

Annex 4 Measurement Diagrams to
TEST REPORT
No.: 6-0592-14-2-10a

According to:

FCC Part 15.247

for
ASCOM AB

SH1-ACAA
Cellular/Wi-Fi Smartphone
(WLAN 2.4GHz)

FCC ID: BXZSH1C







Laboratory Accreditation and Listings			
 <p>DAkkS Deutsche Akkreditierungsstelle D-PL-12047-01-01</p>	 <p>FEDERAL COMMUNICATIONS COMMISSION FCC USA MRA US-EU 0003</p>	 <p>Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3</p>	 <p>Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2666 C-2914, T-1967, G-301</p>
 <p>WiFi ALLIANCE AUTHORIZED RF LABORATORY</p>	 <p>CTIA Authorized Test Lab LAB CODE 20011130-00</p>		
accredited according to DIN EN ISO/IEC 17025			
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1. Conducted EMI measurements on AC-mains port according 15.207, class B

1.04

Common Information

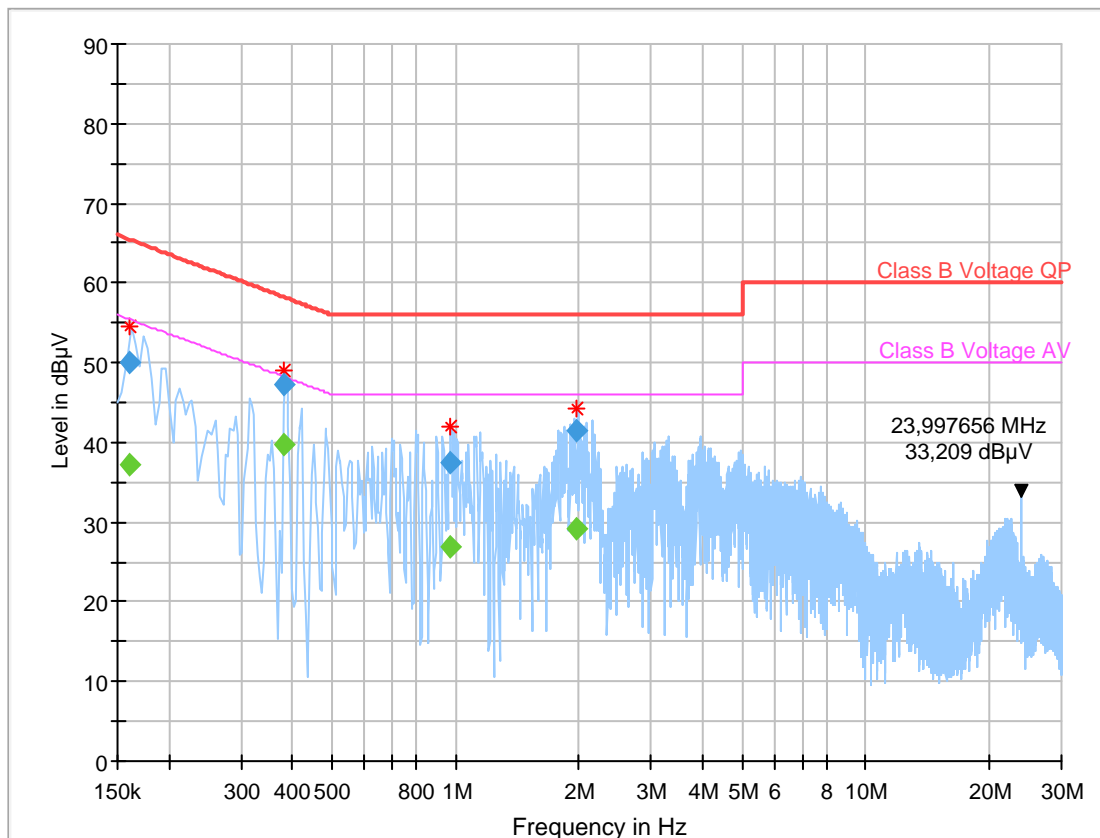
Test Description:	Conducted Voltage Measurement Class B
Test Site & Location:	Conducted Emission, CETECOM GmbH Essen
Test Software:	R&S EMC32 v9.15
Test Specification:	FCC 15.107, FCC 15.207
Operating Mode:	WLAN 2.4GHz ping
Measured on line:	N/L1
Diagram details:	Shows the peak values as a sum of measured ports in maxhold mode
Environmental Conditions:	Humidity: 43%rH; Temperature: 21°C
Operator:	npe
Comments:	

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	120VAC
Comments:	

Full Spectrum



Final Result

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)
0.160000	---	37.25	55.46
0.160000	49.95	---	65.46
0.381875	---	39.77	48.24
0.381875	47.16	---	58.24
0.975625	---	26.91	46.00
0.975625	37.36	---	56.00
1.982344	---	29.04	46.00
1.982344	41.56	---	56.00

Final Result

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)
0.160000	---	37.25	55.46
0.160000	49.95	---	65.46
0.381875	---	39.77	48.24
0.381875	47.16	---	58.24
0.975625	---	26.91	46.00
0.975625	37.36	---	56.00
1.982344	---	29.04	46.00
1.982344	41.56	---	56.00

2. Conducted RF-measurements on antenna port

2.1. Conducted RF-power

Method: §9.1.3

Tnom=20,4°C, 36% Feuchte,

NRV-Z32, Ref#602

2.1.1. Channel 1, 6, 11

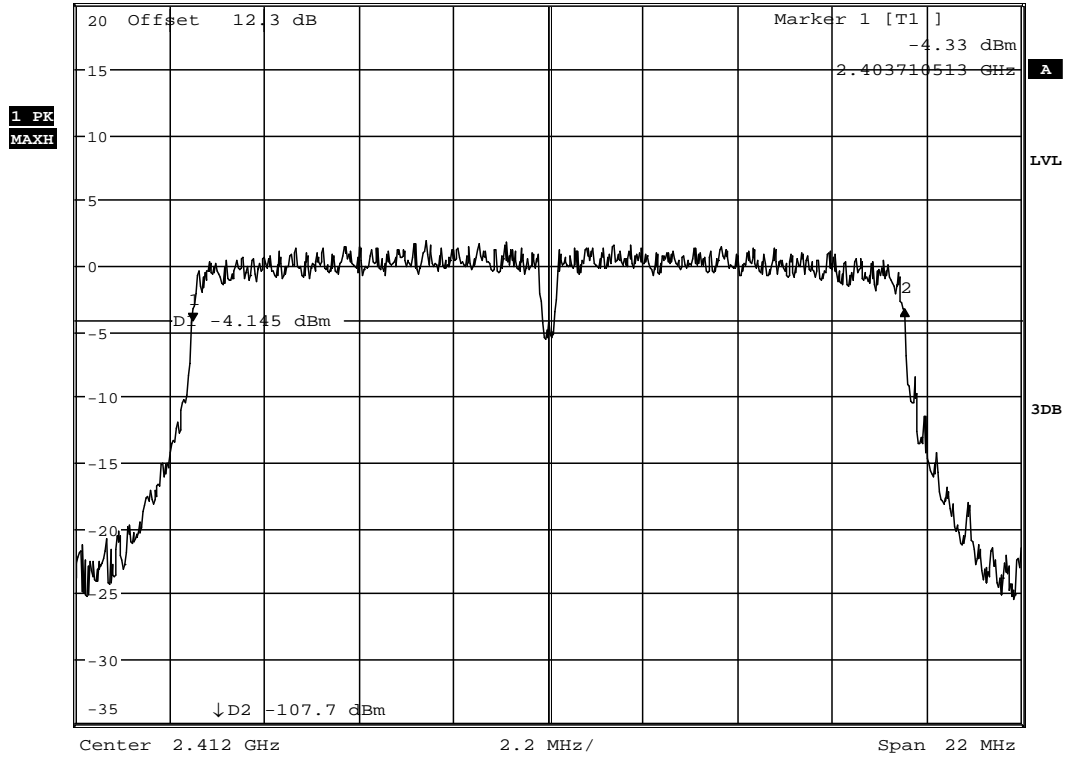
Peak Measurement				
b-mode		Channel no.		
Data rate	Modulation	1, gc=58	6, gc=58	11, gc=58
1Mbit	DBPSK	17,78	17,41	17,04
2Mbit	DQPSK	17,73	17,37	16,97
5.5Mbit	CCK	16,92	16,52	16,11
11Mbit	CCK	17,37	17,03	16,58
MAX-Value		17,78	17,41	17,04
g-Mode		Channel no.		
Data rate	Modulation	1, gc=50	6, gc=58	11, gc=50
6Mbit	BPSK	14,18	16,95	12,90
9Mbit	BPSK	14,12	16,91	12,84
12Mbit	QPSK	14,13	16,97	12,87
18Mbit	QPSK	13,99	16,90	12,78
24Mbit	16QAM	14,05	16,97	12,84
36Mbit	16QAM	14,01	16,93	12,82
48Mbit	64QAM	14,01	17,02	12,84
54Mbit	64QAM	14,08	17,08	12,90
MAX-Value		14,18	17,08	12,9
n-Mode HT20 (1 spatial stream: 1SS)		Channel no.		
Data rate	Modulation	1	6	11
MCS0 - 6.5Mbps	BPSK	14,22	17,20	13,06
MCS1 - 13Mbps	QPSK	14,15	17,16	13,00
MCS2 - 19.5Mbps	QPSK	14,16	17,18	13,03
MCS3 - 26Mbps	QAM16	14,16	17,21	13,02
MCS4 - 39Mbps	QAM16	14,13	17,19	13,01
MCS5 - 52Mbps	QAM64	14,22	17,24	13,11
MCS6 - 58.5Mbps	QAM64	14,22	17,29	13,16
MCS7 - 65Mbps	QAM64	14,15	17,27	13,06
MAX-Value		14,22	17,29	13,16

6Mbit



*RBW 100 kHz Delta 2 [T1]
 *VBW 500 kHz 0.92 dB
 SWT 10 ms 16.570512821 MHz

Ref 20 dBm *Att 25 dB



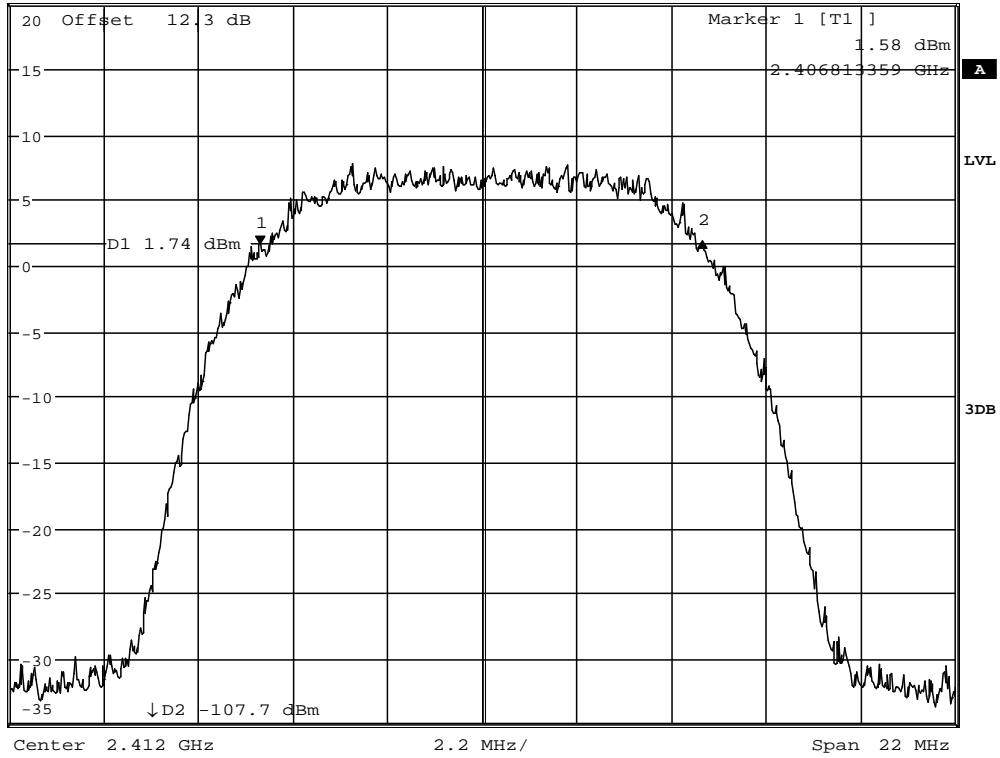
Date: 27.JAN.2015 12:09:39

11Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.24 dB
SWT 10 ms 10.294871795 MHz

Ref 20 dBm *Att 25 dB



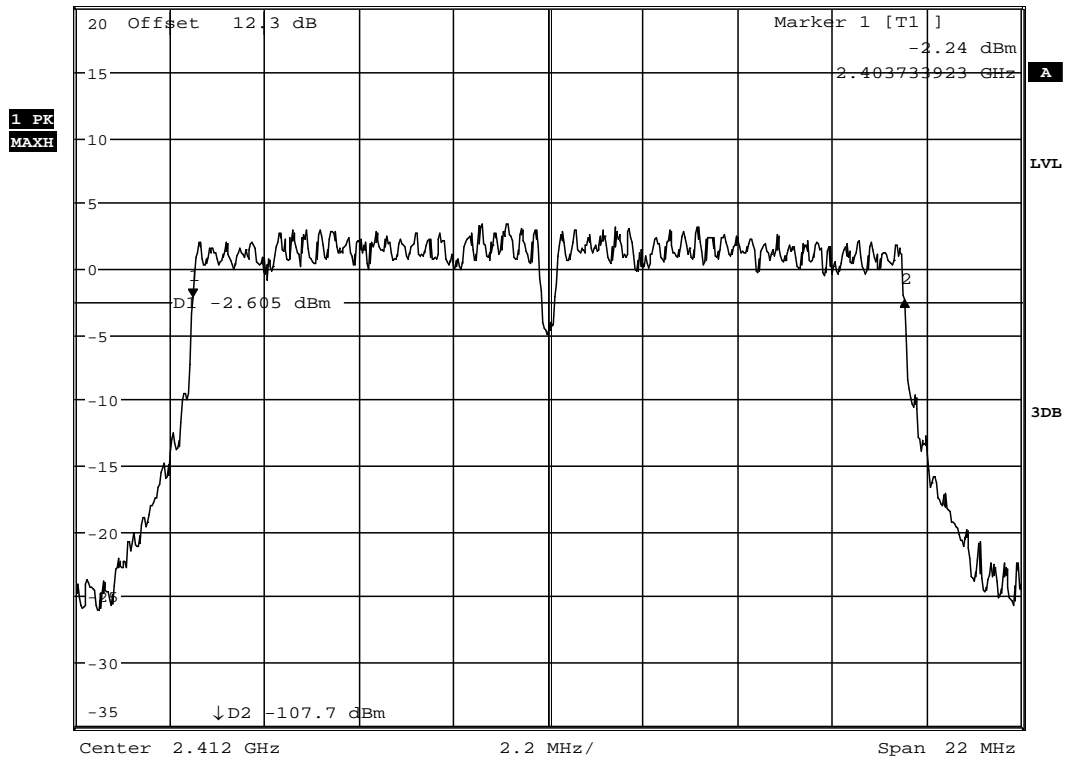
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54Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz -0.20 dB
SWT 10 ms 16.551333333 MHz

Ref 20 dBm *Att 25 dB



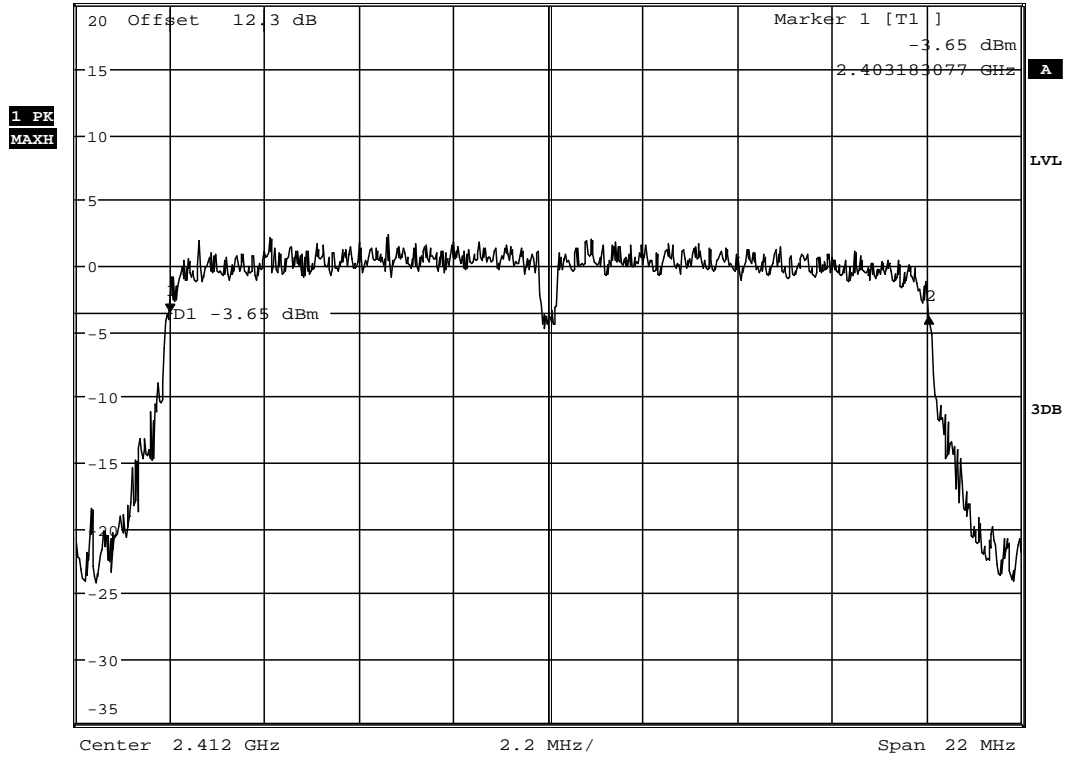
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MCS0



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz -0.38 dB
SWT 10 ms 17.663461538 MHz

Ref 20 dBm *Att 25 dB



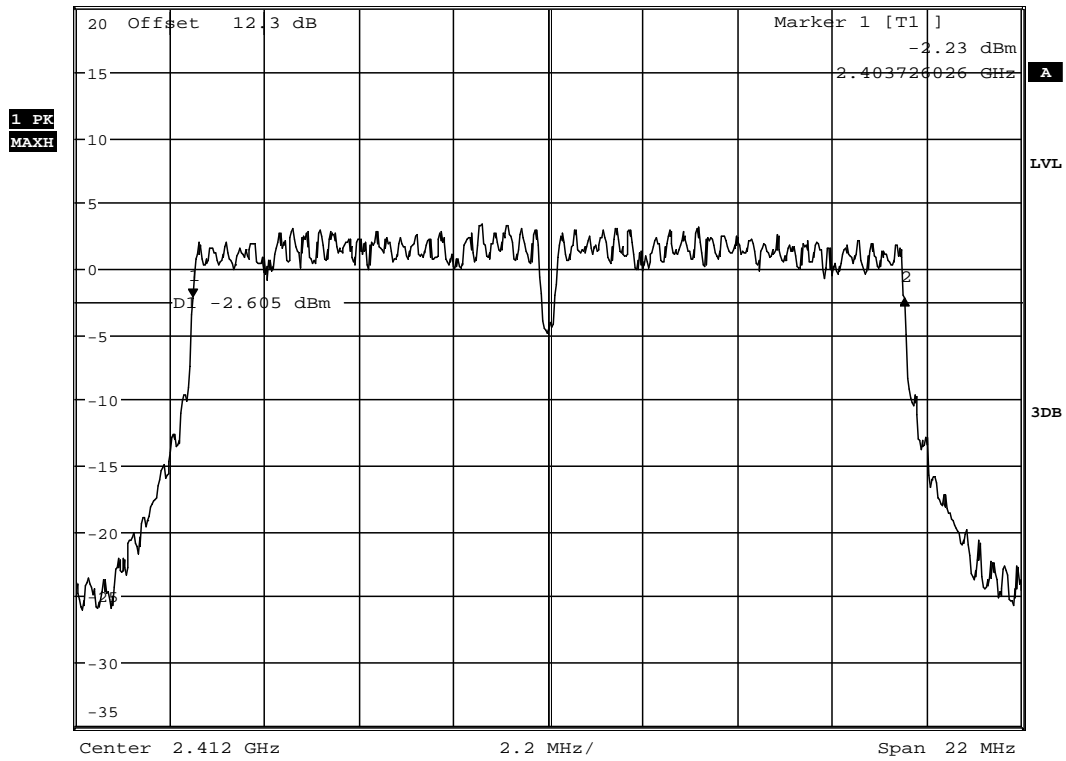
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MCS7



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz -0.08 dB
SWT 10 ms 16.570512821 MHz

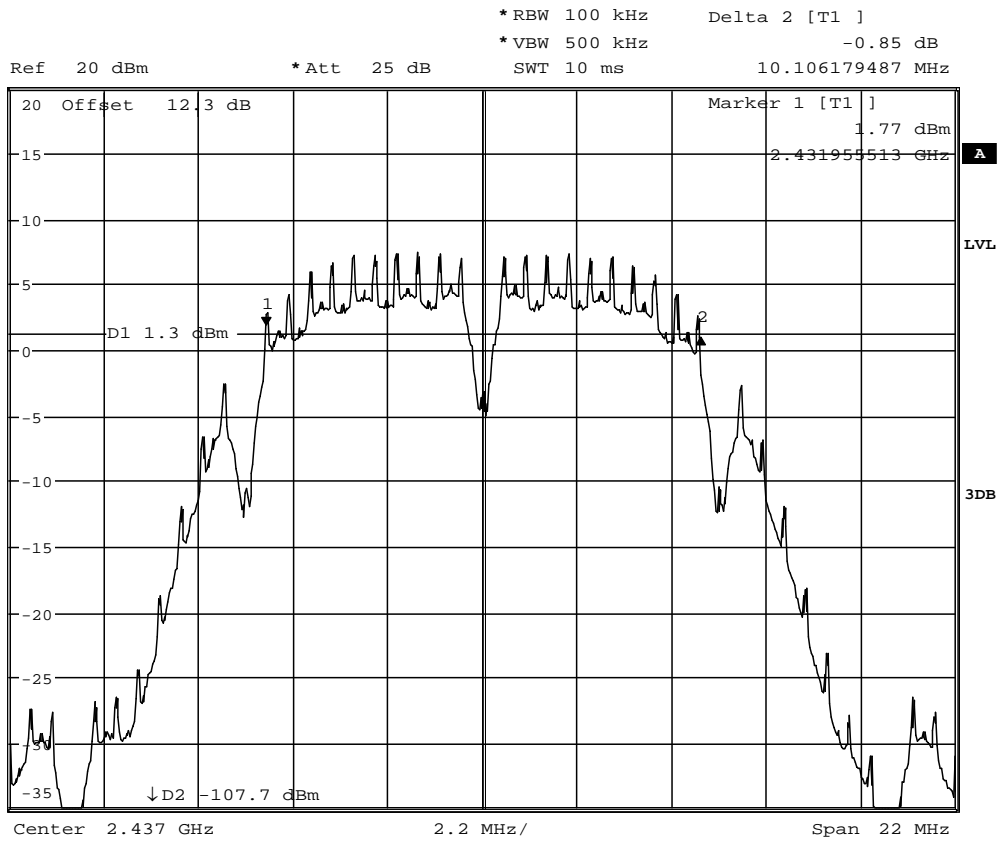
Ref 20 dBm *Att 25 dB



Date: 27.JAN.2015 11:37:10

2.2.2. Channel 6

1Mbit



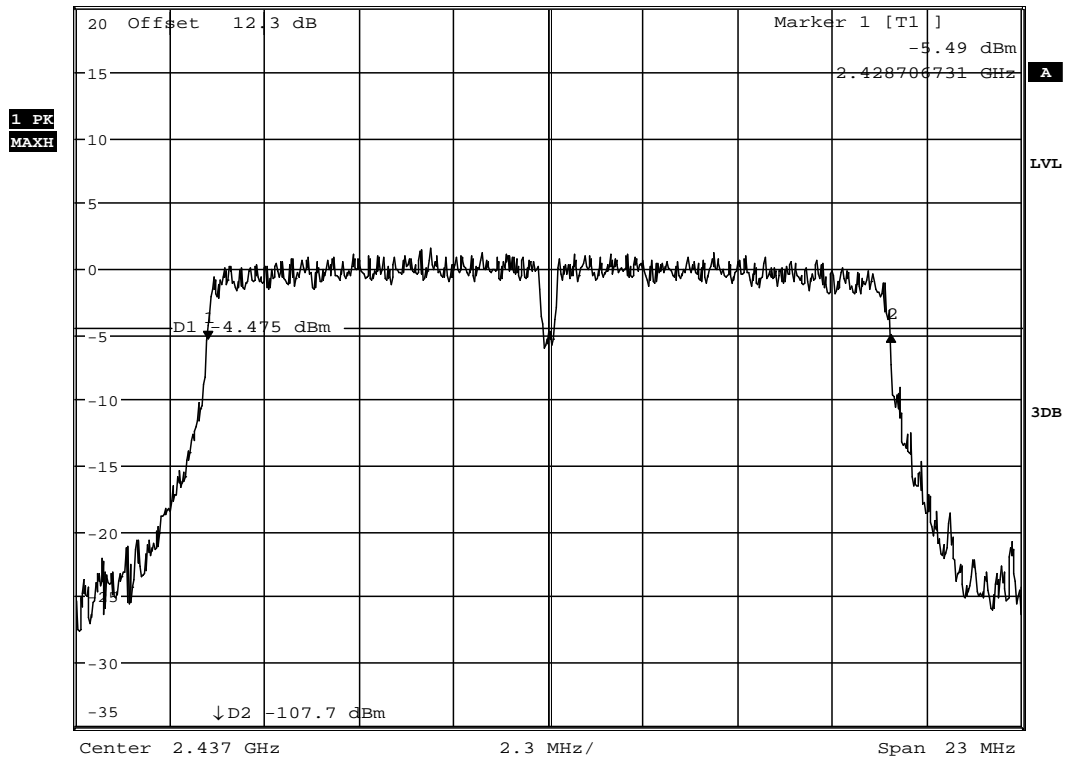
Date: 27.JAN.2015 12:36:33

6Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.34 dB
SWT 10 ms 16.630179487 MHz

Ref 20 dBm *Att 25 dB



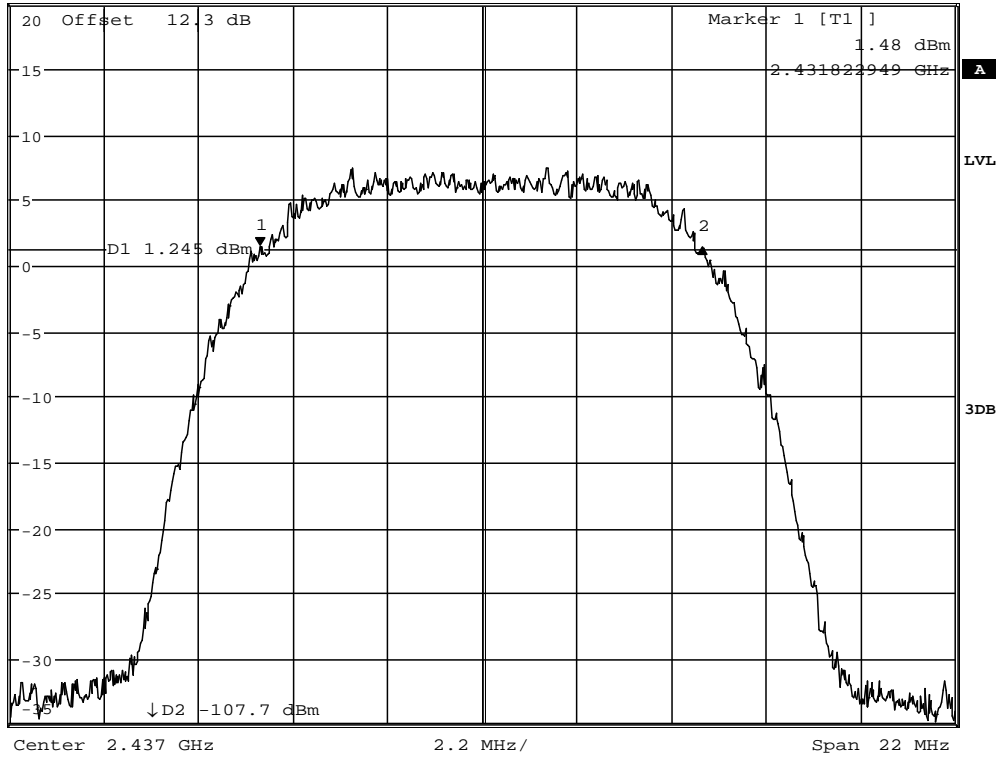
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11Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz -0.19 dB
SWT 10 ms 10.289230769 MHz

Ref 20 dBm *Att 25 dB



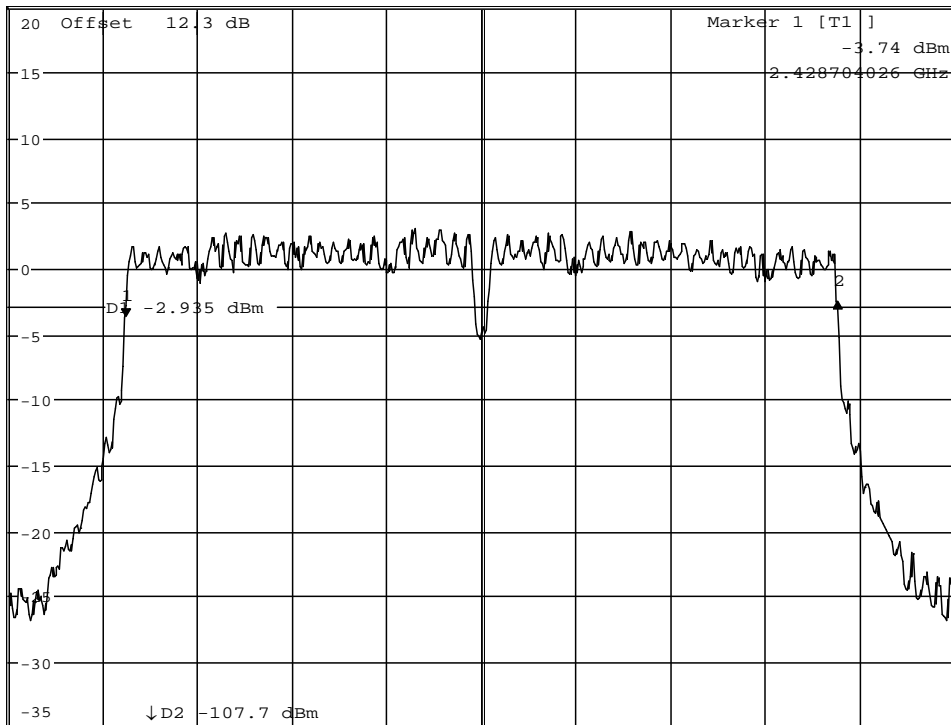
Date: 27.JAN.2015 12:45:58

54Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 1.18 dB
SWT 10 ms 16.570512821 MHz

Ref 20 dBm *Att 25 dB



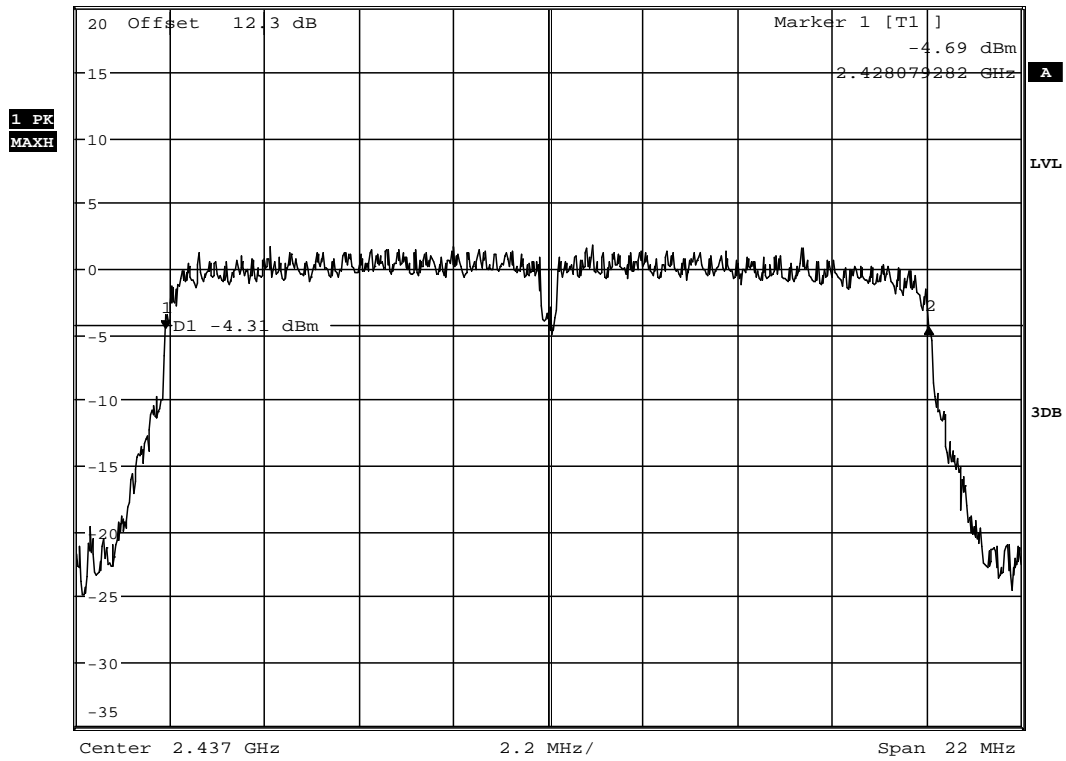
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MCS0



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.12 dB
SWT 10 ms 17.759641026 MHz

Ref 20 dBm *Att 25 dB



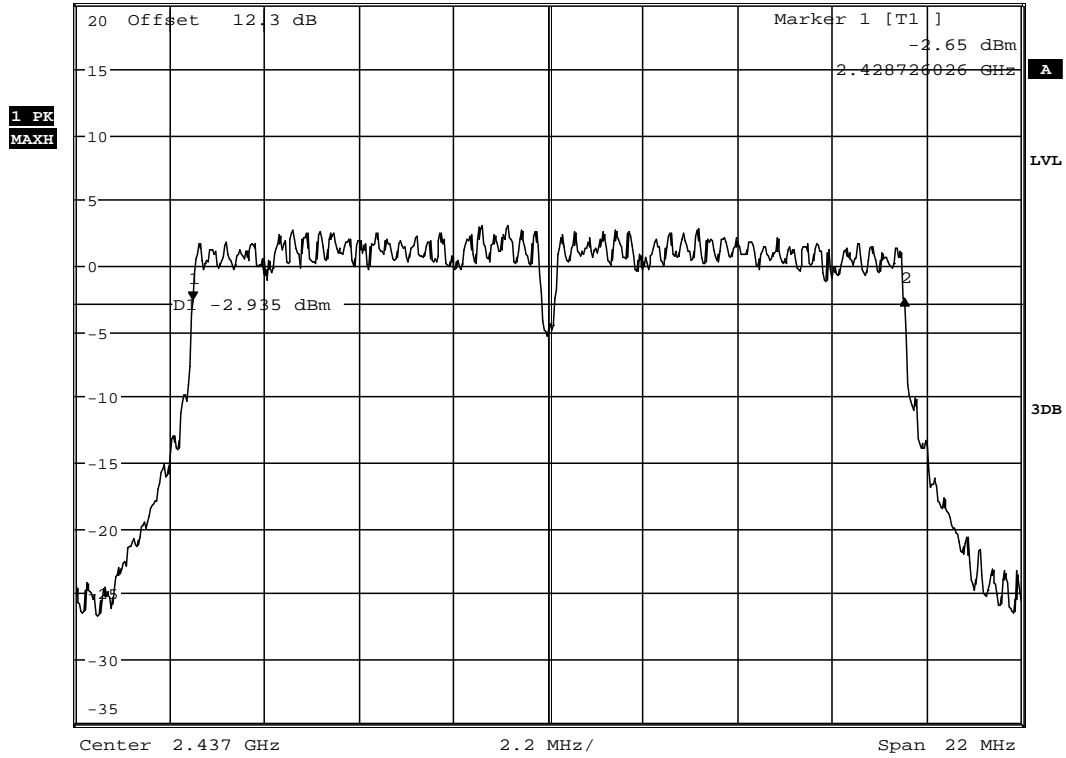
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MCS7



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.08 dB
SWT 10 ms 16.535256410 MHz

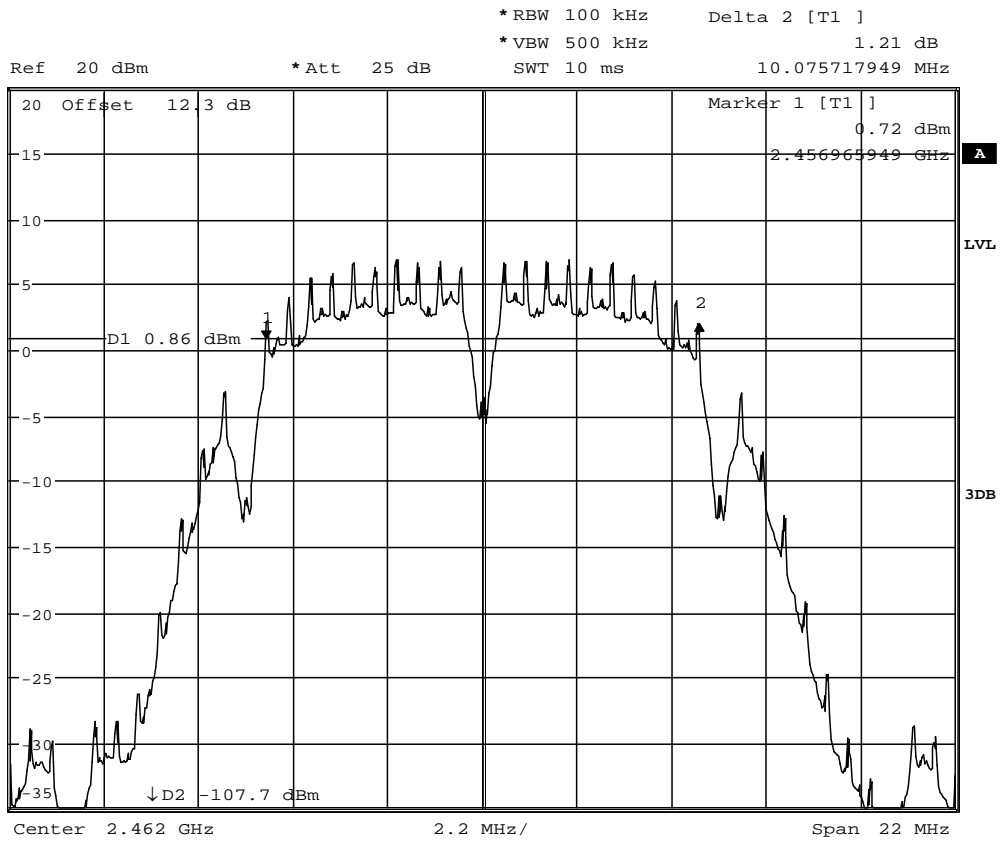
Ref 20 dBm *Att 25 dB



Date: 27.JAN.2015 11:44:58

2.2.3. Channel 11

1Mbit



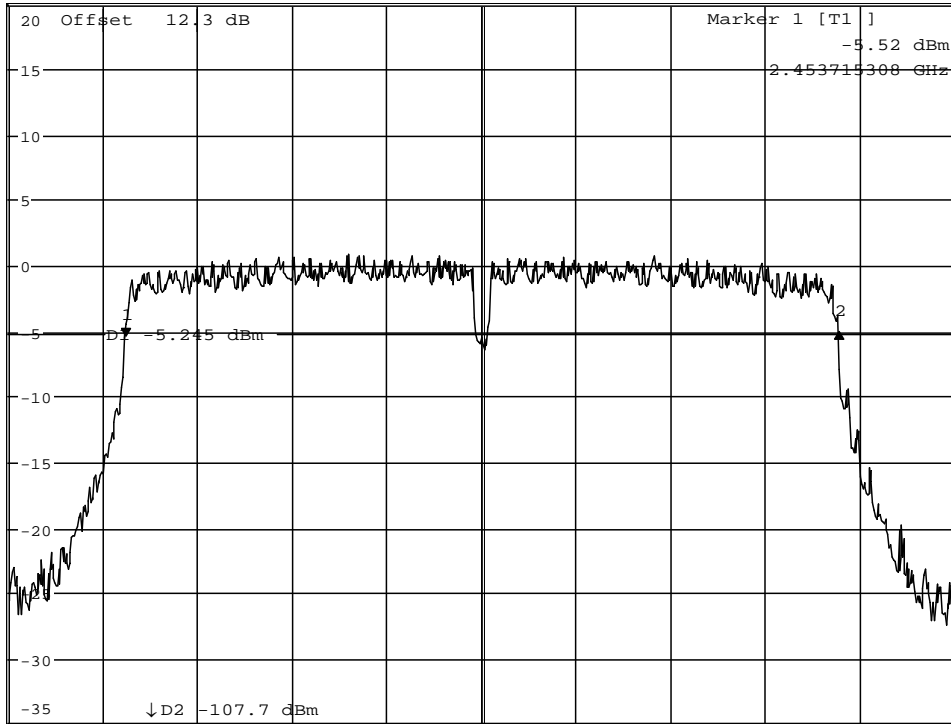
Date: 27.JAN.2015 12:39:48

6Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.42 dB
SWT 10 ms 16.605769231 MHz

