Appendix A: Transmitter Output Power

1 Result Table

1.1 Channel Power, Total

NOTE 1: If applicable, the EIRP [W] = 10 ^ ((Channel Power [dBm] + 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	19.85	Pass
1L5M _M	19.92	Pass
1L5M _T	19.97	Pass
1L10M_B	19.78	Pass
1L10M _M	19.86	Pass
1L10M_T	19.93	Pass
1L15M_B	19.80	Pass
1L15M _M	19.89	Pass
1L15M_T	19.95	Pass
1L20M_B	19.82	Pass
1L20M _M	19.90	Pass
1L20M_T	19.94	Pass
1U_B	22.98	Pass
1U_M	22.85	Pass
1U_T	22.97	Pass
2U_B	19.98,19.91	Pass
2U_M	19.95,19.97	Pass
2U_T	19.91,19.89	Pass
1U1L5M_B	16.96,16.92	Pass
1U1L5M_M	16.94,16.93	Pass
1U1L5M_T	16.95,16.88	Pass
1U1L10M_B	16.94,16.89	Pass
1U1L10M_M	16.89,16.90	Pass
1U1L10M_T	16.96,16.88	Pass
1U1L15M_B	16.95,16.87	Pass
1U1L15M_M	16.90,16.92	Pass
1U1L15M_T	16.91,16.93	Pass

1.2 Power Spectral Density

NOTE 1: If applicable, the EIRP [W/MHz] = 10 ^ ((Power Spectral Density [dBm/MHz] + 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	13.83	Pass
1L5M _M	13.85	Pass
1L5M _T	14.02	Pass
1U_B	14.68	Pass
1U_M	14.46	Pass
1U_T	14.57	Pass

1.3 Peak-to-Average Ratio

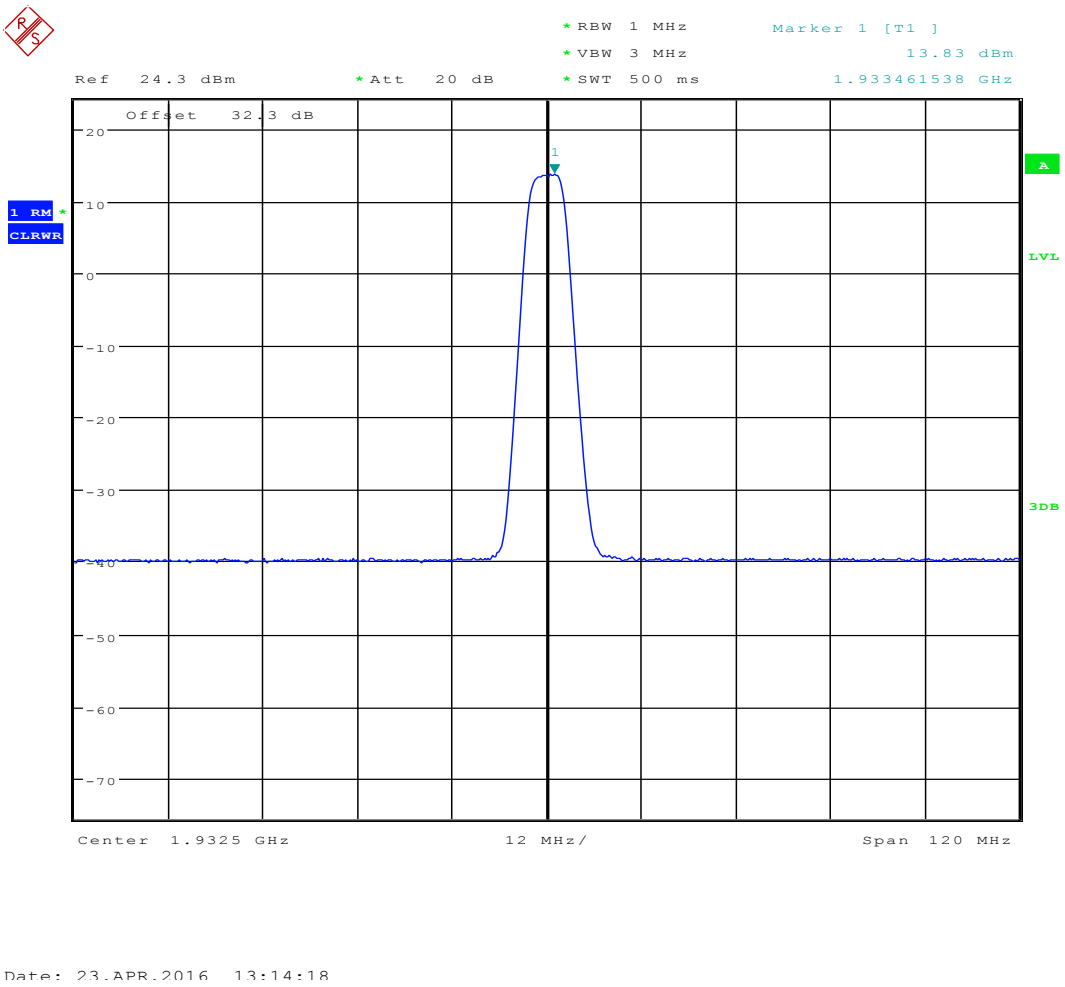
EUT Conf.	Peak-to-Average Ratio [dB]	Verdict
1L5M_B	8.46	Pass
1L5M _M	8.56	Pass
1L5M _T	8.46	Pass
1L20M_B	8.53	Pass
1L20M _M	8.56	Pass
1L20M _T	8.59	Pass
1U_B	7.98	Pass
1U_M	7.88	Pass
1U_T	7.92	Pass

2 Test Plot

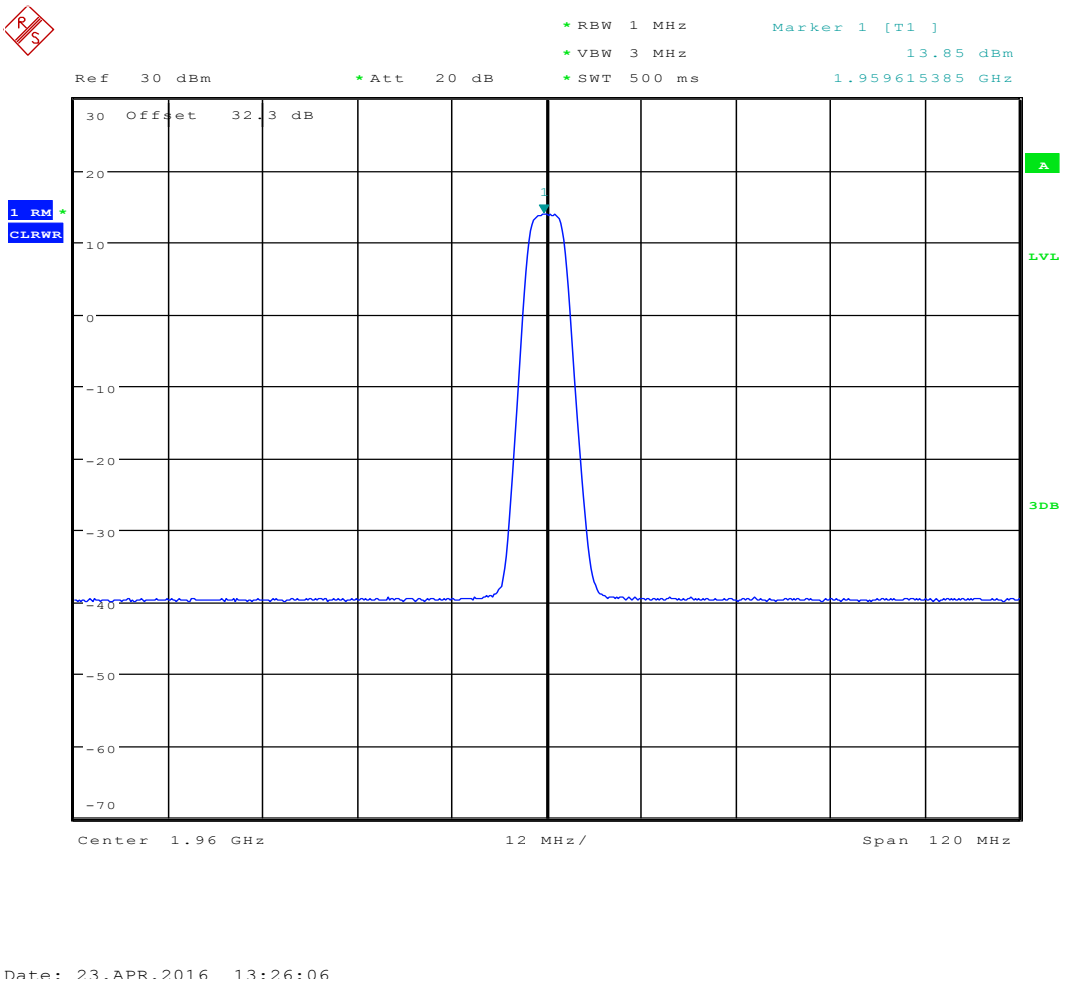
NOTE: Only the test plots for the measurements of Spectral Density and Peak-to-Average Ratio are supplied.

2.1 Power Spectral Density

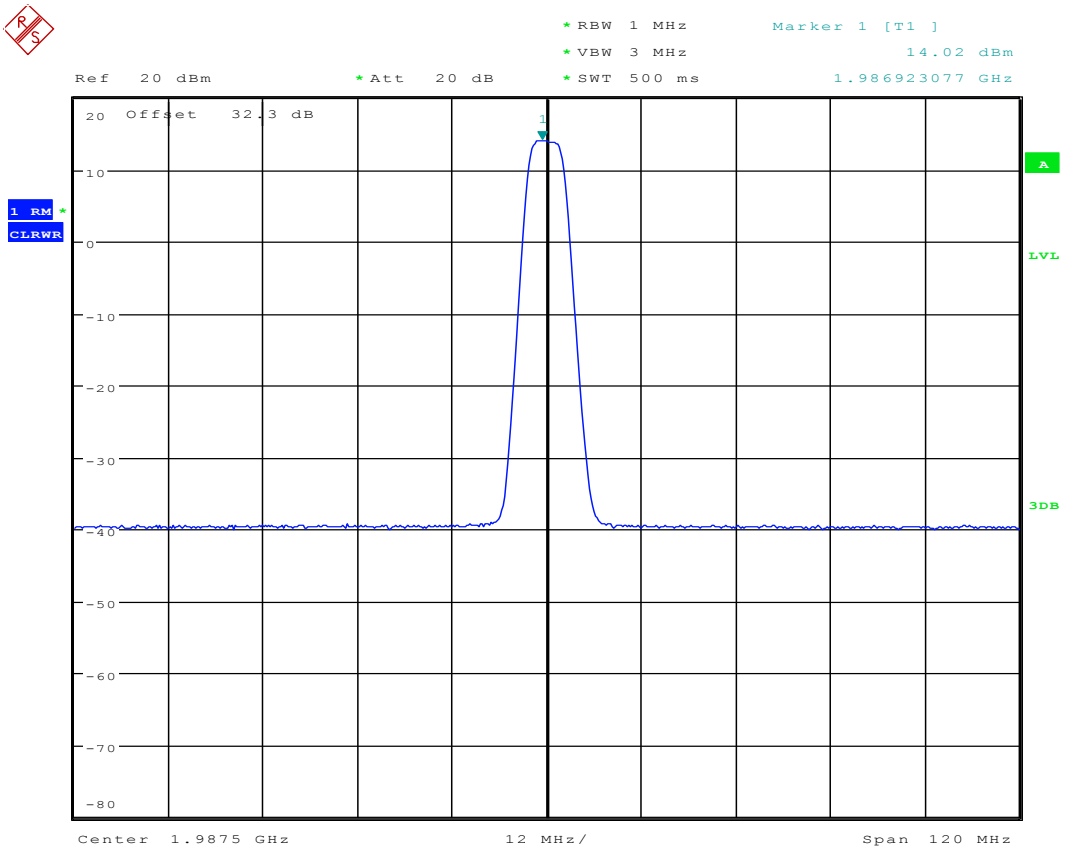
2.1.1 1L5M_B



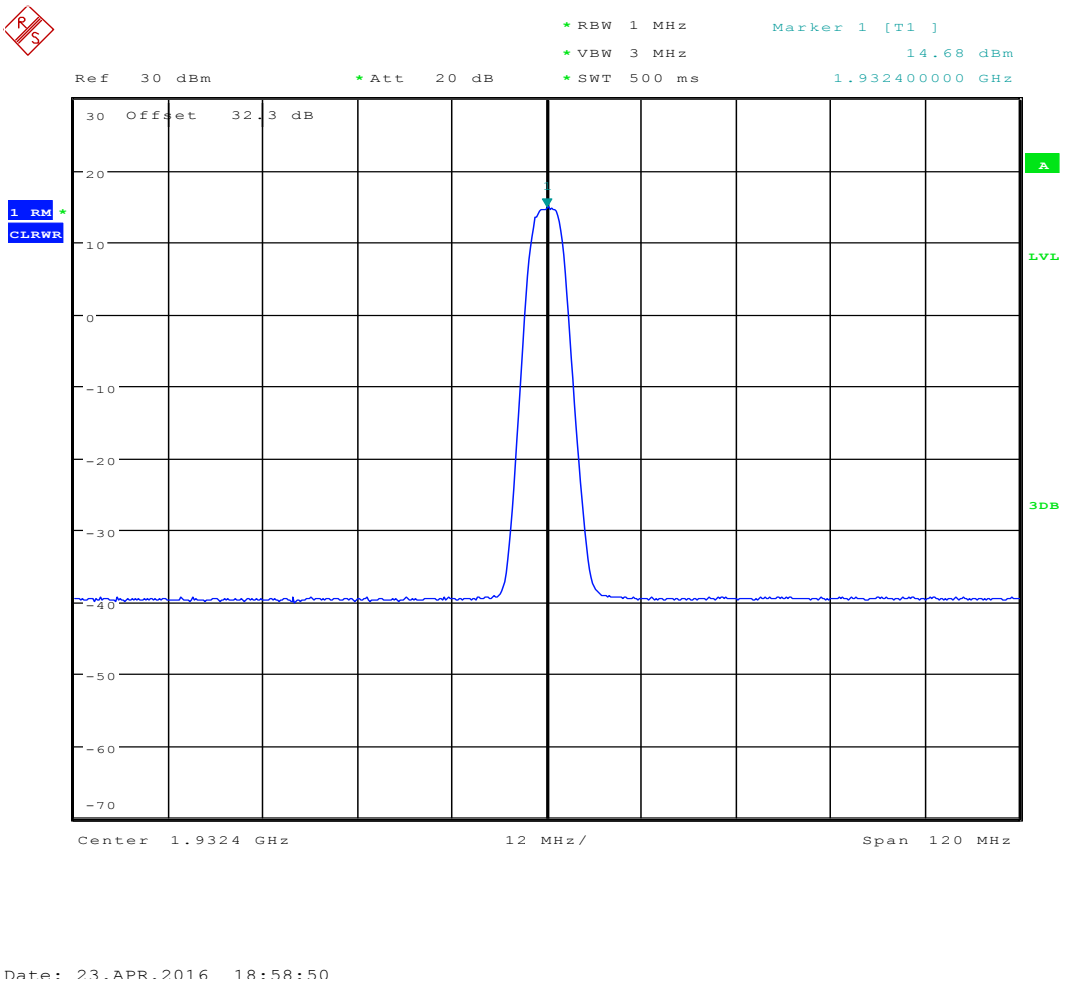
2.1.2 1L5M_M



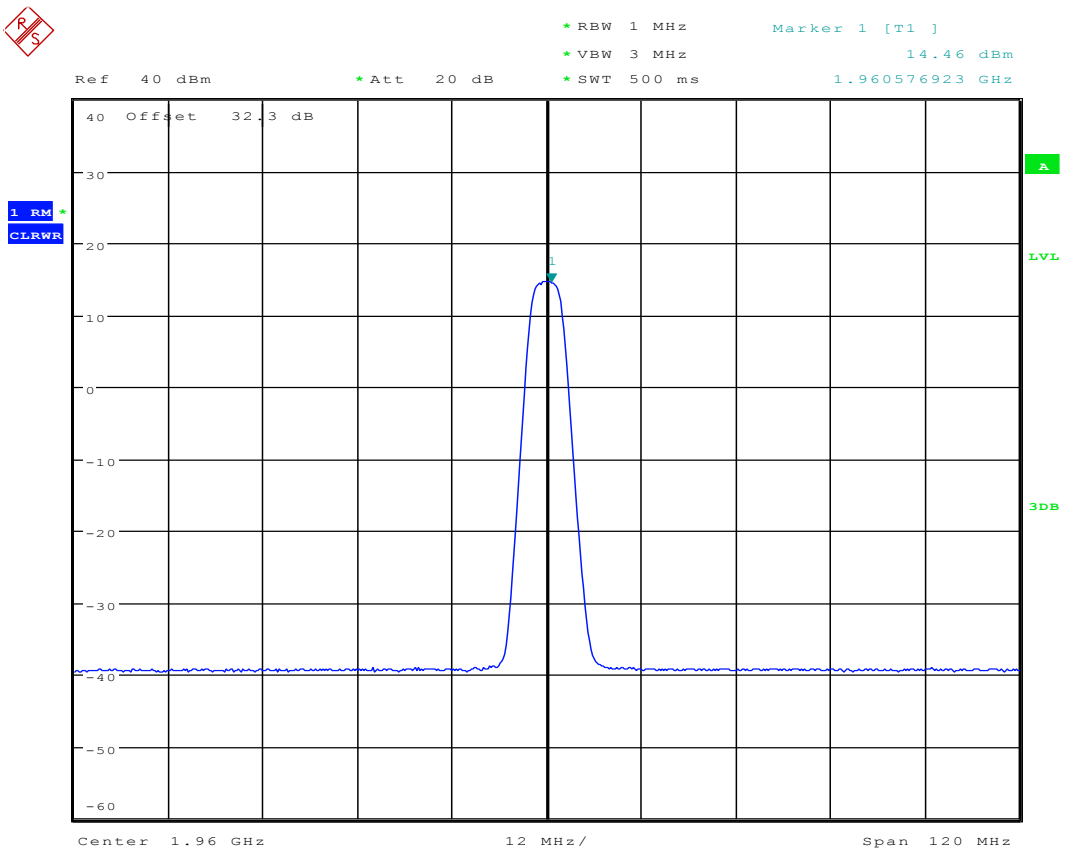
2.1.3 1L5M_T



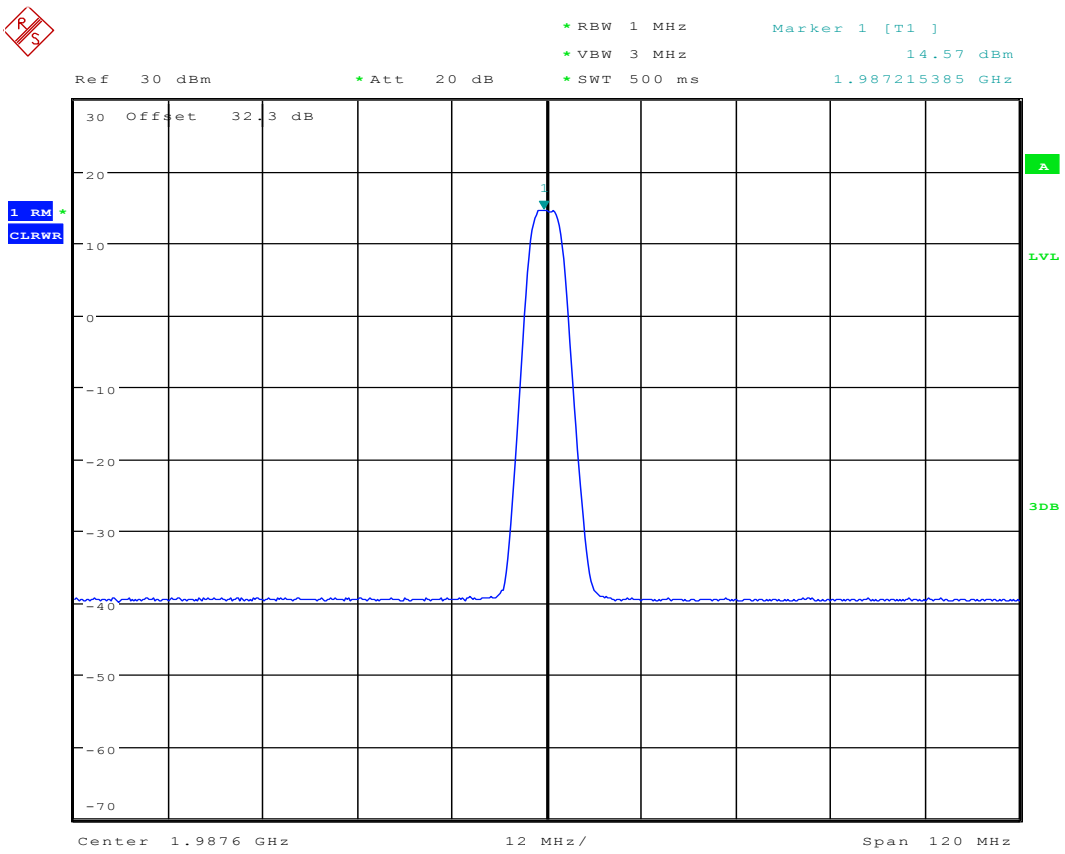
2.1.4 1U_B



2.1.5 1U_M



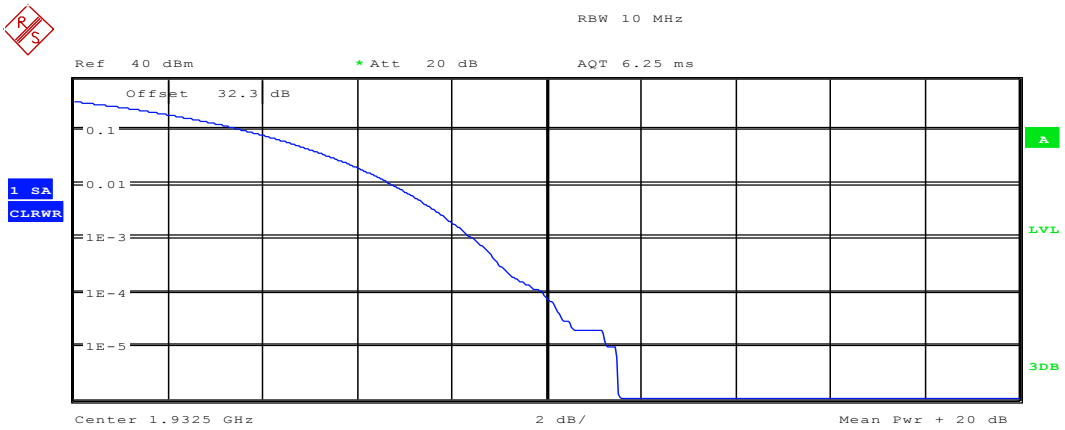
2.1.6 1U_T



Date: 23.APR.2016 19:09:35

2.2 Peak-to-Average Ratio

2.2.1 1L5M_B

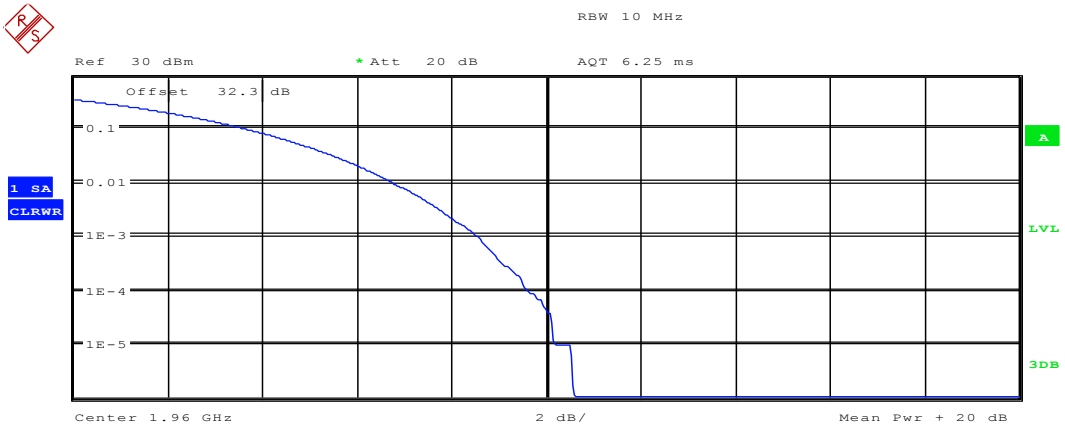


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	19.61 dBm
Peak	31.14 dBm
Crest	11.53 dB
10 %	3.72 dB
1 %	6.76 dB
.1 %	8.46 dB
.01 %	9.90 dB

Date: 23.APR.2016 13:14:57

2.2.2 1L5M _M

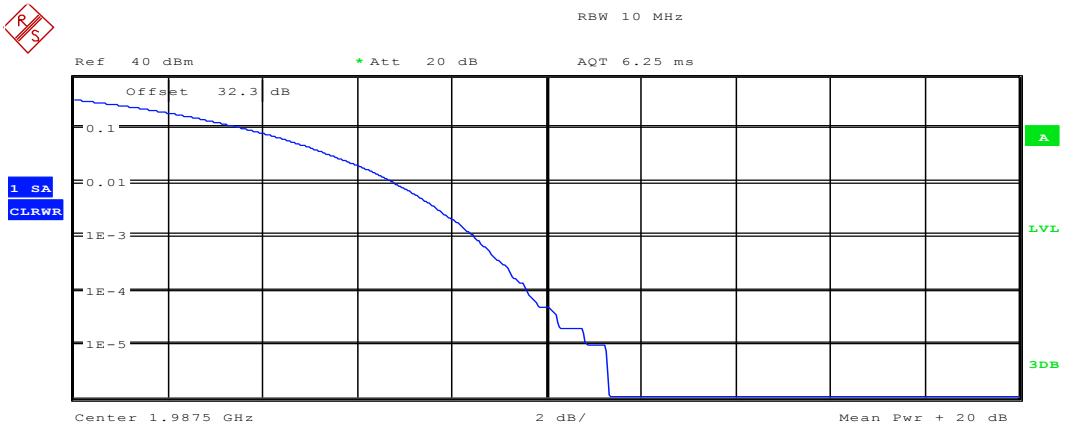


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	19.73 dBm
Peak	30.31 dBm
Crest	10.57 dB
10 %	3.72 dB
1 %	6.76 dB
.1 %	8.56 dB
.01 %	9.62 dB

Date: 23.APR.2016 13:26:23

2.2.3 1L5M _T

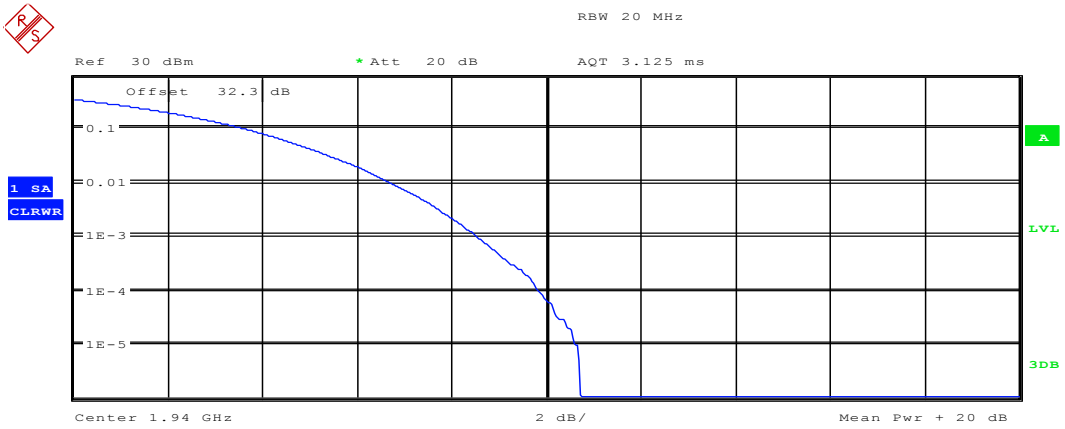


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	19.81 dBm
Peak	31.13 dBm
Crest	11.32 dB
10 %	3.72 dB
1 %	6.79 dB
.1 %	8.46 dB
.01 %	9.58 dB

Date: 23.APR.2016 13:53:21

2.2.4 1L20M _B

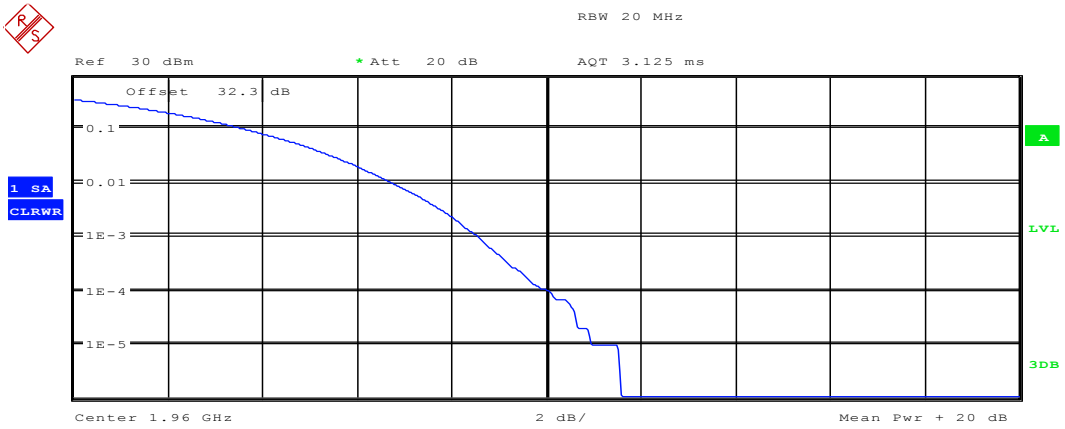


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	19.67 dBm
Peak	30.39 dBm
Crest	10.72 dB
10 %	3.69 dB
1 %	6.73 dB
.1 %	8.53 dB
.01 %	9.84 dB

Date: 23.APR.2016 18:21:51

2.2.5 1L20M _M

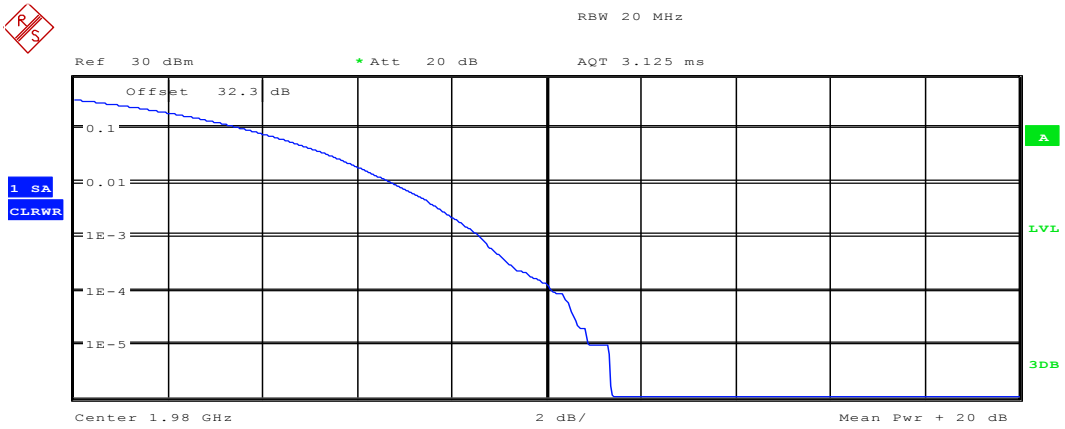


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	19.59 dBm
Peak	31.16 dBm
Crest	11.57 dB
10 %	3.69 dB
1 %	6.73 dB
.1 %	8.56 dB
.01 %	10.03 dB

Date: 23.APR.2016 18:29:18

2.2.6 1L20M _T

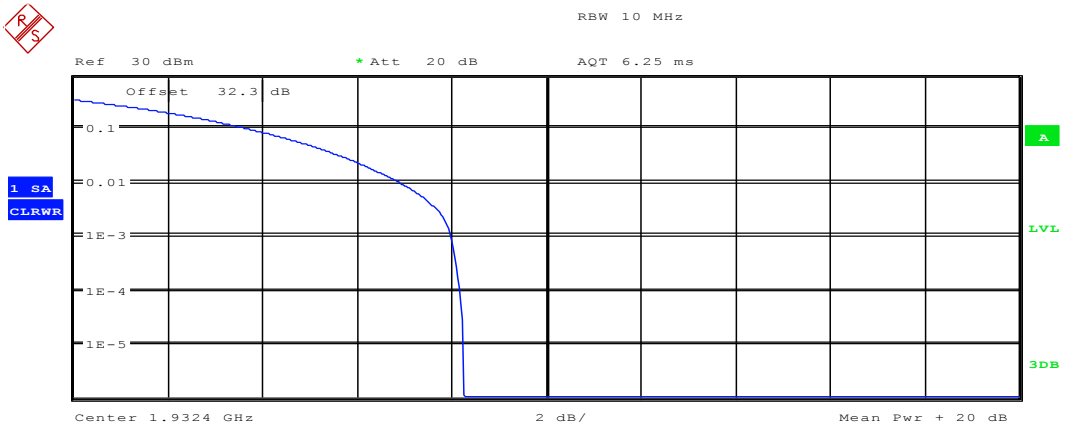


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	19.72 dBm
Peak	31.09 dBm
Crest	11.37 dB
10 %	3.65 dB
1 %	6.76 dB
.1 %	8.59 dB
.01 %	10.13 dB

Date: 23.APR.2016 18:33:22

2.2.7 1U_B

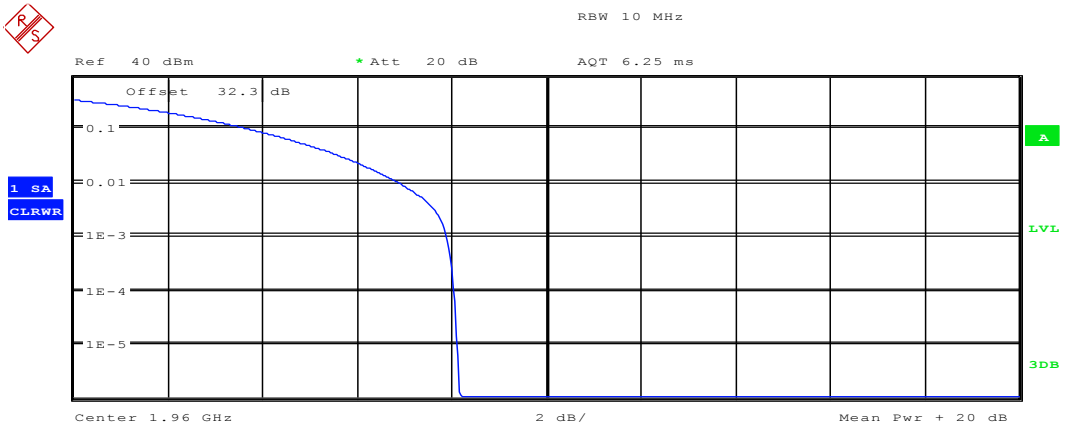


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	19.90 dBm
Peak	28.15 dBm
Crest	8.26 dB
10 %	3.78 dB
1 %	6.92 dB
.1 %	7.98 dB
.01 %	8.17 dB

Date: 23.APR.2016 18:59:05

2.2.8 1U_M

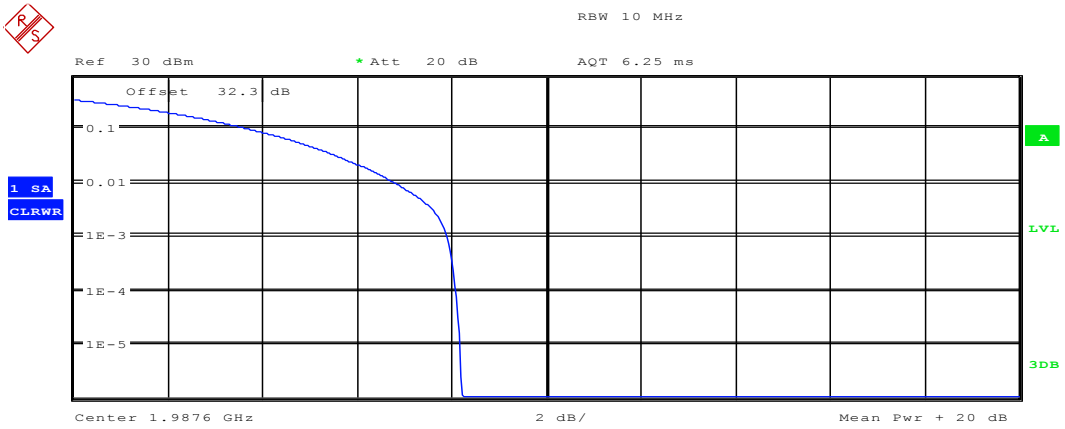


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 11.2MHz

	Trace 1
Mean	19.97 dBm
Peak	28.14 dBm
Crest	8.17 dB
10 %	3.78 dB
1 %	6.89 dB
.1 %	7.88 dB
.01 %	8.04 dB

Date: 23.APR.2016 19:05:13

2.2.9 1U_T



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

	Trace 1
Mean	19.88 dBm
Peak	28.08 dBm
Crest	8.20 dB
10 %	3.75 dB
1 %	6.83 dB
.1 %	7.92 dB
.01 %	8.08 dB

Date: 23.APR.2016 19:09:52

Appendix B: Bandwidth

1 Result Table

1.1 Occupied Bandwidth

EUT Conf.	Occupied Bandwidth [MHz]	Verdict
1L5M_B	4.512909000	---
1L5M _M	4.512909000	---
1L5M _T	4.512909000	---
1L10M_B	8.939031288	---
1L10M _M	8.939031288	---
1L10M_T	8.939031288	---
1L15M_B	13.365153577	---
1L15M _M	13.365153577	---
1L15M_T	13.408546933	---
1L20M_B	17.791275856	---
1L20M _M	17.834669221	---
1L20M_T	17.834669221	---
1U_B	4.165762154	---
1U_M	4.165762154	---
1U_T	4.165762154	---

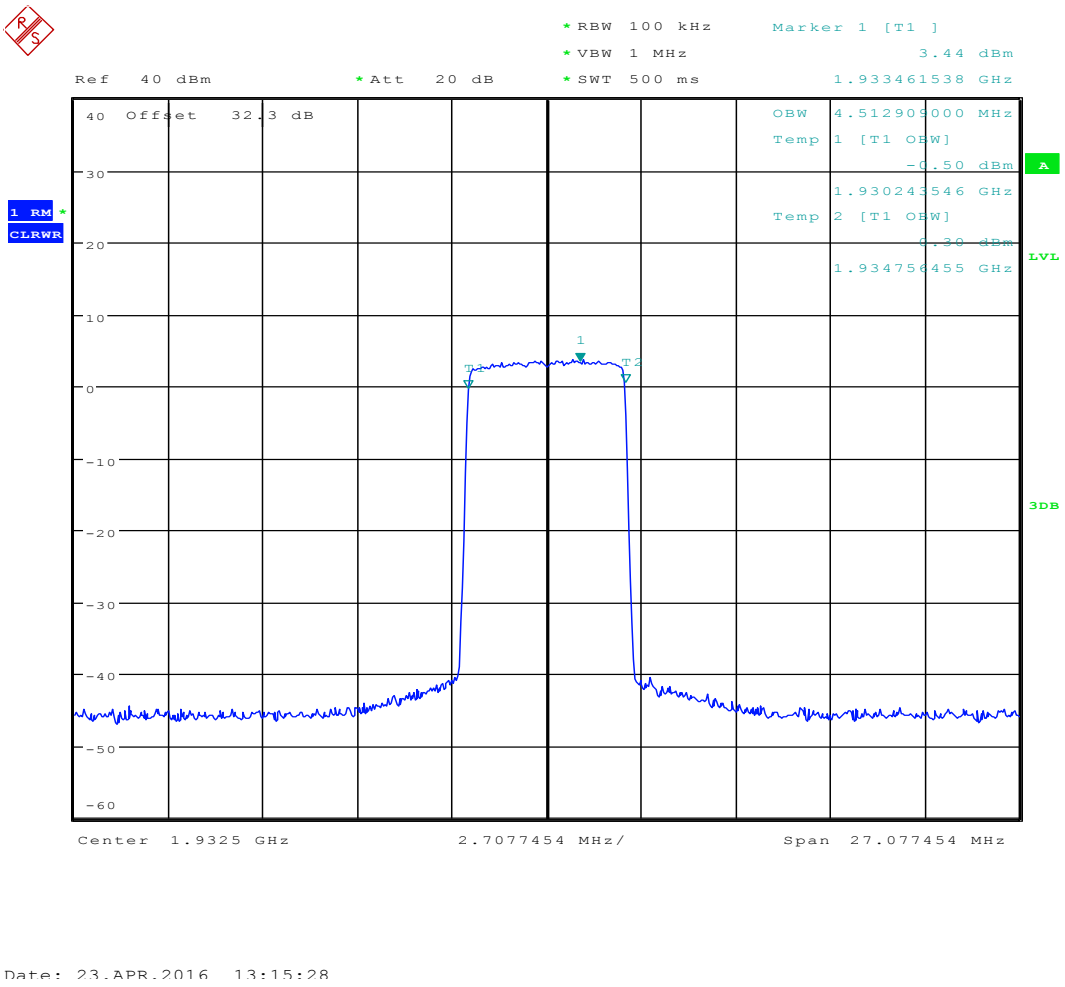
1.2 Emission Bandwidth

EUT Conf.	Emission Bandwidth, -20 dBc [MHz]	Emission Bandwidth, -26 dBc [MHz]	Verdict
1L5M_B	4.773269135	4.773269135	---
1L5M _M	4.729875779	4.773269135	---
1L5M _T	4.773269135	4.773269135	---
1L10M_B	9.286178135	9.372964846	---
1L10M _M	9.286178135	9.372964846	---
1L10M_T	9.286178135	9.372964846	---
1L15M_B	13.755693779	13.885873846	---
1L15M _M	13.799087135	13.885873846	---
1L15M_T	13.755693779	13.885873846	---
1L20M_B	18.268602779	18.355389490	---
1L20M _M	18.268602779	18.398782846	---
1L20M_T	18.268602779	18.355389490	---
1U_B	4.599695712	4.686482423	---
1U_M	4.599695712	4.686482423	---
1U_T	4.599695712	4.686482423	---

