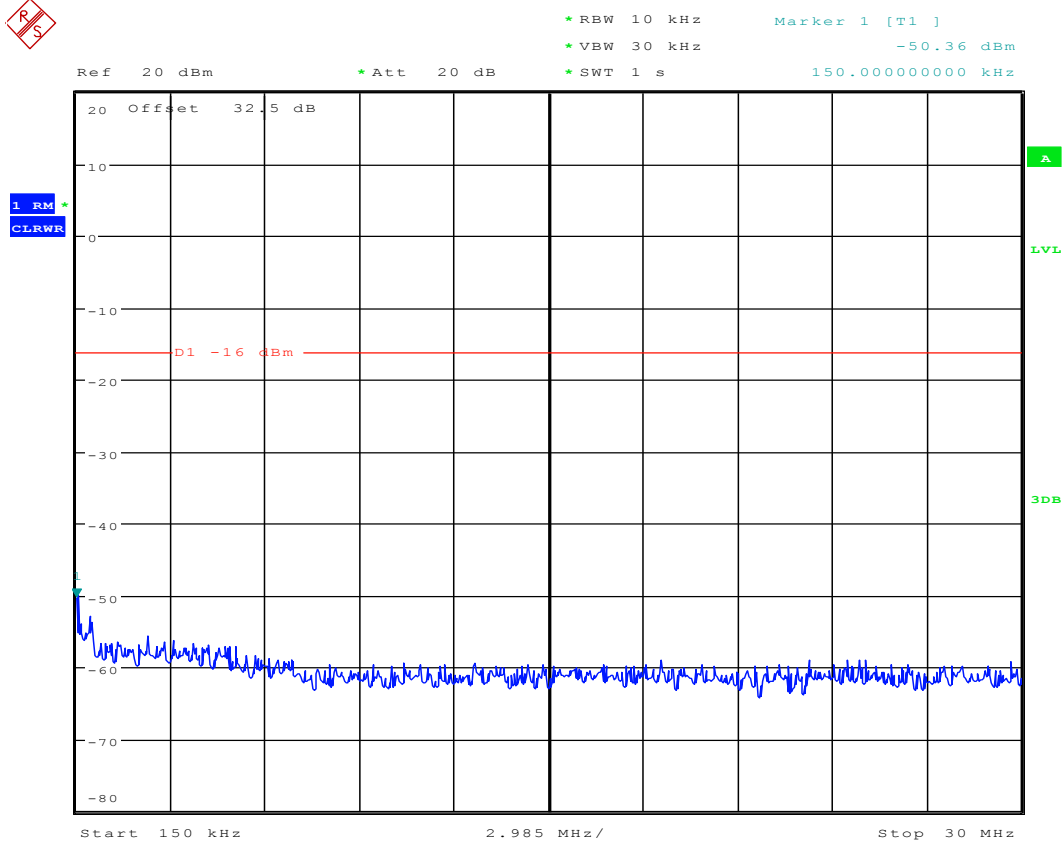
Date: 29.APR.2016 12:29:55



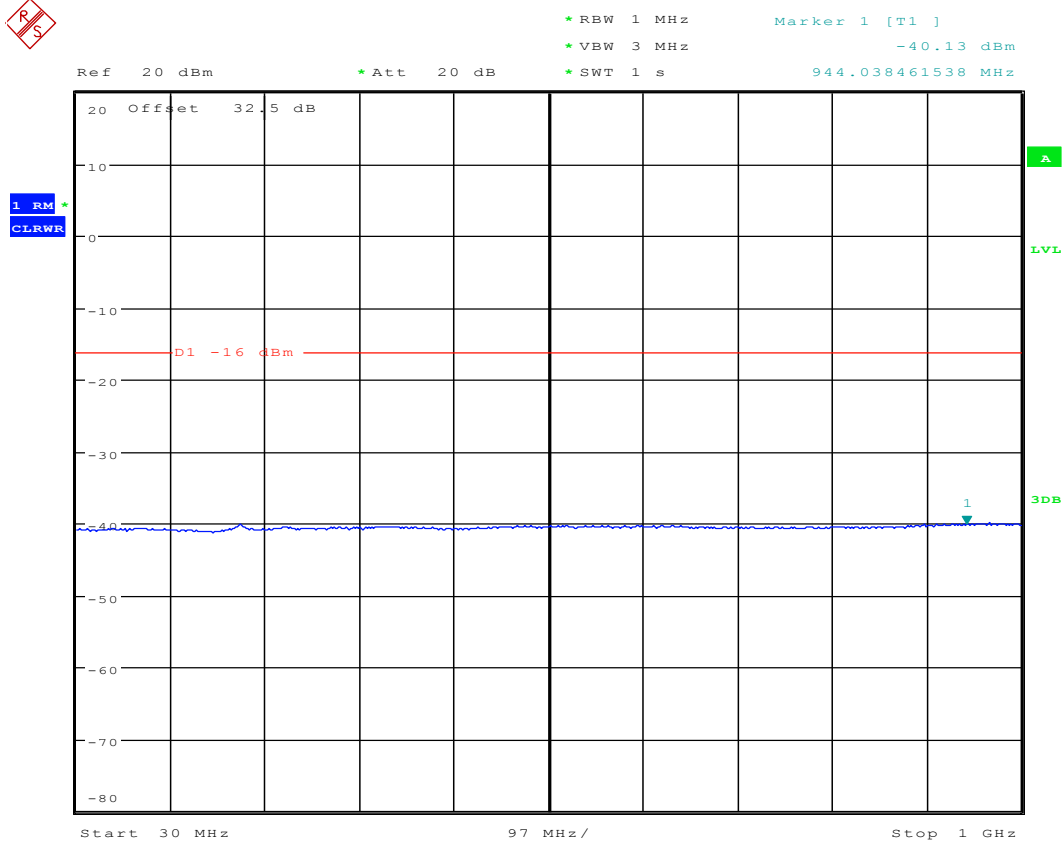
2.8 1U1L5M_M



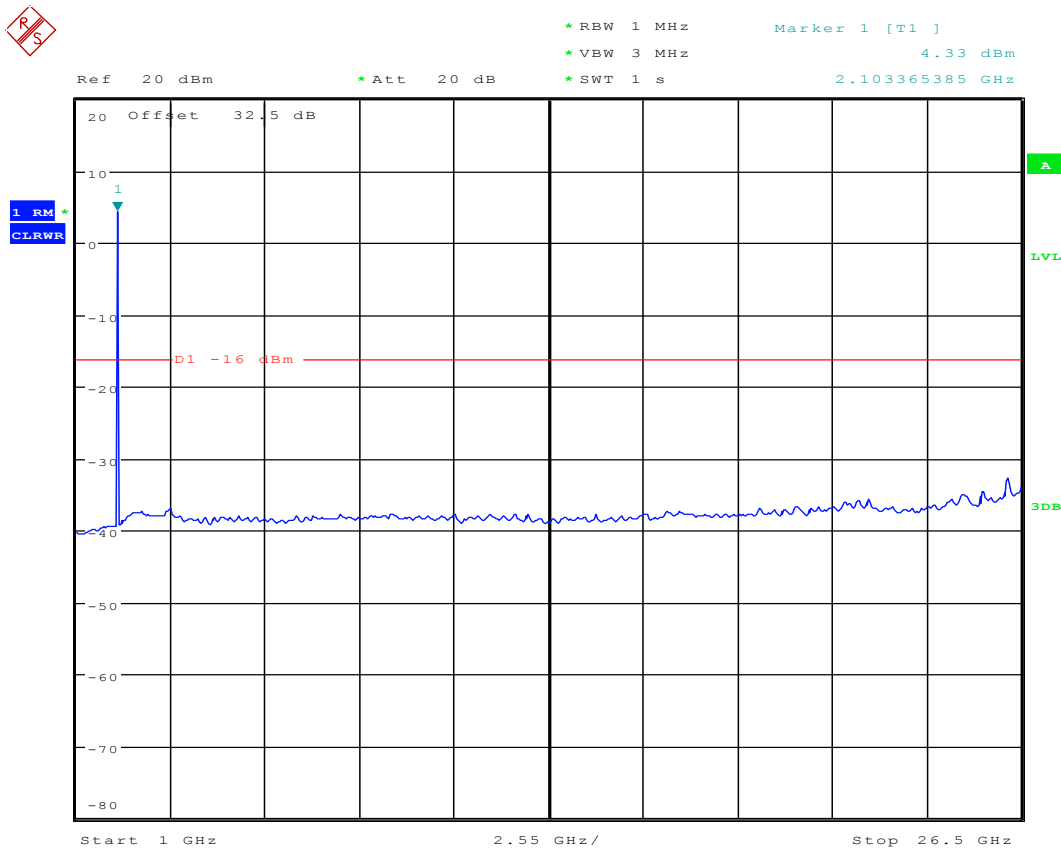
Date: 29.APR.2016 12:34:20



Date: 29.APR.2016 12:34:38



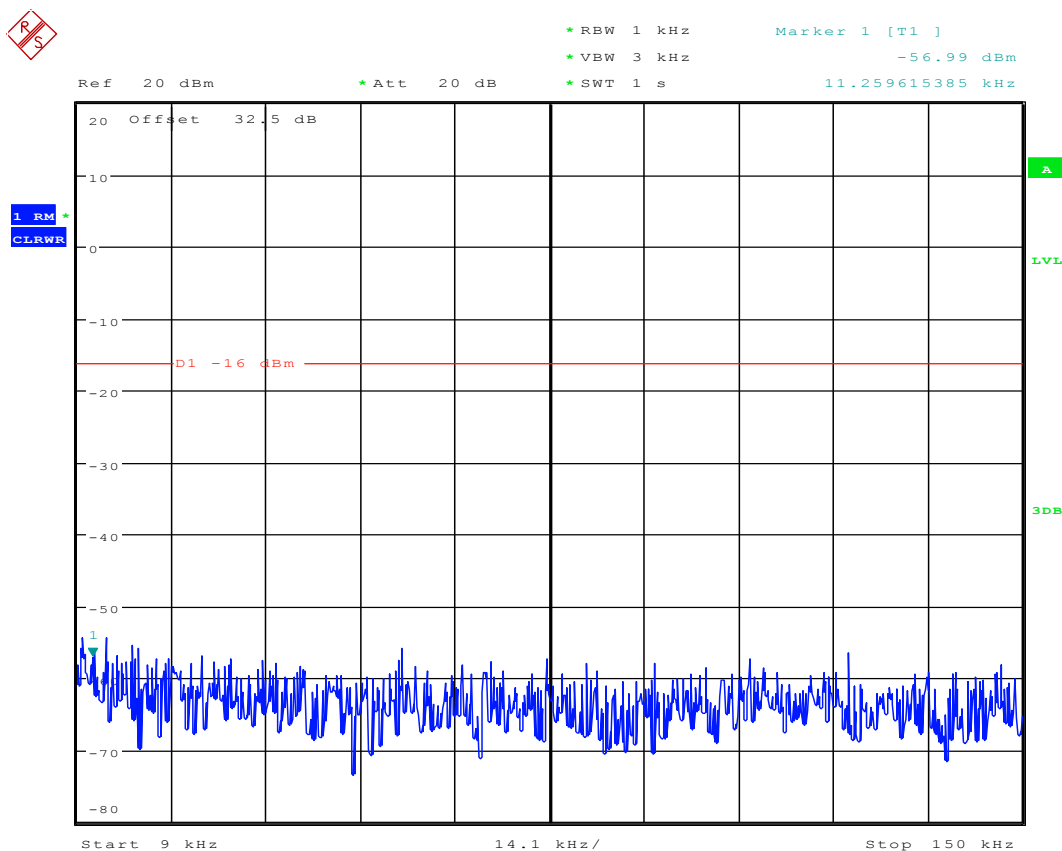
Date: 29.APR.2016 12:34:58



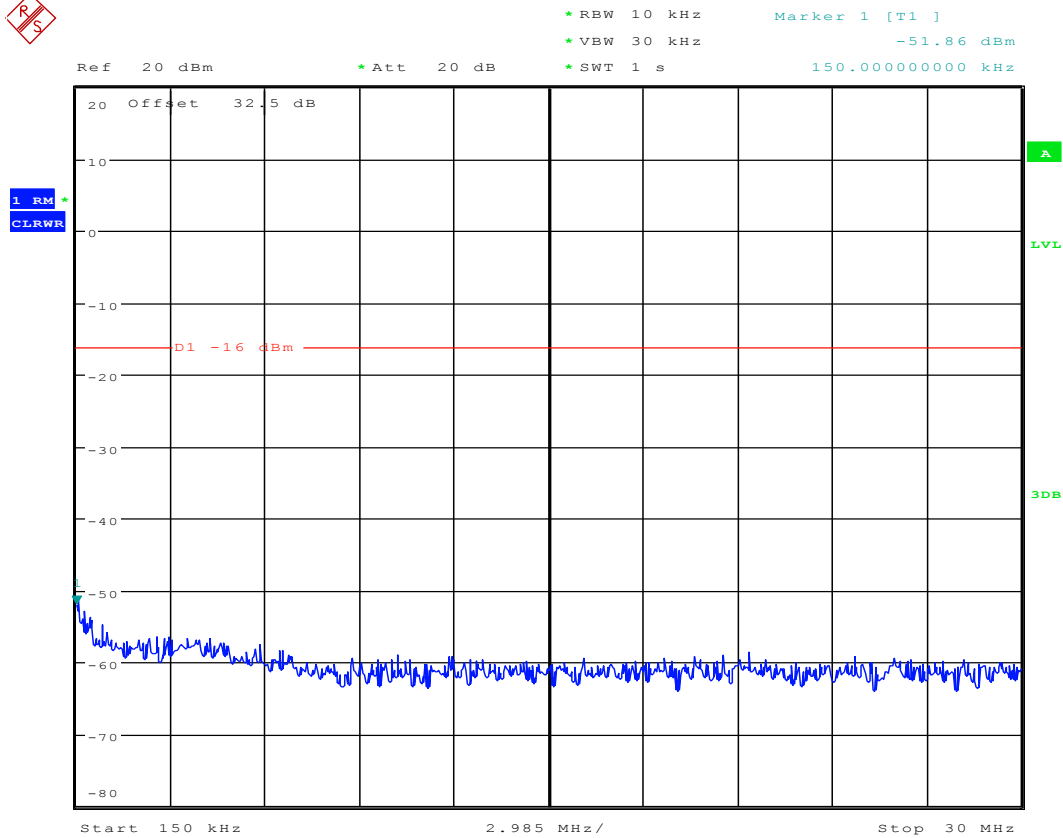
Date: 29.APR.2016 12:35:14



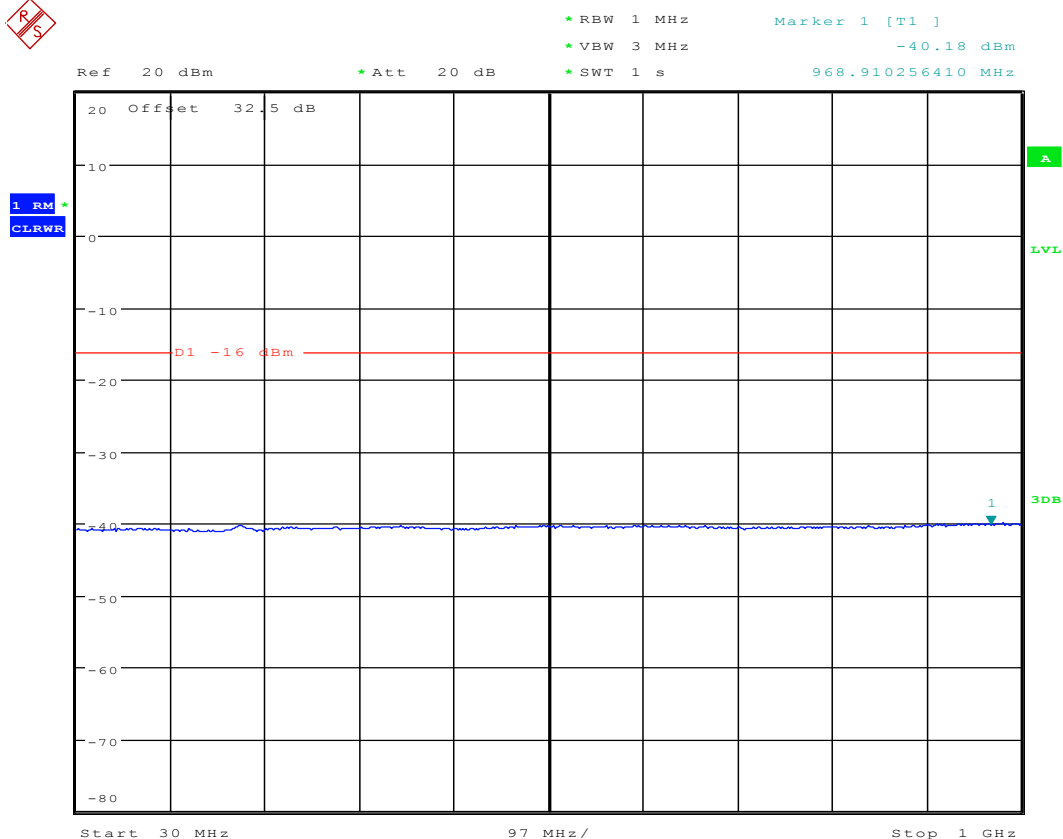
2.9 1U1L5M_T



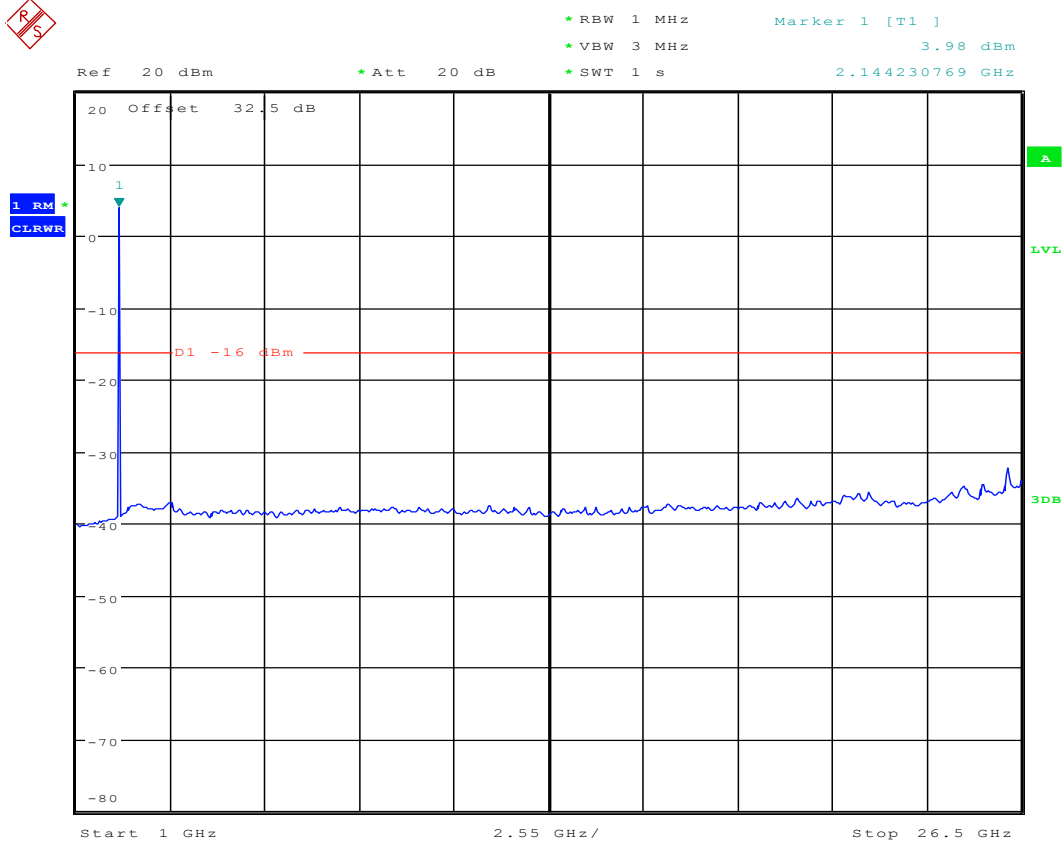
Date: 29.APR.2016 12:40:23



Date: 29.APR.2016 12:40:47



Date: 29.APR.2016 12:41:20



Date: 29.APR.2016 12:41:38



Appendix E: Radiated (Spurious) Emissions



1 Result Table

EUT Conf.	Measured Curve Conformed to the Emission Limit?	Verdict
1U1L5M_M (Worst case)	Yes	Pass

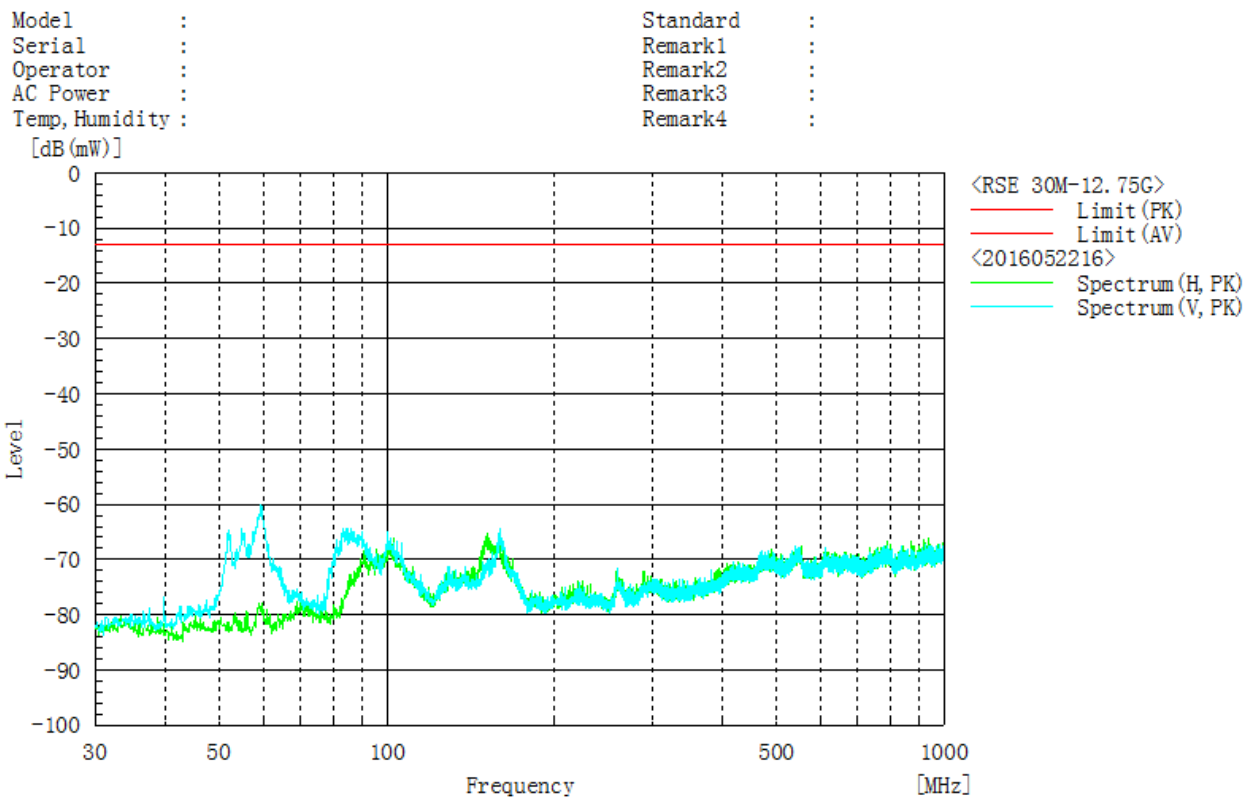
Note: The setting of analyzer is below

Frequency range	RBW	Detector
30MHz to 1GHz	1MHz	Average
1GHz to 18GHz	1MHz	Average
18GHz to 26.5GHz	1MHz	Average

Note: the signal exceeding the limit line is the wanted signal.

