

Annex 4: Measurement diagrams
to TEST REPORT
No.: 6-0315-13-1-8a

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 V1140-103

FCC-ID: QWY-V1140-103
IC: 6588A-V1140103







Laboratory Accreditation and Listings			
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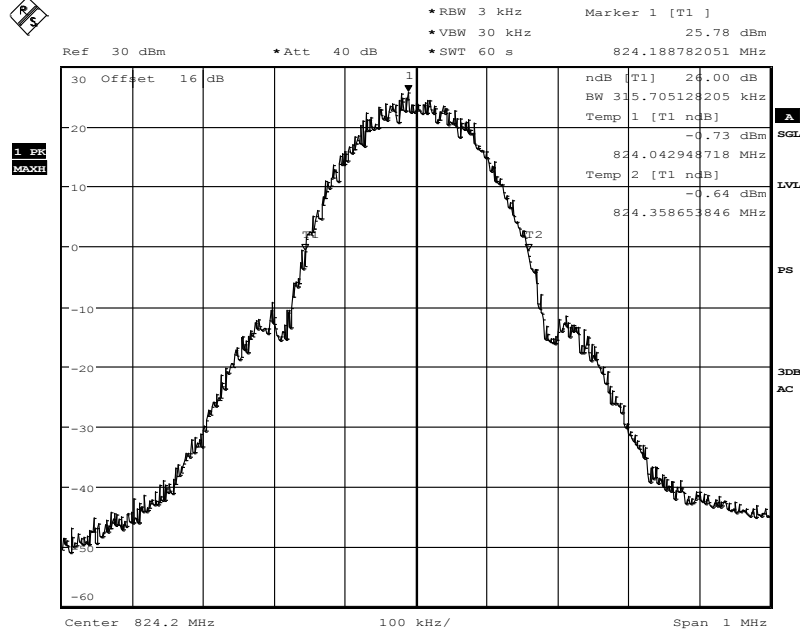
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1. Measurement diagrams

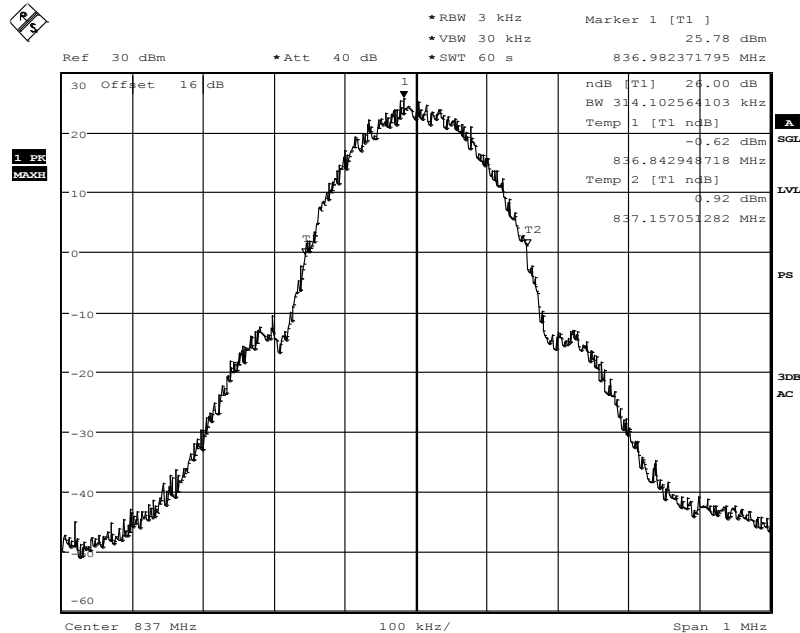
1.1. Emission bandwidth (26dBc Bandwidth)

1.1.1. GSM 850 (GMSK Modulation)



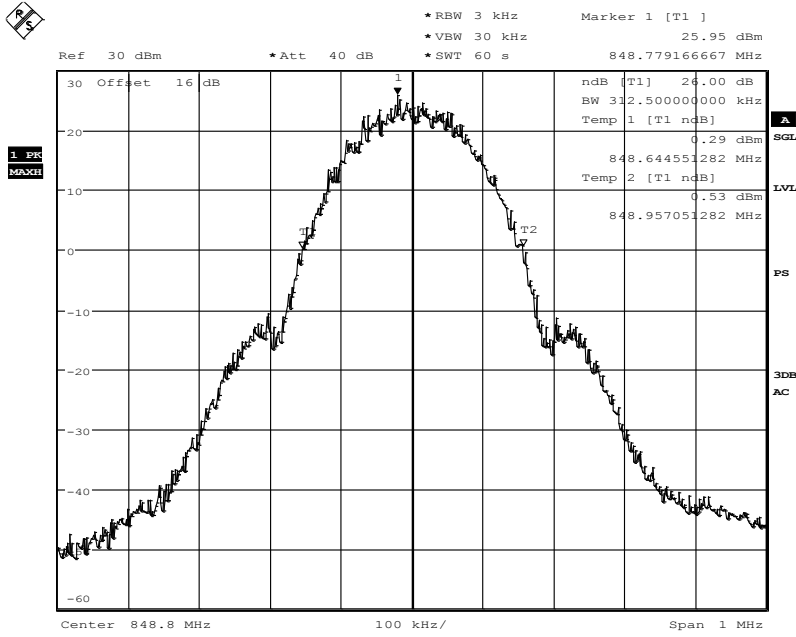
Date: 24.OCT.2013 13:59:26

Channel 128



Date: 24.OCT.2013 14:04:15

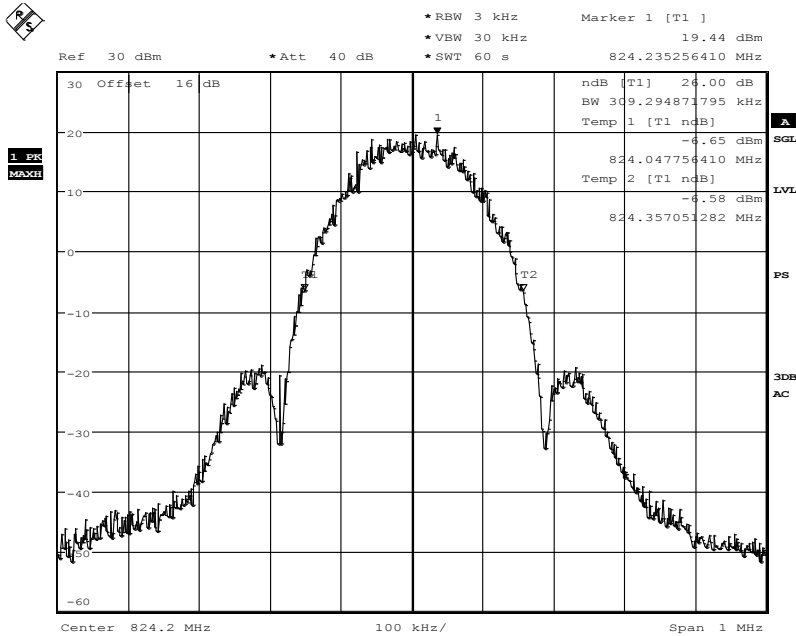
Channel 192



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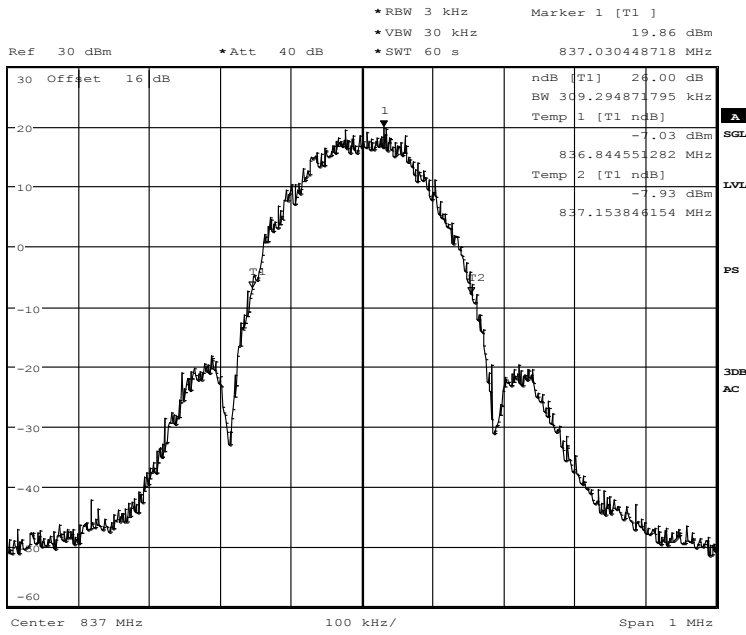
Channel 251

1.1.2. E-GPRS 850 (8-PSK Modulation)



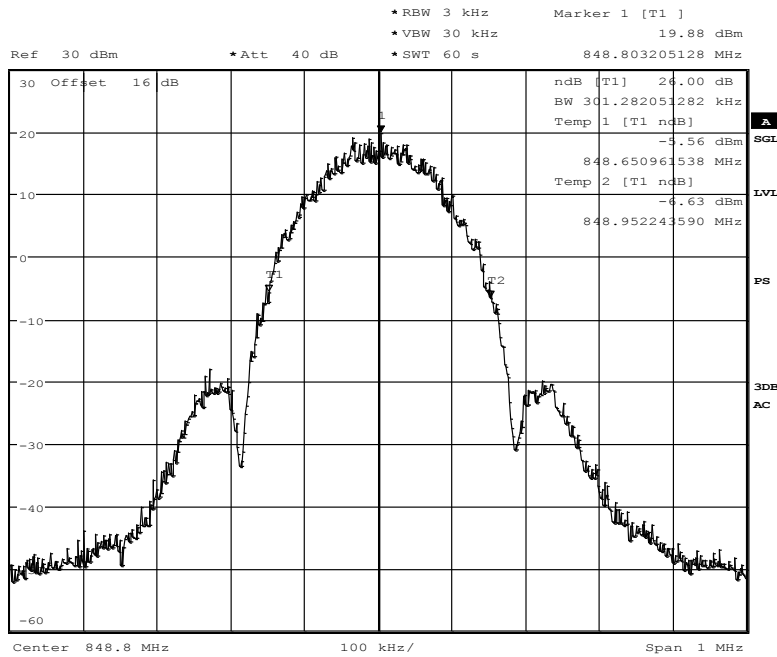
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Channel 128



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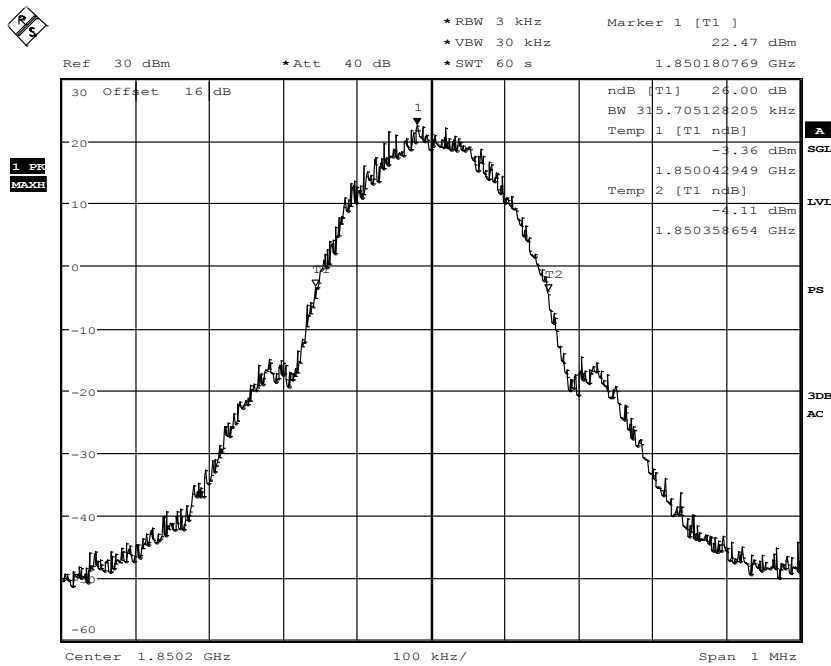
Channel 192



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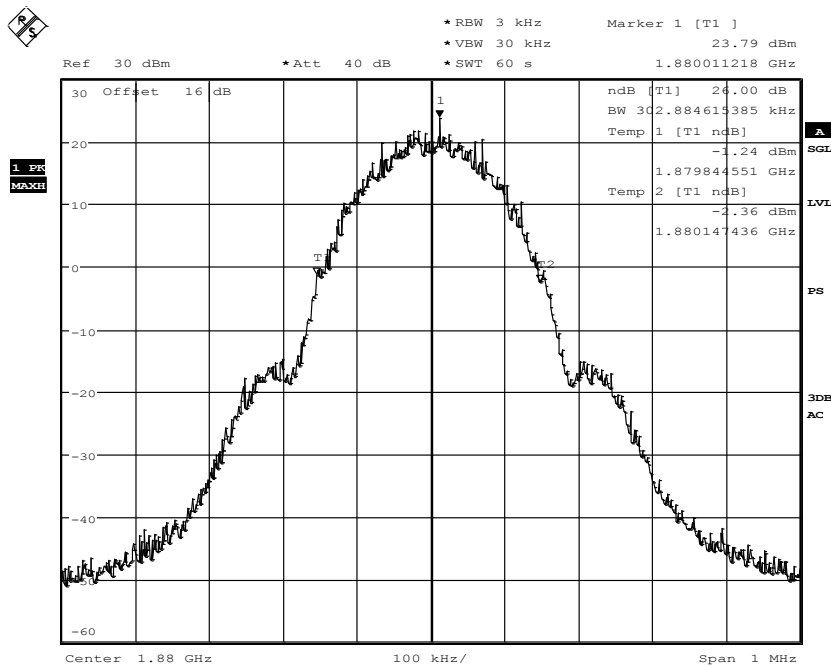
Channel 251

1.1.3. GSM 1900 (GMSK-Modulation)



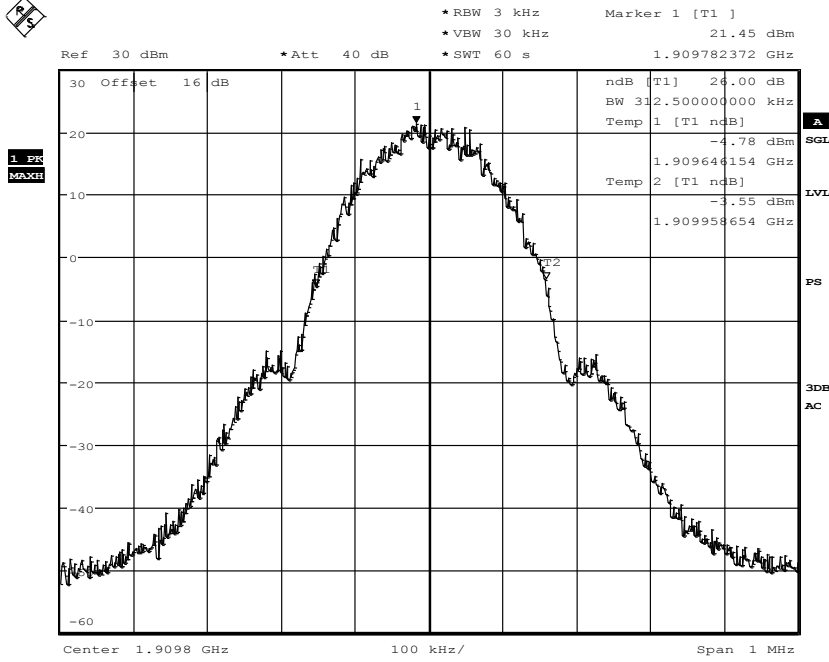
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Channel 512



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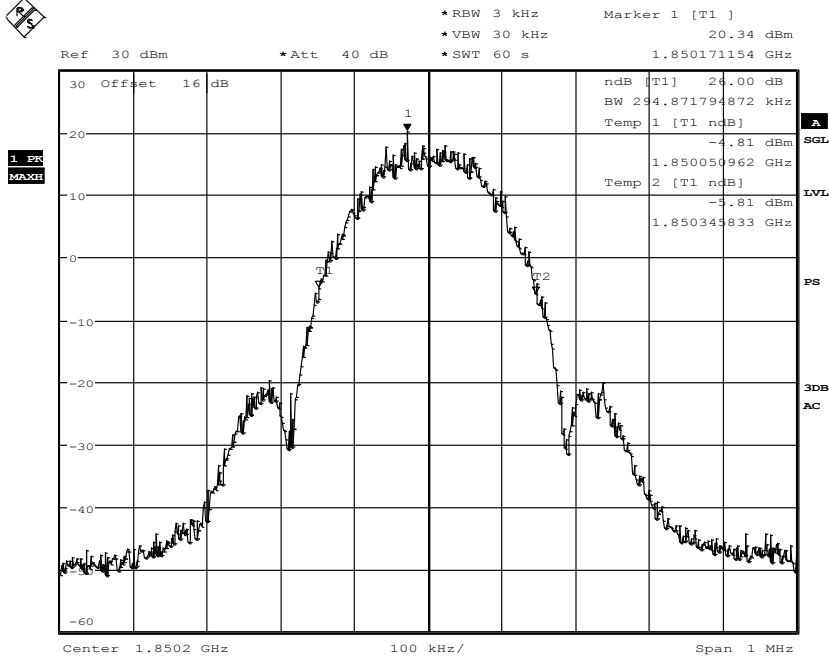
Channel 661