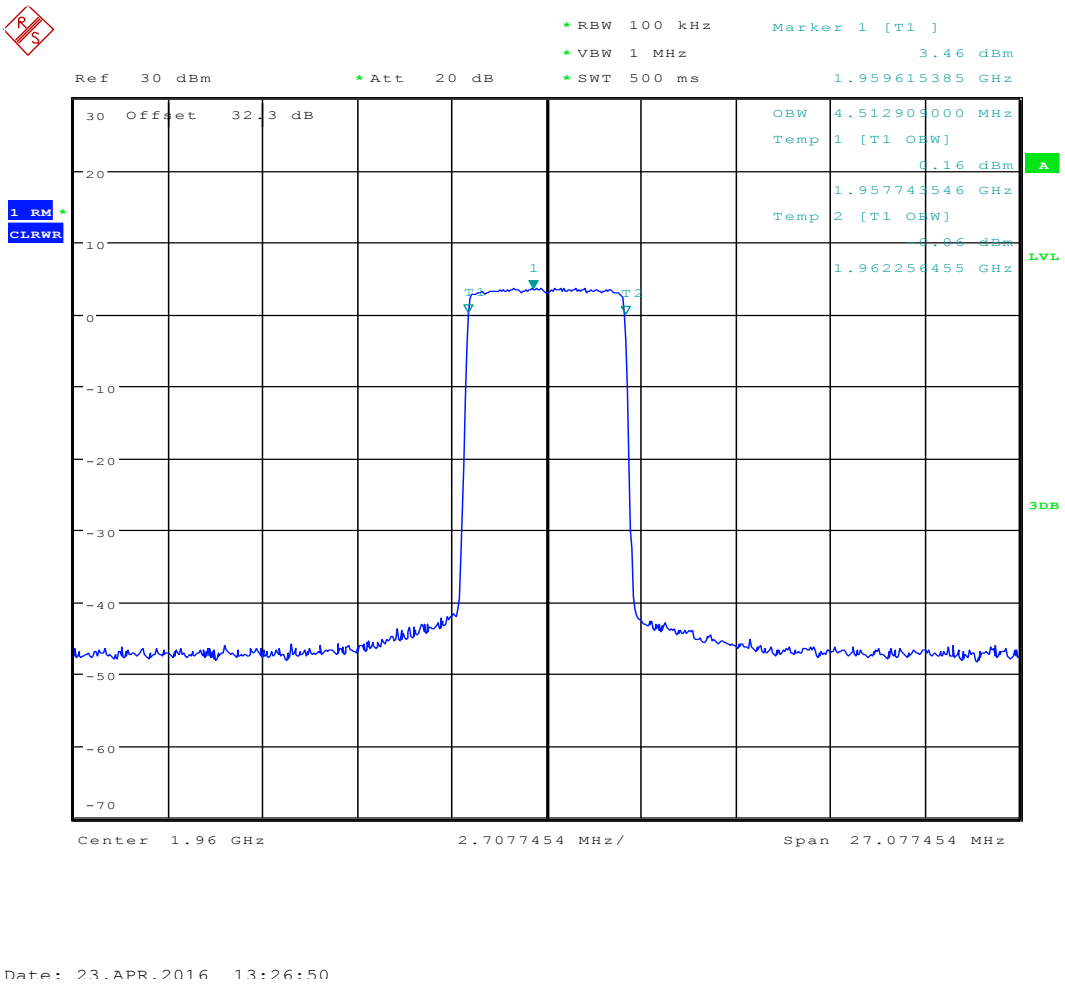
2 Test Plot

2.1 Occupied Bandwidth

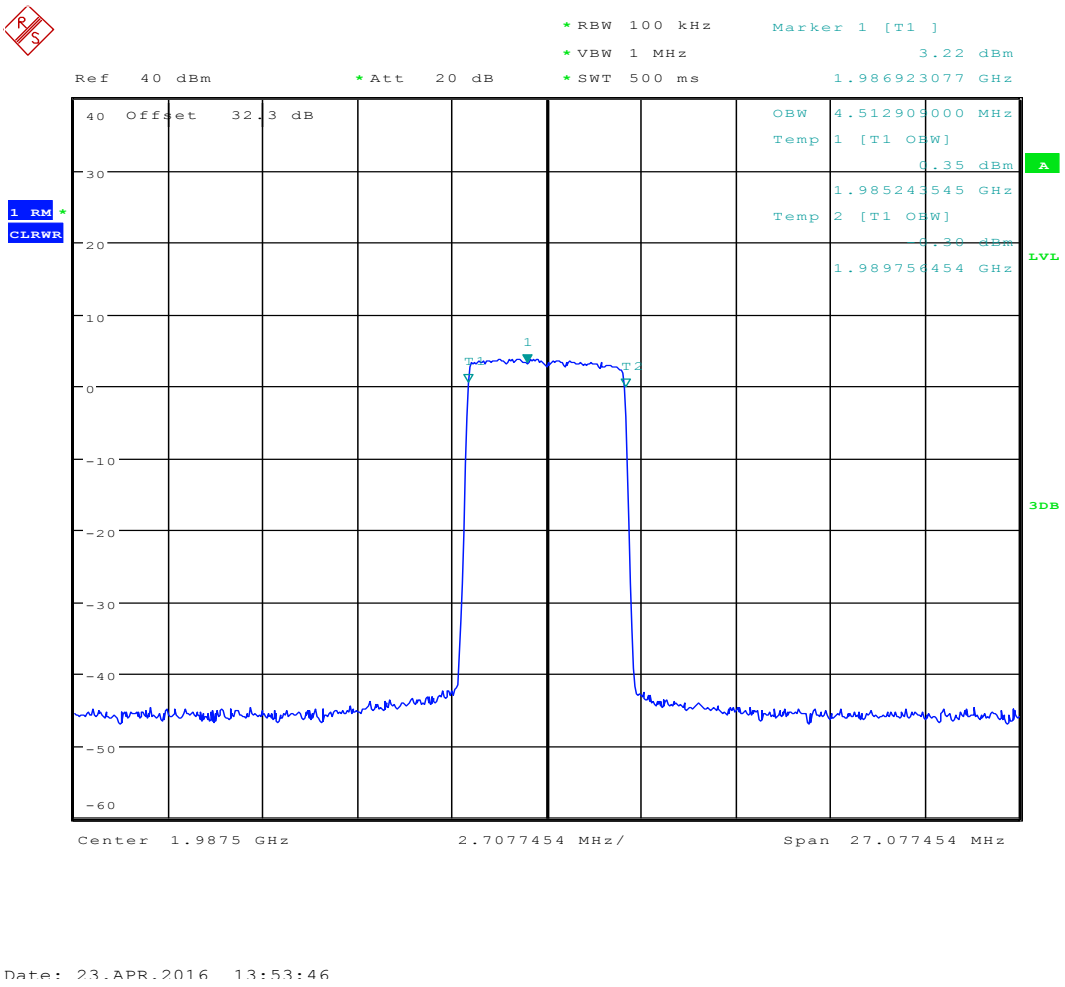
2.1.1 1L5M_B



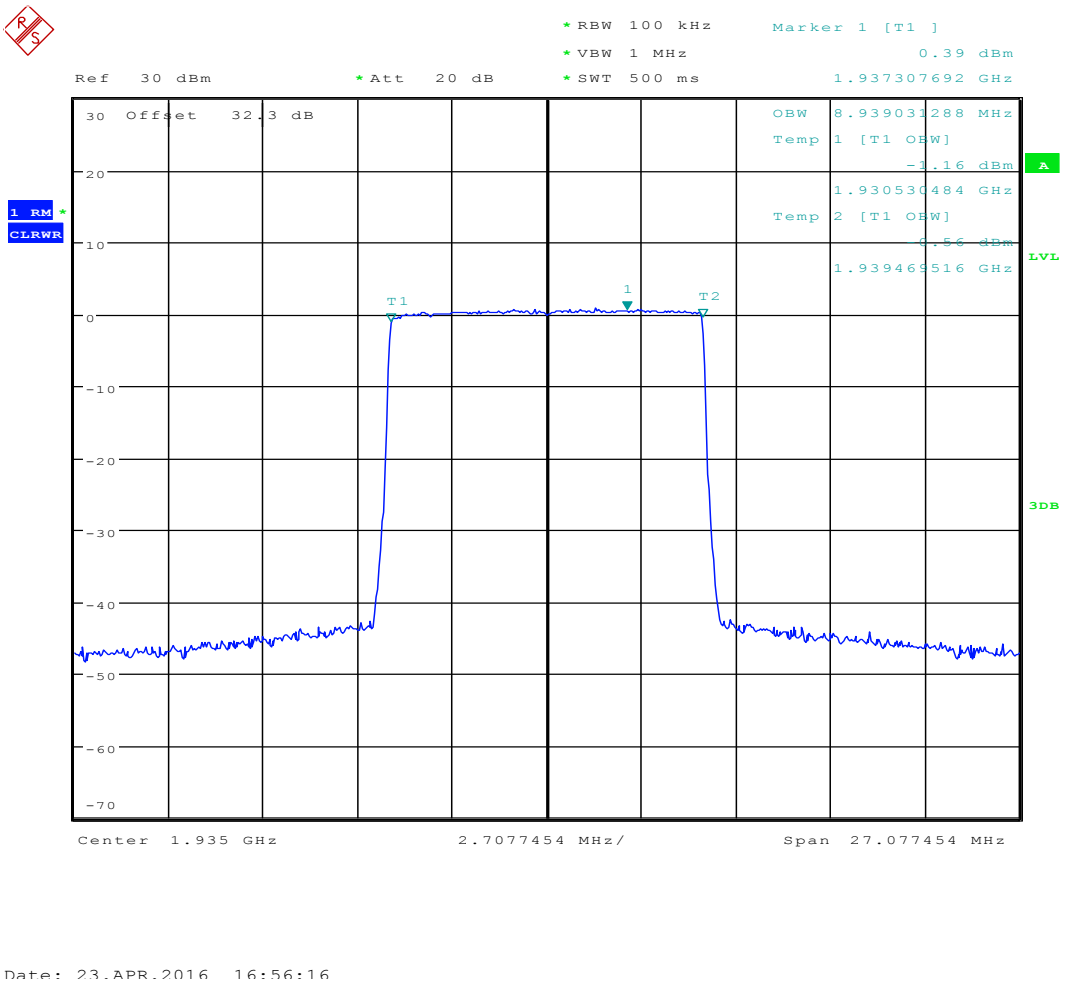
2.1.2 1L5M_M



2.1.3 1L5M_T

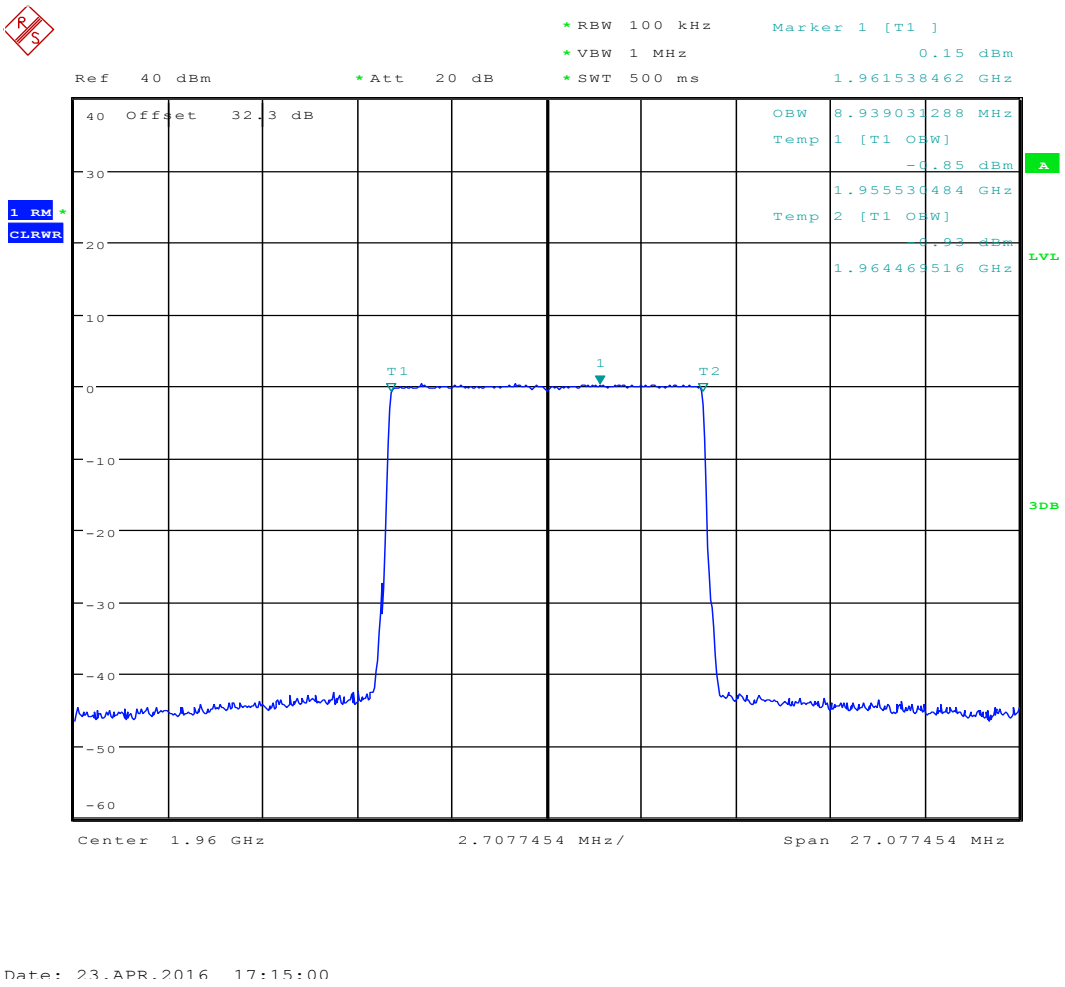


2.1.4 1L10M_B



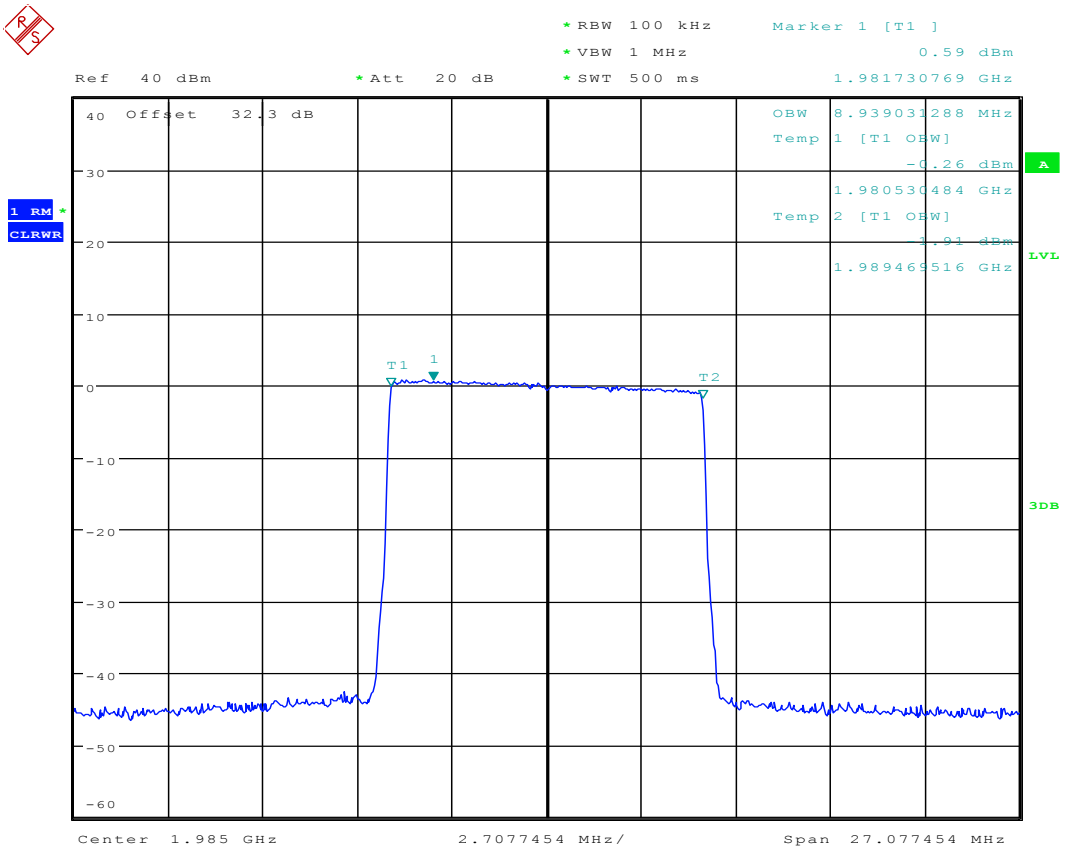
Date: 23.APR.2016 16:56:16

2.1.5 1L10M_M



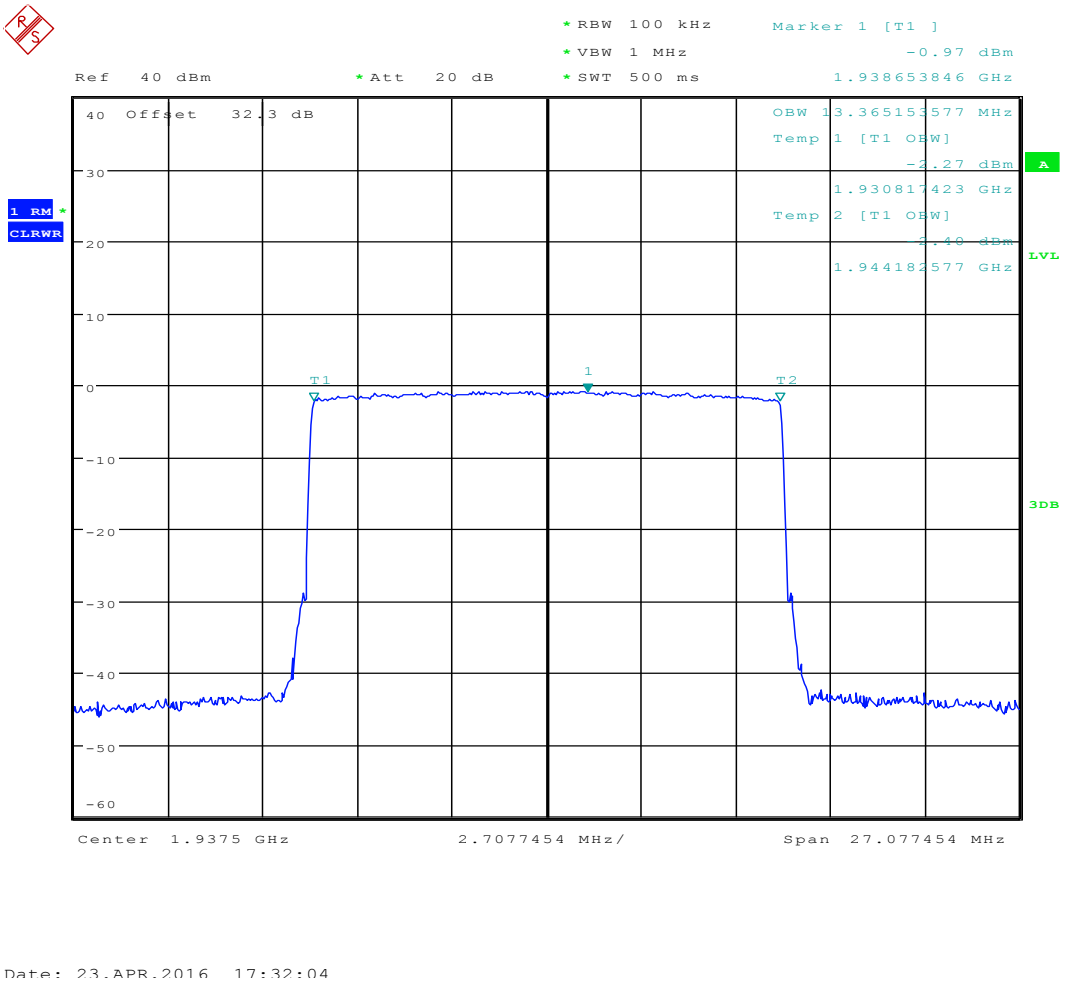
Date: 23.APR.2016 17:15:00

2.1.6 1L10M_T



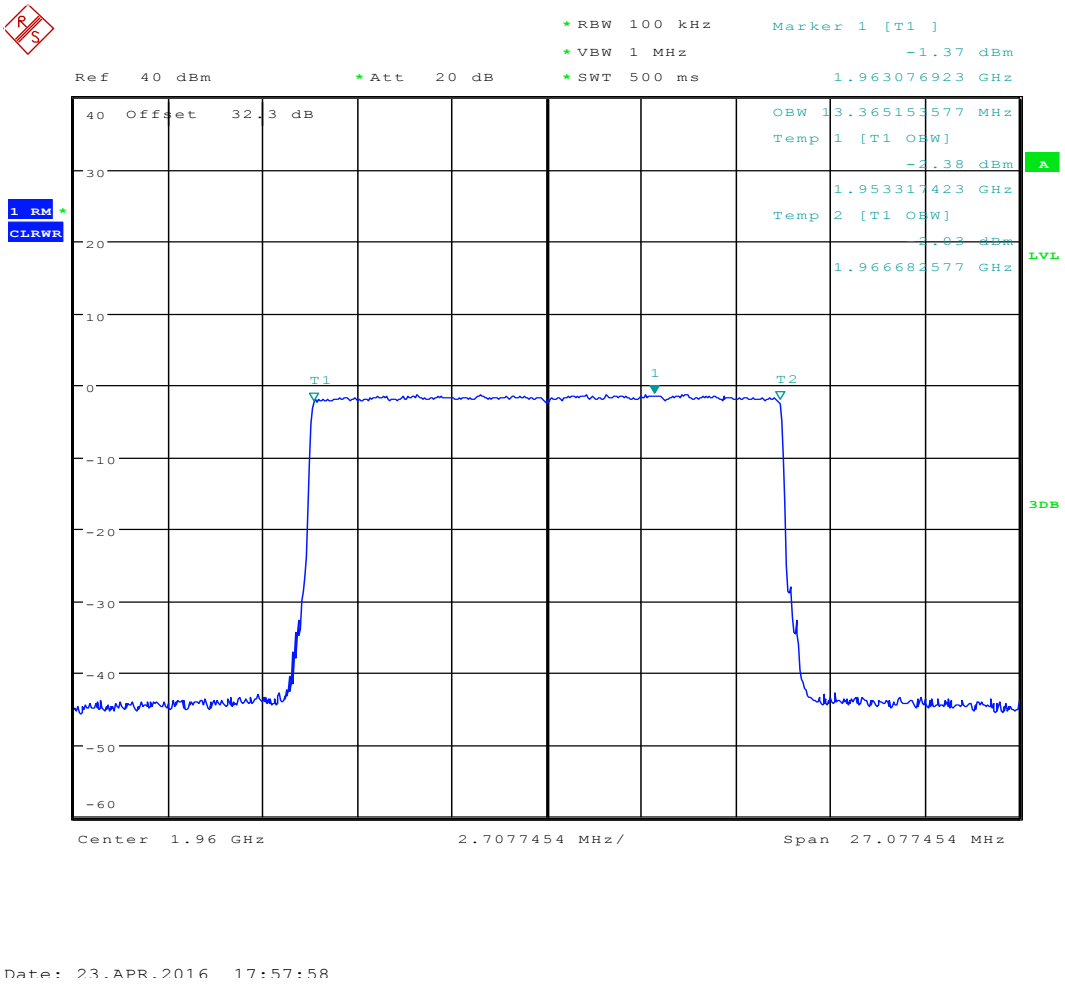
Date: 23.APR.2016 17:22:09

2.1.7 1L15M_B



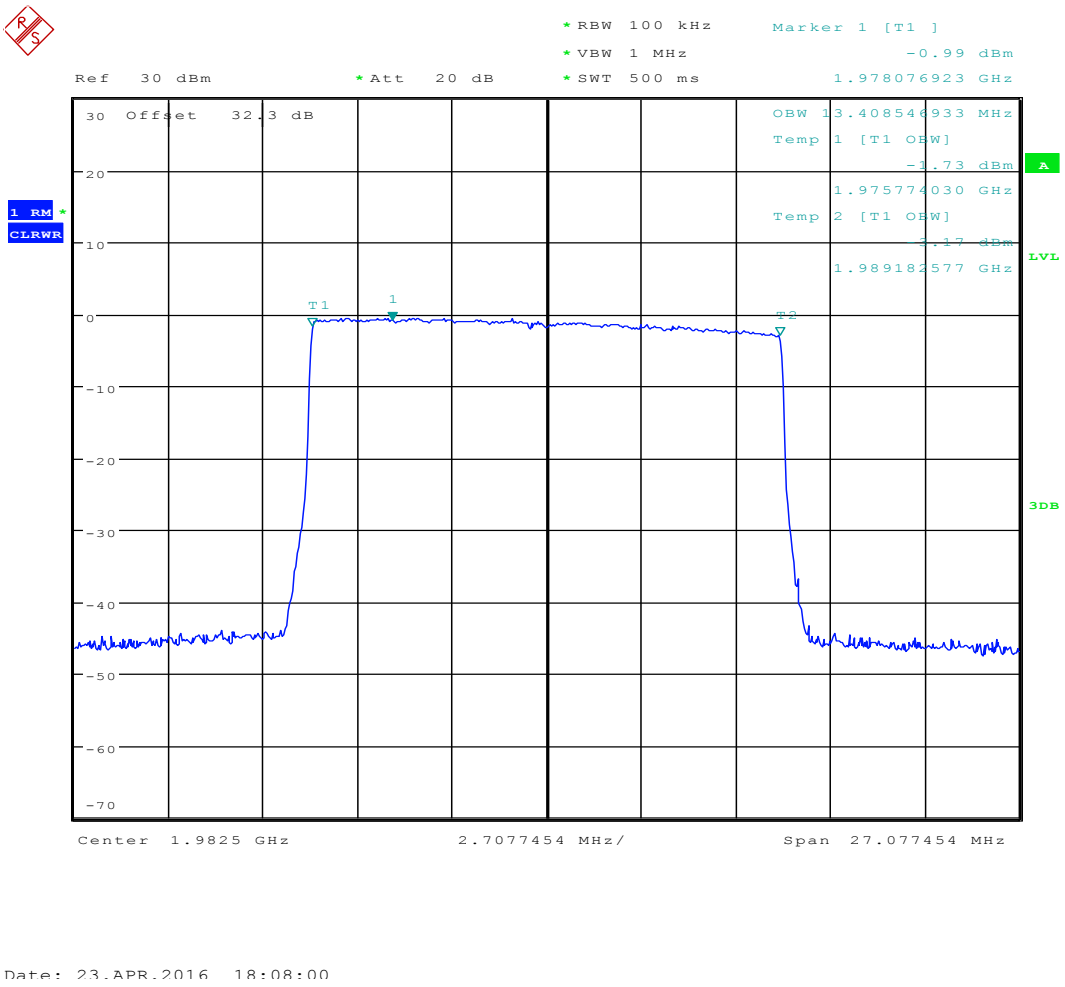
Date: 23.APR.2016 17:32:04

2.1.8 1L15M_M

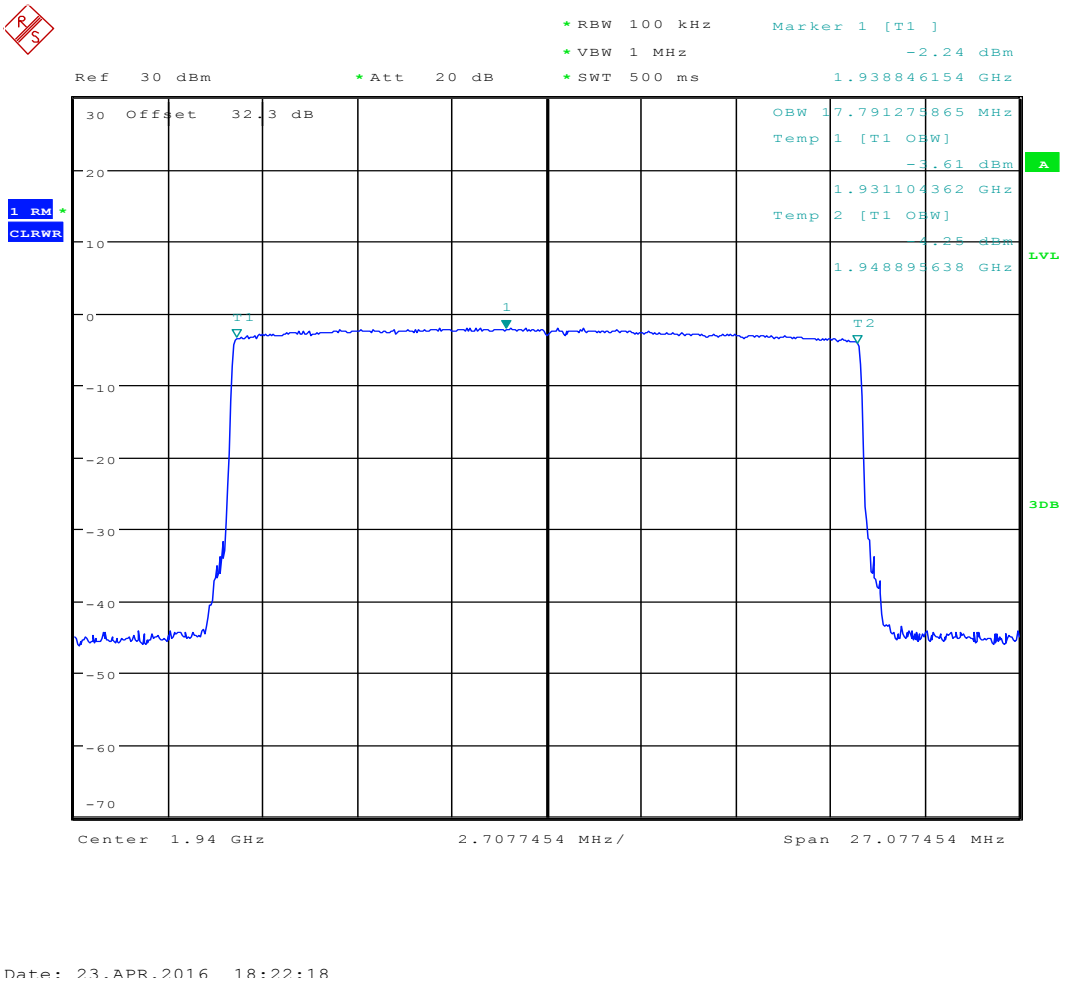


Date: 23.APR.2016 17:57:58

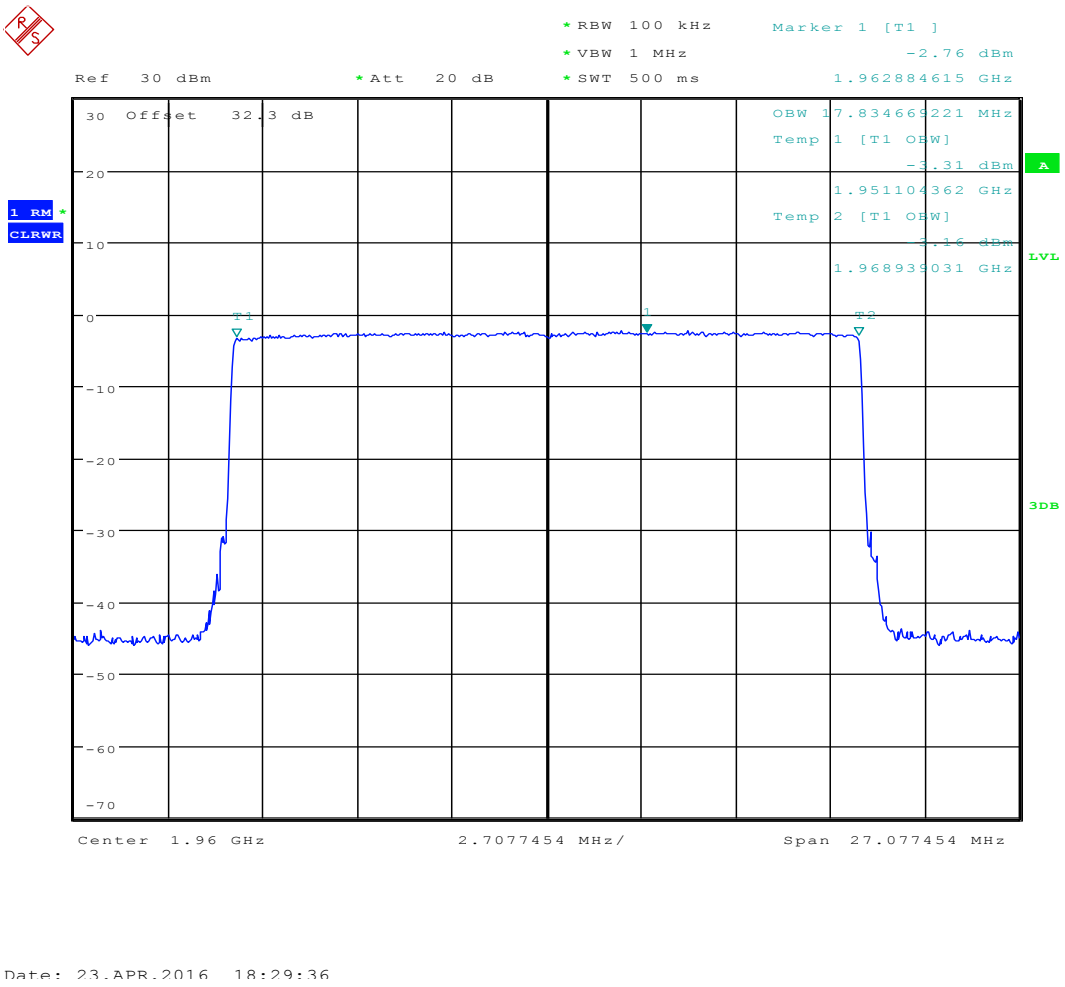
2.1.9 1L15M_T



2.1.10 1L20M_B

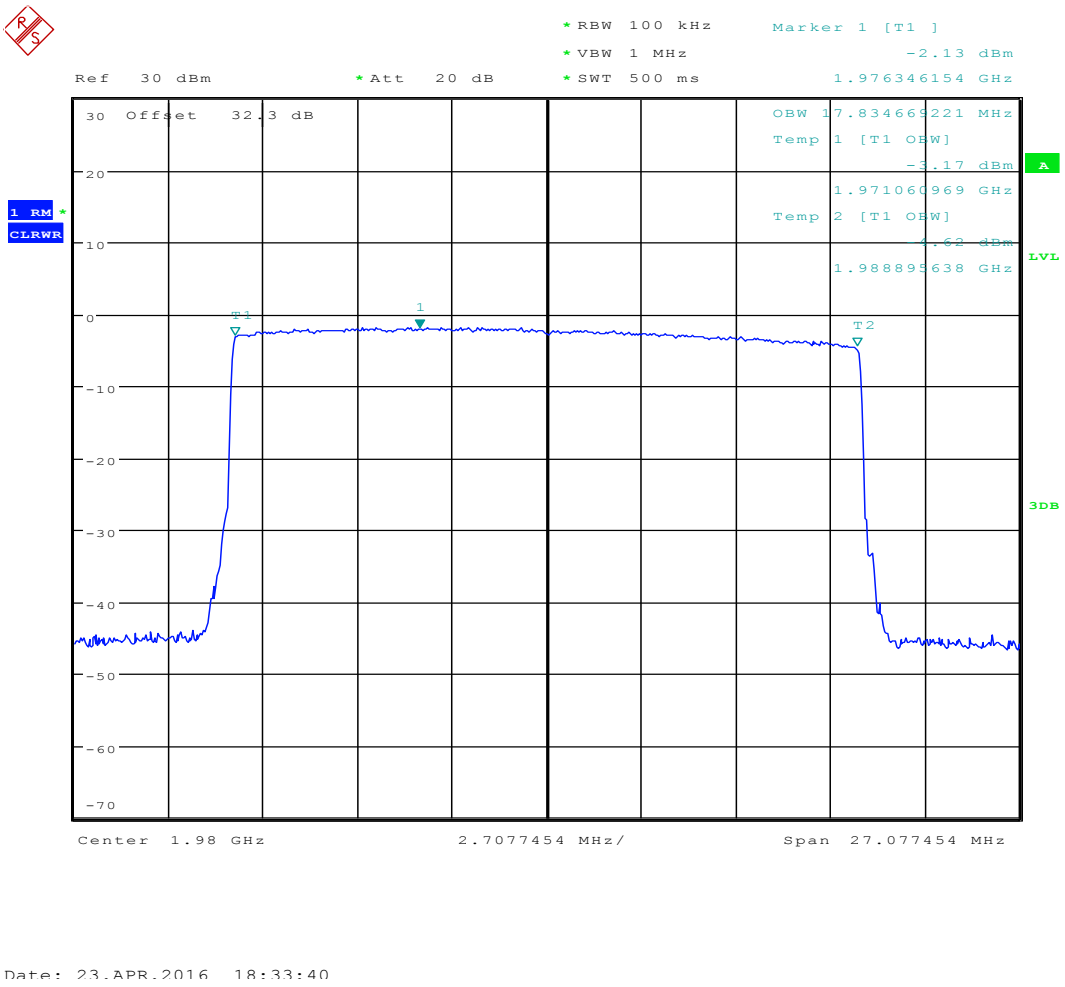


2.1.11 1L20M _M



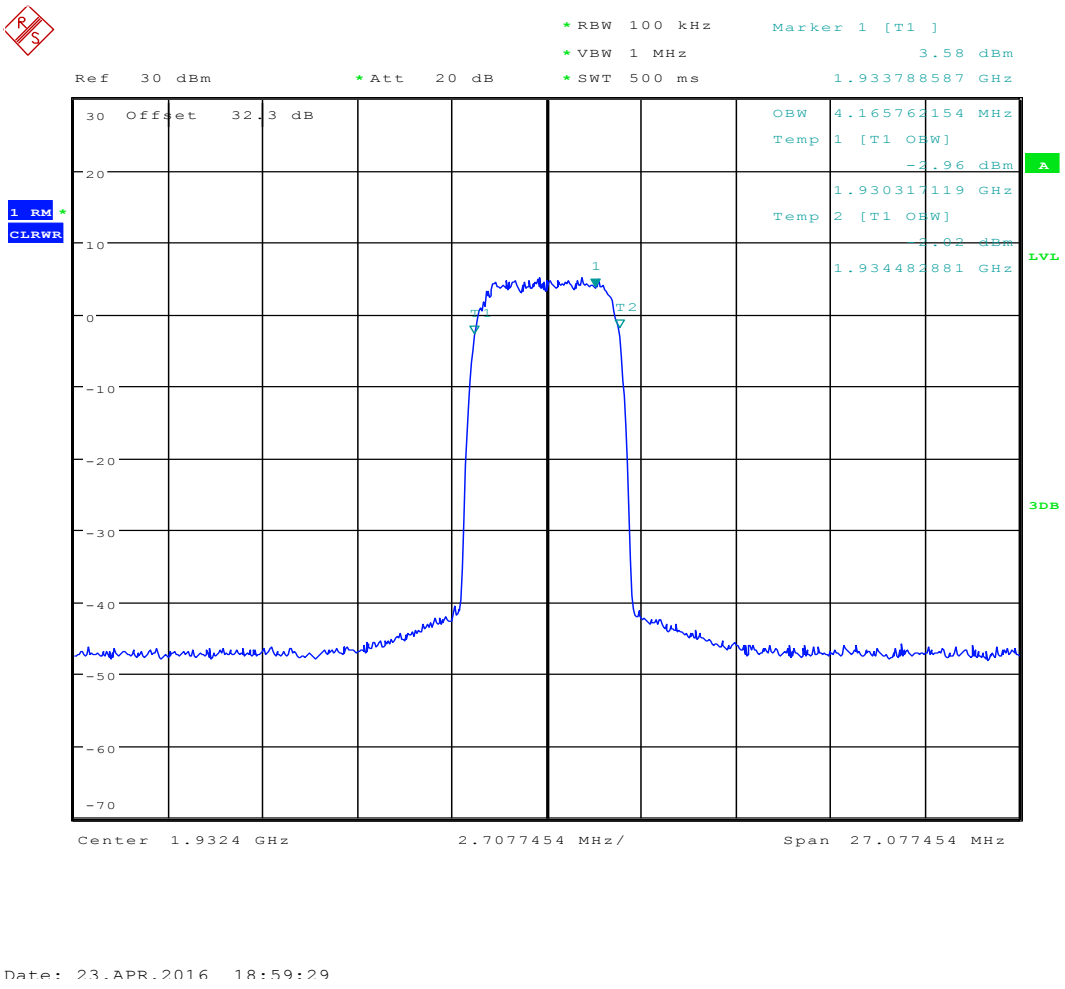
Date: 23.APR.2016 18:29:36

2.1.12 1L20M _T

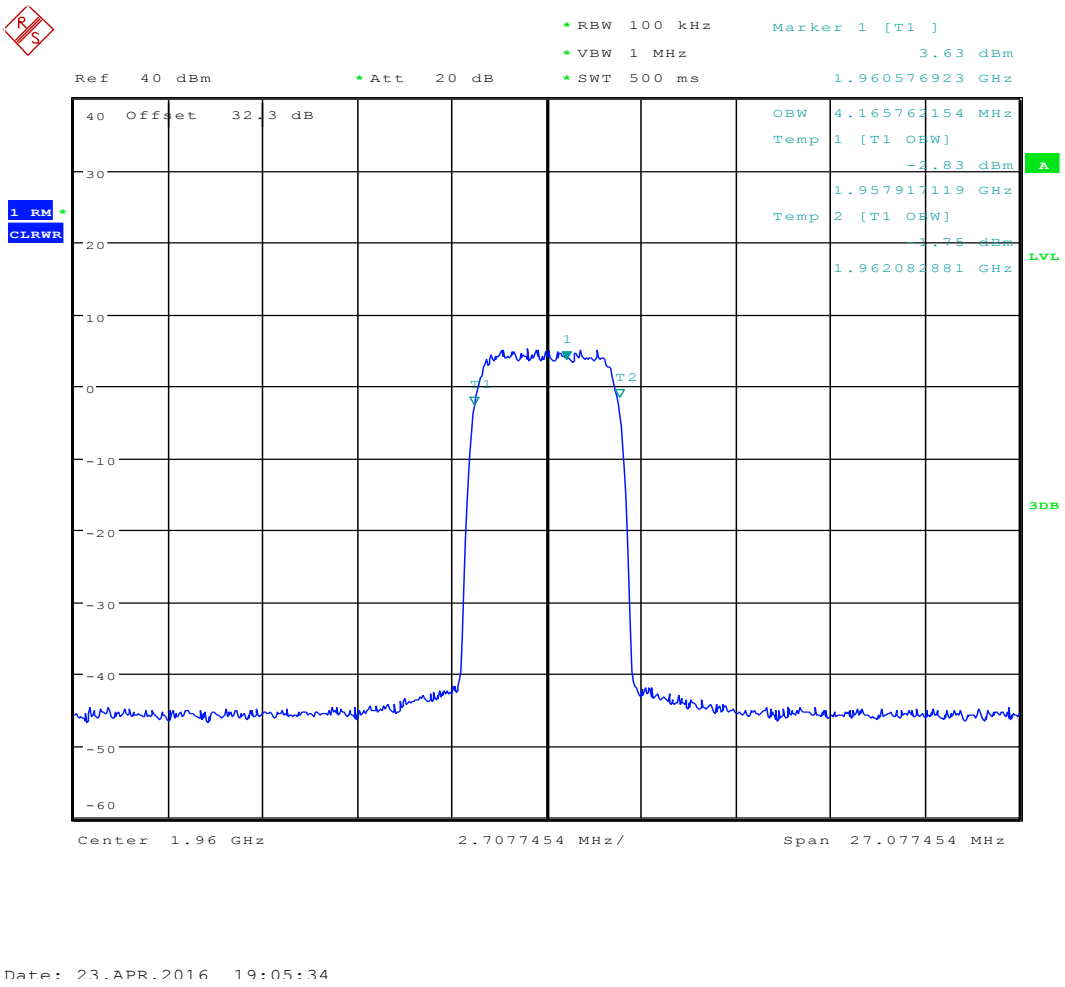


Date: 23.APR.2016 18:33:40

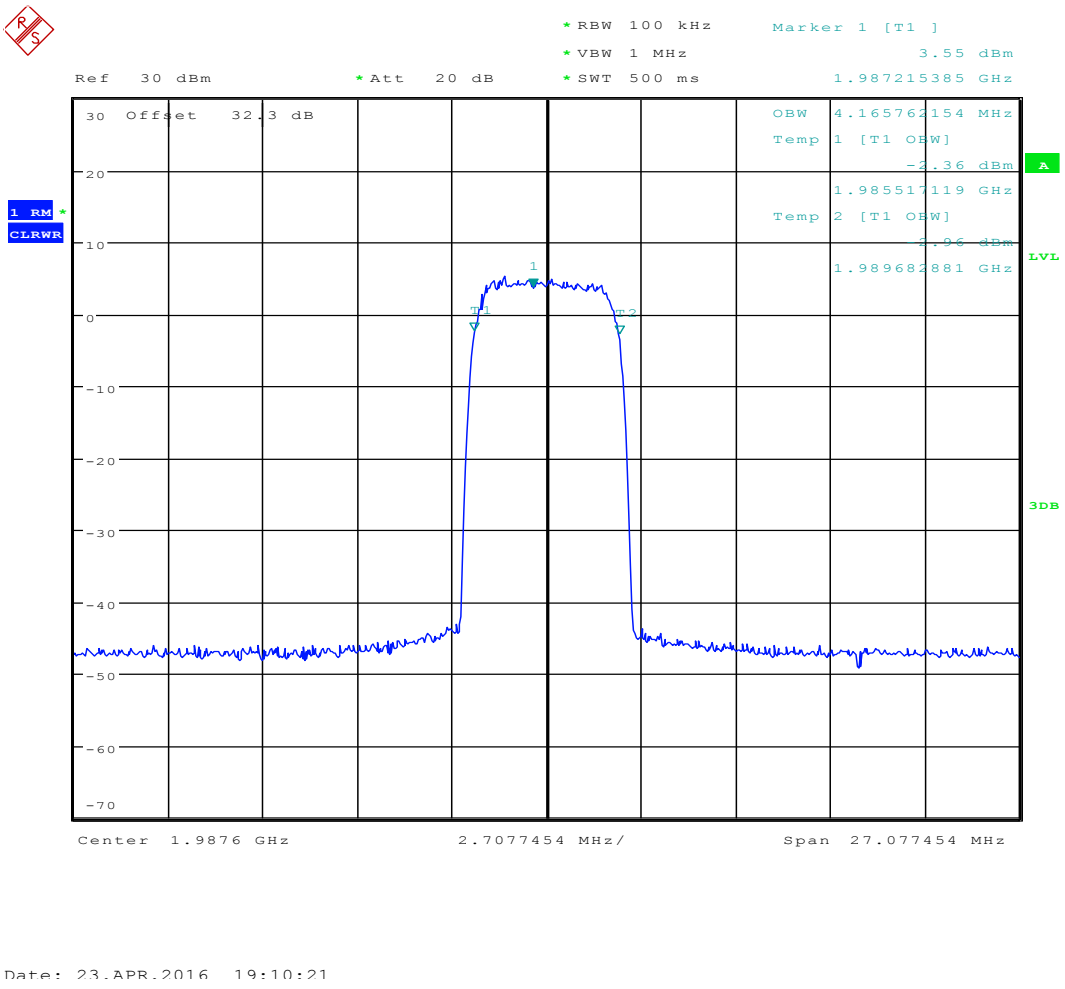
2.1.13 1U_B



2.1.14 1U_M

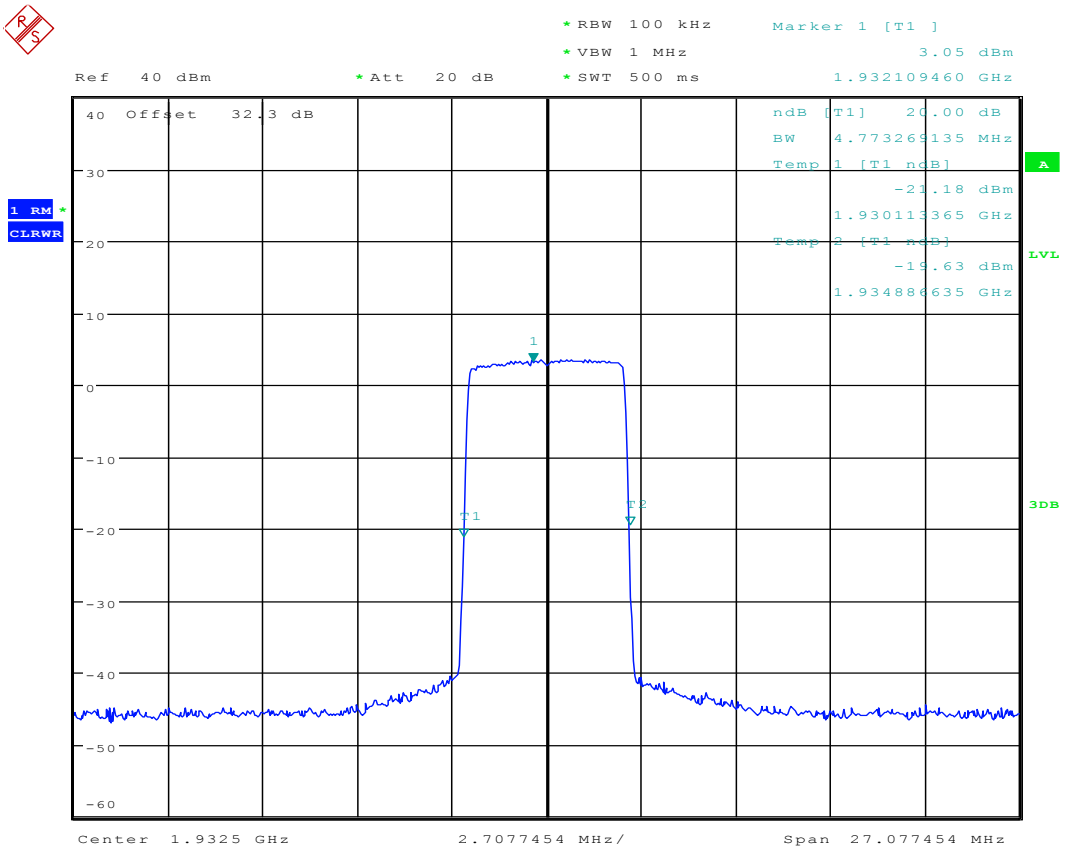


2.1.15 1U_T



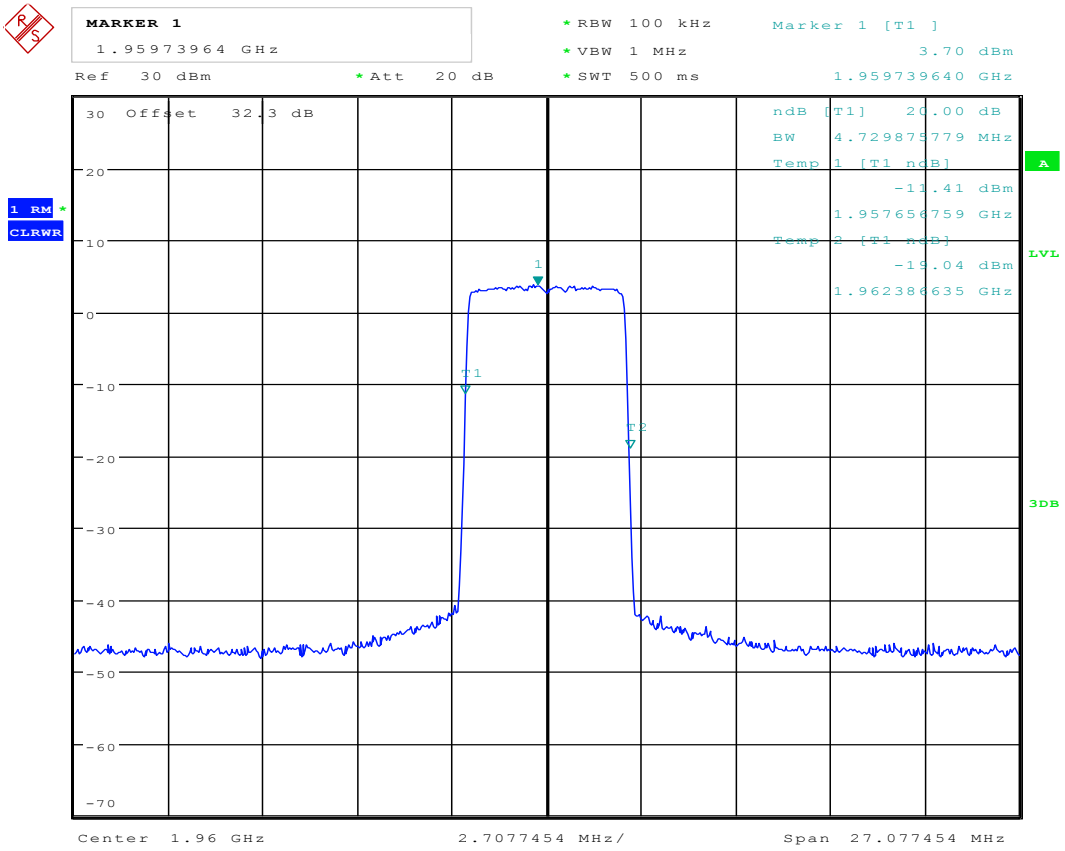
2.2 Emission Bandwidth(-20 dBc)