2 Test Plot

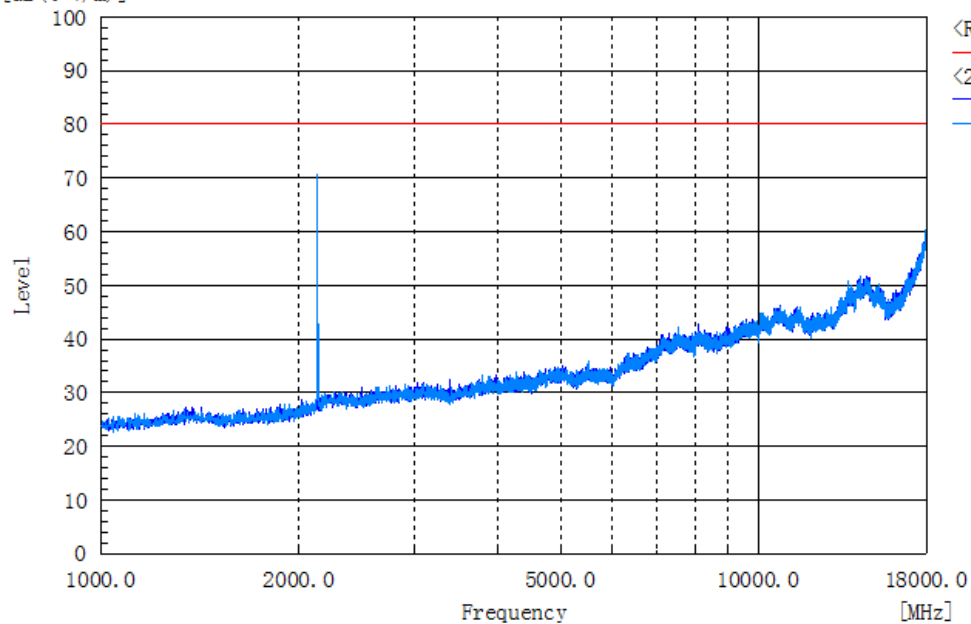
2.1 30MHz-1GHz



2.2 1GHz-18GHz

Model	:	Standard	:	RSE to RE_80.08dBuV_1G_40G.rli
Serial	:	Remark1	:	
Operator	:	Remark2	:	
AC Power	:	Remark3	:	
Temp, Humidity	:	Remark4	:	

[dB(μV/m)]



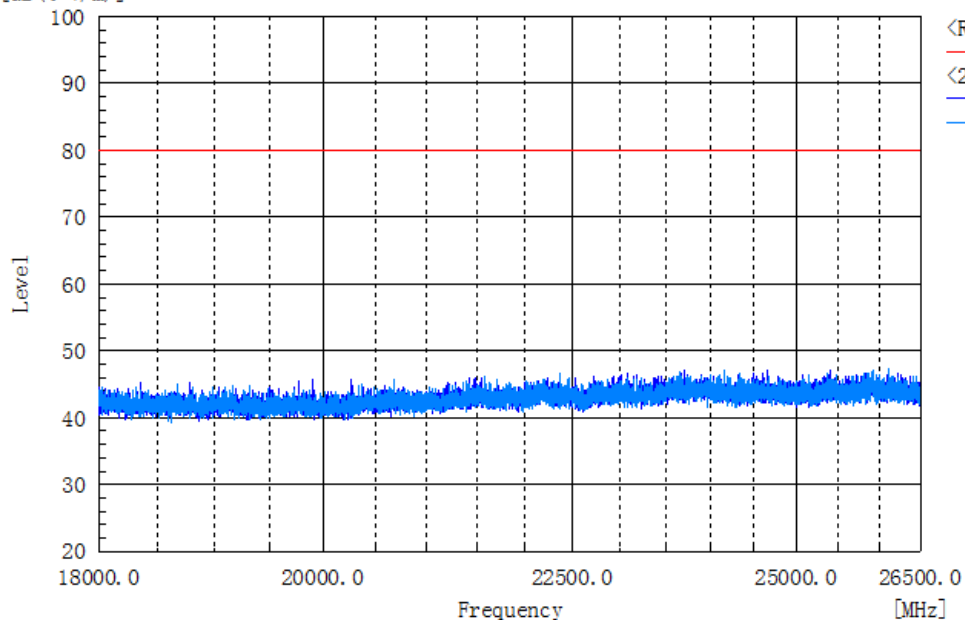
<RSE to RE_80.08dBuV_1G_40
Limit (AV)
<2016052212>
Spectrum (H, AV)
Spectrum (V, AV)



2.3 18GHz-26.5GHz

Model	:	Standard	:	RSE to RE_80.08dBuV_1G_40G.rli
Serial	:	Remark1	:	
Operator	:	Remark2	:	
AC Power	:	Remark3	:	
Temp, Humidity	:	Remark4	:	

[dB(μ V/m)]





Appendix F: Frequency Stability

1 Result Table

1.1 Frequency Error

(1) Frequency Error vs. Temperature:

EUT Conf.	Voltage	Temperature	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
1L5M_M	100%	-30 °C	-1.98	-0.00093	-0.00035	Pass
		-20 °C	-2.16	-0.00101	-0.00044	Pass
		-10 °C	-1.76	-0.00083	-0.00025	Pass
		0 °C	-1.89	-0.00089	-0.00031	Pass
		+10 °C	-1.64	-0.00077	-0.00019	Pass
		+20 °C	-1.23	-0.00058	---	Pass
		+30 °C	-1.58	-0.00074	-0.00016	Pass
		+40 °C	-1.92	-0.00090	-0.00032	Pass
		+50 °C	-2.45	-0.00115	-0.00057	Pass

(2) Frequency Error vs. Voltage:

EUT Conf.	Temperature	Voltage	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
1L5M_M	+20 °C	85 %	-1.97	-0.00092	-0.00035	Pass
		100 %	-1.23	-0.00058	---	Pass
		115 %	-2.14	-0.00100	-0.00043	Pass

1.2 OBW within frequency block

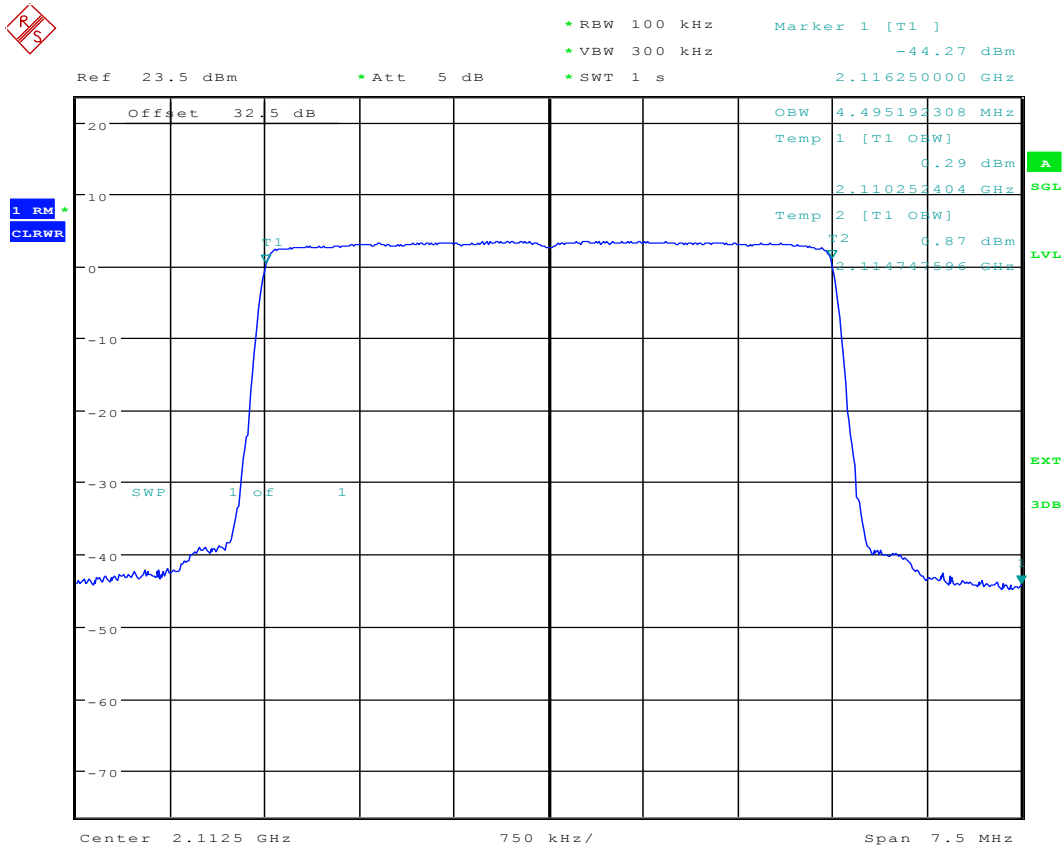
EUT Conf.	Verdict
1L5M_B	Pass
1L5M_T	Pass
1L10M_B	Pass
1L10M_T	Pass
1L15M_B	Pass
1L15M_T	Pass
1L20M_B	Pass
1L20M_T	Pass
1U_B	Pass
1U_T	Pass

2 Test Plot

NOTE: Only the test plots for the measurements of Frequency Range are supplied.

2.1 1L5M_B

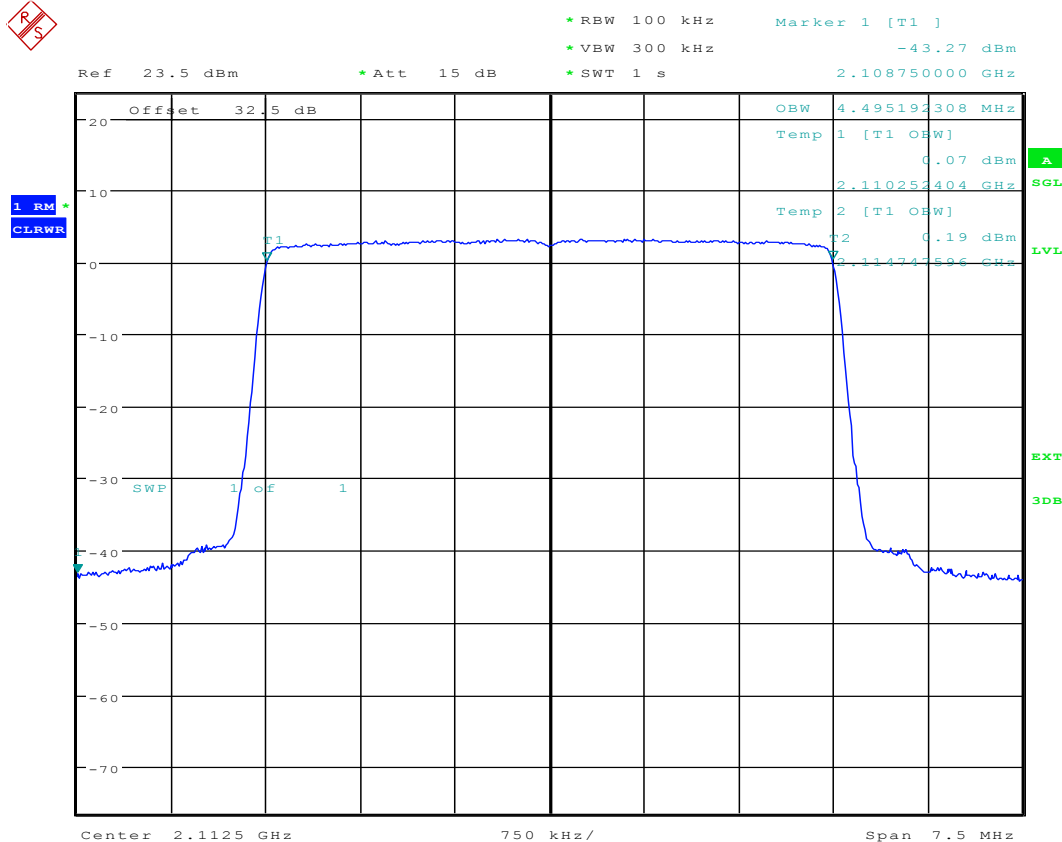
2.1.1 NV, -30°C



Date: 19.MAY.2016 22:02:30



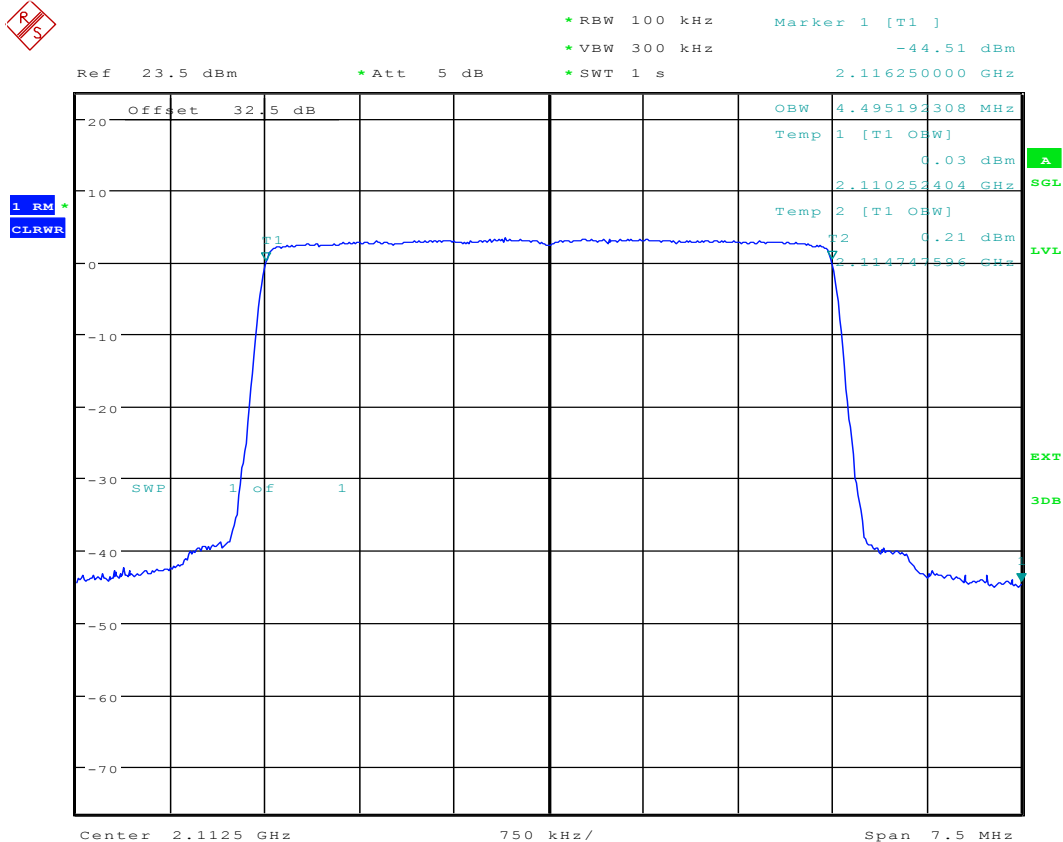
2.1.2 NV, +20°C



Date: 18.MAY.2016 23:24:55



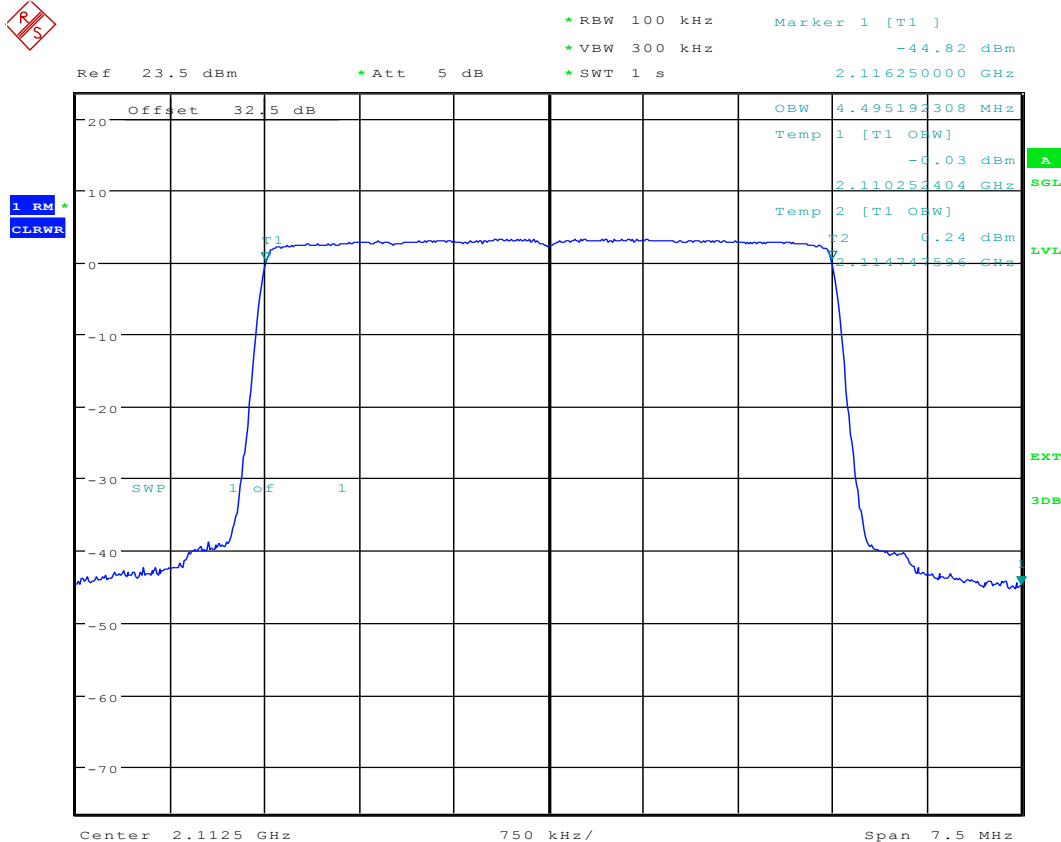
2.1.3 NV, +50°C



Date: 19.MAY.2016 23:42:55



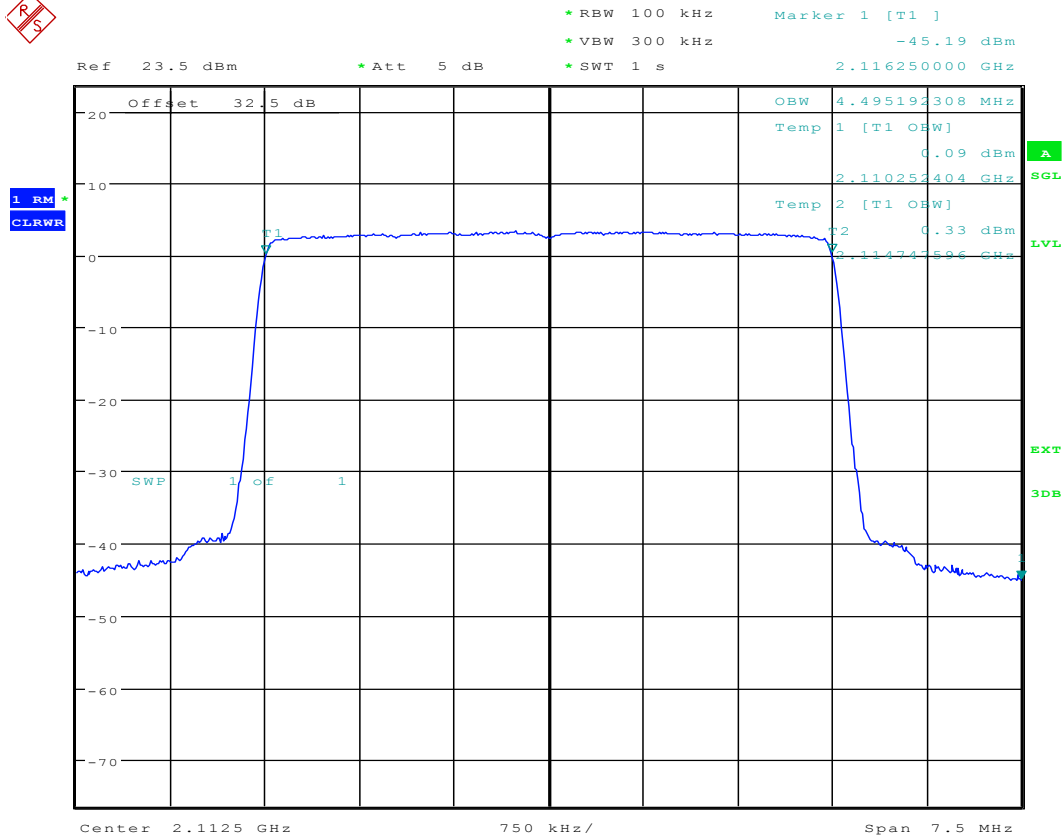
2.1.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:24:11