Date: 24.OCT.2013 15:07:18

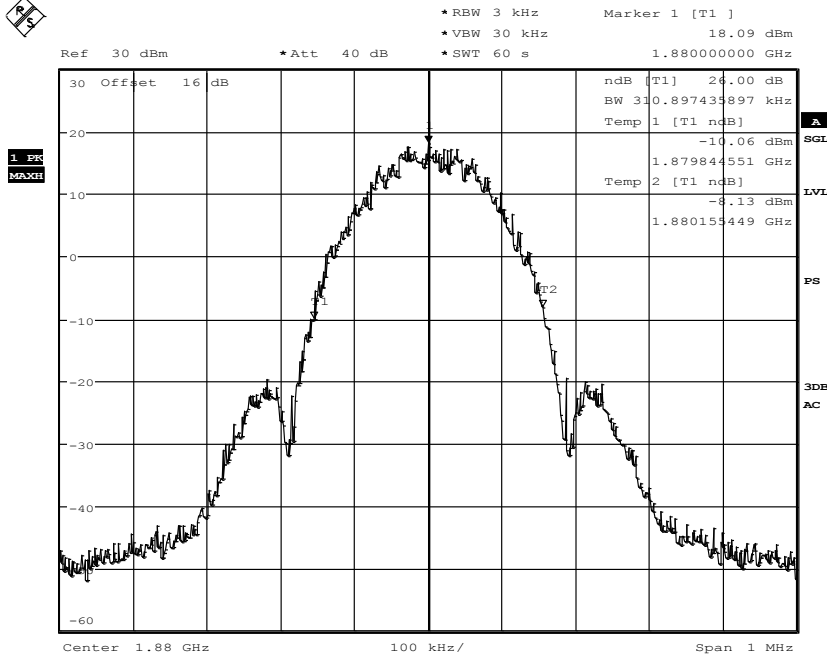
Channel 810

1.1.4. E-GPRS 1900 (8-PSK Modulation)



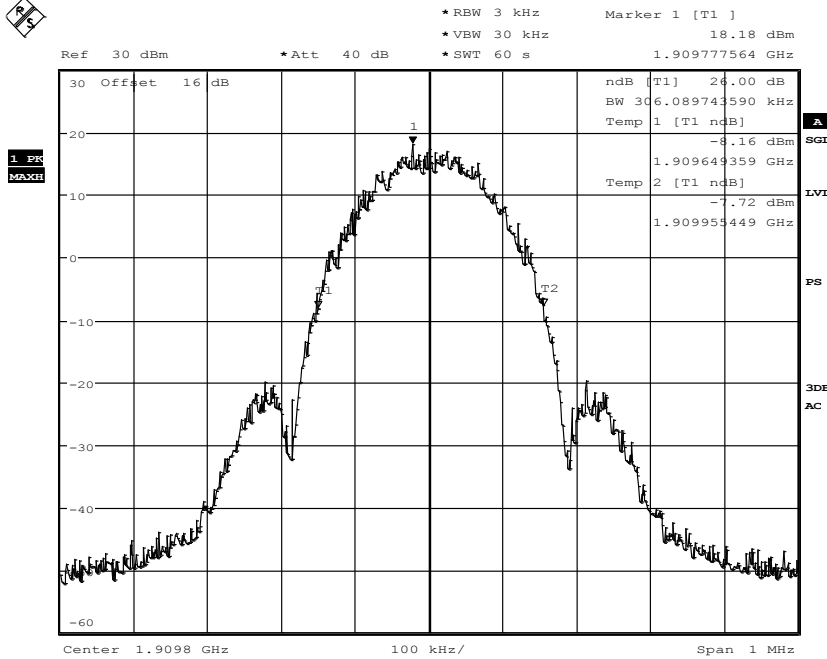
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Channel 512



Date: 24.OCT.2013 14:44:01

Channel 661

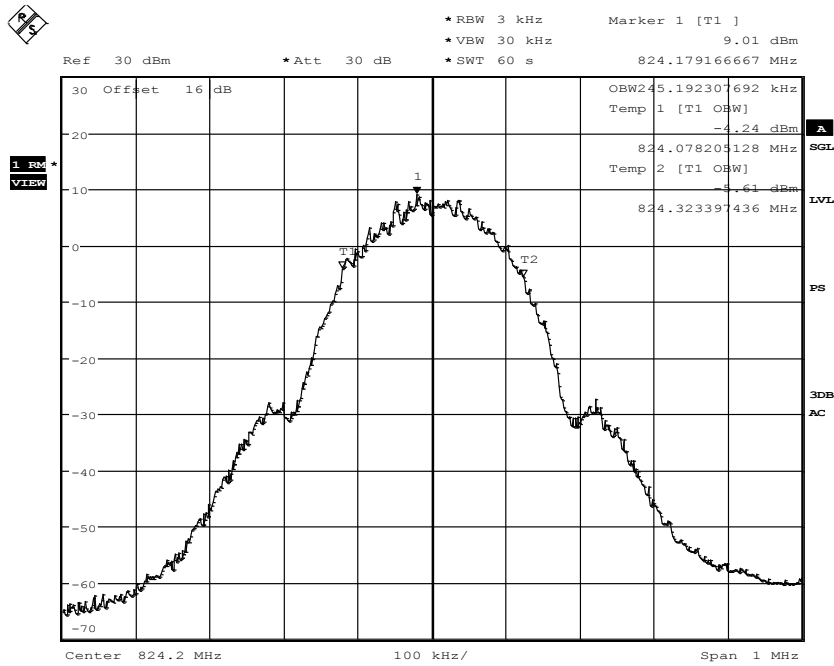


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Channel 810

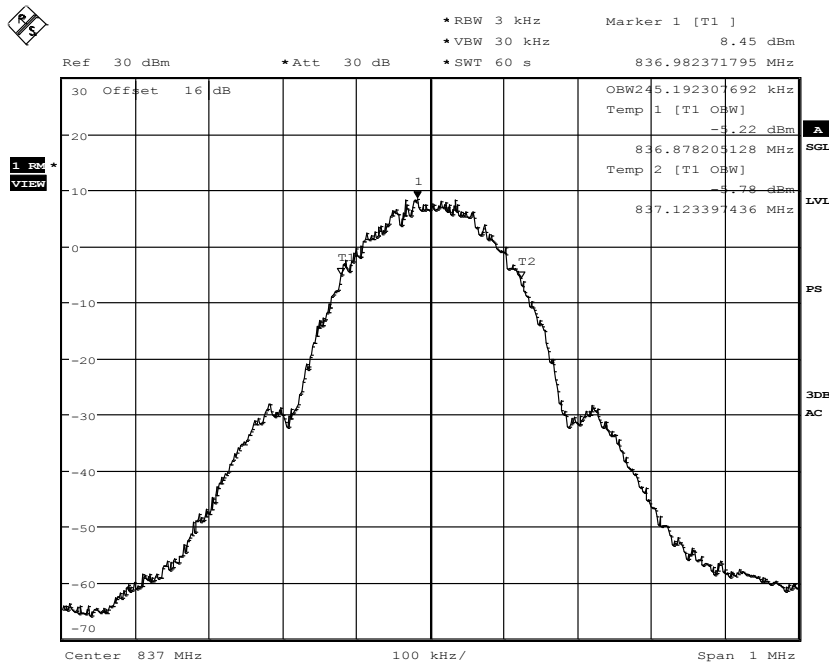
1.2. 99% Occupied bandwidth

1.2.1. GSM 850 (GMSK modulation)



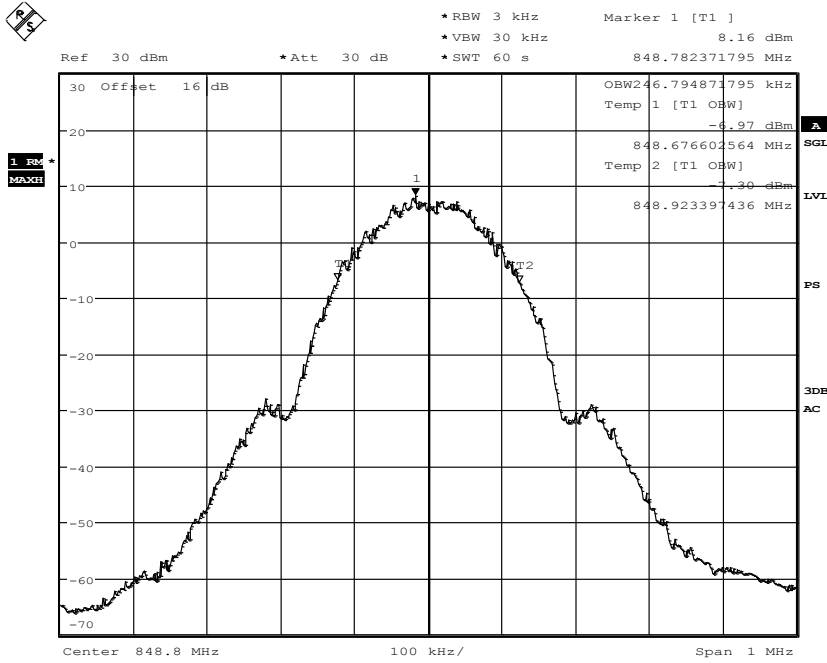
Date: 24.OCT.2013 16:26:57

Channel 128



Date: 24.OCT.2013 16:25:01

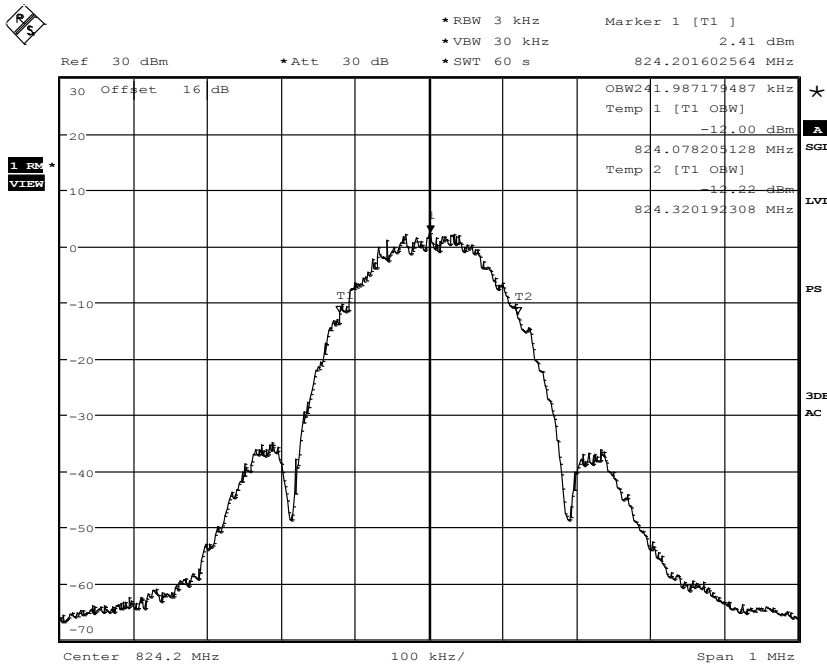
Channel 192



Date: 24.OCT.2013 16:23:00

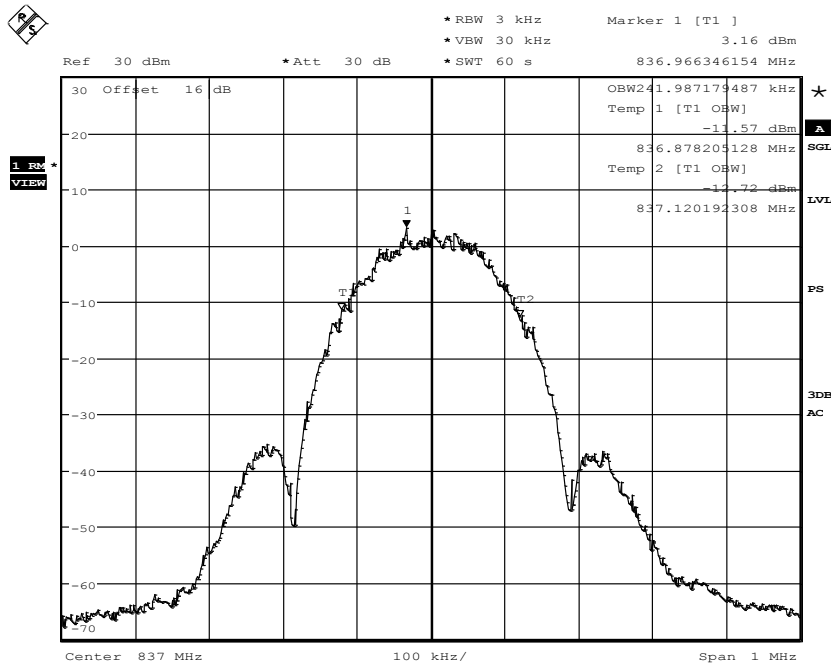
Channel 251

1.2.2. E-GPRS 850 (8PSK modulation)



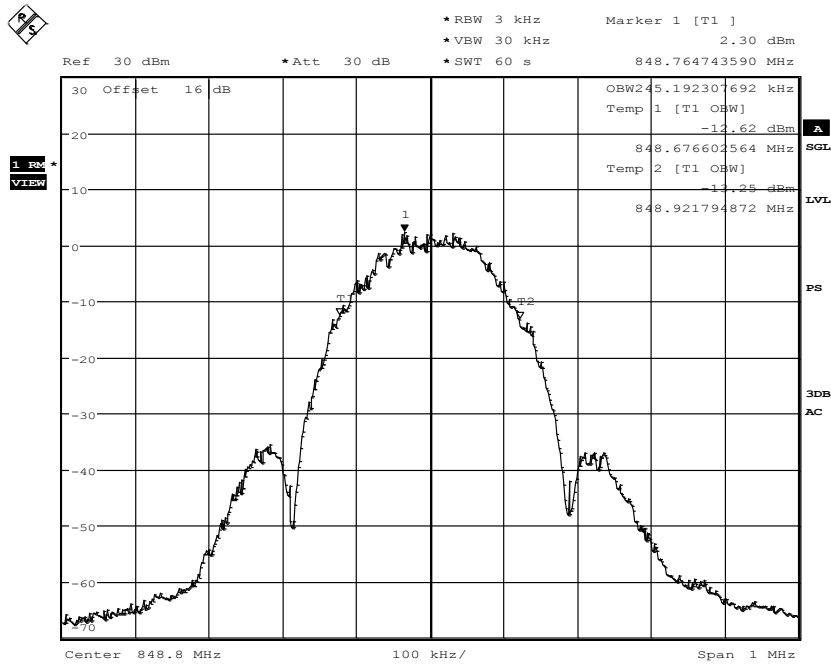
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Channel 128



