

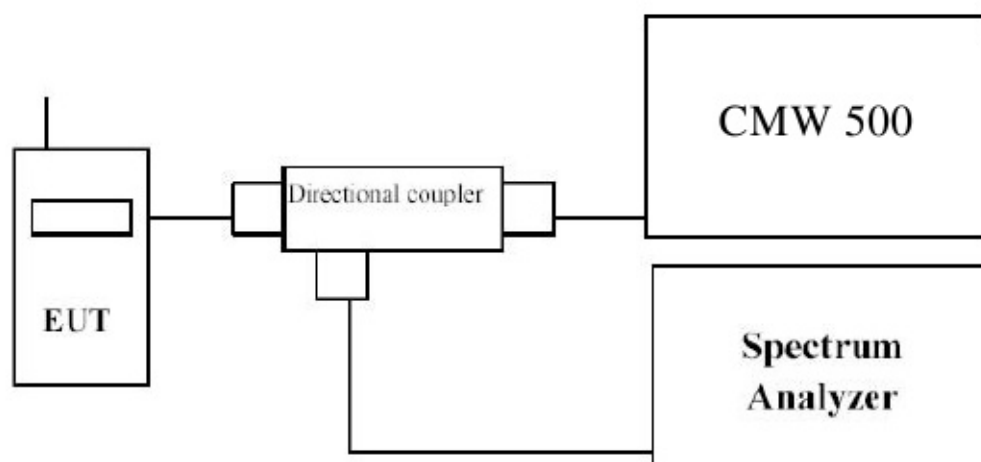
4. Occupied Bandwidth

4.1. Test Equipment

Occupied Bandwidth / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date
Spectrum Analyzer	R&S	FSVA40	101455	2016/11/28	2017/11/27
Wideband Radio Communication Tester	R&S	CMW500	150246	2017/04/19	2018/04/18
Directional Coupler	Agilent	778D	20402	2016/10/07	2017/10/06

4.2. Test Setup



4.3. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The 26 dB bandwidth and 99% occupied bandwidth of the low & middle & high channel for the highest RF powers were measured.

4.4. Test Method

KDB 971168 D01 Power Meas License Digital Systems v03 sub-clause 4.2 & 4.3
ANSI C63.26-2015 Sub-clause 5.4.3 & 5.4.4

4.5. Uncertainty

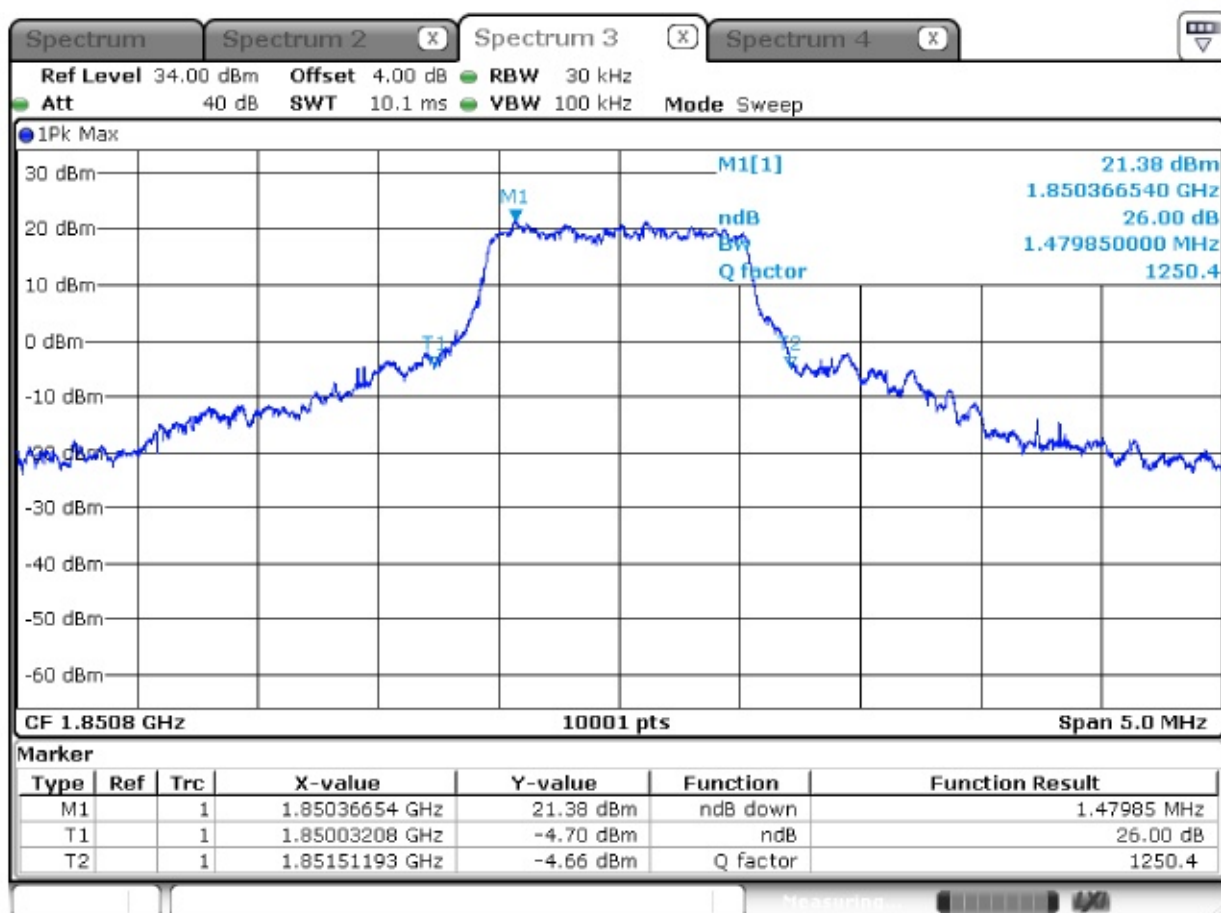
The measurement uncertainty is defined as ± 10 Hz

4.6. Test Result

Product	Module		
Test Item	26 dB bandwidth		
Test Mode	Mode 1: LTE_CAT-M1_Band 2_QPSK_Link		
Date of Test	2017/09/08	Test Site	SR10-H

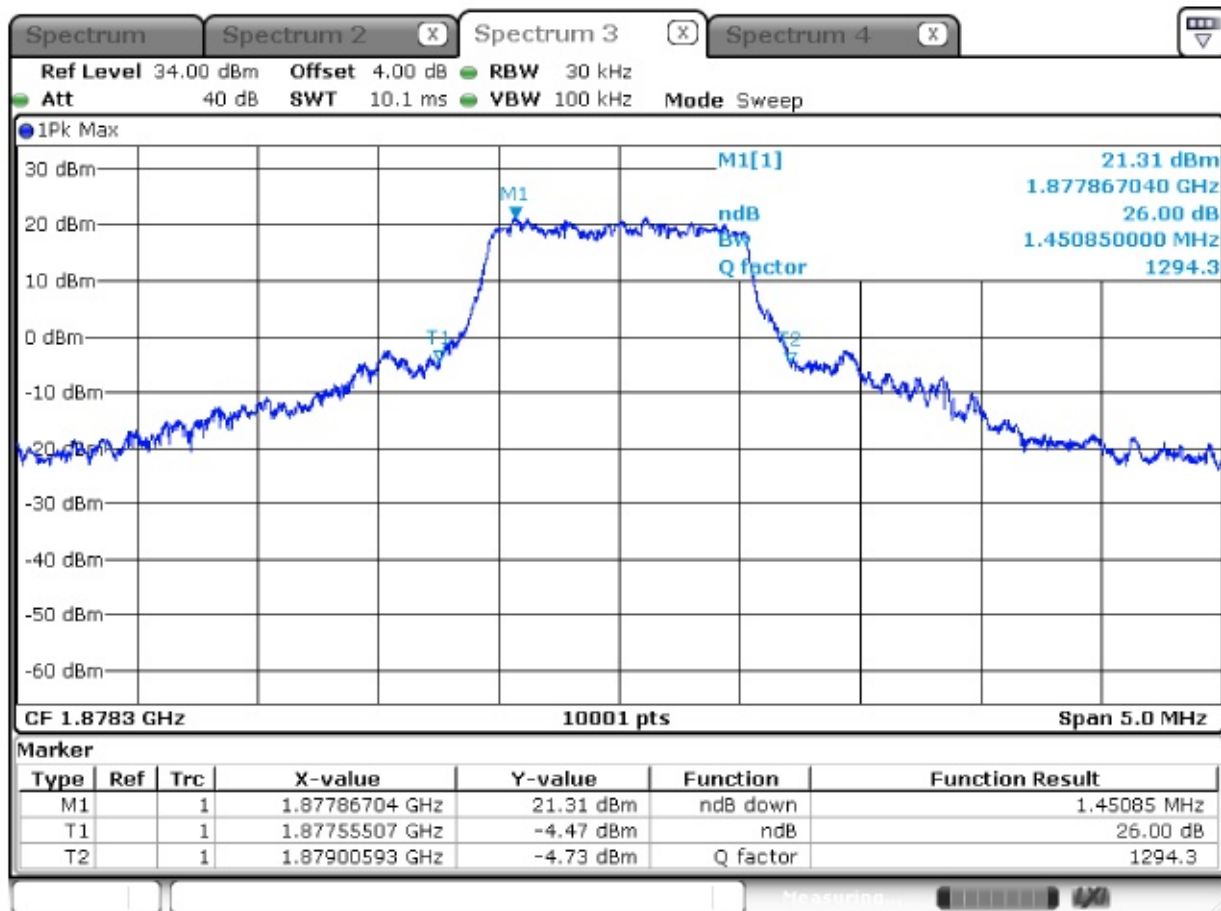
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.7	1.480	N/A
1878.3	1.451	N/A
1909.3	1.410	N/A

1850.7 MHz



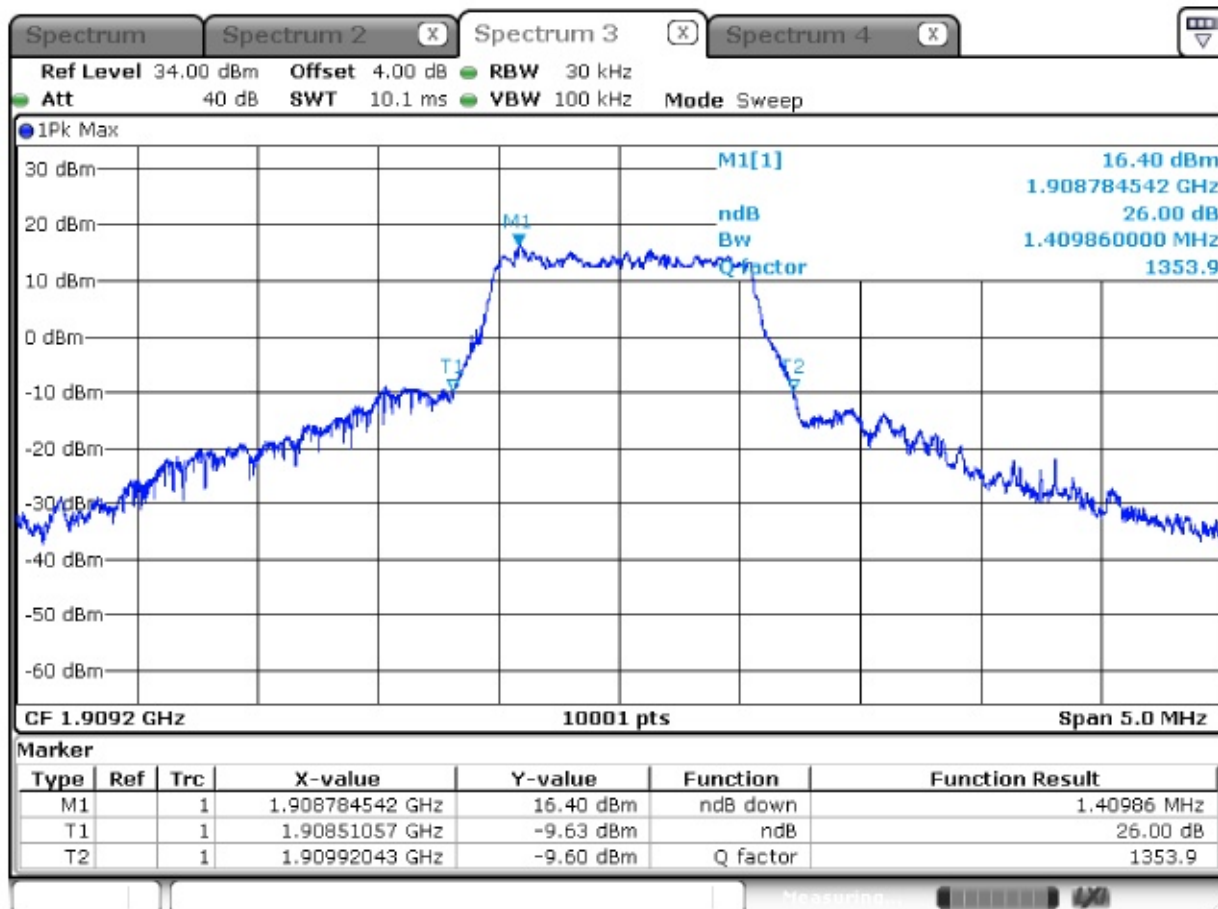
Date: 8.SEP.2017 14:49:19

1878.3 MHz



Date: 8.SEP.2017 15:06:06

1909.3MHz

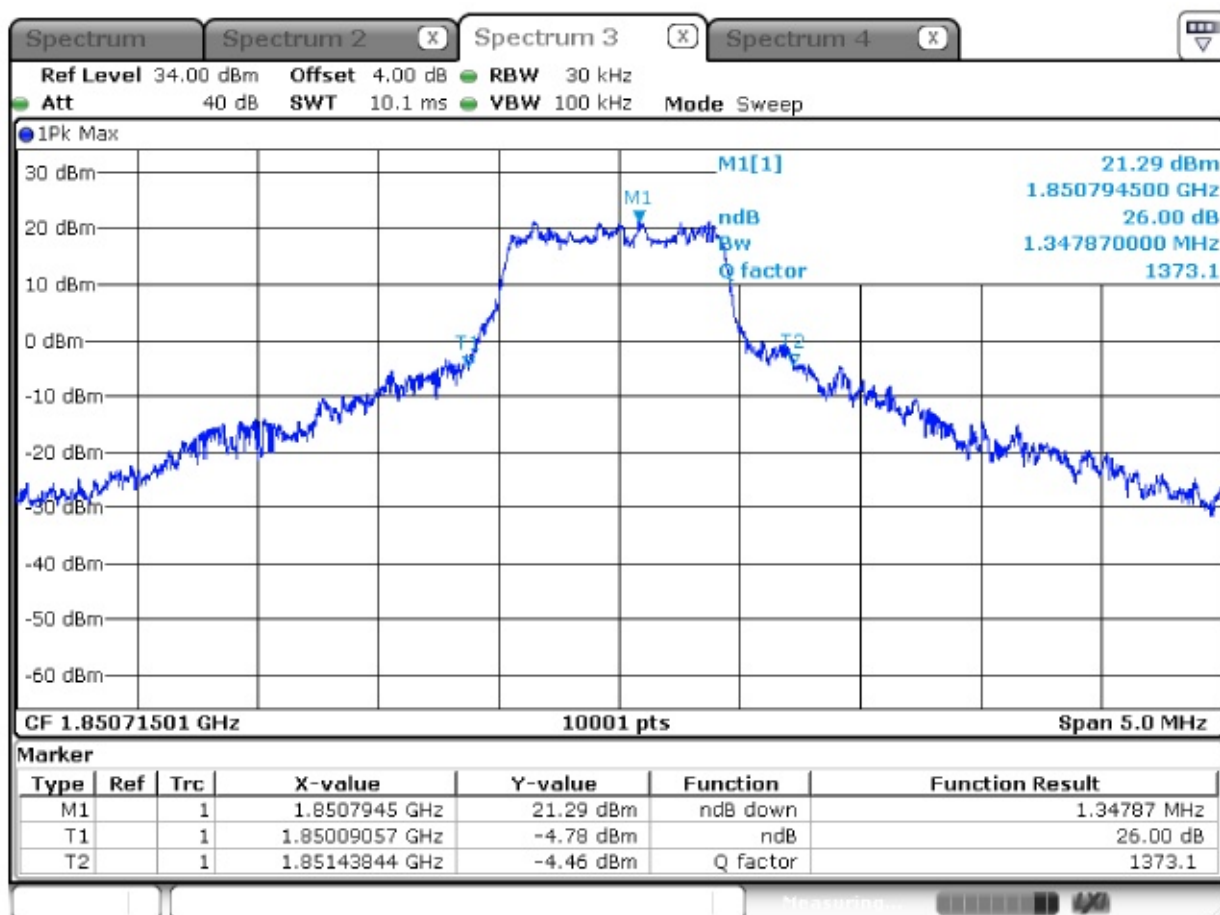


Date: 8.SEP.2017 15:19:28

Product	Module		
Test Item	26 dB bandwidth		
Test Mode	Mode 2: LTE_CAT-M1_Band 2_16-QAM_Link		
Date of Test	2017/09/08	Test Site	SR10-H