2.1.5 +20°C, +15%*NV

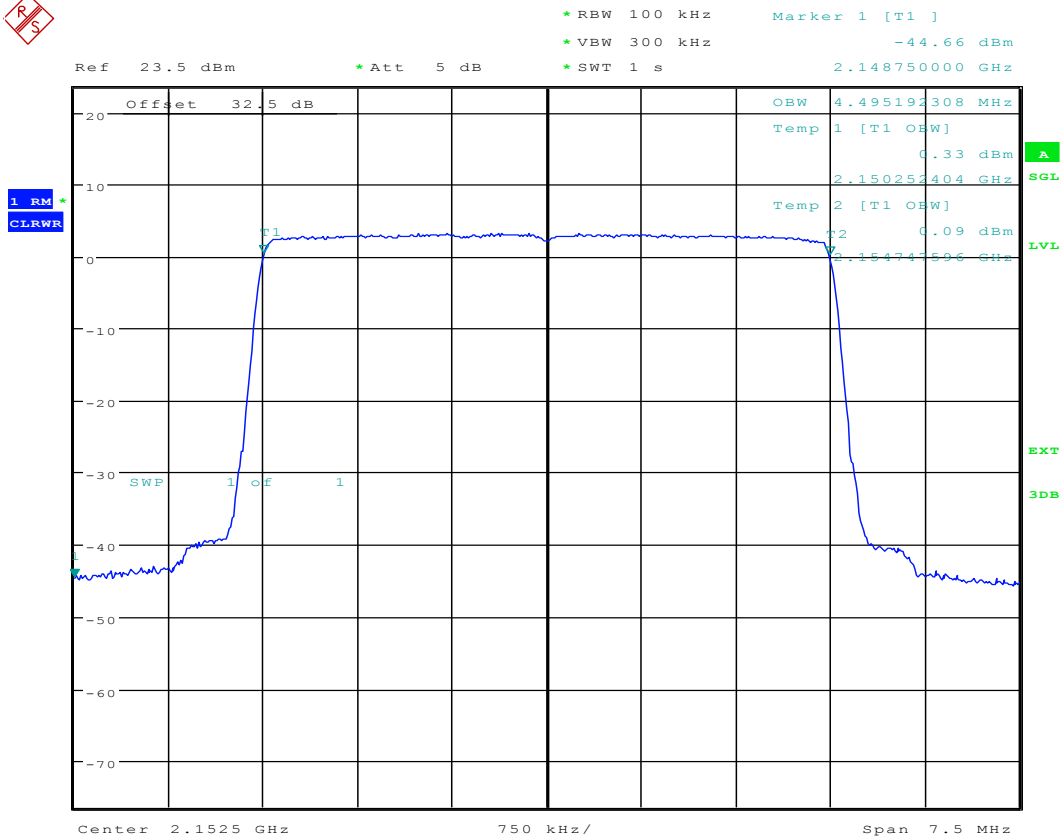


Date: 19.MAY.2016 19:02:39



2.2 1L5M_T

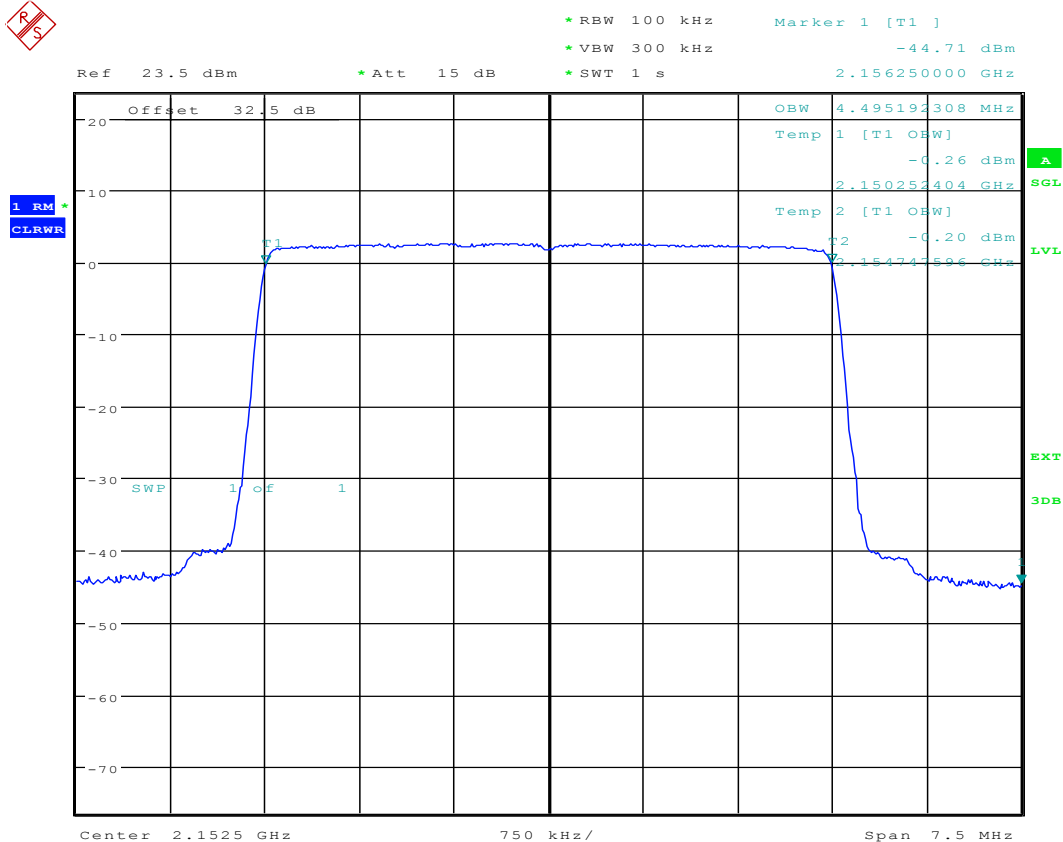
2.2.1 NV, -30°C



Date: 19.MAY.2016 22:03:23



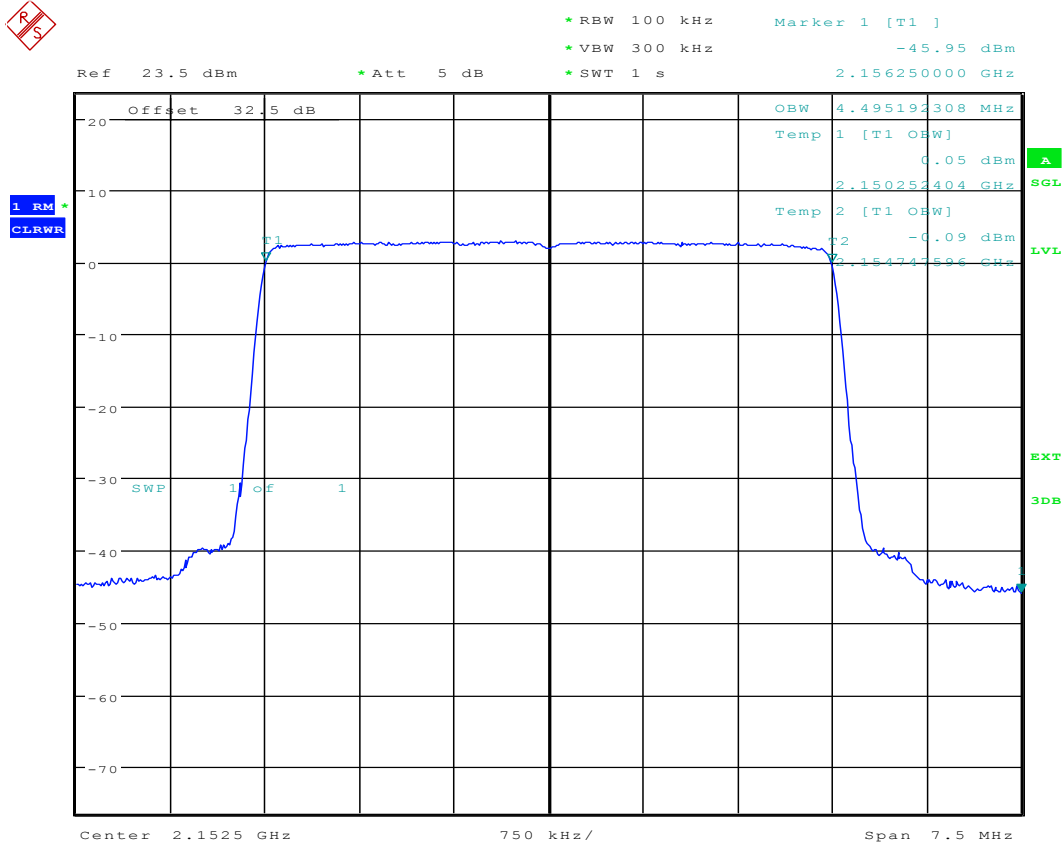
2.2.2 NV, +20°C



Date: 18.MAY.2016 23:29:30



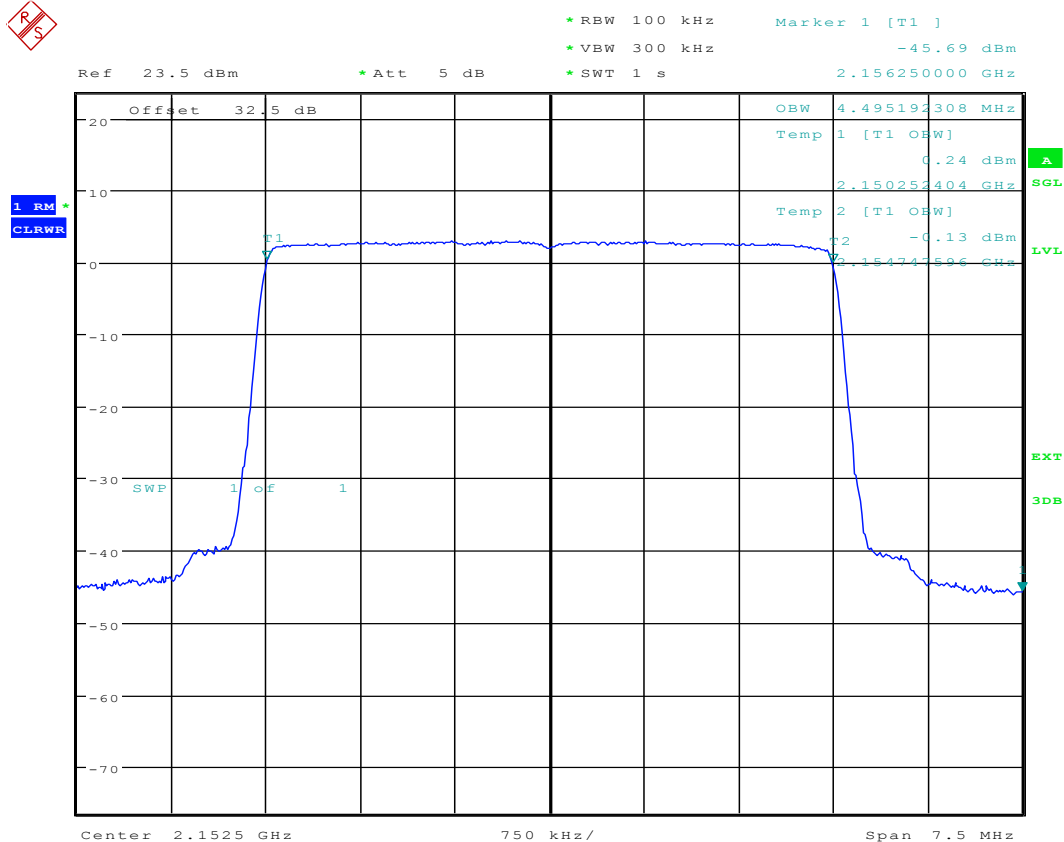
2.2.3 NV, +50°C



Date: 19.MAY.2016 23:43:47



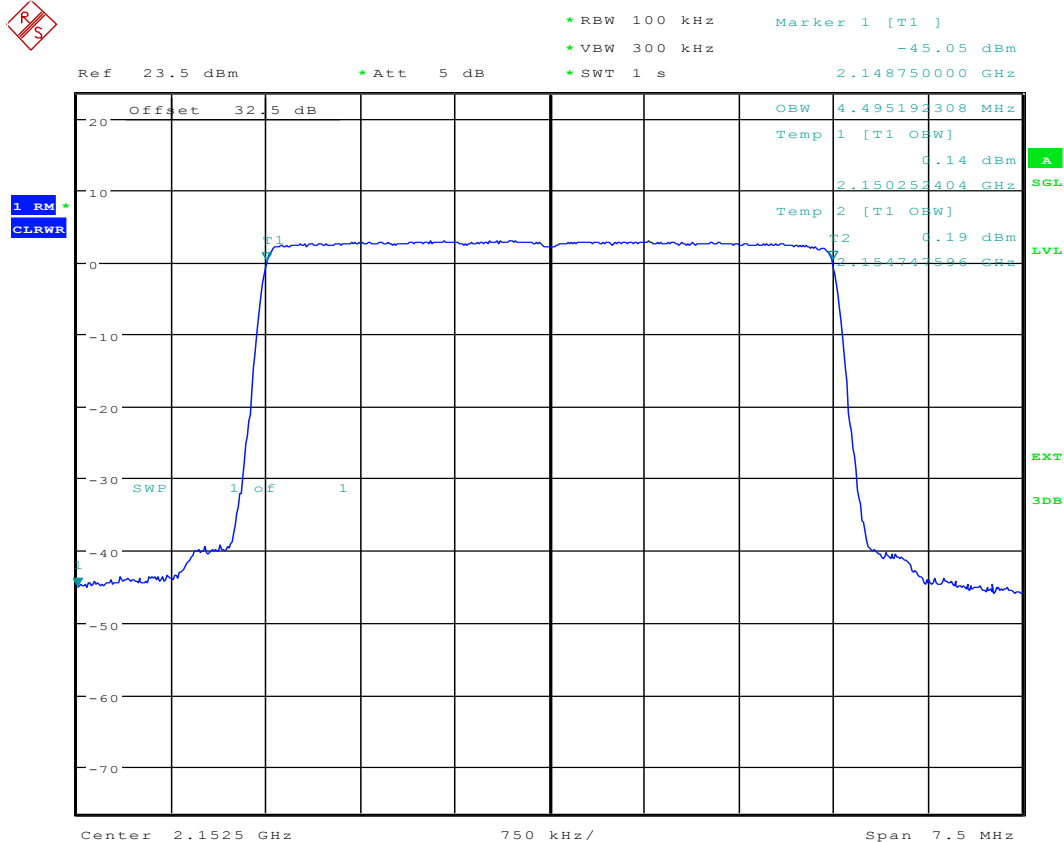
2.2.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:25:02