Ref 20 dBm *Att 25 dB



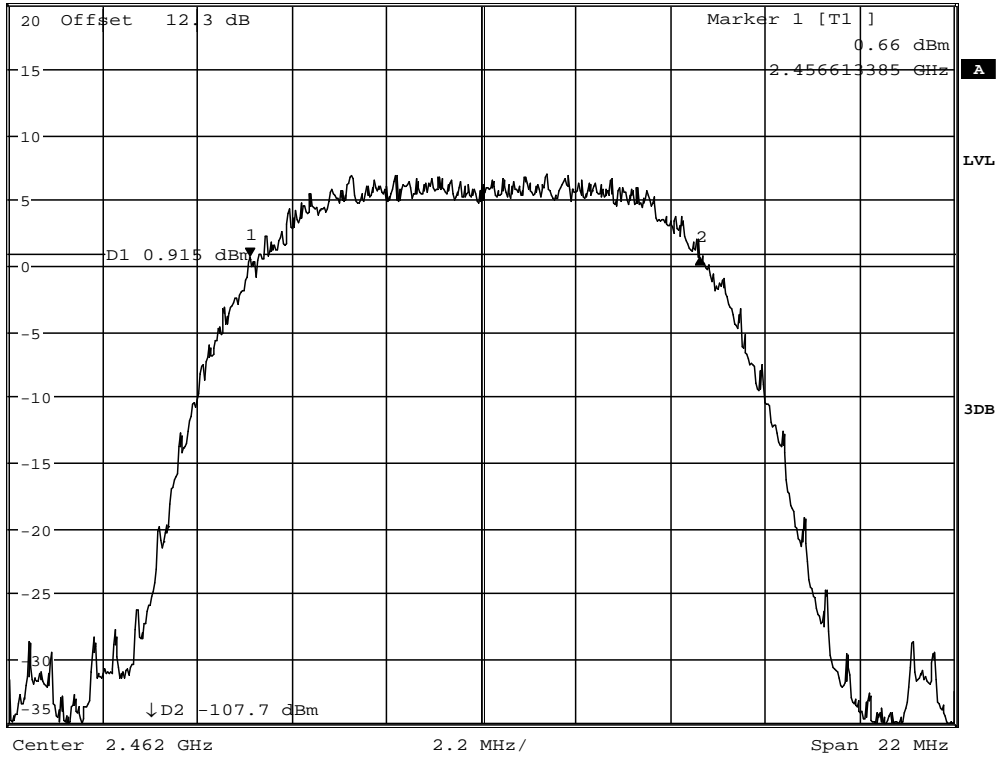
Date: 27.JAN.2015 12:19:02

11Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz -0.14 dB
SWT 10 ms 10.435897436 MHz

Ref 20 dBm *Att 25 dB



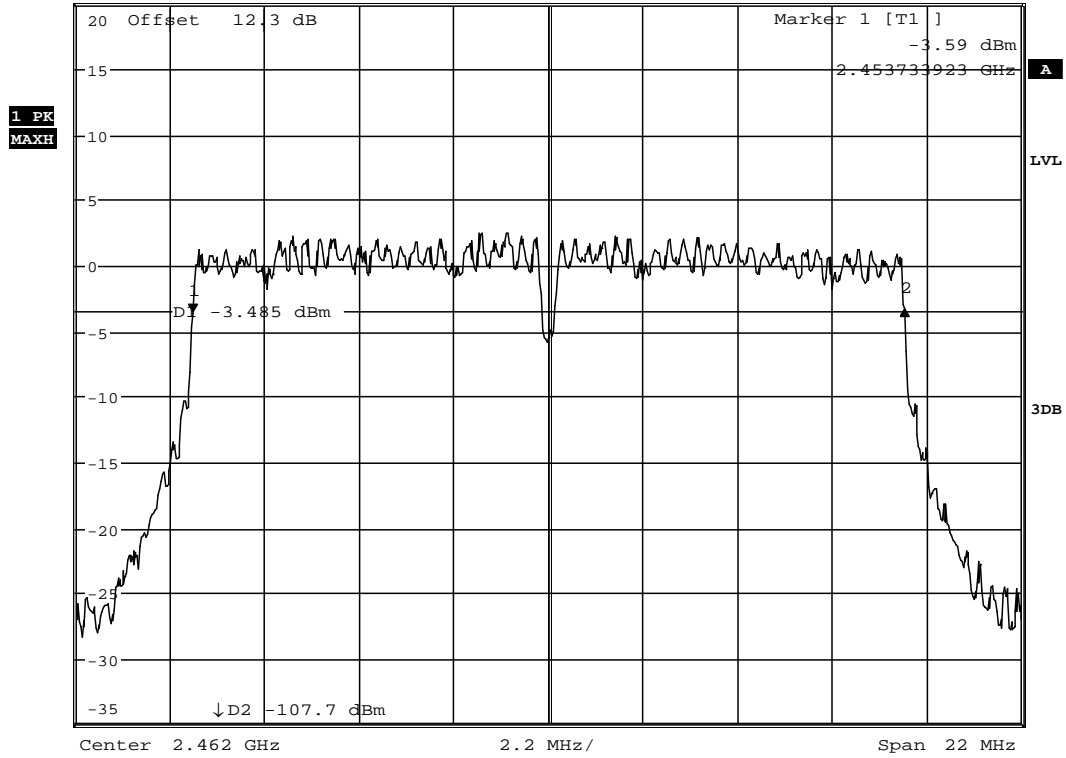
Date: 27.JAN.2015 12:42:35

54Mbit



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.16 dB
SWT 10 ms 16.551344333 MHz

Ref 20 dBm *Att 25 dB



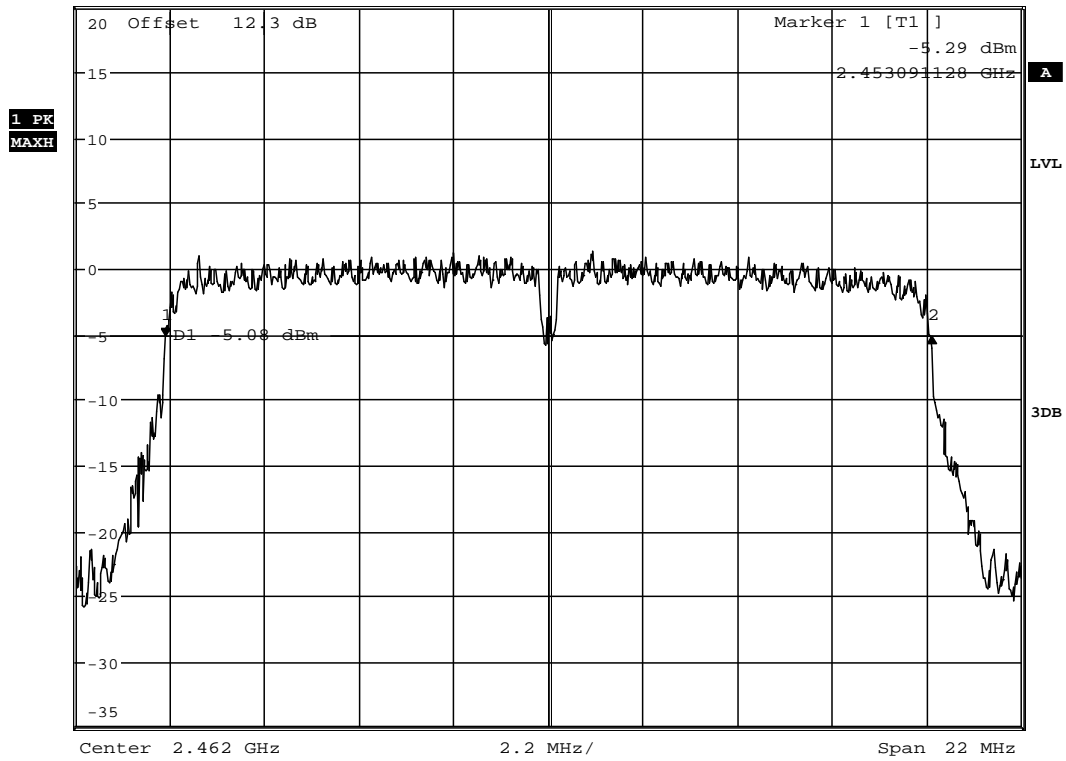
Date: 27.JAN.2015 11:55:55

MCS0



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.07 dB
SWT 10 ms 17.810487179 MHz

Ref 20 dBm *Att 25 dB



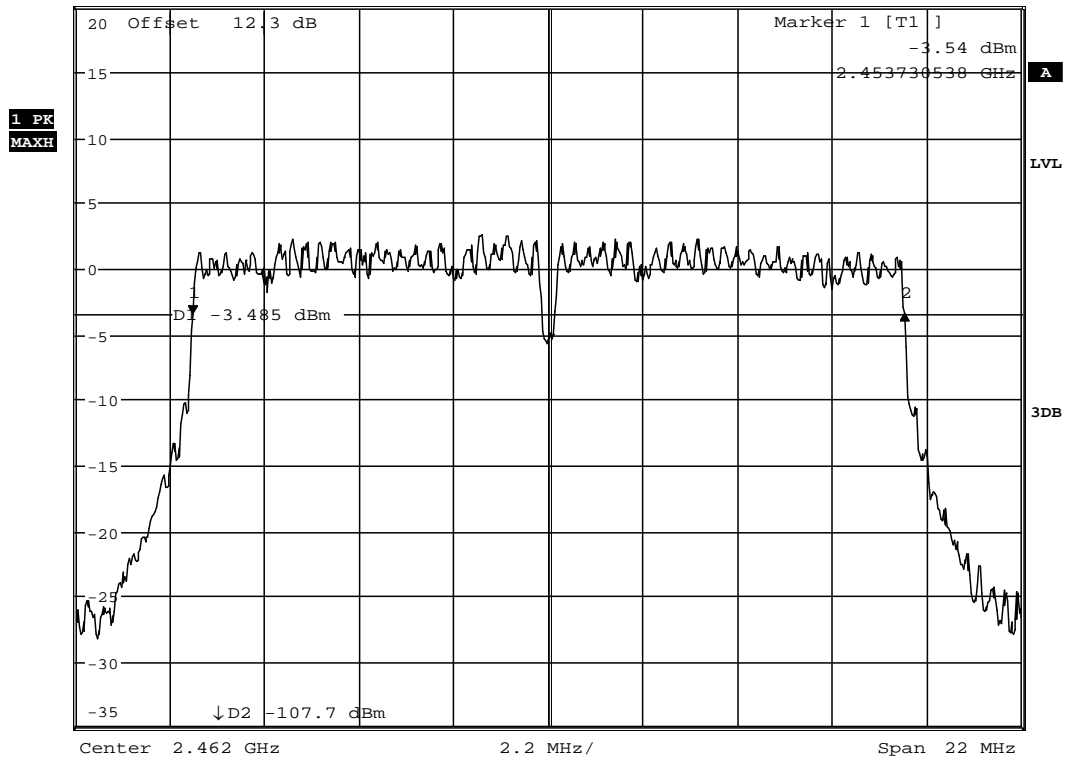
Date: 27.JAN.2015 11:12:33

MCS7



*RBW 100 kHz Delta 2 [T1]
*VBW 500 kHz 0.06 dB
SWT 10 ms 16.554717949 MHz

Ref 20 dBm *Att 25 dB

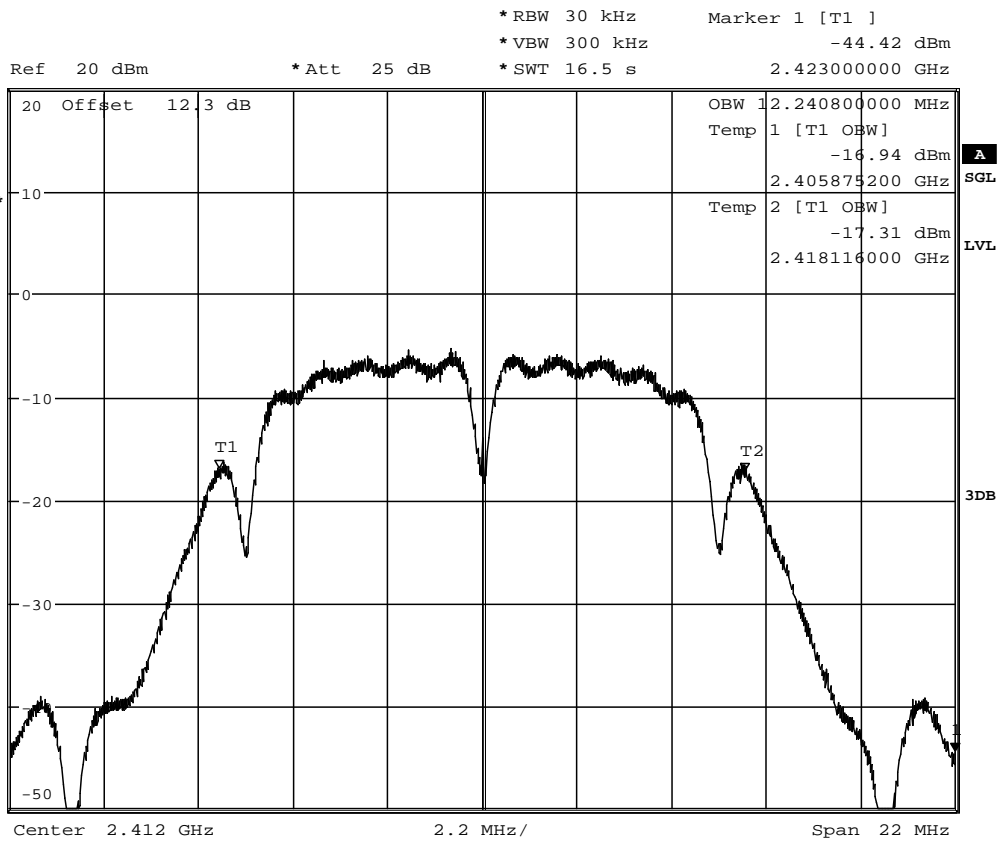


Date: 27.JAN.2015 11:50:28

2.3. 99% Occupied Bandwidth

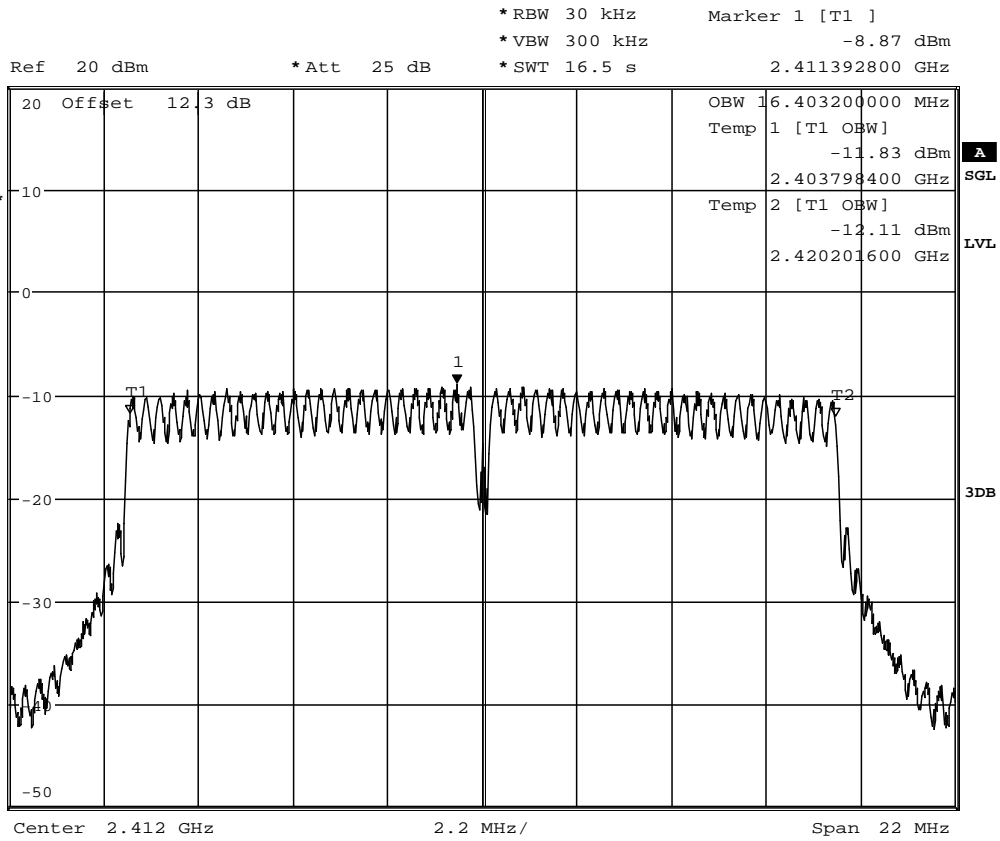
2.3.1. Channel 1

1Mbit



Date: 27.JAN.2015 14:13:31

6Mbit



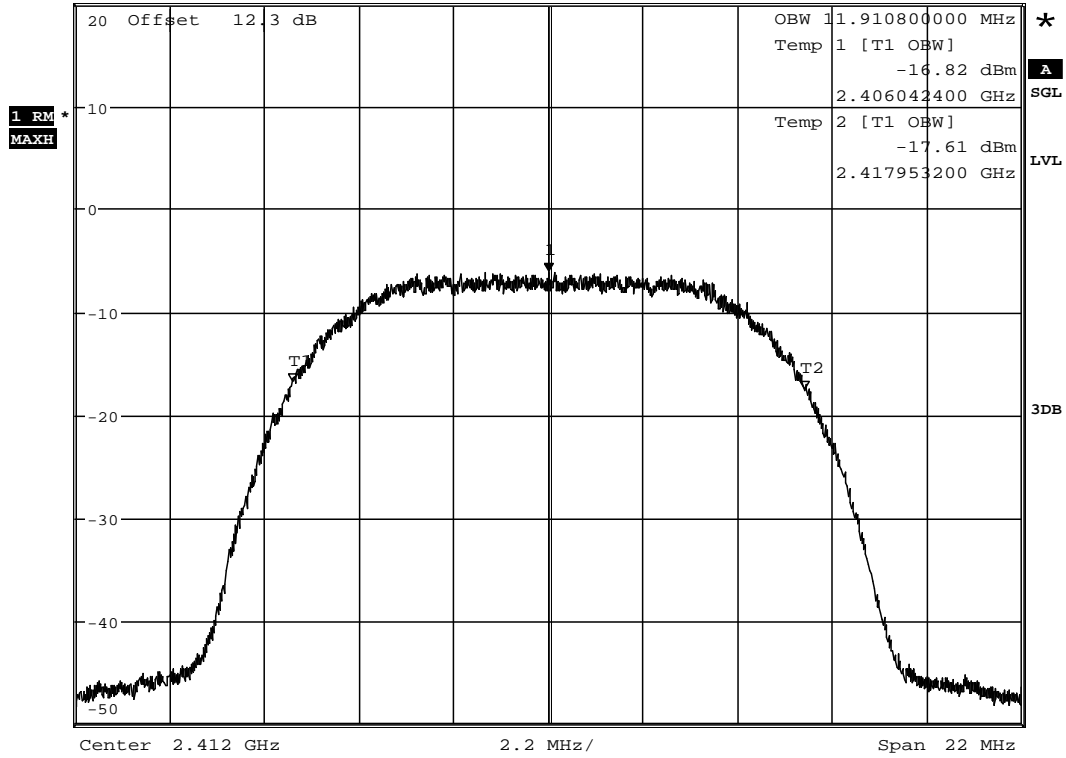
Date: 27.JAN.2015 14:14:55

11Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -6.07 dBm
 *SWT 20 s 2.412000000 GHz

Ref 20 dBm *Att 25 dB



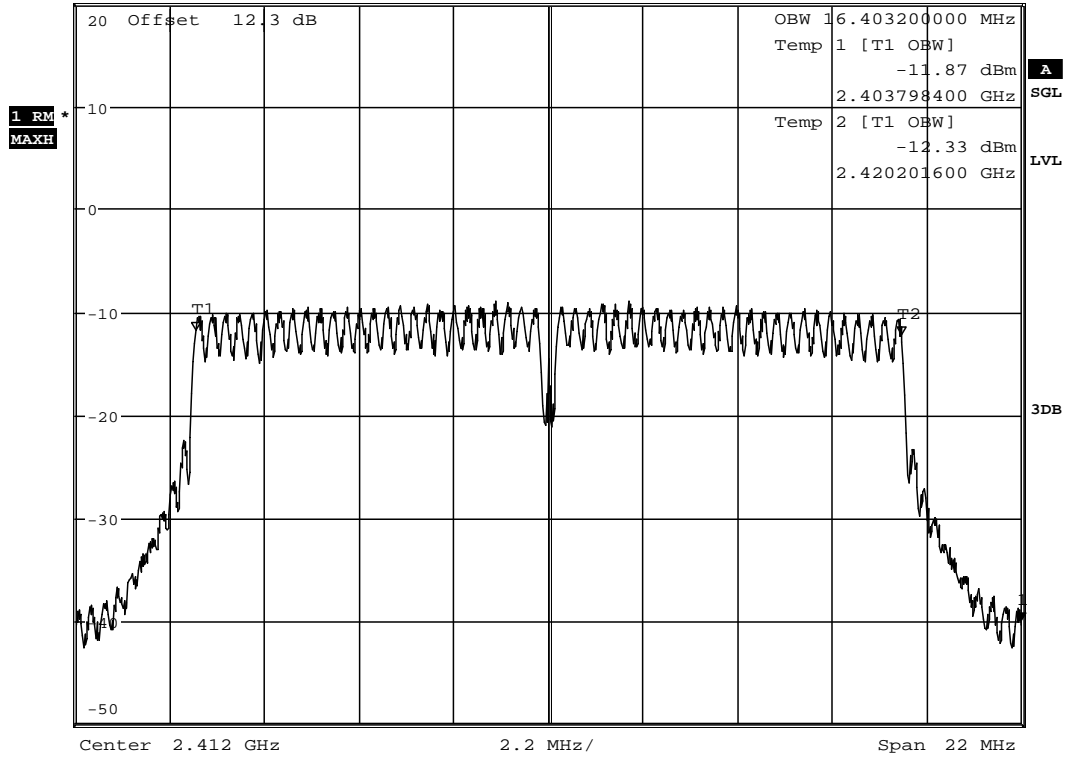
Date: 27.JAN.2015 13:45:54

54Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -40.03 dBm
 *SWT 16.5 s 2.423000000 GHz

Ref 20 dBm *Att 25 dB



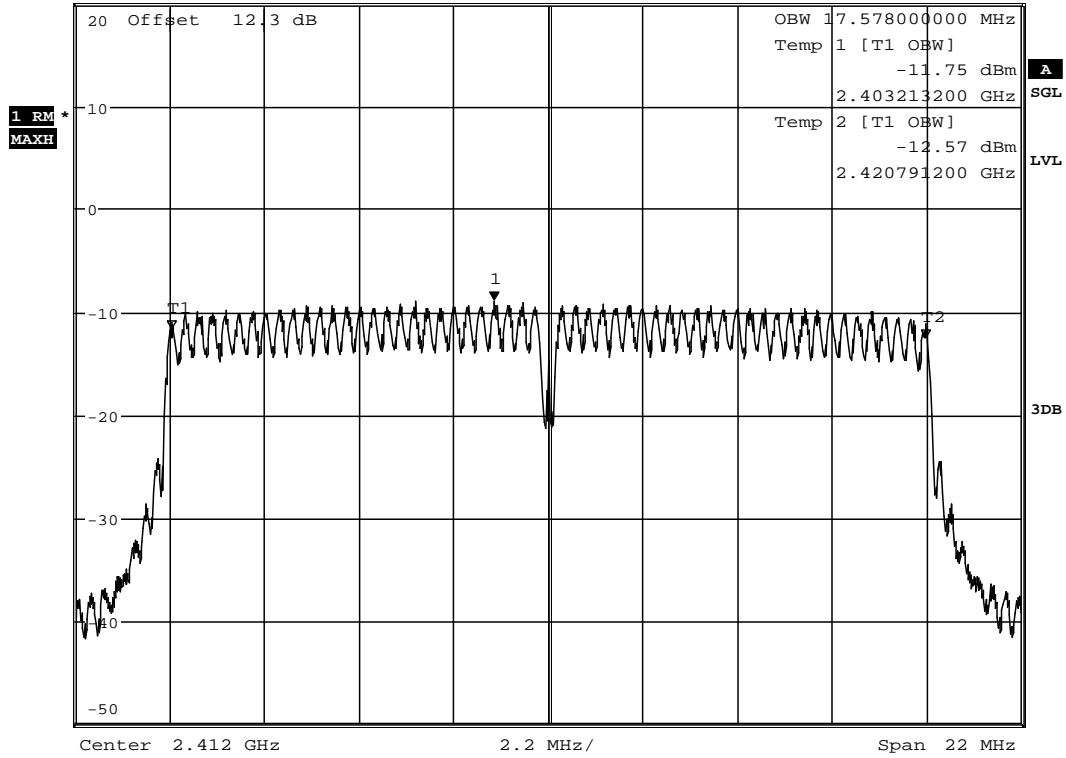
Date: 27.JAN.2015 14:23:06

MCS0



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -8.88 dBm
 *SWT 16.5 s 2.410746000 GHz

Ref 20 dBm *Att 25 dB



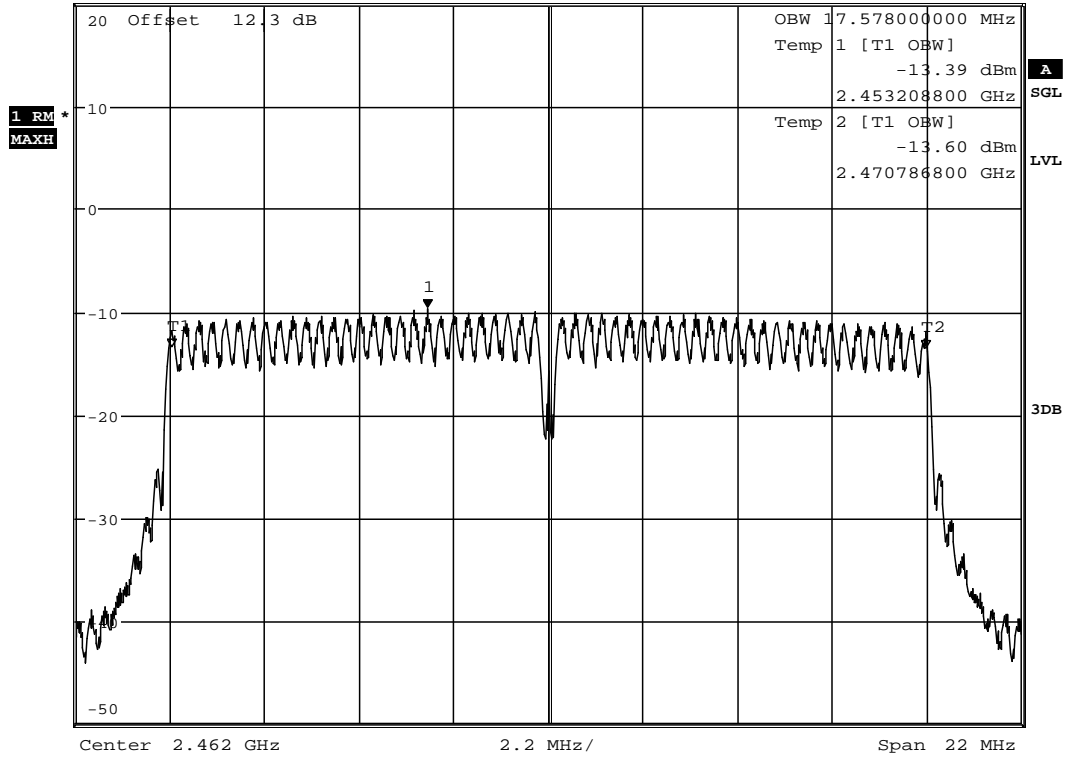
Date: 27.JAN.2015 14:24:45

MCS7



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -9.65 dBm
 *SWT 16.5 s 2.459184000 GHz

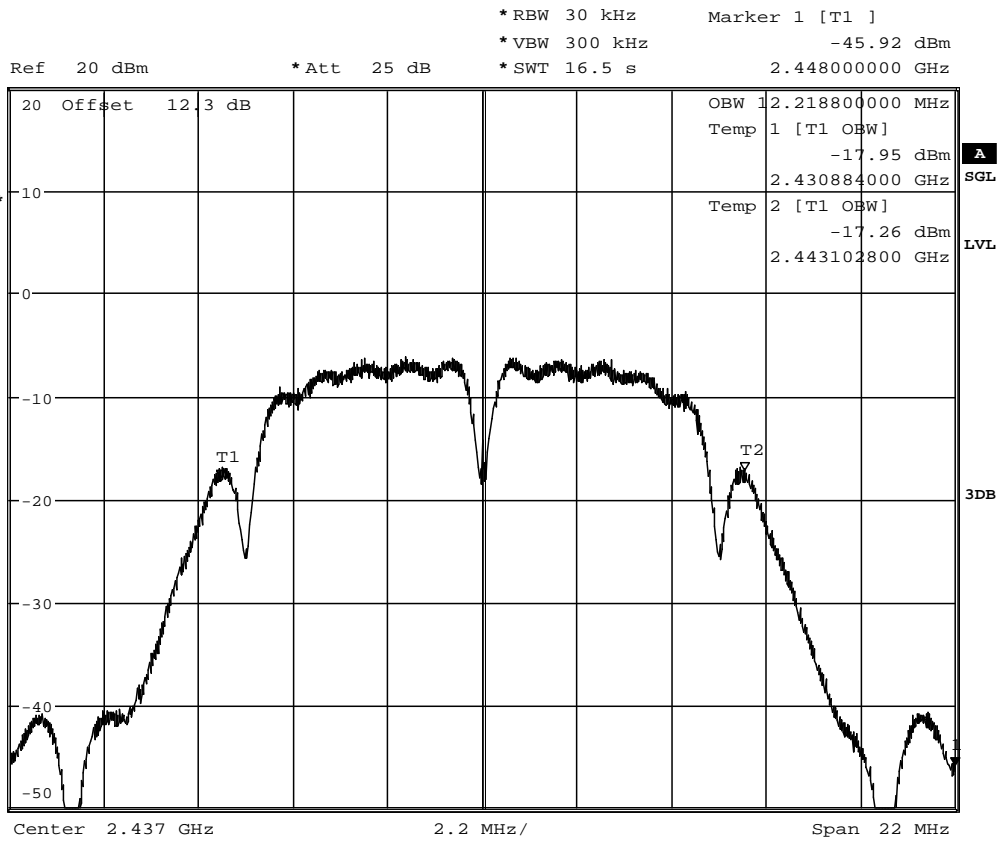
Ref 20 dBm *Att 25 dB



Date: 27.JAN.2015 14:36:26

2.3.2. Channel 6

1Mbit



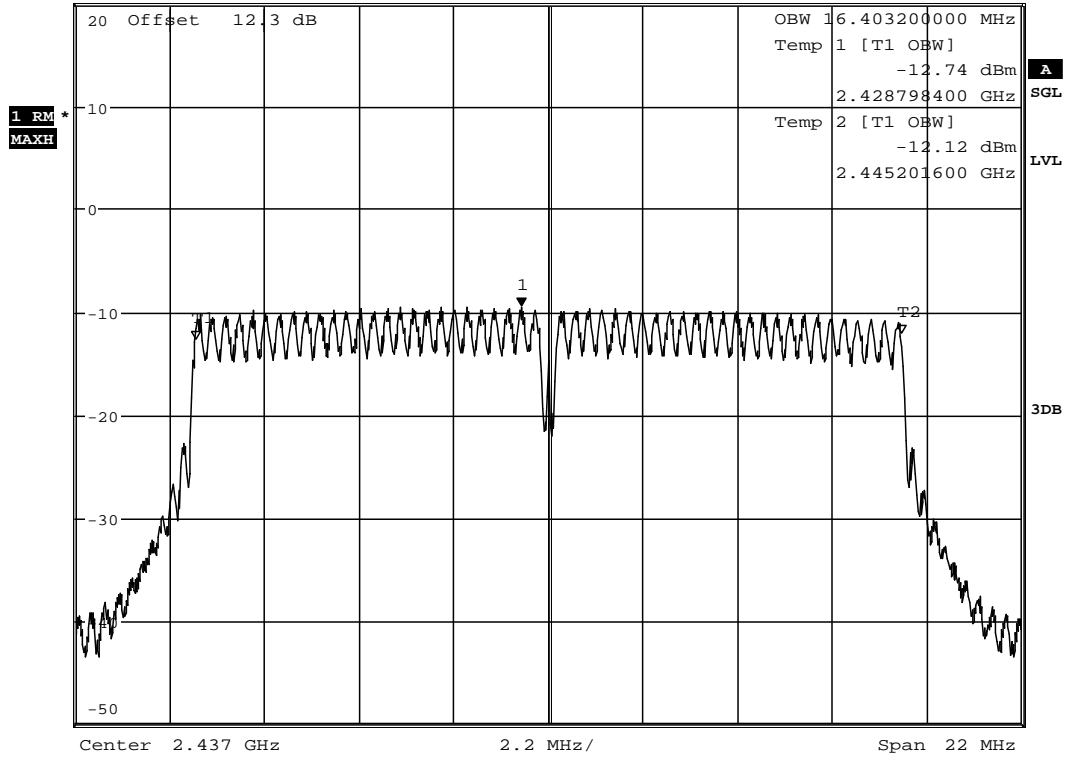
Date: 27.JAN.2015 14:11:05

6Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -9.42 dBm
 *SWT 16.5 s 2.436375200 GHz

Ref 20 dBm *Att 25 dB



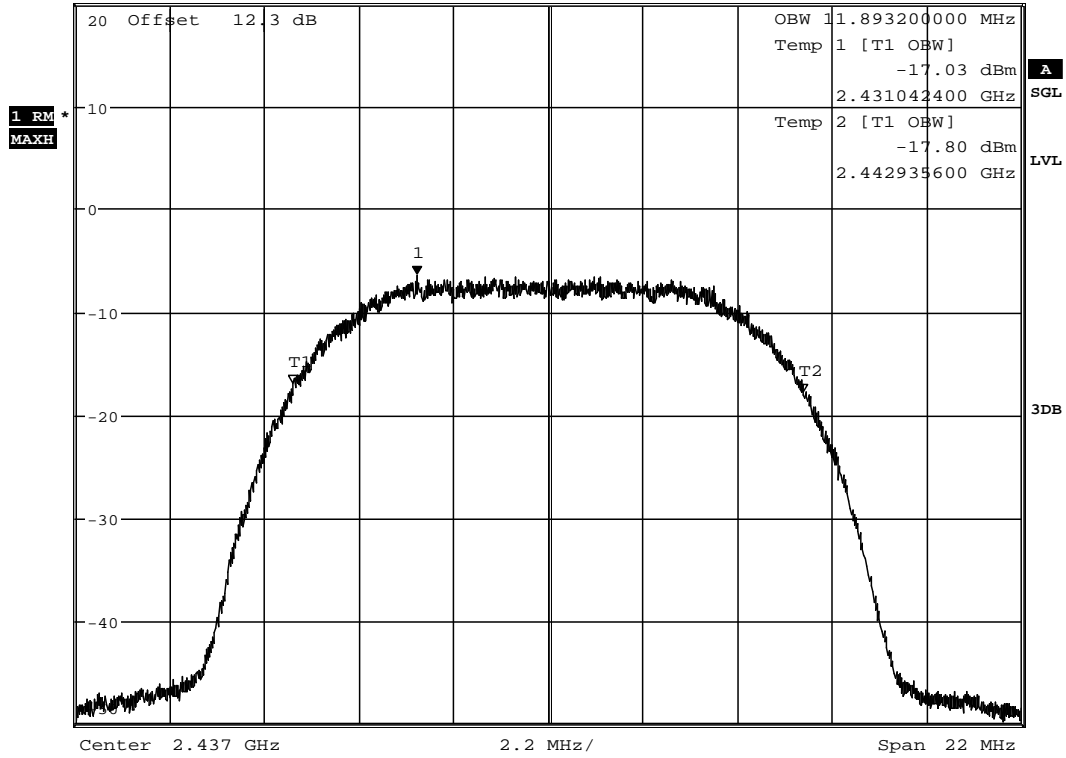
Date: 27.JAN.2015 14:16:18

11Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -6.38 dBm
 *SWT 16.5 s 2.433942000 GHz

Ref 20 dBm *Att 25 dB



Date: 27.JAN.2015 14:02:48

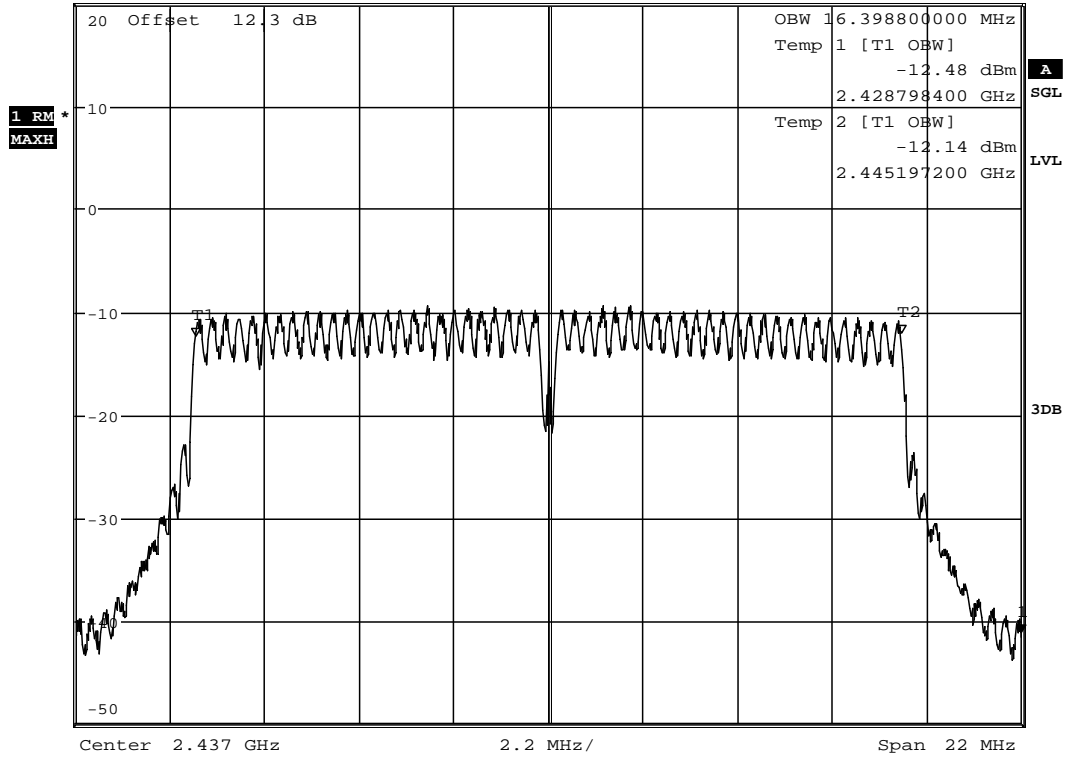
54Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -41.21 dBm
 *SWT 16.5 s 2.448000000 GHz

Ref 20 dBm

*Att 25 dB



Date: 27.JAN.2015 14:21:00

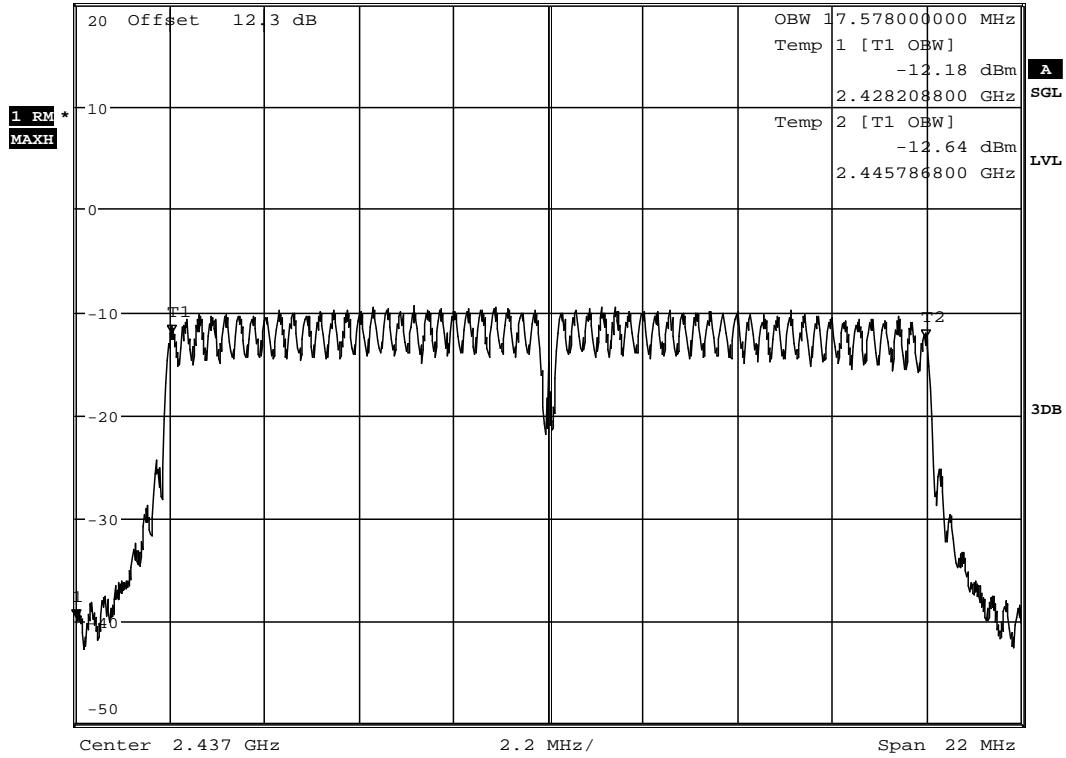
MCS0



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -39.80 dBm
 *SWT 16.5 s 2.426000000 GHz