Date: 24.OCT.2013 16:15:15

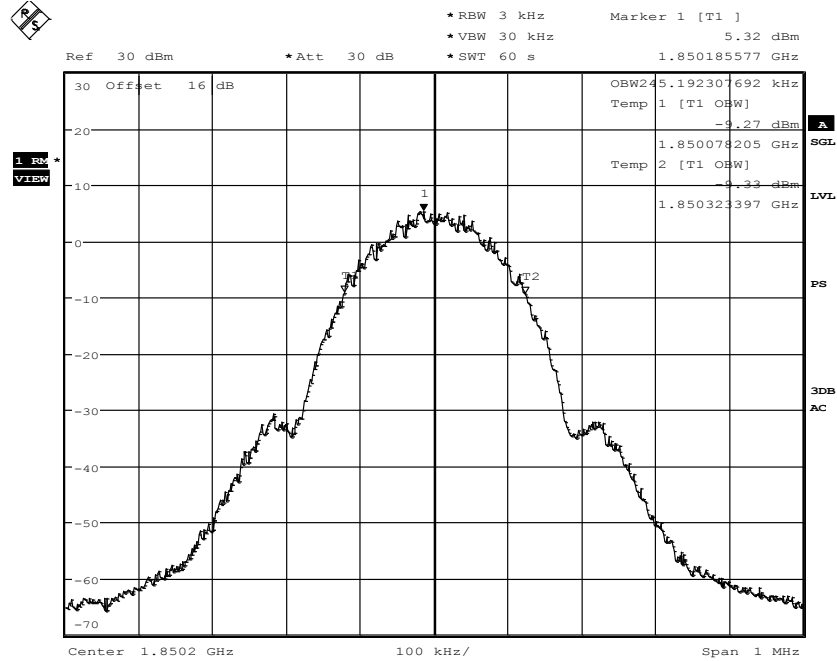
Channel 192



Date: 24.OCT.2013 16:17:14

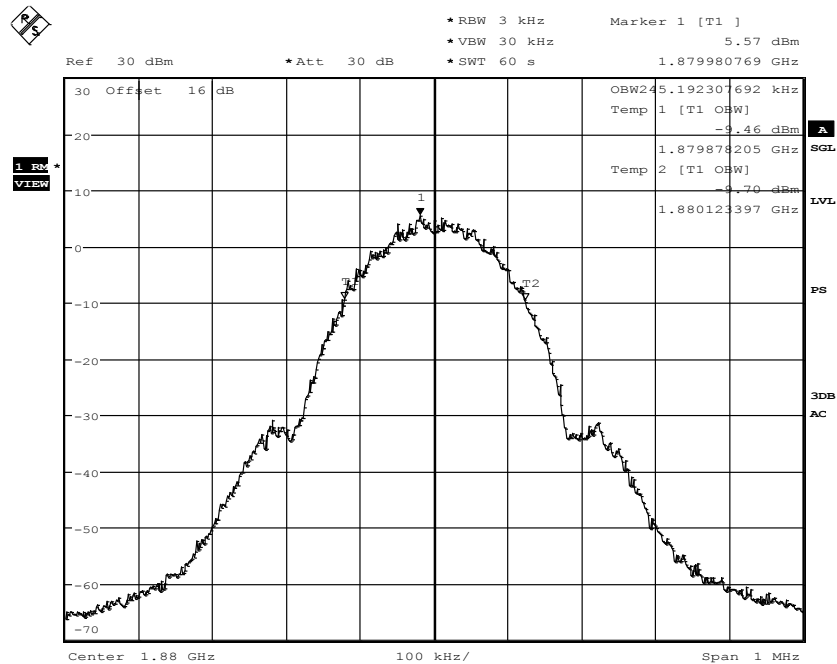
Channel 251

1.2.3. GSM 1900 (GMSK-Modulation)



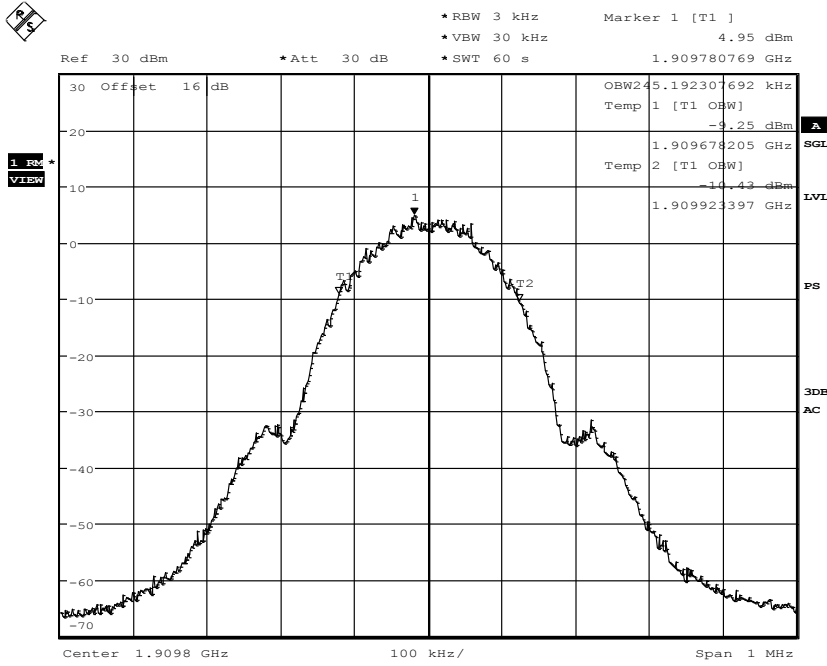
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Channel 512



Date: 24.OCT.2013 16:32:54

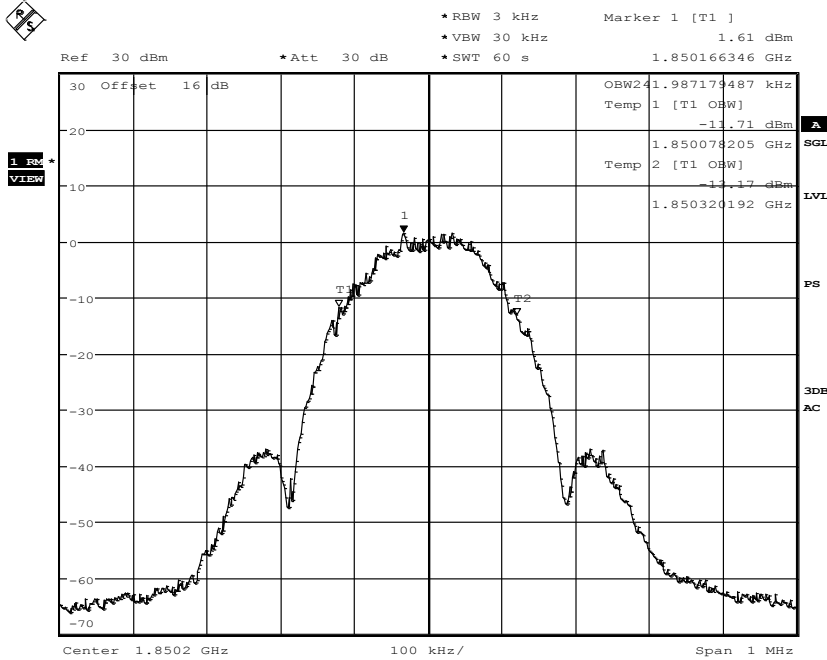
Channel 661



Date: 24.OCT.2013 16:34:37

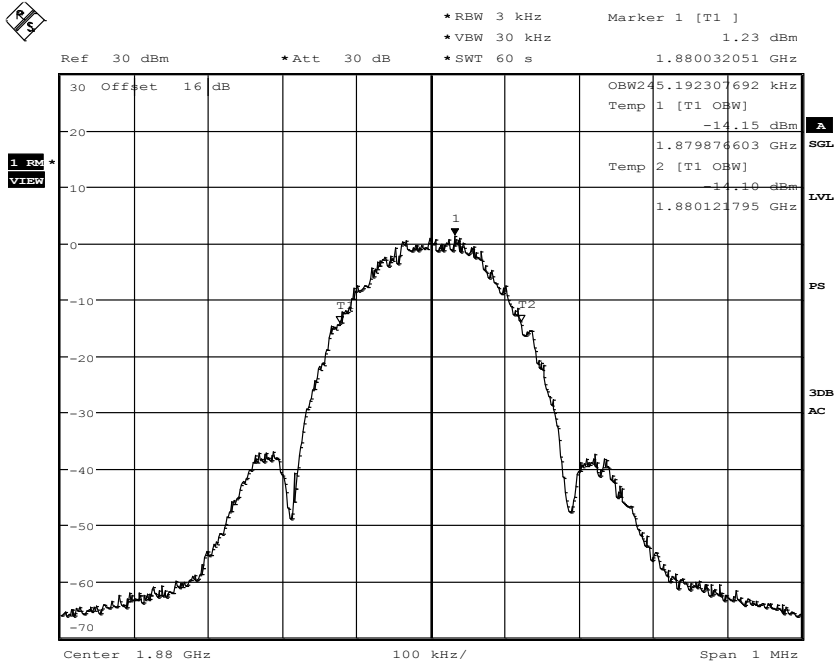
Channel 810

1.2.4. E-GPRS 1900 (8-PSK Modulation)



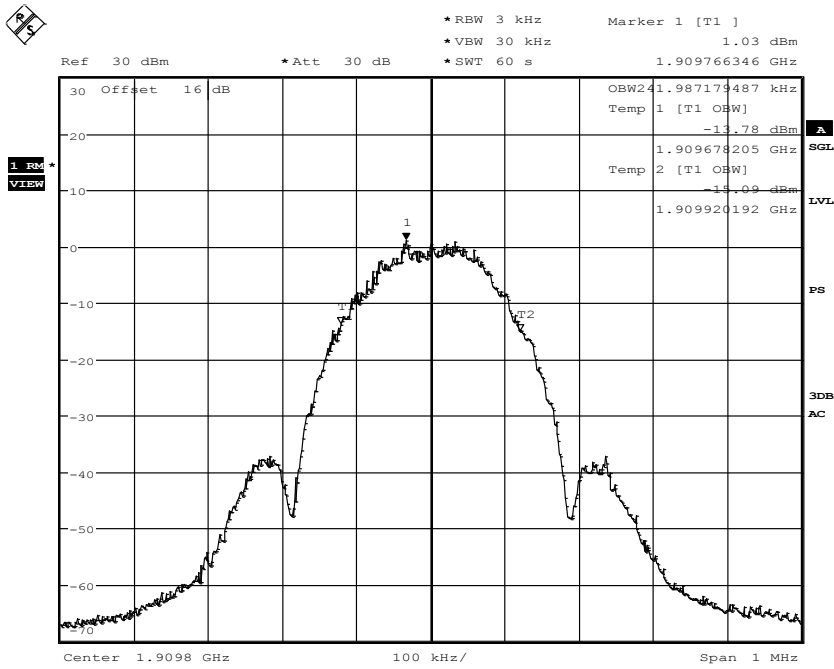
Date: 24.OCT.2013 18:22:33

Channel 512



Date: 24.OCT.2013 18:19:26

Channel 661



Date: 24.OCT.2013 18:17:14

Channel 810

1.3. Spurious emissions conducted

1.3.1. Out-of-Band emissions - GSM 850 mode (GMSK-Modulation)

Diagram No.: 36.01_RSE_Ch128_GPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22

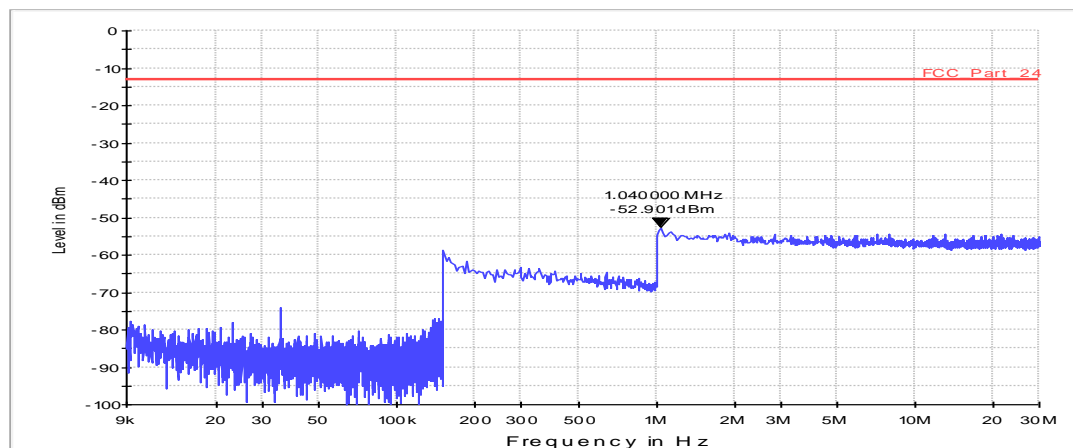
Operation mode: TX - GPRS, Channel 128
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_22_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.02_RSE_Ch128_GPRS_Sweep2

Common Information

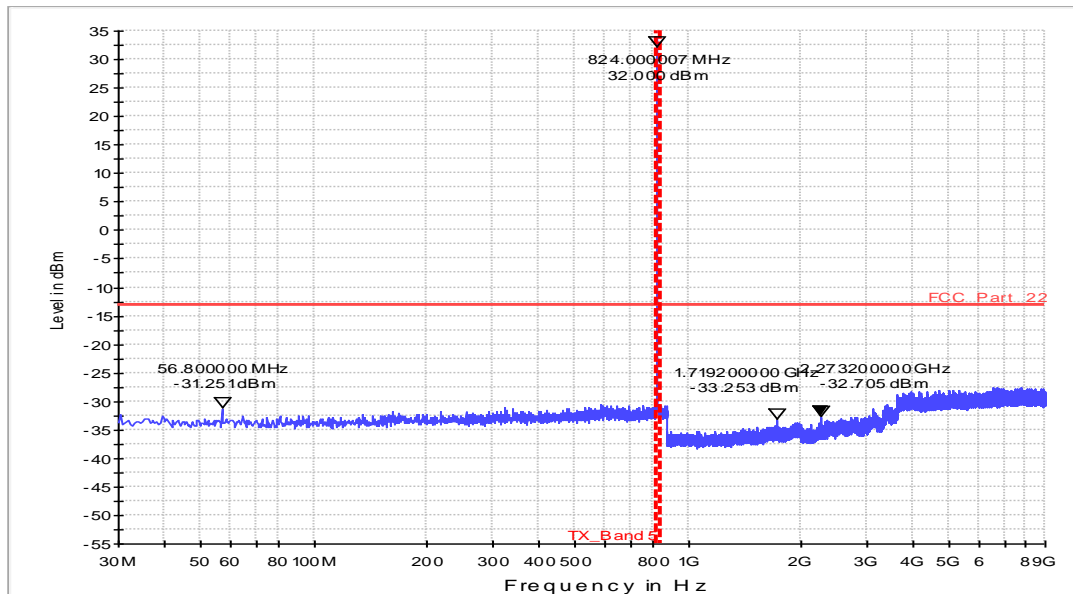
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22, RSS-132
Environment conditions:	Normal conditions (Vnominal, Tnominal)
Operator name:	Lor
Operating mode:	TX - Channel 128

EUT Information

Manufacturer:	Peiker
EuT:	PKD0424AB0o
Type:	GPRS/W-CDMA/LTE

HW version:	3.0
SW version:	M9615A-CETWZTAZM-5.0.17006
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	Microphone and loudspeaker
Power Supply:	3.8V DC
Comments:	--

Fula2_FCC_22_GSM_Scan2_30MHz_9GHz



Scan Setup: Fula2_FCC_22_GSM_Scan2_30MHz_9GHz [EMI radiated]

Hardware Setup:	Fula2_HW_08_FCC_22_24_6dB_coupler
Receiver:	[ESU 26]
Level Unit:	dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 823 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
823 MHz - 850 MHz	400 kHz	PK+	1 MHz	0.02 s	0 dB
850 MHz - 880 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
880 MHz - 9 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.03_RSE_Ch192_GPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22

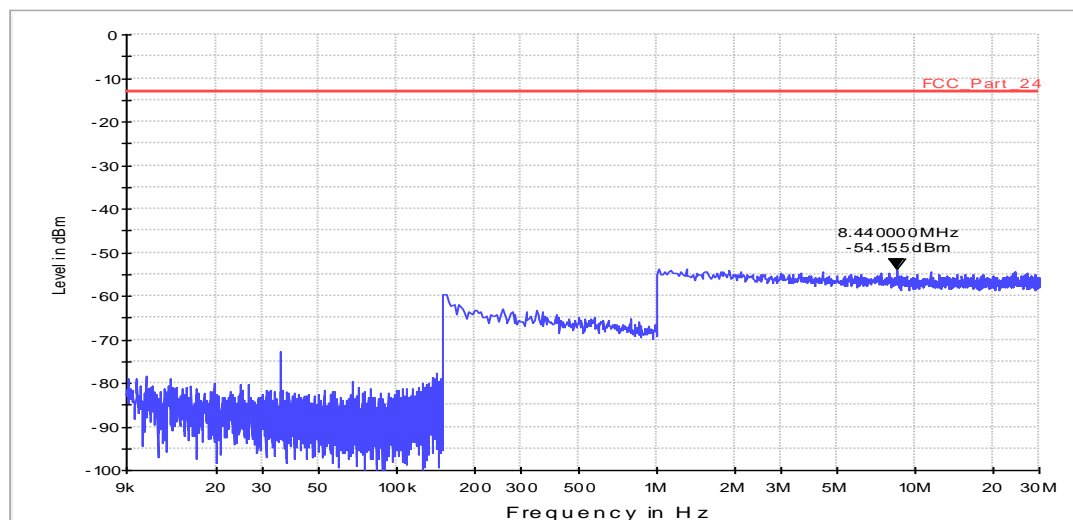
Operation mode: TX - GPRS, Channel 192
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_22_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.04_RSE_Ch192_GPRS_Sweep2

Common Information

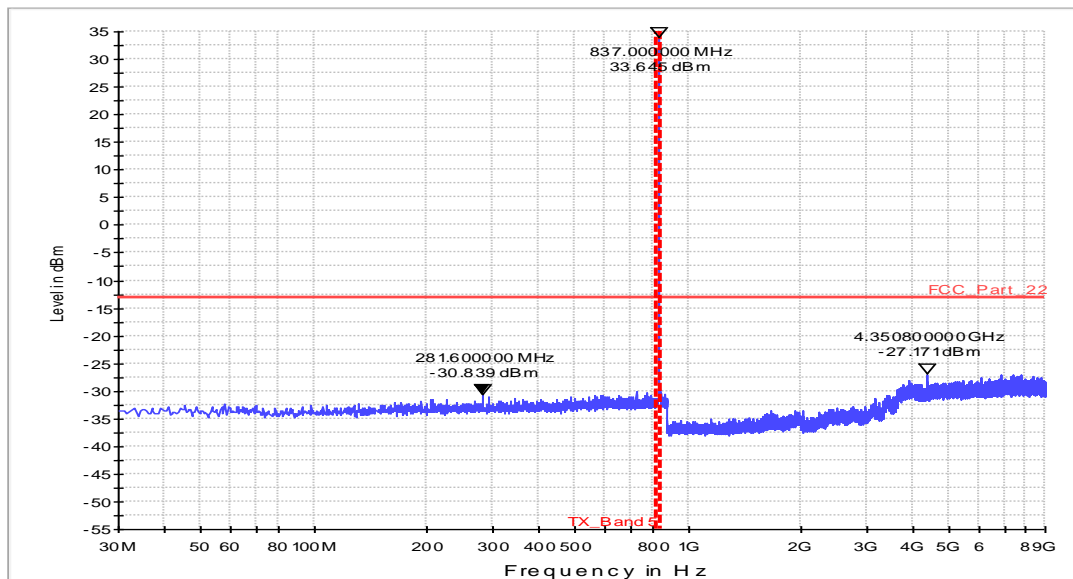
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22, RSS-132
Environment conditions:	Normal conditions (Vnominal, Tnominal)
Operator name:	Ada
Operating mode:	TX - Channel 192