2.2.5 +20°C, +15%*NV

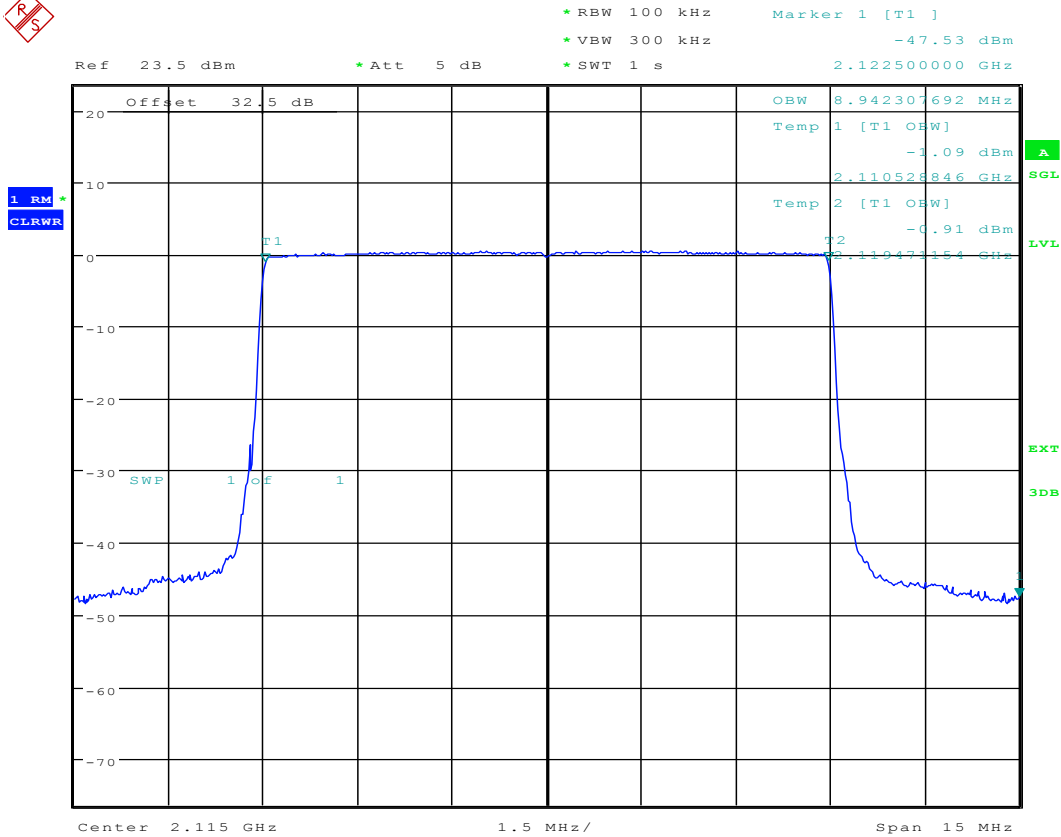


Date: 19.MAY.2016 19:03:36



2.3 1L10M_B

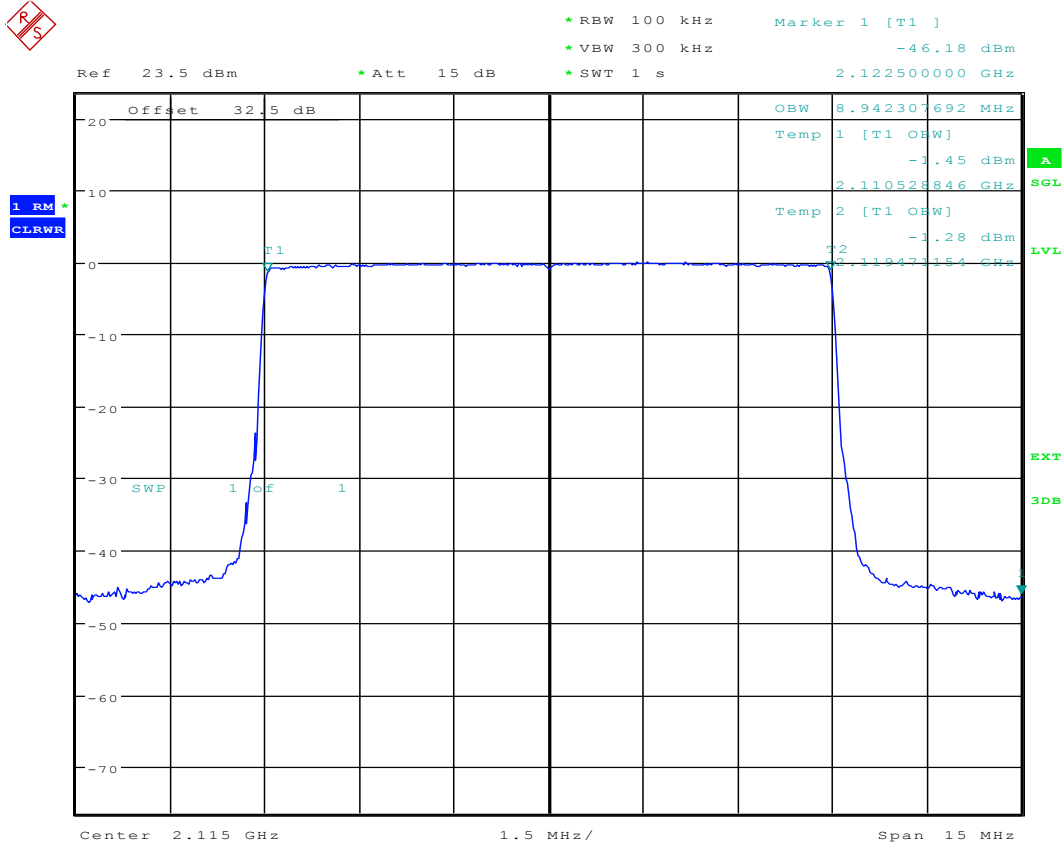
2.3.1 NV, -30°C



Date: 19.MAY.2016 22:04:56



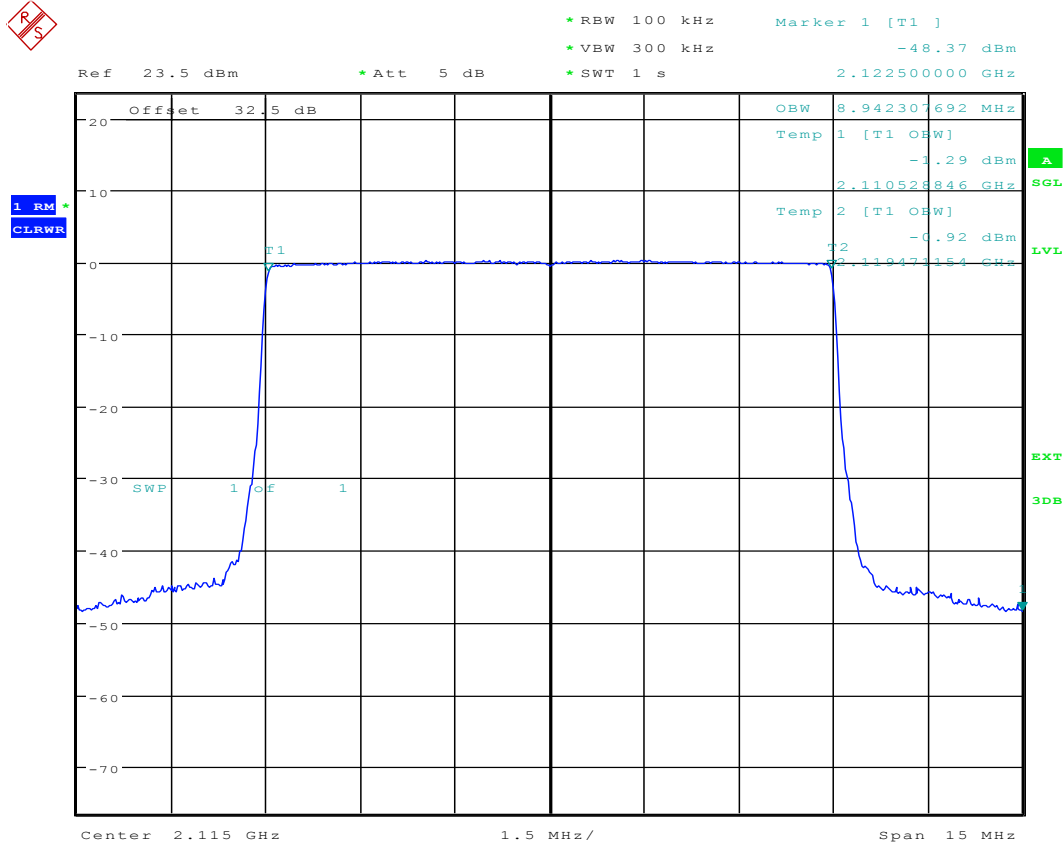
2.3.2 NV, +20°C



Date: 18.MAY.2016 23:32:38



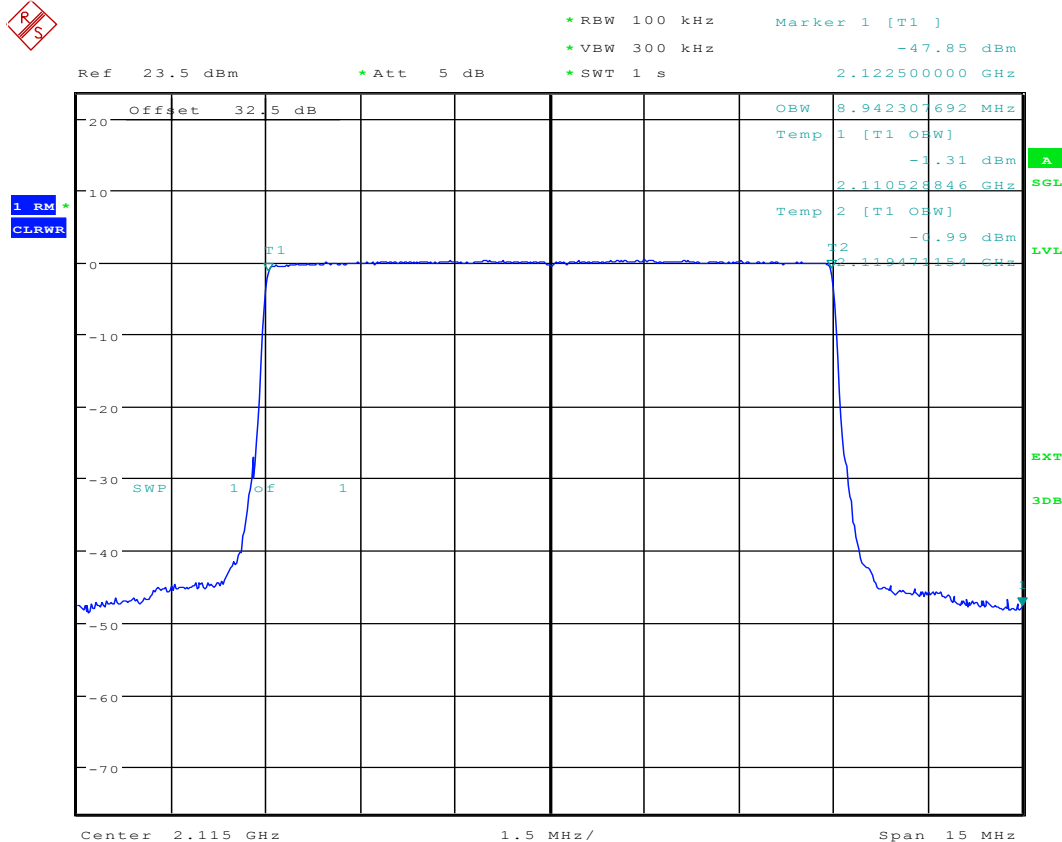
2.3.3 NV, +50°C



Date: 19.MAY.2016 23:45:17



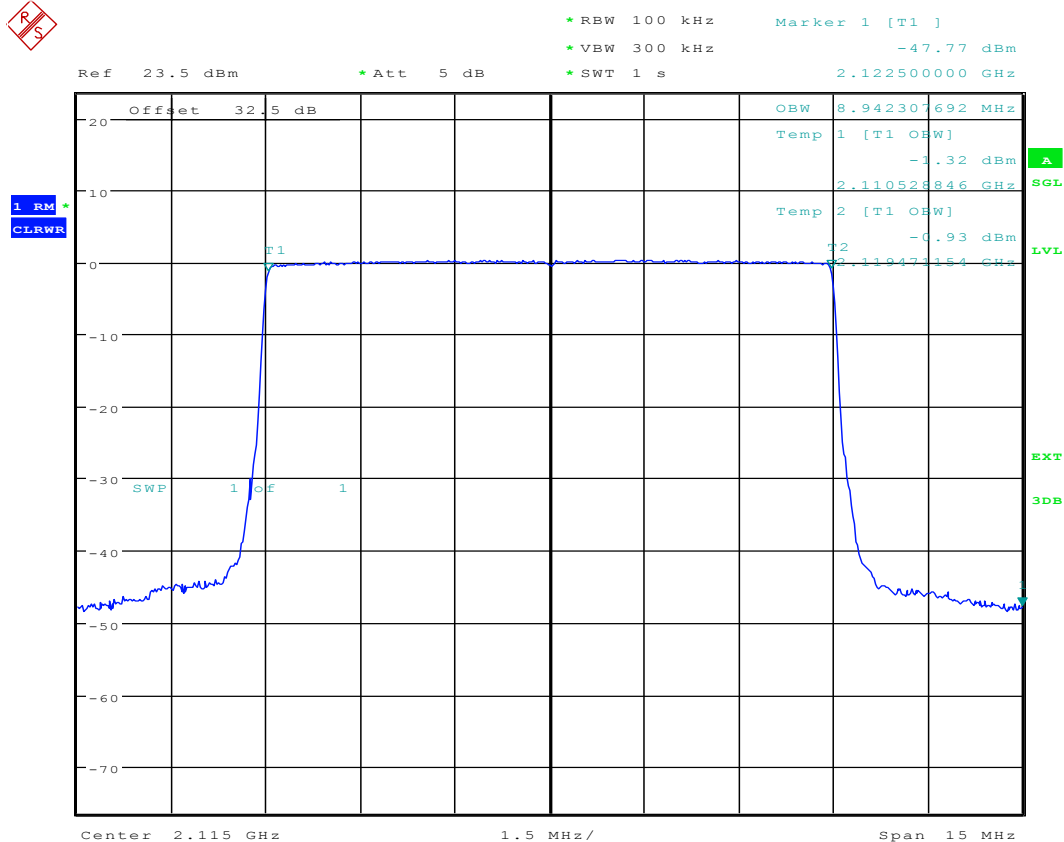
2.3.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:26:33



2.3.5 +20°C, +15%*NV

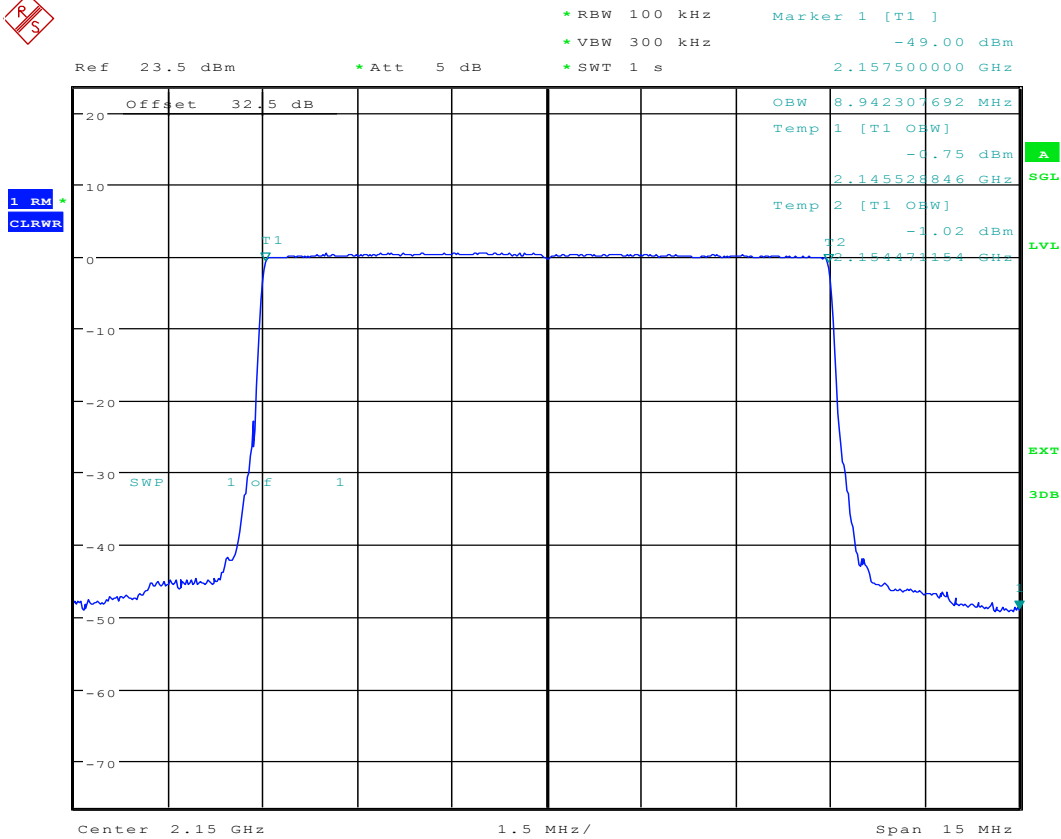


Date: 19.MAY.2016 19:05:06



2.4 1L10M_T

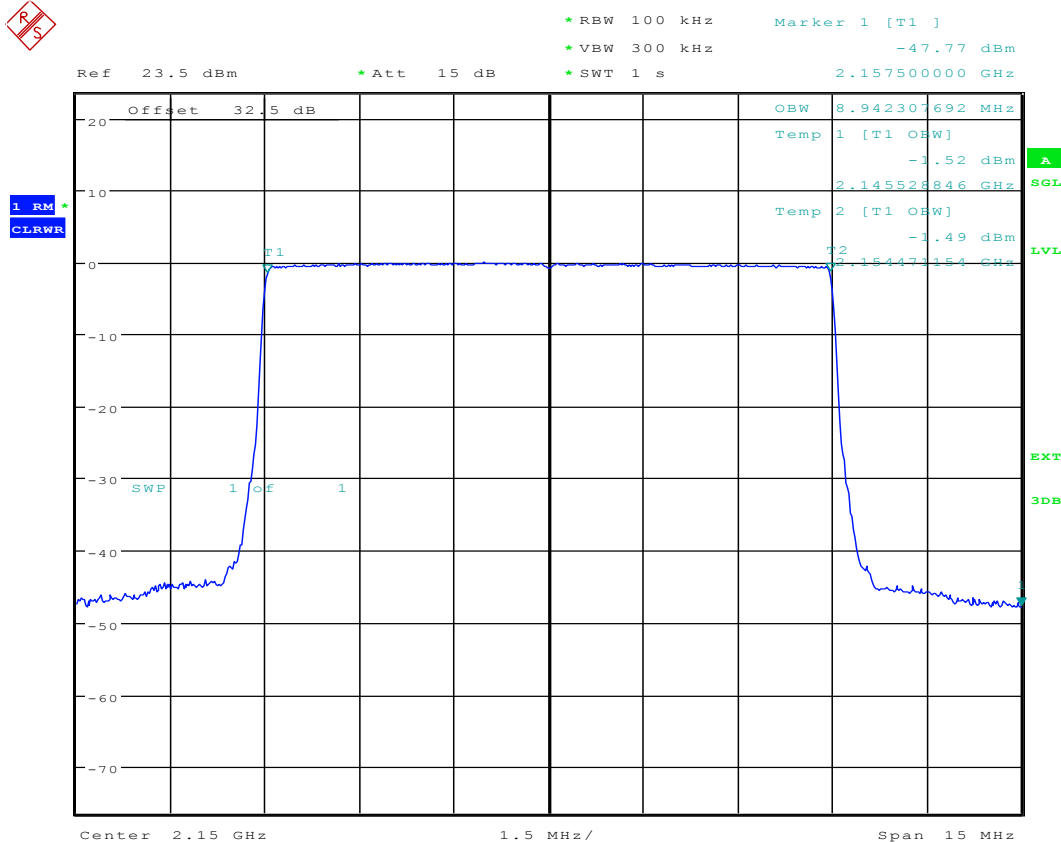
2.4.1 NV, -30°C



Date: 19.MAY.2016 22:05:49



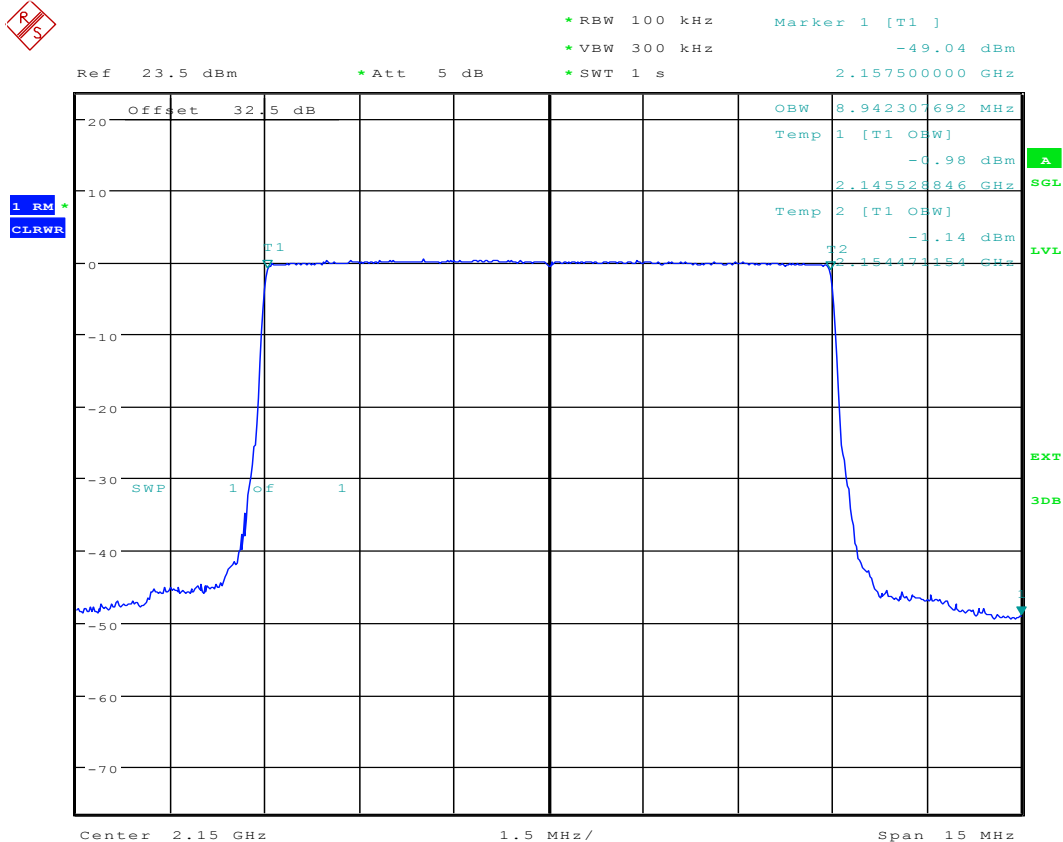
2.4.2 NV, +20°C



Date: 19.MAY.2016 01:26:03



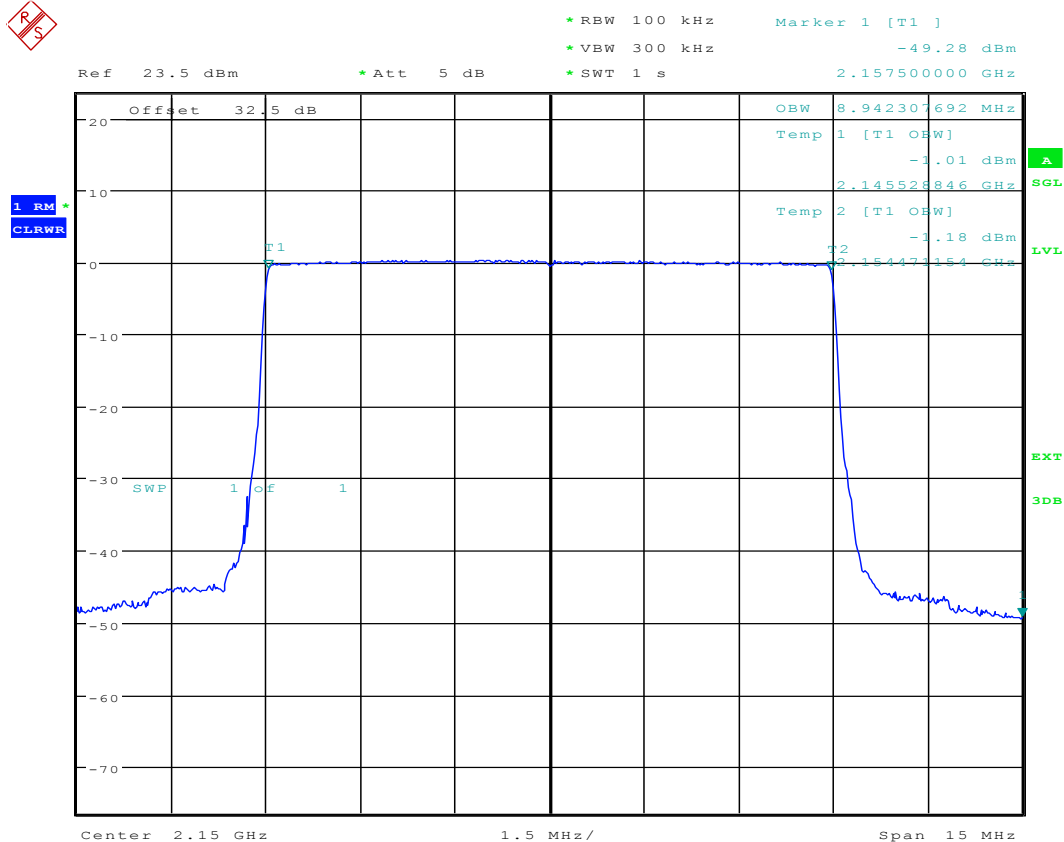
2.4.3 NV, +50°C



Date: 19.MAY.2016 23:46:09



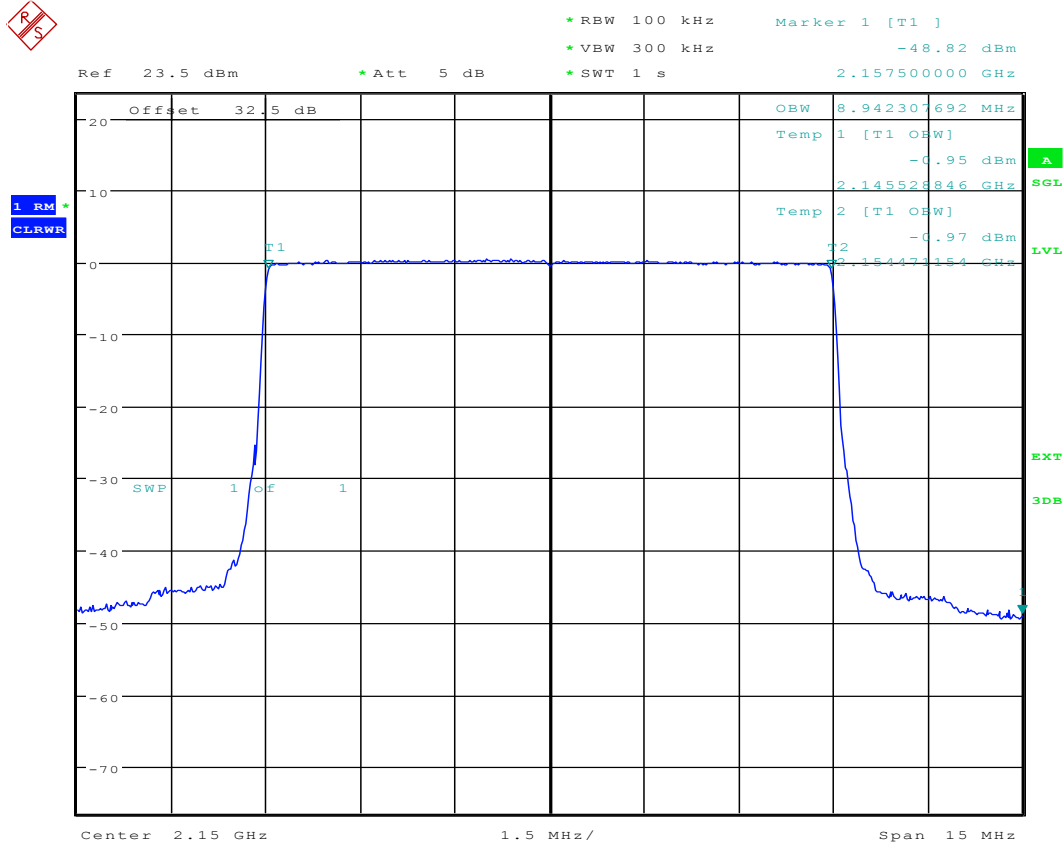
2.4.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:27:29



