Full

TEST REPORT

No. I18D00022-SRD04

For

Client : Datalogic S.r.l.

Production : Smartphone

Model Name : MEMOR 10

FCC ID : U4GDL35US

IC ID: 3862E-DL35US

Hardware Version: V00 (US)

Software Version: 0.02.06D.20180716-userdebug-customer1

Issued date: 2018-11-14

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of ECIT Shanghai.

Test Laboratory:

ECIT Shanghai, East China Institute of Telecommunications

Add: 7-8F, G Area, No.668, Beijing East Road, Huangpu District, Shanghai, P. R. China

Tel: (+86)-021-63843300, E-Mail: welcome@ecit.org.cn

Revision Version

Report Number	Revision	Date	Memo
I18D00022-SRD04	00	2018-10-30	Initial creation of test report
I18D00022-SRD04	01	2018-11-14	Second creation of test report

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1. Test Laboratory

1.1. Testing Location

Company Name:	ECIT Shanghai, East China Institute of Telecommunications
Address:	7-8F, G Area, No. 668, Beijing East Road, Huangpu District, Shanghai, P. R. China
Postal Code:	200001
Telephone:	(+86)-021-63843300
Fax:	(+86)-021-63843301
FCC registration No	958356

1.2. Testing Environment

Normal Temperature:	15-35℃
Extreme Temperature:	-30/+50℃
Relative Humidity:	20-75%

1.3. Project data

Project Leader:	Yu Anlu
Testing Start Date:	2018-07-13
Testing End Date:	2018-10-22

1.4. Signature

Yang Dejun
(Prepared this test report)

Shi Hongqi
(Reviewed this test report)

Zheng Zhongbin
(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Datalogic S.r.l.
Address:	Via San Vitalino no. 13, Calderara di Reno – 40012 (BO) - Italy
Telephone:	+39 051 314 72 16
Postcode:	/

2.2. Manufacturer Information

Company Name:	Datalogic S.r.l.
Address:	Via San Vitalino no. 13, Calderara di Reno – 40012 (BO) - Italy
Telephone:	+39 051 314 72 16
Postcode:	/

3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1. About EUT

EUT Description	Smartphone
Model name	MEMOR 10
FCC ID	U4GDL35US
IC ID	3862E-DL35US
GSM Frequency Band	GSM850/GSM900/GSM1800/GSM1900
UMTS Frequency Band	Band Ⅰ/Band Ⅱ/BandⅣ/Band Ⅴ/BandⅧ
CDMA Frequency Band	BC0/BC1
LTE Frequency Band	LTE 2/4/5/7/12/13/17/25/26
Additional Communication Function	BT4.2,BLE; WiFi 802.11a,b,g,n,ac;NFC,GPS; GLONASS; WLC, Beidou.
Extreme Temperature	-30/+50℃
Nominal Voltage	3.8V
Extreme High Voltage	4.35V
Extreme Low Voltage	3.6V

Note: Photographs of EUT are shown in ANNEX A of this test report.

3.2. Internal Identification of EUT used during the test

EUT ID*	Model Name	SN or IMEI	HW Version	SW Version	Date of receipt
N14	MEMOR 10	359737090202228	V00 (US)	0.02.06D.20180716-userdebug-customer1	2018-07-04
N11	MEMOR 10	359737090203739	V00 (US)	0.02.06D.20180716-userdebug-customer1	2018-07-04

*EUT ID: is used to identify the test sample in the lab internally.

3.3. Internal Identification of AE used during the test

AE ID*	Description	SN
AE1	RF cable	---
AE2	---	---

*AE ID: is used to identify the test sample in the lab internally.

3.4. Statements

The MEMOR 10, supporting GSM/GPRS/EDGE/WCDMA/LTE/CDMA/BT/BLE/NFC/WLAN, manufactured by Datalogic S.r.l., which is a new product for testing.

ECIT has verified that the compliance of the tested device specified in section 5 of this test report is successfully evaluated according to the procedure and test methods as defined in type certification requirement listed in section 5 of this test report.

4. Reference Documents

4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 24	PERSONAL COMMUNICATIONS SERVICES	2017/10/1
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	2017/10/1
FCC Part 22	PUBLIC MOBILE SERVICES	2017/10/1
ANSI-TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
ANSI C63.4	Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz	2014
RSS-Gen	RSS-Gen —General Requirements for Compliance of Radio Apparatus	2018/4
RSS-132	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz	2013/1
RSS-133	2 GHz Personal Communications Services	2013/10

5. SUMMARY OF TEST RESULTS

Item	Test items	FCC rules	IC rules	result
1	Output Power	2.1046/22.913(a)/24.23	RSS-132 5.4/ RSS-133 6.4	Pass
2	Peak-to-Average	24.232(d)	RSS-132 5.4/ RSS-133 6.4	Pass
3	99%Occupied	2.1049(h)(i)/ 22.917(b)	RSS-Gen 4.6	Pass
4	-26dB Emission	22.917(b)/§24.238(b)	RSS-Gen 4.6	Pass
5	Band Edge at antenna terminals	22.917(a)/24.238(a)	RSS-132 5.5/ RSS-133 6.5	Pass
6	Frequency stability	2.1055/24.235	RSS-132 5.3/ RSS-133 6.3	Pass
7	Conducted Spurious mission	2.1053/22.917(a)/24.23	RSS-132 5.5/ RSS-133 6.5	Pass
8	Emission Limit	2.1051/22.917/24.238/	RSS-132 5.5/ RSS-133 6.5	Pass

6. Test Equipment Utilized

Climate chamber

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Cal.interval
1	Climate chamber	SH-641	92012011	ESPEC	2017-12-25	2 Year

Radiated emission test system

The test equipment and ancillaries used are as follows.

No.	Equipment	Model	Serial Number	Manufacturer	Calibration date	Cal.interval
1	Universal Radio Communication Tester	CMU200	123123	R&S	2018-05-11	1 Year
2	EMI Test Receiver	ESU40	100307	R&S	2018-05-11	1 Year
3	TRILOG Broadband Antenna	VULB9163	VULB9163-515	Schwarzbeck	2017-02-25	3 Year
4	Double-ridged Waveguide Antenna	ETS-3117	00135890	ETS	2017-01-11	3 Year
5	2-Line V-Network	ENV216	101380	R&S	2018-05-11	1 Year
6	Substitution Antenna	ETS-3117	00135890	ETS	2017-01-11	3 Year
7	RF Signal Generator	SMF100A	102314	R&S	2018-05-11	1 Year
8	Substitution Antenna	VUBA9117	9117-266	Schwarzbeck	2017-11-18	3 Year
9	Amplifier	SCU08	10146	R&S	2018-05-11	1 Year

Conducted test system

No.	Name	Type	SN	Manufacture	Calibration date	Cal.interval
1	Spectrum Analyzer	FSQ26	101096	R&S	2018-05-11	1 Year
2	Universal Radio Communicat	CMU200	123124	R&S	2018-05-11	1 Year
3	DC Power Supply	ZUP60-14	LOC-220Z006-0007	TDL-Lambda	2018-05-11	1 Year

7. Test Environment

Shielding Room1 (6.0 meters×3.0 meters×2.7 meters) did not exceed following limits along the conducted RF performance testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. = 20 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Ground system resistance	< 0.5 Ω

Control room did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. =25 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω

Fully-anechoic chamber1 (6.9 meters×10.9 meters×5.4 meters) did not exceed following limits along the EMC testing:

Temperature	Min. = 15 ℃, Max. = 35 ℃
Relative humidity	Min. = 25 %, Max. = 75 %
Shielding effectiveness	> 100 dB
Electrical insulation	> 10 kΩ
Ground system resistance	< 0.5 Ω
VSWR	Between 0 and 6 dB, from 1GHz to 18GHz
Site Attenuation Deviation	Between -4 and 4 dB,30MHz to 1GHz
Uniformity of field strength	Between 0 and 6 dB, from 80MHz to 3000 MHz

8. Measurement Uncertainty

Measurement uncertainty for all the testing in this report are within the limit specified in ECIT documents. The detailed measurement uncertainty to see the column, k=2

Measurement Items	Range	Confidence Level	Calculated Uncertainty
Maximum Peak Output Power	30MHz-3600MHz	95%	±0.88db
EBW and VBW	30MHz-3600MHz	95%	±0.031MHz
Transmitter Spurious Emission-Conducted	9KHz-10000MHz	95%	±4.56db
Transmitter Spurious Emission-Conducted	10000 MHz -40000MHz	95%	±5.34db
Transmitter Spurious Emission-Radiated	9KHz-30MHz	95%	±5.66db
Transmitter Spurious Emission-Radiated	30MHz-1000MHz	95%	±4.98db
Transmitter Spurious Emission-Radiated	1000MHz -18000MHz	95%	±5.06db
Transmitter Spurious Emission-Radiated	18000MHz -40000MHz	95%	±5.20db
Frequency stability	1MHz-16GHz	95%	10KHz

ANNEX A. MEASUREMENT RESULTS

ANNEX A.1. OUTPUT POWER

A.1.1. Summary

During the process of testing, the EUT was controlled Rhode & Schwarz Digital Radio. Communication tester (CMU-200) to ensure max power transmission and proper modulation. This result contains peak output power and EIRP measurements for the EUT. In all cases, output power is within the specified limits.

A.1.2. Conducted

A.1.2.1. Method of Measurements

Method of measurements please refer to KDB971168 D01 v03 clause 5.
The EUT was set up for the max output power with pseudo random data modulation.
The power was measured with Rhode & Schwarz Spectrum Analyzer FSQ(peak).
These measurements were done at 3 frequencies, 1850.2 MHz, 1880.0MHz and 1909.8MHz for PCS1900 band; 824.2MHz, 836.6MHz and 848.8MHz for GSM850 band. (bottom, middle and top of operational frequency range).
These measurements were done at 3 frequencies, 1852.4 MHz, 1880.0MHz and 1907.6MHz for WCDMA Band II; 826.4MHz, 836.6MHz and 846.6MHz for WCDMA Band V. (bottom, middle and top of operational frequency range).

A.1.2.2 Test procedures:

1. The transmitter output port was connected to base station.
2. Set the EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure the maximum burst average power for GSM and maximum average power for other modulation signal.

A.1.2.3 Limit:

22.913(a) Mobile stations are limited to 7watts.
24.232(c) Mobile and portable stations are limited to 2 watts.

A.1.2.4 Test Procedure:

The transmitter output power was connected to calibrated attenuator, the other end of which was connected to signal analyzer. Transmitter output power was read off the power in dBm. The power outputs at the transmitter antenna port was determined by adding the value of attenuator to the signal analyzer reading.

A.1.2.5 GSM Test Condition:

RBW	VBW	Sweep time	Span

3MHz	10MHz	Auto	50MHz

A.1.2.6 WCDMA Test Condition:

RBW	VBW	Sweep time	Span
10MHz	30MHz	Auto	50MHz

A.1.2.7 Measurement results:

GSM 850 (GMSK)		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 189/836.4	33.9	33.77
Low 128/824.2	33.74	33.59
High 251/848.8	33.87	33.74
GPRS 850 (GMSK 1 Slot)		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 189/836.4	33.93	33.79
Low 128/824.2	33.76	33.63
High 251/848.8	33.92	33.8
EDGE 850 (8PSK 1 Slot)		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 189/836.4	30.34	27.4
Low 128/824.2	30.72	27.63
High 251/848.8	30.75	27.65

GSM 1900(GMSK)		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 661/1880	30.9	30.74
Low 512/1850.2	31.32	31.21
High 810/1909.8	30.54	30.41

GPRS 1900 (GMSK 1 Slot)		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 661/1880	30.95	30.82
Low 512/1850.2	31.38	31.26
High 810/1909.8	30.6	30.47
EDGE 1900 (8PSK 1 Slot)		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 661/1880	29.62	26.96
Low 512/1850.2	30.05	27.4
High 810/1909.8	29.34	26.61

WCDMA II		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 9400 /1880	26.45	23.4
Low 9262/1852.4	26.37	23.38
High 9538/1907.6	26.73	23.52
WCDMA BAND IV		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 1413 /1732.6	26.42	23.6
Low 1312/1712.4	26.37	23.7
High 1513/1752.6	26.61	23.94
WCDMA BAND V		
Channel/fc(MHz)	Peak power (dBm)	AV power (dBm)
Mid 4183/836.6	26.95	23.59
Low 4132/826.4	27.21	23.71
High 4233/846.6	26.54	23.24

Conclusion: PASS

ANNEX A.2. Peak-to-Average Power Ratio

Method of test measurements please refer to KDB971168 D01 v03 clause 5.7.

A.2.1 PAPR Limit

The peak-to-average power ratio (PAPR) of the transmission may not exceed 13dB

A.2.2 Test procedures

1. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
2.
   1) Select the spectrum analyzer CCDF function.
   2) Set RBW⩾signal's occupied bandwidth.
   3) Set the number of counts to a value that stabilizes the measured CCDF cure;
   4) Sweep time ⩾ 1s.
3. Record the maximum PAPR level associated with a probability of 0.1%.

A.2.3 Test results:

GSM850			
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
PAPR(dB)	9.71	10.67	8.04
GPRS850			
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
PAPR(dB)	9.45	10.39	9.56
EDGE850			
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
PAPR(dB)	8.47	10.43	9.54

GSM1900			
Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8

PAPR(dB)	9.40	10.35	8.43
GPRS1900			
Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8
PAPR(dB)	8.89	10.01	9.32
EDGE1900			
Channel	512	661	810
Frequency (MHz)	1850.2	1880	1909.8
PAPR(dB)	8.75	9.94	9.01

WCDMA Band II			
Channel	9262	9400	9538
Frequency (MHz)	1852.4	1880	1907.6
PAPR(dB)	5.78	5.89	5.23
WCDMA Band IV			
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
PAPR(dB)	5.71	5.08	5.53
WCDMA Band V			
Channel	4132	4183	4233
Frequency (MHz)	826.4	836.4	846.6
PAPR(dB)	5.33	5.77	5.04

Conclusion: PASS

ANNEX A.3. Occupied Bandwidth

Method of test please refer to KDB971168 D01 v03 clause 4.0.

A.3.1. Occupied Bandwidth

Similar to conducted emissions; occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of GSM850, PCS1900, WCDMA BANDII and WCDMA BANDV.

A.3.2 Test Procedure:

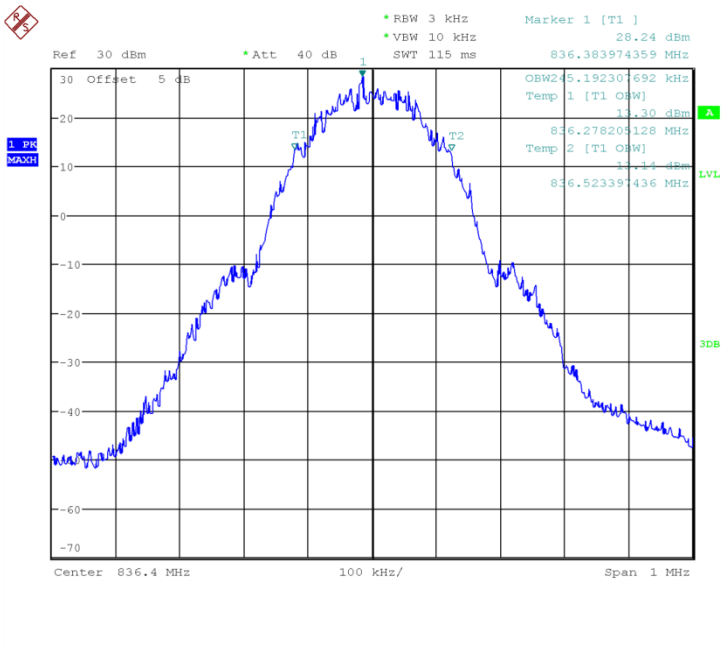
1. The EUT output RF connector was connected with a short cable to the signal analyzer.
2. RBW was set to about 1% of emission BW, VBW >= 3 times RBW,.
3. 99% bandwidth were measured, the occupied bandwidth is delta frequency between the two points where the display line intersects the signal trace.