2.2.1 1L5M_B

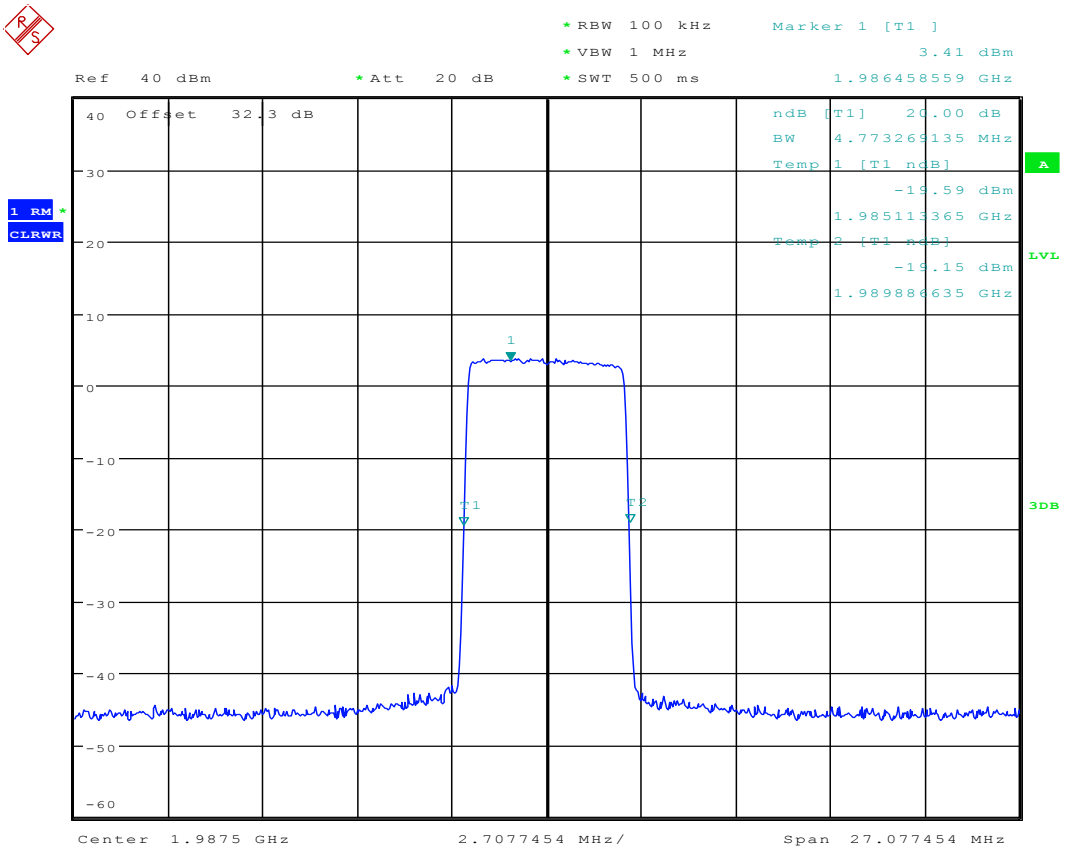


Date: 23.APR.2016 13:16:10

2.2.2 1L5M_M

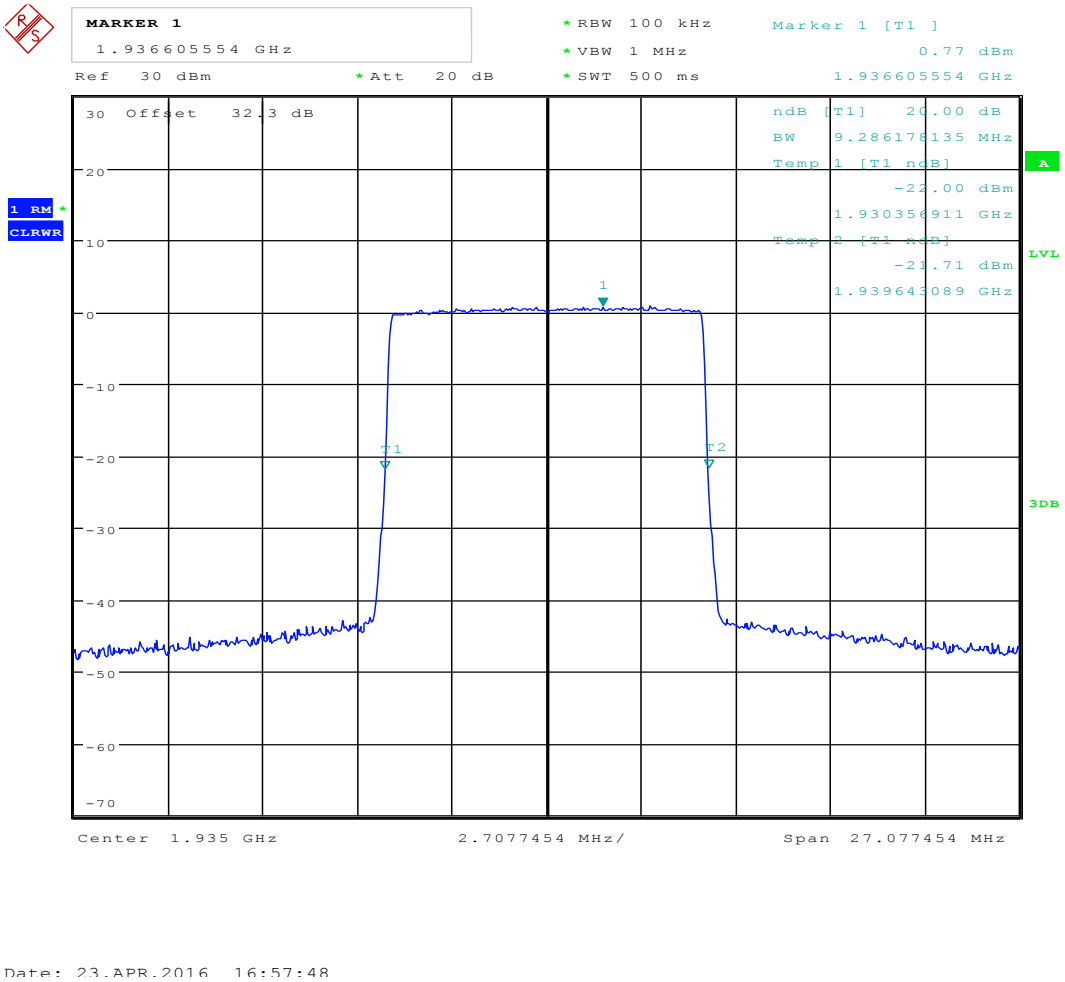


2.2.3 1L5M_T

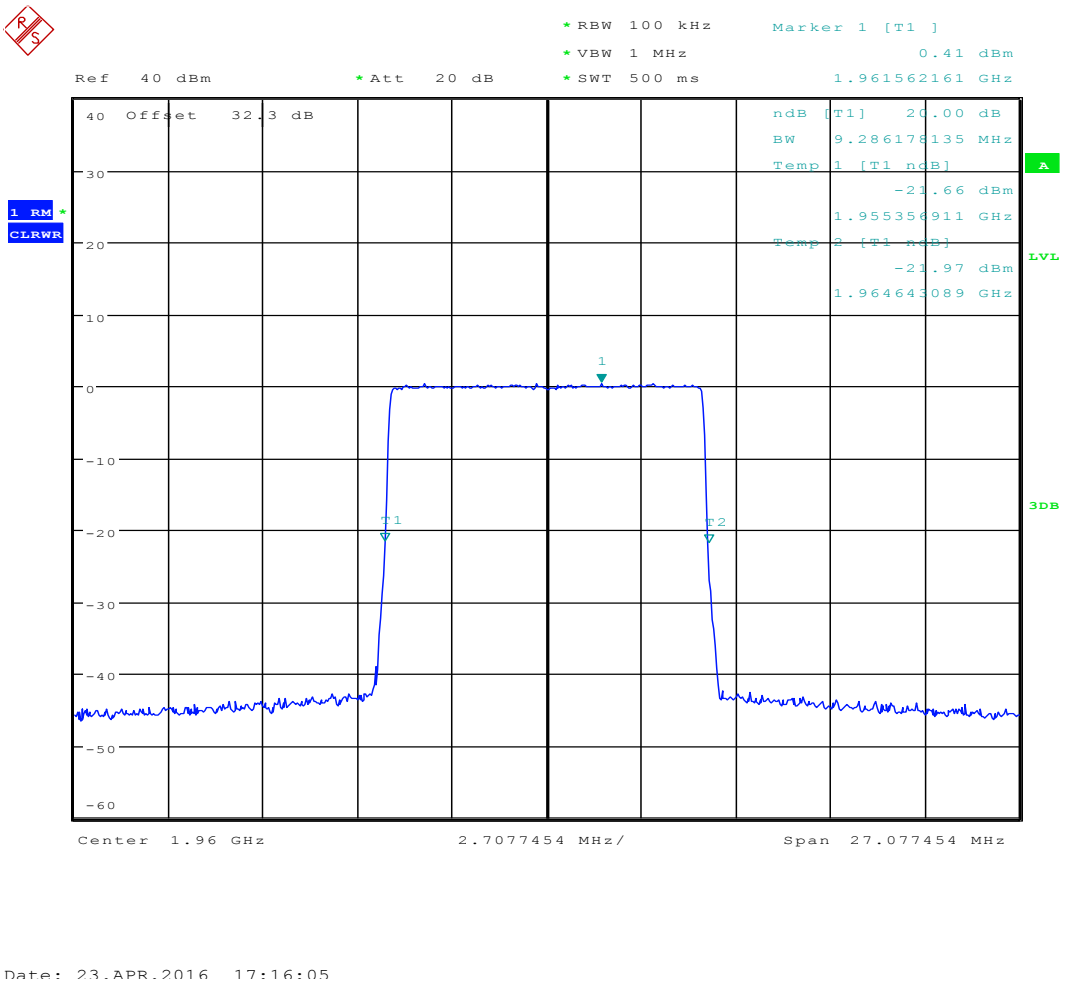


Date: 23.APR.2016 13:54:31

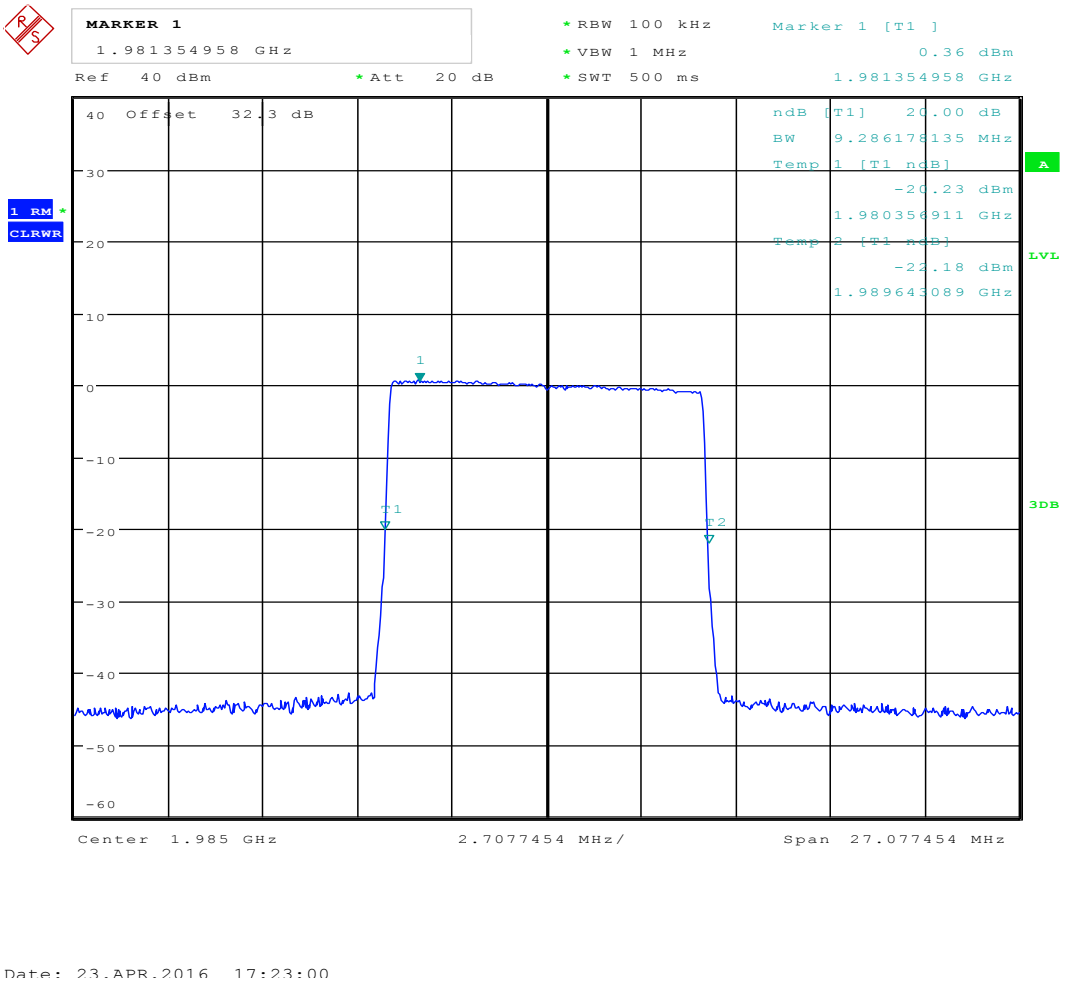
2.2.4 1L10M_B



2.2.5 1L10M_M

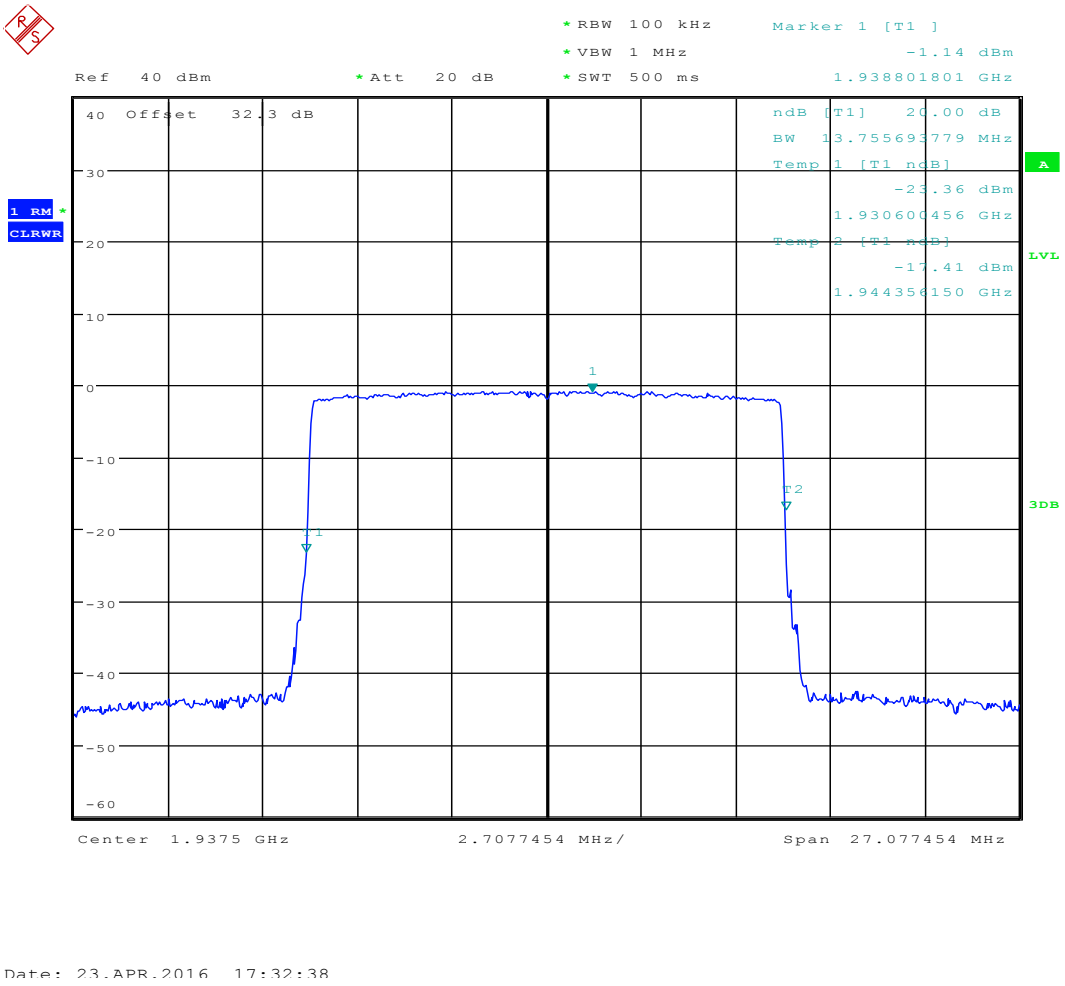


2.2.6 1L10M_T

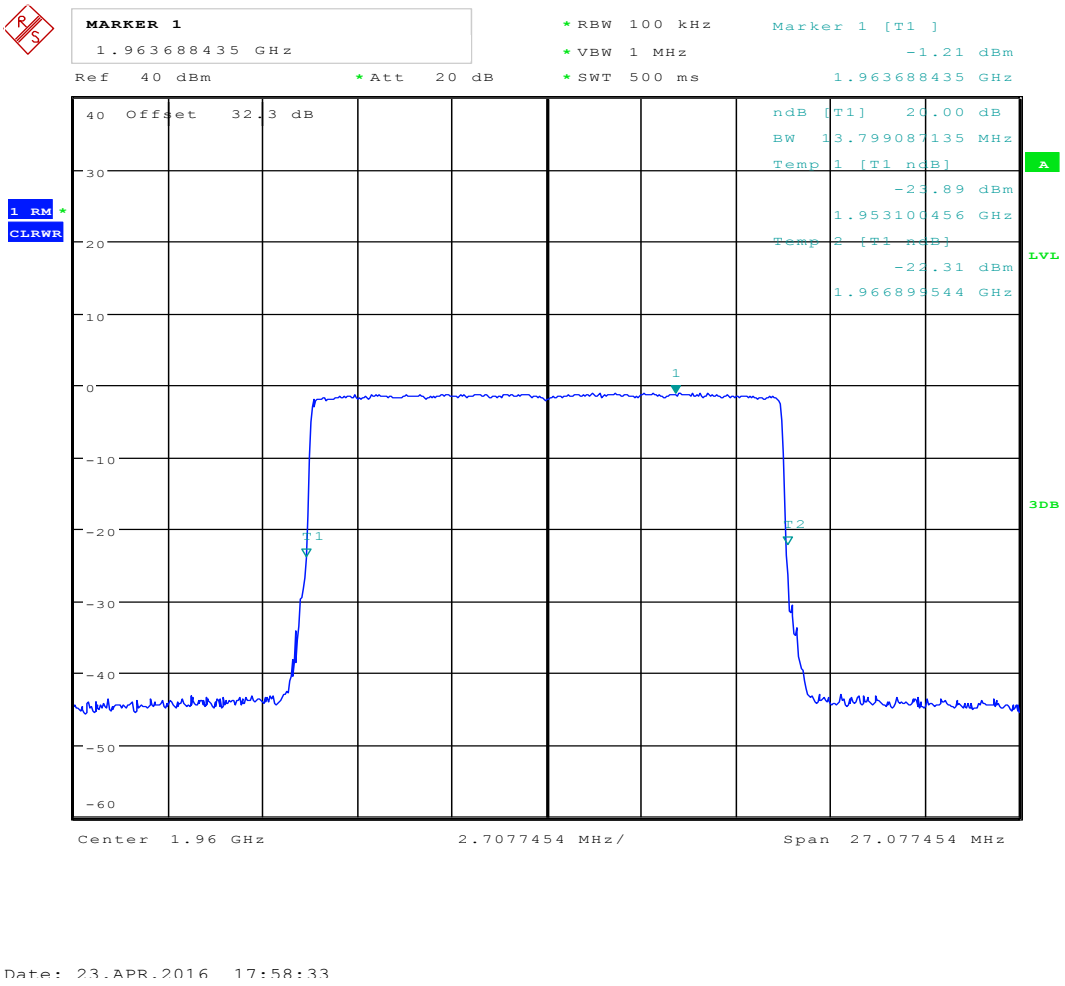


Date: 23.APR.2016 17:23:00

2.2.7 1L15M_B

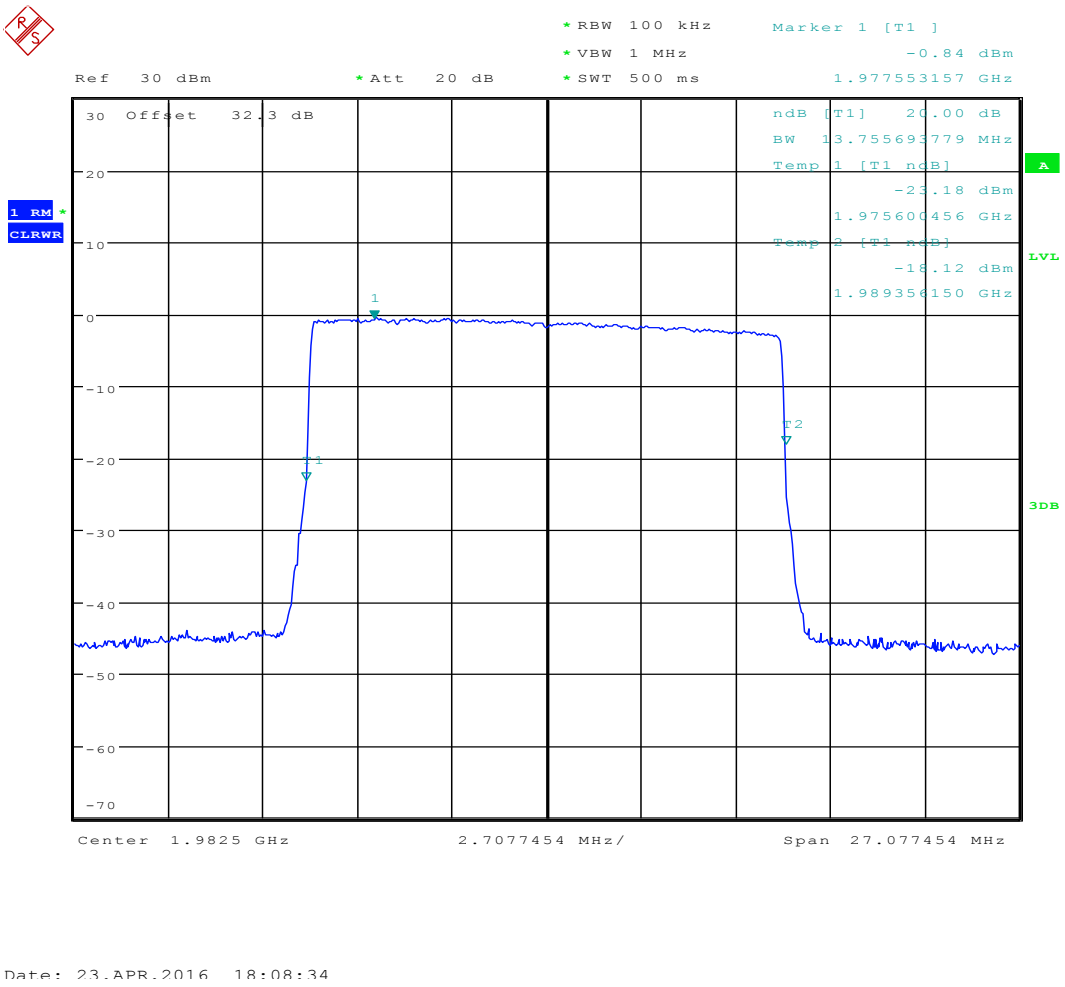


2.2.8 1L15M_M

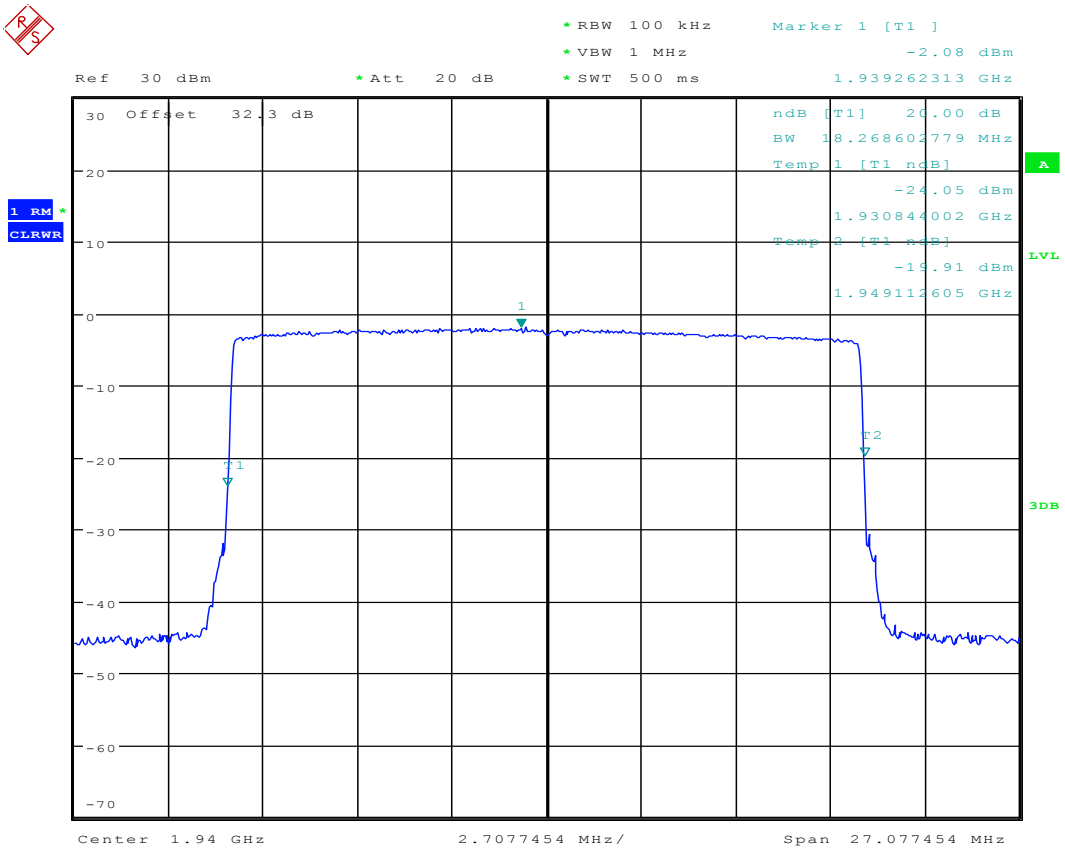


Date: 23.APR.2016 17:58:33

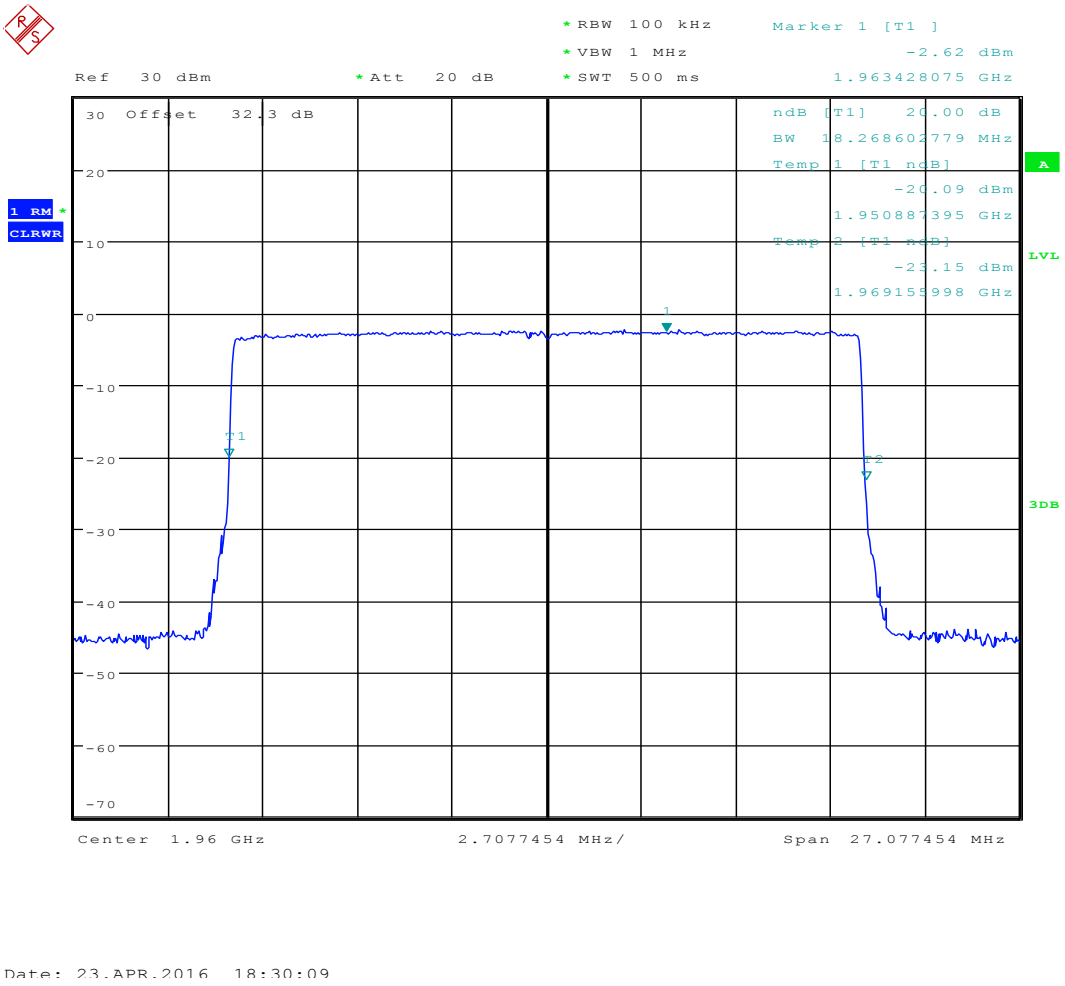
2.2.9 1L15M_T



2.2.10 1L20M_B

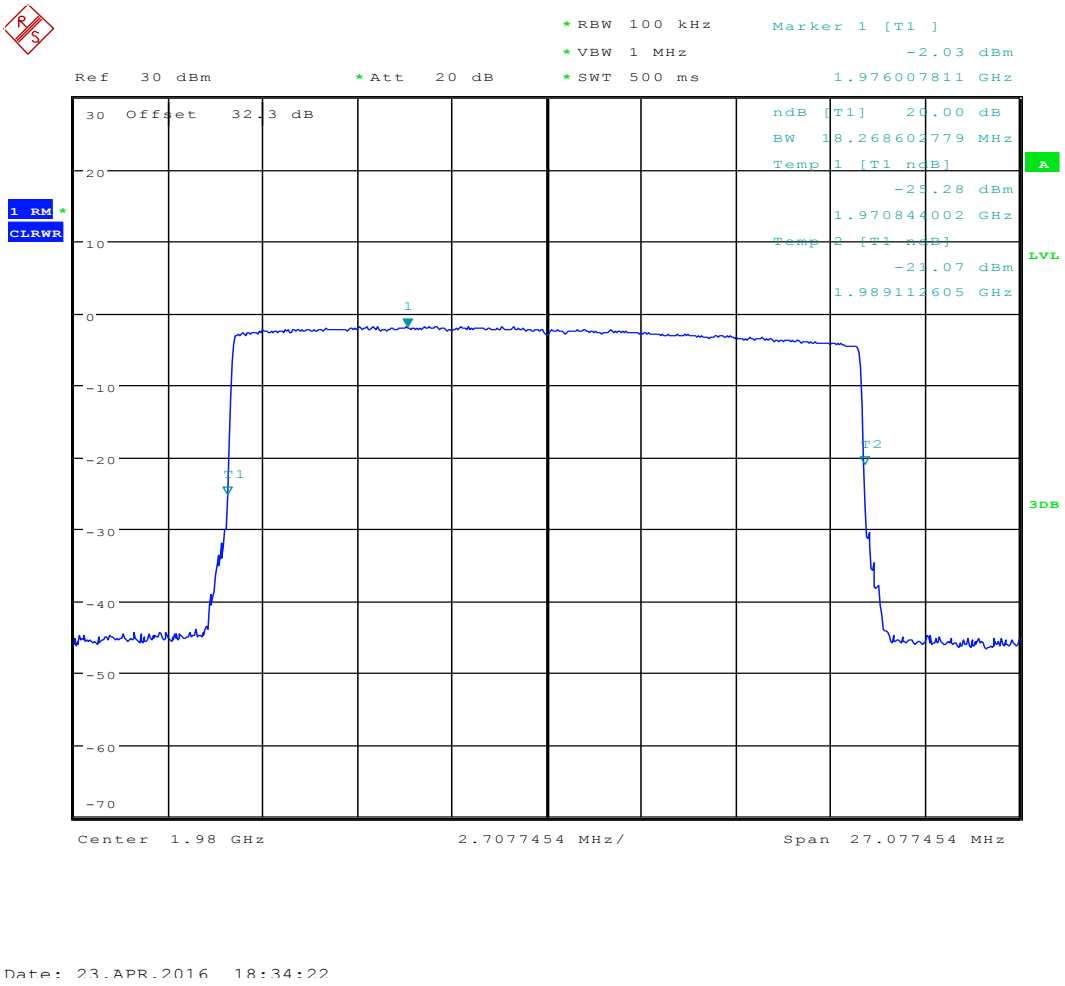


2.2.11 1L20M _M

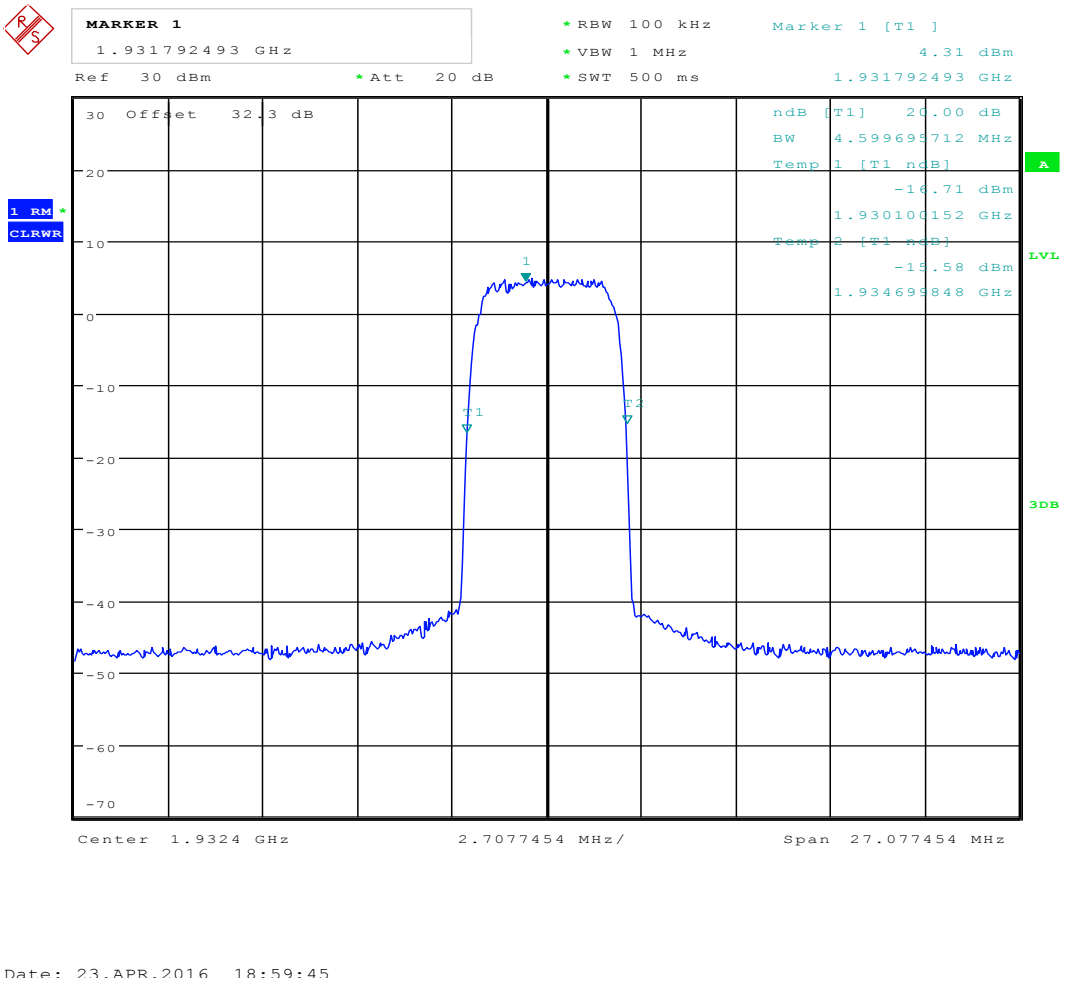


