

Annex 4: Measurement diagrams to
TEST REPORT
 No.: 6-0315-13-3-2b

According to:
FCC Regulations
 Part 22, Part 24

IC-Regulations
 RSS-132, RSS-133, RSS-Gen

for

Peiker Acoustic GmbH & Co. KG

GSM/GPRS/E-GPRS/W-CDMA Wireless Module V1140-105

FCC-ID: QWY-V1140-105
 IC: 6588A-V1140105

Laboratory Accreditation and Listings			
 Deutsche Akkreditierungsstelle D-PL-12047-01-01	 Reg. No.: 736496 MRA US-EU 0003	 Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3	 Voluntary Controls for Electromagnetic Emissions Reg. No.: R-2666 C-2914, T-1967, G-301
 AUTHORIZED RF LABORATORY	 Authorized Test Lab LAB CODE 20011130-00		
accredited according to DIN EN ISO/IEC 17025			
CETECOM GmbH Laboratory Radio Communications & Electromagnetic Compatibility Im Teelbruch 116 • 45219 Essen • Germany Registered in Essen, Germany, Reg. No.: HRB Essen 8984 Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964 E-mail: info@cetecom.com • Internet: www.cetecom.com			

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1. Measurement diagrams

1.1. Spurious emissions radiated (FDD Band II transmitting mode)

8.21_RSE_R_Ch9400_RMC

Common Information

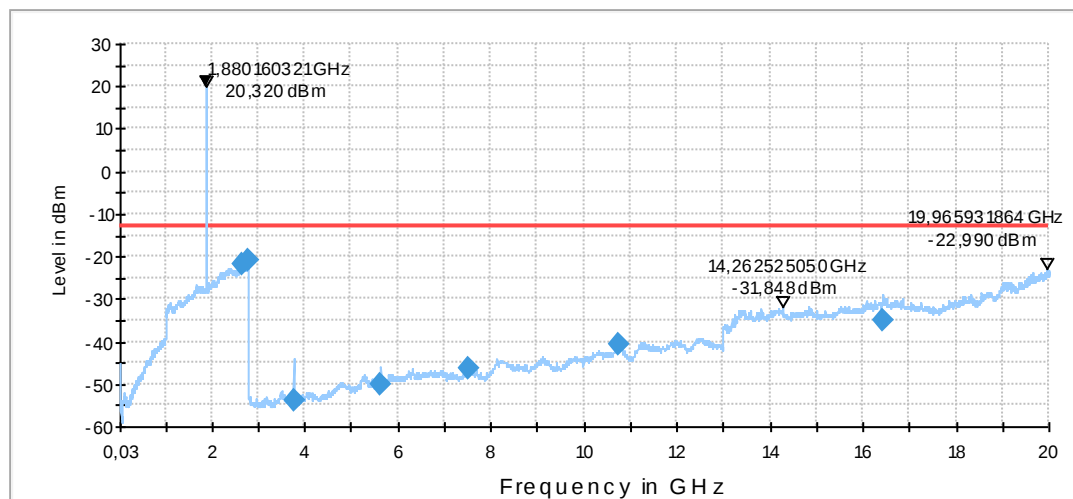
Test Description:	Radiated Spurious Emissions UMTS FDDII
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24
Operating Mode:	UE allocated channel 9400 (fc = 1880.0 MHz)
Environmental Conditions:	Humidity: 34%rH; Temperature: 21°C
Operator:	FTe

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030414_FCC_Part24_UMTS-FDDII_TX_all_channels_30M-25G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
2644.278557	-22.0	10000.0	1000.000	155.0	V	-3.0	0.0	-58.6	9.0	-13.0
2797.545090	-21.0	10000.0	1000.000	155.0	V	134.0	0.0	-57.1	8.0	-13.0
3761.232465	-54.0	10000.0	1000.000	155.0	V	90.0	90.0	-95.1	41.0	-13.0
5643.496994	-50.0	10000.0	1000.000	155.0	H	0.0	90.0	-89.7	37.0	-13.0
7520.290581	-46.2	10000.0	1000.000	155.0	H	79.0	90.0	-83.4	33.2	-13.0
10767.144288	-40.9	10000.0	1000.000	155.0	V	256.0	90.0	-76.9	27.9	-13.0
16429.328658	-35.1	10000.0	1000.000	155.0	H	241.0	0.0	-69.6	22.1	-13.0