A.3.3 Test result:

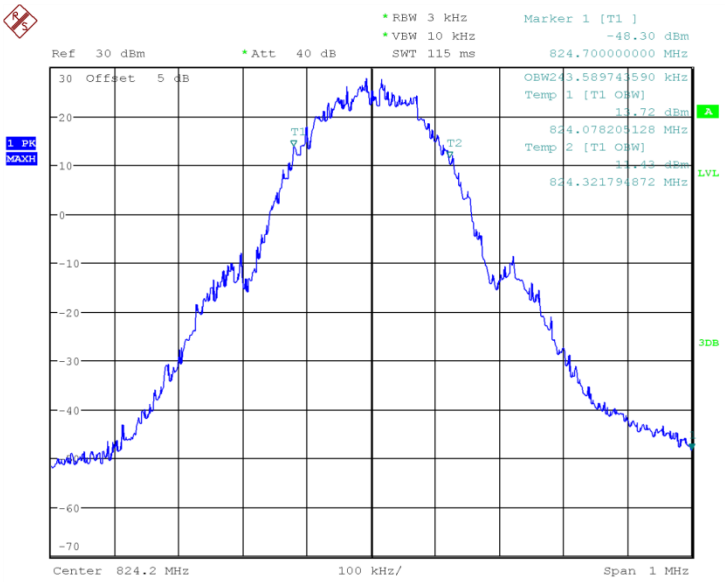
GSM850		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(KHz)
Mid 189	836.4	245.192
Low 128	824.2	243.59
High 251	848.8	245.192
GPRS850		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(KHz)
Mid 189	836.4	243.59
Low 128	824.2	243.59
High 251	848.8	246.795
EDGE850		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(KHz)
Mid 189	836.4	246.795
Low 128	824.2	246.795
High 251	848.8	253.205

Conclusion: PASS

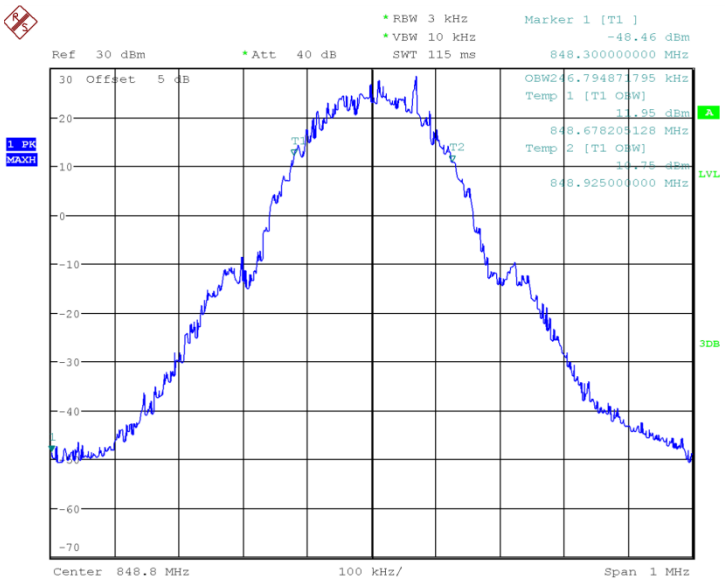
GSM 850



Channel 189-Occupied Bandwidth (99%)

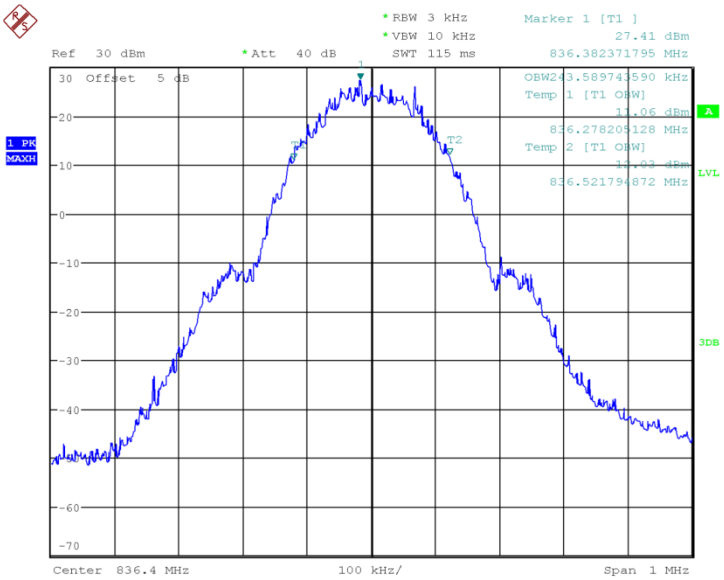


Channel 128-Occupied Bandwidth (99%)

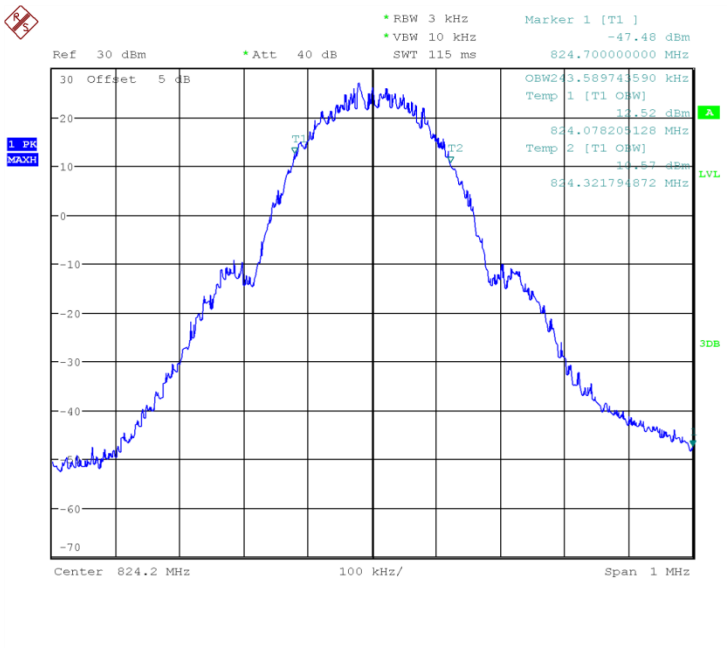


Channel 251-Occupied Bandwidth (99%)

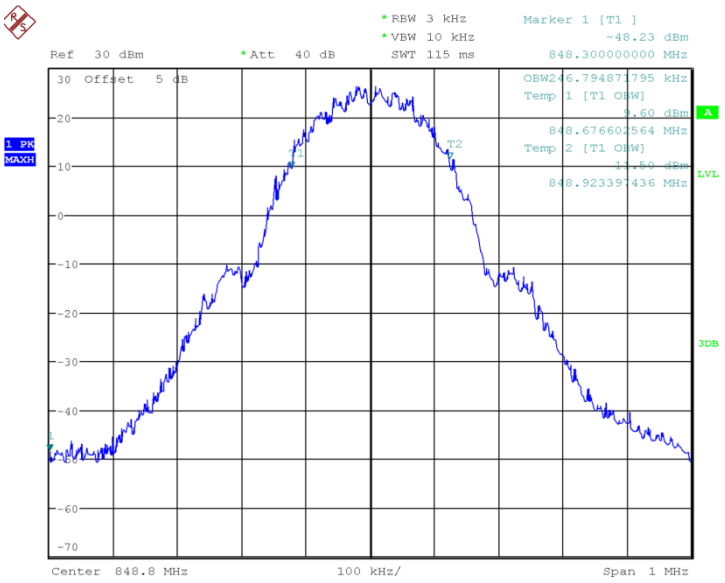
GPRS 850



Channel 189-Occupied Bandwidth (99%)

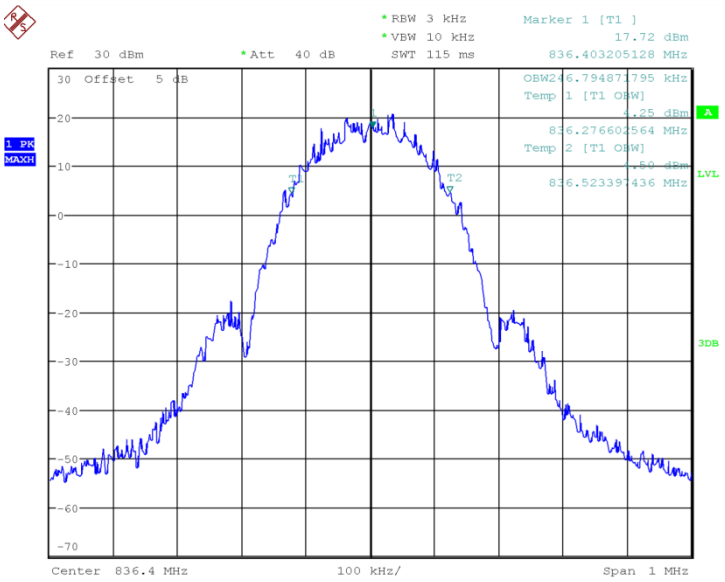


Channel 128-Occupied Bandwidth (99%)

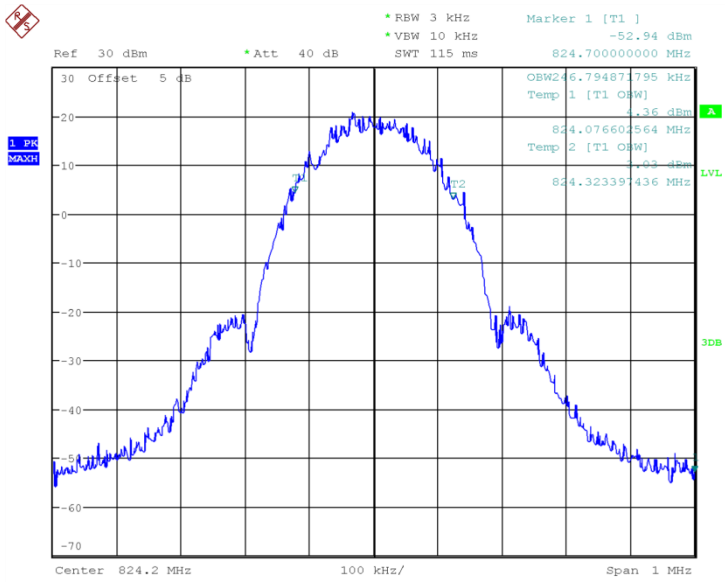


Channel 251-Occupied Bandwidth (99%)

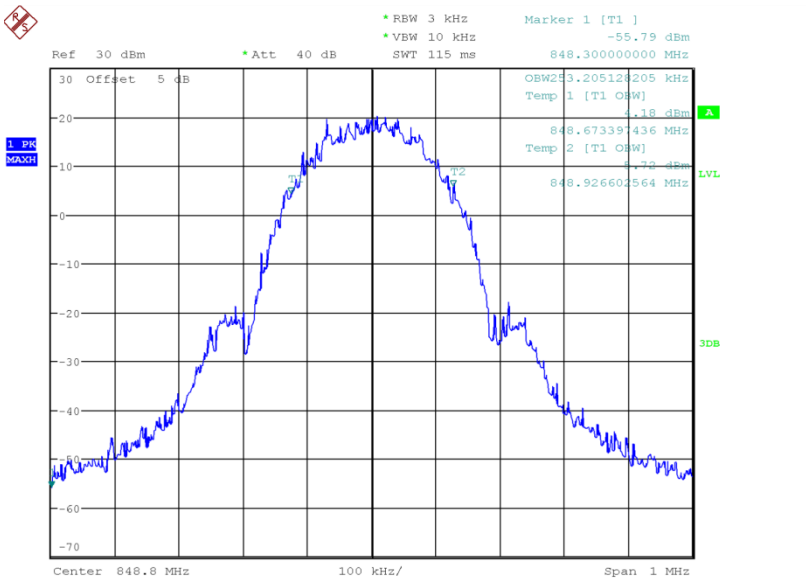
EDGE 850



Channel 189-Occupied Bandwidth (99%)



Channel 128-Occupied Bandwidth (99%)

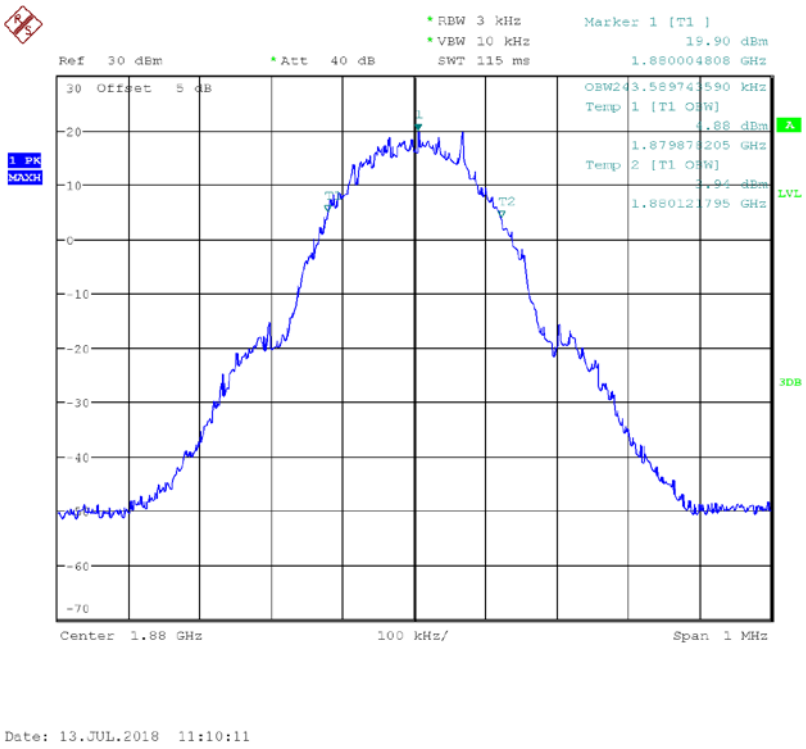


Channel 251-Occupied Bandwidth (99%)

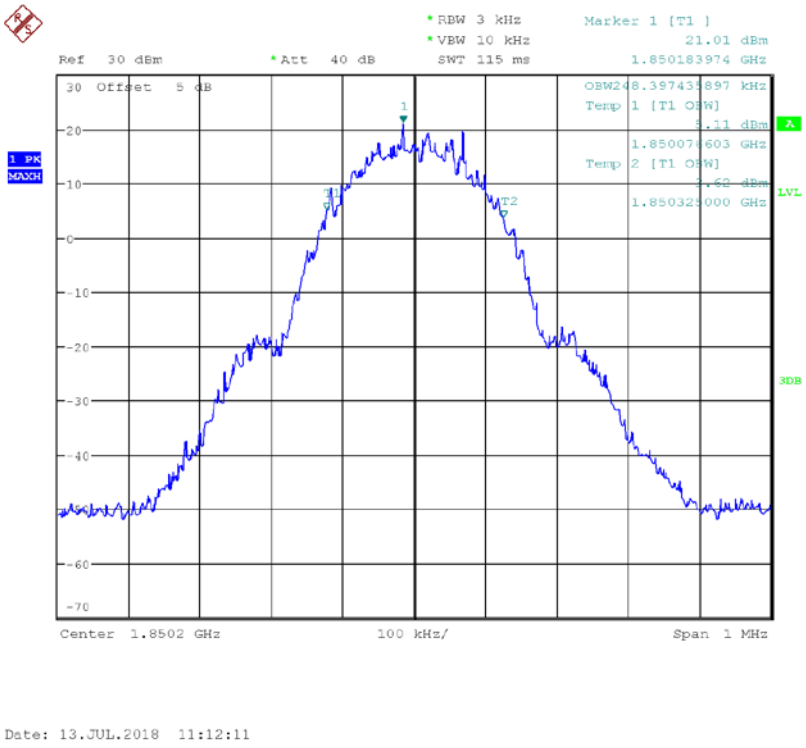
GSM1900		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(KHz)
Mid 661	1880	243.589
Low 512	1850.2	248.397
High 810	1909.8	243.589
GPRS1900		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(KHz)
Mid 661	1880	246.795
Low 512	1850.2	243.589
High 810	1909.8	246.794
EDGE1900		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(KHz)
Mid 661	1880	251.602
Low 512	1850.2	250.000
High 810	1909.8	251.602