Date: 23.APR.2016 18:30:09

2.2.12 1L20M _T

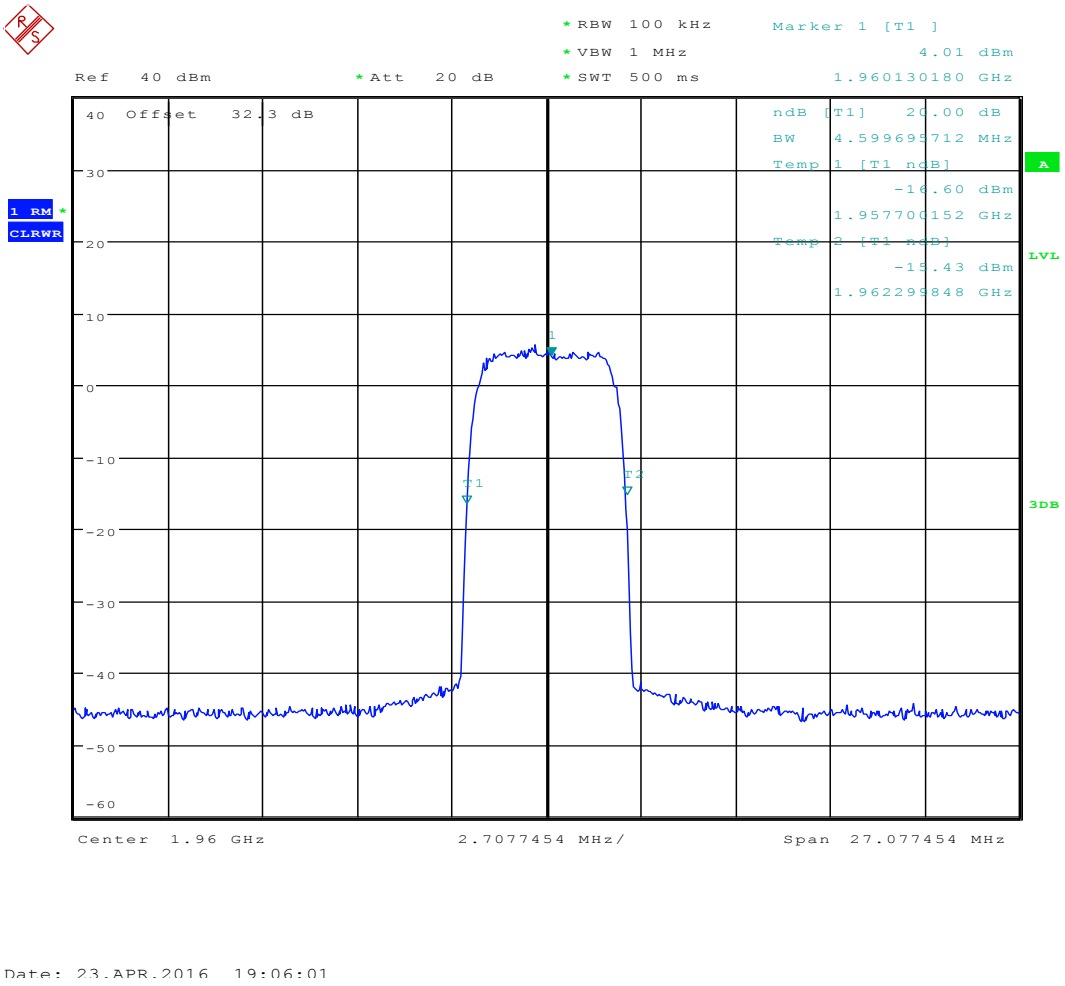


2.2.13 1U_B



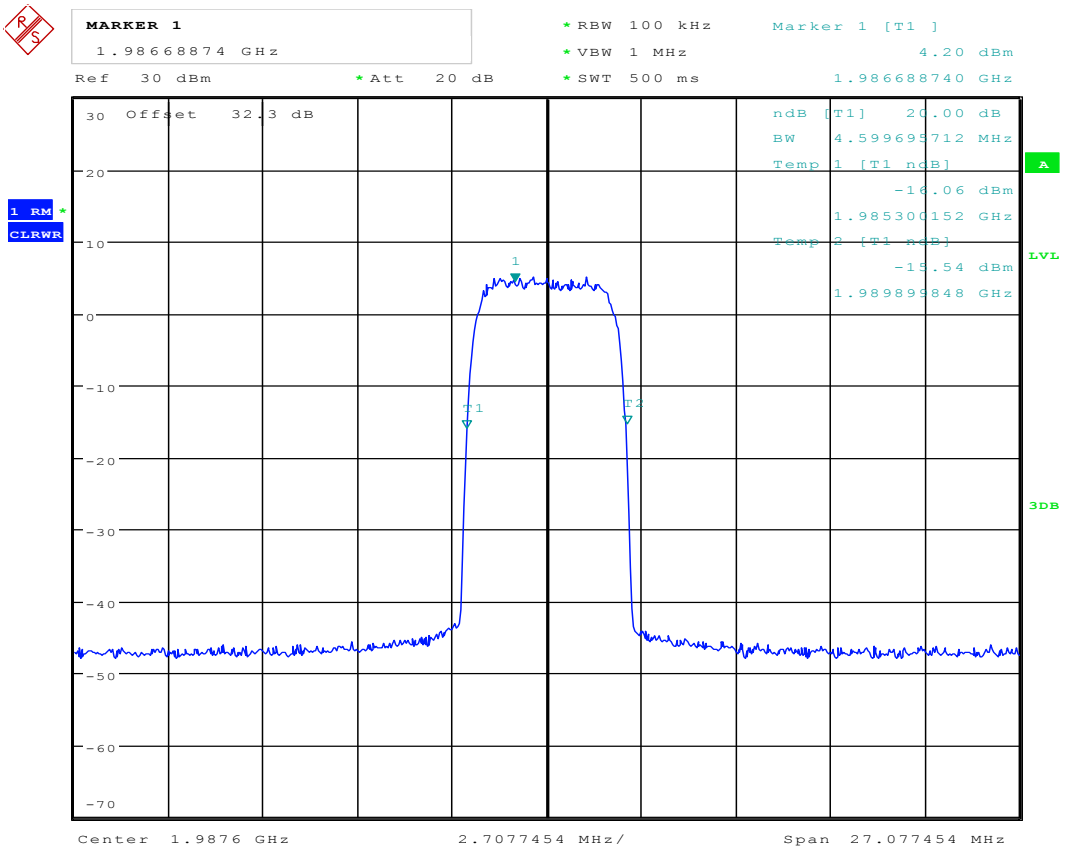
Date: 23.APR.2016 18:59:45

2.2.14 1U_M



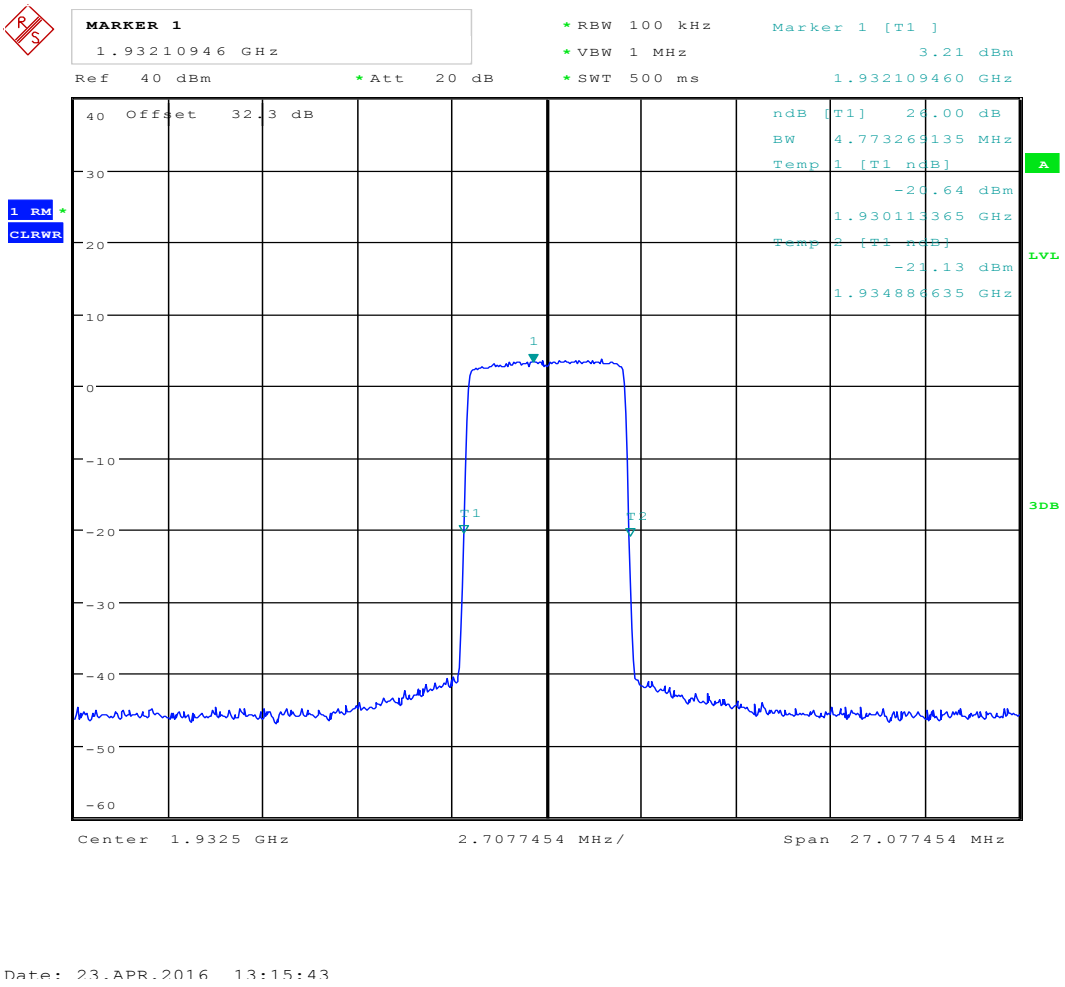
Date: 23.APR.2016 19:06:01

2.2.15 1U_T

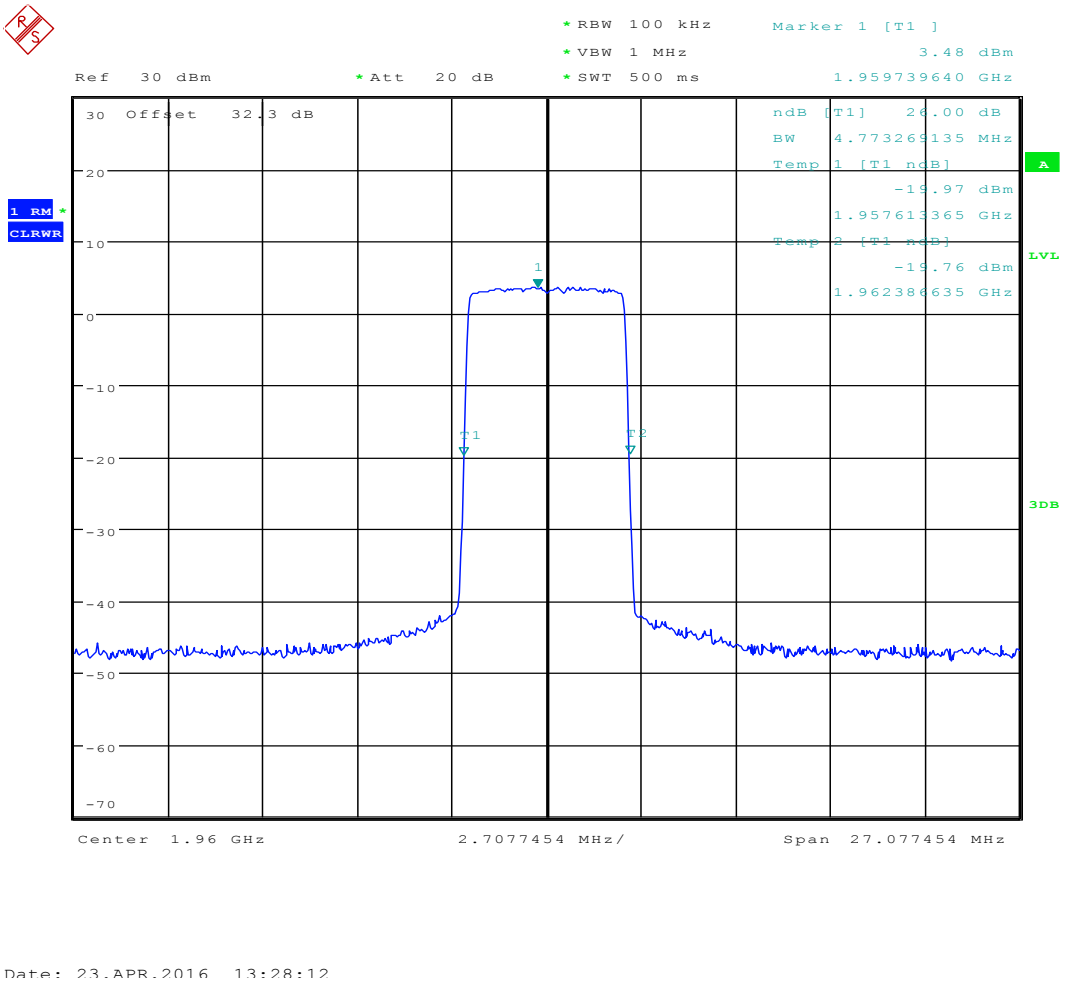


2.3 Emission Bandwidth(-26 dBc)

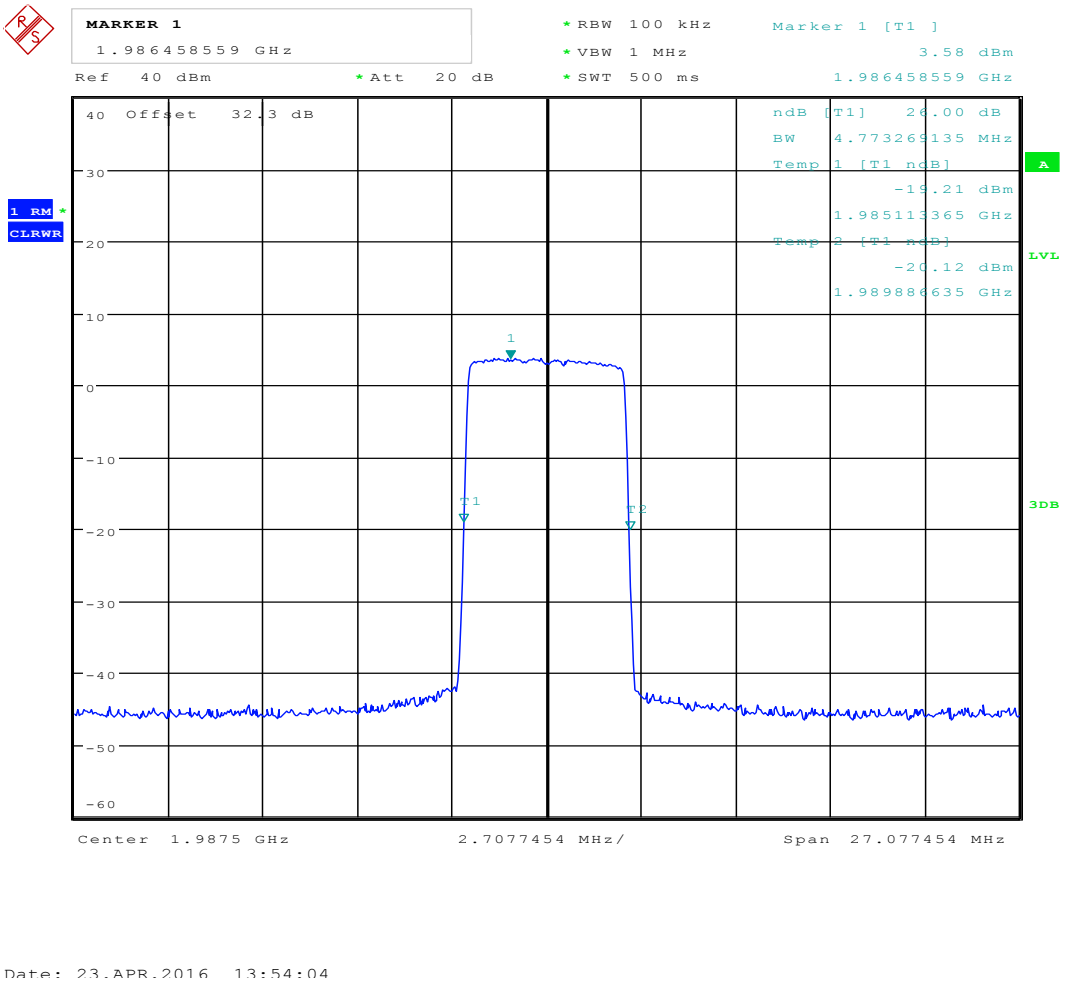
2.3.1 1L5M_B



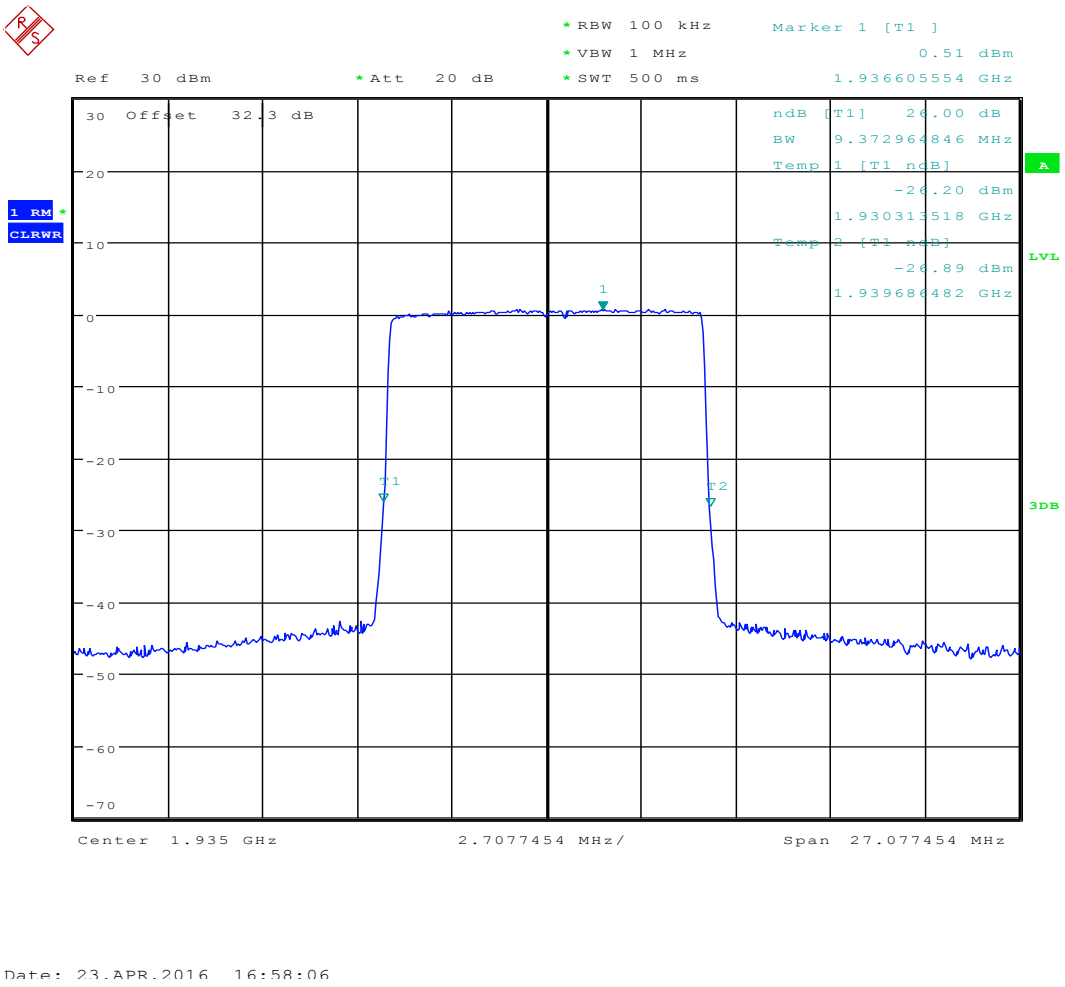
2.3.2 1L5M_M



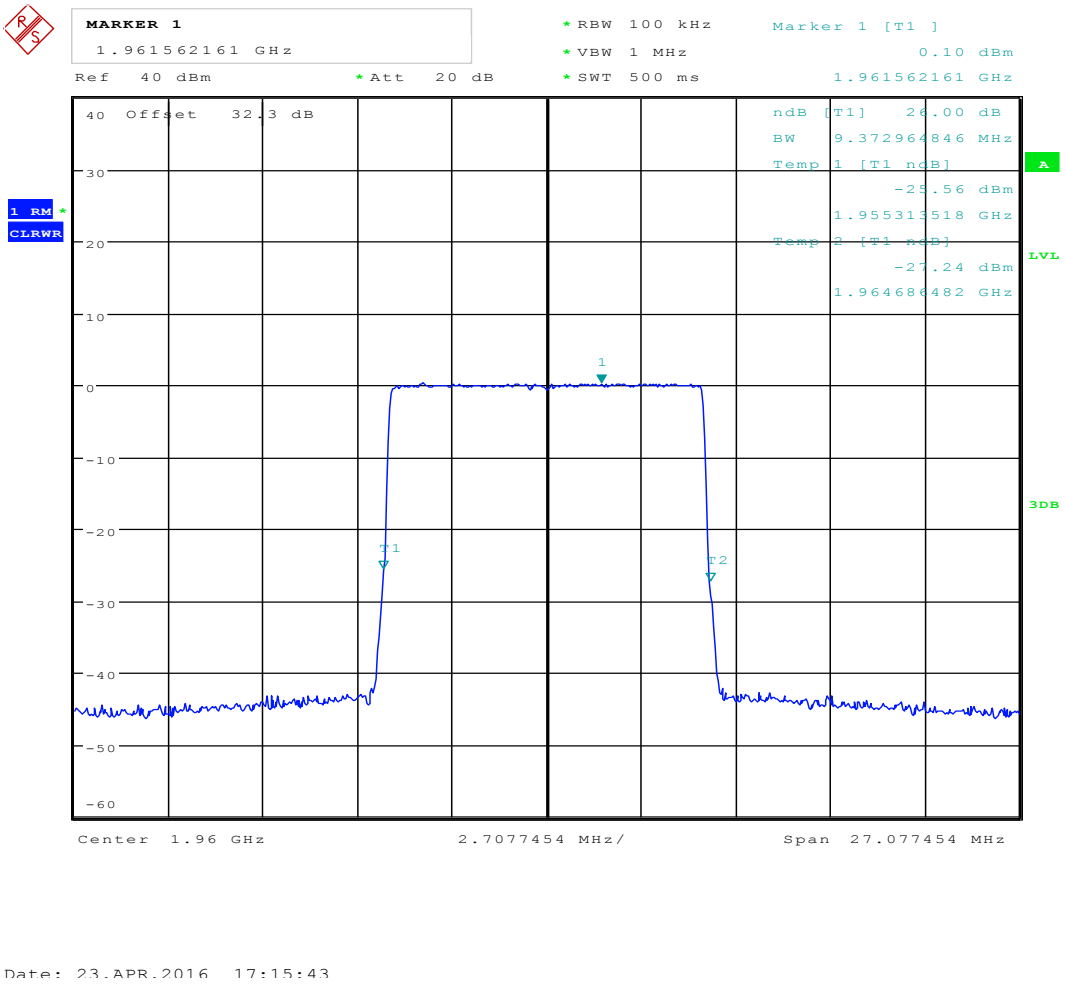
2.3.3 1L5M_T



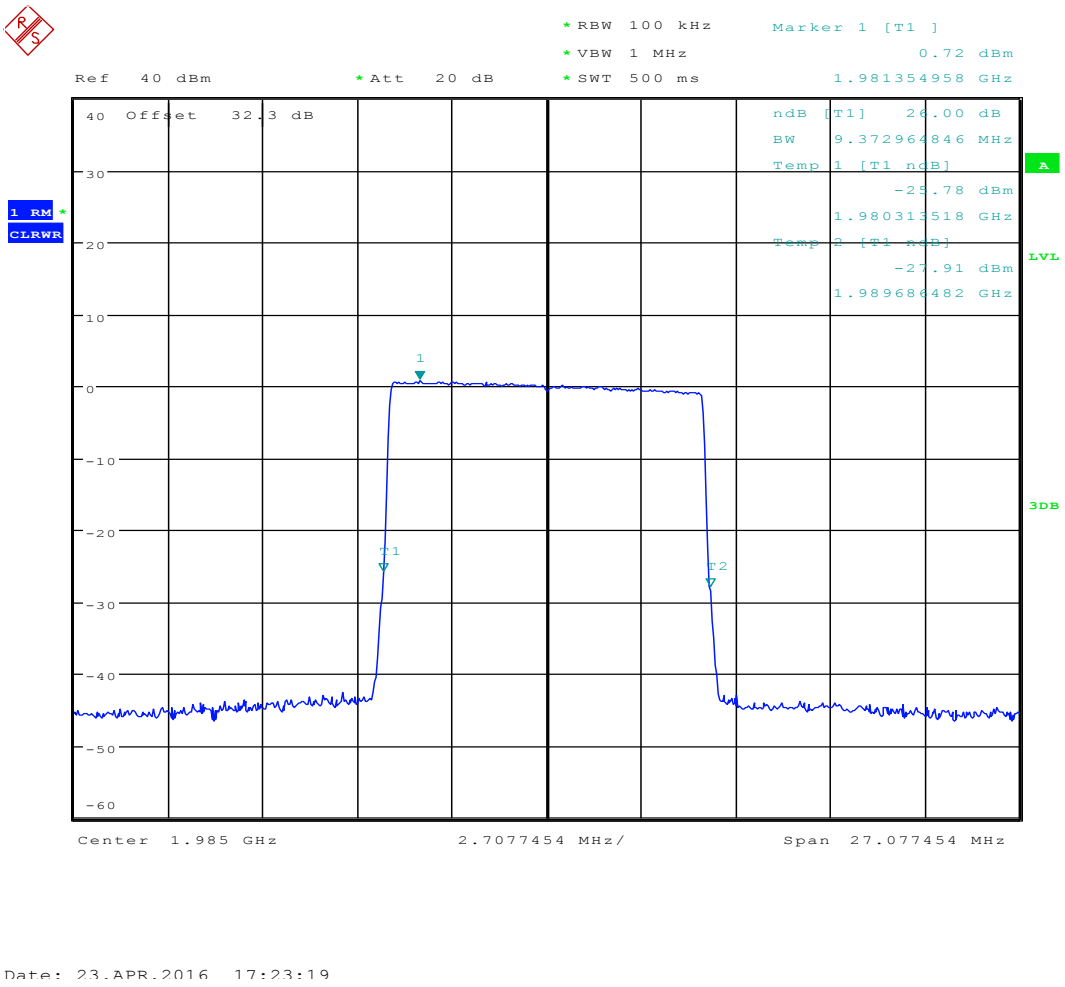
2.3.4 1L10M_B



2.3.5 1L10M_M



2.3.6 1L10M_T



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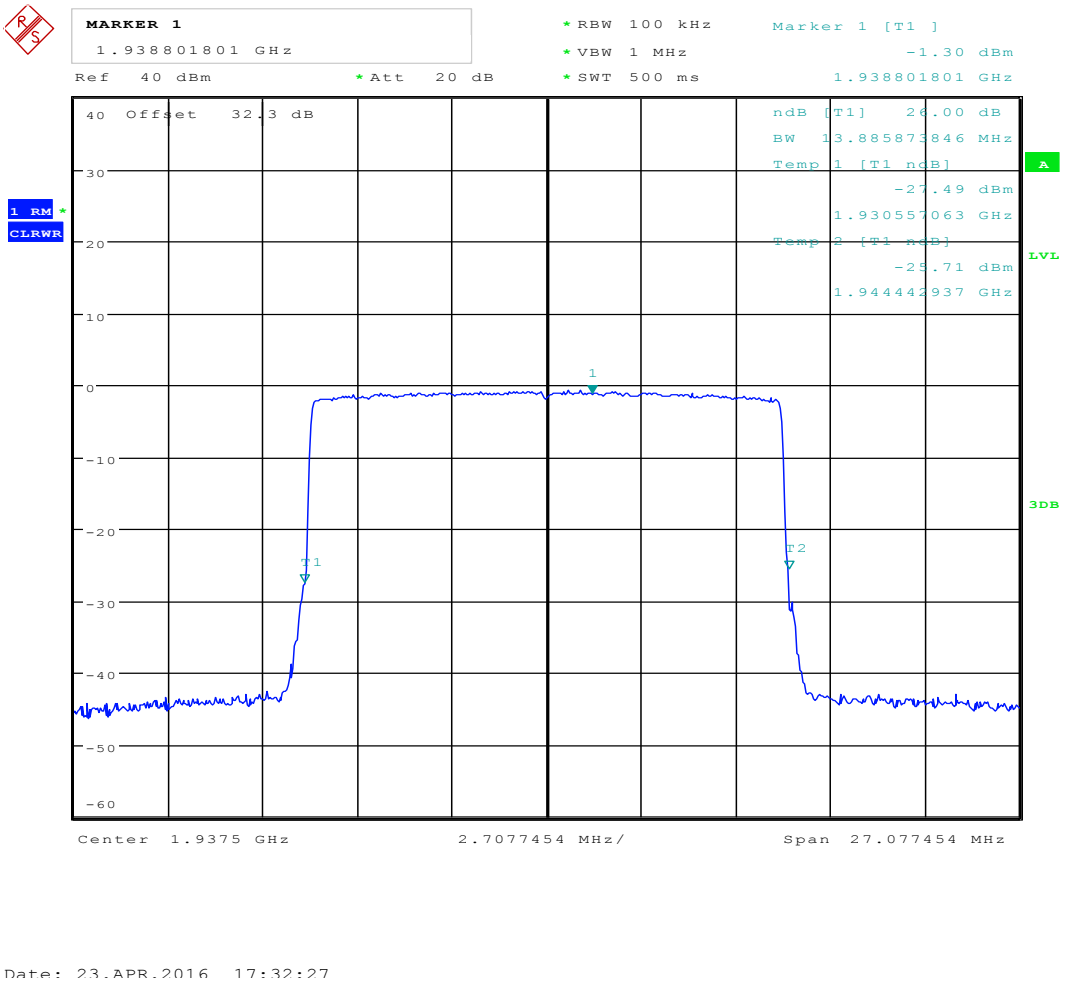
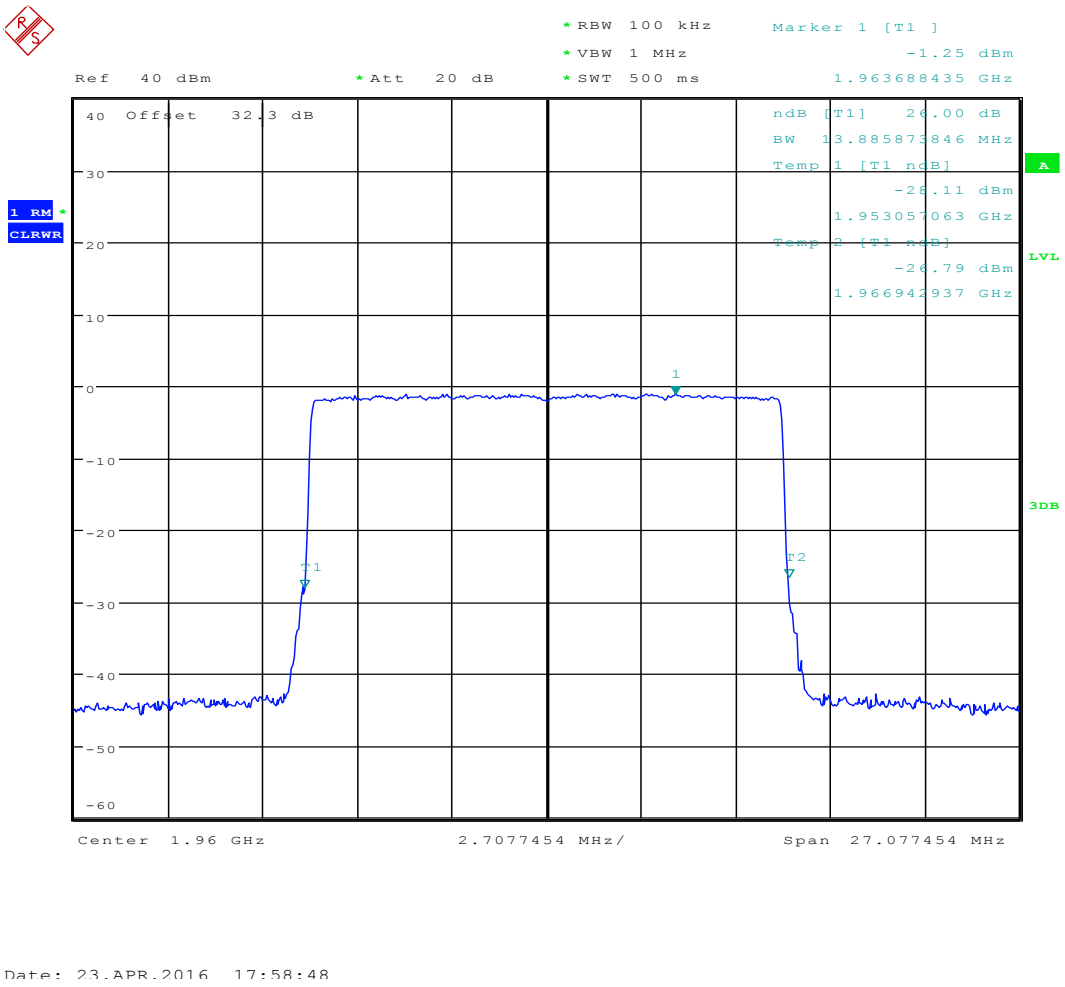
2.3.7 1L15M_B

