

Annex 1: Measurement diagrams to
TEST REPORT
No.: 17-1-0231001T02a

According to:
Title 47 CFR, Chapter I
FCC Regulations, Subchapter B
Part 27

for

IPETRONIK GmbH & Co KG

µCROS SL
Data Logger

FCC-ID: 2ARF8UCROS-SL

Laboratory Accreditation and Listings



accredited according to DIN EN ISO/IEC 17025

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1. Measurement diagrams

1.1. Spurious emissions radiated (FDD Band IV + WLAN 2.4GHz transmitting mode) _30MHz-2.8GHz

8.03a_RSE_UMTS_FDD4_WLAN_2.4GHz

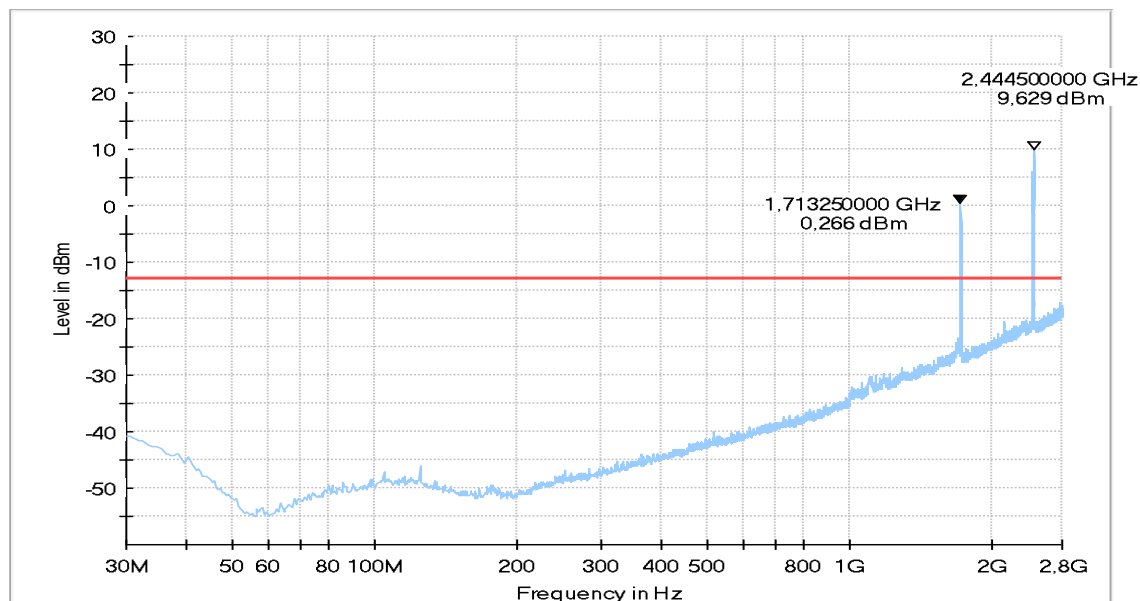
Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Room
Test Standard:	FCC Part 27.53(h) AWS emission limits
Antenna polarisation:	vertical / horizontal
Measurement software version:	EMC32 V10.50.3
Operating Mode:	UMTS FDD IV +W-Lan 2.4GHz
Operator:	TFra
Verdict:	Passed

EUT Information

Manufacturer:	IPETRONIK GmbH & Co KG
Product:	µCROS SL
Model:	Data Logger
HW version:	1.03
SW version:	1.30
Serial number:	00060
Power Supply:	24 V DC

Full Spectrum



Remarks:

- Emission at 1,713250000GHz and 2,444500000GHz is Carrier Frequency from WCDMA Band IV and WLAN 2.4GHz, which are not relevant to results.