1.2. Spurious emissions radiated (FDD Band V transmitting mode)

8.51_RSE_R_Ch4183_RMC

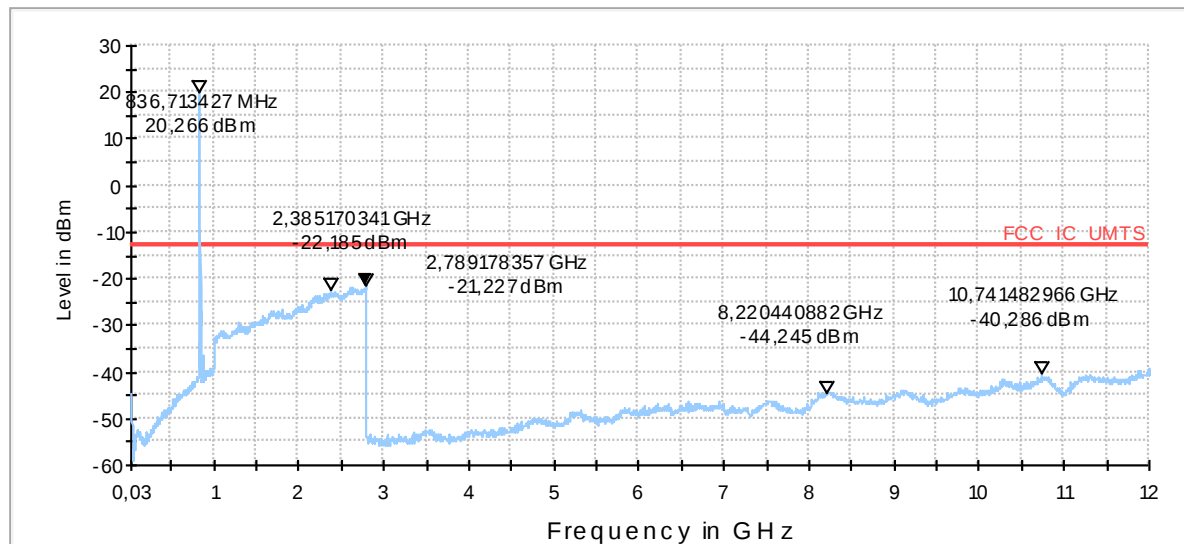
Common Information

Test Description:	Radiated Spurious Emissions UMTS FDDV
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917(a)
Operating Mode:	UE allocated channel 4183 (fc = 836.4 MHz), Voice/HSDPA/HSUPA/HSPA+, H-Set x
Environmental Conditions:	Humidity: 34%rH; Temperature: 21°C
Operator:	FTe

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module
EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030411_FCC_Part22_UMTS-FDDV_TX_all_channels_30M-12G