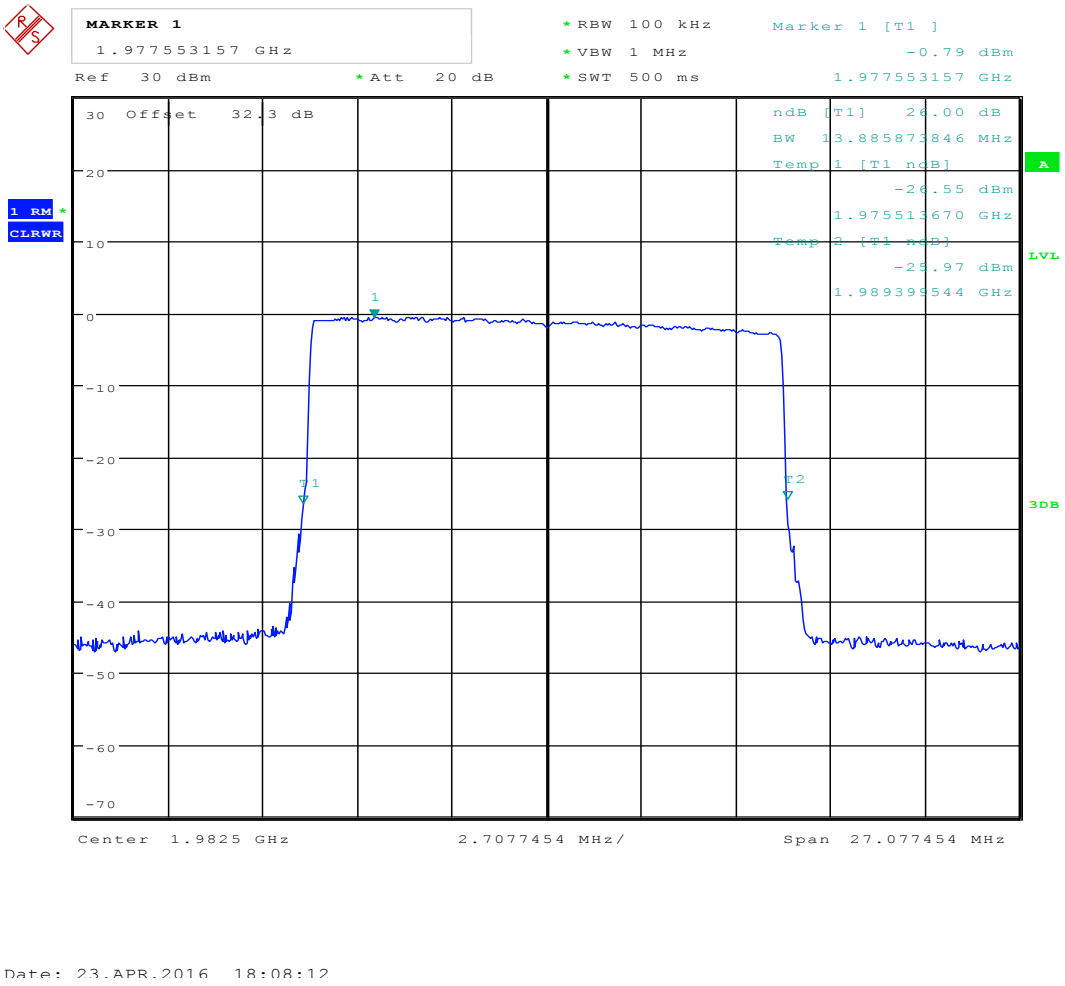


2.3.8 1L15M_M



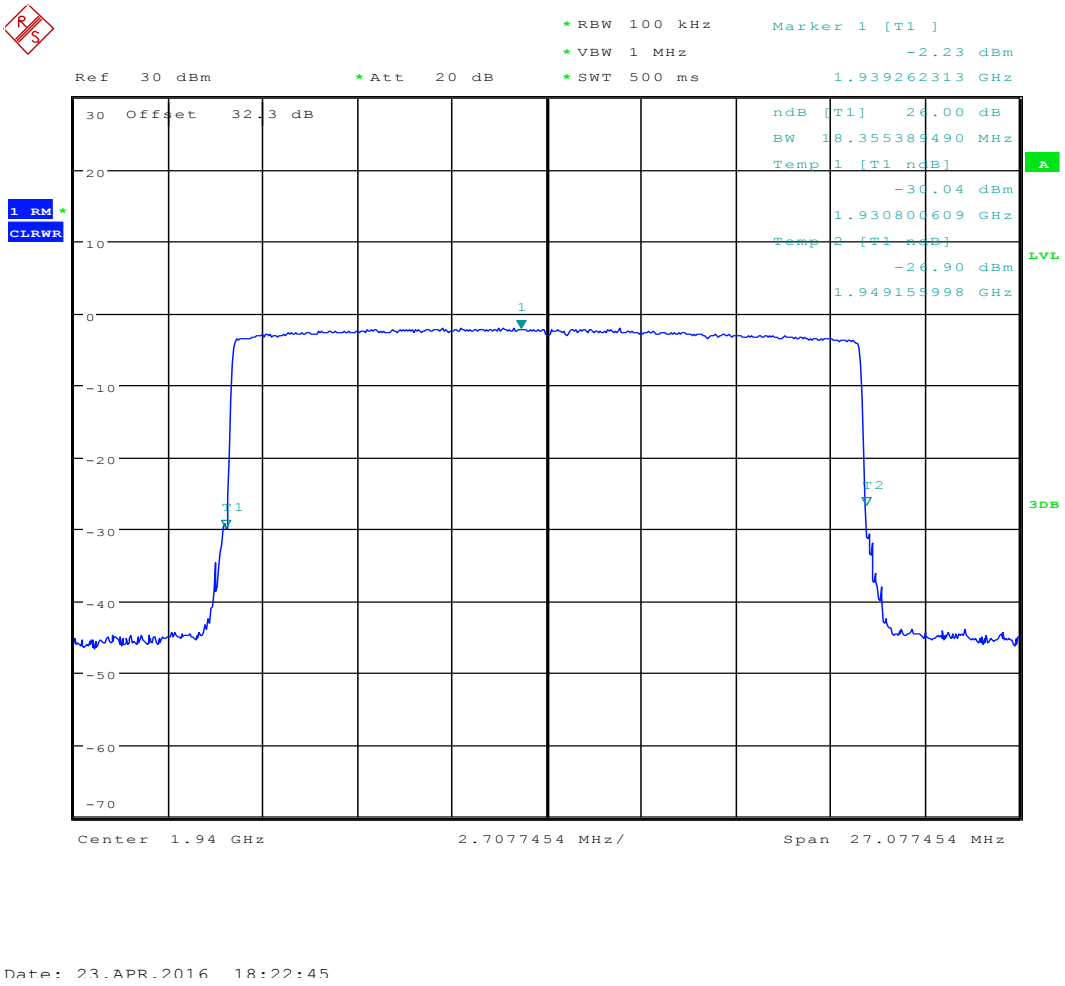
Date: 23.APR.2016 17:58:48

2.3.9 1L15M_T

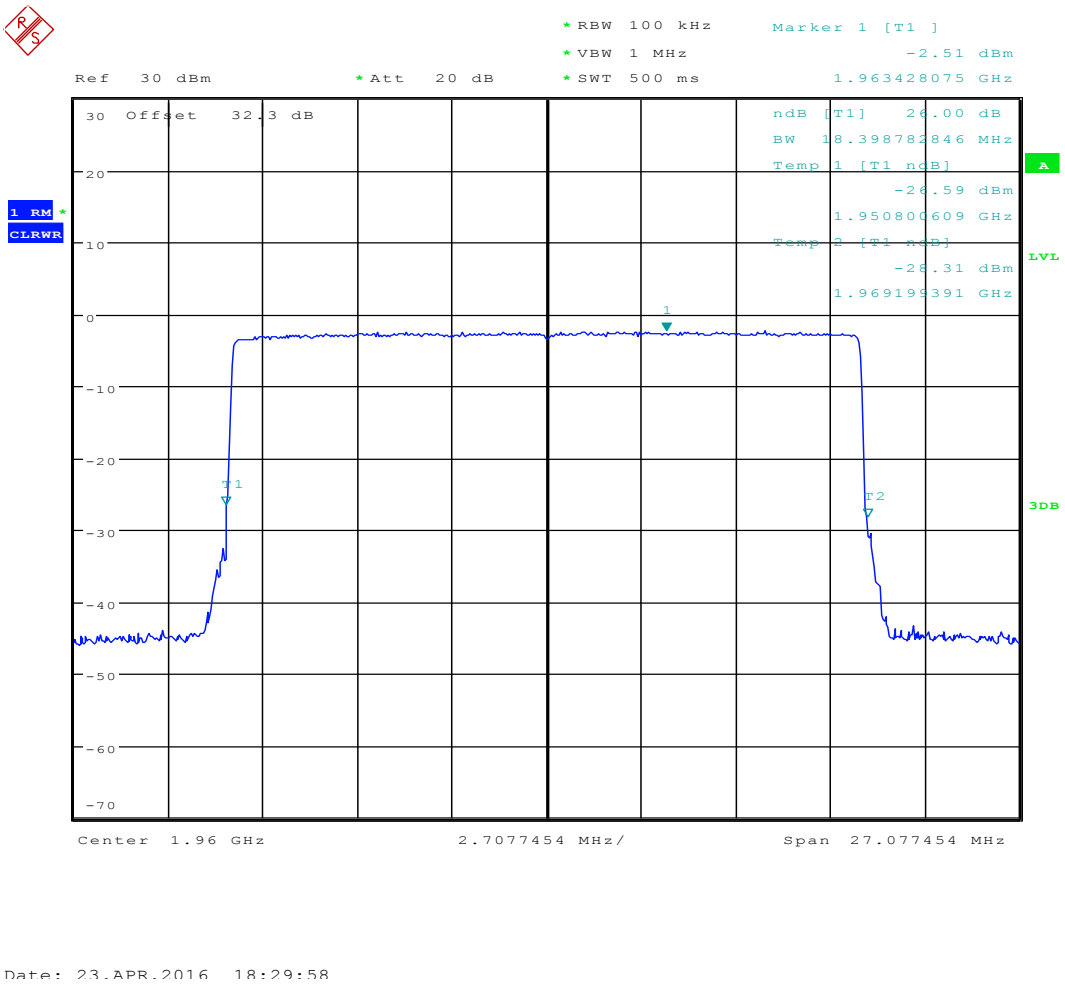


Date: 23.APR.2016 18:08:12

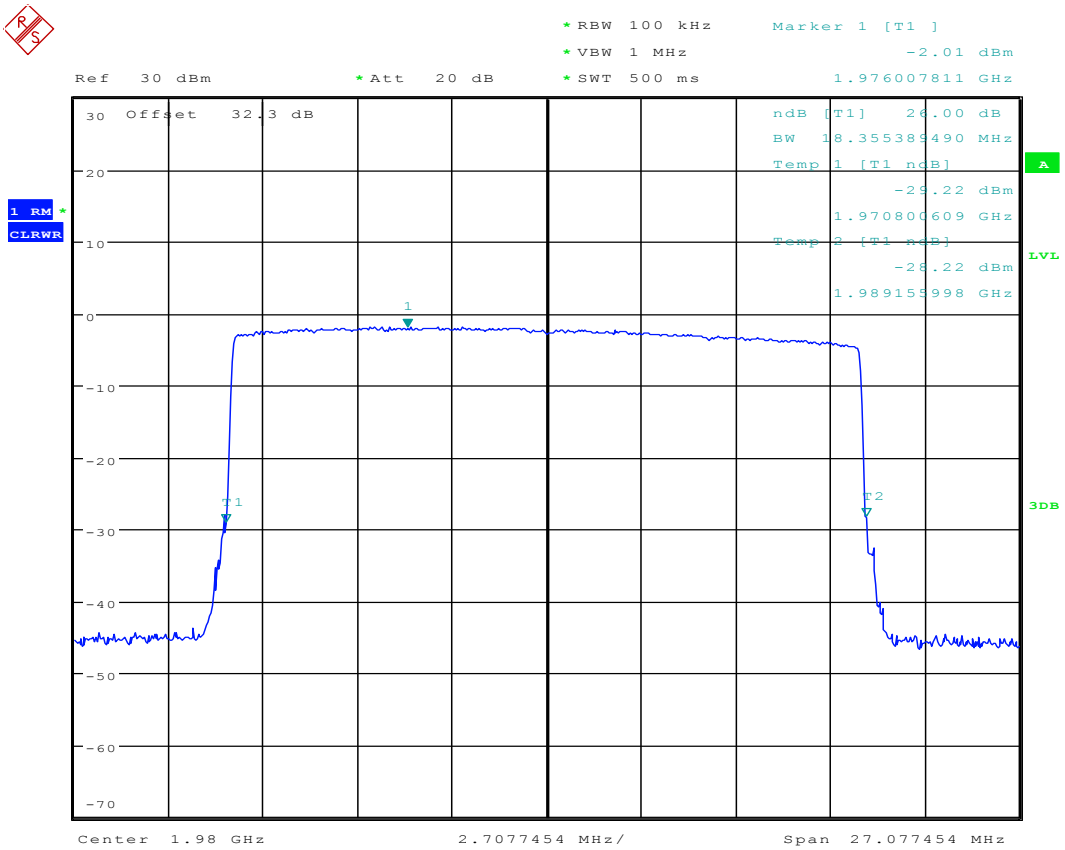
2.3.10 1L20M_B



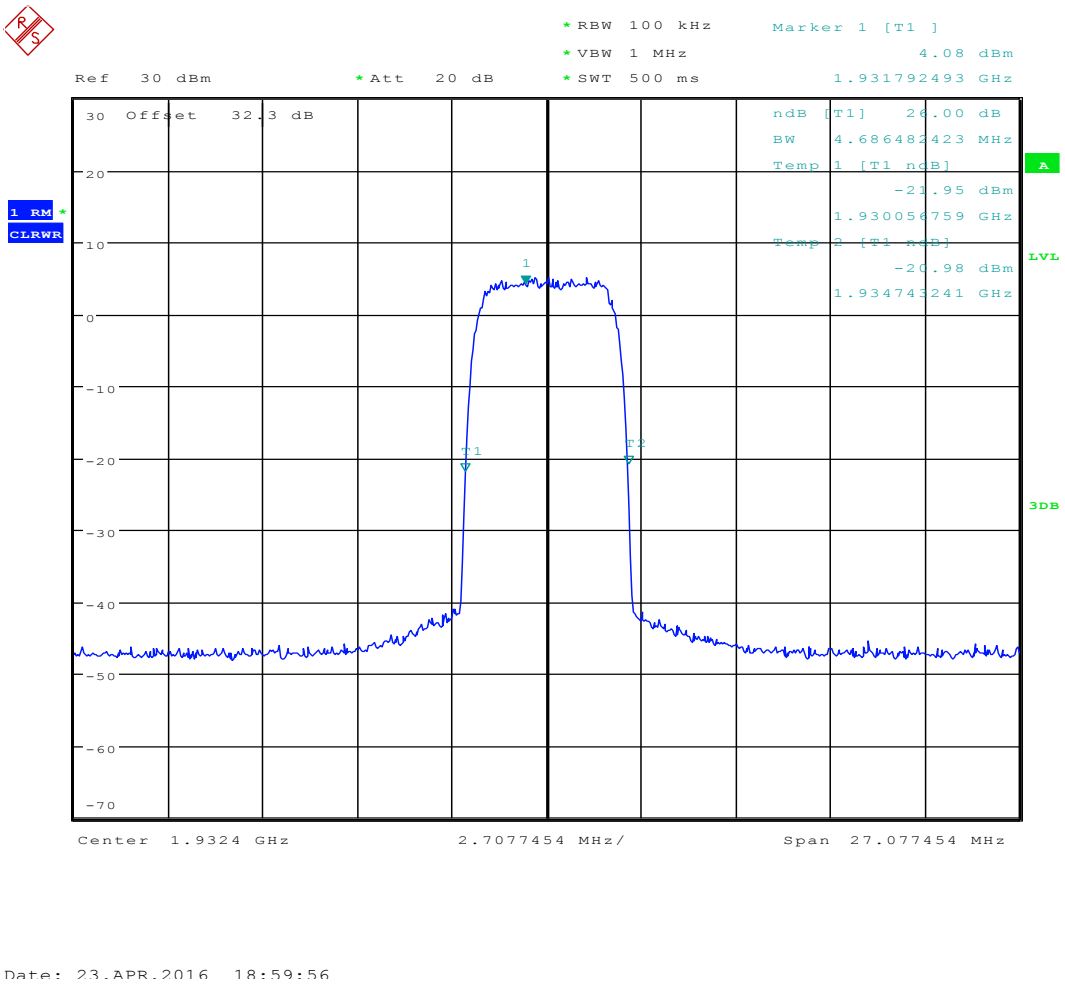
2.3.11 1L20M _M



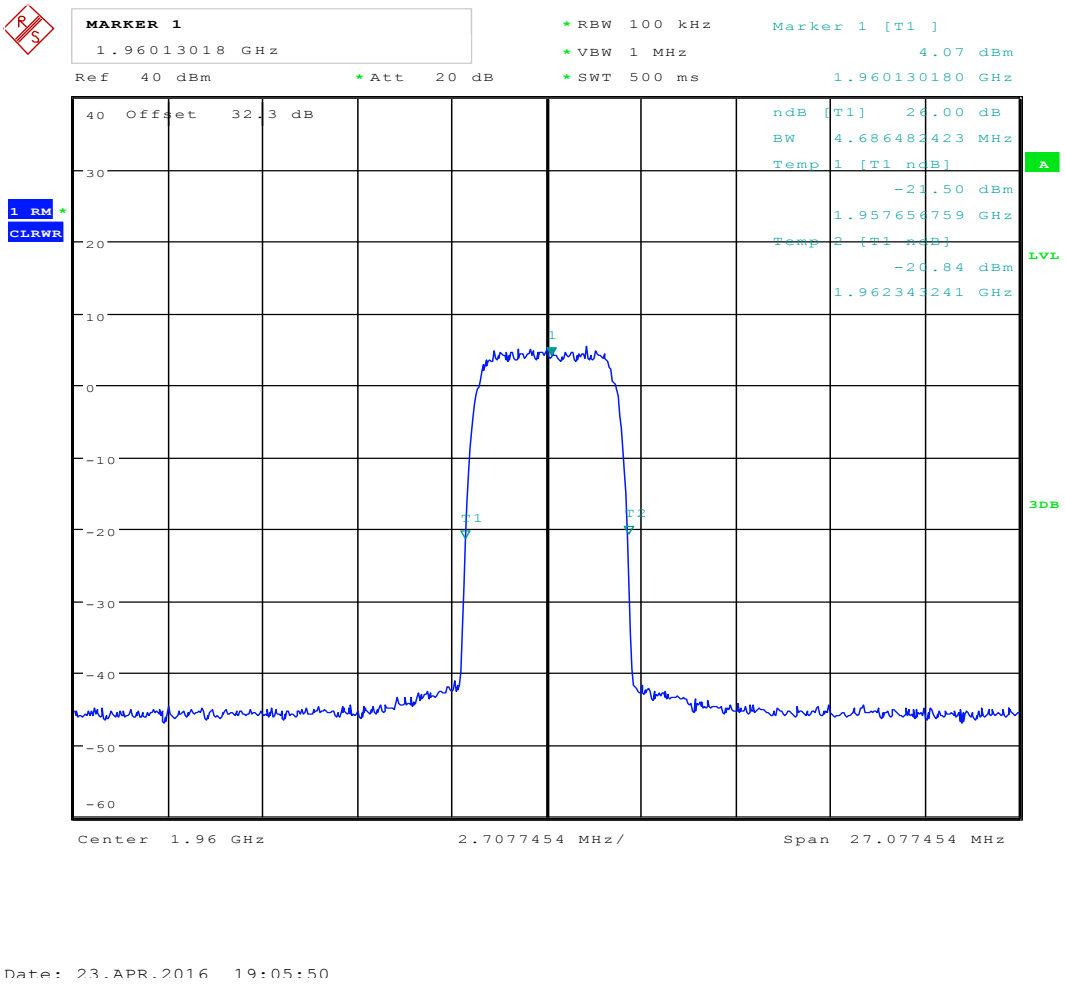
2.3.12 1L20M _T



2.3.13 1U_B

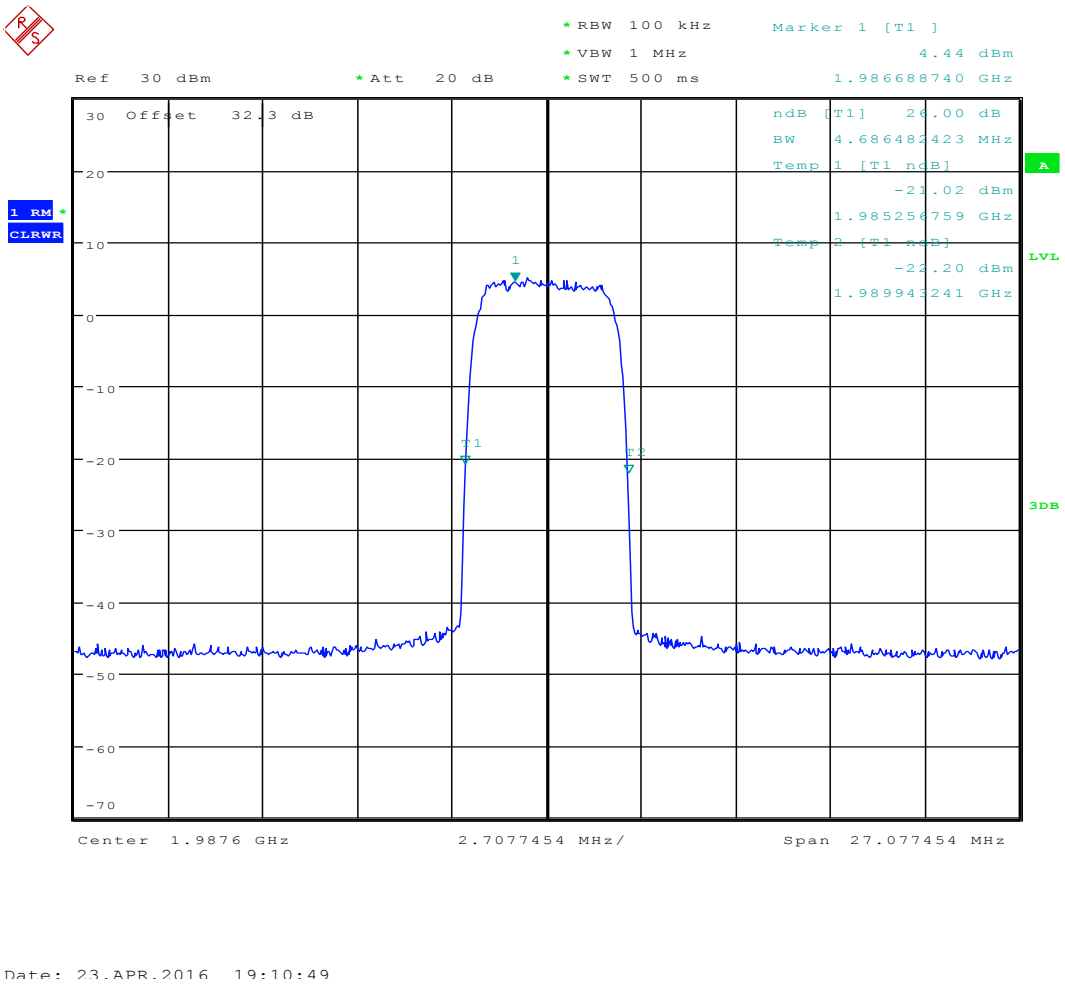


2.3.14 1U_M



Date: 23.APR.2016 19:05:50

2.3.15 1U_T



Appendix C: Band Edges Compliance

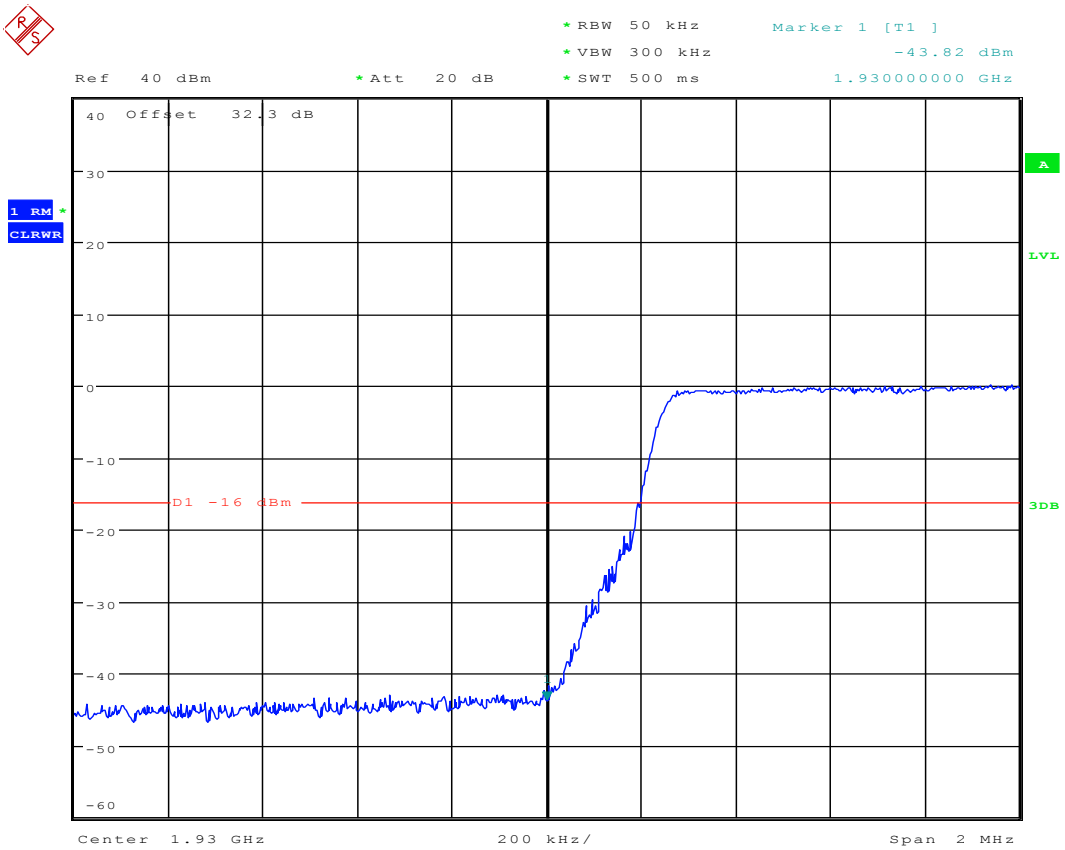
1 Result Table

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.

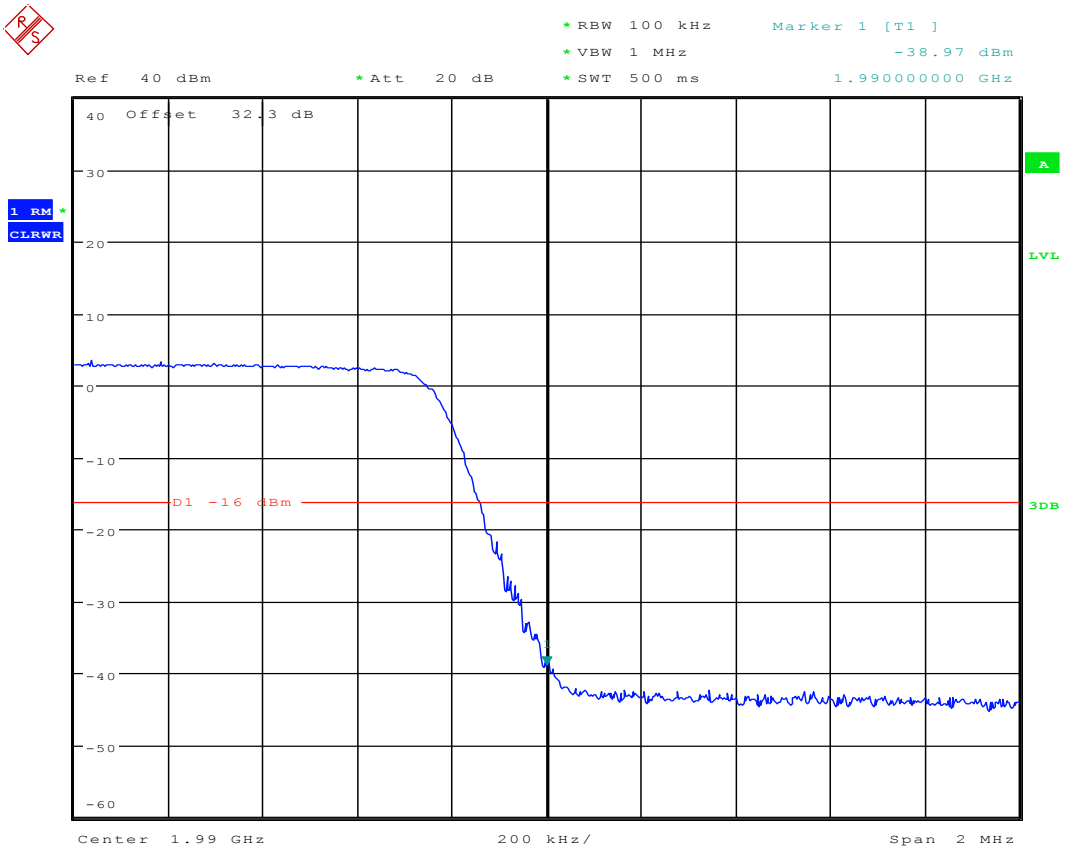
EUT Conf.	Maximum Emission [dBm]	Verdict
1L5M_B	<-13	Pass
1L5M _T	<-13	Pass
1L20M_B	<-13	Pass
1L20M_T	<-13	Pass
1U_B	<-13	Pass
1U_T	<-13	Pass
1U1L5M_B	<-13	Pass
1U1L5M_T	<-13	Pass