2.4.5 +20°C, +15%*NV

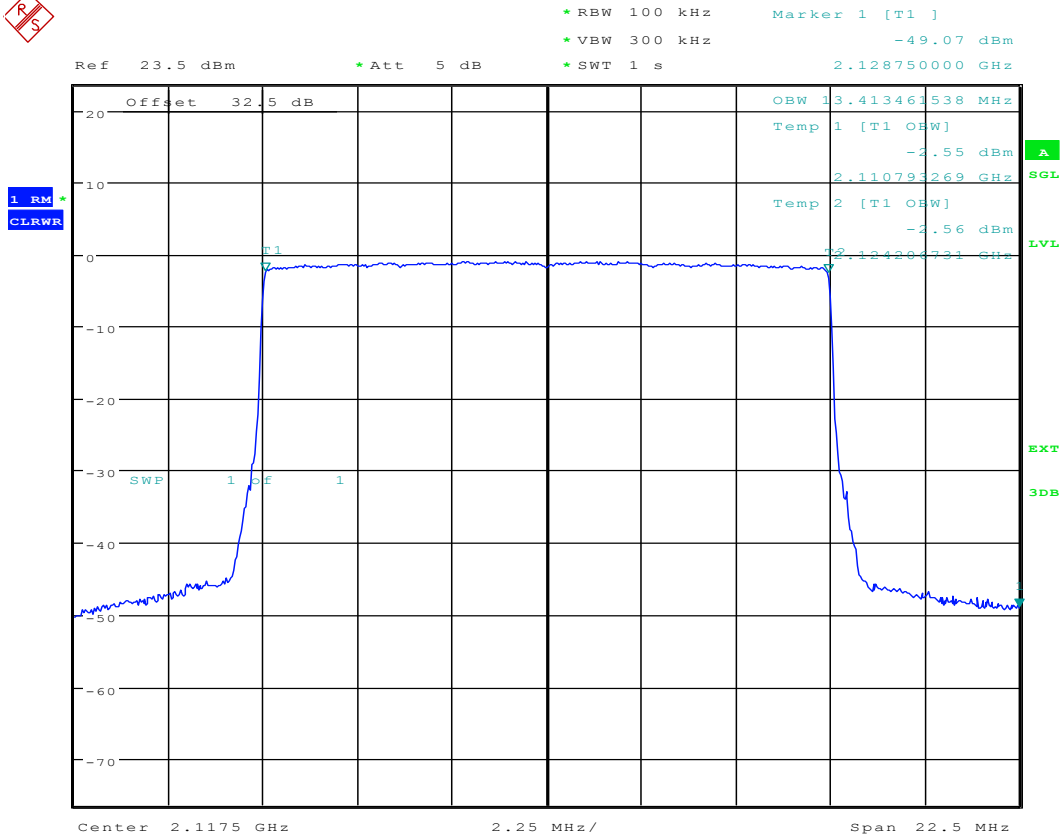


Date: 19.MAY.2016 19:05:57



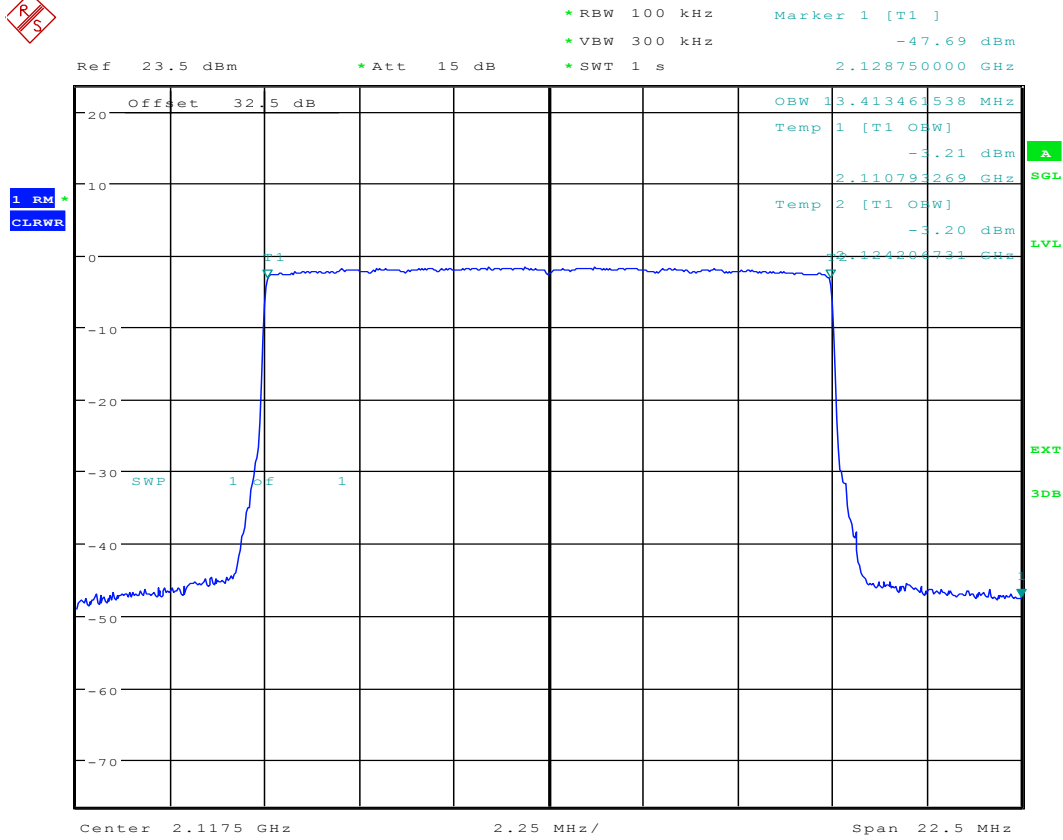
2.5 1L15M_B

2.5.1 NV, -30°C



Date: 19.MAY.2016 22:07:08

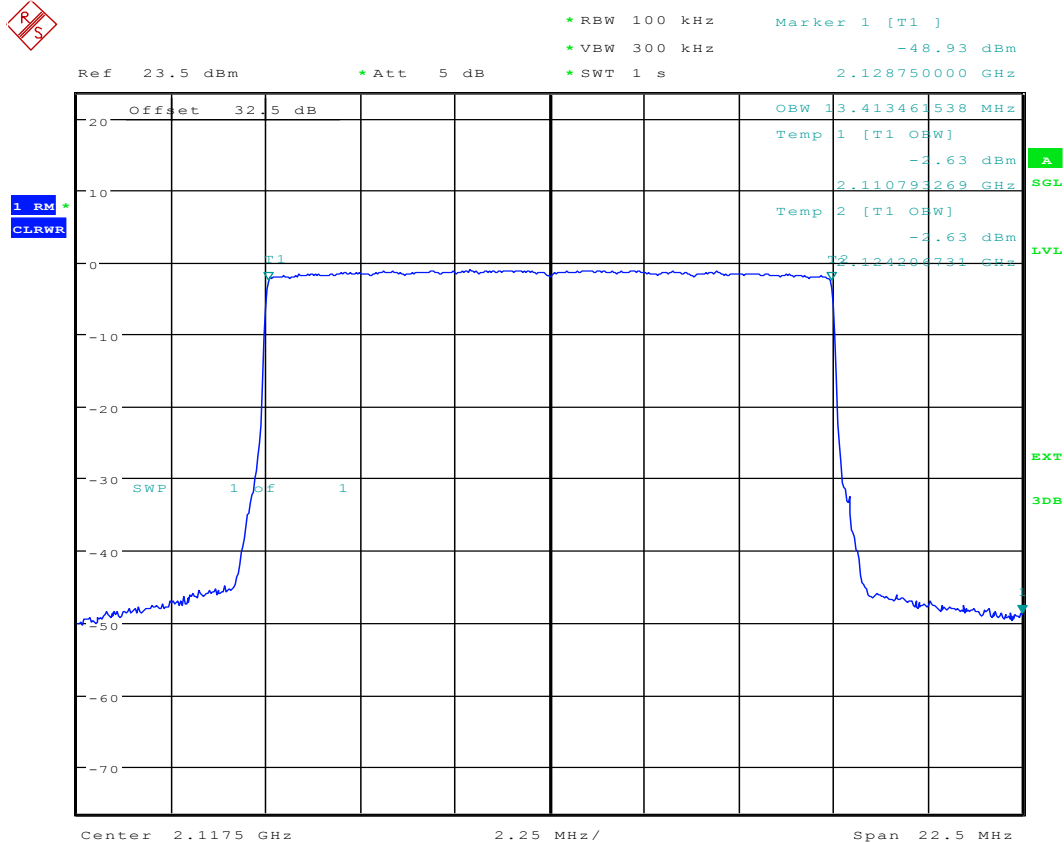
2.5.2 NV, +20°C



Date: 19.MAY.2016 01:29:24



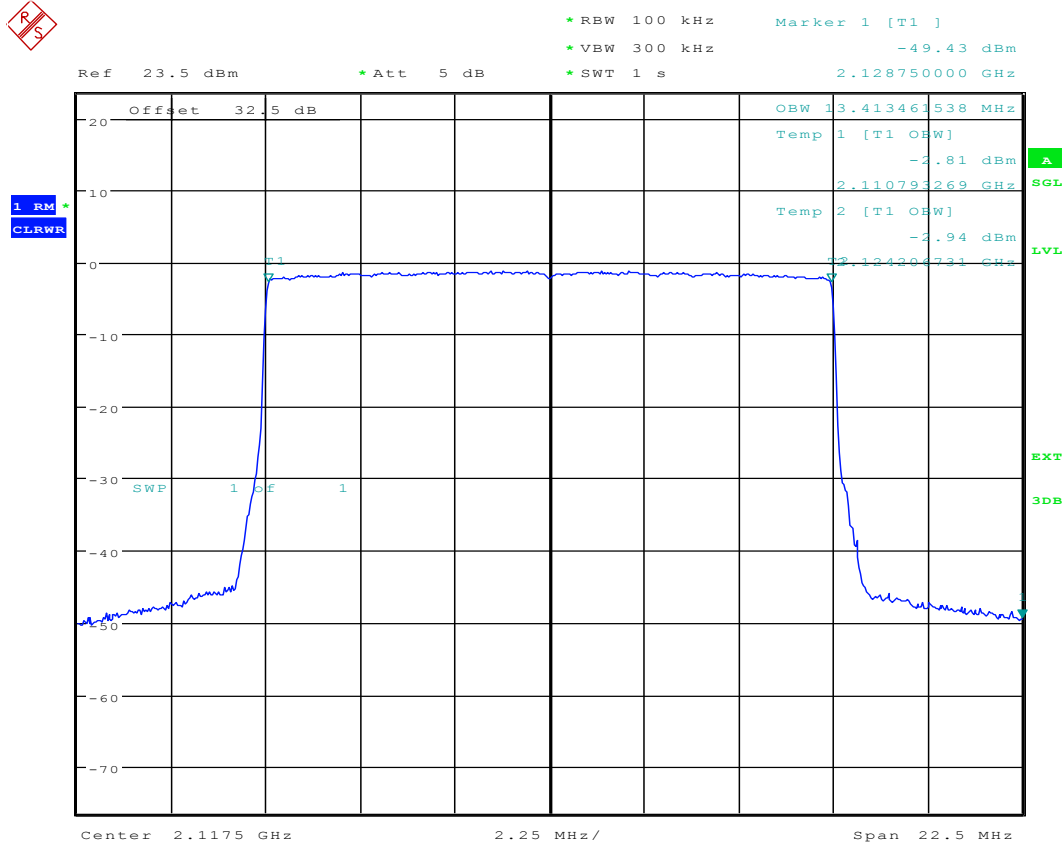
2.5.3 NV, +50°C



Date: 19.MAY.2016 23:47:17



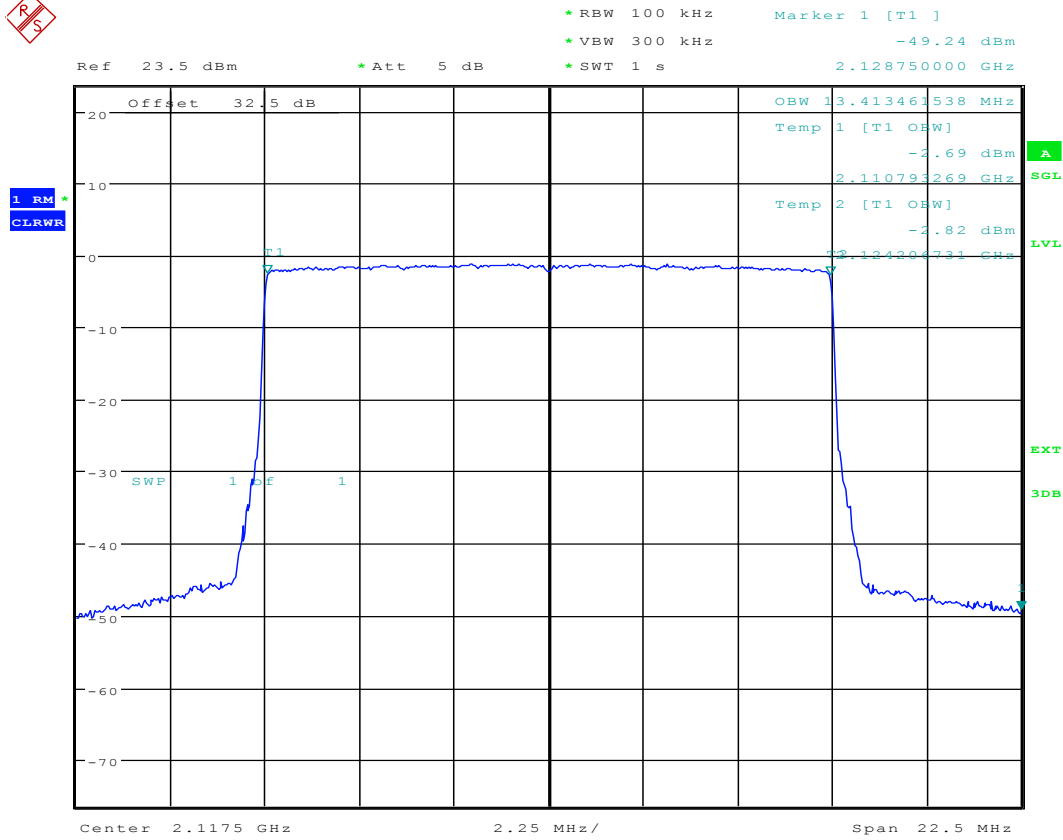
2.5.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:29:00