1.3. Spurious emissions conducted on FDD Band II

36.62_RSE_C_Ch9400_RMC_Sweep1

Common Information

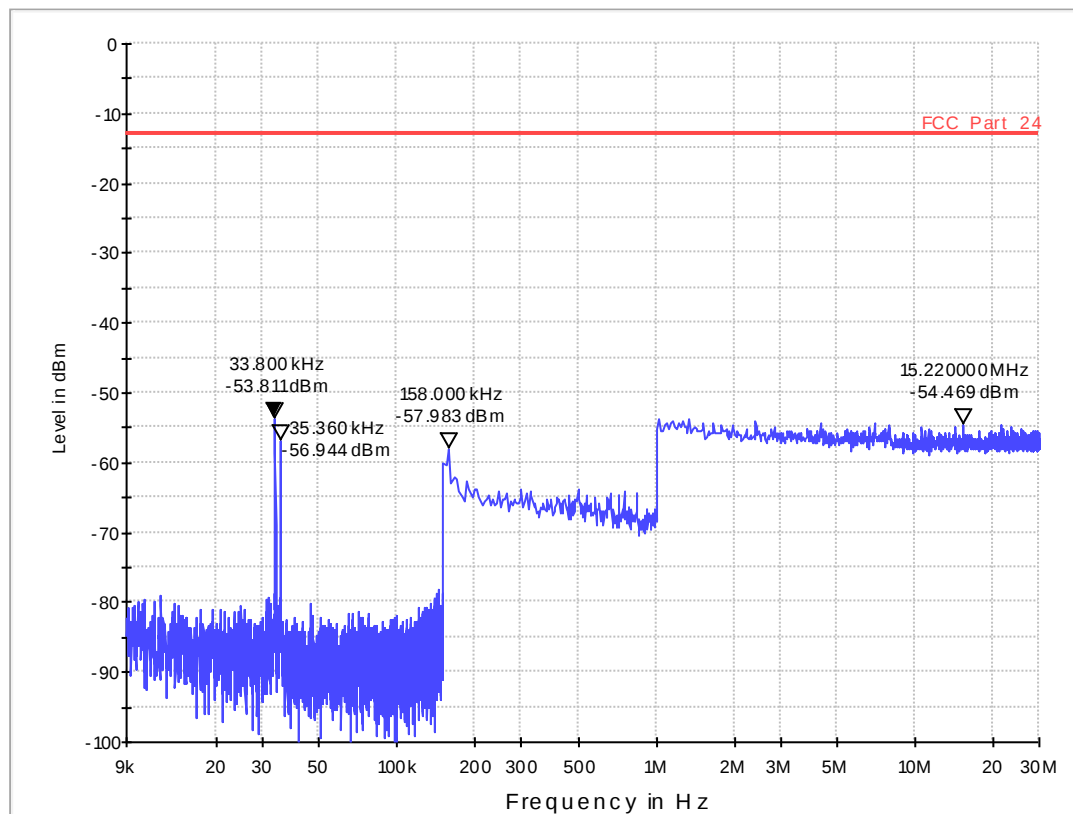
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 24
Operation Mode:	FDD 2, TX-Channel 9400 (1880MHz)
Operator:	Dpa
Comment:	--

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_24_FDD_Scan1_9kHz_30MHz



36.63_RSE_C_Ch9400_RMC_Sweep2

Common Information

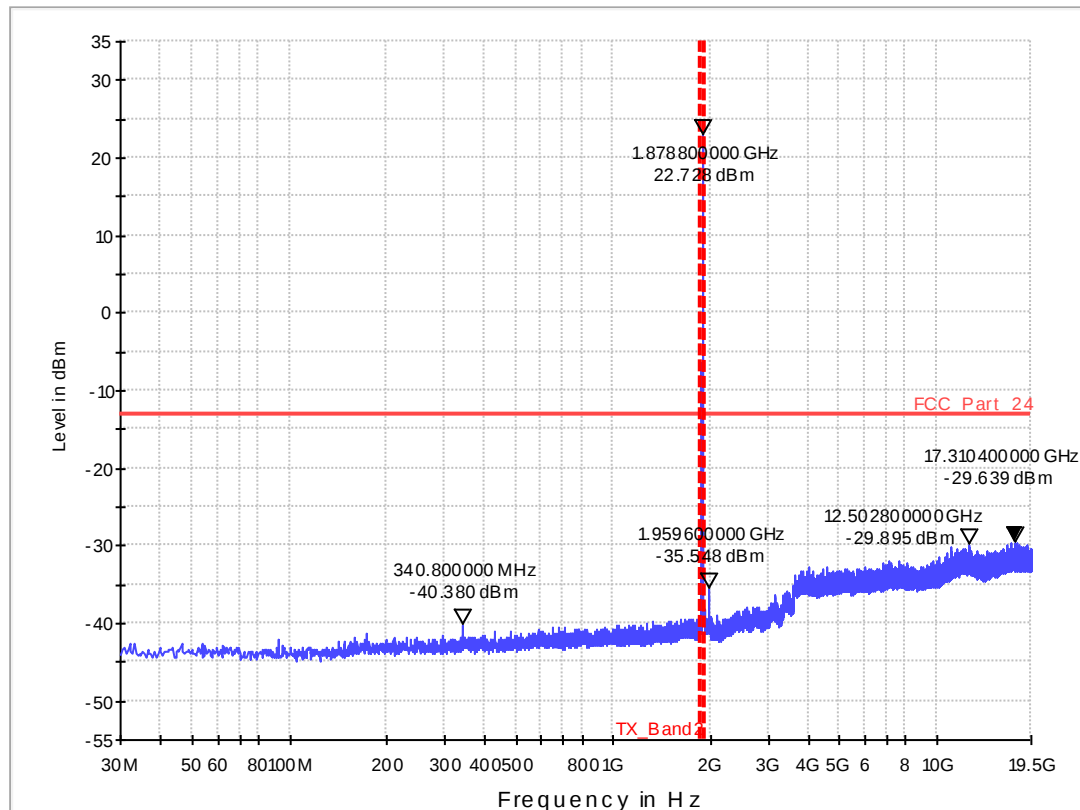
Test Description:	TX Spurious Emission Conducted S2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 24, RSS-133
Operation mode:	FDD 2, TX-Channel 9400 (1880MHz)
Operator:	Dpa
Comment:	--