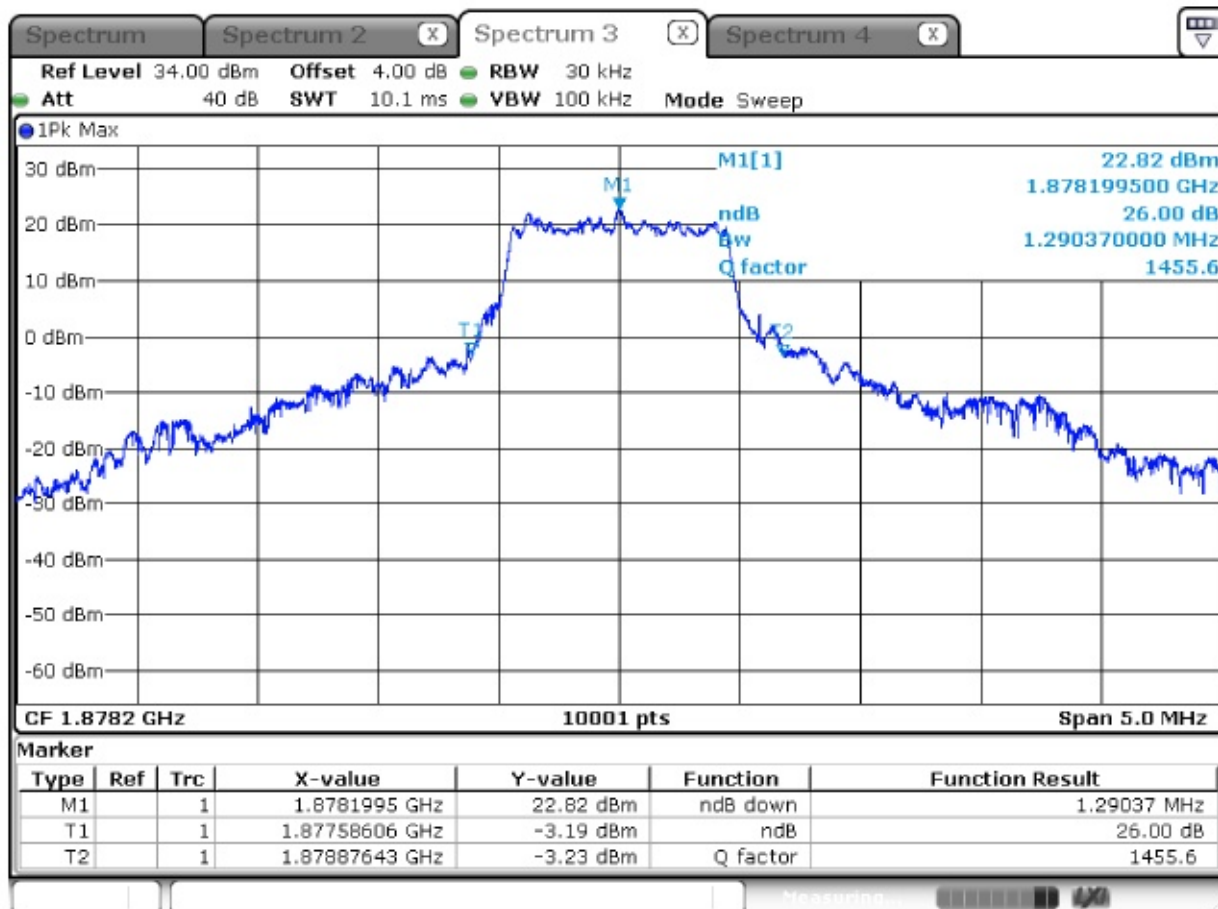
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.7	1.348	N/A
1878.3	1.290	N/A
1909.3	1.382	N/A

1850.7 MHz



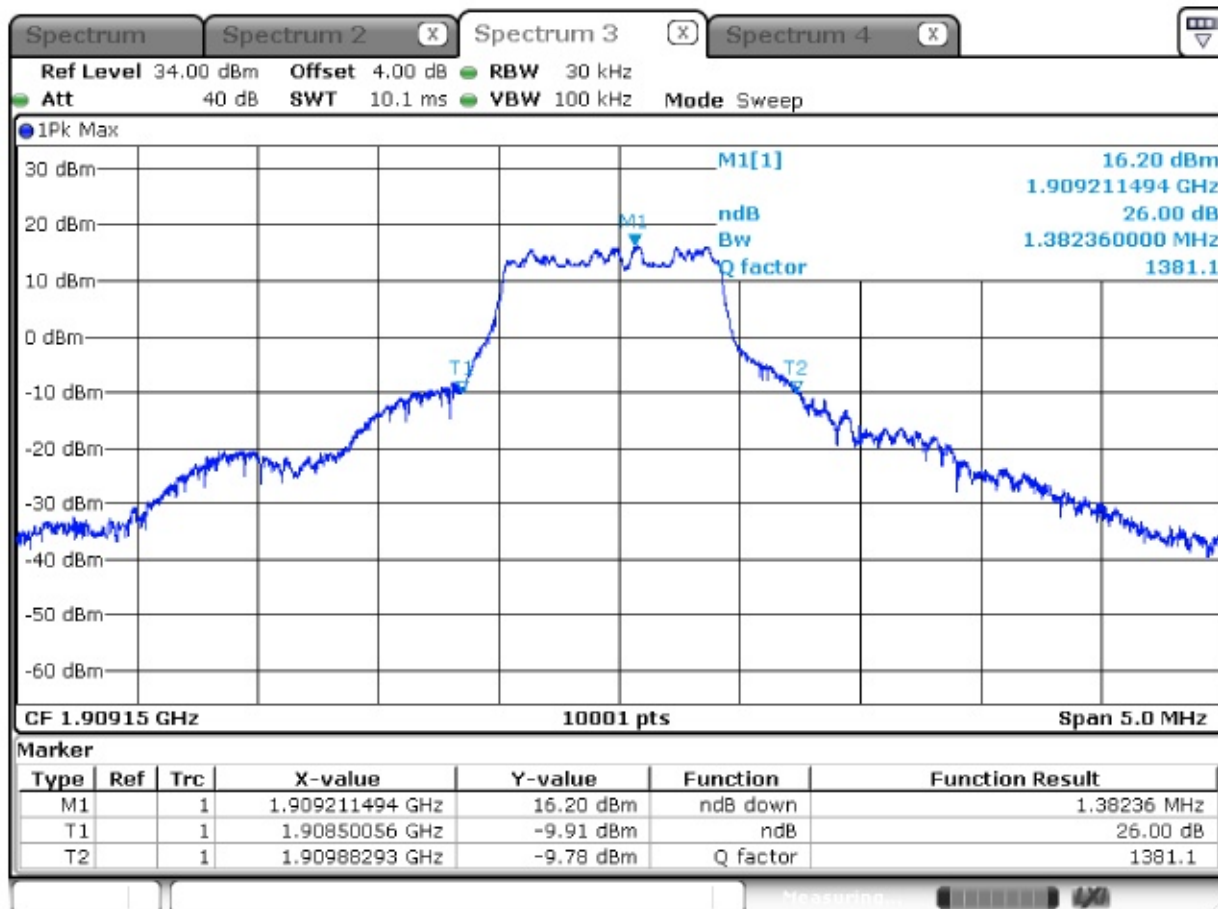
Date: 8.SEP.2017 14:54:13

1878.3 MHz



Date: 8.SEP.2017 15:08:15

1909.3MHz

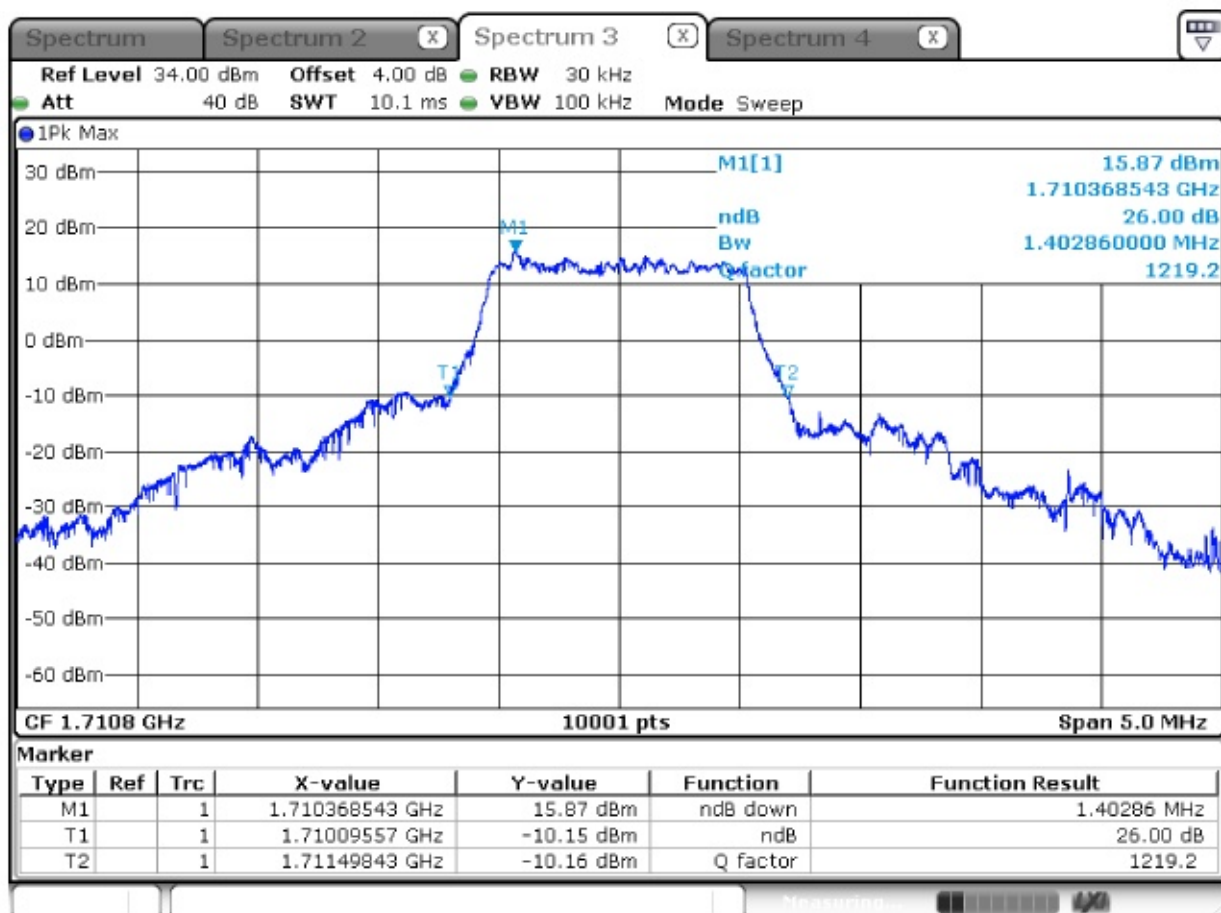


Date: 8.SEP.2017 15:22:23

Product	Module		
Test Item	26 dB bandwidth		
Test Mode	Mode 3: LTE_CAT-M1_Band 4_QPSK_Link		
Date of Test	2017/09/08	Test Site	SR10-H

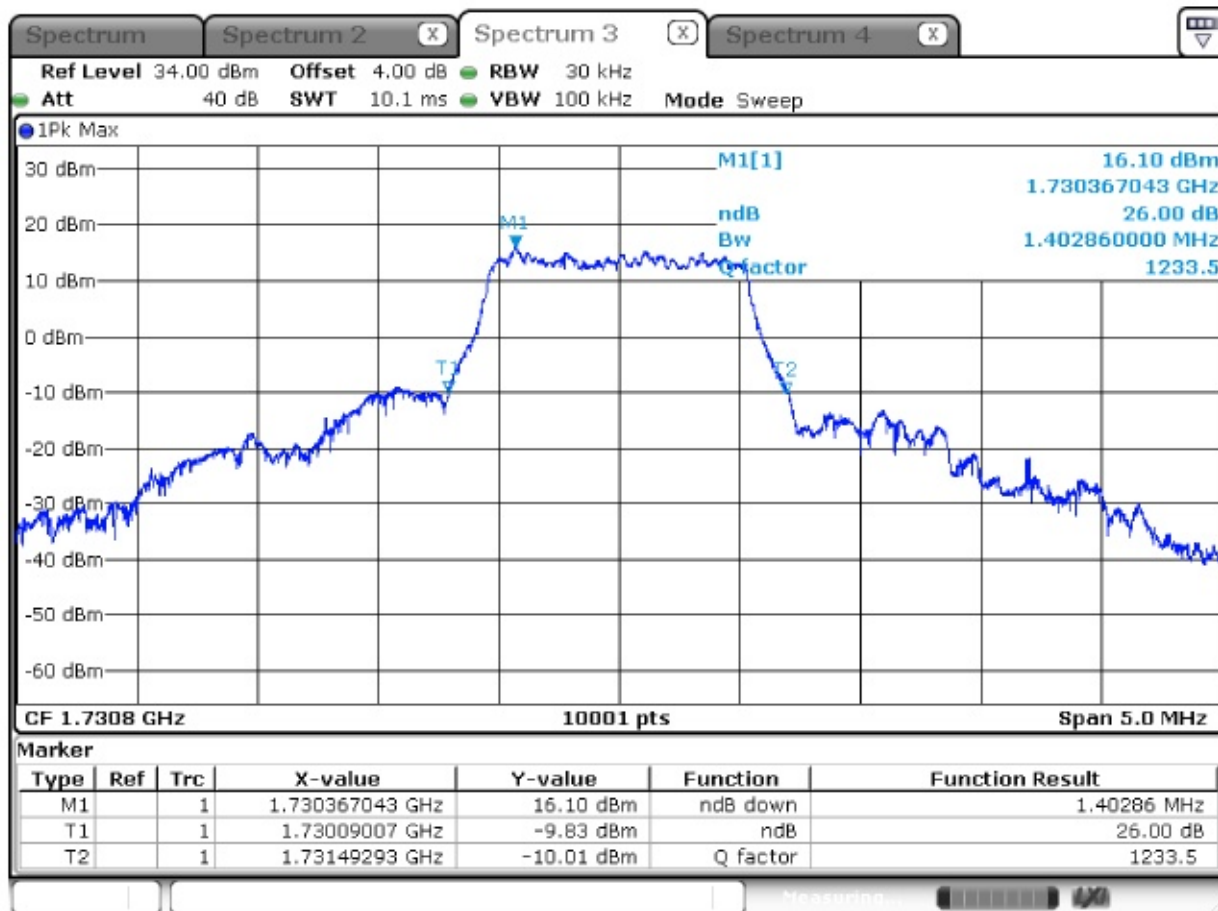
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1710.7	1.403	N/A
1730.8	1.403	N/A
1754.3	1.415	N/A