Ref 20 dBm

*Att 25 dB



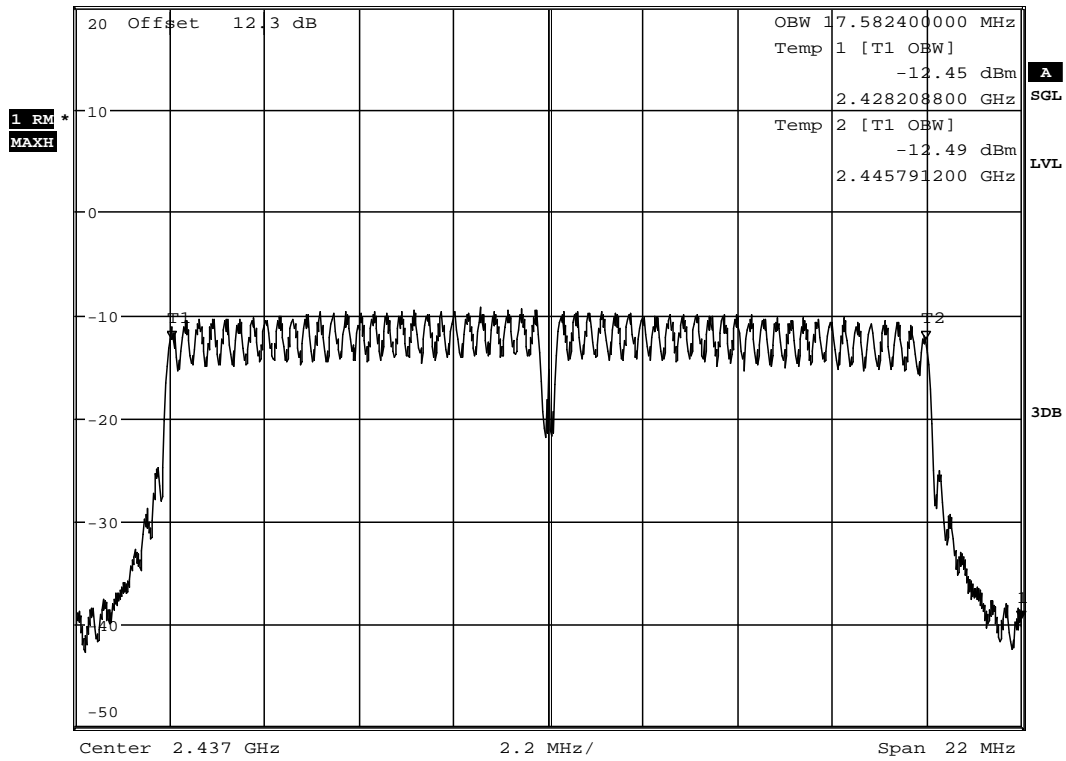
Date: 27.JAN.2015 14:26:39

MCS7



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -39.69 dBm
 *SWT 16.5 s 2.448000000 GHz

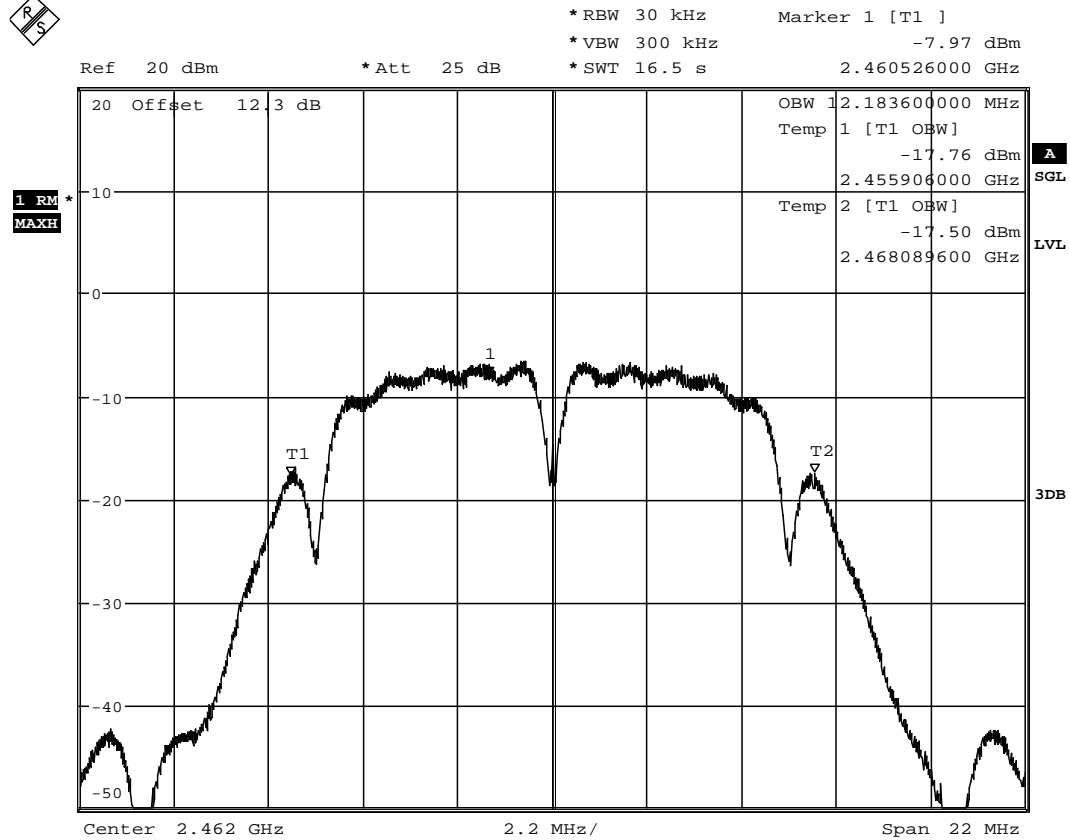
Ref 20 dBm *Att 25 dB



Date: 27.JAN.2015 14:34:08

2.3.3. Channel 11

1Mbit



Date: 27.JAN.2015 14:08:51

6Mbit

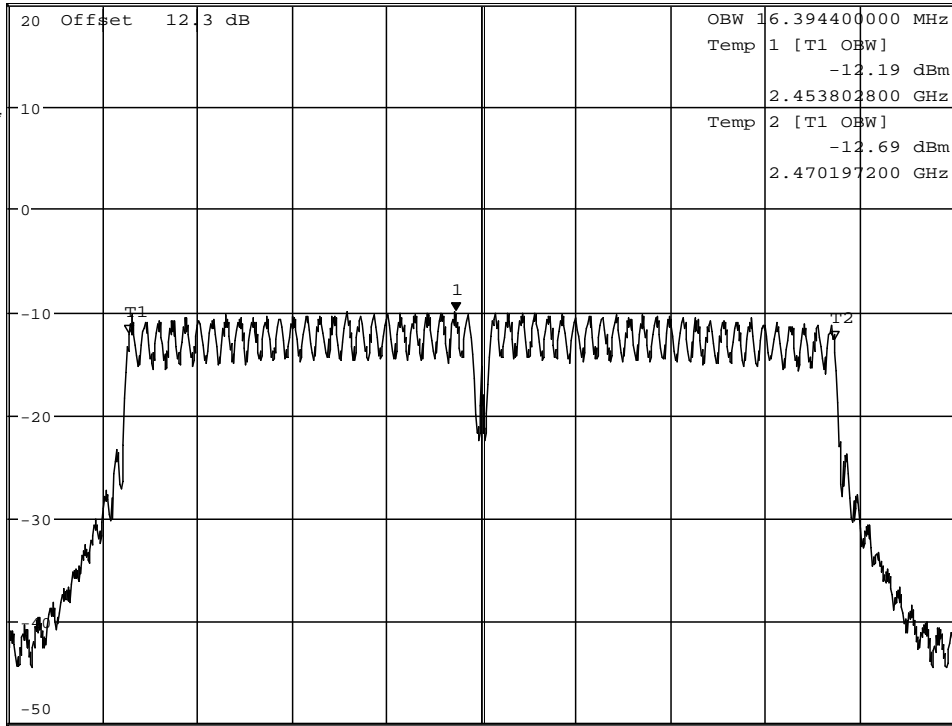


*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -9.89 dBm
 *SWT 16.5 s 2.461384000 GHz

Ref 20 dBm

*Att 25 dB

1 RM *
 MAXH



Date: 27.JAN.2015 14:17:44

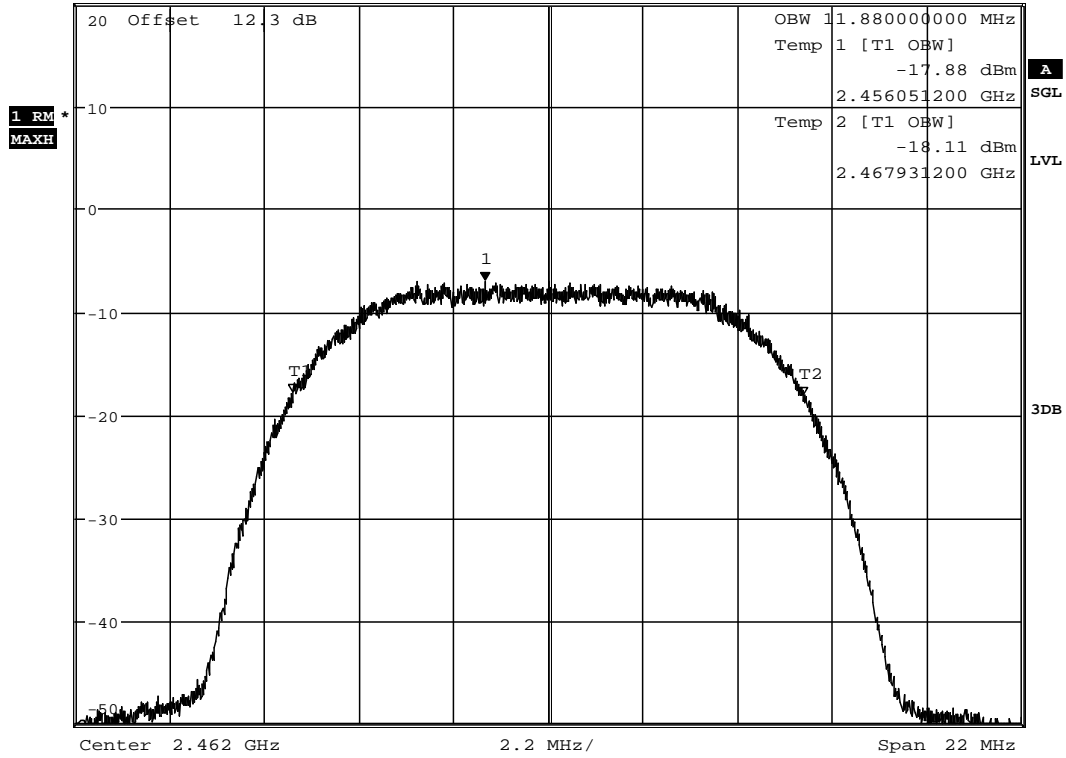
11Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -6.94 dBm
 *SWT 16.5 s 2.460526000 GHz

Ref 20 dBm

*Att 25 dB



Date: 27.JAN.2015 14:04:55

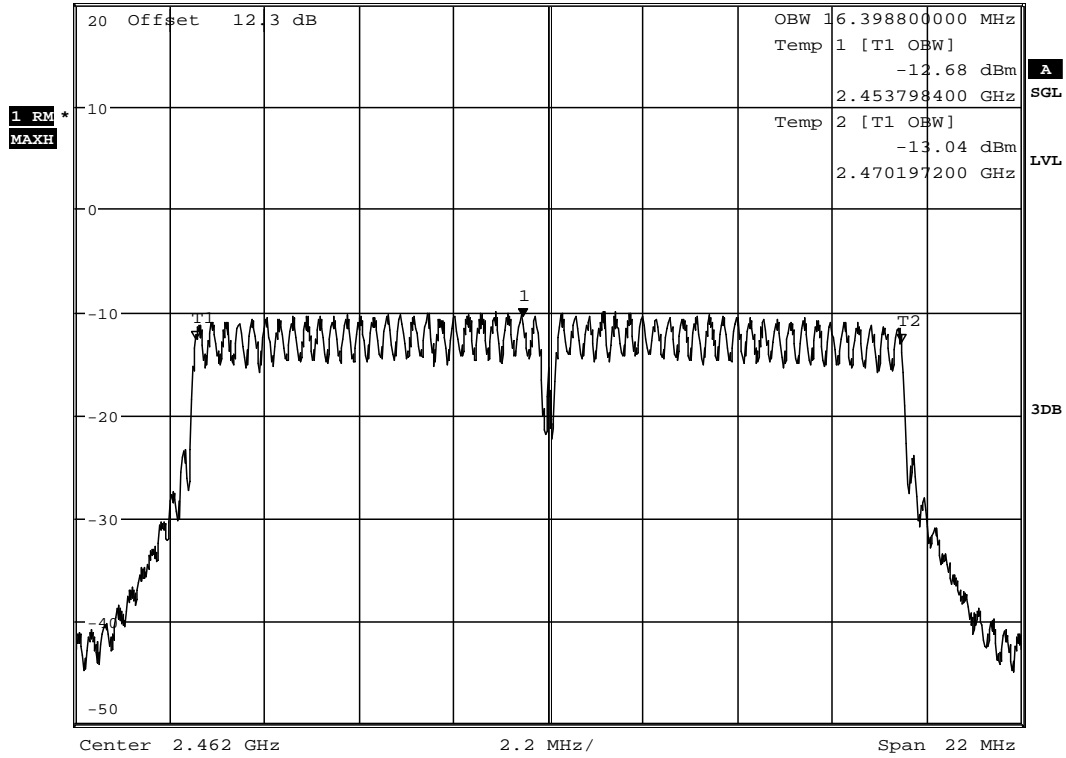
54Mbit



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -10.50 dBm
 *SWT 16.5 s 2.461384000 GHz

Ref 20 dBm

*Att 25 dB



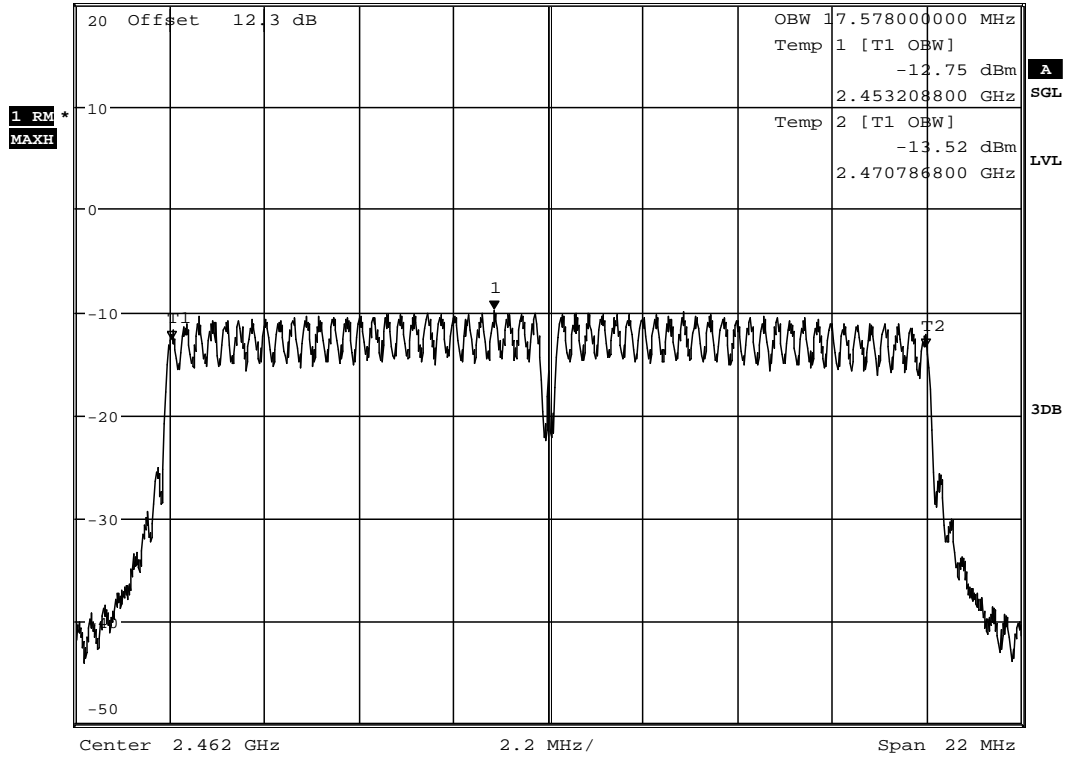
Date: 27.JAN.2015 14:19:39

MCS0



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -9.83 dBm
 *SWT 16.5 s 2.460746000 GHz

Ref 20 dBm *Att 25 dB



Date: 27.JAN.2015 14:28:20

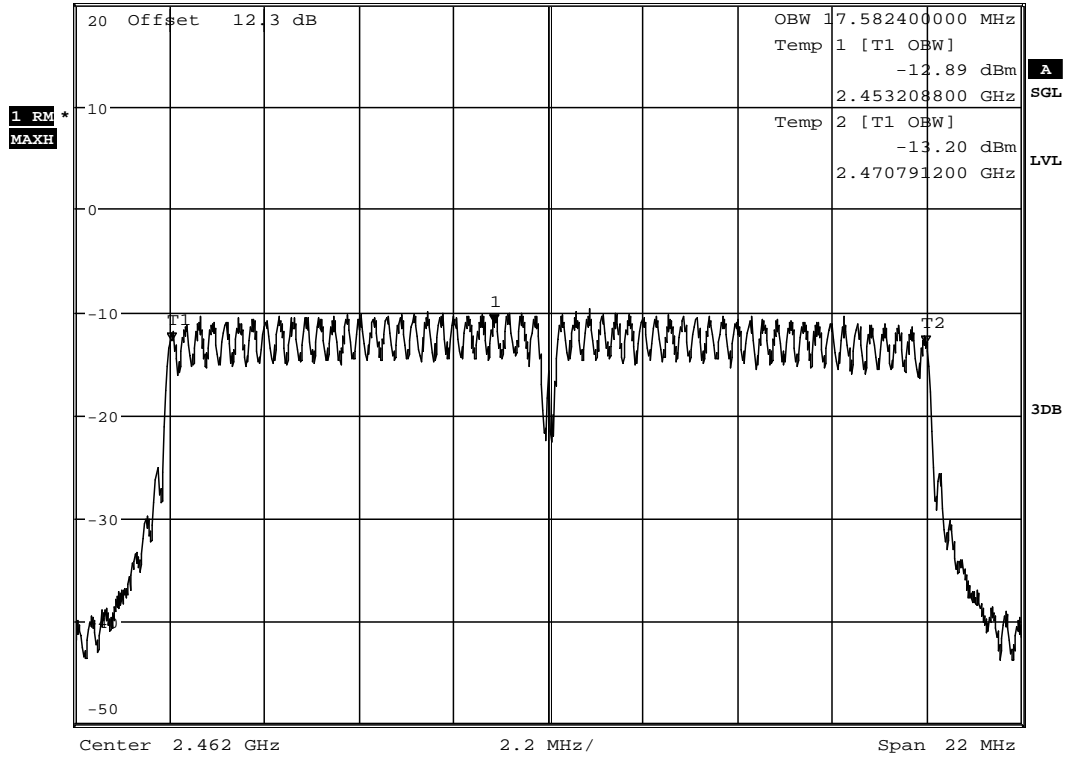
MCS7



*RBW 30 kHz Marker 1 [T1]
 *VBW 300 kHz -11.05 dBm
 *SWT 16.5 s 2.460746000 GHz

Ref 20 dBm

*Att 25 dB



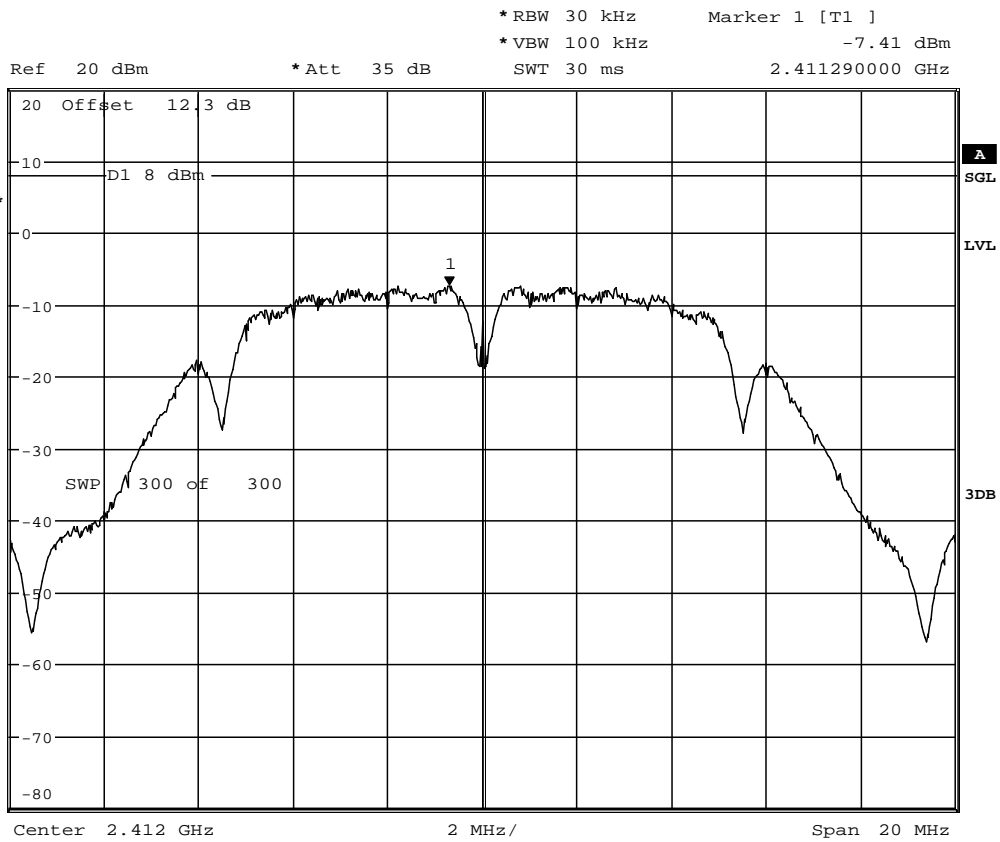
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2.4. Power Spectral Density

Method §10.2

2.4.1. Channel 1

1Mbit

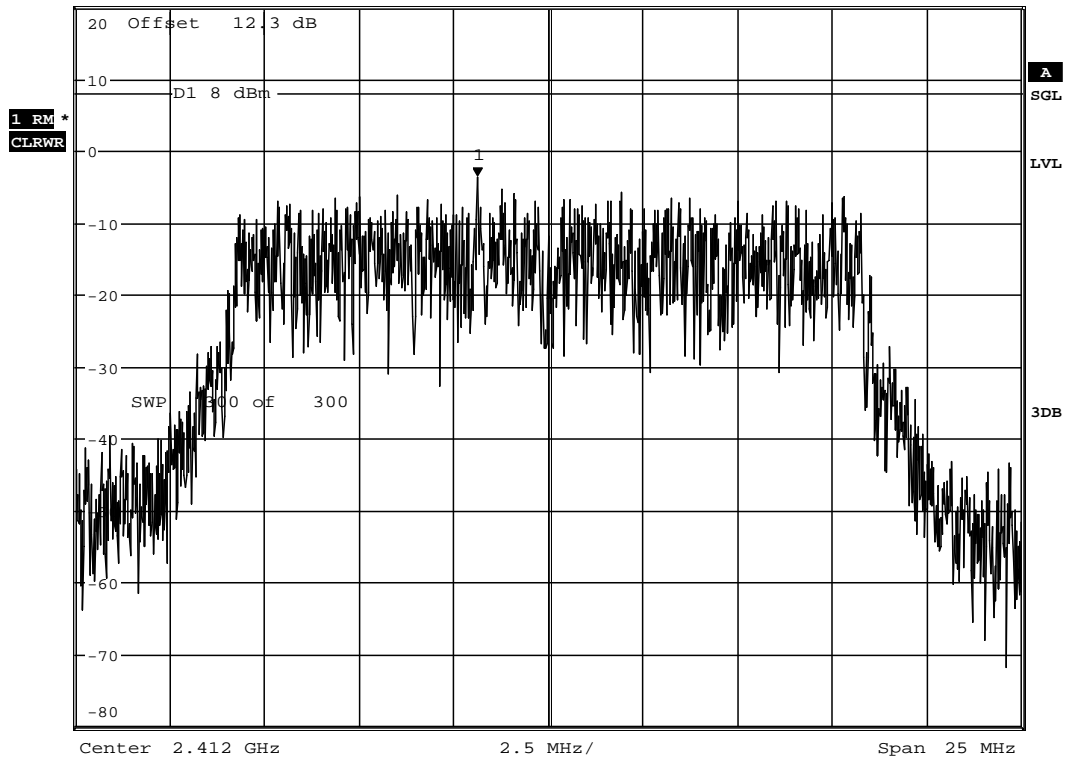


Date: 28.JAN.2015 09:33:26

6Mbit



Ref 20 dBm *Att 35 dB *RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -3.66 dBm
SWT 30 ms 2.410125000 GHz



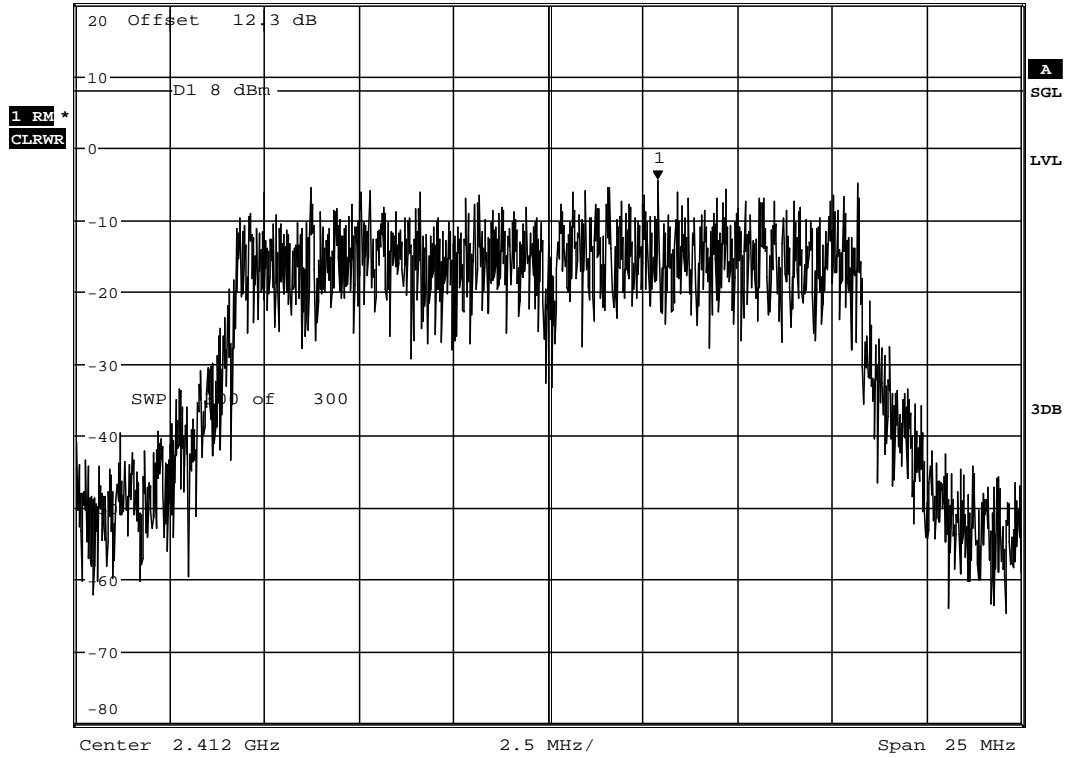
Date: 13.MAR.2015 15:25:18

12Mbit



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -4.45 dBm
SWT 30 ms 2.414875000 GHz

Ref 20 dBm *Att 35 dB



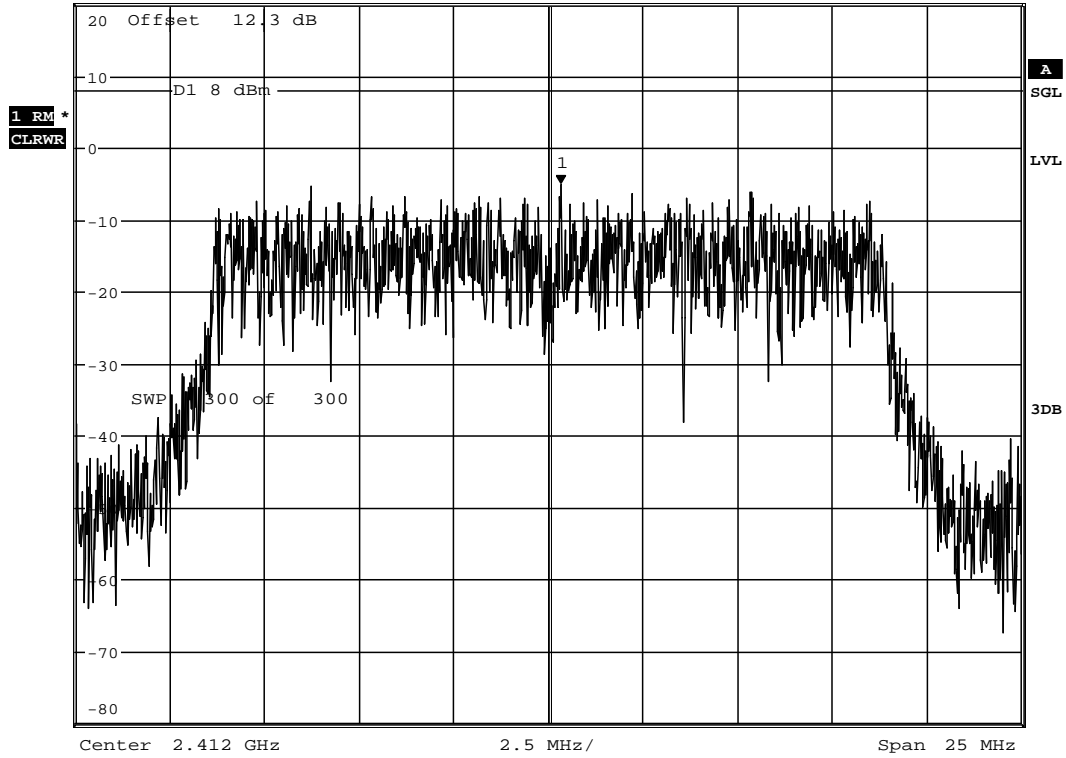
Date: 13.MAR.2015 15:27:34

MCS0



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -5.04 dBm
SWT 30 ms 2.412325000 GHz

Ref 20 dBm *Att 35 dB



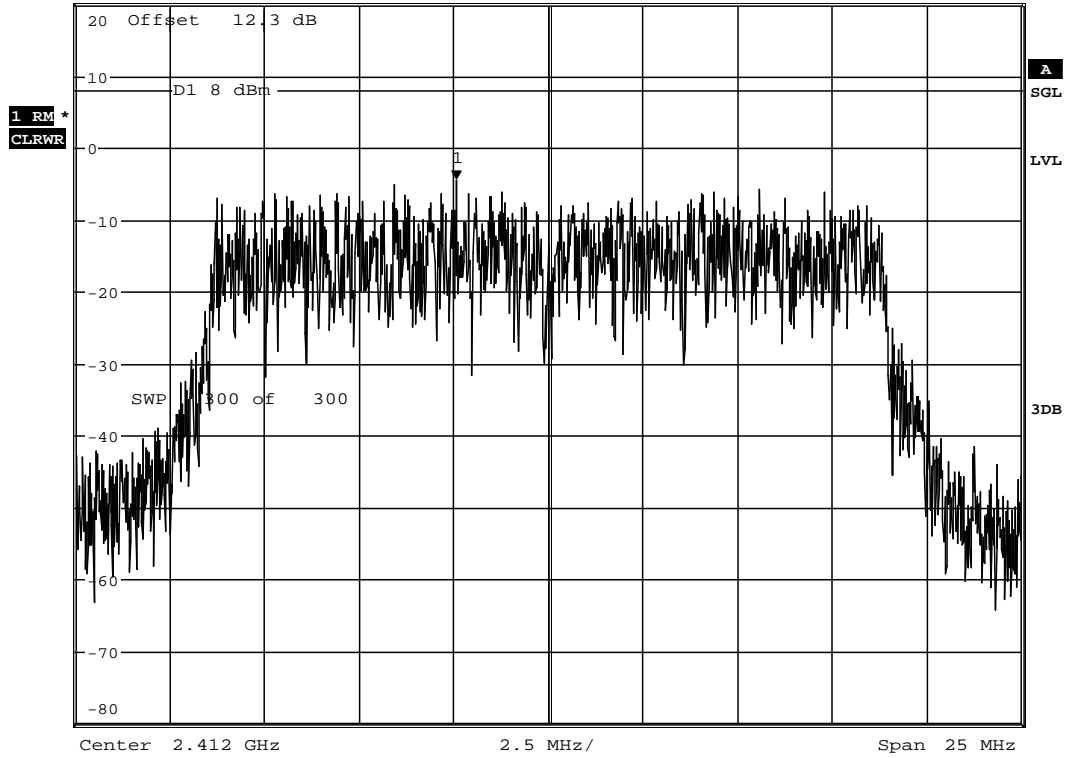
Date: 13.MAR.2015 15:29:21

MCS7



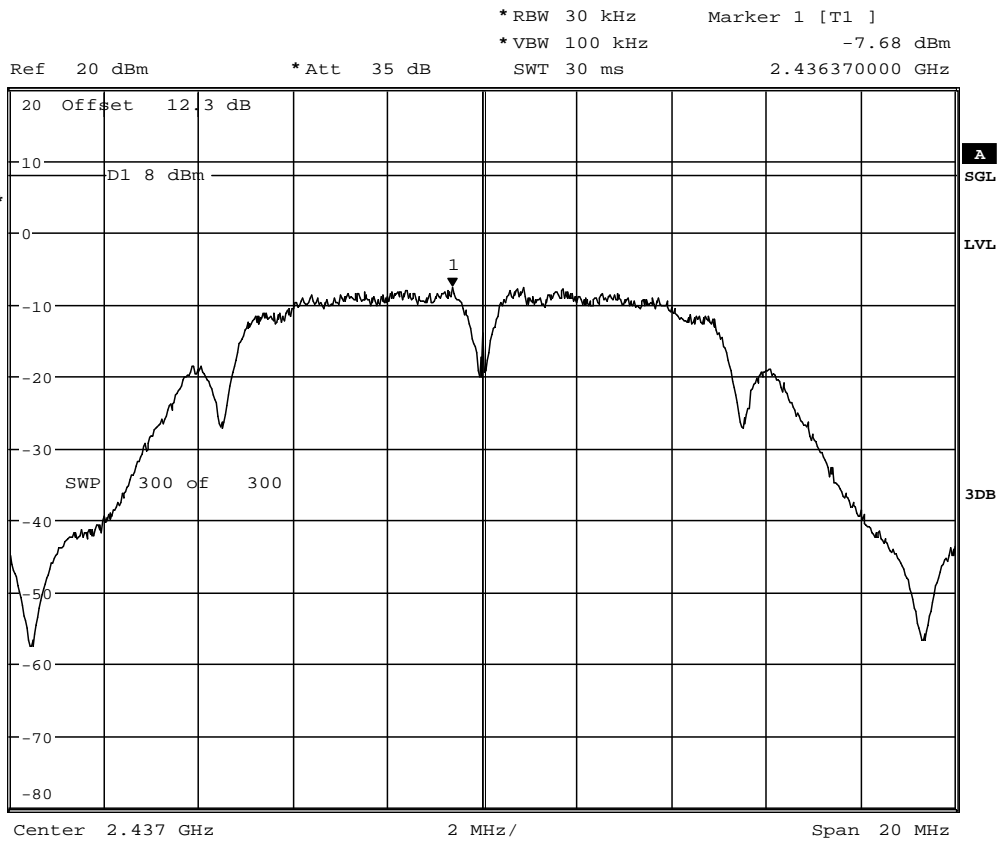
*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -4.54 dBm
SWT 30 ms 2.409550000 GHz

Ref 20 dBm *Att 35 dB



Date: 13.MAR.2015 15:30:35

2.4.2. Channel 6 2Mbit



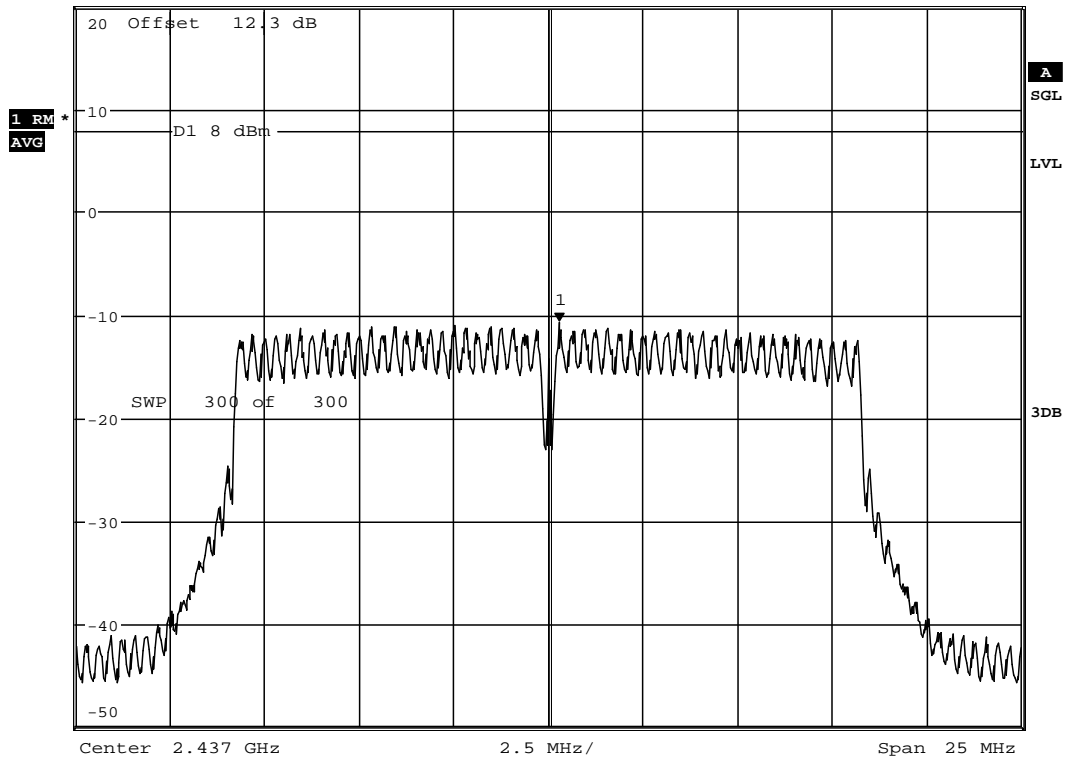
Date: 28.JAN.2015 09:39:38

6Mbit



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -10.70 dBm
SWT 30 ms 2.437300000 GHz

Ref 20 dBm *Att 35 dB

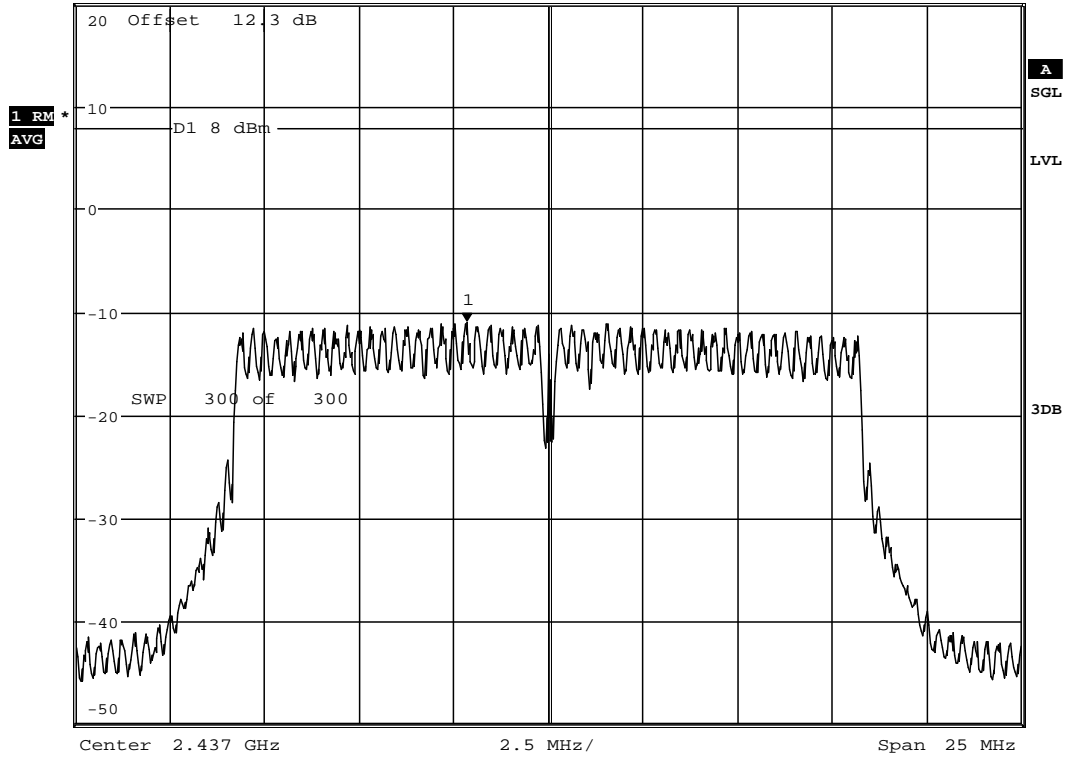


Date: 28.JAN.2015 10:20:46

9Mbit



Ref 20 dBm *Att 35 dB *RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -10.97 dBm
SWT 30 ms 2.434825000 GHz