EUT Information

Manufacturer:	Peiker
EuT:	PKD0424AB0o
Type:	GPRS/W-CDMA/LTE

HW version:	3.0
SW version:	M9615A-CETWZTAZM-5.0.17006
Serial number:	US#405V1140-101 HW1613
Connected Interfaces:	Microphone and loudspeaker
Power Supply:	3.8V DC
Comments:	--

Fula2_FCC_22_GSM_Scan2_30MHz_9GHz



Scan Setup: Fula2_FCC_22_GSM_Scan2_30MHz_9GHz [EMI radiated]

Hardware Setup:	Fula2_HW_08_FCC_22_24_6dB_coupler
Receiver:	[ESU 26]
Level Unit:	dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 823 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
823 MHz - 850 MHz	400 kHz	PK+	1 MHz	0.02 s	0 dB
850 MHz - 880 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
880 MHz - 9 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.05_RSE_Ch192_GPRS_Sweep1

Common Information

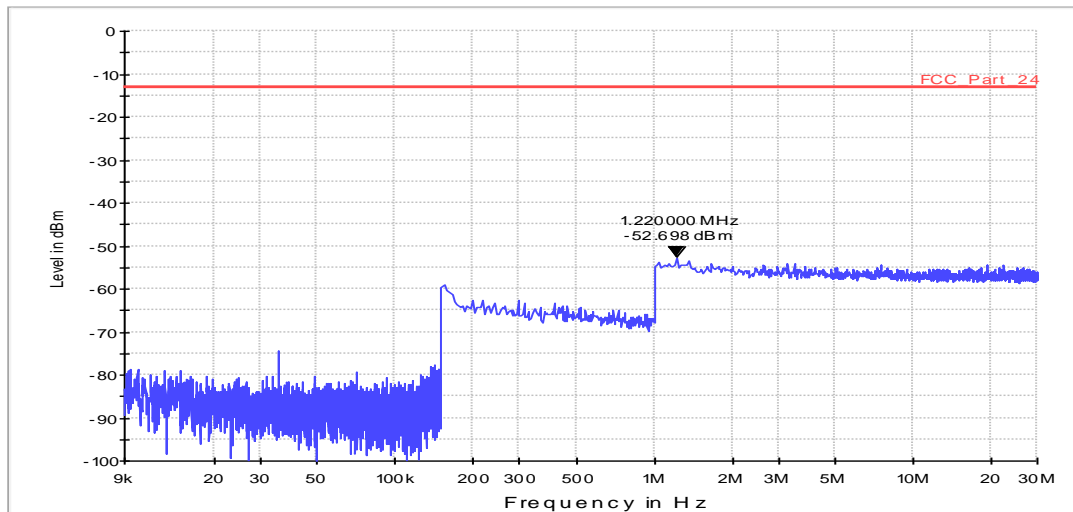
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22
Operation mode:	TX - GPRS, Channel 251
Operator:	Lor
Comment:	--

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_22_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_22_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup:	Fula2_HW_08_FCC_22_24_6dB_coupler
Receiver:	[ESU 26]
Level Unit:	dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.06_RSE_Ch251_GPRS_Sweep2

Common Information

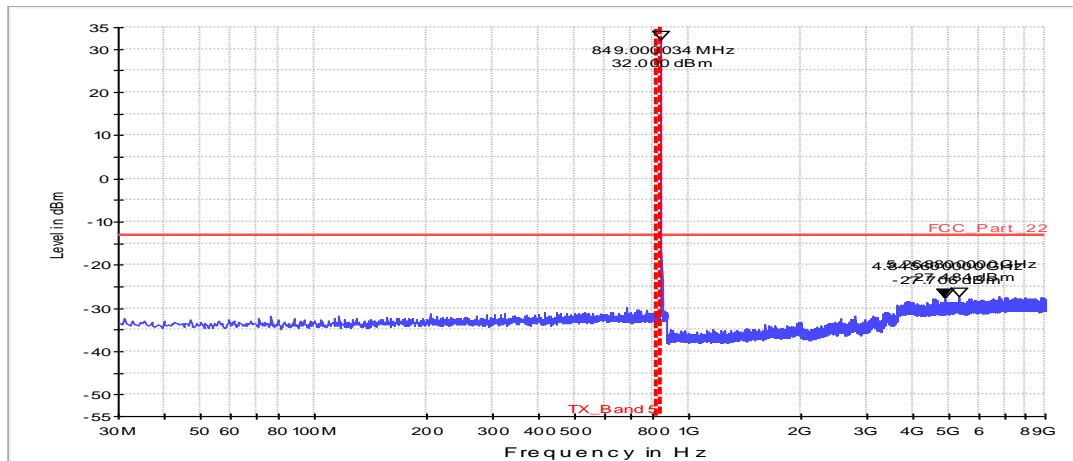
Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132
 Environment conditions: Normal conditions (Vnominal, Tnominal)
 Operator name: Lor
 Operating mode: TX - Channel 251

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_GSM_Scan2_30MHz_9GHz



Scan Setup: Fula2_FCC_22_GSM_Scan2_30MHz_9GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 823 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
823 MHz - 850 MHz	400 kHz	PK+	1 MHz	0.02 s	0 dB
850 MHz - 880 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
880 MHz - 9 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

1.3.1.1. Band-Edge compliance GSM-850 (GMSK-Modulation)

Diagram No.: 37.01_BE_Ch128_GPRS_AV

Common Information

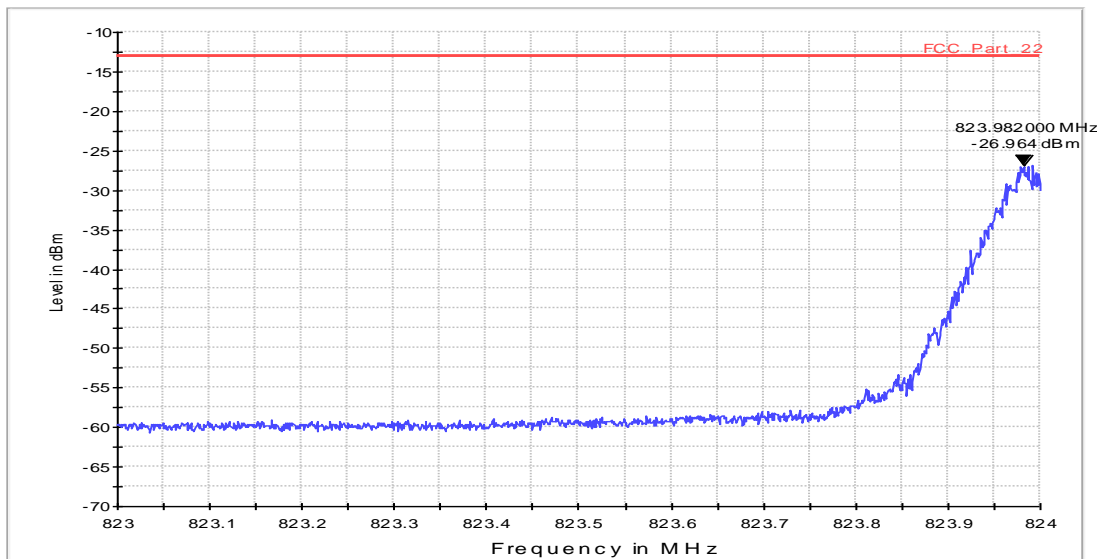
Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132
 Operation mode: TX - GSM, Channel 128
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_BE_LOW_128_AV



Scan Setup: Fula2_FCC_22_BE_LOW_128_AV [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
823 MHz - 824 MHz	1 kHz	RMS	3 kHz	0.05 s	0 dB

Diagram No.: 37.02_BE_Ch251_GPRS_AV

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132

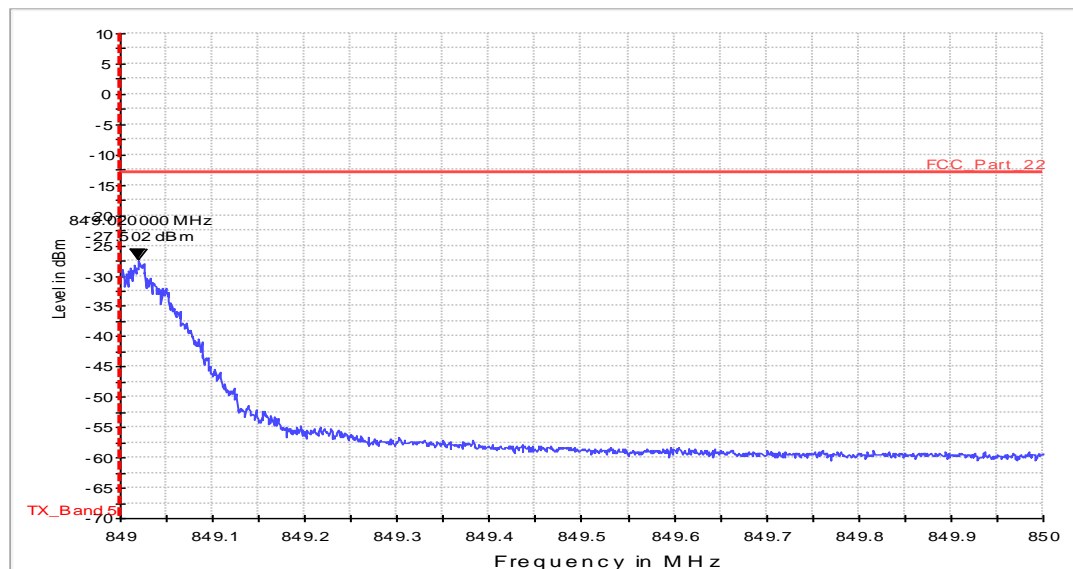
Operation mode: TX - GSM, Channel 251
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_BE_High_251_AV



Scan Setup: Fula2_FCC_22_BE_High_251_AV [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
849 MHz - 850 MHz	1 kHz	RMS	3 kHz	0.05 s	0 dB

1.3.2. Out-of-Band emissions - GSM 850 mode (8PSK-Modulation)

Diagram No.: 36.07_RSE_Ch128_EGPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132

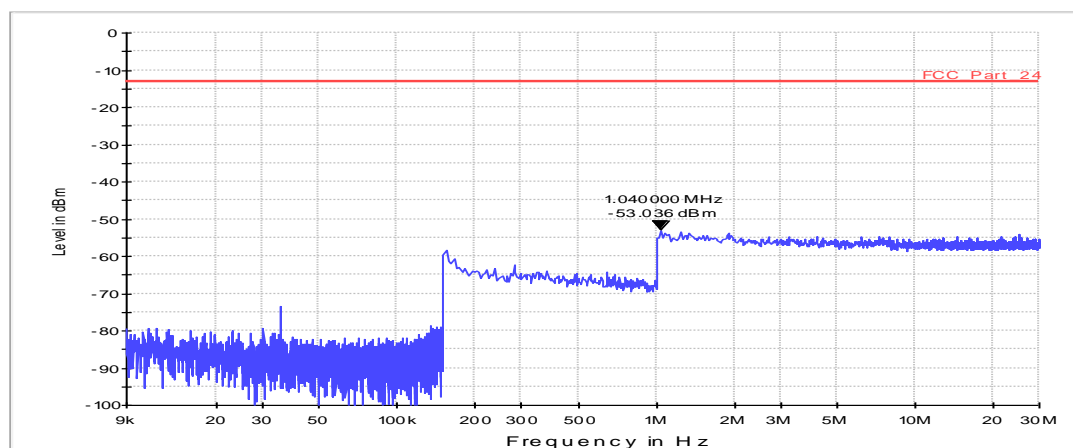
Operation mode: TX - EGPRS, Channel 128
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_22_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.08_RSE_Ch128_EGPRS_Sweep2

Common Information

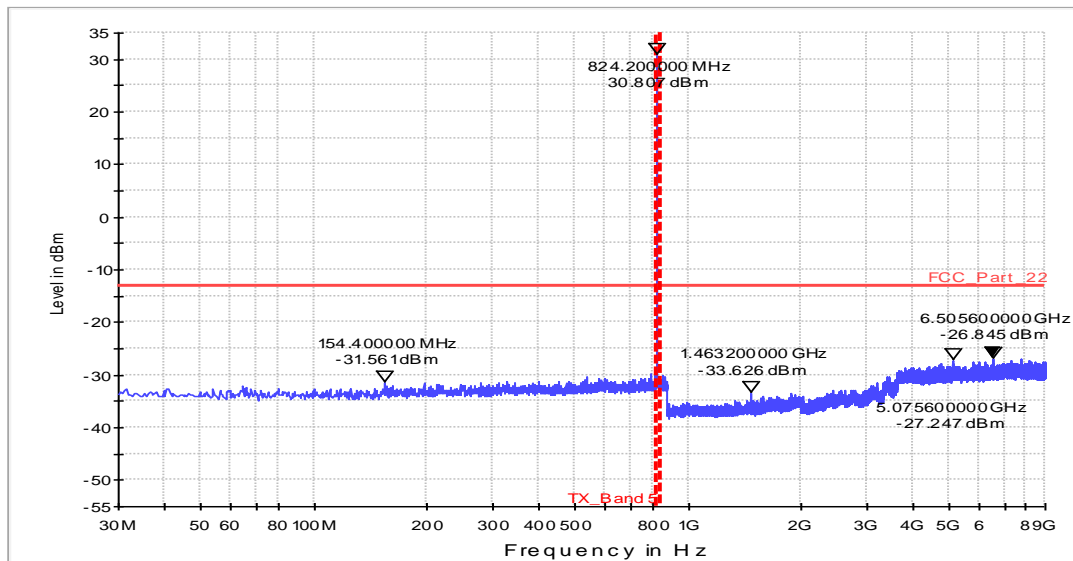
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22, RSS-132
Environment conditions:	Normal conditions (Vnominal, Tnominal)
Operator name:	Lor
Operating mode:	TX - Channel 128

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_22_GSM_Scan2_30MHz_9GHz



Scan Setup: Fula2_FCC_22_GSM_Scan2_30MHz_9GHz [EMI radiated]

Hardware Setup:	Fula2_HW_08_FCC_22_24_6dB_coupler
Receiver:	[ESU 26]
Level Unit:	dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 823 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
823 MHz - 850 MHz	400 kHz	PK+	1 MHz	0.02 s	0 dB
850 MHz - 880 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
880 MHz - 9 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.09_RSE_Ch192_EGPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132

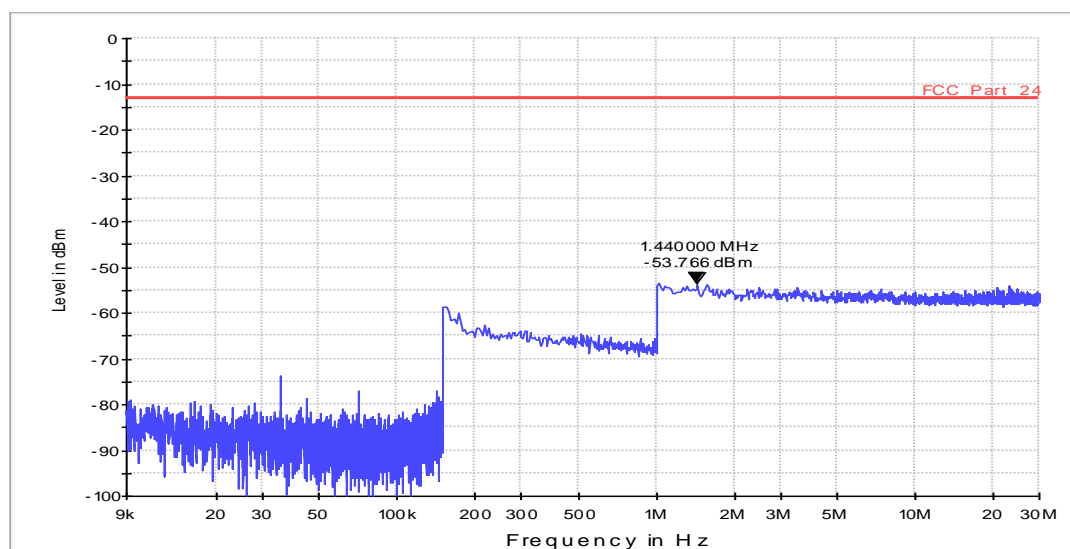
Operation mode: TX - EGPRS, Channel 192
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_22_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.10_RSE_Ch192_EGPRS_Sweep2