1710.7 MHz



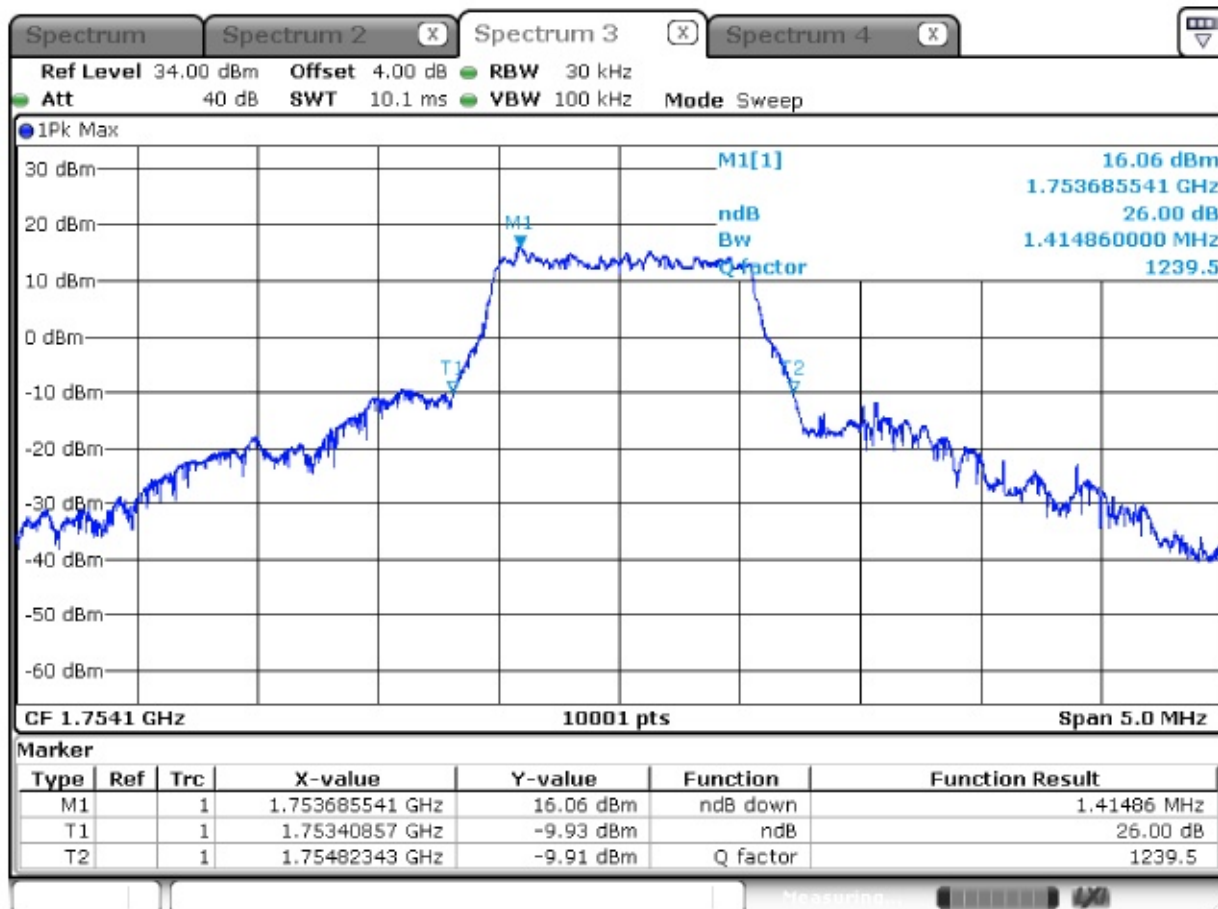
Date: 8.SEP.2017 15:35:11

1730.8 MHz



Date: 8.SEP.2017 15:46:21

1754.3 MHz

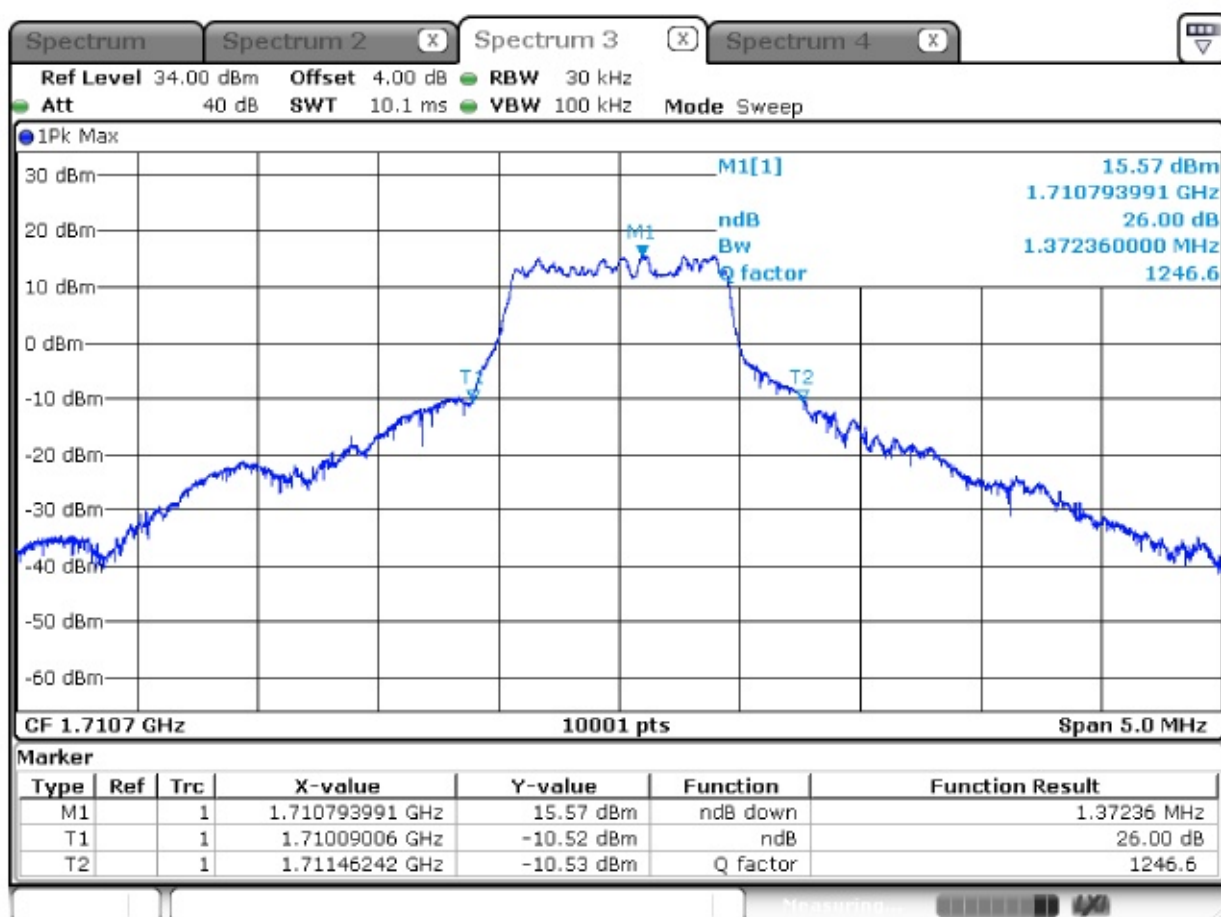


Date: 8.SEP.2017 16:10:36

Product	Module		
Test Item	26 dB bandwidth		
Test Mode	Mode 4: LTE_CAT-M1_Band 4_16-QAM_Link		
Date of Test	2017/09/08	Test Site	SR10-H

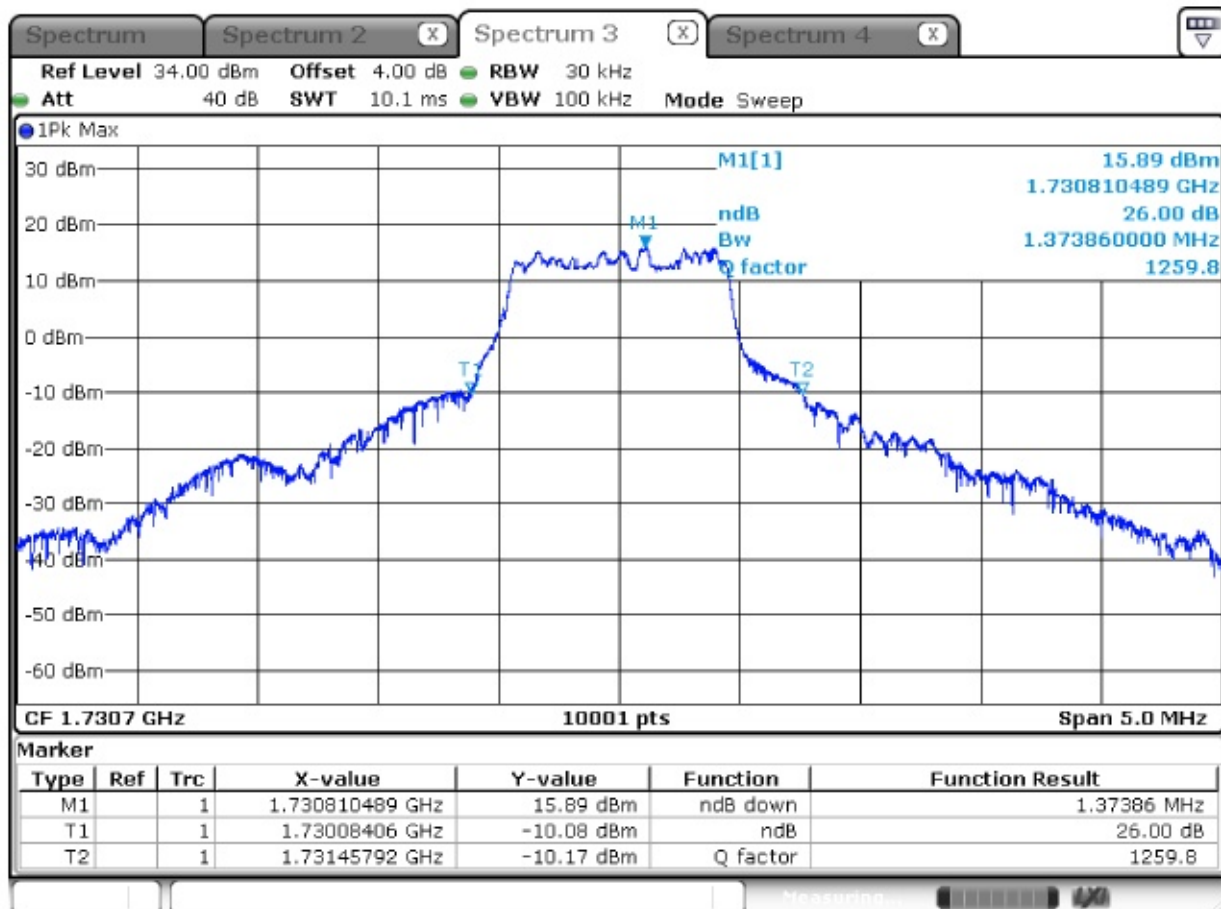
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1710.7	1.372	N/A
1730.8	1.374	N/A
1754.3	1.381	N/A

1710.7 MHz



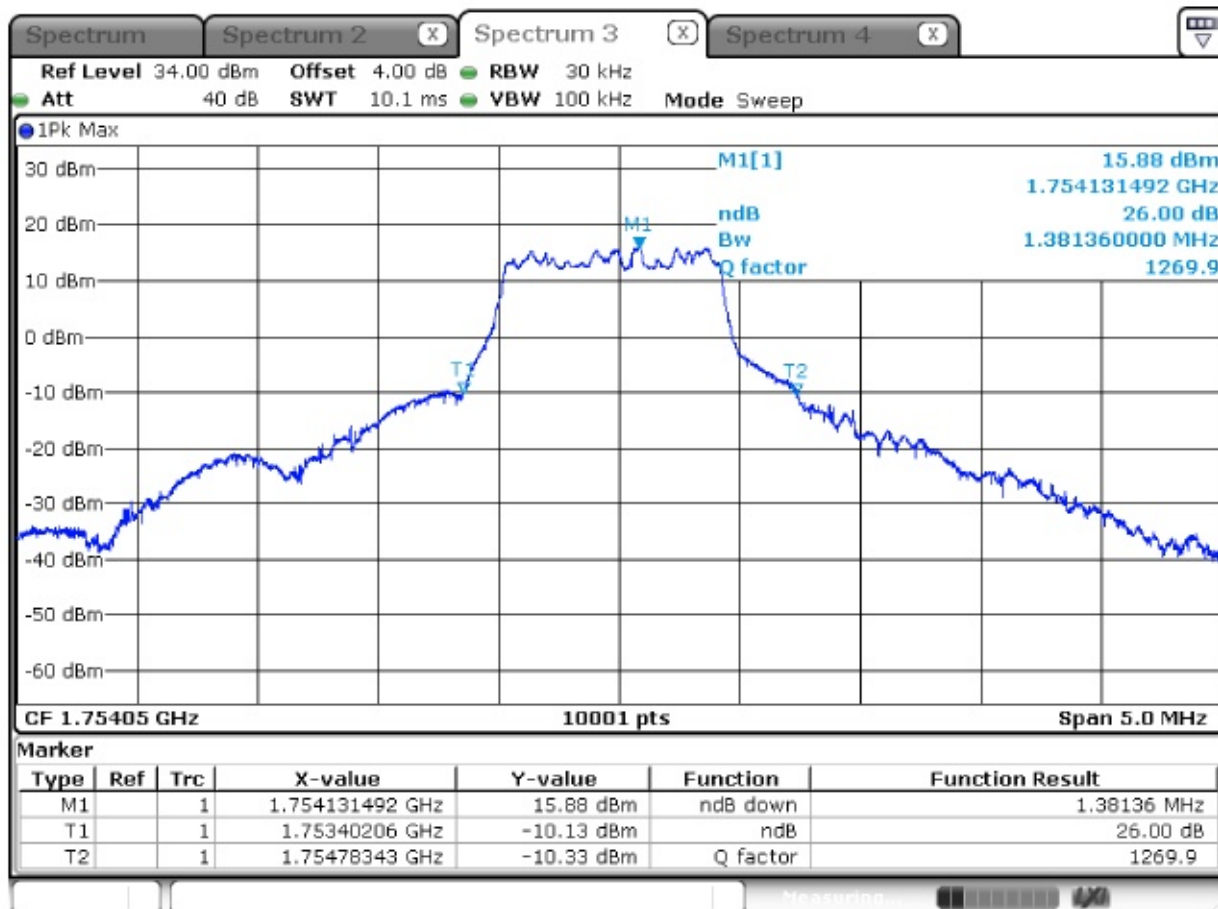
Date: 8.SEP.2017 15:38:14

1730.8 MHz



Date: 8.SEP.2017 15:43:40

1754.3 MHz

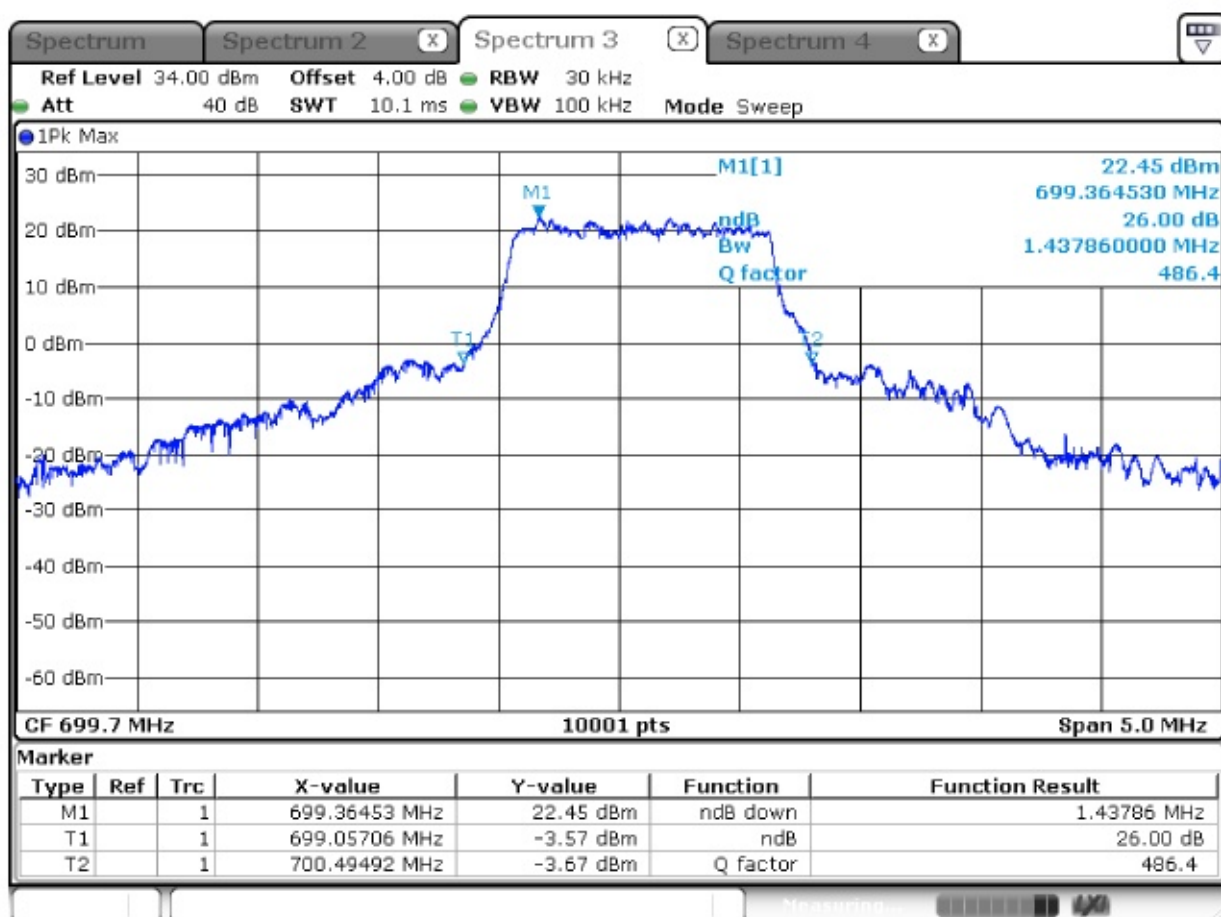


Date: 8.SEP.2017 16:07:54

Product	Module		
Test Item	26 dB bandwidth		
Test Mode	Mode 5: LTE_CAT-M1_Band 12_QPSK_Link		
Date of Test	2017/09/08	Test Site	SR10-H