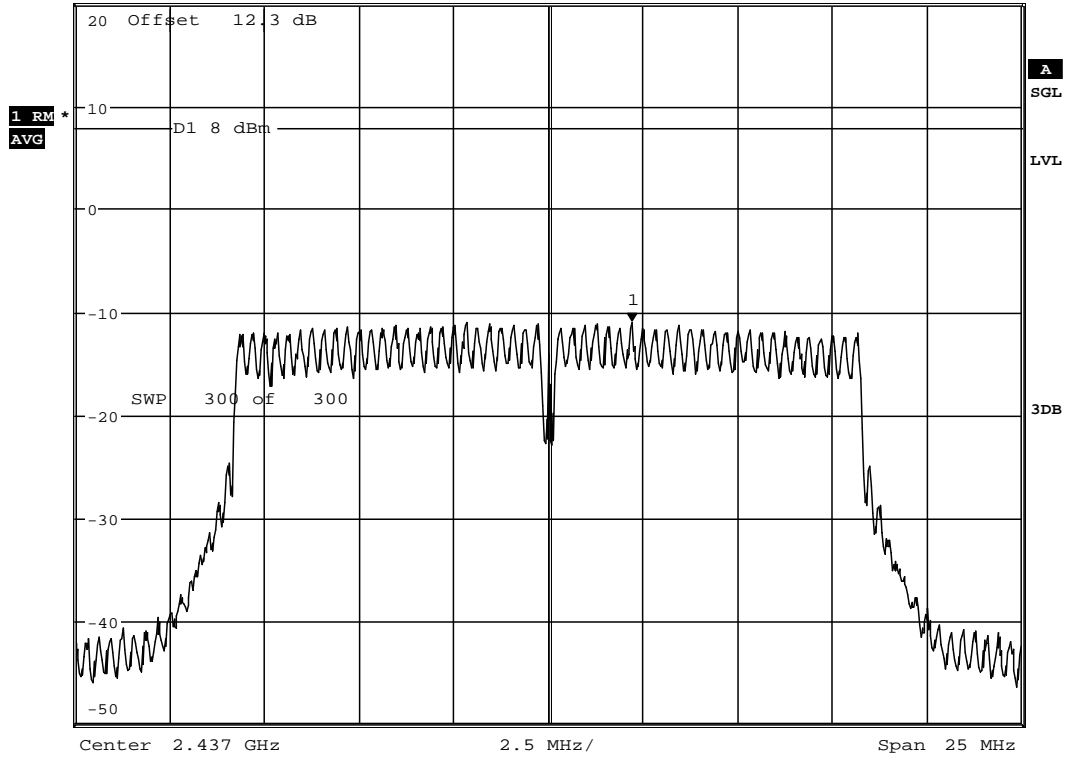
Date: 28.JAN.2015 10:18:10

18Mbit



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -10.91 dBm
SWT 30 ms 2.439200000 GHz

Ref 20 dBm *Att 35 dB



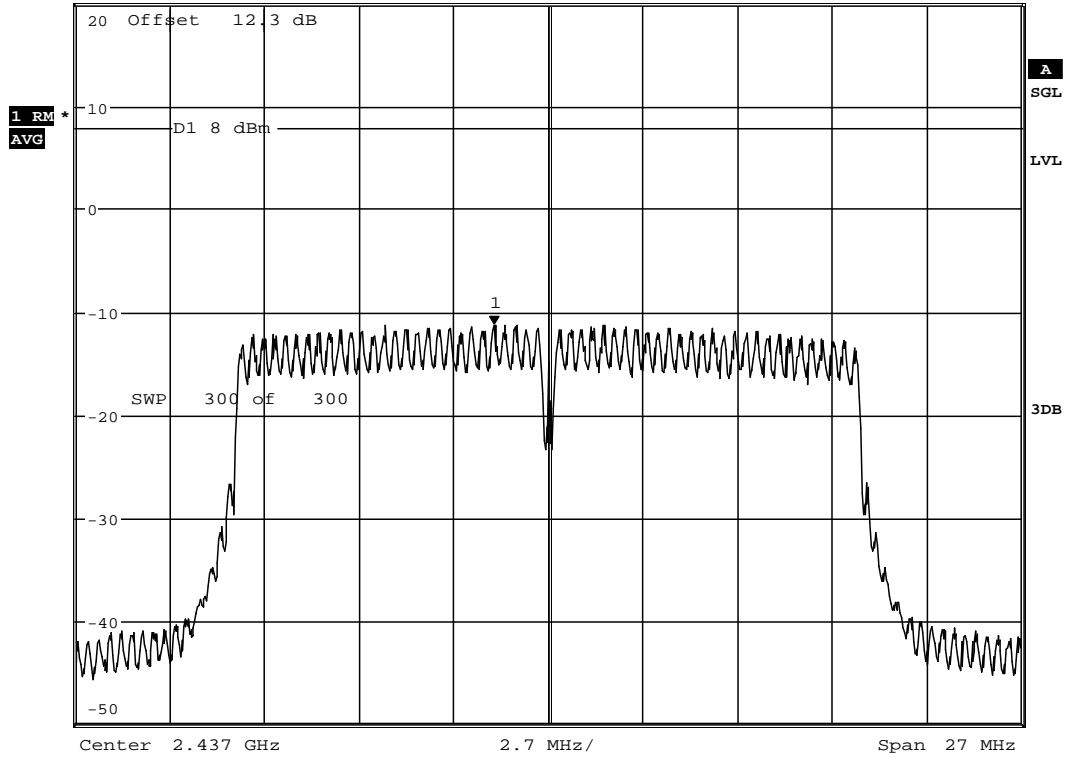
Date: 28.JAN.2015 10:13:58

MCS0



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -11.19 dBm
SWT 30 ms 2.435461000 GHz

Ref 20 dBm *Att 35 dB



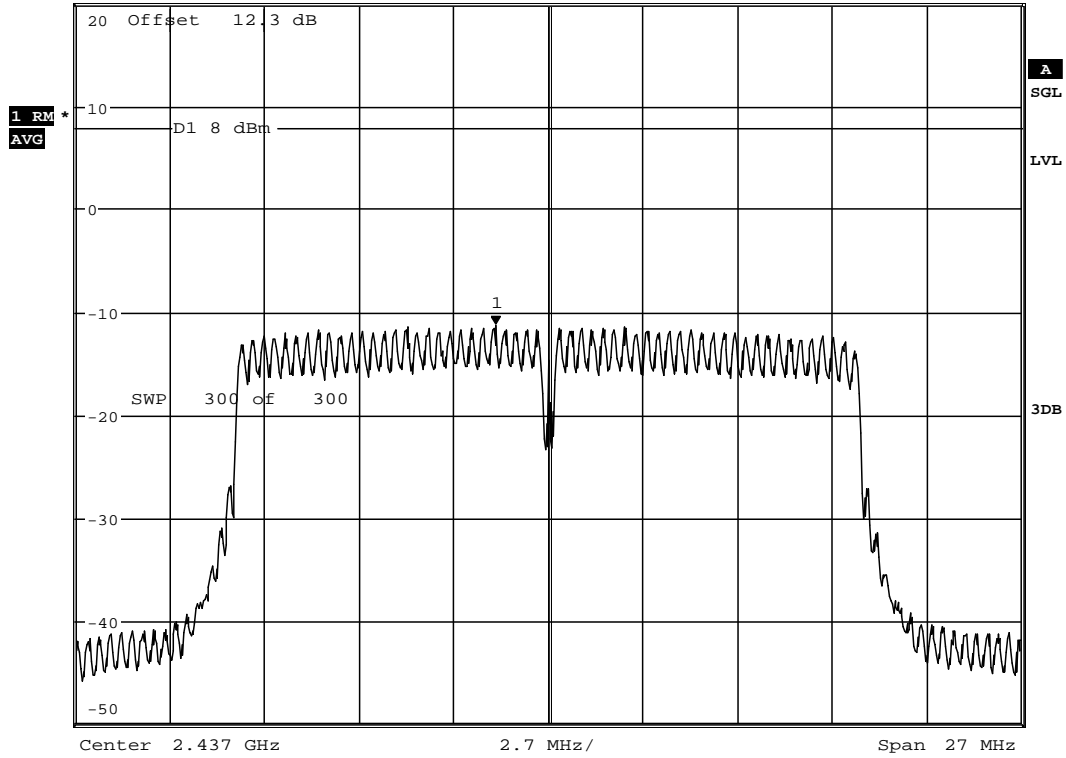
Date: 28.JAN.2015 10:50:14

MCS7



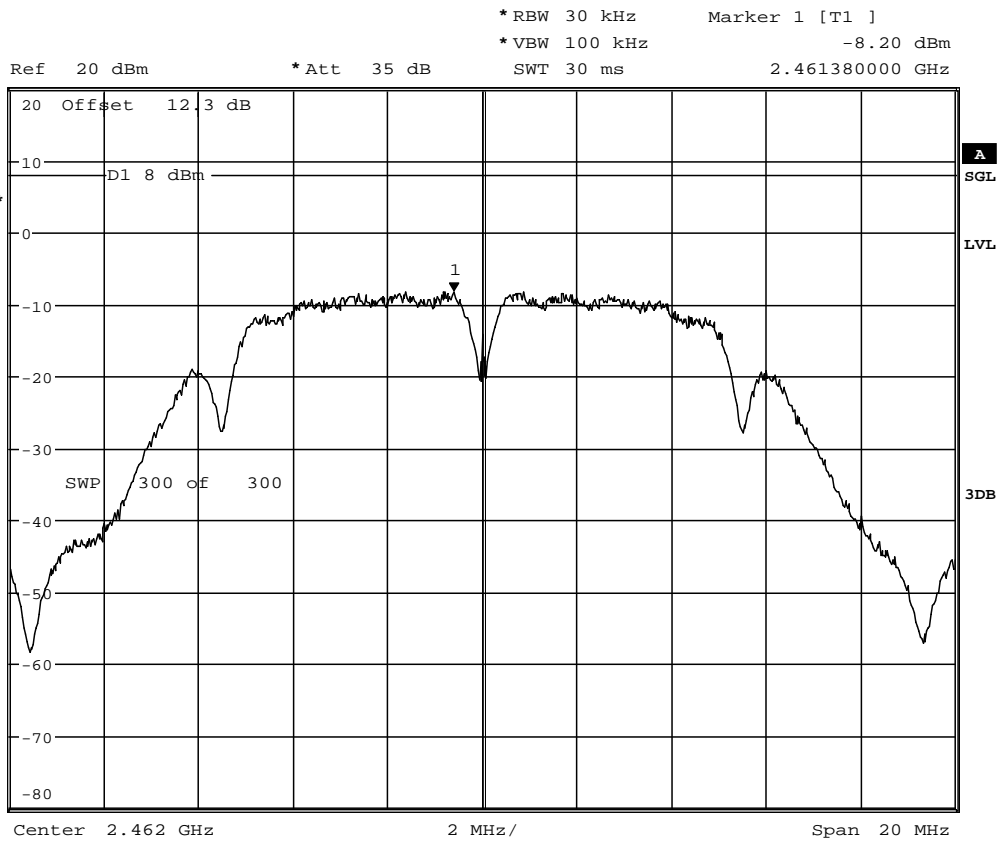
*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -11.21 dBm
SWT 30 ms 2.435474500 GHz

Ref 20 dBm *Att 35 dB



Date: 28.JAN.2015 10:45:50

2.4.3. Channel 11 2Mbit



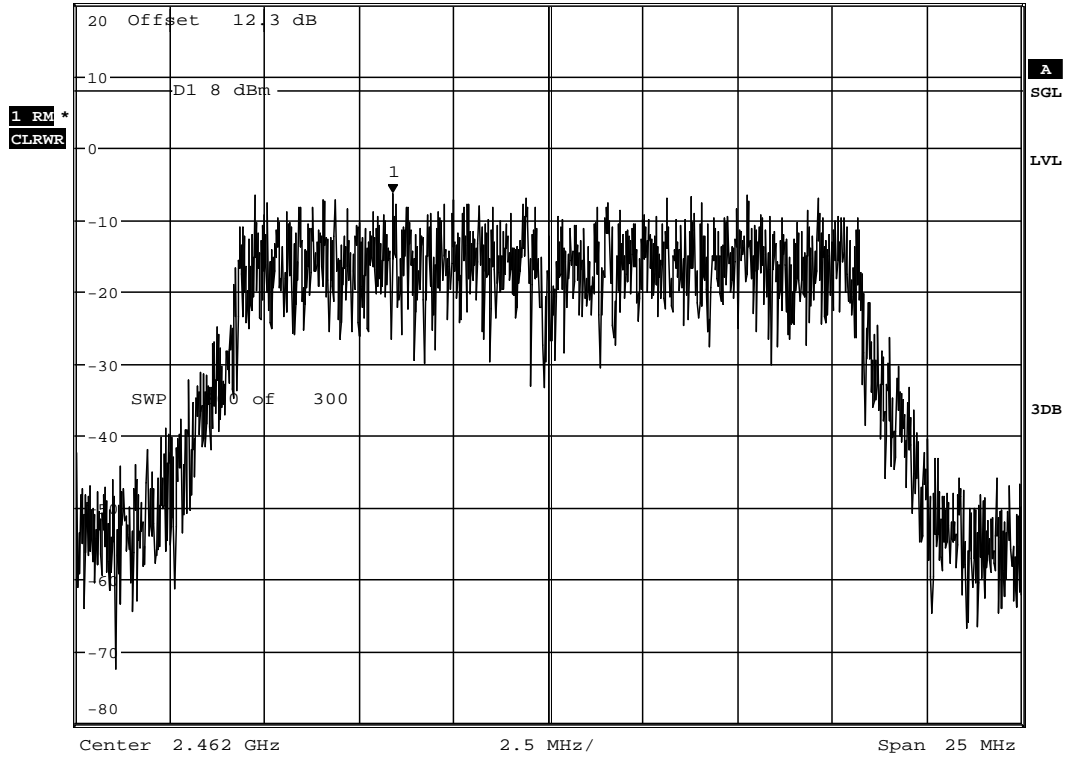
Date: 28.JAN.2015 09:41:47

6Mbit



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -6.27 dBm
SWT 30 ms 2.457875000 GHz

Ref 20 dBm *Att 35 dB

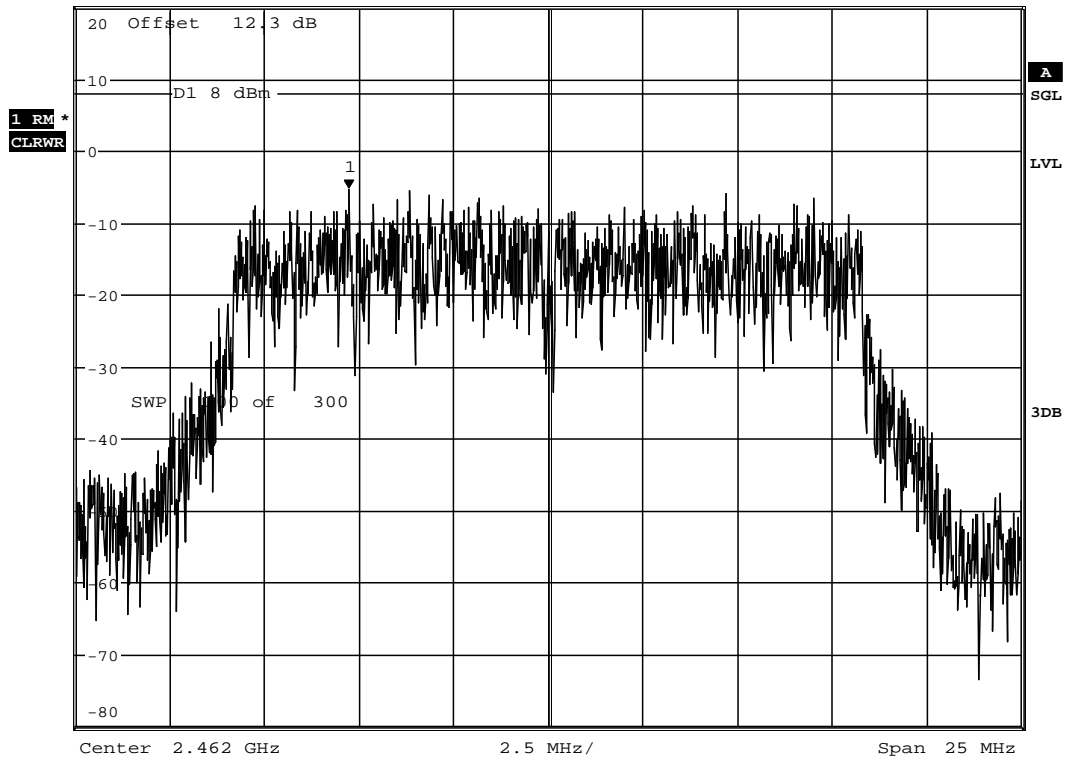


Date: 13.MAR.2015 15:37:17

54Mbit



Ref 20 dBm *Att 35 dB *RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -5.29 dBm
SWT 30 ms 2.456725000 GHz



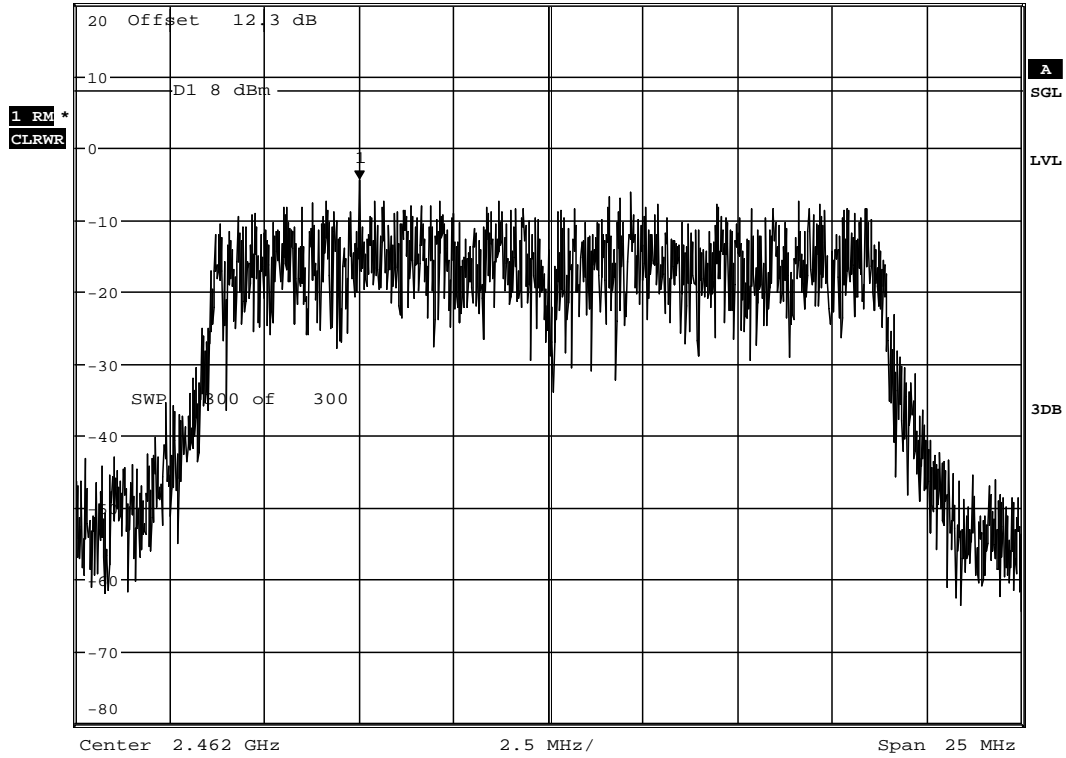
Date: 13.MAR.2015 15:35:51

MCS0



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -4.39 dBm
SWT 30 ms 2.457000000 GHz

Ref 20 dBm *Att 35 dB



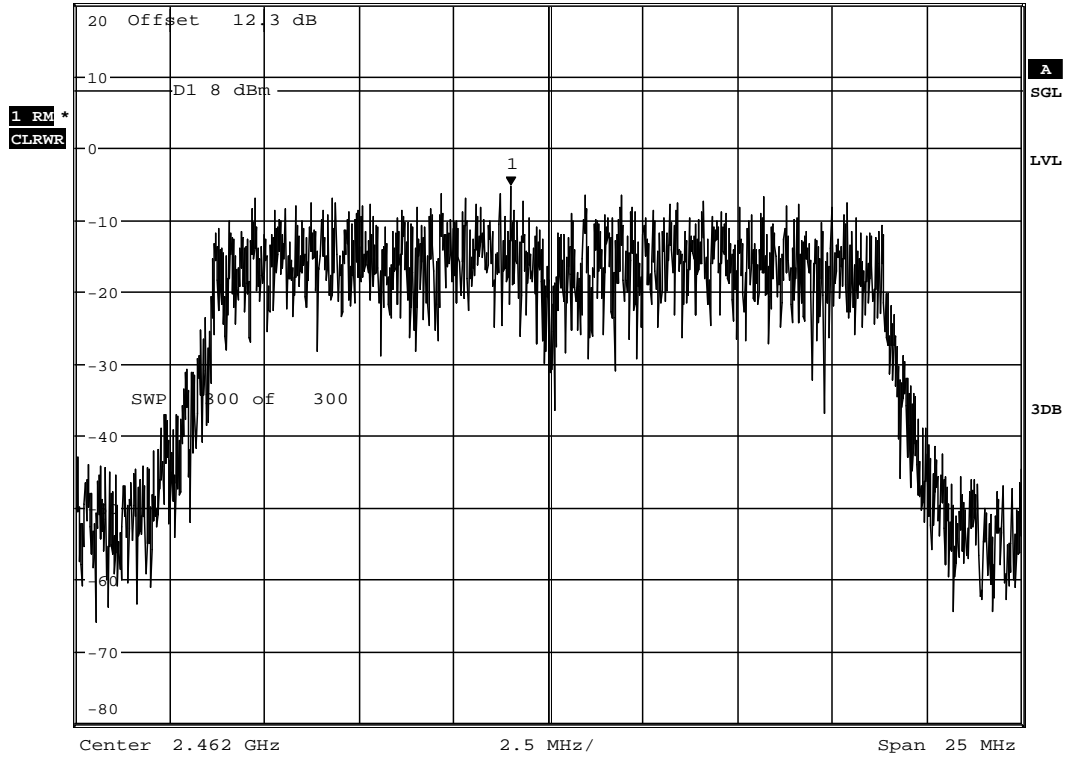
Date: 13.MAR.2015 15:33:54

MCS6



*RBW 30 kHz Marker 1 [T1]
*VBW 100 kHz -5.30 dBm
SWT 30 ms 2.461000000 GHz

Ref 20 dBm *Att 35 dB

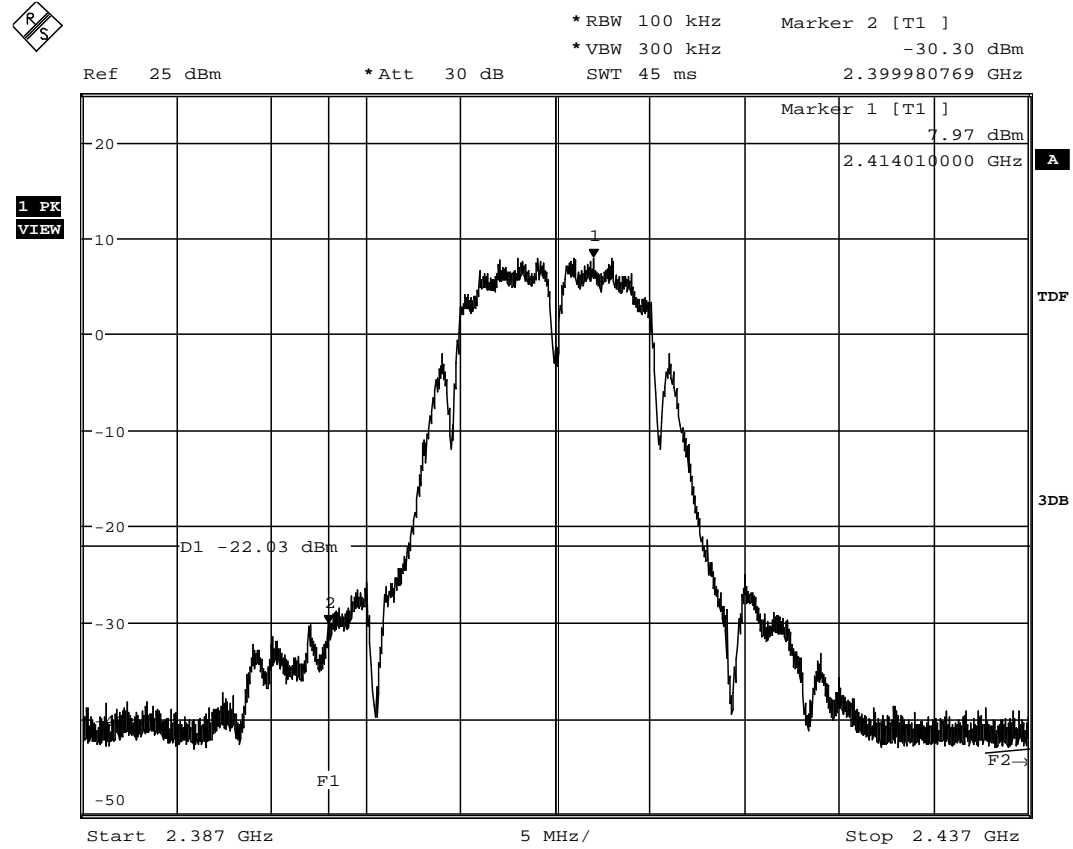


Date: 13.MAR.2015 15:32:41

2.5. 20dBc Emissions

2.5.1. Channel 1, b-mode, 5.5Mbit

2.5.1.1. Channel 1 Reference

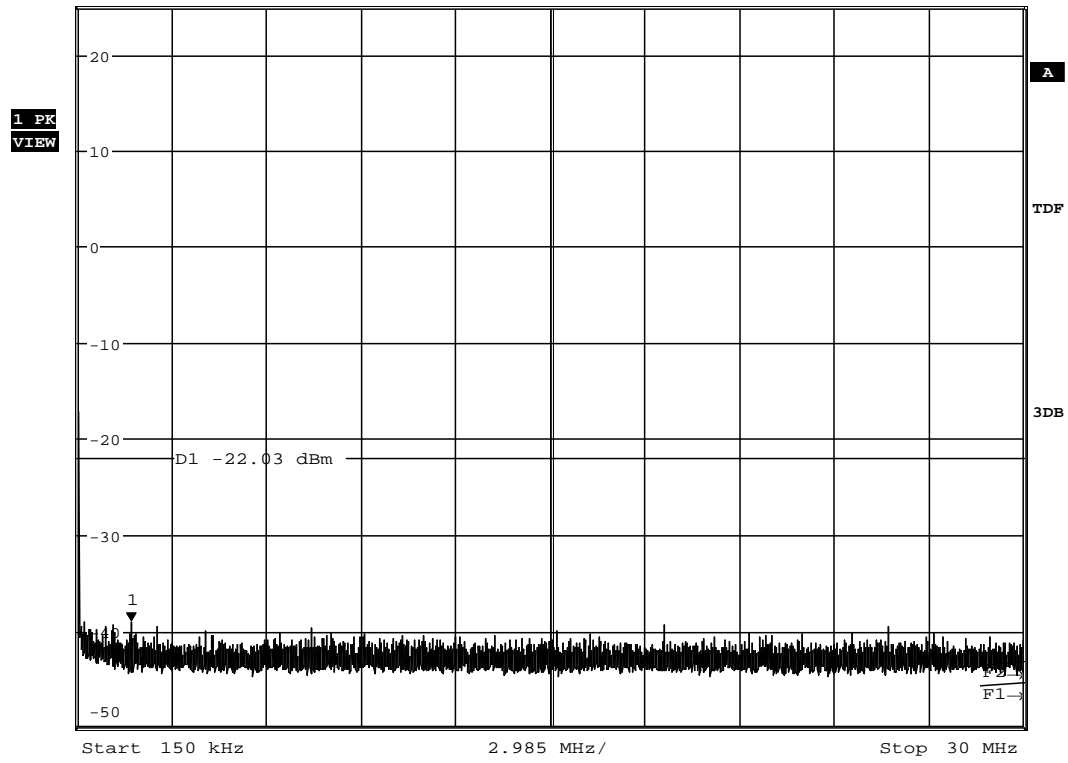


Date: 28.JAN.2015 13:33:21

2.5.1.2. Sweep 1: 150kHz to 30MHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -39.07 dBm
SWT 45 ms 1.824585000 MHz

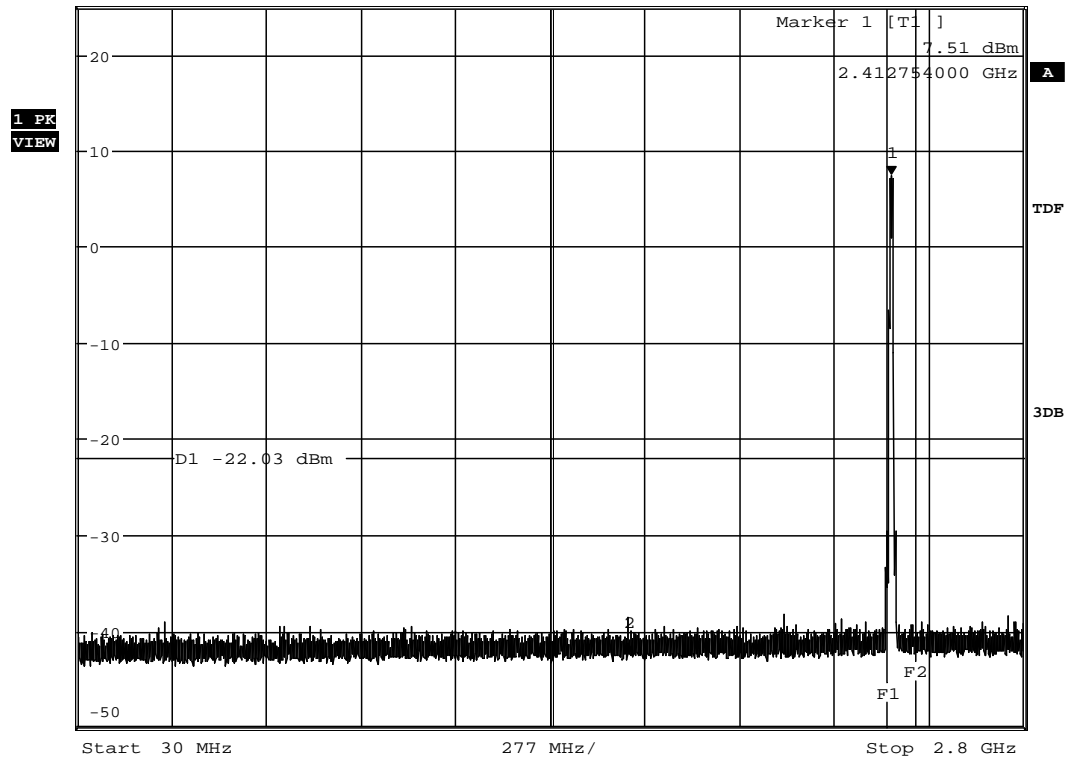


Date: 28.JAN.2015 13:36:36

2.5.1.3. Sweep 2: 30MHz to 2.8GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Delta 2 [T1]
*VBW 300 kHz -48.98 dB
SWT 280 ms -770.457743590 MHz

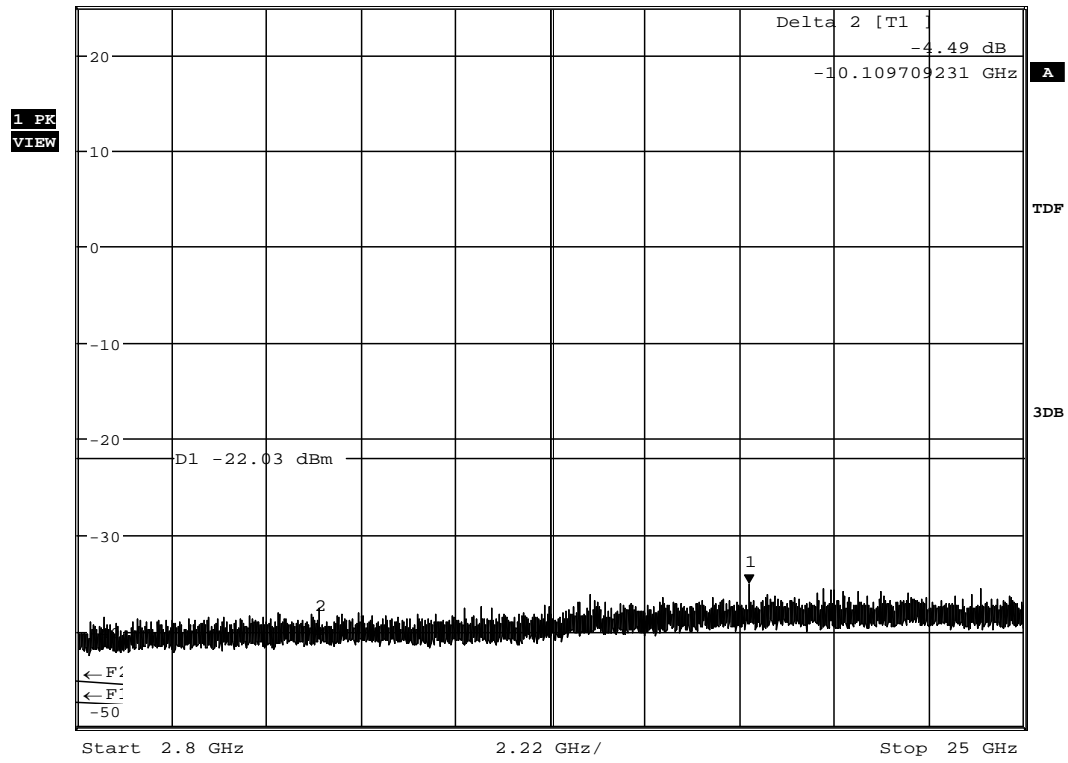


Date: 28.JAN.2015 13:40:46

2.5.1.4. Sweep 2: 2.8GHz to 25GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -35.16 dBm
SWT 2.25 s 18.566440000 GHz

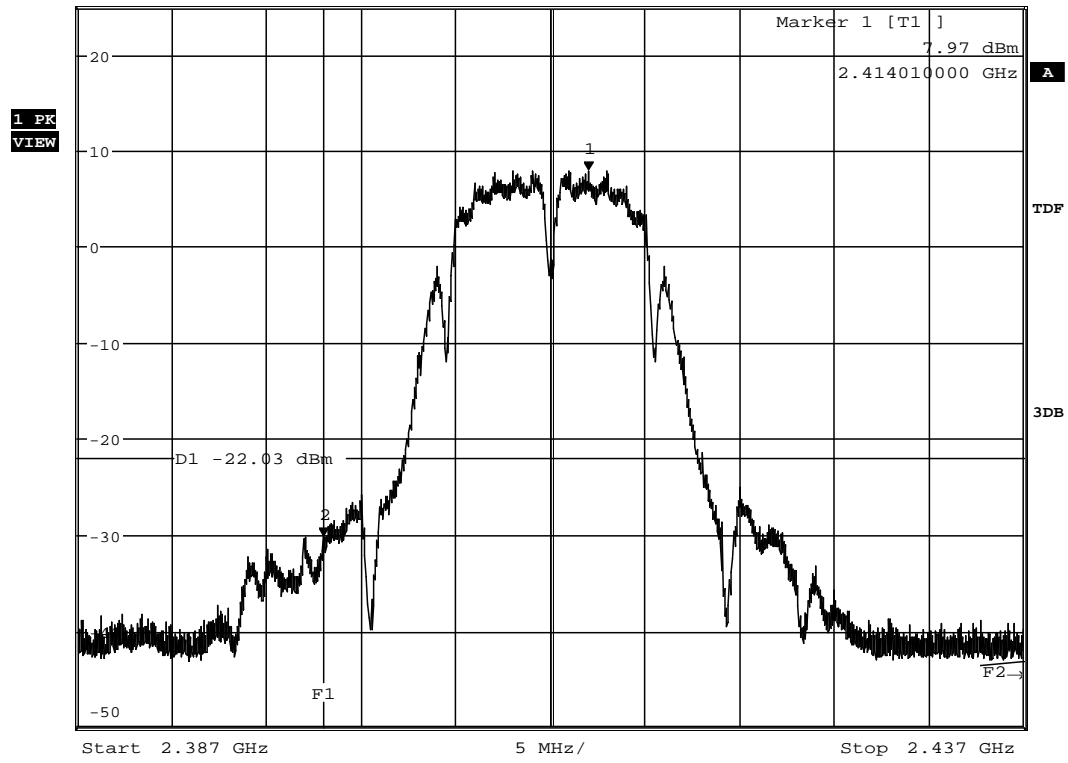


Date: 28.JAN.2015 13:44:29

2.5.1.5. Sweep Band-Edge left at 2.4GHz



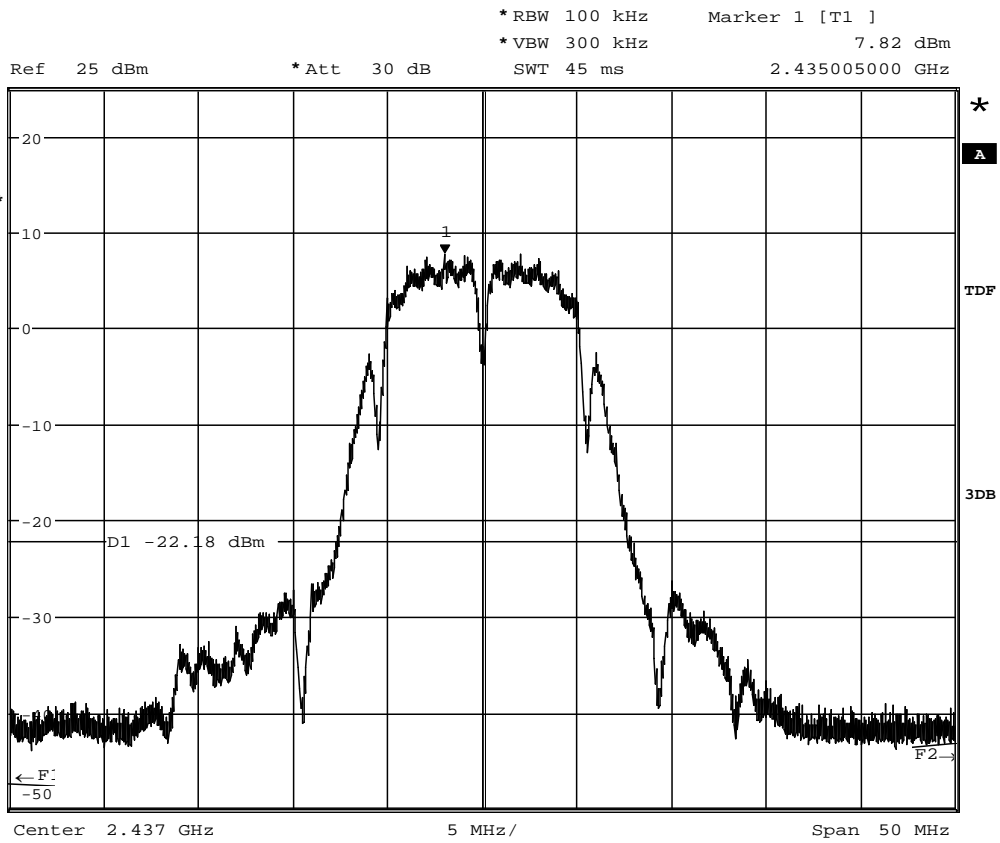
Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -30.30 dBm
SWT 45 ms 2.399980769 GHz



Date: 28.JAN.2015 13:33:21

2.5.2. Channel 6, b-mode, 2Mbit

2.5.2.1. Channel 6 Reference

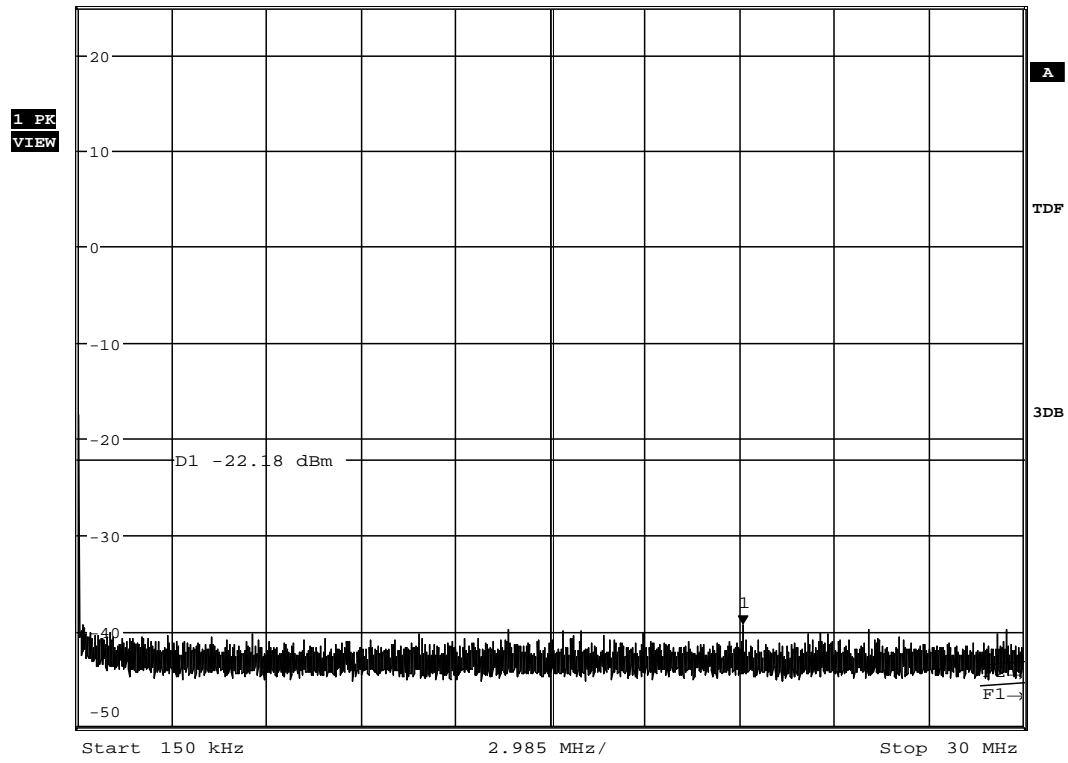


Date: 28.JAN.2015 13:16:40

2.5.2.2. Sweep 1: 150kHz to 30MHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -39.33 dBm
SWT 45 ms 21.161415000 MHz