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_24_FDD_Scan2_30MHz_19.5GHz



1.4. Spurious emissions conducted on FDD Band V

36.42_RSE_Ch4183_RMC_Sweep1

Common Information

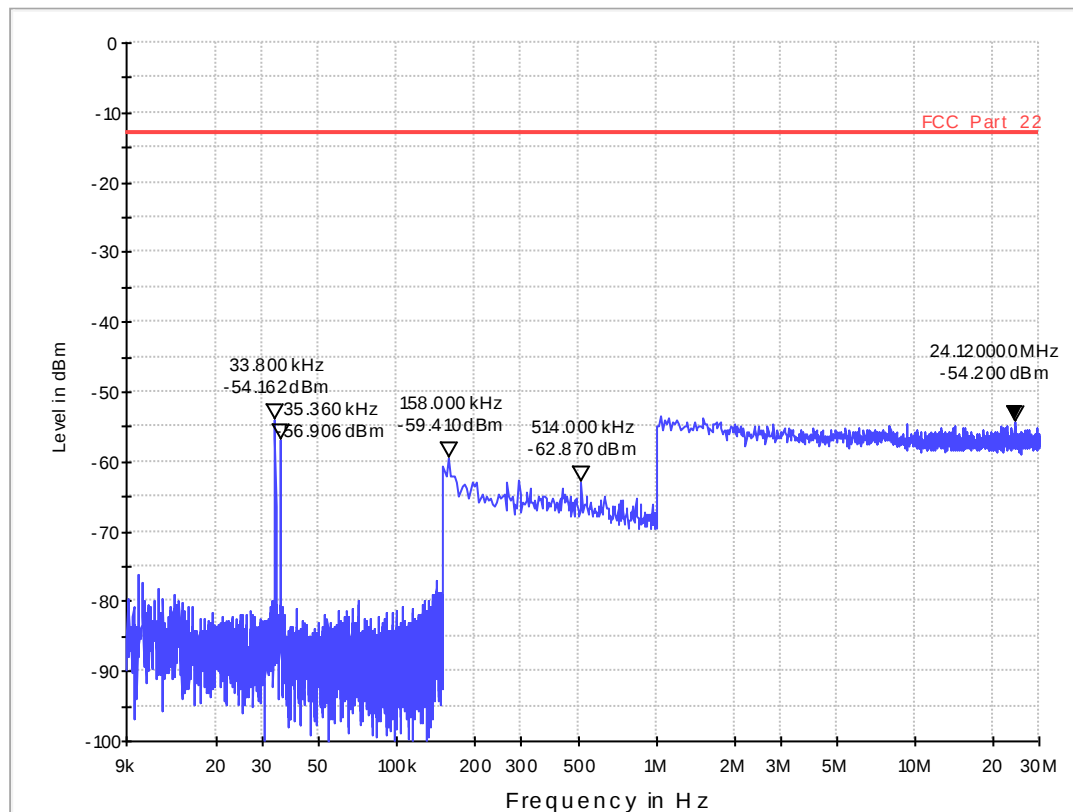
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22, RSS-132
Operation mode:	FDD 5, TX-Channel 4183 (836,6MHz)
Operator	Dpa
Comment:	--