2 Test Plot

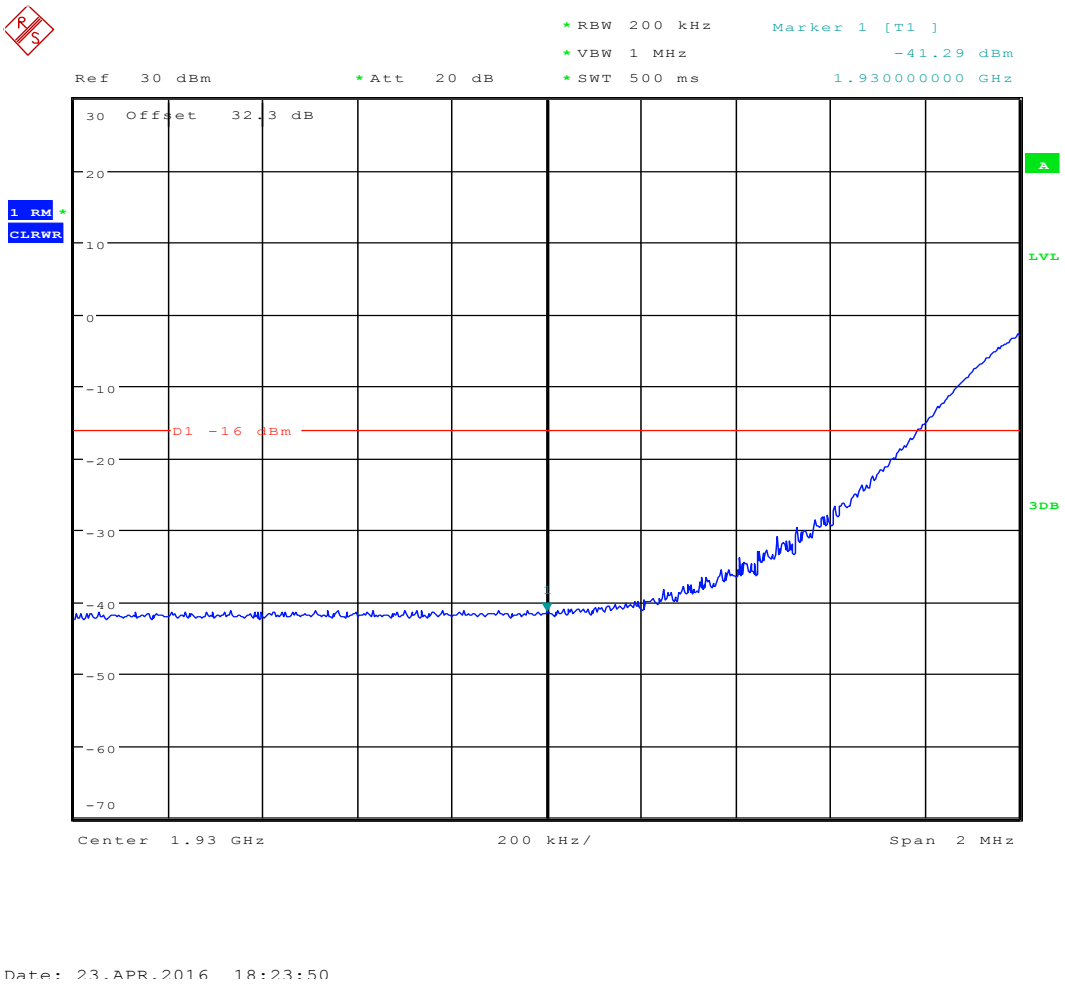
2.1 1L5M_B



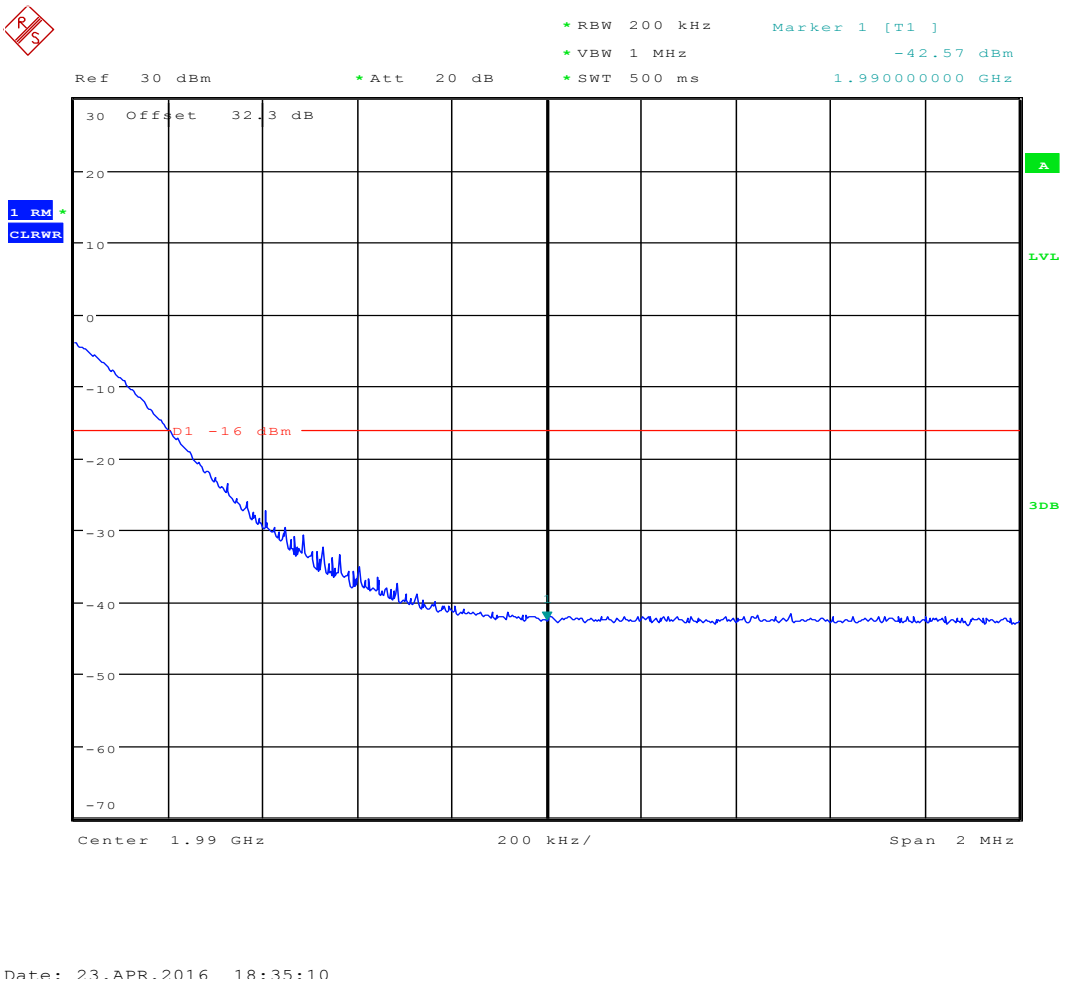
2.2 1L5M_T



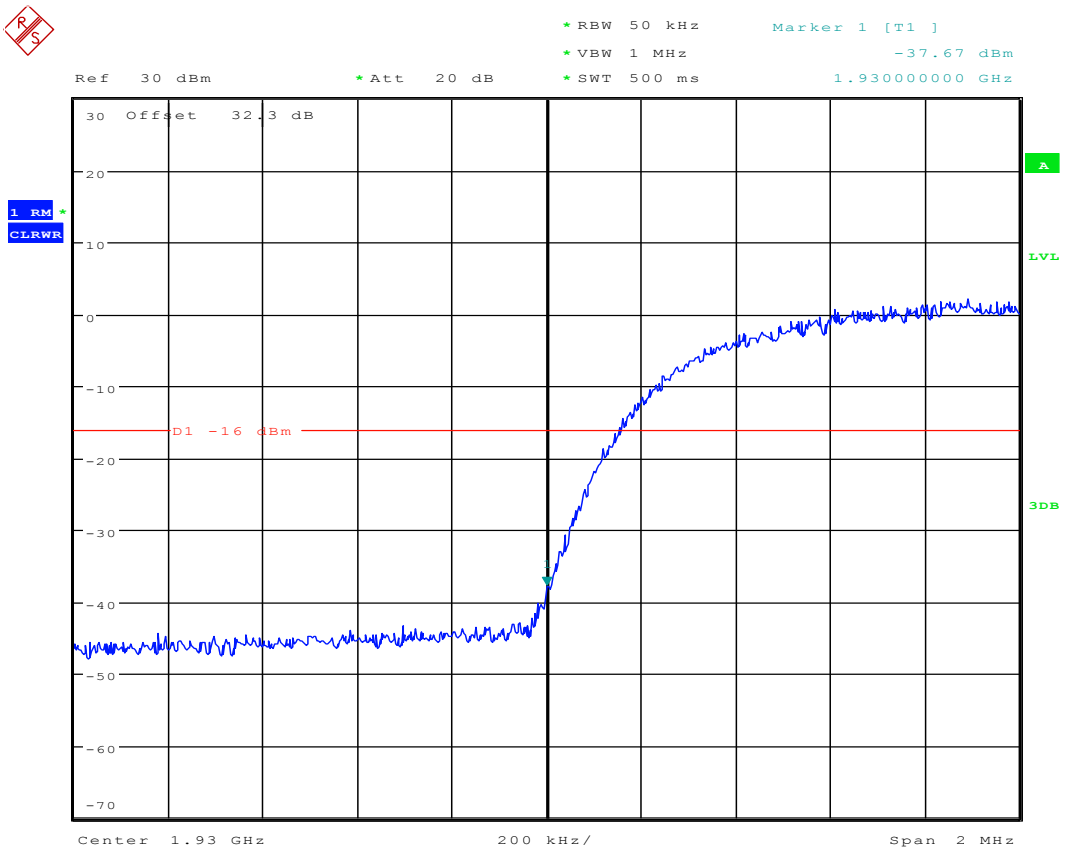
2.3 1L20M_B



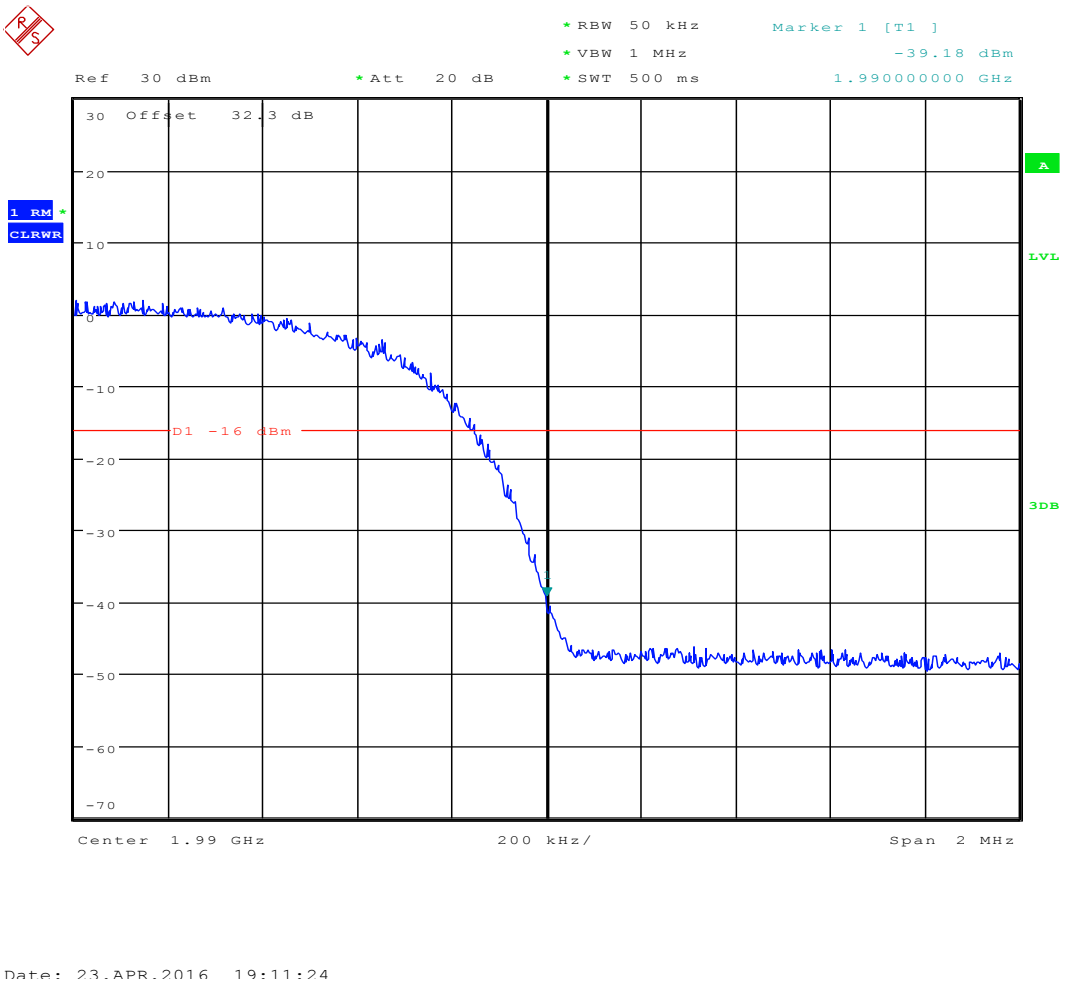
2.4 1L20M _T



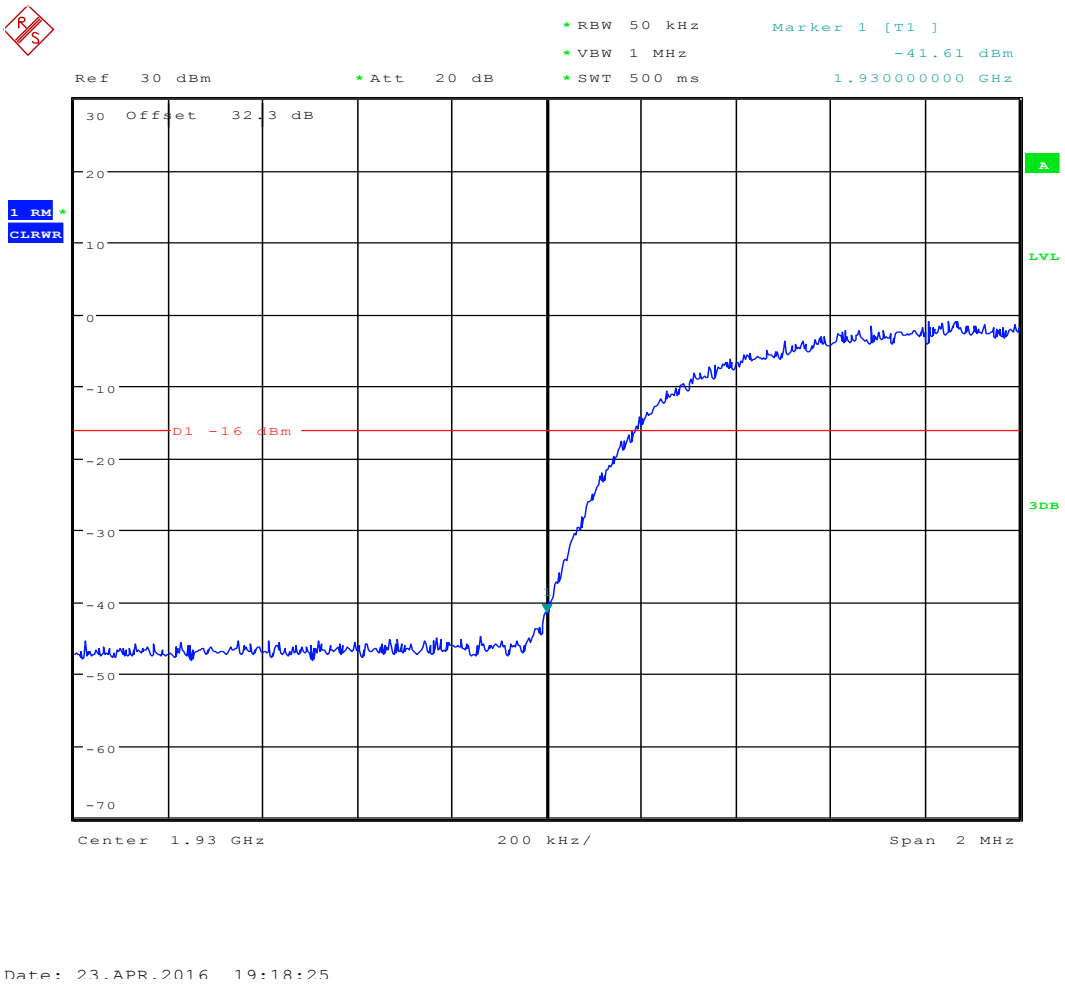
2.5 1U_B



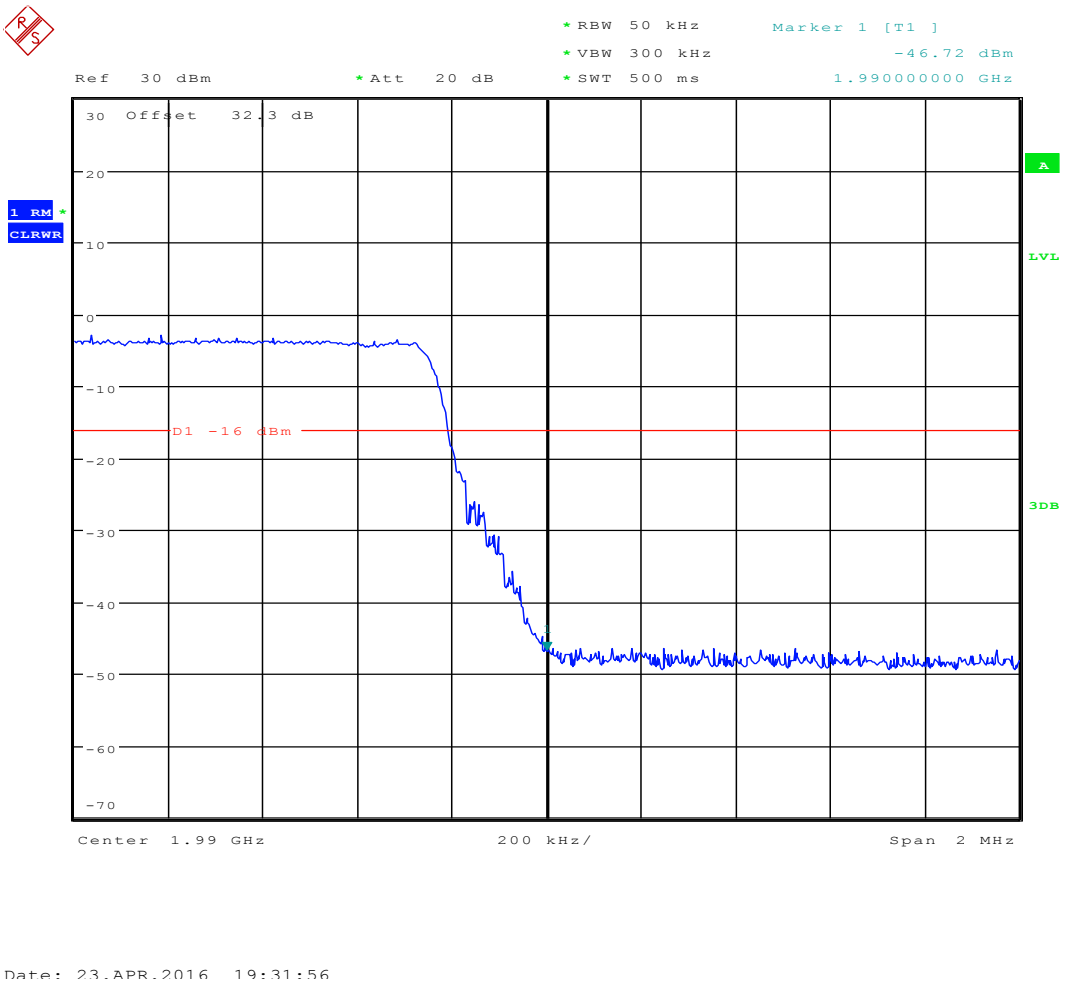
2.6 1U_T



2.7 1U1L5M_B



2.8 1U1L5M_T



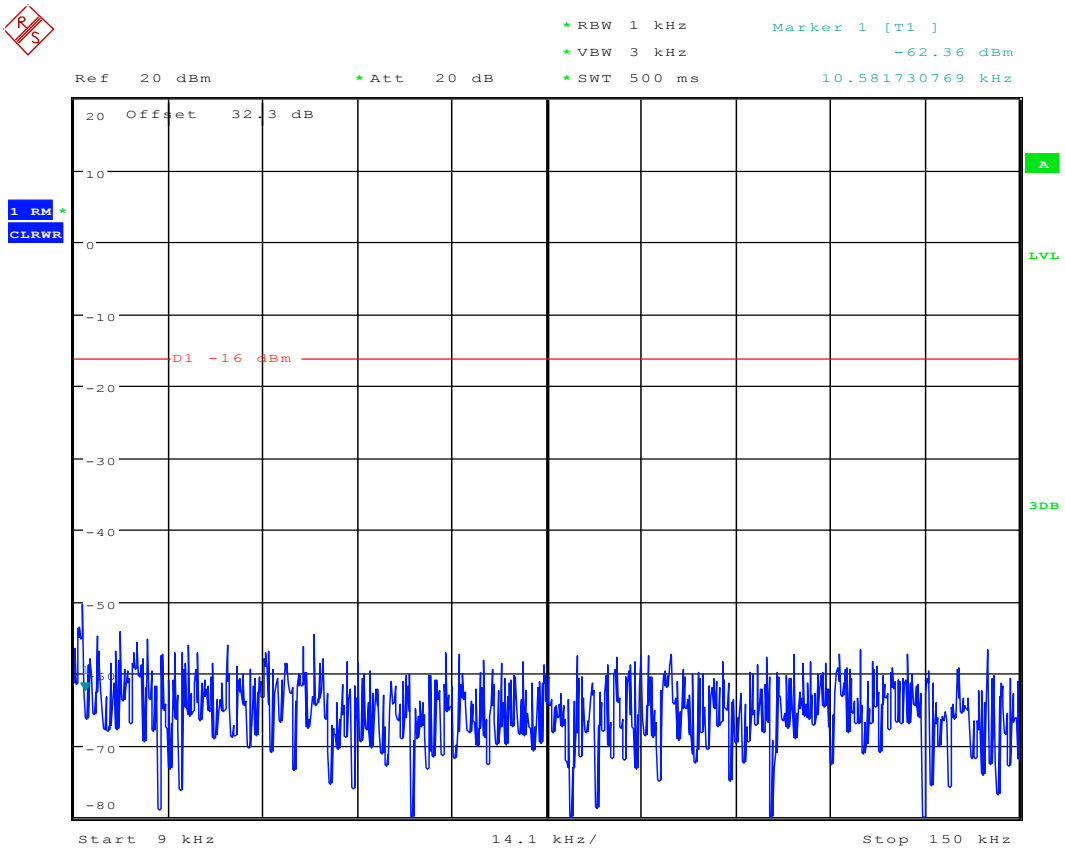
Appendix D: Spurious Emission at Antenna Terminals

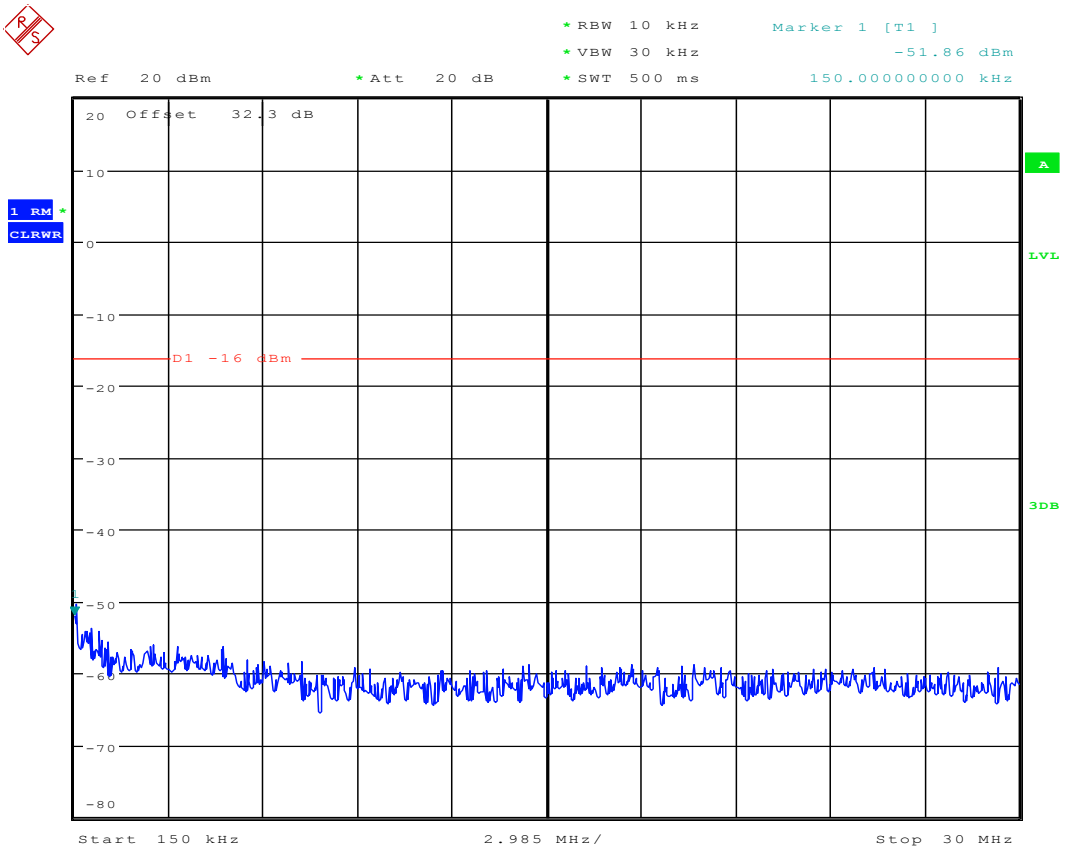
1 Result Table

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

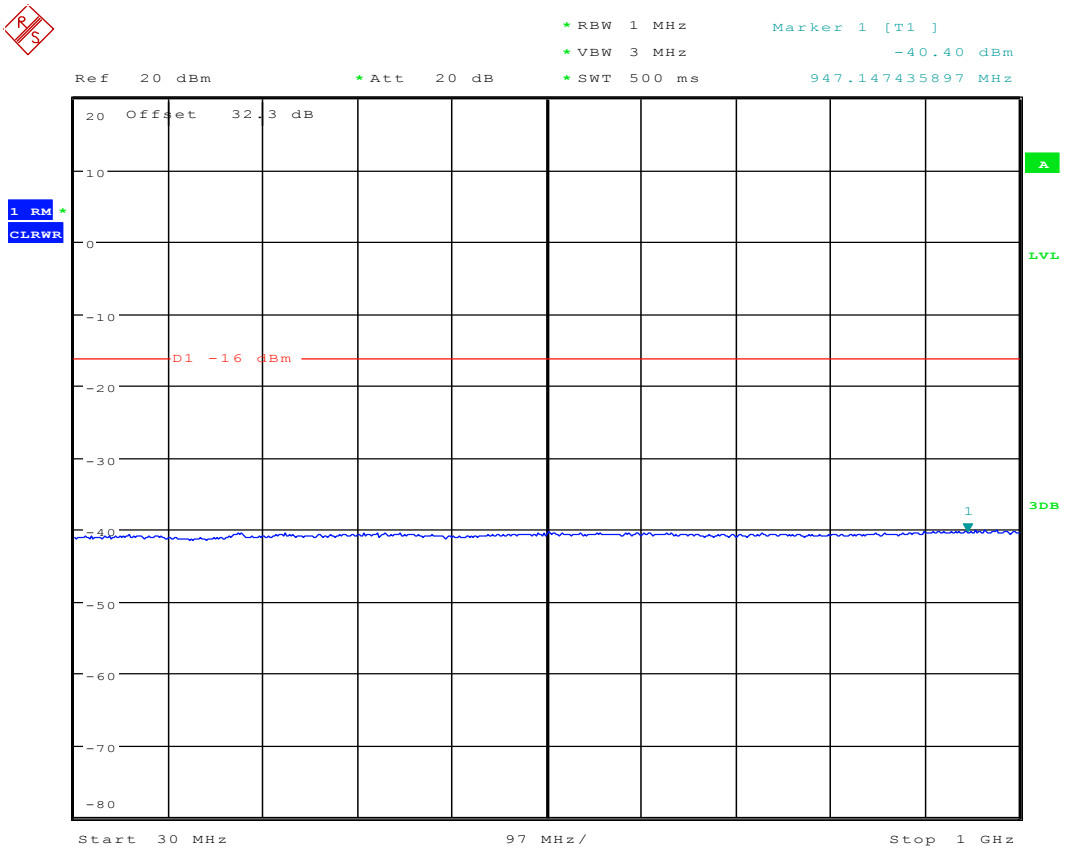
2 Test Plot

2.1 1L20M_B

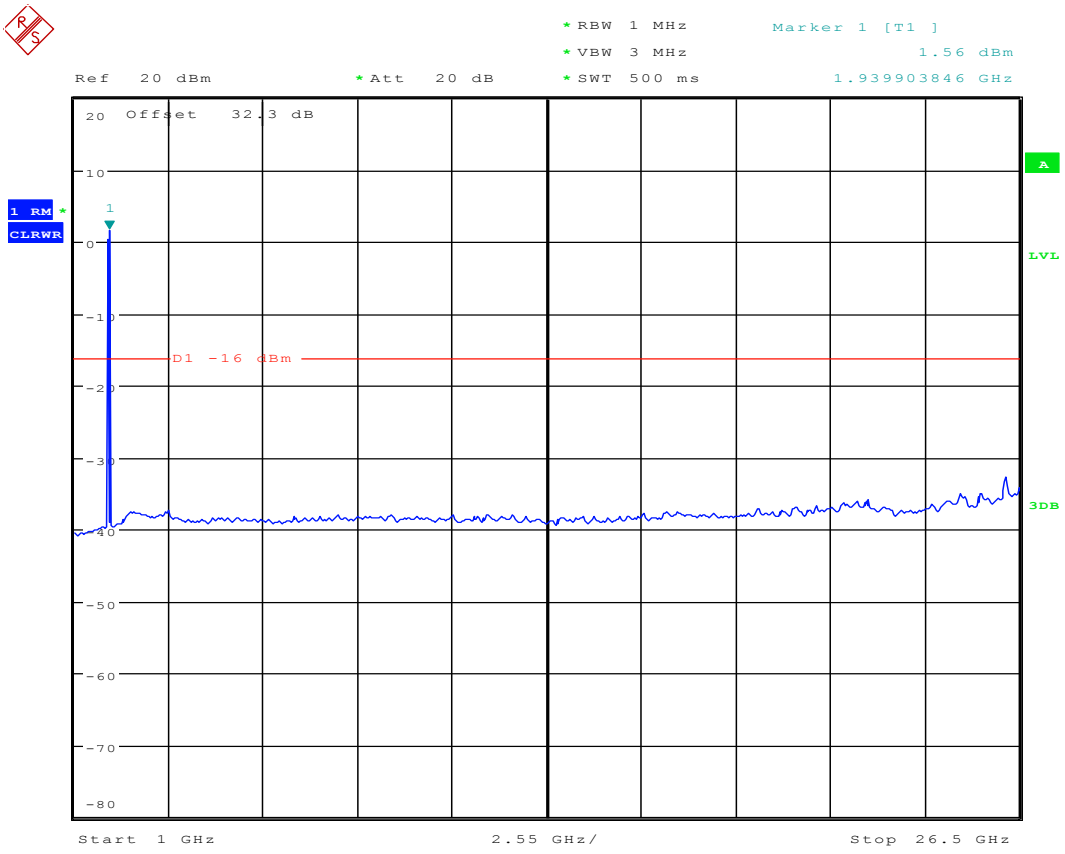




Date: 23.APR.2016 18:25:53

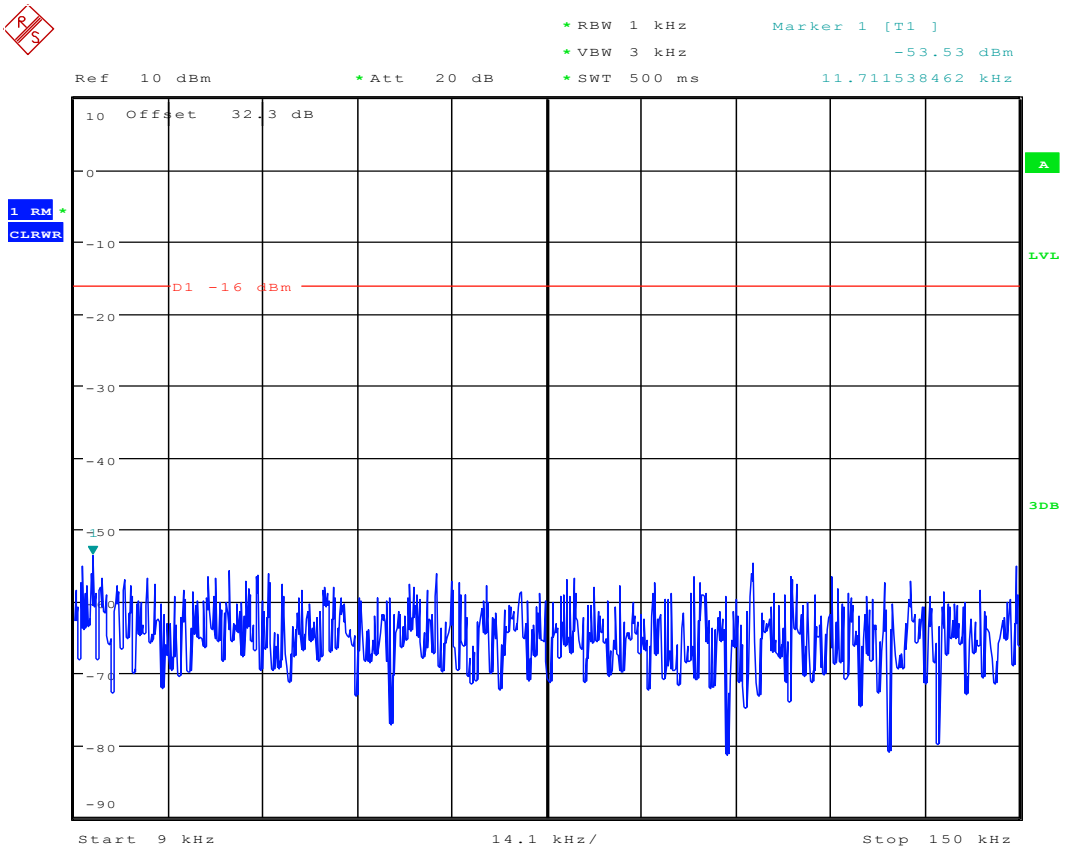


Date: 23.APR.2016 18:26:15

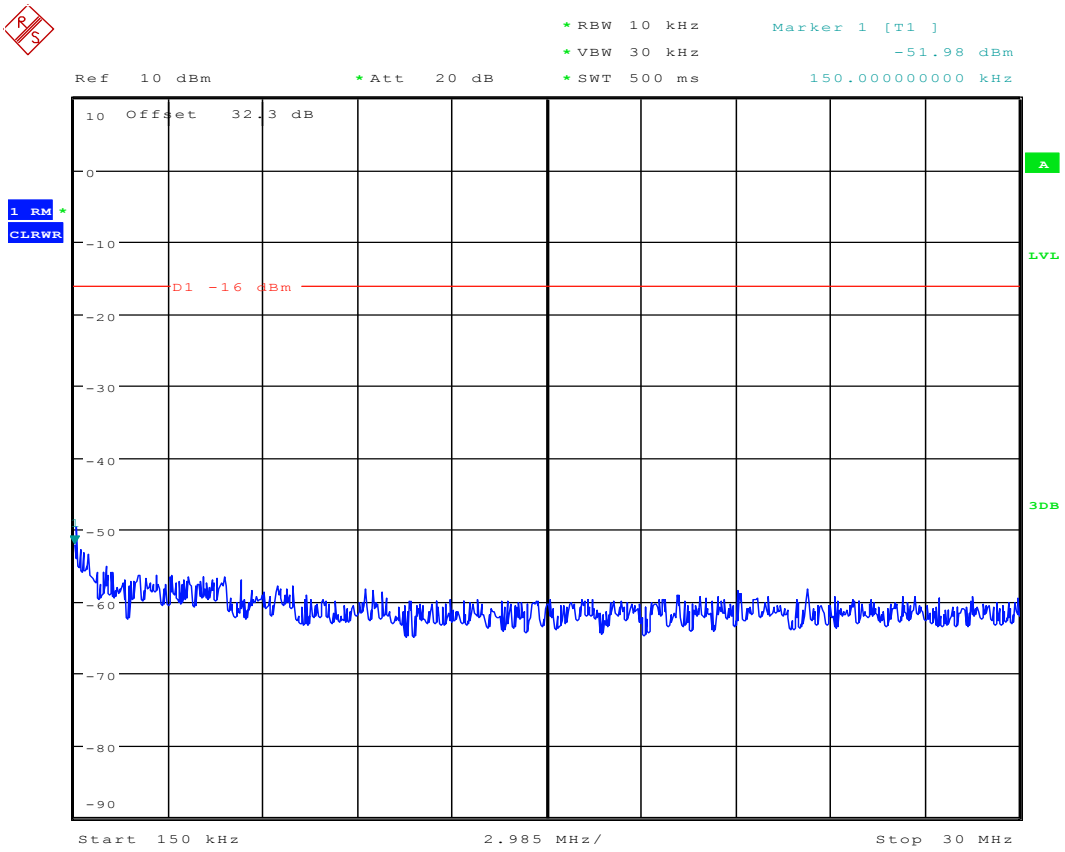


Date: 23.APR.2016 18:26:33

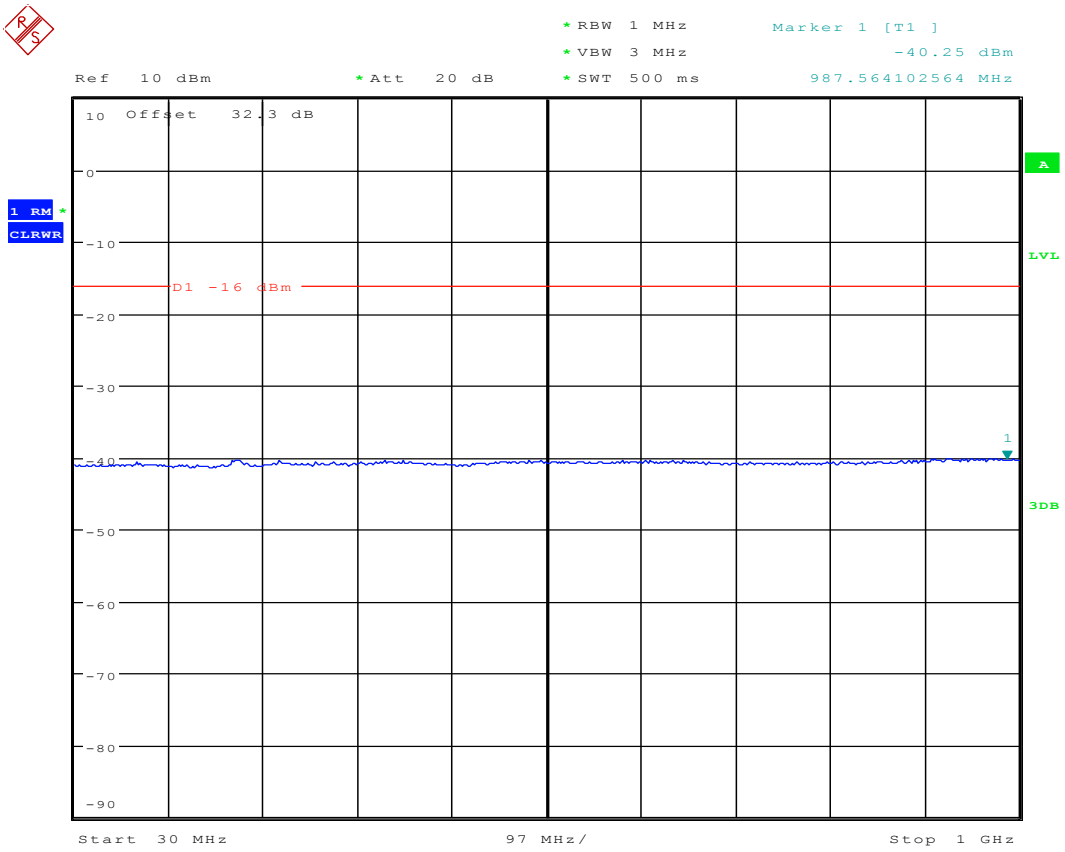
2.2 1L20M_M



Date: 23.APR.2016 18:30:42



Date: 23.APR.2016 18:31:04



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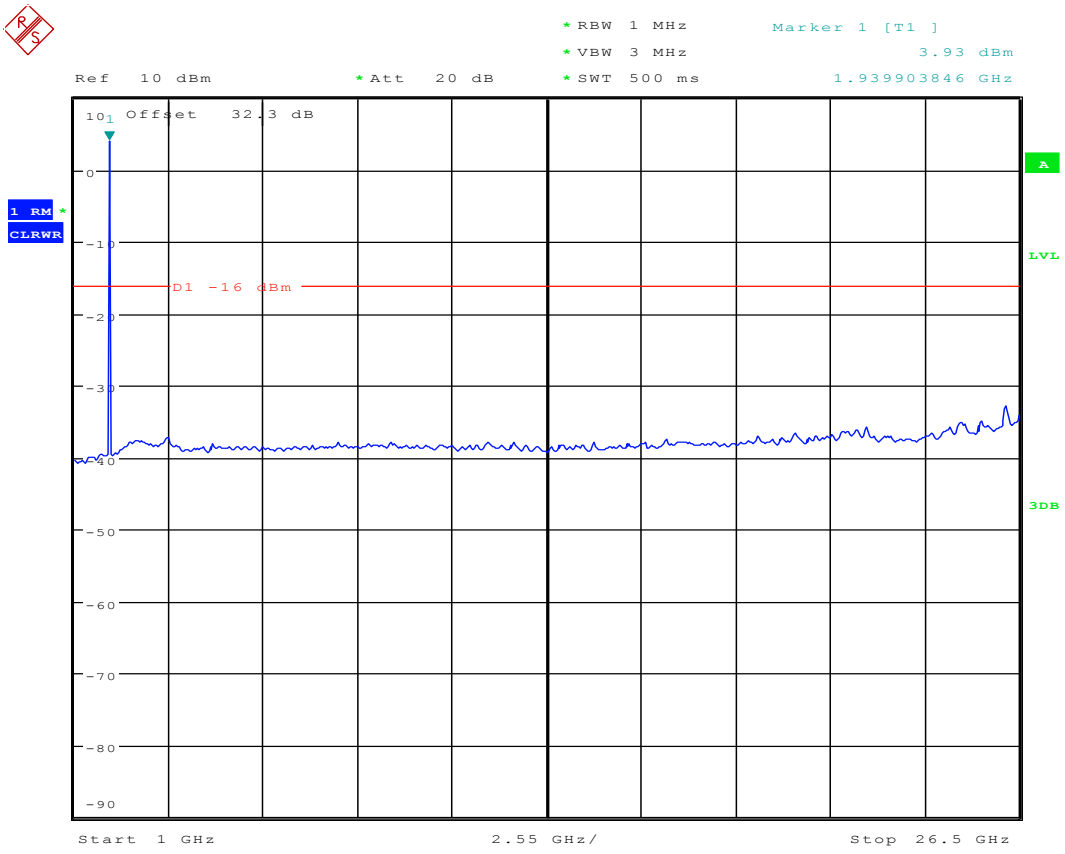

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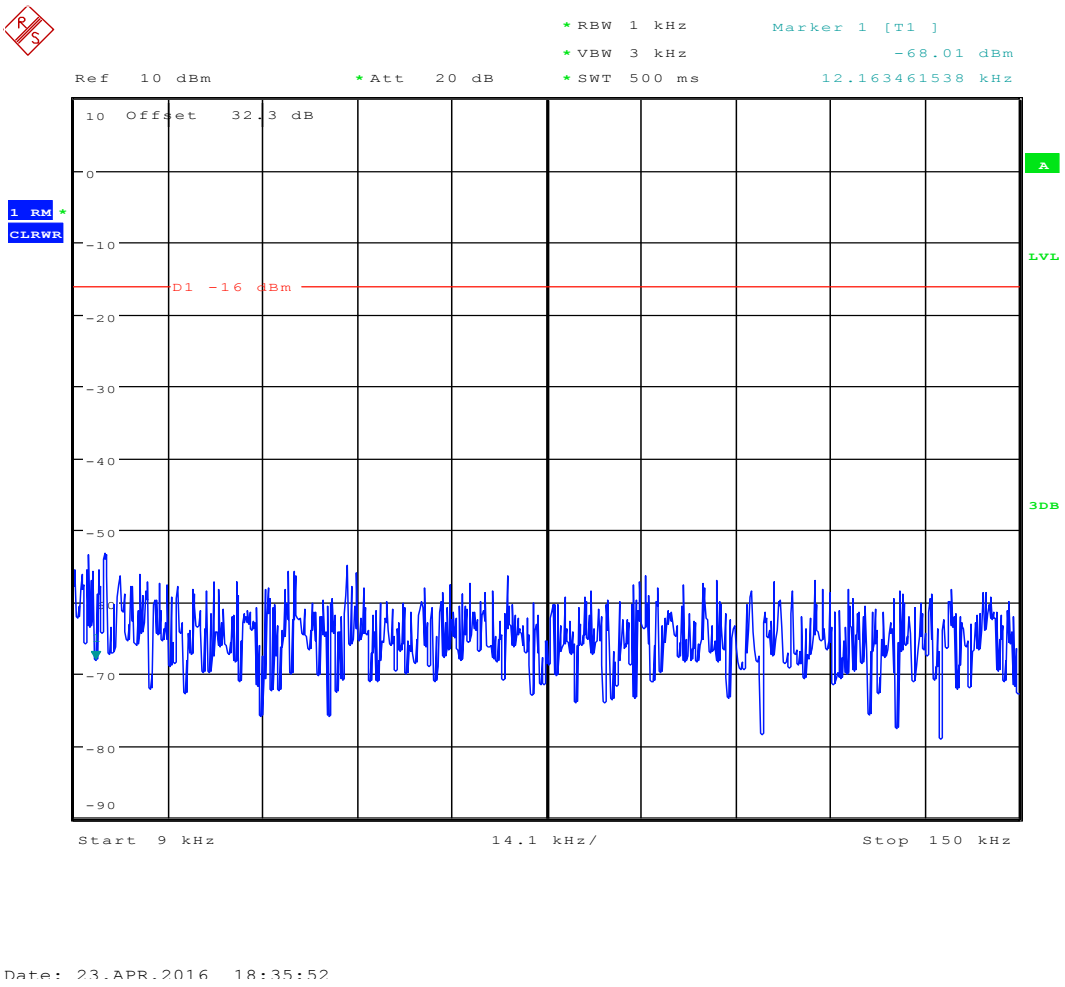
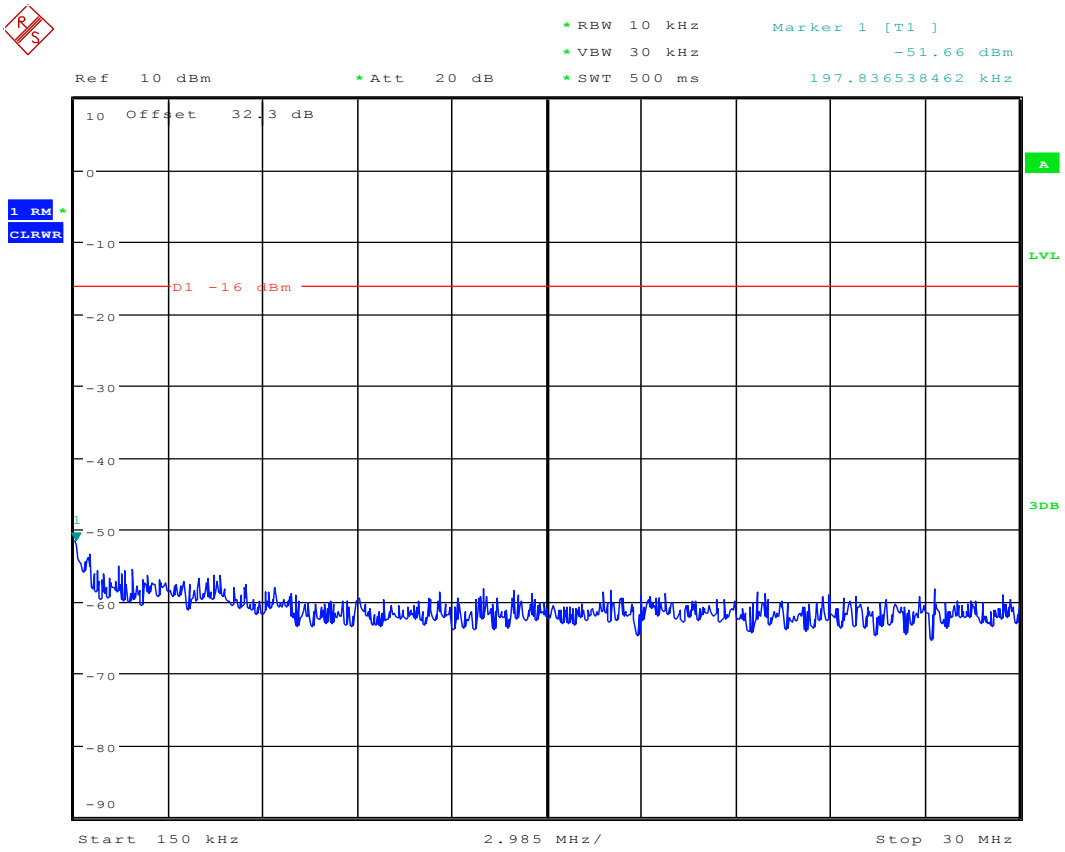
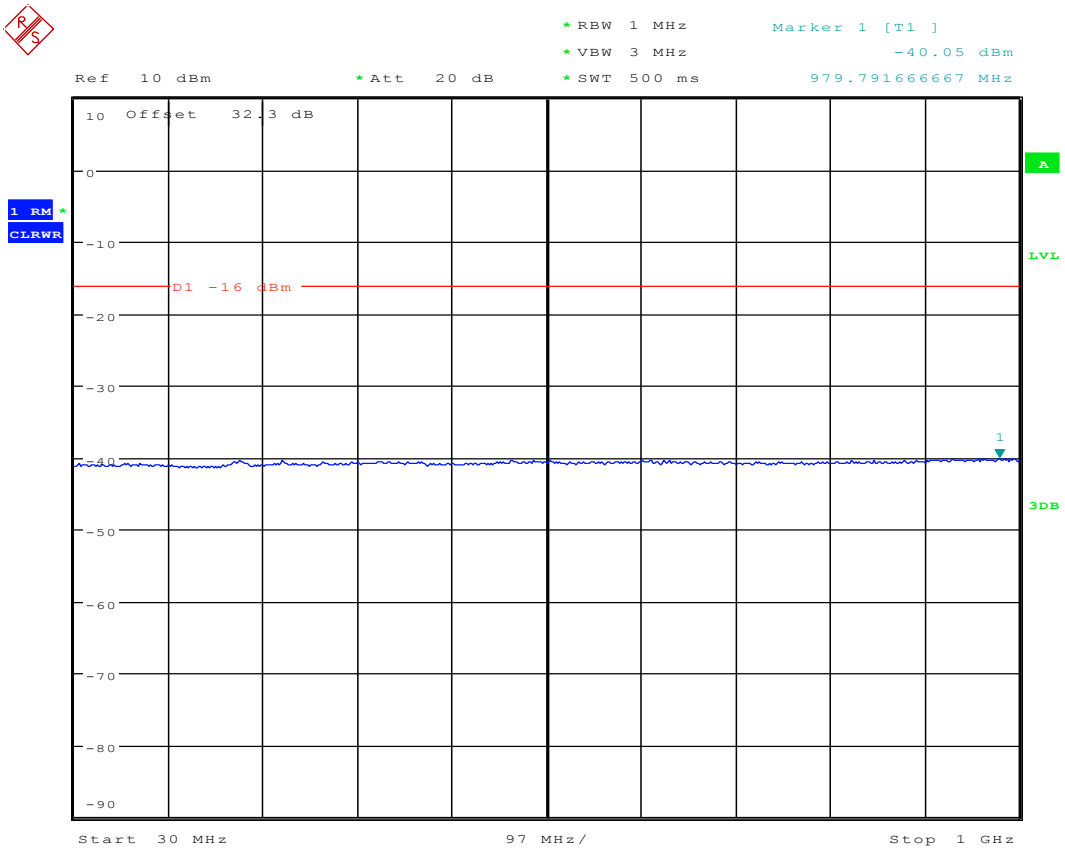
2.3 1L20M_T