Conclusion: PASS

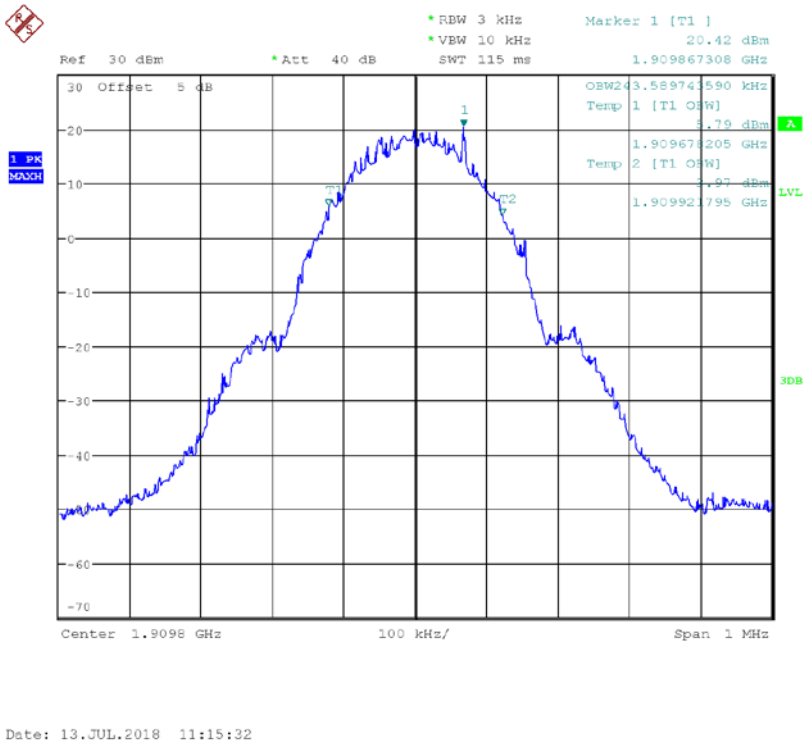
GSM 1900



Channel 661-Occupied Bandwidth

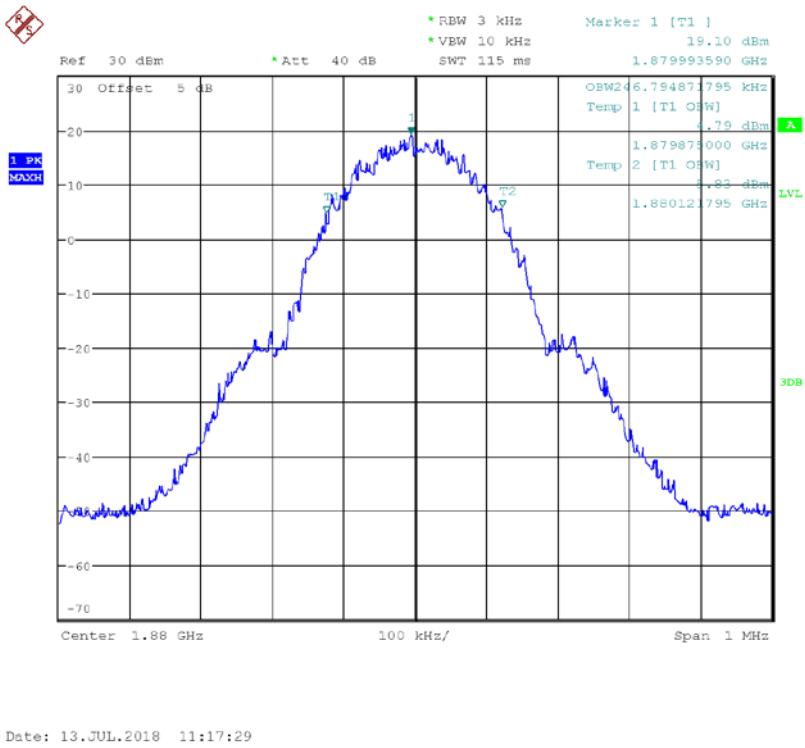


Channel 512-Occupied Bandwidth

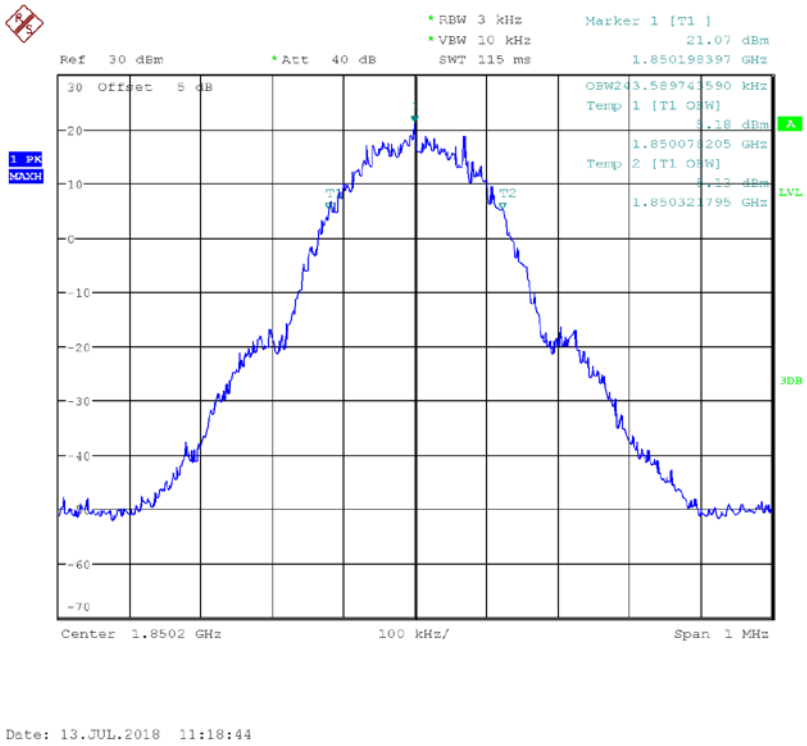


Channel 810-Occupied Bandwidth

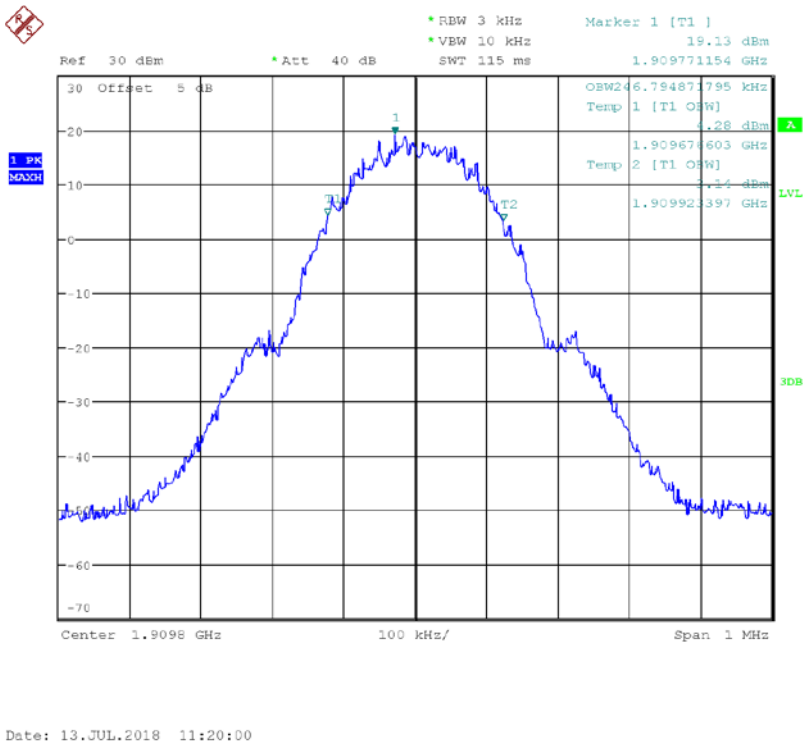
GPRS 1900



Channel 661-Occupied Bandwidth

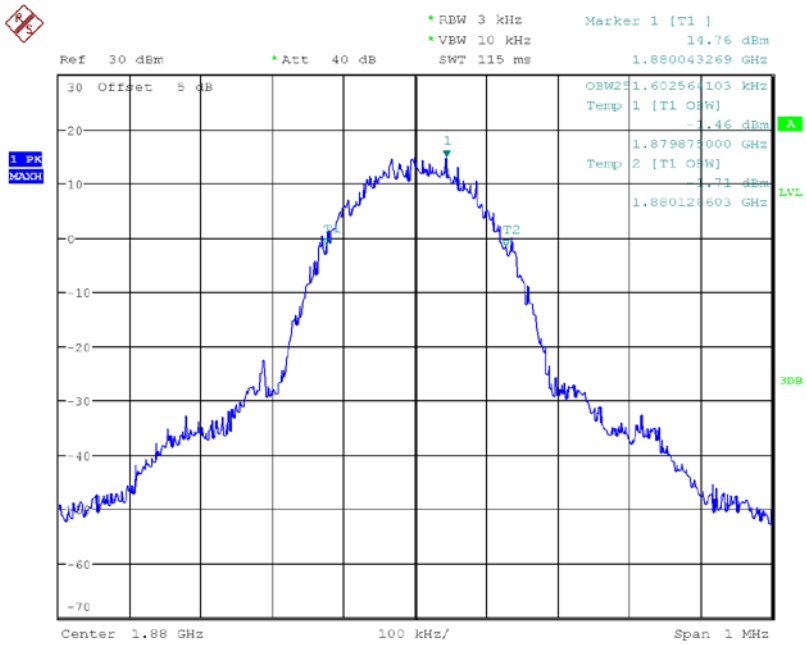


Channel 512-Occupied Bandwidth



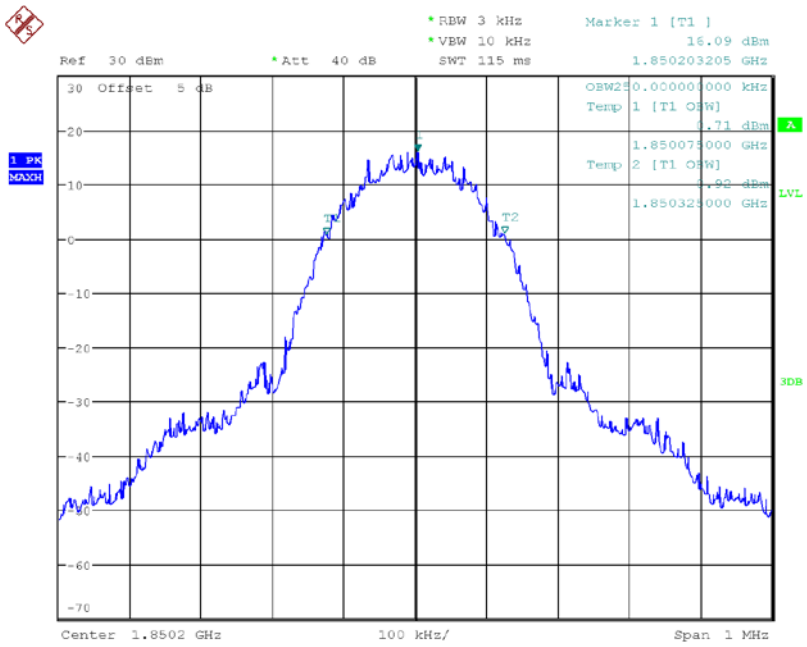
Channel 810-Occupied Bandwidth

EDGE 1900



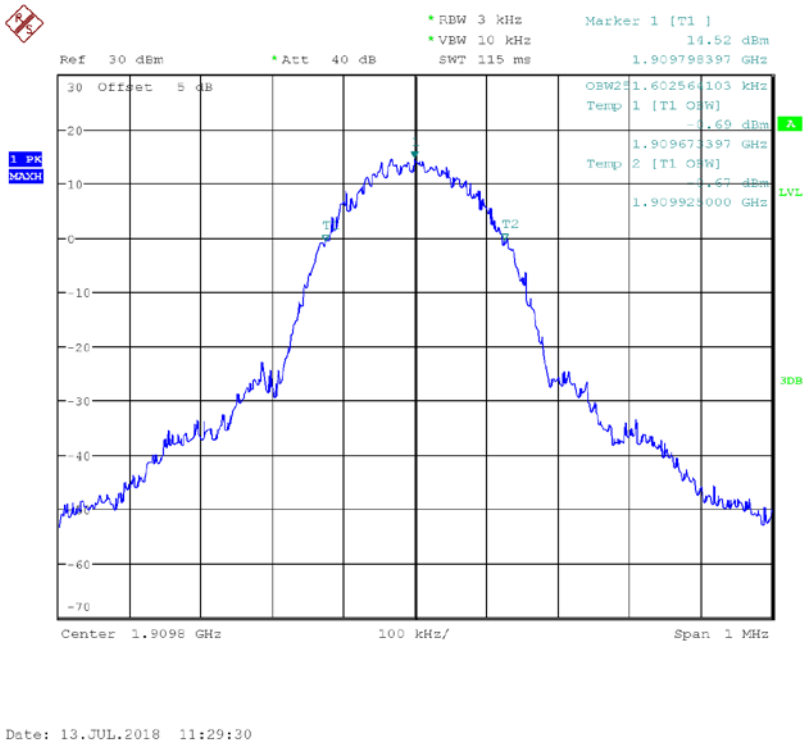
Date: 13.JUL.2018 11:24:59

Channel 661-Occupied Bandwidth



Date: 13.JUL.2018 11:27:01

Channel 512-Occupied Bandwidth

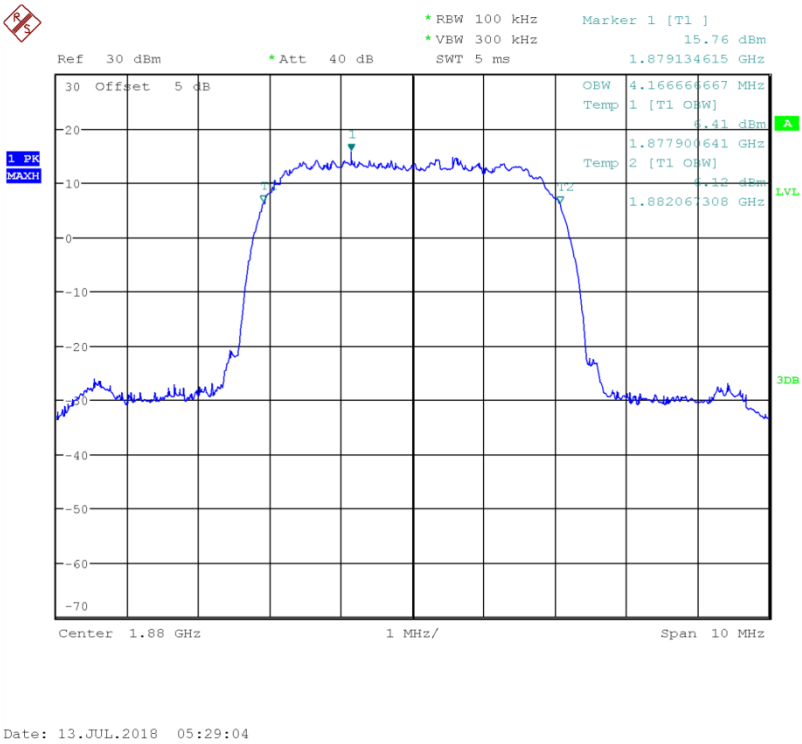


Channel 810-Occupied Bandwidth

WCDMA BAND II		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(MHz)
Mid 9400	1880	4.16
Low 9262	1852.4	4.18
High 9538	1907.6	4.17

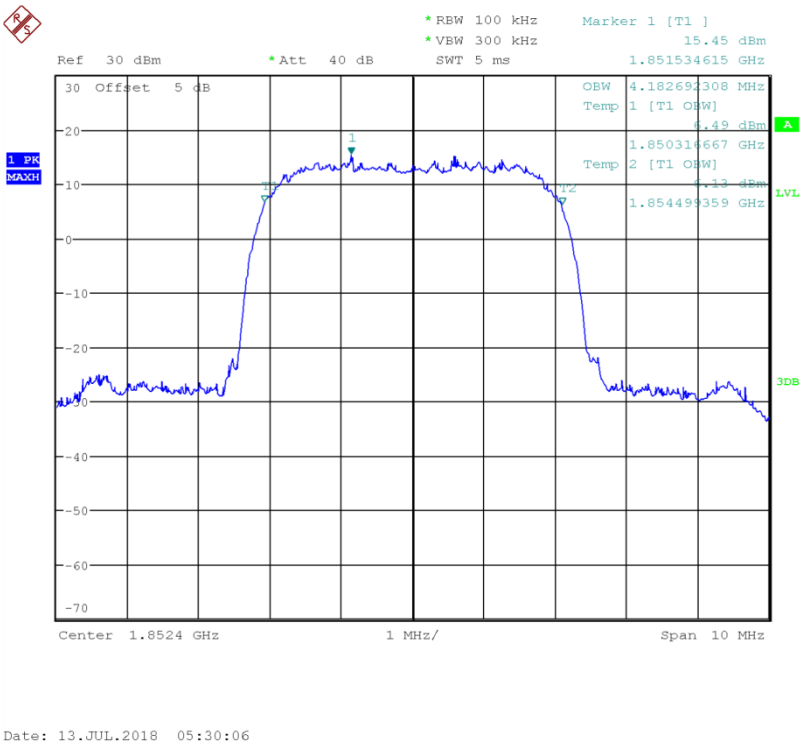
Conclusion: PASS

WCDMA BAND II



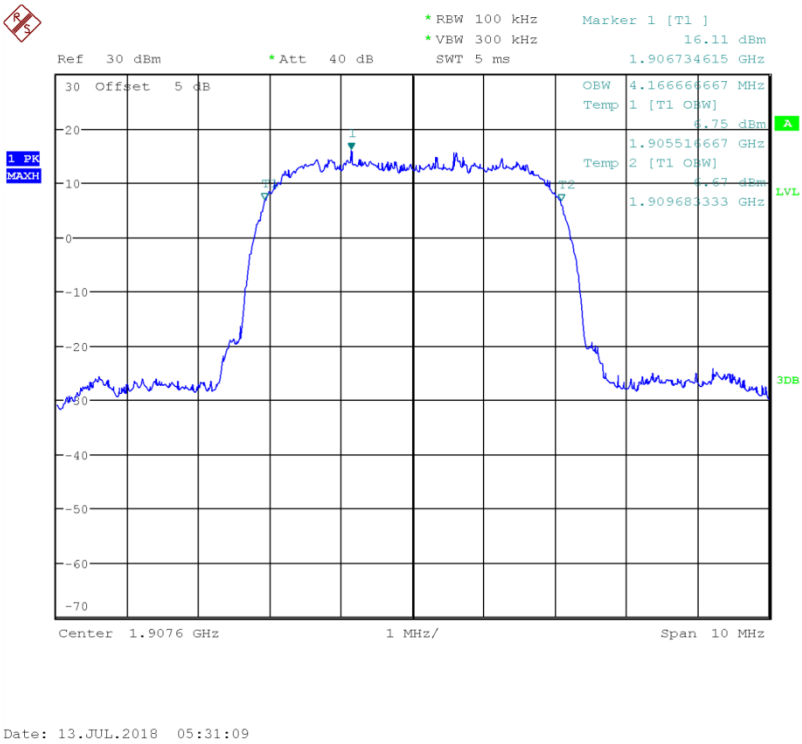
Date: 13.JUL.2018 05:29:04

Channel 9400-Occupied Bandwidth



Date: 13.JUL.2018 05:30:06

Channel 9262-Occupied Bandwidth

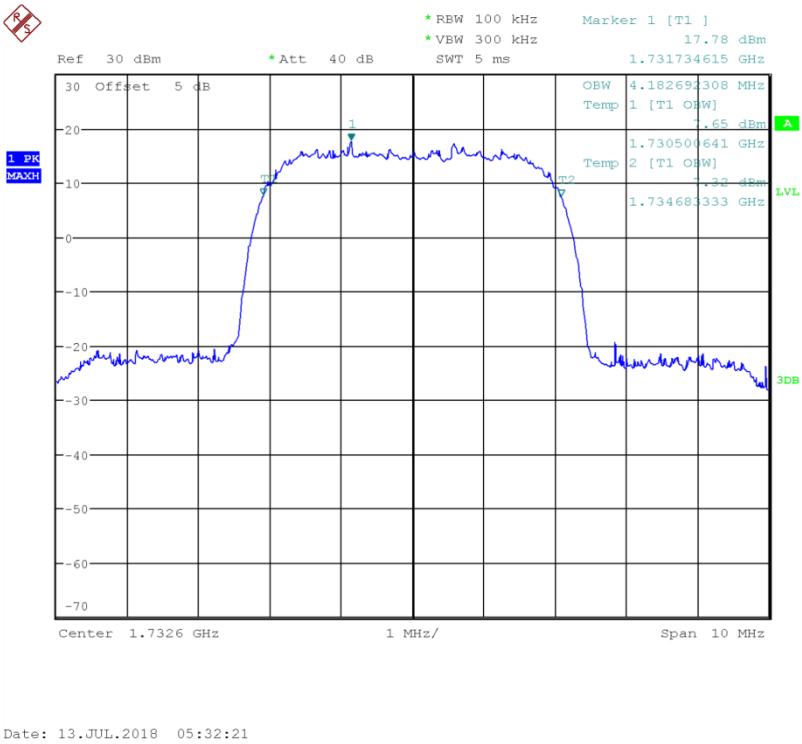


Channel 9538-Occupied Bandwidth

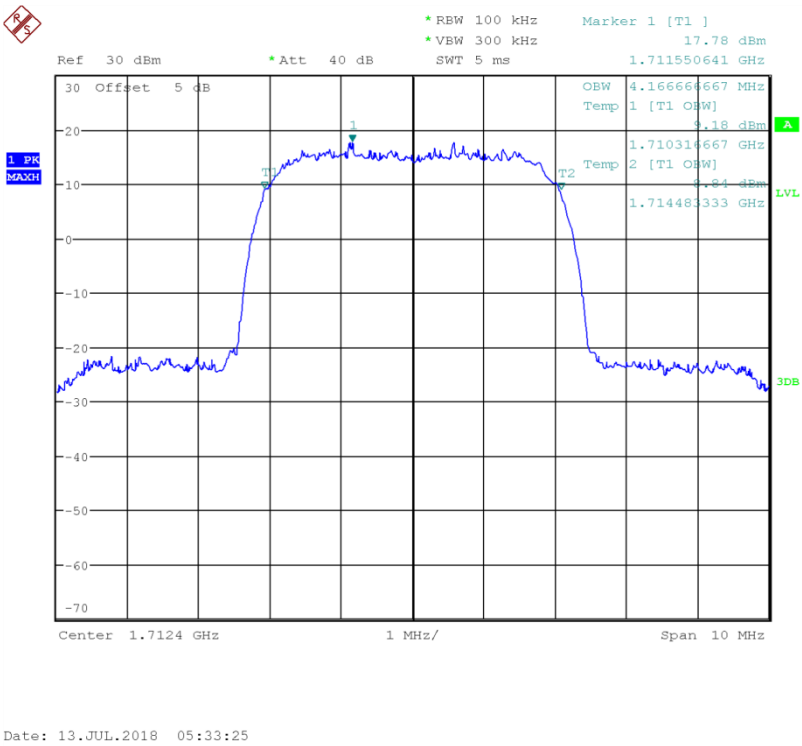
WCDMA BAND IV		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(MHz)
Mid 1413	1732.6	4.18
Low 1312	1712.4	4.17
High 1513	1752.6	4.20