2.5.5 +20°C, +15%*NV

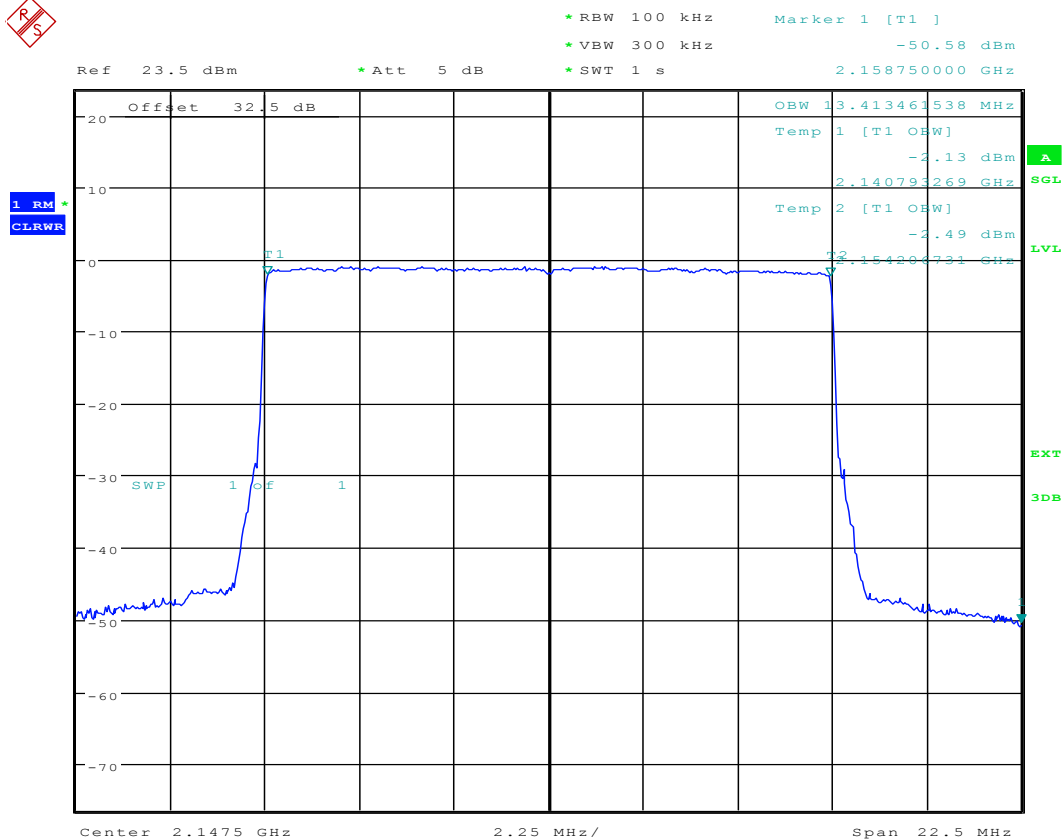


Date: 19.MAY.2016 19:07:28



2.6 1L15M_T

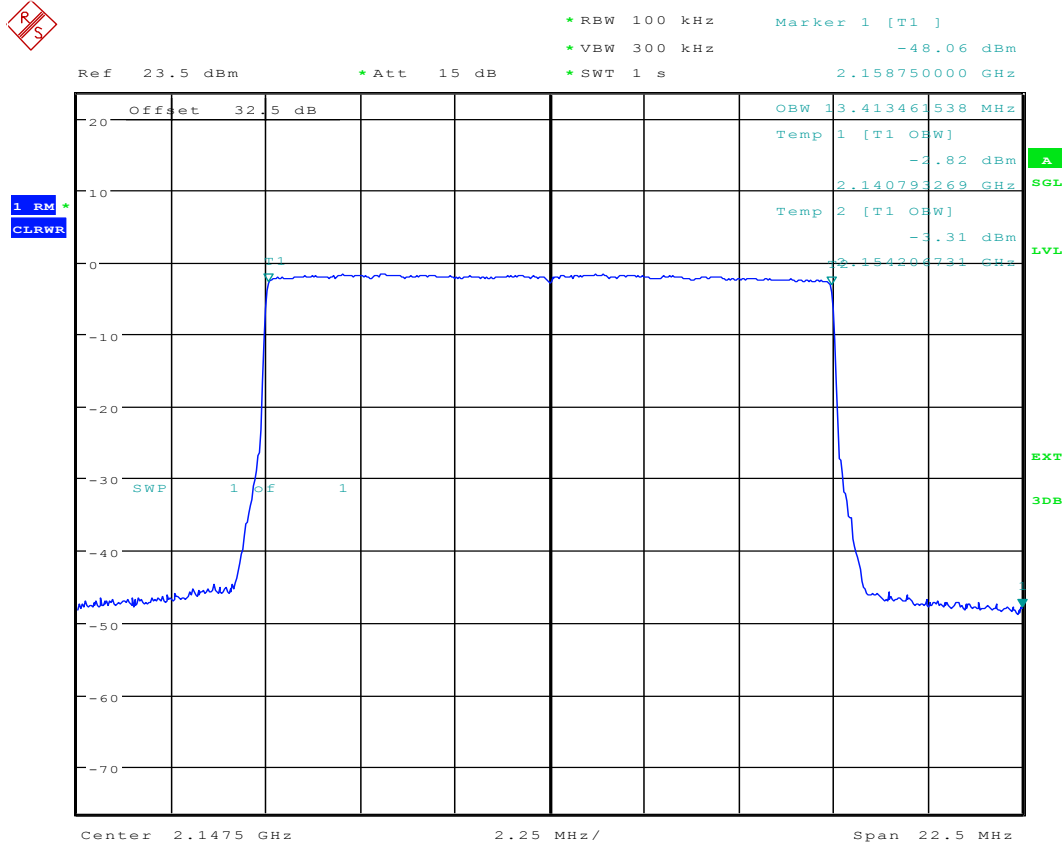
2.6.1 NV, -30°C



Date: 19.MAY.2016 22:07:59



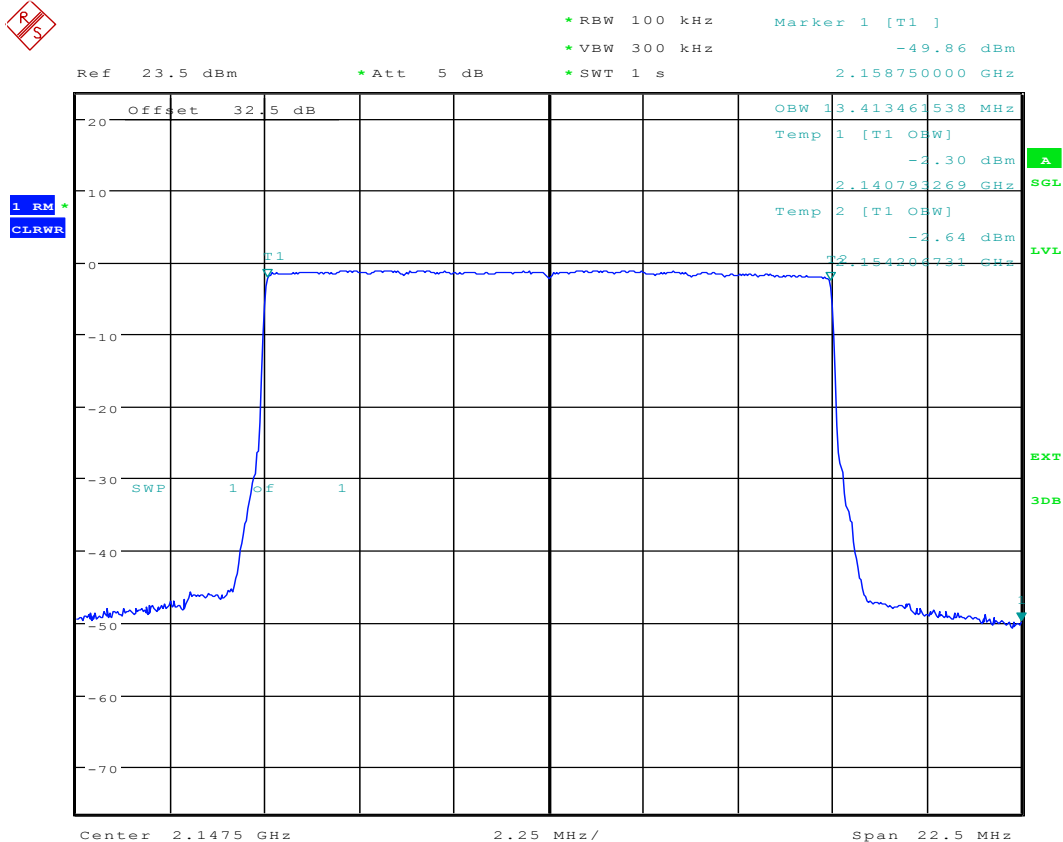
2.6.2 NV, +20°C



Date: 19.MAY.2016 01:41:18



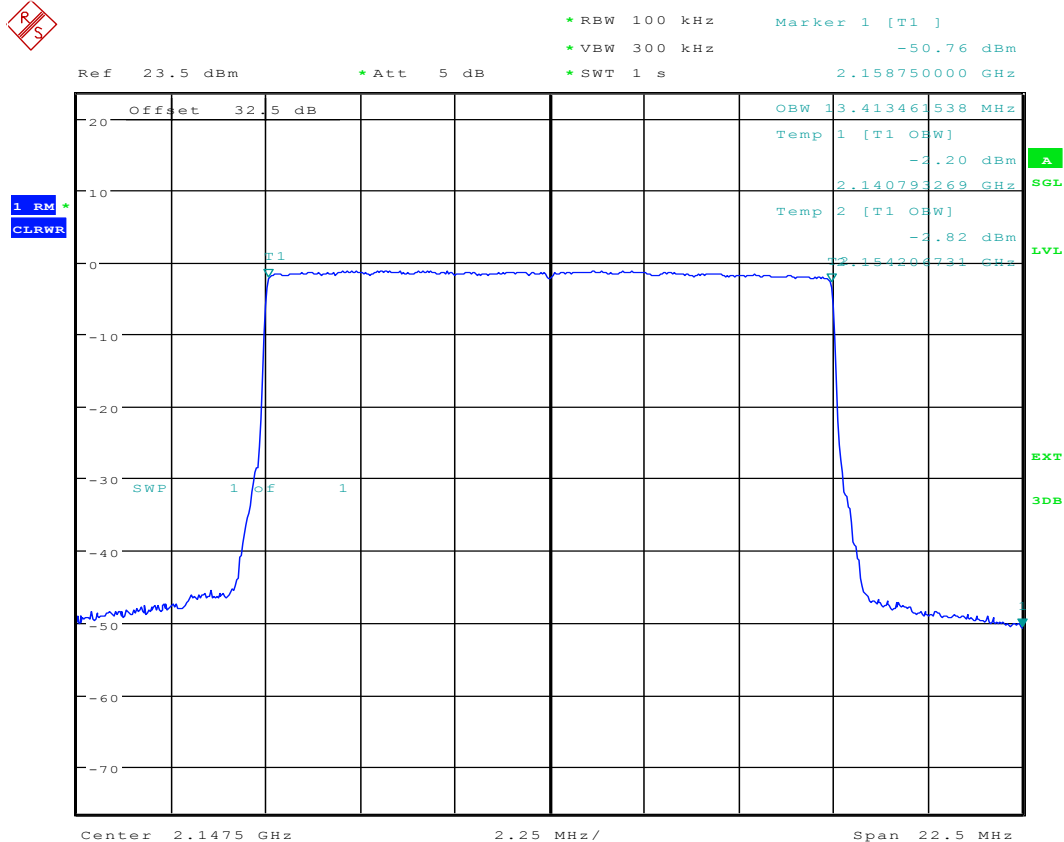
2.6.3 NV, +50°C



Date: 19.MAY.2016 23:48:09



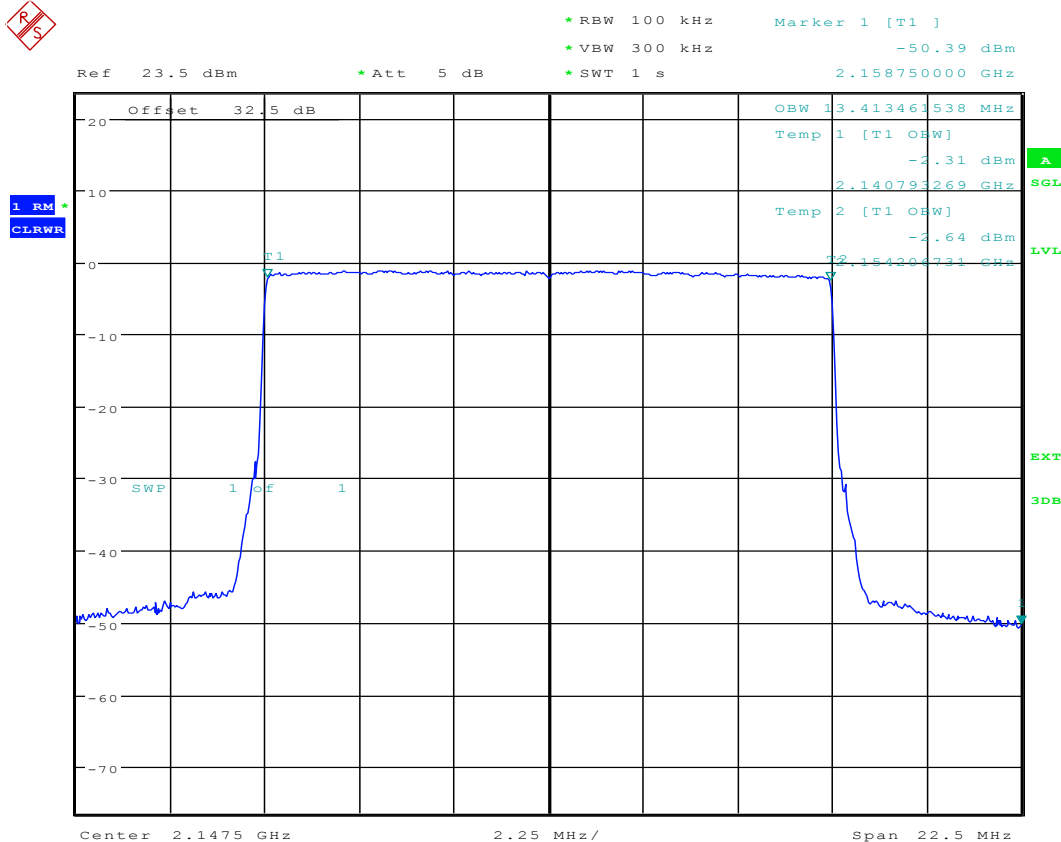
2.6.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:29:53



2.6.5 +20°C, +15%*NV

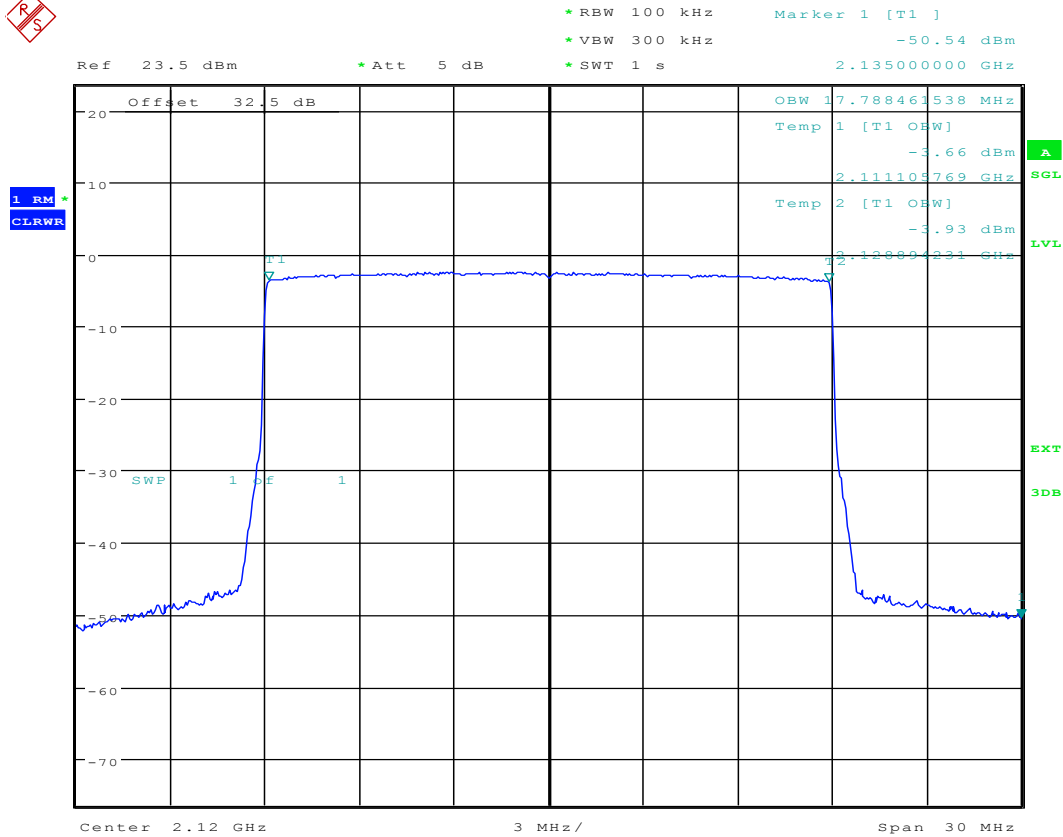


Date: 19.MAY.2016 19:08:21



2.7 1L20M_B

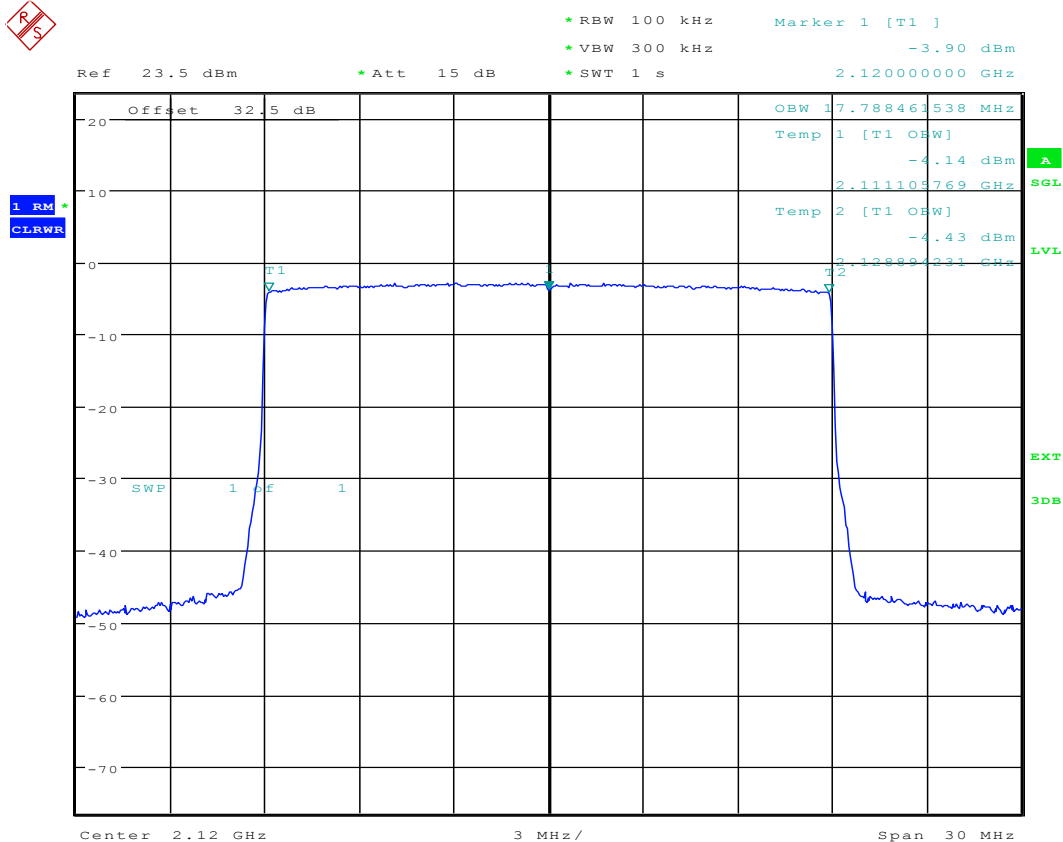
2.7.1 NV, -30°C



Date: 19.MAY.2016 22:09:27



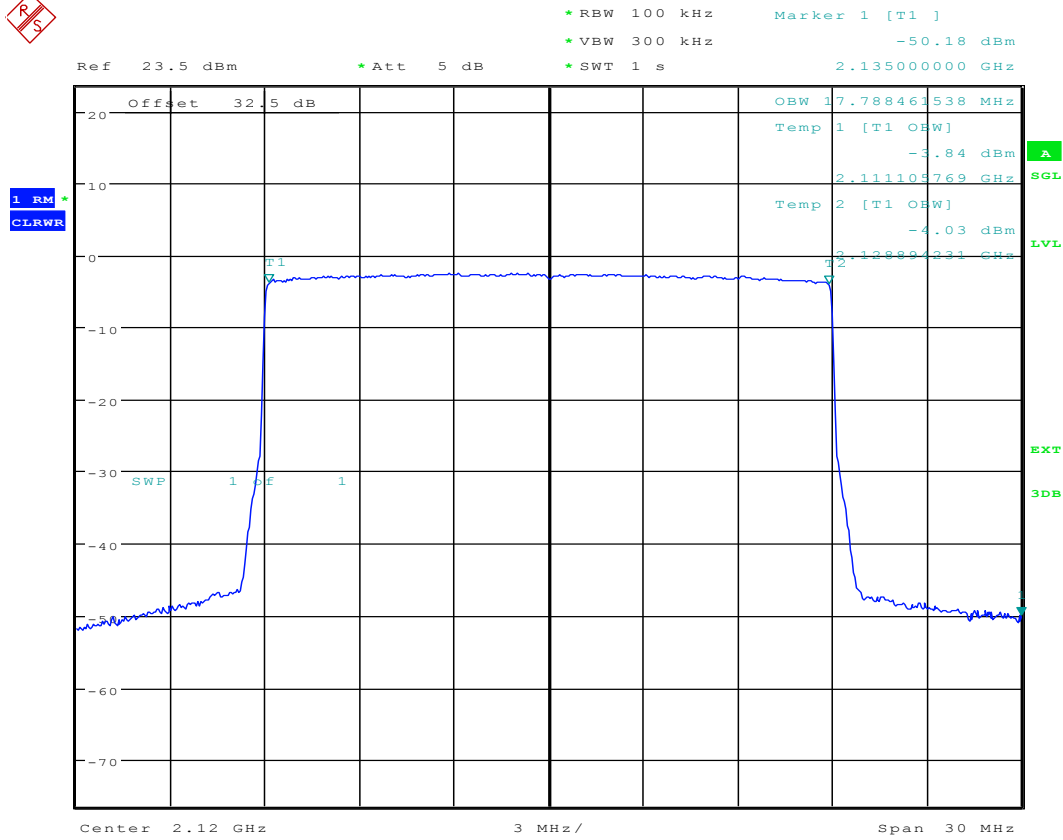
2.7.2 NV, +20°C



Date: 19.MAY.2016 01:44:17



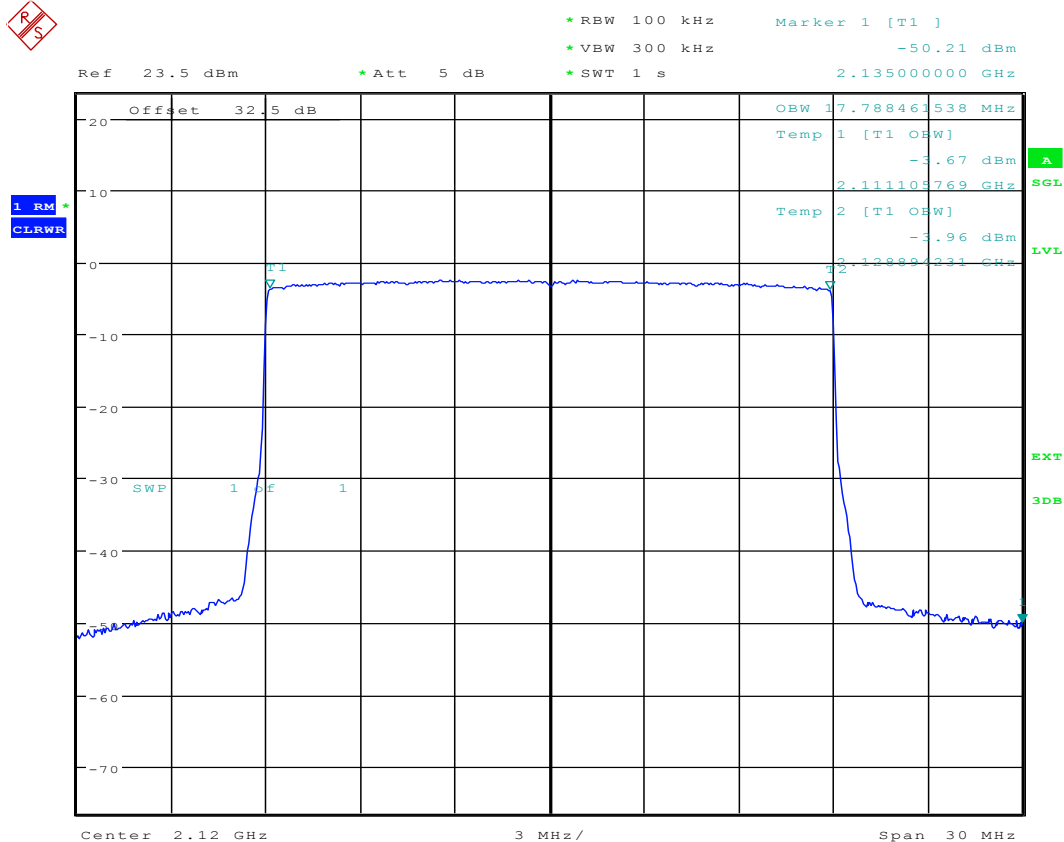
2.7.3 NV, +50°C



Date: 19.MAY.2016 23:49:17



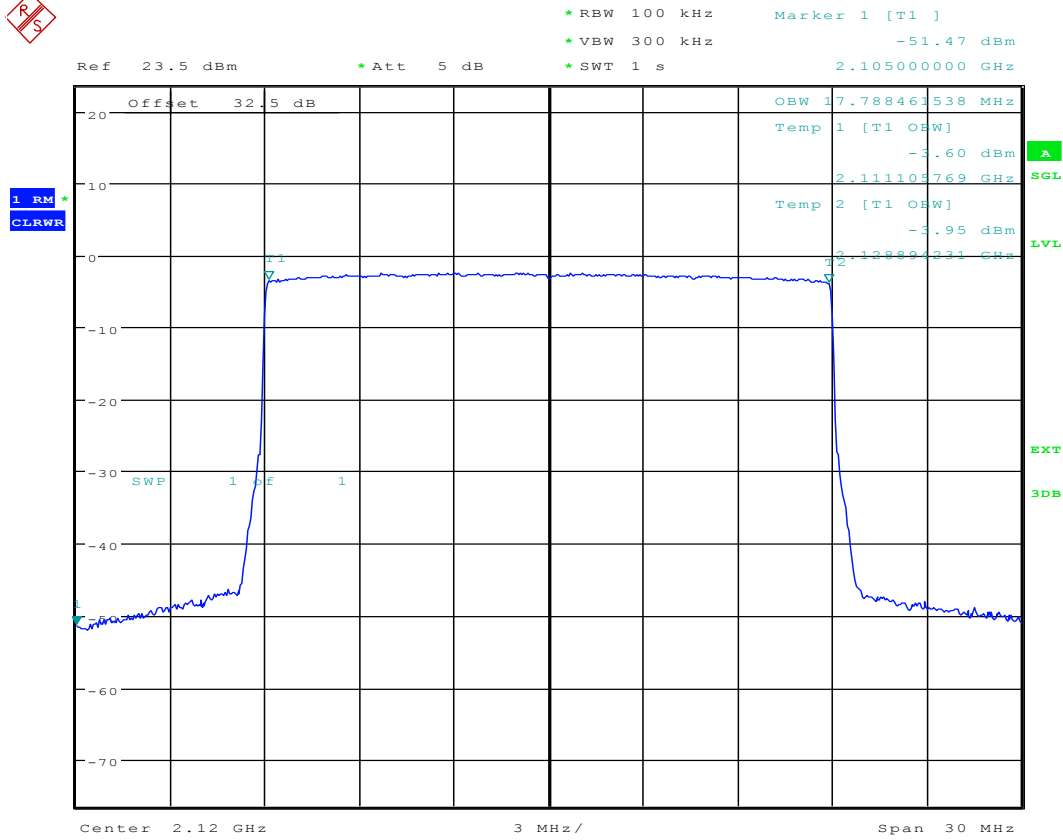
2.7.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:31:00