Spurious Emission Table

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)
30 to 50	-45	-13.00	58	155.0
50 to 100	-49	-13.00	62	155.0
100 to 200	-47.00	-13.00	60	155.0
200 to 500	-42.00	-13.00	53	155.0
500 to 1000	-40.00	-13.00	53	155.0
1000 to 2000	-29.31	-13.00	31.12	155.0
2000 to 2800	-21.31	-13.00	31.12	155.0

1.2. Spurious emissions radiated (FDD Band IV + WLAN 2.4GHz transmitting mode)_2.8GHz-18GHz

8.03b_RSE_UMTS_FDD4_WLAN_2.4G

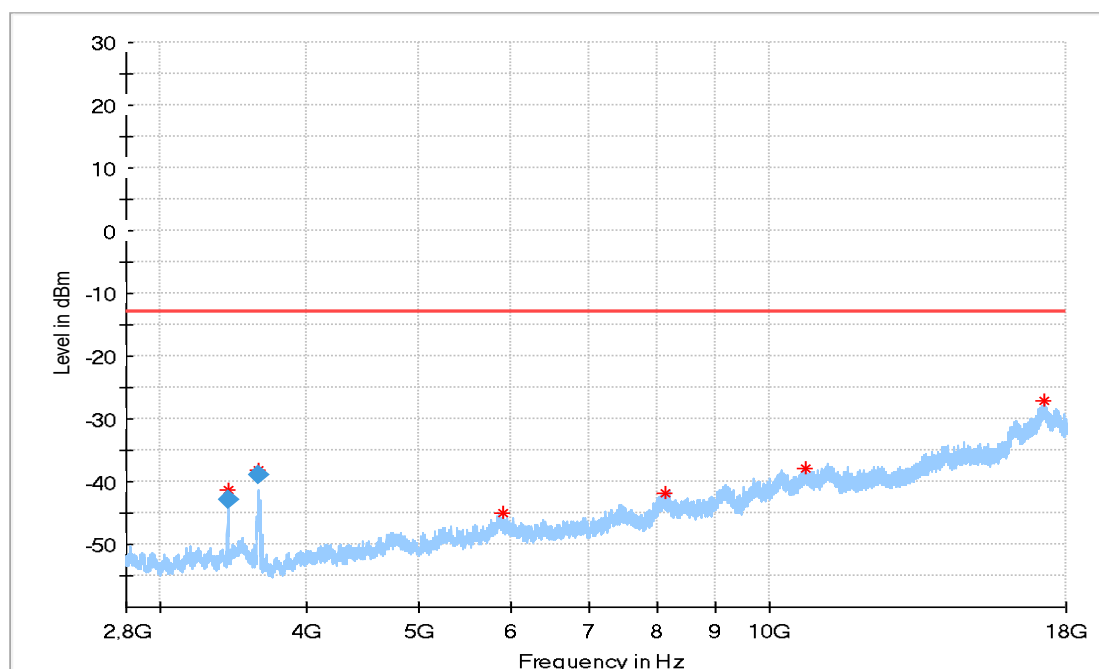
Common Information

Test Description:	Radiated emission
Test Site:	Fully-Anechoic Room
Test Standard:	FCC Part 27.53(h) AWS emission limits
Antenna polarisation:	vertical / horizontal
Measurement software version	EMC32 V10.50.3
Operating Mode:	UMTS FDD IV +W-Lan 2.4GHz
Operator:	TFra
Verdict:	Passed

EUT Information

Manufacturer:	IPETRONIK GmbH & Co KG
Product:	µCROS SL
Model:	Data Logger
HW version:	1.03
SW version:	1.30
Serial number:	00061
Power Supply:	24 V DC