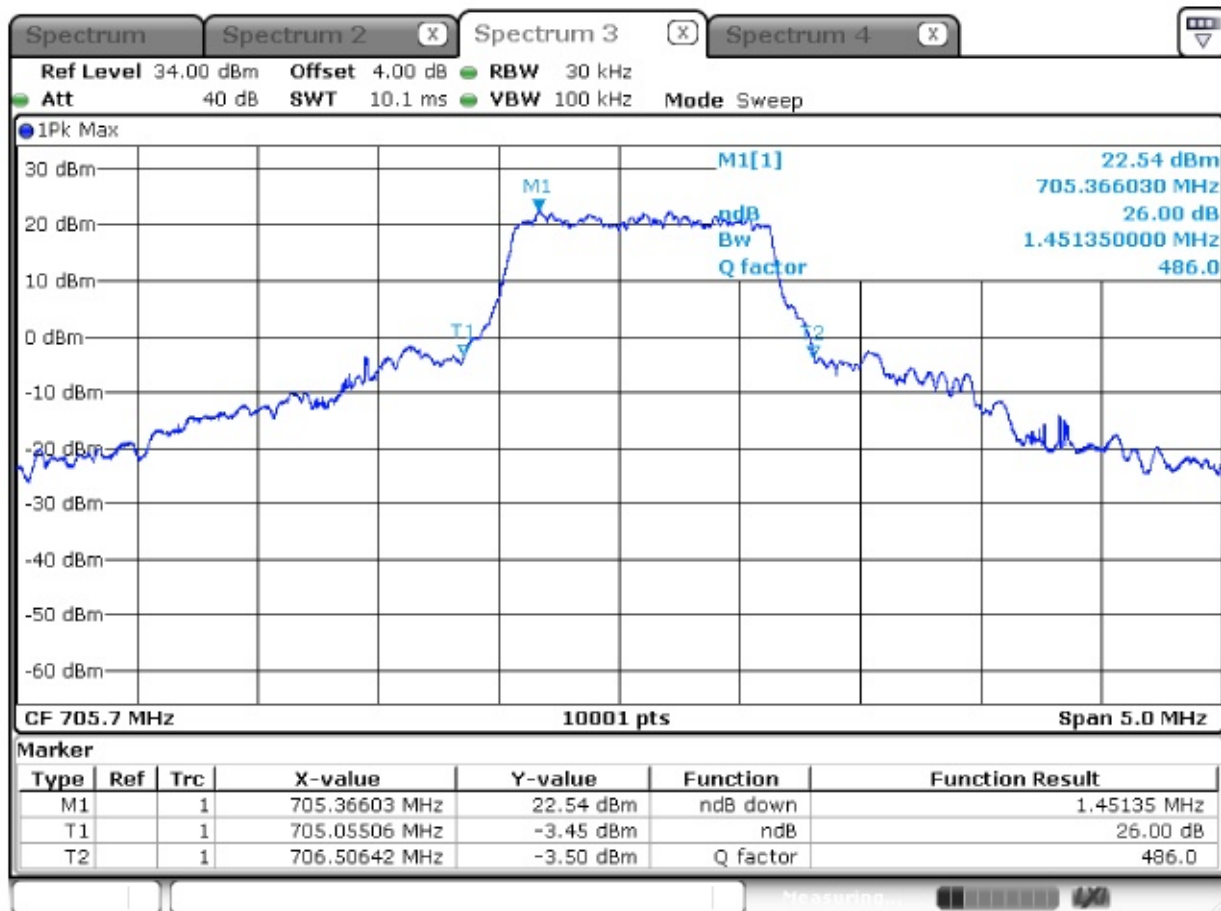
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
699.7	1.438	N/A
705.7	1.451	N/A
715.3	1.447	N/A

699.7 MHz



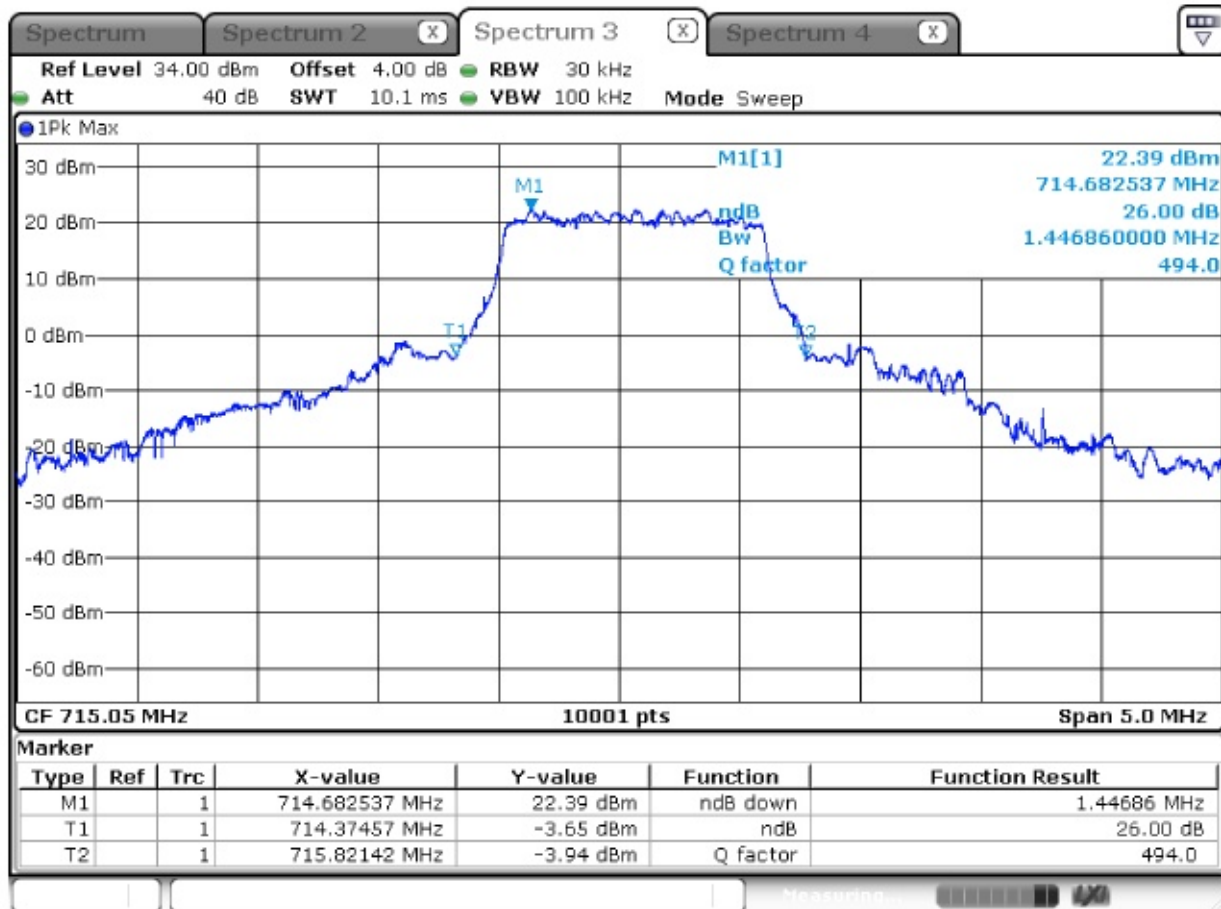
Date: 8.SEP.2017 16:29:59

705.7 MHz



Date: 8.SEP.2017 16:39:57

715.3 MHz

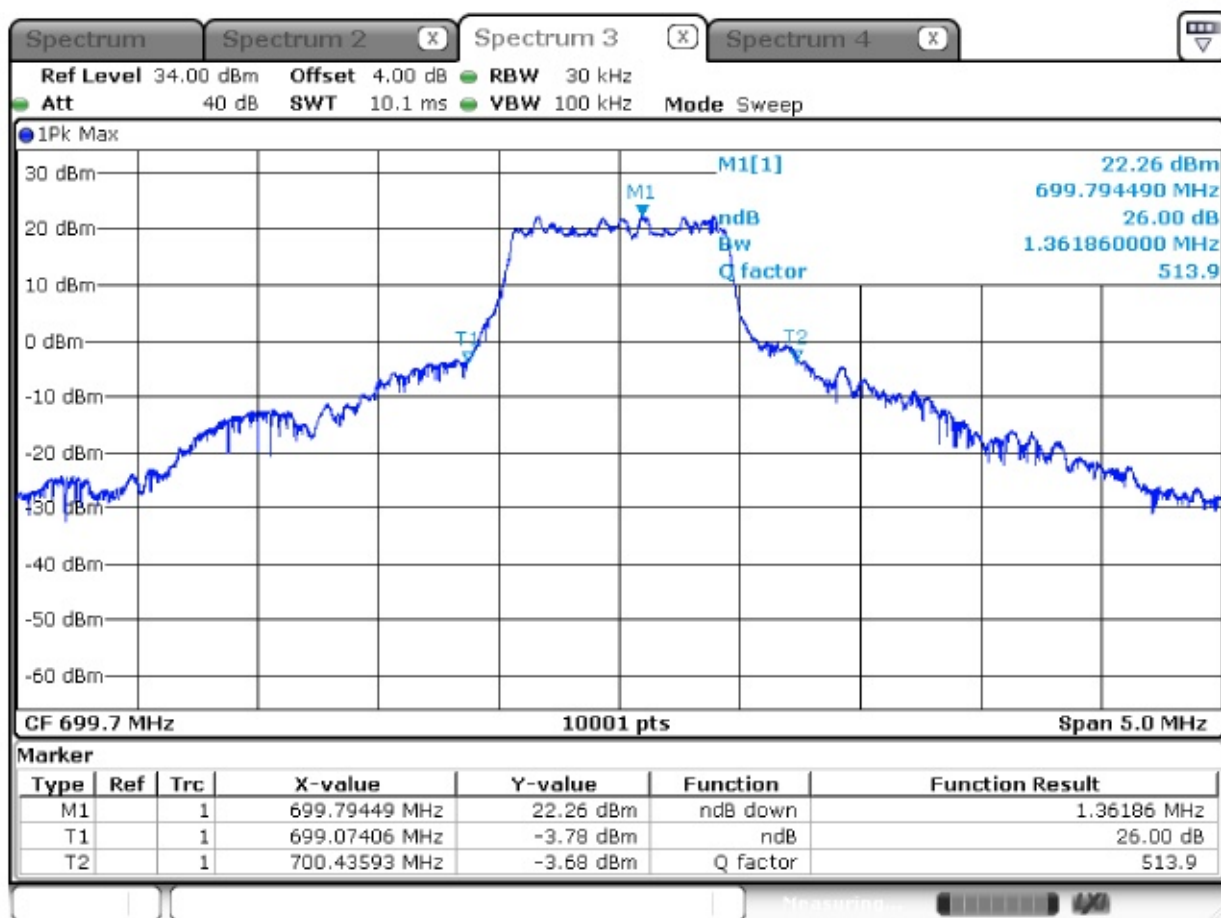


Date: 8.SEP.2017 16:52:47

Product	Module		
Test Item	26 dB bandwidth		
Test Mode	Mode 6: LTE_CAT-M1_Band 12_16-QAM_Link		
Date of Test	2017/09/08	Test Site	SR10-H

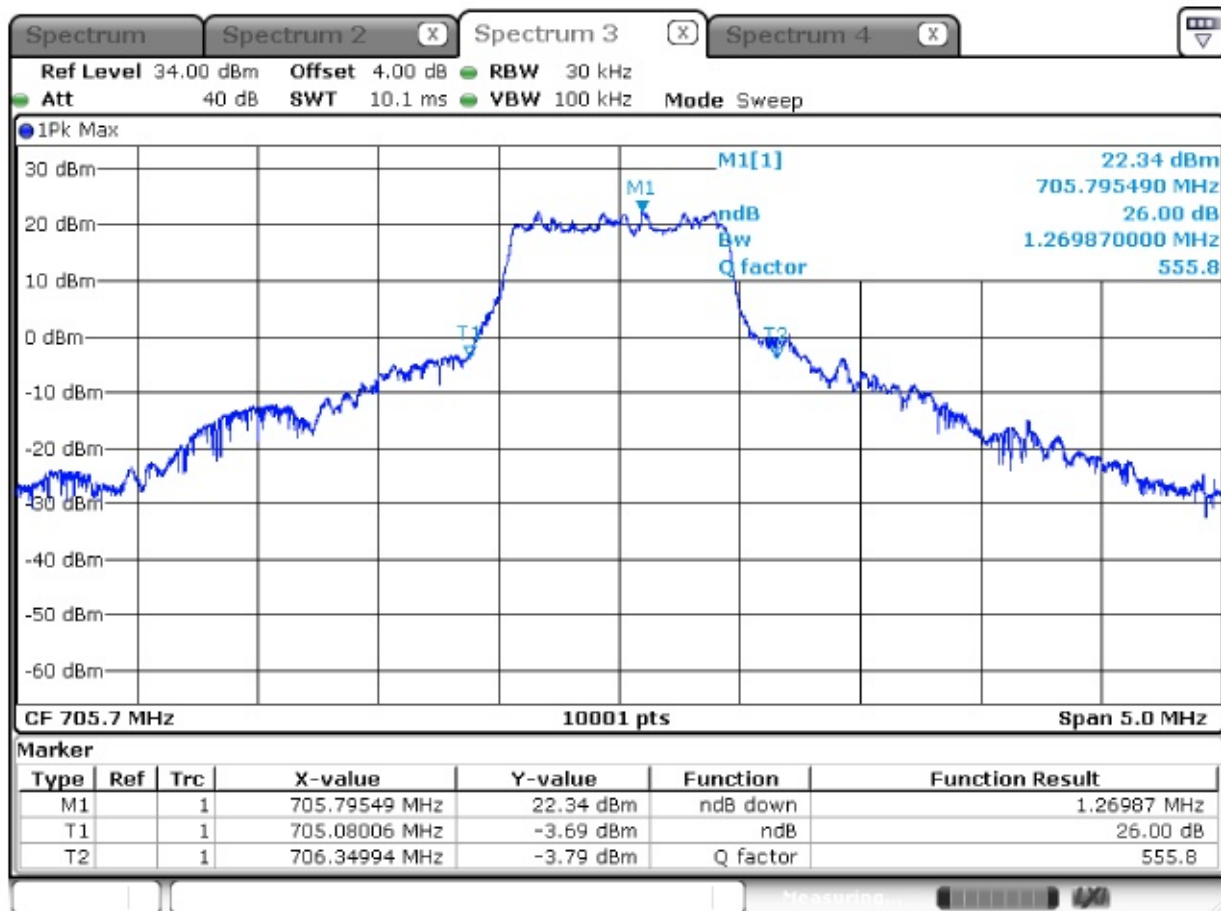
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
699.7	1.362	N/A
705.7	1.270	N/A
715.3	1.386	N/A