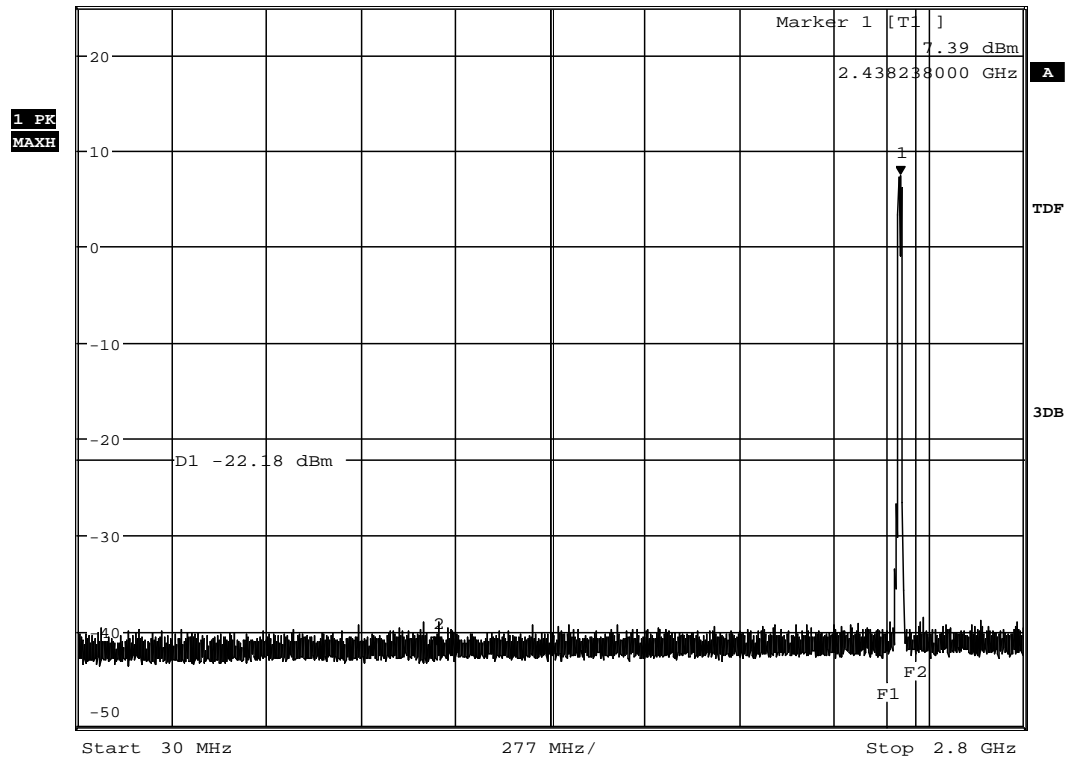


Date: 28.JAN.2015 13:18:39

2.5.2.3. Sweep 2: 30MHz to 2.8GHz

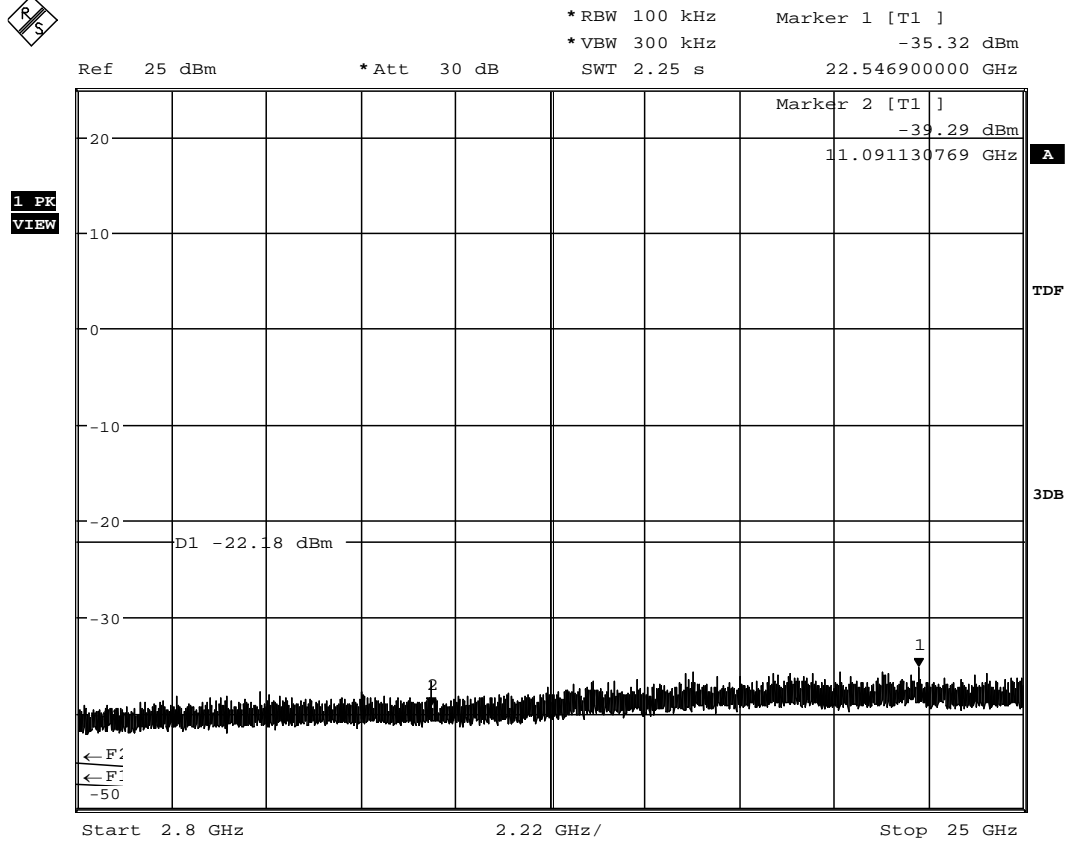


Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1] -41.57 dBm
 *VBW 300 kHz SWT 280 ms 1.081264718 GHz



Date: 28.JAN.2015 13:22:13

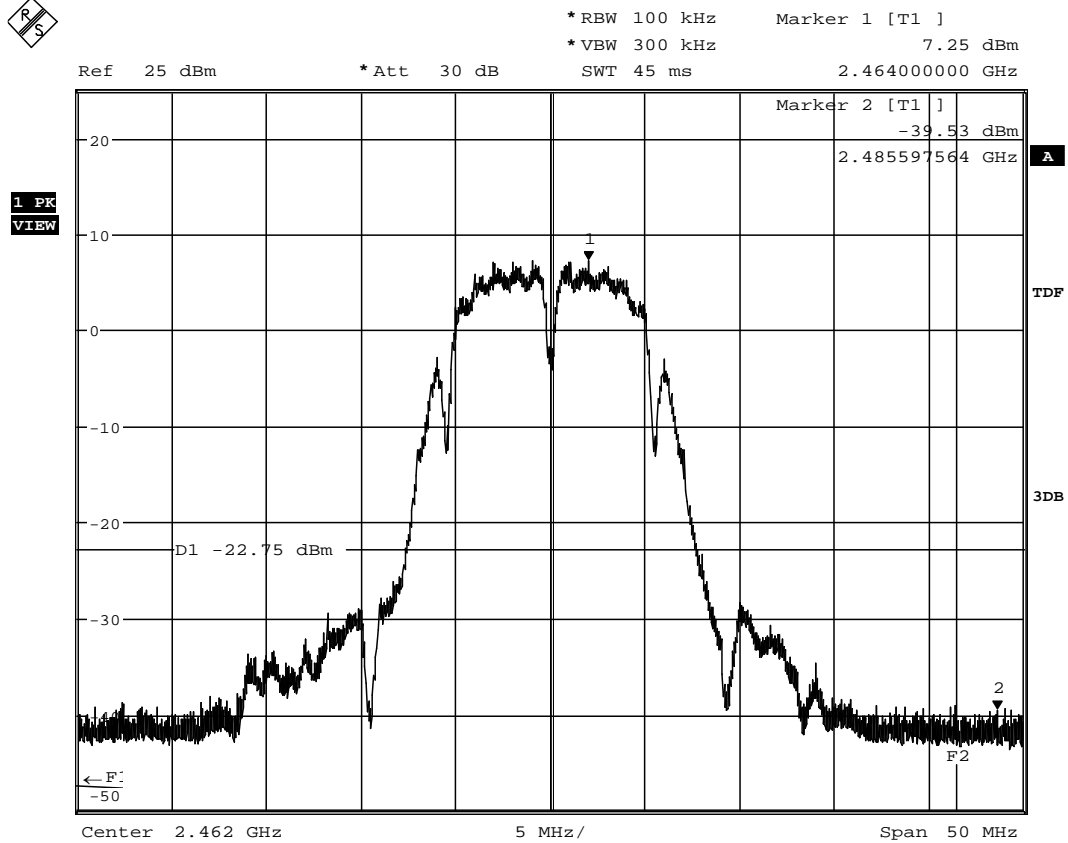
2.5.2.4. Sweep 3: 2.8GHz to 25GHz



Date: 28.JAN.2015 13:27:14

2.5.3. Channel 11, b-mode, 2Mbit

2.5.3.1. Channel 11 Reference



Date: 28.JAN.2015 12:19:08

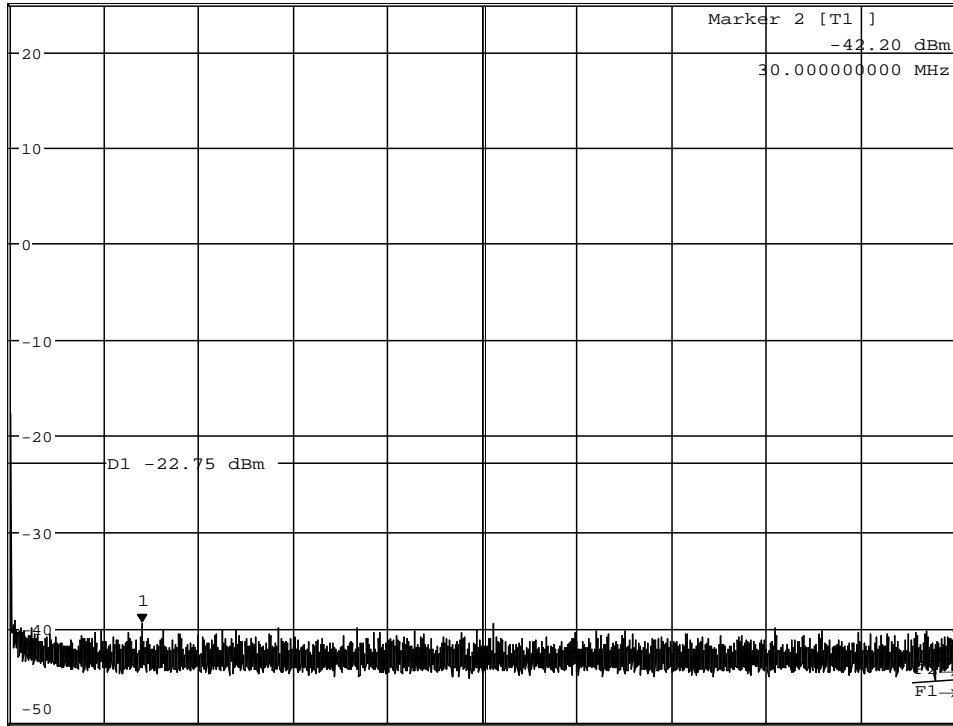
2.5.3.2. Sweep 1: 150kHz to 30MHz



*RBW 100 kHz Marker 1 [T1]
 *VBW 300 kHz -39.47 dBm
 SWT 45 ms 4.326015000 MHz

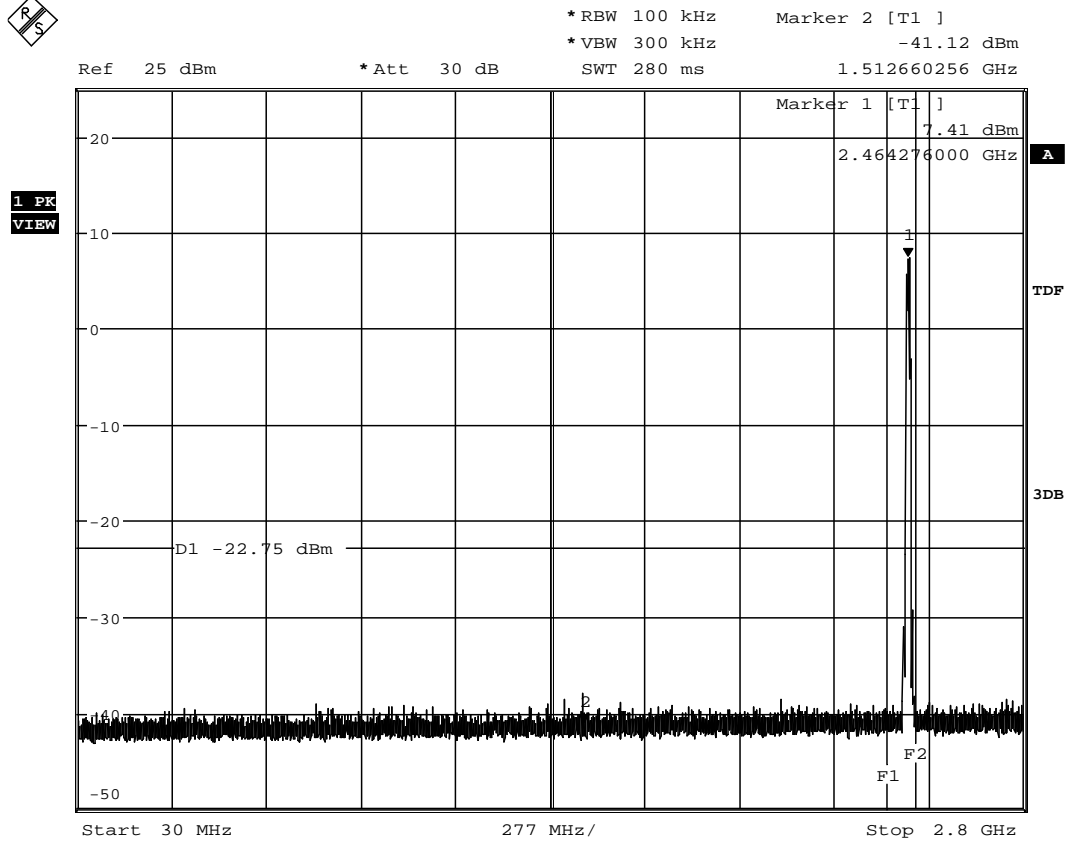
Ref 25 dBm *Att 30 dB

1 PK
VIEW



Date: 28.JAN.2015 12:24:56

2.5.3.3. Sweep 2: 30MHz to 2.8GHz

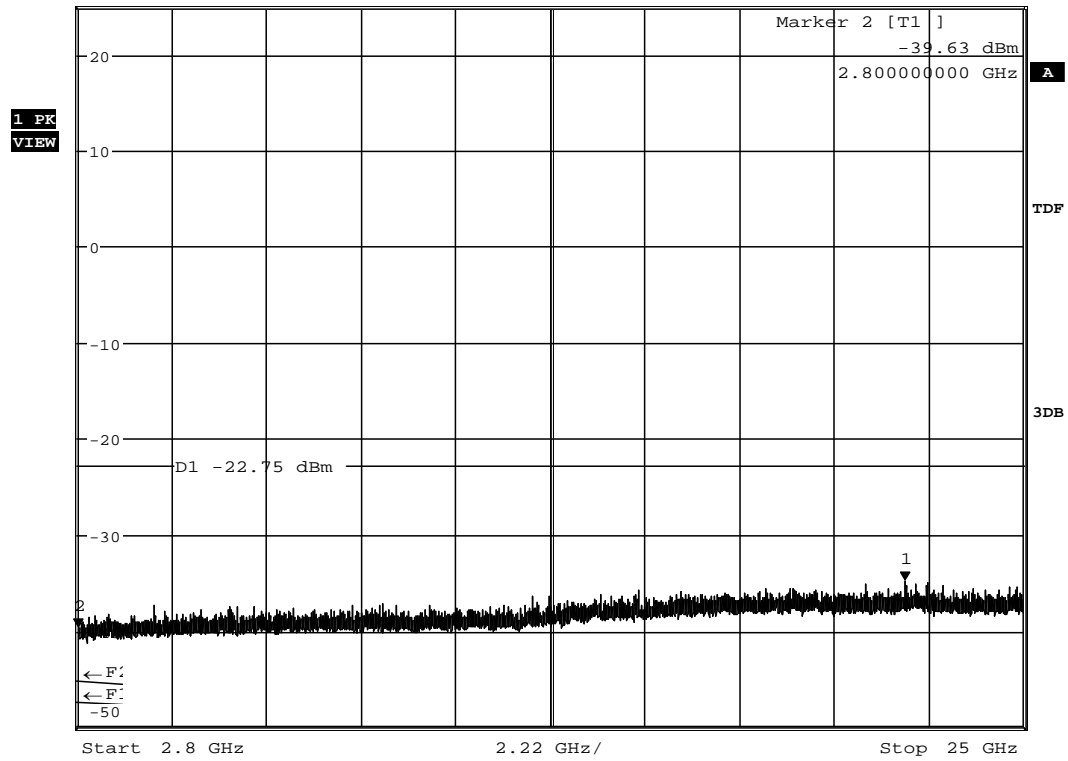


Date: 28.JAN.2015 13:10:34

2.5.3.4. Sweep 3: 2.8GHz to 25GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -34.80 dBm
SWT 2.25 s 22.218340000 GHz

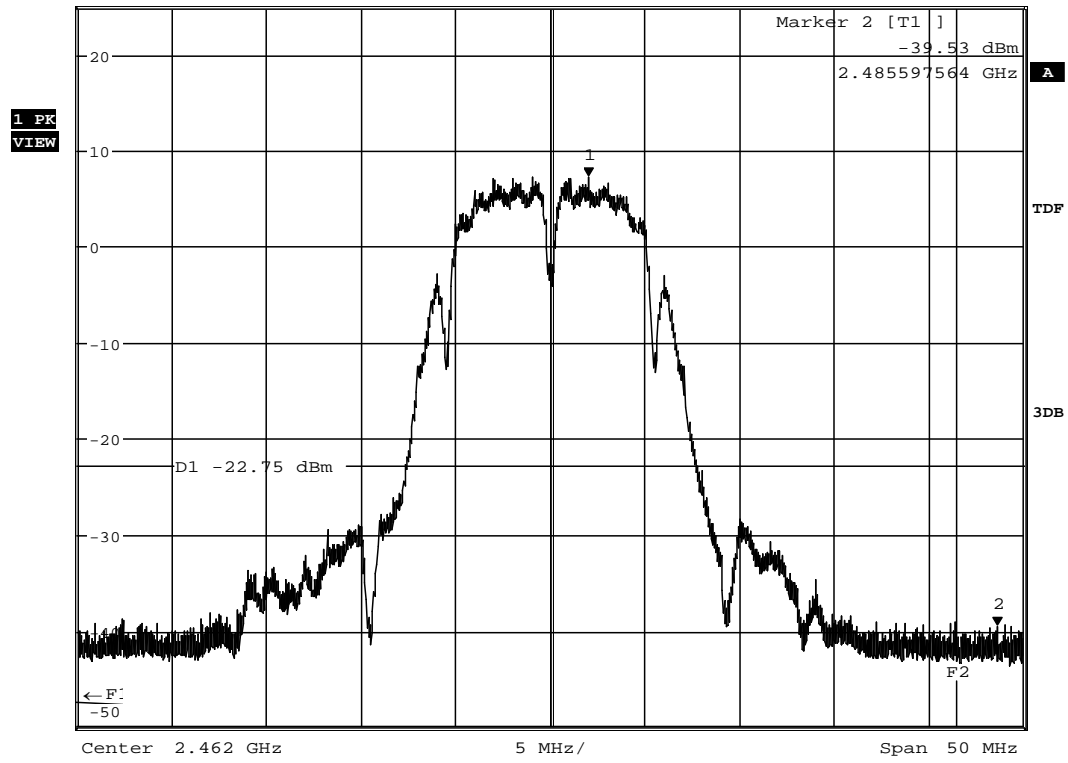


Date: 28.JAN.2015 13:03:26

2.5.3.5. Sweep Band-Edge right at 2483.5GHz



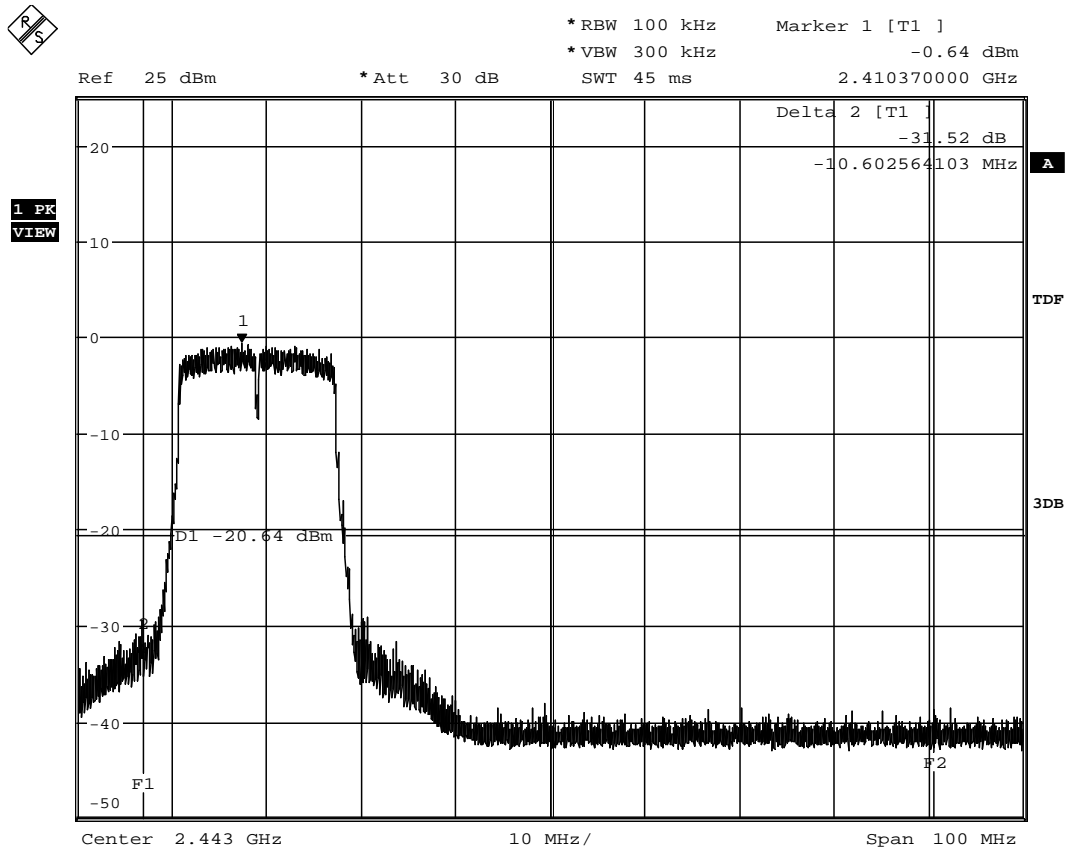
Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] 7.25 dBm
*VBW 300 kHz 2.464000000 GHz
SWT 45 ms



Date: 28.JAN.2015 12:19:08

2.5.4. Channel 1, g-mode, 6Mbit

2.5.4.1. Channel 1 Reference



Date: 16.MAR.2015 14:54:02

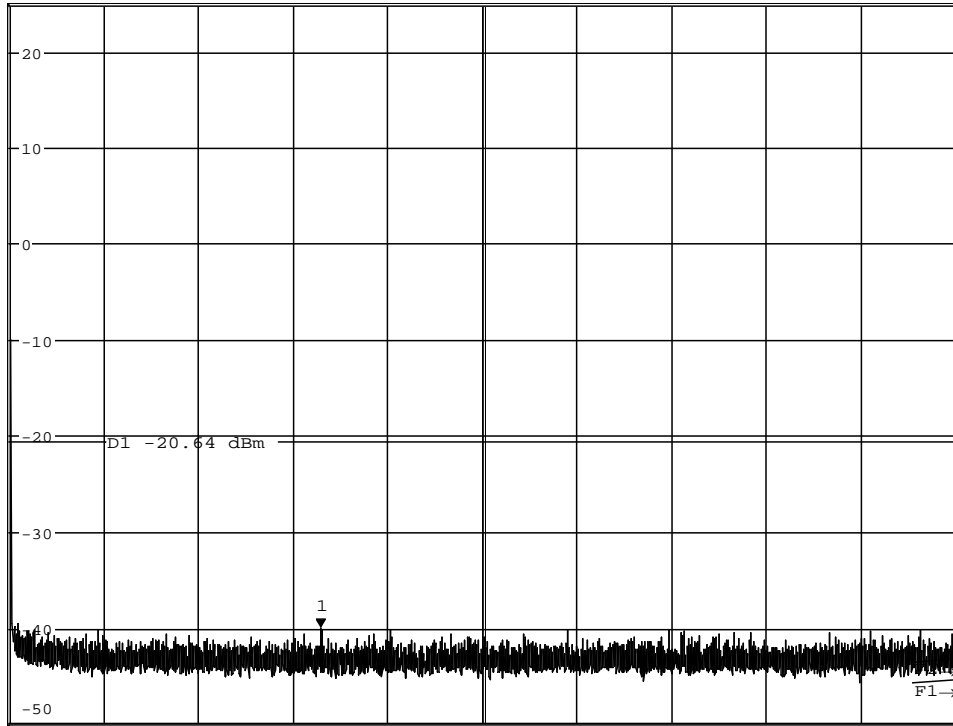
2.5.4.2. Sweep 1: 150kHz to 30MHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -40.01 dBm
SWT 45 ms 9.949755000 MHz

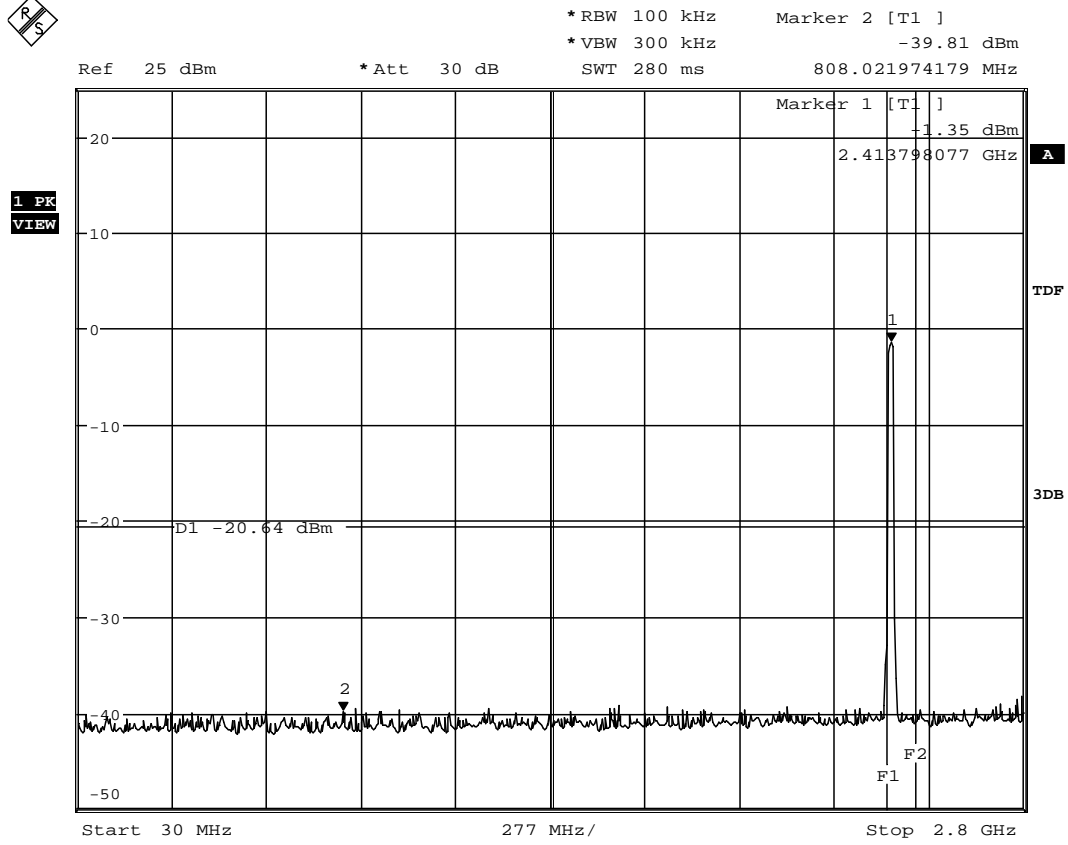
Ref 25 dBm *Att 30 dB

1 PK
VIEW



Date: 16.MAR.2015 15:00:52

2.5.4.3. Sweep 2: 30MHz to 2.8GHz

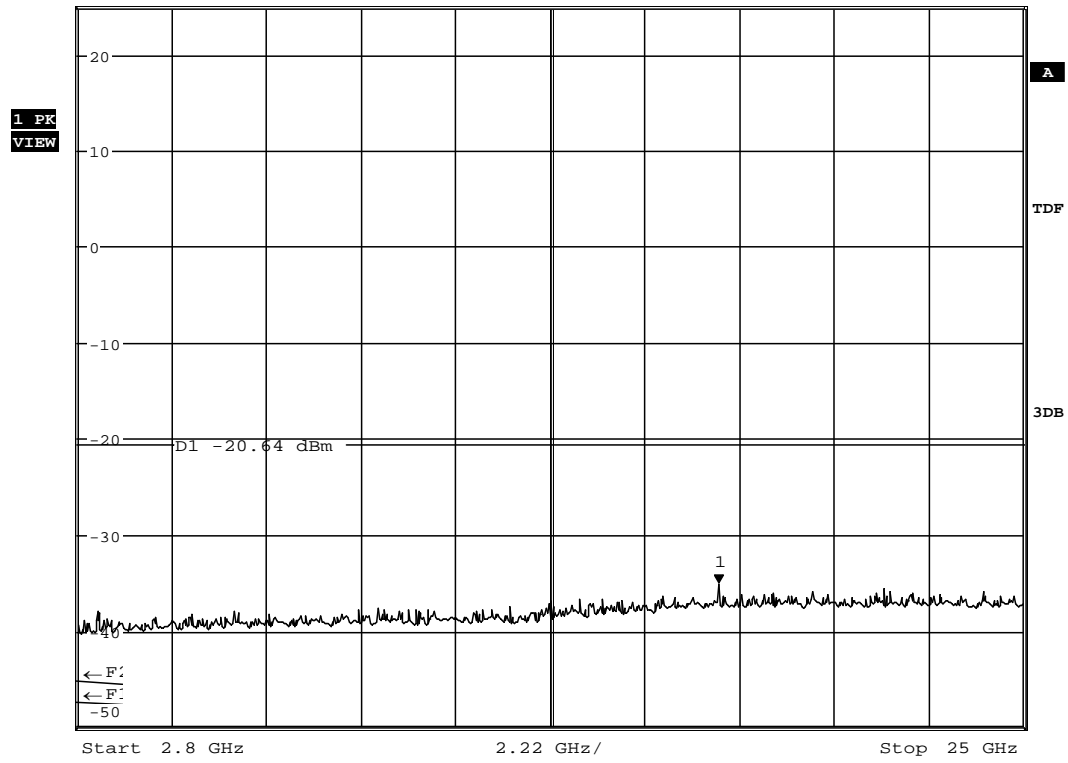


Date: 16.MAR.2015 15:05:22

2.5.4.4. Sweep 2: 2.8GHz to 25GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -35.18 dBm
SWT 2.25 s 17.849038462 GHz



Date: 16.MAR.2015 15:14:05

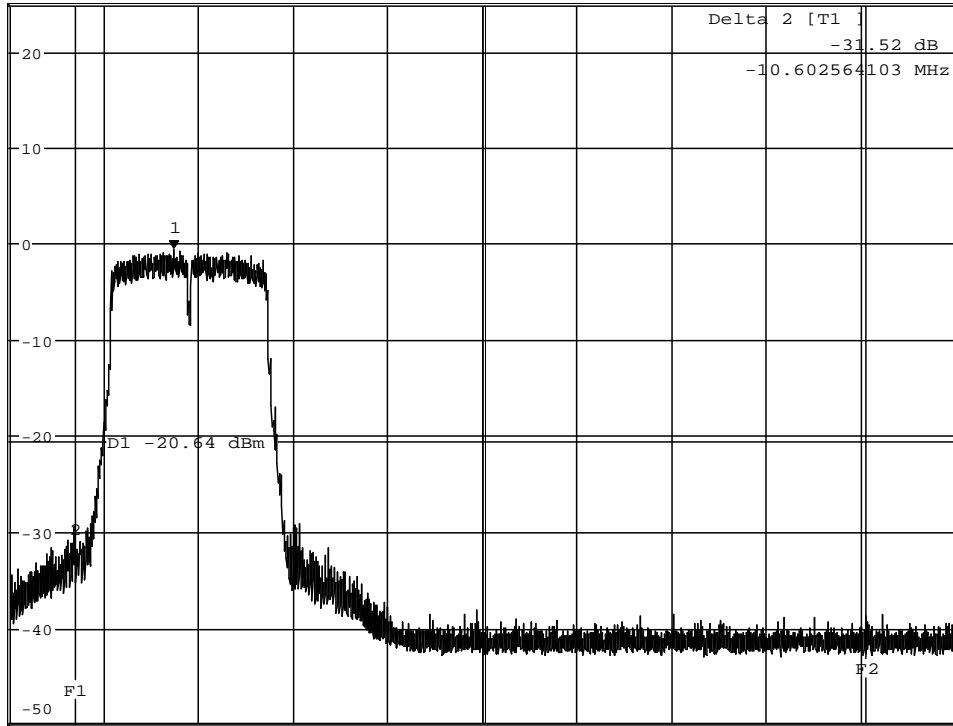
2.5.4.5. Sweep Band-Edge left at 2.4GHz



*RBW 100 kHz Marker 1 [T1]
 *VBW 300 kHz -0.64 dBm
 SWT 45 ms 2.410370000 GHz

Ref 25 dBm *Att 30 dB

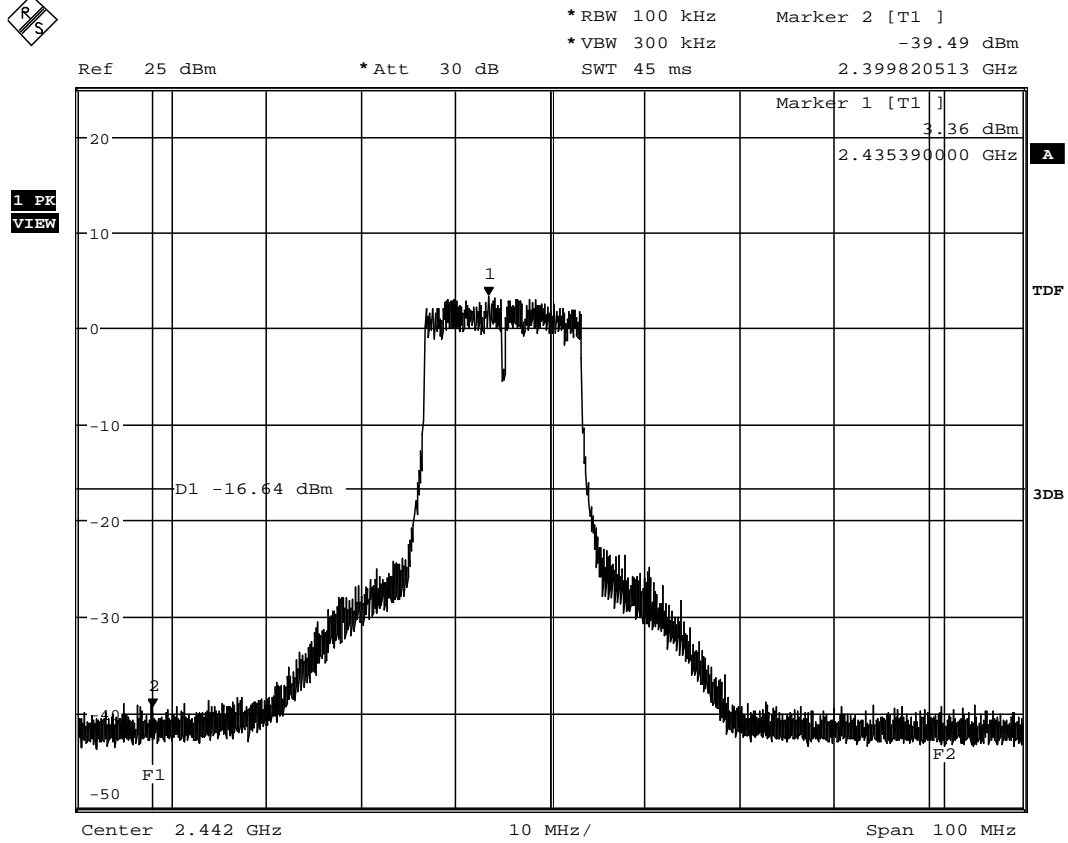
1 PK
VIEW



Date: 16.MAR.2015 14:54:02

2.5.5. Channel 6, g-mode, 54Mbit

2.5.5.1. Channel 6 Reference



Date: 16.MAR.2015 15:20:16

2.5.5.2. Sweep 1: 150kHz to 30MHz

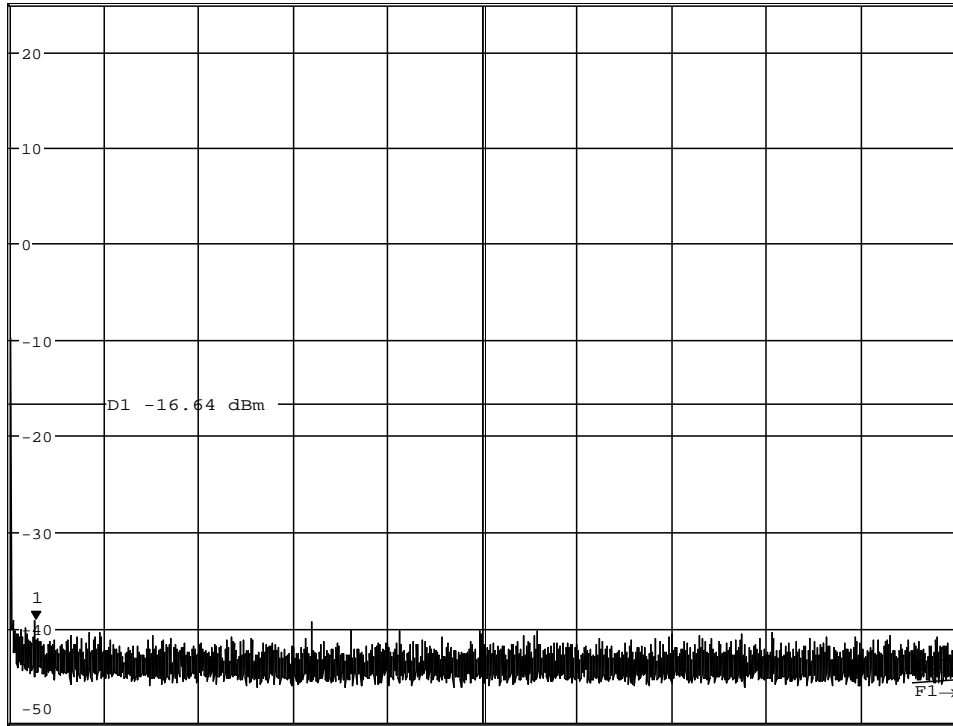


*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -39.15 dBm
SWT 45 ms 946.995000000 kHz

Ref 25 dBm

*Att 30 dB

1 PK
VIEW



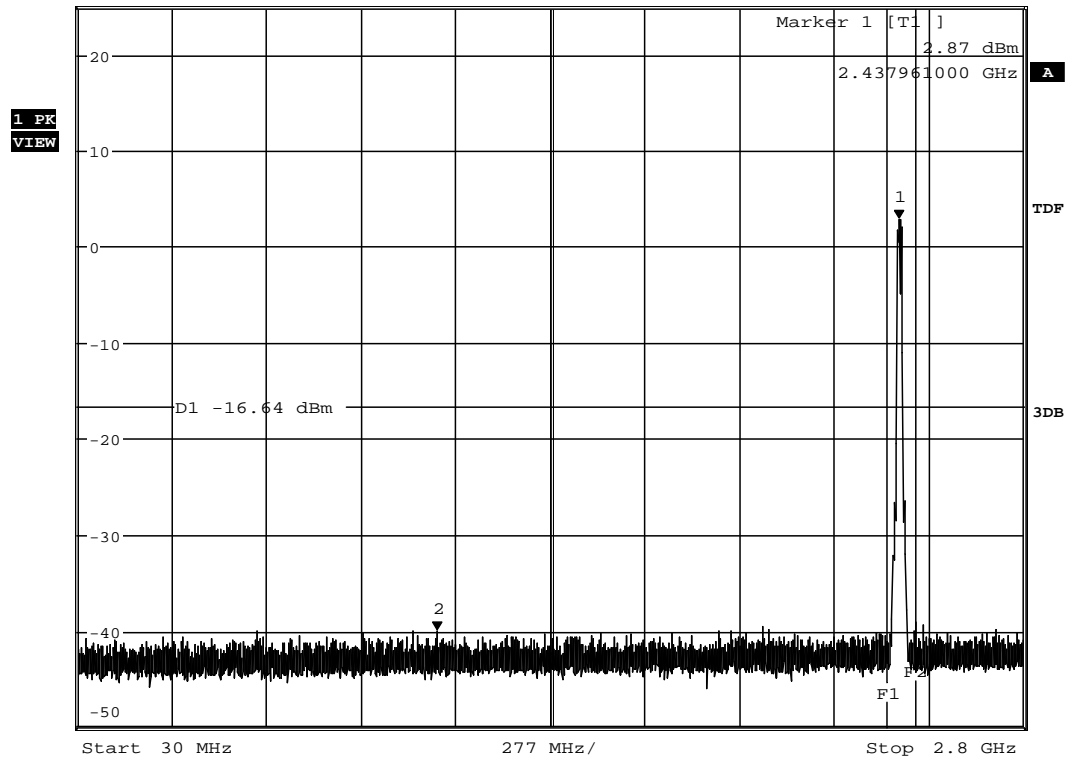
Start 150 kHz 2.985 MHz/ Stop 30 MHz

Date: 16.MAR.2015 15:26:06

2.5.5.3. Sweep 2: 30MHz to 2.8GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -39.95 dBm
SWT 280 ms 1.082323000 GHz