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_22_Scan1_9kHz_30MHz



36.43_RSE_Ch4183_RMC_Sweep2

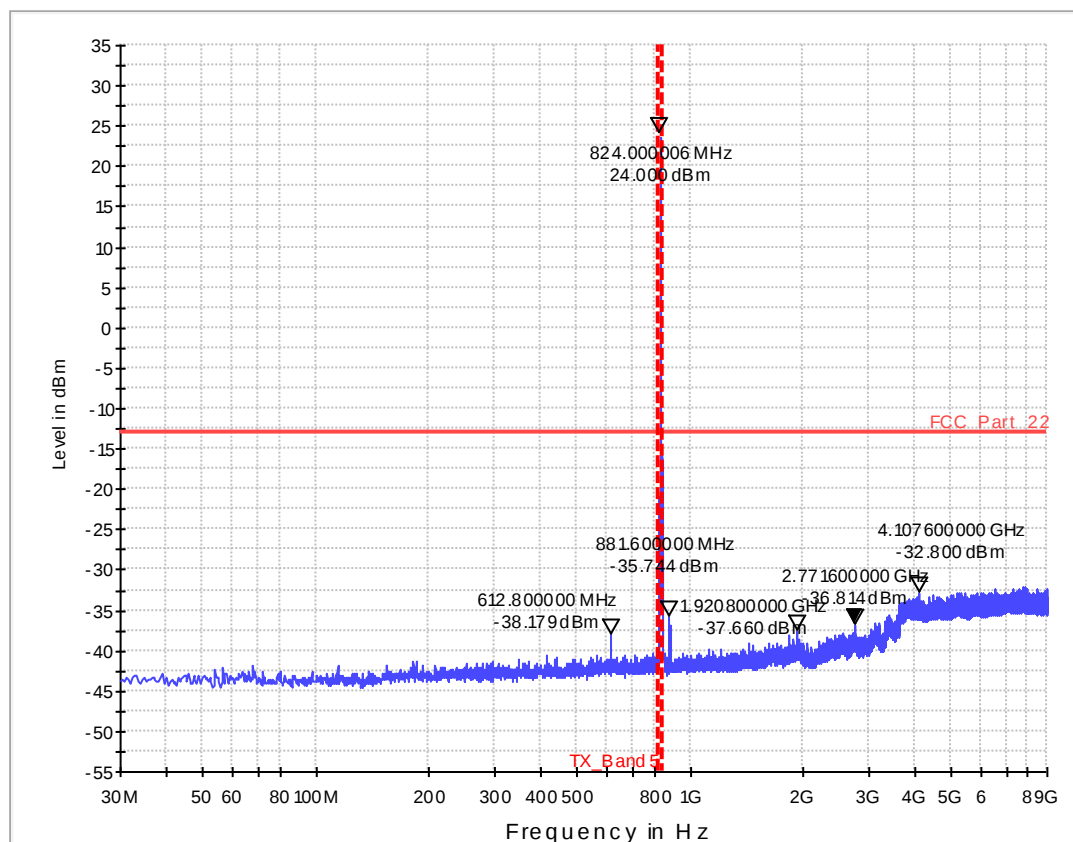
Common Information

Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22, RSS-132
Operating Mode:	FDD 5, TX-Channel 4183 (836,6MHz)
Operator:	dpa
Comments:	--

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-



1.5. Band-Edge emissions on FDD Band II

37.60_BE_Ch9262_RMC_AV

Common Information

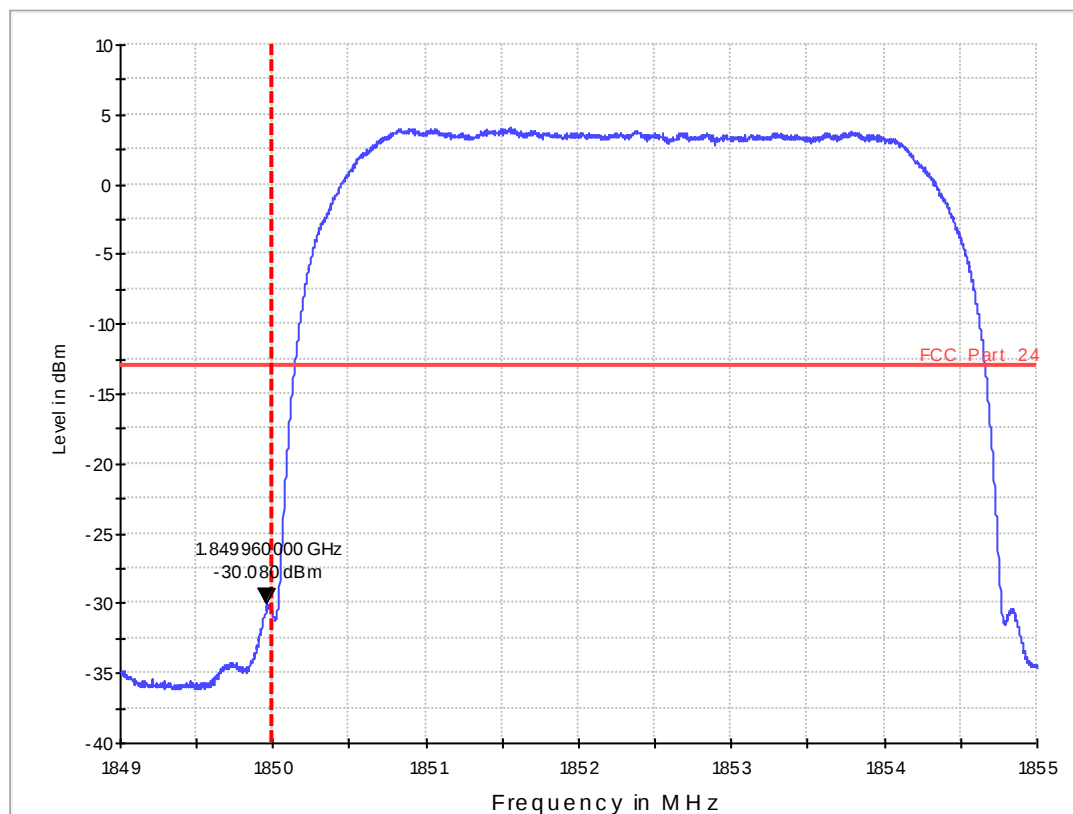
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 24
Operation mode:	Normal conditions (Vnominal, Tnominal)
Operator:	dpa
Comment:	TX on channel 9262, FDD 2