Common Information

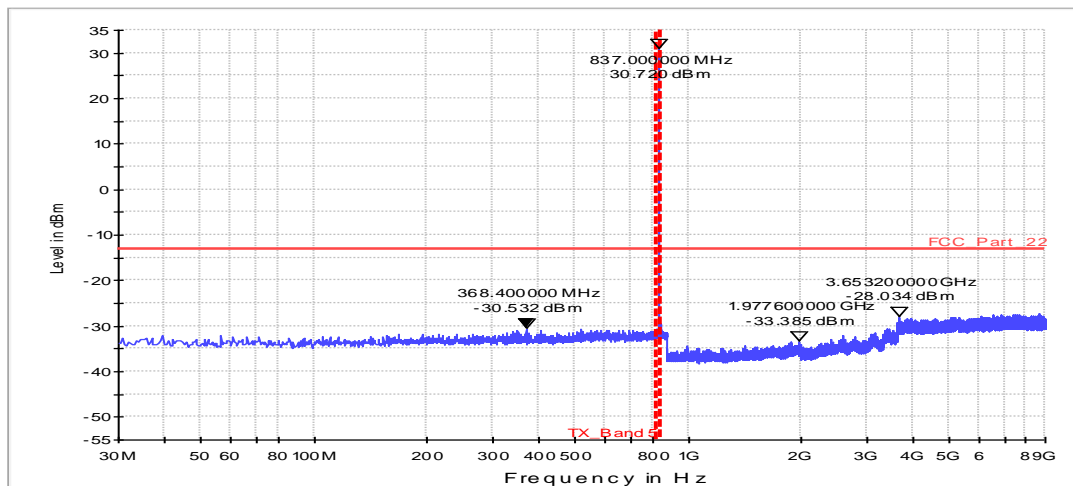
Test Description:	TX Spurious Emission Conducted §2.1051
Test Site:	Radio laboratory 2
Test Standard:	FCC Part 22, RSS-132
Environment conditions:	Normal conditions (Vnominal, Tnominal)
Operator name:	Lor
Operating mode:	TX - Channel 192

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

Fula2_FCC_22_GSM_Scan2_30MHz_9GHz



Scan Setup: Fula2_FCC_22_GSM_Scan2_30MHz_9GHz [EMI radiated]

Hardware Setup:	Fula2_HW_08_FCC_22_24_6dB_coupler
Receiver:	[ESU 26]
Level Unit:	dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 823 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
823 MHz - 850 MHz	400 kHz	PK+	1 MHz	0.02 s	0 dB
850 MHz - 880 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
880 MHz - 9 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.11_RSE_Ch251_EGPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22

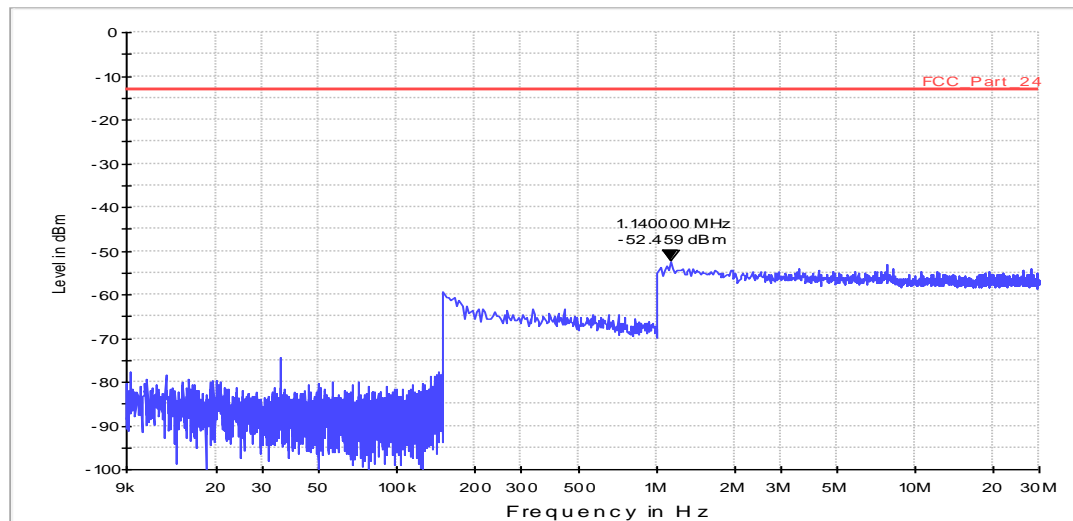
Operation mode: TX - EGPRS, Channel 251
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_22_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.12_RSE_Ch251_EGPRS_Sweep2

Common Information

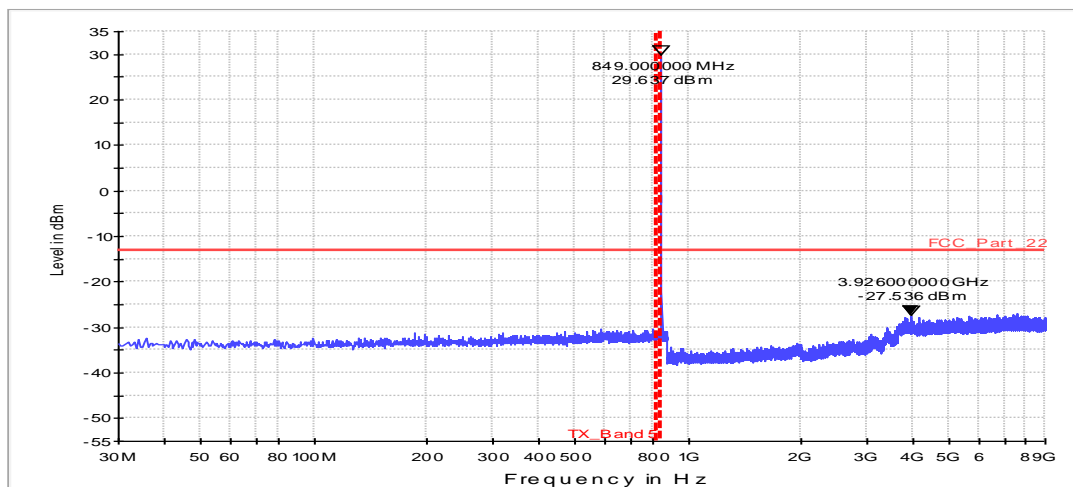
Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132
 Environment conditions: Normal conditions (Vnominal, Tnominal)
 Operator name: Lor
 Operating mode: TX - Channel 251

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_GSM_Scan2_30MHz_9GHz



Scan Setup: Fula2_FCC_22_GSM_Scan2_30MHz_9GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 823 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
823 MHz - 850 MHz	400 kHz	PK+	1 MHz	0.02 s	0 dB
850 MHz - 880 MHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
880 MHz - 9 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

1.3.2.1. Band-Edge compliance (8-PSK Modulation)

Diagram No.: 37.03_BE_Ch128_EGPRS_AV

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132

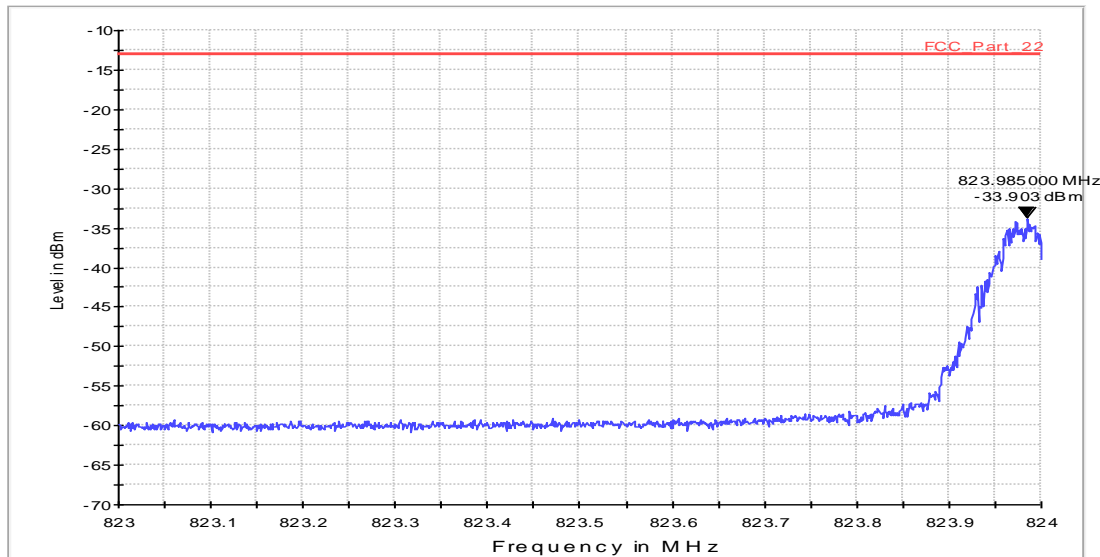
 Operation mode: TX - GSM, Channel 128
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_BE_LOW_128_AV



Scan Setup: Fula2_FCC_22_BE_LOW_128_AV [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
823 MHz - 824 MHz	1 kHz	RMS	3 kHz	0.05 s	0 dB

Diagram No.: 37.04_BE_Ch251_EGPRS_AV

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 22, RSS-132

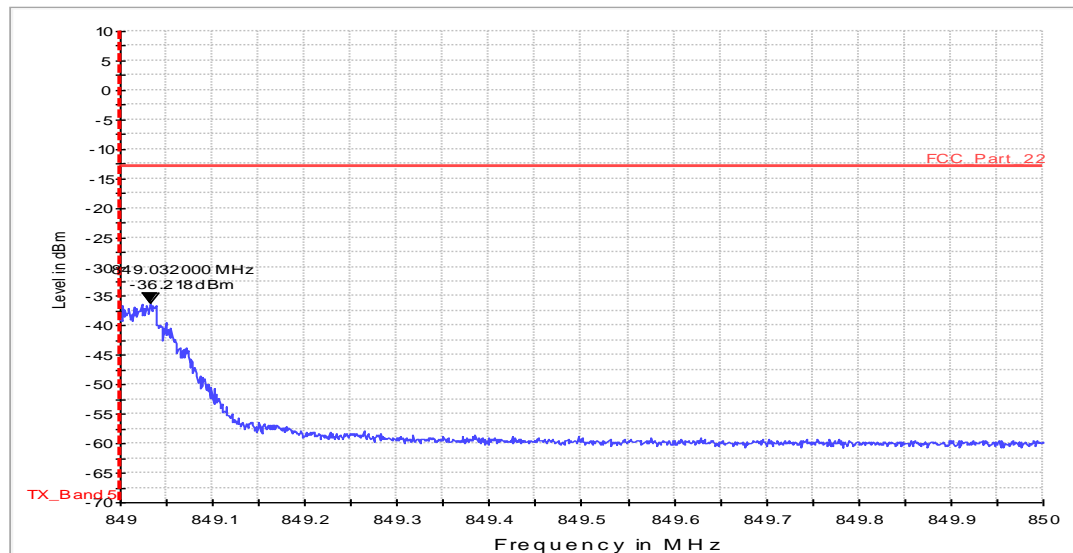
 Operation mode: TX - EGPRS, Channel 251
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

 EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

Fula2_FCC_22_BE_High_251_AV



Scan Setup: Fula2_FCC_22_BE_High_251_AV [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
849 MHz - 850 MHz	1 kHz	RMS	3 kHz	0.05 s	0 dB

1.3.2.2. Out-of-Band emissions - GSM 1900 mode (GMSK-Modulation)

Diagram No.: 36.20_RSE_Ch512_GSM_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

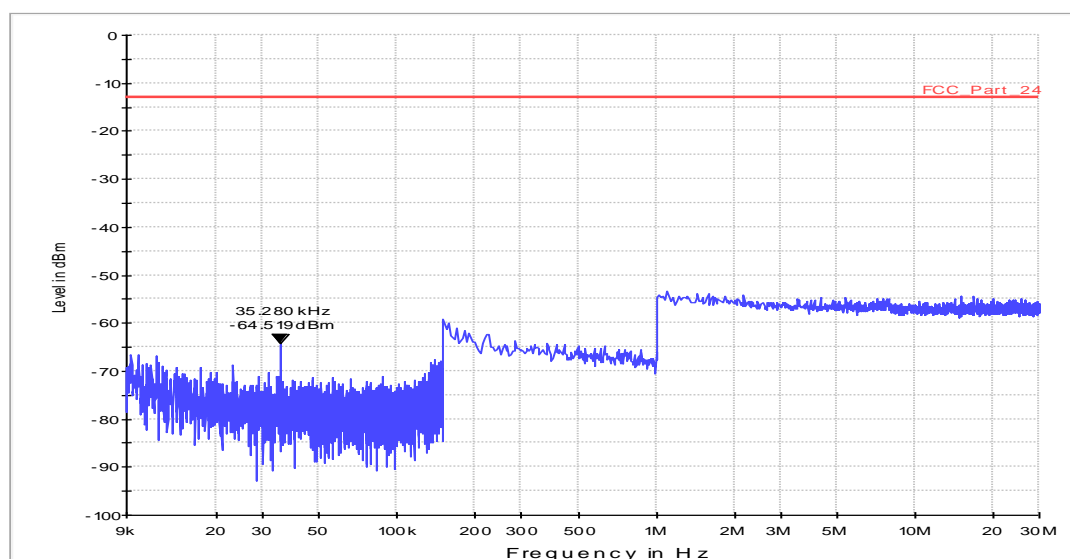
Operation mode: TX - GSM, Channel 512
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_24_GSM_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.21_RSE_Ch512_GSM_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

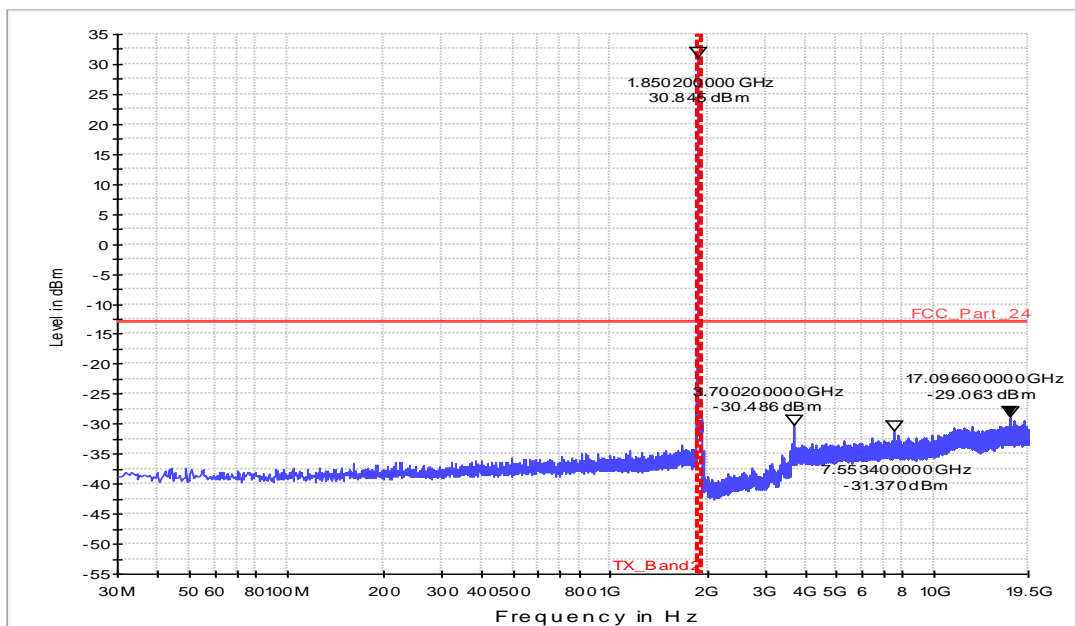
 Operation mode: TX - GSM, Channel 512
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz



Scan Setup: Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1.849 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.849 GHz - 1.911 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.911 GHz - 1.915 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.915 GHz - 19.5 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.22_RSE_Ch661_GSM_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

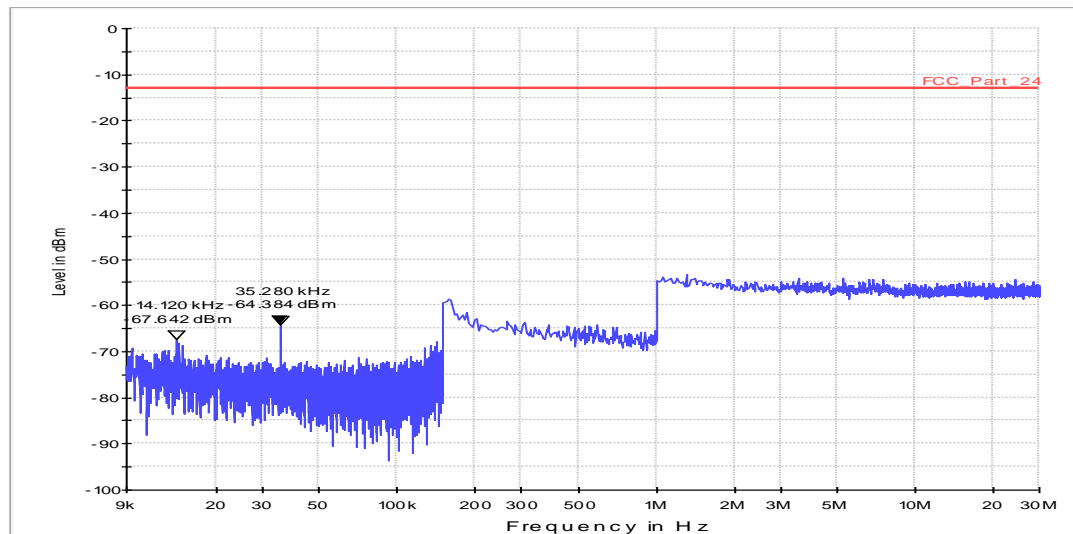
 Operation mode: TX - GSM, Channel 661
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_24_GSM_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.23_RSE_Ch661_GSM_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