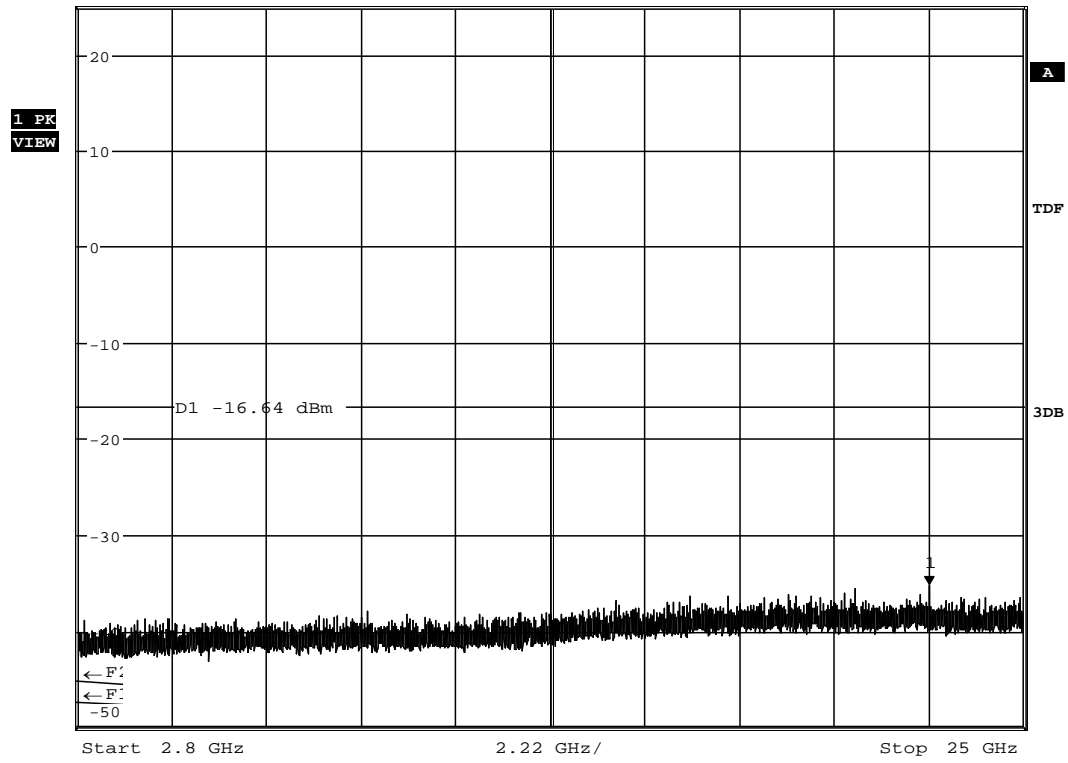


Date: 16.MAR.2015 15:29:31

2.5.5.4. Sweep 3: 2.8GHz to 25GHz



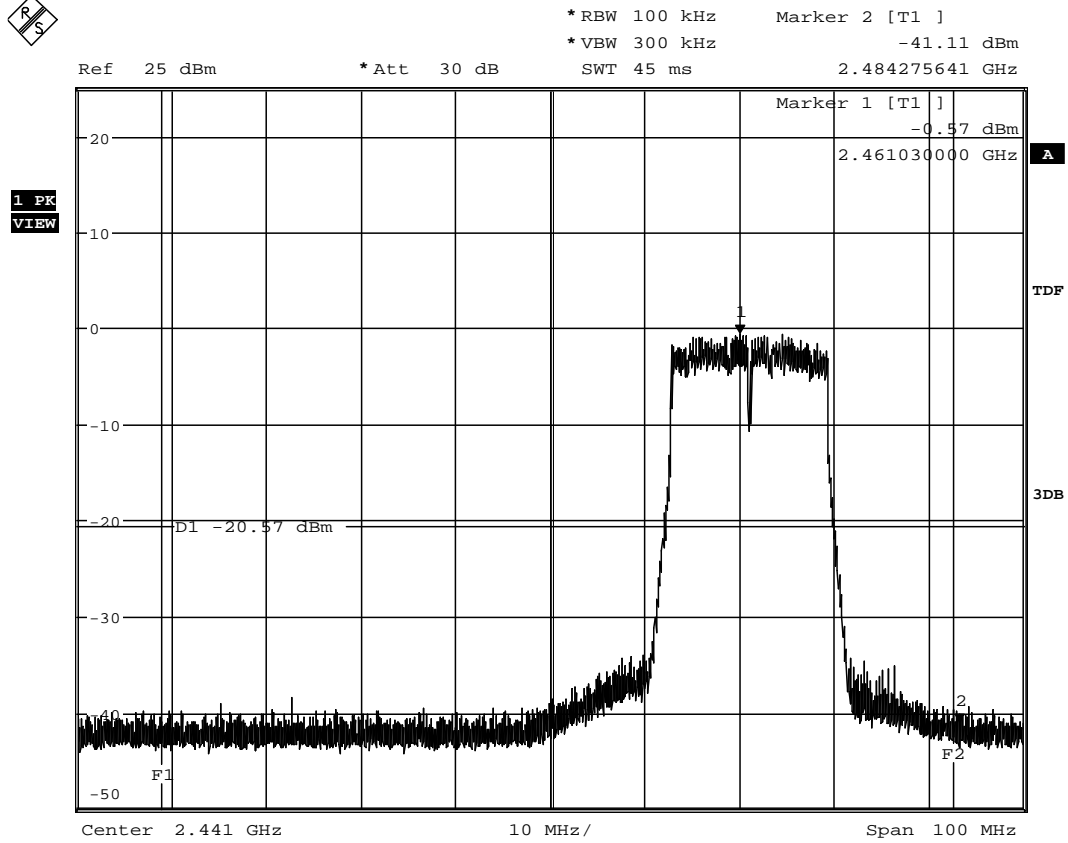
Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -35.30 dBm
SWT 2.25 s 22.788880000 GHz



Date: 16.MAR.2015 15:31:54

2.5.6. Channel 11, g-mode, 54Mbit

2.5.6.1. Channel 11 Reference

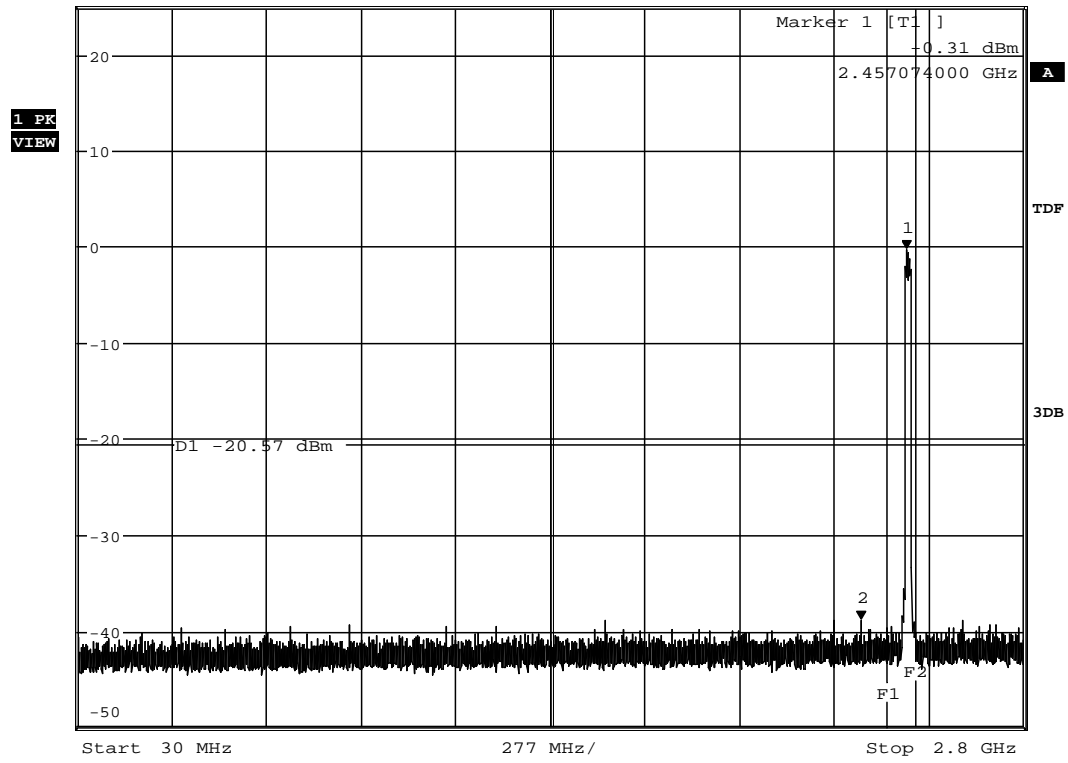


Date: 16.MAR.2015 15:35:57

2.5.6.3. Sweep 2: 30MHz to 2.8GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1] -38.88 dBm
*VBW 300 kHz SWT 280 ms 2.323900923 GHz

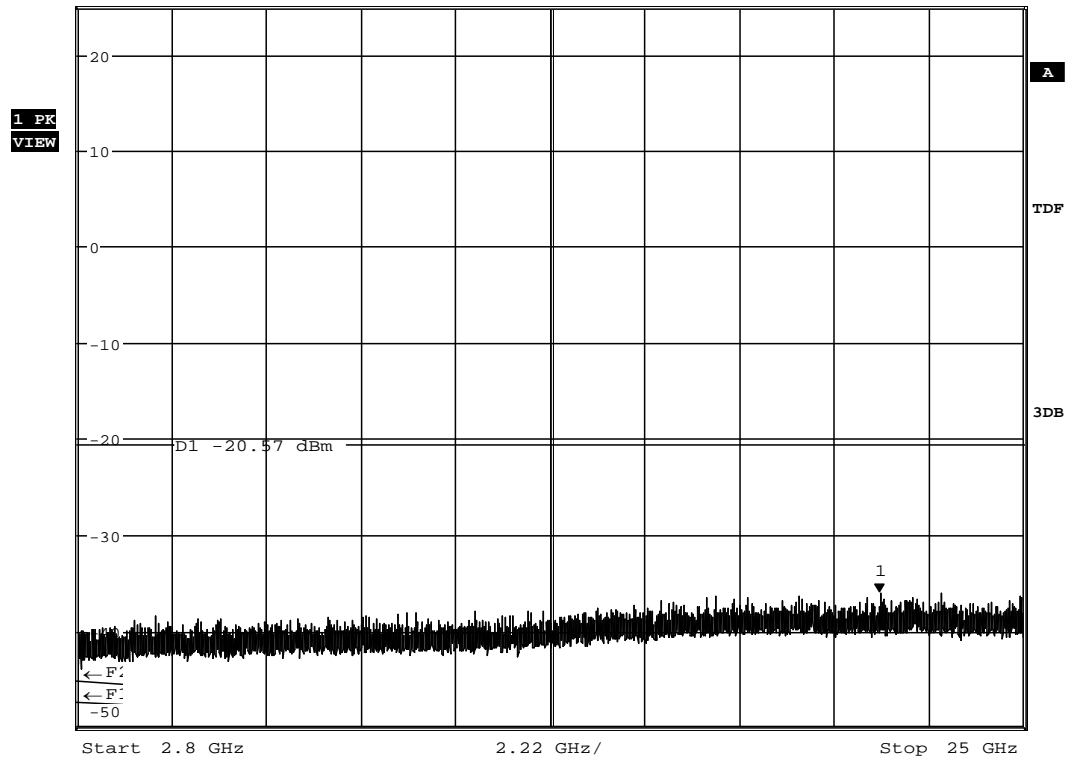


Date: 16.MAR.2015 15:43:53

2.5.6.4. Sweep 3: 2.8GHz to 25GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -36.01 dBm
SWT 2.25 s 21.632260000 GHz

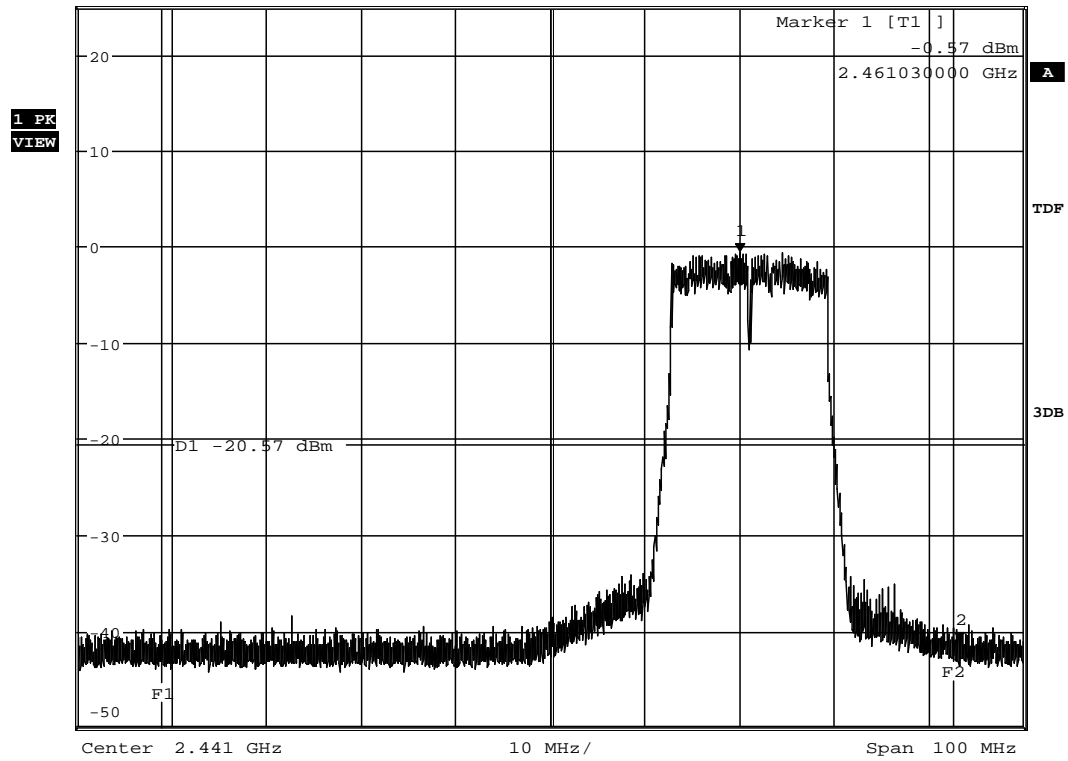


Date: 16.MAR.2015 15:45:32

2.5.6.5. Sweep Band-Edge right at 2483.5GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1] -41.11 dBm
*VBW 300 kHz SWT 45 ms 2.484275641 GHz



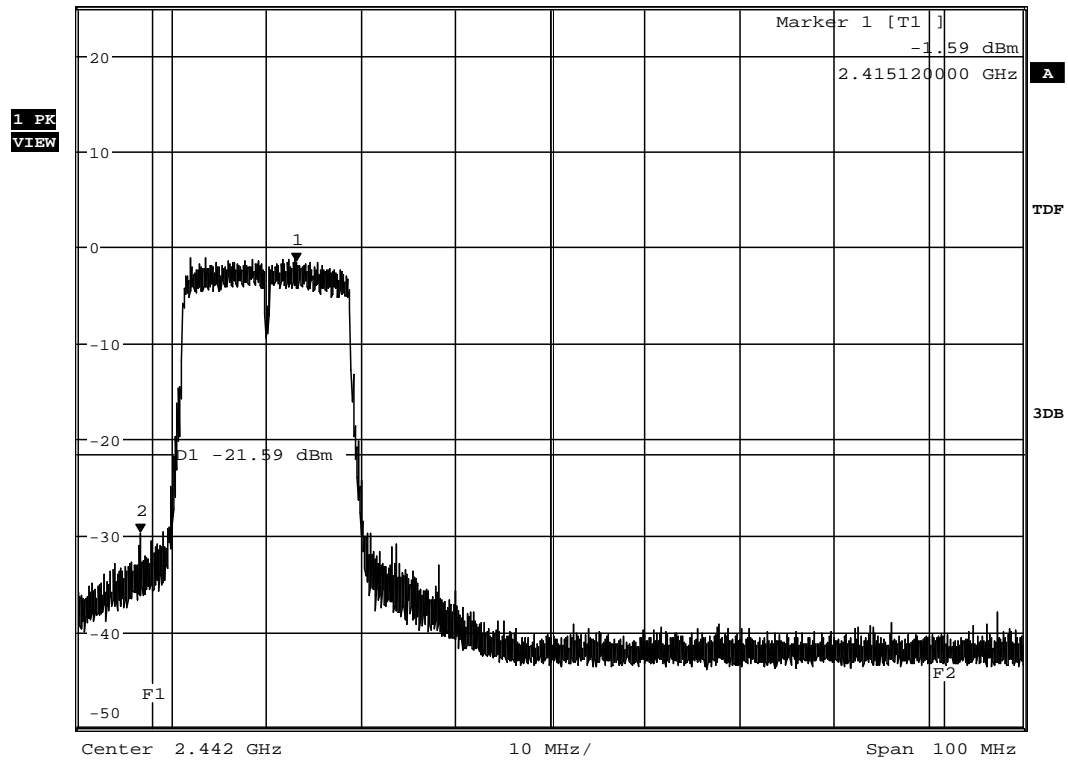
Date: 16.MAR.2015 15:35:57

2.5.7. Channel 1, n-mode, MCS0

2.5.7.1. Channel 1 Reference



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -29.69 dBm
SWT 45 ms 2.398570000 GHz



Date: 16.MAR.2015 15:55:35

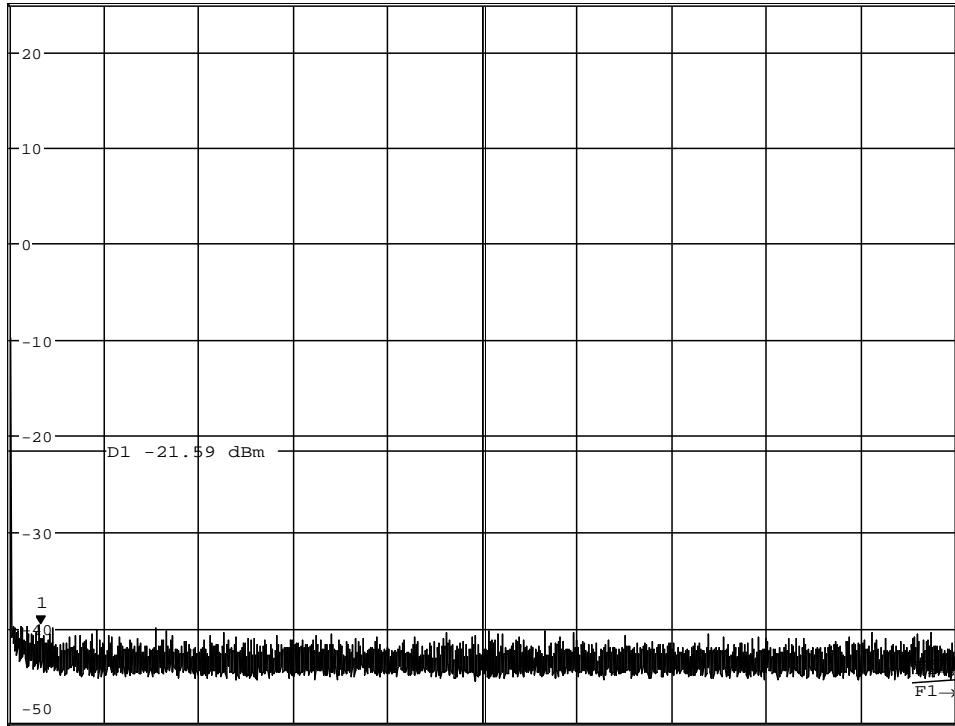
2.5.7.2. Sweep 1: 150kHz to 30MHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -39.72 dBm
SWT 45 ms 1.099230000 MHz

Ref 25 dBm *Att 30 dB

1 PK
VIEW



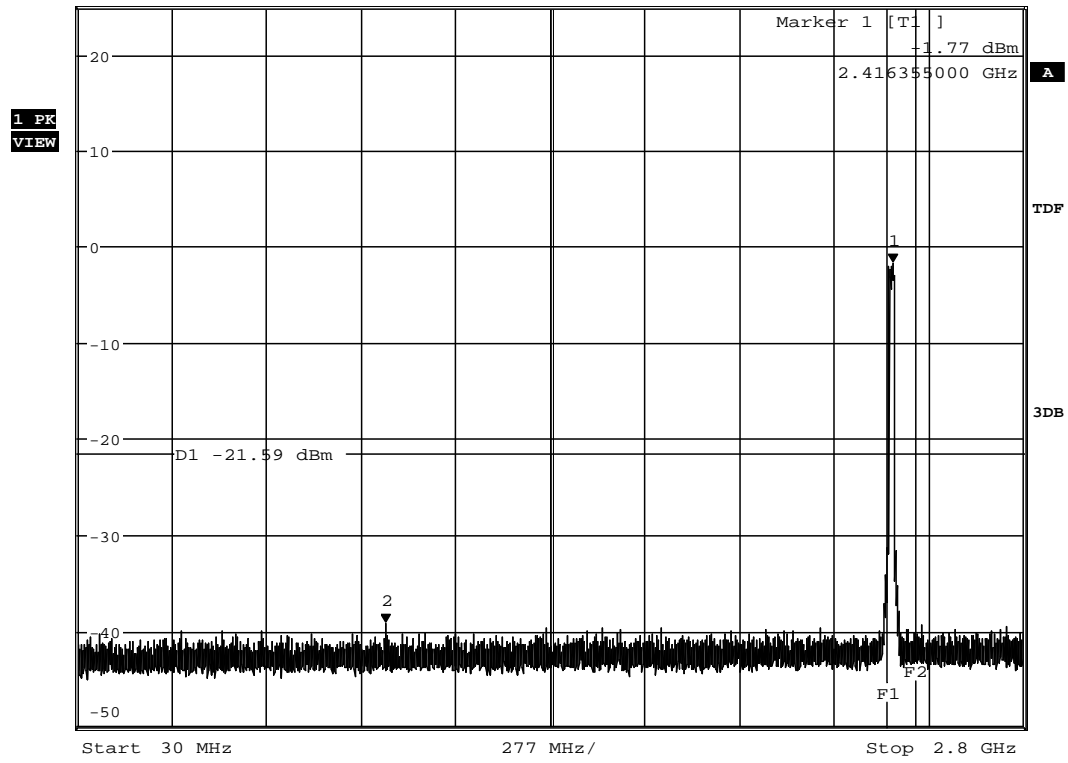
Start 150 kHz 2.985 MHz/ Stop 30 MHz

Date: 16.MAR.2015 15:58:08

2.5.7.3. Sweep 2: 30MHz to 2.8GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -39.21 dBm
SWT 280 ms 931.081000000 MHz

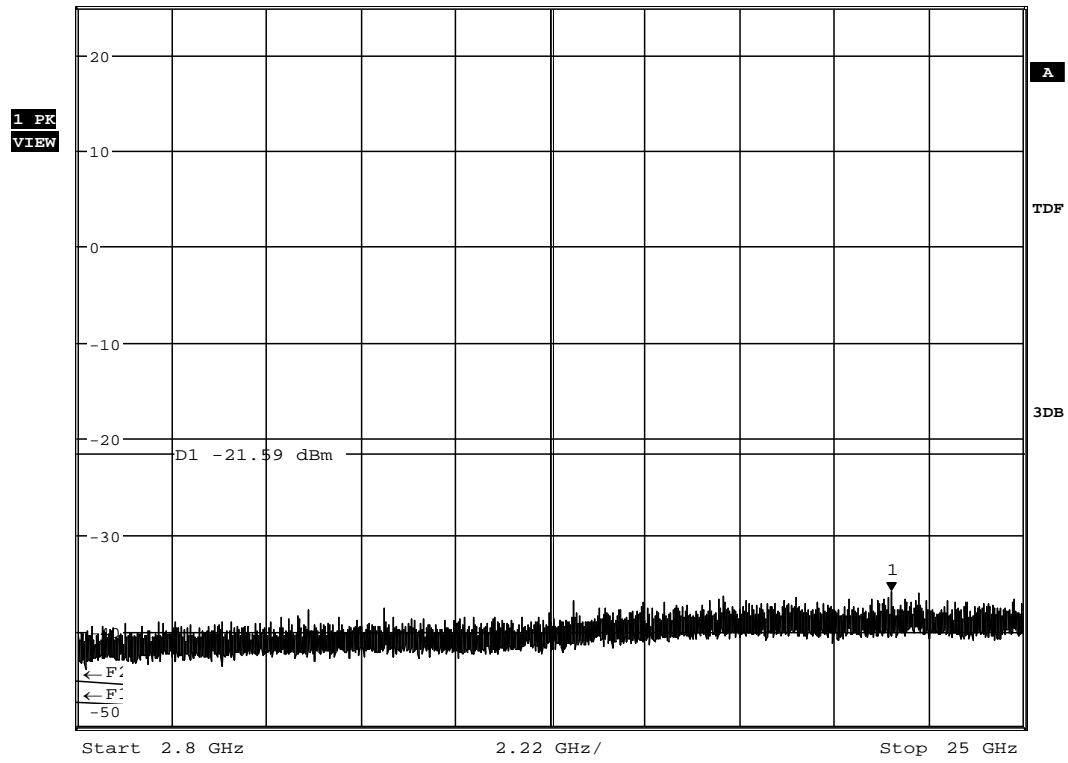


Date: 16.MAR.2015 16:00:28

2.5.7.4. Sweep 2: 2.8GHz to 25GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -35.98 dBm
SWT 2.25 s 21.903100000 GHz

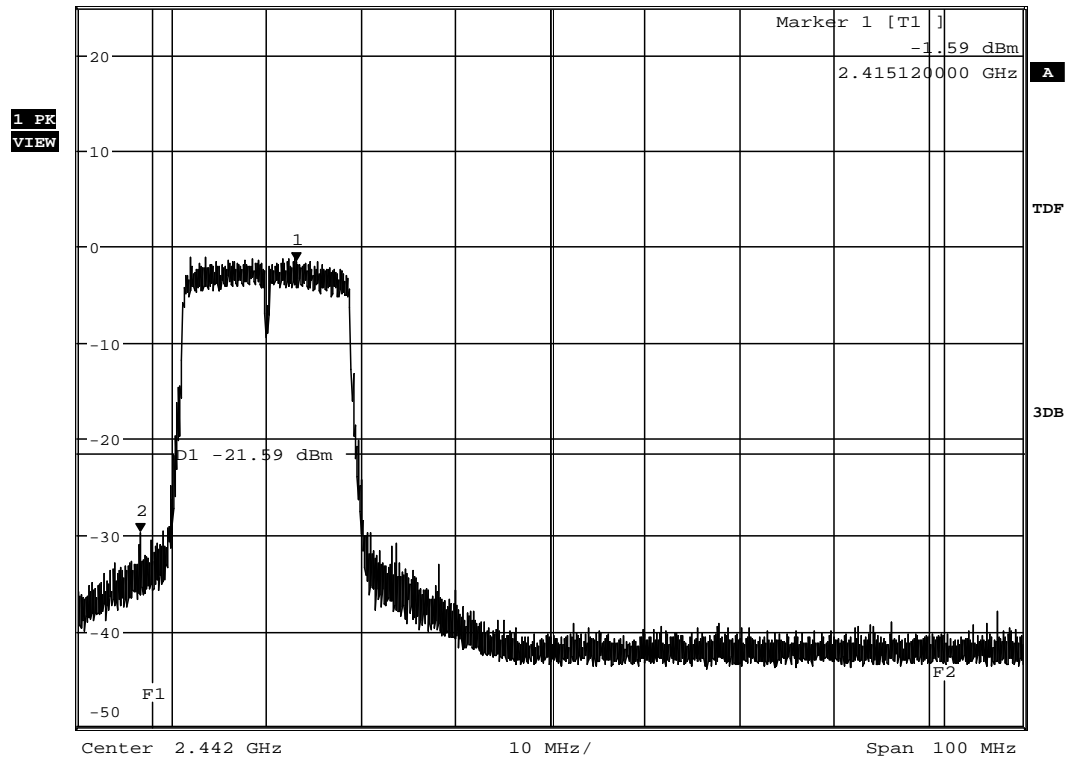


Date: 16.MAR.2015 16:01:50

2.5.7.5. Sweep Band-Edge left at 2.4GHz



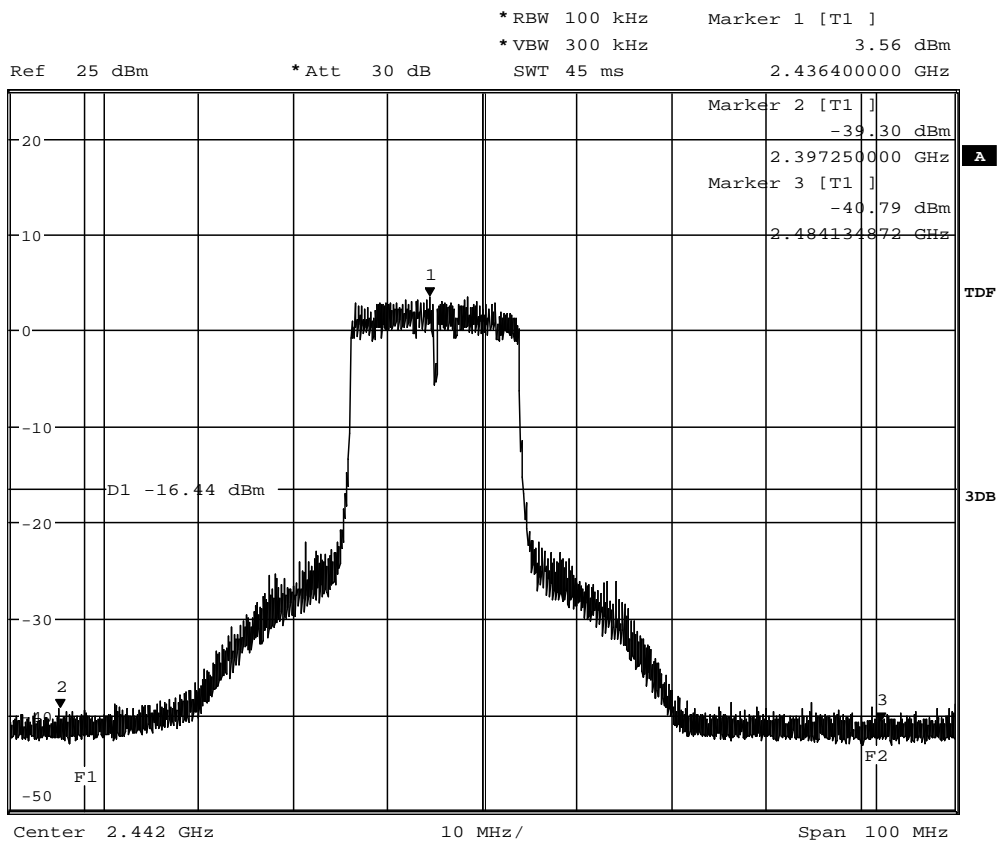
Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -29.69 dBm
SWT 45 ms 2.398570000 GHz



Date: 16.MAR.2015 15:55:35

2.5.8. Channel 6, n-mode, MCS7

2.5.8.1. Channel 6 Reference



Date: 16.MAR.2015 16:10:09

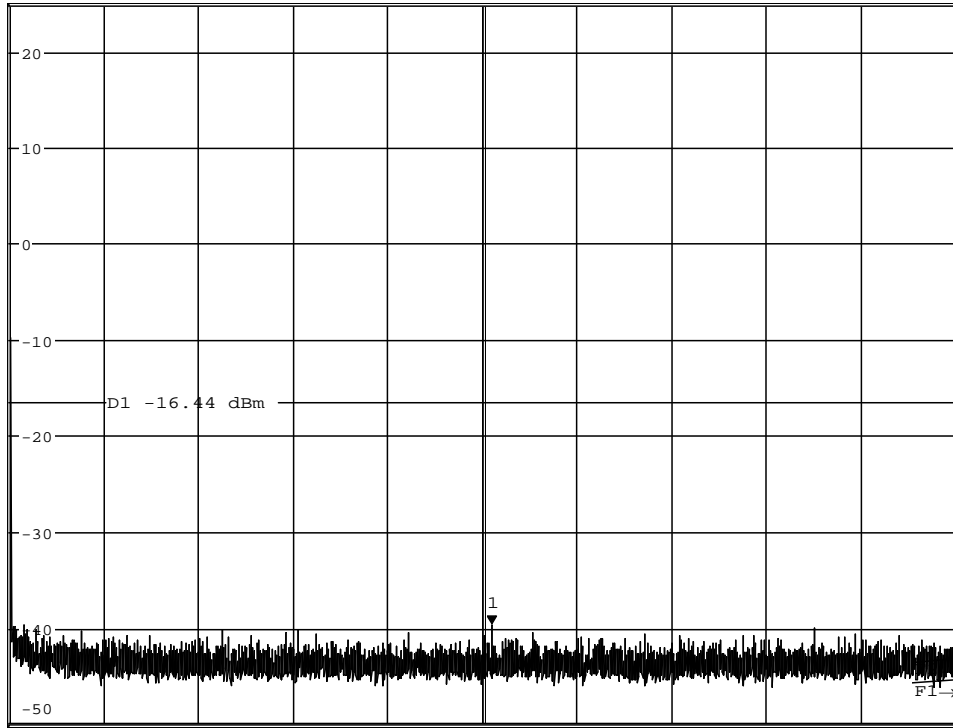
2.5.8.2. Sweep 1: 150kHz to 30MHz



*RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -39.69 dBm
SWT 45 ms 15.361560000 MHz

Ref 25 dBm *Att 30 dB

1 PK
VIEW



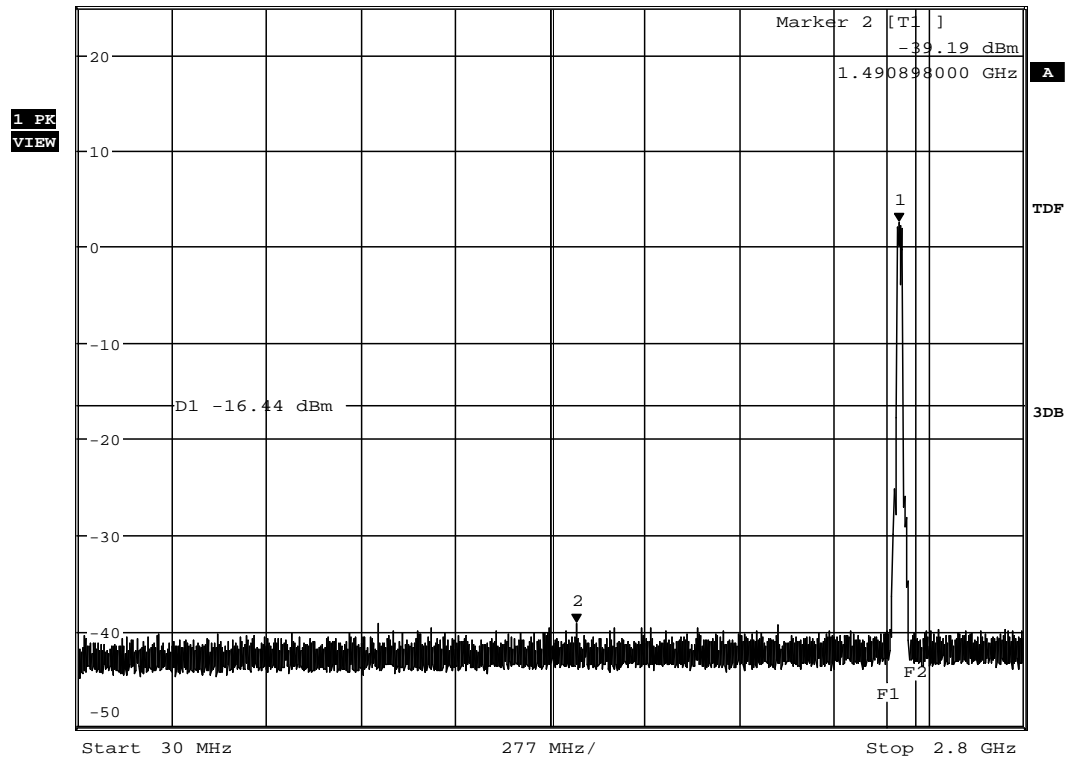
Start 150 kHz 2.985 MHz/ Stop 30 MHz

Date: 16.MAR.2015 16:11:58

2.5.8.3. Sweep 2: 30MHz to 2.8GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] 2.49 dBm
*VBW 300 kHz 2.436299000 GHz
SWT 280 ms

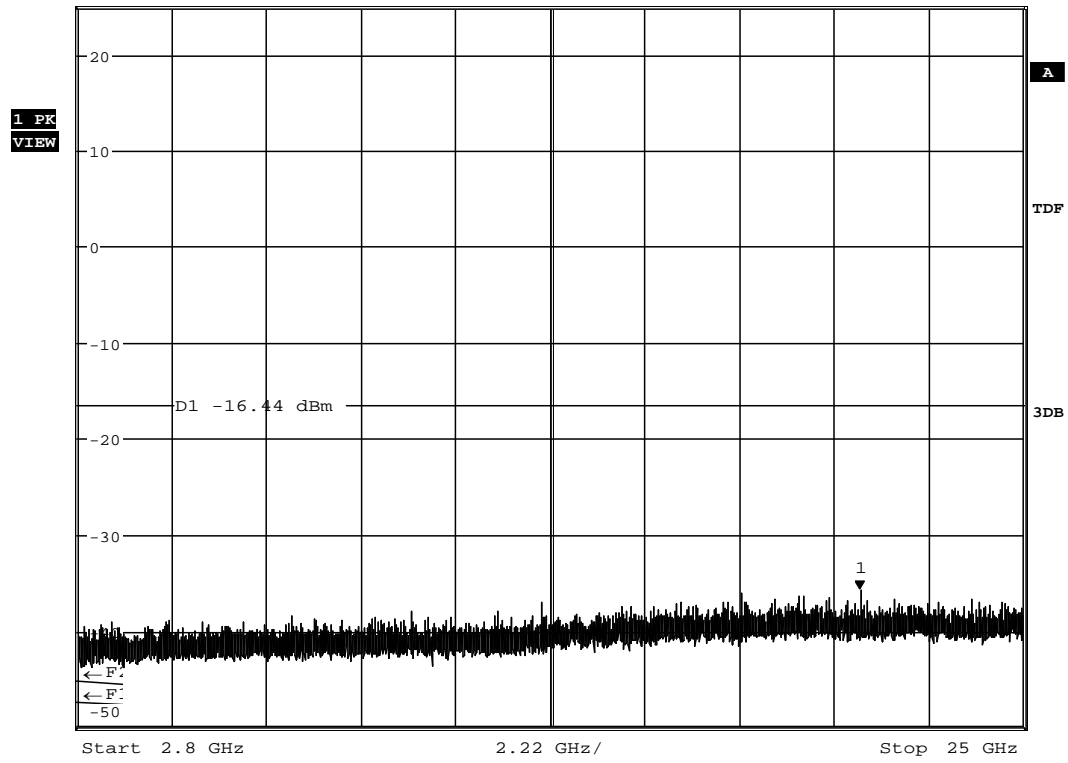


Date: 16.MAR.2015 16:14:14

2.5.8.4. Sweep 3: 2.8GHz to 25GHz



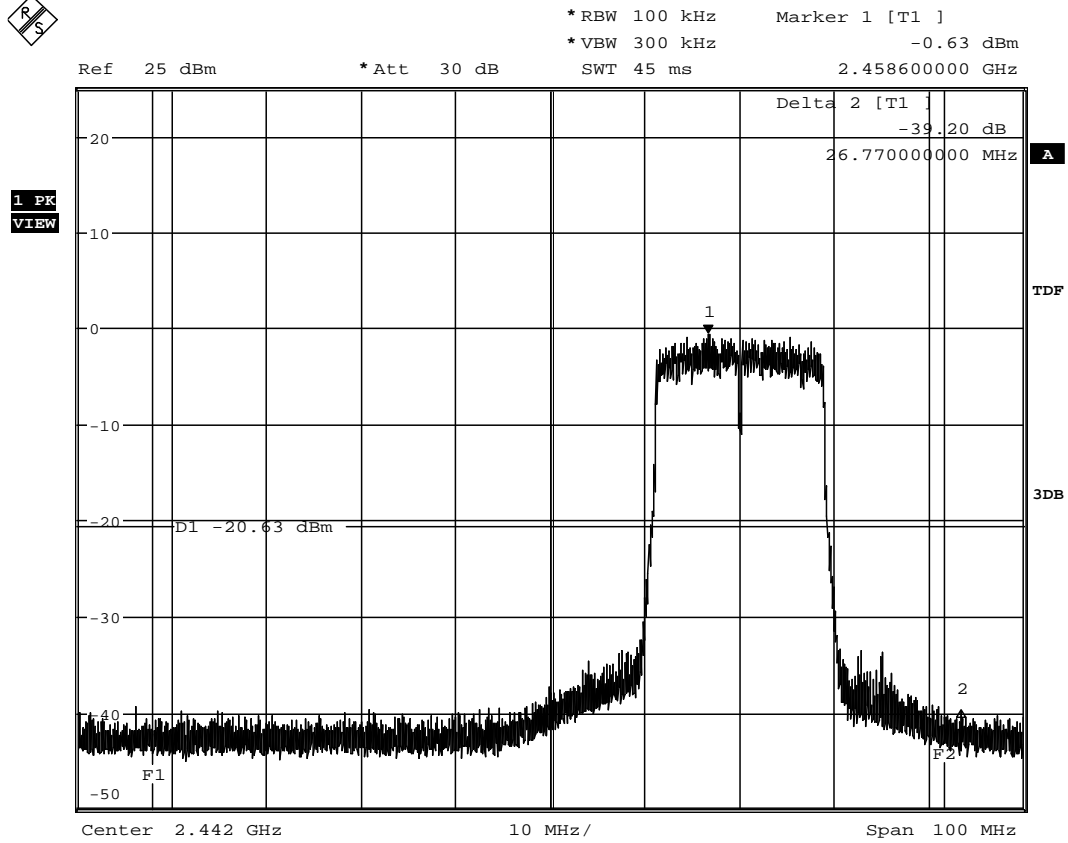
Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -35.68 dBm
SWT 2.25 s 21.174940000 GHz