699.7 MHz



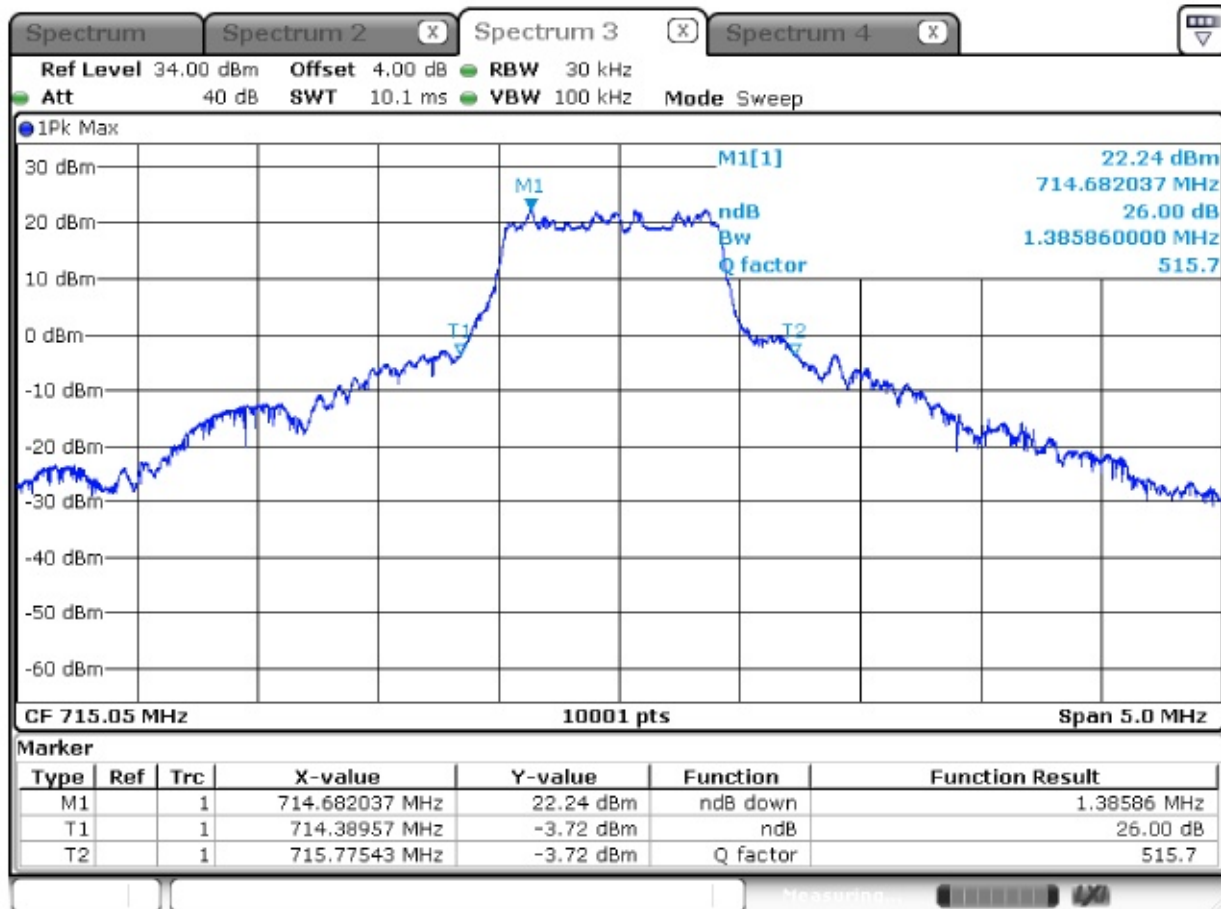
Date: 8.SEP.2017 16:28:42

705.7 MHz



Date: 8.SEP.2017 16:40:58

715.3 MHz

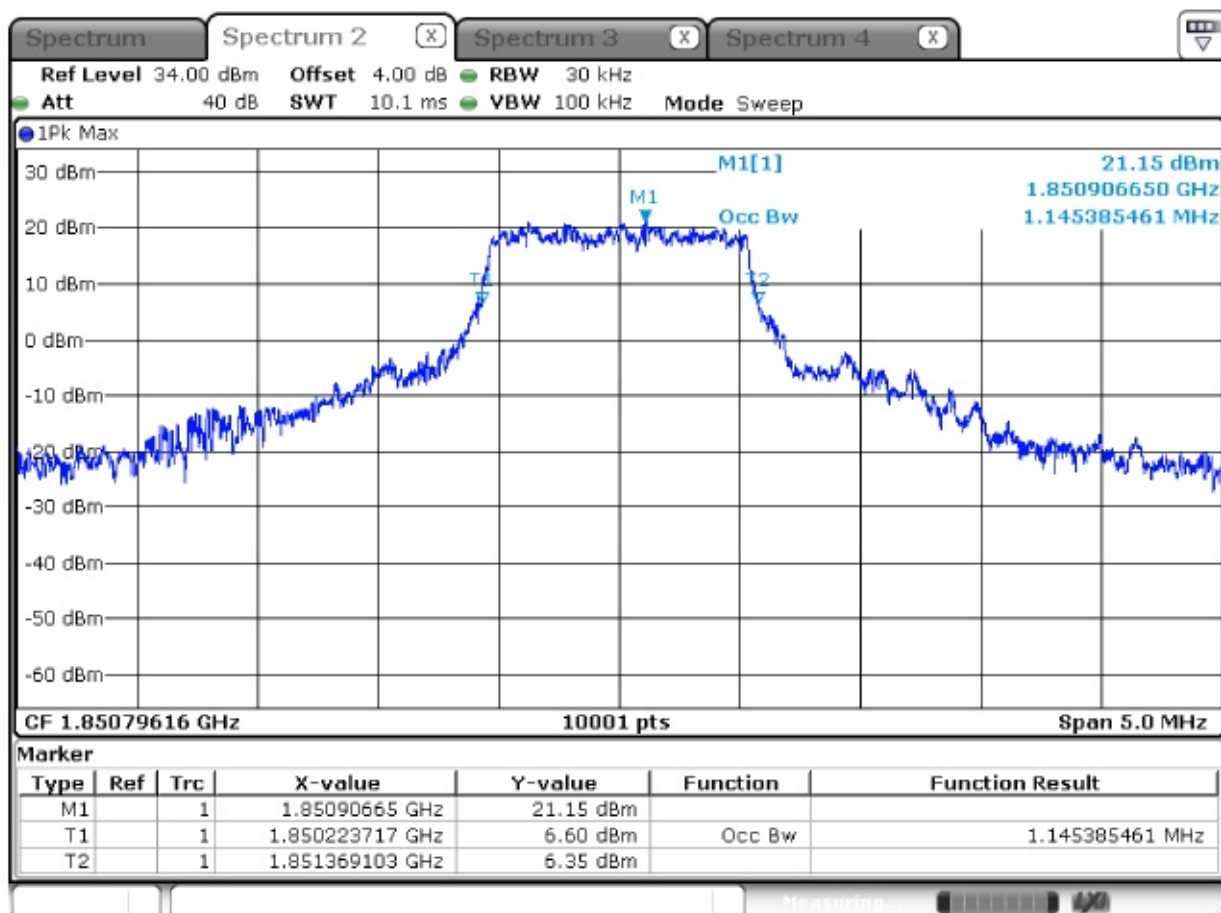


Date: 8.SEP.2017 16:51:26

Product	Module		
Test Item	99% occupied bandwidth		
Test Mode	Mode 1: LTE_CAT-M1_Band 2_QPSK_Link		
Date of Test	2017/09/08	Test Site	SR10-H

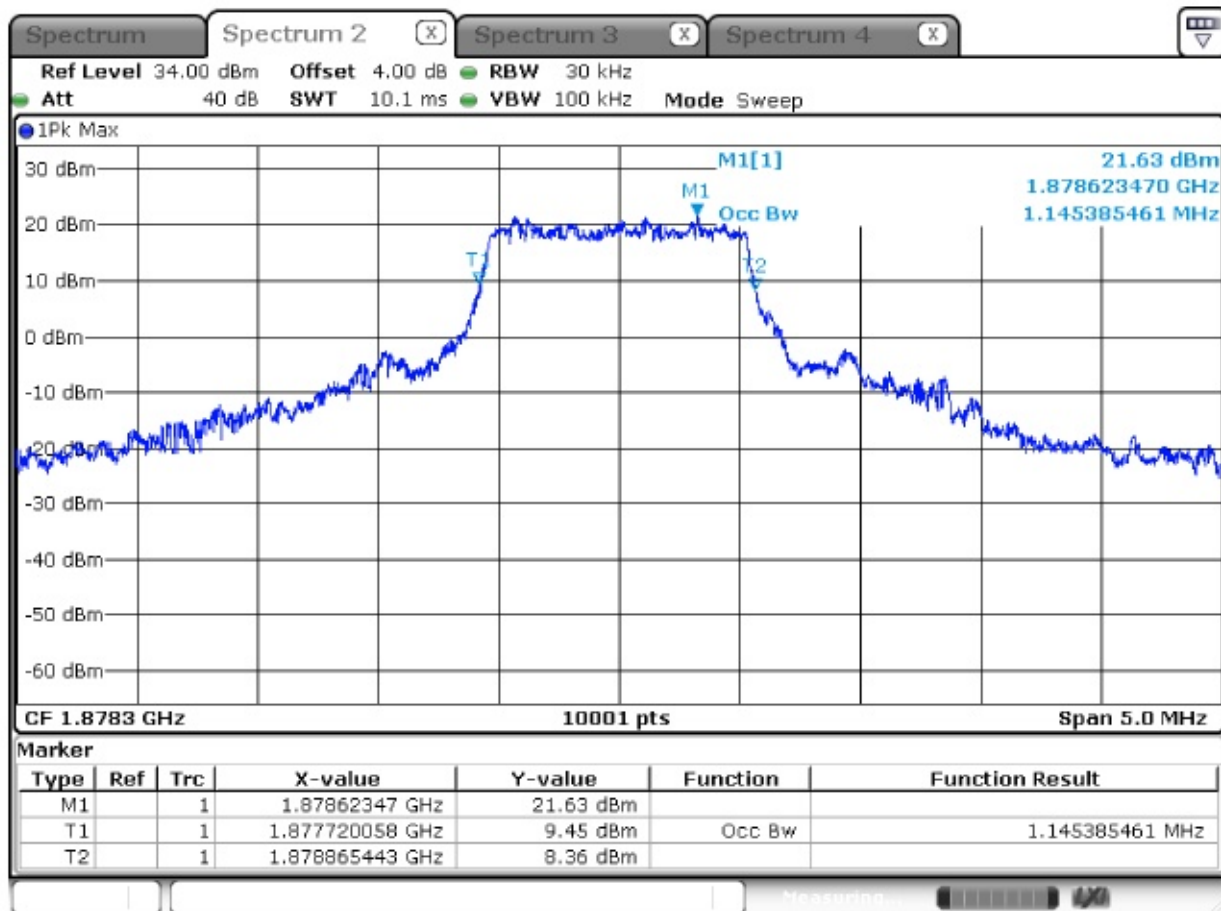
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.7	1.145	N/A
1878.3	1.145	N/A
1909.3	1.135	N/A

1850.7 MHz



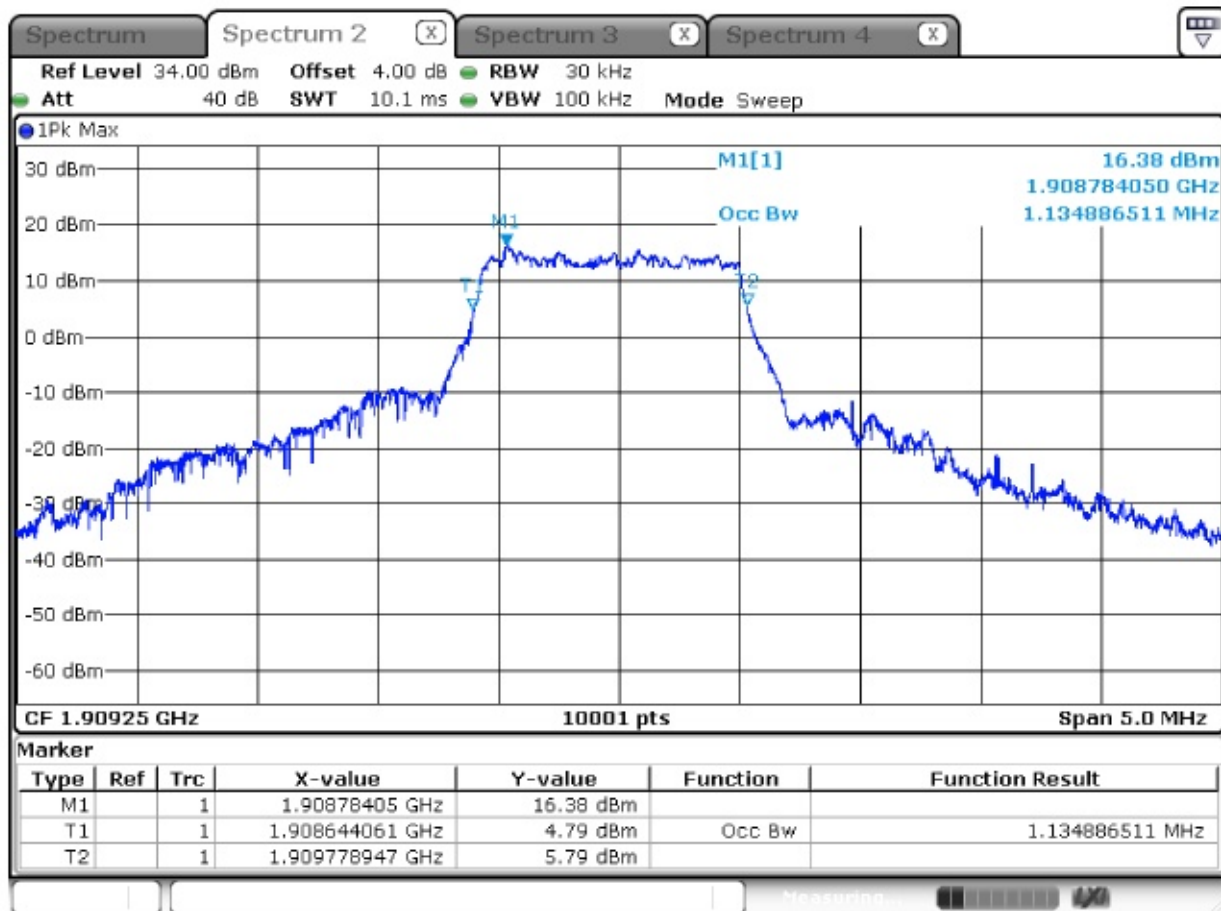
Date: 8.SEP.2017 14:47:01

1878.3 MHz



Date: 8.SEP.2017 15:05:08

1909.3MHz

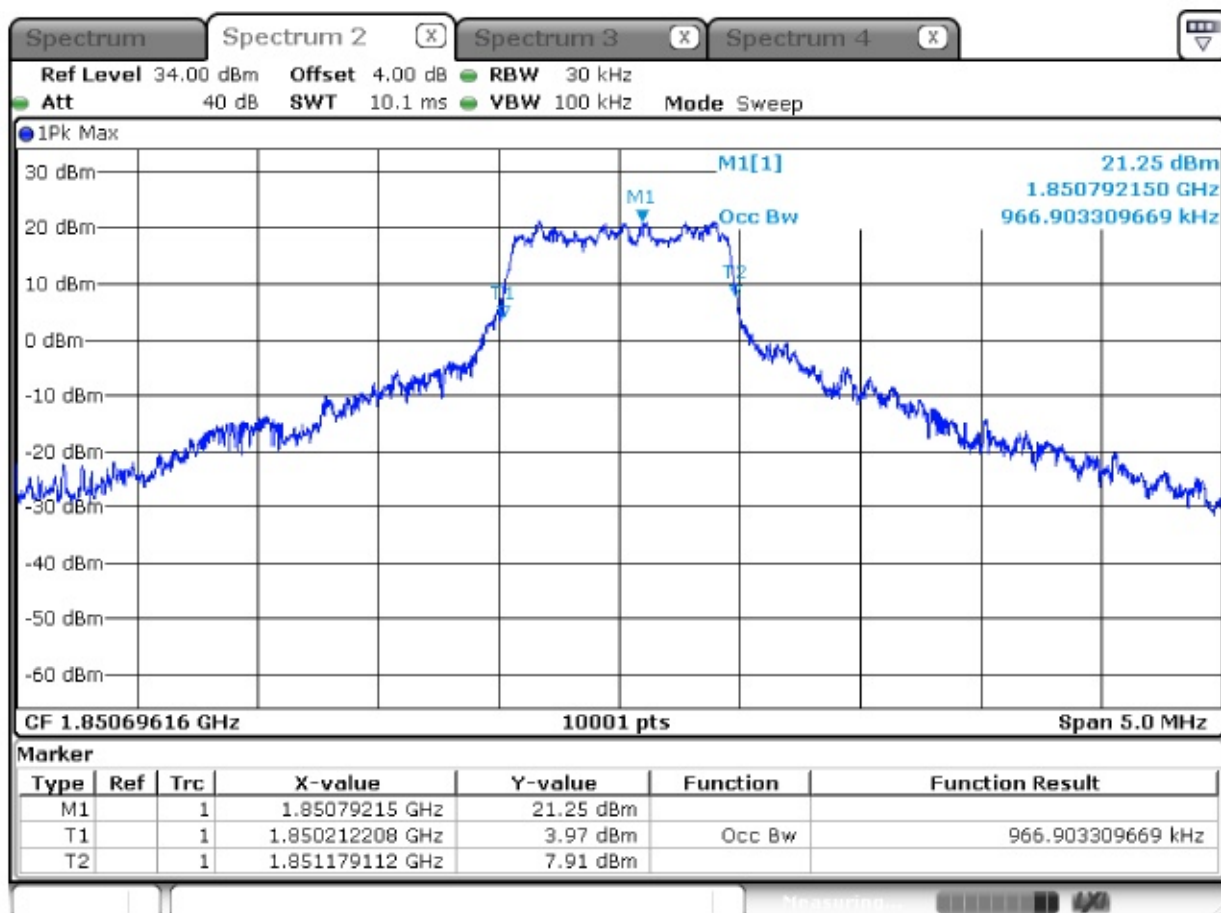


Date: 8.SEP.2017 15:18:20

Product	Module		
Test Item	99% occupied bandwidth		
Test Mode	Mode 2: LTE_CAT-M1_Band 2_16-QAM_Link		
Date of Test	2017/09/08	Test Site	SR10-H