Conclusion: PASS

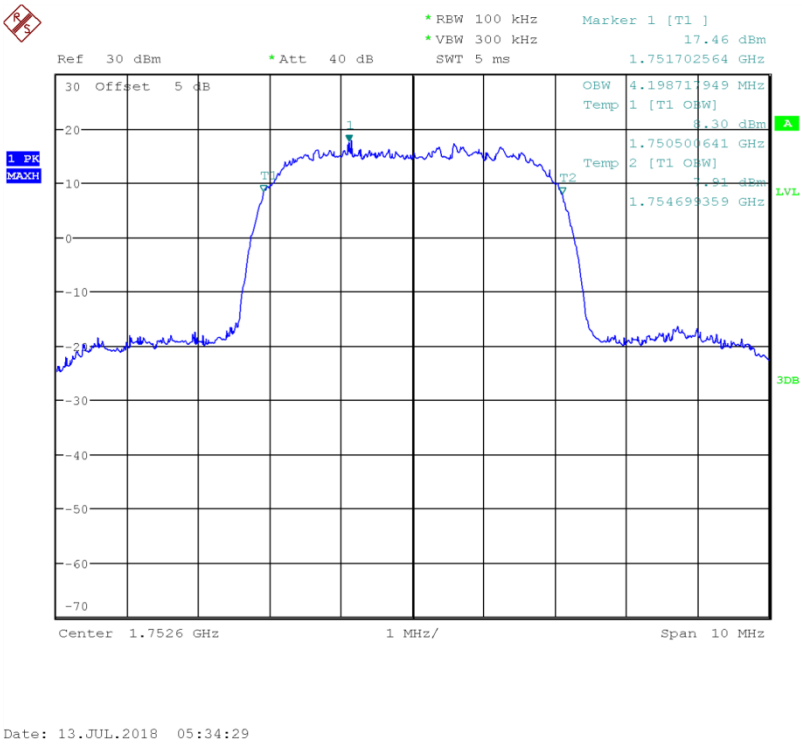
WCDMA BAND IV



Channel 1413-Occupied Bandwidth



Channel 1312-Occupied Bandwidth

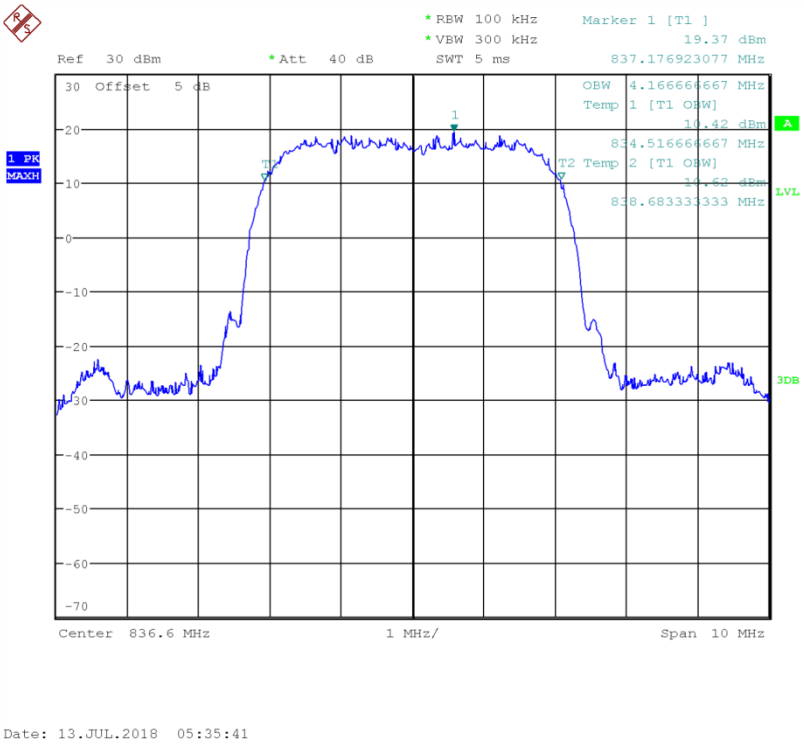


Channel 1513-Occupied Bandwidth

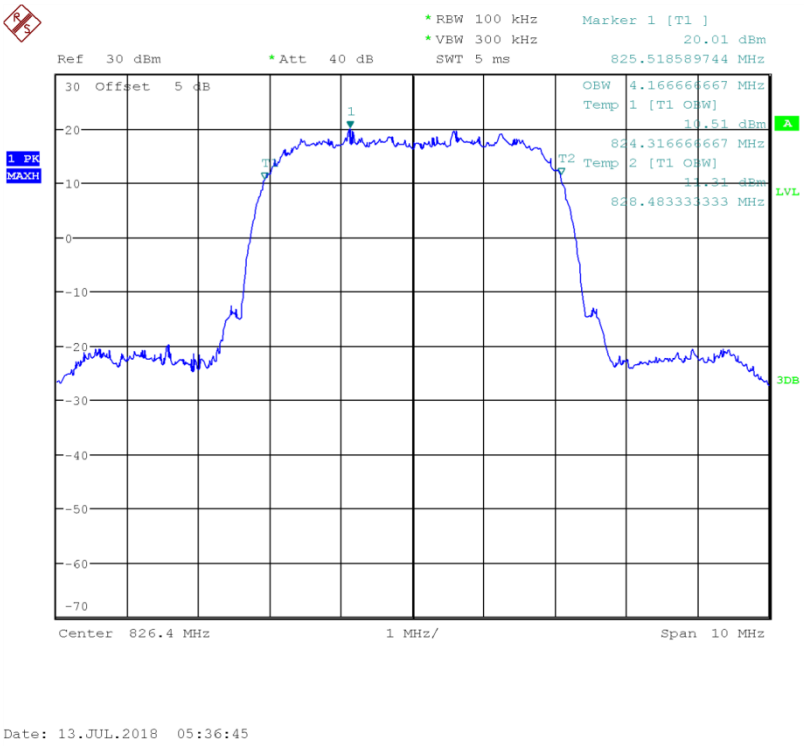
WCDMA BAND V		
Test channel	Frequency (MHz)	99% Occupied Bandwidth(MHz)
Mid 4183	836.6	4.17
Low 4132	826.4	4.17
High 4233	846.6	4.17

Conclusion: PASS

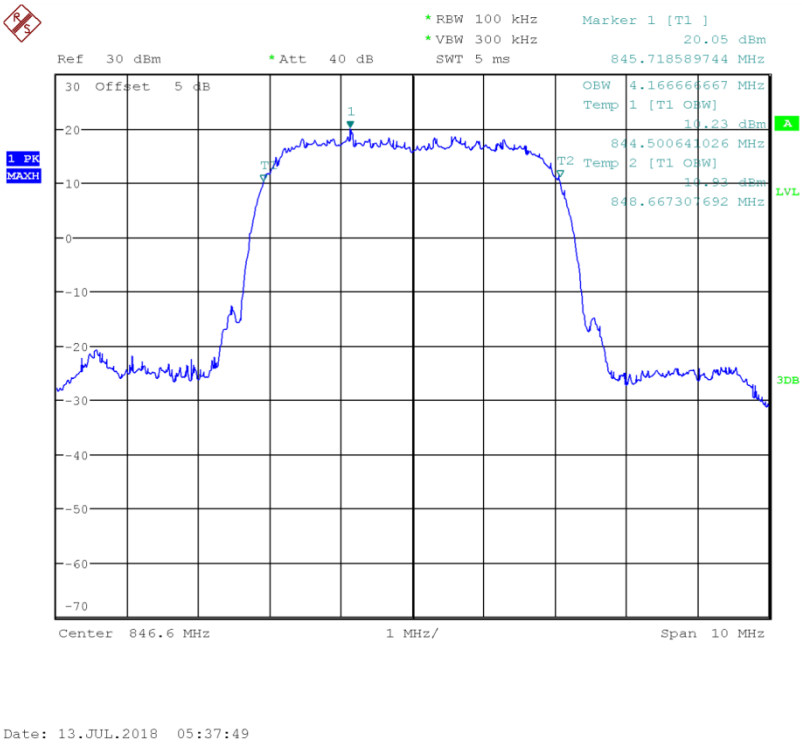
WCDMA BAND V



Channel 4183-Occupied Bandwidth



Channel 4132-Occupied Bandwidth



Channel 4233-Occupied Bandwidth

ANNEX A.4. -26dB Emission Bandwidth

Method of test please refer to KDB971168 D01 v03 clause 4.0.

A.4.1. -26dB Emission Bandwidth

Similar to conducted emissions; occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of GSM850, PCS1900, WCDMA BANDII and WCDMA BANDV.

A.4.2 Test Procedure:

1. The EUT output RF connector was connected with a short cable to the signal analyzer.
2. RBW was set to about 1% of emission BW, VBW >= 3 times RBW,.
3. 26dB bandwidth were measured, the occupied bandwidth is delta frequency between the two points where the display line intersects the signal trace.

A.4.3 Measurement methods:

For GSM: signal analyzer setting as: RBW=3KHz;VBW=10KHz;Span=1MHz.

For WCDMA: signal analyzer setting as: RBW=50KHz;VBW=200KHz;Span=10MHz.

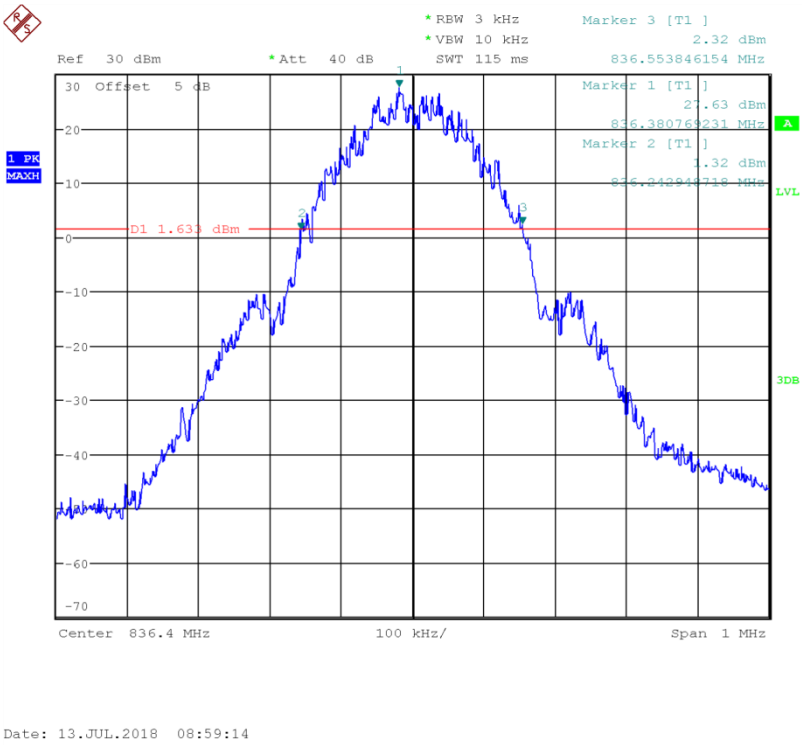
A.4.4 Test results:

GSM 850		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(KHz)
Mid 189	836.4	310.897
Low 128	824.2	320.513
High 251	848.8	312.5
GPRS 850		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(KHz)
Mid 189	836.4	307.692
Low 128	824.2	314.103
High 251	848.8	314.103
EDGE 850		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(KHz)
Mid 189	836.4	314.103

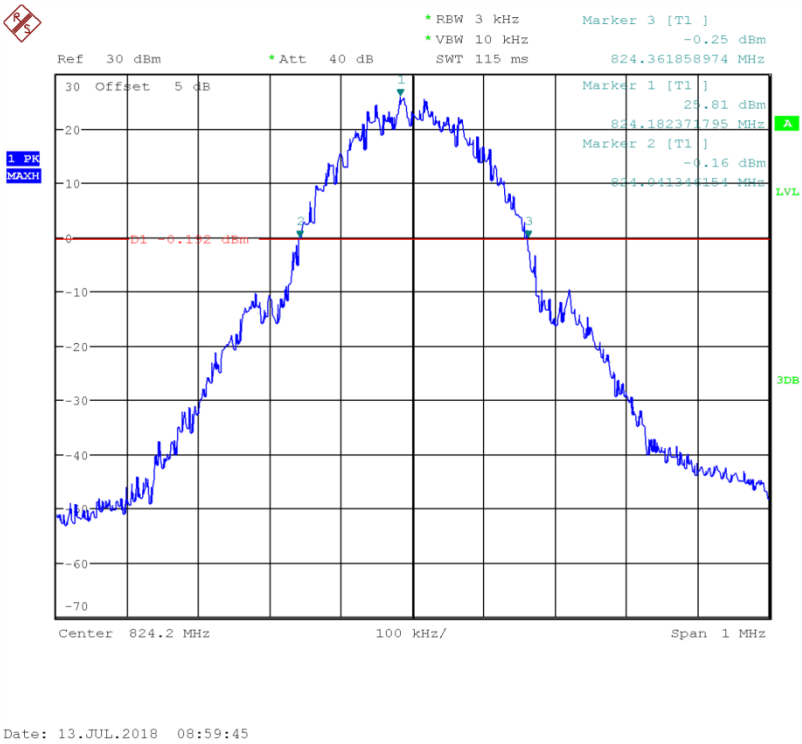
Low 128	824.2	318.91
High 251	848.8	310.897

Conclusion: PASS

GSM 850

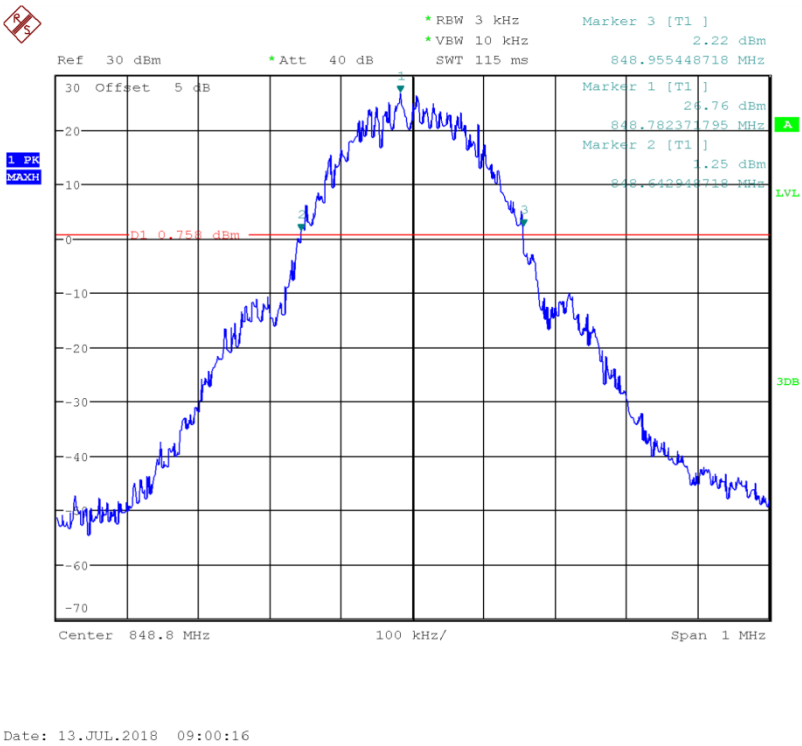


Channel 189- Emission Bandwidth (-26dBc BW)



Date: 13.JUL.2018 08:59:45

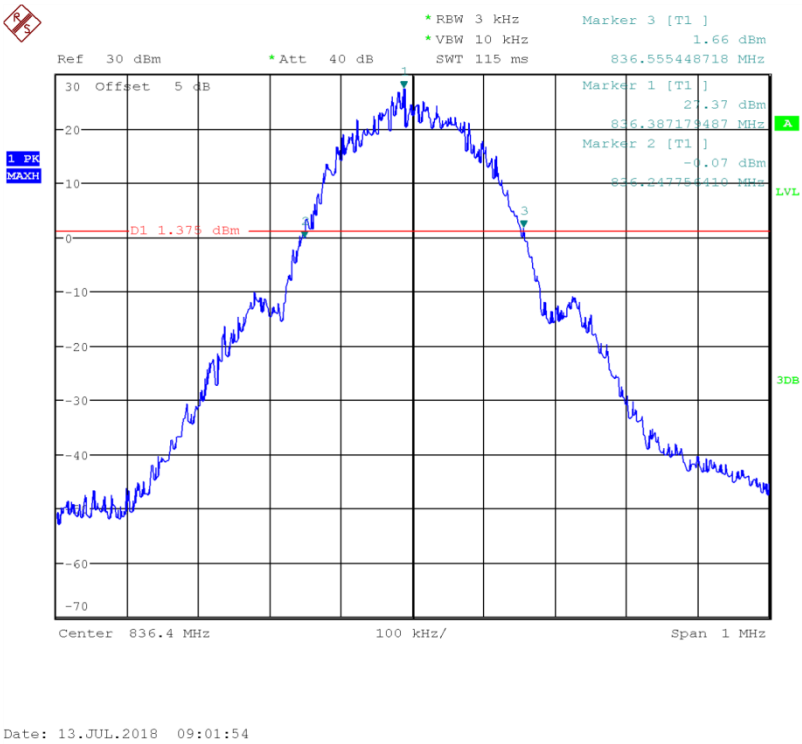
Channel 128- Emission Bandwidth (-26dBc BW)



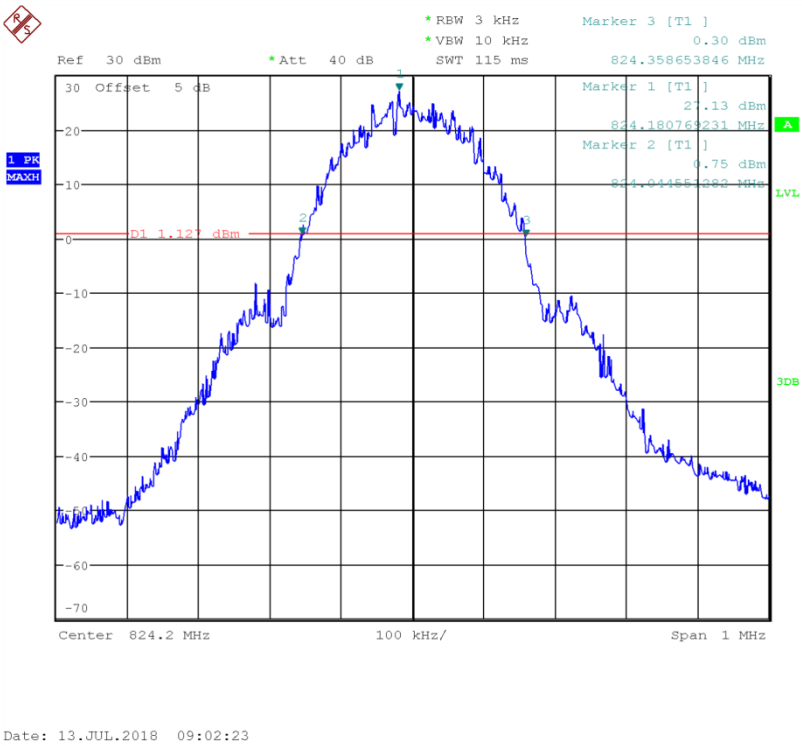
Date: 13.JUL.2018 09:00:16

Channel 251- Emission Bandwidth (-26dBc BW)