Date: 16.MAR.2015 16:15:32

2.5.9. Channel 11,n-mode, MCS6

2.5.9.1. Channel 11 Reference

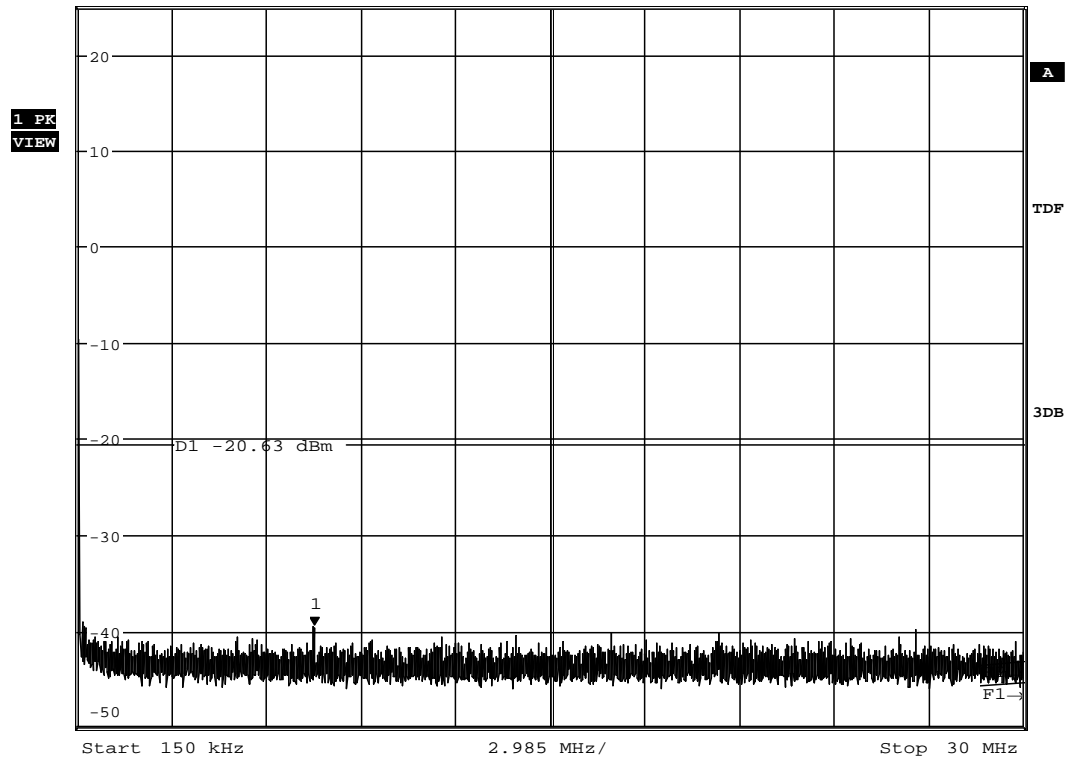


Date: 16.MAR.2015 16:21:21

2.5.9.2. Sweep 1: 150kHz to 30MHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -39.46 dBm
SWT 45 ms 7.600560000 MHz

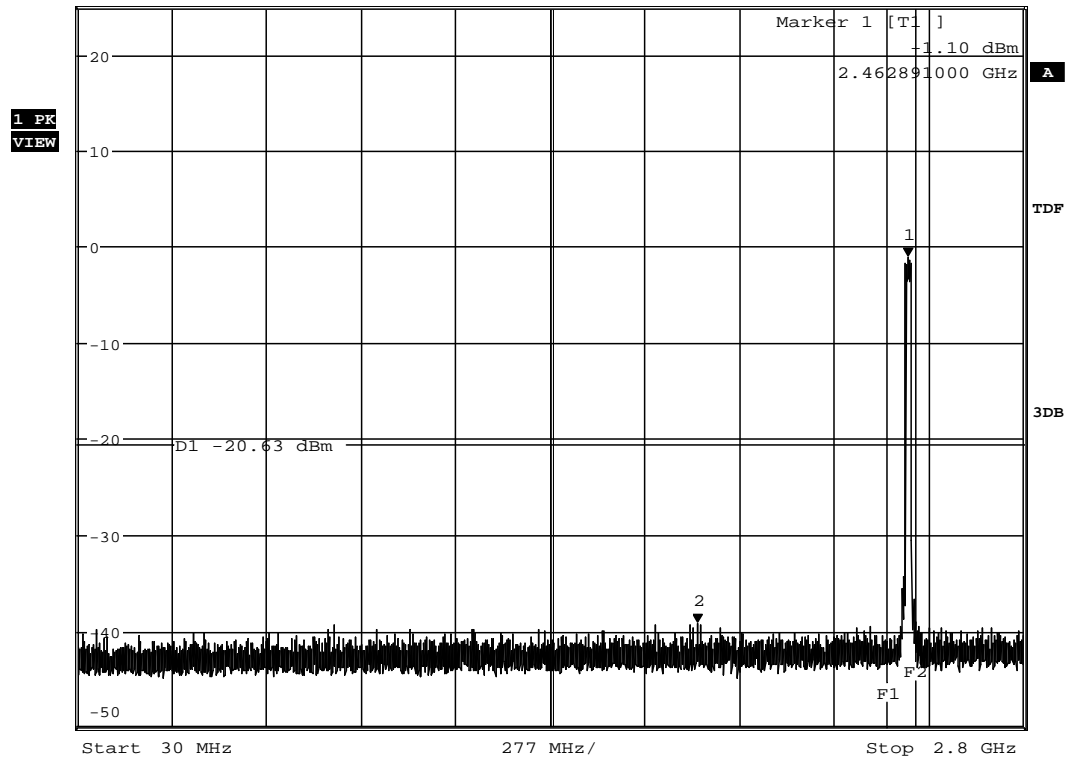


Date: 16.MAR.2015 16:22:54

2.5.9.3. Sweep 2: 30MHz to 2.8GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 2 [T1]
*VBW 300 kHz -39.13 dBm
SWT 280 ms 1.844350000 GHz

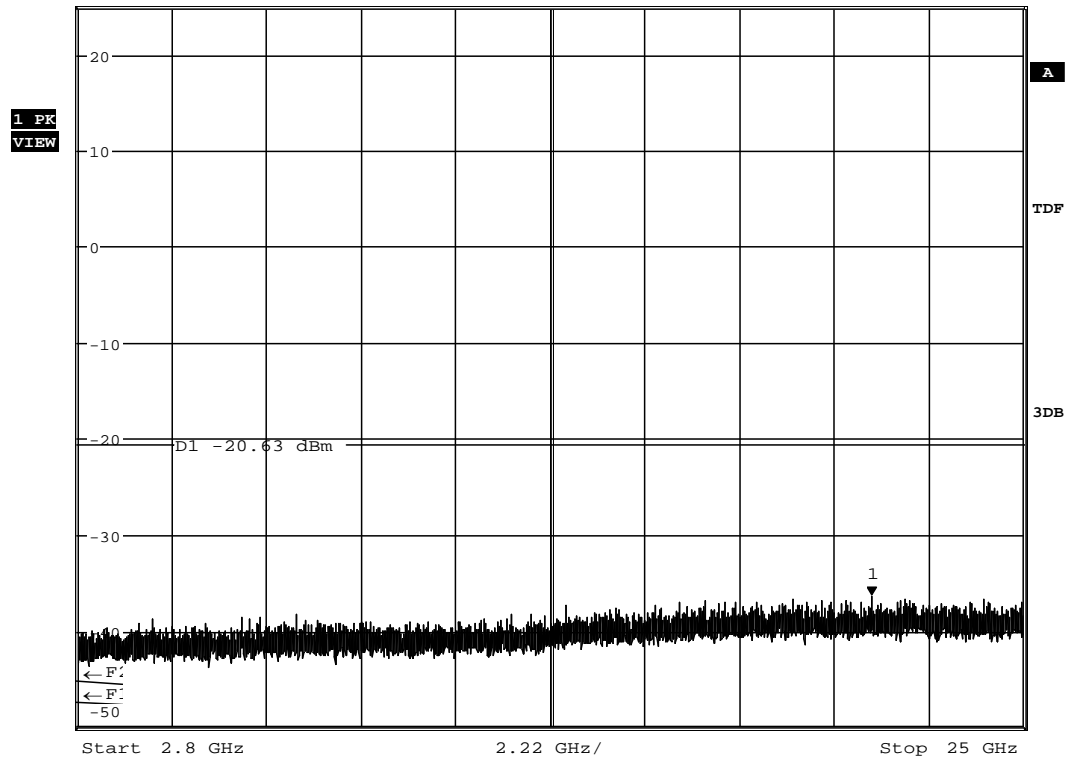


Date: 16.MAR.2015 16:25:02

2.5.9.4. Sweep 3: 2.8GHz to 25GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1]
*VBW 300 kHz -36.36 dBm
SWT 2.25 s 21.439120000 GHz

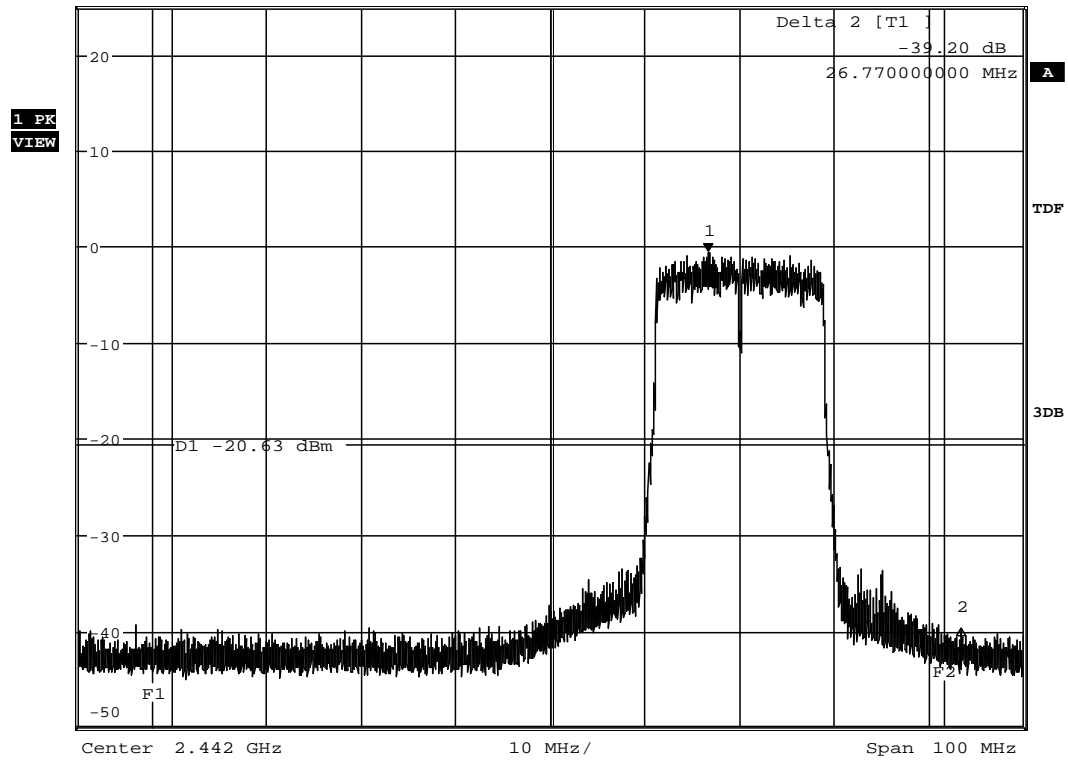


Date: 16.MAR.2015 16:26:15

2.5.9.5. Sweep Band-Edge right at 2483.5GHz



Ref 25 dBm *Att 30 dB *RBW 100 kHz Marker 1 [T1] -0.63 dBm
*VBW 300 kHz SWT 45 ms 2.458600000 GHz



Date: 16.MAR.2015 16:21:21

3. Radiated field strength measurements accord. §15.209&15.205

3.1. Magnetic field measurements f<30MHz

3.1.1. b-Mode modulation

Diagram No. 2.01_Ch1_2Mbit

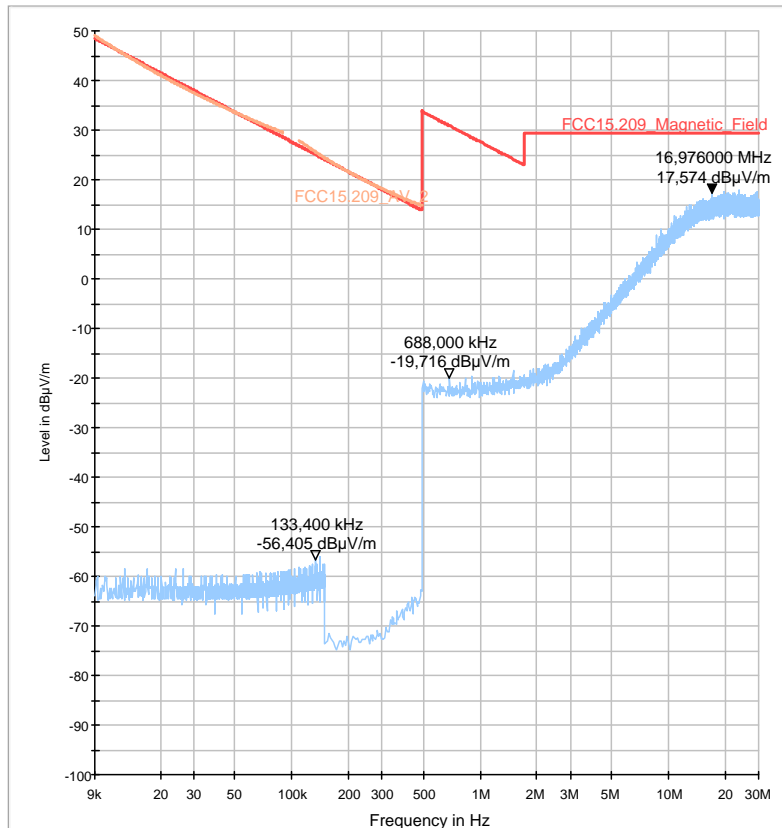
EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	120V AC 60 Hz

Date:	04.03.
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V8.51.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 3
Operator:	Lor
Operating conditions:	TX-on , continuous, modulation on
Power during tests:	110V/60Hz
Comment 1:	Channel low=1
Comment 2:	2MBit, PWR Level=50

FCC15.209_magn hor+vert



3.1.2. g-Mode modulation

Diagram No. 2.02_Ch6_9Mbit

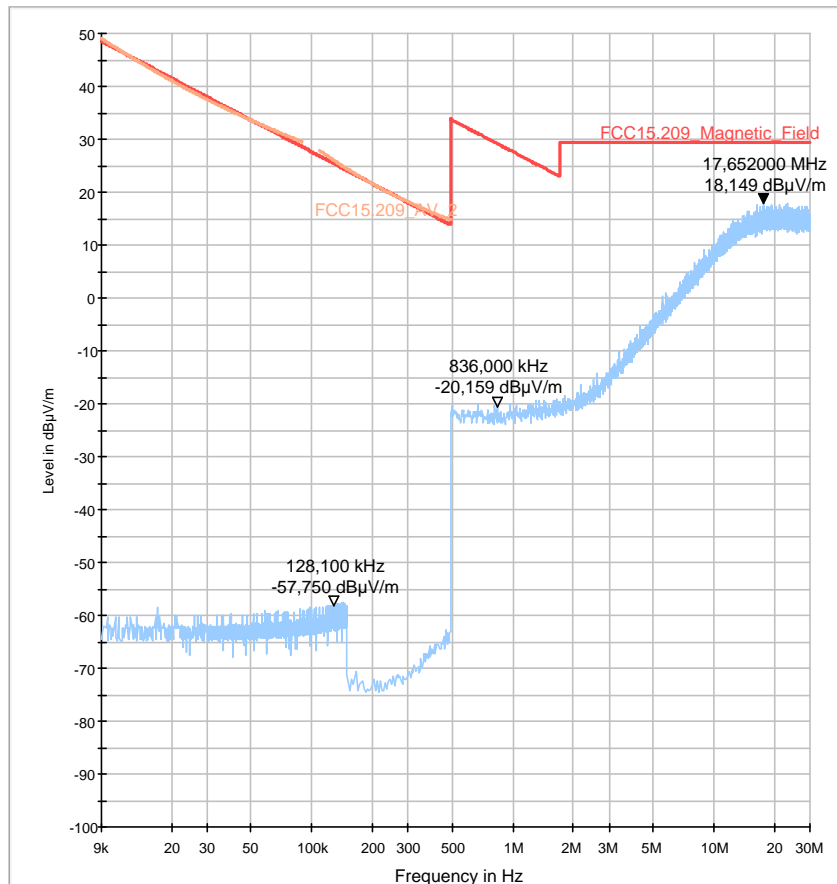
EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	120V AC 60 Hz

	Date: 04.03.2015 Page 1 of 2
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V8.51.0
Distance correction:	used accord. table, pls. see test report
Technical Data:	Please see page 2 for detailed data of measurement setup
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation
Used filter:	bypass
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 3
Operator:	AHo
Operating conditions:	TX-on, continuous, modulation on
Power during tests:	12V DC, 110V/60Hz
Comment 1:	Channel Low=6
Comment 2:	9 Mbit, PWR Level=58

FCC15.209_magn hor+vert



3.1.3. n-Mode modulation

Diagram No. 2.03_Ch11_MCS0

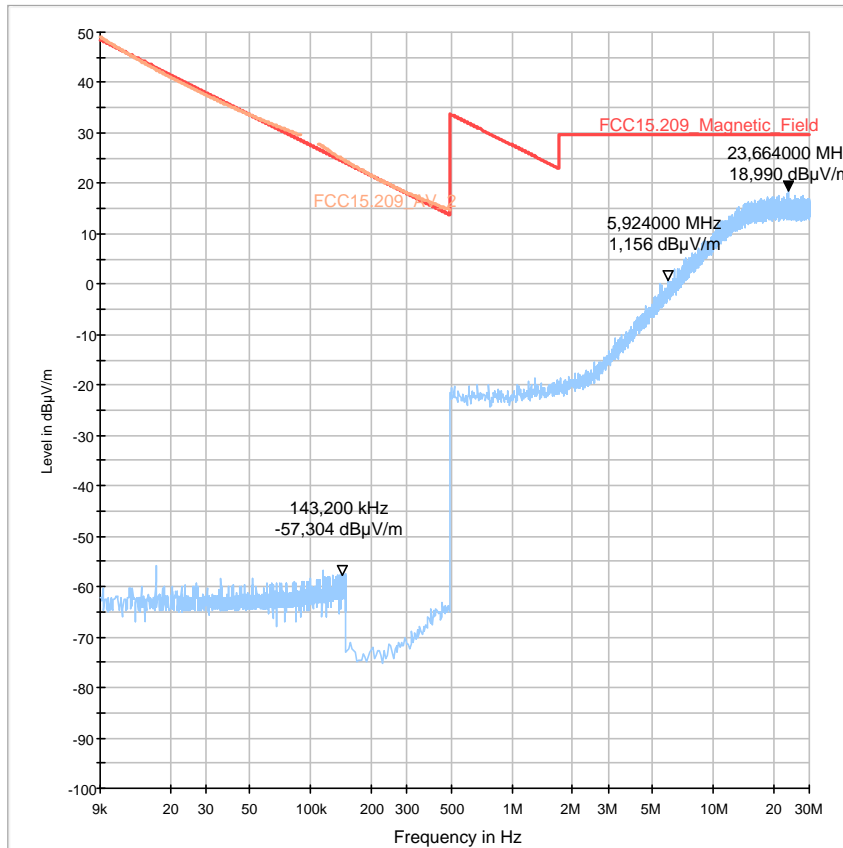
EUT Information

Manufacturer:	Ascom AB
EUT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	120V AC 60 Hz

Date:	04.03.2015	Page 1 of 2
Test description:	Magnetic Field Strength Measurement related to 30/300 m distance	
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance	
Version of Testsoftware:	EMC32 V8.51.0	
Distance correction:	used accord. table, pls. see test report	
Technical Data:	Please see page 2 for detailed data of measurement setup	
Rec. antenna (pre-scan):	height 1.00 m, parallel and 90° to EUT polarisation	
Used filter:	bypass	
Test specification:	FCC 15.205 § 15.209; RSS-Gen: Issue 3	
Operator:	AHo	
Operating conditions:	TX-on, continuous mode	
Power during tests:	12V DC, 110V/60Hz, full loaded batteries	
Comment 1:	Channel Low=11	
Comment 2:	MCS0,PWR Level =50	

FCC15.209_magn hor+vert



3.2. Field strength measurements 30MHz <f <1GHz

3.2.1. b-Mode modulation

Diagram No. 3.01_ch1_2MBit

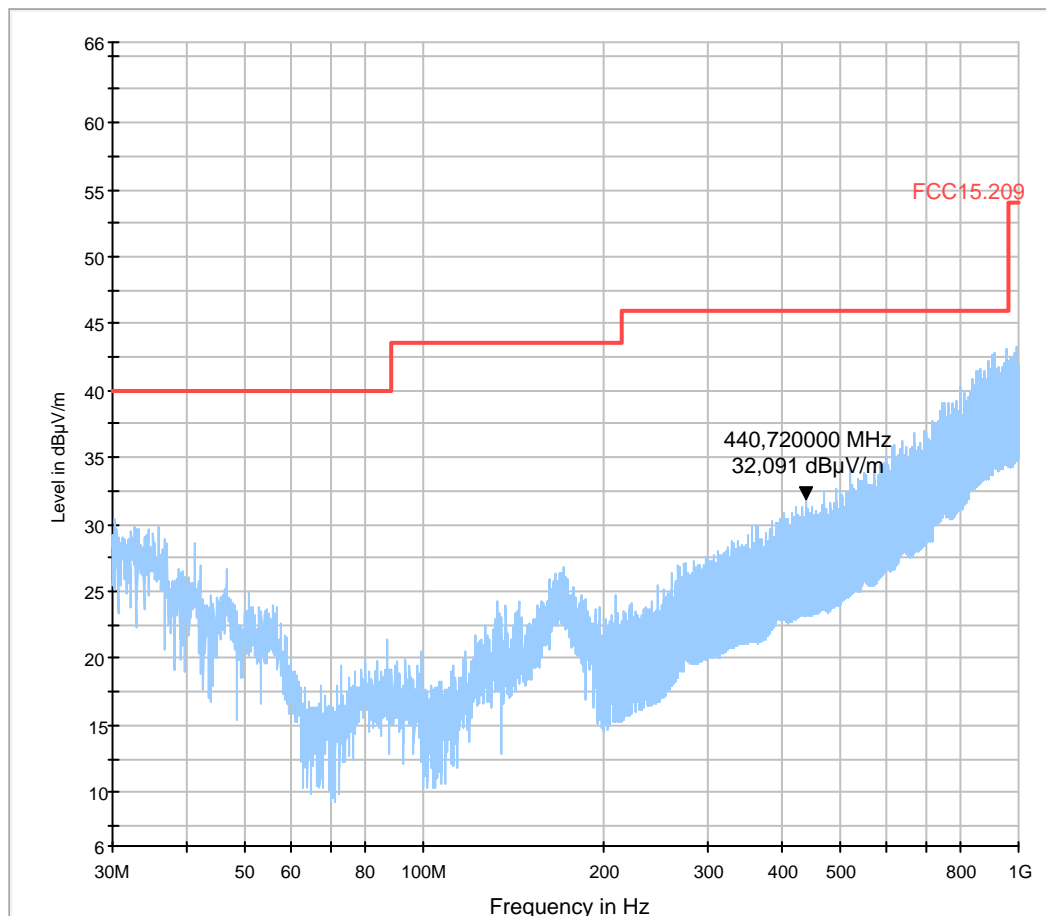
EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	120V AC 60 Hz

	05.03.2015 Page 1 of 1
Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V8.51.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operator:	MFr
Operating conditions:	WLAN B_mode _2MBit-Ch01
Power during tests:	110V 60Hz

01_FCC15.209_hor+vert_kipp



3.2.2. g-Mode modulation

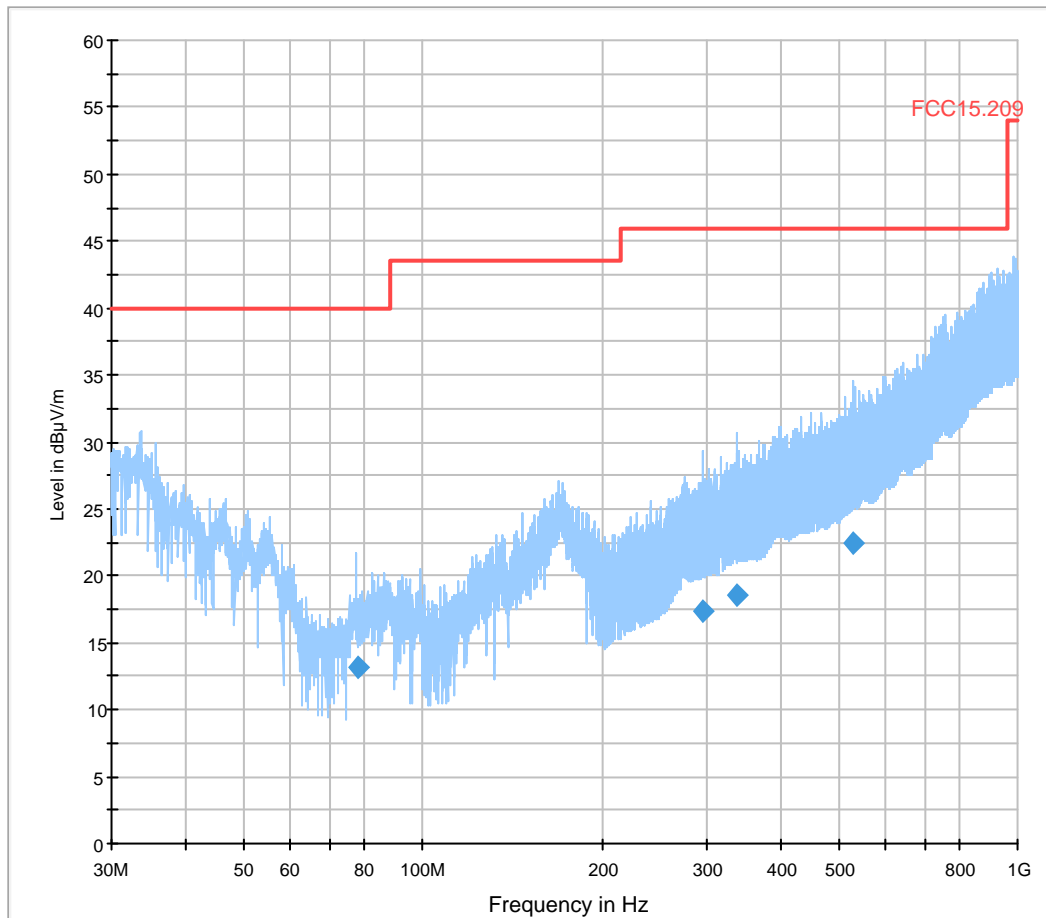
Diagram No. 3.02_ch6_9MBit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	120V AC 60 Hz

	05.03.2015 Page 1 of 2
Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V8.51.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operator:	MFr
Operating conditions:	WLAN B_mode _9MBit-Ch06
Power during tests:	110V 60Hz

01_FCC15.209_hor+vert_kipp



Final Result 1

Frequency (MHz)	QuasiPeak (dBµ)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
78.110000	13.1	1000.0	120.000	132.0	V	191.0	90.0	7.9	26.90	40.00
296.090000	17.4	1000.0	120.000	132.0	H	94.0	90.0	15.1	28.60	46.00
337.090000	18.6	1000.0	120.000	165.0	V	0.0	90.0	16.5	27.40	46.00
528.770000	22.4	1000.0	120.000	332.0	H	0.0	0.0	20.9	23.60	46.00

3.2.3. n-Mode modulation

Diagram No. 3.03_ch11_MCS0_rc_50

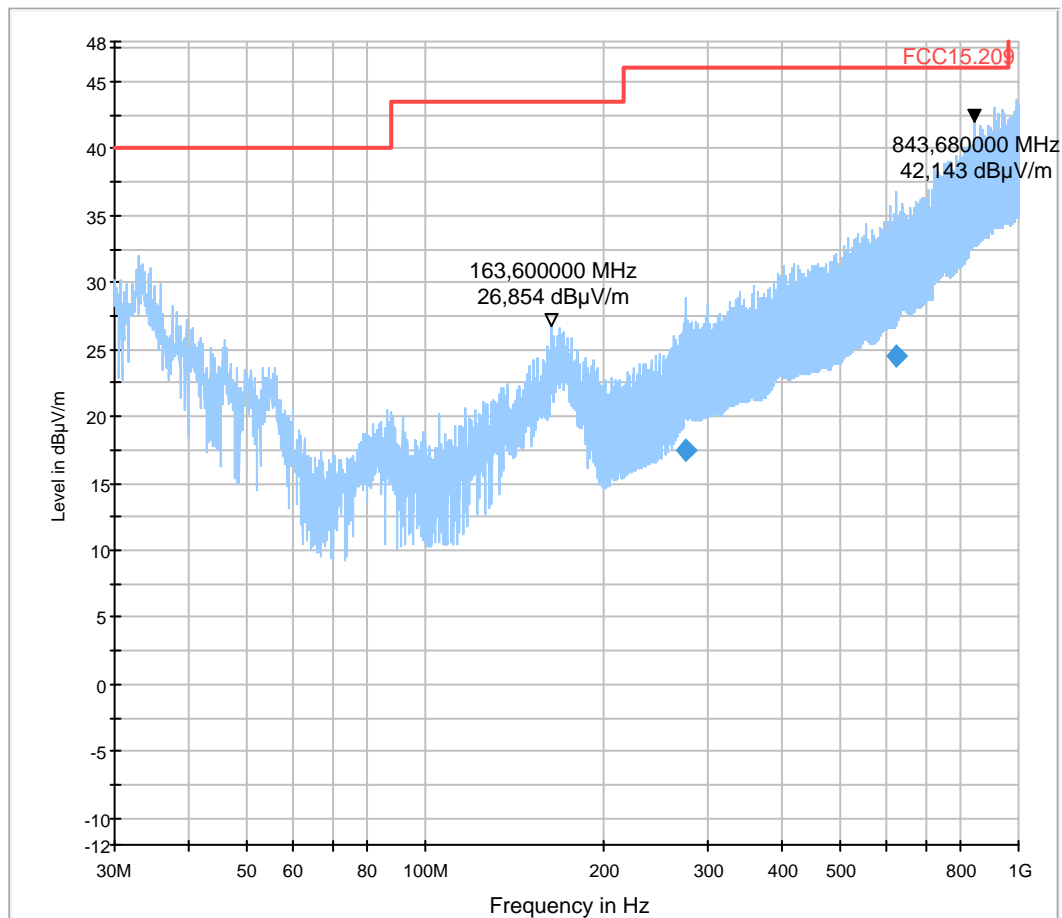
EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EA0D
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC

	05.03.2015 Page 1 of 2
Test description:	Electric Field Strength Measurement
Test site and distance:	Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
Version of Testsoftware:	EMC32 V8.51.0
Distance correction:	not used
Used filter:	not used
Technical Data:	please see page 2 for detailed data of measurement setup
Test specification.:	FCC 15.209; RSS-Gen: Issue 3
Operator:	MFr
Operating conditions:	WLAN B_mode _MCS0-Ch11
Power during tests:	110V 60Hz

01_FCC15.209_hor+vert_kipp



Final Result 1

Frequency (MHz)	Quasi Peak (dB μ V/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dB μ V/m)
274.170000	17.4	1000.0	120.000	210.0	H	328.0	90.0	14.9	28.60	46.00
624.150000	24.5	1000.0	120.000	105.0	V	105.0	90.0	22.7	21.50	46.00

3.3. Field strength measurements 1GHz < f < 18GHz

3.3.1. b-Mode modulation

Diagram No.: 8.01_TX_b-Mode_Ch1_2Mbit

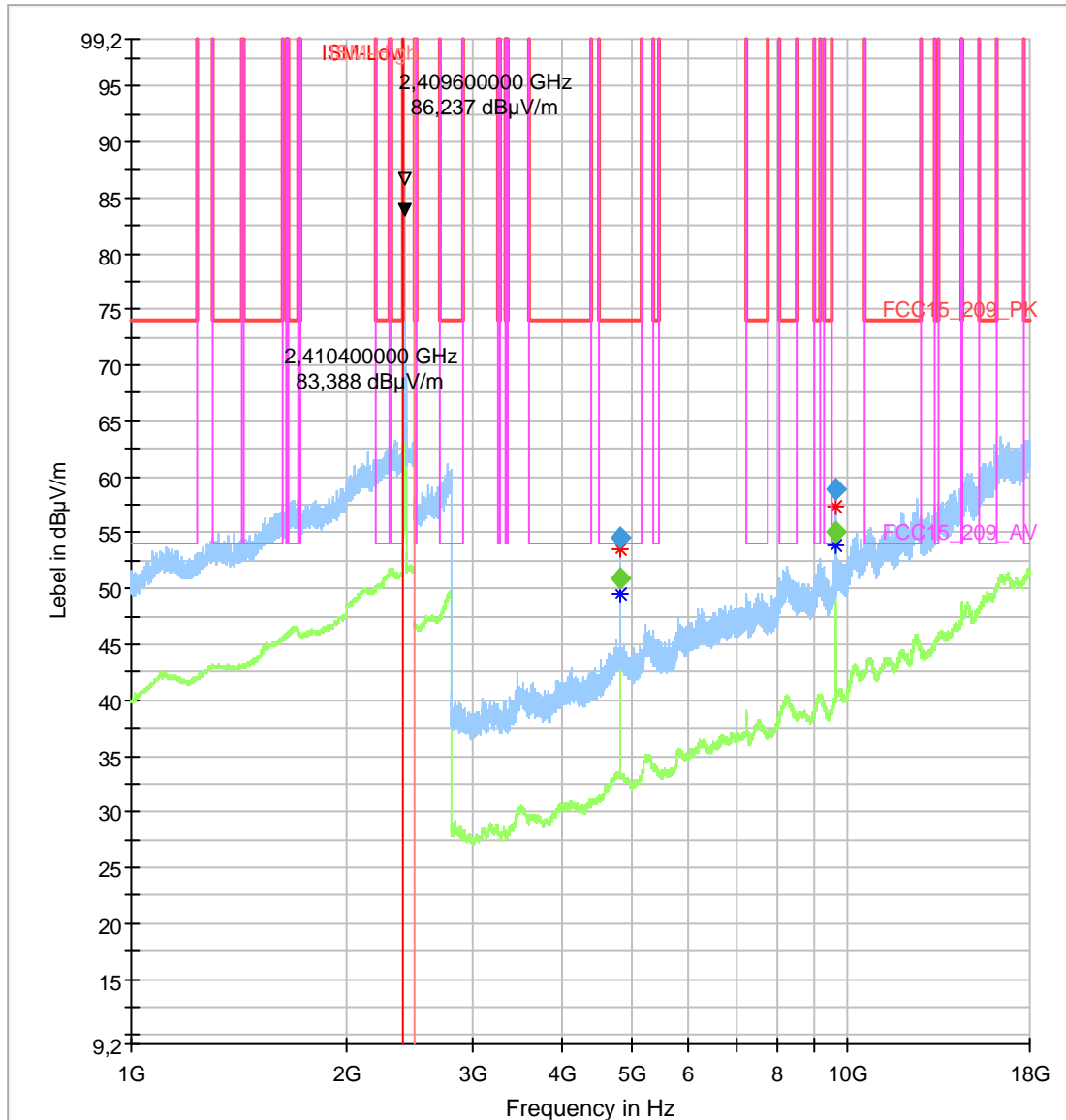
Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo
Comment:	Channel 01; 02 Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Height (cm)	Po l	Azimuth (deg)	Elevation (deg)
4824.000000	---	50.90	54.00	3.10	100.0	1000.000	155.0	H	230.0	90.0
4824.000000	54.60	---	74.00	19.40	100.0	1000.000	155.0	V	332.0	0.0
9648.000000	---	55.10	150.00	94.90	100.0	1000.000	155.0	V	320.0	0.0
9648.000000	58.92	---	150.00	91.08	100.0	1000.000	155.0	V	321.0	0.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Corr .	Comment
4824.000000	4.8	12:47:37 - 27.02.2015
4824.000000	4.8	12:44:46 - 27.02.2015
9648.000000	14.2	12:49:12 - 27.02.2015
9648.000000	14.2	12:46:00 - 27.02.2015

3.3.2. g-Mode modulation

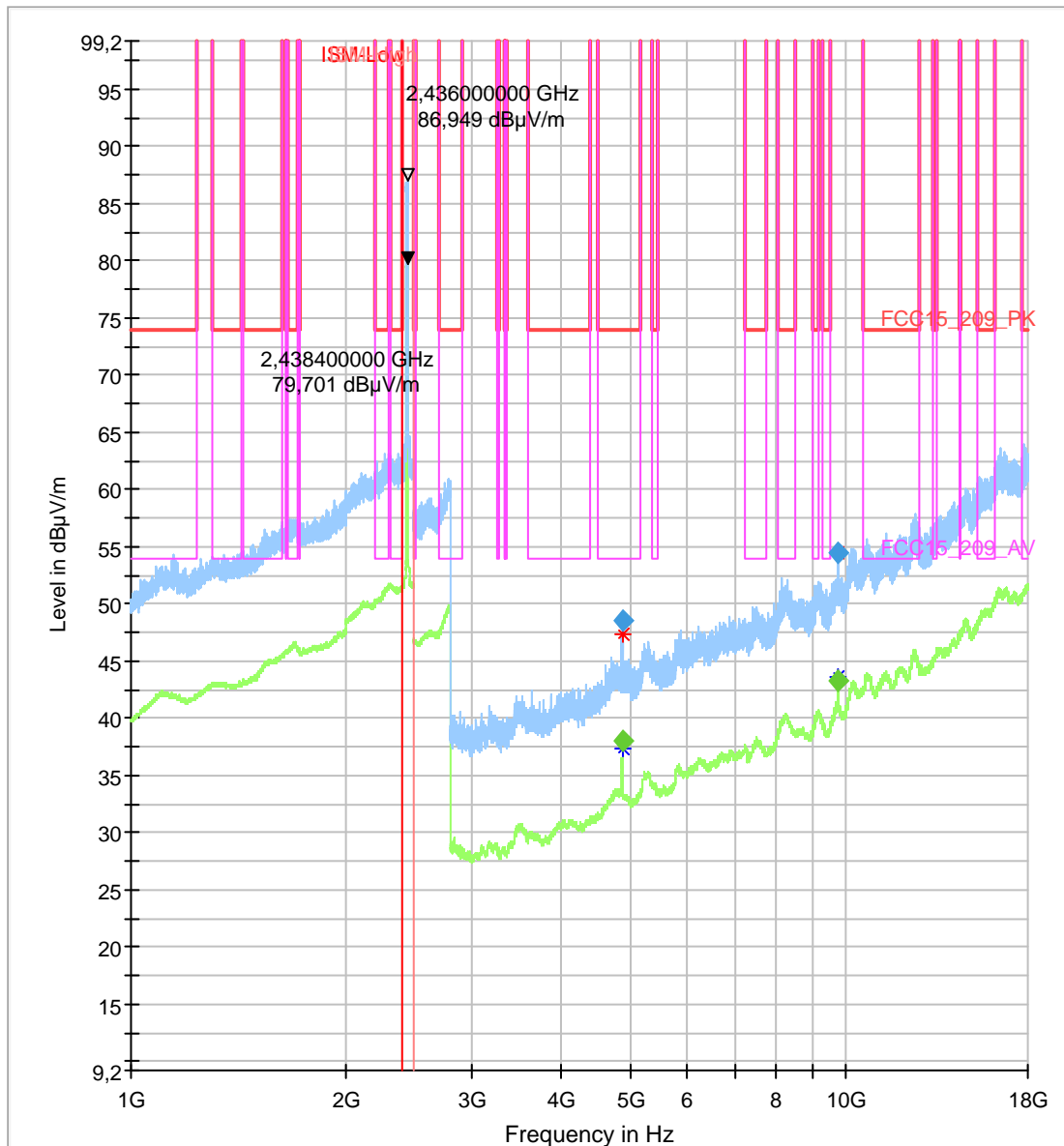
Diagram No.: 8.02_TX_g-Mode_ch6_9Mbit

Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	



Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas . Time	Bandwid th (kHz)	Heigh t (cm)	Po l	Azimut h (deg)	Elevatio n (deg)
4867.760000	48.49	---	74.00	25.51	100.0	1000.000	155.0	H	42.0	0.0
4872.480000	---	37.97	54.00	16.03	100.0	1000.000	155.0	H	265.0	90.0
9748.000000	---	43.30	150.00	106.70	100.0	1000.000	155.0	H	136.0	90.0
9750.520000	54.39	---	150.00	95.61	100.0	1000.000	155.0	V	333.0	0.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Corr .	Comment
4867.760000	4.7	15:20:10 - 25.02.2015
4872.480000	4.7	15:25:43 - 25.02.2015
9748.000000	14.6	15:24:06 - 25.02.2015
9750.520000	14.6	15:22:07 - 25.02.2015