Full Spectrum



Final Result

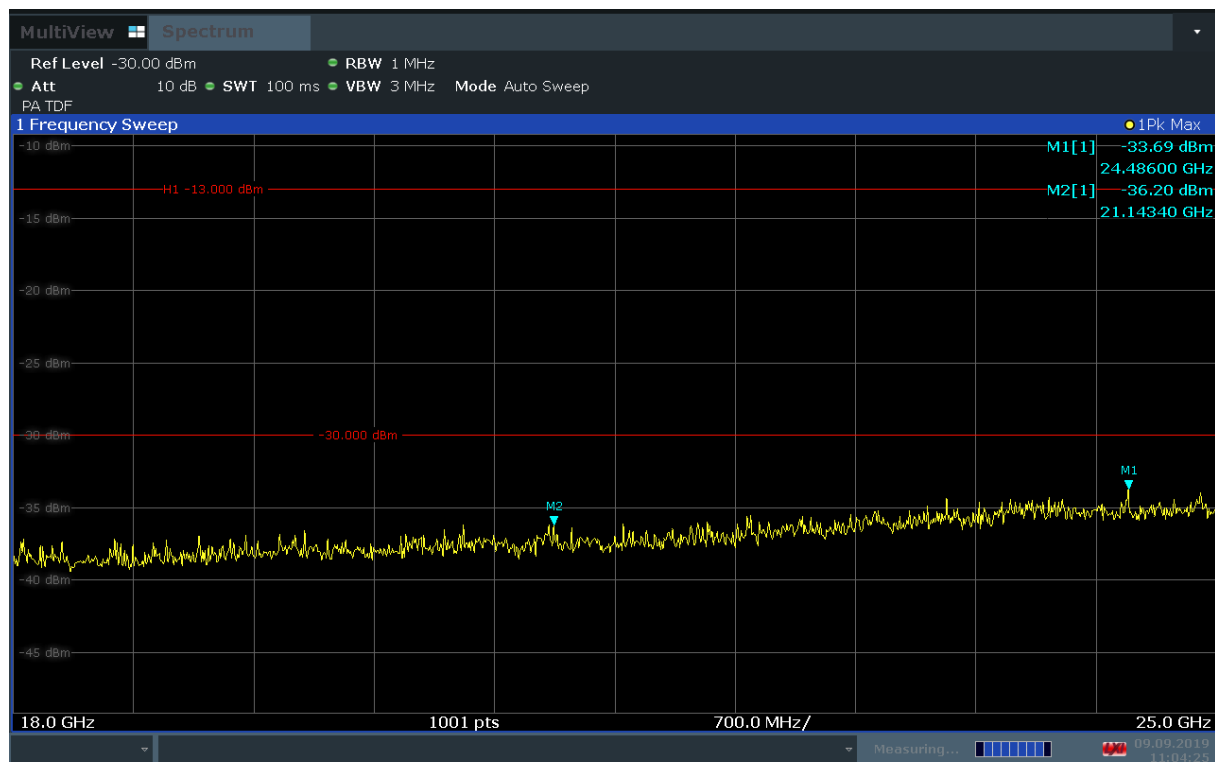
Frequency (MHz)	RMS (dBm)	Limit (dBm)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Elevation (deg)	Corr. (dB)
3423.351667	-42.89	-13.00	29.89	100.0	1000.000	V	284.0	0.0	-93.4
3634.063333	-39.02	-13.00	26.02	100.0	1000.000	V	186.0	0.0	-93.5

Spurious Emission Table

Frequency (MHz)	MaxPeak (dBm)	Limit (dBm)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
3423.351667	-41.31	-13.00	31.12	155.0	V	284.0
3634.063333	-38.16	-13.00	28.25	155.0	V	186.0
5893.706667	-45.06	-13.00	32.06	155.0	V	30.0
8127.600000	-41.90	-13.00	28.90	155.0	H	210.0
10736.426667	-37.94	-13.00	24.94	155.0	H	210.0
17214.666667	-27.04	-13.00	14.04	155.0	V	345.0

1.3. Spurious emissions radiated (FDD Band IV + WLAN 2.4GHz transmitting mode)_18GHz-25GHz

8.03c_RSE_UMTS_FDD4_WLAN_2.4G



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Remarks:

- Limit line -30dBm is not relevant to results, just graphical indication of reference line of spectrum-analyzer FSW67
- Measurement from 18GHz to 25GHz limit line is -13dBm.