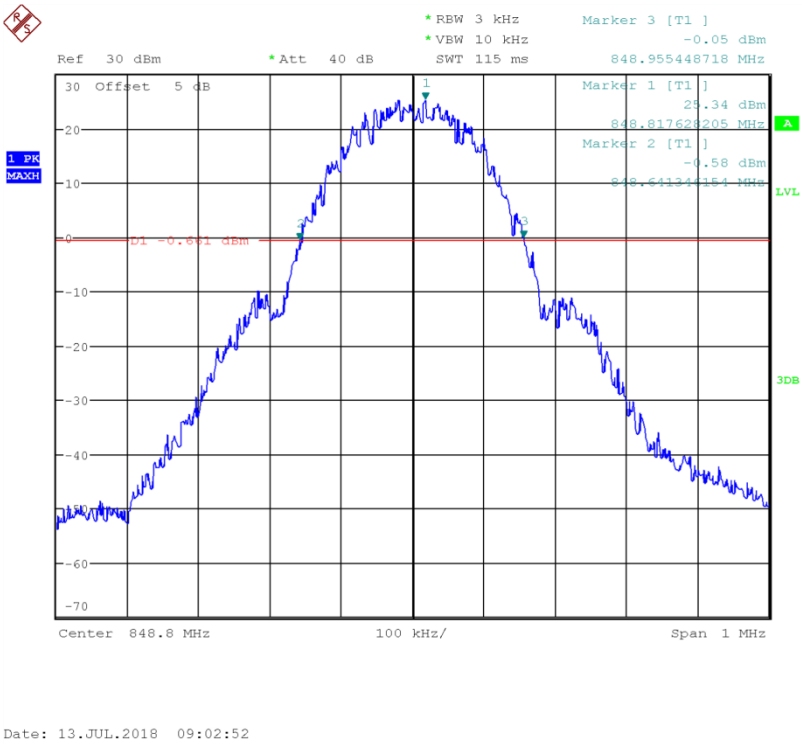
GPRS 850



Channel 189- Emission Bandwidth (-26dBc BW)

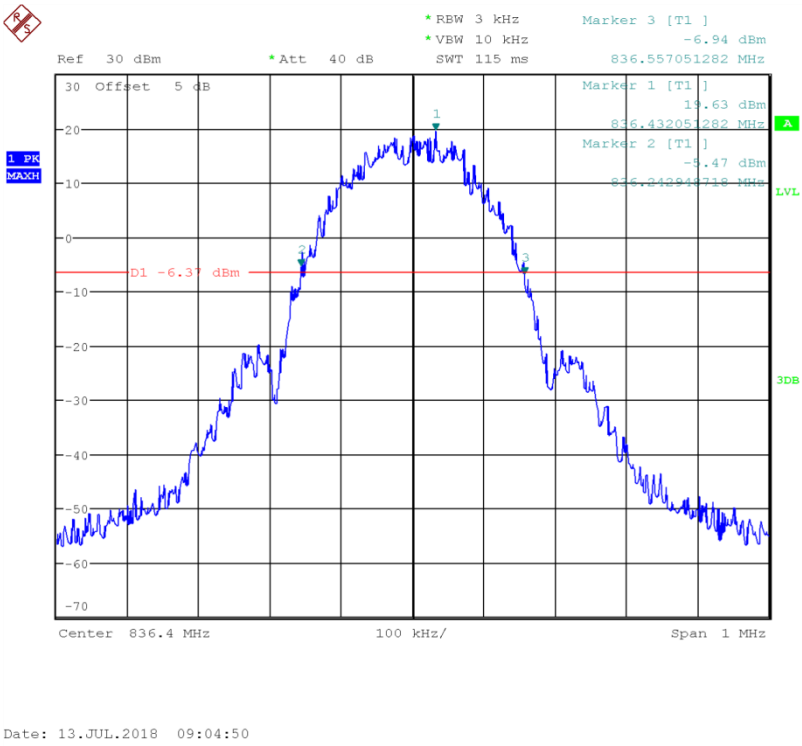


Channel 128- Emission Bandwidth (-26dBc BW)

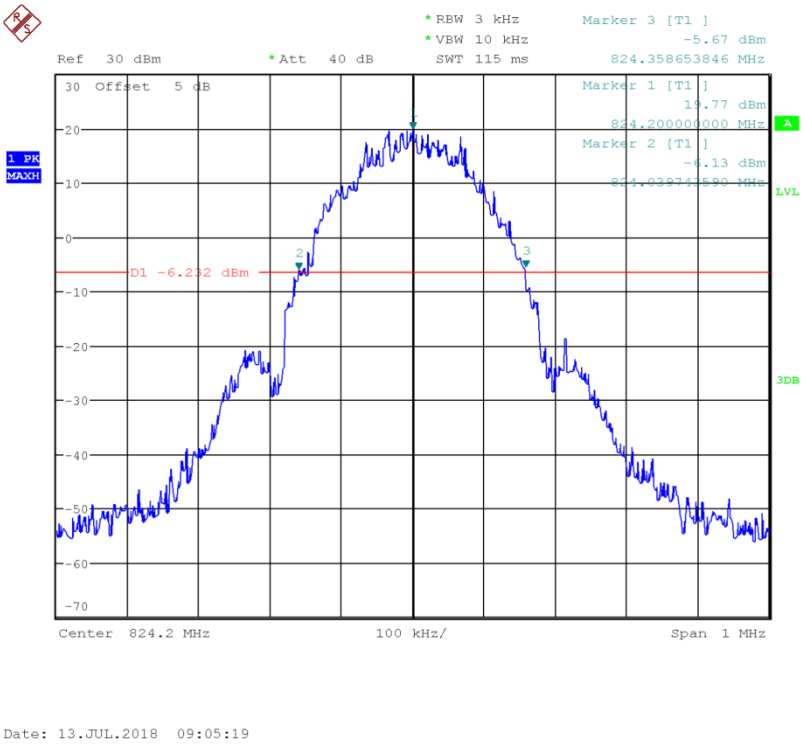


Channel 251- Emission Bandwidth (-26dBc BW)

EDGE 850

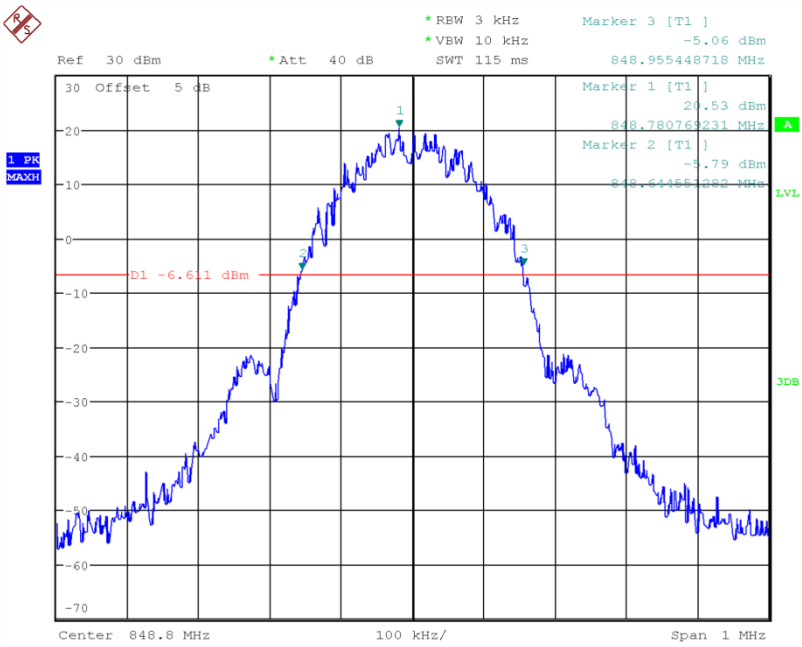


Channel 189- Emission Bandwidth (-26dBc BW)



Date: 13.JUL.2018 09:05:19

Channel 128- Emission Bandwidth (-26dBc BW)



Date: 13.JUL.2018 09:05:49

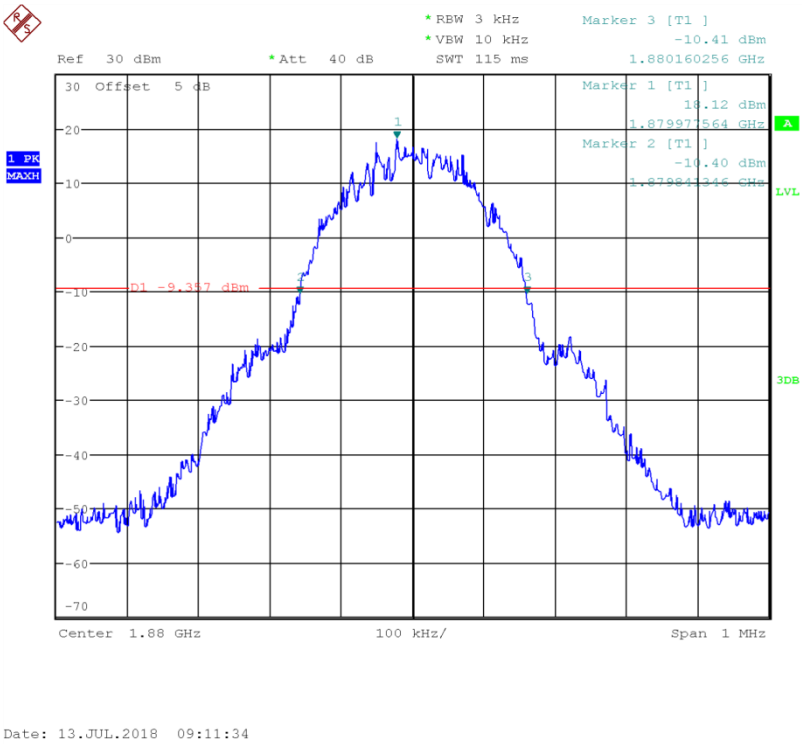
Channel 251- Emission Bandwidth (-26dBc BW)

GSM1900		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(KHz)

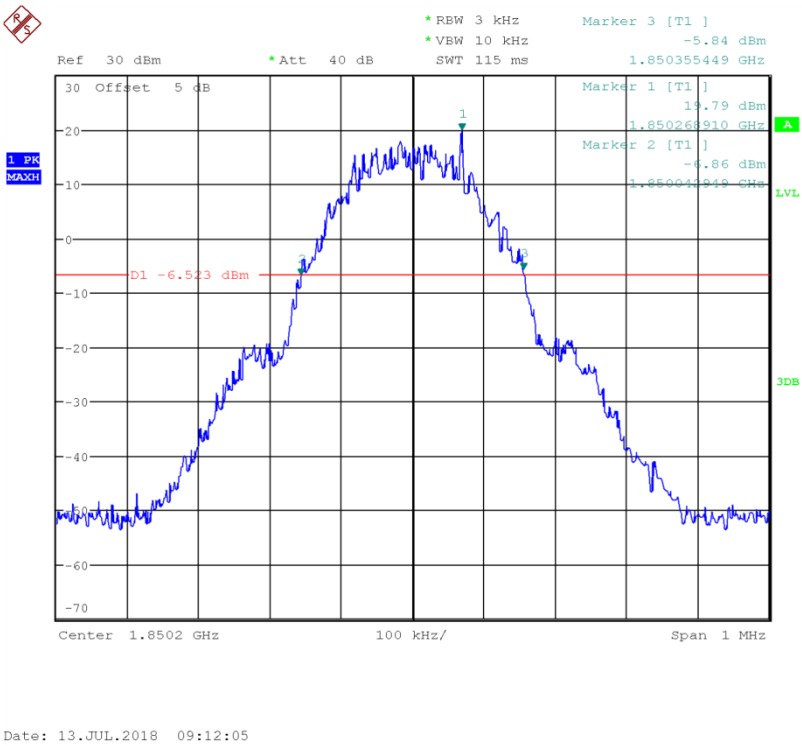
Mid 661	1880	317.308
Low 512	1850.2	312.5
High 810	1909.8	309.295
GPRS1900		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(KHz)
Mid 661	1880	314.103
Low 512	1850.2	320.513
High 810	1909.8	310.897
EDGE1900		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(KHz)
Mid 661	1880	315.705
Low 512	1850.2	318.91
High 810	1909.8	310.897

Conclusion: PASS

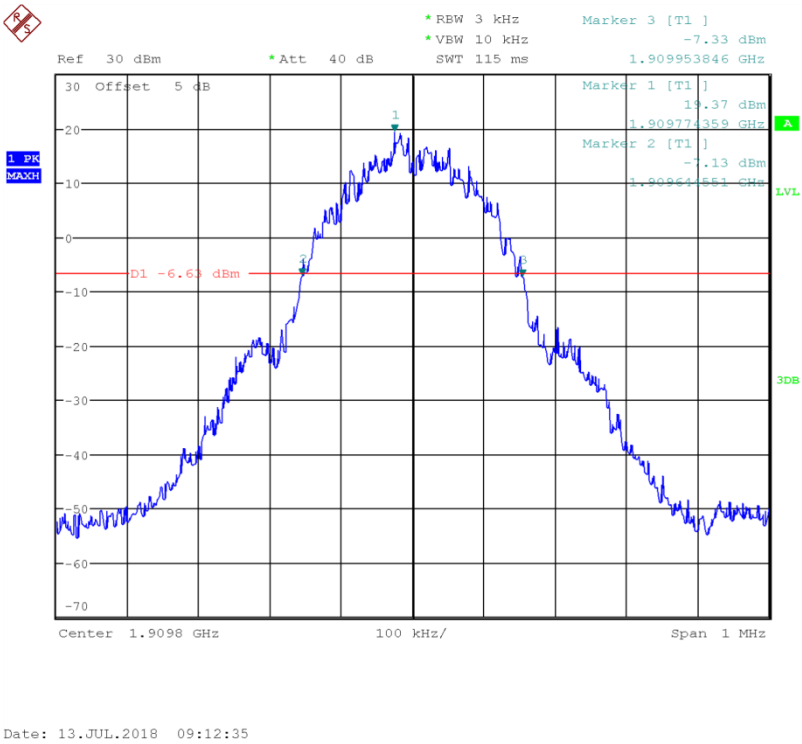
GSM 1900



Channel 661- Emission Bandwidth (-26dBc BW)

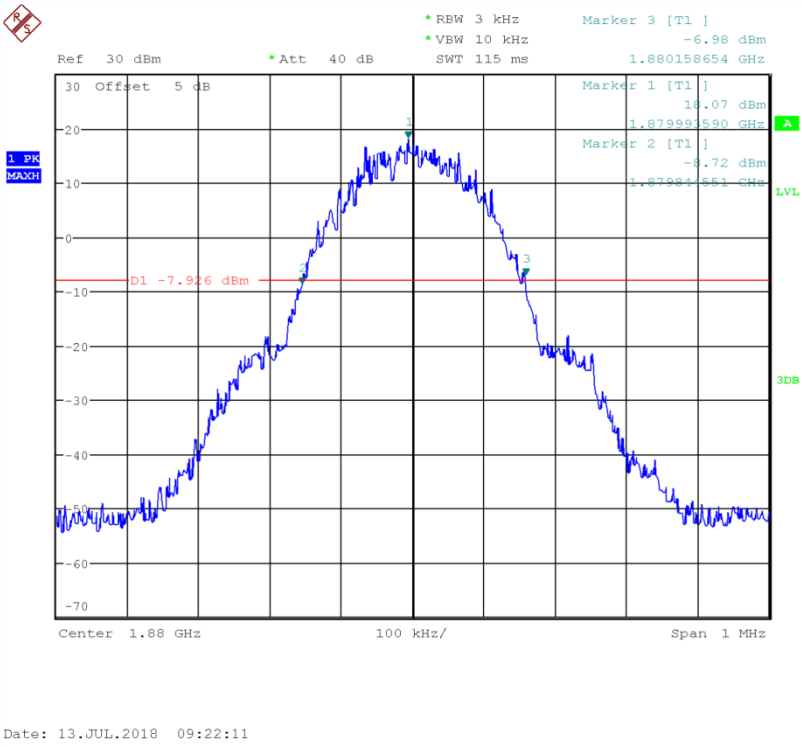


Channel 512- Emission Bandwidth (-26dBc BW)

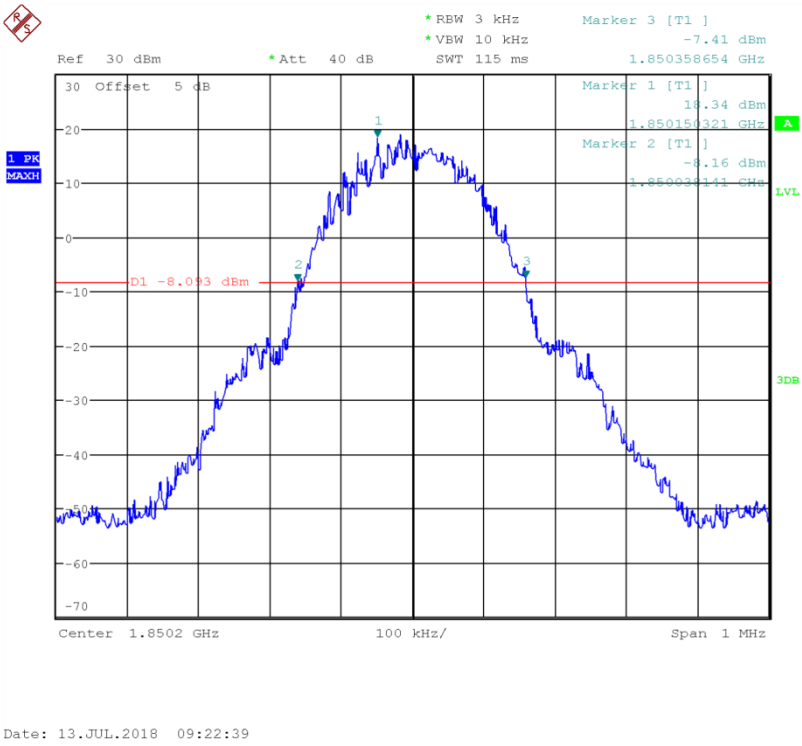


Channel 810- Emission Bandwidth (-26dBc BW)