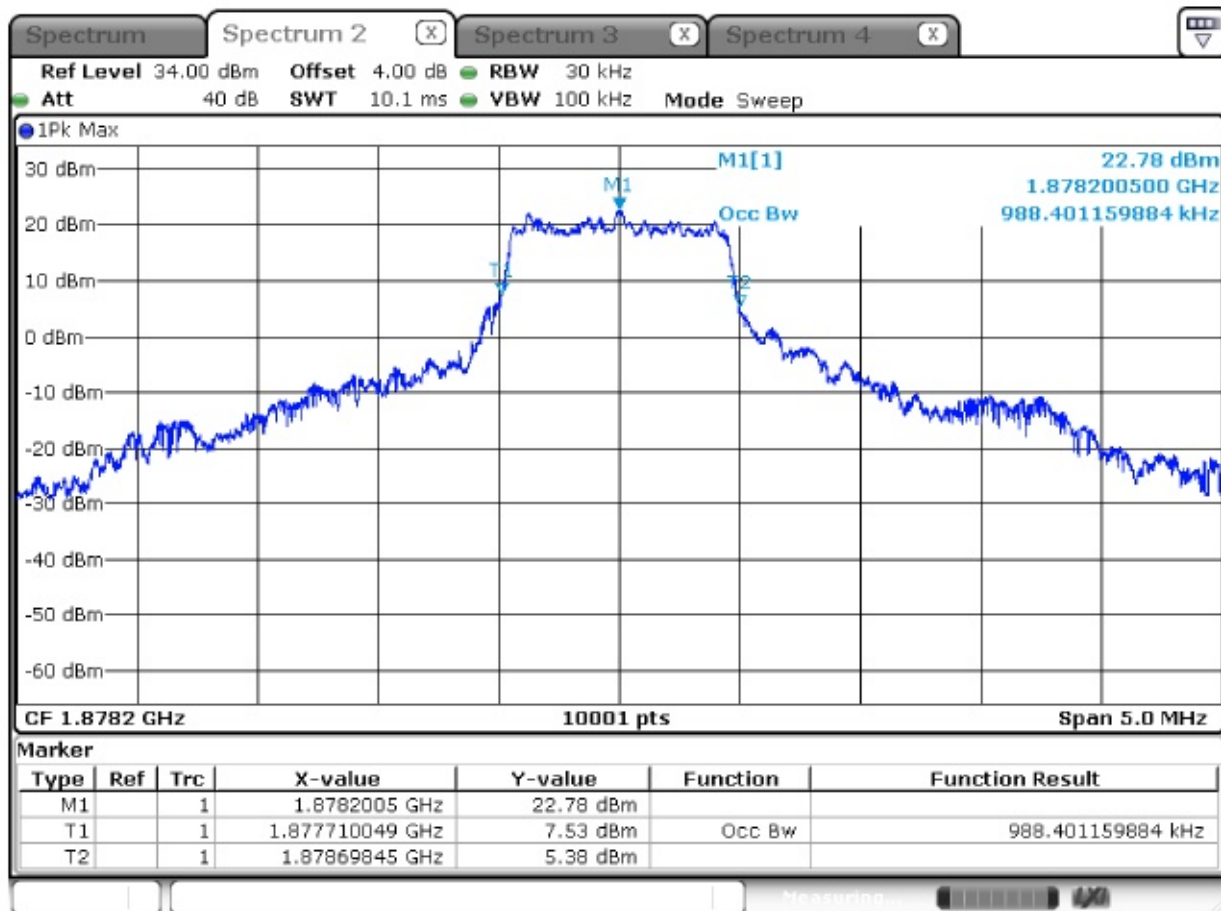
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1850.7	0.967	N/A
1878.3	0.988	N/A
1909.3	0.984	N/A

1850.7 MHz



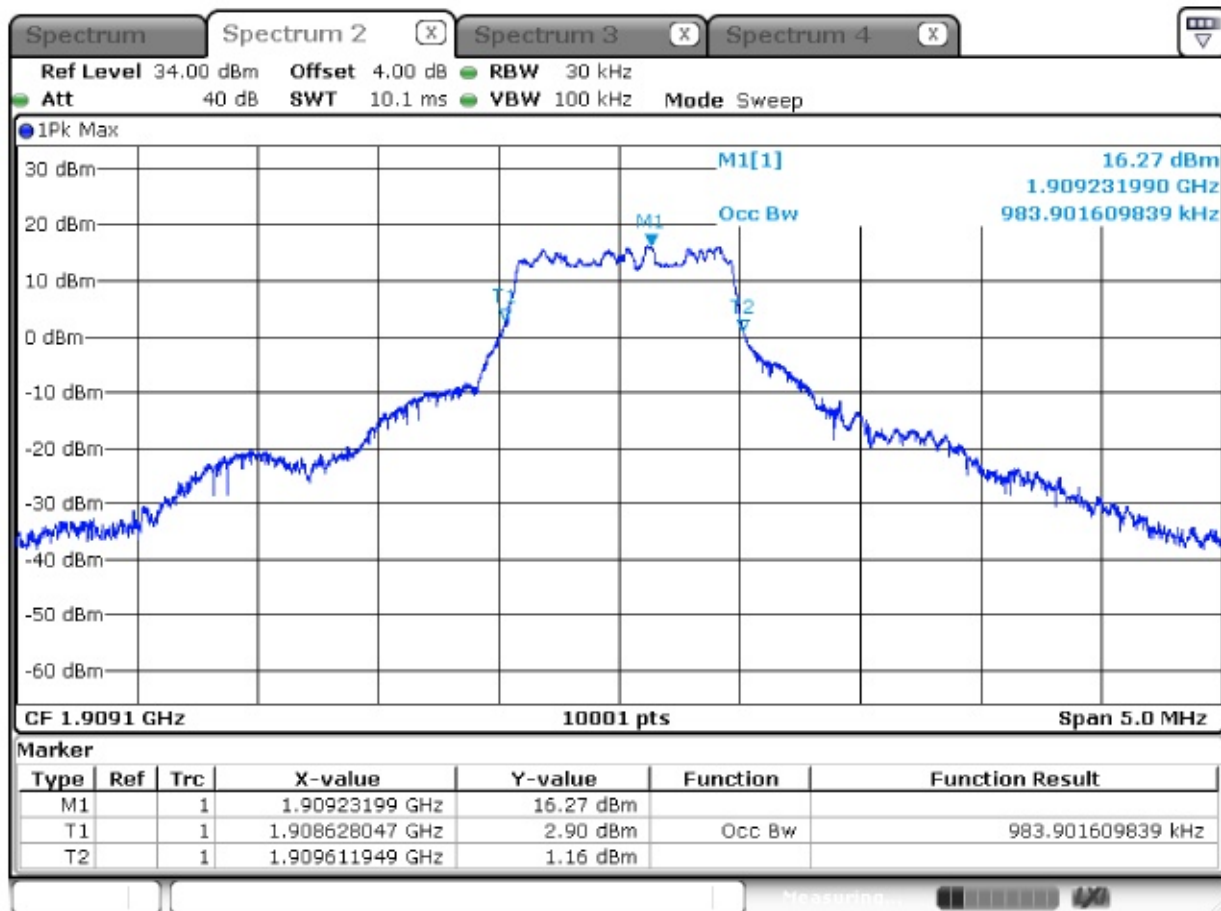
Date: 8.SEP.2017 14:55:47

1878.3 MHz



Date: 8.SEP.2017 15:09:50

1909.3MHz

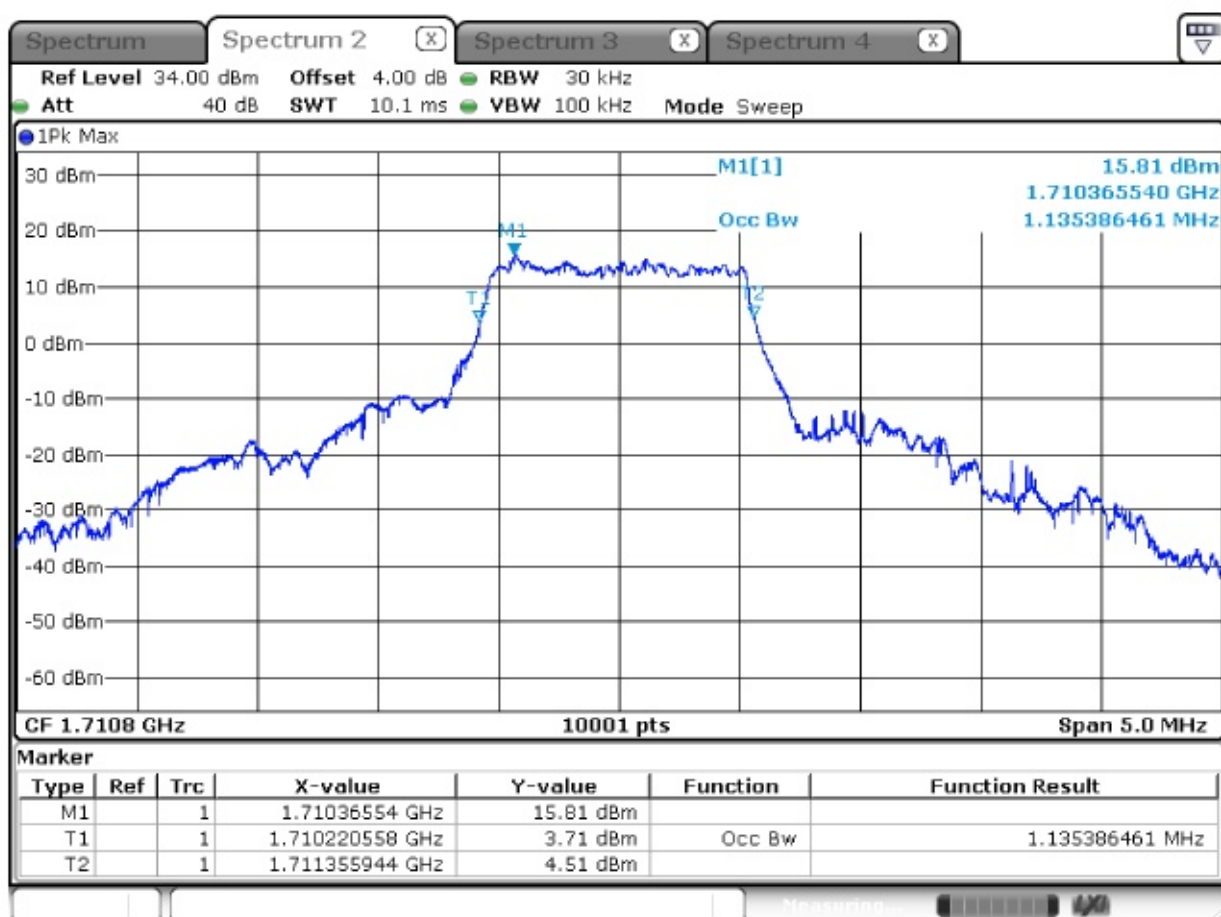


Date: 8.SEP.2017 15:23:53

Product	Module		
Test Item	99% occupied bandwidth		
Test Mode	Mode 3: LTE_CAT-M1_Band 4_QPSK_Link		
Date of Test	2017/09/08	Test Site	SR10-H

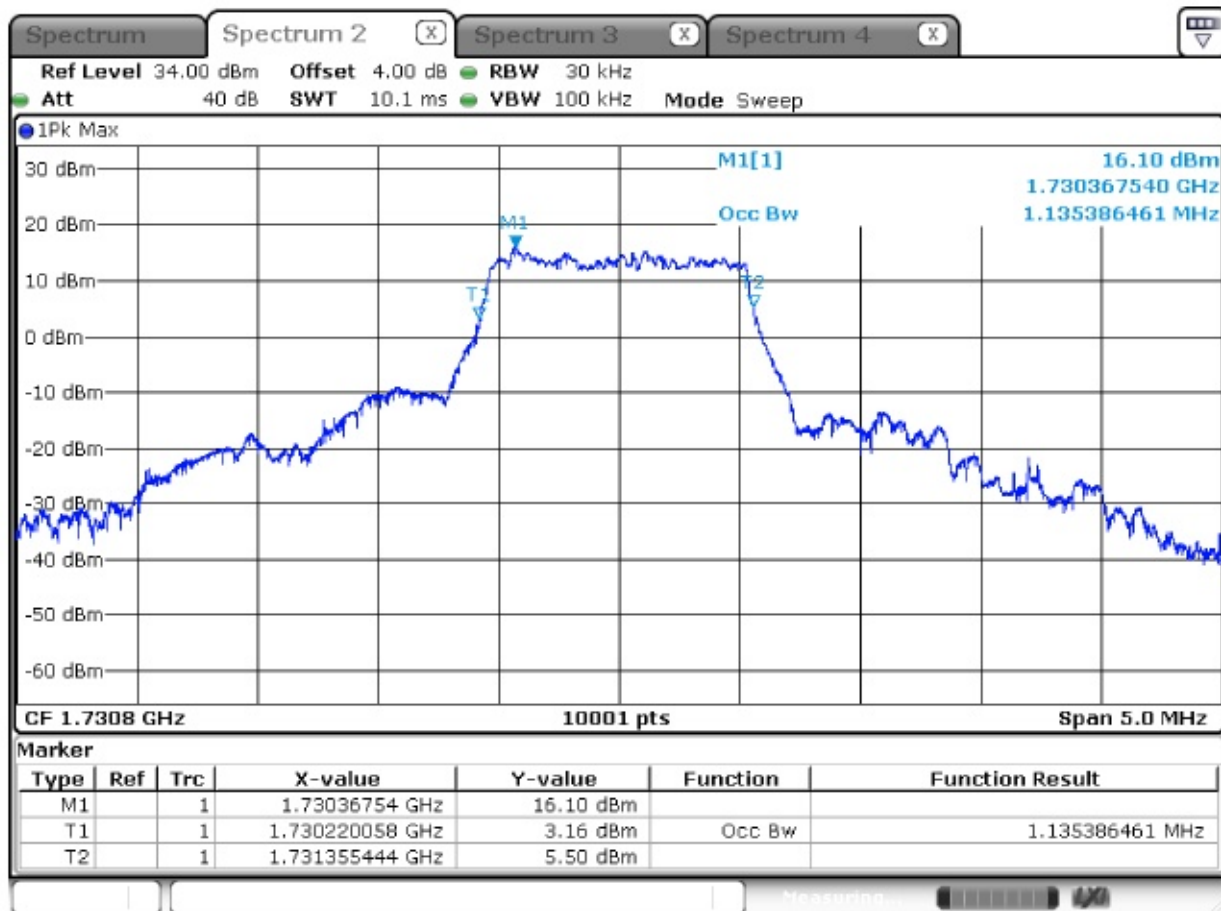
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1710.7	1.135	N/A
1730.8	1.135	N/A
1754.3	1.142	N/A