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_24_BE_LOW_9262



37.61_BE_Ch9538_RMC_AV

Common Information

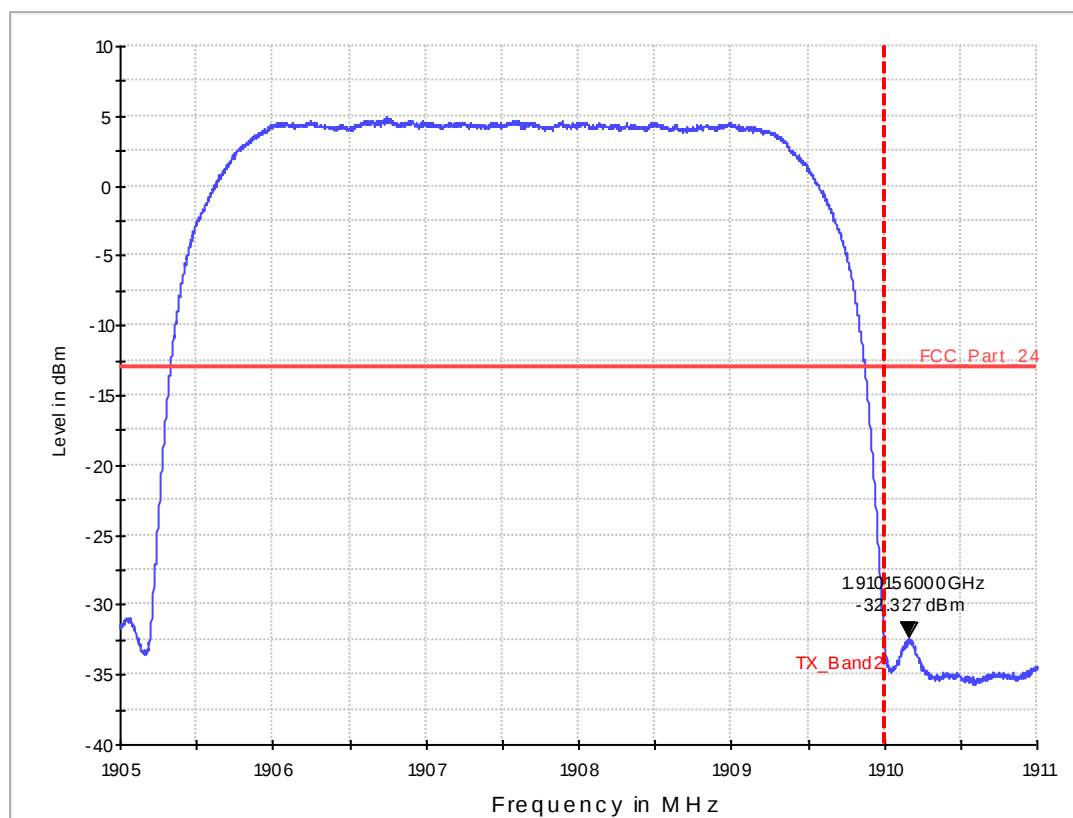
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 24, RSS-133
Operation mode:	Normal conditions (Vnominal, Tnominal)
Operator:	dpa
Comment:	TX on channel 9538, FDD 2