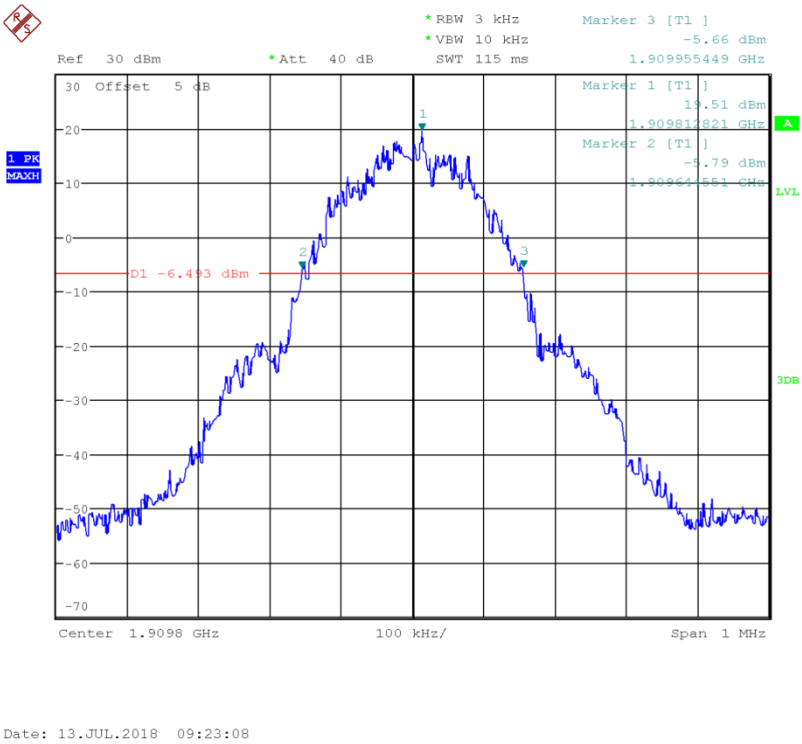
GPRS 1900



Channel 661- Emission Bandwidth (-26dBc BW)

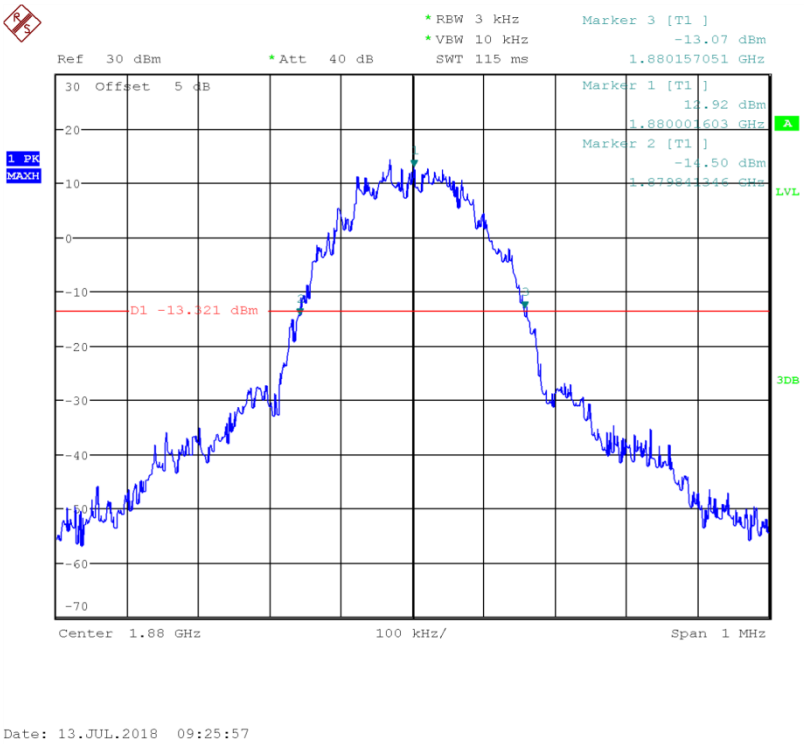


Channel 512- Emission Bandwidth (-26dBc BW)

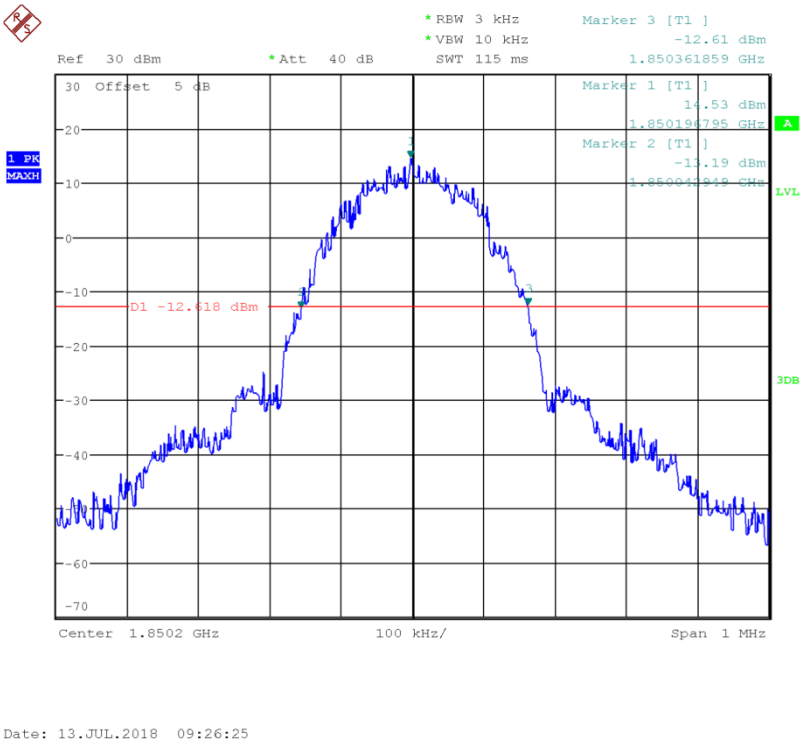


Channel 810- Emission Bandwidth (-26dBc BW)

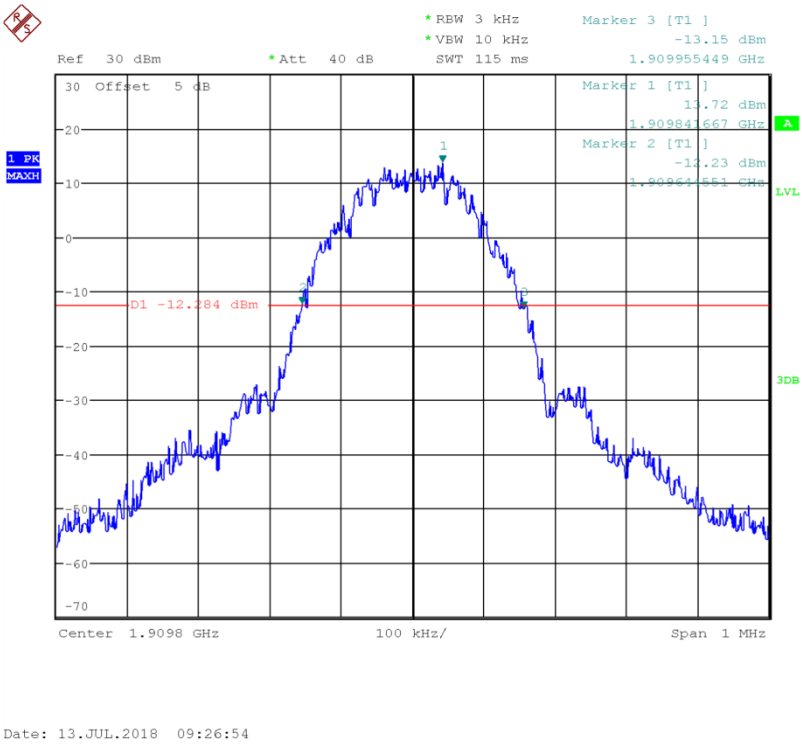
EDGE 1900



Channel 661- Emission Bandwidth (-26dBc BW)



Channel512- Emission Bandwidth (-26dBc BW)

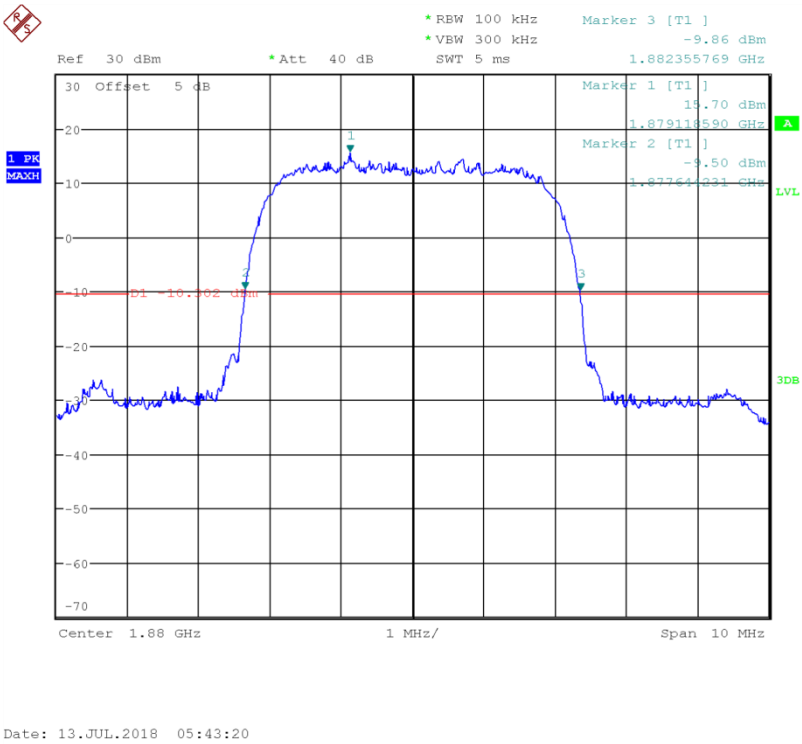


Channel 810- Emission Bandwidth (-26dBc BW)

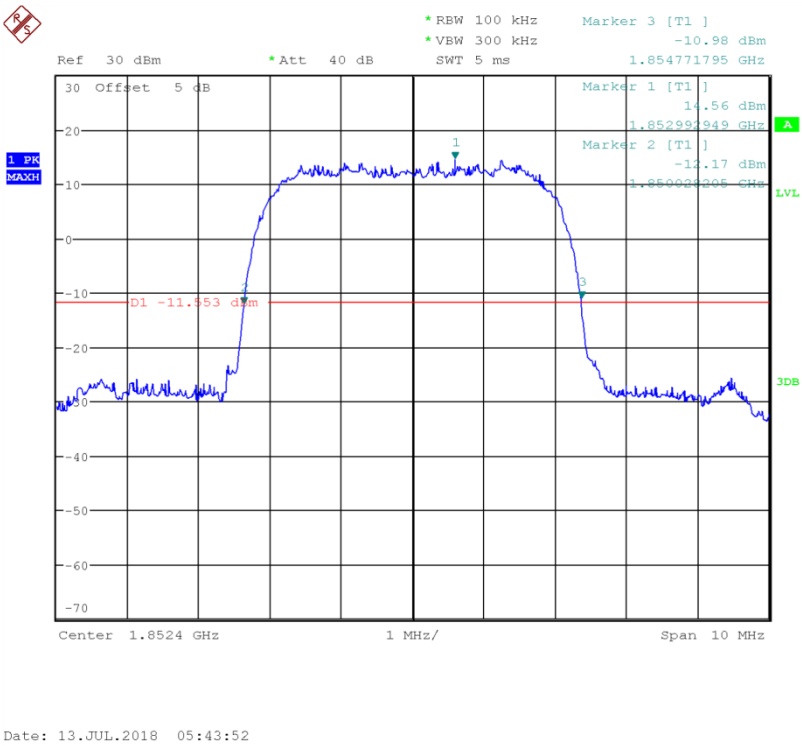
WCDMA BAND II		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(MHz)
Mid 9400	1880	4.6
Low 9262	1852.4	4.7
High 9538	1907.6	4.7

Conclusion: PASS

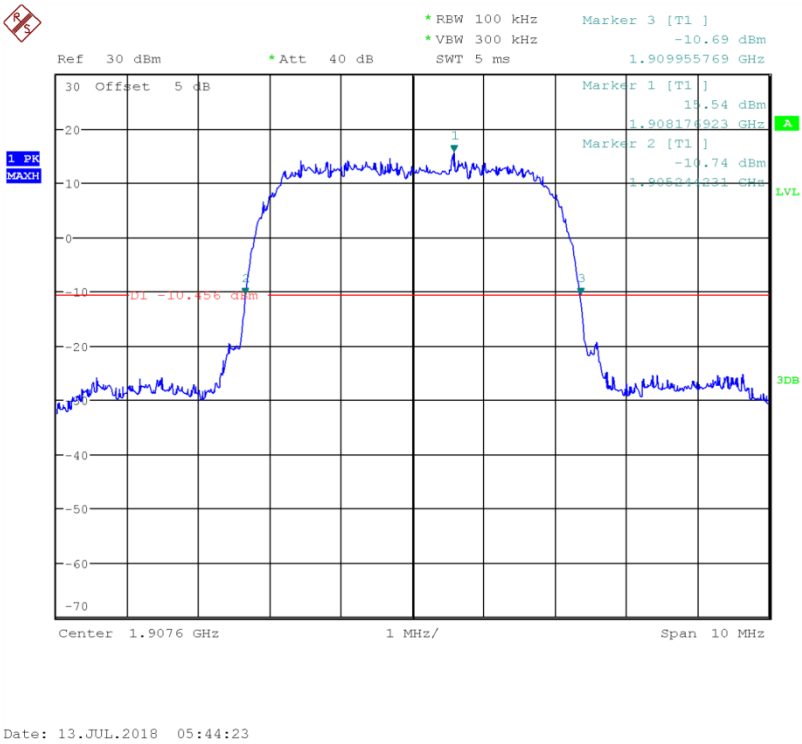
WCDMA BAND II



Channel 9400- Emission Bandwidth (-26dBc BW)



Channel 9262- Emission Bandwidth (-26dBc BW)

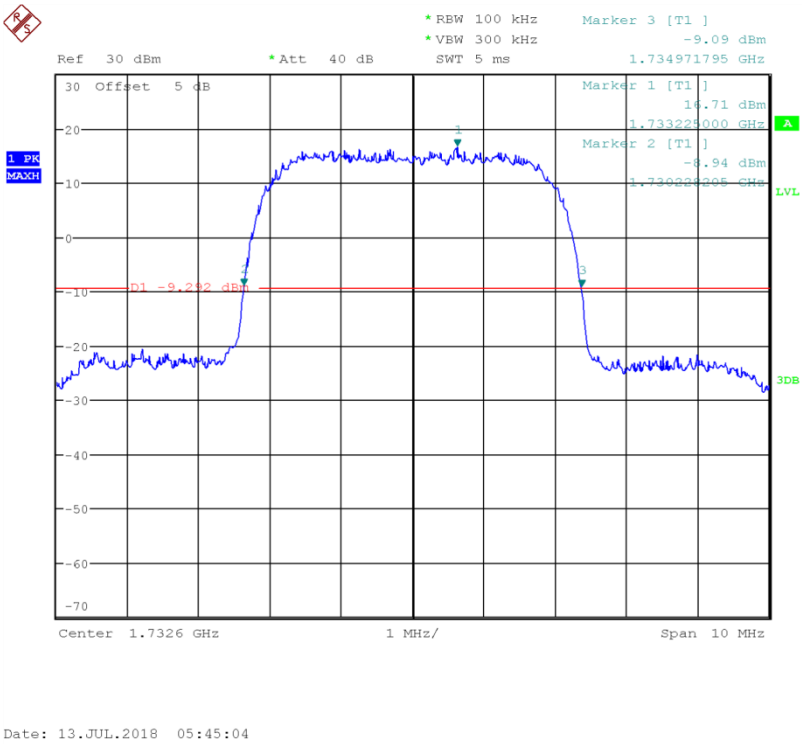


Channel 9538- Emission Bandwidth (-26dBc BW)

WCDMA BAND IV		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(MHz)
Mid 1413	1732.6	4.7
Low 1312	1712.4	4.7
High 1513	1752.6	4.8

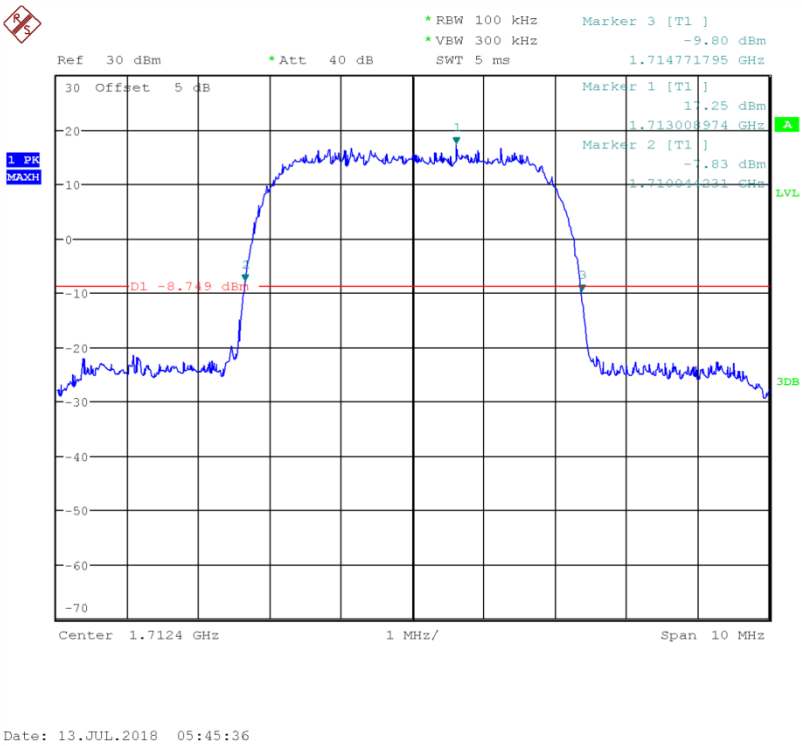
Conclusion: PASS

WCDMA BAND IV



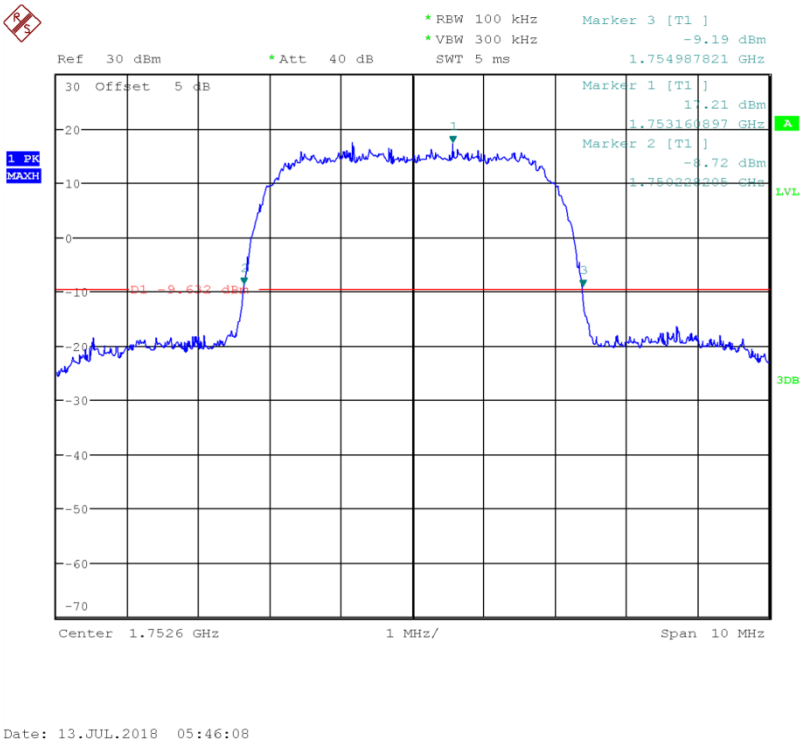
Date: 13.JUL.2018 05:45:04

Channel 1413- Emission Bandwidth (-26dBc BW)