1710.7 MHz



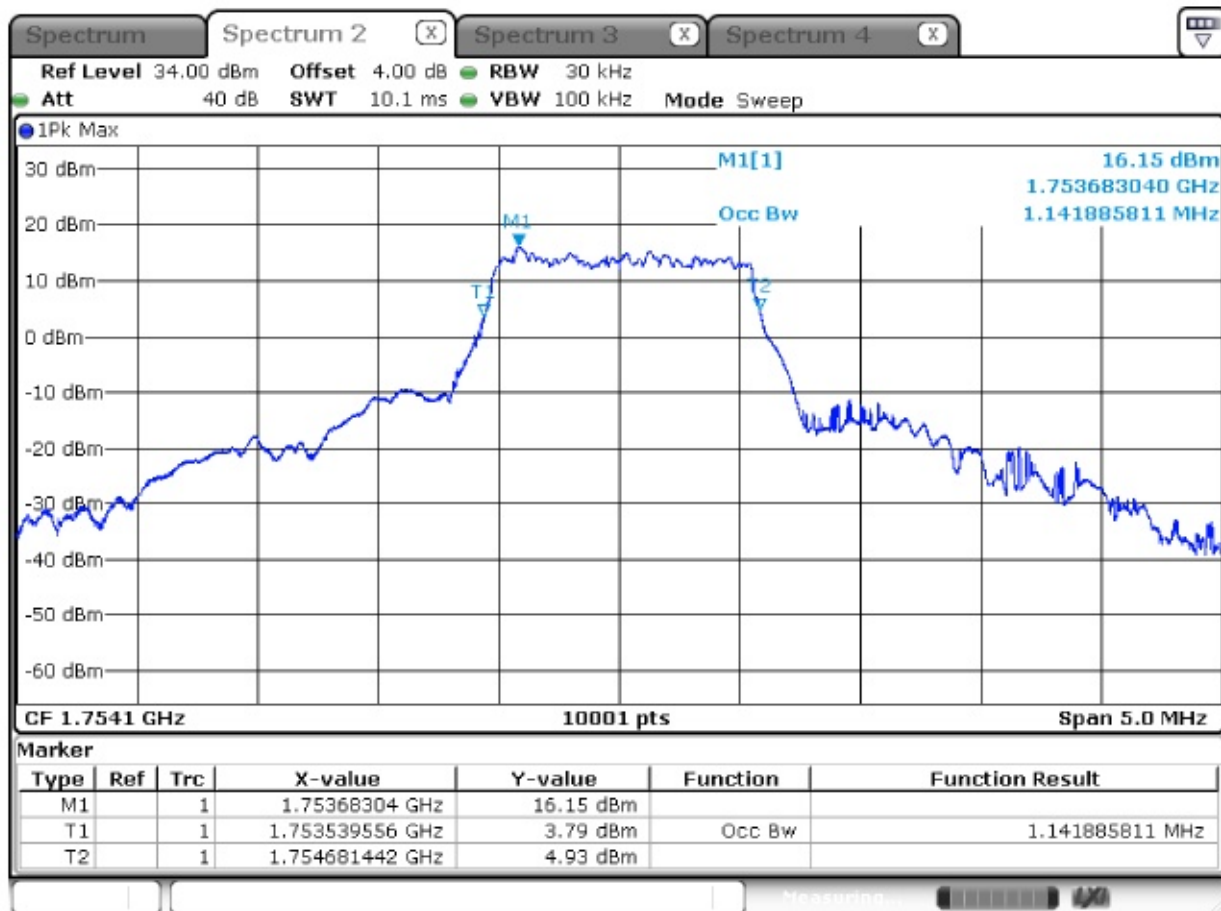
Date: 8.SEP.2017 15:33:27

1730.8 MHz



Date: 8.SEP.2017 15:47:47

1754.3 MHz

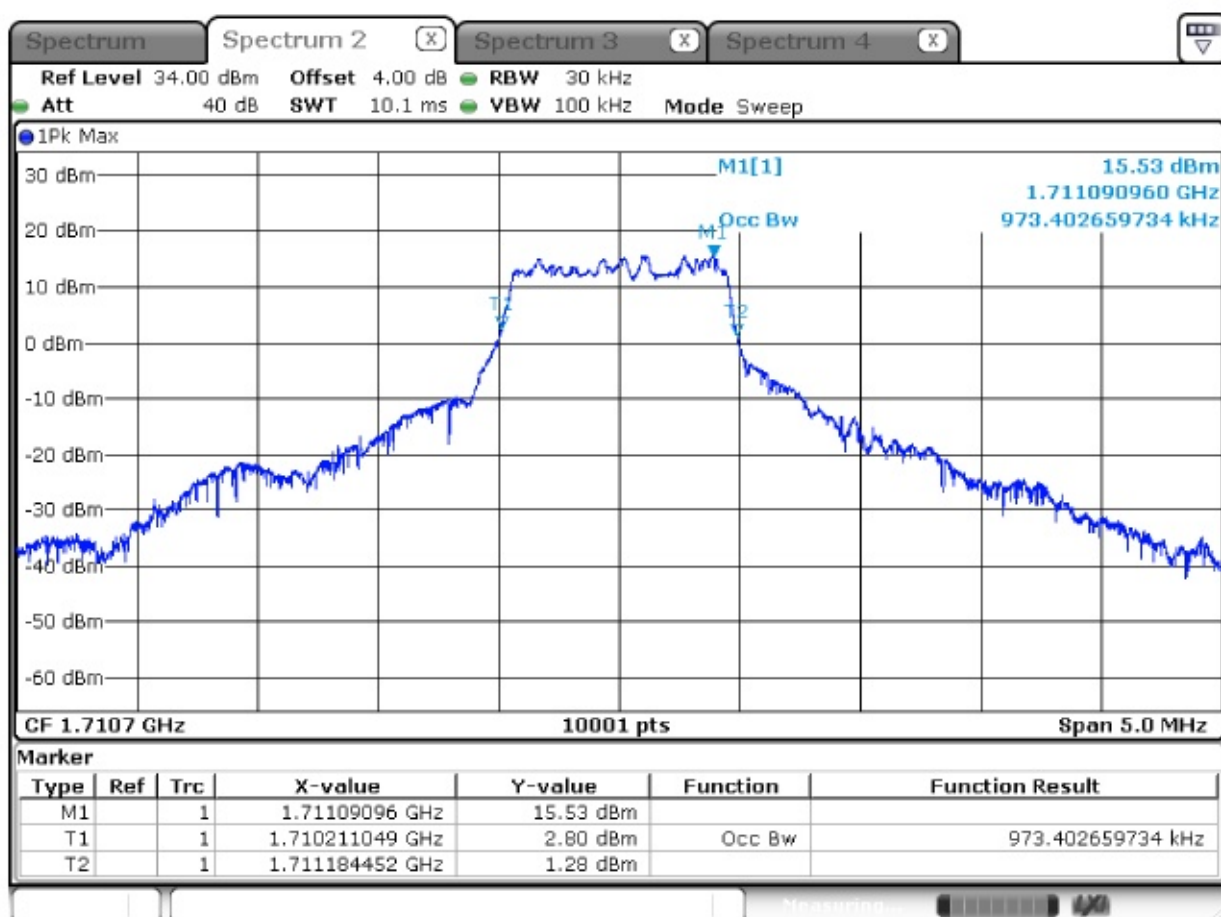


Date: 8.SEP.2017 16:00:26

Product	Module		
Test Item	99% occupied bandwidth		
Test Mode	Mode 4: LTE_CAT-M1_Band 4_16-QAM_Link		
Date of Test	2017/09/08	Test Site	SR10-H

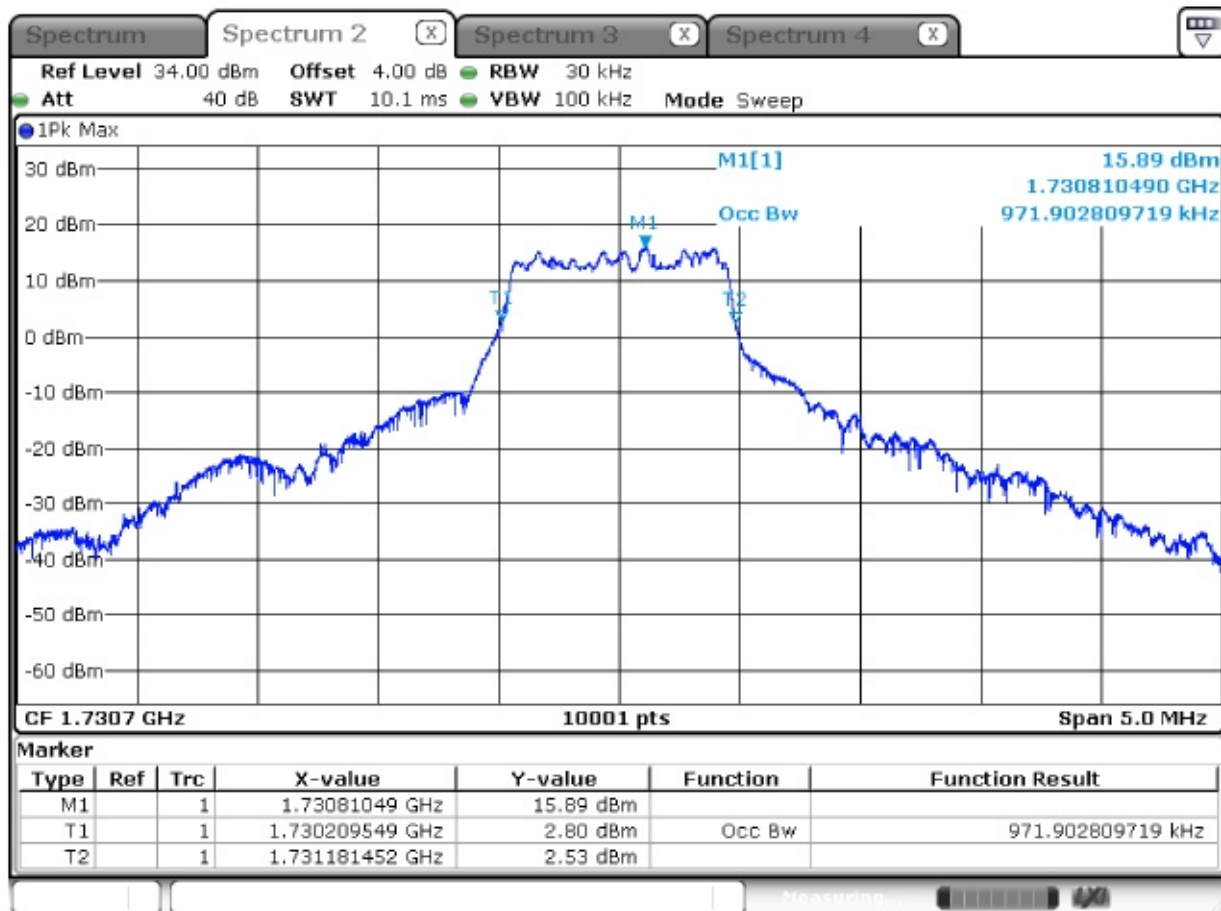
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
1710.7	0.973	N/A
1730.8	0.972	N/A
1754.3	0.977	N/A

1710.7 MHz



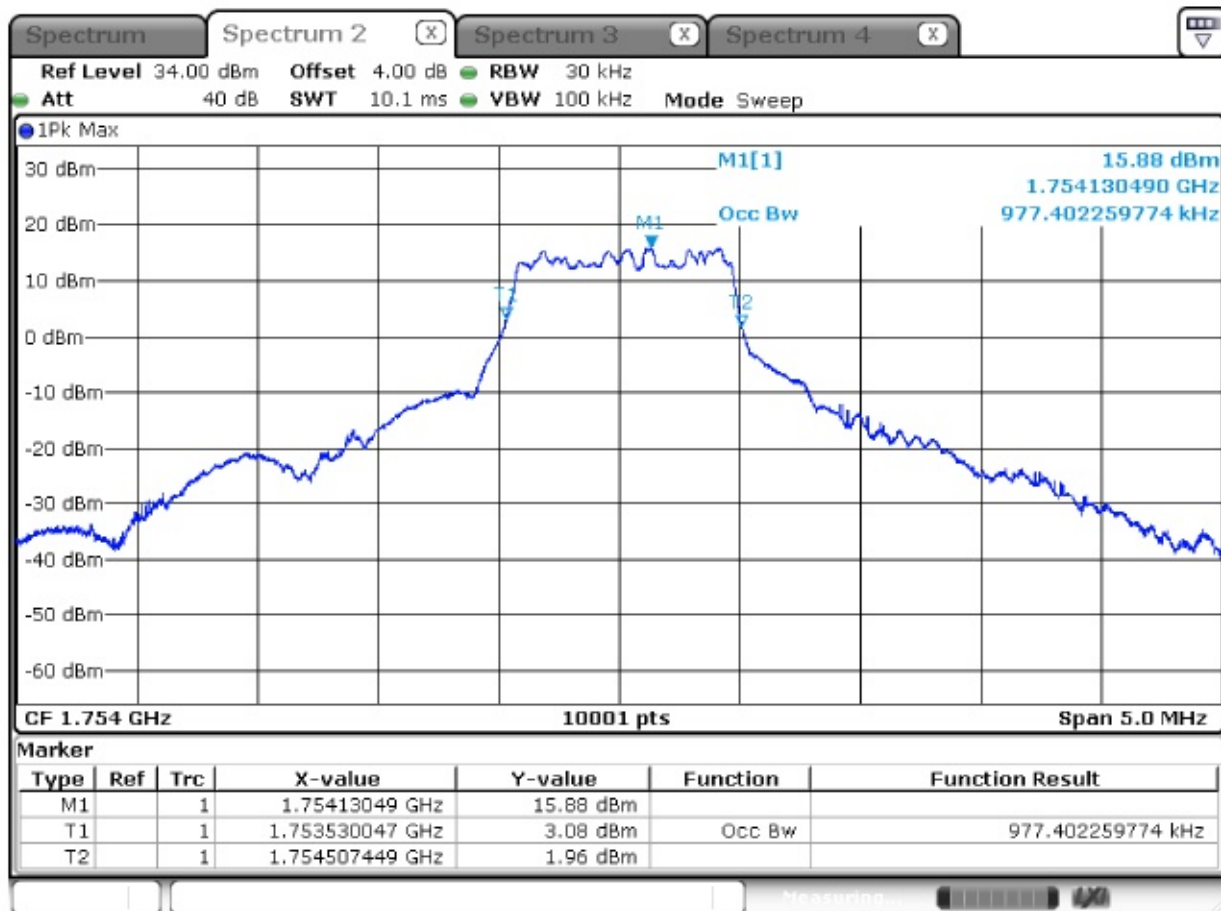
Date: 8.SEP.2017 15:39:38

1730.8 MHz



Date: 8.SEP.2017 15:42:21

1754.3 MHz

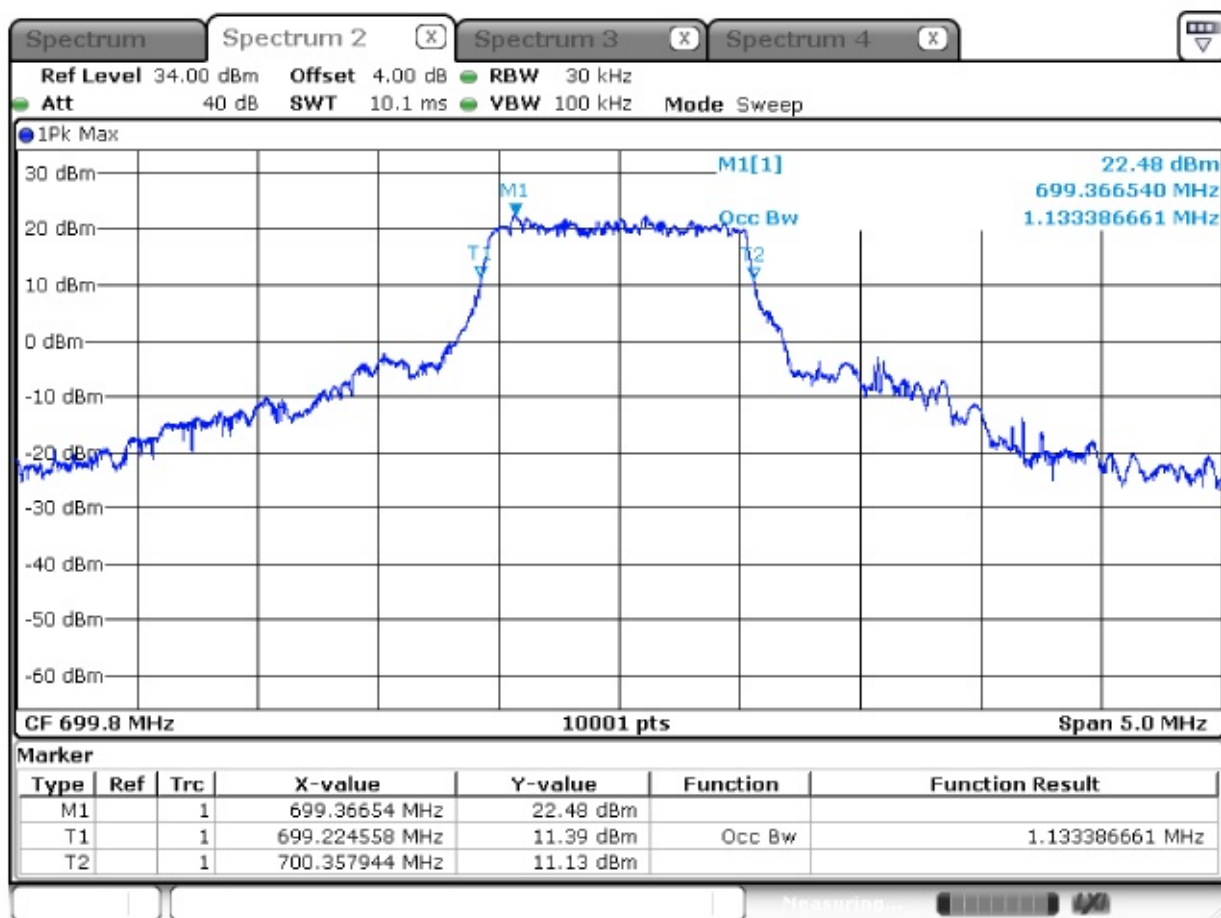


Date: 8.SEP.2017 16:04:36

Product	Module		
Test Item	99% occupied bandwidth		
Test Mode	Mode 5: LTE_CAT-M1_Band 12_QPSK_Link		
Date of Test	2017/09/08	Test Site	SR10-H