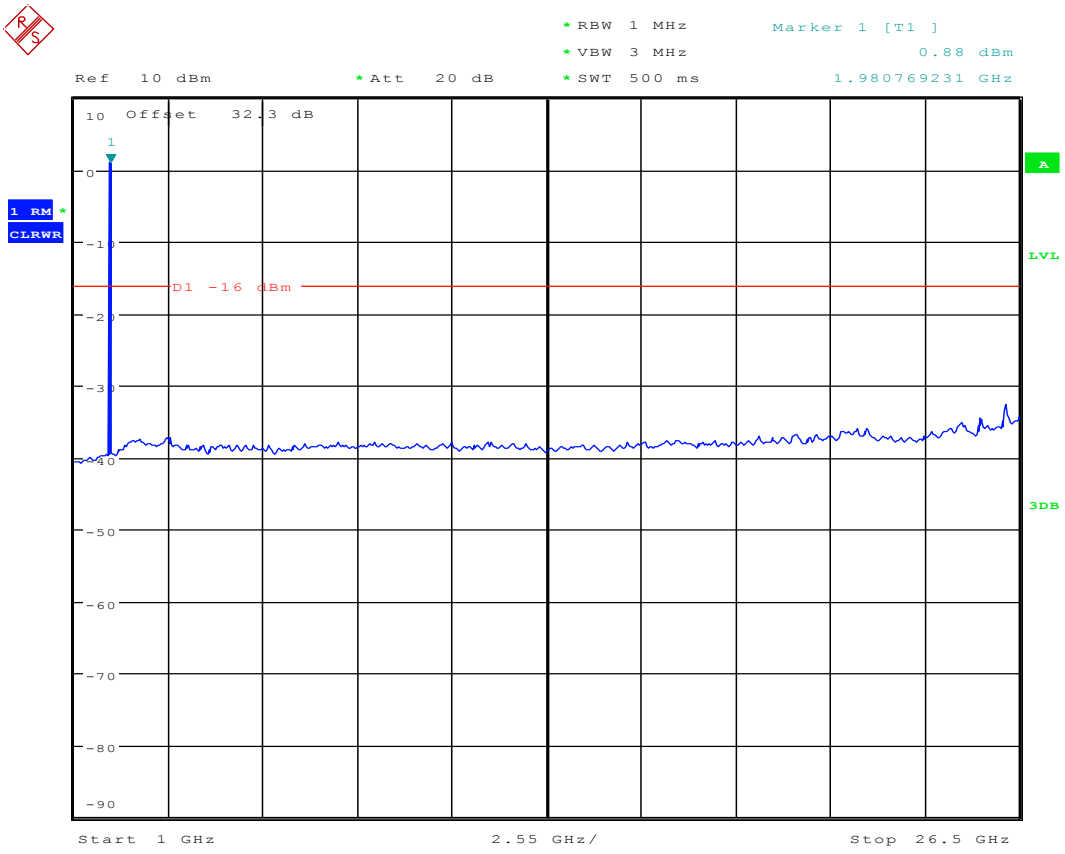




Date: 23.APR.2016 18:36:11

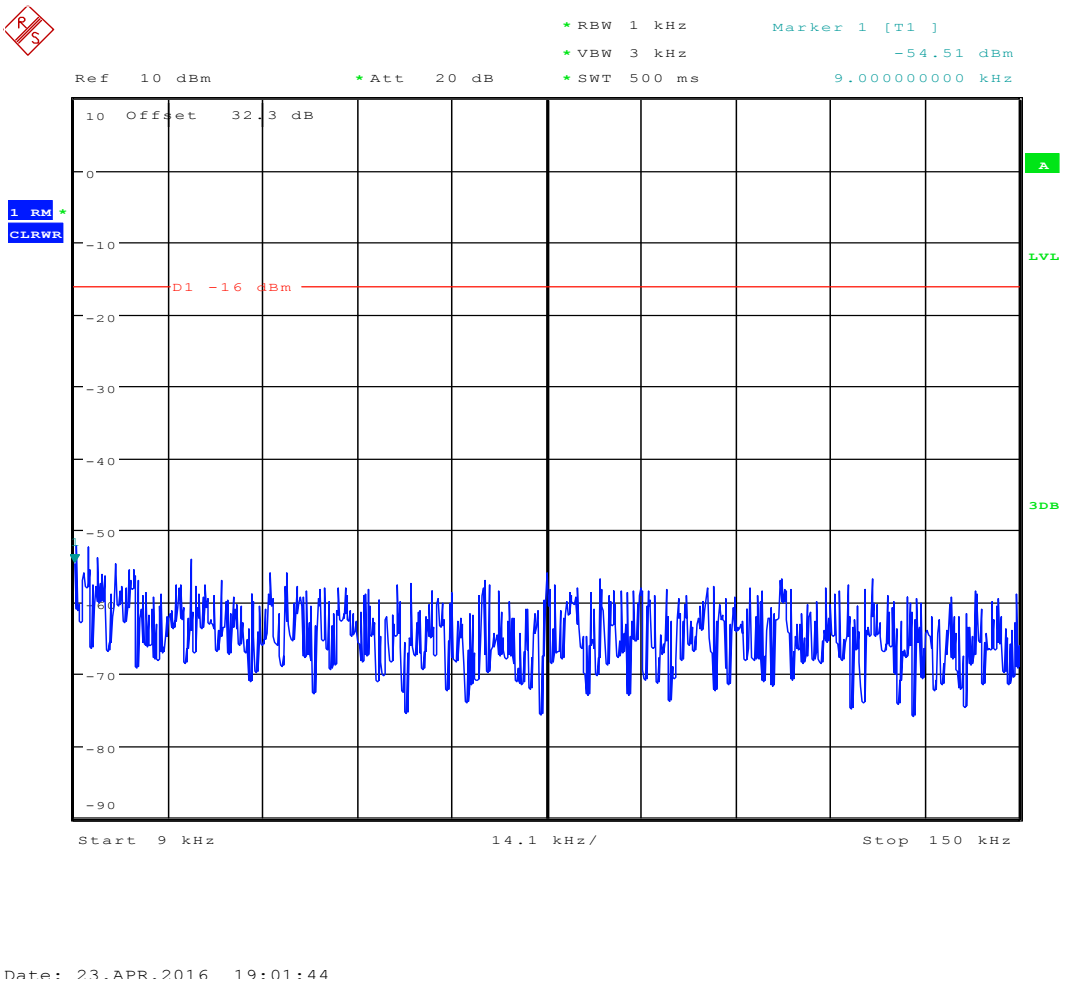


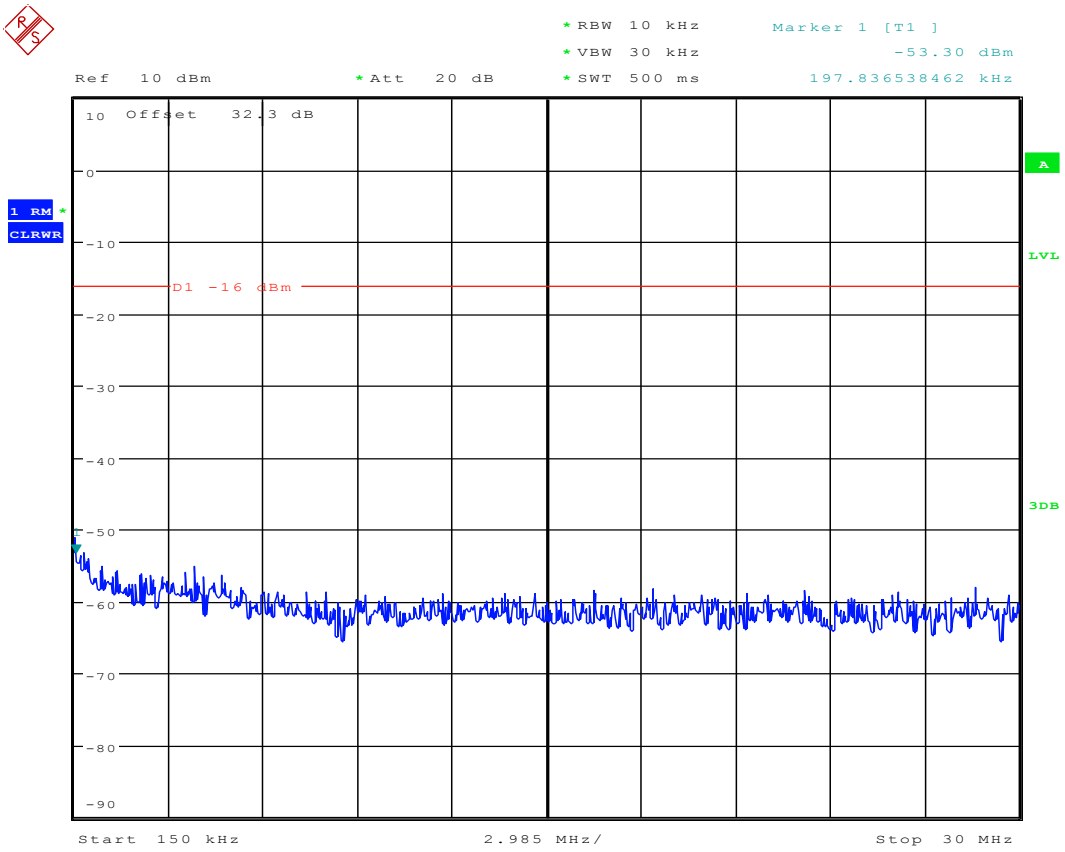
Date: 23.APR.2016 18:36:37



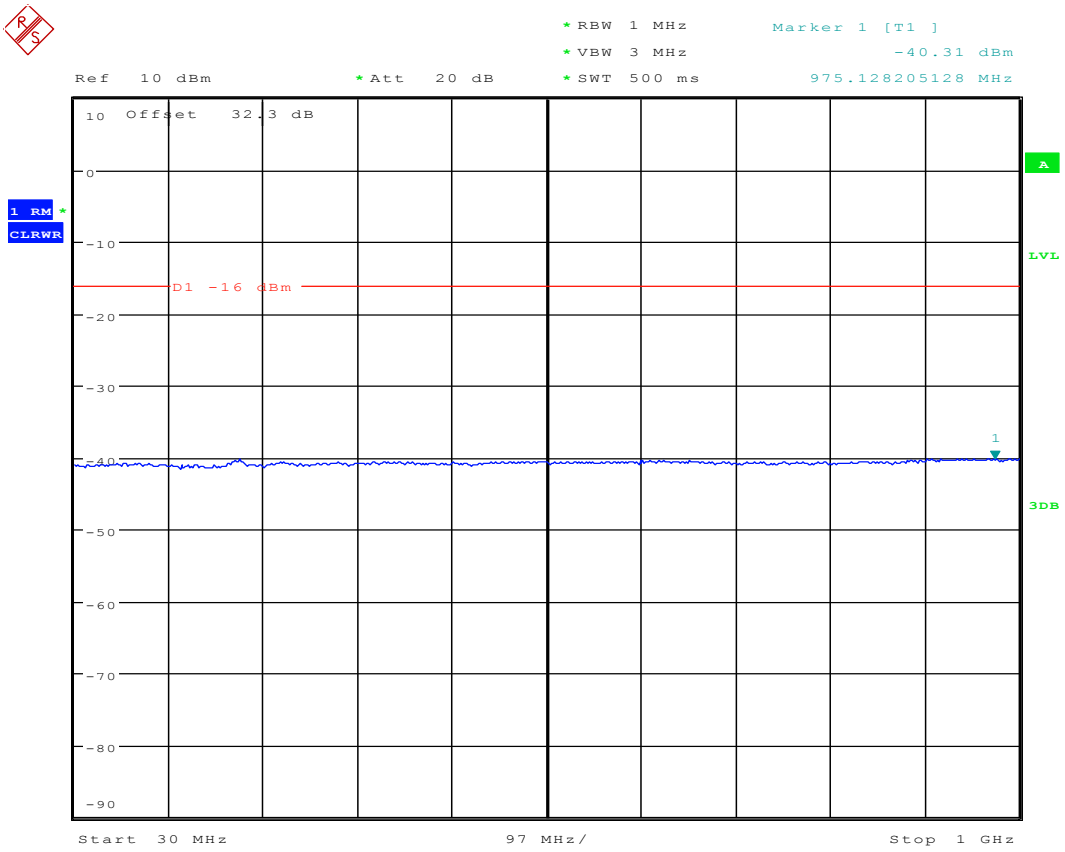
Date: 23.APR.2016 18:36:55

2.4 1U_B





Date: 23.APR.2016 19:02:11



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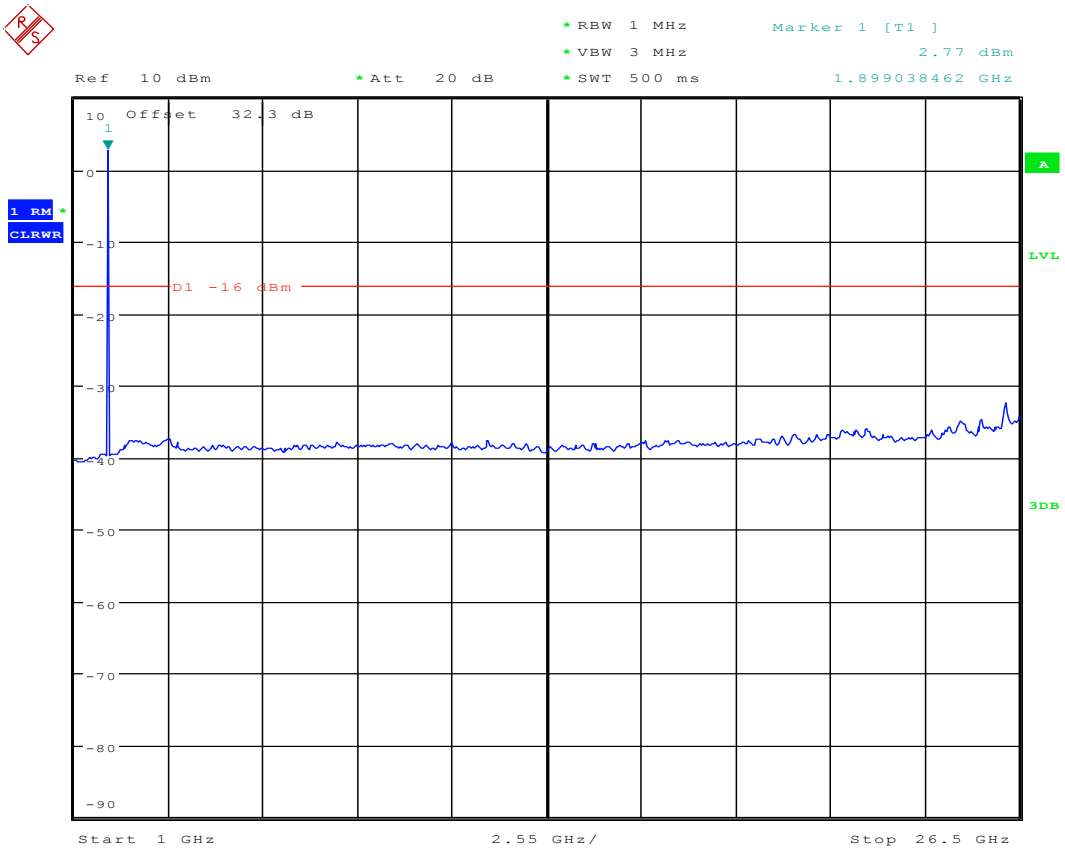

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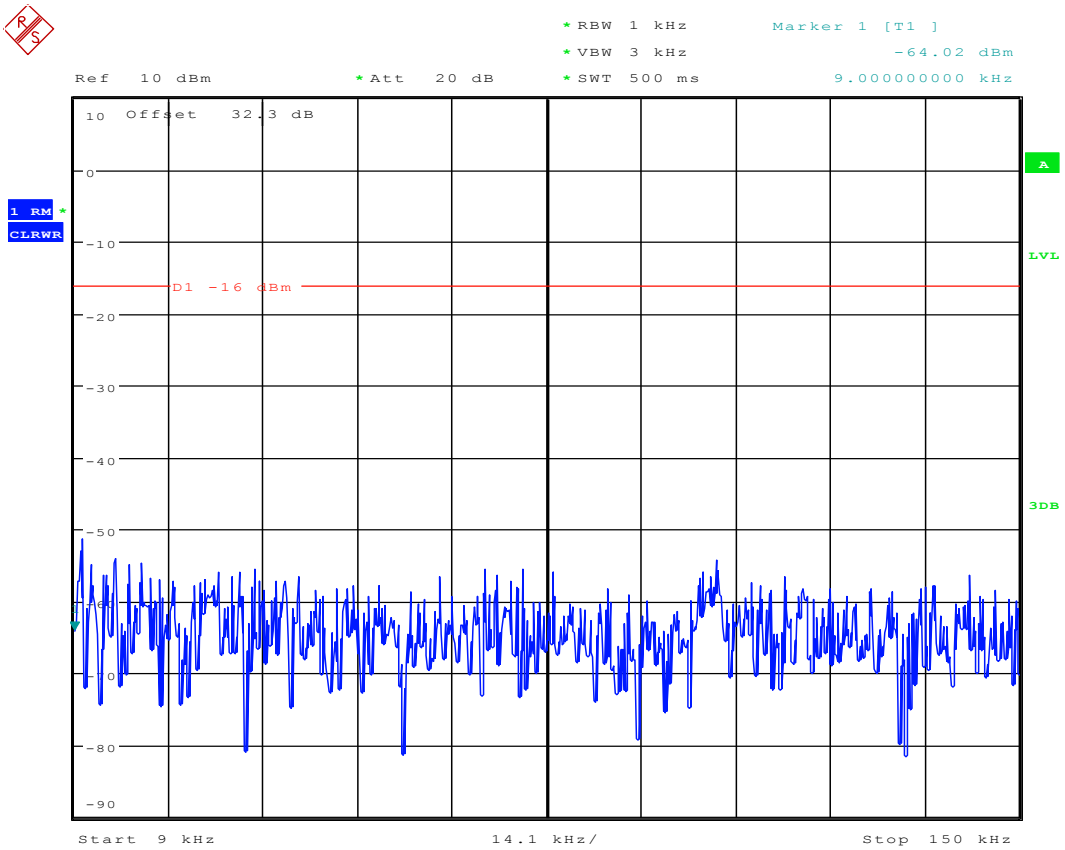
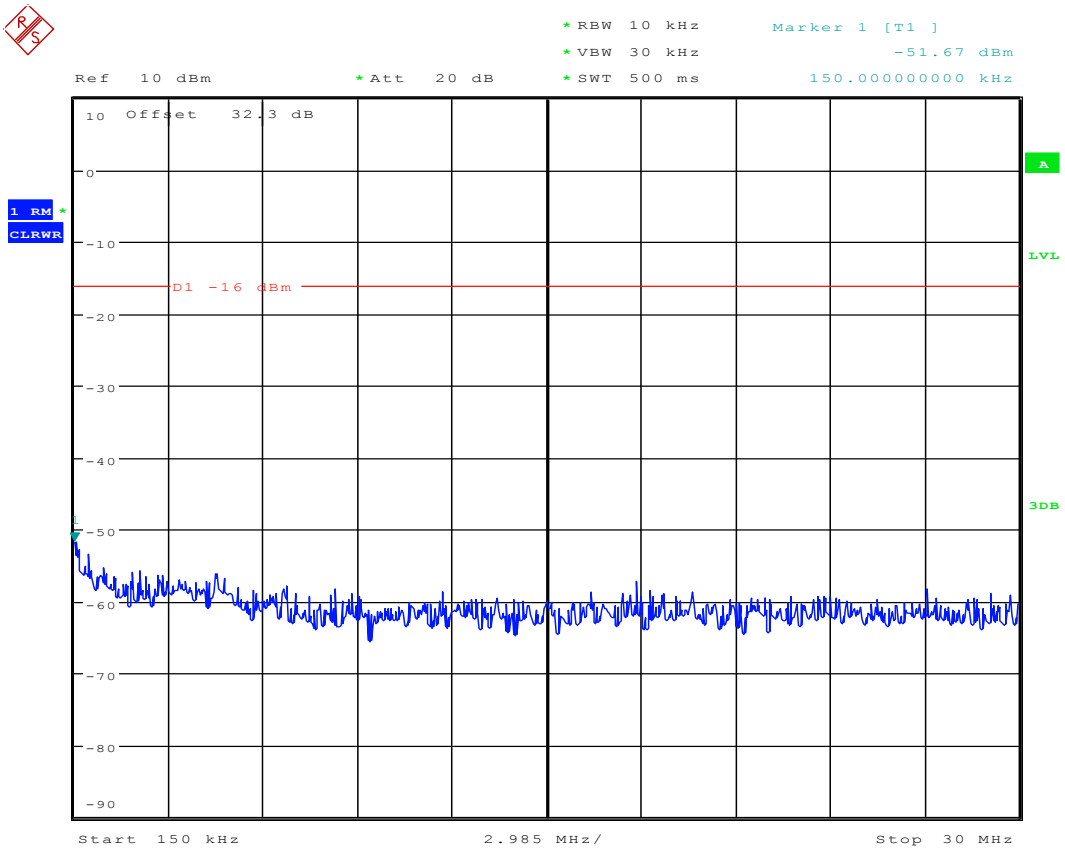
2.5 1U_M



Date: 23.APR.2016 19:06:38



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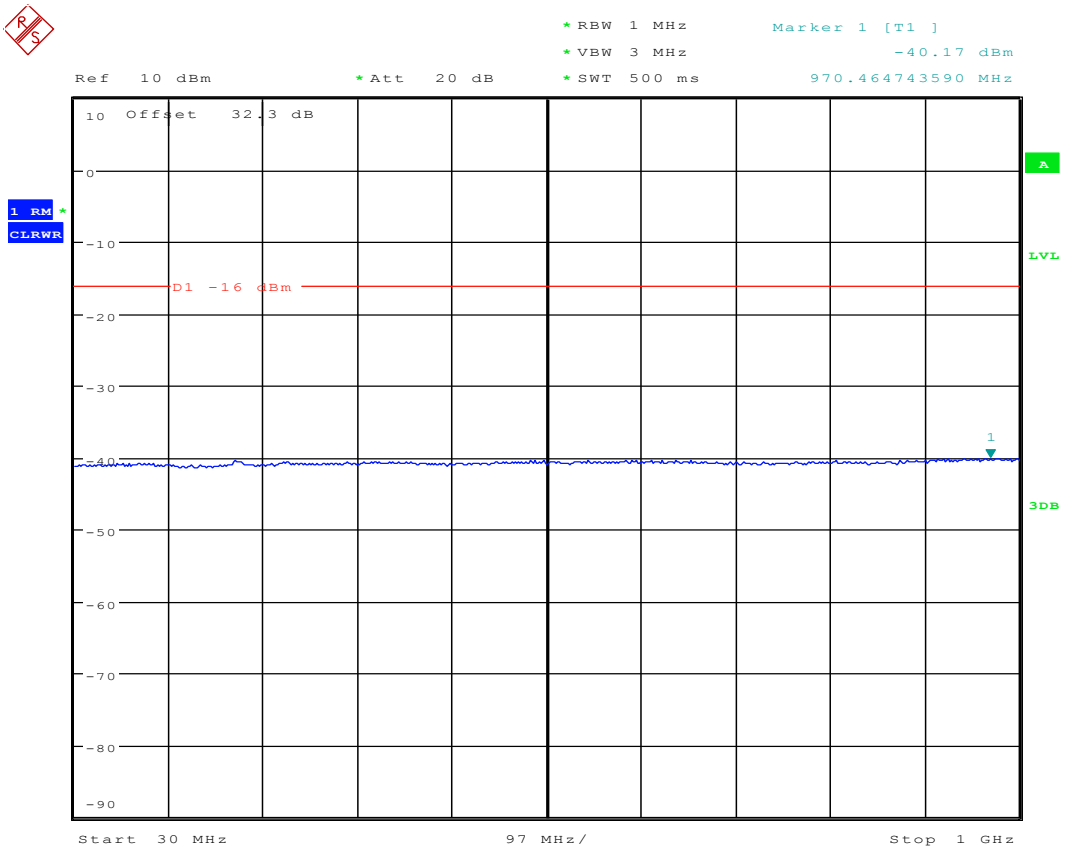

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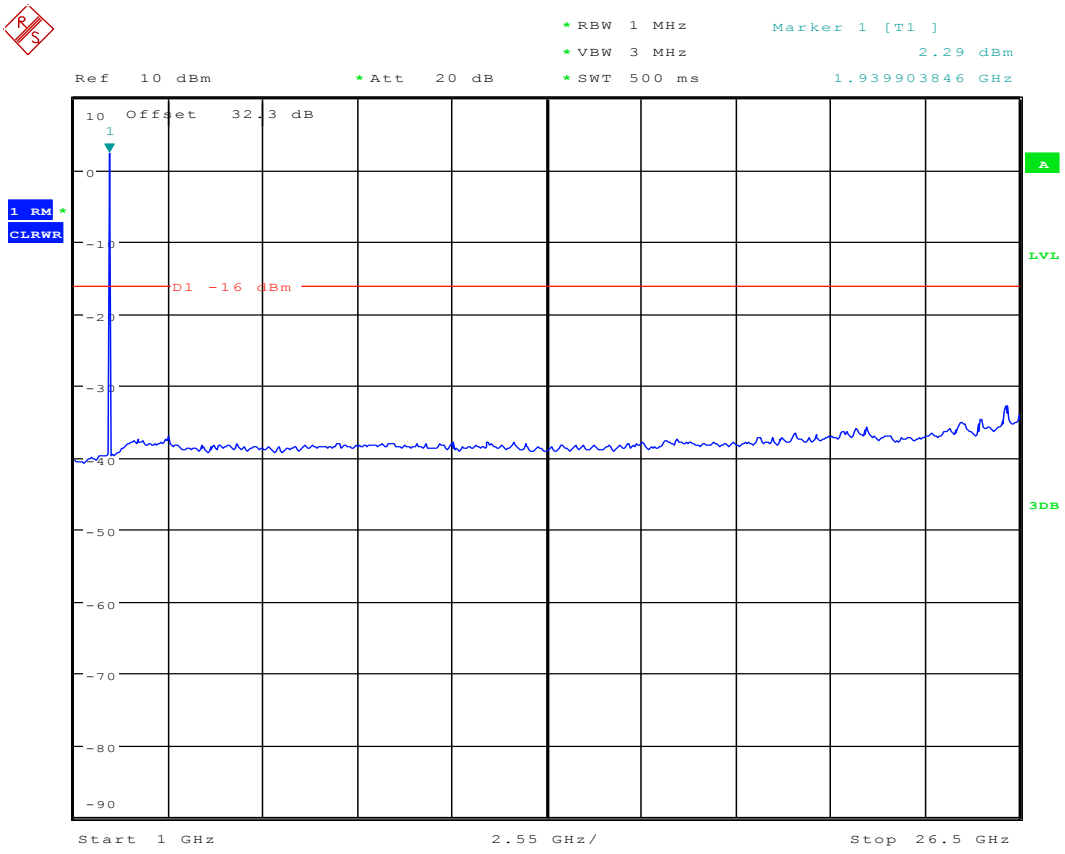
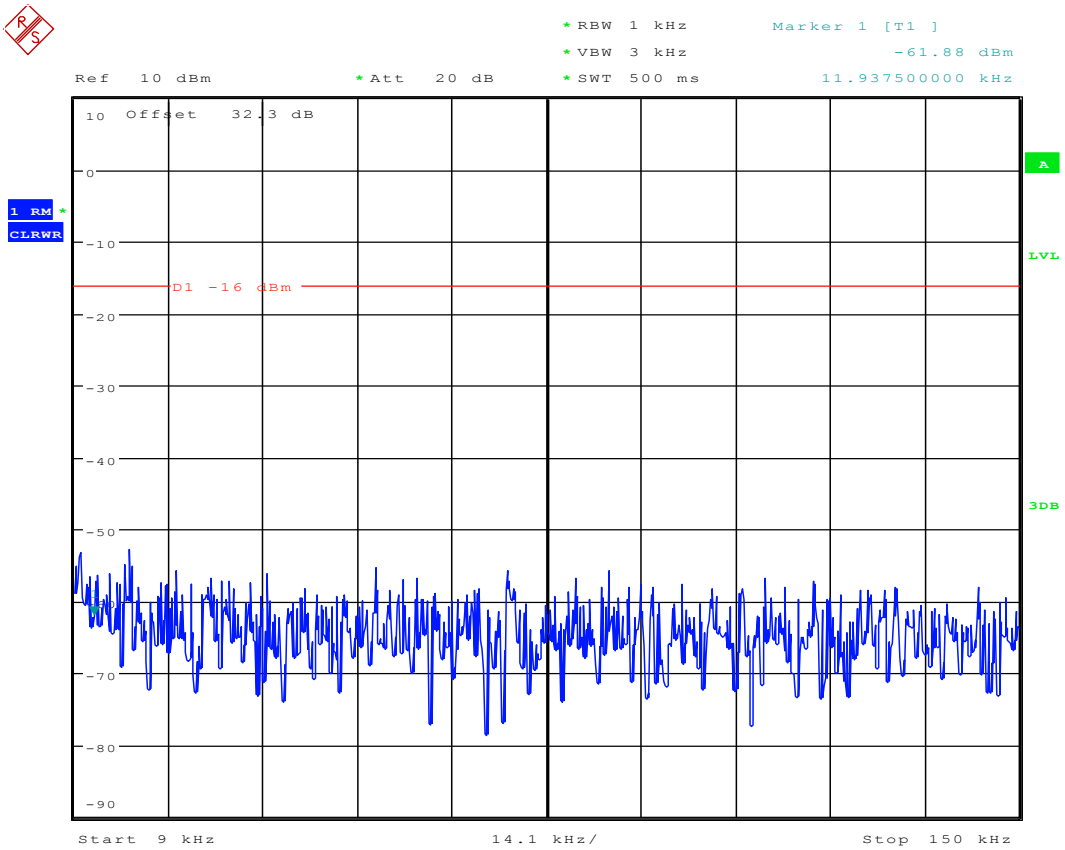


Date: 23.APR.2016 19:07:36

2.6 1U_T



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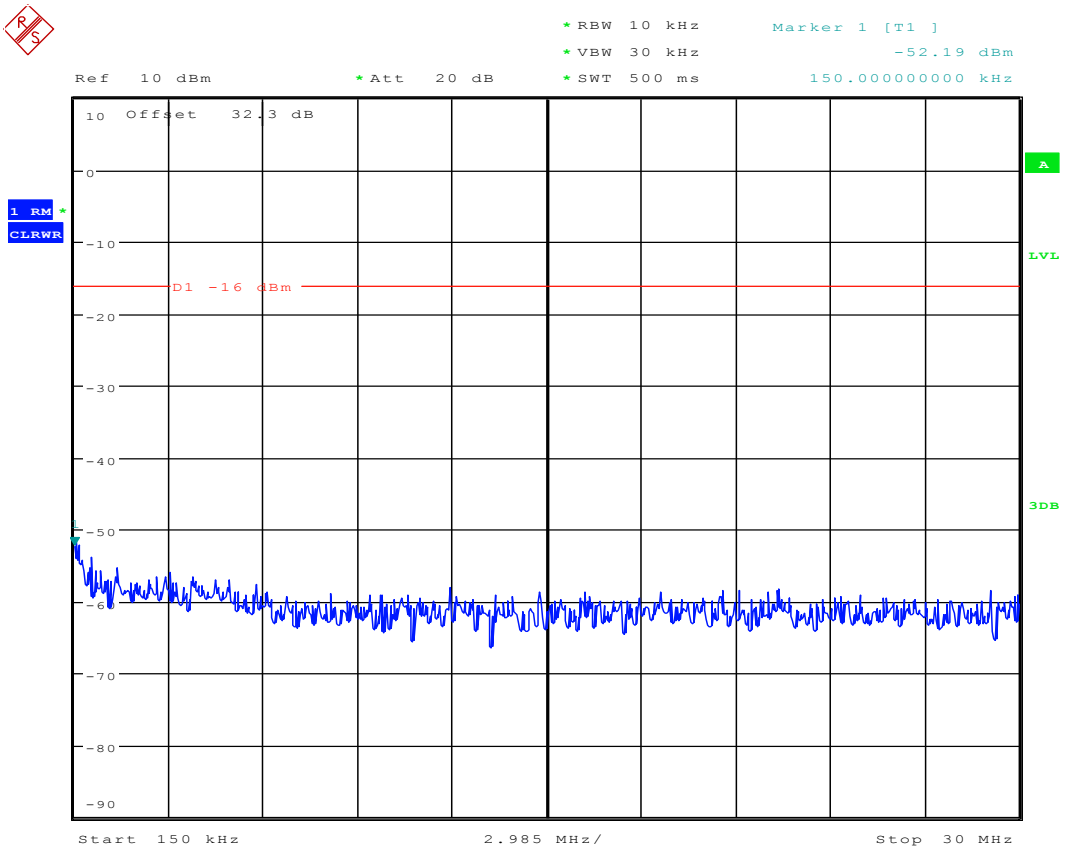

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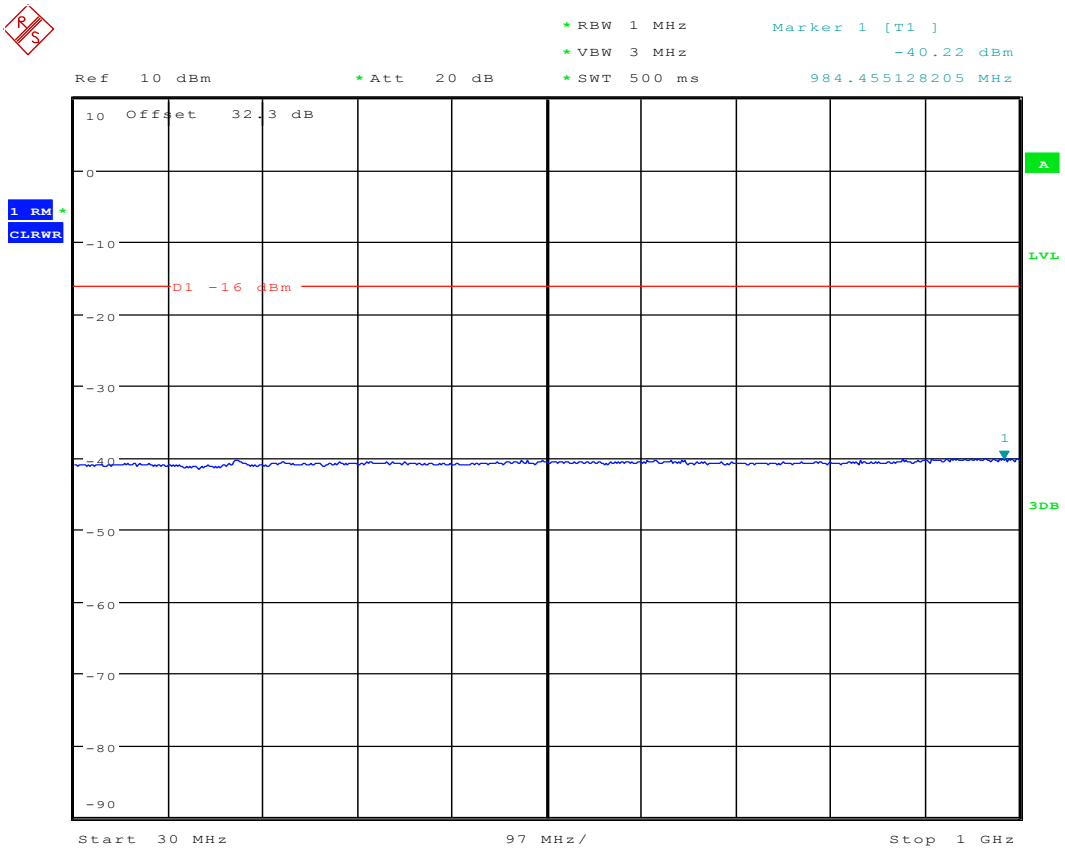

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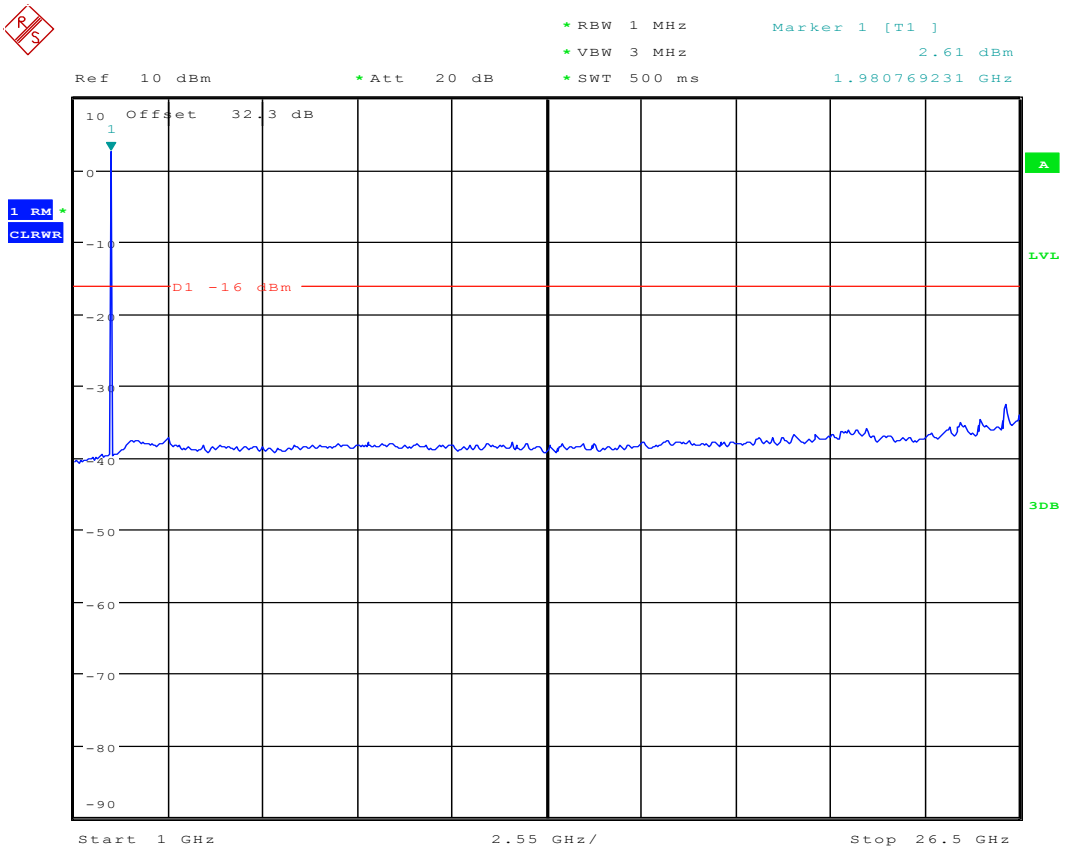

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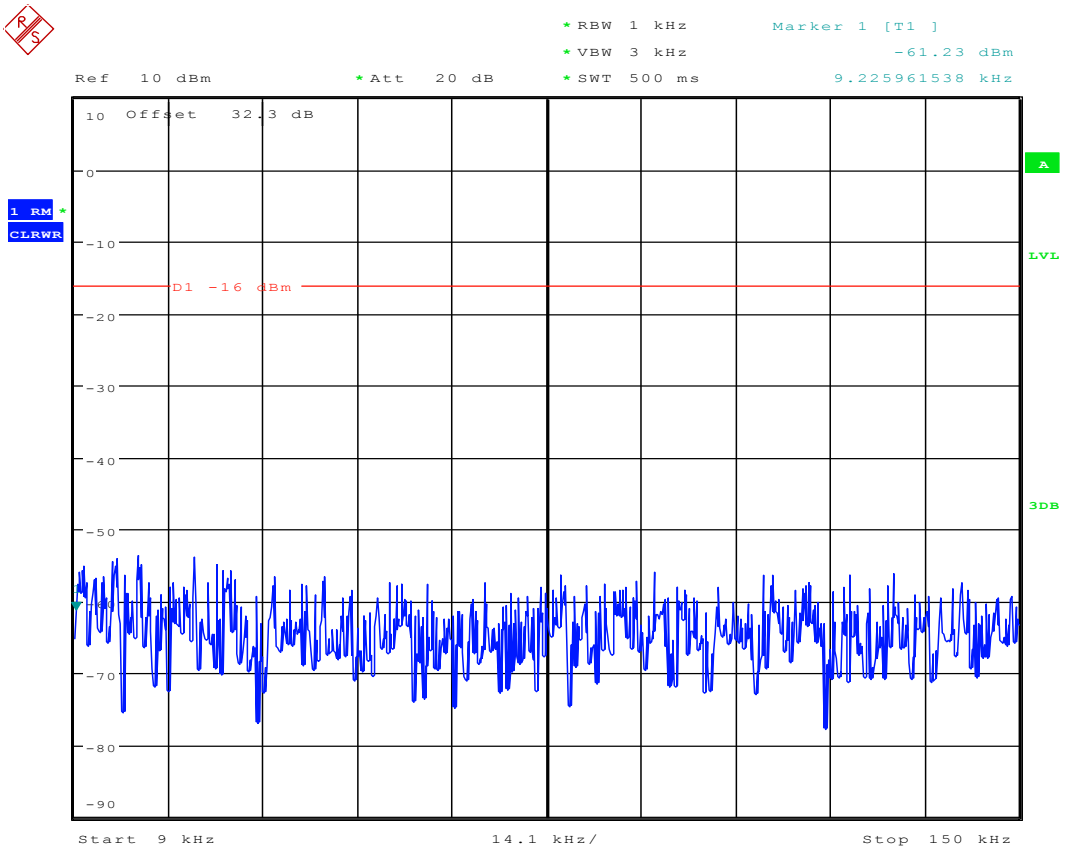
2.7 1U1L5M_B



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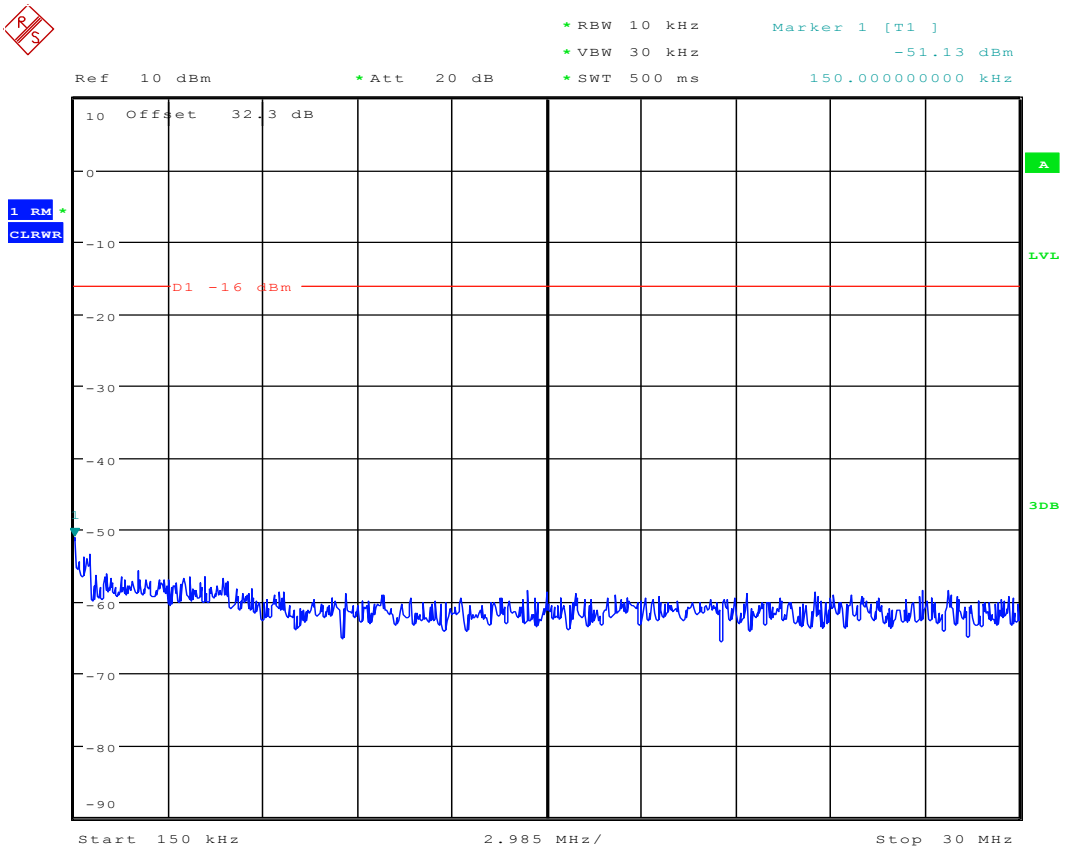