Date: 13.JUL.2018 05:45:36

Channel 1312- Emission Bandwidth (-26dBc BW)

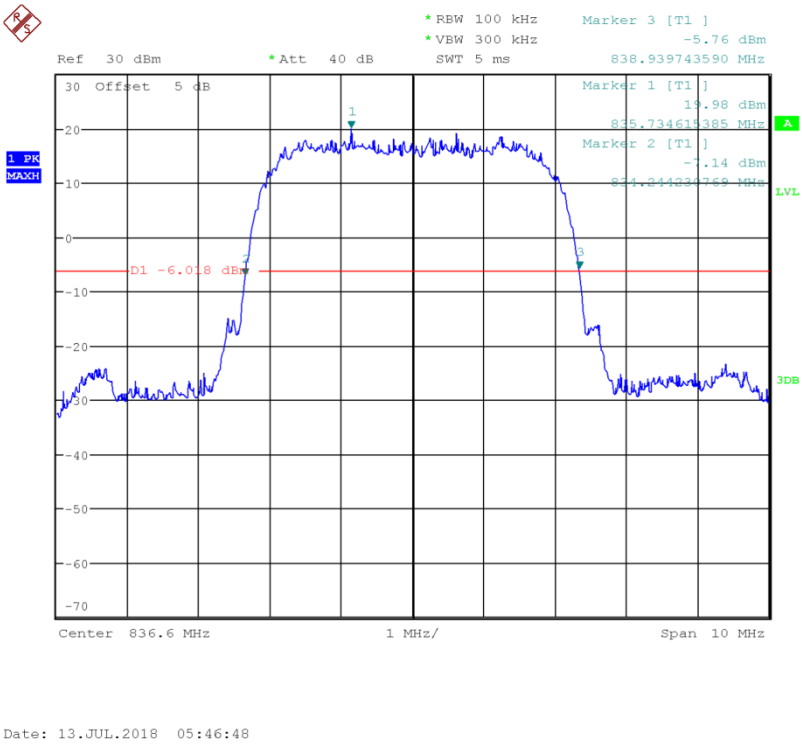


Channel 1513- Emission Bandwidth (-26dBc BW)

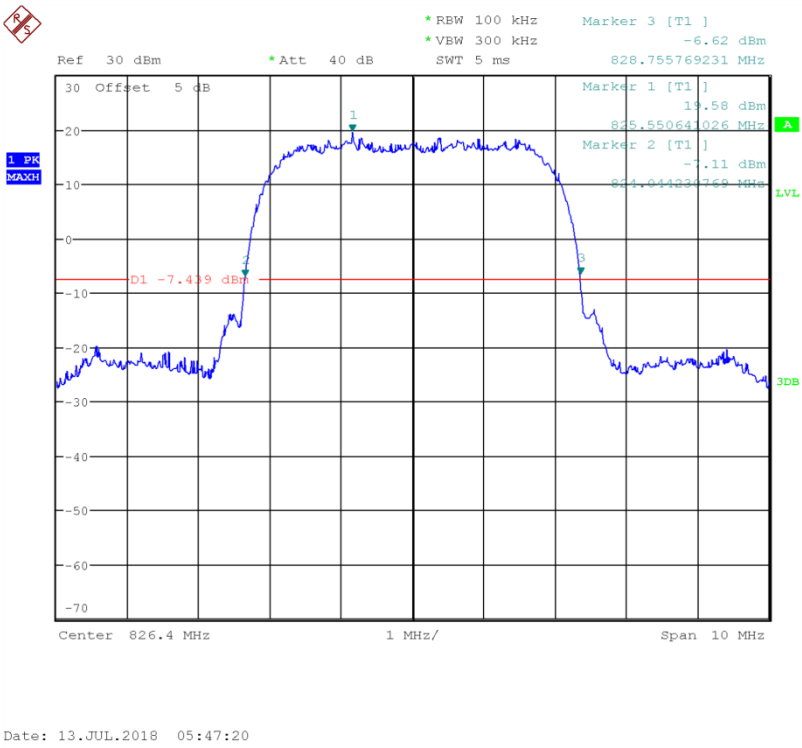
WCDMA BAND V		
Test channel	Frequency (MHz)	–26dBc Emission Bandwidth(MHz)
Mid 4183	836.6	4.7
Low 4132	826.4	4.7
High 4233	846.6	4.7

Conclusion: PASS

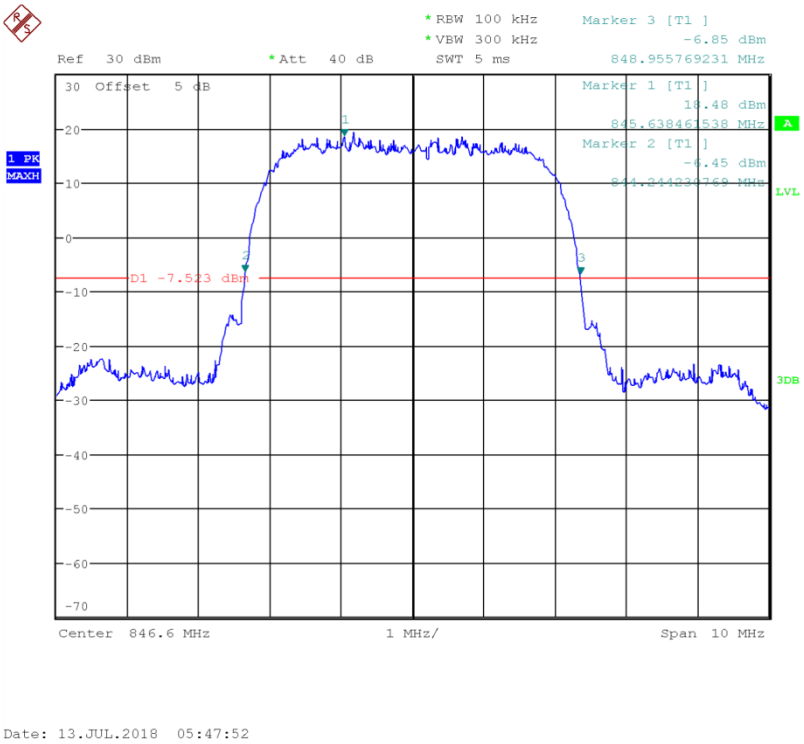
WCDMA BAND V



Channel 4183- Emission Bandwidth (-26dBc BW)



Channel4132- Emission Bandwidth (-26dBc BW)



Channel 4233- Emission Bandwidth (-26dBc BW)

ANNEX A.5. Band Edge at antenna terminals

Method of test measurements please refer to KDB971168 D01 v03 clause 6

A.5.1 Limit:

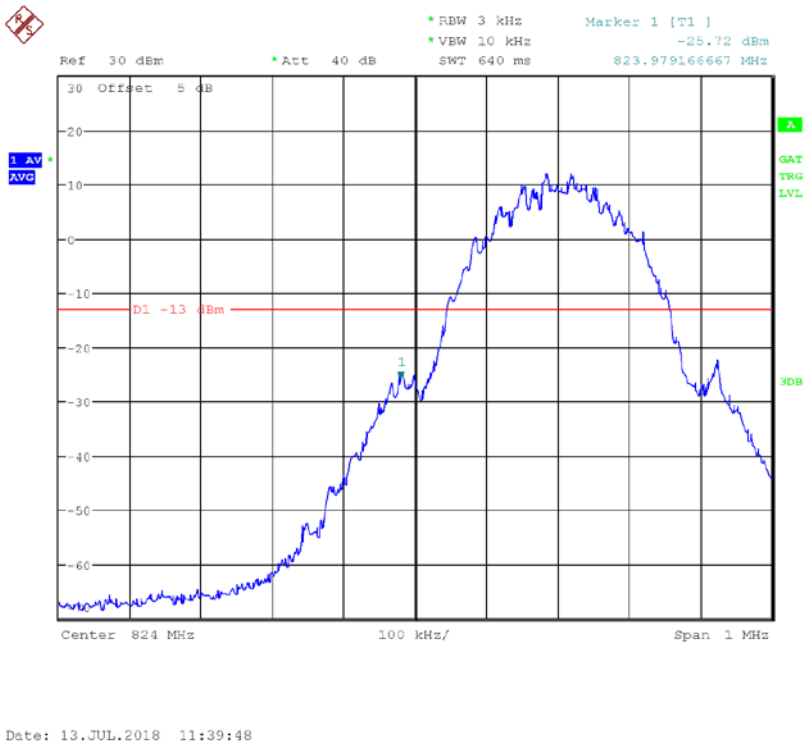
The magnitude of each spurious and harmonic emission that can be detected when the equipment is operated under the conditions specification in the instruction manual and/or alignment procedure, shall not be less than 43+10log (Mean power in watts) dBc below the mean power output outside a license's frequency block(-13dBm).

A.5.2 Test procedure:

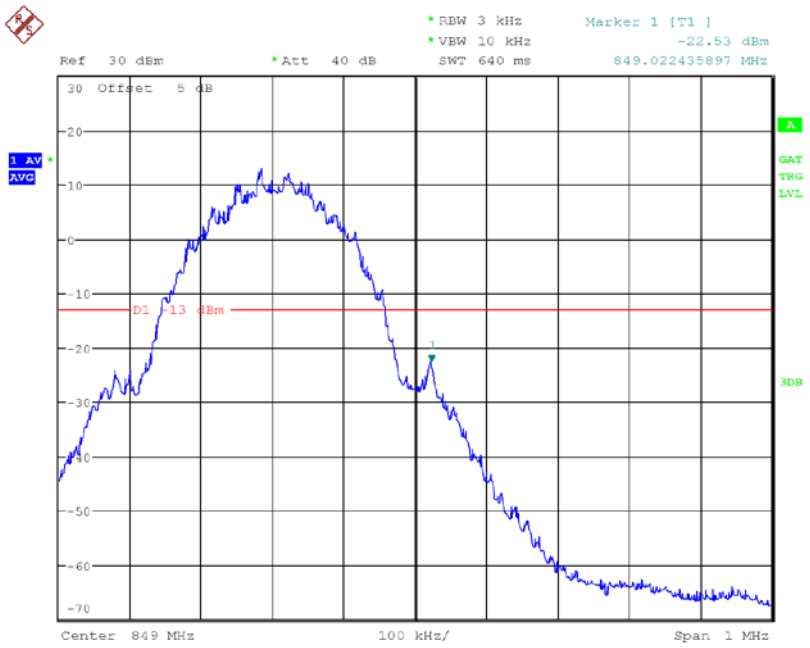
1. The RF output of the transceiver was connected to a signal analyzer through appropriate attenuation.
2. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.
3. The RF fundamental frequency should be excluded against the limit line in the operating frequency band
4. The limit line is derived from 43+10log(P) Db below the transmitter power P(Watts)
   =P(W)-[43+10log(P)](Db)
   =[30+10log(P)](dBm)-[43+10log(P)](Db)
   =-13dBm

A.5. Test Result:

GSM 850

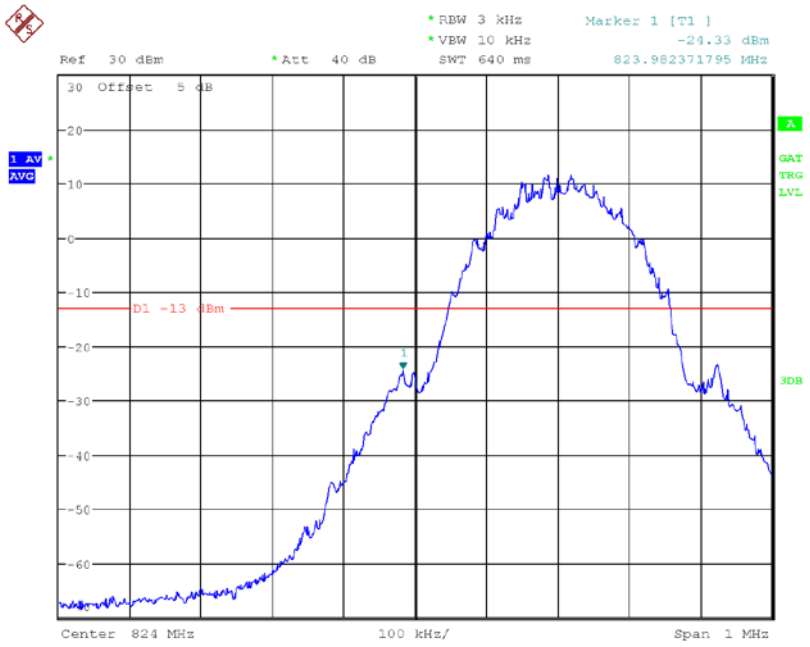


Channel 128- LOW BAND EDGE BLOCK

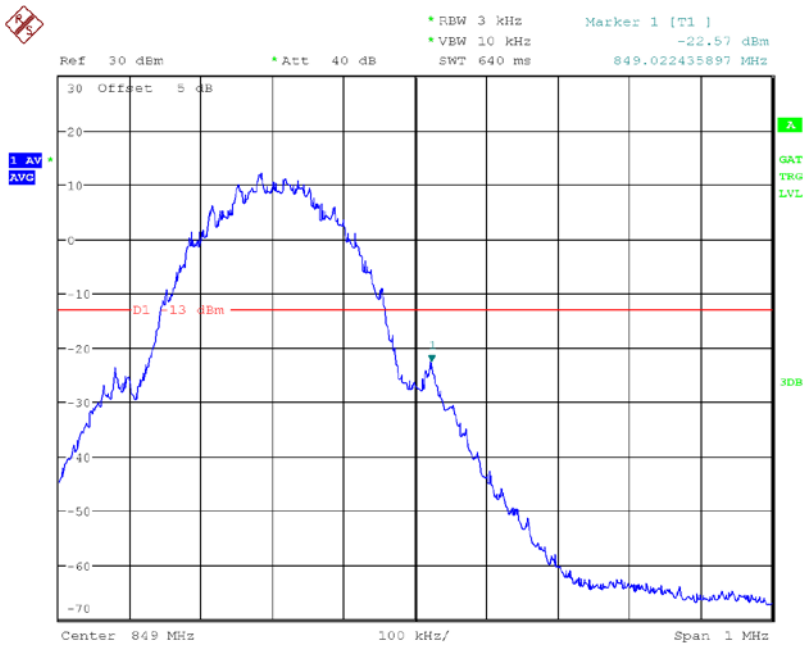


Channel 251- HIGH BAND EDGE BLOCK

GPRS 850



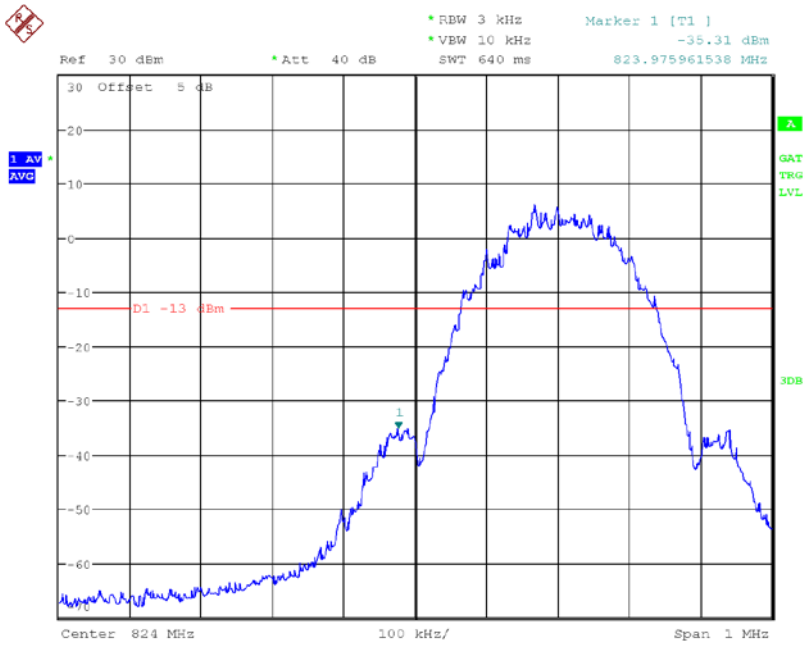
Channel 128- LOW BAND EDGE BLOCK



Date: 13.JUL.2018 11:49:39

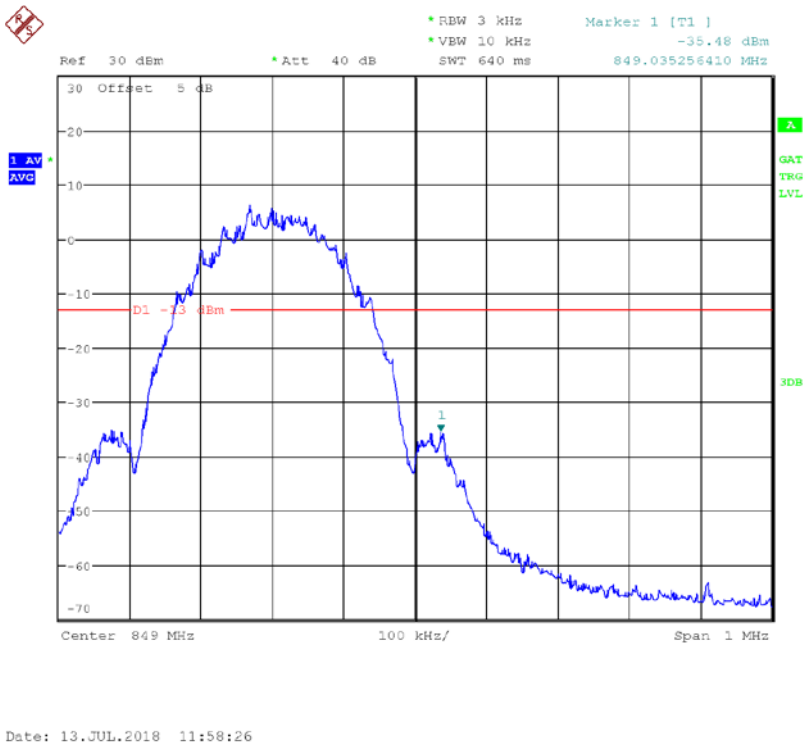
Channel 251- HIGH BAND EDGE BLOCK

EDGE 850



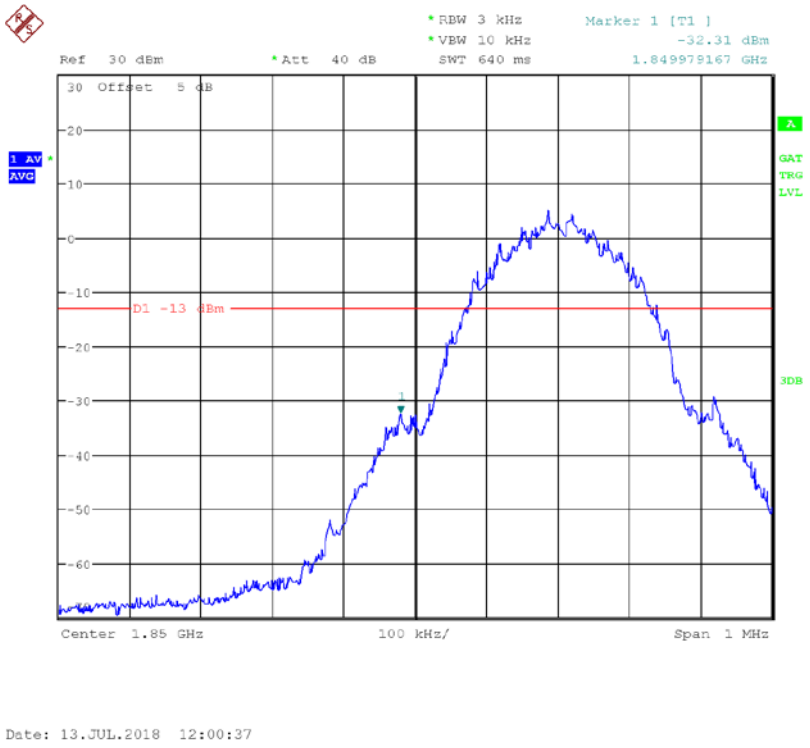
Date: 13.JUL.2018 11:55:53

Channel 128- LOW BAND EDGE BLOCK

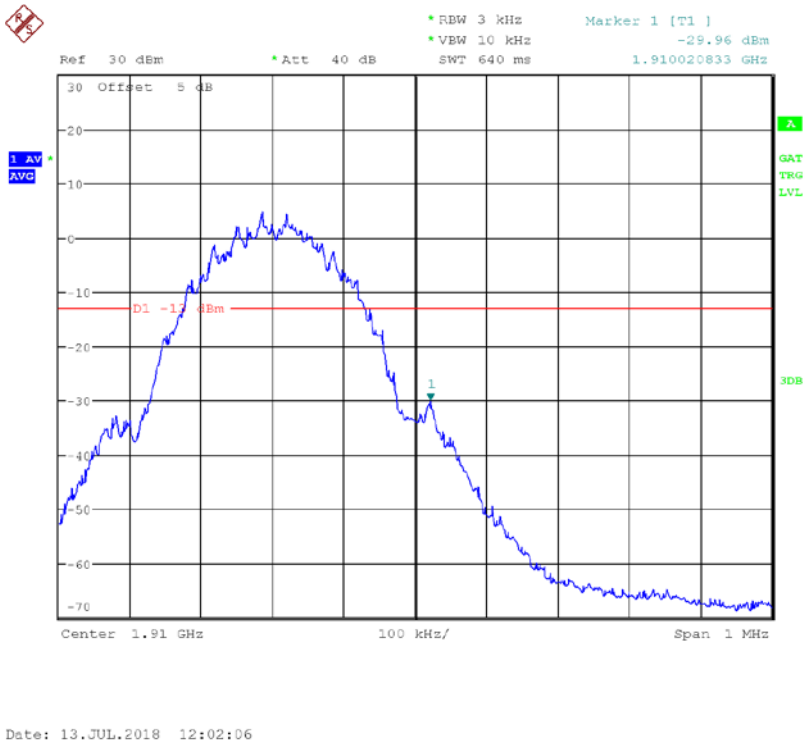


Channel 251- HIGH BAND EDGE BLOCK

GSM 1900

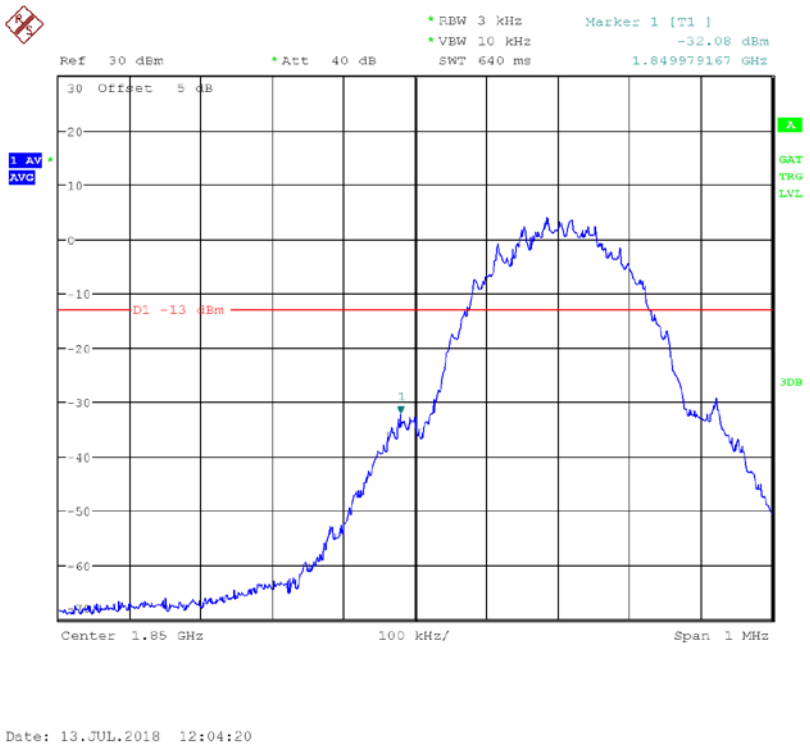


Channel 512- LOW BAND EDGE BLOCK

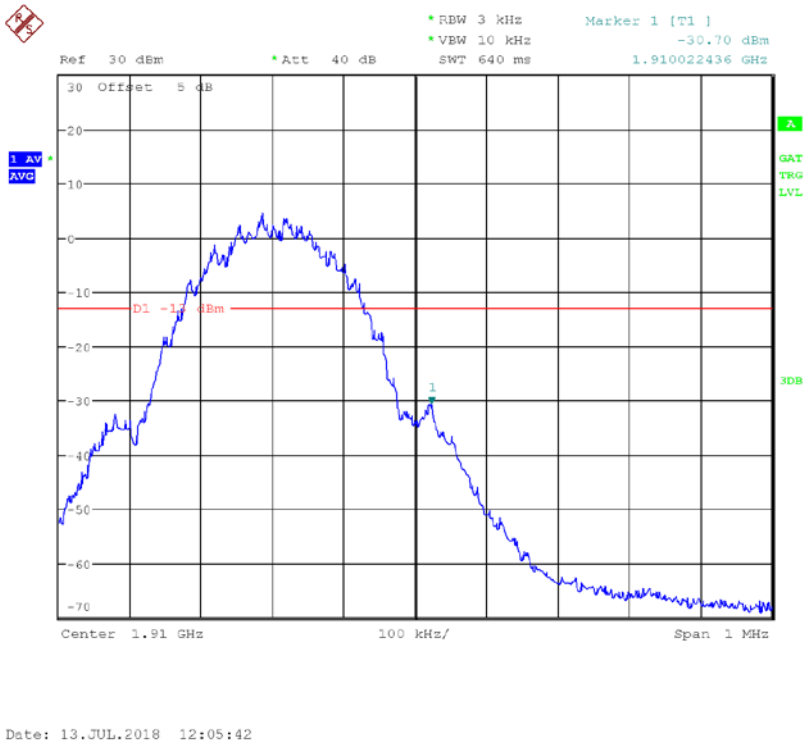


Channel 810- HIGH BAND EDGE BLOCK

GPRS 1900

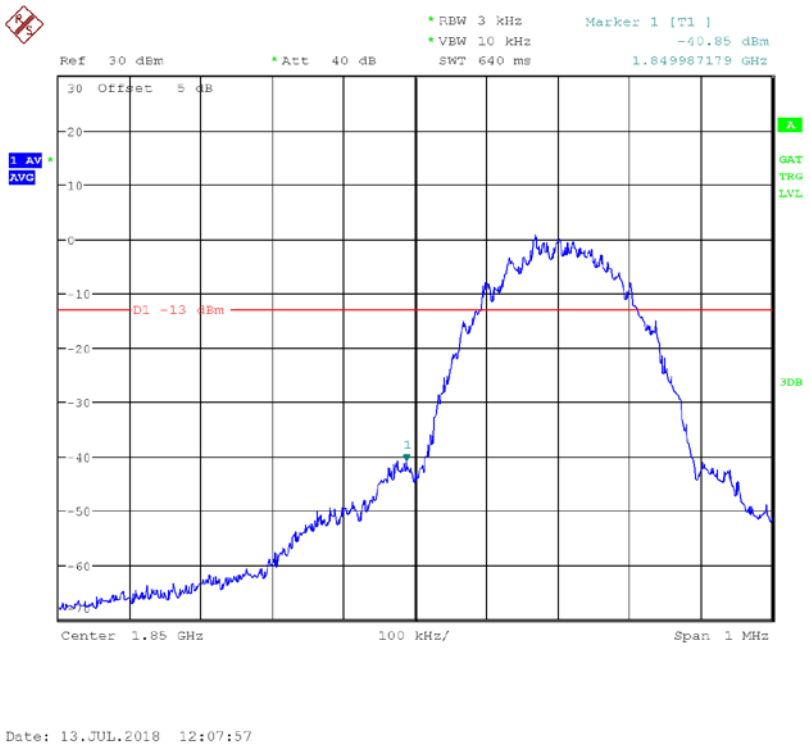


Channel 512- LOW BAND EDGE BLOCK

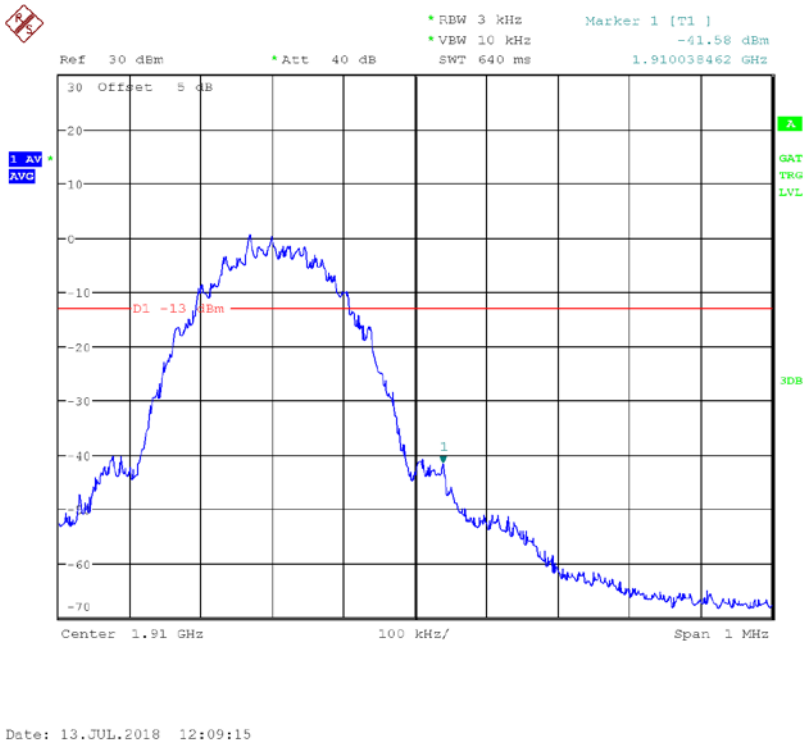


Channel 810- HIGH BAND EDGE BLOCK

EDGE 1900

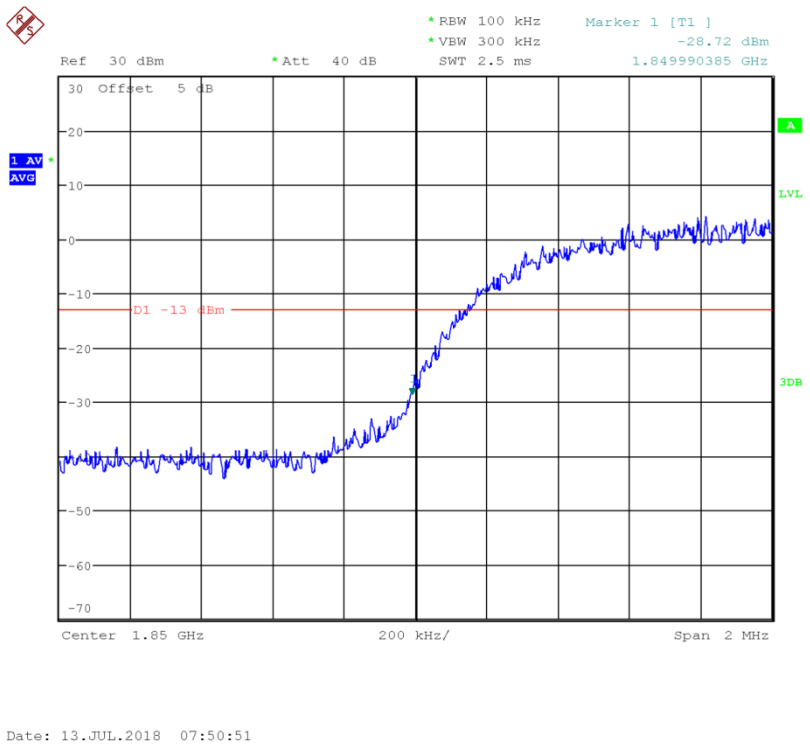


Channel 512- LOW BAND EDGE BLOCK

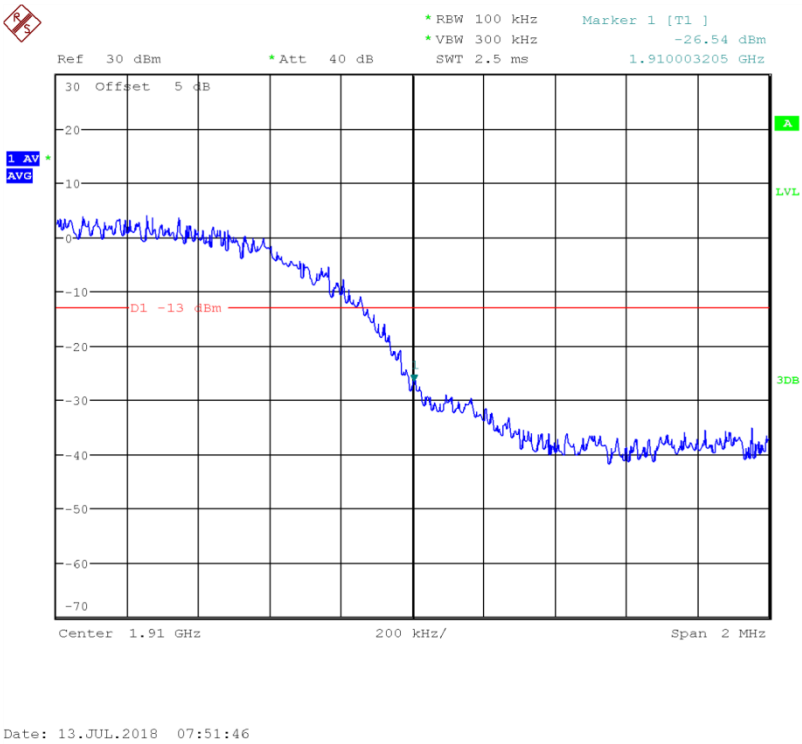


Channel 810- HIGH BAND EDGE BLOCK

WCDMA BAND II



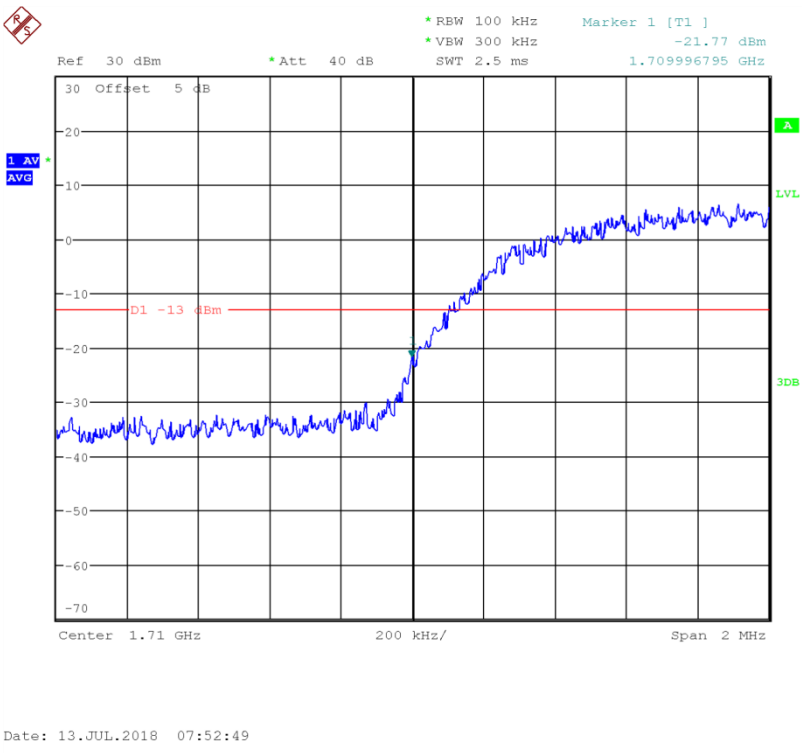
Channel 9262- LOW BAND EDGE BLOCK



Channel 9538- HIGH BAND EDGE BLOCK

Conclusion: PASS

WCDMA BAND IV



Channel 1312- LOW BAND EDGE BLOCK