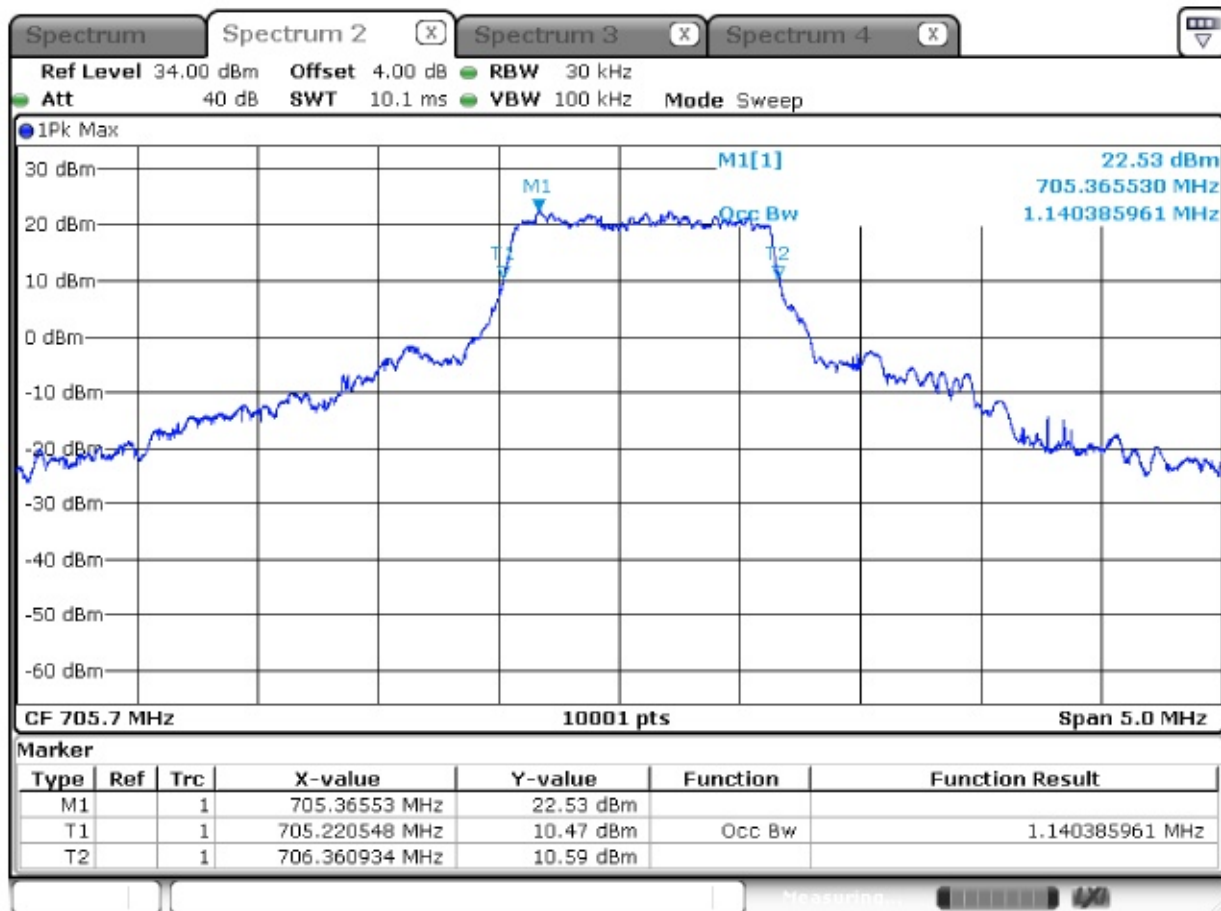
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
699.7	1.133	N/A
705.7	1.140	N/A
715.3	1.145	N/A

699.7 MHz



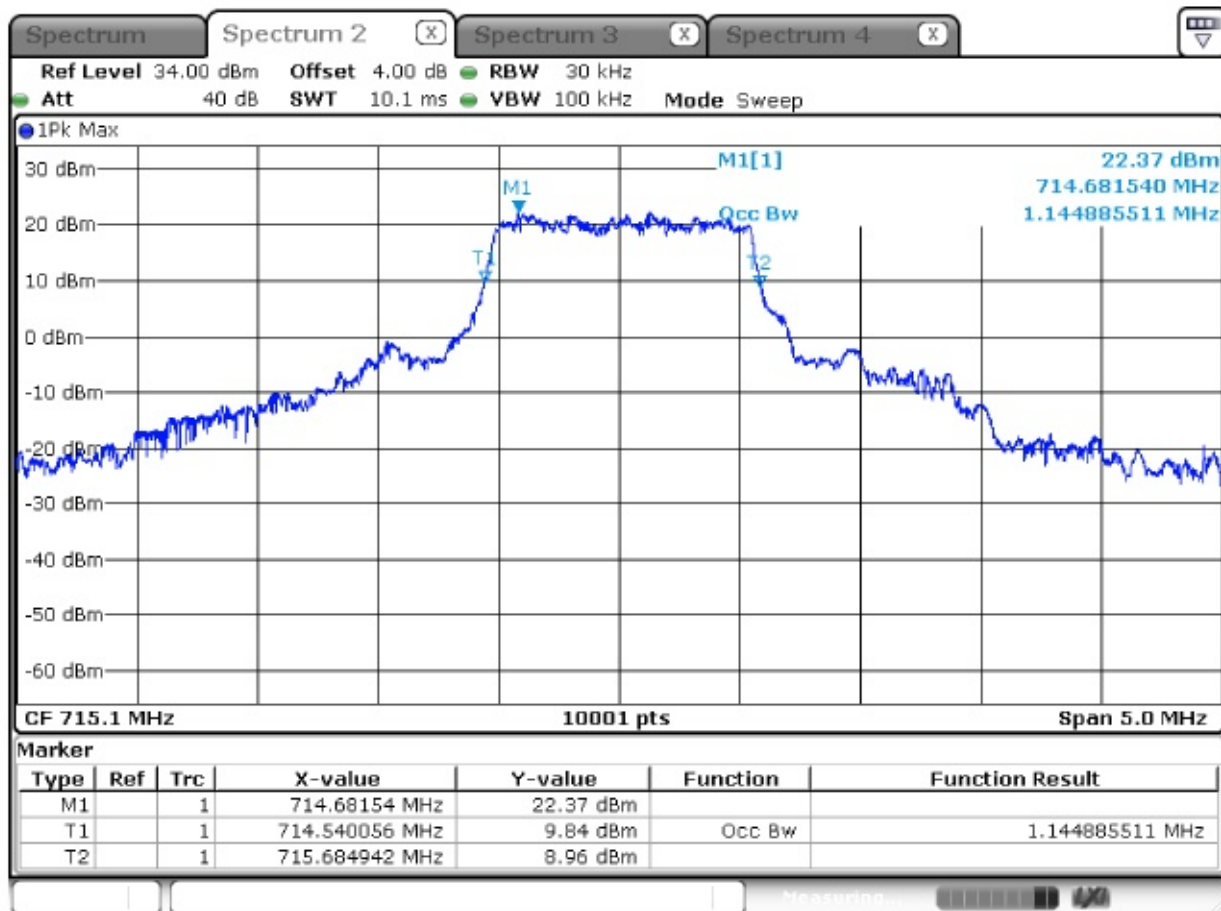
Date: 8.SEP.2017 16:26:09

705.7 MHz



Date: 8.SEP.2017 16:36:53

715.3 MHz

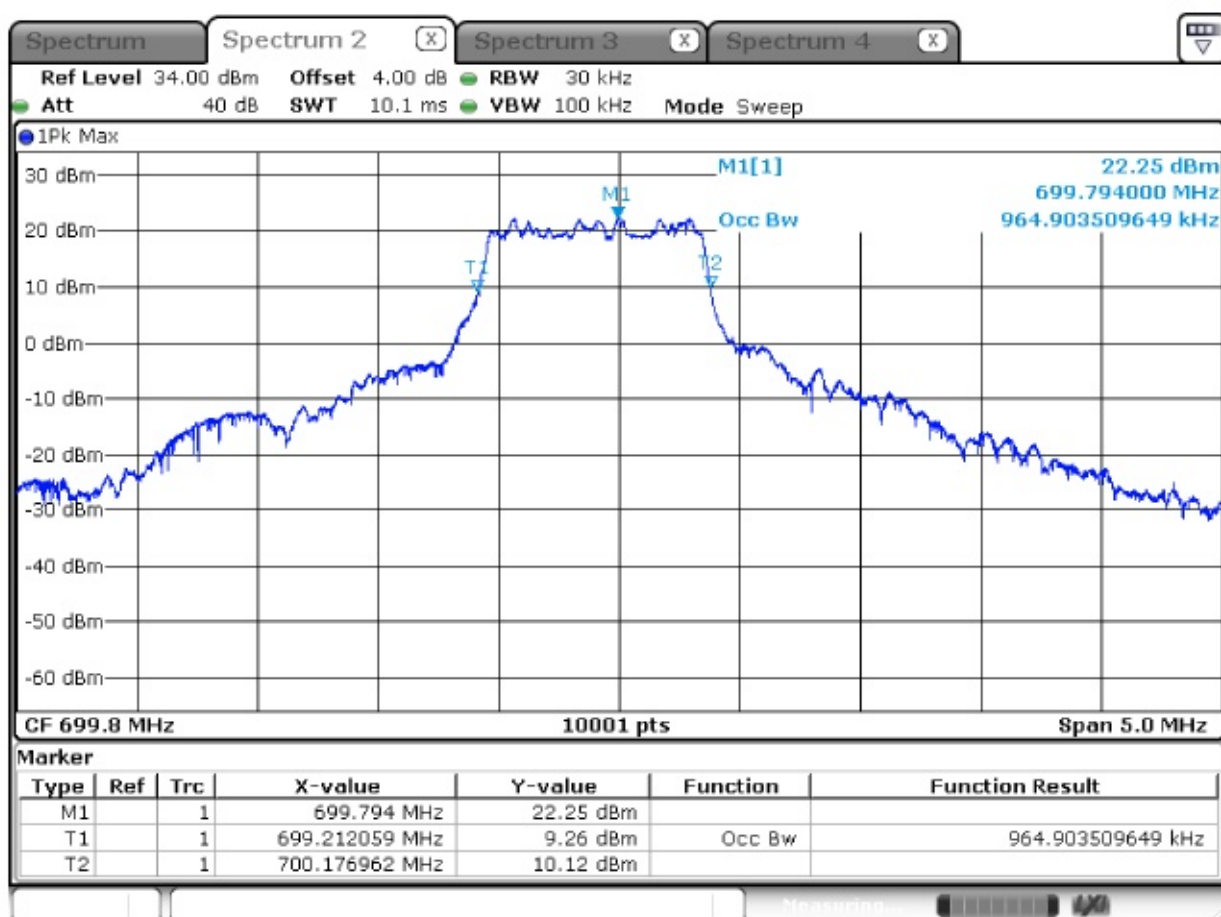


Date: 8.SEP.2017 16:49:04

Product	Module		
Test Item	99% occupied bandwidth		
Test Mode	Mode 6: LTE_CAT-M1_Band 12_16-QAM_Link		
Date of Test	2017/09/08	Test Site	SR10-H

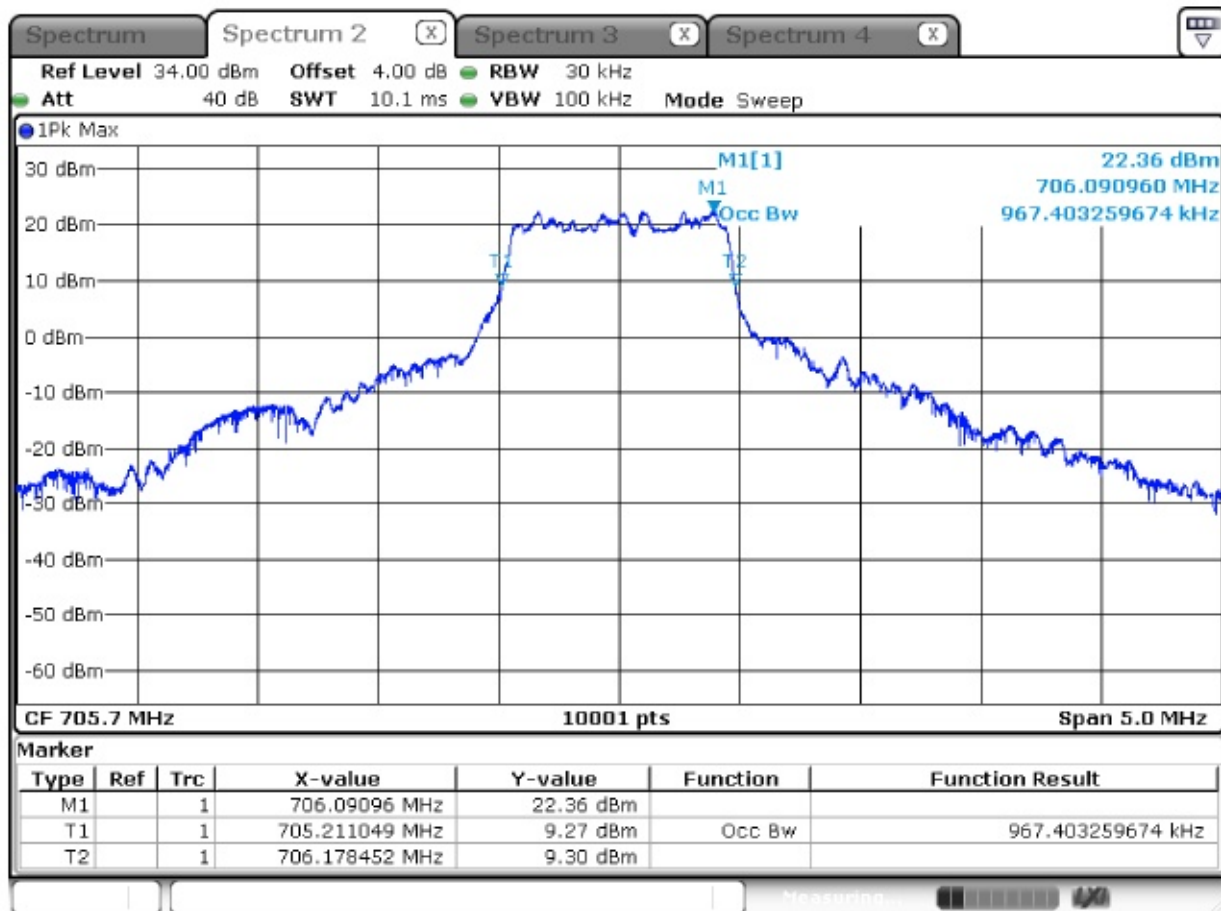
Frequency (MHz)	Measure Level (MHz)	Limit (MHz)
699.7	0.965	N/A
705.7	0.967	N/A
715.3	0.971	N/A

699.7 MHz



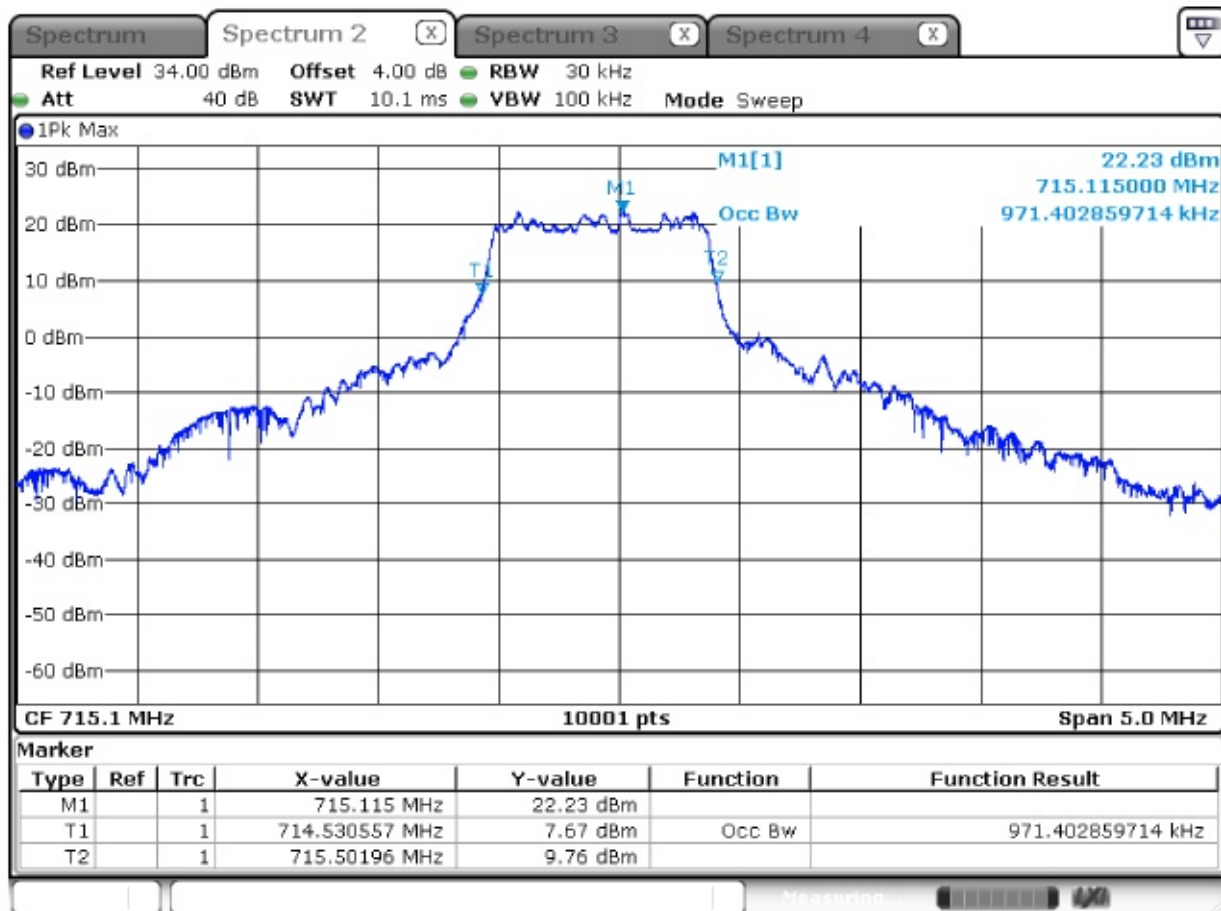
Date: 8.SEP.2017 16:27:32

705.7 MHz



Date: 8.SEP.2017 16:34:53

715.3 MHz



Date: 8.SEP.2017 16:50:11