3.3.3. n-Mode modulation

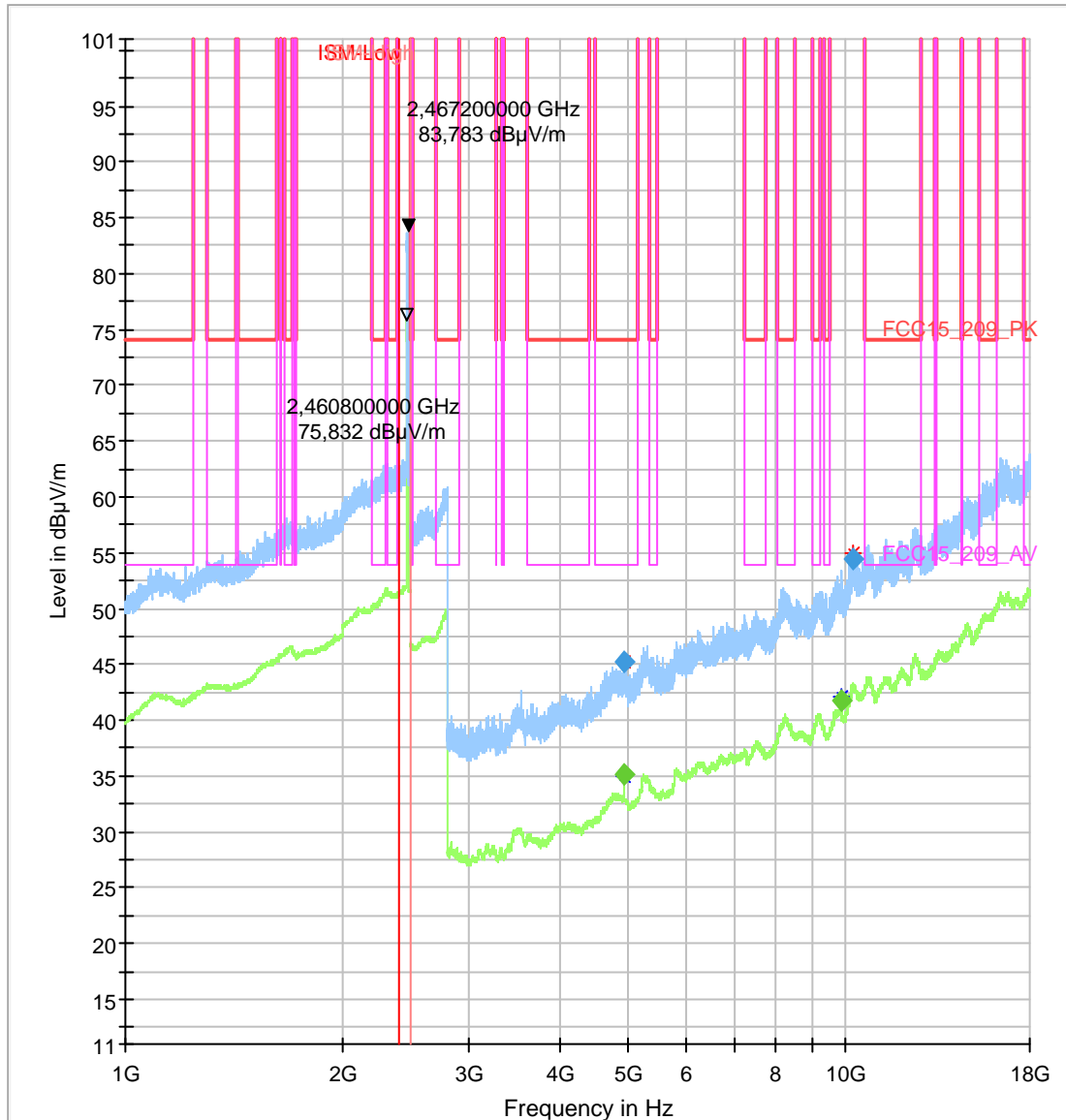
Diagram No:8.03_TX_n-Mode_Ch11_MCS0

Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo
Comments:	Channel 11; MCS0

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
-----	-----
HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas . Time	Bandwidt h (kHz)	Heigh t (cm)	Po l	Azimut h (deg)	Elevatio n (deg)
4920.000000	45.21	---	74.00	28.79	100.0	1000.000	155.0	H	235.0	0.0
4924.000000	---	35.08	54.00	18.92	100.0	1000.000	155.0	H	43.0	0.0
9843.320000	---	41.73	150.00	108.27	100.0	1000.000	155.0	H	108.0	90.0
10225.080000	54.40	---	150.00	95.60	100.0	1000.000	155.0	H	213.0	0.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Corr .	Comment
4920.000000	4.5	13:50:54 - 27.02.2015
4924.000000	4.4	13:52:25 - 27.02.2015
9843.320000	14.4	13:53:45 - 27.02.2015
10225.080000	17.3	13:49:32 - 27.02.2015

3.4. Field strength measurements 18GHz <math>f < 25\text{GHz}</math>

3.4.1. b-Mode modulation

Diagram No.: 8.01b_b-mode_ch01_2Mbit

Common Information

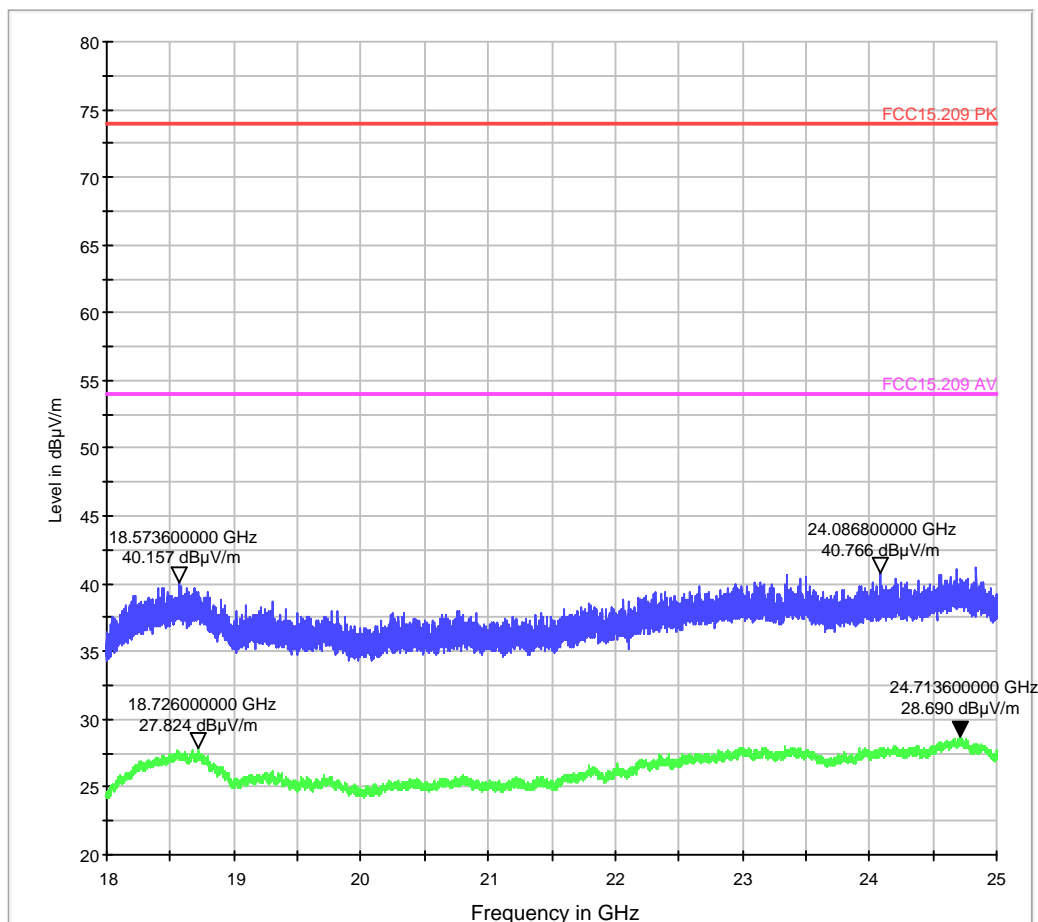
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	MFr
Comment:	ch1, 2Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys
Serial Number:	T26105GL8N
Connected Interfaces:	
Power Supply:	

EMI Scan_18_25GHz_Pre



3.4.2. g-Mode modulation

Diagram No.: 8.02b_g-mode_ch06_9Mbit

Common Information

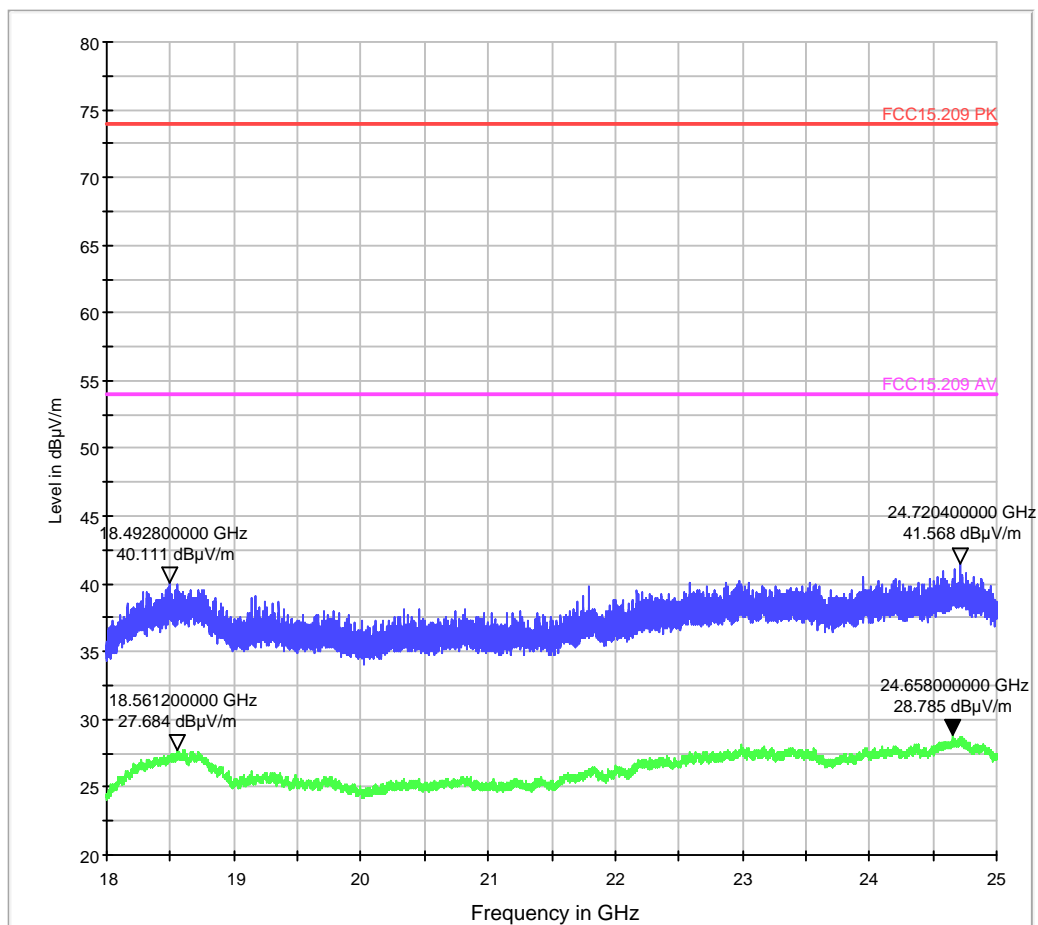
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	MFr
Comment:	ch1, 2Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys
Serial Number:	T26105GL8N
Connected Interfaces:	
Power Supply:	

EMI Scan_18_25GHz_Pre



3.4.3. n-Mode modulation

Diagram No.: 8.03b_n-mode_ch11_MCS0

Common Information

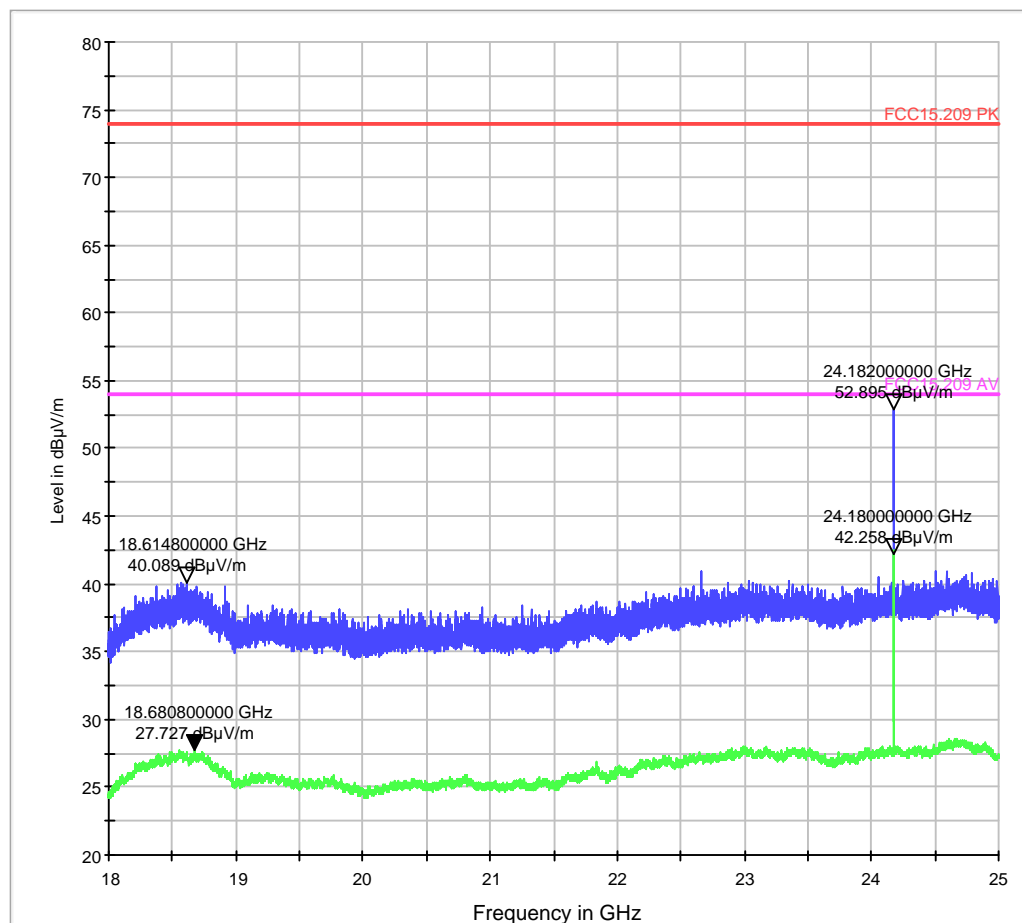
Test Description:	Radiated field strength emission in 1m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.247, 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Distance correction factor	3 to 1m: -10.5 dB applying to measurement results
SW-Version:	EMC32 V8.53.0
Operation mode:	TX mode continuous
Operator Name:	MFr
Comment:	ch11, MCS0

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2015-02-20_eng daily_448_2015-02-20 dev-keys
Serial Number:	T26105GL8N
Connected Interfaces:	
Power Supply:	

EMI Scan_18_25GHz_Pre



4. Radiated band-edge measurements accord. §15.209 & §15.205 (§15.247)

4.1. Channel 1 (left band edge)

b-mode

Diagram No.: 9.01a_BE_Ch1_2 Mbit_gc_58

Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh
Comment:	Channel 1; 2 Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	

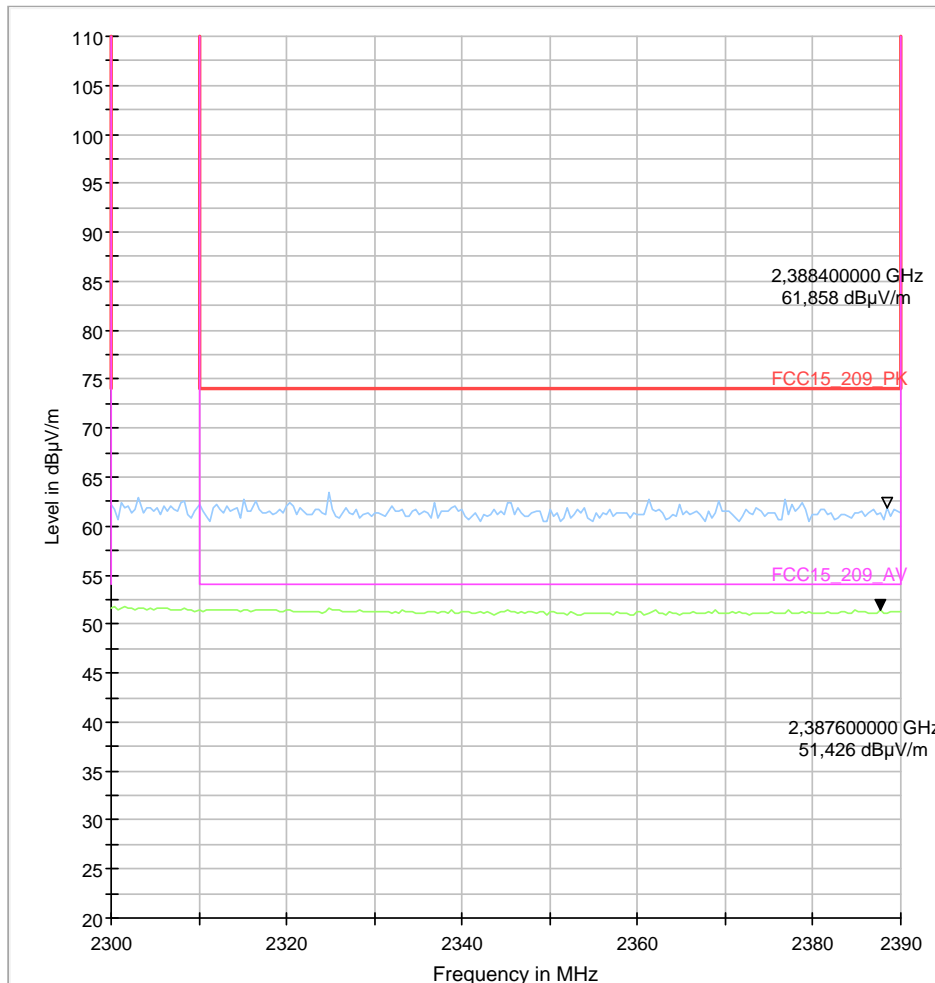


Diagram No.: 9.01b_BE_Ch1_2 Mbit_gc_58

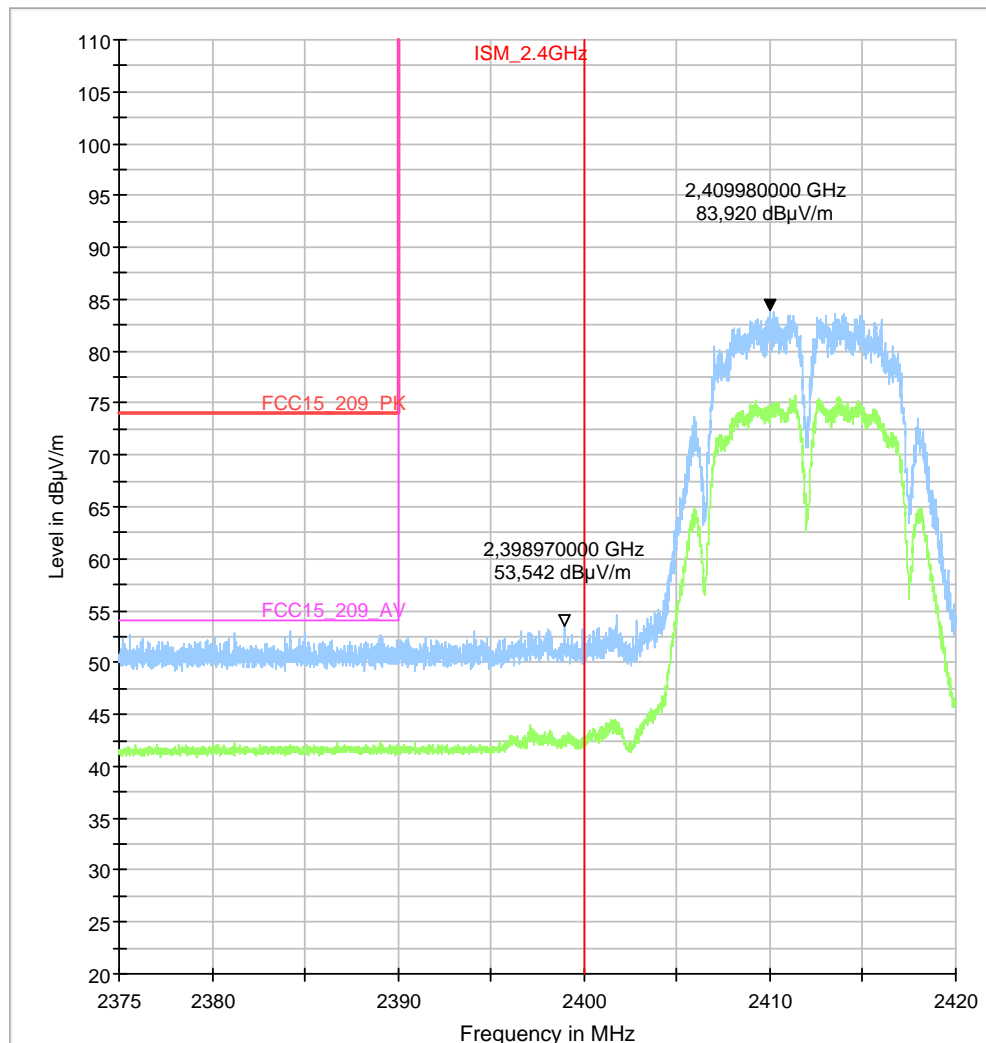
Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh
Comment:	Channel 1; 2 Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	



g-mode

Diagram No.: 9.02a_BE_Ch1_9MBit_gc_50

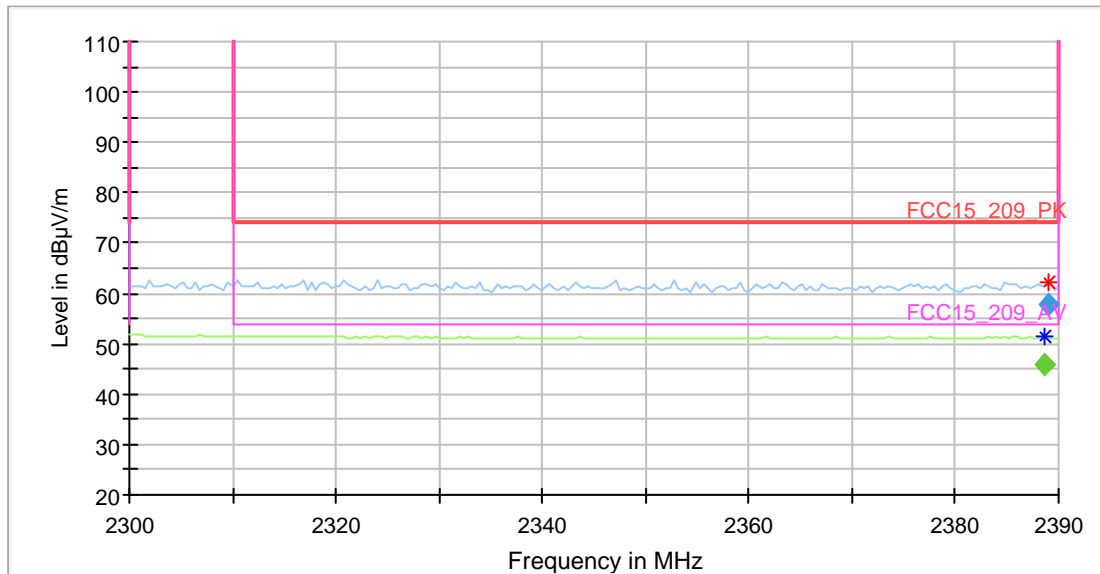
Common Information

Test Description: Radiated Band-Edge Emissions in 3m distance
 Test Site: CETECOM GmbH Essen
 Test Standard: FCC 15.205&15.209 Intentional Radiator
 Antenna polarisation: horizontal/vertical
 Operation mode: TX, continuous
 Operator Name: aho/npe
 Comment: Channel 1, 9Mbit

EUT Information

Manufacturer: Ascom AB
 EuT: SH1-ACAA/PF

 HW Version:
 SW Version: myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
 Serial Number: T26105EB77
 Connected Interfaces: 1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
 Power Supply: 230VAC
 Comments:



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	RMS (dBµV/m)	Limit (dBµV/m)	Margi n (dB)	Meas . Time	Bandwidt h (kHz)	Heigh t (cm)	Po l	Azimut h (deg)	Elevatio n (deg)
2388.720000	---	45.80	54.00	8.20	100.0	1000.000	155.0	H	37.0	0.0
2389.040000	57.66	---	74.00	16.34	100.0	1000.000	155.0	H	281.0	0.0

(continuation of the "Final_Result" table from column 16 ...)

Frequency (MHz)	Corr .	Comment
2388.720000	35.5	08:40:04 - 25.02.2015
2389.040000	35.5	08:38:38 - 25.02.2015

Diagram No.: 9.02b_BE_Ch1_9MBit_gc_50

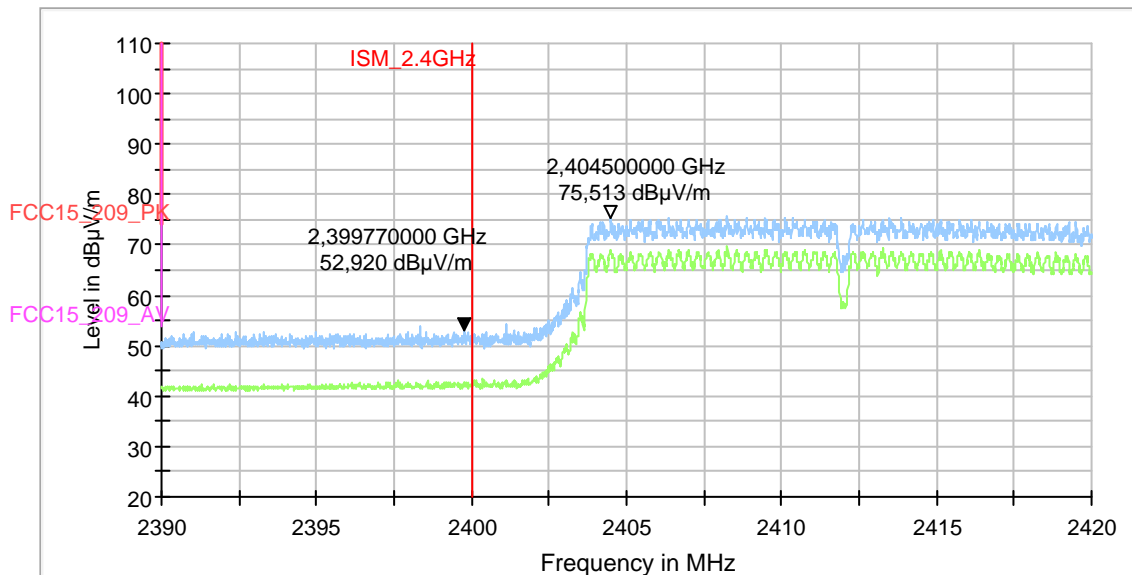
Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	Lor
Comment:	Channel no. low/high

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	



n-mode

Diagram No.: 9.03a_BE_Ch1_MCS0_gc_50

Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh
Comment:	Channel 1; MCS0; QPSK

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF
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HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	

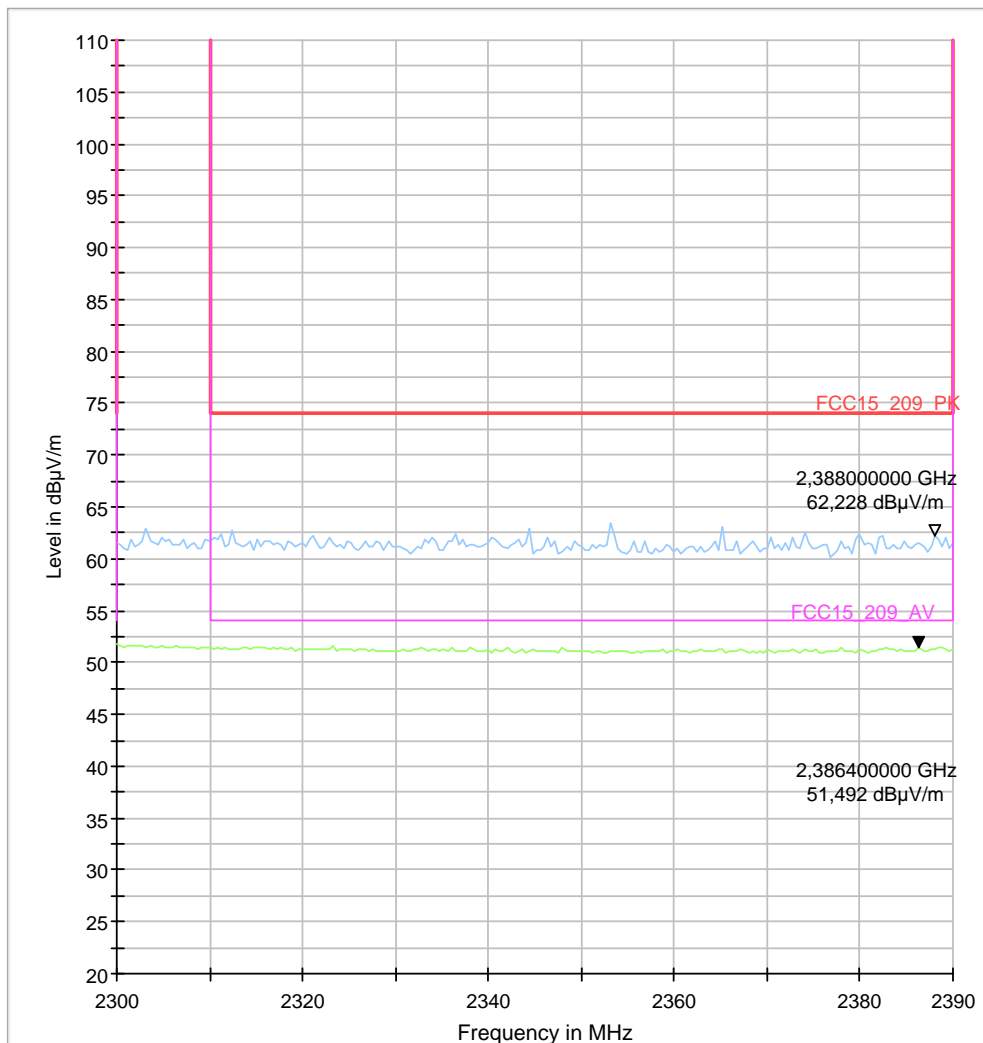


Diagram No.: 9.03b_BE_Ch1_MCS0_gc_50

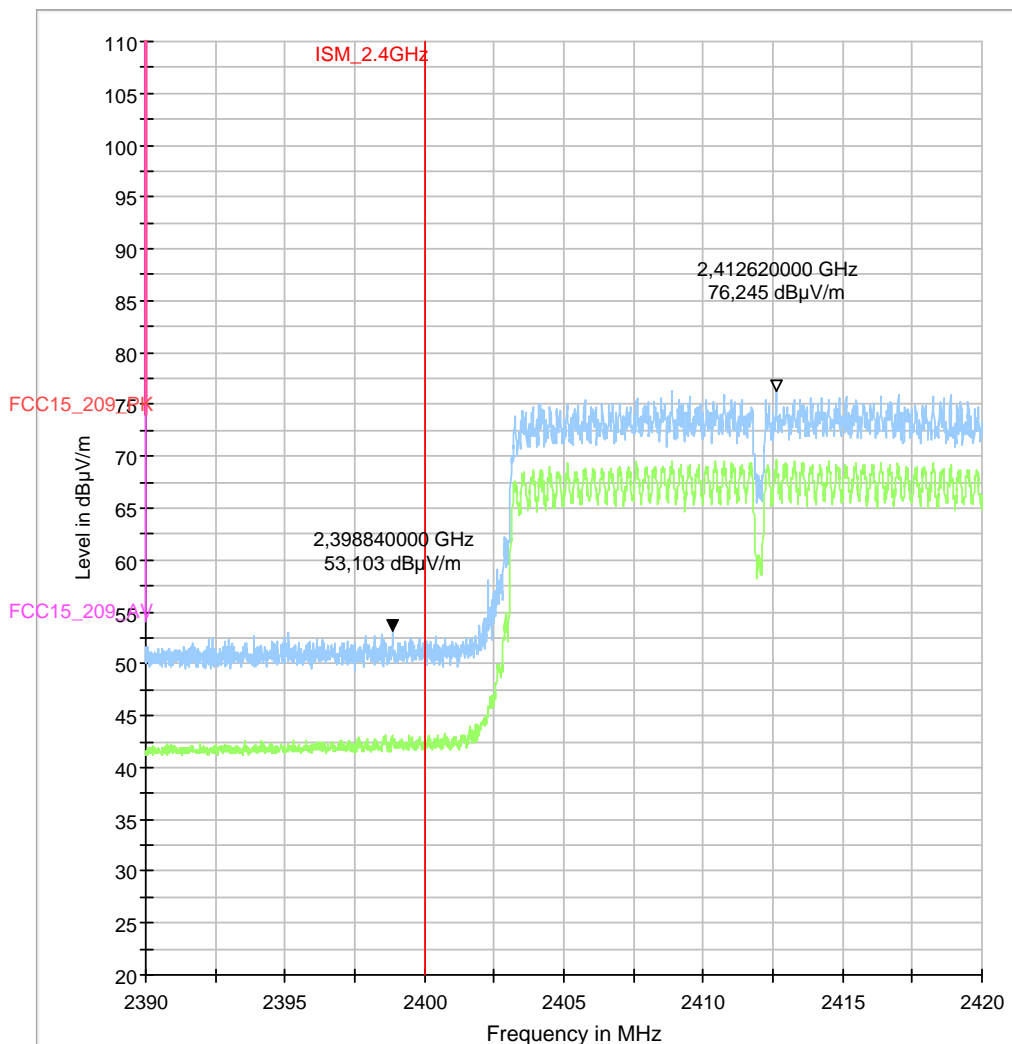
Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh
Comment:	Channel 1; MCS0; QPSK

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	230VAC
Comments:	



4.2. Channel 11 (right band edge)

b-mode

Diagram No.: 9.01c_BE_Ch11_2 Mbit_gc_58

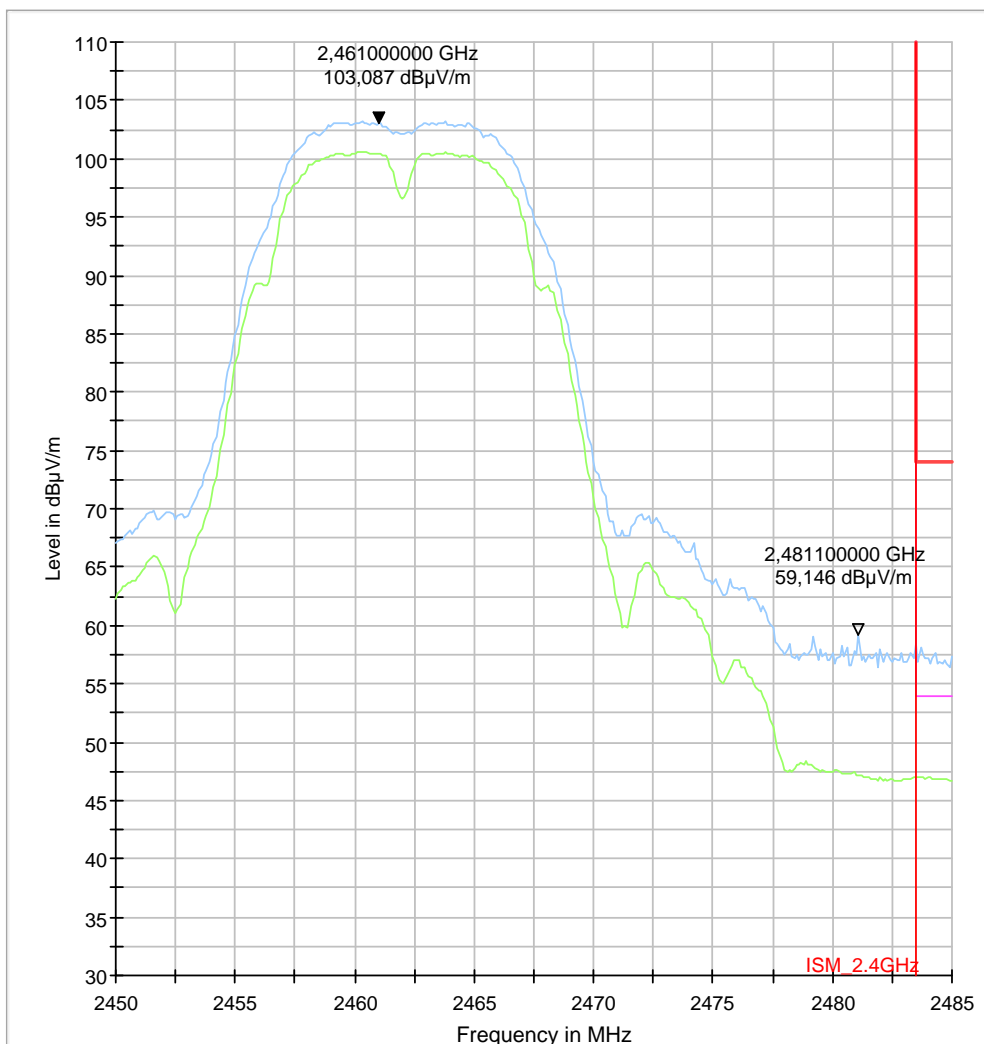
Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh
Comment:	Channel 11; 2 Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	



g-mode

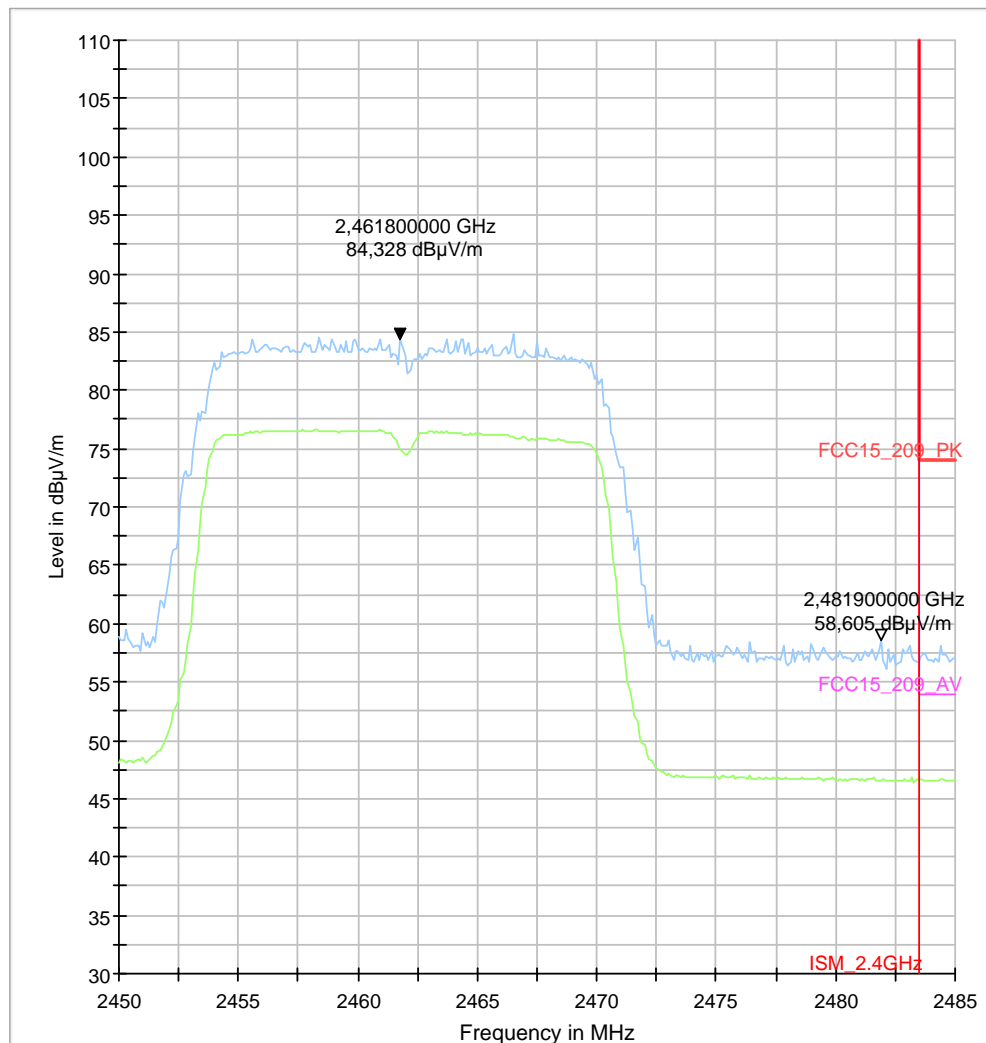
Diagram No.: 9.02c_BE_Ch11_9 Mbit_gc_50**Common Information**

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	AHo/YZh
Comment:	Channel 11; 9 Mbit

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	



n-mode

Diagram No.: 9.03c_BE_Ch11_6MBit_gc_50

Common Information

Test Description:	Radiated Band-Edge Emissions in 3m distance
Test Site:	CETECOM GmbH Essen
Test Standard:	FCC 15.205&15.209 Intentional Radiator
Antenna polarisation:	horizontal/vertical
Operation mode:	TX, continuous
Operator Name:	Lor
Comment:	Channel no. low/high

EUT Information

Manufacturer:	Ascom AB
EuT:	SH1-ACAA/PF

HW Version:	
SW Version:	myco-eng 4.4.2 daily_2014-12-11_eng daily_379_214-12-11 dev-keys
Serial Number:	T26105EB77
Connected Interfaces:	1m USB cable + USB Charger (UNIFIVE Model:UBX305-0510)
Power Supply:	110VAC
Comments:	