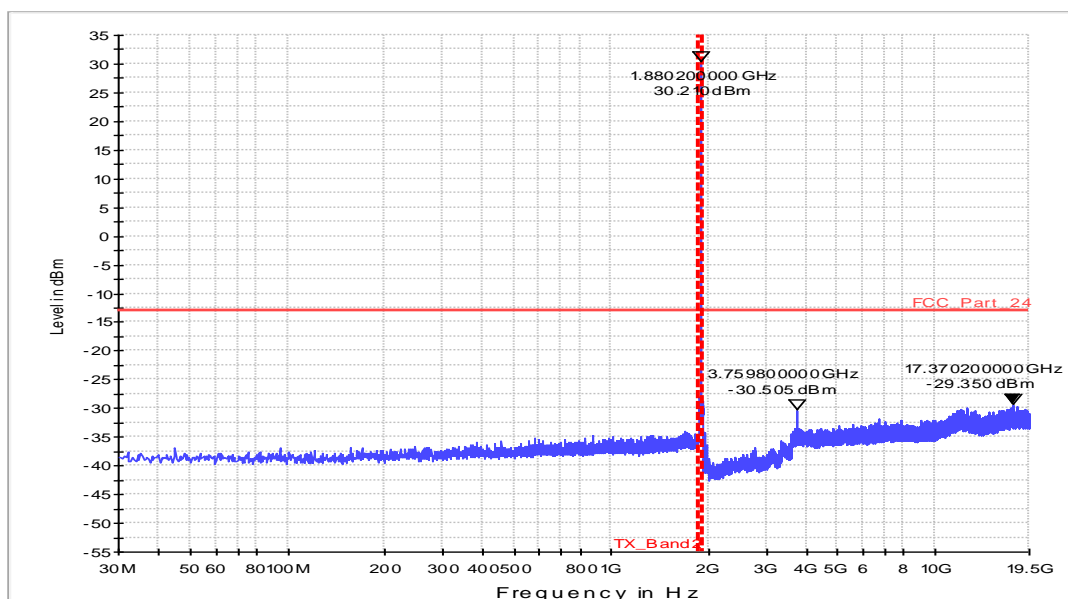
Operation mode: TX - GSM, Channel 661
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz



Scan Setup: Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1.849 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.849 GHz - 1.911 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.911 GHz - 1.915 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.915 GHz - 19.5 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.24_RSE_Ch810_GSM_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

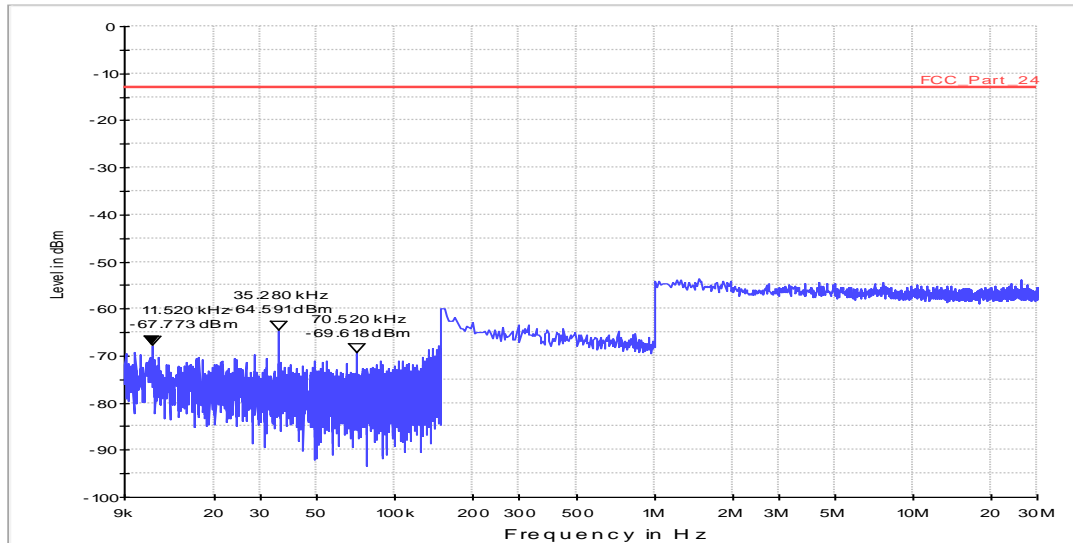
 Operation mode: TX - GSM, Channel 810
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

 HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_24_GSM_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.25_RSE_Ch810_GSM_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

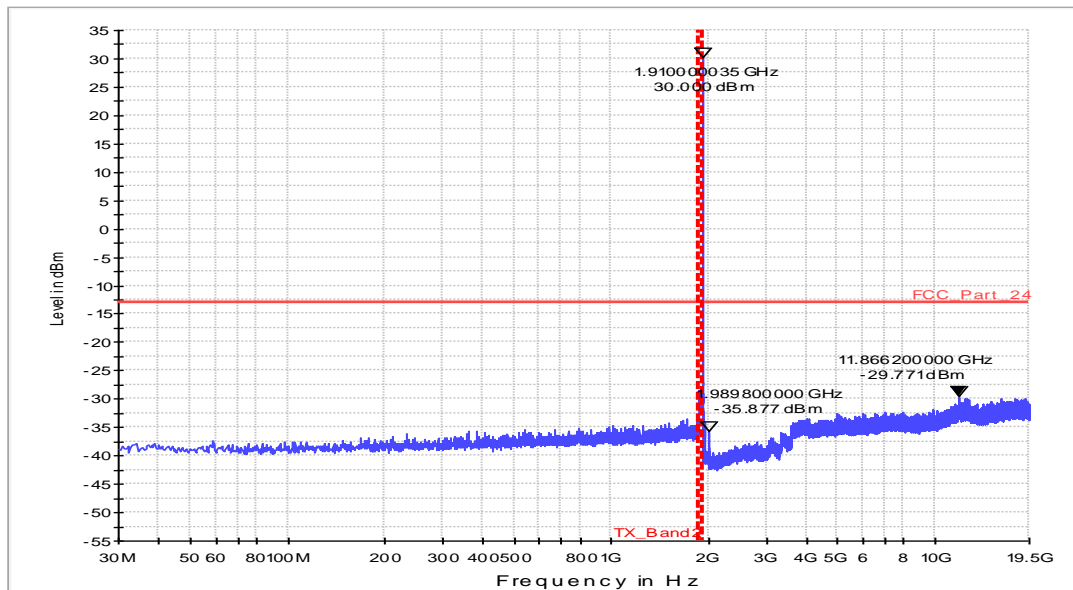
 Operation mode: TX - GSM, Channel 810
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz



Scan Setup: Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1.849 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.849 GHz - 1.911 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.911 GHz - 1.915 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.915 GHz - 19.5 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

1.3.2.3. Band-Edge compliance: GSM1900 – Mode (GMSK –Modulation)

Diagram No.: 37.10_BE_Ch512_GSM_AV

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

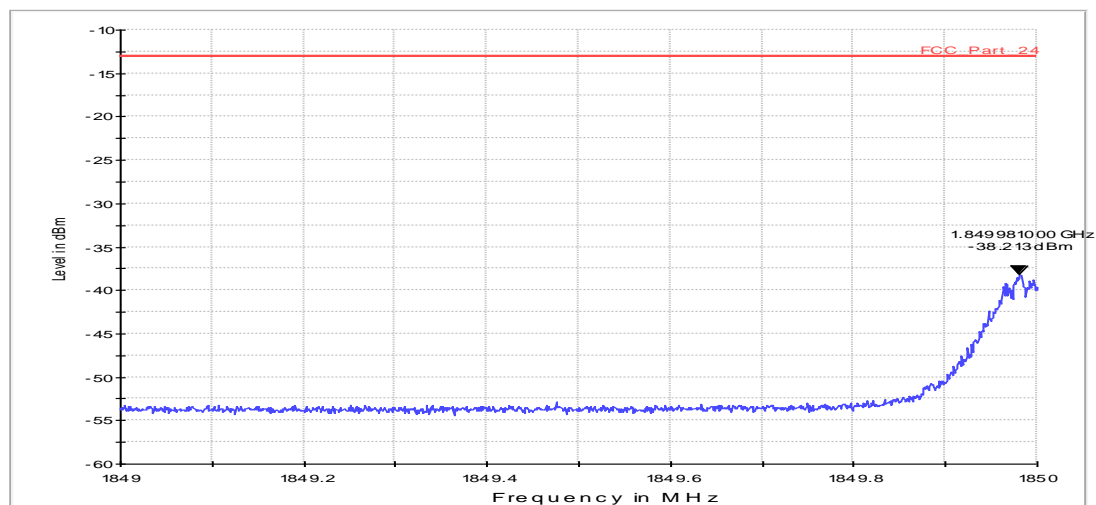
Operation mode: TX - GSM, Channel 512
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_BE_Low_512_AV



Scan Setup: Fula2_FCC_24_GSM_BE_Low_512_AV [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
1.849 GHz - 1.85 GHz	1 kHz	AVG	3 kHz	0.1 s	0 dB

Diagram No.: 37.11_BE_Ch810_GSM_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

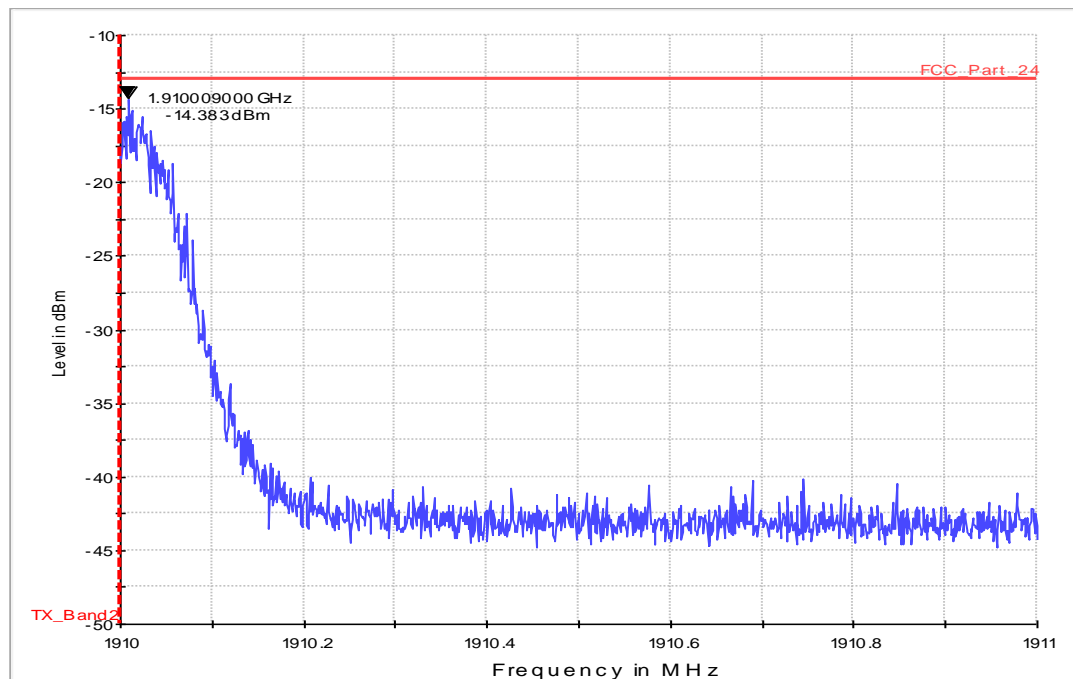
Operation mode: TX - GSM, Channel 810
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_BE_High_810_PK



Scan Setup: Fula2_FCC_24_GSM_BE_High_810_PK [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
1.91 GHz - 1.911 GHz	1 kHz	PK+	3 kHz	0.1 s	0 dB

1.3.2.4. Out-of-Band emissions E-GSM 1900 mode (8-PSK-Modulation)

Diagram No.: 36.26_RSE_Ch512_EGPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

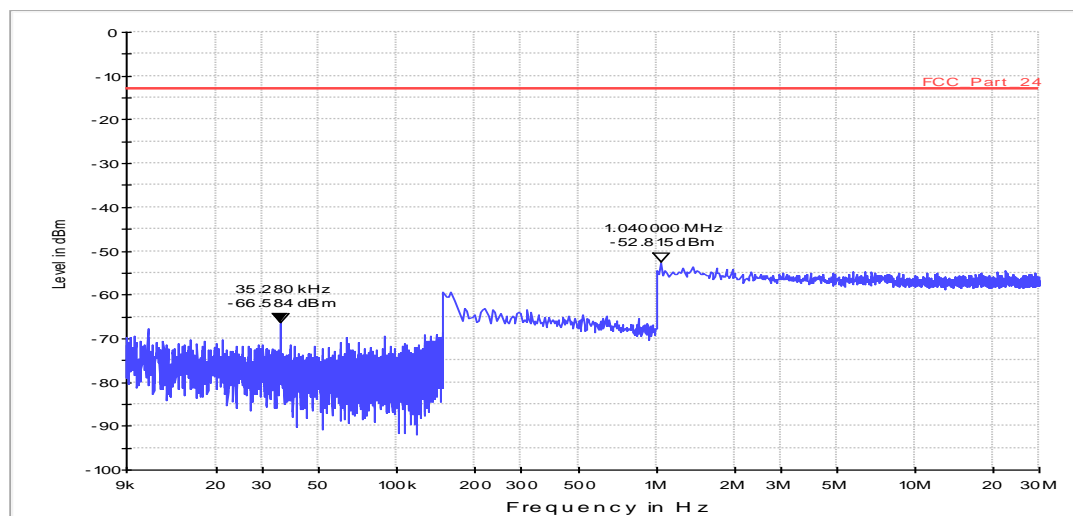
Operation mode: TX - EGPRS, Channel 512
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_24_GSM_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.27_RSE_Ch512_EGPRS_Sweep2

Common Information

TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

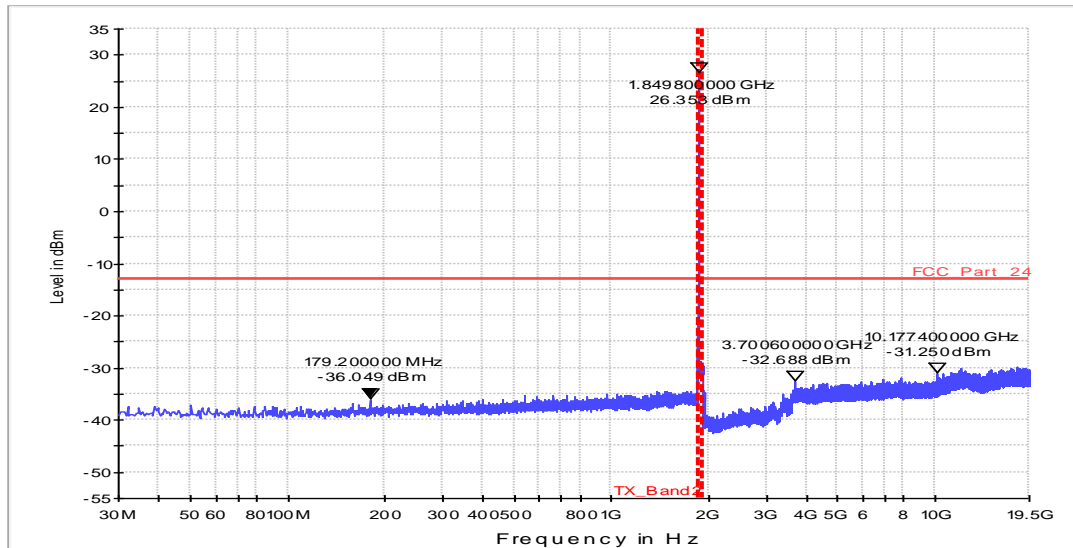
 Operation mode: TX - EGPRS, Channel 512
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz



Scan Setup: Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1.849 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.849 GHz - 1.911 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.911 GHz - 1.915 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.915 GHz - 19.5 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.28_RSE_Ch661_EGPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

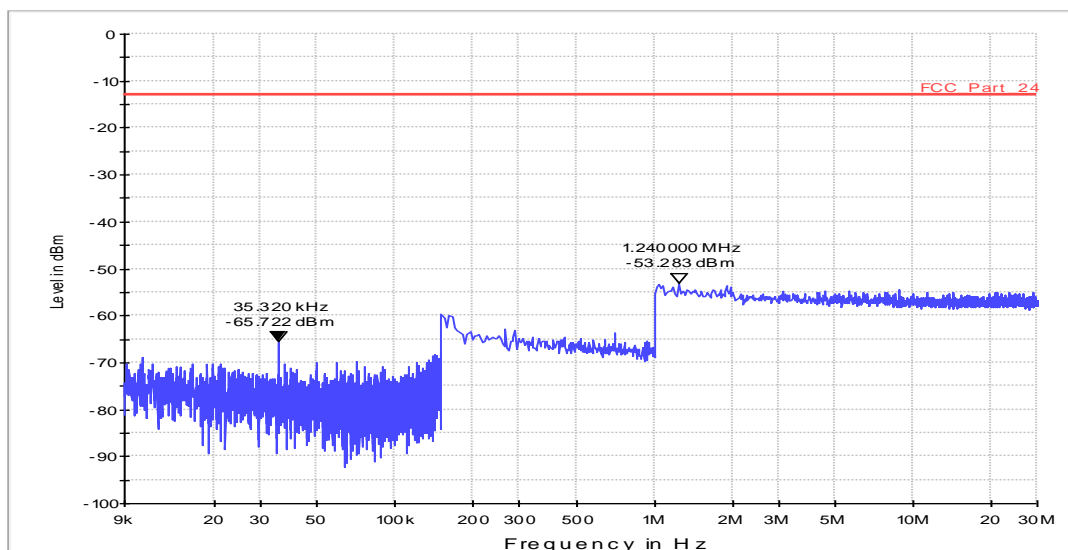
Operation mode: TX - EGPRS, Channel 661
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

 HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_24_GSM_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.29_RSE_Ch661_EGPRS_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

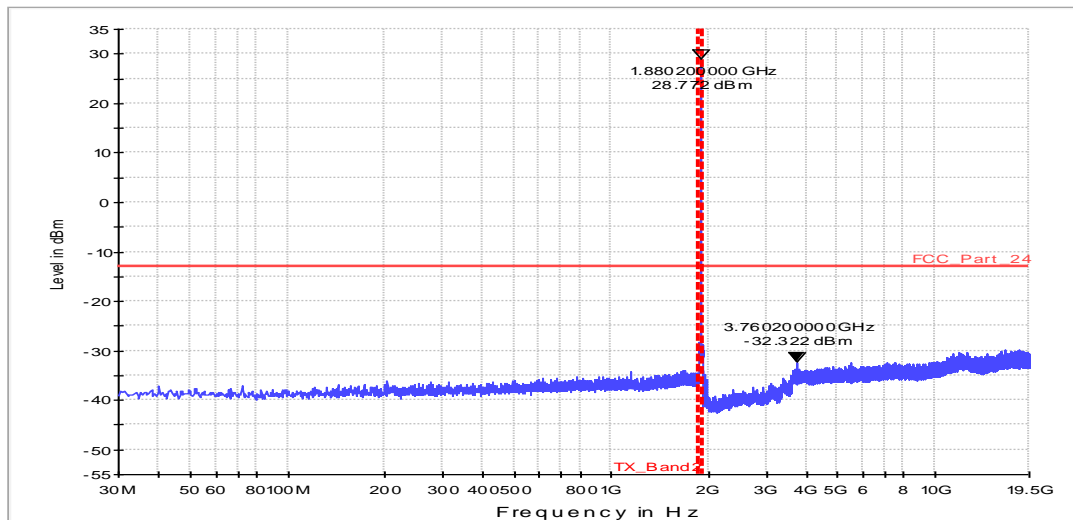
 Operation mode: TX - EGPRS, Channel 810
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz



Scan Setup: Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1.849 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.849 GHz - 1.911 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.911 GHz - 1.915 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.915 GHz - 19.5 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

Diagram No.: 36.30_RSE_Ch810_EGPRS_Sweep1

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

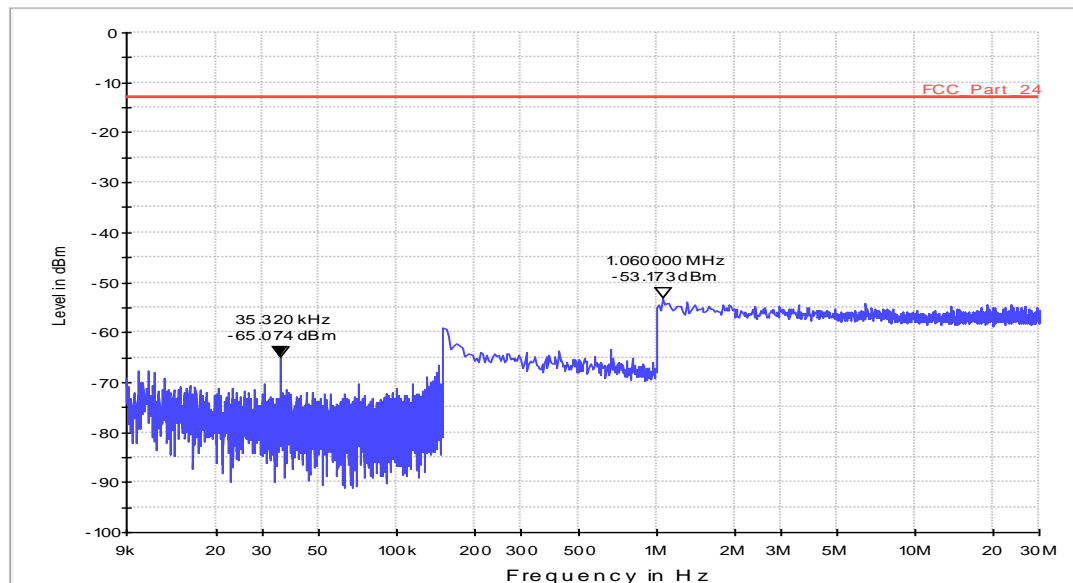
Operation mode: TX - EGPRS, Channel 810
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan1_9kHz_30MHz



Scan Setup: Fula2_FCC_24_GSM_Scan1_9kHz_30MHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
9 kHz - 150 kHz	40 Hz	PK+	100 Hz	0.01 s	0 dB
150 kHz - 1 MHz	4 kHz	PK+	9 kHz	0.01 s	0 dB
1 MHz - 30 MHz	20 kHz	PK+	100 kHz	0.01 s	0 dB

Diagram No.: 36.31_RSE_Ch810_EGPRS_Sweep2

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

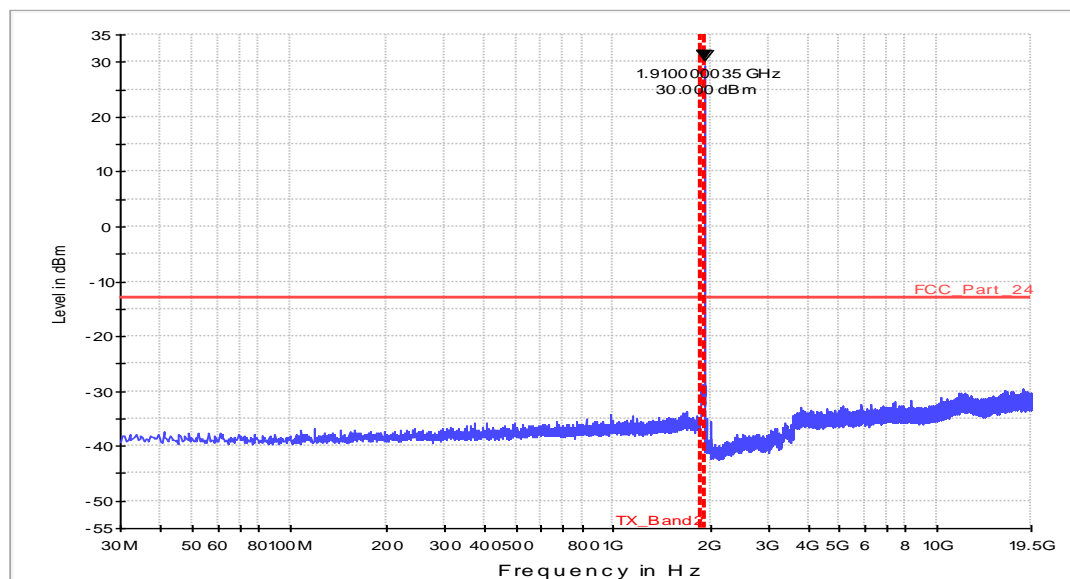
 Operation mode: TX - EGPRS, Channel 810
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

 HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz



Scan Setup: Fula2_FCC_24_GSM_Scan2_30MHz_19.5GHz [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 1.849 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.849 GHz - 1.911 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.911 GHz - 1.915 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB
1.915 GHz - 19.5 GHz	400 kHz	PK+	1 MHz	0.01 s	0 dB

1.3.2.5. Band-Edge compliance: E-GSM1900 (8-PSK Modulation)

Diagram No.: 37.12_BE_Ch512_EGPRS_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

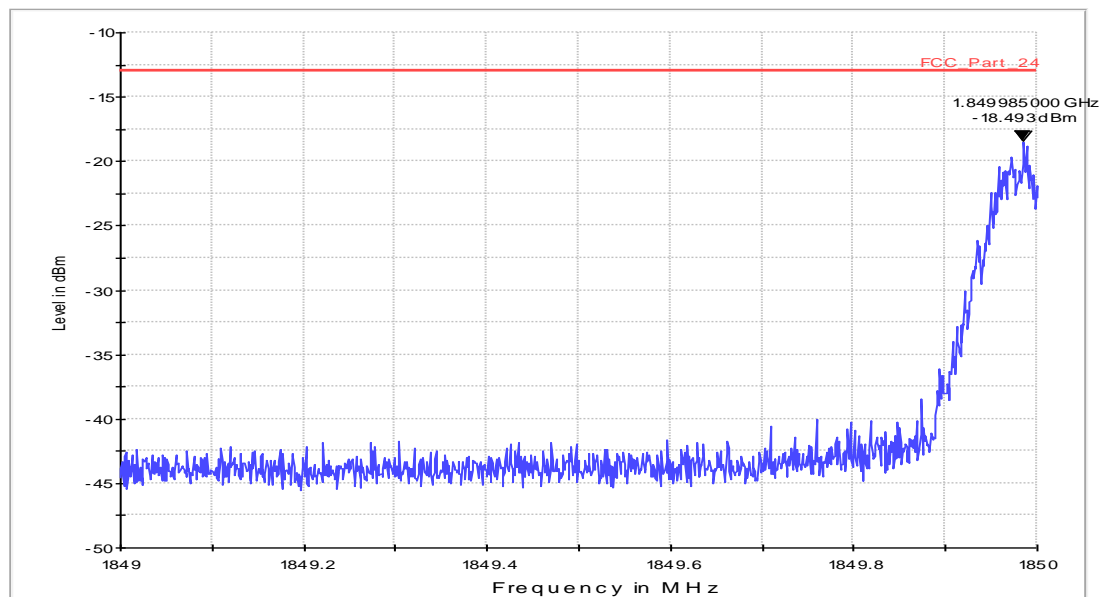
 Operation mode: TX - EGPRS, Channel 512
 Operator: Dpa
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_BE_Low_512



Scan Setup: Fula2_FCC_24_GSM_BE_Low_512 [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
1.849 GHz - 1.85 GHz	1 kHz	PK+	3 kHz	0.1 s	0 dB

Diagram No.: 37.13_BE_Ch810_EGPRS_PK

Common Information

Test Description: TX Spurious Emission Conducted §2.1051
 Test Site: Radio laboratory 2
 Test Standard: FCC Part 24

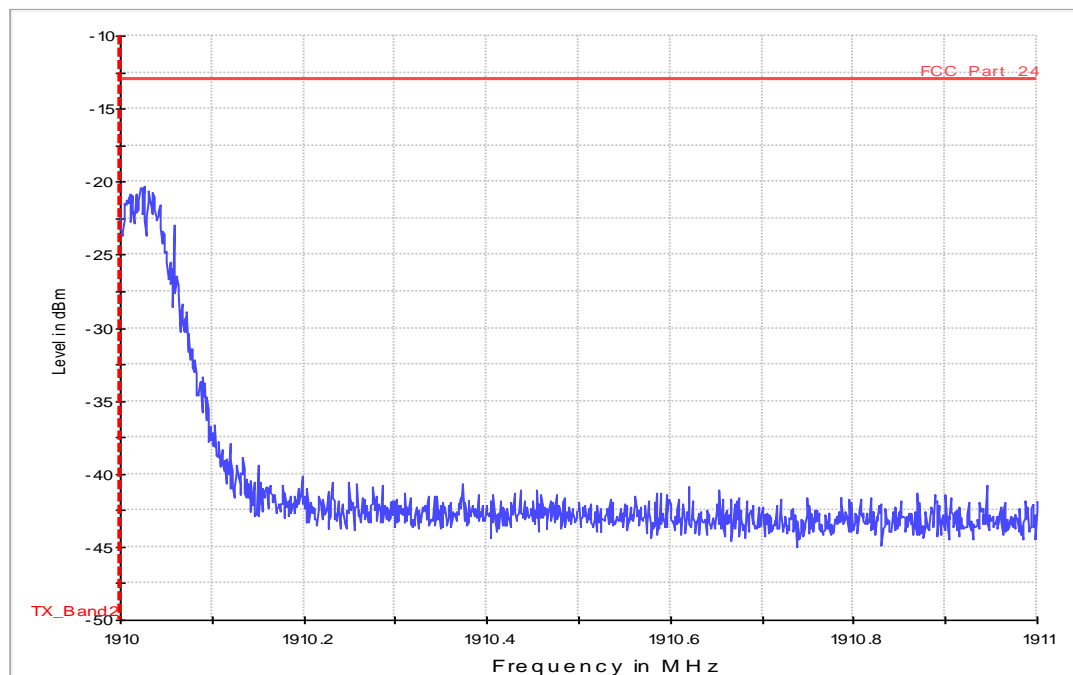
Operation mode: TX - EGPRS, Channel 810
 Operator: Lor
 Comment: --

EUT Information

Manufacturer: Peiker
 EuT: PKD0424AB0o
 Type: GPRS/W-CDMA/LTE

 HW version: 3.0
 SW version: M9615A-CETWZTAZM-5.0.17006
 Serial number: US#405V1140-101 HW1613
 Connected Interfaces: Microphone and loudspeaker
 Power Supply: 3.8V DC
 Comments: --

Fula2_FCC_24_GSM_BE_High_810_PK



Scan Setup: Fula2_FCC_24_GSM_BE_High_810_PK [EMI radiated]

Hardware Setup: Fula2_HW_08_FCC_22_24_6dB_coupler
 Receiver: [ESU 26]
 Level Unit: dBm

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
1.91 GHz - 1.911 GHz	1 kHz	PK+	3 kHz	0.1 s	0 dB

1.4. Spurious emissions radiated (30 MHz < f < 18 GHz)

1.4.1. GSM850 mode (GMSK-Modulation)

8.04_CH128_GPRS

Common Information

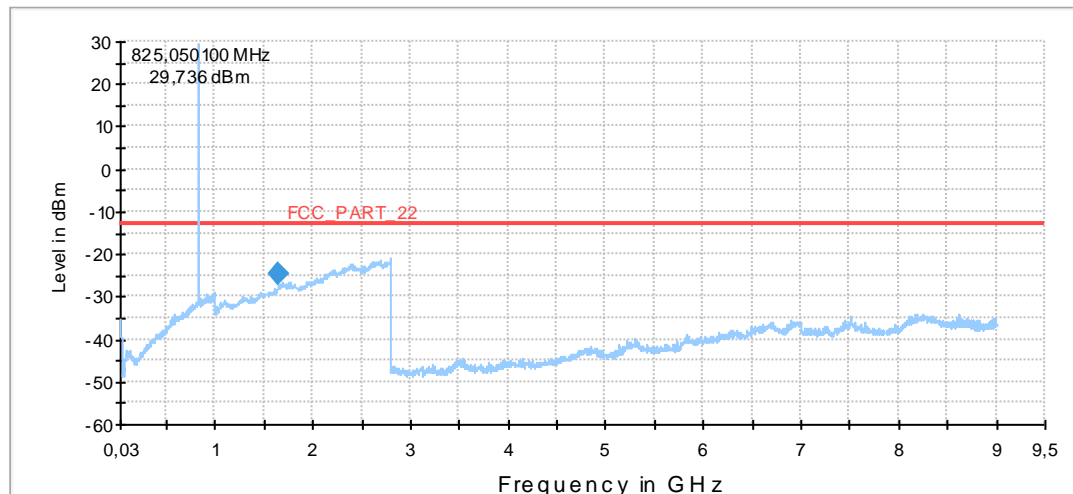
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 128
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 24,0°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030401_FCC_Part22_GSM850_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1648.046092	-24.5	5000.0	1000.000	H	319.0	90.0	-63.4	11.5	-13.0

Diagram 8.05_CH192_GPRS

Common Information

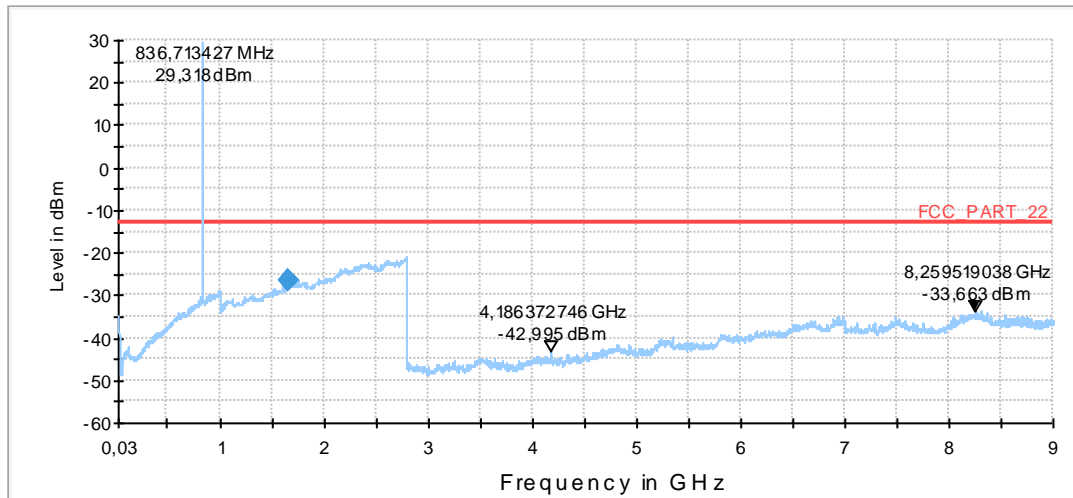
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 192
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 24,0°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030401_FCC_Part22_GSM850_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1668.366734	-26.7	5000.0	1000.000	H	30.0	90.0	-63.2	13.7	-13.0