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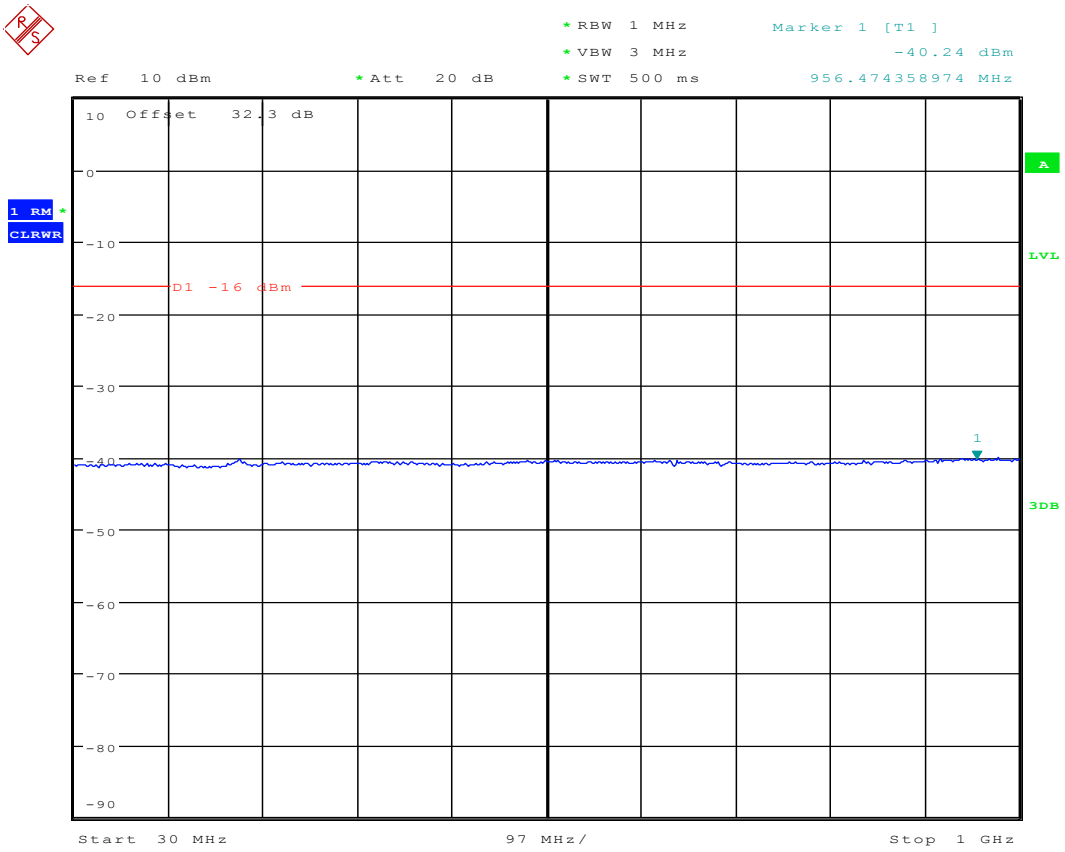

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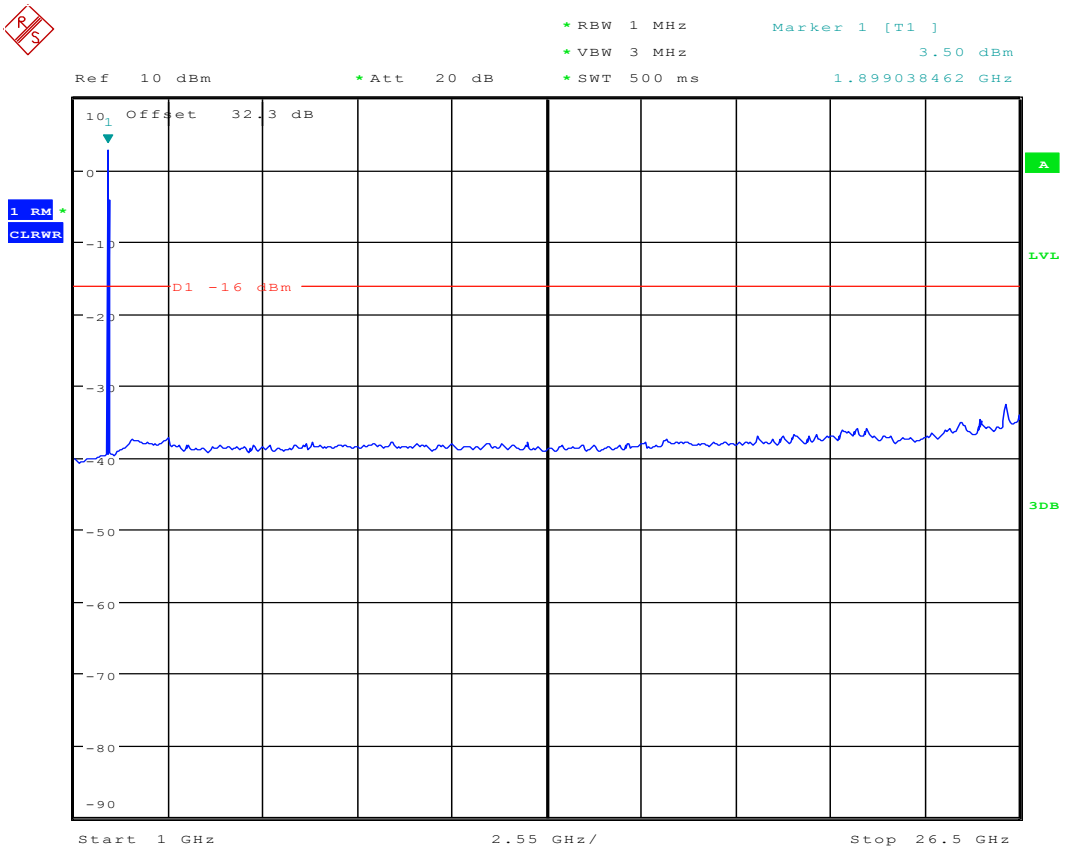

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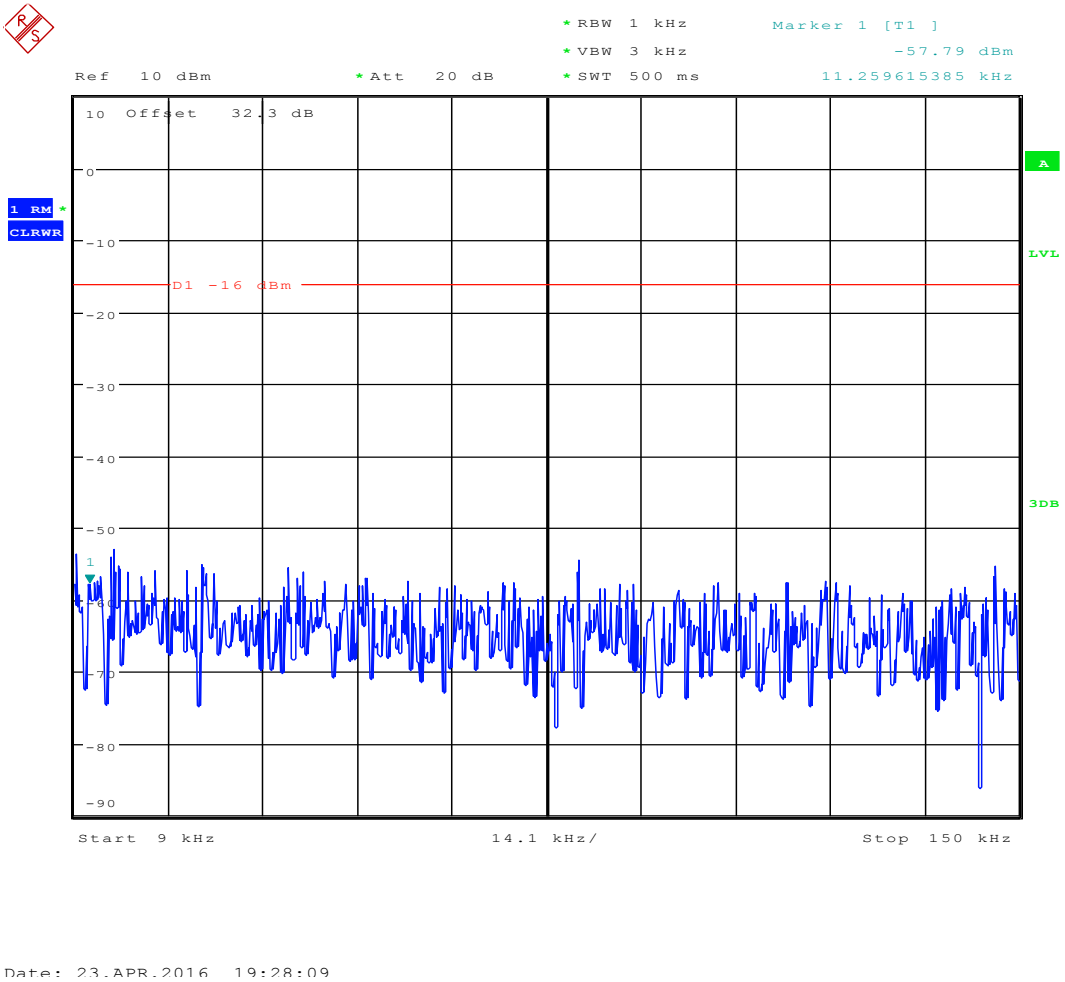
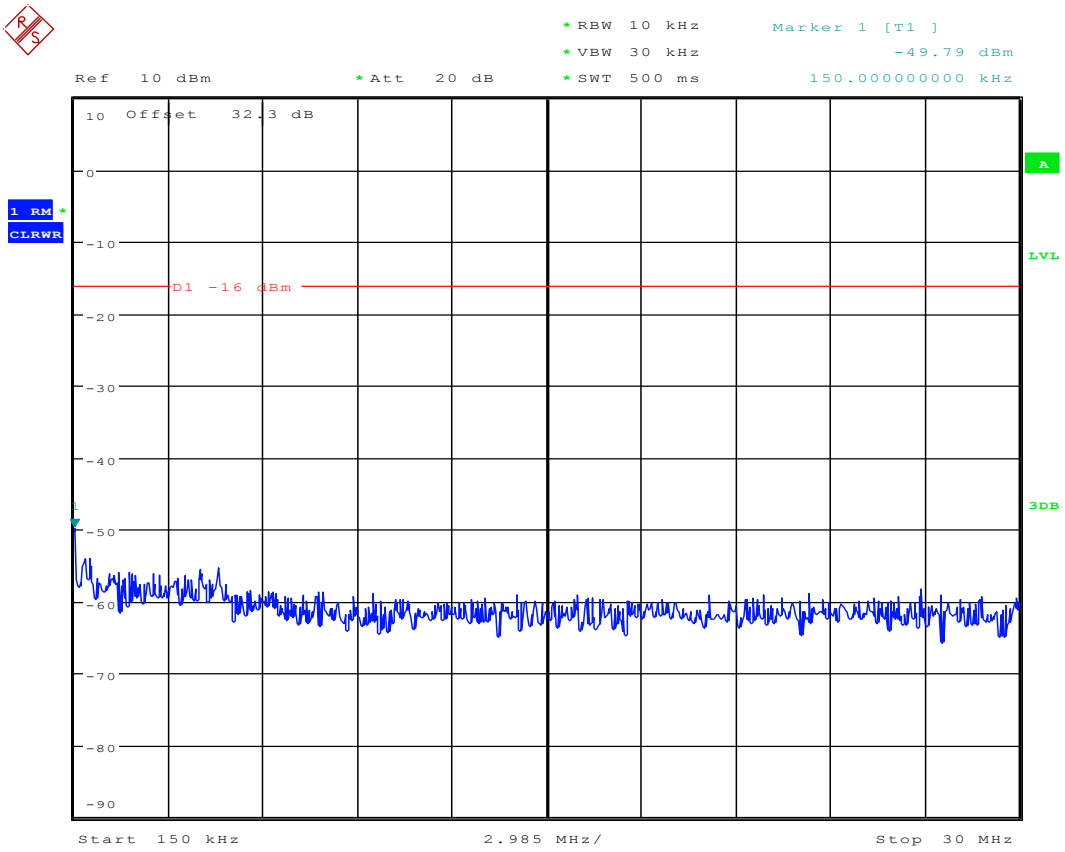
2.8 1U1L5M_M





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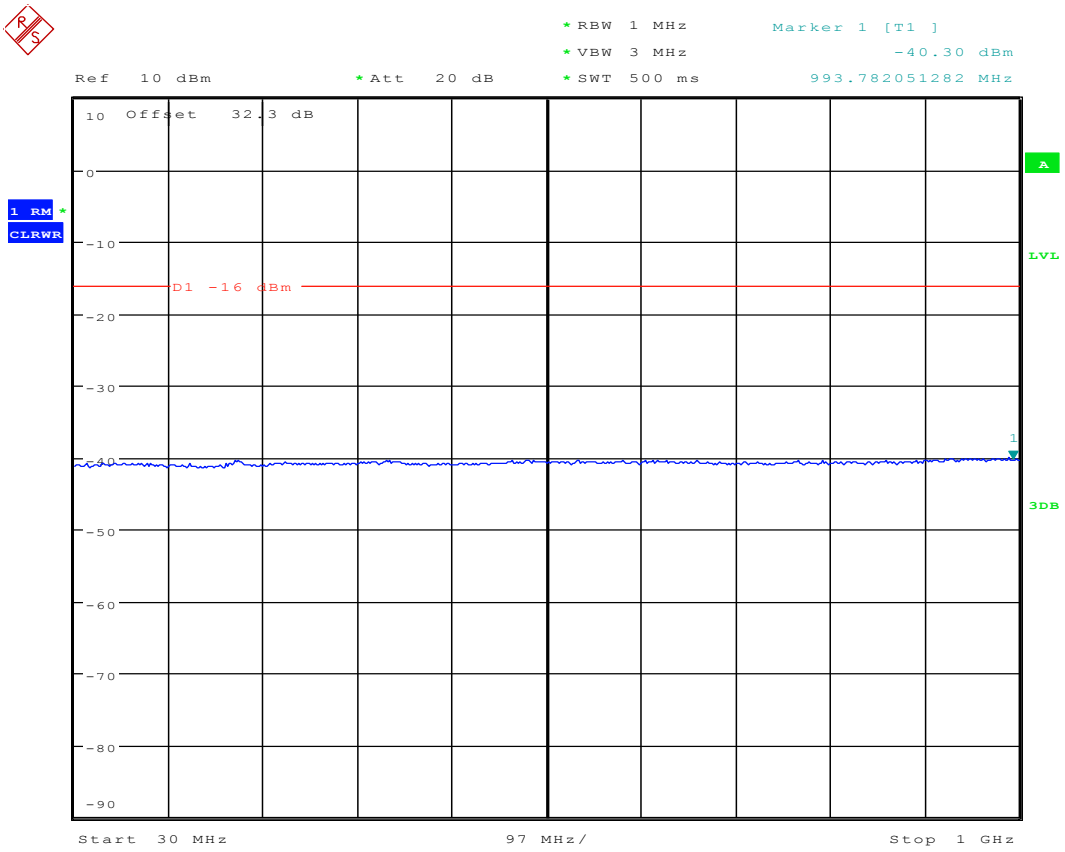

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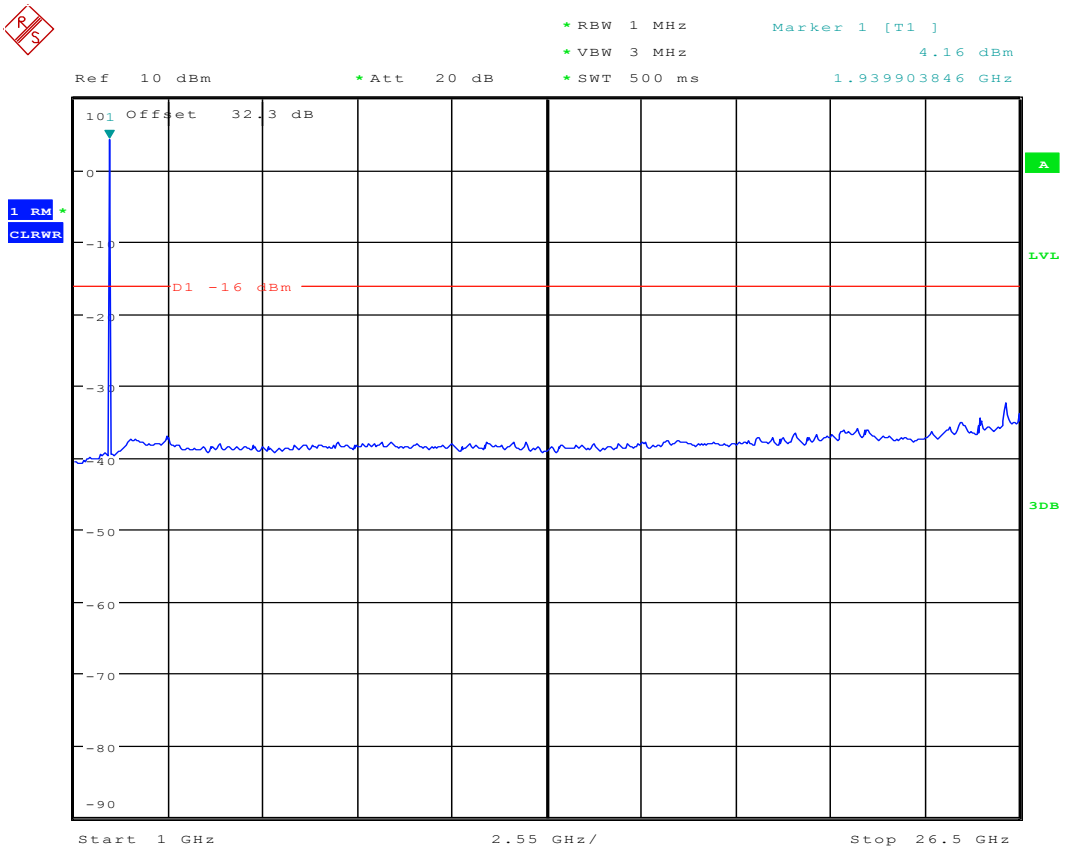
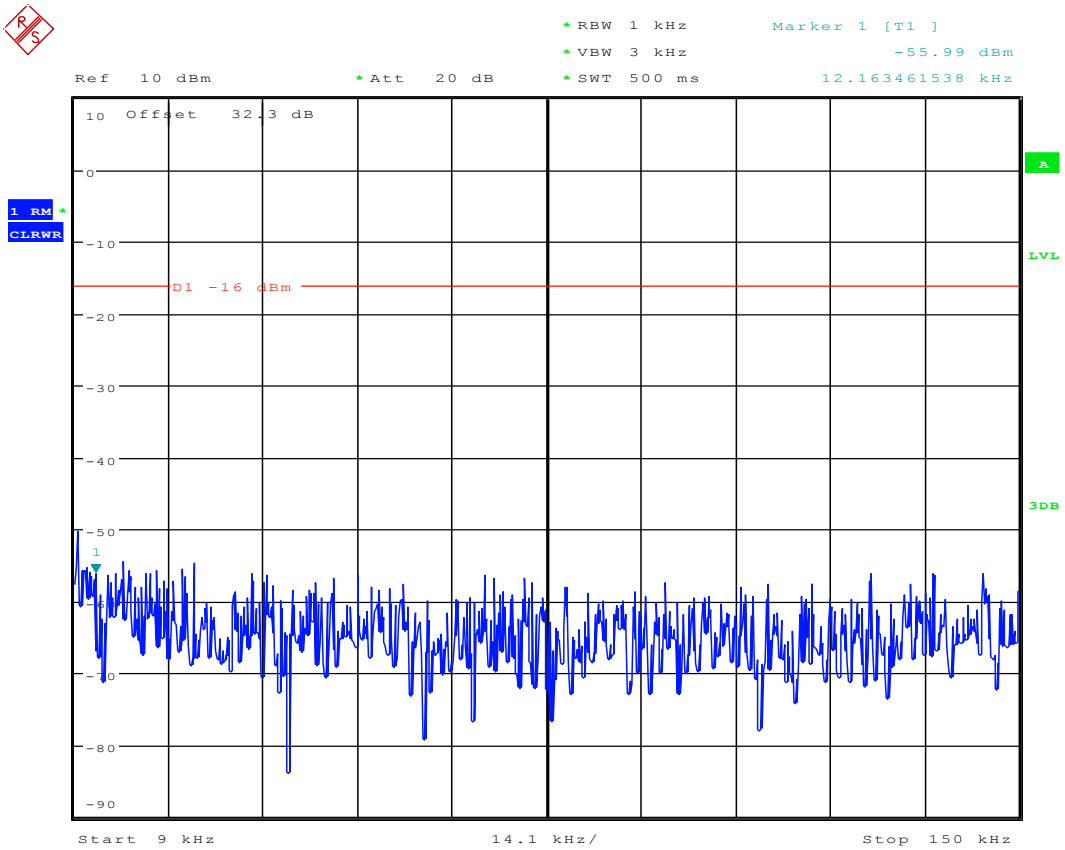


2.9 1U1L5M_T



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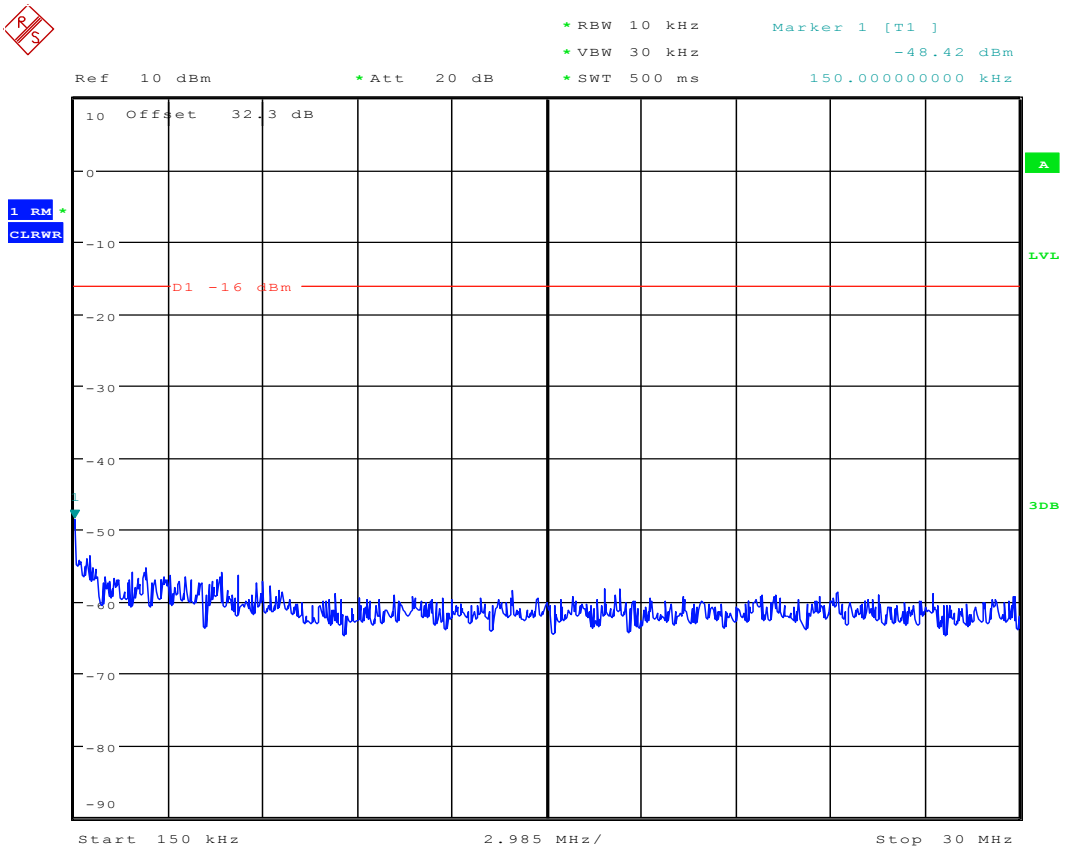

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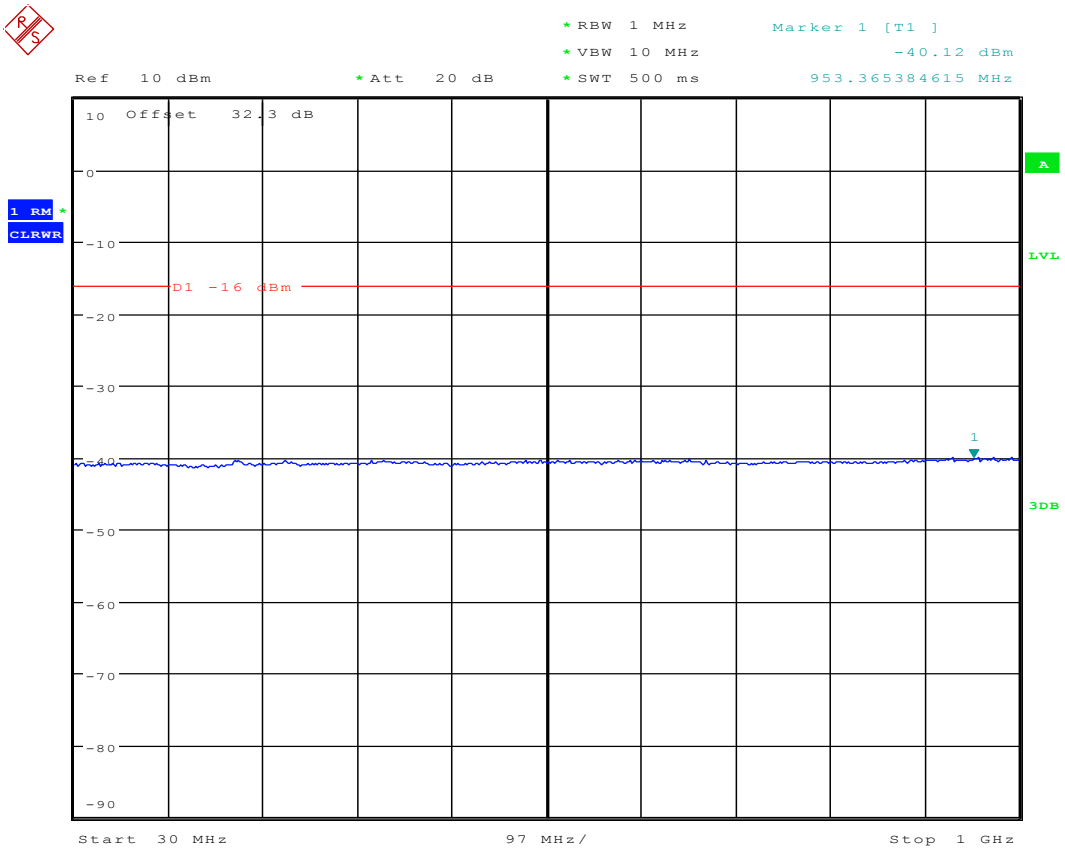

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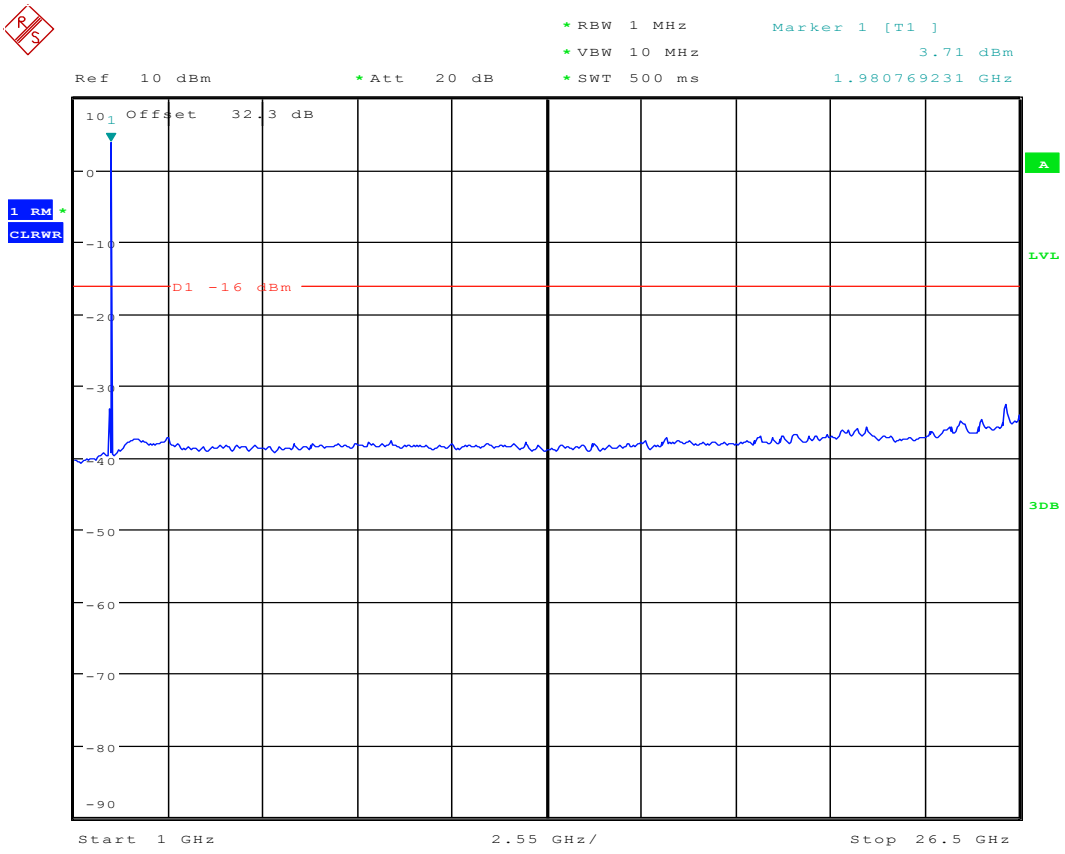


Date: 23.APR.2016 19:34:15

Appendix E: Radiated (Spurious) Emissions

1 Result Table

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

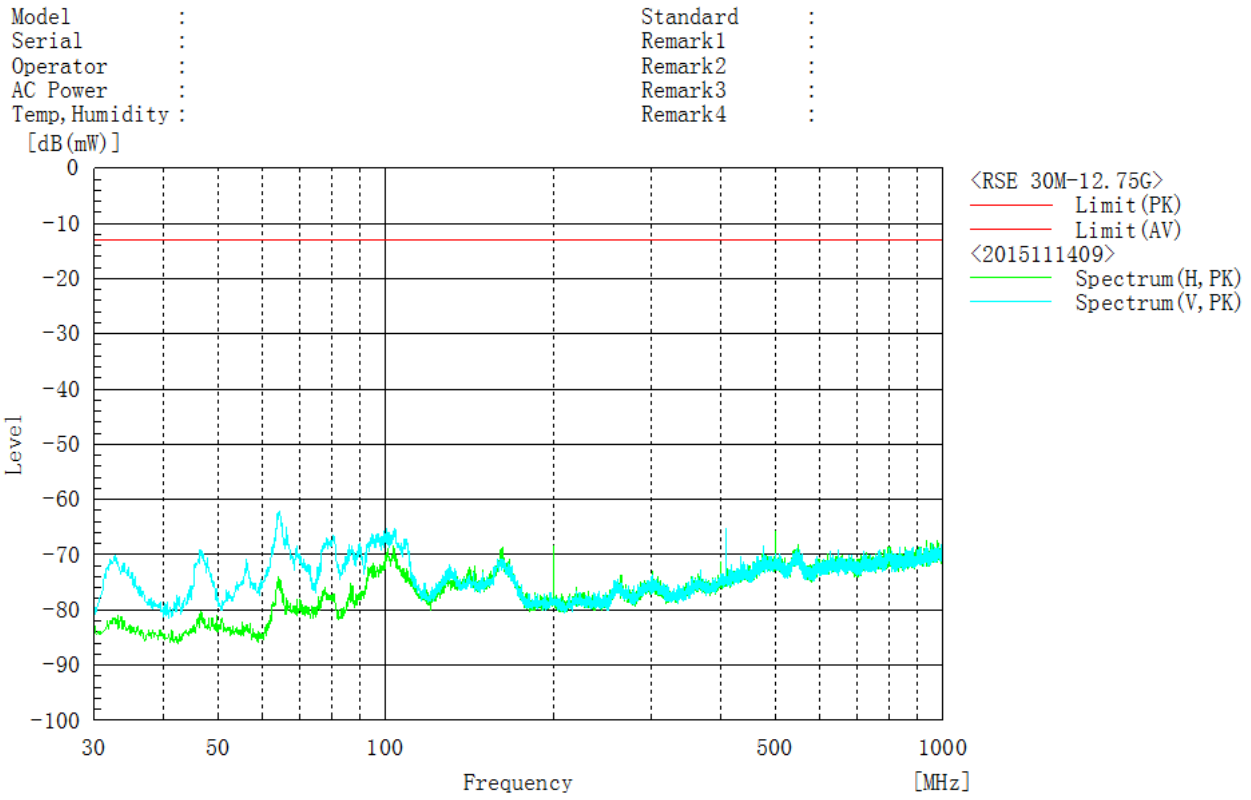
Note: The setting of analyzer is below

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

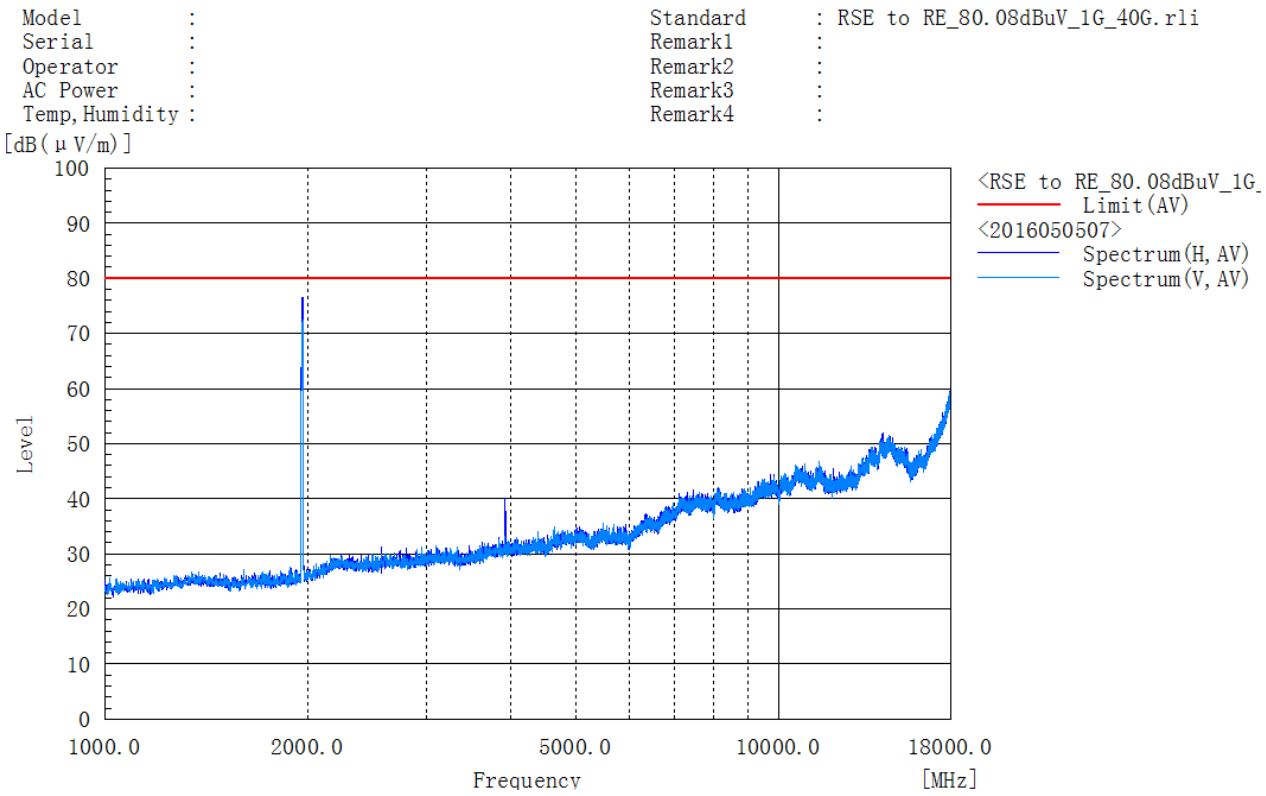
Note: the signal exceeding the limit line is the wanted signal.

2 Test Plot

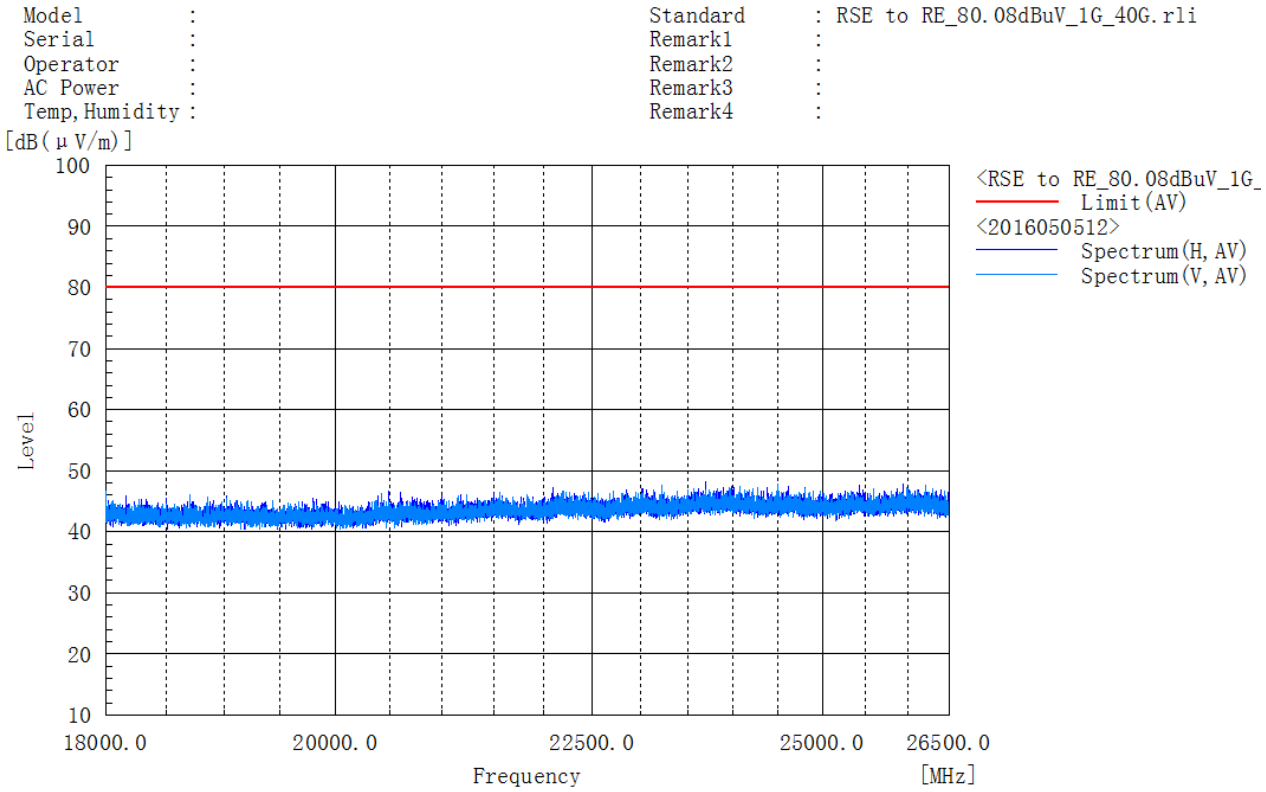
2.1 30MHz-1GHz



2.2 1GHz-18GHz



2.3 18GHz-26.5GHz



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	-1.93	-0.00098	-0.00039	Pass
		-20 °C	-1.10	-0.00056	0.00003	Pass
		-10 °C	-2.05	-0.00105	-0.00045	Pass
		0 °C	-1.25	-0.00064	-0.00005	Pass
		+10 °C	-1.69	-0.00086	-0.00027	Pass
		+20 °C	-1.16	-0.00059	---	Pass
		+30 °C	-1.35	-0.00069	-0.00010	Pass
		+40 °C	-1.95	-0.00099	-0.00040	Pass
		+50 °C	-2.58	-0.00132	-0.00072	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 %	-1.62	-0.00083	-0.00023	Pass
		100 %	-1.16	-0.00059	---	Pass
		115 %	-1.49	-0.00076	-0.00017	Pass

1.2 Frequency Range

(Not applicable)

2 Test Plot

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

(Not applicable)

Appendix G: Receiver Spurious Emissions

1 Result Table

(Not applicable)

2 Test Plot

(Not applicable)

END