2.7.5 +20°C, +15%*NV

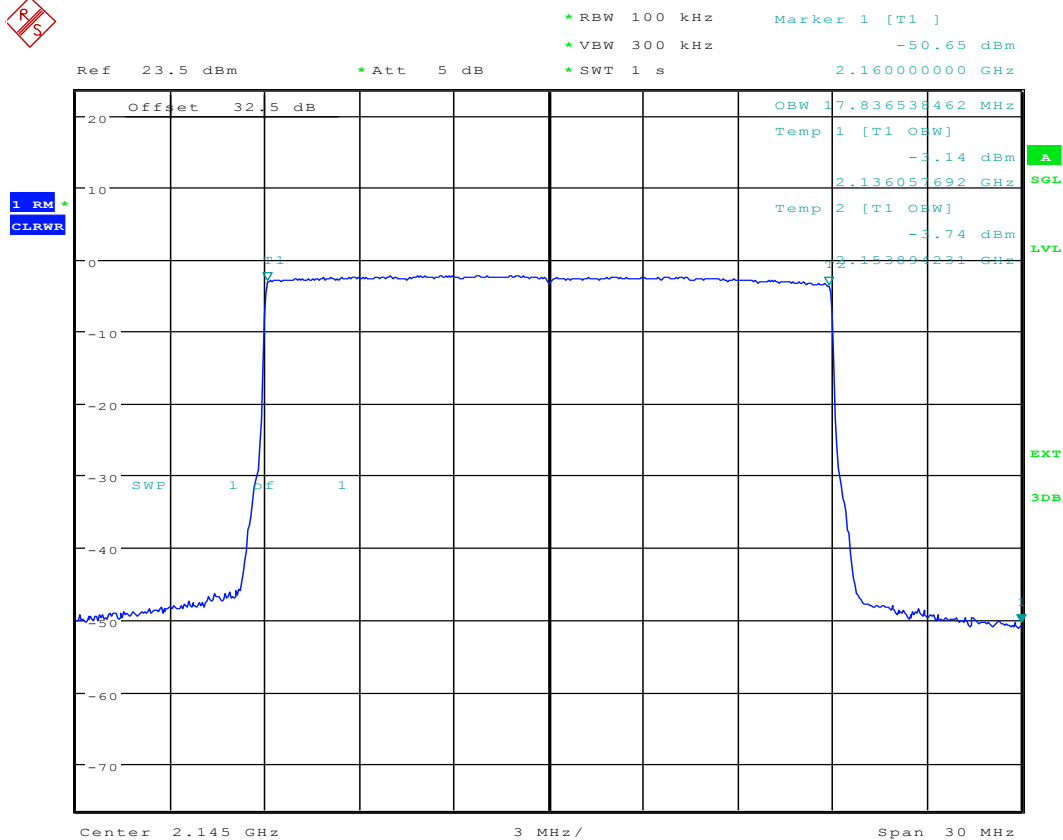


Date: 19.MAY.2016 19:09:28



2.8 1L20M_T

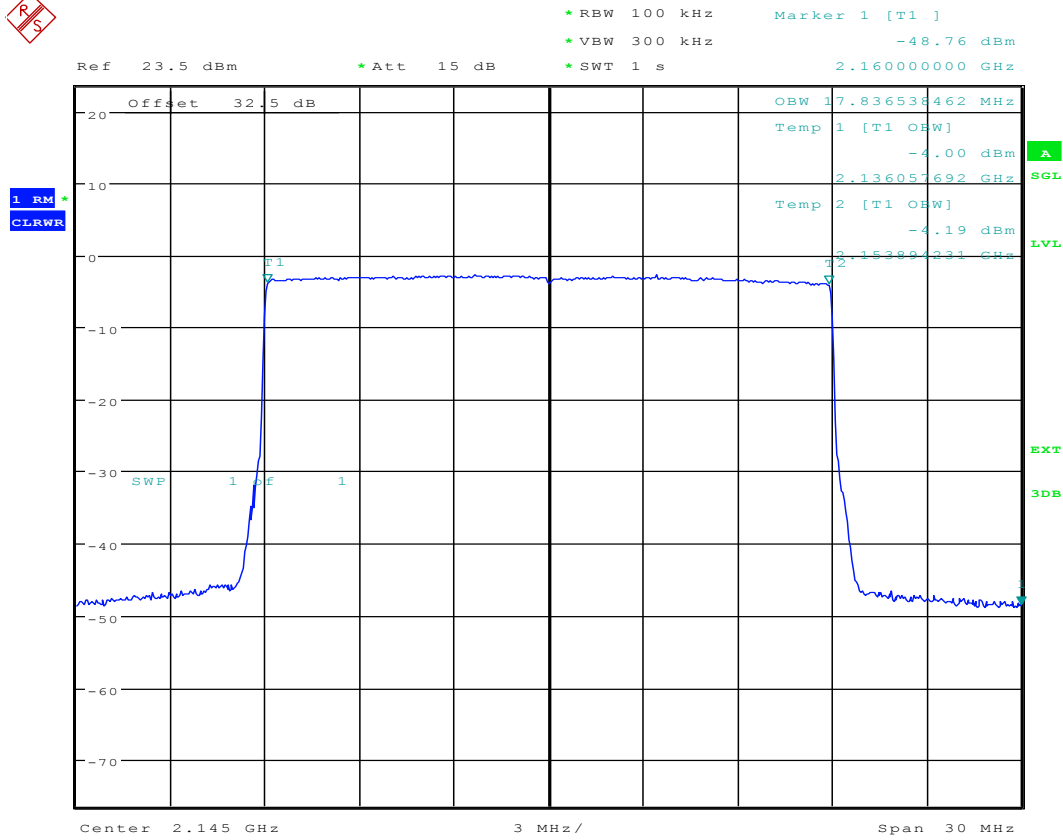
2.8.1 NV, -30°C



Date: 19.MAY.2016 22:10:19



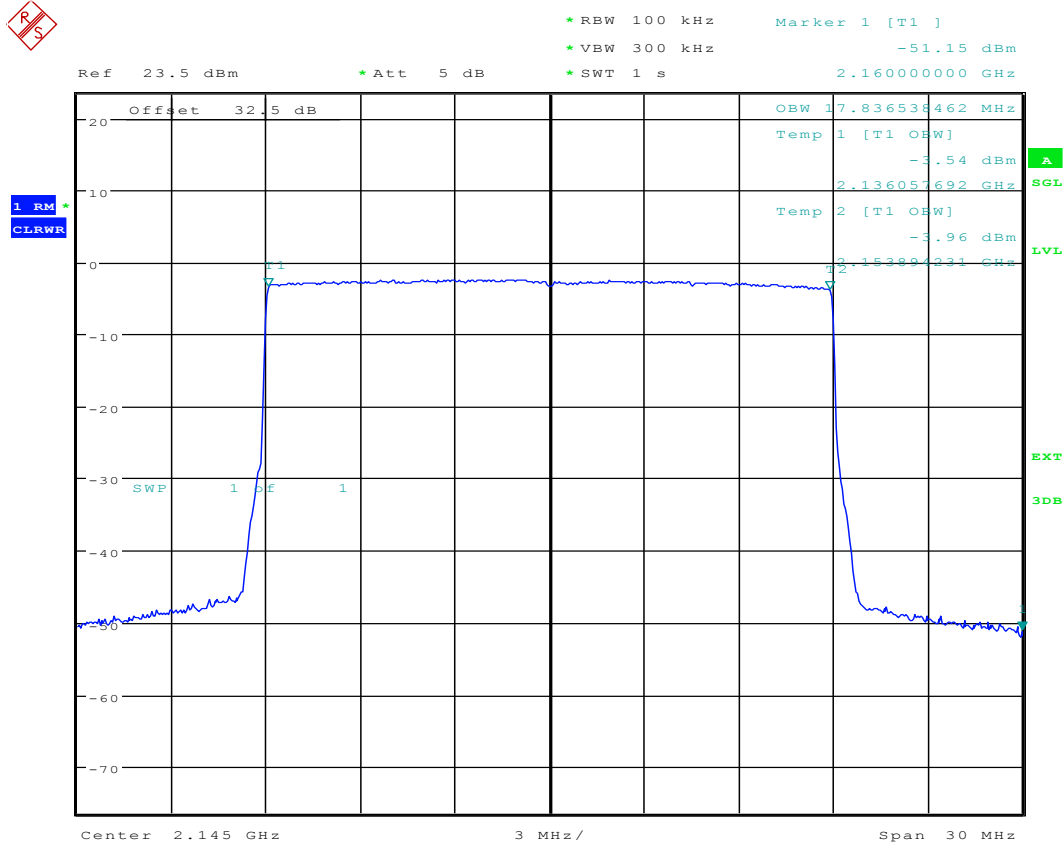
2.8.2 NV, +20°C



Date: 19.MAY.2016 01:48:56



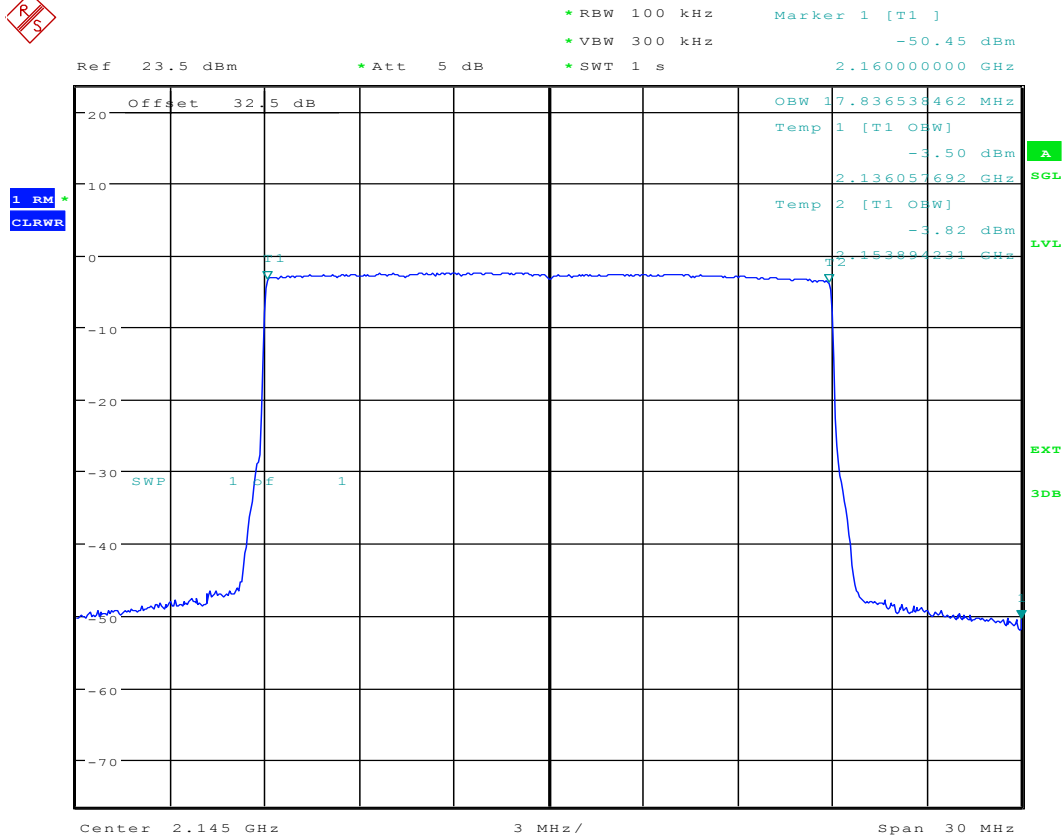
2.8.3 NV, +50°C



Date: 19.MAY.2016 23:50:10



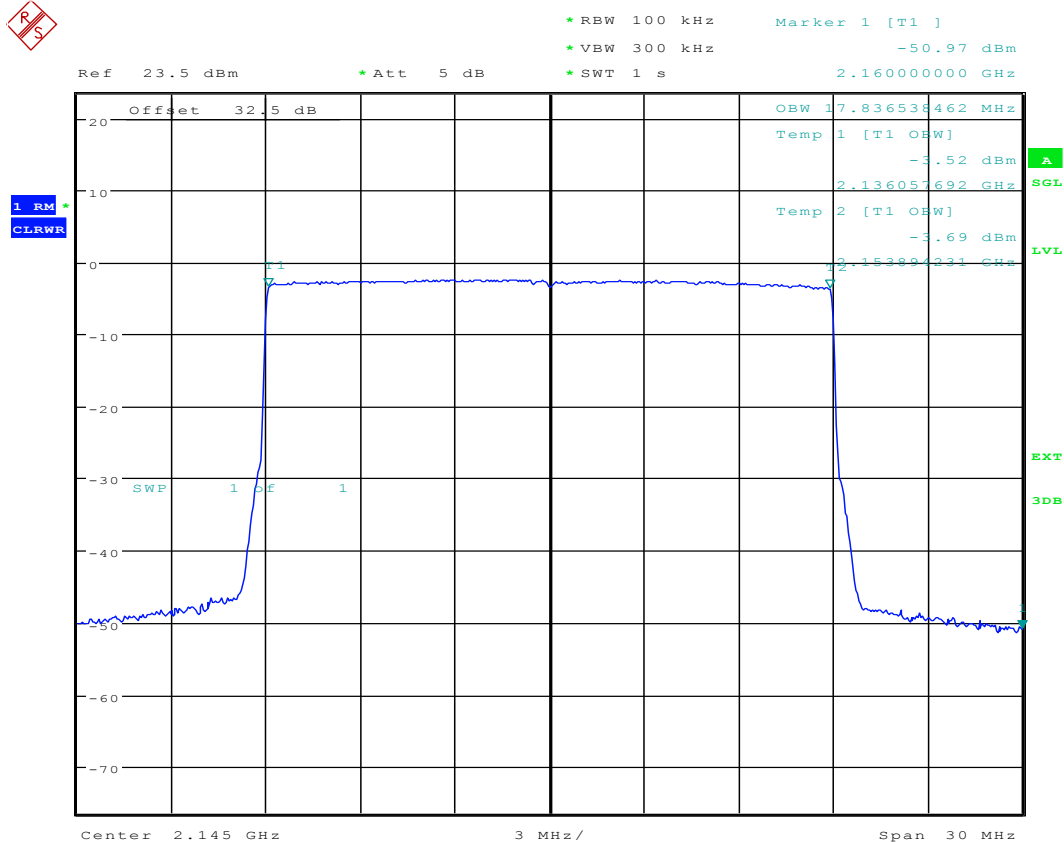
2.8.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:31:53