Diagram 8.06_CH251_GPRS

Common Information

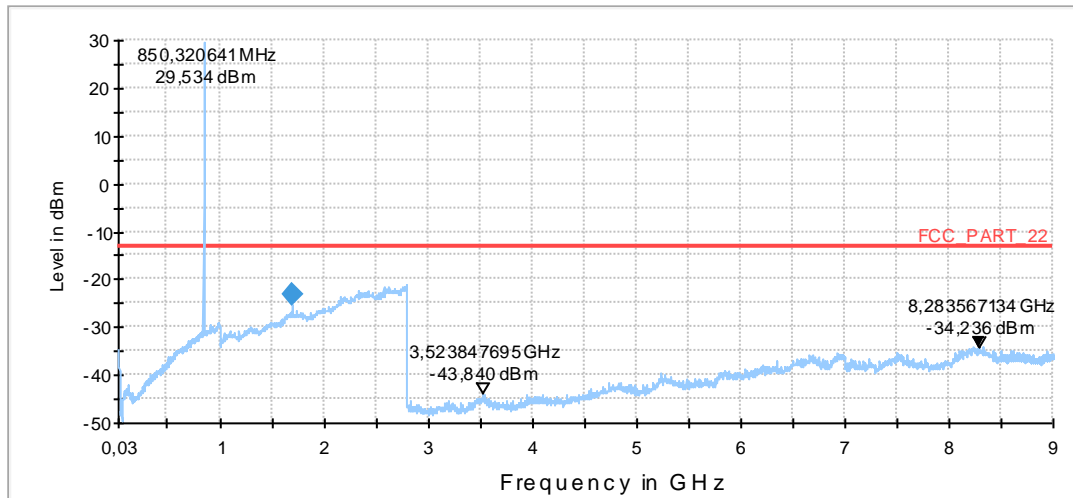
Test Description:	Radiated Emissions GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part22.917
Test Case:	-
Operating Mode:	MS allocated UL channel 251
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 24,0°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030401_FCC_Part22_GSM850_TX_all_channels_30M-12G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1697.545090	-23.2	5000.0	1000.000	H	297.0	90.0	-62.8	10.2	-13.0

1.4.2. GSM1900 mode (GMSK-Modulation)

Diagram 8.13_Ch512_GPRS

Common Information

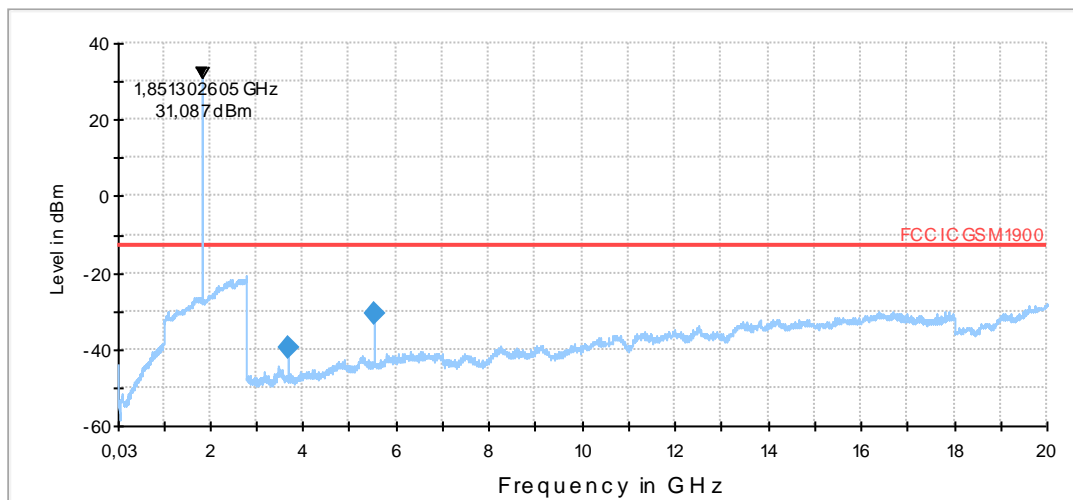
Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900, GPRS
Operating Mode:	MS allocated channel 512
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 58%rH; Temperature: 21,7°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030404_FCC_Part24_GSM1900_TX_all_channels_30M-20G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3700.255511	-39.7	1000.0	1000.000	H	43.0	90.0	-94.9	26.7	-13.0
5550.405812	-30.4	1000.0	1000.000	H	27.0	90.0	-89.9	17.4	-13.0

Diagram 8.14_Ch661_GPRS

Common Information

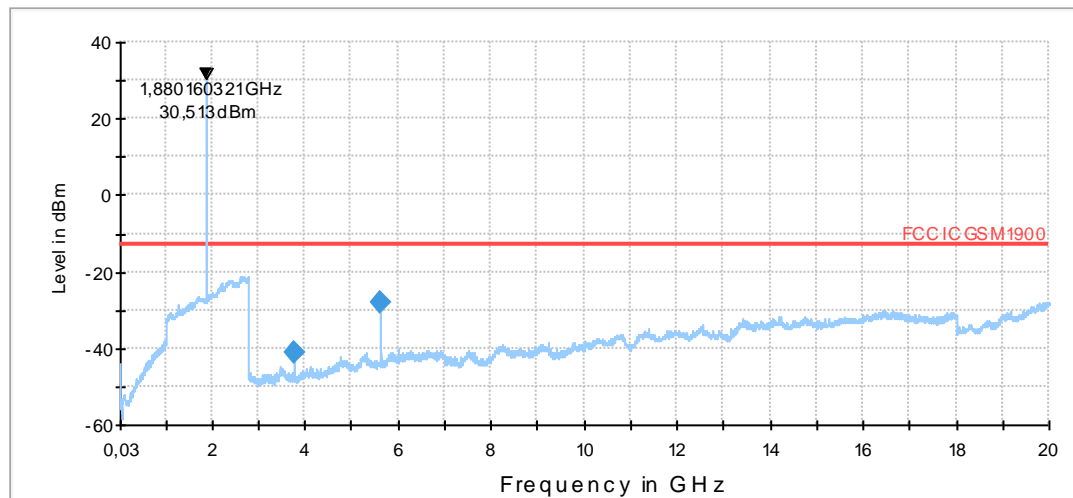
Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900, GPRS
Operating Mode:	MS allocated channel 661
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 53%rH; Temperature: 24.2°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030404_FCC_Part24_GSM1900_TX_all_channels_30M-20G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3760.125251	-41.2	1000.0	1000.000	H	54.0	90.0	-95.1	28.2	-13.0
5639.794589	-27.9	1000.0	1000.000	H	-16.0	90.0	-89.7	14.9	-13.0

Diagram 8.15_Ch810_GPRS

Common Information

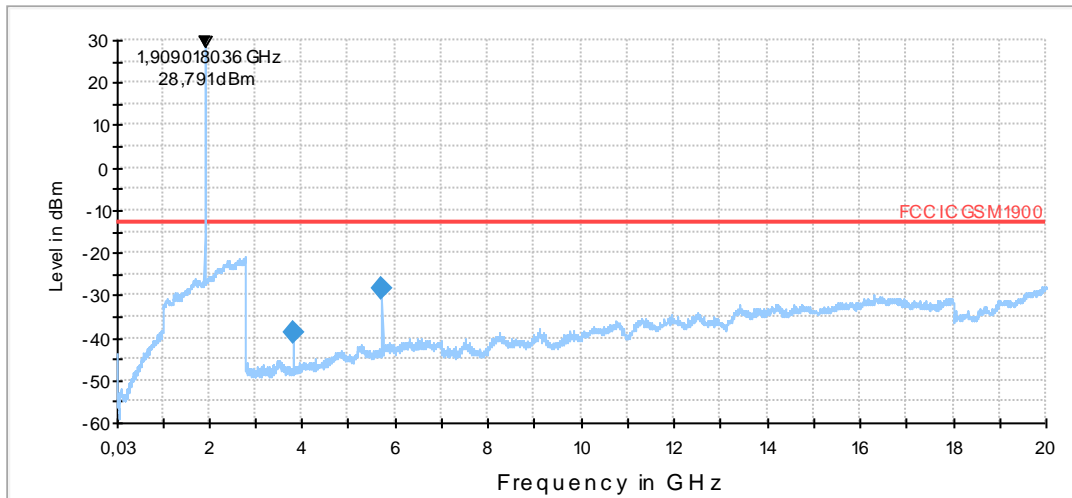
Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900, GPRS
Operating Mode:	MS allocated channel 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 58%rH; Temperature: 21,7°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030404_FCC_Part24_GSM1900_TX_all_channels_30M-20G



Final Result 1

Frequency (MHz)	MaxPeak (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
3819.734469	-38.8	1000.0	1000.000	H	54.0	90.0	-95.1	25.8	-13.0
5729.604209	-28.5	1000.0	1000.000	H	29.0	90.0	-89.4	15.5	-13.0

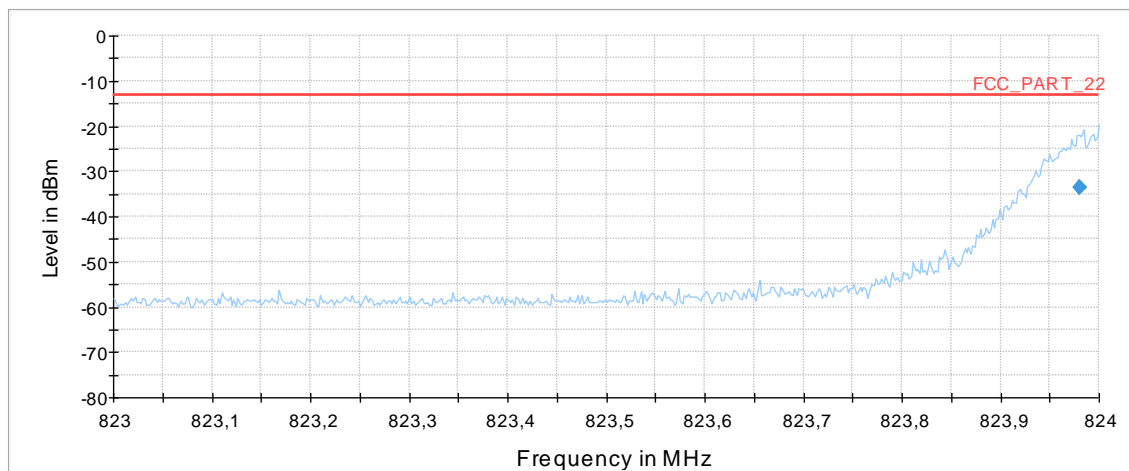
1.4.3. Band-Edge compliance radiated

1.4.4. GSM850 mode (GMSK-Modulation)

9.03_Ch128_GPRS

Common Information

Test Description:	Radiated Band Edge Compliance GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917
Operating Mode:	MS allocated channel 128 (fc = 824.2MHz)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 24°C
Operator:	Lor

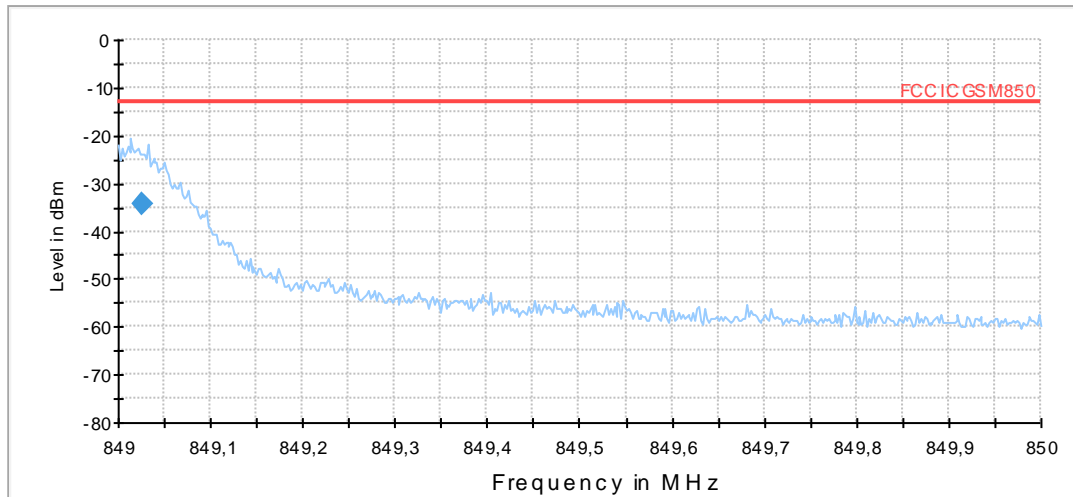


9.04_Ch251_GPRS

Common Information

Test Description:	Radiated Band Edge Compliance GSM850
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 22.917
Operating Mode:	MS allocated channel 251 (fc = 848.8MHz)
Exclusionband:	824 - 849MHz
Environmental Conditions:	Humidity: 50%rH; Temperature: 24°C
Operator:	Lor

030403e_FCC_Part22_GSM850_TX_high_BE_CMU_RF3_RF4_no_Control



Final Result 1

Frequency (MHz)	RMS (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
849.026052	-34.4	10000.	3.000	V	52.0	0.0	-76.1	21.4	-13.0

1.4.5. GSM 1900 mode (GMSK Modulation)

Diagram 9.09_Ch512_GPRS

Common Information

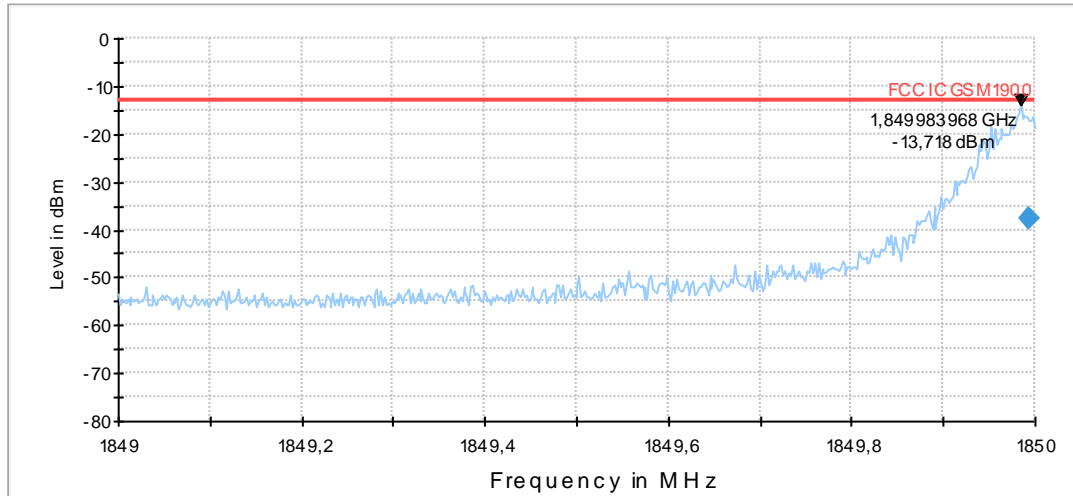
Test Description: Radiated Spurious Emissions GSM1900
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24.238
 Comm. Link: GSM1900, GPRS
 Operating Mode: MS allocated channel 512 (UL = 1850.2MHz)
 Exclusionband: 1850- 1910MHz
 Environmental Conditions: Humidity: 53%rH; Temperature: 24.2°C
 Operator: Lor

UT Information

Manufacturer: Peiker
 Model: V1140-103
 Type: GSM/WCDMA Module

 EUT: PKD0054AB0h
 HW version: HW0913
 SW version: M9615A-CETWTAZM-50110010
 SVN: -
 Config: C25
 Serial number: WC#418 V1140-103 HW0913
 Connected Interfaces: microphone + loudspeaker + USB cable + antenna EU 64159
 Power Supply: 3.8VDC via external DC Power supply inside chamber
 Comments: -

030405_FCC_Part24_GSM1900_TX_low_ch_band_edge



Final Result 1

Frequency (MHz)	Average (dBm)	Meas. Time (ms)	Bandwidth (kHz)	Polarization	Azimuth (deg)	Elevation (deg)	Corr. (dB)	Margin (dB)	Limit (dBm)
1849.993988	-37.9	10000.0	3.000	H	73.0	90.0	-63.1	24.9	-13.0

Diagram 9.10_Ch810_GPRS

Common Information

Test Description:	Radiated Spurious Emissions GSM1900
Test Site Location:	CETECOM GmbH Essen
Test Site:	Fully Anechoic Room (FAR)
Test Standard:	FCC Part 24.238
Comm. Link:	GSM1900, GPRS
Operating Mode:	MS allocated channel 810 (UL = 1909.8MHz)
Exclusionband:	1850- 1910MHz
Environmental Conditions:	Humidity: 51%rH; Temperature: 24,0°C
Operator:	Lor

EUT Information

Manufacturer:	Peiker
Model:	V1140-103
Type:	GSM/WCDMA Module

EUT:	PKD0054AB0h
HW version:	HW0913
SW version:	M9615A-CETWTAZM-50110010
SVN:	-
Config:	C25
Serial number:	WC#418 V1140-103 HW0913
Connected Interfaces:	microphone + loudspeaker + USB cable + antenna EU 64159
Power Supply:	3.8VDC via external DC Power supply inside chamber
Comments:	-

030406_FCC_Part24_GSM1900_TX_high_ch_band_edge