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_24_BE_High_9538



1.6. Band-Edge emissions on FDD Band V

37.40_BE_Ch4132_RMC_AV

Common Information

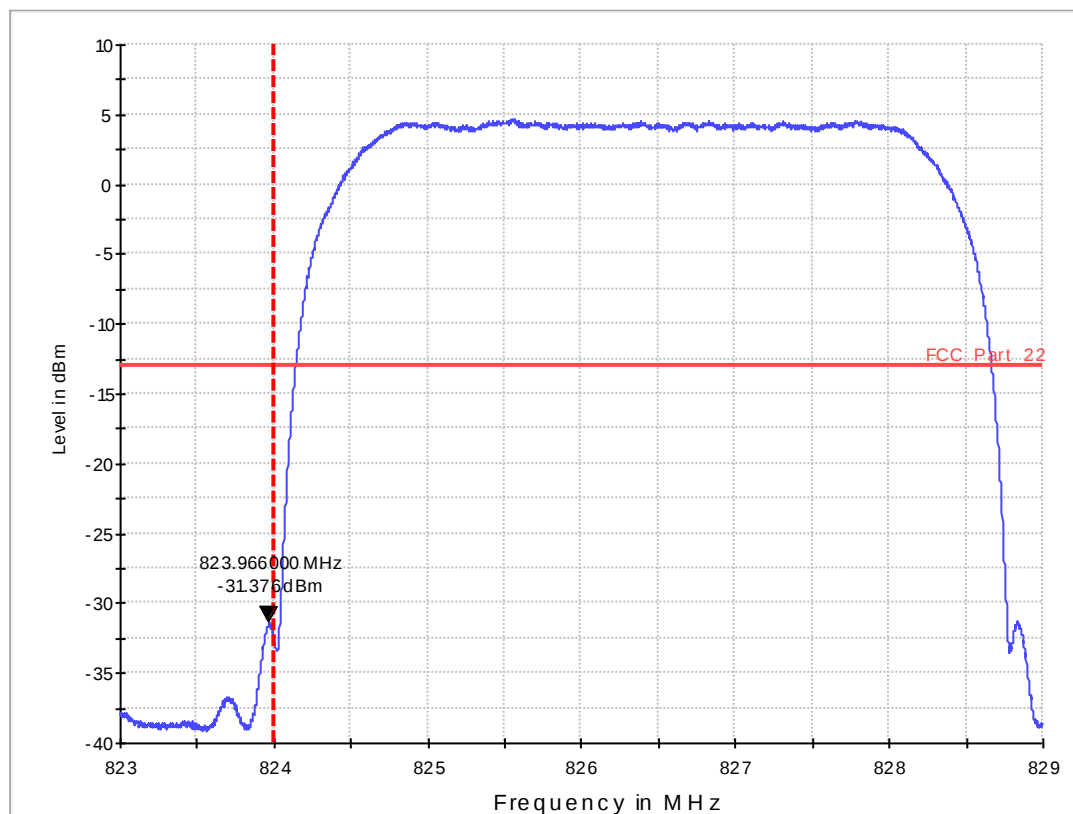
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22
Environment Conditions:	Normal conditions (Vnominal, Tnominal)
Operator Name:	dpa
Operating mode:	TX on channel 4132, FDD 5

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_22_BE_LOW_4132



37.41_BE_Ch4233_RMC_AV

Common Information

Test Description:	TX Spurious Emission Conducted S2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22
Environment Conditions:	Normal conditions (Vnominal, Tnominal)
Operator Name:	dpa
Operating mode:	TX on channel 4233, FDD 5

EUT Information

Manufacturer:	Peiker
Model:	V1140-105
Type:	GSM/WCDMA Module

EUT:	PKD0024AB1d
HW version:	HW3913
SW version:	M9615A-CETWTAZM-5.0.110014
SVN:	-
Config:	C01
Serial number:	NA_3G#605 V1140-105 HW3913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna US 34105
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_22_BE_High_4233