2.8.5 +20°C, +15%*NV

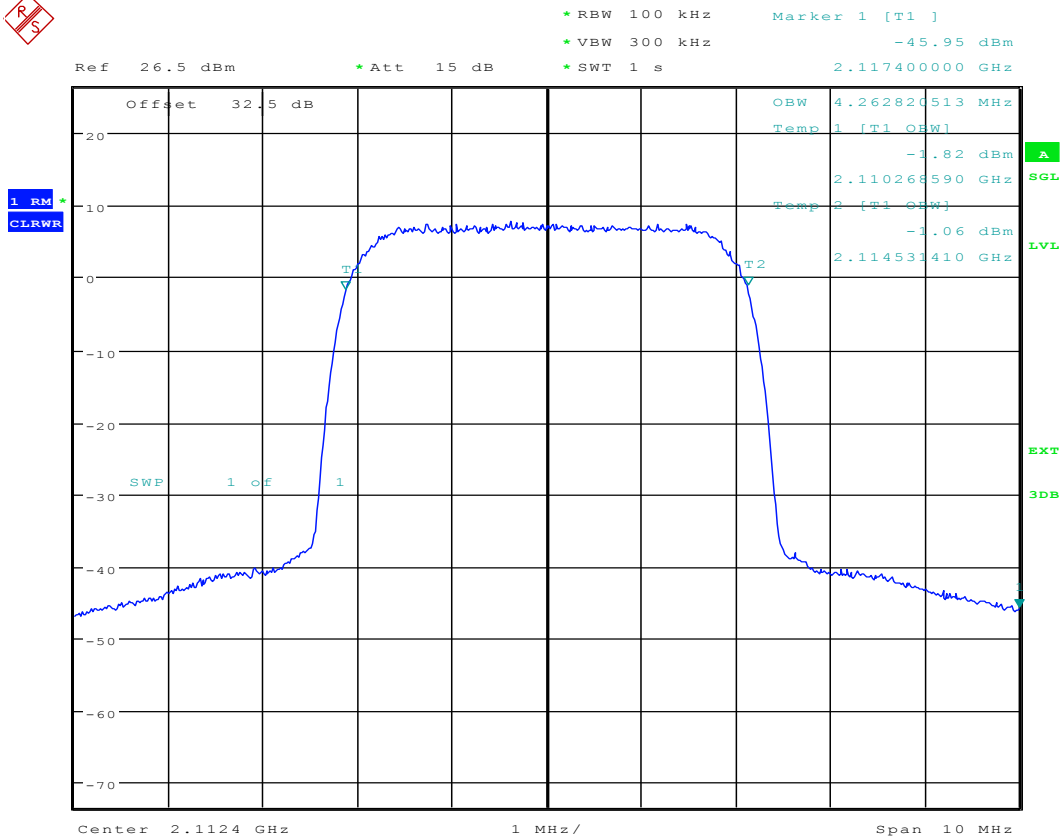


Date: 19.MAY.2016 19:10:19



2.9 1U_B

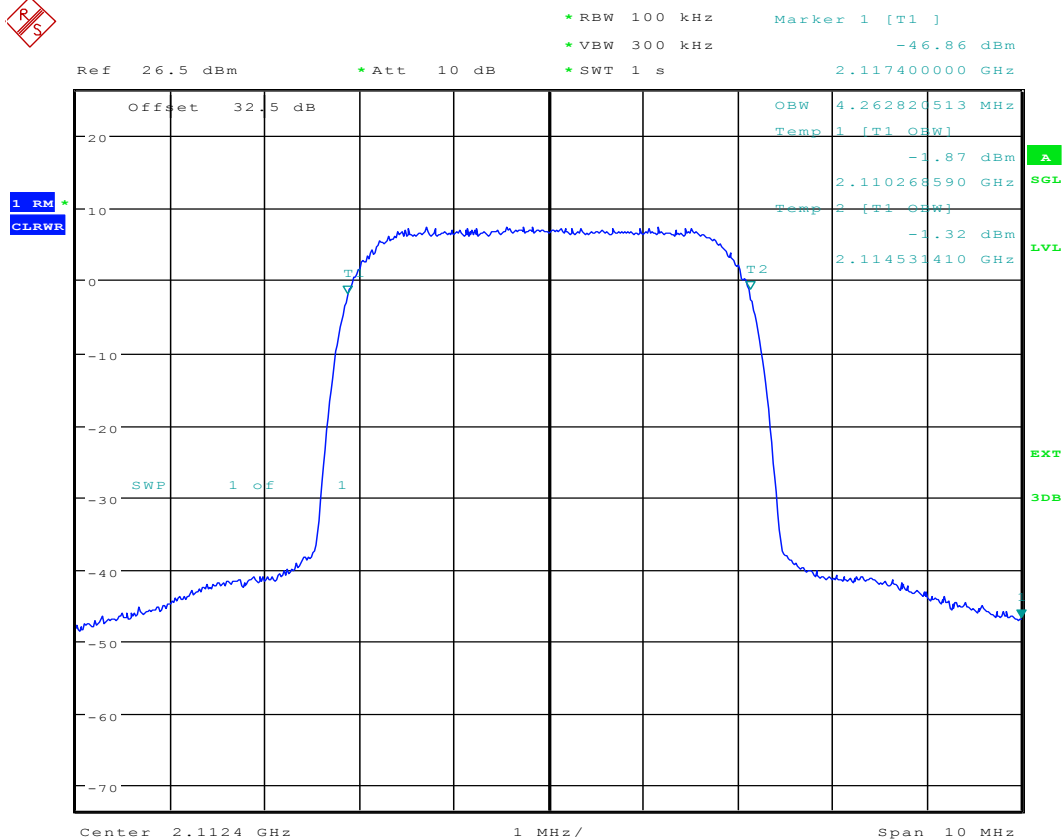
2.9.1 NV, -30°C



Date: 19.MAY.2016 22:12:24



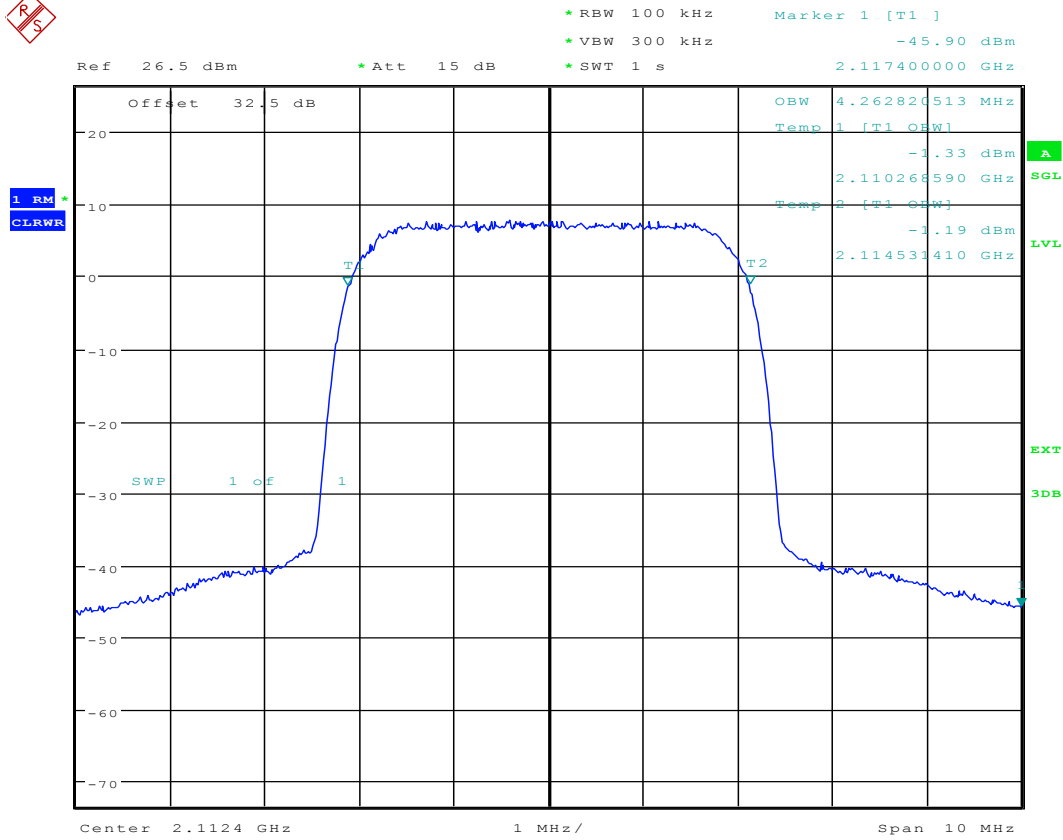
2.9.2 NV, +20°C



Date: 19.MAY.2016 01:52:53



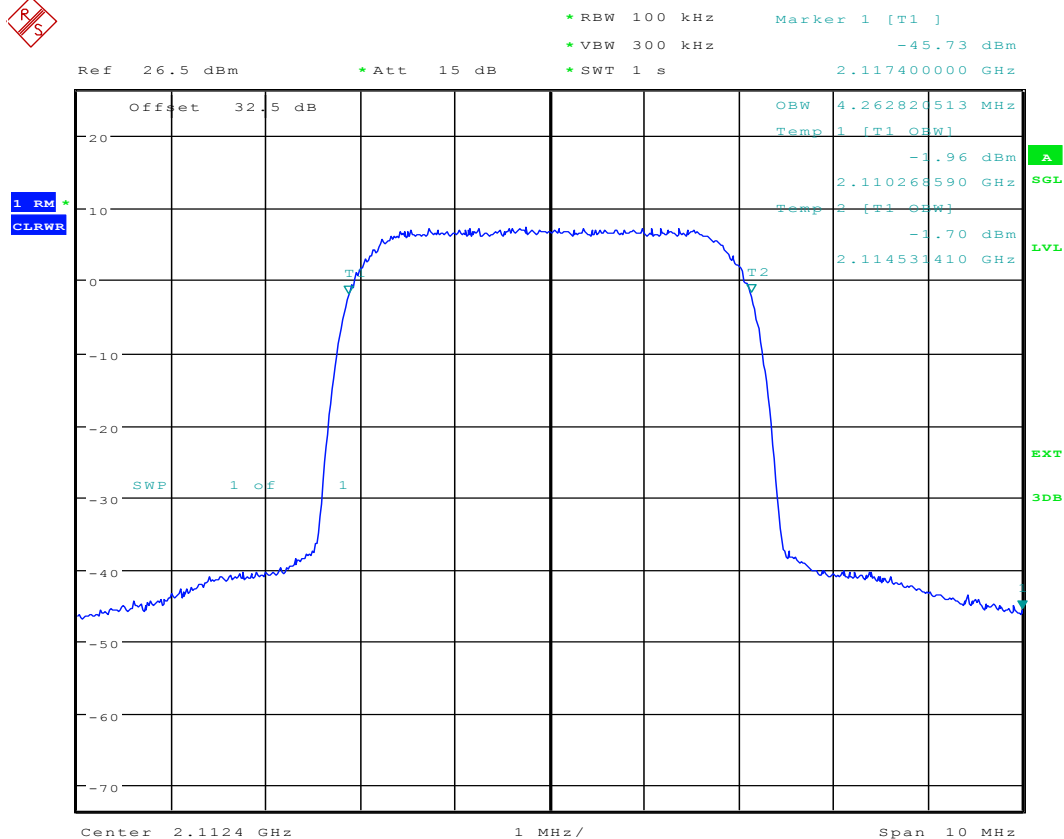
2.9.3 NV, +50°C



Date: 20.MAY.2016 00:37:51

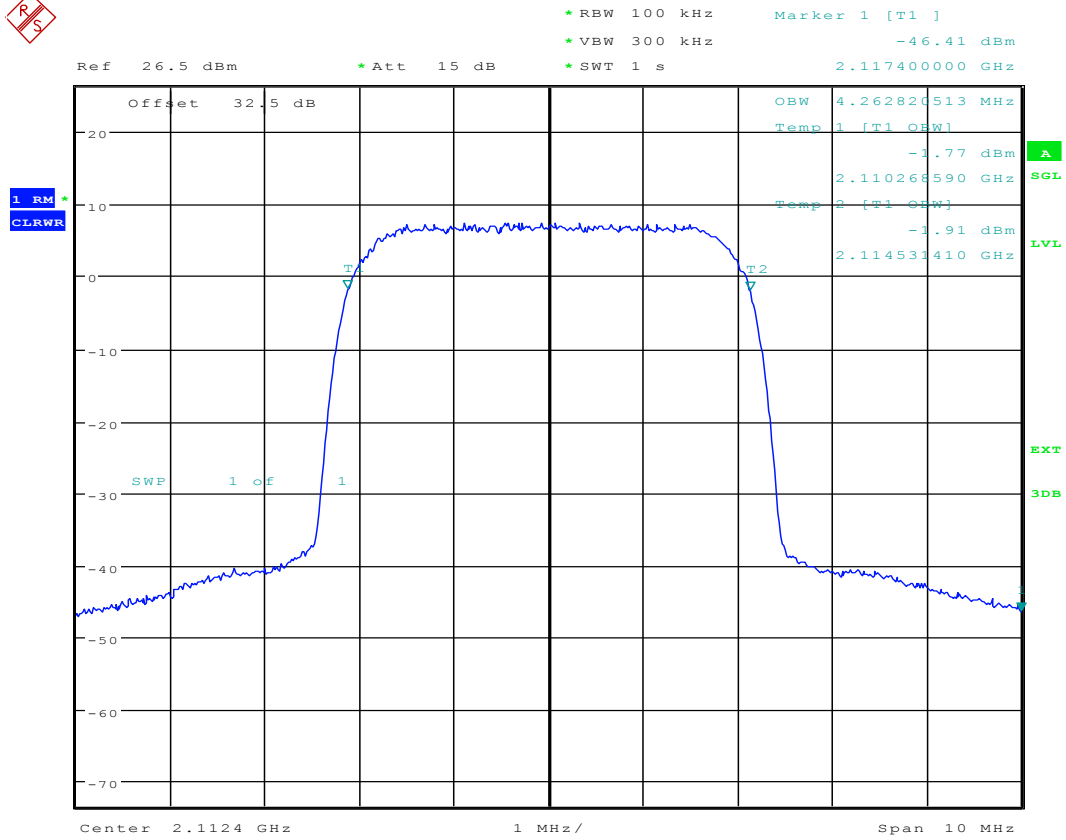


2.9.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:33:57

2.9.5 +20°C, +15%*NV

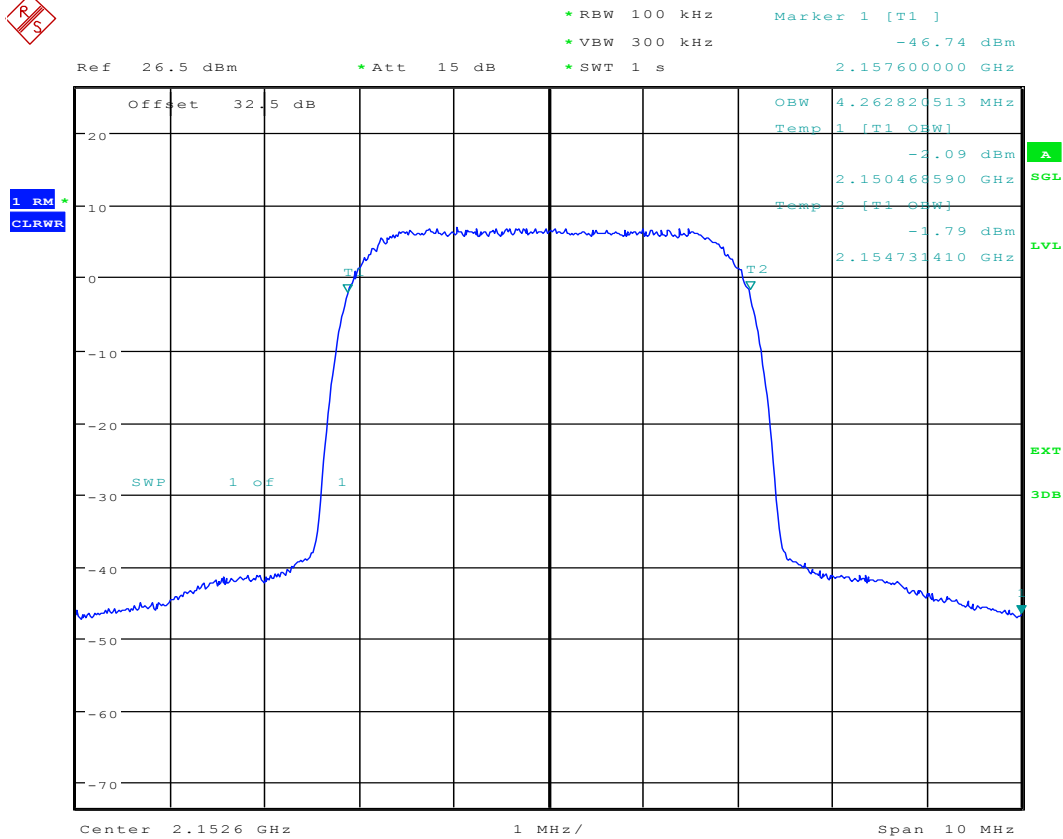


Date: 19.MAY.2016 19:12:24



2.10 1U_T

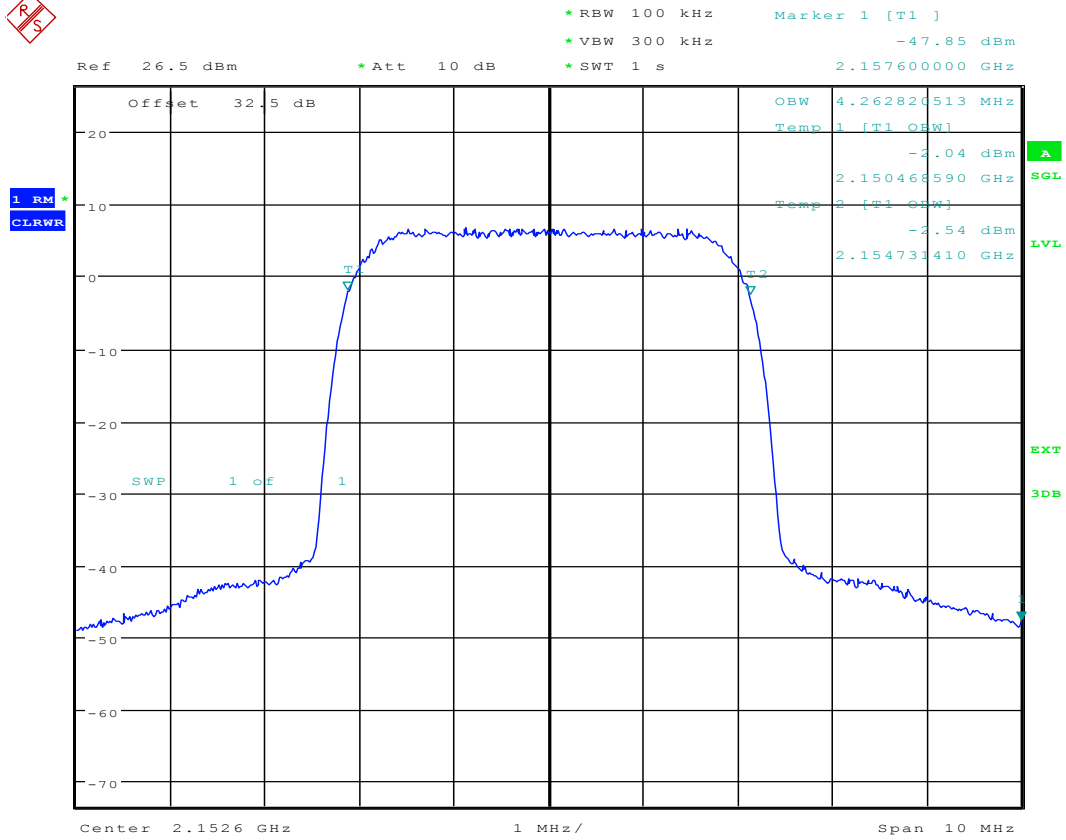
2.10.1 NV, -30°C



Date: 19.MAY.2016 22:14:20



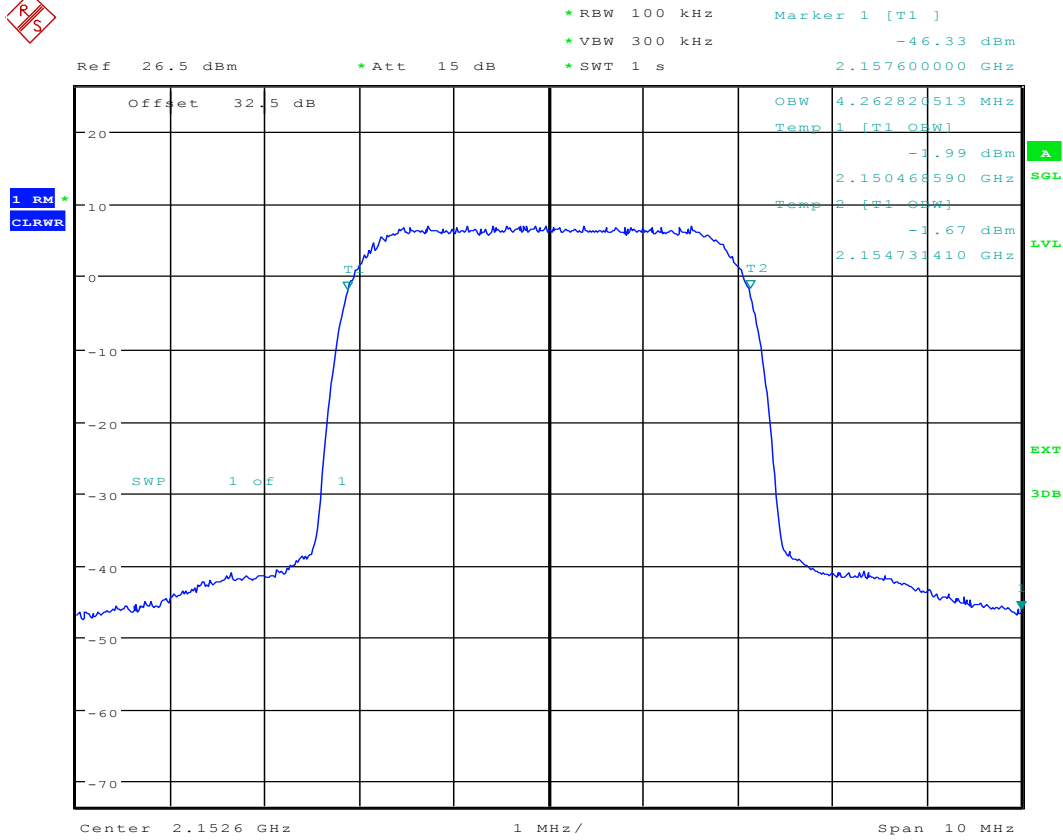
2.10.2 NV, +20°C



Date: 19.MAY.2016 01:54:30



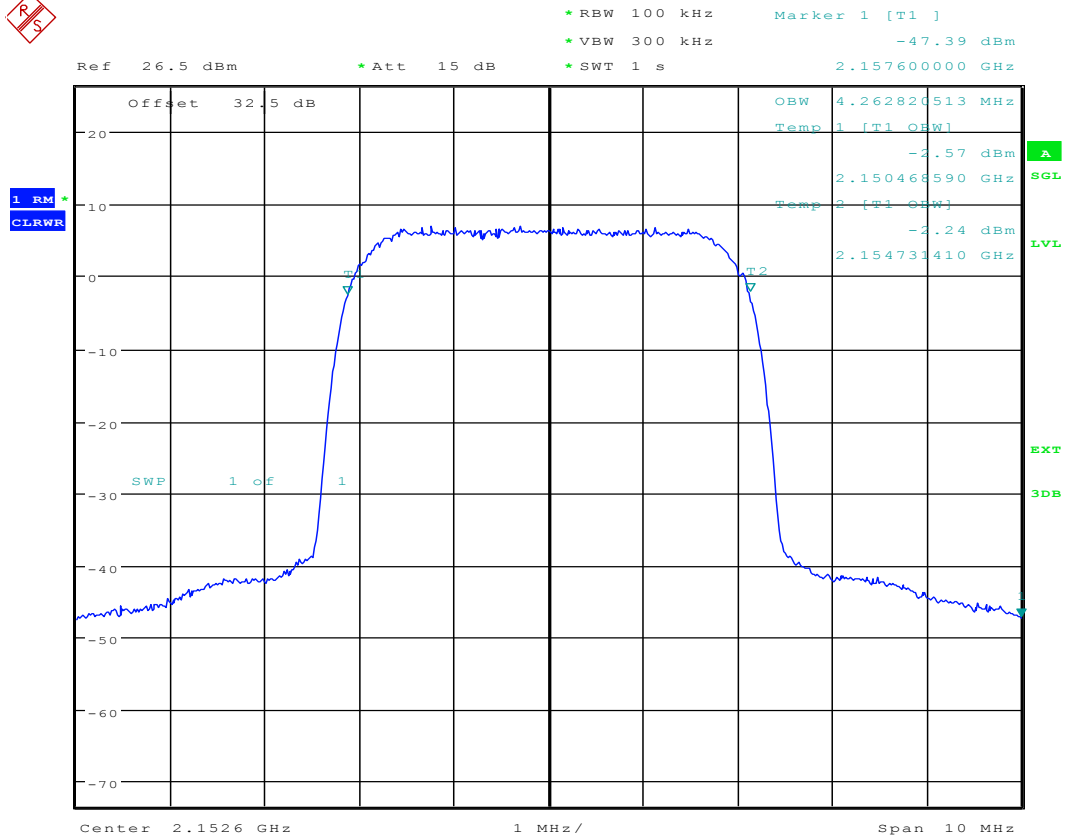
2.10.3 NV, +50°C



Date: 20.MAY.2016 00:39:46



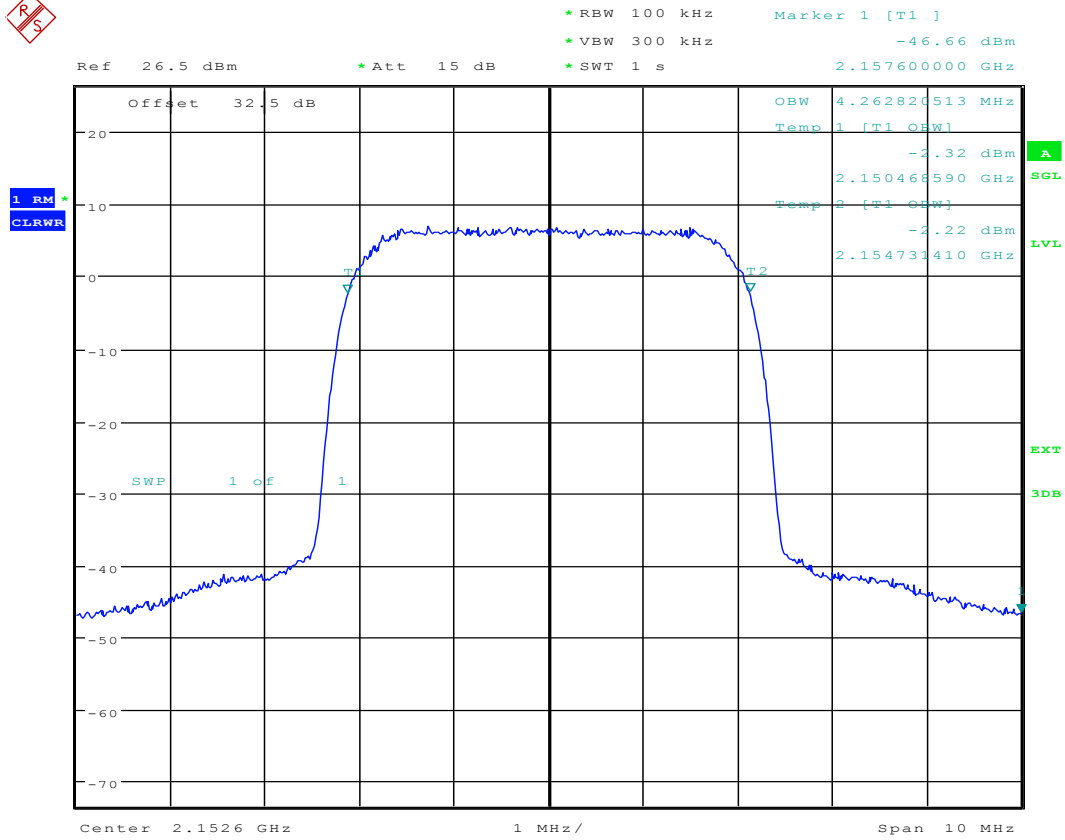
2.10.4 +20°C, -15%*NV



Date: 19.MAY.2016 19:35:54



2.10.5 +20°C, +15%*NV



Date: 19.MAY.2016 19:14:33



Appendix G: Receiver Spurious Emissions



1 Result Table

(Not applicable)

2 Test Plot

(Not applicable)

END